

The Oklahoma Department of Environmental Quality (DEQ) is pleased to present the City of Kingfisher with the Final Remediation Report for the former Kingfisher 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 Kingfisher 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 ceiling tile, floor tile, and mastic.
- Asbestos abatement, including:
 - Asbestos containing ceiling tile, floor tile and mastic.

TARGETED BROWNFIELD ASSESSMENT

In March 2010, DEQ provided a Phase I Targeted Brownfield Assessment to the City of Kingfisher. 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
- Soil sampling outside of firing range vent fan
- LBP abatement, including:
 - Scraping and sealing downspouts, window lintels, indoor firing range vent fan frame, overhead doors, overhead door frames, walls containing LBP, and handrails
 - Removing LBP and sealing sidewalk, curb, and hole cover outside front entrance to building
 - Removal and replacement of windows, and doors containing LBP
- Indoor firing range cleanup, including:
 - Lead dust cleanup: high efficiency particulate air (HEPA) vacuuming, wet washing, and sealing with appropriate sealant floors, walls, and ceiling
- HEPA vacuuming and wet washing of floors in the building
- Proper disposal of associated waste



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



This publication is issued by the Oklahoma Department of Environmental Quality authorized by Steven A. Thompson, Executive Director. Copies have been prepared at a cost of \$0.053 each. Copies have been deposited with the Publications Clearinghouse of the Oklahoma Department of Libraries. mullins\LPDI\Armories_SCAP\ArmoryReports\KingfisherArmory_6/2012.

**Former National Guard Armory
Kingfisher, Oklahoma**

Remediation Final Report



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



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



RECEIVED
AUG 21 2012
LAND PROTECTION DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

**NOTICE OF REMEDIATION AND EASEMENT
FORMER KINGFISHER ARMORY
KINGFISHER, OKLAHOMA**

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

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

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

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

REASON FOR NOTICE: The below described Affected Property was contaminated with materials that required remediation pursuant to state and federal environmental laws and regulations. Sampling performed by DEQ contractors, conducted on May 9, 2010, indicated that there was asbestos, lead-based paint, and lead dust in the building.

AFFECTED PROPERTY: The Affected Property is the former Kingfisher Armory located at 301 North 6th Street, Kingfisher, Kingfisher County, Oklahoma 73750

The legal description is as follows:

Lots Thirteen (13), Fourteen (14), Fifteen (15), Sixteen (16), Seventeen (17), and Eighteen (18) in Block Six (6) of the City of Kingfisher, County of Kingfisher, State of Oklahoma.

REMEDY: Remediation activities (Remedy) at the Affected Property included abatement of asbestos, lead-based paint and dust. The remedy was completed on March 19, 2012.

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

Oklahoma Department of Environmental Quality
Central Records

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

Physical Address
707 N Robinson
Oklahoma City, OK 73102

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

DISCLAIMER

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

CONTINUING OPERATION, MAINTENANCE AND MONITORING

- (A) **Lead-based paint encapsulant:** Lead-based paint encapsulant was applied over lead-based paint on non-friction surfaces. These areas should be periodically inspected and maintained as appropriate.
- (B) **Sealant:** Following cleanup, sealant was applied to the Indoor Firing Range (IFR) and room floors where lead-based paint abatement was performed. Sealant should be inspected on a periodic basis and maintained as appropriate.

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

- a. No residential use of the property by children age 6 or under. Residential use is defined as having a child present at the Affected Property for more than sixteen (16) hours within one twenty four (24) hour period.
- b. The IFR should not be used as a child occupied facility. Child-occupied facilities include, but are not limited to, day-care centers, preschools, and kindergarten classrooms where a child 6 or under spends at least 6 hours per week.

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

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

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

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

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



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

9-4-12

Date

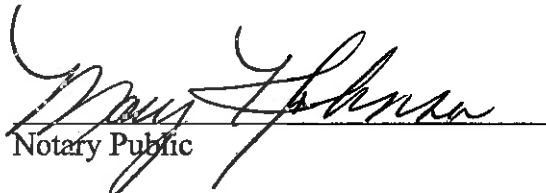
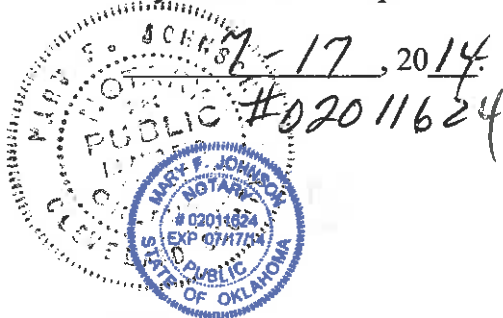
ACKNOWLEDGMENT

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 4th day of September, 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:



Notary Public

KINGFISHER ARMORY EASEMENT

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

Jack Steterville
Landowner

8-13-2012
Date

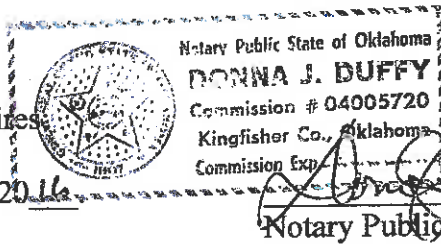
ACKNOWLEDGMENT

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 13th day of August, 2012, personally appeared Jack Steterville 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 6-25, 2016



Donna J. Duffy
Notary Public

When Recorded Mail To:

Name: Rebecca Marfort LPD, DEQ
Address: 707 N. Robinson
City: OKC, OK 73101
Date: _____

MAINTENANCE PLAN

**MAINTENANCE PLAN
FORMER KINGFISHER ARMORY
KINGFISHER, OKLAHOMA**

The Armory located at 301 North 6th Street, Kingfisher, 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 May 10, 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 March 20, 2012. The following maintenance plan is to be completed by the owner of the Affected Property. DEQ recommends inspection of remediated areas every 5 years. During site inspections the owner should note any signs of disrepair or improper maintenance. Continuing operation, maintenance and monitoring should include:

1. Firing Range – Walls, floor and ceiling of indoor firing range were cleaned and sealed with acrylic sealant to remediate surfaces below 40µg/SF for lead. These surfaces need to be resealed if acrylic sealant shows signs of deterioration, damage, or flaking.
2. All window lintels, window sills, down spouts, overhead door frames, wood overhead doors, and the indoor firing range vent fan frame were scrapped and encapsulated with lead-based paint encapsulant. These surfaces need to be re-encapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking.
3. The walls in Room #6 and Room #13 were scrapped and encapsulated with lead-based paint encapsulant. These surfaces need to be re-encapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking. See Attachment 2 for Kingfisher Armory Floor Plan Map.

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

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

Sincerely,



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

ATTACHMENT 1

Land use Restrictions

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

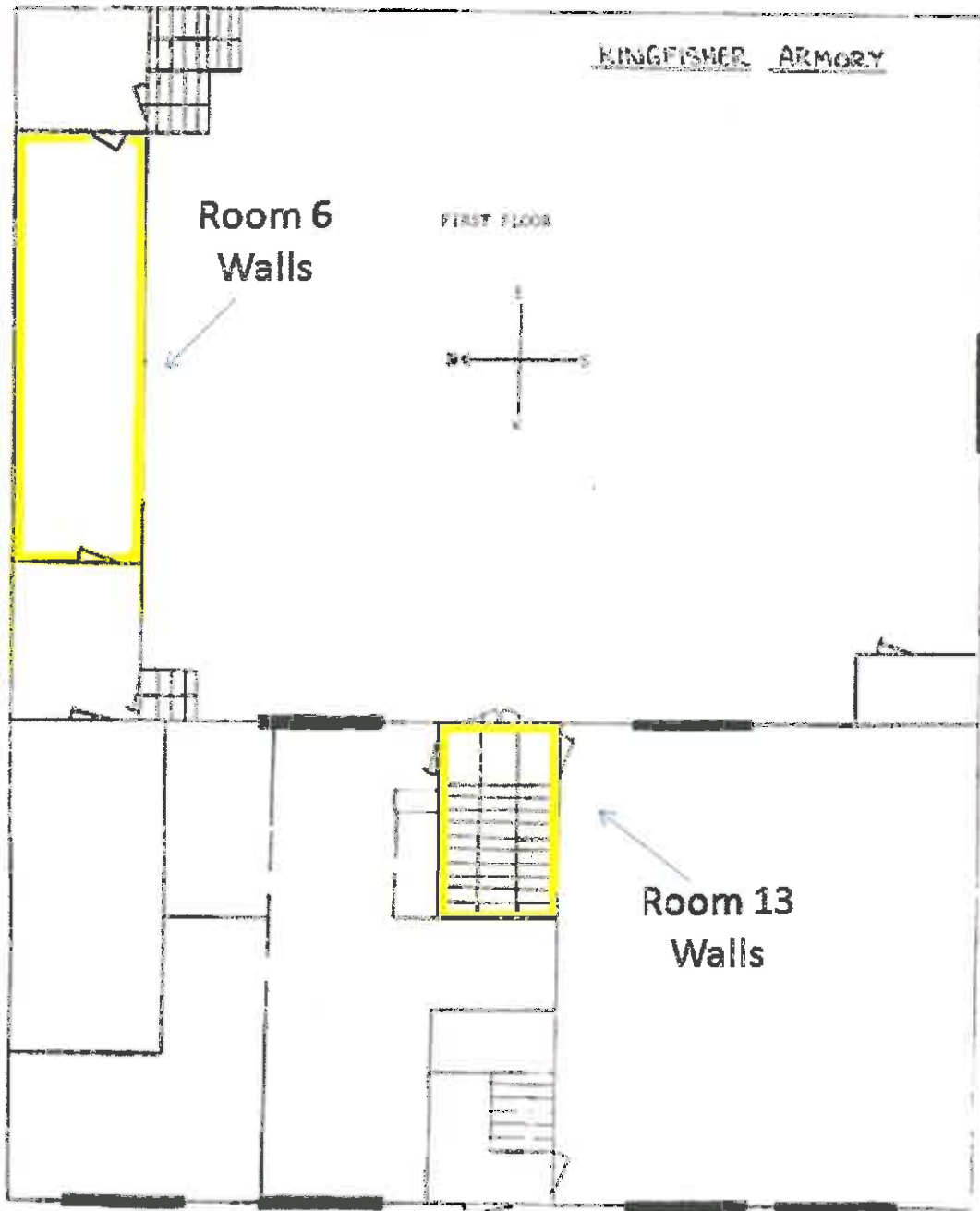
- a. No residential use of the property by children age 6 or under. Residential use is defined as having a child present at the Affected Property for more than sixteen (16) hours within one twenty four (24) hour period.
- b. The indoor firing range should not be used as a child occupied facility. Child occupied facilities include, but are not limited to, day-care centers, preschools, and kindergarten classrooms where a child under 6 spends at least 6 hours per week.

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

ATTACHMENT 2

Floor Plan Map

Labeled areas represent walls with encapsulant.



ATTACHMENT 3

DEQ Approved Sealants and Encapsulants List

Acrylic Sealant approved by DEQ

KM-669 Acrylic

Lead-Based Paint Encapsulants approved by DEQ

Encapsulant Manufacturer Product(s)	Encapsulant
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

KINGFISHER ARMORY

DCS Contract Number: ID009139-4

5-5-10 & 5-10-10

*Lead-Based Paint Inspection &
Settled-Dust Sampling*

Prepared For:

Oklahoma Department of Environmental Quality

Land Protection Division

707 North Robinson

Oklahoma City, Oklahoma 73102

Prepared By:

Marshall Environmental Management, Inc.

1601 Southwest 89th Street, Suite A-100

Oklahoma City, Oklahoma 73159

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CERTIFICATION

This is to certify that, Marshall Environmental Management, Inc. was contracted by the State of Oklahoma, Department of Central Services to conduct a Lead-Based Paint Inspection in addition to collecting samples of settled dust of the Kingfisher Armory located at 303 North 6th Street in Kingfisher, Oklahoma for the State of Oklahoma Department of Environmental Quality, Land Protection Division. All services performed on May 5, 2010 and May 10, 2010 were conducted by a Certified, Oklahoma Department of Environmental Quality, Lead-Based Paint Inspector/Risk Assessor, Jacob Jones, representative of Marshall Environmental Management, Inc., under the direction of Dr. Charles L. Marshall Certified Industrial Hygienist and President of Marshall Environmental Management, Inc. The analytical results associated with this Lead-Based Paint Inspection and settled dust sampling are believed to accurately, reflect the concentrations of lead in paint and settled dust that were present at the time this Inspection was accomplished.

CURRENT OWNER INFORMATION

State of Oklahoma

CERTIFIED LEAD-BASED PAINT INSPECTOR/RISK ASSESSOR



Jacob Jones, B.S., Industrial Hygiene Associate

Oklahoma Department of Environmental Quality Certification Number: OKRASR13457

7/25/2010

Date

CERTIFIED LEAD-BASED PAINT FIRM

Marshall Environmental Management, Inc.

1601 SW 89th Street, Suite A-100

Oklahoma City, OK 73159

Oklahoma Department of Environmental Quality Certification Number: OKFIRM11160

XRF INFORMATION

Analyzer Make: Niton XLp Spectrum Analyzer

Analyzer Model: #XLp 300A

Analyzer Serial Number: 12585

Source Date: November 11, 2006

INFORMATION REVIEWED AND APPROVED BY



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

7-25-10

Date

KINGFISHER ARMORY

LEAD-BASED PAINT INSPECTION

EXECUTIVE SUMMARY

Marshall Environmental Management, Inc. (MEM) performed a Lead-Based Paint (LBP) Inspection, in addition to collecting samples of settled dust on May 5, 2010 and May 10, 2010 at the Kingfisher Armory located 303 North 6th Street in Kingfisher, Oklahoma. This LBP Inspection and sampling event were accomplished as part of the Oklahoma Department of Environmental Quality (ODEQ), Land Protection Division (LPD) Site Cleanup Assistance Program and Armory Cleanup Program for the purpose of establishing the presence of lead-based paint and lead-laden dust, if present, so that a strategy may be prepared for remediation and/or abatement activities.

The analytical data resulting from the surfaces that were analyzed and the samples that were collected during this Lead-Based Paint Inspection and settled dust sampling event did identify lead-based paint and lead-laden dust on various surfaces throughout the Kingfisher Armory. As such, the remainder of this Report is comprised of the Scope of Service, the Analytical Findings, which include specific sampling locations and corresponding analytical data, information regarding the obligation to disclose the results of this LBP Inspection as well as information regarding lead-based paint.

SCOPE OF SERVICE

This LBP Inspection and settled dust sampling were conducted in accordance with the United States Department of Housing and Urban Development (HUD) Guidelines, "*Guidelines for the Evaluation of Lead-Based Paint Hazards in Housing*," in addition to the requirements set forth by the Environmental Protection Agency (EPA), "*Requirements for Lead-based Paint Activities in Target Housing and Child-occupied Facilities*," 40 Code of Federal Regulations (CFR) Part 745.

LEAD-BASED PAINT

All painted surfaces within the Armory were representatively sampled and analyzed for lead content excluding non-fixed and factory painted items utilizing an X-Ray Fluorescence (XRF), direct reading, data logging instrument. The street facing side of the Armory was labeled as Side A and going in a clockwise direction, the remaining sides were categorized as Side B, Side C and Side D respectively. Each door within the Armory was given a sequential number that corresponds with the associated analytical data indicated on the floor plan diagram included in the Appendix of this Report. Additionally, miscellaneous surfaces that were coated with "lead-based paint" are specified on the floor plan diagram attached with the Appendix to this Report.

LEAD-LADEN DUST

Settled dust collected from randomly selected floor surfaces throughout the Armory were sampled and analyzed for lead content. The settled dust is collected by placing a template of a known dimension firmly against the selected surface; next, the area within the template is wiped in a specific pattern utilizing a particular wipe; each wipe is then placed in an approved container for transportation purposes. The

laboratory data resulting from the analysis of the surface samples coincides with the sampling locations indicated on the floor plan diagram attached with the Appendix to this Report.

ANALYTICAL FINDINGS

LEAD-BASED PAINT

According to HUD/EPA "Lead-Based Paint" is characterized as paint that contains concentrations of lead greater than or equal to 1-milligram per square centimeter ($\geq 1\text{-mg/cm}^2$). The following tables list and categorize the painted surfaces in which the lead concentrations exceeded 1-mg/cm^2 therefore characterizing the surfaces listed below as positive for lead-based paint. Additionally, the analytical data, including the start and stop times and calibration checks, and the floor plan diagram, that illustrates room equivalents and specific sampling locations, are attached in the Appendix to this Report. Due to numerous windows being positive for LBP all windows will be characterized as LBP positive; therefore, the Appendix does not include a diagram associated with the windows.

TABLE 1: DOORS AND DOORJAMBS

DOOR NUMBER	DOOR RESULT	DOORJAMB RESULT	DIMENSIONS
1	NEGATIVE	NEGATIVE	N/A
2	POSITIVE	POSITIVE	3' x 7'
3	POSITIVE	POSITIVE	3' x 7'
4	POSITIVE	POSITIVE	3' x 7'
5	POSITIVE	POSITIVE	3' x 7'
6	POSITIVE	POSITIVE	3' x 7'
7	POSITIVE	POSITIVE	3' x 7'
8	POSITIVE	POSITIVE	3' x 7'
9	POSITIVE	POSITIVE	3' x 7'
10	POSITIVE	POSITIVE	3' x 7'
11	POSITIVE	POSITIVE	3' x 7'
12	POSITIVE	POSITIVE	3' x 7'
13	POSITIVE	POSITIVE	3' x 7'
14	POSITIVE	POSITIVE	3' x 7'
15	NO PAINT	NEGATIVE	N/A
16	NO DOOR	POSITIVE	6' x 7'
17	NO DOOR	POSITIVE	3' x 7'
18	NEGATIVE	POSITIVE	3' x 7'
19	POSITIVE	POSITIVE	6' x 7'
20	FACTORY FINISH	FACTORY FINISH	N/A
21	POSITIVE	POSITIVE	3' x 7'
22	POSITIVE	POSITIVE	3' x 7'
23	POSITIVE	POSITIVE	N/A
24	POSITIVE	POSITIVE	N/A
25	POSITIVE	POSITIVE	3' x 7'
26	NO DOOR	POSITIVE	3' x 7'

DOOR NUMBER	DOOR RESULT	DOORJAMB RESULT	DIMENSIONS
27	POSITIVE	POSITIVE	3' x 7'
28	NEGATIVE	NEGATIVE	N/A
29	POSITIVE	POSITIVE	3' x 7'
30	NO DOOR	POSITIVE	3' x 7'
31	POSITIVE	POSITIVE	3' x 7'
32	POSITIVE	POSITIVE	3' x 7'
33	POSITIVE	POSITIVE	3' x 7'
34	POSITIVE	POSITIVE	48"x84"
35	POSITIVE	POSITIVE	3' x 7'
(½ Door) 35	POSITIVE	POSITIVE	3' x 3'
36	POSITIVE	POSITIVE	3' x 7'
37	NEGATIVE	NEGATIVE	N/A
38	POSITIVE	POSITIVE	3' x 7'
39	NO DOOR	POSITIVE	3' x 7'
40	POSITIVE	POSITIVE	3' x 7'
41	POSITIVE	POSITIVE	3' x 7'
42	POSITIVE	POSITIVE	3' x 7'
43	POSITIVE	POSITIVE	3' x 7'
44	POSITIVE	POSITIVE	3' x 7'
45	NO PAINT	NO PAINT	N/A
46	NEGATIVE	POSITIVE	3' x 7'

TABLE 2: LEAD-BASE PAINTED MISCELLANEOUS SURFACES

LOCATION	SIDE	COMPONENT	SUBSTRATE	COLOR
EXTERIOR	A	OVERHEAD DOOR TRIM 1	METAL	WHITE
EXTERIOR	A	OVERHEAD DOOR TRIM 2	METAL	WHITE
EXTERIOR	A	OVERHEAD DOOR TRIM 3	METAL	WHITE
EXTERIOR	A	OVERHEAD DOOR TRIM 4	METAL	WHITE
EXTERIOR	B 1	ROOF DRAIN 1	METAL	BEIGE
EXTERIOR	B 2	ROOF DRAIN 2	METAL	BEIGE
EXTERIOR	B 2	VENT FRAME	WOOD	BEIGE
EXTERIOR	C	ROOF DRAIN 1	METAL	BEIGE
EXTERIOR	C	ROOF DRAIN 2	METAL	BEIGE
EXTERIOR	D	OVERHEAD DOOR FRAME	METAL	WHITE
EXTERIOR	D	ROOF DRAIN 1	METAL	WHITE
EXTERIOR	D	ROOF DRAIN 2	METAL	WHITE
EXTERIOR	A	CURB	CONCRETE	YELLOW
EXTERIOR	A	CURB	CONCRETE	RED
EXTERIOR	A	SIDEWALK	CONCRETE	YELLOW
EXTERIOR	A	HOLE COVER	CONCRETE	YELLOW
ROOM 1	C	OVERHEAD DOOR	WOOD	WHITE

LOCATION	SIDE	COMPONENT	SUBSTRATE	COLOR
ROOM 1	C	OVERHEAD DOOR TRIM	METAL	WHITE
ROOM 10	C	OVERHEAD DOOR (ASSUMED DATA)	WOOD	WHITE
ROOM 10	C	OVERHEAD DOOR TRIM	METAL	WHITE
ROOM 6	B	WALL	CONCRETE	SILVER
ROOM 8	C	STAIR RAIL	METAL	WHITE
ROOM 13	D	WALL	CONCRETE	WHITE

LEAD-LADEN DUST

In accordance with HUD/EPA, settled dust containing concentrations of lead equal to or greater than 40- $\mu\text{g}/\text{ft}^2$ represent lead contamination; this action level applies to all surfaces within the Armory excluding the Indoor Firing Range (IFR). According to the Departments of the Army National Guard (ARNG) and the Air Force National Guard (ANG) Bureau Guidelines, "Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges", lead concentrations within an IFR equal to or greater than 200- $\mu\text{g}/\text{ft}^2$ represent lead contamination. As follows, the table below reflects the lead concentrations identified in the settled dust that was collected throughout the Armory. The "Bolted" data represents lead concentrations, which exceeded their respective clearance levels. The laboratory results as well as the floor plan diagram, which indicates where the samples were collected, are attached in the Appendix to this Report.

TABLE 3: SURFACE WIPES

LAB ID	SAMPLE ID	LOCATION	CONCENTRATION	CLEARANCE LEVEL
0063-1	1	ROOM 1	39.36- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-2	2	ROOM 2	403.30- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-3	3	ROOM 3	140.18- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-4	4	ROOM 4	176.16- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-5	5	ROOM 5	375.56- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-6	6	ROOM 6	746.63- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-7	7	ROOM 7	884.56- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-8	8	ROOM 8	62.44- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-9	8-NORTH	DRILL FLOOR NORTH	191.00- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-10	8-SOUTH	DRILL FLOOR SOUTH	180.00- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-11	8-CENTER	DRILL FLOOR CENTER	36.80- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-12	9	ROOM 9	191.15- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-13	10	ROOM 10	147.68- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-14	11	ROOM 11	213.64- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-15	12	ROOM 12	624.44- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-16	13	ROOM 13	532.98- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-17	14	ROOM 14	1521.74- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-18	16	ROOM 16	43.10- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-19	17	ROOM 17	<23.99- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-20	18	ROOM 18	2196.40- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-21	19	ROOM 19	1101.95- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$

LAB ID	SAMPLE ID	LOCATION	CONCENTRATION	CLEARANCE LEVEL
0063-22	20	ROOM 20	263.87- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-23	21	ROOM 21	39.13- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-24	22	ROOM 22	1731.63- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-25	23	ROOM 23	699.40- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-26	24	ROOM 24	824.59- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-27	25	ROOM 25	1506.75- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-28	26	ROOM 26	139.43- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-29	27	ROOM 27	173.91- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-30	28	ROOM 28	568.22- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-31	29	ROOM 29	248.88- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-32	30	ROOM 30	72.49- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-33	31	ROOM 31	64.09- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-34	32	ROOM 32	<23.99- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-35	33	ROOM 33	300.60- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-36	34	ROOM 34	38.91- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-37	35	ROOM 35	603.45- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-38	36	ROOM 36	166.42- $\mu\text{g}/\text{ft}^2$	40- $\mu\text{g}/\text{ft}^2$
0063-39	W-IFR	IFR West	42100.00- $\mu\text{g}/\text{ft}^2$	200- $\mu\text{g}/\text{ft}^2$
0063-40	E-IFR	IFR East	800- $\mu\text{g}/\text{ft}^2$	200- $\mu\text{g}/\text{ft}^2$
0063-41	IFR-SR	IFR Side Room	8700- $\mu\text{g}/\text{ft}^2$	200- $\mu\text{g}/\text{ft}^2$

HISTORICAL OVERVIEW OF LEAD-BASED PAINT ACTIVITIES

Historical records were not provided for review nor was there evidence or information that would suggest that a prior LBP Inspection or Risk Assessment occurred at the Kingfisher Armory.

DISCLAIMER AND STANDARD OF CARE

The Kingfisher Armory is a two-story structure comprised of a brick façade with a partially flat and partially arched roof that was constructed on a concrete slab in approximately 1938. Although paint on various surfaces does not contain lead in concentrations that exceed the federal standard, a hazard could be presented if painted surfaces are disturbed. Occupational Safety and Health Administration (OSHA) regulations covering worker safety and health may apply when painted surfaces, lead-based paint or not, are disturbed. For any renovation that may disturb more than 2-square feet (2-ft²) of painted surface in a facility built before 1978 the EPA pre-renovation rule requires that the contractor provide a copy of the booklet “*Protect Your Family From Lead in Your Home*” or “*Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools.*” If renovation of any kind takes place the contractor should provide a copy of “*Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools.*” This Report was generated utilizing HUD/EPA protocols referenced in the Scope of Service, the analytical results associated with this LBP Inspection are only applicable on the date(s) this Inspection was performed and future activities could alter these results. At the time these services were completed, no deviations from the Scope of Service took place.

DISCLOSURE STATEMENT AND OWNERS LEGAL OBLIGATION

Under Federal law (24 CFR part 35 and 40 CFR part 745) to the extent this facility would be covered by HUD/EPA, this LBP Inspection Report must be disclosed and made available to prospective tenants before becoming obligated under a lease or sales contract where lead-based paint is present. If an Inspection finds that lead-based paint is not present in certain individual units, which are to be leased, the individual unit(s) is exempt from disclosure requirements. However, under federal law **even if no lead-based paint is identified** the owner is still required to fulfill certain legal responsibilities when the property is sold not leased. Property owners and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that information is provided in order to protect children from lead-based paint hazards.

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

LEAD-BASED PAINT INFORMATION

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

APPENDIX

XRF ANALYTICAL DATA

(CALIBRATION CHECKS & START & STOP TIMES)

SURFACE WIPES CHAIN OF CUSTODY & ANALYTICAL DATA

FLOOR PLAN DIAGRAMS

DOORS & DOORJAMBS

LBP MISCELLANEOUS SURFACES

SURFACE WIPES

DIGITAL PHOTOGRAPHS

CERTIFICATIONS

Index	Time	Units	Component	Substrate	Side	Color	Results	Axium Level	Ppk
5	2010-05-05 10:31	mg / cm ^2			CALIBRATE		Positive	1.00	< LOD : 0.60
6	2010-05-05 10:33	mg / cm ^2			CALIBRATE		Positive	1.00	< LOD : 0.60
7	2010-05-05 10:34	mg / cm ^2			CALIBRATE		Positive	1.00	< LOD : 0.60
10	2010-05-05 12:12	mg / cm ^2	WALL	CONCRETE	A	WHITE	Negative	1.00	< LOD : 1.80
11	2010-05-05 12:14	mg / cm ^2	WALL TRIM	CONCRETE	A	WHITE	Negative	1.00	< LOD : 1.80
12	2010-05-05 12:15	mg / cm ^2	OVERHEAD DOOR TRIM	METAL	A #1	WHITE	Positive	1.00	< LOD : 4.95
13	2010-05-05 12:16	mg / cm ^2	OVERHEAD DOOR TRIM	METAL	A #2	WHITE	Positive	1.00	3.30 ± 2.20
14	2010-05-05 12:17	mg / cm ^2	OVERHEAD DOOR TRIM	METAL	A #3	WHITE	Positive	1.00	< LOD : 5.40
15	2010-05-05 12:18	mg / cm ^2	OVERHEAD DOOR TRIM (DUP)	METAL	A #4	WHITE	Positive	1.00	< LOD : 9.15
17	2010-05-05 12:19	mg / cm ^2	OVERHEAD DOOR TRIM	METAL	A #4	WHITE	Positive	1.00	5.40 ± 3.40
18	2010-05-05 12:21	mg / cm ^2	GARAGE DOOR	METAL	A #1	WHITE	Negative	1.00	< LOD : 2.61
19	2010-05-05 12:22	mg / cm ^2	GARAGE DOOR	METAL	A #3	WHITE	Negative	1.00	< LOD : 2.41
20	2010-05-05 12:23	mg / cm ^2	BRICK ENTRANCE	CONCRETE	A	RED	Negative	1.00	< LOD : 3.30
21	2010-05-05 12:24	mg / cm ^2	PANELING ADJ TO DOOR	WOOD	A	RED	Negative	1.00	< LOD : 2.15
22	2010-05-05 12:25	mg / cm ^2	DOOR FRAME	METAL	A	RED	Negative	1.00	< LOD : 3.09
23	2010-05-05 12:26	mg / cm ^2	STEP	CONCRETE	A	RED	Negative	1.00	< LOD : 1.05
24	2010-05-05 12:27	mg / cm ^2	STEP	CONCRETE	A	BLACK	Negative	1.00	< LOD : 2.45
25	2010-05-05 12:29	mg / cm ^2	ROOF DRAIN	METAL	B #1	BEIGE	Positive	1.00	5.50 ± 3.60
26	2010-05-05 12:30	mg / cm ^2	ROOF DRAIN	METAL	B #2	BEIGE	Positive	1.00	< LOD : 10.65
27	2010-05-05 12:32	mg / cm ^2	CONDUIT	METAL	B	BEIGE	Negative	1.00	< LOD : 3.75
28	2010-05-05 12:33	mg / cm ^2	WINDOW 1	METAL	B	BEIGE	Negative	1.00	< LOD : 3.45
29	2010-05-05 12:36	mg / cm ^2	WINDOW 3	METAL	B	BEIGE	Positive	1.00	1.00 ± 0.40
30	2010-05-05 12:40	mg / cm ^2	WINDOW 4	METAL	B 2	BEIGE	Negative	1.00	< LOD : 2.10
31	2010-05-05 12:41	mg / cm ^2	WINDOW 4 PAINT ON GLASS	GLASS	B 2	BEIGE	Negative	1.00	< LOD : 2.15
32	2010-05-05 12:42	mg / cm ^2	WINDOW 5	METAL	B 2	BEIGE	Positive	1.00	< LOD : 1.50
35	2010-05-05 12:46	mg / cm ^2	WINDOW 7	METAL	B 2	BEIGE	Negative	1.00	< LOD : 1.20
36	2010-05-05 12:50	mg / cm ^2	VENT FRAMR	WOOD	B 2	BEIGE	Positive	1.00	< LOD : 2.70
37	2010-05-05 12:51	mg / cm ^2	VENT FRAMR	CONCRETE	B 2	BEIGE	Negative	1.00	< LOD : 2.28
38	2010-05-05 12:52	mg / cm ^2	WINDOW	METAL	C	BEIGE	Negative	1.00	< LOD : 5.55
39	2010-05-05 12:53	mg / cm ^2	WINDOW 1	METAL	C	BEIGE	Negative	1.00	< LOD : 3.60
40	2010-05-05 12:53	mg / cm ^2	WINDOW 4	METAL	C	BEIGE	Negative	1.00	< LOD : 4.80
41	2010-05-05 12:54	mg / cm ^2	ROOF DRAIN	METAL	C	BEIGE	Positive	1.00	< LOD : 5.25
42	2010-05-05 12:55	mg / cm ^2	ROOF DRAIN 2	METAL	C	BEIGE	Positive	1.00	< LOD : 9.45
43	2010-05-05 12:56	mg / cm ^2	WINDOW LEDGE	CONCRETE	C	BEIGE	Negative	1.00	< LOD : 2.49
44	2010-05-05 12:57	mg / cm ^2	WINDOW 8	METAL	C	BEIGE	Negative	1.00	< LOD : 1.20
47	2010-05-05 12:59	mg / cm ^2	TRIM	CONCRETE	D	WHITE	Negative	1.00	< LOD : 1.20
48	2010-05-05 13:00	mg / cm ^2	DOOR	METAL	D	GREY	Negative	1.00	< LOD : 3.14
49	2010-05-05 13:00	mg / cm ^2	DOOR FRAME	METAL	D	GREY	Negative	1.00	< LOD : 3.35
50	2010-05-05 13:01	mg / cm ^2	WINDOW	METAL	D	BEIGE	Negative	1.00	< LOD : 5.40
52	2010-05-05 13:02	mg / cm ^2	WINDOW 3	METAL	D	BEIGE	Negative	1.00	< LOD : 1.20
53	2010-05-05 13:03	mg / cm ^2	OVERHEAD DOOR FRAME	METAL	D	WHITE	Positive	1.00	5.60 ± 3.40
54	2010-05-05 13:04	mg / cm ^2	GARAGE DOOR	METAL	D	WHITE	Negative	1.00	< LOD : 2.49
55	2010-05-05 13:05	mg / cm ^2	GARAGE DOOR	CONCRETE	D	WHITE	Negative	1.00	< LOD : 0.90

Index	Time	Units	Component	Substrate	Side	Color	Results	Action Level	PLPK
57	2010-05-05 13:06	mg / cm ^2	WINDOW LEDGE	CONCRETE	D	WHITE	Negative	1.00	< LOD : 1.80
58	2010-05-05 13:07	mg / cm ^2	DOOR	METAL	D	GREY	Negative	1.00	< LOD : 2.98
59	2010-05-05 13:08	mg / cm ^2	DOOR FRAME	METAL	D	GREY	Negative	1.00	< LOD : 3.62
60	2010-05-05 13:09	mg / cm ^2	ROOF DRAIN	METAL	D	WHITE	Positive	1.00	< LOD : 6.00
61	2010-05-05 13:09	mg / cm ^2	ROOF DRAIN #2	METAL	D	WHITE	Positive	1.00	< LOD : 3.00
62	2010-05-05 13:11	mg / cm ^2	WINDOW #6	METAL	D.2	WHITE	Negative	1.00	< LOD : 0.51
63	2010-05-05 13:15	mg / cm ^2	WALL	CONCRETE	ROOM 1 A	SILVER	Negative	1.00	< LOD : 3.75
66	2010-05-05 13:16	mg / cm ^2	WALL	CONCRETE	ROOM 1 B	SILVER	Negative	1.00	< LOD : 1.05
67	2010-05-05 13:18	mg / cm ^2	WALL	CONCRETE	ROOM 1 C	SILVER	Negative	1.00	< LOD : 0.60
68	2010-05-05 13:19	mg / cm ^2	WALL	CONCRETE	Room 1 C.2	WHITE	Negative	1.00	< LOD : 1.05
69	2010-05-05 13:20	mg / cm ^2	OVERHEAD DOOR	WOOD	ROOM 1 C	WHITE	Positive	1.00	< LOD : 2.37
73	2010-05-05 13:23	mg / cm ^2	WALL	CONCRETE	ROOM 1 D	WHITE	Negative	1.00	< LOD : 11.70
75	2010-05-05 13:25	mg / cm ^2	WALL	CONCRETE	ROOM 3 a	WHITE	Negative	1.00	< LOD : 0.90
76	2010-05-05 13:26	mg / cm ^2	WALL	CONCRETE	ROOM 3 b	WHITE	Negative	1.00	0.09 ± 0.06
77	2010-05-05 13:26	mg / cm ^2	WALL	CONCRETE	ROOM 3 C	WHITE	Negative	1.00	< LOD : 0.14
78	2010-05-05 13:27	mg / cm ^2	WALL	CONCRETE	ROOM 3 D	WHITE	Negative	1.00	< LOD : 0.13
79	2010-05-05 13:29	mg / cm ^2	WALL	CONCRETE	ROOM 3 D	WHITE	Negative	1.00	< LOD : 0.18
80	2010-05-05 13:30	mg / cm ^2	WALL	CONCRETE	ROOM 4 A	WHITE	Negative	1.00	< LOD : 1.95
81	2010-05-05 13:31	mg / cm ^2	WALL	CONCRETE	ROOM 4 B	WHITE	Negative	1.00	< LOD : 1.80
82	2010-05-05 13:32	mg / cm ^2	WALL	CONCRETE	ROOM 4 C	WHITE	Negative	1.00	< LOD : 2.07
83	2010-05-05 13:36	mg / cm ^2	WALL	CONCRETE	ROOM 4 D	WHITE	Negative	1.00	< LOD : 0.03
84	2010-05-05 13:37	mg / cm ^2	WALL	CONCRETE	ROOM 10 A	WHITE	Negative	1.00	< LOD : 1.05
85	2010-05-05 13:38	mg / cm ^2	WALL	CONCRETE	ROOM 10 B	WHITE	Negative	1.00	< LOD : 2.13
86	2010-05-05 13:38	mg / cm ^2	WALL	CONCRETE	ROOM 10 B	WHITE	Negative	1.00	< LOD : 2.94
87	2010-05-05 13:39	mg / cm ^2	WALL	CONCRETE	ROOM 10 C	WHITE	Negative	1.00	< LOD : 2.29
88	2010-05-05 13:39	mg / cm ^2	WALL	CONCRETE	ROOM 10 C	WHITE	Negative	1.00	< LOD : 3.07
91	2010-05-05 13:41	mg / cm ^2	WALL	CONCRETE	ROOM 10 D	BLUE	Negative	1.00	< LOD : 2.95
93	2010-05-05 13:42	mg / cm ^2	WALL	CONCRETE	ROOM 8 A	BEIGE	Negative	1.00	< LOD : 2.91
94	2010-05-05 13:44	mg / cm ^2	WALL	CONCRETE	ROOM 8 B	WHITE	Negative	1.00	< LOD : 2.20
95	2010-05-05 13:45	mg / cm ^2	WALL	CONCRETE	ROOM 8 C	WHITE	Negative	1.00	< LOD : 2.09
96	2010-05-05 13:47	mg / cm ^2	WALL	CONCRETE	ROOM 8 D	WHITE	Negative	1.00	< LOD : 2.58
98	2010-05-05 13:47	mg / cm ^2	WALL	CONCRETE	ROOM 5 a	WHITE	Negative	1.00	< LOD : 2.42
100	2010-05-05 13:48	mg / cm ^2	WALL	CONCRETE	ROOM 5 a	RED	Negative	1.00	< LOD : 2.08
101	2010-05-05 13:48	mg / cm ^2	WALL	CONCRETE	ROOM 5 b	RED	Negative	1.00	< LOD : 2.78
103	2010-05-05 13:50	mg / cm ^2	WALL	CONCRETE	ROOM 5 d	RED	Negative	1.00	< LOD : 2.11
104	2010-05-05 13:52	mg / cm ^2	CONDUIT	CONCRETE	ROOM 5 c	RED	Negative	1.00	< LOD : 1.05
105	2010-05-05 13:53	mg / cm ^2	WALL	METAL	ROOM 5 D	BLACK	Negative	1.00	< LOD : 0.90
106	2010-05-05 13:54	mg / cm ^2	WALL	CONCRETE	ROOM 4 A	BLUE	Negative	1.00	< LOD : 3.15
107	2010-05-05 13:54	mg / cm ^2	WALL	CONCRETE	ROOM 4 B	BLUE	Negative	1.00	< LOD : 2.76
108	2010-05-05 13:55	mg / cm ^2	WALL	CONCRETE	ROOM 4 C	BLUE	Negative	1.00	< LOD : 2.14
109	2010-05-05 13:56	mg / cm ^2	WINDOW	CONCRETE	ROOM 4 D	BLUE	Negative	1.00	< LOD : 1.17
110	2010-05-05 13:57	mg / cm ^2	WALL	METAL	ROOM 4 B	BLUE	Negative	1.00	< LOD : 2.18
111	2010-05-05 13:58	mg / cm ^2	WALL	CONCRETE	ROOM 6 A	SILVER	Negative	1.00	< LOD : 2.32
				CONCRETE	ROOM 6 b	SILVER	Positive	1.00	< LOD : 1.95
							3.00 ± 1.90		< LOD : 15.60

Index	Time	Units	Component	Substrate	Side	Color	Results	Acidim Level	pH	Temp
112	2010-05-05 13:59	mg/cm ²	WALL	CONCRETE	ROOM 6 a	SILVER	Negative	1.00	< LOD: 0.03	< LOD: 2.14
113	2010-05-05 13:59	mg/cm ²	WALL (DUP)	CONCRETE	ROOM 6 b	SILVER	Positive	1.00	< LOD: 18.00	< LOD: 25.35
114	2010-05-05 14:04	mg/cm ²	WALL	CONCRETE	ROOM 6 c	SILVER	Negative	1.00	< LOD: 0.03	< LOD: 1.95
117	2010-05-05 14:05	mg/cm ²	WALL	CONCRETE	ROOM 6 c	SILVER	Negative	1.00	< LOD: 0.03	< LOD: 2.65
118	2010-05-05 14:07	mg/cm ²	STAIR	CONCRETE	ROOM 8 c	GREY	Negative	1.00	< LOD: 0.07	< LOD: 2.29
119	2010-05-05 14:08	mg/cm ²	STAIR	CONCRETE	ROOM 8 c	RED	Negative	1.00	< LOD: 0.21	< LOD: 2.48
120	2010-05-05 14:09	mg/cm ²	STAIR RAIL	CONCRETE	ROOM 8 c	WHITE	Positive	1.00	< LOD: 3.60	< LOD: 10.65
122	2010-05-05 14:15	mg/cm ²	PIPE	METAL	ROOM 8 c	RED	Negative	1.00	< LOD: 0.09	< LOD: 2.70
124	2010-05-05 14:17	mg/cm ²	PIPE	CONCRETE	IFR A	WHITE	Negative	1.00	< LOD: 0.03	< LOD: 2.25
125	2010-05-05 14:18	mg/cm ²	PIPE	CONCRETE	IFR B	WHITE	Negative	1.00	< LOD: 0.12	< LOD: 2.54
126	2010-05-05 14:18	mg/cm ²	PIPE	CONCRETE	IFR C	WHITE	Negative	1.00	< LOD: 0.03	< LOD: 2.20
127	2010-05-05 14:19	mg/cm ²	WALL	CONCRETE	IFR D	WHITE	Negative	1.00	< LOD: 0.03	< LOD: 2.04
128	2010-05-05 14:21	mg/cm ²	WALL	CONCRETE	ROOM 7 a	WHITE	Negative	1.00	< LOD: 0.03	< LOD: 2.18
129	2010-05-05 14:22	mg/cm ²	WALL	CONCRETE	ROOM 7 B	WHITE	Negative	1.00	< LOD: 0.04	< LOD: 2.48
130	2010-05-05 14:22	mg/cm ²	WALL	CONCRETE	ROOM 7 C	WHITE	Negative	1.00	< LOD: 0.03	< LOD: 2.44
131	2010-05-05 14:23	mg/cm ²	WALL	CONCRETE	ROOM 7 D	WHITE	Negative	1.00	< LOD: 0.03	< LOD: 2.22
132	2010-05-05 14:27	mg/cm ²	CURB	CONCRETE	A	YELLOW	Positive	1.00	1.70 ± 0.60	< LOD: 4.20
133	2010-05-05 14:28	mg/cm ²	CURB	CONCRETE	A	RED	Positive	1.00	1.60 ± 0.60	< LOD: 3.45
134	2010-05-05 14:30	mg/cm ²	SIDEWALK	CONCRETE	A	YELLOW	Positive	1.00	1.20 ± 0.20	< LOD: 1.20
135	2010-05-05 14:31	mg/cm ²	HOLE COVER	CONCRETE	A	YELLOW	Positive	1.00	1.20 ± 0.20	< LOD: 1.35
136	2010-05-05 14:37	mg/cm ²					Negative	1.00	0.90 ± 0.10	1.10 ± 0.50
137	2010-05-05 14:40	mg/cm ²		CALIBRATE	CALIBRATE		Positive	1.00	1.00 ± 0.10	1.20 ± 0.20
138	2010-05-05 14:41	mg/cm ²		CALIBRATE	CALIBRATE		Positive	1.00	1.10 ± 0.10	1.20 ± 0.40
141	2010-05-10 09:34	mg/cm ²		CALIBRATE	CALIBRATE		Positive	1.00	0.90 ± 0.10	0.90 ± 0.40
142	2010-05-10 09:37	mg/cm ²		CALIBRATE	CALIBRATE		Positive	1.00	1.00 ± 0.10	0.80 ± 0.20
145	2010-05-10 09:40	mg/cm ²					Positive	1.00	1.10 ± 0.10	< LOD: 0.60
146	2010-05-10 09:43	mg/cm ²					Negative	1.00	< LOD: 0.07	< LOD: 2.37
147	2010-05-10 09:44	mg/cm ²	WALL	CONCRETE	ROOM 13 B	WHITE	Negative	1.00	0.80 ± 0.20	1.70 ± 0.70
148	2010-05-10 09:46	mg/cm ²	FLOOR	CONCRETE	ROOM 13	GREY	Negative	1.00	< LOD: 0.24	< LOD: 3.02
149	2010-05-10 09:46	mg/cm ²	FLOOR	CONCRETE	ROOM 13	RED	Negative	1.00	< LOD: 0.57	< LOD: 2.60
150	2010-05-10 09:47	mg/cm ²	STAIR	CONCRETE	ROOM 13	GREY	Negative	1.00	< LOD: 0.15	< LOD: 2.40
154	2010-05-10 09:49	mg/cm ²	WALL	CONCRETE	ROOM 13 B	WHITE	Negative	1.00	< LOD: 0.07	< LOD: 2.58
159	2010-05-10 09:54	mg/cm ²	WALL	CONCRETE	ROOM 12 a	WHITE	Negative	1.00	< LOD: 0.15	< LOD: 1.94
161	2010-05-10 09:55	mg/cm ²	WALL	CONCRETE	ROOM 12 b	WHITE	Negative	1.00	< LOD: 0.08	< LOD: 2.05
162	2010-05-10 09:56	mg/cm ²	WALL	CONCRETE	ROOM 12 c	WHITE	Negative	1.00	< LOD: 0.27	< LOD: 2.11
163	2010-05-10 09:56	mg/cm ²	WALL	CONCRETE	ROOM 12 c	RED	Negative	1.00	< LOD: 0.09	< LOD: 1.20
165	2010-05-10 09:58	mg/cm ²	WALL	CONCRETE	ROOM 12 c	WHITE	Negative	1.00	< LOD: 0.46	< LOD: 2.16
166	2010-05-10 09:58	mg/cm ²	STAIR	CONCRETE	ROOM 12	RED	Negative	1.00	< LOD: 0.08	< LOD: 2.26
167	2010-05-10 09:59	mg/cm ²	FLOOR	CONCRETE	ROOM 12	RED	Negative	1.00	< LOD: 0.08	< LOD: 2.37
169	2010-05-10 10:01	mg/cm ²	WALL	CONCRETE	ROOM 14 A	WHITE	Negative	1.00	< LOD: 0.03	< LOD: 1.80
170	2010-05-10 10:02	mg/cm ²	WINDOW	METAL	ROOM 14 A	WHITE	Positive	1.00	2.10 ± 1.10	< LOD: 6.30
171	2010-05-10 10:03	mg/cm ²	WALL	CONCRETE	ROOM 14 B	WHITE	Negative	1.00	< LOD: 0.03	< LOD: 2.17
172	2010-05-10 10:04	mg/cm ²	WALL	CONCRETE	ROOM 14 D	WHITE	Negative	1.00	< LOD: 0.05	< LOD: 2.08

Index	Time	Units	Component	Substrate	Side	Color	Results	Action Level	PH	Pbk
174	2010-05-10 10:05	mg / cm ^2	WALL	CONCRETE	ROOM 14 D	RBD	Negative	1.00	< LOD : 0.17	< LOD : 2.07
176	2010-05-10 10:06	mg / cm ^2	STAIR	CONCRETE	ROOM 14 D	RED	Negative	1.00	< LOD : 0.24	< LOD : 3.27
177	2010-05-10 10:08	mg / cm ^2	WINDOW	METAL	ROOM 16 A	WHITE	Positive	1.00	< LOD : 3.00	< LOD : 10.20
179	2010-05-10 10:10	mg / cm ^2	WALL AROUND WINDOW	CONCRETE	ROOM 16 A	WHITE	Negative	1.00	< LOD : 0.05	< LOD : 3.09
180	2010-05-10 10:10	mg / cm ^2	WALL AROUND WINDOW	CONCRETE	ROOM 16 B	WHITE	Negative	1.00	< LOD : 2.42	< LOD : 2.42
181	2010-05-10 10:11	mg / cm ^2	WALL AROUND WINDOW	CONCRETE	ROOM 16 B	GREEN	Negative	1.00	< LOD : 0.17	< LOD : 2.28
182	2010-05-10 10:17	mg / cm ^2	WALL	CONCRETE	ROOM 17 B	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 1.97
183	2010-05-10 10:17	mg / cm ^2	WALL	WOOD	ROOM 17 B	GREY	Negative	1.00	< LOD : 0.03	< LOD : 2.40
184	2010-05-10 10:37	mg / cm ^2	WALL	CONCRETE	ROOM 17 A	RBD	Negative	1.00	< LOD : 0.03	< LOD : 1.80
185	2010-05-10 10:38	mg / cm ^2	WALL	CONCRETE	ROOM 17 C	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 1.95
186	2010-05-10 10:39	mg / cm ^2	WALL	CONCRETE	ROOM 17 D	WHITE	Negative	1.00	< LOD : 0.04	< LOD : 2.67
187	2010-05-10 10:40	mg / cm ^2	FLOOR	CONCRETE	ROOM 17	GREY	Negative	1.00	< LOD : 0.06	< LOD : 1.92
188	2010-05-10 10:41	mg / cm ^2	WALL	CONCRETE	ROOM 18 A	SILVER	Negative	1.00	< LOD : 0.03	< LOD : 2.26
189	2010-05-10 10:43	mg / cm ^2	WALL	CONCRETE	ROOM 18 B	SILVER	Negative	1.00	< LOD : 0.03	< LOD : 0.60
191	2010-05-10 10:43	mg / cm ^2	WALL	CONCRETE	ROOM 18 C	SILVER	Negative	1.00	< LOD : 0.03	< LOD : 1.80
192	2010-05-10 10:44	mg / cm ^2	WALL	CONCRETE	ROOM 19 A	WHITE	Negative	1.00	< LOD : 0.04	< LOD : 2.10
193	2010-05-10 10:45	mg / cm ^2	WALL	CONCRETE	ROOM 19 B	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 2.11
194	2010-05-10 10:46	mg / cm ^2	WALL	CONCRETE	ROOM 19 C	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 1.80
195	2010-05-10 10:47	mg / cm ^2	FLOOR	CONCRETE	ROOM 19	GREY	Negative	1.00	< LOD : 0.16	< LOD : 2.40
196	2010-05-10 10:48	mg / cm ^2	PIPE	METAL	ROOM 19 A	WHITE	Negative	1.00	< LOD : 0.90	< LOD : 0.75
197	2010-05-10 10:49	mg / cm ^2	PIPE	CONCRETE	ROOM 19 D	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 1.05
198	2010-05-10 10:50	mg / cm ^2	WALL	METAL	ROOM 18 B	SILVER	Negative	1.00	< LOD : 0.11	< LOD : 5.40
199	2010-05-10 10:52	mg / cm ^2	CABINETS	WOOD	ROOM 20 D	WHITE	Negative	1.00	< LOD : 0.04	< LOD : 2.52
200	2010-05-10 10:52	mg / cm ^2	WALL	CONCRETE	ROOM 20 B	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 2.02
201	2010-05-10 10:54	mg / cm ^2	WALL	CONCRETE	ROOM 20 A	WHITE	Negative	1.00	0.40 ± 0.10	< LOD : 1.20
202	2010-05-10 10:56	mg / cm ^2	WINDOW	METAL	ROOM 20 B	GREEN	Positive	1.00	2.90 ± 1.70	< LOD : 8.85
203	2010-05-10 10:57	mg / cm ^2	WALL	WOOD	ROOM 20 C	GREEN	Negative	1.00	< LOD : 0.03	< LOD : 2.70
204	2010-05-10 10:58	mg / cm ^2	WALL	WOOD	ROOM 20 C	WHITE	Negative	1.00	< LOD : 0.04	< LOD : 2.59
205	2010-05-10 10:59	mg / cm ^2	FLOOR	WOOD	ROOM 20	GREY	Negative	1.00	< LOD : 0.11	< LOD : 2.26
207	2010-05-10 10:59	mg / cm ^2	FLOOR	WOOD	ROOM 20	RED	Negative	1.00	< LOD : 0.07	< LOD : 2.37
208	2010-05-10 11:00	mg / cm ^2	FLOOR	CONCRETE	ROOM 20	YELLOW	Negative	1.00	< LOD : 0.06	< LOD : 2.22
213	2010-05-10 11:03	mg / cm ^2	WALL	CONCRETE	ROOM 21 A	WHITE	Negative	1.00	< LOD : 0.05	< LOD : 2.95
214	2010-05-10 11:04	mg / cm ^2	WALL	CONCRETE	ROOM 21 B	WHITE	Negative	1.00	< LOD : 0.07	< LOD : 1.80
215	2010-05-10 11:04	mg / cm ^2	WINDOW	METAL	ROOM 21 B	WHITE	Positive	1.00	1.99 ± 0.70	< LOD : 4.35
216	2010-05-10 11:05	mg / cm ^2	WALL	CONCRETE	ROOM 21 B	RED	Negative	1.00	< LOD : 0.03	< LOD : 2.10
218	2010-05-10 11:06	mg / cm ^2	WALL	CONCRETE	ROOM 21 C	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 3.00
219	2010-05-10 11:08	mg / cm ^2	WALL	CONCRETE	ROOM 21 D	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 1.80
220	2010-05-10 11:09	mg / cm ^2	WALL	CONCRETE	ROOM 22 A	WHITE	Negative	1.00	< LOD : 0.08	< LOD : 2.06
221	2010-05-10 11:09	mg / cm ^2	WALL	CONCRETE	ROOM 22 B	WHITE	Negative	1.00	< LOD : 0.07	< LOD : 2.52
222	2010-05-10 11:10	mg / cm ^2	WALL	CONCRETE	ROOM 22 C	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 2.27
223	2010-05-10 11:11	mg / cm ^2	WALL	CONCRETE	ROOM 22 D	WHITE	Negative	1.00	< LOD : 0.13	< LOD : 2.37
224	2010-05-10 11:12	mg / cm ^2	WALL	CONCRETE	ROOM 23 A	SILVER	Negative	1.00	< LOD : 0.03	< LOD : 2.29
225	2010-05-10 11:13	mg / cm ^2	WALL	CONCRETE	ROOM 23 B	SILVER	Negative	1.00	< LOD : 0.03	< LOD : 1.20

Index	Time	Units	Component	Substrate	Side	Color	Results	Acidm Level	pH	PbK
226	2010-05-10 11:14	mg / cm ^2	WALL	CONCRETE	ROOM 23 C	SILVER	Negative	1.00	< LOD : 0.03	< LOD : 2.30
227	2010-05-10 11:15	mg / cm ^2	WALL	CONCRETE	ROOM 23 D	SILVER	Negative	1.00	< LOD : 0.03	< LOD : 2.10
228	2010-05-10 11:16	mg / cm ^2	FLOOR	CONCRETE	ROOM 22	GREEN	Negative	1.00	0.50 ± 0.10	< LOD : 1.35
229	2010-05-10 11:16	mg / cm ^2	FLOOR	CONCRETE	ROOM 23	GREY	Negative	1.00	< LOD : 0.07	< LOD : 2.16
230	2010-05-10 11:19	mg / cm ^2	FLOOR	CONCRETE	ROOM 24	GREY	Negative	1.00	< LOD : 0.09	< LOD : 2.49
231	2010-05-10 11:21	mg / cm ^2	WALL	CONCRETE	ROOM 25 A	WHITE	Negative	1.00	< LOD : 0.22	< LOD : 3.20
232	2010-05-10 11:22	mg / cm ^2	WALL	CONCRETE	ROOM 25 B	WHITE	Negative	1.00	< LOD : 0.10	< LOD : 2.07
234	2010-05-10 11:23	mg / cm ^2	WALL	CONCRETE	ROOM 25 B	BROWN	Negative	1.00	< LOD : 0.03	< LOD : 2.49
236	2010-05-10 11:24	mg / cm ^2	WALL	CONCRETE	ROOM 25 B	GREEN	Negative	1.00	< LOD : 0.03	< LOD : 1.95
238	2010-05-10 11:25	mg / cm ^2	WALL	CONCRETE	ROOM 25 B	BLACK	Negative	1.00	< LOD : 0.05	< LOD : 2.00
243	2010-05-10 11:26	mg / cm ^2	WALL	CONCRETE	ROOM 25 B	BLACK	Negative	1.00	< LOD : 0.20	< LOD : 1.95
244	2010-05-10 11:27	mg / cm ^2	WALL	CONCRETE	ROOM 25 C	BEIGE	Negative	1.00	< LOD : 0.05	< LOD : 2.56
245	2010-05-10 11:27	mg / cm ^2	WALL	CONCRETE	ROOM 25 C	WHITE	Negative	1.00	< LOD : 0.04	< LOD : 2.42
246	2010-05-10 11:28	mg / cm ^2	WALL	CONCRETE	ROOM 25 C	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 2.38
247	2010-05-10 11:29	mg / cm ^2	WALL	CONCRETE	ROOM 25 D	GREY	Negative	1.00	< LOD : 0.28	< LOD : 2.22
248	2010-05-10 11:30	mg / cm ^2	FLOOR	CONCRETE	ROOM 25	SILVER	Negative	1.00	< LOD : 0.06	< LOD : 3.28
249	2010-05-10 11:31	mg / cm ^2	WALL	CONCRETE	ROOM 24 A	SILVER	Negative	1.00	< LOD : 0.03	< LOD : 0.75
250	2010-05-10 11:32	mg / cm ^2	WALL	CONCRETE	ROOM 24 B	SILVER	Negative	1.00	< LOD : 0.03	< LOD : 2.08
251	2010-05-10 11:32	mg / cm ^2	WALL	CONCRETE	ROOM 24 C	SILVER	Negative	1.00	< LOD : 0.03	< LOD : 2.73
252	2010-05-10 11:33	mg / cm ^2	WALL	CONCRETE	ROOM 24 d	SILVER	Negative	1.00	< LOD : 0.41	< LOD : 2.75
253	2010-05-10 11:33	mg / cm ^2	WALL	CONCRETE	ROOM 26 A	WHITE	Negative	1.00	< LOD : 0.21	< LOD : 2.50
255	2010-05-10 11:34	mg / cm ^2	WALL	CONCRETE	ROOM 26 B	WHITE	Negative	1.00	< LOD : 0.22	< LOD : 2.14
256	2010-05-10 11:34	mg / cm ^2	WALL	CONCRETE	ROOM 26 C	GREY	Negative	1.00	< LOD : 0.05	< LOD : 4.35
258	2010-05-10 11:36	mg / cm ^2	WINDOW	CONCRETE	ROOM 26 C	WHITE	Negative	1.00	< LOD : 0.31	< LOD : 2.97
260	2010-05-10 11:36	mg / cm ^2	WALL	CONCRETE	ROOM 27 A	WHITE	Negative	1.00	< LOD : 0.07	< LOD : 2.13
261	2010-05-10 11:37	mg / cm ^2	WALL	CONCRETE	ROOM 27 B	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 2.04
262	2010-05-10 11:38	mg / cm ^2	WALL	CONCRETE	ROOM 27 C	WHITE	Negative	1.00	< LOD : 0.18	< LOD : 2.61
263	2010-05-10 11:39	mg / cm ^2	WALL	CONCRETE	ROOM 27 C	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 2.32
264	2010-05-10 11:39	mg / cm ^2	WALL	CONCRETE	ROOM 27 C	RED	Negative	1.00	< LOD : 0.03	< LOD : 2.14
265	2010-05-10 11:40	mg / cm ^2	WALL	CONCRETE	ROOM 27 C	YELLOW	Negative	1.00	< LOD : 0.07	< LOD : 2.90
267	2010-05-10 11:41	mg / cm ^2	WALL	CONCRETE	ROOM 27 C	BROWN	Negative	1.00	< LOD : 0.22	< LOD : 2.67
269	2010-05-10 11:41	mg / cm ^2	WINDOW	METAL	ROOM 27 D	WHITE	Positive	1.00	< LOD : 4.95	< LOD : 8.10
270	2010-05-10 11:42	mg / cm ^2	FLOOR	CONCRETE	ROOM 27	RED	Negative	1.00	< LOD : 0.11	< LOD : 2.06
271	2010-05-10 11:46	mg / cm ^2	WALL	CONCRETE	ROOM 28 a	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.60
272	2010-05-10 11:47	mg / cm ^2	WALL	CONCRETE	ROOM 28 b	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 2.24
274	2010-05-10 11:47	mg / cm ^2	WALL	CONCRETE	ROOM 28 c	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 2.23
275	2010-05-10 11:48	mg / cm ^2	WALL	CONCRETE	ROOM 28 d	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 2.11
276	2010-05-10 11:48	mg / cm ^2	FLOOR	CONCRETE	ROOM 28	GREY	Negative	1.00	< LOD : 0.07	< LOD : 2.09
277	2010-05-10 11:50	mg / cm ^2	FLOOR	CONCRETE	ROOM 29	GREY	Negative	1.00	< LOD : 0.04	< LOD : 1.20
278	2010-05-10 11:51	mg / cm ^2	WALL	CONCRETE	ROOM 29 A	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 1.95
279	2010-05-10 11:51	mg / cm ^2	WALL	CONCRETE	ROOM 29 B	WHITE	Negative	1.00	< LOD : 0.20	< LOD : 1.20
280	2010-05-10 11:53	mg / cm ^2	WALL	CONCRETE	ROOM 29 B	WHITE	Negative	1.00	< LOD : 0.05	< LOD : 2.21
281	2010-05-10 11:53	mg / cm ^2	WALL	CONCRETE	ROOM 29 C	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 2.05

Index	Date	Units	Component	Substrate	Swab	Color	Results	Action Level	PHK
283	2010-05-10 12:02	mg / cm ^2	WALL	CONCRETE	ROOM 36 a	WHITE	Negative	1.00	< LOD : 0.07
284	2010-05-10 12:03	mg / cm ^2	WALL	CONCRETE	ROOM 36 b	WHITE	Negative	1.00	< LOD : 2.03
287	2010-05-10 12:04	mg / cm ^2	WALL	CONCRETE	ROOM 36 c	WHITE	Negative	1.00	< LOD : 2.05
288	2010-05-10 12:04	mg / cm ^2	WALL	CONCRETE	ROOM 36 d	WHITE	Negative	1.00	< LOD : 2.38
289	2010-05-10 12:05	mg / cm ^2	WALL	CONCRETE	ROOM 36 d	GREY	Negative	1.00	< LOD : 2.40
290	2010-05-10 12:06	mg / cm ^2	FLOOR	CONCRETE	ROOM 36	GREY	Negative	1.00	< LOD : 2.30
291	2010-05-10 12:06	mg / cm ^2	PIPE	METAL	ROOM 36	GREY	Negative	1.00	< LOD : 5.13
292	2010-05-10 12:09	mg / cm ^2	WINDOW BOX	WOOD	ROOM 34 a	WHITE	Negative	1.00	< LOD : 2.55
293	2010-05-10 12:10	mg / cm ^2	WINDOW	METAL	ROOM 34 a	WHITE	Positive	1.00	< LOD : 9.60
294	2010-05-10 12:12	mg / cm ^2	FLOOR	CONCRETE	ROOM 33	GREY	Positive	1.00	2.90 ± 1.70
295	2010-05-10 12:13	mg / cm ^2	WALL	CONCRETE	ROOM 35 A	WHITE	Negative	1.00	< LOD : 2.70
296	2010-05-10 12:14	mg / cm ^2	WALL	CONCRETE	ROOM 35 B	WHITE	Negative	1.00	< LOD : 1.20
297	2010-05-10 12:14	mg / cm ^2	WALL	CONCRETE	ROOM 35 C	WHITE	Negative	1.00	< LOD : 2.52
298	2010-05-10 12:15	mg / cm ^2	WALL	CONCRETE	ROOM 35 C	WHITE	Negative	1.00	< LOD : 2.35
299	2010-05-10 12:15	mg / cm ^2	WALL	CONCRETE	ROOM 35 C	RED	Negative	1.00	< LOD : 2.47
300	2010-05-10 13:14	mg / cm ^2	DOOR	CONCRETE	ROOM 35 D	WHITE	Negative	1.00	< LOD : 1.80
301	2010-05-10 13:15	mg / cm ^2	DOOR jamb	METAL	1	black	Negative	1.00	< LOD : 3.92
302	2010-05-10 13:16	mg / cm ^2	DOOR jamb	METAL	1	WHITE	Negative	1.00	< LOD : 4.25
303	2010-05-10 13:17	mg / cm ^2	DOOR jamb	METAL	2	black	Positive	1.00	3.70 ± 2.10
304	2010-05-10 13:17	mg / cm ^2	DOOR	WOOD	2	black	Positive	1.00	< LOD : 4.20
305	2010-05-10 13:18	mg / cm ^2	DOOR JAMB	WOOD	3	black	Positive	1.00	< LOD : 3.75
308	2010-05-10 13:20	mg / cm ^2	DOOR	METAL	3	black	Positive	1.00	< LOD : 8.40
310	2010-05-10 13:21	mg / cm ^2	DOOR jamb	WOOD	4	grey	Positive	1.00	< LOD : 9.00
312	2010-05-10 13:22	mg / cm ^2	DOOR jamb	METAL	4	grey	Positive	1.00	< LOD : 1.80
313	2010-05-10 13:23	mg / cm ^2	DOOR	METAL	5	WHITE	Positive	1.00	< LOD : 4.35
314	2010-05-10 13:26	mg / cm ^2	DOOR	WOOD	5	WHITE	Positive	1.00	< LOD : 4.80
315	2010-05-10 13:29	mg / cm ^2	OVERHEAD DOOR FRAME	METAL	ROOM 10 C	WHITE	Positive	1.00	< LOD : 1.80
316	2010-05-10 13:29	mg / cm ^2	DOOR	WOOD	7	BLUE	Positive	1.00	< LOD : 7.20
317	2010-05-10 13:30	mg / cm ^2	DOOR jamb	METAL	7	BLUE	Positive	1.00	< LOD : 11.55
318	2010-05-10 13:31	mg / cm ^2	DOOR jamb	METAL	6	BROWN	Positive	1.00	< LOD : 11.55
319	2010-05-10 13:31	mg / cm ^2	DOOR	WOOD	6	BROWN	Positive	1.00	< LOD : 7.20
320	2010-05-10 13:32	mg / cm ^2	DOOR	WOOD	8	BROWN	Positive	1.00	< LOD : 7.20
321	2010-05-10 13:34	mg / cm ^2	DOOR jamb	WOOD	8	BROWN	Positive	1.00	4.50 ± 2.70
322	2010-05-10 13:35	mg / cm ^2	DOOR jamb	METAL	8	BROWN	Positive	1.00	< LOD : 5.10
323	2010-05-10 13:36	mg / cm ^2	DOOR	METAL	9	BROWN	Positive	1.00	< LOD : 7.50
324	2010-05-10 13:37	mg / cm ^2	DOOR	WOOD	9	BROWN	Positive	1.00	4.10 ± 2.60
325	2010-05-10 13:37	mg / cm ^2	DOOR JAMB	METAL	10	BLACK	Positive	1.00	< LOD : 12.30
326	2010-05-10 13:38	mg / cm ^2	DOOR JAMB	METAL	11	BLACK	Positive	1.00	< LOD : 3.60
327	2010-05-10 13:38	mg / cm ^2	DOOR	WOOD	11	BLACK	Positive	1.00	< LOD : 20.40
328	2010-05-10 13:38	mg / cm ^2	DOOR	WOOD	12	BLACK	Positive	1.00	< LOD : 13.20
329	2010-05-10 13:43	mg / cm ^2	DOOR JAMB	METAL	12	BLACK	Positive	1.00	< LOD : 14.10
330	2010-05-10 13:44	mg / cm ^2	DOOR	METAL	13	BLACK	Positive	1.00	< LOD : 21.30
331	2010-05-10 13:45	mg / cm ^2	DOOR	WOOD	13	grey	Positive	1.00	< LOD : 16.20
331	2010-05-10 13:45	mg / cm ^2	DOOR	WOOD	14	WHITE	Positive	1.00	< LOD : 12.00

Index	Time	Units	Component	Substrate	State	Color	Results	Action Level	Pbk
332	2010-05-10 13:45	mg / cm ^2	DOOR jamb	METAL	14	WHITE	Positive	1.00	< LOD : 11.25
333	2010-05-10 13:46	mg / cm ^2	DOOR jamb	METAL	15 (IFR)	WHITE	Negative	1.00	< LOD : 4.98
334	2010-05-10 13:47	mg / cm ^2	DOOR jamb	METAL	16	WHITE	Positive	1.00	< LOD : 12.00
336	2010-05-10 13:49	mg / cm ^2	DOOR jamb	METAL	17	WHITE	Positive	1.00	< LOD : 9.90
337	2010-05-10 13:51	mg / cm ^2	DOOR jamb	METAL	46	WHITE	Positive	1.00	< LOD : 4.80
338	2010-05-10 13:51	mg / cm ^2	DOOR	METAL	46	WHITE	Negative	1.00	< LOD : 4.27
340	2010-05-10 13:52	mg / cm ^2	DOOR	METAL	18	WHITE	Negative	1.00	< LOD : 4.10
341	2010-05-10 13:53	mg / cm ^2	DOOR jamb	METAL	18	WHITE	Positive	1.00	< LOD : 4.95
342	2010-05-10 13:54	mg / cm ^2	FLOOR	CONCRETE	room 8	RED	Negative	1.00	< LOD : 1.35
343	2010-05-10 13:56	mg / cm ^2	DOOR	WOOD	19	BROWN	Negative	1.00	< LOD : 12.45
344	2010-05-10 13:56	mg / cm ^2	DOOR jamb	METAL	19	BROWN	Positive	1.00	< LOD : 5.10
345	2010-05-10 13:57	mg / cm ^2	DOOR jamb	METAL	21	BROWN	Positive	1.00	< LOD : 11.85
346	2010-05-10 13:58	mg / cm ^2	DOOR	METAL	21	BROWN	Positive	1.00	< LOD : 9.90
347	2010-05-10 13:59	mg / cm ^2	DOOR	WOOD	21	BROWN	Positive	1.00	< LOD : 6.30
348	2010-05-10 13:59	mg / cm ^2	DOOR jamb	WOOD	22	BLUE	Positive	1.00	< LOD : 10.05
349	2010-05-10 14:00	mg / cm ^2	DOOR jamb	METAL	22	BLUE	Positive	1.00	< LOD : 15.90
352	2010-05-10 14:00	mg / cm ^2	DOOR	METAL	23	BROWN	Positive	1.00	< LOD : 15.30
353	2010-05-10 14:01	mg / cm ^2	DOOR	WOOD	23	BROWN	Positive	1.00	< LOD : 7.86
354	2010-05-10 14:02	mg / cm ^2	DOOR jamb	WOOD	24	BLUE	Positive	1.00	< LOD : 11.40
355	2010-05-10 14:02	mg / cm ^2	DOOR jamb	METAL	24	BLUE	Positive	1.00	< LOD : 4.95
356	2010-05-10 14:03	mg / cm ^2	DOOR jamb	METAL	25	BLUE	Positive	1.00	< LOD : 5.25
357	2010-05-10 14:07	mg / cm ^2	DOOR jamb	WOOD	25	BLUE	Positive	1.00	< LOD : 13.05
358	2010-05-10 14:08	mg / cm ^2	DOOR jamb	METAL	26	WHITE	Positive	1.00	< LOD : 11.85
359	2010-05-10 14:08	mg / cm ^2	DOOR	METAL	27	BROWN	Positive	1.00	< LOD : 10.20
360	2010-05-10 14:09	mg / cm ^2	DOOR	WOOD	27	BROWN	Positive	1.00	< LOD : 7.80
361	2010-05-10 14:10	mg / cm ^2	DOOR jamb	WOOD	28	GREEN	Negative	1.00	< LOD : 2.19
362	2010-05-10 14:11	mg / cm ^2	DOOR jamb	WOOD	28	WHITE	Negative	1.00	< LOD : 2.55
363	2010-05-10 14:11	mg / cm ^2	DOOR jamb	METAL	29	BROWN	Positive	1.00	< LOD : 9.75
364	2010-05-10 14:12	mg / cm ^2	DOOR	WOOD	29	BROWN	Positive	1.00	< LOD : 13.20
366	2010-05-10 14:13	mg / cm ^2	DOOR jamb	METAL	30	BROWN	Positive	1.00	< LOD : 15.15
367	2010-05-10 14:14	mg / cm ^2	DOOR	METAL	31	WHITE	Positive	1.00	< LOD : 9.75
368	2010-05-10 14:14	mg / cm ^2	DOOR jamb	METAL	31	WHITE	Positive	1.00	< LOD : 7.65
369	2010-05-10 14:14	mg / cm ^2	DOOR	METAL	32	BROWN	Positive	1.00	< LOD : 10.50
370	2010-05-10 14:15	mg / cm ^2	DOOR	METAL	32	BROWN	Positive	1.00	< LOD : 17.10
371	2010-05-10 14:16	mg / cm ^2	DOOR jamb	METAL	33	BROWN	Positive	1.00	< LOD : 15.90
372	2010-05-10 14:17	mg / cm ^2	DOOR jamb	METAL	33	BROWN	Positive	1.00	< LOD : 5.40
374	2010-05-10 14:17	mg / cm ^2	DOOR	METAL	34	BROWN	Positive	1.00	< LOD : 8.85
376	2010-05-10 14:18	mg / cm ^2	DOOR	METAL	34	BROWN	Positive	1.00	< LOD : 13.35
377	2010-05-10 14:18	mg / cm ^2	DOOR jamb	METAL	35	BROWN	Positive	1.00	< LOD : 7.95
378	2010-05-10 14:19	mg / cm ^2	DOOR (Half door)	METAL	35	BROWN	Positive	1.00	< LOD : 8.70
379	2010-05-10 14:20	mg / cm ^2	DOOR	WOOD	36	WHITE	Positive	1.00	< LOD : 8.10
380	2010-05-10 14:20	mg / cm ^2	DOOR jamb	WOOD	36	BROWN	Positive	1.00	< LOD : 6.45
381	2010-05-10 14:21	mg / cm ^2	DOOR jamb	METAL	36	BROWN	Positive	1.00	< LOD : 5.55
					37	BROWN	Negative	1.00	< LOD : 0.03

Index	Time	Units	Component	Substrate	Side	Color	Results	Airflow Level	PbB
382	2010-05-10 14:22	mg / cm ^2	DOOR	WOOD	37	BROWN	Negative	1.00	< LOD : 1.63
384	2010-05-10 14:23	mg / cm ^2	DOOR	WOOD	38	BROWN	Positive	1.00	3.60 ± 1.90
385	2010-05-10 14:23	mg / cm ^2	DOOR jamb	METAL	38	BROWN	Positive	1.00	< LOD : 4.20
386	2010-05-10 14:24	mg / cm ^2	DOOR jamb	METAL	39	WHITE	Positive	1.00	3.00 ± 1.50
387	2010-05-10 14:24	mg / cm ^2	DOOR jamb	METAL	40	BROWN	Positive	1.00	< LOD : 4.50
388	2010-05-10 14:25	mg / cm ^2	DOOR	WOOD	40	BROWN	Positive	1.00	< LOD : 8.25
389	2010-05-10 14:26	mg / cm ^2	DOOR	WOOD	41	BROWN	Positive	1.00	< LOD : 6.75
390	2010-05-10 14:27	mg / cm ^2	DOOR jamb	METAL	41	BROWN	Positive	1.00	< LOD : 8.25
391	2010-05-10 14:28	mg / cm ^2	DOOR jamb	METAL	41	BROWN	Positive	1.00	< LOD : 8.25
392	2010-05-10 14:28	mg / cm ^2	DOOR	METAL	42	BROWN	Positive	1.00	< LOD : 14.10
393	2010-05-10 14:29	mg / cm ^2	DOOR	WOOD	42	BROWN	Positive	1.00	< LOD : 9.60
394	2010-05-10 14:29	mg / cm ^2	DOOR jamb	WOOD	43	BROWN	Positive	1.00	< LOD : 8.40
395	2010-05-10 14:30	mg / cm ^2	DOOR jamb	METAL	43	BROWN	Positive	1.00	< LOD : 9.00
396	2010-05-10 14:30	mg / cm ^2	DOOR jamb	METAL	44	BROWN	Positive	1.00	< LOD : 10.05
397	2010-05-10 14:35	mg / cm ^2	STAIR	METAL	44	BROWN	Positive	1.00	< LOD : 9.15
398	2010-05-10 14:36	mg / cm ^2	OVERHEAD DOOR FRAME	CONCRETE	ROOM 8 B	GREY	Negative	1.00	< LOD : 2.53
400	2010-05-10 14:38	mg / cm ^2		METAL	ROOM 1 C	WHITE	Positive	1.00	< LOD : 10.80
401	2010-05-10 14:40	mg / cm ^2			CALIBRATE		Negative	1.00	< LOD : 0.75
402	2010-05-10 14:40	mg / cm ^2			CALIBRATE		Positive	1.00	< LOD : 0.90
					CALIBRATE		Positive	1.00	0.89 ± 0.50

824 03

PROJECT				INVOICE TO				REPORT TO			
Project Number	0063-LBP050510-JM			Client				Client			
Project Name				Attention				Attention			
Project Type				Address				Address			
Address				Phone Number				Phone Number			
Site Contact				E-mail Address				E-mail Address			
Phone Number				E-mail Address				E-mail Address			
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0063-1	5/10/2010	1	Room 1				LW	N/A	N/A	96in ²	Total Pb
0063-2	5/10/2010	2	Room 2				LW	N/A	N/A	96in ²	Total Pb
0063-3	5/10/2010	3	Room 3				LW	N/A	N/A	96in ²	Total Pb
0063-4	5/10/2010	4	Room 4				LW	N/A	N/A	96in ²	Total Pb
0063-5	5/10/2010	5	Room 5				LW	N/A	N/A	96in ²	Total Pb
Samples Collected By	Jacob Jones		Date	5/10/2010	Samples Relinquished By	Jacob Jones		Date	5/11/2010	Method of Shipment	
Samples Received By	<i>[Signature]</i>		Time	17:00	Samples Relinquished By	<i>[Signature]</i>		Time	12:00	Sample Notes	
Samples Received By	<i>[Signature]</i>		Date	5/10/2010	Samples Relinquished By	<i>[Signature]</i>		Date	5/11/2010	Condition Upon Receipt	
	<i>[Signature]</i>		Time	12:00	Samples Relinquished By	<i>[Signature]</i>		Time	12:00	Turn-Around-Time	
	<i>[Signature]</i>		Date		Samples Relinquished By	<i>[Signature]</i>		Date			
	<i>[Signature]</i>		Time		Samples Relinquished By	<i>[Signature]</i>		Time			







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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

5 day TAT

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

182403

PROJECT				INVOICE TO				REPORT TO			
Project Number	0063-LBP050510-JM			Client				Client			
Project Name				Attention				Attention			
Project Type				Address				Address			
Address				Phone Number				Phone Number			
Site Contact				E-mail Address				E-mail Address			
Phone Number				E-mail Address				E-mail Address			
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0063-6	5/10/2010	6	Room 6				LW	N/A	N/A	96in ²	Total Pb
0063-7	5/10/2010	7	Room 7				LW	N/A	N/A	96in ²	Total Pb
0063-8	5/10/2010	8	Room 8				LW	N/A	N/A	96in ²	Total Pb
0063-9	5/10/2010	8-N	Room 8	North Area of Room			LW	N/A	N/A	1ft ³	Total Pb
0063-10	5/10/2010	8-S	Room 8	South Area of Room			LW	N/A	N/A	1ft ³	Total Pb
Samples Collected By	Jacob Jones		(print)	Date	5/10/2010	Samples Relinquished By	Jacob Jones	(print)	Date	5/11/2010	Method of Shipment
Samples Received By			(signature)	Time	17:00	Samples Relinquished By		(signature)	Time	12:00	Sample Notes
Samples Received By			(print)	Date	5-11-10	Samples Relinquished By		(print)	Date		Condition Upon Receipt
			(signature)	Time	12 noon	Samples Relinquished By		(signature)	Time		Turn-Around-Time
			(print)	Date		Samples Relinquished By		(print)	Date		
			(signature)	Time		Samples Relinquished By		(signature)	Time		

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

182403

PROJECT				INVOICE TO				REPORT TO			
Project Number	0063-LBP050510-JM			Client				Client			
Project Name				Attention				Attention			
Address				Address				Address			
Site Contact				Phone Number				Phone Number			
Phone Number				E-mail Address				E-mail Address			
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0063-11	5/10/2010	8-C	Room 8	Center of Room			LW	N/A	N/A	1ft ²	Total Pb
0063-12	5/10/2010	9	Room 9				LW	N/A	N/A	96in ²	Total Pb
0063-13	5/10/2010	10	Room 10				LW	N/A	N/A	96in ²	Total Pb
0063-14	5/10/2010	11	Room 11				LW	N/A	N/A	96in ²	Total Pb
0063-15	5/10/2010	12	Room 12				LW	N/A	N/A	96in ²	Total Pb
Samples Collected By	Jacob Jones		Date	5/10/2010	Samples Relinquished By	Jacob Jones		Date	5/11/2010	Method of Shipment	
Samples Received By	<i>[Signature]</i>		Time	17:00	Samples Relinquished By	<i>[Signature]</i>		Time	12:00	Sample Notes	
Samples Received By	<i>[Signature]</i>		Date	5-11-10	Samples Relinquished By	<i>[Signature]</i>		Date		Condition Upon Receipt	
	<i>[Signature]</i>		Time	12:00	Samples Relinquished By	<i>[Signature]</i>		Time		Turn-Around-Time	
	<i>[Signature]</i>		Date		Samples Relinquished By	<i>[Signature]</i>		Date			
	<i>[Signature]</i>		Time		Samples Relinquished By	<i>[Signature]</i>		Time			

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

182403

PROJECT				INVOICE TO				REPORT TO			
Project Number	0063-LBP050510-JM			Client				Client			
Project Name				Attention				Attention			
Address				Address				Address			
Site Contact				Phone Number				Phone Number			
Phone Number				E-mail Address				E-mail Address			
Laboratory Identification	Date Collected	Field Identification	Sample Area	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0063-16	5/10/2010	13	Room 13				LW	N/A Pre	N/A	96in ²	Total Pb
0063-17	5/10/2010	14	Room 14				LW	N/A Post	N/A	96in ²	Total Pb
0063-18	5/10/2010	16,	Room 16				LW	N/A Pre	N/A	96in ²	Total Pb
0063-19	5/10/2010	17	Room 17				LW	N/A Post	N/A	96in ²	Total Pb
Samples Collected By	Jacob Jones	Date	5/10/2010	Samples Relinquished By	Jacob Jones	Date	5/11/2010	Method of Shipment			
Samples Received By	<i>[Signature]</i>	Time	17:00	Samples Relinquished By	<i>[Signature]</i>	Time	12:00	Sample Notes			
Samples Received By	<i>[Signature]</i>	Date	5-11-10	Samples Relinquished By	<i>[Signature]</i>	Date		Condition Upon Receipt			
Samples Received By	<i>[Signature]</i>	Time	12:00	Samples Relinquished By	<i>[Signature]</i>	Time		Turn-Around-Time			

Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

182403

PROJECT				INVOICE TO				REPORT TO			
Project Number	0063-LBP050510-JM			Client				Client			
Project Name				Attention				Attention			
Address				Address				Address			
Site Contact				Phone Number				Phone Number			
Phone Number				E-mail Address				E-mail Address			
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0063-20	5/10/2010	18	Room 18				LW	N/A	N/A	96in ²	Total Pb
0063-21	5/10/2010	19	Room 19				LW	N/A	N/A	96in ²	Total Pb
0063-22	5/10/2010	20	Room 20				LW	N/A	N/A	96in ²	Total Pb
0063-23	5/10/2010	21	Room 21				LW	N/A	N/A	96in ²	Total Pb
0063-24	5/10/2010	22	Room 22				LW	N/A	N/A	96in ²	Total Pb
Samples Collected By	Jacob Jones		(print)	Date	5/10/2010	Samples Relinquished By	Jacob Jones	(print)	Date	5/11/2010	Method of Shipment
Samples Received By	<i>[Signature]</i>		(signature)	Time	17:00	Samples Relinquished By	<i>[Signature]</i>	(signature)	Time	12:00	Sample Notes
Samples Received By	<i>[Signature]</i>		(print)	Date	5-11-10	Samples Relinquished By		(print)	Date		Condition Upon Receipt
	<i>[Signature]</i>		(signature)	Time	17:00	Samples Relinquished By		(signature)	Time		Turn-Around-Time
	<i>[Signature]</i>		(print)	Date		Samples Relinquished By		(print)	Date		
	<i>[Signature]</i>		(signature)	Time		Samples Relinquished By		(signature)	Time		

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

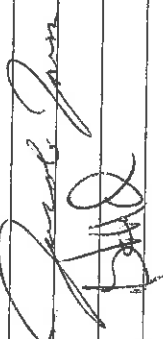

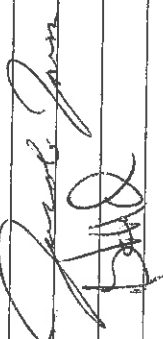
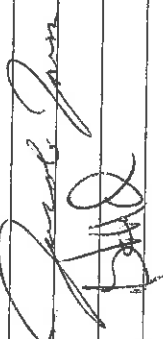
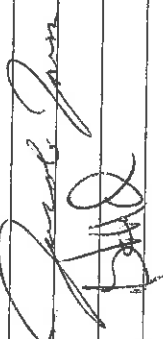
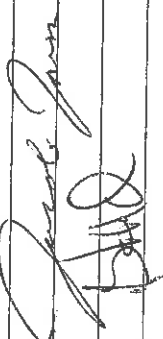
PROJECT				INVOICE TO				REPORT TO			
Project Number	0063-LBP050510-JM			Client				Client			
Project Name				Attention				Attention			
Address				Address				Address			
Site Contact				Phone Number				Phone Number			
Phone Number				E-mail Address				E-mail Address			
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0063-25	5/10/2010	23	Room 23				LW	N/A Pre	N/A	96in ²	Total Pb
0063-26	5/10/2010	24	Room 24				LW	N/A Post	N/A	96in ²	Total Pb
0063-27	5/10/2010	25	Room 25				LW	N/A Post	N/A	96in ²	Total Pb
0063-28	5/10/2010	26	Room 26				LW	N/A Post	N/A	96in ²	Total Pb
0063-29	5/10/2010	27	Room 27				LW	N/A Post	N/A	96in ²	Total Pb
Samples Collected By	Jacob Jones		(print)	Date	5/10/2010	Samples Relinquished By	Jacob Jones	(print)	Date	5/11/2010	Method of Shipment
Samples Received By	<i>[Signature]</i>		(signature)	Time	17:00	Samples Relinquished By	<i>[Signature]</i>	(signature)	Time	12:00	Sample Notes
Samples Received By	<i>[Signature]</i>		(print)	Date	5-11-10	Samples Relinquished By		(print)	Date		Condition Upon Receipt
	<i>[Signature]</i>		(signature)	Time	12:00	Samples Relinquished By		(signature)	Time		Turn-Around-Time
	<i>[Signature]</i>		(print)	Date		Samples Relinquished By		(print)	Date		
	<i>[Signature]</i>		(signature)	Time		Samples Relinquished By		(signature)	Time		

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

82403

PROJECT				INVOICE TO				REPORT TO			
Project Number	0063-LBP050510-JM			Client				Client			
Project Name				Attention				Attention			
Project Type				Address				Address			
Address				Phone Number				Phone Number			
Site Contact				E-mail Address				E-mail Address			
Phone Number				E-mail Address				E-mail Address			
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0063-30	5/10/2010	28	Room 28				LW	N/A	N/A	96in ²	Total Pb
0063-31	5/10/2010	29	Room 29				LW	N/A	N/A	96in ²	Total Pb
0063-32	5/10/2010	30	Room 30				LW	N/A	N/A	96in ²	Total Pb
0063-33	5/10/2010	31	Room 31				LW	N/A	N/A	96in ²	Total Pb
0063-34	5/10/2010	32	Room 32				LW	N/A	N/A	96in ²	Total Pb
Samples Collected By	Jacob Jones		(print)	Date	5/10/2010	Samples Relinquished By	Jacob Jones	(print)	Date	5/11/2010	Method of Shipment
Samples Received By			(signature)	Time	17:00	Samples Relinquished By		(signature)	Time	12:00	Sample Notes
Samples Received By			(print)	Date	5/11/10	Samples Relinquished By		(print)	Date		Condition Upon Receipt
Samples Received By			(signature)	Time	12:00	Samples Relinquished By		(signature)	Time		Turn-Around-Time
Samples Received By			(print)	Date		Samples Relinquished By		(print)	Date		
Samples Received By			(signature)	Time		Samples Relinquished By		(signature)	Time		

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

182403

**Chain of Custody
 Marshall Environmental Management, Inc.**

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

REPORT TO

INVOICE TO

PROJECT			INVOICE TO			REPORT TO					
Project Number	0063-LBP050510-JM		Client			Client					
Project Name			Attention			Attention					
Project Type			Address			Address					
Address			Phone Number			Phone Number					
Site Contact			E-mail Address			E-mail Address					
Phone Number			E-mail Address			E-mail Address					
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor-tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0063-35	5/10/2010	33	Room 33				LW	N/A	N/A	96in ²	Total Pb
0063-36	5/10/2010	34	Room 34				LW	N/A	N/A	96in ²	Total Pb
0063-37	5/10/2010	35	Room 35				LW	N/A	N/A	96in ²	Total Pb
0063-38	5/10/2010	36	Room 36				LW	N/A	N/A	96in ²	Total Pb
0063-39	5/10/2010	W-IFR	Indoor Firing Range	West			LW	N/A	N/A	af ²	Total Pb
Samples Collected By	Jacob Jones	Date	5/10/2010	Samples Relinquished By	Jacob Jones	Date	5/11/2010	Method of Shipment			
Samples Received By	Jacob Jones	Time	17:00	Samples Relinquished By	Jacob Jones	Time	12:00	Sample Notes			
Samples Received By	Jacob Jones	Date	5-11-10	Samples Relinquished By	Jacob Jones	Date		Condition Upon Receipt			
Samples Received By	Jacob Jones	Time	12:00	Samples Relinquished By	Jacob Jones	Time		Turn-Around-Time			

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

82403

PROJECT				INVOICE TO				REPORT TO			
Project Number	0063-LBF050510-JM			Client				Client			
Project Name				Attention				Attention			
Project Type				Address				Address			
Address				Phone Number				Phone Number			
Site Contact				E-mail Address				E-mail Address			
Phone Number				E-mail Address				E-mail Address			
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/Parameters
0063-40	5/10/2010	E-IFR	Indoor Firing Range	East		LW	LW	N/A	N/A	sf ²	Total Pb
0063-41	5/10/2010	IFR-SR	Indoor Firing Range	Side Room		LW	LW	N/A	N/A	sf ²	Total Pb
Samples Collected By	Jacob Jones	(print)	Date	5/10/2010	Samples Relinquished By	Jacob Jones	(print)	Date	5/11/2010	Method of Shipment	
Samples Received By	<i>[Signature]</i>	(signature)	Time	17:00	Samples Relinquished By	<i>[Signature]</i>	(signature)	Time	12:00	Sample Notes	
Samples Received By	<i>[Signature]</i>	(print)	Date	5-11-10	Samples Relinquished By		(print)	Date		Condition Upon Receipt	
		(signature)	Time	1200	Samples Relinquished By		(signature)	Time		Turn-Around-Time	
		(print)	Date		Samples Relinquished By		(print)	Date			
		(signature)	Time		Samples Relinquished By		(signature)	Time			

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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



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

Environmental Chemistry Analysis Report

Quantem Set ID: 182403
Date Received: 05/11/10
Received By: Barbara Holder
Date Sampled:
Time Sampled:
Analyst: JZ
Date of Report: 5/20/2010

Client: Marshall Environmental Management, Inc.
1601 SW 89th Street, Ste. A-100
Oklahoma City, OK 73159
Acct. No.: A331
Project: N/A
Location: N/A
Project No.: 0063-LBP050510-JM

AIHA ID: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	0063-1	Wipe	Lead	39.36	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
002	0063-2	Wipe	Lead	403.30	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
003	0063-3	Wipe	Lead	140.18	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
004	0063-4	Wipe	Lead	176.16	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
005	0063-5	Wipe	Lead	375.56	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
006	0063-6	Wipe	Lead	746.63	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
007	0063-7	Wipe	Lead	884.56	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
008	0063-8	Wipe	Lead	62.44	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
009	0063-9	Wipe	Lead	191.00	16.00	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
010	0063-10	Wipe	Lead	180.00	16.00	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
011	0063-11	Wipe	Lead	36.80	16.00	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100

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

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

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



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

Environmental Chemistry Analysis Report

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Date of Report: 5/20/2010

Client: Marshall Environmental Management, Inc.
 1601 SW 89th Street, Ste. A-100
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Acct. No.: A331
Project: N/A
Location: N/A
Project No.: 0063-LBP050510-JM

AIHA ID: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
012	0063-12	Wipe	Lead	191-15	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
013	0063-13	Wipe	Lead	147.68	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
014	0063-14	Wipe	Lead	213.64	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
015	0063-15	Wipe	Lead	624.44	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
016	0063-16	Wipe	Lead	532.98	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
017	0063-17	Wipe	Lead	1521.74	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
018	0063-18	Wipe	Lead	43.10	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
019	0063-19	Wipe	Lead	<23.99	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
020	0063-20	Wipe	Lead	2196.40	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
021	0063-21	Wipe	Lead	1101.95	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
022	0063-22	Wipe	Lead	263.87	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100

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

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Location: N/A
Project No.: 0063-LBP050510-JM

AIHA ID: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
023	0063-23	Wipe	Lead	39.13	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
024	0063-24	Wipe	Lead	1731.63	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
025	0063-25	Wipe	Lead	699.40	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
026	0063-26	Wipe	Lead	824.59	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
027	0063-27	Wipe	Lead	1506.75	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
028	0063-28	Wipe	Lead	139.43	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
029	0063-29	Wipe	Lead	173.91	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
030	0063-30	Wipe	Lead	568.22	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
031	0063-31	Wipe	Lead	248.88	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
032	0063-32	Wipe	Lead	72.49	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
033	0063-33	Wipe	Lead	64.09	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100

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

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Acct. No.: A331
Project: N/A
Location: N/A
Project No.: 0063-LBP050510-JM

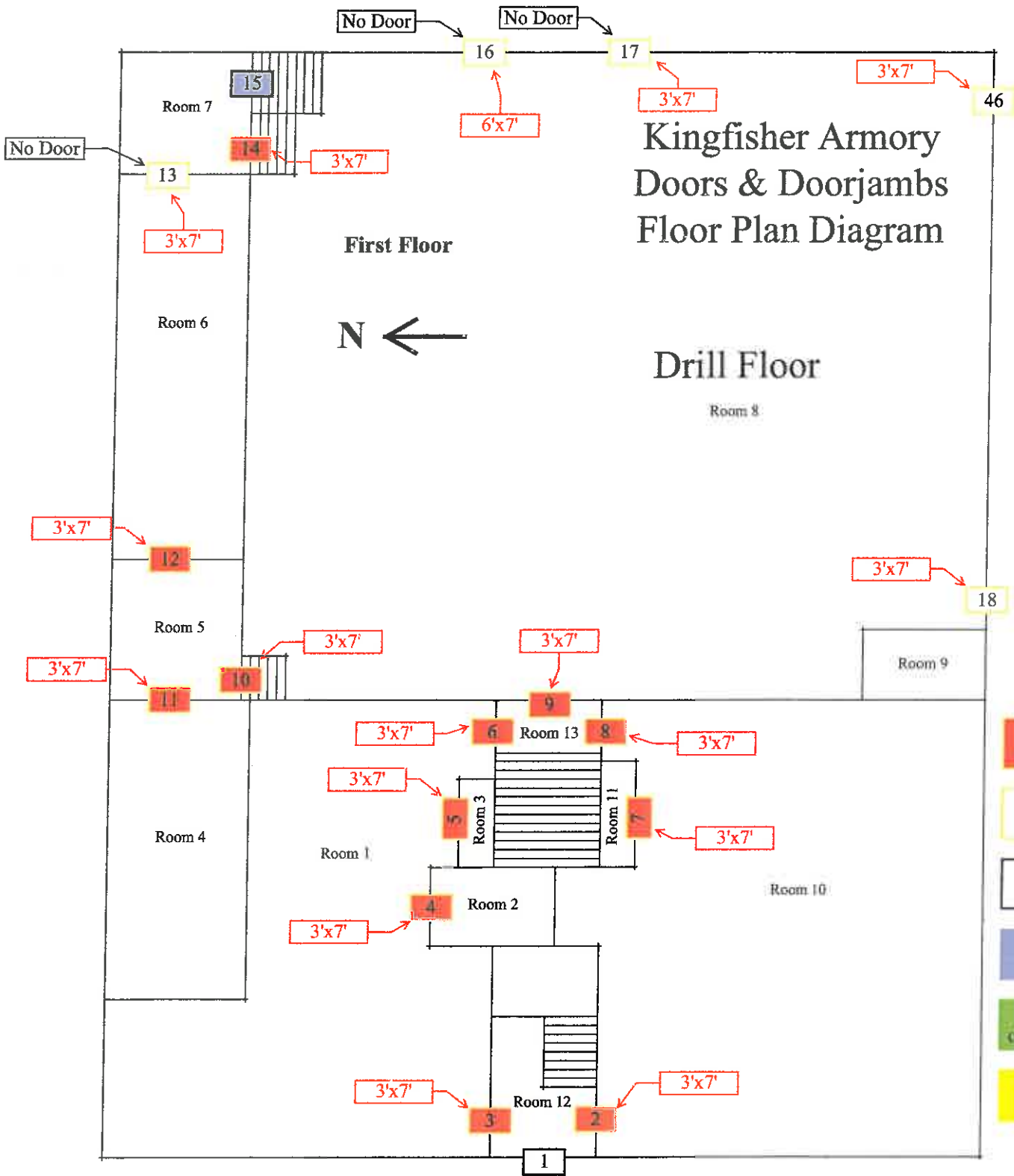
AIHA ID: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
034	0063-34	Wipe	Lead	<23.99	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
035	0063-35	Wipe	Lead	300.60	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
036	0063-36	Wipe	Lead	38.91	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
037	0063-37	Wipe	Lead	603.45	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
038	0063-38	Wipe	Lead	166.42	23.99	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
039	0063-39	Wipe	Lead	42100.00	16.00	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
040	0063-40	Wipe	Lead	800.00	16.00	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100
041	0063-41	Wipe	Lead	8700.00	16.00	ug/sq. Ft.	05/19/10 0:00	EPA 3051 / NIOSH 9100

Analysis performed by ODEQ Lab No. 7211

Authorized Signature: 
Leigh Armstrong, 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.



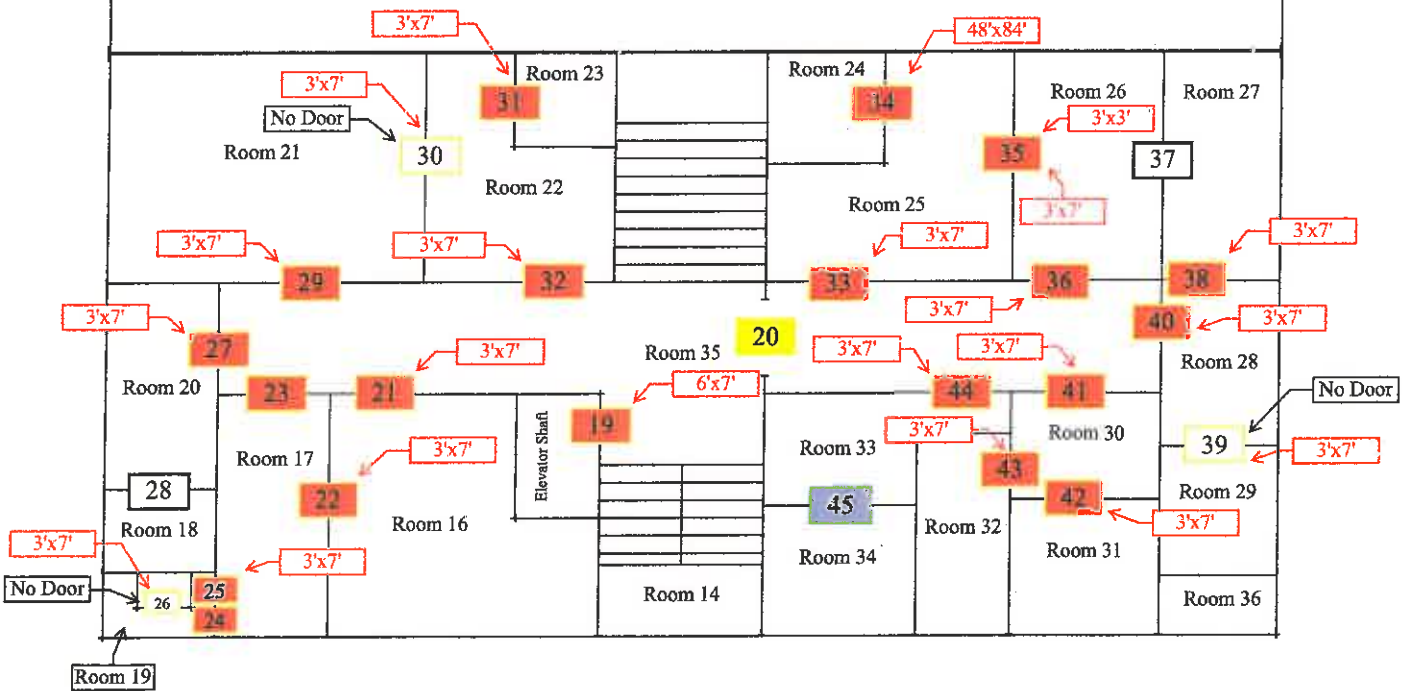
- = Door
- + Doorjamb
- Door & Doorjamb
- No Paint on Door
- No Paint on Doorjamb
- Factory Finish

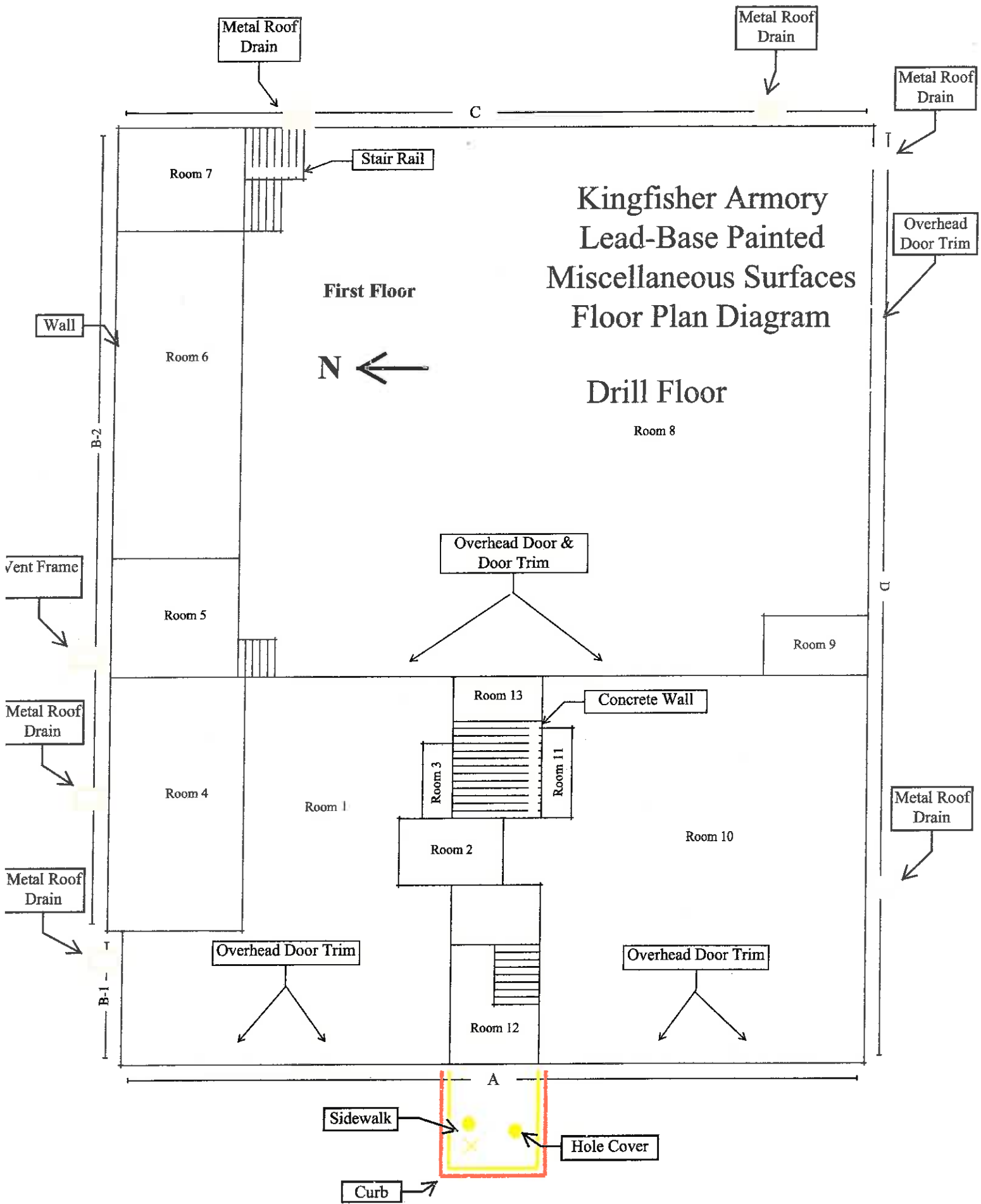
Kingfisher Armory Doors & Doorjamb Floor Plan Diagram

Second Floor



- + Door
- + Doorjamb
- Door & Doorjamb
- No Paint on Door
- No Paint on Doorjamb
- Factory Finish





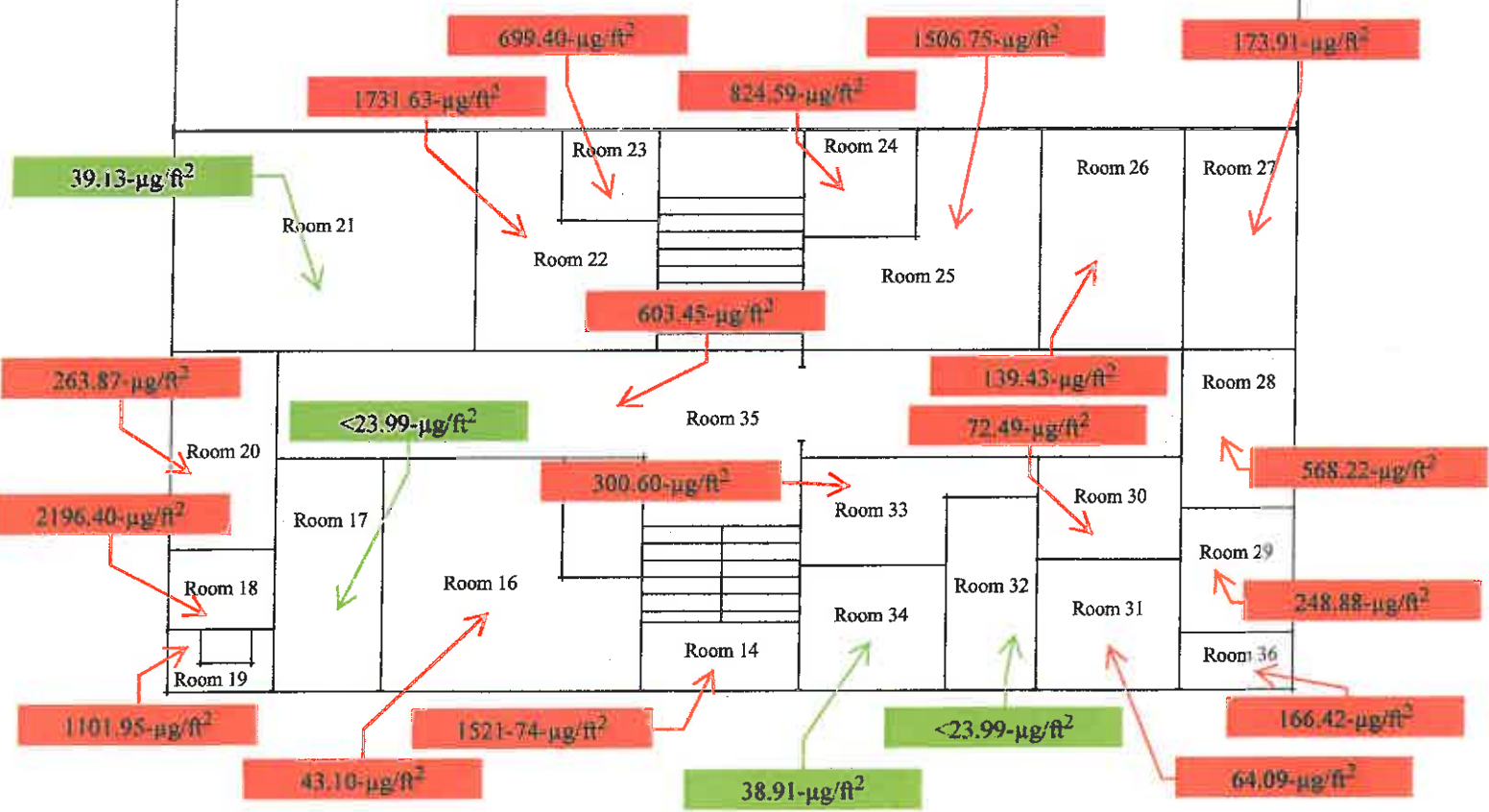
Kingfisher Armory Surface Wipes Floor Plan Diagram

Second Floor



> Reporting Limit

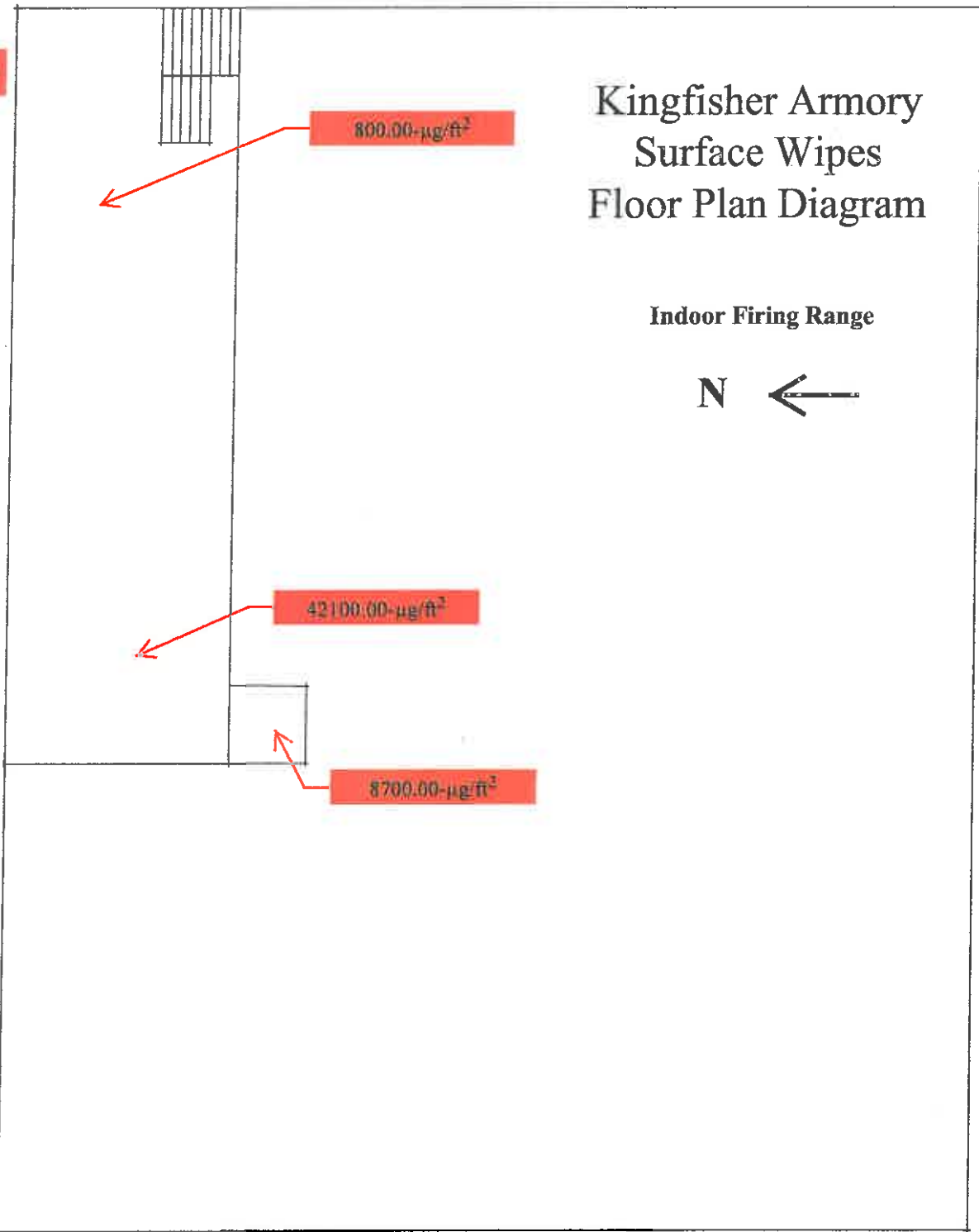
< Reporting Limit



Reporting Limit

Kingfisher Armory Surface Wipes Floor Plan Diagram

Indoor Firing Range



800.00-µg/ft²

42100.00-µg/ft²

8700.00-µg/ft²



Garage Frame Trim - Side A #1



Garage Frame Trim - Side A #2



Garage Frame Trim - Side A #3



Garage Frame Trim - Side A #4



Roof Drain - Side B #1



Roof Drain - Side B #2



Window #1 - Side B



Window #3 - Side B



Window #5 - Side B-2



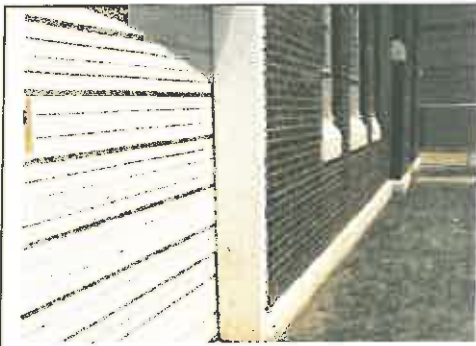
Vent Frame - Side B-2



Roof Drain - Side C #1



Roof Drain - Side C #2



Garage Door Frame - Side D



Roof Drain - Side D #1



Roof Drain - Side D #2



Overhead Door - Room 1 - Side C



Room 6 - Side B - Silver Brick Wall



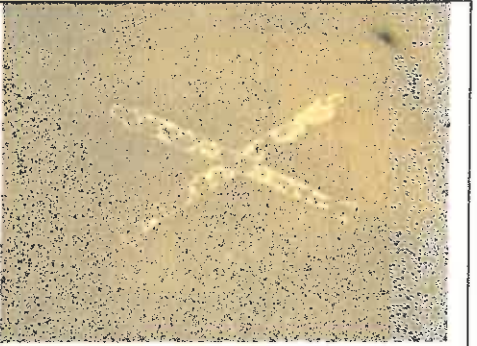
Room 8 - Side C - Stair Rail



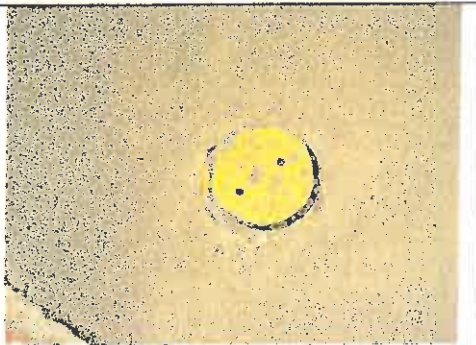
Red Paint on Side of Curb - Side A



Yellow Paint on Sidewalk - Side A



Yellow Paint on Sidewalk - Side A



Yellow Concrete Hole Cover - Side A



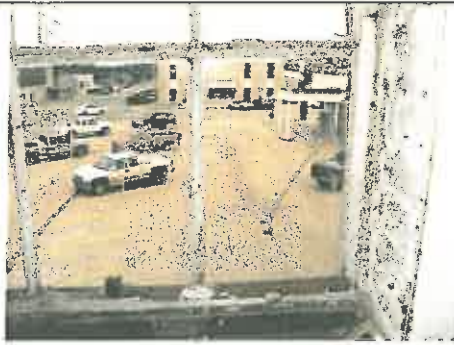
Room 13 - Side D - White Brick Wall



Room 14 - Side A - Metal Window



Room 16 - Side A - Metal Window



Room 20 - Side B - Metal Window



Room 21 - Side B - Metal Window



Room 27 - Side D - Metal Window



Room 34 - Side A - Metal Window



Room 8 - Side B - Metal Overhead Door Frame

Department of Environmental Quality

This is to Certify That

MARSHALL ENVIRONMENTAL MANAGEMENT

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

FIRM

Certification #: OKFIRM11160

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

Issued on: **4/1/2010**

Expires on: **3/31/2011**



Division Director
Air Quality Division





Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

JACOB JONES

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

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR13457

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

Issued on: **4/1/2010**

Expires on: **3/31/2011**



Division Director
Air Quality Division





Environmental Programs Manager
Air Quality Division

KINGFISHER ARMORY

05-05-10

Asbestos Inspection

Prepared For:

Oklahoma Department of Environmental Quality

Land Protection Division

P.O. Box 1677

Oklahoma City, Oklahoma 73101

Prepared By:

Marshall Environmental Management, Inc.

1601 Southwest 89th Street, Suite A-100

Oklahoma City, Oklahoma 73159

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Certification

This is to certify that, on May 5, 2010 Marshall Environmental Management, Inc was contracted by the State of Oklahoma, Department of Central Services to conduct an Asbestos Inspection of the Kingfisher Armory, located at 303 North 6th Street in Kingfisher, Oklahoma, for the State of Oklahoma Department of Environmental Quality, Land Protection Division. This Asbestos Inspection was performed by a Licensed, Oklahoma Department of Labor, Asbestos Hazard Emergency Response Act, Asbestos Inspector Jamie Marshall, of Marshall Environmental Management, Inc, under the direction of a Licensed, Oklahoma Department of Labor, Asbestos Hazard Emergency Response Act, Management Planner Dr. Charles L. Marshall, Certified Industrial Hygienist and President of Marshall Environmental Management, Inc. The findings and analytical data resulting from this Asbestos Inspection are believed to accurately, depict the condition(s) and location(s) of material(s) that contain(s) asbestos on the date this Inspection was conducted.



7-25-10

Dr. Charles L. Marshall, CIH, CSP

Date

Certified Industrial Hygienist - Comprehensive Practice Certification		#4489
Certified Safety Professional - Comprehensive Practice Certification		#9941
Registered Professional Environmental Specialist - State Department of Health		#710
Certified Hazardous Materials Manager, Master Level Certification		#1909
Certified Healthcare Safety Professional, Master Level Certification		#521
EPA AHERA Certifications	Asbestos Inspector	#400517
	Management Planner	#500396
	Project Designer	#2415
ODOL License	Project Designer	#OKMP-0028
	Management Planner	#OKMP-0246
	Asbestos Inspector	#OK-150343



7-25-10

Jamie Marshall, B.S., Industrial Hygiene Associate

Date

Oklahoma Department of Labor License	Asbestos Inspector	#OK-158090
--------------------------------------	--------------------	------------

LABORATORY ANALYSIS PERFORMED BY

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

KINGFISHER ARMORY

ASBESTOS INSPECTION

EXECUTIVE SUMMARY

On May 5, 2010, as part of the Oklahoma Department of Environmental Quality, Land Protection Division, Site Cleanup Assistance Program and Armory Cleanup Program Marshall Environmental Management, Inc. (MEM) completed an Asbestos Inspection of the Kingfisher Armory located at 303 North 6th Street in Kingfisher, Oklahoma. This Asbestos Inspection was accomplished so that strategy, which follows the regulations set forth by the Environmental Protection Agency (EPA), may be prepared for the abatement of Asbestos Containing Materials (ACM) that may be present within the Kingfisher Armory. The analytical results correlating with the samples that were collected as part of this Asbestos Inspection identified the presence of asbestos containing ceiling tile in room 11. At the time this Inspection was conducted, the asbestos containing ceiling tile was in good condition.

Since the asbestos concentrations identified in the ceiling tile were greater than 1-percent (>1%) and because this material is considered friable (i.e. that which can be rendered to a powder via had pressure) the ceiling tile is classified as a "Regulated" ACM. Therefore, as required by EPA regulations to ensure that Occupational Safety and Health Administration (OSHA) and EPA compliance methods are utilized the abatement and disposal of the ceiling tile is required to be treated as a regulated response action, which must be accomplished by a Licensed Oklahoma Department Of Labor (ODOL) Asbestos Abatement Contractor. Additionally, the abatement of the ceiling tile will require the submittal of a Project Design, to be approved by the ODOL, in addition to a National Emission Standard for Hazardous Air Pollutants (NESHAP) Notification, to be submitted to the Oklahoma Department of Environmental Quality (ODEQ).

Although the ceiling tile located within the Kingfisher Armory contains asbestos, no action is required as long as the asbestos containing ceiling tile remains in good condition and undisturbed. The remainder of this Report is comprised of the Sampling Strategy and Methodology, the Observations and Findings, Abatement Response Actions, the Regulatory Review, Limitations of the Survey and the Appendix to this Report.

SAMPLING STRATEGY AND METHODOLOGY

Each accessible area throughout the Kingfisher Armory was systematically inspected in order to collect samples of building materials suspected of containing asbestos. The sample collection process includes thoroughly documenting the location, condition, classification and the estimated quantity of material(s) suspected of containing asbestos. Suspect ACM that are uniform in color and texture and believed to be applied during the same period are described as "Homogenous". A specified number of samples are collected from a homogenous material and if laboratory analyses determine that the material contains asbestos, the entirety of the homogenous material is considered asbestos containing. The following are examples of the types of materials that were visually inspected and sampled during this Asbestos Inspection:

Surfacing Materials

- Examples include but are not limited to blown on or troweled on surfacing material commonly observed on ceilings, walls or structural steel.

Thermal System Insulation

- Examples include but are not limited to insulation on piping on hot or cold water lines, steam lines, thermal process or Heating Ventilation and Air Conditioning (HVAC) equipment and components.

Miscellaneous Materials

- Examples include but are not limited to floor tiles, mastics, ceiling tiles, vinyl sheet flooring and wallboard, wallboard-tape, wallboard-mud or joint compounds.

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

OBSERVATIONS AND FINDINGS

The Kingfisher Armory is a two-story structure comprised of a brick façade with a partially flat and partially arched roof that was constructed on a concrete slab in approximately 1938. The following table summarizes the ACM discovered during this Asbestos Inspection. Additionally, a floor plan diagram identifying the materials that contain asbestos and their estimated quantities is included in the Appendix of this Report.

TABLE I: ASBESTOS CONTAINING MATERIALS

SAMPLE NUMBER	SAMPLE LOCATION	SAMPLE DESCRIPTION	% ASBESTOS	TYPE OF ASBESTOS	TYPE OF MATERIAL	CONDITION OF MATERIAL
0045-53B	ROOM 11	CEILING TILE	3%	CHRYSTOLE	SURFACING MATERIAL	GOOD

TABLE II: ASBESTOS CONTAINING HOMOGENOUS AREAS

SAMPLE LOCATION	SAMPLE MATERIAL	TOTAL QUANTITY
ROOM11	CEILING TILE	-120-ft ²

HISTORICAL OVERVIEW OF ASBESTOS ACTIVITIES

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

ABATEMENT RESPONSE ACTIONS

- In accordance with the ODOL, the abatement of the regulated, asbestos containing ceiling tile is required to be performed by a Licensed ODOL Asbestos Abatement Contractor.
- The submittal of a Project Design to be approved by the ODOL in addition to a NESHP Notification submitted to the ODEQ 10-business days prior to the commencement of any abatement activities is required.

REGULATORY REVIEW

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

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

http://www.ok.gov/odol/documents/Asbestos_law_rules.pdf

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

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

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

The EPA requires asbestos inspections in school buildings in grades K through 12, as part of the Asbestos Hazard Emergency Response Act (AHERA), which is authorized in 40 CFR 763.6. If asbestos is present within School Facilities grades K-12, an Asbestos Management Plan is required by the Local Educational Authority (LEA). The AHERA inspection protocol requires a thorough sampling of all forms of friable and non-friable asbestos. The types of ACM to be assessed as part of an AHERA Inspection include:

Surfacing Materials

- Examples include but are not limited to blown on or troweled on surfacing material commonly observed on ceilings, walls or structural steel.

Thermal System Insulation

- Examples include but are not limited to insulation on piping on hot or cold water lines, steam lines, thermal process or Heating Ventilation and Air Conditioning (HVAC) equipment and components.

Miscellaneous Materials

- Examples include but are not limited to floor tiles, mastics, ceiling tiles, vinyl sheet flooring, wallboard or wallboard-tape and wallboard-mud or joint compounds.

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

In addition to AHERA, the EPA also regulates commercial asbestos abatement activities. A NESHAP Notice is required for abatement whenever the quantities of ACM meet or exceed 160-square feet, 260-linear feet or 35-cubic feet. All required NESHAP Notifications must be submitted to the DEQ 10-business days prior to any abatement, renovation or demolition activities. Instruction of how to file and comply with DEQ and NESHAP notification requirements are provided on the DEQ web site at: <http://www.deq.state.ok.us/aqdnew/asbestos/index.htm>

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

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

<http://www.ok.gov/odol/>

LIMITATIONS OF SURVEY

This Asbestos Inspection was limited to certain aspects of the building construction these limitations may have restricted or prevented the complete inspection of hidden or inaccessible building materials; therefore, inaccessible building materials were not inspected. Furthermore, locations presenting a hazard to bystanders or the Inspector were not assessed.

The findings resulting from this Inspection are valid as of the date this Asbestos Inspection was performed; however, changes in the conditions of a property may certainly occur with the passage of time whether due

to natural processes or the works of man. Additionally, changes in applicable or appropriate standards may also occur possibly resulting from legislation or the expansion of knowledge.

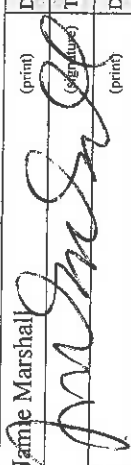
Our Investigation was conducted using the degree of care and skill ordinarily exercised by professional consultants under similar circumstances practicing in this or similar localities. Professional services have been performed; results associated with this Asbestos Inspection were obtained and reported in accordance with generally accepted principles and practices. No other representations either expressed or implied are made; thus, Marshall Environmental Management, Inc. is not responsible for independent conclusions, opinions, or recommendations made by others. It should also be noted that as-built plans were not available for review or use in the planning of this Asbestos Inspection.

APPENDIX

CHAIN OF CUSTODY & ANALYTICAL RESULTS

DIAGRAM OF ACM

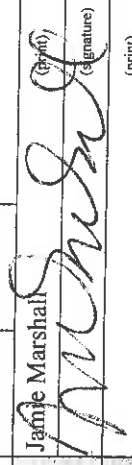
LICENSES

PROJECT				INVOICE TO				REPORT TO			
Project Number	0062-AB-050510-JM			Client	State of Oklahoma - DCS Construction & Properties Division			Client	Oklahoma Department of Environmental Quality Land Protection Division		
Project Name	Asbestos Inspection Kingfisher Armory			Attention	Cindy Melton Administrative Programs Officer			Attention	Dustin Davidson		
Address	303 North 6th Street Kingfisher, OK 73750			Address	P.O. Box 53448 Oklahoma City, OK 73152-3448			Address	707 North Robinson Oklahoma City, OK 73102		
Site-Contact				Phone Number	405-522-4805			Phone Number	405-702-5115		
Phone Number				E-mail Address	cindy_melton@dcs.state.ok.us			E-mail Address	dustin.davidson@den.ok.gov		
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/Parameters
0045-050510-CJM-PLM-1	5/5/2010	PLM-1	Room 1	Center Floor	12 x 12 Floor Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-2	5/5/2010	PLM-2	Room 1	Center Floor	Yellow Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-3	5/5/2010	PLM-3	Room 5	North Ceiling	2 x 4 Ceiling Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-4	5/5/2010	PLM-4	Room 5	Center Ceiling	Battling Insulation	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-5	5/5/2010	PLM-5	Room 35	North Floor	12 x 12 Floor Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Collected By	Jamie Marshall (print) 			Date	5/5/2010	Time	16:30	Method of Shipment			
Samples Received By				Date		Time		Sample Notes			
Samples Received By				Date		Time		Condition Upon Receipt			
Samples Received By				Date		Time		Turn-Around-Time			

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

PROJECT				INVOICE TO				REPORT TO			
Project Number	0062-AB-050510-JM			Client	State of Oklahoma - DCS Construction & Properties Division			Client	Oklahoma Department of Environmental Quality Land Protection Division		
Project Name	Asbestos Inspection Kingfisher Armory			Attention	Cindy Melton Administrative Programs Officer			Attention	Dustin Davidson		
Address	303 North 6th Street Kingfisher, OK 73750			Address	P.O. Box 53448 Oklahoma City, OK 73152-3448			Address	707 North Robinson Oklahoma City, OK 73102		
Site Contact				Phone Number	405-522-4805			Phone Number	405-702-5115		
Phone Number				E-mail Address	cindy_melton@dcs.state.ok.us			E-mail Address	dustin.davidson@deq.ok.gov		
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0045-050510-CJM-PLM-6	5/5/2010	PLM-6	Room 35	North Floor	Yellow Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-7	5/5/2010	PLM-7	Room 35	South Floor	12 x 12 Floor Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-8	5/5/2010	PLM-8	Room 35	South Floor	Yellow Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-9	5/5/2010	PLM-9	Room 35	North Center	12 x 12 Floor Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-10	5/5/2010	PLM-10	Room 35	North Center	Yellow Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Collected By	Jamie Marshall (print)			Date	5/5/2010	Samples Relinquished By	(print)	Date			
Samples Received By				Time	16:30	Samples Relinquished By	(signature)	Time			
Samples Received By				Date		Samples Relinquished By	(print)	Date			
				Time		Samples Relinquished By	(signature)	Time			
				Date		Samples Relinquished By	(print)	Date			
				Time		Samples Relinquished By	(signature)	Time			

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

PROJECT				INVOICE TO				REPORT TO							
Project Number	0062-AB-050510-JM	Client	State of Oklahoma - DCS Construction & Properties Division	Client	Oklahoma Department of Environmental Quality Land Protection Division	Project Name	Asbestos Inspection Kingfisher Army	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson	Address	303 North 6th Street Kingfisher, OK 73750	Address	707 North Robinson Oklahoma City, OK 73102
Address	303 North 6th Street Kingfisher, OK 73750	Phone Number	405-522-4805	Phone Number	405-522-4805	Site Contact		E-mail Address	cindy_melton@dcs.state.ok.us	E-mail Address	dustin.davidson@deq.ok.gov	Phone Number	405-702-5115	Phone Number	405-702-5115
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters				
0045-050510-CJM-PLM-11	5/5/2010	PLM-11	Room 8	SW Ceiling	Ceiling Material	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos				
0045-050510-CJM-PLM-12	5/5/2010	PLM-12	Room 8	West Ceiling	Ceiling Material	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos				
0045-050510-CJM-PLM-13	5/5/2010	PLM-13	Room 8	NE Ceiling	Ceiling Material	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos				
0045-050510-CJM-PLM-14	5/5/2010	PLM-14	Room 9	East Floor	Tan 9 x 9 Floor Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos				
0045-050510-CJM-PLM-15	5/5/2010	PLM-15	Room 9	East Floor	Black Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos				
Samples Collected By	Date	Field Identification	Sample Area	Location of Sample	Sample Composition	Sample Matrix	Sample Media	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters				
Jamie Marshall	5/5/2010	PLM-11	Room 8	SW Ceiling	Ceiling Material	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos				
Samples Received By	Date	Field Identification	Sample Area	Location of Sample	Sample Composition	Sample Matrix	Sample Media	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters				
Jamie Marshall	5/5/2010	PLM-11	Room 8	SW Ceiling	Ceiling Material	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos				
Samples Received By	Date	Field Identification	Sample Area	Location of Sample	Sample Composition	Sample Matrix	Sample Media	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters				
Jamie Marshall	5/5/2010	PLM-11	Room 8	SW Ceiling	Ceiling Material	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos				

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

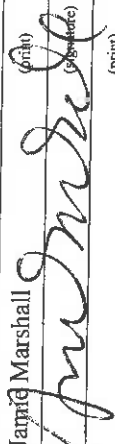
Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Sample Media	MV
Micro-Vacuum	MP
Mold Plate	ST
Spoor Trap	SW
Swab	TL

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

Chain of Custody Marshall Environmental Management, Inc.

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

PROJECT				INVOICE TO				REPORT TO			
Project Number	0062-AB-050510-JM			Client	State of Oklahoma - DCS Construction & Properties Division			Client	Oklahoma Department of Environmental Quality Land Protection Division		
Project Name	Asbestos Inspection Kingfisher Armory			Attention	Cindy Melton Administrative Programs Officer			Attention	Dustin Davidson		
Address	303 North 6th Street Kingfisher, OK 73750			Address	P.O. Box 53448 Oklahoma City, OK 73152-3448			Address	707 North Robinson Oklahoma City, OK 73102		
Site Contact				Phone Number	405-522-4805			Phone Number	405-702-5115		
Phone Number				E-mail Address	cindy_melton@dcs.state.ok.us			E-mail Address	dustin.davidson@deq.ok.gov		
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0045-050510-CJM-PLM-16	5/5/2010	PLM-16	Room 9	West Floor	Tan 9 x 9 Floor Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-17	5/5/2010	PLM-17	Room 9	West Floor	Black Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-18	5/5/2010	PLM-18	Room 9	Center Floor	Tan 9 x 9 Floor Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-19	5/5/2010	PLM-19	Room 9	Center Floor	Black Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-20	5/5/2010	PLM-20	Room 5	East Floor	Beige 12 x 12 Floor Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Collected By	Jarrod Marshall			Date	5/5/2010	Samples Relinquished By		Date		Method of Shipment	
Samples Received By				Time	16:30	Samples Relinquished By		Time		Sample Notes	
Samples Received By				Date		Samples Relinquished By		Date		Condition Upon Receipt	
Samples Received By				Time		Samples Relinquished By		Time		Turn-Around-Time	

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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


PROJECT				INVOICE TO				REPORT TO										
Project Number	0062-AB-050510-JM	Client	State of Oklahoma - DCS Construction & Properties Division	Client	Oklahoma Department of Environmental Quality Land Protection Division	Project Name	Asbestos Inspection Kingfisher Armory	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson	Address	303 North 6th Street Kingfisher, OK 73750	Address	707 North Robinson Oklahoma City, OK 73102			
Address	303 North 6th Street Kingfisher, OK 73750	Phone Number	405-522-4805	Phone Number	405-522-4805	Site Contact		E-mail Address	cindy_melton@dcs.state.ok.us	E-mail Address	dustin.davidson@deq.ok.gov	Phone Number	405-702-5115					
Phone Number		E-mail Address	cindy_melton@dcs.state.ok.us	E-mail Address		Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/Parameters	
0045-050510-CJM-PLM-21	5/5/2010	PLM-21	Room 5	Room 5	East Floor	Black Mastic	Bulk	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PLM Asbestos	
0045-050510-CJM-PLM-22	5/5/2010	PLM-22	Room 5	Room 5	West Floor	Beige 12 x 12 Floor Tile	Bulk	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PLM Asbestos	
0045-050510-CJM-PLM-23	5/5/2010	PLM-23	Room 5	Room 5	West Floor	Black Mastic	Bulk	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PLM Asbestos	
0045-050510-CJM-PLM-24	5/5/2010	PLM-24	Room 5	Room 5	Center Floor	Beige 12 x 12 Floor Tile	Bulk	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PLM Asbestos	
0045-050510-CJM-PLM-25	5/5/2010	PLM-25	Room 5	Room 5	Center Floor	Black Mastic	Bulk	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PLM Asbestos	
Samples Collected By	Jaymie Marshall	Date	5/5/2010	Time	16:30	Samples Relinquished By		Date	5/5/2010	Time	16:30	Samples Relinquished By		Date	5/5/2010	Time	16:30	Method of Shipment
Samples Received By		Date		Time		Samples Relinquished By		Date		Time		Samples Relinquished By		Date		Time		Sample Notes
Samples Received By		Date		Time		Samples Relinquished By		Date		Time		Samples Relinquished By		Date		Time		Condition Upon Receipt
Samples Received By		Date		Time		Samples Relinquished By		Date		Time		Samples Relinquished By		Date		Time		Turn-Around-Time

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

Turn-Around-Time	
------------------	--

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

PROJECT				INVOICE TO				REPORT TO			
Project Number	0062-AB-050510-JM			Client	State of Oklahoma - DCS Construction & Properties Division			Client	Oklahoma Department of Environmental Quality Land Protection Division		
Project Name	Asbestos Inspection Kingfisher Armory			Attention	Cindy Melton Administrative Programs Officer			Attention	Dustin Davidson		
Address	303 North 6th Street Kingfisher, OK 73750			Address	P.O. Box 53448 Oklahoma City, OK 73152-3448			Address	707 North Robinson Oklahoma City, OK 73102		
Site Contact				Phone Number	405-522-4805			Phone Number	405-702-5115		
Phone Number				E-mail Address	cindy_melton@dcs.state.ok.us			E-mail Address	dustin.davidson@deq.ok.gov		
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0045-050510-CJM-PLM-26	5/5/2010	PLM-26	Room 27	East Floor	Brown 12 x 12 Floor Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-27	5/5/2010	PLM-27	Room 27	East Floor	Yellow Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-28	5/5/2010	PLM-28	Room 27	West Floor	Brown 12 x 12 Floor Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-29	5/5/2010	PLM-29	Room 27	West Floor	Yellow Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-30	5/5/2010	PLM-30	Room 27	Center Floor	Brown 12 x 12 Floor Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Collected By	Jayne Marshall (print)			Date	5/5/2010	Samples Relinquished By		Date		Method of Shipment	
Samples Received By				Time	16:30	Samples Relinquished By		Time		Sample Notes	
Samples Received By				Date		Samples Relinquished By		Date		Condition Upon Receipt	
				Time		Samples Relinquished By		Time		Turn-Around-Time	

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

PROJECT				INVOICE TO				REPORT TO			
Project Number	0062-AB-050510-JM	Client	State of Oklahoma - DCS	Client	Construction & Properties Division	Client	Oklahoma Department of Environmental Quality	Land Protection Division			
Project Name	Asbestos Inspection Kingfisher Army	Attention	Cindy Melton	Attention	Administrative Programs Officer	Attention	Dustin Davidson				
Address	303 North 6th Street Kingfisher, OK 73750	Address	P.O. Box 53448	Address	Oklahoma City, OK 73152-3448	Address	707 North Robinson				
Site Contact		Phone Number	405-522-4805	Phone Number	405-522-4805	Phone Number	405-702-5115				
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/Parameters
0045-050510-CJM-PLM-31	5/5/2010	PLM-31	Room 27	Center Floor	Yellow Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-32	5/5/2010	PLM-32	Room 27	East Wall	Wall Texture	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-33	5/5/2010	PLM-33	Room 27	East Wall	Bed Tape	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-34	5/5/2010	PLM-34	Room 27	East Wall	Bed Mud	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-35	5/5/2010	PLM-35	Room 27	East Wall	Dry Wall	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Collected By	Date	Field Identification	Sample Area	Location of Sample	Sample Composition	Sample Matrix	Sample Media	Sample Time	Calibrated Flow Rate	Total Volume	Analysis/Parameters
Jamie Marshall	5/5/2010	PLM-31	Room 27	Center Floor	Yellow Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Received By	Date	Field Identification	Sample Area	Location of Sample	Sample Composition	Sample Matrix	Sample Media	Sample Time	Calibrated Flow Rate	Total Volume	Analysis/Parameters
Jamie Marshall	5/5/2010	PLM-31	Room 27	Center Floor	Yellow Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Received By	Date	Field Identification	Sample Area	Location of Sample	Sample Composition	Sample Matrix	Sample Media	Sample Time	Calibrated Flow Rate	Total Volume	Analysis/Parameters
Jamie Marshall	5/5/2010	PLM-31	Room 27	Center Floor	Yellow Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos

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

Phase-Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

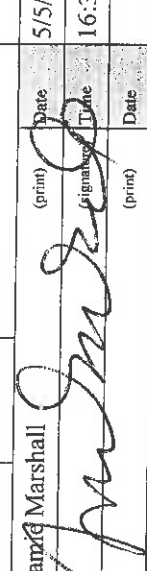
Chain of Custody Marshall Environmental Management, Inc.

PROJECT				INVOICE TO				REPORT TO			
Project Number	0062-AB-050510-JM	Client	State of Oklahoma - DCS Construction & Properties Division	Client	Oklahoma Department of Environmental Quality Land Protection Division						
Project Name	Asbestos Inspection Kingfisher Armory	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson						
Address	303 North 6th Street Kingfisher, OK 73750	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	707 North Robinson Oklahoma City, OK 73102						
Site Contact		Phone Number	405-522-4805	Phone Number	405-702-5115						
Phone Number		E-mail Address	cindy_melton@dcs.state.ok.us	E-mail Address	dustin_davidson@deq.ok.gov						
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0045-050510-CJM-PLM-36	5/5/2010	PLM-36	Room 27	West Wall	Wall Texture	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-37	5/5/2010	PLM-37	Room 27	West Wall	Bed Tape	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-38	5/5/2010	PLM-38	Room 27	West Wall	Bed Mud	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-39	5/5/2010	PLM-39	Room 27	West Wall	Dry Wall	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-40	5/5/2010	PLM-40	Room 27	Center Wall	Wall Texture	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Collected By	Date		Samples Relinquished By		Date		Method of Shipment		Page 8 of 11		
<i>Jamie Marshall</i>	(print) 5/5/2010		By		(print) 5/5/2010		Time				
	(signature)		By		(signature)		Time				
Samples Received By	Date		Samples Relinquished By		Date		Sample Notes				
	(print)		By		(print)		Time				
	(signature)		By		(signature)		Time				
Samples Received By	Date		Samples Relinquished By		Date		Condition Upon Receipt				
	(print)		By		(print)		Time				
	(signature)		By		(signature)		Time				

Sample Media	Micro-Vacuum	MV
Mold Plate	Polarized Light Microscopy	PLM
Sponge Trap		
Swab		
Tape-Lift		

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

PROJECT				INVOICE TO				REPORT TO			
Project Number	0062-AB-050510-JM	Client	State of Oklahoma - DCS	Client	Construction & Properties Division	Client	Oklahoma Department of Environmental Quality				
Project Name	Asbestos Inspection Kingfisher Armory	Attention	Cindy Melton	Attention	Administrative Programs Officer	Attention	Dustin Davidson				
Address	303 North 6th Street Kingfisher, OK 73750	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	Oklahoma City, OK 73152-3448	Address	707 North Robinson Oklahoma City, OK 73102				
Site Contact		Phone Number	405-522-4805	Phone Number	405-522-4805	Phone Number	405-702-5115				
Phone Number		E-mail Address	cindy_melton@dcs.state.ok.us	E-mail Address	cindy_melton@dcs.state.ok.us	E-mail Address	dstutin.davidson@denr.ok.gov				
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0045-050510-CJM-PLM-41	5/5/2010	PLM-41	Room 27	Center Wall	Bed Tape	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-42	5/5/2010	PLM-42	Room 27	Center Wall	Bed Mud	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-43	5/5/2010	PLM-43	Room 27	Center Wall	Dry Wall	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-44	5/5/2010	PLM-44	Room 25	Floor	Vinyl Sheet Floor	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-45	5/5/2010	PLM-45	Room 26	West Ceiling	Ceiling Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Collected By	Janet Marshall		(print)	Date	5/5/2010	(print)	Date	5/5/2010	Samples Relinquished By	16:30	Turn-Around-Time
Samples Received By			(signature)	Date		(signature)	Date		Samples Relinquished By		Standard
Samples Received By			(signature)	Date		(signature)	Date		Samples Relinquished By		Rush
			(signature)	Date		(signature)	Date		Samples Relinquished By		Immediate
			(signature)	Date		(signature)	Date		Samples Relinquished By		Same Day

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

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

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

PROJECT				INVOICE TO				REPORT TO			
Project Number	0062-AB-050510-JM			Client	State of Oklahoma - DCS Construction & Properties Division			Client	Oklahoma Department of Environmental Quality Land Protection Division		
Project Name	Asbestos Inspection Kingfisher Armory			Attention	Cindy Melton			Attention	Dustin Davidson		
Address	303 North 6th Street Kingfisher, OK 73750			Address	P.O. Box 53448 Oklahoma City, OK 73152-3448			Address	707 North Robinson Oklahoma City, OK 73102		
Site Contact				Phone Number	405-522-4805			Phone Number	405-702-5115		
Phone Number				E-mail Address	cindy_melton@dcs.state.ok.us			E-mail Address	dustin.davidson@deq.ok.gov		
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysts/ Parameters
0045-050510-CJM-PLM-46	5/5/2010	PLM-46	Room 27	West Ceiling	Ceiling Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-47	5/5/2010	PLM-47	Room 21	Floor	Vinyl Sheet Floor	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-48	5/5/2010	PLM-48	Room 21	Floor	Black Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-49	5/5/2010	PLM-49	Room 21	Floor	Yellow Mastic	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-50	5/5/2010	PLM-50	Room 20	West Ceiling	Ceiling Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Collected By	Date	Field Identification	Sample Area	Location of Sample	Sample Composition	Sample Matrix	Sample Media	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysts/ Parameters
Jamie Marshall	5/5/2010	PLM-46	Room 27	West Ceiling	Ceiling Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Received By	Date	Field Identification	Sample Area	Location of Sample	Sample Composition	Sample Matrix	Sample Media	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysts/ Parameters
Jamie Marshall	5/5/2010	PLM-46	Room 27	West Ceiling	Ceiling Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Received By	Date	Field Identification	Sample Area	Location of Sample	Sample Composition	Sample Matrix	Sample Media	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysts/ Parameters
Jamie Marshall	5/5/2010	PLM-46	Room 27	West Ceiling	Ceiling Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos

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

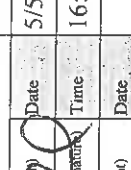
Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

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

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PROJECT				INVOICE TO				REPORT TO			
Project Number	0062-AB-050510-JM			Client	State of Oklahoma - DCS Construction & Properties Division			Client	Oklahoma Department of Environmental Quality Land Protection Division		
Project Name	Asbestos Inspection Kingfisher Armory			Attention	Cindy Melton Administrative Programs Officer			Attention	Dustin Davidson		
Address	303 North 6th Street Kingfisher, OK 73750			Address	P.O. Box 53448 Oklahoma City, OK 73152-3448			Address	707 North Robinson Oklahoma City, OK 73102		
Site Contact				Phone Number	405-522-4805			Phone Number	405-702-5115		
Phone Number				E-mail Address	cindy_melton@dcs.state.ok.us			E-mail Address	dustin.davidson@dea.ok.gov		
Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/Parameters
0045-050510-CJM-PLM-51	5/5/2010	PLM-51	Room 16	West Wall	Drywall	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-52	5/5/2010	PLM-52	Room 17	Ceiling	Ceiling Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
0045-050510-CJM-PLM-52	5/5/2010	PLM-53	Room 11	Ceiling	Ceiling Tile	Bulk	N/A	N/A	N/A	N/A	PLM Asbestos
Samples Collected By	Jamie Marshall			Date	5/5/2010	Samples Relinquished By		Date		Method of Shipment	
Samples Received By				Time	16:30	Samples Relinquished By		Time		Sample Notes	
Samples Received By				Date		Samples Relinquished By		Date		Condition Upon Receipt	
				Time		Samples Relinquished By		Time		Turn-Around-Time	

Sample Media

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

Phase Contrast Microscopy

PCM	
Polarized Light Microscopy	PLM

Turn-Around-Time

Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

Page 11 of 11

Bulk Asbestos Analysis

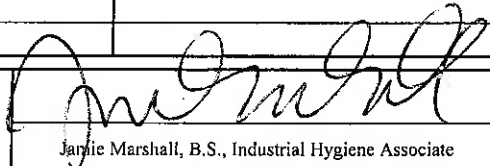
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PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0062-AB-050510-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Kingfisher Armory AB Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	303 N. 6th Street Kingfisher, OK 73750	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Contact	Bill Tucker	Phone	405-522-4805	Phone #	405-702-5115
Phone	405-375-3705	Fax	405-522-0051	Fax #	
Cell	405-368-7355	Other		Cell #	
email		email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deo.ok.gov

LAB LOG NUMBER	LAB LOG NUMBER	DATE OF SAMPLING	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected	
					COLOR			
0045-050510-CJM-PLM-1	0045-050510-CJM-PLM-1	May 5, 2010	May 5, 2010	Room 1 - Center	COLOR	Beige		100% Vinyl Aggregate
				12"x12" Floor Tile	CONDITION	Good		
					TYPE	Miscellaneous		
					NOTE			
0045-050510-CJM-PLM-2	0045-050510-CJM-PLM-2	May 5, 2010	May 5, 2010	Room 1 - Center	COLOR	Yellow		100% Adhesive
				Floor Mastic	CONDITION	Good		
					TYPE	Miscellaneous		
					NOTE			
0045-050510-CJM-PLM-3	0045-050510-CJM-PLM-3	May 5, 2010	May 5, 2010	Room 5 - North	COLOR	White		100% Foam
				Ceiling Tile	CONDITION	Good		
					TYPE	Miscellaneous		
					NOTE			
0045-050510-CJM-PLM-4	0045-050510-CJM-PLM-4	May 5, 2010	May 5, 2010	Room 5 - Center	COLOR	Yellow		100% Fibrous Glass
				Batting Insulation	CONDITION	Good		
					TYPE	Thermal System Insulation		
					NOTE			
0045-050510-CJM-PLM-5	0045-050510-CJM-PLM-5	May 5, 2010	May 5, 2010	Room 35 - North	COLOR	Beige		100% Vinyl Aggregate
				12"x12" Floor Tile	CONDITION	Good		
					TYPE	Miscellaneous		
					NOTE			

Jamie Marshall



Jamie Marshall, B.S., Industrial Hygiene Associate

May 19, 2010

ANALYST NAME (PRINT)

ANALYST SIGNATURE

DATE ANALYZED

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

Lab Accreditation:
 AIHA PAT ID# 102334

Bulk Asbestos Analysis

Marshall Environmental Management, Inc.

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

PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0062-AB-050510-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Kingfisher Armory AB Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	303 N. 6th Street Kingfisher, OK 73750	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Contact	Bill Tucker	Phone	405-522-4805	Phone #	405-702-5115
Phone	405-375-3705	Fax	405-522-0051	Fax #	
Cell	405-368-7355	Other		Cell #	
email		email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected	
			COLOR	CONDITION		
0045-050510-CJM-PLM-6	May 5, 2010	Room 35 - North	Yellow	Good	100%	Adhesive
		Floor Mastic				
0045-050510-CJM-PLM-7	May 5, 2010	Room 35 - South	Beige	Good	100%	Vinyl Aggregate
		12"x12" Floor Tile				
0045-050510-CJM-PLM-8	May 5, 2010	Room 35 - South	Yellow	Good	100%	Adhesive
		Floor Mastic				
0045-050510-CJM-PLM-9	May 5, 2010	Room 35 - North/Center	Beige	Good	100%	Vinyl Aggregate
		12"x12" Floor Tile				
0045-050510-CJM-PLM-10	May 5, 2010	Room 35 - North/Center	Beige	Good	100%	Adhesive
		Floor Mastic				

Jamie Marshall



Jamie Marshall, B.S., Industrial Hygiene Associate

May 19, 2010

ANALYST NAME (PRINT)

ANALYST SIGNATURE

DATE ANALYZED

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

Lab Accreditation:

AIHA PAT ID# 102334

Bulk Asbestos Analysis

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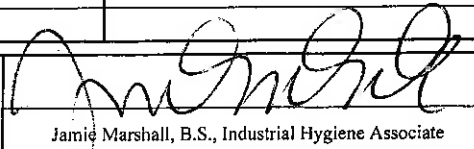
Oklahoma City, OK 73159

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marshenv@swbell.net

PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0062-AB-050510-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Kingfisher Armory AB Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	303 N. 6th Street Kingfisher, OK 73750	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
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Phone	405-375-3705	Fax	405-522-0051	Fax #	
Cell	405-368-7355	Other		Cell #	
email		email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected		
			COLOR	CONDITION			
0045-050510-CJM-PLM-11	May 5, 2010	Room 8 - Southwest	Brown	Damaged	95%	Tar	
		Ceiling Material			5%	Cellulose	
			Miscellaneous				
0045-050510-CJM-PLM-12	May 5, 2010	Room 8 - West	Brown	Damaged	95%	Tar	
		Ceiling Material			5%	Cellulose	
			Miscellaneous				
0045-050510-CJM-PLM-13	May 5, 2010	Room 8 - Northeast	Brown	Damaged	95%	Tar	
		Ceiling Material			5%	Cellulose	
			Miscellaneous				
0045-050510-CJM-PLM-14	May 5, 2010	Room 9 - East	Tan	Good	2%	Cellulose	
		9"x9" Floor Tile			98%	Vinyl Aggregate	
			Miscellaneous				
0045-050510-CJM-PLM-15	May 5, 2010	Room 9 - East	Black	Good	100%	Adhesive	
		Floor Mastic					
			Miscellaneous				

Jamie Marshall	 Jamie Marshall, B.S., Industrial Hygiene Associate	May 19, 2010
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.	Lab Accreditation: AIHA PAT ID# 102334
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Bulk Asbestos Analysis

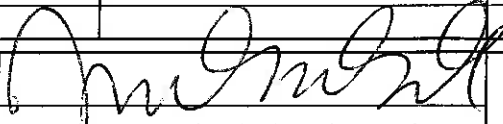
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marshenv@swbell.net

PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0062-AB-050510-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Kingfisher Armory AB Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	303 N. 6th Street Kingfisher, OK 73750	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Contact	Bill Tucker	Phone	405-522-4805	Phone #	405-702-5115
Phone	405-375-3705	Fax	405-522-0051	Fax #	
Cell	405-368-7355	Other		Cell #	
email		email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected	
			COLOR	CONDITION		
0045-050510-CJM-PLM-16	May 5, 2010	Room 9 - West	Tan		2%	Cellulose
		9"x9" Floor Tile	Good		98%	Vinyl Aggregate
			Miscellaneous			
0045-050510-CJM-PLM-17	May 5, 2010	Room 9 - West	Black		100%	Vinyl Aggregate
		Floor Mastic	Good			
			Miscellaneous			
0045-050510-CJM-PLM-18	May 5, 2010	Room 9 - Center			2%	Cellulose
		9"x9" Floor Tile			98%	Vinyl Aggregate
0045-050510-CJM-PLM-19	May 5, 2010	Room 9 - Center	Black		100%	Adhesive
		Floor Mastic	Good			
			Miscellaneous			
0045-050510-CJM-PLM-20	May 5, 2010	Room 5 - East	Beige		100%	Adhesive
		12" x 12" Floor Tile	Good			
			Miscellaneous			

Jamie Marshall


 Jamie Marshall, B.S., Industrial Hygiene Associate

May 19, 2010

ANALYST NAME (PRINT)

ANALYST SIGNATURE

DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light
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Lab Accreditation:
 AIHA PAT ID# 102334

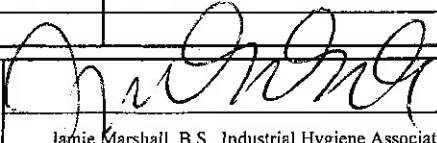
Bulk Asbestos Analysis

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PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0062-AB-050510-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Kingfisher Armory AB Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	303 N. 6th Street Kingfisher, OK 73750	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
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Phone	405-375-3705	Fax	405-522-0051	Fax #	
Cell	405-368-7355	Other		Cell #	
email		email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected	
			COLOR	CONDITION		
0045-050510-CJM-PLM-21	May 5, 2010	Room 5 - East	Black	Good		100% Adhesive
		Floor Mastic		Miscellaneous		
0045-050510-CJM-PLM-22	May 5, 2010	Room 5 - East	Beige	Good		100% Vinyl Aggregate
		12"x12" Floor Tile		Miscellaneous		
0045-050510-CJM-PLM-23	May 5, 2010	Room 5 - West	Black	Good		100% Adhesive
		Floor Mastic		Miscellaneous		
0045-050510-CJM-PLM-24	May 5, 2010	Room 5 - Center	Beige	Good		100% Vinyl Aggregate
		12"x12" Floor Tile		Miscellaneous		
0045-050510-CJM-PLM-25	May 5, 2010	Room 5 - Center	Black	Good		100% Adhesive
		Floor Mastic		Miscellaneous		

Jamie Marshall ANALYST NAME (PRINT)	 Jamie Marshall, B.S., Industrial Hygiene Associate ANALYST SIGNATURE	May 19, 2010 DATE ANALYZED
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Polarized Light Microscopy Asbestos Analysis Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.	Lab Accreditation: AIHA PAT ID# 102334
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Bulk Asbestos Analysis

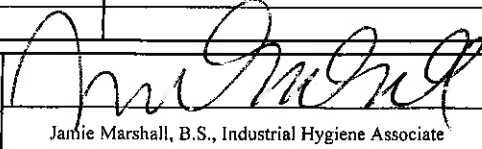
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Project	Kingfisher Armory AB Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
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Contact	Bill Tucker	Phone	405-522-4805	Phone #	405-702-5115
Phone	405-375-3705	Fax	405-522-0051	Fax #	
Cell	405-368-7355	Other		Cell #	
email		email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected	
0045-050510-CJM-PLM-26	May 5, 2010	Room 27 - East	COLOR	Brown	100%	Vinyl Aggregate
		12"x12" Floor Tile	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			
0045-050510-CJM-PLM-27	May 5, 2010	Room 27 - East	COLOR	Yellow	100%	Adhesive
		Floor Mastic	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			
0045-050510-CJM-PLM-28	May 5, 2010	Room 27 - West	COLOR	Brown	100%	Vinyl Aggregate
		12"x12" Floor Tile	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			
0045-050510-CJM-PLM-29	May 5, 2010	Room 27 - West	COLOR	Yellow	100%	Adhesive
		Floor Mastic	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			
0045-050510-CJM-PLM-30	May 5, 2010	Room 27 - Center	COLOR	Brown	100%	Vinyl Aggregate
		12"x12" Floor Tile	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			

Jamie Marshall



Jamie Marshall, B.S., Industrial Hygiene Associate

May 19, 2010

ANALYST NAME (PRINT)

ANALYST SIGNATURE

DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:

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

Lab Accreditation:

AIHA PAT ID# 102334

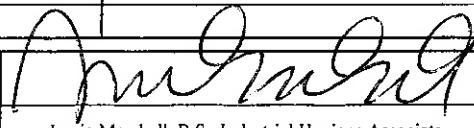
Bulk Asbestos Analysis

Marshall Environmental Management, Inc.

1601 Southwest 890th Street, Suite A-100
 Oklahoma City, OK 73159
 Phone: (405) 616-0401 Fax: (405) 681-6753
 marshenv@swbell.net

PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0062-AB-050510-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Kingfisher Armory AB Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	303 N. 6th Street Kingfisher, OK 73750	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Contact	Bill Tucker	Phone	405-522-4805	Phone #	405-702-5115
Phone	405-375-3705	Fax	405-522-0051	Fax #	
Cell	405-368-7355	Other		Cell #	
email		email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected	
			COLOR	CONDITION		
0045-050510-CJM-PLM-31	May 5, 2010	Room 27 - Center	Yellow	Good		100% Adhesive
		Floor Mastic		Miscellaneous		
0045-050510-CJM-PLM-32	May 5, 2010	Room 27 - East	White	Good		100% Calcareous Material
		Wall Texture		Surfacing		
0045-050510-CJM-PLM-33	May 5, 2010	Room 27 - East	White	Good		100% Cellulose
		Bedding Tape		Miscellaneous		
0045-050510-CJM-PLM-34	May 5, 2010	Room 27 - East	White	Good		100% Calcareous Material
		Bedding Mud		Surfacing		
0045-050510-CJM-PLM-35	May 5, 2010	Room 27 - East	White	Good		2% Cellulose
		Drywall		Miscellaneous		2% Fibrous Glass
						96% Calcareous Material

Jamie Marshall  Jamie Marshall, B.S., Industrial Hygiene Associate	May 19, 2010
ANALYST NAME (PRINT)	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.	Lab Accreditation: AIHA PAT ID# 102334
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Phone	405-375-3705	Fax	405-522-0051	Fax #	
Cell	405-368-7355	Other		Cell #	
email		email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deo.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected	
			COLOR	CONDITION		
0045-050510-CJM-PLM-36	May 5, 2010	Room 27 - West	White	Good	100%	Calcareous Material
		Wall Texture		Surfacing		
0045-050510-CJM-PLM-37	May 5, 2010	Room 27 - West	White	Good	100%	Cellulose
		Bedding Tape		Miscellaneous		
0045-050510-CJM-PLM-38	May 5, 2010	Room 27 - West	White	Good	100%	Calcareous Material
		Bedding Mud		Surfacing		
0045-050510-CJM-PLM-39	May 5, 2010	Room 27 - West	White	Good	2%	Cellulose
		Drywall		Miscellaneous	2%	Fibrous Glass
					96%	Calcareous Material
0045-050510-CJM-PLM-40	May 5, 2010	Room 27 - Center	White	Good	100%	Calcareous Material
		Wall Texture		Surfacing		

Jamie Marshall 	May 19, 2010
ANALYST NAME (PRINT)	ANALYST SIGNATURE
DATE ANALYZED	

Polarized Light Microscopy Asbestos Analysis Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.	Lab Accreditation: AIHA PAT ID# 102334
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Bulk Asbestos Analysis

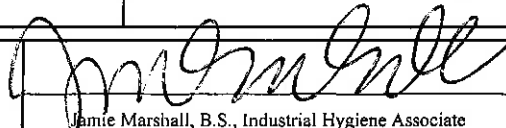
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Cell	405-368-7355	Other		Cell #	
email		email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected		
			COLOR	White		100%	Cellulose
0045-050510-CJM-PLM-41	May 5, 2010	Room 27 - Center	COLOR	White		100%	Cellulose
		Bedding Tape	CONDITION	Good			
			TYPE	Miscellaneous			
			NOTE				
0045-050510-CJM-PLM-42	May 5, 2010	Room 27 - Center	COLOR	White		100%	Calcareous Material
		Bedding Mud	CONDITION	Good			
			TYPE	Surfacing			
			NOTE				
0045-050510-CJM-PLM-43	May 5, 2010	Room 27 - Center	COLOR	White		2%	Cellulose
		Drywall	CONDITION	Good		2%	Fibrous Glass
			TYPE	Surfacing		96%	Calcareous Material
			NOTE				
0045-050510-CJM-PLM-44	May 5, 2010	Room 25 - Floor	COLOR	Blue		100%	Vinyl
		Vinyl Sheet Flooring	CONDITION	Good			
			TYPE	Miscellaneous			
			NOTE				
0045-050510-CJM-PLM-45	May 5, 2010	Room 26 - West	COLOR	White		45%	Cellulose
		Ceiling Tile	CONDITION	Good		25%	Fibrous Glass
			TYPE	Miscellaneous		10%	Glass Beads
			NOTE			20%	Calcareous Material

Jamie Marshall



Jamie Marshall, B.S., Industrial Hygiene Associate

May 19, 2010

ANALYST NAME (PRINT)

ANALYST SIGNATURE

DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light
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Cell	405-368-7355	Fax	405-522-0051	Cell #	
email		Other		email	dustin.davidson@deq.ok.gov
		email	Cindy.melton@dcs.state.ok.us		

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected	
			COLOR	CONDITION		
0045-050510-CJM-PLM-46	May 5, 2010	Room 27 - West	White		45%	Cellulose
		Ceiling Tile	Good		25%	Fibrous glass
			Miscellaneous		10%	Glass Beads
					20%	Calcareous Material
0045-050510-CJM-PLM-47	May 5, 2010	Room 21	Beige		25%	Cellulose
		Vinyl Sheet Flooring	Good		15%	Fibrous glass
			Miscellaneous		60%	Calcareous Material
0045-050510-CJM-PLM-48	May 5, 2010	Room 21	Black		100%	Tar
		Floor Mastic	Good			
			Miscellaneous			
0045-050510-CJM-PLM-49	May 5, 2010	Room 21	Yellow		100%	Adhesive
		Floor Mastic	Good			
			Miscellaneous			
0045-050510-CJM-PLM-50	May 5, 2010	Room 20 - West	White		45%	Cellulose
		Ceiling Tile	Good		25%	Fibrous glass
			Miscellaneous		10%	Glass Beads
					20%	Calcareous Material

Jamie Marshall Jamie Marshall, B.S., Industrial Hygiene Associate	May 19, 2010
ANALYST NAME (PRINT)	ANALYST SIGNATURE
DATE ANALYZED	

Polarized Light Microscopy Asbestos Analysis Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.	Lab Accreditation: AIHA PAT ID# 102334
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Bulk Asbestos Analysis

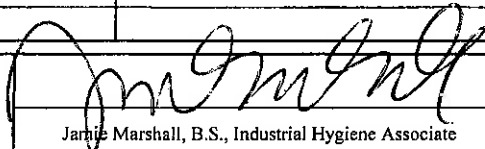
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Cell	405-368-7355	Other		Cell #	
email		email	Cindy.mellon@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	LAB LOG NUMBER	DATE OF SAMPLING	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected	
					COLOR	White		1% Fibrous glass
	0045-050510-CJM-PLM-51	May 5, 2010	May 5, 2010	Room 16 - West	CONDITION	Good		2% Cellulose
				Drywall	TYPE	Miscellaneous		97% Calcareous Material
					NOTE			
LAB LOG NUMBER	LAB LOG NUMBER	DATE OF SAMPLING	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected	
					COLOR	White		100% Foam
	0045-050510-CJM-PLM-52	May 5, 2010	May 5, 2010	Room 17	CONDITION	Good		
				Ceiling Tile	TYPE	Miscellaneous		
					NOTE			
LAB LOG NUMBER	LAB LOG NUMBER	DATE OF SAMPLING	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		No Asbestos Detected	
					COLOR	Brown		100% Cellulose
				Room 11	CONDITION	Good		
				Ceiling Tile	TYPE	Miscellaneous		
					NOTE			
LAB LOG NUMBER	LAB LOG NUMBER	DATE OF SAMPLING	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		3% Asbestos Detected	
					COLOR	White	3% Chrysotile	97%
				Room 11	CONDITION	Good		
				Ceiling Tile	TYPE	Surfacing		
					NOTE			
LAB LOG NUMBER	LAB LOG NUMBER	DATE OF SAMPLING	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION			
					COLOR			
					CONDITION			
					TYPE			
					NOTE			

Jamie Marshall



Jamie Marshall, B.S., Industrial Hygiene Associate

May 19, 2010

ANALYST NAME (PRINT)

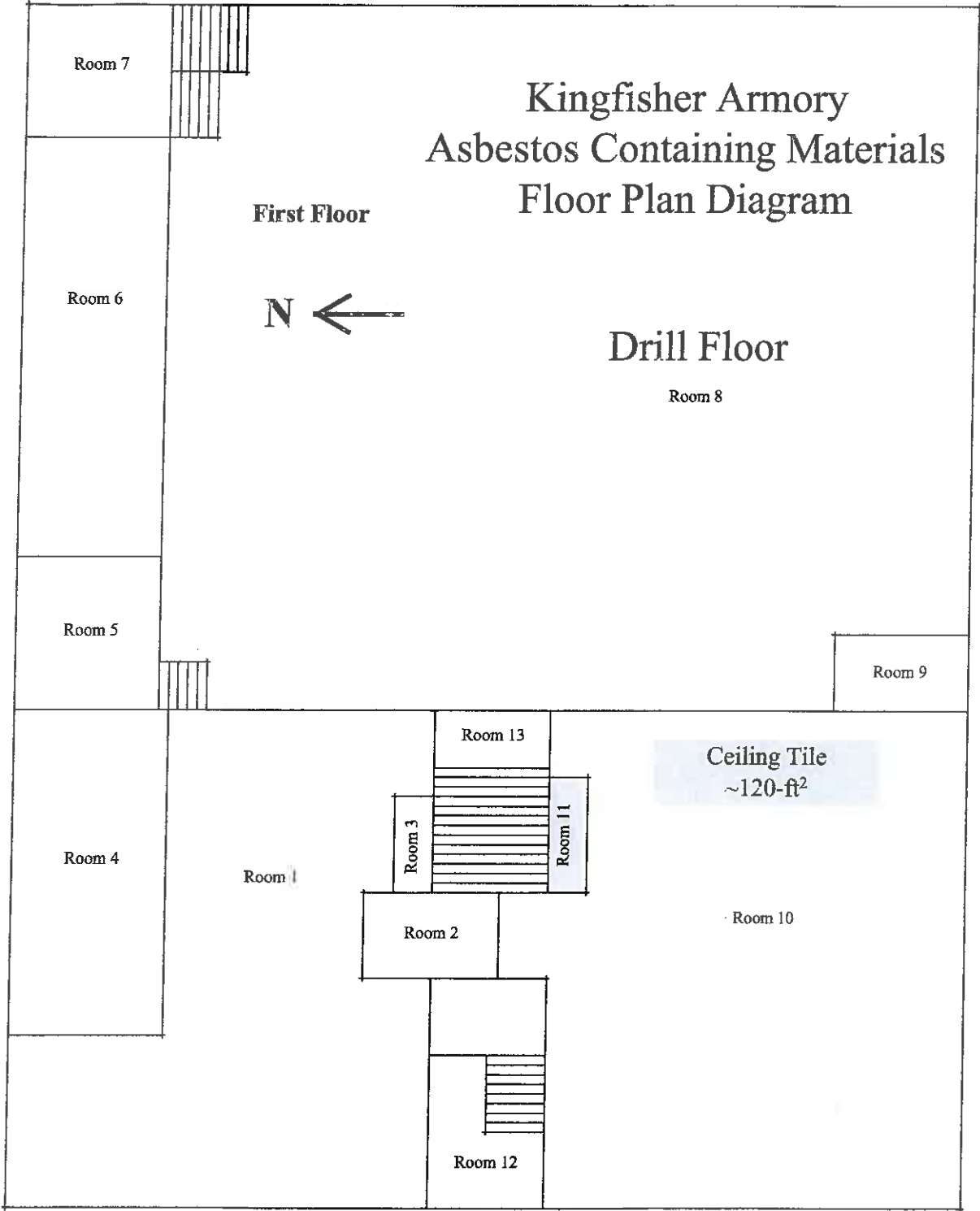
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DATE ANALYZED

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

Lab Accreditation:
AIHA PAT ID# 102334

Kingfisher Armory Asbestos Containing Materials Floor Plan Diagram



FEE: \$500.00

Oklahoma Department of Labor



Charles Marshall

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

AHERA MANAGEMENT PLANNER

Now, therefore, The Commissioner of Labor of the State of Oklahoma, by virtue of
the power vested in him by law hereby issues to the
applicant license No. **OK-MP130246**.

Lloyd L. Fields

LLOYD L. FIELDS
Commissioner of Labor

July 14, 2010

Date of Issuance

EXPIRES: June 30, 2011

FEE: \$25.00

Oklahoma Department of Labor



Jamie Marshall

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

AHERA INSPECTOR

Now, therefore, The Commissioner of Labor of the State of Oklahoma, by virtue of
the power vested in him by law hereby issues to the
applicant license No. **OK158090**.

Lloyd L. Fields

LLOYD L. FIELDS
Commissioner of Labor

June 03, 2010

Date of Issuance

EXPIRES: June 02, 2011

SCOPES OF WORK



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: 12/29/11 P. O. NUMBER: 2929015081 DCS/CAP PROJECT NUMBER: 12049

FROM PROPOSAL REQUEST NUMBER(S): 292049312 CONTRACT NUMBER: _____

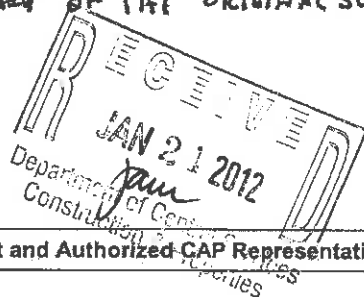
PROJECT NAME: KINGFISHER ARMORY - LEAD CONTAMINATION REMED DCS/CAP PROJ. MANAGER: REBEKAH RICHARDSON

CONTRACTOR: ES&S ENVIRONMENTAL & SAFETY TECHNOLOGIES CHANGE ORDER NUMBER: 1

BRIEF DESCRIPTION OF CHANGE:

ABATEMENT OF 1500 SQUARE FEET OF LINOLEUM & ACUM FLOOR TILE DISCOVERED UNDER CARPETING WHICH WAS REMOVED AS PART OF THE ORIGINAL SCOPE.

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 \$ 91,325.00^{0.00}

Net change by previously authorized Change Orders \$ 0.00

The Contract Sum Guaranteed Maximum Price prior to this Change Order was \$ 91,325.00^{0.00}

The Contract Sum Guaranteed Maximum Price will be increased decreased unchanged by this Change Order in the amount of \$ 6,750.00^{-0.00}

The new Contract Sum Guaranteed Maximum Price including this Change Order will be \$ 98,075.00^{0.00}

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 No Change Date

APPROVALS:

Jim DHSFELD Contractor Name Signature Jim DHSfeld Date 12/29/11

N/A Consultant Name Signature _____ Date: _____

Department of Environmental Quality								Signature <u>Andy Caperton</u>	Date <u>JAN 06 2012</u>
Using Agency									
GL Unit:	Acct:	Sub-Acct:	Fund Type:	Class	Fund:	Dept:	Bud Ref:		

Mike Jones Authorized CAP Representative Signature Mike Jones Date 1.20.12

Rebekah Richardson DCS Project Manager Signature Rebekah Richardson Date 1.20.12



Purchase Order

Dept of Environmental Quality
 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

CHANGE ORDER

Dispatch via Print

Purchase Order	Date	Revision	Page
2929015081	11/21/2011	1 - 01/24/2012	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	

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

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	Cat CD / Item Id	Description	Quantity	UOM	PO Price	Extended Amt	Due Date
1- 1	77111602 / 1000002278	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	1.0000	SUM	98,075.0000	98,075.00	01/24/2012

KINGFISHER ARMORY LEAD REMEDIATION CONTAMINATION
 ASSOCIATED WITH THE INDOOR FIRING RANGE (IFR).

PRICE AND VENDOR TO BE DETERMINED AFTER BIDS RECEIVED BY DCS.
 FY: 2012

PROJECT: SITE CLEANUP ASSISTANCE PROGRAM-KINGFISHER ARMORY
 LEAD DUST REMEDIATION BIDDING.

JUSTIFICATION: UNDER THE SITE CLEANUP ASSISTANCE PROGRAM THE
 DEQ WILL HIRE A LICENSED PROFESSIONAL TO ABATE LEAD DUST
 LOCATED IN THE KINGFISHER ARMORY.

(FOR AGENCY USE ONLY)

CONTACT: KAREN RUMSEY/ASD/(405)702-1168
 LINDA YARBER/LPD/(405)702-5110

DEQ IS AN EQUAL OPPORTUNITY EMPLOYER.

FUNDING: 493

REQUISITION # 29290003091 PLEASE RETURN PO TO LINDA YARBER 6/30/2011

Total PO Amount

98,075.00

COMMENTS:

DCS#12049
 REBEKAH RICHARDSON-DCS/CAP PROJECT MANAGER
 405-522-0050

PROJECTS OVER STATUTORY AMOUNT

AWARD OF CONSTRUCTION CONTRACT PURSUANT TO O.S. 61 § 103.A FOR PROJECTS OVER THE STATUTORY AMOUNT.

The Contractor Certifies that it and proposed subcontractors, whether known or unknown at the time this contract is executed or awarded, are in compliance with 25 O.S. §1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. §1312 and included but is not limited to the free Employee Verification Program (E-Verify) available at www.dhs.gov/E-Verify.

01/24/12 - CO# 1 - Abatement of 1,500 SF of Linoleum & ACM Floor Tile Discovered under Carpeting (Part of Original Scope). The Contract Time Remains Unchanged and the CONTRACT SUM IS INCREASED BY \$6,750.00 (Line# 1-1-1) jam

Authorized Signature

STATEMENT OF WORK

For

Remediation of Lead Contamination at Kingfisher 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 Kingfisher, Oklahoma. This statement of work (SOW) describes the cleanup of lead contamination associated with the indoor firing range (IFR), and lead contaminated dust on the floors of the building. This work must be performed to provide for safe re-use of the facility with unrestricted use such as storage areas, classrooms, or office space. A mandatory site visit and walk through will be held to give a better understanding of the site. Sample results are attached for review (**Attachment 1**).

The Kingfisher Armory building is located at 301 N. 6th Street, Kingfisher, Oklahoma 73750. The building does have available electricity but does not have available water to use during remediation.

SPECIAL PROVISIONS:

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

CONTRACTOR SHALL:

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

Submit With Bid:

- Copy of lead-based paint firm license.
- Copy of lead-based paint supervisor license.
- Three references with name, type of project, phone number, and location of similar work in the last three years.

Submit After Contract Award:

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

LEAD REMEDIATION INSTRUCTIONS

Sequence of Events

The initial cleaning of the building shall be as follows:

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

1. Indoor Firing Range (IFR)

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

- **Pre-remediation Preparation**

- To ensure cross contamination does not occur, use engineering controls such as:
 - Sealing openings with 6 mil poly sheeting to contain dust inside IFR;
 - Covering floor of area outside IFR with 6 mil poly sheeting to make sure not to track lead dust into clean areas;
 - Securing IFR at the end of the work day. At no time shall the IFR be accessible for unauthorized entry without the contractor present;
- When inside IFR wear appropriate personal protective equipment (See Attachment 2).

- **Water Removal**

- All wash water from the IFR shall be filtered through a 1 micron filter and then sampled for total lead and total phosphorus. Total lead shall be run by ICP and total phosphorus shall be run by EPA Method 365.3. Wash water shall be disposed appropriately. Sample results shall be submitted to DEQ to determine if wash water can be disposed at the local Waste Water Treatment Facility.

- **Pre-remediation Removal**

- Decontaminate door to IFR side room, remove from frame, wrap in poly sheeting, and properly dispose;
- Remove all paint from side room door frame to bare metal and paint frame with neutral colored primer;
- If sand trap is present:
 - Decontaminate metal backstop, wrap in poly sheeting and properly dispose;
 - Decontaminate sand trap framework, wrap in poly sheeting and properly dispose;
 - Place sand in sealed drums and dispose of sand as hazardous waste.
- Decontaminate all items to be removed from the IFR, wrap in poly sheeting, and properly dispose.
 - Items such as acoustical tiles, carpet, or other porous materials shall be HEPA vacuumed, washed, and sampled for TCLP. Acoustical tile, if present, will have 3 – five part composite samples taken. All other materials shall have 1 – five part composite sample taken of each material. If samples pass TCLP then properly dispose. If any samples fail TCLP, dispose of that item as hazardous waste.

- **Remediation**

- HEPA vacuum and wet wash walls, floor, ceiling, vent fan, and other structures that are contaminated;
- Dispose lead contaminated dust, wash water, and appropriate cleaning materials as hazardous waste or as appropriate (See section 3. Disposal of Materials for detailed information).

- **Post-remediation**

- All post-remediation sampling shall be performed by Enercon Services, Inc. (ESI). The Contractor shall provide ESI a minimum of five (5) calendar days prior notice to perform sampling. See Section C (Confirmation and Clearance Sampling) for contact information;
- Post remediation sampling is required to confirm the IFR has been remediated to 200 micrograms per square foot (ug/SF);
 - Areas above 200 ug/SF shall be re-cleaned and re-tested until results are at or below 200 ug/SF;
- If surfaces of the IFR cannot be cleaned and DEQ determines that these surfaces contain imbedded lead fragments, construction grout shall be used over these surfaces.

- Surfaces shall be thoroughly cleaned;
- BASF Acryl 60 or DEQ approved equivalent shall be applied to surfaces according to manufacturer's specifications. Specifications are attached (Attachment 3);
- BASF Construction Grout or DEQ approved equivalent shall be applied (sprayed or troweled) to surfaces according to manufacturer's specifications. Specifications are attached (Attachment 3).
- Once the IFR has been remediated to 200 ug/SF, seal the floor, ceiling, and walls with appropriate sealant;
 - Floor, ceiling, and walls will be sealed with KM-669 Acrylic Sealer or equivalent. Specifications attached (Attachment 3);
 - IFR area will have forced air applied to room 4 days after sealer is applied. This will be done to remove all vapors from the area;
- After surfaces are sealed, the Contractor shall provide ESI a minimum of five (5) calendar days prior notice to perform post remediation wipe sampling to confirm the IFR has been remediated to 40 ug/SF;
- Areas above 40 ug/SF shall be cleaned to remove lead dust from sealed surface. Once cleaned, the area shall be retested to confirm area has been remediated to 40 ug/SF;
- All re-testing of previously failed areas shall be performed by ESI. Contractor shall provide ESI a minimum of five (5) calendar day's prior notice to perform sampling.
- The chart below summarizes the clearance numbers for the indoor firing range. All lead wipe samples must be at or below these numbers in order for the room to be considered clean.

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

2. Remaining Building

Lead Dust Remediation (See Attachment 1)

- Surfaces above the floors such as walls, shelves, etc. may have accumulated dust that has settled. This accumulation shall be removed prior to the cleaning of the floors. This shall be done to prevent recontamination of the floors after they are cleaned.
- Floors of the entire building shall require lead dust remediation;
 - Remove dust from all equipment, shelving, trash, etc, and remove these items from room before remediation begins;

- Remove dust from all carpet, remove carpet from rooms, and dispose of all carpet as non-hazardous waste before lead dust remediation of floor begins;
- Dispose any materials, determined by the DEQ to be trash, as non-hazardous waste;
- HEPA vacuum and wet wash floors of entire building;
 - Lead levels on the floor are high in many areas of the building and lead contaminated dust may be ground into the pores and cracks of the concrete. It may be necessary to clean floors several times or use alternate cleaning methods after HEPA vacuuming and wet washing to remove the lead dust from the concrete and get the lead levels down to 40 micrograms per square foot (ug/SF).
- Contact Enercon Services, Inc. to perform independent third-party post remediation wipe sampling to confirm that room floors with lead contamination have been appropriately remediated to 40 micrograms per square foot (ug/SF). See Section C (Confirmation and Clearance Sampling) for additional information;
- Areas above 40 ug/SF shall be re-cleaned and re-tested until results are at or below 40 ug/SF;
- Lead dust and appropriate cleaning materials shall be disposed as appropriate.
- Wash Water Disposal
 - All wash water from the building shall be filtered through a 1 micron filter and stored on site in containers;
 - The wash water will be sampled for total lead and total phosphorus; Total lead shall be run by ICP and total phosphorus shall be run by EPA Method 365.3;
 - Sample results shall be submitted to DEQ to determine if wash water can be disposed at the local Waste Water Treatment Facility;
 - Wash water shall be disposed appropriately.

3. Disposal of Materials

Hazardous Waste

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

Other

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

4. Confirmation and Clearance Sampling

- Contractor may use his own lab to check progress of remediation, however all DEQ decisions shall be based on analytical data from ESI.
- Enercon Services, Inc. (ESI) will be responsible for taking all post remediation samples.
- ESI shall be notified five (5) days prior to each sampling event.
- Contact Information: Enercon Services, Inc.
6525 North Meridian, Suite 400
Oklahoma City, Oklahoma 73116
Contact: Bill Muenker
Phone: (405) 722-7693
- The third-party sampling shall not be included in the contractors base bid;
- All post remediation sampling done outside the indoor firing range will be performed after all initial abatement, remediation, and cleaning is complete.
- The chart below summarizes the clearance numbers for the building. All lead wipe samples shall be at or below these numbers in order for these areas to be considered clean.

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

5. FINAL REPORT

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

- photo documentation of work;
 - Photo documentation of work will have color digital photos with captions describing photo;
- Final report will be submitted in hard copy and electronically on disc.

OWNER REPRESENTATIVE

Owner's Representative:

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

Phone Numbers:

(405) 702-5115 (Office)

(405) 702-5101 (Fax)

E-Mail: Dustin.Davidson@deq.ok.gov

ATTACHMENT 1

Sample Results and Floor Plan

ATTACHMENT 2

Health & Safety Aspects to Consider

Health & Safety Aspects to Consider

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

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

Health and Medical Aspects

Health Effects

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

Medical Surveillance for occupational Exposure to Lead

- a. 29 CFR 1910.1025(j)(i-ii), Medical Surveillance - General: "The employer shall institute a medical surveillance program for all employees who are or may be exposed above the action level for more than 30 days per year. The employer shall assure all medical examinations and procedures are performed by or under the supervision of a licensed physician."
- b. The DOD 6055.5-M, Occupational Medical Surveillance Manual - Table 2-I lists medical surveillance criteria for employees "who are or may be exposed above the action level for 30 days/year."

Personal Protective Equipment

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

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

- (1) Protective coveralls with hood and shoe covers or disposable Tyvek™ full body suit.
- (2) Disposable rubber gloves; and disposable shoe coverlets (If necessary).
- (3) Full-face air purifying respirator with P-100 cartridges.

- b. The employer shall provide the clothing required in a clean and dry condition at least daily to employees engaged in the conversion of IFRs.
- c. The employer shall provide for the cleaning, laundering, or disposal of used or contaminated protective clothing and equipment.
- d. The employer shall assure that all protective clothing is removed at the completion of a work shift only in areas designated for that purpose (Change Areas or Change Rooms).
- e. The employer shall ensure that contaminated protective clothing that is to be cleaned, laundered, or disposed of, is placed in a closed container in the change area that seals sufficiently enough to prevent dispersion of lead dust.
- f. The employer shall further inform in writing any person who cleans or launders protective clothing or equipment of the potentially harmful effects of exposure to lead.
- g. The employer shall ensure that the containers of contaminated protective clothing and equipment are labeled as follows: ***CAUTION: CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL***

REGULATIONS.

Education, Maintenance, Cleaning and Conversion

Worker Education

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

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

- (1) The content of the standard and its appendices.
- (2) The specific nature of operations that could result in exposure to lead above the action level.
- (3) The purpose, proper selection, fitting, use, and limitations of respirators.
- (4) The purpose and a description of medical surveillance program.
- (5) Eating and drinking are prohibited in lead contaminated areas.
- (6) Smoking and smoking materials shall not be permitted in contaminated areas.
- (7) Employees must wash their hands and other exposed skin whenever they leave the work area.
- (8) The engineering controls and work practices associated with the individual's job assignment.
- (9) The contents of any compliance plan in effect.
- (10) Instructions to employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician.

REFERENCES

Section 1 Required Publications

There are no entries in this section

Section II Related Publications

ASTM E1792-03

Standard Specification for Wipe Sampling Materials for Lead in Surface Dust

AR 11-34

The Respiratory Protection Program

AR 40-5

Preventive Medicine

DODI 6055.5

Industrial Hygiene and Occupational Health

DOD 6055.5-M

Occupational Medical Surveillance Manual

29 CFR, Part 1910

Occupational Safety and Health Administration, Department of Labor

National Institute for Occupational Safety and Health (NIOSH) 76-130

Lead Exposure and Design Considerations for Indoor Firing Ranges, Department of Health, Education and Welfare

NGR 385-15

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

NGR 415-5

Army National Guard Military Construction Program Development and Execution

NGR 420-10

Construction and Facilities Management Office Operations

Technical Manual, 5th Edition

Occupational Safety and Health Administration, Department of Labor Section III

ATTACHMENT 3

Sealant and Encapsulant Specifications

KELLY-MOORE PAINTS INDUSTRIAL COATINGS HIGH PERFORMANCE SYSTEMS

KM-669 Acrylic Sealer

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

Product Description

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

Performance Features

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

Product Specifications

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

Surface Preparation

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

Surface Preparation:

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

Application Procedure:

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

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

Dry Times: 8 hours

See Precautions and Limited Warranty next page

KM-669 (cont.)

Precautions

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

Proper Disposal

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

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

SEE MATERIAL SAFETY DATA SHEETS FOR FULL SAFETY PRECAUTIONS.

KM-669 IS FOR PROFESSIONAL USE ONLY

KM-669 IS FOR INDUSTRIAL USE ONLY

KEEP AWAY FROM CHILDREN

KELLY-MOORE PAINT COMPANY INC. • 987 COMMERCIAL ST. • SAN CARLOS, CA 94070
Technical Assistance 1-888-MR-PAINT www.kellymoore.com

MATERIAL SAFETY DATA SHEET

For Coatings, Resins & Related Materials

Section I

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

Prep Date: 07/28/06

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

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

Information Phone: 1-888-677-2468

Section II - HAZARDOUS INGREDIENTS

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

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

Section III - PHYSICAL DATA

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

Vapor Density: Heavier than air

Weight Per Gallon (lbs.): 7.75 ± .25

Section IV - FIRE & EXPLOSION HAZARD DATA

Flash Point (Deg. F): 80°

Lower Explosive Limit: 1.0

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

OSHA Flammability Classification: Flammable Liquid IC

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

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

KM-669 CLEAR

=====**Section V - HEALTH HAZARD DATA**=====

THIS PRODUCT IS FLAMMABLE

Effects Of Overexposure:

Eyes: Irritation, burning, tearing and redness.

Skin: Moderate irritation or defatting of skin upon prolonged or repeated contact.

Ingestion: Abdominal pain, nausea, vomiting and diarrhea.

Inhalation: Excessive exposure to vapors can cause headache, dizziness, uncoordination, nausea and loss of consciousness.

Emergency & First Aid Procedures:

Eyes: Flush with water for 15 minutes.

Skin: Remove contaminated clothing, wash skin with soap and water.

Ingestion: Do not induce vomiting. Get medical attention immediately.

Inhalation: Move to fresh air, aid breathing if necessary.

In all cases, consult a physician for best treatment.

Chemical listed as carcinogen or potential carcinogen:

NTP: No IARC: No OSHA: No

=====**Section VI - REACTIVITY DATA**=====

Stability: Product Stable

Conditions to Avoid: All sources of ignition

Incompatibility (Materials to Avoid): Oxidizing agents, strong acids & bases

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides and organic compounds.

Hazardous Polymerization: Will Not Occur

=====**Section VII - SPILL OR LEAK PROCEDURES**=====

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

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

=====**Section VIII - SPECIAL PROTECTION INFORMATION**=====

Respiratory Protection: Use a NIOSH/MSHA jointly approved respirator

Ventilation: Use mechanical ventilation

Protective Gloves: Neoprene or rubber

Eye Protection: Chemical splash goggles

Other Protective Equipment: Protective clothing, barrier cream, eye bath, safety shower

=====**Section IX - SPECIAL PRECAUTIONS**=====

Precautions To Be Taken In Handling & Storing: Store in dry area. Keep away from open flames and high temperatures.

Other Precautions: Minimize contact. Avoid breathing vapors. Practice good industrial hygiene and safe working practices.

State and Local Regulations

California Proposition 65

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



The Chemical Company

PRODUCT DATA



ACRYL 60®

Water-based acrylic bonding and modifying admixture

Description

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

Packaging

- 1 quart (0.9 L) bottles
- 1 gallon (3.8 L) bottles
- 5 gallon (18.9 L) pails
- 30 gallon (113.5 L) drums
- 55 gallon (208 L) drums

Color

Milky white

Shelf Life

1 year when properly stored

Storage

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

Features

- Acrylic polymer
- Excellent chemical and UV resistance
- Improved freeze/thaw stability of Portland cement-based materials
- Stable

Benefits

- Significantly improves adhesion, cohesion, tensile, compressive, and flexural strengths of cement-based materials
- Promotes long-lasting repairs
- Suitable for cold climate applications
- Will not re-emulsify when exposed to water

Where to Use

APPLICATION

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

LOCATION

- Interior or exterior
- Above or below grade

SUBSTRATE

- Columns

How to Apply

Surface Preparation

1. The methods required for preparation will vary depending on the end product to be applied and the site and substrate conditions.
2. In all cases the surface must be clean and sound. Remove all loose and disintegrated material. Remove any and all traces of oil, grease, dirt, dust, efflorescence, biological, mold or mildew, and release or curing agents.
3. Vacuum, sweep, or blow out the areas to be patched with clean, oil-free air.

CONCRETE/CMU/MASONRY SURFACES

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

OTHER SURFACES

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

Mixing

1. The normal ratio of Acryl 60® to clean potable water is 4 part Acryl 60® to 3 parts water (1 to 3). Where increased physical and chemical resistance are required, increase the Acryl 60® content in the mixing liquid to a 1 to 2 or 1 to 1 Acryl 60® to water ratio (see chart above).
2. Always mechanically mix. Do not overmix or mix at a high speed.



Technical Data

Composition

Acryl 60® is an acrylic-polymer emulsion.

Typical Properties

PROPERTY	VALUE
Density, lbs/gal (kg/L), Lab Method	8.65 (1.04)
Solids content, by volume, %, Lab Method	28
Maximum water dilution, Parts Acryl 60® to H ₂ O, Lab Method	1:3

Test Data

The following properties are for sand/cement mortar samples:

PROPERTY	RESULTS		TEST METHODS
	With Water	With 1 to 1 Acryl 60® and Water	
Compressive strength, psi (MPa) 28 days	3,800 (26.2)	4,500 (31)	ASTM C 109
Tensile strength, psi (MPa) 28 days	225 (1.5)	350 (2.4)	ASTM C 190
Flexural strength, psi (MPa) 28 days	1,000 (6.9)	1,800 (12.4)	ASTM C 348
Freeze/thaw durability	11 at 98 cycles	102 at 300 cycles	Method A

Note: Test results are averages obtained under laboratory conditions at 70° F (21° C) and 50% rh. Reasonable variations can be expected.

Mixing Ratios

APPLICATIONS	RATIOS
For scrub coats applied before patching or overlays	Use straight Acryl 60®
To improve the adhesion properties of pointing mortars and to reduce cracking in cement plaster	Use 1 part Acryl 60® to 3 parts water
For large overlays or topping	Use 2 parts Acryl 60® to 1 part water
For bonding cement plaster no thicker than 1/4 - 3/8" (6 - 10 mm)	Use 1 part Acryl 60® to 3 parts water

NOTE: The above ratios are for normal conditions. Where bonding is more critical, increase the Acryl 60® content of the mixing liquid. A TEST PATCH IS ALWAYS RECOMMENDED.

For detailed application instructions for Them® products, see specific product data sheets.

Application

SAND/CEMENT MORTAR

1. Thoroughly mix all cement and sand first. The sand must be clean, free of clay, and dry.
2. Make up mixing liquid from a 1 to 3 or 1 to 2 Acryl 60® water ratio depending upon requirements.
3. Slowly add the mixing liquid to the cement/sand mixture and mix with a slow-speed mixer for 1 - 2 minutes to avoid entrapping air. After preparing, cleaning, and predampening the surface, brush apply a scrub coat (not diluted) of the Acryl 60®-modified cement/sand. Scrub vigorously into the surface to displace any air pockets.

4. Place the mix into the scrub-coated repair area while the scrub coat is still wet or tacky. Place the mix and avoid overtroweling. The trowel should be cleaned frequently, kept wet, and used with minimal pressure.

5. Maximum time for placement should not exceed 20 minutes. Higher air and surface temperatures will decrease working and placement time.

Curing

1. When rapid drying is expected due to high temperatures, rapid air movement, or wind, it is recommended that the surface be covered with wet burlap to retain moisture.
2. For normal use, allow a 24-hour curing period.
3. For heavy wheeled traffic, allow a 4-day curing period.

Clean Up

Clean all tools and equipment immediately with water. Cured material may be removed by mechanical means only.

For Best Performance

- Do not use Acryl 60® modified mixes when the ambient air or surface temperature is below 40° F (4° C) or when the temperature is expected to fall below 40° F (4° C) within 24 hours. High relative humidity, excessive moisture, and low temperatures will retard the curing of Acryl 60® modified mixes.
- Do not use with air-entrained cement mixes or with air-entraining admixtures.
- Do not overmix or aerate mixes.
- Use with proper ventilation.
- Do not use Acryl 60® as a surface-applied external bonding agent or as a primer.
- Do not expose cement-based mixes modified with Acryl 60® to water immersion service for a minimum of 24 hours at 73° F (23° C).
- Not recommended for exposure to soft water or immersion where contact with water-treatment chemicals is present without a protective top coat.
- Caution should be used when a highly solvent material is being used over a base system that contains Acryl 60®.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

Health and Safety

ACRYL 60®

Caution

Acryl 60® contains no hazardous ingredients as defined by 29 CFR 1910.1200 WHMIS.

Risks

May cause skin, eye or respiratory irritation. Ingestion may cause irritation.

Precautions

Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep container closed when not in use. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Proposition 65

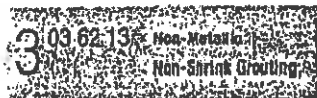
This product contains material listed by the state of California as known as to cause cancer, birth defects, or other reproductive harm.

VOC Content

1 g/L or 0.01 lbs/gal less water and exempt solvents.

For medical emergencies only,
call ChemTrec (1-800-424-9300).

PRODUCT DATA



CONSTRUCTION GROUT

General construction, mineral-aggregate
nonshrink grout

Description

Construction Grout is a noncatalyzed, multi-purpose construction grout containing mineral aggregate.

Yield

One 50 lb (22.7 kg) bag of Construction Grout mixed with 1.15 gallons (4.35 L) of water (flowable mix) provides approximately 0.45 ft³ (0.013 m³) of mixed grout.

Packaging

50 lb (22.7 kg) multi-wall paper bags

Color

Concrete gray when cured

Shelf Life

1 year when properly stored

Storage

Store in unopened bags under clean, dry conditions.

Features

- Concrete gray color (after curing)
- No organic accelerators, including chlorides or other salts
- Can be extended with clean, well graded coarse aggregate
- Hardens free of bleeding when properly placed

Benefits

- Blends in with surrounding concrete
- Will not corrode reinforcing steel
- Fills large voids without additional mix water
- Provides high effective bearing area for proper support and load transfer

Where to Use

APPLICATION

- Normal loads for columns and baseplates
- Bedding grout for precast panels
- Repairing of cavities resulting from ineffective concrete consolidation
- Caulking concrete pipe
- Backfilling, underpinning foundations, and pressure grouting of slabs needing alignment
- General construction applications
- Damp pack applications

LOCATION

- Interior or exterior

How to Apply

Application

For aggregate extension guidelines refer to Appendix MB-10: Guide to Cementitious Grouting.

Mixing

By using the minimum amount of water to provide the desired workability, maximum strength will be achieved. Whenever possible, mix the grout with a mechanical mixer. Either a mortar mixer or an electric drill with a paddle device is acceptable. Put the measured amount of water into the mixer, add grout, then mix till a uniform consistency is attained. Do not use water in an amount or a temperature that will cause bleeding or segregation.

Curing

Cure all exposed grout shoulders by wet curing for 24 hours and by applying a recommended curing compound compliant with ASTM C 309 or preferably ASTM C 1315.

For Best Performance

- Contact your local representative for a pre-job conference to plan the installation.
- Construction Grout is designed for the 50 to 90° F (10 to 32° C) application temperature range. Consult your BASF representative when applying outside this range. Use cold and hot weather concreting practices (ACI 305 and ACI 306) when grouting within 10° F (6° C) of these minimum and maximum temperature ranges.
- To ensure optimum performance of Construction Grout, place at a plastic or flowable consistency and at ambient temperatures of 50° F (10° C) and above.
- For best results, allow a minimum of 1" (25 mm) vertical clearance under baseplates when placing Construction Grout.
- Do not use Construction Grout where it will come in contact with steel designed for stresses above 80,000 psi (552 MPa). Use Masterflow® 816, Masterflow® 1205, or Masterflow® 1341 post-tensioning cable grouts.



Technical Data

Composition

Construction Grout is a noncatalyzed hydraulic cement-based grout containing mineral aggregate.

Compliances

- CHD C 621 and ASTM C 1107, Grade C, at flowable or plastic consistency
- City of Los Angeles Research Report Number RR 23137

Typical Properties

Mixed Grout Data* (Flowable Mix)

PROPERTY	VALUE
Approximate Water, gal (L)	1.15 (4.35)
Initial set, hrs. at 70° F (21° C)	6
Final set, hrs. at 70° F (21° C)	8

*At a constant percent of water, consistency will vary with temperature. Final set takes place in approximately 8 hours at a flowable consistency and 70° F (21° C).

Test Data

PROPERTY	RESULTS	TEST METHOD	
Flow, %, 5 drops	126 - 145	ASTM C 230	
Volume change, %, flowable consistency, after 28 days	0.08	ASTM C 1090	
Compressive strength, psi (MPa)		ASTM C 942, according to ASTM C 1107	
	Consistency		
	Flowable ¹	Plastic ²	Stiff ³ (damp pack)
1 day	1,500 (10)	—	—
3 days	5,000 (34.5)	6,000 (41.4)	8,000 (55.2)
7 days	6,000 (41.3)	7,000 (48.3)	9,500 (65.5)
28 days	7,000 (48.0)	8,500 (58.6)	10,000 (68.0)

¹ 140% flow on flow table, ASTM C 230, 5 drops in 3 seconds
² 100% flow on flow table, ASTM C 230, 5 drops in 3 seconds
³ 40% flow on flow table, ASTM C 230, 5 drops in 3 seconds
 Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

- Do not add plasticizers, accelerators, retarders, or other additives unless advised in writing by BASF Technical Services.
- The surface to be grouted should be clean, strong, and roughened to CSP 5 - 9 according to ICHI Guideline 03732 to permit proper bond. For freshly placed concrete, consider using Liquid Surface Etchant (see Form No. 102D198).
- Do not place Construction Grout in lifts greater than 6" (152 mm) unless the product is extended with aggregate to dissipate hydration heat.
- Where precision alignment and severe service, such as heavy loading, rolling, or impact resistance are required, use metallic-reinforced, noncatalyzed Embecco® 885 grout. If the amount of impact resistance needed is not great enough to require metallic reinforcement, use natural-aggregate, Masterflow® 928.
- The water requirement may vary with mixing efficiency, temperature, and other variables.
- The concrete surfaces should be saturated (ponded) with clean water for 24 hours before grouting. Remove water immediately before application.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current versions.

- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

Health and Safety
CONSTRUCTION GROUT
WARNING!

Construction Grout contains silica, crystalline quartz; portland cement; limestone; calcium oxide; gypsum; silica, amorphous.

Risks
 Product is alkaline on contact with water and may cause injury to skin or eyes. Ingestion or inhalation of dust may cause irritation. Contains small amount of free respirable quartz which has been listed as a suspected human carcinogen by NTP and IARC. Repeated or prolonged overexposure to free respirable quartz may cause silicosis or other serious and delayed lung injury.

Precautions
 Avoid contact with skin, eyes and clothing. Prevent inhalation of dust. Wash thoroughly after handling. Keep container closed when not in use. **DO NOT** take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

First Aid
 In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Waste Disposal Method
 This product when discarded or disposed of is not listed as a hazardous waste in federal regulations. Dispose of in a landfill in accordance with local regulations. For additional information on personal protective equipment, first aid, and emergency procedures, refer to the product Material Safety Data Sheet (MSDS) on the job site or contact the company at the address or phone numbers given below.

Proposition 65
 This product contains material listed by the State of California as known to cause cancer, birth defects or other reproductive harm.
VOC Content
 0 g/L or 0 lbs/gal less water and exempt solvents.
 For medical emergencies only, call ChemTrec (1-800-424-9300).

BASF Construction Chemicals, LLC -
 Building Systems
 889 Valley Park Drive
 Shakopee, MN, 55379

www.BuildingSystems.BASF.com
 Customer Service 800-433-9517
 Technical Service 800-243-6739



we warrant our products to be of good quality and will replace or, at our discretion, refund the purchase price of any products proved defective. This warranty is limited to the original purchaser and does not apply to products used in applications other than those intended. We do not warrant the performance of our products in applications other than those intended. We do not warrant the performance of our products in applications other than those intended. We do not warrant the performance of our products in applications other than those intended.

ATTACHMENT 4

Guidelines for Rehabilitation and Conversion of Indoor Firing Ranges

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

*NG Pam 420-15

Facilities Engineering

**Guidelines and Procedures for Rehabilitation and
Conversion of Indoor Firing Ranges**

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

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

Official:

GEORGE R. BROCK
Chief, Plans and Policy Division

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

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

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

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

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

Distribution. A.

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

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Glossary

1-1. Purpose

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

1-2. References

Required and related publications and referenced and prescribed forms are listed in Appendix A.

1-3. Explanation of abbreviations and terms

Abbreviations and special terms used in this publication are listed in the glossary.

1-4. Policy and Procedures

Indoor firing ranges can be safely rehabilitated or converted for other uses, such as a storage area, classrooms or office space, provided the following –

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

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

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

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

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

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

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

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

1-5. Goal

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

1-6. Deviation

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

Chapter 2

Health and Medical Aspects

2-1. Health Effects

29 Code of Federal Regulations (CFR) 1910.1025, Appendix A, identifies lead as a highly toxic metal. Elemental lead is indestructible, and common in the environment. Lead can enter the body by inhalation (breathing) or

ingestion (eating). In addition, lead is a cumulative poison. It accumulates in the blood, bones, and organs, including the kidneys, brain and liver. Effects include nervous and reproductive system disorders, delays in neurological and physical development, cognitive and behavioral changes, and hypertension. Symptoms include loss of appetite, difficulty sleeping, irritability, fatigue, headache, and inability to concentrate. It can stay in the bones for decades. Worker awareness and training are important to ensure that employees can recognize the symptoms of exposure and get prompt medical attention.

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

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

b. The DOD 6055.5-M, Occupational Medical Surveillance Manual - Table 2-1 lists medical surveillance criteria for employees "who are or may be exposed above the action level for 30 days/year."

2-3. Air Monitoring

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

2-4. Wipe Sampling Protocol and Media

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

2-5. Personal Protective Equipment

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

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

- (1) Protective coveralls with hood and shoe covers or disposable Tyvek™ full body suit.
- (2) Disposable rubber gloves; and disposable shoe coverlets (if necessary).
- (3) Full-face air purifying respirator with P-100 cartridges.

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

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

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

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

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

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

Chapter 3 Education, Maintenance, Cleaning and Conversion

3-1. Worker Education

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

b. The commander/supervisor will ensure that each soldier or Army National Guard (ARNG) employee is informed of the following:

- (1) The content of the standard and its appendices.
- (2) The specific nature of operations that could result in exposure to lead above the action level.
- (3) The purpose, proper selection, fitting, use and limitations of respirators.
- (4) The purpose and a description of medical surveillance program.
- (5) Eating and drinking are prohibited in lead contaminated areas.
- (6) Smoking and smoking materials will not be permitted in contaminated areas.
- (7) Soldiers and ARNG employees must wash their hands and other exposed skin whenever they leave

the work area.

- (8) The engineering controls and work practices associated with the individual's job assignment.
- (9) The contents of any compliance plan in effect.
- (10) Instructions to soldiers and ARNG employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician.

3-2. Range Cleaning Instructions

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

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

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

d. Prohibited methods include:

(1) Wet cleaning using high-pressure systems, since this method may embed the lead into the substratum and generate large quantities of hazardous waste.

(2) Dry sweeping is not permitted.

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

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

(1) Clean the steel bullet trap, areas in front of and behind the bullet trap, and the steel bullet trap plate(s), after removing the sand (if applicable).

(2) Clean the ceiling, floors, lights, baffles, retrieval system, heating system(s), and ventilation duct(s).

(3) Vacuum and remove acoustical material. *Painting over this material is not recommended.*

(4) Clean the floor the last, starting at the bullet trap and ending behind the firing line.

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

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

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

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

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

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

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

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

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

3-3. Cleaning Stored Contaminated Equipment

a. Equipment contaminated (sample result is higher than 200 ug/ft²) with lead dust must be decontaminated before it is removed from the range.

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

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

3-4. Contaminated Sand and Lead Waste

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

3-5. Range Rehabilitation

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

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

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

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

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

3-6. Conversion of Indoor Firing Ranges

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

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

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

- c. All equipment stored in the range, if applicable, prior to the start of decontamination must be sampled, decontaminated, re-sampled and removed or turned in as lead contaminated material.
- d. All acoustical tiles and/or sound proofing material (if applicable) must be removed and turned in as lead contaminated material through the environmental office.
- e. The bullet trap, target retrieval system and firing line stations must be removed and turned in as lead containing material through the environmental office.
- f. Light fixtures and ventilation system grills must be removed and decontaminated.
- g. Ventilation system ducts need to be decontaminated or removed and replaced.
- h. The exhaust fans and/or the complete ventilation air-handling unit (if applicable) must be decontaminated or removed to include roof fans.
- i. Cover all openings of any component previously decontaminated prior to start of interior decontamination of the firing range.
- j. Prior to start of washing, the interior of the range should be vacuumed with a HEPA filtered vacuum. The range should be washed using a cleaning solution of hot water and Spic and Span in five gallons of hot water. A progression of cleaning from top to bottom, and from back to front should be used. All surface areas of the range must be cleaned. Mix new solutions of water frequently. Washing will require dual containers of water; one container for wetting the applicators (mops, rags, sponges, etc.), and the other container for rinsing the applicators. Waste water placed into containers can be left to evaporate. *Properly dispose of all hazardous waste and do not place any lead contaminated waste into the sewer system or onto the ground.* Mop heads, sponges and rags will be discarded as hazardous waste following decontamination of the range. After completion of decontamination, and prior to taking clearance samples, the ventilation system must be run for a period of 36 hours. Wipe clearance samples will be taken from ceiling, walls and floors. The range will be considered clean if no clearance sample is greater than 200 ug/ft², if any sample is above 200 ug/ft², the range is not considered clean, the range will need to be re-washed until clearance samples are below 200 ug/ft².
- k. The regional industrial hygienist will do quality assurance sampling as needed.
- l. After obtaining clearance, the walls of the range will be coated with a sealant (Not Paint), which is smooth, wood floors will receive a coat of deck enamel or urethane, concrete floors will be sealed with deck enamel. After sealing, floors will be tiled or covered with linoleum.
- m. As a variety of conditions exist in ranges, unique situations may arise and specific written guidance from the Regional Industrial Hygiene Office may be required.
- n. All personnel involved in the decontamination/conversion of IFRs as a minimum will be provided with the following personal protective equipment.
 - (1). Full Face air purifying respirator with HEPA cartridges. The requirements outline in 29 CFR 1910.134, must be met prior to placing workers in respiratory protection.
 - (2). Individuals will be provided personal protective equipment as required per paragraph 2-5, this pamphlet.
- o. Any conversion must be supervised by a person certified to perform inspections, evaluations, and determinations of IFRs IAW with OSHA standards, other nationally accepted standards, and accepted IH practices for maintenance, cleaning, conversion, ventilation, and air sampling of IFRs. All work shall be according to current industry engineering standards under the control of the State Construction and Facilities Management Officer. Cleaning must recognize that there likely will be "background" lead presence in the readiness center totally independent of the existence of an indoor range and that the method of cleaning is less important than achieving the goal of less than 200 micrograms (40 micrograms in the case of child exposure).
- p. After conversion, lead testing shall continue on an annual basis to verify that no lead migration from the substrate is occurring.

**Appendix A
References**

**Section I
Required Publications**

There are no entries in this section

**Section II
Related Publications**

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

AR 11-34
The Respiratory Protection Program

AR 40-5
Preventive Medicine

DODI 6055.5
Industrial Hygiene and Occupational Health

DOD 6055.5-M
Occupational Medical Surveillance Manual

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

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

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

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

NGR 420-10
Construction and Facilities Management Office Operations

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

**Section III
Prescribed Forms**

There are no entries in this section

**Section IV
Referenced Forms**

There are no entries in this section

**Appendix B
Protocol for Collecting Wipe Samples**

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

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

B-3. Wipe Samples

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

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

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

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

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

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

**Appendix C
Sampling Strategy for Collection of Wipe Samples**

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

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

Glossary

**Section I
Abbreviations**

ARNG
Army National Guard

CFR
Code of Federal Regulations

HEPA
High Efficiency Particulate Air

IFR
Indoor Firing Range

NIOSH
National Institute for Occupational Safety and Health

OSHA
Occupational Safety and Health Administration

ug/ft²
Micrograms per square foot

**Section II
Terms**

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

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

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

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

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

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

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

3 November 2006

NGP 420-15

Section III
Special Abbreviations and Terms

This section contains no entries

STATEMENT OF WORK

For

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

The building is located at 301 North 6th Street, Kingfisher, Oklahoma 73750. The building does not have available water and electricity to use during remediation.

SPECIAL PROVISIONS:

1. Work Schedule: The Contractor shall schedule all work to be complete within ninety (90) calendar days after date of the written "Notice to Proceed".
 - a. A pre-construction meeting shall be held at the site after the Notice to Proceed date to review Scope of Work and answer any questions the contractor may have.
 - b. All on-site work shall be completed by the Contractor five (5) days prior to the scheduled contract completion date, with the remaining five (5) days utilized for final inspection and correction of all deficiencies.
2. Conditions of Work: The following conditions of work will apply in accomplishment of this contract:
 - a. All work shall be performed in accordance with all applicable State and Federal regulations.
 - b. The contractor shall perform this work in such a manner as to cause a minimum of interruption to normal work being performed in the contract area.
 - c. 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;

ASBESTOS ABATEMENT INSTRUCTIONS

The Kingfisher Armory contains friable and regulated asbestos containing material.

- Friable and regulated asbestos containing material shall be removed as described in the attached project design (**Attachment 2**).

LEAD-BASED PAINT ABATEMENT INSTRUCTIONS

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 7**);
 - All Down Spouts
 - All Window Lintels
 - All Overhead Door Frames
 - The Indoor Firing Range Vent Fan Frame
 - The two interior wood overhead doors in Drill Floor
 - The walls in Room # 6
 - The walls in Room # 13
- The drill floor hand rails shall have all paint removed and then be painted with a neutral colored primer;
- The sidewalk, curb, and hole cover paint outside the front entrance to the Kingfisher Armory shall be visibly removed. Once paint is visibly removed, HEPA vacuum, wet wash area, and seal with KM 669 acrylic sealant.
- Deteriorated paint removed from building surface will be properly disposed.

2. Friction and Impact Surfaces

A. Windows

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

B. 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**);
- Doors will be replaced with pre-hung Steelcraft Commercial Replacement Door Units (Specifications Attached) or equivalent;
- Doors will be replaced with UL listed 90 minute standard metal doors;
- Doors will be replaced with Steelcraft L18 and L16 – Series Honeycomb Doors (Specifications Attached) or equivalent;
- Contractor must submit product data for approval if different from doors or door frames in bid package;
- Replacement doors and frames must meet all compliance and fire rating requirements in the attached specifications;
 - a. Exterior Doors**
 - Exterior doors will be replaced with galvanized, 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. Clearance Inspection

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

4. Sampling and Disposal

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

FINAL REPORT

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

OWNER REPRESENTATIVE

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

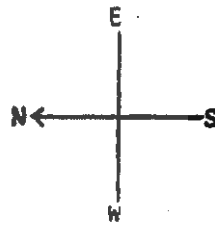
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ATTACHMENT 1

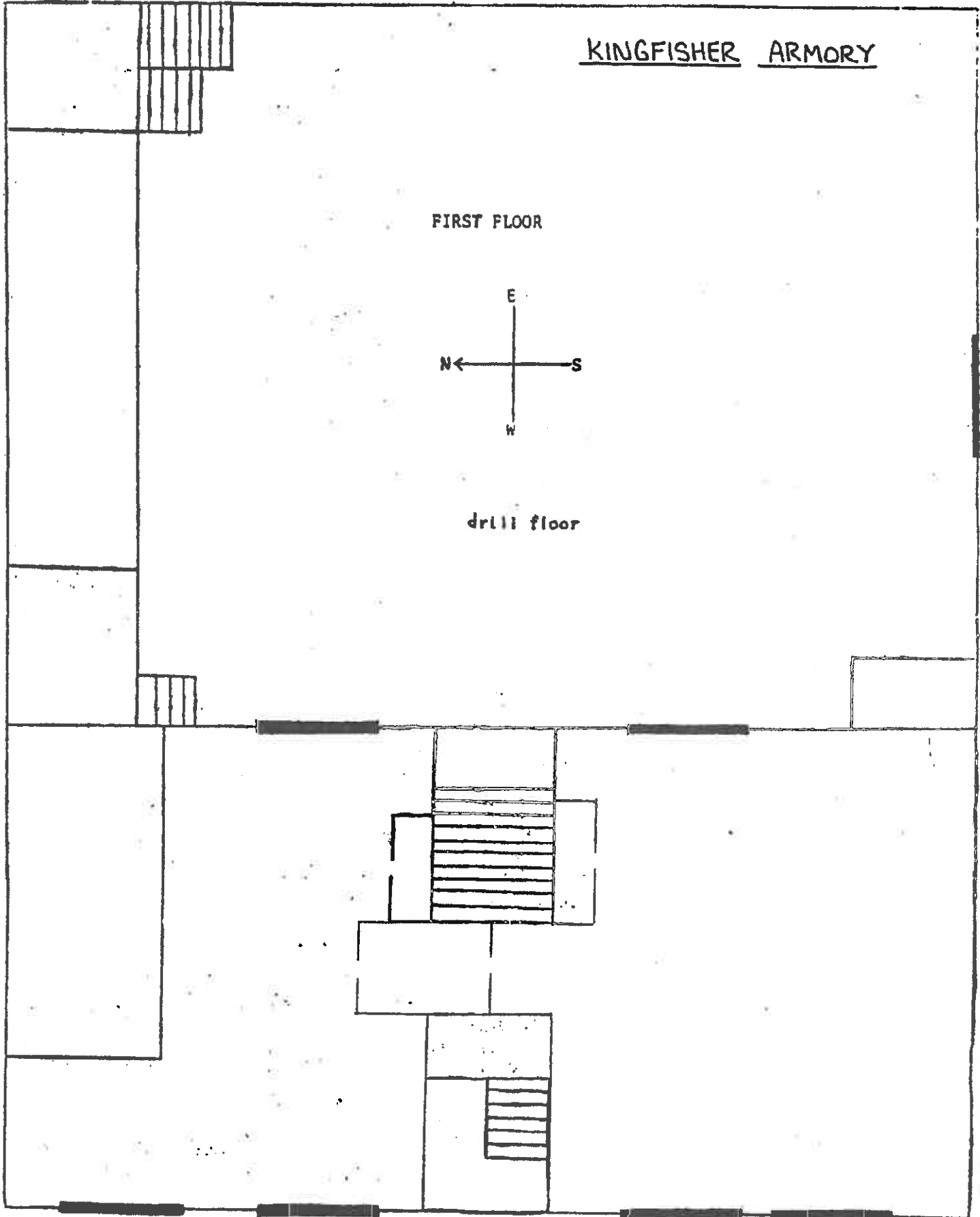
Floor Plan Map

KINGFISHER ARMORY

FIRST FLOOR

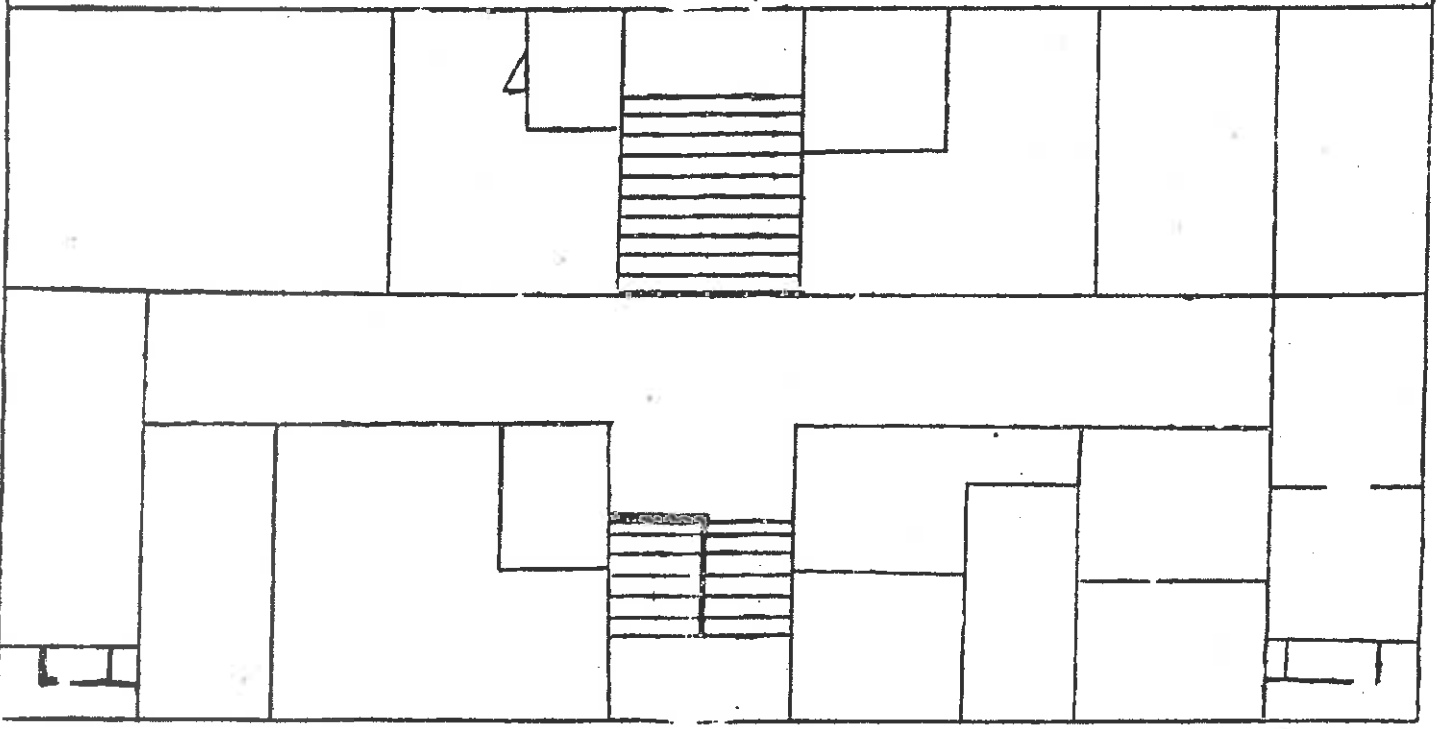
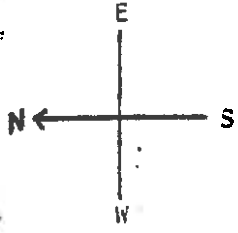


drill floor



KINGFISHER ARMORY

SECOND FLOOR



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ATTACHMENT 2

**Kingfisher Armory Asbestos Project Design
And
Scope of Work**

RECEIVED

Project Design Review Form

Oklahoma Department of Labor
Asbestos Division

Project Name: Kingfisher Armory
Project No: 10 - 5383
Project Designer: Charles Marshall

Date: 9/10/10

NOV 22 2010

DEPARTMENT OF ENVIRONMENTAL QUALITY
17 N. Stiles, Oklahoma City, OK 73105

Phone - 405.521.6454
Fax - 405.521-6025

Sep. 10. 2010 3:49PM

Approved: _____
Disapproved: _____

STEM	ACCEPTED	REJECTED	COMMENTS
1. A statement that DOL Abatement of Friable Materials Rules apply.	X		page three and page seven B. # 6 codes and regulations.
2. Sequencing and phasing of work.	X		page thirteen. VII. Abatement procedures. One phase.
3. Identification of means of egress and a fire protection plan and a diagram for emergency escape routes, and fire extinguisher placements.	X		page twenty. XIII. Safety issues, electrical, fire and emergency egress.
4. The quantity, type, percentage with bulk analysis unless presumed and a diagrammed location of asbestos materials to be abated.	X		page five, and appendix. 3% chrysotile, 120 ft. sq.
5. Abatement methods, and techniques, and numbers of containments, glove bags or mini-containments.	X		page eleven, VI. B. 380 : 50 - 23 - 4 ceiling texturing
6. Details of personal and area air monitoring samples.	X		page seventeen, air monitoring and clearance testing
7. Numbers and locations of Clean Test samples and type of analysis to be employed.	X		pages eighteen and nineteen E. Five pcm two hours 1200 LPM
8. Numbers, capacities, a diagram to identify locations, and discharge points, if any, of negative air machines.	X		page fourteen, A. Engineering controls
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		Drawings and page thirteen VII.
10. Details of decontamination system(s).	X		page sixteen, X. Decontamination and waste loadout
11. The extent to which asbestos-contaminated soils, if any, must be removed, and the sampling methods of determining the efficacy of such removal.	NA		
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.	NA		
13. Any variances from the Abatement of Friable Asbestos Materials Rules.	X		page twentyone. XIV. Request not necessary.

MARSHALL ENV No. 0361 P. 1

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: [Signature] DATE: 9-10-10 REVIEWED BY: [Signature] DATE: 9/10/10

**ASBESTOS PROJECT DESIGN
AND
SCOPE OF WORK
RELATED TO THE
ASBESTOS ABATEMENT
AT THE
DEQ OKLAHOMA ARMORY RESTORATION PROJECTS**

RECEIVED

OCT 22 2010

LAND PROTECTION DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

DCS Project # _____
(DCS Bid Packet of Project #)

ODOL Project # _____

Kingfisher Armory

**August 31, 2010
(Version 1.0)**

Services Provide For:
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson Ave.
Oklahoma City, OK 73102

Asbestos Inspection Services Provided By:
Marshall Environmental Management, Inc.
1601 SW 89th Street, Suite A-100
Oklahoma City, Oklahoma 73159
(405) 616-0401

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I. SCOPE OF WORK

This Project Design has been prepared to allow for the safe and economical removal of friable Asbestos Containing Material (ACM) as part of the Oklahoma Department of Environmental Quality (DEQ), Land Protection Division's (LPD), Oklahoma Armory Restoration Projects. This Asbestos Abatement Project will receive a Project Number that is to be assigned by the Oklahoma Department of Labor (ODOL).

This Project Design will be used to address the removal of friable ACM from the Armory. The scheduled for abatement will be determined by the DEQ LPD. The Project Design includes the Scope of Work for the Abatement of Friable Asbestos and the approximate locations and quantities of friable ACM to be abated at the Armory. Once hired, an ODOL Licensed Asbestos Abatement Contractor will file the individual notifications required by ODOL and DEQ (NESHAP). The information on the Armory floor plan and the estimated quantities and types of ACM is provided in the Appendix.

The work to be conducted for the asbestos abatement work at this Armory involves the removal of friable asbestos. Therefore, the ODOL rules that govern the removal of friable asbestos containing materials shall apply to this Project.

The identified friable ACM present in this Armory consists of asbestos located on ceiling tiles, as an applied ceiling texture, at the locations identified in the Table provided in the Appendix of this Project Design.

The methods used for work area preparation, cleaning, and abatement of the friable ACM shall be consistent with the requirements of the Oklahoma Rules for Abatement of Friable Asbestos Materials, OAC 380:50 (ODOL Rules).

II. RESPONSIBLE PARTIES AND CONSULTANTS:

Licensed Contractor:

An ODOL Licensed Asbestos Contractor is to be selected based on a successful bid submittal. The Oklahoma Department of Central Services (DCS) Construction and Properties Division will oversee the bidding and the Award of the Contract. The DEQ LPD will be the Project's Contracting Officer.

Licensed Project Designer:

Marshall Environmental Management, Inc.
1601 SW 89th Street Suite A-100
Oklahoma City, Oklahoma 73159
(405) 616-0401 (Office)
(405) 820-1656 (Mobile)
(405) 681-6753 (Fax)
marshenv@swbell.net



Charles L. Marshall, Ph.D., C.I.H., OKPD-140028

Owner's Representative:

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

Department of Central Services:

DCS Project Manager
To be identified by DCS in the Bid Packet.

III. LOCATION, TYPES OF ACM AND ESTIMATED QUANTITIES

The Appendix to the Project Design contains the documentation on the location and estimated quantities for the type of ACM identified in the Armory.

The types of the response actions to be taken, methods for removal, quantities, dates and responsible parties performing the abatement, air monitoring and waste disposal landfill locations shall be indicated on the Licensed Asbestos Contractor's NESHAPS Notice and Notification of Asbestos Abatement that are to be filed with DEQ and ODOL, respectively.

The ODOL Asbestos Division will assign this Armory Project. The ODOL will utilize the approved Project Design, and any subsequent Project Design Amendments, as a basis to assess the Project's required scope of work, sequence of events, abatement procedures, air monitoring, clearance sampling and any other related requirements of ODOL Rules.

The asbestos abatement work will include removal the removal of all asbestos containing ceiling tiles from Rooms #11. The friable ACM, consisting of 3% Chrysotile is appears to be present as a form of surfacing material place onto the ceiling tile in Room #11. The quantity of asbestos containing textured ceiling tile is estimated at approximately 120 square feet. These quantities are only estimates and the actual quantity that the Contractor must verify may vary. Regardless of variations in quantity, all of the asbestos materials and associated ceiling tiles in the work areas associated with this room shall to be abated by the Licensed Asbestos Contractor.

The amounts and types of ACM are provided as an Appendix to this Project Design. Questions regarding the Scope of Work shall be addressed in writing to the DCS Constructions and Properties Division (DCS) Representative.

IV. SEQUENCE OF EVENTS, PROJECTED DATES AND DURATION

The Abatement Contractor will follow the following sequence of events.

1. The Licensed Asbestos Contractor shall file required ODOL and courtesy NESHAP Notification NESHAPS notifications. **Note:** Copies of the notifications are to be provided to DEQ LPD and the Licensed Project Designer.
2. Licensed Asbestos Contractor will mobilize to begin prep work based upon the DEQ LPD approval to start work and after coordination is confirmed with any appropriate authorities (e.g. armory occupants) for the work dates and times of work approved by the DEQ LPD at the specific Armory.
3. The Air Monitoring Firm shall conduct background air monitoring prior to prep inspection.
4. As part of the preparation for abatement, the Licensed Asbestos Contractor shall isolate adjacent areas and install critical barriers.
5. Establish GFI circuits and a Decon for use throughout prep.
6. Establish a Centralized Decon for use during prep work and abatement
7. Place abatement supplies in the Armory rooms.
8. Surround regulated work areas with asbestos hazard warning tape.
9. Perform any pre-cleaning of loose ACM, if necessary, to complete the Prep.
10. Prepare the room requiring abatement of ceiling tiles and texture in a manner that is similar to the requirements of ODOL Rules 380:50-23-4, except that the decon and load out shall be at a remote location or room with the Armory were they can attached a negative air machines to the dirty room as specified in this Project Design and ODOL Rules. The abatement room entrance shall have two sheets of 6-mil polyethylene sheeting put in place at the doorway as an "air lock" barrier (e.g. Z-Flap).
11. As stated above, provide adequate negative pressure HEPA filtered exhaust machines to establish a negative pressure to the Central Decon Facility and the associated loadout facility for all phases of abatement work.
12. When prep is completed, schedule an ODOL Prep Inspection.
13. Perform the asbestos abatement and loadout all wastes.
14. Schedule any interim ODOL visual inspections per ODOL Inspector requirements.
15. Upon completion of final cleaning call for the ODOL visual inspection.
16. Perform post abatement lock-down applications as required.
17. Schedule the final visual inspection with ODOL and conduct clearance sampling to coincide with the ODOL inspection requirements.
18. Schedule any final ODOL inspection that may be required.
19. Schedule the non-friable ACM with the Owners Representative.
20. Conduct a final inspection to verify the completion of the Scope of Work with the Project Designer's representative.
21. Tear down prep work and critical barriers and demobilize after approval by the ODOL and Owner's Representative (DEQ LPD).
22. File final project documents with ODOL and provide a copy to the DEQ LPD Representative.

The Licensed Asbestos Contractor shall file the notification of the intended start date based upon the schedule to be determined by the DEQ LPD Representative. This Project is anticipated to start, once a Licensed Contractor is selected as a successful bidder and a Notice to Proceed is issued by the DEQ LPD and DCS.

The Project duration is estimated to take less than less than five days to complete friable ACM abatement. Clearance testing will be conducted per ODOL rules or as specified in the approved Project Design or any subsequent Project Specific Project Design Amendments.

V. GENERAL REQUIREMENTS

A. Asbestos Contractor

The DCS Bid Packet will be used to select an ODOL Licensed Asbestos Abatement Contractor for use by the DEQ on this Oklahoma Armory Remediation Project. The ODOL Licensed Asbestos Contractor shall perform the asbestos abatement work in accordance with the ODOL Rules, this Project Design, any Site Specific Project Design Amendments and all applicable rule and regulations issued by those authorities' having jurisdiction.

B. Codes and Regulations

The Asbestos Abatement Contractor (herein and hereafter referred to as the Contractor) shall abide by this Project Design and the requirements, which govern asbestos removal in OAC 380:50 and transportation of asbestos waste materials to include, but not limited to, the following:

1. 29 CFR 1910, OSHA General Industry Standards.
2. 29 CFR 1926, OSHA Construction Industry Standard.
3. 29 CFR 1926, 1101 OSHA Asbestos Construction Standard
3. 40 CFR 61, Subpart M (NESHAPS) enforced by ODEQ.
4. ANSI Z88.2 latest edition (Respiratory Protection).
5. Oklahoma Asbestos Control Act Title 40 Sections 450-456.
6. OAC 380:50 (All-inclusive), Oklahoma Rules for Abatement of Friable Asbestos Materials.
7. 49 CFR (USDOT) Hazardous Material Transportation Regulations.
8. All Applicable State Statutes, County and City Codes/Ordinances
9. OAC 252:100-40, Air Pollution Control Rules, Control of Emission of Friable Asbestos during Demolition and Renovation Operations (replaces OAC 252:100-41-16).
10. OAC 252:515-19, Management of Solid Wastes (DEQ Asbestos Land Protection Division Asbestos Disposal Requirements).
11. When applicable, follow the Resilient Floor Covering Institute (RFCI) Recommended Work Practices for Removal of Resilient Floor Covering, available at:
<http://www.rfci.com/files/pdf/RFCIRecommended9-04.pdf>

Wherever conflicts arise in any of this Project Design's General Requirements or Procedures and/or among the applicable Rules and Regulations, the most stringent rules shall apply, subject to approval by ODOL or other authorities' having jurisdiction (e.g. DEQ). Wherever allowed by the authority that has jurisdiction, a request for a variance can be submitted, provided it is acceptable to the Owner's Representative (DEQ) and its representatives in advance of consideration by the authority having jurisdiction.

C. Notifications

The Asbestos Abatement Contractor, prior to any abatement work, shall be required to file a Notifications of Asbestos Removal with both the ODOL Asbestos Division and the DEQ NESHAP Division (per Subchapter 9 ODOL Rules). These processes require ten days, unless the Agency waves the waiting period due to an emergency. The Contractor shall also be responsible for submitting any request for variances within this period of notification.

Note: A courtesy NESHAP notification shall be filed by the Licensed Asbestos Contractor with the DEQ Air Quality Division. A copy is to be provided to the ODOL, Project Designer and DEQ LPD representative. All quantities and disposition of waste shall conform to the notification. Changes in the amounts of asbestos waste materials (greater or less than 20% of the notified amounts) shall require that the Licensed Asbestos Contractor files a revised NESHAP Notice with the DEQ AQD at the time the waste is prepared for disposal. The DEQ LPD representative shall approve the landfill indicated on the NESHAP form prior to the Contractor filing the notification.

A copy of the NESHAP Notice can be obtained at the following DEQ website: <http://www.deq.state.ok.us/aqdnew/asbestos/NESHAPfm.pdf>

A copy of the ODOL Asbestos Project Check list can be obtained from the following ODOL web site:
<http://www.ok.gov/odol/documents/AsbestosProjectChecklist.pdf>

D. Waste Disposal

The Licensed Asbestos Contractor is responsible for all fees for wastes, storage, transportation and disposal. Unless properly insured, in accordance with the Oklahoma Asbestos Control Act, the Licensed Asbestos Contractor shall hire a Licensed and Insured Asbestos Disposal Contractor that is also a Licensed Asbestos Contractor, for the transportation and disposal of all

asbestos wastes as specified in the Project Design and in accordance with the NESHAP notification and Subchapter 40 of the Oklahoma Clean Air Act.

The Contractor or Licensed Transporter shall be responsible to provide onsite storage and licensed transportation of all asbestos wastes to the DEQ Permitted Asbestos Landfill where the ACM will be disposed of at the end of the job. The Project's NESHAP notification shall list the disposal site to be used for the Project.

During periods of time when the asbestos waste is to be stored onsite, the Asbestos Abatement Contractor shall maintain an enclosed and properly placarded waste storage unit and/or waste disposal trailer or roll-off bin, which is to be located in a secure area on the Armory campus at a location determined by the Owner's Representative (DEQ LPD).

The storage area, trailer or roll-off bin shall be prepared with 6-mil polyethylene and placarded in accordance with OSHA and DOT requirements. When not in use, the enclosed storage area, trailer or roll-off bin will be kept locked, wherever possible (e.g. trailer), or sealed tightly (e.g. roll-off bin) to control access to any stored waste. The trailer or storage unit shall be available for inspection to representatives of the ODOL during all site visits, no later than the initial prep inspection.

A uniform style industrial waste manifest or asbestos disposal record shall accompany each load transport to the landfill as specified in the NESHAP regulation. All 6 mil double wrapped wastes, 6-mil double bagged asbestos waste, manifests, landfill disposal records and NESHAP notices shall designate the DEQ and the specific Armory Name (with its address) as the generator of each specific project (e.g. DEQ LPD – Kingfisher Armory – Address and Dates).

The list of DEQ Approved Landfills that can accept Asbestos Waste can be found on the DEQ Land Protection web site at the following web site link: <http://www.deq.state.ok.us/lpdnew/SW/MSWLFsAcceptingAsbestos.htm>

E. Insurance

The Asbestos Abatement Contractor performing the asbestos abatement and any related contract services (e.g. re-insulation), shall provide the DCS and the DEQ LPD with copies of current Certificates of Insurance. Use of any sub-contracts shall require written approval by the DCS Construction and Properties Division. The Contractor's General Liability Insurance, Worker Compensation, Hired and Non-Owned Auto Insurance shall meet the requirements of the DCS as specified in the Bid Packet and this Project Design, as well as applicable State Statutes and meet the requirements of Section 452 of Title 40, Oklahoma Asbestos Control Act.

F. Documentation

The Asbestos Abatement Contractor shall complete all documentation as required by the authorities having jurisdiction and those specified in this Project Design. Air monitoring data shall be generated by the Project's Air Monitoring Firm and supplied to the Licensed Asbestos Abatement Contractor for any required submittals upon completion of the clearance sampling.

Upon completion of the job, the Licensed Asbestos Abatement Contractor shall provide the Owner's Representative with copies of ODOL inspections, copy of:

1. Asbestos supervisor's daily reports
2. List the names of all Licensed Asbestos Personnel and other site workers, visitors and/or other employees with their valid ODOL License Numbers and valid State ID or valid Driver License Numbers.
3. Any electrical engineers safety instructions (if required)
4. All air monitoring results.
5. Final clearance testing results.
6. Copies of negative pressure recording devices (if required) tapes.
7. All signed asbestos disposal manifests.
8. Copies of All ODOL Inspector Forms and Approval for the Project.

G. Site Security, Electrical Safety and Employee Hazard Communication

All entrances and exits to the regulated work areas within the Armory (i.e. areas marked by asbestos warning signs) and entrance to the central decon shall have an asbestos hazard warning sign attached. During off shift hours, all entryways into the Armory shall be kept locked to restrain unauthorized personnel from entry into the Armory until such time as all the ACM has been removed and clearance sampling has conducted and the final visual inspection has been approved by the ODOL.

A daily log must be maintained by the Licensed Asbestos Abatement Contractor, which includes the names of all Licensed Asbestos Personnel and other site workers, visitors and/or other employees with their valid ODOL License Numbers and valid State ID or valid Driver License Numbers.

The Owner's Representative shall be responsible to see that all required lockout-tagout of electrical lines are performed in accordance with the OSHA Standards 29 CFR 1910.147 and 29 CFR 1926.417 and applicable

Armory Policy. The Licensed Asbestos Contractor and individual employees who work around electrical energy lines will also perform their own lockout-tagout procedures to de-energize all electrical circuits necessary to ensure worker safety. If an electrical engineers statement is required to work around live electrical circuits, it will be the responsibility of the Licensed Asbestos Contractor to obtain the Licensed Mechanical Contractor/Electrician or Engineer's Statement in accordance with ODOL Rules. Based on the pre-abatement inspection, no live electricity is anticipated to be left on in the abatement work areas located within the Armory.

The Owner's Representative will be responsible for any required hazard communication notifications of all applicable Armory personnel. Access to the abatement work areas, "the regulated work area", is to be kept to licensed personnel. Access to other areas of the Armory is to be authorized DEQ LPD personnel.

VI. PREP FOR ABATEMENT

A. Available Utilities

Special Condition: Some Armories do not have utilities. This may include the supply of potable water for the use in abatement methods, decontamination facility, and wastewater disposal. Also, some armories do not have an active electrical supply hook-up with the local electric utility authority. Those Armories that do not have utilities for electricity, potable water and sewer connections will be identified by the Owner's Representative at the pre-bid site visit or Project walk-through by the DEQ Representative. The Asbestos Contractor will be responsible to provide all utility services in connection with their services for any location that does not have these services. Any fees or cost for the connection and disconnection of these services shall be paid by the Asbestos Contractor as a part of the SOW and are to be included in the cost for the services for these projects.

B. Requirements for the Prep Work for the Abatement of Asbestos Containing Textured Ceiling Tiles.

The Asbestos Abatement Contractor shall prepare the area for abatement in the manner that is similar to and meets the requirements of ODOL regulations OAC 380:50-23-4. The methods for work area preparation are outlined in previous sections of this Project Design and the following requirements. Negative pressure will be established by externally vented Negative Pressure Machines and will be verified with a manometer prior to calling the ODOL for an inspection.

The Contractor shall ensure that when the textured ceiling tile are removed, this work effort will not compromise critical barriers to any of the adjacent rooms, interior walls or ceiling interstitial space, which must remain intact and sealed off with appropriate critical barriers whenever the ceiling boards are removed from the inner side of the modified containment.

If the Contractor's work would penetrate the adjacent room's wall or ceiling spaces, then the Contractor shall extend the dimensions of the Containment area to include the sealing of any adjacent room or ceiling space in the prep work of the Project's modified containment in order maintain negative pressure throughout the abatement process.

The Contractor's prep work shall adhere to the following sequence of events:

1. Assist as need, the Armory Personnel in the moving out from the work area all non-fixed items (e.g. desks, files, non-attached shelving, stored paperwork, etc.) identified by Facility Representative.
2. Establish required asbestos warning signs and regulated work area boundaries using asbestos warning tape at the entrances to the rooms that are undergoing the removal of the ACM. Establish GFI circuits, and a Central Decon for use throughout Prep as needed.
3. Setup GFI circuits panels and temporary lighting in the work area and adjacent locations to assist with prep work, inspections and air monitoring. Any connections to the buildings electrical circuits for the purpose of obtaining power for GFI circuits shall be performed at the contractor's expense using a State Licensed Mechanical Contractor/Electrician or Licensed Electrical Engineer.
4. Once the Armory heating and air conditioning is turned off, negative pressure is established by externally vented negative air machines and verified by a manometer, the contractor may begin to pre-clean all visible dust on surface inside the work area using HEPA vacuums.
5. Place critical barriers over the HVAC supply and return vents, windows and adjacent room doorways and hallways.
6. Prep the floor space and walls within the work area with two layers of 6-mil polyethylene to protect the floor and wall surface in the work area.
7. Mark all fire exit routes with red arrow or signage type markings with the arrows showing path of egress.
8. Cover any fixed items (lights fixtures, fire extinguisher cabinets, etc.) in a sheet of 6-mil polyethylene per ODOL requirements.
9. Set-up an attached load-out chamber area and an attached decon and connect to the water supply and wastewater drain at a location approved by the Owner's Representative.

10. Provide adequate negative pressure HEPA Filter exhaust machines to establish a negative pressure of -0.02" water pressure in the work area and provide a continuously recording negative pressure monitor. Mark the tape each day at the start and end of each work shift with the time and date.
11. When prep is completed call for an ODOL prep inspection.

VII. ABATEMENT PROCEDURES

Phasing: The phasing of asbestos removal work shall be indicated on Contractor's initial ODOL notification for scheduling purposes. **The Friable Asbestos Removal for this Project is to be conducted in One Phase.** This one phase will consist of the removal of asbestos containing textured ceiling tiles from the affected rooms of the Armory.

A Modified Negative Pressure Containment: The Modified Negative Pressure Containment is required for the efforts to remove the asbestos containing textured ceiling tiles from Rooms 11.

The Modified Negative Pressure Containment is required to facilitate a safe removal of asbestos containing textured ceiling tiles. The prep work to seal the area, install critical barriers and seal the work area containment shall in general follow the requirements of OAC 380:50-23-4 as summarized in the previous section of this Project Design.

Notice: The quantity for this Project's work area or modified containment work does not exceed 160 square feet. However, the Contractor shall file a courtesy NESHAPS notice with DEQ Air Quality Division, which requires a 10-day notice prior to the start of asbestos removal activities.

During all phases of the work, the building's re-circulating heat and air system will be turned off, and the critical barriers are to be placed over all HVAC supply and return air grilles. These shall be routinely inspected and maintained in a sealed condition by the Licensed Abatement Contractor.

Procedures for Abatement Work and Removal of Asbestos Containing Textured Ceiling Tile Materials

Insure that the work areas are isolated from adjacent occupied areas and that all critical barriers are installed.

The Asbestos Abatement Contractor shall perform this abatement work in accordance with the requirements of ODOL regulations OAC 380:50-23-4, except that the decon and load out shall be centralized and a negative air machines shall be provided to the Central Decon as specified in this Project Design.

1. Once the prep has been approved by the ODOL, the Asbestos Abatement Contractor can begin the ACM removal operations.
2. Each worker involved in removal shall perform a careful and cautious manner for the removal all asbestos containing textured ceiling tiles and other ACM waste and prepare it for loadout as asbestos waste.
3. Initially wet each section of asbestos containing textured ceiling tiles with amended water using a low-pressure hand-held spray bottle or pressure sprayer.
4. Then scrape and or dismantle the asbestos containing textured ceiling tiles by removing all the substrate or by cutting them into suitable size section that can be easily prepared for disposal in 6-mil asbestos waste disposal bags.
5. Collect and HEPA vacuum all residues and all dusts that are generated in the removal process for collection in the asbestos disposal bags.
6. Upon completion of the asbestos removal call for an initial visual inspection with the ODOL Inspector.
7. Once the gross removal and final cleaning work is completed, the Asbestos Abatement Contractor will call for an ODOL visual inspection.
8. Upon approval of the visual inspection, apply an EPA approved post abatement sealant as a "lockdown" onto all the surfaces throughout the modified containment.
9. Once the lockdown is dry schedule an ODOL inspection or follow the ODOL inspector's recommendation for the timing of clearance sampling.
10. Upon completion of successful clearance sampling and any addition required ODOL inspections, tear down the containment barriers and restore the area for occupancy.

VIII. ENGINEERING CONTROLS

A. Asbestos Containing Textured Ceiling Tile Material Removal.

The primary engineering control will consist of the use the externally vented negative pressure containment and HEPA vacuums and wet methods (amended water) to wet and abate the ACM while working with the negative pressure modified containment.

The HEPA Filtered Negative Air Equipment shall maintain a -0.02 inches of water pressure for the abatement of all asbestos containing materials. Based on the area involved (<1500 ft³) one negative air filtration unit is recommended for use to supply at least (4) air exchanges per hour and a minimum of -0.02 inches of negative pressure to the work area. However, a total of two (2) may be needed onsite in order to provide one for use in the Central Decon during abatement. An individual negative air machine may be used and moved around as needed to accomplish air scrubbing nits

so long as the -0.02 inches of negative pressure to the work area is maintained throughout the project.

The Asbestos Abatement Contractor shall have onsite at least one additional Negative Air Filtration Unit throughout the project for use in the event that one of the units supplied to the containment fails to operate properly during the course of the abatement work.

IX. Worker Protection

A. Respiratory Protection.

Full Face (FF-APR's) - are to be worn by all personnel in the regulated areas during all prep work that has a potential to disturb ACM and during each work shift for the asbestos removal activities until final clearance levels have been met provided the fiber counts remain <0.5 f/cc UCL.

Full Face PAPR's - Full Face PAPR's may be provided to employees who request them or who need to wear one on the basis of a physician's recommendation provided the fiber counts remain <0.5 f/cc UCL.

B. Work Clothing and Associated PPE.

Additional PPE will consist of disposable asbestos worker clothing, protective gloves, hard hats, steel toe rubber boots and disposable work gloves.

All disposable PPE not limited to respirator cartridges, asbestos work clothing, gloves and other disposable items will be disposed of as asbestos waste throughout all phases of work.

Re-use items will be decontaminated using wet methods and HEPA vacuums at the central decontamination unit before they are brought out of the work area (e.g. rubber boots, respirator face piece).

The Abatement Contractor shall have sufficient work clothing and associated PPE on-site so as to supply these items to the Project Designer's Representative and Air Monitoring Firm Representative as needed to assist them in their work.

Workers may need to use a "double suit" protocol whenever they egress from a work area room after conducting abatement work in order to walk to the central decon or loadout through an adjacent hallway.

X. DECONTAMINATION AND WASTE LOAD-OUT

A. Decon and Loadout.

Workers will be provided a three-chamber centralized decontamination facility (Central Decon).

The Central Decon will be connected up with a HEPA filtered negative pressure device/machine, such as a low speed negative air machine attached to the dirty side of the central decon. The set-up will allow for the flow of clean air into the clean room and then allow for the air to exhaust through the HEPA filter device attached to the dirty side of the Decon.

This will allow the central decon to have a flow of clean air that is drawn into the clean room and exhausts out through the central decon's dirty room per ODOL requirements OAC 380:50-15-12 (7).

Due to limitations in space, the Licensed Asbestos Contractor shall have some flexibility in the placement of the decontamination facility and loadout.

Workers may need to use a "double suit" protocol whenever they egress from a work area room after conducting abatement work in order to walk to the central decon or loadout through an adjacent hallway.

A containment diagram is provided in the Appendix to the Floor Plan Design that give the approximate location for the decon, the loadout and the negative pressure exhaust equipment.

The Clean Room shall conform to the requirements of OAC 380:50-15-7 and 15-12(8) dealing with size and suitable shower water temperature.

When space is limited, the Contractor may request a variance from the ODOL rule for the size and configuration of the centralized or attached decontamination facility.

XI. AIR MONITORING AND CLEARANCE TESTING

Sampling Requirements.

A. Background Samples

One background air sample will be collected in the room scheduled for abatement at the Armory prior to the start of any asbestos abatement.

B. Personal Monitoring

1. During Preparation for Abatement

A minimum of 25% of the workers will be monitored during preparation of the containment work area if any prep work has the potential to disturb asbestos. Examples of tasks requiring air monitoring during prep work include such tasks as pre-cleaning contaminated fixed and non-fixed items, cleanup of loose ACM on floors or ceiling tiles, and putting up of any critical barriers within arms reach of exposed friable ACM (e.g. where ACM is significantly damaged or missing).

2. During Abatement in Negative Pressure Containments

A minimum of 25% of the workers will be monitored during the abatement activities for all negative pressure containments or modified containment abatement work efforts. Personal monitoring is required during these phases to assure adequate respirator protection factors are applied in respirator selection.

3. Excursion (30-minute sampling)

One or more 30-minute excursion sample will be collected during the removal of the asbestos that is representative work conducted for each work activity that may generate a potential for worker exposure in excess of the OSHA PEL for the 30 minute Excursion Limit of 1.0 f/cc as specified in 29 CFR 1926.1101.

The Contractor may use prior air monitoring for compliance with the requirement to collect an excursion sample whenever the representative sampling was conducted for work conducted in the previous 12 months as specified in 29 CFR 1926.1101(f)(2)(iii)(B). ODOL has no excursion limit requirement, therefore it the Contractor responsibility to see that appropriate excursion sampling is conducted by the Third Party Air Monitoring firm.

4. Negative Air Machine Air Monitoring

All negative air machine exhaust or exhaust from a group of negative air machines will be monitored while abatement procedures are being conducted.

C. Area Monitoring

The following area samples shall be collected inside the Armory during each work shift when asbestos removal activities are being conducted.

One inside work area sample should be placed in the vicinity of a work crew during each day of work inside the negative pressure work area.

One outside area sample shall be collected adjacent to the work area in the entrance to the Armory's abatement work area (e.g. hallway) and at the entrance from the hallways to the Armory's Drill Floor Area.

One outside area sample will be collected outside the Clean Room for the Decon Facility for each shift that the Decon is in use.

One area sample will be collected outside the Loadout during the loading out of wastes.

One negative air sample will be collected for each negative air machine or group of negative air machines while abatement procedures are being conducted.

D. Action Level

Fiber counts for outside area samples collected in adjacent spaces which exceed an actual fiber concentration of >0.01 fibers/cc, shall be cause to stop work and evaluate the need to change procedures and perform necessary cleanup. A representative set of such samples will be re-analyzed by the NIOSH 7402 TEM method to establish a confirmed level of asbestos fibers. If it is determined that a representative number of samples tested using the NIOSH 7402 procedure exceed the 0.01 fibers per cc then all the work will stop and ODOL will be notified before any work is allowed to continue. Those samples, which are B.D.L., due to insufficient sample volume or sampling time, will not be considered as exceeding this action level.

E. Clearance Testing

Clearance testing containments or modified containments will consist of five (5) PCM samples collected for a minimum of 2 hours and 1200 liters.

The Clearance Testing can be scheduled once a visual inspection has been approved by ODOL. If conducted in advance, it must be approved by the ODOL Inspector and may need to be repeated if the visual inspection fails.

The Clearance Criteria will be 0.01-fibers/cc UCL. NIOSH 7402 TEM Analysis will be used to confirm asbestos levels if the PCM clearances exceed 0.01-fibers/cc UCL. If they exceed the criteria, the Licensed Asbestos Contractor will contact ODOL, reclean the work areas and schedule a re-test for clearance. This process will be repeated until the clearance criteria are met or as approved by ODOL.

Whenever the Armory is governed by an AHERA Asbestos Management Plan of a Local Educational Authority (LEA) for school activities grades K-12, the Asbestos Abatement Contractor's Third Party Air Monitoring Firm shall conduct the Clearance Testing using an AHERA protocol, which when the quantities exceed 160 square feet or 260 linear feet required Transmission Electron Microscopy (TEM) analysis and the collection of a total of 5 PCM samples per each response action location/phase of work for a minimum volume of 1200 liters (i.e. Federal AHERA requirements).

F. Laboratory Requirements

PCM Asbestos Fiber Analysis - Marshall Environmental Management, Inc.

All routine and periodic asbestos air monitoring, performed during this response action, will be performed by the Third Party Air Monitoring Firm hired by the Licensed Asbestos Abatement Contractor. The Third Party Air Monitoring Firm shall be identified on the ODOL and NESHAPS Notification Forms.

Notice: It is the Contractors Responsibility to include all costs for Third Party Air Monitoring in the DCS Bid Amount. The DEQ LPD is not responsible for providing any Third Party or other Air Monitoring as a part of any of the Scope of Work for the Project Awarded.

Air monitoring personnel will have an ODOL Asbestos Worker category and/or Asbestos Inspector Licenses where applicable. Air monitoring staff and lab analysts will have completed the NIOSH 582 equivalency course for sampling and analysis of airborne asbestos. The Lab or air monitoring firm shall be a participant in the AIHA Proficiency Analytical Testing Program (PAT) in accordance with ODOL requirements.

PLM - Bulk Asbestos Analysis - Marshall Environmental Management, Inc.

Bulk Asbestos samples will be analyzed in accordance with EPA methods. Bulk Asbestos analysis labs shall be a participant in the AIHA/RTI Bulk Asbestos Proficiency Analytical Testing Program (PAT) or NVLAP Lab.

TEM – Transmission Electron Microscopy Analysis – QUANTEM LABS, OKC

Transmission Electron Microscope (TEM) analysis of asbestos air samples, when PCM results exceed 0.01 f/cc UCL, or when AHERA Protocol Clearance sampling is conducted will be performed by Quantem Labs of Oklahoma City.

XII. LOAD-OUT AND DISPOSAL

Double-bagged asbestos waste will be brought from the egress area of the Central Decon/Loadout location to an exit location at the Armory. Waste generator labels will be placed on each bag. Then each bag will be transported by the workers to the prepared storage unit, waste trailer or roll-off bin. Worker personal air monitoring and one outside area air sample shall be performed during each loadout activity in the vicinity of the loadout.

Waste manifests will be used to track the quantity of waste to the disposal site on the NESHAPS Notice.

XIII. SAFETY ISSUES, ELECTRICAL, FIRE AND EMERGENCY EGRESS

No work will be at performed without adequate lighting. The work area will be clearly illuminated by droplights, light stands, or equivalent lighting, if the ambient room light does not properly illuminate the work area through the polyethylene sheeting used for critical barriers over the windows.

All work will be performed using a buddy system.

All power to the area is to be supplied by the GFI power source. All exit routes from the Armory building work areas will be clearly marked with a sign and red arrow designating the exit path. Emergency lights will be in place, where necessary, in all areas that are not properly illuminated so as to assist in the identification of the exit locations.

A minimum of three fire extinguishers will be on site during all phases of work. The fire extinguishers shall be a #10-A:B:C rated extinguisher.

A minimum of one fire extinguisher will be in the work area and one in each of the containment area prepared for the removal of the wallboard and ceiling board material.

A minimum of one fire extinguisher shall be placed in the Clean Room of the Decon facility.

XIV. REQUESTS FOR VARIANCES

Request for variances must be submitted to both the Licensed Project Designer and ODOL Inspector.

A variance from starting the work in Type "C" supplied air is requested. The Contractor may start the initial shift of work in Powered Air Purifying Respirators (PAFP) and then down grade to full face APR's once a full shift of air monitoring shows asbestos fiber counts are below <0.50 fibers/cc UCL. Alternatively, the Asbestos Abatement Contractor may submit to ODOL a request to start the containment work in full face APR's based on air monitoring records from previous projects where similar work practices maintained the fiber count exposure level below <0.50 fiber/cc UCL.

The Licensed Project Designer supports the variance request for starting the wallboard and ceiling board abatement work in full face APR's due to the low percentage of chrysotile asbestos in the materials to be abated.

No other variances were anticipated at the Pre-abatement Bid Conference.

XV. REMOVAL OF ASBESTOS IN SOIL

XVI. SPECIAL MATERIALS OR METHODS AND ASBESTOS IN SOIL

This Project does not require the removal of any soils contaminated with ACM.

The portion of the Armory location selected for this asbestos abatement project is to be unoccupied during the asbestos removal work.

No special materials or methods for accomplishing the removal are anticipated.

Requests for the use of any special materials or methods shall be coordinated with the Licensed Project Designer and submitted as a Project Design Amendment for consideration by the ODOL.

APPENDIX

Armory Floor Plan Diagram with Abatement Area Location

Armory Estimated Quantities of ACM

Asbestos Inspection Report and Bulk Asbestos Test Results

Project Designer License

Appendix

Location, Estimated Quantities and Types of ACM at Kingfisher Armory Project Design

TABLE I: ASBESTOS CONTAINING MATERIALS

SAMPLE NUMBER	SAMPLE LOCATION	SAMPLE DESCRIPTION	% ASBESTOS	TYPE OF ASBESTOS	TYPE OF MATERIAL	CONDITION OF MATERIAL
0045-53B	ROOM 11	CEILING TILE	3%	CHRYSTOLE	SURFACING MATERIAL	GOOD

TABLE II: ASBESTOS CONTAINING HOMOGENOUS AREAS

SAMPLE LOCATION	SAMPLE MATERIAL	TOTAL QUANTITY
ROOM 11	CEILING TILE	120 R

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

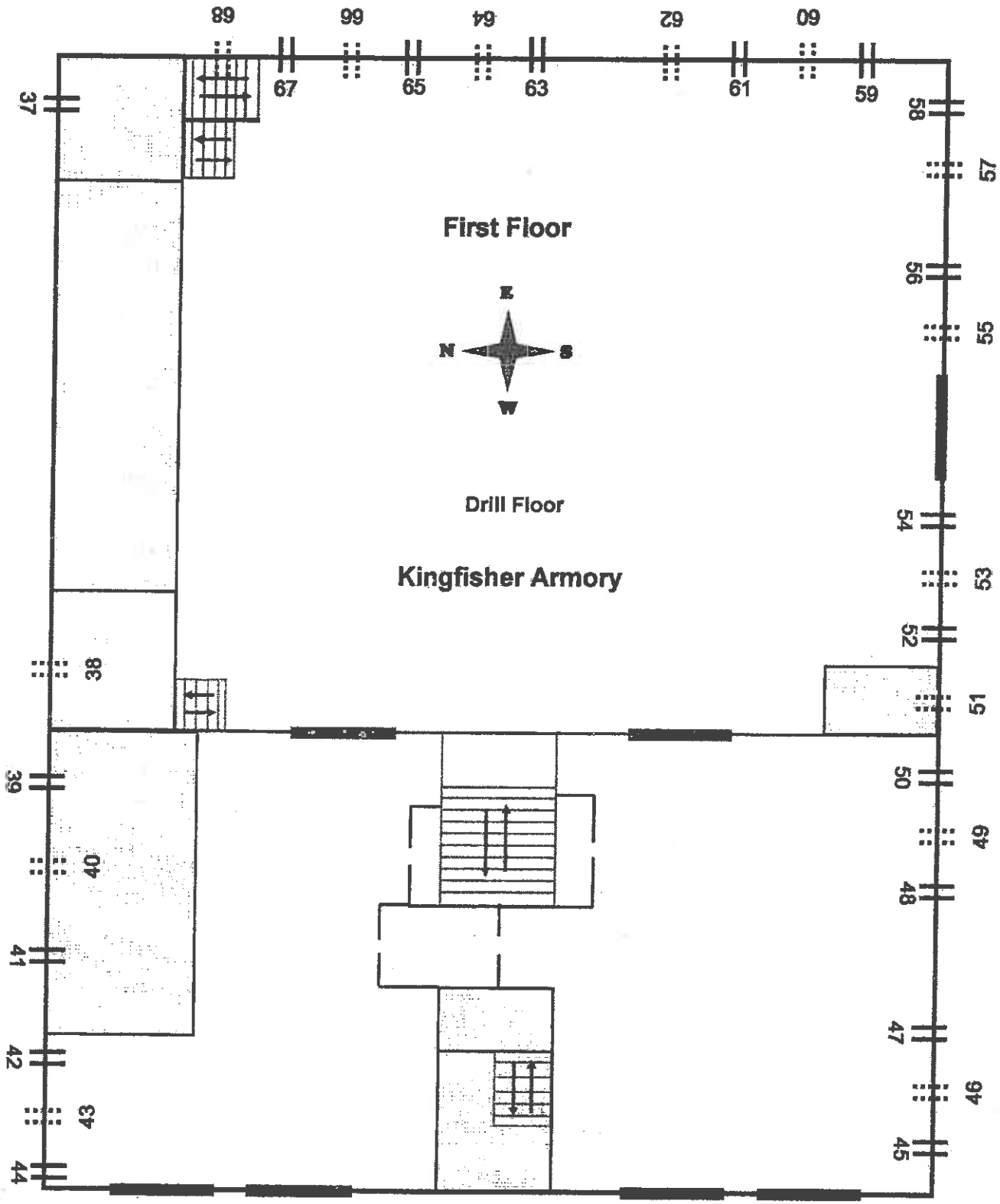
DEQ Approved Lead-Based Paint Encapsulants List

Lead-Based Paint Encapsulants approved by DEQ

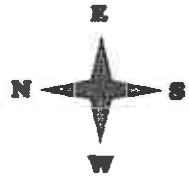
Encapsulant Manufacturer	Encapsulant Product(s)
Coronado Paint Company	LEAD BLOCK™
Dumond Chemicals	LEAD STOP™
Dynacraft Industries, Inc.	Back to Nature Protect-A-Coat
Encap Systems Corporation	EncapSeal™ I
Encap Systems Corporation	EncapSeal™ II
Fiberlock Technologies, Inc.	Child GUARD interior/exterior
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

Window Scope of Work Including Measurements and Specifications



First Floor

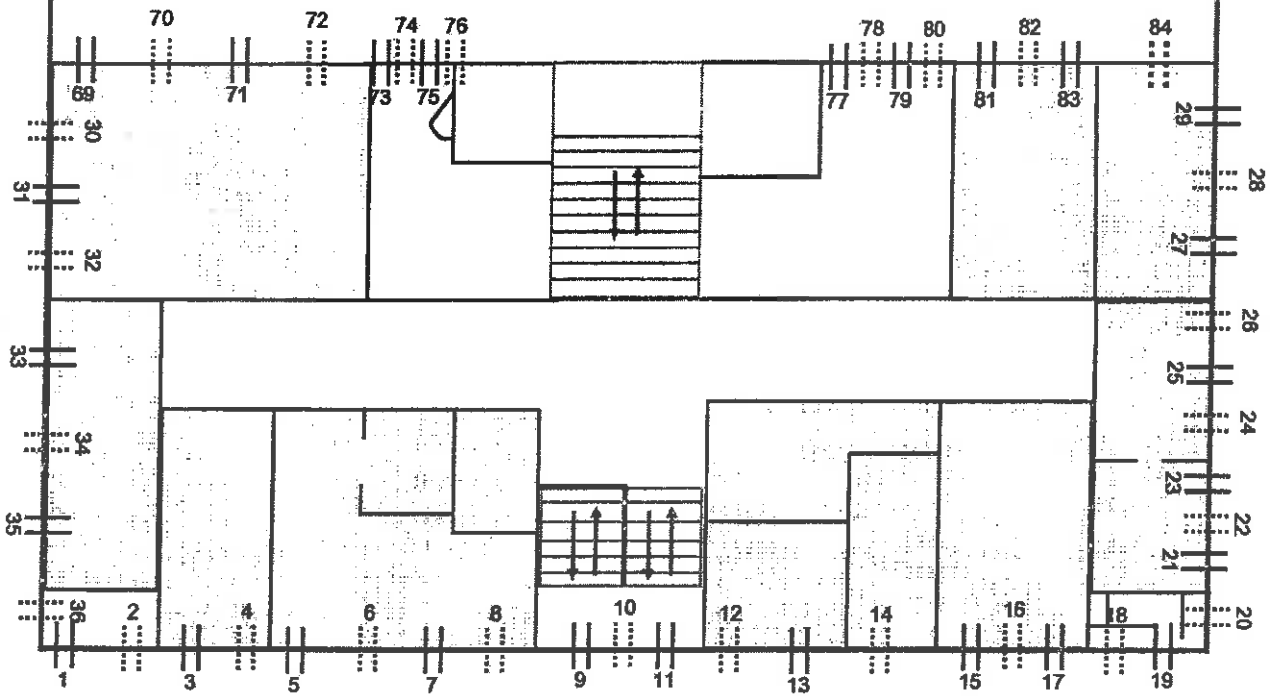
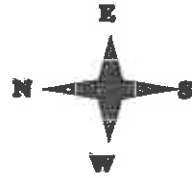


Drill Floor

Kingfisher Armory

Kingfisher Armory

Second Floor



Kingfisher Armory Window Measurements And Scope of Work

- **Window measurements are listed as approximate Width X Height; Contractor to field verify.**
 - **All window bars shall be removed and properly disposed.**
 - **Caulking shall be removed from outside edges of window and properly disposed prior to window removal.**
 - **All removed windows shall be properly disposed.**
 - **Window lintels and any remaining metal with lead-based paint shall be wet scraped and sealed with a DEQ approved encapsulant (See Attachment 3).**
 - **Interior and Exterior window sills shall be HEPA vacuumed and wet washed to remove remaining lead dust. Once loose paint and lead dust is removed, window sills shall be sealed with a DEQ approved encapsulant (See Attachment 3).**
 - **Attached is a Kingfisher Armory Floor Plan with designated window numbers that correspond with the numbers on this Scope of Work.**
 - **Specifications for replacement windows are attached.**
-
1. **1'7" X 6'7"** – Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
 2. **2'2" X 6'3"** - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
 3. **2'2" X 6'3"** - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
 4. **2'2" X 6'3"** - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
 5. **2'2" X 6'3"** - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
 6. **2'2" X 6'3"** - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
 7. **2'2" X 6'3"** - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
 8. **2'2" X 6'3"** - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

9. 1' X 9'11" - Replacement window will be non-opening window.
10. 1' X 9'11" - Replacement window will be non-opening window.
11. 1' X 9'11" - Replacement window will be non-opening window.
12. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
13. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
14. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
15. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
16. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
17. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
18. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
19. 1'7" X 6'7" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
20. 1'7" X 6'7" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
21. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
22. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
23. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
24. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

25. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
26. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
27. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
28. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
29. 2'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
30. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
31. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
32. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
33. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
34. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
35. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
36. 1'7" X 6'7" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
37. 3'2" X 6'3"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
38. 3'2" X 6'3"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
39. 3'2" X 6'3"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
40. 3'2" X 6'3"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

41. 3'2" X 6'3"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
42. 3'2" X 6'3"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
43. 3'2" X 6'3"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
44. 3'2" X 6'3"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
45. 2'2" X 7'9"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
46. 3'2" X 7'9"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
47. 2'2" X 7'9"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
48. 2'2" X 7'9"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
49. 3'2" X 7'9"- Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
50. 2'2" X 7'9" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
51. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
52. 2'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
53. 3'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
54. 2'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
55. 2'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

56. 3'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
57. 2'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
58. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
59. 3'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
60. 3'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
61. 3'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
62. 3'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
63. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
64. 3'2" X 6'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
65. 3'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
66. 3'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
67. 3'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
68. 3'2" X 9'3" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.
69. 3'2" X 3'1" - Window to be single hung opening window.
70. 3'2" X 3'1" - Window to be single hung opening window.
71. 3'2" X 3'1" - Window to be single hung opening window.
72. 3'2" X 3'1" - Window to be single hung opening window.

73. 3'2" X 3'1" - Window to be single hung opening window.
74. 3'2" X 3'1" - Window to be single hung opening window.
75. 3'2" X 3'1" - Window to be single hung opening window.
76. 3'2" X 3'1" - Window to be single hung opening window.
77. 3'2" X 3'1" - Window to be single hung opening window.
78. 3'2" X 3'1" - Window to be single hung opening window.
79. 3'2" X 3'1" - Window to be single hung opening window.
80. 3'2" X 3'1" - Window to be single hung opening window.
81. 3'2" X 3'1" - Window to be single hung opening window.
82. 3'2" X 3'1" - Window to be single hung opening window.
83. 3'2" X 3'1" - Window to be single hung opening window.
84. 3'2" X 3'1" - Window to be single hung opening window.

SECTION 08520 – ALUMINUM WINDOWS

PART 1 – GENERAL

1.1 SECTION REQUIREMENTS

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

PART 2 – PRODUCTS

2.1 MANUFACTURERS

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

2.2 ALUMINUM WINDOWS

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

2.3 SPANDREL PANELS

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

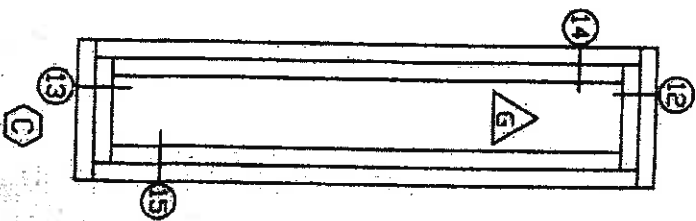
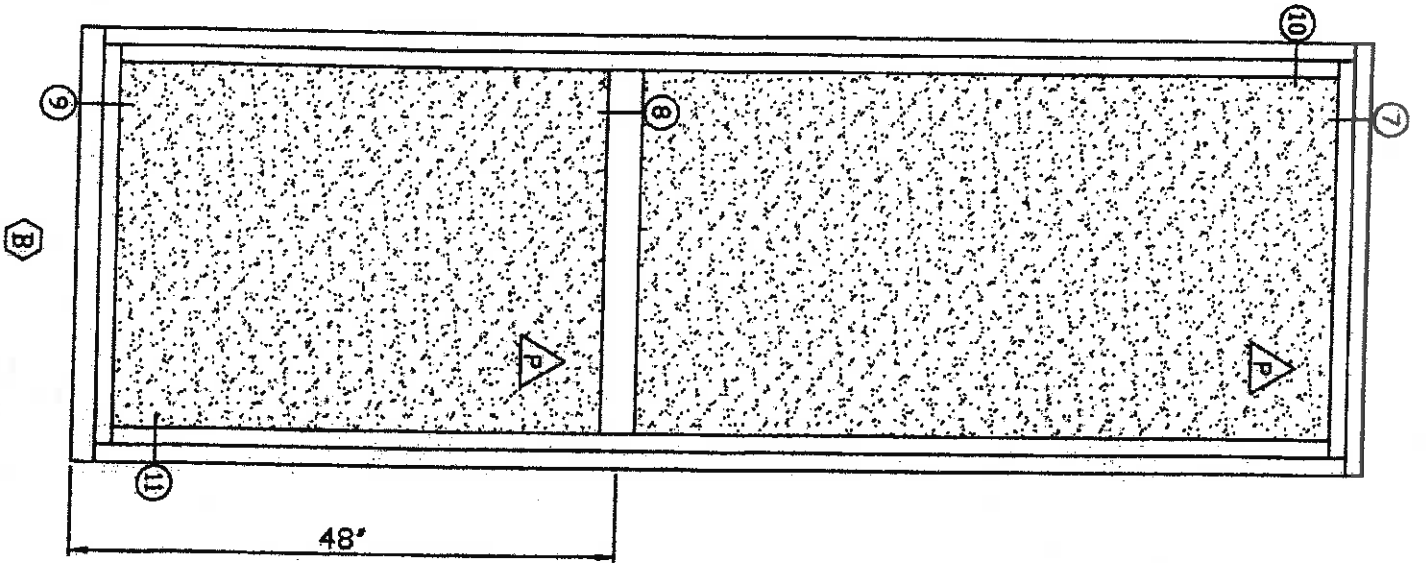
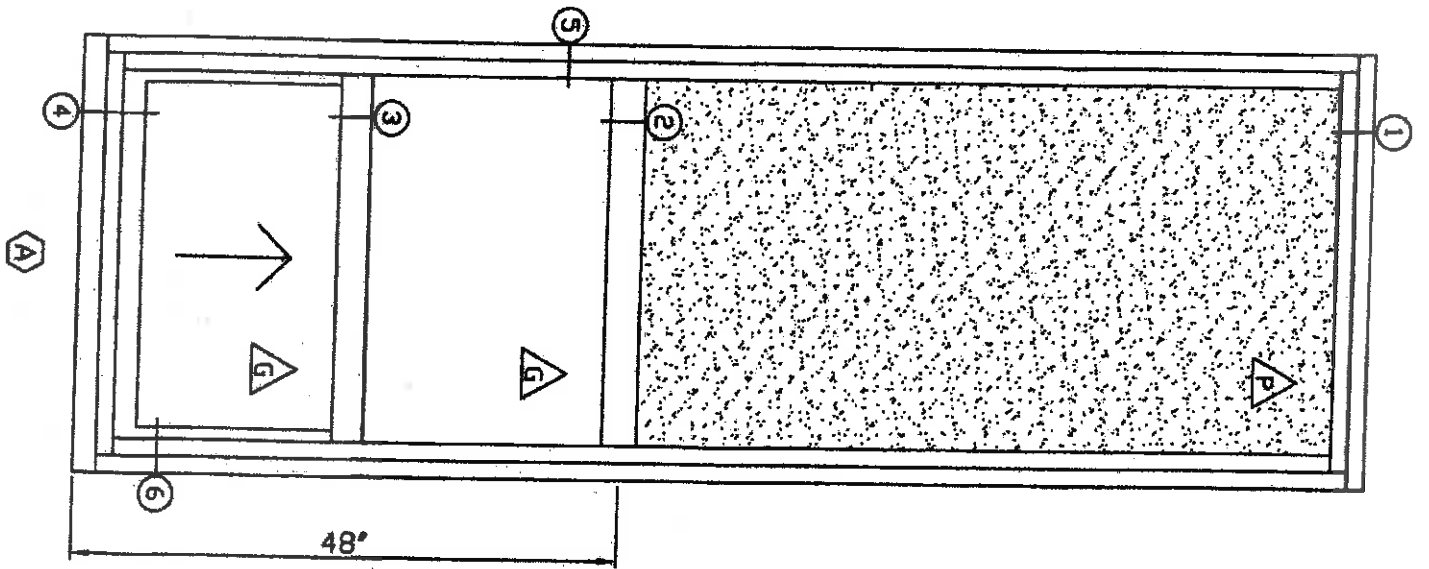
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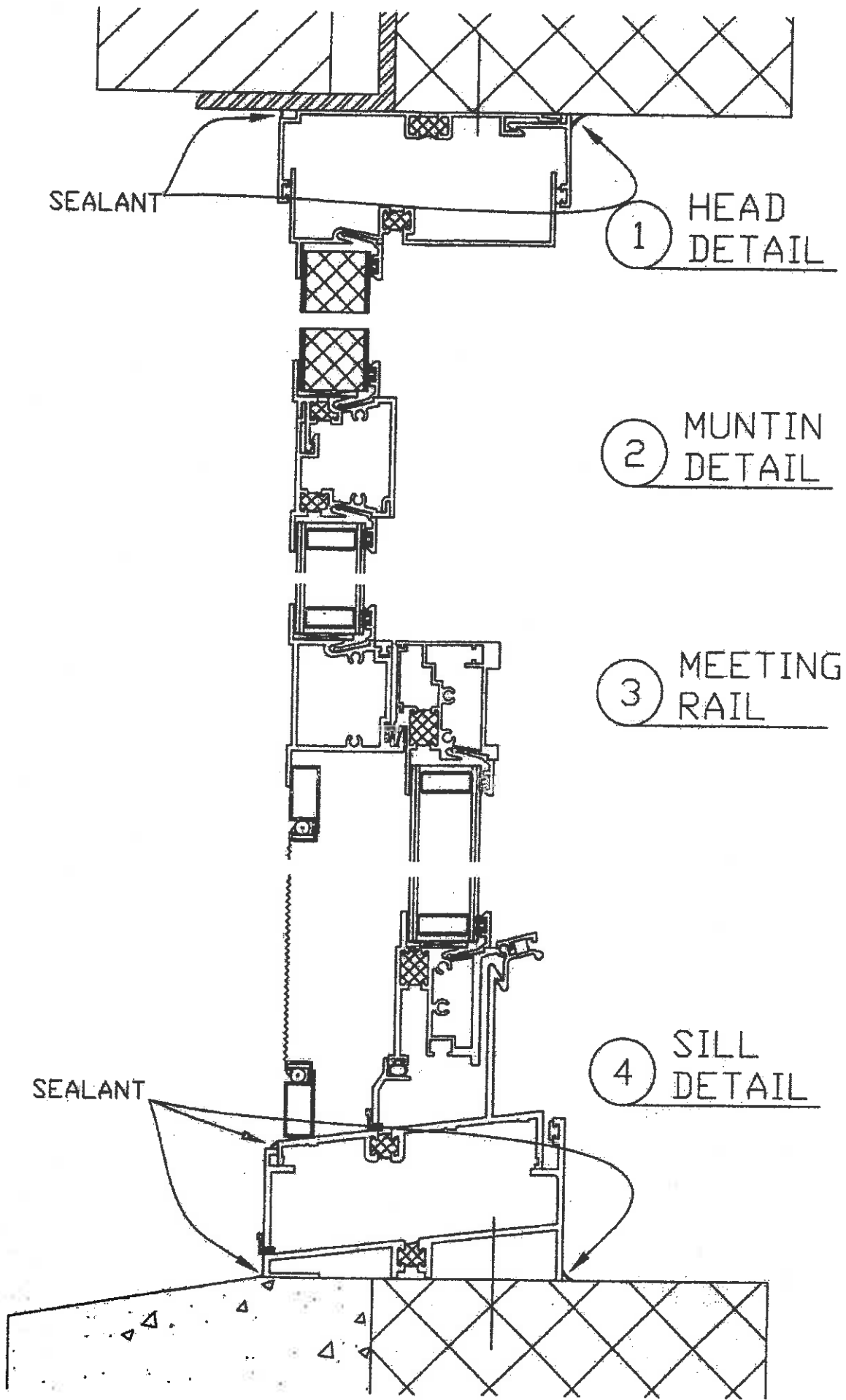
- A. Organic coating tested and certified by window manufacturer to comply with the AAMA 2605. Application must be by the window manufacturer.

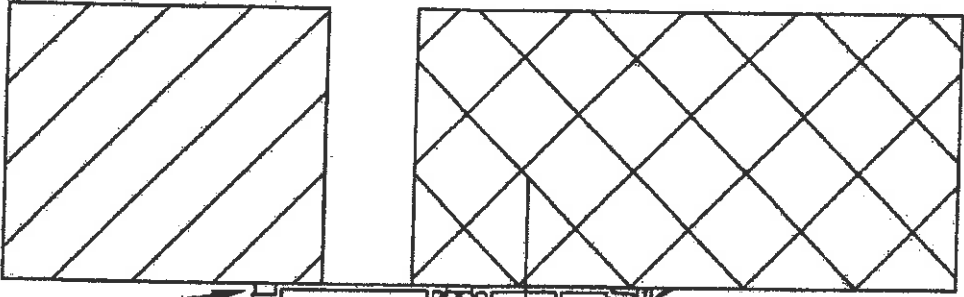
PART 3 – EXECUTION

3.1 INSTALLATION

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

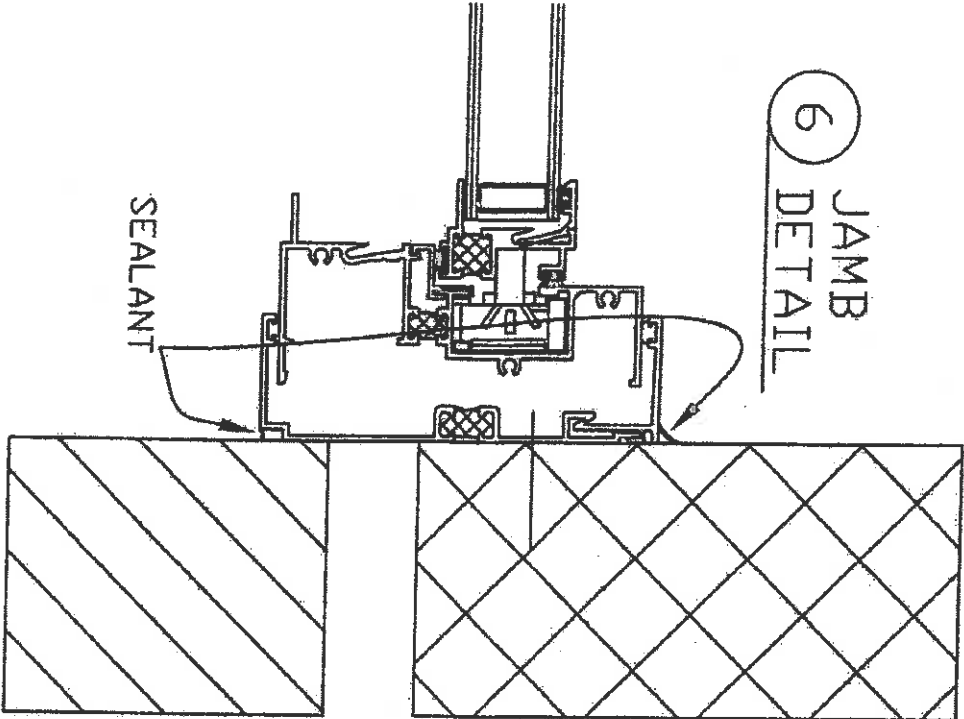






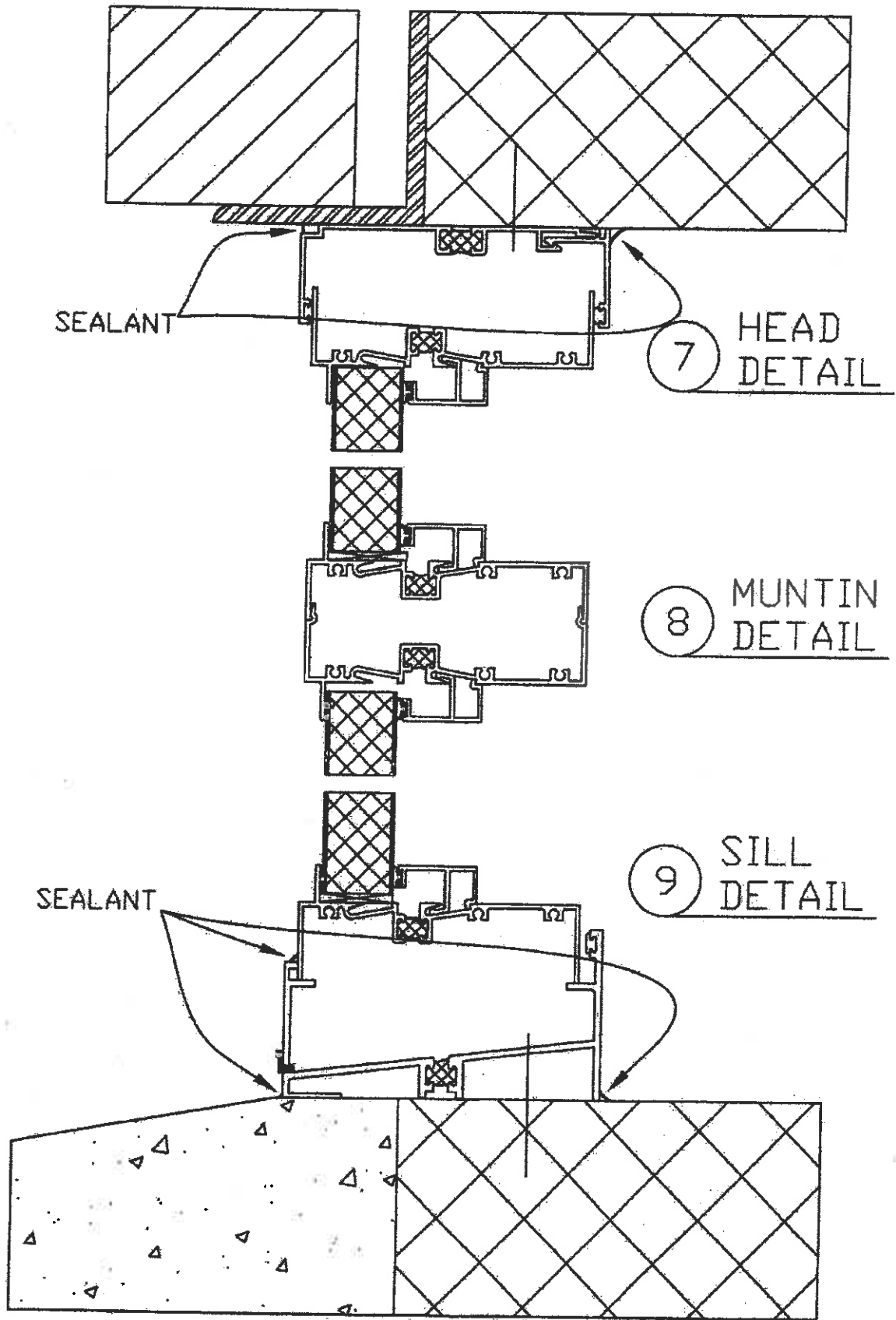
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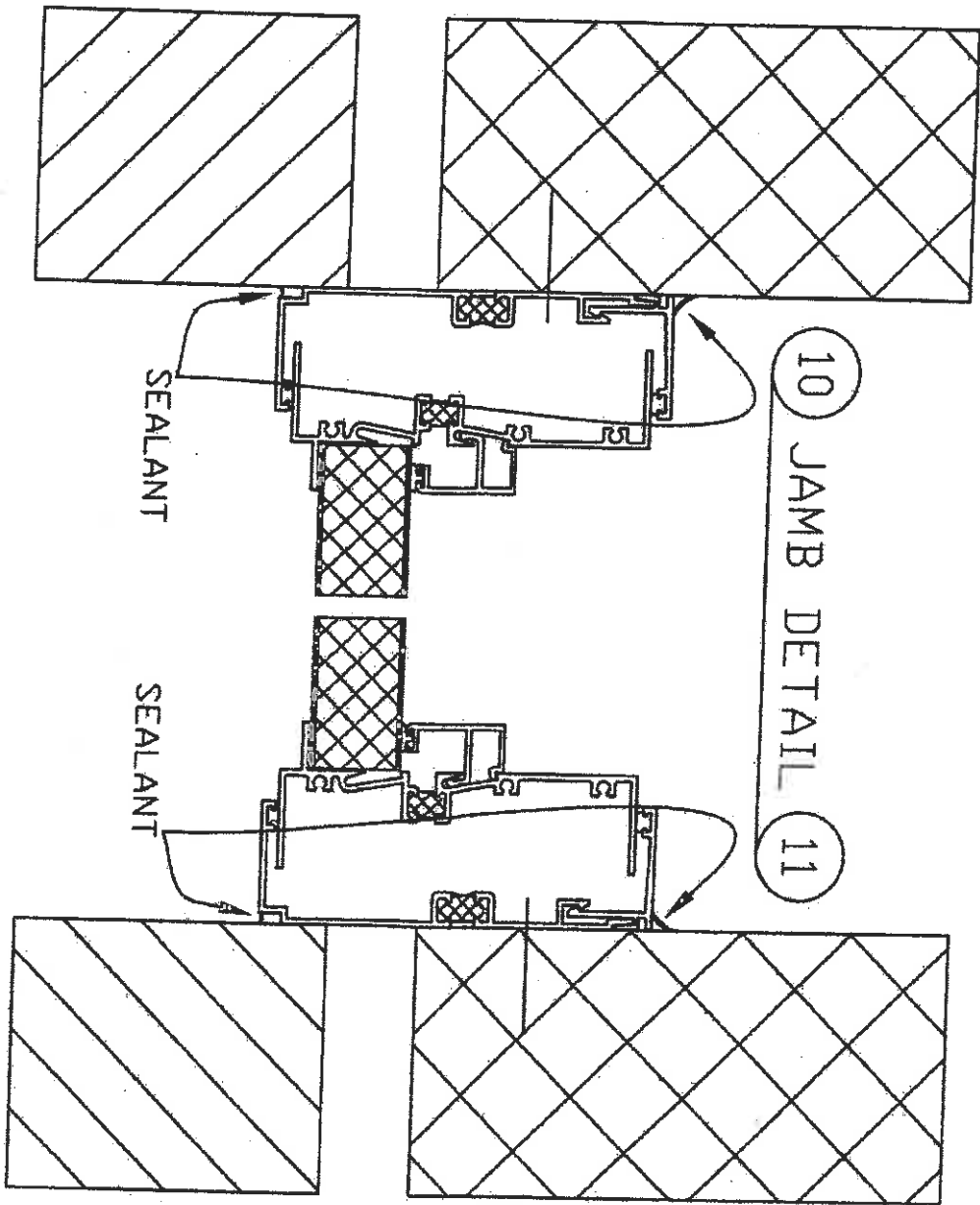
5 JAMB
DETAIL

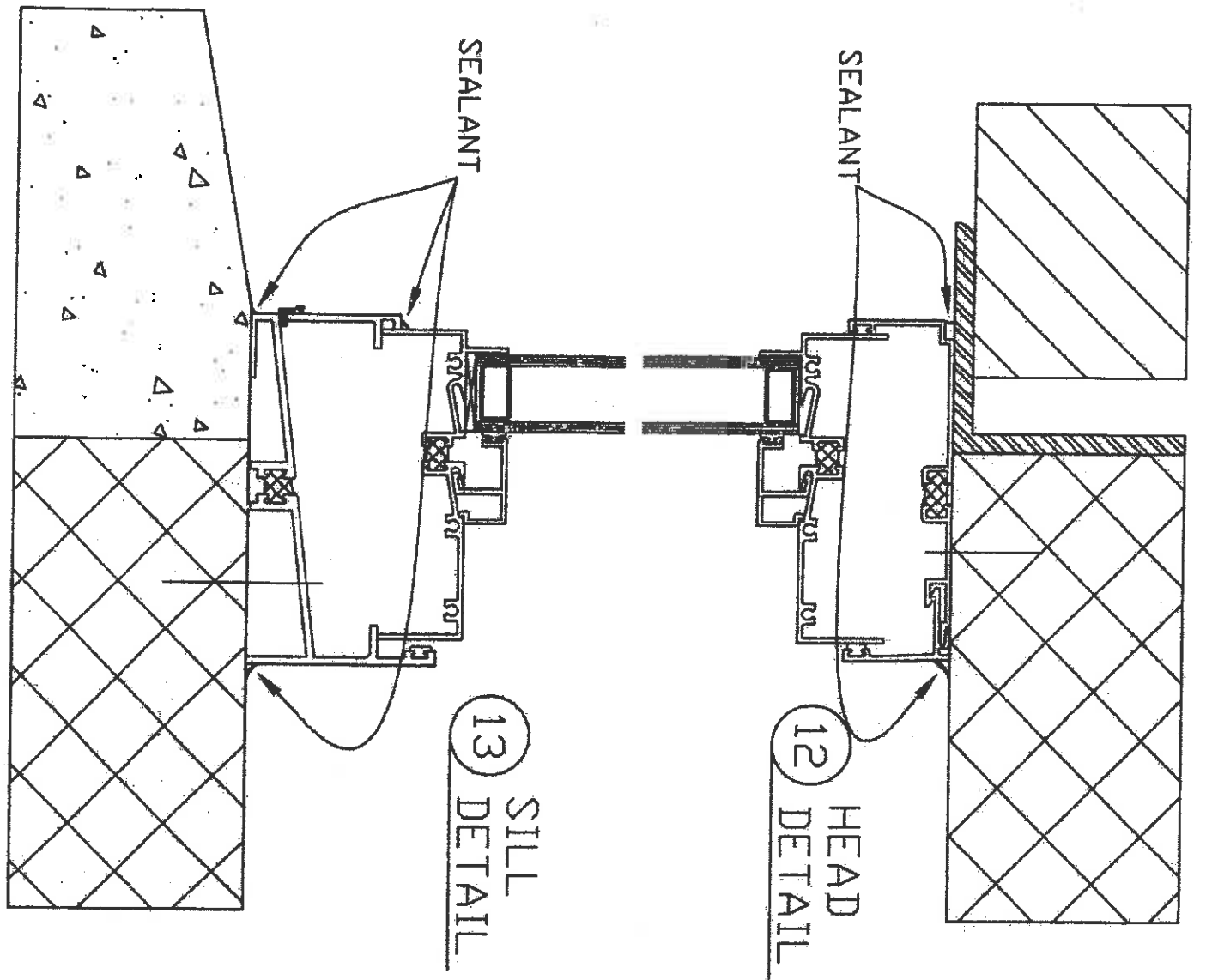


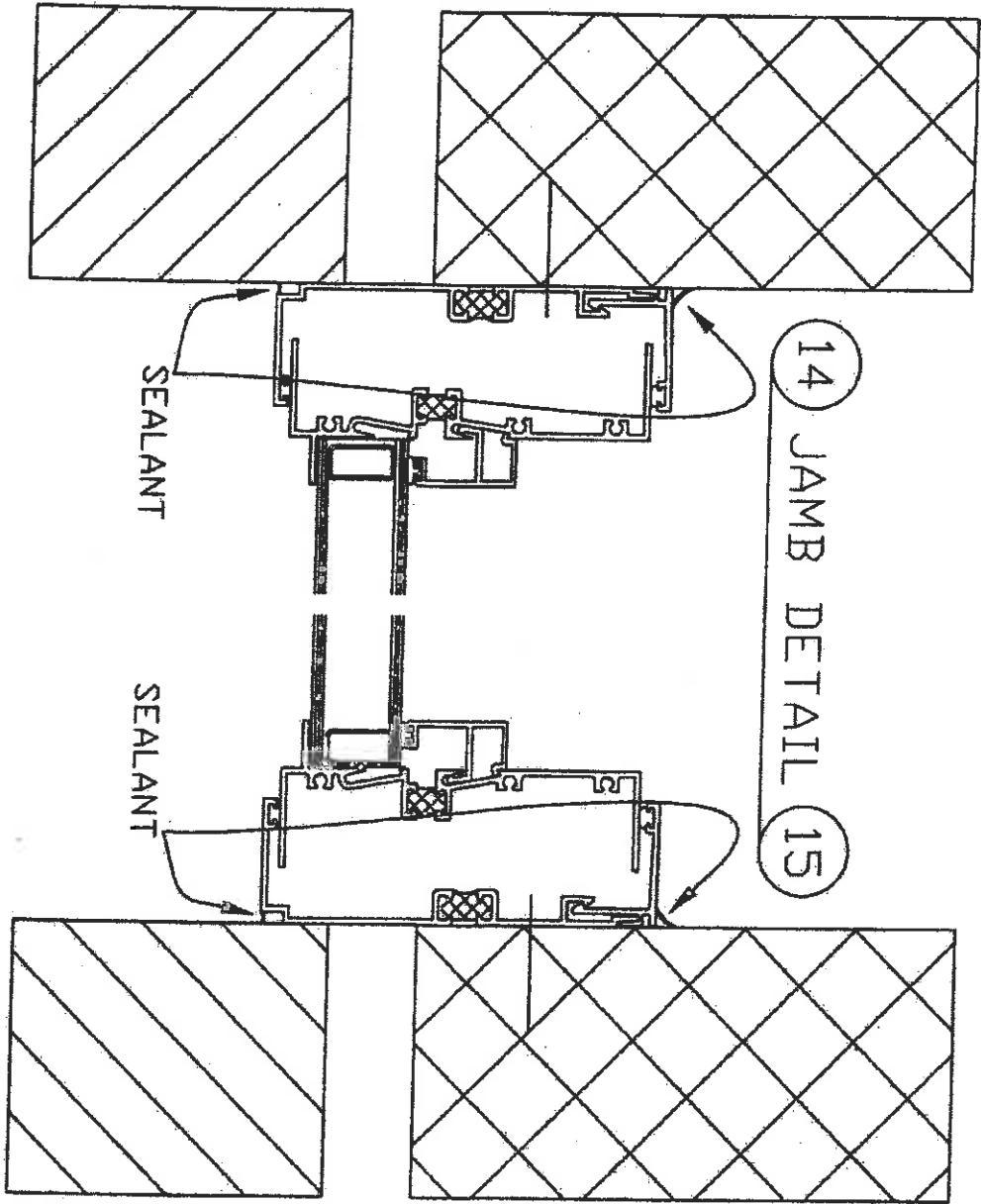
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6 JAMB
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14

JAMB DETAIL

15

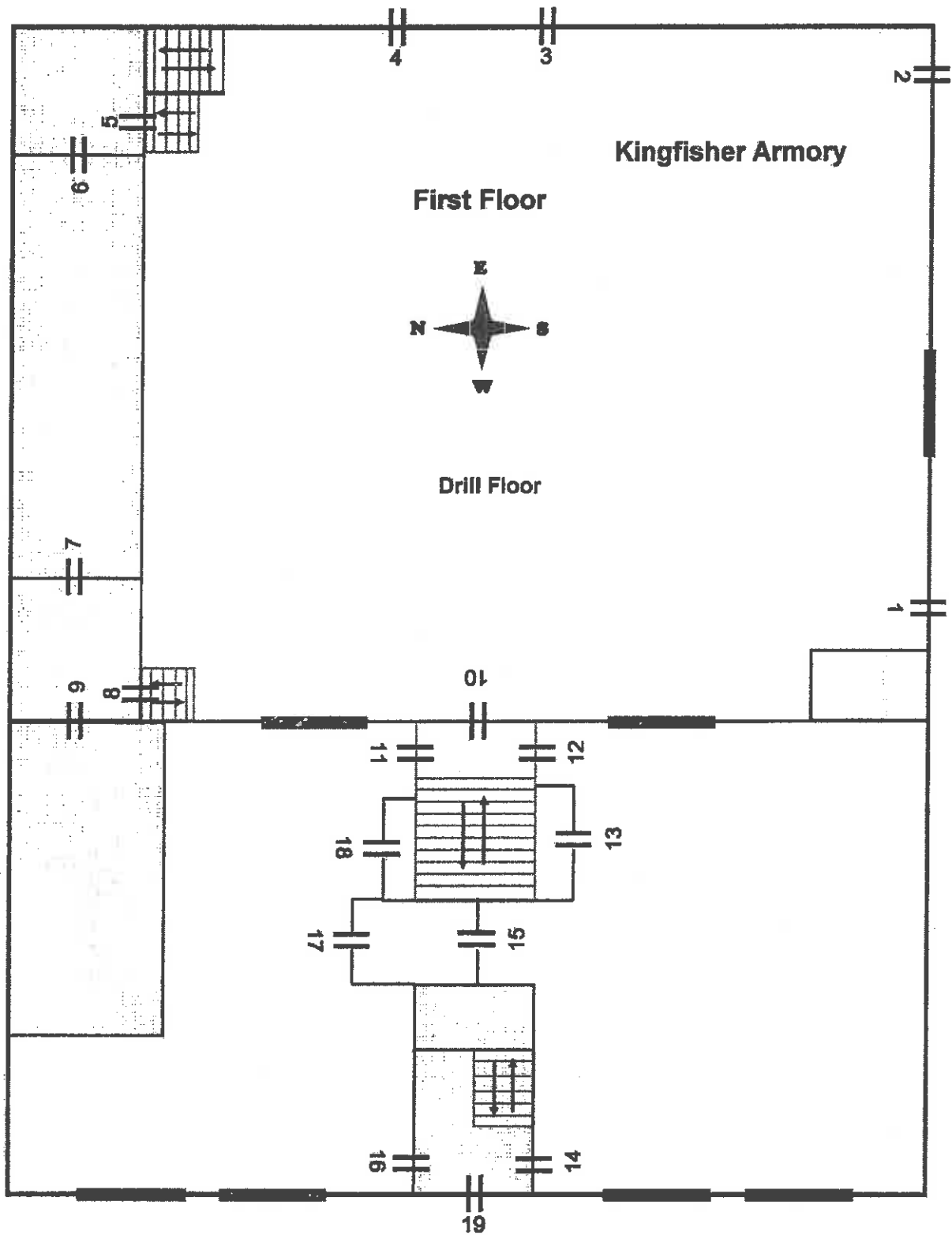
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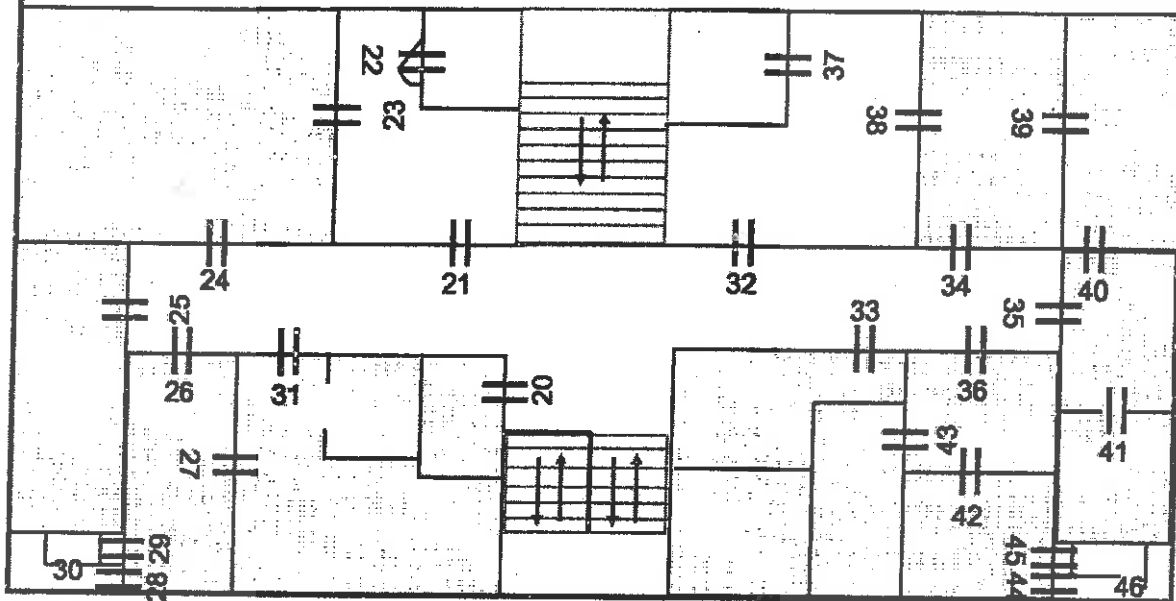
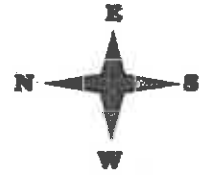
ATTACHMENT 6

Door Scope of Work Including Measurements and Specifications



Kingfisher Armory

Second Floor



Kingfisher Armory Door Measurements And Scope of Work

- **Door measurements are listed as approximate Width X Height; Contractor to field verify.**
 - **All removed doors will be properly disposed.**
 - **All removed lead-based paint will be properly disposed.**
 - **Attached is a Kingfisher armory Floor Plan with designated door numbers that correspond with the numbers on this Scope of Work.**
 - **Specifications for replacement doors are attached.**
-
1. Remove all paint from original outer door frame. Once paint is removed, paint frame with neutral colored primer.
 2. Remove all paint from original outer door frame. Once paint is removed, paint frame with neutral colored primer.
 3. Remove all paint from original outer door frame. Once paint is removed, paint frame with neutral colored primer.
 4. Remove all paint from original outer door frame. Once paint is removed, paint frame with neutral colored primer.
 5. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
 6. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
 7. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
 8. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
 9. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'

10. Remove double doors. Remove all paint from door frame. Replace double doors with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Double Door Measurements – 5' X 7'
11. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
12. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
13. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
14. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
15. Remove double doors. Remove all paint from door frame. Replace double doors with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Double Door Measurements – 5' X 7'
16. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
17. Remove double doors. Remove all paint from door frame. Replace double doors with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Double Door Measurements – 5' X 7'
18. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
19. Remove all paint from original outer door frame. Once paint is removed, paint frame with neutral colored primer.
20. Remove double doors. Remove all paint from door frame. Replace double doors with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Double Door Measurements – 5' X 7'

21. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 4' X 7'
22. Remove all paint from vault door and door frame. Once paint is removed, paint door and frame with neutral colored primer.
23. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 2'8" X 7'
24. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
25. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
26. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
27. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
28. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 2'4" X 7'
29. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 2'4" X 7'
30. Remove all paint from door frame. Once paint is removed, paint frame with neutral colored primer.
31. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
32. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 4' X 7'

33. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
34. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
35. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
36. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
37. Remove all paint from vault door and door frame. Once paint is removed, paint door and frame with neutral colored primer.
38. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 2'8" X 7'
39. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 6'9"
40. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
41. Remove all paint from door frame. Once paint is removed, paint frame with neutral colored primer.
42. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
43. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'
44. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 2'4" X 7'

45. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.

Door Measurements - 2'4" X 7'

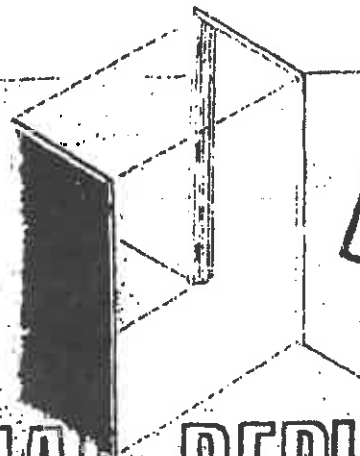
46. Remove all paint from door frame. Once paint is removed, paint frame with neutral colored primer.

Install a pre-hung

Steelcraft

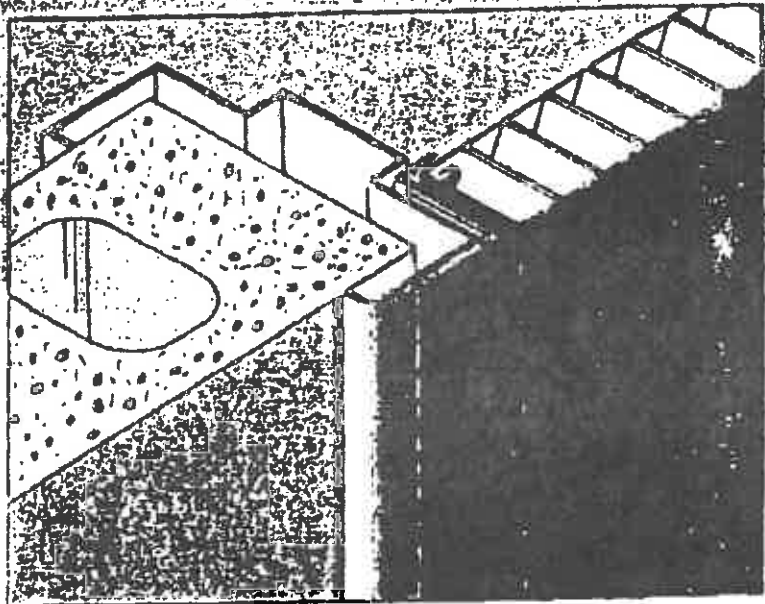
COMMERCIAL REPLACEMENT DOOR UNIT

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



New beauty
 and security
 for worn out doors.

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



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

QUICK

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

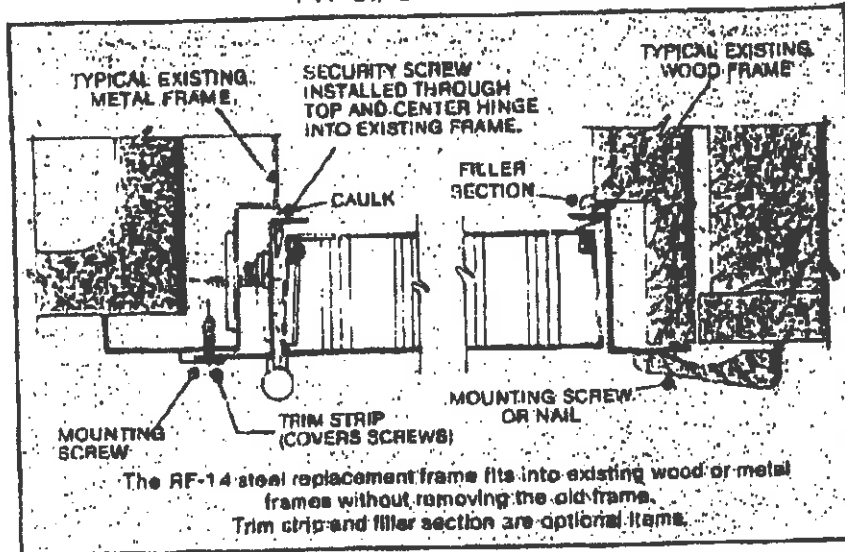
'N EASY

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

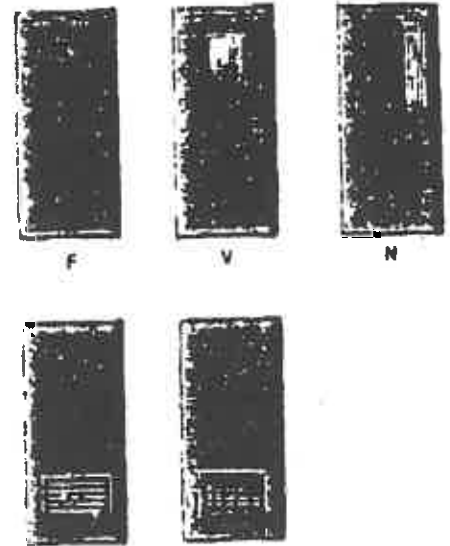
INSTALLATION

3. Mount hardware as required. Paint.

TYPICAL SECTION



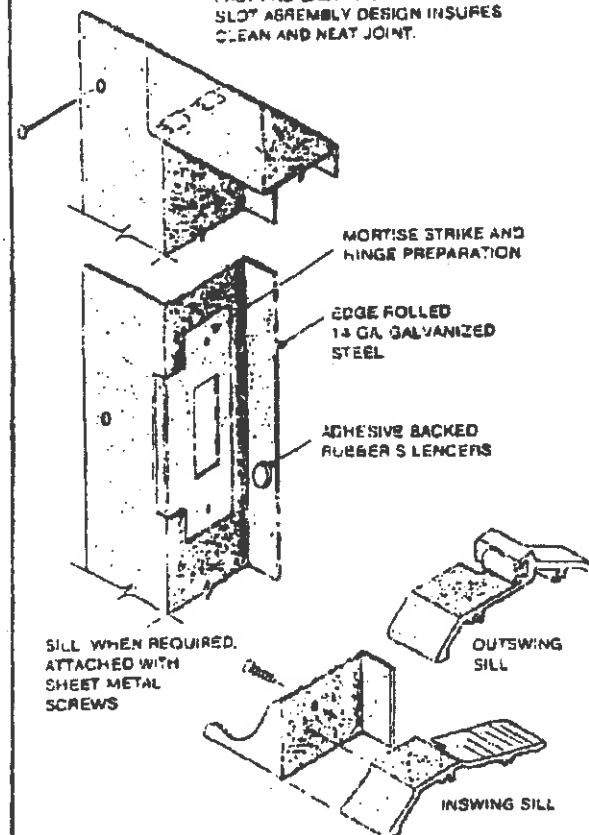
DESIGNS AND FINISHES AVA



LOUVERS

FRAME DETAIL

KNOCKED DOWN CORNER CONSTRUCTION, FAST AND EASY TAB AND SLOT ASSEMBLY DESIGN INSURES CLEAN AND NEAT JOINT.



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

SPECIFICATIONS

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

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

Doors shall conform to the following:

Doors shall be as manufactured by Steelcraft, Cincinnati, Ohio, and designated as RL-18 (1/4" 18 ga. steel).

Doors shall be fabricated from cold rolled steel.

Doors shall have 1/8" bevel in 2" on hinge and lock edges.

Doors shall have vertical mechanical interlocking seams on hinge and lock edges with visible edge seam.

Doors shall be provided with top and bottom inverted steel channels, spotwelded within the door.

Doors shall be reinforced, stiffened and sound deadened with impregnated kraft honeycomb core completely filling the inside of the door and laminated to the inside faces of panels.

Doors shall be mortised and adequately reinforced for all hardware.

Doors shall be phosphatized and receive one coat of baked-on prime paint.

Frames shall conform to the following:

Frames shall be as manufactured by Steelcraft, Cincinnati, Ohio, and designated as RF-14 (14 ga.).

Frames shall be accurately formed from galvanized steel.

Frames shall be furnished knocked down (KD). Corners shall have tabs for secure and easy interlocking of jambs to head at each corner.

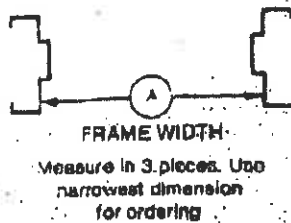
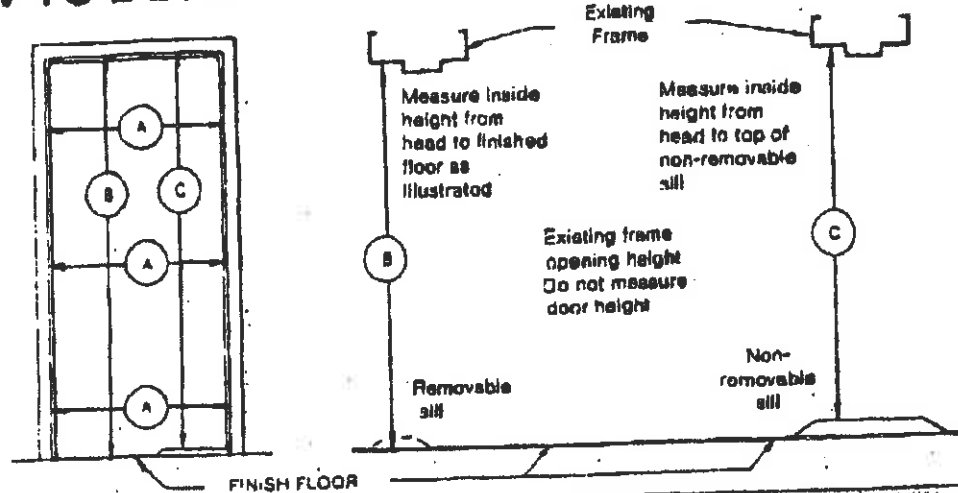
Frames shall be adequately reinforced for all hardware.

Frames shall be supplied with adhesive backed rubber bumpers; three per strike jamb, two per double door frame head.

Frames shall be phosphatized and receive one coat of baked-on prime paint.

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

HOW TO DETERMINE SIZE OF EXISTING FRAME



SIZE (Nominal)	FITS THESE EXISTING OPENINGS			
	A WIDTHS		B C HEIGHTS	
	MIN.	MAX.	MIN.	MAX.
28" x 6'8"	31 1/4"	32 1/2"	78 1/2"	80 1/2"
30" x 6'8"	35 1/2"	36 1/2"	78 1/2"	80 1/2"
36" x 6'8"	41 1/2"	42 1/2"	78 1/2"	80 1/2"
3'6" x 6'8"	43 1/2"	44 1/2"	78 1/2"	80 1/2"
40" x 6'8"	47 1/2"	48 1/2"	78 1/2"	80 1/2"
2'8" x 7'0"	31 1/2"	32 1/2"	83 1/2"	84 1/2"
3'0" x 7'0"	35 1/2"	36 1/2"	83 1/2"	84 1/2"
3'6" x 7'0"	41 1/2"	42 1/2"	83 1/2"	84 1/2"
3'8" x 7'0"	43 1/2"	44 1/2"	83 1/2"	84 1/2"
4'0" x 7'0"	47 1/2"	48 1/2"	83 1/2"	84 1/2"
5'4" x 6'8"	63 1/2"	64 1/2"	79 1/2"	80 1/2"
6'0" x 6'8"	71 1/2"	72 1/2"	79 1/2"	80 1/2"
5'4" x 7'0"	63 1/2"	64 1/2"	83 1/2"	84 1/2"
6'0" x 7'0"	71 1/2"	72 1/2"	83 1/2"	84 1/2"

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

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

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

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

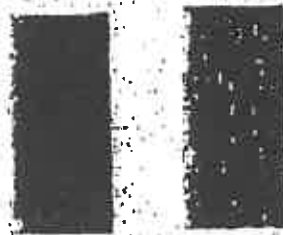
Steelcraft
 2017 Blue Ash Road, Cincinnati, Ohio 45222 513/745-6408



LNL

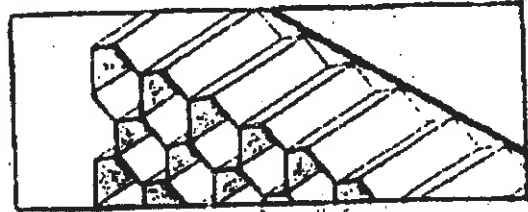
G

G2/G4

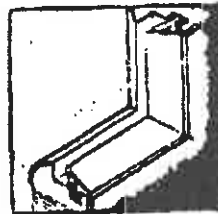


FINISH: PAINTED AND WOOD
GRAIN FINISHES

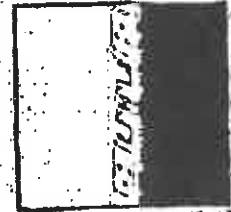
DOOR DETAILS



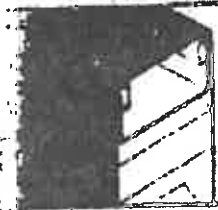
Full honeycomb core of phenolic resin-impregnated kraft paper reinforces the door every 3-inch, providing superlative resistance to impact and assuring a flat surface.



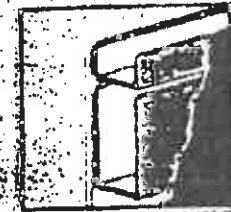
Aluminum glass insert
(3/4" x 1/4")



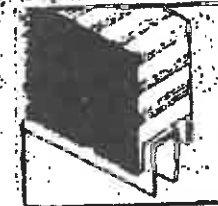
8-gauge thick hinge
reinforcement.



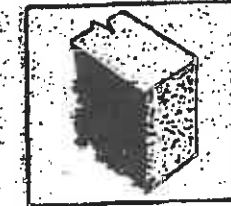
Snap-in steel top caps
(for exterior openings)



Strike and bottom
reinforcing channels
1/4-gauge closer rein-
forcement when
required.



Door bottom with
double sweep when
required.



Insulated doors:
one pound polystyrene
core, 1 1/2 pound
polyurethane core
when required.

HARDWARE

Replacement Units shall be prepared for the following hardware:

Hinges:

1-1/2 pair of 4-1/2 x 4-1/2 x 1/4 template hinges

Lock and Strike:

Government 161 (ANSI-A115.2) cylindrical or Government 88 (ANSI-A115.1) mortise lock with an ANSI-A115.1 or .2 strike.

Consult distributor for other hardware preparations.

	NOMINAL SIZE	FRAME SIZE (FINISHED OPENING)		NET DOOR SIZE*	
		WIDTH	HEIGHT	WIDTH	HEIGHT
SINGLE	2858	31"	79 1/4"	30-13/16"	79 1/4"
	3068	35"		34-13/16"	
	3558	41"		40-13/16"	
	3868	43"		42-13/16"	
	4068	47"		46-13/16"	
SINGLE	2870	31"	83 1/4"	30-13/16"	82 1/4"
	3070	35"		34-13/16"	
	3870	41"		40-13/16"	
	3870	43"		42-13/16"	
	4070	47"		46-13/16"	
PAIR	5468	63"	79 1/4"	30-13/16" & 31-13/16"	78 1/4"
	6068	71"		34-13/16" & 35-13/16"	
	5470	63"	83 1/4"	30-13/16" & 31-3/16"	82 1/4"
	6070	71"		34-13/16" & 35-13/16"	

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

PAIRS OF DOORS

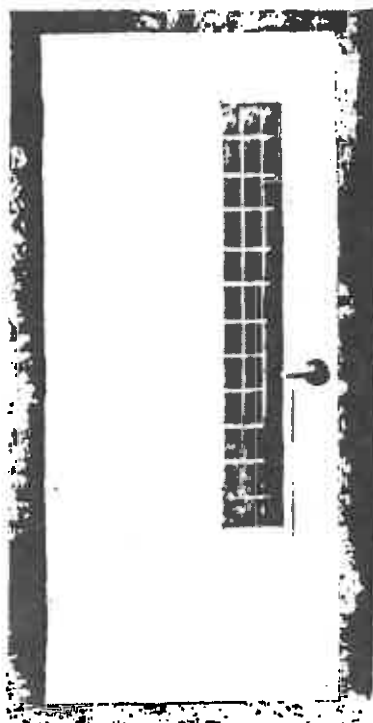


Designs shown may be combined for pairs of doors. Pairs of doors consist of two leaves and a 14 ga. steel "Z" astragal field mounted to inactive leaf of pair. Inactive leaf may be secured with flush bolts or surface bolts.

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

STEELCRAFT.

L18 AND L16-SERIES HONEYCOMB DOORS



ABOUT THE PRODUCT:

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

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

FEATURES AND BENEFITS:

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

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

SPECIFICATION COMPLIANCE:

1. Door construction for the Steelcraft L18 and L16-Series Full Flush Doors meet the requirements of **ANSI A250.8-1998** (commonly referred to as **SDI-100**).
2. Hardware preparations and reinforcements are in accordance with ANSI A250.6-1997. Locations are in accordance with ANSIDHI 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 Galvanized ²	Mainly Interior	• Typical building conditions	
Galvanized ²	Mainly Exterior	• Used in locations with high humidity and/or weather exposure	

MATERIAL:

Depending on environmental conditions, exterior doors are generally galvanized and interior doors non galvanized. 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

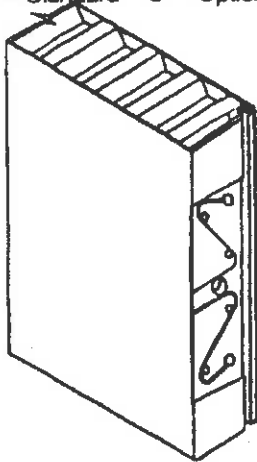
² Reinforcements for galvanized doors are also galvanized

³ Commercial quality carbon steel



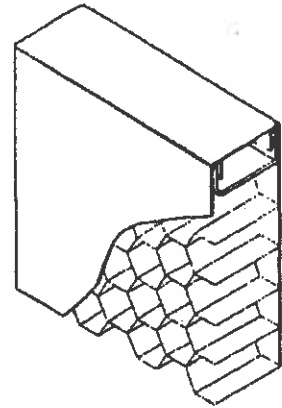
Details are subject to change without prior notice.

Universal Mortise Hinge Prep
4 1/2" - Standard 5" - Optional

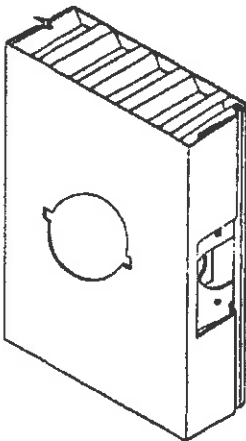


7 Gage Hinge Reinforcement

Optional Snap-In Top Cap

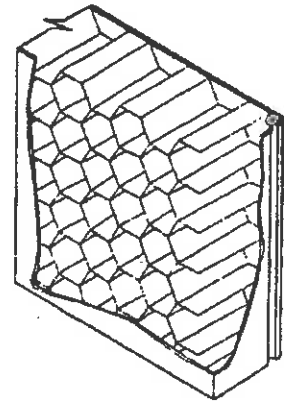


Lock Prep

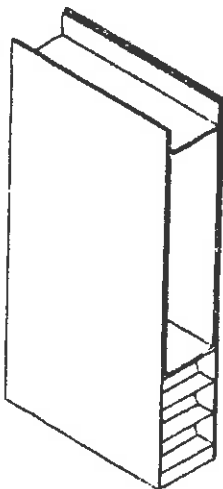


161 Cylindrical Lock shown

Rigid Honeycomb Core

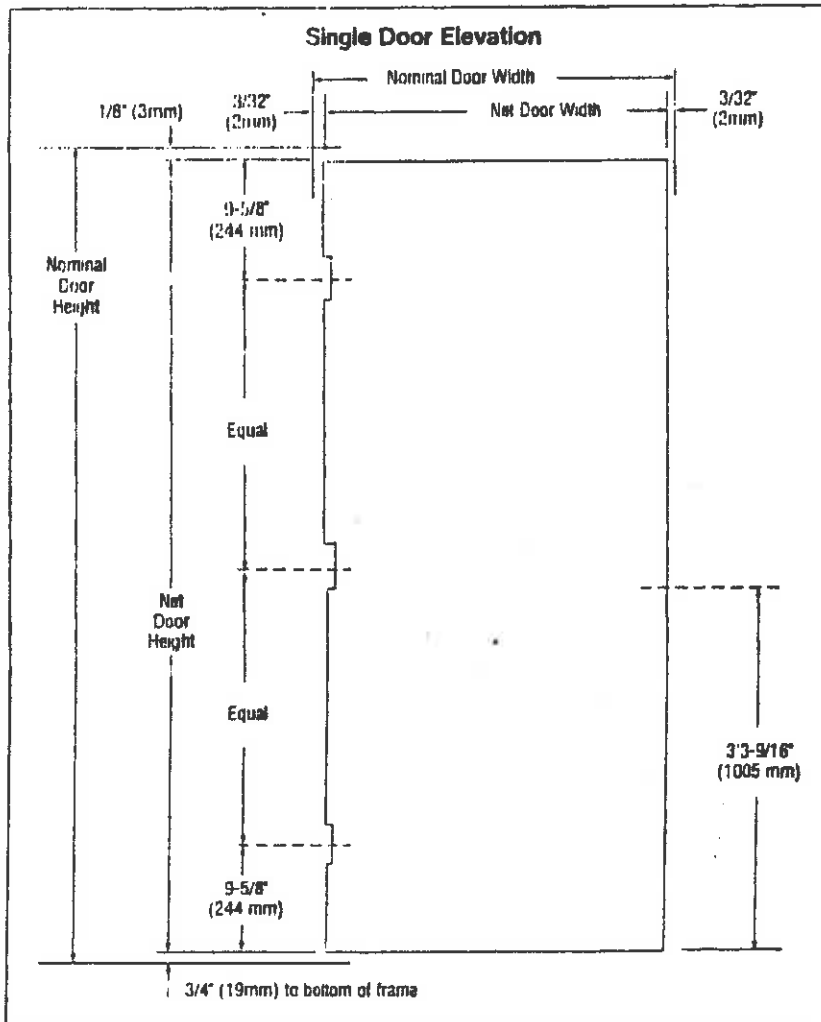


Optional 14 Gage Closer Reinforcement

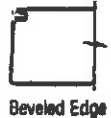
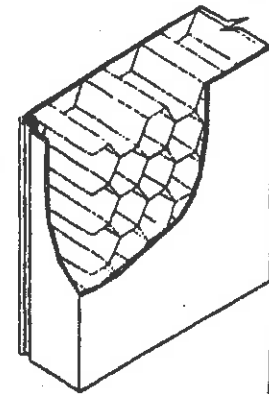


GENERAL NOTES:

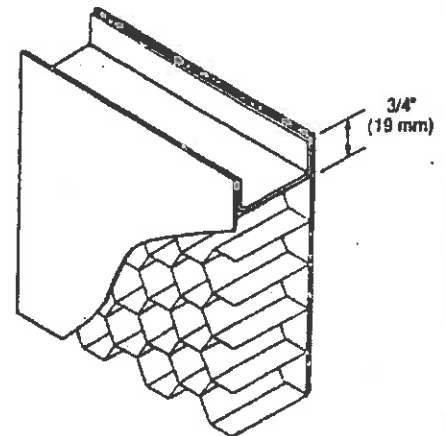
1. **Edge construction:**
 - Vertical edges (both hinge and lock) are beveled with a visible seam.
 - Top and bottom edges are closed with inverted 14 gage welded channels. Exterior applications require the addition of snap-in top caps to protect against the weather.
2. **Optional edge seams available 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** - 4 1/2" (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 4 7/8" (124mm) strike are 161, 61L and 86.



Beveled Edge with Full Height Mechanical Interlock



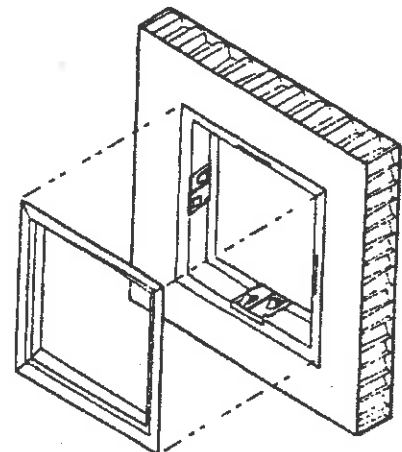
Inverted Top & Bottom Channels 14 Gage



CONSTRUCTION NOTES:

- Doors are 1 3/4" (45mm) thick.
- 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)
- Standard operating clearances (installed in frame):
Head = 1/8" (3mm) to bottom of head or transom panel
Hinge and lock side = 3/32" (2mm) to rabbet on jamb
- 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.
- 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 3/8" (9mm) lower.
- Glass lites with Designer® trim and louvers: doors with glazed cutouts and doors with louvers are available (see *Lites and Louvers* section of *Spec Manual*).

Designer Trim Option 1/4" – Standard 1/2" – Optional



INSTALLATION:

1. Installation shall conform to the published Steelcraft installation instructions, SDI 105 *Recommended Installation Instructions for Steel Frames*, and ANSV/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

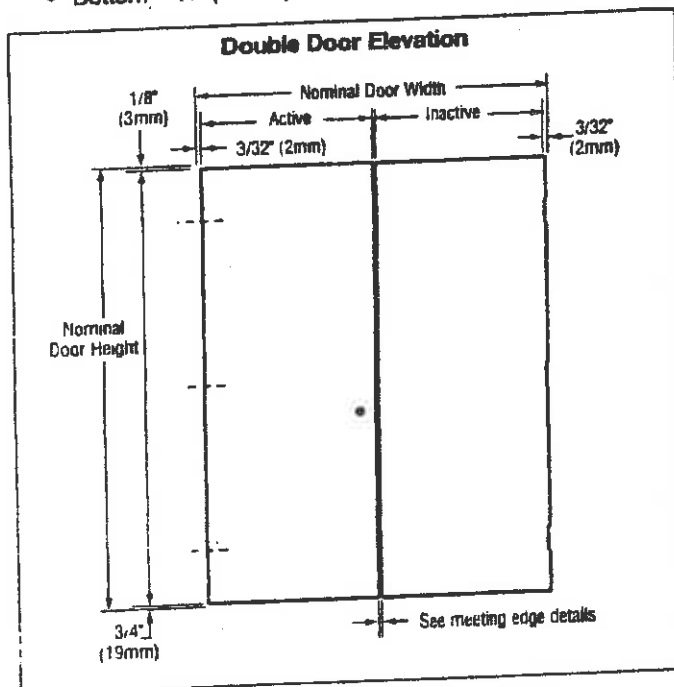
DOUBLE DOOR APPLICATIONS:

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

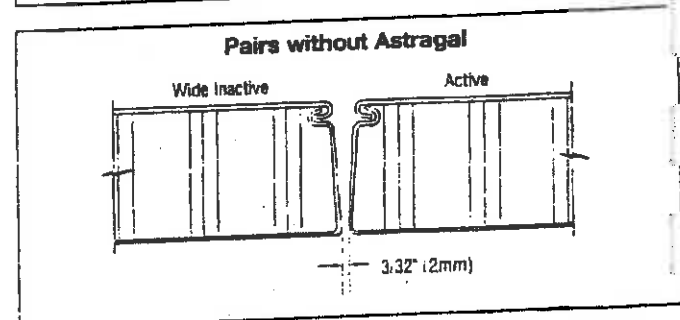
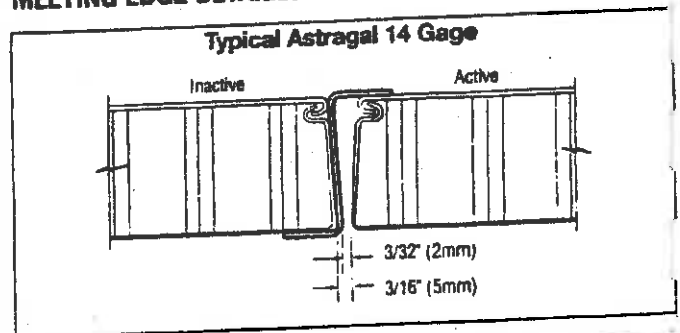
- Standard operating clearances (*installed in frame*):
 - Head = $\frac{1}{8}$ " (3mm) to bottom of head or transom panel
 - Hinge side = $\frac{3}{32}$ " (2mm) to rabbet on jamb
 - Meeting edges = $\frac{3}{32}$ " (2mm) with or without astragal. For openings without an astragal, a wide inactive leaf is used.
 - Bottom = $\frac{3}{4}$ " (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 $\frac{3}{32}$ " (2mm).
- Hardware preparations: the inactive leaf can be prepared for hardware as specified.



MEETING EDGE DETAILS:



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

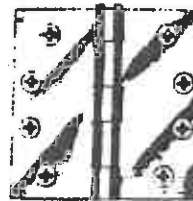
For use on medium weight doors or doors requiring low frequency service

- 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

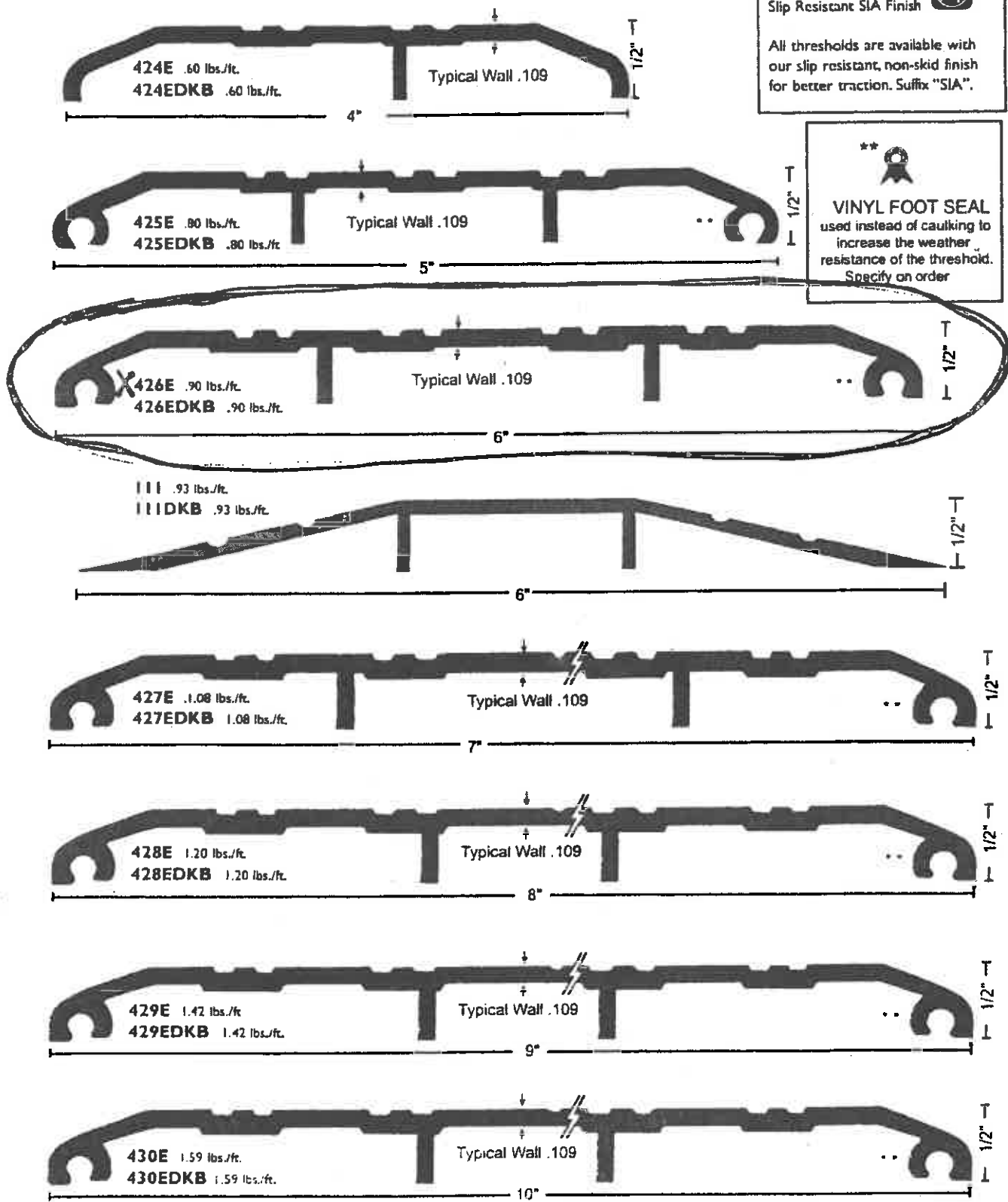
MATERIALS & FINISHES

- Aluminum mill finish
- DK8 - 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



NATIONAL GUARD PRODUCTS, INC.

Vinyl Seals

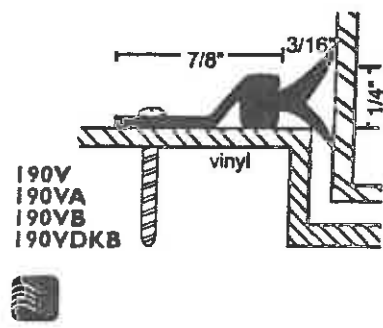
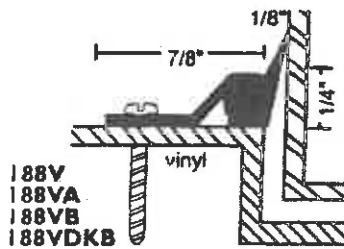
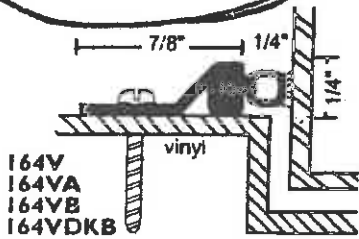
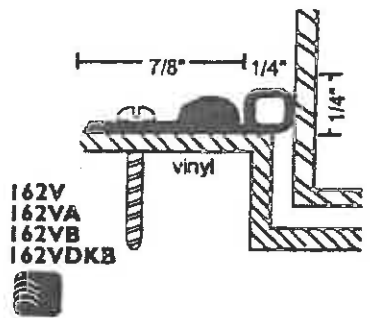
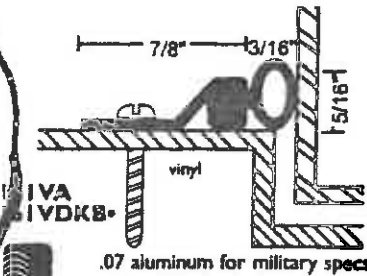
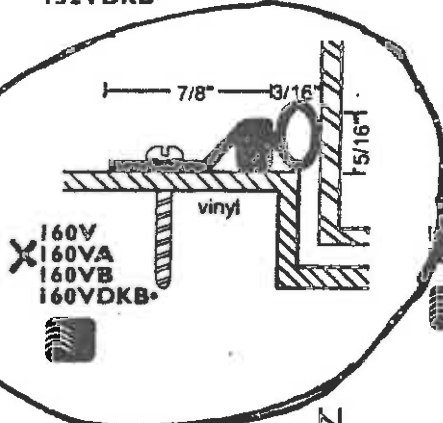
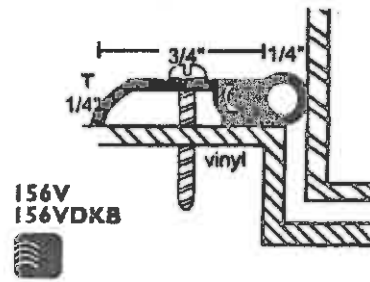
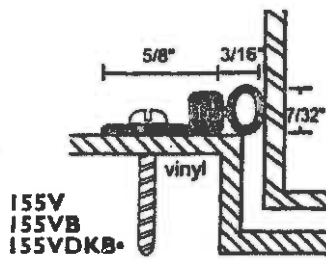
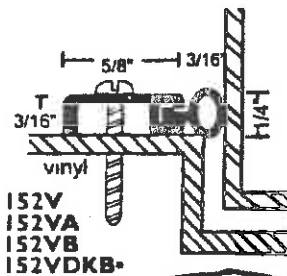
Properties:

- 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

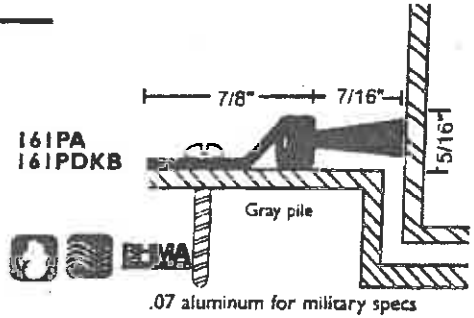
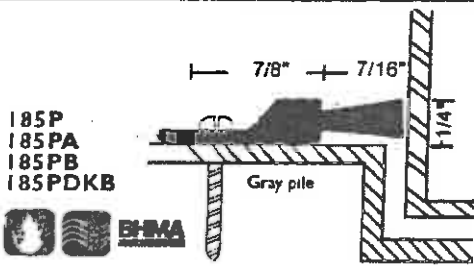
#6 x 3/4" Stainless Steel Sheet Metal Screws furnished
 Screw holes slotted for adjustment

 All vinyl seals this section

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



Pile Seals



Vinyl Perimeter Seals

Pile Seals

Specifications

Handing:

All D-Series lever locksets are non-handed.

Door Thickness:

1½" to 2½" (41mm-54mm) standard including Vandlgard® functions.

See accessories (Page 12) for spacers required for 1½" doors.

Backsets:

2¾" (70mm) standard. 2⅞", 3¼" and 5" (60mm, 95mm, 127mm) optional.

Faceplates:

Brass, bronze or stainless steel. 1½" x 2¼" (29 mm x 57mm) square corner, beveled.

Lock Chassis:

Zinc plated for corrosion resistance.

Latch Bolts:

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.

Strikes:

ANSI curved lip strike 1¼" x 4⅞" x 1⅜" 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:

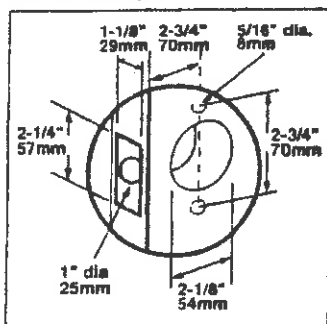
Interchangeable core and Primus® high security cylinders. Master keying, grand master keying and construction keying.

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.

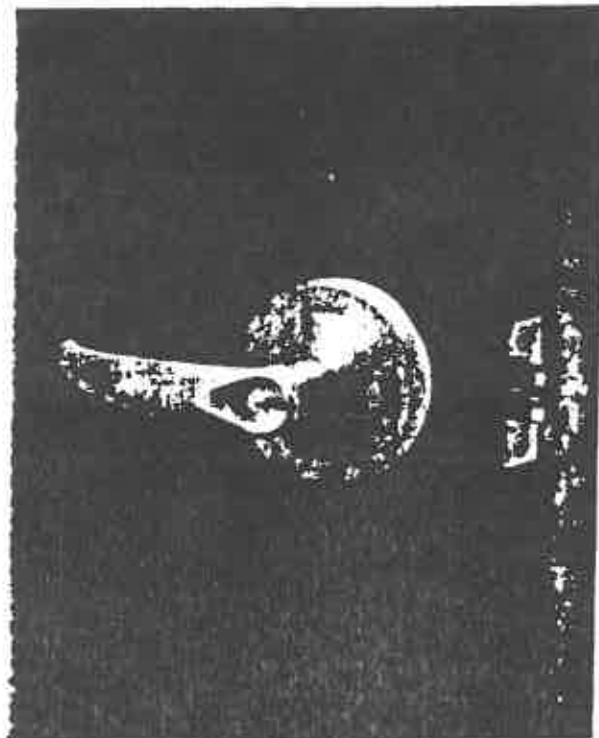
California State Reference Code

(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.

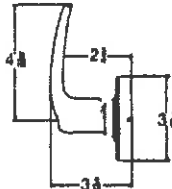



D SERIES LEVERS

Lever Designs & Finishes

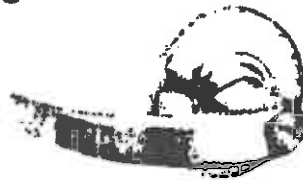


ATHENS
 Symbol: ATH
 Material: Pressure cast zinc lever; wrought brass rose
 Finishes: 605, 606, 612, 613, 619, 625, 626

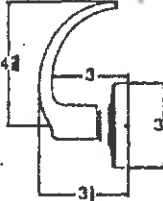



608 


Lever Designs & Finishes



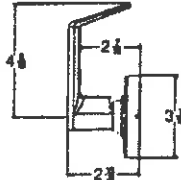
SPARTA
 Symbol: SPA (17)
 Material: Pressure cast zinc lever; wrought brass rose
 Finishes: 605, 606, 612, 613, 619, 625, 626




628 



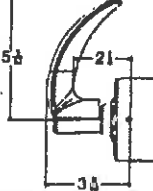
RHODES
 Symbol: RHO (06)
 Material: Pressure cast zinc lever; wrought brass rose
 Finishes: 605, 606, 612, 613, 619, 625, 626




612 



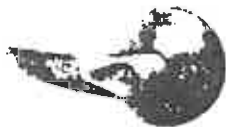
OMEGA
 Symbol: OME
 Material: Pressure cast zinc lever; wrought brass rose
 Finishes: 605, 606, 612, 613, 619, 625, 626



619 



605
Bright Brass



606
Satin Brass



612
Satin Bronze



613
Oil Rubbed
Bronze



619
Satin Nickel

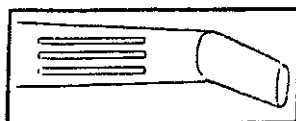


625
Bright Chromium
Plated



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

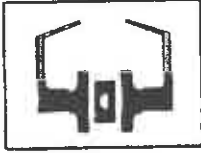
D SERIES LEVERS

Functions

Non-Keyed Locks

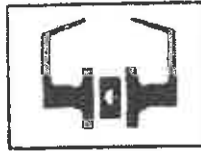
SCHLAGE ANSI

ND10S F75



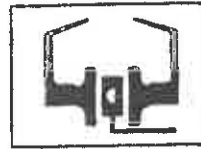
Passage Latch
Both levers always unlocked.

ND12D F89



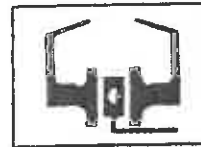
Exit Lock
Outside lever always fixed. Inside lever always unlocked.

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



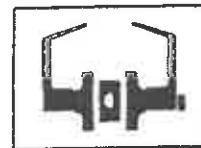
Electrically Unlocked (Fail Secure)
Outside lever continuously locked until unlocked by electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.

ND25D



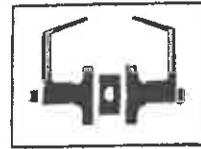
Exit Lock
Blank plate outside. Inside lever always unlocked.

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

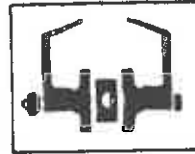


Single Dummy Trim
Dummy trim for one side of door. Used for door pull or as matching inactive trim.

Keyed Locks

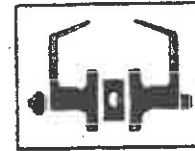
SCHLAGE ANSI

ND50PD F82



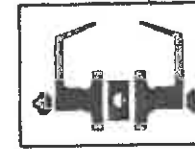
Entrance/Office Lock*
Push-button locking. Push-button locks outside lever until unlocked with key or by turning inside lever.

ND53PD F109



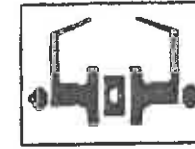
Entrance Lock*
Turn/push-button locking; pushing and turning button locks outside lever, requires use of key until button is manually unlocked. Push-button locking; pushing button locks outside lever until unlocked by key or by turning inside lever.

ND60PD F88



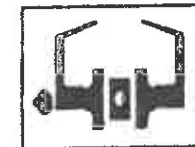
Vestibule/Classroom Security Lock*
Latch retracted by key from outside when outside lever is locked by key in inside lever. Inside lever is always unlocked.

ND66PD F91



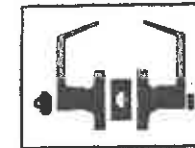
Store Lock*†
Key in either lever locks or unlocks both levers.

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

Handings

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

Door Thickness

1 $\frac{1}{8}$ " to 1 $\frac{7}{8}$ " (35 mm to 48 mm) standard.
2" (51 mm) to 2 $\frac{1}{2}$ " (64 mm) optional extended inside.

Backsets

2 $\frac{3}{4}$ " (60 mm) standard. 2 $\frac{1}{4}$ " (70 mm), 3 $\frac{3}{4}$ " (95 mm) and 5" (127 mm) optional.

Front

Steel. 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " square corner, beveled, for 2 $\frac{3}{4}$ " 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 Bolts

Brass, chrome plated, $\frac{1}{2}$ " 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 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " (29 mm x 70 mm) x 1 $\frac{1}{8}$ " (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

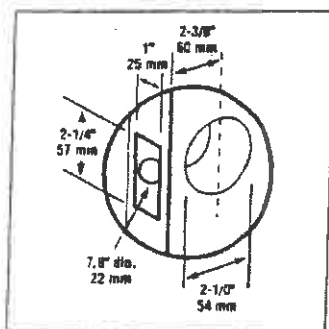
Interchangeable core and Primus® high security cylinders. Master keying, grand master keying, and construction keying.

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 $\frac{1}{2}$ " of door face.

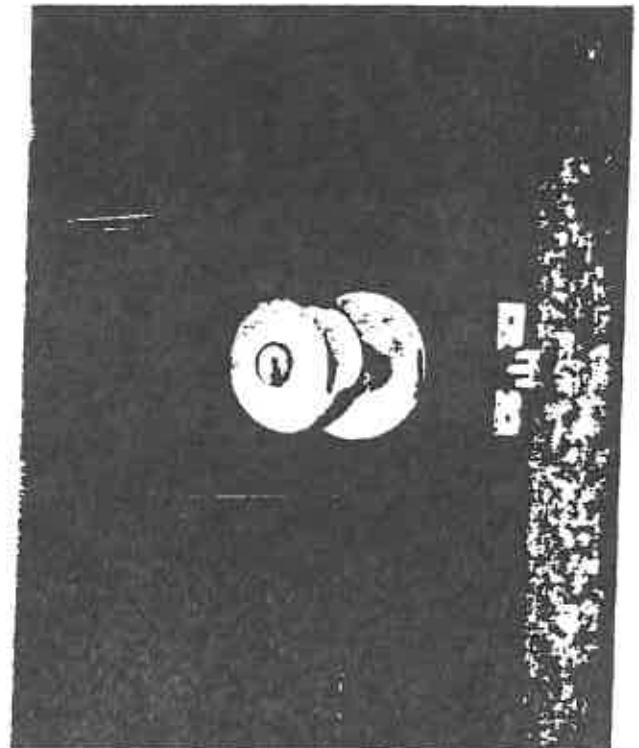
UL / ULC

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

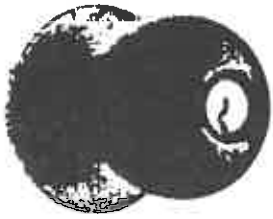
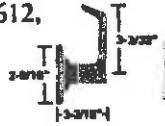
Symbol: GEO
Material: Wrought brass
Finishes: 605, 606,
609, 610,
625, 626



605

LEVON

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



613

ORBIT

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



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

Finishes

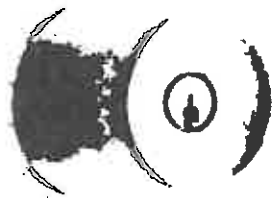
- 605 Bright Brass
- 606 Satin Brass
- 609 Antique Brass
- 610 Bright Brass, Blackened
- 611 Bright Bronze
- 612 Satin Bronze
- 613 Oil Rubbed Bronze
- 616 Antique Bronze
- 625 Bright Chromium Plated
- 626 Satin Chromium Plated
- 629 Bright Stainless Steel
- 630 Satin Stainless Steel



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



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

Functions

ANSI A156.2 Series 4000 Grade 2

Non-Keyed Functions

SCHLAGE
A10S ANSI
F75

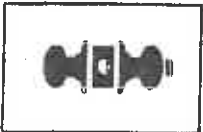
Passage Latch
Both knobs always unlocked.



A25D Exit Lock
Blank plate outside. Inside knob always unlocked. Specify door thickness, 1 3/8" or 1 3/4".



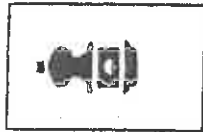
A30D F77 Patio Lock
Push-button locking. Turning inside knob or closing door releases button, preventing lock-out.



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

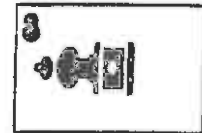
Entrance Lock
Turn/push-button locking: pushing and turning button locks outside knob requiring use of key until button is manually unlocked. Push-button locking: pushing button locks outside knob until unlocked by key or by turning inside knob.



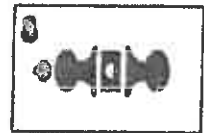
A70PD F84 Classroom Lock
Outside knob locked and unlocked by key. Inside knob always unlocked.



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



A80PD F85 Storeroom Lock
Outside knob fixed. Entrance by key only. Inside knob always unlocked.



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



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

SECTION 07920 - JOINT SEALANTS

PART I - 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 caulk 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:	<u>Minimum</u>	<u>Maximum</u>
a) For metal, glass, or other nonporous surfaces:		
(1) 1/4 inch (6 mm) (minimum)	1/4 inch (6 mm)	1/4 inch (6 mm)
(2) Over 1/4 inch (6 mm)	1/2 of width	Equal to width
b) For wood, concrete, masonry, or stone:		
(1) 1/4 inch (6 mm) (minimum)	1/4 inch (6 mm)	1/4 inch (6 mm)
(2) Over 1/4 inch (6 mm) to 1/2 inch (13 mm)	1/4 inch (6 mm)	Equal to width
(3) Over 1/2 inch (13 mm) to 2 inch (50 mm)	1/2 inch (50 mm)	5/8 inch (16 mm)
(4) Over 2 inch (50 mm)	(As recommended by sealant mfr.)	
2. Unacceptable Ratios: Where joints of acceptable width-to-depth ratios have not been provided, clean out joints to acceptable depths and grind or cut to acceptable widths without damage to the adjoining work. Grinding is not required on metal surfaces.		

- B. Masking Tape: Place masking tape on the finish surface on one or both sides of a joint cavity to protect adjacent finish surfaces from primer or sealant smears. Remove masking tape within 10 minutes after joint has been filled and tooled.
- C. Immediately prime prior to application of the sealant, clean out loose particles from joints. Where recommended by sealant manufacturer, apply primer to joints in concrete masonry units, wood, and other porous surfaces in accordance with sealant manufacturer's instructions. Do not apply primer to exposed finish surfaces.
- D. Provide bond breakers to the back or bottom of joint cavities, as recommended by the sealant manufacturer for each type of joint and sealant used, to prevent sealant from adhering to these surfaces. Carefully apply the bond breaker to avoid contamination of adjoining surfaces or breaking bond with surfaces other than those covered by the bond breaker.
- E. Provide a sealant compatible with the material(s) to which it is applied. Do not use a sealant that has exceeded shelf life or has jelled and can not be discharged in a continuous flow from the gun. Apply the sealant in accordance with the manufacturer's printed instructions with a gun having a nozzle that fits the joint width. Force sealant into joints to fill the joints solidly without air pockets. Tool sealant after application to ensure adhesion. Make sealant uniformly smooth and free of wrinkles. Upon completion of sealant application, roughen partially filled or unfilled joints, apply sealant, and tool smooth as specified. Apply sealer over the sealant when and as specified by the sealant manufacturer.
- F. Thresholds: Place double band of sealant under and along all sides of all exterior thresholds.

END OF SECTION 07920

ATTACHMENT 7

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

FINAL ABATEMENT REPORTS

RECEIVED
APR 27 2011 3:11
ENVIRONMENTAL PROTECTION DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

KINGFISHER ARMORY

KINGFISHER, OKLAHOMA

DCS Project #11124

KINGFISHER ARMORY
KINGFISHER, OKLAHOMA
DCS Project #111234

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1. Description of Work – Pictures with Captions
2. Warranty
3. Disposal Manifest – Asbestos
4. Disposal Manifest - Lead

OVERHEAD DOOR FRAME – LOOSE AND
PEELING LEAD BASED PAINT REMOVED ---->



←---- OVERHEAD DOOR FRAME – LOOSE
AND PEELING LEAD BASED PAINT REMOVED
AND SEALED



ORIGINAL WINDOWS AND SILLS



ABATED AND SEALED DOOR FRAME



NEW WINDOWS AND SEALED SILLS



**NEW WINDOWS, SILLS, DOWNSPOUT
- SEALED**



**LOOSE AND PEELING LEAD
BASED PAINT REMOVED –
BEING SEALED**



STAIRWELL AFTER REMOVAL – SEALED



NEW DOOR



NEW DOOR



**NEW DOOR – AND STAGE LEAD
BASED PAINT TO BE REMOVED**



CONCRETE CURB – LEAD BASED PAINT REMOVED



CONCRETE CURB – SEALED



VAULT DOOR – LEAD
BASED PAINT REMOVED

VAULT DOOR - SEALED





ORIGINAL WINDOWS

NEW WINDOW





STAGE WALL - LOOSE AND PEELING PAINT



LOOSE AND PEELING PAINT ON DOWNSPOUT



LEAD BASED PAINT ON CURB



LOOSE AND PEELING PAINT ON WINDOW SILL



LEAD BASED PAINT ON HANDRAIL

Warranty



LIMITED WARRANTY

Warranty. Seller warrants only to its distributors, other direct Buyers for resale and other direct Buyers for commercial and industrial use that it will, at its option and in its sole discretion, furnish, F.O.B. Cincinnati, Ohio, a replacement for, repair, or refund the purchase price to such distributor or direct Buyer of any goods of its manufacture or part or portion thereof proved to its satisfaction to be defective in workmanship or material under normal use and service within one year (365 days) from the date of delivery to such distributor or such direct Buyer, provided that notice of such defect is given to Seller within such one-year (365 days) period.

THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, LABOR, TRANSPORTATION OR OTHER COSTS OR EXPENSES RELATING TO SUCH REPLACEMENT OR SUCH REPAIR, INCLUDING ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

 **Security & Safety®**

STEELCRAFT.

9017 Blue Ash Road
Cincinnati, Ohio 45242
(513) 745-6400
(513) 745-6657 FAX



EAST OAK LANDFILL
3201 Mosley Rd
Oklahoma City, OK

(405) 427-1112 Fax: (405) 427-1139

NESHAPS ADMINISTRATOR
Air Quality Control (405) 702-4100
ODEQ - Oklahoma City, Oklahoma
707 N. Robinson, OKC, OK 73101

MANIFEST # 8932

NON-HAZARDOUS MANIFEST

GENERATOR: ~~Kingfisher~~ ~~Agency State of Oklahoma~~
ADDRESS: ~~301 N 6th St~~ Abatement System Inc. Muv
CITY/ST: ~~Kingfisher, OK, 73750~~ PO Box 773 mva
BA, OK, 74013

Reg-CAP
I.D. #
SITE LOCATION: Kingfisher, 2401 N Lincoln #1
PHONE: (405) 522-0050

Description of Waste Materials: WMT Profile Approval # Quantity Units

Asbestos tile E016998 1 m³ cube yard

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261. Have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable regulations.

Mark Walker
Generator Authorized Agent Name (Print)

Signature 4/22/11
Shipment Date

TRANSPORTER

TRANSPORTER NAME: Abatement System Inc
ADDRESS: PO Box 773
CITY/ST: Broken Arrow, OK, 74013

DRIVER NAME (Print): Mark Walker
TRUCK NUMBER: 15
PHONE #: (918) 269-2813

I hereby acknowledge receipt of the above-described materials was received from the generator listed above and delivered to the disposal facility listed below without incident.

Driver Signature 4/21/11
Shipment Date

Driver Signature 4/21/11
Delivery Date

DISPOSAL FACILITY

SITE NAME: East Oak Recycling and Disposal Facility
ADDRESS: 3201 Mosley Road, Oklahoma City, OK 73141

PHONE NUMBER: (405) 427-1112
PERMIT # 3555036

I hereby acknowledge receipt of the above-described materials.

Ticket # 426164

Tangie Partnidge
Name of Authorized Agent (Print)

Signature 4/21/11
Receipt Date

LAND DISPOSAL RESTRICTION AND SUBPART CC WASTE DETERMINATION CERTIFICATION

Generator Name: STATE OF OKLAHOMA DEPARTMENT
CENTRAL
301 N. 6TH ST
KING FISHER, OK 73750

Manifest Doc. #: 001480234FLE
State Manifest #:

Generator USEPA ID#: OKCSQ1111111

INSTRUCTIONS: In Column 1, identify all USEPA hazardous waste codes that apply to this waste approval/shipment. In Column 2, indicate the appropriate Treatability Group, Non-WasteWater (NWW) or WasteWater (WW) for each waste code. In Column 3, in accordance with Subpart CC, identify whether or not your waste contains >500 ppmw VOC (YES or NO). In Column 4, enter the appropriate Subcategory key # from Table - 4, if applicable, and also enter "Debris" in Column 4 if the waste is debris that will be treated using one of the alternative treatment technologies provided by 26845. In Column 5, reference the appropriate Waste Management paragraph(s) from Table -3: In Column 6, enter the Reference Number(s) from Table - 1 for all regulated constituents associated with Subpart CC VOC's, F001-F005, F039, D001-D043. If the waste is a California List waste, complete the boxes below and identify the Reference Number(s) of the appropriate California List constituent(s) identified in Table -2.

Check this box if using a continuation sheet.

MANIFEST LINE ITEM #	1. WASTE CODE(S)	2. NWW or WW	3. SUBPART CC YES/NO	4. SUBCATEGORY	5. WASTE MANAGEMENT	6. REGULATED CONSTITUENTS
1	D008	NWW	NO			

I hereby certify that all information submitted in this and all associated documents is complete and accurate to the best of my knowledge and information.

Signature *Jon M. Summers*

Title *Pres.*

Print Name *Jon M. Summers*

Date *10/10/11*

Waste Express, Inc.

Waste Acceptance Notification

Dear STATE OF OKLAHOMA DEPARTMENT CENTRAL :

STATE OF OKLAHOMA DEPARTMENT CENTR.
301 N. 6TH ST
KING FISHER, OK 73750

06-OCT-11

Waste Express has reviewed your Waste Profile Sheets:

AES-57177 LEAD PAINT CHIPS AND DEBRIS

And approves the referenced waste(s) for management at our Kansas City Facility.

This letter is to notify you that Waste Express has the Authorizations and permits for the waste(s) described on the referenced Waste Profile Sheets(s) and is providing herein that management of such waste(s) delivered to Waste Express, will be in accordance with all applicable federal, state, and local laws and regulations.

Thank you for the opportunity to be of service, Please contact us if you have any questions.

Respectfully yours,



Paul Shields
Office Manager

CONFIRMATION SAMPLING

**ARMORY LEAD CONFIRMATION SAMPLING
KINGFISHER ARMORY
301 N. 6th STREET
KINGFISHER, OKLAHOMA**

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

June 4, 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

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- APPENDIX B – Lead-Based Paint Firm and Individual License
- APPENDIX C – Post-Remediation Initial (Round 1) Confirmation Sampling Results – IFR & IFR Storage
- APPENDIX D – Post-Remediation Re-Sampling (Round 2) Confirmation Sampling Results – IFR & IFR Storage
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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 Kingfisher Armory, 301 N. 6th Street, Kingfisher, 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. Following remediation confirmation testing is done by firms licensed by the State to conduct Lead-Based Paint Inspections and Clearance Tests in order to determine if the contamination has been satisfactorily remediated. These firms are independent of the remediation contractor. The remediation contractor for the Kingfisher Armory was Basin Environmental, 325 North Portland Avenue, Oklahoma City, Oklahoma 73107.

3.0 CONFIRMATION PROCEDURES

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

be below 200 $\mu\text{g}/\text{ft}^2$, then the next step in the process involved sealing the area with an encapsulating sealant, followed by confirmation wipe sampling. Following application of the sealant, wipe samples were again collected and the results were not to exceed 40 $\mu\text{g}/\text{ft}^2$. The Inspector marked the grid intersections and wipe sample locations with duct tape in preparation for sampling. Procedures for individual wipe samples as outlined for EPA/HUD dust wipe sampling were used for this project.

4.0 CONFIRMATION SAMPLING

4.1 Results of Initial (Round 1) Confirmation Sampling Following Remediation in the Indoor Firing Range and IFR Storage Room

The initial round of clearance testing was conducted on January 24, 2012 following remediation in the Indoor Firing Range and IFR Storage Room. The IFR was approximately 110 FT long; therefore, it was divided into two 55 FT long 3 x 3 gridded areas for confirmation wipe sampling. Thirty wipe samples were collected from the walls, floors and ceilings of the IFR and eighteen wipe samples were collected from the IFR Storage Room. Eleven of the 30 samples collected from the IFR and ten of the 18 samples from the IFR Storage Room contained lead in excess of 200 $\mu\text{g}/\text{ft}^2$. Appendix C contains sketches showing the areas that exceeded the threshold during the initial round of sampling in the IFR and IFR Storage Room along with the laboratory reports and chains of custody.

4.2 Results of Confirmation Re-sampling (Round 2) Following Re-cleaning in the Indoor Firing Range and IFR Storage Room

The areas that failed the initial clearance testing in the IFR and IFR Storage Room were re-cleaned and then re-sampled on February 9, 2012. Eighteen wipe samples were collected in the IFR and fifteen wipe samples were collected in the IFR Storage Room. Three wipe samples in the IFR and four wipe samples in the IFR Storage Room contained lead in excess of 200 $\mu\text{g}/\text{ft}^2$. Sketches showing the results of re-testing, along with the laboratory reports and chains of custody are provided in Appendix D.

4.3 Results of Confirmation Re-Sampling (Round 3) Following Re-Cleaning in the Indoor Firing Range and IFR Storage Room

The areas that failed the second round of clearance testing in the IFR and IFR Storage Room were re-cleaned and then re-sampled on February 23, 2012. Nine wipe samples were collected in the IFR and nine wipe samples were collected in the IFR Storage Room. None of the samples in the IFR and the IFR Storage Room area exceeded the threshold of 200 $\mu\text{g}/\text{ft}^2$ during the re-test. The laboratory reports

and chains of custody are provided in Appendix E. No sketches are included as all locations tested below the threshold.

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

With all samples in the IFR less than $200 \mu\text{g}/\text{ft}^2$, the ceiling, walls and floors were covered with construction grout and sealant prior to re-testing. At this point, ODEQ recommended only taking two confirmation wipe samples from each of the original 3x3 gridded areas. The confirmation sampling was completed on March 14, 2012. Twenty samples were collected in the IFR with one sample above the threshold of $40 \mu\text{g}/\text{ft}^2$. Six samples were collected in the IFR Storage Room with none above the threshold. Sketches showing the sample locations, laboratory report and chain of custody are contained in Appendix F.

4.5 Results of Confirmation Re-Sampling Following Sealant Application and Re-Cleaning in the Indoor Firing Range

The area that exceeded the threshold was re-cleaned. On March 19, 2012, the area was re-sampled. Two samples were collected and both were below the $40 \mu\text{g}/\text{ft}^2$. Sketches showing the sample locations, laboratory report and chain of custody are contained in Appendix F.

4.6 Results of Initial (Round 1) Confirmation Sampling in the Drill Floor and Office Areas

On January 20, 2012, initial confirmation wipe samples were collected in the Drill Floor and Office Areas. Forty-two wipe samples were collected, with twenty-six exceeding the $40 \mu\text{g}/\text{ft}^2$ threshold. Access to Rooms 10 and 11 was not available until February 9, when three wipe samples were collected and all exceeded the $40 \mu\text{g}/\text{ft}^2$ threshold. A layout sketch showing the location of the wipe samples, the laboratory report and chain of custody are located in Appendix G.

4.7 Results of First Confirmation Re-Sampling (Round 2) in the Drill Floor and Office Areas

On January 30 and 31, 2012 following additional cleaning in the areas that exceeded the threshold, re-sampling confirmation wipe samples were collected in the Drill Floor and Office Areas. Thirty wipe samples were collected, six of which exceeded the $40 \mu\text{g}/\text{ft}^2$ threshold. A layout sketch showing the location of the wipe samples, the laboratory report and chain of custody are found in Appendix H.

4.8 Results of Second Confirmation Re-Sampling (Round 3) in the Drill Floor and Office Areas

On February 9, 2012 following further additional cleaning in the six areas that exceeded the threshold, re-sampling confirmation wipe samples were collected in the Drill Floor and Office Areas. Six samples were collected, with one exceeding the 40 $\mu\text{g}/\text{ft}^2$ threshold. A layout sketch showing the location of the wipe samples, the laboratory report and chain of custody are found in Appendix I.

4.9 Results of Confirmation Re-Sampling (Rounds 3 and 4) in the Drill Floor and Office Areas

On February 23, 2012 following further additional cleaning in the five areas that exceeded the threshold, re-sampling confirmation wipe samples were collected in the Drill Floor and Office Areas. Five wipe samples were collected, with none exceeding the 40 $\mu\text{g}/\text{ft}^2$ threshold. The laboratory report and chain of custody are found in Appendix J. No layouts are included as all areas were below the threshold.

5.0 CONCLUSIONS

Based upon the foregoing confirmation sampling and following the application of epoxy coatings in the Office Area that exceeded 40 $\mu\text{g}/\text{ft}^2$ of lead, it is concluded that the lead hazard associated with the walls, floors and ceilings in the IFR and IFR Storage Room and the floors in the remainder of the Armory has been effectively mitigated.

APPENDIX A

SCOPE OF WORK
For
Armory Lead Confirmation Sampling

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

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

Confirmation Sampling Instructions

Protocol for Collecting Wipe Samples

1. Prepare a rough sketch of the area(s) or room(s), to be wipe sampled.
 - a. Mark all sample locations on map before sample event starts.
 - b. When possible DEQ will supply a floor plan map with sample locations marked.
2. A new set of clean, impervious gloves should be used for each sample to avoid cross contamination of samples.
3. Wipe Samples
 - a. If using Ghost Wipes™, tear open the individually sealed package. Remove the moistened wipe. Unfold the wipe.
 - b. If using a dry media such as MCE or Whatman™ filter, moisten the filter with distilled or deionized water prior to sampling.
4. Place a 12 inch by 12 inch, 1 foot square, template on the area to be wiped.
5. Apply uniform firm pressure while wiping the area inside the template.
6. To insure that all portions of the partitioned area are wiped, start at the outside edge and progress toward the center making concentric squares decreasing in size.
7. After collecting a sample, fold the filter or wipe inward and place into a container and number it. Note the number at the sample location on the sketch.
8. At least one blank filter treated in the same fashion but without wiping, should be submitted to the laboratory with every 10 samples.

Confirmation Sampling Instructions

Indoor Firing Range

1. To properly sample the IFR, a 3 section by 3 section grid system shall be used. Samples shall not be collected on all one section or end of a grid. A total of 3 samples shall be collected per 3 section by 3 section grid.
 - Each range surface less than 50 feet in length shall be divided into a 3 section by 3 section grid. (Figure 1 and Figure 2)
 - Each range surface more than 50 feet in length shall be divided in half and a 3 section by 3 section grid shall be established on each half. (Figure 3 and Figure 4)
2. If a sample fails, the entire 3 section by 3 section grid shall be re-cleaned and re-sampled.
 - Confirmation samples taken *after remediation* are considered to have failed if results exceed 200 ug/SE.
 - Confirmation samples taken *after sealing* are considered to have failed if results exceed 40 ug/SE.
3. If more than ten (10) confirmation samples fail, the entire IFR shall be re-cleaned.

4. DEQ reserves the right to take additional confirmation samples.

Areas Where Lead-Based Paint Abatement Has Been Performed

1. One (1) confirmation wipe sample shall be taken on the floor within ten feet of the abatement area.
 - a. If a confirmation sample for lead dust is located within ten feet of the lead-based paint abatement area, this sample can count as both the lead-based paint and lead dust confirmation sample (See below for details on lead dust confirmation sampling).
2. Sample results in excess of 40 ug/SF are considered to have failed. If a sample result fails, the area shall be re-cleaned and re-sampled.

Areas Outside IFR with Elevated Lead Dust on Floor

1. A 3 section by 3 section grid system shall be used. Samples shall not be collected on all one section or end of a grid. A total of 3 samples shall be collected per 3 section by 3 section grid.
 - Each floor surface less than 50 feet in length shall be divided into a 3 section by 3 section grid. (Figure 1 and Figure 2)
 - Each floor surface more than 50 feet in length shall be divided in half and a 3 section by 3 section grid shall be established on each half. (Figure 3 and Figure 4)
2. Sample results in excess of 40 ug/SF are considered to have failed. If a sample fails, the entire 3 section by 3 section grid shall be re-cleaned and re-sampled.
3. DEQ reserves the right to take additional confirmation samples.

Figure 1. ACCEPTABLE FOR SURFACES LESS THAN 50 FEET

Wipe Sample		
	Wipe Sample	
		Wipe Sample

Figure 2. NOT ACCEPTABLE FOR SURFACES LESS THAN 50 FEET

Wipe Sample	<u>OR</u> Wipe Sample	Wipe Sample
Wipe Sample		
Wipe Sample		

Figure 3. ACCEPTABLE FOR SURFACES GREATER THAN 50 FEET

Wipe Sample					Wipe Sample
	Wipe Sample		Wipe Sample		
		Wipe Sample		Wipe Sample	

Surface Center

Figure 4. NOT ACCEPTABLE FOR SURFACES GREATER THAN 50 FEET

				Wipe Sample	
Wipe Sample	Wipe Sample	Wipe Sample		Wipe Sample	
				Wipe Sample	

Surface Center

Department of Environmental Quality

MARSHALL BRANSCUM

INSPECTOR

Certification #: OKINSR13415

Issued on: 4/1/2011

Expires on: 3/31/2012



Division Director
Air Quality Division



Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

Division of Air Quality

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 certification is valid from the date of issuance and expires as per statute law.

Issued on: 4/1/2011

Expires on: 3/31/2012



Division Director
Air Quality Division





Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

RICHARD BELCHER

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

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR13549

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

Issued on: **4/1/2012**

Expires on: **3/31/2013**

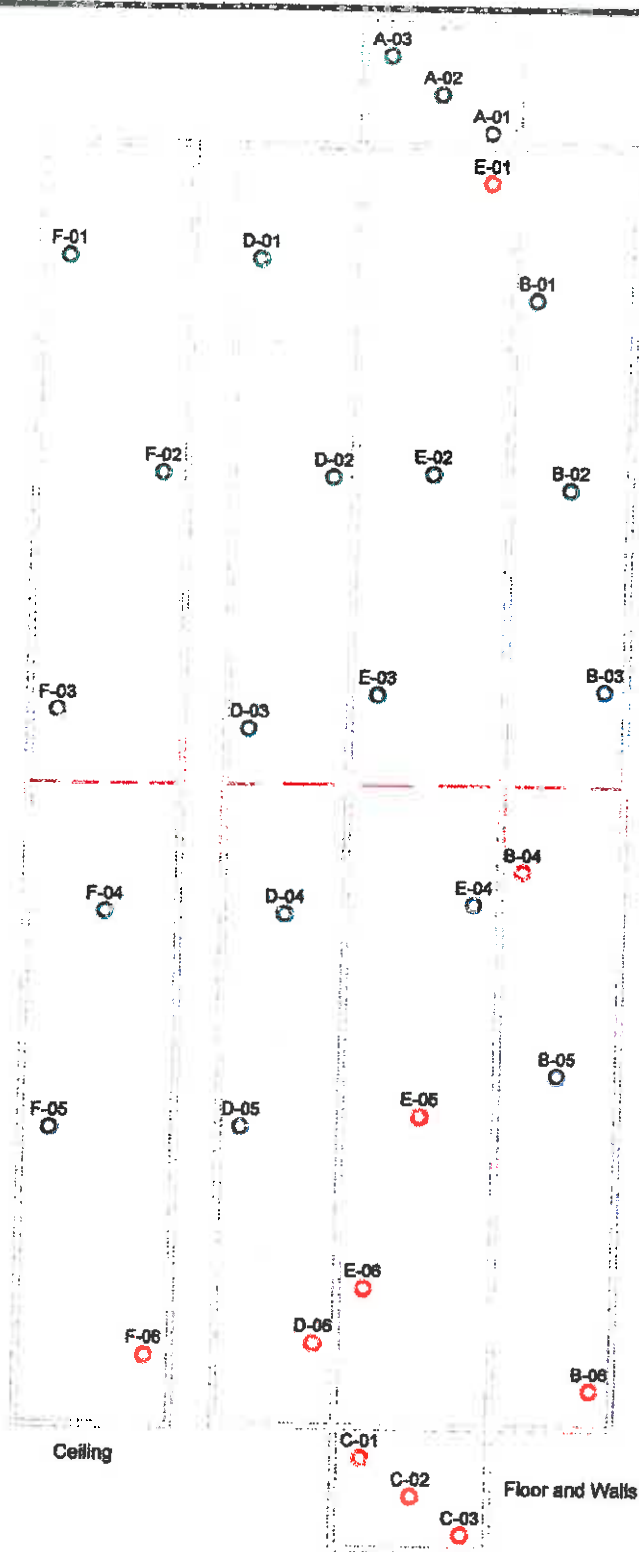


Division Director
Air Quality Division



Environmental Programs Manager
Air Quality Division

APPENDIX C



Not to Scale

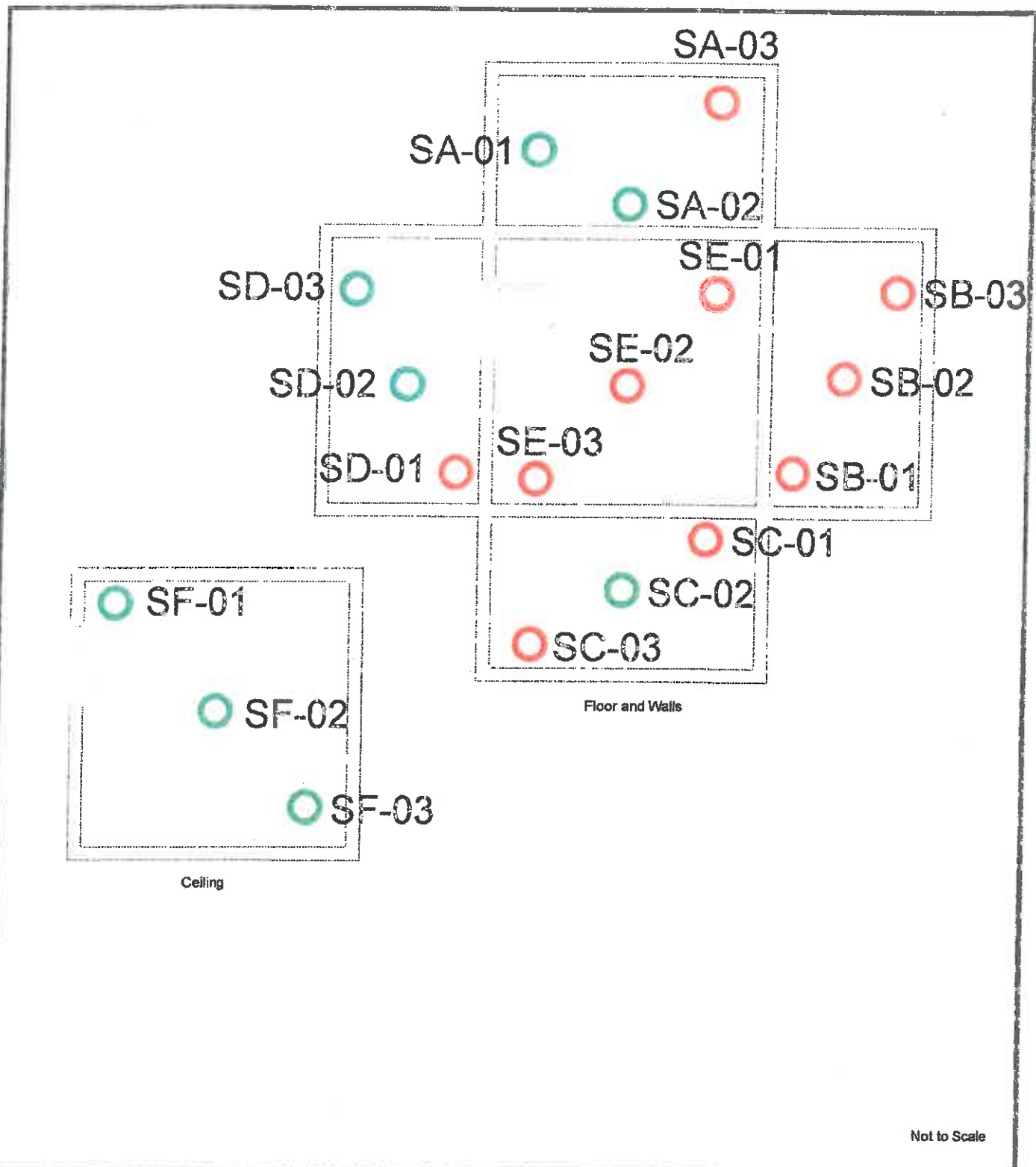
Kingfisher Armory
Kinfisher, Ok.

Legend:
 ● = Positive Sample Location
 ○ = Negative Sample Location

ENERCON

Lead Wipe Sample Locations
IFR (Round 1)

Sample Date: 1/24/12



Kingfisher Army
 Kingfisher, Ok.

Legend:

- = Positive Sample Location
- = Negative Sample Location

ENERCON

Lead Wipe Sample Locations
 IFR Storage (Round 1)

Sample Date: 1/24/12



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

Environmental Chemistry Analysis Report

QuantEM Set ID: 203676
Date Received: 01/24/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 1/25/2012

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

Acct. No.: A845

Project: Kingfisher Armory (IFR)

Location: Kingisher OK

Project No.: N/A

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-A-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
002	KA-A-02	Wipe	Lead	74.7	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
003	KA-A-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
004	KA-B-01	Wipe	Lead	38.2	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
005	KA-B-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
006	KA-B-03	Wipe	Lead	89.9	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
007	KA-B-04	Wipe	Lead	374	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
008	KA-B-05	Wipe	Lead	57.8	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
009	KA-B-06	Wipe	Lead	7,880	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
010	KA-C-01	Wipe	Lead	564	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
011	KA-C-02	Wipe	Lead	1,800	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
012	KA-C-03	Wipe	Lead	2,100	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
013	KA-D-01	Wipe	Lead	23.5	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
014	KA-D-02	Wipe	Lead	24.2	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
015	KA-D-03	Wipe	Lead	40.7	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
016	KA-D-04	Wipe	Lead	53.4	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
017	KA-D-05	Wipe	Lead	215	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)

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

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

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

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

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

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



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 203676	Client: Enercon Services, Inc.
Date Received: 01/24/12	6525 N. Meridian, Suite 400
Received By: Sherrie Leftwich	Oklahoma City, OK 73116
Date Sampled:	
Time Sampled:	Acct. No.: A845
Analyst: BM	Project: Kingfisher Armory (IFR)
Date of Report: 1/25/2012	Location: Kingisher OK
	Project No.: N/A

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	KA-D-06	Wipe	Lead	338	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
019	KA-E-01	Wipe	Lead	1,100	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
020	KA-E-02	Wipe	Lead	174	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
021	KA-E-03	Wipe	Lead	92.1	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
022	KA-E-04	Wipe	Lead	95.8	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
023	KA-E-05	Wipe	Lead	907	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
024	KA-E-06	Wipe	Lead	7,300	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
025	KA-F-01	Wipe	Lead	18.3	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
026	KA-F-02	Wipe	Lead	20.4	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
027	KA-F-03	Wipe	Lead	16.4	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
028	KA-F-04	Wipe	Lead	18.1	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
029	KA-F-05	Wipe	Lead	27.7	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
030	KA-F-06	Wipe	Lead	31,000	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)

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

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

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

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

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



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

Environmental Chemistry Analysis Report

Quantem Set ID: 203676	Client: Enercon Services, Inc.
Date Received: 01/24/12	6525 N. Meridian, Suite 400
Received By: Sherrie Leftwich	Oklahoma City, OK 73116
Date Sampled:	
Time Sampled:	Acct. No.: A845
Analyst: BM	Project: Kingfisher Armory (IFR)
Date of Report: 1/25/2012	Location: Kingfisher OK
	Project No.: N/A

AIHA ID: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
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Authorized Signature: _____

Benton Miller, Analyst

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

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

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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: 9587
Test: Lead

Date: 1/25/2012
Matrix: Wipe

Lab Number: 203676
Approved By: Benton Miller
Date Approved: 1/25/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.7	5.5
FCV	4.5	4.9	5.5
ICV	0.8	1.2	1.2
RLVS	0.256	0.344	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W3	0.000	5.416	5.606	103.5	5.567	102.8	0.7
MS-W2	0.000	5.449	5.069	93.0	4.968	91.2	2.0
MS-W1	0.000	5.416	5.380	99.3	5.447	100.6	1.2

Authorized Signature: _____



Benton Miller, Analyst



Lead Chain-of-Custody

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 Lab No. 203676
 Assay Report

Company Name: Encompass Services Inc Project Name: Kingman Army (TFR)
 Acct #: _____ Project Number: _____

Project Location: Embarked OK

Sample Number	Sample Description	Volume of Area	Analysis	Units Requested	Sample Matrix Codes
1 RA-4-01	A wall wipe	1x1' C	X	mg / cu ft	A - Soil
2 02	B			mg / cu ft	B - Paint Chips
3 03	B			mg / cu ft	C - Surface / Dust Wipes
4 B-01	B wall wipe			mg / cu ft	D - Bulk Miscellaneous
5 01				mg / cu ft	E - Air Cassette
6 03				mg / cu ft	F - Other (SPECIFY)
7 04				mg / cu ft	
8 05				mg / cu ft	
9 06				mg / cu ft	
10 C-01	C-wall wipe			mg / cu ft	
11 02				mg / cu ft	
12 03				mg / cu ft	
13 D-01	D-wall wipe			mg / cu ft	
14 02				mg / cu ft	
15 03				mg / cu ft	

LEGAL DOCUMENT
 Please Print Legibly

TURNAROUND TIME

Same Day
 X 24 Hour
 3-Day
 5-Day

CONTACT INFORMATION

Name: Rich
 Phone: 207 9637
 Report Results VIA (CHOOSE ONE):
 FAX
 QUANTEM WEBSITE
 E-Mail

Received by: Kathy Date: 1/24/12 Time: 3:00
 Sampled by: RB Date: 1/24/12 Time: 12

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



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 Lab No. 203676
 Project

Company Name: Enscor Services Inc. Acct #: _____
 Project Location: Kingfisher, OK Project Name: Kingfisher Primary (I.F.R.)
 Project Number: _____

Sample Number	Sample Description	Volume of Area	Sample Matrix	Analyte	Units Requested	Sample Matrix Codes
16						
17	D-wall w/ir	1X1'				
18						
19	Flood w/ir					
20						
21						
22						
23						
24						
25	RA-F-01 Ceiling w/ir					
26						
27						
28						
29						
30						

LEGAL DOCUMENT
 Please Print Legibly

TURNAROUND TIME

Same Day
 24 Hour
 3-Day
 5-day

CONTACT INFORMATION

Name: Rich
 Phone: 209 9637
 Report Reurls VIA (CHOOSE ONE):
 FAX
 QUANTEM Website
 E-Mail

Requested By: RB
 Date Rec'd: 1/24/12
 Date Rec'd: _____
 Requested By: _____

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**



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 203675
Date Received: 01/24/12
Received By: Sherric Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 1/25/2012

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

Acct. No.: A845

Project: Kingfisher Armory Storage Room
Location: Kingfisher, OK
Project No.: N/A

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-SA-01	Wipe	Lead	123	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
002	KA-SA-02	Wipe	Lead	198	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
003	KA-SA-03	Wipe	Lead	218	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
004	KA-SB-01	Wipe	Lead	304	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
005	KA-SB-02	Wipe	Lead	1,120	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
006	KA-SB-03	Wipe	Lead	308	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
007	KA-SC-01	Wipe	Lead	335	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
008	KA-SC-02	Wipe	Lead	185	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
009	KA-SC-03	Wipe	Lead	335	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
010	KA-SD-01	Wipe	Lead	376	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
011	KA-SD-02	Wipe	Lead	175	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
012	KA-SD-03	Wipe	Lead	78.5	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
013	KA-SE-01	Wipe	Lead	5,440	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
014	KA-SE-02	Wipe	Lead	7,320	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
015	KA-SE-03	Wipe	Lead	1,370	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
016	KA-SF-01	Wipe	Lead	57.6	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)
017	KA-SF-02	Wipe	Lead	119	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)

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

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

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

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

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



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Environmental Chemistry Analysis Report

QuantEM Set ID: 203675
Date Received: 01/24/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 1/25/2012

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

Acct. No.: A845

Project: Kingfisher Armory Storage Room
Location: Kingfisher, OK
Project No.: N/A

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	KA-SF-03	Wipe	Lead	102	16	ug/sq. Ft.	01/25/12 10:45	W EPA 7420 (1)

Authorized Signature: 

Benton Miller, 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 Preparation Modified. EPA 7420 Analysis Modified

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

Supplemental Report QAQC Results

QA ID: 9587
Test: Lead

Date: 1/25/2012
Matrix: Wipe

Lab Number: 203675
Approved By: Benton Miller
Date Approved: 1/25/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.7	5.5
PCV	4.5	4.9	5.5
ICV	0.8	1.2	1.2
RLYS	0.256	0.344	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W3	0.000	5.416	5.606	103.5	5.567	102.8	0.7
MS-W2	0.000	5.449	5.069	93.0	4.968	91.2	2.0
MS-W1	0.000	5.416	5.380	99.3	5.447	100.6	1.2

Authorized Signature: _____

Benton Miller, Analyst



Lead Chain-of-Custody
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 Lab No. 203675
 Report

Company Name: Environ Services Project Name: King Fisher Army Storage Base
 Project Location: King Fisher OK Project Number: _____
 Acd.#: _____

Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis	Units Requested	Sample Matrix Codes	TURNAROUND TIME
1	RA-SA-01	Wall	11' C			A - Soil	Same Day
2	02					B - Paint Chips	24 Hour
3	03					C - Surface / Dust Wipes	3-Day
4	RA-SA-01	Wall				D - Bulk Miscellaneous	5-day
5	02					E - Air Cassette	
6	03					F - Other (SPECIFY)	
7	RA-SC-01	Wall					
8	02						
9	03						
10	RA-SD-01	Wall					
11	02						
12	03						
13	RA-SE-01	Floor					
14	02						
15	03						

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CONTACT INFORMATION
 Name: Rich
 Phone: 202 9637
 Report Results VIA (CHOOSE ONE):
 FAX
 Quantem Website
 E-Mail

Signature: [Signature] Date: 1-24-12 1500
 Name: T. Astey Date: 1/24/12
 Sample By: RB

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



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 (800) 922-1950 (405) 755-7272 Fax: (405) 755-2058
 www.quantem.com

THIS BOX FOR LAB USE ONLY
 Lab No. 203675
 Analyst _____
 Project _____

Company Name: Fusion Sealing Inc Project Name: King Fisher Army Storage Box
 Project Location: Kingfisher OK Project Number: _____
 Acct #: _____

Sample Number	Sample Description	Volume of Area	Sample Matrix	Analyte	Units Requested	Sample Matrix Codes
16 KA-SF-01	Ceiling wiper	1/4"				A - Soil
17 02						B - Paint Chips
18 03						C - Surfaces / Dust Wipes
						D - Bulk Miscellaneous
						E - Air Casette
						F - Other (SPECIFY)

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TURNDOWN TIME

Same Day _____
 24 Hour _____
 3-Day _____
 5-day _____

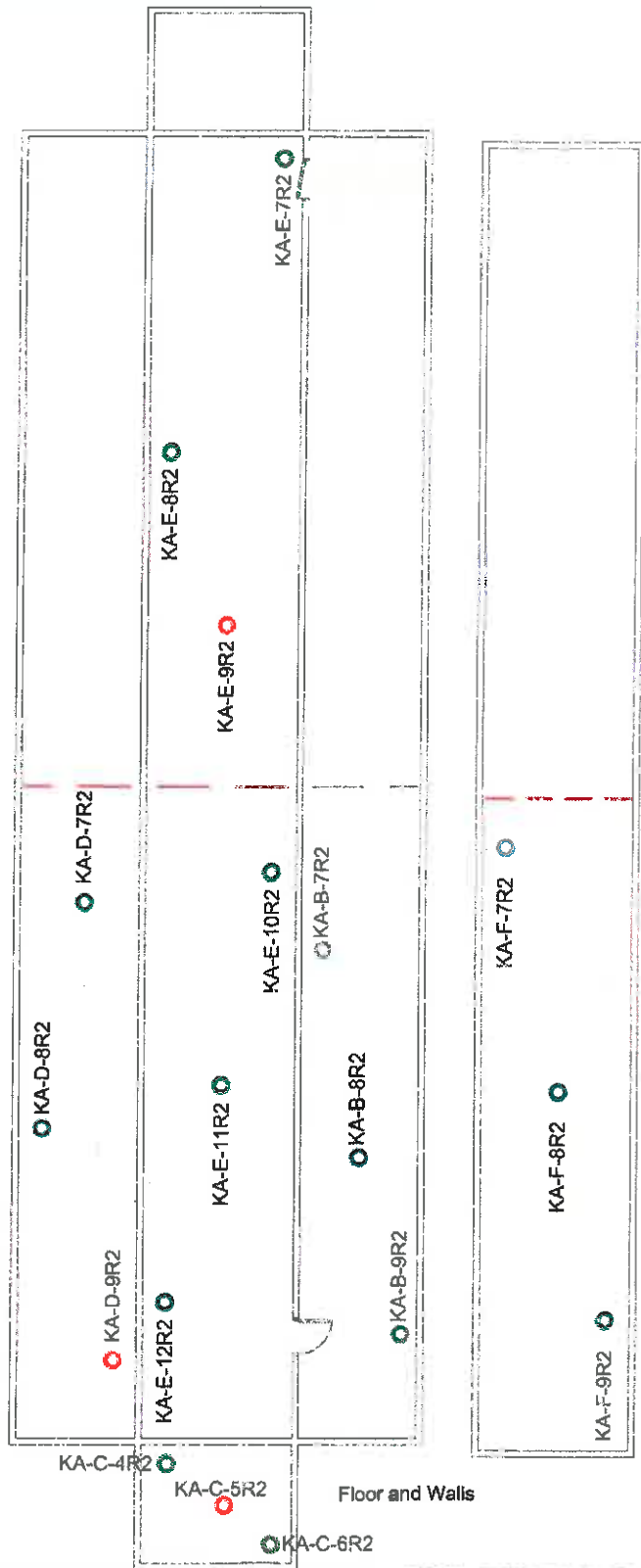
CONTACT INFORMATION

Name: Rich
 Phone: 209 9637
 Report Results VIA (CHOOSE ONE):
 FAX
 QUANTEM Website
 E-Mail: _____

Shipped By: RB
 Date Shipped: 1/24/12
 Received By: _____
 Date Received: _____

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



Ceiling

Floor and Walls

Not to Scale

Kingfisher Armory
Kinfisher, Ok.

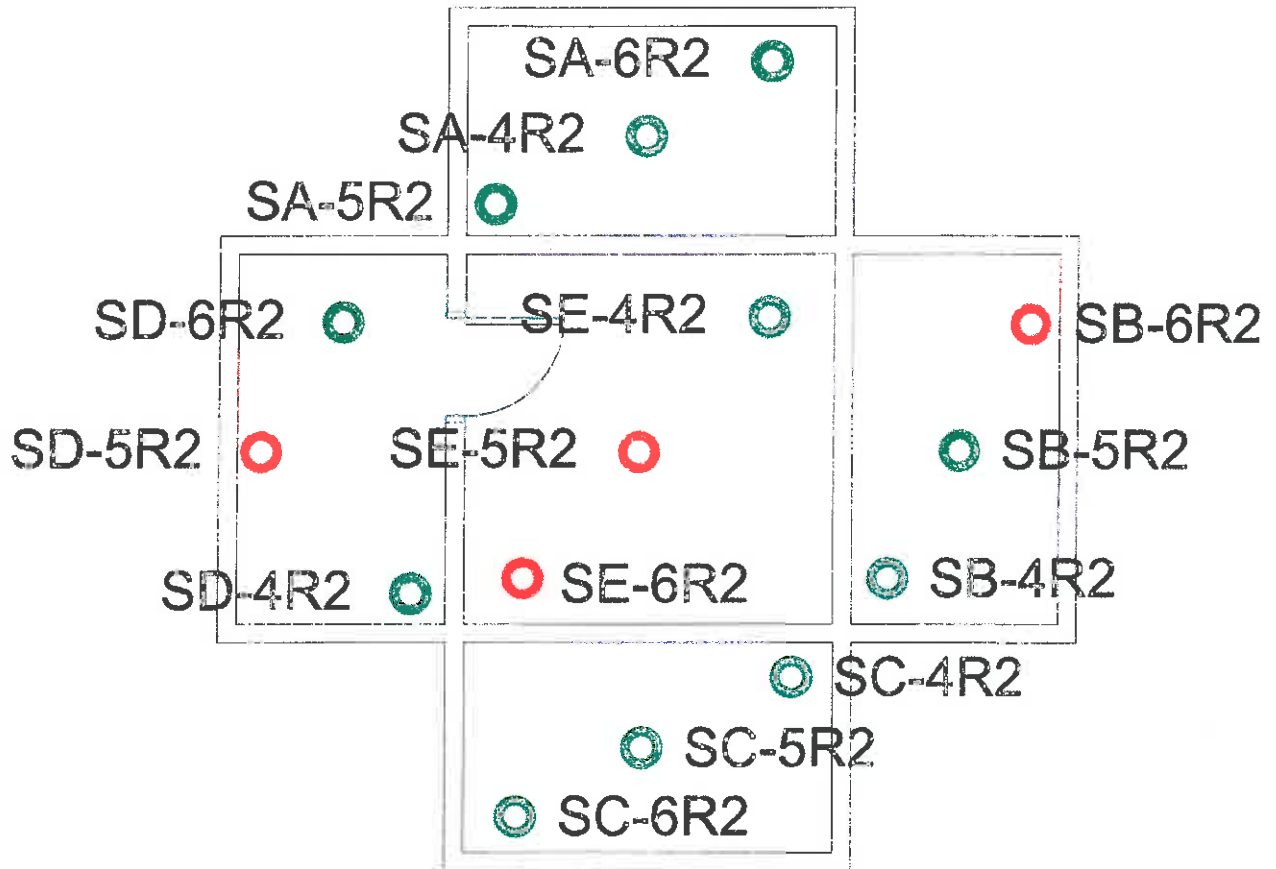
Legend:

- = Positive Sample Location
- = Negative Sample Location



Lead Wipe Sample Locations
IFR (Round 2)

Sample Date: 2/9/12



Floor and Walls

Not to Scale

Kingfisher Armory
Kingfisher, Ok.

Legend:

- = Positive Sample Location
- = Negative Sample Location

ENERCON

Lead Wipe Sample Locations
IFR Storage (Round 2)

Sample Date: 2/9/12



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 204363
Date Received: 02/10/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 2/10/2012

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

Acct. No.: A845
Project: Kingfisher Armory/IFR
Location: Kingfisher, OK
Project No.: N/A

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-B-7R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
002	KA-B-8R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
003	KA-B-9R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
004	KA-C-4R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
005	KA-C-5R2	Wipe	Lead	474	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
006	KA-C-6R2	Wipe	Lead	98.4	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
007	KA-D-7R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
008	KA-D-8R2	Wipe	Lead	53.3	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
009	KA-D-9R2	Wipe	Lead	1,260	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
010	KA-E-7R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
011	KA-E-8R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
012	KA-E-9R2	Wipe	Lead	4,910	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
013	KA-E-10R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
014	KA-E-11R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
015	KA-E-12R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
016	KA-F-7R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
017	KA-F-8R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)

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

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

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

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

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

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



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 204363
Date Received: 02/10/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 2/10/2012

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

Acct. No.: A845

Project: Kingfisher Armory/IFR

Location: Kingfisher, OK

Project No.: N/A

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	KA-F-9R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)

Authorized Signature: _____

Benton Miller, Analyst

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

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

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

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

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

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

Supplemental Report QAQC Results

QA ID: 9666
Test: Lead

Date: 2/10/2012
Matrix: Wipe

Lab Number: 204363
Approved By: Benton Miller
Date Approved: 2/10/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5	5.5
FCV	4.5	5	5.5
ICV	0.8	1	1.2
RLVS	0.256	0.326	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W3	0.000	5.470	5.646	103.2	5.468	100.0	3.2
MS-W2	0.000	5.492	5.723	104.2	5.179	94.3	10.0
MS-W1	0.000	5.514	5.801	105.2	5.985	108.6	3.1

Authorized Signature: _____


Benton Miller, Analyst



LEAD CHAIN OF CUSTODY

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 Lab No. 204363
 Accept Reject
 Report Results (2) one box
 QuantEM Website
 Other

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

Company: **Eneron Services Inc.**
 Contact: **Richard**
 Account #: _____
 Project Information:
 Project Name: Kingfisher Area 1 / IER
 Project Location: Enron site
 Project ID: _____
 Phone: _____
 Cell Phone: (405) 209-9637
 E-mail: _____
 Date: _____

Sampled By: Richard Belcher
 Date: _____
 RECEIVED BY: Richard Belcher
 DATE & TIME: 2-10-12
 RECEIVED BY: Anthony
 DATE & TIME: 2/10/12 11:15

No.	Sample ID: (10 Character Max)	Sample Description	Volume (Liters)	Analysis	Units (ONE box only)					Sample Matrix Codes
					PPM	mg / l	mg / ft ²	ug / m ²	mg / cm ²	
1	KA-B-7R2	Wall-B	1.11	Pb						A
2	8R2									B
3	9R2									C
4	KA-C-4R2	Wall-C								D
5	5R2									E
6	6R2									
7	KA-D-7R2	Wall-D								
8	8R2									
9	9R2									
10	KA-E-7R2	Floor-E								
11	8R2									
12	9R2									

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



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LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. <u>204363</u>
<input checked="" type="radio"/> Accept <input type="radio"/> Reject

Project Information	
Company: Enercon Services Inc.	Project Location:
Project Name:	

REQUESTED SERVICES (Please check the appropriate boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (See matrix code on pg. 1)	Analysis	Units (check ONE box only)					Sample Matrix Codes	
							PPM	Wt %	mg / l	µg / ft ²	µg / m ²		mg / cm ²
13	Ka-E-10 RL	Floor				Pb							
14	11 RL												
15	12 RL												
16	Ka-F-7 RL	Ceiling											
17	8 RL												
18	9 RL												
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													



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Environmental Chemistry Analysis Report

QUANTEM Set ID: 204365
Date Received: 02/10/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 2/10/2012

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

Acct. No.: A845

Project: Kingfisher Armory/Storage
Location: Kingfisher, OK

Project No.: N/A

AIHA ID: 101352

QUANTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-SA-4R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
002	KA-SA-5R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
003	KA-SA-6R2	Wipe	Lead	34.4	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
004	KA-SB-4R2	Wipe	Lead	47.9	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
005	KA-SB-5R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
006	KA-SB-6R2	Wipe	Lead	251	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
007	KA-SC-4R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
008	KA-SC-5R2	Wipe	Lead	25.5	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
009	KA-SC-6R2	Wipe	Lead	59.5	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
010	KA-SD-4R2	Wipe	Lead	17.8	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
011	KA-SD-5R2	Wipe	Lead	306	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
012	KA-SD-6R2	Wipe	Lead	38.6	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
013	KA-SE-4R2	Wipe	Lead	60.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
014	KA-SE-5R2	Wipe	Lead	1,390	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
015	KA-SE-6R2	Wipe	Lead	336	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)

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

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

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

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

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

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



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Environmental Chemistry Analysis Report

QuanTEM Set ID: 204365
Date Received: 02/10/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 2/10/2012

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

Acct. No.: A845

Project: Kingfisher Armory/Storage

Location: Kingfisher, OK

Project No.: N/A

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
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Authorized Signature: _____

Benton Miller, Analyst

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

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

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

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

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

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

Supplemental Report QAQC Results

QA ID: 9666
Test: Lead

Date: 2/10/2012
Matrix: Wipe

Lab Number: 204365
Approved By: Benton Miller
Date Approved: 2/10/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5	5.5
PCV	4.5	5	5.5
ICV	0.8	1	1.2
RLVS	0.256	0.326	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W3	0.000	5.470	5.646	103.2	5.468	100.0	3.2
MS-W2	0.000	5.492	5.723	104.2	5.179	94.3	10.0
MS-W1	0.000	5.514	5.801	105.2	5.985	108.6	3.1

Authorized Signature: _____


Benton Miller, Analyst



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Lab No. 201365

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Report Results (Phone Box)

Quantem Website

Other _____

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

Project Information

Project Name: River Area / Stairs

Project Location: Richard Belcher

Project ID: _____

Date: 2-9-12

Company: Enercon Services Inc.

Contact: Richard

Account #: _____

Phone: _____

Call Phone: (405) 209-9637

E-mail: _____

Requested Services (Use the Appropriate Boxes)

Sample ID (18 Characters Max)	Sample Description	Volume (Liters)	Volume Area (m ²)	Sample Matrix (See matrix code box)	Analysis	Units (ONE box only)	DATE & TIME	RECEIVED BY	DATE & TIME
1 KA-2A-4R2	Wall Wipe Bores		1X1'	C			2-10-12	Richard	11:15
2 5R2									
3 6R2									
4 KA-3D-4R2	B Wall								
5 5R2									
6 6R2									
7 KA-3C-4RA	C Wall								
8 5RA									
9 6R2									
10 KA-3D-4R2									
11 5R2									
12 6R2									

Sample Matrix Codes	Units (ONE box only)				
	mg / cm ²	µg / m ²	µg / ft ²	mg / l	Wt %
A Soil					
B Paint Chips					
C Surface / Dust Wipes					
D Bulk Miscellaneous					
E Air Cassette					

TURNAROUND TIME	
<input checked="" type="checkbox"/> Same Day	
<input type="checkbox"/> 24-Hour	
<input type="checkbox"/> 3-Day	
<input type="checkbox"/> 5-Day	



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 Lab No. 20H365
 Accept Reject

Project Information:
 Company: Enercon Services Inc. Project Name: King Star Army / Station Project Location: King Star Army

REQUESTED SERVICES (Please check the appropriate boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis	Units (check ONE box only)						Sample Matrix Codes	
							PPM	Wt %	mg / l	µg / ft ²	µg / m ²	mg / cm ²		
13	KA-9E-4R2	Station floor		1' x 1'	C	Pb								
14	5R2			7	S									
15	6R2													
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														

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



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

Environmental Chemistry Analysis Report

QuantEM Set ID: 204367
Date Received: 02/10/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 2/10/2012

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

Acct. No.: A845

Project: Kingfisher Armory

Location: Kingfisher OK

Project No.: N/A

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-2-1R3	Wipe	Lead	96.2	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
002	KA-13-1R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
003	KA-17-1R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
004	KA-24-1R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
005	KA-33-1R3	Wipe	Lead	20.3	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
006	KA-34-1R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
007	KA-10-1	Wipe	Lead	46.3	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
008	KA-10-2	Wipe	Lead	80.6	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
009	KA-11-1	Wipe	Lead	655	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)

Authorized Signature: 

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 Preparation Modified. EPA 7420 Analysis Modified.

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

Supplemental Report QAQC Results

QA ID: 9666
Test: Lead

Date: 2/10/2012
Matrix: Wipe

Lab Number: 204367
Approved By: Benton Miller
Date Approved: 2/10/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5	5.5
FCV	4.5	5	5.5
ICV	0.8	1	1.2
RLVS	0.256	0.326	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W3	0.000	5.470	5.646	103.2	5.468	100.0	3.2
MS-W2	0.000	5.492	5.723	104.2	5.179	94.3	10.0
MS-W1	0.000	5.514	5.801	105.2	5.985	108.6	3.1

Authorized Signature: _____

BJM
Benton Miller, Analyst



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 Report Results (in one box)
 QUANTEM Website
 Other _____

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

Company: Enercon Services Inc.
 Contact: Richard
 Account #: _____
 Project Information:
 Project Name: Enron System Removal 7
 Project Location: Knowledge - OK
 Project ID: _____

Sampled By: Richard Belcher Date: 2-9-12
 RELINQUISHED BY: Richard Belcher DATE & TIME: 2-10-12
 RECEIVED BY: Richard Belcher DATE & TIME: 2-10-12 11:15

REQUESTED SERVICES (Please check the Appropriate Boxes)

No.	Sample ID (10-Character Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (See matrix code box)	Analysis	Units (check ONE box only)					Sample Matrix Codes	TURNAROUND TIME	
							PPM	Wt %	mg / l	µg / ft ²	µg / m ³			mg / cm ²
1	KA-2-1R3	Floor Wipe 7		1' x 1'	C									
2	KA-13-1R3													
3	KA-17-1R3													
4	KA-24-1R3													
5	KA-33-1R3													
6	KA-34-1R3													
7														
8	KA-10-1	Floor wipe Room 1												
9	10-2													
10	KA-11-1													
11														
12														

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

APPENDIX E



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

Environmental Chemistry Analysis Report

QUANTEM Set ID: 204770
Date Received: 02/24/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 2/24/2012

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

Acct. No.: A845

Project: Kingfisher Armory
Location: Kingfisher, OK/6th and Admire
Project No.: N/A

AIHA ID: 101352

QUANTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-2-1-R4	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
002	KA-10-1-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
003	KA-10-2-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
004	KA-10-3-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
005	KA-11-1-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
006	KA-C-4-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
007	KA-C-5-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
008	KA-C-6-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
009	KA-D-7-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
010	KA-D-8-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
011	KA-D-9-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
012	KA-E-7-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
013	KA-E-8-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
014	KA-E-9-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
015	KA-SB-4-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
016	KA-SB-5-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
017	KA-SB-6-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)

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

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

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

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

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



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

Environmental Chemistry Analysis Report

QuantEM Set ID: 204770
Date Received: 02/24/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 2/24/2012

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

Acct. No.: A845

Project: Kingfisher Armory
Location: Kingfisher, OK/6th and Admire
Project No.: N/A

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	KA-SD-4-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
019	KA-SD-5-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
020	KA-SD-6-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
021	KA-SE-4-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
022	KA-SE-5-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
023	KA-SE-6-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)

Authorized Signature: _____

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 Preparation Modified. EPA 7420 Analysis Modified

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

Supplemental Report QAQC Results

QA ID: 9712
Test: Lead

Date: 2/24/2012
Matrix: Wipe

Lab Number: 204770
Approved By: Rebecca Sparks
Date Approved: 2/24/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.9	5.5
FCV	4.5	4.8	5.5
ICV	0.9	0.9	1.1
RLVS	0.256	0.275	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.438	5.387	99.1	5.306	97.6	1.5
MS-W1	0.000	5.481	4.801	87.6	4.940	90.1	2.8

Authorized Signature: _____

Rebecca Sparks

Rebecca Sparks, Analyst



Lead Chain-of-Custody
 2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
 (800) 822-1650 (406) 755-7272 Fax: (405) 755-2058
 www.quantem.com

Page 1 of 2
 This Box for Lab Use Only
 Lab No. 204770
 (Accept) (Reject)

Company Name: Emercon Services, Inc. Project Name: Kingfisher Armory
 Project Location: Kingfisher, OK / 6A and Adair Project Number: _____
 Acct.#: _____

Sample Number	Sample Description	Volume of Area	Sample Matrix	Analyte	Units Requested	Sample Matrix Codes
1. KA-2-1-R4	1 st Floor	1/4 in ² C		Pb	mg / kg	A - Soil
2. -10-1-R1					ug / g	B - Paint Chips
3. -10-2-R1					ug / g	C - Surface / Dust Wipes
4. -10-3-R1					ug / g	D - Bulk Miscellaneous
5. -11-1-R1					mg / kg	E - Air Cassette
6. -C-4-R3	IFR				PPM	F - Other (SPECIFY)
7. -C-5-R3						
8. -C-6-R3						
9. -D-7-R3						
10. -D-8-R3						
11. -D-9-R3						
12. -E-7-R3						
13. -E-8-R3						
14. -E-9-R3						
15. V-SB-4-R3	IFR Storage Box					

LEGAL DOCUMENT
 Please Print Legibly

TURNAROUND TIME

Same Day _____
 24 Hour
 3-Day _____
 5-day _____

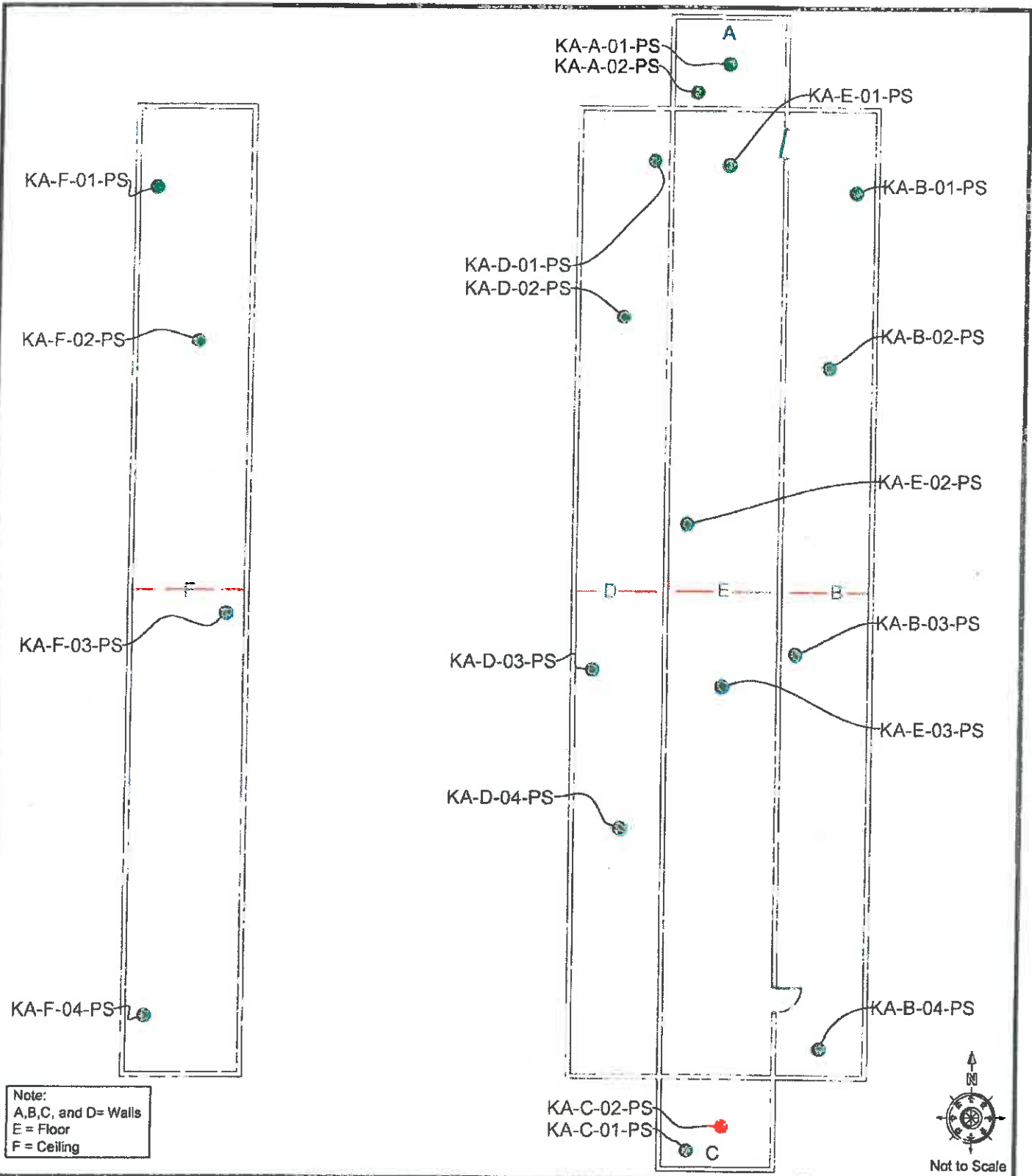
CONTACT INFORMATION

Name: Marshall
Blanscum
 Phone: 722-7693
 Report Results VIA (CHOOSE ONE):
 FAX
 Quantem WebSite
 E-Mail: _____

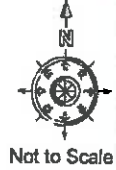
Received by: Marshall Blanscum Date: 1-24-2002 Time: 10:00
 Sampled by: MLB
 Date: 2-24-12 Time: 10:00

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 F



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



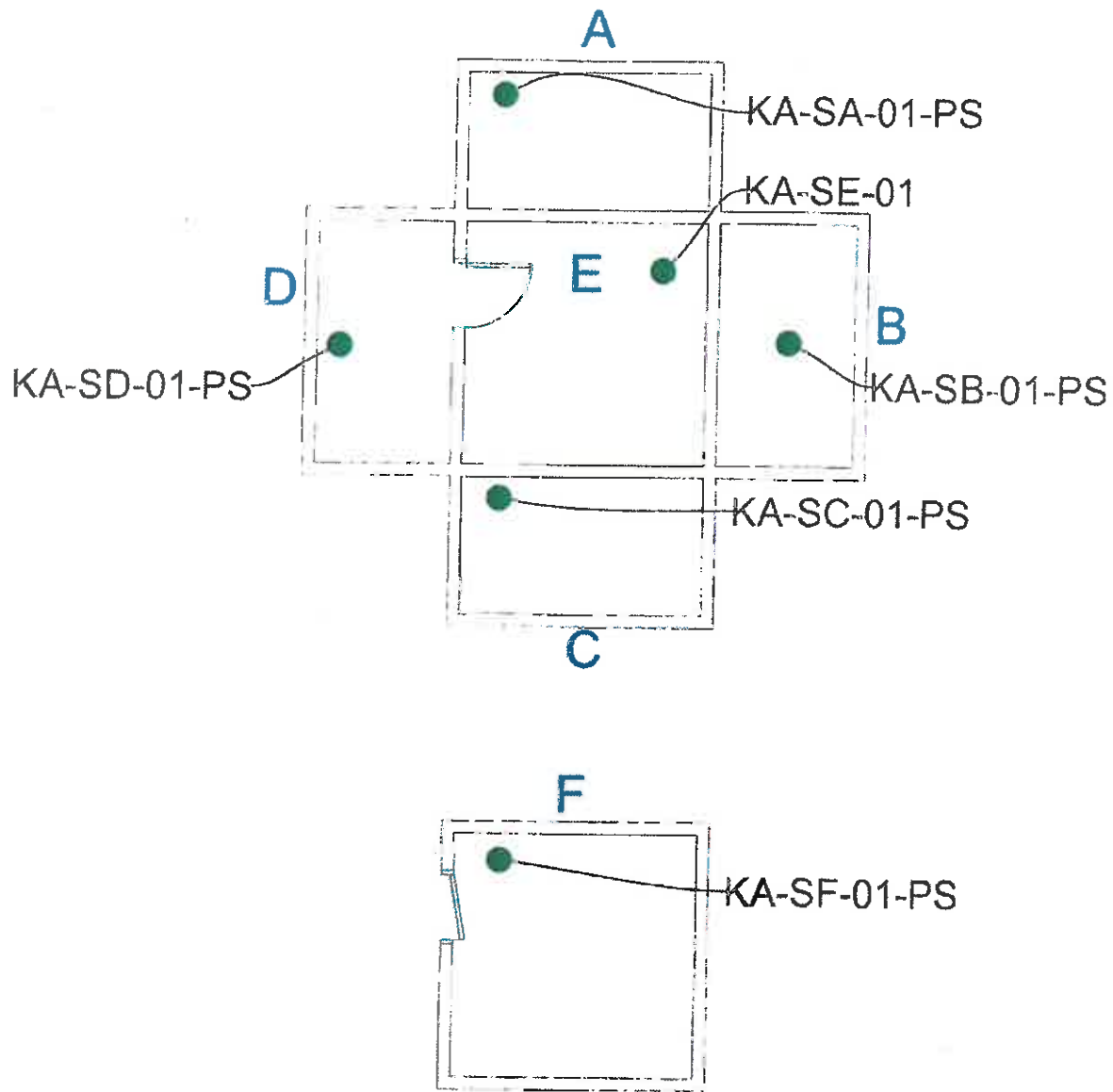
Oklahoma Department of
 Environmental Quality
 Kingfisher Army
 301 N. 6th Street.
 Kingfisher, Ok.

Legend:
 ● =Dust Wipe Sample Location Positive, > 40 ug / SF
 ● =Dust Wipe Sample Location Negative, < 40 ug / SF

ENERCON

Lead Wipe Sample Locations
 IFR (Post Sealant) 3-14-12

Project Number: ENMISC2590



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



Oklahoma Department of
 Environmental Quality
 Kingfisher Army
 301 N. 6th Street.
 Kingfisher, Ok.

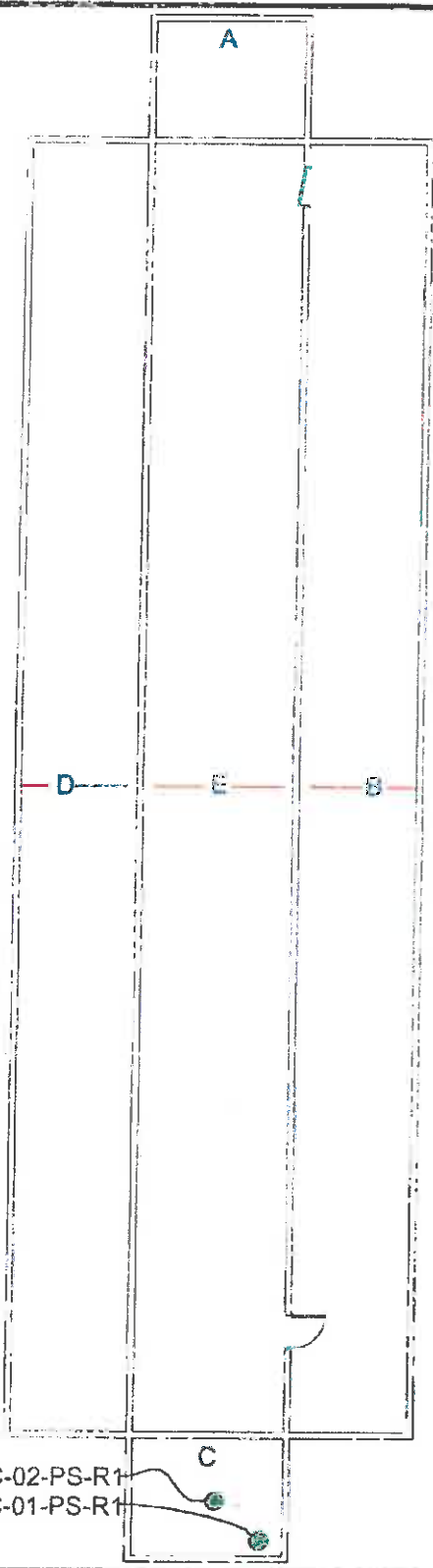
Legend:

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

ENERCON

Lead Wipe Sample Locations
 Storage RM(Post Sealant) 3-14-12

Project Number: ENMISC2590



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



Not to Scale

Oklahoma Department of
 Environmental Quality
 Kingfisher Armory
 301 N. 6th Street.
 Kingfisher, Ok.

Legend:

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

Note: Samples < 40ug / SF on previous round not shown

ENERCON

Lead Wipe Sample Locations
 IFR (Post Sealant - R1) 3-19-12

Project Number: ENMISC2590



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

Environmental Chemistry Analysis Report

Quantem Set ID: 205422
Date Received: 03/14/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 3/15/2012

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

Acct. No.: A845

Project: Kingfisher Armory
Location: 6th & Admire, Kingfisher, OK
Project No.: N/A

AIHA ID: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-A-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
002	KA-A-02-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
003	KA-B-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
004	KA-B-02-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
005	KA-B-03-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
006	KA-B-04-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
007	KA-C-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
008	KA-C-02-PS	Wipe	Lead	43.7	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
009	KA-D-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
010	KA-D-02-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
011	KA-D-03-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
012	KA-D-04-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
013	KA-E-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
014	KA-E-02-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
015	KA-E-03-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
016	KA-E-04-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
017	KA-F-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	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 Preparation Modified, EPA 7420 Analysis Modified

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



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

Environmental Chemistry Analysis Report

QuantEM Set ID: 205422
Date Received: 03/14/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 3/15/2012

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116
Acct. No.: A845
Project: Kingfisher Armory
Location: 6th & Admire, Kingfisher, OK
Project No.: N/A

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	KA-F-02-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
019	KA-F-03-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
020	KA-F-04-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
021	KA-SA-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
022	KA-SB-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
023	KA-SC-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
024	KA-SD-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
025	KA-SE-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	W EPA 7420 (1)
026	KA-SF-01-PS	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/14/12 16:10	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 Preparation Modified. EPA 7420 Analysis Modified

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



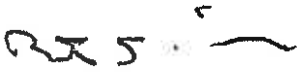
2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Environmental Chemistry Analysis Report

QuanTEM Set ID: 205422	Client: Enercon Services, Inc.
Date Received: 03/14/12	6525 N. Meridian, Suite 400
Received By: Sherrie Leftwich	Oklahoma City, OK 73116
Date Sampled:	
Time Sampled:	Acct. No.: A845
Analyst: BM	Project: Kingfisher Armory
Date of Report: 3/15/2012	Location: 6th & Admire, Kingfisher, OK
	Project No.: N/A

AIHA ID: 101352

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

Authorized Signature: 
 Benton Miller, Analyst

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

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

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: 9788
Test: Lead

Date: 3/14/2012
Matrix: Wipe

Lab Number: 205422
Approved By: Benton Miller
Date Approved: 3/14/2012

Notes:

Blank Data:

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

Standards Data:

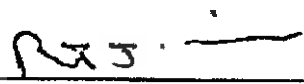
Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.9	5.5
FCV	4.5	4.9	5.5
ICV	0.9	1.1	1.1
RLVS	0.256	0.314	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.427	5.901	108.7	5.790	106.7	1.9
MS-W1	0.000	5.427	5.171	95.3	5.222	96.2	1.0

Authorized Signature: _____



Benton Miller, Analyst



www.QuanTEM.com

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For Lab Use Only
 Lab No. 005422
 Accept Reject
 Report Results (in one box)
 QuantEM Website
 Other

Company: **Enertcon Services Inc.**
 Contact: **Richard**
 Account #: _____
 Name: **Richard Belcher**
 Date: **3-14-12**
 Project Name: **Kingfisher Alimony**
 Project Location: **6299 Admire Ringfisher Ok**
 Project ID: _____

Requested By: **Richard Belcher**
 Date & Time: **3/14/12 1:15 PM**
 RECEIVED BY: **[Signature]**
 Date & Time: _____

No.	Sample ID (10 characters max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Analysis	Units (in ONE box only)					Sample Matrix Codes	
						Pb	Pb	mg/l	µg/ft²	µg/m²		mg/cm²
1	KA-A-01-PS	A-Wall-IFR	1	1x1								A
2	02-PS											B
3	KA-B-01-PS	B-Wall-IFR										C
4	02-PS											D
5	03-PS											E
6	04-PS											
7	KA-C-01-PS	C-Wall-IFR										
8	02-PS											
9	KA-D-01-PS	D-Wall-IFR										
10	02-PS											
11	03-PS											
12	04-PS											

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



www.QuanTEM.com

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For Lab Use Only
 Lab No. 205422
 Accept Reject

Project Information:
 Company: **Enercon Services Inc.**
 Project Name: Kim Fisher Armory
 Project Location: CF & Admirer, Kim Fisher

REQUESTED SERVICES (Please check the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis	Units (check ONE box only)					Sample Matrix Codes
							PPM	mg/l	mg/ft ²	µg/m ³	mg/cm ²	
13	KA-E-01-PS	Floor IFR		1X1	G	Pb						A
14	KA-E-02-PS											B
15	KA-E-03-PS											C
16	KA-E-04-PS											D
17	KA-F-01-PS	Ceiling IFR										E
18	KA-F-02-PS											
19	KA-F-03-PS											
20	KA-F-04-PS											
21	KA-SA-01-PS	A Wall Storage										
22	KA-SB-01-PS	B Wall Storage										
23	KA-SC-01-PS	C Wall Storage										
24	KA-SD-01-PS	D Wall Storage										
25	KA-SE-01-PS	Door Storage										
26	KA-SF-01-PS	Ceiling Storage										
27												
28												
29												
30												



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

Environmental Chemistry Analysis Report

QuantEM Set ID: 205568
Date Received: 03/19/12
Received By: Barbara Holder
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 3/20/2012

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116
Acct. No.: A845
Project: Kingfisher Armory
Location: 301 North 6th Street, Kingfisher, OK
Project No.: ENMISC2590

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-C-01-PS-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/20/12 9:45	W EPA 7420 (1)
002	KA-C-02-PS-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/20/12 9:45	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 Preparation Modified. EPA 7420 Analysis Modified

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

Supplemental Report QAQC Results

QA ID: 9798
Test: Lead

Date: 3/20/2012
Matrix: Wipe

Lab Number: 205568
Approved By: Rebecca Sparks
Date Approved: 3/20/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
FCV	4.5	4.8	5.5
ICV	0.9	1	1.1
RLVS	0.256	0.273	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	5.977	109.9	5.975	109.9	0.0

Authorized Signature: _____

Rebecca Sparks

Rebecca Sparks, Analyst



Lead Chain-of-Custody

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
 (800) 922-1690 (405) 755-7272 Fax: (405) 755-2058
 www.quantem.com

Page 1 of 1

THIS CAN BE USED ONLY

Lab No. 205514
 Account # _____
 Name _____

Company Name: Emercon Services, Inc.

Project Name: Kingfisher Armory

Acct #:

Project Location: 301 North 6th Street, Kingfisher, OK

Project Number: ENMIS 2590

Sample Number	Sample Description	Volume of Amp	Barcode	Activity	Units Requested	Sample Matrix Codes
KAC-01-P5-R1	IFR-Wall C	147.2 C		X	1 / 24	A - Soil
KAC-02-P5-R1	IFR-Wall C	147.2 C		X	1 / 24	B - Paint Chips
						C - Surfaces / Dust Wipes
						D - Bulk Heterogeneous
						E - Air Concentrate
						F - Other (SPECIFY)

LEGAL DOCUMENT
 Please Print Legibly

TURNAROUND TIME

Same Day
 24 Hour
 3-Day
 5-day

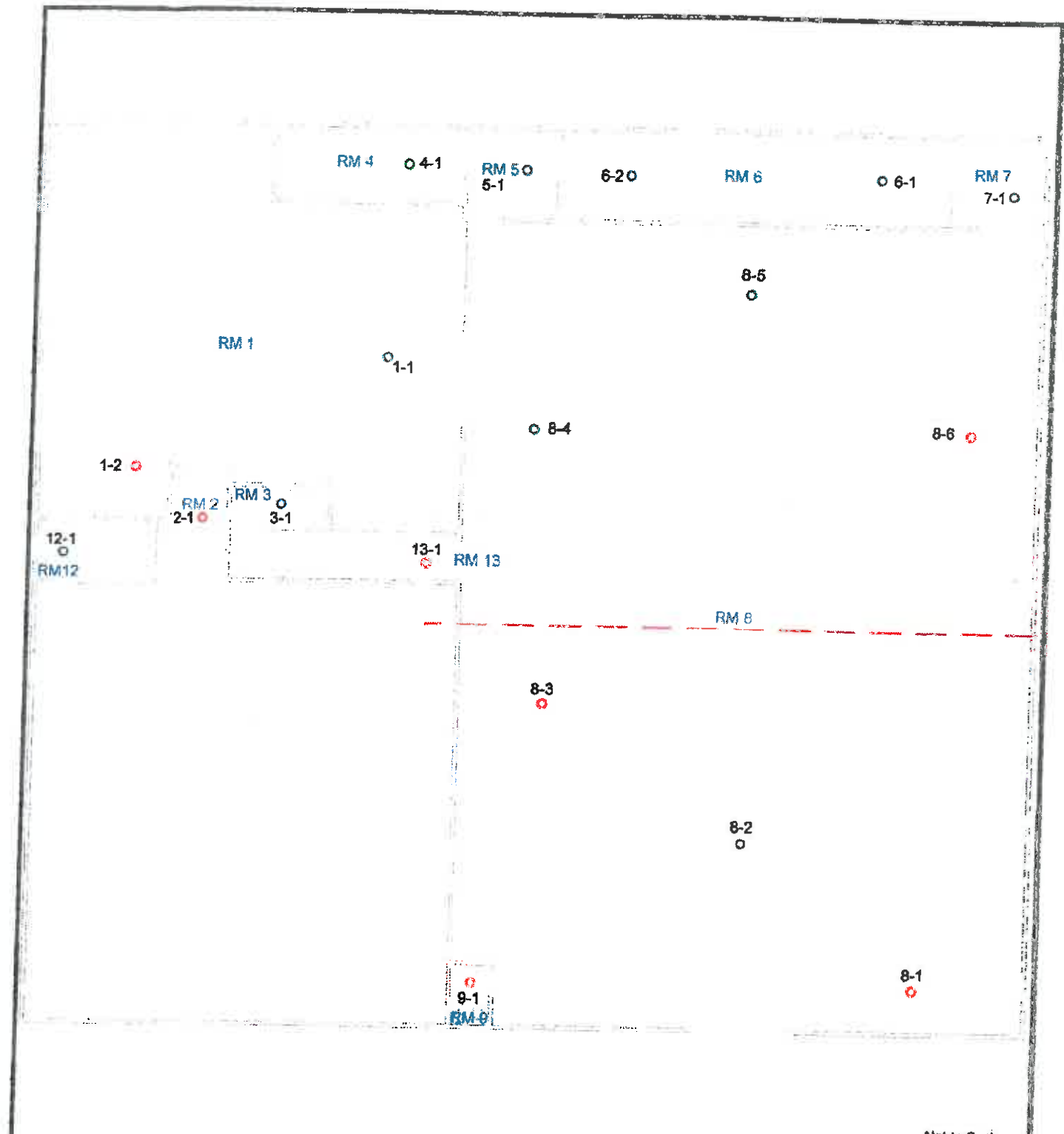
CONTACT INFORMATION

Name: Marshall
Beaseman
 Phone: 405-722-7693
 Report Results VIA (CHOOSE ONE):
 FAX: _____
 QUANTEM Website
 E-Mail: _____

Signature: [Signature] Date: 3-19-12
 Title: 30112
 MCB

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

APPENDIX G



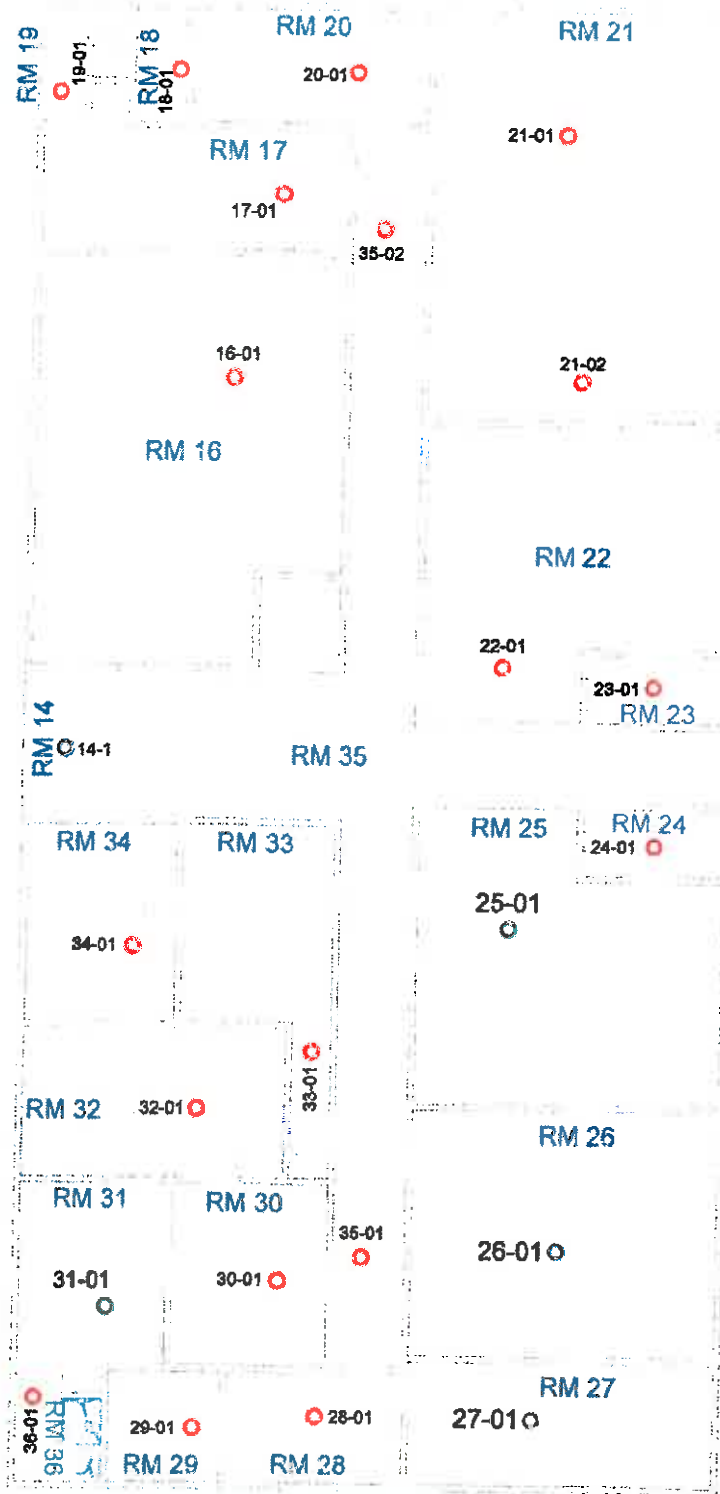
Kingfisher Armory
Kingfisher, Ok.

Legend:
 ○ = Positive Sample Location
 ● = Negative Sample Location

ENERCON

Lead Wipe Sample Locations
First Floor (Round 1)

Sample Date: 1/20/12



36

Not to Scale

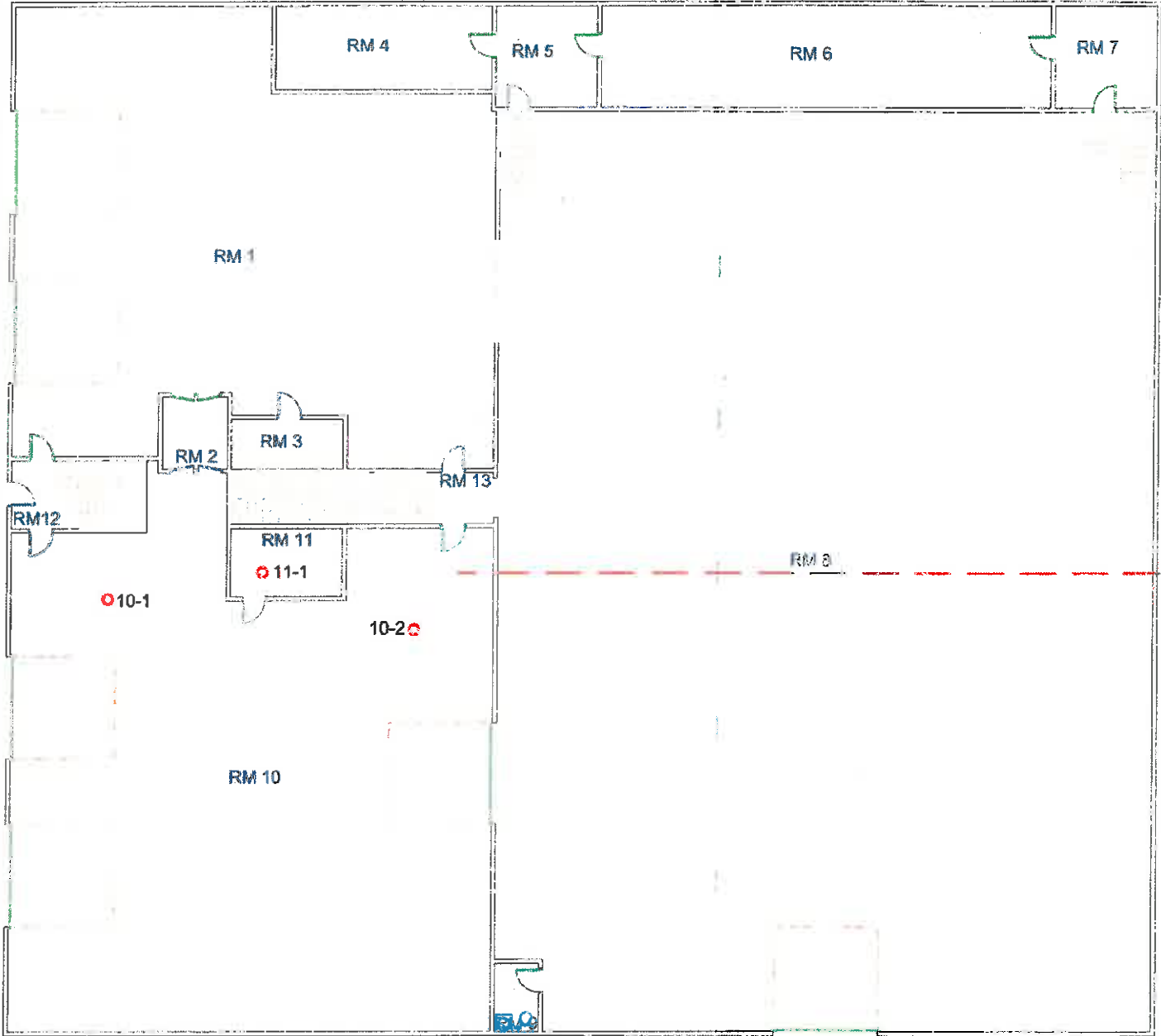
Kingfisher Armory
Kinfisher, Ok.

Legend:
 ○ = Positive Sample Location
 ● = Negative Sample Location

FJ ENERCON

Lead Wipe Sample Locations
Second Floor (Round 1)

Sample Date: 1/20/12



Room 10 and 11 only

Not to Scale

Kingfisher Armyory
Kingfisher, Ok.

Legend:

- = Positive Sample Location
- = Negative Sample Location



Lead Wipe Sample Locations
First Floor, Rooms 10-11 (Round 1)

Sample Date: 2/9/12



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

Environmental Chemistry Analysis Report

QuantEM Set ID: 203637
Date Received: 01/23/12
Received By: Sherric Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 1/24/2012

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

Acct. No.: A845

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

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-1-01	Wipe	Lead	38.5	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
002	KA-1-02	Wipe	Lead	56.3	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
003	KA-2-01	Wipe	Lead	2,090	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
004	KA-3-01	Wipe	Lead	24.6	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
005	KA-4-01	Wipe	Lead	36.5	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
006	KA-5-01	Wipe	Lead	16.7	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
007	KA-6-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
008	KA-6-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
009	KA-7-01	Wipe	Lead	18.4	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
010	KA-8-01	Wipe	Lead	466	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
011	KA-8-02	Wipe	Lead	31.5	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
012	KA-8-03	Wipe	Lead	128	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
013	KA-8-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
014	KA-8-05	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
015	KA-8-06	Wipe	Lead	136	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
016	KA-9-01	Wipe	Lead	3,020	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
017	KA-12-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)

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

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

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

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



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

Environmental Chemistry Analysis Report

QuantEM Set ID: 203637
Date Received: 01/23/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 1/24/2012

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

Acct. No.: A845

Project: Kingfisher Armory

Location: Kingfisher, OK

Project No.: N/A

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	KA-13-01	Wipe	Lead	238	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
019	KA-14-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
020	KA-16-01	Wipe	Lead	487	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
021	KA-17-01	Wipe	Lead	75.3	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
022	KA-18-01	Wipe	Lead	831	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
023	KA-19-01	Wipe	Lead	184	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
024	KA-20-01	Wipe	Lead	105	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
025	KA-21-01	Wipe	Lead	216	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
026	KA-21-02	Wipe	Lead	244	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
027	KA-22-01	Wipe	Lead	468	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
028	KA-23-01	Wipe	Lead	121	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
029	KA-24-01	Wipe	Lead	125	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
030	KA-25-01	Wipe	Lead	36.9	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
031	KA-26-01	Wipe	Lead	17.1	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
032	KA-27-01	Wipe	Lead	33.8	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
033	KA-28-01	Wipe	Lead	129	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
034	KA-29-01	Wipe	Lead	177	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)

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

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

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

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

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



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Environmental Chemistry Analysis Report

QuanTEM Set ID: 203637
Date Received: 01/23/12
Received By: Sherric Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 1/24/2012

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116
Acct. No.: A845
Project: Kingfisher Armory
Location: Kingfisher, OK
Project No.: N/A

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
035	KA-30-01	Wipe	Lead	53.3	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
036	KA-31-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
037	KA-32-01	Wipe	Lead	68.9	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
038	KA-33-01	Wipe	Lead	385	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
039	KA-34-01	Wipe	Lead	208	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
040	KA-35-01	Wipe	Lead	78.7	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
041	KA-35-02	Wipe	Lead	91.1	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)
042	KA-36-01	Wipe	Lead	139	16	ug/sq. Ft.	01/24/12 8:45	W EPA 7420 (1)

Authorized Signature: 

Benton Miller, Analyst

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

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

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

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

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

Supplemental Report QAQC Results

QA ID: 9582
Test: Lead

Date: 1/24/2012
Matrix: Wipe

Lab Number: 203637
Approved By: Benton Miller
Date Approved: 1/24/2012

Notes:

Blank Data:

Types of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5	5.5
FCV	4.5	4.9	5.5
ICV	0.8	1	1.2
RLVS	2.56	0.364	3.84

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W3	0.000	5.384	5.470	101.6	5.530	102.7	1.1
MS-W2	0.000	5.438	5.541	101.9	5.249	96.5	5.4
MS-W1	0.000	5.362	5.061	94.4	5.117	95.4	1.1

Authorized Signature: _____

Benton Miller
Benton Miller, Analyst



Lead Chain-of-Custody

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 www.quantem.com

Page 1 of 3

This Box for Lab Use Only
 Lab No. 203637
 Request

Company Name: Financial Services Inc. Project Name: Kingfisher Meet
 Acc. #: _____

Project Location: Kingfisher OK Project Number: _____

Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis	Units Requested	Turnaround Time
1. KA-1-01	Spot wipe	1X1C	A - Soil		100 / SW	LEGAL DOCUMENT Please Print Legibly Same Day <input checked="" type="checkbox"/> 24 Hour <input type="checkbox"/> 3-Day <input type="checkbox"/> 5-Day
2. KA-1-02			B - Paint Chips		100 / SW	
3. KA-2-01			C - Surface / Dust Wipes		100 / SW	
4. KA-2-01			D - Bulk Miscellaneous		100 / SW	
5. KA-2-01			E - Air Cassette		100 / SW	
6. KA-2-01			F - Other (SPECIFY)		100 / SW	
7. KA-2-01					100 / SW	
8. KA-2-01					100 / SW	
9. KA-2-01					100 / SW	
10. KA-2-01					100 / SW	
11. KA-2-01					100 / SW	
12. KA-2-01					100 / SW	
13. KA-2-01					100 / SW	
14. KA-2-01					100 / SW	
15. KA-2-01					100 / SW	

Name: <u>[Signature]</u> Phone: <u>704 916 917</u> Report Results Via (CHOOSE ONE): <input type="checkbox"/> FAX <input checked="" type="checkbox"/> QUANTEM WEBSITE <input type="checkbox"/> E-Mail	Sampled by: <u>[Signature]</u> Date: <u>1-23-12</u> Time: <u>1:15</u> Location: <u>Kingfisher OK</u>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------

Saturday FedEx Shipping - CALL TO SCHEDULE
 Use this address for Saturday FedEx only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8617
 Mark Packages HOLD FOR SATURDAY PICKUP



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 2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
 (800) 822-1000 (405) 755-7272 Fax: (405) 755-2058
 www.quantem.com

This Box for Lab Use Only
 Lab No. 203637
 Account _____ Project _____

Company Name: Finessa Sullivan LLC Acc.#: _____ Project Name: Kingfisher Army

Project Location: Kingfisher AR Project Number: _____

Sample Number	Sample Description	Volume of Area	Sample Matrix	Antipells	Units Requested	Sample Matrix Codes	TURNAROUND TIME
					PP % mg/kg mg/l ug/cg ug/cg mg/g	A - Soil B - Paint Chips C - Surface / Dust Wipes D - Bulk Miscellaneous E - Air Cassette F - Other (SPECIFY)	Same Day 3-Day 5-day
16. RA-9-01	Stone Wipe	111					
17.							
18.							
19.							
20.							
21.							
22.							
23.							
24.							
25.							
26.							
27.							
28.							
29.							
30.							

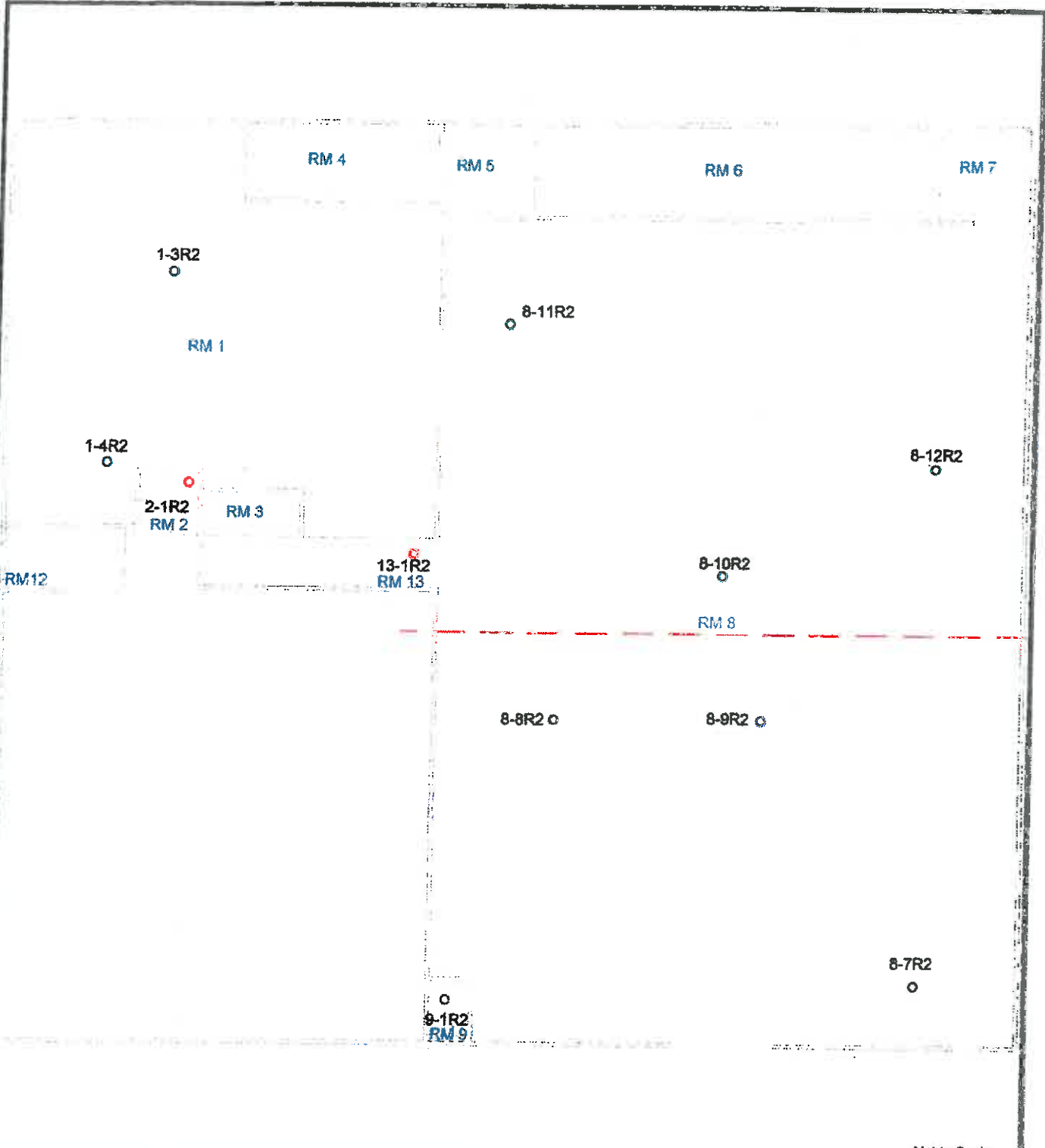
CONTACT INFORMATION
 Name: _____
 Phone: 202 9637
 Report Results VIA (CHOOSE ONE):
 FAX
 Quantem Website
 E-Mail: _____

LEGAL DOCUMENT
 Please Print Legibly

Received By: _____ Date Rec'd: _____
 Submitted By: H. S. Sullivan Date Submitted: 12/12/15
YAO/12 RLB

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 H



Not to Scale

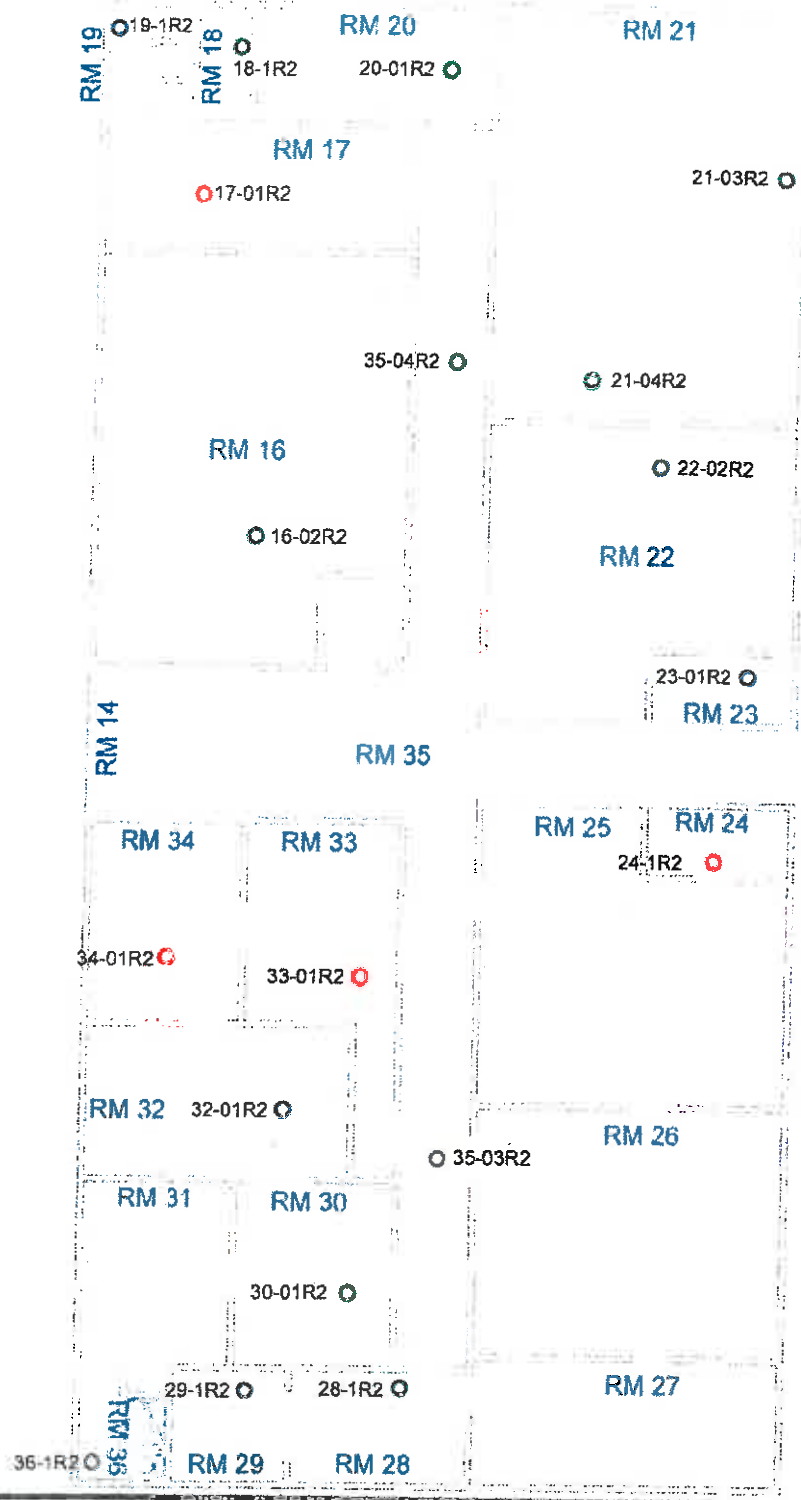
Kingfisher Armory
 Kinfisher, Ok.

Legend:
 ○ = Positive Sample Location
 ⊙ = Negative Sample Location



Lead Wipe Sample Locations
First Floor (Round 2)

Sample Date: 1/30/12



Not to Scale

Kingfisher Armory
Kinfisher, Ok.

Legend:
 ● = Positive Sample Location
 ○ = Negative Sample Location

FJ ENERCON

Lead Wipe Sample Locations
Second Floor (Round 2)

Sample Date: 1/31/12



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

Environmental Chemistry Analysis Report

QuantEM Set ID: 203896
Date Received: 01/30/12
Received By: Barbara Holder
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 1/31/2012

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

Acct. No.: A845

Project: Kingfisher Armory

Location: Kingfisher, OK

Project No.: N/A

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-1-3R2	Wipe	Lead	17.4	16	ug/sq. Ft.	01/31/12 9:00	W EPA 7420 (1)
002	KA-1-4R2	Wipe	Lead	26.4	16	ug/sq. Ft.	01/31/12 9:00	W EPA 7420 (1)
003	KA-8-7R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/31/12 9:00	W EPA 7420 (1)
004	KA-8-8R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/31/12 9:00	W EPA 7420 (1)
005	KA-8-9R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/31/12 9:00	W EPA 7420 (1)
006	KA-8-10R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/31/12 9:00	W EPA 7420 (1)
007	KA-8-11R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/31/12 9:00	W EPA 7420 (1)
008	KA-8-12R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/31/12 9:00	W EPA 7420 (1)
009	KA-13-1R2	Wipe	Lead	90.5	16	ug/sq. Ft.	01/31/12 9:00	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: 9613
Test: Lead

Date: 1/31/2012
Matrix: Wipe

Lab Number: 203896
Approved By: Benton Miller
Date Approved: 1/31/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.7	5.5
FCV	4.5	5	5.5
ICV	0.8	1.1	1.2
RLVS	0.256	0.371	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.492	5.234	95.3	5.331	97.1	1.8
MS-W1	0.000	5.514	5.311	96.3	5.233	94.9	1.5

Authorized Signature: _____



Benton Miller, Analyst



www.QuanTEM.com

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LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

Contact Information Company: <i>Farson Services Inc.</i> Contact: <i>Rock</i> Account #: _____ Phone: _____ Cell Phone: <i>209 9637</i> E-mail: _____		Project Information Project Name: <i>Kristina Arenal</i> Project Location: <i>Kristina OR</i> Project ID: _____	
Sampled By: <i>Richard</i> Date: <i>1-30-12</i>		Report Results: <input checked="" type="checkbox"/> One box <input type="checkbox"/> Quantem Website <input type="checkbox"/> Other	

RELINQUISHED BY: <i>Richard</i>	DATE & TIME: <i>1-30-12 1540</i>	RECEIVED BY: <i>Stafford</i>	DATE & TIME: <i>1/30/12 1:40</i>
---------------------------------	----------------------------------	------------------------------	----------------------------------

REQUESTED SERVICES (Please check the appropriate boxes)											
No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume/Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis	Units (check ONE box only)	mg / l	µg / ft ²	µg / m ²	mg / cm ²
1	<i>KA-1-3R2</i>	<i>Floor Wipes</i>		<i>1'x1'</i>	<i>G A</i>						
2	<i>1-4R2</i>										
3	<i>KA-8-7R2</i>										
4	<i>2-8R2</i>										
5	<i>8-9R2</i>										
6	<i>8-10R2</i>										
7	<i>8-11R2</i>										
8	<i>8-12R2</i>										
9	<i>KA-13-1R2</i>										
10											
11											
12											

Sample Matrix Codes
A Soil
B Paint Chips
C Surface / Dust Wipes
D Bulk Miscellaneous
E Air Cassette

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



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 203943	Client: Enercon Services, Inc.
Date Received: 01/31/12	6525 N. Meridian, Suite 400
Received By: Sherrie Leftwich	Oklahoma City, OK 73116
Date Sampled:	
Time Sampled:	Acct. No.: A845
Analyst: BM	Project: Kingfisher Armory
Date of Report: 2/1/2012	Location: Kingfisher, OK
	Project No.: N/A

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-2-1R2	Wipe	Lead	1,460	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
002	KA-9-1R2	Wipe	Lead	17.2	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
003	KA-16-02R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
004	KA-17-01R2	Wipe	Lead	43.9	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
005	KA-18-1R2	Wipe	Lead	21.5	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
006	KA-19-1R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
007	KA-20-01R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
008	KA-21-03R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
009	KA-21-04R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
010	KA-22-02R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
011	KA-23-01R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
012	KA-24-1R2	Wipe	Lead	176	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
013	KA-28-1R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
014	KA-29-1R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
015	KA-30-01R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
016	KA-32-01R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
017	KA-33-01R2	Wipe	Lead	287	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)

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

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

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

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

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



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 203943
Date Received: 01/31/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 2/1/2012

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

Acct. No.: A845

Project: Kingfisher Armory

Location: Kingfisher, OK

Project No.: N/A

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	KA-34-01R2	Wipe	Lead	55.6	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
019	KA-35-03R2	Wipe	Lead	19.8	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
020	KA-35-04R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)
021	KA-36-1R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/01/12 10:45	W EPA 7420 (1)

Authorized Signature: 

Benton Miller, Analyst

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

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

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

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

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

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

Supplemental Report QAQC Results

QA ID: 9621
Test: Lead

Date: 2/1/2012
Matrix: Wipe

Lab Number: 203943
Approved By: Benton Miller
Date Approved: 2/1/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.9	5.5
FCV	4.5	5.1	5.5
ICV	0.8	1.1	1.2
RLVS	0.256	0.336	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W1	0.000	5.449	5.432	99.7	5.360	98.4	1.3
MS-W1	0.000	5.514	4.840	87.8	5.360	97.2	10.2

Authorized Signature: _____


Benton Miller, Analyst

LEAD CHAIN OF CUSTODY

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 Lab No. 208943
 Accept Reject

Report Results one box
 QuantEM Website
 Other

Project Information
 Project Name: KingSons Army
 Project Location: Kingston St
 Project ID:

Contact Information
 Company: Emerex Services Inc
 Contact: Brian Bullock
 Account #: _____
 Phone: _____
 Cell Phone: 909 9637
 E-mail: _____
 Date: 1-31-12

RELINQUISHED BY: [Signature] DATE & TIME: 1-26-12 1330 VIA: H
 RECEIVED BY: [Signature] DATE & TIME: 2/9 1312

REQUESTED SERVICES: (Please the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (See matrix code on box)	Analysis				Units (<input checked="" type="checkbox"/> ONE box only)				Sample Matrix Codes
						Pb	mg/l	mg/ft ²	µg/m ²	PPM	mg/l	µg/ft ²	µg/m ²	
1	KA-2-1R2	Floor wipe	-	1'x1'	CX									
2	9-1R2													
3	16-02R2													
4	17-01R2													
5	18-1R2													
6	19-1R2													
7	20-01R2													
8	21-03R2													
9	21-04R2													
10	22-02R2													
11	23-01R2													
12	24-1R2													

TURNAROUND TIME	
Same Day	
24 - Hour	<input checked="" type="checkbox"/>
3 - Day	
5 - Day	



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LEAD CHAIN OF CUSTODY

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 (800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab-Use Only
 Lab No. 203943
 Accept Reject
 Report Results (in one box)
 Quantem Website
 Other

Company: Environ Services, Inc.
 Contact: 709 9637
 Account #: _____
 Project Name: _____
 Project Location: _____
 Project ID: _____

Sampled by: [Signature] Date: _____
 Relinquished by: [Signature] Date: 1-31-12 1405
 VIA: Hand RECEIVED BY: [Signature] DATE & TIME: 2:00 1-31-12

REQUESTED SERVICES (Please check the appropriate boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis	Units (in ONE box only)
1	KA-18-1R2	Flour Wipe		1' x 1'	CX	Pb	mg / cm ²
2	29-1R2						µg / m ²
3	30-01R2						µg / ft ²
4	32-01R2						mg / l
5	33-01R2						Wt %
6	34-01R2						PPM
7	35-03R2						
8	35-04R2						
9	36-1R2						
10							
11							
12							

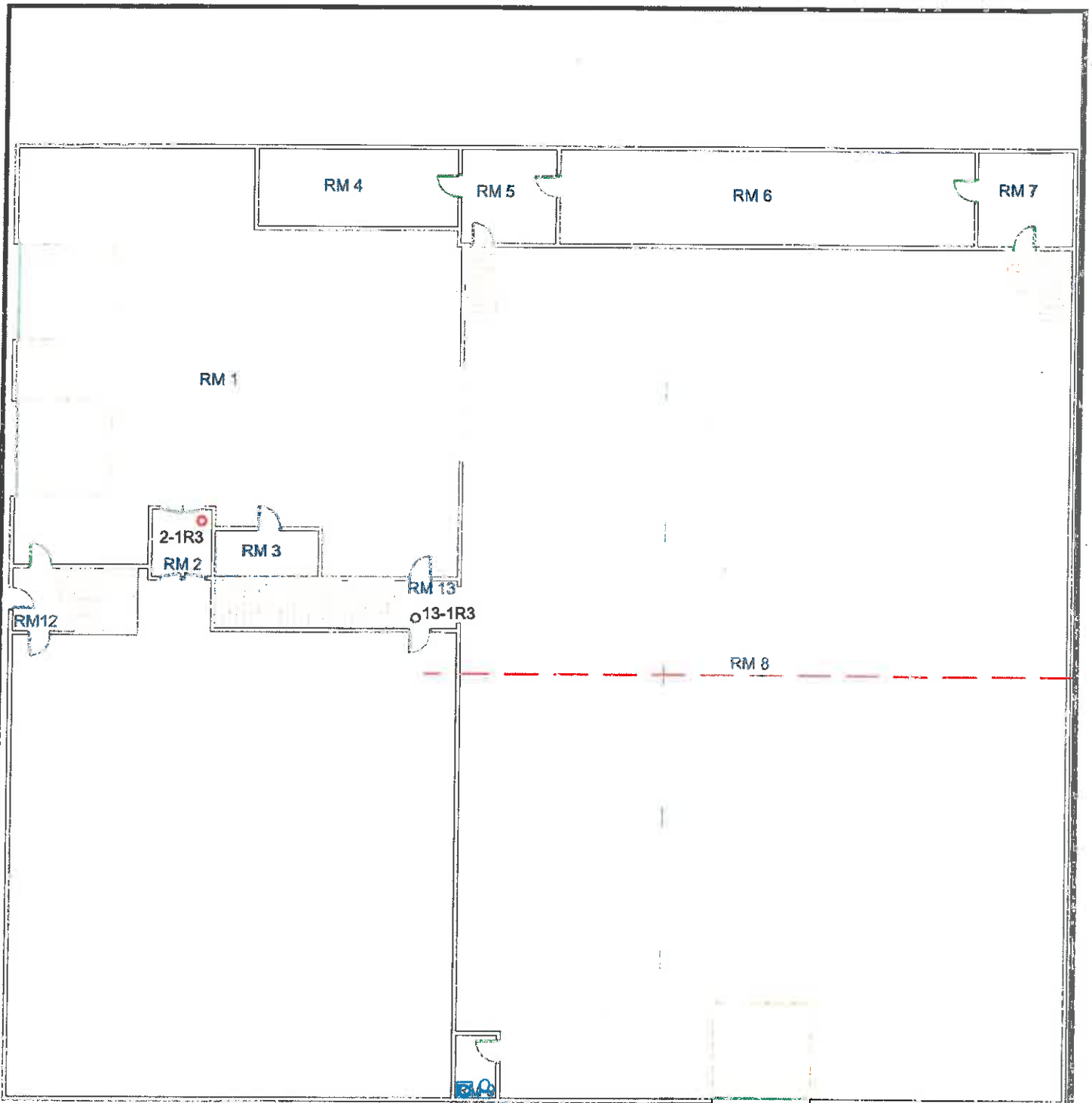
Sample Matrix Codes:

A	Soil
B	Paint Chips
C	Surface / Dust Wipes
D	Bulk Miscellaneous
E	Air Cassette

TURNAROUND TIME

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

APPENDIX I



Not to Scale

Kingfisher Armory
Kinfisher, Ok.

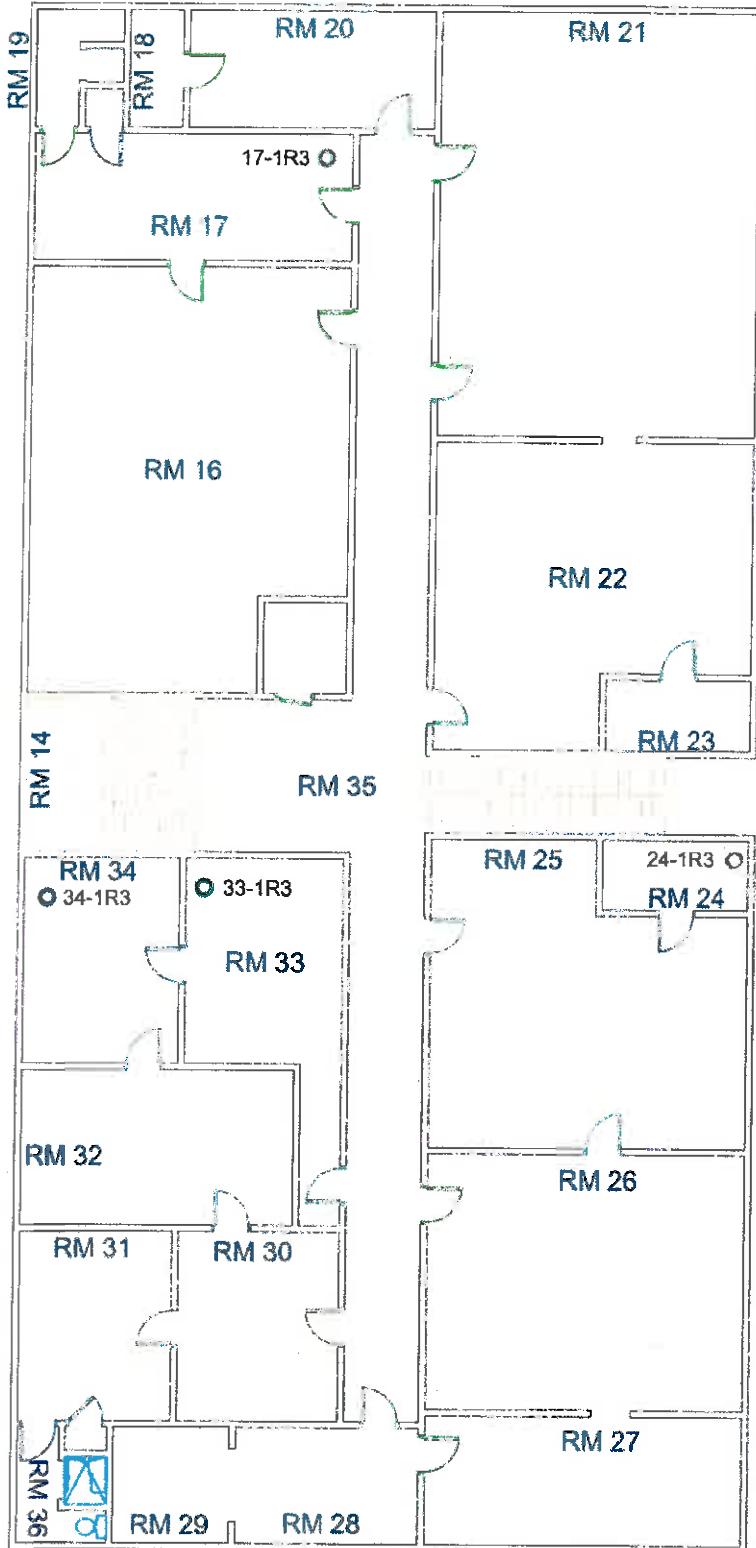
Legend:

- = Positive Sample Location
- = Negative Sample Location



Lead Wipe Sample Locations
First Floor (Round 3)

Sample Date: 2/9/12



Not to Scale

Kingfisher Armory
Kingfisher, Ok.

Legend:

- = Positive Sample Location
- = Negative Sample Location



Lead Wipe Sample Locations
Second Floor (Round 3)

Sample Date: 2/9/12



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

Environmental Chemistry Analysis Report

QuantEM Set ID: 204367
Date Received: 02/10/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 2/10/2012

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

Acct. No.: A845

Project: Kingfisher Armory

Location: Kingfisher OK

Project No.: N/A

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-2-1R3	Wipe	Lead	96.2	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
002	KA-13-1R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
003	KA-17-1R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
004	KA-24-1R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
005	KA-33-1R3	Wipe	Lead	20.3	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
006	KA-34-1R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
007	KA-10-1	Wipe	Lead	46.3	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
008	KA-10-2	Wipe	Lead	80.6	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)
009	KA-11-1	Wipe	Lead	655	16	ug/sq. Ft.	02/10/12 15:00	W EPA 7420 (1)

Authorized Signature: 

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: 9666
Test: Lead

Date: 2/10/2012
Matrix: Wipe

Lab Number: 204367
Approved By: Benton Miller
Date Approved: 2/10/2012

Notes:

Blank Data:

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

Standards Data:

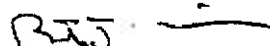
Standard	Low Limit	Obtained	High Limit
CCV	4.5	5	5.5
FCV	4.5	5	5.5
ICV	0.8	1	1.2
RLVS	0.256	0.326	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W3	0.000	5.470	5.646	103.2	5.468	100.0	3.2
MS-W2	0.000	5.492	5.723	104.2	5.179	94.3	10.0
MS-W1	0.000	5.514	5.801	105.2	5.985	108.6	3.1

Authorized Signature: _____



Benton Miller, Analyst



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Send this to the Only
 Lab No. 204367
 Accept Reject
 Report Results (add one box)
 Quantem Website
 Other

Company: Enercon Services Inc.
 Contact: Richard
 Account #: _____
 Project Name: Eno Risk Assessment
 Project Location: Kristler RR
 Project ID: _____

Contact Information
 Name: Richard Belcher
 Date: 2-9-12
 Phone: _____
 Cell Phone: (405) 209-9637
 E-mail: _____
 RECEIVED BY: Richard Belcher
 DATE & TIME: 2-10-12
 RECEIVED BY: L. Holtz
 DATE & TIME: 2/10/12 11:15

REQUESTED SERVICES (Please the Appropriate Boxes)

No.	Sample ID (10 Connectors Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Analysis	Units (<input checked="" type="checkbox"/> ONE box only)	Sample Matrix Codes	TURNAROUND TIME
						PPM Wt % mg / l mg / ft ² mg / m ³ mg / cm ²	A Soil B Paint Chips C Surface / Dust Wipes D Bulk Miscellaneous E Air Cassette	Same Day 24 - Hour 3 - Day 5 - Day
1	KA-2-1R3	Floor wipe		1' x 1'	Pb		C	<input checked="" type="checkbox"/>
2	KA-12-1R3							
3	KA-12-1R3							
4	KA-24-1R3							
5	KA-33-1R3							
6	KA-34-1R3							
7								
7.	KA-10-1	Floor wipe Room 1						<input checked="" type="checkbox"/>
8.	10-2							
9.	KA-11-1							
11								
12								

APPENDIX J



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 204770
Date Received: 02/24/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 2/24/2012

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

Acct. No.: A845

Project: Kingfisher Armory
Location: Kingfisher, OK/6th and Admire
Project No.: N/A

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	KA-2-1-R4	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
002	KA-10-1-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
003	KA-10-2-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
004	KA-10-3-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
005	KA-11-1-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
006	KA-C-4-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
007	KA-C-5-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
008	KA-C-6-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
009	KA-D-7-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
010	KA-D-8-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
011	KA-D-9-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
012	KA-E-7-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
013	KA-E-8-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
014	KA-E-9-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
015	KA-SB-4-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
016	KA-SB-5-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
017	KA-SB-6-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)

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

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

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

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

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

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



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 204770
Date Received: 02/24/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 2/24/2012

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

Acct. No.: A845

Project: Kingfisher Armory
Location: Kingfisher, OK/6th and Admire
Project No.: N/A

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	KA-SD-4-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
019	KA-SD-5-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
020	KA-SD-6-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
021	KA-SE-4-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
022	KA-SE-5-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)
023	KA-SE-6-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/24/12 14:00	W EPA 7420 (1)

Authorized Signature: _____

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 Preparation Modified. EPA 7420 Analysis Modified

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

Supplemental Report QAQC Results

QA ID: 9712
Test: Lead

Date: 2/24/2012
Matrix: Wipe

Lab Number: 204770
Approved By: Rebecca Sparks
Date Approved: 2/24/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.9	5.5
FCV	4.5	4.8	5.5
ICV	0.9	0.9	1.1
RLVS	0.256	0.275	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.438	5.387	99.1	5.306	97.6	1.5
MS-W1	0.000	5.481	4.801	87.6	4.940	90.1	2.8

Authorized Signature: _____

Rebecca Sparks

Rebecca Sparks, Analyst



Lead Chain-of-Custody

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 www.quantem.com

Form for Lab Use Only
 Lab No. 204770
 Accept Reject

Company Name: Emvicon Services, Inc.
 Project Name: Kingsfield Armory

Project Location: Kingsfield, OK / BA and Advice
 Project Number: _____

Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis	Units Requested	Sample Matrix Codes
1. KA-2-1-R4	1 st Floor	Pin 2		X		A - Sol
2. -10-1-R1						B - Paint Chips
3. -10-2-R1						C - Surface / Dust Wipes
4. -10-3-R1						D - Bulk Miscellaneous
5. -11-1-R1						E - Air Cassette
6. -C-4-R3	IFR					F - Other (SPECIFY)
7. -C-5-R3						
8. -C-6-R3						
9. -D-7-R3						
10. -D-8-R3						
11. -D-9-R3						
12. -E-7-R3						
13. -E-8-R3						
14. -E-9-R3						
15. V-SB-4-R3	IFR Storage Bin					

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TURNDOWN TIME
 Same Day
 24 Hour
 3-Day
 5-day

CONTACT INFORMATION
 Name: Marshall
Blanscam
 Phone: 722-7693
 Report Results VIA (CHOOSE ONE):
 FAX
 QUANTEM Website
 E-Mail

Signature: Marshall Blanscam Date: 1-24-2012 Time: 10:00
 Sample By: MLB
 2-23

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



Lead Chain-of-Custody
 2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
 (800) 822-1550 (405) 755-7272 Fax: (405) 755-2058
 www.quantem.com

Lab No. 204770
 (This Box for Lab Use Only)

Company Name: Enron Services
 Project Location: Kingfisher, OK
 Project Name: Kingfisher Army

Acct.#: _____
 Project Number: _____

Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis	Units Requested	Sample Codes	Turnaround Time
16. KA-SB-5-R3	IFR Storage Lm	144.20		X	15 / 50	A - Soil	Same Day
17. -SB-6-R3						B - Paint Chips	X 24 Hour
18. -SD-4-R3						C - Surface / Dust Wipes	3-Day
19. -SD-5-R3						D - Bulk Miscellaneous	5-day
20. -SD-6-R3						E - Air Cassette	
21. -SE-4-R3						F - Other (SPECIFY)	
22. -SE-5-R3							
23. -SE-6-R3							

LEGAL DOCUMENT
 Please Print Legibly

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

CONTACT INFORMATION
 Name: Marshall
Samsam
 Phone: 722-7693
 Report Results VIA (CHOOSE ONE):
 FAX
 QUANTEM Website
 E-Mail

Shipped by: MLB
 Date: 2-23
 Time: 10:00
 Signature: Shelby
 Date: 2/24/12
 Time: 10:00

Saturday FedEx Shipping - CALL TO SCHEDULE
 Use this address for Saturday FedEx only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-6517
 Mark Package HOLD FOR SATURDAY PICKUP