

**Targeted Brownfields Assessment  
Oklahoma Army National Guard  
Hartshorne Armory  
Hartshorne, Oklahoma**

**ASTM E 1527-05  
Phase I Environmental Site Assessment  
All Appropriate Inquiry**

**December 12, 2007**

**Prepared by:**



*Prepared for:*

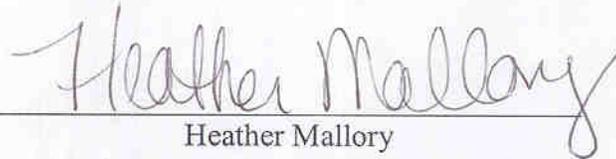
The City of Hartshorne  
1101 Pennsylvania Avenue  
Hartshorne, Oklahoma

*Prepared by:*

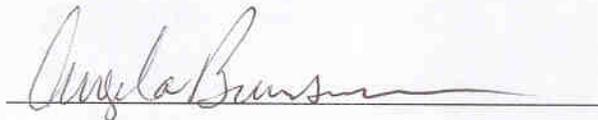
Oklahoma Department of Environmental Quality  
Land Protection Division  
707 N. Robinson, P.O. Box 1677  
Oklahoma City, Oklahoma 73101-1677  
(405) 702-5100

I declare that to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR Part 312. I have specific qualifications based on education, training, and experience to assess a property of the nature, history and setting of the subject property. I have developed and performed the all appropriate inquiry in conformance with the standards and practices set forth in 40 CFR Part 312. Appendix O contains qualifications for the environmental professionals that signed this document.

*Environmental Professionals in charge of the project:*



Heather Mallory  
Environmental Programs Specialist II



Angela Brunsman  
Environmental Programs Manager



Rita Kottke, Ph.D  
Environmental Programs Manager

*Background and Disclaimer:* The purpose of an environmental site assessment is to identify actual or potential “recognized environmental conditions” that may result in liability or land use restrictions. The ASTM Phase I Environmental Site Assessment E 1527 – 05 is the minimum standard for environmental due diligence in the commercial real estate industry and meets the standard for All Appropriate Inquiry under the Small Business Liability Relief and Brownfields Revitalization Act of 2002. A diligent effort in accordance with generally accepted good commercial and customary standards and practices was undertaken to identify the “recognized environmental conditions” that might affect the redevelopment project. However, the identification of old hazardous waste sites is an evolving process; therefore, Oklahoma Department of Environmental Quality (DEQ) cannot state with absolute certainty that no other potential hazardous waste sites are located in the area. In no event shall the DEQ or its employees be liable for any damages, injury, loss, cost or expense whatsoever arising in connection with the use or reliance on the information contained in this report, except as otherwise provided by law.

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## 1.0 Executive Summary

This Phase I Targeted Brownfield Assessment of the Hartshorne Armory was performed in accordance with the ASTM E 1527-05, a guide for conducting Environmental Site Assessments. Heather Mallory and Jarrett Keck conducted a site visit on September 14, 2006.

The Hartshorne Armory is located in the Southeast Quarter of Section 6, Township 5 North, and Range 17 East in Pittsburg County, Oklahoma. The physical address of the site is 305 South 12<sup>th</sup> Street, Hartshorne, Oklahoma.

The following details some of the findings contained in this paper. However, all details are not contained in this section; therefore the report must be read in its entirety for a complete understanding of the topics discussed below.

### **Opinions**

Based on the findings of this assessment, it is the opinion of the DEQ that additional investigation should be conducted to evaluate areas of the property that may need future clean-up and remediation.

The old motor pool storage areas were used as an IFR, therefore there is a potential for lead dust contamination from gun shot residue (GSR). It is advised that lead wipe sampling occur in the old motor pool and all areas where lead dust can be potentially spread. Since no sand trap is present in the IFR, there is no need for removal or testing of IFR sand. Due to the age of the facility there is a potential for lead paint and asbestos within the facility. It is advised that all paint be tested for lead and that all suspect material be tested for asbestos. If lead paint and asbestos are found then appropriate action should be taken. It is not recommended that the soil surrounding the removed underground storage tank (UST) be sampled due to the fact that this area is now covered by a parking lot and because the Oklahoma Corporation Commission approved the closure of the UST.

## **2.0 Introduction**

The State of Oklahoma Department of Environmental Quality under a Brownfield Assistance Agreement (No. # VC 98677601) (Ref. 1) with the U.S. Environmental Protection Agency (EPA) conducted a Targeted Brownfield Assessment of the Hartshorne Armory.

### *2.1 Purpose*

The purpose of this assessment is to look at the environmental conditions within the target area and provide this information to the City of Hartshorne to assist in its redevelopment planning as well as meet the All Appropriate Inquiry requirement of the Landowner liability protections under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, better known as Superfund – Ref. 2), as provided in the Small Business Relief and Brownfields Revitalization Act of 2002

(Public Law 107-118, Subtitle B – Ref. 3). The purpose of a Phase I Environmental Site Assessment is to identify, to the extent feasible, recognized environmental conditions in connection with the target property through a systematic review of readily available information sources and a site reconnaissance. The assessment will also guide DEQ's future cleanup actions at the Armory.

The DEQ is providing technical assistance to the project by evaluating the environmental condition of the property prior to the City acquiring the property. Funding for this assessment has been provided by the U.S. Environmental Protection Agency (EPA).

## *2.2 Detailed Scope-of-Services*

The DEQ examined the current use of the property and then identified the historical uses of the property to determine if recognized environmental conditions exist. The DEQ examined historical documents, governmental databases, deed records, aerial photographs, governmental environmental files, and Sanborn Fire Insurance Maps, and conducted interviews with past unit members, and performed a site reconnaissance of the area. DEQ also hired a contractor to conduct asbestos and lead based paint assessments. A good faith effort was made to identify possible environmental conditions that might affect the development of the property.

## *2.3 Significant Assumptions*

Past studies of the Oklahoma Army National Guard Armories suggest that there is a potential for lead and asbestos contamination at the Hartshorne Armory. Since the building was constructed in 1953, the building is likely to contain ACM. The U.S. began banning the use of asbestos in most building materials in the 1970s due to studies confirming the harmful health effects caused by exposure to airborne asbestos. ACM may be found in a number of materials including but not limited to 9X9 floor tiles, joint compound, pipe wrap, insulation, and elbow joints, heating pipes, and roofing materials. All of which could be present in the Hartshorne Armory.

Sampling of pipe wrap and 9x9 floor tiles and associated mastic revealed that these materials contain asbestos (see Appendix F). During the site visit, the DEQ observed blueprints that indicated that the roof over the drill floor contained asbestos. The roof panels appear to be transite and original to the building. Therefore, it was assumed that the roof above the drill floor contains asbestos.

## *2.4 Limitations and Exceptions*

The purpose of an environmental site assessment is to identify actual or potential “recognized environmental conditions” that may result in liability, land use restrictions, or cause delays in redevelopment. The ASTM Phase I Environmental Site Assessment E 1527 – 05 (Ref. 4) is the minimum standard for environmental due diligence in the commercial real estate industry and meets the standard for All Appropriate Inquiry under

the Small Business Liability Relief and Brownfields Revitalization Act of 2002. A diligent effort in accordance with generally accepted good commercial and customary standards and practices was undertaken to identify the “recognized environmental conditions” that might affect the redevelopment project. However, the identification of old hazardous waste sites is an evolving process; therefore, DEQ cannot state with absolute certainty that no other potential hazardous waste sites are located in the area. This assessment was conducted under constraints of time, cost, and scope and reflects a limited investigation and evaluation. It reflects the normal degree of care and skill that is ordinarily exercised by environmental professionals conducting business in this or similar localities. In no event shall the DEQ or its employees be liable for any damages, injury, loss, cost or expense whatsoever arising in connection with the use or reliance on the information contained in this report, except as otherwise provided by law.

The information in this report is based on a review of governmental records, interviews with knowledgeable residents in the community, information provided by the City of Hartshorne, the Oklahoma Military Department and observations of the environmental professional. The result of this assessment, as written in this report, is valid as of the date of report. The assessment does not include sampling of soil, rock, groundwater, surface water, or air. However, if sampling results were available then they were included in this report.

### *2.5 Special Terms and Conditions*

This assessment report has been prepared for the City of Hartshorne by the DEQ using EPA funding. Information about this report will be provided to the EPA and Oklahoma Military Department for their files. This report and the working file are public record and subject to the Oklahoma Open Records Act and the federal Freedom of Information Act.

## **3.0 Site Description**

### *3.1 Location and Legal Description*

The Hartshorne Armory is located in the Southeast Quarter of Section Six, Township 5 North, and Range 17 East in Pittsburg County, Oklahoma. The physical address of the site is 305 South 12<sup>th</sup> Street, Hartshorne, Oklahoma. The legal description of the property is as follows. Lots Six (6), Seven (7), and Eight (8) in Block One Hundred Thirty-Six (136) - Lots Three (3), Four (4), and Five (5) in Block One hundred forty-two (142), all located in the City of Hartshorne, Pittsburg County, Oklahoma.

### *3.2 Site and Vicinity General Characteristics*

#### Environmental Setting

Pittsburg County is located in Southeast Oklahoma and covers an area of 1,359 square miles. The county seat is located at in McAlister, Oklahoma (Ref. 5).

Most of the Pittsburg County is rough and hilly. Post oak and blackjack oak trees are predominant in rough, hilly areas with sandstone ridges that have a Northeast-Southwest trend. Prairie dominates the landscape in South-central and North-central portions of the county (Ref. 5). The general topography of the Hartshorne area is shown in Figure 1 (see Appendix A).

The overall elevation of the county is approximately 700 feet. The Northeastern part of the county has an elevation of 616 feet and the Southeastern part of the county has an elevation of 1017 feet (Ref. 5).

### Soils

The Pittsburg County Soil Survey indicates that subject property is located within the Counts Loam soil association. The Counts Loam is primarily in the North-central portion of Pittsburg County. This soil is an upland soil that is nearly level to gently sloping and is usually forms a 5 foot layer over the underlying shale. The soil profile shows gray brown loam at the surface and subsurface, yellow-brown mottled clay at a depth of 46 inches, and mottled gray yellow-brown and reddish-yellow firm clay. The soil is subject to erosion during drought periods and can retain moisture during rainy periods (Ref. 5).

### Climate

The climate in Pittsburg County is warm and temperate with plenty of rainfall for crops and community needs. Winters are short and mild, with short periods of snow cover and low temperatures. Summers are hot and long in duration. Average annual temperature for the county is 62.2 °F and the average annual precipitation is 41 inches in the Northwestern portion of the county and 47 inches in the Southeastern part of the county (Ref. 5).

### Surface water

The South Canadian River, which forms the Northern border of Pittsburg County, drains 4/5 of the county. A few small streams in the county flow South toward the Red River. Drainage from the Southeastern portion of the county flows into the Jackfork Creek, which flows Southeast toward the Red River (Ref. 5).

### Groundwater

Generally the groundwater wells in Pittsburg County yield less than 10 gallons per minute. The closest groundwater formation is the Arkansas Novaculite and Bigfork Chert, which is located in Southern Latimer and Northern Pushmataha Counties. Groundwater in Pittsburg County is rated good to fair in quality in terms of having low dissolved solids. The water source for the City of Hartshorne is a combination of surface water and groundwater. The surface water source is not near the Armory. The

groundwater source is through a Rural Water District and the surface water source is from a nearby stream or impoundment. The primary geologic formation in the Hartshorne area is the McAlester Formation. The McAlester Formation contains gray shale and is illitic and chloritic with tan to gray sandstones. The formation also contains fine to course grained, micaceous quartzose. The McAlester and Stigler coals lie 600 to 800 feet or more below the top of the formation and are 2,000 to 2,830 feet thick (Ref. 8). Coal was mined underneath the City of Hartshorne. According to Mike Sharp at the Oklahoma Conservation Commission Abandoned Mine Lands Program, the land below the Armory is not undermined (see Appendix M for email).

### Utilities

The following utilities service the subject property (Ref. 6):

Center Point Energy – Natural Gas  
PSO - Electric  
Southwestern Bell – Telephone  
City of Hartshorne – Water and Sewer

### Underground features

One 1,000 gallon UST that held gasoline was installed onsite in January of 1966. The tank was made of asphalt coated or bare steel and had galvanized steel piping. The UST was used to refuel vehicles at the Armory. The UST was removed from the ground on April 13, 1989. During the time that the UST was removed the Oklahoma Corporation Commission did not require sampling of hydrocarbons in the soil or groundwater surrounding the UST. Therefore, no hydrocarbon data is available for the associated soil (Ref. 19). The condition of the soil in and around the tank pit is unknown and therefore is considered a data gap for the purpose of this assessment. See Appendix B for available documentation of this closure. According to Ron Hunt, a former unit administrator of the Armory, the area where the UST resided is now covered by a parking lot. Ron Hunt also mentioned that the UST leaked water, but was not aware of it leaking fuel (Ref. 7).

No sumps were observed during the site visit.

### Structures

To the West and North of the subject property lies residential property. To the East of the subject property is a community swimming pool and rodeo ground. To the South of the property is a vacant lot (Ref. 7).

### ASTs

No above ground storage tanks (ASTs) were observed on the subject property during the DEQ site visit conducted on September 14, 2006. Historically, no ASTs were known to be located on the property (Ref. 7).

### Landfills, Dumping, Disturbed Soil

According to the DEQ GIS and Data Viewer, the closest landfill is located in McAlester, Oklahoma (Appendix C). No landfills, dumping, or disturbed soil were observed on the subject property during the DEQ site visit conducted on September 14, 2006.

### Impoundments

No impoundments were observed on the subject property during the September 14, 2006 site visit.

### Air Emissions, Wastewater Discharge

There are several permitted air emissions and wastewater discharge facilities near Hartshorne, Oklahoma (See Appendix D). However, none of these are on the subject property. During the site visit, no air emissions or wastewater discharges were observed. However, there is a potential for air emissions associated with particulates from asbestos and lead paint if these substances are disturbed.

### Industrial Activities

The subject property was used as a National Guard Armory. Vehicle maintenance and fueling occurred at the facility. The UST has since been removed. The following list below details sites that have USTs. All of these sites are located within 0.5 miles of the subject property according to the Oklahoma Corporation Commission UST Notification Database.

<b>Name</b>	<b>Location</b>	<b># Tanks</b>	<b>Tank Status</b>	<b>LUST case?</b>
Plaza Superette	12th and Pennsylvania Ave	?	Out of use	No
Texaco Station	Across St. from Baptist Church	1	Out of use	Yes
C&P Express	P.O. Box 1003	3	In use	No
Goodwin's One Stop	1000 Pennsylvania Ave	3	In use	No
Municipal Government	1101 Pennsylvania Ave	3	Out of use	No
Flash-n-Dash	1131 Pennsylvania Ave	2	In use	Yes
Watts #1 Station	1517 Pennsylvania Ave	2	In use	No
National Bank	1027 Pennsylvania Ave	4	Out of use	No
Carl's	1039 E. Pennsylvania Ave	?	Out of use	No

### Monitoring Wells

No water monitoring wells or water wells are listed on the OWRB water well record search for SE-SE-6-5-17 (Ref. 9).

### Stained Soils

No stained soils were observed on the subject property.

### Seeps

No seeps were observed on the subject property.

### Chemical Spills

One small spill of an unknown black substance was noted in the supply room during the October 31, 2006 visit (see photos in Appendix H). No chemical spills were observed on the subject property. However, several spills were reported on the Emergency Response Notification System (ERNS) for Hartshorne, Oklahoma (see Appendix E).

### Oil and Gas Exploration

No record of oil and gas exploration or coal mining was found for the subject property during the property record search at the Pittsburg County Courthouse.

### Known Groundwater or Surface Water contamination

There is no known groundwater contamination on the subject property or adjoining properties. There are no surface water sources located on the subject property or adjoining properties.

### Farm Wastes

No farm waste was observed on the subject property.

### Known Pesticide Misapplication

No pesticide misapplication was observed during the site visit, and Ron Hunt, former unit administrator of the Armory, had no recollection of any misapplication of pesticides during his time at the Armory.

### Discharges and Runoff from Adjacent Property Affecting the Site

All storm water runoff runs through the concrete ditch that is located in front of the Armory (to the West) near the street. None of this runoff appeared to adversely affect the subject property.

### Other known or Suspected Environmental Concerns On the Site

The following recognized environmental concerns (RECs) were noted during the site reconnaissance and record review. More information on each of these can be found in section 8.0 "Findings".

- The IFR at the Hartshorne Armory is not a traditional firing range with a sand trap. The Old Motor Pool used to be one room before the storage areas were added on. The firing range was located in the South wall of the motor pool and consisted of targets and a hopper that collected bullet casings. The hopper and targets are no longer in the Armory. The only evidence of the IFR activities is bullet holes in the wall of the storage room. Due to the IFR activities there is potential for lead dust from gun shot residue (GSR) to be present in the Old Motor Pool storage area and any rooms that GSR might be tracked via footwear or articles of clothing. For these reasons the IFR is a REC.
- Asbestos samples were collected by DEQ staff and Marshall Environmental Management. Asbestos containing materials were found in the Armory (Appendix F). The asbestos containing materials in the Armory are considered a REC.
- Marshall Environmental Management performed a lead-based paint inspection on the Armory and found lead-based paint (Appendix F). For this reason lead-based paint inside and outside of the Armory is considered a REC.

### Historical Recognized Environmental Conditions on the Site

This assessment has revealed the following historical recognized environmental conditions (HRECs) on the subject property. More information on each of these can be found in section 8.0 "Findings".

- One 1,000 gallon UST that held gasoline was installed onsite in January of 1966. The tank was made of asphalt coated or bare steel and had galvanized steel piping. The UST was used to refuel vehicles at the Armory. The UST was removed from the ground on April 13, 1989. During the time that the UST was removed, the Oklahoma Corporation Commission didn't require sampling of hydrocarbons in the soil or groundwater surrounding the UST. See Appendix B for available documentation of this closure. According to Ron Hunt, the area where the UST resided is now covered by a parking lot. Ron Hunt also

mentioned that the UST leaked water, but was not aware of it leaking fuel (Ref. 7). The 1,000 gallon UST constitutes an HREC.

- Improperly stored chemicals were found at the subject property during the site reconnaissance. These chemicals were removed by a DEQ contractor on November 3, 2006. These chemicals constitute a HREC.

### Pipelines

Due to homeland security, it is difficult to obtain information regarding the location of utility lines from the Oklahoma Corporation Commission. The Hartshorne Armory is on City water and sewer. There are several floor drains in the Armory; these are depicted in the floor plan in the back of Appendix I. According to a report published by the Oklahoma Conservation Commission the Arkula Gas Line runs near Hartshorne (Appendix J, Ref. 20).

### Transformers/PCB Equipment

During the site visit a pole-mounted transformer was observed in front of the Armory near the ditch. According to Ron Hunt, the transformer was replaced in the late 1980's. Therefore, it is not suspected that the transformer contains PCBs. No other PCB equipment was observed on the subject property (i.e. fluorescent light fixtures).

### *3.3 Operational History*

The Hartshorne Armory was built in 1953 and was managed and maintained by the Oklahoma Military Department to support the military mission of the Oklahoma Army National Guard (OKARNG). The OKARNG is a component of the United States Army and fulfills the military mission of national security. The Armory served as a training site for the component and stored those materials required by the component (Ref. 10).

Ron Hunt served as the unit administrator and held the rank of 1<sup>st</sup> Sergeant; he served in the Army National Guard for 36 years before retiring. According to Ron Hunt, the Veterans of Foreign Wars (VFW) uses the South part of the facility for meetings. The Drill Floor is being used as a daycare facility for children of unknown ages. He also noted that the OKARNG vacated the facility about 6 years ago. (See Appendix K for notes from the interviews).

According to the letter from the City of Hartshorne, future use of the property will include use by the local VFW, Boys and Girls Club, high school P.E. classes, and any church or civic group that wishes to use the facility (see Appendix L).

### *3.4 Current Use of the Property*

The OKARNG vacated the facility about 6 years ago. The local VFW and women's auxiliary utilize the Southern portion of the Armory and kitchen area for meetings. Children occasionally stay in the drill floor area in a daycare setting. In the future, the Oklahoma Department of Environmental Quality plans to transfer the property to the City of Hartshorne.

### *3.5 Current Uses of Adjacent Properties*

The properties to the West and North of the Armory are residential. To the East of the Armory is a rodeo grounds and public swimming pool. To the South of the Armory building is a park, which is on property owned by the Oklahoma Department of Environmental Quality. To the South of the park is a vacant lot.

### *3.6 Descriptions of Structures, Roads, Other Improvements on the Site*

On the North side of the building there is a gravel driveway. The driveway leads to a gate that opens up to a concrete vehicle compound. The vehicle compound consists of a fenced in concrete parking lot located behind the Armory. A concrete ditch lies in front of the Armory. The property to the South consists of a park. This park is owned by the Armory (State of Oklahoma). A concrete parking lot and concrete picnic tables are the only improvements at the park.

### *3.7 Site Inspection*

Site reconnaissance was performed on September 14, 2006, and on October 31, 2006. The September site visit was performed by Heather Mallory and Jarrett Keck, with the DEQ. The October site visit was performed by Heather Mallory and Dustin Davidson, with the DEQ. Ron Hunt, a retired member of the OKARNG, was present during both site visits. For full details on the site reconnaissance see Section 6.0.

## **4.0 User Provided Information**

### *4.1 Title and Judicial Records*

County land records were researched and reviewed on September 4, 2006. The City of Hartshorne purchased the property from the Choctaw Nation on December 9, 1903. The property remained the property of the City of Hartshorne until November 18, 1948, when it was transferred to the State of Oklahoma for building a National Guard Armory. Since that time, the State of Oklahoma has owned the property described as followed. Lots Six (6), Seven (7), and Eight (8) in block One Hundred Thirty-Six (136) and Lots three (3), Four (4), and Five (5) in block One Hundred Forty-Two (142). See Appendix L for copy of deeds.

#### *4.2 Environmental Liens or Activity and Use Limitations (AULs)*

During the county record review no environmental liens or activity and use limitations were discovered for the subject property and none are known to exist. No activity and use limitations or engineering controls were listed for the subject property in the DEQ records.

#### *4.3 Specialized Knowledge or Experience of User*

The user of this report is the City of Hartshorne and the DEQ Site Cleanup Assistance Program (SCAP). Previously the Oklahoma Military Department (OMD) performed a Limited Environmental Baseline Assessment (LEBA) on the subject property. This report was provided to the DEQ before the Phase I site reconnaissance was conducted. The LEBA documented the findings of the OMD on October 5, 2005 (see Appendix I). The LEBA identified the following as recognized environmental conditions: Petroleum and other liquids (POLs), floor stripper, and cleaning supplies.

#### *4.4 Actual Knowledge of User*

This is outside the scope of this assessment. The DEQ is unaware of any environmental liens or AULs associated with the property.

#### *4.5 Commonly Known or Reasonably Ascertainable Information*

This is outside the scope of this assessment. The DEQ searched available State and Federal records and found no documented spills or environmental cleanups on the subject property.

#### *4.6 Valuation Reduction for Environmental Issues*

This is outside the scope of this assessment.

#### *4.7 Owner, Property Manager, and Occupant Information*

The subject property is currently owned by the State of Oklahoma and managed by the Oklahoma Department of Environmental Quality. The Oklahoma Military Department allowed the City of Hartshorne to use the facility for the local VFW and women's auxiliary as well as a daycare. The Oklahoma Military Department disconnected utilities to the Armory in November of 2007, therefore the local VFW, women's auxiliary, and daycare will have to temporarily relocate. After the DEQ contractors abate asbestos and lead in the Armory, the deed will transfer to the City of Hartshorne.

#### 4.8 Reason for Performing Phase I

The DEQ performed a Phase I Targeted Brownfield Assessment (TBA) of the facility to determine if any environmental conditions exist on the subject property that need to be addressed prior transfer of ownership. The City of Hartshorne would like to take ownership of the property and use the facility for VFW and women's auxiliary meetings, the boys and girls club, and High School P.E. classes. Before transfer of property can occur the environmental issues associated with the facility must be resolved.

### 5.0 Records Review

#### 5.1 Standard Environmental Record Sources

A regulatory database search was conducted by the DEQ. This search included, at a minimum, those records and distances from the site dictated as appropriate in the ASTM standard. The DEQ performed a review of available federal and state databases to assess whether the subject property or proximate properties were listed as having environmental concerns, which could have an adverse impact on the subject property. The following provides a summary of the databases reviewed.

##### Federal National Priorities List (NPL) Sites within one Mile

There are no NPL sites within one mile of the subject property (Ref. 11).

##### Federal Delisted NPL site list within one-half mile

There are no federal delisted NPL sites within one-half mile of the subject property (Ref. 12).

##### Federal Active Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Sites within one-half mile

There are no active CERCLIS sites within one-half mile of the subject property (Ref. 12).

##### Federal Archived CERCLIS (No Further Remedial Action Planned) Sites within one-half mile

There are no archived CERCLIS sites within one-half mile of the subject property (Ref. 12).

##### Federal RCRA CORRACTS Facilities List within one mile

There are no RCRA CORRACTS facilities within one mile of the subject property (Ref. 13).

RCRA non-CORRACTS TSD Facilities List within one-half mile

There are no RCRA non-CORRACTS TSD facilities within one mile of the subject property (Ref. 14 and 15).

Federal RCRA Generators List (property and adjoining properties)

There are no RCRA Generators on the property and adjoining properties (Ref. 16 and Appendix E).

Federal Institutional Control/Engineering control registries (property only)

There are no institutional controls or engineering controls (IC/EC) for the subject property according to the county land records at the Pittsburg County Courthouse. This site is not listed in any federal IC/EC registries currently under development.

Federal ERNS list (property only)

The subject property is not listed on the federal ERNS list (see Appendix E).

State and Tribal lists of hazardous waste sites identified for investigation or Remediation (property only)

The subject property is being investigated by the Oklahoma Department of Environmental Quality under the Site Cleanup Assistance Program. If site conditions warrant, the environmental contamination will be cleaned up. Tribal environmental records were not consulted during this investigation.

State- and Tribal-equivalent NPL within one mile

The State of Oklahoma does not have a state Superfund Law; therefore, there are no State equivalent NPL sites in the area. Tribal environmental records were not consulted during this investigation.

State- and Tribal-equivalent CERCLIS within one-half mile

The State of Oklahoma does not have a state Superfund Law; therefore, there are no State equivalent NPL sites in the area. Tribal environmental records were not consulted during this investigation.

State and Tribal Landfill and/or Solid Waste Disposal Sites within one-half mile

There are no State or Tribal Landfills and/or solid waste disposal sites within one-half mile of the subject property. The closest active municipal landfill is located

approximately 8 miles Northwest of Hartshorne (Ref. 15). Tribal environmental records were not consulted during this investigation.

State and Tribal Leaking Underground Storage Tank (LUST) List within one-half Mile

The following Table shows Underground Storage Tanks that are within one-half mile of the subject property. The Table also indicates if a particular tank has a LUST case. The list was obtained from the Oklahoma Corporation Commission.

Name	Location	# Tanks	Tank Status	LUST case?
Plaza Superette	12th and Pennsylvania Ave	?	Out of use	No
Texaco Station	Across St. from Baptist Church	1	Out of use	Yes
C&P Express	P.O. Box 1003	3	In use	No
Goodwin's One Stop	1000 Pennsylvania Ave	3	In use	No
Municipal Government	1101 Pennsylvania Ave	3	Out of use	No
Flash-n-Dash	1131 Pennsylvania Ave	2	In use	Yes
Watts #1 Station	1517 Pennsylvania Ave	2	In use	No
National Bank	1027 Pennsylvania Ave	4	Out of use	No
Carl's	1039 E. Pennsylvania Ave	?	Out of use	No

Tribal environmental records were not consulted during this investigation.

State and Tribal registered Storage Tank Lists (property and adjoining properties)

One tank was registered with the Oklahoma Corporation Commission. No tanks were found on adjoining properties. The subject property had an UST on the property from January 1966 until April 1989, when it was removed from the ground. The tank was a 1,000 gallon gasoline storage tank. See Appendix B for more information regarding the UST on the subject property. Tribal environmental records were not consulted during this investigation.

State and Tribal Institutional Control/Engineering control Registries (property only)

No institutional controls or engineering controls were found for the subject property during the title search at the Pittsburg County Courthouse. DEQ has not information regarding ICs at this facility in the data accumulated for its IC database, which is under construction. Tribal environmental records were not consulted during this investigation.

State and Tribal Voluntary Cleanup Sites and Brownfield Sites within one-half Mile

The closet Voluntary Cleanup site to the subject property is located about 1.5 miles away. The site name is OAI Electronics, Inc. and it is located at 300 Jupiter Street (Ref. 17). No

Brownfields sites are located within one-half mile of the subject property (Ref. 18). Tribal environmental records were not consulted during this investigation.

### *5.2 Additional Environmental Record Sources*

No material safety data sheets were found at the subject property during the site visit. The Federal Emergency Management Agency (FEMA) floodplain maps were consulted to determine if the subject property lies in a flood prone area. The FEMA map indicates that the subject property is not located within the 100 year or 500 year flood plain. The City of Hartshorne is located in the heart of coal mining country. Therefore, Mike Sharp from the Oklahoma Conservation Commission was consulted to determine if the ground beneath the subject property is undermined. Mike Sharp consulted coal mine maps and determined that no mining occurred beneath the subject property. See Appendix M for the FEMA floodplain map and for the email from Mike Sharp.

### *5.3 Physical Setting Sources*

Physical setting sources were obtained from the USGS 7.5 minute topographic maps, current and past aeriels, the Federal Emergency Management Agency, United States Department of Agriculture Soil Conservation Service, and site visits.

### *5.4 Historical Use Information on the Property*

The National Guard Armory located in Hartshorne, Oklahoma was historically used to further the mission of the Oklahoma Army National Guard (OKARNG). The Hartshorne Armory operated as a center of operations for a military component of the OKARNG. It served as both a training site and storage for materials required by the occupant.

### *5.5 Historical Use Information on Adjoining Properties*

According to Ron Hunt, the adjoining properties to the West and North were always residential, the property to the East has always been used as a public park, and the property to the South has always been a vacant lot. Historical aeriels indicate that in 1939 the area around the subject property was vacant or used for agricultural purposes.

### Aerial Photo Review

Historical aerial photos showing the subject property were reviewed at the Oklahoma Department of Libraries (See Appendix A). The historical aerial photograph that was reviewed was taken in August of 1939. The subject property and adjoining properties appear to be vacant or used for agricultural purposes during that time. Aeriels from 1995 and 2003, which show the Hartshorne Armory and adjacent properties, were also consulted (see Appendix A).

### Zoning/Land Use Records Review

No zoning/land use records were reviewed while conducting this Phase I Targeted Brownfield Assessment.

### Fire Insurance Maps

The 1925 Sanborn Fire Insurance Maps were reviewed to confirm past uses of the site and surrounding properties (Ref. 22). These maps revealed that the subject property being investigated was used as residential property during that time. The maps also revealed that the property to the Northeast of the Hartshorne Armory used to house a lumber yard. Also, about 1 mile Southwest of the Hartshorne Armory there used to be a cement plant.

### Property Tax files

No property tax files were reviewed while conducting this Phase I Targeted Brownfield Assessment.

### City Directories

No city directories were reviewed while conducting this Phase I Targeted Brownfield Assessment.

### Building Department Record

During the site visit on September 14, 2006, Ron Hunt allowed members of the DEQ to view blueprints of the Hartshorne Armory. The blueprints revealed that the roof above the motor pool was constructed of asbestos containing materials (see Appendix G).

### Interviews

Ron Hunt, a former employee of the Oklahoma Army National Guard who served at the Hartshorne Armory as a member and unit administrator for 36 years, was interviewed during the site visit. Information about this interview can be found in Section 7.3.

## **6.0 Site Reconnaissance**

### *6.1 Methodology and Limiting Conditions*

On September 14, 2006, Heather Mallory and Jarrett Keck met with Ron Hunt, a retired 1<sup>st</sup> Sergeant at the Hartshorne Armory. Site reconnaissance consisted of a walk through of the building and its surrounding property. The motor pool, drill floor, storage areas, classroom, offices, outdoor storage building, and other rooms were inspected during this time. The vault was inaccessible during this site visit.

On October 31, 2006, Dustin Davidson and Heather Mallory returned to the Armory to view the vault and inventory military property at the Armory. Details of the sites visits are explained in the following sections.

### *6.2 General Site Setting*

The former vehicle compound area located behind the Hartshorne Armory is surrounded by a fence with a locked gate. A metal cabinet with chemicals was found in the fenced in area during September 14, 2006 the site reconnaissance. All chemicals were removed from the cabinet and inside the Armory on November 3, 2006. A pole mounted transformer is located in front of the Armory. No water or monitoring wells were observed on the property. The Armory receives water from the City of Hartshorne, gas from Center Point Energy, and electricity from PSO. According to Ron Hunt, the former UST was located to the Northeast of the building near the motor pool area. No vent pipes or remains of the former UST were observed during the visit. Roof drains were also observed on the outside of the building.

### *6.3 External Observations*

Behind the Armory lies a concrete parking lot, which served as the vehicle compound. The parking lot has a few cracks running through it but is otherwise in good condition. There is a metal storage cabinet that, according to Ron Hunt, contained petroleum and other liquids for vehicle maintenance as well as several empty fuel containers. It was confirmed by DEQ personnel that all fuel containers were empty. In front of the Armory electrical lines and a ditch run parallel to the street. A pole mounted transformer, with no signs of leakage, was observed in front of the Armory as well. No seeps or stains were observed on the outside of the building, in the ditch, or in the soil on the subject property.

### *6.4 Internal Observations*

A couple minor roof leaks were observed inside the property. However, these roof leaks have been repaired. A spill was observed in the supply room, it consisted of a black substance (see Appendix H for photograph). A stain on the floor of the motor pool was observed near a 5 gallon bucket used for used motor oil (see Appendix H). Several chemicals were observed in the Armory. A complete list is provided in Appendix N. These chemicals were removed from the Armory by a DEQ contractor on November 3, 2006 Suspect ACM were observed during the site visit. Possible ACM consisted of pipe wrap, 9x9 floor tile, ceiling tile, heating flues, and roof above drill floor and motor pool.

## **7.0 Interviews**

### *7.1 Interviews with Past and Present Owners of the property*

The property is currently vacant and was owned by the State of Oklahoma and managed by the Oklahoma Military Department during the time of the site reconnaissance. The DEQ is the current owner of the property; after all cleanup activities have been performed the deed will transfer to the City. The DEQ has had several interviews regarding environmental and safety issues at the armories, with various employees of the military department. Colonel James Peck, Chuck Reveille, Major Joe Merkle, and Richard Brooks were among the individuals that the DEQ has spoken with. The OMD provided a Limited Environmental Baseline Assessment (see Appendix I) of the property to the DEQ, and the DEQ was able to review the OMD files on the indoor firing range.

### *7.2 Interviews with Key Site Manager*

The State of Oklahoma owns the property for the benefit of the Army National Guard. Various employees with OMD are responsible for managing the health and safety and the environmental issues at the armories. Major Joe Merkle was interviewed regarding health and safety issues involving asbestos and lead and Colonel James Peck and Richard Brooks were interviewed regarding the environmental issues at the Armory.

### *7.3 Interviews with Operators and Occupants of the property*

Ron Hunt, former unit administrator of the Hartshorne Armory, was interviewed about the operations that took place during the Army National Guard occupation of the building. Ron Hunt retired from the Army National Guard after 36 years of service. During that time he obtained the rank of 1st Sergeant and served as Unit Administrator. As Unit Administrator he was in charge of all the incoming enlistments, vehicles, and payrolls. Ron Hunt has extensive knowledge of the operations and use of the Hartshorne Armory.

On September 14, 2006 and October 31, 2006, site visits and interviews were conducted with Ron Hunt. Ron Hunt was also contacted by phone on September 20, 2006 and October 18, 2006, regarding additional questions.

Mr. Hunt was very knowledgeable about the Hartshorne Armory. The following information was relayed by Ron Hunt during the walk-through of the property.

- The Armory is on City water, City sewer, and Center Point natural gas
- The property that the Armory was built on was a vacant lot before the Armory was built
- The Armory closed about 6 years ago

- During operation the Armory stored weapons and ammunition as needed.
- In 1986, the 1,000 gallon UST was removed along with the associated pump and vent pipes
  - The UST leaked water some (source of water unknown)
  - The former site of the UST is now a parking lot
- No cisterns, above ground storage tanks, sumps, or impoundments have ever been present on the property
- Adjoining properties
  - Residential to the West and North
  - Public swimming pool, rodeo ground, and baseball field to the East
  - There is a vacant lot to the South
- The property to the South of the Armory is owned by the Armory and has been made into a park
- No air emissions or wastewater discharges ever occurred on the property
- No monitoring wells, stained soils, seeps, oil and gas exploration, ground or surface water contamination, farm wastes, or discharges from adjacent properties have ever occurred on the property
- The pole mounted transformer located in front of the property near the ditch, was changed out in the late 1980's
- The drill hall and motor pool were part of the original Armory. At a later date the rest of the Armory was added on.
  - The drill hall used to have offices and a latrine in the Southeast corner. These offices and latrine have since been torn down and the drill hall is now one room.
- The VFW currently uses the classrooms, orderly room, offices, and kitchen.
- There was a minor roof leak, separation from top beams, and settling in one of the offices near the orderly room. There was also a minor roof leak in the South classroom area.
  - The roof has since been repaired by OMD

- Several of the windows have been broken out in the supply room and training room
- The drop ceiling was installed in the training room in 1991 or 1992. There is no other drop ceiling above the current drop ceiling.
- The central heating unit is housed in the storage room.
- Outside, in the paved vehicle compound near the storage building is where vehicles were washed and serviced. No stains were observed in this area.
- The following items belong to the Oklahoma Military Department:
  - Supply room
    - All items in this room belong to the OMD including the shelving, cleaning/housekeeping supplies, and military items
  - Orderly room
    - Desks
  - Vault
    - Shelving
  - Supply room
    - All items in this room belong to the OMD including supplies, shelving, batteries, paint, and chemicals
  - Training room
    - Desks, room vault, and all materials belong to OMD
  - Class room 1
    - Desks, chairs, and chalk board belong to OMD
    - Everything else belongs to VFW
  - Storage room and mess supply
    - Old food, cleaning supplies, and shelving belong to OMD
  - Drill floor
    - All lockers and contents inside the locker belong to OMD
    - All other items belong to children's daycare
  - Motor pool, storage areas, and storage above motor pool

- Mower, weed trimmer, motor oil, various chemicals, heaters, shelving, and file cabinets belong to OMD.
- All items in the storage area above the motor pool belong to the OMD
- All other items belong to children's daycare
- Outside storage shed
  - All chemicals along with the storage shed belong to OMD

#### *7.4 Interviews with State and/or Local Government Officials*

The Mayor of Hartshorne, Caroline Trueblood, was contacted and had limited knowledge of the Armory operations. She referred me to Ron Hunt regarding questions about the Armory. OMD personnel were interviewed regarding health and safety and environmental issues. Colonel James Peck, Chuck Reveille, Major Joe Merkle, and Richard Brooks were among the individuals that the DEQ has spoken with.

#### *7.5 Interviews with Others*

No interviews were conducted with anyone else other than Ron Hunt and OMD personnel.

### **8.0 Findings**

The following findings were noted during the site reconnaissance and record review. One 1,000 gallon UST that held gasoline was installed onsite in January of 1966. The tank was made of asphalt coated or bare steel and had galvanized steel piping. The UST was used to refuel vehicles at the Armory. The UST was removed from the ground on April 13, 1989. During the time that the UST was removed the Oklahoma Corporation Commission didn't require sampling of hydrocarbons in the soil or groundwater surrounding the UST. See Appendix B for available documentation of this closure. According to Ron Hunt, the area where the UST resided is now covered by a parking lot. Ron Hunt also mentioned that the UST leaked water, but was not aware of it leaking fuel (Ref. 7). It can be assumed that the tank or its piping was not sound.

The IFR at the Hartshorne Armory is not a traditional firing range with a sand trap. The Old Motor Pool used to be one room before the storage areas were added. The firing range encompassed the entire Motor Pool. The IFR was located in the South wall of the motor pool and consisted of targets and a hopper that collected bullet casings. The bullet shrapnel was swept up by members of the National Guard unit occupying the facility. Some bullets and shrapnel may be imbedded in the wall due to evidence of bullet holes. The hopper and targets are no longer in the Armory. The only evidence of the IFR activities is the bullet holes in the wall of the storage room. Due to the IFR, activities

there is potential for lead dust from gun shot residue (GSR) to be present in the Old Motor Pool storage area and any rooms that GSR might be tracked via footwear or articles of clothing.

During the site visit to the Armory, asbestos samples were collected by the DEQ under separate funding (State funding). The following details the sample location and material as well as the corresponding results. Marshall Environmental Management also collected asbestos samples, per DEQ request, under separate funding. Complete analysis results for DEQ and Marshall Environmental Management are located in Appendix F.

<b>Sample #</b>	<b>Location</b>	<b>Material</b>	<b>Results</b>
TR-1	Training Room	Ceiling panel	Asbestos not present
OR-2	Orderly Room	9X9 floor tile mastic	6% Chrysotile
OR-2	Orderly Room	9X9 floor tile	3% Chrysotile
CR-3	Classroom	12X12 floor tile	Asbestos not present
CR-3	Classroom	12X12 floor tile mastic	<1% Chrysotile
SR-5	Storage Room	Inside pipe wrap	30% Chrysotile
SR-6	Storage Room	Outside pipe wrap	Asbestos not present
SR-7	Storage Room	Older pipe wrap	Asbestos not present
SR-7	Storage Room	Older pipe wrap - paper	25% Chrysotile
SR-7	Storage Room	Older pipe wrap - insulation	Asbestos not present

As built drawings for the Armory noted that the roof above the motor pool contained cement asbestos material. During the site visit DEQ personnel photographed these blueprints (see Appendix G) as documentation that this material contains asbestos. This material was also observed above the drill floor during the site visit.

Due to the age of the facility, there is a potential for lead paint to be present on internal and external painted surfaces on the subject property.

The LEBA documented the findings of the OMD on October 5, 2005 (see Appendix I). This report was provided to the DEQ before the Phase I site reconnaissance was conducted. The LEBA identified the following as recognized environmental conditions: Petroleum and other liquids (POLs), floor stripper, and cleaning supplies.

During site reconnaissance, it was noted that various types of chemicals are stored within the Armory and in a storage building behind the Armory. These chemicals could potentially be harmful to humans or the environment if improperly handled. Some of the chemicals included various household cleaning agents, magnesium batteries, dry cell 6 volt batteries, motor oil, hydraulic fluid, gun cleaning solvent, floor stripper, boxes of asbestos floor tile, ink for ink pads, PVC primer and cement, oil-based floor cleaner, and lens cleaning solution (see Appendix N). See photographs in Appendix H for pictures of

most of the items listed. These chemicals were removed by a DEQ contractor on November 3, 2006.

## **9.0 Opinion**

Based on the findings of this assessment, it is the opinion of the DEQ that additional investigation be conducted to evaluate areas of the property that may need future clean-up and remediation.

Areas of additional evaluation consist of the following:

- Indoor firing range for contamination of lead
- All painted surfaces for lead content in paint
- All friable ACM should be removed

## **10.0 Data Gaps**

The fact that the UST was unsound was not documented in the OCC files and no soil samples were taken during the tank removal, therefore this is considered a data gap. The lack of tribal environmental information is another data gap in this report.

## **11.0 Conclusions**

A Phase I Targeted Brownfield Assessment in conformance with the scope of work and ASTM Practice E 1527-05 was performed on the subject property. This assessment revealed recognized environmental conditions that may need additional investigation and remediation of the subject property before the property transfer can take place. The information provided in this assessment is to assist the City of Hartshorne in its redevelopment planning as well as meet the All Appropriate Inquiry requirement of the landowner liability protections under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, better known as Superfund – Ref. 2), as provided in the Small Business Relief and Brownfields Revitalization Act of 2002 (Public Law 107-118, Subtitle B – Ref. 3).

## **12.0 Deviations**

Sampling of asbestos, lead paint, and lead dust were taken during the site visit. Normally sampling is not included in a Phase I Environmental Assessment but was in this case. No tax records, city directories, zoning records, or tribal information were reviewed. All other requirements of E 1527-05 were adhered to.

## **13.0 Additional Services**

No additional services were provided in this Phase I Targeted Brownfield Assessment other than the lead and asbestos results described in Section 8.0, “Findings” and the removal of the chemicals inside and outside of the building. In addition to the Phase I Targeted Brownfield

Assessment, the DEQ will assist the city with removal of the environmental contaminants and ensure that the property is ready for redevelopment.

#### **14.0 References**

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### ***15.0 Signature(s) of Environmental Professional(s)***

See page two for signatures of environmental professionals.

### ***16.0 Environmental Professional(s) Statement***

See page two for environmental professionals statement.

### ***17.0 Appendices***

Appendix A - Topographic Map, Aerials, and Fire Insurance Maps

Appendix B – UST records

Appendix C – Map of RCRA Generators, Landfills, and TSD sites

Appendix D – Map of Air Emission Permitted Facilities and Public Discharge Permitted Areas

Appendix E - Regulatory Records Documentation

Appendix F – Laboratory results

Appendix G – As Built Drawings and photograph of roof

Appendix H – Photographs of the subject property

Appendix I – Limited Environmental Baseline Assessment (includes site map)

Appendix J – Map of pipelines near Hartshorne

Appendix K - Interview Documentation

Appendix L – Letter from City of Hartshorne

Appendix M – Flood Insurance Map and email from OK Conservation Commission

Appendix N – Email documenting chemicals onsite

Appendix O – Qualification(s) of Environmental Professionals

**APPENDIX A**



Figure 2: 1939 Aerial of Hartshorne, OK



**Figure 3: Present Day Aerial**



Miles  
0 0.025 0.05 0.1 0.15 0.2

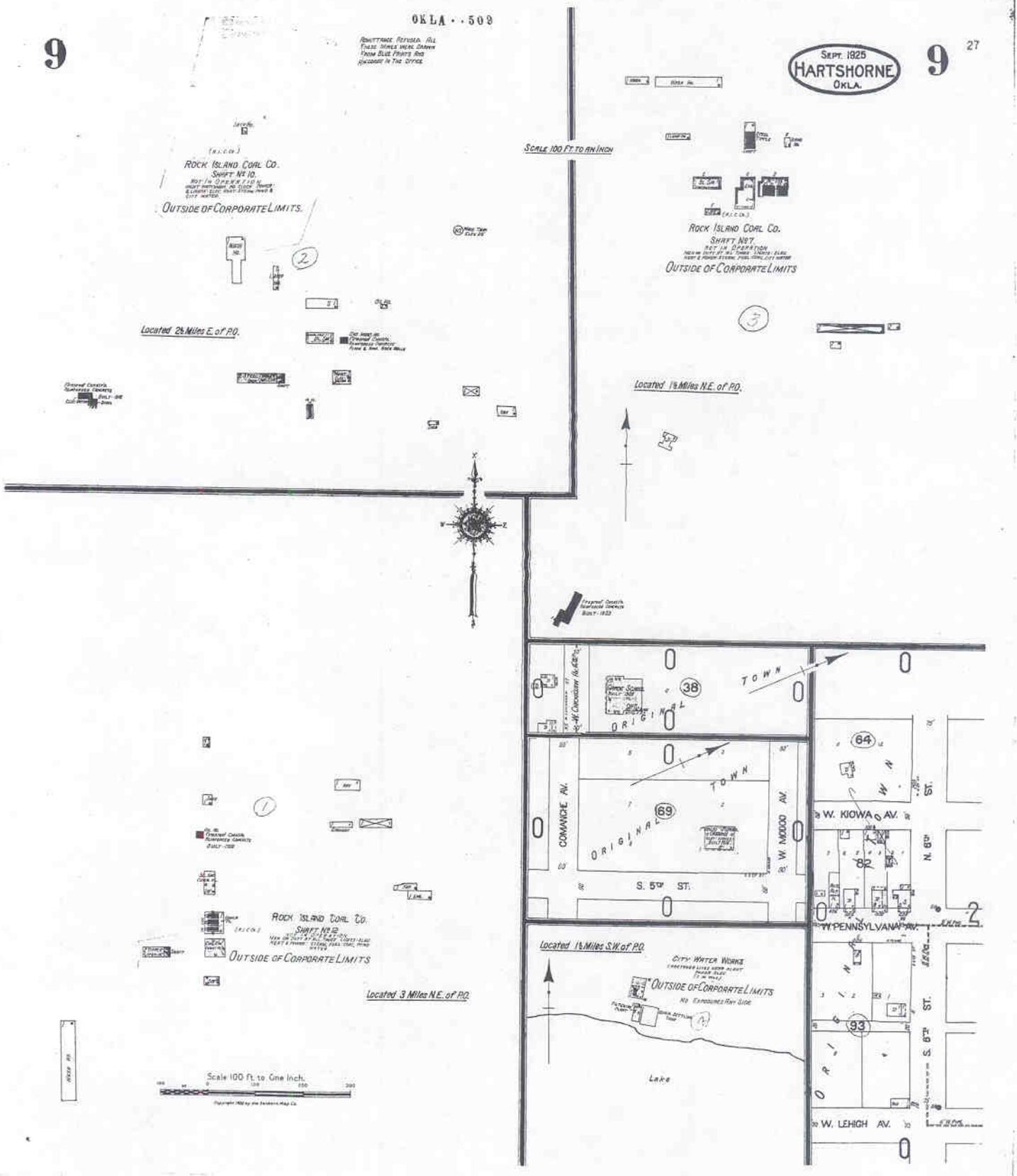


Oklahoma Department of Environmental Quality





Figure 6: 1925 Sanborn Map



**APPENDIX B**

EXHIBIT 2 REPORT

OK16097001

Installation Name: HARTSHORNE ARMORY  
 Street Address: 305 S 12TH  
 City: HARTSHORNE  
 Congressional District:  
 Abbreviation:  
 Local Information:

FFID: OK-211840160  
 Property Number: 40160  
 State: OKLAHOMA

Agency Project Number: OK16097001  
 Project Name: UNDERGROUND STORAGE TANK REMOVAL - ARMORY  
 Date of Initial Entry: 7/9/96  
 Reason for Initiation: OTHER  
 P2 Category: Other Hazardous Materials  
 Pillar: Compliance

Multiple Installations: N  
 BSB:

Construction/Work Start: 1/1/97  
 Progress Code: WRK  
 Project Contact Name: JAMES C. PECK  
 Geographic Initiative:  
 Program Area: VEHICLE FUEL 1  
 Other Project ID Type: 56

Must Fund (Y/N): Y  
 Construction/Work Complete: 2/1/97

Earliest FY Start:  
 Activity/Process Type:  
 Regulatory Driver:  
 Baseline Qty Stream:  
 Pollution Reduction:  
 Unit Investment Cost:  
 Unit Recurring Cost:  
 Unit Energy Savings:  
 Breakdown Waste:  
 Breakdown Energy:  
 Breakdown Labor:  
 Breakdown Maint&Oper:  
 Breakdown Material:  
 Breakdown Other:  
 Total Unit Savings:

Latest FY Start:  
 Total Identical Units:

Major Command: ARNG  
 Support Installation:  
 Country: US Zip: 74547-0370  
 Ownership Type: SOSO  
 Installation Type: ADMINISTRATIVE  
 Subcommand:  
 Date of Last Revision: 11/5/97  
 Law/Reg Area: RCRI  
 Environmental Category: USTS  
 Compliance Status: ESDP  
 Project Assessment: H  
 Class: 1  
 Design Plan Completion: 11/1/96  
 Final Compliance Required: 12/1/98  
 Year Funding Required: 1997  
 Contact Telephone: (405)425-8521  
 Total Cost Estimate: \$ 40,345  
 Project Type: Other  
 Other Project ID:  
 Command Priority: 1998  
 Major Pollutant:  
 Years Economic Life:

FY 1997  
 Budget Code 515856.50  
 Fund Code: OMNG(VENC)  
 Required \$0  
 Prg/Bdgt \$0  
 Obligated \$345

FY 1998  
 Budget Code 515856.50  
 Required \$40,000  
 Prg/Bdgt \$40,000  
 Obligated \$0

Narrative:  
 STATE TANK AT ARMORY OUT OF COMPLIANCE AND WILL NEED TO BE REMOVED IN ACCORDANCE WITH OKLAHOMA ADMINISTRATIVE CODE 165-25-3-64, STATE TANK NUMBER NK, 1000 GAL. CAPACITY, ABANDONED 5 JUNE 1987. ADDITIONAL FUNDING MAY BE REQUIRED IF TANK FOUND TO BE LEAKING. FAILURE TO FUND MAY RESULT IN NOVUS/LITIGATION AND OR POSSIBLE FINES.  
 Comments:

Facility ID: 6105824 Facility Name: DET 1 CBT SPT CO 1/180 FA

**I. Ownership of Tank(s)**

Owner ID:   
Name:   
Street:   
City:  County:   
State:  ZIP:  -   
Phone:  Fax:   
Contact:  (if other than Owner)  
Taxpayer ID:  S.S. No:

Comments:

**Type of Notification**

New:  Amended:  Closure:

Facility ID:

Date Received:

Facility Operator:  ,   
*Last First*

**II. Location of Tank(s)**

Name:   
Street:   
City:  County:   
State:  ZIP:  -   
Latitude: °  '  " Longitude: °  '  "  
Phone:

Comments:

P;D RECPRD (TANK REMOVAL)  
BEING RE-ENTERED

**III. Type of Owner**

No Longer Used

**IV. Indian Lands**

Indian Lands:  Tanks are located on land within an Indian Reservation or on other trust lands.

Tribe Owned:  Tanks are owned by native American nation or tribe.

Tribe:

Facility ID: 6105824 Facility Name: DET 1 CBT SPT CO 1/180 FA

Latitude: :34<sup>o</sup> 50' 47.68" Longitude: :95<sup>o</sup> 33' 43.17"

### IX. Description of Underground Storage Tanks

#### 1. Status of Tank

Federally Regulated: <input checked="" type="checkbox"/>	Compartment: <input type="checkbox"/>	AST: <input type="checkbox"/>	Facility ID: 6105824
Amended Information: <input checked="" type="checkbox"/>	Manifolded: <input type="checkbox"/>	No Fee: <input type="checkbox"/>	Tank ID: 001

Tank Status: Permanently Out of Use      Comments:

Rcvd:

Alt Tank ID: 1

#### 2. Date of Installation (month/year)      3a. Tank Type      3b. Est. Total Capacity (gallons)

Date Installed: Jan 1966      Tank Type: Public-State      Tank Capacity: 1,000

#### 4. Material of Construction

Enter material of construction for the tank. You may supplement primary description with one of the Secondary Options.

Tank Material: Asphalt Coated or Bare Steel      Comments:

Sec. Tank Option: None

Check if tank has been repaired:

Check if tank is used for emergency generator:

#### 5. Piping (Material)

Enter material of construction for the piping. You may supplement primary description with one of the Secondary Option

Piping Material: Galvanized Steel      Comments:

Sec. Piping Option: None

#### 6. Piping (Type)

Type of Pipe: Not Listed

Check if piping has been repaired:

#### 7. Substance Currently or Last Stored in Greatest Quantity by Volume

Substance: Gasoline      Comments:

CERCLA No.:

Description:

Facility ID: 6105824

Facility Name: DET 1 CBT SPT CO 1/180 FA

**V. Type of Facility**

No Longer Used

Comments:

**VI. Contact Persons in Charge of Tanks**

Name: L HARWELL, RICHARD

Address: 3501 MILITARY CIRCLE

Phone: (405) 427-8371

Fax:

Contact Type:  Owner  Operator  CA Contact  Manager  Outreach  Location Contact  
 RP  Fee Contact  Other ENVIRONMENTAL ENGINE

**VII. Financial Responsibility**

Facility meets financial responsibility requirements:

Check all that apply:

Self-Insured:  Letter of Credit:   
Insurance:  State Fund:   
Risk Retention Group:  Trust Fund:   
Guarantee:  Other:   
Surety Bond:  Not Listed:

Comments:

**VIII. Certification**

Name:

Title:

Date:

**MARSHALL ENVIRONMENTAL MANAGEMENT  
ASBESTOS, LEAD-BASED PAINT, AND LEAD DUST  
SAMPLE RESULTS**

Facility ID: 6105824 Facility Name: DET 1 CBT SPT CO 1/180 FA

**X. Tanks Out of Use, or Change in Service**

**1. Closing of Tank**

NOTE: This section not available unless tank status at top of form is set to a form of closure.

Date Last Used: 01 Jun 1978

Closure Status: Tank removed from ground

Date Closure Rcvd.:

Inert Fill: None

Date Closed: 13 Apr 1989

**2. Site Assessment**

Site Assessment Completed:

Evidence of a Leak Detected:

**XI. Certification of Compliance**

**1. Installation**

Installer certified by tank & piping manufacturer:

Manufacturer's installation checklists have been completed:

Installer certified or licensed by implementing agency:

Another method allowed by State agency:

Installation inspected by registered engineer:

Comments:

Installation inspected & approved by implementing agency:

**2. Release Detection**

	Tank/Pipe	
Manual tank gauging:	<input type="checkbox"/>	<input type="checkbox"/>
Tank tightness testing:	<input type="checkbox"/>	<input type="checkbox"/>
Inventory control:	<input type="checkbox"/>	<input type="checkbox"/>
Automatic tank gauging:	<input type="checkbox"/>	<input type="checkbox"/>
Vapor monitoring:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Groundwater monitoring:	<input type="checkbox"/>	<input type="checkbox"/>
SIR:	<input type="checkbox"/>	<input type="checkbox"/>
Interstit. Dbl-wall Monitor:	<input type="checkbox"/>	<input type="checkbox"/>
Interstit. Sec. Con. Monitor:	<input type="checkbox"/>	<input type="checkbox"/>

	Tank/Pipe	
Auto line leak detector:	<input type="checkbox"/>	<input type="checkbox"/>
Line tightness testing:	<input type="checkbox"/>	<input type="checkbox"/>
Other method:	<input type="checkbox"/>	<input type="checkbox"/>
Deferred:	<input type="checkbox"/>	<input type="checkbox"/>
Not listed:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

**3. Spill, Overfill, and Corrosion Protection**

Overfill Protected:

Spill Protected:

CP Met on Tank & Piping:

Check if deliveries limited to 25 gallons at a time (e.g., used oil tanks)

**Installer Oath:**

Name:

Company:

## Facility Summary for 6105824

**Owner Name and Address:** OKLAHOMA MILITARY DEPT (OKDE-ENV) 3501 MILITARY CIRCLE Oklahoma City OK Owner Phone: (405) 228-5363  
 73111

Facility ID	Location Name	Location Street Address	Location City	Zip	Facility Phone
6105824	DET 1 GBT SPT CO 1/180 FA	307 S 12TH	Hartshome	74547	

Tank ID / AST	Installed Age	Product Capacity	Tank Mat'l of Construction Secondary Option	Piping Material Secondary Option	Piping Type Exempt	Tank Release Detection	FR Met
1	No	1/1/1966	Gasoline	Asphalt Coated or Bare Steel	Galvanized Steel	Not Listed	No
	Permanently Out of Use	40	1,000	None	None		No

### Tank/Piping Release Detection Codes

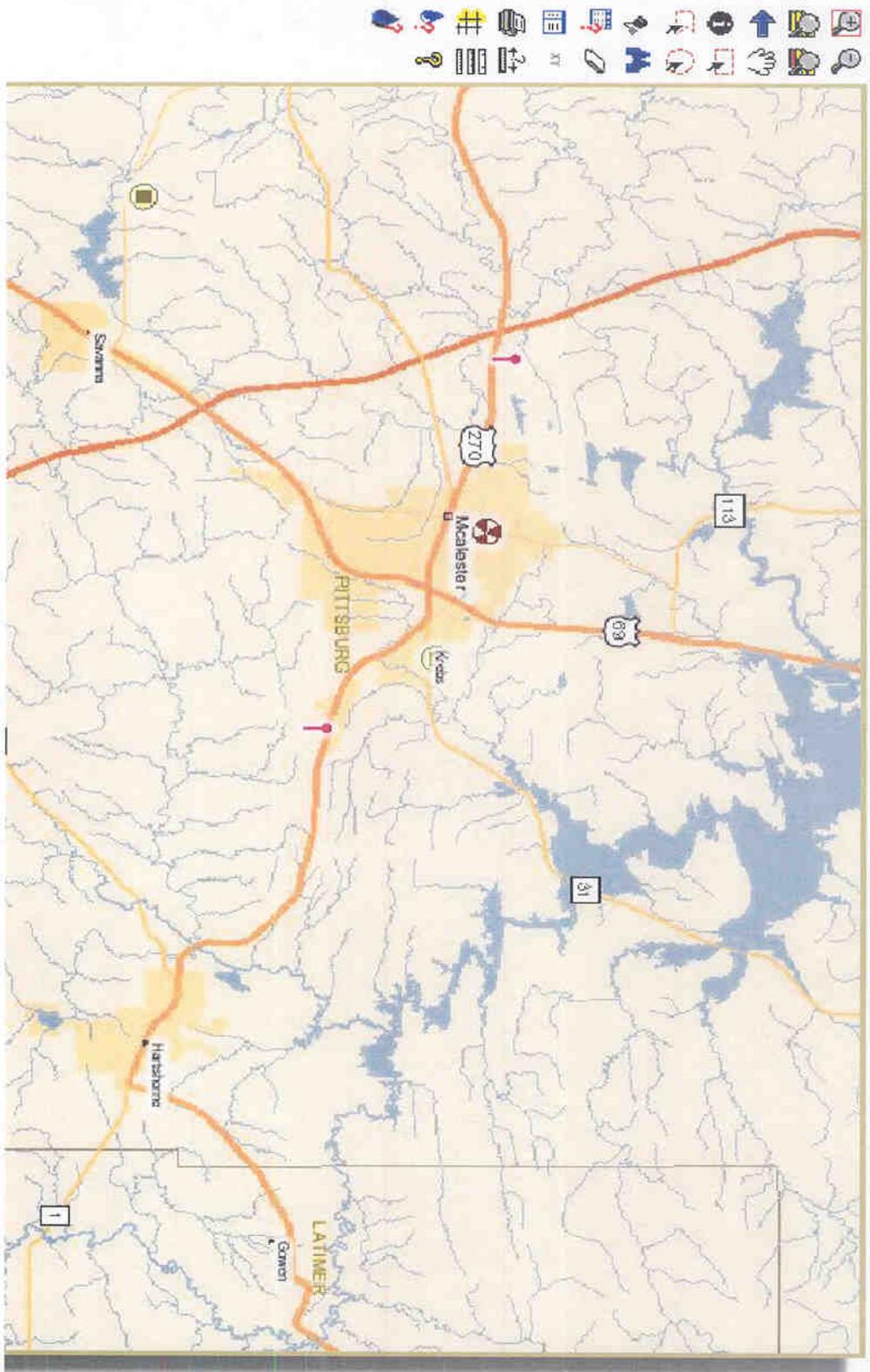
- A** Manual Tank Gauging
- B** Tank/Line Tightness Testing
- C** Inventory Control
- D** ATG/Auto Line LD
- E** Vapor Monitoring
- F** GW Monitoring
- G** Interstit. Dbl-Wall Monitor
- H** Interstit. Sec. Con. Monitor
- I** SIFR
- J** Other Methods
- K** Deferred
- L** Not Listed

**APPENDIX C**



# Oklahoma Department of Environmental Quality

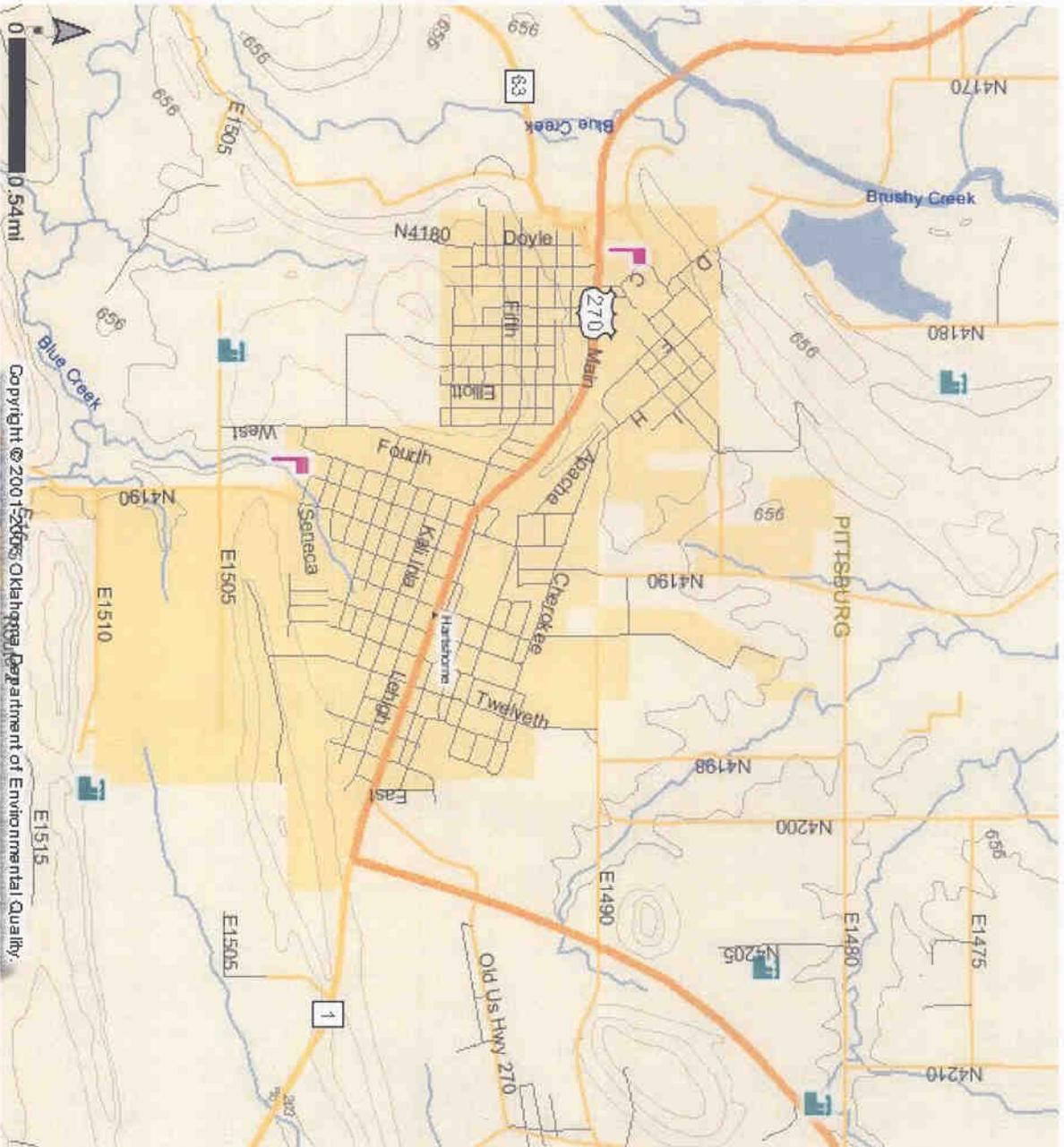
# GIS DATA V



- Legend
- Active Municipals Landfills
- Large Quantity Generators
- Superfund Sites
- Treatment Storage / Disposal
- Cities**
  - Major Cities
  - Cities, 30,000 - 100,000
  - Towns, 10,000 - 30,000
  - Small Towns, 2,500 - 10,000
- Other Places, 1,250
- States
- 3D Lakes
- Highways**
  - Interstate
  - US Highways
  - State Highways
  - Major Roads
  - Major Highways
  - Highways

**APPENDIX D**

# Hartshorne, Oklahoma



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-  Legend
-  Air Quality Permitted Facilities
-  PDES Discharges

**APPENDIX E**



## STANDARD QUERY RESULTS

Need Help?

Select a report number from the ACTION Column to view the report details.

Action	NRC Report#	Incident Date	Street	Location County	City	State	ZIP	Suspected Responsible Company	Type Of Incident	Medium Affected	Material Name
View	99482	12/12/1991	HWY 1	LATIMER	HARTSHORNE	OK	(null)	BIG K CONSTRUCTION	MOBILE	WATER	TAC OIL (ASPHALT)
View	108760	02/01/1992	NORTH OF HARTSHORNE,OKBY THE ARCO YARD	PITTSBURG	HARTSHORNE	OK	(null)	SUPERIOR PIPE INSPECTION	VESSEL	WATER	NAPHTHA: COAL TAR
View	368637	11/22/1996	WEST OFF ACADEMY DRRIG "PROSPECTOR 2"	PITTSBURG	HARTSHORNE	OK	745479712	(null)	FIXED	WATER	HYDRAULIC OIL
View	368637	11/22/1996	WEST OFF ACADEMY DRRIG "PROSPECTOR 2"	PITTSBURG	HARTSHORNE	OK	745479712	(null)	FIXED	WATER	OIL: CRUDE
View	368637	11/22/1996	WEST OFF ACADEMY DRRIG "PROSPECTOR 2"	PITTSBURG	HARTSHORNE	OK	745479712	(null)	FIXED	WATER	SALTWATER
View	605297	05/20/2002	NORTHWOOD EDITTONOFF OF ACADEMY DRIVE	PITTSBURG	HARTSHORNE	OK	745479712	VANSTAR RESOURCES	FIXED	AIR	POISONOUS GAS
View	608120	06/02/2002	HCR 74 BOX 85-5	PITTSBURG	HARTSHORNE	OK	74547	BRITISH PETROLEUM AMERICA	FIXED	AIR	CARBON MONOXIDE
View	608120	06/02/2002	HCR 74 BOX 85-5	PITTSBURG	HARTSHORNE	OK	74547	BRITISH PETROLEUM AMERICA	FIXED	AIR	HYDROGEN SULFIDE
View	609420	06/07/2002	DRILLING RIGHCR 74 BOX	PITTSBURG	HARTSHORNE	OK	74547	BP	FIXED	AIR	HYDROGEN

View	620109	08/15/2002	85-5	3 MILES NORTH OF THE HARTSHORNE ON ADAMSON ROAD.	PITTSBURG	HARTSHORNE	OK	(null)	BP AMERICAN PETROLEUM COMPANY	PIPELINE	AIR	SULFIDE NATURAL GAS
------	--------	------------	------	--	-----------	------------	----	--------	-------------------------------	----------	-----	---------------------

Row(s) 1 - 10 of 10

Elapsed Time 1.51 second(s)

[NEW Query](#)



**APPENDIX F**

**DEQ ASBESTOS SAMPLE RESULTS**



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

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

Re: QuantEM ID 142085

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

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

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

Respectfully,  
QuantEM Laboratories, LLC.





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

### Polarized Light Microscopy Asbestos Analysis Report

QuantEM Lab No. 142085	Client:	State of Oklahoma
Account Number: B486		DEQ Land Protection
Date Received: 09/20/2006		Attn: Ray Roberts
Received By: Barbara Holder		707 N. Robinson
Date Analyzed: 09/25/2006	Project:	Oklahoma Citv. OK 73102
Analyzed By: Stacey Holder	Project Location:	Hartshorne Armory
Methodology: EPA 600	Project Number:	Hartshorne, OK
		N/A

QuantEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)
001	TR-1	Homogeneous	Gray Ceiling Tile	Asbestos Not Present	NA
002	OR-2	Layered	Tan Floor Tile	Asbestos Present Chrysotile 3	Cellulose <1
002a			Brown Mastic	Asbestos Present Chrysotile 6	NA
003	CR-3	Layered	Gray Floor Tile	Asbestos Not Present	Cellulose 10
003a			Yellow Mastic	Asbestos Present Chrysotile <1	Cellulose 2
004	SR-5	Homogeneous	Gray Pipe Wrap	Asbestos Present Chrysotile 30	Cellulose 5
005	SR-6	Homogeneous	Tan Pipe Wrap	Asbestos Not Present	Cellulose 30

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

QuantEM is a NVLAP accredited TEM and PLM laboratory (Lab Code: 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40CFR Ch. 1 (1-1-87 ed.) Part 763, Appendix A to Subparts E and F]. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.



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

### Polarized Light Microscopy Asbestos Analysis Report

Quantem Lab No. 142085

Account Number: B486

Date Received: 09/20/2006

Received By: Barbara Holder

Date Analyzed: 09/25/2006

Analyzed By: Stacey Holder

Methodology: EPA 600

Client:

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

Project:

Hartshorne Armory

Project Location:

Hartshorne, OK

Project Number:

N/A

Quantem Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)
006	SR-7	Layered	Gray Pipe Wrap	Asbestos Not Present	Cellulose 25
006a		Layered	Gray Paper	Asbestos Present Chrysotile 25	Cellulose 5
006b			Gray Insulation	Asbestos Not Present	Cellulose 20

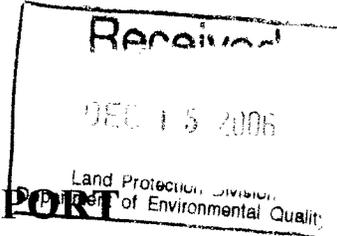
Stacey Holder, Analyst

9/25/2006  
Date of Report

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

Quantem is a NVLAP accredited TEM and PLM laboratory (Lab Code: 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40CFR Ch. 1 (1-1-87 ed.) Part 763, Appendix A to Subparts E and F]. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.





# ASBESTOS INSPECTION REPORT

## *HARTSHORNE ARMORY*

305 S. 12<sup>th</sup>, Street

Hartshorne, Oklahoma 74547

October 31, 2006

**Services Provided For:**

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

**Asbestos Inspection Services Provided By:**

*Marshall Environmental Management, Inc.*  
1145 SW 74<sup>th</sup> Street, Building E, Suite 300  
Oklahoma City, Ok 73139  
(405) 616-0401

## TABLE OF CONTENTS

I.	CERTIFICATION	3
II.	LIMITATIONS OF SURVEY	4
III.	EXECUTIVE SUMMARY	5
IV.	REGULATORY REVIEW	6
V.	HISTORICAL OVERVIEW OF ASBESTOS ACTIVITIES	9
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## LIST OF TABLES

Table 1 - Summary of Sampling Data for Samples that were Positive for Asbestos Content

## APPENDIX

ASBESTOS SAMPLING TEST RESULTS

CHAIN OF CUSTODY FORMS

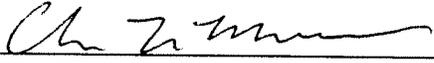
SUMMARY OF ESTIMATED QUANTITIES OF ACM

ARMORY FLOOR PLAN

DIGITAL PHOTO

## I. CERTIFICATION

This is to certify that an Asbestos Inspection was performed at the Hartshorne Armory located at 305 S. 12<sup>th</sup> Street, in Hartshorne Oklahoma for the Land Protection Division of the Oklahoma Department of Environmental Quality on October 31, 2006. The inspection was performed in an attempt to identify building materials considered suspect for asbestos content. This Inspection for friable and non-friable building materials was performed by an Oklahoma State Department of Labor Licensed AHERA Management Planner, Dr. Charles L. Marshall, Ph.D., C.I.H. The contents, conclusions, and recommendations made in this report are believed to accurately depict the site conditions as noted on the date the inspection work was performed.

  
Charles L. Marshall, Ph.D., C.I.H., C.S.P

10/31/06  
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 - #400517 Inspector  
#500396 Management Planner  
#2415 Project Designer  
Oklahoma Department of Labor License - #OKMP-0028 Project Designer  
#OKMP-0246 Management Planner  
#OK-150343 Inspector

AIHA/NIOSH PAT Lab ID #201334

Laboratory Analysis Performed by:  
Marshall Environmental Management, Inc. (AIHA PAT ID# 102334)  
1145 SW 74<sup>th</sup> Street, E-300  
Oklahoma City, OK. 73139

## II. LIMITATIONS OF SURVEY

This Inspection was conducted within the limitations of budgetary constraints, cost, time, and scope and reflects a limited investigation and evaluation. Physical limitations of facility construction may have, in some cases, prevented the complete inspection of hidden or inaccessible building materials and substrates. Inaccessible Asbestos Containing Building Materials (ACM) were not inspected. Locations with high potential for disturbance, or locations presenting a hazard to the inspectors, or the Armory staff or visitors were also not inspected at this time. Additional inspections should be conducted whenever the Owner anticipates conducting demolition or renovation work. Plans for the abatement of friable asbestos should only be developed by an Oklahoma State Department of Labor (ODOL) Licensed Asbestos Project Designer. Additional sampling may be required to support the planning for asbestos abatement work.

Our Investigation was performed using the degree of care and skill ordinarily exercised under similar circumstances by professional consultants practicing in this or similar localities. The findings of this Report are valid as of the date of the investigation. However, changes in the conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation, from the broadening of knowledge, or from other reasons. Professional services have been performed, results 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 based on field inspections and other data presented in this report.

### III. EXECUTIVE SUMMARY

The Oklahoma Department of Environmental Quality (DEQ) Land Protection Division (LPD) requested that the Oklahoma Department of Central Services (DCS) provide a Licensed Asbestos Inspection Firm to evaluate the locations and conditions of Asbestos Containing Materials (ACM) in the Hartshorne Armory located at 305 S. 12<sup>th</sup> Street located in Hartshorne Oklahoma.

Marshall Environmental Management, Inc. (MEM) was contracted by DCS to conduct an Asbestos Inspection for the ODEQ at the Hartshorne Armory. The Asbestos Inspection was conducted on October 31, 2006. A total of twenty-eight (28) asbestos samples were analyzed in accordance with the EPA authorized Method 600 49 CFR Part 61 Subpart M, Asbestos NESHAPS Rules.

The Asbestos Inspection identified the presence of friable asbestos in all of the plumbing pipe insulation for hot and cold water supply. This type of insulated plumbing is referred to as Thermal System Insulation or (TSI). In this Armory, both the straight linear runs of pipe and all elbows and connections consist of ACM. Non-friable asbestos was also found in miscellaneous materials consisting of the older 9-inch by 9-inch floor tiles which have the black asbestos containing asphalt mastic associated with the floor tiles. Another miscellaneous form of non-friable asbestos was identified in the Inspection that consisted of the cement asbestos flue pipes (Transite) which are used to exhaust combustion products from space heaters and hot water tanks throughout the Armory. Many of these, such as those present in the Drill Floor, are abandoned. It should also be noted that the roof over the Drill Floor in the Armory Building is also composed of Transite.

The principal recommendations of the Asbestos Inspection Report consist of developing plans for a response action (i.e. Project Design) to abate the TSI insulation on the plumbing lines. It is recommended that while on-site, conducting the friable asbestos removal, the Licensed Asbestos Contractor should remove all asbestos floor tiles and the associated black asphalt asbestos containing mastic located in the Armory Orderly Rooms.

#### **IV. REGULATORY REVIEW**

The Hartshorne Armory Building was constructed prior to 1953. The Armory Building was constructed in the era when asbestos was used in construction and installed in certain building components. In 1994, the Occupational Safety and Health Administration (OSHA) required employers to identify asbestos containing building materials (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 identification surveys, owners and/or operators must treat suspected ACM as asbestos. In such cases, this is referred to as presumed ACM or PACM. One of the purposes of the Asbestos Survey was to identify the types of ACM present in the various building components.

The Oklahoma Department of Labor (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 for in OAC 380 Chapter 45. [http://www.state.ok.us/~okdol/peosh/PEOSHTitle%20380-45%20\(8-06\).pdf](http://www.state.ok.us/~okdol/peosh/PEOSHTitle%20380-45%20(8-06).pdf)

Specific provisions of the Standard (OAC: 45-15-1) addresses an Asbestos Notice and Labeling requirement. The Labeling requirements specify that various equipment, such as pipe insulation and equipment with asbestos insulation (e.g. HVAC equipment), as well as room locations where asbestos is present, such as mechanical rooms, 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 is used in acoustical materials on ceilings and walls. This type of ACM is referred to as Surfacing Material.

The U.S. Environmental Protection Agency (EPA) requires inspections in schools grades K through 12, as part of the Asbestos Hazard and Emergency Response Act (AHERA), which is authorized in 40 CFR 763.6. These AHERA requirements would only be applicable to the Armory in the case that the future use of the Armory Facility would include any use by a Local Educational Authority (LEA), such as a school grades K through 12. The AHERA inspection protocol requires a thorough sampling of all forms of asbestos. The types of ACM to be assessed as part of an AHERA Inspection include:

**Thermal System Insulation (TSI)** – found on plumbing lines, HVAC equipment, boilers and steam lines

**Surfacing Materials (SM)** – blown on, textured or troweled onto building components (e.g. ceilings and beams)

**Miscellaneous Materials (Misc.)** – floor tile, mastics, ceiling tile, wallboard, cement asbestos boards, etc.

The AHERA sampling protocol addresses the systematic sampling of each of these forms of ACM and the identification of both friable ACM (i.e. that which can be rendered to a powder by hand pressure) and non-friable ACM, such as floor tiles and mastic. This Inspection also evaluated the condition of the ACM identified as good, damaged, or significantly damaged. No significantly damaged ACM was identified in the Inspection. The potential for disturbance of the ACM identified was indicated on the field inspection forms in accordance with the AHERA inspection protocol in order to assist with future Asbestos Management Planning efforts.

In addition to AHERA, the EPA regulates asbestos removal and land disposal requirements. These efforts are now administered by the Oklahoma Department of Environmental Quality (DEQ). Air quality regulations require the filing of advance notices of any demolition or renovation activities. These notices are referred to as a National Emission Standard for Hazard Air Pollutants (NESHAPS) Notice. Both historical and future asbestos abatement response actions track asbestos removal from the Armory to the DEQ approved landfill on a project by project basis as part of this NESHAP notification process.

The ODOL Asbestos Division regulates the abatement of asbestos in Oklahoma. 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 Oklahoma State Department of Labor. It should be noted that the ODOL Asbestos Rules are currently undergoing a Rule Change process regarding the current ODOL Asbestos Rules.

One of the goals of the Asbestos Inspection was to identify the presence, types, and quantity of ACM within the Armory so that plans can be made to abate the asbestos, and therefore eliminate the need for any long term asbestos management requirements, such as those required by ODOL or the EPA AHERA regulations.

## **V. HISTORICAL OVERVIEW OF ASBESTOS ACTIVITIES**

This Asbestos Inspection did not identify evidence of prior asbestos inspection work or previous abatement of friable ACM. No historical inspection records were available. As a result, this Asbestos Inspection took the approach of a thorough initial sampling of the Armory, as opposed to a re-inspection and confirmation sampling approach.

## **VI. RESULTS OF THE ASBESTOS INSPECTION**

The DEQ LPD requested that the DCS provide a Licensed Asbestos Inspection Firm to perform an initial Asbestos Inspection of the Armory. Marshall Environmental Management, Inc. began

a systematic inspection of the Armory on November 16, 2006 to locate and assess the condition of the suspected Asbestos Containing Materials in the facility. Each room was visually inspected by a Licensed AHERA Asbestos Inspector. All accessible locations throughout the Armory were visually inspected for suspected ACM.

Sampling consisted of taking bulk asbestos samples from each category of suspected ACM consisting of the following typical examples:

**Surfacing Materials (SM)** – blown on or troweled on ACM, typically observed on ceilings, structural steel, and concrete ceils or metal pan decks.

**Thermal System Insulation (TSI)** - typically located on plumbing, HVAC equipment, boilers, steam lines and heated thermal processes.

**Miscellaneous Materials (Misc.)** - typically consists of floor tiles, mastics, ceiling tiles, sheet vinyl flooring and wallboard bedding tapes and joint compounds, and other suspect ACM not typically included in Surfacing Materials or TSI designations.

A total of twenty-eight (28) samples were collected and ten (10) were identified by laboratory testing to be “Positive” for asbestos content, which is defined by EPA regulations to consist of any material with more than 1% asbestos as determined by the EPA approved Test Method 0600 or Polarized Light Microscopy (PLM).

The following Table is a summary of the samples collected by location and type of building component. Locations where ACM was identified can be identified by referring to the facility floor plan diagram provided in the Appendix of this Inspection Report. A summary of the estimated quantities of ACM located during the Asbestos Inspection is provided in the Appendix.

<b>Location</b>	<b>Sample ID</b>	<b>Type of ACM</b>	<b>Asbestos Content Type (%)</b>	<b>Condition - Item</b>
Supply Room	B-1	TSI	Chrysotile 8%	Good – Straight Run of Pipe
Supply Room	B-2	TSI	Chrysotile 70%	Damaged – Pipe Elbow
Kitchen	B-3	TSI	Chrysotile 90%	Good – Air-Cell Run of Pipe
Mechanical Room	B-4	TSI	Chrysotile 90%	Good – Elbow on Pipe
Ladies Room	B-5	TSI	Chrysotile 8%	Good – Mud Pack to Wall Penetration for Plumbing
Class Room	B-8	TSI	Chrysotile 5%	Good – TSI Pipe Run
Orderly Room	B-14A	Misc.	Chrysotile 3%	Good – 9-in. x9-in. Floor Tile
Orderly Room	B-14B	Misc.	Chrysotile 5%	Good – Mastic on Back of Sample A-14A
Orderly Room	B-16	Misc.	Chrysotile 3%	Good – 9-in. x9-in. Floor Tile (no mastic)
Motor Pool	B-26	Misc.	Chrysotile 60%	Good – Transite Exhaust Flue

**Table 1 - Summary of Sampling Data for Samples that were Positive for Asbestos Content**

Copies of the individual asbestos sample test results provided by the accredited testing lab, along with the chain of custody forms and several digital photos are provided for review in the Appendix of this Inspection Report.

## VII. ASBESTOS INSPECTION – CONCLUSIONS AND FINDINGS

The results for this initial Asbestos Inspection did identify that ACM, both friable and non-friable forms, are present in the Hartshorne Oklahoma Armory.

The following are some of the conclusions and findings related to the results of this initial Asbestos Inspection Report.

1. **Surfacing Materials** – No surfacing materials in the form of blown on fireproofing or acoustical insulation were observed for sampling at any of the accessible locations selected for sampling as a part of this initial Asbestos Inspection.

**CONDITION OF SURFACING MATERIALS** – No Surfacing Materials were found.

2. **Thermal System Insulation** – The predominant category of ACM identified in the Asbestos Inspection of the Hartshorne Armory is found on Thermal System components consisting of water lines in the Mechanical Room and above the ceilings in the offices, classrooms of the Armory.

**Plumbing** – TSI, consisting of insulation on all piping, both linear runs of plumbing and all hard packed mud on elbows, valves and fittings contained 5-90% Chrysotile asbestos. The straight runs of Pipe are referred to as “Air-Cell” (a cellulose containing insulation), and the places where the insulation is joined by tape or at elbow and fittings are insulated with mudded plaster or ACM paste.

**HVAC** – No Friable ACM was identified on HVAC equipment or components, but some exhaust flues and/or abandoned exhaust flue vents were made of Transite.

**CONDITION OF TSI** – Good.

- 3. Miscellaneous Materials** – The predominant type of miscellaneous ACM located within the Hartshorne Armory is the 9-inch by 9-inch non-friable asbestos containing floor tiles and the associated non-friable asbestos containing black asphalt mastics; each contains around 5% Chrysotile asbestos.

The other miscellaneous forms of asbestos consisted of the non-friable Transite exhaust flues for space heaters and hot water tanks were identified in the Armory. Some of the exhaust pipes, such as those found in the Drill Floor Area, are abandoned.

**CONDITION OF MISCELLANEOUS ACM** –

Floor Tiles and Black Asphalt Mastic - Good

Transite Exhaust Flue Vents – Good

## VIII. RECOMMENDATIONS

This Asbestos Inspection Report should be considered as the initial step in a process to develop plans for asbestos abatement or an Armory Asbestos Management Plan.

The principal recommendations of the Asbestos Inspection Report consist of developing plans for a response action (i.e. Project Design) to abate the TSI insulation on the plumbing lines. It is recommended that while the Licensed Asbestos Contractor is on site conducting the friable asbestos removal, they shall also remove all the non-friable asbestos floor tiles and the associated black asphalt asbestos containing mastic located in the Armory Storage Room.

1. A Project Design needs to be developed to allow for the removal of the TSI consisting of the insulation on the full run of the pipes ("Air-Cell") and all hard mudpack on the plumbing components located in the Armory.
2. The Scope of Work for the Asbestos Response Action should include the requirement for the removal of all of the non-friable asbestos containing Floor Tiles and the asbestos containing Black Asphalt Mastic.
3. The removal of non-friable Transite Exhaust Flues can also be accomplished so long as funds are provided for the corresponding repairs to the roof that would be needed if these items were removed.

**APPENDIX**

**ASBESTOS SAMPLING TEST RESULTS**

**CHAIN OF CUSTODY FORMS**

**SUMMARY OF ESTIMATED QUANTITIES OF ACM**

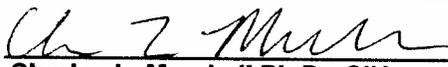
**ARMORY FLOOR PLAN**

**DIGITAL PHOTOS**

**Marshall Environmental Management, Inc.**  
 1145 SW 74th Street, E-300  
 Oklahoma City, Oklahoma 73139  
 Phone: (405) 616-0401 Fax: (405) 972-0525

**Date:** 10/31/2006 **Lab Accreditation:** AIHA PAT ID #102334  
**Client:** ODEQ - Land Protection Division **Client Contact:** Angela Brunsmann  
 707 N. Robinson **Project Reference:** Hartshorne Armory  
 Oklahoma City, OK

Sample ID	Sample Description	Results
B-1	<u>Location:</u> Supply Room <u>Color:</u> White <u>Type:</u> TSI <u>Note</u> Good Condition	<b><u>Asbestos Detected</u></b> <b>8% Chrysotile</b> 93% Calcareous Material  <b><u>Total Asbestos: 8%</u></b>
B-2	<u>Location:</u> Supply Room <u>Color:</u> White <u>Type:</u> TSI <u>Note</u> Damaged Condition	<b><u>Asbestos Detected</u></b> <b>70% Chrysotile</b> 30% Calcareous Material  <b><u>Total Asbestos: 70%</u></b>
B-3	<u>Location:</u> Kitchen <u>Color:</u> White <u>Type:</u> TSI <u>Note</u> Good Condition	<b><u>Asbestos Detected</u></b> <b>90% Chrysotile</b> 10% Calcareous Material  <b><u>Total Asbestos: 90%</u></b>
B-4	<u>Location:</u> Mechanical Room <u>Color:</u> White <u>Type:</u> TSI <u>Note</u> Good	<b><u>Asbestos Detected</u></b> <b>90% Chrysotile</b> 10% Calcareous Material  <b><u>Total Asbestos: 90%</u></b>

  
 Charles L. Marshall Ph.D., CIH

11/7/06  
 DATE:

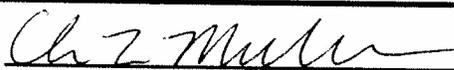
**Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A Interim Method for Determination of Asbestos in Bulk Insulation Samples and/or Current EPA Method for the Analysis of Asbestos in Building Materials by Polarized Light Microscopy.**

**Marshall Environmental Management, Inc.**  
 1145 SW 74th Street, E-300  
 Oklahoma City, Oklahoma 73139  
 Phone: (405) 616-0401 Fax: (405) 972-0525

**Date:** 10/31/2006 **Lab Accreditation:** AIHA PAT ID #102334  
**Client:** ODEQ - Land Protection Division **Client Contact:** Angela Brunsmann  
 707 N. Robinson **Project Reference:** Hartshome Armory  
 Oklahoma City, OK

Sample ID	Sample Description	Results
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B-5	<u>Location:</u> Ladies Room <u>Color:</u> White <u>Type:</u> TSI <u>Note</u> Pipe Insulation	<b><u>Asbestos Detected</u></b> <b>8% Chrysotile</b> 93% Calcareous Material  <b><u>Total Asbestos: 8%</u></b>
B-6	<u>Location:</u> Men's Room <u>Color:</u> White <u>Type:</u> Misc. <u>Note</u> Caulking for Shower Tile	<b><u>Asbestos Not Detected</u></b> 100% Calcareous Material  Total Asbestos: None Detected
B-7A	<u>Location:</u> Class Room <u>Color:</u> White <u>Type:</u> Misc. <u>Note</u> Floor Tile	<b><u>Asbestos Not Detected</u></b> 60% Vinyl Aggregate 35% Calcareous Material 5% Cellulose  Total Asbestos: None Detected
B-7B	<u>Location:</u> Class Room <u>Color:</u> White <u>Type:</u> Misc. <u>Note</u> Mastic	<b><u>Asbestos Not Detected</u></b> 100% Rubber Mastic  Total Asbestos: None Detected

  
 Charles L. Marshall Ph.D., CIH

4/7/06  
 DATE:

**Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A Interim Method for Determination of Asbestos in Bulk Insulation Samples and/or Current EPA Method for the Analysis of Asbestos in Building Materials by Polarized Light Microscopy.**











Chain of Custody

<b>Marshall Environmental Management, Inc.</b> 1145 SW 74th Street Suite E-300 Oklahoma City, OK 73139 Email: marshenv@swbell.net		<b>TAT</b> Standard <input checked="" type="checkbox"/> X Rush Phone: (405) 616-0401 Fax: (405) 972-0525		<b>JOB ID: #2184</b> <b>Project Name:</b> HARTSHORNE ARMORY INSPECTION DCS Project #06164C-12	
<b>Location Address:</b> Hartshorne Armory N/A 305 SW 12th Street, Hartshorne OK 74547-4401 Angela Brunnsman N/A Department: DEQ LPD				<b>Invoice To:</b> Company: <b>DEQ - Land Protection Division</b> Mailing Address: 707 N. Robinson, Oklahoma City, OK 73102 Phone No: 405-702-5141 Fax No: Email: Angela.Brunnsman@deq.state.ok.us Contact: Angela Brunnsman Phone Results Fax Results <input checked="" type="checkbox"/> Email Results	
Date	Sample Number	Location/Description	Sample Type	Volume Area	Analysis Requested
10/31/2006	B-1	Supply Room TSI	Bulk	N/A	Asbestos
10/31/2006	B-2	Supply Room TSI, Damaged	Bulk	N/A	Asbestos
10/31/2006	B-3	Kitchen TSI	Bulk	N/A	Asbestos
10/31/2006	B-4	Mechanical Room TSI	Bulk	N/A	Asbestos
10/31/2006	B-5	Ladies Room TSI	Bulk	N/A	Asbestos
10/31/2006	B-6	Men's Room	Bulk	N/A	Asbestos
10/31/2006	B-7 A&B	Classroom Floor Tile & Mastc	Bulk	N/A	Asbestos
10/31/2006	B-8	Classroom TSI on Pipe	Bulk	N/A	Asbestos
10/31/2006	B-9	Training Room Ceiling Tile	Bulk	N/A	Asbestos
10/31/2006	B-10	Training Room Floor Tile	Bulk	N/A	Asbestos
10/31/2006	B-11	Training Wallboard & Bedding Tape	Bulk	N/A	Asbestos
10/31/2006	B-12	HVAC Insulation	Bulk	N/A	Asbestos
10/31/2006	B-13	Supply Room Wallboard & Bedding Tape	Bulk	N/A	Asbestos
10/31/2006	B-14 A&B	Orderly Room Floor Tile & Mastc	Bulk	N/A	Asbestos
10/31/2006	B-15	Orderly Room Window Panel Caulking	Bulk	N/A	Asbestos
<b>Instructions/Special Requirements:</b>					
<b>Collected By (print):</b> Charles L. Marshall		<b>Collector's Signature:</b> 		<b>Date:</b> 10/31/06 <b>Time:</b> 17:00	
<b>Relinquished By:</b> 		<b>Receive By:</b>		<b>Date:</b> <b>Time:</b>	
<b>Relinquished By:</b>		<b>Receive By:</b>		<b>Date:</b> <b>Time:</b>	
<b>Relinquished By:</b>		<b>Receive By:</b>		<b>Date:</b> <b>Time:</b>	
<b>Method of Shipment:</b>		<b>Condition Upon Reception:</b>		<b>Acceptable</b> <b>Unacceptable</b>	



Oklahoma Department of Environmental Quality Land Protection Division HARTSHORNE ARMORY		Asbestos Inspection by: Marshall Environmental Management, Inc. Summary of Estimated Quantities of ACM Date of Inspection: 10-31-06			
Location	Type of ACM	Category	Estimated Quantity	Units	Comments
<b>Inside Armory</b>					
<b>TSI on Plumbing</b>					
Small Class Room	TSI	Air-Cell & Mud Packs	8	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Supply Room	TSI	Air-Cell & Mud Packs	20	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Hallway	TSI	Air-Cell & Mud Packs	14	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Kitchen	TSI	Air-Cell & Mud Packs	17	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Men's Room	TSI	Air-Cell & Mud Packs	54	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Maintenance Room	TSI	Air-Cell & Mud Packs	46	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Ladies Room	TSI	Air-Cell & Mud Packs	8	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Other Above Ceiling	TSI	Air-Cell & Mud Packs	36	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Above Ceiling Tile Grids or in Exposed Portions of Ceiling Through the Armory	TSI	All of the Plumbing Lines (Straight Runs and Mud Packs)	195	Total Est. Linear Feet of TSI	Approximately 65 Glove Bags (Ave. 3 LF each)
<b>Floor Tiles &amp; Mastic</b>					
Orderly Room/Offices	Misc.	Floor Tile/Mastic	588	Square Feet	Asbestos Floor Tile & Asbestos Mastic
<b>Transite</b>					
Drill Floor Roof	TSI		6,080	~Square Feet	Roof is Transite Panels on Steel Trusses & Brick
Exhaust Flues:					
Drill Floor	Misc.	Cement Asbestos	36	Linear Feet	4 Flues for Old "Removed" Space Heaters
Motor Pool	Misc.	Cement Asbestos	6	Linear Feet	1 Flue Active

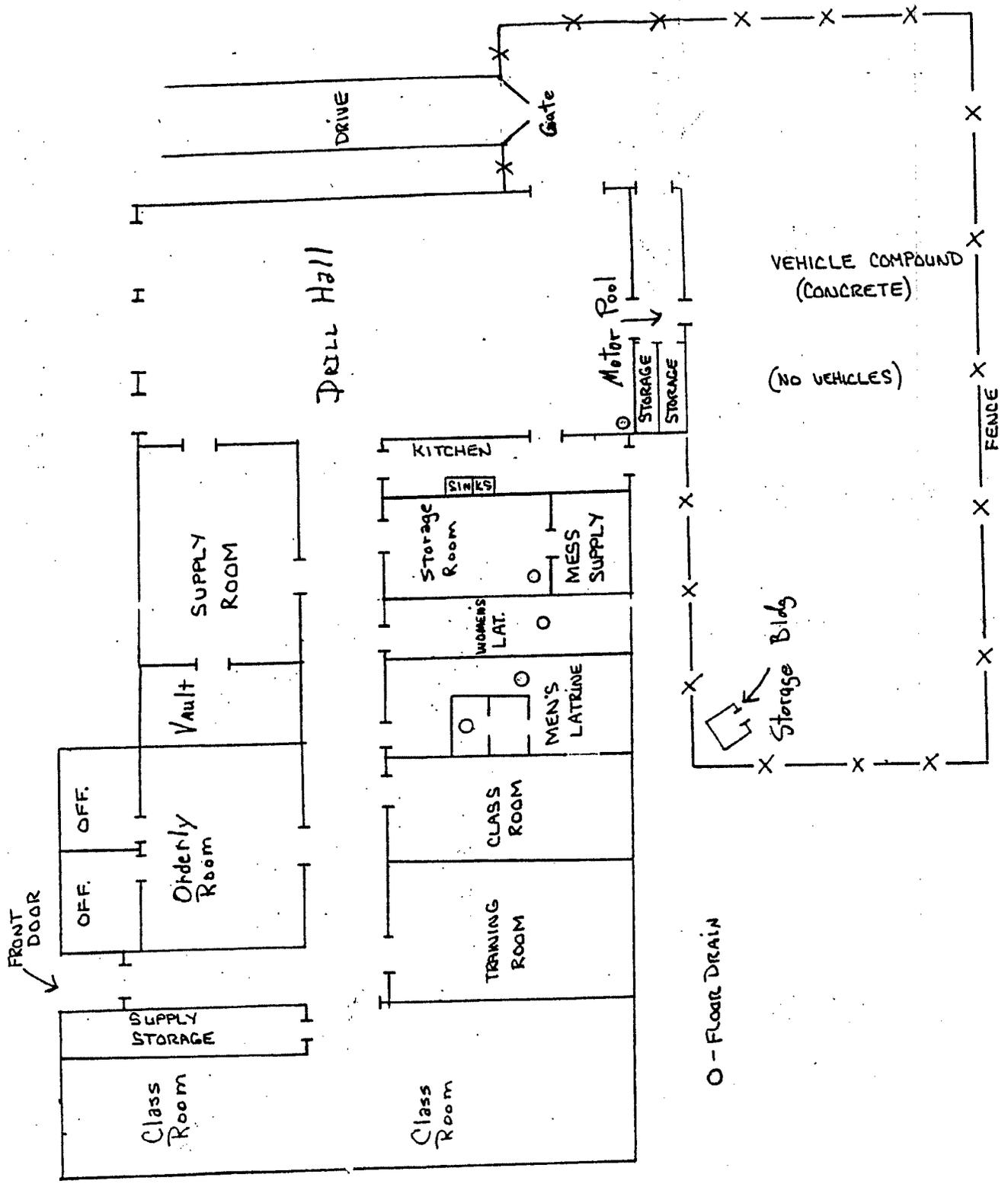
# HARTSHORNE ARMORY

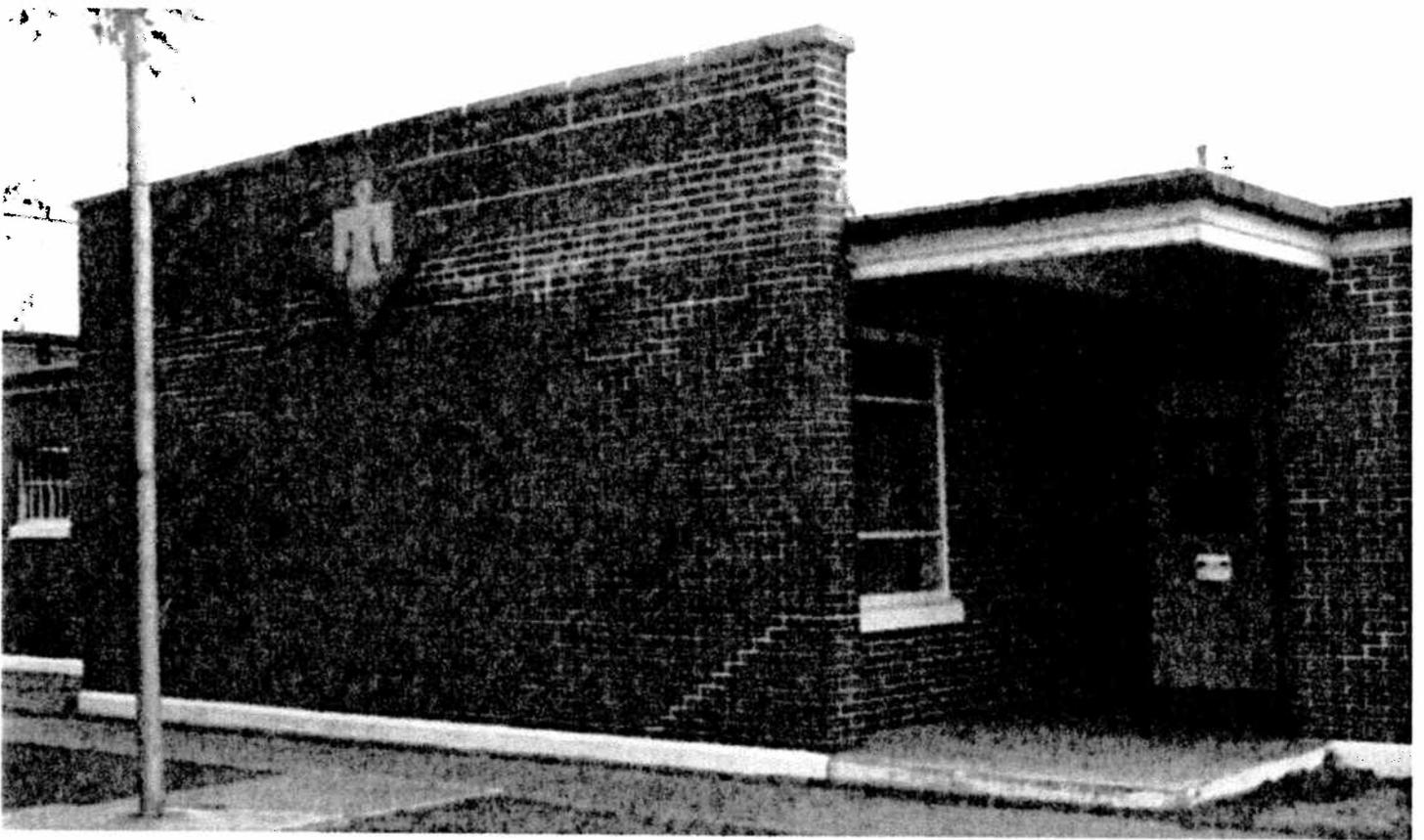
HARTSHORNE, OKLAHOMA

BUILT: 1953

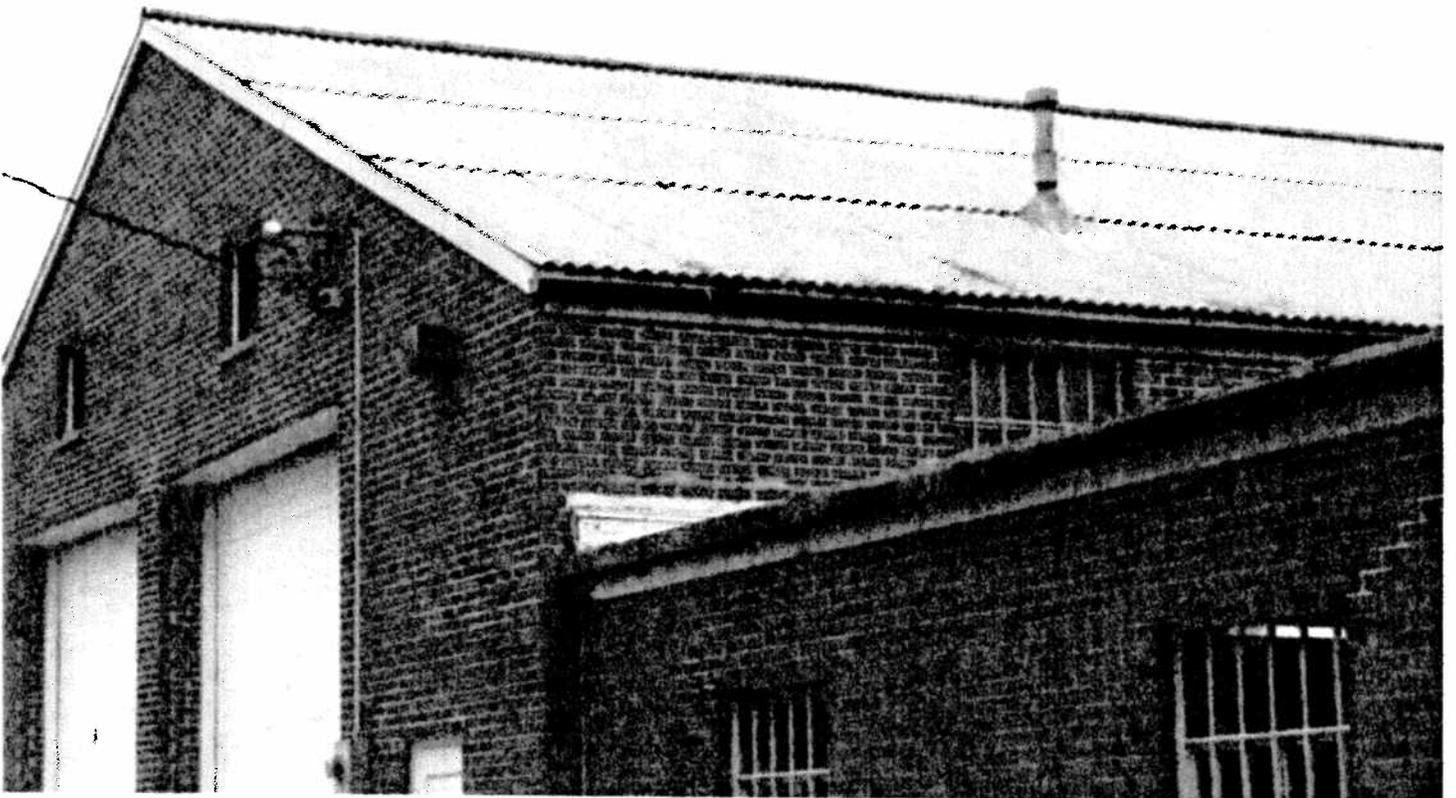
(CO A (-) 1 BN 180 INF)

VISIT: JUNE, 14 1996

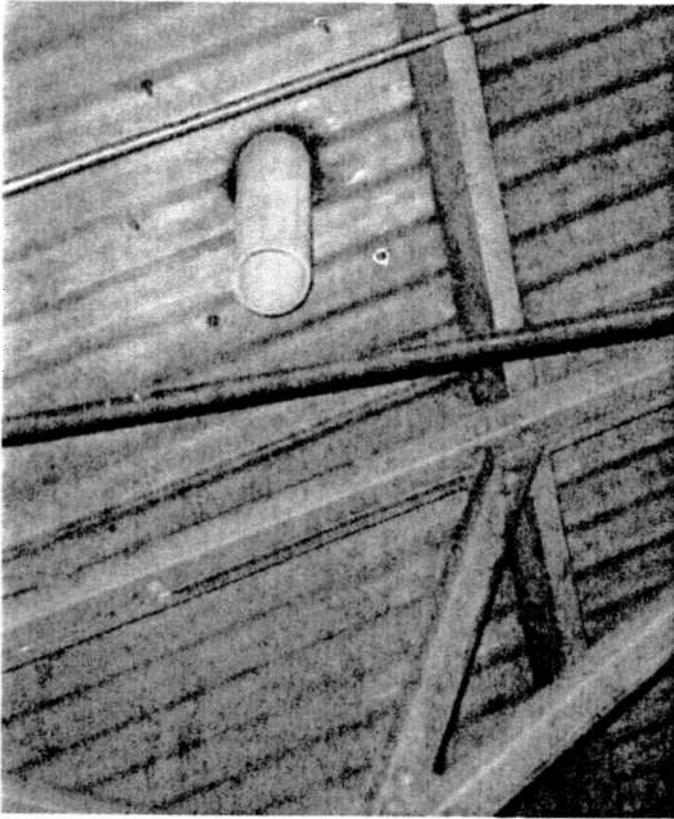




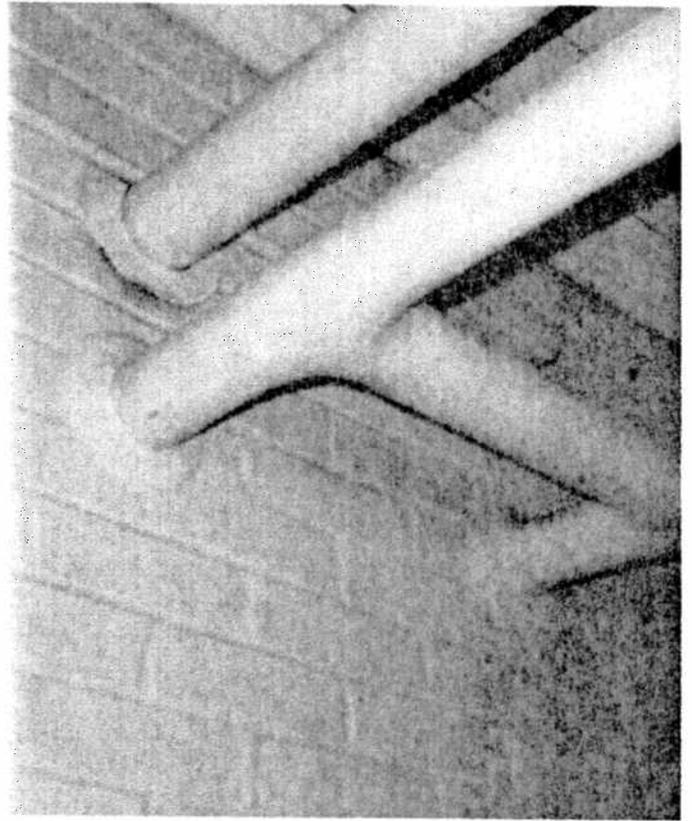
Main Entrance



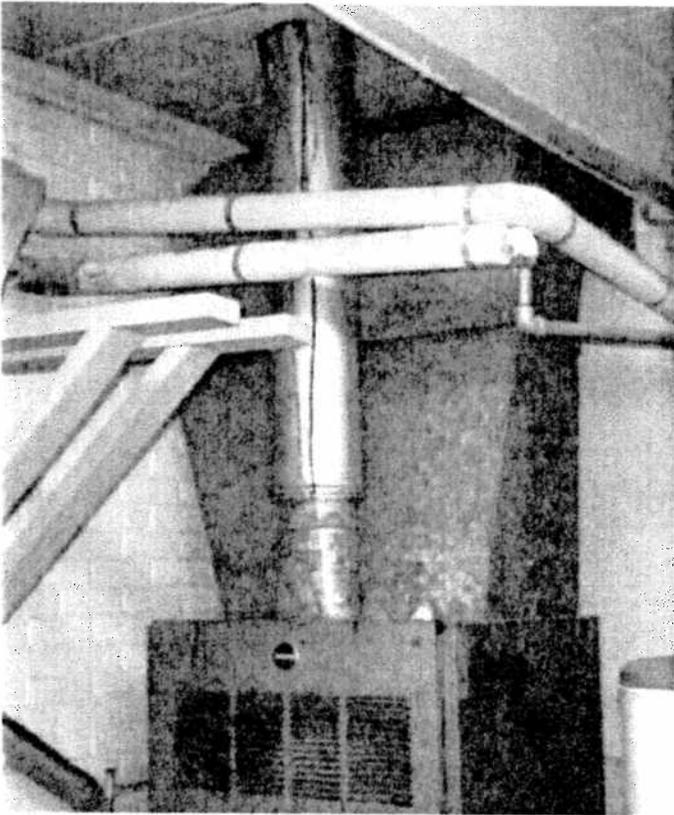
Front of Drill Floor (Positive Roof)



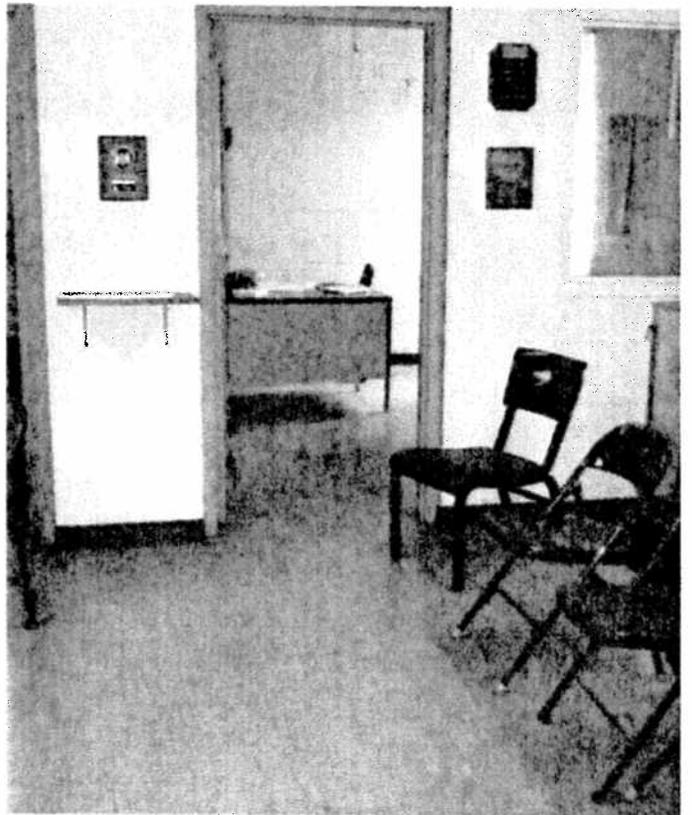
Drill Floor Roof/Exhaust Flues (Positive)



TSI Elbows and Runs (Positive)



TSI Elbows and Runs (Positive)

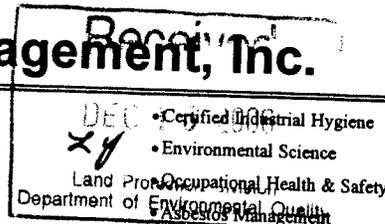


Floor Tile and Mastic (Positive)

# Marshall Environmental Management, Inc.

Charles L. Marshall, Ph.D., C.I.H.  
President

Established 1987



December 8, 2006

Ms. Angela Brunzman  
Land Protection Division  
Oklahoma Department of Environmental Quality  
707 N. Robinson  
Oklahoma City, OK 73102

RE: Hartshorne Armory Surface Wipe Sampling For Lead In Dust.

Dear Angela:

As part of the Inspection at the Hartshorne, Oklahoma Armory on October 31 2006, Marshall Environmental Management, Inc. was requested to collect surface wipe samples for lead in dust at various locations in the Armory. Attachments to this correspondence include the Certified Lab Analysis for the surface wipe samples conducted by the EPA Accredited Environmental Lead Lab and the associated Chain of Custody form.

The results of the testing for floor wipes identified one (1) out of the five samples taken on the floor of the Armory as exceeding the Army National Guard (ARNG) and Air National Guard (ANG) action level of 200 micrograms/ft<sup>2</sup> for floor surfaces. This sample was collected in the vicinity of the Firing Range (219.75 ug/ft<sup>2</sup>). The QC Blank was below detection limits.

The ARNG and ARG Guidelines for Converting Indoor Firing Ranges to Other Use advise that floor surfaces exceeding 200 micrograms/ft<sup>2</sup> be cleaned, so that post cleaning lead wipe testing is below this action level or that, at least, a 75% reduction is obtained between the pre-and post-cleanup levels. Appendix C of the guidelines provides recommendations for interpretation of these results.

If we can be of further assistance in this regard, please don't hesitate to give us a call.

Sincerely,  
Marshall Environmental Management, Inc.

Charles L. Marshall, CIH  
President

Attachments



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

# Environmental Chemistry Analysis Report

**QuantEM Set ID:** 143638  
**Date Received:** 11/07/06  
**Received By:** Teresa DeJarnett  
**Date Sampled:**  
**Time Sampled:**  
**Analyst:** HC  
**Date of Report:** 11/10/2006

**Client:** Marshall Environmental Management, Inc.  
1145 S.W. 74th Street, Ste. E-300  
Oklahoma City, OK 73139

**Acct. No.:** A331

**Project:** Hartshorne Armory  
**Location:** 305 S. 12th Street, Hartshorne, OK

**Project No.:** N/A

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	B-MT-01	Wipe	Lead	219.75	16.00	ug/sq. Ft.	11/09/06 13:12	NIOSH 9100
002	B-DF-02	Wipe	Lead	130.90	16.00	ug/sq. Ft.	11/09/06 13:12	NIOSH 9100
003	B-MH-03	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	11/09/06 13:12	NIOSH 9100
004	B-OS-04	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	11/09/06 13:12	NIOSH 9100
005	B-DH-05	Wipe	Lead	24.25	16.00	ug/sq. Ft.	11/09/06 13:12	NIOSH 9100
006	B-B-06	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	11/09/06 13:12	NIOSH 9100

**Authorized Signature:** Heather R. Carter  
Heather R. Carter, 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.

# QAQC Results

QA ID: 4429  
Test: Lead

Date: 11/9/2006  
Matrix: Wipe

Lab Number: 143638  
Approved By: Heather R. Carter  
Date Approved: 11/9/2006

Notes:

## Blank Data:

Type of Blank	Blank Value
Continuing	0
Initial	0
Final	0

## Standards Data:

Standard	Low Limit	Obtained	High Limit
Final	225	273	275
CCV	225	259	275
ICV	22.5	25.4	27.5
RLVS	12.8	15.3	19.2

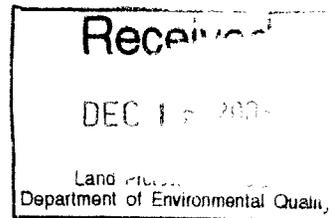
## Duplicate Data:

## Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MSW 2	0.000	5369.000	5073.000	94.5	5380.000	100.2	5.9
MSW 1	0.000	5369.000	5330.000	99.3	5270.000	98.2	1.1
MSW 3	0.000	5369.000	5480.000	102.1	5120.000	95.4	6.8
MSW 4	0.000	5369.000	5006.000	93.2	5150.000	95.9	2.8

Authorized Signature: Heather R. Carter  
Heather R. Carter, Analyst





**LEAD-BASED PAINT INSPECTION REPORT  
FOR**

*Hartshorne Armory*

**307 South 12<sup>th</sup> Street**

**Hartshorne, Oklahoma 74547**

**October 31st, 2006**

**Services Provided for:**

*Oklahoma Department of Environmental Quality*

**Land Protection Division**

**707 N. Robinson**

**Oklahoma City, OK 73102**

**Certified Industrial Hygiene Services Provided By:**

*Marshall Environmental Management, Inc.*

**1145 SW 74<sup>th</sup> Street, E-300**

**Oklahoma City, OK 73139**

**(405) 616-0401**

## CERTIFICATION

This is to certify that the Lead-Based Paint Inspection conducted at the Hartshorne Armory Located at 307 South 12<sup>th</sup> Street in Hartshorne Oklahoma (Year of Construction: 1953) on October 31, 2006 was conducted in accordance with "*Good Industrial Hygiene Practice.*" The results of the testing accurately reflect the condition of the property at the time the sampling was performed.

### Current Owner Information

State of Oklahoma

### Certified Lead Based Paint Risk Assessor/Inspector



Brice Somrad, Sr. Industrial Hygienist

Certified Lead-Based Paint Inspector/Risk Assessor OKRASR13046

### Certified Lead-Based Paint Firm #OKFIRM11160

Marshall Environmental Management, Inc.

1145 SW 74<sup>th</sup> E-300

Oklahoma City, Oklahoma 73139

(405) 616-0401

### XRF Information

Niton XLp Spectrum Analyzer

Model #XLp 300A

Serial #12585

Source: 40 mCi

## **Executive Summary:**

### **Sampling Methodology:**

Lead based paint (LBP) testing was done to determine lead levels on painted structural building components at the Hartshorne Armory. Each room of the Building was numbered on a floor plan that is provided in the Appendix. The front side of the Armory Building was marked "Side A" and going in a clockwise motion the remaining sides were categorized as Sides B, C, and D, respectively.

The building is a one-story structure constructed on a concrete slab foundation with an asphalt composite flat roof over the office area and a metal pitched roof over the Drill Hall. Concrete brick covers the side of the Building. All of the windows are metal. Throughout the Building were concrete floors, walls, and windowsills. The roof was constructed with steel rafters and wood decking with asphalt roof.

***The findings from the XRF testing indicated that there is lead-based paint in amounts greater than the EPA Standard for XRF readings or equal to 1.0 mg/cm<sup>2</sup> located on the Building components.***

The following locations contain lead-based paint:

1. Structural Steel in the Drill Hall
2. Overhead Doors and Frames in the Drill Hall

Please note that the following items were not tested in this inspection:

1. Non-painted floors
2. Non-fixed Items on the property

## ROOM LEGEND

<u>Site</u>	<u>Current Use</u>
1	Supply Room
2	Vault
3	Orderly Room
4	Office
5	Office
6	Front Entrance Hall
7	Supply Storage
8	Classroom
9	Training Room
10	Classroom
11	Classroom
12	Men's Latrine
13	Women's Latrine
14	Storage Room
15	Mess Supply
16	Kitchen
17	Drill Hall
18	Motor Pool / Firing Range
Blank	Outside

# **CERTIFICATES**

# Department of Environmental Quality

This is to Certify That

**BRICE SEMRAD**

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

**INSPECTOR/RISK ASSESSOR**

Certification #: OKRASR13046

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

Issued on: 4/1/2006

Expires on: 3/31/2007

  
Division Director  
Air Quality Division



  
Environmental Programs Manager  
Air Quality Division

# Department of Environmental Quality

## MARSHALL ENVIRONMENTAL MANAGEMENT

This is to Certify That

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: 4/1/2006

Expires on: 3/31/2007

  
Division Director  
Air Quality Division



  
Environmental Programs Manager  
Air Quality Division

**SITE MAP**

# HARTSHORNE ARMORY

HARTSHORNE, OKLAHOMA

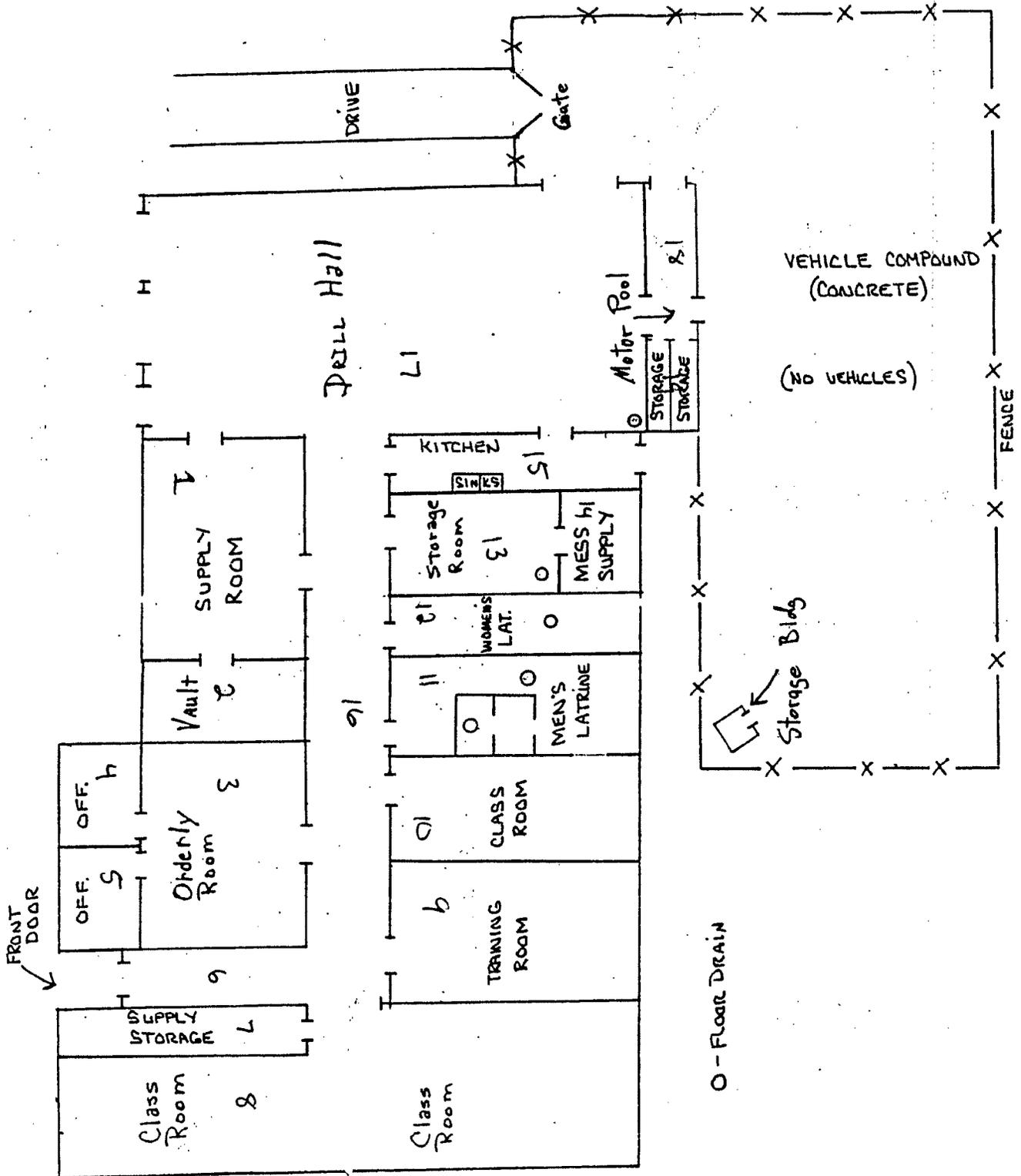
BUILT: 1953

(CO A(-) 1 BN 180 INF)

VISIT: JUNE, 14 1996



A



D

## **XRF READINGS**

Index	Component	Substrate	Side	Condition	Color	Site	Room	Results	PhC	PhI	PhK
1			CALIBRATE					Positive	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.60
2			CALIBRATE					Positive	1.30 ± 0.30	1.30 ± 0.30	< LOD : 1.50
3			CALIBRATE					Positive	1.30 ± 0.30	1.30 ± 0.30	< LOD : 1.65
4			CALIBRATE					Positive	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.60
5	WALL	CONCRETE	A	INTACT	BEIGE	1	SUPPLY ROOM	Negative	< LOD : 0.07	< LOD : 0.07	< LOD : 1.92
6	WALL	CONCRETE	B	INTACT	BEIGE	1	SUPPLY ROOM	Negative	< LOD : 0.20	< LOD : 0.20	< LOD : 2.29
7	WALL	CONCRETE	C	INTACT	BEIGE	1	SUPPLY ROOM	Negative	0.10 ± 0.05	0.10 ± 0.05	< LOD : 1.04
8	WALL	CONCRETE	D	INTACT	BEIGE	1	SUPPLY ROOM	Negative	< LOD : 0.08	< LOD : 0.08	< LOD : 2.09
9	DOOR	CONCRETE	B	INTACT	BLUE	1	SUPPLY ROOM	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 3.76
10	DOOR FRAME	CONCRETE	B	INTACT	BLUE	1	SUPPLY ROOM	Negative	< LOD : 0.14	< LOD : 0.14	< LOD : 3.55
11	CEILING	CONCRETE	UPPER	INTACT	GREEN	1	SUPPLY ROOM	Negative	0.50 ± 0.30	0.50 ± 0.30	< LOD : 1.80
12	CEILING PIPE	CONCRETE	UPPER	INTACT	GREEN	1	SUPPLY ROOM	Negative	< LOD : 0.18	< LOD : 0.18	< LOD : 1.72
13	WINDOW	CONCRETE	A	INTACT	BEIGE	1	SUPPLY ROOM	Negative	< LOD : 0.04	< LOD : 0.04	< LOD : 4.01
14	CEILING	CONCRETE	A	INTACT	BEIGE	2	VAULT	Negative	< LOD : 0.10	< LOD : 0.10	< LOD : 2.34
15	CEILING	CONCRETE	B	INTACT	BEIGE	2	VAULT	Negative	< LOD : 0.23	< LOD : 0.23	< LOD : 2.42
16	CEILING	CONCRETE	C	INTACT	BEIGE	2	VAULT	Negative	0.40 ± 0.20	0.40 ± 0.20	< LOD : 1.95
17	CEILING	CONCRETE	D	INTACT	BEIGE	2	VAULT	Negative	< LOD : 0.10	< LOD : 0.10	< LOD : 1.80
18	CEILING	CONCRETE	UPPER	INTACT	BEIGE	2	VAULT	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.16
19	DOOR	METAL	B	INTACT	GREEN	2	VAULT	Negative	< LOD : 0.09	< LOD : 0.09	< LOD : 3.39
20	DOOR FRAME	METAL	B	INTACT	GREEN	2	VAULT	Negative	< LOD : 0.07	< LOD : 0.07	< LOD : 3.95
21	WALL	CONCRETE	A	INTACT	BEIGE	3	OLDERLY ROOM	Negative	< LOD : 0.98	< LOD : 0.03	< LOD : 0.98
22	WALL	CONCRETE	B	INTACT	BEIGE	3	OLDERLY ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.16
23	WALL	CONCRETE	B	INTACT	BEIGE	3	OLDERLY ROOM	Negative	< LOD : 0.12	< LOD : 0.12	< LOD : 2.29
24	WALL	CONCRETE	C	INTACT	BEIGE	3	OLDERLY ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.98
25	WALL	CONCRETE	D	INTACT	BEIGE	3	OLDERLY ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.03
26	CEILING	CONCRETE	UPPER	INTACT	BROWN	3	OLDERLY ROOM	Negative	< LOD : 0.21	< LOD : 0.21	< LOD : 1.80
27	DOOR	METAL	C	INTACT	BLUE	3	OLDERLY ROOM	Negative	< LOD : 0.04	< LOD : 0.04	< LOD : 3.88
28	DOOR FRAME	METAL	C	INTACT	BLUE	3	OLDERLY ROOM	Negative	< LOD : 0.11	< LOD : 0.11	< LOD : 3.92
29	DOOR FRAME	METAL	C	INTACT	BLUE	4	OFFICE	Negative	< LOD : 0.04	< LOD : 0.04	< LOD : 4.08
30	DOOR	METAL	C	INTACT	BLUE	4	OFFICE	Negative	< LOD : 0.13	< LOD : 0.13	< LOD : 3.32
31	WALL	CONCRETE	A	POOR	BEIGE	4	OFFICE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.58
32	WALL	CONCRETE	A	POOR	BEIGE	4	OFFICE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.97
33	WALL	CONCRETE	B	INTACT	BEIGE	4	OFFICE	Negative	< LOD : 0.11	< LOD : 0.11	< LOD : 1.90
34	WALL	CONCRETE	C	INTACT	BEIGE	4	OFFICE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.94
35	WALL	CONCRETE	D	INTACT	BEIGE	4	OFFICE	Negative	< LOD : 0.91	< LOD : 0.03	< LOD : 0.91
36	GAS PIPE	CONCRETE	D	INTACT	BEIGE	4	OFFICE	Negative	< LOD : 0.38	< LOD : 0.38	< LOD : 3.86
37	WINDOW	METAL	B	INTACT	BEIGE	4	OFFICE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 3.85
38	WALL	WOOD	A	INTACT	BROWN	5	OFFICE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.80
39	WALL	CONCRETE	B	INTACT	BEIGE	5	OFFICE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.62
40	WALL	CONCRETE	C	INTACT	BEIGE	5	OFFICE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.96

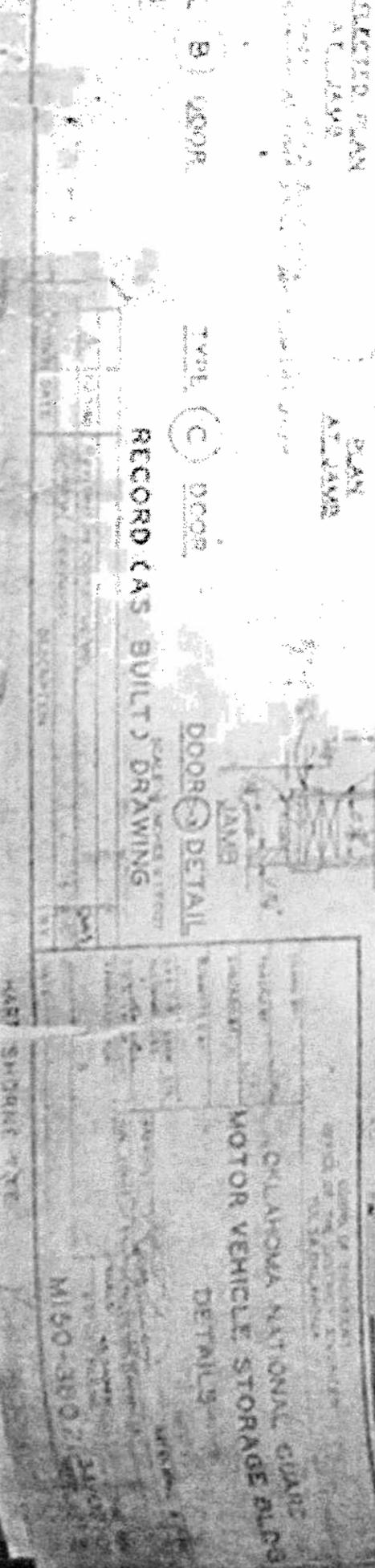
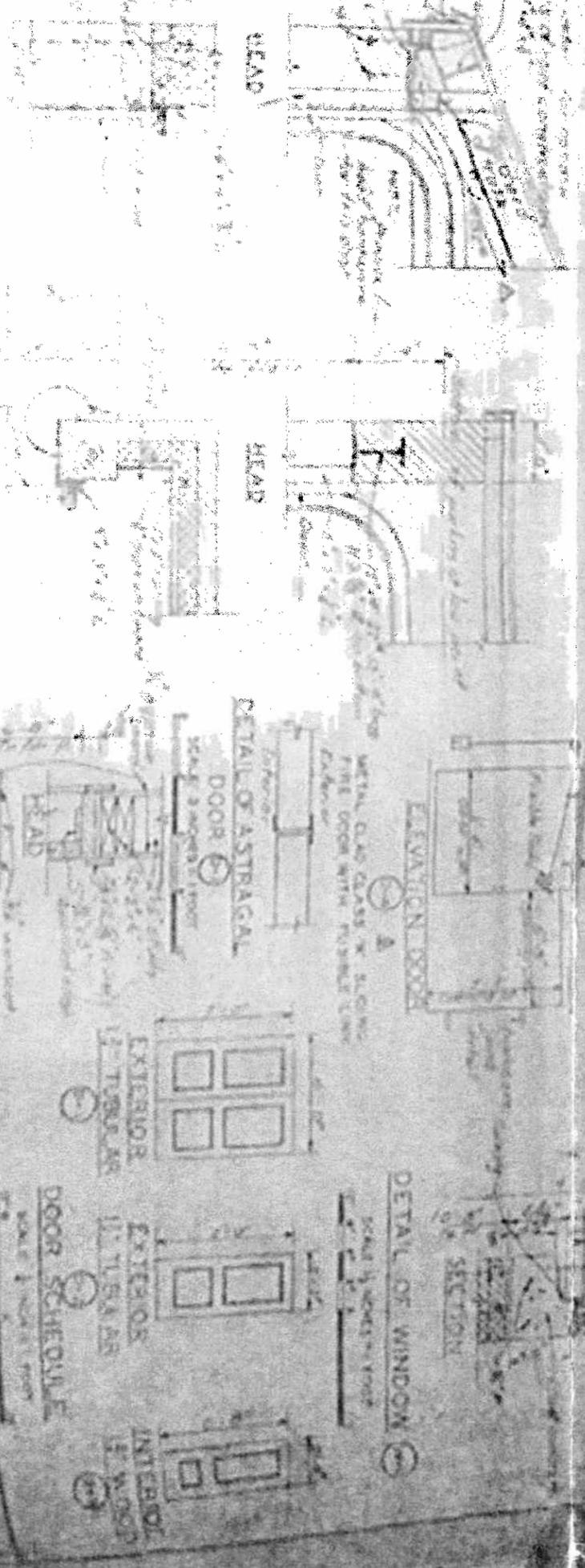
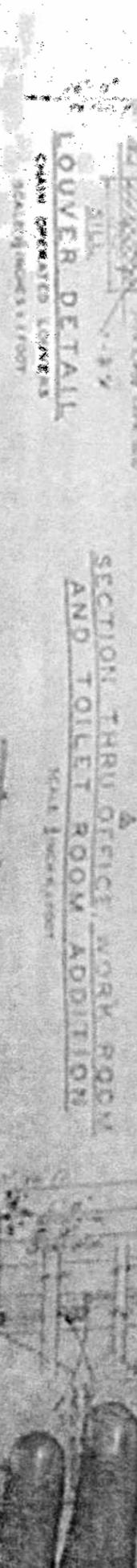
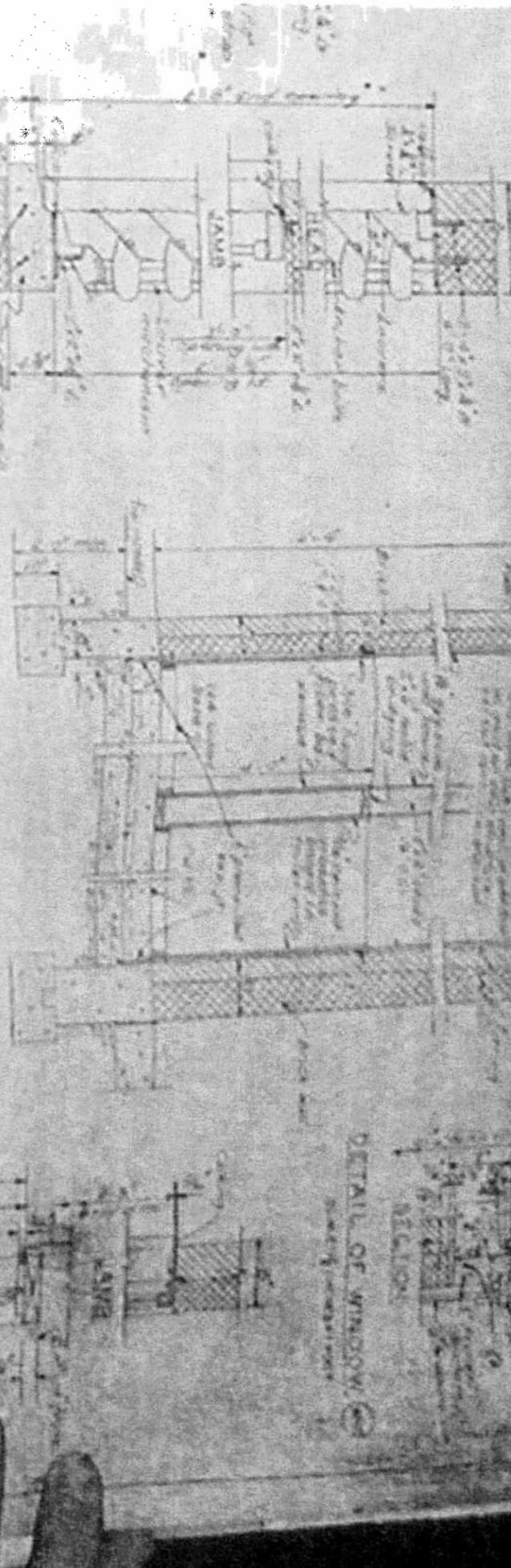
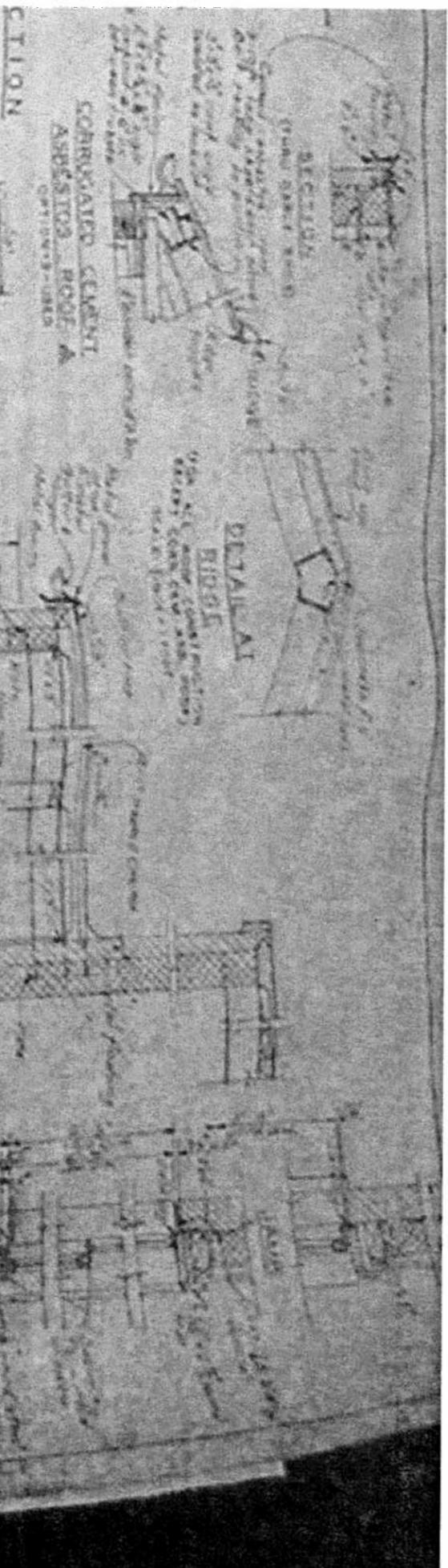
Index	Component	Substrate	Side	Condition	Color	Site	Room	Results	Plc	Phl	Phk
41	WALL	CONCRETE	D	INTACT	BEIGE	5	OFFICE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.90
42	DOOR	METAL	C	INTACT	BLUE	5	OFFICE	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 3.64
43	WALL	CONCRETE	A	INTACT	BEIGE	6	HALL ENTRANCE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.97
44	WALL	CONCRETE	B	INTACT	BEIGE	6	HALL ENTRANCE	Negative	< LOD : 0.75	< LOD : 0.07	< LOD : 0.75
45	WALL	CONCRETE	C	INTACT	BEIGE	6	HALL ENTRANCE	Null	< LOD : 0.07	< LOD : 0.07	< LOD : 1.61
46	WALL	CONCRETE	C	INTACT	BEIGE	6	HALL ENTRANCE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.75
47	WALL	CONCRETE	D	INTACT	BEIGE	6	HALL ENTRANCE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.90
48	DOOR	METAL	C	INTACT	BLUE	6	HALL ENTRANCE	Negative	< LOD : 0.14	< LOD : 0.14	< LOD : 3.46
49	DOOR FRAME	METAL	C	INTACT	BLUE	6	HALL ENTRANCE	Negative	< LOD : 0.06	< LOD : 0.06	< LOD : 3.60
50	DOOR FRAME	METAL	C	INTACT	BLUE	6	HALL ENTRANCE	Negative	< LOD : 0.15	< LOD : 0.15	< LOD : 3.35
51	DOOR	METAL	C	INTACT	BLUE	7	SUPPLY ROOM	Negative	< LOD : 0.10	< LOD : 0.10	< LOD : 3.48
52	WALL	CONCRETE	A	INTACT	BEIGE	7	SUPPLY ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.90
53	WALL	CONCRETE	B	INTACT	BEIGE	7	SUPPLY ROOM	Negative	< LOD : 0.75	< LOD : 0.03	< LOD : 0.75
54	WALL	CONCRETE	C	INTACT	BEIGE	7	SUPPLY ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.92
55	WALL	CONCRETE	A	INTACT	BEIGE	7	SUPPLY ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.90
56	WALL	CONCRETE	B	INTACT	BEIGE	8	CLASS ROOM	Negative	< LOD : 0.90	< LOD : 0.03	< LOD : 0.90
57	WALL	CONCRETE	C	INTACT	BEIGE	8	CLASS ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.90
58	WALL	CONCRETE	D	INTACT	BEIGE	8	CLASS ROOM	Negative	< LOD : 0.93	< LOD : 0.04	< LOD : 0.93
59	WINDOW	METAL	D	INTACT	BEIGE	8	CLASS ROOM	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 3.83
60	CEILING	WOOD	UPPER	INTACT	TAN	8	CLASS ROOM	Negative	0.70 ± 0.30	0.70 ± 0.30	< LOD : 1.65
61	CEILING	METAL	UPPER	INTACT	TAN	8	CLASS ROOM	Null	< LOD : 0.07	< LOD : 0.07	< LOD : 5.58
62	CEILING	METAL	UPPER	INTACT	TAN	8	CLASS ROOM	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 3.81
63	WALL	CONCRETE	A	INTACT	WHITE	9	TRAINING ROOM	Negative	< LOD : 0.75	0.11 ± 0.05	< LOD : 0.75
64	WALL	WOOD	B	INTACT	BROWN	9	TRAINING ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.59
65	WALL	WOOD	C	INTACT	WHITE	9	TRAINING ROOM	Negative	< LOD : 0.90	0.11 ± 0.07	< LOD : 0.90
66	WALL	WOOD	D	INTACT	WHITE	9	TRAINING ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 0.90
67	DOOR	METAL	A	INTACT	BLUE	9	TRAINING ROOM	Negative	< LOD : 0.04	< LOD : 0.04	< LOD : 3.42
68	DOOR FRAME	METAL	A	INTACT	BLUE	9	TRAINING ROOM	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 3.68
69	WALL	WOOD	A	INTACT	BROWN	10	CLASS ROOM	Negative	< LOD : 0.06	< LOD : 0.06	< LOD : 1.95
70	WALL	WOOD	B	INTACT	BROWN	10	CLASS ROOM	Negative	< LOD : 0.09	< LOD : 0.09	< LOD : 1.95
71	WALL	WOOD	C	INTACT	BROWN	10	CLASS ROOM	Negative	< LOD : 0.14	< LOD : 0.14	< LOD : 1.80
72	WALL	WOOD	D	INTACT	BROWN	10	CLASS ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.56
73	WINDOW	METAL	C	INTACT	BEIGE	10	CLASS ROOM	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 3.40
74	WINDOW	METAL	C	INTACT	BEIGE	11	MENS RR	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 3.46
75	WALL	CONCRETE	A	INTACT	BEIGE	11	MENS RR	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.94
76	WALL	CONCRETE	B	INTACT	BEIGE	11	MENS RR	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.65
77	WALL	CONCRETE	C	INTACT	BEIGE	11	MENS RR	Negative	< LOD : 0.07	< LOD : 0.07	< LOD : 1.80
78	WALL	CONCRETE	D	INTACT	BEIGE	11	MENS RR	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.65
79	PIPE	METAL	UPPER	INTACT	BEIGE	11	MENS RR	Negative	< LOD : 0.04	< LOD : 0.04	< LOD : 1.28
80	FLOOR	CONCRETE	UPPER	POOR	BROWN	11	MENS RR	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.80

Index	Component	Substrate	Side	Condition	Color	Site	Room	Results	PhC	PhI	PhK
81	STALL PANEL	METAL	B	INTACT	BEIGE	11	MENS RR	Negative	< LOD : 0.07	< LOD : 0.07	< LOD : 3.70
82	STALL PANEL	METAL	D	INTACT	BEIGE	12	WOMENS RR	Negative	< LOD : 0.30	< LOD : 0.30	< LOD : 3.26
83	WALL	CONCRETE		INTACT	BEIGE	12	WOMENS RR	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.11
84	WALL	CONCRETE	B	INTACT	BEIGE	12	WOMENS RR	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.05
85									3.65 ± 0.00	0.45 ± 0.00	0.00 ± 0.00
86								Positive	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.75
87								Positive	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.62
88								Positive	1.00 ± 0.10	1.00 ± 0.10	0.50 ± 0.30
89	WALL	CONCRETE	C	INTACT	BEIGE	12	WOMENS RR	Negative	< LOD : 0.06	< LOD : 0.06	< LOD : 2.72
90	WALL	CONCRETE	D	INTACT	BEIGE	12	WOMENS RR	Negative	< LOD : 0.19	< LOD : 0.19	< LOD : 2.11
91	DOOR	METAL	A	INTACT	BLUE	12	WOMENS RR	Negative	< LOD : 0.13	< LOD : 0.13	< LOD : 4.50
92	DOOR FRAME	METAL	A	INTACT	BLUE	12	WOMENS RR	Negative	< LOD : 0.17	< LOD : 0.17	< LOD : 4.52
93	WALL	CONCRETE	A	INTACT	BEIGE	13	STORAGE ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.05
94	WALL	CONCRETE	B	INTACT	BEIGE	13	STORAGE ROOM	Negative	< LOD : 0.06	< LOD : 0.06	< LOD : 1.85
95	WALL	CONCRETE	C	INTACT	BEIGE	13	STORAGE ROOM	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.81
96	WALL	CONCRETE	D	INTACT	BEIGE	13	STORAGE ROOM	Negative	< LOD : 0.06	< LOD : 0.06	< LOD : 2.37
97	WALL	CONCRETE	A	INTACT	BEIGE	14	MESS SUPPLY	Negative	< LOD : 1.10	< LOD : 0.05	< LOD : 1.10
98	WALL	CONCRETE	B	INTACT	BEIGE	14	MESS SUPPLY	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.79
99	WALL	CONCRETE	C	INTACT	BEIGE	14	MESS SUPPLY	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.30
100	WALL	CONCRETE	D	INTACT	BEIGE	14	MESS SUPPLY	Negative	< LOD : 0.10	< LOD : 0.10	< LOD : 3.44
101	WALL	WOOD	A	INTACT	BEIGE	14	MESS SUPPLY	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 2.74
102	WALL	CONCRETE	A	INTACT	BEIGE	15	KITCHEN	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.19
103	WALL	CONCRETE	B	INTACT	BEIGE	15	KITCHEN	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.96
104	WALL	CONCRETE	B	INTACT	BEIGE	15	KITCHEN	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.28
105	WALL SHELF	WOOD	B	INTACT	BLUE	15	KITCHEN	Negative	< LOD : 0.13	< LOD : 0.13	< LOD : 1.83
106	WINDOW	WOOD	B	INTACT	BEIGE	15	KITCHEN	Negative	< LOD : 0.06	< LOD : 0.06	< LOD : 1.59
107	WALL	CONCRETE	C	INTACT	BEIGE	15	KITCHEN	Negative	< LOD : 1.12	< LOD : 0.09	< LOD : 1.12
108	WALL	CONCRETE	D	INTACT	BEIGE	15	KITCHEN	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.19
109	CEILING PIPE	CONCRETE	A	INTACT	BEIGE	15	KITCHEN	Negative	< LOD : 0.20	< LOD : 0.20	< LOD : 6.57
110	CEILING	WOOD	UPPER	INTACT	BEIGE	15	KITCHEN	Negative	< LOD : 0.45	< LOD : 0.45	< LOD : 2.21
111	DOOR	METAL	A	INTACT	BLUE	15	KITCHEN	Negative	< LOD : 0.15	< LOD : 0.15	< LOD : 4.36
112	DOOR FRAME	METAL	A	INTACT	BLUE	15	KITCHEN	Negative	< LOD : 0.14	< LOD : 0.14	< LOD : 4.34
113	DOOR FRAME	METAL	B	INTACT	BLUE	16	HALL MAIN	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 3.89
114	DOOR	METAL	B	INTACT	BLUE	16	HALL MAIN	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 3.46
115	WALL	CONCRETE	A	INTACT	BEIGE	16	HALL MAIN	Negative	< LOD : 1.08	< LOD : 0.09	< LOD : 1.08
116	WALL	CONCRETE	B	INTACT	BEIGE	16	HALL MAIN	Negative	< LOD : 2.21	< LOD : 0.16	< LOD : 2.21
117	WALL	CONCRETE	C	INTACT	BEIGE	16	HALL MAIN	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.86
118	WALL	CONCRETE	D	INTACT	BEIGE	16	HALL MAIN	Negative	< LOD : 0.13	< LOD : 0.13	< LOD : 2.14
119	DOOR	METAL	A	INTACT	BLUE	17	DRILL HALL	Negative	< LOD : 0.46	< LOD : 0.46	< LOD : 3.83
120	DOOR FRAME	METAL	A	INTACT	BLUE	17	DRILL HALL	Negative	< LOD : 0.60	< LOD : 0.60	< LOD : 4.50

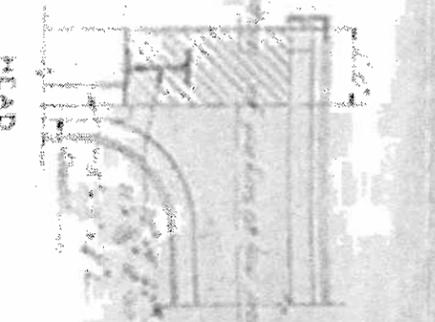
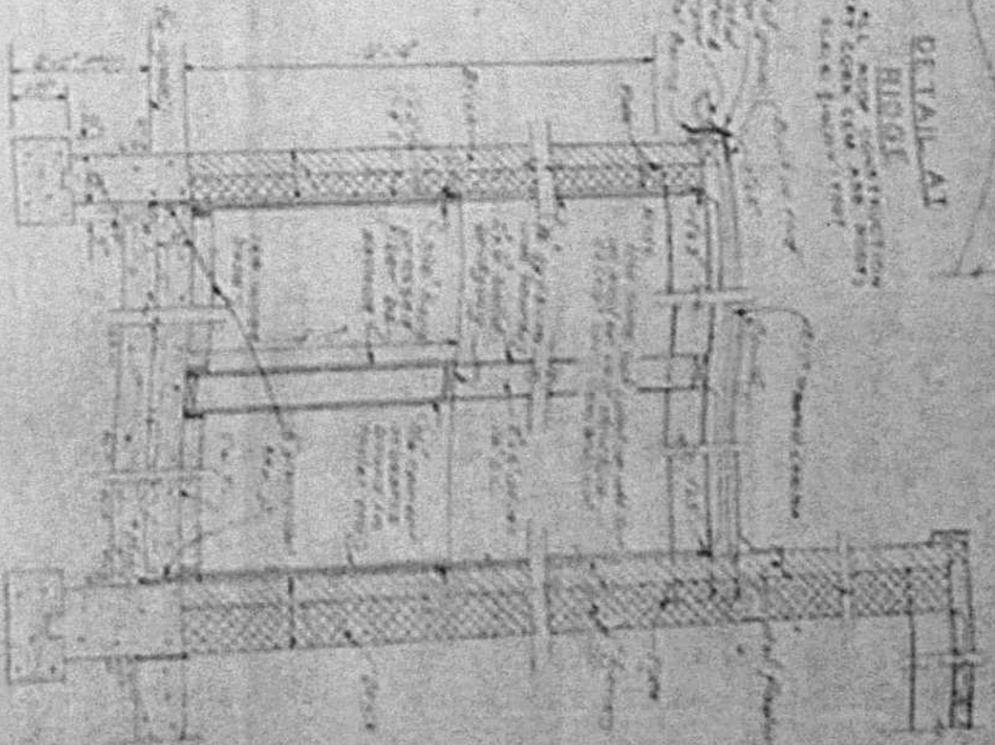
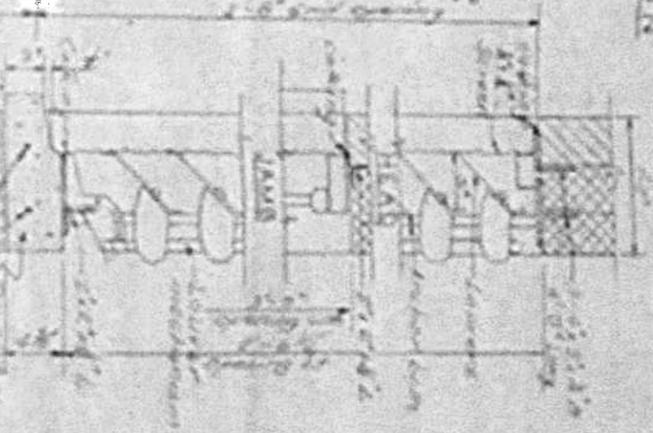
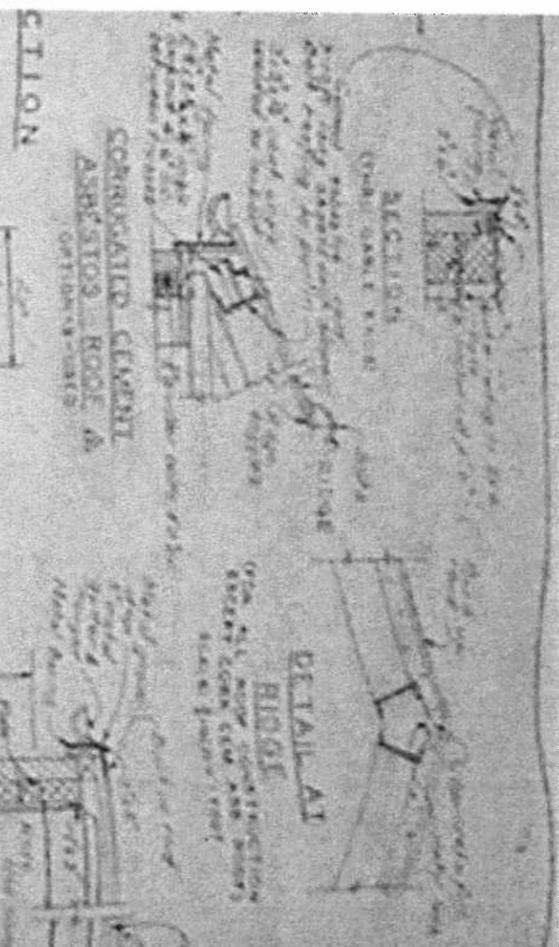
Index	Component	Substrate	Slide	Condition	Color	Site	Room	Results	PbC	PbI	PbK
121	OVERHEAD DR FRAME	METAL	A	INTACT	BLUE	17	DRILL HALL	Positive	2.80 ± 1.70	2.80 ± 1.70	< LOD : 10.65
122	OVERHEAD DR FRAME	METAL	A	INTACT	BLUE	17	DRILL HALL	Positive	2.60 ± 1.30	2.60 ± 1.30	< LOD : 9.15
123	OVERHEAD DOOR	METAL	A	INTACT	BLUE	17	DRILL HALL	Positive	1.90 ± 0.80	1.90 ± 0.80	< LOD : 4.80
124	OVERHEAD DOOR	METAL	A	INTACT	BLUE	17	DRILL HALL	Positive	1.10 ± 0.10	1.30 ± 0.50	1.30 ± 0.50
125	OVERHEAD DOOR	METAL	B	INTACT	BEIGE	17	DRILL HALL	Positive	< LOD : 5.70	< LOD : 5.70	< LOD : 13.50
126	OVERHEAD DR FRAME	METAL	B	INTACT	BEIGE	17	DRILL HALL	Positive	< LOD : 4.95	< LOD : 4.95	< LOD : 11.40
127	FIRE DOOR	METAL	C	INTACT	BEIGE	17	DRILL HALL	Negative	< LOD : 0.45	< LOD : 0.45	< LOD : 3.28
128	FIRE DOOR	METAL	C	INTACT	BEIGE	17	DRILL HALL	Positive	6.20 ± 4.10	6.20 ± 4.10	< LOD : 14.70
129	FIRE DOOR	METAL	C	INTACT	BEIGE	17	DRILL HALL	Positive	4.30 ± 2.60	4.30 ± 2.60	< LOD : 13.35
130	FIRE DR FRAME	METAL	C	INTACT	BEIGE	17	DRILL HALL	Positive	4.80 ± 2.80	4.80 ± 2.80	< LOD : 12.30
131									3.64 ± 0.00	0.53 ± 0.00	0.00 ± 0.00
132			CALIBRATE					Positive	1.30 ± 0.30	1.30 ± 0.30	< LOD : 1.65
133			CALIBRATE					Positive	1.00 ± 0.10	1.00 ± 0.10	0.40 ± 0.20
134			CALIBRATE					Positive	1.00 ± 0.10	1.00 ± 0.10	0.60 ± 0.20
135									3.37 ± 0.00	0.52 ± 0.00	0.00 ± 0.00
136	WALL	DRYWALL	A	FAIR	WHITE	18	MOTOR POOL	Negative	< LOD : 0.30	< LOD : 0.30	< LOD : 2.35
137	WALL	DRYWALL	B	FAIR	WHITE	18	MOTOR POOL	Negative	< LOD : 0.20	< LOD : 0.20	< LOD : 2.61
138	WALL	DRYWALL	C	FAIR	WHITE	18	MOTOR POOL	Negative	< LOD : 0.18	< LOD : 0.18	< LOD : 2.09
139	OVERHEAD DOOR	DRYWALL	C	FAIR	WHITE	18	MOTOR POOL	Negative	< LOD : 0.60	< LOD : 0.60	< LOD : 2.85
140	OVERHEAD DOOR	METAL	B	INTACT	WHITE	18	MOTOR POOL	Negative	0.50 ± 0.30	0.50 ± 0.30	< LOD : 3.58
141	OVERHEAD DR FRAME	METAL	B	INTACT	WHITE	18	MOTOR POOL	Negative	0.50 ± 0.30	0.50 ± 0.30	< LOD : 5.01
142	DOOR	METAL	C	INTACT	BLUE	18	MOTOR POOL	Negative	< LOD : 0.60	< LOD : 0.60	< LOD : 3.77
143	DOOR FRAME	METAL	C	INTACT	BLUE	18	MOTOR POOL	Negative	< LOD : 0.37	< LOD : 0.37	< LOD : 4.65
144	WALL	WOOD	A	INTACT	BEIGE	1P	MOTOR POOL STORAG	Negative	< LOD : 0.20	< LOD : 0.20	< LOD : 2.48
145	WALL	WOOD	B	INTACT	BEIGE	1P	MOTOR POOL STORAG	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.62
146	WALL	WOOD	C	INTACT	BEIGE	1P	MOTOR POOL STORAG	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.60
147	WALL	WOOD	D	INTACT	BEIGE	1P	MOTOR POOL STORAG	Negative	< LOD : 0.12	< LOD : 0.12	< LOD : 2.71
148	WALL	WOOD	D	INTACT	BEIGE	1P	MOTOR POOL STORAG	Negative	< LOD : 0.10	< LOD : 0.10	< LOD : 1.76
149	WALL	CONCRETE	A LOWER	FAIR	WHITE		OUTSIDE	Negative	< LOD : 0.04	< LOD : 0.04	< LOD : 2.35
150	DOOR	CONCRETE	A	POOR	WHITE		OUTSIDE	Negative	0.60 ± 0.30	0.60 ± 0.30	< LOD : 1.67
151	OVERHEAD DR GARDS	CONCRETE	A	POOR	WHITE		OUTSIDE	Positive	< LOD : 7.80	< LOD : 3.60	< LOD : 7.80
152	OVERHEAD DOOR	CONCRETE	A	POOR	WHITE		OUTSIDE	Positive	2.90 ± 1.40	1.40 ± 0.60	2.90 ± 1.40
153	WINDOW	CONCRETE	A	POOR	WHITE		OUTSIDE	Negative	0.05 ± 0.03	0.05 ± 0.03	< LOD : 1.33
154	TRIM BOARD	WOOD	A	INTACT	WHITE		OUTSIDE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.48
155	ENTRANCE DOOR	METAL	A	INTACT	WHITE		OUTSIDE	Negative	0.70 ± 0.20	0.70 ± 0.20	< LOD : 1.20
156	WINDOW	METAL	A	INTACT	WHITE		OUTSIDE	Negative	< LOD : 1.34	< LOD : 0.09	< LOD : 1.34
157	ENTRANCE CEILING	WOOD	A	INTACT	WHITE		OUTSIDE	Negative	0.60 ± 0.30	0.60 ± 0.30	< LOD : 1.05
158	FLAG POLE	METAL	A	POOR	SILVER		OUTSIDE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 4.80
159	OVERHEAD DOOR	METAL	B	POOR	SILVER		OUTSIDE	Positive	< LOD : 5.40	< LOD : 3.00	< LOD : 5.40
160	OVERHEAD DR GARDS	CONCRETE	B	POOR	SILVER		OUTSIDE	Positive	< LOD : 4.65	2.30 ± 1.40	< LOD : 4.65

Index	Component	Substrate	Side	Condition	Color	Site	Room	Results	PbC	PbI	PbK
161	OVERHEAD DR FRAME	CONCRETE	B	POOR	SILVER		OUTSIDE	Positive	1.80 ± 0.80	2.20 ± 0.40	1.80 ± 0.80
162	WINDOW	CONCRETE	C	POOR	WHITE		OUTSIDE	Negative	< LOD : 1.38	< LOD : 0.07	< LOD : 1.38
163	DOOR	CONCRETE	C	POOR	WHITE		OUTSIDE	Negative	< LOD : 0.75	< LOD : 0.75	< LOD : 4.80
164	STORAGE SHED	METAL	C	POOR	GREEN		OUTSIDE	Null	1.30 ± 0.40	1.30 ± 0.40	< LOD : 3.60
165	STORAGE SHED	METAL	C	POOR	GREEN		OUTSIDE	Positive	3.10 ± 1.60	3.10 ± 1.60	< LOD : 11.40
166	STORAGE SHED	METAL	C	POOR	GREEN		OUTSIDE	Positive	1.80 ± 0.80	1.80 ± 0.80	< LOD : 8.25
167			CALIBRATE					Positive	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.60
168			CALIBRATE					Null	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.72
169			CALIBRATE					Null	1.00 ± 0.10	1.00 ± 0.10	< LOD : 0.70
170			CALIBRATE					Positive	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.70
171			CALIBRATE					Positive	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.75
172			CALIBRATE					Positive	1.20 ± 0.10	1.20 ± 0.10	< LOD : 1.05

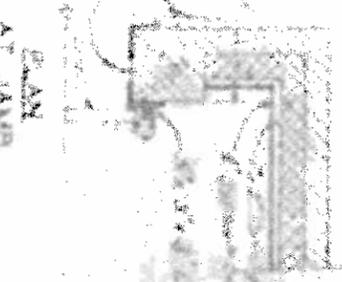
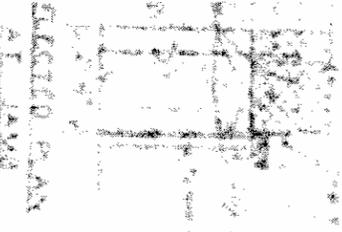
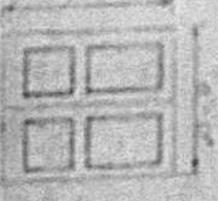
**APPENDIX G**



RECORD (AS BUILT) DRAWING  
 MOTOR VEHICLE STORAGE BLDG  
 OCLAYONA NATIONAL GUARD  
 M150-380



DETAIL OF ASTRAGAL  
DOOR



DOOR DETAIL  
JAMB

RECORD CAS BUILT J DRAWING

TRAIL C DOOR

B DOOR

OKLAHOMA NATIONAL GUARD  
MOTOR VEHICLE STORAGE BLDG  
DETAILS  
MISO-3802

## Roof in Drill Floor of Hartshorne Armory



**APPENDIX H**

# Hartshorne Armory Photos



Cleaning products in Kitchen



Asbestos tile and floor stripper in upper level of Motor Pool



Various POLs in outside storage building

# Hartshorne Armory Photos



Gun cleaning solvent and ink pad  
Ink in Orderly Room



Magnesium batteries in  
Orderly Room

# Chemicals and Spill Photos



# Some OMD Property



# Asbestos Sampling



**APPENDIX I**

# LIMITED ENVIRONMENTAL BASELINE ASSESSMENT



**OKLAHOMA ARMY NATIONAL GUARD  
HARTSHORNE ARMORY  
305 SOUTH 12<sup>TH</sup> STREET  
HARTSHORNE, OK**

**25 OCTOBER 2005**

**PERFORMED BY  
OKLAHOMA MILITARY DEPARTMENT ENVIRONMENTAL OFFICE [OKDE-ENV]  
FOR  
THE OKLAHOMA MILITARY DEPARTMENT**

**LIMITED ENVIRONMENTAL BASELINE ASSESSMENT**

*for*

**HARTSHORNE ARMORY  
305 SOUTH 12<sup>TH</sup> STREET  
HARTSHORNE, OK**

**25 OCTOBER 2005**

**CONDUCTED BY  
THE OKLAHOMA MILITARY DEPARTMENT ENVIRONMENTAL OFFICE (OKDE-ENV)**

**CONDUCTED FOR  
THE OKLAHOMA MILITARY DEPARTMENT**

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## EXECUTIVE SUMMARY

Representatives of the Oklahoma Military Department Environmental Office (OKDE-ENV) conducted a Limited Environmental Baseline Assessment for the Oklahoma Army National Guard (OKARNG) Hartshorne Armory facility. The evaluation was conducted on behalf of the Oklahoma Military Department (OMD) and the OKARNG. The OKARNG is a component of the United States Army and fulfills the military mission of national security. The purpose of this assessment is to identify and record recognized environmental conditions (if any) at the subject property.

The following issues were noted (these are minor and only of minor concern):

- Motor oil and light bulbs in Motor Pool
- Lawnmower and weed trimmer in Motor Pool
- Box of automatic transmission fluid in Motor Pool
- PVC primer and adhesive in Motor Pool
- Floor stripper in upper level of Motor Pool
- Various cleaning supplies beneath sink in Kitchen and Storage Room
- Various POLs found in Storage Building

Recognized environmental conditions associated with the property and identified during this Limited Environmental Baseline Assessment revealed the following minor issues which have limited environmental risk:

- POLs, adhesives, floor stripper, and cleaning supplies at the facility present a potential for improper disposal and could result in undesirable consequences if released into the environment. They may also require special consideration for disposal.
- Based solely on the age of the facility, flooring tiles, pipe coatings, and roofing materials present a potential for presence of asbestos containing materials (ACM).

Based on findings of this evaluation, it is unlikely that activities or events during the Oklahoma Army National Guard's use of the property have resulted in a significant adverse environmental impact.

## **SITE DESCRIPTION**

The subject property is located at 305 South 12<sup>th</sup> Street, Hartshorne, Oklahoma. The City of Hartshorne is located in Pittsburg County, Oklahoma. The subject property is a parcel of property managed and maintained by the Oklahoma Military Department (on behalf of State of Oklahoma) to support the military mission of the OKARNG. The facility served as an Armory to further the mission of the OKARNG. It operated as a center of operations for a military component of the OKARNG. It served as a training site for the component and stored those materials required by the component.

## **SITE RECONNAISSANCE**

Matthew Simpson (OKDE-ENV) performed a site reconnaissance visit on 25 October 2005 to visually assess the subject property and record the current environmental condition of the facility and grounds.

The facility is currently being used by the Twin Cities VFW (Post 3085). The rooms are being used for meetings and storage. The gaming tables and basketball goals on the Drill Hall floor belong to a local Youth Center. The Youth Center was using the building along with the VFW for about a year. The VFW also allowed local organizations to use the facility to fabricate floats for parades.

Twin Cities VFW is utilizing the entire building, except four inaccessible rooms. Items in the building that were brought onto the property by either the VFW, Youth Center, or organizations constructing parade floats include:

- Clothes and toys in the Motor Pool storage area (Appendix C, Photo #15)
- Billiards and foosball tables in Drill Hall (Appendix C, Photo #16)
- Basketball goals in Drill Hall (Appendix C, Photo #18)

The following recognized environmental conditions were identified during the assessment:

- Motor oil and light bulbs in Motor Pool (Appendix C, Photo #1)
- Lawnmower and weed trimmer in Motor Pool (Appendix C, Photo #2)
- Box of automatic transmission fluid in Motor Pool (Appendix C, Photo #3)
- PVC primer and adhesive in Motor Pool (Appendix C, Photo #5)
- Floor stripper in upper level of Motor Pool (Appendix C, Photo #7)
- Various cleaning supplies beneath sink in Kitchen and Storage Room (Appendix C, Photo #8 & #9)
- Various POLs found in Storage Building (Appendix C, Photo #11,#12,#13, & #14)

## **INTERVIEWS**

Mr. Gilbert Edington, Twin Cities VFW Post 3085 member, presented information voluntarily during the facility site reconnaissance conducted on 25 October 2005 and assisted in giving a tour of the facility. Mr. Edington stated that the Youth Center, who was also using the facility, had been doing so for about one year and would no longer be using the facility. Mr. Edington also aided in differentiating between the owners of the several pieces of property within the facility.

## **LIMITATIONS**

The following locations at the Hartshorne Armory were not accessible for evaluation:

- Supply Room (Appendix D)
- Vault (Appendix D)
- Training Room (Appendix D)
- Storage Supply (Appendix D)

**NOTE:** These rooms need to be accessed and examined before this assessment can be completed and before transfer of the property.

## **CONCLUSIONS**

Representatives of the Oklahoma Military Department Environmental Office (OKDE-ENV) conducted a Limited Environmental Baseline Assessment at the Hartshorne Armory facility. The evaluation was conducted on behalf of the Oklahoma Military Department (OMD) and the Oklahoma Army National Guard (OKARNG) to identify and record recognized environmental conditions (if any) at the subject property.

Recognized environmental conditions associated with the property and identified during this Limited Environmental Baseline Assessment revealed the following minor issues which have limited environmental risk:

- POLs, adhesives, floor stripper, and cleaning supplies at the facility present a potential for improper disposal and could result in undesirable consequences if released into the environment. They may also require special consideration for disposal.
- Based solely on the age of the facility, flooring tiles, pipe coatings, and roofing materials present a potential for presence of asbestos containing materials (ACM).

Based on findings of this evaluation, it is unlikely that activities or events during the Oklahoma Army National Guard's use of the property have resulted in a significant adverse environmental impact. .

## **RECOMMENDATIONS**

It is the recommendation of this assessment that the POLs, adhesives, floor stripper, and cleaning supplies at the facility should be removed and/or properly disposed of by the unit to last utilize the facility. The facility should also be inspected for asbestos containing materials (ACM).

**APPENDICES**

**APPENDIX A: ASSESSMENT PURPOSE and SCOPE/LIMITATIONS**

**APPENDIX B: METHODOLOGY**

**APPENDIX C: RECONNAISSANCE PHOTOGRAPHS**

**APPENDIX D: FACILITY MAP**

## **APPENDIX A**

### ***ASSESSMENT PURPOSE and SCOPE/LIMITATIONS***

## **PURPOSE**

It is in the best interest of the OMD and the OKARNG to evaluate the current condition of the property, document any recognized environmental conditions, and prepare a record of the assessment.

This Limited Environmental Baseline Assessment was conducted to gather contemporary environmental data and preserve it in a manner consistent with customary professional practice. It is not intended to fulfill requirements of any recognized guidance document. No recommendations may be reached based solely upon the content of this Limited Environmental Baseline Assessment.

## **SCOPE and LIMITATIONS**

This assessment is exclusively limited to investigation and evaluation of the subject property based on visual observation of the property and appurtenances. Recognized environmental conditions identified on the subject property or on those abutting properties were documented in written form and photographed (whenever possible) for record (included as Appendix C, Reconnaissance Photographs).

The assessment did not include any of the following commonly used elements:

- Historical Document Evaluation (inspection records, aerial photographs, topographic maps, etc).
- Media sample collection and laboratory analyses.

Those areas not readily accessible to the assessor (building roofs, drainage devices, and etcetera) were not evaluated unless otherwise stated. No conclusions may be reached concerning their condition.

**APPENDIX B**  
***METHODOLOGY***

## **METHODOLOGY**

The investigation process was conducted as follows:

- A pedestrian survey of the property perimeter (as judged feasible).
- A pedestrian survey of the property. Using a perimeter fence as reference, the assessor traversed the property repeatedly on 20 (twenty) foot intervals by walking in a straight line parallel to the reference fencing (as allowed by obstacles).
- Visual examination of the exterior and interior of all buildings, sheds, (as accessible), and storage areas.

Recognized environmental conditions identified at the subject property were photographed for record (whenever possible).

**APPENDIX C**  
***RECONNAISSANCE PHOTOGRAPHS***



Photo #1  
Motor Oil and Light Bulbs in Motor Pool  
25 October 2005: View to W



Photo #2  
Lawnmower and Weed Trimmer in Motor Pool  
25 October 2005: View to NE



Photo #3  
Box of Automatic Transmission Fluid in Motor Pool  
25 October 2005: View to W



Photo #4  
Oil-based Sweeping Compound in Motor Pool  
25 October 2005: View to W



Photo #5  
PVC Primer and Adhesive in Motor Pool  
25 October 2005: View to S



Photo #6  
Various Items in Motor Pool  
25 October 2005: View to W



Photo #7  
Floor Stripper in Upper Level of Motor Pool  
25 October 2005: View to E



Photo #8  
Various Cleaning Supplies beneath Sink in Kitchen  
25 October 2005: View to S



Photo #9  
Various Cleaning Supplies in Storage Room  
25 October 2005: View to N

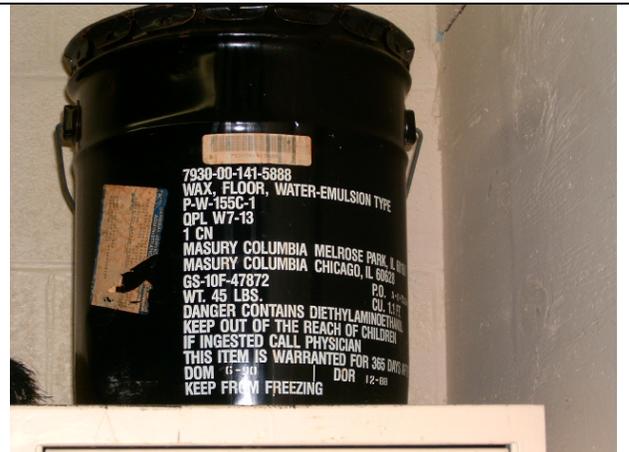


Photo #10  
Floor Wax in Storage Room  
25 October 2005: View to N



Photo #11  
Various POLs found in Storage Building  
25 October 2005: View to SE



Photo #12  
Various POLs found in Storage Building  
25 October 2005: View to SE



Photo #13  
Various POLs found in Storage Building  
25 October 2005: View to NE



Photo #14  
Various POLs found in Storage Building  
25 October 2005: View to NE



Photo #15  
Clothes and Toys in Motor Pool  
25 October 2005: View to S



Photo #16  
Billiards and Foosball Tables in Drill Hall  
25 October 2005: View to E



Photo #17  
Tables and Lockers in Drill Hall  
25 October 2005: View to NW



Photo #18  
Basketballs Goals in Drill Hall  
25 October 2005: View to SW



Photo #19  
Building Exterior  
25 October 2005: View to SE



Photo #20  
Building Exterior  
25 October 2005: View to W



Photo #21  
Building Exterior  
25 October 2005: View to NW



Photo #22  
Building Exterior  
25 October 2005: View to NNE



Photo #23  
Building Exterior  
25 October 2005: View to NNW

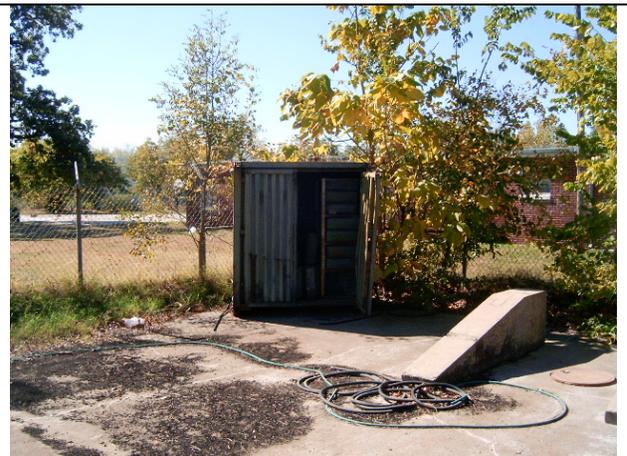


Photo #24  
Storage Building in Vehicle Compound  
25 October 2005: View to SW

**APPENDIX D**  
***FACILTY MAP***

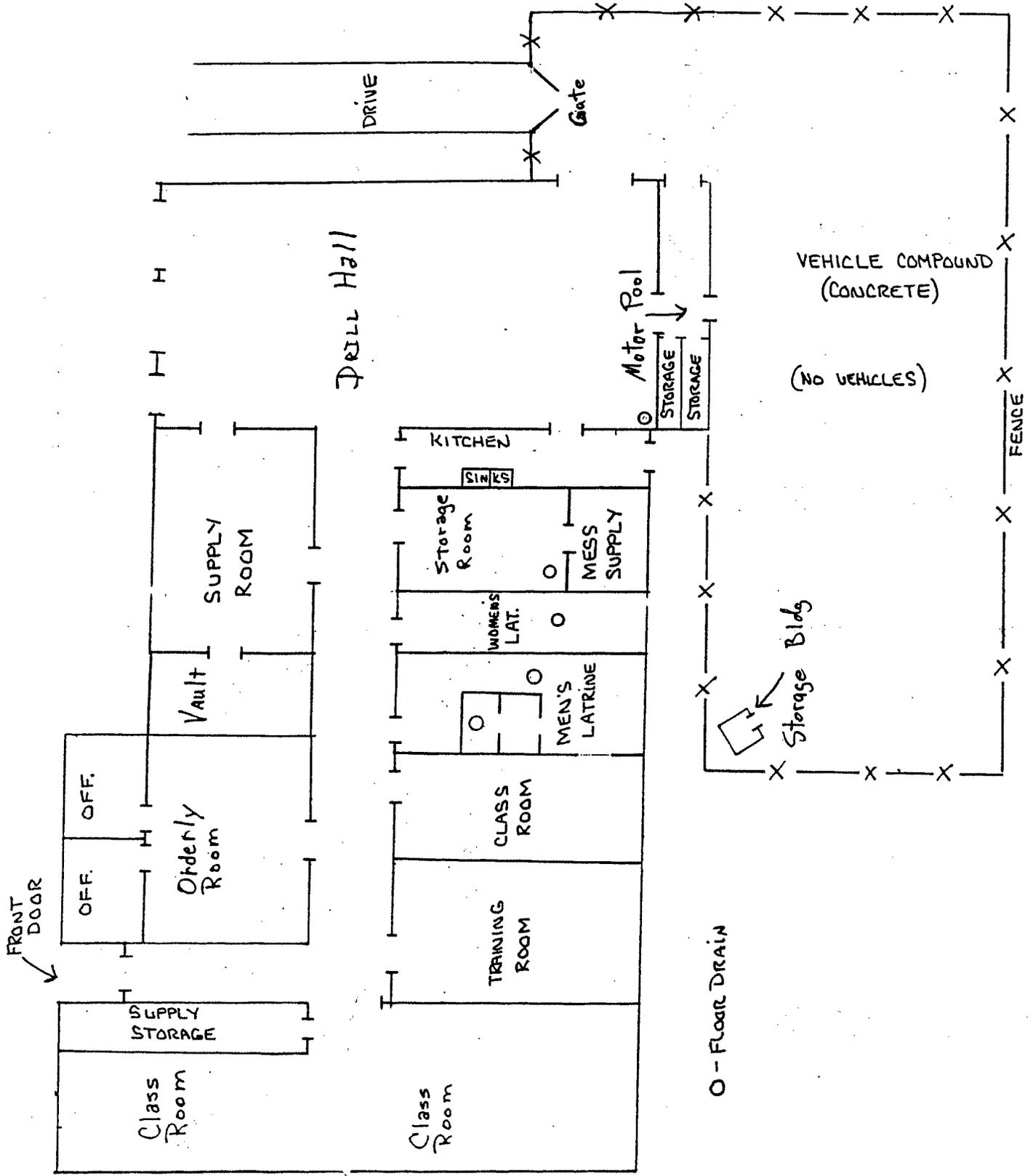
# HARTSHORNE ARMORY

HARTSHORNE, OKLAHOMA

BUILT: 1953

(CO A(-) 1BN 180 INF)

VISIT: JUNE, 14 1996



**APPENDIX J**

# CHAPTER ONE INTRODUCTION

The Brushy Peaceable Creek Watershed encompasses 213,686 acres south of McAlester, Oklahoma (Oklahoma Water Resources Board 1980:60b). The watershed is confined to Pittsburg County, except for a small portion extending into Latimer County (Figure 1.1). The primary tributaries of this area, Peaceable, Brushy, and Elm creeks, are part of the Canadian River drainage. Immediately to the south in Atoka County, streams are part of the Red River drainage system.

The sponsors of the project are the Pittsburg County Soil and Water Conservation District, the city of McAlester, and the Brushy Peaceable Creek Conservancy District. The watershed will be composed of 44 single purpose floodwater retarding structures and two multipurpose structures (Figure 1.1). These structures are being constructed for land treatment practices and flood protection of 13,097 acres of fertile bottomland. The multipurpose structures will also add 7,750 acre feet of storage capacity for a

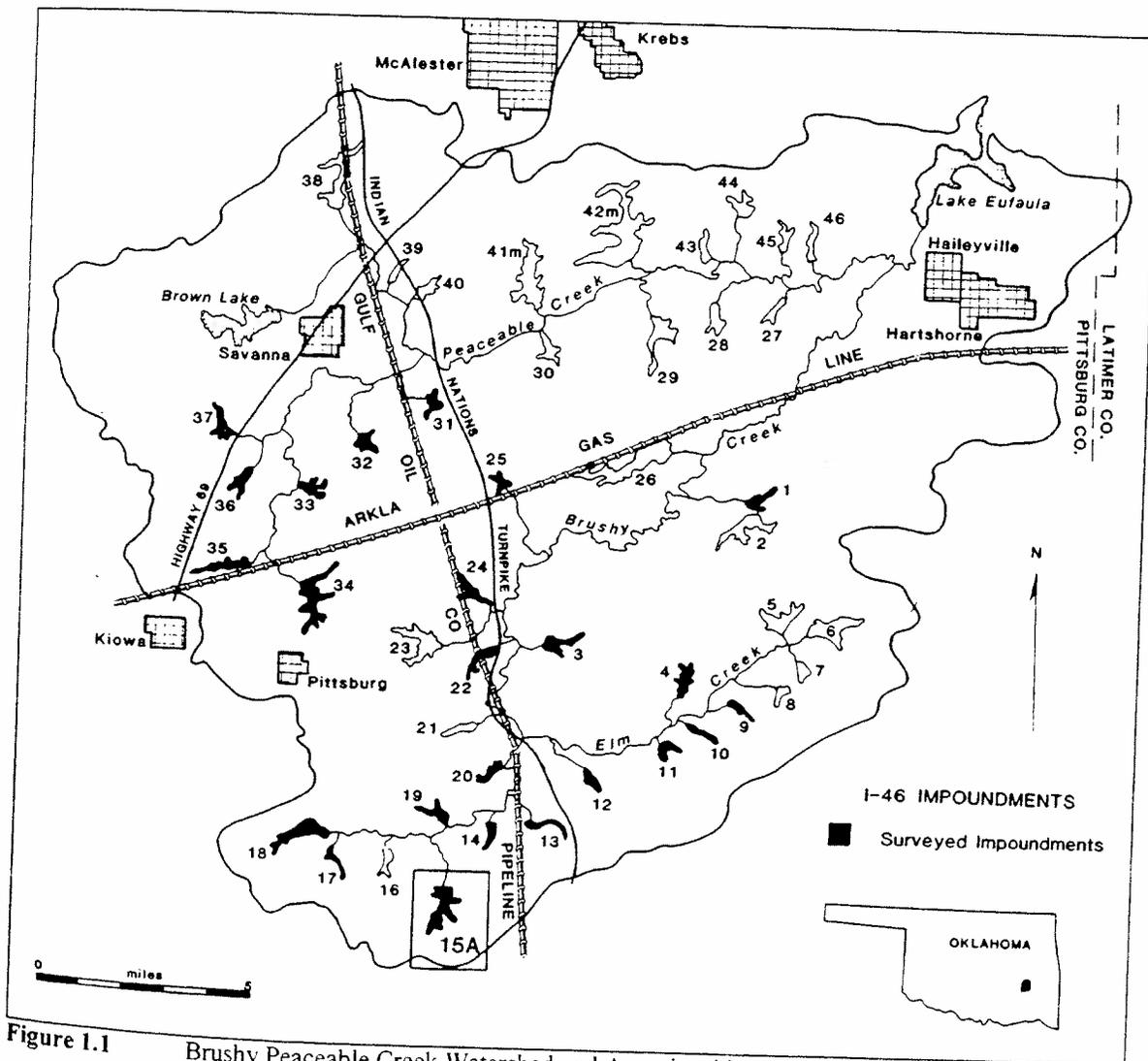


Figure 1.1 Brushy Peaceable Creek Watershed and Associated Impoundments

**APPENDIX K**

AAI Site Visit

Facility name: Hartshorn Artery

Facility address:

Date of visit: 9-14-06

DEQ staff in attendance: Heather Mallory & Jarrett Keck

People interviewed/affiliation with site: Ron Hunt, 1st Sgt, Unit Admin  
36 yrs

Note: Take a copy of the facility map with you to mark where drains, utilities, and sampling locations are located

**Utilities**

City water    \_\_\_ Well     City sewer    \_\_\_ Septic tank  
 Natural gas    \_\_\_ Propane

**Underground features**

Under current parking lot  
 USTs removed NO Vent pipes present    \_\_\_ USTs not removed  
~1986, gasoline 1,000 gallon, UST leaked water some

**Above ground features**

NO Cisterns present    NO ASTs    NO Impoundments

**Structures on adjoining property**

Residential, commercial structures, churches, schools etc

W, N - residential  
E - swimming pool / rodeo ground  
S - vacant lot

**Onsite information**

NO Air Emissions    NO Wastewater Discharge

**Industrial activities**

No Monitoring wells *Location:*

No Stained soils *Location:*

No Seeps *Location:*

     Chemical spills *Location:*

No Oil and Gas Exploration *Describe:*

No Known Groundwater or Surface Water contamination

*Describe:*

No Farm Wastes

     Known Pesticide Misapplication

No Discharges and Runoff from Adjacent Property Affecting the Site

No Transformers/PCB Equipment *Location:*

*Transformer changed out in late 80's*

*Describe:*

Other known or Suspected Environmental Concerns On the Site

Historical Recognized Environmental Conditions On the Site

**Current Use of the Property**

Descriptions of Structures, Roads, Other Improvements on the Site

*Property belongs to army & has been made into a park*

**Description of adjacent properties**

S - park  
W, N - residential  
E - city park swimming pool, redso, baseball field

**Owner, Property Manager, and Occupant Information**

OKANG

**Additional Environmental Record Sources**

City Records: e.g. Material Safety Data Sheets for chemicals used at industrial or commercial facilities Land Use Restrictions

NO

**Physical Setting Sources**

**Historical Use Information on the Property**

vacant lot before armory

**Historical Use Information on Adjoining Properties**

Same

**Site Reconnaissance**

Methodology and Limiting Conditions: The method used to observe the property and limitations imposed by physical obstructions or limiting weather conditions.

**General Site conditions:**

External observations

\_\_\_ Stained soil or pavement \_\_\_ Stressed vegetation \_\_\_ Solid waste

Other:

Internal observations

\_\_\_ Odors \_\_\_ Pools of liquids \_\_\_ Drums

Stains or Corrosion on floors, walls, or ceilings

Other:

**General notes:**

Army closed for 20-6 yrs.

Stored weapons here (M16, M60, M203)

Didn't store ammo here

40. 1. 1968  
- [unclear] [unclear] [unclear]

1. 1. 1968  
- [unclear] [unclear] [unclear]  
- [unclear] [unclear] [unclear]  
- [unclear] [unclear] [unclear]  
- [unclear] [unclear] [unclear]

1. 1. 1968  
- [unclear] [unclear] [unclear]  
- [unclear] [unclear] [unclear]  
- [unclear] [unclear] [unclear]



**APPENDIX L**

*City of Hartshorne*  
HARTSHORNE, OKLAHOMA 74547

(918) 297-2544 FAX (918) 297-2594

CITY COUNCIL MEETING • SECOND MONDAY NIGHT OF EACH MONTH AT 8:30 P.M.

**SHIRLEY DAY**  
CITY TREASURER

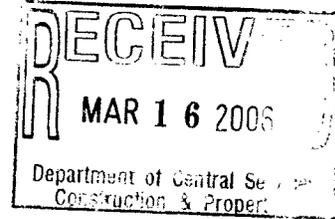
**DAWN DUNKIN**  
CITY CLERK

**CAROLYN JO TRUEBLOOD**  
MAYOR

**JAMES WILSON**  
CHIEF OF POLICE

**DAVID MASS**  
FIRE CHIEF

3-14-06



STATE OF OKLAHOMA  
Dept. of Central Services

Attn: Mr. John Richard  
Director

RE : Armory Building - Hartshorne, Ok

Dear Sir:

Per your letter of February 10, 2006 we are pleased to accept the Hartshorne Armory Building and to take possession of same at your direction.

I have been in contact with Ms. Rita Kottke and she will be perusing the property for environmental remediation.

Enclosed are the minutes from our City Council meeting wherein we accepted aforementioned building.

We thank you for this opportunity to render the Armory's availability to our local VFW, Boys & Girls Club, highschool P.E. classes to be held in the drill room, any civic organization needing meeting space and church groups services. We are very excited to get to offer this facility to our town.

Thank you for your consideration and if you have any questions please do not hesitate to call.

Yours truly,

A handwritten signature in cursive script that reads "Carolyn Jo Trueblood".

Carolyn Jo Trueblood  
Mayor

Enc.

City of Hartshorne, Minutes  
March 13, 2006

Mayor Carolyn Trueblood met in a regular meeting with council members Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.

No action was taken on the property located at 111 South 15<sup>th</sup> that was addressed by Scott Spears.

No action was taken on removing the floral arrangements at Elmwood Cemetery that as addressed by Delores Pingleton.

1. No comments or questions on the Public Hearing for the Oklahoma Department of Commerce CDBG Contract #10679 CDBG-REAP 02, Water/Wastewater.
2. Motion was made by Mark Day seconded by Bob Baldwin to approve the CDBG Contract #10679 CDBG-REAP 02 Water/Wastewater project. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.
3. Motion was made by Bob Baldwin seconded by Mark Day to approve the Fair Housing Resolution. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.
4. Motion was made by Leon Mace seconded by Bob Baldwin to declare April Fair Housing Month. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.
5. Motion was made by Mark Day seconded by Bob Baldwin on approving the minutes of the previous meeting held on 2-13-06. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.
6. Motion was made by Mark Day seconded by Bob Baldwin to proceed with the abatement located at 201 N 15<sup>th</sup> belonging to Van Christopher. Roll call 5 ayes Mark Day, Brian Young, Eddie Kelly, Leon Mace and Bob Baldwin. 1 no Barney Rosso. 1 Abstain Alvin Lopez. 1 absent: Tim Colbert.
7. The action on the abatement sent to Bible Church Ministry located on 9<sup>th</sup> and Penn next to the Pawn Shop was tabled until next month.

March 13, 2006

8. Motion was made by Mark Day seconded by Alvin Lopez to proceed with building a fishing dock with donations and tearing down the old bathrooms at the City Lake. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.
9. Motion was made by Mark Day seconded by Bob Baldwin on approving to hire Jarrod Hauff as the 2006 Baseball Commissioner at \$1800. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.
10. Motion was made by Mark Day seconded by Bob Baldwin on hiring Harden Sweet as weed eater for the city cemetery at \$7.00 per hour. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.
11. Motion was made by Bob Baldwin seconded by Eddie Kelly on accepting the armory. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.
12. The action on renting the armory to the Haileyville School was tabled until next month.
13. Motion was made by Bob Baldwin seconded by Mark Day on accepting Bill Howry's resignation as ambulance driver. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.
14. Motion was made by Leon Mace seconded by Bob Baldwin on enforcing the ordinance book not allowing curbing, rocks, benches, etc. at the City Cemetery. The City will type up a letter to everyone that has put these things around there grave space asking them to remove the items. If not removed within a timely manner then the city will remove them. Roll call 6 ayes Mark Day, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 no Barney Rosso. 1 absent: Tim Colbert.
15. Motion was made by Leon Mace seconded by Mark Day on purchasing the John Deere tractor/mower for the City Cemetery at \$11,210. Roll call 6 ayes Mark Day, Barney Rosso, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 no Brian Young. 1 absent: Tim Colbert.
16. Motion was made by Leon Mace seconded by Bob Baldwin on hooking up David Spears to the new water line and discontinuing the old line. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.

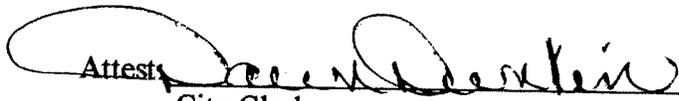
March 13, 2006

17. Motion was made by Leon Mace seconded by Bob Baldwin on accepting the \$.25 cent increase from Pittsburg County Water Authority per thousand and passing this increase on to the water customer. Roll call 3 ayes Mark Day, Leon Mace and Bob Baldwin, 3 no Eddie Kelly, Brian Young and Barney Rosso. 1 Abstain Alvin Lopez.

18. Motion was made by Bob Baldwin seconded by Mark Day on replacing the water line from Cherokee to Bill Schiller's on North 12<sup>th</sup>. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.

Motion was made by Leon Mace seconded by Eddie Kelly on paying the city bills. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.

Motion was made by Mark Day seconded by Leon Mace on adjourning the meeting. Roll call 7 ayes Mark Day, Barney Rosso, Brian Young, Eddie Kelly, Alvin Lopez, Leon Mace and Bob Baldwin. 1 absent: Tim Colbert.

Attest    
City Clerk Mayor

No 934

THE CHOCTAW AND CHICKASAW NATIONS. OKLAHOMA. (Formerly Indian Territory)

ALL TO WHOM THESE PRESENTS COME, GREETING:

WHEREAS, A certain townsite commission, heretofore appointed, and acting in accordance with law, has appraised the lots in the town of Natchitown, Oklahoma, formerly, Choctaw Nation, Indian Territory; and

WHEREAS, The plat of said town was approved by the Secretary of the Interior on the 9th day of December, 1905, and was duly placed on file; and

WHEREAS, The said commission has awarded the real estate described hereinbelow to the City of Natchitown, Oklahoma, Incorporated

has deposited Eighty six DOLLARS full amount of the purchase price, with the United States Indian Agent at Muskogee, Oklahoma, and is, therefore, entitled to a patent;

NOW, THEREFORE, We, the undersigned, the Principal Chief of the Choctaw Nation and the Governor of the Chickasaw Nation, do, by virtue of the power authority vested in us by the twenty-ninth section of the act of Congress of the United States, approved June 28, 1898 (30 Stat., 495), and the act of Congress approved July 1, 1902 (32 Stat., 641), hereby grant, sell, and convey unto the said City of Natchitown, Oklahoma, Incorporated, Successors

and assigns, forever, all the right, title, and interest of the Choctaw and Chickasaw Nations aforesaid, in and to lot numbered 245, 247 & 248, block numbered 136.

the town of Natchitown, Oklahoma, formerly, Choctaw Nation, Indian Territory, and according to plat thereof on file as aforesaid, saving and excepting from this conveyance, however, all coal and asphalt.

IN WITNESS WHEREOF, we, the Principal Chief of the Choctaw Nation and the Governor of the Chickasaw Nation, have hereunto set our hands and caused great seals of our respective nations to be affixed at the dates hereinafter shown.

Date, Apr 8 - 1917, 19... Victor M. Locke Jr. Principal Chief of the Choctaw Nation.

Date, Sep 18, 1917, 19... Douglas N. Johnston Governor of the Chickasaw Nation.

Filed for Record 10 day of Apr 1913, at 2:20 o'clock P.M. E. M. Myers Register of Deeds.

Deputy, No 867

THE CHOCTAW AND CHICKASAW NATIONS. OKLAHOMA. (Formerly Indian Territory)

ALL TO WHOM THESE PRESENTS COME, GREETING:

WHEREAS, A certain townsite commission, heretofore appointed, and acting in accordance with law, has appraised the lots in the town of Natchitown, Oklahoma, formerly, Choctaw Nation, Indian Territory; and

WHEREAS, The plat of said town was approved by the Secretary of the Interior on the 9th day of December, 1905, and was duly placed on file; and

WHEREAS, The said commission has awarded the real estate described hereinbelow to the City of Natchitown, Oklahoma

has deposited Fifty three DOLLARS full amount of the purchase price, with the United States Indian Agent at Muskogee, Oklahoma, and is, therefore, entitled to a patent;

NOW, THEREFORE, We, the undersigned, the Principal Chief of the Choctaw Nation and the Governor of the Chickasaw Nation, do, by virtue of the power authority vested in us by the twenty-ninth section of the act of Congress of the United States, approved June 28, 1898 (30 Stat., 495), and the act of Congress approved July 1, 1902 (32 Stat., 641), hereby grant, sell, and convey unto the said City of Natchitown, Oklahoma, Successors

and assigns, forever, all the right, title, and interest of the Choctaw and Chickasaw Nations aforesaid, in and to lot numbered 2, block numbered 136.

lots numbered 1 and 10, in Block 137, also lot numbered 1, in Block numbered 141.

the town of Natchitown, Oklahoma, formerly, Choctaw Nation, Indian Territory, and according to plat thereof on file as aforesaid, saving and excepting from this conveyance, however, all coal and asphalt.

IN WITNESS WHEREOF, we, the Principal Chief of the Choctaw Nation and the Governor of the Chickasaw Nation, have hereunto set our hands and caused great seals of our respective nations to be affixed at the dates hereinafter shown.

Date, May 2, 1911, 19... Victor M. Locke Jr. Principal Chief of the Choctaw Nation.

Date, May 5, 1911, 19... Douglas N. Johnston Governor of the Chickasaw Nation.

Filed for Record 10 day of April 1913, at 2:20 o'clock P.M. E. M. Myers Register of Deeds.

Deputy.

1917 and 1905... by whom? Martin's deed... 1000000... by whom? Martin's deed... 1917 and 1905... by whom? Martin's deed...

D-16 355

Law and Chickasaw Nations to City of Hartshorne Lot No. 3, 4, 5 Block No. 142  
Town of Hartshorne Oklahoma formerly No. 1024

THE CHOCTAW AND CHICKASAW NATIONS, INDIAN TERRITORY.

ALL TO WHOM THESE PRESENTS COME, GREETING:

WHEREAS, A certain townsite commission, heretofore appointed, and acting in accordance with law, has appraised the lots in the town of Hartshorne, Oklahoma formerly Choctaw Nation, Indian Territory; and

WHEREAS, The plat of said town was approved by the Secretary of the Interior on the 9th day of December 1903 was duly placed on file; and

WHEREAS, The said commission has awarded the real estate described hereinbelow to City of Hartshorne, Oklahoma (Incorporated)

has deposited Thirty DOLLARS, full amount of the purchase price, with the United States Indian Agent at  Muskogee Oklahoma, and is, therefore, entitled to a patent;

NOW THEREFORE, We, the undersigned, the Principal Chief of the Choctaw Nation and the Governor of the Chickasaw Nation, do, by the power and authority vested in us by the twenty-ninth section of the Act of Congress of the United States, approved June 28, 1898 (Stat., 495,) and the Act of Congress approved July 1, 1902 (32 Stat. 641) hereby grant, sell, and convey unto the said City of Hartshorne, Oklahoma (Incorporated) Successors and assigns forever, all the right, title, and interest of the Choctaw and Chickasaw Nations aforesaid in and to lot numbered 3 and 5, in block numbered 142, in the town of Hartshorne Oklahoma formerly Choctaw Nation, Indian Territory, and according to the plat thereof on file as aforesaid, saving and excepting from this conveyance, however, all coal and asphalt.

IN WITNESS WHEREOF, We, the Principal Chief of the Choctaw Nation and the Governor of the Chickasaw Nation, have hereunto set hands and caused the great seal of our respective nations to be affixed at the dates hereinafter shown.

Date, June 18 1914 1914 June 14 11 a Victor M. Locke Jr.  
(SEAL) 58 129 Principal Chief of the Choctaw Nation.

Date, June 22 1914 1914 J. S. Wright Douglas H. Johnston  
(SEAL) Wm J. Martin Governor of the Chickasaw Nation.

Filed for record on the 22 day of June 1920, at 9:30 o'clock A.M.  
W. J. Kendrick Co. Clerk  
Pittsburg County, Oklahoma.

Law and Chickasaw Nations to E Ellen Perry Lot No. 4 Block No. 174  
Town of Hartshorne Oklahoma formerly No. 651

THE CHOCTAW AND CHICKASAW NATIONS, INDIAN TERRITORY.

ALL TO WHOM THESE PRESENTS COME, GREETING:

WHEREAS, A certain townsite commission, heretofore appointed, and acting in accordance with law, has appraised the lots in the town of Hartshorne Oklahoma formerly Choctaw Nation, Indian Territory; and

WHEREAS, The plat of said town was approved by the Secretary of the Interior on the 9th day of December 1903 was duly placed on file; and

WHEREAS, The said commission has awarded the real estate described hereinbelow to E Ellen Perry

has deposited Thirty five DOLLARS, full amount of the purchase price, with the United States Indian Agent at Muskogee Oklahoma, and is, therefore, entitled to a patent;

NOW THEREFORE, We, the undersigned, the Principal Chief of the Choctaw Nation and the Governor of the Chickasaw Nation, do, by the power and authority vested in us by the twenty-ninth section of the Act of Congress of the United States, approved June 28, 1898 (Stat., 495,) and the Act of Congress approved July 1, 1902 (32 Stat. 641) hereby grant, sell, and convey unto the said E Ellen Perry

and assigns forever, all the right, title, and interest of the Choctaw and Chickasaw Nations aforesaid in and to lot numbered 4, in block numbered 174, in the town of Hartshorne Oklahoma formerly Choctaw Nation, Indian Territory, and according to the plat thereof on file as aforesaid, saving and excepting from this conveyance, however, all coal and asphalt.

IN WITNESS WHEREOF, We, the Principal Chief of the Choctaw Nation and the Governor of the Chickasaw Nation, have hereunto set hands and caused the great seal of our respective nations to be affixed at the dates hereinafter shown.

Date, Aug 23 1909 1909 Aug 10 a Green M. Britain  
(SEAL) 51 402 Principal Chief of the Choctaw Nation.

Date, Aug 25 1909 1909 J. S. Wright Douglas H. Johnston  
(SEAL) Wm J. Martin Governor of the Chickasaw Nation.

Filed for record on the 22 day of June 1920, at 1 o'clock P.M.  
W. J. Kendrick Co. Clerk  
Pittsburg County, Oklahoma.

EY

WARRANTY DEED

COPY

This indenture, made and entered into this 18 day of November, 1948, by and between the Board of City Commissioners of the City of Hartshorne, Oklahoma, a municipal corporation, acting by and through M. L. Thompson, the duly elected, qualified Mayor and acting Chairman of the Board of City Commissioners of the City of Hartshorne, Oklahoma, party of the first part, and the State of Oklahoma, acting as trustee for the Oklahoma National Guard, party of the second part, WITNESSETH:

That, whereas, on the 18 day of November, 1948, the said Board of City Commissioners of the City of Hartshorne, Oklahoma, made an Order by proper resolution, authorizing the said party of the first part to sell certain real estate belonging to the said City of Hartshorne, Oklahoma, to the said second party, and directing said Chairman of the Board of City Commissioners of said City of Hartshorne, Oklahoma, to execute and deliver a deed to the said second party.

Now, therefore, KNOW ALL MEN BY THESE PRESENTS: That the Board of City Commissioners of the City of Hartshorne, Oklahoma, acting by and through M. L. Thompson, the duly elected, qualified Mayor and acting Chairman of the Board of City Commissioners of the City of Hartshorne, Oklahoma party of the first part in consideration of the sum of one dollar and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, does grant, bargain, sell and convey unto the State of Oklahoma for the use and benefit of the Oklahoma National Guard, party of the second part, the following described real property and premises situated in the City of \_\_\_\_\_

Hartshorne, Pittsburg County, Oklahoma, to-wit:  
Lots Six (6)-Seven (7) and Eight (8) in Block One Hundred Thirty Six (136)-Lots Three (3)-Four (4) and Five (5) in Block One hundred forty two (142), all located in the City of Hartshorne, Pittsburg County, Oklahoma.

together with all improvements thereon and the appurtenances thereunto belonging, and warrant the title to same.

To Have and To Hold the said described premises unto the said party of the second part, its successors and assigns forever free, clear and discharged of

and from all former grants, taxes, judgments, mortgages, and other liens and incumbrances whatsoever nature.

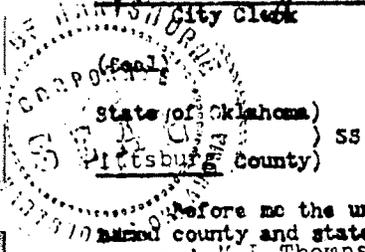
Signed and delivered this 18th day of November, 1948.

BOARD OF CITY COMMISSIONERS OF THE CITY OF Hartshorne, OKLAHOMA.

By M. L. Thompson  
Mayor and Chairman of the Board of City Commissioners of the City of Hartshorne, Oklahoma.

ATTEST:

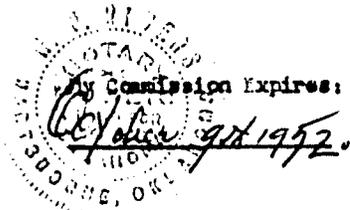
Norman Jones  
City Clerk



Before me the undersigned, a Notary Public, within and for the above named county and state, on this 22 day of November 1948, personally appeared M. L. Thompson, to me known to be the duly qualified and acting Mayor of the City of Hartshorne, Oklahoma, and Chairman of the Board of City Commissioners of the City of Hartshorne, Oklahoma, and the identical person who executed the within and foregoing instrument, and acknowledged to me that he executed the same in his capacity as Mayor and Chairman of the Board of City Commissioners of the City of Hartshorne, Oklahoma, as his free and voluntary act and deed as such Mayor and Chairman of said Board and as the free and voluntary act and deed of the Board of City Commissioners of the city of Hartshorne, Oklahoma, for the uses and purposes therein set forth.

Witness my hand and seal the date first above written.

A. P. Rivers  
Notary Public

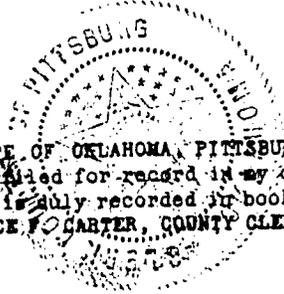


Accepted by the undersigned, Roy W. Kenny, The Adjutant General of the State of Oklahoma, pursuant to Section 218, Title 44, Oklahoma Statutes, 1941, this 29th day of November, 1948.

Roy W. Kenny  
ROY W. KENNY, The Adjutant General  
State of Oklahoma

I, Roy J. Turner, Governor of the State of Oklahoma, do hereby approve the above and foregoing acceptance, this 7th day of December, 1948.

Roy J. Turner  
ROY J. TURNER, Governor of the  
State of Oklahoma



55557

STATE OF OKLAHOMA, PITTSBURG COUNTY: I hereby certify that this instrument was filed for record in my office at 10 o'clock a.m. June 1 - 1949 and is duly recorded in book in 2 page 532-533  
GRACE F. CARTER, COUNTY CLERK By William M. Funch Deputy

RESOLUTION

WHEREAS, the City of Hartshorne, State of Oklahoma, is the owner of the following-described real property and premises, situate in Pittsburg County, State of Oklahoma, to wit:

Lots Six (6), Seven (7), and Eight (8), in Block One Hundred Thirty-six (136), and Lots Three (3), Four (4), and Five (5), in Block One Hundred Forty-two (142), in the City of Hartshorne, according to the official map and plat thereof, excepting all coal and asphalt.

together with all the improvements thereon and the appurtenances thereunto belonging; and,

WHEREAS, the same is deemed to be a suitable site for the construction, erection, and completion of an armory building or buildings under the provisions of Senate Bill No. 233 of the Twenty-fourth (1953) Oklahoma Legislature (44 Okla. St. Ann. ¶ 233.1 through 233.5); and,

WHEREAS, the same is not needed for any public purposes of the said

City of Hartshorne, State of Oklahoma:

NOW THEREFORE, BE IT RESOLVED by the Mayor and City Council

of the City of Hartshorne,

State of Oklahoma, that, if acceptable, the same be conveyed to the State of

Oklahoma, as provided for in said Senate Bill No. 233; and that the

Mayor of said City of

Hartshorne State of Oklahoma, be and hereby is, authorized and

directed to execute and deliver to the State of Oklahoma, subject to acceptance

by the Adjutant General of the Military Department of the State of Oklahoma, as

provided for in said Senate Bill No. 233, a good and sufficient deed conveying

the same to the State of Oklahoma, for the uses and purposes set forth in said

Senate Bill No. 233, and that the City Clerk of said

City of Hartshorne, State of Oklahoma, be,

and hereby is, authorized and directed to attest the same and affix the seal

of said City thereto.

Adopted, this 18th. day of November, 1948.

*Elmer Shover*

(Title): Acting Mayor

ATTEST: (SEAL)

*Paul Hyde*

(Title): City Clerk

I, the undersigned city clerk of the City of Hartshorne, Oklahoma, hereby certify the within to be a true and correct copy of a resolution passed by the mayor and city council Nov. 18th. 1948.

*Paul Hyde*  
City Clerk.

PITTSBURG COUNTY

# Pioneer Abstract Company

ABSTRACTS OF LAND TITLES

McALESTER, OKLAHOMA

ABSTRACTION SHEET

No. 25567

## ABSTRACT OF TITLE TO

Lots Six (6), Seven (7) and Eight (8) in Block One hundred thirty-six (136) and Lots Three (3), Four (4) and Five (5) in Block One hundred forty-two (142) in the city of Hartshorne, County of Pittsburg and State of Oklahoma, as per the approved map or plat of the original City of South McAlester.

A copy of the official plat from which the following diagram is taken is on file in the office of the County Clerk at McAlester, County of Pittsburg, State of Oklahoma, and bears the following certificate, to-wit:

Hartshorne, I.T. Aug. 16, 1902.

I hereby certify that I have carefully and accurately surveyed and staked the Town of Hartshorne, Choctaw Nation, Ind. Ter. embracing the above described lands and that this is a correct plat thereof.

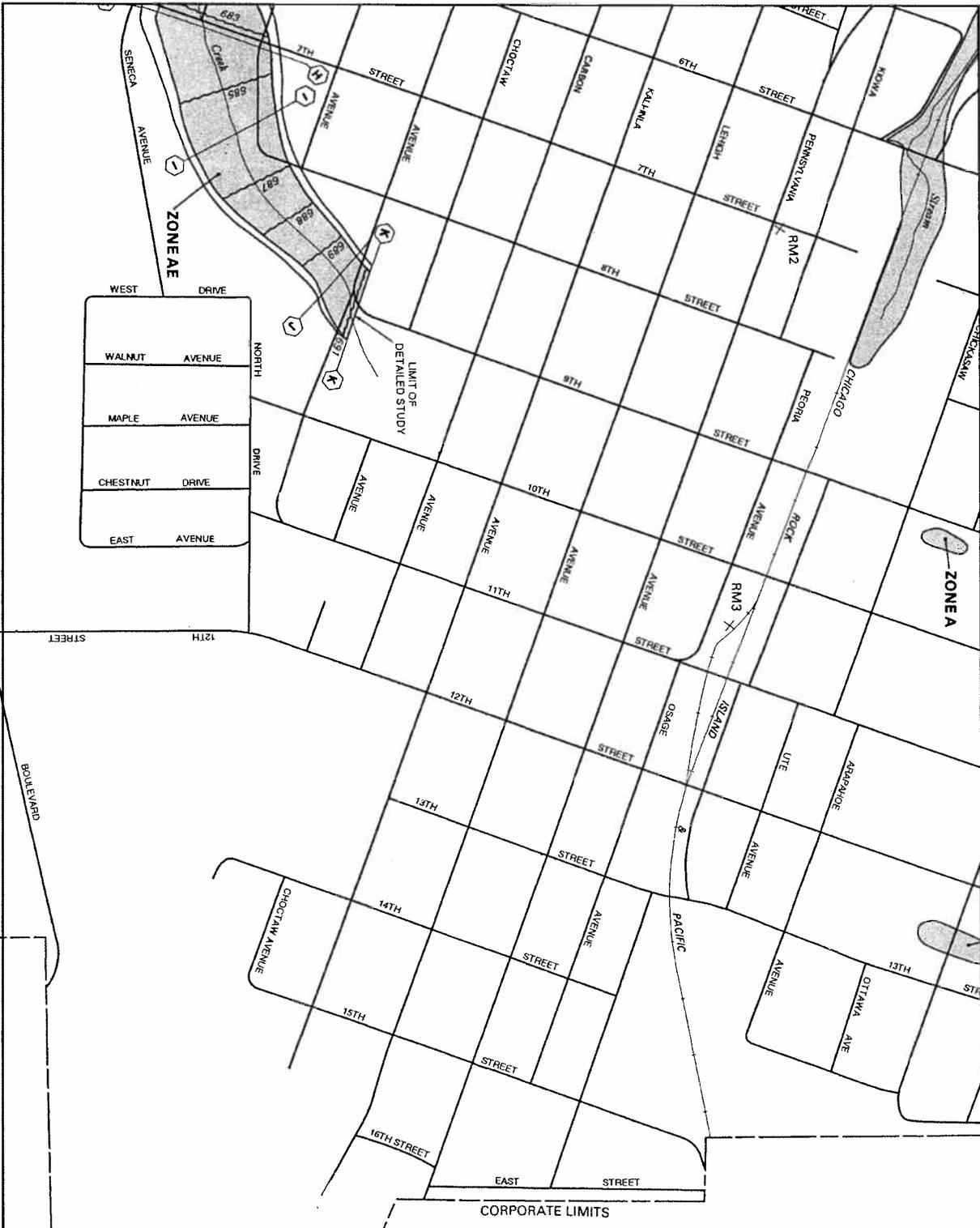
Chas. L. Wood, Surveyor

SEE NEXT SHEET FOR PLAT

APPROVED by Thos. Ryan, Acting Secretary of the Interior, Dec. 9th, 1903.



**APPENDIX M**



**NATIONAL FLOOD INSURANCE PROGRAM**

**FIRM**

**FLOOD INSURANCE RATE MAP**

CITY OF  
HARTSHORNE,  
OKLAHOMA  
PITTSBURG COUNTY

**ONLY PANEL PRINTED**

COMMUNITY-PANEL NUMBER  
400387 0001 B

MAP REVISED:  
SEPTEMBER 21, 1998

Federal Emergency Management Agency

APPROXIMATE SCALE IN FEET

500 0 500

This is an official copy of a portion of the above referenced flood map. It is not to be used for any purpose other than that for which it was prepared or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps, check the Flood Map Store at [www.nflc.firm.gov](http://www.nflc.firm.gov)

## LEGEND

 **SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD**

- ZONE A** No base flood elevations determined.
- ZONE AE** Base flood elevation determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of parking); base flood elevations determined.
- ZONE AD** Flood depths of 1 to 3 feet (usually street flow on sloping terrain); average depths determined. For areas of elevated fee flooding, velocities also determined.
- ZONE A99** To be projected from 100-year flood by Federal flood protection system under construction; no base elevations determined.
- ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

 **FLOODWAY AREAS IN ZONE AE**

- OTHER FLOOD AREAS**
- ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

- OTHER AREAS**
- ZONE X** Areas determined to be outside 500-year flood plain.
  - ZONE D** Areas in which flood hazards are undetermined.

-  Flood Boundary
-  Floodway Boundary
-  Zone D Boundary

 Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

 Base Flood Elevation Line; Elevation in Feet\*

 Cross Section Line

1EL 867)  
RM7<sub>x</sub>  
M1.5

Base Flood Elevation in Feet Where Uniform Within Zone\*  
Elevation Reference Mark  
River Axis

**Mallory, Heather**

---

**From:** Mike Sharp [mike.sharp@conservation.ok.gov]  
**Sent:** Monday, October 16, 2006 3:22 PM  
**To:** Mallory, Heather  
**Subject:** Hartshorne Armory

Heather,

I checked two map sources for the area around 12<sup>th</sup> and Kala Inla in Hartshorne and did not find any coal mining at this location.

If you need additional information, please let me know.

Mike Sharp  
Director Information Technology  
Ass't Director AML Program  
Oklahoma Conservation Commission  
800 N. Lincoln Blvd., Suite 160  
Oklahoma City, OK 73105  
405-521-4813 Office  
405-833-0648 Cell  
405-521-6686 Fax  
Mike.Sharp@conservation.ok.gov

**APPENDIX N**

**Mallory, Heather**

**From:** Davidson, Dustin W.  
**Sent:** Friday, November 03, 2006 11:33 AM  
**To:** Kottke, Rita  
**Cc:** Brunzman, Angela; Mallory, Heather  
**Subject:** Chemical Inventory for Hartshorne Armory

Rita, this is the chemical inventory for the Hartshorne armory. Heather sent me an email and wanted me to send it to you. I took the information directly from Heathers field book.

**Orderly Room**

4 bottles of methyl alcohol  
 1 cyalume PML personnel marker lights  
 9 magnesium batteries  
 7 69 volt batteries  
 unknown liquids  
 multipurpose cleaner  
 5 spray paint  
 1 gallon paint can  
 small can of high gloss enamel  
 isopropyl alcohol  
 89 6 volt lantern batteries  
 2 6 volt larger batteries  
 permanone tick repellent  
 7 boxes of trioxane ration heating (heats food)

**Storage Room**

2 lemon glo  
 2 encore stainless steel cleaner  
 4 superstripper gold  
 8 floor finish (hd-25)  
 1 multipurpose cleaner  
 4 bleach scouring powder  
 2 bags of rat poison  
 1 fan fare bowl cleaner  
 1 ultra pine disinfectant  
 1 toilet cake

**Technicians Office**

glo coat floor finish  
 simple green  
 isopropyl alcohol  
 multipurpose cleaner

**Utility Room**

4 multipurpose cleaner  
 3 chlorinated powder  
 1 orange cleaner  
 1 Ajax dish soap  
 1 detergent  
 1 5 gallon bucket of floor wax

**Motor Pool**

motor oil  
 case of transmission fluid  
 2 pvc primer and cement  
 impact industrial soap  
 cotto wax oil base

**Second Story Storage Area**

2 buckets of mop and shine  
 1 5 gallon bucket of unknown  
 3 boxes of azerok (12 X12)  
 1 box of ken tile (12 X 12)  
 2 boxes of tile (12 X 12)  
 2 cases of ceiling tiles

**Drill Floor**

2 break free weapon cleaner (contains petroleum distillates) in locker 31  
 parking lot)

**Outside Storage Shed**

13 POLS  
 33 metal POL containers that appear empty (one is in

*Dustin Davidson*  
*Environmental Programs Specialist*  
*Department of Environmental Quality*  
*(405) - 702 - 5119*

11/6/2006

**APPENDIX O**

## **Environmental Professional Qualifications**

**Heather Mallory** holds a Bachelors and Masters Degree in Environmental Science from the University of Oklahoma. Mrs. Mallory has 5 years experience in environmental sampling and technical studies. She is an Environmental Programs Specialist with the Land Protection Division of the Oklahoma Department of Environmental Quality. Her responsibilities include: project management of the Tar Creek Superfund Site, conducting Targeted Brownfield Assessments, and project management of remediation and sampling associated with the Site Cleanup Assistance Program.

**Rita R. Kottke, Ph.D.**, holds a Doctorate in Environmental Science from Oklahoma State University. She is an Environmental Programs Manager with the Land Protection Division of the Oklahoma Department of Environmental Quality. She functions as the DEQ's Brownfield Coordinator, Brownfield Cleanup Revolving Loan Fund Contact, Superfund Site Redevelopment Contact, Superfund Emergency Response Contact, Land Revitalization/Reuse Contact, and as a liaison between the state, EPA, and local communities. Her responsibilities also include acting as technical project manager at various Voluntary Cleanup and Superfund sites within the state. She has been with the agency for thirteen years, working in the Superfund and Brownfields Programs. She has 13 years experience performing site assessments of real property. She was heavily involved in the formulation of the Brownfields Program's implementing rules, the negotiation of DEQ's Brownfields Memorandum of Agreement (MOA) with EPA, and the development of the Brownfield Cleanup Revolving Loan Fund Grant Proposal.

**Angela Brunzman** holds a Bachelors Degree in Environmental Science and a Masters Degree in Construction Science from the University of Oklahoma. Ms. Brunzman has 12 years experience working for the state of Oklahoma in the environmental remediation field. Duties have included managing Superfund sites, coordinating with local, state, and federal agencies, and currently managing the state Site Cleanup Assistance Program.