

Phase I Targeted Brownfield Assessment

(All Appropriate Inquiry-ASTM E 1527-05)

Oklahoma Army National Guard Tonkawa Armory

345 Thunderbird Road, Tonkawa,
Kay County, Oklahoma

April 2, 2009

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Environmental Professionals in charge of the project:

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.



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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 Redevelopment 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. 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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Lead-Based Paint Inspection Report
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1.0 Executive Summary

This Phase I Targeted Brownfield Assessment (TBA) of the Tonkawa Armory, located at 345 Thunderbird Road, Tonkawa, Oklahoma, was performed in accordance with the ASTM E 1527-05, for the purposes of identifying potential environmental concerns at the subject property. A preliminary inspection of the Armory was conducted by Ms. Subi John and Ms. Heather Mallory and Mr. Dustin Davidson of the Oklahoma Department of Environmental Quality (DEQ) on October 31, 2008. Ms. Subi John and Ms. Heather Mallory visited the Armory again on January 21, 2009, for the purposes of photo documentation.

The site is located in Section 33, Township 26 North, Range 1 West, in Tonkawa, Kay County, Oklahoma. The site address is 345 Thunderbird Road, Tonkawa, Oklahoma [latitude 36.694335304, longitude 97.316002883] (Ref. 4, 23) [See Appendix A].

A cursory summary of the main environmental site assessment findings is provided below. However, details are not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The Tonkawa Armory was built in 1984. It was managed and maintained by the Oklahoma Military Department (OMD) to support the military mission of the Oklahoma Army National Guard (OKARNG).
- Results of Oklahoma Military Department (OMD) sampling in 2004 indicated lead dust concentrations of 351,000 $\mu\text{g}/\text{ft}^2$ in the bullet trap, and 68,840 $\mu\text{g}/\text{ft}^2$ on the indoor firing range (IFR) floor (Appendix E).

Marshall Environmental Management, Inc., under a contract with the DEQ, collected lead dust samples from various locations inside the Armory on November 4, 2008. Lead dust levels were found to exceed the 40 $\mu\text{g}/\text{ft}^2$ standard (HUD Child Occupied Facility Standard) selected by the DEQ as the lead dust remediation goal for room floors in several areas. The highest concentrations of lead dust was found in the maintenance office (2,694 $\mu\text{g}/\text{ft}^2$), IFR (target end- 226,015 $\mu\text{g}/\text{ft}^2$, middle- 14,151 $\mu\text{g}/\text{ft}^2$, near entrance- 3,549 $\mu\text{g}/\text{ft}^2$), and the two storage rooms behind the IFR target end (716 $\mu\text{g}/\text{ft}^2$ and 4,611 $\mu\text{g}/\text{ft}^2$).

All floors in the Armory, except the maintenance office, indoor firing range (IFR), and the two storage rooms behind the IFR target end, were HEPA vacuumed and wet washed by the City of Tonkawa. It was recommended by DEQ at the time that the maintenance office, IFR, and the two storage rooms behind the IFR target end remain closed until the lead hazard had been remediated by the DEQ. This would minimize chances of lead dust being tracked into clean areas. All floors with lead dust levels that exceeded 100 $\mu\text{g}/\text{ft}^2$ were re-sampled by DEQ personnel on December 4, 2008. Lead dust levels were found to have reduced in all the rooms compared to earlier sampling levels (sampled on November 4, 2008), but only in the classroom#5 did the levels decrease below 40 $\mu\text{g}/\text{ft}^2$.

[See Appendix F –Armory Floor Plan for the spaces sampled for lead dust]. The IFR bullet trap was not observed to contain sand at the time of site reconnaissance. Spent bullets and bullet fragments were observed in the bullet trap.

Other rooms in the Armory indicated to have lead dust contamination greater than 40 $\mu\text{g}/\text{ft}^2$ were classroom#5 (210 $\mu\text{g}/\text{ft}^2$), classroom#7 (105 $\mu\text{g}/\text{ft}^2$), furnace room (173 $\mu\text{g}/\text{ft}^2$), hallway#15 (343 $\mu\text{g}/\text{ft}^2$), hallway#16 (139 $\mu\text{g}/\text{ft}^2$), storage room#20 (123 $\mu\text{g}/\text{ft}^2$), vault (108 $\mu\text{g}/\text{ft}^2$), east side of drill hall (96 $\mu\text{g}/\text{ft}^2$), and west side of the drill hall (131 $\mu\text{g}/\text{ft}^2$) (Marshall Environmental Management, Inc., November 4, 2008) [See Appendix F –Armory Floor Plan for the spaces sampled for lead dust].

The IFR and the rooms indicated as having lead dust contamination exceeding the 40 $\mu\text{g}/\text{ft}^2$ standard constitute a recognized environmental condition (REC) for the purposes of this report.

- A surface soil sample was collected by DEQ personnel on October 31, 2008 from outside the IFR intake vent on the south side of the Armory (See Appendix F). The lead concentration in the soil sample (11 ppm) was found to be below DEQ's action level for lead in soil of 500 ppm. According to the USGS National Geochemical Survey, the average background concentration of lead in Kay County is 25.179 ppm (Ref. 25).
- A lead-based paint (LBP) inspection was conducted by Marshall Environmental Management, Inc., on October 31, 2008, to determine the lead levels on painted structural building components of the Armory. The X-Ray Fluorescence Analyzer tests did not indicate the presence of building components that contained lead in amounts greater than or equal to 1.0 mg/cm^2 (EPA's and the Department of Housing and Urban Development's screening level for LBP) [See Appendix F].
- Marshall Environmental Management, Inc. conducted an asbestos inspection on October 31, 2008. The inspection did not identify the presence of asbestos containing material within the Armory building [See Appendix F].
- DEQ personnel conducted a radiation survey and wipe sampling of the area around the vault in the Armory on December 10, 2008. The highest measured exposure rate recorded was 25 micro-Roentgen per hour using a Ludlum Model 19 survey meter. This exposure rate is only about twice background levels and is very common due to the high amount of naturally occurring radiation in structures making extensive use of concrete. Radiochemical analyses of the wipe samples for Ni-63 and Tritium indicated levels much below detection limits [See Appendix F – Analytical results of DEQ sampling events].
- Review of the Oklahoma Corporation Commission's (OCC's) records did not indicate the presence of underground storage tanks (USTs) at the site. Three USTs were identified within a one-half mile radius [See Appendix A- DEQ GIS maps]. As per OCC records, none of these USTs have been reported as being leaking underground storage tanks.

- No sites on the National Priority List (NPL), delisted NPL list, active or archived Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, Resource Conservation and Recovery Act (RCRA) database, Emergency Response Notification System (ERNS) list, State Voluntary Cleanup Program and State Brownfield Programs lists were identified on the subject property. The site is on the DEQ Site Cleanup Assistance Program's list for investigation and cleanup of environmental hazards.

2.0 Introduction

The State of Oklahoma Department of Environmental Quality (DEQ) under a Brownfield Assistance Agreement (#RP96681001-0) (Ref. 1) with the U.S. Environmental Protection Agency (EPA) conducted a Phase I Targeted Brownfield Assessment of the Tonkawa Armory located at 345 Thunderbird Road, Tonkawa, Oklahoma.

2.1 Purpose

The purpose of this assessment is to examine the environmental conditions within the target area. This information will be provided to the City of Tonkawa 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 TBA 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 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 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, Sanborn Fire Insurance Maps, conducted an interview with former unit personnel, reviewed OMD site records, and visited the site. A good faith effort was made to identify possible environmental conditions that might affect the development of the property. DEQ personnel collected a surface soil sample from the area outside the indoor firing range (IFR) intake fan on the south side of the Armory. DEQ personnel also conducted a radiation survey and wipe sampling of the area around the vault in the Armory on December 10, 2008. Marshall Environmental Inc., was contracted to perform asbestos inspection, lead-based paint surveys and lead wipe sampling at the Armory, and the appropriate samples were collected for purposes of the survey.

2.3 Significant Assumptions

Significant assumptions and past studies of the Oklahoma Army National Guard (OKARNG) Armories suggest there is a possibility for lead and asbestos contamination at the Tonkawa Armory. Most of these Armories have IFRs. These ranges usually contain lead contamination caused by past handgun and/or rifle shooting activity. As the Tonkawa Armory was constructed approximately in 1984, the potential for asbestos containing material (ACM) in the Armory is low. The United States began banning the use of asbestos in most building products in the 1970s due to studies confirming the harmful health effects caused by exposure to airborne 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. 22) 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, information provided by the City of Tonkawa, the OMD and observations made by the environmental professionals involved in the site reconnaissance and sampling event. The results of this assessment, as documented in this report, are valid as of the date of this report. This assessment does not include sampling of rock, groundwater, surface water, or air.

2.5 Special Terms and Conditions

This assessment report has been prepared for the City of Tonkawa by the DEQ with EPA funds. Information about this report will be provided to the EPA for its files. This report and the working file are public record and subject to the Oklahoma Open Records Act.

3.0 Site Description

3.1 Location and Legal Description

The site consists of all of Lots 14, 15, 16, 17,18, and 19, all in Block 5, Carrousel North Second Addition to the City of Tonkawa, Kay County, Oklahoma, according to the recorded plat thereof, and the following described tract of unplatted land. Commencing at the NW corner of Section 33, Township 26N, Range 1W I.M., Kay County, Oklahoma; thence S89° 35' 11" E and along the North line of said Section 33 for a distance of 664.26 feet to the NW corner of the E1/2 NW1/4 NW1/4 of said Section 33, thence S0° 09' 26"E along the West line of said E1/2 NW1/4 NW1/4 for a distance of 547.95 feet to the SW corner of Lot 19, Block 5, of the platted Carrousel North Second Addition to the City of Tonkawa, State of Oklahoma and the point of beginning; thence S89° 53' 05"E for a distance of 43.05 feet, thence N78° 48' 19"E for a distance of 178.47 feet, thence S89° 53' 05"E for a distance of 76.25 feet, thence S0° 06' 55"W for a distance of 16.00 feet, thence S89° 53' 05"E for a distance of 42.61 feet, thence S0° 09' 26"E for a distance of 792.88 feet, thence N89° 35' 05"W along the South line of said E1/2 NW1/4 NW1/4 for a distance of 337.02 feet to the SW corner of said E1/2 NW1/4 NW1/4, thence N0° 09' 26"W along the West line of said E1/2 NW1/4 NW1/4 a distance of 772.12 feet to the point of beginning. Said tracts containing 7.50 acres more or less (Appendix F- Site Assessment Documents).

The site is located at 345 Thunderbird Road (latitude 36.694335304, longitude 97.316002883 (Ref. 4) [See Appendix A- DEQ GIS maps].

3.2 *Site and Vicinity General Characteristics*

Environmental Setting: Kay County is in the north-central part of Oklahoma. It is bounded on the south by Noble County, on the east by Osage County, on the west by Grant County, and on the north by the state of Kansas. It has an area of 945 square miles. Newkirk, the county seat, is in the north-central part of the County. Agriculture and related services are important enterprises in Kay County. Oil and gas are also important sources of income. Kay County is in the Central Rolling Red Prairies and Bluestem Hills major land resource areas. The County is drained by the Arkansas River, the Salt Fork of the Arkansas River, and the Chikaskia River and their tributaries. The topography ranges from nearly level flood plains along the rivers to steep uplands. The general slope is towards the south and southeast. Elevation ranges from about 920 feet, where the Arkansas River leaves the southeastern part of the County, to about 1,290 feet in the northeastern part of the County.

In winter, the average temperature is 37 degrees Fahrenheit, and the average daily minimum temperature is 26 degrees. In summer, the average daily temperature is 79.5 degrees Fahrenheit and the average daily maximum temperature is 90.7 degrees. The average annual total precipitation in Kay County is between 35.5 and 38.8 inches. Of this, 27.7 inches or 74 percent usually falls from April through October. The average seasonal snowfall is between 8.7 and 9.1 inches. The average relative humidity in mid-afternoon is about 54 percent. Humidity is higher at night and the average at dawn is about 80 percent. The prevailing wind is from the south. Average wind speed is highest, 13.3 miles per hour in April (Ref. 5).

The City of Tonkawa is located in southwestern Kay County and along the Salt Fork of the Arkansas River. Tonkawa was founded following the historic land race of September 16, 1893. The name "Tonkawa" meaning "They All Stay Together" comes from the Tonkawa Tribe that moved to the area in 1885. The City covers an area of three square miles (Ref. 24).

Groundwater: The occurrence of groundwater in the Enid quadrangle is controlled primarily by climate; the movement of groundwater is controlled primarily by geology. Precipitation is the source of nearly all groundwater in the Enid quadrangle. Groundwater movement is generally from the uplands towards the streams. Seepage to streams and evapotranspiration account for most of the groundwater discharge. During dry periods, seepage from the aquifers is the source of base flow in the streams. Small streams in the quadrangle frequently go dry because the fine-grained sandstone and shale underlying the area have a limited capacity to absorb and transmit groundwater. Along the major streams, the alluvium is thick enough to absorb and transmit large amounts of water maintaining base flow in the major streams. During wet periods, however, when the stream level is higher than the water table in the adjacent alluvium, seepage from the stream through the stream bank is a source of recharge to the alluvium. The principal aquifers in the area consist of minor aquifers that include shale, minor sandstone, and terrace deposits, and less productive areas of other aquifers.

The Sumner Group underlies the site. The Sumner Group is Permian in age. The Wellington Formation underlies the Sumner. The Wellington Formation is mostly red-brown shale to the north, grading into fine-grained sandstone and mudstone conglomerate to the south, with a thickness of about 850 feet. The regional dip, which averages about 40 feet/mile, is toward the northwest at the eastern edge of the area and towards the southwest at the western edge. Groundwater is the principal source of municipal water supply in the area. The site is not in an area of recharge for any aquifers.

The closest well shown on the hydrologic atlas is located to the south of the site. The depth of the well is 44 feet, the water level below the land surface is at 14 feet, and the approximate yield of the well is 450 gallons per minute. Water in this region contains approximately 481 mg/l of dissolved solids and is generally considered satisfactory for most domestic and industrial uses. The geologic source of the regional water is from terrace deposits.

The five groundwater wells nearest to the site reported in the Oklahoma Water Resources Board (OWRB) database are listed in the section on Monitoring Wells [See Appendix A-OWRB Maps]. The OWRB database consists only of information submitted to OWRB for all well data reported by licensed firms since 1982 and monitoring well data reported since 1988. There could be other wells in the area that are not included in the database. Wells drilled prior to the licensing requirements for well drillers would not necessarily have had a well log submitted to the OWRB (Ref. 21).

Soils: Vanoss silt loam soils with 0-1 percent slope are the general soils at the site. The soils are well drained. The soil map unit consists of Vanoss soils (90 percent) and other minor components (Norge – three percent, Navina - three percent, Bethany – two percent, and Teller – two percent) [Ref. 8, See Appendix A-USDA web soil survey map].

Air: The prevailing wind is from the south. Average wind speed is highest, 13.3 miles per hour in April. Southerly winds prevail across the County except in January and February, when winds become north-westerly. Windspeed averages about 12.5 miles per hour during July and August and about 15.5 miles per hour during March and April (Ref. 5).

Surface water: The Enid quadrangle is within the Arkansas River basin. In addition to the Arkansas River, the Chikaskia River, Salt Fork of the Arkansas River, Cimarron River, and their tributaries form the drainage network for most of the region. The rivers are normally perennial, but most of their tributaries commonly go dry for brief periods each year as a result of seasonal variations in precipitation. Kaw Lake, located to the northeast, with a drainage area of 7,250 square miles is a major impoundment in the area. The Kaw Lake is used for flood control, recreation, electrical power, and municipal purposes. Lake Ponca (805 acres) is another lake to the northeast that is used for municipal purposes in Kay County (Ref. 6).

Utilities: Natural gas is supplied to the area by Center Point Energy, electricity by OG & E, and telephone service by AT&T (Ref. 23). Water, sewer, and sanitation services are supplied by the City of Tonkawa (Ref. 4). A twenty foot utility easement across the south property of lots 14, 15, 16, 17, 18 and 19, Block 5, Carrousel North 2nd Addition was provided to the Arkansas Louisiana Gas Company on November 6, 1983 [See Appendix F- Site Assessment Documents].

Underground features: A review of the Oklahoma Corporation Commission (OCC) database did not indicate the presence of underground storage tanks (USTs) at the site. As per information in the database, there are three USTs within a one-half mile radius of the site [See Section 5.1 for further details].

No sumps were noticed on the site during the site reconnaissance (Ref. 4).

Structures: The Tonkawa Armory was built approximately in 1984. A military vehicle compound was also observed at the southwest portion corner of the site at the time of the site reconnaissance. A water tower that appeared to be owned by the City was observed to the southeast of the Armory (Ref. 4) [See Appendix B- Site Photographs].

The indoor firing range (IFR) at the Tonkawa Armory is approximately 103 feet long, 30 wide and 12 feet high. At one end is a backstop and bullet trap. At the other end, an area has been sectioned off as the maintenance office. The ventilation system within the IFR is comprised of a louvered fan located in the ceiling near the backstop and vented directly

through the roof to the outside. Two louvered intake air vents are located in the maintenance office, at the opposite end of the IFR (Ref. 20) [See Appendix B- Site Photographs]. The Armory covers an approximate area of 16,664 square feet. Entrances into the Armory can be found through the exterior doors on the north and west sides of the building. There is also an overhead door located on the west side of the drill hall (Ref. 4).

Landfills, Dumping, Disturbed Soil: There are no landfills on the subject property or adjoining properties. There was no dumping observed either on-site or at the adjoining properties, during the site reconnaissance. An area of poorly established grass was observed near the northeast corner of the Armory at the time of the site reconnaissance [See Appendix B- Site Photographs]. No obvious signs of environmental contamination were observed in this area (Ref. 4).

Impoundments: No impoundments were observed on the subject property during the site reconnaissance (Ref. 4).

Air Emissions, Wastewater Discharge: There are no current air emissions from the subject property. There is ongoing waste water discharge from the Armory, when occupied, as the water utility service has not been disconnected (Ref. 4).

Industrial Activities: There are no industrial activities currently being conducted on the subject property. The OK Bit Services, Inc., facility is located to the immediate east of the site (Ref. 4) [See Appendix B- Site Photographs].

Monitoring Wells: No monitoring wells were observed on the property at the time of the site reconnaissance (Ref. 4). The nearest groundwater wells reported in the Oklahoma Water Resources Board (OWRB) database are listed in the table below [See Appendix F for OWRB Multi-purpose well completion and plugging reports. Also see Appendix A – OWRB Maps].

Well ID	Latitude	Longitude	Well type	Use class	Total depth
14998	36.694552	-97.31535	Groundwater	Domestic	35 feet
75611	36.692745	-97.317604	Groundwater	Domestic	26 feet
75543	36.694552	-97.317604	Groundwater	Domestic	31 feet
32469	36.694552	-97.317604	Groundwater	Domestic	31 feet
61915	36.69636	-97.319916	Groundwater	Domestic	25 feet

Stained Soils & Seeps: No stained soils or seeps were observed at the subject property during the site reconnaissance (Ref. 4).

Chemical Spills: No chemical spills were observed at the subject property. No spills were reported on the subject property from the Emergency Response Notification System (ERNS) database either (Ref 18). According to Mr. Todd Ross, Former OMD Specialist,

Tonkawa Armory, there had been no known instances of hazardous chemical spills to his knowledge that occurred on the site (Ref. 4) [See Appendix F- Federal ERNS database search results].

Oil and Gas Exploration: Oil and gas exploration has not been conducted on the property. The general area around the subject property has had oil exploration in the past [See Appendix A- DEQ GIS maps]. There were no pump jacks observed on the site during the site reconnaissance (Ref. 4).

Known Groundwater or Surface Water contamination: There is no known groundwater contamination. There is no surface water present on the property (Ref. 4).

Farm Waste & Known Pesticide Misapplication: No farm waste or known pesticide misapplications was observed at the subject property during the site reconnaissance (Ref. 4).

Discharges and Runoff from Adjacent Property Affecting the Site: No discharges and/or runoff were observed from adjacent properties during the site reconnaissance, which would affect the subject property.

Hazardous Chemicals: There were no hazardous chemicals observed on site during the site reconnaissance.

Unidentified Substance Containers: There were two containers with unidentified substances of a similar appearance observed in the maintenance office at the time of the October 30, 2008 site reconnaissance. However, only one container labeled “Exsorbet Emergency Spill Kit- Grabs oil and won’t let go” with a very little amount of a dark brown colored liquid was observed at the time of the January 21, 2009 site reconnaissance (Ref. 4, Photograph# 36).

Other known or Suspected Environmental Concerns On the Site: A statewide sampling event for lead was conducted by C.H. Guernsey & Company for the OKARNG on all Armories containing IFRs. These sampling events lead to the preparation of the ‘Indoor Firing Range Lead Issues Report’. According to the report, the IFR at the Tonkawa Armory was surveyed on December 29, 2004. OMD personnel collected wipe samples from the IFR on April 30, 2004 and the sample results indicated elevated lead contamination throughout the Armory. Ten samples were collected from inside the IFR. The locations and concentrations of the lead contamination found in the samples are listed below:

- 351,000 ug/ft² of lead at the former bullet trap (Sample ID#432- sampled 4/30/2004).
- 68,840 ug/ft² of lead was found at the IFR floor (Sample ID#433- sampled 4/30/2004).

- 111,300 ug/ft² of lead (Sample ID#434 - sampled 4/30/2004).
- 6,630 ug/ft² of lead (Sample ID#435- sampled 4/30/2004).
- 65.60 ug/ft² of lead (Tonk 1A FR -1/31/2005)
- 79.70 ug/ft² of lead at the kitchen (Tonk 1B KIT -1/31/2005)
- 193.75 ug/ft² of lead (Tonk 1C FRC -1/31/2005)
- 105.80 ug/ft² of lead (Tonk 1D AD Office -1/31/2005)
- 106.00 ug/ft² of lead (Tonk1E Hall -1/31/2005)
- 116.70 105.80 ug/ft² of lead (Tonk 1F DF -1/31/2005)
- 79.70 ug/ft² of lead at the kitchen (Tonk 1B KIT)
- 116.70 ug/ft² of lead at the Drill Floor (Tonk 1F DF)

The 'Indoor Firing Range Lead Issues Report' for the Tonkawa Armory has been included in Appendix E. The IFR and the rooms indicated as having lead dust contamination exceeding the 40 µg/ ft² standard constitute a recognized environmental condition (REC) for the purposes of this report.

DEQ personnel collected a surface soil sample (Sample# 453884) from outside the IFR intake air vent located on the south side of the Armory (October 31, 2008). Analytical results of the surface soil sample indicated a Total Lead concentration of 11 mg/kg (11ppm) [See Appendix F]. This concentration does not exceed the DEQ chosen screening level for sand/soil of 500 ppm for lead. According to the USGS National Geochemical Survey, the average background concentration of lead in Kay County is 25.179 ppm (Ref. 25).

A lead-based paint (LBP) inspection was conducted by Marshall Environmental Management, Inc., on October 31, 2008, to determine the lead levels on painted structural building components of the Armory. The X-Ray Fluorescence Analyzer tests did not indicate the presence of building components that contained lead in amounts greater than or equal to 1.0 mg/cm² (EPA's and the Department of Housing and Urban Development's screening level for LBP) [See Appendix F for the LBP report].

Marshall Environmental Management, Inc. conducted an asbestos inspection on October 31, 2008. The inspection did not identify the presence of asbestos containing material in the Armory building [See Appendix F for the Asbestos Report].

During the site reconnaissance, a Radioactive Materials label was observed on the door of the vault (Ref. 4). DEQ personnel conducted a radiation survey and wipe sampling of the area around the vault in the Armory. The highest measured exposure rate recorded was 25 micro-Roentgen per hour using a Ludlum Model 19 survey meter. This exposure rate is only about twice background levels and is very common due to the high amount of naturally occurring radiation in structures making extensive use of concrete. Radiochemical analyses of the wipe samples for Ni-63 and Tritium indicated levels much below detection limits [See Appendix F – Analytical results of DEQ sampling event].

Historical Recognized Environmental Conditions (HREC) on the Site: A review of the OCC database did not indicate the presence of USTs at the facility [See Appendix F- State registered storage tank list]. Records reviewed for this report did not indicate a reason to suspect the presence of HRECs at the site. Mr. Todd Ross, Former OMD Specialist, Tonkawa Armory, did not recollect a UST having been present at the site (Ref. 4).

Pipelines: The Armory is served by municipal water and electrical lines. A fire hydrant was observed to the north of the Armory. Water is supplied from the City of Tonkawa. Sewage and waste water drain to the municipal sewer system. There were several outdoor roof drains on the north and south sides of the building. There were floor drains observed in the IFR, kitchen, restrooms, and vault during the site reconnaissance. The February 22, 1995 Armory floor plan indicates the presence of an outdoor drain located to the northwest of the Armory (Appendix F – Floor Plan).

Transformers/PCB Equipment: A pad mounted transformer was observed on the northeast side of the Armory. The transformer was observed to be in good condition and had a “No PCBs” label (Photograph# 12). Several fluorescent light fixtures were observed in the building during the site reconnaissance. These could potentially contain PCBs (Polychlorinated biphenyls) in their ballast.

3.3 Operational History

The Tonkawa Armory was built in 1984. It was managed and maintained by the OMD to support the military mission of the OKARNG. The OKARNG is a component of the United States Army and fulfills the military mission of national security. According to Mr. Todd Ross, Former OMD Specialist, Tonkawa Armory, the OMD ceased to operate at the Armory approximately in December 2007.

3.4 Current Use of the Property

According to Mr. Todd Ross, Former OMD Specialist, Tonkawa Armory, the Armory has been vacant since approximately December 2007 (Ref. 4). According to information provided by the City, the Armory has been used by various members of the community who have had access to the building as a venue for various events and as a place for youth and adults to play basketball. The City is interested in utilizing the Armory to house a manufacturing company that will provide jobs for the community. The initial intent is to create eleven jobs, with 25 additional jobs created within the first year and 130 within three years (Appendix F- City of Tonkawa Letter of Interest). The subject property is currently owned by the DEQ.

3.5 Adjacent Properties

The Armory is immediately bound by the OK Bit Services, Inc. facility to the east, by open space to the south and west sides, and by the Frontage Road to the north. Residential properties were observed further to the south, west and the north of the site.

The Anderson Ridgeway Funeral Home is located further to the north west of the site (Ref. 4).

3.6 Site Inspection

Site reconnaissance visits were performed on the following dates: October 31, 2008 (Ms. Heather Mallory, Ms. Subi John, Mr. Dustin Davidson, DEQ) and January 21, 2009 (Ms. Subi John, and Ms. Heather Mallory, DEQ). Mr. Dave Neely, City Manager, City of Tonkawa was also present at the time of the site reconnaissance visits. Observations made during the site visits have been included in Section 6.0.

4.0 User Provided Information

4.1 Title Records

Kay Holding Company, an Oklahoma Corporation of Kay County, State of Oklahoma, transferred title of the subject property on May 19, 1978, to the City of Tonkawa, a municipality of Kay County, State of Oklahoma, through a warranty deed. Title was transferred with the caveat that if an armory was not built on the premises within a period of five years from the date of transfer, then the property would revert back to the Grantor.

The City of Tonkawa, a municipality of Kay County, State of Oklahoma, transferred title of the subject property on May 19, 1978, to the State of Oklahoma, as trustee for the Oklahoma National Guard through a warranty deed. Title was transferred with the caveat that if an armory was not built on the premises within a period of five years from the date of transfer, then the property would revert back to the Grantor.

The State of Oklahoma, acting through the OMD, transferred the subject property to the DEQ through a quitclaim deed signed on December 17, 2008. The 2007 quitclaim deed states that the DEQ will hold the subject property for the purposes of environmental characterization and remediation determined to be necessary by the DEQ, and that the property will transfer to the City of Tonkawa upon the filing of a recordable Notice of Remediation in the county land records [See Appendix F- Site Assessment Documents].

4.2 Environmental Liens or Activity and Use Limitations (AULs)

Information on AULs for the subject property was not provided by either the OMD or the City of Tonkawa during the preparation of this report. There were no known AULs on the subject property discovered during the record search.

4.3 Specialized Knowledge or Experience of User

The Tonkawa Armory supported the military mission of the OKARNG, which is classified as a component of those entities engaged in matters of national security. A statewide sampling event for lead was conducted by C.H. Guernsey & Company for the OKARNG on all Armories containing IFRs. These sampling events lead to the preparation of the 'Indoor Firing Range Lead Issues Report'. According to the report, the IFR at the Tonkawa Armory was surveyed on December 29, 2004. OMD personnel

collected wipe samples from the IFR on April 30, 2004 and the sample results indicated elevated lead contamination throughout the Armory [See Appendix E].

4.4 Commonly Known or Reasonably Ascertainable Information

Kay Holding Company, an Oklahoma Corporation of Kay County, State of Oklahoma, transferred title of the subject property on May 19, 1978, to the City of Tonkawa, a municipality of Kay County, State of Oklahoma, through a warranty deed.

The City of Tonkawa, a municipality of Kay County, State of Oklahoma, transferred title of the subject property on May 19, 1978, to the State of Oklahoma, as trustee for the Oklahoma National Guard through a warranty deed.

The State of Oklahoma, acting through the OMD, transferred the subject property to the DEQ through a quitclaim deed signed on December 17, 2008 [See Appendix F- Site Assessment Documents].

The OMD has ceased to operate from the Armory at the time of preparation of this report (Ref. 4).

4.5 Valuation Reduction for Environmental Issues

A valuation reduction study of the property was not performed, being outside the scope of this Phase I TBA.

4.6 Owner, Property Manager, and Occupant Information

The State of Oklahoma, acting through the OMD, transferred the subject property to the DEQ through a quitclaim deed signed on December 17, 2008 [See Appendix F- Site Assessment Documents]. The OMD has ceased to operate from the Armory at the time of preparation of this report (Ref. 4). Mr. Dave Neely, City Manager, City of Tonkawa currently controls access to the Armory.

4.7 Reason for Performing Phase I

The DEQ performed a Phase I TBA to determine the potential presence of recognized environmental conditions that might need to be addressed, prior to transfer of ownership of the Armory.

5.0 Records Review

5.1 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 E 1527-05 document (Ref. 22). The DEQ performed a review of available federal and state databases to assess whether the subject property or adjacent properties were listed as having environmental concerns, which could have an adverse impact on the subject

property. Summarized below is the information gained from the databases reviewed for the purposes of this report.

Federal National Priorities List (NPL) Sites within one mile: The subject property is not an NPL site. There are no NPL sites reported within a one-mile radius of the subject property (Ref. 9, 12).

Federal delisted NPL site list within one-half mile: The subject property does not have any delisted or partially deleted NPL sites within one-half mile (Ref. 10, 11).

Federal active Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Sites: The subject property is not listed on the active CERCLIS list. The Tonkawa Landfill (OK0000605298), located approximately 1.5 miles south of HWY 77, Tonkawa, is the closest listed active CERCLIS site. The preliminary assessment and site inspection was completed under a tribal lead on Feb 6, 2001 and April 4, 2002 respectively (Ref. 13, Appendix F- State and federal database search results).

Federal archived CERCLIS (NFRAP) Sites: The subject property is not listed on the archived CERCLIS list. Deems Salvage (OKD987083771) located approximately six miles west and two miles north of 601177 JCT, and Tonkawa-3 Sands (OK0001574961), located approximately five miles south of Tonkawa on HWY 77 are the closest archived CERCLIS sites listed. For the Deems Salvage site, the preliminary assessment was conducted under state lead (11/01/1992) and the site inspection was conducted under EPA lead (12/31/1996). The site was archived on December 31, 1996. The preliminary assessment of the Tonkaway-3 Sands site was completed under a tribal lead on April 15, 1998 and the site was archived on April 9, 1998 (Ref. 13, Appendix F- State and federal database search results).

Federal RCRA CORRACTS Facilities List within one mile: The subject property does not have any federal RCRA CORRACTS facilities within one mile (Ref. 19, 26).

Federal RCRA non-CORRACTS TSD Facilities List within one-half mile: The subject property does not have any federal RCRA non-CORRACTS TSD facilities within one-half mile (Ref. 19, 20, 26).

RCRA Generators List (property and adjoining properties): The subject property does not have any listed RCRIS-Large Quantity Generators (LQGs) or RCRIS-Small Quantity Generators (SQGs). There are no RCRIS LQG or SQG sites reported at the adjoining properties either (Ref. 19, 26). The closest conditionally exempt small generator listed in the EPA Envirofacts Data Warehouse database is the Transformer Disposal Specialists facility (Handler ID- OKD987087020). Stretch N Bends Auto Body (OKR000016360) is the closest facility listed on the RCRA Notifiers Listing (Source: USEPA RCRAInfo Database) for Oklahoma [See Appendix F -State and federal database search results].

Federal Institutional Control/Engineering Control registries (property only): No federal institutional control/engineering control registries were reviewed while conducting this Phase I TBA of the Tonkawa Armory, as such registries were not readily available for review at the time of preparation of this report. However county land records do not show any Institutional Controls in effect at the subject property.

Federal ERNS list (property only): The subject property is not listed as an ERNS site (Ref. 14) [See Appendix F- Federal ERNS database search results].

State and Tribal lists of hazardous waste sites identified for investigation or remediation (property only): The subject property is listed on the Oklahoma Site Cleanup Assistance Program's list for investigation and cleanup (Ref. 18). No tribal lists of hazardous sites were reviewed during the preparation of this Phase I TBA. At this time, such a list was not readily available for review.

State and Tribal landfill and/or solid waste disposal sites within one-half mile: The subject property does not have any listed state landfills within one-half mile. The Ponca City landfill (Permit #3536014) is the closest municipal solid waste landfill. This landfill also accepts asbestos waste and non-hazardous industrial waste (Ref. 17). No tribal lists of landfill and/or solid waste disposal sites were reviewed during the preparation of this Phase I TBA. At this time, such lists are not readily available for review.

State and Tribal registered storage tank lists (property and adjoining properties): According to the OCC UST Notification Database, there are three UST sites within a one-half mile of the property (Appendix F- Site Assessment Documents). The table provided below lists the names and addresses of these UST facilities. No tribal lists of landfill and/or solid waste disposal sites were reviewed during the preparation of this Phase I TBA. At this time, such lists are not readily available for review.

Facility	Address	Latitude	Longitude	Tank Status	Total No. of Tanks	LUST case?
Quicke Store	1205 N. Main, Tonkawa	36.692211000	-97.310547000	In use	6 [4-Gasoline, 2-Diesel]	No
Paul A. Long & Sons	-	36.695661000	-97.309881000	Temporarily out of use	1 [Gasoline]	No
Paul A. Long Oil Company	1501 N. Eastern, Tonkawa	36.695900000	-97.309800000	Permanently out of use	45 [10-Gasoline, 5-Diesel, 22-Kerosene, 8-Not listed]	No

- Information unavailable in the OCC database at the time of report preparation

State and Tribal Leaking Underground Storage Tank (LUST) List within one-half mile: The UST Notification Database maintained by the OCC did not have any LUST sites listed within one-half mile of the Tonkawa Armory. No tribal lists of Leaking Underground Storage Tanks were reviewed during the preparation of this Phase I TBA. At this time, such lists are not readily available for review.

State and Tribal Institutional Control/Engineering Control Registries (property only): There are no Institutional Controls/Engineering Controls listed either in the preliminary data collected for Oklahoma's Institutional Control database or in the county land records for the subject property. No tribal institutional control/engineering control registries were reviewed while conducting this Phase I TBA of the Tonkawa Armory. At the time of preparation of this report, such tribal registries were not readily available for review.

State and Tribal Voluntary Cleanup Sites and Brownfield Sites within one-half mile: The subject property does not have any Brownfield sites listed in the DEQ database. There are no active VCP sites within one-half mile of the subject property, listed in the DEQ VCP tracking database. No tribal lists of VCP or Brownfield sites were reviewed during the preparation of this Phase I TBA. At this time, such lists are not readily available for review.

5.2 *Physical Setting Sources*

Physical Setting sources were obtained from the U.S. Geological Survey, Federal Emergency Management Association, United States Department of Agriculture, Natural Resources Conservation Services, and site visits conducted by DEQ personnel on October 30, 2008, and January 21, 2009.

5.3 *Historical Use Information*

Aerial photograph review:

An archived aerial photograph, dated March 7, 1937, was reviewed at the Oklahoma Department of Libraries. The Armory is not visible and the area around the subject property appears to consist predominantly of open space and a few buildings.

A historical aerial photograph obtained from DEQ's archived aerial photographs, dated August 25, 1954, was also reviewed for the purposes of this report. This aerial photograph also shows a land use similar to the March 7, 1937 photograph. The subject property and adjoining properties appear to consist predominantly of open space and the same buildings observed in the March 7, 1937 aerial photograph.

Aerial photographs from 1995 and 2003, and 2008 were also reviewed for the purposes of this report. These photographs were obtained from DEQ's digital database of historical and current aerial photographs (Ref. 19). The Armory is visible onsite and adjacent properties appear to have buildings on them at that time [See Appendix C]. Aerial photographs of the property between 1954 and 1995 were not reviewed as at the time of preparation of this report, such photographs were not readily available for review.

Fire Insurance Maps: Sanborn Fire Insurance maps prepared for this area did not include the boundaries of the subject property.

City Directories, Property Tax files, Building Department Records, Zoning/Land Use Records: A review of the above records was not conducted for the Phase I TBA of the Tonkawa Armory as this information was not easily accessible while this report was being prepared.

Interview: A telephonic interview was conducted with Mr. Todd Ross, Former OMD Specialist, Tonkawa Armory, on January 21, 2009 [See Section 7.3, “Interview with Operators and Occupants of the property”].

6.0 Site Reconnaissance

6.1 Methodology and Limiting Conditions

A site reconnaissance of the Tonkawa Armory was performed on October 30, 2008 by Ms. Subi John, Ms. Heather Mallory, and Mr. Dustin Davidson of the DEQ. An additional site reconnaissance was performed on January 21, 2009, by Ms. Subi John, and Ms. Heather Mallory of the DEQ. The site reconnaissance consisted of a visual inspection of the Armory building and its surrounding property. The IFR area, the drill hall, offices, furnace room, storage rooms, supply room, classrooms, vault, kitchen, dining hall, the men’s and women’s restrooms were inspected. During the October 30, 2008, site reconnaissance, a surface soil sample was collected from outside the south IFR intake vent (Sample# 453884). DEQ personnel also conducted a radiation survey and wipe sampling of the area around the vault in the Armory on December 10, 2008. The analytical results and the Chain-of-Custody have been included in Appendix F.

Marshall Environmental Management, Inc (MEM) collected surface wipe samples for lead dust at various locations in the Armory on November 4, 2008. A lead-based paint inspection to determine the lead levels on painted structural building components of the Armory, and an asbestos inspection was also conducted by MEM on October 31, 2008, [See Appendix F for all MEM reports].

The following observations were made during the site reconnaissance (Ref. 4).

6.2 General Site Conditions

The site consists of the 16,664 square foot Armory building and a military vehicle compound on the south side of the Armory. Access to the Armory is provided by Frontage Road. Access to the military vehicle compound on the southwest side of the Armory can be controlled by means of the chain-link fence around it. Access to the compound was not controlled at the time of the site reconnaissance. The rest of the property is unsecured. The Armory is immediately bound by the OK Bit Services, Inc. facility to the east, by open space to the south and west sides, and by Frontage Road to

the north. The OMD has ceased to operate from the premises, and the Armory was vacant at the time of the site reconnaissance.

6.3 Exterior Observations

Three air-conditioning units were observed on the east side of the Armory during the site reconnaissance and what appeared to be a city owned water tower was also observed southeast of the site. A military vehicle compound with a chain-link fence was located southwest of the Armory. Parking lots are located to the north and west sides of the building. A pad mounted transformer was observed to the northeast of the Armory. The transformer was observed to be in good condition and had a “Non PCB” label on it. There were no areas of stained soil, pits, ponds or lagoons, wells, septic systems, wells, pump jacks, storage tanks, drums observed on the site during the site reconnaissance. An area of poorly established grass was observed near the northeast corner of the Armory at the time of the site reconnaissance. No obvious signs of environmental contamination were observed in this area. The OK Bit Services, Inc. building is located to the east, open land to the south and west, and by Frontage Road to the north of the site. Residential properties lie further to the north, south and west, and the Anderson Ridgeway Funeral Home is located further to the northwest of the site [See Appendix B- Site photographs].

6.4 Interior Observations

A hot water unit was observed in the furnace room. Unit heaters were observed in the drill hall, kitchen, dining hall, supply room, and in one of the offices on the north side of the Armory [See Appendix F- Floor Plan]. The floor tile from the offices on the east side of the Armory, the library, and the classroom has been removed. According to Mr. Todd Ross, Former OMD Specialist, Tonkawa Armory, the tile was removed by the OMD. At one end of the indoor firing range (IFR) is a backstop and bullet trap. At the other end, an area has been sectioned into the maintenance office. Two louvered intake air vents are located in the maintenance office, at the opposite end of the IFR. The ceiling and walls of the IFR were observed to be covered with sound proofing material. The IFR bullet trap was not observed to contain sand at the time of site reconnaissance. Spent bullets and fragments were observed in the bullet trap. There were metal shelving units, tables, chairs, tents, and other miscellaneous items stored in the IFR, maintenance office, and in the supply room at the time of the site reconnaissance. The OMD is assumed to be owner of these items, being the previous occupant of the building. Entrances into the Armory can be found through the exterior doors on the north and west sides of the building. There is also an overhead door located on the west side of the drill hall.

An empty cabinet with a Flammable Materials label was observed in the maintenance office. The door of the vault was observed to have a Radioactive Materials warning sign posted on it at the time of the October 30, 2008 site reconnaissance. The electric and water utilities were still in use at the Armory at the time of site reconnaissance. There were two containers with an unidentified substances of a similar appearance observed in the maintenance office at the time of the October 30, 2008 site reconnaissance. However, only one container labeled “Exsorbet Emergency Spill Kit- Grabs oil and won’t let go”

with a very little amount of a dark brown colored liquid was observed at the time of the January 21, 2009 site reconnaissance (Ref. 4, Photograph# 36).

7.0 Interviews

7.1 Interviews with Past and Present Owners of the Property

The DEQ has had several conversations regarding environmental and safety issues at the armories, with various employees of the military department. The Oklahoma Military Department (OMD) provided an 'Indoor Firing Range Lead Issues Report' to the DEQ (Appendix E). OMD also provided DEQ with access to their files on the Tonkawa Armory.

7.2 Interview with Key Site Manager

There is no current key site manager for the property. Therefore, no interviews were conducted with a key site manager. Mr. Dave Neely, City Manager, City of Tonkawa currently controls access to the property.

7.3 Interview with Operators and Occupants of the Property

A telephonic interview was conducted with Mr. Todd Ross, Former OMD Specialist, Tonkawa Armory, was conducted on January 21, 2009. Mr. Ross had served as a Specialist at the Tonkawa Armory for about seven years and was very informative about the Armory. The following information was ascertained during the interview.

- The OK Bit Services, Inc., has operated on the property to the northeast of the Armory for about 10 - 15 years.
- All sewage and waste water drain to the City of Tonkawa's sewage system.
- To Mr. Ross's knowledge, no underground storage tanks were present onsite.
- The military had vacated the Armory approximately in December 2007.
- The IFR did not have proper ventilation and so was not used for target practice. Instead personnel would shoot four to five rounds of ammunition at targets to ensure that their weapons were discharging properly. According to Mr. Ross, the IFR had not seen frequent use.
- The vault was used to store weapons and blank ammunition, all of which has been removed from the Armory by the OMD. Mr. Ross did not know about why a Radioactive Materials sign was posted on the vault door, as he did not recollect radioactive materials having been stored inside the vault.
- According to Mr. Ross, the Armory had served as a center for artillery (for one to two years), and then as a supply unit.

- A self contained parts washer had been in use at the site for a brief period of time by the military and was removed from the Armory about eight years prior to the date of this interview.
- The maintenance office was used mostly for storage purposes.
- The military vehicle compound was used for vehicle maintenance inspections by the military. OMD personnel maintained a checklist for inspection purposes, and vehicles that were found to be in need of maintenance were then transferred to an OMD facility that then performed those tasks.
- The kitchen was used for the purposes of food preparation from approximately 1987 to the 1990s. After that it was used for water purification operations.
- Oil, lubricants and other such chemicals were stored for a period of time in the storage room (labeled POL storage in the February 22, 1995 Floor Plan). This room is not connected to the rest of the Armory building and opens only to the outside. A CONEX container located in the vehicle maintenance compound was later used to store these supplies. The February 22, 1995 Tonkawa Armory Floor Plan indicates the location of this CONEX container. [See Appendix F- Floor Plan].

7.4 Interview with State and/or Local Government Officials

A discussion was conducted with Mr. Dave Neely, City Manager, City of Tonkawa, was conducted during the site reconnaissance. The following details were ascertained from the discussion.

- The electric and water utilities were still in use at the Armory at the time of site reconnaissance.
- The site consisted of approximately 7.5 acres
- The OK Bit Services, Inc., was located on the Tonkawa Industrial Park.

8.0 Findings

This Phase I Targeted Brownfield Assessment (TBA) of the Tonkawa Armory was performed in accordance with the ASTM E 1527-05, a guide for conducting Environmental Site Assessments. The site is located in Section 33, Township 26North, Range 1West, in Kay County, Oklahoma. The site is located at 345 Thunderbird Road [latitude 36.694335304, longitude 97.316002883] (Ref. 4, 23). Summarized below are the major environmental findings of this Phase I TBA [See relevant sections of this report for further details on each finding].

- Results of Oklahoma Military Department (OMD) sampling in 2004 indicated lead dust concentrations of 351,000 $\mu\text{g}/\text{ft}^2$ in the bullet trap, and 68,840 $\mu\text{g}/\text{ft}^2$ on the Indoor Firing Range (IFR) floor (Appendix E). Marshall Environmental Management, Inc., collected lead dust samples from various locations inside the Armory on November 4,

2008. Lead dust levels were found to exceed the 40 $\mu\text{g}/\text{ft}^2$ standard (HUD Child Occupied Facility Standard) selected by the DEQ as the lead dust remediation goal for room floors in several areas. The highest concentrations of lead dust was found in the maintenance office (2,694 $\mu\text{g}/\text{ft}^2$), IFR (target end- 226,015 $\mu\text{g}/\text{ft}^2$, middle- 14,151 $\mu\text{g}/\text{ft}^2$, near entrance- 3,549 $\mu\text{g}/\text{ft}^2$), and storage rooms near the two storage rooms behind the IFR target end (716 $\mu\text{g}/\text{ft}^2$ and 4,611 $\mu\text{g}/\text{ft}^2$).

All floors in the Armory, except the maintenance office, IFR, and the two storage rooms behind the IFR target end, were HEPA vacuumed and wet washed by the City of Tonkawa. It was recommended by DEQ at the time that the maintenance office, IFR, and the two storage rooms behind the IFR target end remain closed until the lead hazard had been remediated by the DEQ. This was intended to minimize chances for lead dust being tracked into clean areas. DEQ personnel re-sampled all floors with lead dust levels that exceeded 100 $\mu\text{g}/\text{ft}^2$ on December 4, 2008. Lead dust levels were found to have reduced in all the rooms compared to earlier sampling levels (sampled on November 4, 2008), but only in the classroom#5 did the levels decrease below 40 $\mu\text{g}/\text{ft}^2$ [See Appendix F – Armory Floor Plan for the spaces sampled for lead dust].

Other rooms in the Armory indicated to have lead dust contamination (Marshall Environmental Management, Inc., November 4, 2008) were classroom#5 (210 $\mu\text{g}/\text{ft}^2$), classroom#7 (105 $\mu\text{g}/\text{ft}^2$), furnace room (173 $\mu\text{g}/\text{ft}^2$), hallway#15 (343 $\mu\text{g}/\text{ft}^2$), hallway#16 (139 $\mu\text{g}/\text{ft}^2$), storage room#20 (123 $\mu\text{g}/\text{ft}^2$), vault (108 $\mu\text{g}/\text{ft}^2$), east side of drill hall (96 $\mu\text{g}/\text{ft}^2$), and west side of the drill hall (131 $\mu\text{g}/\text{ft}^2$) were found to have lead dust levels that were greater than 40 $\mu\text{g}/\text{ft}^2$.

The IFR bullet trap was not observed to contain sand at the time of site reconnaissance. Spent bullets and fragments were observed in the bullet trap. The IFR and the rooms indicated as having lead dust contamination exceeding the 40 $\mu\text{g}/\text{ft}^2$ standard constitute a recognized environmental condition (REC) for the purposes of this report.

- A surface soil sample was collected by DEQ personnel on October 31, 2008 from outside the IFR intake vent on the south side of the Armory (See Appendix F). The lead concentration in the soil sample (11 ppm) was found to be below DEQ's action level for lead in soil of 500 ppm. According to the USGS National Geochemical Survey, the average background concentration of lead in Kay County is 25.179 ppm (Ref. 25).
- A lead-based paint (LBP) inspection was conducted by Marshall Environmental Management, Inc., on October 31, 2008, to determine the lead levels on painted structural building components of the Armory. The X-Ray Fluorescence Analyzer tests did not indicate the presence of building components that contained lead in amounts greater than or equal to 1.0 mg/cm^2 (EPA's and the Department of Housing and Urban Development's screening level for LBP) [See Appendix F].

- Marshall Environmental Management, Inc. conducted an asbestos inspection on October 31, 2008. The inspection did not identify the presence of asbestos containing material within the Armory building [See Appendix F].
- DEQ personnel conducted a radiation survey and wipe sampling of the area around the vault in the Armory. The highest measured exposure rate recorded was 25 micro-Roentgen per hour using a Ludlum Model 19 survey meter. This exposure rate is only about twice background levels and is very common due to the high amount of naturally occurring radiation in structures making extensive use of concrete. Radiochemical analyses of the wipe samples for Ni-63 and Tritium indicated levels much below detection limits [See Appendix F – Analytical results of DEQ sampling events].
- Review of the Oklahoma Corporation Commission’s (OCC’s) records did not indicate the presence of underground storage tanks (USTs) at the site. Three USTs were identified within a one-half mile radius [See Appendix A- DEQ GIS maps]. As per OCC records, none of these USTs have been reported as being leaking underground storage tanks.
- No sites on the National Priority List (NPL), delisted NPL list, active or archived Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, Resource Conservation and Recovery Act (RCRA) database, Emergency Response Notification System (ERNS) list, State Voluntary Cleanup Program and State Brownfield Programs lists were identified on the subject property. The site is on the DEQ Site Cleanup Assistance Program’s list for investigation and cleanup of environmental hazards. There are no Institutional Controls/Engineering Controls listed either in the preliminary data collected for Oklahoma’s Institutional Control database or in the county land records for the subject property. The subject property does not have any listed state landfills within one-half mile.
- Sanborn Fire Insurance maps prepared for this area did not include the boundaries of the subject property.
- A pad mounted transformer was observed to the northeast of the Armory. The transformer was observed to be in good condition and had a “Non PCB” label on it.
- There were no areas of stained soil, pits, ponds or lagoons, wells, septic systems, wells, pump jacks, storage tanks, drums observed on the site during the site reconnaissance.
- The Armory is immediately bound by the OK Bit Services, Inc. facility to the east, by open space to the south and west sides, and by Frontage Road to the north.

9.0 *Opinion and Recommendations*

Based on the findings of this assessment, The DEQ recommends that additional cleanup be conducted to support the reuse of the Armory.

- The IFR was found to have lead dust contamination. Remediation of the lead dust residue in the IFR is recommended [See Appendix F for analytical results]. The spent bullets and fragments in the bullet trap should also be disposed of appropriately.
- Surface lead wipe samples collected by Marshall Environmental Inc., (November 4, 2008) from the Tonkawa Armory indicated lead contamination in the classrooms#5 and #7, furnace room, hallways#15, and 16, storage room #20, vault, and east and west sides of the drill hall (Appendix F).

Results of DEQ's December 4, 2008 sampling indicated that although all lead dust levels were reduced compared to the earlier sampling levels, only Classroom#5 had lead dust levels that were reduced to below the HUD Child Occupied Facility Standard ($40 \mu\text{g}/\text{ft}^2$). DEQ has selected the $40 \mu\text{g}/\text{ft}^2$ HUD standard as the remediation goal for room floors. As this remediation goal was not achieved in all rooms, DEQ recommends that all rooms that tested above $40 \mu\text{g}/\text{ft}^2$ be HEPA vacuumed and wet washed until areas contaminated by lead dust are remediated. DEQ also recommends that even after remediation of the environmental concerns at the Armory, the building not be used for residential purposes and further that the IFR not be used as a child occupied facility at any time in the future. Child occupied facilities would include, but are not limited to, day-care centers, preschools, and kindergarten classrooms.

- Miscellaneous cleaning chemicals in the Armory should be disposed of safely. A container labeled "Exsorbet Emergency Spill Kit- Grabs oil and won't let go" with a very little amount of a dark brown colored liquid was observed at the time of the January 21, 2009 site reconnaissance (Ref. 4, Photograph# 36). This substance should be disposed of safely and appropriately.
- Fluorescent light fixtures used in the Armory should be investigated for the possible presence of Polychlorinated biphenyls (PCBs). Any fluorescent bulb that is not in good working order should be recycled and the fixture inspected for leaking ballasts. If the ballast is leaking it needs to be disposed of properly in a manner dependant on its PCB content.

10.0 Data Gaps

Property tax files, city directories, building development records, and zoning/land use records for the subject property were not reviewed during the preparation of this report. No tax records, zoning records, city directories were reviewed for the purposes of this report. However, these are not considered significant data gaps for this Phase I TBA. The lack of tribal environmental information is considered a data gap for the purposes of this report.

11.0 Conclusions

DEQ has performed a Phase I Targeted Brownfield Assessment (TBA)/Environmental Site Assessment in conformance with the scope of work and limitations of ASTM Practice E 1527-05 of the Tonkawa Armory located at 345 Thunderbird Road, Tonkawa, Oklahoma (Section 33, Township 26North, Range 1West I.M., in Kay County, Oklahoma). Any exceptions to, or deletions from, this practice are described in Sections 2.4, 13.0 of this report. This assessment revealed a recognized environmental condition regarding the lead dust contamination in the Tonkawa Armory that may need additional investigation and remediation before future occupational control can take place. The information provided in this assessment is to guide future cleanup action and to assist the City of Tonkawa 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 Additional Services

Additional services provided for this Phase I Targeted Brownfield Assessment include soil sampling by DEQ personnel, as well as an asbestos inspection, a lead-based paint inspection and sampling for lead dust in the Armory performed by Marshall Environmental Inc., under contract with the DEQ. In addition to the Phase I TBA, the DEQ will assist the City with remediation of the environmental contaminants and ensure that the property is ready for redevelopment.

13.0 Deviations

Tribal environmental lists, property tax files, city directories, building development records, and zoning/land use records for the subject property were not reviewed during the preparation of this report.

14.0 References

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11. EPA Partially Deleted NPL list:
<http://www.epa.gov/superfund/sites/query/queryhtm/nplpdel.htm#Oklahoma>.
12. EPA Proposed NPL
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<http://www.deq.state.ok.us/LPDnew/HW/Notifiers/notifiersbycountycity.pdf>.
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<http://tin.er.usgs.gov/geochem/doc/averages/countydata.htm>.
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http://www.epa.gov/region6/gis/data/kml_files/index.htm.

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 professional statements.

17.0 Appendices

Appendix A – Site (Vicinity) Map

USGS Topographic Maps

DEQ Dataviewer & DEQ GIS Maps

Oklahoma Water Resources Board (OWRB) Maps

FEMA Floodplain Map

USDA Web Soil Survey Map

Appendix B - Site Photographs

Appendix C - Aerial Photographs: 1937, 1954, 1995, 2003

Appendix D - Qualifications of Environmental Professionals

Appendix E – C.H. Guernsey & Company. Indoor Firing Range Lead Issues Report (Oklahoma Army National Guard), October 2005

Appendix F - Analytical results of DEQ sampling events, Chain-of-Custody

Asbestos Inspection Report (Marshall Environmental, Inc., October 31, 2008)

Lead-Based Paint Inspection Report (Marshall Environmental, Inc., October 31, 2008)

Tonkawa Armory Surface Wipe Sampling for Lead in Dust (Marshall Environmental, Inc., November 4, 2008)

Site Assessment Documents: Property Records, Tonkawa Armory Floor Plan, OWRB Multi-purpose well completion and plugging reports, Federal ERNS database search results, State registered storage tank list (Tonkawa), State and federal database search results, City of Tonkawa letter of interest

APPENDIX A

Site (Vicinity) Map

USGS Topographic maps

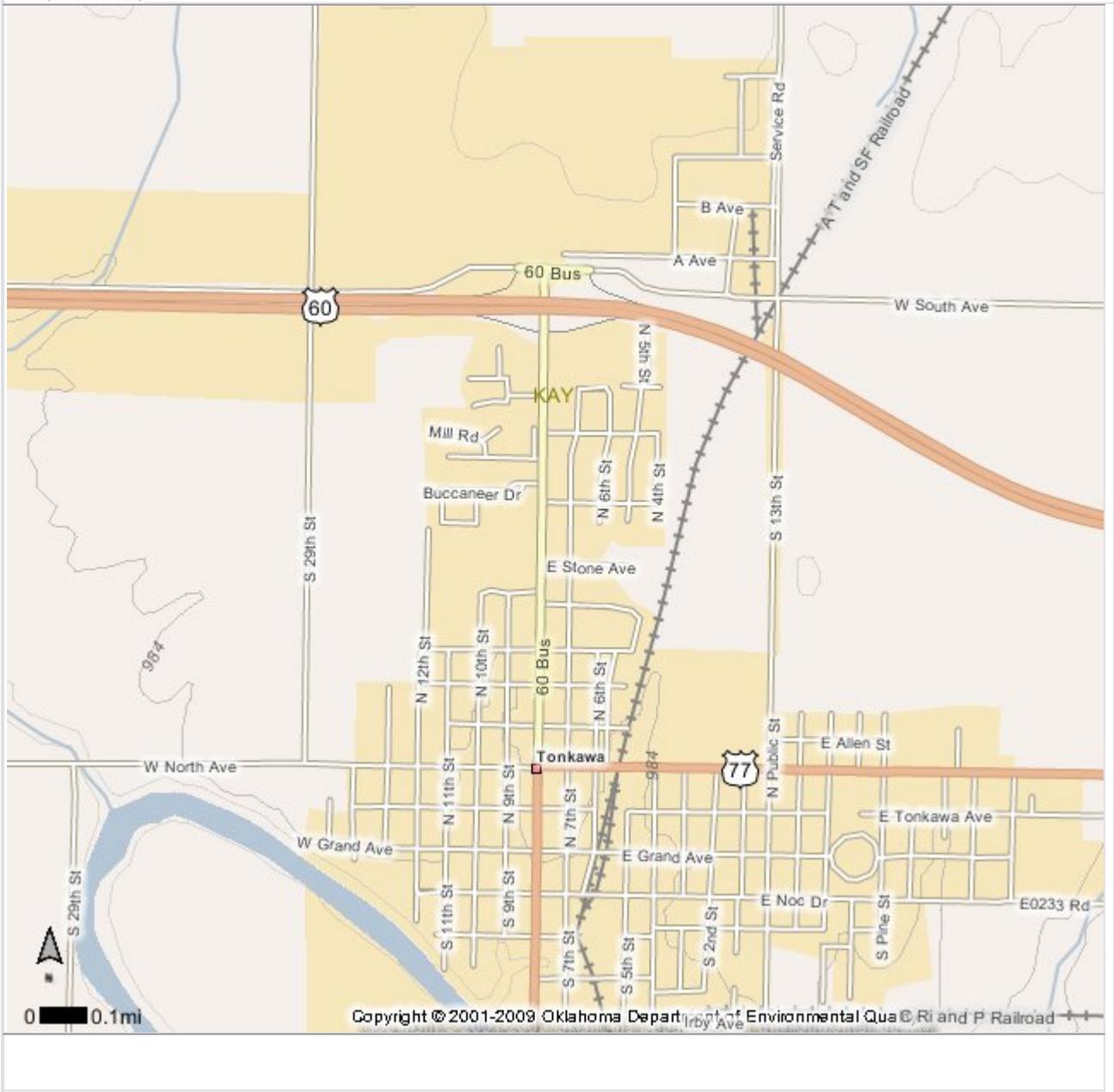
DEQ Dataviewer & DEQ GIS Maps

Oklahoma Water Resources Board (OWRB) Maps

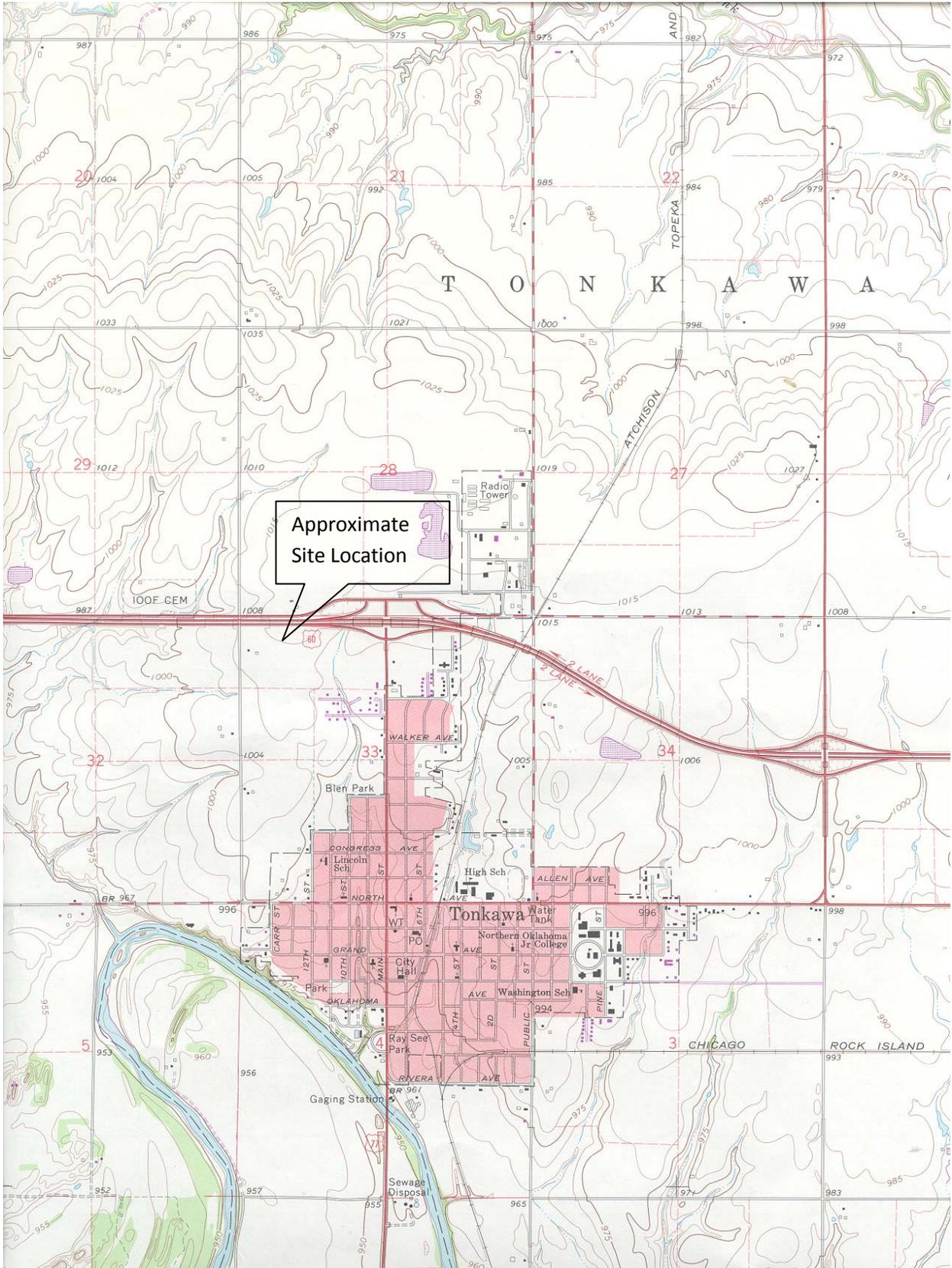
FEMA Floodplain Map

USDA Web Soil Survey Map

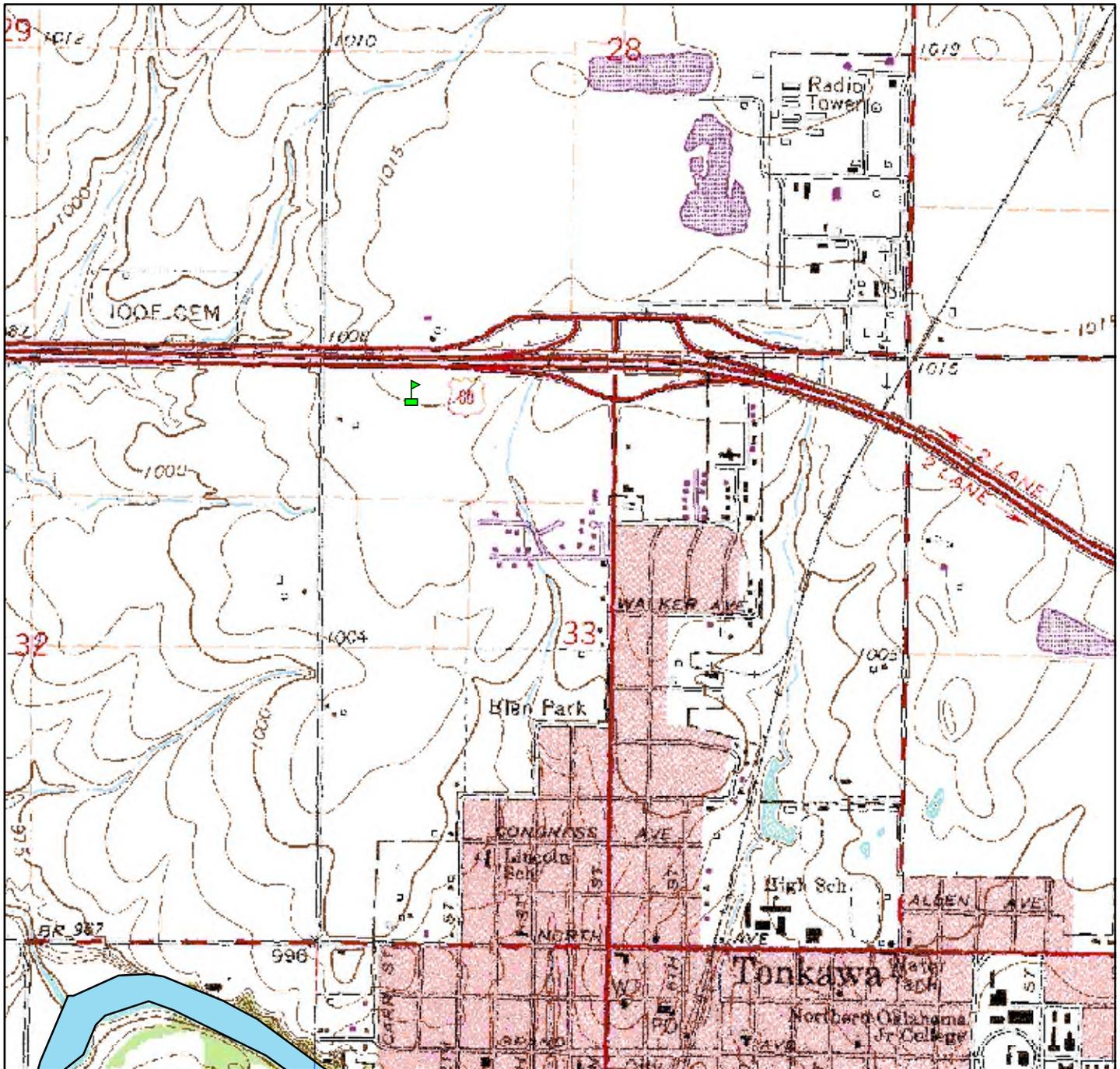
Site (Vicinity) Map [DEQ Dataviewer]



1968 USGS Topographic Map



Tonkawa Armory
345 Thunderbird Road, Tonkawa, Oklahoma

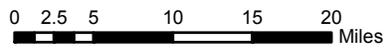
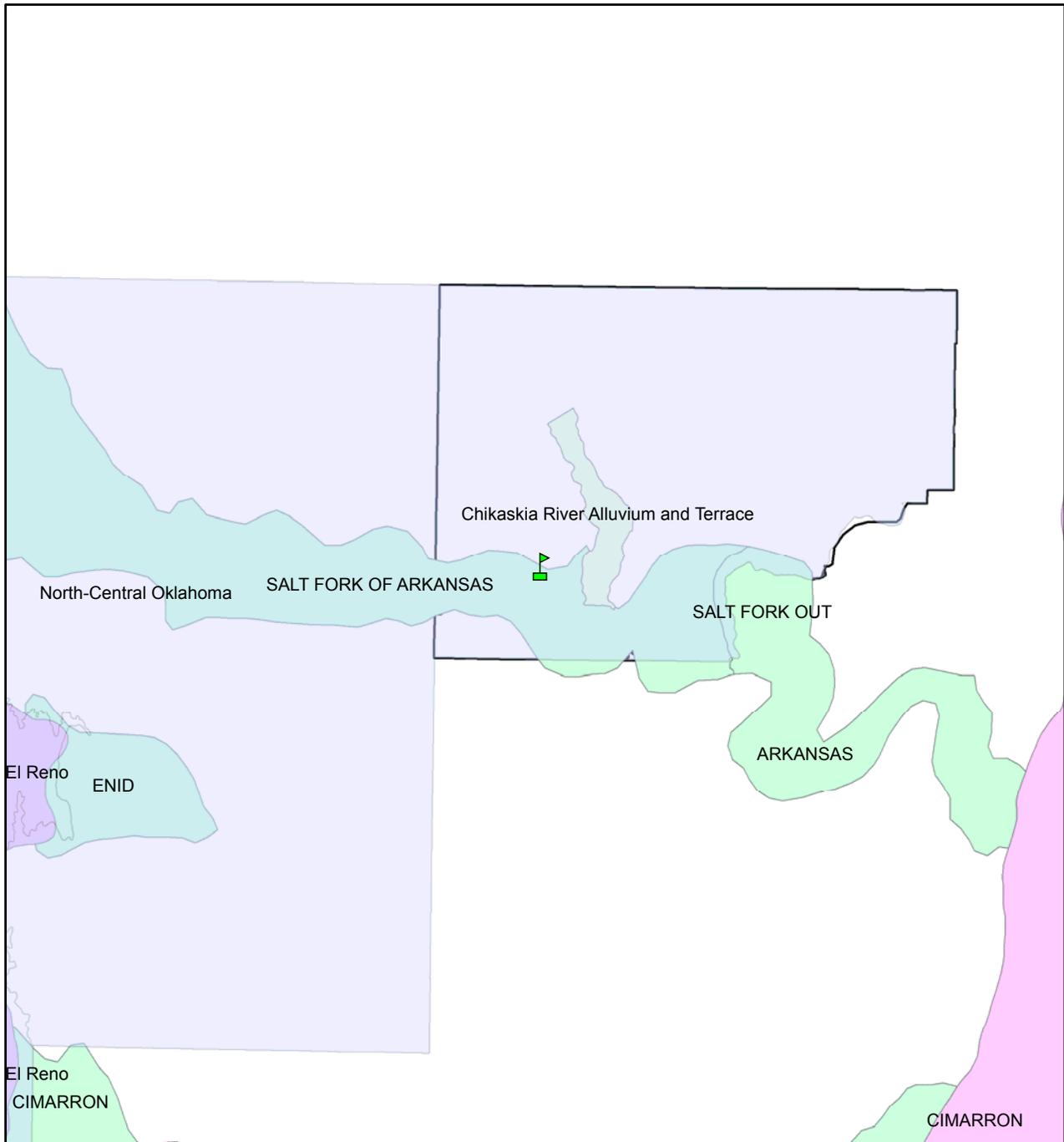


Legend

-  Tonkawa Armory
-  Lakes



Tonkawa Armory
345 Thunderbird Road, Tonkawa, Oklahoma

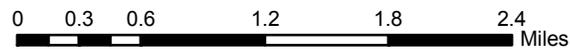
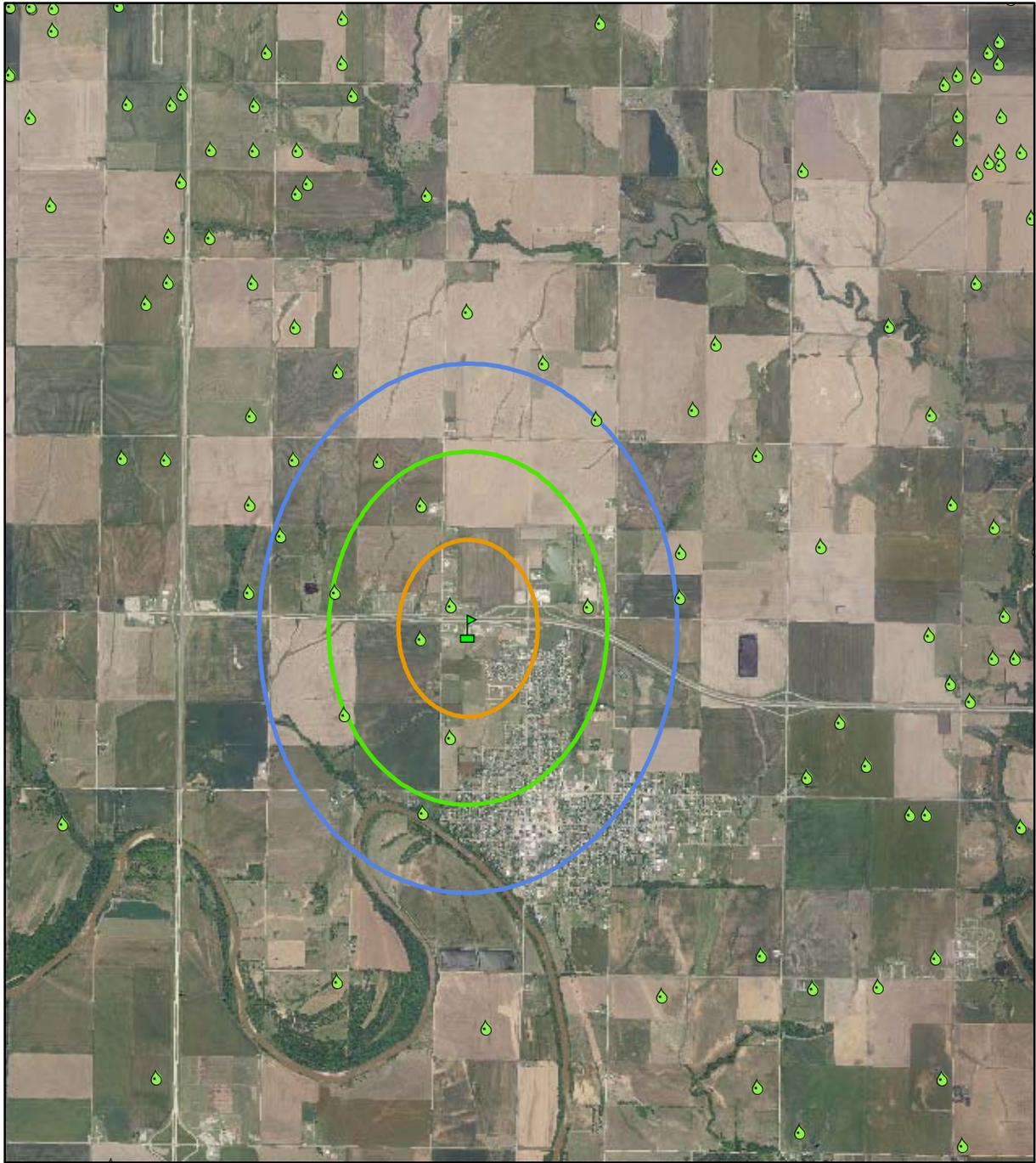


Legend

-  Tonkawa Armory
-  Minor Bedrock Basin
-  Minor Alluvium Basin
-  Major Bedrock
-  Major Alluvium Basin



Tonkawa Armory
345 Thunderbird Road, Tonkawa, Oklahoma



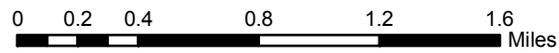
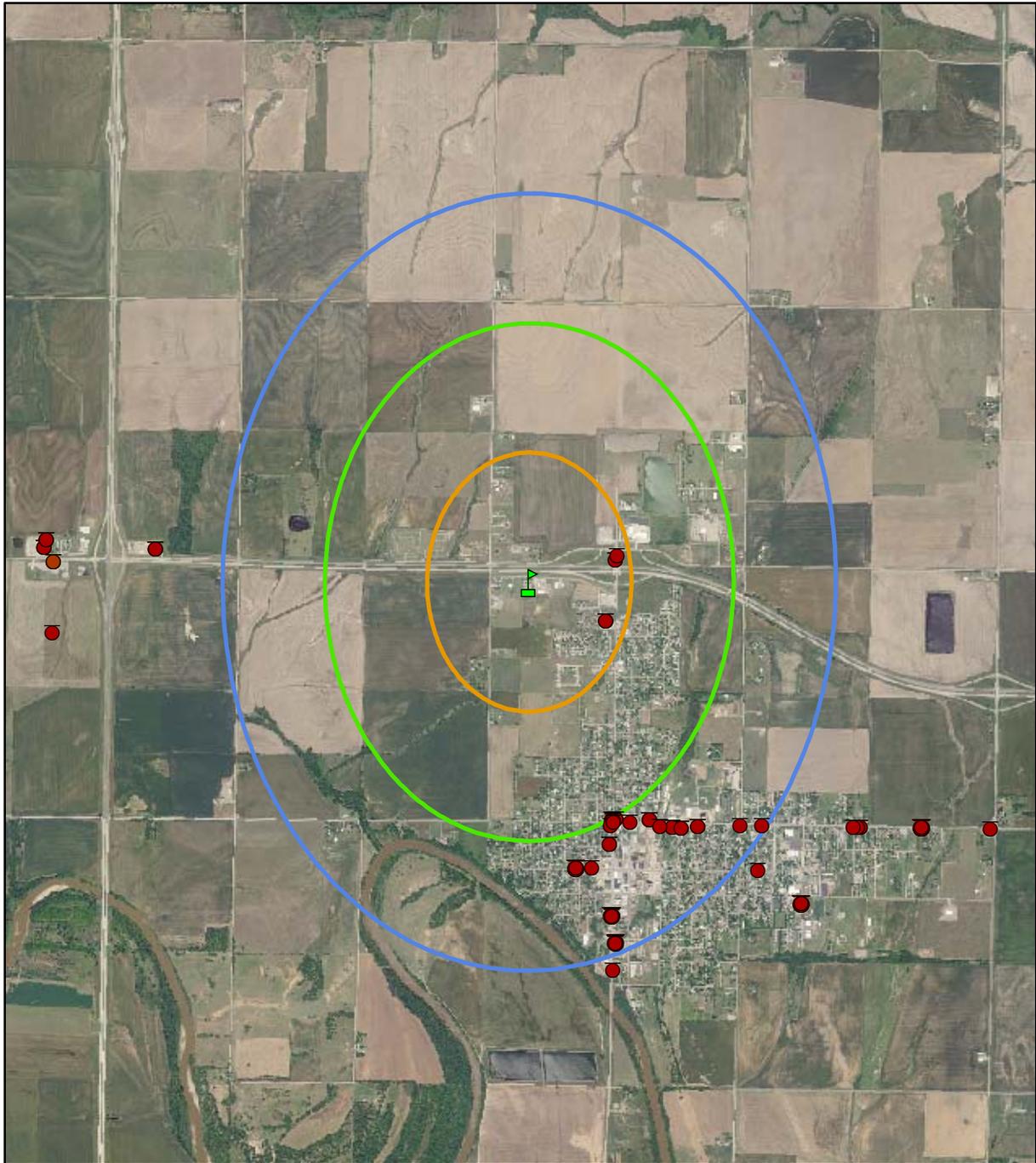
Legend

-  Tonkawa Armory
-  Oil & Gas



Created: February, 2009

Tonkawa Armory
345 Thunderbird Road, Tonkawa, Oklahoma



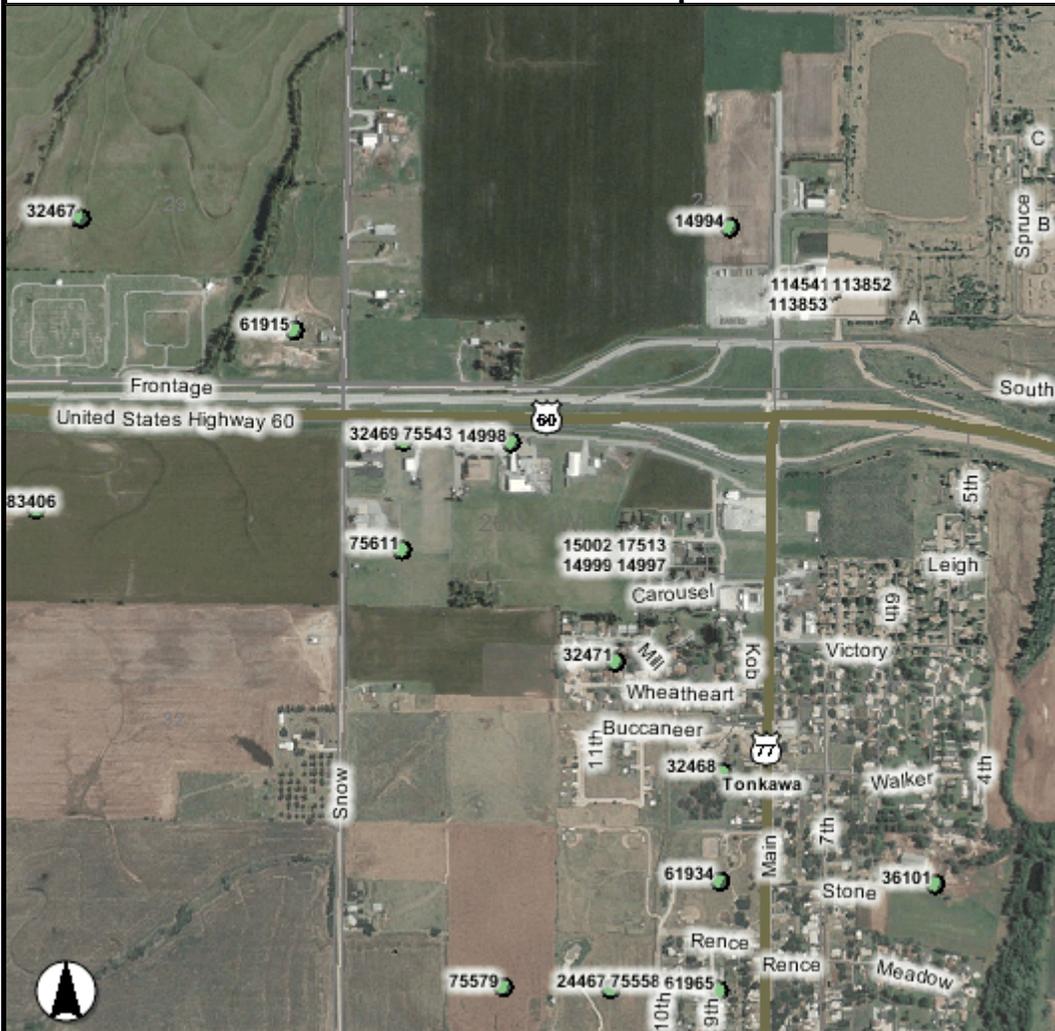
Legend

-  Tonkawa Armory
-  Underground Storage Tank



Created: February, 2009

OWRB Map Viewer



- Legend**
- Counties
 - Groundwater Wells
 - Monitoring Wells
 - Other Wells
 - Cities**
 - Populated Place/County Seat
 - Highways
 - County Roads
 - PLSS Sections
 - PLSS Townships
 - Lakes and Ponds
 - Streams
 - Rivers
 - Swamps
 - Municipal Boundaries

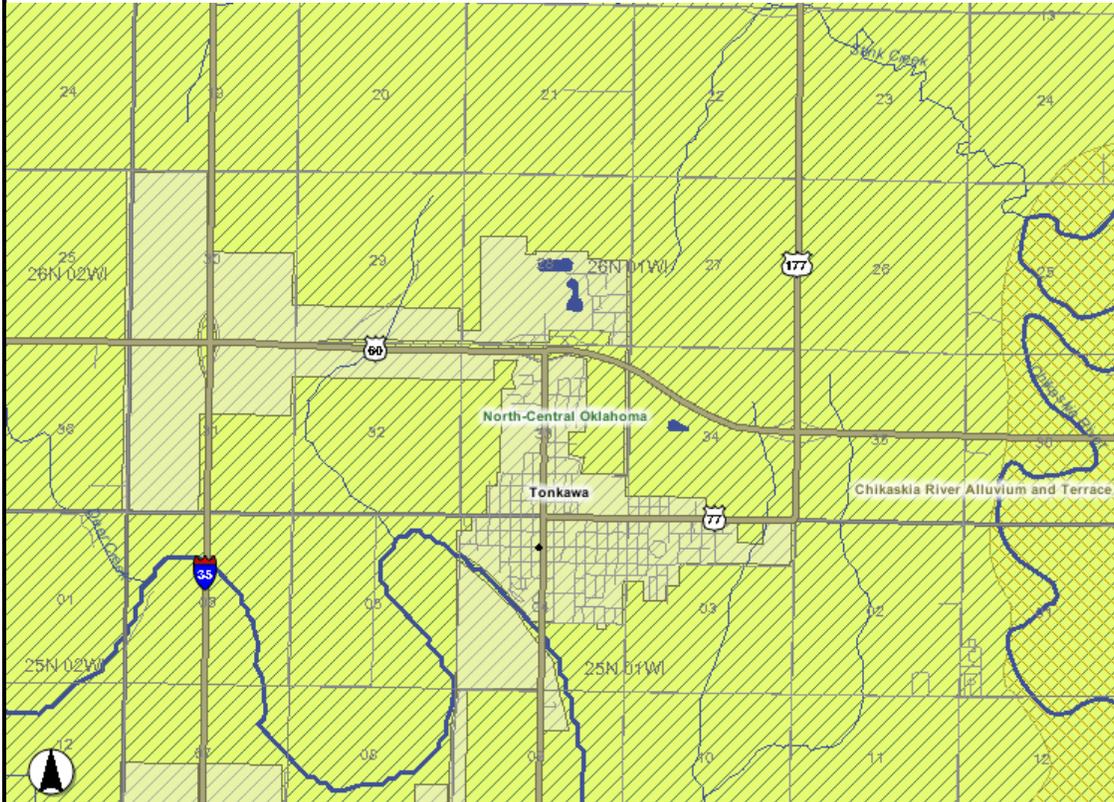
Created by the OWRB Map Viewer - Copyright (C) 2009

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OWRB Map Viewer



Legend

- Counties
- Cities
- Populated Place/County Seat
- Highways
- County Roads
- PLSS Sections
- PLSS Townships
- Lakes and Ponds
- Streams
- Rivers
- Streams
- Municipal Boundaries
- Minor GW Basins
- Alluvium and Terrace
- Bedrock
- Average Annual Precipitation

0-16
16-18
18-20
20-22
22-24
24-26
26-28
28-30
30-32
32-34
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50-54
54-58
58-62
62-66

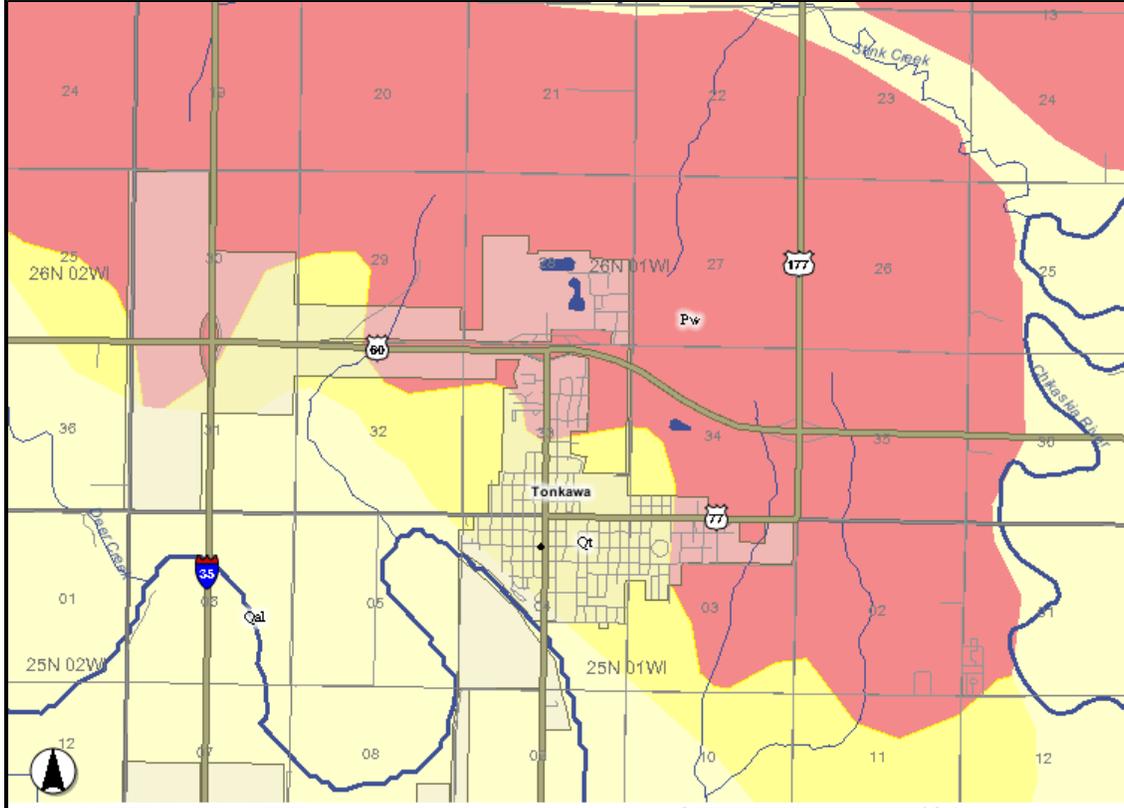
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OWRB Map Viewer



- Legend
- Counties
- Cities
- Populated Place/County Seat
- Highways
- County Roads
- PLSS Sections
- PLSS Townships
- Lakes and Ponds
- Streams
- Rivers
- Streams
- Municipal Boundaries

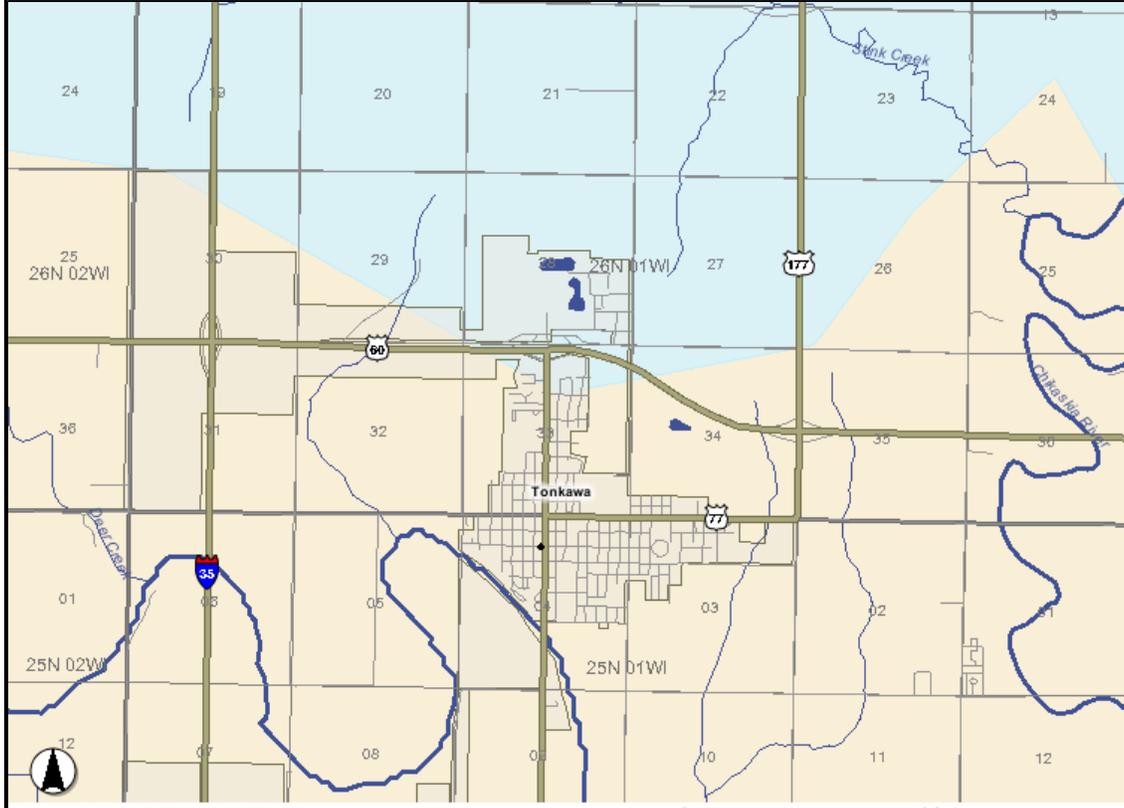
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OWRB Map Viewer



- Legend**
- Counties
 - Cities
 - Populated Place/County Seat
 - Highways
 - County Roads
 - PLSS Sections
 - PLSS Townships
 - Lakes and Ponds
 - Streams
 - Rivers
 - Streams
 - Municipal Boundaries
 - Aquifer Vulnerability
 - Very High
 - High
 - Moderate
 - Low
 - Very Low

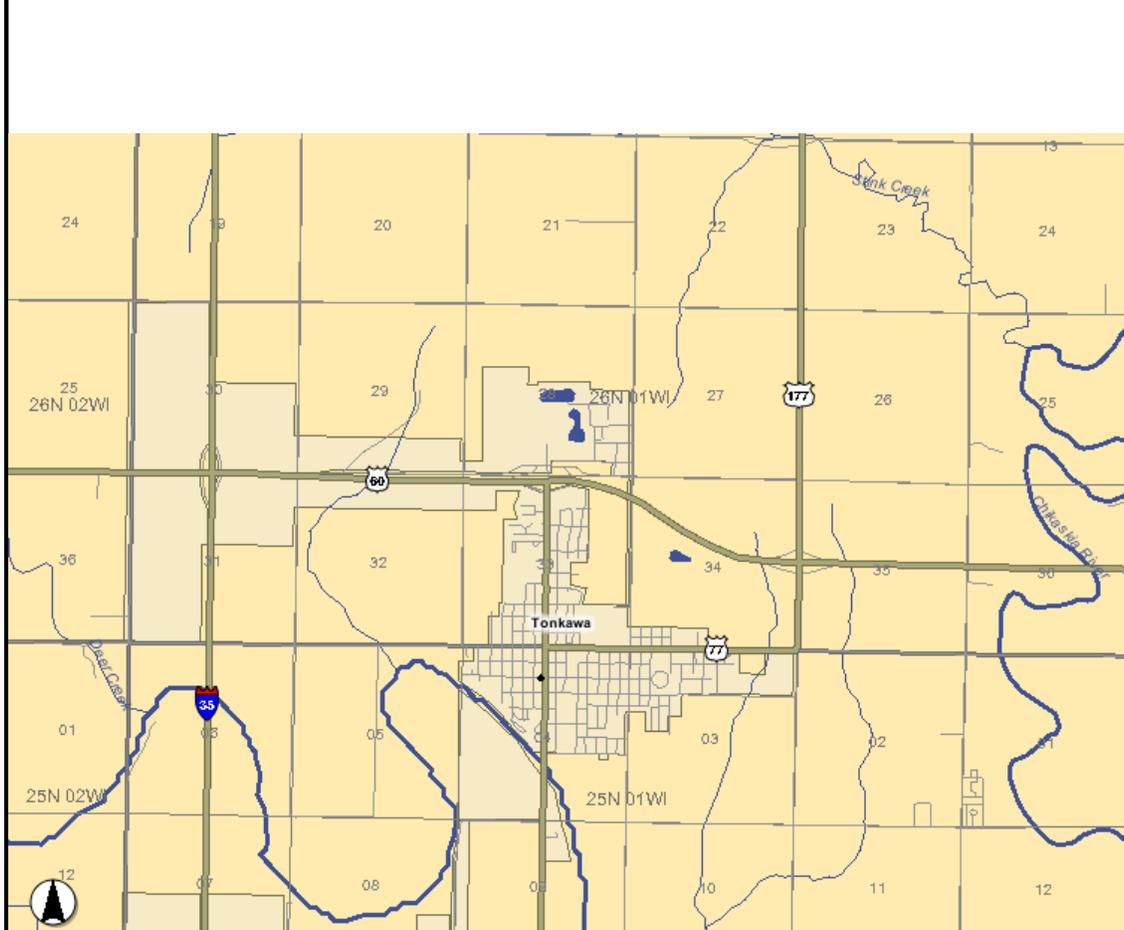
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OWRB Map Viewer



Legend

- Counties
- Cities
- Populated Place/County Seat
- Highways
- County Roads
- PLSS Sections
- PLSS Townships
- Lakes and Ponds
- Streams
- Rivers
- Streams
- Municipal Boundaries
- Mesonet Sites
- Climate Divisions

Average Annual Precipitation

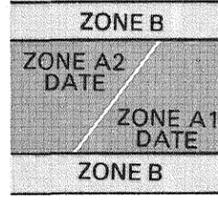
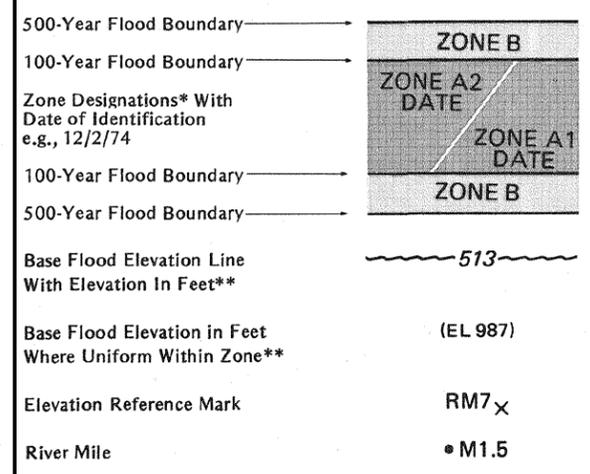
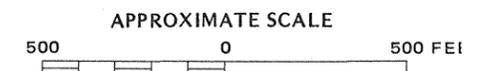
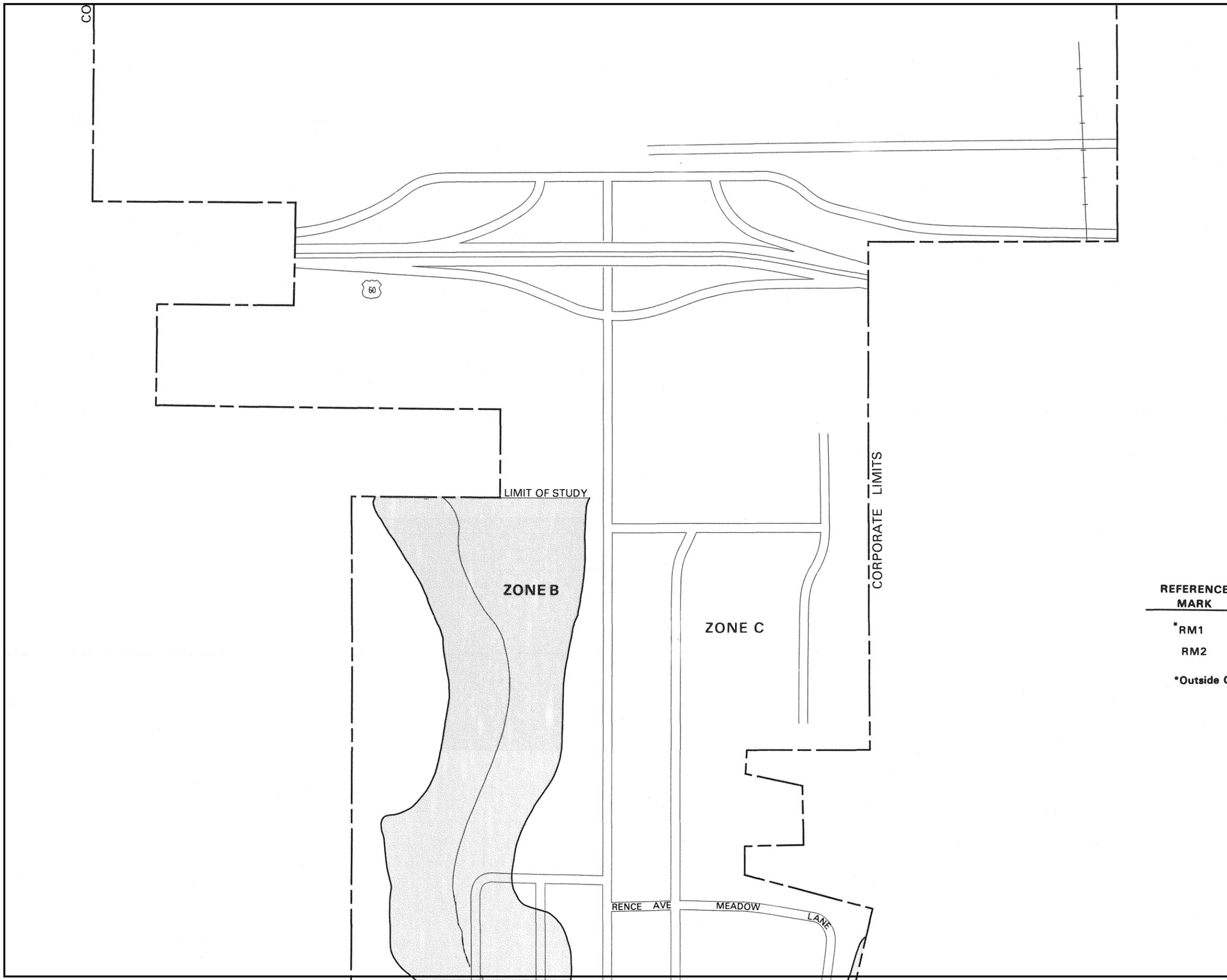
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513

(EL 987)

RM7_x

• M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

***EXPLANATION OF ZONE DESIGNATIONS**

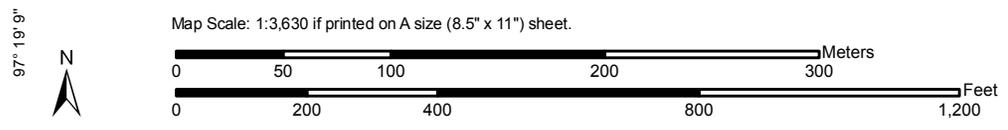
ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

REFERENCE MARK
*RM1
RM2
*Outside C

NOTES TO USER

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes 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 FEMA Flood Map Store at www.msc.fema.gov

Soil Map—Kay County, Oklahoma



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other

Special Line Features

-  Gully
-  Short Steep Slope
-  Other

Political Features

-  Cities
-  PLSS Township and Range
-  PLSS Section

Water Features

-  Oceans
-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:3,630 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 14N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Kay County, Oklahoma
 Survey Area Data: Version 7, Sep 12, 2008

Date(s) aerial images were photographed: 6/27/2003; 7/4/2003

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Kay County, Oklahoma (OK071)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BeA	Bethany silt loam, 0 to 1 percent slopes	2.2	4.8%
VaA	Vanoss silt loam, 0 to 1 percent slopes	28.0	61.9%
VaB	Vanoss silt loam, 1 to 3 percent slopes	15.1	33.3%
Totals for Area of Interest		45.3	100.0%

APPENDIX B

Site Photographs (January 21, 2009)

Site Photographs: All photographs taken by Subi John on January 21, 2009



Photo #1: Front view of the Armory



Photo #2: Property to the northwest of the Armory



Photo #3: Adjacent residential property to the west of site



Photo #4: Facing west



Photo #5: Military vehicle compound to the southwest of Armory



Photo #6: Facing west



Photo #7: Facing east



Photo #8: Facing southwest



Photo #9: Water tower to southeast of Armory



Photo #10: Facing north



Photo #11: OK Bit Services Inc. facility located east of site



Photo #12: Pad mounted transformer with “Non-PCB” label



Photo #13: Concreted area on east side of Armory



Photo #14: Bare patch without grass at northeast corner of Armory



Photo #15: Supply room



Photo #16: Vault



Photo #17: Kitchen



Photo #18: Kitchen



Photo #19: Facing entryway into kitchen



Photo #20: Classroom # 5 at southeast corner of Armory



Photo #21: Office at northeast corner of Armory



Photo #22: Office on east side of Armory building



Photo #23: Furnace room



Photo #24: Hot water heater in furnace room



Photo #25: Another view of the Classroom#5 on southeast corner of Armory



Photo #26: Soundproofing material on walls of Indoor Firing Range



Photo #27: Bullet trap in Indoor Firing Range



Photo #28: Spent bullets along with bullet fragments at the base of the bullet trap of the Indoor Firing Range



Photo #29: Items stored in the Indoor Firing Range



Photo #30: Target end of the Indoor Firing Range



Photo #31: Miscellaneous items stored in the Indoor Firing Range



Photo #32: Automotive and artillery grease container observed in the Indoor Firing Range



Photo #33: Other items observed in the Indoor Firing Range



Photo #34: Maintenance office



Photo #35: Items observed in the maintenance office



Photo #36: Remnants of unknown liquid observed in container labeled "Emergency Spill Kit"



Photo #37: Intake vent on south side of maintenance office



Photo #38: Intake vent on north wall of maintenance office



Photo #39: Bucket used to store chains observed in the maintenance office



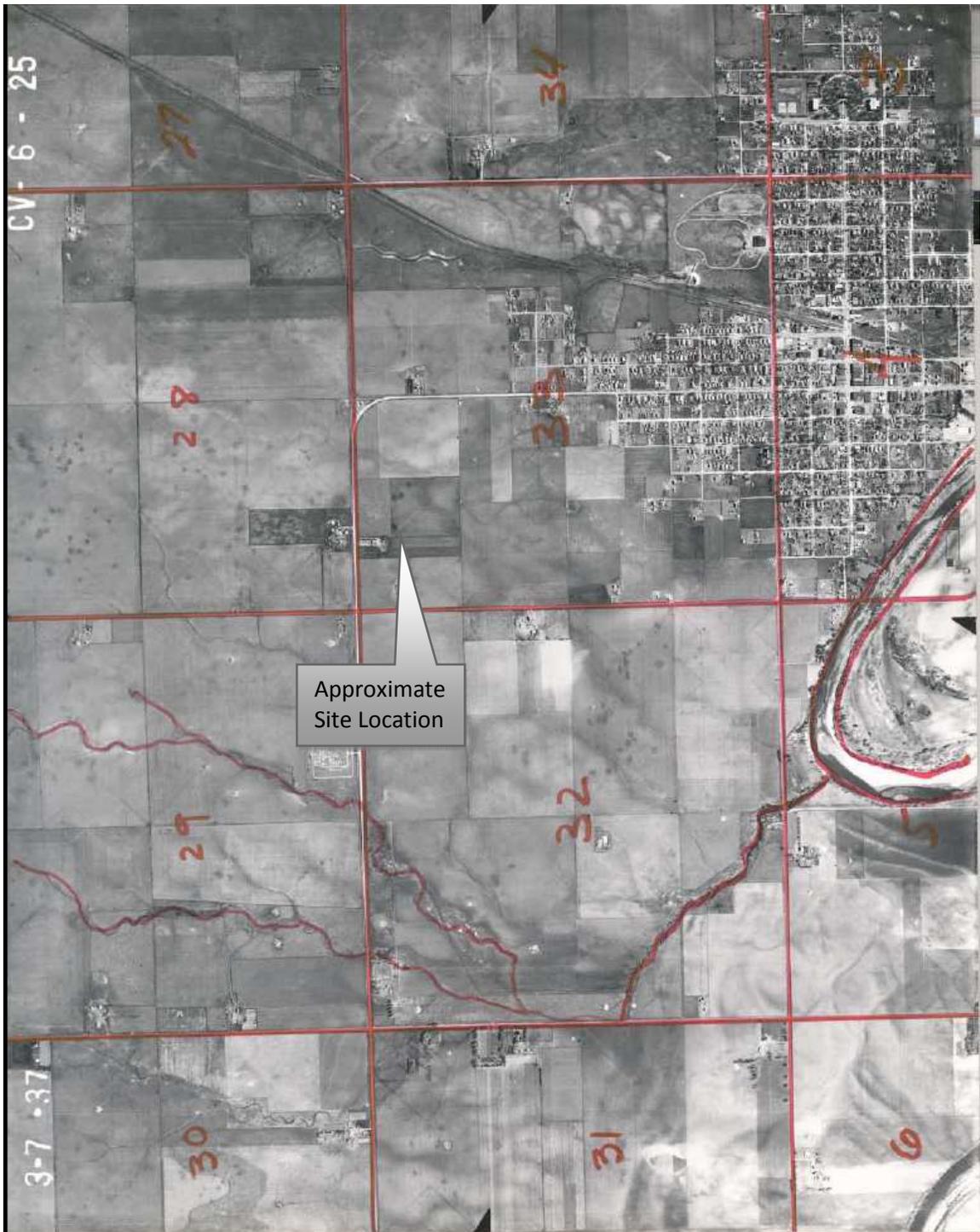
Photo #40: Drill Hall



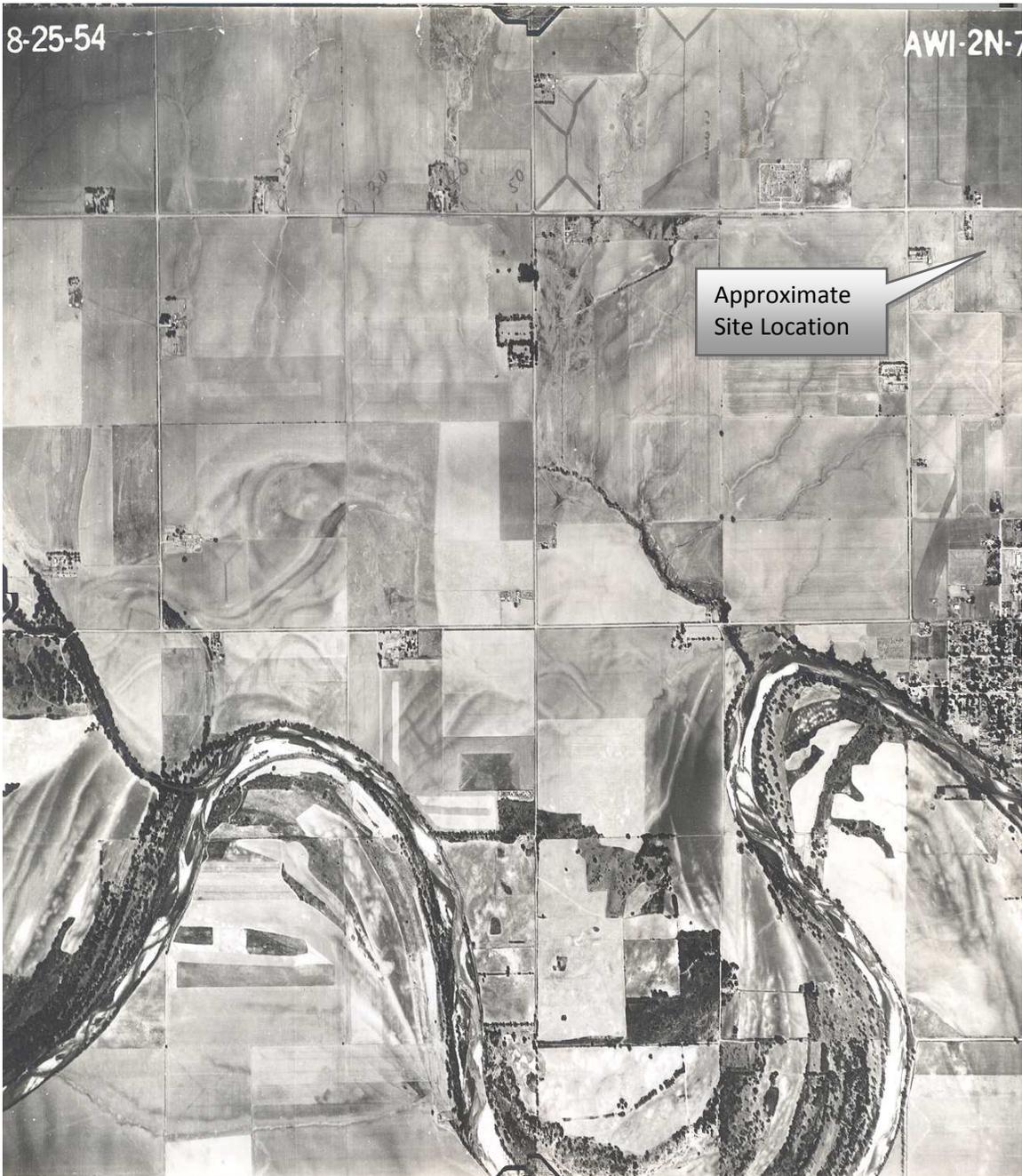
Photo #41: Storage room located next to Classroom#7 on east side of Armory

APPENDIX C

Aerial Photographs: 1937, 1954, 1995, 2003, 2008



Aerial Photograph [3-7-1937]



8-25-54

AWI-2N-7

Approximate
Site Location

Aerial Photograph [8-25-1954]



Oklahoma Department of Environmental Quality

1995 Aerial Photograph (DEQ Dataviewer)



Tonkawa Armory

60

0 0.05mi

Copyright © 2001-2009 Oklahoma Department of Environmental Quality.



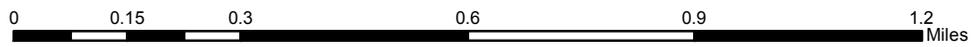
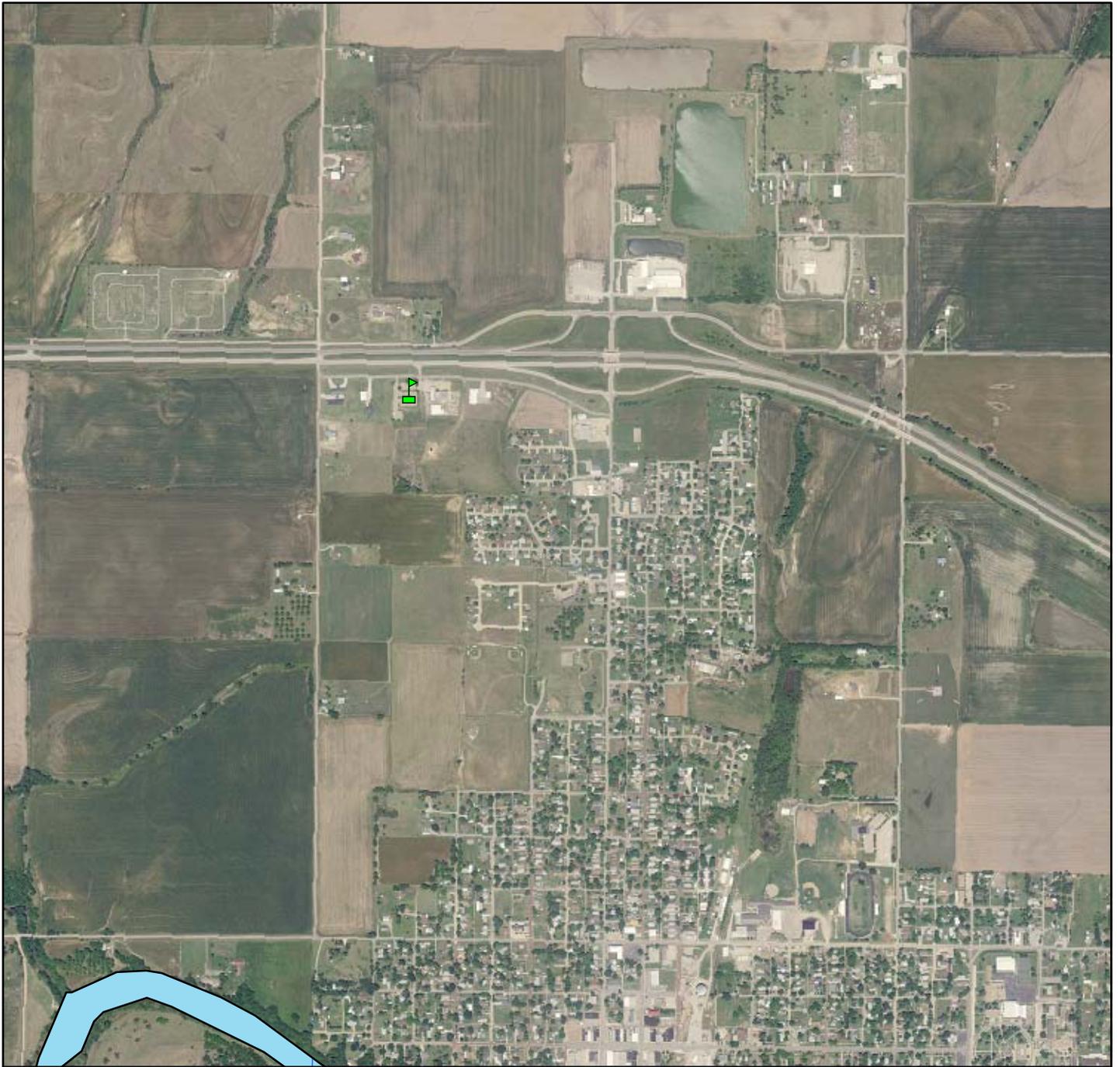
Oklahoma Department of Environmental Quality

2003 Aerial Photograph (DEQ Dataviewer)



Tonkawa Armory
345 Thunderbird Road, Tonkawa, Oklahoma

2008 Aerial Photograph



Legend

-  Tonkawa Armory
-  Lakes



Created: February, 2009

APPENDIX D

Qualifications of Environmental Professionals

Environmental Professional Qualifications

Rita R. Kottke, Ph.D., holds a Doctorate in Environmental Science from Oklahoma State University. She is a Brownfields Program 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 15 years, working in the Superfund and Brownfields Programs. She has 15 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.

Subi John is an Environmental Programs Specialist with the Land Protection Division of the Oklahoma Department of Environmental Quality. She joined the DEQ in 2005 and has been working on various Superfund, Brownfields and Voluntary Cleanup projects.

APPENDIX E

C.H. Guernsey & Company, Indoor Firing Range Lead Issues Report (Oklahoma Army National Guard), October 2005

47.0 TONKAWA ARMORY

C.H. Guernsey & Company (GUERNSEY) surveyed the indoor firing range (IFR) at the Tonkawa Armory on December 29, 2004 (Photographs 47-1 through 47-33). The IFR is approximately 103 feet long, approximately 30 feet wide, and the ceiling is approximately 12 feet high. At one end is a backstop and bullet trap. At the other end, an area has been sectioned off with a wall. The ventilation system within the IFR is comprised of a louvered fan located in the ceiling near the backstop and vented directly through the roof to the outside. Two louvered intake air vents are located at the opposite end of the IFR providing makeup air.

Based upon information supplied to GUERNSEY, Oklahoma Military Department (OMD) personnel collected wipe sample from the IFR on April 30, 2004. Concentrations of lead in the bullet trap were determined to be 351,000 $\mu\text{g}/\text{ft}^2$, the IFR floor was 68,840 $\mu\text{g}/\text{ft}^2$, and the entryway into the IFR was 6,630 $\mu\text{g}/\text{ft}^2$. Further sampling by OMD personnel indicated elevated lead contamination throughout the armory. Therefore, the floors throughout the army will be cleaned. Table 47-1 summarizes the laboratory results for the wipe samples.

**Table 47-1
Laboratory Analysis**

Sample ID #	Sample Date	Result ($\mu\text{g}/\text{sq. ft.}$)	Lab Report ID #
432	4/30/2004	351,000.0	Quantem 111870
433	4/30/2004	68,840.0	Quantem 111870
434	4/30/2004	111,300.0	Quantem 111870
435	4/30/2004	6,630.0	Quantem 111870
Tonk 1A FR	1/31/2005	65.60	Quantem 119878
Tonk 1B KIT	1/31/2005	79.70	Quantem 119878
Tonk 1C FRC	1/31/2005	193.75	Quantem 119878
Tonk 1D AD Office	1/31/2005	105.80	Quantem 119878
Tonk 1E Hall	1/31/2005	106.00	Quantem 119878
Tonk 1F DF	1/31/2005	116.70	Quantem 119878

Table 47-2 lists equipment identified for cleaning by OMD and armory personnel.

**Table 47-2
Equipment Identified for Cleaning**

Description	Number
Metal Tables (3'x2')	28
Flammable Cabinet	1
Tommy Lift Gates	2
Truck Tire	1

Table 47-3 provides a preliminary cost estimate to clean the equipment and/or remediate the lead contamination in the IFR. Figure 47-1 shows the approximate locations of the OMD samples.

47.1 OTHER ENVIRONMENTAL CONSIDERATIONS

Beyond the issues related to the IFR, the following environmental related issues potentially exist at the Armory:

- Asbestos containing material (ACM) is material that contains 1% or more asbestos fibers. Because of the Armory's age, there is a potential for ACM in building materials (roofing materials, floor tiles, mastic, ceiling tiles, window putty, natural gas-fired heating systems, etc);
- Lead has been used as a color carrier in paints for hundreds of years. In 1978, its use in residential paints was restricted in the United States. Because of its age, there is a potential for lead containing paints at the Armory;
- Polychlorinated biphenyls (PCB) are oils that were used in electrical equipment until their regulation in 1977. There is a potential for PCB in fluorescent lighting ballasts, capacitors, transformers and other dielectric fluid filled electrical equipment at the Armory;
- The potential for mold exists within the Armory due to a compromise of the building envelope and the presence of standing water and visible water damage;
- Chlorofluorocarbons (CFCs) are compounds used in heating, ventilation, and cooling (HVAC) systems and in fire suppression (i.e., halon) systems. The use, release and recycling of these compounds are regulated by EPA. There is a potential for CFCs to be present in the HVAC equipment and fire suppression system of the Armory;
- Mercury is a heavy metal used in thermostats, pressure gauges, and other building and process related equipment. There is a potential for mercury containing thermostats at the Armory;
- Lead, nickel, and cadmium are heavy metals used in batteries. There is a potential for heavy metal containing batteries in the emergency lighting and exit signage at the Armory; and
- Other issues may be present that were not visually evident to GUERNSEY.

**Table 47-3
Preliminary Cost Estimate**

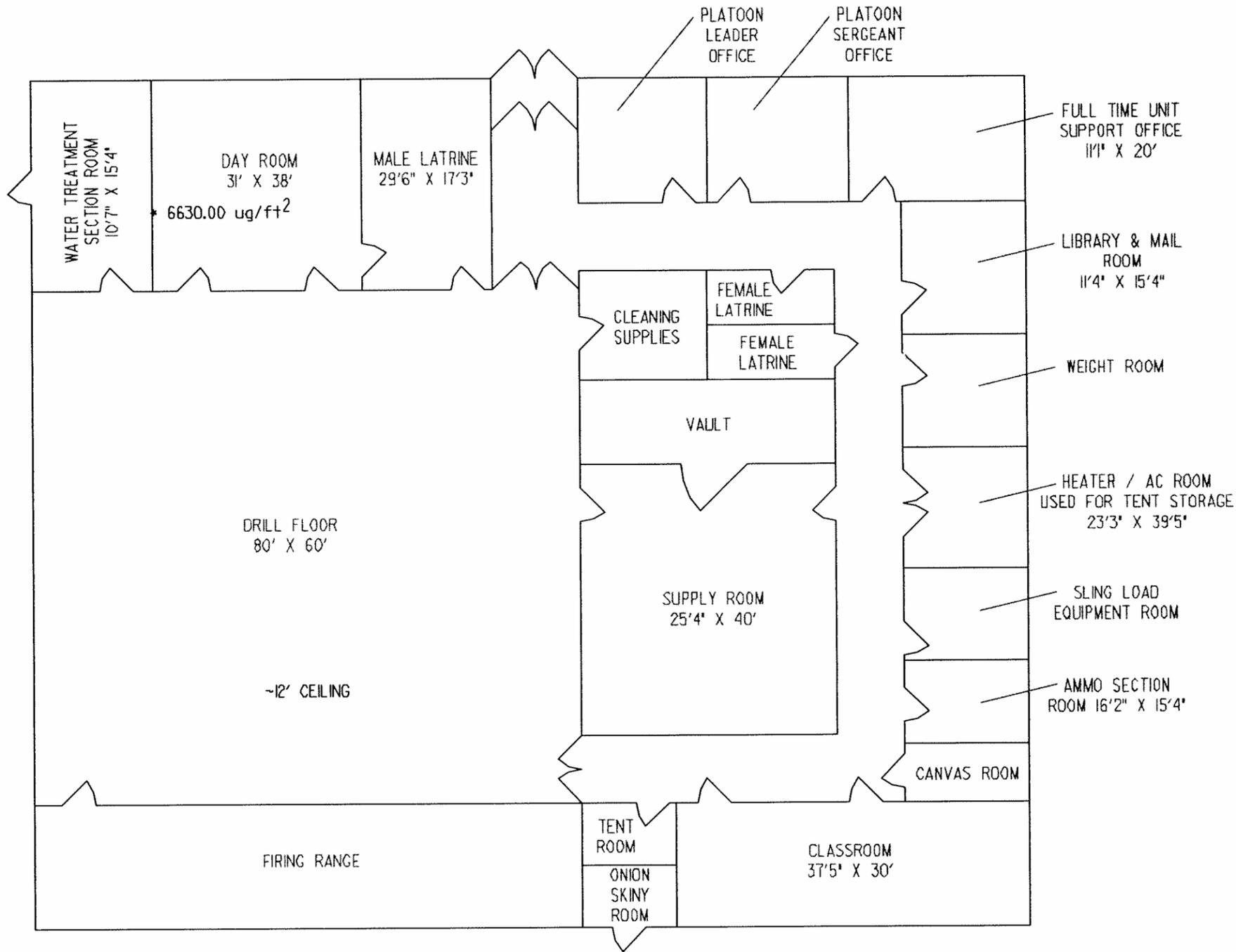
Equipment Cleaning Costs (a)				
Item Description	Number	Unit	Cost Per Unit	Total Cost
Metal Tables (3'x2')	28	Each	\$75	\$2,100
Flammable Cabinet	1	Each	\$50	\$50
Tommy Lift Gates	2	Each	\$100	\$200
Truck Tire	1	Each	\$100	\$100
Total				\$2,450

Remediation Costs (b)				
Item Description	Number	Unit	Cost Per Unit	Total Cost
Mob/DeMob	1	Each	\$1,500	\$1,500
Stage/Clean Equipment/Components for Disposal	1	Each	\$2,500	\$2,500
Cleaning of Army Equipment (a)	N/A	N/A	N/A	\$2,450
Clean/Seal Firing Range surfaces	8500	ft ²	\$5	\$38,250
Clean All Armory Floors (c)	30625	ft ²	\$0.25	\$7,656
Solidify/Stabilize Material in Bullet Trap	400	ft ³	\$15	\$6,000
Waste Disposal (non-hazardous)	7	Ton	\$1,000	\$7,000
Total (+/- 25%)				\$65,356

Notes:

- (a) Includes the cleaning of equipment identified by OMD personnel during site visit. Please reference photographs for each item.
- (b) Includes cleaning of firing range space, drill floor, and other surfaces to <40 ug/ft².

- TONKAWA FIRING RANGE NOTES:**
1. ALL MEASUREMENTS ARE APPROX.
 2. SAMPLE LOCATIONS ARE APPROX. & IDENTIFIED BY '*'
 3. SAMPLE CONCENTRATIONS ARE IN MICROGRAMS PER SQUARE FOOT (UG/FT²)
 4. SAMPLES COLLECTED BY OMD PERSONNEL 30-APR-04
 5. SEE PHOTOGRAPHS FOR REFERENCE
 6. SEE INVENTORY LIST FOR DESCRIPTION OF EQUIPMENT TO BE CLEANED



STATE OF OKLAHOMA
Department of Central
Services
Construction and
Properties Division

Approvals:

- State Fire Marshal
- Department of Environmental Quality
- Military Reserve Board
-

This approval is for compliance with State Statute of O.S. 204-A, 204-B. This approval does not constitute a warranty or a quality control check of the Contractor's work. The Contractor shall be solely responsible for any and all work, conditions or existing conditions in the proposed structure.

Daniel J. Brown, AIA, CMAA
State Construction Administrator

Consultant:



100 West 10th Street
Oklahoma City, Oklahoma 73101
Phone: (405) 521-1111

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Project Information
DCS Project #
C-43 Project # CH204417
Project Name: Tonkawa Firing Range Lead Issues Type A Study
Project Location: Tonkawa, OK
Oklahoma Military Department
Issue Date: January, 2004
Designer By:
Drawn By:



DATE: JAN 20, 2005 TIME: 10:54 AM BY: DMELLS

TONKAWA ARMORY - PHOTOGRAPH LOG



Photograph #47-1



Photograph #47-2



Photograph #47-3



Photograph #47-4



Photograph #47-5



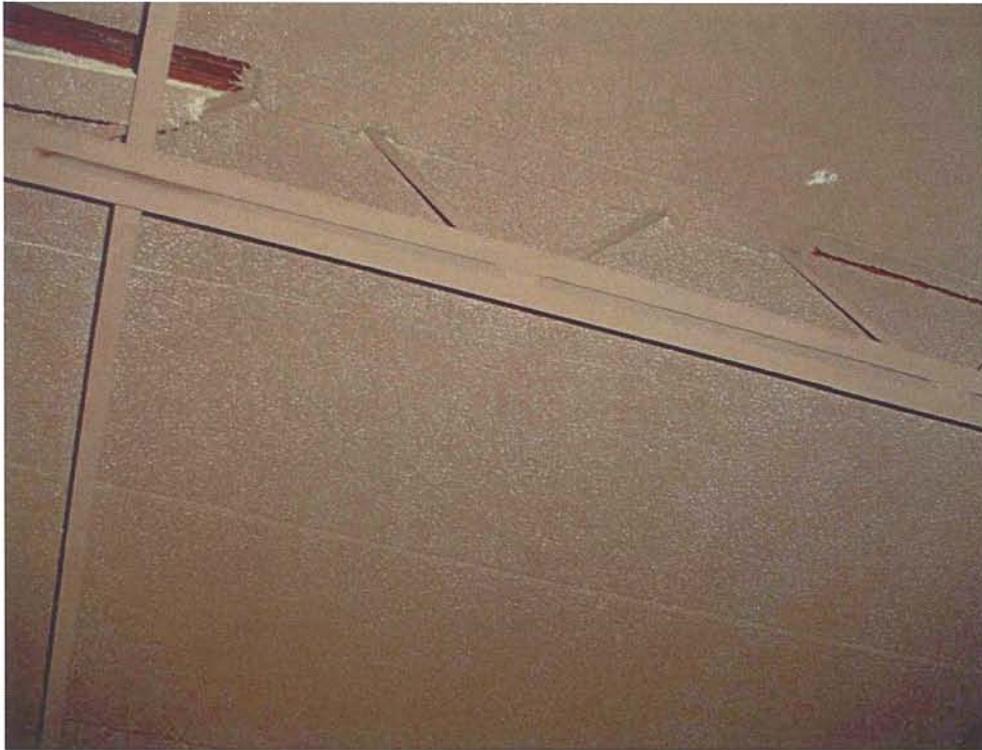
Photograph #47-6



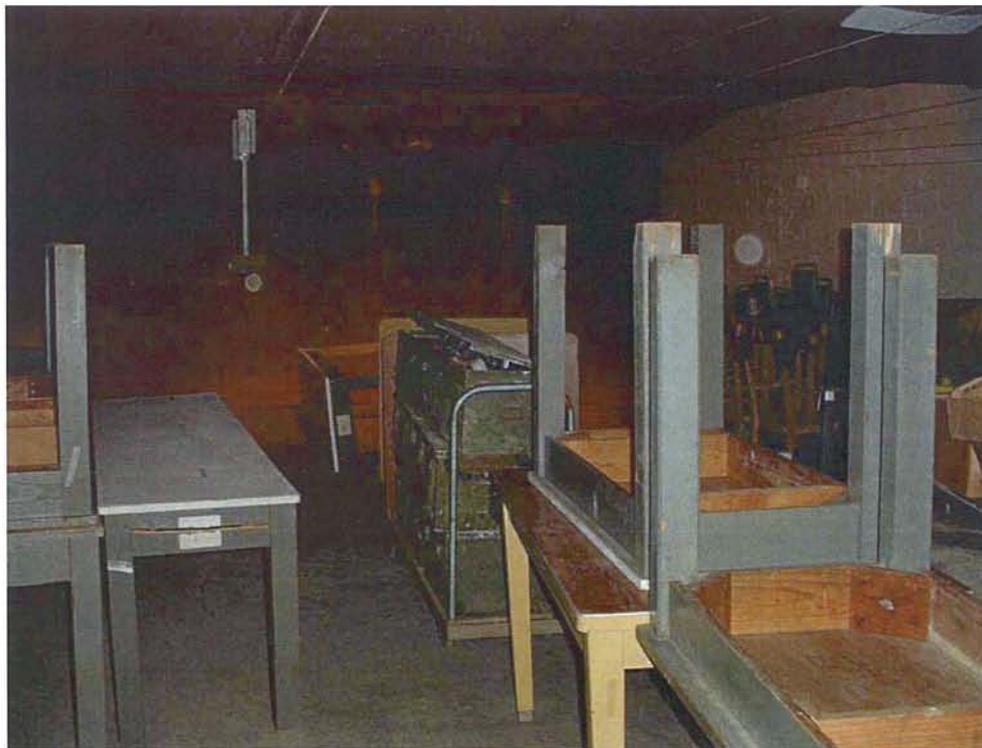
Photograph #47-7



Photograph #47-8



Photograph #47-9



Photograph #47-10



Photograph #47-11



Photograph #47-12



Photograph #47-13



Photograph #47-14



Photograph #47-15



Photograph #47-16



Photograph #47-17



Photograph #47-18



Photograph #47-19



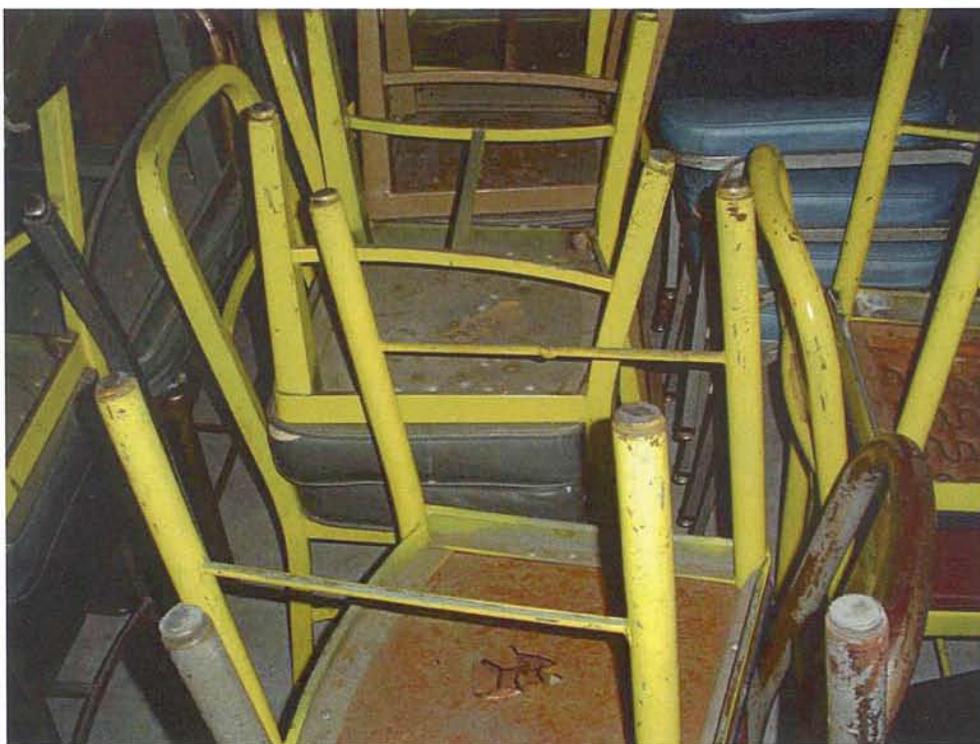
Photograph #47-20



Photograph #47-21



Photograph #47-22



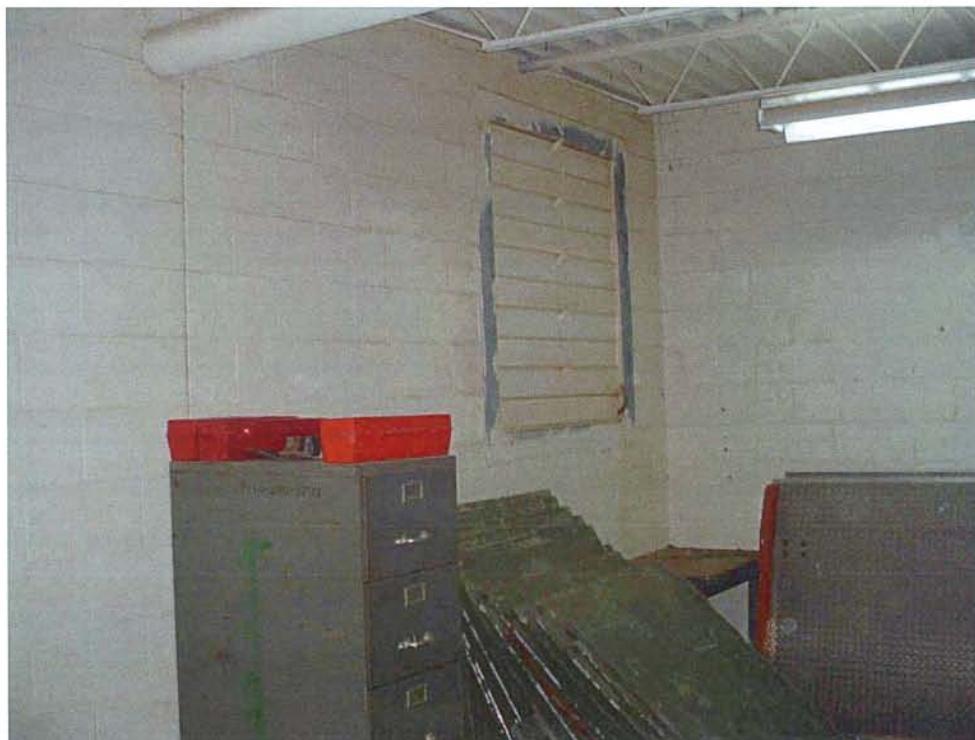
Photograph #47-23



Photograph #47-24



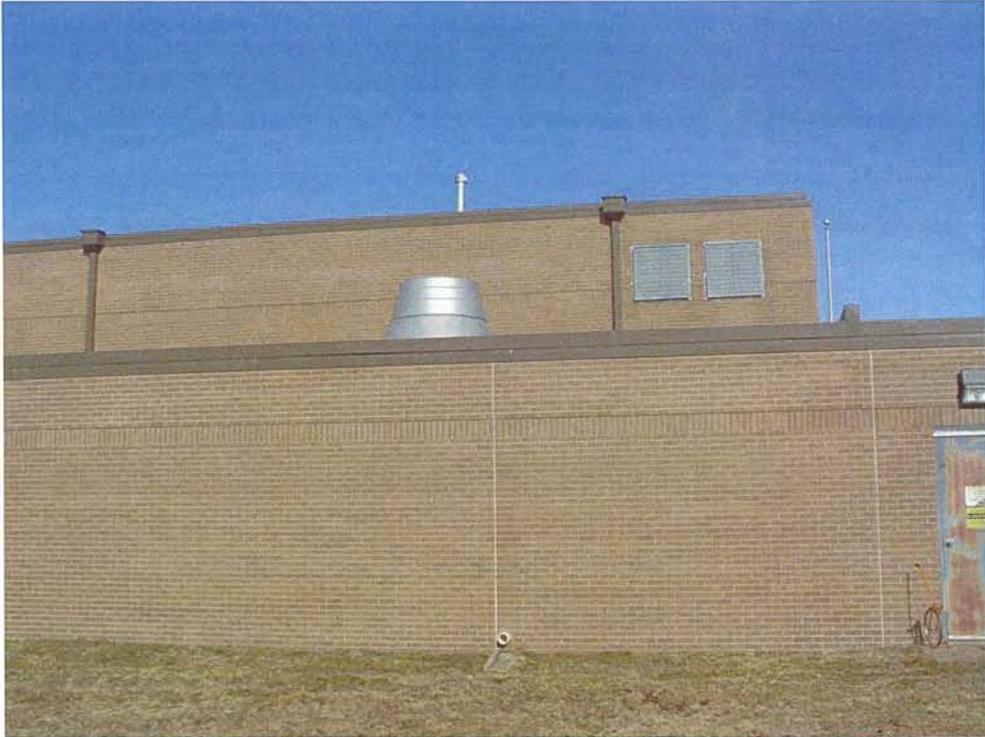
Photograph #47-25



Photograph #47-26



Photograph #47-27



Photograph #47-28



Photograph #47-29



Photograph #47-30



Photograph #47-31



Photograph #47-32



Photograph #47-33

APPENDIX F

Analytical results of DEQ sampling events & Chain-of-Custody

Asbestos Inspection Report (Marshall Environmental, Inc., October 31, 2008)

Lead-Based Paint Inspection Report (Marshall Environmental, Inc., October 31, 2008)

Tonkawa Armory Surface Wipe Sampling for Lead in Dust (Marshall Environmental, Inc., November 4, 2008)

Site Assessment Documents



311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

March 9, 2009

Oklahoma Department of Environmental Quality
Dustin Davidson
707 North Robinson
Oklahoma City, OK 73102

PROJECT: Tonkawa Armory
OUTREACH LAB ID: 20081039

Dear Mr. Davidson,

Please find enclosed the analytical report for your samples received in our laboratory on December 10, 2008 for the above captioned project. Two swipe samples were received in good condition and analyzed for Nickel- 63 and Tritium, per your chain of custody

All available Quality Control for the requested analyses is reported on the analytical report and is within method control limits.

Unless you notify us otherwise, these samples will be disposed 30 days after the report date.

Thank you for choosing Outreach Laboratory and if you have any questions, please call us at 918-251-2515.

Laboratory Director

A handwritten signature in black ink, appearing to be "M. Davidson", is written over a horizontal line.

ODEQ ID #9517
NRC ODEQ LIC. #27522-01



CERT. ID #OK001
See Certified
Parameter List



Outreach Laboratory

311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

Client: OK Dept of Environmental Quality
Client Project: Tonkawa Armory
Lab Number: 20081039
Date Reported: 3/9/2009
Date Received: 12/10/08
Page Number: 1 of 1

Analytical Report

Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
Lab ID: 20081039-01						
Client ID: 1						
Date Sampled: 12/4/2008 11:30:00 AM						
Matrix: Other						
Radiochemical Analyses						
Nickel-63	CHEM-TP-Ni 1	0 +/- 3.4 pCi/filter	6.1	1/27/2009	1/27/2009	RE
Lab ID: 20081039-02						
Client ID: 2						
Date Sampled: 12/4/2008 11:35:00 AM						
Matrix: Other						
Radiochemical Analyses						
Tritium (H3)	EPA 906*	0 +/- 0 pCi/filter	8	1/27/2009	2/16/2009	RE

QC Report

Parameter	Blank	LCS %REC	LCSD %REC RPD	DUP RPD	MS %REC	MSD %REC RPD	Date
Nickel-63	5.9	108.0					1/27/2009

Lab Approval: _____

Sample Number: 453884
Project Code: LP-ARM
Agency Number:
Date Collected: 10/31/2008
Time Collected: 1123
Date Received: 11/5/2008
Date Completed: 11/24/2008
Collected By: DD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 11/24/2008

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113
Report of Analysis by Metals
EPA Drinking Water Certification #OK00013

To: LAND PROTECTION DIVISION
HEATHER MALLORY

CC: FILE COPY

Name	Qualifier	SAMPLE DATA			
		Value	Units	Analyzed	Method Prep Type
Lead, Sediment		11.0	MG/KG	11/20/08	6020
% Solids		86.6	%	11/20/08	CLP 05.3

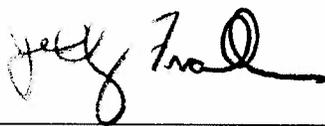
Summary

Labs performing analysis on this Sample:
Metals

SOURCE: TONKAWA ARMORY

SAMPLERS COMMENTS:
IFR FAN -1; SOIL OUTSIDE OF VENT FAN

ANALYST'S COMMENTS:



* ANALYST _____



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

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

Re: Quantem ID 168113

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

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

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

Respectfully,
Quantem Laboratories, LLC.





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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 168113	Client: State of Oklahoma
Date Received: 12/04/08	DEQ Land Protection
Received By: Sherric Leftwich	Attn: Dustin Davidson
Date Sampled:	707 N. Robinson
Time Sampled:	Oklahoma City, OK 73102
Analyst: EC	Acct. No.: B486
Date of Report: 12/5/2008	Project: Tonkawa Armory
	Location: Tonkawa Armory
	Project No.: N/A

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	S-1	Wipe	Lead	36.37	21.33	ug/sq. Ft.	12/05/08 11:20	EPA 3051 / NIOSH 9100
002	S-2	Wipe	Lead	47.17	21.33	ug/sq. Ft.	12/05/08 11:20	EPA 3051 / NIOSH 9100
003	S-3	Wipe	Lead	69.38	21.33	ug/sq. Ft.	12/05/08 11:20	EPA 3051 / NIOSH 9100
004	S-4	Wipe	Lead	87.87	21.33	ug/sq. Ft.	12/05/08 11:20	EPA 3051 / NIOSH 9100
005	S-5	Wipe	Lead	74.61	21.33	ug/sq. Ft.	12/05/08 11:20	EPA 3051 / NIOSH 9100
006	S-6	Wipe	Lead	57.62	21.33	ug/sq. Ft.	12/05/08 11:20	EPA 3051 / NIOSH 9100
007	S-7	Wipe	Lead	48.23	21.33	ug/sq. Ft.	12/05/08 11:20	EPA 3051 / NIOSH 9100
008	S-8	Wipe	Lead	105.68	21.33	ug/sq. Ft.	12/05/08 11:20	EPA 3051 / NIOSH 9100
009	S-9	Wipe	Lead	55.09	21.33	ug/sq. Ft.	12/05/08 11:20	EPA 3051 / NIOSH 9100

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.



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 168113	Client: State of Oklahoma
Date Received: 12/04/08	DEQ Land Protection
Received By: Sherric Leftwich	Attn: Dustin Davidson
Date Sampled:	707 N. Robinson
Time Sampled:	Oklahoma City, OK 73102
Analyst: EC	Acct. No.: B486
Date of Report: 12/5/2008	Project: Tonkawa Armory
	Location: Tonkawa Armory
	Project No.: N/A

AIHA ID: 101352

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

Authorized Signature: _____

Eric Caves, 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: 6451
Test: Lead

Date: 12/5/2008
Matrix: Wipe

Lab Number: 168113
Approved By: Eric Caves
Date Approved: 12/5/2008

Notes:

Blank Data:

Type of Blank	Blank Value
Initial	0
Continuing	0
Final	0

Standards Data:

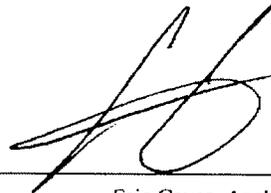
Standard	Low Limit	Obtained	High Limit
FCV	225	242	275
CCV	225	245	275
ICV	22.5	26.1	27.5
RLVS	12.8	15.3	19.2

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MSW 4	0.000	5369.000	5303.000	98.8	5174.000	96.4	2.5

Authorized Signature: _____



Eric Caves, Analyst

RECEIVED
JAN 20 2009 *WB*
LAND PROTECTION DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

Asbestos Inspection

Tonkawa Armory
345 Thunderbird Road
Tonkawa, Oklahoma 74653

October 31, 2008

DCS Contract NO.: ID090139

PROVIDED FOR

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

PROVIDED BY

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

Table of Contents

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CONCLUSIONS AND FINDINGS	5
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CERTIFICATION

This is to certify that Marshall Environmental Management, Inc. was contracted by the Department of Central Services to conduct an Asbestos Inspection, of the Tonkawa Armory, for the Oklahoma Department of Environmental Quality. The Tonkawa Armory Asbestos Inspection was performed by an Oklahoma Department of Labor Licensed, Asbestos Hazard Emergency Response Act Inspector, Jamie Marshall of Marshall Environmental Management, Inc.; under the direction of Oklahoma Department of Labor Licensed, Asbestos Hazard Emergency Response Act Management Planner, Dr. Charles L. Marshall, C.I.H. President of Marshall Environmental Management, Inc. The contents, conclusions, and recommendations included in this report are believed to accurately depict the conditions observed on the date this Asbestos Inspection was performed.



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

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



Jamie Marshall, B.S.

1-16-09

Date

Oklahoma Department of Labor License

#OK-158090 Inspector

Laboratory Analysis Performed by:

Marshall Environmental Management, Inc. (AIHA/NIOSH PAT Lab ID #102334)
1601 SW 89th Street, 100-A
Oklahoma City, OK. 73159

EXECUTIVE SUMMARY

Marshall Environmental Management, Inc. conducted an Asbestos Inspection, on October 31, 2008, of the Tonkawa Armory, constructed in approximately 1986 and located at 345 Thunderbird Road in Tonkawa, Oklahoma, in order to evaluate the locations, conditions and friability of suspected Asbestos Containing Materials (ACM) which may have been present.

The analytical results associated with this Asbestos Inspection did not identify the presence of friable ACM or Category I or II non-friable ACM within areas that were accessible. The Sampling Strategy, Conclusions and Findings, Historical Overview, Limitations of the Survey and the Regulatory will follow in subsequent portions of this Report.

SAMPLING STRATEGY

This Asbestos Inspection took the approach of a thorough initial Asbestos Inspection. A systematic approach was employed by Marshall Environmental Management, Inc. in an attempt to locate, identify and assess the condition, types and quantities of ACM that may be present within the Tonkawa Armory. Each accessible area throughout the Tonkawa Armory was visually inspected by a Licensed Asbestos Hazard Emergency Response Act (AHERA) Asbestos Inspector. Sample collection consisted of collecting suspected ACM from each category listed below:

Surfacing Materials (SM)

Examples include: blown on or towed on ACM, typically observed on ceilings, structural steel, and concrete ceilings or metal pan decks.

Thermal System Insulation (TSI)

Examples include: piping, hot and cold water lines, HVAC equipment components, boilers, steam lines and heated thermal processes.

Miscellaneous Materials (Misc.)

Examples include: 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 categories.

Each sample collected was analyzed in accordance with the EPA authorized Method 600.49 Code of Federal Regulations (CFR) Part 61 Subpart M, Asbestos National Emission Standard for Hazardous Air Pollutant (NESHAP) Rules. Samples considered "Positive" for asbestos is any material which consists of greater than 1% asbestos as defined by the EPA Approved Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, referred to as:

Test Method: "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), U.S. E.P.A. 600/M4-82-020 1982.

FINDINGS AND CONCLUSIONS

This Asbestos Inspection did not identify ACM within the Tonkawa Armory. A total of twenty-four samples were collected and analyzed. None of the samples collected were identified as "Positive" for asbestos, which is any material to consist of greater than 1% asbestos as defined by the EPA Approved Test Method referenced in the Sampling Strategy portion of this Report.

The summary of the analytical results and the various types of building materials sampled as part of this Asbestos Inspection included representative samples from each of the following categories.

1. Surfacing Materials

Location: None identified as positive ACM

Condition: None identified as positive ACM

2. Thermal System Insulation

Location: None identified as positive ACM

Condition: None identified as positive ACM

3. Miscellaneous Materials

Location: None identified as positive ACM

Condition: None identified as positive ACM

Chain of custody forms, specific sampling locations, associated analytical results and floor plans are provided for review in the Appendix of this Report.

HISTORICAL OVERVIEW OF ASBESTOS ACTIVITIES

This Asbestos Inspection did not identify evidence that would suggest prior asbestos inspections or previous asbestos abatement occurred within the Tonkawa Armory. No historical inspection records or records from previous asbestos abatement work were available for review.

LIMITATIONS OF SURVEY

This Asbestos Inspection was limited to certain aspects of the building construction; these limitations may have restricted or prevented the complete inspection of hidden or inaccessible building materials and substrates. Inaccessible building materials and/or substrates were not inspected. Locations presenting a hazard to the Inspector, Armory Staff or Visitors were not inspected.

The findings within this Report are valid as of the date this Asbestos Inspection was performed, October 31, 2008; however, changes in the conditions of a property may certainly occur with the passage of time, whether due to natural processes or the works of man. Furthermore, changes in applicable or appropriate standards may also occur, possibly resulting from legislation or the expansion of knowledge.

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. Professional services have been performed; results associated with this Asbestos Inspection were obtained and reported in accordance with generally accepted principles and practices. No other representations either expressed or implied are made; thus, Marshall Environmental Management, Inc. is not responsible for independent conclusions, opinions, or recommendations made by others based on field inspections and other data presented in this Report. It should also be noted that as-built building plans were not available for review and use in the planning this asbestos inspection.

REGULATORY REVIEW

Prior to 1980 asbestos was utilized during construction and in certain building materials. In 1994, the Occupational Safety and Health Administration (OSHA) required employers to identify ACM in pre-1980 construction as part of its Standard for Occupational Exposure to Asbestos in Construction (29 CFR 1926.1101). This OSHA standard covers maintenance, repair and removal functions involving ACM or Presumed ACM (PACM). Without Asbestos Inspections, owners and/or operators must treat suspected ACM as asbestos.

The 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 the Oklahoma Asbestos Control Act (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) address an Asbestos Notice and Labeling requirement. The Labeling requirements specify that various equipment, such as pipe insulation and equipment with asbestos insulation, 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 school buildings in grades K through 12, as part of the AHERA, which is authorized in 40 CFR 763.6. These AHERA requirements would only be applicable to the Tonkawa Armory in an instance where the future use of the Building would include an Asbestos Management Plan required by a Local Educational Authority (LEA) using the facility for school activities in grades K through 12. The

AHERA inspection protocol requires a thorough sampling of all forms of friable and non-friable asbestos. The types of ACM to be assessed as part of an AHERA Inspection include:

Surfacing Materials (SM)

Examples include: blown on or toweled on ACM, typically observed on ceilings, structural steel, and concrete ceilings or metal pan decks.

Thermal System Insulation (TSI)

Examples include: piping, hot and cold water lines, HVAC equipment components, boilers, steam lines and heated thermal processes.

Miscellaneous Materials (Misc.)

Examples include: 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 categories.

The AHERA sampling protocol addresses the systematic sampling of each type of ACM and the identification of both friable ACM, that which can be rendered to a powder by hand pressure, and EPA Category I non-friable ACM, such as floor tiles and mastic, and Category II non friable, such as cement asbestos tiles. The AHERA Inspection must also evaluate the condition and potential for disturbance of the ACM found in the buildings which must be identified as to its condition in terms of good, damaged, or significantly damaged.

In addition to AHERA, the EPA regulates asbestos removal during renovation and demolition. Land disposal requirements are also regulated by the EPA through State Landfill Permits. These efforts are now administered by the Oklahoma Department of Environmental Quality (DEQ) Air Quality and Land Protection regulations. The DEQ requires the filing of advance notices of any demolition or renovation activities. These notices are referred to as a NESHAP Notice. Both historical and future asbestos abatement response actions track asbestos removal to a DEQ approved landfill on a project by project basis as part of this NESHAP notification process.

A NESHAP Notice is required for Renovation whenever the quantities of ACM are greater than 160 square feet, 260 linear feet or 35 cubic feet. All required NESHAP Notification must be submitted to the DEQ ten working days prior to any demolition or renovation work where asbestos is present.

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

When friable ACM is present, in amounts 1% or greater (ODOL rules still define ACM as 1% or greater whereas the EPA uses a greater than 1% in the definition of ACM), all abatement of

friable ACM must be conducted by a Licensed Asbestos Contractor in accordance with ODOL asbestos rules OAC 380:50.

The ODOL Rules are available at the ODOL web site at: <http://www.ok.gov/odol/>

RECOMMENDATIONS

Although the analytical results related to this Asbestos Inspection did not identify ACM., additional inspections should be conducted whenever demolition or renovation of areas not included in this inspection is anticipated.

A NESHAP Notice is required for all forms of Demolition. Instruction of how to file and comply with DEQ NESHAP Notification Requirements are provided on the DEQ web site at: <http://www.deq.state.ok.us/aqdnew/asbestos/index.htm>

APPENDIX

**BULK ASBESTOS CHAIN OF CUSTODY FORMS
ANALYTICAL DATA**

CERTIFICATES

ARMORY FLOOR PLAN

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma City, Oklahoma 73159
 Phone: (405) 616-0401 Fax: (405) 681-6753

Project Location:			Invoice To:			Report To:					
Job ID #	2529-EN-103108-JM-B5	Company:	DCS			Company:					
Project Name:	Tonkawa Armory	Attention:				Attention:					
Address:		Address:				Address:					
Phone #:		Phone #:		Fax/email:		Phone #:		Fax/email:			
Date Sampled	Job #	Site Contact	Sample #	Sample Location/Description	Sample Type	Matrix	Media	Time On/Off	Calibration Pre/Post	Volume/Area	Analysis/Parameters
10/31/08	2529		B1	Ceiling tile Rm #17	Bulk	N/A	N/A				→ PLM Asbest
			B2	mastic on base of cinder block wall Rm #17							
			B3	Tile & mastic Rm #17							
			B4	ceiling tile Rm #13							
			B5	ceiling tile Rm #14							
			B6	pipe insulation Rm #14							
			B7	Elbow insulation Rm #17							
			B8	Floor tile & mastic Rm #11							
			B9	cove base glue on cinder block wall in Hallway Rm #15							
			B10	HOT H2O TSS Elbow Rm #9							
Collected By:	Samie Marshall										
Collected By:											
Relinquished By:											
Relinquished By:											
Relinquished By:											
Method of Shipment:											
Conditions Upon Reception:											
Received By:	Date:	Time:	Received By:	Date:	Time:	Received By:	Date:	Time:	Received By:	Date:	Time:

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma city, Oklahoma 73159
 405-616-0401 (office) 405-681-6753 (fax)
marshenv@swbell.net

Client:	Oklahoma State Department of Central Services	Job Identification No.:	2529-EN-103108-JM-BS
Report To:	Department of Environmental Quality	Project Name:	Tonkawa Armory
Report To Address:	707 North Robinson Oklahoma City, OK 73102	Project Address:	345 Thunderbird Road Tonkawa, OK 74653

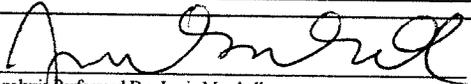
Date Sampled:	October 31, 2008	Date Analyzed:	November 3, 2008
Sampled By:	Jamie Marshall	Analyst:	Jamie Marshall

Identification #	Location	Description	No Asbestos Detected
2529-B1	ROOM #17 - Ceiling Tile	Color: GRAY	60% Cellulose
		Condition: GOOD	40% Silica
		Type: MISCELLANEOUS	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B2	ROOM #17 - Mastic On Base Of Cinder Block Wall	Color: BROWN	100% Adhesive
		Condition: SIGNIFICANTLY DAMAGED	
		Type: MISC	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B3A	ROOM #17 - Floor Tile Mastic	Color: BEIGE	30% Aggregate
		Condition: SIGNIFICANTLY DAMAGED	70% Calcareous Material
		Type: MISC	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B3B	ROOM #17 - Floor Tile	Color: YELLOW	2% Fiberglass
		Condition: SIGNIFICANTLY DAMAGED	98% Adhesive
		Type: MISCELLANEOUS	
		Note:	
			No Asbestos Detected


 Analysis Performed By: Jamie Marshall
 Environmental / Industrial Hygiene Technician

Date: 1-16-09

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.

Lab Accreditation:
 AIHA PAT ID# 102334

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma city, Oklahoma 73159
 405-616-0401 (office) 405-681-6753 (fax)
marshenv@swbell.net

Client:	Oklahoma State Department of Central Services	Job Identification No.:	2529-EN-103108-JM-BS
Report To:	Department of Environmental Quality	Project Name:	Tonkawa Armory
Report To Address:	707 North Robinson Oklahoma City, OK 73102	Project Address:	345 Thunderbird Road Tonkawa, OK 74653

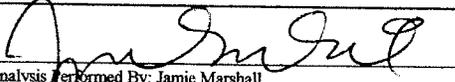
Date Sampled:	October 31, 2008	Date Analyzed:	November 3, 2008
Sampled By:	Jamie Marshall	Analyst:	Jamie Marshall

Identification #	Location	Description	No Asbestos Detected
2529-B4	ROOM #13 - Ceiling Tile	Color: GREY	60% Cellulose
		Condition: GOOD	40% Silica
		Type: MISC	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B5	ROOM #14 - Ceiling Tile	Color: GRAY	60% Cellulose
		Condition: GOOD	40% Silica
		Type: MISC	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B6	ROOM #13 - Pipe Insulation	Color: YELLOW	100% Fiberglass
		Condition: GOOD	
		Type: THERMAL SYSTEM INSULATION	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B7	ROOM #17 - Elbow Insulation	Color: YELLOW	100% Fiberglass
		Condition: GOOD	
		Type: THERMAL SYSTEM INSULATION	
		Note:	
			No Asbestos Detected

Analysis Performed By:  Date: 1-16-09
 Environmental / Industrial Hygiene Technician

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. Lab Accreditation: AIHA PAT ID# 102334

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma city, Oklahoma 73159
 405-616-0401 (office) 405-681-6753 (fax)
marshenv@swbell.net

Client:	Oklahoma State Department of Central Services	Job Identification No.:	2529-EN-103108-JM-BS
Report To:	Department of Environmental Quality	Project Name:	Tonkawa Armory
Report To Address:	707 North Robinson Oklahoma City, OK 73102	Project Address:	345 Thunderbird Road Tonkawa, OK 74653

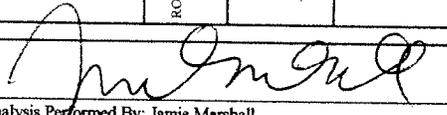
Date Sampled:	October 31, 2008	Date Analyzed:	November 3, 2008
Sampled By:	Jamie Marshall	Analyst:	Jamie Marshall

Identification #	Location	Description	No Asbestos Detected	
2529-B8	ROOM # 11 - Floor Tile	Color:	BEIGE	30% Aggregate
		Condition:	GOOD	70% Calcareous Material
		Type:	MISC	
		Note:		
			No Asbestos Detected	

Identification #	Location	Description	No Asbestos Detected	
2529-B9	ROOM # 15 - Cove Base glue on Base	Color:	BROWN	100% Adhesive
		Condition:	SIGNIFICANTLY DAMAGED	
		Type:	MISC	
		Note:	HORIZONTAL CYLINDER	
			No Asbestos Detected	

Identification #	Location	Description	No Asbestos Detected	
2529-B10	ROOM #9 - Hot Water Tank Elbow	Color:	GREY	6% Fiberglass
		Condition:	GOOD	94% Calcareous Material
		Type:	THERMAL SYSTEM INSULATION	
		Note:		
			No Asbestos Detected	

Identification #	Location	Description	No Asbestos Detected	
2529-B11	ROOM #9 - Hot Water Tank Hand Peak at Valve	Color:	GREY	6% Fiberglass
		Condition:	GOOD	94% Calcareous Material
		Type:	THERMAL SYSTEM INSULATION	
		Note:		
			No Asbestos Detected	


 Analysis Performed By: Jamie Marshall
 Environmental / Industrial Hygiene Technician

Date: 1-16-09

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.

Lab Accreditation:
 AIHA PAT ID# 102334

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma city, Oklahoma 73159
 405-616-0401 (office) 405-681-6753 (fax)
 marshenv@swbell.net

Client: Oklahoma State Department of Central Services
 Job Identification No.: 2529-EN-103108-JM-BS
 Report To: Department of Environmental Quality
 Project Name: Tonkawa Armory
 Report To: 707 North Robinson
 Project Address: 345 Thunderbird Road
 Address: Oklahoma City, OK 73102
 Tonkawa, OK 74653

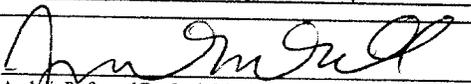
Date Sampled: October 31, 2008
 Date Analyzed: November 3, 2008
 Sampled By: Jamie Marshall
 Analyst: Jamie Marshall

Identification #	Location	Description	No Asbestos Detected
2529-B12	ROOM # 9 - Small Hot Water Hard pack	Color: GREY	6% Fiberglass
		Condition: GOOD	94% Calcareous Material
		Type: THERMAL SYSTEM INSULATION	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B13	ROOM #9 - Roof Drain Insulation	Color: YELLOW	100% Fiberglass
		Condition: GOOD	
		Type: THERMAL SYSTEM INSULATION	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B14	ROOM #22 - Cove base Mastic	Color: WHITE	100% Rubber
		Condition: GOOD	
		Type: THERMAL SYSTEM INSULATION	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B15	ROOM #22 - Cove base	Color: BROWN	100% Adhesive
		Condition: GOOD	
		Type: MISC	
		Note:	
			No Asbestos Detected

Analysis Performed By:  Jamie Marshall
 Environmental / Industrial Hygiene Technician
 Date: 1-16-09

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.
 Lab Accreditation: AIHA PAT ID# 102334

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Client:	Oklahoma State Department of Central Services	Job Identification No.:	2529-EN-103108-JM-BS
Report To:	Department of Environmental Quality	Project Name:	Tonkawa Armory
Report To Address:	707 North Robinson Oklahoma City, OK 73102	Project Address:	345 Thunderbird Road Tonkawa, OK 74653

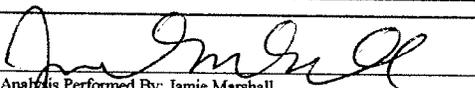
Date Sampled:	October 31, 2008	Date Analyzed:	November 3, 2008
Sampled By:	Jamie Marshall	Analyst:	Jamie Marshall

Identification #	Location	Description	No Asbestos Detected
2529-B16A	ROOM #7 - Floor Tile	Color: BEIGE	60% Aggregate
		Condition: GOOD	40% Calcareous Material
		Type: MISC	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B16B	ROOM #7 - Floor Tile Mastio	Color: YELLOW	100% Adhesive
		Condition: GOOD	
		Type: MISC	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B17	ROOM #5 - Dry Wall	Color: WHITE	5% Fiberglass
		Condition: GOOD	95% Calcareous Material
		Type: MISC	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B18	ROOM #2 - Roof Drain Elbow	Color: GREY	6% Fiberglass
		Condition: GOOD	94% Calcareous Material
		Type: THERMAL SYSTEM INSULATION	
		Note:	
			No Asbestos Detected


 Analysis Performed By: Jamie Marshall
 Environmental / Industrial Hygiene Technician

Date: 1-16-09

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.

Lab Accreditation:
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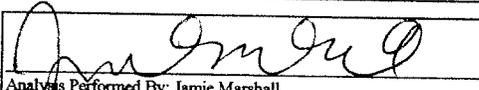
Client:	Oklahoma State Department of Central Services	Job Identification No.:	2529-EN-103108-JM-BS
Report To:	Department of Environmental Quality	Project Name:	Tonkawa Armory
Report To Address:	707 North Robinson Oklahoma City, OK 73102	Project Address:	345 Thunderbird Road Tonkawa, OK 74653
Date Sampled:	October 31, 2008	Date Analyzed:	November 3, 2008
Sampled By:	Jamie Marshall	Analyst:	Jamie Marshall

Identification #	Location	Description	No Asbestos Detected
2529-B219	ROOM #2 - Fire Hose Insulation	Color: WHITE	100% Cellulose
		Condition: GOOD	
		Type: MISC	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B20	ROOM #2 - South Wall	Color: WHITE	100% Cellulose
		Condition: GOOD	
		Type: MISC	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B21	ROOM #2 - North Wall	Color: WHITE	6% Fiberglass
		Condition: GOOD	94% Calcareous Material
		Type: MISC	
		Note:	
			No Asbestos Detected

Identification #	Location	Description	No Asbestos Detected
2529-B22	ROOM #2 - Ceiling	Color: WHITE	6% Fiberglass
		Condition: GOOD	94% Calcareous Material
		Type: MISC	
		Note:	
			No Asbestos Detected

 Analysis Performed By: Jamie Marshall Environmental / Industrial Hygiene Technician	Date: 1-10-09
---	---------------

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.

Lab Accreditation:
 AIHA PAT ID# 102334

FEE: \$25.00

Oklahoma Department of Labor



Jamie Marshall

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

AHERA INSPECTOR

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

Lloyd L. Fields

LLOYD L. FIELDS
Commissioner of Labor

June 05, 2008

Date of Issuance

EXPIRES: June 04, 2009

Oklahoma Department of Labor



FEE: \$500.00

Charles Marshall

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

AHERA MANAGEMENT PLANNER

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

Lloyd L. Fields

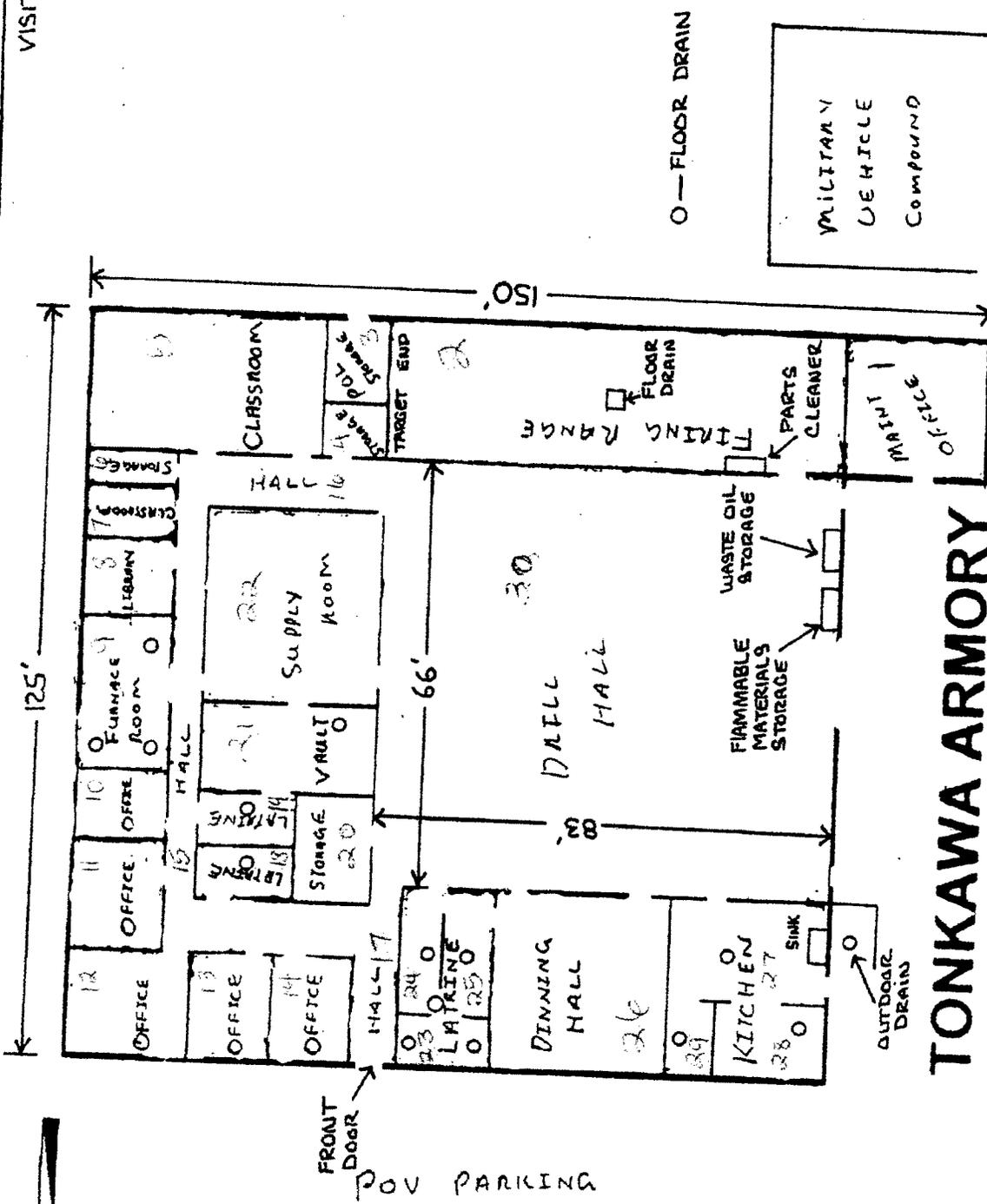
LLOYD L. FIELDS
Commissioner of Labor

July 17, 2008

Date of Issuance

EXPIRES: July 02, 2009

VISIT: 22 FEB. 1995



TONKAWA ARMORY

BUILT IN 1984

RECEIVED
JAN 26 2009
LAND PROTECTION DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

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

Tonkawa Armory
345 Thunderbird Road
Tonkawa, Oklahoma 74653

October 31, 2008

DCS Contract NO.: ID090139

PROVIDED FOR

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

PROVIDED BY

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

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CERTIFICATION

This is to certify that Marshall Environmental Management, Inc. was contracted by the Department of Central Services to conduct a Lead-Based Paint Inspection, of the Tonkawa Armory, for the Oklahoma Department of Environmental Quality. The Tonkawa Armory Lead-Based Paint Inspection was performed by an Oklahoma Department of Environmental Quality Certified, Lead-Based Paint Inspector/Risk Assessor, Jamie Marshall of Marshall Environmental Management, Inc.; under the direction of Dr. Charles L. Marshall, C.I.H. President of Marshall Environmental Management, Inc. The analytical results associated with this Lead-Based Paint Inspection are believed to accurately reflect the locations and concentrations of paint containing lead at the time this sampling was accomplished.

Current Owner Information

State of Oklahoma

Certified Lead Based Paint Risk Assessor/Inspector

 1-16-09
Jamie Marshall, B.S., Industrial Hygiene Associate Date

Oklahoma Department of Environmental Quality Certification Number: OKRASR13418

Certified Lead-Based Paint Firm

Marshall Environmental Management, Inc.
1601 SW 89th Street, Suite 100-A
Oklahoma City, OK 73159
(405) 616-0401

Oklahoma Department of Environmental Quality Certification Number: OKFIRM11160

XRF Information

Niton XLp Spectrum Analyzer
Model #XLp 300A
Serial #12585
Source: 40 mCi

Information Reviewed & Approved By:

 10/31/09
Charles L. Marshall, Ph.D., C.I.H., C.S.P. Date

EXECUTIVE SUMMARY

Marshall Environmental Management, Inc. conducted a Lead-Based Paint Inspection in order to evaluate the locations, condition and content of suspected lead-based paint and lead laden settled dust which may be present.

This Lead-Based Paint Inspection was conducted on October 31, 2008, of the Tonkawa Armory; a one story, brick, conventional foundation, flat roof structure constructed in approximately 1986 and located at 345 Thunderbird Road in Tonkawa, Oklahoma.

The analytical results related to this Lead-Based Paint Inspection did not identify lead-based paint on any of the substrates analyzed as part of this Lead-Based Paint Inspection; however, the majority of the analytical results related to the settled dust did identify lead contamination.

Chains of custody and specific sampling locations are included in the Appendix of this Lead-Based Paint Inspection Report.

SAMPLING METHODOLOGY

Each room of the building was numbered on a floor plan that is provided in the Appendix of this Report. The North side of the building was labeled Side A and going in a clockwise direction the remaining sides were categorized as Side B, Side C, and Side D respectively. Painted substrates and the settled dust on specific floor surface areas were sampled and analyzed for lead content in accordance with the United States Department of Housing and Urban Development (HUD) "*HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*"; in addition to, the United States Environmental Protection Agency (EPA) proposed regulations in 40 Code of Federal Regulations (CFR) part 745.

Lead Sampling

Paint

Lead concentrations were sampled and analyzed in all applicable painted substrates by utilizing an x-ray fluorescence (XRF), direct reading, data logging instrument. Lead concentrations identified as equal to or as greater than one (1.0) milligram per square centimeter (mg/cm^2) are characterized as lead-based paint.

Settled Dust

The collection of settled dust is accomplished by selecting a specific surface area and a known dimension; utilizing a particular template and wipe, the area is wiped with a specified pattern. Analytical results determine if the area is contaminated with lead laden dust. Concentrations of lead equal to or greater than forty (40) micrograms per square foot ($\mu\text{g}/\text{ft}^2$) are considered contaminated with lead, in accordance with HUD and EPA guidelines.

FINDINGS AND CONCLUSIONS

The analytical results related to this Lead-Based Paint Inspection did not identify lead-based paint on any of the substrates analyzed as part of this Inspection.

Please note that the following substrates were not analyzed for lead content at the time this Lead-Based Paint Inspection was performed:

1. Non-fixed Items on the property
2. Factory Painted Substrates

Four surface samples were collected from the Drill Floor and three surface samples were collected from the Firing Range Floor. A total of 28 surface composite samples were collected throughout the rest of the Tonkawa Armory. The following table is a summary of the sampling locations and analytical results:

Room #	Location	Area (in ²)	Concentration (µg/ft ²)
1	Composite	108	2694.27
2	West	144	3549.3
2	Center	144	14150.5
2	East	144	226015
3	Composite	108	4610.93
4	Composite	108	715.79
5	Composite	108	209.71
6	Composite	108	85.95
7	Composite	108	104.62
8	Composite	108	72.38
9	Composite	108	173.34
10	Composite	108	47.67
11	Composite	108	49.51
12	Composite	108	<21.33
13	Composite	108	25.5
14	Composite	108	69
15	Composite	108	342.59
16	Composite	108	139.37
17	Composite	108	78.91
18	Composite	108	<21.33
19	Composite	108	<21.33
20	Composite	108	123.01
21	Composite	108	108.27
22	Composite	108	70.68
23	Composite	108	<21.33
24	Composite	108	22.29
25	Composite	108	<21.33
26	Composite	108	33.35
27	Composite	108	64.38
28	Composite	108	30.57
29	Composite	108	35.87
30	Composite	108	101.8
30	Northeast	144	130.91
30	Center	144	43.54
30	West	144	95.6

DISCLOSURE STATEMENT AND OWNERS LEGAL OBLIGATION

Federal law requires, to the extent this facility would be covered by HUD and EPA guidelines, that the analytical results associated with lead-based paint inspections and/or risk assessments be disclosed to prospective renters, lessees and/or tenants entering into or renewing a lease; and to prospective purchasers, prior to obligation under a sales contract, if lead-based paint is found. If the inspection finds that lead-based paint is not present in certain multifamily dwelling units, which are to be leased, the dwelling unit(s) is exempt from disclosure requirements. However, for dwelling units which are being sold, not leased, the owner still has certain legal responsibilities to fulfill under Federal law **even if no lead-based paint is identified**. Landlords and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that information is provided in order to protect children from lead-based paint hazards.

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

LEAD-BASED PAINT INFORMATION

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

APPENDIX

SURFACE WIPES CHAIN OF CUSTODY ANALYTICAL DATA

XRF DATA

CERTIFICATES

SITE MAP

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma City, Oklahoma 73159
 Phone: (405) 616-0401 Fax: (405) 681-6753

167434

Project Location:				Invoice To:				Report To:			
Job ID #	2529-EN-103108-JM-BS			Company:				Company:			
Project Name:	Tonkawa Armory			Address:				Address:			
Address:				Phone #:				Phone #:			
Phone #:				Site Contact:				Phone #:			
Date Sampled	Job #	Sample #	Sample Location/Description	Sample Type	Matrix	Media	Time On/Off	Calibration Pref/Post	Volume/ Area	Analyte Parameters	
10/31/08	2529	1	Room #1 Composite	Surface	DUST	Wipe/centrifuge	N/A	N/A	108in ²	TOTAL Pb	
		2A	Room #2 West						144in ²		
		2B	Room #2 Center								
		2C	Room #2 East								
		3	Room #3 Composite						108in ²		
		4	Room #4 Composite								
		5	Room #5 Composite								
		6	Room #6 Composite								
		7	Room #7 Composite								
		8	Room #8 composite								
Collected By:	Jamie Marshall			Sample Note:							
Collected By:	[Signature]			Method of Sequestration:							
Relinquished By:	[Signature]			Condition Upon Reception:							
Relinquished By:	[Signature]			Date:	11/1/08	Time:	4:20	Date:	11/1/08	Time:	4:20
Relinquished By:	[Signature]			Date:		Time:		Date:		Time:	
Relinquished By:	[Signature]			Date:		Time:		Date:		Time:	

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma City, Oklahoma 73159
 Phone: (405) 616-0401 Fax: (405) 681-6753

167434

Project Location:				Invoice To:				Report To:					
Job ID#	2529-EN-103108-JM-BS	Company:		Company:		Company:		Company:		Company:		Company:	
Project Name:	Tonkawa Armory	Address:		Address:		Address:		Address:		Address:		Address:	
Phone #:		Phone #:		Phone #:		Phone #:		Phone #:		Phone #:		Phone #:	
Date Sampled	Job #	Site Contact	Sample #	Sample Location/Description	Sample Type	Matrix	Media	Time On/Off	Calibration Pref/Post	Volume/ Area	Analysis Parameters		
10/31/08	2529		9	Room #9 composite	Surf Dust	Dust	Wiped centrifuge	N/A	N/A	108in ²	TOTAL Pb		
			10	Room #10 composite									
			11	Room #11 composite									
			12	Room #12 composite									
			13	Room #13 composite									
			14	Room #14 composite									
			15	Room #15 composite									
			16	Room #16 composite									
			17	Room #17 composite									
			18	Room #18 composite									
Collected By:	Jamie Marshall	Sample Notes:											
Collected By:	<i>Jamie Marshall</i>	Method of Shipment:											
Relinquished By:	<i>Jamie Marshall</i>	Condition Upon Reception:											
Relinquished By:		Received By:											
Relinquished By:		Received By:											
Relinquished By:		Received By:											

Date: 11/4/08
 Time: 4:20p

BMH

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma City, Oklahoma 73159
 Phone: (405) 616-0401 Fax: (405) 681-6753

167434

Project Location:				Invoice To:				Report To:			
Job ID #	2529-EN-103108-JM-BS			Company:				Company:			
Project Name:	Tonkawa Armory			Attention:				Attention:			
Address:				Address:				Address:			
Phone #:	Site Contact:	Job #	Sample #	Phone #:	Fax/Email:	Phone #:	Media	Time Out	Calibration Pref/Post	Volume/Area	Analysis Parameters
Date Sampled											
10/31/08		2529	19				Wipe/Composite	N/A	N/A	108in ²	TOTAL P6
			20								
			21								
			22								
			23								
			24								
			25								
			26								
			27								
			28								
			29								
			30								
Collected By: (print)	Jamie Marsha V			Sample Note:							
Collected By: (Signature)				Received By:				Date:	11-1-08		
Relinquished By:				Received By:				Date:	4/20/11		
Relinquished By:				Received By:				Date:			
Relinquished By:				Received By:				Date:			

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma City, Oklahoma 73159
 Phone: (405) 616-0401 Fax: (405) 681-6753

167434

Project Location:				Invoice To:				Report To:			
Job ID #	Date Sampled	Job #	Site Contact:	Company:	Address:	Phone #:	Fax/Email:	Company:	Address:	Phone #:	Fax/Email:
Project Name:	Address:	Sample #	Sample Location/Description	Attention:	Address:	Phone #:	Fax/Email:	Attention:	Address:	Phone #:	Fax/Email:
Address:	Phone #:	Sample #	Sample Location/Description	Address:	Phone #:	Phone #:	Phone #:	Address:	Phone #:	Phone #:	Phone #:
Date Sampled	Job #	Sample #	Sample Location/Description	Sample Type	Matrix	Media	Time On/Off	Calibration Pref/Past	Volume/ Area	Analysis/ Parameters	
10/31/08	2529	29	Room # 29 composite	Surface DUST	DUST	WIPES Composite	N/A	N/A	108 in ²	TOTAL Pb	
		30A	Room # 30 composite						108 in ²		
		30B	Room # 30 by Room #2 (NE)						144 in ²		
		30C	Room # 30 center								
		31D	Room # 30 West								
		32	QA/QC								
		33	QA/QC								
		34	QA/QC								
		35	QA/QC								
Collected By: (print)	Jamie Marshall			Sample Notes:				Method of Shipment:			
Collected By: (signature)	<i>Jamie Marshall</i>							Condition Upon Reception:			
Relinquished By:	Date:	Received By:	Date:					Date:	11-6-08		
Relinquished By:	Time:	Received By:	Time:					Time:	2:30 PM		
Relinquished By:	Date:	Received By:	Date:					Date:			
Relinquished By:	Time:	Received By:	Time:					Time:			



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

Environmental Chemistry Analysis Report

Quantem Set ID: 167434	Client: Marshall Environmental Management, Inc.
Date Received: 11/04/08	1601 SW 89th Street, Ste. A-100
Received By: Barbara Holder	Oklahoma City, OK 73159
Date Sampled:	
Time Sampled:	Acct. No.: A331
Analyst: EC	Project: Tonkawa Armory
Date of Report: 11/7/2008	Location: N/A
	Project No.: 2529-EN-103108-JM-BS

AIHA ID: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	2529-1	Wipe	Lead	2694.27	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
002	2529-2A	Wipe	Lead	3549.30	16.00	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
003	2529-2B	Wipe	Lead	14150.50	16.00	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
004	2529-2C	Wipe	Lead	226015.00	16.00	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
005	2529-3	Wipe	Lead	4610.93	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
006	2529-4	Wipe	Lead	715.79	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
007	2529-5	Wipe	Lead	209.71	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
008	2529-6	Wipe	Lead	85.95	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
009	2529-7	Wipe	Lead	104.62	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
010	2529-8	Wipe	Lead	72.38	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
011	2529-9	Wipe	Lead	173.34	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100

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

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

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



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 167434	Client: Marshall Environmental Management, Inc.
Date Received: 11/04/08	1601 SW 89th Street, Ste. A-100
Received By: Barbara Holder	Oklahoma City, OK 73159
Date Sampled:	
Time Sampled:	Acct. No.: A331
Analyst: EC	Project: Tonkawa Armory
Date of Report: 11/7/2008	Location: N/A
	Project No.: 2529-EN-103108-JM-BS

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
012	2529-10	Wipe	Lead	47.67	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
013	2529-11	Wipe	Lead	49.51	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
014	2529-12	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
015	2529-13	Wipe	Lead	25.50	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
016	2529-14	Wipe	Lead	69.00	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
017	2529-15	Wipe	Lead	342.59	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
018	2529-16	Wipe	Lead	139.37	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
019	2529-17	Wipe	Lead	78.91	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
020	2529-18	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
021	2529-19	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
022	2529-20	Wipe	Lead	123.01	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100

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

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

Environmental Chemistry Analysis Report

Quantem Set ID: 167434 Client: Marshall Environmental Management, Inc.
Date Received: 11/04/08 1601 SW 89th Street, Ste. A-100
Received By: Barbara Holder Oklahoma City, OK 73159
Date Sampled:
Time Sampled: Acct. No.: A331
Analyst: EC Project: Tonkawa Armory
Date of Report: 11/7/2008 Location: N/A
Project No.: 2529-EN-103108-JM-BS

AIHA ID: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
023	2529-21	Wipe	Lead	108.27	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
024	2529-22	Wipe	Lead	70.68	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
025	2529-23	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
026	2529-24	Wipe	Lead	22.29	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
027	2529-25	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
028	2529-26	Wipe	Lead	33.35	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
029	2529-27	Wipe	Lead	64.38	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
030	2529-28	Wipe	Lead	30.57	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
031	2529-29	Wipe	Lead	35.87	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
032	2529-30A	Wipe	Lead	101.80	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
033	2529-30B	Wipe	Lead	130.91	16.00	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100

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

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

Environmental Chemistry Analysis Report

QuantEM Set ID: 167434
Date Received: 11/04/08
Received By: Barbara Holder
Date Sampled:
Time Sampled:
Analyst: EC
Date of Report: 11/7/2008

Client: Marshall Environmental Management, Inc.
1601 SW 89th Street, Ste. A-100
Oklahoma City, OK 73159

Acct. No.: A331

Project: Tonkawa Armory

Location: N/A

Project No.: 2529-EN-103108-JM-BS

AIHA ID: 101352

QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
034	2529-30C	Wipe	Lead	43.54	16.00	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
035	2529-30D	Wipe	Lead	95.60	16.00	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
036	2529-32	Wipe	Lead	235.13	16.00	ug/sq. Ft.	11/07/08 13:00	EPA 3051 / NIOSH 9100
037	2529-33	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	11/07/08 13:00	EPA 3051 / NIOSH 9100
038	2529-34	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	11/07/08 13:00	EPA 3051 / NIOSH 9100
039	2529-35	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	11/07/08 13:00	EPA 3051 / NIOSH 9100

Authorized Signature: _____

Eric Caves, 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: 6393

Date: 11/7/2008

Approved By: Eric Caves

Test: Lead

Matrix: Wipe

Date Approved: 11/7/2008

Notes:

Blank Data:

Type of Blank	Blank Value
Initial	0
Continuing	0
Final	0

Samples:

167434-36	167434-37
167434-38	167434-39
MSW E	RLVSW

Standards Data:

Standard	Low Limit	Obtained	High Limit
FCV	225	248	275
CCV	225	253	275
ICV	22.5	23.7	27.5
RLVS	12.8	17.9	19.2

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MSW E	0.000	5369.000	5811.000	108.2	5523.000	102.9	5.1

QAQC Results

QA ID: 6385
Test: Lead

Date: 11/5/2008
Matrix: Wipe

Lab Number: 167434
Approved By: Eric Caves
Date Approved: 11/5/2008

Notes:

Blank Data:

Type of Blank	Blank Value
Initial	0
Continuing	0
Final	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
FCV	225	246	275
CCV	225	253	275
ICV	22.5	24.3	27.5
RLVS	12.8	15.2	19.2

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MSW A	0.000	5369.000	5014.000	93.4	5348.000	99.6	6.4
MSW 5	0.000	5369.000	4912.000	91.5	5148.000	95.9	4.7

Authorized Signature: _____


Eric Caves, Analyst

Index	Time	Type	Units	Component	Substrate	Side	Color	Room	Results	Action Level	PbC	PbL	PbK	
1	10/31/08 7:50	SHUTTER_CAL	cps											0
2	10/31/08 7:52	PAINT	mg/cm ²			CALIBRATE			Positive		1	1.1	1.1	<LOD: 0.60
3	10/31/08 7:52	PAINT	mg/cm ²			CALIBRATE			Positive		1	1.2	1.2	<LOD: 0.65
4	10/31/08 7:53	PAINT	mg/cm ²			CALIBRATE			Positive		1	1.1	1.1	
5	10/31/08 7:54	PAINT	mg/cm ²	WALL	CONCRETE	A	WHITE		14 Negative		1	<LOD: 0.05	<LOD: 0.05	<LOD: 2.22
6	10/31/08 7:55	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		14 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.64
7	10/31/08 7:55	PAINT	mg/cm ²	WALL	CONCRETE	C	WHITE		14 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.43
8	10/31/08 7:55	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		14 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.66
9	10/31/08 7:56	PAINT	mg/cm ²	DOOR FRAME	CONCRETE	D	WHITE		14 Negative		1	<LOD: 0.05	<LOD: 0.05	<LOD: 3.91
10	10/31/08 7:56	PAINT	mg/cm ²	DOOR FRAME	CONCRETE	D	BROWN		14 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.83
11	10/31/08 7:56	PAINT	mg/cm ²	DOOR FRAME	CONCRETE	C	BROWN		14 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 4.06
12	10/31/08 7:57	PAINT	mg/cm ²	DOOR FRAME	CONCRETE	C	BROWN		13 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.73
13	10/31/08 7:57	PAINT	mg/cm ²	WALL	CONCRETE	A	WHITE		13 Negative		1	<LOD: 0.07	<LOD: 0.07	<LOD: 2.15
14	10/31/08 7:57	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		13 Negative		1	<LOD: 0.12	<LOD: 0.12	<LOD: 2.52
15	10/31/08 7:57	PAINT	mg/cm ²	WALL	CONCRETE	C	WHITE		13 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.39
16	10/31/08 7:58	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		13 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.49
17	10/31/08 7:58	PAINT	mg/cm ²	WALL	CONCRETE	A	BLUE		12 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.62
18	10/31/08 7:58	PAINT	mg/cm ²	WALL	CONCRETE	B	BLUE		12 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.53
19	10/31/08 7:59	PAINT	mg/cm ²	WALL	CONCRETE	C	BLUE		12 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.49
20	10/31/08 7:59	PAINT	mg/cm ²	WALL	CONCRETE	D	BLUE		12 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.78
21	10/31/08 7:59	PAINT	mg/cm ²	DOOR FRAME	CONCRETE	C	BROWN		12 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.81
22	10/31/08 8:00	PAINT	mg/cm ²	DOOR FRAME	CONCRETE	B	BROWN		11 Negative		1	<LOD: 0.05	<LOD: 0.05	<LOD: 3.90
23	10/31/08 8:01	PAINT	mg/cm ²	WALL	CONCRETE	A	WHITE		11 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.05
24	10/31/08 8:01	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		11 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.18
25	10/31/08 8:01	PAINT	mg/cm ²	WALL	CONCRETE	C	WHITE		11 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.25
26	10/31/08 8:02	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		11 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.20
27	10/31/08 8:02	PAINT	mg/cm ²	WALL	CONCRETE	A	WHITE		10 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.95
28	10/31/08 8:02	PAINT	mg/cm ²	WALL	CONCRETE	C	WHITE		10 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.09
29	10/31/08 8:03	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		10 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.38
30	10/31/08 8:03	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		10 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.50
31	10/31/08 8:04	PAINT	mg/cm ²	DOOR FRAME	METAL	D	BROWN		10 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.75
32	10/31/08 8:06	PAINT	mg/cm ²	DOOR FRAME	METAL	D	BROWN		9 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.78
33	10/31/08 8:06	PAINT	mg/cm ²	DOOR	METAL	D	BROWN		9 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.35
34	10/31/08 8:06	PAINT	mg/cm ²	DOOR	METAL	D	BROWN		8 Negative		1	<LOD: 0.05	<LOD: 0.05	<LOD: 3.49
35	10/31/08 8:07	PAINT	mg/cm ²	DOOR FRAME	METAL	D	BROWN		8 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.66
36	10/31/08 8:07	PAINT	mg/cm ²	WALL	CONCRETE	A	WHITE		8 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.82
37	10/31/08 8:08	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		8 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.34
38	10/31/08 8:08	PAINT	mg/cm ²	WALL	CONCRETE	C	WHITE		8 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.49
39	10/31/08 8:08	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		8 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.17
40	10/31/08 8:09	PAINT	mg/cm ²	WALL	CONCRETE	A	WHITE		7 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.57
41	10/31/08 8:09	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		7 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.38
42	10/31/08 8:10	PAINT	mg/cm ²	WALL	CONCRETE	C	WHITE		7 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.45
43	10/31/08 8:10	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		7 Negative		1	<LOD: 0.05	<LOD: 0.05	<LOD: 2.10
44	10/31/08 8:11	PAINT	mg/cm ²	DOOR	WOOD	D	stain		7 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.13
45	10/31/08 8:11	PAINT	mg/cm ²	DOOR FRAME	METAL	D	BROWN		7 Negative		1	<LOD: 0.12	<LOD: 0.12	<LOD: 3.85
46	10/31/08 8:12	PAINT	mg/cm ²	DOOR FRAME	METAL	D	BROWN		6 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.88
47	10/31/08 8:12	PAINT	mg/cm ²	DOOR	WOOD	D	BROWN		6 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 1.93
48	10/31/08 8:13	PAINT	mg/cm ²	WALL	CONCRETE	A	WHITE		6 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.02
49	10/31/08 8:13	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		6 Negative		1	<LOD: 0.15	<LOD: 0.15	<LOD: 2.26
50	10/31/08 8:14	PAINT	mg/cm ²	WALL	CONCRETE	C	WHITE		6 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.57
51	10/31/08 8:14	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		6 Null		1	<LOD: 0.05	<LOD: 0.05	<LOD: 3.52
52	10/31/08 8:14	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		6 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.08
53	10/31/08 8:15	PAINT	mg/cm ²	WALL	CONCRETE	A	WHITE		5 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.25
54	10/31/08 8:15	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		5 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.26
55	10/31/08 8:15	PAINT	mg/cm ²	WALL	CONCRETE	C	WHITE		5 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.61
56	10/31/08 8:16	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		5 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.62
57	10/31/08 8:16	PAINT	mg/cm ²	DOOR FRAME	METAL	A	BROWN		5 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.64
58	10/31/08 8:18	PAINT	mg/cm ²	DOOR FRAME	METAL	A	BROWN		4 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.79
59	10/31/08 8:19	PAINT	mg/cm ²	WALL	CONCRETE	A	WHITE		4 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.24
60	10/31/08 8:19	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		4 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.47
61	10/31/08 8:19	PAINT	mg/cm ²	WALL	CONCRETE	C	WHITE		4 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.66
62	10/31/08 8:19	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		4 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 1.86
63	10/31/08 8:24	PAINT	mg/cm ²	WALL	CONCRETE	A	WHITE		18 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.42
64	10/31/08 8:25	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		18 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.50
65	10/31/08 8:25	PAINT	mg/cm ²	WALL	CONCRETE	C	WHITE		18 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.82
66	10/31/08 8:25	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		18 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.51
67	10/31/08 8:26	PAINT	mg/cm ²	CEILING	CONCRETE	UPPER	WHITE		18 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.39
68	10/31/08 8:26	PAINT	mg/cm ²	DOOR	WOOD	A	BROWN		18 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 1.37
69	10/31/08 8:27	PAINT	mg/cm ²	DOOR FRAME	METAL	A	BROWN		18 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.58
70	10/31/08 8:27	PAINT	mg/cm ²	DOOR FRAME	METAL	A	BROWN		19 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 3.51
71	10/31/08 8:28	PAINT	mg/cm ²	DOOR	WOOD	B	BROWN		19 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.00
72	10/31/08 8:28	PAINT	mg/cm ²	WALL	CONCRETE	A	BLUE		19 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.16
73	10/31/08 8:30	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		19 Negative		1	<LOD: 0.04	<LOD: 0.04	<LOD: 2.51
74	10/31/08 8:30	PAINT	mg/cm ²	WALL	CONCRETE	C	WHITE		19 Negative		1	<LOD: 0.05	<LOD: 0.05	<LOD: 2.14
75	10/31/08 8:30	PAINT	mg/cm ²	WALL	CONCRETE	D	WHITE		19 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.57
76	10/31/08 8:32	PAINT	mg/cm ²	WALL	CONCRETE	A	WHITE		20 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.63
77	10/31/08 8:32	PAINT	mg/cm ²	WALL	CONCRETE	B	WHITE		20 Negative		1	<LOD: 0.03	<LOD: 0.03	<LOD: 2.35
78	10/31/08 8:32	PAINT	mg/cm ²	WALL	CONCRETE	C								

104	10/31/08 8:50 PAINT	mg / cm ^2	WALL	CONCRETE	D	WHITE	25 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.63
105	10/31/08 8:51 PAINT	mg / cm ^2	WALL	CONCRETE	A	WHITE	26 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.22
106	10/31/08 8:51 PAINT	mg / cm ^2	WALL	CONCRETE	B	WHITE	26 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.89
107	10/31/08 8:52 PAINT	mg / cm ^2	WALL	CONCRETE	C	WHITE	26 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.51
108	10/31/08 8:52 PAINT	mg / cm ^2	WALL	CONCRETE	D	WHITE	26 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.53
109	10/31/08 8:53 PAINT	mg / cm ^2	DOOR	METAL	C	BROWN	26 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 3.45
110	10/31/08 8:53 PAINT	mg / cm ^2	DOOR FRAME	METAL	C	BROWN	26 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 3.90
111	10/31/08 8:54 PAINT	mg / cm ^2	DOOR FRAME	METAL	C	BROWN	27 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 3.87
112	10/31/08 8:55 PAINT	mg / cm ^2	CEILING	CONCRETE	UPPER	WHITE	27 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.37
113	10/31/08 8:56 PAINT	mg / cm ^2	CEILING	CONCRETE	UPPER	WHITE	28 Null	1 < LOD : 0.03	< LOD : 0.03	< LOD : 4.71
114	10/31/08 8:58 PAINT	mg / cm ^2	CEILING	CONCRETE	UPPER	WHITE	28 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.59
115	10/31/08 9:04 PAINT	mg / cm ^2	WALL	CONCRETE	A	WHITE	1 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.29
116	10/31/08 9:04 PAINT	mg / cm ^2	WALL	CONCRETE	C	WHITE	1 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.68
117	10/31/08 9:04 PAINT	mg / cm ^2	WALL	CONCRETE	D	WHITE	1 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.52
118	10/31/08 9:06 PAINT	mg / cm ^2	DOOR	METAL	A	BROWN	1 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 3.48
119	10/31/08 9:06 PAINT	mg / cm ^2	DOOR FRAME	METAL	A	BROWN	1 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 3.55
120	10/31/08 9:08 PAINT	mg / cm ^2	DOOR FRAME	METAL	A	BROWN	2 Negative	1 < LOD : 0.24	< LOD : 0.24	< LOD : 3.62
121	10/31/08 9:08 PAINT	mg / cm ^2	DOOR	METAL	A	BROWN	2 Negative	1 < LOD : 0.05	< LOD : 0.05	< LOD : 3.45
122	10/31/08 9:10 PAINT	mg / cm ^2	WALL	CONCRETE	A	WHITE	30 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.48
123	10/31/08 9:10 PAINT	mg / cm ^2	WALL	CONCRETE	B	WHITE	30 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.82
124	10/31/08 9:11 PAINT	mg / cm ^2	WALL	CONCRETE	C	WHITE	30 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 1.91
125	10/31/08 9:15 PAINT	mg / cm ^2	WALL	METAL	D	WHITE	30 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.18
126	10/31/08 9:16 PAINT	mg / cm ^2	DOOR OVERHEAD	METAL	D	BROWN	30 Negative	1 < LOD : 0.22	< LOD : 0.22	< LOD : 2.98
127	10/31/08 9:16 PAINT	mg / cm ^2	DOOR OVERHEAD FRAME	METAL	D	BROWN	30 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 4.03
128	10/31/08 9:17 PAINT	mg / cm ^2	DOOR	METAL	D	BROWN	30 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 3.27
129	10/31/08 9:17 PAINT	mg / cm ^2	DOOR FRAME	METAL	D	BROWN	30 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 3.60
130	10/31/08 9:19 PAINT	mg / cm ^2	WALL	CONCRETE	B	WHITE	17 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.58
131	10/31/08 9:19 PAINT	mg / cm ^2	WALL	CONCRETE	D	WHITE	17 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.27
132	10/31/08 9:19 PAINT	mg / cm ^2	WALL	CONCRETE	A	WHITE	15 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.59
133	10/31/08 9:21 PAINT	mg / cm ^2	WALL	CONCRETE	D	WHITE	15 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.38
134	10/31/08 9:21 PAINT	mg / cm ^2	WALL	CONCRETE	A	WHITE	16 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.08
135	10/31/08 9:21 PAINT	mg / cm ^2	WALL	CONCRETE	B	WHITE	16 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.51
136	10/31/08 9:22 PAINT	mg / cm ^2	WALL	CONCRETE	C	WHITE	16 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.34
137	10/31/08 9:28 PAINT	mg / cm ^2	OVER HANG CEILING	CONCRETE	A	WHITE	OUTSIDE Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 2.08
138	10/31/08 9:29 PAINT	mg / cm ^2	WATER PIPE	METAL	B	WHITE	OUTSIDE Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 3.74
139	10/31/08 9:31 PAINT	mg / cm ^2	DOOR	METAL	C	BLUE	OUTSIDE Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 3.41
140	10/31/08 9:32 PAINT	mg / cm ^2	DOOR GARDS	METAL	C	YELLOW	OUTSIDE Negative	1 < LOD : 0.05	< LOD : 0.05	< LOD : 3.89
141	10/31/08 9:33 PAINT	mg / cm ^2	DOOR GARDS	METAL	C	YELLOW	OUTSIDE Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 4.05
142	10/31/08 9:45 PAINT	mg / cm ^2	FLOOR	CONCRETE	LOWER	GREY	17 Negative	1 < LOD : 0.03	< LOD : 0.03	< LOD : 3.08
143	10/31/08 9:46 PAINT	mg / cm ^2		CALIBRATE			Positive	1	1.1	1.1 < LOD : 0.75
144	10/31/08 9:46 PAINT	mg / cm ^2		CALIBRATE			Positive	1	1.2	1.2 < LOD : 0.99
145	10/31/08 9:46 PAINT	mg / cm ^2		CALIBRATE			Positive	1	1.2	1.2 < LOD : 0.99

Department of Environmental Quality

This is to Certify That

CHARLES MARSHALL

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

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR13418

This certificate is valid from the date of issuance and expires as prescribed by law.
Issued on: 10/30/2008 Expires on: 3/31/2009



Division Director
Air Quality Division





Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

MARSHALL ENVIRONMENTAL MANAGEMENT

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

FIRM

Certification #: OKFIRM11160

This certificate is valid from the date of issuance and expires as prescribed by law.
Issued on: 4/1/2008 Expires on: 3/31/2009



A handwritten signature in black ink, appearing to read "A. Todd", is written over a horizontal line.

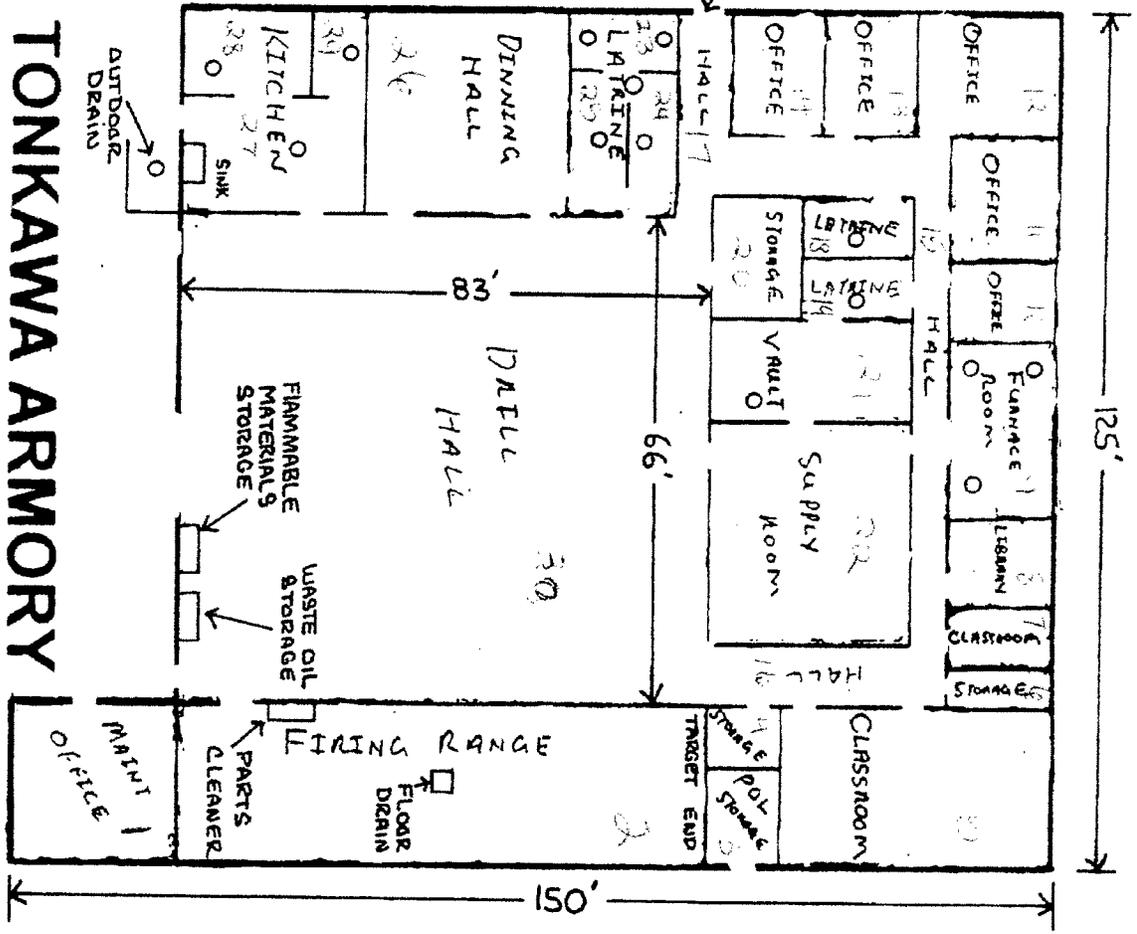
Division Director
Air Quality Division

A handwritten signature in black ink, appearing to read "Randall L. Ward", is written over a horizontal line.

Environmental Programs Manager
Air Quality Division



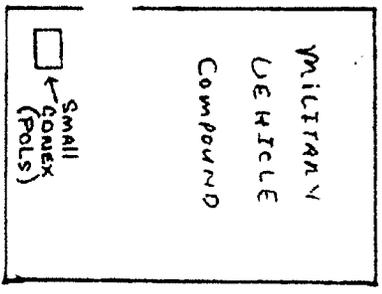
FRONT DOOR
POV PARKING



TONKAWA ARMORY

BUILT IN 1984

VISIT: 22 FEB. 1995



2
150
5
750



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

Environmental Chemistry Analysis Report

QuantEM Set ID: 167434 Date Received: 11/04/08 Received By: Barbara Holder Date Sampled: Time Sampled: Analyst: EC Date of Report: 11/7/2008 AIHA ID: 101352	Client: Marshall Environmental Management, Inc. 1601 SW 89th Street, Ste. A-100 Oklahoma City, OK 73159 Acct. No.: A331 Project: Tonkawa Armory Location: N/A Project No.: 2529-EN-103108-JM-BS
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QuantEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
012	2529-10	Wipe	Lead	47.67	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
013	2529-11	Wipe	Lead	49.51	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
014	2529-12	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
015	2529-13	Wipe	Lead	25.50	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
016	2529-14	Wipe	Lead	69.00	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
017	2529-15	Wipe	Lead	342.59	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
018	2529-16	Wipe	Lead	139.37	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
019	2529-17	Wipe	Lead	78.91	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
020	2529-18	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
021	2529-19	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
022	2529-20	Wipe	Lead	123.01	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100

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.



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 167434	Client: Marshall Environmental Management, Inc.
Date Received: 11/04/08	1601 SW 89th Street, Ste. A-100
Received By: Barbara Holder	Oklahoma City, OK 73159
Date Sampled:	
Time Sampled:	Acct. No.: A331
Analyst: EC	Project: Tonkawa Armory
Date of Report: 11/7/2008	Location: N/A
	Project No.: 2529-EN-103108-JM-BS

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
023	2529-21	Wipe	Lead	108.27	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
024	2529-22	Wipe	Lead	70.68	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
025	2529-23	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
026	2529-24	Wipe	Lead	22.29	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
027	2529-25	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
028	2529-26	Wipe	Lead	33.35	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
029	2529-27	Wipe	Lead	64.38	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
030	2529-28	Wipe	Lead	30.57	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
031	2529-29	Wipe	Lead	35.87	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
032	2529-30A	Wipe	Lead	101.80	21.33	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
033	2529-30B	Wipe	Lead	130.91	16.00	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100

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

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



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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 167434	Client: Marshall Environmental Management, Inc.
Date Received: 11/04/08	1601 SW 89th Street, Ste. A-100
Received By: Barbara Holder	Oklahoma City, OK 73159
Date Sampled:	
Time Sampled:	Acct. No.: A331
Analyst: EC	Project: Tonkawa Armory
Date of Report: 11/7/2008	Location: N/A
	Project No.: 2529-EN-103108-JM-BS

AIHA ID: 101352

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
034	2529-30C	Wipe	Lead	43.54	16.00	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
035	2529-30D	Wipe	Lead	95.60	16.00	ug/sq. Ft.	11/05/08 14:10	EPA 3051 / NIOSH 9100
036	2529-32	Wipe	Lead Q A Q C	235.13	16.00	ug/sq. Ft.	11/07/08 13:00	EPA 3051 / NIOSH 9100
037	2529-33	Wipe	Lead Q A Q C	<16.00	16.00	ug/sq. Ft.	11/07/08 13:00	EPA 3051 / NIOSH 9100
038	2529-34	Wipe	Lead Q A Q C	<16.00	16.00	ug/sq. Ft.	11/07/08 13:00	EPA 3051 / NIOSH 9100
039	2529-35	Wipe	Lead Q A Q C	<16.00	16.00	ug/sq. Ft.	11/07/08 13:00	EPA 3051 / NIOSH 9100

Authorized Signature: _____

Eric Caves, 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.

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma City, Oklahoma 73159
 Phone: (405) 616-0401 Fax: (405) 681-6753

167434

Project Location:				Invoice To:				Report To:			
Job ID #:	2529-EN-103108-IM-B5	Company:		Company:		Company:		Company:		Company:	
Project Name:	Tonkawa Army	Address:		Address:		Address:		Address:		Address:	
Address:		Address:		Address:		Address:		Address:		Address:	
Phone #:		Site Contact:		Phone #:		Phone #:		Phone #:		Phone #:	
Date Sampled	Job #	Sample #	Sample Location/Description	Received:	Sample Type	Matrix	Media	Time On/Off	Calibration Part/Part	Volume Area	Analysis Parameters
10/31/08	2529	9	Room #9 composite		Surface Dust	Dust	Wipe/ventilate	N/A	N/A	108m ²	TOTAL Pb
		10	Room #10 composite								
		11	Room #11 composite								
		12	Room #12 composite								
		13	Room #13 composite								
		14	Room #14 composite								
		15	Room #15 composite								
		16	Room #16 composite								
		17	Room #17 composite								
		18	Room #18 composite								
Collected By:	Jamie Marshall	Method of Sampling:		Received By:		Condition Upon Receipt:		Date:	11/4/08		
Collected By:	Jamie Marshall	Method of Sampling:		Received By:		Condition Upon Receipt:		Date:	11/4/08		
Collected By:	Jamie Marshall	Method of Sampling:		Received By:		Condition Upon Receipt:		Date:	11/4/08		
Collected By:	Jamie Marshall	Method of Sampling:		Received By:		Condition Upon Receipt:		Date:	11/4/08		

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma City, Oklahoma 73159
 Phone: (405) 616-0401 Fax: (405) 681-6753

167434

Project Location:

Invoice To:

Report To:

Job ID #	2529-EN-103108-IM-B5	Company:	Company:	Report To:						
Project Number:	Tonkawa Armory	Address:	Address:							
Address:		Address:	Address:							
Phone #:		Phone #:	Phone #:							
Date Sampled	Job #	Sample #	Sample Location/Description	Sample Type	Matrix	Matrix	Time Out/In	Collection Protocol	Volume/ Area	Analysis/ Parameters
10/31/08	2524	19	Room # 19 composite	Surface Dust	Dust	Wipe/contaminant	N/A	N/A	108 in ²	TOTAL Pb
		20	Room # 20 composite							
		21	Room # 21 composite							
		22	Room # 22 composite							
		23	Room # 23 composite							
		24	Room # 24 composite							
		25	Room # 25 composite							
		26	Room # 26 composite							
		27	Room # 27 composite							
		28	Room # 28 composite							

Collected By: (print)	Jamie Mavshu V	Sample Notes:	
Collected By: (signature)	<i>Jamie Mavshu V</i>	Method of Substrate:	
Released By:	<i>Jamie Mavshu V</i>	Condition Upon Receipt:	
Date:	11/1/08	Date:	11-1-08
Time:	13:30	Time:	12:01
Date:		Date:	
Time:		Time:	
Date:		Date:	
Time:		Time:	

Page 3 of 4

Marshall Environmental Management, Inc.
 1601 Southwest 89th Street, Suite 100-A
 Oklahoma City, Oklahoma 73159
 Phone: (405) 616-0401 Fax: (405) 681-6753

167434

Project Location:

Invoice To:

Report To:

JOB ID #: 2529-EN.103108.JM-B5

Company:

Company:

Project Name: Tenkawa Armory

Address:

Address:

Phone #:

Phone #:

Phone #:

Site Contact:

Phone #:

Fax/Email:

Phone #:

Date Sampled

Sample Location/Description

Sample Type

Matrix

Media

Time On/Off

Calibration Period

Prevalent Volume Area

Analytical Parameters

10/31/08 2529 29

Room # 29 composite

Surface Dust

Dust

WPE/cont-Roc N/A

N/A

188 in²

TOTAL Pb

30A Room # 30 composite

30B Room # 30 by Room # 2 (NE)

30C Room # 30 center

31D Room # 30 West

32 QA/QC

33 QA/QC

34 QA/QC

35 QA/QC

Collected By: (print) Janice Marshall

Collected By: (signature) Janice Marshall

Sample Notes:

Method of Statement:

Condition Upon Receipt:

Relinquished By: Date: Time:

Received By: Date: Time:

PAOLD

Date: 11-6-08
 Time: 2:30 PM

Relinquished By: Date: Time:

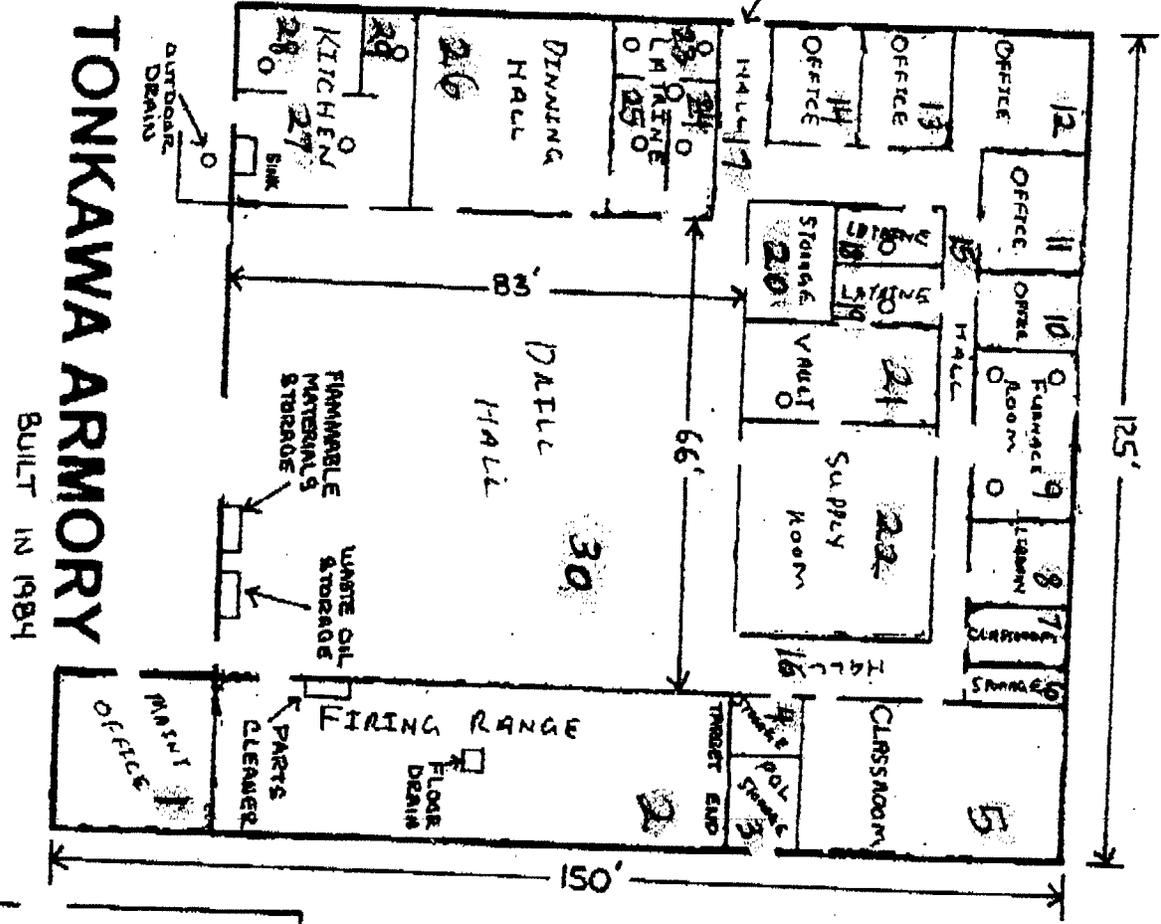
Received By: Date: Time:

Date: 11-6-08
 Time: 2:30 PM

Relinquished By: Date: Time:

Received By: Date: Time:

Date: 11-6-08
 Time: 2:30 PM



TONKAWA ARMORY

BUILT IN 1984

VISIT: 22 FEB. 1995

Small
 Gonex
 (POLS)

MILITARY
 VEHICLE
 COMPOUND

○—FLOOR DRAIN

EXHIBIT "A"

All of Lots 14, 15, 16, 17, 18, and 19, all in Block 5, Carrousel North Second Addition to the City of Tonkawa, Kay County, Oklahoma, according to the recorded plat thereof; and the following described tract of unplatted land. Commencing at the NW corner of Section 33, T26N, R1W, I.M., Kay County, Oklahoma; thence S89° 35' 11" E and along the North line of said Section 33 for a distance of 664.26 feet to the NW corner of the E ½ NW ¼ NW ¼ of said Section 33, thence S0° 09' 26"E along the West line of said E ½ NW ¼ NW ¼ for a distance of 547.95 feet to the SW corner of Lot 19, Block 5, of the platted Carrousel North Second Addition to the City of Tonkawa, State of Oklahoma and the point of beginning; thence S89° 53' 05"E for a distance of 43.05 feet, thence N78° 48' 19"E for a distance of 178.47 feet, thence S89° 53' 05"E for a distance of 76.25 feet, thence S0° 06' 55" W for distance of 16.00 feet, thence S89° 53' 05"E for a distance of 42.61 feet, thence S0° 09' 26"E for a distance of 792.88 feet, thence N89° 35' 05"W along the South line of said E ½ NW ¼ NW ¼ for a distance of 337.02 feet to the SW corner of said E ½ NW ¼ NW ¼, thence N0° 09' 26"W along the West line of said E ½ NW ¼ NW ¼ a distance of 772.12 feet to the point of beginning. Said tracts containing 7.50 acres more or less.

*16.50
REV.

SECURITY ABSTRACT CO.
PO BOX 409
NEWKIRK, OK. 74647

04279

WARRANTY DEED

Recorded 5-23-78 at 1:28 P.M.

Reception No. _____ Norma Lee Cook, Kay County Clerk

By Naola J. Weber,

Know All Men By These Presents:

THAT Kay Holding Company, an Oklahoma corporation, of Kay County, State of Oklahoma, party of the first part, in consideration of the sum of One and 00/100 Dollars (\$1.00) and other good and valuable consideration in hand paid, the receipt of which is hereby acknowledged, does hereby Grant, Bargain, Sell and Convey unto the City of Tonkawa, a municipality of Kay County, State of Oklahoma, party of the Second part, the following described real property and premises, situate in Kay County, State of Oklahoma, to-wit:

1978 MAY 23 PM 1:28

All of Lots 14, 15, 16, 17, 18, and 19, all in Block 5, Carrousel North Second Addition to the City of Tonkawa, Kay County, Oklahoma, according to the recorded plat thereof; and the following described tract of unplatted land. Commencing at the NW corner of Section 33, T26N, R1W, I.M., Kay County, Oklahoma; thence S89°35'11"E and along the North line of said Section 33 for a distance of 664.26 feet to the NW corner of the E 1/2 NW 1/4 NW 1/4 of said Section 33, thence S0°09'26"E along the West line of said E 1/2 NW 1/4 NW 1/4 for a distance of 547.95 feet to the SW corner of Lot 19, Block 5, of the platted Carrousel North Second Addition to the City of Tonkawa, Oklahoma and the point of beginning; thence S89°53'05"E for a distance of 43.05 feet, thence N78°48'19"E for a distance of 178.47 feet, thence S89°53'05"E for a distance of 76.25 feet, thence S0°06'55"W for a distance of 16.00 feet, thence S89°53'05"E for a distance of 42.61 feet, thence S0°09'26"E for a distance of 792.88 feet, thence N89°35'05"W along the South line of said E 1/2 NW 1/4 NW 1/4 for a distance of 337.02 feet to the SW corner of said E 1/2 NW 1/4 NW 1/4, thence N0°09'26"W along the West line of said E 1/2 NW 1/4 NW 1/4 a distance of 772.12 feet to the point of beginning. Said tracts containing 7.50 acres more or less,

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

Except that if an armory is not built on said premises within five (5) years from the date hereof, then all of said premises shall revert to the Grantor upon all consideration paid therefore being returned to Grantee; and

All utilities must be underground.

To have and to hold said described premises unto the said party of the second part, it's heirs and assigns forever, free, clear and discharged of and from all former grants, charges, taxes, judgments, mortgages and other liens and encumbrances of whatsoever nature, except reservations of record.

Signed and delivered this 19th day of May, 1978.

KAY HOLDING COMPANY

BY: Neil R. Martin, Pres
Neil R. Martin, President



Margaret Charlene Martin
Margaret Charlene Martin,
Secretary-Treasurer

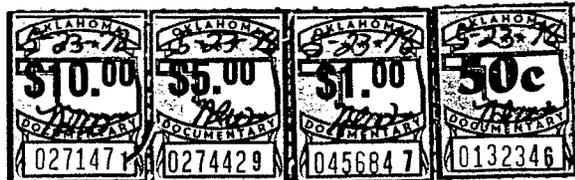
ACKNOWLEDGMENT

STATE OF OKLAHOMA)
) SS.
COUNTY OF KAY)

Before me, the undersigned, a Notary Public, in and for the said County and State, on this 19 day of May, 1978, personally appeared Neil R. Martin, President of Kay Holding Company, to me known to be the identical person whose name is subscribed to the above and foregoing Warranty Deed as President of Kay Holding Company, and who acknowledged to me that he executed the same as the act and deed of the Kay Holding Company for the purposes and considerations therein expressed and in the capacity therein stated.

Phyllis M. Keen
NOTARY PUBLIC

My Commission Expires:



SECURITY ABSTRACT CO.
PO BOX 409
NEWKIRK, OK. 74647

WARRANTY DEED

04280

Recorded _____ at _____
Reception No. 78 MAY 23 PM 1 29 Norma Lee Cook, Kay County Clerk

Know All Men By These Presents:

THAT City of Tonkawa, a municipal corporation of Kay County, State of Oklahoma, party of the first part, in consideration of the sum of One and 00/100 Dollars (\$1.00) and other good and valuable consideration in hand paid, the receipt of which is hereby acknowledged, does hereby Grant, Bargain, Sell and Convey unto the State of Oklahoma as Trustee for the Oklahoma National Guard of the State of Oklahoma, party of the Second part, the following described real property and premises, situate in Kay County, State of Oklahoma, to-wit:

All of Lots 14, 15, 16, 17, 18, and 19, all in Block 5, Carrousel North Second Addition to the City of Tonkawa, Kay County, Oklahoma, according to the recorded plat thereof; and the following described tract of unplatted land. Commencing at the NW corner of Section 33, T26N, R1W, I.M., Kay County, Oklahoma; thence S89°35'11"E and along the North line of said Section 33 for a distance of 664.26 feet to the NW corner of the E 1/2 NW 1/4 NW 1/4 of said Section 33, thence S0°09'26"E along the West line of said E 1/2 NW 1/4 NW 1/4 for a distance of 547.95 feet to the SW corner of Lot 19, Block 5, of the platted Carrousel North Second Addition to the City of Tonkawa, Oklahoma and the point of beginning; thence S99°53'05"E for a distance of 43.05 feet, thence N78°48'19"E for a distance of 178.47 feet, thence S89°53'05"E for a distance of 76.25 feet, thence S0°06'55"W for a distance of 16.00 feet, thence S89°53'05"E for a distance of 42.61 feet, thence S0°09'26"E for a distance of 792.88 feet, thence N89°35'05"W along the South line of said E 1/2 NW 1/4 NW 1/4 for a distance of 337.02 feet to the SW corner of said E 1/2 NW 1/4 NW 1/4, thence N0°09'26"W along the West line of said E 1/2 NW 1/4 NW 1/4 a distance of 772.12 feet to the point of beginning. Said tracts containing 7.50 acres more or less,

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

Except that if an armory is not built on said premises within five (5) years from the date hereof, then all of said premises shall revert to the Grantor upon all consideration paid therefore being returned to Grantee; and

All utilities must be underground.

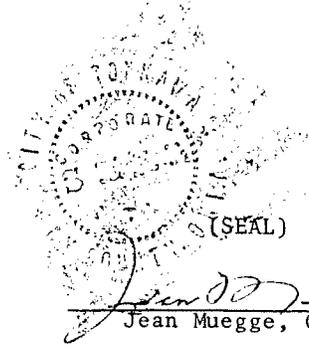
To have and to hold said described premises unto the said party of the second part, it's heirs and assigns forever, free, clear and discharged of and from all former grants, charges, taxes, judgments, mortgages and other liens and encumbrances of whatsoever nature, except reservations of record.

Signed and delivered this 19th day of May, 1978.

CITY OF TONKAWA

by: *Ronnie Blubaugh*
Ronnie Blubaugh, Mayor

No stamps required-Bonus Less
Than \$101 Title 68, O.S. 1971
Section 5101-A


(SEAL)
Jean Muegge
Jean Muegge, City Clerk

ACKNOWLEDGMENT

STATE OF OKLAHOMA)
) SS.
COUNTY OF KAY)

Before me, the undersigned, a Notary Public, in and for the said County and State, on this 19th day of May, 1978, personally appeared Ronnie Blubaugh, Mayor of the City of Tonkawa, to me known to be the identical person whose name is subscribed to the above and foregoing Warranty Deed as Mayor of the City of Tonkawa, and who acknowledged to me that he executed the same as the act and deed of said City, for the purposes and considerations therein expressed and in the capacity therein stated.

[Signature]
NOTARY PUBLIC


My Commission Expires:
10/21/1980

6-6

LD 114-OK

011566

ARKANSAS LOUISIANA GAS COMPANY

47526

RECORDED
STATE OF OKLAHOMA
'83 DEC 27 PM 12 11

FOR AND IN CONSIDERATION of the sum of One or more Dollars,

to us in hand paid, receipt of which is hereby acknowledged, United States Army COUNTY

Handwritten signature

do hereby grant to the Arkansas Louisiana Gas Company, its successors, or assigns, the right of way to lay, maintain, alter, repair, operate and remove pipe lines for the transportation of oil or gas, or products of oil or gas, and erect, maintain and operate telegraph and telephone lines, and to construct Meter Houses and other Appurtenances if the same shall be found necessary on, over and through certain lands situated in County of Kay, State of OKLAHOMA, described as follows:

A Twenty (20) foot utility easement across the South property of lots 14,15,16,17,18 and 19, Blk 5 of the Carrousel North 2nd addition in T26N R17W Sec 33, Tonkawa, Okla. Further described as the South 20' (FT) of lots 14,15,16,17,18, & 19. (20FT. of each lot.)

with ingress and egress to and from the same. The said grantor, heirs or assigns, to fully use and enjoy the said premises except for the purposes hereinbefore granted to the said grantee, who hereby agrees to pay any damages which may arise to crops, timber and fences from laying, maintaining and operating said lines, said damage if not mutually agreed upon, to be ascertained and determined by three disinterested persons, one thereof to be appointed by the said grantor, heirs or assigns, one by said grantee, successors or assigns, and the third by the two so appointed as aforesaid, and the award of three such persons shall be final and conclusive. Should more than one pipe line be laid under this grant at any time the same consideration shall be paid for each line so laid as was paid for the first line laid.

IN WITNESS WHEREOF, The parties hereto have set their hands and seals, this 6 day of November A. D., 1983

Major Robert M. Morgan
Major General Robert M. Morgan (Seal)

WHEN RECORDED RETURN TO
ARKANSAS LOUISIANA GAS COMPANY
P. O. Box 21734
Shreveport, Louisiana 71151
ALBERT A. WALKER, JR.

BOOK 444 PAGE 220

Tonkawa Dist.

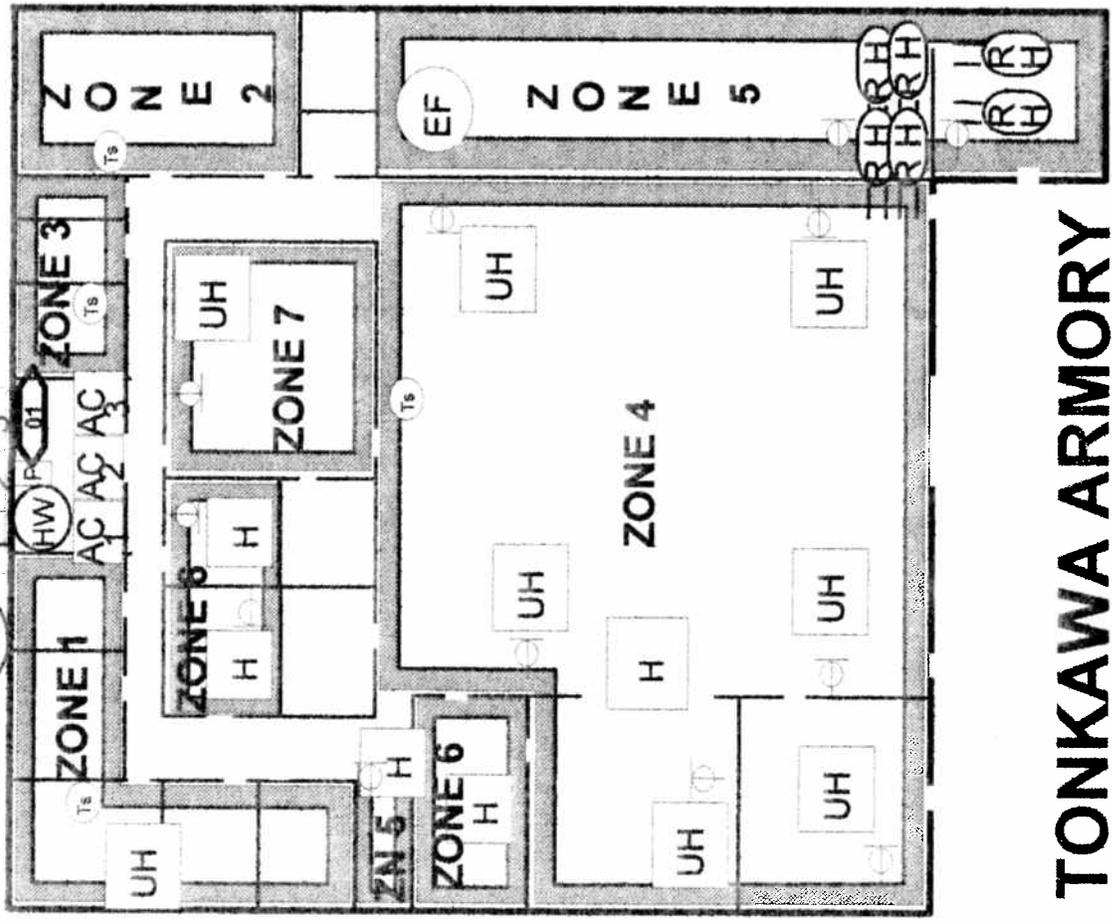
-  EXISTING THERMISTAT
-  TEMPERATURE SENSOR
-  ADDRESS CONTROL UNIT WITH ADDRESS
-  SPLIT SYSTEM
-  ROOF TOP UNIT
-  UNIT HEATER
-  OUTSIDE AIR TEMP
-  WALL/CEILING UNIT WALL UNIT
-  ELECTRICAL PANEL
-  PHONE PANEL/SW
-  HEATER
-  RADIANT HEATER
-  DOMESTIC WATER HEATER
-  BOILER
-  EXHAUST DAMPER
-  FRESH AIR DAMPER
-  FRESH AIR DAMPER
-  EXHAUST FAN
-  INOPERATIVE
-  *

REV	BY & DATE	APPROVED

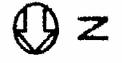
STATE OF OKLAHOMA
MILITARY DEPARTMENT

TONKAWA ARMORY
MECHANICAL EQUIPMENT LOCATIONS

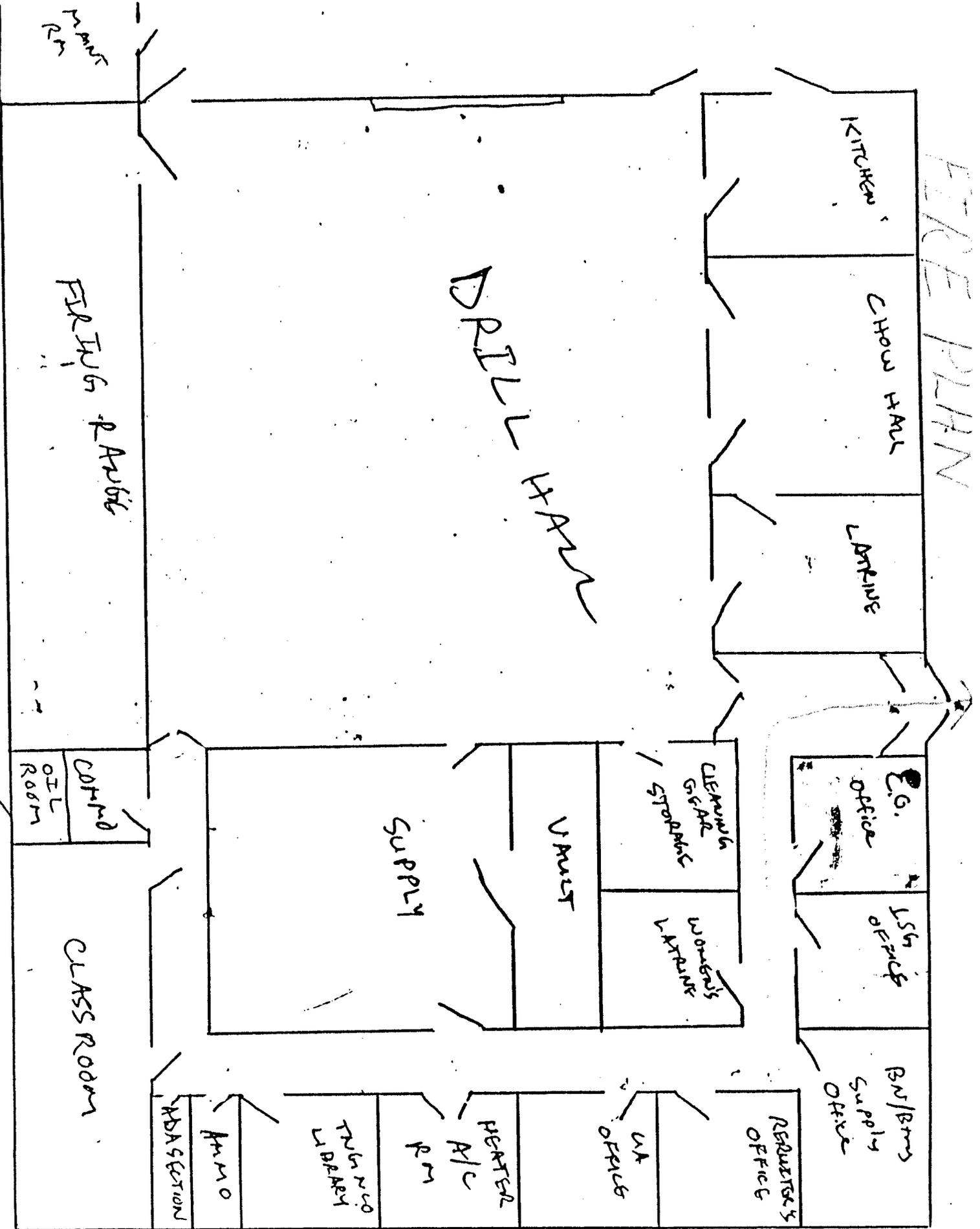
PROJECT: 254003
DRAWING: TON-1 REV. 1.0



TONKAWA ARMORY



FLOOR PLAN



NOTE: NOT TO SCALE

FILTER PACK INFORMATION

Filter Pack Material:

WELL SEAL INFORMATION

Type of Surface Seal n/a

Surface Seal Interval: From n/a ft to n/a ft

Type of Annular Seal n/a

Annular Seal Interval: From n/a ft to n/a ft

Filter Pack Seal Material n/a

Filter Pack Seal Interval: From n/a ft to n/a ft

TYPE OF COMPLETION:

HYDROLOGIC INFORMATION

Depth to water at time of drilling ft

Estimated yield of well 30 gpm

First water zone 11 ft

LITHOLOGY DESCRIPTION

MATERIAL	ENCOUNTERED		SATURATED
	FROM (ft.)	TO (ft.)	
no lithological description obtained			

WELL LOCATION TO POTENTIAL SOURCES OF POLLUTION

Has this well been disinfected after completion of work? n/a

Are there any potential sources of pollution or wastewater lagoons within 300 ft. of the well? n/a

Distance of Well is n/a from possible source. Type of possible source: n/a

PLUGGING INFORMATION

Date Well or Boring Was Plugged n/a

Total Depth of well being plugged ft.

Was the well contaminated or was it plugged as though it was contaminated? n/a

If the well or boring was plugged as if it was contaminated, was the casing removed or perforated? n/a

Was the grout tremied? n/a

Backfilled with n/a

Backfilled from ft. to ft.

Grouted with n/a

Grouted from ft. to ft.

Grouted with Cement

Grouted from ft. to ft.

Firm Name Robinson Water Well

D/PC No. DPC-0167

Operator Name

OP No.

Date n/a

Comments: n/a



MULTI-PURPOSE WELL COMPLETION & PLUGGING REPORT

Oklahoma Water Resources Board
3800 North Classen Boulevard
Oklahoma City, OK 73118
Telephone (405) 530-8800

Legal Location
North

Grid table for legal location with 'X' in the top-left corner.

WELL ID NUMBER: 32469

Quarters NW-NW-NW Section 33 Township 26N Range 01W1

Latitude 36.694552 Longitude -97.317604
Date collected(latitude and longitude), if different from date the well was drilled: 01/08/1998
Method latitude and longitude was collected: Interpolation from PLSS

One Mile
Each square is 10-acres

County Kay

Variance Request No. (if applicable) n/a

WELL OWNER - NAME AND ADDRESS

Well Owner Neil Martin
Address/City/State 206 N. Barnes Tonkawa OK
Finding Location 1/2 mi W of N. Main on Thunderbird Rd
Well Name

Phone
Zip 74653

Water Rights #:

TYPE OF WORK: Groundwater Well

USE OF WELL: Domestic

NEW WELL CONSTRUCTION DATA

Date Well or Boring Was Completed 07/27/1994
Number of wells or borings represented by this log 1
* (Borings are within the same 10 acre-tract and with the same general depths and lithologies)
Hole Diameter 8 inches to a depth of 31 ft.

CASING INFORMATION *Note: If surface casing is used please indicate that on the appropriate well casing information line.

Surface Pipe Material: Surface Pipe Diameter inches Surface Pipe From ft to ft

SCREEN OR PERFORATION INFORMATION

FILTER PACK INFORMATION

Filter Pack Material: Fine Gravel

Filter Pack Interval: From 10 ft to 31

WELL SEAL INFORMATION

Type of Surface Seal Cement Grout

Surface Seal Interval: From 0 ft to 10 ft

Type of Annular Seal n/a

Annular Seal Interval: From n/a ft to n/a ft

Filter Pack Seal Material n/a

Filter Pack Seal Interval: From n/a ft to n/a ft

TYPE OF COMPLETION: Above Ground

HYDROLOGIC INFORMATION

Depth to water at time of drilling 17 ft

Estimated yield of well 40 gpm

First water zone 17 ft

LITHOLOGY DESCRIPTION

MATERIAL	ENCOUNTERED		SATURATED
	FROM (ft.)	TO (ft.)	
dark brown clay	0	3	N
brown clay	3	11	N
gray brown clay	11	15	N
sandy gray yellow clay	15	17	Y
fine sand	17	22	N
sand gravel	22	30	N
shale	30	31	N

WELL LOCATION TO POTENTIAL SOURCES OF POLLUTION

Has this well been disinfected after completion of work? n/a

Are there any potential sources of pollution or wastewater lagoons within 300 ft. of the well? n/a

Distance of Well is n/a from possible source. Type of possible source: n/a

PLUGGING INFORMATION

Date Well or Boring Was Plugged n/a

Total Depth of well being plugged ft.

Was the well contaminated or was it plugged as though it was contaminated? n/a

If the well or boring was plugged as if it was contaminated, was the casing removed or perforated? n/a

Was the grout tremied? n/a

Backfilled with n/a

Backfilled from ft. to ft.

Grouted with n/a

Grouted from ft. to ft.

Grouted with Cement

Grouted from ft. to ft.

Firm Name Bruce Robinson

D/PC No. DPC-0167

Operator Name BRUCE ROBINSON

OP No. OP-0264

Date n/a

Comments: n/a

FILTER PACK INFORMATION

Filter Pack Material:

WELL SEAL INFORMATION

Type of Surface Seal n/a

Surface Seal Interval: From n/a ft to n/a ft

Type of Annular Seal n/a

Annular Seal Interval: From n/a ft to n/a ft

Filter Pack Seal Material n/a

Filter Pack Seal Interval: From n/a ft to n/a ft

TYPE OF COMPLETION:

HYDROLOGIC INFORMATION

Depth to water at time of drilling ft

Estimated yield of well 30 gpm

First water zone 18 ft

LITHOLOGY DESCRIPTION

MATERIAL	ENCOUNTERED		SATURATED
	FROM (ft.)	TO (ft.)	
no lithological description obtained			

WELL LOCATION TO POTENTIAL SOURCES OF POLLUTION

Has this well been disinfected after completion of work? n/a

Are there any potential sources of pollution or wastewater lagoons within 300 ft. of the well? n/a

Distance of Well is n/a from possible source. Type of possible source: n/a

PLUGGING INFORMATION

Date Well or Boring Was Plugged n/a

Total Depth of well being plugged ft.

Was the well contaminated or was it plugged as though it was contaminated? n/a

If the well or boring was plugged as if it was contaminated, was the casing removed or perforated? n/a

Was the grout tremied? n/a

Backfilled with n/a

Backfilled from ft. to ft.

Grouted with n/a

Grouted from ft. to ft.

Grouted with Cement

Grouted from ft. to ft.

Firm Name Robinson Water Well

D/PC No. DPC-0167

Operator Name

OP No.

Date n/a

Comments: n/a

FILTER PACK INFORMATION

Filter Pack Material:

WELL SEAL INFORMATION

Type of Surface Seal n/a

Surface Seal Interval: From n/a ft to n/a ft

Type of Annular Seal n/a

Annular Seal Interval: From n/a ft to n/a ft

Filter Pack Seal Material n/a

Filter Pack Seal Interval: From n/a ft to n/a ft

TYPE OF COMPLETION:

HYDROLOGIC INFORMATION

Depth to water at time of drilling ft

Estimated yield of well 10 gpm

First water zone 17 ft

LITHOLOGY DESCRIPTION

MATERIAL	ENCOUNTERED		SATURATED
	FROM (ft.)	TO (ft.)	
no lithological description obtained			

WELL LOCATION TO POTENTIAL SOURCES OF POLLUTION

Has this well been disinfected after completion of work? n/a

Are there any potential sources of pollution or wastewater lagoons within 300 ft. of the well? n/a

Distance of Well is n/a from possible source. Type of possible source: n/a

PLUGGING INFORMATION

Date Well or Boring Was Plugged n/a

Total Depth of well being plugged ft.

Was the well contaminated or was it plugged as though it was contaminated? n/a

If the well or boring was plugged as if it was contaminated, was the casing removed or perforated? n/a

Was the grout tremied? n/a

Backfilled with n/a

Backfilled from ft. to ft.

Grouted with n/a

Grouted from ft. to ft.

Grouted with Cement

Grouted from ft. to ft.

Firm Name Robinson Water Well

D/PC No. DPC-0167

Operator Name

OP No.

Date n/a

Comments: n/a



MULTI-PURPOSE WELL COMPLETION & PLUGGING REPORT

Oklahoma Water Resources Board
3800 North Classen Boulevard
Oklahoma City, OK 73118
Telephone (405) 530-8800

Legal Location
North

	X						

WELL ID NUMBER: 14998

Quarters NE-NW-NW Section 33 Township 26N Range 01W1

Latitude <u>36.694552</u>	Longitude <u>-97.31535</u>
Date collected(latitude and longitude), if different from date the well was drilled: <u>01/08/1998</u>	
Method latitude and longitude was collected: <u>Interpolation from PLSS</u>	

«———— One Mile —————»
Each square is 10-acres

County Kay

Variance Request No. (if applicable) n/a

WELL OWNER - NAME AND ADDRESS

Well Owner Bill Leatherman
Address/City/State 105 Wheatheart Drive. Tonkawa OK
Finding Location _____
Well Name _____

Phone _____
Zip 74653

Water Rights #: _____

TYPE OF WORK: Groundwater Well

USE OF WELL: Domestic

NEW WELL CONSTRUCTION DATA

Date Well or Boring Was Completed 09/17/1984
Number of wells or borings represented by this log 1
* (Borings are within the same 10 acre-tract and with the same general depths and lithologies)
Hole Diameter 8 inches to a depth of 35 ft.

CASING INFORMATION *Note: If surface casing is used please indicate that on the appropriate well casing information line.

Surface Pipe Material: Surface Pipe Diameter inches Surface Pipe From ft to ft
l) Well Casing Material PVC Casing Diameter 5.135 inches Casing From ft to 35 ft

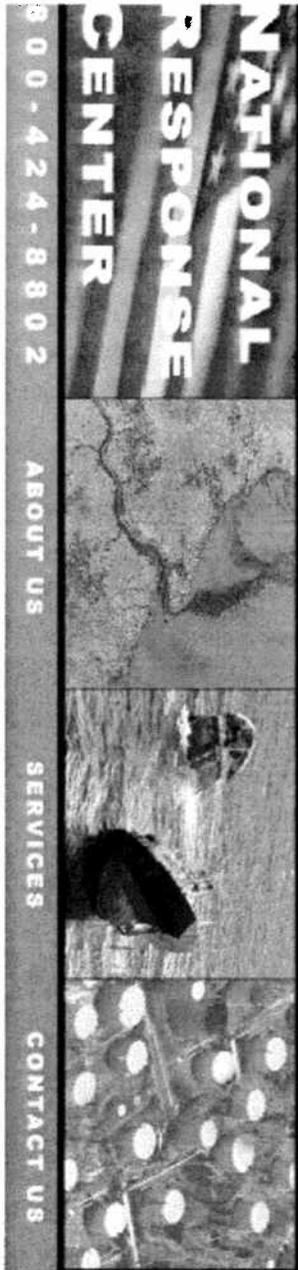
SCREEN OR PERFORATION INFORMATION

Type of Screen: PVC Type of Slots or Openings: Hand Slotted From 30 ft to 34 ft.

FILTER PACK INFORMATIONFilter Pack Material: **WELL SEAL INFORMATION**Type of Surface Seal Cement GroutSurface Seal Interval: From n/a ft to 10 ftType of Annular Seal n/aAnnular Seal Interval: From n/a ft to n/a ftFilter Pack Seal Material n/aFilter Pack Seal Interval: From n/a ft to n/a ftTYPE OF COMPLETION: **HYDROLOGIC INFORMATION**Depth to water at time of drilling ftEstimated yield of well 20 gpmFirst water zone 22 ft**LITHOLOGY DESCRIPTION**

MATERIAL	ENCOUNTERED		SATURATED
	FROM (ft.)	TO (ft.)	
top soil	0	3	N
brown clay	3	12	N
sandy gray	12	25	N
brown clay	25	30	N
sand & gravel	30	34	N
red shale	34	35	N

WELL LOCATION TO POTENTIAL SOURCES OF POLLUTIONHas this well been disinfected after completion of work? n/aAre there any potential sources of pollution or wastewater lagoons within 300 ft. of the well? n/aDistance of Well is n/a from possible source. Type of possible source: n/a**PLUGGING INFORMATION**Date Well or Boring Was Plugged n/aTotal Depth of well being plugged ft.Was the well contaminated or was it plugged as though it was contaminated? n/aIf the well or boring was plugged as if it was contaminated, was the casing removed or perforated? n/aWas the grout tremied? n/aBackfilled with n/aBackfilled from ft. to ft.Grouted with n/aGrouted from ft. to ft.Grouted with CementGrouted from ft. to ft.Firm Name ROBINSOND/PC No. Operator Name OP No. Date n/aComments: n/a



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QUERY RESULTS

New Report	Materials Page	NRC Report #	Type of Call	Date/Time Received	Description Of Incident	Type Of Incident	Incident Cause	Incident Date/Time	Location	State	Nearest C
View	Materials	97551	INCIDENT	26-NOV-1991 10:21	HWY TRUCK WAS REAR ENDED RELEASING MATERIAL	MOBILE	OPERATOR ERROR	26-NOV-1991 03:30	HWY 35	OK	TONKAW
View	Materials	214358	INCIDENT	28-DEC-1993 14:43	GATHERING SYSTEM/ CALLER BELIEVES CORROSION IS THE CAUSE	FIXED	EQUIPMENT FAILURE	28-DEC-1993 11:45	CORNER OF PUBLIC AND RIVERIA STREETS	OK	TONKAW
View	Materials	466389	INCIDENT	04-DEC-1998 15:44	2IN ABOVE GROUND DISTRIBUTION GAS LINE (DOT REGULATED)/AUTOMOBILE RANOVER PIPE CAUSING BREAK AND SUBSEQUENT RELEASE	PIPELINE	OPERATOR ERROR	03-DEC-1998 21:30	314 NORTH MAIN	OK	TONKAW
View	Materials	623933	INCIDENT	25-SEP-2002 16:22	THE CALLER IS REPORTING A HOUSE EXPLOSION. NATURAL GAS CAN NOT BE RULED OUT AS THE CAUSE.	PIPELINE	EXPLOSION	25-SEP-2002 14:50	314 NORTH MAIN	OK	TONKAW
				17-FEB-2009	CALLER REPORTED THEY HAD A TWO INCH FLOW LINE DEVELOP A PIN HOLE	STORAGE	EQUIPMENT	16-FEB-2009	CAUGHLIN A AND B		



897697

INCIDENT

10:00

LEAK BETWEEN A PUMP AND A TANK THAT CAUSED A SPILL INTO WATER.

TANK

FAILURE

11:00

TANK FARM

OK

TONKAW

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1 - 5

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Superfund Site Information

TONKAWA LANDFILL

Site Information

[Site Info](#) | [Aliases](#) | [Operable Units](#) | [Contacts](#)
[Actions](#) | [Contaminants](#) | [Site-Specific Documents](#)**Site Name:** TONKAWA LANDFILL**Street:** APPROX. 1-1/2 MILES SOUTH OF HWY 77**City / State / ZIP:** TONKAWA, OK 74653**NPL Status:** Not on the NPL**Non-NPL Status:** NFRAP**EPA ID:** OK0000605298**EPA Region:** 06**County:** KAY**Federal Facility Flag:** Not a Federal Facility[Return to Search Results](#)[Return to Search Superfund Site Information](#)

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- Superfund Site Information
- Site Documents
- Data Element Dictionary (DED)
- Order Superfund Products

Superfund Site Information

TONKAWA-3 SANDS

Actions

[Site Info](#) | [Aliases](#) | [Operable Units](#) | [Contacts](#)
[Actions](#) | [Contaminants](#) | [Site-Specific Documents](#)

OU	Action Name	Qualifier	Lead	Actual Start	Actual Completion
00	DISCOVERY		TR		09/19/1996
00	ARCHIVE SITE		EP		04/09/1998
00	PRELIMINARY ASSESSMENT	N	TR	08/22/1997	04/15/1998

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> [Search Results](#) > DEEM'S SALVAGE

Superfund Site Information

DEEM'S SALVAGE

Site Information

[Site Info](#) | [Aliases](#) | [Operable Units](#) | [Contacts](#)
[Actions](#) | [Contaminants](#) | [Site-Specific Documents](#)

This site has been archived from the inventory of active sites.

Site Name: DEEM'S SALVAGE

Street: 6MI.W & 2MI. N OF 601177 JCT.

City / State / ZIP: TONKAWA, OK 74653

NPL Status: Not on the NPL

Non-NPL Status: NFRAP

EPA ID: OKD987083771

EPA Region: 06

County: KAY

Federal Facility Flag: Not a Federal Facility

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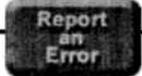
&program_search=1&report=1&page_no=1&output_format_switch=TRUE&database_type=RCRAINFO

Resource Conservation and Recovery Act (RCRAInfo)

You are here: [EPA Home](#) | [Envirofacts](#) | [RCRAInfo](#) | Query Results



Query Results



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Consolidated facility information (from multiple EPA systems) was searched to select facilities

City Name: tonkawa
County Name: kay
State Abbreviation: ok
EPA Region Code: 06

Results are based on data extracted on NOV-14-2008

Note: Click on the underlined CORPORATE LINK value for links to that company's environmental web pages.
 Click on the underlined MAPPING INFO value to obtain mapping information for the facility.

[Go To Bottom Of The Page](#)

<u>HANDLER NAME:</u>	CHILCOAT NURSING CENTER INC	<u>HANDLER ID:</u>	OKD085541324
<u>STREET:</u>	1300 N 5TH ST	<u>FACILITY INFORMATION:</u>	View Facility Information
<u>CITY:</u>	TONKAWA	<u>CORPORATE LINK:</u>	No
<u>STATE:</u>	OK	<u>COUNTY:</u>	KAY
<u>ZIP CODE:</u>	74653	<u>MAPPING INFO:</u>	MAP
<u>EPA REGION:</u>	6		

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
CECIL CHILCOAT	1300 N 5TH ST	TONKAWA	OK	74653	5806282529	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
62311	Nursing Care Facilities

HANDLER NAME: CHURCHILL TRUCK LINES INC **HANDLER ID:** OKD987087079
STREET: .5M S OF HWY 60 **FACILITY INFORMATION:** [View Facility Information](#)
CITY: TONKAWA **CORPORATE LINK:** No
STATE: OK **COUNTY:** KAY
ZIP CODE: 74653 **MAPPING INFO:** [MAP](#)
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
DAVID EDWARDS	PO BOX 212	TONKAWA	OK	74653	8166461590	Public

No NAICS Codes are available for the facility listed above.

HANDLER NAME: CONOCO PHILLIPS PIPELINE CO OGG STATION **HANDLER ID:** OKR000019620
STREET: 9 MI S TONKAWA SR77 1MI RT 2.5 **FACILITY INFORMATION:** [View Facility Information](#)
CITY: TONKAWA **CORPORATE LINK:** No
STATE: OK **COUNTY:** KAY
ZIP CODE: 74653 **MAPPING INFO:** [MAP](#)
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
LEVI POE	S PINE	PONCA CITY	OK	74602	5807676967	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
48611	Pipeline Transportation of Crude Oil

HANDLER NAME: FINA #9455 HANDLER ID: OKD987096864
STREET: I-35 & FOUNTAIN RD FACILITY INFORMATION: [View Facility Information](#)
CITY: TONKAWA CORPORATE LINK: No
STATE: OK COUNTY: KAY
ZIP CODE: 74653 MAPPING INFO: [MAP](#)
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
DANNY KITE	PO BOX 2159	DALLAS	TX	75221	2147502374	Public

No NAICS Codes are available for the facility listed above.

HANDLER NAME: GARYS PAINT & BODY HANDLER ID: OKD987094448
STREET: 213 S MAIN FACILITY INFORMATION: [View Facility Information](#)
CITY: TONKAWA CORPORATE LINK: No
STATE: OK COUNTY: KAY
ZIP CODE: 746534 MAPPING INFO: [MAP](#)
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
GARY FRUITS	PO BOX 112	TONKAWA	OK	74653	5806285114	Public

No NAICS Codes are available for the facility listed above.

HANDLER NAME: STRETCH N BENDS AUTO BODY **HANDLER ID:** OKR000016360
STREET: 305 THUNDERBIRD **FACILITY INFORMATION:** [View Facility Information](#)
CITY: TONKAWA **CORPORATE LINK:** No
STATE: OK **COUNTY:** KAY
ZIP CODE: 74653 **MAPPING INFO:** [MAP](#)
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
JERRY DANIEL	305 THUNDERBIRD	TONKAWA	OK	74653	5806282331	Public

No NAICS Codes are available for the facility listed above.

HANDLER NAME: SUN GAS CO TONKAWA GAS PROD PLT 915128 **HANDLER ID:** OKD000741595
STREET: PO BOX 484 SE OF CITY ON HY77 **FACILITY INFORMATION:** [View Facility Information](#)
CITY: TONKAWA **CORPORATE LINK:** No
STATE: OK **COUNTY:** KAY
ZIP CODE: 74653 **MAPPING INFO:** [MAP](#)
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
HK KELLER	2525 NW EXPRESSWAY	OKLAHOMA CITY	OK	73112	4058439711	Public

No NAICS Codes are available for the facility listed above.

HANDLER NAME: SUN OIL CO SCHOOL LAND #22 HANDLER ID: OKD000732412
STREET: 3M S & 6M W OF FACILITY INFORMATION: [View Facility Information](#)
CITY: TONKAWA CORPORATE LINK: No
STATE: OK COUNTY: KAY
ZIP CODE: 74653 MAPPING INFO: [MAP](#)
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
GM EUBANKS	PO BOX 3800	TULSA	OK	74102	9184967384	Public

No NAICS Codes are available for the facility listed above.

HANDLER NAME: SUN OIL CO THOMAS MISSISSIPPI CHAT UNI HANDLER ID: OKD000732487
STREET: 1M S & 6M W OF FACILITY INFORMATION: [View Facility Information](#)
CITY: TONKAWA CORPORATE LINK: No
STATE: OK COUNTY: KAY
ZIP CODE: 74653 MAPPING INFO: [MAP](#)
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
GM EUBANKS	PO BOX 3800	TULSA	OK	74102	9184967384	Public

No NAICS Codes are available for the facility listed above.

HANDLER TOTAL PIPELINE CORP AUTWINE HANDLER ID: OKD000764753

NAME: STATION
STREET: 1M N & 5M E OF TOWN
CITY: TONKAWA
STATE: OK
ZIP CODE: 74653
EPA REGION: 6

FACILITY INFORMATION:
CORPORATE LINK: No
COUNTY: KAY
MAPPING INFO: [MAP](#)

[View Facility Information](#)

CONTACT INFORMATION

<u>NAME</u>	<u>STREET</u>	<u>CITY</u>	<u>STATE</u>	<u>ZIP CODE</u>	<u>PHONE</u>	<u>TYPE OF CONTACT</u>
LEDEKER ROBIN	PO BOX 857	ARKANSAS CITY	KS	67005	3164425100	Public

No NAICS Codes are available for the facility listed above.

HANDLER NAME: TOTAL PIPELINE CORP
 DILWORTH STATION
STREET: 3M W 2M N
CITY: TONKAWA
STATE: OK
ZIP CODE: 74653
EPA REGION: 6

HANDLER ID: OKD000764704
FACILITY INFORMATION:
CORPORATE LINK: No
COUNTY: KAY
MAPPING INFO: [MAP](#)

[View Facility Information](#)

CONTACT INFORMATION

<u>NAME</u>	<u>STREET</u>	<u>CITY</u>	<u>STATE</u>	<u>ZIP CODE</u>	<u>PHONE</u>	<u>TYPE OF CONTACT</u>
LEDEKER ROBIN	PO BOX 857	ARKANSAS CITY	KS	67005	3164425100	Public

No NAICS Codes are available for the facility listed above.

HANDLER NAME: TOTAL PIPELINE CORP OGG STATION HANDLER ID: OKD000764514
STREET: SECT. 35 T25 R1W WEST OF FACILITY INFORMATION: [View Facility Information](#)
CITY: TONKAWA CORPORATE LINK: No
STATE: OK COUNTY: KAY
ZIP CODE: 74653 MAPPING INFO: [MAP](#)
EPA REGION: 6

CONTACT INFORMATION

<u>NAME</u>	<u>STREET</u>	<u>CITY</u>	<u>STATE</u>	<u>ZIP CODE</u>	<u>PHONE</u>	<u>TYPE OF CONTACT</u>
LEDEKER ROBIN	PO BOX 857	ARKANSAS CITY	KS	67005	3164425100	Public

No NAICS Codes are available for the facility listed above.

HANDLER NAME: TOTAL PIPELINE CORP SEE STATION HANDLER ID: OKD000764555
STREET: 8M S OF TONKAWA FACILITY INFORMATION: [View Facility Information](#)
CITY: TONKAWA CORPORATE LINK: No
STATE: OK COUNTY: KAY
ZIP CODE: 74653 MAPPING INFO: [MAP](#)
EPA REGION: 6

CONTACT INFORMATION

<u>NAME</u>	<u>STREET</u>	<u>CITY</u>	<u>STATE</u>	<u>ZIP CODE</u>	<u>PHONE</u>	<u>TYPE OF CONTACT</u>
LEDEKER ROBIN	PO BOX 857	ARKANSAS CITY	KS	67005	3164425100	Public

No NAICS Codes are available for the facility listed above.

HANDLER NAME: TOTAL PIPELINE CORP
 TONKAWA STATION

HANDLER ID: OKD000764548

STREET: 3.5M S & 3M E OF TOWN

FACILITY INFORMATION: [View Facility Information](#)

CITY: TONKAWA

CORPORATE LINK: No

STATE: OK

COUNTY: KAY

ZIP CODE: 74653

MAPPING INFO: [MAP](#)

EPA REGION: 6

CONTACT INFORMATION

<u>NAME</u>	<u>STREET</u>	<u>CITY</u>	<u>STATE</u>	<u>ZIP CODE</u>	<u>PHONE</u>	<u>TYPE OF CONTACT</u>
LEDEKER ROBIN	PO BOX 857	ARKANSAS CITY	KS	67005	3164425100	Public

No NAICS Codes are available for the facility listed above.

HANDLER NAME: TRANSFORMER DISPOSAL
 SPECIALISTS

HANDLER ID: OKD987087020

STREET: 1500 N MAIN

FACILITY INFORMATION: [View Facility Information](#)

CITY: TONKAWA

CORPORATE LINK: No

STATE: OK

COUNTY: KAY

ZIP CODE: 74653

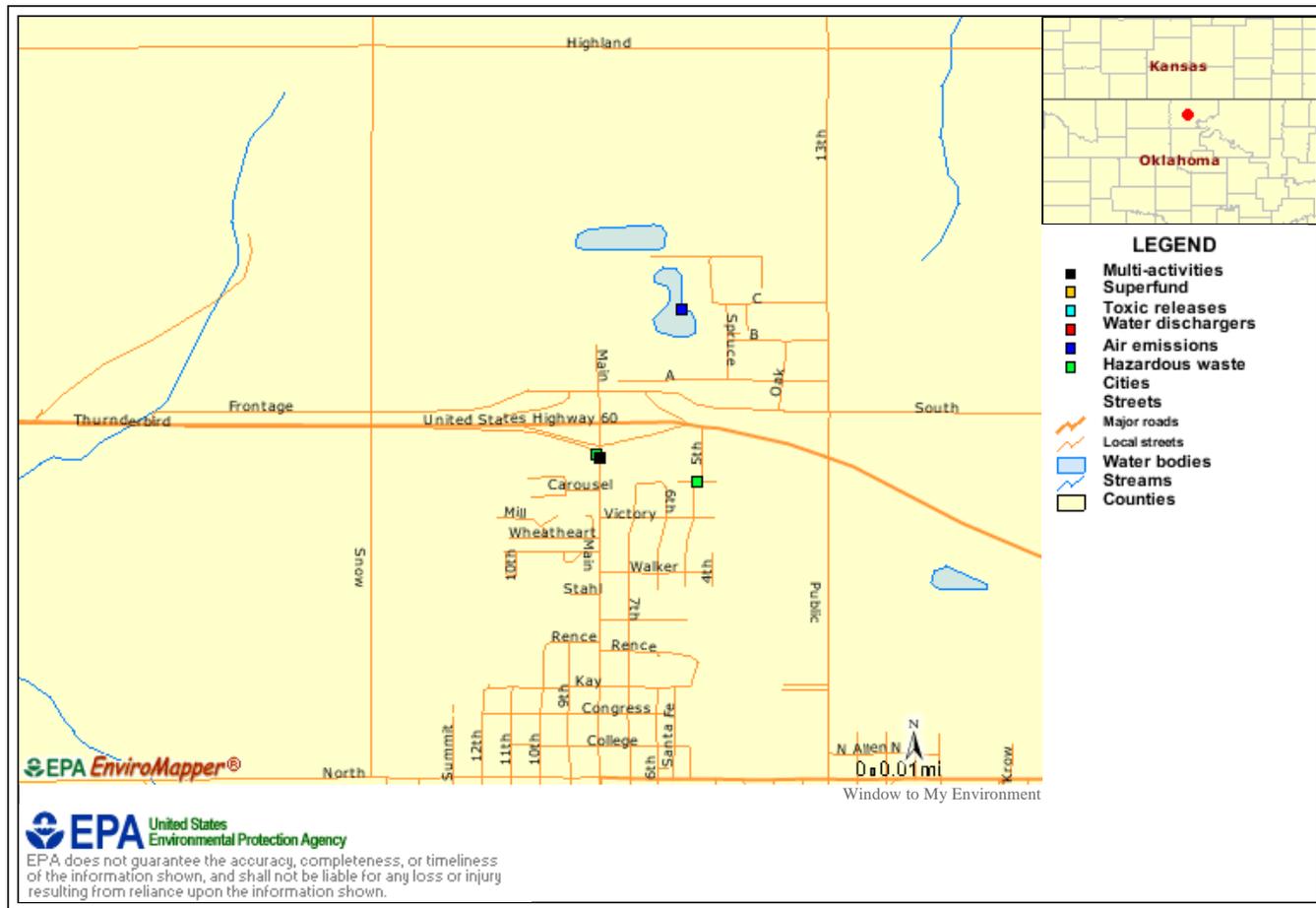
MAPPING INFO: [MAP](#)

EPA REGION: 6

CONTACT INFORMATION

<u>NAME</u>	<u>STREET</u>	<u>CITY</u>	<u>STATE</u>	<u>ZIP CODE</u>	<u>PHONE</u>	<u>TYPE OF CONTACT</u>
RODNEY TROWER	PO BOX 428	TONKAWA	OK	74653	5806282094	Public

No NAICS Codes are available for the facility listed above.



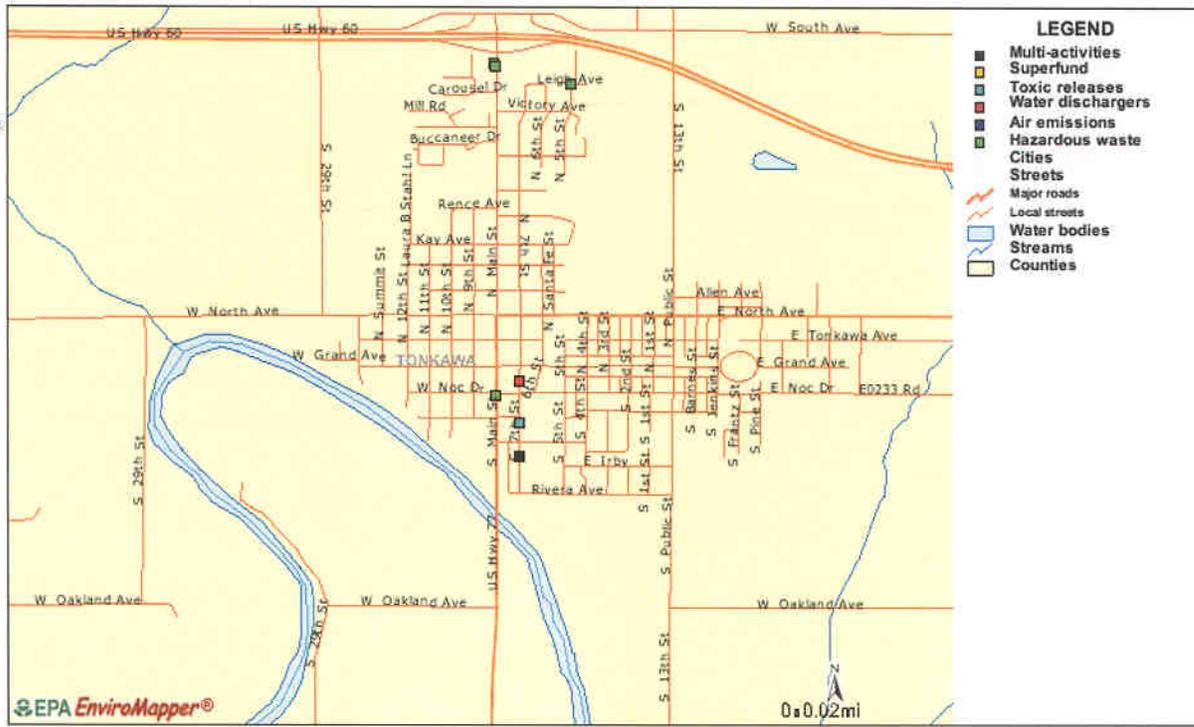
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Envirofacts Data Warehouse

Last updated on Thursday, February 19th, 2009.

You are here: [EPA Home](#) [Envirofacts](#) [Multisystem](#) [Query](#)



LIST OF EPA-REGULATED FACILITIES IN ENVIROFACTS

To see a report on a facility click on the underlined Facility Name. Click on the underlined "View Facility Information" link to view EPA Facility information for the facility.

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FACILITY NAME/ADDRESS	FACILITY INFORMATION	Permitted Discharges to Water?	Toxic Releases Reported?	Hazardous Waste Handler?	Active or Archived Superfund Report?	Air Releases Reported?
B & L FOUNDRY INC 316 S 7TH ST TONKAWA, OK 74653	View Facility Information	NO	YES	NO	NO	NO
CHILCOAT NURSING CENTER INC 1300 N 5TH ST TONKAWA, OK 74653	View Facility Information	NO	NO	YES	NO	NO
CITY OF TONKAWA 113 SOUTH 7TH STREET TONKAWA, OK 74653	View Facility Information	YES	NO	NO	NO	NO
GARYS PAINT & BODY 213 S MAIN TONKAWA, OK 746534	View Facility Information	NO	NO	YES	NO	NO
STRETCH N BENDS AUTO BODY 305 THUNDERBIRD	View Facility Information	NO	NO	YES	NO	NO

TONKAWA, OK 74653						
TONKAWA FOUNDRY INC. 510 S. 7TH ST. TONKAWA, OK 74653	View Facility Information	NO	YES	NO	NO	NO
TRANSFORMER DISPOSAL SPECIALISTS 1500 N MAIN TONKAWA, OK 74653	View Facility Information	NO	NO	YES	NO	NO

[Go To Top Of The Page](#)

Total Number of Facilities Displayed: 7



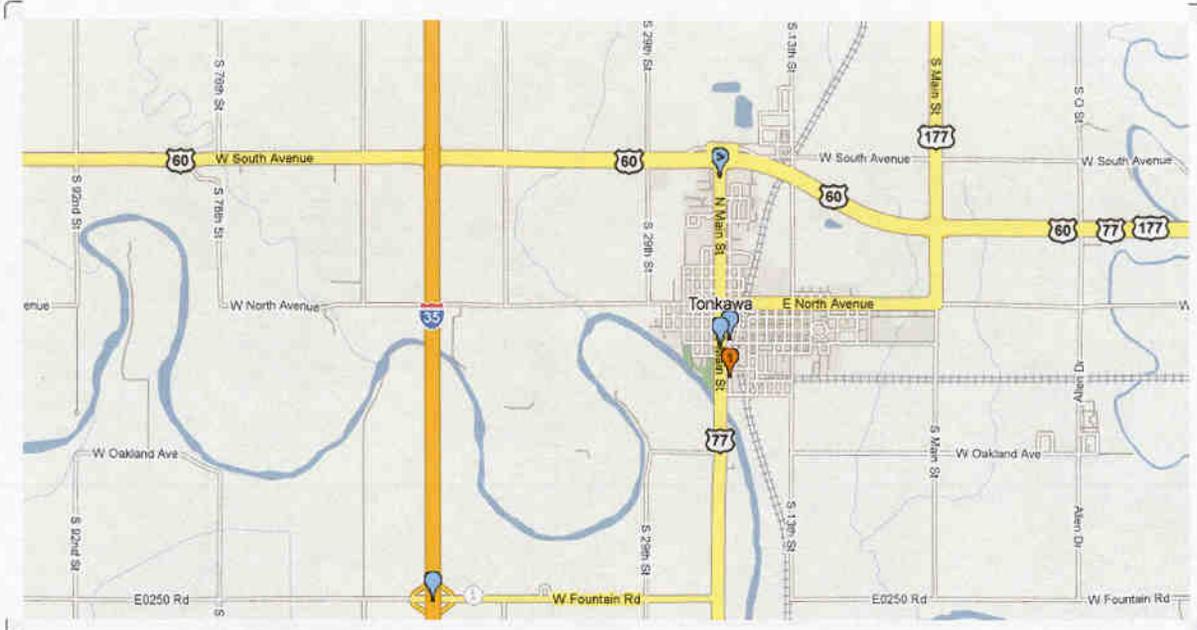
http://www.epa-echo.gov/cgi-bin/ideaotis.cgi?idea_database=MAPECHO_MM&map_file=id123557724122284.txt
 Last updated on Wednesday, February 25th, 2009.

Enforcement & Compliance History Online (ECHO)

You are here: [EPA Home](#) [Compliance and Enforcement](#) [ECHO](#) [Search Data](#) Search Results



Search Results
(Multimedia)



- No Current Violations
 - Unknown(AFS only)
 - Current Non Compliance
 - SNC/HPV
 - Major/TSD LQG
 - Non Major/Other
- 1,2,3,5 Inspected within x year(s) Never Inspected Last Inspected > 5years ago

Facility Information <i>Select Name to Read Report</i> <i>Select [Map Icon] to view map information</i>	Program ID#	Inspections (5 yrs)	Qtrs in Non Compliance (3 yrs)	Alleged Current Significant Violations	Informal Enforcement Actions/NOVs (5 yrs)	Formal Enforcement Actions (5 yrs)
CHURCHILL TRUCK LINES INC 5M S OF HWY 60 TONKAWA, OK 74653 FRS ID: 110007734559	RCR: OKD987087079			no		
CITY OF TONKAWA 113 SOUTH 7TH STREET TONKAWA, OK 74653 FRS ID: 110011009513	PCS: OK0021903		n/a	n/a		
CONOCO PHILLIPS PIPELINE CO OGG STATION 9 MI S TONKAWA SR77 1MI RT 2.5 TONKAWA, OK 74653 FRS ID: 110020478730	RCR: OKR000019620	1		no		
CONOCOPHILLIPS - TR/OGG STA ON HWY 77 S OF TONKAWA, OK 74653 FRS ID: 110012640865	AFS: 4007100034		n/a	n/a		
FINA #9456 I-35 & FOUNTAIN RD TONKAWA, OK 74653 FRS ID: 110007734979	RCR: OKD987096864			no		
GARYS PAINT & BODY 213 S MAIN TONKAWA, OK 74653 FRS ID: 110004765380	RCR: OKD987094448			no		
MUSTANG GAS PROD LL/TONKAWA STA 5 MI S, 4MI E OF TONKAWA TONKAWA, OK 74653 FRS ID: 110007385659	AFS: 4007100014	1	6	yes	1	
RANGE RESOURCES LLC/TONKAWA CMPSR STA 5 MILES S AND 1 MILE W OF TONKAWA, OK 74653 FRS ID: 110037601351	AFS: 4007100038			no		
TONKAWA CITY OF/TONKAWA CONVENIENCE 1 MI S ON HWY 177	AFS: 4007100025		n/a	n/a		

TONKAWA, OK 74653 FRS ID: 110007168484						
TONKAWA FOUNDRY INC. 510 S. 7TH ST. TONKAWA, OK 74653 FRS ID: 110000743651	AFS: 4007100007	t	n/a	n/a		
	TRI: 74653TNKWF510SO			no		
TRANSFORMER DISPOSAL SPECIALISTS 1500 N MAIN TONKAWA, OK 74653 FRS ID: 110004764461	AFS: 4007100018		n/a	n/a		
	RCR: OKD987087020			no		

Last updated on February 25th, 2009

RCRA Notifiers Listing

Report Date: March 30, 2009 8:25 AM

User Selection Criteria:

Activity Location: OKLAHOMA	EPA ID:
Facility Name:	
State District:	
County/Parish Code or Name:	
City:	Zip Code:
Address:	
Owner/Operator/Land Type:	
Generator Selection:	
Tranporter Selection:	
Operating TSDf Selection:	
North American Industry Classification System (NAICS) Code:	
Include Contact information: Yes	
Sort Selection: Sorted by County, City, Facility Name, EPA-ID	

Report Results:

Data meeting the criteria you selected follows.

Report Description:

This report provides information concerning RCRA facilities that have the Extract_Flag is set to "X".

Report Information:

Name: 06notifiers_list_v4.rdf
Developed by: US EPA Region 6, Dallas TX
Last Revised: May 2008
Contact: vo.huy@epa.gov

RCRA NOTIFIERS LISTING
 Source: USEPA RCRAInfo Database

State of: **OKLAHOMA**

EPA-ID	FACILITY NAME	LOCATION ADDRESS	CITY	ZIP	COUNTY/ PARISH	S E N	T R N	L O P N R D	R E C E I V E D D A T E
OKD000764738	TOTAL PIPELINE CORP BLACKWELL Contact: LEDEKER ROBIN	1.25M N ON HWY 11 Mailing Addr: PO BOX 857, ARKANSAS CITY, KS 67005	BLACKWELL	74631	KAY	6		00A	08/18/80
OKD000764522	TOTAL PIPELINE CORP VINCENT ST Contact: LEDEKER ROBIN	1M S 5M EAST OF TOWN Mailing Addr: PO BOX 857, ARKANSAS CITY, KS 67005	BLACKWELL	74631	KAY	6		00A	08/18/80
OKR000016006	WAL-MART STORE # 136 Contact: TERESA PRUITT	1219 W DOOLIN Mailing Addr: 1300 SE 8TH STREET, BENTONVILLE, AR 72716	BLACKWELL	74631	KAY	3		P P P	01/23/09
OKD000732230	SUN OIL CO CHILOCCO RED FORK S Contact: GM EUBANKS	.5M E & .5M N Mailing Addr: PO BOX 3800, TULSA, OK 74102	CHILOCCO	74647	KAY	6		00A	08/18/80
OKD000732248	SUN OIL CO CHILOCCO SCHOOL FUE Contact: GM EUBANKS	.5M E & .5M N Mailing Addr: PO BOX 3800, TULSA, OK 74102	CHILOCCO	74647	KAY	6		00A	08/18/80
OKD000732255	SUN OIL CO CHILOCCO-AMERADA WS Contact: GM EUBANKS	.5M E & .5M N Mailing Addr: PO BOX 3800, TULSA, OK 74102	CHILOCCO	74647	KAY	6		00A	08/18/80
OKD980598403	AMERICAN TEL & TEL CO LONG LIN Contact: DENNI CLEVELAND	4M E H-166 4M SE ON CITY Mailing Addr: 811 MAIN STREET ROOM 939, KANSAS CITY, MO 64141	HARDY	74641	KAY	6		P	04/15/81
OKD981057888	SOUTHWEST DISPOSAL FACILITY Contact: DENNIS KELLEY	NE QTR SEC 17 TOWNSHIP 2 Mailing Addr: 8795 S LEWIS, TULSA, OK 74137	KAY	74641	KAY	8		P	07/02/85
OKD000732198	SUN OIL CO BUESING Contact: GM EUBANKS	1M S & 5M E OF BLACKWELL Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6		00A	08/18/80
OKD000732206	SUN OIL CO CAUGHLIN-AB- Contact: GM EUBANKS	5M S & 4M E OF TONKAWA Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6		00A	08/18/80
OKD000732214	SUN OIL CO CAUGHLIN-B- SWD SYS Contact: GM EUBANKS	5M S & 4M E OF TONKAWA Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6		00A	08/18/80
OKD000732222	SUN OIL CO CHEROKEE UNIT Contact: GM EUBANKS	2M E OF CHILOCCO Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6		00A	08/18/80
OKD000732313	SUN OIL CO GUYER Contact: GM EUBANKS	1M S & 7M E OF BLACKWELL Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6		00A	08/18/80
OKD000732339	SUN OIL CO KEMNITZ-A- Contact: GM EUBANKS	1M S & 8M E OF BLACKWELL Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6		00A	08/18/80
OKD000732347	SUN OIL CO MILLION Contact: GM EUBANKS	1M S & 7M E OF BLACKWELL Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6		00A	08/18/80
OKD000732271	SUN OIL CO N DICKERSON #7 Contact: GM EUBANKS	6M W OF CHILOCCO Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	8		00A	08/18/80
OKD000732354	SUN OIL CO NW GARRETT RED FORK Contact: GM EUBANKS	2M N & 3M W OF PONCA CITY Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6		00A	08/18/80

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State of: **OKLAHOMA**

EPA-ID	FACILITY NAME	LOCATION ADDRESS	CITY	ZIP	COUNTY/ PARISH	S G E N	T R A N	L O O P N R D	R E C E I V E D
									DATE
OKD000732412	SUN OIL CO SCHOOL LAND #22	3M S & 6M W OF TONKAWA Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6			08/18/80
	Contact: GM EUBANKS							Phone: 9184967384	
OKD000732396	SUN OIL CO SE TONKAWA UNIT	5M S & 2M E OF TONKAWA Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6			08/18/80
	Contact: GM EUBANKS							Phone: 9184967384	
OKD000732461	SUN OIL CO STATE TR 1 COTTAGE	5M S & 2M E OF TONKAWA Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6			08/18/80
	Contact: GM EUBANKS							Phone: 9184967384	
OKD000732453	SUN OIL CO STATE-A-	5M S & 2M E OF TONKAWA Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6			08/18/80
	Contact: GM EUBANKS							Phone: 9184967384	
OKD000732479	SUN OIL CO STATE-SE TONKAWA WS	5M S & 2M E OF TONKAWA Mailing Addr: PO BOX 0800, TULSA, OK 74102	KAY	74641	KAY	6			08/18/80
	Contact: GM EUBANKS							Phone: 9184967384	
OKD000732487	SUN OIL CO THOMAS MISSISSIPPI	1M S & 6M W OF TONKAWA Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6			08/18/80
	Contact: GM EUBANKS							Phone: 9184967384	
OKD000732495	SUN OIL CO VERNON MISSISSIPPI	6M W OF CHILOCCO Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6			08/18/80
	Contact: GM EUBANKS							Phone: 9184967384	
OKD000732511	SUN OIL CO WEST GARRETT RED FO	2M N & 4M W OF PONCA CITY Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6			08/18/80
	Contact: GM EUBANKS							Phone: 9184967384	
OKD000732529	SUN OIL CO WILDGRUBE	1M S & 7M E OF BLACKWELL Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6			08/18/80
	Contact: GM EUBANKS							Phone: 9184967384	
OKD000732537	SUN OIL CO WILDGRUBE-A-	1M S & 7M E OF BLACKWELL Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY	74641	KAY	6			08/18/80
	Contact: GM EUBANKS							Phone: 9184967384	
OKD000764514	TOTAL PIPELINE CORP OGG STATIO	SECT. 35 T25 R1W Mailing Addr: PO BOX 857, ARKANSAS CITY, KS 67005	KAY	74641	KAY	6			08/18/80
	Contact: LEDEKER ROBIN							Phone: 3164425100	
OKD000732545	SUN OIL CO WILDGRUBE SWD SYS	1 MI S & 7 MI E OF BLACK Mailing Addr: PO BOX 3800, TULSA, OK 74102	KAY COUNTY	74000	KAY	6			08/18/80
	Contact: GM EUBANKS							Phone: 9184967384	
OK0000963272	SOUTHERN STAR CENTRAL GAS PIPE	RT 1 BOX 108 Mailing Addr: 4700 HWY 56, OWENSBORO, KY 42301	NARDIN	74646	KAY	7			02/26/08
	Contact: MIKE HAMILTON							Phone: 2708524422	
OKD019078286	FORMER BLUESTEM CONST INC	515 W SOUTH ST. Mailing Addr: PO BOX 449, NEWKIRK, OK 74647	NEWKIRK	74647	KAY	7			10/31/07
	Contact: MARY HARRIS							Phone: 5803622291	
OKD032998163	JIM CROSSLAND FORD INC	HWY 77 S Mailing Addr: PO BOX 470, NEWKIRK, OK 74647	NEWKIRK	74647	KAY	3			09/05/85
	Contact: WALT WILLIAMS							Phone: 5803623180	
OKD981151640	LOCKE AUTO PARTS	103 SO. MAPLE Mailing Addr: 103 SO. MAPLE, NEWKIRK, OK 74647	NEWKIRK	74647	KAY	3			01/23/86
	Contact: KEITH LOCKE							Phone: 5803622591	
OKD981899172	MAUPIN GARAGE	PECKAM RD 2BLKS OF CITY Mailing Addr: RT 1PECHAM RD, NEWKIRK, OK 74647	NEWKIRK	74647	KAY	3			12/23/86
	Contact: GARY MAUPIN							Phone: 5803623327	

RCRA NOTIFIERS LISTING

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State of: **OKLAHOMA**

EPA-ID	FACILITY NAME	LOCATION ADDRESS	CITY	ZIP	COUNTY/ PARISH	S G E N	T R A N	L O O P N R D	RECEIVED DATE
OKD000764704	TOTAL PIPELINE CORP DILWORTH S Contact: LEDEKER ROBIN	3M W 2M N Mailing Addr: PO BOX 857, ARKANSAS CITY, KS 67005	TECKHAM	74653	KAY	6		3164425100	08/18/80
OKD085541324	CHILCOAT NURSING CENTER INC Contact: CECIL CHILCOAT	1300 N 5TH ST Mailing Addr: 1300 N 5TH ST, TONKAWA, OK 74653	TONKAWA	74653	KAY	6		5806282529	06/26/80
OKD987087079	CHURCHILL TRUCK LINES INC Contact: DAVID EDWARDS	.5M S OF HWY 60 Mailing Addr: PO BOX 212, TONKAWA, OK 74653	TONKAWA	74653	KAY	3		8166461590	12/19/91
OKR000019620	CONOCO PHILLIPS PIPELINE CO OG Contact: LEVI FOE	9 MI S TONKAWA SR77 1MI Mailing Addr: 1000 S PINE, PONCA CITY, OK 74602	TONKAWA	74653	KAY	3		5807676967	02/26/08
OKD987096864	FINA #9455 Contact: DANNY KITE	I-35 & FOUNTAIN RD Mailing Addr: PO BOX 2159, DALLAS, TX 75221	TONKAWA	74653	KAY	3		2147502374	01/11/93
OKD987094448	GARYS PAINT & BODY Contact: GARY FRUITS	213 S MAIN Mailing Addr: PO BOX 112, TONKAWA, OK 74653	TONKAWA	74653	KAY	3		5806285114	06/21/92
OKR000016360	STRETCH N BENDS AUTO BODY Contact: JERRY DANIEL	305 THUNDERBIRD Mailing Addr: PO BOX 482, TONKAWA, OK 74653	TONKAWA	74653	KAY	6		5806282331	03/16/01
OKD000741595	SUN GAS CO TONKAWA GAS PROD PL Contact: HK KELLER	PO BOX 484 SE OF CITY ON Mailing Addr: 2525 NW EXPRESSWAY, OKLAHOMA CITY, OK 73112	TONKAWA	74653	KAY	6		4058439711	08/14/80
OKD000764753	TOTAL PIPELINE CORP AUTWINE ST Contact: LEDEKER ROBIN	1M N & 5M E OF TOWN Mailing Addr: PO BOX 857, ARKANSAS CITY, KS 67005	TONKAWA	74653	KAY	6		3164425100	08/18/80
OKD000764555	TOTAL PIPELINE CORP SEE STATIO Contact: LEDEKER ROBIN	8M S OF TONKAWA Mailing Addr: PO BOX 857, ARKANSAS CITY, KS 67005	TONKAWA	74653	KAY	6		3164425100	08/18/80
OKD000764548	TOTAL PIPELINE CORP TONKAWA ST Contact: LEDEKER ROBIN	3.5M S & 3M E OF TOWN Mailing Addr: PO BOX 857, ARKANSAS CITY, KS 67005	TONKAWA	74653	KAY	6		3164425100	08/18/80
OKD987087020	TRANSFORMER DISPOSAL SPECIALIS Contact: RODNEY TROWER	1500 N MAIN Mailing Addr: PO BOX 428, TONKAWA, OK 74653	TONKAWA	74653	KAY	3		5806282094	12/19/91
OKD000758490	DEFS CASHION GAS PLANT Contact: VICTORIA SANCHEZ	4M W & .5M S OF CASHION Mailing Addr: ROUTE 1 BOX 120-B, CASHION, OK 73016	CASHION	73016	KINGFISHER	3		4053410786	02/06/03
OKD000763649	DEFS KINGFISHER GAS PLANT Contact: VICTORIA L SANCHEZ	4M W & .75M S OF TOWN Mailing Addr: ROUTE 1 BOX 120-B, CASHION, OK 73016	CASHION	73016	KINGFISHER	3		4053410786	02/06/03
OKR000004192	PEPL - CASHION Contact: VICTORIA WAGNER	4 M W HALF M S ON CO RD Mailing Addr: PO BOX 4967 ENV SERVICES, HOUSTON, TX 77210	CASHION	73016	KINGFISHER	3		7139987459	11/03/99
OKD987083888	FARRAR TANK TRUCKS & CONSTRUCT Contact: STEVE FARRAR	512 E RED FORK DRIVE Mailing Addr: PO BOX 197, DOVER, OK 73734	DOVER	73734	KINGFISHER	3		4058284681	05/15/00
OKD074287855	BECK PUMP & SUPPLY Contact: HARRY JOYCE	N HWY 81 Mailing Addr: PO BOX 175, HENNESSEY, OK 73742	HENNESSEY	73742	KINGFISHER	3		4058537279	03/29/90

Underground Storage Tank	Latitude	Longitude	Address
Kerr Mcgee	36.680833000	-97.303794000	601 E. North Ave
Tonkawa Public Schools	36.680778000	-97.305594000	500 E. North Ave
OK Dept of Transportation	36.695889200	-97.342510000	Jct of US60 & I-35
Quickee Store	36.692211000	-97.310547000	1205 N. Main
Northern Oklahoma College	36.676570000	-97.296420000	310 S.Pine
Eastside Conoco	36.680881000	-97.292300000	1603 E. North Ave
Love's Fuel Stop#213	36.650795000	-97.341927000	I-35 & Fountain Rd
Automart-Bernard Buchholz	36.675750000	-97.309810000	301 S. Main
Farmers Cooperative Assn	36.678390000	-97.312390000	313 E. Grand
FINA Oil & Chem Co.	36.753067000	-97.347872000	I-35 & Fountain Rd
Sav-a-trip #16	36.695919000	-97.350406000	HWY60 & I-35
Sunshine Tonkawa	36.652153000	-97.349292000	P.O. Box 309, I-35 & Fountain Rd
Tonkawa Jiffy Trip	36.680733000	-97.304993000	501 E. North Ave
Paul A Long & Sons	36.695661000	-97.309881000	unknown
Paul A Long Oil Company	36.695900000	-97.309800000	1501 N. Eastern
Stop-N-Go, Inc	36.681175000	-97.307220000	300 E. North Ave
BHPP(A) Lucient W.F. Unit	36.274925000	-97.396033000	sec 20, 22N, 2W
BHPP(A) Thomas	36.652078000	-97.459794000	sec 15, 25N,2W
Former Truck Stop	36.691110000	-97.349767000	I-35 & Fountain Rd
Gas Land	36.680950000	-97.287950000	1900 E. North Ave
Owen Sinclair Service	36.681194000	-97.309601000	33 N. Main
Kabredlos #391	36.696327000	-97.350266000	16700 W. South
River Road Farms, Inc	36.619984000	-97.247391000	14251 South "P" Street
T.E. Smith Oil Co,Inc	36.681130000	-97.309820000	309 S. Main
SWBT-R63195 Tonkawa Co	36.679756000	-97.310061000	109 N. Main
B&S Oil	36.681110000	-97.309820000	306.S. Main
Summers One Stop	36.674255000	-97.309525000	400 S. Main
Charles Bevins APCO	36.678400000	-97.299500000	1014 E. Grand
Conoco Station	36.680800000	-97.310000000	115 S. Main
Eastside Conoco	36.680900000	-97.292500000	1691 E. North Ave
Ed & Lucile Service	36.680900000	-97.283100000	HWY60 & 177, 1 M E
Gulf Station	36.681000000	-97.308600000	301 S. 7th
Interstate Discount APCO	36.652300000	-97.340800000	RR 1 JCT I-35 & Fountain Rd
Kelle Hall Oil Co	35.695100000	-97.350400000	HWY 60, Box 668
Kountry Corner	36.680900000	-97.292800000	1601 E. North Ave
L.B. Brawner	36.672700000	-97.309700000	RT 1, HWY 177W End of River Bridge
Magnolia Bulk	36.680800000	-97.306500000	Santa Fe Tracks & North Ave
Mid West One Stop	36.680900000	-97.299300000	1001 E. North Ave
Texaco Station	36.678400000	-97.311300000	222 E. Grand
Tom Holley Champlin	36.681000000	-97.309800000	300 S. Main
Weldons Gibble gas	36.680900000	-97.300800000	908 E. North Ave

CITY OF TONKAWA
113 South 7th Street
Tonkawa, Oklahoma 74653-5014
Phone: 580-628-2508 I Fax: 580-628-5030

Dave Neely, City Manager
Kenna Grace, City Clerk/Treasurer

Joe Kingery, Sr., Mayor
Glen Watkins, Councilmember

Joe Lewellen, Vice Mayor
Todd Ross, Councilmember

November 4, 2008

John S. Richard, Director
State of Oklahoma Department of Central Services
P. O. Box 53448
Oklahoma City, Oklahoma 73152-3218

Dear Mr. Richard,

Please allow this letter to serve as the City of Tonkawa's interest in obtaining possession of the Tonkawa Armory.

The Tonkawa Armory has served many purposes through the years, including a place for youth and adults to play basketball and conduct birthday parties.

The City is aware of the contamination that exists in the Armory and would like for the environmental issues to be resolved before we take possession.

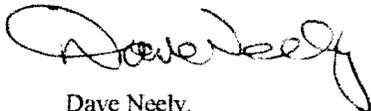
In the future, this building will be used for community purposes by way of rental to a new industry that will supply desperately needed jobs for the Tonkawa community. The initial intent is eleven new jobs created with twenty-five additional within the first year and one hundred thirty within three years.

If economic development is important to the State of Oklahoma, it is also extremely important to the City of Tonkawa. This facility will create rental income for the City of Tonkawa as well as utility payments consisting of electrical service, water, wastewater and sanitation that will allow the City of Tonkawa to help keep costs down for all our citizens in a time of rising utility costs

The Tonkawa Armory holds special memories to many in our community. Our local troops have just returned from deployment in Iraq and they have been dispersed to other armory facilities. It is our desire to maintain the dignity and honor of a building that has sent many men and women into battle for our country. Their spirits will forever walk the hallways of this building. Echos of the sounds of preparation for battle, will remind us of the sacrifice many have made to protect our freedom.

We appreciate the opportunity to take possession of this building, which will always stand for "the land of the free and the home of the brave", and those who served to protect this right.

Sincerely,



Dave Neely,
City Manager