

TARGETED BROWNFIELD ASSESSMENT

For

**Oklahoma Army National Guard
Former Miami Armory
Miami, Oklahoma**

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

Prepared by:



March 26, 2010

Prepared for:

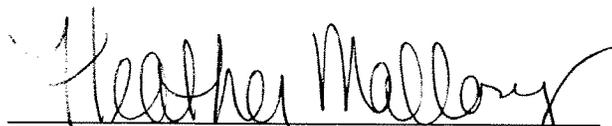
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I declare that to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of this part. I have specific qualifications based on education training, and experience to assess 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 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, the Oklahoma Department of Environmental Quality (DEQ) cannot state with absolute certainty that no other potential hazardous waste sites are located in the area. In no event shall the DEQ or its employees be liable for any damages, injury, loss, cost or expense whatsoever arising in connection with the use or reliance on the information contained in this report, except as otherwise provided by law.

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1.0 Executive Summary

On April 16, 2009, Heather Mallory of the DEQ performed site reconnaissance of the Miami Armory located at 830 D Street SE, Miami, Oklahoma as part of a Targeted Brownfield Assessment (TBA). The subject property is situated near a city park in Miami and a residential area. The purpose of the TBA was to identify potential environmental concerns by reviewing historical data, regulatory information, and by performing a visual inspection of the site and surrounding area. The following is an executive summary of the environmental site assessment results:

- The former Miami Armory was built in 1949 and completed in 1957. The land for the building was owned by private land owners and was undeveloped until the armory was built in 1949. The subject property is currently owned by the Department of Environmental Quality. The Oklahoma Department of Environmental Quality Site Cleanup Assistance Program (SCAP) plans to clean up the lead and asbestos contamination on the subject property and properly dispose of all associated waste. After all remediation activities have taken place and a notice of remediation and easement has been filed in the Ottawa County, courthouse, the deed to the property will revert to the City of Miami.
- Historically, the subject property was used to house equipment needed by Company B, 1-279 Infantry. Tools, firearms, gas masks, communication equipment, chemicals, lithium batteries, and numerous other supplies were stored in the building. See Appendix E for a list of supplies formerly stored in the armory. The building does not have an indoor firing range. The building is likely to contain lead-based paint and asbestos due to the age of construction. Marshall Environmental Management conducted asbestos and lead surveys on July 7, 2009 and found asbestos in the caulking around the windows, pipe wrap, 9x9 floor tile, mastic, and tar on a flue. Lead dust was found throughout the building and lead-based paint was found on doors, door jambs, windows, overhead doors, overhead door rollers, fire door slide, a soffit, a beam, overhead door guards, wood cabinets, a window ledge, and a concrete wall painted with black paint.
- The armory was flooded in the 1980's up to 2 feet and in 2007 up to 4 feet. The flood waters originated from the nearby Neosho River. During the 2007 flood, lithium batteries leaked and caused several OKARNG members to suffer chemical burns. The OKARNG subsequently cleaned up the lithium battery spill. The lithium battery spill is considered an historically recognized environmental condition (HREC). The lead dust and lead-based paint in the building are considered HRECs.
- The mining operations in Oklahoma, Kansas, and Missouri are part of the Tri-State Mining District. The Tri-State Mining District is comprised of Superfund sites located in northeastern Oklahoma, southeastern Kansas, and southwestern Missouri. The Miami Armory is located within the Operable Unit 2 boundary of the Tar Creek Superfund Site, the Oklahoma portion of the Tri-State Mining District. Mining waste, locally known as chat, was used as gravel on the south and east sides of the building. DEQ sampled the

soil in the driveway and parking areas along the south and east sides of the building (see Appendix F for illustration and results). The soil on the south side contained large amounts of visible chat and tested above the site specific screening level for lead and below the screening level for zinc and cadmium (see Section 5.2 Lead). The soil on the east side contained moderate amounts of visible chat and tested below screening levels for lead, zinc, and cadmium. Residential screening levels were considered for this armory, because it is situated near city parks and residential areas. The chat contaminated soil outside of the building is considered an recognized environmental condition (REC).

- The former underground storage tank (UST) was a 1,000 gallon, asphalt coated or bare steel tank with steel piping that held gasoline. Soil testing after tank removal revealed no benzene, ethylbenzene, toluene, xylenes, gasoline range organics, diesel range organics, kerosene, JP-4, naphtha, fuel oil, or higher order hydrocarbons in the tank excavation pit. The UST at the subject property was removed on July 13, 1995 according to Oklahoma Corporation Commission (OCC) records. The tank did not appear to have any leaks upon removal. Before removal, the UST was last used in June of 1978. The UST is considered an HREC. See Appendix C for information on UST removal.
- Nineteen leaking underground storage tanks (LUST) cases were reported in the OCC UST database within ½ mile of the subject property. No LUST cases were reported on the subject property.
- Twenty-five underground storage tank sites were found within a ½ mile radius of the subject property. The UST sites are primarily located to the north, east, and northeast of the subject property. The USTs located to the east and northeast are upgradient of the subject property. The closest USTs to the subject property are located five blocks from the subject property and are listed as permanently out of use. For more detail on tank removal see Section 4.11. Of the twenty-five USTs, nineteen sites have historic leaking underground storage tank cases. Several LUST cases are upgradient of the subject property, see Section 4.11 for more detail. The subject property does not have any LUST cases on record.
- No oil and gas development was found in the OCC oil and gas records for the subject property and quarter, quarter, quarter sections directly above and upgradient of the site.
- Adjoining properties consist of residences to the north and east and a city park to the south and west. Historical aerial photographs show residences and structures associated with the city park on adjacent properties and a vacant lot where the armory building now stands.
- Sanborn Fire Insurance maps showed that the subject property was either vacant or residential before the armory was built. Adjacent properties were most likely residential structures and/or a city park.

- No delisted NPL sites, archived CERCLIS site listings, RCRA non-corrective action sites, CORRACTS TSD listings, ERNS list, Institutional Controls/Engineering Controls, or State landfills and/or solid waste disposal sites were found on the subject property or within the ASTM recommended search radii. No RCRA generators, VCP sites, or Brownfield sites were found on the subject property. The subject property is on the DEQ SCAP list for cleanup of lead and asbestos contamination. One active CERCLIS site listing was found within ½ mile of the property. It is the Ottawa Robison-Roger Building. A preliminary assessment on the property is scheduled for the future on that site. The subject property is located within the Operable Unit 2 boundary of the Tar Creek Superfund Site.
- No transformers were found on the subject property. Fluorescent lighting ballasts are located throughout the building. The lighting ballasts are all in good condition. It is unknown if the lighting ballasts contain PCBs. Fluorescent light bulbs generally contain mercury.

2.0 INTRODUCTION

The State of Oklahoma Department of Environmental Quality under a Brownfield Assistance Agreement (No. RP96681001-0) (Ref. 1) with the U.S. Environmental Protection Agency (EPA) conducted a Targeted Brownfield Assessment of a property located at 830 D Street SE, Miami, Oklahoma.

2.1 Purpose

The purpose of this assessment is to look at the environmental conditions within the target area and provide this information to the City of Miami 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 Brownfield’s Revitalization Act of 2002 (Public Law 107-118, Subtitle B – Ref. 3). The purpose of a Phase I Environmental Site Assessment is to identify, to the extent feasible, recognized environmental conditions in connection with the target property through a systematic review of readily available information sources and a site reconnaissance.

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

DEQ examined the current use of the property and then identified the historical uses of the property to determine if recognized environmental conditions exist. DEQ examined historical documents, governmental databases, oil and gas records, aerial photographs, Sanborn Fire Insurance Maps, and conducted interviews and a site reconnaissance of the

area. DEQ also took soil samples at the armory to determine if the mining waste used for vehicle parking had contaminated the soil outside of the armory. A good faith effort was made to identify possible environmental conditions that might affect the development of the property.

2.3 Significant Assumptions

History and knowledge of the subject property shows that the building was used as a National Guard Armory. A small portion of the armory was built in 1949 and the additions were made to the armory through 1957. There has been no oil and gas exploration on the property or adjacent properties according to Oklahoma Corporation Commission records.

Since the building was constructed in 1949, the building is likely to contain ACM. The U.S. began banning the use of asbestos in most building materials in the 1970s due to studies confirming the harmful health effects caused by exposure to airborne asbestos. Pipe wrap and suspect floor tile was observed in the building during the site reconnaissance conducted on April 16, 2009. The building also contains lead dust and lead-based paint. Marshall Environmental Management conducted asbestos and lead surveys on July 7, 2009, and found asbestos in the caulking around the windows, pipe wrap, 9x9 floor tile, mastic, and tar on a flue. Lead dust was found throughout the building and lead-based paint was found on doors, door jambs, windows, overhead doors, overhead door rollers, fire door slide, a soffit, a beam, overhead door guards, wood cabinets, a window ledge, and a concrete wall painted with black paint (see Appendix F for reports). During the site reconnaissance, mining waste rock locally known as “chat” was observed in parking areas on the south and east sides of the building. Two, five part composite soil samples were taken by Heather Mallory and submitted to the State Environmental Laboratory for analysis. For more information on contaminants found in soil, see Section 3.2 and Appendix F. Photo documentation can be found in Appendix D.

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 revitalization. The ASTM Phase I Environmental Site Assessment E 1527 – 05 (Ref. 4) is the minimum standard for environmental due diligence in the commercial real estate industry and meets the standard for All Appropriate Inquiry under the Small Business Liability Relief and Brownfields Revitalization Act of 2002. A diligent effort in accordance with generally accepted good commercial and customary standards and practices was undertaken to identify the “recognized environmental conditions” that might affect the revitalization project. However, the identification of old hazardous waste sites is an evolving process; therefore, DEQ cannot state with absolute certainty that no other potential hazardous waste sites are located in the area. This assessment was conducted under constraints of time, cost, and scope and reflects a limited investigation and evaluation. It reflects the normal degree of care and skill that is ordinarily exercised by environmental professionals conducting business in this or similar localities.

In no event shall the DEQ or its employees be liable for any damages, injury, loss, cost or expense whatsoever arising in connection with the use or reliance on the information contained in this report, except as otherwise provided by law.

The information in this report is based on a review of governmental records, interviews with knowledgeable representatives of the property, and observations of the environmental professional. The result of this assessment, as written in this report, is valid as of the date of report. The assessment does not include sampling of rock, groundwater, surface water, or air. For qualifications of environmental professionals see Appendix G.

2.5 Special Terms and Conditions

This assessment report has been prepared for the City of Miami, Oklahoma by the DEQ using EPA funding. 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 and the federal Freedom of Information Act.

3.0 SITE CHARACTERIZATION AND HISTORY

3.1 Location and Legal Description

The subject property is located in the southwest quadrant of Eighth Avenue SE and D Street SE in Miami, Oklahoma. This property consists of approximately 1.77 acres of land and contains the former National Guard Armory building. A site map and topographical map depicting the property has been provided in Appendix A and Appendix B respectively.

The subject property is located in section 31, township 28N, and range 23E. The armory building's legal location is described as block 167 original plat to the City of Miami, Ottawa County, State of Oklahoma.

Records at the Ottawa County Courthouse were searched to determine ownership and operational history of the subject property. It was determined that the property was previously owned by the City of Miami and deeded to the State of Oklahoma for the purpose of building a Oklahoma National Guard armory in 1949. Prior to 1949 the property was privately owned by several individuals. The armory is currently owned by the Oklahoma Department of Environmental Quality and will be conveyed to the City of Miami after cleanup activities have occurred and a notice of remediation and easement has been filed in the Ottawa County Courthouse.

Ottawa County Courthouse Records showed the following history on the property. See Appendix C for copies of these documents. All documents reviewed at the county courthouse are located in Appendix C except for the one with an asterisk (*) by it.

- On November, 1919 lots 4, 5, 6, 12, 13, 19, 20, 21, and 22 in block 167 were sold to A.C Towne by the county treasurer
- On November 3, 1919 lots 27 and 28 in block 167 of the Original Plat of Miami were sold to George B. Paine by the county treasurer*
- On April 5, 1922 lots 5, 6, 21, and 22 in block 167 were sold to Ida Effes by A.C. Towne and Mary Towne
- On November 16, 1923 lots 17 and 29 in block 167 were sold to Louis N. Stivers by Georgia Yawman
- On December 11, 1925 a sheriff's deed was filed for several properties including lots 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32
 - The property was to be sold in a sheriff's sale on January 14, 1925
- On June 26, 1926 lots 7, 8, 23, and 24 in block 167 was sold to George Raper by Charles Parnell
- On June 19, 1926 lots 7, 8, 23, and 24 in block 167 was sold to L.O. Gibson by George Raper
- On February 11, 1929 lots 4,12, 13, 14,19, and 20 in block 167 were given to the heirs of A.C. Towne
- On October 14, 1929 lots 1-32 in block 167 were sold to the City of Miami, Oklahoma, a municipal corporation by The Hanchett Bond Co. Inc.
- On May 5, 1930 the City of Miami, Oklahoma, a municipal corporation purchased lots 1-32 from the County Treasurer
- On May 25, 1931 the City of Miami, Oklahoma, a municipal corporation purchased lots 7, 8, 23, and 24 from Eliza Gibson, Vivian Garrison, and L.O. Gibson (heirs of George O. Gibson)
- On December 31, 1929 the City of Miami, Oklahoma a municipal corporation purchased lots 1-32 from the Hanchett bond Company, a corporation
- On April 12, 1949 the City of Miami, Oklahoma, a municipal corporation sold all of block 167 to the State of Oklahoma for benefit and use of the Oklahoma National Guard
- On April 7, 2009 the Oklahoma Military Department conveyed the property to the Oklahoma Department of Environmental Quality for the purpose of cleanup of the armory

3.2 Site and Vicinity Characterization

The former Miami Armory was built in 1949 and completed in 1957. According to Ottawa County land records, the land for the building was deeded by the City of Miami to the State of Oklahoma, on April 12, 1949, for benefit of the Oklahoma National Guard (see Appendix A). The subject property is a small tract of land about one acre in size. Vehicle maintenance, fueling, and storage occurred onsite. The subject property is located at 830 D Street SE, Miami, Oklahoma bound by Eighth Street on the north, D Street SE on the east, Ninth Street on the south, and C Street SE on the west. The areas where the subject property and adjacent properties are located are best characterized by residential and recreational development. Residences surround the property to the north and east and a city park resides to the east and south of the property. A site vicinity map of the subject property can be found in Appendix A.

Lead-based paint and asbestos are present onsite. Marshall Environmental Management conducted asbestos and lead surveys on July 7, 2009, and found asbestos in the caulking around the windows, pipe wrap, 9x9 floor tile, mastic, and tar on a flue. Lead dust was found throughout the building and lead-based paint was found on doors, door jambs, windows, overhead doors, overhead door rollers, fire door slide, a soffit, a beam, overhead door guards, wood cabinets, a window ledge, and a concrete wall painted black (see Appendix F for reports). During the site visit on April 16, 2009, DEQ took soil samples on the south and east sides of the armory. Visible mine waste (chat) was present in the areas where the soil samples were taken. DEQ sampled the soil in the driveway and parking areas along the south and east sides of the building (see Appendix F for illustration and results). The soil on the south side contained large amounts of visible chat and tested above the site specific screening level for lead and below the screening level for cadmium (see table below). The soil on the east side contained moderate amounts of visible chat and tested below screening levels for lead, zinc, and cadmium. Residential screening levels were considered for this armory, because it is situated near city parks and residential areas. For more information on lead-based paint and asbestos, see Appendix F.

Contaminant	Residential Screening Level (mg/kg)	M-1	M-2
Lead	500*	777	394
Zinc	23,000	9080	1740
Cadmium	70	38	11.4

* Site specific screening level for armory program

Utilities that serve the subject property are Oklahoma Natural Gas for natural gas and the Grand River Dam Authority for electric, AT&T provides telephone services, and the City of Miami provides sewer services to the armory according to Jeff Alls, facility maintenance for the Oklahoma Military Department (OMD) northeast Oklahoma and

Oklahoma Corporation Commission records (Ref.5). According to the Oklahoma Water Resources Board Water Information Mapping System, the subject property is served by the City of Miami water distribution system (Ref.6).

A review of the topographical map indicated that the surface elevation of the site is approximately 760 feet above mean sea level. The topographical gradient is to the southwest, toward the Neosho River. The Neosho River is located approximately 0.2 miles southwest of the site. Tar Creek is located 0.5 miles east of the subject property. The Neosho River and Tar Creek flooded in the 1980's and in 2007 according to Jeff Alls. Water from the Neosho River flooded the subject property during both floods. Jeff Alls indicated that flood waters from Tar Creek did not reach the subject property. The topographical map can be found in Appendix B.

Underground features at the subject property include utility lines. A UST was installed on December 31, 1949 and removed on July 13, 1995. The former UST was a 1,000 gallon, asphalt coated or bare steel tank with steel piping that held gasoline. Soil testing after tank removal revealed no benzene, ethylbenzene, toluene, xylenes, gasoline range organics, diesel range organics, kerosene, JP-4, naphtha, fuel oil, or higher order hydrocarbons the tank excavation pit. Before removal, the UST was last used in June 1978. See Appendix C for information on UST removal.

3.3 Description of Structures, Roads, and Other Improvements

The subject property consists of one city block. The one city block is used to house the former armory building, driveway, sidewalk, and vehicle compound. The driveway consists of gravel and chat and starts on the south side of the building, wraps the east side of the building, and extends a little beyond the building on the east side. The sidewalk extends from the gravel parking area along the east side to the front door of the armory. The vehicle compound area is a fenced in area consisting of grass.

The adjacent properties to the north and east consist of residential areas. The adjacent properties to the south and west are part of Riverview Park. Riverview Park houses ballfields, a swimming pool, and play areas for children. Less than a mile to the southeast is the City of Miami wastewater treatment facility and lagoons.

3.4 Owner, Property Manager, and Occupant Information

The Oklahoma Department of Environmental Quality currently owns the subject property. After all remediation activities have taken place and a notice of remediation and easement has been filed in the Ottawa County courthouse, the deed to the property will be transferred to the City of Miami.

3.5 Information Reported by User Regarding Environmental Lien or Specialized Knowledge or Experience

Before transfer of property to the DEQ, OMD reported no environmental liens on the subject property. OMD did disclose that the building had been flooded twice by flood waters from the Neosho River. OMD also mentioned that the building could contain asbestos and lead-based paint due to the age of the building.

3.6 Commonly Known or Reasonably Ascertainable Information

It is commonly known within the community that the building was used as a National Guard Armory by the Oklahoma Army National Guard. The building was used to house equipment required by Company B (-) 1st battalion 279 infantry. During the April 16, 2009 site visit by the DEQ, the following chemicals were encountered in the building:

- Simple Green – 24 ounces
- Lithium batteries – 50 or more
- Latex paint – 6 gallons
- Polyurethane – 1 gallon
- Reducer – 4 liters
- Air fresheners – 2 cans
- Super glue – 2 cases
- Spray paint – 1 can
- Cyalume light sticks (on floor and in trash can) – 50 or more
- Alkaline batteries (in trash can) – 30 or more

The Oklahoma National Guard unit in Vinita removed these chemicals from the armory on July 10, 2009.

3.7 Valuation Reduction for Environmental Issues

Valuation of the property is outside the scope of this assessment. A professional appraiser should be consulted to place a value on the property.

3.8 Current Use of the Property

The armory building is currently vacant and has been for approximately two years.

3.9 Past Use of the Property

3.9.1 Review of Aerial Photographs

Historic aerial photographs were searched to view the changes to the property over time. The 1939 aerial photographs were obtained from the Oklahoma Department of Libraries archives. All other aerial photographs were obtained from the DEQ digital database of archived and present-day aerial photographs.

Aerial photographs from 1952, 1995, 2003, and 2008 were obtained from DEQ. The digital photographs (1995, 2003, and 2008) showed more detail, because they are higher resolution photography. All of these photographs are located in Appendix B. The following represents a summary of what was found at the subject property from each aerial photograph.

November 22, 1939 Aerial Photograph

The November 22, 1939 aerial photograph shows the subject property to be in a residential and recreational area of Miami, Oklahoma. The photograph shows buildings on adjacent properties to the north, south, east, and west. Most of the structures appear to be residential. The buildings to the west of the subject property appear to be structures associated with Riverview Park. The Burlington Northern Railroad, located about ¼ mile to the east of the subject property, appears to be active. The subject property appears to be an empty lot. No apparent environmental conditions were noted from the photograph.

July 7, 1939 Aerial Photograph

The July 7, 1939 aerial photograph shows little change from the November 22, 1939 aerial photograph. The subject property appears to be an empty lot. No apparent environmental conditions were noted from the photograph.

July 27, 1952 Aerial Photograph

The July 27, 1952 aerial photograph shows the armory building during construction. Only the southern portion of the building has been built. The adjacent properties have not changed much from the 1939 aerial photos. The major difference is that the waste water treatment plant for the City of Miami has been built and is located ¼ mile to the southeast of the subject property. The Burlington Northern Railroad, located about ¼ mile to the east of the subject property, appears to be inactive. A new Burlington Northern Railroad has been built a little over ¼ mile to the northwest of the subject property. No apparent environmental conditions were noted from the photograph.

1995 Aerial Photograph

The 1995 aerial photograph shows the complete armory building decades after construction. Numerous things have changed compared to the 1952 aerial photograph. Several homes have been built to the northeast of the subject property. Baseball fields have been built to the southeast of the subject property. The waste water treatment plant has expanded and added more tanks, settling basins, and other features. The large building to the west of the subject property has expanded. The residential properties to the north and east have not changed much compared to the 1952 aerial photograph. No apparent environmental conditions were noted from the photograph.

2003 Aerial Photograph

The 2003 aerial photograph shows no change in the subject property compared to the 1995 aerial photograph. More structures have been built to on the adjacent property to the west of the subject property. More homes have been built to the east and northeast of the subject property. The waste water treatment plant has expanded as added several structures. The residential properties to the north have not changed much compared to the 1952 aerial photograph. No apparent environmental conditions were noted from the photograph.

2008 Aerial Photograph

The 2008 aerial photograph shows no change in the subject property compared to the 2003 aerial photograph. The structures on the property to the west of the subject property, have been removed and a baseball field has been constructed in their place. Structures have been removed to the east of the subject property and a parking lot has been built on the adjacent property to the southwest.

3.9.2 Fire Insurance Maps

Sanborn Fire Insurance maps were viewed for Miami, Oklahoma and downloaded from the University of Oklahoma Libraries website (Ref. 8). Sanborn maps of the subject property and adjoining properties were found for 1917, 1924, 1929, and 1945. All of the Sanborn maps are located in Appendix C along with the two map legends used to decipher the maps. The following represents a summary of what was found at the subject property and adjoining properties from each Sanborn map. The 1896, 1898, 1900, and 1910 Sanborn maps do not show the area where the subject property resides and therefore were omitted from this report.

1917 Sanborn Map

Sheet 1 of the 1917 Sanborn shows the subject property in the overview map of Miami, Oklahoma. Adjacent properties are only shown in the overview map of Miami, Oklahoma. There is nothing marked on the subject property or adjacent properties, which indicates either vacant or residential land. Approximately nine blocks north of the subject property (sheet 8) resides the Saint Louis and San Francisco Rail Road Station, City Water Works and Electric Light Plant, Miami Flour and Feed Company, and Ottawa County Ice Company. The Saint Louis and San Francisco Rail Road Station is a train station for passenger and freight loading and unloading. The City Water Works and Electric Light Plant has a 100,000 gallon reservoir, two artesian wells, and an in ground fuel oil tank. The Sanborn Map indicates that power is generated by steam. There is a Deane Duplex steam pump listed on the Sanborn Map. It can be assumed that the fuel oil and gas were used to run the steam pump. The Miami Flour and Feed Company has a grain elevator and chop mill. The Ottawa County Ice Company

has an oil house onsite. Five blocks north and five blocks west of the subject property, are two automotive garages with gasoline tanks (sheet 10). It appears that the gasoline tanks are below ground. Seven blocks north of the subject property are the Pierce Oil Corporation and Standard Oil Company barrel houses and oil tanks (sheet 11). Standard Oil Company has one barrel house and two iron oil tanks and Pierce Oil Corporation has one barrel house and two iron oil tanks. All oil tanks appear to be above ground. Nine blocks north and two blocks east are the Miami Auto Oil Corporation and the Missouri and Gulf Railroad Station (sheet 12). The Miami Auto Oil Corporation has two iron oil tanks that appear to be above ground and the Missouri and Gulf Railroad Station is a train station for unloading and loading passengers and freight.

1924 Sanborn Map

Sheet 1 of the 1924 Sanborn shows the subject property in the overview map of Miami, Oklahoma. Adjacent properties are only shown in the overview map of Miami, Oklahoma. The Saint Louis and San Francisco Rail Road Station has become a passenger station only (sheet 13). The City Water Works and Electric Light Plant has moved from Short and 3rd Street to 4th and D S.E. Street (sheet 17). Miami Flour and Feed Company is now called Johnson-Pulford Grain Company Elevator and Feed Mill and encompasses the area formerly occupied by the feed company and the electric plant (sheet 13). There is a gravity water tank at the Johnson-Pulford Grain Company Elevator. The Ottawa County Ice Company has expanded and removed the oil house and put coal storage in its place (sheet 13). A filling station appears seven blocks north and 1 block west of the subject property (sheet 13). The two automotive garages with gasoline tanks, on sheet 10 of the 1917 Sanborn map, are not shown in the 1924 Sanborn maps. The Pierce Oil Corporation and Standard Oil Company barrel houses and oil tanks have expanded (sheet 15). Standard Oil Company has expanded their barrel house to include a fenced in portion, added one oil tank, and built an automotive garage. The Pierce Oil Corporation has expanded their barrel house. All oil tanks appear to be above ground. The Miami Auto Oil Corporation oil tanks and building have been removed and replaced by a coal house used for storage and an automotive garage (sheet 14). The Ottawa Gas Company appears near the coal house and a nearby grain elevator (sheet 14). The Missouri and Gulf Railroad Station is now called the Kansas Oklahoma and Gulf Railroad station, due to the railroad changing names (sheet 14).

The Ottawa Oil Corporation appears for the first time, near the Saint Louis and San Francisco Railroad, in the 1924 Sanborn Map (sheet 15). It is located about 5 blocks north and 1 block east of the subject property and contains two oil tanks and oil depot. The Mining Exchange Building is shown ten blocks north and four blocks west of the subject property (sheet 2). The map shows that 1/3 of the building was used for printing and that the building was built in 1918. The map also shows that printing and offices resided next door to the east. An internet search on the building revealed that Northeastern Oklahoma A&M College

temporarily resided in the building from 1919 to 1920 (Ref. 9). It is possible that this building served as a mining assay office. The Northeast Oklahoma Railroad (NEORR) freight depot, scales, and coal house is located thirteen blocks north and four blocks west of the subject property (sheet 16). The NEORR was not shown on the 1917 Sanborn map. Cunningham Oil Company, the Water Works and Electric Plant, and Texaco Company oil tanks appear on sheet 17 of the 1924 Sanborn map. These structures were not shown in the 1917 Sanborn map and are located thirteen blocks north of the subject property. The Cunningham Oil Company and the Texaco Company oil tanks reside on the same property. The Sanborn labels the entire property as Cunningham Oil Company. Cunningham Oil Company has two warehouses, one compound house, one automotive garage, two rectangular iron oil tanks, six round oil tanks, one office building, one smaller building near the oil tanks, one building labeled gasoline engine, and two rectangular, iron oil tanks labeled Texaco Company. A dry cleaner is shown on sheet 2 of the 1924 Sanborn map and is located ten blocks north and four blocks west of the subject property (sheet 2).

1929 Sanborn Map

Sheet 1 shows the subject property in the overview map of Miami, Oklahoma. Adjacent properties are only shown in the overview map of Miami, Oklahoma. There is no indication what the subject property and adjacent properties were used for on the 1929 Sanborn overview map.

The Mining Exchange building shows no change as compared to the 1924 Sanborn map (sheet 3). The Ottawa Oil Corporation is now labeled Continental Oil Company on the 1929 Sanborn Map (sheet 17). Continental Oil Company has three oil tanks, an oil barrel storage building, and another building. Other oil storage for various companies appear to the north and northwest of Continental Oil Company and new railroad track has been added near the oil companies (sheet 17). These companies include Shell Oil Company, Magnolia Petroleum Company, Marland Refining Company, Standard Oil Company, Pierce Oil Corporation, and Transcontinental Oil Company. Standard Oil and Pierce Oil Corporation appear in the 1924 Sanborn map. Shell Oil Company has three oil tanks, an oil storage building, and a automotive garage. Magnolia Petroleum Company has two oil tanks, an oil storage building, and a pump house. Marland Refining Company has two oil tanks, an oil barrel storage building, and a pump house. Standard Oil Company has one automotive garage, two brick buildings, three oil tanks, and an oil barrel storage building. Pierce Oil Corporation has one automotive garage, two oil tanks, and one oil barrel storage building with a platform. Transcontinental Oil Company has three oil tanks and an oil barrel storage building.

The Saint Louis and San Francisco Rail Road Station has not changed since 1924 (sheet 4). The City Water Works and Electric Light Plant is now called Southwest Utility Ice Company (sheet 4). Three filling stations appear seven

blocks north and 1 block west of the subject property (sheet 4). One of these appeared on the 1924 Sanborn, the other two did not. Johnson-Pulford Grain Company Elevator and Feed Mill has basically stayed the same with small changes made to existing buildings (sheet 4). The Ottawa County Ice Company is now called Southwest Utility Ice Company. The only change in the facility is that the coal house is now an automotive garage (sheet 4). The coal house located at the former Miami Auto Oil tanks site has been removed and an automotive garage has been built nearby (sheet 15). To the south, Barnsdall Refining Company has been added. Barnsdall Refining Company consists of three oil tanks and one oil barrel house (sheet 15). The Ottawa Gas Company warehouse and the Missouri and Gulf Railroad Station remain unchanged (sheet 15). The Northeast Oklahoma Railroad freight depot, scales, and coal house have not changed (sheet 19). The Northeast Oklahoma Railroad (electric) Car Barn is shown as an inset in the 1929 Sanborn map and doesn't indicate its location. It can be assumed by its name that the facility is located near the NEO Railroad. The Northeast Oklahoma Railroad Car Barn consists of one sub-station, two oil storage houses, an office, car barn, and a sand storage house (sheet 19). Cunningham Oil Company, the Water Works and Electric Plant, and Texaco Company oil tanks appear on sheet 18 of the 1929 Sanborn map. The Cunningham Oil Company and the Texaco Company oil tanks reside on the same property. Cunningham Oil Company has three oil storage houses, two rectangular iron oil tanks, nine round oil tanks, one office building, and one building labeled gasoline engine. The Texas Company has two rectangular iron oil tanks, one oil storage house, one automotive garage, and one pump house (sheet 18). The Kansas, Oklahoma, and Gulf Railroad depot is unchanged (sheet 15). The dry cleaner is shown on sheet 2 of the 1924 Sanborn map has expanded in the 1929 Sanborn map (sheet 3). An automotive garage with a filling station is located nine blocks north and four blocks west of the subject property (sheet 3).

1945 Sanborn Map

The 1945 Sanborn maps was an update of the 1929 Sanborn maps. No changes were noted in the 1945 Sanborn maps compared to the 1929 Sanborn maps.

3.10 Current and Past Uses of Adjoining Properties

The Sanborn maps did not show detailed maps of adjoining properties, therefore it is assumed that the properties were formerly residential or vacant property.

During the site visit on April 16, 2009, adjoining properties were observed to contain the following. The adjacent properties to the north and east are residential properties. The adjacent properties to the south and west are part of the city park.

3.11 Environmental (Physical) Setting

DEQ reviewed several sources to obtain information on the physical setting of the subject property and its surrounding areas. These sources include: The United States Department of Agriculture Ottawa County Soil Survey, Oklahoma Geological Survey Hydrologic Atlas, and the Federal Emergency Management Association. Review of the physical setting of the area is to evaluate the sensitivity of the hydrogeology to potential contamination from sources either on or near the site.

3.11.1 Surface Water Characteristics

The subject property is located in Miami, Oklahoma, which is in Ottawa County. The climate in Miami, Oklahoma is temperate and receives above average rainfall for Oklahoma, about 42 inches per year. The temperature usually ranges from 38°F to 83°F during the winter and summer respectively (Ref. 6). Primary surface water bodies in Ottawa County include the Grand Neosho River, Spring River, and Grand Lake of the Cherokees. The Spring River and Grand Neosho River flow south and converge near Wyandotte, Oklahoma and flow into the Grand Lake of the Cherokees. The Neosho River receives metal laden water from the Tar Creek Superfund site via Tar Creek and Elm Creek. The Grand Neosho River is located about 0.4 miles west of the Miami Armory. Tar Creek flows about 0.4 miles to the east of the Miami Armory. The Spring River is located about 6 miles east of the Miami Armory.

No surface water bodies are on the subject property or the adjoining properties. According to the Federal Emergency Association, the subject property and adjoining properties are in a flood hazard zone (Ref. 7). A map of this information is located in Appendix C. There is one wastewater discharge permit located within one mile of the subject property. This wastewater discharge permit is for the South Waste Water Treatment Plant in Miami, Oklahoma and is located about 0.3 miles southeast of the subject property. There are five public water supply wells owned by the City of Miami and four wellhead protection areas, within one mile of the subject property. All public water supply wells are screened in the Roubidoux aquifer. The Roubidoux aquifer lies 200 to 300 feet below the contaminated Boone aquifer. DEQ Land Protection monitors the public water supplies of the City of Miami's water supply and neighboring towns and has detected no contamination in the City of Miami's public water supply. There are two 303D waterbodies, Tar Creek and Neosho River, within one mile of the subject property. There are three facilities listed on the master facility list for water quality. These are Dan's Recycling and Auto Salvage, South Waste Water Treatment Plant, and Doane Pet Care Company. The South Waste Water Treatment Plant is listed on the master facility list (MFL), because it has an Oklahoma Pollution Discharge Elimination System permit. No explanation is given for the other facilities regarding their listing on the DEQ Water Quality

MFL. For more information on the location of these facilities and waterbodies, see the one mile radius map and descriptions in Appendix C.

3.11.2 Soil Characterization

The subject property is located within the Dennis-Parsons-Bates soil association. It is characterized by nearly level to moderately sloping upland soils formed in material from sandstone and shale. The soil type on the subject properties is the Parsons silt loam. This soil type is nearly level and located on uplands. The soil profile is silty on the surface and heavy clay through the rest of the profile. The depth to bedrock is about 10 feet. Perched water tables can form during the wet season. This soil is unsuitable for crops, highway locations, grading material, gravel, embankments, agricultural drainage, irrigation, and waterways. The soil is suitable for topsoil (upper foot only), small hand dug farm ponds, and terraces and surface water diversions (Ref.10).

3.11.3 Subsurface Geological Characterization

Subsurface geology near the subject property primarily consists of the Keokuk and Reeds Spring Formations and St. Joe Group also known as the “Boone Chert”. The Boone Chert consists of fractured massive chert with beds of cherty limestone in the lower part. The maximum thickness of the unit is 400 feet in Ottawa County (Ref.13). Below the Boone Formation lies the Ozark Confining Unit, this consists of shale and limestone. Below the Ozark Confining Unit lies the Roubidoux Aquifer that consists of sandstone and dolomite. Below the Roubidoux Aquifer lie the St. Francois Confining Unit, St. Francois Aquifer, and Basement Confining Unit that consist of dolomite, sandstone, and granite respectively (Ref. 21).

3.11.4 Ground Water Characteristics

The groundwater near Miami, Oklahoma typically has fair to good chemical quality, however the water quality in the Boone aquifer to the north of Miami in Picher, Oklahoma is poor due to contamination from past mining operations. This area is underlain by Boone Chert and alluvial and terrace deposits. The water tends to contain high concentrations of total dissolved solids, calcium, and bicarbonate. The water contains low sulfate, chloride, and nitrate concentrations. The Boone Chert formation yields about 1,000 gpm in wells drilled in the vicinity of Miami, Oklahoma (Ref. 13). The direction of shallow groundwater flow, according to the topographic map on the DEQ dataviewer, is southwest from the subject property toward the Neosho River. The Oklahoma Water Resources Board Water Well database was searched for section 31, township 28 north, and range 23 east (subject property and adjoining properties); section 29, township 28 north, and range 23 east (northeast of subject property); and section 30, township 28 north, and range 23 east (north of subject property). Twenty-one wells were

found for the aforementioned areas. A list of these wells and a map can be found in Appendix C.

3.11.5 Air Characteristics

No air emissions were noticed at the subject property or the adjoining properties. Jeff Alls had no knowledge of any air emissions on the subject property (Ref. 12). The armory had a faint musty odor due to past flooding of the armory. No odors were noticed outside of the subject property during the site visit. There is a potential for lead dust and asbestos emissions from the subject property.

The following facilities were located within 1 mile of the subject property and listed on the DEQ Air Quality air emissions inventory on the DEQ Dataviewer (Ref. 17). Comet Cleaners of Miami located is a dry cleaning pick up site, no dry cleaning is performed on site. No permit has been issued through the DEQ Air Quality Division (DEQ AQD). Carter's Custom Fiberglass is considered as De minimis for volatile organic compounds (VOC), therefore no permit is required from DEQ AQD. Miami COOP Association is considered De minimis for total particulate matter and does not have a permit from DEQ AQD. Miami Laundry and Dry Cleaners uses a petroleum solvent for dry cleaning and is considered as a permit exempt facility, because it has low VOC emissions (Ref. 18).

4.0 RECORDS REVIEW

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

4.1 Federal National Priorities List (NPL)

The EPA Envirofacts Warehouse database was searched for NPL sites near the subject property within the ASTM's recommended search radius of one mile. Three NPL sites came up in the search. The subject property is located within the Operable Unit 2 boundary of the Tar Creek Superfund site (Ref. 22).

There is also an EPA database for Delisted NPL sites, which ASTM requires to be reported within ½ mile of the subject property. No delisted NPL sites are within the ½ mile search radius.

4.2 Federal CERCLIS List

The EPA database for CERCLA Information Service (CERCLIS) was searched for active and archived CERCLIS sites on and near the subject property. The ASTM's recommended search radius of the subject property for both active and archived CERCLIS sites is ½ mile. One active CERCLIS site was found within ½ mile of the subject property. It is the Ottawa Robison-Roger Building. EPA completed a pre-CERCLIS screening on June 25, 2009. They also plan to perform a preliminary assessment on the property in the future (Ref.14). See Appendix C for more information.

4.3 Federal RCRA CORRACTs List

The EPA database for RCRA facilities subject to corrective action were searched within the ASTM's required minimum distance of one mile of the subject property. No RCRA CORRACT facilities are within the one-mile radius of the subject property (Ref. 15 and 19).

4.4 Federal RCRA non-CORRACTS TSD List

The EPA database for RCRA facilities not subject to corrective action was searched within the ASTM's required minimum distance of ½ mile of the subject property. No RCRA non-CORRACT TSD sites are within the ½ mile radius of the subject property (Ref. 15 and 19).

4.5 Federal RCRA Generators List

DEQ RCRA Notifiers database was searched for RCRA generators within the ASTM's required minimum search distance of the subject property (Ref. 20). The minimum distance is the property and adjoining properties. The subject property did not have any RCRA notifiers or generators and none are known on adjacent properties. The list of RCRA notifiers for Miami, Oklahoma is in located in Appendix C.

4.6 Federal ERNS List

ERNS maintained by the National Response Center was searched for any hazardous substance releases or spills within the subject property. ASTM requires a minimum search distance of property only when identifying ERNS cases. No ERNS sites were reported within the property or the adjoining properties. The ERNS data is included in Appendix C.

4.7 Federal Institutional Control/Engineering Control Registries

There are no known Institutional Controls/Engineering Controls on the subject property according to the owner and representatives of the subject property. Federal Institutional Control Registries are still under development.

4.8 State-Equivalent NPL

DEQ does not have a State-equivalent NPL database. Oklahoma does not have a State Superfund law to establish a State-equivalent NPL database.

4.9 State-Equivalent CERCLIS

DEQ does not have a State-equivalent CERCLIS database.

4.10 State Landfill and / or Solid Waste Disposal Sites

DEQ regulates landfills and solid waste disposal sites across the State of Oklahoma. State landfills and solid waste disposal facilities were searched in the DEQ database within the ASTM required minimum distance ½ mile from the subject property. No permitted landfills or solid waste disposal facilities are located within the search distance of the subject property (see Radius Map in Appendix C). No landfills, dumping, or disturbed soil were noticed on the subject property during the DEQ site visit on April 16, 2009. A waste transfer station is located in Miami, Oklahoma. Waste is stored at this facility until it can be transported to a landfill in Kansas.

4.11 State Leaking UST List

The Oklahoma Corporation Commission UST Notification Database was searched to locate any known LUST sites located within the ASTM's minimum search distance of a ½ mile of the subject property. Twenty-five LUST sites were found within the ½ mile radius. The following sites are listed below. The OCC database did not have detailed information for all of the sites; those with detailed information are listed below. The OWRB map in Appendix C shows locations of LUST sites near the subject property.

State Registered UST sites and LUST cases

Facility ID	Name	Address	LUST	Product	Tank Status	Tank Removed
5802211	MIAMI CON	2840 6TH	X	Diesel	Permanently out of use	
5802211	MIAMI CON	2840 6TH	X	Gasoline	Permanently out of use	
5805785	CO B (-)	830 D SE		Gasoline	Permanently out of use	X
5806191	BOGLE STATION	400 D ST	X	Other	Permanently out of use	X
5806191	BOGLE STATION	400 D ST	X	Gasoline	Permanently out of use	X
5806191	BOGLE STATION	400 D ST	X	Diesel	Permanently out of use	X
5806191	BOGLE STATION	400 D ST	X	Gasoline	Permanently out of use	X
5806191	BOGLE STATION	400 D ST	X	Gasoline	Permanently out of use	X
5806191	BOGLE STATION	400 D ST	X	Gasoline	Permanently out of use	X
5807435	OPERATION	4TH & D ST SE		Other	Permanently out of use	
5807435	OPERATION	4TH & D ST SE		Gasoline	Permanently out of use	
5809652	GAS & SERVE	505 S MAIN	X	Gasoline	Permanently out of use	
5809652	GAS & SERVE	505 S MAIN	X	Gasoline	Permanently out of use	
5809652	GAS & SERVE	505 S MAIN	X	Gasoline	Permanently out of use	
5810793	SOUTH SEWAGE TREATMENT PLANT	10TH & H		Diesel	Permanently out of use	
5812425	BIG DADDY	1030 E. S	X	Gasoline	Permanently out of use	
5812425	BIG DADDY	1030 E. S	X	Gasoline	Permanently out of use	
5812425	BIG DADDY	1030 E. S	X	Gasoline	Currently in use	
5812425	BIG DADDY	1030 E. S	X	Diesel	Currently in use	
5813451	RIVERVIEW AUTO SALES	624 S MAIN		Gasoline	Permanently out of use	
5813451	RIVERVIEW AUTO SALES	624 S MAIN		Gasoline	Permanently out of use	
H5815176	SINCLAIR	2ND & D ST SE	X	Not Listed	Permanently out of use	
H5815176	SINCLAIR	2ND & D ST SE	X	Not Listed	Permanently out of use	
H5815176	SINCLAIR	2ND & D ST SE	X	Not Listed	Permanently out of use	
064-2778	SHINN OIL COMPANY	2nd & D St SE	X	Not Listed	Permanently out of use	X

- The former Bogle Station lease property, located at 400 D Street, is located approximately 0.38 miles northeast (upgradient) of the subject property. The site has a historical release at the site. Historically, the site housed several USTs, ASTs, and various product storage buildings. All structures including USTs have been removed. Several soil samples contained total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and total xylenes above the OCC action levels. Groundwater samples contained TPH and benzene concentrations above OCC action levels. For more information on contaminant concentrations see the Environmental Site Assessment Report written by EMR Incorporated on November 4, 2003 located in Appendix C. The contamination is located across the street to the west of the Miami Water Treatment facility. Data indicate that contaminated groundwater is flowing away from City drinking water wells. City drinking water wells are sealed to a depth of about 500 feet below ground surface and the contamination at the Bogle site is located in a perched water layer that is not connected to the City drinking water source. The site is still being monitored by OCC.
- The Shinn Oil Company formerly Ingram Oil Company, located at 2nd and D Street SE, is located approximately 0.6 miles north (upgradient) of the subject property. The site was formerly used as a bulk fuel and oil distribution facility. The soil and groundwater contain elevated levels of

Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) and total petroleum hydrocarbons (TPH) as gasoline, diesel fuel, fuel oil, and motor oil. All site improvements, including above ground storage tanks, a UST, and underground piping, were removed in 2003 by EMR Incorporated. DEQ did not find any documentation that shows the soil and groundwater contamination has been addressed. The OCC database indicated that the case is still open.

OCC Action Levels

Name	Media	OCC Action Level
Benzene	Soil	0.5 mg/kg
Benzene	Groundwater	0.005 mg/l
Toluene	Groundwater	1.0 mg/l
Ethylbenzene	Groundwater	0.7 mg/l
Total Xylenes	Groundwater	10.0 mg/l
DRO	Soil	Not listed
GRO	Soil	Not listed

Soil and Groundwater Results

Summary of Soil Analytical Results									
Sample Number	Sample Depth	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH as Gasoline	Diesel Fuel	Fuel Oil	Motor Oil
GP-1	4'-8'	0.0130	ND	0.110	0.170	163	ND	7.7	ND
GP-2	4'-8'	ND	ND	ND	ND	52.6	ND	14.1	7.6
GP-3	4'-8'	0.190	0.230	0.680	1.16	133	ND	256	88.2
GP-4	15'-16'	2.50	3.40	11.2	50.6	1,220	131	ND	ND
GP-5	8'-12'	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	8'-12'	ND	ND	ND	ND	ND	ND	ND	ND

Note: All concentrations reported in mg/kg or parts per million (ppm).

Summary of Groundwater Analytical Results							
Sample Number	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH as Gasoline	Fuel Oil	Motor Oil
GP-1	38.4	5.3	13.4	18.9	1,200	470	1,400
GP-4	15,000	3,540	3,390	13,600	219,000	494,000	ND

Note: All Concentrations reported in µg/l or parts per billion (ppb).

- The Gas N Serve, located at 505 South Main in Miami, OK, is located about 0.4 miles from the subject property. The OCC issued a letter in January of 2000, stating that there is no contamination of concern on site and that the tanks are considered permanently closed. DEQ could not find any evidence of the tanks being removed.

4.12 State Registered UST Sites

The Oklahoma Corporation Commission UST Notification Database was searched to locate registered USTs located within the ASTM's minimum search distance for the subject property and adjoining properties. The subject property formerly contained a 1,000 gallon gasoline UST on the property. The UST was removed July 13, 1995 from the subject property. No leaks were reported to the OCC for the UST. Following the tank removal the soil was sampled from the side and the center of the tank pit. No gasoline range organics, diesel range organics, BTEX, or other contaminants were found in the UST excavation. For a list of registered UST sites, see Section 4.11. For a map of UST sites near the subject property, see Appendix C.

4.13 State Institutional Control/Engineering Control Registries

The State Institutional Control/Engineering Control Registry is currently under development by the DEQ. There are no known Institutional Control/Engineering Controls in effect for this property.

4.14 State Voluntary Cleanup Sites

DEQ VCP database was searched for VCP sites within the required ASTM search distance of ½ mile of the former Miami Armory property. No VCP sites are located on or within ½ mile of the subject property (see Radius Map in Appendix C).

4.15 State Brownfield Sites

DEQ Brownfield database was searched for Brownfield sites within the required ASTM search distance of ½ mile of the former Miami Armory property (Ref. 16). No Brownfield sites were found within ½ mile of the former Miami Armory property.

4.16 Oil and Gas Records

The subject property is located in the NW ¼ SW ¼ of Section 31 – T28N – R23E. DEQ performed a search of oil and gas records from the Oklahoma Corporation Commission's oil and gas records database and looked at Ottawa county land records at the Ottawa County Courthouse. The subject property is in an area where there is no history of oil and gas development. Oil and gas records were searched to record the known history of well development on this site. A search area consisted of the property as described from the legal location above and the quarter, quarter, quarter sections directly above and upgradient of the site. No well records were found in the quarter, quarter, quarter sections directly above and upgradient of the site. County land records show no record of oil and gas development on the subject property.

5.0 SITE RECONNAISSANCE AND INTERVIEWS

5.1 Methodology and Limiting Conditions

A site reconnaissance of the property located on the northwest corner of D SE Street and 9th Street was performed on April 16, 2009. Heather Mallory of the DEQ met Jeff Alls, Oklahoma National Guard facility maintenance for northeast Oklahoma, at the property. Mr. Alls served as the facility maintenance provider at the Miami Armory. Mr. Alls introduced Heather Mallory to the site and answered questions to the best of his knowledge. Mr. Alls led Mallory inside the building and gave his knowledge regarding the former use of the building and property and past activities that occurred onsite. All areas of the building were observed noting any environmental conditions that might need additional investigation. The outside area of the property was examined thoroughly for observations that might need additional investigation. Visible chat was observed on the south side of the building in the driveway and in the parking area alongside the ditch on the east side. Soil samples were taken, by Heather Mallory, from the south and east parking areas during the site visit. No indoor firing range, shooting activities, or disturbed soil was observed onsite; therefore, no other soil samples were taken.

5.2 General Site conditions

The former Miami Armory Property is a brick building of approximately 11,000 square feet. The building is currently vacant. The property surrounding the building consists of residential to the north and east and city parks to the west and south. The property has a chat gravel driveway/parking area on the south and east side of the building; grass to the north, east, and west; and a sidewalk on the east side of the building. The property is in town and surrounded by paved streets. The following are general site conditions that were evaluated on the property and adjacent properties.

Aboveground Storage Tanks (ASTs)

The subject property does not have any ASTs. No ASTs were found on the adjacent properties during the site reconnaissance.

Landfills and/or Dumping

No landfills, dumping, or disturbed soil was found on the property or adjacent properties.

Impoundments

No impoundments were observed at the subject property or adjacent properties. The closest impoundments are located 0.15 miles to the southeast at the waste water treatment plant.

Monitoring Wells

No monitoring wells are present on the property. According to the Oklahoma Water Resources Board well search, performed on September 18, 2009, there are 21 monitoring wells located within one mile of the subject property. Some of these wells are all located upgradient of the subject property. See Appendix C for a map and list of OWRB wells found within 1 mile of the subject property.

Disturbed and Stained Soils

No stained soils were observed at the subject property. Visible chat was noticed in the parking area/driveway on the east and south sides of the building. Composite soil samples were taken, by DEQ personnel, from the parking areas on the east and south side of the building. For a detailed sketch of the sample point locations see Appendix F.

Seeps

No seeps of any kind were observed at the subject property.

Chemical Spills

The subject property has been flooded twice by the Neosho River. In the 1980's water stood up to two feet in the building and in 2007 water stood up to four feet in the building. As a result of recent and past flooding, many of the building materials have been removed from the building (i.e. floor tile, sheet rock, insulation). Stains were not observed on the floor during the site visit. Jeff Alls did mention that lithium batteries exploded during the flood in the supply room. Mr. Alls said that the batteries were properly cleaned up. Several chemicals were observed at the subject property during the site visit. These are listed in section 3.6. These chemicals have been removed from the building by Jeff Alls.

Farm Waste

No farm waste was observed at the subject property.

Known Pesticide Misapplication

No known pesticide misapplications were detected during the site visit or during the supportive research.

Discharges and Runoff from Adjacent Property Affecting the Site

Flooding from the nearby Neosho River has affected the site in the past. The Neosho River resides to the west of the subject property. The ditch located on the east side of the building receives stormwater runoff from properties to the north. There are also

numerous floor drains throughout the armory building on the subject property that have the potential to discharge into the subsurface.

Petroleum Products and Oil and Natural Gas Exploration

No petroleum products or oil and natural gas exploration was observed during the site visit.

Asbestos

The building contains some asbestos containing materials. Some asbestos containing floor tile and mastic has been removed from the building after the floods. No information was available on the removal of the floor tile. Marshall Environmental Management conducted an asbestos survey on July 7, 2009 and found asbestos in the caulking around the windows, pipe wrap, 9x9 floor tile, mastic, and tar on a flue.

Lead

The building contains lead-based paint and lead dust. Marshall Environmental Management conducted lead-based paint and lead dust surveys on July 7, 2009 and found lead dust and lead-based paint throughout the building. Lead dust was found in every room of the building. There is no indoor firing range in this building, so the lead dust is most likely due to deteriorated lead-based paint and tracking lead dust from the mining waste located on the south and east sides of the building. Lead-based paint was found on doors, door frames, windows, a wall, overhead doors, overhead door slides/rollers, overhead door guards, soffit, beam, brown wood cabinets, and window ledge in various places inside and outside of the building. DEQ sampled the soil in the driveway and parking areas along the south and east sides of the building (see Appendix F for illustration and results). The soil on the south side (sample M-1) contained large amounts of visible chat and tested above the site specific screening level for lead and below the screening level for zinc and cadmium (see table below). The soil on the east side (sample M-2) contained moderate amounts of visible chat and tested below screening levels for lead, zinc, and cadmium. Residential screening levels were considered for this armory, because it is situated near city parks and residential areas. The lead dust and lead-based paint in the building and the chat contamination outside are considered an REC. For more information on lead-based paint and asbestos, see Appendix F.

Contaminant	Residential Screening Level (mg/kg)	M-1	M-2
Lead	500*	777	394
Zinc	23,000	9080	1740
Cadmium	70	38	11.4

* Site specific screening level for armory program

Transformers/PCB Equipment/Mercury

There were no transformers observed onsite. No Polychlorinated biphenyl (PCB) contamination or other PCB-containing equipment was found at the site.

Fluorescent lighting ballasts were found throughout the entire building. It is unknown if the ballasts contain PCBs. None of the ballasts appeared to have leaks. Fluorescent light bulbs generally contain mercury.

5.3 External Observations

The chat (mining waste from the Tar Creek Superfund Site) that was historically used as gravel for the driveway and parking area on the south and east side of the building is a hazard especially to children 6 and under and is considered a REC. The subject property is composed of a chat/gravel driveway and parking area, concrete sidewalks on the east side, and grass vegetation covering the remainder of the site. This armory does not have an indoor firing range, so no vent fan was present. There was no vent pipe, from the former UST, observed during the site visit. The area between the ditch and the road, on the east side of the building, is used as a parking area. This parking area contains a mixture of soil, gravel, and chat. The driveway on the south side of the building contains large amounts of chat. The soil samples were taken from the top three inches of soil. The soil was too hard to dig deeper than three inches at the time of sampling. Chat was observed in the top three inches of soil in all of the excavations on the south side of the building. On the east side of the building, chat was observed in the greatest abundance near the southeast corner of the building near the overhead doors. Soil along the ditch on the east side contained a chat and limestone gravel mixture. Chat is not as prevalent along the ditch as it is on the southern side of the building.

5.4 Internal Observations

The building is currently vacant and was last used by the Oklahoma Army National Guard to support the military mission. The building was constructed from brick in 1956. During the site visit on April 16, 2009, no staining or strong odors were noticed. However, numerous chemicals and military equipment were found throughout the building. These chemicals are listed in detail in section 3.6. According to Jeff Alls, all of these chemicals were removed from the building on July 10, 2009, by the Oklahoma National Guard unit in Vinita. Marshall Environmental Management conducted an asbestos survey on July 7, 2009 and found asbestos in the caulking around the windows, pipe wrap, 9x9 floor tile, mastic, and tar on a flue. All of the asbestos containing materials listed above are considered an REC. The building also contains lead dust and lead-based paint. Marshall Environmental Management conducted a lead survey on July 7, 2009. Lead dust was found throughout the building and lead-based paint was found on doors, door jambs, windows, overhead doors, overhead door rollers, fire door slide, a soffit, a beam, overhead door guards, wood cabinets, a window ledge, and a concrete wall painted black (see Appendix F for reports). Several lithium batteries were observed in the building during the DEQ site visit. Jeff Alls pointed out that several lithium batteries

leaked during recent flooding and gave National Guard members chemical burns when cleaning them up. Jeff Alls indicated that this happened in the Supply Room and was cleaned up appropriately. The leaking lithium batteries are considered an HREC. Photographs of the internal view of the site can be found in Appendix D.

5.5 Interviews

Jeff Alls currently serves as the OMD facility maintenance representative for northeast Oklahoma. Jeff Alls has been in this position since about 2006 and is a good point of contact for information about the armory. Alls said that the Oklahoma Army National Guard (OKARNG) vacated the property approximately two years ago. Alls said that the OKARNG formerly used this building for equipment needed to support the military mission of Company B, 1st Battalion, 279 Infantry division of the OKARNG. Alls stated that the building housed tools, gas masks, communication equipment, weapons, and a limited amount of chemicals. Alls stated that to his knowledge no weapons fire occurred onsite either indoors or outdoors. All weapons fire occurred offsite. The chemicals used in the armory consisted of household cleaning agents, paint, and lithium batteries. Alls said that military vehicles were formerly stored in the fenced in grassy area on the west side of the building. Vehicle fuel, motor oil, brake fluid, and transmission fluid were formerly stored onsite. Jeff Alls stated that vehicles were worked on in the drill floor room of the armory. It is unknown where used oil, antifreeze, etc were stored. Jeff Alls stated that the underground storage tank had been removed (See Appendix C for documentation). For more information on the site visit, see the notes and numbered floor plan map and description of each room in Appendix E.

6.0 FINDINGS

Summarized below are the major findings from this Targeted Brownfield Assessment and DEQ's recommendations. The major findings of the highest environmental concern are presented first.

- The former Miami Armory was built in 1949 and completed in 1957. The land for the building was owned by private land owners and was undeveloped until the armory was built in 1949. The subject property is currently owned by the Department of Environmental Quality. The DEQ SCAP plans to clean up the lead and asbestos contamination on the subject property and properly dispose of all associated waste. After all remediation activities have taken place and a notice of remediation and easement has been filed in the Ottawa County, courthouse, the deed to the property will revert to the City of Miami.
- Historically, the subject property was used to house equipment needed by Company B, 1-279 Infantry. Tools, firearms, gas masks, communication equipment, chemicals, lithium batteries, and numerous other supplies were stored in the building. See Appendix E for a list of supplies formerly stored in the armory. The building does not have an indoor firing range. The building is likely to contain lead-based paint and asbestos due to the age of construction. Marshall Environmental Management conducted asbestos and lead

surveys on July 7, 2009 and found asbestos in the caulking around the windows, pipe wrap, 9x9 floor tile, mastic, and tar on a flue. Lead dust was found throughout the building and lead-based paint was found on doors, door jambs, windows, overhead doors, overhead door rollers, fire door slide, a soffit, a beam, overhead door guards, wood cabinets, a window ledge, and a concrete wall painted with black paint.

- The armory was flooded in the 1980's up to 2 feet and in 2007 up to 4 feet. The flood waters originated from the nearby Neosho River. During the 2007 flood, lithium batteries leaked and caused several OKARNG members to suffer chemical burns. The OKARNG subsequently cleaned up the lithium battery spill. The lithium battery spill is considered an HREC. The lead dust and lead-based paint in the building are considered HRECs.
- The mining operations in Oklahoma, Kansas, and Missouri are part of the Tri-State Mining District. The Tri-State Mining District is comprised of Superfund sites located in northeastern Oklahoma, southeastern Kansas, and southwestern Missouri. The Miami Armory is located within the Operable Unit 2 boundary of the Tar Creek Superfund Site, the Oklahoma portion of the Tri-State Mining District. Mining waste, locally known as chat, was used as gravel on the south and east sides of the building. DEQ sampled the soil in the driveway and parking areas along the south and east sides of the building (see Appendix F for illustration and results). The soil on the south side contained large amounts of visible chat and tested above the site specific screening level for lead and below the screening level for zinc and cadmium (see Section 5.2 Lead). The soil on the east side contained moderate amounts of visible chat and tested below screening levels for lead, zinc, and cadmium. Residential screening levels were considered for this armory, because it is situated near city parks and residential areas. The chat contaminated soil outside of the building is considered an REC.
- The former UST was a 1,000 gallon, asphalt coated or bare steel tank with steel piping that held gasoline. Soil testing after tank removal revealed no benzene, ethylbenzene, toluene, xylenes, gasoline range organics, diesel range organics, kerosene, JP-4, naphtha, fuel oil, or higher order hydrocarbons in the tank excavation pit. The UST at the subject property was removed on July 13, 1995 according to OCC records. The tank did not appear to have any leaks upon removal. Before removal, the UST was last used in June of 1978. The UST is considered an HREC. See Appendix C for information on UST removal.
- Nineteen LUST cases were reported in the OCC UST database within ½ mile of the subject property. No LUST cases were reported on the subject property.
- Twenty-five underground storage tank sites were found within a ½ mile radius of the subject property. The UST sites are primarily located to the north, east, and northeast of the subject property. The USTs located to the east and northeast are upgradient of the subject property. The closest USTs to the subject property are located five blocks from the subject property and are listed as permanently out of use. For more detail on tank removal see Section 4.11. Of the twenty-five USTs, nineteen sites have historic leaking

underground storage tank cases. Several LUST cases are upgradient of the subject property, see Section 4.11 for more detail. The subject property does not have any LUST cases on record.

- No oil and gas development was found in the OCC oil and gas records for the subject property and quarter, quarter, quarter sections directly above and upgradient of the site.
- Adjoining properties consist of residences to the north and east and a city park to the south and west. Historical aerial photographs show residences and structures associated with the city park on adjacent properties and a vacant lot where the armory building now stands.
- Sanborn Fire Insurance maps showed that the subject property was either vacant or residential before the armory was built. Adjacent properties were most likely residential structures and/or a city park.
- No delisted NPL sites, archived CERCLIS site listings, RCRA non-corrective action sites, CORRACTS TSD listings, ERNS list, Institutional Controls/Engineering Controls, or State landfills and/or solid waste disposal sites were found on the subject property or within the ASTM recommended search radii. No RCRA generators, VCP sites, or Brownfield sites were found on the subject property. The subject property is on the DEQ SCAP list for cleanup of lead and asbestos contamination. One active CERCLIS site listing was found within ½ mile of the property. It is the Ottawa Robison-Roger Building. A preliminary assessment on the property is scheduled for the future on that site. The subject property is located within the Operable Unit 2 boundary of the Tar Creek Superfund Site.
- No transformers were found on the subject property. Fluorescent lighting ballasts are located throughout the building. The lighting ballasts are all in good condition. It is unknown if the lighting ballasts contain PCBs. Fluorescent light bulbs generally contain mercury.

7.0 OPINION AND RECOMMENDATIONS

Due to the past use of the property and contamination found on the subject property, the environmental professionals working on this site believe that cleanup of lead and asbestos is warranted. Remediation of the mining waste and contaminated soil underlying the mining waste is also warranted. Additional sampling of the outside soil may be needed to further delineate the extent of soil contamination. Several findings mentioned in Section 6.0 of this Phase I TBA report support this opinion.

DEQ feels there is a low potential of impact from the LUST cases due to the distance they are located from the site. None of these LUST cases were found on the adjoining properties or subject property. The closest LUST case that is upgradient of the subject property is located 5

blocks north of the subject property. This LUST case should not affect the subject property due its proximity. It is not believed that nearby UST sites pose a threat because they are listed as permanently out of use and are all located 5 blocks or further from the subject property. DEQ feels there is a low potential of impact to the site from the LUST and UST sites.

Four air emission facilities were found within the recommended search radii. These facilities are located approximately 0.4 to one mile north or northeast of the subject property. DEQ feels that there is a low potential impact to the subject property from the air emissions at these facilities.

Flooding from the Grand Neosho River enters the subject property every 20 to 30 years. The Grand Neosho River carries metals laden water from Elm Creek, which receives metals laden runoff from the Tar Creek Superfund Site. According to Dennis Datin, DEQ Tar Creek Superfund Site Project Manager, sampling conducted by EPA contractors after the 2007 flood indicates that flood waters did not contaminate properties near the subject property. For this reason, DEQ does not feel that metals contamination at this site is due to flooding. Especially since Tar Creek is located east and the confluence of Tar Creek and the Grand Neosho River lies south and downgradient of the subject property. DEQ does not believe that the Tar Creek Superfund Site has the potential to impact this site other than the historical placement of chat in the parking areas.

DEQ believes that there was low impact from chemicals stored on the premises. All chemicals have been removed from the building and the leaking lithium batteries have been cleaned up.

8.0 DATA GAPS

No tribal information was obtained for this assessment. No tax records, city directories, or zoning records were reviewed for this report. However, this did not affect the ability of the DEQ to make a recommendation on the subject property. No site limitations were encountered during the site visit.

9.0 CONCLUSIONS

DEQ has performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E 1527-05 of the former Miami armory located at 830 D Street SE Miami, Oklahoma. Any exceptions to, or deletions from, this practice are described in Section [10.0] of this report. This assessment has revealed no evidence of recognized conditions in connection with the property except for the following: soil contaminated with lead and low levels of zinc and cadmium; and lead dust, lead-based paint, and asbestos contamination throughout the building.

The information provided in this assessment is to assist the City of Miami in its revitalization 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).

10.0 ADDITIONAL SERVICES

Additional services provided in this Phase I Targeted Brownfield Assessment include soil, asbestos, lead-based paint, and lead dust sampling by DEQ and its contractors.

11.0 DEVIATIONS

The following deviations from ASTM Practice E 1527-05 occur in this Phase I Targeted Brownfield Assessment. Asbestos, lead-based paint, lead dust, and soil were sampled and the corresponding results were included in this report. Normally, sampling is not included in a Phase I Environmental Assessment, but it was in this case. No tax records, city directories, or zoning records were reviewed for this report.

12.0 REFERENCES

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22. U.S. Environmental Protection Agency. Region 6. (August 1997). Record of Decision: *Residential Areas Operable Unit 2, Tar Creek Superfund Site, Ottawa County, Oklahoma.*

13.0 APPENDICIES

Appendix A	Site Map and Legal Documents
Appendix B	Aerial Photographs and Topographic Maps
Appendix C	Review of Regulatory Records
Appendix D	Site Photographs
Appendix E	Site Visit Notes
Appendix F	Sample Results
Appendix G	Qualification(s) of Environmental Professionals

APPENDIX A: SITE MAP AND LEGAL DOCUMENTS

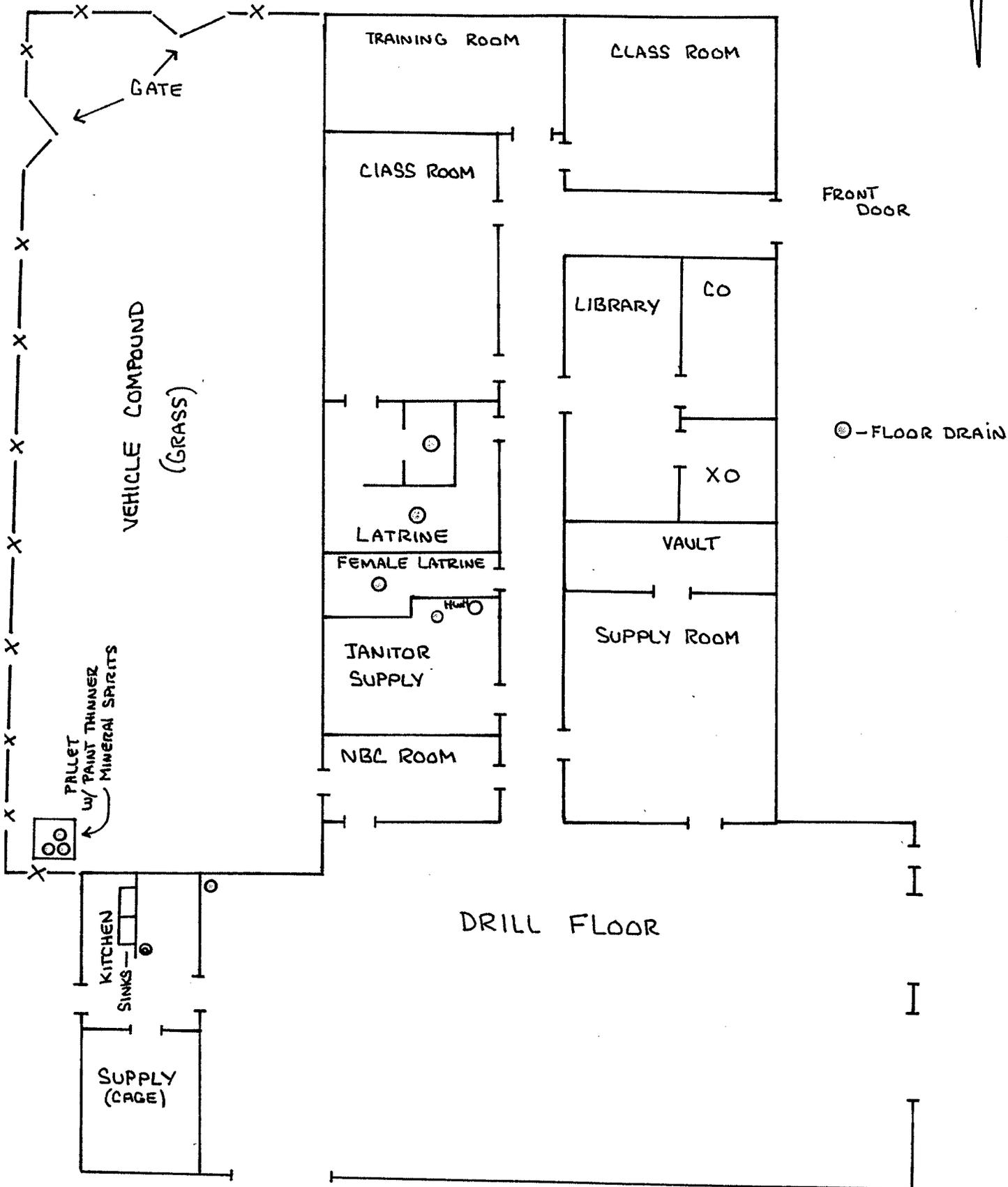
MIAMI ARMORY

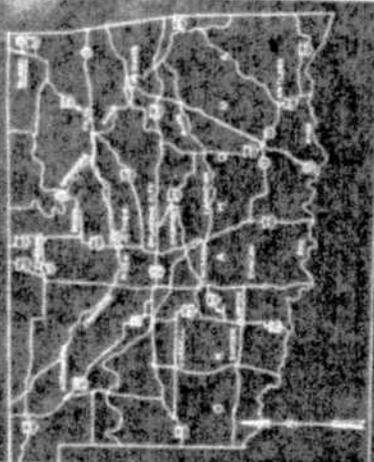
MIAMI, OKLAHOMA

BUILT: 1957

(CO B (-) 1 BN 279 INF)

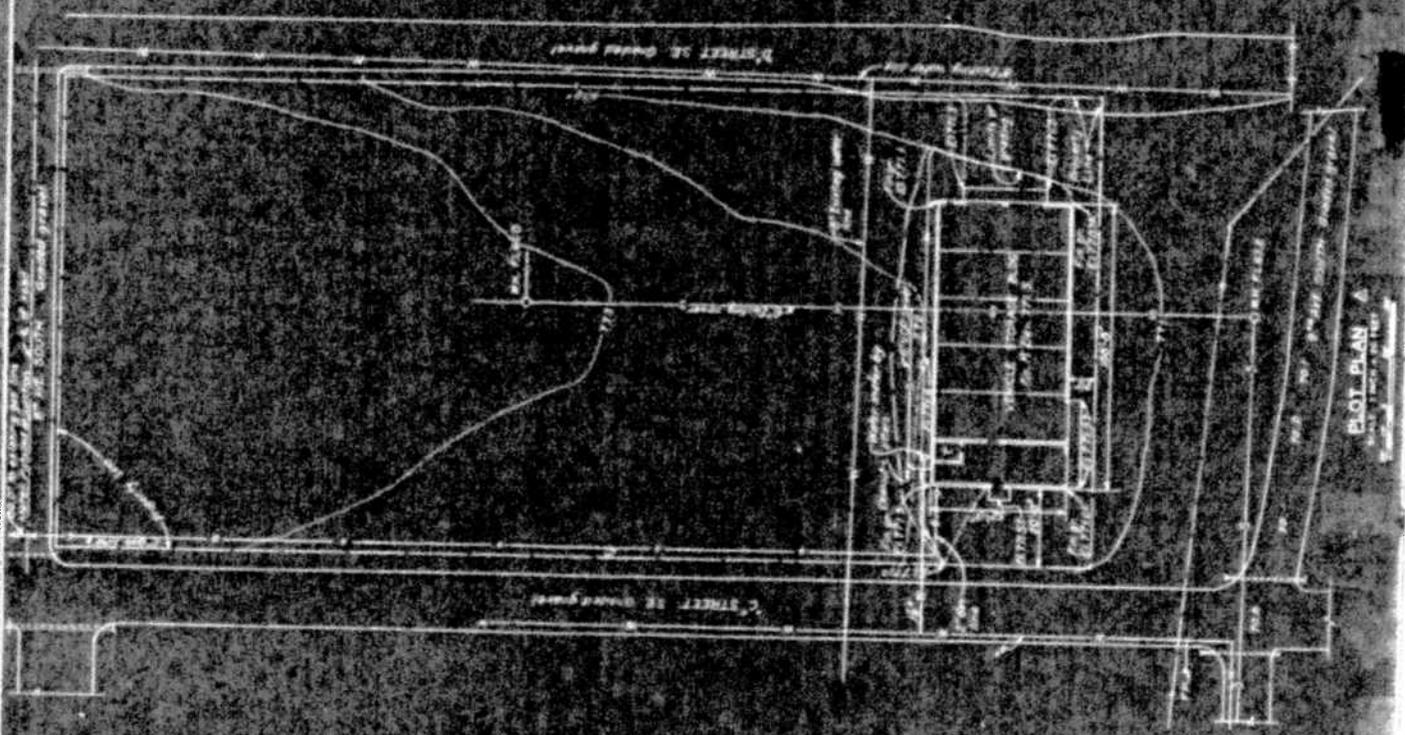
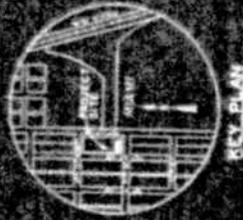
VISIT: JUNE 24, 1996





RECORD (AS BUILT) DRAWING

DATE	1950-3-27
PROJECT	OKLAHOMA NATIONAL GUARD MOTOR VEHICLE STORAGE BLDG
OWNER	MAW SITE
DESIGNED BY	
CHECKED BY	
APPROVED BY	
SCALE	1" = 100'



RE-SALE TAX DEED
(Individual)

WHEREAS, each of the tracts, parcels or lots of land in this indenture described were separately offered for sale at public auction at a certain sale begun and held on the first Monday in November, 19 19, at the office of the County Treasurer in the court house in and for said county of Ottawa, State of Oklahoma, for the taxes levied thereon for the year 19 19 and each of said lands being legally liable for such taxation, and having been duly, separately assessed and properly charged on the tax book or duplicate for said year, and having been legally advertised for sale for said taxes, and there being no other bidder therefor offering the amount due thereon, each of same was by said County Treasurer at said sale bid off in the name of said county of Ottawa, State of Oklahoma, for the respective sum after each tract mentioned, the same being the amount of taxes, penalties, interest and costs due and unpaid on the said described tract or lot of land returning delinquent for non-payment of said taxes, costs and charges for the said year aforesaid, and,

WHEREAS, each of said tracts, parcels or lots of land so sold as aforesaid to said Ottawa County, having remained unredeemed for a period of two years from said sale, and no person having offered to purchase the same for the taxes, penalties and costs due thereon, was duly and legally advertised for separate sale at re-sale for said taxes, costs, penalty and interest accrued on each of same, and so remaining due, delinquent and unpaid, and was at a certain sale begun and held on the 4th Monday in November, 19 21, by the undersigned County Treasurer of said county, pursuant to said advertisement, offered for sale in separate tracts, at public auction for cash at the office of the County Treasurer in the Court House in and for said County of Ottawa, and was then and there sold to ADDISON, in the manner required by law, for the respective sum hereafter indicated, he being the highest and best bidder therefor, and the said sum paid being the highest amount bid, and, the owner of said property so sold at said re-sale has not paid to the said County Treasurer the said delinquent taxes, penalties and costs so accrued on said property, and the same now remains unredeemed.

NOW, THEREFORE, this indenture made this 1 day of December 19 21, between the State of Oklahoma by said undersigned treasurer of said county of the first part, and the said ADDISON of the second part,

WITNESSETH, that the said party of the first part, for and in consideration of the premises and the sum of \$ 6472.5 in hand paid, hath granted, bargained and sold, and by these presents doth grant, bargain, sell and convey unto the said party of the second part, his heirs and assigns forever, the tracts or parcels of land so sold as aforesaid, and described as follows, to-wit:-

Description.	Amount bid in by county for.	Re-sale taxes, penalty and costs.	Highest bid and purchase price.
Lot 15 Block 108 1/2 m. main	\$ 464	\$ 113.19	\$ 25.00
Lot 13 Block 119 1/2 m. main	5.36	80.90	50.00
Lot 7 Block 133 m. main	35.49	144.65	25.00
Lot 6 Block 139 m. main	1.72	100.13	35.00
Lot 4 Block 142 m. main	1.72	2.25	2.00
Lot 26 Block 142 m. main	2.10	3.47	6.75
Lot 37 Block 145 m. main	4.78	75.30	20.00
Lot 9 Block 151 m. main	2.10	50.10	16.00
Lot 21 Block 153 m. main	3.23	52.74	20.00
Lot 22 Block 153 m. main	3.23	58.09	20.00
Lot 3, Block 156 m. main	2.10	41.27	22.00
Lot 14 - Block 157 m. main	2.10	59.38	10.00
Lot 10 - Block 159 m. main	2.09	91.70	13.00

Lot 17 Block 159 64' measure	709	57.34	15.00
Lot 18 Block 159 64' measure	709	57.34	15.00
Lot 4 Block 165 64' measure	709	57.34	14.00
Lot 28 Block 166 64' measure	710	37.13	11.00
Lot 4 Block 167 64' measure	1.57	45.14	10.00
Lot 5 Block 167 64' measure	1.57	53.19	10.00
Lot 6 Block 167 64' measure	1.57	53.19	10.00
Lot 12 Block 167 64' measure	.98	41.40	5.00
Lot 13 Block 167 64' measure	.98	41.40	4.00
Lot 19 Block 167 64' measure	1.57	47.21	4.00
Lot 20 Block 167 64' measure	1.57	47.21	4.00
Lot 21 Block 167 64' measure	1.57	53.19	5.00
Lot 22 Block 167 64' measure	1.57	53.19	5.00
Lot 11 Block 175 64' measure	1.03	7.42	2.00
Lot 12 Block 175 64' measure	1.03	7.40	5.00
Lot 31 Block 7 Green addition to main	7.09	3.46	2.00
Lot 4 Block 11 Green addition to main	7.09	3.46	2.00
Lot 5 Block 5 Green addition to main	7.35	17.87	2.00
Lot 11 Block 8 Green addition to main	7.98	135.12	12.00

In the county of Ottawa, State of Oklahoma.

TO HAVE AND TO HOLD each of said mentioned tracts or parcels of land to said party of the second part, his heirs and assigns forever, and all taxes, penalties, interest and costs previously assessed or existing against said real estate, including paving taxes and outstanding tax sale certificates, are hereby cancelled and set aside.

IN TESTIMONY WHEREOF, the said Joe Bless Treasurer of said County of Ottawa, has hereunto set his hand and seal on the day and year aforesaid.



STATE OF OKLAHOMA.
BY Joe Bless
County Treasurer of Ottawa County.

ACKNOWLEDGMENT.

State of Oklahoma,
County of Ottawa

SS.

Before me, John W. Chandler, County Clerk in and for said county, on the 1 day of December, 1921, personally appeared Joe Bless to me known to be the duly qualified and acting county treasurer of Ottawa County, State of Oklahoma, and the identical person as described in the within and foregoing instrument and acknowledged to me that he executed the same as his free and voluntary act and deed as such county treasurer for the uses and purposes therein set forth.



Filed for Record Dec. 1, 1921
at 3:16 o'clock P.M.
John W. Chandler, Co. Clk.

John W. Chandler
County Clerk of Ottawa County.

QUIT CLAIM DEED

Form No. 3

THIS INDENTURE, made and entered into this 5 day of April 1912, by and between ~~husband and wife~~ A. L. Towne and Mary Towne parties of the first part, and E. A. Effer part of the second part:

WITNESSETH, That the said parties of the first part for and in consideration of the sum of ~~Two Hundred and Twenty Five~~ One Hundred and Sixty Seven Dollars, to ~~them~~ them duly paid, the receipt whereof is hereby acknowledged has remised, released, and quit-claimed, and by these Presents do for themselves heirs, executors and administrators, remise, release and forever quit-claim unto the said part of of the second part, and to his heirs and assigns, forever, all their right, title, interest, estate, claim, and demand, both at law and in equity, of, in and to all the following described land situated in the county of Ottawa and State of Oklahoma, to-wit: Lots Five Six Twenty one and Twenty Two (5, 6, 21, 22) Block One Hundred and sixty seven (167) in the Original Town (now City) of Miami according to the Original plat thereof on file in the County Clerk's office in and for said Ottawa County.

TO HAVE AND TO HOLD THE SAME, Together with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining to the above described premises forever unto the said ~~A. L. Towne and Mary Towne~~ E. A. Effer heirs and assigns, so that neither of the said grantors A. L. Towne and Mary Towne or any person in their name and behalf, shall or will hereafter claim or demand any right or title to the said premises or any part thereof; but they, and every one of them, shall by these presents be excluded and forever barred.

IN WITNESS WHEREOF, The said parties of the first part have hereunto set their hand and seal... the day and year first above written.

Signed, sealed and delivered in the presence of
A. L. Towne (Seal)
Mary Towne (Seal)

THIS INDENTURE, made and entered into this 16th day of April, 1923
 by and between Georgia Yawman, a single woman,
 part V of the first part, and Louis N. Stivers, her husband and
~~part~~ part II of the second part;

WITNESSETH, That the said part V of the first part, for and in consideration of the sum of
One and no/100 Dollars,
 to her duly paid, the receipt whereof is hereby acknowledged has remised, released,
 and quit-claimed, and by these Presents does for her and her heirs and adminis-
 trators, remise, release, and quit-claim unto the said part II of the second part, and to ~~her~~ his
 heirs and assigns, forever, all her right, title, interest, estate, claim, and demand, both at law and in
 equity, of, in and to all the following described land situated in the county of Ottawa and
 State of Oklahoma, to-wit: Lots 29, 30, 31, Block 139; Lots 13, 14, 17, 18,
Block 142; Lots 21, 22, 23, 24, 25, Block 143; Lots 29, 29, 30, 31,
32, Block 144; Lots 7, Block 150; Lot 27, Block 155; Lots 14, 16, 17,
18, 25, Block 160; Lots 1, 10, 11, 14, 18, Block 161; Lots 11, 12,
15, 21, 25, 24, 31, Block 164; Lot 6, Block 165; Lots 17, 29, Block
167; Lots 16, and 26, Block 168; Lots 14, 19, 20, 21, Block 171;
4, Block 172 to official platt of Town of Miami

TO HAVE AND TO HOLD THE SAME, Together with all and singular the hereditaments and appurtenances
 thereunto belonging, or in anywise appertaining to the above described premises forever unto the said
~~Louis N. Stivers~~ Louis N. Stivers his
~~heirs and assigns~~ heirs and assigns, so that neither she
 the said Georgia Yawman or any person in her
 name and behalf, shall or will hereafter claim or demand any right or title to the said premises or any part
 thereof; but they, and every one of them, shall by these presents be excluded and forever barred.

IN WITNESS WHEREOF, The said part V of the first part has hereunto set her hand
 and seal... the day and year first above written.
 Signed, sealed and delivered in the presence of

Georgia Yawman (Seal)
 (Seal)
 (Seal)

STATE OF OKLAHOMA
County of OTTAWA

Subscribed and sworn to before me this 14th day of April 1923

to me well known to be the identical person who executed the within and foregoing instrument and who acknowledged that ERD executed the same as ERD and voluntarily executed same in accordance with the purposes therein set forth.



In Witness Whereof, I have hereunto set my hand and affixed my notarial seal this 14th day of April 1923 year last above written.

Nov. 18 - 1926

[Signature]
Notary Public

1248

Quit Claim Deed

FROM
George L. Yawman,

a single woman

From N. to Devere

[Signature]

STATE OF OKLAHOMA }
County of OTTAWA }

This instrument was filed for record on the

day of _____, 1923

at _____ o'clock _____ minutes _____ M.

in the office of the Register of Deeds, at

_____ Oklahoma.

and recorded in Book _____ at Page _____

Register of Deeds.

STATE OF OKLAHOMA }
COUNTY OF OKLAHOMA }
THIS INSTRUMENT FILED FOR RECORD IN DUPLICATE
BY THE OFFICE OF COUNTY CLERK AT MIAMI

APR 21 1923

Time _____ P. M.
And recorded in book _____ Page _____

[Signature] Deputy

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[Signature]

SHERIFF'S DEED.

KNOW ALL MEN BY THESE PRESENTS:

That, Whereas, on the 11th. day of December, 1935, in the District Court of Ottawa County, State of Oklahoma, in Cause No. 7519, wherein E. D. Morris, Treasurer of Ottawa County, Oklahoma, is plaintiff, and The Hanchett Bond Company, a corporation, and J. Harness, C. M. Griffith, Herbert Mott, Wm. R. Schneberger, Georgia Lawran, Ed. Briton, J. M. Gates, Susie Howe, L. F. Parker, E. L. Warner, H. A. Montayne, E. J. Potter, Louise Darford, Anna Derford, S. E. Turner, C. V. Stuart, Q. B. Gibson, Mrs. C. V. Stuart, L. H. Stivers, H. D. Buhner, Mrs. G. Stuart, C. P. W. Wiley, C. P. McGhee, G. C. Hanna, F. M. Smith, Roger S. Bennett, Chas. A. Burnett, North Eastern Oklahoma Railroad Company, Geo. W. Beck, Jr., Mrs. W. A. Stuart, J. P. Craig, S. A. Yeargin, W. W. Grace, Wm. S. Smith, T. C. Murdock, Ottawa County, M. C. Pinnitt, J. R. Walker, L. D. James, Geo. Reed, A. C. Towne, Chas. E. George, F. C. Blair, R. C. Cardin, A. C. Brown, E. Webster, J. C. Vaughn, Mrs. W. J. Beace, W. P. Hill, F. E. Smith, C. E. Cushing, Ella B. Lyon, A. G. Martin, E. E. Pinnell, C. R. Weebitt, J. T. Hickill, J. A. Cooper, Mrs. Q. B. Gibson, T. Taylor, F. A. Sweet, A. J. Maloney, E. E. Comstock, Nancy J. Comstock, Effie Stockstill, Georgia Fitzner, Martha Lorfield, Mary C. Beechwood, C. P. Fillebrown, J. A. Daniels, J. G. Speer, J. S. Minor, W. L. Graham, D. L. Harrington, L. H. Dinsmore, Alice M. Wright, Anna P. Wright, L. B. Ziler, L. W. Carr, R. C. Coday, Blackwell & Turner, Leon Herwitz, J. P. Maxwell, J. B. Denton, A. L. Miller, Frank J. Finn, Chas. S. Williams, E. Pearl, Geo. C. Brown, R. C. James, L. A. Miller, S. P. O'Bannon, Vera K. Baker, Sara B. Baker, James W. Grafton, J. E. Callahan, C. B. Lee, J. W. Elliott, Rachel Cable, Sarah E. Rice, C. H. Hunsie, Ella M. Louderback, L. W. Thompson, Maud Smothers, H. R. Purdum, J. E. Morgan, H. Clay Kilburn, F. S. Webster, A. L. Williams, Wayne Laugherty, G. E. Woodall, Mary Davis, R. C. Barbee, E. J. Tabler, John Penman, Louis Fienel, Adolph Buehau, Miami Bridge Toll Company, Emery Finley, Ione Alexander, Jas. W. Chapman, A. B. Phelps, Chas. Russell, Ike Thompson, R. M. Hayard, G. O. Boneher, C. C. Barwell, Mrs. C. H. Monroe, G. O. Harper, H. T. Deering, Mrs. C. H. Houshire, L. John, Mary J. Grain, W. E. Pickler, J. D. Shulte, Mrs. Walter Aesculerine, Anna Schulte, Maud Crawford, Chas. Miller, J. D. Bennett, Miami Townsite Company, L. W. Judd, Geo. Cushing, C. W. Dean, Frank W. Freeman, Albert Havenmiller, J. S. Colorth, C. S. Emerson, L. C. Hibbs, Lucy A. Tyree, F. Morgan, Bernard Wohl, J. Mason, T. J. Bennett, Clara I. Bennett, R. Poe, May Poe, A. T. Cooper, P. W. Lowder, M. Groff, H. Connolly, W. H. Nays, W. L. Marshall, W. P. Groom, Arthur Brown, Helen Strain, Geo. D. Gibson, W. P. Gunn, Gus Chaney, Geo. B. Paine, Wm. Drawne, C. Canthier, W. J. Wilson, J. E. Shaddy, Lizzie Shultze, J. E. Anderson, J. H. Hightower, Geo. W. Nicely, R. L. Johnson, L. E. Lechonne, John W. Williams, K. A. Vaughn, R. L. Mayfield, W. W. Graham, Elizabeth Baker, J. C. McGriffin, Eunice Jackson, Grace Morris, Lillian O. Beal, W. H. Beal, F. Wodena, J. J. McGuire, F. W. Adams, W. G. Ruple, Earl Shofiner, C. Y. Casey, Samuel Atkins, Ed Tada, C. A. Montgomery, Brown Crummer Company, City of Miami, Guaranty Title & Trust Company, R. C. Jackman and Wm. Docking, et al, are defendants, the plaintiff by the consideration of said court recovered a judgment and decree of foreclosure of all tax liens upon the property hereinafter described, under Chapter 212, Session Laws, 1923, the amount of said tax liens, including advalorem and special improvement taxes upto and including the year 1924, upon each lot, being as follows, towit:

City of Miami:

Lot 16, Block 140, \$48.49

Lot	Block	Value
17	44	\$121.45
4	45	84.62
18	140	39.03
4	141	32.87
6	141	47.48
11	141	34.53
21	141	34.12
35	141	34.53
5	142	60.95
7	142	60.95
9	142	60.89
13	142	60.95
17	142	60.95
19	142	60.95
13	143	47.96
23	143	41.89
25	143	86.53
19	144	39.08
22	144	21.78
31	144	29.48
27	145	220.59
31	145	231.01
5	151	53.72
7	151	54.72
9	151	84.88
5	152	199.62
7	152	153.22
10	152	176.20
12	152	181.49
15	152	207.02
18	152	67.07
24	152	60.07
3	153	45.96
12	153	65.07
22	153	68.07
30	153	64.07
32	153	64.07
2	154	67.82
4	154	45.96
10	154	65.07
16	154	65.07
20	154	65.07
28	154	32.08
30	154	95.47
32	154	64.07
4	155	21.39
6	155	21.39
10	155	58.00
12	155	124.39
14	155	47.63
20	155	21.39
22	155	21.39
26	155	52.37
28	155	103.13
2	156	51.00
4	156	51.00
6	156	49.57
8	156	49.57
10	156	50.23
14	156	51.80
16	156	51.80
18	156	51.80
20	156	51.80

Lot 18 Block 44, \$91.94

Lot	Block	Value
18	44	\$189.03
11	140	117.97
27	140	39.50
5	141	32.88
10	141	34.53
20	141	34.12
22	141	48.77
26	141	34.53
6	142	60.95
8	142	60.95
10	142	60.89
14	142	60.95
18	142	59.95
20	142	60.95
14	143	47.96
24	143	56.10
26	143	66.60
30	144	39.08
32	144	35.87
32	144	44.71
30	145	217.85
1	151	35.92
6	151	67.00
8	151	57.35
10	151	30.74
6	152	177.84
9	152	192.80
11	152	175.99
13	152	181.55
17	152	67.07
23	152	60.07
5	153	45.96
10	153	65.44
21	153	65.07
29	153	64.07
31	153	64.07
1	154	62.36
3	154	45.96
9	154	47.96
14	154	66.67
19	154	65.07
27	154	32.08
29	154	67.07
31	154	67.07
3	155	21.39
5	155	64.24
9	155	58.00
11	155	61.52
13	155	47.63
19	155	21.39
21	155	21.39
25	155	52.37
27	155	52.37
1	156	51.00
3	156	51.00
5	156	49.57
7	156	49.57
9	156	53.40
13	156	51.80
15	156	51.80
17	156	51.80
19	156	51.80
21	156	48.87

City of Miami:

Lot	18	Block	167	\$	54.86	Lot	19	Block	167	\$	54.89
"	23	"	167		38.84	"	24	"	167		41.35
"	25	"	167		80.01	"	26	"	167		54.89
"	27	"	167		54.89	"	28	"	167		54.89
"	29	"	167		54.89	"	30	"	167		37.77
"	31	"	167		23.54	"	32	"	167		32.89
"	2	"	147		39.35	"	3	"	147		97.37
"	4	"	147		97.37	"	5	"	147		97.37
"	6	"	147		97.37	"	7	"	147		97.37
"	8	"	147		93.59	"	11	"	147		199.37
"	12	"	147		425.25						

McWilliams Addition to the City of Miami:

Lot	1	Block	2	\$	38.03	Lot	2	Block	2	\$	53.87
"	3	"	2		65.71	"	4	"	2		55.69
"	5	"	2		55.67	"	6	"	2		60.67
"	7	"	2		60.67	"	11	"	2		69.01
"	12	"	2		62.76	"	13	"	2		62.76
"	14	"	2		62.76	"	15	"	2		62.76
"	16	"	2		62.76	"	17	"	2		39.43
"	18	"	4		148.87	"	4	"	6		95.89
"	5	"	6		94.88	"	6	"	6		279.54
"	7	"	6		126.51	"	9	"	6		95.89
"	10	"	6		74.29	"	11	"	6		95.89
"	13	"	6		95.79	"	14	"	6		51.70
"	16	"	6								

\$1.50 Ft. of N. 100
Ft. of Lot 1, Block 8

Rosedale Addition to the City of Miami:

Lot	1	Block	1	\$	107.49	Lot	12	Block	1	\$	106.49
"	13	"	1		106.49	"	1	"	2		93.92
"	3	"	2		83.42	"	1	"	3		132.95
"	2	"	3		108.04	"	5	"	3		110.04
"	6	"	3		110.04	"	7	"	3		110.04

Tydings Addition to the City of Miami:

Lot	25	Block	6	149.80	Lot	26	"	6	154.97
"	27	"	6	159.20					

together with interest, penalty and costs on the above sums.

And thereafter and on the 14th. day of January, 1926, a special execution and order of sale was issued out of the office of the court clerk of said county, upon and in pursuance of said judgment, directed to the sheriff of Ottawa County, Oklahoma, commanding him to levy upon, advertise and sell without appraisalment, the above described real property, each lot separately, to satisfy said tax liens, on each lot, and to make return of said order of sale with his certificate thereon, showing the manner in which he had executed the same within sixty days from the date thereof; and

Whereas, said sheriff by virtue thereof, advertised said property for sale by giving due and legal notice of the time and place of sale, and the property to be sold, by advertising the same in the Miami News-Record, a newspaper of general circulation, printed and published in Ottawa County, Oklahoma, once a week for at least thirty days next prior to the date of sale, which was the 1st. day of March, 1926; and,

Whereas, on the 1st. day of March, 1926, pursuant to said notice of sale, said sheriff did offer said above described real property each lot separately, for sale at public auction, at the north front door of the court house in the city of Miami, said county and state, at the hour of one o'clock P.M. as specified in said notice, at which sale said lots were sold separately, to the

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS:

That George Raper and Jennie Raper his wife

part of the first part, in consideration of the sum of

One and no/100---DOLLARS

the receipt of which is hereby acknowledged, do by these presents grant, bargain, sell and convey unto Charles Parnell

part y of the second part his heirs and assigns, all of the following described real property and premises situated in Ottawa County, State of Oklahoma, to-wit:

Lots 7, 8, 23 and 24 in Block 107 in the City of Miami, Okla. and lots 3, 4, 5 and 6 in Block 2 and lots 9, 10, 11, 12, 13, 14, 15 and 16 in Block 9 and lots 1, 2, 3, and 4 in Block 8 and lots 3, 4, 13 and 14 in Block 11 and lots 13, 14, 29, 30, 31 and 32 in Block 7 and lots 19, 20, 21 and 22 in Block 13 and Lots 3 and 4 in Block 15 all in Reckhill Addition to the City of Miami Okla.

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

TO HAVE AND TO HOLD said described premises unto said party of the second part his heirs and assigns forever, free, clear, discharged of and from all former grants, titles, charges, judgments, taxes, mortgages and other liens and incumbrances of whatsoever nature

Signed and sealed this 26th day of June 1926

George Raper
Jennie Raper

State of Oklahoma, County of Delaware ss:

Before me Red F. Smith a Notary Public within and

for said County and State, on this 26th day of June A. D., 1926

personally appeared George Raper and Jennie Raper, his wife

to me known to be the identical persons who executed the within and foregoing instrument, and acknowledged to me that ^{they} ~~she~~ executed the same as ^{their} ~~her~~ free and voluntary act and deed, for the uses and purposes therein set forth.

WITNESS my hand and official seal the day and year last above written



[Signature]
Notary Public.

My commission expires June 31st 1929

Notary Public.

KNOW ALL MEN BY THESE PRESENTS:

That L. O. Gibson a single man,

part y of the first part, in consideration of the sum of One Dollar and other considerations and DOLLARS

the receipt of which is hereby acknowledged, do SA by these presents grant, bargain, sell and convey unto George Raper,

part y of the second part his heirs and assigns, all of the following described real property and premises situated in Ottawa County County, State of Oklahoma, to-wit:

All of Lots Twelve (12) in Block Thirty-seven (37) in North Miami now Commerce, Oklahoma; and Lots 7, 8, 23 and 24 in Block 167 in the City of Miami, Oklahoma; and Lots 3, 4 5 and 6 in Block 2, and Lots 9, 10, 11, 12, 13, 14, 15 and 16 in Block 9, and Lots 1, 2, 3 and 4 in Block 8, and Lots 3 and 4, and 13 and 14 in Block 11, and Lots 13, 14, 29, 30, 31 and 32 in Block 7, and Lots 19, 20, 21 and 22 in Block 13, and Lots 3 and 4 in Block 15 all in ROCKHILL A DITION to the City of Miami, State of Oklahoma

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

TO HAVE AND TO HOLD said described premises unto said part y of the second part his heirs and assigns forever, free, clear, discharged of and from all former grants, titles, charges, judgments, ~~taxes~~ mortgages and other liens and incumbrances of whatsoever nature except taxes

Signed and sealed this 19th day of June, 1926.

L. O. Gibson

State of Oklahoma, County of OTTAWA ss:

Before me M. J. Nichols, a Notary Public within and

for said County and State, on this 19th day of June, A. D., 1926

personally appeared L. O. Gibson, a single man,

to me known to be the identical person who executed the within and foregoing instrument, and acknowledged to me that he executed the same as his free and voluntary act and deed, for the uses and purposes therein set forth.

WITNESS my hand and official seal the day and year last above written.

My commission expires July 25th, 1928



M. J. Nichols
Notary Public.

State of Oklahoma
County of Ottawa

BOOK 130 PAGE 997
IN COUNTY COURT.

In the matter of the estate
of A. C. Towne, deceased.

No. 1722.

FINAL DECREE

Now on this 5th day of March 1929, the same being one of the regular days of the January term of County Court of said County and State; this matter comes on to be heard before the Honorable Cuddie E. Davidson, Judge of the County Court, upon the final report of Mary Towne, administratrix with the Will annexed of the estate of A. C. Towne, deceased, and her petition for distribution of said estate and for final discharge, the court having heard evidence and being advised in the premises finds;

1. That due notice of the application for this final decree herein approving the final report of the said administratrix with the will annexed and assigning the estate to the persons thereto entitled by law, has been duly given and served pursuant to law by publication in the Miami News Record, a news paper of general circulation in this county for more than one year past, for three consecutive weeks, the first publication being more than 20 days prior to the date set for hearing in said notice, said hearing having been set originally for March 4th, 1929 at 9 o'clock A. M. and upon that date, it was duly and legally continued by order of this court to this date, and notice was further given by posting copies of the notice of hearing, which was published in three of the most public places in Ottawa County, one of which was at the door of the Court House and by delivering notices to all of the heirs at law, devisees and legatees herein personally.

2. It appearing to the court on satisfactory proof and evidence, that the necessary expenses of funeral, of last sickness of said deceased and of administration of said estate, have been fully paid. That due and legal notice to creditors was given, served and published as required by law, proof of publica-

time of which was duly filed herein, and that four months from the time of the first publication of notice to creditors has long since expired and that time for filing claims herein has long since expired; the court finds that all of the debts existing against said deceased, are allowed by the court pursuant to law, having been fully paid and satisfied, and that said estate has been fully administered as shown by the final account of Mary Towne, administratrix with the Will annexed of said estate, which final account was duly audited and allowed by this court pursuant to due notice given as hereinbefore stated; and that said estate is now ready for distribution.

3. The court further finds that the heirs, who will be hereinafter enumerated, are all adults and competent, that they have entered into certain agreements as set out in the final report for the liquidation of certain debts due by the estate, and thereby have made it possible to close this estate at this time. The exact nature of said agreements being immaterial for the purpose of this decree.

4. It further appearing to the court that all taxes of whatsoever nature required to be paid by this estate, have been fully paid and satisfied as shown by the final report and receipts filed herein.

5. The court further finds that the administratrix herein is entitled to a fee under the law for her services as such administratrix with the Will annexed in the sum of \$635, and that her attorney of record, William M. Thomas is entitled to a fee in the sum of \$1000, that \$40 has been paid said attorney, leaving a balance due of \$950.

6. It further appearing to the court that said deceased, A. G. Towne, died testate, that his last Will and testament was duly and legally admitted to probate herein on the 5th day of December, 1927, and that no contest or protest against said Will has been made or filed in this court, that under the terms of said Will, one-third of the estate of deceased was devised to Earl L. Towne, son, one-third to Earl G. Towne, son, and one-third to Mary Towne, wife, said division to be made after the debts,

funeral expenses, together with the expenses of administration have been paid. The court finds that all of said decedents were adults and that said decedents were all deceased at the time of said estate if the estate had been distributed according to the laws of the Decedent and distribution of the State of Oklahoma. The court further finds that there remains in said estate for distribution the following described property to-wit:

REAL ESTATE

Lots 12-13, Block 157; Lot 2, Block 81; Lot 2, Block 153; Lots 9-10 and 19-20 in Block 88; Lots 21-22-23, Block 78; Lot 13, Block 208; Lot 6, Block 139; Lot 4, Block 142; Lot 26, Block 243; Lot 26, Block 144; Lot 32, Block 145; Lot 9, Block 151; Lot 21-22, Block 153; Lot 2, Block 156; Lot 14, Block 157; Lot 5-17-18, Block 159; Lot 4, Block 166; Lot 2, Block 166; Lots 4-14-19-20, Block 167; Lots 11-12, Block 175; all of which is in the original addition in the City of Miami, Ottawa County, Oklahoma.

Lots 14-15, Block 12 of the Fairhome addition of the City of Miami, Oklahoma; Lots 4, Block 11, of the Frisco addition of the City of Miami, Okla.

The North one-half of the Northwest one-fourth of the Southwest one-fourth of Section 20, Township 27 North and Range 23 East, containing 20 acres;

The Northwest one-fourth of the Southeast one-fourth of the Northwest one-fourth of Section 25, Township 28 North, Range 22 East, containing 10 acres;

The Southwest one-fourth of the Southwest one-fourth of the Southwest one-fourth of Section 2, Township 25 North, Range 23 East, all of said real estate being situated in Ottawa County, Oklahoma.

MINING LEASE OR MINING INTERESTS

One per cent royalty on the Southeast one-fourth of the Northeast one-fourth, and the Northeast one-fourth of the Southeast one-fourth of Section 19, Township 29 North, Range 24 East, Ottawa County, Oklahoma, said royalty having been assigned by John Piller and Martha Piller to A. C. Towne on the 1st day of February, 1924, said royalty assignment being filed of record in the office of the County Clerk of Ottawa County, Oklahoma in book 114, page 1;

Three-fourths of one per cent royalty in the Alice Greenback lease described as follows:

The Southwest one-fourth (SW 1/4) of Section 24, and the Southeast one-fourth (SE 1/4) of the Northwest one-fourth (NW 1/4) of Section 25, Township 27 North, Range 23 East, Ottawa County, Oklahoma, said royalty having been assigned to A. C. Towne on the 1st day of February, 1924, said royalty assignment being filed of record in the office of the County Clerk of Ottawa County, Oklahoma in book 114, page 1;

...on the premises, including other furnishings
...stoves, refrigerators, etc.
...located on lots 21-22-23,
...to the City of Miami,
...and appraisement.
...less the
...and 10
...in the
...of the Peace Court of O. W. Coleman, in
...Miami, Justice District in
...Mary L. Towne, administratrix with the Will
...of A. G. Towne, deceased,
...in the sum of \$ 120.50
...day of February, 1929.

The judgment rendered in the Justice of the Peace
Court of O. W. Coleman, in and for the City of
Miami, Justice District, in favor of Mary L. Towne,
administratrix with the Will of A. G. Towne,
deceased, against G. B. Jones and Mary Jones in the
sum of \$ 75.50. Said judgment having been ren-
dered on the 17th day of February, 1929.

7. And it appearing to the court that the following
persons are entitled under the terms of said Will to dis-
tributing shares in the estate in the following portions to-wit:
Mary Towne, widow, an undivided one-third interest; Earl G.
Towne, son, an undivided one-third interest and Don L. Towne,
son, an undivided one-third interest.

IT IS THEREFORE ORDERED, ADJUDGED AND DECREEED by the
court that due and legal notice upon this final report has been
given as provided by law, that notice to creditors was duly given
as required by law, and time for filing claims has expired, that
this said estate has been fully and completely administered upon,
that an undivided one-third of the aforesaid property and each
and every item thereof be and the said is hereby transferred,
vested, assigned and conveyed to each of the aforesaid heirs for-
ever to have and to hold the same, together, with all and
whenever the hereditaments and appurtenances thereunto apper-
taining to the above named persons, their heirs and assigns for

FILED FOR RECORD APR - 3 1929 2:00 O'CLOCK P.M. A. J. LAMPKIN, CLERK

[Handwritten signature]
[Handwritten signature]
[Handwritten signature]
[Handwritten signature]

QUIT CLAIM DEED

Form No. 5

539 BOOK 135 PAGE 31

THIS INDENTURE, made and entered into this 14 day of October 1929

by and between The Hanchett Bond Co. Inc. party of the first part, and The City of Miami, Okla. a Municipal Corporation party of the second part;

WITNESSETH That the said party of the first part, for and in consideration of the sum of Dollars,

to them duly paid, the receipt whereof is hereby acknowledged hereby remised, released, and quit-claimed, and by these Presents does remise, release and forever quit-claim unto the said party of the second part, and to their heirs and assigns, forever, all their right, title, interest, estate, claim, and demand, both at law and in equity of in and to all the following described land situated in the county of Ottawa and State of Oklahoma, to-wit: Lots 5-6-7-3-10 11-12-15-16-21-22-23-24-25-26-31-32 Block 164 O.P.; Lots 3-4-6-9-10-11-12-13-14-15-16-19-20 23-29-30-31-32 Block 165 O. P.; Lots 1-2-3-4-5-6-9-10-13-14-15-16-17-18-19-20-21-23-25-26 27-28, Block 166, O. P.; Lots 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23 24-25-26-27-29-29-30-31-32 Block 167, O. P. All in the City of Miami, Oklahoma

TO HAVE AND TO HOLD THE SAME, Together with all and singular the hereunto and appertaining thereto hereunto or hereunto appertaining to the above described premises unto the said The City of Miami, Oklahoma their heirs and assigns, then neither

the said Hanchett Bond Co. Inc. or any person in their name and behalf, shall or will hereafter claim or demand any right or title to the said premises or any part thereof, but that, and every one of them, shall by these presents be excluded and forever barred.

IN WITNESS WHEREOF, The said party of the first part has hereunto set their hand and seal on the day and year first above written.

Witnessed, sealed and delivered in the presence of THE HANCHETT BOND CO. (Seal) Hanchett (Seal) M. Hanchett (Seal)

ACKNOWLEDGMENT

State of ILLINOIS

County of Cook

Before me A. H. Eckersall a Notary Public in and for said County and State on this 14 day of October 1929, personally appeared H. B. Hanchett

to me well known to be the identical person who executed the within and foregoing instrument, and acknowledged that he executed the same as his free and voluntary act and deed for the uses and purposes thereof.

In Witness Whereof, I have hereunto set my hand and affixed my notarial seal the day and year last above written.

My commission expires H-1 31 Notary Public.

FILED FOR RECORD MAR 14 1930 10:00 O'CLOCK A.M. A. J. LAMPKIN, Co. Clk.

RELEASE OF REAL ESTATE MORTGAGE

Form No. 7

IN CONSIDERATION of the payment of the debt named therein, the mortgage made by

Earl C. Towne

to Elliott-Rush Auto Company, a corporation,

which is recorded in Book 129 of Mortgages, page 598, of the records of Ottawa County, Oklahoma,

covering the following Real Estate in said County: An undivided 1/3 interest in Lots 31, 23, 23, Block 76; Lot 2 Block 81; 1/4 interest in Lots 9 & 10, Block 58; Lots 12 & 13 Block 187; Lots 21 & 22 Block 153; Lot 5 Block 159, all in the City of Miami; & N 1/2 of NW 1/4 of Sec. 1, Twp. 28, Range 23, is hereby released, in full.



Witness my hand and seal this 2nd day of April 1929.

ELLIOTT-RUSH AUTO COMPANY

By [Signature] Its President.

[Signature] Its Secretary.

ACKNOWLEDGMENT BY INDIVIDUAL

STATE OF _____ County of _____ ss.

Before me _____ within and for said County and State, on this _____ day of _____ 1929 personally appeared _____ and _____

to me known to be the identical person who executed the within and foregoing instrument and acknowledged to me that _____ executed the same as _____ free and voluntary act and deed, for the uses and purposes therein set forth.

WITNESS my hand and seal the day and year above set forth.

My commission expires _____ 1929

Notary Public.

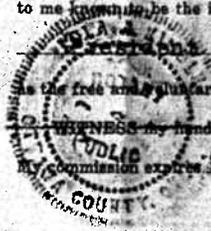
ACKNOWLEDGEMENT BY CORPORATION.

STATE OF Oklahoma County of Ottawa ss.

Before me _____ Notary Public within and for said County and State, on this 2nd day of April 1929 personally appeared

Earl W. Elliott

to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its _____ and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation for the uses and purposes therein set forth.



WITNESS my hand and notarial seal the day and year above set forth.

My commission expires Dec 6 1929

[Signature] Notary Public.

State of Oklahoma, } ss.
County of Ottawa, }
Filed for Record in the Office
of County Clerk at Miami.

APR 3 - 1929

Time 2 o'clock & _____ Min. P.M.
Recorded in Book 129 Page _____
A. G. LAMBKIN, County Clerk
[Signature] Deputy

RE-SALE TAX DEED.

1989

KNOW ALL MEN BY THESE PRESENTS: That

WHEREAS the County Treasurer of Ottawa County, State of Oklahoma, sold the hereinafter described tracts, parcels or lots of land heretofore on the 7th day of November, 1931, to said County, for non-payment of delinquent taxes assessed thereon, and did execute a separate Tax Sale Certificate for each of said tracts, parcels or lots of land, and the same has remained unredeemed for a period of more than two years from the date of said sale, and no person having offered to purchase said tracts, parcels or lots of land, or either of them, by paying the Treasurer the amount of all the taxes, penalties, interest and costs of sale and transfer, notice of the resale thereof was duly and legally given by the publication of a notice of sale in the Miami News-Record, a newspaper of general circulation published in said county once each consecutive week for four publications on the following dates, to-wit: March 27, April 3, April 10 and April 17, 1930, preceding the resale, describing the real estate to be sold; name of the owner of each of said tracts, parcels or lots of land, respectively, as shown by the last tax rolls in the office of the County Treasurer; the time and place of sale; the date on which said real estate was sold to the county for delinquent taxes; the years that taxes have been assessed and after delinquency added to the county lien; that the same have not been redeemed for a period of more than two years from date of sale to the county; the amount of all delinquent taxes, costs, penalties and interest accrued on each of said tracts, parcels or lots of land, separately stated; that such real estate will be sold to the highest bidder for cash for said taxes, costs, penalties and interest accrued on same, and remaining due, delinquent and unpaid, and on the 31st day of April, 1930, at a sale begun on the third Monday of April of the year 1930, between the hours of nine o'clock A. M., and four o'clock P. M., and continued from day to day between the same hours until completed on the 21st day of April, 1930, Horace M. Rider, the undersigned County Treasurer of said county, pursuant to said advertisement did offer separately for sale upon a Tax Sale Certificate heretofore issued as aforesaid, at public auction, for cash, at the office of the County Treasurer in the Court House in and for said County of Ottawa, where by law the taxes are payable, and no bidder offering or bidding the amount due upon said tracts, lots or parcels of real estate, or any of them, offered for sale, the County Treasurer of said Ottawa County, Oklahoma, did bid off separately each tract, lot or parcel of land hereinafter described in the name of the County of Ottawa, State of Oklahoma, for the sum set opposite thereto, the same being the amount of taxes, penalties and interest and costs due thereon, to-wit:

DESCRIPTION	PRICE
Lot 21 in Block 164	\$ 132.92
Lot 22 in Block 164	132.92
Lot 23 in Block 164	132.92
Lot 24 in Block 164	130.19
Lot 25 in Block 164	138.53
Lot 26 in Block 164	141.30
Lot 31 in Block 164	152.43
Lot 32 in Block 164	153.43
Lot 3 in Block 165	106.06
Lot 4 in Block 165	106.06
Lot 6 in Block 165	145.69
Lot 9 in Block 165	161.00
Lot 10 in Block 165	161.23
Lot 11 in Block 165	141.16
Lot 12 in Block 165	144.69
Lot 13 in Block 165	136.81
Lot 14 in Block 165	163.35
Lot 15 in Block 165	162.34
Lot 16 in Block 165	162.05
Lot 19 in Block 165	144.65

Lot 20 in Block 165	145.58
Lot 21 in Block 165	31.36
Lot 22 in Block 165	31.36
Lot 23 in Block 165	145.08
Lot 29 in Block 165	132.81
Lot 30 in Block 165	133.65
Lot 31 in Block 165	180.34
Lot 32 in Block 165	180.34
Lot 1 in Block 166	156.13
Lot 2 in Block 166	177.33
Lot 3 in Block 166	191.25
Lot 4 in Block 166	71.59
Lot 5 in Block 166	155.60
Lot 6 in Block 166	155.60
Lot 9 in Block 166	153.97
Lot 10 in Block 166	153.97
Lot 13 in Block 166	228.16
Lot 14 in Block 166	159.87
Lot 15 in Block 166	183.93
Lot 16 in Block 166	145.04
Lot 17 in Block 166	180.60
Lot 18 in Block 166	154.38
Lot 19 in Block 166	182.07
Lot 20 in Block 166	154.39
Lot 21 in Block 166	154.39
Lot 23 in Block 166	153.99
Lot 1 in Block 167	142.18
Lot 2 in Block 167	136.92
Lot 3 in Block 167	130.72
Lot 4 in Block 167	128.96
Lot 5 in Block 167	109.19
Lot 6 in Block 167	109.19
Lot 7 in Block 167	118.86
Lot 8 in Block 167	81.58
Lot 9 in Block 167	67.46
Lot 10 in Block 167	114.88
Lot 11 in Block 167	119.89
Lot 12 in Block 167	128.96
Lot 13 in Block 167	151.19
Lot 14 in Block 167	151.19
Lot 15 in Block 167	116.29
Lot 16 in Block 167	116.29
Lot 17 in Block 167	152.21
Lot 18 in Block 167	146.87
Lot 19 in Block 167	130.96
Lot 20 in Block 167	130.96
Lot 21 in Block 167	110.24
Lot 22 in Block 167	110.24
Lot 23 in Block 167	87.53
Lot 24 in Block 167	79.97
Lot 25 in Block 167	75.67
Lot 26 in Block 167	142.98
Lot 27 in Block 167	130.73
Lot 28 in Block 167	127.03
Lot 29 in Block 167	141.76
Lot 30 in Block 167	141.76
Lot 31 in Block 167	107.01
Lot 32 in Block 167	141.76

All of the above situated in the City of Miami,
County of Ottawa, State of Oklahoma.

WHEREAS none of the owners of said property so sold at said re have offered to redeem the same by paying to the County Treasurer t amount of all taxes, penalties, interest and costs of sale up to th date of such redemption, and the said property remains unredeemed.

NOW THEREFORE, This indenture, made this 6th day of September, 1930, between the State of Oklahoma, by Horace M. Rider, the Treasu of Ottawa County, of the first part, and J. M. Fuser, Chairman of the Board of County Commissioners of Ottawa County, Oklahoma, and h successors in office, for the use and benefit of Ottawa County, Oklahoma, of the second part,

WITNESSETH: That the said party of the first part for and in consideration of the premises, taxes, penalties, interest and costs in the sum of \$10,385.32 in hand paid, hath granted, bargained and and by these presents doth grant, bargain, sell and convey to the said party of the second part, and his successors in office, for th use and benefit of Ottawa County, Oklahoma, forever, the tracts and parcels of land so sold at resale as aforesaid, and described as follows, to-wit:

Lots 21, 22, 23, 24, 25, 26, 31 and 32, in Block 164; Lots 3, 4, 6, 9, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22, 23, 29, 30, 31 and 32 in Block 165; Lots 1, 2, 3, 4, 5, 6, 9, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21, and 23, in Block 166; and Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32, in Block 167; all in the City of Miami, County of Ottawa, State of Oklahoma.

TO HAVE AND TO HOLD said tracts or parcels of land with the appurtenances thereunto belonging to said party of the second, his successors and assigns, forever, in a full and ample manner as the said Treasurer of said County is empowered by law to sell and convey the same, and all delinquent taxes, penalties, interest and costs previously assessed or existing against said real estate, including valorem and outstanding individual and county tax sale certificates, are hereby cancelled and set aside. All special improvement taxes are hereby excepted.

This deed is executed for the purpose of correcting certain irregularities in a deed recorded in the office of the County Clerk of Ottawa County, Oklahoma, in Book 130, page 36.

IN TESTIMONY WHEREOF, the said Horace M. Rider, Treasurer of sa County of Ottawa, State of Oklahoma, has hereunto set his hand and s on the day and year aforesaid.

STATE OF OKLAHOMA

By Horace M. Rider
County Treasurer of
Ottawa County.

STATE OF OKLAHOMA,)

COUNTY OF OTTAWA.)

38.

Before me, a Notary Public in and for said County and State, on this ~~24~~ day of September, 1930, personally appeared Horace M. Rider, to me known to be the duly qualified and acting County Treasurer of Ottawa County, State of Oklahoma, and the identical person who execut the within and foregoing instrument for and on behalf of the State of Oklahoma, and acknowledged to me that he executed the same as his free and voluntary act and deed as such County Treasurer, and as the free and voluntary act and deed of the State of Oklahoma for the uses and purposes therein set forth.

J. D. Gibson
Notary Public.

My commission expires April 28th 1931

DEED FOR PROPERTY PURCHASED BY COUNTY
AT RESALE FOR DELINQUENT TAXES.

2227

WHEREAS at a resale for delinquent taxes held on the 31st day of April, 1930, at the office of the County Treasurer in and for County of Ottawa and State of Oklahoma, the real property situated in said county and State and hereinafter described was offered for sale for delinquent taxes then due and unpaid on and against said property, in separate parcels, and no person having offered to purchase the same, said property was by the County Treasurer of said County bid in and purchased for said county; and

WHEREAS, on the 5th day of May, 1930, the City of Miami, Oklahoma a municipal corporation, presented to the County Treasurer of said county its offer in writing to purchase said property for the following sum, to-wit:

For Lots 31, 22, 23, 24, 25, 26, 31 and 32 in Block 164; Lots 3, 4, 6, 9, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22, 23, 29, 30, 31 and 32 in Block 165; Lots 1, 2, 3, 4, 5, 6, 9, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 23 in Block 166; Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32 in Block 167; all in the City of Miami, County of Ottawa, State of Oklahoma, the sum of Five Hundred Dollars (\$500.00).

WHEREAS notice of said offer was duly published as required in the Miami News-Record, the official newspaper of said county, Tuesday, the 8th day of July, 1930, and no person has filed or presented any objections to the sale of said property for said sum offered to pay a greater amount for said property or any part thereof, and said purchaser has deposited with the County Treasurer of said county the sum of \$500.00, being the full amount offered by said purchaser for said property; and

WHEREAS, on the 12th day of August, 1930, the Board of County Commissioners met and entered an order accepting said offer authorizing and directing the Chairman of said Board to make, execute and deliver to said purchaser proper deed of conveyance of said property;

NOW THEREFORE, This indenture, made this 6th day of September, 1930, by and between J. M. Fuser, as Chairman of the Board of County Commissioners in and for the County of Ottawa and State of Oklahoma, party of the first part, and City of Miami, Oklahoma, a municipal corporation, party of the second part,

WITNESSETH: That under and by virtue of the authority in him vested by law and the order of the Board of County Commissioners aforesaid, and in consideration of the premises and the sum of Five Hundred Dollars (\$500.00) paid into the treasury of said County as aforesaid, the said party of the first part does hereby grant, bargain, sell and convey unto the said party of the second part, and to its assigns, all the following described real property and premises situate in the County of Ottawa and state of Oklahoma, to-wit:

Lots 31, 22, 23, 24, 25, 26, 31 and 32 in Block 164; Lots 3, 4, 6, 9, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22, 23, 29, 30, 31 and 32 in Block 165; Lots 1, 2, 3, 4, 5, 6, 9, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 23 in Block 166; and Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 29, 30, 31 and 32 in Block 167, all in the City of Miami, County of Ottawa, State of Oklahoma,

together with the improvements thereon and the hereditaments and appurtenances thereunto belonging, and all the right, title, interest

and estate of the State of Oklahoma and of the County of Ottawa in and to said real property, as fully as the said party of the first part is by law authorized and empowered so to do.

TO HAVE AND TO HOLD said real property, with the appurtenances, unto the said party of the second part and its assigns, forever.

IN WITNESS WHEREOF the said party of the first part has hereunto set his hand this 6 day of September, 1930.

A. J. Lampkin
Chairman of the Board of County Commissioners of Ottawa County, Oklahoma.

STATE OF OKLAHOMA, }
COUNTY OF OTTAWA. } SS.

Before me, A. J. Lampkin, County Clerk in and for said County and State, on this 6 day of September, 1930, personally appeared J. . . Fuser, Chairman of the Board of County Commissioners of said county and State, to me known to be the identical person who executed the within and foregoing instrument, and acknowledged to me that in his official capacity as aforesaid he had executed the same as his free and voluntary act and deed, for the uses and purposes therein set forth.

County Clerk.



State of Oklahoma, }
County of Ottawa. } ss.
Filed for Record in the Office of
County Clerk at Miami.

NOV 28 1930
Time 10 o'clock & Min. AM
Recorded in Book 107 Page
A. P. LAMPKIN, County Clerk
A. P. Lampkin DEPUTY

QUIT CLAIM DEED

1572

THIS INDENTURE, made and entered into this 25th day of May by and between Eliza Gibson, Vivian Garrison (formerly Vivian Gibson) L. O. Gibson, heirs at law of George O. Gibson, deceased, part les of the first part, and City of Miami, Oklahoma, a municipal corporat

WITNESSETH, That the said part les of the first part, for and in consideration of the one dollar and other valuable considerations to them duly paid, the receipt whereof is hereby acknowledged have remised, re and quit-claimed, and by these Presents does remise, release and forever quit-claim unto the said pa of the second part, and to its successors and assigns, forever, all their title, interest, estate, claim, and demand, both at law and in equity of in and to all the following des land situated in the county of Ottawa and State of Oklahoma, to-wit: Lots Seven (7) and Eight (8) in Block One Hundred Sixty-seven (167) in the City of Miami, Oklahoma, according to Supplemental Plat No. 2 of said block.

Grantors warrant that the above described property is not now and has never been occupied by them or either of them as a homestead.

The improvements located on said lots are not included in this conveyance, but are excepted therefrom; Provided, however, that said improvements shall be removed from said premises within thirty days after notice in writing from the second party to remove said improvements has been given to first parties.

This conveyance includes all claims for unpaid rent due from the present occupants of the above described premises.

TO HAVE AND TO HOLD THE SAME, Together with all and singular the hereditaments and appurten thereunto belonging, or in anywise appertaining to the above described premises forever unto the City of Miami, its successors and assigns, so that neither the

the said parties of the first part or any person in their name and behalf, shall or will hereafter claim or demand any right or title to the said premises or any thereof; but they, and every one of them, shall by these presents be excluded and forever barred.

IN WITNESS WHEREOF, The said part les of the first part have hereunto set their hand and seal the day and year first above written. Signed, sealed and delivered in the presence of

Eliza Gibson (S)
Vivian Garrison (S)
L. O. Gibson (S)

ACKNOWLEDGMENT
State of Oklahoma
County of Ottawa
Before me Alma J McClure a Notary Public in and for said County and State on 25th day of May, 1931 personally appeared Eliza Gibson, Vivian Garrison (formerly Vivian Gibson) and L. O. Gibson to me well known to be the identical persons who executed the within and foregoing instrument, and they acknowledged that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth. In Witness Whereof, I have hereunto set my hand and affixed my notarial seal the day and year last above written. My commission expires July 11, 1934 Alma J. McClure Notary Public

FILED FOR RECORD OCT 17, 1931 2:00 O'CLOCK P.M. A. J. LAMPKIN, Co. Clk.

QUIT CLAIM DEED BOOK 1 46 PAGE 60

Form

THIS INDENTURE, made and entered into this 31st day of December 19... by and between The Hanchett Bond Company, a corporation, part Y of the first part, and The City of Miami, Oklahoma, a municipal corporation, part Y of the second part

WITNESSETH, That the said part Y of the first part, for and in consideration of the sum One dollar and other valuable considerations... to it... duly paid, the receipt whereof is hereby acknowledged... and quit-claimed, and by these Presents does remise, release and forever quit-claim unto the said part of the second part, and to its successors and assigns, forever, all its title, interest, estate, claim, and demand, both at law and in equity of in and to all the following described land situated in the county of Ottawa and State of Oklahoma, to-wit: Lots 5, 8, 7, 8, 10, 11, 12, 15, 16, 21, 22, 23, 24, 25, 26, 31 and 32, in Block 164; Lots 3, 4, 6, 9, 10, 11, 12, 13, 14, 15, 16, 19, 20, 23, 29, 30, 31 and 32 in Block 165; Lots 1, 2, 3, 4, 5, 6, 9, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 25, 26, 27, 28, in Block 166; Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32, in Block 167; all in the city of Miami, Oklahoma, and according to the supplemental plat of said blocks.

TO HAVE AND TO HOLD THE SAME, Together with all and singular the hereditaments and appurtenances therunto belonging, or in anywise appertaining to the above described premises forever, unto the City of Miami, its successors and assigns, so that neither the said Hanchett Bond Company or any person in their name and behalf, shall or will hereafter claim or demand any right or title to the said premises or any thereof; but they, and every one of them, shall by these presents be excluded and forever barred. IN WITNESS WHEREOF, The said part Y of the first part has hereunto subscribed its name and signed, sealed and delivered in the presence of affixed its corporate seal, the day and year first above written.

Attest: [Signature] Its Secretary. THE HANCHETT BOND COMPANY By [Signature] Its President.

ACKNOWLEDGMENT (See other side) State of Oklahoma County of... Before me... day of... 192... a Notary Public in and for said County and State on th... personally appeared... to me well known to be the identical person... who executed the within and foregoing instrument, and... acknowledged that... executed the same as... free and voluntary act and deed for the uses and purposes therein set forth. In Witness Whereof, I have hereunto set my hand and affixed my notarial seal the day and year last above written. My commission expires... 192... Notary Public.

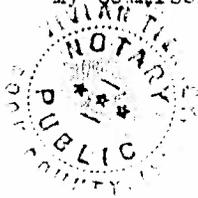
STATE OF ILLINOIS, }
COUNTY OF COOK. } ss.

Before me, a Notary Public in and for said County and State, on this 8 day of January, 1930, personally appeared W. F. Hanchett, to me known to be the identical person who subscribed the name of the maker thereof to the within and foregoing instrument as its ~~maker~~ President, and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

My Commission Expires
October 22, 1931

Verlan J. ...
Notary Public.

My commission expires



Quit Claim Deed

From

James H. Bond Co

City of ...

State of Oklahoma

County of

This instrument was first recorded on

day of

at

in the office of the Register of Deeds, at

Oklahoma,

and recorded in Book at Page

Register of Deeds

County

Page

8
WB
2

James H. Bond Co

Notary Public for Cook County, Illinois
My Commission Expires

This indenture, made and entered into this _____ day of _____ 1919, by and between the Board of City Commissioners of the City of _____, Oklahoma, a municipal corporation, acting by and through _____, the duly elected, qualified and acting Mayor and Chairman of the Board of City Commissioners of the City of _____, Oklahoma, party of the first part, and the State of Oklahoma, acting as Trustee for the Oklahoma National Guard, party of the second part, WITNESSETH:

That, whereas, on the _____ day of _____, 1919, the said Board of City Commissioners of the City of _____, Oklahoma, made an Order by proper resolution, authorizing the said party of the first part to sell certain real estate belonging to the said City of _____, Oklahoma, to the said second party, and directing said Chairman of the Board of City Commissioners of said City of _____, Oklahoma, to execute and deliver a deed to the

said second party, and this conveyance having been authorized by the voters of said City of _____, Oklahoma, by their vote at the _____ election, therefore, KNOW ALL MEN BY THESE PRESENTS, that the Board of City Commissioners of the City of _____, Oklahoma, acting by and through

_____, the duly elected, qualified and acting Mayor and Chairman of the Board of City Commissioners of the City of _____, Oklahoma,

party of the first part in consideration of the sum of One Dollar and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, does grant, bargain, sell and convey unto the State of Oklahoma for the use and benefit of the Oklahoma National Guard, party of the second part,

the following described real property and premises situated in the _____ County, Oklahoma, to-wit:

Book 220 Page 147

of and from all former grants, taxes, judgments, mor' ares, and other liens and incumbrances of whatsoever nature.

Executed and delivered this _____ day of _____, 1917.

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

By _____ Mayor and Chairman of the Board of City Commissioners of the City of _____, Oklahoma.

WITNESSES:
ROY L. KERRY
Notary Public

(City)
State of Oklahoma } SS
County }

Before me the undersigned, a Notary Public, within and for the above named county and state, on this _____ day of _____, 1917, personally appeared _____, to be known to be the only qualified and acting Mayor of the City of _____, Oklahoma, and Chairman of the Board of City Commissioners of the City of _____, Oklahoma, and the identical person who executed the within and foregoing instrument, and acknowledged to me that he executed the same in his capacity as Mayor and Chairman of the Board of City Commissioners of the City of _____, Oklahoma, as his free and voluntary act and deed as such Mayor and Chairman of said Board and as the free and voluntary act and deed of the Board of City Commissioners of the City of _____, Oklahoma, for the uses and purposes therein set forth.

Witness my hand and seal the date first above written.

My Commission Expires: _____ Notary Public

Accepted by the undersigned, Roy L. Kerry, The Adjutant General of the State of Oklahoma, pursuant to Section 21, Title 44, Oklahoma Statutes, 1911, this _____ day of _____, 1917.

ROY L. KERRY, The Adjutant General
State of Oklahoma

City Clerk

690

RIGHT OF WAY DEED

This indenture, made this the 7th day of March 1966 by and between City of Miami, a municipal corp. of Ottawa County, Oklahoma, party of the first part, and the County of Ottawa, State of Oklahoma, party of the second part.

Witnesseth, that party of the first part, for and in consideration of One dollar Dollars (\$1.00)

to him in hand paid, the receipt of which is hereby acknowledged, does by these presents hereby grant, bargain, sell and convey unto party of the second part, a right of way in, over, across and upon the following described real estate, to-wit: **A 130 foot wide right-of-way over and across the E $\frac{1}{2}$ of SW $\frac{1}{4}$ and the City Park in Lots 11 and 14 of Section 31, Twp 28 N, R 23 E, Cherokee Survey, Ottawa County; across the Neosho River, and across the City Park and Streets of Miami, according to the supplemental Plat of Original Townsite in Section 36, Twp 28 N, R 22 E, Quapaw Survey, Ottawa County, Oklahoma. Said right-of-way to be 65 feet each side of a centerline more particularly described as follows:**

Beginning at a point on the west line of Lot 14 of said Sec. 31, Cherokee Survey, said point being 1084.1 feet north of the southwest corner thereof; thence continuing north along said west line a distance of 150.7 feet to point of curvature; thence turning right on a curve having a radius of 477.4 feet a distance of 556.94 feet to point of tangency; thence continuing along tangent from that point approximately 416 feet across Lot 11 to Neosho river; continuing across river on said line and across City Park and Streets to the south line of Block 160, at a point 402 feet east of SW corner thereof.

For the purpose of constructing, building and maintaining a public highway over, across and upon said real estate and to do all things necessary for said purpose.

To Have and to Hold said right of way unto said second party so long as said real estate hereby conveyed is used for the purpose of a public highway.

Attest: Wm Lach Mayor
Ed. Wright City Clerk

STATE OF OKLAHOMA }
County of Ottawa. } ss.

Before me, the undersigned, a Notary Public in and for said county and state, on this 8th day of March 1966 personally appeared Wm Lach to me known to be the identical person who executed the above and foregoing instrument and acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth.

In witness whereof I have hereunto set my hand and affixed my official seal the day and year first above



W. C. White
Notary Public

150

691

RIGHT OF WAY DEED

This indenture, made this the 7th day of March 1966 by and between City of Miami, a municipal corp. of Ottawa County, Oklahoma, party of the first part, and the County of Ottawa, State of Oklahoma, party of the second part.

Witnesseth, that party of the first part, for and in consideration of One dollar Dollars (\$.....)

to him in hand paid, the receipt of which is hereby acknowledged, does by these presents hereby grant, bargain, sell and convey unto party of the second part, a right of way in, over, across and upon the following described real estate, to-wit:

Beginning at the Northeast corner of Block 160, Supplemental Plat of Original Townsite of Miami, thence west along the north line of lot 17 and said block to a point 26 1/2 ft. west of said corner; thence running southwesterly on a curve having a radius of 412.4 feet, across lots 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 11, 12, 13, and 14 to a point on the west line of said block at a point 55 ± feet north of the southwest corner thereof; thence south along the west line of lots 14, 15 & 16 to said Southwest corner; thence east along the south line of said block to its Southeast corner; thence north along the east line of lots 12 thru 17 to the Northeast corner and point of beginning.

For the purpose of constructing, building and maintaining a public highway over, across and upon said real estate and to do all things necessary for said purpose.

To Have and to Hold said right of way unto said second party so long as said real estate hereby conveyed is used for the purpose of a public highway.

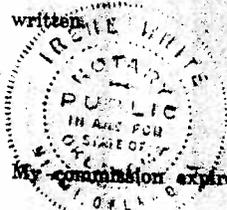
Attest:

Wm. P. Lusk
Mayor
E. L. Mugh
City Clerk.

STATE OF OKLAHOMA }
County of Ottawa. } ss.

Before me, the undersigned, a Notary Public in and for said county and state, on this 8th day of March 1966 personally appeared Wm. P. Lusk to me known to be the identical person who executed the above and foregoing instrument and acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth.

In witness whereof I have hereunto set my hand and affixed my official seal the day and year first above written.



Irene White
Notary Public

My commission expires 10-28-69

200

646776

692

CONSENT TO THE CITY OF MIAMI, OTTAWA COUNTY, OKLAHOMA, FOR USE OF GRAND RIVER DAM AUTHORITY'S FLOWAGE EASEMENT.

WHEREAS, the Grand River Dam Authority is the owner and holder of a perpetual flowage easement for the construction, operation and maintenance of the Pensacola Dam and Reservoir Project upon and over a portion of the hereinafter described lands; and

WHEREAS, the City of Miami, Ottawa County, Oklahoma, desires to construct roads and bridges over the hereinafter described lands and has requested the Grand River Dam Authority to give its consent for the same.

NOW, THEREFORE, in consideration of the foregoing and the payment of One Dollar, the receipt of which is hereby acknowledged, the Grand River Dam Authority, a public corporation, hereby consents to the City of Miami, Ottawa County, Oklahoma, operating, constructing and maintaining roads and bridges over the Authority's easement and more particularly described, to-wit:

A 130' foot wide right of way across the City Park in Lot 11, Sec. 31, T 28 N, R 23 E, Cherokee Survey, Ottawa County, across the Neosho River, and across City Park and streets in City of Miami; said right of way being 65 feet on each side of a center line more particularly described as follows:

Beginning at a point on the west line of Lot 14 of Sec. 31, T 28 N, R 23 E, of the Indian Meridian, Cherokee Survey, Ottawa County, Oklahoma, said point being 1049.1 feet north of the southwest corner thereof; thence continuing north along said line a distance of 185.7 feet to a Point of Curvature; thence turning right on a curve having a radius of 477.4 feet a distance of 556.94 feet to a Point of Tangency; thence continuing along said tangent from that point approximately 416 feet across the City Park to the River, across said Neosho River, across City Park and Streets in City of Miami to the south line of Block 160, O.P. Miami, at a point approximately 40 feet east of the Southwest corner of said Block 160.

25

It being specifically understood that the Grand River Dam Authority does not own the fee title to the above described lands and said Authority is only consenting to the City of Miami, Ottawa County, Oklahoma's use of its easement.

The City of Miami, Ottawa County, Oklahoma, by the acceptance of this consent agrees as follows:

1. To construct, operate and maintain the roads and bridges over said strip of land in such a manner that it will not interfere with the construction, operation and maintenance of the Pensacola Dam and Reservoir Project by the Grand River Dam Authority and/or the United States of America.
2. That it will obtain the necessary rights-of-way from the fee owners of said lands to construct, maintain and operate said roads and bridges and related facilities on said property.
3. That it will hold the Grand River Dam Authority harmless from any damage or claims for damage arising out of the construction, maintenance and operation of said roads and bridges and related facilities upon the Authority's easement and shall release the Authority and/or the United States of America from any damage occasioned to its facilities by the construction, maintenance and operation of the Pensacola Dam and Reservoir Project.
4. That the City shall construct said roads and bridges with sufficient clearances and in such a manner as to prevent the flooding of any lands or facilities that are not owned by the Grand River Dam Authority or upon which the Grand River Dam Authority and/or the United States of America holds a flowage easement.

DATED this the 21st day of February, 1966.

GRAND RIVER DAM AUTHORITY

By *L. J. Quinn*
Chairman, Board of Directors

ATTEST:

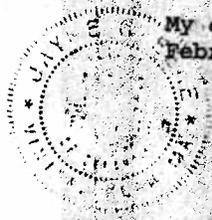
Robert Phillips
Secretary

STATE OF OKLAHOMA)
) ss. Acknowledgment
County of Craig)

Before me, the undersigned, a Notary Public, in and for said County and State, on this 21st day of February, 1966, personally appeared BEN T. OWENS to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its Chairman of the Board of Directors, and acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of such public corporation for the uses and purposes therein set forth.

WITNESS my hand and official seal the day and year last above set forth.

James Greene
Notary Public



My commission expires:
February 10, 1968

STATE OF OKLAHOMA)
COUNTY OF OTTAWA) ss.
FILED FOR RECORD OFFICE
COUNTY CLERK, AT MIAMI

1966 MAR 8 PM 4:14

RECORDED BY _____
BERT V. BRESIA CO. CLK.
DEPUTY

[Signature]



Mayor Brent Brassfield
Councilman Terry Atkinson, Ward 3
Councilman Rudy Schultz, Ward 1
Councilman Scott Trussler, Ward 2
Councilman John Dalgam, Ward 4

Huey P. Long, City Manager
David Anderson, City Attorney
Charles Tomlin, City Clerk/CFO

January 15, 2009

Jana Phillips
Real Property Officer, Directorate of Engineering
Joint Forces HQ-OKDE-PPB
3515 Military Circle
Oklahoma City, OK 73111-4398

RE: City of Miami, Oklahoma
Letter of Intent to Obtain Miami National Guard Armory

Dear Ms. Phillips:

This letter will serve as the City of Miami's Letter of Intent to obtain the Miami National Guard Armory located at 830 D Street SE, Miami, OK.

The City intends to utilize the facility for storage of the City's Emergency Management equipment.

The City is aware of the potential lead, asbestos, and other possible environmental contamination at the armory, and it is our understanding that the armory will be deeded to the Oklahoma Department of Environmental Quality (ODEQ) for environmental testing and remediation prior to being deeded to the City. During the time the Armory is deeded to the ODEQ, the City will provide exterior maintenance of the facility, such as mowing.

We appreciate the opportunity to take possession of the Miami National Guard Armory. If you have any questions or need additional information, please do not hesitate to contact my office at: 918-541-2203.

Sincerely,

CITY OF MIAMI

Huey P. Long,
City Manager

Cc: Tim Wilson, Assistant City Manager
Jill Fitzgibbon, Public Services Coordinator
Gary Brooks, Emergency Mgmt/Code Enforcement Director
Mike Johnson, Parks & Rec Supervisor
Angela Hughes, ODEQ

MJF/mjf
HPLL09-02

APPENDIX B: AERIAL PHOTOGRAPHS AND TOPOGRAPHIC MAPS

11-22-1939



7-7-1939

2841

CFO - 3 - 01

EASTMAN KODAK COMPANY

7-27-52

CFQ-5K- 13





[Click here to go to the DEQ home page](#)

Oklahoma Department of Environmental Quality

GIS DATA VIEWER



Refresh Map

Master Facility List

Air Quality

Customer Services

Land Protection

Water Quality

Other Agency Data

Geo/Political

Cultural Data

Base Map

Images

Visible

- 2008 - 1 METER COLOR AERIALS
- 2003 - 1 METER COLOR AERIALS
- 1995 - 1 METER AERIALS
- 3D QUADS
- USGS QUADS



Refresh Map

Master Facility List

Air Quality

Customer Services

Land Protection

Water Quality

Other Agency Data

Geo/Political

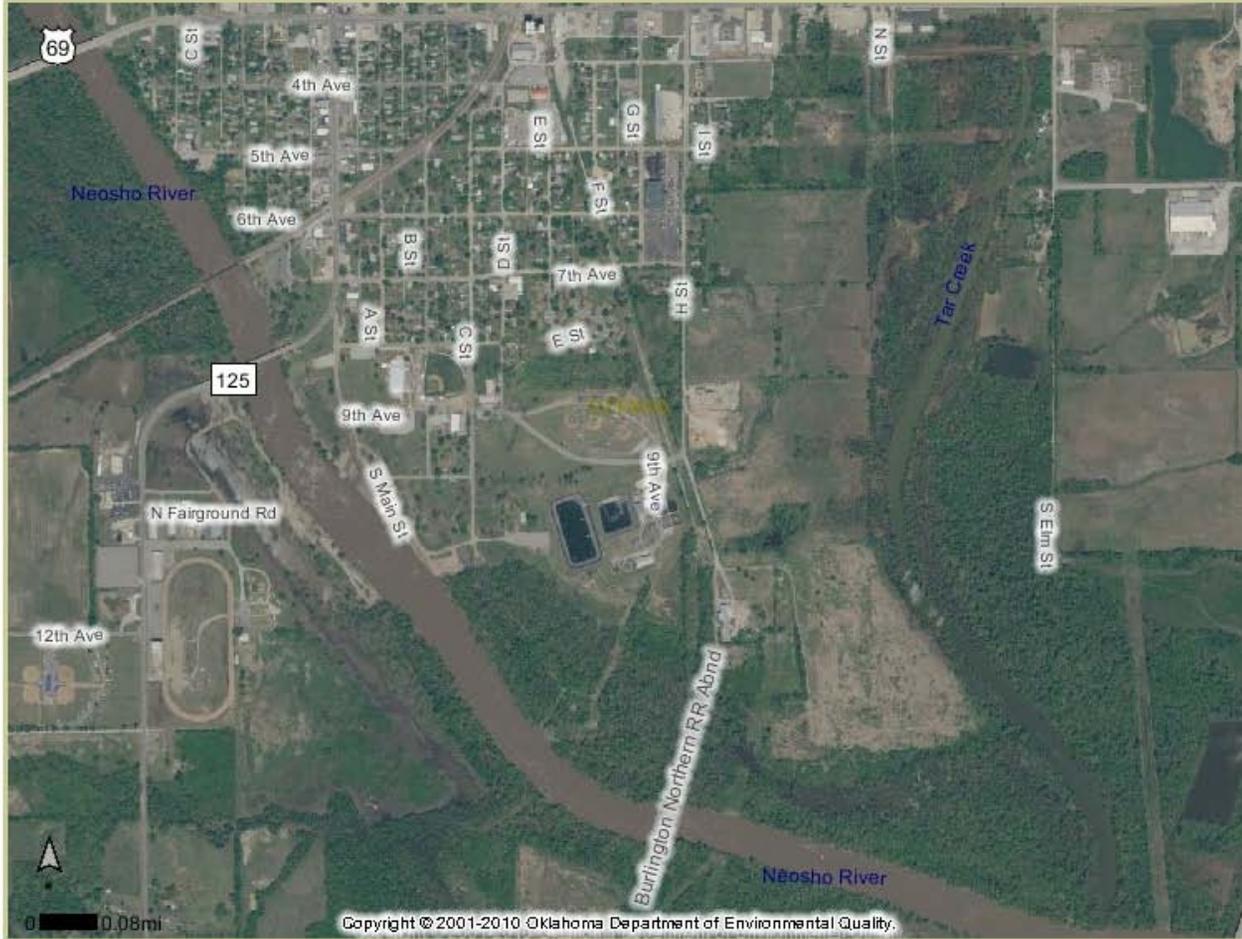
Cultural Data

Base Map

Images

Visible

- 2008 - 1 METER COLOR AERIALS
- 2003 - 1 METER COLOR AERIALS
- 1995 - 1 METER AERIALS
- 3D QUADS
- USGS QUADS



Refresh Map

Master Facility List

Air Quality

Customer Services

Land Protection

Water Quality

Other Agency Data

Geo/Political

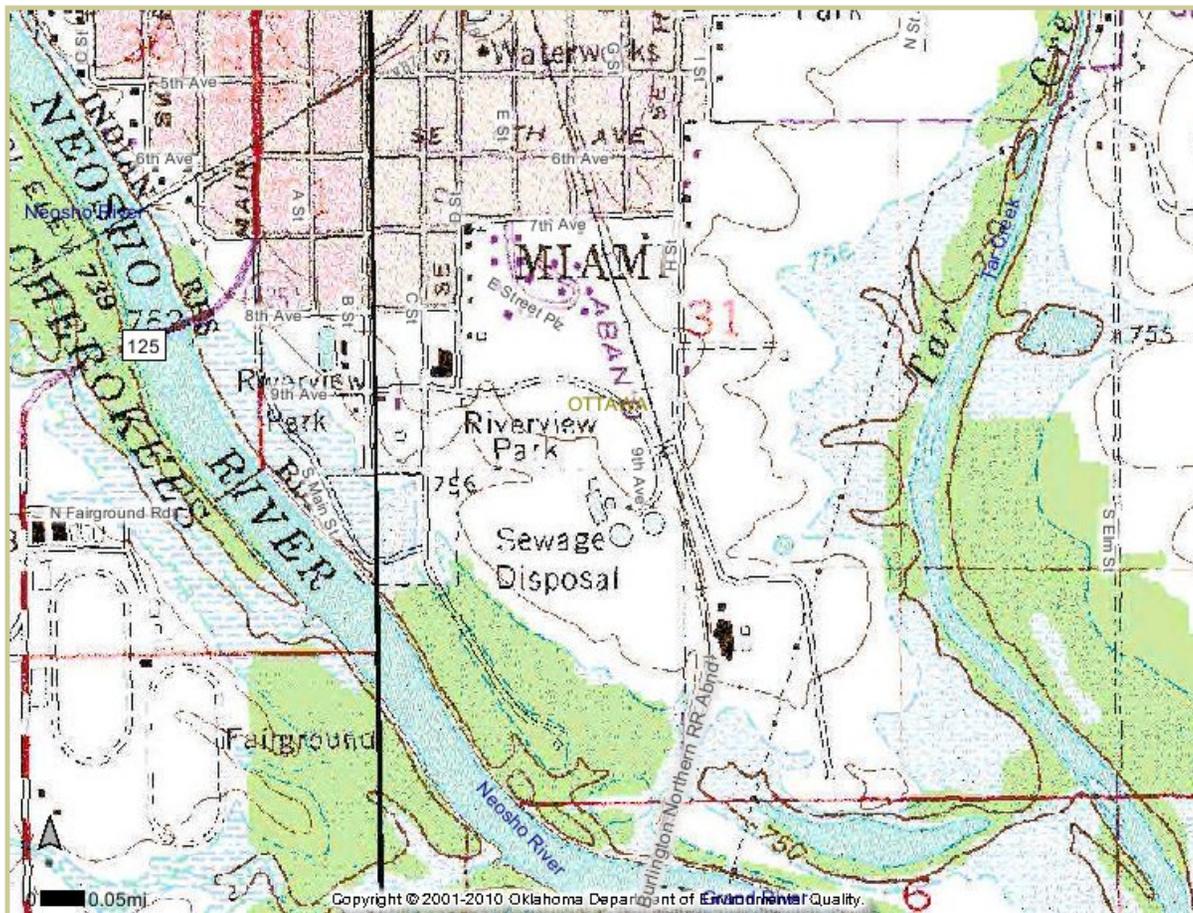
Cultural Data

Base Map

Images

Visible

- 2008 - 1 METER COLOR AERIALS
- 2003 - 1 METER COLOR AERIALS
- 1995 - 1 METER AERIALS
- 3D QUADS
- USGS QUADS



Refresh Map

Master Facility List

Air Quality

Customer Services

Land Protection

Water Quality

Other Agency Data

Geo/Political

Cultural Data

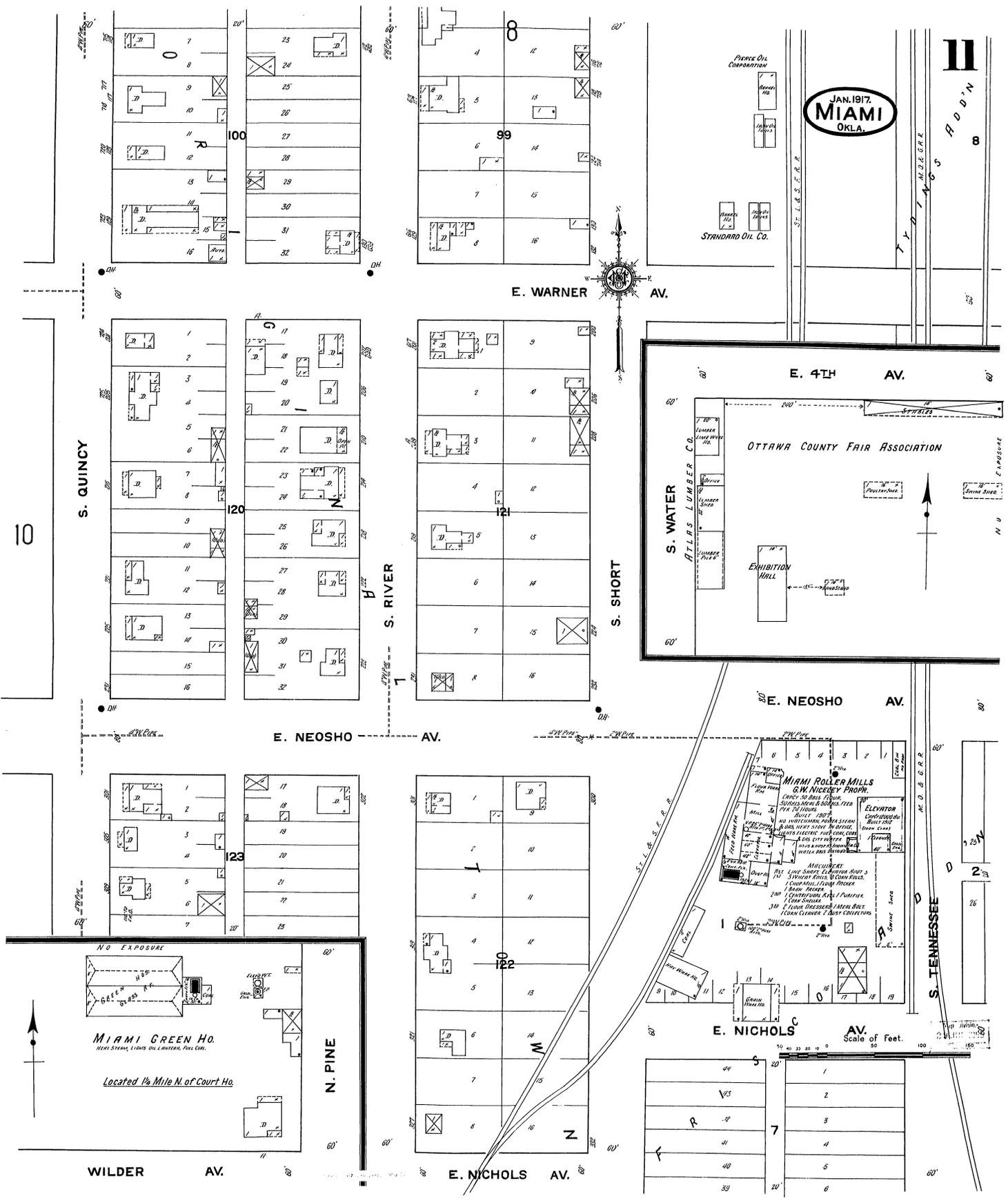
Base Map

Images

Visible

- 2008 - 1 METER COLOR AERIALS
- 2003 - 1 METER COLOR AERIALS
- 1995 - 1 METER AERIALS
- 3D QUADS
- USGS QUADS

APPENDIX C: REVIEW OF REGULATORY RECORDS



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MIAMI
 OKLA.

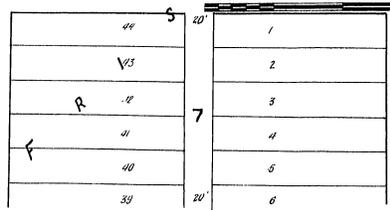
OTTAWA COUNTY FAIR ASSOCIATION

MIAMI ROLLER MILLS
 G.M. NICELEY PROP.

MIAMI GREEN HO.
 1101 S. QUINCY, LINDSAY OIL & LUMBER CO. PROP.

Located 1/4 Mile N. of Court Ho.

E. NICHOLS AV. Scale of Feet.



E. WARNER AV.

E. 4TH AV.

E. NEOSHO AV.

E. NICHOLS AV.

S. QUINCY

S. RIVER

S. SHORT

S. WATER

S. TENNESSEE

WILDER AV.

E. NICHOLS AV.

N. PINE

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123

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100

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JAN. 1917.
MIAMI
 OKLA.

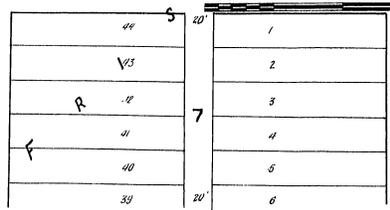
OTTAWA COUNTY FAIR ASSOCIATION

MIAMI ROLLER MILLS
 G.M. NICELEY PROP.

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 1101 S. QUINCY, LINDSAY OIL & LUMBER CO. PROP.

Located 1/4 Mile N. of Court Ho.

E. NICHOLS AV. Scale of Feet.



E. WARNER AV.

E. 4TH AV.

E. NEOSHO AV.

E. NICHOLS AV.

S. QUINCY

S. RIVER

S. SHORT

S. WATER

S. TENNESSEE

WILDER AV.

E. NICHOLS AV.

N. PINE

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JAN. 1917.
MIAMI
OKLA.

8



N. TENNESSEE

12

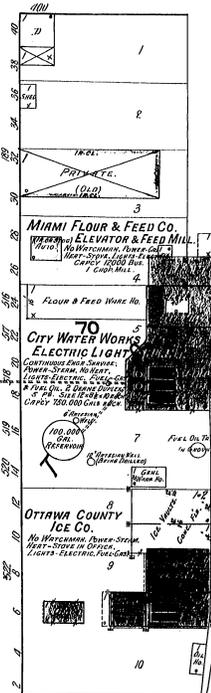
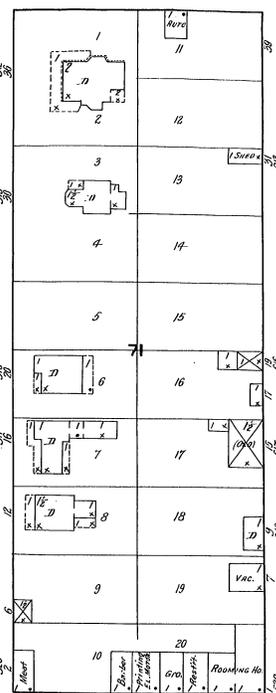
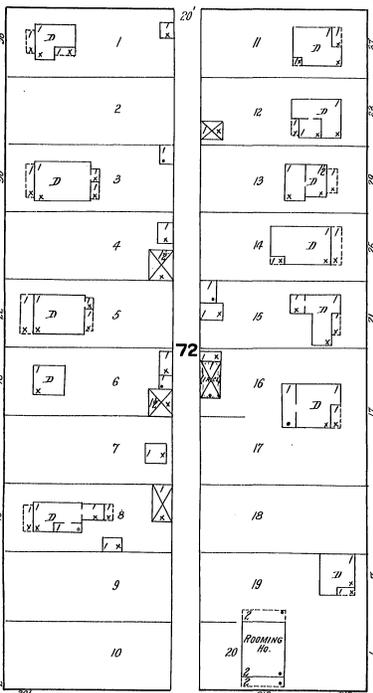
E. 3RD AV.

5

N. QUINCY

N. RIVER

N. SHORT

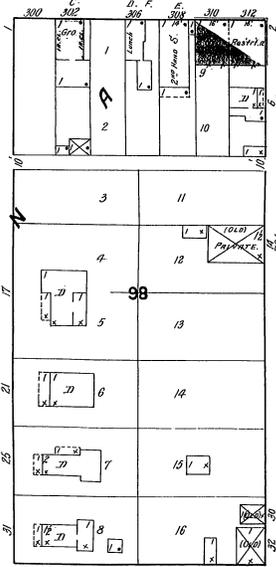
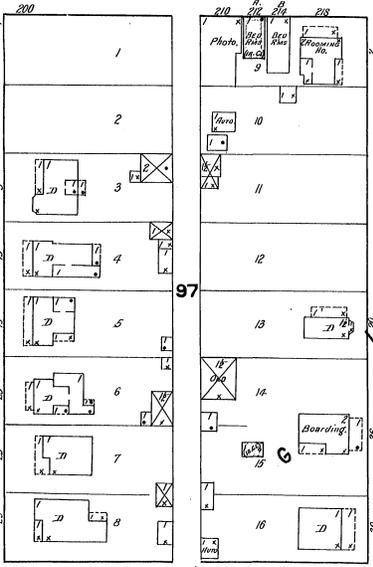


E. 4TH AV.

S. QUINCY

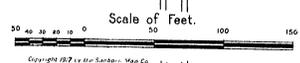
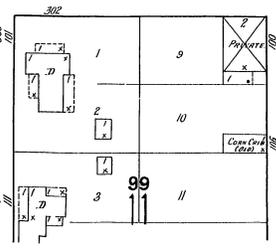
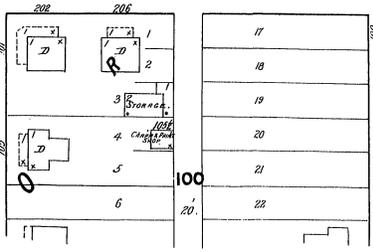
S. RIVER

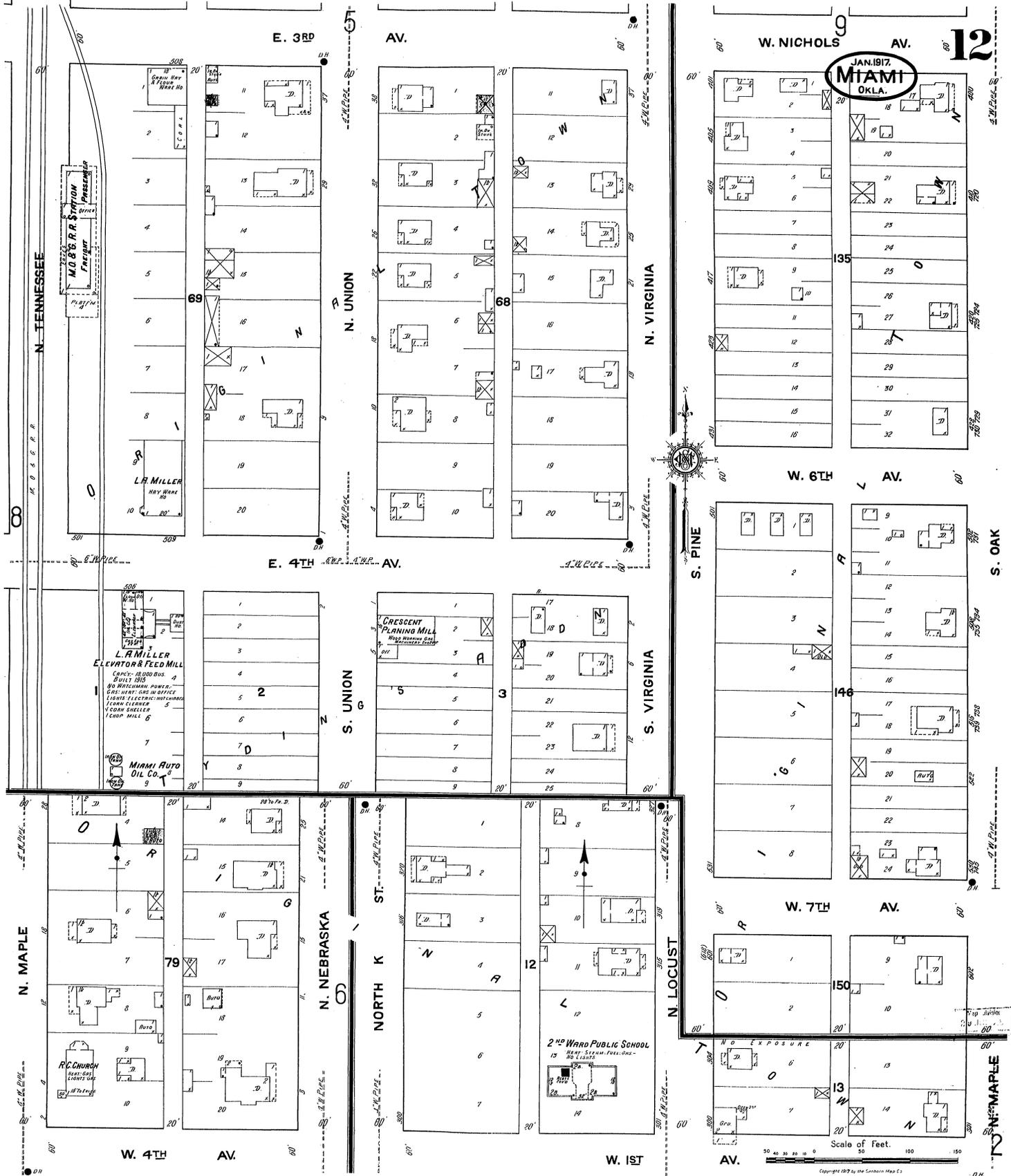
S. SHORT



E. 5TH AV.

10





JAN. 1917.
MIAMI
OKLA.



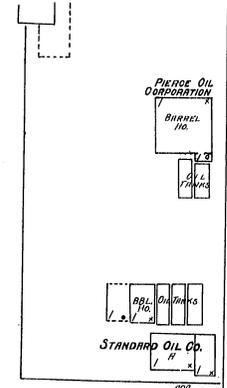
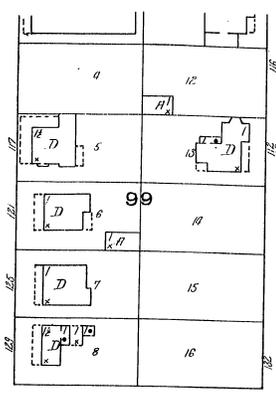
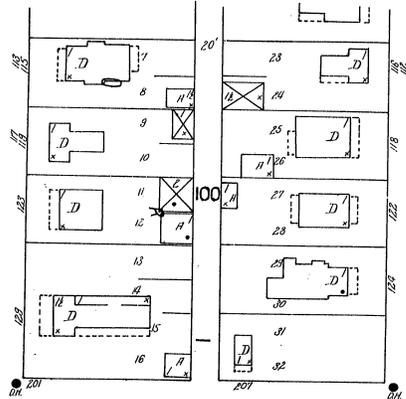
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Copyright 1917 by the Sanborn Map Co.

15

15

JULY, 1924
MIAMI
OKLA.

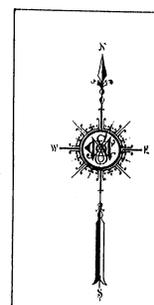
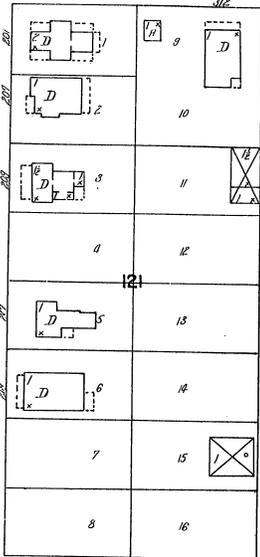
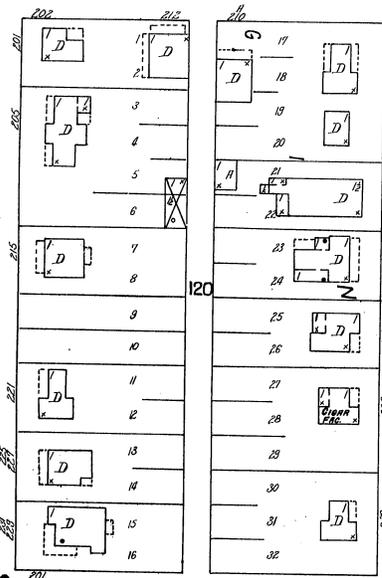


2ND AV. S. E. (E. WARNER AV.)

B. ST. S. E. (S. QUINCY)

C. ST. S. E. (S. RIVER)

D. ST. S. E. (S. SHORT)



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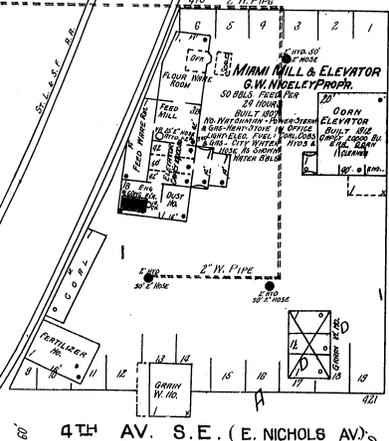
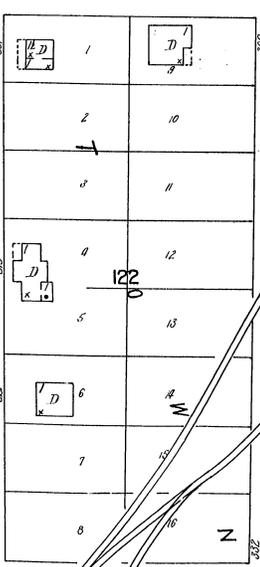
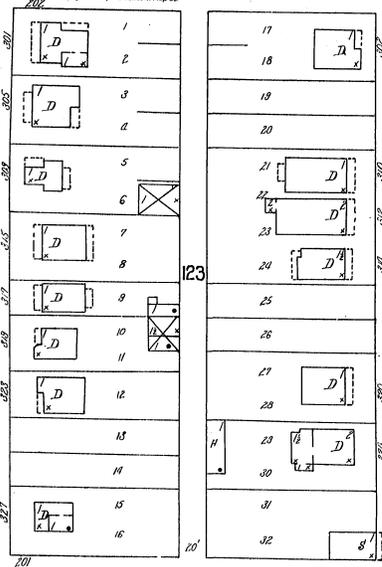
BOTTING COUNTY
OIL CO.
OIL DEPOT

3RD AV. S. E. (E. NEOSHO AV.)

3RD AV. S. E.

3RD AV. S. E.

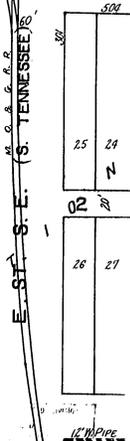
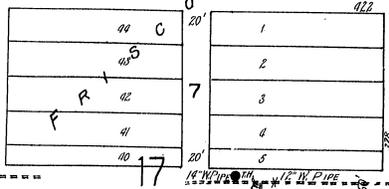
Scale of Feet. 0 10 20 30 40 50 60 70 80 90 100



4TH AV. S. E. (E. NICHOLS AV.)

4TH AV. S. E.

4TH AV. S. E.



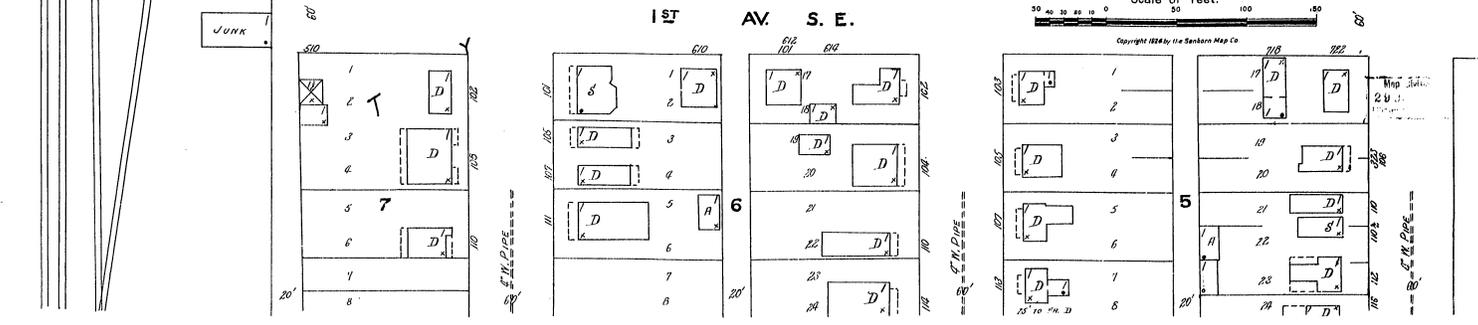
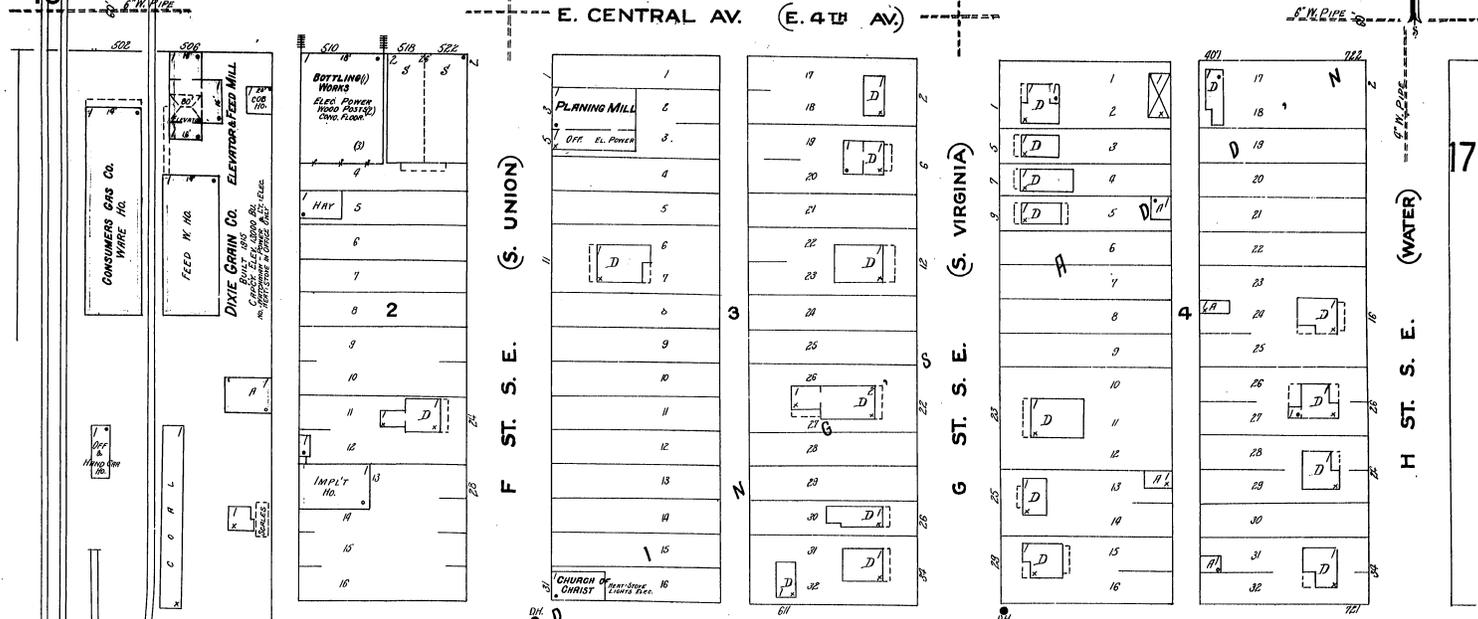
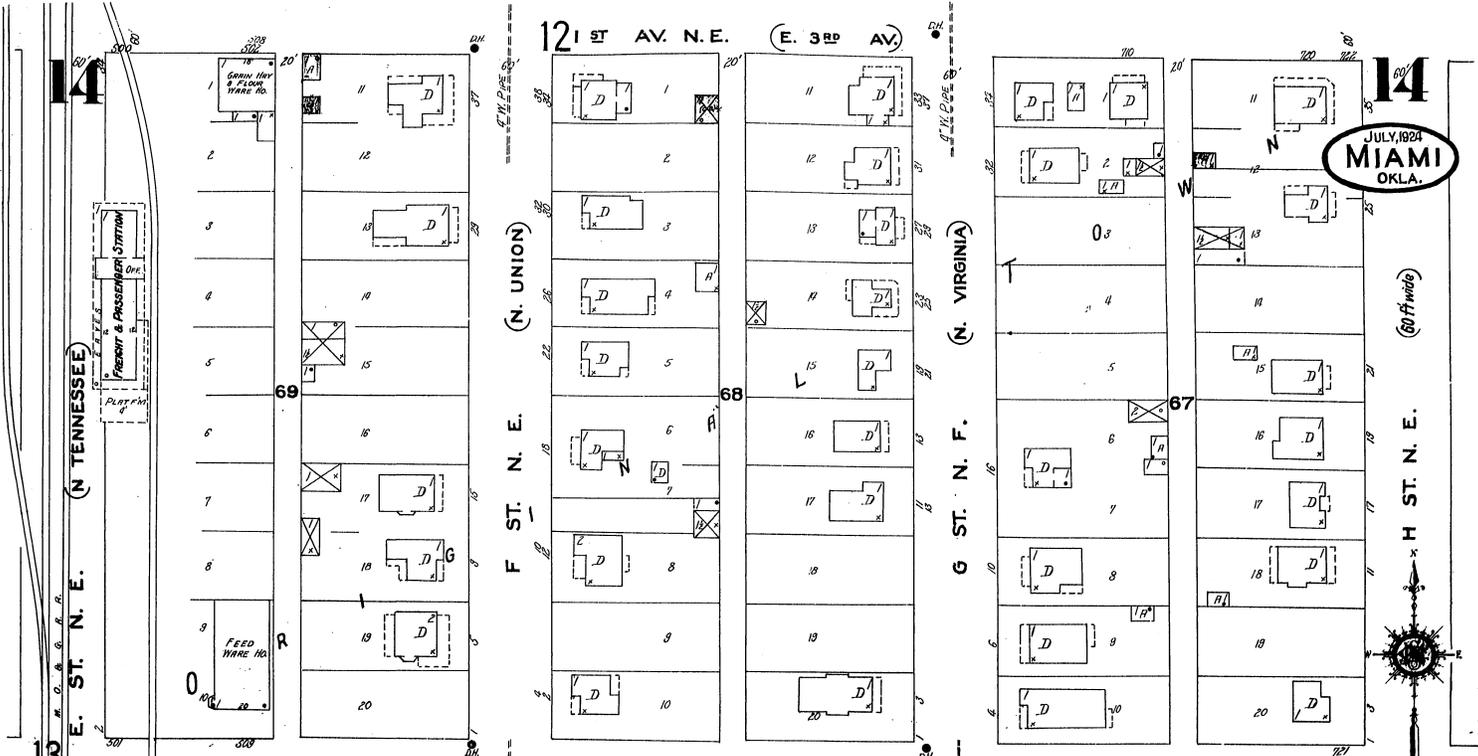
E. ST. S. E. (S. TENNESSEE)

124

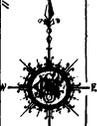
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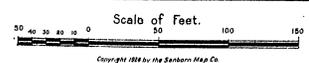
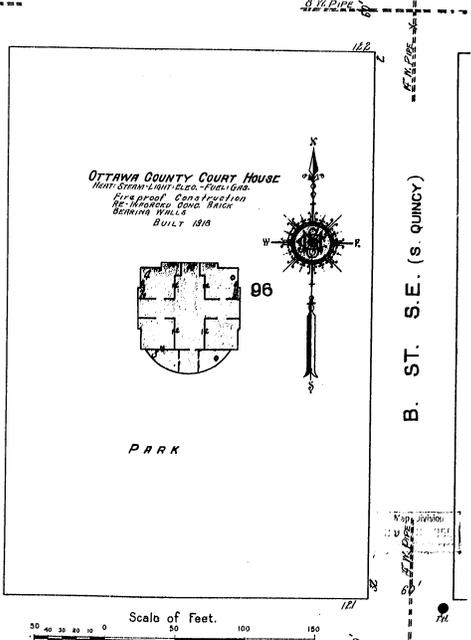
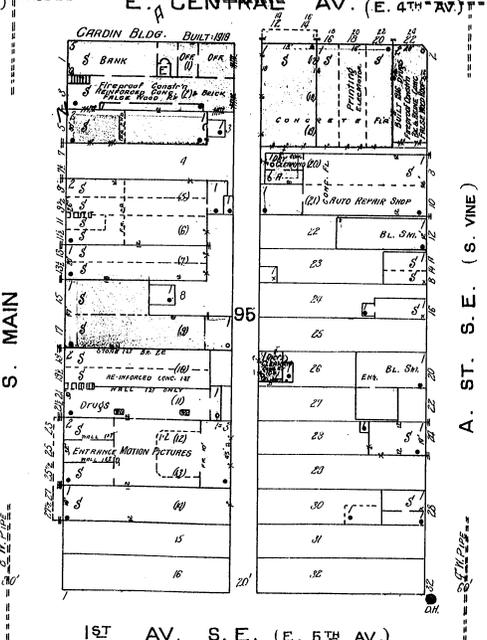
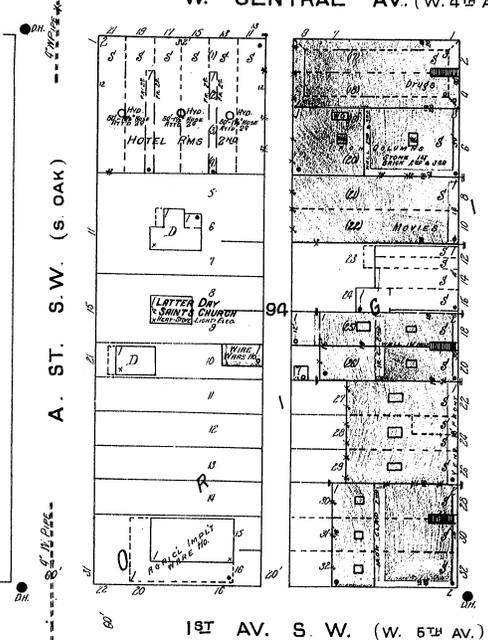
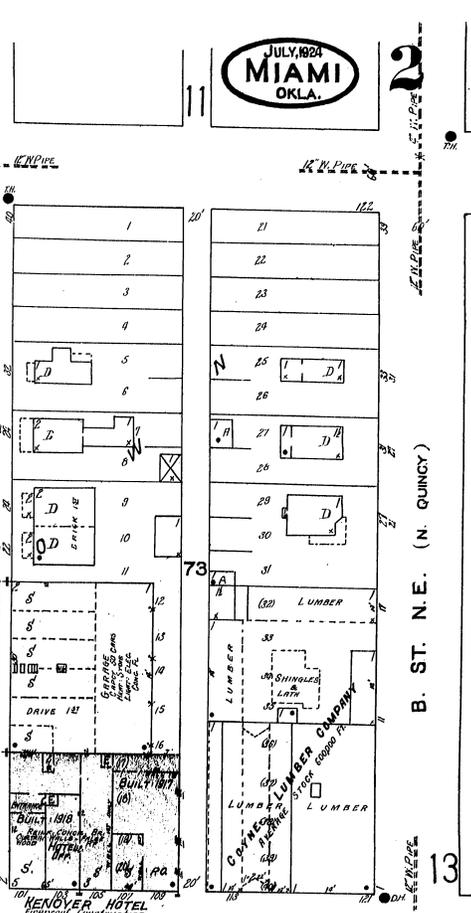
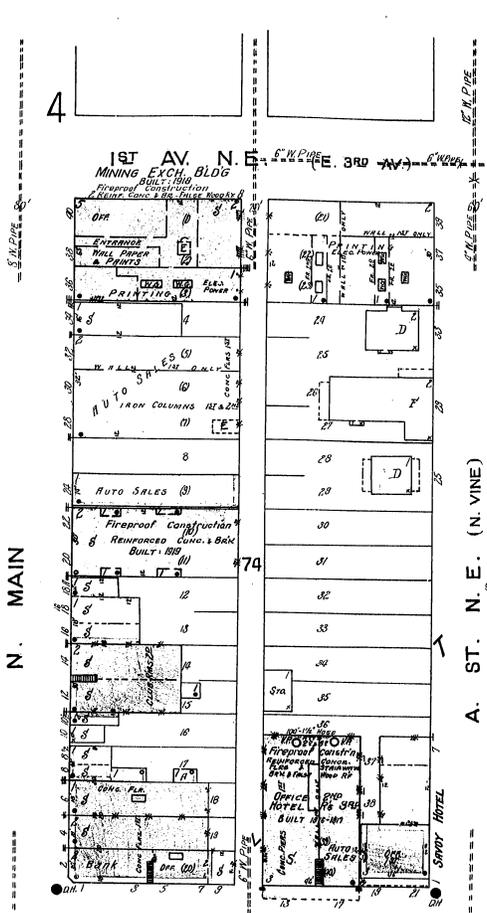
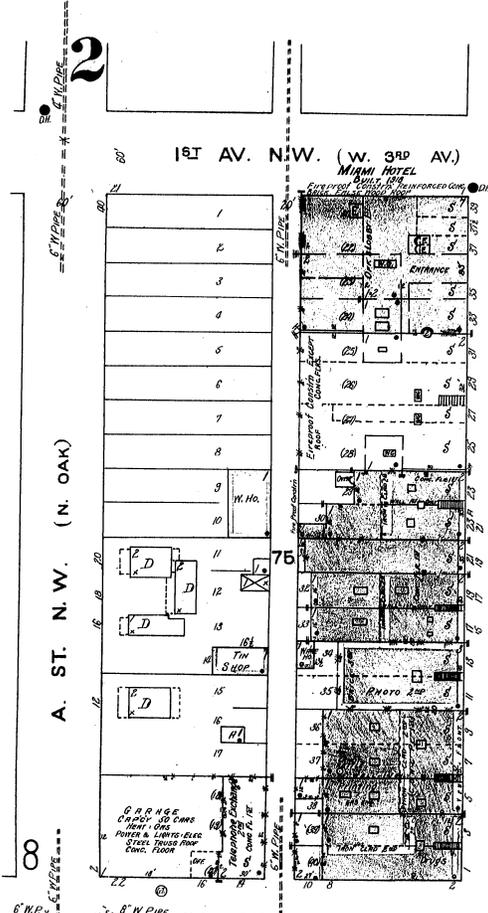
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JULY, 1924
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OKLA.

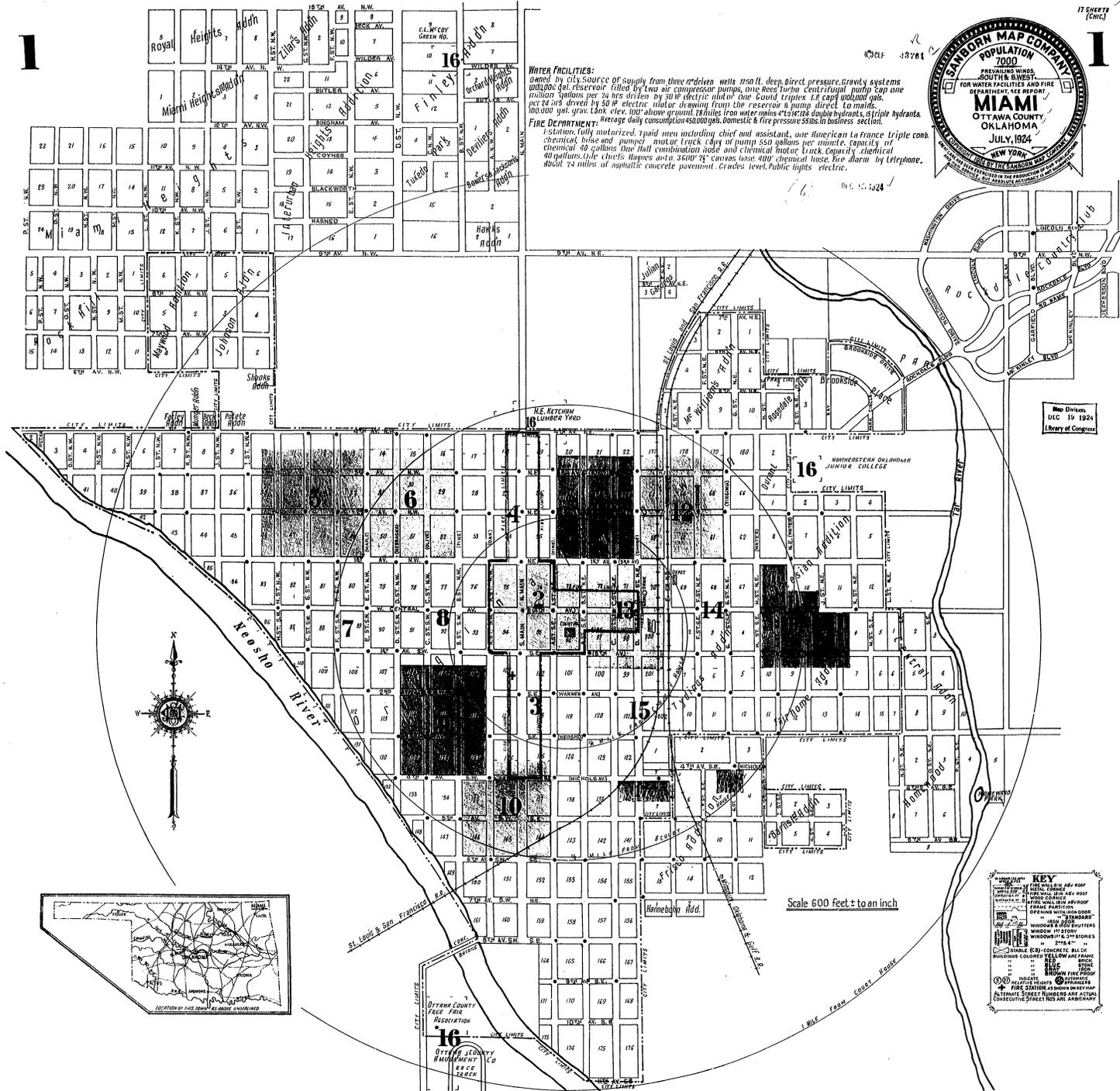


JULY, 1924
MIAMI
OKLA.





WATER FACILITIES:
Owned by city. Source of supply from three artesian wells 150 ft. deep direct pressure gravity systems with 200 gal. reservoir filled by two air compressor pumps, one Ross turbo centrifugal pump cap one million gallons per 24 hrs driven by 20 HP electric motor on the ground triplex 1250 gal. capacity per 24 hrs driven by 50 HP electric motor drawing from the reservoir a pump direct to mains. 100,000 gal. gross tank elev. 100' above ground. 28 ft. from water mains to triplex double hydrants, 12 triplex hydrants.
FIRE DEPARTMENT:
1 station, fully motorized, 1 paid men including chief and assistant, one American la France triple comb chemical hose and pumper motor truck capacity of pump 550 gallons per minute, capacity of chemical 40 gallons line haul combination hose and chemical motor truck capacity chemical 40 gallons, the chiefs hoses and 3500' 3/4" canvas hose with chemical hose for alarm by telephone, about 24 miles of asphaltic concrete pavement. Grades level. Public lights, electric.



KEY

- 1. City Limits
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- 3. City Limits
- 4. City Limits
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- 100. City Limits

INDEX

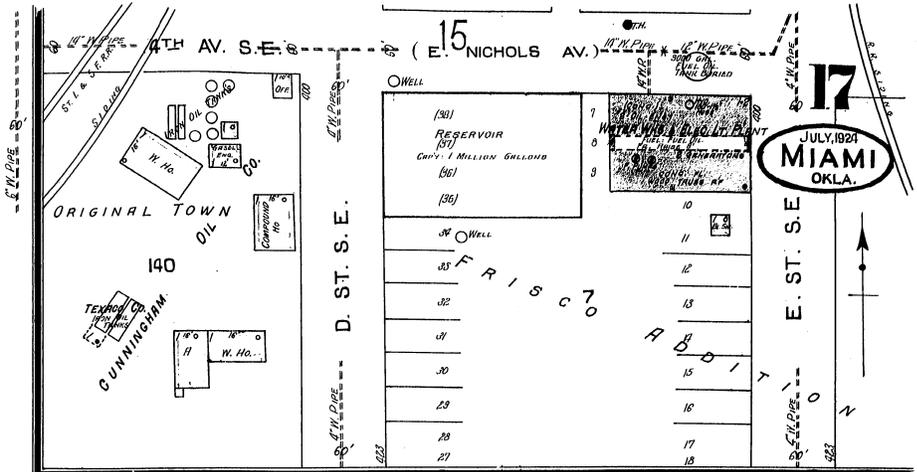
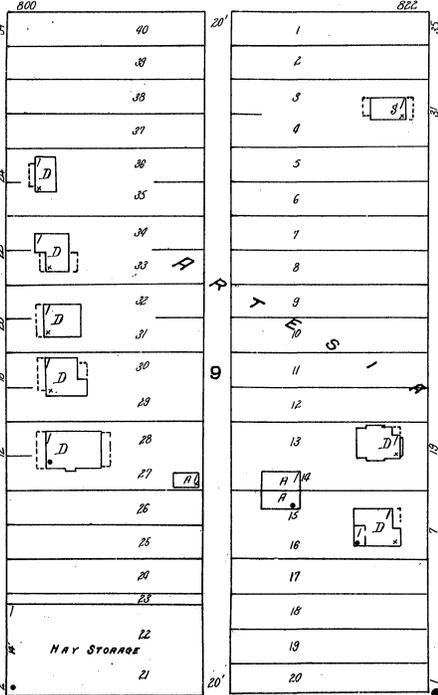
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A. N. R. 2	110-120	G. S. N. 2	110-120	S. N. R. 2	110-120	T. N. R. 2	110-120
A. N. R. 3	120-130	G. S. N. 3	120-130	S. N. R. 3	120-130	T. N. R. 3	120-130
A. N. R. 4	130-140	G. S. N. 4	130-140	S. N. R. 4	130-140	T. N. R. 4	130-140
A. N. R. 5	140-150	G. S. N. 5	140-150	S. N. R. 5	140-150	T. N. R. 5	140-150
A. N. R. 6	150-160	G. S. N. 6	150-160	S. N. R. 6	150-160	T. N. R. 6	150-160
A. N. R. 7	160-170	G. S. N. 7	160-170	S. N. R. 7	160-170	T. N. R. 7	160-170
A. N. R. 8	170-180	G. S. N. 8	170-180	S. N. R. 8	170-180	T. N. R. 8	170-180
A. N. R. 9	180-190	G. S. N. 9	180-190	S. N. R. 9	180-190	T. N. R. 9	180-190
A. N. R. 10	190-200	G. S. N. 10	190-200	S. N. R. 10	190-200	T. N. R. 10	190-200
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A. N. R. 13	220-230	G. S. N. 13	220-230	S. N. R. 13	220-230	T. N. R. 13	220-230
A. N. R. 14	230-240	G. S. N. 14	230-240	S. N. R. 14	230-240	T. N. R. 14	230-240
A. N. R. 15	240-250	G. S. N. 15	240-250	S. N. R. 15	240-250	T. N. R. 15	240-250
A. N. R. 16	250-260	G. S. N. 16	250-260	S. N. R. 16	250-260	T. N. R. 16	250-260
A. N. R. 17	260-270	G. S. N. 17	260-270	S. N. R. 17	260-270	T. N. R. 17	260-270
A. N. R. 18	270-280	G. S. N. 18	270-280	S. N. R. 18	270-280	T. N. R. 18	270-280
A. N. R. 19	280-290	G. S. N. 19	280-290	S. N. R. 19	280-290	T. N. R. 19	280-290
A. N. R. 20	290-300	G. S. N. 20	290-300	S. N. R. 20	290-300	T. N. R. 20	290-300
A. N. R. 21	300-310	G. S. N. 21	300-310	S. N. R. 21	300-310	T. N. R. 21	300-310
A. N. R. 22	310-320	G. S. N. 22	310-320	S. N. R. 22	310-320	T. N. R. 22	310-320
A. N. R. 23	320-330	G. S. N. 23	320-330	S. N. R. 23	320-330	T. N. R. 23	320-330
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A. N. R. 34	430-440	G. S. N. 34	430-440	S. N. R. 34	430-440	T. N. R. 34	430-440
A. N. R. 35	440-450	G. S. N. 35	440-450	S. N. R. 35	440-450	T. N. R. 35	440-450
A. N. R. 36	450-460	G. S. N. 36	450-460	S. N. R. 36	450-460	T. N. R. 36	450-460
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A. N. R. 42	510-520	G. S. N. 42	510-520	S. N. R. 42	510-520	T. N. R. 42	510-520
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A. N. R. 60	690-700	G. S. N. 60	690-700	S. N. R. 60	690-700	T. N. R. 60	690-700
A. N. R. 61	700-710	G. S. N. 61	700-710	S. N. R. 61	700-710	T. N. R. 61	700-710
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A. N. R. 63	720-730	G. S. N. 63	720-730	S. N. R. 63	720-730	T. N. R. 63	720-730
A. N. R. 64	730-740	G. S. N. 64	730-740	S. N. R. 64	730-740	T. N. R. 64	730-740
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A. N. R. 66	750-760	G. S. N. 66	750-760	S. N. R. 66	750-760	T. N. R. 66	750-760
A. N. R. 67	760-770	G. S. N. 67	760-770	S. N. R. 67	760-770	T. N. R. 67	760-770
A. N. R. 68	770-780	G. S. N. 68	770-780	S. N. R. 68	770-780	T. N. R. 68	770-780
A. N. R. 69	780-790	G. S. N. 69	780-790	S. N. R. 69	780-790	T. N. R. 69	780-790
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A. N. R. 72	810-820	G. S. N. 72	810-820	S. N. R. 72	810-820	T. N. R. 72	810-820
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A. N. R. 79	880-890	G. S. N. 79	880-890	S. N. R. 79	880-890	T. N. R. 79	880-890
A. N. R. 80	890-900	G. S. N. 80	890-900	S. N. R. 80	890-900	T. N. R. 80	890-900
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A. N. R. 82	910-920	G. S. N. 82	910-920	S. N. R. 82	910-920	T. N. R. 82	910-920
A. N. R. 83	920-930	G. S. N. 83	920-930	S. N. R. 83	920-930	T. N. R. 83	920-930
A. N. R. 84	930-940	G. S. N. 84	930-940	S. N. R. 84	930-940	T. N. R. 84	930-940
A. N. R. 85	940-950	G. S. N. 85	940-950	S. N. R. 85	940-950	T. N. R. 85	940-950
A. N. R. 86	950-960	G. S. N. 86	950-960	S. N. R. 86	950-960	T. N. R. 86	950-960
A. N. R. 87	960-970	G. S. N. 87	960-970	S. N. R. 87	960-970	T. N. R. 87	960-970
A. N. R. 88	970-980	G. S. N. 88	970-980	S. N. R. 88	970-980	T. N. R. 88	970-980
A. N. R. 89	980-990	G. S. N. 89	980-990	S. N. R. 89	980-990	T. N. R. 89	980-990
A. N. R. 90	990-1000	G. S. N. 90	990-1000	S. N. R. 90	990-1000	T. N. R. 90	990-1000

*Indicates only one side of street shown.

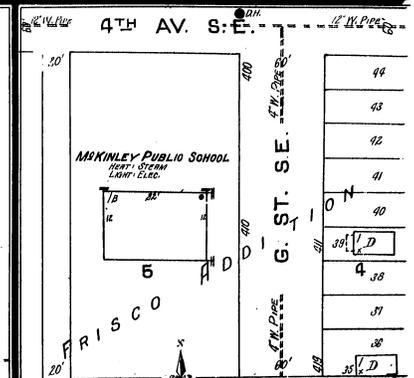
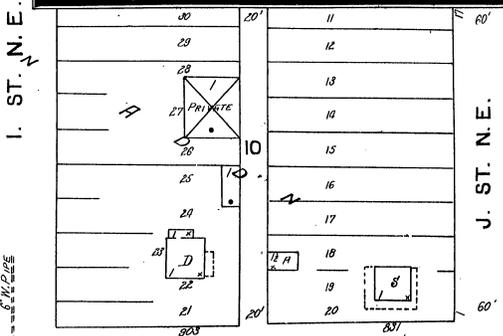
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1ST AV. N. E.

H. ST. N. E.

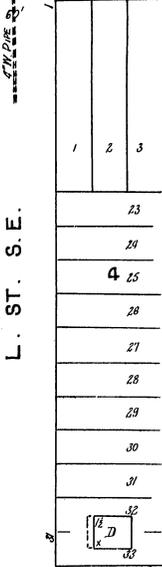
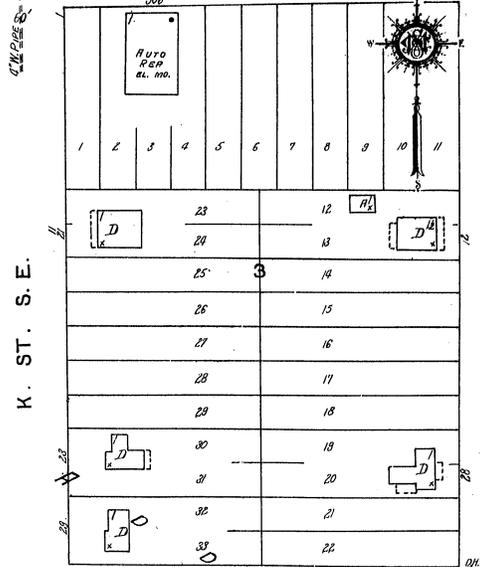
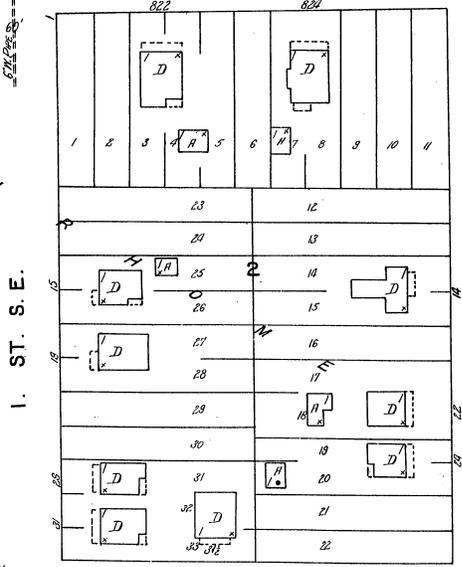
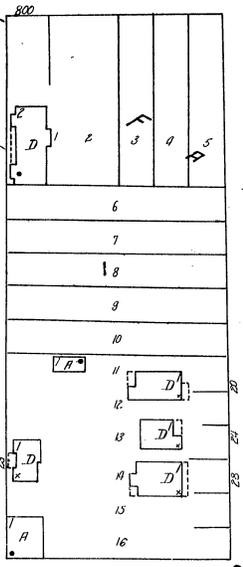


JULY, 1924
MIAMI
OKLA.



14

H. ST. S. E.

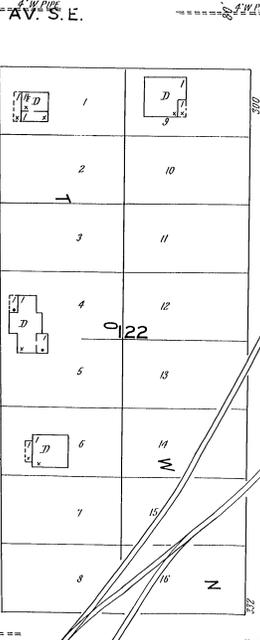
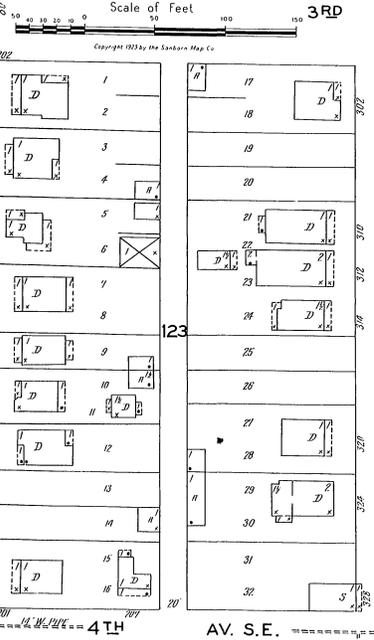
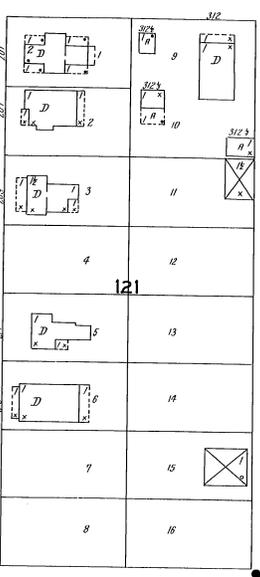
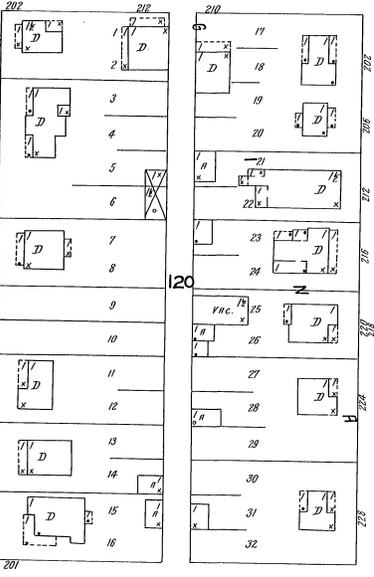
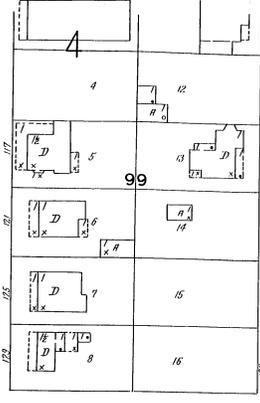
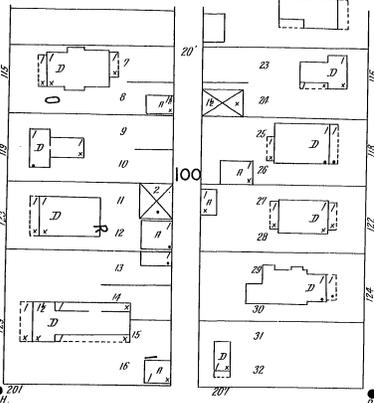


1ST AV. S. E.

Scale of Feet.

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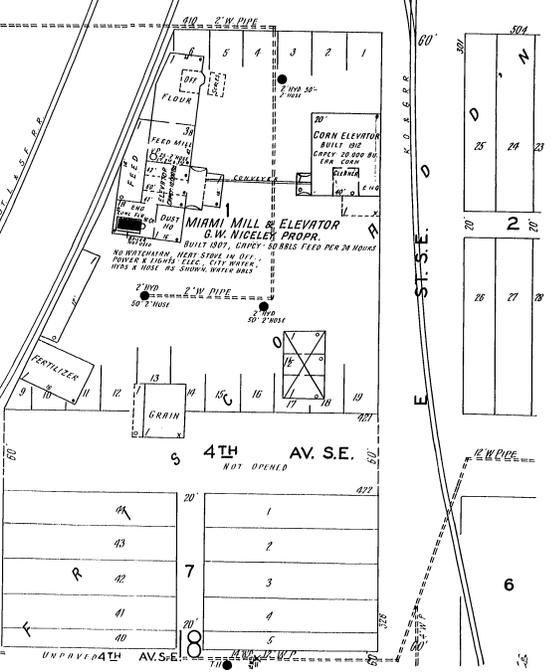
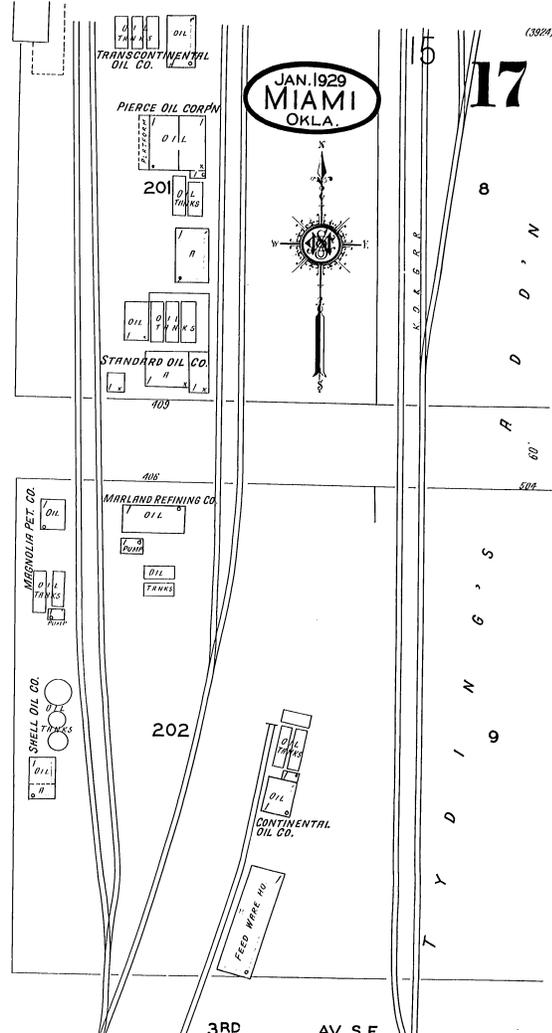
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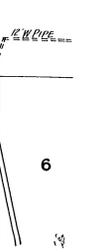
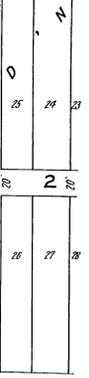
JAN. 1929
MIAMI
OKLA.



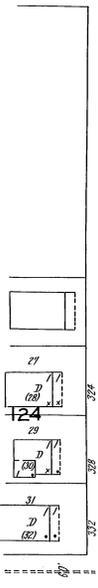
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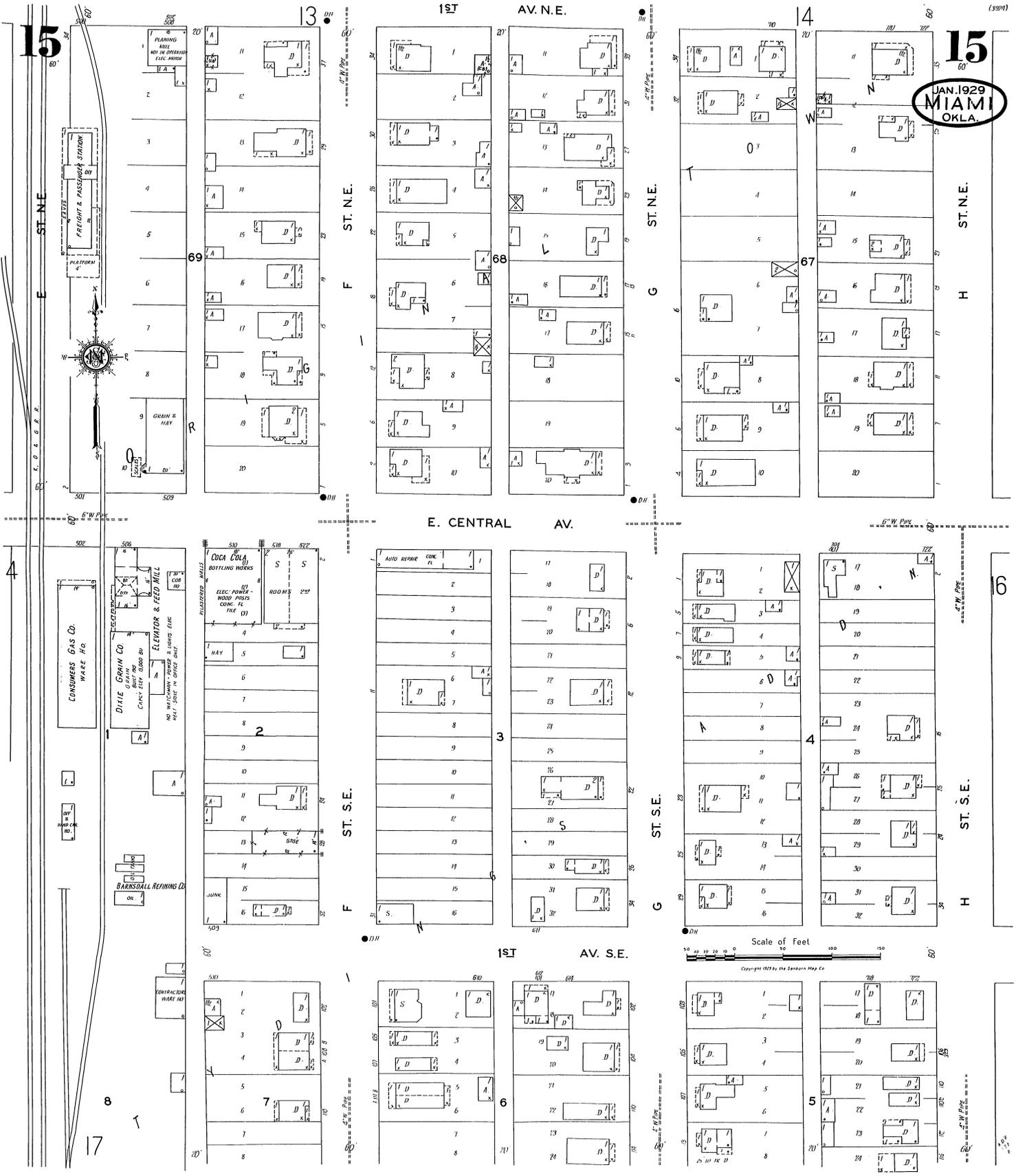
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4TH AV. S.E.

(3829)

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JAN. 1929
MIAMI
OKLA.



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ST. N.E.

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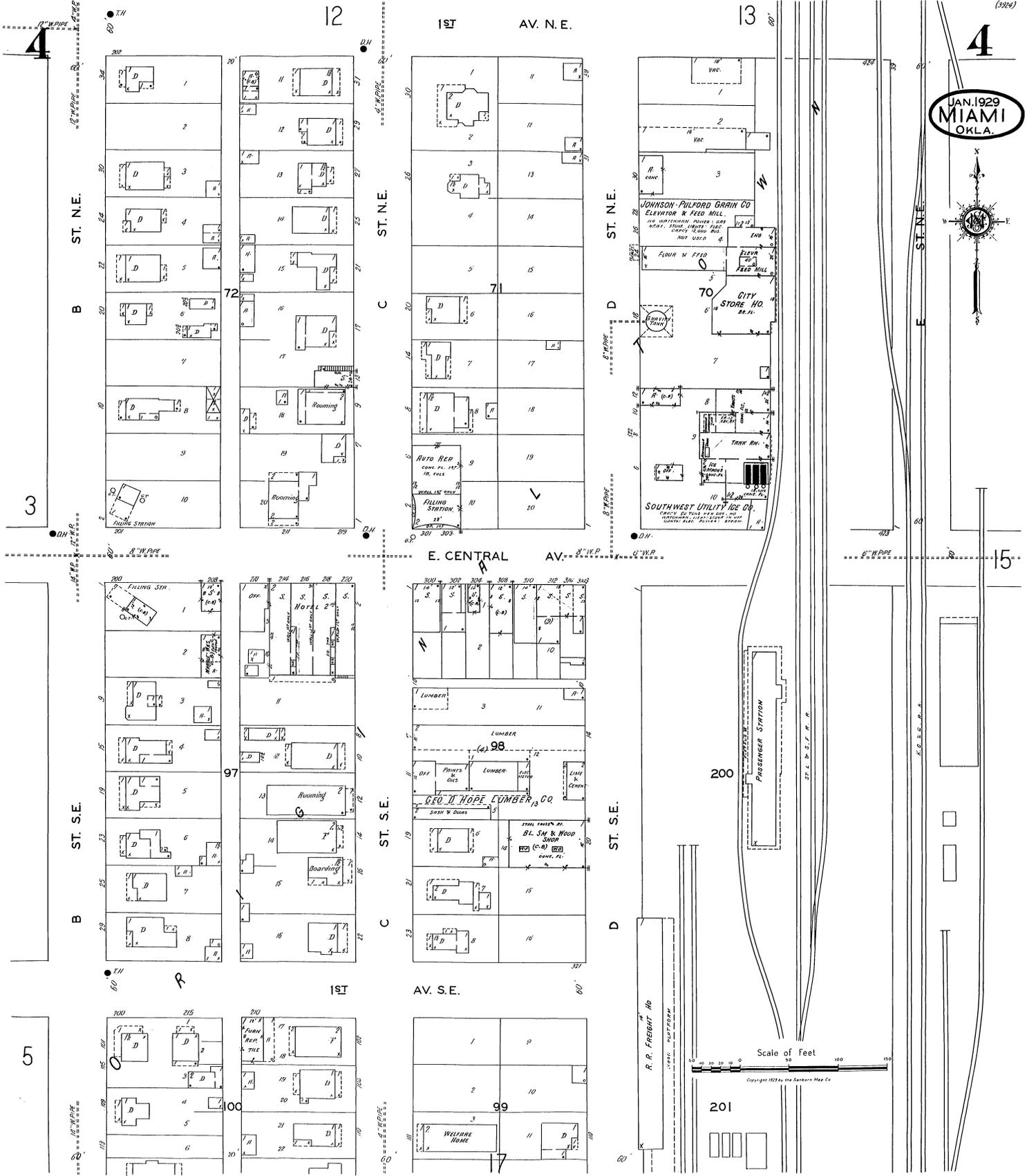
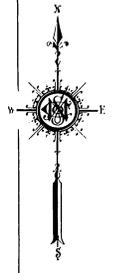
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JAN. 1929
MIAMI
OKLA.



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1ST AV. N.E.

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E. CENTRAL AV. 8" W.P.

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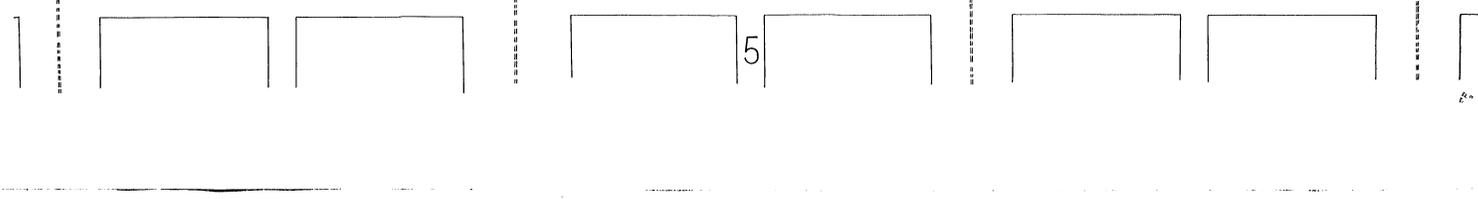
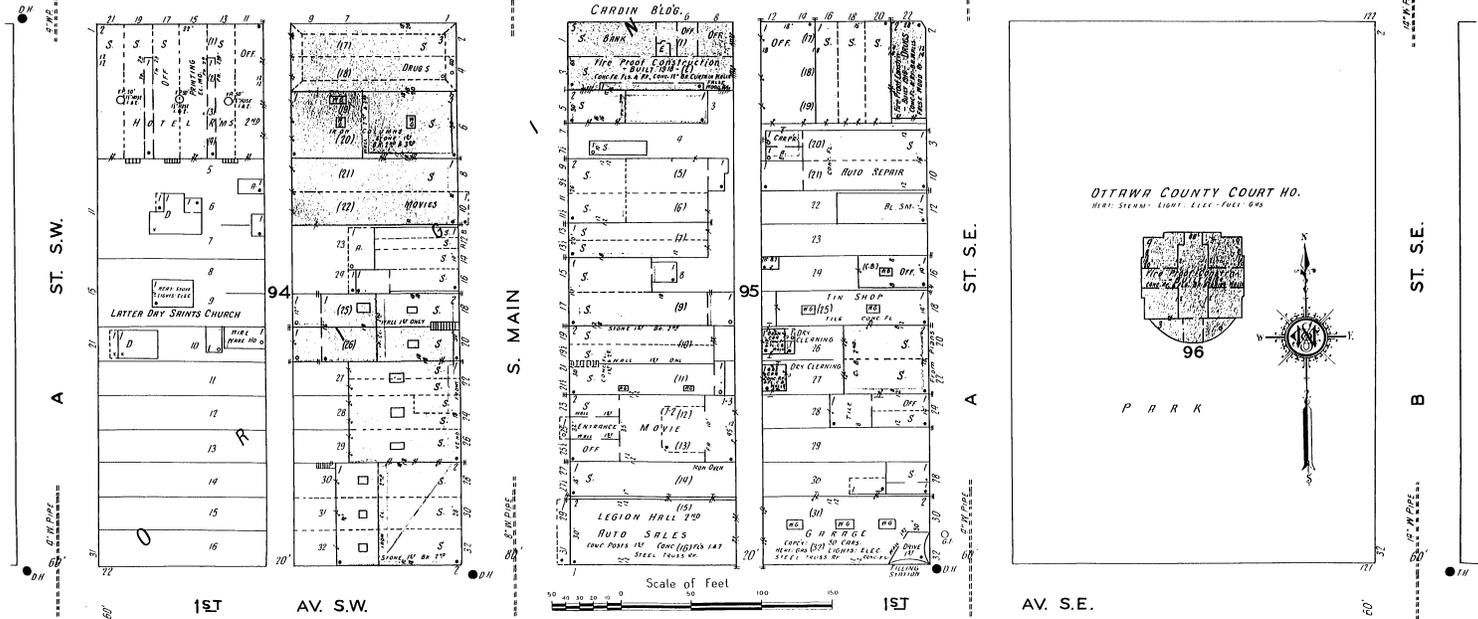
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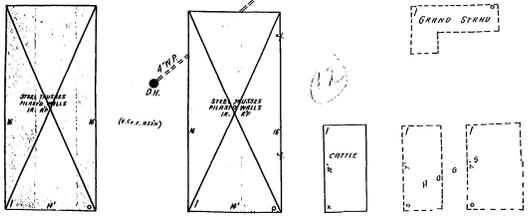
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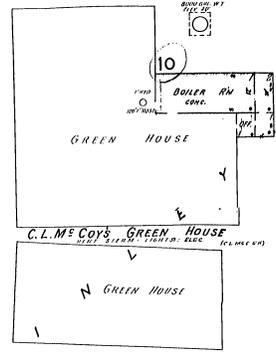
Scale of Feet
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JAN. 1929
MIAMI
OKLA.



OTTAWA COUNTY FREE FAIR ASSOCIATION
(C.F.F.A.)



C.L. M.C. COY'S GREEN HOUSE
GREEN HOUSE

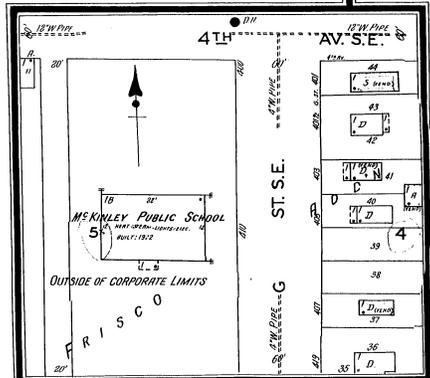


EXHIBIT BLDG
STEEL TRUSS, IN
POST & RAIL,
PORTLAND CEMENT
WALLS

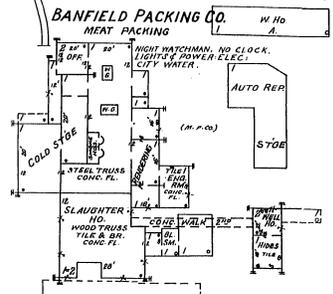
TERRITORY SHOWN ON THIS SECTION OF
SHEET OUTSIDE OF CORPORATE LIMITS

OUTSIDE OF CORPORATE LIMITS
OUTSIDE OF CORPORATE LIMITS

NO EXPOSURE ANY SIDE



MCKINLEY PUBLIC SCHOOL
MAY 1912



BANFIELD PACKING CO.
MEAT PACKING

STOCK PENS
STOCK PENS

OTTAWA COUNTY AMUSEMENT COMPANY

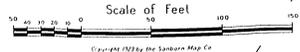
RACE TRACK

GRAND STAND
EXHIBITION RIMS 12' X
CONC. FR. & CONC. FLS.
16' POSTS & OVER,
STONE CURTAIN WALLS

THE TEARS CO.
ORIGINAL TOWN



RESERVOIR
WATER WKS & ELEC. LT. PLANT



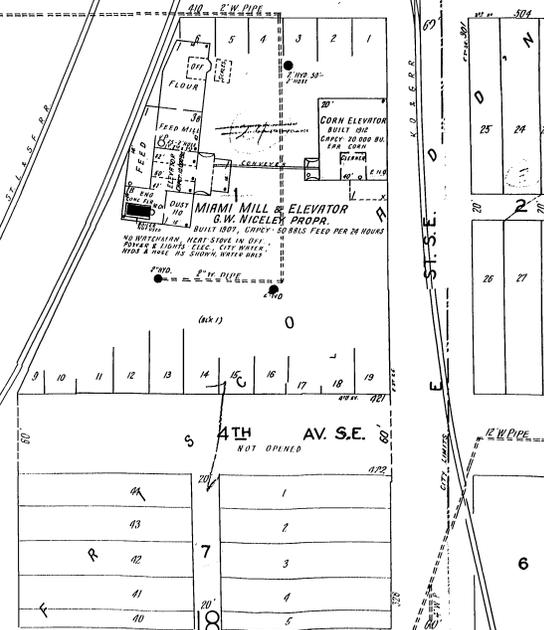
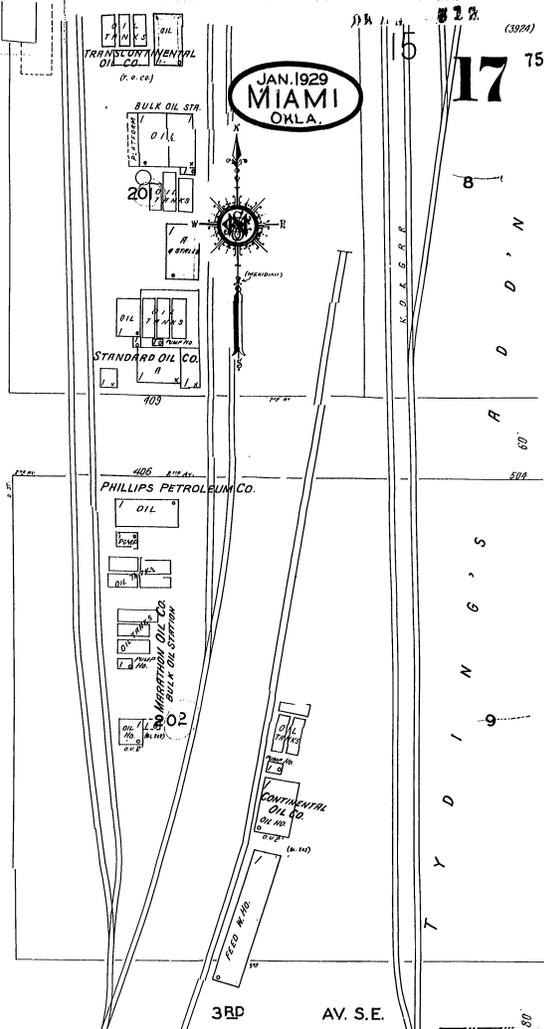
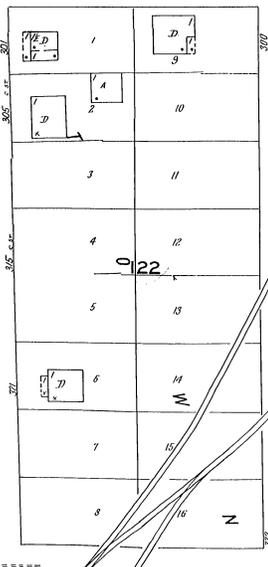
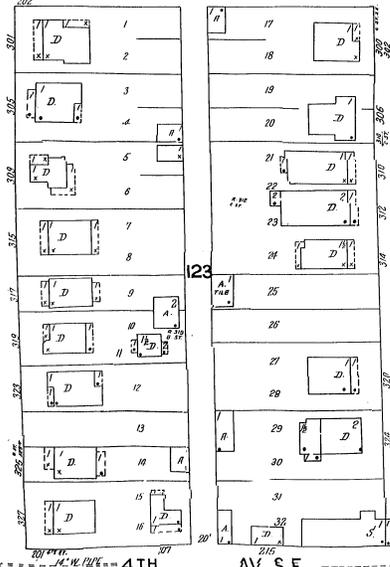
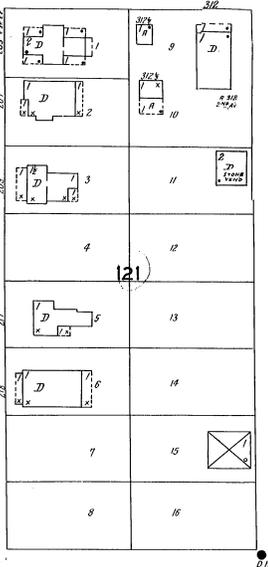
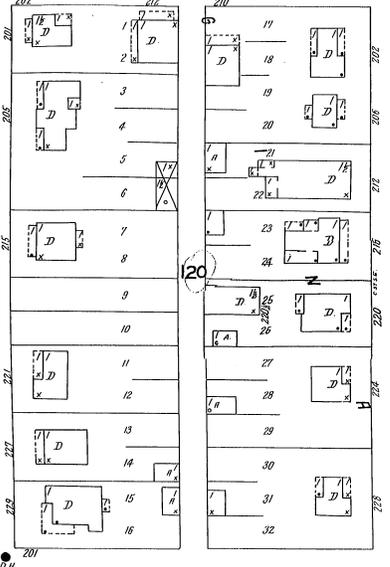
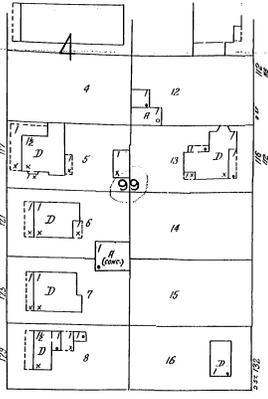
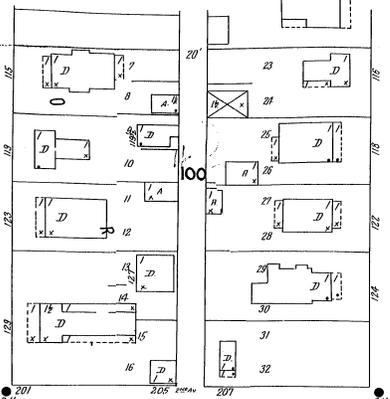
Scale of Feet
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17

(3994) 75

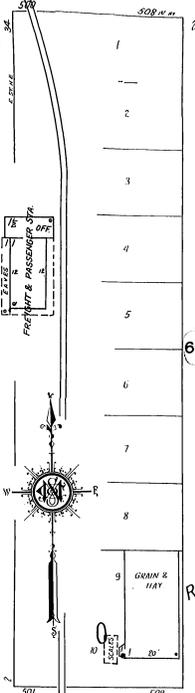


Scale of Feet
 Copyright 1927 by the Standard Map Co.

UNPROVED 4TH AV. S.E.

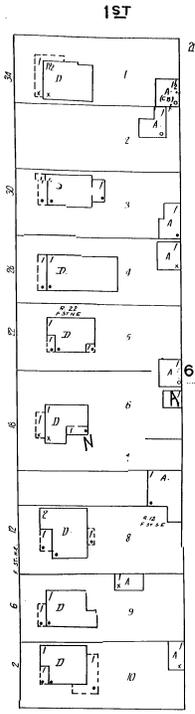
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ST. N.E.

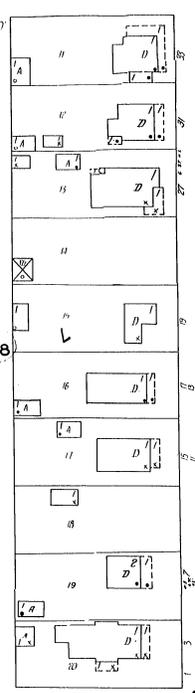


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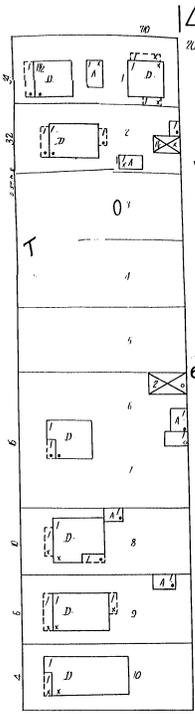
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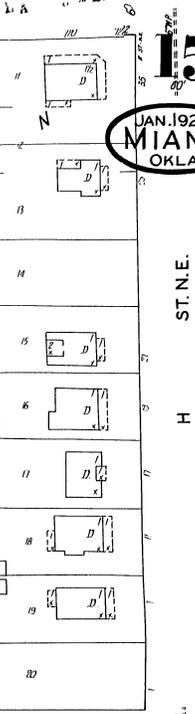
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ST. N.E.

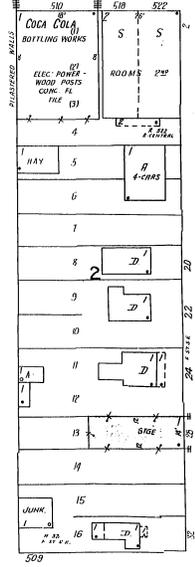
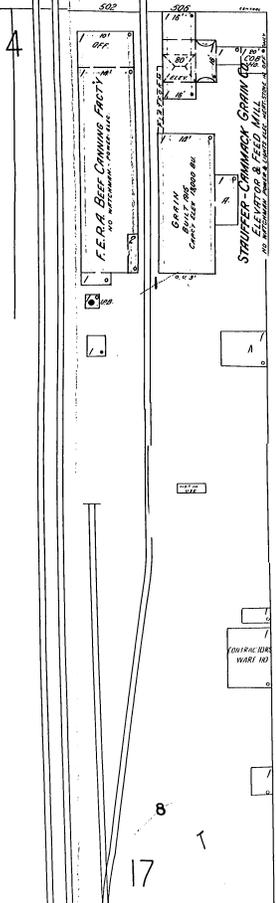


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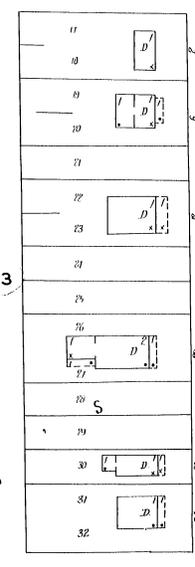
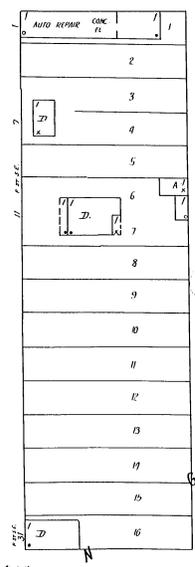


JAN. 1929
MIAMI
OKLA.

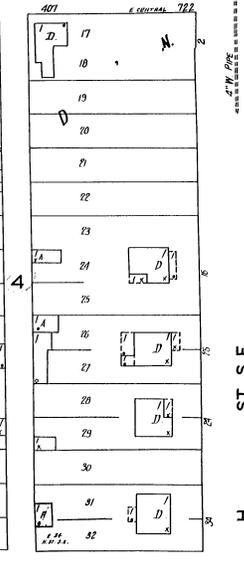
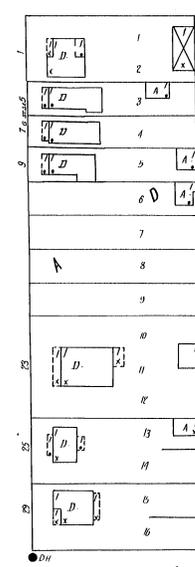
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ST. S.E.



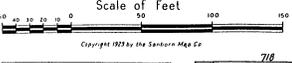
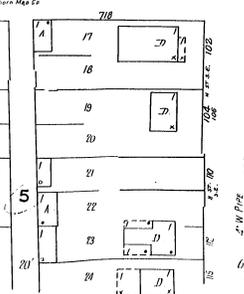
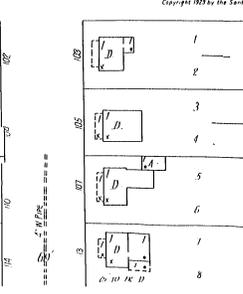
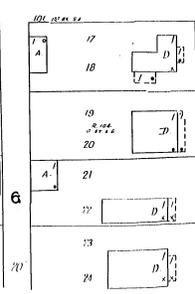
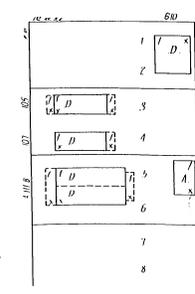
ST. S.E.



ST. S.E.

16

1ST AV. S.E.



OKLA

(3224)

4

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12

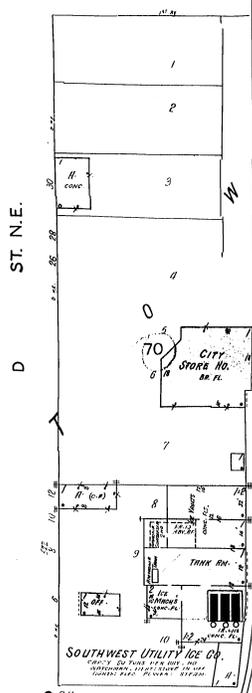
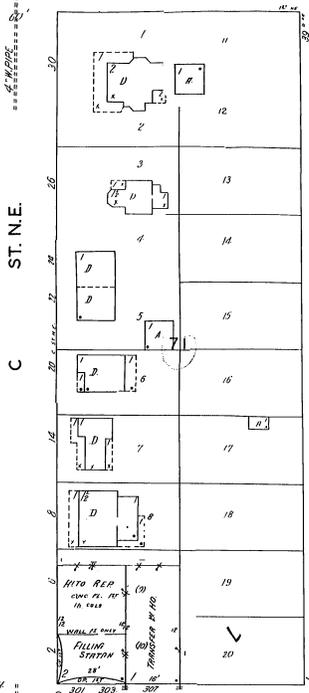
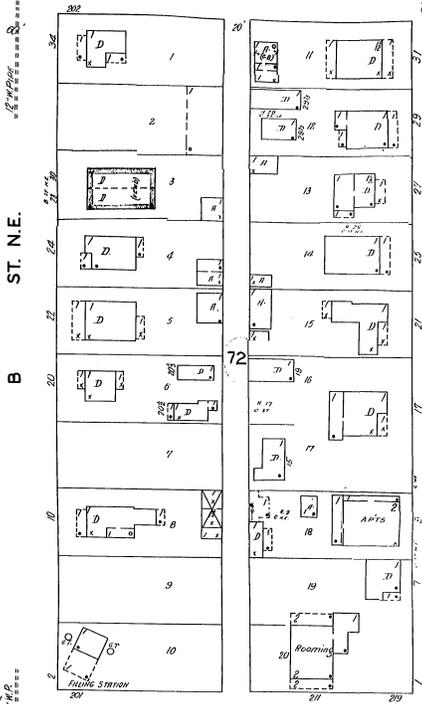
1ST

AV. N.E.

13

4

JAN. 1929
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E. CENTRAL AV. N.E.

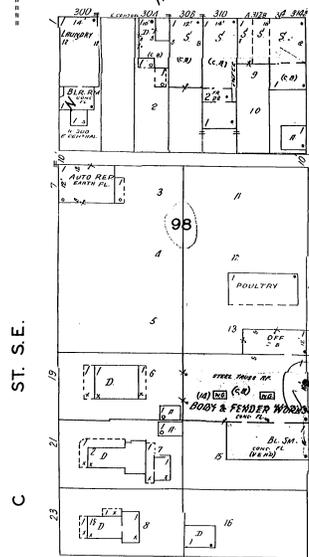
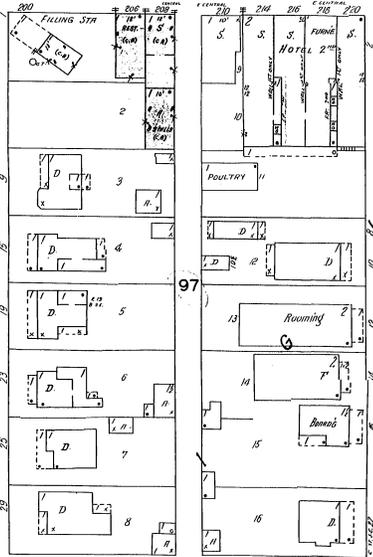
15

3

B
ST. S.E.

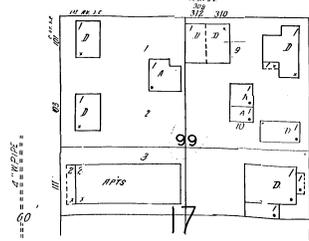
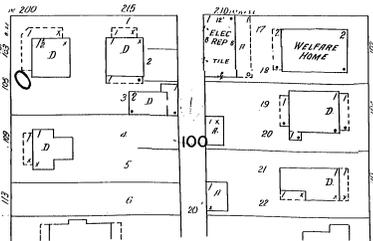
C
ST. S.E.

D
ST. S.E.



1ST
AV. S.E.

5



Scale of Feet
0 50 100 150

R. R. FREIGHT RD

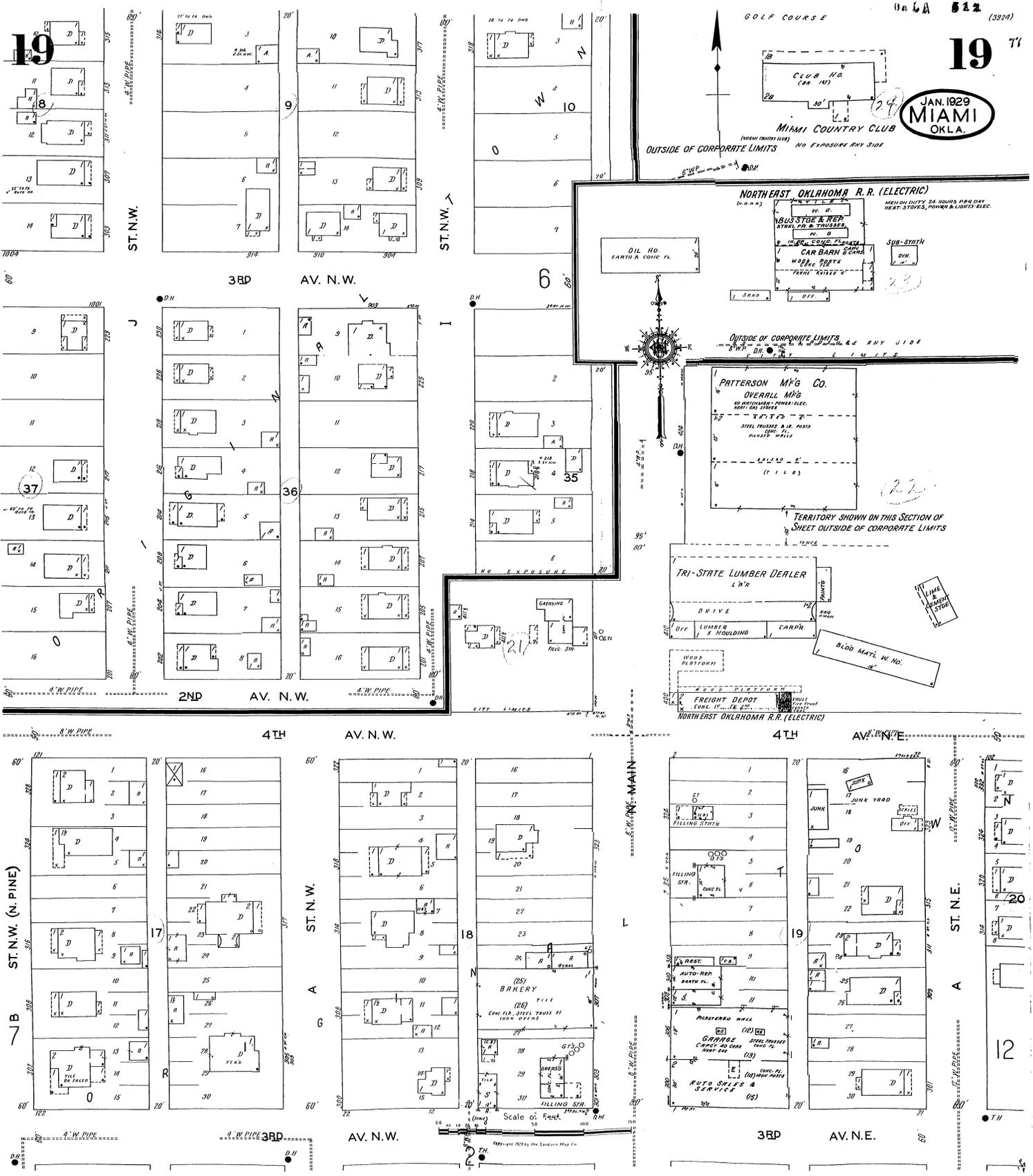
PASSENGER STA.
EXPRESS

200
IN 200'

20'
IN 20'

Copyright 1929 by the Sanborn Map Co

JAN. 1929
MIAMI
OKLA.





Quick Start

http://oaspub.epa.gov/enviro/ef_home3.html?p_zipcode=OTTAWA%2C+OK&p_type=county&x=8&y=3
Last updated on Tuesday, September 15th, 2009.

You are here: [EPA Home](#) [Envirofacts](#) Quick Start



Envirofacts

Ottawa County, OK

LEGEND

- Discharges to water
- Superfund sites
- Hazardous waste
- Toxic releases
- Air releases
- Others
- Multiple
- ∨ Streets
- ▭ Water Bodies
- ▭ Counties

To view the above map interactively, click [EnviroMapper](#).

For additional information on Ottawa County, OK, click [MyEnvironment](#).

Envirofacts information about Ottawa County, OK

- [AIR](#)

- Facilities that produce and release air pollutants: **17**
- **TOXICS**
 - Facilities that have reported toxic releases: **9**
- **WASTE**
 - Facilities that have reported hazardous waste activities: **42**
 - Number of Large Quantity Generators: **3**
 - Number of Small Quantity Generators: **4**
 - Number of Treatment, Storage, or Disposal Facilities: **1**
 - Potential hazardous waste sites that are part of Superfund that exist: **6**
 - Sites Currently on the Final NPL: **1**
 - Sites Not on the NPL: **3**
 - Sites Site is Part of NPL Site: **2**
 - Facilities that generate hazardous waste from large quantity generators: **0**
- **WATER**
 - Facilities issued permits to discharge to waters of the United States: **16**
 - Transient Non-Community Water Systems that do not consistently serve the same people (e.g. rest stops, campgrounds, gas stations): **3**
 - Community Water Systems that serve the same people year-round (e.g. in homes or businesses): **16**
 - Non-Transient Non-Community Water Systems that serve the same people, but not year-round (e.g. schools that have their own water system): **2**

Additional information on Ottawa County, OK available through MyEnvironment.

- Watershed(s) in your area:
 - Lower Neosho. Arkansas, Oklahoma.
 - Elk. Arkansas, Missouri, Oklahoma.
 - Lake O Cherokees. Arkansas, Kansas, Missouri, Oklahoma.
 - Spring. Kansas, Missouri, Oklahoma.

[Return to more topical information](#)



Query Results

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.
 Click on the underlined STACKS or Points to see detailed pollutant information for the facility.
 Go To Bottom Of The Page

Facility Information		PLANT NAME	STREET ADDRESS	CITY NAME	COUNTY	STATE	ZIP CODE	MAPPING INFO	CORPORATE LINK	STACKS POINTS	PUNS NUMBER	LATITUDE	LONGITUDE	AIR PLANT ID	CDS PLANT ID
View Facility Information	Map	B. F. GOODRICH	1000 BF GOODRICH BVD	MIAMI	OK	74354	MAP	No	0	0		0	0	00002	00002
View Facility Information	Map	B. F. GOODRICH	1000 BF GOODRICH BVC	MIAMI	OK	74354	MAP	No	0	23		0	0	00002	83002
View Facility Information	Map	CARTERS CUSTOM FIBER/CARTERS CUSTOM FIBER	100 N MAIN ST	MIAMI	OK	74354	MAP	No	0	0		0	0	00018	00018
View Facility Information	Map	COMMERCE PLASTICS/FIBERGLASS REINFORCE	900 N MAIN ST	NORTH MIAMI	OK	74358	MAP	No	0	0		0	0	00017	00017
View Facility Information	Map	ENGLE PITCHER IND IN/ENGLE PITCHER MIAMI	200 EAST B J TUNNELL BLVD	MIAMI	OK	74354	MAP	No	0	0		0	0	00015	00015
View Facility Information	Map	HUMBLE SAND AND GRA/PICHER SAND PLT	800 S COLLEGE	PICHER	OK	74360	MAP	No	0	0	007149412	0	0	00005	00005
View Facility Information	Map	KEMP STONE INC/MI R MORE QUARRY	NE OK US60	FAIRLAND	OK	74343	MAP	No	0	0		0	0	00016	00016
View Facility Information	Map	MARS PETCARE US INC/MIAMI PET FOOD PROCE	2020 6TH AVE S E	MIAMI	OK	74354	MAP	No	0	0		0	0	00014	00014
View Facility Information	Map	MIAMI PUB. SCHOOL	4TH & G STREETS, S.E.	MIAMI	OK	74354	MAP	No	0	4		0	0	00011	83007
View Facility Information	Map	NEO CONCRETE AND MA/FAIRLAND READY MIX	1 MI W AND .5 MI SE OF TOWN	FAIRLAND	OK	74343	MAP	No	0	0		0	0	00011	00011
View Facility Information	Map	NEO CONCRETE AND MA/MIAMI CONCRETE	2540 G ST NW	MIAMI	OK	74354	MAP	No	0	0		0	0	00010	00010
View Facility Information	Map	NEWELL COACH CORP/NEWELL COACH- MIAMI P	HWY 69 N	MIAMI	OK	74355	MAP	No	0	0		0	0	00019	00019
View Facility Information	Map	NORTHEASTERN OKLAHOMA A&M COLLEGE	200 I STREET NE	MIAMI	OK	74354	MAP	No	0	13		0	0	83003	83003
View Facility Information	Map	OKLAHOMA LEATHER PRO/OKLAHOMA LEATHER PRO	500 26TH STREET NW	MIAMI	OK	74354	MAP	No	0	0		0	0	00021	00021
View Facility Information	Map	SIMMONS POULTRY FAR/FAIRLAND FEED MILL	1 MI SW ON HWY 60	FAIRLAND	OK	74343	MAP	No	0	0		0	0	00004	00004
View Facility Information	Map	TEETERS ASPHALT AND/PICHER	1 MI SW OF PICHER	PICHER	OK	74363	MAP	No	0	0		0	0	00006	00006
View Facility Information	Map	TRACKER MARINE LLC/TRACKER MIAMI PLT	3807 TAHOE WAY	MIAMI	OK	74354	MAP	No	0	0		0	0	00020	00020

Total Number of Facilities Displayed: 17



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

Toxics Release Inventory (TRI)

http://oaspub.epa.gov/enviro/fil_master.fil_retrieve?county_name=OTTAWA&state_code=OK&all_programs=YES&program_search=1&report=1&page_no=1&output_sql_switch=TRUE&database_type=TRIS
Last updated on Tuesday, September 15th, 2009.

Query Results



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

County Name: OTTAWA

State Abbreviation: OK

Results are based on data extracted on AUG-11-2009

Note:

Click on the underlined TRI_FACILITY_ID value to view a detailed report on the facility.
Click on "View Facility Information" to view EPA Facility information for the facility.
Click on the underlined SUBMISSIONS value to view the list of DCN's for each of the TRI Reporting Year.

[Go To Bottom Of The Page](#)

List of EPA-Regulated Facilities in TRI

TRI FACILITY ID	FACILITY INFORMATION	FACILITY NAME	ADDRESS	COUNTY NAME	SUBMISSIONS
Z4354BYLNR300NE	View Facility Information	BAYLINER MARINE CORP (CUSTOMER SERVICE CENTER)	300 NEWMAN RD MIAMI, OK 74354	OTTAWA	23
Z4354BYLNR805E1	View Facility Information	BAYLINER MARINE CORPORATION	805 PINE ST MIAMI, OK 74354	OTTAWA	19
Z4363GLPCH1M1LE	View Facility Information	EAGLE PICHER TECHNOLOGY LLC BORON DEPARTMENT	798 HIGHWAY 69A QUAPAW, OK 74363	OTTAWA	47
Z4354GLPCH200B1	View Facility Information	EAGLE-PICHER TECHNOLOGIES LLC	200 BJ TUNNELL BLVD MIAMI, OK 74354	OTTAWA	3
Z4354GLPCH520NO	View Facility Information	EP SCIENTIFIC PRODUCTS LLC	520 N MAIN ST MIAMI, OK 74354	OTTAWA	9
Z4343SMMNNS10101	View Facility Information	SIMMONS FEED MILL	1010 INDUSTRIAL PARK RD. FAIRLAND, OK 74343	OTTAWA	33
Z4354STLCRS0530	View Facility Information	STEELCRAFT INCORPORATED	505 30TH AVENUE NW MIAMI, OK 74355	OTTAWA	10
Z4363GLPCHHIGHW	View Facility Information	UMICORE OPTICAL MATERIALS USA	2976 SOUTH 614 ROAD QUAPAW, OK 74363	OTTAWA	54
Z4354BYLNR380ZM	View Facility Information	US MARINE BAYLINER MARINE	3807 MAXUM DR. MIAMI, OK 74354	OTTAWA	33

[Go To Top Of The Page](#)

Total Number of Facilities Displayed: 9



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



Query Results

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

County Name: OTTAWA
State Abbreviation: OK

Results are based on data extracted on SEP-12-2009

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](#)

HANDLER NAME: ALLEN SIGN STUDIO LLC HANDLER ID: OKR000018929
 STREET: 307 E CENTRAL AVE FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: [MAP](#)
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
COLBY W ALLEN	E CENTRAL AVE	MIAMI	OK	74354	9185421180	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
33995	Sign Manufacturing

HANDLER NAME: BAYLINER MARINE CORP (CUSTOMER SERVICE CENTER) HANDLER ID: OKD980879068
 STREET: 300 NEWMAN RD FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: [MAP](#)
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
DONALD BARNHILL	PO BOX 1438	MIAMI	OK	74355	2064355571	Public

HANDLER NAME: CHILDRESS CHEMICAL COMPANY HANDLER ID: OKD078641412
 STREET: NW/4 NE/4 SEC 30 T29N R23 FACILITY INFORMATION: [View Facility Information](#)
 CITY: CARDIN CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74335 MAPPING INFO: [MAP](#)
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
KENNETH CHILDRESS	PO BOX 350	WEBB CITY	MO	64870	4176231331	Public

HANDLER NAME: CJF INC DBA COMET ONE HOUR CLEANERS HANDLER ID: OK0000004010
 STREET: 135 N MAIN ST FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: [MAP](#)
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
JAMES FLORIO	135 N MAIN ST	MIAMI	OK	74354	9185421671	Public

HANDLER NAME: CLEAN HARBORS OK AG COLLECTION HANDLER ID: OKR000021790
 STREET: OTTAWA CO FAIRGROUNDS FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
NATE EMBRY	N NEW YORK	WICHITA	KS	67219	3162697496	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
562219	Other Nonhazardous Waste Treatment and Disposal

HANDLER NAME: COLLINS CONSTRUCTION CO OF MIAMI INC HANDLER ID: OKD071231781
 STREET: RT #1 BOX 259 FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
F-LEROY COLLINS	RT 1 BOX 259	MIAMI	OK	74354	9185426657	Public

HANDLER NAME: COMMERCE PLASTICS HANDLER ID: OKD987095403
 STREET: 900 N. MAIN ST FACILITY INFORMATION: [View Facility Information](#)
 CITY: NORTH MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74358 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
JOHNNY JONES	PO BOX 21	N MIAMI	OK	743580021	9186754506	Public

HANDLER NAME: DOANE PRODUCTS COMPANY HANDLER ID: OKR000000653
 STREET: 2060 6TH AVE SE FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
THOMAS CROSSNO	2060 6TH AVE SE	MIAMI	OK	74354	4176246166	Public

HANDLER NAME: EAGLE PICHER TECHNOLOGY LLC BORON DEPARTMENT HANDLER ID: OKD980623037
 STREET: 798 HIGHWAY 69A FACILITY INFORMATION: [View Facility Information](#)

CITY: QUAPAW
 STATE: OK
 ZIP CODE: 74363
 EPA REGION: 6

CORPORATE LINK: No
 COUNTY: OTTAWA
 MAPPING INFO: MAP
 RCRA Corrective Action: [REDACTED]

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
MICHAEL F BUFANO	PO BOX 798	QUAPAW	OK	74363	9186732201 2256	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
334119	Other Computer Peripheral Equipment Manufacturing
339999	All Other Miscellaneous Manufacturing
325188	All Other Basic Inorganic Chemical Manufacturing

HANDLER NAME: EAGLE-PICHER ENVIRONMENTAL SVC HANDLER ID: OKD982760191
 STREET: 36 BJ TUNNELL BLVD FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
MARK THOMPSON	36 BJ TUNNELL BLVD E	MIAMI	OK	74354	9185401507	Public

HANDLER NAME: EAGLE-PICHER TECHNOLOGIES LLC HANDLER ID: OKD007150709
 STREET: 200 BJ TUNNELL BLVD FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
JOSEPH R METCALF	B.J. TUNNELL BLVD.	MIAMI	OK	74354	9187762273 157	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
327215	Glass Product Manufacturing Made of Purchased Glass
325199	All Other Basic Organic Chemical Manufacturing
325188	All Other Basic Inorganic Chemical Manufacturing
334413	Semiconductor and Related Device Manufacturing

HANDLER NAME: EP SCIENTIFIC PRODUCTS LLC HANDLER ID: OKR00024422
 STREET: 520 N MAIN ST FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
MATTHEW T HAILEY	EAST B J TUNNELL BLVD	MIAMI	OK	74354	9185421801 157	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
327215	Glass Product Manufacturing Made of Purchased Glass
42469	Other Chemical and Allied Products Merchant Wholesalers

HANDLER NAME: EP SCIENTIFIC PRODUCTS LLC HANDLER ID: OKR00020438
 STREET: 36 E BJTUNNELL FACILITY INFORMATION: [View Facility Information](#)

CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
MATT HAILEY	E BJUNNELL	MIAMI	OK	74354	9185421801 157	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
42469	Other Chemical and Allied Products Merchant Wholesalers
54138	Testing Laboratories
42349	Other Professional Equipment and Supplies Merchant Wholesalers

HANDLER NAME: GALLIUM COMPOUNDS HANDLER ID: OKR000023838
 STREET: 3225 S 625 RD FACILITY INFORMATION: [View Facility Information](#)
 CITY: QUAPAW CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74363 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
KEVIN READING					9186732511	Public

HANDLER NAME: GLASS TEX COMPANY HANDLER ID: OKD981612773
 STREET: HWY 10 S 3M1 S OF INT 10 & 60 FACILITY INFORMATION: [View Facility Information](#)
 CITY: WYANDOTTE CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74370 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
PAUL FEAGAN	P.O. BOX 337	WYANDOTTE	OK	74370	9186782712	Public

HANDLER NAME: KEETON PEST & TERMITE CONTROL HANDLER ID: OKD080599384
 STREET: 432 G SE FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
DILL-H KEETON	432 G S.E.	MIAMI	OK	74354	9185428960	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
56171	Exterminating and Pest Control Services

HANDLER NAME: LOVES BODY WORKS HANDLER ID: OKD085949204
 STREET: W RAILWAY AVE 1 BLK S HWY 60 FACILITY INFORMATION: [View Facility Information](#)
 CITY: FAIRLAND CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74343 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
JIM LOVE	P.O. BOX 56	FAIRLAND	OK	74343	9186763978	Public

HANDLER NAME: MCD CUSTOM CHROME PLATING HANDLER ID: OKD980699078
 STREET: 409 E STREET NE FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
FRANK MCDUGLE	409 E STREET NE	MIAMI	OK	74354	9185401145	Public

HANDLER NAME: METAL MASTERS HANDLER ID: OKR000001537
 STREET: 2108 E STEVE OWENS FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
CHARLES GARRETT	2108 E STEVE OWENS	MIAMI	OK	74354	9185401200	Public

HANDLER NAME: MIAMI CITY OF FLEET MNTNCE HANDLER ID: OKD987069275
 STREET: 428 N MAIN FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
MARK JONES	428 N MAIN	MIAMI	OK	74354	9185426685	Public

HANDLER NAME: MIAMI CITY OF UTILITY DEPARTMENT HANDLER ID: OKD980508030
 STREET: 9TH AVE AND H ST SE FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
BOB BALLENGER	PO BOX 309	MIAMI	OK	74354	9185427665	Public

HANDLER NAME: MIAMI CITY OF UTILITY DEPARTMENT HANDLER ID: OKT410010045
 STREET: 14TH & STREET FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP

EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
BOB BALLENGER	PO BOX 309	MIAMI	OK	74354	9185427665	Public

HANDLER NAME: MIAMI FORD LINCOLN MERCURY INC HANDLER ID: OKD981594310
 STREET: 521 N MAIN FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
MARK MERSKI	521 N MAIN	MIAMI	OK	74354	9185423341	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
44112	Used Car Dealers
44111	New Car Dealers

HANDLER NAME: NEWELL COACH CORP HANDLER ID: OKD064559909
 STREET: HWY 69 N FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74355 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
SCOTT LAWSON	PO BOX 511	MIAMI	OK	74355	9185423344	Public

HANDLER NAME: NR INDUSTRIES HANDLER ID: OKR000005017
 STREET: 533 HENLEY FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
MICHAEL BOYCE	HENLEY	MIAMI	OK	74354	9185421902	Public

HANDLER NAME: OKLA DOT BRIDGE NO BR NBIP 08 HANDLER ID: OKR000000109
 STREET: ST HWY 10C OVER LOST CREEK FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74355 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
TIMOTHY BRAY	PO BOX 638	CLAREMORE	OK	74018	9183410552	Public

HANDLER NAME: OKLA DOT BRIDGE NO BR NBIP 10 **HANDLER ID:** OKR00000083
STREET: ST HWY 10 OVER SYCAMORE CREEK **FACILITY INFORMATION:** [View Facility Information](#)
CITY: WYANDOTTE **CORPORATE LINK:** No
STATE: OK **COUNTY:** OTTAWA
ZIP CODE: 74370 **MAPPING INFO:** MAP
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
TIMOTHY BRAY	PO BOX 638	CLAREMORE	OK	74018	9183410552	Public

HANDLER NAME: OKLA VO-TECH NE AREA **HANDLER ID:** OKD982290421
STREET: HWY 69 4M N OF AFTON **FACILITY INFORMATION:** [View Facility Information](#)
CITY: AFTON **CORPORATE LINK:** No
STATE: OK **COUNTY:** OTTAWA
ZIP CODE: 74331 **MAPPING INFO:** MAP
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
RALPH ROSS	PO BOX 219	AFTON	OK	74331	9182578324	Public

HANDLER NAME: OKLAHOMA LEATHER PRODUCTS INC **HANDLER ID:** OKD071231419
STREET: 500 26TH NW **FACILITY INFORMATION:** [View Facility Information](#)
CITY: MIAMI **CORPORATE LINK:** No
STATE: OK **COUNTY:** OTTAWA
ZIP CODE: 74354 **MAPPING INFO:** MAP
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
MIKE PLATT	500 26TH NW	MIAMI	OK	74354	9185401534	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
3379	Other Furniture Related Product Manufacturing

HANDLER NAME: PHILLIPS SS#27059 **HANDLER ID:** OKD987095080
STREET: HWY 10 ON I 44 .5M E **FACILITY INFORMATION:** [View Facility Information](#)
CITY: MIAMI **CORPORATE LINK:** No
STATE: OK **COUNTY:** OTTAWA
ZIP CODE: 74354 **MAPPING INFO:** MAP
EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
BETH EISENMANN	PEAKVIEW	CENTENNIAL	CO	80111	3036494041	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
44711	Gasoline Stations with Convenience Stores

HANDLER NAME: PRECISION PAINT & BODY **HANDLER ID:** OKD981913924
STREET: 102 D ST SE **FACILITY INFORMATION:** [View Facility Information](#)
CITY: MIAMI **CORPORATE LINK:** No
STATE: OK **COUNTY:** OTTAWA
ZIP CODE: 74355 **MAPPING INFO:** MAP

EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
KEVIN CANTWELL	P O BOX 1224	MIAMI	OK	74355	9185428004	Public

HANDLER NAME: QUIKTRIP STORE # 30 HANDLER ID: OKD987080652
 STREET: 10 GOODRICH BLVD FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
MONICA OLASON	PO BOX 3475	TULSA	OK	74101	9186157990	Public

HANDLER NAME: QUIKTRIP STORE # 55 HANDLER ID: OKD987080645
 STREET: 812 E CENTRAL FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
DAVE CISIEWSKI	1862 CRAIGSHIRE DRIVE	ST LOUIS	MO	63146	3148781221	Public

HANDLER NAME: R & R BODY SHOP HANDLER ID: OKD115104283
 STREET: 309 N MAIN FACILITY INFORMATION: [View Facility Information](#)
 CITY: N MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74358 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
RANDY RHODES	PO BOX 603	N MIAMI	OK	74358	9185428055	Public

HANDLER NAME: SHERWIN WILLIAMS CO HANDLER ID: OKD078645330
 STREET: 1901 N MAIN ST FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
TERRY MORS	1901 NO MAIN ST	MIAMI	OK	74354	2165663096	Public

HANDLER NAME: STEELCRAFT INCORPORATED HANDLER ID: OKD061627196

STREET: 505 30TH AVENUE NW FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74355 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
ALAN WIPPMAN	PO BOX 1284	MIAMI	OK	74354	9185424466	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
332611	Spring (Heavy Gauge) Manufacturing

HANDLER NAME: UMICORE OPTICAL MATERIALS USA HANDLER ID: OKD007158454
 STREET: 2976 SOUTH 614 ROAD FACILITY INFORMATION: [View Facility Information](#)
 CITY: QUAPAW CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74363 MAPPING INFO: MAP
 EPA REGION: 6 RCRA Corrective Action: **UIC**

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
JAMES J BREINER					4176238000	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
334119	Other Computer Peripheral Equipment Manufacturing
325188	All Other Basic Inorganic Chemical Manufacturing
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)
331419	Primary Smelting and Refining of Nonferrous Metal (except Copper and Aluminum)

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)

HANDLER NAME: UNITED IRON & METAL CO INC HANDLER ID: OKD033069360
 STREET: 215 S ELLA FACILITY INFORMATION: [View Facility Information](#)
 CITY: PICHER CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74360 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
UNKNOWN UNKNOWN	PO BOX 85	PICHER	OK	74360		Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
42193	Recyclable Material Wholesalers

HANDLER NAME: US MARINE BAYLINER MARINE HANDLER ID: OKD987084514
 STREET: 3807 MAXUM DR. FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
LARRY D CLUTTER	E KEARNEY ST	SPRINGFIELD	MO	65803	4178735968	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
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NAICS CODE	NAICS DESCRIPTION
336612	Boat Building
336611	Ship Building and Repairing

HANDLER NAME: US METAL CONTAINER CO INC HANDLER ID: OKD007151459
 STREET: 204-22ND NW FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
CHARLIE FORBIS	204-22ND NW	MIAMI	OK	74354	9185401515	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
332431	Metal Can Manufacturing
337127	Institutional Furniture Manufacturing

HANDLER NAME: USARC FRANKLIN L WEEKS HANDLER ID: OK5210022005
 STREET: 104 5TH AVE NE FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
JAMES WHEELER	CAMP ROBINSON RD	NORTH LITTLE ROCK	AR	721182205	8005011493 7992	Public

HANDLER NAME: WAL-MART SUPERCENTER # 28 HANDLER ID: OKD981909211
 STREET: 2415 NW MAIN ST FACILITY INFORMATION: [View Facility Information](#)
 CITY: MIAMI CORPORATE LINK: No
 STATE: OK COUNTY: OTTAWA
 ZIP CODE: 74354 MAPPING INFO: MAP
 EPA REGION: 6

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
PRUITT PRUITT	SE 8TH ST	BENTONVILLE	AR	727160605	4792042231	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
45291	Warehouse Clubs and Supercenters

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Total Number of Facilities Displayed: 42



Superfund (CERCLIS)

You are Here: EPA Home | Envirofacts | CERCLIS | Query Results

http://oaspub.epa.gov/enviro/fii_master/fii_retrieve?county_name=OTTAWA&state_code=OK&all_programs=YES&program_search=1&report=1&page_no=1&report_sql_switch=TRUE&database_type=CERCLIS
 Last updated on Tuesday, September 15th, 2009.

Query Results



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

County Name: OTTAWA
 State Abbreviation: OK

Results are based on data extracted on AUG-19-2009

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.
 Click on the underlined CERCLIS_EPA_ID value to view a detailed report for the facility.
 Click on the underlined RECORD OF DECISION value for a RODS Site Report.
 Click on the underlined "View Facility Information" link to view EPA Facility Information for the facility.
 Click on the underlined "Code/Descriptions" link to view OWNERSHIP codes and descriptions.

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Facility Information

CERCLIS EPA ID	Facility Information	SITE NAME	ADDRESS	COUNTY	SITE SMSA	FEDERAL FACILITY	NPL STATUS	CORPORATE LINK	MAPPING INFO	RECORD OF DECISION (ROD) INFO	EPA REGIONAL LINK	LATITUDE	LONGITUDE	OWNERSHIP
OKN000605475	View Facility Information	CENTRAL MILL	1.5 MILES SOUTH OF PICHER BOULEVARD, OK 74360	OTTAWA		N	Site is Part of NPL Site	No	MAP	No	No			
OKD078641412	View Facility Information	CHILDRESS CHEMICAL COMPANY	NW/4 NE/4 SEC 30 T29N R23 CARDIN, OK 74335	OTTAWA		N	Site is Part of NPL Site	No	MAP	No	No			
OKN000606568	View Facility Information	MIAMI OKLAHOMA RESIDENTIAL BASEMENT	2602 P STREET MIAMI, OK	OTTAWA		N	Not on the NPL	No	MAP	No	No			
OKN000606596	View Facility Information	OTTAWA ROBISON-ROGER BUILDING	10 W. STEVE OWENS BOULEVARD MIAMI, OK 74354	OTTAWA		N	Not on the NPL	No	MAP	No	No			
OKD987084936	View Facility Information	QUAPAW WASTE SITE	SW1/4, SEC. 6, TOWNSHIP 28 NO. RANGE 24E LINCOLNVILLE, OK 74363	OTTAWA		N	Not on the NPL	No	MAP	No	No			
OKD980629844	View Facility Information	TAR CREEK (OTTAWA COUNTY)	MIAMI/PICHER/SURROUNDINGS COMMERCE, OK 74339	OTTAWA		N	Currently on the Final NPL	No	MAP	No	No	36.9436	-94.84191	Code/Descriptions

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Total Number of Facilities Displayed: 6



Query Results



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

PCS
 County Name: OTTAWA
 State Abbreviation: OK

Results are based on data extracted on AUG-11-2009

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.
 Click on the underlined NPDES value to view detailed reports on the facility.
[Go To Bottom Of The Page](#)

Facility Information

NPDES ID	Facility Information	FACILITY NAME	ADDRESS	COUNTY NAME	PERMIT ISSUED DATE	PERMIT EXPIRED DATE	SIC CODE	SIC DESC	MAPPING INFO	USGS HUC
OK0020656	View Facility Information	AFTON WASTEWATER PLANT	PO DRAWER 250 AFTON, OK 74331	OTTAWA	JUN-09-2004	JUN-30-2009	4952	SEWERAGE SYSTEMS	MAP	11070206
OKG580023	View Facility Information	BLUEJACKET PWA	315 SOUTH ROSS BLUEJACKET, OK 74333	OTTAWA	AUG-10-2006	JUN-30-2011	4952	SEWERAGE SYSTEMS	MAP	
OK0038962	View Facility Information	CARDIN SPECIAL UTILITIES	P.O. BOX 246 CARDIN, OK 74335	OTTAWA	DEC-09-2002	DEC-31-2007	4952	SEWERAGE SYSTEMS	MAP	11070206
OK0031798	View Facility Information	CITY OF MIAMI-SOUTHEAST WTF	PO BOX 1288 MIAMI, OK 743551288	OTTAWA	OCT-08-2004	OCT-31-2009	4952	SEWERAGE SYSTEMS	MAP	11070206
OK0020320	View Facility Information	COMMERCE, CITY OF	300 COMMERCE AVENUE COMMERCE, OK 74339	OTTAWA	DEC-03-2004	DEC-31-2009	4952	SEWERAGE SYSTEMS	MAP	11070206
OK0040142	View Facility Information	EAGLE PICHER TECHNOLOGY LLC BORON DEPARTMENT	798 HIGHWAY 69A QUAPAW, OK 74363	OTTAWA	MAR-26-2003	MAR-31-2008	1474	POTASH, SODA, AND BORATE MINERALS	MAP	
OK0021504	View Facility Information	FAIRLAND PUBLIC WORKS AUTH	PO BOX 429 FAIRLAND, OK 74343	OTTAWA	OCT-10-2007	OCT-31-2012	4952	SEWERAGE SYSTEMS	MAP	11070206
			451107 E 320							

OK0037770	View Facility Information	HARBORS AREA ASSOCIATION	RD AFTON, OK 74331	OTTAWA	SEP-29-2004	SEP-30-2009	4952	SEWERAGE SYSTEMS	MAP	11070206
OKG110028	View Facility Information	MID-CONTINENT CONCRETE CO.	PO BOX 3878 AFTON, OK 74331	OTTAWA	JUL-28-2004	JUN-22-2008	3273	READY-MIXED CONCRETE	MAP	
OKG950040	View Facility Information	MIDWEST MINERALS, INC.-QUARRY NO. 32	61250 EAST 57 ROAD QUAPAW, OK 74363	OTTAWA	FEB-29-2008	FEB-03-2013	1422	CRUSHED AND BROKEN LIMESTONE	MAP	
OK0028291	View Facility Information	OTTAWA CO RURAL W&S DIST # 1	P.O. BOX 324 WYANDOTTE, OK 74370	OTTAWA	DEC-06-2004	DEC-31-2009	4952	SEWERAGE SYSTEMS	MAP	11070206
OK0039039	View Facility Information	PELLICAN PT. HOMEOWNER'S ASSOC.	448666 PELLICAN POINT AFTON, OK 74331	OTTAWA	SEP-29-2004	SEP-30-2009	4952	SEWERAGE SYSTEMS	MAP	11070206
OK0032263	View Facility Information	PICHER, CITY OF	213 EAST 3RD ST. PICHER, OK 74360	OTTAWA	MAR-26-2003	MAR-31-2008	4952	SEWERAGE SYSTEMS	MAP	11070206
OK0028258	View Facility Information	QUAPAW PUBLIC WORKS AUTHORITY	P.O. BOX 706 QUAPAW, OK 74363	OTTAWA	JUN-02-2006	JUN-30-2011	4952	SEWERAGE SYSTEMS	MAP	11070206
OK0039098	View Facility Information	SENECA-CAYUGA TRIBE	P.O. BOX 1283 MIAMI, OK 74355	OTTAWA	NOV-05-2007	NOV-30-2012	4952	SEWERAGE SYSTEMS	MAP	11070208
OK0001261	View Facility Information	UMICORE OPTICAL MATERIALS USA	2976 SOUTH 614 ROAD QUAPAW, OK 74363	OTTAWA	SEP-21-2004	SEP-30-2009	3339	PRIMARY SMELTING AND REFINING OF NONFERROUS METALS, EXCEPT COPPER AND ALUMINUM	MAP	11070207

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Total Number of Facilities Displayed: 16



Safe Drinking Water Information System (SDWIS)



Query Results

Query Selections:
 State selected: OKLAHOMA
 County Selected: OTTAWA
 Population Selected: Very Small (0-500), Small (501-3,300), Medium (3,301-10,000), Large (10,001-100,000), Very Large (100,000+)
 Water System Status: active
 Query executed on: SEP-15-2009
 Results are based on data extracted on : JUL-15-2009

Information about water systems in OKLAHOMA is maintained by Department of Environmental Quality.

To obtain additional information about drinking water please call EPA's Safe Drinking Water hotline at 1-800-426-4791.

List of Water Systems in SDWIS

Community Water Systems: Water Systems that serve the same people year-round (e.g. in homes or businesses).

Water System Name	County(s)	Served Population	Served	Primary Water Source	Type	System Status	Water System ID
ALTON PWA	OTTAWA	1118		Surface water		Active	OK1021696
CARDIN WATER SERVICE	OTTAWA	230		Groundwater		Active	OK2005807
COMBEECE	OTTAWA	2645		Groundwater		Active	OK2005810
ARRIAND	OTTAWA	1925		Groundwater		Active	OK2005809
MIAMI	OTTAWA	13704		Groundwater		Active	OK2005813
NIGHT MIAMI	OTTAWA	433		Purch. groundwater		Active	OK3005801
OTTAWA CO BWD # 1	OTTAWA	458		Groundwater		Active	OK2005805
OTTAWA CO BWD # 2	OTTAWA	700		Groundwater		Active	OK2005804
OTTAWA CO BWD # 3	OTTAWA	140		Groundwater		Active	OK2005806
OTTAWA CO BWD # 4	OTTAWA	652		Groundwater		Active	OK2005801
OTTAWA CO BWD # 5	OTTAWA	750		Groundwater		Active	OK2005840
OTTAWA CO BWD # 6	OTTAWA	560		Groundwater		Active	OK2005859
OTTAWA CO BWD # 7	OTTAWA	500		Groundwater		Active	OK2005860
PICHER PUBLIC WORKS AUTHORITY	OTTAWA	1650		Groundwater		Active	OK2005812
QUAPAW	OTTAWA	1000		Groundwater		Active	OK2005811
WINDHILL HILL ESTATES	OTTAWA	30		Groundwater		Active	OK2005828

Non-Transient Non-Community Water Systems: Water Systems that serve the same people, but not year-round (e.g. schools that have their own water system).

Water System Name	County(s)	Served Population	Served	Primary Water Source	Type	System Status	Water System ID
NORTHEAST TECHNOLOGY CENTER	OTTAWA	500		Purch. groundwater		Active	OK2005815
TURKEY FORD CONS SCHOOL	OTTAWA	85		Groundwater		Active	OK2005843

Transient Non-Community Water Systems: Water Systems that do not consistently serve the same people (e.g. rest stops, campgrounds, gas stations).

Water System Name	County(s)	Served Population	Served	Primary Water Source	Type	System Status	Water System ID
HARBORS VIEW MARINA	OTTAWA	100		Purch. surface water		Active	OK3005805
SERENITY INN	OTTAWA	25		Purch. groundwater		Active	OK3005802
KOUR PLACE	OTTAWA	40		Groundwater		Active	OK2005876



Safe Drinking Water Information System (SDWIS)



Query Results

Query Selections:
 State selected: OKLAHOMA
 County selected: OTTAWA
 Population Selected: Very Small (0-500), Small (501-3,300), Medium (3,301-10,000), Large (10,001-100,000), Very Large (100,000+)
 Water System Status: Active
 Query Executed on: SEP-15-2009
 Results are based on data extracted on : JUL-15-2009

List of Water Systems in SDWIS

Information about water systems in OKLAHOMA is maintained by Department of Environmental Quality.
 To obtain additional information about drinking water please call EPA's Safe Drinking Water hotline at 1-800-426-4791.

Community Water Systems: Water Systems that serve the same people year-round (e.g. in homes or businesses).

Water System Name	County(s)	Served Population	Primary Water Source	Type	System Status	Water System ID
ALTON FWA	OTTAWA	1118	Surface water		Active	OK1021696
CARDIN WATER SERVICE	OTTAWA	250	Groundwater		Active	OK2005807
COMBEECE	OTTAWA	2645	Groundwater		Active	OK2005810
FAIRLAND	OTTAWA	1925	Groundwater		Active	OK2005809
MIAMI	OTTAWA	13704	Groundwater		Active	OK2005813
NORTH MIAMI	OTTAWA	433	Purch. groundwater		Active	OK3005801
OTTAWA CO BWD #1	OTTAWA	458	Groundwater		Active	OK2005805
OTTAWA CO BWD #2	OTTAWA	700	Groundwater		Active	OK2005804
OTTAWA CO BWD #3	OTTAWA	140	Groundwater		Active	OK2005806
OTTAWA CO BWD #4	OTTAWA	652	Groundwater		Active	OK2005801
OTTAWA CO BWD #5	OTTAWA	750	Groundwater		Active	OK2005840
OTTAWA CO BWD #6	OTTAWA	500	Groundwater		Active	OK2005859
OTTAWA CO BWD #7	OTTAWA	500	Groundwater		Active	OK2005860
PICHER PUBLIC WORKS AUTHORITY	OTTAWA	1650	Groundwater		Active	OK2005812
QUAPAW	OTTAWA	1000	Groundwater		Active	OK2005811
WINNEMILL HILL ESTATES	OTTAWA	30	Groundwater		Active	OK2005868

Non-Transient Non-Community Water Systems: Water Systems that serve the same people, but not year-round (e.g. schools that have their own water system).

Water System Name	County(s)	Served Population	Primary Water Source	Type	System Status	Water System ID
NORTHEAST TECHNOLOGY CENTER	OTTAWA	500	Purch. groundwater		Active	OK2005815
DURKEE FORD CONS SCHOOL	OTTAWA	85	Groundwater		Active	OK2005843

Transient Non-Community Water Systems: Water Systems that do not consistently serve the same people (e.g. rest stops, campgrounds, gas stations).

Water System Name	County(s)	Served Population	Primary Water Source	Type	System Status	Water System ID
HARBORS VIEW MARINA	OTTAWA	100	Purch. surface water		Active	OK3005805
SERENITY INN	OTTAWA	25	Purch. groundwater		Active	OK3005802
YOUR PLACE	OTTAWA	40	Groundwater		Active	OK2005876



Safe Drinking Water Information System (SDWIS)

Query Results

Query Selections:
 State Selected: OKLAHOMA
 County Selected: OTTAWA
 Population Selected: Very Small (0-500), Small (501-3,300), Medium (3,301-10,000), Large (10,001-100,000), Very Large (100,000+)
 Water System Status: Active
 Query Selected on: SEP-15-2009
 Results are based on data extracted on: JUL-15-2009

List of Water Systems in SDWIS

Information about water systems in OKLAHOMA is maintained by Department of Environmental Quality.
 To obtain additional information about drinking water please call EPA's Safe Drinking Water hotline at 1-800-426-4791.

Community Water Systems: Water Systems that serve the same people year-round (e.g. in homes or businesses).

Water System Name	County	Service	Population	Service	Primary Water Source	Type	System Status	Water System ID
ALTON LYVA	OTTAWA		1118		Surface water	Active	OK1021696	
CARDIN WATER SERVICE	OTTAWA		250		Groundwater	Active	OK2005807	
COMMERCE	OTTAWA		2645		Groundwater	Active	OK2005810	
FARLAND	OTTAWA		1025		Groundwater	Active	OK2005809	
MIAMI	OTTAWA		13704		Groundwater	Active	OK2005813	
NORTH MIAMI	OTTAWA		433		Purch. groundwater	Active	OK3005801	
OTTAWA CO RWD # 1	OTTAWA		458		Groundwater	Active	OK2005805	
OTTAWA CO RWD # 2	OTTAWA		700		Groundwater	Active	OK2005804	
OTTAWA CO RWD # 3	OTTAWA		740		Groundwater	Active	OK2005806	
OTTAWA CO RWD # 4	OTTAWA		652		Groundwater	Active	OK2005801	
OTTAWA CO RWD # 5	OTTAWA		750		Groundwater	Active	OK2005840	
OTTAWA CO RWD # 6	OTTAWA		560		Groundwater	Active	OK2005859	
OTTAWA CO RWD # 7	OTTAWA		500		Groundwater	Active	OK2005860	
PUEBLO PUBLIC WORKS AUTHORITY	OTTAWA		1650		Groundwater	Active	OK2005812	
QUAPAW	OTTAWA		1000		Groundwater	Active	OK2005811	
WINDMILL HILL ESTATES	OTTAWA		30		Groundwater	Active	OK2005868	

Non-Transient Non-Community Water Systems: Water Systems that serve the same people, but not year-round (e.g. schools that have their own water system).

Water System Name	County	Service	Population	Service	Primary Water Source	Type	System Status	Water System ID
NORTHEAST TECHNOLOGY CENTER	OTTAWA		500		Purch. groundwater	Active	OK2005815	
TUCKER FORD CONS SCHOOL	OTTAWA		85		Groundwater	Active	OK2005843	

Transient Non-Community Water Systems: Water Systems that do not consistently serve the same people (e.g. rest stops, campgrounds, gas stations).

Water System Name	County	Service	Population	Service	Primary Water Source	Type	System Status	Water System ID
KARBO'S VIEW MARINA	OTTAWA		100		Purch. surface water	Active	OK3005805	
SEEDENLY INN	OTTAWA		25		Purch. groundwater	Active	OK3005802	
TOUR PLACE	OTTAWA		40		Groundwater	Active	OK2005876	

Voluntary Cleanup Sites

Received	Inact_Closed	SITENAME	Consultant	CITY	County	BF	IC	MACO	CO
10-Mar-98		BF Goodrich/Ottawa Mgmt Co	GMR	Miami	Ottawa				3/10/1998
30-Jan-07		Eagle Picher Holdings, Inc.	Environmental	Miami	Ottawa				Settlement
05-May-97	22-May-97	John's Diesel	Darnell Serv.	Miami	Ottawa				
09-Oct-97		Michelin/BFG	URS Corporation	Miami	Ottawa				10/9/97 \$

Voluntary Cleanup
Sites

Proj/Mgr	Issues	Status	Location	Declar	Declon	Media	pnizContactFirst	pnizContactLast	pnizContactEm	pnizContactComp
Reid	buildings	on at the	Blvd.	36.88935556	-94.88928611	building	Alan	Kaspar	N/A	N/A
Cates	(TCA & 1.1-DCE)	Remediation.	Blvd.	36.885043	-94.8752	Water	Bill	West	tech.net	EP Custodial
Curry	deal	Phase II review	821 D St.							
Davis	Exterior	Results of	Blvd.	36.88918056	-94.88685	soil/gw		Counsel		American, Inc.



Superfund

<http://cfpub.epa.gov/supercpad/cursites/csitinfo.cfm?id=0606996>
Last updated on Tuesday, September 15th, 2009.

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Search Superfund Site Information

OTTAWA ROBISON-ROGER BUILDING

Site Information

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

Site Name: OTTAWA ROBISON-ROGER BUILDING

Street: 10 W. STEVE OWENS BOULEVARD

City / State / ZIP: MIAMI, OK 74354

NPL Status: Not on the NPL

Non-NPL Status: PA Start Needed

EPA ID: OKN000606996

EPA Region: 06

County: OTTAWA

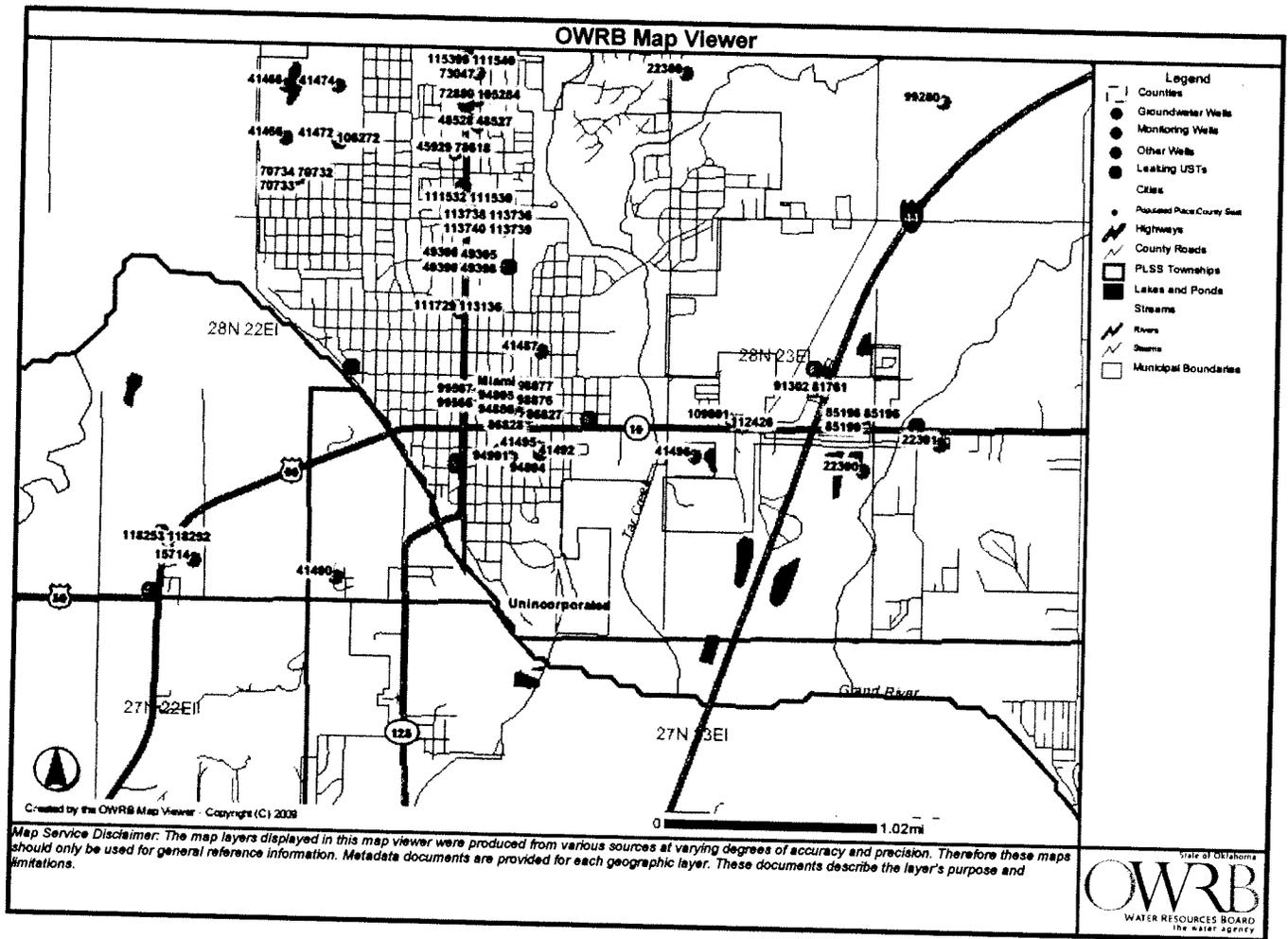
Federal Facility Flag: Not a Federal Facility

[Return to Search Results](#)

[Return to Search Superfund Site Informati](#)

[OSWER Home](#) | [Superfund Home](#)

URL: <http://cfpub.epa.gov/supercpad/cursites/csitinfo.cfm>
This page design was last updated on Tuesday, June 23, 2009
Content is dynamically generated by ColdFusion



OWRB Water Well Search 4-18-04

WELL ID	WELL NAME	COUNTY	OWNER NAME	QTRS	SEC TWP RGE	LATITUDE	LONGITUDE	DATE CONST	DPC NO	USE	WELL TYPE	TD
94994	MW-1 thru 4	Ottawa	Bogle Oil	SENNWNW	31-28N-23E	36.8689833	-94.8736667	6/27/2005	DPC-0402	Site Assessment	Monitoring Well	10.5
94894	MW-1 thru 4	Ottawa	Shinn Oil	SENNWNW	31-28N-23E	36.8689833	-94.8736667	6/27/2005	DPC-0402	Site Assessment	Monitoring Well	10.5
113077	n/a	Ottawa	Bogle Oil 1 BNSF	SENNWNW	31-28N-23E	36.8689833	-94.8736667	12/15/2005	DPC-0619	Water Quality	Monitoring Well	n/a
91302	MW-1-4	Ottawa	Conoco Phillips	NESSWE	29-28N-23E	36.873824	-94.847331	n/a	DPC-0650	Site Assessment	Monitoring Well	n/a
112426	MW-1	Ottawa	Dakota Leasing	SWSESW	29-28N-23E	36.8713333	-94.8535	9/11/2007	DPC-0563	Site Assessment	Monitoring Well	16.5
86825	n/a	Ottawa	Burlington Norther	SWSESW	30-28N-23E	36.87184	-94.872206	3/13/2004	DPC-0205	Site Assessment	Monitoring Well	n/a
86827	n/a	Ottawa	Burlington Norther	SWSESW	30-28N-23E	36.87184	-94.872206	3/13/2004	DPC-0205	Water Quality	Monitoring Well	n/a
86828	n/a	Ottawa	Burlington Norther	SWSESW	30-28N-23E	36.87184	-94.872206	3/13/2004	DPC-0205	Water Quality	Monitoring Well	n/a
94895	MW-1-5 & MV	Ottawa	Shinn Oil	NWSESW	30-28N-23E	36.8729333	-94.8730667	6/27/2005	DPC-0402	Site Assessment	Monitoring Well	17
125420	MW-18	Ottawa	BNSF Shinn Oil Lea	NWSESW	30-28N-23E	36.87275	-94.87295	3/27/2008	DPC-0619	Site Assessment	Monitoring Well	17.5
125378	MW-2	Ottawa	BNSF Shinn Oil Lea	NWSESW	30-28N-23E	36.87293	-94.87307	6/27/2005	DPC-0619	Site Assessment	Monitoring Well	16.5
125380	MW-5	Ottawa	BNSF Shinn Oil Lea	NWSESW	30-28N-23E	36.87367	-94.87221	1/14/2005	DPC-0619	Site Assessment	Monitoring Well	15.3
125383	MW-6	Ottawa	BNSF Shinn Oil Lea	NWSESW	30-28N-23E	36.873647	-94.872206	12/14/2005	DPC-0619	Site Assessment	Monitoring Well	15.2
125384	MW-7	Ottawa	BNSF Shinn Oil Lea	NWSESW	30-28N-23E	36.873647	-94.872206	12/14/2005	DPC-0619	Site Assessment	Monitoring Well	15.2
125408	MW-9	Ottawa	BNSF Shinn Oil Lea	NWSESW	30-28N-23E	36.873	-94.87286	9/6/2006	DPC-0619	Site Assessment	Monitoring Well	17.5
125411	MW-13 & MW	Ottawa	BNSF Shinn Oil Lea	SWSESW	30-28N-23E	36.87254	-94.87249	5/11/2007	DPC-0619	Site Assessment	Monitoring Well	17
125413	MW-14	Ottawa	BNSF Shinn Oil Lea	SWSESW	30-28N-23E	36.87254	-94.87249	5/11/2007	DPC-0619	Site Assessment	Monitoring Well	17
125414	MW-16	Ottawa	BNSF Shinn Oil Lea	NWSESW	30-28N-23E	36.87254	-94.87276	3/26/2008	DPC-0619	Site Assessment	Monitoring Well	17
125415	MW-17	Ottawa	BNSF Shinn Oil Lea	NWSESW	30-28N-23E	36.8729	-94.8728	3/27/2008	DPC-0619	Site Assessment	Monitoring Well	17
125416	MW-18	Ottawa	BNSF Shinn Oil Lea	NWSESW	30-28N-23E	36.87275	-94.87295	3/27/2008	DPC-0619	Site Assessment	Monitoring Well	17.5
125417	MW-19	Ottawa	BNSF Shinn Oil Lea	SWSESW	30-28N-23E	36.87274	-94.873	3/27/2008	DPC-0619	Site Assessment	Monitoring Well	17.5

This search does not necessarily contain information about all of the water wells within the area of interest. The multi-purpose well completion report database consists of information submitted to the Board 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 which are not included in our database. Wells drilled prior to the licensing requirements for well drillers would not necessarily have had a well log submitted to the OWRB. A field survey may need to be conducted to verify the presence or absence of other water wells.

The Oklahoma Water Resources Board does not guarantee the accuracy of the data shown in the well completion records. Data entered into the database are as reported by the well drillers and much of the data have not been field verified for accuracy. If any errors in the records are discovered please bring them to our attention so that corrections to the database may be made.

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- [2008 Integrated Report Waterbodies](#)
- [Land Application Sites](#)
- [PDES Discharges](#)
- [Total Retention Facilities](#)
- [Sensitive Waters and Watersheds for the OKR10 Construction Storm Water General Permit](#)
- [PWS Wells](#)
- [Air Emissions MEL](#)
- [AIR Multimedia MEL](#)
- [Multimedia Facility List](#)
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- [Voluntary Cleanup Program Sites](#)
- [Treatment Storage / Disposal](#)
- [Superfund Sites](#)
- [Large Quantity Generators](#)
- [Active Municipal Landfills](#)

Air Quality Permitted Facilities [back to top](#)

Click ID to Zoom	FAC_NAME	FAC_ID	STATUS	RECORD_YR	COUNTY	FAC_ADD	FAC_CITY	FAC_ST	FAC_ZIP	FAC_DIR	FAC_PH	CONT_FN	CONT_LN	CONT_PH	FAC_PE
1	405 E STEVE OWENS BLVD MIAMI	946	Operational	1999	OTTAWA		OK		0			Edward	Meyer	9185422856	0

[Zoom to Results](#)

Wellhead Protection Areas (WHPAs) [back to top](#)

Click ID to Zoom	SOURCE_ID	ZONE	area	len
1	25110	A	26266.3276799286	574.527824926259
2	25110	B	12718.5223948359	1274.4647580229
3	25110	C	155937.911421798	2265.03607374424
4	25115	C	141584.663234221	2158.27565734333
5	25117	A	26266.3615027961	574.528317695481
6	25117	B	12280.5917243825	1270.52314278999
7	25117	C	154187.737277025	2252.28473586597
8	25126	A	26266.400325274	574.528640286315
9	25126	B	16460.7678063473	1307.29077144105
10	25126	C	170908.355369993	2371.26543083396

[Zoom to Results](#)

PWS Surface Water Intakes [back to top](#)

Click ID to Zoom	SYSTEM	PWSID	SOURCE_NA	SOURCE_TY	SOURCE_ID	SOURCE	POP_SERVED	SEVICES	COUNTY	AVAILABI	STATUS	FAC_ADD	FAC_CITY	FAC_ST	FA
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No results found

2008 303D Waterbodies [back to top](#)

Click ID to Zoom	WBID	Name	Size	Unit	Category	NH3	Arsenic	Barium	Cadmium	Chloride	Chl_a	Chlorpyrif	Chromium	Color	Copper	DDT	Diazinon	Diel
1	OK121600040010_00	Neosho River	16.57	MILES	5a													
2	OK121600040060_00	Tar Creek	11.67	MILES	5a													

[Zoom to Results](#)

2008 Integrated Report Waterbodies [back to top](#)

Click

ID to Zoom	WBID	Name	Type	Size	Unit	Category	AES	AG	CWAC	HLAC	Trout	WWAC	FISH	NAV	PBCR	SBCR	PPWS	EWS	HQW	ORW	SWS	area	
1	OK121600040010_00	Neosho River	R	16.57	Miles	5a	I	F				N	N		F		I						0
2	OK121600040060_00	Tar Creek	R	11.67	Miles	5a				N			X			I							0

[Zoom to Results](#)

Land Application Sites [back to top](#)

Click ID to Zoom	FACILITY ID	SITE	COUNTY	CRD_METHOD	CRD_CONFID	LATDD3	LONGD3	DD3_XYDAT	area	len
------------------	-------------	------	--------	------------	------------	--------	--------	-----------	------	-----

No results found

PDES Discharges [back to top](#)

Click ID to Zoom	id	facility_n	permit_num	facility_i	outfall_id	outfall_st	outfall_1	loc_method	loc_accura	loc_datum	lat	lon	permit_exp	area	len
1	513	MIAMI SOUTH WWT	OK0031798	S21602	001A	A		1	1	1	36.860333	94.869685	1256947200000	0	0

[Zoom to Results](#)

Total Retention Facilities [back to top](#)

Click ID to Zoom	FACILITY	FACNO	OWRB	INDUST_ID	AUTH_NUM	COUNTY	FAC_TYPE	FAC_ADD	FAC_CITY	FAC_ST	FAC_ZIP	FAC_PH	OWN_NA	OWN_ADD	OWN_CITY	O
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No results found

Sensitive Waters and Watersheds for the OKR10 Construction Storm Water General Permit [back to top](#)

Click ID to Zoom	HUC11	NAME	area	len
1		Neosho River	100566537.240098	62315.7186699523

[Zoom to Results](#)

PWS Wells [back to top](#)

Click ID to Zoom	SYSTEM	PWSID	SOUR_NAME	SOUR_TYPE	SOUR_ID	SOURCE	POP	SERVICES	COUNTY	AVAILABI	AQUIFER	WELL_DEPTH	STATUS	FAC_ADD
1	MIAMI	OK2005813	WELL 1	WL	1	GW	14300	5531	OTTAWA	P	ROUBIDOUX	1233	0	PO BOX 1288
2	MIAMI	OK2005813	WELL 3	WL	3	GW	14300	5531	OTTAWA	P	ROUBIDOUX	1247	0	PO BOX 1288
3	MIAMI	OK2005813	WELL 4	WL	4	GW	14300	5531	OTTAWA	P	ROUBIDOUX	1125	0	PO BOX 1288

[Zoom to Results](#)

Air Emissions MFL [back to top](#)

NO RECORDS

No results found

AIR Multimedia MFL [back to top](#)

NO RECORDS

No results found

Multimedia Facility List [back to top](#)

NO RECORDS

No results found

Master Facility List [back to top](#)

Click ID to Zoom	MFLID	Name	Address1	Address2	City	Zip	County	State	Latitude	Longitude	TRSTownship	TRSRRange	TRSQuarter	TRSSection	Perr
------------------	-------	------	----------	----------	------	-----	--------	-------	----------	-----------	-------------	-----------	------------	------------	------

1	43864	DANS RECYCLING AND AUTO SALVAGE	54900 E 110 RD	MIAMI 74354	OTTAWA	OK	36.860000002	94.890000040	28N	23E	31	OKGPI
2	43878	SOUTH WASTE WATER TREATMENT PLANT	1002 H SE	MIAMI 74355	OTTAWA	OK	36.860000002	94.870000040	28N	23E	31	OKGPI
3	44694	DOANE PET CARE CO	2020 6TH AVE SE	MIAMI 74354	OTTAWA	OK	36.870000002	94.870000040	28N	23E	31	OKGPI
4	46601	135 N MAIN	135 N MAIN	MIAMI 74354	OTTAWA	OK	36.876689502	94.877689540	28N	22E	25	51f
5	46828	CARTERS CUSTOM FIBERGLASS	100 N MAIN ST	MIAMI 74354	OTTAWA	OK	36.876189502	94.877689540	28N	22E	25	42
6	47628	MIAMI COOP ASSN	NEW ST	NEW CITY	OTTAWA	OK	36.869377502	94.872593540	28N	23E	31	94
7	48262	217 S MAIN	217 S MAIN	MIAMI 74354	OTTAWA	OK	36.871929502	94.877709540	28N	22E	25	43

[Zoom to Results](#)

Voluntary Cleanup Program Sites [back to top](#)

Click ID to Zoom SITE_NAME CITY COUNTY LAT LONG ID area len

[No results found](#)

Treatment Storage / Disposal [back to top](#)

Click ID to Zoom FACILITY FAC_ID FAC_TYPE STATUS FAC_STR FAC_CITY FAC_ST FAC_ZIP COUNTY OWNER OWN_STR OWN_CITY OWN_ST OWN_ZIP O_PHONE OW_Zoom

[No results found](#)

Superfund Sites [back to top](#)

Click ID to Zoom NPL_SITE CRD_METHOD CRD_CONFID LATDD3 LONDD3 DD3_XYDAT area len

[No results found](#)

Large Quantity Generators [back to top](#)

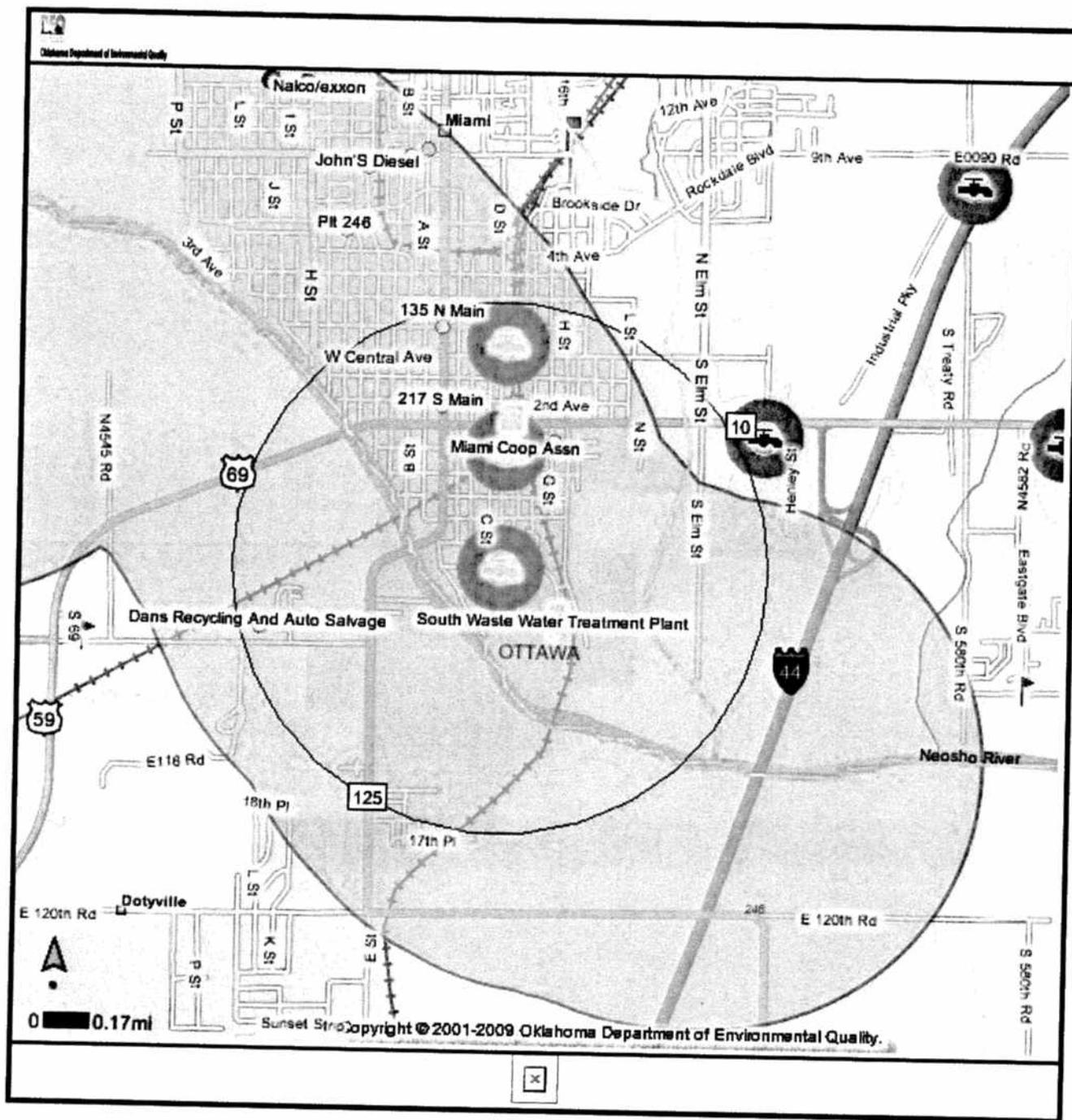
Click ID to Zoom HANDLER EPA_HAND COUNTY FAC_TYPE FAC_STATUS FAC_ADD FAC_CITY FAC_STATE FAC_ZIP OW_NAME OW_STREET OW_CITY OW_STATE OW_Z

[No results found](#)

Active Municipal Landfills [back to top](#)

Click ID to Zoom FACILITY PERMIT_ COUNTY FAC_TYPE STATUS PERM_DATE FAC_ADD FAC_ADD2 FAC_CITY FAC_ST FAC_ZIP OWNER OWN_ADD OWN_CITY OWN_S

[No results found](#)



Legend

 OCC_UST

 wellhead_protection_areas



Surface Water Sample Point



Water Quality MFL

OKStateData.SDE.MFL_VIEW.MULTIMEDIA

-  Multimedia Facility
-  Single Facility

OKStateData.SDE.MFL_VIEW.MULTIMEDIA

-  Multimedia Facility
-  Single Facility

OKStateData.SDE.MFL_VIEW.MULTIMEDIA

-  Multimedia Facility
-  Single Facility

OKStateData.SDE.MFL_VIEW.MULTIMEDIA

-  Multimedia Facility
-  Single Facility

OKStateData.SDE.MFL_VIEW.MULTIMEDIA

-  Multimedia Facility
-  Single Facility

OKStateData.SDE.MFL_VIEW.MULTIMEDIA

-  Multimedia Facility
-  Single Facility

OKStateData.SDE.MFL_VIEW.MULTIMEDIA

-  Multimedia Facility
-  Single Facility

OKStateData.SDE.MFL_VIEW.MULTIMEDIA

-  Multimedia Facility
-  Single Facility



Air Permitted Facilities



2008 303D Waterbodies



PDES Discharges



Sara Title III Facilities



Mallory, Heather

From: Taber, Holly
Sent: Tuesday, September 22, 2009 4:41 PM
To: Mallory, Heather
Subject: Air Quality facilities
Attachments: image001.png

Heather,

Here is all of the information that we have on these facilities. All are unpermitted because of their low emissions.

MFLID# Name

46601 Comet Cleaners of Miami (135 N Main)

This is a pick-up only facility. No dry cleaning performed on-site. No permit issued.

46828 Carter's Custom Fiberglass

The facility is considered as De minimis (less than 5 TPY) of VOC (volatile organic compounds). No permit issued. A permit is not required for this status. (SIC 3089)

47628 Miami COOP Assn

This facility is considered as De minimis for total PM (particulate matter). No permit issued but I can't find any other information about this site. The (SIC 5153) might help you determine what type of facility this is.

48262 Miami Laundry and Dry Cleaners (217 S Main)

The facility uses a petroleum solvent for dry cleaning but is considered as a permit exempt facility with emissions of less than 40 TPY of VOC. No permit issued.

Let me know if you need any other information.

Holly Taber
Environmental Programs Specialist
Department of Environmental Quality
Air Quality Division
405.702.4107
holly.taber@deq.ok.gov



Revised April 14, 2009

County	Facility Name	Permit #	Phone	Facility Type
ADAIR	Cherokee Nation Sanitary Landfill		(918)696-5490	Municipal Solid Waste Landfill
BECKHAM	Elk City Municipal Landfill	3505009	(580)225-3230	Municipal Solid Waste Landfill
BECKHAM	Sayre Municipal Landfill	3505011	(580)928-2260	Municipal Solid Waste Landfill
BLAINE	City of Watonga Transfer Station	3506012	(580)262-1565	Transfer Station
BRYAN	City of Durant Landfill Station	3507001	(580)924-8358	Construction/Demolition Landfill
BRYAN	City of Durant Transfer Station	3507001	(580)924-8358	Transfer Station
CADDO	City of Eakly Transfer Station	3508022	(580)457-6628	Transfer Station
CANADIAN	OEMA Landfill	3509005	(405) 262-0161	Municipal Solid Waste Landfill
CANADIAN	City of Yukon Transfer Station	3509006	(405) 354-2121	Transfer Station
CANADIAN	EnviroClean Regulated Medical Waste Processing Facility	3509013	(405)820-5607	Biomedical Waste Processing Facility
CARTER	Southern Oklahoma Regional Disposal Landfill	3510007	(580)226-1276	Municipal Solid Waste Landfill
CHEROKEE	Tahlequah Solid Waste Transfer Station	3511005	(918)456-8336	Transfer Station
CHEROKEE	South Tenkiller Transfer Station	3511006	(918)458-6573	Transfer Station
CHEROKEE	North Moody Transfer Station	3511007	(918)458-6573	Transfer Station
CHEROKEE	Hulbert West Transfer Station	3511008	(918)458-6573	Transfer Station
CIMMARON	Boise City Solid Waste Transfer Station	3513004	(580)544-2271	Transfer Station
CLEVELAND	Norman Transfer Station	3514009	(405)329-8583	Transfer Station
CLEVELAND	City of Norman Yardwaste Compost Facility	3514013	(405)329-8583	Composting Facility
COMANCHE	Ft. Sill C/D Landfill	3516013	(580)442-3266	Construction/Demolition Landfill
COMANCHE	City of Lawton Landfill	3516015	(580)581-3468	Municipal Solid Waste Landfill
COMANCHE	Ft. Sill Composting Facility	3516018	(580)442-3266	Composting Facility
COMANCHE	Ft. Sill Landfill	3516018	(580)442-3266	Municipal Solid Waste Landfill
COMANCHE	MCSA Transfer Station	3516024	(580)549-6717	Transfer Station

COTTON	Cotton County Transfer Station	3517004	(877)592-5030	Transfer Station
COTTON	Temple Utilities Auth. Landfill	3517006		Construction/Demolition Landfill
CRAIG	Vinita Transfer Station	3518008	(918)256-1024	Transfer Station
CREEK	Creek County Landfill	3519020	(918)299-3755	Construction/Demolition Landfill
CREEK	Bristow Transfer Station	3519021	(918)367-6622	Transfer Station
CUSTER	Weatherford Transfer Station	3520011	(580)672-7379	Transfer Station
CUSTER	Clinton Transfer Station	3520012	(580)672-7379	Transfer Station
DELAWARE	Delaware County Transfer Station #2	3521008	(918)786-1036	Transfer Station
DELAWARE	Delaware County Transfer Station #1	3521009	(918)786-1036	Transfer Station
GARFIELD	City of Enid Landfill	3524006	(580)249-4942	Municipal Solid Waste Landfill
GARVIN	Pauls Valley Landfill	3525009	(405)238-2012	Municipal Solid Waste Landfill
GARVIN	Pauls Valley Transfer Station	3525014	(405)238-3308	Transfer Station
GRADY	Washita Pipe & Steel Transfer Station	3526012	(405)222-4454	Transfer Station
GRADY	Southern Plains Landfill	3526013	(405)785-2060	Municipal Solid Waste Landfill
GRADY	Great Plains Landfill	3526014	(405)745-4141	Municipal Solid Waste Landfill
HASKELL	Haskell County Transfer Station	3531007	(918)967-0812	Transfer Station
JACKSON	City of Altus Landfill	3533005	(580)481-2251	Municipal Solid Waste Landfill
JEFFERSON	City of Waurika Transfer Station	3534007	(580)228-2714	Transfer Station
KAY	Ponca City Landfill	3536014	(580)767-0300	Municipal Solid Waste Landfill
KINGFISHER	Kingfisher County Transfer Station	3537008	(405)375-3705	Transfer Station
KIOWA	Kiowa County Transfer Station	3538017	(877)592-5030	Transfer Station
LEFLORE	Spiro Transfer Station	3540008	(918)647-8516	Transfer Station
LEFLORE	Talihina Transfer Station	3540014	(918)647-8516	Transfer Station
LEFLORE	Heavener Transfer Station	3540019	(918)647-8516	Transfer Station
LEFLORE	Arkoma Transfer Station	3540023	(918)647-8516	Transfer Station
LEFLORE	Poteau Transfer Station	3540024	(918)647-8516	Transfer Station
LINCOLN	Center Point Landfill	3541013	(405)567 3806	Municipal Solid Waste Landfill

INCOLN	Stericycle	3541014	(405)557-0024	Biomedical Waste Processing Facility
LOVE	Marietta Transfer Station	3543004	(580)276-9771	Transfer Station
MCCLAIN	Newcastle Landfill	3544014	(405)745-4141	Municipal Solid Waste Landfill
MCCURTAIN	City of Broken Bow Landfill	3545008	(580)584-9445	Municipal Solid Waste Landfill
MCCURTAIN	McCurtain County Landfill	3545011	(580)286-5035	Municipal Solid Waste Landfill
MCINTOSH	City of Eufaula Transfer Station	3546006	(918)689-3182	Transfer Station
MCINTOSH	City of Checotah Transfer Station	3546008	(918)473-2286	Transfer Station
MAJOR	Red Carpet Landfill	3547002	(580)776-2255	Municipal Solid Waste Landfill
MAYES	Pryor Transfer Station	3549029	(918)825-0026	Transfer Station
MUSKOGEE	Muskogee Comm. Landfill & Rec. Center	3551020	(918)682-7284	Municipal Solid Waste Landfill
NOBLE	Northern Oklahoma Regional Disposal, Inc.	3552011	(580)628-2445	Municipal Solid Waste Landfill
OKLAHOMA	Oklahoma Landfill	3555018	(405)745-3091	Municipal Solid Waste Landfill
OKLAHOMA	SE Oklahoma City Landfill	3555028	(405)672-7379	Municipal Solid Waste Landfill
OKLAHOMA	City of Midwest City Transfer Station	3555029	(405)739-1360	Transfer Station
OKLAHOMA	East Oak Sanitary Landfill	3555036	(405)427-1112	Municipal Solid Waste Landfill
OKLAHOMA	American Medical Disposal, Inc.	3555049	(405)557-0024	Biomedical Waste Transfer Station
OKLAHOMA	NE Landfill	3555050	(405)424-8000	Construction/Demolition Landfill
OKLAHOMA	Edmond Transfer Station	3555051	(405) 216-9401	Transfer Station
OKLAHOMA	Engineered Recovery Systems, Inc.	3555052	(913)631-3300	Biomedical Waste Transfer Station
OKLAHOMA	EnviroMed Transfer Station	3555052	(405)340-2430	Biomedical waste transfer station
OKLAHOMA	Oklahoma City Household Hazardous Waste Collection Facility	3555054	(405)297-1774	Transfer Station
OKMULGEE	City of Henryetta Transfer Station	3556006	(918)652-3344	Transfer Station
OKMULGEE	Elliott Construction Co. Landfill	3556008	(918)733-4558	Municipal Solid Waste Landfill
OSAGE	American Environmental Landfill	3557021	(918)245-7786	Municipal Solid Waste Landfill
OSAGE	Osage Landfill	3557025	(918)336-3159	Municipal Solid Waste

				Landfill
OTTAWA	Miami Transfer Station	3558019	(918)541-2287	Transfer Station
PAYNE	City of Cushing Transfer Station	3560008	(918)225-1999	Transfer Station
PAYNE	Stillwater Landfill	3560010	(405)377-3880	Municipal Solid Waste Landfill
PITTSBURG	City of McAlester Landfill	3561012	(918)421-4900	Municipal Solid Waste Landfill
PITTSBURG	Pittsburg County Landfill	3561013	(918)426-0993	Municipal Solid Waste Landfill
PONTOTOC	City of Ada Municipal Landfill	3562006	(580)436-6300	Municipal Solid Waste Landfill
POTTAWATOMIE	Canadian Valley Landfill	3563004	(405)275-9211	Municipal Solid Waste Landfill
POTTAWATOMIE	Absolute Waste Solutions, Inc. Landfill	3563005	(405)598-3893	Municipal Solid Waste Landfill
PUSHMATAHA	Clinton Lewis Construction Co. Landfill	3564004	(580)298-3729	Municipal Solid Waste Landfill
SEMINOLE	Sooner Land Management Landfill	3567020	(405)257-3354	Municipal Solid Waste Landfill
SEQUOYAH	Sallisaw Solid Waste Disposal Facility	3568008	(918)775-6241	Municipal Solid Waste Landfill
SEQUOYAH	Sue's Recycling Facility	3568009	(918)773-4007	Transfer Station
SEQUOYAH	Roland Yard Waste Composting Facility	3568009C	(918)427-3252	Composting Facility
STEPHENS	Four D Materials Conversion Corp.	3569013	(580)255-8473	Tire Processing Facility
STEPHENS	Stephens County Transfer Station	3569014	(580)252-2264	Transfer Station
TEXAS	City of Guymon Transfer Station	3570006	(580)338-2434	Transfer Station
FILLMAN	Frederick Transfer Station	3571011	(580)335-7149	Transfer Station
FILLMAN	Frederick Public Works Authority Landfill	3571012	(580)335-5499	Construction/Demolition Landfill
FULSA	North Tulsa Sanitary landfill	3572001	(918)425-1400	Municipal Solid Waste Landfill
FULSA	Covanta Walter B. Hall Resource Recovery Facility	3572033	(918) 699-0011	Municipal Waste Combustor
FULSA	Tulsa Recycle & Transfer, Inc.	3572037	(918)583-3867	Transfer Station
FULSA	Quarry Landfill	3572042	(918)437-7773	Municipal Solid Waste Landfill
FULSA	APAC-East Quarry Landfill	3572049	(918)438-2020	Construction/Demolition Landfill
MAGONER	51B Landfill	3573021	(918)483-2871	Municipal Solid Waste Landfill
MOODS	City of Alva Waste	3576005	(580)327-3342	Transfer Station

	Processing Plant			
WOODWARD	NW Oklahoma Solid Waste Disposal Authority	3577001	(580)256-8097	Municipal Solid Waste Landfill

RCRA NOTIFIERS LISTING
 Source: USEPA RCRAInfo Database

State of: **OKLAHOMA**

EPA-ID	FACILITY NAME	LOCATION ADDRESS	CITY	ZIP	COUNTY/ PARISH	ST G R E E N N	L O O P P N N	RECEIVED DATE
OKD078641412	CHILDRESS CHEMICAL COMPANY Contact: KENNETH CHILDRESS	NW/4 NE/4 SEC 30 T29N R2 Mailing Addr: PO BOX 350, WEBB CITY, MO 64870	CARDIN	74335	OTTAWA	6	P	11/17/80
OKD085949204	LOVES BODY WORKS Contact: JIM LOVE	W RAILWAY AVE 1 BLK S HW Mailing Addr: P.O. BOX 56, FAIRLAND, OK 74343	FAIRLAND	74343	OTTAWA	6	P	07/29/86
OKR000018929	ALLEN SIGN STUDIO LLC Contact: COLBY W ALLEN	307 E CENTRAL AVE Mailing Addr: 307 E CENTRAL AVE, MIAMI, OK 74354	MIAMI	74354	OTTAWA	3	P P P	08/21/03
OKD980879068	BAYLINER MARINE CORP Contact: DONALD BARNHILL	300 NEWMAN ROAD Mailing Addr: PO BOX 1438, MIAMI, OK 74355	MIAMI	74355	OTTAWA	3		10/01/84
OK0000004010	CJF INC DBA COMET ONE HOUR CLE Contact: JAMES FLORIO	135 N MAIN ST Mailing Addr: 135 N MAIN ST, MIAMI, OK 74354	MIAMI	74354	OTTAWA	7	P	09/13/93
OKR000021790	CLEAN HARBORS OK AG COLLECTION Contact: NATE EMBRY	OTTAWA CO FAIRGROUNDS Mailing Addr: 2249 N NEW YORK, WICHITA, KS 67219	MIAMI	74354	OTTAWA	8	M M M	03/19/07
OKD071231781	COLLINS CONSTRUCTION CO OF MIA Contact: F-LEROY COLLINS	RT #1 BOX 259 Mailing Addr: RT 1 BOX 259, MIAMI, OK 74354	MIAMI	74354	OTTAWA		P	08/09/82
OKR000000653	DORNE PRODUCTS COMPANY Contact: THOMAS CROSSNO	2060 6TH AVE SE Mailing Addr: 2060 6TH AVE SE, MIAMI, OK 74354	MIAMI	74354	OTTAWA	3	P P	07/30/98
OKD007150709	EAGLE PICHER TECHNOLOGIES LLC Contact: JOSEPH R METCALF	200 B.J. TUNNELL BLVD. SU Mailing Addr: 200 B.J. TUNNELL BLVD., MIAMI, OK 74354	MIAMI	74354	OTTAWA	2	P P P	02/22/08
OKD982760191	EAGLE-PICHER ENVIRONMENTAL SVC Contact: MARK THOMPSON	36 BJ TUNNELL BLVD Mailing Addr: 36 BJ TUNNELL BLVD, MIAMI, OK 74354	MIAMI	74354	OTTAWA	6	P	08/21/89
OKR000020438	EP SCIENTIFIC PRODUCTS LLC Contact: MATT HAILEY	36 E BJTUNNELL Mailing Addr: 36 E BJTUNNELL, MIAMI, OK 74354	MIAMI	74354	OTTAWA	2	P P P	02/25/08
OKR000024422	EP SCIENTIFIC PRODUCTS LLC Contact: MATTHEW T HAILEY	520 N MAIN ST Mailing Addr: 36 EAST B J TUNNELL BLVD, MIAMI, OK 74354	MIAMI	74354	OTTAWA	3	M P P	05/18/09
OKD061627196	FORMER STEELCRAFT INDUSTRIES L Contact: ALAN WIPPMAN	505 30TH NW Mailing Addr: PO BOX 1284, MIAMI, OK 74355	MIAMI	74254	OTTAWA	7	P P P	08/20/08
OKD080599384	KEETON PEST & TERMITTE CONTROL Contact: DILL-H KEETON	432 G SE Mailing Addr: 432 G S.E., MIAMI, OK 74354	MIAMI	74354	OTTAWA	6		07/21/80
OKD980699078	MCD CUSTOM CHROME PLATING Contact: FRANK MCDUGGLE	409 E STREET NE Mailing Addr: 409 E STREET NE, MIAMI, OK 74354	MIAMI	74354	OTTAWA	7	P	03/14/83
OKR000001537	METAL MASTERS Contact: CHARLES GARRETT	2108 E STEVE OWENS Mailing Addr: 2108 E STEVE OWENS, MIAMI, OK 74354	MIAMI	74354	OTTAWA	3	P P	01/29/96
OKD987069275	MIAMI CITY OF FLEET MNTNCE Contact: MARK JONES	428 N MAIN Mailing Addr: 428 N MAIN, MIAMI, OK 74354	MIAMI	74354	OTTAWA	7	U M O O	06/06/03

RCRA NOTIFIERS LISTING

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 Report Title: 06notifiers_list_v4.rdf

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
OKD980508030	MIAMI CITY OF UTILITY DEPARTME Contact: BOB BALLENGER	9TH AVE AND H ST SE Mailing Addr: PO BOX 309, MIAMI, OK 74354	MIAMI MIAMI, OK 74354	74354	OTTAWA	6		M	09/25/80
OKT410010045	MIAMI CITY OF UTILITY DEPARTME Contact: BOB BALLENGER	14TH & STREET Mailing Addr: PO BOX 309, MIAMI, OK 74354	MIAMI MIAMI, OK 74354	74354	OTTAWA	3		P P P	12/11/02
OKD981594310	MIAMI FORD LINCOLN MERCURY INC Contact: MARK MERSKI	521 N MAIN Mailing Addr: PO BOX 1650, MIAMI, OK 74354	MIAMI MIAMI, OK 74354	74354	OTTAWA	2		P	02/09/87
OKD064559909	NEWELL COACH CORP Contact: SCOTT LAWSON	N HWY 69 Mailing Addr: PO BOX 511, MIAMI, OK 74355	MIAMI MIAMI, OK 74355	74354	OTTAWA	7		P P	10/28/98
OKR000005017	NR INDUSTRIES Contact: MICHAEL BOYCE	533 HENLEY Mailing Addr: 533 HENLEY, MIAMI, OK 74354	MIAMI MIAMI, OK 74354	74355	OTTAWA	4		S S	04/02/96
OKR000000109	OKLA DOT BRIDGE NO BR NBIP 08 Contact: TIMOTHY BRAY	ST HWY 10C OVER LOST CRE Mailing Addr: PO BOX 638, CLAREMORE, OK 74018	MIAMI MIAMI, OK 74354	74354	OTTAWA	6		P P P	02/05/03
OKD071231419	OKLAHOMA LEATHER PRODUCTS INC Contact: MIKE PLATT	500 26TH NW Mailing Addr: 500 26TH NW, MIAMI, OK 74354	MIAMI MIAMI, OK 74354	74354	OTTAWA	3		P P P	02/24/03
OKD987095080	PHILLIPS SSH27059 Contact: BETH EISENMANN	HWY 10 ON I 44 .5M E Mailing Addr: 13059 E PEAKVIEW, CENTENNIAL, CO 80111	MIAMI MIAMI, CO 80111	74355	OTTAWA	3		P	06/10/87
OKD981913924	PRECISION PAINT & BODY Contact: KEVIN CANTWELL	102 D ST SE Mailing Addr: P O BOX 1224, MIAMI, OK 74355	MIAMI MIAMI, OK 74355	74354	OTTAWA	3		P P P	03/20/03
OKD987080652	QUIKTRIP STORE # 30 Contact: MONICA OLASON	10 GOODRICH BLVD Mailing Addr: PO BOX 3475, TULSA, OK 74101	MIAMI MIAMI, OK 74101	74354	OTTAWA	7		P	06/07/96
OKD987080645	QUIKTRIP STORE # 55 Contact: DAVE CISIEWSKI	812 E CENTRAL Mailing Addr: 1862 CRAIGSHIRE DRIVE, ST LOUIS, MO 63146	MIAMI MIAMI, MO 63146	74354	OTTAWA	6		P	08/18/80
OKD078645330	SHERWIN WILLIAMS CO Contact: TERRY MORS	1901 N MAIN ST Mailing Addr: 1901 NO MAIN ST, MIAMI, OK 74354	MIAMI MIAMI, OK 74354	74354	OTTAWA	1		P P P	02/04/09
OKD987084514	TRACKER MARINE / MIAMI Contact: LARRY D CLUTTER	3807 TAHOE WAY Mailing Addr: 2500 E KEARNEY ST, SPRINGFIELD, MO 65803	MIAMI MIAMI, MO 65803	74354	OTTAWA	6		P	08/08/80
OKD007151459	US METAL CONTAINER CO INC Contact: CHARLIE FORBIS	204-22ND NW Mailing Addr: 204-22ND NW, MIAMI, OK 74354	MIAMI MIAMI, OK 74354	74354	OTTAWA	3		F F F	10/01/03
OKS210022005	USARC FRANKLIN L WEEKS Contact: JAMES WHEELER	104 5TH AVE NE Mailing Addr: 104 5TH AVE NE, MIAMI, OK 74354	MIAMI MIAMI, OK 74354	74354	OTTAWA	3		P P P	01/23/09
OKD981909211	WAL-MART SUPERCENTER # 28 Contact: PRUITT PRUITT	2415 NW MAIN ST Mailing Addr: 1300 SE 8TH ST, BENTONVILLE, AR 72716	MIAMI MIAMI, AR 72716	74358	OTTAWA	2		P P	01/21/00
OKD987095403	COMMERCE PLASTICS Contact: JOHNNY JONES	900 MAIN Mailing Addr: PO BOX 21, N MIAMI, OK 74358	N MIAMI MIAMI, OK 74358	74358	OTTAWA			P	01/21/00

Report run on: September 22, 2009 8:30 AM
 Report Title: 06notifiers_list_v4.rdf

RCRA NOTIFIERS LISTING
 Source: USEPA RCRAInfo Database

Column Descriptions

<u>Column</u>	<u>Value</u>	<u>Description</u>
GEN - Generator Status	1	Large Quantity Generator
	2	Small Quantity Generator
	3	Conditionally Exempt Small Quantity Generator
SGEN - State Waste Generator Code	1	Large Quantity Generator
	2	SQG
	3	CESQG
	4	One Time Generator
	5	Periodic Generator
	6	No Longer Generating, Still in Business
	7	No Longer Generating, Out of Business
	8	Never Generated Hazardous Waste - Verified
	9	Transporter
	N	No separately defined State status
TRAN - Hazardous Waste Transporter	Y	Hazardous Waste Transporter
OPER TSDF - Operating Treatment/Storage/Disposal Facility	L	Land Disposal Facility
	I	Incinerator
	B	Burner/Boiler
	S	Storage Facility
	T	Treatment Facility
OWN - Owner Type	C	County
OPR - Operator Type (Though different in meaning, the value of codes are the same)	D	District
Land- Land Type	F	Federal
	I	Indian
	M	Municipal
	O	Other
	P	Private
	S	State
RECEIVED DATE		Receipt Date of most current RCRA Site ID Form

Depending on User Selection Criteria, all of the above Values may not appear on this report.



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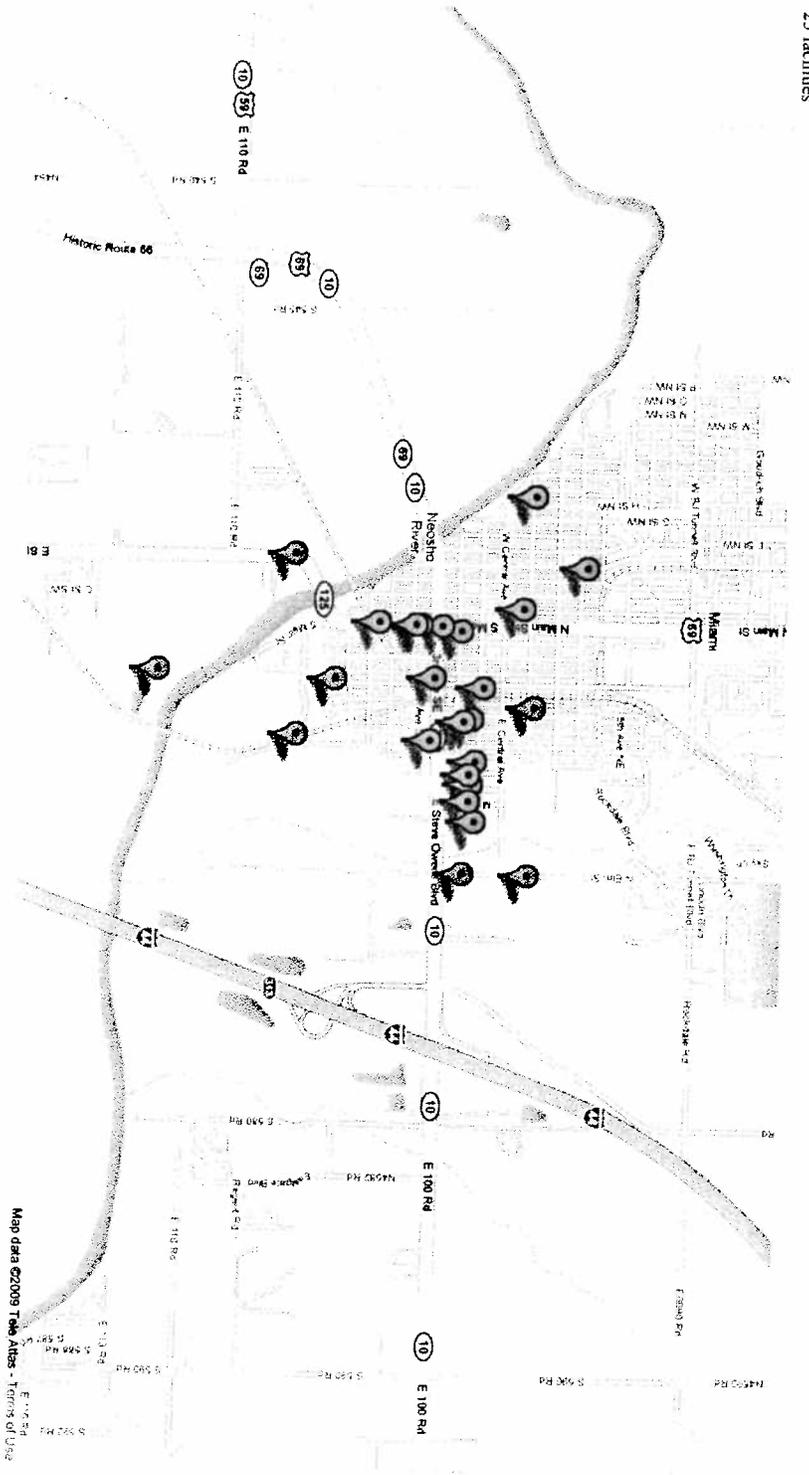
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New Report # Material Page NRC Report # Type of Call Date/Time Received

Report #	Material Page	NRC Report #	Type of Call	Date/Time Received	Description Of Incident	Type Of Incident	Incident Cause	Incident Date/Time	Location	State	Nearest City	County	Suspected Responsible Company	Medium Affected	Material Name
119800			INCIDENT	01-JUN-1992 14:36	CALLER STATES THAT COMPANY IS RELEASING AMMONIA TO ATMOSPHERE	FIXED	UNKNOWN	20-NOV-1991 00:00	INDUSTRIAL PARK	OK	MIAMI	OTTAWA	J&M FARMS	AIR	AMMONIA
120169			INCIDENT	02-JUN-1992 19:11	GRADE CROSSING FATALITY/CROSSBUCKS IN SERVICE AT INCIDENT	RAILROAD NON-RELEASE	UNKNOWN	02-JUN-1992 14:10	INDUSTRIAL PARK	OK	MIAMI	OTTAWA	J&M FARMS	RAIL REPORT (N/A)	AMMONIA
123235			INCIDENT	23-JUN-1992 14:52	TRANSFORMER/EQUIPMENT FAILURE	FIXED	EQUIPMENT FAILURE	23-JUN-1992 11:00	DOTTYVILLE ROAD, MP175.2	OK	MIAMI	OTTAWA		LAND	POLYCHLORINATED BIPHENYLS
127145			INCIDENT	16-JUL-1992 14:39	55 GAL DRUMS AND AUTOMOBILE BATTERIES/LEAKING DRUMS AND BATTERIES	FIXED	DUMPING	16-JUL-1991 00:00	BF GOODRICH 1000 GOODRICH BLVD	OK	MIAMI	OTTAWA	BF GOODRICH	LAND	BATTERY ACID
127145			INCIDENT	16-JUL-1992 14:39	55 GAL DRUMS AND AUTOMOBILE BATTERIES/LEAKING DRUMS AND BATTERIES	FIXED	DUMPING	16-JUL-1991 00:00	500E NE	OK	MIAMI	OTTAWA	MIAMI METAL	LAND	OIL, MISC. MOTOR
280655			INCIDENT	27-APR-1995 21:03	UNKNOWN/HOUSE EXPLOSION	FIXED	UNKNOWN	27-APR-1995 18:15	500E NE	OK	MIAMI	OTTAWA	MIAMI METAL	LAND	OIL, MISC. MOTOR
286016			INCIDENT	18-JUN-1995 14:24	A DERAILMENT OF 13 CARS HAS CAUSED THE EVACUATION OF MEMBERS OF THE GENERAL PUBLIC	RAILROAD	UNKNOWN	18-JUN-1995 11:15	600 20TH AVE NW	OK	MIAMI	OTTAWA		RAIL REPORT (N/A)	UNKNOWN MATERIAL
407695			INCIDENT	15-OCT-1997 17:02	RESIDENCE FIRE AND EXPLOSION MAY HAVE NATURAL GAS INVOLVEMENT/UNSURE IF MATERIAL WAS INVOLVED	PIPELINE	UNKNOWN	15-OCT-1997 14:26	893 P STREET NW	OK	MIAMI	OTTAWA		AIR	NATURAL GAS
425461			INCIDENT	21-FEB-1998 13:52	TRANSFORMER/UNKNOWN	FIXED	UNKNOWN	20-FEB-1998 14:00	1000 BFG BLVD	OK	MIAMI	OTTAWA	SAVE THE CHILDREN AND ENV	LAND	POLYCHLORINATED BIPHENYLS
444377			INCIDENT	03-JUL-1998 11:28	TRANSFORMER/Crane HIT A TRANSFORMER CAUSING IT TO LEAK	FIXED	OPERATOR ERROR	02-JUL-1998 15:00	1000 BFG BLVD	OK	MIAMI	OTTAWA	NOVA ENVIRONMENTAL	LAND	POLYCHLORINATED BIPHENYLS
480660			INCIDENT	16-APR-1999 23:21	TANK TRUCK / OCCURRED ON TRIBAL TRUST LAND / DURING FUEL DELIVERY, ASPRILL OCCURRED, EXACT CAUSE UNKNOWN	MOBILE	OTHER	16-APR-1999 21:30	O-GAH/PAH CONVENIENCE STORE, 6590 SOUTH 580 RD	OK	MIAMI	OTTAWA	WES BERT TRUCKING	LAND	OIL, DIESEL
663623			INCIDENT	20-APR-2001 15:20	THE CALLER IS REPORTING THE DISCOVERY OF A 55 GALLON DRUM OF MATERIAL ON THE LAKE SHORE, AND POSSIBLY 2 OR 3 OTHER OPEN 55-GALLON DRUMS OF THE SAME MATERIAL	STORAGE TANK	UNKNOWN	13-APR-2001 13:30	GRAND LAKE OF THE STEROKES WEST SIDE OF LAKE	OK	MIAMI	OTTAWA		WATER	ALUMINUM FLAKES SLURRY (UNH-1506)
740490			INCIDENT	04-NOV-2004 17:22	THE CALLER IS REPORTING THE DISCOVERY OF AN UNKNOWN POSSIBLY HAZARDOUS MATERIAL IN A PRIVATE RESIDENCE. THE MATERIAL WAS FOUND IN THE HOME IN THE BASEMENT MIXED WITH FLOOD WATER. THE ORIGIN OF THE MATERIAL IS UNKNOWN AT THIS TIME.	FIXED	UNKNOWN	04-NOV-2004 15:30	2603 P NW	OK	MIAMI	OTTAWA		LAND	UNKNOWN MATERIAL
797517			INCIDENT	17-MAY-2006 14:53	CALLER STATED THERE WAS SOME ILLEGAL DUMPING OF MATERIALS ON THE PROPERTY OF A RAILROAD FACILITY. THERE WAS NO TRAIN INVOLVED IN THIS INCIDENT.	FIXED	DUMPING	17-MAY-2006 13:41	400 EAST CENTRAL AVENUE	OK	MIAMI	OTTAWA		LAND	MERCURY
850382			INCIDENT	01-OCT-2007 10:30	CALLER IS REPORTING THAT WASTE RUNOFF MATERIAL IN A PIT IS BEING DUMPED ONTO THE BACK OF THE PROPERTY AND INTO A STORM SEWER.	FIXED	DUMPING	24-SEP-2007 10:00	860 NORTH MAIN	OK	MIAMI	OTTAWA	SPIRIT OF AMERICA CAR WASH	WATER	RUNOFF WATER MIXED WITH OIL

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Notification for Underground Storage Tanks	STATE USE ONLY
State agency name and address <i>OKLAHOMA Military Department 3501 Military Circle, Okc, Ok 73111</i>	ID NUMBER <i>5-805785</i>
TYPE OF NOTIFICATION	DATE RECEIVED
<input type="checkbox"/> A. NEW FACILITY <input type="checkbox"/> B. AMENDED <input checked="" type="checkbox"/> C. CLOSURE	A. Date Entered into Computer _____
____ No. of tanks at facility ____ No. of continuation sheets attached	B. Data Entry Clerk Initials _____
INSTRUCTIONS	C. Owner Was Contacted to: Clarity Responses, Comments.
Please type or print in ink all items except "signature" in section V. This form must be completed for each location containing underground storage tanks. If more than five (5) tanks are owned at this location, photocopy the following sheets, and staple continuation sheets to the form.	_____

GENERAL INFORMATION

Notification is required by Federal law for all underground tanks that have been used to store regulated substances since January 1, 1974, that are in the ground as of May 8, 1984, or that are brought into use after May 8, 1984. The information requested is required by Section 9002 of the Resource Conservation and Recovery Act, (RCRA), as amended.

The primary purpose of this notification program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or in the absence of such records, your knowledge, belief, or recollection.

Who Must Notify? Section 9002 of RCRA, as amended, requires that, unless exempted, owners of underground tanks that store regulated substances must notify designated State or local agencies of the existence of their tanks. Owner means—

- a) in the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances, and
- b) in the case of any underground storage tank in use before November 8, 1984, but no longer in use on that date, any person who owned such tank immediately before the discontinuation of its use.
- c) if the State agency so requires, any facility that has undergone any changes to facility information or tank system status (only amended tank information needs to be included).

What Tanks Are Included? Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of regulated substances, and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing: 1. Gasoline, used oil, or diesel fuel, and 2. industrial solvents, pesticides, herbicides or fungicides.

What Tanks Are Excluded? Tanks removed from the ground are not subject to notification. Other tanks excluded from notification are:

- 1. farm or residential tanks of 1,100 gallons or less capacity used for storing, major fuel for noncommercial purposes.
- 2. tanks used for storing heating oil for consumer use on the premises where stored;

- 3. septic tanks;
- 4. pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979, or which is an interstate pipeline facility regulated under State laws;
- 5. surface impoundments, pits, ponds, or lagoons;
- 6. storm water or waste water collection systems;
- 7. low-trough process tanks;
- 8. liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;
- 9. storage tanks situated in an underground area (such as caverns, collection, mining, drift, shaft, or tunnel) if the storage tank is situated upon or above the surficial of the floor.

What Substances Are Covered? The notification requirements apply to underground storage tanks that contain regulated substances. This includes any substance defined as hazardous in section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), with the exception of those substances regulated as hazardous waste under Subtitle C of RCRA. It also includes petroleum, e.g., crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (50 degrees Fahrenheit and 14.7 pounds per square inch absolute).

Where To Notify? Send completed forms to:

Oklahoma Corporation Commission
Underground Storage Tank Program
Jim Thorpe Building
Room 240
Oklahoma City, OK 73105

When To Notify? 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must notify by May 8, 1984. 2. Owners who bring underground storage tanks into use after May 8, 1984, must notify within 30 days of bringing the tanks into use. 3. If the State requires notification of any amendments to facility and tank information to State agency immediately.

Penalties: Any owner who knowingly fails to notify or submit false information shall be subject to a civil penalty not to exceed \$10,000 for each tank for which notification is not given or for which false information is submitted.

I. OWNERSHIP OF TANK(S)

II. LOCATION OF TANK(S)

If owned by State, give the geographic location of tanks by geographic coordinates and elevation. Example Lat. 42, 34, 12 N Long 66, 34, 17W

Owner Name (Corporation, Individual, Public Agency, or Other Entity)
OKLAHOMA MILITARY DEPARTMENT

Street Address
3501 MILITARY CIRCLE

OKLAHOMA CITY, OK 73111-4398
City State ZIP Code

OKLAHOMA
County

405/425-8334
Phone Number (include Area Code)

Latitude _____ Longitude _____

(if same as Section I, mark box)

Facility Name or Company Site Identifier, as of 1984
Midwest National Guard Arsenal

Street Address (P.O. Box not acceptable)
830 D STREET S.E.

Midwest Ok 74354-8346
City State ZIP Code

CITAHWA
County Municipality

IX. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location.)

Tank Identification Number 5-805985 Tank No. 1 Tank No. Tank No. Tank No. Tank No.

1. Status of Tank (mark only one)	Currently in Use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Temporarily Out of Use <small>(Refer to Section 2.1)</small>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Permanently Out of Use <small>(Refer to Section 2.1)</small>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Amendment of Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Date of Installation (mo./year) 1958

3. Estimated Total Capacity (gallons) 1,000

4. Material of Construction (Mark all that apply)	Asphalt Coated or Bare Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cathodically Protected Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Epoxy Coated Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Composite (Steel with Fiberglass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Fiberglass Reinforced Plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lined Interior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Double Walled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Polyethylene Tank Jacket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Concrete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excavation Liner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, Please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has tank been repaired?	<u>NO</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

5. Piping (Material) (Mark all that apply)	Bare Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Galvanized Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Fiberglass Reinforced Plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Copper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cathodically Protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Double Walled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Secondary Containment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, Please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

6. Piping (Type) (Mark all that apply)	Suction: no valve at tank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Suction: valve at tank	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Gravity Feed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Has piping been repaired?	<u>NO</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

STEVE OWENS Blvd HWY 10

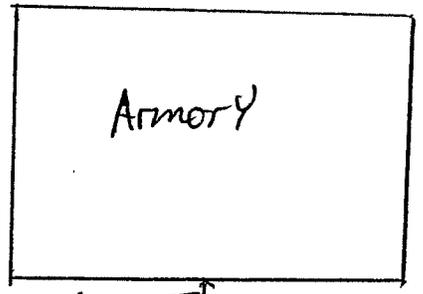
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Miami, Ok

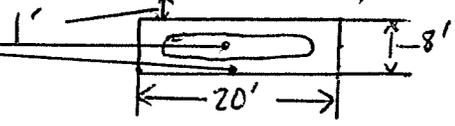
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1000 GAL



SAMPLES



AMERICAN ANALYTICAL & TECHNICAL SERVICES

10926 E. 55th PLACE TULSA, OK 74146 918 664-0387

Client Name: OKLAHOMA MILITARY DEPARTMENT, ATTN:OKSA 3501 MILITARY CIRCLE OKLAHOMA CITY , OK 73111-4398			
Client ID:	MIAMI SIDE	Project ID:	
AATS ID:	11196.03	Report:	11196.03
Received:	07/18/95	Analyzed:	07/19/95
Report Date:	07/20/95	Matrix:	Soil

Sample Amount: 5.0 RESULTS REPORTED IN ug/Kg

COMPOUND	REPORTING		COMPOUND	REPORTING	
	RESULTS	LIMIT		RESULTS	LIMIT
BENZENE	ND	1.0	TOLUENE	ND	1.0
ETHYLBENZENE	ND	1.0	TOTAL XYLENES	ND	1.0

QA Sequence No: 3B071995
QUALITY ASSURANCE/QUALITY CONTROL
Surrogate Recoveries

BFB (65-135%)

80 %

- ** - Outside of QC Limits on both Original and Rerun
- B - Compound Also Found in Blank
- J - Estimated Value Below Reporting Limit
- ND - Not Determined

Approved by: 

Method: SW 8020

AMERICAN ANALYTICAL & TECHNICAL SERVICES

10926 E. 55th PLACE TULSA, OK 74146 918 664-0387

Client Name: OKLAHOMA MILITARY DEPARTMENT, ATTN:OKSA 3501 MILITARY CIRCLE OKLAHOMA CITY , OK 73111-4398			
Client ID:	MIAMI CENTER	Project ID:	
AATS ID:	11196.04	Report:	11196.04
Received:	07/18/95	Analyzed:	07/20/95
Report Date:	07/20/95	Matrix:	Soil

Sample Amount: 5.0 RESULTS REPORTED IN ug/Kg

COMPOUND	REPORTING		COMPOUND	REPORTING	
	RESULTS	LIMIT		RESULTS	LIMIT
BENZENE	ND	1.0	TOLUENE	ND	1.0
ETHYLBENZENE	ND	1.0	TOTAL XYLENES	ND	1.0

QA Sequence No: 3B071995
QUALITY ASSURANCE/QUALITY CONTROL
Surrogate Recoveries

BFB (65-135%)
71 %

- ** - Outside of QC Limits on both Original and Rerun
- B - Compound Also Found in Blank
- J - Estimated Value Below Reporting Limit
- ND - Not Determined

Approved by: 

Method: SW 8020

AMERICAN ANALYTICAL AND TECHNICAL SERVICES
GAS CHROMATOGRAPHY LABORATORY

METHOD : MODIFIED 8015
 CLIENT : OKMILDPT
 CLIENT SAMPLE ID: MIAMI SIDE
 AATS SAMPLE ID : 11196.03
 FILENAME : 5072495\023F1301
 SAMPLE MATRIX : SOIL
 AMT. EXTRACTED : 20.0 g
 EXTRACTION SOL. : METHYLENE CHLORIDE
 SOLVENT AMT : 5.0 ml
 DILUTION FACTOR : 1
 DATE SAMP. REC. : 07/18/95
 DATE EXTRACTED : 07/24/95
 DATE ANALYZED : 07/25/95
 REPORT DATE : 07/25/95

QUANTITATION REPORT

TOTAL EXTRACTABLE HYDROCARBONS	QUANTITATION LIMIT (mg/Kg)	AMOUNT FOUND (mg/Kg)	FLAG
GASOLINE C6-C10	2.0	2.0	ND
DIESEL C10-C22	2.0	2.0	ND
KEROSENE C9-C18	2.0	2.0	ND
JP-4 C6-C14	2.0	2.0	ND
NAPHTHA C6-C12	2.0	2.0	ND
#6 FUEL OIL C12-C24	2.0	2.0	ND
MISCELLANEOUS C20-C28 (1)	2.0	2.0	ND

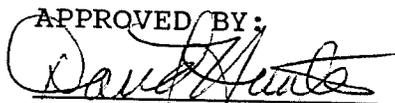
SURROGATE RECOVERY: (NAPHTHALENE 48-164%) * 87.2 %

* SURROGATE LEVEL 50.0 mg/L

** Outside of QC limits on both original and rerun.

- (1) Analysis shows miscellaneous peaks which cannot be identified as any specific hydrocarbon pattern. The response factor for the nearest eluting hydrocarbon standard was used to calculate the concentration of the miscellaneous peaks. Numbers indicate the approximate carbon chain length.
- (2) Pattern is similar to, but not identical to standard.

FLAG DEFINITIONS: ND -- NOT DETECTED ABOVE QUANTITATION LIMIT
 J -- ESTIMATED VALUE (BELOW QUANTITATION LIMIT)
 B -- COMPOUND FOUND IN BLANK
 D -- SURROGATE OR MATRIX SPIKE DILUTED OUT-SAMPLE RUN AT SECONDARY DILUTION
 E -- ESTIMATED VALUE (ABOVE LINEAR RANGE)
 I -- NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

APPROVED BY:


AMERICAN ANALYTICAL AND TECHNICAL SERVICES
GAS CHROMATOGRAPHY LABORATORY

METHOD : MODIFIED 8015
 CLIENT : OKMILDPT
 CLIENT SAMPLE ID: MIAMI CENTER
 AATS SAMPLE ID : 11196.04
 FILENAME : 5072495\024F1301
 SAMPLE MATRIX : SOIL
 AMT. EXTRACTED : 20.0 g
 EXTRACTION SOL. : METHYLENE CHLORIDE
 SOLVENT AMT : 5.0 ml
 DILUTION FACTOR : 1
 DATE SAMP. REC. : 07/18/95
 DATE EXTRACTED : 07/24/95
 DATE ANALYZED : 07/25/95
 REPORT DATE : 07/25/95

QUANTITATION REPORT

TOTAL EXTRACTABLE HYDROCARBONS	QUANTITATION LIMIT (mg/Kg)	AMOUNT FOUND (mg/Kg)	FLAG
GASOLINE C6-C10	2.0	2.0	ND
DIESEL C10-C22	2.0	2.0	ND
KEROSENE C9-C18	2.0	2.0	ND
JP-4 C6-C14	2.0	2.0	ND
NAPHTHA C6-C12	2.0	2.0	ND
#6 FUEL OIL C12-C24	2.0	2.0	ND
MISCELLANEOUS C20-C28 (1)	2.0	2.0	ND

SURROGATE RECOVERY: (NAPHTHALENE 48-164%) * 85.9 %

* SURROGATE LEVEL 50.0 mg/L

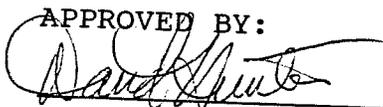
** Outside of QC limits on both original and rerun.

- (1) Analysis shows miscellaneous peaks which cannot be identified as any specific hydrocarbon pattern. The response factor for the nearest eluting hydrocarbon standard was used to calculate the concentration of the miscellaneous peaks. Numbers indicate the approximate carbon chain length.
- (2) Pattern is similar to, but not identical to standard.

FLAG DEFINITIONS:

- ND -- NOT DETECTED ABOVE QUANTITATION LIMIT
- J -- ESTIMATED VALUE (BELOW QUANTITATION LIMIT)
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- E -- ESTIMATED VALUE (ABOVE LINEAR RANGE)
- I -- NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

APPROVED BY:



AMERICAN ANALYTICAL & TECHNICAL SERVICES

10926 East 55th Place/Tulsa, OK 74146 (918) 664-0387

July 25, 1995

Lieutenant Colonel Englebretson
02500
Oklahoma Military Department
Attn: OKSA
3501 Military Circle
Oklahoma City, OK 73111-4398

Dear Lieutenant Colonel Englebretson:

Enclosed are the analytical results for your samples received in our laboratory on July 18, 1995.

If, in your review, you should have any questions or require additional information, please call.

Sincerely,



David Hunter
Laboratory Manager
American Analytical & Technical Services

JDH/pc

Enclosures

RECEIVED
OKFAC
27 JUL 95 08 23

Sheet 1 of 1
Job No. Miami
Date 7-13-95

Completed by T. Wheeler

CERTIFICATE OF DESTRUCTION

Scrapping/Disposal Company:
Wheeler Metals
5500 Border
Muskogee, Ok 74401

Site of Destruction:
same

Tank Removal Contractor:
Oklahoma Military Dept.
OKDE-D

Tank Identification:

Tank No.: _____
Size: 1000 gallons
Location: Company Miami
Address _____
City/State _____
Destruction Date: _____

I certify that the above described tank has been rendered unusable for the storage of any fluids, and all removed fluids, sludges and the tanks were disposed of in accordance with all applicable local, state, and federal regulations.

By Jimmy Wheeler
Title Sec

Subscribed & Sworn to before me this 13th day of July,
in the year 1995.

Notary Public Patricia M. Cook My Commission Expires: 1-4-98

Ticket No. _____

Date 7-13-95

WHEELER METALS

PIPE • SUCKER ROD •
NEW STEEL

Steel Warehouse and Recycling Center

Vineta
Mintini

Front <u>3315.0</u>	Front <u>33370</u>
Rear <u>15560</u>	Rear <u>13000</u>
Tare <u>48710</u>	Gross <u>48710</u>
	Tare <u>46370</u>
	Net

Material 2 Tanks

Customer Name _____

Truck Number Quincy Truck

10

Driver On Off

Weight By Doug

Weighed on Cardinal Scales

Muskogee, Oklahoma
918 - 682-1083

AMERICAN ANALYTICAL & TECHNICAL SERVICES
10926 East 55th Place/Tulsa, OK 74146 (918) 664-0387

INVOICE

02500
CLIENT: OKLAHOMA MILITARY DEPARTMENT
ATTN: OKSA
3501 MILITARY CIRCLE
OKLAHOMA CITY, OK 73111-4398

No.: T-2372
Date: 08/01/95

Page: 1 of 1

CLIENT PO:

Ref.:

Report Date & Number	Description	PRICE	TOTAL
07-25-95 11196	4 TPH BY MODIFIED 8015	\$ 75.00	\$ 300.00

David
Vinita
Miami

TOTAL AMOUNT DUE THIS INVOICE:

\$ 300.00

Please remit to 1700 WEST ALBANY, SUITE C, BROKEN ARROW, OK 74014
Include reference to the above Invoice No. in remittance.
Past due balances are subject to a service charge of 1.5%

[Signature]

Okla Military Dept
 3501 Military Circle
 Okla City, Ok 73111-4528

Lease Name Vacita & Miami USTs Well No. _____

Legal Description _____

Truck Hrs. 8 Price Hr. 45.00 Total _____

TRUCK NO.	DESCRIPTION	CHARGES
	<p>Emptied Fuel Tanks at armories</p> <p style="text-align: right;">_____ Surcharges</p> <p><u>50</u> Barrels Disp. Charge</p> <p style="text-align: right;">_____ Insurance Surcharge</p>	<p style="text-align: right;">360.00</p> <p style="text-align: right;">10.00</p>
1772	<p style="text-align: center;"><i>Alton A. English</i> Authorized Agent</p>	<p>TOTAL <u>370.00</u></p>

15 Aug 95
 Okay to Pay
 W/E

Notification for Underground Storage Tanks

FOR TANKS IN OK

RETURN COMPLETED FORM TO

Underground Storage Tank Program
Oklahoma Corporation Commission
Jim Thorpe Building
Oklahoma City, OK 73105

I.D. Number

580578

Date Received

APR 28 1986

GENERAL INFORMATION

Notification is required by Federal law for all underground tanks that have been used to store regulated substances since January 1, 1974, that are in the ground as of May 8, 1986, or that are brought into use after May 8, 1986. The information requested is required by Section 9002 of the Resource Conservation and Recovery Act, (RCRA), as amended.

The primary purpose of this notification program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or, in the absence of such records, your knowledge, belief, or recollection.

Who Must Notify? Section 9002 of RCRA, as amended, requires that, unless exempted, owners of underground tanks that store regulated substances must notify designated State or local agencies of the existence of their tanks. Owner means—
(a) in the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances, and
(b) in the case of any underground storage tank in use before November 8, 1984, but no longer in use on that date, any person who owned such tank immediately before the discontinuation of its use.

What Tanks Are Included? Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of "regulated substances," and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing: 1. gasoline, used oil, or diesel fuel, and 2. industrial solvents, pesticides, herbicides or fumigants.

What Tanks Are Excluded? Tanks removed from the ground are not subject to notification. Other tanks excluded from notification are:
1. farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;
2. tanks used for storing heating oil for consumptive use on the premises where stored;
3. septic tanks;

4. pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979, or which is an intrastate pipeline facility regulated under State law;
5. surface impoundments, pits, ponds, or lagoons;
6. storm water or waste water collection systems;
7. flow-through process tanks;
8. liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;
9. storage tanks situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

What Substances Are Covered? The notification requirements apply to underground storage tanks that contain regulated substances. This includes any substance defined as hazardous in section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), with the exception of those substances regulated as hazardous waste under Subtitle C of RCRA. It also includes petroleum, e.g., crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

Where To Notify? Completed notification forms should be sent to the address given at the top of this page.

When To Notify? 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must notify by May 8, 1986. 2. Owners who bring underground storage tanks into use after May 8, 1986, must notify within 30 days of bringing the tanks into use.

Penalties: Any owner who knowingly fails to notify or submits false information shall be subject to a civil penalty not to exceed \$10,000 for each tank for which notification is not given or for which false information is submitted.

INSTRUCTIONS

Please type or print in ink all items except "signature" in Section V. This form must be completed for each location containing underground storage tanks. If more than 5 tanks are owned at this location, photocopy the reverse side, and staple continuation sheets to this form.

Indicate number of continuation sheets attached

83 of 146

I. OWNERSHIP OF TANK(S)

Owner Name (Corporation, Individual, Public Agency, or Other Entity)

Oklahoma Military Department

Street Address

3501 Military Circle, N.E.

County

Oklahoma City, Oklahoma 73111

City

405 427-8371 State ZIP Code

Area Code

Phone Number

Type of Owner (Mark all that apply)

- Current State or Local Gov't Private or Corporate
 Former Federal Gov't (GSA facility I.D. no) Ownership uncertain

II. LOCATION OF TANK(S)

(If same as Section I, mark box here)

Facility Name or Company Site Identifier, as applicable

Co B (-) 1/279 Inf

Street Address or State Road, as applicable

830 "D" SE

County

Miami OK 74354-8346

City (nearest)

State ZIP Code

Indicate number of tanks at this location

1

Mark box here if tank(s) are located on land within an Indian reservation or on other Indian trust lands

III. CONTACT PERSON AT TANK LOCATION

Name (If same as Section I, mark box here)

CPT Richard L. Harwell

Job Title

Environmental Engr

Area Code

(405) 427-8371

Phone Number

X333

IV. TYPE OF NOTIFICATION

Mark box here only if this is an amended or subsequent notification for this location.

V. CERTIFICATION (Read and sign after completing Section VI.)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner or owner's authorized representative

Signature

Date Signed

VI. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location.)

Tank Identification No. (e.g., ABC-123), or Arbitrarily Assigned Sequential Number (e.g., 1,2,3...)	Tank No.	Tank No.	Tank No.	Tank No.	Tank No.
1. Status of Tank (Mark all that apply <input type="checkbox"/>) Currently In Use <input type="checkbox"/> Temporarily Out of Use <input type="checkbox"/> Permanently Out of Use <input checked="" type="checkbox"/> Brought into Use after 5/8/86 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Estimated Age (Years)	20				
3. Estimated Total Capacity (Gallons)	1000				
4. Material of Construction (Mark one <input type="checkbox"/>) Steel <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Fiberglass Reinforced Plastic <input type="checkbox"/> Unknown <input type="checkbox"/> Other, Please Specify _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Internal Protection (Mark all that apply <input type="checkbox"/>) Cathodic Protection <input type="checkbox"/> Interior Lining (e.g., epoxy resins) <input type="checkbox"/> None <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Other, Please Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. External Protection (Mark all that apply <input type="checkbox"/>) Cathodic Protection <input type="checkbox"/> Painted (e.g., asphaltic) <input type="checkbox"/> Fiberglass Reinforced Plastic Coated <input type="checkbox"/> None <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Other, Please Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Piping (Mark all that apply <input type="checkbox"/>) Bare Steel <input type="checkbox"/> Galvanized Steel <input checked="" type="checkbox"/> Fiberglass Reinforced Plastic <input type="checkbox"/> Cathodically Protected <input type="checkbox"/> Unknown <input type="checkbox"/> Other, Please Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Substance Currently or Last Stored In Greatest Quantity by Volume (Mark all that apply <input type="checkbox"/>) a. Empty <input checked="" type="checkbox"/> b. Petroleum Diesel <input type="checkbox"/> Kerosene <input type="checkbox"/> Gasoline (including alcohol blends) <input checked="" type="checkbox"/> Used Oil <input type="checkbox"/> Other, Please Specify _____ c. Hazardous Substance <input type="checkbox"/> Please Indicate Name of Principal CERCLA Substance _____ OR Chemical Abstract Service (CAS) No. _____ Mark box <input type="checkbox"/> if tank stores a mixture of substances d. Unknown <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional Information (for tanks permanently taken out of service) a. Estimated date last used (mo/yr) <u>6/78</u> b. Estimated quantity of substance remaining (gal.) <u>0</u> c. Mark box <input type="checkbox"/> if tank was filled with inert material (e.g., sand, concrete) <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

58-05785

10-31-90 LB

OCT 30 1990

COMPANY B (-) 1ST BATTALION 279TH INFANTRY
Oklahoma Army National Guard
830 "D" S.E., Miami, Oklahoma 74354-8346

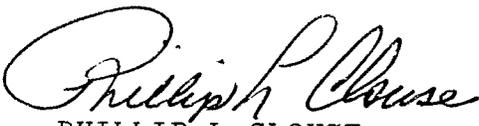
22 October 1990

MEMORANDUM FOR State of Oklahoma, Military Department, ATTN:
Environmental Officer, 3501 Military Circle,
Oklahoma City, OK 73111-4398

SUBJECT: Status of Fuel-storage Tank

The underground fuel-storage tank at the National Guard Armory located at Miami, OK has been out of service since October 1979. No fuel has been purchased for or pumped from the tank since that date.

FOR THE COMMANDER:


PHILLIP L CLOUSE
SFC, OKARNG
Readiness NCO

Notification for Underground Storage Tanks	STATE USE ONLY
State Agency Name and Address: <u>OKLAHOMA Military Department</u> <u>3501 Military Circle, Okc, Ok 73111</u>	ID NUMBER <u>5-805785</u>
TYPE OF NOTIFICATION	DATE RECEIVED
<input type="checkbox"/> A. NEW FACILITY <input type="checkbox"/> B. AMENDED <input checked="" type="checkbox"/> C. CLOSURE	A. Date Entered into Computer _____
_____ No. of tanks at facility _____ No. of continuation sheets attached	B. Data Entry Clerk Initials _____
INSTRUCTIONS	C. Owner Was Contacted to _____
Please type or print in ink all items except "signature" in section V. This form must be completed for each location containing underground storage tanks. If more than five (5) tanks are owned at this location, photocopy the following sheets, and staple continuation sheets to the form.	Clarity Responses, Comments. _____ _____ _____

GENERAL INFORMATION

Notification is required by Federal law for all underground tanks that have been used to store regulated substances since January 1, 1974, that are in the ground as of May 8, 1984, or that are brought into use after May 8, 1984. The information requested is required by Section 9002 of the Resource Conservation and Recovery Act, (RCRA), as amended.

The primary purpose of the notification program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or in the absence of such records, your knowledge, belief, or recollection.

Who Must Notify? Section 9002 of RCRA, as amended, requires that, unless exempted, owners of underground tanks that store regulated substances must notify designated State or local agencies of the existence of their tanks. Owner means—

- a) in the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances, and
- b) in the case of any underground storage tank in use before November 8, 1984, but no longer in use on that date, any person who owned such tank immediately before the discontinuance of its use,
- c) if the State agency so requires, any facility that has undergone any changes to facility information or tank system status (only amended tank information needs to be included).

What Tanks Are Included? Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of "regulated substances," and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing: 1. Gasoline, used oil, or diesel fuel, and 2. industrial solvents, pesticides, herbicides or fungicides.

What Tanks Are Excluded? Tanks removed from the ground are not subject to notification. Other tanks excluded from notification are—

- 1. farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes,
- 2. tanks used for storing heating oil for consumption use on the premises where stored;

- 3. acute tanks;
- 4. pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979, or which is an intrastate pipeline facility regulated under State laws,
- 5. surface impoundments, pits, ponds, or lagoons,
- 6. storm water or waste water collection systems;
- 7. flow-through process tanks;
- 8. liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;
- 9. storage tanks situated in an underground area (such as caverns, cisterns, mine workings, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

What Substances Are Covered? The notification requirements apply to underground storage tanks that contain regulated substances. This includes any substance defined as hazardous in section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) with the exception of those substances regulated as hazardous inorganic Substances C of RCRA. It also includes petroleum, e.g., crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (50 degrees Fahrenheit and 14.7 pounds per square inch absolute).

Where To Notify? Send completed forms to:

Oklahoma Corporation Commission
 Underground Storage Tank Program
 Jim Thorpe Building
 Room 240
 Oklahoma City, OK 73105

When To Notify? 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must notify by May 8, 1984. 2. Owners who bring underground storage tanks into use after May 8, 1984, must notify within 30 days of bringing the tanks into use. 3. If the State requires notification of any circumstances in which send information to State agency immediately.

Penalties: Any owner who knowingly fails to notify or submit false information shall be subject to a civil penalty not to exceed \$10,000 for each tank for which notification is not given or for which false information is submitted.

I. OWNERSHIP OF TANK(S)

II. LOCATION OF TANK(S)

Owner Name (Corporation, Individual, Public Agency, or Other Entity)
OKLAHOMA MILITARY DEPARTMENT

Street & Address
3501 MILITARY CIR

City
OKLAHOMA CITY, OK ZIP Code 73111-4398

County
OKLAHOMA

Phone Number (include Area Code)
405/425-8334

If required by State, give the geographic coordinates of tanks by degrees, minutes and seconds. Example: 42, 34, 12 N Long 06, 24, 177 W

Latitude _____ Longitude _____

(If same as Section I, mark box)

Facility is: 1. or Company Site Number, or 2. _____
Missouri National Guard Armory

Street Address: P.O. Box or Community _____
P.O. Box STREET S.E.

City
Missouri Ok ZIP Code 74354-8346

County
CTIAW

III. TYPE OF OWNER		IV. INDIAN LANDS	
<input type="checkbox"/> Federal Government	<input type="checkbox"/> Commercial	Tanks are located on land within an Indian Reservation or on other trust lands. <input type="checkbox"/>	Tribes or Nations: _____
<input checked="" type="checkbox"/> State Government	<input type="checkbox"/> Private	Tanks are owned by native American nation, tribe, or individual. <input type="checkbox"/>	
<input type="checkbox"/> Local Government			

V. TYPE OF FACILITY

Select the Appropriate Facility Description:

<input type="checkbox"/> Gas Station	<input type="checkbox"/> Railroad	<input type="checkbox"/> Trucking/Transport
<input type="checkbox"/> Petroleum Distributor	<input type="checkbox"/> Federal - Non-Military	<input type="checkbox"/> Utilities
<input type="checkbox"/> Air Taxi (Airline)	<input type="checkbox"/> Federal - Military	<input type="checkbox"/> Residential
<input type="checkbox"/> Aircraft Owner	<input type="checkbox"/> Industrial	<input type="checkbox"/> Farm
<input type="checkbox"/> Auto Dealership	<input type="checkbox"/> Contractor	<input checked="" type="checkbox"/> Other (Explain) <u>NATIONAL GUARD ARMORY</u>

VI. CONTACT PERSON IN CHARGE OF TANKS

Name	Job Title	Address	Phone Number (Include Area Code)
ALTON ENGLEBRETSON	Deputy Dir of Engineering	ATTN OKDE-D 3501 Military Circle, Dec	7311-4368 (405) 425-8334

VII. FINANCIAL RESPONSIBILITY

I have met the financial responsibility requirements in accordance with 40 CFR Subpart H

Check All that Apply

<input type="checkbox"/> Self Insurance	<input type="checkbox"/> Guarantee	<input type="checkbox"/> State Funds
<input type="checkbox"/> Commercial Insurance	<input type="checkbox"/> Surety Bond	<input type="checkbox"/> Trust Fund
<input type="checkbox"/> Risk Retention Group	<input type="checkbox"/> Letter of Credit	<input type="checkbox"/> Other Method Allowed Specify _____

VIII. CERTIFICATION (Read and sign after completing all sections)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner or owner's authorized representative (Print) ALTON L. ENGLEBRETSON Deputy Dir of Engineering Missouri Military Department	Signature <i>Alton L. Englebretson</i>	Date Signed 9-73-95
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EPA estimates public reporting burden for this form to average 30 minutes per response including time for reviewing instructions, gathering and maintaining the data needed and completing and reviewing the form. Send comments regarding this burden estimate to Chief, Information Policy Branch PM-223, U.S. Environmental Protection Agency, 401 M Street, Washington D.C. 20460, marked "Attention Desk Officer for EPA." This form amends the previous notification form as printed in 40 CFR Part 280, Appendix I. Previous editions of this notification form may be used while supplies last.

IX. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location.)

Tank Identification Number: 5-805985 Tank No. 1 Tank No. Tank No. Tank No. Tank No.

1. Status of Tank (mark only one)	Currently in Use:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Temporarily Out of Use: <small>(Refer to Section A.)</small>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Permanently Out of Use: <small>(Refer to Section A.)</small>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Amendment of Information:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Date of Installation (mo./year)	<u>1958</u>				
------------------------------------	-------------	--	--	--	--

3. Estimated Total Capacity (gallons)	<u>1,000</u>				
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4. Material of Construction (Mark all that apply)	Asphalt Coated or Bare Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cathodically Protected Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Epoxy Coated Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Composite (Steel with Fiberglass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Fiberglass Reinforced Plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lined Interior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Double Walled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Polyethylene Tank Jacket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Concrete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excavation Liner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Other, Please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Has tank been repaired?	<u>NO</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Piping (Material) (Mark all that apply)	Bare Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Galvanized Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Fiberglass Reinforced Plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Copper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cathodically Protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Double Walled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Secondary Containment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Other, Please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Piping (Type) (Mark all that apply)	Suction: no valve at tank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Suction: valve at tank	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Gravity Feed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Has piping been repaired?	<u>NO</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tank Identification Number 5-205785 Tank No. 1 Tank No. _____ Tank No. _____ Tank No. _____ Tank No. _____

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

- Gasoline
- Diesel
- Gasohol
- Kerosene
- Heating Oil
- Used Oil
- Other, Please specify

Hazardous Substance
CERCLA name and/or,
CAS number

Mixture of Substances
Please specify

X. TANKS OUT OF USE, OR CHANGE IN SERVICE

1. Closing of Tank

A. Estimated date last used
(mo./day/year)

Jun 78

B. Estimate date tank closed
(mo./day/year)

6-30-78

C. Tank was removed from ground

7-13-95

D. Tank was closed in ground

E. Tank filled with inert material

Describe

F. Change in service

2. Site Assessment Completed

Evidence of a leak detected

--	--	--	--	--	--

Miami/KCRA/4:

COMPANY B (-) 1ST BATTALION 279TH INFANTRY
Oklahoma Army National Guard
830 "D" S.E., Miami, Oklahoma 74354-8346

22 October 1990

MEMORANDUM FOR State of Oklahoma, Military Department. ATTN:
Environmental Officer, 3501 Military Circle,
Oklahoma City, OK 73111-4398

SUBJECT: Status of Fuel-storage Tank

The underground fuel-storage tank at the National Guard Armory located at Miami, OK has been out of service since October 1979. No fuel has been purchased for or pumped from the tank since that date.

FOR THE COMMANDER:

PHILLIP L CLOUSE
SFC. OKARNG
Readiness NCO

Facility Summary for 5805785

Owner Name and Address: OKLAHOMA MILITARY DEPT (OKDE-ENV) **ATTN:** ENVIRONMENTAL OFFICE
 3501 MILITARY CIRCLE Oklahoma City OK 73114 **Owner Phone:** (405) 228-5363

Facility ID	Location Name	Location Street Address	Location City	ZIP	Facility Phone
5805785	CO B (-) 1/279 INF	830 D SE	Miami	74354	

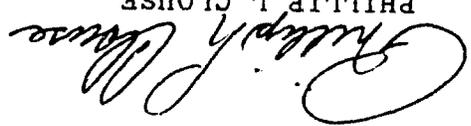
Tank ID / AST Status	Installed Age	Product Capacity	Tank Mat'l of Construction Secondary Option	Piping Material Secondary Option	Piping Type Exempt	Tank Release Detection Piping Release Detection	FR Met Over/Spill/CP
1 No	12/31/194	Gasoline 1,000	Asphalt Coated or Bare Steel None	Galvanized Steel None	Not Listed Yes	(A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K) (L) (M) (N) (O) (P) (Q) (R) (S) (T) (U) (V) (W) (X) (Y) (Z)	No No No

Tank/Piping Release Detection Codes

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

Report Generation Date: 2/24/2009 1:11:05 PM
 noFacility Summary Report

PHILLIP L. CLOUSE
SFC, OKARNG
Readiness NCO



FOR THE COMMANDER:

The underground fuel-storage tank at the National Guard Armory located at Miami, OK has been out of service since October 1979. No fuel has been purchased for or pumped from the tank since that date.

SUBJECT: Status of Fuel-storage Tank

MEMORANDUM FOR State of Oklahoma, Military Department, ATTN: Environmental Officer, 3501 Military Circle, Oklahoma City, OK 73111-4398

22 October 1990

COMPANY B (-) 1ST BATTALION 279TH INFANTRY
Oklahoma Army National Guard
830 D. S.E., Miami, Oklahoma 74354-8346

OCT 3 9 1990

16-31-90 JH

58-05785

Facility Summary for 5806191

Owner Name and Address: BOGLE STATIONS INC BOX 325 Chetopa KS 67336 Owner Phone: (316) 236-7269

Facility ID 5806191	Location Name BOGLE STATIONS INC	Location Street Address 400 D ST SE
	Location City Miami	Zip 74354
		Facility Phone

Tank ID / AST Status	Installed Age	Product Capacity	Tank Mat'l of Construction Secondary Option	Piping Material Secondary Option	Piping Type Exempt	Tank Release Detection Piping Release Detection	FR Mat Over/Spill/CP
1 No Permanently Out of Use	4/22/1974 34	Other 2,000	Asphalt Coated or Bare Steel None	Bare Steel None	Safe Suction No	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I <input type="radio"/> J <input type="radio"/> K <input type="radio"/> L	Yes No No
2 Yes Permanently Out of Use		Gasoline 15,000	Asphalt Coated or Bare Steel None	Bare Steel None	U.S. Suction No	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I <input type="radio"/> J <input type="radio"/> K <input type="radio"/> L	Yes No No
3 Yes Permanently Out of Use		Diesel 15,000	Asphalt Coated or Bare Steel None	Bare Steel None	U.S. Suction No	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I <input type="radio"/> J <input type="radio"/> K <input type="radio"/> L	Yes No No
4 Yes Permanently Out of Use		Gasoline 12,500	Asphalt Coated or Bare Steel None	Bare Steel None	U.S. Suction No	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I <input type="radio"/> J <input type="radio"/> K <input type="radio"/> L	Yes No No
5 No Permanently Out of Use	4/22/1974 34	Gasoline 1,000	Asphalt Coated or Bare Steel None	Bare Steel None	Safe Suction No	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I <input type="radio"/> J <input type="radio"/> K <input type="radio"/> L	Yes No No
6 No Permanently Out of Use	4/22/1974 34	Gasoline 1,000	Asphalt Coated or Bare Steel None	Bare Steel None	Safe Suction No	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I <input type="radio"/> J <input type="radio"/> K <input type="radio"/> L	Yes No No

Tank/Piping Release Detection Codes

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

Boyle Station

580619 Tank Closure Form signed by
David Cobb 7-16-03
Tanks Pulled 2002 & Feb + March 03

1-23-03 - see letter about Backfill - Must
Get Pre-Appraisal
Took Compliance samples
No Backfill

MW 3 .904 PPM Benzene - Highest

Pit 1 SE Compliance Sample 4.4 Benzene
~~to~~ N side 1.7

Pit 2 Composite 3.0 Benzene
Btm 3.6 Benzene

Lab data Composite of Exc. Mth. - TPH/GRO 388

014-2338 - Bagly Station

11-10-03: Soil & Water Sample From MWS
& Geo probes & action levels

Sample SE side of Pit #1 4.42 mg/kg
North side of Pit TPH GRD 2050
MW 3 1.11

Tanks Pulled Jan, Feb + ~~March~~ March 2003
No Notification to Regulatory
No Backfill Samples
Backfill Put Back in Pit
Also had ASTs

City of Miami Million gal water tank 20'
east

~~4-2-03~~

12-6-01 - Dig Soil Borings B-1 - B-7

4-3-03 - 9 SB BP-8-14

5-13-03 - Install MW-1-4

5-29-03 - Sample

1-3-04 Sample

Avg DTGW = ~~10.3~~ 10.3'

No contours on maps

No OWRB

~~Wells~~ Wells are 2" Wells &
are NPIE

4-12-04 Signed as-S on By Glenn Lindsey

Handwritten scribble



*5806191
064-2778*

**ENVIRONMENTAL SITE ASSESSMENT REPORT
FOR THE FORMER BOGLE STATIONS LEASE PROPERTY
LOCATED IN MIAMI, OKLAHOMA**

*Approved
11/21/03
03*

Prepared for

**THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY
4200 DEEN ROAD
FORT WORTH, TEXAS 76106**

Prepared by

**ENVIRONMENTAL MANAGEMENT RESOURCES, INC.
3201 NE LOOP 820, SUITE 180
FORT WORTH, TEXAS 76137**

EMR Project No. 6053

November 4, 2003

3.0 Results of UST Removal Activities and Site Investigation

This section discusses the results of the UST removal activities and comprehensive site assessment activities to determine the degree of impact and assist in evaluating the next course of action.

3.1 Laboratory Results – UST Removal Activities

Eight soil samples from the native soil were collected on the sidewalls and bottom of the UST removal areas for release determination. On February 11, 2003, one composite sample was collected from the excavated material, and one grab sample was collected from each of the bottom of the pit area, the north-side pit bottom, and the southeast-side pit bottom from the former UST 1 area. The soil samples were analyzed for BTEX and TPH. Analytical results of the soil samples indicated levels above laboratory method detection limits with benzene ranging from 0.04 mg/kg to 4.42 mg/kg, toluene ranging from 0.947 mg/kg to 40.9 mg/kg, Ethylbenzene ranging from 0.325 mg/kg to 12.6 mg/kg, and total xylenes ranging from 9.85 mg/kg to 196.2 mg/kg. TPH-GRO was present in the sample collected from the north side pit bottom with a concentration of 2,050 mg/kg.

On March 26, 2003, one composite soil sample was collected from the excavated material, and one grab sample was collected from each of the bottom of the pit area, the south wall and the east wall from the former UST 2 and 3 areas. The soil samples were analyzed for BTEX and TPH. Analytical results of the soil samples indicate levels above laboratory method detection limits with benzene ranging from 0.222 mg/kg to 3.6 mg/kg, toluene ranging from 0.082 mg/kg to 4.08 mg/kg, ethylbenzene ranging from 0.416 mg/kg to 5.48 mg/kg and total xylenes ranging from 2.63 mg/kg to 17.2 mg/kg. TPH-GRO was present in concentrations ranging from 90.3 mg/kg to 461.0 mg/kg. The laboratory analytical results for the soil samples collected from the UST removal areas are summarized in Table 3.1. The UST closure report from Cobbs Engineering and detailed lab report is included in Appendix E.

3.2 Geologic Profile

Sediments encountered during the advancement of each geoprobe point included a mixture of topsoil in the top 1-foot bgs and silty clay to an approximate depth of 4 feet bgs. The soil conditions from 4 feet to 12 feet below grade consist of gray/brown mottled orange clay with some silt. The Boring/Well Log Forms provided in Appendix C and D detail the soil type, soil observations, and PID readings encountered during the advancement of each boring. An impenetrable layer of solid rock was encountered at approximately 13 bgs.

3.3 Laboratory Results - Soil Assessment

A total of 33 soil samples were collected from the installation of sixteen soil borings and four monitoring wells. The samples were submitted for analysis of BTEX, TPH, and Lead. Two soil samples obtained during ground probing activities exhibiting the highest TPH concentrations were also analyzed for polynuclear aromatic hydrocarbons (PAH), along with the two monitoring well soil

Table 3.1
UST Removal
Soil Analytical Summary – February 11, 2003 and March 26, 2003
The Burlington Northern and Santa Fe Railway Company
Former Bogle Stations Lease Property
Miami, Oklahoma

Sample ID	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)	TPH as gasoline (mg/kg)	Unidentified Organics (mg/kg)
Pit Bottom	2/11/03	<0.0026	<0.0026	<0.0049	<0.0079	<1.29	<1.29
SE Side Pit Bottom	2/11/03	4.42	40.9	12.6	189.3	<13.8	3,440.0
N Side Pit Bottom	2/11/03	1.74	14.4	1.58	196.2	2,050.0	<3.05
Composite Sample Excavated Material	2/11/03	0.04	0.947	0.325	9.85	<1.31	296.0
Composite Of Excavated Material	3/26/03	3.01	4.08	3.78	172.0	388.0	NA
Grab Bottom Of Pit	3/26/03	3.6	1.25	5.48	7.57	300.0	NA
Grab S Side of Wall at Bottom	3/26/03	0.222	0.0829	0.416	2.63	90.3	NA
Grab E Side Wall at Bottom	3/26/03	2.10	1.09	3.78	9.15	461.0	NA
BTEX – EPA Method 8021B TPH – Total Petroleum Hydrocarbons – EPA Method 8015B NA – Not Analyzed							

samples exhibiting the highest TPH.

The laboratory analytical results indicate TPH concentrations above the laboratory method detection limit in all of the soil borings except GP-1, GP-6, GP-7, and B-MW-1. The highest TPH concentrations (336 mg/kg GRO and 230 mg/kg GRO) were detected in B-MW-2 and B-MW-3, respectively. Ten of the twenty soil boring locations indicate TPH concentrations greater than 50 mg/kg in either the gasoline or diesel range above the OCC action level for TPH.

Benzene concentrations were above the laboratory method detection limit at seven of the twenty soil boring locations. The highest benzene concentration (1.35 mg/kg) was detected in B-GP-10 at the 10 to 12-foot depth interval. Three soil boring locations (GP-5, B-GP-10, and B-GP-14) indicate benzene concentrations above the OCC action level for benzene (0.50 mg/kg). Toluene, ethylbenzene, and xylene concentrations were below OCC action levels in all soil borings.

The PAH results for the four samples with the highest TPH concentrations indicate below laboratory method detection limits except for B-GP-13 and B-MW-2. 2-methylnaphthalene was detected at these locations at 0.339 mg/kg and 0.349 mg/kg, respectively. These concentrations are below OCC action levels. The highest lead concentration (116 mg/kg) was detected at B-MW-4. This concentration is below the most conservative screening level of 400 mg/kg used by the Oklahoma Department of Environmental Quality.

Soil sample depths and laboratory analytical results are summarized in Table 3.2 and are illustrated on the soil contaminant concentration map included as Figure 4. The detailed laboratory analytical report and chain of custody are included in Appendix F.

3.4 Laboratory Results – Groundwater Assessment

In addition to the previously collected groundwater data from the two geoprobe points (GP-1 and GP-7) completed during the limited site assessment, one groundwater sample was collected from each of the four monitoring wells installed during the additional assessment activities. The groundwater samples were analyzed for BTEX and TPH. PAH analysis was performed on the groundwater sample exhibiting the highest TPH-DRO concentration. One sample from monitoring well B-MW-1 was also analyzed for Total Dissolved Solids. Laboratory analytical results indicate benzene concentrations in groundwater above the OCC action levels in the samples collected from monitoring points GP-1, GP-7, B-MW-1, and B-MW-3. All other BTEX constituents resulted in concentrations below the OCC action levels. Laboratory results indicated TPH-GRO concentrations above MDLs from monitoring points GP-1, GP-7, B-MW-1, B-MW-2, and B-MW-3 ranging from 0.269 mg/l to 10.5 mg/l, however only TPH-GRO concentrations in groundwater collected from monitoring points GP-1, GP-7, and B-MW-3 are above the OCC action level of 2.0 mg/l. TPH-DRO concentrations were above MDLs in groundwater samples submitted from monitoring points B-MW-1 through B-MW-4, ranging from 0.68 mg/l to 4.5 mg/l. Results indicated TPH-DRO concentrations in groundwater above the OCC action levels from monitoring point B-MW-2, B-MW-3, and B-MW-4.

**Table 3.2
Soil Analytical Summary
The Burlington Northern and Santa Fe Railway Company
Former Bogle Stations Lease Property
Miami, Oklahoma**

Sample ID	Sample Date	Sample Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)	TPH as gasoline (mg/kg)	Fuel Oil (mg/kg)	Motor Oil (mg/kg)	TPH as diesel (mg/kg)	LEAD (mg/kg)	PAH (mg/kg)
GP-1	12/5/01	8-10	0.0020	0.0060	0.0053	0.0249	<5.0	95.1	673.0	NA	NA	NA
GP-2	12/5/01	8-11	<0.0010	0.0020	0.0140	0.0030	8.6	<4.0	<4.0	NA	NA	NA
GP-3	12/6/01	4-8	0.0731	0.0030	0.540	0.0080	17.7	38.1	53.6	NA	NA	NA
GP-4	12/6/01	4-8	<0.0010	<0.0010	<0.0010	<0.0020	11.1	99.8	117.0	NA	NA	NA
GP-5	12/6/01	8-11	0.608	0.122	0.161	0.109	60.4	<4.0	<4.0	NA	NA	NA
GP-6	12/6/01	8-11	<0.0010	<0.0010	<0.0010	<0.0020	<5.0	<4.0	<4.0	NA	NA	NA
GP-7	12/6/01	8-11	<0.0010	<0.0010	<0.0010	<0.0020	<5.0	<4.0	<4.0	NA	NA	NA
B-GP-8	4/3/03	6-8	<0.020	<0.020	<0.020	<0.060	13.8	NA	NA	29.0	7.13	NA
		10-12	<0.020	<0.020	<0.020	<0.060	42.9	NA	NA	18.0	4.78	NA
B-GP-9	4/3/03	4-6	<0.020	<0.020	<0.020	<0.060	1.28	NA	NA	<8.3	53.6	NA
		10-12	<0.020	<0.020	<0.020	<0.060	<1.0	NA	NA	<8.3	5.65	NA
B-GP-10	4/3/03	4-6	0.747	<0.020	0.158	0.201	52.8	NA	NA	<8.3	16.1	NA
		10-12	1.350	<0.020	0.145	0.132	55.2	NA	NA	<8.3	11.1	NA
B-GP-11	4/3/03	6-8	0.278	0.104	0.150	1.280	200.0	NA	NA	220.0	8.10	See Note 1
		10-12	<0.020	0.126	0.301	0.807	28.8	NA	NA	11.0	6.93	NA
B-GP-12	4/3/03	6-8	<0.020	<0.020	<0.020	<0.060	1.64	NA	NA	100.0	6.21	NA
		10-12	<0.020	<0.020	<0.020	<0.060	1.41	NA	NA	68.0	10.9	NA
B-GP-13	4/3/03	4-6	<0.020	<0.020	0.243	0.906	100.0	NA	NA	170.0	17.7	See Note 2
		10-12	<0.020	<0.020	0.0351	0.290	100.0	NA	NA	120.0	6.18	NA
B-GP-14	4/3/03	4-6	0.758	<0.020	2.410	0.684	200.0	NA	NA	130.0	14.6	NA
		8-10	0.127	0.187	0.374	0.853	89.0	NA	NA	170.0	9.62	NA
B-GP-15	4/3/03	8-10	<0.020	<0.020	<0.020	0.0674	5.620	NA	NA	18.0	9.29	NA
		10-12	<0.020	0.0469	<0.020	<0.060	2.0	NA	NA	16.0	8.17	NA
B-GP-16	4/3/03	4-6	<0.020	0.0544	0.0877	0.164	25.9	NA	NA	67.0	16.5	NA
		10-12	<0.020	<0.020	<0.020	<0.060	8.85	NA	NA	<8.3	7.63	NA

BTEX - EPA Method 8021
 TPH - Total Petroleum Hydrocarbons - EPA Method 8015B
 LEAD - EPA Method 6010
 PAH - Polynuclear Aromatic Hydrocarbons - EPA Method 8270
 NA - Not Analyzed
 Note 1: All constituents for PAH below Method Detection Limits
 Note 2: 2-Methylnaphthalene (0.339 mg/kg), all other constituents for PAH below Method Detection Limits

Table 3.2 (continued)
Soil Analytical Summary
The Burlington Northern and Santa Fe Railway Company
Former Bogle Stations Lease Property
Miami, Oklahoma

Sample ID	Sample Date	Sample Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)	TPH as gasoline (mg/kg)	Fuel Oil (mg/kg)	Motor Oil (mg/kg)	TPH as diesel (mg/kg)	LEAD (mg/kg)	PAH (mg/kg)
B-MW - 1	5/13/03	5-8	<0.020	<0.020	<0.020	<0.060	<1.0	NA	NA	<8.3	11.4	NA
		11.5-13	<0.020	<0.020	<0.020	<0.060	<1.0	NA	NA	<8.3	7.62	NA
B-MW - 2	5/13/03	2.5-5	<0.020	0.109	0.294	1.820	336.0	NA	NA	99.0	42.5	See Note 3
		7.5-10	<0.020	0.0526	0.185	1.070	117.0	NA	NA	35.0	38.5	NA
B-MW - 3	5/13/03	5-7.5	0.299	0.583	1.780	2.840	230.0	NA	NA	21.0	54.7	NA
		10-12.5	0.0359	<0.020	0.119	0.183	30.1	NA	NA	<8.3	6.53	NA
B-MW - 4	5/13/03	5-7.5	<0.020	0.0377	0.0222	0.140	2.65	NA	NA	60.0	116.0	See Note 4
		10-11.1	<0.020	<0.020	0.0245	<0.060	3.64	NA	NA	20.0	13.4	NA

BTEX - EPA Method 8021
 TPH - Total Petroleum Hydrocarbons - EPA Method 8015B
 LEAD - EPA Method 6010
 PAH - Polynuclear Aromatic Hydrocarbons - EPA Method 8270
 NA - Not Analyzed
 Note 3: 2-Methylnaphthalene (0.349 mg/kg), all other constituents for PAH below Method Detection Limits
 Note 4: All constituents for PAH below Method Detection Limits

IMAGED 3/5/2008

The sample from monitoring well B-MW-2 indicated detectable concentrations of 1-Methylnaphthalene (0.0105 mg/l), with all other PAH constituents below laboratory method detection limits. Groundwater samples analyzed from monitoring wells B-MW-1, B-MW-3, and B-MW-4 resulted in concentrations above the EPA Region 6 Guidance Screening Levels used by the ODEQ for lead at 0.182 mg/l, 0.0189 mg/l, and 0.203 mg/l, respectively. The screening level used by the ODEQ is 0.015 mg/l.

The laboratory analytical results for the groundwater samples are summarized in Table 3.3 and illustrated on the Groundwater Contaminant Concentration Map included as Figure 5. The detailed laboratory analytical report and chain of custody are included in Appendix G.

Table 3.3
Groundwater Analytical Summary
The Burlington Northern and Santa Fe Railway Company
Former Bogle Stations Lease Property
Miami, Oklahoma

Sample ID	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	TPH as gasoline (mg/L)	Fuel Oil (mg/L)	Motor Oil (mg/L)	TPH as diesel (mg/L)	LEAD (mg/L)	PAH (mg/L)	Total Dissolved Solids (mg/L)
GP - 1	12/05/01	0.560	0.970	0.260	1.810	10.5	6.71	23.3	NA	NA	NA	NA
GP - 7	12/06/01	0.0105	0.0019	0.0868	0.0639	5.8	22.9	<2.04	NA	NA	NA	NA
B-MW - 1	5/29/03	0.0059	<0.001	<0.001	<0.003	0.815	NA	NA	0.68	0.182	NA	NA
B-MW - 2	5/29/03	<0.001	<0.001	<0.001	<0.003	0.269	NA	NA	4.5	0.015	See Note 1	NA
B-MW - 3	5/29/03	0.904	<0.025	0.111	<0.075	4.55	NA	NA	2.5	0.0189	NA	NA
B-MW - 4	5/29/03	<0.001	<0.001	<0.001	<0.003	<0.050	NA	NA	2.2	0.203	NA	672.0

BTEX - EPA Method 8021
 TPH - Total Petroleum Hydrocarbons - EPA Method 8015B
 LEAD - EPA Method 6010
 PAH - Polynuclear Aromatic Hydrocarbons - EPA Method 8270
 TDS - Total Dissolved Solids - EPA Method 160.1
 NA = Not Analyzed
 Note 1: 1-Methylnaphthalene, Water (0.0105 mg/l), all other constituents for PAH below Method Detection Limits

4.0 Conclusions

This section provides conclusions based on the site assessment activities and laboratory analytical results discussed in previous sections.

The laboratory analytical results indicate TPH concentrations in soil samples collected from soil borings GP-5, B-GP-10, B-GP-11, B-GP-12, B-GP-13, B-GP-14, B-GP-16, B-MW-2, B-MW-3 and B-MW-4 above the Oklahoma Corporation Commission (OCC) action levels of 50 mg/kg. The highest TPH concentration in soil (336 mg/kg) was detected in the gasoline range in B-MW-2 at the 2.5-5-foot depth interval. The highest diesel range concentration (220 mg/kg) was identified in B-GP-11 at the 6-8-foot depth interval.

The laboratory analytical results from soil samples collected from GP-5, B-GP-10, and B-GP-14 indicates benzene concentrations above the OCC action level. The benzene concentrations in soil samples collected from GP-5 at the 8'-11' depth interval is 0.608 mg/kg, from B-GP-14 at the 4'-6' interval is 0.758 mg/kg and B-GP-10 at the 4'-6' and 10'-12' depth intervals is 0.747 mg/kg and 1.35 mg/kg, respectively. The OCC action level for benzene is 0.5 mg/kg. Soil samples collected from the remaining soil borings and monitoring wells indicate BTEX concentrations below OCC action levels.

Analytical results of the soil samples collected from the UST removal area No. 1 indicate levels above laboratory method detection limits with benzene ranging from 0.222 mg/kg to 3.6 mg/kg, toluene ranging from 0.082 mg/kg to 4.08 mg/kg, ethylbenzene ranging from 0.416 mg/kg to 5.48 mg/kg and total xylenes ranging from 2.63 mg/kg to 17.2 mg/kg. Analytical results of the soil samples collected from UST removal areas No. 1 and No. 3 indicate levels above laboratory method detection limits with benzene ranging from 0.04 mg/kg to 4.42 mg/kg, toluene ranging from 0.947 mg/kg to 40.9 mg/kg, ethylbenzene ranging from 0.325 mg/kg to 12.6 mg/kg, and total xylenes ranging from 9.85 mg/kg to 196.2 mg/kg. The OCC action levels for BTEX in native soil are 0.5 mg/kg, 40.0 mg/kg, 15.0 mg/kg, 200.0 mg/kg, respectively.

Laboratory analytical results also indicate TPH concentrations above OCC action levels in soil samples collected from UST removal areas No. 1, No. 2 and No. 3. TPH-GRO was present in the sample collected from UST1 north side pit bottom with a concentration of 2,050 mg/kg. TPH-GRO was present in concentrations ranging from 90.3 mg/kg to 461.0 mg/kg at UST removal areas No. 1 and No.3. The OCC action level for TPH in native soil is 50.0 mg/kg.

The PAH results for soil samples collected from four boring locations indicated concentrations below method detection limit for each PAH constituent with the exception of 2-Methylnaphthalene which resulted in concentrations of 0.339 mg/kg and 0.349 mg/kg in samples collected from B-GP-13 and B-MW-2.

The data collected during the groundwater assessment indicate the TPH concentrations of groundwater samples collected from GP-1, GP-7, B-MW-2, B-MW-3, and B-MW-4 were above the OCC action levels of 2 mg/l. The TPH concentration from GP-1 was 10.5 mg/l, from GP-7 was 5.8

mg/l, from B-MW-2 was 4.5 mg/l, from B-MW-3 was 2.5 mg/l, and from B-MW-4 was 2.2 mg/l. The laboratory analytical results from groundwater samples collected at sampling points GP-1, GP-7, B-MW-1, and B-MW-3 were above the OCC benzene action level (0.005 mg/l). Benzene concentrations were 0.560 mg/l, 0.0105 mg/l, 0.0059 mg/l, and 0.904 mg/l, respectively. Groundwater samples collected from the remaining monitoring wells indicate BTEX concentrations below OCC action levels. The action levels for BTEX in groundwater are 0.005 mg/l, 1.0 mg/l, 0.7 mg/l, 10.0 mg/l, respectively.

PAH analysis was performed on a groundwater sample collected from monitor well B-MW-2. The PAH analysis indicated concentrations of 1-Methylnaphthalene (0.0105 mg/l) with all other constituents below method detection limits.

Groundwater elevations were measured during site assessment activities. The groundwater gradient indicates a northwesterly flow at 0.3031 ft/ft. The groundwater measurements are summarized in Table 4.1. A groundwater gradient map is provided as Figure 6.

Seven drinking water wells have been identified in and around the City of Miami, Oklahoma. Each well is approximately 1,200 feet in total depth in the Roubidoux Aquifer. A map illustrating the location of drinking water wells was obtained from the City of Miami. The City drinking water well map is provided as Figure 7.

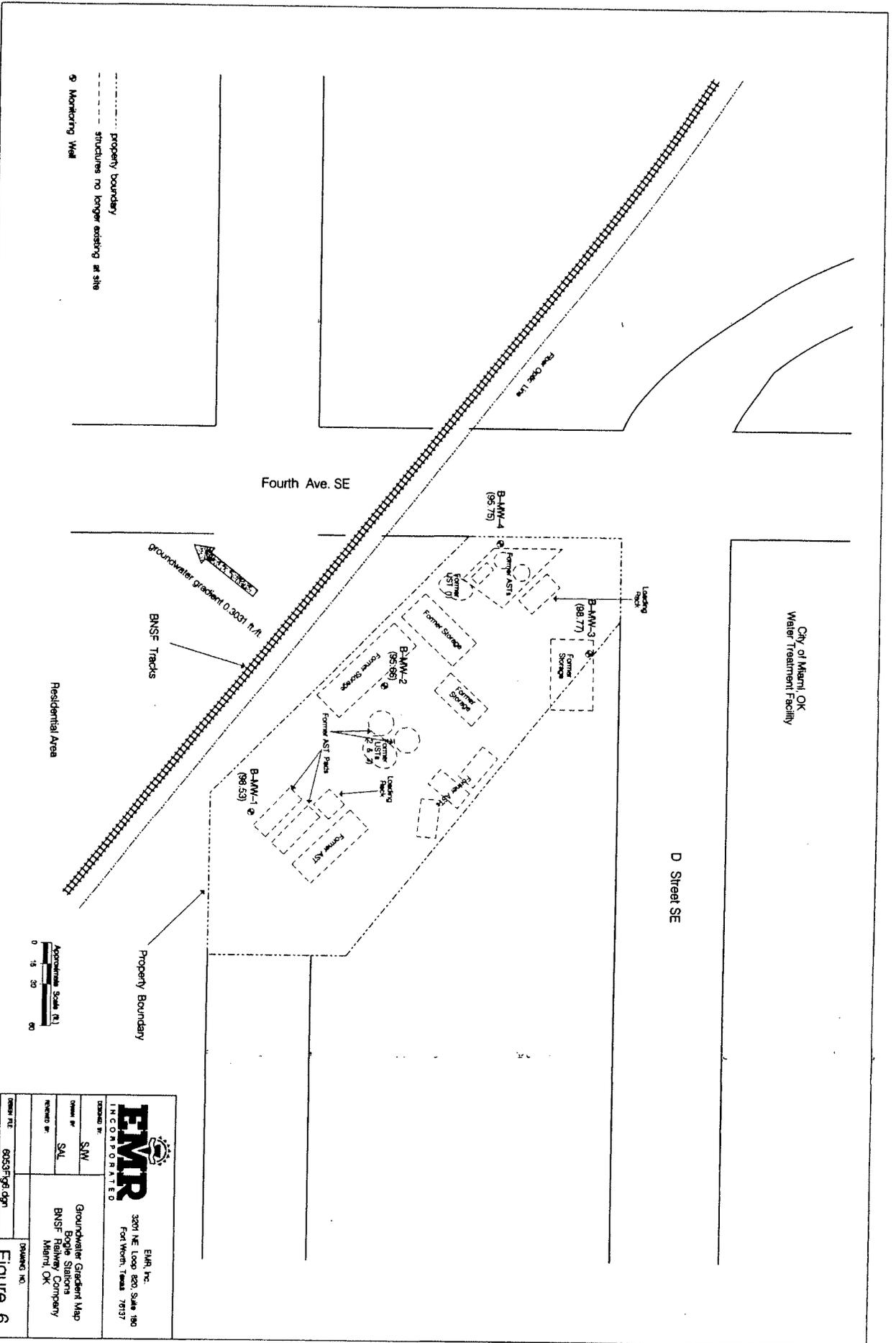
Based on laboratory analytical results and field screening of soil and groundwater samples, petroleum hydrocarbon impact has been identified during the investigation. The extent of petroleum hydrocarbon impacted soil has been identified horizontally across the site and vertically at depths ranging from 2 to 12-feet bgs. Groundwater impacts have been identified in five of the six groundwater sampling locations across the site.

As a result of the former fueling activities operated by former lessees, petroleum hydrocarbon impact is present in the soil and groundwater.

An impermeable confining clay layer at approximately 12-feet bgs lays over a solid rock layer exists at a depth of approximately 13 feet bgs. It is likely the vertical migration of petroleum contamination terminates at these layers. Additionally, groundwater gradient measurements indicate groundwater flow to the northwest, away from City drinking water wells. It should also be noted, City drinking water wells are sealed to a depth of almost 500-feet bgs and the water sampled at the Bogle site is from a perched water layer that is not connected to the City drinking water source.

Table 4.1
Groundwater Elevation Summary
The Burlington Northern and Santa Fe Railway Company
Former Bogle Stations Lease Property
Miami, Oklahoma

Well ID	Date	TOC Elevation (ft)	Depth To Groundwater (ft)	Groundwater Elevation (ft)	Depth To Product (ft)	Product Thickness (ft)
B-MW - 1	5/29/03	100.17	1.64	98.53	NA	NA
B-MW - 2	5/29/03	100.91	5.25	95.66	NA	NA
B-MW - 3	5/29/03	101.1	2.33	98.77	NA	NA
B-MW - 4	5/29/03	101.94	6.19	95.75	NA	NA
TOC - Top of Casing						



EMR INCORPORATED
 3201 NE Loop 800, Suite 180
 Fort Worth, Texas 76137

ENR, Inc.
 3201 NE Loop 800, Suite 180
 Fort Worth, Texas 76137

Groundwater Gradient Map
 BNSF Railway Company
 Miami, OK

Figure No. **Figure 6**

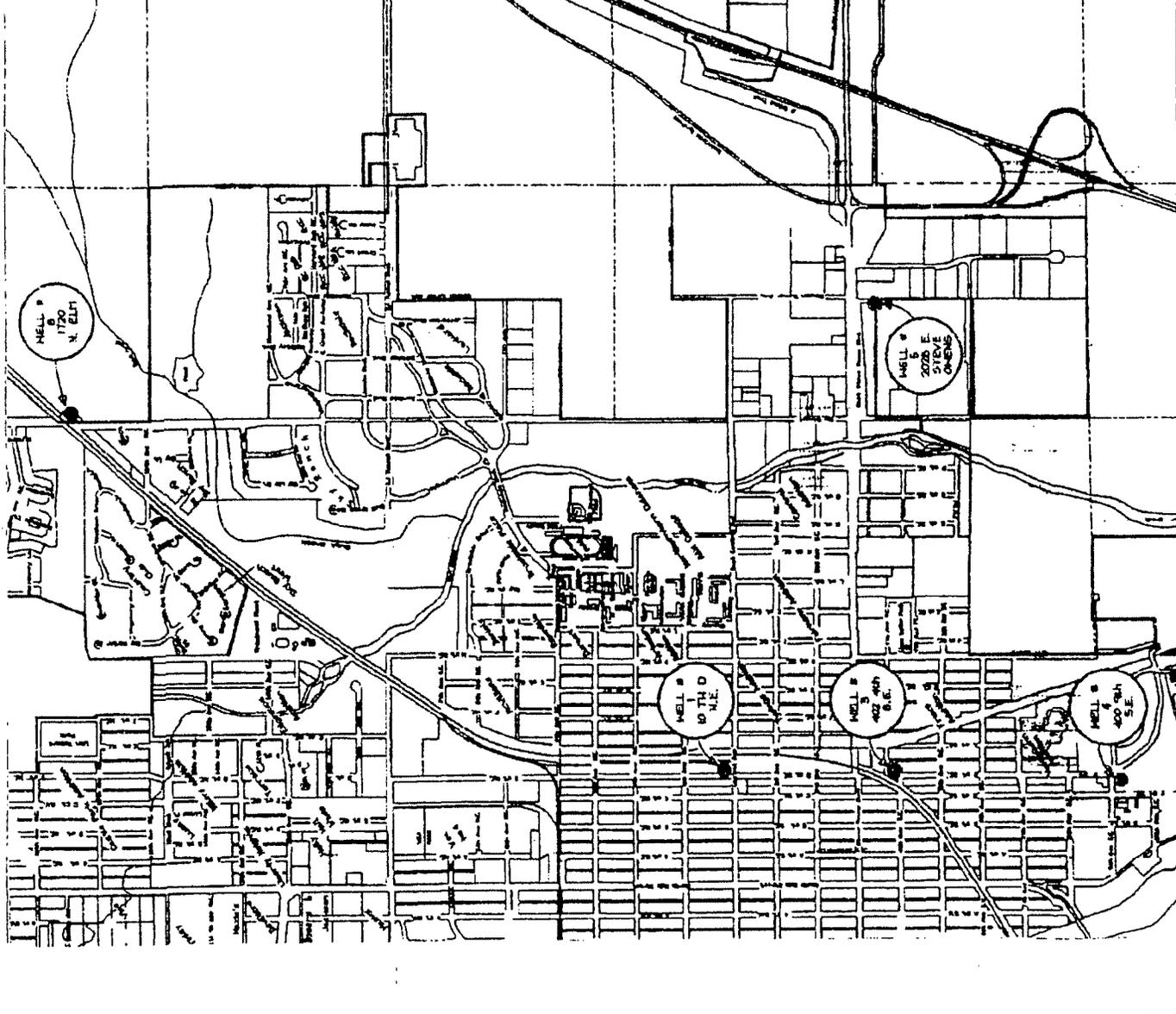
THE CITY OF

 MIAMI
 OKLAHOMA

LEGEND:
 WELL SYMBOL

WELL LOCATIONS

SCALE
 0 1000 2000

EMR
 INCORPORATED

EMR, Inc.
 3001 NE Loop 820, Suite 160
 Fort Worth, Texas 76137

DESIGNED BY:
 CHECKED BY: SAJ
 REVIEWED BY: SJA

Drafting Water Well Location Map
 BNSF Stations
 BNSF Railway Company
 Miami, OK

DRAWING NO.
Figure 7

DRAWING FILE: 6053167.dwg
 PLOT DATE: 9/1/03

Facility Summary for 5810793

Owner Name and Address: CITY OF MIAMI UTILITY DEPT PO BOX 1288 Miami OK 74355 Owner Phone: (918) 542-6685

Facility ID	Location Name	Location Street Address	Location City	Zip	Facility Phone
5810793	SOUTH SEWAGE TREATMENT PLANT	10TH & H STREET SE	Miami	74355	(918) 541-2226

Tank ID / AST	Installed Age	Product Capacity	Tank Mat'l of Construction Secondary Option	Piping Material Secondary Option	Piping Type Exempt	Tank Release Detection Piping Release Detection	FR Met	Over/Spill/CP
1	No	4/30/1984	Diesel	Asphalt Coated or Bare Steel	Galvanized Steel	Not Listed	Yes	No
	Permanently Out of Use	24	350	None	None	Yes	No	No

Tank/Piping Release Detection Codes

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

Report Generation Date: 2/24/2009 2:12:18 PM
not Facility Summary Report

Facility Summary for 5813451

Owner Name and Address: **RON SIMPSON** 123 GRANDVIEW Columbus KS 66725 Owner Phone: (316) 429-2962

Facility ID	Location Name	Location Street Address	Location City	Zip	Facility Phone
5813451	RIVERVIEW AUTO SALES	624 S MAIN	Miami	74354	

Tank ID / AST Status	Installed Age	Product Capacity	Tank Mat'l of Construction Secondary Option	Piping Material Secondary Option	Piping Type Exempt	Tank Release Detection Piping Release Detection	FR Met Over/Spill/CP
1	No Permanently Out of Use	Gasoline 8,000	Epoxy Coated Steel None	Galvanized Steel None	Not Listed No	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I <input type="radio"/> J <input type="radio"/> K <input type="radio"/> L	No No No
2	No Permanently Out of Use	Gasoline 8,000	Epoxy Coated Steel None	Galvanized Steel None	Not Listed No	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> I <input type="radio"/> J <input type="radio"/> K <input type="radio"/> L	No No No

Tank/Piping Release Detection Codes

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

BNSF



K. JACK CLAY
Manager Environmental - Leases

The Burlington Northern
and Santa Fe Railway Company

920 SE Quincy, P. O. Box 1738
Topeka, KS 66601-1738
Phone (785) 435-2386
Fax (785) 435-2202
E-mail Jack.Clay@BNSF.com

November 1, 2002
11050494

Oklahoma Corporation Commission
Attn: Petroleum Storage Tank Division
P.O. Box 52000
Oklahoma City, Oklahoma 73152

RE: Shinn Oil Company (formerly Ingram Oil Company)
Miami, Oklahoma

Storage Tank Section:

Please find enclosed a copy of the Limited Phase II Site Assessment report for the referenced site.

Six soil samples and two groundwater samples were collected from a total of six onsite geoprobings. Analytical results indicate petroleum hydrocarbon contamination.

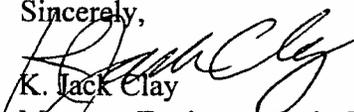
The property initially leased by Ingram Oil Company from Burlington Northern Santa Fe Railway (BNSF) for use as a bulk oil facility. The lease was then assigned to Shinn Oil Company. Current improvements include two abandoned buildings, several abandoned aboveground storage tanks (ASTs), and former AST concrete foundations.

BNSF would look to Schinn Oil as the responsible party of the bulk oil facility located on this property and the associated environmental impacts. Contact information is Mr. Phillip D. Shinn, Shinn Oil Company, P.O. Box 8, Miami, Oklahoma 74355.

Please review the enclosed report and provide a site status and a determination of further action.

Should you have any questions, or require additional information, please contact Lance Overmyer at (785) 435-2256.

Sincerely,


K. Jack Clay
Manager Environmental - Leases
785-435-2386

Enclosure

Cc: Mary Weaver, Staubach - Fort Worth

2002 NOV -11 PM 1:29
RECEIVED
PETROLEUM STORAGE
TANK DIVISION



ENVIRONMENTAL MANAGEMENT RESOURCES

11050494

PRIVILEGED & CONFIDENTIAL

DRAFT

January 16, 2002

Burlington Northern Santa Fe Railway Co.
920 S.E. Quincy
Topeka, Kansas 66612-1116

RE: Limited Phase II Assessment Report - Leased Property No.: 250,279
Shinn Oil Company, Miami, Ottawa County, Oklahoma
EMR Project # 5569.001-1

Environmental Management Resources, Inc. (EMR) has completed a Limited Phase II Assessment for the above referenced property. This letter is submitted to present our findings and should be viewed as a summary of the Lease Property Checklist, included as an attachment.

Background and Setting

The Shinn Oil Company parcel contains approximately 34,000 square feet (400 feet by 85 feet). The parcel was originally leased to Ingram Oil Company on January 15, 1975 as bulk fuel and oil distributing facility. Known improvements include: one warehouse/storage building, one office/storage building, one pump house, and storage tanks. The lease was then transferred to Shinn Oil Company on July 1, 1987 for use as a bulk fuel and oil distributing station.

Findings

EMR inspected the site on December 12, 2001. At the time of the site visit, the parcel was abandoned. Three above ground storage tanks (ASTs), concrete pads for two former loading racks, AST cradles and footings, two storage buildings and two concrete building foundations were located on the parcel. A photographic log of the inspection is included as an attachment.

Evaluation of shallow subsurface soils was conducted utilizing direct push probe techniques. Six borings were drilled on the parcel. Depth of the borings ranged from 12 feet to 16 feet below ground surface (bgs). Samples were collected continuously during advancement of the probe. The soil samples were screened in the field utilizing a photoionization detector (PID). Soil samples corresponding to the highest screening results were packaged and submitted to a laboratory for analysis. One subsurface soil sample was collected from each soil boring.

Two groundwater samples were collected from borings GP-1 and GP-4. The groundwater samples were collected from a depth of 15 feet and 16 feet, respectively, and were submitted for laboratory analysis.

Analytical results of the soil samples indicate elevated levels of BTEX (Benzene, Toluene, Ethylbenzene, Xylenes), TPH as Gasoline, Diesel Fuel, Fuel Oil and Motor Oil. Benzene was present in concentrations ranging up to 2.50 parts per million (ppm), Toluene concentrations ranged up to 3.40 ppm, Ethylbenzene concentrations ranged up to 11.2 ppm, Total Xylene concentrations ranged up to 50.6 ppm, TPH as Gasoline was present in concentrations of 1,220 ppm, Diesel Fuel concentrations ranged up

to 131 ppm, Fuel Oil was present in concentrations ranging up to 256 ppm and Motor Oil concentrations ranged up to 88.2 ppm. Analytical results are summarized in the table below.

Analytical results of the groundwater samples indicate elevated levels of Benzene from 38.4 to 15,000 parts per billion (ppb), Toluene from 5.3 to 3,540 ppb, Ethylbenzene from 13.4 to 3,390 ppb, Xylenes from 18.9 to 13,600 ppb, TPH as gasoline from 1,200 to 219,000 ppb, Fuel Oil from 470 to 494,000 ppb and Motor Oil at 1,400 ppb. Analytical results are summarized in the table below. Analytical data sheets for soil and groundwater are provided as an attachment.

Summary of Soil Analytical Results									
Sample Number	Sample Depth	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH as Gasoline	Diesel Fuel	Fuel Oil	Motor Oil
GP-1	4'-8'	0.0130	ND	0.110	0.170	163	ND	7.7	ND
GP-2	4'-8'	ND	ND	ND	ND	52.6	ND	14.1	7.6
GP-3	4'-8'	0.190	0.230	0.680	1.16	133	ND	256	88.2
GP-4	15'-16'	2.50	3.40	11.2	50.6	1,220	131	ND	ND
GP-5	8'-12'	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	8'-12'	ND	ND	ND	ND	ND	ND	ND	ND

Note: All concentrations reported in mg/kg or parts per million (ppm).

Summary of Groundwater Analytical Results							
Sample Number	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH as Gasoline	Fuel Oil	Motor Oil
GP-1	38.4	5.3	13.4	18.9	1,200	470	1,400
GP-4	15,000	3,540	3,390	13,600	219,000	494,000	ND

Note: All Concentrations reported in µg/l or parts per billion (ppb).

Site Summary

At the time of the site visit the parcel was abandoned. Three above ground storage tanks (ASTs), concrete pads for two former loading racks, AST cradles and footings, two storage buildings and two concrete building foundations remained on site. Six soil samples and two groundwater samples were collected from six borings on the parcel.

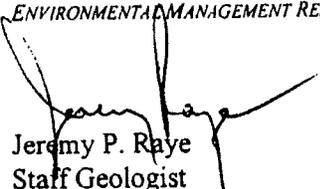
Analytical results indicate elevated levels of BTEX, TPH as Gasoline, Diesel Fuel, Fuel Oil and Motor Oil.

Study limitations

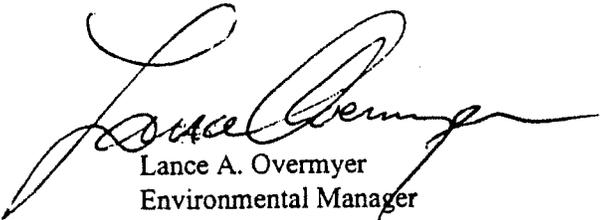
This assessment was completed following generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area. The findings and conclusions stated herein must be considered not as scientific certainties, but as professional opinions concerning the significance of the limited data gathered during the assessment. No other warranty, expressed or implied, is made. EMR does not and cannot represent that the site contains no hazardous waste or material, petroleum products, or other latent condition beyond that noted by EMR during the period of the site assessment.

EMR appreciates the opportunity to assist you in this matter. Should you have any questions, or require further assistance, please contact EMR at (785) 842-9013.

Sincerely,
ENVIRONMENTAL MANAGEMENT RESOURCES, INC.



Jeremy P. Raye
Staff Geologist



Lance A. Overmyer
Environmental Manager

Attachments
cc: file5569.001-1

LEASE PROPERTY CHECKLIST

I. BACKGROUND

Inspected by: Jeremy Raye Inspection Date: 12/12/01

Lessee Name: Shinn Oil Company Lease Number: 250,279

Site Address: _____

City/State/Zip: Miami, Oklahoma County: Ottawa

Site Operator: _____ Phone: _____

Site Contact: _____ Phone: _____

BNSF Manager Environmental Leases: _____ Phone: _____

Regional Property Manager: _____ Phone: _____

BNSF Manager Environmental Remediation: _____ Phone: _____

Legal Description/Location:

T _____ R _____ 1/4 of the _____ 1/4 of Section: _____

GPS Location:

N 36 ° 52 ' 20.4 " W 94 ° 52 ' 23.1 "

Site Dimensions: 400 feet by 85 feet

Site Accesses: Open

Present Site Setting: Urban

1) Present Site Use:

- | | | |
|---------------------------------------|--------------------------------------|--|
| <input type="checkbox"/> Agricultural | <input type="checkbox"/> Commercial | <input type="checkbox"/> Undeveloped |
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Residential | <input checked="" type="checkbox"/> Other (describe) |

Abandoned

2) Former Site Use:

- | | | |
|---------------------------------------|--|---|
| <input type="checkbox"/> Agricultural | <input checked="" type="checkbox"/> Commercial | <input type="checkbox"/> Undeveloped |
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Residential | <input type="checkbox"/> Other (describe) |

Specific former use and comment: Bulk oil storage facility

Former Occupants: Shinn Oil

3) Potentially Significant Land Usage Adjacent to the Site:

North: Vacant

East: BNSF Right-Of-Way

South: Second Avenue SE / Claibourne Oil

West: D Street SE / Residential

Comments: _____

II. SITE AND SURROUNDING AREA PHYSICAL DESCRIPTION

- 1) Regional Topography: Flat Hilly Mountainous
- 2) Site Topography: Flat Moderate Slope Bowl-shaped
 Gentle Slope Steep Slope
- Slope Direction: N NE E SE S SW W NW

3) Land Use Percentages:

	Percent	Describe location:
Buildings	<u>5%</u>	<u>Northern and Southern areas of parcel</u>
Concrete/asphalt	<u>5%</u>	<u>Near center of parcel</u>
Bare ground	<u>90%</u>	_____
Other	_____	_____

4) Utilities (Show location of all utilities on site map)

- Electrical Yes No
- Natural gas Yes No
- Potable water: Municipal Supply Rural Supply Site Well(s) None
- Sewer System: Municipal Supply On-site septic system None

If septic system, describe and locate on site map: _____

5) Transformers

- Are electrical transformers present on the leased parcel? Yes No
- If yes, where are they located? Pole mounted Pad mounted
- Evidence of environmental impacts around transformers? Yes No
- Are the transformers labeled as "Non PCB containing"? Yes No Unknown

6) Fill Materials (LPA only)

Type: _____

Amount: _____

Source: _____

7) **Waste/Spill Evidence**

Stressed vegetation	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Descr.	_____
Soil/surface staining	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Descr.	<u>Near former loading racks</u>
Odors	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Descr.	_____
Leachate seeps	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Descr.	_____
Construction/demolition debris	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Descr.	<u>AST Cradles near ASTs</u>
Surface water discoloration, sheens or odors	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Descr.	_____
Disposal areas (mounds/depressions)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Descr.	_____

If yes, describe: _____

8) **External Housekeeping**

Excellent Good Fair Poor

Comments: Construction debris throughout, ASTs empty and sitting on the ground, down electrical lines

III. **SURFACE WATER/GROUNDWATER CHARACTERISTICS**

1) **Nearest Surface Water Bodies**

Lake River Stream Wetlands Saltwater Bay

Distance from parcel (feet): 1/2 mile

2) **Effluent Discharges:**

Does the site accumulate surface water (ponding) Yes No

Runoff Direction? N NE E SE S SW W NW

If water is ponded on site, does it display any unusual odors or sheen? Yes No

If yes, describe: _____

Does the parcel contain any of the following:

Stormwater Retention System?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Lagoons, impoundment's?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Oil/Water Separator?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Sumps?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Dry wells?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Catch basins?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Roof drains?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Floor drains?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Compressor blowdown areas?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown

If Yes, describe: _____

2) Above Ground Storage Tanks (Show all areas and features on site map)

Are there any above ground storage tanks on the parcel? Yes No

Inventory any on-site ASTs:

Tank I.D.	Type	Capacity	Contents	Date/Age	Spill Prevention (describe)	Registered? Y/N
1	Riveted	15,000 gal.	Unknown	Unknown	Conc. Cont. Wall	Unknown
2	Riveted	15,000 gal.	Unknown	Unknown	Conc. Cont. Wall	Unknown
3	Welded	8,000 gal.	Unknown	Unknown	None	Unknown

Evidence of spill or leakage: Yes No

If yes, describe: Staining near loading rack

3) Piping/Dispensing Systems: Yes No

Describe: Disassembled

4) Secondary Containment Structure: Yes No

Does the secondary containment structure have an impervious bottom? Yes No

Describe the containment area construction (earthen berm, concrete containment wall, etc.): Partial
concrete containment wall around AST 1 and AST 2.

V. BUILDINGS

1) Buildings/Structures: Yes No If yes, how many? 2

Describe Buildings/Structures

Construction Type	Approximate Dimensions/Square feet	Age	Usage
Wood	40' x 20'	Unknown	Storage
Wood	40' x 20'	Unknown	Storage

VIII. PRODUCTS/WASTE STORAGE AND HANDLING

1) Does the facility store bulk chemicals, petroleum products or hazardous substances other than previously identified?

Yes No

If yes, check all applicable products listed below:

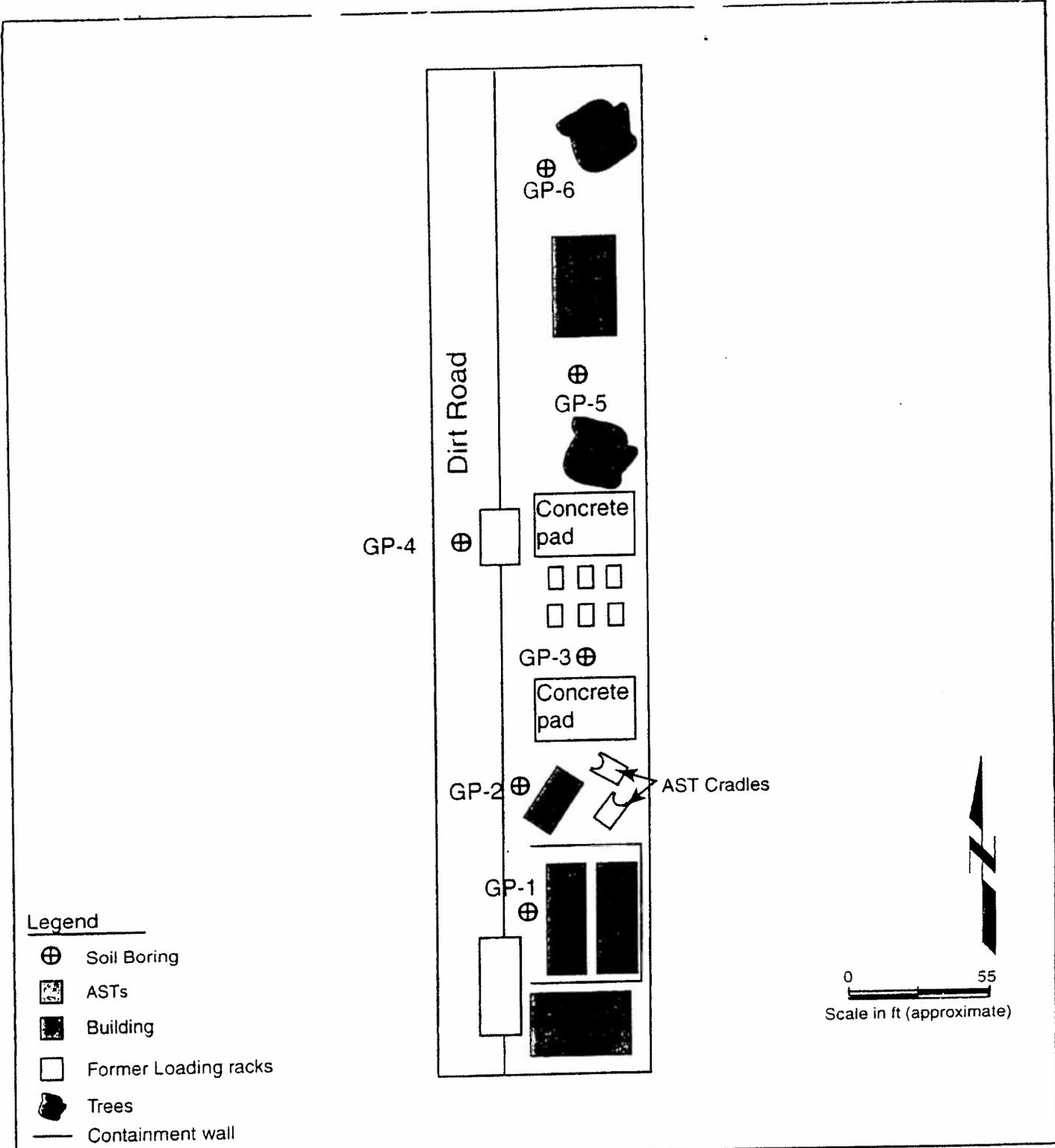
Product	Container	Volume (gallons)	Product	Container	Volume (gallons)
<input type="checkbox"/> Solvents	_____	_____	<input type="checkbox"/> Gasoline	_____	_____
<input type="checkbox"/> Degreasers	_____	_____	<input type="checkbox"/> Fuel Oil/Diesel	_____	_____
<input type="checkbox"/> Acids/Bases	_____	_____	<input type="checkbox"/> Lubricant/Motor Oil	_____	_____
<input type="checkbox"/> Paints/Thinners	_____	_____	<input type="checkbox"/> Organic Chemicals	_____	_____
<input type="checkbox"/> Adhesives/Glues	_____	_____	<input type="checkbox"/> Inorganic Chemical	_____	_____
<input type="checkbox"/> Hydraulic Fluid	_____	_____	<input type="checkbox"/> Perfumes	_____	_____
<input type="checkbox"/> Pesticides	_____	_____	<input type="checkbox"/> Plastics	_____	_____
<input type="checkbox"/> Herbicides	_____	_____	<input type="checkbox"/> Wood Preservatives	_____	_____
<input type="checkbox"/> Rodenticides	_____	_____	<input type="checkbox"/> PCBs	_____	_____
<input type="checkbox"/> Fertilizers	_____	_____	<input type="checkbox"/> Unlabeled	_____	_____
<input type="checkbox"/> Other _____					

IX. ADDITIONAL OBSERVATIONS/COMMENTS REGARDING INSPECTION:

At the time of the site visit the parcel was abandoned. There are two buildings, three ASTs, two former loading racks, and concrete foundations and AST footings.

DRAW A SITE MAP

Include the parcel boundaries, remaining improvements, areas of concern, and sampling locations along with dimensions and distances. Mark each photo location and indicate direction of view. Don't forget the railway and a north arrow.



Legend

- ⊕ Soil Boring
- ▨ ASTs
- Building
- Former Loading racks
- Trees
- Containment wall

0 55
Scale in ft (approximate)

Figure No.
1

Shinn Oil Company
Miami, OK
Lease Property No.: 250,279

Site Map

DRAWN BY: jpr DATE: 12/18/01
 CHECKED BY: lao REVISION NO.: 1
 PROJECT NO.: 5569.001-1 REFERENCE: _____





Photo 1: View south through parcel from near the northern boundary.

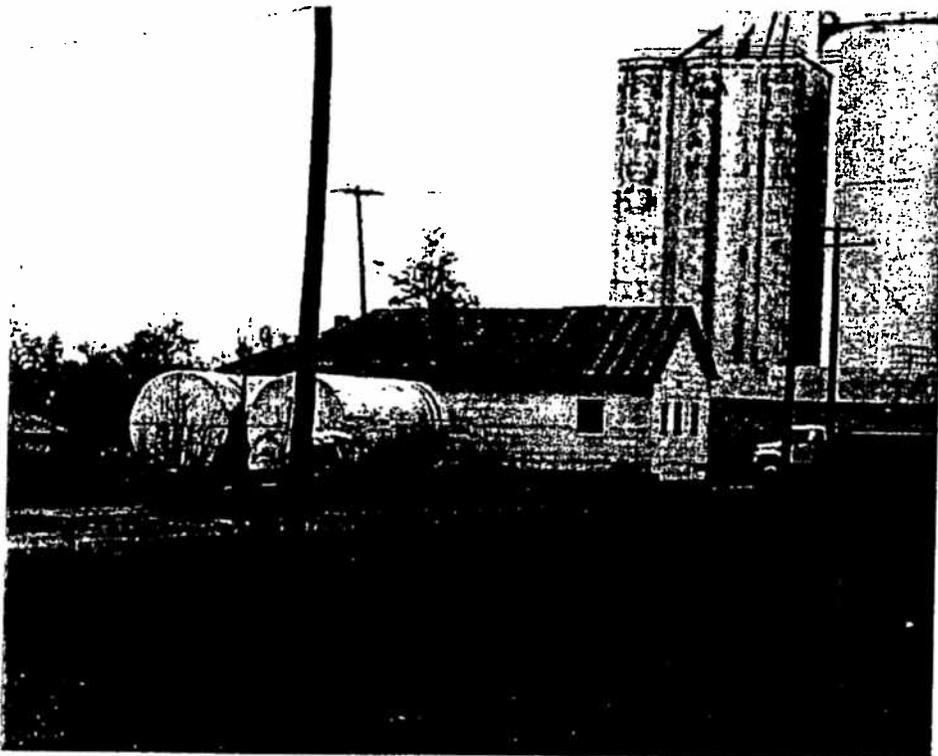


Photo 2: View south of the ASTs and southern building from the parcel to the west.



H5815176
D104-277

**ENVIRONMENTAL SITE ASSESSMENT REPORT
FOR THE FORMER SHINN OIL LEASE PROPERTY
LOCATED IN MIAMI, OKLAHOMA**

*Approved
KCS
11/21/03*

Prepared for

**THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY
4200 DEEN ROAD
FORT WORTH, TEXAS 76106**

Prepared by

**ENVIRONMENTAL MANAGEMENT RESOURCES, INC.
3201 NE LOOP 820, SUITE 180
FORT WORTH, TEXAS 76137**

EMR Project No. 6052

November 4, 2003

ENVIRONMENTAL SITE ASSESSMENT REPORT
FOR THE FORMER SHINN OIL LEASE PROPERTY
LOCATED IN MIAMI, OKLAHOMA

Prepared for:

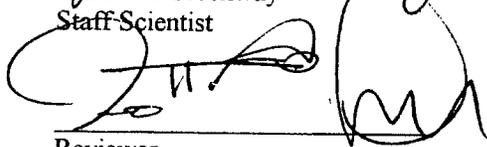
THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY
4200 DEEN ROAD
FORT WORTH, TEXAS 76106

EMR Project No. 6052

November 4, 2003

EMR, Inc.
Submitted by:


Tiffannie Greenway
Staff Scientist


Reviewer
Scott Lowry
Senior Project Manager

EMR, Inc.
Approved by:

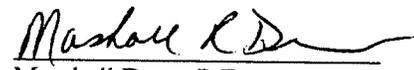

Marshall Dunn, P.E.
Texas Manager Environmental Services

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- Figure 7 – Map of Drinking Water Wells

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- Table 4.1 Groundwater Elevation Summary

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- Appendix A Photograph Log
- Appendix B Waste Disposal Manifests
- Appendix C Soil Boring Logs
- Appendix D Monitoring Well Construction Logs
- Appendix E UST Removal Report
- Appendix F Detailed Laboratory Analytical Report – Soil Samples
- Appendix G Detailed Laboratory Analytical Report – Groundwater Samples

1.0 INTRODUCTION

Environmental Management Resources, Inc. (EMR) is pleased to submit this environmental assessment report addressing the asbestos inspection and abatement, removal of site improvements, and completion of a comprehensive soil and groundwater site assessment conducted at the former Shinn Oil Property located in Miami, Oklahoma. Burlington Northern and Santa Fe Railway Company (BNSF) is the landowner of the subject property. BNSF has never operated the former bulk fuel and oil distribution facility. EMR was retained by BNSF to provide environmental consulting services.

This report details site activities from December 2002 through May 2003 and includes information regarding a preliminary Phase II Site Assessment conducted by EMR on December 12, 2001, which included the completion of six soil borings. The purpose of the initial environmental site assessment was to determine whether petroleum hydrocarbon impact existed at the site and if additional assessment activities were required. On March 26, 2003, EMR began the comprehensive environmental site assessment which included installation of fourteen soil borings, five of which were converted to monitoring wells. Site activities included soil and groundwater sampling, field screening, and laboratory analysis. Photograph documentation is provided in Appendix A.

1.1 Site Location

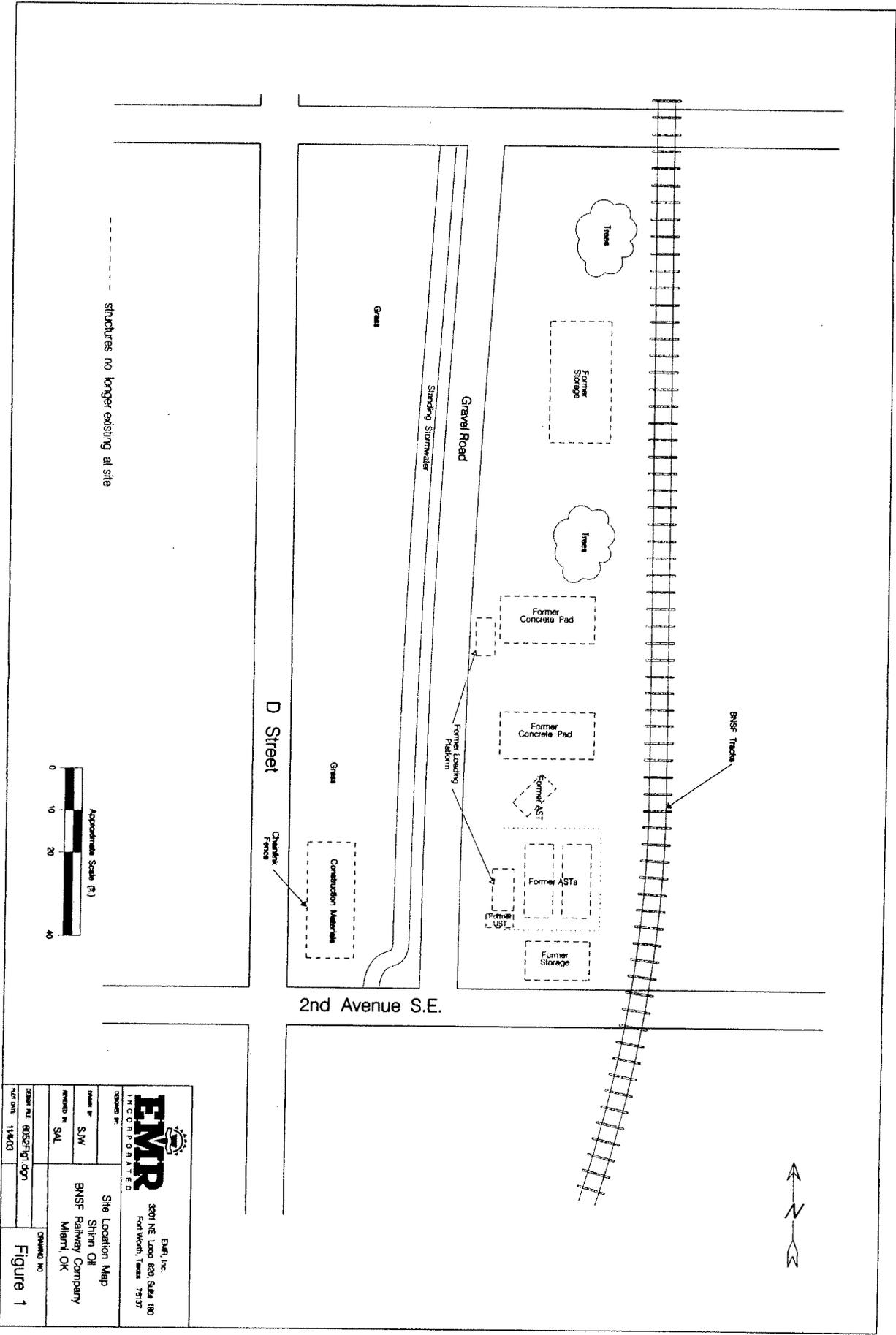
The subject property is located at the corner of 2nd Avenue S.E. and D Street in Miami, Oklahoma. The Shinn Oil parcel contains approximately 34,000 square feet. Figure 1 illustrates the site plan and location of the subject property.

1.2 Site Background

The parcel was originally leased to Ingram Oil Company on January 15, 1975, as a bulk fuel and oil distribution facility. Known improvements included one warehouse/storage building, one office/storage building, one pump house, and aboveground storage tanks (ASTs). The lease was transferred to Shinn Oil Company on July 1, 1987, for use as a bulk fuel and oil distribution station.

Limited Phase II Site Assessment

EMR performed a Limited Phase II Site Assessment at the subject property on December 12, 2001. At the time of the site visit, the parcel was abandoned. The assessment included documenting visual observations, collecting photograph documentation, field screening subsurface soils, and collecting subsurface soil and groundwater samples for chemical analysis. EMR collected six subsurface soil samples utilizing a truck-mounted geoprobe. Soil samples were collected at depths ranging from 4 feet to 16 feet below ground surface (bgs). One soil sample was collected from each boring and was analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX), total petroleum hydrocarbons (TPH) as gasoline range organics (GRO), Fuel Oil, and Motor Oil.



<p>EMR INCORPORATED</p>		<p>ENR, Inc. 3001 NE Loop 820, Suite 180 Fort Worth, Texas 76177</p>
<p>DESIGNED BY S.W.</p>	<p>PROJECT NO. SAL</p>	<p>DRAWING NO. 11403</p>
<p>Site Location Map Shipp, OH BNSF Railway Company Mills, OK</p>		<p>Figure 1</p>

Two groundwater samples were collected from open borings GP-1 and GP-4. The samples were collected from a depth of 15 feet and 16 feet bgs respectively, and were analyzed for BTEX, TPH-GRO, Fuel Oil, and Motor Oil. Benzene concentrations in a soil sample collected from probe point GP-4 at a depth interval of 15 to 16-feet bgs, exceeded the Oklahoma Corporation Commission (OCC) action level of 0.5 mg/kg. TPH-GRO concentrations in soil exceeded the OCC action level of 50.0 mg/kg in GP-1 through GP-4. BTEX and TPH GRO concentrations exceeded the groundwater OCC action levels of 0.005 mg/L, 1.0 mg/L, 0.7 mg/L, 10.0 mg/L, and 2.0 mg/L in the sample collected at GP-4. In summary, the results of the Limited Site Assessment indicated additional assessment activities were necessary to delineate the extent and degree of petroleum hydrocarbon impact associated with the former bulk fuel and oil distribution facility operations.

2.0 SCOPE OF WORK

The former lessee (Shinn Oil) who operated the bulk fuel and oil distribution facility ceased operations without removing the site improvements and performing due diligence in assessing the environmental impact associated with the fueling and storage operation. BNSF contracted EMR to initiate the removal of site improvements and perform additional site investigation activities to determine the extent of petroleum hydrocarbon impact at the subject property. The following subsections provide detailed information concerning the removal of site improvements and site investigation activities.

2.1 Site Survey and Inspection

Prior to initiating subsurface assessment activities, EMR contacted the local underground utility locating organization for the State of Oklahoma to locate public utilities on or near the subject site. The local gas company, telephone company, electric company, and water department were notified within 48 hours of the initial start date.

EMR performed a site walk of the subject property to identify all marked and unmarked utilities, overhead obstructions, and potential on-site hazards.

2.2 Site Safety

Before work was initiated each day, all personnel working at the site attended a tailgate safety meeting. During the meetings, EMR personnel discussed the safety and health concerns and procedures for the site as outlined in the Site Health and Safety Plan (HASP). All personnel signed the HASP at the close of each meeting to document their attendance. A copy of the HASP was accessible at the site during all working hours.

2.3 Asbestos Inspection and Abatement

In preparation for building demolition activities, EMR completed an asbestos inspection. During a site visit performed on December 16 and 17, 2002, EMR completed an asbestos inspection that identified asbestos containing material (ACM) on the outside of the office/warehouse structure. The laboratory analytical results indicate only the transite siding contained more than 1-percent asbestos.

On February 18 and 19, 2003, EMR personnel returned to the site to complete asbestos abatement activities. Horsely Specialties, located in Kansas City, Kansas, was contracted by BNSF to assist with abatement of ACM. EMR provided project management and air monitoring during abatement activities. Approximately 1,675 square feet of ACM was removed from the site and was disposed of at the Johnson County Landfill, located at 18181 West 53rd Street in Shawnee, Kansas.

2.4 Removal of Site Improvements

EMR personnel completed cleaning and removal of aboveground storage tanks, building demolition, and removal of an underground storage tank between January 28, 2003, and March 29, 2003. The following subsections provide detailed information regarding the removal of site improvements.

2.4.1 Aboveground Storage Tank Removal

During the initial site visit, EMR personnel identified two 17,000 gallon and one 1,000 gallon aboveground storage tanks (ASTs). During the week of January 27, 2003, EMR was on-site to complete AST removal activities. EMR contracted Environmental Remediation Specialists, Inc. (ERS) and Ark Wrecking, both located in Tulsa, Oklahoma, to assist with AST removal. ERS personnel removed the contents from each AST utilizing a vacuum truck and rinsed the interior of the tanks using a high-pressure water spray. All of the tank contents and rinsate were collected using vacuum trucks. ERS drained all of the associated piping to insure all contents were captured and properly dispositioned. ERS cleaned two ASTs on-site. Another contractor removed the remaining tank. A total of three ASTs were removed from the site. The two ASTs removed by ERS were destroyed and stockpiled by Ark Wrecking for future disposal. The tanks were transported to Commercial Metals Company, located at 814 D Street NE, Miami, Oklahoma. Oil/fuel/petroleum rinsate was transported to E & E Environmental, located in Calumet, Oklahoma. Waste manifests are included in Appendix B.

2.4.2 Building Demolition

EMR returned to the site on March 28, 2003, for building demolition. One storage building was demolished at the Shinn Oil Property. The mandatory 10-day notification was submitted to the Commissioner of the Oklahoma Department of Labor (ODOL). Material from the building was separated into stockpiles for disposal. Ark Wrecking utilized appropriate heavy equipment for demolition and transported and disposed of the debris at B-3 Construction, Inc., located at 1106 South Highschool Avenue, Columbus, Kansas. Waste disposal manifests are included in Appendix B.

2.4.3 Underground Storage Tank Removal

During the site visit on December 16 and 17, 2002, EMR identified one underground storage tank (UST) located approximately 15-feet northwest of the office/warehouse building. ERS and Cobbs Engineering, a licensed subcontractor located in Tulsa, Oklahoma, arrived on-site February 11, 2003 for UST removal and cleaning. During tank cleaning, the tanks were monitored for explosive conditions using a lower explosive limit and oxygen (LEL/O₂) meter. ERS personnel removed fuel from the storage tank using a vacuum truck and rinsed the interior of the tank using a high-pressure water spray. All tank contents and rinsate were collected using vacuum trucks. All of the associated piping was also drained to ensure all contents were captured and properly dispositioned. The UST was removed by excavating the overburden soil to expose the tank. EMR personnel contacted

Collins Construction Company, located in Miami, Oklahoma, to deliver backfill material. Upon removal of the USTs, the area was immediately backfilled. A total of one UST was removed from the site and transported to Commercial Metals Company located in Miami, Oklahoma. On March 28, 2003, oil/fuel/petroleum rinsate was transported to E & E Environmental, located in Calumet, Oklahoma. Waste manifests are included in Appendix B.

2.4.4 Underground Piping Removal

During removal of site improvements, the underground supply lines from the ASTs to the dispensers were drained and the contents captured using vacuum trucks. The underground piping was removed by excavating the overburden soil to expose the piping. The piping was visually inspected for integrity prior to removal. Upon removal of the piping, all of the trench backfill material was removed to native soils. The excavated soils were returned to the excavation to eliminate the safety concerns associated with open excavations.

2.5 Comprehensive Soil Assessment

On March 26-27, 2003, EMR performed additional subsurface site assessment activities and collected soil samples in an effort to define the horizontal and vertical extent of hydrocarbon impact at the subject site. Figure 2 illustrates the location of each boring completed to date.

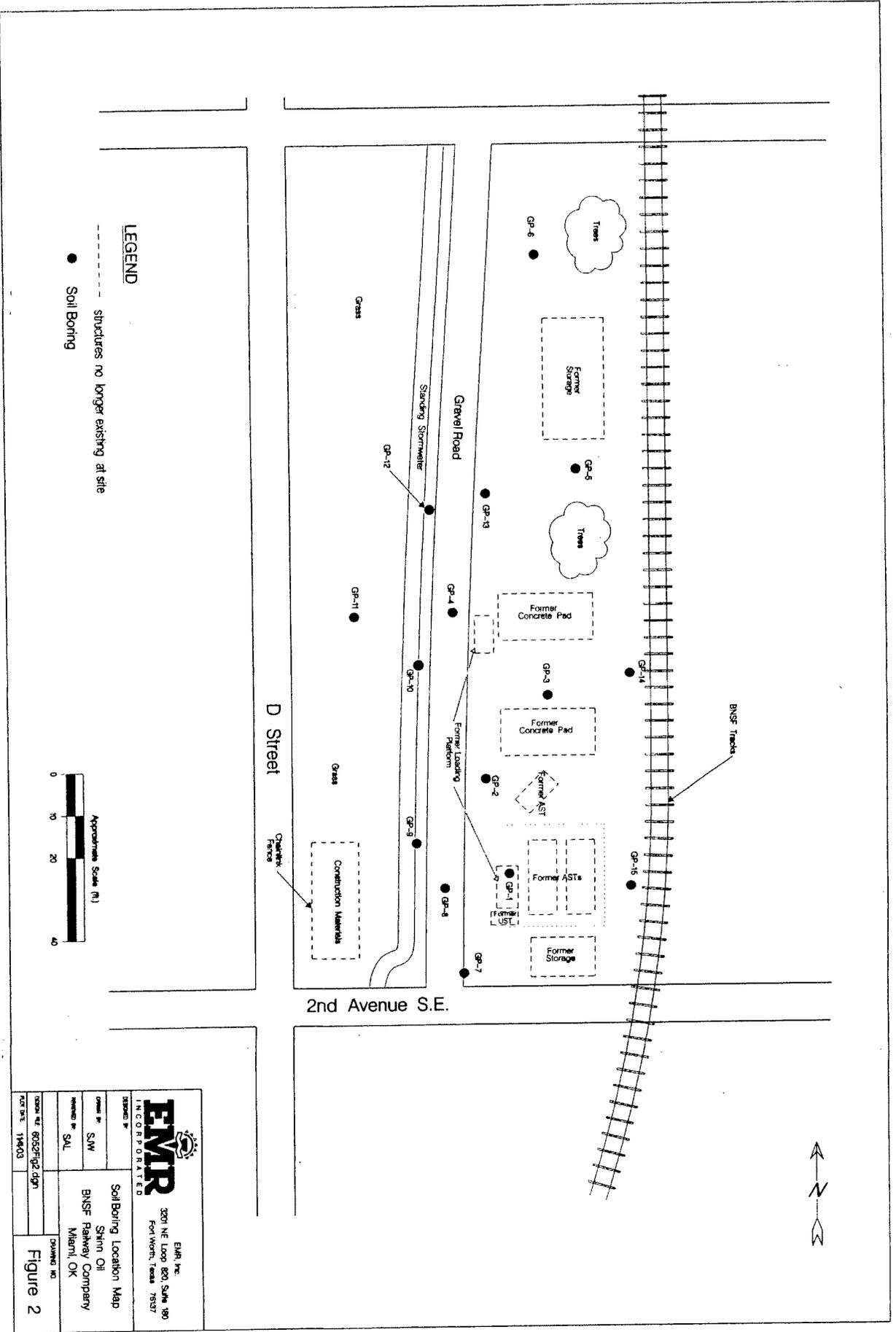
2.5.1 Soil Probing Activities

Soil probing activities were completed using a truck-mounted geoprobe. The geoprobe consists of solid stem push rods equipped with a continuous four-foot sampler. Soil obtained with the soil sampler was retrieved for detailed visual examination, field screening, sample collection, and logging. Upon retrieval, soil samples were geologically described and the core sample from each boring was screened with a photoionization detector (PID). Soil boring logs were completed to record subsurface conditions and sample locations. Soil boring logs are included in Appendix C.

Field activities included the installation of nine additional geoprobe points (GP-7 through GP-15). Each geoprobe point was advanced to refusal. Total depth ranged between 14 feet to 18 feet bgs. The soil samples were collected by attaching a four-foot stainless steel core sampler barrel to the solid stem of the probe. The soil sampler was then advanced into the subsurface soil zone to be sampled. Figure 2 illustrates the location of each probe point to date.

2.5.2 Soil Sampling Procedures and Laboratory Analysis

Soil samples were collected from geoprobe point locations GP-7 through GP-15 on March 26-27, 2003. Probe-driven soil samples were continuously collected from grade to the bottom of each boring. Each sample was field screened for the presence of volatile organic compounds (VOCs) using a PID and standard headspace methods. The PID readings indicate relative concentrations of VOCs in the vapor headspace but do not represent actual concentrations, which may exist in the soil. The



		EMPR, Inc. 32711 NE Loop 820, Suite 180 Fort Worth, Texas 76137	
DESIGNED BY CONSULTANT	DRAWING NO. Figure 2	SOIL BORING LOCATION MAP SHINN OIL BNSF Railway Company Miami, OK	DRAWING NO. Figure 2
CHECKED BY S.W.	DATE 1/14/03	PROJECT NO. 00527812.dgn	DRAWING NO. Figure 2

PID has a detection range of 1 part per million volume (ppmv) to 2000 ppmv.

A minimum of two composite samples from each geoprobe point (the sample exhibiting the highest PID reading, or if none is recorded, the sample at the field-interpreted groundwater table interface and the bottom sample) were retained for laboratory analysis. Soil samples were placed in plastic sealable bags and allowed to stabilize for a period of at least 15 minutes. After stabilization a PID reading was obtained by piercing the side of the plastic bag with the tip of the PID. PID readings were recorded on the boring logs that are included in Appendix C.

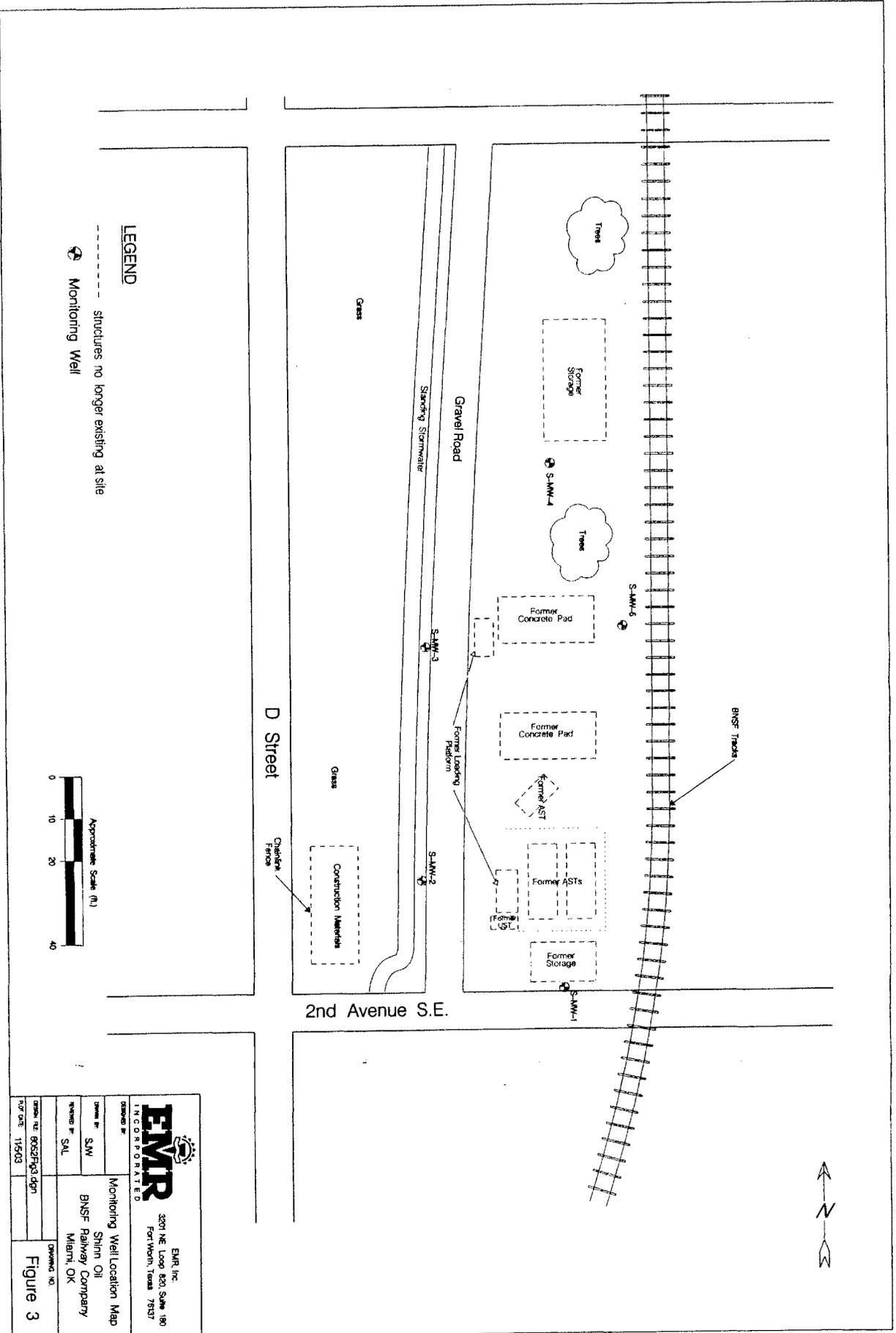
Soil samples selected for chemical analysis were placed in laboratory certified pre-cleaned glass jars. For each sample collected, one 2-ounce jar and one 8-ounce jar with Teflon lined lids were used. The soil was placed in the jars to allow for zero headspace. A sample label was attached to each container and included the sample ID, date, time, location, sampler name, and desired laboratory analysis. The samples were preserved at 4-degrees Celsius from the time they were collected through receipt at the laboratory. Preservation was accomplished using a sample cooler and bagged ice. The sample information was recorded on a chain of custody form which accompanied the samples from the field to the laboratory. The samples were transported to Severn Trent Laboratories located in Houston, Texas, to be analyzed for BTEX using EPA Method 8021B, TPH-GRO and TPH-DRO (diesel range organics) using EPA Method 8015B and Total Lead using EPA Method 6010B. The two samples exhibiting the highest TPH concentrations were also analyzed for polynuclear aromatic hydrocarbons (PAH) using EPA Method 8270.

2.6 Monitoring Well Installation and Sampling Procedures

On May 14-15, 2003, EMR installed monitoring wells and collected additional soil samples at the subject property. At the time of installation, an insufficient amount of groundwater was available for sample collection. Groundwater samples were collected on May 29, 2003, a week and a half after installation to allow for groundwater equilibration. The location of each well was based on the information obtained during the previous environmental assessments and availability of space on the site. Five monitoring wells, S-MW-1 through S-MW-5, were installed. Figure 3 illustrates the location of each monitoring well.

2.6.1 Monitoring Well Installation Activities

The monitoring well installation activities were completed utilizing a drill rig and hollow-stem augers. The rig consists of hollow-stem augers equipped with a continuous sampler. A 5-foot long stainless steel continuous sampler was used to obtain soil samples. Soil obtained with the split-spoon soil sampler was retrieved for detailed visual examination, field screening, sample collection, and logging. Soil samples were geologically described and the entire core was screened with a PID. Monitoring Well Construction Logs were completed to record subsurface conditions. The Monitoring Well Construction Logs for monitoring wells S-MW-1 through S-MW-5 are provided in Appendix D.



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	<p>EMR, Inc. 3201 NE Loop 820, Suite 180 Fort Worth, Texas 76127</p>
<p>Drawing No. 8082F03.dgn Date: 11/5/03</p>	<p>EMR, Inc. 3201 NE Loop 820, Suite 180 Fort Worth, Texas 76127</p>
<p>Drawing No. 8082F03.dgn Date: 11/5/03</p>	<p>EMR, Inc. 3201 NE Loop 820, Suite 180 Fort Worth, Texas 76127</p>
<p>Drawing No. 8082F03.dgn Date: 11/5/03</p>	<p>EMR, Inc. 3201 NE Loop 820, Suite 180 Fort Worth, Texas 76127</p>
<p>Drawing No. 8082F03.dgn Date: 11/5/03</p>	<p>EMR, Inc. 3201 NE Loop 820, Suite 180 Fort Worth, Texas 76127</p>

Field activities included the installation of five 2-inch monitoring wells. The total depth of each well ranged from approximately 17 to 19 feet bgs. Each well consisted of 10 feet of 0.020-inch machine slotted PVC screen and 7 to 9 feet of PVC riser, determined by the depth of the well. A sand filter pack (10/20 silica sand) was placed in the annulus from the base of the boring to approximately 1 foot above the screened interval. A bentonite seal was then placed above the sand filter pack to form a tight seal. The annulus was completed to the surface with cement. Each well was completed as a flush mount with a 4 foot by 4 foot pad and was locked with a watertight seal cap. Subsequent to monitoring well installation, the monitoring wells were developed using a pump located on the drill rig.

2.6.2 Soil Sampling Procedures and Laboratory Analysis

Soil samples were collected during the installation of monitoring wells S-MW-1 through S-MW-5. Soil samples were continuously collected from grade to the bottom of each boring. Each sample was field screened for the presence of VOCs using a PID and standard headspace methods.

Two soil samples from each boring (the sample exhibiting the highest PID reading, or if none is recorded, the sample at the field-interpreted groundwater table and the bottom sample) were retained for laboratory analysis. Soil samples were placed in plastic sealable bags and allowed to stabilize for a period of at least 15 minutes. After stabilization, a PID reading was obtained by piercing the side of the plastic bag with the tip of the PID. Soil samples from borings S-MW-1 through S-MW-5 indicated PID readings ranging from 1 ppm to 1,460 ppm. PID readings are located on the well logs included in Appendix D.

The soil samples selected for laboratory analysis were placed in laboratory certified pre-cleaned glass jars. At each sample location, one 2-ounce jar and one 8-ounce jar with Teflon lined lids were used. The soil was placed in the jars to allow for zero headspace. The horizontal and vertical location of each sample was recorded during sampling activities. A sample label was attached to each sample, which included sample ID, date, time, location, sampler name and desired laboratory analysis. The samples were preserved at 4-degrees Celsius from the time they were collected through receipt at the laboratory. Preservation was accomplished using a sample cooler and bagged ice. The sample information was recorded on a chain of custody form, which accompanied the samples from the field to the laboratory. The samples were shipped to Severn Trent Laboratories in Houston, Texas, to be analyzed for BTEX using EPA Method 8021B, TPH-GRO and TPH-DRO using EPA Method 8015B, and Total Lead using EPA Method 6010B. The two samples exhibiting the highest TPH concentrations were also analyzed for polynuclear aromatic hydrocarbons (PAH) using EPA Method 8270.

2.6.3 Monitoring Well Sampling and Laboratory Analysis

Sufficient groundwater was encountered in each well for sampling purposes. Groundwater ranged from 3 to 6 feet below the top of casing (TOC). Although groundwater was encountered above the screened interval, a disposable, single use, polyethylene bailer was used for each well to evacuate the

equivalent of three well volumes to ensure proper communication with perched groundwater. After purging each monitoring well it was allowed to equilibrate. All of the wells came to a static level inside the screened interval. A representative groundwater sample was then collected. A disposable, single use, polyethylene bailer was also used to collect the groundwater sample.

Samples selected for chemical analysis were placed in laboratory-prepared 40ml VOA sample containers. The laboratory prepared sample jars contained the appropriate acid preservation prior to collection. A sample label was attached to each container upon collection. The sample label included the sample ID, date, time, location, sampler name, and desired laboratory analysis. The samples were preserved at 4-degrees Celsius from the time they were collected until receipt at the laboratory. Preservation was accomplished using a sample cooler and bagged ice. The sample information was recorded on a chain-of-custody form, which accompanied the samples from the field to the laboratory. The samples were shipped to Severn Trent Laboratories in Houston, Texas, where they were analyzed for BTEX using EPA Method 8021B, TPH-GRO and TPH-DRO using EPA Method 8015B, and PAH using EPA Method 8270.

2.7 Decontamination Procedures

The downhole equipment was decontaminated between each soil boring location utilizing a high-pressure wash. The cleaning equipment incorporated the use of Alconox detergent. Sample gloves were changed between examination of each soil core and sample collection.

3.0 RESULTS OF SITE INVESTIGATION

This section discusses the results of the site assessment activities to determine the degree of impact and assist in evaluating the next course of action.

3.1 Geologic Profile

Sediments encountered during the advancement of each geoprobe point included a mixture of topsoil and gravel to an approximate depth of 1-foot bgs. The soil conditions from 2 feet to 18 feet bgs consist of gray/orange mottled clay and gray/brown clay. The Boring/Well Log Forms provided in Appendix C and D detail the soil type, soil observations, and PID readings encountered during the advancement of each boring.

3.2 Laboratory Results - Soil Assessment

A total of 36 soil samples were collected from the installation of fifteen soil borings and five monitoring wells. The samples were submitted for analysis of BTEX, TPH, and Lead. Two soil samples obtained during push probe and two from drilling activities were analyzed for polynuclear aromatic hydrocarbons (PAH).

The laboratory analytical results indicate TPH concentrations above the laboratory method detection limit in all of the soil borings with the exception of GP-5, GP-6, GP-13, and GP-15. The highest TPH concentrations (2,290 mg/kg and 1,800 mg/kg) were detected in GP-14 and GP-10, respectively. Eleven of the twenty soil boring locations indicated TPH concentrations above the OCC action level for TPH.

Benzene concentrations were above the laboratory method detection limit at eleven of the twenty soil boring locations. The highest benzene concentration (27.2 mg/kg) was detected in GP-14 at the 10-foot to 12-foot depth interval. Five soil boring locations (GP-4, GP-10, GP-14, S-MW-2, and S-MW-5) indicated benzene concentrations above the OCC action level (0.50 mg/kg). Toluene, ethylbenzene, and xylene concentrations were below the OCC action level (40.0 mg/kg, 15.0 mg/kg, and 200 mg/kg, respectively) in all soil borings with the exception of soil boring GP-14 (140.0 mg/kg, 46.1 mg/kg, and 225.0 mg/kg, respectively).

The PAH results for the four samples with the highest TPH indicate concentrations above the laboratory method detection limits. Sample results from GP-10, 14 to 16 foot depth, GP-14, 10 to 12 foot depth, and monitoring well S-MW-2, 2.5 to 5 foot depth resulted with detectable concentrations of 2-methylnaphthalene, naphthalene, and 1-methylnaphthalene, with all other PAH constituents below MDLs. The soil sample collected from monitoring well S-MW-5, 7.5 to 10 foot depth interval resulted with detectable concentrations of naphthalene, with all other PAH constituents below MDLs. These concentrations are below OCC action levels. The highest lead concentration (168 mg/kg) was detected at S-MW-2. This concentration is below the most conservative screening level of 400 mg/kg used by the Oklahoma Department of Environmental Quality (ODEQ).

Soil sample depths and laboratory analytical results are summarized in Table 3.1 and are illustrated on the soil contaminant concentration map included as Figure 4. The laboratory analytical report and chain of custodies are included in Appendix F.

3.3 Laboratory Results – Groundwater Assessment

In addition to the previously collected groundwater data from two geoprobe points (GP-1 and GP-4) completed during the limited Phase II site assessment, one groundwater sample was collected from each of the five monitoring wells installed during additional assessment activities. The groundwater samples were analyzed for BTEX and TPH. PAH analysis was performed on the groundwater sample exhibiting the highest TPH-DRO concentration. One sample from monitor well S-MW-1 was also analyzed for Total Dissolved Solids. Laboratory analytical results indicate benzene concentrations in groundwater above the OCC action levels in the samples collected from GP-1, GP-4, S-MW-1, S-MW-2, S-MW-3, and S-MW-5. Toluene, ethylbenzene, and xylene concentrations were above the OCC action level (1.0 mg/L, 0.7 mg/L, and 10 mg/L, respectively) in monitoring points GP-4 and S-MW-5.

Laboratory results indicate TPH-GRO concentrations above MDLs in all of the monitoring points ranging from 0.865 mg/L to 219 mg/L. TPH-GRO concentrations in groundwater collected from monitoring points GP-4, S-MW-2, S-MW-3, and S-MW-5 are above the OCC action level of 2.0 mg/L. TPH-DRO concentrations were above MDLs in groundwater samples submitted from monitoring points S-MW-1 through S-MW-5 ranging from 0.87 mg/L to 72.0 mg/L, however only TPH-DRO concentrations in groundwater collected from monitoring points S-MW-2 and S-MW-5 above the OCC action level of 2.0 mg/L.

The laboratory analytical results for a groundwater sample collected at S-MW-5 indicated detectable PAH concentrations of 2-Methylnaphthalene, Naphthalene, and 1-Methylnaphthalene (0.442 mg/L, 0.661 mg/L, and 0.233 mg/L, respectively), with all other PAH constituents below MDLs. These concentrations are below OCC action levels. Groundwater samples analyzed from monitoring wells S-MW-2 and S-MW-5 resulted in concentrations above the Oklahoma Department of Environmental Quality screening levels for lead at 0.0174 mg/L and 0.106 mg/L, respectively. Screening levels utilized by the ODEQ are 0.015 mg/L.

Laboratory analytical results for groundwater samples are summarized in Table 3.2 and illustrated on the Groundwater Contaminant Concentration Map included as Figure 5. The laboratory analytical report and chain of custodies are included in Appendix G.

Table 3.1
Soil Analytical Summary
The Burlington Northern and Santa Fe Railway Company
Shinn Oil Property
Miami, Oklahoma

Sample ID	Sample Date	Sample Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)	TPH as gasoline (mg/kg)	Diesel Fuel (mg/kg)	Fuel Oil (mg/kg)	Motor Oil (mg/kg)	TPH as diesel (mg/kg)	LEAD (mg/kg)	PAH (mg/kg)
GP-1	12/12/01	4'-8'	0.0130	<0.0050	0.110	0.170	163.0	<4.0	7.7	<4.0	NA	NA	NA
GP-2	12/12/01	4'-8'	<0.0100	<0.0100	<0.0100	<0.0100	52.6	<4.0	14.1	7.6	NA	NA	NA
GP-3	12/12/01	4'-8'	0.190	0.230	0.680	1.16	133.0	<39.4	256.0	88.2	NA	NA	NA
GP-4	12/12/01	15'-16'	2.50	3.40	11.2	50.6	1,220.0	131.0	<39.7	<39.7	NA	NA	NA
GP-5	12/12/01	8'-12'	<0.0100	<0.0100	<0.0100	<0.0020	<5.0	<4.1	<4.1	<4.1	NA	NA	NA
GP-6	12/12/01	8'-12'	<0.0100	<0.0100	<0.0100	<0.0020	<5.0	<4.0	<4.0	<4.0	NA	NA	NA
GP-7	3/26/03	4-6	<0.020	<0.020	<0.020	<0.060	1.150	NA	NA	NA	<8.3	10.1	NA
		12-14	<0.020	<0.020	<0.020	<0.060	3.380	NA	NA	NA	<8.3	19.0	NA
		16-17	<0.020	<0.020	<0.020	<0.060	<1.0	NA	NA	NA	<8.3	8.65	NA
GP-8	3/26/03	4-6	0.107	0.241	<0.020	0.520	256.00	NA	NA	NA	230.0	7.86	NA
		16-18	<0.020	<0.020	0.146	0.192	82.9	NA	NA	NA	63.0	9.95	NA
GP-9	3/27/03	8-10	<0.020	<0.020	<0.020	<0.060	<25.0	NA	NA	NA	<8.3	20.4	NA
		12-14	<0.020	<0.020	<0.020	<0.060	21.4	NA	NA	NA	22.0	151.0	NA
GP-10	3/27/03	0-2	0.225	0.427	0.878	3.7	182.0	NA	NA	NA	530.0	15.7	NA
		6-8	1.52	5.73	8.52	40.4	457.00	NA	NA	NA	140.0	16.5	NA
		14-16	0.673	2.51	1.14	5.22	251.00	NA	NA	NA	1800.0	24.2	See Note 1
GP-11	3/27/03	6-8	0.0553	0.056	0.083	0.144	52.0	NA	NA	NA	48.0	4.66	NA
		14-16	<0.020	<0.020	<0.020	<0.060	<50.0	NA	NA	NA	<8.3	17.6	NA
GP-12	3/27/03	6-8	<0.020	<0.020	<0.020	<0.060	5.65	NA	NA	NA	92.0	29.9	NA
		14-16	<0.020	<0.020	<0.020	<0.060	<1.0	NA	NA	NA	<8.3	11.6	NA
GP-13	3/27/03	6-8	<0.020	<0.020	<0.020	<0.060	<1.0	NA	NA	NA	<8.3	16.4	NA
		14-16	<0.020	<0.020	<0.020	<0.060	<1.0	NA	NA	NA	<8.3	6.62	NA
GP-14	3/27/03	10-12	27.2	140.0	46.1	225.0	2290.0	NA	NA	NA	600.0	27.4	See Note 2
		14-16	0.0626	0.365	0.906	2.36	105.0	NA	NA	NA	63.0	28.2	NA
GP-15	3/27/03	8-10	<0.020	<0.020	<0.020	<0.060	<5.0	NA	NA	NA	<8.3	8.24	NA
		14-16	<0.020	<0.020	<0.020	<0.060	<1.0	NA	NA	NA	<8.3	10.4	NA

BTEX - EPA Method 8021
 TPH - Total Petroleum Hydrocarbons - EPA Method 8015B
 PAH - Polynuclear Aromatic Hydrocarbons - EPA Method 8270
 NA - Not Analyzed
 Note 1: 2-Methylnaphthalene (1.91 mg/kg), Naphthalene (1.05 mg/kg), 1-Methylnaphthalene (1.12 mg/kg), all other constituents for PAH below Method Detection Limits
 Note 2: 2-Methylnaphthalene (6.09 mg/kg), Naphthalene (5.80 mg/kg), 1-Methylnaphthalene (3.39 mg/kg), all other constituents for PAH below Method Detection Limits

Table 3.1 (continued)
Soil Analytical Summary
The Burlington Northern and Santa Fe Railway Company
Shinn Oil Property
Miami, Oklahoma

Sample ID	Sample Date	Sample Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)	TPH as gasoline (mg/kg)	Diesel Fuel (mg/kg)	Fuel Oil (mg/kg)	Motor Oil (mg/kg)	TPH as diesel (mg/kg)	LEAD (mg/kg)	PAH (mg/kg)
S - MW - 1	5/14/03	10-12.5	<0.020	<0.020	<0.020	<0.060	12.5	NA	NA	NA	9.6	18.5	NA
		15-17.5	<0.020	<0.020	<0.020	<0.060	5.06	NA	NA	NA	<8.3	8.25	NA
S - MW - 2	5/15/03	2.5-5	1.54	0.316	1.69	2.64	76.2	NA	NA	NA	1100.0	168.0	See Note 3
		17.5	0.482	0.0595	0.629	1.06	65.9	NA	NA	NA	11.0	9.87	NA
S - MW - 3	5/15/03	10-12.5	0.0454	<0.020	<0.020	<0.060	3.52	NA	NA	NA	<8.3	24.0	NA
		15-17.5	0.0577	<0.020	0.0317	<0.060	10.2	NA	NA	NA	<8.3	21.2	NA
S - MW - 4	5/15/03	5-7.5	0.0253	<0.020	<0.020	<0.060	1.5	NA	NA	NA	13.0	28.6	NA
		15-17.5	0.024	<0.020	<0.020	<0.060	<1.0	NA	NA	NA	<8.3	24.7	NA
S - MW - 5	5/15/03	7.5-10	7.47	29.8	10.5	56.6	900.0	NA	NA	NA	140.0	27.1	See Note 4
		15-17.5	4.39	15.0	7.71	39.1	400.0	NA	NA	NA	25.0	21.5	NA

BTEX - EPA Method 8021

TPH - Total Petroleum Hydrocarbons - EPA Method 8015B

PAH - Polynuclear Aromatic Hydrocarbons - EPA Method 8270

NA - Not Analyzed

Note 3: 2-Methylnaphthalene (3.45 mg/kg), Naphthalene (3.05 mg/kg), and 1-Methylnaphthalene (1.91 mg/kg), all other constituents for PAH below Method Detection Limits

Note 4: Naphthalene (0.348 mg/kg), all constituents for PAH below Method Detection Limits

LEGEND

--- Structures no longer existing at site

● Soil Boring Units in mg/kg

Note 1 - 2-Methylnaphthalene (1.91 mg/kg), Naphthalene (1.05 mg/kg), 1-Methylnaphthalene (1.12 mg/kg) all other constituents for PAH below MDLs.

Note 2 - 2-Methylnaphthalene (6.09 mg/kg), Naphthalene (5.80 mg/kg), 1-Methylnaphthalene (3.39 mg/kg) all other constituents for PAH below MDLs.

Note 3 - 2-Methylnaphthalene (3.45 mg/kg), Naphthalene (3.05 mg/kg), 1-Methylnaphthalene (1.91 mg/kg) all other constituents for PAH below MDLs.

Note 4 - Naphthalene (0.348 mg/kg), all other constituents for PAH below MDLs.



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Client: BNSF
Prepared by: SAL
Project: BNSF Railway Company
Middin, OK

Soil Contaminant Concentration Map
Shim Oil
BNSF Railway Company
Middin, OK

Figure 4

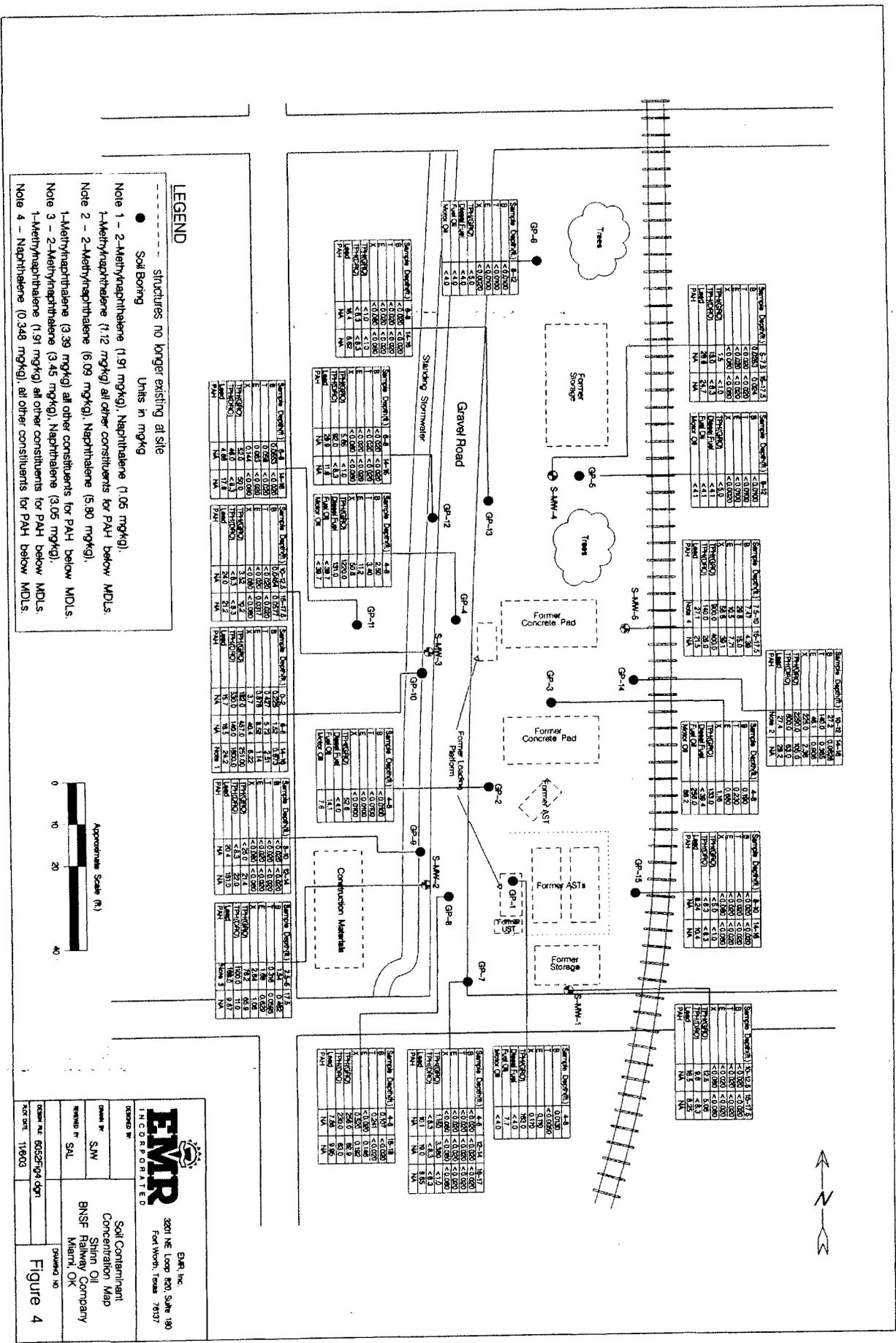


Table 3.2
Groundwater Analytical Summary
The Burlington Northern and Santa Fe Railway Company
Shinn Oil Property
Miami, Oklahoma

Sample ID	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	TPH as gasoline (mg/L)	Fuel Oil (mg/L)	Motor Oil (mg/L)	TPH as diesel (mg/L)	LEAD (mg/L)	PAH (mg/L)	Total Dissolved Solids (mg/L)
GP - 1	12/12/01	0.0384	0.0053	0.0134	0.0189	1.20	0.470	1.4	NA	NA	NA	NA
GP - 4	12/12/01	15.0	3.54	3.39	13.6	219.0	494.0	<0.0408	NA	NA	NA	NA
S-MW - 1	5/29/03	0.0576	0.00468	<0.001	<0.003	0.865	NA	NA	1.8	<0.010	NA	593.0
S-MW - 2	5/29/03	3.81	<0.050	<0.050	0.335	13.0	NA	NA	4.1	0.0174	NA	NA
S-MW - 3	5/29/03	0.403	<0.010	<0.010	<0.030	2.2	NA	NA	0.87	<0.010	NA	NA
S-MW - 4	5/29/03	<0.001	<0.001	0.0108	<0.003	0.918	NA	NA	1.1	<0.010	NA	NA
S-MW - 5	5/29/03	25.5	20.6	0.700	10.2	97.5	NA	NA	72.0	0.106	See Note 1	NA

BTEX - EPA Method 8021

TPH - Total Petroleum Hydrocarbons - EPA Method 8015B

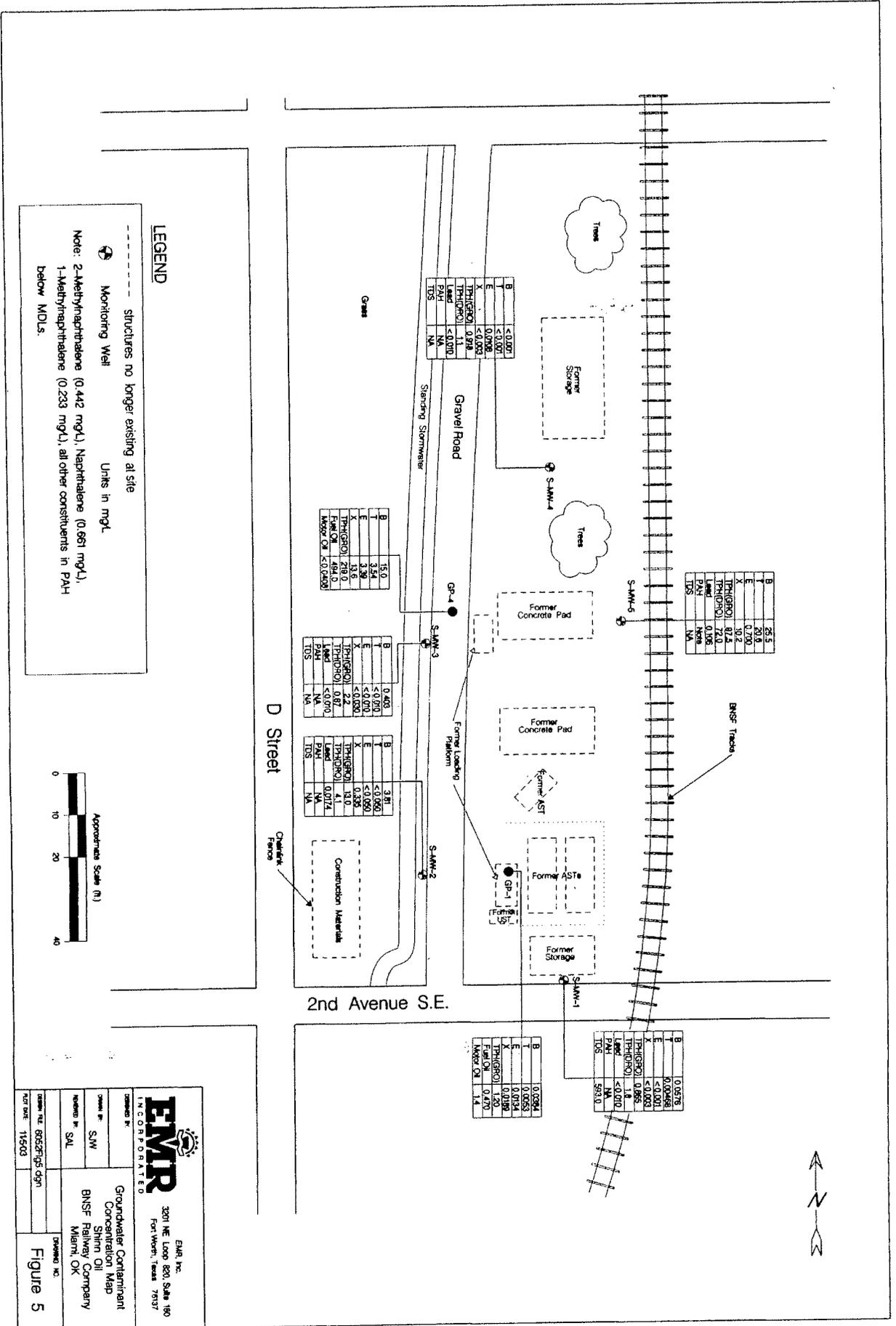
LEAD - EPA Method 6010

PAH - Polynuclear Aromatic Hydrocarbons - EPA Method 8270

TDS - Total Dissolved Solids - EPA Method 160.1

NA - Not Analyzed

Note 1: 2-Methylnaphthalene (0.442 mg/L), Naphthalene (0.661 mg/L), 1-Methylnaphthalene (0.233 mg/L), all other constituents for PAH below Method Detection Limits



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Checked by: SAL

Groundwater Contaminant Concentration Map
Shinn Oil
BNSF Railway Company
Miami, OK

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Figure 5

Scale: 1:500
Date: 11/5/03

4.0 Conclusions

This section provides conclusions based on the site assessment activities and laboratory analytical results discussed in previous sections.

The laboratory analytical results indicate TPH concentrations in soil samples collected from soil borings GP-1, GP-2, GP-3, GP-4, GP-8, GP-10, GP-11, GP-12, GP-14, S-MW-2, and S-MW-5 above the Oklahoma Corporation Commission (OCC) action level of 50 mg/kg. The highest TPH concentration in soil (2,290 mg/kg) was detected in the gasoline range in GP-14 at the 10 to 12-foot depth interval. Geoprobe point GP-14 was positioned on the far east-central side of the site adjacent to the railroad tracks. The highest TPH in the diesel range (1,800 mg/kg) was detected in GP-10 at the 14 to 16-foot depth interval. Geoprobe point GP-10 was located on the far west-central side of the site adjacent to the stormwater drainage ditch.

The laboratory analytical results from soil samples collected from GP-4, GP-10, GP-14, S-MW-2, and S-MW-5 indicate benzene concentrations above the OCC action level. Only the soil sample from S-MW-2 was collected at a depth less than 6 to 8-feet bgs. Soil samples collected from the remaining soil borings and monitoring wells indicate BTEX concentrations below OCC action levels with the exception of GP-14 at 10'-12' bgs. Toluene, ethylbenzene, and xylene concentrations were below the OCC action level (40.0 mg/kg, 15.0 mg/kg, and 200 mg/kg, respectively) in all remaining soil borings with the exception of soil boring GP-14 (140.0 mg/kg, 46.1 mg/kg, and 225.0 mg/kg, respectively). The highest benzene concentration in soil was located in GP-14 at the 10 to 12 foot depth interval. Geoprobe point GP-14 was positioned on the far east-central side of the site adjacent to the railroad tracks.

The PAH results for soil samples collected from four boring locations indicated concentrations below detection limits for each PAH constituent with the exception of GP-10 at 14'-16' bgs, GP-14 at 10'-12' bgs, and S-MW-2 at 2.5'-5' bgs. The sample results indicate detectable concentrations of 2-methylnaphthalene (1.91 mg/kg, 6.09 mg/kg, and 3.45 mg/kg, respectively), naphthalene (1.05 mg/kg, 5.80 mg/kg, and 3.05 mg/kg, respectively), and 1-methylnaphthalene (1.12 mg/kg, 3.39 mg/kg, and 1.91 mg/kg, respectively), with all other PAH constituents below MDLs. The soil sample collected from monitoring well S-MW-5 at the 7.5'-10' bgs resulted with detectable concentrations of naphthalene (0.348 mg/kg), with all other PAH constituents below MDLs. These concentrations are below OCC action levels.

The laboratory analytical results indicate TPH concentrations above OCC action levels in groundwater samples collected from probe point GP-4 and monitor wells S-MW-2, S-MW-3, and S-MW-5. The OCC action level for TPH in either the gasoline or diesel range organics is 2.0 mg/L.

The benzene concentrations of groundwater samples collected from points GP-1, GP-4, S-MW-1, S-MW-2, S-MW-3, and S-MW-5 were above the OCC action level of 0.005 mg/L. Toluene, ethylbenzene, and xylene concentrations were above the OCC action level in Geoprobe point GP-4, and monitoring well S-MW-5. The action levels for BTEX in groundwater are 0.005 mg/L, 1.0 mg/L,

0.7 mg/L, and 10.0 mg/L, respectively.

The results of the PAH analysis on the groundwater sample collected from S-MW-5 indicated concentrations of 2-Methylnaphthalene (0.442 mg/L), Naphthalene (0.661 mg/L), and 1-Methylnaphthalene (0.233 mg/L), with all other PAH constituents below MDLs. Lead concentrations in monitoring wells S-MW-2 and S-MW-5 were above the 0.015mg/L screening level utilized by the Oklahoma Department of Environmental Quality. Resulting lead concentrations were 0.0174 mg/L and 0.106 mg/L, respectively.

Groundwater elevations measured during the assessment activities indicate an apparent gradient in the easterly direction. Groundwater elevations ranged from 97.57 feet at S-MW-4 to 94.84 feet at S-MW-5. The groundwater measurements are summarized in Table 4.1. A groundwater gradient map is provided as Figure 6.

Based on the data collected during the comprehensive assessment, petroleum hydrocarbon impact has been identified in soil and groundwater. Soil samples collected from S-MW-5 and GP-14 on the east boundary of the site indicate benzene concentrations above OCC action levels. The groundwater sample collected from S-MW-5 revealed benzene concentrations above OCC action levels. Soil samples collected from S-MW-2 and GP-10 on the west boundary of the site indicate benzene concentration above OCC action levels. Groundwater samples collected from S-MW-2 and S-MW-3 indicate benzene concentrations exceeding OCC action levels. The groundwater sample collected from S-MW-1 at the south end of the site is above OCC action levels.

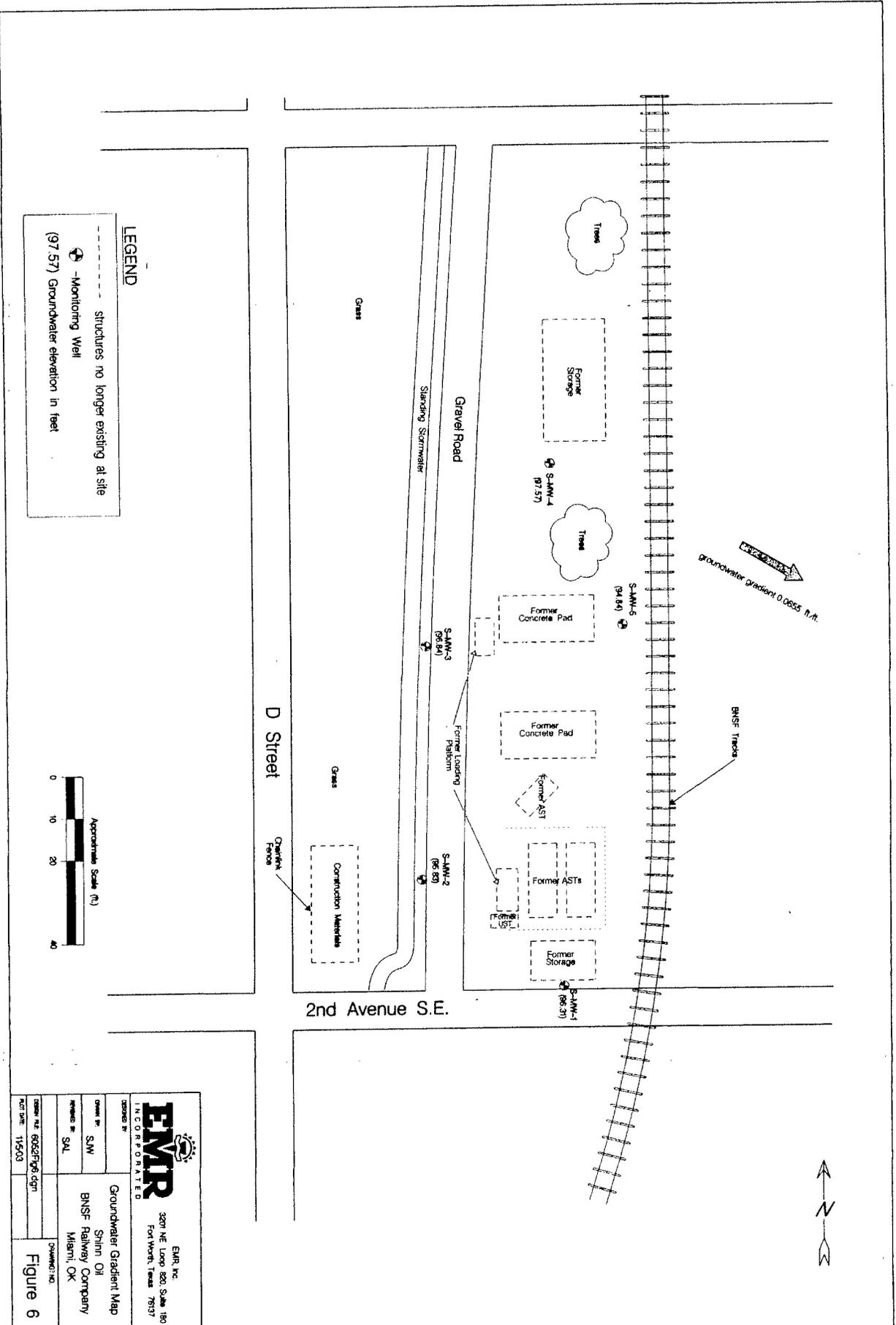
It should be noted that groundwater samples collected from Geoprobe points GP-1 and GP-4 were obtained from open borings not completed, purged and developed monitor wells. Sample collection from an open hole increases the likelihood of cross contamination from impacted soil falling back into the boring from the surface. This practice should only be used for field screening purposes, not as final sampling results from which to draw conclusions.

Due to the confining layer that exists at approximately 17-feet bgs it appears the site has been defined horizontally. Soil and groundwater data collected from S-MW-4 indicate vertical delineation to the north. Based on soil and groundwater laboratory results, the site has not been defined horizontally to the south, east and west.

Seven drinking water wells have been identified in and around the City of Miami, Oklahoma. Each well is approximately 1,200 feet in total depth in the Roubidoux Aquifer. These wells are sealed to a depth of approximately 500-feet below the ground surface. The perched groundwater encountered at the Shinn site does not appear to be connected to the drinking water aquifer. A map illustrating the location of drinking water wells was obtained from the City of Miami. This map is provided as Figure 7.

**Table 4.1
Groundwater Elevation Summary
The Burlington Northern and Santa Fe Railway Company
Shinn Oil Property
Miami, Oklahoma**

Well ID	Date	TOC Elevation (ft)	Depth To Groundwater (ft)	Groundwater Elevation (ft)	Depth To Product (ft)	Product Thickness (ft)
S-MW - 1	5/29/03	99.89	3.58	96.31	NA	NA
S-MW - 2	5/29/03	100.18	4.35	95.83	NA	NA
S-MW - 3	5/29/03	100.21	3.37	96.84	NA	NA
S-MW - 4	5/29/03	100.62	3.05	97.57	NA	NA
S-MW - 5	5/29/03	100.63	5.79	94.84	NA	NA
TOC - Top of Casing						





April 14, 2004

Mr. Richard E. Oppel
Oklahoma Corporation Commission (OCC)
Petroleum Storage Tank Division
Jim Thorpe Building, RM 238
Oklahoma City, Oklahoma 73152-2000

**RE: Oklahoma Risk Based Corrective Action (ORBCA) Report
Former Shinn Oil Company Lease Property
2nd & "D" Street
Miami, Oklahoma
Case ID #064-2777
Facility ID #58-15176**

Dear Mr. Oppel:

On behalf of the Burlington Northern and Santa Fe Railway Company (BNSF), EMR submits the enclosed copy of the Oklahoma Risk Based Corrective Action Report for the former Shinn Oil Company Lease Property located at 2nd & D Street in Miami, Oklahoma. This report summarizes the activities and subsequent actions associated with the site.

Should you have any questions, please do not hesitate to contact me at (817) 560-3030 or Robert Werner of BNSF at (817) 740-7341.

Respectfully,
EMR, Inc.

A handwritten signature in cursive script that reads "Tiffannie Greenway".

Tiffannie Greenway
Staff Scientist

A handwritten signature in cursive script that reads "Marshall R. Dunn".

Marshall R. Dunn, P.E.
Manager, Environmental Services

cc: Robert E. Werner, BNSF

Enclosure

**OKLAHOMA CORPORATION COMMISSION
RISK-BASED CORRECTIVE ACTION (ORBCA) REPORT
FOR THE FORMER SHINN OIL LEASE PROPERTY
LOCATED IN MIAMI, OKLAHOMA
CASE ID #064-2777**

Prepared for

**THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY
4200 DEEN ROAD
FORT WORTH, TEXAS 76106**

Prepared by

**ENVIRONMENTAL MANAGEMENT RESOURCES, INC.
3201 NE LOOP 820, SUITE 180
FORT WORTH, TEXAS 76137
Telephone: (817) 560-3030
Facsimile: (817) 560-2756**

April 12, 2004

EMR Project No. 6052



**OKLAHOMA CORPORATION COMMISSION
RISK-BASED CORRECTIVE ACTION (ORBCA) REPORT
FOR THE FORMER BOGLE STATIONS LEASE PROPERTY
LOCATED IN MIAMI, OKLAHOMA
CASE ID #064-2778**

2004 APR 13 PM 3:57

Prepared for:

**THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY
4200 DEEN ROAD
FORT WORTH, TEXAS 76106**

Prepared by:

**EMR, INC.
3201 NE LOOP 820, SUITE 180
FORT WORTH, TEXAS 76137**

EMR Project No. 6053

April 12, 2004

**OKLAHOMA CORPORATION COMMISSION
RISK-BASED CORRECTIVE ACTION (ORBCA) REPORT
FOR THE FORMER BOGLE STATIONS LEASE PROPERTY
LOCATED IN MIAMI, OKLAHOMA
CASE ID #064-2778**

2004 APR 13 PM 2:56

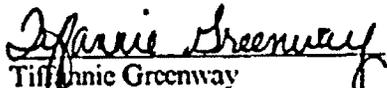
Prepared for:

**THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY
4200 DEEN ROAD
FORT WORTH, TEXAS 76106**

EMR Project No. 6053

April 12, 2004

EMR, Inc.
Submitted by:


Tiffanie Greenway
Staff Scientist

EMR, Inc.
Approved by:


Marshall Dunn, P.E.
Texas Manager Environmental Services


Reviewer
Scott Lowry
Senior Project Manager

EXECUTIVE SUMMARY

- SECTION #1 – FACILITY INFORMATION
- SECTION #2 – SITE DESCRIPTION
- SECTION #3 – UNDERGROUND STORAGE TANK TYPE
- SECTION #4 – LAND USE SUMMARY
- SECTION #5 – CHRONOLOGY OF EVENTS
- SECTION #6 – RELEASE CHARACTERIZATION
- SECTION #7 – UST/PIPING REMOVAL CHARACTERIZATION
- SECTION #8 – SITE STRATIGRAPHY AND HYDROGEOLOGY
- SECTION #9 – WATER USE
- SECTION #10 – ANALYTICAL DATA SUMMARY FOR SOIL
- SECTION #11 – ANALYTICAL DATA SUMMARY FOR GROUNDWATER
- SECTION #12 – SITE CONCEPTUAL EXPOSURE SCENARIO
- SECTION #13 – COMPARISON OF TIER 1 RBSLs with Maximum On-Site Concentrations
- SECTION #14 – TIER 1 FATE AND TRANSPORT PARAMETERS
- SECTION #15 – CONCLUSIONS AND RECOMMENDATIONS

REFERENCES & PROTOCOLS

MAPS

- Vicinity Map (Site Vicinity Map – Figure 1)
- Site Map (General Site Layout – Figure 2)
- Point(s)-of-Exposure Map (Figure 3)
- Land Use & Zoning Map (Figure 4)
- Topographic Map (Figure 5)
- Water Well Map (Figure 6)
- Area Geologic Map (Figure 7)
- UST/AST/Piping Removal Map (Figure 8)
- Groundwater Gradient Map (Figure 9)
- Soil Contaminant Concentration Map (Figure 10)
- Groundwater Contaminant Concentration Map (Figure 11)

TABLES & GRAPHS

- Groundwater Elevations
- Soil Analytical Data (Worksheet #10)
- Groundwater Analytical Data (Worksheet #11A)

FIGURES

- Soil Boring Logs

APPENDIX

- Site Physical Properties Laboratory Reports
- Soil Laboratory Analytical Reports
- Groundwater Laboratory Analytical Reports
- Attachments – UST Removal Report

ORCA SUMMARY REPORT

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffannie Greenway

EXECUTIVE SUMMARY

OCC CASE NUMBER:	064-2777		
OCC FACILITY NUMBER:	58-15176		
PRIORITIZATION INDEX NUMBER:	4.1		
FACILITY NAME AND ADDRESS:	Shinn Oil Lease Property, Corner of 2nd Avenue SE and D Street, Miami, Or		
FACILITY LOCATION DESCRIPTION:	Corner of 2nd Avenue SE and D Street - North of 2nd Ave SE, East of D		
STATUS OF FACILITY:	<input type="checkbox"/> ACTIVE	<input checked="" type="checkbox"/> INACTIVE	
GROUND SURFACE CONDITION:	Unpaved - Grass/Dirt		
ESTIMATED VOLUME RELEASED:	Unknown		
IS NATIVE SOIL IMPACTED ON-SITE:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> UNKNOWN
IS NATIVE SOIL IMPACTED OFF-SITE:	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> UNKNOWN
IS GROUNDWATER IMPACTED ON-SITE:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> UNKNOWN
IS GROUNDWATER IMPACTED OFF-SITE:	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> UNKNOWN
HAS THE SOURCE OF THE RELEASE BEEN IDENTIFIED:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> UNKNOWN
HAS FREE PRODUCT ASSOCIATED WITH THIS RELEASE BEEN FOUND:	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> UNKNOWN
HAS SURFACE WATER BEEN IMPACTED BY THIS RELEASE:	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> UNKNOWN
SHALLOWEST DEPTH TO GROUNDWATER ENCOUNTERED:	8.06		
AVERAGE DEPTH TO GROUNDWATER:	8.6		
HAS A DRINKING WATER SUPPLY BEEN IMPACTED BY THIS RELEASE:	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> UNKNOWN

RECOMMENDATIONS

- CLOSURE UNDER TIER 1
- CLOSURE UNDER TIER 1-A
- REMEDIATE AND CLOSE UNDER TIER 1 OR TIER 1-A
- GO TO TIER 2
- REMEDIATE AND CLOSE UNDER TIER 2
- GO TO TIER 3
- REMEDIATE AND CLOSE UNDER TIER 3
- MONITOR FOR CLOSURE THROUGH NATURAL ATTENUATION

EXPLANATION OF RECOMMENDATIONS

The recommendation of this report is to remediate and close the site under Tier 2 following the excavation and monitoring of groundwater conditions to further delineate and document plume conditions. Impacted soils ("hot-spots") will be removed from the site due to on-site concentration levels, which should also aid in natural attenuation of groundwater concentrations. Groundwater at the site will be monitored to document plume status. This recommendation is based on the Risk Based Screening Levels (RBSLs) determined by the results of the Tier 1 investigation and because source removal will be completed. Providing these additional data during further investigation during Tier 2 activities indicate that the magnitude and extent of the soil and groundwater exceeding the RBSL is delineated and decreasing, the Site should be closed.

ORBCA SUMMARY REPORT

Worksheet ES-2

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffannie Greenway

EXECUTIVE SUMMARY

1 Current land use of the site if no longer an active UST/AST facility::

Site is an empty lot in a commercial/residential/industrial area. This site is zoned industrial. The property is abandoned and currently not being used.

2 Soil stratigraphy and analytical data summary:

The predominant soil on-site is Taloka Soil. The soil consists of silt loam from 0 to 28 inches, and a clay loam from 28-78 inches. Deeper soil types consist of clay, silt loam, silty clay loam, and weathered bedrock.

The maximum level of soil impact on-site was detected in the sample collected from soil boring B-GP-14 with a benzene concentration of 27.2 mg/l and TPH (gasoline) concentration of 2,290 mg/kg. Soil impact associated with monitoring well installations were also detected. The highest level of soil impact in monitoring well soil samples detected was at S-MW-5 at 7.5'-10' with a benzene concentration of 7.47 mg/kg. Soil analytical data is summarized on Figure 10 and Worksheet #10.

Based on analytical data, it appears that no soil impact extends to off-site locations.

3 Groundwater data summary:

Groundwater underlying the site generally flows to the southeast with an estimated hydraulic gradient of 0.048 ft/ft. Groundwater elevation data is summarized in the Tables Section of this report.

Groundwater samples collected from monitoring wells indicate on-site groundwater has been impacted. Monitoring wells S-MW-1 through S-MW-3, and S-MW-5 resulted in concentrations above method detection limits. The groundwater analytical data are summarized on Worksheet #11A and on Figure 11.

ORBCA SUMMARY REPORT

Worksheet ES-3

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffannle Greenway

EXECUTIVE SUMMARY

Benzene concentrations were detected in MW-1 through MW-3 and MW-5. Concentrations ranged from 0.0576 mg/l to 25.5 mg/l, with MW-5 resulting in the highest concentrations.

4 Risk assessment analysis:

A Site Conceptual Exposure Model (SCEM) was developed during completion of the Tier I/Tier IA report. Based on the Tier I/Tier IA SCEM for current conditions, indoor inhalation from shallow groundwater for resident child, resident adult, and commercial worker, along with construction worker ingestions, inhalation, and dermal contact with impacted soils and water, particulates or impacted vapors on and off-site were the major pathways evaluated. The Tier I/Tier IA SCEM results for future conditions identified six potential pathways to be evaluated. Completed exposure pathways for current conditions exceeded calculated RBSLs for indoor inhalation from shallow groundwater for resident child, adult, and commercial worker. RBSLs for dermal contact for construction workers was also exceeded. Completed exposure pathways for future conditions did not exceed RBSLs. Maximum on-site soil and groundwater concentrations exceeded the allowable soil and groundwater concentrations based on the distance (800 feet) of the site to a groundwater exposure point. Allowable concentrations for both soil and water were exceeded for resident child, adult, commercial worker, and construction worker under current conditions. Concentrations for future conditions were not exceeded.

5 Overall recommendations of risk assessment:

Based on analytical data and site investigation, it is recommended that impacted soils ("hot-spots") be removed from the site. Due to maximum on-site soil concentration levels exceeding allowable concentrations, excavation would eliminate exceedence of soil concentrations, which should also aid in natural attenuation of groundwater concentrations. In addition, groundwater at the site should be monitored to document plume status and further delineation is recommended for the groundwater plume. Upon excavation and additional monitoring, providing these additional data indicate that the magnitude and extent of the soil and groundwater exceeding the RBSL is decreasing, the site should be closed.

Report done - see denial letter
TNT 5-13-05

ORBCA SUMMARY REPORT **Worksheet #1**

LUST ID: 064-2777	FACILITY ID: 58-15176
Date Form Completed: 03/31/04	Form Completed by: Tiffannie Greenway

FACILITY INFORMATION

Prioritization Index No.:	4.1
Facility Name:	Shinn Oil Lease Property
Facility Address:	Corner of 2nd Avenue SE and D Street
Facility City:	Miami
Facility County:	Ottawa
Facility Location Description:	Corner of 2nd Avenue SE and D Street - North of 2nd Ave SE, East of D
Facility Owner/Phone No.:	The Burlington Northern and Santa Fe Railway Company (BNSF)
Owner Address:	4200 Deen Road
Owner City/State/Zip:	Fort Worth, Texas, 76106
Facility Operator/Phone No.:	Mr. Robert Werner - Manager Environmental Remediation, BNSF - 817-740-7341
Facility Latitude/Longitude:	N 36 52.342'; W 094 52.382'
Legal Location:	

List Previous names of this facility

1. Shinn Oil Company - July 1, 1987 - present
2. Ingram Oil Company - January 13, 1975 - July 1, 1987
- 3.

List Previous Owner(s) of this Facility with Address(es)

1. BNSF, located at 4200 Deen Road.
2. Fort Worth, Texas, is the current owner of the property.
3. The site has been leased to the companies listed above.

Has this site ever had an emergency response? YES NO
 If yes, then was it: State Lead Owner/Operator Lead (Discuss under Additional notes, below)

I certify that all work has been conducted under my supervision and in accordance with the underground Storage Tank Rules and that I am aware that my misrepresentation of any of the information submitted herein is a violation of OAC 165.25-3-90. See Attached Statement.

Certified UST Consultant	Date Signed	Certification No.	Expiration Date
(Print Name)		(Company Name)	

By signing below, I certify that I have reviewed this report for completeness

	<u>Robert E. Werner</u>	<u>4/14/04</u>
Responsible Party Signature	Responsible Party (Printed Name)	Date

Additional Notes:

Check One:

<input type="checkbox"/> Form UST 374-1, Page 1	<input type="checkbox"/> Form UST 376, Page 1
<input type="checkbox"/> Tier 1	<input type="checkbox"/> Tier 2
	<input type="checkbox"/> Tier 3

**OKLAHOMA CORPORATION COMMISSION
RISK-BASED CORRECTIVE ACTION (ORBCA) REPORT
FOR THE FORMER SHINN OIL LEASE PROPERTY
LOCATED IN MIAMI, OKLAHOMA
CASE ID #064-2777**

Reviewed by:

I certify that I have reviewed the attached ORBCA report for the Former Shinn Oil Lease Property, OCC Case #064-2777, and from the information presented to me, the work and preparation of the report appear to have been conducted in accordance with the Underground Storage Tank Rules and Regulations of the Oklahoma Corporation Commission.

	4-18-04	400 12/31/05
Certified Remediation Consultant	Date	Certification# & Expiration
Glenn Lindsey		

Glenn Lindsey Consulting, LLC

ORBCA SUMMARY REPORT

Worksheet #2

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffannie Greenway

SITE DESCRIPTION

Site Status

- Operating.
- Permanently or Temporarily out of Service. From _____ to _____
- Abandoned in _____

Ground Surface Conditions:

- Paved % area paved : 0 Material. _____
- Degree of cracking Minimal Low Moderate High
- Unpaved

Utilities:

Types and Depths of utilities:

- Conduit Potential Conduit
- Sanitary Sewer: Depth: _____ Flow Direction: _____
- Storm Sewer: Depth: _____ Flow Direction: _____
- Electric Line Depth: _____ Telephone Line Depth: 3
- Gas line Depth: _____ Water Line Depth: _____

- Have the utilities been inspected Yes No Dates Unknown
- Uncovered Yes _____

Immediate (within 500 feet) Land Use (at a minimum, state whether residential or non-residential)

Attach appropriate maps

- North: Empty commercial lot with BNSF Division Trailer/East Central Ave/Commercial Buildings
- Northeast: Railroad Tracks/Residential
- Northwest: D Street/Commercial Buildings
- South: 2nd Ave SE/ Empty Commercial Property/Steve Owens Blvd
- Southeast: Railroad Tracks/Commercial Property
- Southwest: D Street/Commercial Property
- West: D Street/Commercial and residential
- East: BNSF Right-of-way/Railroad tracks/Commercial lot/Residential Property

- Surface Drainage: Direction(s) Southwest Grade (ft): _____
- Drainage Discharge: Stream YES NO If YES, name: _____
- Lake YES NO If YES, name: _____
- Controlled Inlet/Outlet YES NO If YES, name the waterbody: _____
- Groundwater recharge/discharge area YES NO If YES, name the aquifer: _____

Additional Notes:

Utilities, with the exception of the electric line and telephone line are not located on-site. The electric line is aboveground, and a SWB telephone line runs from north to south of the west edge of the property. A natural gas line runs east to west on the south side of 2nd Avenue SE, and sewer and water run north to south to the west of the property under paved road.

Check One:

- Form UST 374-1, Page 2
- Form UST 376, Page 2
- Tier 1
- Tier 2
- Tier 3

ORBCA SUMMARY REPORT

LUST ID: 064-2777
 Date Form Completed: 31-Mar-04
 FACILITY ID: 58-15176
 Form Completed by: Tiffannie Greenway

UNDERGROUND STORAGE TANK TYPE

If the UST is active, check "YES" and if inactive, check "NO". Provide the installation date if the UST is active and the excavation date if the UST is inactive. A site map denoting Tank Number(s) is required.

Tank Number(s)	Product	Tank Registration ID Number	Capacity	Active	Installation Date	Removal Date	Closure in place Date	Temporary out of use Date
1	Gasoline	Unknown	800	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Unknown	2/11/2003	NA	NA
2	Unknown	Unknown	17,000	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Unknown	1/27/2003	NA	NA
3	Unknown	Unknown	17,000	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Unknown	1/27/2003	NA	NA
4	Unknown	Unknown	1,000	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Unknown	1/27/2003	NA	NA
				<input type="checkbox"/> YES <input type="checkbox"/> NO				
				<input type="checkbox"/> YES <input type="checkbox"/> NO				
				<input type="checkbox"/> YES <input type="checkbox"/> NO				
				<input type="checkbox"/> YES <input type="checkbox"/> NO				
				<input type="checkbox"/> YES <input type="checkbox"/> NO				
				<input type="checkbox"/> YES <input type="checkbox"/> NO				
				<input type="checkbox"/> YES <input type="checkbox"/> NO				
				<input type="checkbox"/> YES <input type="checkbox"/> NO				
				<input type="checkbox"/> YES <input type="checkbox"/> NO				
				<input type="checkbox"/> YES <input type="checkbox"/> NO				

Additional Notes:

ORBCA SUMMARY REPORT **Worksheet #4**

LUST ID: 064-2777 **FACILITY ID: 58-15176**

Date Form Completed: 31-Mar-04 **Form Completed by: Tiffannie Greenway**

LAND USE SUMMARY

The purpose of this worksheet is to identify existing and reasonable beneficial uses for land.

CURRENT LAND USE			COMMENTS
	Current	Prior	
Residential	<input type="checkbox"/>	<input type="checkbox"/>	
Non-residential	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>Site is zoned industrial</i>
Sensitive/special	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	

Distance and direction to the nearest residence (feet): *West approximately 125 feet*

Distance and direction to any environmentally sensitive area (feet) within a 1/2 mile (Define in Notes): _____

City water wells are located at distances greater than 1/2 mile. Properties surrounding the site are zoned res. and commercial.

Distance and direction to the nearest school, hospital, day care, retirement home, etc., (feet) (specify facility): _____

Kindergarten Center - 645 yards SW; Baptist Regional Health Center - 612 Yards West; Small

World Day Care - 339 yards SW; Elmview Assisted Living Inn - 2.6 miles NE

Distance and direction to the nearest commercial industrial site (feet) (specify): _____

Jones Harold Garage and Preferred Collision Repair - approximately 50 feet west

Notes:

FUTURE LAND USE			COMMENTS
	Potential		
Residential	<input type="checkbox"/>		<i>Zoning restrictions and established industries prohibit and limit the potential for residential development.</i>
Non-residential	<input checked="" type="checkbox"/>		
Sensitive/special	<input type="checkbox"/>		<i>The site is zoned for industrial property.</i>
Other	<input type="checkbox"/>		

Notes:

A map of the site vicinity/general site layout is provided as Figure 1 and 2. A land use and zoning map is provided as Figure 4.

Check One:

- Form UST 374-1, Page 4
 Form UST 376, Page 4
 Tier 1
 Tier 2
 Tier 3

ORBCA SUMMARY REPORT

Worksheet #5

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffannie Greenway

CHRONOLOGY OF EVENTS

Date	Instructions: Describe potential sources and spill events, including location type and estimated volume of materials stored or released, time and duration of release, and affected media (soil, groundwater, etc.). Describe monitoring well installation, soil boring activities, and slug tests. Discuss past corrective action efforts as appropriate.
<p><i>Unknown</i> <i>75-87</i></p> <p><i>1987</i></p>	<p><i>ASTs/USTs installed</i></p> <p><i>Property leased by Ingram Oil Company</i></p> <p><i>Property leased by Shinn Oil Company</i></p>
<p><i>12/12/01</i></p>	<p><i>Six subsurface soil samples collected from geoprobe points GP-1 through GP-6. Analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX, total petroleum hydrocarbons (TPH) as gasoline range organics (GRO), diesel fuel, fuel oil, and motor oil.</i></p> <p><i>Two groundwater samples collected from "open hole" geoprobe points GP-1 and GP-4.</i></p>
<p><i>01/27/03</i></p>	<p><i>Three ASTs were properly cleaned and removed from the site.</i></p>
<p><i>02/11/03</i></p>	<p><i>One UST removed from the site.</i></p>
<p><i>2/18-19/03</i></p>	<p><i>Soil boring activities completed. Field activities included installation of nine soil borings (GP-7 through GP-15) and sample collection. Soil samples analyzed for BTEX, TPH-GRO and TPH-DRO, Total Lead, and polynuclear aromatic hydrocarbons (PAH) on two highest TPH concentrations.</i></p>
<p><i>03/28/03</i></p>	<p><i>Building demolition.</i></p>

Check One:

Form UST 374-1, Page 5

Form UST 376, Page 5

Tier 1

Tier 2

Tier 3

ORBCA SUMMARY REPORT

Worksheet #6

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffannie Greenway

RELEASE CHARACTERIZATION

Release discovered during/by:

- UST Removal Closure in Place
- Release Detection Equipment
- Property Transaction
- Inventory Control
- System Tightness Testing
- Citizen Complaint
- Spill Incident
- Unknown
- Other (specify) Subsurface Investigation

Pumping Mechanism

- Pressure Unknown
- Suction

Sources of Release(s):

- Spills/overfills Unknown
- Piping
- Dispenser
- Tank
- Other (specify)

Substance Released (check all that apply)

- Gasoline
- Diesel
- Used Oil
- AV Gas
- Jet Fuel
- Hydraulic Fluid
- Other

Has the source of release been identified? YES NO

Has the release been eliminated? YES NO

Is groundwater impacted? On-site Off-site Unknown NO

Is surface water impacted? On-site Off-site Unknown NO

Is native soil impacted? On-site Off-site Unknown NO

Disolved phase extent:

Has NAPL been found at this site? YES NO

If YES, does NAPL extend off-site? YES NO

If YES, denote greatest thickness (to the nearest 1/100 foot):

If YES, has Free Product removal been initiated? YES NO

If NO, cite reason:

Details of the Release(s)

Date Discovered	Location	Quantity
December 12, 2001		Unknown

Notes:

During AST/UST removal activities and follow-up investigation, it was realized that a mixture of gasoline and diesel had been released at the site. This was confirmed with follow-up soil and water samples. This is believed to be from past historic releases rather than one specific release.

Check One:

- Form UST 374-1, Page 6
- Form UST 376, Page 6
- Tier 1
- Tier 2
- Tier 3

(Attach additional sheets if necessary)

ORBCA SUMMARY REPORT **Worksheet #7**

LUST ID: 064-2777 FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04 Form Completed by: Tiffannie Greenway

UST/PIPING REMOVAL CHARACTERIZATION

NOTE: A separate Worksheet # 7 must be filled out for each UST/AST system removal

Date of removal: 2/11/2003

Excavated Soil Tank No.: 1 Capacity(ies): 800
Date: _____ Quantity: _____

Details of Excavated Soil

	Date	Quantity	Location
<input checked="" type="checkbox"/> Stockpiled on-site			
<input type="checkbox"/> Disposed off-site*			
<input checked="" type="checkbox"/> Used (as fill material...) on-site	<u>2/11/03</u>	<u>Unknown</u>	<u>Excavation Area</u>
<input type="checkbox"/> Used as road base*			
<input type="checkbox"/> Soil farm*			

Confirmatory soil samples collected after excavation in native soil YES NO

Include the data in Worksheet # 10

Sampling of excavated soil YES NO

Include the data in Worksheet # 10 only if disposed on-site

Groundwater sampling during excavation YES NO

Include the data in Worksheet # 11

- Status of excavation:
- Open with water
 - Open/dry
 - Barricaded
 - Back filled
 - with excavated soil with clean fill
 - Pervious cover Impervious cover
 - Other

NOTE: A SITE MAP, TO SCALE, DEPICTING SAMPLING LOCATIONS AND ANY USTs, AST's, PIPING RUNS, AND DISPENSER ISLANDS IS REQUIRED

Depth DGS to base of UST pit: Approximately 10 feet

Was UST pit over-excavated? YES NO

If YES, cite dimensions (in feet) and give direction(s): _____

Was piping trench over-excavated? YES NO

If YES, cite dimensions (in feet) and give direction(s): _____

Additional Notes:

UST was removed by excavating overburden to expose the tank. The excavated soil was stockpiled on-site and then used to backfill the excavated area for safety purposes with plans to return to the site for excavation of impacted soil. No groundwater was encountered during the excavation activities and no pipe chase existed at the site. The location of the former UST are presented in the General Site Layout Map (Figure 2).

* Provide as attachments all copies of letters, permits, etc., for off-site removal.

Check One:

Form UST 374-1, Page 7 Form UST 376, Page 7

Tier 1 Tier 2 Tier 3

[1 of]

ORBCA SUMMARY REPORT **Worksheet #8**

LUST ID: 064-2777 FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04 Form Completed by: Tiffannie Greenway

SITE STRATIGRAPHY AND HYDROGEOLOGY

Groundwater impacted by release: YES NO Groundwater not encountered to depth of _____ feet BGS

Stratigraphy		
Depth	Unified Soil Classification	Type of Soil
0-28"	Fine-Grained Soils	Silts and Clays
28-78"	Fine-Grained Soils	Silts and Clays

Predominant Soil Type: Taloka

Depth	Type of Bedrock & Geologic Formation (Give rock properties & features - e.g., orientation of fractures)
>60 inches	Era: Palezoic; System: Mississippian; Series: Chesterian Series; Geologic Age: Stratified Sequence
	Consists of limestone-shale formations alternating with sandstone-shale formations

Predominant Type: Taloka

Average depth at which groundwater was first encountered (ft.):	<u>8.6'</u>	<input type="checkbox"/> Estimated	<input checked="" type="checkbox"/> Measured
Shallowest depth to water table/piezometer (ft.):	<u>8.06</u>	<input type="checkbox"/> Estimated	<input checked="" type="checkbox"/> Measured
Flow Direction (Attach contour map):	<u>Southeast</u>	<input type="checkbox"/> Estimated	<input checked="" type="checkbox"/> Measured
Hydraulic Gradient (i) [ft./ft.]:	<u>0.048</u>	<input type="checkbox"/> Estimated	<input checked="" type="checkbox"/> Measured
Estimated Porosity (θ) [cm ³ /cm ³]:	<u>35.64%</u>	<input type="checkbox"/> Estimated	<input checked="" type="checkbox"/> Measured
Water Content [cm ³ /cm ³]:	<u>22.44%</u>	<input type="checkbox"/> Estimated	<input checked="" type="checkbox"/> Measured
Dry Bulk Density [g/cm ³]:	<u>103.525</u>	<input type="checkbox"/> Estimated	<input checked="" type="checkbox"/> Measured
Hydraulic Conductivity (K) [ft./day]:	<u>2.48E-04</u>	<input type="checkbox"/> Estimated	<input checked="" type="checkbox"/> Measured

Hydraulic Conductivity test method:
 grain size/sieve analysis slug test pump test, period (hours):
 other (specify) Flexible Wall Permeameter

Flow Velocity [ft/day] (K_{i0}): 3.34E-05

Is this a perched aquifer? YES NO

Is the first groundwater encountered confined? YES NO

Groundwater level fluctuations (± ft.) (cite greatest known): 3.94±

Aquifer name: None

Estimated aquifer volume (if known) (cu. ft.): Unknown

Annual precipitation, 30-yr avg. (in/yr): 40.5 - Tulsa, OK; 43/08 (2002) - Miami

Identify any hydrogeologically sensitive areas that are either in, or within 1 mile of the COC's plume: _____

Additional Notes:
 Figure 5 provides a map of the topography of the site and vicinity. A map of the area geology is provided as Figure 7. Logs for all borings and monitoring wells installed at the site are provided in the Figures Section of this report. Groundwater elevation data collected to date for all site wells is summarized in the Tables Section of this report.

Check One:
 Form UST 374-1, Page 8 Form UST 376, Page 8 Tier 1 Tier 2 Tier 3

ORBCA SUMMARY REPORT

Worksheet #9

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffannie Greenway

WATER USE

The purpose of this worksheet is to identify existing and reasonable beneficial uses for groundwater, and surface water.

NOTE: Denote all wells within 1/2 mile radius of the site on Topographic Map

GROUNDWATER RESOURCES			COMMENTS
	Current	Potential	
Domestic supply	<input type="checkbox"/>	<input type="checkbox"/>	<i>According to the City of Miami Engineering Department, no permitted domestic wells are allowed to be drilled within the city limits.</i>
Public/Municipal Supply	<input type="checkbox"/>	<input type="checkbox"/>	
Industrial Supply	<input type="checkbox"/>	<input type="checkbox"/>	
Agriculture	<input type="checkbox"/>	<input type="checkbox"/>	
Other (Define in Notes)	<input type="checkbox"/>	<input type="checkbox"/>	
Within Wellhead Protection Area	<input type="checkbox"/>	<input type="checkbox"/>	

Likelihood of use of groundwater for domestic supply in future
 Low Medium High None/Extremely unlikely

Water Quality (If known, Please specify units)
 TDS: 480 mg/l Specific Conductance: 781-991 S/cm Chlorides: <30 mg/l
 Hardness: NA Nitrates: <5 mg/l Iron: 1.0-3.5 mg/l
 Sulfates: <50 mg/l - 100 mg/l Pesticides (specify): NA
 Other (specify): NA

Notes:

SURFACE WATER RESOURCES (If relevant)			COMMENTS
	Current	Potential	
Domestic supply	<input type="checkbox"/>	<input type="checkbox"/>	<i>Not Applicable</i>
Public/Municipal Supply	<input type="checkbox"/>	<input type="checkbox"/>	
Recreational	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	

Likelihood of use of surface water for domestic supply in future
 Low Medium High None/Extremely unlikely

If a stream is, or may potentially be, impacted by COC's, does the stream have:
 Intermittent water flow Continuous water flow

Notes:
City drinking water wells are located approximately 1200 feet in depth. Screened interval is from 650' to 1200' bgs. Water samples collected from the site is from a perched water layer that is not connected with the city drinking water source. The Grand (Neosho) River is located approximately 2 miles from the site. Figure 6 provides a map of area water wells.

- Check One:
- Form UST 374-1, Page 9 Form UST 376, Page 9
 Tier 1 Tier 2 Tier 3

ORCA SUMMARY REPORT
 LUST ID: 064-2777
 FACILITY ID: 88-15176
 Date Form Completed: 31-Mar-04
 Form Completed by: Tiffanale Greenway

ANALYTICAL DATA SUMMARY FOR SOIL

NW No./Sample Location	Sampling Date	Sample Depth [ft.]	Benzene [mg/kg]	Toluene [mg/kg]	Ethylbenzene [mg/kg]	Xylene [mg/kg]	Naphthalene [mg/kg]	TPHCRO [mg/kg]	THUDRO [mg/kg]	OTHERS
Chemical levels detected during soil borings, and UST/piping removal activity										
Task 1										Unidentified Organic
Bottom	2-11-2003	N/A	0.014	3.31	0.08	6.00	N/A	<5.0	N/A	3260
NE Corner Pt	2-11-2003	N/A	0.007	2.39	0.0027	6.06	N/A	<3.39	N/A	766
SE Corner Pt	2-11-2003	N/A	0.0029	0.558	0.017	1.33	N/A	<1.45	N/A	193
Composite	2-11-2003	N/A	0.023	1.51	0.0026	7	N/A	<5.12	N/A	652
GP-1	12-12-2001	4-8	0.01	<0.005	0.11	0.17	N/A	163	<4.0	Fuel Oil
GP-2	12-12-2001	4-8	<0.010	<0.010	<0.010	<0.010	N/A	52.6	<4.0	7.7
GP-3	12-12-2001	4-8	0.19	0.23	0.68	1.16	N/A	133	<19.4	14.1
GP-4	12-12-2001	15-16	2.5	3.4	11.2	36.6	N/A	1220	131	256
GP-5	12-12-2001	8-12	<0.010	<0.010	<0.010	<0.0020	N/A	<5.0	<4.1	<19.7
GP-6	12-12-2001	8-12	<0.010	<0.010	<0.010	<0.0020	N/A	<5.0	<4.0	<4.1
										Lead

NUMBER OF DETECTIONS(S)	22	17	19	19	4	25	17	37
AVERAGE	2.121	12.241	5.222	44.392	2.562	270.040	295.153	160.673
STD DEVIATION	5.887	33.777	10.698	100.623	2.443	513.507	483.438	5.48 941
MAXIMUM	27.500	140.000	46.100	400.000	5.800	2290.000	1800.000	3260.000

NOTE: Provide any laboratory analytical data sheets not previously submitted to the OCC ND and NO OVA values are ignored for calculating the average and standard deviations.

ORBCA SUMMARY REPORT

LUST ID: 064-3777

Date Form Completed: 31-Mar-04

FACILITY ID: 88-18176

Form Completed by: Tiffanie Oresway

ANALYTICAL DATA SUMMARY FOR SOIL

Chemical levels detected during soil borings, and UST (using removal activity)

VW No./Sample Location	Sampling Date	Sample Depth [ft.]	Benzene [mg/kg]	Toluene [mg/kg]	Ethylbenzene [mg/kg]	Xylene [mg/kg]	Naphthalene [mg/kg]	TPH/GRO [mg/kg]	TPH/DRO [mg/kg]	OTHERS (Lead)
GP-7	3-26-2003	4-6	<0.020	<0.020	<0.020	<0.060	NA	1.2	<0.3	18.7
		12-14	<0.020	<0.020	<0.020	<0.060	NA	3.4	<0.3	19
		16-17	<0.020	<0.020	<0.020	<0.060	NA	<1.0	<0.3	8.65
GP-8	3-26-2003	4-6	0.107	0.241	<0.020	0.52	NA	256	230	7.86
		16-18	<0.020	<0.020	0.146	0.192	NA	829	63	9.95
GP-9	3-27-2003	8-10	<0.020	<0.020	<0.020	<0.060	NA	<53.0	<0.3	20.4
		12-14	<0.020	<0.020	<0.020	<0.060	NA	21.4	22	131
GP-10	3-27-2003	0-2	0.223	0.427	0.078	3.7	NA	182	530	15.7
		6-8	1.32	5.73	8.52	48.4	NA	457	140	16.5
		14-16	0.073	2.51	1.14	5.22	1.05	231	1000	24.2
GP-11	3-27-2003	6-8	0.033	0.056	0.003	0.144	NA	52	48	4.66
		14-16	<0.020	<0.020	<0.020	<0.060	NA	<50	<0.3	17.6
GP-12	3-27-2003	6-8	<0.020	<0.020	<0.020	<0.060	NA	5.65	92	29.9
		14-16	<0.020	<0.020	<0.020	<0.060	NA	<1.0	<0.3	11.6
GP-13	3-27-2003	6-8	<0.020	<0.020	<0.020	<0.060	NA	<1.0	<0.3	16.4
		14-16	<0.020	<0.020	<0.020	<0.060	NA	<1.0	<0.3	6.62
GP-14	3-27-2003	10-12	2.2	140	46.1	225	5.0	2290	600	27.4
		14-16	0.0626	0.365	0.006	2.36	NA	105	63	28.2
GP-15	3-27-2003	8-10	<0.020	<0.020	<0.020	<0.060	NA	<5	<0.3	8.24
		14-16	<0.020	<0.020	<0.020	<0.060	NA	<1	<0.3	18.4
NUMBER OF DETECTIONS:			22	17	19	19	4	25	17	37
AVERAGE:			2.121	12.241	5.222	44.392	2.562	270.040	295.143	160.673
STD. DEVIATION:			5.887	31.777	10.698	100.623	2.443	513.507	483.438	548.941
MAXIMUM:			27.200	140.000	46.100	400.000	5.000	2290.000	1800.000	3250.000

NOTE: Provide any laboratory analytical data sheets not previously submitted to the OCC. ND and NS values are ignored for calculating the average and standard deviations.

Check One: Form UST 374-1, Page 10 Form UST 374, Page 10 Tier 1 Tier 2 Tier 3

ORCA SUMMARY REPORT

LUST ID: 064-2777

FACILITY ID: 88-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffanie Greenway

ANALYTICAL DATA SUMMARY FOR SOIL

Chemical levels detected during soil borings, and UST/piping removal activity

MW No./Sample Location	Sampling Date	Sample Depth [ft.]	Benzene [mg/kg]	Toluene [mg/kg]	Ethylbenzene [mg/kg]	Xylene [mg/kg]	Naphthalene [mg/kg]	TPH/CRO [mg/kg]	TPH/DRO [mg/kg]	OTHERS (Lead)
S-VW-1	5/14/2003	10-12.5	<0.020	<0.020	<0.020	<0.060	NA	12.5	9.6	18.5
		15-17.5	<0.020	<0.020	<0.020	<0.060	NA	5.06	<0.3	8.25
S-VW-2	5/15/2003	2.5-5	1.54	0.316	1.69	2.64	3.95	76.2	1100	168
		17.5	0.482	0.0395	0.629	1.06	NA	65.9	11	9.87
S-VW-3	5/15/2003	10-12.5	0.0454	<0.020	<0.020	<0.060	NA	3.5	<0.3	2.1
		15-17.5	0.0377	<0.020	0.0117	<0.060	NA	10.2	<0.3	21.2
S-VW-4	5/15/2003	5-7.5	0.0253	<0.020	<0.020	<0.060	NA	1.5	1.9	28.6
		15-17.5	0.024	<0.020	<0.020	<0.060	NA	<1.0	<0.3	24.7
S-VW-5	5/15/2003	7.5-10	7.47	29.8	18.5	56.6	0.348	900	140	27.1
		15-17.5	4.39	15	7.71	39.1	NA	400	25	21.5
NUMBER OF DETECTIONS:										
			22	17	19	19	4	25	17	37
AVERAGE			2.121	12.241	5.222	44.392	2.562	270.040	295.153	160.673
STD DEVIATION:			5.887	33.777	10.698	100.623	2.443	513.507	483.438	548.941
MAXIMUM:			27.200	140.000	46.100	400.000	5.800	2290.000	1800.000	3260.000

NOTE: Provide any Laboratory analytical datasets not previously submitted to the OCC. ND and NS values are ignored for calculating the average and standard deviations.

Check Date:

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Tier 2

Tier 3

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ORBCA SUMMARY REPORT
 LUST ID: 064-2777
 Date Form Completed: 31-Mar-04
 FACILITY ID: 88-18176
 Form Completed by: Tiffanise Greenway
 Worksheet #11-A

ANALYTICAL DATA SUMMARY FOR GROUNDWATER - SINGLE SAMPLING EVENTS

M/W No./Sample Location	Installation Date	Screen Interval	No. of Measurements	Sampling Date	Water Level below TOC	Benzene [mg/l] MCL=0.005	Toluene [mg/l] MCL=1.0	Ethylbenzene [mg/l] MCL=0.7	Xylene [mg/l] MCL=1.0	Naphthalene [mg/l]	TPH/GRO [mg/l]	TPH/DRO [mg/l]
GP-1	Boring	N/A		12/12/2001	15	0.0284	0.0033	0.0134	0.0189	N/A	1.2	N/A
GP-2	Boring	N/A		12/12/2001	16	15	3.54	3.39	13.6	N/A	219	N/A
S-M/W-1	5/14/2003	9-17'		5/29/2003	18.33	0.0576	0.00168	<0.001	<0.003	N/A	0.865	1.8
S-M/W-2	5/15/2003	7-17'		1/14/2004	12	0.202	<0.005	<0.005	<0.015	N/A	1.01	1.7
S-M/W-3	5/15/2003	7.5-17.5'		5/29/2003	8.06	3.01	<0.050	<0.050	0.335	N/A	33	4.1
S-M/W-4	5/15/2003	7.5-17.5'		1/14/2004	12	3.6	0.0662	0.0662	0.359	N/A	19	3.3
S-M/W-5	5/15/2003	8-18'		5/29/2003	9.94	0.103	<0.010	<0.010	<0.010	N/A	2.2	0.07
				1/14/2004	10	1.52	0.44	0.17	0.142	N/A	6.15	1.2
				5/29/2003	9.05	<0.001	<0.001	0.0108	<0.003	N/A	0.018	1.1
				1/14/2004	9.8	<0.025	<0.025	<0.025	<0.075	N/A	0.463	0.18
				5/29/2003	18.79	2.53	20.6	0.7	18.2	0.661	97.5	72
				1/14/2004	12	23.4	23.7	4.22	26	N/A	128	42
NUMBER OF DETECTIONS:												
					12	10	7	7	7	1	12	10
AVERAGE												
					11.248	7.659	7.708	1.224	7.236	0.661	40.801	12.855
STD DEVIATION:												
					2.331	10.430	12.268	1.795	9.989	-	70.358	24.342
MAXIMUM												
					16.000	25.500	29.700	4.220	26.000	0.661	219.000	72.000

NOTE: Provide any laboratory analytical data sheets not previously submitted to the OCC
 ND and NS values are ignored for calculating the average and standard deviations.

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Tier 1 Tier 2 Tier 3

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ORBCA SUMMARY REPORT

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffanie Greenway

ANALYTICAL DATA SUMMARY FOR GROUNDWATER - MULTIPLE SAMPLING EVENTS

Instructions: Indicate type and concentrations of hazardous constituents detected in groundwater. Provide statistical data (maximum value, range, and mean) on detectable concentrations only.

Do not include non-detects from outside of permit zone.

Monitoring Well #	1	2	3	4	5	6	7	8	9	10	11	12
Screen Interval (feet below TOC)	9-19	7-17	7.5-17.5	7.5-17.5	8-18							
Water Level (feet below TOC)												
Installation Date (M/D/Y)	5/14/2003	5/15/03	5/15/03	5/15/03	5/15/03							
Number of Measurements	2	2	2	2	2							
Benzene												
Detects	2	2	2	0	2							
MCL = 0.015 mg/l												
Maximum	0.262	3.810	1.520	ND	25.500							
Range (mg/l)	0.262-0	0.21	1.117	NA	0.1							
Mean (mg/l)	0.160	3.705	0.962	NA	25.450							
Recent Trend	Increase	Decrease	Increase	NA	Decrease							
Toluene												
Detects	0	1	1									
MCL = 1.0 mg/l												
Maximum	<0.005	0.066	0.040									
Range (mg/l)	0.00032	0.0162										
Mean (mg/l)	0.005	0.058										
Recent Trend	N/A	Increase										
Ethylbenzene												
Detects												
MCL = 0.7 mg/l												
Maximum												
Range (mg/l)												
Mean (mg/l)												
Recent Trend												
Xylenes												
Detects												
MCL = 10 mg/l												
Maximum												
Range (mg/l)												
Mean (mg/l)												
Recent Trend												

NOTE: Provide any laboratory analytical data sheets not previously submitted to the OCC

Check One:

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Tier 1

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ORBCA SUMMARY REPORT		Worksheet #12
LUST ID: 064-2777	FACILITY ID: 88-15176	
Date Form Completed: 31-Mar-04	Form Completed by: Tiffannie Greenway	

SITE CONCEPTUAL EXPOSURE SCENARIO - CURRENT CONDITIONS

Potentially Exposed Receptor	Exposure Route, Medium, and Exposure Point	C ¹ / NC ²	Justification of Inclusion or Exclusion of Pathways
Resident Child	Ingestion and dermal contact with surficial soil	NC	<i>Site is located on a non-residential area and soil impact appears to be contained on-site.</i>
	Indoor inhalation of vapors from surficial soil	NC	<i>No residential structures are located directly on top of impacted soil.</i>
	Indoor inhalation of vapors from sub-surface soil	NC	<i>No residential structures are located directly on top of impacted soil.</i>
	Ingestion of shallow groundwater	NC	<i>Drinking water wells are not screened in the shallow groundwater zone.</i>
	Indoor inhalation of vapors from shallow groundwater	C	<i>Potential exists for impacted groundwater to migrate beneath residential structures in surrounding area.</i>
	Ingestion of deep groundwater	NC	<i>Drinking water well is not located within 1/2 of the site. Well depth is greater than 1,000 feet with pump set between 650-700 feet. Impacted water is on perched water zone on-site.</i>
	Pathways not evaluated under Tier 1 as per OCC Guidance document.		
	Dermal contact with shallow groundwater	NC	<i>Residents do not have direct access to groundwater and surface water has not been impacted therefore eliminating exposure pathways.</i>
	Indoor inhalation of vapors from deep groundwater (≥10 ft BGS)	C	<i>Potential exists for impacted groundwater to migrate beneath residential structures in surrounding area.</i>
Dermal contact with deep groundwater	NC	<i>Water impacted by hydrocarbons are on a perched zone on-site. There does not appear to be a pathway between the contaminant and receptor off-site.</i>	

Resident Adult	Ingestion and dermal contact with surficial soil	NC	<i>Site is located on a non-residential area and soil impact appears to be on-site.</i>
	Indoor inhalation of vapors from surficial soil	NC	<i>No residential structures are located directly on top of impacted soil.</i>
	Indoor inhalation of vapors from sub-surface soil	NC	<i>No residential structures are located directly on top of impacted soil.</i>
	Ingestion of shallow groundwater	NC	<i>Drinking water wells are not screened in the shallow groundwater zone.</i>
	Indoor inhalation of vapors from shallow groundwater	C	<i>Potential exists for impacted groundwater to migrate beneath residential structures in surrounding area.</i>
	Ingestion of deep groundwater	NC	<i>Drinking water well is not located within 1/2 of the site. Well depth is greater than 1,000 feet with pump set between 650-700 feet. Impacted water is on perched water zone on-site.</i>
	Pathways not evaluated under Tier 1 as per OCC Guidance document.		
	Dermal contact with shallow groundwater	NC	<i>Residents do not have direct access to groundwater and surface water has not been impacted therefore eliminating exposure pathways.</i>
	Indoor inhalation of vapors from deep groundwater (≥10 ft BGS)	C	<i>Potential exists for impacted groundwater to migrate beneath residential structures in surrounding area.</i>
Dermal contact with deep groundwater	NC	<i>Water impacted by hydrocarbons are on a perched zone on-site. There does not appear to be a pathway between the contaminant and receptor off-site.</i>	

Check One:

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 Tier 1 Tier 2 Tier 3

C¹ : Complete Pathway NC² : Incomplete Pathway

ORCA SUMMARY REPORT

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffannie Greenway

SITE CONCEPTUAL EXPOSURE SCENARIO - CURRENT CONDITIONS

Potentially Exposed Receptor	Exposure Route, Medium, and Exposure Point	C ¹ /NC ²	Justification of Inclusion or Exclusion of Pathways
Commercial Worker	Ingestion and dermal contact with surficial soil	NC	Soil impact is contained on-site. Site is currently abandoned eliminating exposure pathways. Based on field screenings, soil impact appears to be greater than 2 feet bgs.
	Indoor inhalation of vapors from surficial soil	NC	No commercial structures are located directly on top of impacted soil.
	Indoor inhalation of vapors from sub-surface soil	NC	No commercial structures are located directly on top of impacted soil.
	Ingestion of shallow groundwater	NC	Drinking water wells are not screened in the shallow groundwater zone.
	Indoor inhalation of vapors from shallow groundwater	C	Potential exists for impacted groundwater to migrate beneath commercial structures in surrounding area.
	Ingestion of deep groundwater	NC	Drinking water well is not located within 1.2 of the site. Well depth is greater than 1,000 feet with pump set between 650-780 feet. Impacted water is on perched water zone on-site.
	Pathways not evaluated under Tier 1 as per OCC Guidance document.		
	Dermal contact with shallow groundwater	NC	Commercial workers do not have direct access to groundwater and surface water has not been impacted therefore eliminating exposure pathways.
	Indoor inhalation of vapors from deep groundwater (≥10 ft BGS)	C	Potential exists for impacted groundwater to migrate beneath commercial structures in surrounding area.
Dermal contact with deep groundwater	NC	Water impacted by hydrocarbons are on a perched zone on-site. There does not appear to be a pathway between the contaminant and receptor off-site.	
Construction Worker	Ingestion and dermal contact with soil, and inhalation of vapor and particulates	C	Possible excavation in area for construction.
	Dermal contact with shallow groundwater	C	Excavation activities on or surrounding properties of the site related to utility repairs or other subsurface work may result in direct contact with impacted groundwater.
	Pathways not evaluated under Tier 1 as per OCC Guidance document.		
	Ingestion of shallow groundwater	NC	Drinking water wells are not screened in the shallow groundwater zone.
	Inhalation of vapors from shallow groundwater	C	Potential exists for impacted groundwater to migrate to utilities on and surrounding property.
	Ingestion of deep groundwater	NC	Drinking water well is not located within 1.2 of the site. Well depth is greater than 1,000 feet with pump set between 650-780 feet. Impacted water is on perched water zone on-site.
	Indoor inhalation of vapors from deep groundwater (≥10 ft BGS)	C	Potential exists for vapor accumulation in existing utilities.
Dermal contact with deep groundwater	C	Excavation activities on or surrounding property related to utility repairs or other subsurface work may result in direct contact with impacted groundwater.	

Check One:

- Form UST 374-1, Page 12 Form UST 376, Page 12
 Tier 1 Tier 2 Tier 3

C¹ : Complete Pathway NC² : Incomplete Pathway

ORCA SUMMARY REPORT **Worksheet #12**

LUST ID: 064-2777 FACILITY ID: 88-15176

Date Form Completed: 31-Mar-04 Form Completed by: Tiffannie Greenway

SITE CONCEPTUAL EXPOSURE SCENARIO - FUTURE CONDITIONS

Potentially Exposed Receptor	Exposure Route, Medium, and Exposure Point	C ¹ / NC ²	Justification of Inclusion or Exclusion of Pathways
Resident Child	Ingestion and dermal contact with surficial soil	NC	Site is located on a non-residential property, and soil impact appears to be contained on-site.
	Indoor inhalation of vapors from surficial soil	NC	No residential structures are located directly on top of impacted soil.
	Indoor inhalation of vapors from sub-surface soil	NC	No residential structures are located directly on top of impacted soil.
	Ingestion of shallow groundwater	NC	Drinking water wells are not screened in the shallow groundwater zone.
	Indoor inhalation of vapors from shallow groundwater	C	Potential exists for impacted groundwater to migrate beneath residential structures in surrounding area.
	Ingestion of deep groundwater	NC	Drinking water well is not located within 1/2 of the site. Well depth is greater than 1,000 feet with pump set between 650-720 feet. Impacted water is on perched water zone on-site.
	Pathways not evaluated under Tier 1 as per OCC Guidance document.		
	Dermal contact with shallow groundwater	NC	Residents do not have direct access to groundwater and surface water has not been impacted therefore eliminating exposure pathways.
	Indoor inhalation of vapors from deep groundwater (≥10 ft BGS)	C	Potential exists for impacted groundwater to migrate beneath residential structures in surrounding area.
Dermal contact with deep groundwater	NC	Water impacted by hydrocarbons are on a perched zone on-site. There does not appear to be a pathway between the contaminant and receptor off-site.	
Resident Adult	Ingestion and dermal contact with surficial soil	NC	Site is located on a non-residential property and soil impact appears to be contained on-site.
	Indoor inhalation of vapors from surficial soil	NC	No residential structures are located directly on top of impacted soil.
	Indoor inhalation of vapors from sub-surface soil	NC	No residential structures are located directly on top of impacted soil.
	Ingestion of shallow groundwater	NC	Drinking water wells are not screened in the shallow groundwater zone.
	Indoor inhalation of vapors from shallow groundwater	C	Potential exists for impacted groundwater to migrate beneath residential structures in surrounding area.
	Ingestion of deep groundwater	NC	Drinking water well is not located within 1/2 of the site. Well depth is greater than 1,000 feet with pump set between 650-720 feet. Impacted water is on perched water zone on-site.
	Pathways not evaluated under Tier 1 as per OCC Guidance document.		
	Dermal contact with shallow groundwater	NC	Residents do not have direct access to groundwater and surface water has not been impacted therefore eliminating exposure pathways.
	Indoor inhalation of vapors from deep groundwater (≥10 ft BGS)	C	Potential exists for impacted groundwater to migrate beneath residential structures in surrounding area.
Dermal contact with deep groundwater	NC	Water impacted by hydrocarbons are on a perched zone on-site. There does not appear to be a pathway between the contaminant and receptor off-site.	

Check One:
 Form UST 374-L, Page 12 Form UST 376, Page 12
 Tier 1 Tier 2 Tier 3
 C¹ : Complete Pathway NC² : Incomplete Pathway
 [3 of 4]

ORBCA SUMMARY REPORT		Worksheet #12
LUST ID: 064-2777	FACILITY ID: 58-15176	
Date Form Completed: 31-Mar-04	Form Completed by: Tiffannie Greenway	

SITE CONCEPTUAL EXPOSURE SCENARIO - FUTURE CONDITIONS

Potentially Exposed Receptor	Exposure Route, Medium, and Exposure Point	C ¹ /NC ²	Justification of Inclusion or Exclusion of Pathways
Commercial Worker	Ingestion and dermal contact with surficial soil	NC	<i>Based on field screenings, impact appears to be greater than two feet bgs</i>
	Indoor inhalation of vapors from surficial soil	NC	<i>Based on field screenings, impact appears to be greater than two feet bgs.</i>
	Indoor inhalation of vapors from sub-surface soil	C	<i>Potential exists for future construction of commercial structures.</i>
	Ingestion of shallow groundwater	NC	<i>Drinking water wells are not screened in the shallow groundwater zone.</i>
	Indoor inhalation of vapors from shallow groundwater	C	<i>Potential exists for impacted groundwater to migrate beneath commercial structures in surrounding area, and potential future structures on-site.</i>
	Ingestion of deep groundwater	NC	<i>Drinking water well is not located within 1/2 of the site. Well depth is greater than 1,000 feet with pump set between 650-780 feet. Impacted water is on perched water zone on-site.</i>
	Pathways not evaluated under Tier 1 as per OCC Guidance document.		
	Dermal contact with shallow groundwater	NC	<i>Commercial workers do not have direct access to groundwater and surface water has not been impacted.</i>
	Indoor inhalation of vapors from deep groundwater (≥10 ft BGS)	C	<i>Potential vapors accumulation in existing structures of possible future structures on-site.</i>
Dermal contact with deep groundwater	NC	<i>Water impacted by hydrocarbons are on a perched zone on-site. There does not appear to be a pathway between the contaminant and receptor off-site.</i>	
Construction Worker	Ingestion and dermal contact with soil, and inhalation of vapor and particulates	C	<i>Possible future excavation in area for construction.</i>
	Dermal contact with shallow groundwater	C	<i>Excavation activities on or surrounding properties of the site related to utility repairs or other subsurface work may result in direct contact with impacted groundwater.</i>
	Pathways not evaluated under Tier 1 as per OCC Guidance document.		
	Ingestion of shallow groundwater	NC	<i>Drinking water wells are not screened in the shallow groundwater zone.</i>
	Indoor inhalation of vapors from deep groundwater (≥10 ft BGS)	C	<i>Potential vapor accumulation in existing structures or possible future structures on-site.</i>
	Ingestion of deep groundwater	NC	<i>Drinking water well is not located within 1/2 of the site. Well depth is greater than 1,000 feet with pump set between 650-780 feet. Impacted water is on perched water zone on-site.</i>
	Inhalation of vapors from deep groundwater	C	<i>The potential exists for vapor accumulation in existing structures off-site or potential future structures on-site.</i>
	Dermal contact with deep groundwater	C	<i>Excavation activities on or surrounding property related to utility repairs or other subsurface work may result in direct contact with impacted groundwater.</i>

Check One:

- Form UST 374-1, Page 12
 Form UST 376, Page 12
 Tier 1
 Tier 2
 Tier 3

C¹ : Complete Pathway NC² : Incomplete Pathway

ORBCA SUMMARY REPORT

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffannie Greenway

COMPARISON OF TIER 1 RBLS WITH MAXIMUM ON-SITE CONCENTRATIONS - CURRENT CONDITIONS

Receptor	Media	Route of Exposure	C/ NC ²	Tier 1 Levels									
				Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene					
Resident Child	Surficial Soil	Ingestion + Dermal	NC	-	-	-	-	-	-	-			
		Indoor Inhalation	NC	-	-	-	-	-	-	-			
		Indoor Inhalation	NC	-	-	-	-	-	-	-			
	Sub-Surface Soil	Allowable Soil Concentration (mg/kg)		25,000	E	35836.110	NE	156581	NE	611434.12	NE	62613.770	NE
		Maximum On-site Soil Concentration (mg/kg)		27,200		140,000		46,100		400,000		5,800	
	Shallow Groundwater	Ingestion of Water	NC	-	-	-	-	-	-	-	-	-	-
		Indoor Inhalation	C	1.769	E	447.727	NE	152,000	NE	198,000	NE	31,000	NE
		Indoor Inhalation	NC	-	-	-	-	-	-	-	-	-	-
	Deep Groundwater	Allowable Groundwater Concentration (mg/l)		2,030	E	1008.600	NE	504.300	NE	10085.950	NE	201.720	NE
		Maximum On-site Groundwater Concentration (mg/l)		25,500		29,700		4,220		26,000		0.661	
Surficial Soil		Ingestion + Dermal	NC	-	-	-	-	-	-	-	-	-	-
		Indoor Inhalation	NC	-	-	-	-	-	-	-	-	-	-
		Indoor Inhalation	NC	-	-	-	-	-	-	-	-	-	-
Sub-Surface Soil	Allowable Soil Concentration (mg/kg)		11,670	E	83617.580	NE	365356.69	NE	1426679.62	NE	146098.79	NE	
	Maximum On-site Soil Concentration (mg/kg)		27,200		140,000		46,100		400,000		5,800		
Resident Adult	Shallow Groundwater	Ingestion of Water	NC	-	-	-	-	-	-	-	-	-	
		Indoor Inhalation	C	1.651	E	535,000	NE	152,000	NE	198,000	NE	31,000	NE
		Indoor Inhalation	NC	-	-	-	-	-	-	-	-	-	-
	Deep Groundwater	Allowable Groundwater Concentration (mg/l)		0.917	E	2353.390	NE	1176.690	NE	23533.89	NE	470.680	NE
		Maximum On-site Groundwater Concentration (mg/l)		25,500		29,700		4,220		26,000		0.661	

N/A : Not Applicable
 1 : Complete Pathway
 2 : Incomplete Pathway
 E : Maximum on-site concentration exceeds Tier 1 RBSL
 NE : Maximum on-site concentration does not exceed Tier 1 RBSL

Point of Exposure for Groundwater [Refer Tables S-6(a) through S-8(c) of the Guidance Document]: 800 ft

County: Ottawa

ORBCA SUMMARY REPORT

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffanle Greenway

COMPARISON OF TIER 1 RBSLs WITH MAXIMUM ON-SITE CONCENTRATIONS - CURRENT CONDITIONS

Receptor	Media	Route of Exposure	C ¹ / NC ²	Tier 1 Levels									
				Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	NE	NE			
Commercial Worker	Surficial Soil	Ingestion + Dermal	NC	-	-	-	-	-	-	-	-	-	-
		Indoor Inhalation	NC	-	-	-	-	-	-	-	-	-	-
	Sub-Surfaces Soil	Indoor Inhalation	NC	-	-	-	-	-	-	-	-	-	-
		Allowable Soil Concentration (mg/kg)		39.210	NE	234129.23	NE	1022998.75	NE	3994702.92	NE	409076.61	NE
Construction Worker	Shallow Groundwater	Maximum On-site Soil Concentration (mg/kg)		27.200	140.000	46.100	400.000	4.000					
		Ingestion of Water	NC	-	-	-	-	-	-	-	-	-	-
	Deep Groundwater	Indoor Inhalation	C	3.898	E	796.930	NE	1980.310	NE	503.320	NE	403.130	NE
		Ingestion of Water	NC	-	-	-	-	-	-	-	-	-	-
Construction Worker	Surficial Soil	Allowable Groundwater Concentration (mg/l)		3.180	E	6389.490	NE	3294.740	NE	63894.88	NE	1317.900	NE
		Maximum On-site Groundwater Concentration (mg/l)		25.500	29.700	4.220	26.000	0.661					
	Groundwater	Ingestion + Dermal + Inhalation of vapor & particulates	C	905.203	NE	796.930	NE	1980.310	NE	503.320	NE	403.130	NE
		Dermal contact	C	5.576	E	17.896	E	5.441	NE	100.664	NE	2.334	NE
Minimum Soil Concentration of all Routes of Exposure (mg/kg)	Maximum On-site Groundwater Concentration (mg/l)		25.500	29.700	4.220	26.000	0.661						
	Minimum Groundwater Concentration of all Routes of Exposure (mg/l)		11.670	796.930	1980.310	503.320	403.130						
Point of Exposure for Groundwater [Refer Tables 5-6(a) through 5-8(c) of the Guidance Document]:			0.947	17.896	5.441	100.664	2.334						

1: Complete Pathway
 2: Incomplete Pathway
 E: Maximum on-site concentration exceeds Tier 1 RBSL
 NE: Maximum on-site concentration does not exceed Tier 1 RBSL

ORBCA SUMMARY REPORT

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffanie Greenway

COMPARISON OF TIER 1 RBSLs WITH MAXIMUM ON-SITE CONCENTRATIONS - FUTURE CONDITIONS

Receptor	Media	Route of Exposure	C/ NC ²	Tier 1 Levels									
				Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene					
Resident Child	Surficial Soil	Ingestion + Dermal	NC	-	-	-	-	-	-	-	-	-	
		Indoor Inhalation	NC	-	-	-	-	-	-	-	-	-	
	Sub-Surface Soil	Indoor Inhalation	NC	-	-	-	-	-	-	-	-	-	
	Allowable Soil Concentration (mg/kg)			2794.640	40052.120	NE	175002.79	NE	683367.55	NE	69980.09	NE	
	Maximum On-site Soil Concentration (mg/kg)			27.200	140.000		46.100		400.000		5.800		
Resident Adult	Shallow Groundwater	Ingestion of Water	NC	-	-	-	-	-	-	-	-	-	
		Indoor Inhalation	C	176.871	NE	447.727	NE	152.000	NE	198.000	NE	31.000	NE
	Deep Groundwater	Ingestion of Water	NC	-	-	-	-	-	-	-	-	-	
	Allowable Groundwater Concentration (mg/l)			202.880	NE	1008.600	NE	504.300	NE	10085.950	NE	201.720	NE
		Maximum On-site Groundwater Concentration (mg/l)			25.500	29.700		4.220		26.000		0.661	
	Surficial Soil	Ingestion + Dermal	NC	-	-	-	-	-	-	-	-	-	-
Resident Adult		Indoor Inhalation	NC	-	-	-	-	-	-	-	-	-	
	Sub-Surface Soil	Indoor Inhalation	NC	-	-	-	-	-	-	-	-	-	
	Allowable Soil Concentration (mg/kg)			1304.170	NE	93454.94	NE	408339.84	NE	1594524.28	NE	163286.88	NE
		Maximum On-site Soil Concentration (mg/kg)			27.200	140.000		46.100		400.000		5.800	
	Shallow Groundwater	Ingestion of Water	NC	-	-	-	-	-	-	-	-	-	
		Indoor Inhalation	C	165.079	NE	535.000	NE	152.000	NE	198.000	NE	31.000	NE
Deep Groundwater	Ingestion of Water	NC	-	-	-	-	-	-	-	-	-		
Allowable Groundwater Concentration (mg/l)				94.680	NE	2333.390	NE	1176.690	NE	23333.89	NE	470.680	NE
	Maximum On-site Groundwater Concentration (mg/l)			25.500	29.700		4.220		26.000		0.661		

Point of Exposure for Groundwater [Refer Tables S-10(a) through S-12 (c) of the Guidance Document]:

County: Utawa

ft

mg/l

N.A : Not Applicable
 1: Complete Pathway
 2: Incomplete Pathway
 C: Maximum on-site concentration exceeds Tier 1 RBSL
 NC: Maximum on-site concentration does not exceed Tier 1 RBSL

ORBCA SUMMARY REPORT

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffanie Greenway

COMPARISON OF TIER I RBLS WITH MAXIMUM ON-SITE CONCENTRATIONS - FUTURE CONDITIONS

Receptor	Media	Route of Exposure	C ¹ / NC ²	Tier 1 Levels								
				Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene				
Commercial Worker	Surficial Soil	Ingestion + Dermal	NC	-	-	-	-	-	-	-		
		Inhalation	NC	-	-	-	-	-	-	-		
	Sub-Surface Soil	Indoor Inhalation	C	180,400	796,930	NE	1980,310	NE	503,320	NE	403,130	
		Indoor Inhalation	C	4382,000	261673.84	NE	1143331.54	NE	446667.97	NE	457203.27	
Allowable Soil Concentration (mg/kg)												
Maximum On-site Soil Concentration (mg/kg)				27,200	140,000	46,100	400,000	5,800				
Shallow Groundwater	Groundwater	Ingestion of Water	NC	-	-	-	-	-	-	-		
		Inhalation	C	389,790	535,000	NE	152,000	NE	198,000	NE	31,000	
		Inhalation	NC	-	-	-	-	-	-	-	-	
Deep Groundwater	Groundwater	Ingestion of Water	NC	-	-	-	-	-	-	-		
		Inhalation	C	318,110	6589,490	NE	3294,740	NE	65894.88	NE	1317,900	
Allowable Groundwater Concentration (mg/l)												
Maximum On-site Groundwater Concentration (mg/l)				25,500	29,700	4,220	26,000	0.661				
Construction Worker	Surficial Soil	Ingestion + Dermal + Inhalation of vapor & particulates	C	905,203	796,930	NE	1980,310	NE	503,320	NE	403,139	
		Maximum On-site Soil Concentration	Groundwater	Dermal contact	C	557,617	NE	5,441	NE	100,664	NE	2,334
				Dermal contact	C	27,200	140,000	46,100	400,000	5,800		
Maximum On-site Groundwater Concentration (mg/l)				25,500	29,700	4,220	26,000	0.661				
Minimum Soil Concentration of all Routes of Exposure (mg/kg)				11,670	796,930	1980,310	503,320	403,130				
Minimum Groundwater Concentration of all Routes of Exposure (mg/l)				0.947	17,896	5,441	100,664	2,334				
Point of Exposure for Groundwater (Refer Tables S-10(a) through S-12 (c) of the Guidance Document):				800								
County:												

1: Complete Pathway
 2: Incomplete Pathway
 E: Maximum on-site concentration exceeds Tier 1 RBSL
 NE: Maximum on-site concentration does not exceed Tier 1 RBSL

ORBCA SUMMARY REPORT

Worksheet #15

LUST ID: 064-2777

FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffannie Greenway

JUSTIFICATION FOR TIER 1-A FATE AND TRANSPORT PARAMETERS

Tier 1-A parameter: _____

Justification: _____

Tier 1-A parameter: _____

Justification: _____

Tier 1-A parameter: _____

Justification: _____

Tier 1-A parameter: _____

Justification: _____

Tier 1-A parameter: _____

Justification: _____

Check One:

- Form UST 374-1, Page 15
- Tier 1

- Form UST 376, Page 15
- Tier 2

- Tier 3

ORBCA SUMMARY REPORT

Worksheet #22

LUST ID: 064-2777

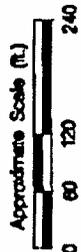
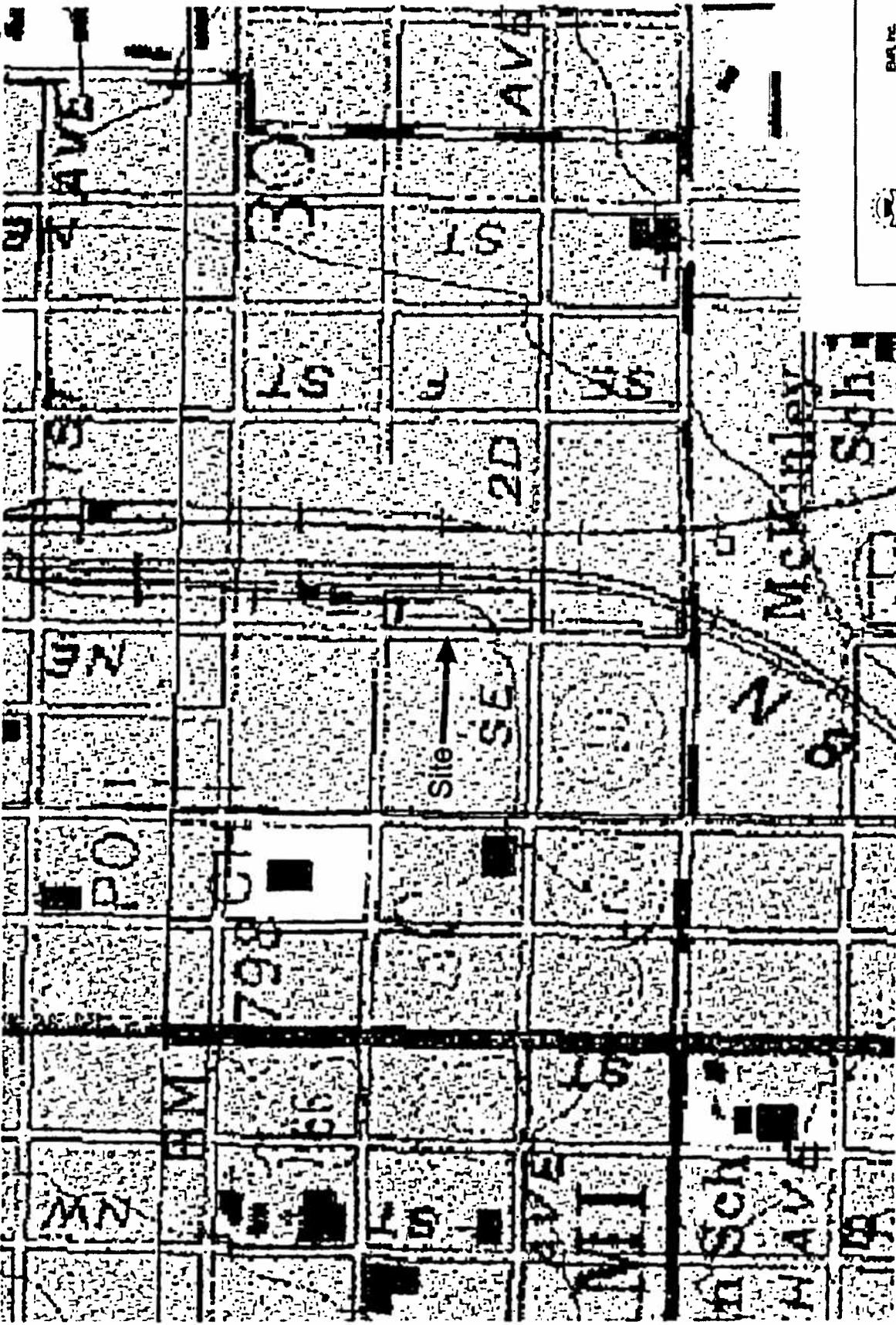
FACILITY ID: 58-15176

Date Form Completed: 31-Mar-04

Form Completed by: Tiffannie Greenway

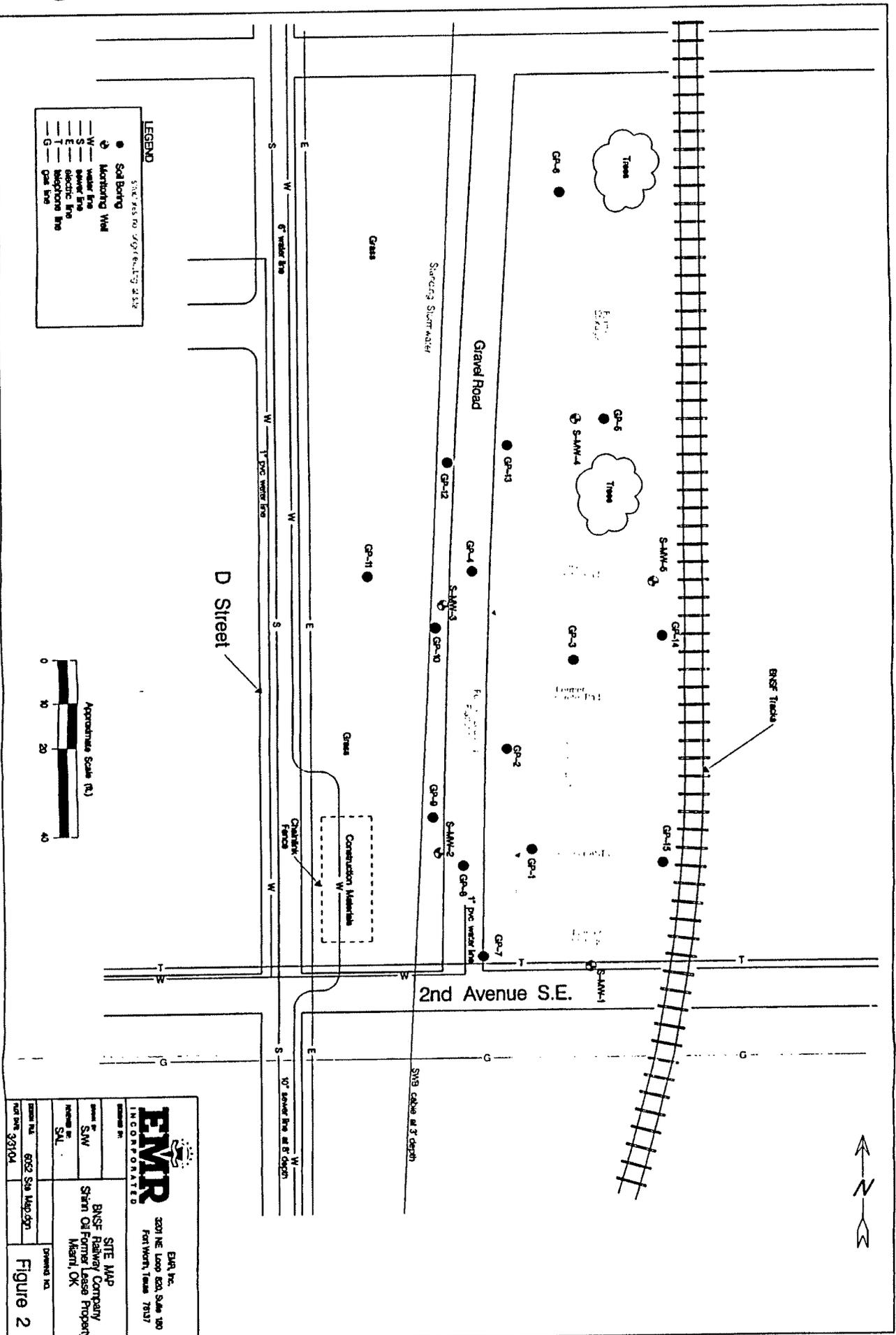
REFERENCES AND PROTOCOLS

	<i>Soil probing activities were completed using a truck-mounted geoprobe. The geoprobe consisted of solid stem push rods equipped with a continuous four-foot sampler. Soil obtained with the sampler was retrieved for detailed visual examination, field screening, sample collection, and logging. The soil samples were collected by attaching a four-foot stainless steel core sampler barrel to the solid stem. The soil sampler was then advanced into the subsurface soil zone to be sampled. Probe-driven soil samples were continuously collected from grade to the bottom of each boring. The bottom was reached at refusal.</i>
	<i>Soil samples were placed in laboratory certified pre-cleaned glass jars. For each sample collected one 2-ounce jar and one 8-ounce jar with Teflon lined lids were used. The soil was placed in the jars to allow for zero headspace. A sample label was attached to each container and included the sample ID, date, time, location, sampler name, and desired laboratory analysis. The samples were preserved at 4-degrees Celsius from the time they were collected through receipt at the laboratory. Preservation was accomplished using a sample cooler and bagged ice. The sample information was recorded on a chain of custody form which accompanied the samples from the field to the laboratory.</i>
	<i>The monitoring well installation activities were completed utilizing a drill rig and hollow-stem augers. The rig consists of hollow-stem augers equipped with a continuous sampler. Groundwater samples were collected using a disposable, single use, polyethylene bailer that was used for each well to evacuate the equivalent of three well volumes to ensure good communication with the perched groundwater. A representative groundwater sample was then collected. A disposable, single use, polyethylene bailer was also used to collect each groundwater sample. The samples were placed in laboratory prepared 40ml sample containers. The laboratory prepared sample jars contained the appropriate acid preservation prior to collection. A sample label was attached to each container upon collection. The sample label included the sample ID, date, time, location, sampler name, and desired laboratory analysis. The samples were preserved at 4-degrees Celsius from the time they were collected until receipt at the laboratory. Preservation was accomplished using a sample cooler and bagged ice. The sample information was recorded on a chain-of-custody form, which accompanied the samples from the field to the laboratory.</i>

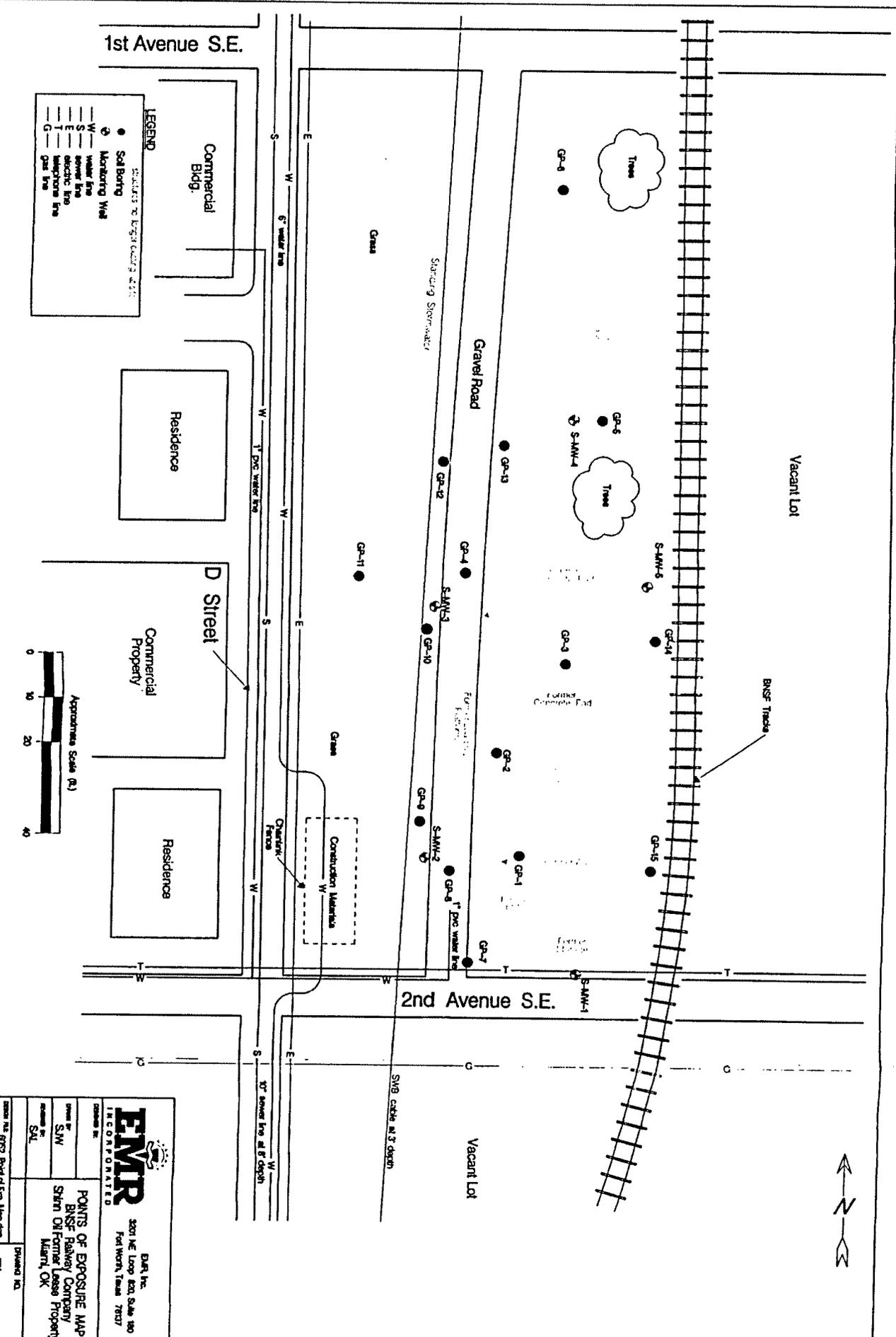


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sheet #: SAJ	vicinity map BNSF Railway Company Station Of Former Lease Site Miami, Ok		
section #: SAL			
drawing file: 6052-Victory_Maps.dwg			
last plot: 3/9/2004			

FIGURE 1



		ERM Inc. 3201 NE Loop East, Suite 100 Fort Worth, Texas 76137
Project No. 0502 S9a Map07b	Date 3/31/04	Drawing No. Figure 2
Client BNSF Railway Company Station Oil Former Lease Property Miami, OK	Designer S.W. S.L.	Scale AS SHOWN

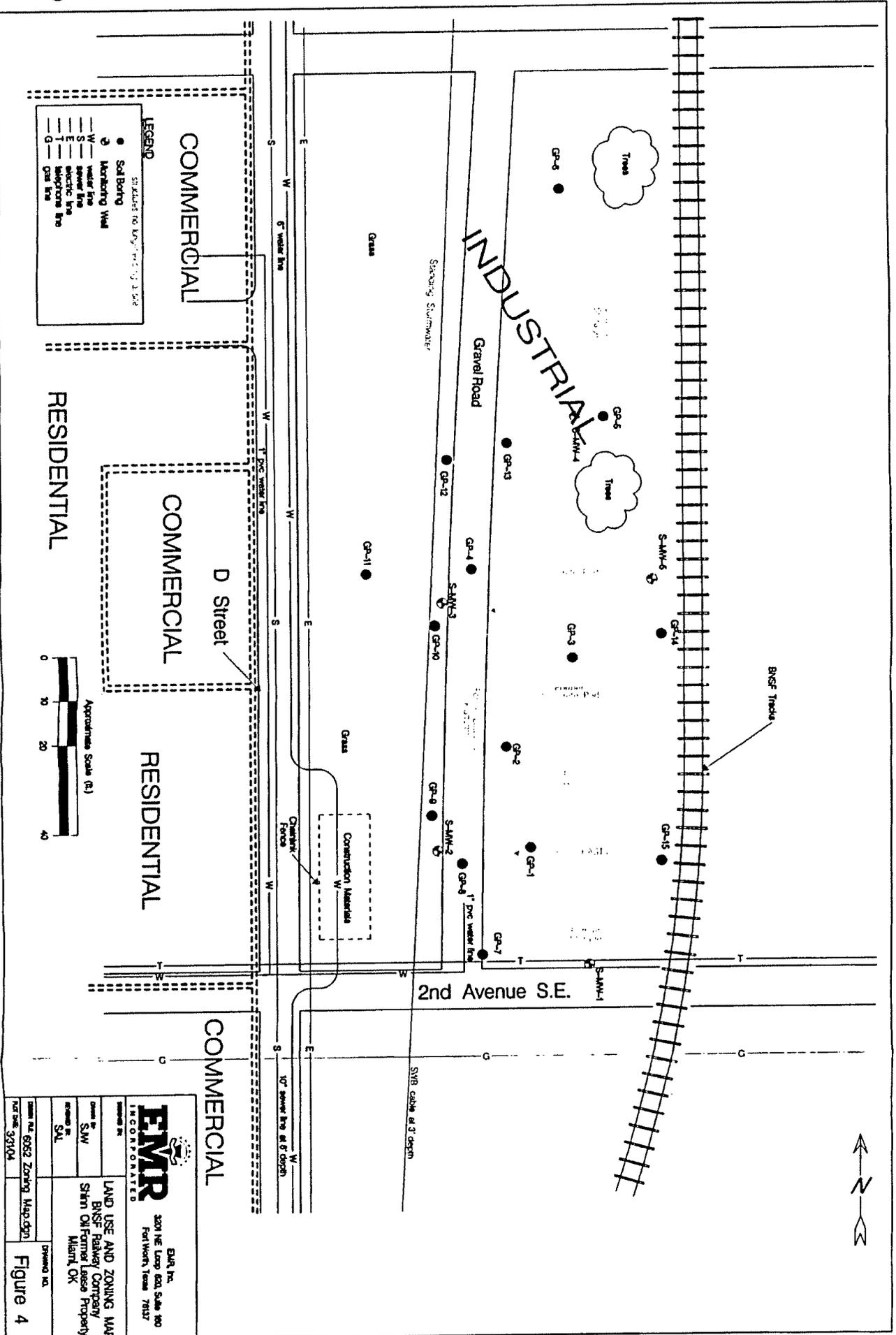


LEGEND
 Symbols to be used on map

●	S&B Boring
⊕	Monitoring Well
—	water line
—	sewer line
—	electric line
—	telephone line
—	gas line



	2001 NE Loop East, Suite 100 Fort Worth, Texas 76107
	8241 Inc. 2001 NE Loop East, Suite 100 Fort Worth, Texas 76107
Project No. 23V2004	Drawing No. Figure 3
Client: BNSF Railway Company Shift Off-Farmer Lease Property Miami, OK	Prepared by: SAJ



EMPR
 INCORPORATED

200 NE Loop East, Suite 100
 Fort Worth, Texas 76117

LAND USE AND ZONING MAP
 BNSF Railway Company
 Shien Oil Former Lease Property
 Miami, OK

DRAWN BY: SAJ CHECKED BY: SML	DATE: 3/31/04
DRAWING NO. Figure 4	SHEET NO. 6032 Zoning Map.dgn

MAGED 6/9/2005



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

CUSTOMER: EMR - Env'tl. Mgmt. Resources
CONTACT: Tiffanrie Greenway
INQUIRY #: 01114868.1r
DATE: January 20, 2004 1:14 pm

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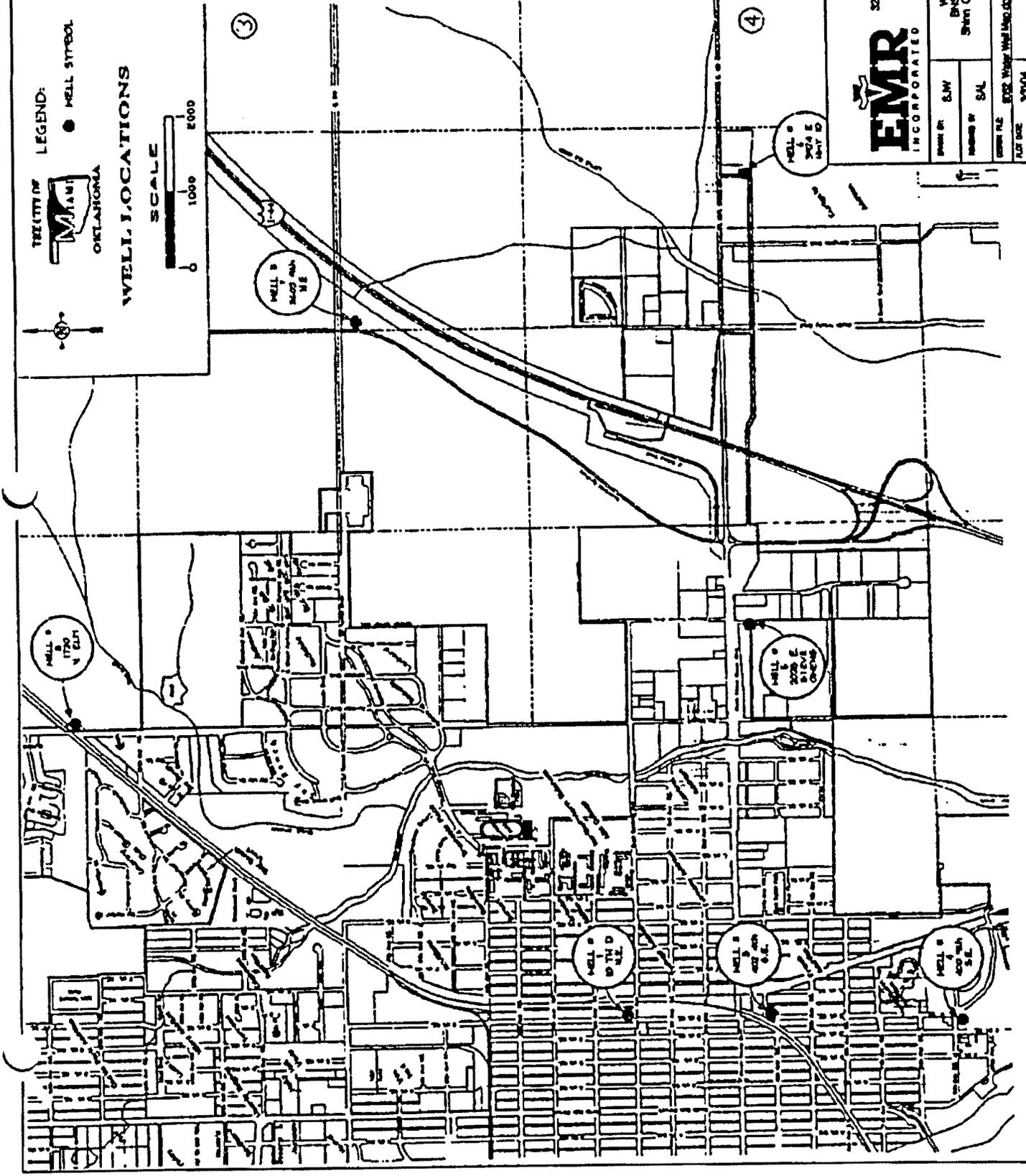
		EDR, Inc. 2801 NE Loop 850, Suite 150 Fort Worth, Texas 76137	
		DRAWN BY BJV	TOPOGRAPHIC MAP BNSF Railway Company Shinn Oil Former Lease Site Miami, OK
CHECKED BY SAL	DRAWN DATE 8052 Topo Map.dgn	DRAWN BY 3/31/04	DRAWN NO. FIGURE 5

THE CITY OF

 OKLAHOMA

LEGEND:
 WELL SYMBOL

WELL LOCATIONS



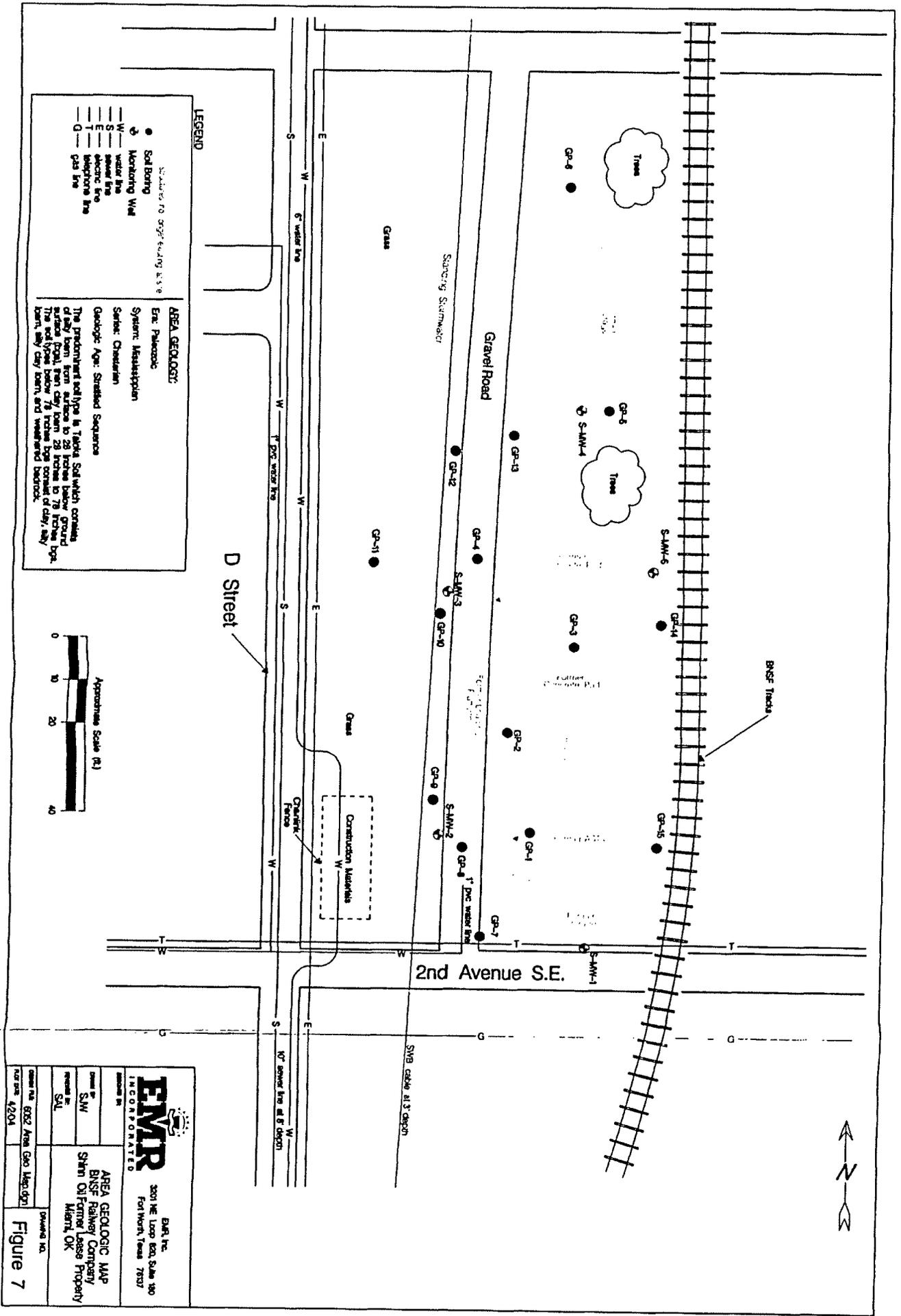
EMIR
 INCORPORATED

EMIR, Inc.
 3201 NE Loop 820, Suite 180
 Fort Worth, Texas 76137

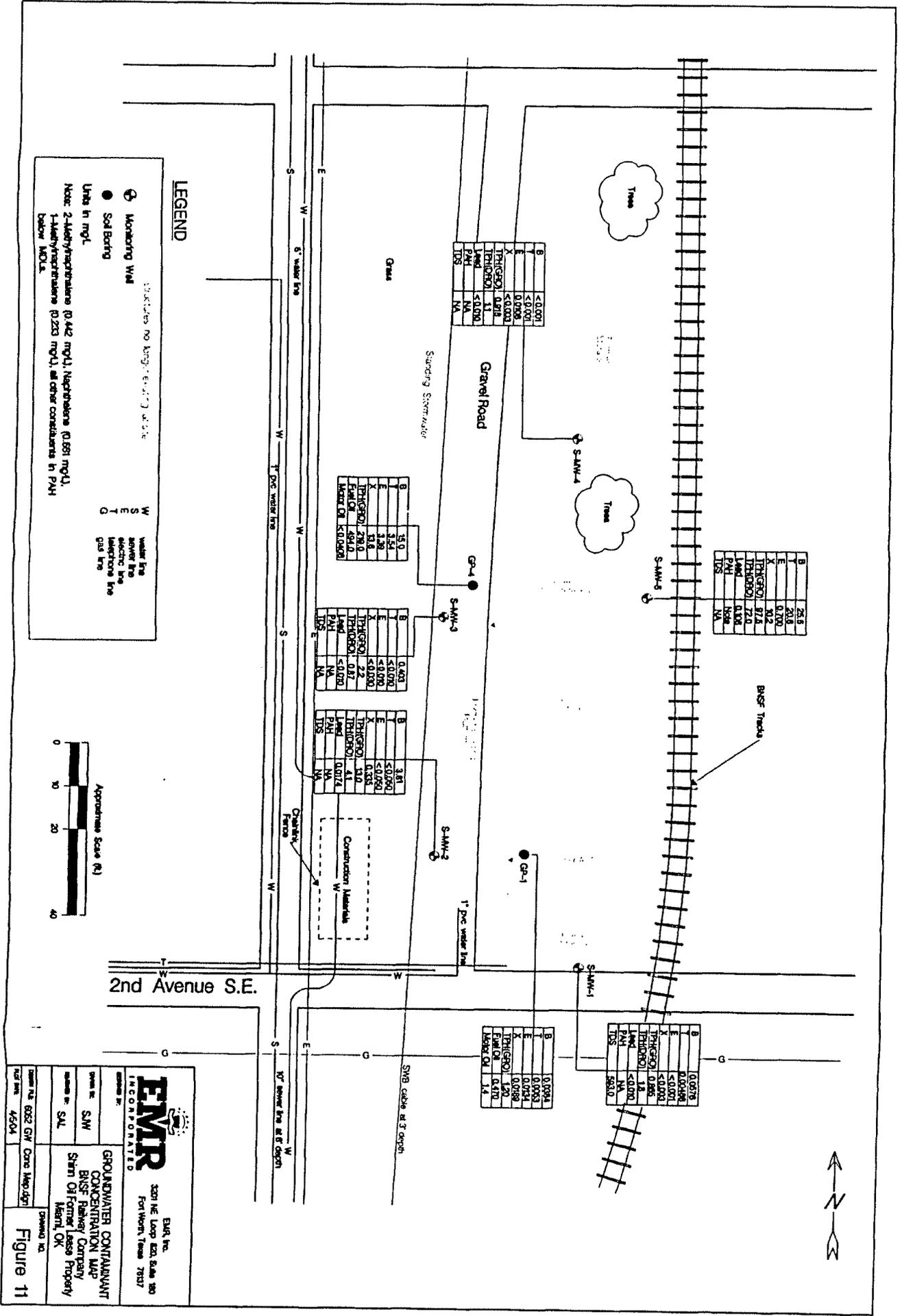
WATER WELL MAP
 BNSF Railway Company
 Station Of Former Lease Property
 Miami, OK

PROJECT NO.	S.W.
ISSUED BY	SAL
DATE FILED	EMIR Water Well Map, OK
PLAT DATE	3/9/04

FIGURE 6



		500 NE Loop East, Suite 100 Fort Worth, Texas 76102
Project No.: S-101 Revision No.: 01	AREA GEOLOGIC MAP BNSF Railway Company Shero Oil Former Lease Property Meritt, OK	Drawn by: JAL
Client: The BNSF Railway Company Date: 4/20/04	Figure 7	



EMIR INCORPORATED

3201 NE Loop East, Suite 350
 Fort Worth, Texas 76177

Client: **SHW**
 Project: **SAL**

Site: **GROUNDWATER CONTAMINANT CONCENTRATION MAP**
 BNSF Bakery Company
 Shari Oil Former Lease Property
 Miami, OK

Drawn by: **GW**
 Date: **4/20/04**

Figure 11

BOB ANTHONY
Commissioner

ED APPLE
Commissioner

DENISE A. BODE
Commissioner



OKLAHOMA CORPORATION COMMISSION
PETROLEUM STORAGE TANK DIVISION
(405) 521-4683 FAX: (405) 521-4945

JIM THORPE BLDG, ROOM 238 • P.O. BOX 52000-2000 • OKLAHOMA CITY, OKLAHOMA 73152-2000

January 24, 2000

Dennis Blakemore
Lakeland Petroleum Corp.
P. O. Box 452378
Grove, OK 74345-2378

Reference: Petroleum storage tank amended notification form for permanent tank closure of (3) 4,000 gallon underground storage tank(s) (UST(s)) located at Gas-N-Serve, 505 South Main Street, Miami, Oklahoma.
Facility #5809652 - Case # 064-0389

Dear Mr. Blakemore:

Thank you for providing your amended notification form and supporting information documenting the permanent closure of your underground storage tank(s) (USTs) at the above referenced facility to the Oklahoma Corporation Commission (OCC).

Based on the information you have provided regarding current site conditions, and a determination by the OCC Hydrology staff as referenced by their letter dated January 4, 2000, closing case number 064-0389, the OCC believes that there is no contamination of concern at this site at this time. The subject tank(s) is/are hereby considered permanently closed in accordance with OCC UST regulations. Should future environmental problems occur, which the OCC determines are related to this site, additional investigation and corrective action may be required in accordance with State Law.

If you have any questions regarding this matter, please contact me at (405) 521-6397.

Sincerely yours,


Guy Goodine
Environmental Compliance Analyst

cc: Facility file # 5809652
Denise Cope, Down-To-Earth Environmental, 1902 E. Rogers, El Reno, OK 73036-3323

BOB ANTHONY
Commissioner

ED APPLE
Commissioner

DENISE A. BODE
Commissioner



OKLAHOMA CORPORATION COMMISSION
PETROLEUM STORAGE TANK DIVISION
(405) 521-4683 FAX: (405) 521-4945

JIM THORPE BUILDING, RM 238 • PO BOX 52000-2000 • OKLAHOMA CITY, OK 73152-2000

March 17, 1999

LAKELAND PETROLEUM CORPORATION
P.O. BOX 452378
HWY. 10 & 25
Grove, OK 74344

RE: 5809652
Status: Temporarily Out of Use Tanks

Dear LAKELAND PETROLEUM CORPORATION

According to our records your tanks have been temporarily out of service since prior to July 1998.

Oklahoma Corporation Commission rules determine guidelines regulating temporarily out of service tanks:

165:25-3-62: Temporary Removal from Service

- (a) When an underground storage tanks system is taken out of service for less than 3 months, the owner or operator shall:
- (1) Continue the operation and maintenance of corrosion protection as required in part 17 of this Subchapter.
 - (2) Continue release detection as required in Subchapters 5 and 7 of this chapter.
 - (3) Comply with the requirements of part 1 and part 15 of this Subchapter concerning release reporting and corrective action.
 - (4) Comply with all applicable financial responsibility requirements.
- (b) Release detection as specified in (a) (2) of this section is not required as long as the underground storage tank system is empty. For the purposes of this Subchapter, the underground tanks system is empty. For the purposes of this Subchapter, the underground tanks system is empty when all materials have been removed using commonly employed practices so that no more than 1 inch of residue, or 0.3 percent by weight of the total capacity of the underground storage tank system, remains in the system.

165:25-3-63: Temporary Closure

When an underground storage tank system is taken out of service for 3 months or more, but less than twelve months, the owner or operator shall comply with the requirements of 165:25:3-62 and shall also meet the following additional requirements:

- (1) All vent lines shall be left open and functioning.
- (2) All other lines, pumps, manways, and ancillary equipment shall be capped and secured.

Owners and/or operators of underground storage tank systems that are temporarily out of service for more than 12 months are required to:

- A) place the tanks into service according to OCC and EPA guidelines OR
- B) permanently close the tank system, perform a site assessment and submit a closure report.

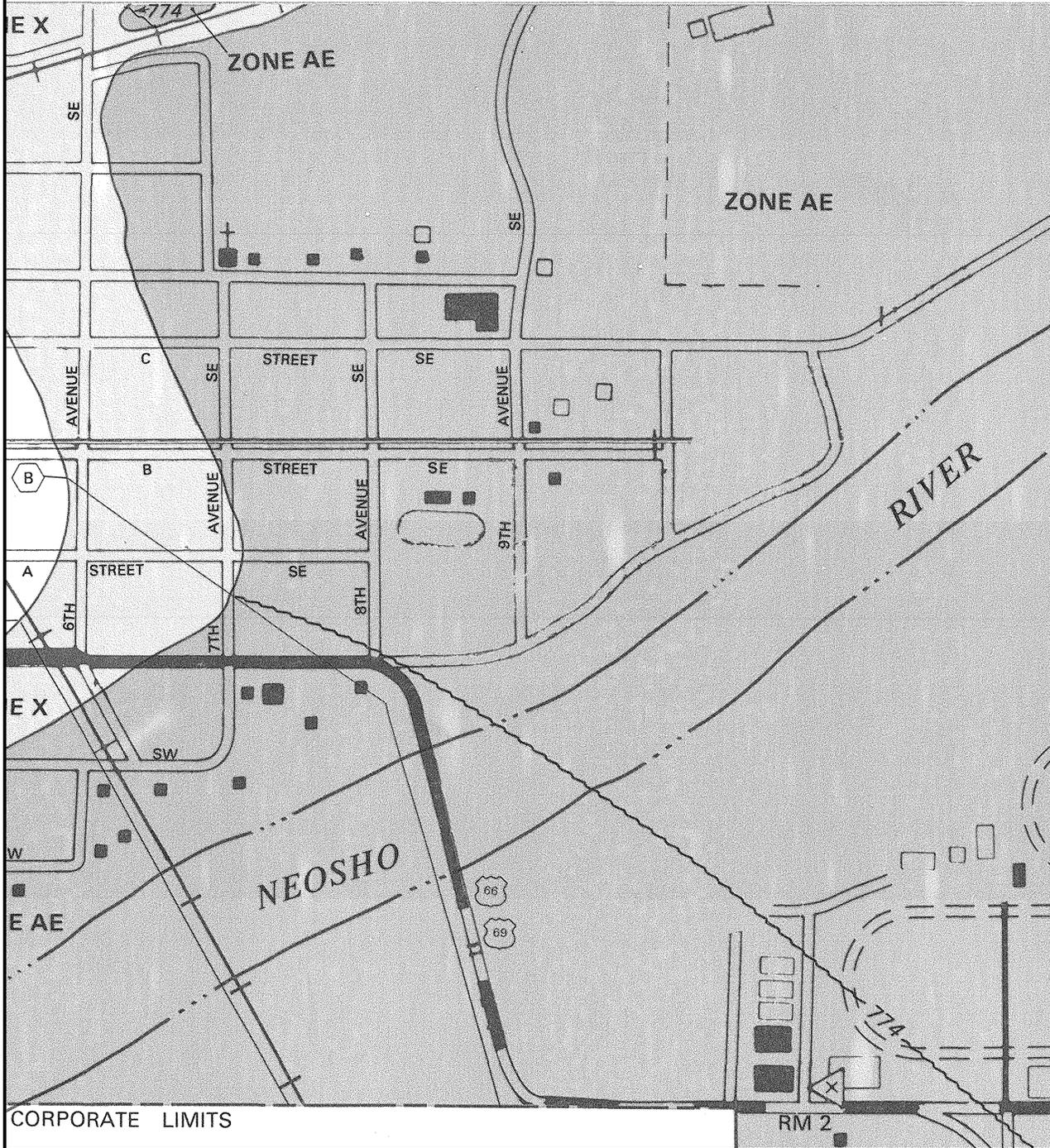
Enclosed you will find a brochure which contains information about tank closures. **If you have any further questions please contact the Compliance Department at (405) 521-4683.** Thank you for your cooperation.

Sincerely,

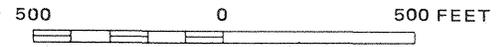


Thomas H. Tucker
Director, Petroleum Storage Tank Division

JOINS PANEL 0002



APPROXIMATE SCALE

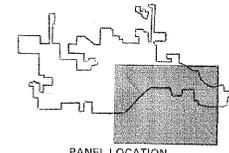


NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
MIAMI, OKLAHOMA
OTTAWA COUNTY

PANEL 4 OF 4
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

COMMUNITY-PANEL NUMBER

400157 0004 C

MAP REVISED:
SEPTEMBER 30, 1988



Federal Emergency Management Agency

CORPORATE LIMITS

RM 2

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

APPENDIX D: SITE PHOTOGRAPHS



Room 8 looking east



Chat on south side



Armory front – east side



Room 2 looking northeast



Chat of South Side



Room 17 looking southwest



Room 17 looking northeast



Room 10 looking southwest



Room 1 looking southwest



Room 10 looking southwest



Room 1 looking west



Room 10 looking northeast



Room 10 looking northeast



Room 3 looking west



Room 15 looking west



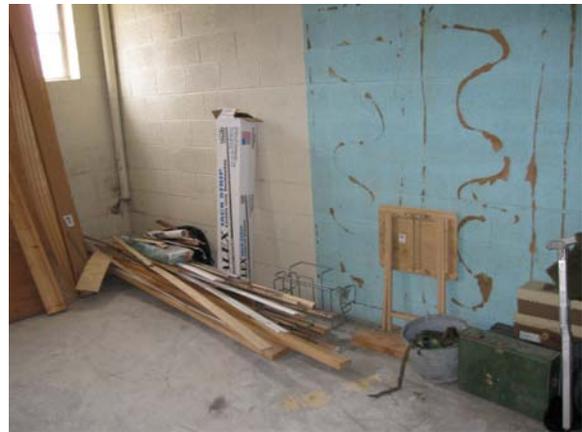
Trash can filled with batteries and other materials in Room 10



Room 14 looking west



Military equipment left in Room 17



Military equipment left in Room 17



Room 14 looking northwest



Military equipment left in Room 17



Military equipment left in Room 17



Room 12 looking southeast



Room 12 looking northwest



Cyalume packets in Room 10



Cyalume packets in Room 10



Lithium batteries in Room 12



Lithium batteries in file cabinet in Room 10



Lithium batteries in Room 12



Lithium batteries in file cabinet in Room 10



Lithium batteries in Room 13



Room 16 looking northwest



Northwest corner



East and south sides



South side



East side- armory front



West side



West side



West side



West and north sides



Room 13 looking west



Paint in Room 10



Room 5 looking northeast



Room 5 looking southeast



Room 16 - showers



Front door sign



Room 18 looking southeast



Room 9 looking southeast



Super glue in Room 12



Room 11 looking northwest



Room 9 looking northwest



Room 8 looking west



Room 10 looking southwest



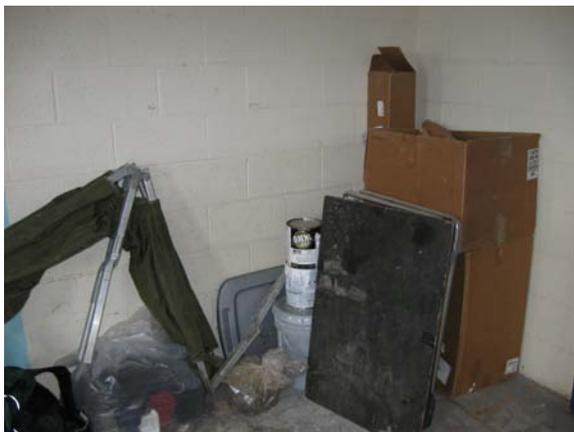
Room 12 looking northwest-3 cardboard boxes of lithium batteries



Trash can filled with batteries and other materials in Room 10



Cyalume packets in Room 10



Military equipment left in Room 17



Cyalume packets in Room 10



Lithium batteries in file cabinet in Room 10



Lithium batteries in Room 12



Lithium batteries in file cabinet in Room 10



Lithium batteries in Room 13



Lithium batteries in Room 12



Room 16 looking northwest- simple green on shelf



Paint in Room 10



Super glue in Room 12

APPENDIX E: SITE VISIT NOTES

AAI Site Visit

Facility name: Miami Armory

Facility address:

Date of visit: 4-16-09

DEQ staff in attendance: Heather Mallory

People interviewed/affiliation with site: Jeff AHS, facility maintenance for NE Oklahoma

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

Asbestos

Note: If Marshall Environmental has already surveyed for asbestos then we can get this information from their report.

Suspect asbestos containing materials (ACM):

<u>Location of ACM</u>	<u>Material</u>	<u>Notes</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

water lines are busted (overhead lines)

flooded in the 80's up to ~~10~~ 2 ft
" in 2007 up to → 4 ft

Military Department Property (Please provide a detailed inventory of military property)

___Boiler present? ___Radiator present? # of radiators ___

Rooms radiator(s) present in: _____

___Old lighting ballasts present?

Rooms old lighting ballasts present in: _____

	<u>Type of property</u>	<u>Amount</u>	<u>Room Located In</u>
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Radiation Signs

Are radiation signs present in the building? ___

What does the sign say? _____

Utilities

City water ___Well City sewer ___Septic tank
 Natural gas ___Propane

Underground features

___USTs removed ___Vent pipes present ___USTs not removed

NO USTs

Above ground features

___Cisterns present ___ASTs ___Impoundments

Structures on adjoining property

Residential, commercial structures, churches, schools etc

Onsite information

___ Air Emissions ___ Wastewater Discharge

Industrial activities

___ Monitoring wells *Location:*

___ Stained soils *Location:*

___ Seeps *Location:*

___ Chemical spills *Location:*

___ Oil and Gas Exploration *Describe:*

___ Known Groundwater or Surface Water contamination

Describe:

___ Farm Wastes

___ Known Pesticide Misapplication

~~___~~ Discharges and Runoff from Adjacent Property Affecting the Site

*flooding
Nearby*

___ Transformers/PCB Equipment *Location:*

Describe:

Other known or Suspected Environmental Concerns On the Site

Historical Recognized Environmental Conditions On the Site

Current Use of the Property

Descriptions of Structures, Roads, Other Improvements on the Site

Description of adjacent properties

Owner, Property Manager, and Occupant Information

Additional Environmental Record Sources

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

Physical Setting Sources

Adjacent
N - residential
S - park city
E - residential

W - City park

Historical Use Information on the Property

Historical Use Information on Adjoining Properties

Site Reconnaissance

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

General Site conditions:

External observations

___ Stained soil or pavement ___ Stressed vegetation ___ Solid waste

Other: Chat on S & E side

Internal observations

___ Odors ___ Pools of liquids ___ Drums

___ Stains or Corrosion on floors, walls, or ceilings

Other:

General notes:

Meet Jeff Alls @ Miami
Armory @ 10:30 A.M. on
4-16-09

Mallory, Heather

From: Hughes, Angela
Sent: Tuesday, January 20, 2009 5:16 PM
To: Reid, Jonathan T.; Davidson, Dustin W.
Cc: Mallory, Heather
Subject: Miami Armory Update

Last week, Jan 15th, I met with OMD and the City of Miami to inspect and discuss the armory handoff and cleanup. Here is the information I gathered.

National Guard member that worked at the armory and will be a good contact for the TBA – Jeff Alls 918-530-7122. He is still in the Guard and works out of Vinita.

Contact for the City as we move forward Jill Fitzgibbon, City of Miami, Public Services Coordinator, 918-541-2300. Huey Long is the city manager but Jill will be our contact.

Building Condition

- Small armory built in 1949. Flooded in 2008. There was a water line break in one of the bathroom.
- Water and electricity are turned off but could be turned back on.
- I saw 9X9 and 12X12 tile on the floor. Guard member mentioned that he believed the 9X9 to be ACM.
- No radiation signage on the vault door.
- Vault door has been disabled.
- No obvious mold issues.
- No IFR.
- Much of the drop ceiling tile has been removed – I didn't see much pipe wrap

Building Contents

OMD Removal

- OMD to remove 3 yellow cabinets marked Flammable.
- OMD to remove large container of Simple Green cleaner

DEQ Contractor Removal

- There was a small amount of painting materials (paint thinner, etc) that we can task contractor to dispose.
- Large stove and other cooking equipment will need to be removed
- Several desks and chairs.
- Many lockers
- City would like to have remaining drop ceiling removed.

I told the city that DEQ would coordinate with them when the time came to determine if the city wants any of the disposed military property/equipment.

Future Use

Storage for emergency management equipment.

Angela Hughes
Environmental Programs Manager

Land Protection Division
Oklahoma Department of Environmental Quality
wk 405-702-5141
cell 405-535-6054
Angela.Hughes@deq.ok.gov

**Note September 1st email address will change to Angela.Hughes@deq.ok.gov
Please update in address book.**

Mask #

~~30~~

31

32

~~33~~

4 34

35

Items ~~missing~~ or Defect

Colored lens safety tie

Colored lens

Safety tie

TM

~~Sighed out~~ SAFETY TIE
Colored Lens

Sighed out

<u>Mask #</u>	<u>Items Missing or Defects</u>
✓ 1	Colored lens.
✓ 2	new case, colored lens
✓ 3	colored lens
✓ 4	Nothing
✓ 5	3-4240-339-10 TM, colored lens
✓ 6	TM, colored lens
✓ 7 (Deadline)	Water Proof Bag, colored lens, Black Seal around mask out of slot <u>(no seal)</u>
✓ 8	colored lens, Safety Tie
✓ 9	colored lens,
✓ 10	colored lens.
✓ 11	colored lens.
✓ 12	colored lens.
✓ 13	TM, colored lens
✓ 14	colored lens
✓ 15	colored lens
✓ 16	colored lens
✓ 17	Safety tie colored lens
✓ 18	TM, colored lens.
✓ 19	M&B AI Decon Kit, colored lens
✓ 20	colored lens
✓ 21	safety tie colored lens
✓ 22	TM colored lens
✓ 23	colored lens
✓ 24	Hood, Safety tie
✓ 25	<u>no Defect</u>
✓ 26	Signed out
✓ 27	colored lens
✓ 28	Signed out TM colored lens
✓ 29	TM colored lens

~~Det Blase~~

NBC Supplies

~~State of~~

Authorized

M 8 A1 Alarm Chem agent Automatic Portable (coming in)	4
PP 1578/PD charger Radiac Detector	3
PP 1578/PD charger Radiac Det. (on hand)	3
IM-93/UD Radiac meter (coming in)	11 (13)
AN/VDR 2 Radiac set (in maintenance)	4
AN/PDR 75 Radiac set (coming in)	1

NBC Supplies

Order Please

NSN
~~NSN~~ #

<u>Name</u>	<u>NSN #</u>	<u>Quantity</u>
NBC Marking Set (TM)	TM# 3-9905-001-10	4
M280 Decon Kit	4230-01-206-4252	4
M280 Decon Kit (Training)	4230-01-207-1911	21
M13 Decon Apparatus (portable)	4230-01-133-4124	3
M15 Decon Apparatus (Practice)	4230-01-345-5122	3
M256A1 Chem Detector Kit	6665-01-133-4964	15
Lens Paper 50's	6640-00-597-6745	50 Books
M58A1 Decon (SKIN) (Refills)	6910-01-113-2434	10 Bxs.
Cleaning compound optical lens	6850-00-392-9751	12 BTLs Per Bx 5 Bxs
Carrying case M40 M40A1		15
Globe Chem. Protective 8110-01-033-3519 150 Pin		
Warning Flag (Atom)	9905-12-132-2579	20 per Roll 5 Rolls
" " (Bio)	9905-12-132-2578	5 Rolls
" " (Gas)	9905-12-132-2580	5 Rolls
yellow Ribbon Rayon	8315-12-132-2577	13 per Roll 5 Rolls
mounting stakes (48 per kit)	9905-12-133-0113	5 Kits worth
marking Crayon	7510-12-120-4355	10 2 per kit
Hoods M40 M40A1	4240-01-376-3152	10

Well

B/Ven
Supplies
empty box

NBC Supplies

- NSN# 6910-01-113-2434 Decon Kit 1+2 Training only
- NSN# 6665-00-050-8529 M-8 Detector Paper
- NSN# 6665-01-112-1644 M-256 Kit
- NSN# 6850-00-392-9751 Cleaning Comp. Optical lens
- NSN# 6665-01-226-5589 M-9 Detector Paper
- NSN# 8415-01-0~~00~~³³-~~0000~~³⁵¹⁹ gloves Chem ~~resist~~ Protective
- NSN# 9905-12-124-5955 NBC Marking Kit (Complex)
- NSN# 9905-12-132-2581 Marking set Container (NBC)
- NSN# 9905-12-132-2579 Warning Flag Atom (NBC)
- NSN# 9905-12-132-2578 Warning Flag BIO (NBC)
- NSN# 9905-12-132-2580 Warning Flag GAS (NBC)
- NSN# ~~8000~~⁸³¹⁵-12-132-2577 Ribbon Reyon yellow
- NSN# ~~9905~~⁹⁹⁰⁵-12-133-0113 Marking Rods
- NSN# 7310-12-120-9355 Marking ~~Crayons~~ Red
- NSN# 6640-00-597-6745 Paper Lens 50's
- NSN# 6910-01-101-1768 Training Aid Per. Decon Kit (MSB)
- NSN# 4240-01-260-8706 outsert set (neutral gray)
- NSN# 4240-01-376-3152 Hood Chem. Bio. ~~M40A~~ M42A
- NSN# 4240-01-119-2315 Consister Filter M40A/M42A
- NSN# 4240-01-399-3350 Carrying case M40 Pro Mask
- NSN# 4240-01-260-8711 Internal Drink Tubes

APPENDIX F: SAMPLE RESULTS

24
OC 26 2009

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

Miami Armory
830 D Street Southeast
Miami, Oklahoma 74354

July 7, 2009

DCS Contract NO.: ID009139-4

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

OCT 26 2009
24

Lead-Based Paint Inspection And Settled Dust Sampling

Miami Armory
830 D Street Southeast
Miami, Oklahoma 74354

July 7, 2009

DCS Contract

PROVIDED FOR
Oklahoma Department of Env
Land Protection Division
707 North Robinson
Oklahoma City, OK 73102

PROVIDED BY
Marshall Environmental Manage
1601 Southwest 89th Street, Suite 100-
Oklahoma City, OK 73159

LBP XRF
33- soffit is at
the entrance to
the armory
39 - corner piece
is OH door guard
34 - beam above
entrance

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Certified Lead Based Paint Risk Assessor/Inspector	3
Certified Lead-Based Paint Firm	3
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DISCLOSURE STATEMENT AND OWNERS LEGAL OBLIGATION.....	8
LEAD-BASED PAINT INFORMATION.....	8
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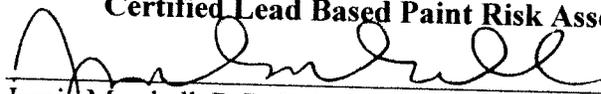
CERTIFICATION

This is to certify, that Marshall Environmental Management, Inc. was contracted by the State of Oklahoma, Department of Central Services to conduct a Lead-Based Paint Inspection and Settled Dust Sampling within the Miami Armory, for the State of Oklahoma Department of Environmental Quality, Land Protection Division. The Miami Armory Lead-Based Paint Inspection and Settled Dust Sampling 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 and Settled Dust Sampling are believed to accurately reflect the locations and concentrations of paint and dust containing lead.

Current Owner Information

State of Oklahoma

Certified Lead Based Paint Risk Assessor/Inspector


Jamie Marshall, B.S., Industrial Hygiene Associate

10/21/09

Date

Oklahoma Department of Environmental Quality Certification Number: OKRASR13418

Certified Lead-Based Paint Firm

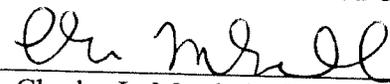
Marshall Environmental Management, Inc.
1601 SW 89th Street, Suite A-100
Oklahoma City, OK 73159
(405) 616-0401

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:


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

10/21/09

Date

EXECUTIVE SUMMARY

Marshall Environmental Management, Inc. conducted a Lead-Based Paint Inspection and collected samples of settled dust within the Miami Armory on July 7, 2009, in order to evaluate the locations, condition and content of suspected lead-based paint and lead-laden dust, which may be present.

The Miami Armory is located at 830 D Street Southeast in Miami, Oklahoma. The Armory is a single story structure, with a brick façade that was constructed in 1957. The Armory was constructed on a traditional concrete slab foundation with a partial pitched and flat roof.

The analytical results associated with this Lead-Based Paint Inspection did identify lead-based paint on various windows and window ledges, doors, doorjambs and door rollers and several wall and cabinet surfaces throughout the Miami Armory. Additionally, various floor surface areas within the Armory were positive for lead-laden dust.

The remainder of this Report includes the Sampling Methodology, the Findings, the Disclosure Statement and Owners Legal Obligation and information regarding lead-based paint. Specific sampling locations and the analytical data correlating with this Inspection and Sampling Event are included in the Appendix of this Report.

SAMPLING METHODOLOGY

Various painted and floor surfaces within the Armory were sampled and analyzed for lead content. Sample collection and analysis was performed in accordance with the United States Department of Housing and Urban Development (HUD) guidelines, "*HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*"; and the United States Environmental Protection Agency (EPA) proposed regulations, 40 Code of Federal Regulations (CFR) part 745.

Lead-Based Paint

Lead concentrations were sampled and analyzed on all applicable painted surfaces by utilizing an x-ray fluorescence (XRF), direct reading, data logging instrument. Lead concentrations identified as greater than or equal to 1-milligram per square centimeter (mg/cm^2) are characterized as "Lead-Based Paint." per the HUD guidelines and the EPA proposed regulations.

The east side of the Armory was labeled Side A and going in a clockwise direction, the remaining sides were categorized as Side B, Side C and Side D, respectively. Each door and window within the Armory was given a sequential number that corresponds with the floor plan included with the Appendix of this Report.

Lead-Laden Dust

Various floor surface areas throughout the Armory were sampled and analyzed for lead-laden dust. Analytical results with lead concentrations equal to or greater than 40-micrograms per

square foot ($\mu\text{g}/\text{ft}^2$) represent lead contamination per the HUD guidelines and the EPA proposed regulations.

The collection of settled dust was accomplished by wiping a selected surface area of a known dimension in a specified pattern in accordance with the HUD guidelines and the EPA proposes regulations. Each sample was given a sample number, which corresponds with the respective room number. All sample locations were labeled in sequential number order and plotted on the floor plan included with the Appendix of this Report.

FINDINGS

The analytical results associated with this Lead-Based Paint Inspection and Settled Dust Sampling did discover lead-based paint and lead-laden dust on various surfaces throughout the Miami Armory. The following tables list and categorize the surfaces, which were identified as "Positive" for lead-based paint and/or lead-laden dust.

Table I: Painted Windows

Window Number	Result	Dimensions
1	Positive	34½" x 45"
2	Positive	34½" x 45"
3	Positive	34½" x 45"
4	Positive	34½" x 45"
5	Positive	34½" x 45"
6	Positive	34½" x 45"
7	Positive	34½" x 45"
8	Positive	34½" x 45"
9	Positive	34½" x 45"
10	Positive	32" x 44"
11	Positive	32" x 44"
12	Positive	32" x 44"
13	Positive	32" x 44"
14	Positive	32" x 44"
15	Positive	32" x 44"
16	Positive	33" x 49"
17	Positive	33" x 33"
18	Positive	33" x 41"
19	Positive	33" x 41"
20	Positive	33" x 41"
21	Positive	33" x 41"
22	Positive	33" x 41"
23	Positive	33" x 41"
24	Positive	48" x 41"
25	Positive	48" x 41"
26	Positive	48" x 41"

Window Number	Result	Dimensions
27	Positive	48" x 41"
28	Positive	48" x 41"
29	Positive	48" x 41"
30	Positive	48" x 41"
31	Positive	48" x 41"
32	Positive	48" x 41"
33	Positive	65" x 57"
34	Positive	65" x 57"
35	Positive	33" x 44½"
36	Positive	33" x 44½"
37	Positive	33" x 44½"

Table II: Painted Doors & Doorjamb

Door Number	Door Result	Doorjamb Result	Dimensions
1	Negative	Negative	
2	No Door	Negative	
3	Negative	Negative	
4	Negative	Negative	
5	Negative	Negative	
6	Negative	Negative	
7	Negative	Negative	
8	Negative	Negative	
9	Negative	Negative	
10	Negative	Negative	
11	Negative	Negative	
12	Positive	Negative	83" x 36"
13	Negative	Negative	
14	Negative	Negative	
15	Negative	Negative	
16	Negative	Negative	
17	Negative	Negative	
18	Negative	Negative	
19	Positive	Positive	84" x 36"
20	No Door	No Paint	
21	Positive	Positive	Fire Door
22	Positive	Positive	84" x 71½"
23	Negative	No Paint	
24	Negative	No Paint	

Table III: Miscellaneous Surfaces Positive for Lead-Based Paint

Room Number/Name	Location	Description
Exterior	Side A1	White Soffit under Entrance Overhang
Exterior	Side A1	White Beam under Entrance Overhang
Room 6	Side A	Brown Wood Cabinet
Room 6	Side A	Brown Wood Cabinet
Room 12	Side B	White Wood Window Ledge
Room 13	Side D	Black Concrete Wall
Room 13	Side B	White Overhead Door
Room 13	Side B	White Overhead Doorjamb
Exterior	Side B	White Corner Piece Overhead Door Protectors
Room 13	Side A	White Overhead Door
Room 13	Side A	White Overhead Doorjamb
Exterior	Side A2	White Corner Piece Overhead Door Protectors
Room 13	Side A	Blue Overhead Door Rollers
Room 13	Side A	Blue Overhead Door Roller Track
Room 13	Side C	White Door Slide
Room 13	Side C	White Doorjamb

Table IV: Floor Surfaces

Sample Number	Sample Location	Concentration ($\mu\text{g}/\text{ft}^2$)	Clearance Level ($\mu\text{g}/\text{ft}^2$)
1	Room 1	27.05	40
2	Room 2	129.48	40
3	Room 3	86.62	40
4	Room 4	73.55	40
5	Room 5	51.01	40
6	Room 6	126.15	40
7	Room 7	281.24	40
8	Room 8	79.17	40
9	Room 9	134.89	40
10	Room 10	163.37	40
11	Room 11	231.93	40
12	Room 12	99.21	40
13	Room 13	3301.20	200
14	Room 13 West	2203.50	200
15	Room 13 Center	407.30	200
16	Room 13 East	4003.50	200
17	Room 14	2391.98	40
18	Room 15	3341.15	40
19	Room 16	753.21	40

Marshall Environmental Management, Inc.

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

- Non-fixed Items on the property
- Factory Painted Substrates

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**. Property owners and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that information is provided in order to protect children from lead-based paint hazards.

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

LEAD-BASED PAINT INFORMATION

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

APPENDIX

Surface Wipes
Chain of Custody
Analytical Data

XRF Data

Certificates

Labeled Floor Plans
Windows
Doors and Doorjamb
Miscellaneous Surfaces

1601 - 49th St. Ste. 104-A
Oklahoma City, OK 73159

Chain of Custody
Marshall Environmental Management, Inc.

Phone: (405) 616-9407
Fax: (405) 681-5753
martheav@emv.beil.net

174459

PROJECT				INVOICE TO				REPORT TO			
Project Number	0083-LBP-070709 JM	Client/Company		Client/Company		Client/Company		Client/Company		Client/Company	
Project Name	Miami	Address		Address		Address		Address		Address	
Project Address		Phone Number		Phone Number		Phone Number		Phone Number		Phone Number	
Phone Number		Site Contact		Site Contact		Site Contact		Site Contact		Site Contact	
Sample Date	Sample Number	Room Number/Designation	Sample Location	Sample Description	Matrix	Media	Time	Calibration	Volume/Amount	Analyte/Parameter	
7/7	1	Room 1					On	Pre	9612	Total Pb	
	2	Room 2					Off	Post			
	3	Room 3					On	Pre			
	4	Room 4					Off	Post			
	5	Room 5					On	Pre			
	6	Room 6					Off	Post			
	7	Room 7					On	Pre			
	8	Room 8					Off	Post			
	9	Room 9					On	Pre			
	10	Room 10					Off	Post			
Collected By	Jacobs project	Date	7/7/09	Subsampled By	Jacobs chaves	Date	7/29/09	Sample			
Received By		Time	3:30	Subsampled By	Standard TAT	Date	7/29/09	Volume			
Received By		Date		Subsampled By		Date		Method of			
Received By		Date		Subsampled By		Date		Shipment			
Received By		Date		Subsampled By		Date		Condition			
Received By		Date		Subsampled By		Date		Upon Receipt			

Standard TAT

1601 - 49th St. Ste. 100-A
Oklahoma City, OK 73159

Chain of Custody Marshall Environmental Management, Inc.

Phone: (405) 616-4471
Fax: (405) 681-5753
mar@emv@earthlink.net

17459

PROJECT				INVOICE TO				REPORT TO			
Project Number	Client Company	Project Name	Client Company	Address	Address	Address	Address	Address	Address	Address	Address
Project Name	Address	Address	Address	Address	Address	Address	Address	Address	Address	Address	Address
Project Address	Phone Number	Phone Number	Phone Number	Phone Number	Phone Number	Phone Number	Phone Number	Phone Number	Phone Number	Phone Number	Phone Number
Phone Number	Site Contact	Site Contact	Site Contact	Site Contact	Site Contact	Site Contact	Site Contact	Site Contact	Site Contact	Site Contact	Site Contact
Sample Date	Sample Number	Room Number/Designation	Sample Location	Sample Compositions	Miscs	Media	Thrs	Calibration	Volume/Atom	Analysis Parameters	
7/7	11	Room 11				Wipe	On		96in ²	Total Pb	
	12	Room 12					Off		↓		
	13	Room 13					Off		↓		
	13W	Room 13 West					On				
	13C	Room 13 Center					Off		144in ²		
	13E	Room 13 East					On		↓		
	14						Off				
	15	Room 14					On		96in ²		
	16	Room 15					Off		↓		
	17	Room 16					On				
	18						Off				
	19						On				
Collected By	Date	Thrs	Signature	Subs	Signature	Signature	Signature	Signature	Signature	Signature	Signature
Received By	Date	Thrs	Signature	Subs	Signature	Signature	Signature	Signature	Signature	Signature	Signature
Received By	Date	Thrs	Signature	Subs	Signature	Signature	Signature	Signature	Signature	Signature	Signature

14
15
16
17
18
19



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

Environmental Chemistry Analysis Report

Quantem Set ID: 174459
Date Received: 07/30/09
Received By: Barbara Holder
Date Sampled:
Time Sampled:
Analyst: EC
Date of Report: 8/4/2009

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

Acct. No.: A331

Project: Miami

Location: N/A

Project No.: 0083-LBP-070709 JM

AIIIA ID: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	27.05	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
002	2	Wipe	Lead	129.48	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
003	3	Wipe	Lead	86.62	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
004	4	Wipe	Lead	73.55	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
005	5	Wipe	Lead	51.01	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
006	6	Wipe	Lead	126.15	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
007	7	Wipe	Lead	281.24	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
008	8	Wipe	Lead	79.17	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
009	9	Wipe	Lead	134.89	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
010	10	Wipe	Lead	163.37	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
011	11	Wipe	Lead	231.93	23.99	ug/sq. Ft.	08/03/09 14:20	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: 174459
Date Received: 07/30/09
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Client: Marshall Environmental Management, Inc.
1601 SW 89th Street, Ste. A-100
Oklahoma City, OK 73159

Acct. No.: A331
Project: Miami
Location: N/A
Project No.: 0083-LBP-070709 JM

AIHA ID: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
012	12	Wipe	Lead	99.21	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
013	13	Wipe	Lead	3301.20	23.99	ug/sq. Ft.	08/03/09 14:20	EPA 3051 / NIOSH 9100
014	13W	Wipe	Lead	2203.50	16.00	ug/sq. Ft.	08/04/09 9:25	EPA 3051 / NIOSH 9100
015	13C	Wipe	Lead	407.30	16.00	ug/sq. Ft.	08/04/09 9:25	EPA 3051 / NIOSH 9100
016	13E	Wipe	Lead	4003.50	16.00	ug/sq. Ft.	08/04/09 9:25	EPA 3051 / NIOSH 9100
017	14	Wipe	Lead	2391.98	23.99	ug/sq. Ft.	08/04/09 9:25	EPA 3051 / NIOSH 9100
018	15	Wipe	Lead	3341.15	23.99	ug/sq. Ft.	08/04/09 9:25	EPA 3051 / NIOSH 9100
019	16	Wipe	Lead	753.21	23.99	ug/sq. Ft.	08/04/09 9:25	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.

Note: corner piece = Overhead door guard

Index	Time	Units	Sequence	Component	Substrate	Side	Color	Results	Pb	Pb/C	Pb/B	Pb/S
1	2009-07-07 11:15	mg / cm ²	Final					Positive	1.10 ± 0.10	1.10 ± 0.10	1.10 ± 0.10	1.00 ± 0.50
5	2009-07-07 11:18	mg / cm ²	Final					Positive	1.10 ± 0.10	1.10 ± 0.10	1.10 ± 0.10	1.00 ± 0.30
6	2009-07-07 11:19	mg / cm ²	Final					Positive	1.20 ± 0.20	1.20 ± 0.20	1.20 ± 0.20	1.00 ± 0.60
7	2009-07-07 11:22	mg / cm ²	Final	WINDOW	METAL	ROOM 13 D	BROWN	Positive	< LOD: 12.45	< LOD: 12.45	< LOD: 12.45	< LOD: 24.00
8	2009-07-07 11:23	mg / cm ²	Final	WINDOW	METAL	ROOM 13 D	BROWN	Positive	< LOD: 12.60	< LOD: 12.60	< LOD: 12.60	< LOD: 22.50
9	2009-07-07 11:25	mg / cm ²	Final	LEDGE	METAL	ROOM 13 D	BROWN	Negative	< LOD: 0.08	< LOD: 0.08	< LOD: 0.08	< LOD: 2.29
10	2009-07-07 11:26	mg / cm ²	Final	RISER	METAL	ROOM 13 D	BROWN	Negative	< LOD: 0.19	< LOD: 0.19	< LOD: 0.19	< LOD: 2.09
11	2009-07-07 11:27	mg / cm ²	Final	WINDOW	METAL	ROOM 13 D	BROWN	Positive	6.40 ± 4.10	6.40 ± 4.10	6.40 ± 4.10	< LOD: 21.30
12	2009-07-07 11:32	mg / cm ²	Final	WINDOW	METAL	ROOM 13 D	BROWN	Positive	< LOD: 8.85	< LOD: 8.85	< LOD: 8.85	< LOD: 12.60
14	2009-07-07 11:38	mg / cm ²	Final	OVERHEAD DOOR	METAL	OUTSIDE SIDE B:	WHITE	Positive	< LOD: 4.95	< LOD: 4.95	< LOD: 4.95	< LOD: 10.80
15	2009-07-07 11:39	mg / cm ²	Final	OVERHEAD DOOR	METAL	OUTSIDE SIDE B:	WHITE	Positive	< LOD: 9.90	< LOD: 9.90	< LOD: 9.90	< LOD: 9.90
16	2009-07-07 11:41	mg / cm ²	Final	CORNER PIECE	DOOR JAM	OUTSIDE SIDE B:	WHITE	Positive	< LOD: 8.70	< LOD: 8.70	< LOD: 8.70	< LOD: 8.70
17	2009-07-07 11:42	mg / cm ²	Final	WINDOW	METAL	OUTSIDE SIDE B:	WHITE	Positive	< LOD: 4.80	< LOD: 4.80	< LOD: 4.80	< LOD: 9.75
18	2009-07-07 11:44	mg / cm ²	Final	WINDOW	METAL	OUTSIDE SIDE B:	WHITE	Positive	< LOD: 8.25	< LOD: 8.25	< LOD: 8.25	< LOD: 8.25
19	2009-07-07 11:45	mg / cm ²	Final	DOOR	METAL	OUTSIDE SIDE B:	WHITE	Positive	4.80 ± 2.80	4.80 ± 2.80	4.80 ± 2.80	< LOD: 4.95
20	2009-07-07 11:48	mg / cm ²	Final	DOOR jam	METAL	OUTSIDE SIDE B:	WHITE	Positive	< LOD: 5.55	< LOD: 5.55	< LOD: 5.55	< LOD: 10.80
23	2009-07-07 11:53	mg / cm ²	Final	WINDOW	METAL	OUTSIDE SIDE B:	WHITE	Positive	0.70 ± 0.20	0.70 ± 0.20	0.70 ± 0.20	< LOD: 1.05
24	2009-07-07 11:55	mg / cm ²	Final	WINDOW guard	METAL	OUTSIDE SIDE B:	WHITE	Negative	< LOD: 0.08	< LOD: 0.08	< LOD: 0.08	< LOD: 4.56
25	2009-07-07 11:56	mg / cm ²	Final	WINDOW	METAL	OUTSIDE SIDE B:	WHITE	Negative	< LOD: 0.08	< LOD: 0.08	< LOD: 0.08	< LOD: 4.56
26	2009-07-07 11:57	mg / cm ²	Final	WINDOW	METAL	OUTSIDE SIDE B:	WHITE	Positive	1.30 ± 0.30	1.30 ± 0.30	1.30 ± 0.30	2.00 ± 1.00
27	2009-07-07 11:59	mg / cm ²	Final	WINDOW	METAL	OUTSIDE SIDE B:	WHITE	Positive	1.60 ± 0.60	1.60 ± 0.60	1.60 ± 0.60	< LOD: 2.45
28	2009-07-07 11:59	mg / cm ²	Final	WINDOW	METAL	OUTSIDE SIDE B:	WHITE	Negative	< LOD: 0.06	< LOD: 0.06	< LOD: 0.06	< LOD: 1.05
31	2009-07-07 12:02	mg / cm ²	Final	WINDOW frame	METAL	OUTSIDE SIDE B:	WHITE	Positive	2.10 ± 1.10	2.10 ± 1.10	2.10 ± 1.10	< LOD: 4.35
32	2009-07-07 12:04	mg / cm ²	Final	WINDOW	METAL	OUTSIDE SIDE B:	WHITE	Positive	1.30 ± 0.20	1.30 ± 0.20	1.30 ± 0.20	1.50 ± 0.50
33	2009-07-07 12:07	mg / cm ²	Final	DOOR jam	METAL	OUTSIDE SIDE B:	WHITE	Negative	< LOD: 0.75	< LOD: 0.75	< LOD: 0.75	< LOD: 2.49
34	2009-07-07 12:08	mg / cm ²	Final	soffit	METAL	OUTSIDE SIDE B:	WHITE	Positive	1.70 ± 0.70	1.70 ± 0.70	1.70 ± 0.70	< LOD: 2.10
35	2009-07-07 12:09	mg / cm ²	Final	BEAM	METAL	OUTSIDE SIDE B:	WHITE	Positive	2.20 ± 1.00	2.20 ± 1.00	2.20 ± 1.00	< LOD: 2.85
36	2009-07-07 12:11	mg / cm ²	Final	door#19	METAL	OUTSIDE SIDE B:	WHITE	Positive	< LOD: 14.10	< LOD: 14.10	< LOD: 14.10	< LOD: 14.10
37	2009-07-07 12:12	mg / cm ²	Final	door jam #19	METAL	OUTSIDE SIDE B:	WHITE	Positive	< LOD: 4.50	< LOD: 4.50	< LOD: 4.50	< LOD: 4.50
38	2009-07-07 12:13	mg / cm ²	Final	overhead door	METAL	OUTSIDE SIDE B:	WHITE	Positive	5.20 ± 3.40	< LOD: 2.40	< LOD: 2.40	5.20 ± 3.40
39	2009-07-07 12:15	mg / cm ²	Final	overhead door jam	METAL	OUTSIDE SIDE B:	WHITE	Positive	< LOD: 8.55	< LOD: 8.55	< LOD: 8.55	< LOD: 8.55
40	2009-07-07 12:18	mg / cm ²	Final	corner piece	METAL	OUTSIDE SIDE B:	WHITE	Positive	2.30 ± 1.00	2.30 ± 1.00	2.30 ± 1.00	2.30 ± 1.00
41	2009-07-07 12:19	mg / cm ²	Final	door#19	METAL	OUTSIDE SIDE B:	WHITE	Positive	< LOD: 9.30	< LOD: 9.30	< LOD: 9.30	< LOD: 9.30
42	2009-07-07 12:23	mg / cm ²	Final	door jam 19	METAL	OUTSIDE SIDE B:	WHITE	Positive	3.20 ± 1.90	3.20 ± 1.90	3.20 ± 1.90	< LOD: 4.95
43	2009-07-07 12:25	mg / cm ²	Final	corner board	WOOD	B room 14	gray	Negative	< LOD: 0.12	< LOD: 0.12	< LOD: 0.12	< LOD: 1.81
44	2009-07-07 12:27	mg / cm ²	Final	WALL	WOOD	d room 14	WHITE	Negative	< LOD: 0.37	< LOD: 0.37	< LOD: 0.37	< LOD: 2.49
45	2009-07-07 12:29	mg / cm ²	Final	WALL	WOOD	e room 14	BLUE	Negative	< LOD: 0.05	< LOD: 0.05	< LOD: 0.05	< LOD: 2.50
46	2009-07-07 12:33	mg / cm ²	Final	overhead door rollers	WOOD	a room 13	BLUE	Positive	< LOD: 9.75	< LOD: 9.75	< LOD: 9.75	< LOD: 15.60
47	2009-07-07 12:36	mg / cm ²	Final	overhead door inside	WOOD	a room 13	BLUE	Positive	< LOD: 4.95	< LOD: 4.95	< LOD: 4.95	< LOD: 10.80
48	2009-07-07 12:37	mg / cm ²	Final	fire extinguisher spot	CONCRETE	b room 13	gray	Negative	< LOD: 0.05	< LOD: 0.05	< LOD: 0.05	< LOD: 1.96
				fire extinguisher spot	CONCRETE	b room 13	RED	Negative	< LOD: 0.09	< LOD: 0.09	< LOD: 0.09	< LOD: 2.29

Index	Time	Units	Sequence	Component	Substrate	Site	Color	Results	PbC	PbI	PbK
49	2009-07-07 12:40	mg / cm ²	Final	WALL	WOOD	a room 16	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.65
50	2009-07-07 12:42	mg / cm ²	Final	WALL	WOOD	B room 13 side room	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.53
51	2009-07-07 12:44	mg / cm ²	Final	WALL	CONCRETE	C room 13	WHITE	Negative	< LOD : 0.26	< LOD : 0.26	< LOD : 1.81
52	2009-07-07 12:45	mg / cm ²	Final	WALL	DRYWALL	A room 15	WHITE	Negative	< LOD : 0.13	< LOD : 0.13	< LOD : 1.65
55	2009-07-07 12:49	mg / cm ²	Final	WALL	CONCRETE	D rm 12	BEIGE	Negative	< LOD : 0.60	< LOD : 0.03	< LOD : 0.60
56	2009-07-07 12:54	mg / cm ²	Final	WALL	CONCRETE	B rm 12	BEIGE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.05
57	2009-07-07 12:56	mg / cm ²	Final	WINDOW	METAL	C rm 12	gray	Negative	< LOD : 0.32	< LOD : 0.32	< LOD : 4.50
60	2009-07-07 12:57	mg / cm ²	Final	WALL	CONCRETE	C rm 12	BEIGE	Negative	< LOD : 0.08	< LOD : 0.08	< LOD : 2.02
61	2009-07-07 12:59	mg / cm ²	Final	WALL	CONCRETE	a rm 12	BEIGE	Negative	< LOD : 0.75	< LOD : 0.03	< LOD : 0.75
62	2009-07-07 13:00	mg / cm ²	Final	CEILING	WOOD	rm 12	BEIGE	Negative	< LOD : 0.15	< LOD : 0.15	< LOD : 1.95
63	2009-07-07 13:02	mg / cm ²	Final	beam	WOOD	rm 12 side b	BEIGE	Negative	< LOD : 0.16	< LOD : 0.16	< LOD : 2.40
65	2009-07-07 13:05	mg / cm ²	Final	WALL	CONCRETE	B room 11	BEIGE	Negative	< LOD : 0.04	< LOD : 0.04	< LOD : 1.65
66	2009-07-07 13:06	mg / cm ²	Final	WALL	CONCRETE	B room 11	It blue	Negative	< LOD : 0.06	< LOD : 0.06	< LOD : 1.80
67	2009-07-07 13:08	mg / cm ²	Final	coat hanger	WOOD	B room 11	BLUE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.19
68	2009-07-07 13:09	mg / cm ²	Final	PIPE	METAL	B room 11	white	Negative	< LOD : 0.10	< LOD : 0.10	< LOD : 4.82
69	2009-07-07 13:11	mg / cm ²	Final	WALL	CONCRETE	B room 11	BLUE	Negative	< LOD : 1.04	< LOD : 0.04	< LOD : 1.04
70	2009-07-07 13:13	mg / cm ²	Final	WALL	CONCRETE	C RM 11	WHITE	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 2.50
71	2009-07-07 13:14	mg / cm ²	Final	WALL	CONCRETE	C RM 11	It blue	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 2.06
72	2009-07-07 13:15	mg / cm ²	Final	WALL	CONCRETE	d2 rm 11	It blue	Negative	< LOD : 0.06	< LOD : 0.06	< LOD : 1.65
74	2009-07-07 13:17	mg / cm ²	Final	WALL	CONCRETE	d2 rm 11	It blue	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 2.12
75	2009-07-07 13:19	mg / cm ²	Final	WALL	CONCRETE	d1 rm 11	It blue	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 1.95
77	2009-07-07 13:23	mg / cm ²	Final	WALL	CONCRETE	d1 rm 11	dk blue	Negative	< LOD : 0.07	< LOD : 0.07	< LOD : 2.18
78	2009-07-07 13:24	mg / cm ²	Final	WALL	CONCRETE	a rm 11	It blue	Negative	< LOD : 0.06	< LOD : 0.06	< LOD : 1.80
79	2009-07-07 13:25	mg / cm ²	Final	WALL	CONCRETE	a rm 11	It blue	Negative	< LOD : 0.27	< LOD : 0.27	< LOD : 2.07
80	2009-07-07 13:25	mg / cm ²	Final	CEILING	WOOD	rm 11	WHITE	Negative	< LOD : 0.15	< LOD : 0.15	< LOD : 2.25
81	2009-07-07 13:27	mg / cm ²	Final	beam	WOOD	rm 11	WHITE	Negative	< LOD : 0.04	< LOD : 0.04	< LOD : 2.45
82	2009-07-07 13:28	mg / cm ²	Final	WALL	CONCRETE	b rm 10	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.80
83	2009-07-07 13:29	mg / cm ²	Final	WALL	CONCRETE	a rm 10	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.72
84	2009-07-07 13:31	mg / cm ²	Final	WALL	CONCRETE	b2 rm 10	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.96
85	2009-07-07 13:33	mg / cm ²	Final	WALL	CONCRETE	c rm 10	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 3.13
86	2009-07-07 13:34	mg / cm ²	Final	WALL	CONCRETE	a rm 10	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.95
87	2009-07-07 13:35	mg / cm ²	Final	WALL	CONCRETE	b rm 9	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.19
88	2009-07-07 13:36	mg / cm ²	Final	WALL	CONCRETE	a rm 9	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.06
89	2009-07-07 13:37	mg / cm ²	Final	WALL	CONCRETE	b rm 9	WHITE	Negative	< LOD : 0.10	< LOD : 0.10	< LOD : 1.20
90	2009-07-07 13:38	mg / cm ²	Final	WALL	CONCRETE	c rm 9	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.61
91	2009-07-07 13:39	mg / cm ²	Final	WALL	CONCRETE	c2 rm 9	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.13
93	2009-07-07 13:40	mg / cm ²	Final	WALL	CONCRETE	d1 rm 9	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.26
94	2009-07-07 13:41	mg / cm ²	Final	WALL	CONCRETE	d2 rm 9	WHITE	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 2.11
95	2009-07-07 13:42	mg / cm ²	Final	WALL	CONCRETE	a2 room 9	WHITE	Negative	< LOD : 0.23	< LOD : 0.23	< LOD : 2.47
96	2009-07-07 13:43	mg / cm ²	Final	WALL	CONCRETE	a3 room 9	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.33

Index	Time	Units	Sequence	Component	Substrate	Side	Color	Results	PbC	PbI	PbK
98	2009-07-07 13:46	mg / cm ²	Final	CEILING	WOOD	rm 9	BEIGE	Negative	< LOD : 0.29	< LOD : 0.29	< LOD : 1.95
99	2009-07-07 13:46	mg / cm ²	Final	beam	WOOD	rm 9	BEIGE	Negative	< LOD : 0.39	< LOD : 0.39	< LOD : 2.43
100	2009-07-07 13:46	mg / cm ²	Final	beam	WOOD	rm 9	BEIGE	Negative	< LOD : 0.21	< LOD : 0.21	< LOD : 2.75
101	2009-07-07 13:49	mg / cm ²	Final	WALL	CONCRETE	b rm 8	BEIGE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.14
102	2009-07-07 13:49	mg / cm ²	Final	WALL	CONCRETE	a rm 8	BEIGE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.52
103	2009-07-07 13:50	mg / cm ²	Final	WALL	CONCRETE	d rm 8	BEIGE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.16
104	2009-07-07 13:50	mg / cm ²	Final	WALL	CONCRETE	d rm 8	It blue	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.92
105	2009-07-07 13:51	mg / cm ²	Final	WALL	CONCRETE	c rm 8	BEIGE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.74
107	2009-07-07 13:54	mg / cm ²	Final	WALL	CONCRETE	a1 rm 1	BEIGE	Negative	< LOD : 0.60	< LOD : 0.03	< LOD : 0.60
108	2009-07-07 13:56	mg / cm ²	Final	WALL	CONCRETE	a2 rm 1	BEIGE	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 1.95
109	2009-07-07 13:57	mg / cm ²	Final	WALL	CONCRETE	d rm 1	BEIGE	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 1.80
110	2009-07-07 13:59	mg / cm ²	Final	WALL	CONCRETE	d rm 1	BEIGE	Negative	< LOD : 0.75	< LOD : 0.03	< LOD : 0.75
111	2009-07-07 14:00	mg / cm ²	Final	WALL	CONCRETE	c1 rm 1	BEIGE	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 1.05
112	2009-07-07 14:03	mg / cm ²	Final	window ledge	CONCRETE	c1 rm 1	BEIGE	Negative	< LOD : 0.20	< LOD : 0.20	< LOD : 2.23
113	2009-07-07 14:03	mg / cm ²	Final	WALL	CONCRETE	b1 rm 1	BEIGE	Negative	< LOD : 0.14	< LOD : 0.14	< LOD : 2.49
114	2009-07-07 14:04	mg / cm ²	Final	WALL	CONCRETE	b2 rm 1	BEIGE	Negative	< LOD : 0.10	< LOD : 0.10	< LOD : 2.12
115	2009-07-07 14:06	mg / cm ²	Final	WALL	CONCRETE	b3 rm 1	BEIGE	Negative	< LOD : 0.32	< LOD : 0.32	< LOD : 1.94
116	2009-07-07 14:07	mg / cm ²	Final	WALL	CONCRETE	rm 2 c	WHITE	Negative	< LOD : 0.04	< LOD : 0.04	< LOD : 2.06
117	2009-07-07 14:08	mg / cm ²	Final	WALL	CONCRETE	rm 2 c	red	Negative	< LOD : 0.12	< LOD : 0.12	< LOD : 1.80
118	2009-07-07 14:09	mg / cm ²	Final	WALL	CONCRETE	rm 2 c	RED	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.09
120	2009-07-07 14:11	mg / cm ²	Final	WALL	CONCRETE	rm 2 a	RED	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.11
121	2009-07-07 14:12	mg / cm ²	Final	WALL	CONCRETE	rm 2 b	WHITE	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 1.05
122	2009-07-07 14:13	mg / cm ²	Final	WALL	CONCRETE	rm 3 b	WHITE	Negative	< LOD : 0.13	< LOD : 0.13	< LOD : 1.98
125	2009-07-07 14:15	mg / cm ²	Final	WALL	CONCRETE	rm 3 c	WHITE	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 0.90
127	2009-07-07 14:16	mg / cm ²	Final	WALL	CONCRETE	rm 3 d	WHITE	Negative	< LOD : 0.13	< LOD : 0.13	< LOD : 0.75
128	2009-07-07 14:17	mg / cm ²	Final	WALL	CONCRETE	rm 3 c	WHITE	Negative	< LOD : 0.75	< LOD : 0.03	< LOD : 2.01
129	2009-07-07 14:18	mg / cm ²	Final	WALL	CONCRETE	rm 4 a	BEIGE	Negative	< LOD : 0.04	< LOD : 0.04	< LOD : 1.65
130	2009-07-07 14:19	mg / cm ²	Final	WALL	CONCRETE	rm 4 b	WHITE	Negative	< LOD : 0.10	< LOD : 0.10	< LOD : 1.80
131	2009-07-07 14:19	mg / cm ²	Final	WALL	CONCRETE	rm 4 b	WHITE	Negative	< LOD : 0.09	< LOD : 0.09	< LOD : 2.63
132	2009-07-07 14:20	mg / cm ²	Final	WALL	CONCRETE	rm 4 d	WHITE	Negative	< LOD : 0.11	< LOD : 0.11	< LOD : 2.36
133	2009-07-07 14:21	mg / cm ²	Final	WALL	CONCRETE	rm 5 a	BEIGE	Negative	< LOD : 0.13	< LOD : 0.13	< LOD : 2.09
134	2009-07-07 14:22	mg / cm ²	Final	WALL	CONCRETE	rm 5 b	BEIGE	Negative	< LOD : 0.24	< LOD : 0.24	< LOD : 2.08
135	2009-07-07 14:24	mg / cm ²	Final	WALL	CONCRETE	rm 5 c	It blue	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.13
136	2009-07-07 14:25	mg / cm ²	Final	WALL	CONCRETE	rm 6 a	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.10
137	2009-07-07 14:25	mg / cm ²	Final	WALL	CONCRETE	rm 6 d	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.59
140	2009-07-07 14:27	mg / cm ²	Final	WALL	CONCRETE	rm 6 c	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.05
142	2009-07-07 14:28	mg / cm ²	Final	CEILING	CONCRETE	rm 6	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 3.03
143	2009-07-07 14:30	mg / cm ²	Final	WALL	CONCRETE	rm 6 b	WHITE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 3.03
144	2009-07-07 14:30	mg / cm ²	Final	WALL	CONCRETE	rm 6 d	It blue	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 1.87
145	2009-07-07 14:31	mg / cm ²	Final	WALL	CONCRETE	rm 6 a	It blue	Negative	< LOD : 0.05	< LOD : 0.05	< LOD : 2.03
				WALL	CONCRETE	rm 7 c	It blue	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.03

Index	Time	Units	Sequence	Component	Substrate	Side	Color	Results	PbPb	PbPb	PbPb
146	2009-07-07 14:32	mg / cm ²	Final	WALL	CONCRETE	rm 7 d	lt blue	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.17
147	2009-07-07 14:33	mg / cm ²	Final	CABINET	WOOD	rm 6	BROWN	Positive	< LOD : 3.45	< LOD : 3.45	< LOD : 13.05
149	2009-07-07 14:34	mg / cm ²	Final	CABINET	WOOD	rm 6	BROWN	Positive	1.50 ± 0.50	0.50 ± 0.10	1.50 ± 0.50
150	2009-07-07 14:35	mg / cm ²	Final	CABINET	WOOD	rm 7 c	BROWN	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.80
151	2009-07-07 14:36	mg / cm ²	Final	WALL	CONCRETE	rm 7 b	BEIGE	Negative	< LOD : 0.17	< LOD : 0.17	< LOD : 1.80
152	2009-07-07 14:37	mg / cm ²	Final	WALL	CONCRETE	rm 7 b	BEIGE	Negative	< LOD : 0.22	< LOD : 0.22	< LOD : 2.40
153	2009-07-07 14:39	mg / cm ²	Final	FLOOR	CONCRETE	rm 15	BEIGE	Negative	0.30 ± 0.11	0.30 ± 0.11	< LOD : 1.35
154	2009-07-07 14:43	mg / cm ²	Final	storage room window	CONCRETE	rm 13 d	WHITE	Negative	0.70 ± 0.20	0.70 ± 0.20	< LOD : 0.75
155	2009-07-07 14:44	mg / cm ²	Final	storage room window	WOOD	rm 12 b	WHITE	Negative	< LOD : 0.60	< LOD : 0.60	< LOD : 3.00
156	2009-07-07 14:44	mg / cm ²	Final	storage room window ledge	WOOD	rm 12 b	WHITE	Positive	2.10 ± 0.90	2.10 ± 0.90	< LOD : 2.85
157	2009-07-07 14:46	mg / cm ²	Final	storage room window frame	WOOD	rm 12 b	BEIGE	Negative	0.80 ± 0.10	0.80 ± 0.10	1.10 ± 0.50
158	2009-07-07 14:48	mg / cm ²	Final	FLOOR markings	CONCRETE	rm 13	YELLOW	Negative	< LOD : 0.14	< LOD : 0.14	< LOD : 1.95
159	2009-07-07 14:52	mg / cm ²	Final	DOOR 16	CONCRETE	16	YELLOW	Negative	< LOD : 0.04	< LOD : 0.04	< LOD : 5.17
160	2009-07-07 14:52	mg / cm ²	Final	DOOR 16	CONCRETE	16	YELLOW	Negative	< LOD : 0.06	< LOD : 0.06	< LOD : 4.91
161	2009-07-07 14:56	mg / cm ²	Final	DOOR 1	METAL		BLUE	Negative	< LOD : 0.35	< LOD : 0.35	< LOD : 4.88
162	2009-07-07 14:57	mg / cm ²	Final	DOOR jam 1	METAL		BLUE	Negative	< LOD : 0.25	< LOD : 0.25	< LOD : 4.98
163	2009-07-07 14:59	mg / cm ²	Final	DOOR jam 2	METAL		BLUE	Negative	< LOD : 0.35	< LOD : 0.35	< LOD : 5.11
164	2009-07-07 15:00	mg / cm ²	Final	DOOR 4	METAL		BLUE	Negative	< LOD : 0.21	< LOD : 0.21	< LOD : 4.51
165	2009-07-07 15:01	mg / cm ²	Final	DOOR jam 4	METAL		BLUE	Negative	< LOD : 0.44	< LOD : 0.44	< LOD : 5.09
166	2009-07-07 15:03	mg / cm ²	Final	DOOR jam 3	METAL		BLUE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 1.85
167	2009-07-07 15:03	mg / cm ²	Final	DOOR 3	METAL		BLUE	Negative	< LOD : 0.03	< LOD : 0.03	< LOD : 2.16
168	2009-07-07 15:05	mg / cm ²	Final	DOOR 5	METAL		BLUE	Negative	< LOD : 0.45	< LOD : 0.45	< LOD : 4.54
169	2009-07-07 15:05	mg / cm ²	Final	DOOR jam 5	METAL		BLUE	Negative	< LOD : 0.18	< LOD : 0.18	< LOD : 4.20
170	2009-07-07 15:07	mg / cm ²	Final	DOOR jam 6	METAL		BROWN	Negative	< LOD : 0.18	< LOD : 0.18	< LOD : 4.46
171	2009-07-07 15:08	mg / cm ²	Final	DOOR 6	METAL		BROWN	Negative	< LOD : 0.23	< LOD : 0.23	< LOD : 4.66
172	2009-07-07 15:09	mg / cm ²	Final	DOOR 7	METAL		BLUE	Negative	< LOD : 0.27	< LOD : 0.27	< LOD : 4.57
173	2009-07-07 15:10	mg / cm ²	Final	DOOR JAM 7	METAL		BLUE	Negative	< LOD : 0.27	< LOD : 0.27	< LOD : 5.40
175	2009-07-07 15:12	mg / cm ²	Final	valve piece	METAL	rm 2 c	BLUE	Negative	< LOD : 0.32	< LOD : 0.32	< LOD : 4.65
176	2009-07-07 15:13	mg / cm ²	Final	door 8	METAL		BLUE	Negative	< LOD : 0.41	< LOD : 0.41	< LOD : 4.39
177	2009-07-07 15:15	mg / cm ²	Final	door jam 8	METAL		WHITE	Negative	< LOD : 0.36	< LOD : 0.36	< LOD : 5.10
178	2009-07-07 15:15	mg / cm ²	Final	door jam 9	METAL		BLUE	Negative	< LOD : 0.33	< LOD : 0.33	< LOD : 4.50
179	2009-07-07 15:16	mg / cm ²	Final	door jam 10	METAL		BLUE	Negative	< LOD : 0.24	< LOD : 0.24	< LOD : 4.65
180	2009-07-07 15:17	mg / cm ²	Final	door 10	METAL		BLUE	Negative	< LOD : 0.41	< LOD : 0.41	< LOD : 4.50
181	2009-07-07 15:18	mg / cm ²	Final	door 11	METAL		BLUE	Negative	< LOD : 0.27	< LOD : 0.27	< LOD : 4.95
182	2009-07-07 15:19	mg / cm ²	Final	door 11	METAL		lt blue	Negative	< LOD : 0.20	< LOD : 0.20	< LOD : 3.77
183	2009-07-07 15:20	mg / cm ²	Final	door jam 11	METAL		BEIGE	Negative	< LOD : 0.29	< LOD : 0.29	< LOD : 4.90
184	2009-07-07 15:22	mg / cm ²	Final	door jam 13	METAL		BLUE	Negative	< LOD : 0.63	< LOD : 0.63	< LOD : 4.65
185	2009-07-07 15:23	mg / cm ²	Final	door 13	METAL		BLUE	Negative	< LOD : 0.60	< LOD : 0.60	< LOD : 4.55
186	2009-07-07 15:27	mg / cm ²	Final	door 13	METAL		BLUE	Negative	< LOD : 0.32	< LOD : 0.32	< LOD : 4.22
187	2009-07-07 15:28	mg / cm ²	Final	door 14	METAL		WHITE	Negative	< LOD : 0.28	< LOD : 0.28	< LOD : 4.42

Index	Time	Units	Sequence	Component	Substrate	Side	Color	Results	Pb/C	Pb/B
188	2009-07-07 15:28	mg / cm ²	Final	door jam 34	METAL		WHITE	Negative	< LOD : 0.40	< LOD : 4.88
189	2009-07-07 15:29	mg / cm ²	Final	door jam 14	METAL		WHITE	Negative	< LOD : 0.63	< LOD : 4.83
190	2009-07-07 15:30	mg / cm ²	Final	door jam 15	METAL		light blue	Negative	< LOD : 0.31	< LOD : 4.80
191	2009-07-07 15:31	mg / cm ²	Final	door 15	METAL		light blue	Negative	< LOD : 0.32	< LOD : 4.36
192	2009-07-07 15:33	mg / cm ²	Final	door 17	METAL		BLUE	Negative	< LOD : 0.49	< LOD : 4.71
193	2009-07-07 15:33	mg / cm ²	Final	door jam 17	METAL		BLUE	Negative	< LOD : 0.54	< LOD : 4.48
194	2009-07-07 15:34	mg / cm ²	Final	door jam 18	METAL		BLUE	Negative	< LOD : 0.20	< LOD : 4.17
195	2009-07-07 15:35	mg / cm ²	Final	door 18	METAL		BLUE	Negative	< LOD : 0.14	< LOD : 3.68
196	2009-07-07 15:40	mg / cm ²	Final	door slide 21	METAL		WHITE	Positive	< LOD : 9.60	< LOD : 14.10
197	2009-07-07 15:42	mg / cm ²	Final	door jam 21	METAL		WHITE	Positive	< LOD : 14.10	< LOD : 14.10
201	2009-07-07 15:46	mg / cm ²	Final	door jam 21	CONCRETE		WHITE	Negative	< LOD : 0.05	< LOD : 1.20
202	2009-07-07 15:48	mg / cm ²	Final	door 21	CONCRETE		WHITE	Positive	< LOD : 4.65	< LOD : 12.00
203	2009-07-07 15:49	mg / cm ²	Final	door 23	WOOD		WHITE	Negative	< LOD : 0.03	< LOD : 1.93
204	2009-07-07 15:51	mg / cm ²	Final	door 22	METAL	rm 13 side	light blue	Positive	< LOD : 11.10	< LOD : 11.10
205	2009-07-07 15:53	mg / cm ²	Final	door jam 22	METAL		light blue	Positive	< LOD : 8.55	< LOD : 9.45
206	2009-07-07 15:57	mg / cm ²	Final	door 18	METAL		light blue	Negative	< LOD : 0.35	< LOD : 4.50
207	2009-07-07 15:58	mg / cm ²	Final	window frame rm 3	METAL	a	gray	Negative	< LOD : 0.41	< LOD : 2.44
209	2009-07-07 16:00	mg / cm ²	Final	window frame rm 4	METAL	C	BEIGE	Negative	< LOD : 0.75	< LOD : 2.70
210	2009-07-07 16:00	mg / cm ²	Final	window frame rm 3	METAL	A	GREEN	Negative	< LOD : 0.29	< LOD : 2.25
211	2009-07-07 16:02	mg / cm ²	Final	window frame rm 3	METAL	A	BLUE	Negative	< LOD : 0.47	< LOD : 2.37
212	2009-07-07 16:06	mg / cm ²	Final	window frame rm 5	METAL	C	light blue	Negative	< LOD : 0.42	< LOD : 2.57
213	2009-07-07 16:06	mg / cm ²	Final	WALL	CONCRETE	D	black	Positive	1.40 ± 0.40	< LOD : 3.60
215	2009-07-07 16:07	mg / cm ²	Final	WALL	CONCRETE	D	black	Negative	< LOD : 0.05	< LOD : 2.45
216	2009-07-07 16:10	mg / cm ²	Final	WALL	CONCRETE	D	black	Negative	0.50 ± 0.10	< LOD : 1.20
217	2009-07-07 16:12	mg / cm ²	Final	DOOR 24	METAL		BLUE	Negative	< LOD : 0.28	< LOD : 4.80
219	2009-07-07 16:13	mg / cm ²	Final	DOOR jam 24	METAL		BLUE	Negative	< LOD : 0.23	< LOD : 4.95
221	2009-07-07 16:16	mg / cm ²	Final	DOOR frame	METAL		WHITE	Negative	< LOD : 0.77	< LOD : 4.54
222	2009-07-07 16:17	mg / cm ²	Final	WALL	CONCRETE	rm 11 d	GREEN	Negative	< LOD : 0.03	< LOD : 1.65
225	2009-07-07 16:19	mg / cm ²	Final	WALL	CONCRETE	rm 11 d	gold	Negative	< LOD : 0.03	< LOD : 0.90
226	2009-07-07 16:21	mg / cm ²	Final	WALL	METAL	rm 10	silver	Negative	< LOD : 0.03	< LOD : 1.65
227	2009-07-07 16:22	mg / cm ²	Final	bathroom stall	METAL	rm 10	WHITE	Negative	< LOD : 0.03	< LOD : 3.87
228	2009-07-07 16:25	mg / cm ²	Final	mirror frame	WOOD	rm 9	gray	Negative	0.60 ± 0.30	< LOD : 1.80
229	2009-07-07 16:26	mg / cm ²	Final	mirror shelf	WOOD	rm 9	WHITE	Negative	< LOD : 0.03	< LOD : 2.08
230	2009-07-07 16:27	mg / cm ²	Final	shower bench	WOOD	rm 9	gray	Negative	< LOD : 0.27	< LOD : 2.25
232	2009-07-07 16:33	mg / cm ²	Final	shower tile	CONCRETE	rm 9	BEIGE	Negative	< LOD : 0.18	< LOD : 2.03
233	2009-07-07 16:35	mg / cm ²	Final	WINDOW	METAL	A	WHITE	Negative	< LOD : 0.60	< LOD : 4.50
235	2009-07-07 16:36	mg / cm ²	Final	WINDOW	METAL	A window 4	WHITE	Positive	1.70 ± 0.60	1.70 ± 0.60
236	2009-07-07 16:37	mg / cm ²	Final	WINDOW	METAL	A window 5	WHITE	Positive	2.30 ± 1.20	< LOD : 3.60
237	2009-07-07 16:38	mg / cm ²	Final	WINDOW	METAL	b1	WHITE	Negative	0.80 ± 0.20	< LOD : 1.20
								Positive	1.60 ± 0.60	< LOD : 2.55

Index	Time	Units	Sequence	Component	Substrate	Side	Color	Results	PbC	PbI	PbB
238	2009-07-07 16:40	mg / cm ²	Final			CALIBRATE		Positive	1.80 ± 0.80	1.00 ± 0.10	1.80 ± 0.80
240	2009-07-07 16:41	mg / cm ²	Final			CALIBRATE		Positive	1.70 ± 0.70	0.90 ± 0.10	1.70 ± 0.70
242	2009-07-07 16:42	mg / cm ²	Final			CALIBRATE		Positive	1.90 ± 0.90	1.20 ± 0.20	1.90 ± 0.90
243	2009-07-07 16:44	mg / cm ²	Final			CALIBRATE		Positive	1.00 ± 0.10	1.00 ± 0.10	0.70 ± 0.20
244	2009-07-07 16:45	mg / cm ²	Final			CALIBRATE		Positive	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.60
245	2009-07-07 16:46	mg / cm ²	Final			CALIBRATE		Positive	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.60

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 Paint

INSPECTOR/RISK ASSESSOR

Certification # OKRASR13418

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

Issued on: **4/1/2009**

Expires on: **3/31/2010**



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: 4/1/2009

Expires on 3/31/2010


Division Director
Air Quality Division


Environmental Programs Manager
Air Quality Division



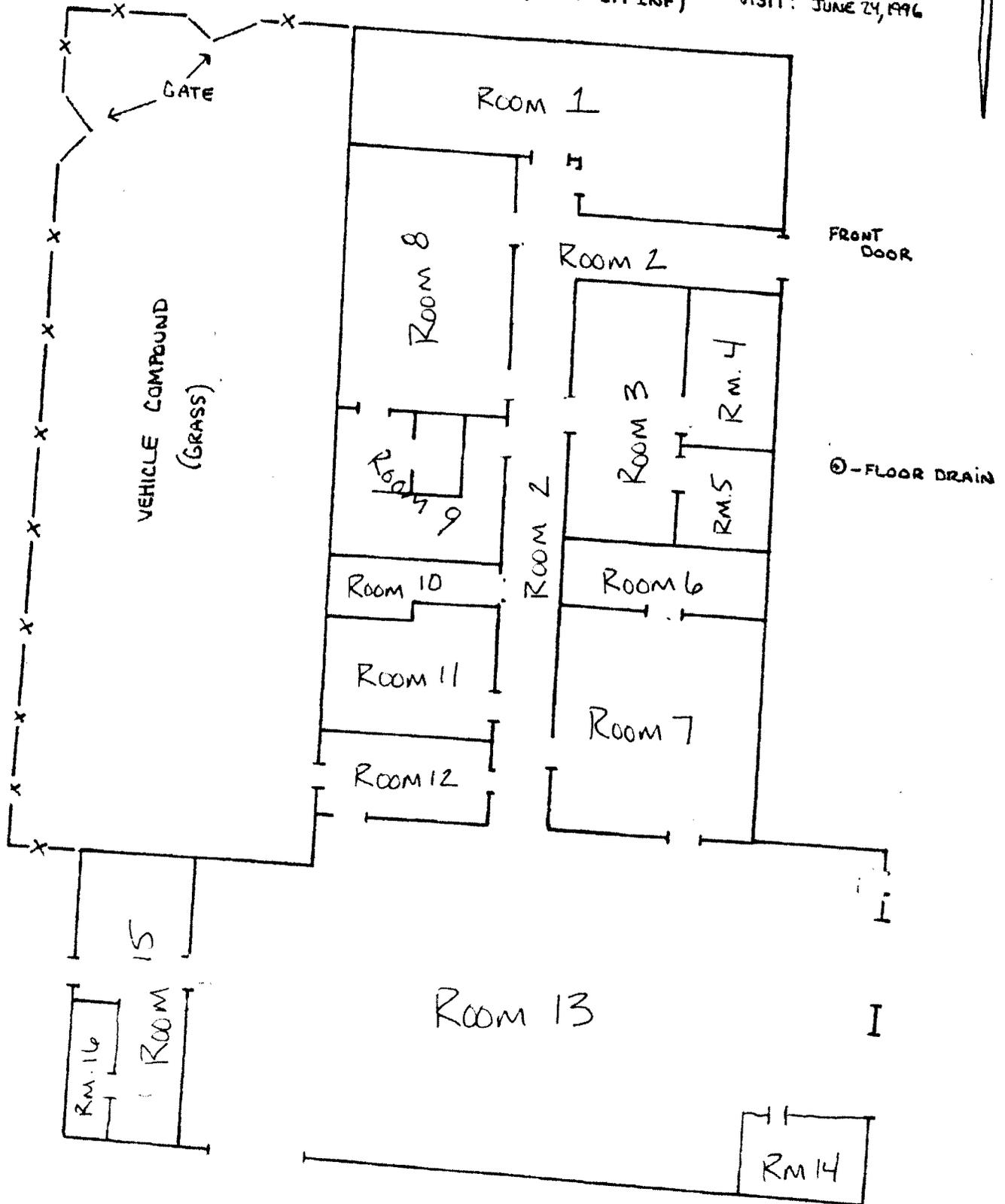
MIAMI ARMORY

MIAMI, OKLAHOMA

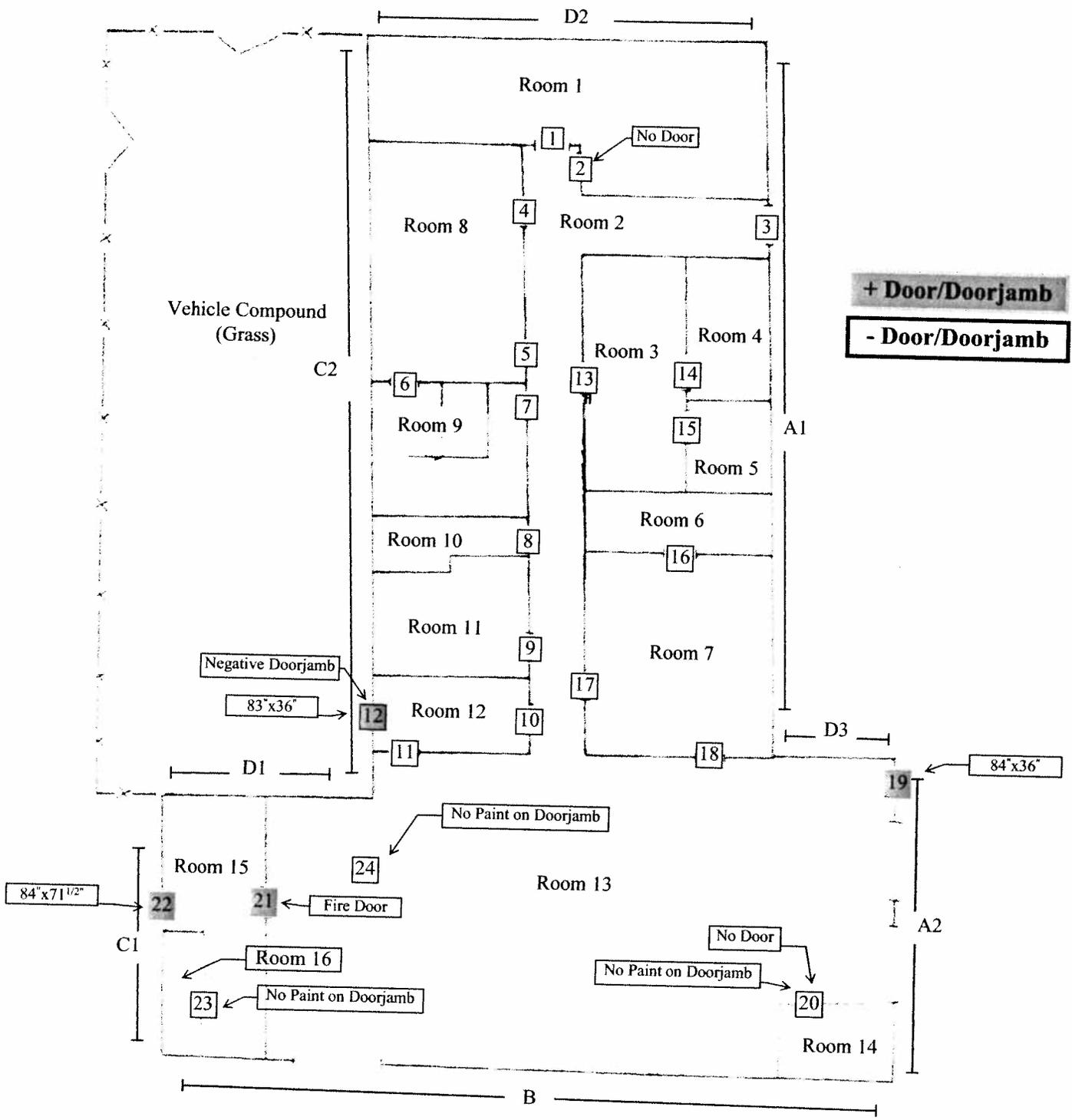
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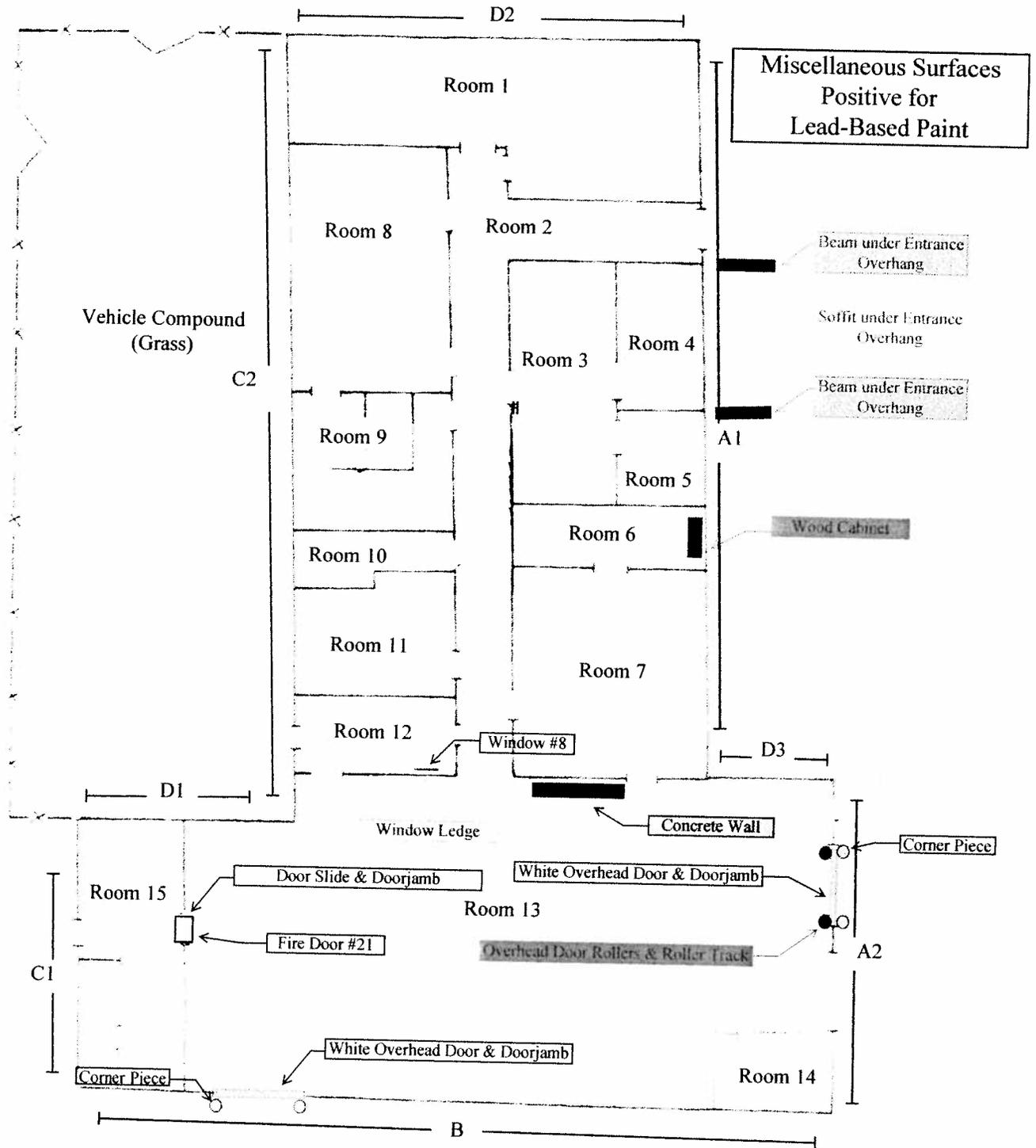
(CO B (-) 1 BN 279 INF)

VISIT: JUNE 24, 1996



SURFACE WIPES





OCT 26 2009
74

Asbestos Inspection

Miami Armory
830 D Street Southeast
Miami, Oklahoma 74354

Date of Inspection
July 7, 2009

DCS Contract No.: ID009139-4

PREPARED FOR:

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

PREPARED BY:

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

OCT 26 2009 *28*

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CERTIFICATION

This is to certify, that Marshall Environmental Management, Inc. was contracted by the State of Oklahoma, Department of Central Services to conduct an Asbestos Inspection of the Miami Armory, for the State of Oklahoma, Department of Environmental Quality, Land Protection Division. The Miami 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 findings and recommendations included in this report are believed to accurately depict the conditions observed on the date this Asbestos Inspection was performed.



10/21/09

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

Date

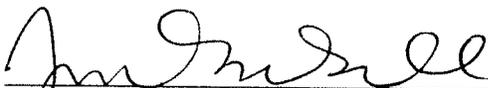
- Certified Industrial Hygienist - Comprehensive Practice Certification #4489
- Certified Safety Professional - Comprehensive Practice Certification #9941
- Registered Professional Environmental Specialist - State Department of Health #710
- Certified Hazardous Materials Manager, Master Level Certification #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



10/21/09

Jamie Marshall, B.S., Industrial Hygiene Associate

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, A-100
Oklahoma City, OK. 73159

EXECUTIVE SUMMARY

Marshall Environmental Management, Inc. (MEM) performed an Asbestos Inspection on July 7, 2009, of the Miami Armory, located at 830 D Street Southeast in Miami, Oklahoma, so that a strategy may be prepared for remediation activities, as required by the Environmental Protection Agency (EPA) for pre-1980 construction. The Miami Armory was constructed in 1957.

The analytical results associated with this Asbestos Inspection identified the presence of asbestos containing pipe insulation, floor tile and mastic, tar and window caulk. The pipe insulation collected from various straight runs and elbows in rooms 8, 10, and 12, contained greater than one percent (>1%) asbestos. Additionally, the floor tile and mastics located in rooms 3, 4 and 5 and the tar on the furnace flu in room 1, also contained >1% asbestos. Lastly, the caulk collected from the exterior windows contained a trace amount of asbestos, less than one percent (<1%).

Recommendations will include that all "Regulated" Asbestos Containing Materials (ACM) that were detected in concentrations >1% be abated. The removal and disposal of the ACM should be treated as a regulated response action covered by the EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations. Due to the quantities, a project Design is required for the abatement of the "Regulated" ACM. If the ACM are in good condition and are to remain in place and be maintained and undisturbed, a Management Plan should be developed.

The remainder of this Asbestos Inspection Report includes the Sampling Strategy, the Findings and Conclusions, the Recommendations and Response Actions, the Limitations of the Survey and the Regulatory Review.

SAMPLING STRATEGY

Each accessible area throughout the Miami Armory was systematically inspected in order to collect samples of building materials suspected of containing asbestos. The sample collection process includes, identifying the type of material suspected of containing asbestos, the location of the material, the condition and the quantity. These procedures are thoroughly documented for the purpose of assisting, if necessary, with the development of appropriate response actions.

The following are examples of the types of building materials that were visually inspected and sampled during this Asbestos Inspection.

Surfacing Materials

- Examples include blown on or trowled substrates materials typically observed on ceilings, structural steel, concrete ceilings or metal pan decks.

Thermal System Insulation

- Examples include piping, hot and cold water lines, Heating Ventilation and Air Conditioning (HVAC) equipment components, boilers, steam lines or heated thermal processes.

Miscellaneous Materials

- Examples include floor tiles, mastics, ceiling tiles, sheet vinyl flooring, wallboard, bedding tapes or joint compounds.

Each sample collected was submitted for analysis in accordance with the EPA authorized Method: 600 49 Code of Federal Regulations (CFR) Part 61 Subpart M, Asbestos NESHAP Rules. "Asbestos Containing Materials" are any materials, which consist of greater than 1 percent (>1%) asbestos, as defined by the EPA Approved Analytical Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, referred to as:

"Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

FINDINGS AND CONCLUSIONS

The analytical results associated with this Asbestos Inspection identified the presence of asbestos containing pipe insulation, floor tile and mastic, tar and window caulk. The pipe insulation collected from various straight runs and elbows in rooms 8, 10, and 12, contained greater than one percent (>1%) asbestos. Additionally, the floor tile and mastics located in rooms 3, 4 and 5 and the tar on the furnace flu in room 1, also contained >1% asbestos. Lastly, the caulk collected from the exterior windows contained a trace amount of asbestos, less than one percent (<1%).

Any material to consist of >1% asbestos, as defined by the EPA approved analytical method, referenced in the Sampling Strategy portion of this Report, is considered an "Asbestos Containing Material." This analytical method is not proficient in quantifying a trace amount of asbestos. When asbestos is detected in separable layers of building materials in quantities <10%, the EPA NESHAP regulations require the material to be treated as an ACM.

The Findings listed in the table below correspond with the analytical data provided in the Appendix of this Report. Recommendations and Response Actions, chain of custody forms, specific sampling locations, labeled homogenous floor plans and associated analytical results are provided in subsequent portions of this Report.

Table I: Asbestos Containing Materials

Sample Id.	Location	Description	Result	Material	Total Quantities (including homogenous areas)
PLM-01	Room 8	Straight Run	40% Chrysotile	TSI	203 linear ft.
PLM-02	Room 8	Elbow	40% Chrysotile	TSI	
PLM-03	Room 8	Straight Run	40% Chrysotile	TSI	
PLM-04	Room 8	Elbow	40% Chrysotile	TSI	
PLM-15	Room 12	Straight Run	40% Chrysotile	TSI	
PLM-20	Room 10	Elbow	40% Chrysotile	TSI	
PLM-11	Room 4	9"x9" Floor Tile	5% Chrysotile	Misc.	130 in. ²
PLM-12	Rm. 3, 4 & 5	Mastic	8% Chrysotile	Misc.	596 in. ²
PLM-24	Ext. Windows	Window Caulk	<1% Chrysotile	Misc.	37 windows
PLM-10	Room 1	Tar on Flu	2% Chrysotile	Misc.	1 glove-bag

Historical Overview of Asbestos Activities

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

RECOMMENDATIONS AND RESPONSE ACTIONS

The following recommendations are based on the results of this Asbestos Inspection Report.

1. All Regulated ACM that were detected in concentrations >1% are recommended to be abated.
2. The removal and disposal of ACM should be treated as a regulated response action covered by the EPA NESHAP regulations.
3. A project Design would be required for building materials that measure greater than 160-square feet, 260-linear feet or 35-cubic feet.
4. If the ACM are in good condition and are to remain in place and be maintained and undisturbed, a Management Plan should be developed.
5. Activities that would disturb the ACM should only be performed by an ODOL Licensed Asbestos Contractor.

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 bystanders or the Inspector were not assessed.

The findings within this Report are valid as of the date this Asbestos Inspection was performed; however, changes in the conditions of a property may certainly occur with the passage of time, whether due to natural processes or the works of man. 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. It should also be noted that as-built plans were not available for review or use in the planning of this asbestos inspection.

REGULATORY REVIEW

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

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

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

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

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

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

The U.S. Environmental Protection Agency (EPA) requires inspections in school buildings in grades K through 12, as part of the Asbestos Hazard Emergency Response Act (AHERA), which is authorized in 40 CFR 763.6. These AHERA requirements would only be applicable to the Miami Armory in an instance where the future intentions for the structure would include school activities grades K through 12. The structure would then necessitate an Asbestos Management Plan, required by the Local Educational Authority (LEA). The AHERA inspection protocol requires a thorough sampling of all forms of friable and non-friable asbestos. The types of ACM to be assessed as part of an AHERA Inspection include:

Surfacing Materials

- Examples include blown on or trowled substrates materials typically observed on ceilings, structural steel, concrete ceilings or metal pan decks.

Thermal System Insulation

- Examples include piping, hot and cold water lines, Heating Ventilation and Air Conditioning (HVAC) equipment components, boilers, steam lines or heated thermal processes.

Miscellaneous Materials

- Examples include floor tiles, mastics, ceiling tiles, sheet vinyl flooring, wallboard bedding tapes or joint compounds.

Marshall Environmental Management, Inc.

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

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 Notifications must be submitted to the DEQ ten working days prior to any demolition or renovation work where asbestos is present. Instruction of how to file and comply with DEQ and NESHAP Notification Requirements are provided on the DEQ web site at:

<http://www.deq.state.ok.us/aqdnew/asbestos/index.htm>

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

APPENDIX

Bulk Asbestos
Chain of Custody
Analytical Results

Floor Plan
Labeled with Homogenous Areas

Licenses

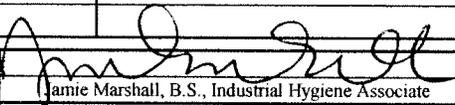
Digital Photographs

Marshall Environmental Management, Inc.

Polarized Light Microscopy Asbestos Analysis

Project Location		Invoice To		Report To	
Project Number	0082-AB-070709-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project Name	Miami Armory Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	830 D Street Southeast Miami, OK 74354	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Site Contact	Jeff Alls	Phone #	405-522-4805	Phone #	405-702-5115
Phone #		Fax #	405-522-0051	Fax #	
Cell #	918-530-7122	Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	Date of Sampling	Sample Location		Sample Description		40% Asbestos Detected		
0105-070709-CJM-PLM-01	July 7, 2009	Room 8		Color	Gray	40% Chrysotile	20% Calcareous Material	
		Straight Run		Condition	Good		40% Cellulose	
				Type	Thermal System Insulation			
				Note				
0105-070709-CJM-PLM-02	July 7, 2009	Room 8		Color	White	40% Chrysotile	55% Calcareous Material	
		Elbow		Condition	Good		5% Cellulose	
				Type	Thermal System Insulation			
				Note				
0105-070709-CJM-PLM-03	July 7, 2009	Room 8		Color	Gray	40% Chrysotile	20% Calcareous Material	
		Straight Run		Condition	Good		40% Cellulose	
				Type	Thermal System Insulation			
				Note				
0105-070709-CJM-PLM-04	July 7, 2009	Room 8		Color	White	40% Chrysotile	55% Calcareous Material	
		Elbow		Condition	Good		5% Cellulose	
				Type	Thermal System Insulation			
				Note				
0105-070709-CJM-PLM-05	July 7, 2009	Room 8		Color	Yellow/Pink		100% Fibrous Glass	
		Flex Duct		Condition	Good			
				Type	Thermal System Insulation			
				Note				

Analyst Name (Print) Jamie Marshall	Analyst Signature  Jamie Marshall, B.S., Industrial Hygiene Associate	Date Analyzed July 21, 2009
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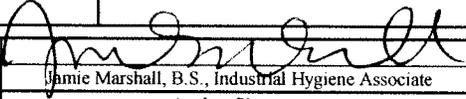
Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.	Lab Accreditation: AIHA PAT ID# 102334
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Marshall Environmental Management, Inc.

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Site Contact	Jeff Alls	Phone #	405-522-4805	Phone #	405-702-5115
Phone #		Fax #	405-522-0051	Fax #	
Cell #	918-530-7122	Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected	
			Color	Condition		
0105-070709-CJM-PLM-06	July 7, 2009	Room 12	Color	Yellow		100% Fibrous Glass
			Condition	Good		
			Type	Thermal System Insulation		
			Note			
0105-070709-CJM-PLM-07A	July 7, 2009	Room 2	Color	Brown		100% Rubber
			Condition	Good		
		Cove Base	Type	Miscellaneous		
			Note			
0105-070709-CJM-PLM-07B	July 7, 2009	Room 2	Color	Yellow		100% Adhesive
			Condition	Good		
		Cove Base Mastic	Type	Miscellaneous		
			Note			
0105-070709-CJM-PLM-08	July 7, 2009	Room 1	Color	White		100% Foam
			Condition	Good		
		Ceiling Tile	Type	Miscellaneous		
			Note			
0105-070709-CJM-PLM-09	July 7, 2009	Room 1	Color	Yellow		100% Fibrous Glass
			Condition	Good		
		Furnace Insulation	Type	Thermal System Insulation		
			Note			

Jamie Marshall		July 21, 2009
Analyst Name (Print)	Jamie Marshall, B.S., Industrial Hygiene Associate	Date Analyzed
	Analyst Signature	

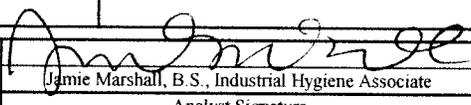
Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.	Lab Accreditation: AIHA PAT ID# 102334
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Marshall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

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Cell #	918-530-7122	Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	Date of Sampling	Sample Location		Sample Description		2% Asbestos Detected		
0105-070709-CJM-PLM-10	July 7, 2009	Room 1	Color	Black		2% Chrysotile	98% Tar	
		Tar on Furnace Flu	Condition	Good				
			Type	Thermal System Insulation				
			Note					
0105-070709-CJM-PLM-11	July 7, 2009	Room 4	Color	Gray		5% Chrysotile	95% Vinyl Aggregate	
		9"x9" Floor Tile	Condition	Good				
			Type	Miscellaneous				
			Note					
0105-070709-CJM-PLM-12	July 7, 2009	Room 3,4 & 5	Color	Black		8% Chrysotile	92% Tar	
		Mastic	Condition	Good				
			Type	Miscellaneous				
			Note					
0105-070709-CJM-PLM-13	July 7, 2009	Room 13	Color	White/Gray		No Asbestos Detected		
		Drill Floor	Condition	Good		2% Cellulose		
		Ceiling	Type	Miscellaneous		98% Cementous Material		
			Note					
0105-070709-CJM-PLM-14A	July 7, 2009	Room 15	Color	Beige		No Asbestos Detected		
		12"x12" Tile	Condition	Good		100% Vinyl Aggregate		
			Type	Miscellaneous				
			Note					

Jamie Marshall Analyst Name (Print)	 Jamie Marshall, B.S., Industrial Hygiene Associate Analyst Signature	July 21, 2009 Date Analyzed
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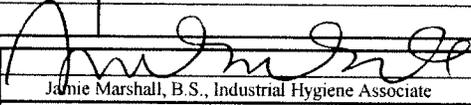
Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.	Lab Accreditation: AIHA PAT ID# 102334
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Cell #	918-530-7122	Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected	
			Color	Condition		
0105-070709-CJM-PLM-14B	July 7, 2009	Room 15	Yellow	Good		100% Adhesive
		Mastic		Miscellaneous		
0105-070709-CJM-PLM-15	July 7, 2009	Room 12	Gray	Good	40% Chrysotile	20% Calcareous Material
		Straight Run		Thermal System Insulation		40% Cellulose
0105-070709-CJM-PLM-16A	July 7, 2009	Room 2	Beige	Good		100% Vinyl Aggregate
		12"x12" Tile		Miscellaneous		
0105-070709-CJM-PLM-16B	July 7, 2009	Room 2	Yellow	Good		100% Adhesive
		Mastic		Miscellaneous		
0105-070709-CJM-PLM-17A	July 7, 2009	Room 7	Beige	Good		100% Vinyl Aggregate
		12"x12" Tile		Miscellaneous		

Jamie Marshall Analyst Name (Print)	 Jamie Marshall, B.S., Industrial Hygiene Associate Analyst Signature	July 21, 2009 Date Analyzed
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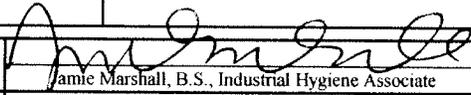
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Project Name	Miami Armory Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	830 D Street Southeast Miami, OK 74354	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Site Contact	Jeff Alls	Phone #	405-522-4805	Phone #	405-702-5115
Phone #		Fax #	405-522-0051	Fax #	
Cell #	918-530-7122	Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected	
			Color	Condition		
0105-070709-CJM-PLM-17B	July 7, 2009	Room 7	Yellow	Good		100% Adhesive
		Mastic		Miscellaneous		
0105-070709-CJM-PLM-18	July 7, 2009	Room 14	White	Good		90% Calcareous Material
		Drywall		Miscellaneous		10% Cellulose
0105-070709-CJM-PLM-19	July 7, 2009	Room 15	White	Good		90% Calcareous Material
		Drywall		Miscellaneous		10% Cellulose
0105-070709-CJM-PLM-20	July 7, 2009	Room 10	White	Significantly Damaged	40% Chrysotile	55% Calcareous Material
		Elbow		Thermal System Insulation		5% Cellulose
0105-070709-CJM-PLM-21	July 7, 2009	Room 16	Brown	Good		80% Cellulose
		Ceiling Tile		Miscellaneous		20% Glass Beads

Jamie Marshall		July 21, 2009
Analyst Name (Print)	Jamie Marshall, B.S., Industrial Hygiene Associate	Date Analyzed

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

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

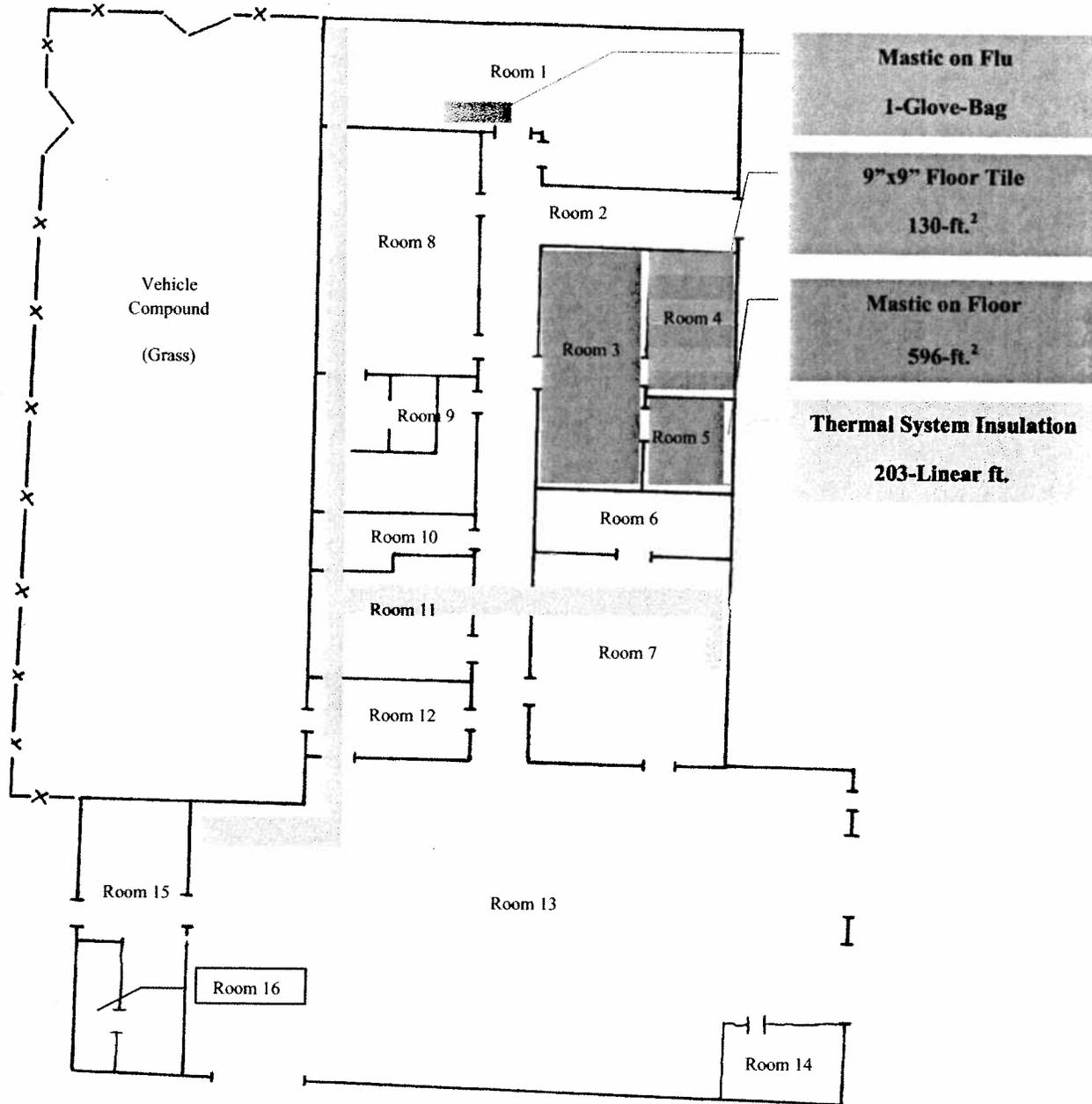
Chain of Custody
Marshall Environmental Management, Inc.

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

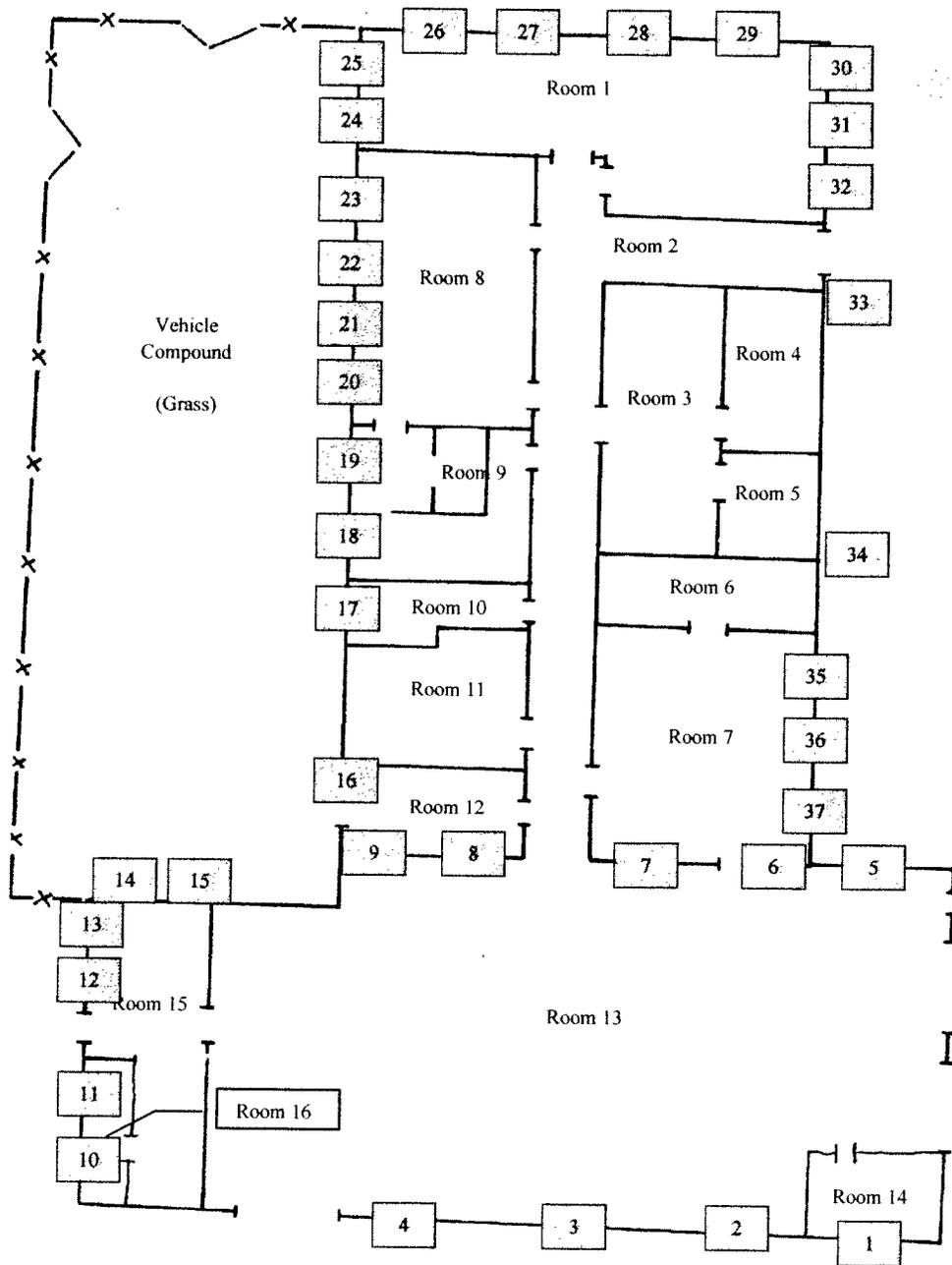
0105-070709-CJM-PLM

PROJECT				INVOICE TO				REPORT TO			
Project Number	Project Name	Project Address	Project Phone	Client/Company	Client/Company Address	Client/Company Phone	Client/Company Email	Client/Company Address	Client/Company Phone	Client/Company Email	Client/Company Fax
082-AB-020709-JM	Miami Army AB Inspection			OK Dept. of Central Security							
Sample Date	Sample Number	Request Number/Department	Sample Location	Sample Description	Matrix	Media	Time	Collection	Volume/Alia	Analysis Parameters	
7/7/09	AB-1	Rm 8	Straight Run	TSI	N/A	N/A	N/A	N/A	N/A	AB PLM	
	AB-2	Rm 8	elbow	TSI							
	AB-3	Rm 8	Straight Run	TSI							
	AB-4	Rm 8	elbow	TSI							
	AB-5	Rm 8	Flex duct	TSI							
	AB-6	Rm 12		TSI							
	AB-7	Rm 2	cover base	Miscellaneous							
	AB-8	Rm 1	yellow mastic	Misc.							
	AB-9	Rm 1	Furnace Insulation	TSI							
	AB-10	Rm 1	Tar on Furnace Fla	TSI							
Collected By	Accepted By	Requested By	Released By	Signature	Date	Time	Signature	Date	Time	Signature	Date
Dynamic Marshall	Dynamic Marshall	Dynamic Marshall	Dynamic Marshall	(print) (signature)	7/7/09	4:00pm	(print) (signature)	N/A		(print) (signature)	

Homogenous Areas



Homogenous Areas



37-Windows

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

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

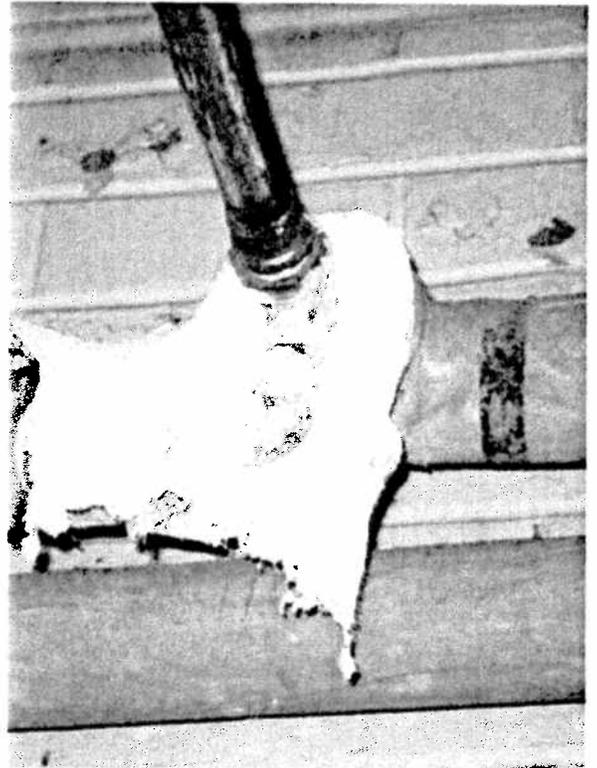
June 05, 2008

Date of Issuance

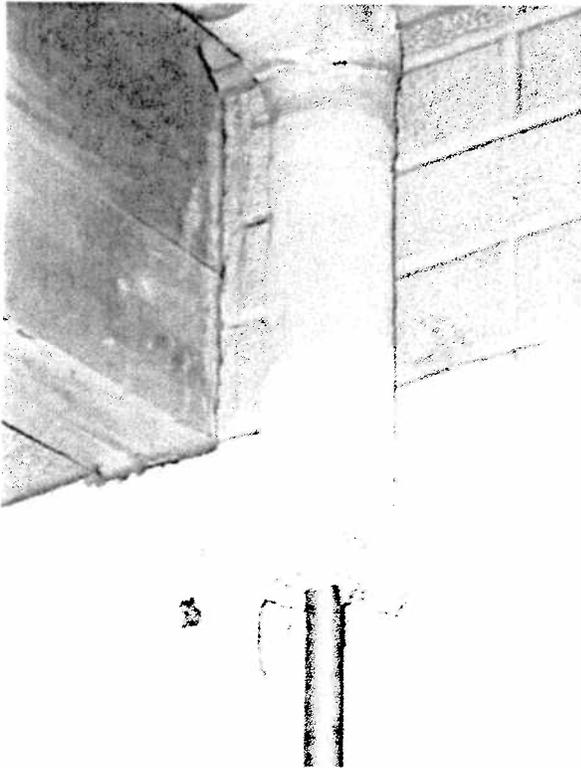
EXPIRES: June 04, 2009



Miami Armory



Significantly Damaged
TSI in Room 10



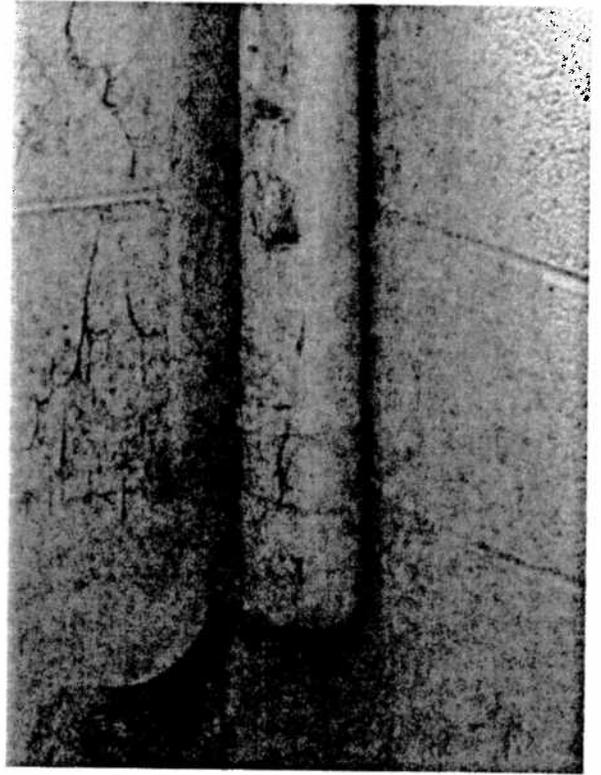
Significantly Damaged
TSI in Room 10



9x9 Floor Tile and
Mastic in Room 4



12x12 Flor Tile and
Black Mastic Room 3

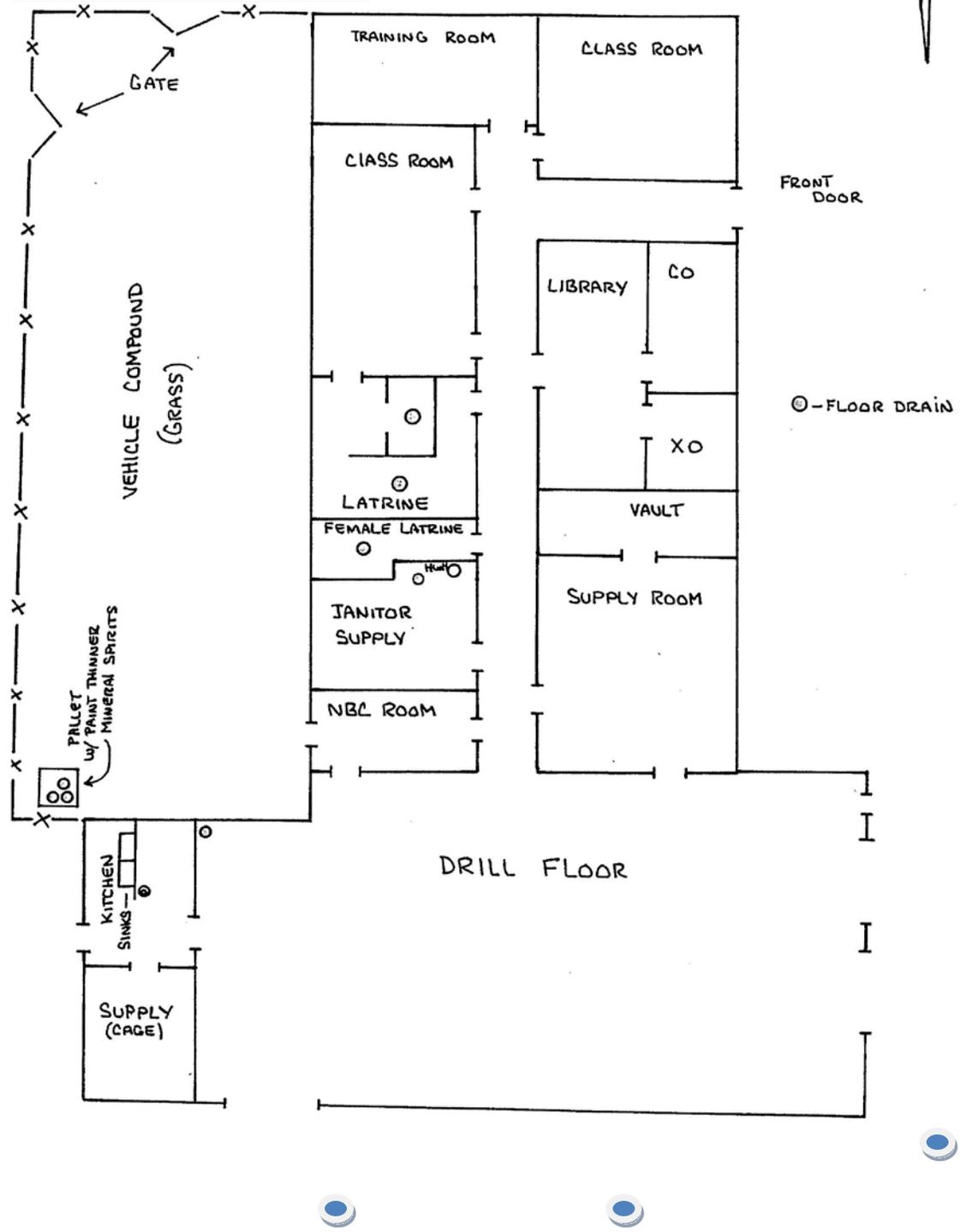


TSI Room 1

Red circles - M-2
 Blue circles - M-1
 Samples were made up of 4 part aliquots

MIAMI ARMORY

MIAMI, OKLAHOMA
 BUILT: 1957
 (CO B (-) 1 BN 279 INF) VISIT: JUNE 24, 1996



Sample Number: 462002
Project Code: SW-SX
Agency Number:
Date Collected: 4/16/2009
Time Collected: 1145
Date Received: 4/21/2009
Date Completed: 05/12/2009
Collected By: HM
PWS Id:
Location Code:
Station:
Facility:
Report Date: 05/12/2009

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
Cadmium , Sediment		38.0	MG/KG	04/23/09	6020	3050
Lead, Sediment		777	MG/KG	04/23/09	6020	3050
Zinc, Sediment		9080	MG/KG	04/30/09	6020	3050
% Solids		89.8	%	04/23/09	CLP 05.3	3050

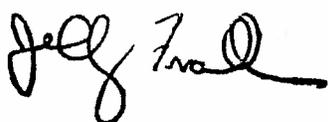
Summary

Labs performing analysis on this Sample:
 Metals

SOURCE: MIAMI ARMORY

SAMPLERS COMMENTS:
 MIAMI -1

ANALYST'S COMMENTS:



* ANALYST _____

Sample Number: 462003
 Project Code: SW-SX
 Agency Number:
 Date Collected: 4/16/2009
 Time Collected: 1148
 Date Received: 4/21/2009
 Date Completed: 05/12/2009
 Collected By: HM
 PWS Id:
 Location Code:
 Station:
 Facility:
 Report Date: 05/12/2009

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

SAMPLE DATA						
Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Cadmium , Sediment		11.4	MG/KG	04/23/09	6020	3050
Lead, Sediment		394	MG/KG	04/23/09	6020	3050
Zinc, Sediment		1740	MG/KG	04/23/09	6020	3050
% Solids		93.7	%	04/23/09	CLP 05.3	3050

Summary

Labs performing analysis on this Sample:

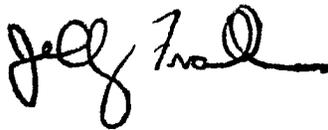
Metals

SOURCE: MIAMI ARMORY

SAMPLERS COMMENTS:

MIAMI -2

ANALYST'S COMMENTS:



* * ANALYST _____

Sample Number: 462003
Project Code: SW-SX
Agency Number:
Date Collected: 4/16/2009
Time Collected: 1148
Date Received: 4/21/2009
Date Completed: 05/12/2009
Collected By: HM
PWS Id:
Location Code:
Station:
Facility:
Report Date: 05/12/2009

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
 707 N. ROBINSON
 OKLAHOMA CITY
 OKLAHOMA, 73102-6010
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To: LAND PROTECTION DIVISION
 HEATHER MALLORY

CC: FILE COPY

Name	Qualifier	SAMPLE DATA				
		Value	Units	Analyzed	Method	Prep Type
Cadmium , Sediment		11.4	MG/KG	04/23/09	6020	3050
Lead, Sediment		394	MG/KG	04/23/09	6020	3050
Zinc, Sediment		1740	MG/KG	04/30/09	6020	3050
% Solids		93.7	%	04/23/09	CLP 05.3	3050

Summary

Labs performing analysis on this Sample:
 Metals

SOURCE: MIAMI ARMORY

SAMPLERS COMMENTS:
 MIAMI -2

ANALYST'S COMMENTS:



* ANALYST _____

CHAIN OF CUSTODY RECORD

SUPERFUND/ SITE REMEDIATION UNIT
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Site Name:

Miami Armory

Site Location:

830 D Street SE
Miami, OK

Code:

493

Return Results To:

Heather Malloy

SAMPLE I.D.

Miami-1
Miami-2

Date

Time

Number of Containers

VOC/ GCMS Purgeables

SVOC/ GCMS Extractables

Metals (lead, zinc, cadmium)

General Chemistry

SEL Numbers

4/6/09 11:45

4/6/09 11:48

1

1

X

X

X

Sampler's Signature
(Relinquished by): *Heather E. Malloy*

Date/Time

4/20/09 13:26

Received by:

Received by:

Date/Time

Date/Time

Relinquished by:

Date/Time

Received by:

Date/Time

APPENEDIX G: QUALIFICATION(S) OF ENVIRONMENTAL PROFESSIONALS

Environmental Professional Qualifications

Heather Mallory holds a Bachelors and Masters Degree in Environmental Science from the University of Oklahoma. Mrs. Mallory has eight years experience in environmental sampling and remediation. She is an Environmental Programs Specialist with the Land Protection Division of the Oklahoma Department of Environmental Quality. Her responsibilities include: project management of the Tar Creek Superfund Site, conducting and reviewing Targeted Brownfield Assessments, and project management of various Voluntary Cleanup site across the state.

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