# National Environmental Protection Agency Document 408-SWT-2023-0025 and 408-SWT-2023-0026

Oklahoma River Improvements
EMBARK Boat Dock and
MAPS4 Pedestrian Bridge
City of Oklahoma City

Prepared for:



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and



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# SECTION 1 - PURPOSE, NEED, AND SCOPE

# 1.1 Project Purpose, Need, and Scope

The need for accessibility to various planned river features was documented in the 1993 Oklahoma City Riverfront Redevelopment Authority's North Canadian River Riverfront Corridor Plan (see **Appendix G-2**). This Environmental Assessment (EA) evaluates the effects of the proposed construction of two (2) Oklahoma River improvement projects which will modify the Oklahoma River levee (federally constructed project). These improvement projects, construction of a boat dock and a pedestrian bridge, address the need for accessibility to the river documented in the 1993 Corridor Plan.

The proposed EMBARK First Americans Museum (FAM) boat dock and the MAPS4 pedestrian bridge will be built in an area along the south bank of the Oklahoma River, west of Eastern Avenue. These projects will provide access to the existing FAM as well as the OKANA resort and indoor waterpark currently under construction. The sole use of this south riverbank area is recreational, including not only the FAM and proposed OKANA resort but also flatwater canoe/kayak and rowing activities sponsored by RIVERSPORT OKC, an official US Olympic & Paralympic training site. The primary purpose and need of the boat dock and pedestrian bridge is to improve neighborhoods and quality of life, and to transform public spaces. See **Figures 1-1** and **1-2**.

**Boat Dock:** The EMBARK FAM boat dock project is funded by a grant from the Federal Transit Administration and will be the sixth dock on the North Canadian River serving the EMBARK ferry system. The boat dock will be a fixed structure cut into the south bank of the Oklahoma River. This boat dock will provide access to the existing FAM and proposed OKANA resort and indoor waterpark. Terraced seating near the dock will allow observation of the starting line of RIVERSPORT boat races.

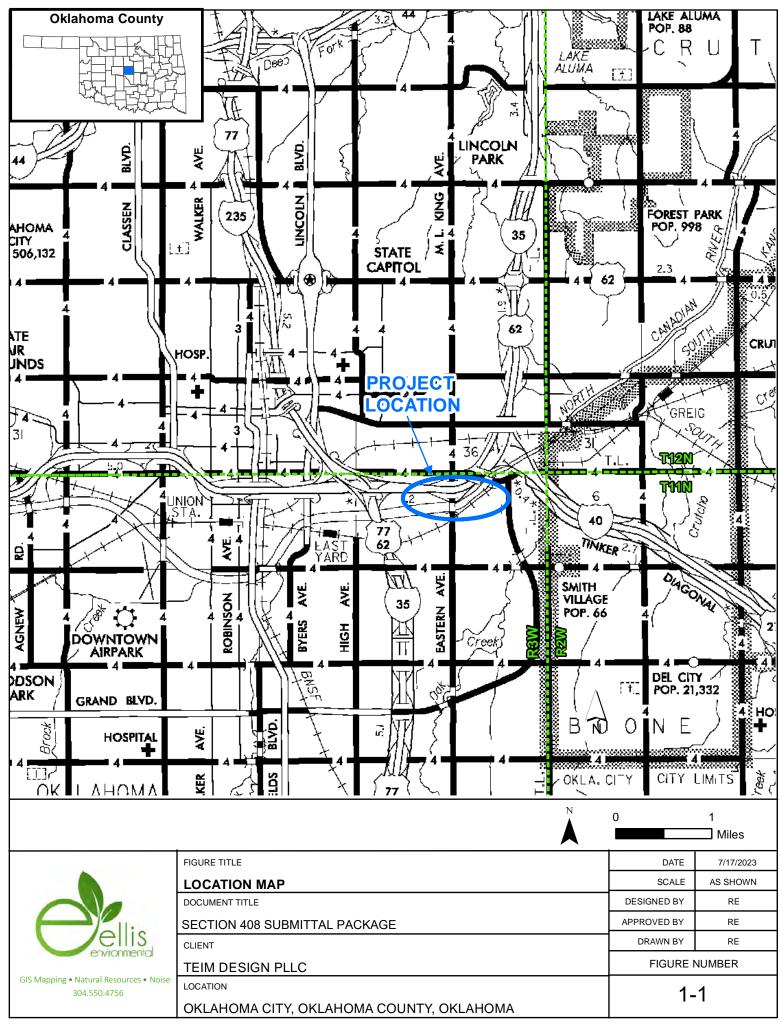
**Pedestrian Bridge**: The pedestrian bridge will connect to the north bank of the river and the existing Greenway Trail, a paved trail used by both bicycle and pedestrian traffic. The southern point of the pedestrian bridge will be built just east of the boat dock's terraced seating and provide connection to the bicycle/pedestrian trail meandering along the north

bank of the river. The pedestrian bridge will span the Oklahoma River, near the FAM site, downstream from the Oklahoma RIVERSPORT Foundation starting line tower. At this location, the bridge will provide a unique view for special events on the river and everyday use by connecting the Greenway and Eagle Lake Trails located on either riverbank. The proposed bridge will accommodate pedestrian foot traffic and will have adequate clearance for river traffic such as the RIVERSPORT modular dock system, Oklahoma River Cruises, and Public Works maintenance boats. Additionally, the bridge will aesthetically complement the surrounding space, particularly the OKANA site.

# 1.2 Background

Both projects will alter the North Canadian River, i.e., Oklahoma River, levee system. This EA is part of a Section 408 submittal package requesting USACE review and approval of the projects. Further, the boat dock is funded by a grant from the Federal Transit Administration, who has completed its own NEPA compliance document (see **Appendix G-1**).

The National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190) requires all Federal agencies to address the environmental impacts of any major Federal action on the natural and human environment. Guidance for complying with the NEPA is contained in Title 40 of the Code of Federal Regulations (CFR), Parts 1500 through 1508, and in Engineering Regulation (ER) 200-2-2, Procedures for Implementing NEPA. The primary intent of NEPA is to ensure that environmental information is made available to public officials and citizens regarding major actions taken by Federal agencies. This EA was developed to assure that the proposed project complies with the intent of NEPA.







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# <u>SECTION 2 – ALTERNATIVES IDENTIFICATION</u>

#### 2.1 No Action Alternative

The Council on Environmental Quality (CEQ) regulations implementing the provisions of NEPA require Federal agencies to consider a "no action" alternative. These regulations define the "no action" alternative as the continuation of existing conditions and their effects on the environment, without implementation of, or in lieu of, a proposed action. This alternative represents the existing condition and serves as the baseline against which to compare the effects of the other alternatives. The no action alternative would retain the existing condition and would not result in any project-related environmental impacts or losses of fish and wildlife habitat.

However, the no action alternative is not consistent with the 1993 River Corridor Plan, which identified the need for a boat dock at the FAM and a pedestrian bridge near Eastern Avenue. Therefore, the no action alternative was not carried forward for the detailed evaluation described in this EA.

## 2.2 Action Alternative

The action alternative is (1) construction of a boat dock to facilitate access to the FAM and OKANA sites, and (2) construction of a pedestrian bridge across the Oklahoma River west of Eastern Avenue.

**Boat Dock:** The location of the boat dock was chosen for its proximity to the FAM and OKANA sites, as well as the Riversport races starting line. Two (2) primary designs were considered for the boat dock, i.e., a floating dock and a fixed dock. The fixed dock design was chosen because it maximizes the adjacent public gathering areas, is more user friendly, aesthetically preferable, and requires less long term maintenance.

**Pedestrian Bridge:** The location of the pedestrian bridge was selected to provide pedestrian accessibility to the FAM and OKANA sites, Greenway Trail and Eagle Lake Trails located on the north and south banks of the River, respectively. The bridge location was also selected to provide a unique opportunity to view the Riversport starting line tower. An underground natural gas pipeline crosses the River west of Eastern Avenue.

Therefore, the final proposed bridge location was chosen to avoid the pipeline (west of the pipeline) while providing convenient access to the FAM and OKANA sites.

Two pedestrian bridge structural beam options were considered, i.e., concrete and steel beams. While concrete beams are readily available, use of them would result in steep trail connections. The steel beam option provides more construction flexibility, allows for flatter trail connections, and is anticipated to have a longer design life than concrete beams. Therefore, the steel beam design option has been chosen.

# **SECTION 3 - PROPOSED ACTION**

#### 3.1 DESCRIPTION OF ACTION

The proposed action is construction of a boat dock and a pedestrian bridge. The proposed EMBARK First Americans Museum (FAM) boat dock and the MAPS4 pedestrian bridge will be built in an area along the south bank of the Oklahoma River, west of Eastern Avenue. These projects will provide access to the existing FAM as well as the OKANA resort and indoor waterpark currently under construction. The sole use of this south riverbank area is recreational, including not only the FAM and proposed OKANA resort but also flatwater canoe/kayak and rowing activities sponsored by RIVERSPORT OKC, an official US Olympic & Paralympic training site. See **Figure 1-2**.

**Boat Dock Concept:** The EMBARK FAM boat dock project will be the sixth dock on the North Canadian River serving the EMBARK ferry system. The boat dock will be a fixed structure cut into the south bank of the Oklahoma River. This boat dock will provide access to the existing FAM and proposed OKANA resort and indoor waterpark. Terraced seating near the dock will allow observation of the starting line of RIVERSPORT boat races.

Pedestrian Bridge Concept: The pedestrian bridge will connect to the north bank of the river and the existing Greenway Trail, a paved trail used by both bicycle and pedestrian traffic. The southern point of the pedestrian bridge will be built just east of the boat dock's terraced seating and provide connection to the bicycle/pedestrian trail meandering along the north bank of the river. The pedestrian bridge will span the Oklahoma River, near the FAM site, downstream from the Oklahoma RIVERSPORT Foundation starting line tower. At this location, the bridge will provide a unique view for special events on the river and everyday use by connecting the Greenway and Eagle Lake Trails located on either riverbank. The proposed bridge will accommodate pedestrian foot traffic and will have adequate clearance for river traffic such as the RIVERSPORT modular dock system, Oklahoma River Cruises, and Public Works maintenance boats. Additionally, the bridge will aesthetically complement the surrounding space, particularly the OKANA site.

**Boat Dock Details:** The boat dock will be constructed in a cove to be created on the south shore of the river. Above the boat dock will be transitions (both stairs and ADA compliant ramps) leading up to a public gathering area and an amphitheater west of the public gathering area. The boat dock area will be graded and dredged, then built with retaining walls, footings, and steel piles driven to bedrock to support the retaining walls. The ends of the boat dock retaining walls, both on the west and the east, will be constructed of steel sheet piling. These retaining walls will transition from steel sheet piling to reinforced concrete when they turn into the boat dock cove.

Pedestrian Bridge Details: The proposed pedestrian bridge will have a 20' clear width and will be approximately 485' long with a consistent low chord elevation of 1179' to provide adequate clearance to the water surface, approximately 14'. There are five spans resting on four, 72" drilled shafts. The pier spacings were coordinated with RIVERSPORT OKC to ensure the bridge will not impact the future eight rowing lanes and the associated modular dock system. Given the pier spacings, the bridge spans from the south to north bank are 88'10", 88'0", 88'0", 100'0", and 100'10". On either bank, the bridge abutments utilize vertical walls to minimize fill in the FEMA floodplain/floodway.

The bridge piers will need to be constructed by barges. Once the piers have been constructed, the steel beams need cranes to be laid into place. The steel beams have the potential of being constructed on the riverbank and launched in a cantilever fashion from the abutments over to the bridge piers. The steel beam launch method would limit the amount of time the bridge contractor needs to be in the water, resulting in less interference with boats. After the beams and deck forms have been placed, the concrete deck will need to be poured, which can be done with a pump truck from the riverbank. As each bridge span cures, the concrete pump truck will be able to drive onto the cured bridge deck to reach the next span.

Ideally, the contractor will have access to both riverbanks to provide greater flexibility in their construction methods. For the north bank, a construction entrance will be needed from the I-40 eastbound off-ramp for Eastern Avenue. However, the south bank may not be readily available, given the ongoing construction for the OKANA site. Further

coordination will be needed with the OKANA developers to determine access to the south bank.

# SECTION 4 – AFFECTED ENVIRONMENT

#### 4.1 LOCATION AND LAND USE

The proposed action is located in Oklahoma County, within the Corporate Limits of the City of Oklahoma City, and on the banks of the North Canadian River (aka "Oklahoma River"). For assessment of potential environmental impacts from the proposed action, a Study Area was established of adequate size and location to accommodate analysis of the proposed boat dock and pedestrian bridge, as well as a future proposed Oklahoma River improvement project. See Figure 4-1. The area adjacent to the south bank of the Oklahoma River is currently under construction for the OKANA resort and indoor waterpark. The proposed EMBARK First Americans Museum (FAM) boat dock and the MAPS4 pedestrian bridge will be built in an area along the south bank of the Oklahoma River – west of Eastern Avenue. These features will provide access to the existing FAM as well as the OKANA resort and indoor waterpark. The sole use of this south riverbank area is recreational, including not only the FAM and proposed OKANA resort but also flatwater canoe/kayak and rowing activities sponsored by RIVERSPORT OKC, an official US Olympic & Paralympic training site. The pedestrian bridge will connect to the north bank of the river and the existing Greenway Trail, a paved trail used by both bicycle and pedestrian traffic. Both the north and south bank areas are owned by OKANA MDE, LLC, a wholly owned subsidiary of the Chickasaw Nation, and who is in full cooperation with the City of Oklahoma City in development of these areas for recreational use. The City of Oklahoma City will obtain long-term leases from OKANA MDE, LLC to construct and maintain the proposed boat dock and pedestrian bridge. OKANA MDE, LLC has provided a statement of no-objection to these projects (see **Appendix A**).

# 4.2 CLIMATE

The Study Area has a temperate, sub humid climate, typical of the central part of Oklahoma. Seasonal changes vary in intensity, but the changes between seasons are gradual. Summer is usually the wettest season. Average annual precipitation varies from 29-38 inches.





STUDY AREA	DOCUMENT TITLE	SECTION 408 SUBITTAL PACKAGE	CLIENT
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OKLAHOMA COUNTY, OKLAHOMA

#### 4.3 SOCIAL AND ECONOMIC CONDITIONS

The City of Oklahoma City, according to the U. S. Census Bureau, had a year 2020 population of 682,760, and an estimated 2023 population of 697,763. With respect to population, Oklahoma City is the 20<sup>th</sup> largest city in the United States, as well as the 6<sup>th</sup> fastest-growing city from 2020 to 2022. The City has an actual corporate land area of 606 square miles.

The ethnic makeup of Oklahoma City per the 2020 Census is:

White	89.2%
Black or African American	13.7%
American Indian and Alaska Native	3.3%
Asian	4.8%
Native Hawaiian and Other Pacific Islander.	0.1%

The remainder is listed as "two or more races" or "some other race".

The 2021 average household income for Oklahoma City was \$59,214, as compared to \$55,826 for the state of Oklahoma and \$69,717 for the U.S. The HHS Poverty Guideline for 2023 is \$27,750.

#### 4.4 AIR QUALITY

The proposed project is located in Oklahoma County. Oklahoma County is in attainment with the National Ambient Air Quality Standards (NAAQS) for the six (6) criteria pollutants carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide.

#### 4.5 NATURAL RESOURCES

The Study Area is mapped within the Cross Timbers Transition subregion of the Central Great Plains ecoregion of Oklahoma, which is composed of rough plains that are sometimes broken and incised streams. The native vegetation of the region is mixed grass prairie, tall grass prairie, and cross timbers; however, rangeland and cropland also cover much of the land outside of Oklahoma City (Woods et al. 2005). Along much of the Canadian River outside of Oklahoma City, bottomland forests often contain hackberry, red elm, sugarberry, and green ash, but a tremendous variety of vegetation occurs where the tallgrass prairie meets the post oak-blackjack forest (Hoagland 2008). According to

the National Land Cover Database (NLCD), the Study Area adjacent to the river consists of grasslands, but the rest of the Study Area has been developed (NLCD 2023).

Geologically, the Study Area is underlain by Holocene-age Alluvium, which consists of gravel, sand, silt, and clay with thickness averaging about 50 feet along major streams (USGS 2022a). Three soils are mapped within the Study Area: Yahola fine sandy loam, Gaddy loamy fine sand, and Gracemore loamy fine sand. The remainder of the land has been classified as "urban land."

The proposed project area lies within the Prairie Tableland ecoregion. Natural vegetation in the Prairie Tableland ecoregion is mixed grass prairie. It has greater natural vegetation density, less rainfall variability, less evaporation, and receives more precipitation than neighboring Red Prairie and Red River Tablelands to the west. Soils are not as sandy as other nearby ecoregions and broad, shallow, low gradient channels with silty bottoms are common. Streams often go dry during the late summer and autumn. At other times, turbid water over one meter deep may occur in larger streams. Uncommon, short stream reaches with gravel, cobble, or bedrock substrates support a few darter species, freckled madtoms, and suckermouth minnows. Most wildlife is confined to the borders of stream channels (Woods, et al. 2005).

An official species list was obtained through the United States Fish and Wildlife Service's (USFWS) online Information, Planning, and Conservation (IPaC) decision support system. This system is a conservation planning tool for streamlining the environmental review process. The threatened, endangered, and candidate species listed for Oklahoma County are presented in the following text.

# Oklahoma County Threatened & Endangered Species, USFWS

SPECIES	CLASSIFICATION	
Tricolored Bat	Proposed Endangered	
Piping Plover	Threatened	
Red Knot	Threatened	
Whooping Crane	Endangered	
Monarch Butterfly	Candidate	

## 4.6 CULTURAL RESOURCES

A cultural resources field study of the Study Area was conducted on June 14, 2023 and identified no cultural resources nor historic properties within the Study Area.

#### 4.7 HAZARDOUS MATERIALS

A hazardous material study of the Study Area was conducted on September 16, 2014. Based upon the site visit and a review of available environmental records, no recognized environmental conditions were identified within the Study Area.

# <u>SECTION 5 – ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION</u>

#### 5.1 ENVIRONMENTAL IMPACTS EVALUTATION PROCEDURES

Information relative to social, economic, and environmental factors was collected for evaluation through a process of agency solicitation, database/records review, and specialist field studies of threatened and endangered species, waters and wetlands, cultural resources, and hazardous materials. The Study Area utilized for evaluation of the proposed river improvements was an approximately 66-acre area located in Sections 1 and 2 of Township 11 North, Range 3 West. The Study Area ranged from 495' to 1,025' wide along the Oklahoma River and was 4,530' in length (see **Figure 4-1**).

#### 5.2 SOCIAL AND ECONOMIC IMPACTS

# 5.2.1 Environmental Justice (Executive Order 12898)

Executive Order 12898 requires each Federal agency to make environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations.

Under NEPA, the identification of a disproportionately high and adverse human health or environmental effect on a low-income population, minority population, or Indian tribe does not preclude a proposed agency action from going forward, nor does it necessarily compel a conclusion that a proposed action is environmentally unsatisfactory. Rather, the identification of such an effect serves to heighten agency attention to alternatives (including alternative sites), mitigation strategies, monitoring needs, and preferences expressed by the affected community or population.

Low-income populations in an affected area are identified with the annual statistical poverty thresholds from the Bureau of the Census Reports on Income and Poverty. In identifying low-income populations, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect.

Minorities are comprised of individual(s) who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.

Minority populations are identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. In identifying minority communities, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a geographically dispersed/transient set of individuals (such as migrant workers or Native American), where either type of group experiences common conditions of environmental exposure or effect. The selection of the appropriate unit of geographic analysis may be a governing body's jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as to not artificially dilute or inflate the affected minority population. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds.

Disproportionately high and adverse human health effects: When determining whether human health effects are disproportionately high and adverse, agencies are to consider the following three factors to the extent practicable: (a) Whether the health effects, which may be measured in risks and rates, are significant or above generally accepted norms. Adverse health effects may include bodily impairment, infirmity, illness, or death; and (b) Whether the risk or rate of hazard exposure by a minority population, low–income population, or Indian tribe to an environmental hazard is significant and appreciably exceeds or is likely to appreciably exceed the risk or rate to the general population or other appropriate comparison group; and (c) Whether health effects occur in a minority population, low-income population, or Indian tribe affected by cumulative or multiple adverse exposures from environmental hazards.

Based upon the review of U. S. Census data for the City of Oklahoma, the proposed action is anticipated to have no disproportionately high and adverse human health or environmental effects on minority populations or low-income populations.

# 5.2.2 Protection of Children (Executive Order 13045)

On April 21, 1997, President Clinton issued Executive Order 13045 (EO 13045), Protection of Children From Environmental Health Risks and Safety Risks, which notes that children often suffer disproportionately from environmental health and safety risks, due in part to a child's size and maturing bodily systems. The executive order defines environmental health and safety risks as risks to health or to safety that are attributable to products or substances that the child is likely to come in contact with or ingested (such as the air we breathe, the food we eat, the water we drink or use for recreation, the soil we live on, and the products we use or are exposed to). Executive Order 13045 requires Federal agencies, to the extent permitted by law and mission, to identify and assess environmental health and safety risks that may affect children disproportionately. The Order further requires Federal agencies to ensure that its policies, programs, activities, and standards address these disproportionate risks. Executive Order 13045 is addressed in this NEPA document to examine the effects this action will have on children.

The proposed action poses no disproportionate environmental health and safety risks to children.

#### 5.2.3 Floodplain Management (Executive Order 11988)

Because both riverbanks are completely planned out for recreational purposes by FAM, OKANA, and the City of Oklahoma City, no additional development is possible in these floodplain areas. See **Appendix G-3** for a news article containing artist renderings of the fully-developed areas.

# 5.3 NATURAL RESOURCE IMPACTS

# 5.3.1 Threatened and Endangered Species

A biological assessment of threatened and endangered species and their habitat was conducted of the Study Area on June 14, 2023. The field investigation indicated there will be no effect on the Red Knot and Monarch Butterfly, and that the project may affect, but is not likely to adversely affect, the Tricolored Bat, Piping Plover, and Whooping Crane. The biological assessment is contained in **Appendix C-3** with an updated United States Fish and Wildlife Service (USFWS) Species list provided in **Appendix C-2**.

Coordination with the USFWS was conducted and a consultation letter was provided (see **Appendix C-1**) where the USFWS concurred with the findings of the biological assessment.

#### 5.3.2 Waters and Wetlands

A waters and wetlands evaluation of the Study Area was conducted on June 14, 2023 and identified a total of seven (7) potentially jurisdictional streams and two (2) potentially jurisdictional waters and wetlands within the Study Area. The evaluation is contained in **Appendix E**.

**Appendices B-1** and **B-2** contain the Pre-Construction Notice for Nationwide Permit #13 for the boat dock and the Pre-Construction Notice for Nationwide Permit #14 for the pedestrian bridge.

#### 5.4 OTHER IMPACTS

#### **5.4.1 Cultural Resources**

A cultural resources field study of the Study Area was conducted on June 14, 2023 and identified no cultural resources nor historic properties within the Study Area. The report has been removed to protect any historically or archeologically significant findings. Consultation letters were sent to the Oklahoma Archeological Survey (OAS), the State Historic Preservation Office (SHPO), and the following Tribes: Caddo Nation of Oklahoma, Citizen Potawatomi Nation, Iowa Tribe of Oklahoma, Kickapoo Tribe of Oklahoma, Muscogee (Creek) Nation, and Osage Nation. OAS and SHPO provided consultation letters stating that no historic or archeological sites were known in the area. These OAS, SHPO, and Tribal consultation letters can be found in **Appendices D-1**, **D-2**, and **D-3**, respectively.

#### 5.4.2 Water Quality

Floodplain permitting will be obtained from the City of Oklahoma City Floodplain Administrator. Water quality impacts will be minimized through implementation of a Storm Water Pollution Prevention Plan (SWPPP) developed in accordance with the

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Nationwide Storm Water Permit for Construction Activities. The SWPPP will include best management practices (BMPs) to reduce runoff and erosion, as well as the potential for fuel and oil spills related to construction activities.

#### 5.4.3 Hazardous Materials

A hazardous material study of the Study Area was conducted on September 16, 2014. Based upon the site visit and a review of available environmental records, no recognized environmental conditions were identified within the Study Area. The report is included in **Appendix F**.

The potential for fuel and oil spills will be minimized through the implementation of best management practices outlined in the site-specific SWPPP to be developed for the construction project. The SWPPP will also include spill response measures to be followed in the event of a release of fuel or oil.

# 5.4.4 Air Quality

Typical air emissions generated from construction activities include:

- particulate matter from soil disturbance and construction equipment and vehicle fuel combustion, and
- oxides of nitrogen from construction equipment and vehicle fuel combustion.

Because the construction activity will be short-term (i.e., estimated time to complete the boat dock is 8 months, and to complete the pedestrian bridge is 6 months) and does not require extensive earth disturbance, the project is not anticipated to have any appreciable effect on air quality.

#### **5.4.5** Noise

There would be an increase in noise from heavy equipment and trucks during construction of the river improvement projects, but this would be temporary and last only

during the construction. No special noise sensitive land uses or activities that may be affected by construction noise are in proximity to the water pipeline project.

# 5.4.6 Transportation and Utilities

Traffic signs will be posted as appropriate to warn adjacent roadway traffic of the construction activities and presence of workers near the roadway. One traffic lane may be temporarily blocked during certain phases of the construction, but construction of the proposed project will not require the closure of any local roads.

If any existing aboveground or belowground utility locations are in conflict with the proposed project, the utilities will be relocated. Regardless, all utility services will be continued with no interruption.

# 5.4.7 Cumulative Impacts

Construction of the EMBARK FAM boat dock and the MAPS4 pedestrian bridge are anticipated to increase access to the FAM and OKANA waterpark. A possible cumulative impact may be construction of other traffic-dependent businesses, such as gas stations and convenience stores, near this growing recreational area; however, the increase in these types of businesses would likely happen even without the proposed boat dock and pedestrian bridge due to the new traffic stimulated by the FAM and the OKANA waterpark.

# 5.4.8 Direct Effect on the Federally Constructed Project

The existing condition of the portion of the levee that will be altered for construction of the boat dock and pedestrian bridge is horizontally and vertically stabilized with riprap. The following construction details are provided to demonstrate there will be no effect on the levee.

#### EMBARK FAM Boat Dock - Retaining Walls and Sheet Pile Walls

The EMBARK FAM boat dock will be constructed using cast-in-place conventional cantilever retaining walls and sheet pile walls. These retaining walls will have two (2) differing typical section designs. Design Typical "A" ranges in height from nine (9) feet to

seventeen (17) feet tall and the foundation will be concrete footings supported by HP12x53 steel piles. Design Typical "B" ranges in height from two (2) feet to eight (8) feet tall and the foundation will be a spread footings on subgrade. The subgrade will be comprised of two (2) feet of aggregate base on silty sand. Expansive soils are not reported nor expected near or around the retaining walls and sheet pile walls.

# MAPS4 Pedestrian Bridge, Abutments and Retaining Walls

The pedestrian bridge will consist of five (5) spans over the Oklahoma River using vertical face abutments and four (4) piers. The bridge abutments will be located on the north and south shores of the Oklahoma River and positioned 2'-0" behind the top of bank/top of rip rap, and will extend east thirty-five (35) feet downstream. These retaining walls will then make a ninety (90) degree turn inland for eighty-five (85) feet, perpendicular to the shore.

The bridge embankment walls will have two (2) differing typical section structural designs. Design Typical "A" ranges in height from nine (9) feet to seventeen (17) feet tall and will be supported on concrete footings and HP12x53 steel piles. Design Typical "B" ranges in height from two (2) feet to eight (8) feet tall and will be supported by spread footings on subgrade. The subgrade will be comprised of two (2) feet of aggregate base on silty sand. Expansive soil is not reported nor expected near or around the bridge, abutments, and retaining walls. Bridge piers will be located between the shores in the river basin and each will be supported by a single six (6) foot diameter drilled shaft.

# Flooding and Water Control Management

Hydraulic analysis, as summarized in Section 5 of the 408 Submittal, modelled the effects of construction of the pedestrian bridge and a low water dam. That modeling indicates that the maximum backwater associated with the new structures is 0.10 feet at river station 264.309, a minimal rise in the base flood elevation. This project will obtain floodplain permitting from the City of Oklahoma City Floodplain Administrator.

Construction of the boat dock and the pedestrian bridge is not anticipated to have impacts on the operation of water control structures. Specifically, operation of the downstream Eastern Avenue lock and dam will continue unchanged.

# Conclusion

The OKC North Canadian channel was constructed for Flood Risk Reduction. The proposed boat dock and pedestrian bridge projects will not impact the operation of the Federal project, the levee, as authorized by Congress.

# **SECTION 6 - MITIGATION PLAN**

Impacts from the proposed boat dock and pedestrian bridge projects are limited to impacts to potentially jurisdictional waters under the Ordinary High Water Mark (OHWM). These impacts are to be addressed with Nationwide Section 404 Permits #13 and #14 for the boat dock and the pedestrian bridge, respectively. The Pre-construction Notifications for these can be found in **Appendices B-1** and **B-2**.

# SECTION 7 - FEDERAL, TRIBAL, STATE, AND LOCAL AGENCY COORDINATION

Agency coordination included consultation with:

- United States Fish and Wildlife Service (USFWS)
- Oklahoma Archeological Society (OAS)
- Oklahoma State Historic Preservation Office (SHPO)
- Caddo Nation of Oklahoma
- Citizen Potawatomi Nation
- Iowa Tribe of Oklahoma
- Kickapoo Tribe of Oklahoma
- Muscogee (Creek) Nation
- Osage Nation

# **SECTION 8 - REFERENCES**

All of the references utilized in the various specialist reports are included in those reports located in the Appendices. The references that were included in the removed Cultural Resources Report are listed here:

#### Apache Tribe of Oklahoma (ATO)

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# **SECTION 9 – APPLICABLE ENVIRONMENTAL LAWS AND REGULATIONS**

Archaeological and Historic Preservation Act, 1974, as amended	16 USC 469, et. seq.
Clean Air Act, as amended	42 USC 7609, et. seq.
Clean Water Act, 1977, as amended (Federal Water Pollution Control Act)	33 USC 1251, et.seq.
Emergency Wetlands Resources Act of 1986	16 USC 3901-3932
Endangered Species Act, 1973, as amended	16 USC 1531, et. seq.
Farmland Protection Policy Act	7 USC 4201, et. seq.
Federal Land Policy and Management Act of 1976	43 USC 1701-1784
Federal Water Project Recreation Act, as amended	16 USC 460-1-12, et. seq.
Fish and Wildlife Coordination Act, as amended	16 USC 661, et. seq.
Flood Control Act of 1936	
Flood Control Act of 1944, as amended	16 USC 460d
Land and Water Conservation Fund Act, 1965, as amended	16 USC 4601, et. seq.
Migratory Bird Treaty Act	16 USC 701-719c
National Environmental Policy Act, as amended	42 USC 4321, et. seq.
National Historic Preservation Act, 1966, as amended	16 USC 470a, et. seq.
Native American Graves Protection and Repatriation Act, 1990	25 USC 3001-13, et. seq.
Noise Control Act of 1972	PL 92-574
Resource Conservation and Recovery Act (RCRA) of 1976	42 USC 6901-6992k
Rivers and Harbors Act, 1894, as amended and supplemented	33 USC 401, et. seq.
Rivers and Harbors Act, 1899	33 USC 403, Section 10
Water Pollution Control Act Amendments of 1961	PL 87-88
Water Resources Development Act, multiple years	PL 99-662
Watershed Protection and Flood Prevention Act	16 USC 1001, et. seq.
Wild and Scenic Rivers Act, as amended	16 USC 1271, et. seq.
Floodplain Management	EO 11988
Protection of Wetlands	EO 11990
Environmental Justice	EO 12898
Protection of Children	EO 13045
Invasive Species	EO 13112

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# APPENDIX A CORRESPONDENCE OKANA MDE, LLC STATEMENT OF NO-OBJECTION

## **SECTION 408 STATEMENT OF NO OBJECTION**

OKANA MDE, LLC, a wholly owned subsidiary of the Chickasaw Nation, is aware of and in support of the proposed Oklahoma River improvement projects which are the subject of this Section 408 request to the United States Army Corps of Engineers, i.e., the EMBARK FAM boat dock and the pedestrian bridge. OKANA MDE, LLC owns the property on the south bank of the Oklahoma River where the boat dock will be built, as well as the property on the north and south banks where the pedestrian bridge will be built. As a non-federal sponsor, OKANA MDE, LLC hereby expresses no objection to these two projects and is in full support of the projects.

#### NON-FEDERAL SPONSOR SIGNATURES

Chad Claborn, Asset Manager		
OKANA MDE, LLC.		
Signature:	- that the	
Date:	10/17 /23	

# APPENDIX B-1 NATIONWIDE PERMIT (NWP) PRE-CONSTRUCTION NOTIFICATION (PCN) NWP #13 FOR EMBARK FAM BOAT DOCK

## U.S. Army Corps of Engineers (USACE)

#### NATIONWIDE PERMIT PRE-CONSTRUCTION NOTIFICATION (PCN)

33 CFR 330. The proponent agency is CECW-CO-R.

Form Approved OMB No. 0710-0003 Expires: 02-28-2022

#### DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority

Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Regulatory Program of the Corps of

Engineers (Corps); Final Rule 33 CFR 320-332.

Routine Uses

Principal Purpose Information provided on this form will be used in evaluating the nationwide permit pre-construction notification.

This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and

may be made available as part of the agency coordination process.

Disclosure

Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can

a permit be issued.

The public reporting burden for this collection of information, 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

#### PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE EMAIL.

(ITEMS 1 THRU 4 TO B	E FILLED BY THE CORPS)					
1. APPLICATION NO. 2. FIELD OFFICE CODE	3. DATE RECEIVED 4. DATE APPLICATION COMPLETI					
(ITEMS BELOW TO BE	E FILLED BY APPLICANT)					
5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)					
First - Cory Middle - Last - Hubert	First - Melissa Middle - Last - Boothe					
Company - City of Oklahoma City	Company - TEIM Design, PLLC					
Company Title - COTPA	E-mail Address - mboothe@teimdesign.com					
E-mail Address - cory.hubert@okc.gov						
3. APPLICANT'S ADDRESS	9. AGENT'S ADDRESS					
Address- 2000 S. May Avenue	Address- 3020 NW 149th Street					
City - Oklahoma City State - OK Zip - 73108 Country - USA	City - Oklahoma City State - OK Zip - 73134 Country - USA					
7. APPLICANT'S PHONE NOs. with AREA CODE	10. AGENT'S PHONE NOs. with AREA CODE					
a. Residence b. Business c. Fax d. Mobile 405-297-2932	a. Residence b. Business c. Fax d. Mobile 405-752-1122					
STATEMENT O	F AUTHORIZATION					
11. I hereby authorize, Melissa Boothe to act in my behalf as	s my agent in the processing of this nationwide permit pre-construction notificati					
and to furnish, upon request, supplemental information in support of this nation	16.23.2025					
NAME LOCATION AND DESCR	RIPTION OF PROJECT OR ACTIVITY					

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY							
13. NAME OF WATERBODY, IF KNOWN ( <i>if applicable</i> ) North Canadian River, i.e., Oklahoma River	14. PROPOSED ACTIVITY STREET ADDRESS (if applicable) See attached LOCATION MAP.						
15. LOCATION OF PROPOSED ACTIVITY (see instructions) Latitude °N Longitude °W 35.45985 97.48166	City: State: Zip: Oklahoma City OK						
16 OTHER LOCATION DESCRIPTIONS IF KNOWN (see instructions)							

State Tax Parcel ID Municipality

City of Oklahoma

Section Township Range T11N R3W

#### 17. DIRECTIONS TO THE SITE

From Tulsa Corps. office, proceed on I-44 west, continuing south on I-35, take Eastern Avenue exit south of NE 4th Street, proceed south on Eastern Avenue to the site.

#### 18. IDENTIFY THE SPECIFIC NATIONWIDE PERMIT(S) YOU PROPOSE TO USE

NWP 13 - Bank Stabilization

#### 19. DESCRIPTION OF PROPOSED NATIONWIDE PERMIT ACTIVITY (see instructions)

The EMBARK FAM boat dock project will be the sixth dock on the North Canadian River serving the EMBARK ferry system. The boat dock will be a fixed structure cut into the south bank of the Oklahoma River. This boat dock will provide access to the existing FAM and proposed OKANA resort and indoor waterpark. Terraced seating near the dock will allow observation of the starting line of RIVERSPORT boat races. See the boat dock plan and profile sheets included in the associated Section 408 submittal package.

#### 20. DESCRIPTION OF PROPOSED MITIGATION MEASURES (see instructions)

The proposed project will not result in the loss of any wetlands or streams (see Blocks 22 and 24).

#### 21. PURPOSE OF NATIONWIDE PERMIT ACTIVITY (Describe the reason or purpose of the project, see instructions)

The need for accessibility to various planned river features was documented in the 1993 Oklahoma City Riverfront Redevelopment Authority's North Canadian River Riverfront Corridor Plan. The EMBARK FAM boat dock project is funded by a grant from the Federal Transit Administration and will be the sixth dock on the North Canadian River serving the EMBARK ferry system. The proposed EMBARK FAM boat dock will be built in an area along the south bank of the Oklahoma River, west of Eastern Avenue. The project will provide access to the existing FAM as well as the OKANA resort and indoor waterpark currently under construction. The sole use of this south riverbank area is recreational, including not only the FAM and proposed OKANA resort but also flatwater canoe/kayak and rowing activities sponsored by RIVERSPORT OKC, an official US Olympic & Paralympic training site. The primary purpose and need of the boat dock is to improve neighborhoods and quality of life, and to transform public spaces.

22. QUANTITY OF WETLANDS, STREAMS, OR OTHER TYPES OF WATERS DIRECTLY AFFECTED BY PROPOSED NATIONWIDE PERMIT ACTIVITY (see instructions)

Acres Linear Feet Cubic Yards Dredged or Discharged 0 acres of wetlands 399 linear feet of stream (OK River) TABLE 1 103.74 cu yds of fill (TABLE 1)

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site.

23. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. (see instructions)

None.

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submittal package. Also attached are OKLAHOMA STREAM	MITIGATI	ON W	RKSHEETS AT,	A2, AND A3.	
25. Is any portion of the nationwide permit activity already complete?	Yes	<b>∦</b> No	If Yes, describe the	completed work:	
26. List the name(s) of any species listed as endangered or threatened upon utilize the designated critical habitat that might be affected by the passed upon a biological assessment conducted July 2023, the professional process. A copy of the biological assepackage.	proposed NV	VP activit	y. (see instructions) It is not likely to ac	versely affect the	Whoming Crane
27. List any historic properties that have the potential to be affected by the property or properties. (see instructions)  Based upon a cultural resource study conducted June 2023, there resource study is included as an Appendix to the associated Section	are no his	toric pr	operties within the		
28. For a proposed NWP activity that will occur in a component of the Nat "study river" for possible inclusion in the system while the river is in an There are no National Wild and Scenic Rivers or "study rivers" v	n official stud	dv status	identify the Wild and	a river officially desig I Scenic River or the "	nated by Congress as a study river":
29. If the proposed NWP activity also requires permission from the Corps use a U.S. Army Corps of Engineers federally authorized civil works district having jurisdiction over that project?  Yes No If "yes", please provide the date your request was submitted to the Corps of the NWP(s) you want to use require additional information an additional sheet of paper marked Block 30. (see instructions)  A Floodplain Development Permit will be obtained from the City See attached BLOCK 30 for alternative analysis.	project, have orps district:	2023- cluded in	omitted a written requipment of the requirement of t	est for section 408 pe	mission from the Corps
31. Pre-construction notification is hereby made for one or more nationwing information in this pre-construction notification is complete and accuration and active as the day putriorized agent of the applicant.    11.2.7.7	ate. I further	certify th			
The pre-construction notification must be signed by the person who desire been filled out and signed, the authorized agent to be signed out and signed, the authorized agent to be signed out and signed, the authorized agent to be signed out and signed, the authorized agent to be signed out and signed out to be s	jurisdiction	ake the post of any decrease any f	proposed activity (app epartment or agency alse, fictitious or frauc	of the United States k	nowingly and willfully

#### Instructions for Preparing a Department of the Army

#### Nationwide Permit (NWP) Pre-Construction Notification (PCN)

Blocks 1 through 4. To be completed by the Corps of Engineers.

**Block 5. Applicant's Name.** Enter the name and the e-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the preconstruction notification, please attach a sheet of paper with the necessary information marked Block 5.

**Block 6. Address of Applicant.** Please provide the full address of the party or parties responsible for the PCN. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant's Telephone Number(s). Please provide the telephone number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, consultant, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by the applicant, if an agent is to be employed.

Block 12. Proposed Nationwide Permit Activity Name or Title. Please provide a name identifying the proposed NWP activity, e.g., Windward Marina, Rolling Hills Subdivision, or Smith Commercial Center.

**Block 13. Name of Waterbody.** Please provide the name (if it has a name) of any stream, lake, marsh, or other waterway to be directly impacted by the NWP activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Activity Street Address. If the proposed NWP activity is located at a site having a street address (not a box number), please enter it in Block 14.

**Block 15. Location of Proposed Activity.** Enter the latitude and longitude of where the proposed NWP activity is located. Indicate whether the project location provided is the center of the project or whether the project location is provided as the latitude and longitude for each of the "corners" of the project area requiring evaluation. If there are multiple sites, please list the latitude and longitude of each site (center or corners) on a separate sheet of paper and mark as Block 15.

**Block 16. Other Location Descriptions.** If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality where the site is located.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide a description of the location of the proposed NWP activity, such as lot numbers, tract numbers, or you may choose to locate the proposed NWP activity site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed NWP activity site if known. If there are multiple locations, please indicate directions to each location on a separate sheet of paper and mark as Block 17.

Block 18. Identify the Specific Nationwide Permit(s) You Propose to Use. List the number(s) of the Nationwide Permit(s) you want to use to authorize the proposed activity (e.g., NWP 29).

Block 19. Description of the Proposed Nationwide Permit Activity. Describe the proposed NWP activity, including the direct and indirect adverse environmental effects the activity would cause. The description of the proposed activity should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal. Identify the materials to be used in construction, as well as the methods by which the work is to be done.

Provide sketches when necessary to show that the proposed NWP activity complies with the terms of the applicable NWP(s). Sketches usually clarify the activity and result in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed NWP activity (e.g.,a conceptual plan), but do not need to be detailed engineering plans.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 19.

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Block 20. Description of Proposed Mitigation Measures. Describe any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed NWP activity. The description of any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or additional mitigation measures.

**Block 21. Purpose of Nationwide Permit Activity.** Describe the purpose and need for the proposed NWP activity. What will it be used for and why? Also include a brief description of any related activities associated with the proposed project. Provide the approximate dates you plan to begin and complete all work.

Block 22. Quantity of Wetlands, Streams, or Other Types of Waters Directly Affected by the Proposed Nationwide Permit Activity. For discharges of dredged or fill material into waters of the United States, provide the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained by the proposed NWP activity. For structures or work in navigable waters of the United States subject to Section 10 of the Rivers and Harbors Act of 1899, provide the amount of navigable waters filled, dredged, or occupied by one or more structures (e.g., aids to navigation, mooring buoys) by the proposed NWP activity.

For multiple NWPs, or for separate and distant crossings of waters of the United States authorized by NWPs 12 or 14, attach an extra sheet of paper marked Block 21 to provide the quantities of wetlands, streams, or other types of waters filled, flooded, excavated, or drained (or dredged or occupied by structures, if in waters subject to Section 10 of the Rivers and Harbors Act of 1899) for each NWP. For NWPs 12 and 14, include the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained for each separate and distant crossing of waters or wetlands. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Identify Any Other Nationwide Permit(s), Regional General Permit(s), or Individual Permit(s) Used to Authorize Any Part of Proposed Activity or Any Related Activity. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. For linear projects, list other separate and distant crossings of waters and wetlands authorized by NWPs 12 or 14 that do not require PCNs. If more space is needed, attach an extra sheet of paper marked Block 23.

Block 24. Compensatory Mitigation Statement for Losses of Greater Than 1/10-Acre of Wetlands When Pre-Construction Notification is Required. Paragraph (c) of NWP general condition 23 requires compensatory mitigation at a minimum one-for-one replacement ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation is more environmentally appropriate or the adverse environmental effects of the proposed NWP activity are no more than minimal without compensatory mitigation, and provides an activity-specific waiver of this requirement. Describe the proposed compensatory mitigation for wetland losses greater than 1/10 acre, or provide an explanation of why the district engineer should not require wetland compensatory mitigation for the proposed NWP activity. If more space is needed, attach an extra sheet of paper marked Block 24.

Block 25. Is Any Portion of the Nationwide Permit Activity Already Complete? Describe any work that has already been completed for the NWP activity.

Block 26. List the Name(s) of Any Species Listed As Endangered or Threatened under the Endangered Species Act that Might be Affected by the Nationwide Permit Activity. If you are not a federal agency, and if any listed species or designated critical habitat might be affected or is in the vicinity of the proposed NWP activity, or if the proposed NWP activity is located in designated critical habitat, list the name(s) of those endangered or threatened species that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 7 of the Endangered Species Act

Block 27. List Any Historic Properties that Have the Potential to be Affected by the Nationwide Permit Activity. If you are not a Federal agency, and if any historic properties have the potential to be affected by the proposed NWP activity, list the name(s) of those historic properties that have the potential to be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

Block 28. List the Wild and Scenic River or Congressionally Designated Study River if the Nationwide Permit Activity Would Occur in such a River. If the proposed NWP activity will occur in a river in the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" under the Wild and Scenic Rivers Act, provide the name of the river. For a list of Wild and Scenic Rivers and study rivers, please visit <a href="http://www.rivers.gov/">http://www.rivers.gov/</a>.

Block 29. Nationwide Permit Activities that also Require Permission from the Corps Under 33 U.S.C. 408. If the proposed NWP activity also requires permission from the Corps under 33 U.S.C. 408 because it will temporarily or permanently alter, occupy, or use a Corps federal authorized civil works project, indicate whether you have submitted a written request for section 408 permission from the Corps district having jurisdiction over that project.

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Block 30. Other Information Required For Nationwide Permit Pre-Construction Notifications. The terms of some of the Nationwide Permits include additional information requirements for preconstruction notifications:

- \* NWP 3, Maintenance –information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals.
- \* NWP 31, Maintenance of Existing Flood Control Facilities –a description of the maintenance baseline and the dredged material disposal site.
- \* NWP 33, Temporary Construction, Access, and Dewatering –a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions.
- \* NWP 44, Mining Activities –if reclamation is required by other statutes, then a copy of the final reclamation plan must be submitted with the pre-construction notification.
- \* NWP 45, Repair of Uplands Damaged by Discrete Events –documentation, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration.
- \* NWP 48, Commercial Shellfish Aquaculture Activities –(1) a map showing the boundaries of the project area, with latitude and longitude coordinates for each corner of the project area; (2) the name(s) of the species that will be cultivated during the period this NWP is in effect; (3) whether canopy predator nets will be used; (4) whether suspended cultivation techniques will be used; and (5) general water depths in the project area (a detailed survey is not required).
- \* NWP 49, Coal Remining Activities –a document describing how the overall mining plan will result in a net increase in aquatic resource functions must be submitted to the district engineer and receive written authorization prior to commencing the activity.
- \* NWP 50, Underground Coal Mining Activities –if reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the pre-construction notification.

If more space is needed, attach an extra sheet of paper marked Block 30.

**Block 31. Signature of Applicant or Agent.** The PCN must be signed by the person proposing to undertake the NWP activity, and if applicable, the authorized party (agent) that prepared the PCN. The signature of the person proposing to undertake the NWP activity shall be an affirmation that the party submitting the PCN possesses the requisite property rights to undertake the NWP activity (including compliance with special conditions, mitigation, etc.).

#### **DELINEATION OF WETLANDS, OTHER SPECIAL AQUATIC SITES, AND OTHER WATERS**

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current wetland delineation manual and regional supplement published by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. The 45 day PCN review period will not start until the delineation is submitted or has been completed by the Corps.

#### DRAWINGS AND ILLUSTRATIONS

#### General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number. For linear projects (e.g. roads, subsurface utility lines, etc.) gradient drawings should also be included. Please submit one original, or good quality copy, of all drawings on 8½x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations. Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.

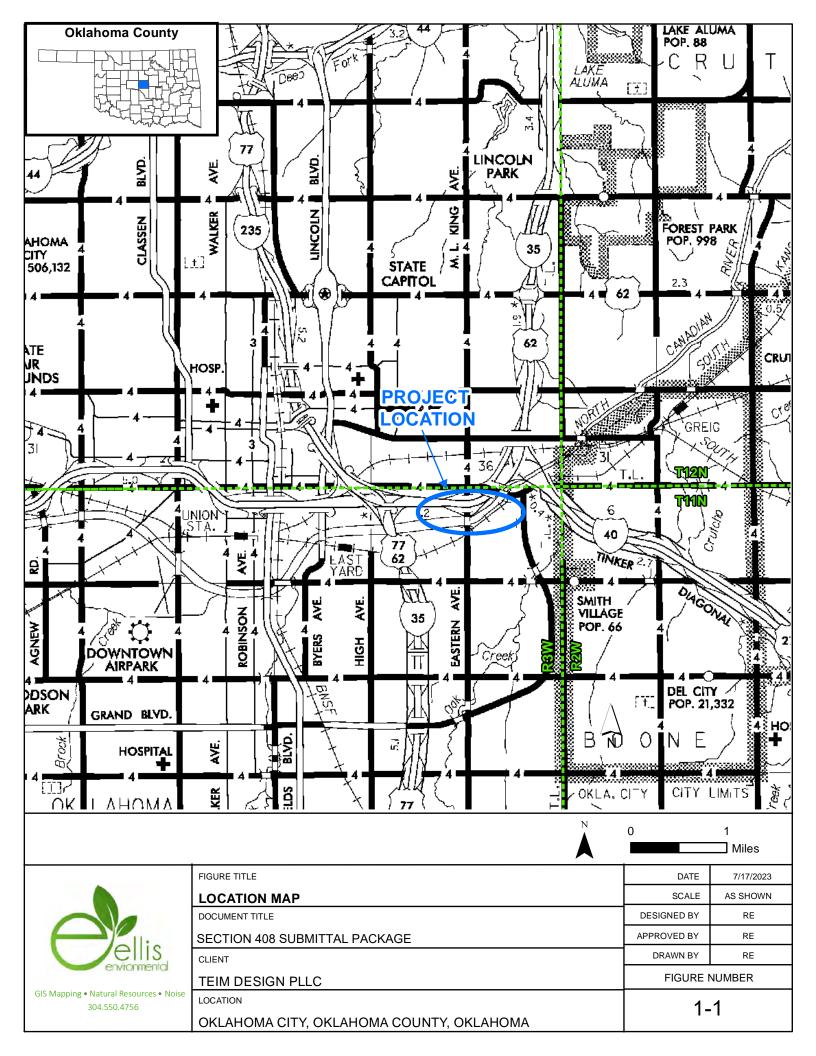
#### ADDITIONAL INFORMATION AND REQUIREMENTS

For proposed NWP activities that involve discharges into waters of the United States, water quality certification from the State, Tribe, or EPA must be obtained or waived (see NWP general condition 25). Some States, Tribes, or EPA have issued water quality certification for one or more NWPs. Please check the appropriate Corps district web site to see if water quality certification has already been issued for the NWP(s) you wish to use. For proposed NWP activities in coastal states, state Coastal Zone Management Act consistency concurrence must be obtained, or a presumption of concurrence must occur (see NWP general condition 26). Some States have issued Coastal Zone Management Act consistency concurrences for one or more NWPs. Please check the appropriate Corps district web site to see if Coastal Zone Management Act consistency concurrence has already been issued for the NWP(s) you wish to use.

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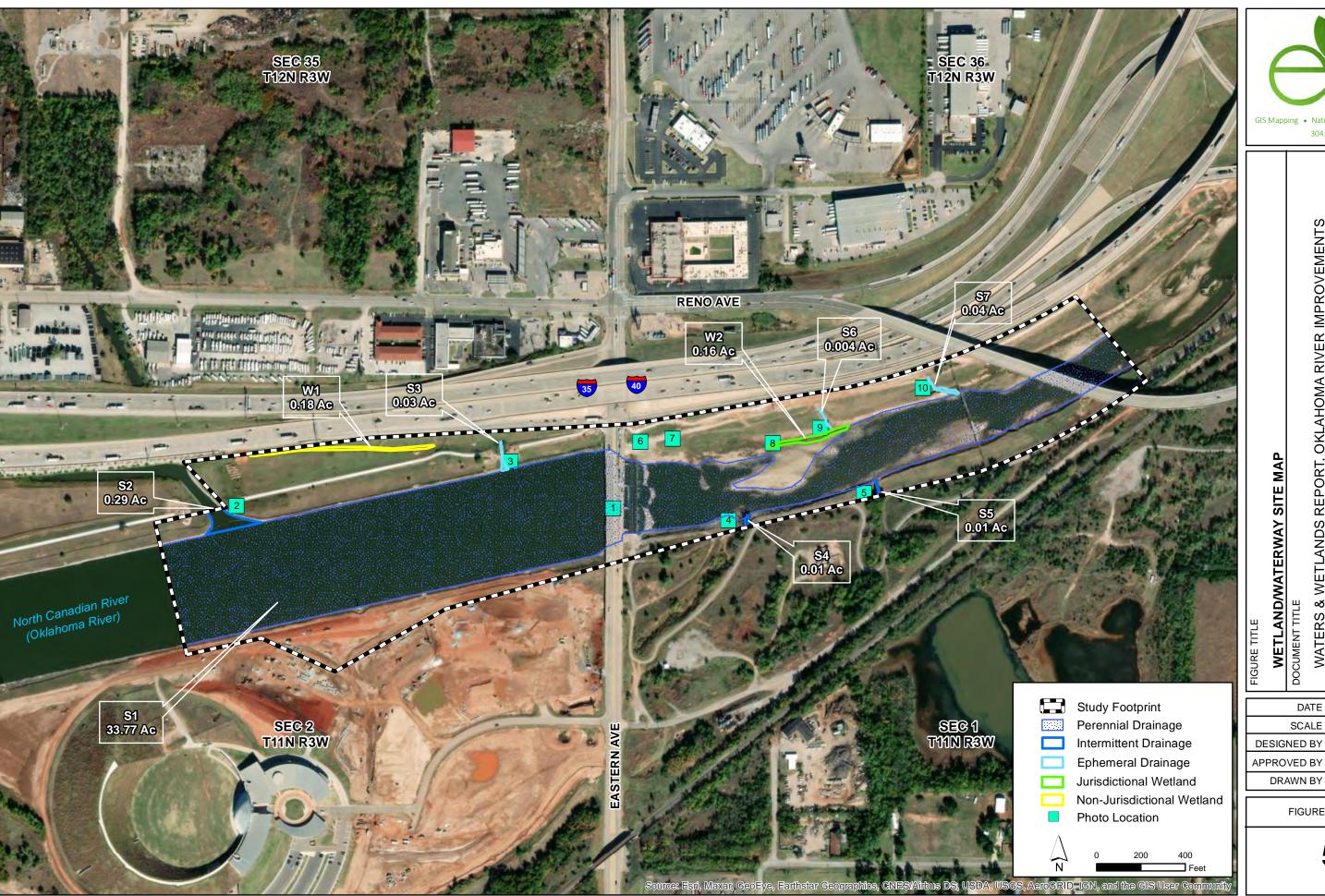
# ATTACHMENTS TO PCN, BOAT DOCK

- Location Map
- Table 1 Summary Of Estimated Fill Material Amounts
- Wetland/Waterway Site Map
- Oklahoma Stream Mitigation Sheets A1, A2, and A3
- Block 30, Alternative Analysis



# TABLE 1: SUMMARY OF ESTIMATED FILL MATERIAL AMOUNTS CITY OF OKLAHOMA CITY OKLAHOMA RIVER PROJECTS - EMBARK BOAT DOCK

Bridge Feature	Length Along Bank	Fill Material	Fill per Running Foot
	(LF)	(CY)	(CY/LF)
Retaining Wall	399	103.74	0.26





WETLAND/WATERWAY SITE MAP
DOCUMENT TITLE
WATERS & WETLANDS REPORT, OKLAHOMA RIVER IMPROV
CLIENT

OKLAHOMA CITY, OKLAHOMA COUNTY, OKLAHOMA

FIGURE NUMBER

7/14/2023

AS SHOWN

RE

RE

5

## **ADVERSE IMPACT FACTORS WORKSHEET (A-1)**

Factors: Variables:

Factors:	variable	5.									
Stream Type Impacted (ST)	Ephemeral 0.3				Intermittent 0.4			Perennial 0.8			
Priority Waters (PW)		All Othe 0.05	er			Secondary 0.4				Priority 0.8	
Existing Condition (EC)	Severely Impaired Impaired 0.4 0.1		Partia Impai 0.6	red	Moderately Functional 0.8		Fully Functional 1.6		al		
Impact Duration (ID)	Temporary 0.05				Recurring 0.15		Permanent 0.3				
Impact Activity (IA)	Clearing 0.05 or 0.1*	Crossin Foo	ility g/Bridge oting 15	Below Grade Culvert 0.3		Fac	ntion cility 75	Morphologic Change 1.5	ment	Pipe 2.2	Fill 2.5
Linear Impact Magnitude (LIM)	0.0003 multiplied by linear feet (LF) of stream impact (recorded in each column below)										
IMPACT FACTORS											
Site Name	Boat Dock										
Station ID											

Site Name	Boat Dock			
Station ID				
Stream Type Impacted (ST)	0.8			
Priority Waters (PW)	0.4			
Existing Condition (EC)	0.4			
Impact Duration (ID)	0.3			
Impact Activity (IA)	0.5			
Linear Impact Magnitude (LIM)	0.12			
Sum of Factors (M ) = (ST+PW+EC+ID+IA+LIM)	2.52			
Linear Feet of Stream Impact (LF)	399			
Required Credits (C) = M * LF	1,005.48			
Compensation Ratio <sup>1 *</sup> (C)	N/A, this is	s not a mitigat	tion project	

# Total Credits Required from all Columns = 1,005.48

<sup>1.</sup> Compensation Ratio - when the Corps determines that a third party mitigation source is acceptable to fulfill compensatory mitigation requirements the total credits determined on this worksheet shall be applied to mitigation banks or in-lieu fee programs at a 1:1 ratio when the impact area is within an approved service are, however, an increased compensation ratio may be used at the Corps discretion when an impact occurs beyond the geographic service area of an approved mitigation bank or in-lieu fee program.

<sup>\*</sup> Impact Activity - Clearing on both sides of stream double the clearing category to 0.1.

# **IN-STREAM WORKSHEET (A-2)**

FACTORS: VARIABLES:

Stream Type (ST)	Ephemeral Intermitte 0.15 0.2			rent Perennial 0.4			
Priority Waters (PW)	All Other 0.05			Secondary 0.2		F	Priority 0.4
Net Benefit (NB)	Stream Relocation to Accommodate Proposed Project 0.5	Preservation Only 0.65	Minimal 0.9	Moderate 1.2	Goo 2.4	-	Excellent 3.5
Site Protection (SP)	Corps approved site protection without third party grantee 0.0				te protection recorded with third pransfer of title to a conservancy  0.5		
Credit Schedule (CS)	4.1		Schedule 2 0.1		Schedule 3 0.0		

#### **IN-STREAM FACTORS**

Site Name:	Boat Dock		
Station ID:			
Stream Type (ST)	0.4		
Priority Waters (PW)	0.2		
Net Benefits (NB)	0.5		
Site Protection (SP)	N/A		
Credit Schedule (CS)	N/A		
Sum Factors (M) = (ST+PW+NB+SP+CS)	1.1		
Stream Length Benefitted (do not count each bank separately or count same channel reach twice) (LF) =	399		
Credits (C) = M * LF	438.9		
Total In-Stream Credits Generated C * LK Factor <sup>1</sup> =	N/A, not a mitigation project		
Total from Riparian Buffer Worksheet (Page 32) =	239.4		
<b>Total</b> (In-stream Credits + Riparian Credits) =	678.3		

Total In-Stream Credits Generated from all Columns =	678.3
--	-------

<sup>1.</sup> Location and Kind (LK) Factor only applies to permittee-responsible mitigation projects (see page 20 of document).

# **RIPARIAN BUFFER WORKSHEET (A-3)**

Stream Type	Ephemeral 0.15	Int	ermittent 0.2		Perennial 0.4		
Priority Waters	All Other Waters 0.05	Secondary 0.2			Primary 0.4		
Net Benefit (for each side of		Riparian Restoration/Establishment, Enhancement, and Preservation Factors (select values from Table 1) (also see Minimum Buffer Width (MBW) page 17)					
Supplemental Buffer Credit			ished, enhanced or լ nefit Stream Side A +		on both stream banks fit Stream Side B)/2		
Site Protection	Corps approved sit without third part 0.0		Corps approved site protection recorded with third part grantee, or transfer of title to a conservancy  0.5				
Credit Schedule	Schedule 0.3	e 1	Schedule 2 0.1		Schedule 3		
Temporal Lag (Years)	Over 20 -0.3	10 to 20 -0.2	5 to 10 -0.1		0 to 5 0.0		

### **RIPARIAN FACTORS**

INI AMAN I	71010110		 	 
Site Name		Boat Dock		
Station ID				
Stream Type	(ST)	0.4		
Priority Water	rs (PW)	0.2		
Net Benefit	Stream Side	0.00		
(NB)	Stream Side	0.00		
	Buffer Credit on both sides)	0.00		
Site Protection	n (SP)	N/A		
Credit	Stream Side A	N/A		
Schedule (CS)	Stream Side B	N/A		
Temporal Lag	(TL)	N/A		
Sum Factor ( NB+SBC+SP	<b>(M)</b> =( ST+ PW+ +CS+TL)	0.6		
Buffered (LF): each bank se	Linear Feet of Stream Buffered (LF)= (do not count each bank separately or count same channel segment			
Credits (C) =	M * LF	239.4		
	Total Credits Generated C * LK Factor1 =			
	notos of Riparian nented for the	N		

Total Riparian Credits Generated from all Columns = 239.4

<sup>1.</sup> Location and Kind (LK) Factor only applies to permittee-responsible mitigation projects (see page 20 of document).

#### **EMBARK FAM BOAT DOCK, ALTERNATIVE ANALYSIS**

The no action alternative would retain the existing condition and would not result in any project-related environmental impacts or losses of fish and wildlife habitat. However, the no action alternative is not consistent with the 1993 River Corridor Plan, which identified the need for a boat dock at the First Americans Museum and a pedestrian bridge near Eastern Avenue.

The location of the boat dock was chosen for its proximity to the FAM and OKANA sites, as well as the Riversport races starting line. Two (2) primary designs were considered for the boat dock, i.e., a floating dock and a fixed dock. The fixed dock design was chosen because it maximizes the adjacent public gathering areas, is more user friendly, aesthetically preferable, and requires less long term maintenance.

# APPENDIX B-2 NATIONWIDE PERMIT (NWP) PRE-CONSTRUCTION NOTIFICATION (PCN) NWP #14 FOR MAPS4 PEDESTRIAN BRIDGE

#### U.S. Army Corps of Engineers (USACE)

#### NATIONWIDE PERMIT PRE-CONSTRUCTION NOTIFICATION (PCN)

33 CFR 330. The proponent agency is CECW-CO-R.

Form Approved -OMB No. 0710-0003 Expires: 02-28-2022

#### DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority

Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Regulatory Program of the Corps of

Engineers (Corps); Final Rule 33 CFR 320-332.

Principal Purpose Information provided on this form will be used in evaluating the nationwide permit pre-construction notification.

**Routine Uses** 

This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and

may be made available as part of the agency coordination process.

**Disclosure** 

Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can

a permit be issued.

The public reporting burden for this collection of information, 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

#### PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE EMAIL.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the district engineer having jurisdiction over the location of the proposed activity. An application that is

	(ITEMS 1 THRU 4 TO	BE FILLED BY TH	E CORPS)			
1. APPLICATION NO.	2. FIELD OFFICE CODE		3. DATE RECEIVED	4. DATE APPLICATION COMPLET		
	(ITEMS BELOW TO	BE FILLED BY API	PLICANT)			
5. APPLICANT'S NAME		8. AUTHORIZ	ED AGENT'S NAME AN	ND TITLE (agent is not required)		
First - David Middle	- Last - Todd	First - Melissa	a Middle -	Last - Boothe		
Company - City of Oklahoma Cit	y	Company - T	EIM Design, PLLC			
Company Title - MAPS Program N	Manager	E-mail Address	s - mboothe@teimdes	ign.com		
E-mail Address - david.todd@okc.g	gov					
6. APPLICANT'S ADDRESS		9. AGENT'S A	9 <sub>s</sub> , AGENT'S ADDRESS			
Address- 420 W. Main, Suite 400	)	Address- 302	Address- 3020 NW 149th Street			
City - Oklahoma City State - (	OK Zip - 73102 Country - USA	City - Oklaho	City - Oklahoma City State - OK Zip - 73134 Country - USA			
7. APPLICANT'S PHONE NOs. with	AREA CODE	10. AGENT'S I	10. AGENT'S PHONE NOs. with AREA CODE			
a. Residence b. Business 405-297-3461	c. Fax d. Mobile	a. Residence	a. Residence b. Business c. Fax d. Mobile 405-752-1122			
	STATEMENT	OF AUTHORIZATION	ON			
11. I hereby authorize,Melis	ssa Boothe opact in my behalf	as my agent in the	processing of this nation	wide permit pre-construction notificati		
and to furnish, upon request, supplem	nental information in support of this national information in support of the	Zel	onstruction notification.			
	NAME, LOCATION, AND DESC		JECT OR ACTIVITY			

Construction of MAPS4 Pedestrian Bridge, Oklahoma River, Oklahoma City, OK

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY							
13. NAME OF WATERBODY, IF KNOWN ( North Canadian River, i.e., Oklahoma	'''	14. PROPOSED ACTIVITY STREET ADDRESS (if applicable) See attached LOCATION MAP.					
	(see instructions) ongitude °W 7.47981	City: Oklahoma City	State: OK	Zip:			
16. OTHER LOCATION DESCRIPTIONS,	IF KNOWN (see instructions)						
State Tax Parcel ID		Municipality					
		City of Oklahoma					
Section	Township	Range					

#### 17. DIRECTIONS TO THE SITE

From Tulsa Corps. office, proceed on I-44 west, continuing south on I-35, take Eastern Avenue exit south of NE 4th Street, proceed south on Eastern Avenue to the site.

R3W

#### 18. IDENTIFY THE SPECIFIC NATIONWIDE PERMIT(S) YOU PROPOSE TO USE

T11N

NWP 14 - Linear Transportation Projects

#### 19. DESCRIPTION OF PROPOSED NATIONWIDE PERMIT ACTIVITY (see instructions)

The proposed pedestrian bridge will have a 20' clear width and will be approximately 485' long with a consistent low chord elevation of 1179' to provide adequate clearance to the water surface, approximately 14'. There are five spans resting on four, 72" drilled shafts. The pier spacings were coordinated with RIVERSPORT OKC to ensure the bridge will not impact the future eight rowing lanes and the associated modular dock system. Given the pier spacings, the bridge spans from the south to north bank are 88'10", 88'0", 88'0", 100'0", and 100'10". On either bank, the bridge abutments utilize vertical walls to minimize fill in the FEMA floodplain/floodway.

The bridge piers will need to be constructed by either utilizing coffer dams, work platforms, barges, and/or lowering the Eastern Basin. The ideal window of time to lower the basin is from November 2023 through February 2024 as there will be fewer RIVERSPORT OKC racing events in the winter. Additionally, this will allow OKC Public Works to complete maintenance repairs on the Eastern Avenue Dam, as well as other maintenance in the Regatta Park area. Once the piers have been constructed, the steel beams need cranes to be laid into place. The steel beams have the potential of being constructed on the riverbank and launched in a cantilever fashion from the abutments over to the bridge piers. The steel beam launch method would limit the amount of time the bridge contractor needs to be in the water, resulting in less interference with boats. After the beams and deck forms have been placed, the concrete deck will need to be poured, which can be done with a pump truck from the riverbank. As each bridge span cures, the concrete pump truck will be able to drive onto the cured bridge deck to reach the next span.

Ideally, the contractor will have access to both riverbanks to provide greater flexibility in their construction methods. For the north bank, a construction entrance will be needed from the I-40 eastbound off-ramp for Eastern Avenue. However, the south bank may not be readily available, given the ongoing construction for the OKANA site. Further coordination will be needed with the OKANA developers to determine access to the south bank.

See the pedestrian bridge plan and profile sheets included in the associated Section 408 submittal package.

#### 20. DESCRIPTION OF PROPOSED MITIGATION MEASURES (see instructions)

The proposed project will not result in the loss of any wetlands or streams (see Blocks 22 and 24).

#### 21. PURPOSE OF NATIONWIDE PERMIT ACTIVITY (Describe the reason or purpose of the project, see instructions)

The need for accessibility to various planned river features was documented in the 1993 Oklahoma City Riverfront Redevelopment Authority's North Canadian River Riverfront Corridor Plan. The primary objective of the MAPS4 Pedestrian Bridge project is to improve neighborhoods, quality of life, and transform public spaces. The pedestrian bridge will connect to the north bank of the river and the existing Greenway Trail, a paved trail used by both bicycle and pedestrian traffic. The southern point of the pedestrian bridge will be built just east of the boat dock's terraced seating and provide connection to the bicycle/pedestrian trail meandering along the north bank of the river. The pedestrian bridge will span the Oklahoma River, near the First Americans Museum site, downstream from the Oklahoma RIVERSPORT Foundation starting line tower. At this location, the bridge will provide a unique view for special events on the river as well as everyday use by connecting the Greenway and Eagle Lake Trails located on either riverbank. The proposed bridge will accommodate pedestrian foot

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traffic and will have adequate clearance for rive Public Works maintenance boats. Additionally			•
22. QUANTITY OF WETLANDS, STREAMS, OR OTI (see instructions)	HER TYPES OF WATERS DIRECTL	AFFECTED BY PR	OPOSED NATIONWIDE PERMIT ACTIVITY
	Linear Feet 6 linear feet of stream (OK River		ubic Yards Dredged or Discharged 6.07 CY fill material (Piers) TABLE 1
Each PCN must include a delineation of wetlands	, other special aquatic sites, and o and ephemeral streams, on the		s lakes and ponds, and perennial, intermittent,
23. List any other NWP(s), regional general permit(s), related activity. (see instructions) None.			horize any part of the proposed project or any
24. If the proposed activity will result in the loss of gre mitigation requirement in paragraph (c) of general and why compensatory mitigation should not be reased upon a site review, the only potentially j sidewalk where the pedestrian bridge will tie in WATERWAY SITE MAP from the wetlands of Appendix to the associated Section 408 submit A2, AND A3.	condition 23 will be satisfied, or explequired for the proposed activity. urisdictional wetlands within the and thus will not be impacted by elineation conducted July 2023.	project area west of construction of the A copy of the wet	of Eastern Avenue are located north of the ne bridge. See the attached WETLAND lands delineation is included as an
25. Is any portion of the nationwide permit activity alre	eady complete? Yes N	o If Yes, describe t	he completed work:
26. List the name(s) of any species listed as endange or utilize the designated critical habitat that might Based upon a biological assessment conducted Tricolored Bat, and Piping Plover. A copy of t package.	be affected by the proposed NWP ac July 2023, the project may affec	tivity (see instruction but is not likely to	ns) o adversely affect the: Whooping Crane,
List any historic properties that have the potential property or properties. (see instructions)     Based upon a cultural resource study conducted resource study is included as an Appendix to the	I June 2023, there are no historic	properties within t	
28. For a proposed NWP activity that will occur in a constitute "study river" for possible inclusion in the system where are no National Wild and Scenic Rivers of the state of the system where are no National Wild and Scenic Rivers of the system of the s	hile the river is in an official study sta	tus, identify the Wild	
29. If the proposed NWP activity also requires permis use a U.S. Army Corps of Engineers federally au district having jurisdiction over that project?  If "yes", please provide the date your request was	thorized civil works project, have you Yes No	submitted a written r	t will alter or temporarily or permanently occupy or equest for section 408 permission from the Corps
30. If the terms of the NWP(s) you want to use require on an additional sheet of paper marked Block 30. A Floodplain Development Permit will be obta	(see instructions)		
See attached BLOCK 30 for alternative analysi	S.		

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SIGNATUR	E OF APPLICANT	10/20/2	3 m	SIGNATURE OF AGENT	10/24/2 DATE
pre-construction notifi n filled out and signed,		the person who desires t	o undertake the prop	oosed activity (applicant) and, if the	statement in Block 11 ha
		any manner within the jur	isdiction of any dena	rtment or agency of the United Stat	es knowingly and willfully
fies, conceals, or cove	ers up any trick, scheme,	or disguises a material fa	ct or makes any false	e, fictitious or fraudulent statements statements or entry, shall be fined n	or representations or ma
risoned not more than		to to sometiment, talog no		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

#### Instructions for Preparing a Department of the Army

#### Nationwide Permit (NWP) Pre-Construction Notification (PCN)

Blocks 1 through 4. To be completed by the Corps of Engineers.

**Block 5. Applicant's Name.** Enter the name and the e-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the preconstruction notification, please attach a sheet of paper with the necessary information marked Block 5.

**Block 6. Address of Applicant.** Please provide the full address of the party or parties responsible for the PCN. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant's Telephone Number(s). Please provide the telephone number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, consultant, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by the applicant, if an agent is to be employed.

Block 12. Proposed Nationwide Permit Activity Name or Title. Please provide a name identifying the proposed NWP activity, e.g., Windward Marina, Rolling Hills Subdivision, or Smith Commercial Center.

**Block 13. Name of Waterbody.** Please provide the name (if it has a name) of any stream, lake, marsh, or other waterway to be directly impacted by the NWP activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Activity Street Address. If the proposed NWP activity is located at a site having a street address (not a box number), please enter it in Block 14.

**Block 15. Location of Proposed Activity.** Enter the latitude and longitude of where the proposed NWP activity is located. Indicate whether the project location provided is the center of the project or whether the project location is provided as the latitude and longitude for each of the "corners" of the project area requiring evaluation. If there are multiple sites, please list the latitude and longitude of each site (center or corners) on a separate sheet of paper and mark as Block 15.

**Block 16. Other Location Descriptions.** If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality where the site is located.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide a description of the location of the proposed NWP activity, such as lot numbers, tract numbers, or you may choose to locate the proposed NWP activity site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed NWP activity site if known. If there are multiple locations, please indicate directions to each location on a separate sheet of paper and mark as Block 17.

Block 18. Identify the Specific Nationwide Permit(s) You Propose to Use. List the number(s) of the Nationwide Permit(s) you want to use to authorize the proposed activity (e.g., NWP 29).

Block 19. Description of the Proposed Nationwide Permit Activity. Describe the proposed NWP activity, including the direct and indirect adverse environmental effects the activity would cause. The description of the proposed activity should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal. Identify the materials to be used in construction, as well as the methods by which the work is to be done.

Provide sketches when necessary to show that the proposed NWP activity complies with the terms of the applicable NWP(s). Sketches usually clarify the activity and result in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed NWP activity (e.g.,a conceptual plan), but do not need to be detailed engineering plans.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 19.

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Block 20. Description of Proposed Mitigation Measures. Describe any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed NWP activity. The description of any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or additional mitigation measures.

**Block 21. Purpose of Nationwide Permit Activity.** Describe the purpose and need for the proposed NWP activity. What will it be used for and why? Also include a brief description of any related activities associated with the proposed project. Provide the approximate dates you plan to begin and complete all work.

Block 22. Quantity of Wetlands, Streams, or Other Types of Waters Directly Affected by the Proposed Nationwide Permit Activity. For discharges of dredged or fill material into waters of the United States, provide the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained by the proposed NWP activity. For structures or work in navigable waters of the United States subject to Section 10 of the Rivers and Harbors Act of 1899, provide the amount of navigable waters filled, dredged, or occupied by one or more structures (e.g., aids to navigation, mooring buoys) by the proposed NWP activity.

For multiple NWPs, or for separate and distant crossings of waters of the United States authorized by NWPs 12 or 14, attach an extra sheet of paper marked Block 21 to provide the quantities of wetlands, streams, or other types of waters filled, flooded, excavated, or drained (or dredged or occupied by structures, if in waters subject to Section 10 of the Rivers and Harbors Act of 1899) for each NWP. For NWPs 12 and 14, include the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained for each separate and distant crossing of waters or wetlands. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Identify Any Other Nationwide Permit(s), Regional General Permit(s), or Individual Permit(s) Used to Authorize Any Part of Proposed Activity or Any Related Activity. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. For linear projects, list other separate and distant crossings of waters and wetlands authorized by NWPs 12 or 14 that do not require PCNs. If more space is needed, attach an extra sheet of paper marked Block 23.

Block 24. Compensatory Mitigation Statement for Losses of Greater Than 1/10-Acre of Wetlands When Pre-Construction Notification is Required. Paragraph (c) of NWP general condition 23 requires compensatory mitigation at a minimum one-for-one replacement ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation is more environmentally appropriate or the adverse environmental effects of the proposed NWP activity are no more than minimal without compensatory mitigation, and provides an activity-specific waiver of this requirement. Describe the proposed compensatory mitigation for wetland losses greater than 1/10 acre, or provide an explanation of why the district engineer should not require wetland compensatory mitigation for the proposed NWP activity. If more space is needed, attach an extra sheet of paper marked Block 24.

Block 25. Is Any Portion of the Nationwide Permit Activity Already Complete? Describe any work that has already been completed for the NWP activity.

Block 26. List the Name(s) of Any Species Listed As Endangered or Threatened under the Endangered Species Act that Might be Affected by the Nationwide Permit Activity. If you are not a federal agency, and if any listed species or designated critical habitat might be affected or is in the vicinity of the proposed NWP activity, or if the proposed NWP activity is located in designated critical habitat, list the name(s) of those endangered or threatened species that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 7 of the Endangered Species Act

Block 27. List Any Historic Properties that Have the Potential to be Affected by the Nationwide Permit Activity. If you are not a Federal agency, and if any historic properties have the potential to be affected by the proposed NWP activity, list the name(s) of those historic properties that have the potential to be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

Block 28. List the Wild and Scenic River or Congressionally Designated Study River if the Nationwide Permit Activity Would Occur in such a River. If the proposed NWP activity will occur in a river in the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" under the Wild and Scenic Rivers Act, provide the name of the river. For a list of Wild and Scenic Rivers and study rivers, please visit <a href="http://www.rivers.gov/">http://www.rivers.gov/</a>.

Block 29. Nationwide Permit Activities that also Require Permission from the Corps Under 33 U.S.C. 408. If the proposed NWP activity also requires permission from the Corps under 33 U.S.C. 408 because it will temporarily or permanently alter, occupy, or use a Corps federal authorized civil works project, indicate whether you have submitted a written request for section 408 permission from the Corps district having jurisdiction over that project.

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Block 30. Other Information Required For Nationwide Permit Pre-Construction Notifications. The terms of some of the Nationwide Permits include additional information requirements for preconstruction notifications:

- \* NWP 3, Maintenance -information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals.
- \* NWP 31, Maintenance of Existing Flood Control Facilities -a description of the maintenance baseline and the dredged material disposal site.
- \* NWP 33, Temporary Construction, Access, and Dewatering –a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions.
- \* NWP 44, Mining Activities –if reclamation is required by other statutes, then a copy of the final reclamation plan must be submitted with the pre-construction notification.
- \* NWP 45, Repair of Uplands Damaged by Discrete Events –documentation, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration.
- \* NWP 48, Commercial Shellfish Aquaculture Activities –(1) a map showing the boundaries of the project area, with latitude and longitude coordinates for each corner of the project area; (2) the name(s) of the species that will be cultivated during the period this NWP is in effect; (3) whether canopy predator nets will be used; (4) whether suspended cultivation techniques will be used; and (5) general water depths in the project area (a detailed survey is not required).
- \* NWP 49, Coal Remining Activities —a document describing how the overall mining plan will result in a net increase in aquatic resource functions must be submitted to the district engineer and receive written authorization prior to commencing the activity.
- \* NWP 50, Underground Coal Mining Activities –if reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the pre-construction notification.

If more space is needed, attach an extra sheet of paper marked Block 30.

**Block 31. Signature of Applicant or Agent.** The PCN must be signed by the person proposing to undertake the NWP activity, and if applicable, the authorized party (agent) that prepared the PCN. The signature of the person proposing to undertake the NWP activity shall be an affirmation that the party submitting the PCN possesses the requisite property rights to undertake the NWP activity (including compliance with special conditions, mitigation, etc.).

#### **DELINEATION OF WETLANDS, OTHER SPECIAL AQUATIC SITES, AND OTHER WATERS**

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current wetland delineation manual and regional supplement published by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. The 45 day PCN review period will not start until the delineation is submitted or has been completed by the Corps.

#### DRAWINGS AND ILLUSTRATIONS

#### General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number. For linear projects (e.g. roads, subsurface utility lines, etc.) gradient drawings should also be included. Please submit one original, or good quality copy, of all drawings on 8½x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations. Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.

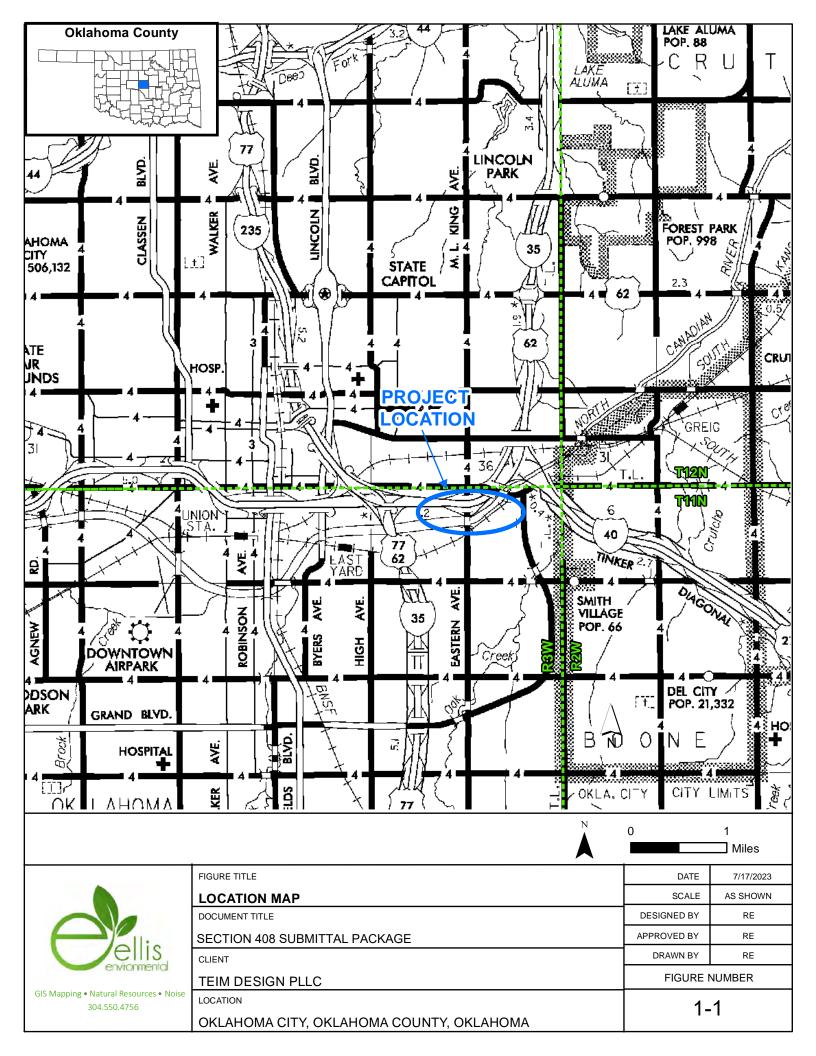
#### ADDITIONAL INFORMATION AND REQUIREMENTS

For proposed NWP activities that involve discharges into waters of the United States, water quality certification from the State, Tribe, or EPA must be obtained or waived (see NWP general condition 25). Some States, Tribes, or EPA have issued water quality certification for one or more NWPs. Please check the appropriate Corps district web site to see if water quality certification has already been issued for the NWP(s) you wish to use. For proposed NWP activities in coastal states, state Coastal Zone Management Act consistency concurrence must be obtained, or a presumption of concurrence must occur (see NWP general condition 26). Some States have issued Coastal Zone Management Act consistency concurrences for one or more NWPs. Please check the appropriate Corps district web site to see if Coastal Zone Management Act consistency concurrence has already been issued for the NWP(s) you wish to use.

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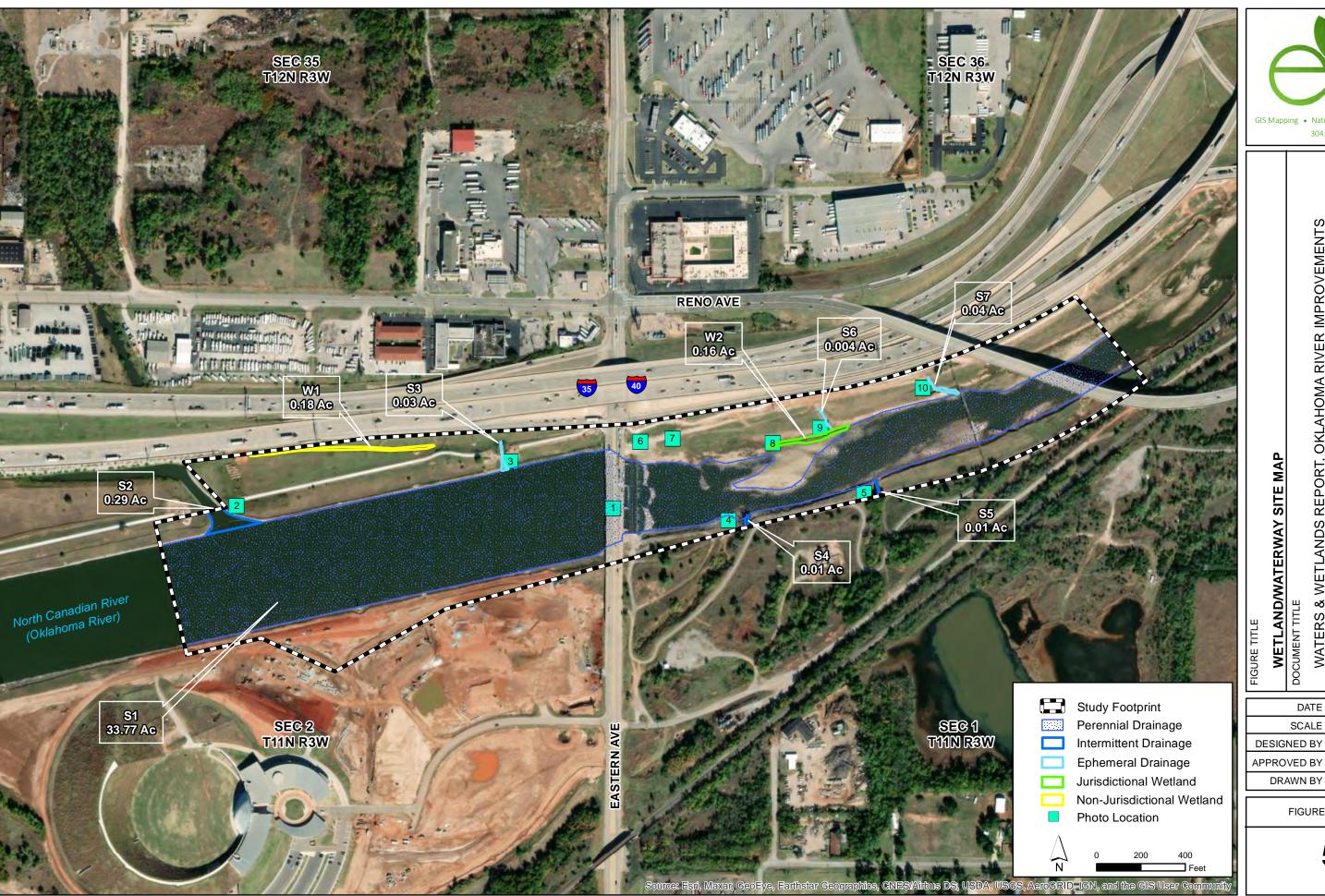
# ATTACHMENTS TO PCN, PEDESTRIAN BRIDGE

- Location Map
- Table 1 Summary Of Estimated Fill Material Amounts
- Wetland/Waterway Site Map
- Oklahoma Stream Mitigation Sheets A1, A2, and A3
- Block 30, Alternative Analysis



# TABLE 1: SUMMARY OF ESTIMATED FILL MATERIAL AMOUNTS CITY OF OKLAHOMA CITY OKLAHOMA RIVER PROJECTS - MAPS4 PEDESTRIAN BRIDGE

Bridge Feature	Length of River Impacted (LF)	Area of Impact under the OHWM (AC)	Fill Material (CY)
Bridge Piers	6	0.003	46.07
Bridge Abutments	0	0	0





WETLAND/WATERWAY SITE MAP
DOCUMENT TITLE
WATERS & WETLANDS REPORT, OKLAHOMA RIVER IMPROV
CLIENT

OKLAHOMA CITY, OKLAHOMA COUNTY, OKLAHOMA

FIGURE NUMBER

7/14/2023

AS SHOWN

RE

RE

5

#### **ADVERSE IMPACT FACTORS WORKSHEET (A-1)**

Factors: Variables:

Stream Type Impacted (ST)	Ephemeral 0.3			Intermittent 0.4			Perennial 0.8				
Priority Waters (PW)	All Other 0.05			Secondary 0.4				Priority 0.8			
Existing Condition (EC)	Impai	Severely Impaired Impaired 0.4 0.1		Partia Impaii 0.6	red	Moderately Functional 0.8		Fully Functional 1.6		I	
Impact Duration (ID)	Temporary 0.05			Recurring 0.15		Permanent 0.3					
Impact Activity (IA)	Clearing 0.05	Crossi Fo	Itility ng/Bridge ooting	Below Grade Culvert	Armor	Deter Fac		Morpho- logic Change	Impound- ment	Pipe	Fill
	or 0.1*	(	).15	0.3	0.5	0.7	75	1.5	2.0	2.2	2.5
Linear Impact Magnitude (LIM)		0.0003 multiplied by linear feet (LF) of stream impact (recorded in each column below)							ow)		

#### IMPACT FACTORS

Site Name	Pedestrian Bridge			
Station ID	Pier Locations			
Stream Type Impacted (ST)	0.8			
Priority Waters (PW)	0.4			
Existing Condition (EC)	0.4			
Impact Duration (ID)	0.3			
Impact Activity (IA)	0.15			
Linear Impact Magnitude (LIM)	0.0018			
Sum of Factors (M ) = (ST+PW+EC+ID+IA+LIM)	2.052			
Linear Feet of Stream Impact (LF)	6			
Required Credits (C) = M * LF	12.31			
Compensation Ratio <sup>1 *</sup> (C)	N/A, this is	not a mitigat	tion project	

# Total Credits Required from all Columns= 12.31

<sup>1.</sup> Compensation Ratio - when the Corps determines that a third party mitigation source is acceptable to fulfill compensatory mitigation requirements the total credits determined on this worksheet shall be applied to mitigation banks or in-lieu fee programs at a 1:1 ratio when the impact area is within an approved service are, however, an increased compensation ratio may be used at the Corps discretion when an impact occurs beyond the geographic service area of an approved mitigation bank or in-lieu fee program.

<sup>\*</sup> Impact Activity - Clearing on both sides of stream double the clearing category to 0.1.

# **IN-STREAM WORKSHEET (A-2)**

FACTORS: VARIABLES:

Stream Type (ST)	Ephemeral 0.15		Intermitte 0.2	ent	Perennial 0.4			
Priority Waters (PW)	,	All Other 0.05		Secondary 0.2		F	Priority 0.4	
Net Benefit (NB)	Stream Relocation to Accommodate Proposed Project 0.5	Preservation Only 0.65	Minimal 0.9	Moderate 1.2	Go. 2.		Excellent 3.5	
Site Protection (SP)	Corps approved site protection C without third party grantee 0.0			Corps approved site protection recorded with third particle grantee, or transfer of title to a conservancy 0.5				
Credit Schedule (CS)				Schedule 2 0.1			Schedule 3 0.0	

## **IN-STREAM FACTORS**

Site Name:	Pedestrian Bridge		
Station ID:	Pier Locations		
Stream Type (ST)	0.4		
Priority Waters (PW)	0.2		
Net Benefits (NB)	0.5		
Site Protection (SP)	N/A		
Credit Schedule (CS)	N/A		
Sum Factors (M) = (ST+PW+NB+SP+CS)	1.1		
Stream Length Benefitted (do not count each bank separately or count same channel reach twice) (LF) =	6		
Credits (C) = M * LF	6.6		
Total In-Stream Credits Generated C * LK Factor1 =	N/A, not a mitigation project		
Total from Riparian Buffer Worksheet (Page 32) =	3.6		
<b>Total</b> (In-stream Credits + Riparian Credits) =	10.2		

Total In-Stream Credits Generated from all Columns =	10.2
--	------

<sup>1.</sup> Location and Kind (LK) Factor only applies to permittee-responsible mitigation projects (see page 20 of document).

# **RIPARIAN BUFFER WORKSHEET (A-3)**

Stream Type	Ephemeral 0.15	Int	ermittent 0.2		Perennial 0.4		
Priority Waters	All Other Waters 0.05	Secondary		Secondary 0.2			
Net Benefit (for each side of		Riparian Restoration/Establishment, Enhancement, and Preservation Factors (select values from Table 1) (also see Minimum Buffer Width (MBW) page 17)					
Supplemental Buffer Credit		Condition: Buffer established, enhanced or preserved on both stream banks To calculate:(Net Benefit Stream Side A + Net Benefit Stream Side B)/2					
Site Protection	Corps approved sit without third part 0.0			Corps approved site protection recorded with third party grantee, or transfer of title to a conservancy 0.5			
Credit Schedule	Schedule 0.3	Schedule 1 0.3			Schedule 3		
Temporal Lag (Years)	Over 20 -0.3	10 to 20 -0.2	5 to 10 -0.1		0 to 5 0.0		

### **RIPARIAN FACTORS**

MI AMAN I	71010I10		 	 
Site Name		Pedestrian Bridge		
Station ID		Pier Locations		
Stream Type (ST)		0.4		
Priority Waters (PW)		0.2		
Net Benefit (NB)	Stream Side	0.00		
	Stream Side	0.00		
Supplemental Buffer Credit [SBC] (Buffer on both sides)		0.00		
Site Protection (SP)		N/A		
Credit Schedule (CS)	Stream Side A	N/A		
	Stream Side B	14// (		
Temporal Lag (TL)		N/A		
Sum Factor (M)=( ST+ PW+ NB+SBC+SP+CS+TL)		0.6		
Linear Feet of Stream Buffered (LF)= (do not count each bank separately or count same channel segment		6		
Credits (C) = M * LF		3.6		
Total Credits Generated C * LK Factor1 =		N/A		
Are current photos of Riparian Area(s) documented for the Corps?		N		

Total Riparian Credits Generated from all Columns = 3.6

<sup>1.</sup> Location and Kind (LK) Factor only applies to permittee-responsible mitigation projects (see page 20 of document).

#### MAPS4 PEDESTRIAN BRIDGE ALTERNATIVE ANALYSIS

The no action alternative would retain the existing condition and would not result in any project-related environmental impacts or losses of fish and wildlife habitat. However, the no action alternative is not consistent with the 1993 River Corridor Plan, which identified the need for a boat dock at the First Americans Museum and a pedestrian bridge near Eastern Avenue.

The location of the pedestrian bridge was selected to provide pedestrian accessibility to the FAM and OKANA sites, Greenway Trail and Eagle Lake Trails located on the north and south banks of the River, respectively. The bridge location was also selected to provide a unique opportunity to view the Riversport starting line tower. An underground natural gas pipeline crosses the River west of Eastern Avenue. Therefore, the final proposed bridge location was chosen to avoid the pipeline (west of the pipeline) while providing convenient access to the FAM and OKANA sites.

Two pedestrian bridge structural beam options were considered, i.e., concrete and steel beams. While concrete beams are readily available, use of them would result in steep trail connections. The steel beam option provides more construction flexibility, allows for flatter trail connections, and is anticipated to have a longer design life than concrete beams. Therefore, the steel beam design option has been chosen.

# APPENDIX C-1 UNITED STATES FISH AND WILDLIFE CONCURRENCE LETTER



# **United States Department of the Interior**FISH AND WILDLIFE SERVICE

Ecological Services Program



Oklahoma Ecological Services Field Office 9014 East 21<sup>st</sup> Street Tulsa, Oklahoma 74129 (918) 581-7458 (Office) / (918) 581-7467 (Fax)

Date:			
To:	_		
Project Name:			
Consultation Code:			

Dear Project Proponent:

Thank you for using the U.S. Fish and Wildlife Service (Service) Oklahoma Ecological Services Field Office (ESFO) online project review process. By providing this letter in conjunction with your complete project review package, you are certifying that you have accurately completed the USFWS Online Project Review Process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. Concurrence with "not likely to adversely affect" determinations does not provide any exemption for violations of section 9 of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA) or "take" of federally-listed species. The Federal action agency is ultimately responsible for ensuring compliance with the ESA and any take that occurs due to your proposed action would be considered a violation under section 9 of the ESA.

This letter and the enclosed project review package complete the review of your project in accordance with the ESA. This letter also provides information for your project review under the National Environmental Policy Act (National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C.4321-4347, 83 Stat. 852), as amended.

information. If the Oklahoma ESFO determines that the package is not complete, or that additional coordination is necessary, we will contact you. If, after 45 days from the date of your email submittal of your project review package, the Oklahoma ESFO has not contacted you, consider your section 7 consultation complete. The proposed action consists of: Project start and completion dates: Federal agency or federal program providing a permit, grant, authorization, loan, etc. associated with the proposed project and how that agency is associated with your project: Federal Agency/Program Point of Contact (name, phone, and email address):

A copy of this letter, with all forms completed, and the project review package must be emailed to **okprojectreview@fws.gov** for this certification to be valid. This letter and the project review package will be maintained in Service records. **Please allow the Oklahoma ESFO 45 days to review your** 

The species conclusions table in the enclosed project review package summarizes your ESA conclusions. These conclusions resulted in "not likely to adversely affect/modify" determinations for listed species and critical habitat in relation to potential effects of your proposed project. We certify that the use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with determinations of "not likely to adversely affect" for listed species and critical habitat reached by proper use of this process. For projects where this particular determination is reached, additional coordination with this office is not needed.

Candidate species are not legally protected pursuant to the ESA. However, the Service encourages efforts to avoid or minimize adverse impacts to them from project effects. Some federal agencies have standing policies that grant limited protections to candidate species. Conservation of candidate species now may preclude future needs to federally list them as endangered or threatened, at which point their legal protection would become required. Please contact this office for additional coordination if your project action area contains candidate species.

Should project plans change or if additional information on the distribution of listed species or critical habitat becomes available, this determination may be reconsidered. You should re-visit the Service's Information, Planning, and Conservation (IPaC) website at <a href="http://ecos/fws.gov/ipac/">http://ecos/fws.gov/ipac/</a> within 90 days of project initiation to ensure species information is correct. If new species or critical habitat is identified, this letter is no longer valid and a new project package should be submitted to the Oklahoma ESFO.

Information about the online project review process including instructions and use, species information, and other information regarding project reviews within Oklahoma is available at our website: <a href="http://www.fws.gov/southwest/es/oklahoma/">http://www.fws.gov/southwest/es/oklahoma/</a>. If you have any questions, please call 918-581-7458 or send an email message to <a href="http://www.fws.gov/southwest/es/oklahoma/">OKProjectReview@fws.gov/southwest/es/oklahoma/</a>.

Sincerely, /s/ Kenneth Collins Field Supervisor

**Enclosures:** 

1) ENTIRE PROJECT REVIEW PACKAGE (check those you are including):
☐ Species Conclusion Table (required)
☐ IPaC Species List and Action Area map (required)
☐ This letter (Online Concurrence Letter) (required)
☐ Additional maps (recommended for adequate review)
2) Other relevant project data/documents

# APPENDIX C-2 UNITED STATES FISH AND WILDLIFE UPDATED SPECIES LIST



## United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Oklahoma Ecological Services Field Office 9014 East 21st Street Tulsa, OK 74129-1428 Phone: (918) 581-7458 Fax: (918) 581-7467

In Reply Refer To: February 05, 2024

Project Code: 2023-0098923

Project Name: Oklahoma River Projects - Pedestrian Bridge & Boat Dock

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

## To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

**Migratory Birds**: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Project code: 2023-0098923 02/05/2024

## Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

## **OFFICIAL SPECIES LIST**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Oklahoma Ecological Services Field Office 9014 East 21st Street Tulsa, OK 74129-1428 (918) 581-7458

## PROJECT SUMMARY

Project code: 2023-0098923

Project Code: 2023-0098923

Project Name: Oklahoma River Projects - Pedestrian Bridge & Boat Dock

Project Type: Recreation - New Construction

Project Description: CITY OF OKLHOMA CITY PROPOSES CONSTRUCTION OF A

BOAT DOCK AND PEDESTRIAN BRIDGE ALONG THE NORTH

**CANADIAN RIVER** 

## **Project Location:**

The approximate location of the project can be viewed in Google Maps: <a href="https://www.google.com/maps/@35.4617323,-97.47627661314974,14z">https://www.google.com/maps/@35.4617323,-97.47627661314974,14z</a>



Counties: Oklahoma County, Oklahoma

Project code: 2023-0098923 02/05/2024

## **ENDANGERED SPECIES ACT SPECIES**

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## **MAMMALS**

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i>	Proposed
No critical habitat has been designated for this species.	Endangered
Species profile: https://ecos.fws.gov/ecp/species/10515	Ö

## **BIRDS**

NAME	STATUS

## Piping Plover Charadrius melodus

Threatened

Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except

those areas where listed as endangered.

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/6039

## Rufa Red Knot Calidris canutus rufa

Threatened

There is **proposed** critical habitat for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>

## Whooping Crane Grus americana

Endangered

Population: Wherever found, except where listed as an experimental population

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

Species profile: <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>

Project code: 2023-0098923 02/05/2024

## **INSECTS**

NAME STATUS

Monarch Butterfly Danaus plexippus

Candidate

No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>

## **CRITICAL HABITATS**

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

# USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

## **BALD & GOLDEN EAGLES**

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act<sup>1</sup> and the Migratory Bird Treaty Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats<sup>3</sup>, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

- 1. The Bald and Golden Eagle Protection Act of 1940.
- 2. The Migratory Birds Treaty Act of 1918.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

## There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME BREEDING SEASON

## Bald Eagle Haliaeetus leucocephalus

https://ecos.fws.gov/ecp/species/1626

Breeds Sep 1 to Jul 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

## **Probability of Presence (■)**

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

## **Breeding Season** (

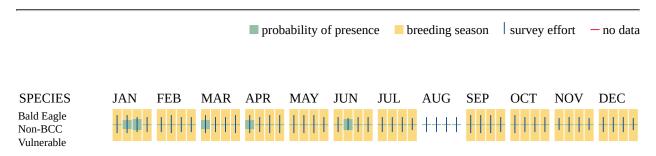
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

## Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

## No Data (-)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <a href="https://www.fws.gov/program/eagle-management">https://www.fws.gov/program/eagle-management</a>
- Measures for avoiding and minimizing impacts to birds <a href="https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds">https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds</a>

- Nationwide conservation measures for birds <a href="https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf">https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf</a>
- Supplemental Information for Migratory Birds and Eagles in IPaC <a href="https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action">https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action</a>

## **MIGRATORY BIRDS**

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a>	Breeds Sep 1 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9406">https://ecos.fws.gov/ecp/species/9406</a>	Breeds Mar 15 to Aug 25
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9443">https://ecos.fws.gov/ecp/species/9443</a>	Breeds Apr 20 to Aug 20
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a>	Breeds elsewhere

NAME	BREEDING SEASON
Little Blue Heron <i>Egretta caerulea</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9477">https://ecos.fws.gov/ecp/species/9477</a>	Breeds Mar 10 to Oct 15
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9398">https://ecos.fws.gov/ecp/species/9398</a>	Breeds May 10 to Sep 10

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

## **Probability of Presence (**■**)**

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

## **Breeding Season** (

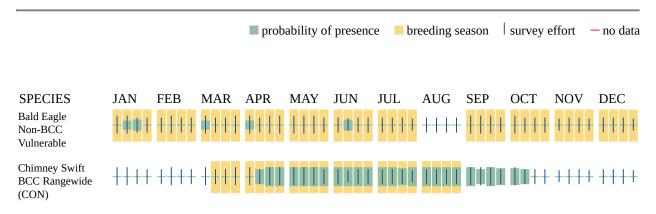
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

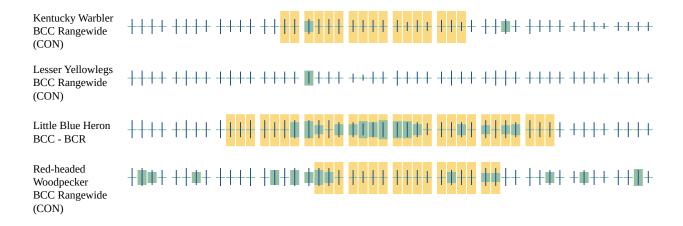
## Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

## No Data (-)

A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management <a href="https://www.fws.gov/program/eagle-management">https://www.fws.gov/program/eagle-management</a>
- Measures for avoiding and minimizing impacts to birds <a href="https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds">https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds</a>
- Nationwide conservation measures for birds <a href="https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf">https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf</a>
- Supplemental Information for Migratory Birds and Eagles in IPaC <a href="https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action">https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action</a>

## **WETLANDS**

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

## FRESHWATER POND

- PUSCx
- PAB4F
- PUBFx
- PUBFh
- PUBHx

#### FRESHWATER FORESTED/SHRUB WETLAND

• PFO1A

Project code: 2023-0098923 02/05/2024

- PSS1Ax
- PSS1A

## FRESHWATER EMERGENT WETLAND

- PEM1Fx
- PEM1F
- PEM1Cx
- PEM1C

## LAKE

• L1UBHx

## RIVERINE

- R5UBF
- R2USC
- R2UBH
- R4SBC

## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity
Name: Melissa Boothe

Project code: 2023-0098923

Address: 3020 NW 149th Street

City: Oklahoma City

State: OK Zip: 73134

Email mboothe@teimdesign.com

Phone: 4057521122

## LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

Name: Tony Clyde

Email: tony.clyde@usace.army.mil

Phone: 9186697556

# APPENDIX C-3 BIOLOGICAL ASSESSMENT REPORT

## **BIOLOGICAL ASSESSMENT REPORT**

OKLAHOMA RIVER IMPROVEMENTS/ BOAT DOCK & PEDESTRIAN BRIDGE City of Oklahoma City

> Prepared for: TEIM Design 3020 Northwest 149th Street Oklahoma City, OK 73134 and City of Oklahoma City

> > Prepared by: Ellis Environmental LLC 922 Pineapple Road South Daytona, FL 32119

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# ENDANGERED, THREATENED AND CANDIDATE SPECIES, DESIGNATED CRITICAL HABITAT, BALD EAGLE AND MIGRATORY BIRD ASSESSMENTS

<u>Project</u>: Oklahoma River Improvements / Boat Dock & Pedestrian Bridge

County: Oklahoma

Water Body: North Canadian River (aka: Oklahoma River)

USFWS Project Code: 2023-0098923

Email used for IPAC: Renee@ellisenvironmental.org

#### 1. PROJECT OVERVIEW

The project's general location is south of I-40/I-35 and East/West of Eastern Avenue (First Americans Boulevard) - Oklahoma City, Oklahoma (See **Figure 1**). The City of Oklahoma City proposes the construction of a boat dock and pedestrian bridge as recreational improvements in the Oklahoma River.

#### 1.1 Federal Nexus

Ellis Environmental, LLC was retained by TEIM (Client) on behalf of the city of Oklahoma City to conduct a biological assessment for the Oklahoma River Projects in Oklahoma County, Oklahoma. The project requires oversight from the US Army Corps of Engineers (USACE) and is subject to Section 7(c) of the Endangered Species Act (ESA) of 1973, as amended. Section 7 of the ESA requires that, through consultation with the U.S. Fish and Wildlife Service (USFWS), federal actions do not jeopardize the continued existence of any threatened, endangered, or proposed species or result in the destruction or adverse modification of critical habitat. This assessment evaluates the potential effects of the proposed project on species that are federally listed under the ESA. Specific project design elements are identified that avoid or minimize adverse effects of the proposed project on listed species and designated critical habitat.

## 1.2 Project Description

Recreation/Enhancement

## Description of the **existing** conditions and reason for proposed project

The area adjacent to the south bank of the North Canadian River (aka "Oklahoma River") is currently under construction for the OKANA resort and indoor waterpark. The proposed EMBARK First Americans Museum (FAM) boat dock and a pedestrian bridge will be built in an area along the south bank of the Oklahoma River, which will provide access to the existing FAM as well as the OKANA resort and indoor waterpark. The sole use of this south riverbank area is recreational, including not only the FAM and proposed OKANA resort but also flatwater canoe/kayak and rowing activities sponsored by RIVERSPORT OKC, an official US Olympic & Paralympic training site. The pedestrian bridge will connect to the north bank of the river and the existing Greenway Trail, a paved trail used by both bicycle and pedestrian traffic. Both the north and south bank areas are owned by the FAM development company, who is in full cooperation with the City of Oklahoma City in development of these areas for recreational use.



## <u>Description of **proposed** improvements</u>

The City of Oklahoma City is proposing recreational enhancements in and along the North Canadian River (aka "Oklahoma River"). The environmental study footprint encompasses the construction activities associated with the following projects as outlined below. Refer to **Figure 2** for the proposed locations of the improvements.

- 1. <u>Boat Dock</u>: The EMBARK FAM boat dock project is funded by a grant from the Federal Transit Administration and will be the sixth dock on the North Canadian River serving the EMBARK ferry system. The boat dock will be a fixed structure cut into the North Canadian River bank. This boat dock will provide access to the existing FAM and proposed OKANA resort and indoor waterpark. Terraced seating near the dock will allow observation of the starting line of RIVERSPORT boat races.
- 2. Pedestrian Bridge: The primary objective of the MAPS4 Pedestrian Bridge project is to improve neighborhoods, quality of life, and transform public spaces. The pedestrian bridge will connect to the north bank of the river and the existing Greenway Trail, a paved trail used by both bicycle and pedestrian traffic. The southern point of the pedestrian bridge will be built just east of the boat dock's terraced seating and provide connection to the bicycle/pedestrian trail meandering along the north bank of the river. The pedestrian bridge will span the Oklahoma River, near the FAM site, downstream from the Oklahoma Riversport Foundation starting line tower. At this location, the bridge will provide a unique view for special events on the river and everyday use by connecting the Greenway and Eagle Lake Trails located on either riverbank. The proposed bridge will accommodate pedestrian foot traffic have adequate clearance for river traffic such as the Riversport modular dock system, Oklahoma River Cruises, and Public Works maintenance boats. Additionally, the bridge will aesthetically complement the surrounding space, particularly, the OKANA site.

The proposed bridge has a 20' clear width and is approximately 485' long with a consistent low chord elevation of 1179' to provide adequate clearance to the water surface, approximately 14'. There are five spans resting on four, 72" drilled shafts. The pier spacings were coordinated with the Riversport to ensure the bridge will not impact the future eight rowing lanes and the associated modular dock system. Given the pier spacings, the bridge spans, from the south to north bank, are 88'10", 88'0", 88'0", 100'0", and 100'10". On either bank, the bridge abutments utilize vertical walls to minimize fill in the FEMA floodplain/floodway.

## **Construction Sequence**

The bridge piers will need to be constructed by either utilizing coffer dams, work platforms, barges, and/or lowering the Eastern Basin. The ideal window of time to lower the basin is from November 2023 through February 2024 as there will be fewer Riversport racing events in the winter. Additionally, this will allow Public Works to complete maintenance repairs on the Eastern Dam, as well as other maintenance in the Regatta Park area.

Once the piers have been constructed, the steel beams need cranes to be laid into place. The steel beams have the potential of being constructed on the riverbank and launched in a cantilever fashion from the abutments over to the bridge piers. The steel beam launch method would limit the amount of time the bridge contractor needs to be in the water, resulting in less interference with boats. After the beams and deck forms have been placed, the concrete deck



will need to be poured, which can be done with a pump truck from the riverbank. As each bridge span cures, the concrete pump truck will be able to drive onto the cured bridge deck to reach the next span.

Ideally, the contractor will have access to both riverbanks to provide greater flexibility in their construction methods. For the north bank, a construction entrance will be needed from the I-40 eastbound off-ramp for Eastern Avenue. However, the south bank may not be readily available, given the ongoing construction for the OKANA site. Further coordination will be needed with the OKANA developers to determine access to the south bank.

## 1.3 Project Area and Setting

Project Location		Environmental Study Footprint		Ecoregion & Game Type	
Section Township & Range	Lat/Long (NAD 83)	Dimensions	Acreage	Level IV Ecoregion (Woods et al. 2005)	Game Type (Duck and Fletcher 1943)
Section 2 T11N R3W Section 1 T11N R 3W	Start: 35.460573 N, 97.483526 W End: 35.463593 N, 97.469275 W	Study footprint ranges from 495' to 1,025' wide along Oklahoma River and is 4,530' in length	66.09	Cross Timbers Transition	Bottomland

## **Action Area:**

The project's Action Area includes a 1-mile buffer surrounding the Environmental Study footprint to accommodate potential species impacts. See **Figure 3**.

## 2. FEDERALLY LISTED SPECIES AND DESIGNATED CRITICAL HABITAT

## Species Range and Occurrence Evaluation (Check √ all that apply)

Species	IPaC <sup>1</sup>	Watershed <sup>2</sup>	Water Body <sup>3</sup>	Records <sup>4</sup>
	Check if Yes	Check if YES	Check if Yes	Check if Yes
Whooping Crane	$\boxtimes$			
Piping Plover	×			
Red Knot	×			
Tri-colored Bat	×			
Monarch Butterfly	$\boxtimes$			

<sup>&</sup>lt;sup>1</sup>Species is on the Proposed Project's IPaC List



<sup>&</sup>lt;sup>2</sup>Action Area is within a watershed associated with occupied water bodies

<sup>&</sup>lt;sup>3</sup>Action Area includes an occupied water body

<sup>&</sup>lt;sup>4</sup>Project site within 5 miles of known records

Designated or Proposed Critical Habitat	Action Area includes Designated Critical Habitat	
	(Check √ if Yes)	
Whooping Crane		

Study footprint is within what percentage **Whooping Crane** migratory corridor: **80%**The study footprint is not within 15 miles of Salt Plains NWR, Hackberry Flat, or Foss Reservoir.

#### 3. ENVIRONMENTAL BASELINE

## 3.1. Ecological Processes and Conditions

Soils (Soil Map of Oklahoma by Carter and Gregory 2008)

oons (oon map or oman	2010 (2011 111ap 21 211ar 21 24 24 25 arra 21 26 27 = 2007		
Soil Class	Central Rolling Red Prairies		
Soil Name	Port-Dale-Yahola-Gaddy-Gracemore-McLain-Relnach		
Soil Type	Mollisols; Entisols		
Soil Characteristics	Very deep, sandy, loamy and silt soils on nearly level slopes (1%)		

## Climate (Woods et al. 2005)

Precipitation	Mean annual inches	29-38
Growing Season	Number of days	205-225
Mean Temperatures	Summer min/max	70/94
	Winter min/max	23/49

## River System

North Canadian River (aka: Oklahoma River), Crooked Oak Creek & unnamed tributaries to North Canadian River

#### Land Use and Land Ownership

·		
From Woods et al. 2005	Mixture of rangeland and cropland. Oil and gas fields occ Overgrazing, channelization, and releases of water from upstre	
	flood control reservoirs have promoted channel incision.	
From Field investigation	Urban/Commercialized with oil/gas fields nearby.	

## Terrestrial and Aquatic Community Descriptions (based on field site visit)

Site investigation was conducted on June 14, 2023. **Figure 2** presents locations of photographs taken during the site visit. The study footprint is within a commercialized/urban area of Oklahoma City paralleling I-40/I-35. The Oklahoma River is impounded at Eastern Avenue with a low water dam. The river was actively being used by individuals for recreation on the day of the site visit. Additionally, transient individuals and their belongings were observed under the Eastern Avenue bridge. The south riverbank (west of Eastern Avenue) exhibited graded topsoil and was under active construction for the OKANA resort. The river is incised throughout the study footprint due to prior construction activities and/or urbanization. The vegetation along the lower terrace of the river banks exhibited dominant herbaceous vegetation such as cheatgrass (*Bromus sp.*), dallisgrass (*Paspalum dilatatum*), Johnson grass



(Sorghum halepense), Aster spp., tickseed (Coreopsis sp.) and sedge (Carex sp). The upper terrace of the north bank (west of Eastern Avenue) consists of a bike trail and appears to have been planted with native vegetation consisting of species such as beeblossom (Gaura lindheimeri), lizard-tail Guara (Oenothera curtiflora), lemon mint (Monarda citriodora), black-eyed Susan (Rudbeckia hirta), wine cup (Callirhoe involucrate), white prickly poppy (Argemone albiflora), little bluestem (Schizachyrium scoparium), and golden crownbeard (Oenothera speciosa). One small, isolated wetland was present between I-40 and the bike trail. Hydrophytic vegetation at this location was dominated by sedge (Carex sp.). The river located east of Eastern Avenue (downstream of the existing low water dam) is deeply incised and exhibited sandbar habitat. A limited amount of riparian forest was present along the upper terrace of the south bank associated with two tributaries. The riparian species present along the tributaries include American Elm (Ulmus americana), sugarberry (Celtis laevigata), red cedar (Juniperus virginiana), and smooth sumac (Rhus glabra). The Oklahoma Climatological Survey's Drought Monitor depicts this portion of the state as being "abnormally dry" for the past 12 months.

## 3.2 Species Habitat Analysis

Pedestrian survey of entire study footprint (including 300-foot work zone buffer in karst areas)	X
Bridge/Structure inspected for bat use (Completed Bridge Inspection Form – Appendix C)	X

SPECIES	HABITAT				
Whooping Crane	Shallowly-submerged sandbars in large river channels occur within the <b>0.25</b> miles of the Environmental Study Footprint.				
	If within the 75% migration corridor, provide the number of acres of emergent wetlands that occur within the <b>Environmental Study Footprint</b> .				
	Croplands suitable for foraging occur within the <b>0.25 miles of the Environmental Study Footprint</b> and is within the 95% migration corridor.				
Piping Plover	Sparsely vegetated sandy or gravelly shorelines and islands associated with the major river systems occur within the <b>0.25 miles of the Environmental Study Footprint.</b>	X			
	Salt flats or mudflats associated with reservoirs occur within the <b>0.25 miles of</b> the Environmental Study Footprint.				
Red Knot	Mudflats associated with reservoirs occur within the <b>0.25 miles of the Environmental Study Footprint.</b>				
Tricolored Bat	Limestone karsts features occur within <b>0.5 mile of the Environmental Study Footprint.</b>				
	Live or dead trees/and or snags with a DBH of >= 3 inches occur within the <b>Environmental Study Footprint</b> .				
	Barns or sheds occur within the <b>Environmental Study Footprint.</b>				



SPECIES	HABITAT			
Tricolored Bat	Linear treed features such as fencerows, riparian forests, and other wooded corridors occur within <b>1 mile of the Environmental Study Footprint.</b> Wooded corridors may be dense or loose aggregates of trees with variable amounts of canopy closure.			
continued	Number of acres of forested/wooded area within the <b>Environmental Study Footprint</b> (include shapefiles). Include forests and woodlots, as well as linear features such as fencerows, riparian forests, and other wooded corridors. Wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure.	0		
Monarch Butterfly	Presence of milkweed ( <i>Asclepias sp.</i> ) species within the <b>Environmental Study Footprint.</b>			
butterny	Presence of flowering or potentially flowering nectar plants (defined as forbs that can provide nectar for monarchs at some point in the growing season) within the <b>Environmental Study Footprint</b> .	×		
	Presence of additional native habitat within the <b>Environmental Study Footprint.</b>			

## 3.3 Bridge, Culvert & Structure Assessment Form for All Listed Bat Species

A field assessment of structures was conducted for bat use. However, all bridge and structures are 1,000 feet or more from suitable bat habitat (e.g. an urban or agricultural area without suitable foraging habitat or corridors linking the bridge, culvert or structure to suitable foraging habitat). USFWS's "Bridge/Culvert and Structure Bat Assessment Form" was completed and included in **Appendix C** for reference.

## 4. ANALYSIS OF EFFECTS

## 4.1 Direct Effects

Species/ Resource	Habitat impacts expected from project activities	Specific actions of the project and the results of those actions on species habitats.  If habitat is checked "yes" within the action area identified above will not be impacted, describe why.
Whooping Crane		Shallowly submerged sandbar habitat is present within the study footprint. One small emergent wetland (isolated) is present within the study footprint; however, due to its size, it is not likely to support foraging habitat for the Whooping Crane. The construction projects may have potential noise impacts that could deter use of the on-site habitat and habitat within 0.25 miles resulting in short-term, temporary impacts to foraging habitat. However, due to the on-site construction activities currently underway, any effects of this project to the Whooping Crane would be discountable.



Piping Plover	Shoreline habitat associated with the river is within the study footprint. The construction projects may have potential noise impacts that could deter use of the on-site shoreline habitat and habitat within 0.25 miles resulting in short-term, temporary impacts to foraging habitat. However, due to the on-site construction activities currently underway, any effects of this project to the Piping Plover would be discountable.
Tri-colored Bat	No suitable habitat is present within the study footprint as this is an urbanized area. However, noise disturbances associated with construction activities may cause deterrence from using nearby foraging and/or roosting habitat within the 1-mile travel corridor (Figure 4). This habitat is present along existing fence rows, riparian forests, and other wooded corridors. Due to the on-site construction activities currently underway, any effects of this project to the Tri-colored Bat would be discountable.
Monarch Butterfly	A small amount of suitable habitat consisting of flowering plants that may support monarch breeding or foraging was present within the study footprint. However, the construction activities associated with the projects will have no effects on these native plant areas.

## 4.2 Indirect Effects

**Long-term habitat alterations** 

Species/ Resource	Identify long-term, permanent changes in habitat
n/a	

## **Indirect land use impacts**

The proposed improvements may make this area a focal point for additional development, which could lead to increased habitat fragmentation and loss.

## 4.3 Interrelated and Interdependent Actions and Activities

The project's improvements could result in the development of new businesses outside of the project's footprint and utility relocations. An estimated four new businesses on 0.5 acre lots could result in a loss of 2 acres of potential Monarch Butterfly habitat.



USFWS TAILS Number:	2023-0098923
Project:	Oklahoma City – Oklahoma River Improvements

	CONCLUSION		ESA SECTION 7			NOTES AND DOCUMENTATION Check V all that apply			
SPECIES / DESIGNATED CRITICAL HABIT	Species Habitat present within the action area	Project Activities expected to impact habitat	No Effect	May affect, not likely to adversely affect	May affect, Likely to adversely affect	Field Studies	ONHI database	USFWS occupied waterbodies & watersheds	Whooping Crane Migration Corridor
Whooping Crane						×			×
Piping Plover				×		×	×		
Red Knot			×			×	×		
Tri-colored Bat	×			×		×	×		
Monarch Butterfly	×		×			×	×		



## 4.4 Conclusions

No Effect	Red Knot & Monarch Butterfly
May affect, not likely to adversely affect	Whooping Crane & Piping Plover
Not likely to jeopardize the continued	Tri-colored Bat
existence of the species – Proposed &	
Candidate species only (no conference	
required)	

## 5. BALD AND GOLDEN EAGLE PROTECTION ACT ASESSMENT

## 5.1 Bald Eagle Assessment

The Bald Eagle (*Haliaeetus leucocephalus*) is a large predatory bird protected by the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Activities that would disturb eagles are prohibited under the Bald and Golden Eagle Protection Act. "Disturb" means to agitate an eagle to the degree that causes or is likely to (1) cause injury, (2) interfere with breeding, feeding or sheltering behavior, or (3) nest abandonment.

Potential Bald Eagle Habitat Present	w/in Study Footprint	w/in 660- ft Buffer of Study Footprint	Details
Presence of Cottonwood, Sycamore, Pecan or Pine		×	American elm, sumac, sugarberry and red cedar trees and saplings were present east of Eastern Avenue along upper terrace of Oklahoma River and bike trail. No cottonwood, sycamore, pecan or pine trees were observed within the study footprint but may be present within 660'.
Open foraging areas with large trees		×	Open water areas with mature tree-lined edge habitat is within the 660-ft buffer along the Oklahoma River.
Distance to closest <u>perennial</u> water bodies	River or Lake	On site	Oklahoma River is on site
Potential Bald Eagle Nests Observed			None observed
Bald Eagles Observed in the general vicinity	×		None observed
General Description of Bald Eagle Nesting Habitat and Impact Determination, within the Study Footprint and within 660-ft of the Study Footprint	of mature Large trees suitable ne	trees just of sare preser esting and r nd nesting b	within the study footprint with scarce amounts outside of the southeastern study boundary. It within the 660-ft buffer which may provide roosting habitat. Therefore, suitable foraging, habitat is present within the 660-ft buffer near



Potential Bald Eagle Habitat Present	w/in Study Footprint	w/in 660- ft Buffer of Study Footprint	Details
---	----------------------------	---	---------

Bald Eagle habitat is present within the 660-ft buffer of the Study Footprint. Refer to **Figure 5** for the Bald Eagle habitat buffer and the proposed project improvements.

In order to avoid impacts to Bald Eagles, if Bald Eagles or their habitat are observed during the biological assessment, a survey for eagles and their nests will be conducted within 660 feet of the work zone, during the winter prior to, and within one year of, the start of construction. If a nest is found, appropriate conservation measures based on the National Bald Eagle Management Guidelines will be implemented.

## 6. MIGRATORY BIRD TREATY ACT (MBTA) ASSESSMENT

#### **6.1 Structure Assessment**

Cliff Swallows (*Petrochelidon pyrrhonota*) and Barn Swallows (*Hirundo rustica*) are small colonial and semi-colonial nesting birds protected by the federal Migratory Bird Treaty Act. Barn Swallows use man-made structures for nesting and live in close association with humans. Both species commonly use bridges and culverts in Oklahoma for nesting. Other migratory birds can also nest on transportation structures. See **Figure 6** for a depiction of migratory bird use of structures within the study footprint.

Identify ALL structures inclu	ding pipe culverts. LABEL according to	Approx.	Approx.	Approx.	
instructions within the cells	Number	Number	Number		
roadway over what feature.	dentify named streams where possible.	of Cliff	of Barn	of Eastern	
Provide shapefiles and map	according to LABEL, identifying pos/neg	Swallow	Swallow	Phoebe	
swallow structures		Nests	Nests	Nests	
Bridge #1: NBI# 26128 (First	Americans Blvd over Oklahoma River)	>100	-	1	
Bridge #2: NBI# 19839 (Re	eno Avenue Bridge over I-40/I-35 &	-	-	-	
Oklahoma River)					
Bike Path Bridge #1	-	-	-		
Bike Path Bridge #2	-	-	-		
Other MB and Nests	rican White	Pelican we	re observed		
Observed foraging within and around the Study Footprint.					
Based on existing plans, no work on suitable drainage structures will occur					

In order to avoid impacts to migratory birds, if structures are being used by these birds, any activities that may destroy active nests, eggs or birds shall be completed between September 1 and February 28, when nests are not occupied. If seasonal avoidance cannot be accomplished, structures shall be protected from new nest establishment prior to March 1, by means that do not result in death or injury to these birds.



## 6.2 Birds of Conservation Concern

Species Identified on IPaC list	Breeding Season
Chimney Swift (Chaetura pelagica)	March 15 to August 25
Kentucky Warbler (Oporornis formosus)	April 20 to August 20
Lesser Yellowlegs ( <i>Tringa flavipes</i> )	Breeds elsewhere
Little Blue Heron ( <i>Egretta caerulea</i> )	March 10 to October 15
Red-headed Woodpecker (Melanerpes erythrocephalus)	May 10 to September 10

The Chimney Swift nests in tree cavities or vertical artificial structures (such as chimneys). The Red-headed Woodpecker nests in tree cavities. The Kentucky Warbler utilizes forested areas for ground nesting. The Little Blue Heron nests in trees or shrubs, usually 3'-15' above ground or water. This project does not involve activities which would remove any structures or trees/forested areas; therefore, no affects to these species are anticipated. The Lesser Yellowlegs does not breed in the project's vicinity; therefore, no affects to this species are anticipated.

In order to avoid impacts to ground nesting and tree nesting USFWS Birds of Conservation Concern, ground disturbance and/or the removal of trees and shrubs will be restricted to areas within the actual limits of construction, and all aspects of the project (e.g. temporary work areas, alignments) will be modified to avoid ground disturbance and/or tree removal, if possible.

#### 6.3 Interior Least Tern

Sparsely vegetated islands or sandbars along large rivers, with nearby areas of	$\boxtimes$	
shallow water, occur within the 0.25 miles of the Environmental Study Footprint.		

Suitable habitat is present within the study footprint and the 0.25-mile migratory bird buffer. The proposed boat dock and pedestrian bridge will have no impacts to this habitat; therefore, no affects to this species are anticipated.

Interior Least Terns are protected under the Migratory Bird Treaty Act. In order to avoid impacts to Interior Least Terns, any activities that may destroy active nests, eggs or birds shall be completed between September 1 and April 30, outside the nesting season. If construction activities will occur during the active nesting season, a 0.25-mile no-work-zone buffer from the Ordinary High Water Mark of the River will be established until the nesting survey can be completed. Any Interior Least Terns nesting in the area must be protected by limiting all work within 0.25 miles of any nesting colonies until after September 1 and be completed by April 30, the following year.



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  <u>Identification, All About Birds, Cornell Lab of Ornithology</u> and <u>Red-headed Woodpecker Life</u>
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  Red Knot (Calidris canutus) | U.S. Fish & Wildlife Service (fws.gov)
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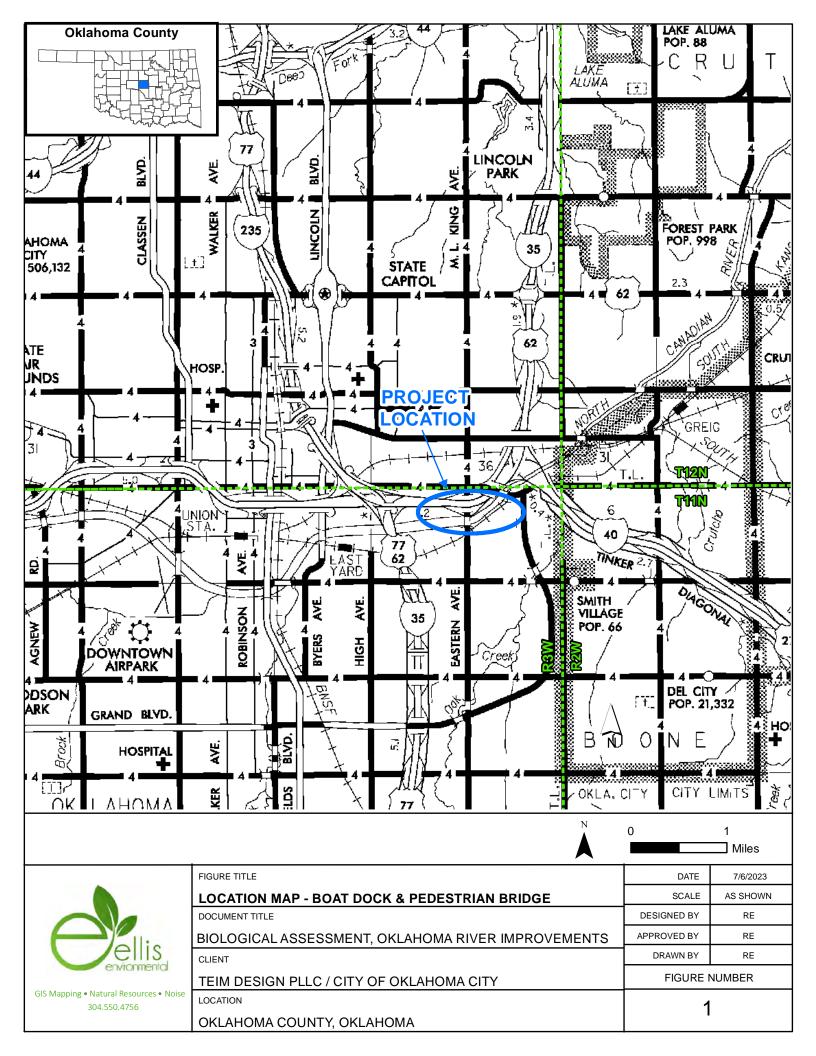
  <u>Species Profile for Tricolored bat(Perimyotis subflavus) (fws.gov)</u>
- U.S. Fish and Wildlife Service. "Whooping Crane" and *Travel Corridor Map Shapefiles*Species Profile for Whooping crane(Grus americana) (fws.gov)
- U.S. Fish and Wildlife Service. Federally listed, proposed and candidate aquatic species and aquatic dependent species watersheds and occupied water bodies of Oklahoma <a href="https://www.fws.gov/southwest/es/oklahoma/add">https://www.fws.gov/southwest/es/oklahoma/add</a> docs.htm



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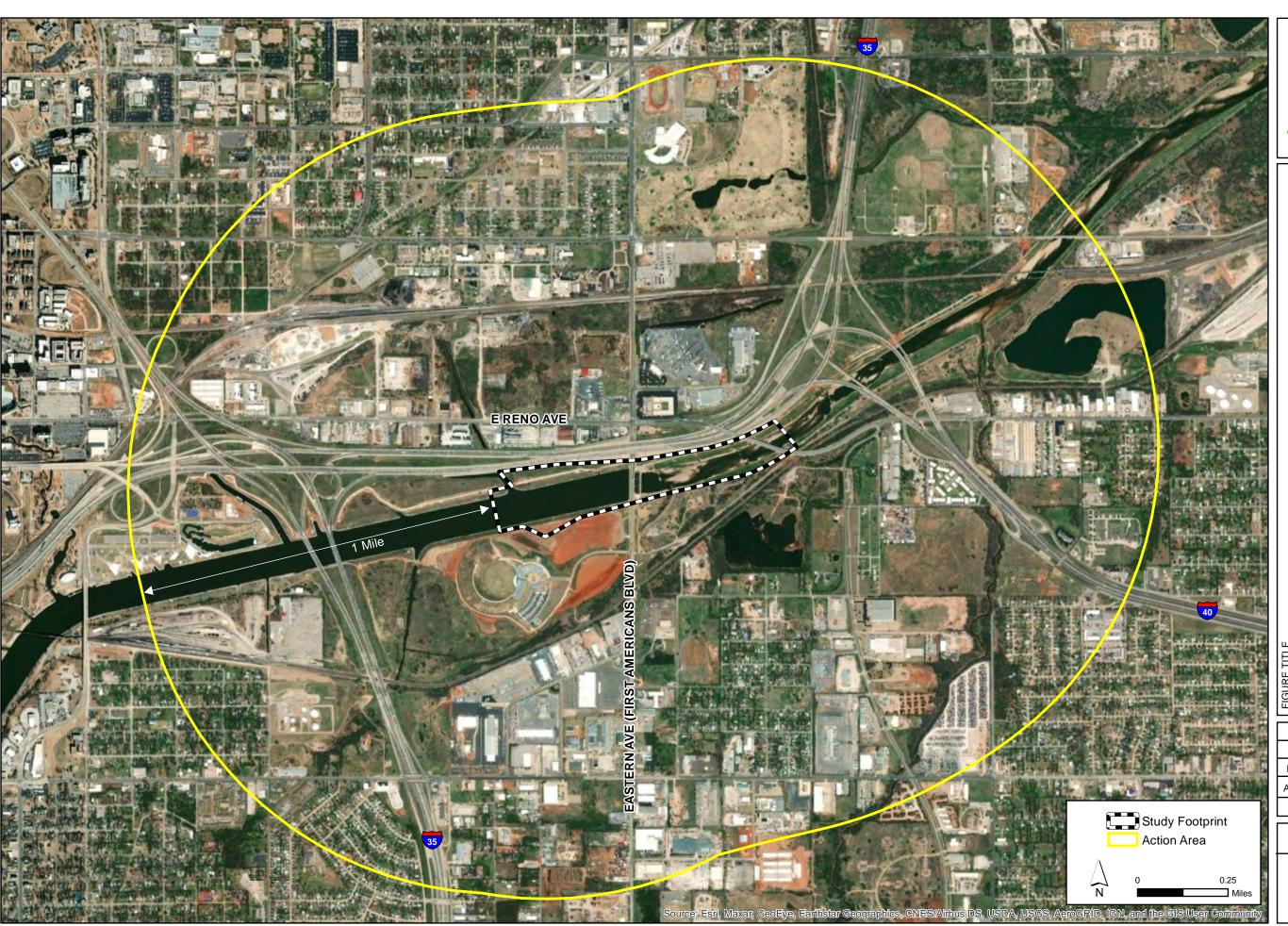
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OKLAHOMA COUNTY, OKLAHOMA

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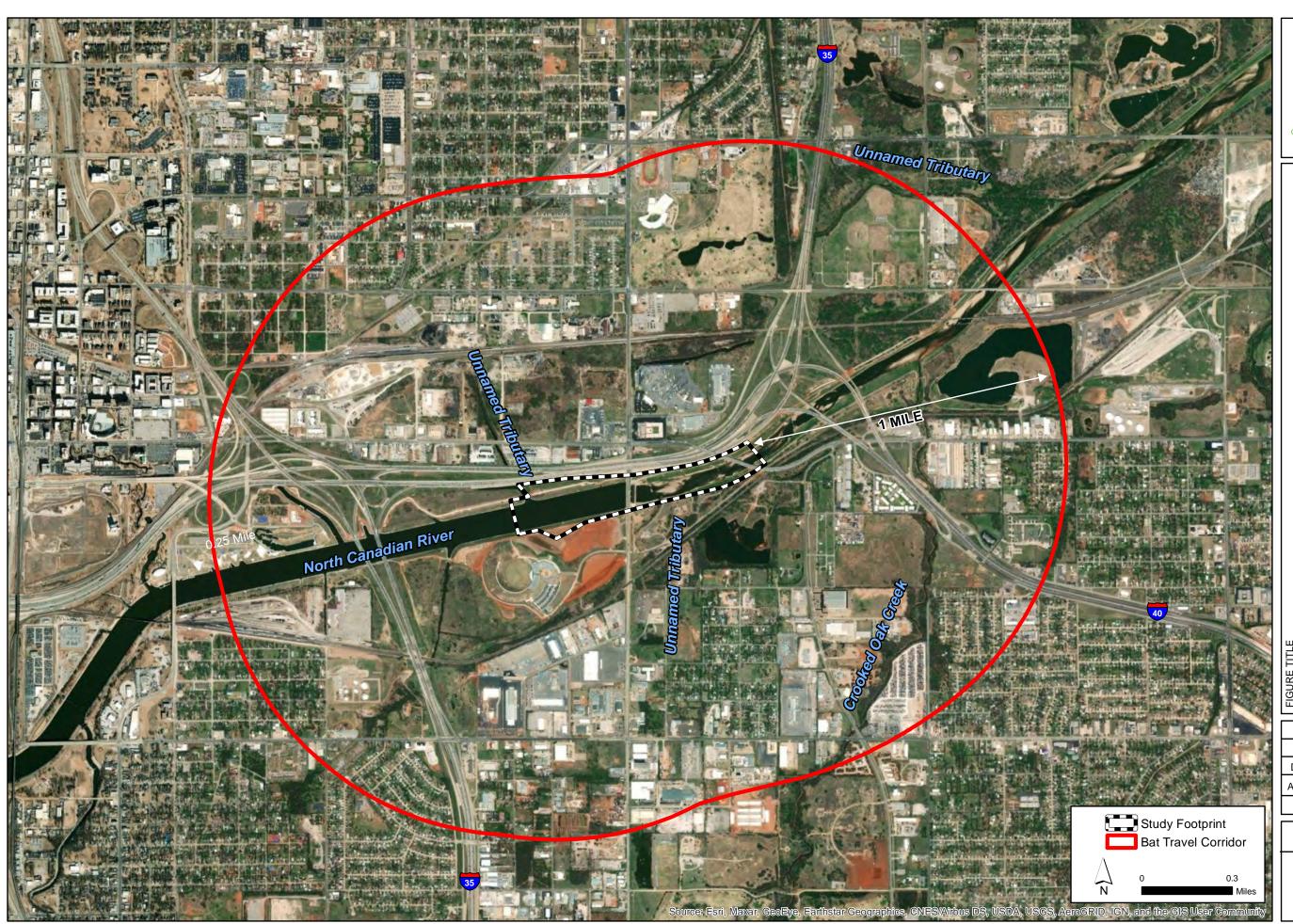




**OKLAHOMA RIVER IMPROVEMENTS** 

OKLAHOMA COUNTY, OKLAHOMA DATE 7/6/2023 SCALE AS SHOWN DESIGNED BY RE APPROVED BY RE DRAWN BY RE

FIGURE NUMBER





AVEL CORRIDOR MAP - BOAT DOCK & PEDESTRIAN BRIDC

 DATE
 7/6/2023

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 AS SHOWN

 DESIGNED BY
 RE

 APPROVED BY
 RE

 DRAWN BY
 RE

OKLAHOMA COUNTY, OKLAHOMA

FIGURE NUMBER

4





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OKLAHOMA COUNTY, OKLAHOMA

FIGURE NUMBER

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OKLAHOMA COUNTY, OKLAHOMA

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Photo 1: Oklahoma River. View from Bridge #1 over First Americans Blvd facing west.



**Photo 2**: Swallow nests along Bridge #1. View from south of bridge facing north.



Photo 3: OKANA construction area. View from south bank of Oklahoma River, west of Bridge #1 facing east.



Photo 4: Pedestrian Bridge #1. View facing northwest.



**Photo 5**: Along Bike Path. View from upper terrace of the north bank of Oklahoma River, west of Bridge #1 facing east.



**Photo 6**: Pedestrian Bridge #2. View facing southwest.



Photo 7: Intermittent tributary convergence to Oklahoma River. View facing southwest.



**Photo 8**: Low water dam (Bridge #1). View from north bank of Oklahoma River facing south.



Photo 9: Tributary convergence to Oklahoma River. View facing northeast.



Photo 10: Tributary convergence to Oklahoma River. View facing northeast.



Photo 11: View from south bank of Oklahoma River, east of low water dam (Bridge #1) facing westward.



Photo 12: View from east of low water dam facing southward. Pipeline bridge crossing in the background.



# United States Department of the Interior



#### FISH AND WILDLIFE SERVICE

Oklahoma Ecological Services Field Office 9014 East 21st Street Tulsa, OK 74129-1428 Phone: (918) 581-7458 Fax: (918) 581-7467

In Reply Refer To: June 28, 2023

Project Code: 2023-0098923

Project Name: NORTH CANADIAN RIVER IMPROVEMENTS

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

**Migratory Birds**: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

06/28/2023

# Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

06/28/2023

# **OFFICIAL SPECIES LIST**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Oklahoma Ecological Services Field Office 9014 East 21st Street Tulsa, OK 74129-1428 (918) 581-7458

# **PROJECT SUMMARY**

Project Code: 2023-0098923

Project Name: NORTH CANADIAN RIVER IMPROVEMENTS

Project Type: Recreation - New Construction

Project Description: CITY OF OKLHOMA CITY PROPOSES CONSTRUCTION OF A

BOAT DOCK AND PEDESTRIAN BRIDGE ALONG THE NORTH

**CANADIAN RIVER** 

#### **Project Location:**

The approximate location of the project can be viewed in Google Maps: <a href="https://www.google.com/maps/@35.461806100000004">https://www.google.com/maps/@35.461806100000004</a>,-97.47627020289856,14z



Counties: Oklahoma County, Oklahoma

06/28/2023 3

#### **ENDANGERED SPECIES ACT SPECIES**

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

#### **MAMMALS**

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i>	Proposed
No critical habitat has been designated for this species.	Endangered
Species profile: https://ecos.fws.gov/ecp/species/10515	8

#### **BIRDS**

NAME	STATUS

#### Piping Plover Charadrius melodus

Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except

those areas where listed as endangered.

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/6039

#### Red Knot Calidris canutus rufa

Threatened

There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/1864

#### Whooping Crane Grus americana

Endangered

Threatened

Population: Wherever found, except where listed as an experimental population

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

Species profile: <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>

#### **INSECTS**

NAME

## Monarch Butterfly Danaus plexippus

Candidate

No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>

#### **CRITICAL HABITATS**

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

# USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

06/28/2023

# **MIGRATORY BIRDS**

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20

NAME	BREEDING SEASON
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a>	Breeds elsewhere
Little Blue Heron <i>Egretta caerulea</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 10 to Oct 15
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10

#### PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

#### **Probability of Presence (■)**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

#### **Breeding Season** (**•**)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

#### Survey Effort (|)

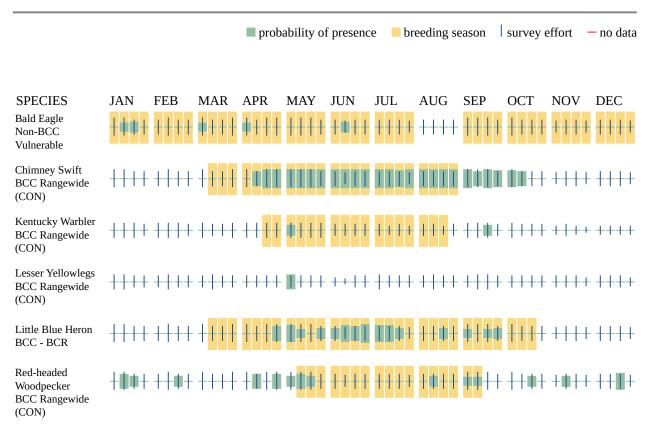
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

#### No Data (-)

A week is marked as having no data if there were no survey events for that week.

#### **Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds <a href="https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds">https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds</a>

Nationwide conservation measures for birds <a href="https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf">https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf</a>

#### **MIGRATORY BIRDS FAQ**

# Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

# What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern</u> (<u>BCC</u>) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <a href="Rapid Avian Information">Rapid Avian Information</a> Locator (RAIL) Tool.

# What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

#### How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the <u>RAIL Tool</u> and look

at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

#### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <a href="Eagle Act">Eagle Act</a> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

#### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the <a href="Northeast Ocean Data Portal">Northeast Ocean Data Portal</a>. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the <a href="NOAA NCCOS Integrative Statistical Modeling">NOAA NCCOS Integrative Statistical Modeling</a> and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic <a href="Outer Continental Shelf">Outer Continental Shelf</a> project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

#### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

#### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be

aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

06/28/2023

# **WETLANDS**

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

#### FRESHWATER POND

- PUBFh
- PAB4F
- PUBHx
- PUBFx
- PUSCx

#### FRESHWATER EMERGENT WETLAND

- <u>PEM1F</u>
- PEM1C
- PEM1Cx
- PEM1Fx

#### RIVERINE

- R2UBH
- R4SBC
- R2USC
- R5UBF

#### LAKE

L1UBHx

#### FRESHWATER FORESTED/SHRUB WETLAND

- <u>PFO1A</u>
- PSS1Ax
- PSS1A

# **IPAC USER CONTACT INFORMATION**

Agency: Oklahoma City city

Name: Renee Ellis

Address: 3020 NW 149TH ST City: Oklahoma City

State: OK Zip: 73134

Email renee@ellisenvironmental.org

Phone: 3045504756

## LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

# **USFWS Bridge/Culvert and Structure Bat Assessment Form**

#### Bridge/Culvert and Structure Bat Assessment Form Instructions

- This form will be completed to document bat occupancy or bat use of bridges, culverts, and other structures. This form (or a different form with the same information) shall be submitted to the appropriate personnel within the DOT and USFWS for recordkeeping (or uploaded into the Information, Planning, and Consultation (IPaC) Determination Key for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat) prior to conducting: any activities below the deck surface either from the underside or from above the deck surface that bore down to the underside; any activities within the culvert where bats may be located; any activities that could impact expansion joints; any activities involving deck removal on bridges; or any activities involving structure demolition for bridges, culverts, and/or other structures.
- Assessments must be completed within two (2) years of conducting any work (see the above bullet),
  regardless of whether assessments have been conducted in the past. Assessments conducted during
  the bat active season is the preferred time of year; however, we recognize this is not always possible.
  Assessments must be completed in appropriate weather conditions, suitable for the assessor to
  observe common signs of bat use.
- Evidence of bat use may include visual observation (live and/or dead), presence of guano, presence of staining, audible observation, and/or odor observation. Presence of one or more indicators is sufficient evidence that bats may be using the bridge, culvert, and/or other structure.
- If bat use of a bridge, culvert, and/or other structure is noted, additional studies may be undertaken
  during bat active season to identify the specific bat species utilizing the structure, or protected bat
  species presence can be assumed, in order to comply with threatened and endangered species
  regulations. Bat active season dates, typically between April and November, vary regionally and by
  species, so assessors should consult with their local USFWS Field Office for more specific active
  season dates.
- For use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat If the bridge/culvert or structure is 1,000 feet or more from suitable bat habitat<sup>1</sup> (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check the appropriate box and fill out the table below. **No further assessment is required.**

Date & Time of Assessment	Project #	Route/Facility Carried	County
Federal Structure ID	Structure Coordinates (latitude and longitude)	This bridge/culvert or structure is 1,000 feet or more from suitable bat habitat <sup>2</sup>	
		Name: Signature:	Eller

 Any questions pertaining to assessments or this form should be directed to the local USFWS Field Office.

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<sup>&</sup>lt;sup>1</sup> Refer to the USFWS's summer survey guidance for the definition of suitable habitat (http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html).

<sup>&</sup>lt;sup>2</sup> This condition is only for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana bat and Northern long-eard bat.

# APPENDIX D-1 OKLAHOMA ARCHEOLOGICAL SOCIETY CONSULTATION LETTER



#### THE UNIVERSITY OF OKLAHOMA

December 21, 2023

U.S. Army Corps of Engineers Attn: Andrew Commer Chief, Regulatory Office 2488 East 81<sup>st</sup> St. Tulsa, OK 74137-4290

Re:

OAS FY24-0422 USACE Proposed Boat Dock Construction & Pedestrian Bridge in Oklahoma City. (SWT

408-2023-0025) & (408 SWT-2023-0026).

Legal Description: NE ¼ Section 2, T11N, R3W, Oklahoma County, Oklahoma.

Dear Mr. Commer:

The Community Assistance Program staff of the Oklahoma Archeological Survey has reviewed the above referenced project to identify areas that may potentially contain prehistoric or historic archeological materials (historic properties). The location of your project has been crosschecked with the state site files containing approximately 27,000 archaeological sites, which are currently recorded for the state of Oklahoma. Our records indicate that parts of your project area have been previously surveyed and that no significant prehistoric cultural resources were located. Thus, an additional field inspection is not considered necessary for your project. Should construction activities expose buried archeological materials such as chipped stone, tools, pottery, bone, historic crockery, glass, metal items or building materials, this agency should be contacted immediately at (405)325-7211.

This environmental review and evaluation are done in cooperation with the State Historic Preservation Office, Oklahoma Historical Society. The responsible federal agency or their official delegate must also have a letter from that office to document consultation pursuant to Section 106 of the National Historic Preservation Act.

In addition to our review comments, under 36CFR Part 800.3 you are reminded of your responsibility to consult with the appropriate Native American tribe/groups to identify any concerns they may have pertaining to this undertaking and potential impacts to properties of traditional and/or ceremonial value.

Sincerely,

Lewis Dolmas Staff Archaeologist

cc: SHPO

(ary L. Stackelbeck, Ph.D.

State Archaeologist



#### **DEPARTMENT OF THE ARMY**

CORPS OF ENGINEERS, TULSA DISTRICT 2488 EAST 81<sup>ST</sup> STREET TULSA, OKLAHOMA 74137-4290

November 22, 2023

Dr. Kary Stackelbeck State Archaeologist Oklahoma Archaeological Survey 111 East Chesapeake, Room 102 Norman, OK 73019

Re: SWT-408-2023-0025 (EMBARK Boat Dock) and 408-SWT-2023-0026 (MAPS4 Pedestrian Bridge) in Oklahoma City, Oklahoma.

Dear Dr. Stackelbeck,

The U.S. Army Corps of Engineers, Tulsa District is reviewing a request from the City of Oklahoma City for the construction of a boat dock (SWT-408-2023-0025) and pedestrian bridge (408-SWT-2023-0026) in Oklahoma City, Oklahoma. The proposed project is located immediately adjacent to the EMBARK First Americans Museum Project located at 659 American Indian Blvd, Oklahoma City, OK 73129. The boat dock will be a fixed structure cut into the south bank of the Oklahoma River. The pedestrian bridge will span the river connecting the north bank with the south bank (Enclosures 1 and 2).

The Area of Potential Effect (APE) for the proposed undertaking is within a U.S. Army Corps of Engineers federally authorized civil works project and therefore requires compliance with 33 USC 408 (Section 408) and Section 106 of the National Historic Preservation Act of 1966. Based on a review of the project area using aerial photographs and historic maps, it was determined that the APE is located within a highly disturbed area that has been previously impacted from construction of the levee, construction of the roadways, and the construction of the First Americans Museum. No previously recorded sites are located within the APE and it is highly unlikely that unrecorded historic properties exist in the APE. After conducting this background research USACE has determined that the undertaking meets the criteria for a finding of No Historic Properties Affected (36CFR Part 800.4 (d)(1)). We are seeking your concurrence with this finding.

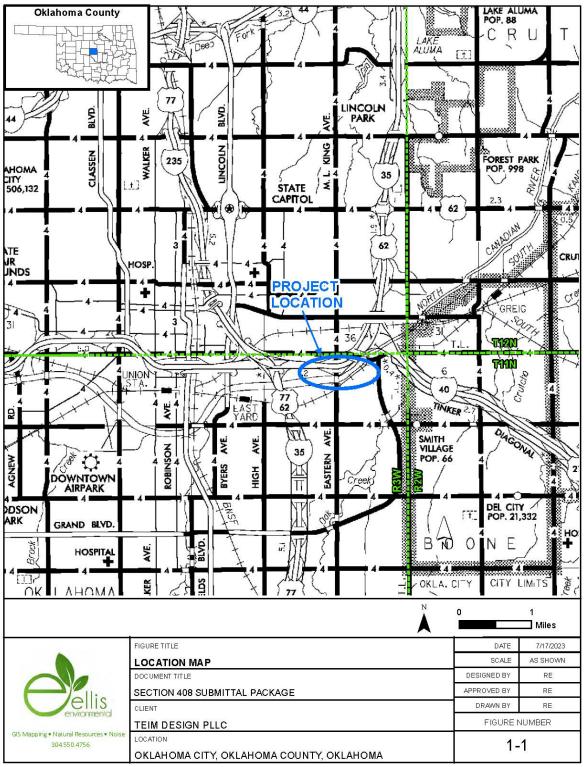
If you have questions or require additional information, please contact Jack "Gus" Adamson, Archeologist, Regional Planning and Environmental Center, Branch, via email at Jack.Adamson@usace.army.mil or by telephone at (417) 849-3610.

Sincerely,

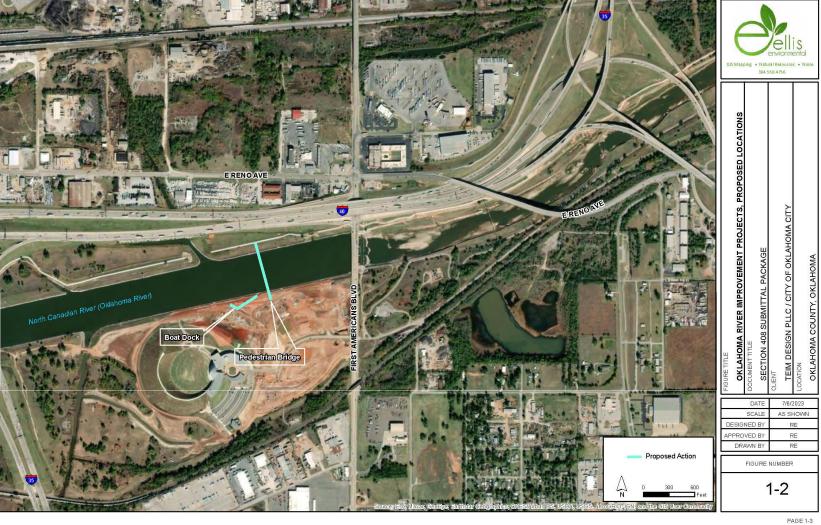
Kenneth Shingleton

Kenneth Shingleton Chief, Environmental Branch Regional Planning and Environmental Center

#### Enclosure 1:



## Enclosure 2:



# APPENDIX D-2 OKLAHOMA STATE HISTORIC PRESERVATION OFFICE CONSULTATION LETTER



December 11, 2023

Mr. Kenneth Shingleton, Chief Environmental Branch U.S. Army Corps of Engineers, Tulsa District 2488 East 81st Street Tulsa, OK 74137

RE:

<u>File #0483-24</u>; USACE Proposed EMBARK Boat Dock Project #SWT-408-2023-0025 & MAPS-4 Pedestrian Bridge Project #SWT-408-2023-0026, Oklahoma City, Oklahoma

Dear Mr. Shingleton:

We have received and reviewed the documentation submitted on the referenced project in Oklahoma County. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office. We find that there are no known historic properties affected within the referenced project's area of potential effect.

In addition to our review, you must contact the Oklahoma Archeological Survey (OAS), 111 East Chesapeake, #102, Norman OK 73019-5111 (#405-325-7211, FAX #405-325-7604), to obtain a determination about the presence of prehistoric resources that may be eligible for the National Register of Historic Places. Should the OAS conclude that there are no prehistoric archaeological sites or other types of "historic properties," as defined in 36 CFR Part 800.16(l), which are eligible for inclusion in the National Register of Historic Places within the project area and that such sites are unlikely to occur, we concur with that opinion.

The OAS may conclude that an on-site investigation of all or part of the project impact area is necessary to determine the presence of archaeological resources. In the event that such an investigation reveals the presence of prehistoric archaeological sites, we will defer to the judgment of the OAS concerning whether or not any of the resources should be considered "historic properties" under the Section 106 review process. If sites dating from the historic period are identified during the survey or are encountered during implementation of the project, additional assessments by the State Historic Preservation Office will be necessary.

Should further correspondence pertaining to this project be necessary, please reference the above underlined file number. If you have any questions, please contact Kristina Wyckoff, Historical Archaeologist, at 405-521-6381. Thank you.

Sincerely.

Lynda Ozan

Deputy State Historic Preservation Officer

LO:pm





#### **DEPARTMENT OF THE ARMY**

CORPS OF ENGINEERS, TULSA DISTRICT 2488 EAST 81<sup>ST</sup> STREET TULSA, OKLAHOMA 74137-4290

November 22, 2023

Dr. Lynda Ozan State Archaeologist Oklahoma Historic Preservation Office 800 Nazih Zuhdi Drive Oklahoma City, OK 73105

Re: SWT-408-2023-0025 (EMBARK Boat Dock) and 408-SWT-2023-0026 (MAPS4 Pedestrian Bridge) in Oklahoma City, Oklahoma.

Dear Dr. Ozan,

The U.S. Army Corps of Engineers, Tulsa District is reviewing a request from the City of Oklahoma City for the construction of a boat dock (SWT-408-2023-0025) and pedestrian bridge (408-SWT-2023-0026) in Oklahoma City, Oklahoma. The proposed project is located immediately adjacent to the EMBARK First Americans Museum Project located at 659 American Indian Blvd, Oklahoma City, OK 73129. The boat dock will be a fixed structure cut into the south bank of the Oklahoma River. The pedestrian bridge will span the river connecting the north bank with the south bank (Enclosures 1 and 2).

The Area of Potential Effect (APE) for the proposed undertaking is within a U.S. Army Corps of Engineers federally authorized civil works project and therefore requires compliance with 33 USC 408 (Section 408) and Section 106 of the National Historic Preservation Act of 1966. Based on a review of the project area using aerial photographs and historic maps, it was determined that the APE is located within a highly disturbed area that has been previously impacted from construction of the levee, construction of the roadways, and the construction of the First Americans Museum. No previously recorded sites are located within the APE and it is highly unlikely that unrecorded historic properties exist in the APE. After conducting this background research USACE has determined that the undertaking meets the criteria for a finding of No Historic Properties Affected (36CFR Part 800.4 (d)(1)). We are seeking your concurrence with this finding.

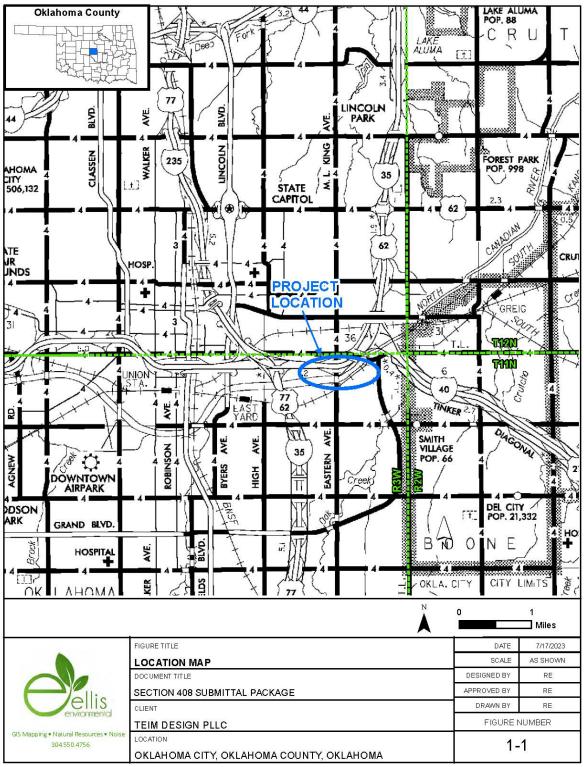
If you have questions or require additional information, please contact Jack "Gus" Adamson, Archeologist, Regional Planning and Environmental Center, Branch, via email at Jack.Adamson@usace.army.mil or by telephone at (417) 849-3610.

Sincerely,

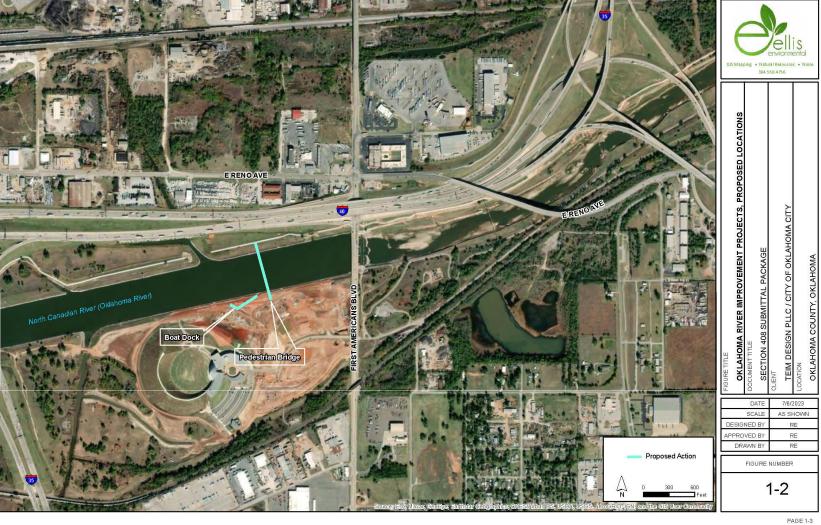
Kenneth Shingleton

Kenneth Shingleton Chief, Environmental Branch Regional Planning and Environmental Center

#### Enclosure 1:



## Enclosure 2:



# APPENDIX D-3 TRIBAL CONSULTATION LETTERS



#### **DEPARTMENT OF THE ARMY**

CORPS OF ENGINEERS, TULSA DISTRICT 2488 EAST 81<sup>ST</sup> STREET TULSA, OKLAHOMA 74137-4290

November 22, 2023

Jonathan M. Rohrer Tribal Historic Preservation Officer Caddo Nation of Oklahoma Post Office Box 487 Binger, Oklahoma 73009

Re: SWT-408-2023-0025 (EMBARK Boat Dock) and 408-SWT-2023-0026 (MAPS4 Pedestrian Bridge) in Oklahoma City, Oklahoma.

Dear Mr. Rohrer,

The U.S. Army Corps of Engineers, Tulsa District is reviewing a request from the City of Oklahoma City for the construction of a boat dock (SWT-408-2023-0025) and pedestrian bridge (408-SWT-2023-0026) in Oklahoma City, Oklahoma. The proposed project is located immediately adjacent to the EMBARK First Americans Museum Project located at 659 American Indian Blvd, Oklahoma City, OK 73129. The boat dock will be a fixed structure cut into the south bank of the Oklahoma River. The pedestrian bridge will span the river connecting the north bank with the south bank (Enclosures 1 and 2).

The Area of Potential Effect (APE) for the proposed undertaking is within a U.S. Army Corps of Engineers federally authorized civil works project and therefore requires compliance with 33 USC 408 (Section 408) and Section 106 of the National Historic Preservation Act of 1966. Based on a review of the project area using aerial photographs and historic maps, it was determined that the APE is located within a highly disturbed area that has been previously impacted from construction of the levee, construction of the roadways, and the construction of the First Americans Museum. No previously recorded sites are located within the APE and it is highly unlikely that unrecorded historic properties exist in the APE. After conducting this background research USACE has determined that the undertaking meets the criteria for a finding of No Historic Properties Affected (36CFR Part 800.4 (d)(1)). We are seeking your concurrence with this finding.

If you have questions or require additional information, please contact Jack "Gus" Adamson, Archeologist, Regional Planning and Environmental Center, Branch, via email at Jack.Adamson@usace.army.mil or by telephone at (417) 849-3610.

Sincerely,

Kenneth Shingleton

Kenneth Shingleton Chief, Environmental Branch Regional Planning and Environmental Center



#### **DEPARTMENT OF THE ARMY**

CORPS OF ENGINEERS, TULSA DISTRICT 2488 EAST 81<sup>ST</sup> STREET TULSA, OKLAHOMA 74137-4290

November 22, 2023

Ms. Kelli Mosteller Tribal Historic Preservation Officer Citizen Potawatomi Nation 1899 S. Gordon Cooper Drive Shawnee, Oklahoma 74801

Re: SWT-408-2023-0025 (EMBARK Boat Dock) and 408-SWT-2023-0026 (MAPS4 Pedestrian Bridge) in Oklahoma City, Oklahoma.

Dear Ms. Mosteller,

The U.S. Army Corps of Engineers, Tulsa District is reviewing a request from the City of Oklahoma City for the construction of a boat dock (SWT-408-2023-0025) and pedestrian bridge (408-SWT-2023-0026) in Oklahoma City, Oklahoma. The proposed project is located immediately adjacent to the EMBARK First Americans Museum Project located at 659 American Indian Blvd, Oklahoma City, OK 73129. The boat dock will be a fixed structure cut into the south bank of the Oklahoma River. The pedestrian bridge will span the river connecting the north bank with the south bank (Enclosures 1 and 2).

The Area of Potential Effect (APE) for the proposed undertaking is within a U.S. Army Corps of Engineers federally authorized civil works project and therefore requires compliance with 33 USC 408 (Section 408) and Section 106 of the National Historic Preservation Act of 1966. Based on a review of the project area using aerial photographs and historic maps, it was determined that the APE is located within a highly disturbed area that has been previously impacted from construction of the levee, construction of the roadways, and the construction of the First Americans Museum. No previously recorded sites are located within the APE and it is highly unlikely that unrecorded historic properties exist in the APE. After conducting this background research USACE has determined that the undertaking meets the criteria for a finding of No Historic Properties Affected (36CFR Part 800.4 (d)(1)). We are seeking your concurrence with this finding.

If you have questions or require additional information, please contact Jack "Gus" Adamson, Archeologist, Regional Planning and Environmental Center, Branch, via email at Jack.Adamson@usace.army.mil or by telephone at (417) 849-3610.

Sincerely,

Kenneth Shingleton

Kenneth Shingleton Chief, Environmental Branch Regional Planning and Environmental Center



#### **DEPARTMENT OF THE ARMY**

CORPS OF ENGINEERS, TULSA DISTRICT 2488 EAST 81<sup>ST</sup> STREET TULSA, OKLAHOMA 74137-4290

November 22, 2023

Ms. Amy Scott Tribal Historic Preservation Officer Iowa Tribe of Oklahoma 335588 E 750 Road Perkins, Oklahoma 74059-3268

Re: SWT-408-2023-0025 (EMBARK Boat Dock) and 408-SWT-2023-0026 (MAPS4 Pedestrian Bridge) in Oklahoma City, Oklahoma.

Dear Ms. Scott,

The U.S. Army Corps of Engineers, Tulsa District is reviewing a request from the City of Oklahoma City for the construction of a boat dock (SWT-408-2023-0025) and pedestrian bridge (408-SWT-2023-0026) in Oklahoma City, Oklahoma. The proposed project is located immediately adjacent to the EMBARK First Americans Museum Project located at 659 American Indian Blvd, Oklahoma City, OK 73129. The boat dock will be a fixed structure cut into the south bank of the Oklahoma River. The pedestrian bridge will span the river connecting the north bank with the south bank (Enclosures 1 and 2).

The Area of Potential Effect (APE) for the proposed undertaking is within a U.S. Army Corps of Engineers federally authorized civil works project and therefore requires compliance with 33 USC 408 (Section 408) and Section 106 of the National Historic Preservation Act of 1966. Based on a review of the project area using aerial photographs and historic maps, it was determined that the APE is located within a highly disturbed area that has been previously impacted from construction of the levee, construction of the roadways, and the construction of the First Americans Museum. No previously recorded sites are located within the APE and it is highly unlikely that unrecorded historic properties exist in the APE. After conducting this background research USACE has determined that the undertaking meets the criteria for a finding of No Historic Properties Affected (36CFR Part 800.4 (d)(1)). We are seeking your concurrence with this finding.

If you have questions or require additional information, please contact Jack "Gus" Adamson, Archeologist, Regional Planning and Environmental Center, Branch, via email at Jack.Adamson@usace.army.mil or by telephone at (417) 849-3610.

Sincerely,

Kenneth Shingleton

Kenneth Shingleton Chief, Environmental Branch Regional Planning and Environmental Center



#### **DEPARTMENT OF THE ARMY**

CORPS OF ENGINEERS, TULSA DISTRICT 2488 EAST 81<sup>ST</sup> STREET TULSA, OKLAHOMA 74137-4290

November 22, 2023

Ms. Kay Rhoads Administrative Assistant Kickapoo Tribe of Oklahoma Post Office Box 70 McCloud, Oklahoma 74851

Re: SWT-408-2023-0025 (EMBARK Boat Dock) and 408-SWT-2023-0026 (MAPS4 Pedestrian Bridge) in Oklahoma City, Oklahoma.

Dear Ms. Rhoads,

The U.S. Army Corps of Engineers, Tulsa District is reviewing a request from the City of Oklahoma City for the construction of a boat dock (SWT-408-2023-0025) and pedestrian bridge (408-SWT-2023-0026) in Oklahoma City, Oklahoma. The proposed project is located immediately adjacent to the EMBARK First Americans Museum Project located at 659 American Indian Blvd, Oklahoma City, OK 73129. The boat dock will be a fixed structure cut into the south bank of the Oklahoma River. The pedestrian bridge will span the river connecting the north bank with the south bank (Enclosures 1 and 2).

The Area of Potential Effect (APE) for the proposed undertaking is within a U.S. Army Corps of Engineers federally authorized civil works project and therefore requires compliance with 33 USC 408 (Section 408) and Section 106 of the National Historic Preservation Act of 1966. Based on a review of the project area using aerial photographs and historic maps, it was determined that the APE is located within a highly disturbed area that has been previously impacted from construction of the levee, construction of the roadways, and the construction of the First Americans Museum. No previously recorded sites are located within the APE and it is highly unlikely that unrecorded historic properties exist in the APE. After conducting this background research USACE has determined that the undertaking meets the criteria for a finding of No Historic Properties Affected (36CFR Part 800.4 (d)(1)). We are seeking your concurrence with this finding.

If you have questions or require additional information, please contact Jack "Gus" Adamson, Archeologist, Regional Planning and Environmental Center, Branch, via email at Jack.Adamson@usace.army.mil or by telephone at (417) 849-3610.

Sincerely,

Kenneth Shingleton

Kenneth Shingleton Chief, Environmental Branch Regional Planning and Environmental Center



#### **DEPARTMENT OF THE ARMY**

CORPS OF ENGINEERS, TULSA DISTRICT 2488 EAST 81<sup>ST</sup> STREET TULSA, OKLAHOMA 74137-4290

November 22, 2023

Mr. Turner Hunt Tribal Historic Preservation Officer Muscogee (Creek) Nation Post Office Box 580 Okmulgee, OK 74447

Re: SWT-408-2023-0025 (EMBARK Boat Dock) and 408-SWT-2023-0026 (MAPS4 Pedestrian Bridge) in Oklahoma City, Oklahoma.

Dear Mr. Hunt,

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Sincerely,

Kenneth Shingleton

Kenneth Shingleton Chief, Environmental Branch Regional Planning and Environmental Center



#### **DEPARTMENT OF THE ARMY**

CORPS OF ENGINEERS, TULSA DISTRICT 2488 EAST 81<sup>ST</sup> STREET TULSA, OKLAHOMA 74137-4290

November 22, 2023

Dr. Andrea Hunter Tribal Historic Preservation Officer Osage Nation 627 Grandview Avenue Pawhuska, OK 74056

Re: SWT-408-2023-0025 (EMBARK Boat Dock) and 408-SWT-2023-0026 (MAPS4 Pedestrian Bridge) in Oklahoma City, Oklahoma.

Dear Dr. Hunter,

The U.S. Army Corps of Engineers, Tulsa District is reviewing a request from the City of Oklahoma City for the construction of a boat dock (SWT-408-2023-0025) and pedestrian bridge (408-SWT-2023-0026) in Oklahoma City, Oklahoma. The proposed project is located immediately adjacent to the EMBARK First Americans Museum Project located at 659 American Indian Blvd, Oklahoma City, OK 73129. The boat dock will be a fixed structure cut into the south bank of the Oklahoma River. The pedestrian bridge will span the river connecting the north bank with the south bank (Enclosures 1 and 2).

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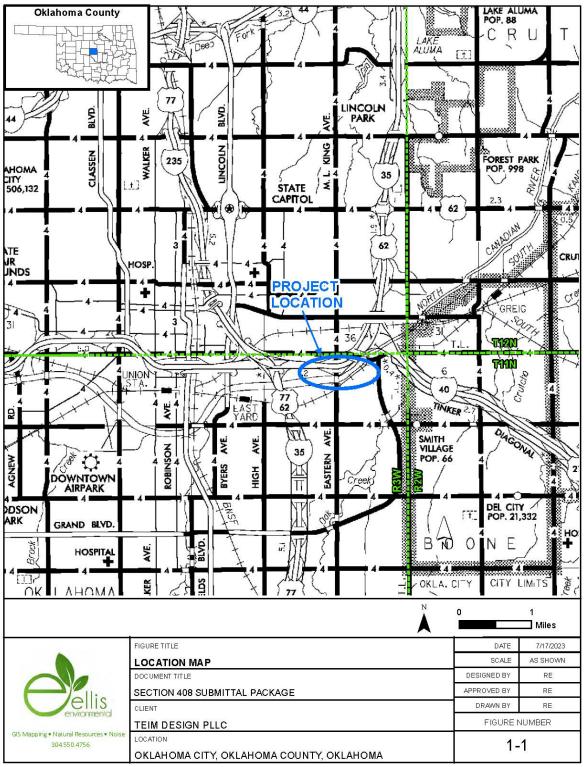
If you have questions or require additional information, please contact Jack "Gus" Adamson, Archeologist, Regional Planning and Environmental Center, Branch, via email at Jack.Adamson@usace.army.mil or by telephone at (417) 849-3610.

Sincerely,

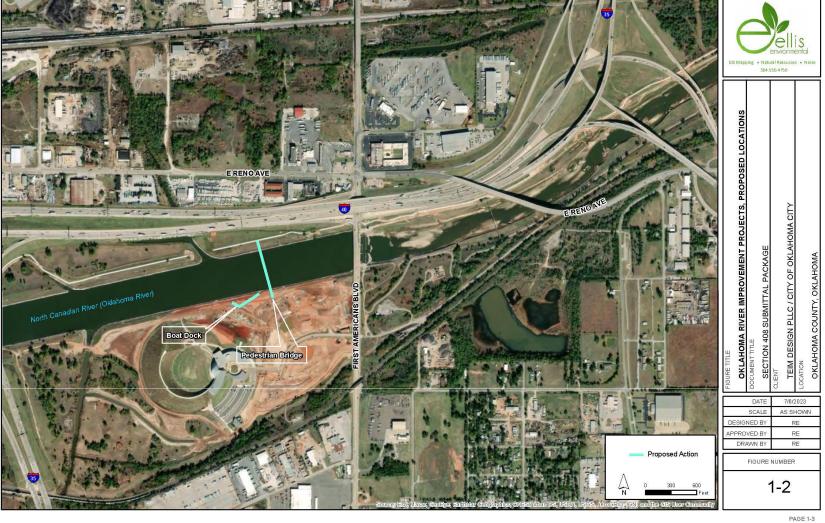
Kenneth Shingleton

Kenneth Shingleton Chief, Environmental Branch Regional Planning and Environmental Center

#### Enclosure 1:



#### Enclosure 2:



# APPENDIX E WATERS AND WETLAND EVALUATION REPORT

# WATERS & WETLANDS EVALUATION REPORT OKLAHOMA RIVER IMPROVEMENTS

City of Oklahoma City

Prepared for: TEIM Design 3020 Northwest 149th Street Oklahoma City, OK 73134 and City of Oklahoma City

> Prepared by: Ellis Environmental LLC 922 Pineapple Road South Daytona, FL 32119

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#### WATERS & WETLANDS EVALUATION REPORT

**<u>Project</u>**: Oklahoma River Improvements

County: Oklahoma

Water Body: North Canadian River (aka: Oklahoma River)

#### 1. PROJECT OVERVIEW

The project's general location is south of I-40/I-35 and East/West of Eastern Avenue (First Americans Boulevard) - Oklahoma City, Oklahoma (See **Figure 1**). The City of Oklahoma City proposes the construction of a boat dock, pedestrian bridge, and a low water dam as recreational improvements in the Oklahoma River.

#### 1.1 Federal Nexus

Ellis Environmental, LLC was retained by TEIM (Client) on behalf of the city of Oklahoma City, to conduct a waters and wetlands evaluation for the Oklahoma River Improvements in Oklahoma County, Oklahoma. The project requires oversight from the US Army Corps of Engineers (USACE). This report evaluates the presence of potentially jurisdictional waters within the study footprint.

#### 1.2. Project Description

Recreation/Enhancement

#### <u>Description of the existing conditions and reason for proposed project:</u>

The area adjacent to the south bank of the North Canadian River (aka "Oklahoma River") is currently under construction for the OKANA resort and indoor waterpark. The proposed EMBARK First Americans Museum (FAM) boat dock and the MAPS4 pedestrian bridge will be built in an area along the south bank of the Oklahoma River — west of Eastern Avenue. These features will provide access to the existing FAM as well as the OKANA resort and indoor waterpark. The sole use of this south riverbank area is recreational, including not only the FAM and proposed OKANA resort but also flatwater canoe/kayak and rowing activities sponsored by RIVERSPORT OKC, an official US Olympic & Paralympic training site. The pedestrian bridge will connect to the north bank of the river and the existing Greenway Trail, a paved trail used by both bicycle and pedestrian traffic. Both the north and south bank areas are owned by the FAM development company, who is in full cooperation with the City of Oklahoma City in development of these areas for recreational use.

An existing low water dam is currently present under the Eastern Avenue bridge. An additional low water dam is proposed along the Oklahoma River between the Eastern and Reno Avenue bridges, approximately 1,400' downstream of Eastern Avenue. The site is in the FEMA Zone AE special flood hazard area. The City of Oklahoma City owns both the north and south bank areas where the low water dam will be built; therefore, no land acquisition is anticipated for the low-head dam or the associated access road. Both banks currently include bicycle/pedestrian trails and the sole use of the area is recreational. The primary objective of the low-head dam project is to improve neighborhoods, quality of life, and transform public spaces. The low-head dam will provide a picturesque space for the community to attend events.



1

#### <u>Description of **proposed** improvements:</u>

The City of Oklahoma City is proposing recreational enhancements in and along the North Canadian River (aka "Oklahoma River"). The environmental study footprint encompasses the construction activities associated with the following projects as outlined below: (1.) Boat Dock; (2.) Pedestrian Bridge; and (3.) Low Water Dam.

- 1. <u>Boat Dock</u>: The EMBARK FAM boat dock project is funded by a grant from the Federal Transit Administration and will be the sixth dock on the North Canadian River serving the EMBARK ferry system. The boat dock will be a fixed structure cut into the North Canadian River bank. This boat dock will provide access to the existing FAM and proposed OKANA resort and indoor waterpark. Terraced seating near the dock will allow observation of the starting line of RIVERSPORT boat races.
- 2. Pedestrian Bridge: The primary objective of the MAPS4 Pedestrian Bridge project is to improve neighborhoods, quality of life, and transform public spaces. The pedestrian bridge will connect to the north bank of the river and the existing Greenway Trail, a paved trail used by both bicycle and pedestrian traffic. The southern point of the pedestrian bridge will be built just east of the boat dock's terraced seating and provide connection to the bicycle/pedestrian trail meandering along the north bank of the river. The pedestrian bridge will span the Oklahoma River, near the FAM site, downstream from the Oklahoma Riversport Foundation starting line tower. At this location, the bridge will provide a unique view for special events on the river and everyday use by connecting the Greenway and Eagle Lake Trails located on either riverbank. The proposed bridge will accommodate pedestrian foot traffic have adequate clearance for river traffic such as the Riversport modular dock system, Oklahoma River Cruises, and Public Works maintenance boats. Additionally, the bridge will aesthetically complement the surrounding space, particularly, the OKANA site. The proposed pedestrian bridge has a 20' clear width and is approximately 485' long with a consistent low chord elevation of 1179' to provide adequate clearance to the water surface, approximately 14'. There are five spans resting on four, 72" drilled shafts. The pier spacings were coordinated with the Riversport to ensure the bridge will not impact the future eight rowing lanes and the associated modular dock system. Given the pier spacings, the bridge spans, from the south to north bank, are 88'10", 88'0", 88'0", 100'0", and 100'10". On either bank, the bridge abutments utilize vertical walls to minimize fill in the FEMA floodplain/floodway.

#### **Construction Sequence**

The bridge piers will need to be constructed by either utilizing coffer dams, work platforms, barges, and/or lowering the Eastern Basin. The ideal window of time to lower the basin is from November 2023 through February 2024 as there will be fewer Riversport racing events in the winter. Additionally, this will allow Public Works to complete maintenance repairs on the Eastern Avenue Dam, as well as other maintenance in the Regatta Park area. Once the piers have been constructed, the steel beams need cranes to be laid into place. The steel beams have the potential of being constructed on the riverbank and launched in a cantilever fashion from the abutments over to the bridge piers. The steel beam launch method would limit the amount of time the bridge contractor needs to be in the water, resulting in less interference with boats. After the beams and deck forms have been placed, the concrete deck will need to be poured, which can be done with a pump truck from the riverbank. As each bridge span cures, the concrete pump truck will be able to drive onto the cured bridge deck to reach the next span.

Ideally, the contractor will have access to both riverbanks to provide greater flexibility in their construction methods. For the north bank, a construction entrance will be needed from the I-40



eastbound off-ramp for Eastern Avenue. However, the south bank may not be readily available, given the ongoing construction for the OKANA site. Further coordination will be needed with the OKANA developers to determine access to the south bank.

- 3. The proposed low water dam will be a fixed crest sheet pile dam with the following features:
  - o 500' of sheet pile driven to bedrock to mitigate seepage
  - o Cap to cover exposed sheet pile edge
  - o 280' notch matching existing river width
  - o Downstream riprap for scour protection
  - Notch for sediment/debris removal
  - o 4' minimum depth to cover bottom of river
  - o No impact to Eastern Avenue Dam operation or maintenance
  - Maintenance of water quality due to shallow pool depth

Preliminary hydraulic modeling indicates CLOMR/LOMR & City floodplain variance will be required.

#### 2. ENVIRONMENTAL STUDY FOOTPRINT DESCRIPTION

#### 2.1 Project Area and Setting

Project	Location	n	Environmental Study Footprint	t
Section Range & Township		at/Long NAD 83)	Dimensions	Acreage
Section 2- T11N R3W		35.460573 N, 97.483526 W	Study footprint ranges from 495' to 1,025' wide along Oklahoma River and is	66.09
Section 1-T11N R3W		35.463593 N <i>,</i> 97.469275 W	4,530' in length	

#### 2.2 Soil Conditions

The NRCS soil survey map was utilized to identify potentially hydric soils that may be present with the study footprint. See **Figure 3.** 

Map Unit Name	Percent	Drainage Class	Hydric Rating		Description
·	Slope		YES	NO	·
Gaddy-Gracemore complex (GaGa)	0-1%	Somewhat excessively drained		х	Frequently flooded
Urban land (URB)	-	-			-
Yahola-Urban land complex (YaUA)	0-1%	Well drained		х	Protected



#### 2.3 Data Sources Reviewed

USGS 7.5 minute	NWI Map	<b>USACE</b> Wetland Regional	Additional Resources	
Quad		Supplement	Reviewed	
Midwest City, OK	US Fish & Wildlife	Great Plains Region -	2020 National List of	
	Service:	Central Great Plains	Plant Species that	
	"CONUS_wet_poly"	subregion (LRR H)	Occur in Wetlands:	
	vector digital data		Region: Great Plains	

#### 2.4 Study Footprint General Description & Vegetation

Terrestrial and Aquatic Community Descriptions (based on field site visit)

The study area is within a commercialized/urban area of Oklahoma City paralleling I-40/I-35. The Oklahoma River is currently impounded at Eastern Avenue with a low water dam. The river was actively being used by individuals for recreation on the day of site visit. Additionally, transient individuals and their belongings were observed under the Eastern Avenue bridge. The south riverbank (west of Eastern Avenue) exhibited graded topsoil and was under active construction for the OKANA resort. The river is incised throughout the study footprint due to prior construction activities and/or urbanization. The vegetation along the lower terrace of the river banks exhibited dominant herbaceous vegetation such as cheatgrass (Bromus sp.), dallisgrass (Paspalum dilatatum), Johnson grass (Sorghum halepense), Aster spp., tickseed (Coreopsis sp.), English plantain (Plantago lanceolata), curly dock (Rumex crispus), frogfruit (Phyla nodiflora), and sedge (Carex sp). The upper terrace of the north bank (west of Eastern Avenue) consists of a bike trail and appears to have been planted with native vegetation consisting of species such as beeblossom (Gaura lindheimeri), lizard-tail Guara (Oenothera curtiflora), lemon mint (Monarda citriodora), black-eyed Susan (Rudbeckia hirta), wine cup (Callirhoe involucrate), white prickly poppy (Argemone albiflora), little bluestem (Schizachyrium scoparium), and golden crownbeard (Oenothera speciosa). The river located east of Eastern Avenue (downstream of the existing low water dam) is deeply incised and exhibited sandbar habitat and one riverine wetland consisting of dock-leaf smartweed (Persicaria lapathifolia) and chairmaker's clubrush (Schoenoplectus americanus). A limited amount of riparian forest was present along the upper terrace of the south bank associated with two intermittent tributaries. The riparian species present along these tributaries included American Elm (Ulmus americana), sugarberry (Celtis laevigata), red cedar (Juniperus virginiana), and smooth sumac (Rhus glabra). The Oklahoma Climatological Survey's Drought Monitor depicts this portion of the state as being "abnormally dry" for the past 12 months.

#### 3. WATERS AND WETLANDS EVALUATION

#### 3.1 Streams and Drainages Summary

Feature Label	Stream Name	Mapped on 7.5 Minute USGS	Feature Type Based on Field Data	Potential Jurisdictional Status	Acres within Environmental Study Footprint
S1	Oklahoma River	Yes	Perennial	Likely	33.77 Ac



Feature Label	Stream Name	Mapped on 7.5 Minute USGS	Feature Type Based on Field Data	Potential Jurisdictional Status	Acres within Environmental Study Footprint
S2	Unnamed tributary to Oklahoma River	Yes	Intermittent	Likely	0.29 Ac
S3	Unnamed tributary to Oklahoma River	No	Ephemeral	Likely	0.03 Ac
S4	Unnamed tributary to Oklahoma River	No	Intermittent	Likely	0.01 Ac
\$5	Unnamed tributary to Oklahoma River	Yes	Intermittent	Likely	0.01 Ac
S6	Unnamed tributary to Oklahoma River	No	Ephemeral	Likely	0.004 Ac
<b>S7</b>	Unnamed tributary to Oklahoma River	No	Ephemeral	Likely	0.04 Ac

#### 3.2 Wetlands and Ponds Summary

Feature Label	Type of Wetland or Pond	Cowardin Classification	Potential Jurisdictional Status	Acres within Environmental Study Footprint
W1	Emergent	PEM1E	Unlikely	0.18 Ac
W2	Riverine	R2USC2	Likely	0.16 Ac

#### 3.4 Feature Descriptions

The site investigation was conducted on June 14, 2023. Photographs of each feature and its location within the study footprint is included in **Figure 5** and **Appendix A**.

#### **Streams and Drainages**

**S1:** North Canadian (Oklahoma) River – Perennial Drainage

This river enters the study area west of Eastern Avenue and flows eastward until it exits the study area. A low water dam is currently present under the Eastern Avenue bridge which impounds water to the



west of the bridge. No riparian tree canopy is present along the banks of the river; rather, the banks consist of herbaceous cover. The riverbanks east of the low water dam are deeply incised. The estimated ordinary high water marks ranged from approximately 460 to 470 feet wide west of the low water dam and 80 to 260 feet wide east of the low water dam. Approximately 4,482 linear feet of the channel is located within the study footprint. The estimated total area of disturbance associated with this drainage is approximately 33.77 acres. The river is mapped as a perennial drainage on the US Geological Survey (USGS) 7.5-Minute Topographic Map and Site Map (Figures 2 and 5). This drainage is likely to be considered jurisdictional because it meets the definition of a) a stream and b) "waters of the state, tribe or the United States."

#### **S2:** Intermittent Drainage

This drainage is an unnamed tributary to the Oklahoma River. It enters the study area south of I-40/I-35 and west of Eastern Avenue and flows southward until its confluence with the Oklahoma River. No riparian tree canopy is present along the banks of the drainage; rather, the banks consist of rip-rap and herbaceous vegetation. The estimated ordinary high water marks were approximately 75 feet wide and widened to 130 feet wide at its confluence with the Oklahoma River. Approximately 108 linear feet of the channel is located within the study limits. The estimated total area of disturbance associated with this drainage is approximately 0.29 acres. The creek is mapped as an intermittent drainage on the US Geological Survey (USGS) 7.5-Minute Topographic Map and Site Map (Figures 2 and 5) and is a tributary to the Oklahoma River. This drainage is likely to be considered jurisdictional because it meets the definition of a) a stream and b) "waters of the state, tribe or the United States."

#### **S3:** Ephemeral Drainage

This drainage is an unnamed tributary to the Oklahoma River. It enters the study area south of I-40/I-35 and west of Eastern Avenue and flows southward until its confluence with the Oklahoma River. No riparian tree canopy is present along the banks of the drainage; rather, the banks consist of rip-rap and herbaceous vegetation. The estimated ordinary high water marks were approximately 4 feet wide and widened to 30 feet wide at its confluence with the Oklahoma River. Approximately 108 linear feet of the channel is located within the study limits. The estimated total area of disturbance associated with this drainage is approximately 0.03 acres. The drainage is not mapped on the US Geological Survey (USGS) 7.5-Minute Topographic Map (Figure 2); however, it appears to be a tributary to the Oklahoma River. The field site is displayed on the Site Map (Figure 5) as S3. This drainage is likely to be considered jurisdictional because it meets the definition of a) a stream and b) "waters of the state, tribe or the United States." Non-Relatively Permanent Waters (RPW) are jurisdictional under the Clean Water Act (CWA) where there is a "significant nexus" with a Traditional Navigable Water (TNW). For each specific request for non-RPWs, USACE field staff will need to perform significant nexus evaluation to determine if tributary is jurisdictional under the CWA.

#### **S4:** Intermittent Drainage

This drainage is an unnamed tributary to the Oklahoma River. It enters the study area east of Eastern Avenue and south of the Oklahoma River and flows northeast until its confluence with the Oklahoma River. The wooded canopy surrounding the drainage consisted of American elm, smooth sumac, and sugarberry trees and saplings. The estimated ordinary high water marks ranged from approximately 10 to 15 feet wide. Approximately 51 linear feet of the channel is located within the study limits. The estimated total area of disturbance associated with this drainage is approximately 0.01 acres. The



6

drainage is not mapped on the US Geological Survey (USGS) 7.5-Minute Topographic Map (**Figure 2**); however, it appears to be a tributary to the Oklahoma River. The field site is displayed on the Site Map (**Figure 5**) as S4. This drainage is likely to be considered jurisdictional because it meets the definition of a) a stream and b) "waters of the state, tribe or the United States."

#### **\$5:** Intermittent Drainage

This drainage is an unnamed tributary to the Oklahoma River. It enters the study area east of Eastern Avenue and south of the Oklahoma River and flows northward until its confluence with the Oklahoma River. The wooded canopy surrounding the drainage consisted of American elm, smooth sumac, red cedar and sugarberry trees and saplings. The estimated ordinary high water marks ranged from approximately 5 to 8 feet wide. Approximately 77 linear feet of the channel is located within the study limits. The estimated total area of disturbance associated with this drainage is approximately 0.01 acres. The creek is mapped as an intermittent drainage on the US Geological Survey (USGS) 7.5-Minute Topographic Map and Site Map (Figures 2 and 5) and is a tributary to the Oklahoma River. This drainage is likely to be considered jurisdictional because it meets the definition of a) a stream and b) "waters of the state, tribe or the United States."

#### **S6:** Ephemeral Drainage

This drainage is an unnamed tributary to the Oklahoma River. It enters the study area south of I-40/I-35 and east of Eastern Avenue and flows southeast until its confluence with the Oklahoma River. No riparian tree canopy is present along the banks of the drainage; rather, the banks consist of rip-rap and herbaceous vegetation. The estimated ordinary high water marks were approximately 2 feet wide. Approximately 116 linear feet of the channel is located within the study limits. The estimated total area of disturbance associated with this drainage is approximately 0.004 acres. The drainage is not mapped on the US Geological Survey (USGS) 7.5-Minute Topographic Map (Figure 2); however, it appears to be a tributary to the Oklahoma River. The field site is displayed on the Site Map (Figure 5) as S6. This drainage is likely to be considered jurisdictional because it meets the definition of a) a stream and b) "waters of the state, tribe or the United States." Non-Relatively Permanent Waters (RPW) are jurisdictional under the Clean Water Act (CWA) where there is a "significant nexus" with a Traditional Navigable Water (TNW). For each specific request for non-RPWs, USACE field staff will need to perform significant nexus evaluation to determine if tributary is jurisdictional under the CWA.

#### **\$7:** Ephemeral Drainage

This deeply incised drainage is an unnamed tributary to the Oklahoma River. It enters the study area south of I-40/I-35 and east of Eastern Avenue and flows southeast until its confluence with the Oklahoma River. No riparian tree canopy is present along the banks of the drainage; rather, the eroded banks consist of herbaceous vegetation. The estimated ordinary high water marks ranged from approximately 2 feet wide at the top terrace and widened to 6 feet wide at its confluence with the Oklahoma River. Approximately 171 linear feet of the channel is located within the study limits. The estimated total area of disturbance associated with this drainage is approximately 0.04 acres. The drainage is not mapped on the US Geological Survey (USGS) 7.5-Minute Topographic Map (Figure 2); however, it appears to be a tributary to the Oklahoma River. The field site is displayed on the Site Map (Figure 5) as S7. This drainage is likely to be considered jurisdictional because it meets the definition of a) a stream and b) "waters of the state, tribe or the United States." Non-Relatively Permanent Waters (RPW) are jurisdictional under the Clean Water Act (CWA) where there is a "significant nexus" with a



Traditional Navigable Water (TNW). For each specific request for non-RPWs, USACE field staff will need to perform significant nexus evaluation to determine if tributary is jurisdictional under the CWA.

#### Wetlands and ponds

Two riverine wetlands were depicted within the study footprint on the NWI mapping (**Figure 4**). During field reconnaissance, it was determined that these areas were no longer present. This is likely due to the existing low water dam's altering of the normal hydrologic functions of the river at this location. The features listed below were present at the time of site investigation.

#### **W1:** Emergent Wetland (Non-jurisdictional)

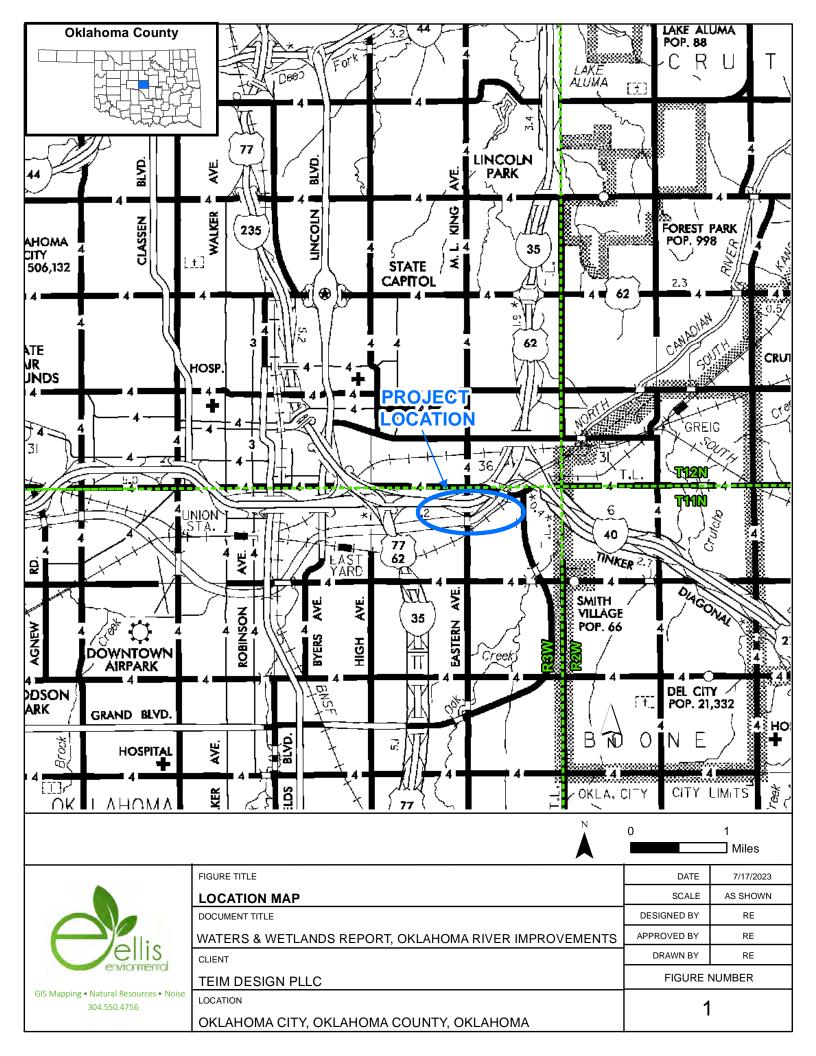
(0.18 acre) This linear feature is located along I-35/I-40. The site is displayed in the photographs and identified on the site map as W1 (Figure 5 and Appendix A). This area is not recorded on the NWI mapping (Figure 4). The observed dominant species were *Carex* sedge, frog fruit, curly dock, and dallisgrass. The soil was mapped as Yahola-Urban land complex (YaUB); 0-1% slopes, well drained. Hydric soils were confirmed by the matrix coloration of 2.5YR 2.5/1 from 0-3 inches and 7.5YR 3/2 with concentrations of 7.5YR 4/6 from 3-6 inches and 7.5YR 3/2 with concentrations of 2.5YR 4/6 from 6-12 inches. The soils were classified as loam, clay loam, sandy clay, respectively. Hydric soil indicator A11-Depleted Below Dark Surface is met. Wetland hydrology is evidenced by inundation, saturation and water-stained leaves. This wetland is classified as PEM1E (palustrine, persistent, seasonally flooded/saturated), following the Cowardin classification system. Functions of this wetland likely include surface water detention and wildlife habitat. This site meets the definition of a wetland pursuant to the USACE and Section 404 of the Clean Water Act. However, it is considered a roadside ditch that does not carry a permanent flow of water and does not have a surface connection to an adjacent water of the U.S. Therefore, this feature is not likely jurisdictional.

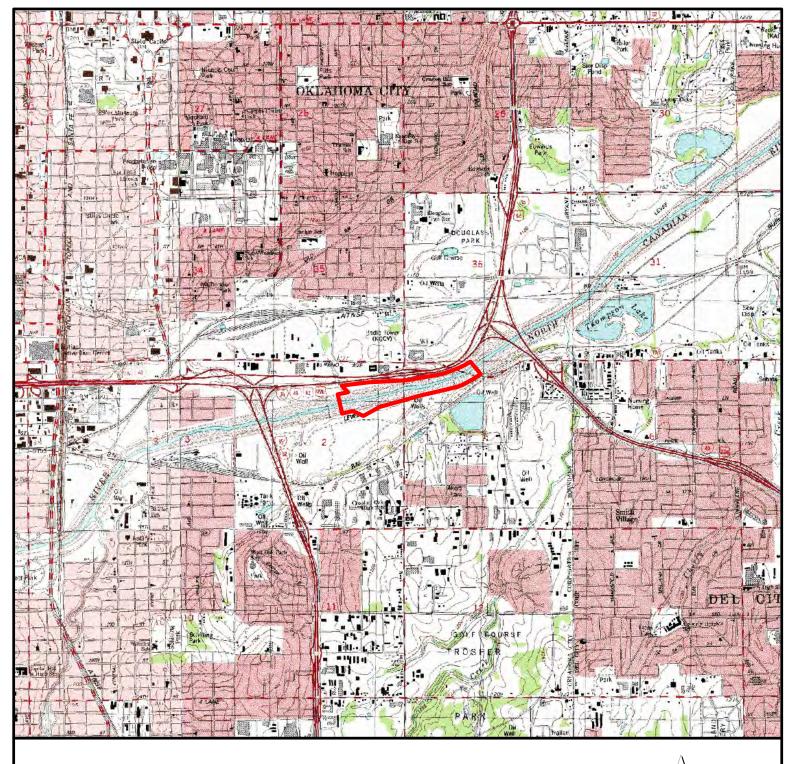
#### W2: Riverine Wetland

**(0.16 acre)** This linear feature is located along the floodplain of the Oklahoma River. The site is displayed in the photographs and identified on the site map as W2 (**Figure 5** and **Appendix A**). This area is not recorded on the NWI mapping (**Figure 4**). The observed dominant species were dock-leaf smartweed and chairmaker's club-rush. The soil was mapped as Gaddy-Gracemore complex (GaGa); 0-1% slopes, somewhat excessively drained, frequently flooded. Hydric soils were confirmed by the matrix coloration of 5Y 2.5/1 from 0-2 inches and 5Y 6/2 with concentrations of 10YR 4/6 from 2-12 inches. The soils were classified as muck and sand, respectively. Hydric soil indicator S5-Sandy Redox is met. Wetland hydrology is evidenced by inundation, saturation, water-stained leaves and FAC-neutral test. This wetland is classified as R2USC2 (riverine, lower perennial, unconsolidated shore, sand), following the Cowardin classification system. Functions of this wetland likely include surface water detention, water quality improvement and wildlife habitat. The site meets the definition of a wetland pursuant to the USACE and Section 404 of the Clean Water Act and has a continuous surface connection to the Oklahoma River; therefore, it is likely jurisdictional.



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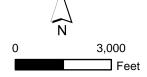






Study Footprint

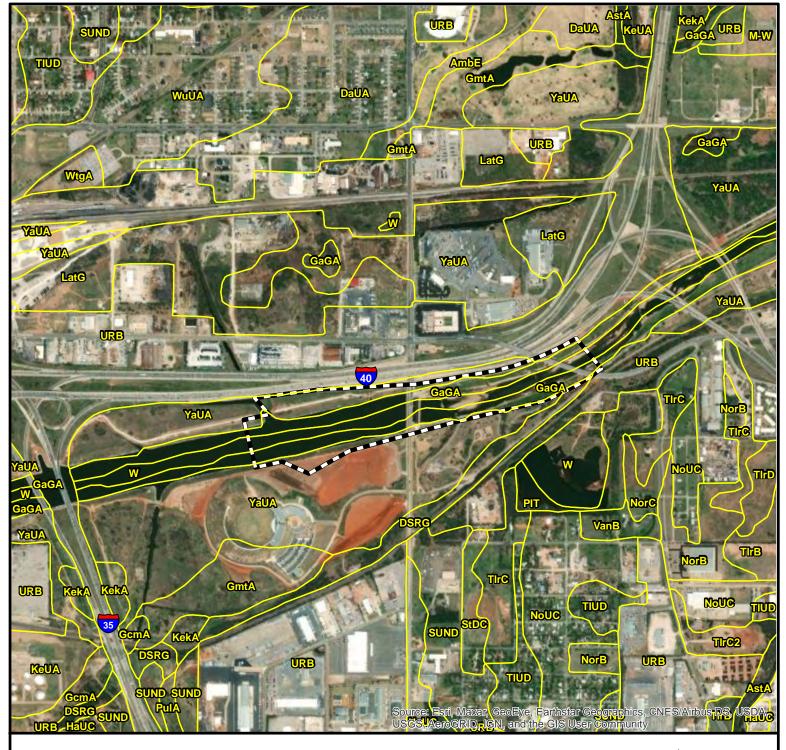
USGS 7.5 Minute Quadrangle at 1:24,000 scale Midwest City, Oklahoma



6	
	environmental

GIS Mapping • Natural Resources • Noise 304.550.4756

FIGURE TITLE	DATE	7/12/2023
USGS TOPOGRAPHIC MAP	SCALE	AS SHOWN
DOCUMENT TITLE	DESIGNED BY	RE
WATERS & WETLANDS REPORT, OKLAHOMA RIVER IMPROVEMENTS	APPROVED BY	RE
CLIENT	DRAWN BY	RE
TEIM DESIGN PLLC	FIGURE N	NUMBER
LOCATION		, l
OKLAHOMA CITY, OKLAHOMA COUNTY, OKLAHOMA	_	-





Study Footprint

SSURGO: OK109, 12/23/2013

600 1,200 Feet

$\epsilon$	
	environmental

GIS Mapping • Natural Resources • Noise 304.550.4756

FIGURE TITLE	DATE	7/14/2023
NRCS SOILS MAP	SCALE	AS SHOWN
DOCUMENT TITLE	DESIGNED BY	RE
WATERS & WETLANDS REPORT, OKLAHOMA RIVER IMPROVEMENTS	APPROVED BY	RE
CLIENT	DRAWN BY	RE
TEIM DESIGN PLLC	FIGURE 1	NUMBER
LOCATION		.
OKLAHOMA CITY, OKLAHOMA COUNTY, OKLAHOMA	,	)





Study Footprint

NWI Wetlands

USFWS CONUS Wetland Polygons 2015 Ortho Imagery



0 600

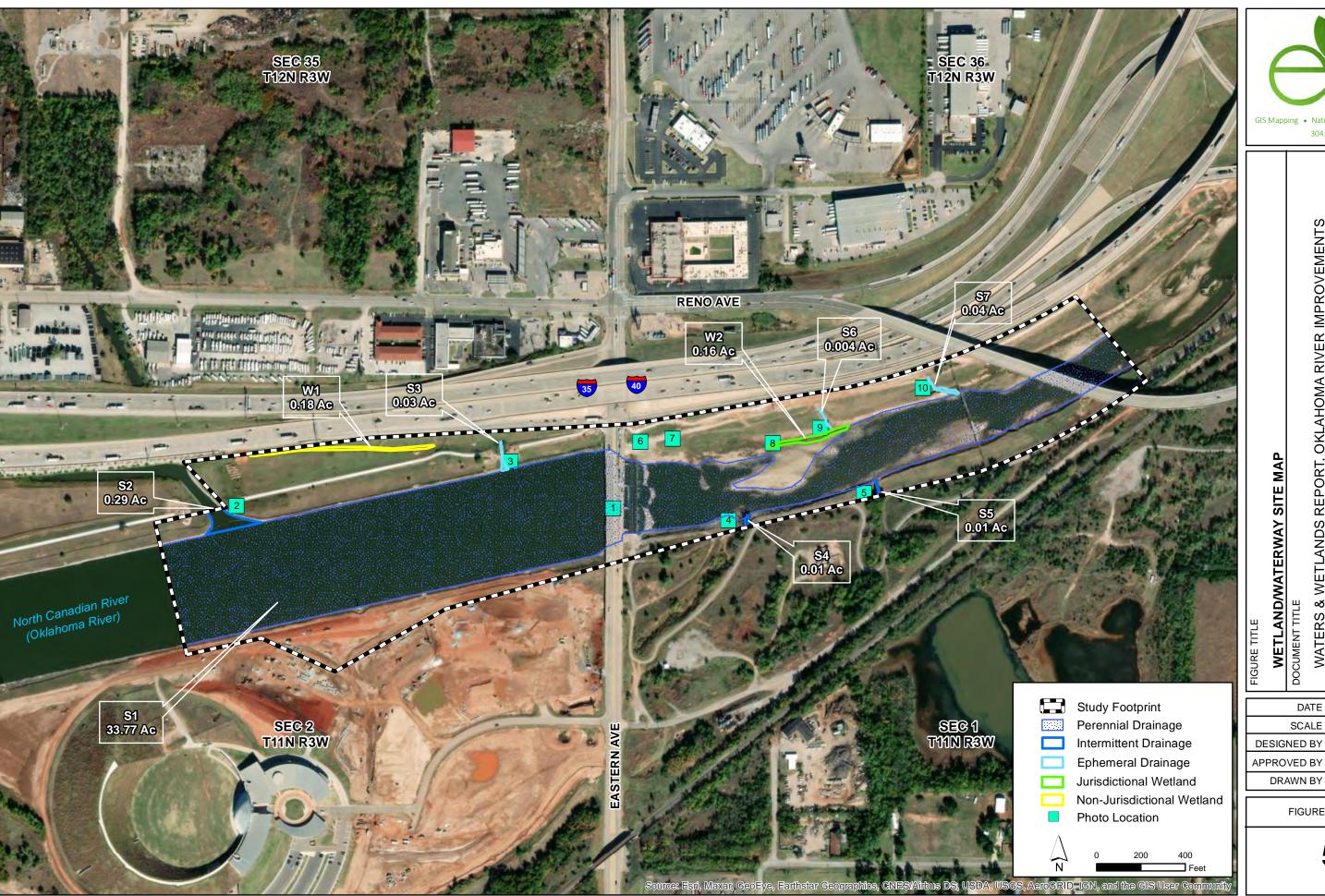
1,200

Feet



GIS Mapping • Natural Resources • Noise 304.550.4756

FIGURE TITLE	DATE	7/14/2023
NATIONAL WETLANDS INVENTORY MAP	SCALE	AS SHOWN
DOCUMENT TITLE	DESIGNED BY	RE
WATERS & WETLANDS REPORT, OKLAHOMA RIVER IMPROVEMENTS	APPROVED BY	RE
CLIENT	DRAWN BY	RE
TEIM DESIGN PLLC	FIGURE N	NUMBER
LOCATION		
OKLAHOMA CITY, OKLAHOMA COUNTY, OKLAHOMA	T	





WETLAND/WATERWAY SITE MAP
DOCUMENT TITLE
WATERS & WETLANDS REPORT, OKLAHOMA RIVER IMPROV
CLIENT

OKLAHOMA CITY, OKLAHOMA COUNTY, OKLAHOMA

FIGURE NUMBER

7/14/2023

AS SHOWN

RE

RE

5



Photo 1: S1 - Oklahoma River. View from Eastern Avenue (First Americans Blvd) bridge facing west.



**Photo 2**: S2 – Intermittent Drainage. View facing west.



**Photo 3**: S3 – Ephemeral Drainage. View facing north.



**Photo 4**: S4 – Intermittent Drainage at convergence to Oklahoma River. View facing northeast.



**Photo 5**: S5 – Intermittent Drainage at convergence to Oklahoma River. View facing northeast.



**Photo 6**: Eastern Avenue bridge - View from north bank of Oklahoma River facing south.



**Photo 7**: View along north bank's terrace of Oklahoma River – facing southeast.



**Photo 8**: W2 – Riverine Wetland. View facing eastward.



**Photo 9**: S6 – Ephemeral Drainage. View facing north.



**Photo 10**: S7. View from northern terrace facing southward.

# APPENDIX F HAZARDOUS MATERIALS ASSESSMENT

### **HAZARDOUS MATERIALS ASSESSMENT**

Oklahoma River Improvements
City of Oklahoma City

Prepared for:

TEIM Design 3020 Northwest 149th Street Oklahoma City, OK 73134

Prepared by:

Abernathy Consulting Services LLC 2634 9<sup>th</sup> Ave. NE Norman, OK 73071

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E	Diane Abernathy resume

#### HAZARDOUS MATERIALS ASSESSMENT

## OKLAHOMA RIVER IMPROVEMENTS JULY 2023

#### 1.0 ASESSMENT SUMMARY

#### 1.1 OVERVIEW

Abernathy Consulting Services LLC (ABE), on behalf of TEIM Design (TEIM), has conducted an assessment of potential hazardous materials in the vicinity of several proposed Oklahoma River improvement projects. The purpose of the assessment was to identify hazardous material-related problems within and adjacent to an area in which several Oklahoma River improvement projects are planned.

#### 1.2 PROJECT DESCRIPTION

Several Oklahoma River improvement projects are planned in the general location depicted in **Figure 1**. A single Study Area was defined which encompasses the footprints of all of these Oklahoma River improvement projects and is depicted in **Figure 2**. The Study Area is located in Sections 1 and 2 of Township 11 North, Range 3 West, Oklahoma County, Oklahoma.

#### 1.3 SUMMARY OF FINDINGS

- Land use within the Study Area is limited to various uses of the North Canadian River, also known as the Oklahoma River. West of Eastern Avenue, the river water level is adequate to accommodate various river sport activities. East of Eastern Avenue, the river is at its normal undammed level and consists of a few streams and several sand bars. North of the Study Area is I-40, and the First Americans Museum is located south of the Study Area west of Eastern Avenue. A new OKANA hotel and indoor water park is being constructed adjacent to the First Americans Museum. South of the Study Area and east of Eastern Avenue is Eagle Lake Trail, a meandering pedestrian trail created by the City of Oklahoma City, as well as several active oil & gas facilities.
- One City of Oklahoma City observation water well is located within the Study Area and numerous groundwater monitoring wells installed to support the First Americans Museum and associated developments are located within 1/8th mile of the Study Area.
- Oklahoma Corporation Commission records and historical aerial photographs indicate numerous
  oil and gas wells in the vicinity of the Study Area have been plugged and abandoned over the
  years. Records searches indicate one (1) oil and gas well plugged and abandoned within the Study
  Area, and four (4) active wells located within 1/8th mile of the Study Area.
- Regulatory records indicate five (5) potential hazardous materials sites within or in close proximity
  to the Study Area, although two of those sites were anonymous complaints made regarding spills
  and lack adequate information to be mapped.

Underground utilities noted within the Study Area include Oklahoma City sanitary sewer paralleling
the river on its north bank, overhead pipelines crossing the river near the Reno Avenue bridge, and
a buried salt water pipeline crossing the river and assumedly terminating at an active salt water
disposal located south of the Study Area.

#### 1.4 RECOGNIZED ENVIRONMENTAL CONDITIONS

Based upon the site visit and a review of available environmental records, no recognized environmental conditions were noted within the Study Area.

Diane Abernathy, P. E

#### 2.0 ASSESSMENT METHODS

#### 2.1 STUDY AREA DESCRIPTION

Several Oklahoma River improvement projects are planned in the general location depicted in **Figure 1**. A single Study Area was defined which encompasses the footprints of all of these Oklahoma River improvement projects and is depicted in **Figure 2**. The Study Area is located in Sections 1 and 2 of Township 11 North, Range 3 West, Oklahoma County, Oklahoma. The Study Area footprint, encompassing approximately 66 acres, encompasses both banks of the Oklahoma River, and extends from approximately 1,500 feet west of Eastern Avenue to just past Reno Avenue.

#### 2.2 DETAILED SCOPE OF SERVICES

#### 2.2.1 Records Review

The following records were reviewed and are referenced in Section 3 of this report:

- <u>Physical Setting</u>: Records reviewed to determine the Study Area physical setting included United States Geological Survey (USGS) 7.5 Minute Topographic Maps, the USGS Hydrologic Atlas, and the United States Department of Agriculture Soil Survey for Oklahoma County.
- <u>Environmental Database Records</u>: Environmental Data Resources Inc. (EDR) performed a search of available environmental records for the Study Area and provided the findings in a report.
- Water, Oil, and Gas Well Information: The EDR report was reviewed for water, oil, and gas wells
  which may be located in or near the Study Area. The Oklahoma Water Resources Board and
  Oklahoma Corporation Commission online databases were also reviewed to confirm the EDR well
  information.

#### 2.2.2 Site Visit

A site visit was conducted on June 14, 2023 to verify information yielded by the records review and to observe the Study Area for any indications of hazardous materials within the Study Area. The results of the site visit are presented in Section 3.3 of this report.

#### 2.3 REPORT FORMAT

Section 1.0 is a brief summary of the findings and recommendations, Section 2.0 explains the assessment methods, Section 3.0 provides the detailed assessment findings, and Section 4.0 is a list of references relied upon for this assessment. Tables, Figures, and Appendix materials are placed at the end of the report.

#### 2.4 REPORT LIMITATIONS LANGUAGE

It is noted that the assessment cannot wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. To prepare this assessment, ABE conducted a visit to the Study Area and obtained and reviewed records and record searches provided

by commercial vendors and government agencies. ABE has not made, nor has it been asked to make, any independent investigation concerning the accuracy, reliability, or completeness of such information.

All sources of information on which ABE has relied in making its conclusions are identified in Section 4.0 of this report. Any information, regardless of source, not listed therein has not been evaluated or relied upon by ABE in the context of this report. The conclusions, therefore, represent ABE's professional opinion based solely and exclusively on visual observations and the sources of information identified in Section 4.0.

The opinions and recommendations presented in this report apply only to site conditions and features as they existed at the time of ABE's site visit. The opinions and recommendations presented in this report cannot be applied to conditions and features of which ABE is unaware and has not had the opportunity to evaluate.

This assessment was conducted on behalf of TEIM and is intended for TEIM's sole use. Any other person or entity obtaining, using, or relying on this report hereby acknowledges that they do so at their own risk, and that ABE shall have no responsibility or liability for the consequences thereof. This report is intended to be used in its entirety, taking or using in any way excerpts from this report are not permitted because, when taken out of context, such excerpts run the risk of being misinterpreted and are not representative of its findings; therefore, any party doing so does so at its own risk.

#### 3.0 ASSESSMENT NARRATIVE

#### 3.1 STUDY AREA DESCRIPTION

#### 3.1.1 Location and Legal Description

The Study Area is located in Sections 1 and 2 of Township 11 North, Range 3 West, Oklahoma County, Oklahoma. **Figure 1** provides a location map of the project. The Study Area footprint, encompassing approximately 66 acres, encompasses both banks of the Oklahoma River, and extends from approximately 1,500 feet west of Eastern Avenue to just past Reno Avenue.

#### 3.1.2 Land Use

Land use within the Study Area is limited to various uses of the North Canadian River, aka the Oklahoma River. West of Eastern Avenue, the river water level is adequate to accommodate various river sport activities. East of Eastern Avenue, the river is at its normal undammed level and consists of a few water streams and several sand bars. North of the Study Area is I-40, and the First Americans Museum is located south of the Study Area west of Eastern Avenue. A new OKANA hotel and indoor water park is being constructed adjacent to the First Americans Museum. South of the Study Area and east of Eastern Avenue is Eagle Lake Trail, a meandering pedestrian trail created by the City of Oklahoma City, as well as several active oil & gas facilities.

#### 3.1.3 Physical Setting Information

The physical setting of the Study Area can be addressed in terms of topography, surface water, groundwater, and geology, as follows:

<u>Topography</u>: Based upon review of the USGS 7.5 Minute Midwest City Quadrangle Map and a site visit, the Study Area topography is relatively flat, with the nearest mapped contours being 1,200 feet above mean sea level (AMSL).

<u>Surface Water</u>: The river flow is west to east.

<u>Groundwater</u>: According to the OGS Hydrologic Atlas #4, Reconnaissance of the Water Resources of the Oklahoma City Quadrangle, Central Oklahoma, the Study Area is underlain by Alluvium, consisting of sand, silt, clay, and lenticular beds of gravel. The Hydrologic Atlas indicates nearby water wells have depths to water ranging from 121 to 256 feet below land surface and water well yields of 70 gallons per minute.

According to the EDR database (see Section 3.2.2 and **Appendix A**) and Oklahoma Water Resources Board (OWRB) water well records information, one City of Oklahoma City observation well is located within the Study Area and numerous monitoring wells installed to support the First Americans Museum

and associated developments are located within 1/8 mile of the Study Area. These wells are listed in **Table 1**.

<u>Geology</u>: Dominant soil type in the Study Area is the Gaddy-Gracemore complex, characterized by 0 – 1 percent slopes and frequently flooding.

#### 3.2 RECORDS REVIEW

#### 3.2.1 Environmental Records

EDR conducts reviews of available environmental records for known hazardous waste management sites, aboveground or underground storage tank sites, and similar potentially-impacted sites identified in the Study Area. A copy of the EDR report is included as **Appendix A**. Based on a review of the Federal and State environmental databases, the EDR database report obtained for this project identified five (5) potential hazardous materials sites within or in close proximity to the Study Area, as listed in **Table 3**. Two of those sites were anonymous complaints made regarding spills and lack adequate information to be mapped. The remaining three sites are presented in **Figure 2**. It is noted the commercial disposal well labeled as EDR Site 1 is likely the same facility as the Penthouse salt water disposal well listed in **Table 3** as oil/gas well Site 4. The other component of oil/gas well Site 4 is the Penthouse oil well, located slightly north of the disposal well and labeled in **Figure 2** as Well 4. The Penthouse oil well and salt water disposal well are included in the **Appendix B** photographs.

A Sanborn fire insurance map search was also conducted by EDR and no maps of the Study Area were found. See **Appendix D** for the EDR Sanborn Report.

#### 3.2.2 Oil and Gas Well Records

Oklahoma Corporation Commission records and historical aerial photographs (see Section 3.2.3) indicate numerous oil and gas wells in the vicinity of the Study Area have been plugged and abandoned over the years. The EDR records search (See **Appendix A**) indicates one (1) oil and gas well plugged and abandoned within the Study Area, as well as two (2) active oil wells and two (2) active disposal wells located within 1/8th mile of the Study Area. These wells are listed in **Table 2**, and approximate locations of these wells are indicated on **Figure 2**.

## 3.2.3 Historical Aerial Photographs

Aerial photographs from the years 1937, 1954, 1963, 1969, 1984, 1990, 2006, and 2019 were obtained from EDR for review of the Study Area. These photographs were reviewed and compared for changes

in the Study Area and vicinity over time. Comparison of the photographs provides some information about the age of certain features noted within and near the Study Area:

- The 1937 photograph predates the construction of I-40 and Reno Avenue. Several oil tank batteries are visible within the Study Area east of Eastern Avenue. The North Canadian River appears more meandering in this photograph than its present day course.
- In the 1954 photograph, more oil and gas facilities are visible, as well as a lagoon system on the east end of the Study Area. A bridge can be seen crossing the river. Although that bridge is no longer present, the associated bridge pilings are still visible in the river bed today.
- In the 1963 photograph, I-40 is visible. Fewer oil and gas facilities are evident, and the currently
  existing utilities pipeline over the east end of the river is present. The levee system is now
  visible.
- The 1969 photograph depicts the same oil and gas facilities present in the area today.
- The construction of Reno Avenue over the bridge is completed in the 1984 photograph.
- The 1990 photograph shows most of the land south of the river to be covered with various trails, assumed to be for recreational off-roading activities.
- The First American Museum construction has commenced in the 2006 photograph. The dam at Eastern Avenue is in place, resulting in a higher river level west of Eastern Avenue.
- The 2019 photograph depicts the City's trail system in the southeast quadrant of Eastern Avenue and the river, although the current trails on the north bank of the river are not visible.
   The aerial photographs for the Study Area are included in Appendix D.

#### 3.3 SITE VISIT

The site visit was conducted by Diane Abernathy of Abernathy Consulting Services LLC (ABE) on June 14, 2023 and consisted of a visual inspection, accompanied by notes and photographs.

No indications of hazardous materials were noted within the Study Area. Several oil and gas facilities are present in the near vicinity of the Study Area and are depicted in **Figure 2**.

Underground utilities noted within the Study Area include Oklahoma City sanitary sewer paralleling the river on its north bank, overhead pipelines crossing the river near the Reno Avenue bridge, and a buried salt water pipeline crossing the river and assumedly terminating at the Baker Townsend salt water disposal well depicted in **Figure 2** as Well #3. Photographs of the buried salt water sign and the Baker Townsend salt water disposal well are included in **Appendix B**.

Figure 2 indicates the site visit observations.

# 3.4 RECOGNIZED ENVIRONMENTAL CONDITIONS

Based upon the site visit and a review of available environmental records, no recognized environmental conditions were noted within the Study Area.

# 4.0 REFERENCES

Environmental Data Resources, Inc., Milford, CT. The *EDR Aerial Photo Decade Package*®. June 15, 2023.

Environmental Data Resources, Inc., Milford, CT. *The EDR Certified Sanborn® Map Report*. June 14, 2023.

Environmental Data Resources, Inc., Milford, CT. The *EDR Radius Map™ Report with GeoCheck*®. December 15, 2022.

Oklahoma Corporation Commission. *Well Data System* searchable database, July 2023. https://wellbrowse.occ.ok.gov.

Oklahoma Geological Survey, The University of Oklahoma, Norman, Oklahoma. *Hydrologic Atlas #4, Reconnaissance of the Water Resources of the Oklahoma City Quadrangle, Central Oklahoma*. 1991.

Oklahoma Water Resources Board. *Water Well Record Search* searchable database, July 2023. <a href="http://www.owrb.state.ok.us">http://www.owrb.state.ok.us</a>.

U.S. Department of Agriculture Soil Conservation Service, 2013, Soil Survey Geographic Database (SSURGO), Oklahoma County, Oklahoma, U.S. Department of Agriculture (USDA).

U.S. Geological Survey, Washington, D.C. 7.5 Minute Midwest City Quadrangle.

# **TABLES**

**Table 1: Groundwater Wells** 

Map ID # (EDR #)	Well Owner	Well Type		
1 (1)	City of Oklahoma City	Observation Well		
2 (2)	American Indian Cultural Center	Monitoring Well		
3 (A cluster)	Various	Monitoring Well		
4 (B cluster)	C P Integrated	Monitoring Well		
5 (C cluster))	American Indian Cultural Center	Monitoring Well		
6 (D cluster)	American Indian Cultural Center	Monitoring Well		

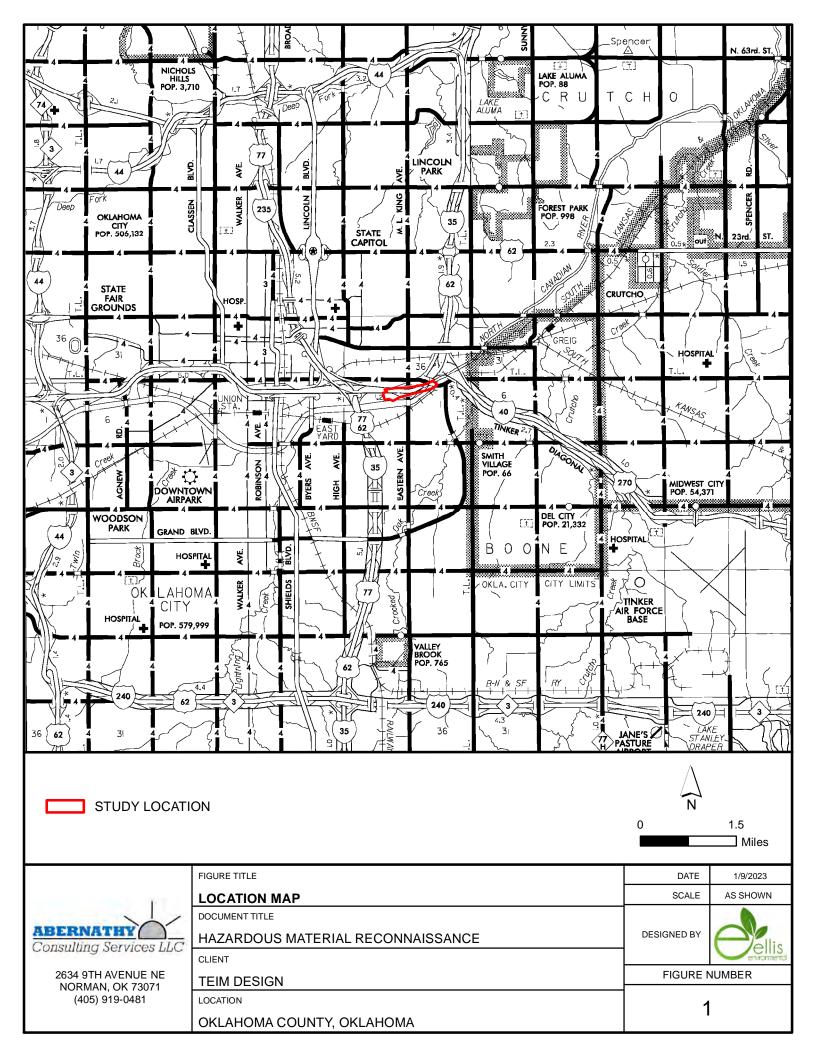
Table 2: Oil and Gas Wells

Map ID (EDR ID)	Well Name	Well Type	Status	Section/Township/Range	Quarter Section
1	Hasting	NA	Plugged/Abandoned	1/11N/3W	SW4/NW4/NW4
(A)	Atkinson	NA	Plugged/Abandoned	1/11N/3W	SW4/SW4/NW4/NW4
2 (3)	Baker #1	Oil	Active	1/11N/3W	NW4/NW4/NW4
3	Baker	NA	Plugged/Abandoned	1/11N/3W	SE4/NW4/NW4
(B)	Baker Townsend	SWD	Active	1/11N/3W	SE4/NW4/NW4
4	Pesthouse	Oil	Active	1/11N/3W	SW4/SW4/NW4
(C)	Pesthouse	SWD	Active	1/11N/3W	SW4/SW4/NW4

**Table 3: Potential Hazardous Material Sites, EDR Report** 

	1 4510 (	r	iai iiazaiac	Tao matoriai or	tes, EDIX Report
Map ID (EDR ID)	Site Name	Location relative to Study Area	Address	Reporting Database	Status / Comment
1 <i>(1)</i>	UIC	Within	35.4604800, -97.4755220	Underground Injection Control (UIC)	EDR reported as a commercial disposal well operated by Rainbo Service Company. Conversations with the owner indicate the well is in fact a salt water disposal well (See Item 4, Table 3.)
2 (2)	2013 Anonymous Complaint	Within	35.46, -97.48	OK COMPLAINT	A 2013 anonymous complaint was made of a radiation release (perhaps associated with the Rainbo Service Company disposal well). Case is reported as closed, with no remediation. Not enough information to map on Figure 2.
3 (3)	2013 Anonymous Complaint	Within	35.46, -97.48	OK COMPLAINT	A 2013 anonymous complaint was made of a self-reported spill (perhaps associated with the Rainbo Service Company disposal well). Case is reported as closed, with no remediation. Not enough information to map on Figure 2.
4 (4)	Evans Transport Gasoline Spill	Within	I-35 south at I- 40 west (north of river)	Voluntary Cleanup Program (VCP)	Spill of hydrocarbons from an overturned tanker truck was reported in 2012 and the case was closed 2013.
5 (12)	AICCM Land Development LLC	Outside but in close proximity	35.46, -97/48	Brownfields Site with Institutional Controls (INST)	The soils at this site were impacted by polycyclic aromatic hydrocarbons. In 2021 the DEQ recommended no further action so long as the following Land Use Restrictions are met:  Commercial land use only Groundwater cannot be used for potable or irrigation purposes

# **FIGURES**







STUDY FOOTPRINT

- **GROUNDWATER WELL**
- OIL/GAS SITE
- POTENTIAL HAZARDOUS MATERIAL SITE



700 Feet



2634 9TH AVENUE NE NORMAN, OK 73071 (405) 919-0481

	FIGURE TITLE	DATE	7/18/2023
	STUDY AREA & HAZARDOUS MATERIALS ASSESSMENT FINDINGS	SCALE	AS SHOWN
	DOCUMENT TITLE		
ò	HAZARDOUS MATERIALS ASSESSMENT	DESIGNED BY	Ollic
	CLIENT		environmental
	TEIM DESIGN	FIGURE 1	NUMBER
	LOCATION	_	,
	OKLAHOMA COUNTY. OKLAHOMA	_	_

# **APPENDICES**

# Appendix A EDR Radius Map™ Report with Geocheck® December 15, 2022

**MAPS 4 River Fron** 

First Americans Blvd Oklahoma City, OK 73117

Inquiry Number: 7204954.2s

December 15, 2022

# The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

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**Thank you for your business.**Please contact EDR at 1-800-352-0050 with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

#### TARGET PROPERTY INFORMATION

#### **ADDRESS**

FIRST AMERICANS BLVD OKLAHOMA CITY, OK 73117

#### **COORDINATES**

Latitude (North): 35.4619160 - 35<sup>27</sup> 42.89" Longitude (West): 97.4769050 - 97<sup>28</sup> 36.85"

Universal Tranverse Mercator: Zone 14 UTM X (Meters): 638208.0 UTM Y (Meters): 3925136.8

Elevation: 1159 ft. above sea level

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 12543169 MIDWEST CITY, OK

Version Date: 2018

West Map: 12543181 OKLAHOMA CITY, OK

Version Date: 2018

#### **AERIAL PHOTOGRAPHY IN THIS REPORT**

Portions of Photo from: 20150623 Source: USDA

# MAPPED SITES SUMMARY

# Target Property Address: FIRST AMERICANS BLVD OKLAHOMA CITY, OK 73117

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1			UIC	Higher	1 ft.
2			OK COMPLAINT	Higher	1 ft.
3			OK COMPLAINT	Lower	1 ft.
4	EVANS TRANSPORT GASO	I-35 SOUTH AT I-40 W	VCP	Higher	41, 0.008, ENE
A5	RED ROCK PET CO NO 2	34 GRAND AVE E	EDR Hist Auto	Higher	263, 0.050, East
A6	STEPHENS E F FILLING	131 GRAND AVE E	EDR Hist Auto	Higher	267, 0.051, East
A7	127 29 PEERYS SERVIC	127 GRAND AVE E	EDR Hist Auto	Higher	268, 0.051, East
B8	GIPSON BROS SERV STA	201 GRAND AVE E	EDR Hist Auto	Higher	287, 0.054, East
B9	KLEIN OIL CO NO 6	203 GRAND AVE E	EDR Hist Auto	Higher	290, 0.055, East
A10	HAWK J C SERV FILL S	100 GRAND AVE E	EDR Hist Auto	Higher	363, 0.069, East
A11	ARROW CLEANERS	110 GRAND AVE E	EDR Hist Cleaner	Higher	363, 0.069, East
12	AICCM LAND DEVELOPME		INST CONTROL	Higher	404, 0.077, South
C13	303 5 PREST MACH: WK	303 GRAND AVE E	EDR Hist Auto	Higher	466, 0.088, East
C14	BUTLER SERV STA EQUI	302 GRAND AVE E	EDR Hist Auto	Higher	521, 0.099, East
D15	UNDERWOOD GARY D	1948 E RENO	EDR Hist Auto	Higher	536, 0.102, North
D16	TRADE WINDS MOBIL	1948 RENO AVE E	EDR Hist Auto	Higher	536, 0.102, North
D17	GARY DALES 66	1948 E RENO	LUST, UST, HIST UST	Higher	536, 0.102, North
C18	PRATTS AUTOREPRS	320 GRAND AVE E	EDR Hist Auto	Higher	561, 0.106, East
19	UNIFIRST CORPORATION	2130 E. CALIFORNIA A	AIRS, DRYCLEANERS, TIER 2	Higher	589, 0.112, NE
D20	WOOLF PEARL R FILL S	1900 RENO AVE E	EDR Hist Auto	Higher	604, 0.114, NNW
E21	SUNSHINE TRUCK STOP	1903 RENO AVE E	EDR Hist Auto	Higher	639, 0.121, NNW
D22	FREDRICK WILSON	1935 E RENO	LUST, UST, HIST UST	Higher	665, 0.126, North
F23	YELLOW FREIGHT SYSTE	1600 E RENO	HIST UST	Higher	673, 0.127, WNW
F24	YELLOW FREIGHT SYSTE	1600 E RENO	LUST, UST	Higher	673, 0.127, WNW
E25	CHECKERS TRUCK STOP	1901 E RENO	LUST, UST, HIST UST	Higher	680, 0.129, NNW
G26	PHILLIPS O.C. PRODUC	2700 E RENO	HIST UST	Higher	810, 0.153, East
G27	PHILLIPS O.C. PRODUC	2700 E RENO	UST	Higher	810, 0.153, East
H28	STANDARD IRON & META	1501 E. RENO AVE	SWRCY	Higher	863, 0.163, WNW
H29	STANDARD IRON & META	1501 E RENO	LUST, UST, HIST UST	Higher	863, 0.163, WNW
H30	ELLIS PROPERTY (VACA	1501 RENO	LUST, UST, HIST UST	Higher	863, 0.163, WNW
H31	STANDARD IRON & META	1501 E RENO	CORRACTS, RCRA NonGen / NLR, US AIRS	Higher	863, 0.163, WNW
132	PARAWAX REFINERY	700 S IRVING	SEMS-ARCHIVE, PRP	Higher	991, 0.188, SSE
133	PARAWAS REFINERY	801 SOUTH IRVING STR	SEMS-ARCHIVE	Higher	1243, 0.235, SSE
J34	FORMER ICX	1315 E RENO AVENUE	UST	Higher	1273, 0.241, WNW
J35	FORMER ICX	1315 E RENO AVENUE	HIST UST	Higher	1273, 0.241, WNW
36	PETRO OKLAHOMA CITY	20 S MARTIN LUTHER K	LUST, LAST, UST, AST, HIST UST, TIER 2	Higher	1280, 0.242, NNE
37	TOWNLEY DAIRY	400 S ECKROAT	LUST, UST	Higher	1564, 0.296, ESE
K38	MID AMERICA CHEMICAL	1801 SKYLINE DR	LUST, LAST, AST, OK COMPLAINT, TIER 2	Higher	1811, 0.343, SSW
39	BRUCE RYAN NOMINEE	100 SOUTH LOTTIE	LUST, UST	Higher	1862, 0.353, WNW

# MAPPED SITES SUMMARY

Target Property Address: FIRST AMERICANS BLVD OKLAHOMA CITY, OK 73117

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
L40	DOUBLE EAGLE REFINER		SHWS	Higher	1889, 0.358, North
L41	DOUBLE EAGLE		INST CONTROL	Higher	1889, 0.358, North
K42	SAIA MOTOR FREIGHT L	1715 S SKYLINE DRIVE	LUST, UST, HIST UST, TIER 2	Higher	1892, 0.358, SSW
M43	PIE NATIONWIDE	1925 SE SKYLINE	LUST, UST	Higher	1895, 0.359, South
M44	GRISBY HOLDINGS CORP	1905 E SKYLINE DR	LUST, UST, HIST UST	Higher	1924, 0.364, South
45	DEL PAINT MANUFACTUR	3105 E RENO	LUST, UST, HIST UST	Higher	2121, 0.402, East
46	PHILLIPS PETROLEUM C	910 S FAIRMONT	SEMS-ARCHIVE, RCRA NonGen / NLR, FINDS, ECHO	Higher	2121, 0.402, SE
N47	INTEGRITY METALS	1101 E. RENO	SWRCY	Higher	2132, 0.404, WNW
N48	INTERSTATE METALS CO	1101 E RENO	LUST, UST, BROWNFIELDS, HIST UST, AIRS	Higher	2132, 0.404, WNW
N49	INTERSTATE METALS	1101 E RENO AVENUE	US BROWNFIELDS, FINDS	Higher	2132, 0.404, WNW
50	DERICHEBOURG RECYCLI	100 N BATH AVE	SWRCY	Higher	2195, 0.416, NW
N51	INTERSTATE METALS		INST CONTROL	Higher	2237, 0.424, West
N52	OKLAHOMA DEPARTMENT	1100 E RENO	LUST, UST	Higher	2242, 0.425, West
53	CARTER & SONS FREIGH	2420 SE 8TH STR	LUST, UST	Higher	2262, 0.428, ESE
54	FOURTH STREET ABANDO	2200 BLOCK NE 4TH	Delisted NPL, SEMS, US ENG CONTROLS, US INST	Higher	2287, 0.433, NNE
55	FUEL AT THE FLAG #5	1113 S EASTERN	LUST, UST, HIST UST	Higher	2354, 0.446, South
O56	HEARN MACHINE WORKS	3201 E. RENO AVE.	VCP	Higher	2519, 0.477, East
O57	DW HEARN MACHINE WOR	3201 E RENO	SEMS-ARCHIVE, RCRA NonGen / NLR, FINDS, ECHO	Higher	2519, 0.477, East
P58	FOURTH STREET		INST CONTROL	Higher	2562, 0.485, NNE
P59	FOURTH STREET REFINE		SHWS	Higher	2562, 0.485, NNE
60	HENLEY'S SEALANT/ZON	200 WISCONSIN	SEMS, PRP	Higher	2576, 0.488, North
61	DOUBLE EAGLE REFINER	301 N RHODE ISLAND	Delisted NPL, SEMS, US ENG CONTROLS, US INST	Higher	2734, 0.518, NNW

# TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

# **DATABASES WITH NO MAPPED SITES**

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

#### STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Super	rfund) citae
, <i>-</i>	•
NPL Proposed NPI	Proposed National Priority List Sites
NPL LIENS	- Federal Superfund Liens
Lists of Federal sites subje	ct to CERCLA removals and CERCLA orders
FEDERAL FACILITY	. Federal Facility Site Information listing
Lists of Federal RCRA TSD	facilities
RCRA-TSDF	RCRA - Treatment, Storage and Disposal
Lists of Federal RCRA gene	erators
	RCRA - Large Quantity Generators
	RCRA - Small Quantity Generators RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity
1.010/1.0000	Generators)
Federal institutional contro	ls / engineering controls registries
LUCIS	Land Use Control Information System
Federal ERNS list	
ERNS	Emergency Response Notification System
Lists of state and tribal land	dfills and solid waste disposal facilities
SWF/LF	Permitted Solid Waste Disposal & Processing Facilities
Lists of state and tribal leal	king storage tanks
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land
Lists of state and tribal reg	istered storage tanks
FEMA UST	Underground Storage Tank Listing

INDIAN UST...... Underground Storage Tanks on Indian Land

#### Lists of state and tribal voluntary cleanup sites

INDIAN VCP...... Voluntary Cleanup Priority Listing SCAP...... Site Cleanup Assistance program Listing

#### ADDITIONAL ENVIRONMENTAL RECORDS

#### Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands

ODI. Open Dump Inventory

DEBRIS REGION 9...... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

#### Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register US CDL...... National Clandestine Laboratory Register

#### Local Land Records

LIENS 2..... CERCLA Lien Information

#### Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System

#### Other Ascertainable Records

FUDS Formerly Used Defense Sites

DOD....... Department of Defense Sites SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR...... Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

2020 COR ACTION.......... 2020 Corrective Action Program List

TSCA...... Toxic Substances Control Act

TRIS...... Toxic Chemical Release Inventory System

SSTS..... Section 7 Tracking Systems

RMP..... Risk Management Plans

RAATS\_\_\_\_\_RCRA Administrative Action Tracking System

ICIS\_\_\_\_\_Integrated Compliance Information System

FTTS......FIFŘA/ TSCA Tracking System - FIFŘA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

MLTS...... Material Licensing Tracking System COAL ASH DOE...... Steam-Electric Plant Operation Data

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER...... PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS...... Incident and Accident Data

CONSENT...... Superfund (CERCLA) Consent Decrees

INDIAN RESERV..... Indian Reservations

FUSRAP..... Formerly Utilized Sites Remedial Action Program

UMTRA..... Uranium Mill Tailings Sites

LEAD SMELTERS..... Lead Smelter Sites

US AIRS..... Aerometric Information Retrieval System Facility Subsystem

US MINES..... Mines Master Index File ABANDONED MINES..... Abandoned Mines

UXO...... Unexploded Ordnance Sites

FUELS PROGRAM..... EPA Fuels Program Registered Listing

PFAS NPL Superfund Sites with PFAS Detections Information

PFAS FEDERAL SITES..... Federal Sites PFAS Information

PFAS TSCA..... PFAS Manufacture and Imports Information

PFAS RCRA MANIFEST..... PFAS Transfers Identified In the RCRA Database Listing

PFAS PART 139 AIRPORT... All Certified Part 139 Airports PFAS Information Listing AQUEOUS FOAM NRC...... Aqueous Foam Related Incidents Listing

PFAS Contamination Site Location Listing

AIRS Permitted AIRS Facility Listing

ASBESTOS..... Asbestos Notification

Financial Assurance Information Listing

TIER 2..... Tier 2 Data Listing

MINES MRDS..... Mineral Resources Data System

#### **EDR HIGH RISK HISTORICAL RECORDS**

#### **EDR Exclusive Records**

EDR MGP..... EDR Proprietary Manufactured Gas Plants

#### **EDR RECOVERED GOVERNMENT ARCHIVES**

#### Exclusive Recovered Govt. Archives

RGA LF...... Recovered Government Archive Solid Waste Facilities List

RGA LUST...... Recovered Government Archive Leaking Underground Storage Tank

## SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in bold italics are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

#### STANDARD ENVIRONMENTAL RECORDS

#### Lists of Federal Delisted NPL sites

Delisted NPL: The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may deleted from the NPL where no further response is appropriate.

A review of the Delisted NPL list, as provided by EDR, and dated 10/27/2022 has revealed that there are 2 Delisted NPL sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FOURTH STREET ABANDO EPA ID:: OKD980696470 Site ID:: 601297	2200 BLOCK NE 4TH	NNE 1/4 - 1/2 (0.433 mi.)	54	138
DOUBLE EAGLE REFINER EPA ID:: OKD007188717 Site ID:: 601029	301 N RHODE ISLAND	NNW 1/2 - 1 (0.518 mi.)	61	166

#### Lists of Federal sites subject to CERCLA removals and CERCLA orders

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 10/27/2022 has revealed that there are 2 SEMS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FOURTH STREET ABANDO Site ID: 0601297 EPA Id: OKD980696470	2200 BLOCK NE 4TH	NNE 1/4 - 1/2 (0.433 mi.)	54	138
HENLEY'S SEALANT/ZON Site ID: 0607040 EPA Id: OKN000607040	200 WISCONSIN	N 1/4 - 1/2 (0.488 mi.)	60	165

#### Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of

assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 10/27/2022 has revealed that there are 4 SEMS-ARCHIVE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
<b>PARAWAX REFINERY</b> Site ID: 0601121 EPA Id: OKD062270590	700 S IRVING	SSE 1/8 - 1/4 (0.188 mi.)	<i>1</i> 32	57
PARAWAS REFINERY Site ID: 0605326 EPA Id: OK0000605326	801 SOUTH IRVING STR	SSE 1/8 - 1/4 (0.235 mi.)	133	59
PHILLIPS PETROLEUM C Site ID: 06011116 EPA Id: OKD060778065	910 S FAIRMONT	SE 1/4 - 1/2 (0.402 mi.)	46	95
<b>DW HEARN MACHINE WOR</b> Site ID: 0601034 EPA Id: OKD007194517	3201 E RENO	E 1/4 - 1/2 (0.477 mi.)	O57	159

#### Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 11/21/2022 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance Map ID	Page
STANDARD IRON & META	1501 E RENO	WNW 1/8 - 1/4 (0.163 mi.) H31	43
EPA ID:: OKD990699423		, ,	

#### Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 08/15/2022 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FOURTH STREET ABANDO	2200 BLOCK NE 4TH	NNE 1/4 - 1/2 (0.433 mi.)	54	138

EPA ID:: OKD980696470 EPA ID:: OKD980696470

US INST CONTROLS: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROLS list, as provided by EDR, and dated 08/15/2022 has revealed that there is 1 US INST CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FOURTH STREET ABANDO	2200 BLOCK NE 4TH	NNE 1/4 - 1/2 (0.433 mi.)	54	138
FPA ID.: OKD980696470				

#### Lists of state- and tribal hazardous waste facilities

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

A review of the SHWS list, as provided by EDR, and dated 08/08/2022 has revealed that there are 2 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOUBLE EAGLE REFINER		N 1/4 - 1/2 (0.358 mi.)	L40	83
FOURTH STREET REFINE		NNE 1/4 - 1/2 (0.485 mi.)	P59	163

#### Lists of state and tribal leaking storage tanks

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Oklahoma Corporation Commission's Leaking UST list.

A review of the LUST list, as provided by EDR, and dated 09/05/2022 has revealed that there are 18 LUST sites within approximately 0.5 miles of the target property.

<b>Equal/Higher Elevation</b>	Address	Direction / Distance	Map ID	Page
GARY DALES 66 STATUS: Closed Facility Id: 5505096 Close Date: 01/26/2000	1948 E RENO	N 0 - 1/8 (0.102 mi.)	D17	16
FREDRICK WILSON STATUS: Closed Facility Id: 5508258 Close Date: 11/22/1996	1935 E RENO	N 1/8 - 1/4 (0.126 mi.)	D22	25
YELLOW FREIGHT SYSTE	1600 E RENO	WNW 1/8 - 1/4 (0.127 mi.	) F24	28

STATUS: Closed Facility Id: 5507078 Close Date: 10/24/1994  CHECKERS TRUCK STOP STATUS: Closed Facility Id: 5510187 Close Date: 12/27/1999 Close Date: 04/25/1991 Close Date: 10/06/1993 Close Date: 03/27/2006 Close Date: 03/01/1989 *Additional key fields are available in the	<b>1901 E RENO</b> Map Findings section	NNW 1/8 - 1/4 (0.129 mi.)	E25	30
STANDARD IRON & META STATUS: Closed Facility Id: 5505351 Close Date: 10/14/2003 Close Date: 03/23/1994	1501 E RENO	WNW 1/8 - 1/4 (0.163 mi.)	H29	38
ELLIS PROPERTY (VACA STATUS: Closed Facility Id: 5510419 Close Date: 01/11/2001	1501 RENO	WNW 1/8 - 1/4 (0.163 mi.)	Н30	40
PETRO OKLAHOMA CITY STATUS: Closed Facility Id: 5511197 Close Date: 05/10/2017 Close Date: 02/29/2008 Close Date: 12/08/2009	20 S MARTIN LUTHER K	NNE 1/8 - 1/4 (0.242 mi.)	36	61
TOWNLEY DAIRY STATUS: Closed Facility Id: 5502145 Close Date: 10/29/2002	400 S ECKROAT	ESE 1/4 - 1/2 (0.296 mi.)	37	69
MID AMERICA CHEMICAL STATUS: Closed Facility Id: 5514905 Close Date: 03/09/2000	1801 SKYLINE DR	SSW 1/4 - 1/2 (0.343 mi.)	K38	70
BRUCE RYAN NOMINEE STATUS: Closed Facility Id: 5503040 Close Date: 08/18/1999	100 SOUTH LOTTIE	WNW 1/4 - 1/2 (0.353 mi.)	39	82
SAIA MOTOR FREIGHT L STATUS: Closed Facility Id: 5505434 Close Date: 03/15/1990	1715 S SKYLINE DRIVE	SSW 1/4 - 1/2 (0.358 mi.)	K42	85
PIE NATIONWIDE STATUS: Closed Facility Id: 5502761 Close Date: 07/14/1994	1925 SE SKYLINE	S 1/4 - 1/2 (0.359 mi.)	M43	88
GRISBY HOLDINGS CORP STATUS: Closed Facility Id: 5500989 Close Date: 06/11/1991	1905 E SKYLINE DR	S 1/4 - 1/2 (0.364 mi.)	M44	89
DEL PAINT MANUFACTUR	3105 E RENO	E 1/4 - 1/2 (0.402 mi.)	45	90

STATUS: Closed Facility Id: 5508558 Close Date: 11/26/2001 Close Date: 07/11/1991 INTERSTATE METALS CO 1101 E RENO WNW 1/4 - 1/2 (0.404 mi.) N48 101 STATUS: Closed Facility Id: 5504605 Close Date: 11/22/2019 OKLAHOMA DEPARTMENT 1100 E RENO W 1/4 - 1/2 (0.425 mi.) N52 136 STATUS: Closed Facility Id: 5501515 Close Date: 01/23/1996 **CARTER & SONS FREIGH** 2420 SE 8TH STR ESE 1/4 - 1/2 (0.428 mi.) 53 137 STATUS: Closed Facility Id: 5503943 Close Date: 04/01/1989 **FUEL AT THE FLAG #5** 1113 S EASTERN S 1/4 - 1/2 (0.446 mi.) 55 156 STATUS: Closed Facility Id: 5505556 Close Date: 04/03/2002

LAST: The Leaking Aboveground Storage Tank database.

A review of the LAST list, as provided by EDR, and dated 09/05/2022 has revealed that there are 2 LAST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PETRO OKLAHOMA CITY STATUS: Closed Facility Id: 5511197 Close Date: 07/16/2009	20 S MARTIN LUTHER K	NNE 1/8 - 1/4 (0.242 mi.)	36	61
MID AMERICA CHEMICAL STATUS: Closed Facility Id: 5514905 Close Date: 05/20/2011	1801 SKYLINE DR	SSW 1/4 - 1/2 (0.343 mi.)	K38	70

## Lists of state and tribal registered storage tanks

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Oklahoma Corporation Commission's State UST List, List II Version.

A review of the UST list, as provided by EDR, and dated 09/05/2022 has revealed that there are 9 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GARY DALES 66 Facility Id: 5505096	1948 E RENO	N 0 - 1/8 (0.102 mi.)	D17	16

TankStatus: POU				
FREDRICK WILSON Facility Id: 5508258 TankStatus: TOU	1935 E RENO	N 1/8 - 1/4 (0.126 mi.)	D22	25
YELLOW FREIGHT SYSTE Facility Id: 5507078 TankStatus: POU	1600 E RENO	WNW 1/8 - 1/4 (0.127 mi.)	F24	28
CHECKERS TRUCK STOP Facility Id: 5510187 TankStatus: CIU	1901 E RENO	NNW 1/8 - 1/4 (0.129 mi.)	E25	30
PHILLIPS O.C. PRODUC Facility Id: 5508348 TankStatus: POU	2700 E RENO	E 1/8 - 1/4 (0.153 mi.)	G27	36
STANDARD IRON & META Facility Id: 5505351 TankStatus: POU TankStatus: CIU	1501 E RENO	WNW 1/8 - 1/4 (0.163 mi.)	H29	38
ELLIS PROPERTY (VACA Facility Id: 5510419 TankStatus: POU	1501 RENO	WNW 1/8 - 1/4 (0.163 mi.)	H30	40
FORMER ICX Facility Id: 5520961 TankStatus: POU	1315 E RENO AVENUE	WNW 1/8 - 1/4 (0.241 mi.)	J34	60
PETRO OKLAHOMA CITY Facility Id: 5511197 TankStatus: CIU	20 S MARTIN LUTHER K	NNE 1/8 - 1/4 (0.242 mi.)	36	61

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Oklahoma Corporation Commission's State AST List, List II Version.

A review of the AST list, as provided by EDR, and dated 09/05/2022 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PETRO OKLAHOMA CITY Facility Id: 5511197	20 S MARTIN LUTHER K	NNE 1/8 - 1/4 (0.242 mi.)	36	61
Tank Status: CIU				

# State and tribal institutional control / engineering control registries

INST CONTROL: Sites with institutional controls in place.

A review of the INST CONTROL list, as provided by EDR, and dated 08/08/2022 has revealed that there are 4 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AICCM LAND DEVELOPME		S 0 - 1/8 (0.077 mi.)	12	15
DOUBLE EAGLE		N 1/4 - 1/2 (0.358 mi.)	L41	84
INTERSTATE METALS		W 1/4 - 1/2 (0.424 mi.)	N51	135

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FOURTH STREET		NNE 1/4 - 1/2 (0.485 mi.)	P58	163

#### Lists of state and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Site Inventory.

A review of the VCP list, as provided by EDR, and dated 08/08/2022 has revealed that there are 2 VCP sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	<b>Direction / Distance</b>	Map ID	Page
EVANS TRANSPORT GASO	I-35 SOUTH AT I-40 W	ENE 0 - 1/8 (0.008 mi.)	4	13
Facility Status: Project inactive. Detail referring to the individual file.	s of closure or withdrawal from VC	CP are not known without		
HEARN MACHINE WORKS Facility Status: Project inactive. Detail referring to the individual file.	3201 E. RENO AVE. s of closure or withdrawal from VO	E 1/4 - 1/2 (0.477 mi.) CP are not known without	O56	158

#### Lists of state and tribal brownfield sites

#### **BROWNFIELDS:**

A review of the BROWNFIELDS list, as provided by EDR, has revealed that there is 1 BROWNFIELDS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
INTERSTATE METALS CO	1101 E RENO	WNW 1/4 - 1/2 (0.404 mi.)	N48	101
Database: BROWNFIELDS 2, Da	te of Government Version: 06/09/2022			

#### ADDITIONAL ENVIRONMENTAL RECORDS

#### Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 02/23/2022 has revealed that there is 1 US BROWNFIELDS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
INTERSTATE METALS ACRES property ID: 232903 Cleanup Completion Date: 5/30/2017	1101 E RENO AVENUE	WNW 1/4 - 1/2 (0.404 mi.)	N49	102

Cleanup Completion Date: -

Cleanup Completion Date: 11/22/2019

#### Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facility locations.

A review of the SWRCY list, as provided by EDR, and dated 07/10/2019 has revealed that there are 3 SWRCY sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANDARD IRON & META	1501 E. RENO AVE	WNW 1/8 - 1/4 (0.163 mi.)	H28	36
INTEGRITY METALS	1101 E. RENO	WNW 1/4 - 1/2 (0.404 mi.)	N47	99
DERICHEBOURG RECYCLI	100 N BATH AVE	NW 1/4 - 1/2 (0.416 mi.)	50	134

#### Local Lists of Registered Storage Tanks

HIST UST: This underground storage tank listing includes tank information through March 2003. This listing is no longer updated by the Oklahoma Corporation Commission.

A review of the HIST UST list, as provided by EDR, and dated 03/21/2003 has revealed that there are 9 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GARY DALES 66 Facility Id: 5505096 Tank Status: Permanently Out of Use	1948 E RENO	N 0 - 1/8 (0.102 mi.)	D17	16
FREDRICK WILSON Facility Id: 5508258 Tank Status: Currently in Use	1935 E RENO	N 1/8 - 1/4 (0.126 mi.)	D22	25
YELLOW FREIGHT SYSTE Facility Id: 5507078 Tank Status: Permanently Out of Use	1600 E RENO	WNW 1/8 - 1/4 (0.127 mi.)	F23	27
CHECKERS TRUCK STOP Facility Id: 5510187 Tank Status: Currently in Use	1901 E RENO	NNW 1/8 - 1/4 (0.129 mi.)	E25	30
PHILLIPS O.C. PRODUC Facility Id: 5508348 Tank Status: Permanently Out of Use	2700 E RENO	E 1/8 - 1/4 (0.153 mi.)	G26	36
STANDARD IRON & META Facility Id: 5505351 Tank Status: Permanently Out of Use Tank Status: Currently in Use	1501 E RENO	WNW 1/8 - 1/4 (0.163 mi.)	H29	38
ELLIS PROPERTY (VACA Facility Id: 5510419 Tank Status: Permanently Out of Use	1501 RENO	WNW 1/8 - 1/4 (0.163 mi.)	H30	40
FORMER ICX	1315 E RENO AVENUE	WNW 1/8 - 1/4 (0.241 mi.)	J35	61

Facility Id: 9919638

Tank Status: Permanently Out of Use

PETRO OKLAHOMA CITY 20 S MARTIN LUTHER K NNE 1/8 - 1/4 (0.242 mi.) 36 61

Facility Id: 5511197 Tank Status: Currently in Use

#### Records of Emergency Release Reports

OK COMPLAINT: Environmental complaints report to the Oklahoma corporation commission.

A review of the OK COMPLAINT list, as provided by EDR, and dated 06/30/2021 has revealed that there are 2 OK COMPLAINT sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported		0 - 1/8 (0.000 mi.)	2	8
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported		0 - 1/8 (0.000 mi.)	3	10

#### Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 11/21/2022 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance Map II	Page
STANDARD IRON & META EPA ID:: OKD990699423	1501 E RENO	WNW 1/8 - 1/4 (0.163 mi.) H31	43

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 10/27/2022 has revealed that there are 2 ROD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FOURTH STREET ABANDO EPA ID:: OKD980696470	2200 BLOCK NE 4TH	NNE 1/4 - 1/2 (0.433 mi.)	54	138
DOUBLE EAGLE REFINER EPA ID:: OKD007188717	301 N RHODE ISLAND	NNW 1/2 - 1 (0.518 mi.)	61	166

DRYCLEANERS: A listing of drycleaner facility locations.

A review of the DRYCLEANERS list, as provided by EDR, and dated 09/13/2022 has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNIFIRST CORPORATION Facility Status: Operating Facility Id: 16589	2130 E. CALIFORNIA A	NE 0 - 1/8 (0.112 mi.)	19	18

UIC: Class I injection wells. CLASS I wells are used to inject liquid hazardous and non-hazardous wastes beneath the lower most Underground Sources of Drinking Water (USDW).

A review of the UIC list, as provided by EDR, and dated 06/16/2022 has revealed that there is 1 UIC site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported		0 - 1/8 (0.000 mi.)	1	8

#### **EDR HIGH RISK HISTORICAL RECORDS**

#### **EDR Exclusive Records**

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 13 EDR Hist Auto sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RED ROCK PET CO NO 2	34 GRAND AVE E	E 0 - 1/8 (0.050 mi.)	A5	13
STEPHENS E F FILLING	131 GRAND AVE E	E 0 - 1/8 (0.051 mi.)	A6	13
127 29 PEERYS SERVIC	127 GRAND AVE E	E 0 - 1/8 (0.051 mi.)	A7	14
GIPSON BROS SERV STA	201 GRAND AVE E	E 0 - 1/8 (0.054 mi.)	B8	14
KLEIN OIL CO NO 6	203 GRAND AVE E	E 0 - 1/8 (0.055 mi.)	B9	14
HAWK J C SERV FILL S	100 GRAND AVE E	E 0 - 1/8 (0.069 mi.)	A10	14
303 5 PREST MACH: WK	303 GRAND AVE E	E 0 - 1/8 (0.088 mi.)	C13	15
BUTLER SERV STA EQUI	302 GRAND AVE E	E 0 - 1/8 (0.099 mi.)	C14	15
UNDERWOOD GARY D	1948 E RENO	N 0 - 1/8 (0.102 mi.)	D15	16
TRADE WINDS MOBIL	1948 RENO AVE E	N 0 - 1/8 (0.102 mi.)	D16	16
PRATTS AUTOREPRS	320 GRAND AVE E	E 0 - 1/8 (0.106 mi.)	C18	18
WOOLF PEARL R FILL S	1900 RENO AVE E	NNW 0 - 1/8 (0.114 mi.)	D20	25
SUNSHINE TRUCK STOP	1903 RENO AVE E	NNW 0 - 1/8 (0.121 mi.)	E21	25

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

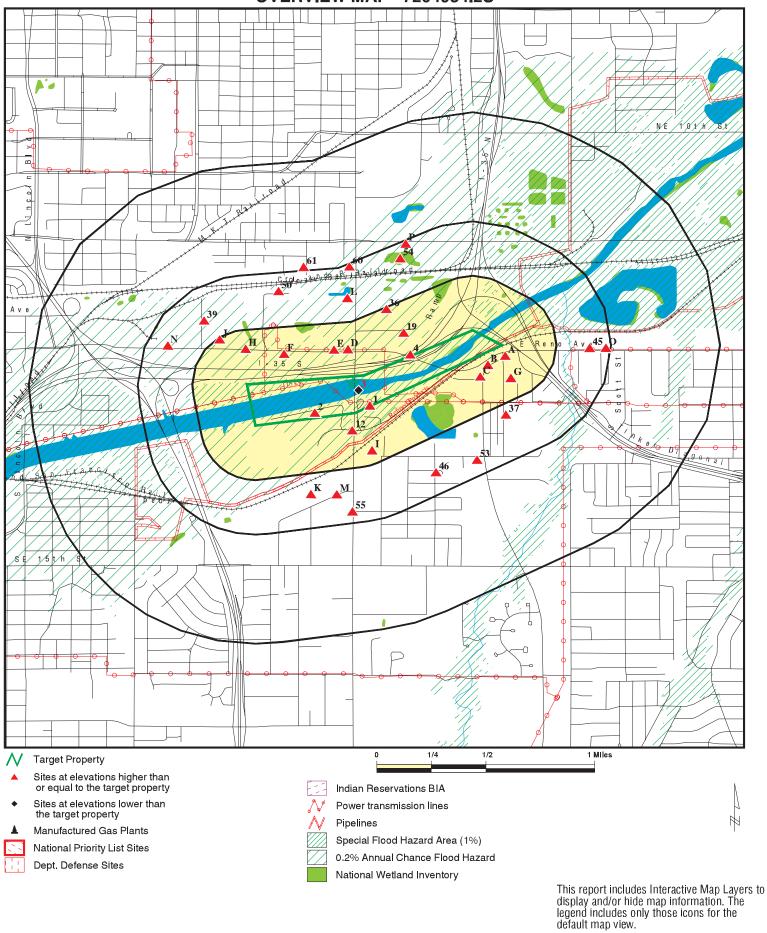
A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there is 1 EDR Hist Cleaner site within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARROW CLEANERS	110 GRAND AVE E	E 0 - 1/8 (0.069 mi.)	A11	15

Due to poor or inadequate address information, the following sites were not mapped. Count: 8 records.

Site Name	Database(s)
AMERICAN MEDICAL DISPOSAL, INC.	SWF/LF
LAND RECLAIMERS, INC. LANDFILL	SWF/LF
VILLA LANDFILL	SWF/LF
CITY OF DEL CITY LANDFILL	SWF/LF
CITY OF DEL CITY MUNICIPAL INCINER	SWF/LF
KIWANIS	VCP
ALTEC LANSING	VCP
CUSTOM EQUIPMENT COMPANY SANITARY	ODI

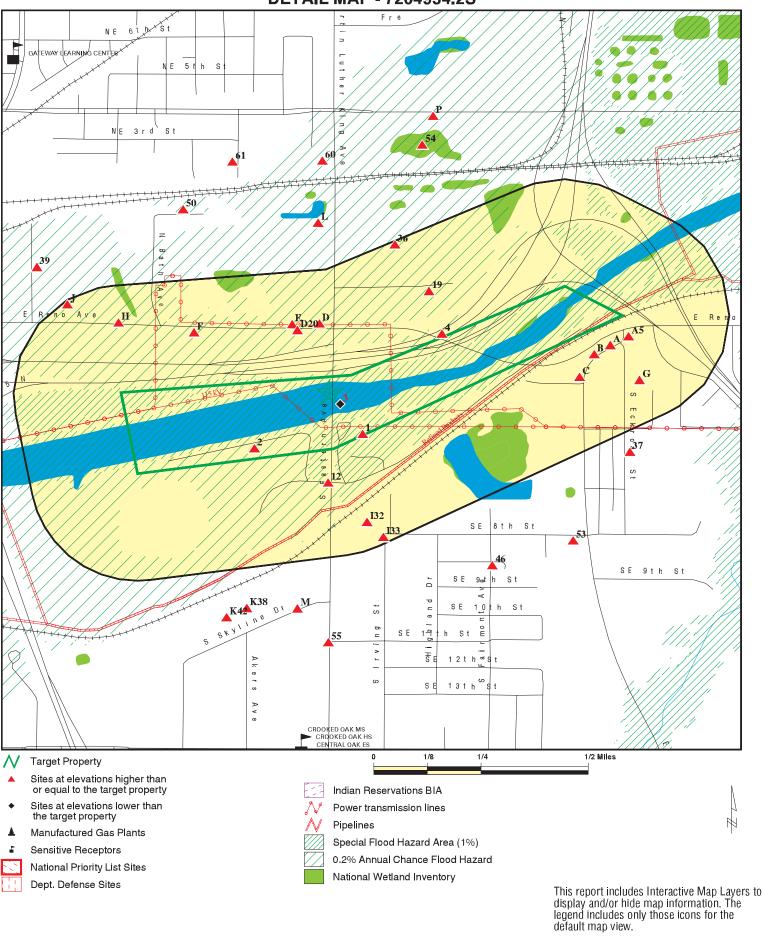
# **OVERVIEW MAP - 7204954.2S**



SITE NAME: MAPS 4 River Fron
ADDRESS: First Americans Blvd
Oklahoma City OK 73117
LAT/LONG: 35.461916 / 97.476905

CLIENT: Triad Design Group
CONTACT: Diane Abernathy
INQUIRY #: 7204954.2s
DATE: December 15, 2022 10:40 am

# **DETAIL MAP - 7204954.2S**



SITE NAME: MAPS 4 River Fron
ADDRESS: First Americans Blvd
Oklahoma City OK 73117
LAT/LONG: 35.461916 / 97.476905

CLIENT: Triad Design Group
CONTACT: Diane Abernathy
INQUIRY #: 7204954.2s
DATE: December 15, 2022 10:41 am

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted	
STANDARD ENVIRONMENT	TAL RECORDS								
Lists of Federal NPL (Su	perfund) site	s							
NPL Proposed NPL NPL LIENS	1.000 1.000 1.000		0 0 0	0 0 0	0 0 0	0 0 0	NR NR NR	0 0 0	
Lists of Federal Delisted	NPL sites								
Delisted NPL	1.000		0	0	1	1	NR	2	
Lists of Federal sites sul CERCLA removals and C		ers							
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 2	NR NR	NR NR	0 2	
Lists of Federal CERCLA sites with NFRAP									
SEMS-ARCHIVE	0.500		0	2	2	NR	NR	4	
Lists of Federal RCRA fa undergoing Corrective A									
CORRACTS	1.000		0	1	0	0	NR	1	
Lists of Federal RCRA TSD facilities									
RCRA-TSDF	0.500		0	0	0	NR	NR	0	
Lists of Federal RCRA go	enerators								
RCRA-LQG RCRA-SQG RCRA-VSQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0	
Federal institutional controls / engineering controls registries									
LUCIS US ENG CONTROLS US INST CONTROLS	0.500 0.500 0.500		0 0 0	0 0 0	0 1 1	NR NR NR	NR NR NR	0 1 1	
Federal ERNS list									
ERNS	0.001		0	NR	NR	NR	NR	0	
Lists of state- and tribal hazardous waste facilities	es								
SHWS	1.000		0	0	2	0	NR	2	
Lists of state and tribal landfills and solid waste disposal facilities									
SWF/LF	0.500		0	0	0	NR	NR	0	
Lists of state and tribal l	eaking storag	ge tanks							
LUST	0.500		1	6	11	NR	NR	18	

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted	
LAST INDIAN LUST	0.500 0.500		0	1 0	1 0	NR NR	NR NR	2 0	
Lists of state and tribal	registered sto	orage tanks							
FEMA UST	0.250		0	0	NR	NR	NR	0	
UST AST	0.250 0.250		1 0	8 1	NR NR	NR NR	NR NR	9 1	
INDIAN UST	0.250		0	0	NR	NR	NR	0	
State and tribal institution control / engineering co		es							
INST CONTROL	0.500		1	0	3	NR	NR	4	
Lists of state and tribal	voluntary clea	anup sites							
INDIAN VCP	0.500		0	0	0	NR	NR	0	
VCP	0.500		. 1	0	1	NR	NR	2	
SCAP	TP		NR	NR	NR	NR	NR	0	
Lists of state and tribal		tes							
BROWNFIELDS	0.500		0	0	1	NR	NR	1	
ADDITIONAL ENVIRONME	NTAL RECORD	<u>s</u>							
Local Brownfield lists									
US BROWNFIELDS	0.500		0	0	1	NR	NR	1	
Local Lists of Landfill / Waste Disposal Sites	Solid								
SWRCY	0.500		0	1	2	NR	NR	3	
INDIAN ODI ODI	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0	
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0	
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0	
Local Lists of Hazardou Contaminated Sites	s waste /								
US HIST CDL	0.001		0	NR	NR	NR	NR	0	
US CDL	0.001		0	NR	NR	NR	NR	0	
Local Lists of Registered Storage Tanks									
HIST UST	0.250		1	8	NR	NR	NR	9	
Local Land Records									
LIENS 2	0.001		0	NR	NR	NR	NR	0	
Records of Emergency Release Reports									
HMIRS	0.001		0	NR	NR	NR	NR	0	
OK COMPLAINT	0.001		2	NR	NR	NR	NR	2	
Other Ascertainable Rec			•		NE	NE			
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1	

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		Ö	Ö	ŏ	Ö	NR	ő
SCRD DRYCLEANERS	0.500		Ö	Ö	Ö	NR	NR	Ö
US FIN ASSUR	0.001		Ö	NR	NR	NR	NR	Ö
EPA WATCH LIST	0.001		Ö	NR	NR	NR	NR	Ö
2020 COR ACTION	0.250		0	0	NR	NR	NR	Ö
TSCA	0.001		0	NR	NR	NR	NR	Ö
TRIS	0.001		Ō	NR	NR	NR	NR	Ö
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	1	1	NR	2
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV FUSRAP	1.000 1.000		0 0	0 0	0	0 0	NR NR	0
UMTRA	0.500		0	0	0 0	NR	NR	0 0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		Ö	Ö	NR	NR	NR	Ö
FINDS	0.001		Ö	NR	NR	NR	NR	Ö
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAINI			0	0	NR	NR	NR	0
PFAS PART 139 AIRPORT AQUEOUS FOAM NRC	0.250		0 0	0 0	NR NR	NR NR	NR NR	0 0
PFAS	0.250 TP		NR	NR	NR NR	NR NR	NR NR	0
AIRS	0.001		0	NR	NR NR	NR	NR	0
ASBESTOS	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		1	0	NR	NR	NR	1
·- <del>-</del>			-	-				-

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Financial Assurance	0.001		0	NR	NR	NR	NR	0
TIER 2	0.001		0	NR	NR	NR	NR	0
UIC	0.001		1	NR	NR	NR	NR	1
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICA	RECORDS							
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		13	NR	NR	NR	NR	13
EDR Hist Cleaner	0.125		1	NR	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals		0	23	29	30	2	0	84

## NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

1 UIC S125710289 N/A

< 1/8 OKLAHOMA (County), OK

1 ft.

UIC:

Relative: Name: Not reported Higher Address: Not reported City,State,Zip: OK Actual:

1160 ft.

Longitude: -97.4755220 Latitude: 35.4604800 Section:

Township: 11N 03W Range: API ID: 3510937654 Q1 Quarter: NW Q2 Quarter: SW Q3 Quarter: SW Q4 Quarter: N2 Order Number: 358049

Operator ID: 20111 RAINBO SERVICE COMPANY Operator:

Well Type: CDW Well Number: 1-1

Well Name: **PESTHOUSE** Approval Date: 06/24/1991 PSI: 0 BBLS: 10000 Zone: **ARBUCKLE** Non Liquid or Solid Injection: Not reported

One Thousand Cubic Feet: Not reported

2 **OK COMPLAINT** S116280616 N/A

Not reported

< 1/8 OKLAHOMA (County), OK 1 ft.

OK COMPLAINT:

Relative: Name: Not reported Higher Address: Not reported City,State,Zip: OK Actual:

Source and Type of Complaint:

Agency Receiving Complaint: Not reported 1169 ft. Agency with Jurisdiction: Not reported Complaint Number: Not reported Complaint Number: Not reported Complaint Number 2: Not reported Complaint Date Closed: Not reported Agency Person Contacted: Not reported Date Referred to Agency: Not reported

Date Agency Received: Not reported Anonymous Complaint: Not reported Confirmation Status: Not reported Complainant Name: Not reported Complainant Address: Not reported Complainant Work Phone: Not reported Complainant Home Phone: Not reported Complainant City, St, Zip: Not reported Date Complaint was Received: Not reported Time Complaint was Received: Not reported

Distance

Elevation Site Database(s) EPA ID Number

(Continued) S116280616

Name of Affected Waterbody: Not reported Waterbody was affected: Not reported Fish or Wildlife Kill Occured: Not reported Legal Subdivition of Complaint Site: Not reported Section, Township, Range: Not reported Township: Not reported Not reported Range: Lat/Long (dms): Not reported Latitude Decimal: Not reported Longitude Decimal: Not reported Date Agency Responded: Not reported First Response Time: Not reported Referred To: Not reported Date Referred: Not reported Pollution: Not reported Locate Meridian: Not reported Not reported Date Investigation: Officer Name: Not reported Investigator Initials: Not reported Responsible Party Telephone: Not reported Responsible Party Telephone2: Not reported Leased Well Name: Not reported Facility Contact: Not reported Date Under Investigation: 03/21/2013 Date Under Litigation: Not reported Date Under Remediation: Not reported Date Under Mediation: Not reported Date Resolved: Not reported Confirmation Status: Not reported Not reported County Number: General Location: Not reported Locate QT1: Not reported Locate QT2: Not reported Locate QT3: Not reported Not reported Locate QT4: Fiscal Year: 2013 Comp Date Closed: Not reported Mobile: Not reported Latitude Measure: 35.46 Longitude Measure: -97.48 Identifier: 134011 Source cat Code: 29253 Description: Radiation Anonymous Inquiry Category Name: Closed Inquiry Status Name: Inquiry Nature Name: Others Responsible Party Address Suite Number: Not reported Complainant Address Suite Number: Not reported Incident No: Not reported Incident Type: Not reported Incident Status: Not reported Event: Not reported **Event Date:** Not reported Saltwater Purge: Not reported

Finding: Not reported
Recommendations: Not reported
Well ID: Not reported

Direction Distance Elevation

levation Site Database(s) EPA ID Number

(Continued) S116280616

Well Type: Not reported Well Status: Not reported Well Number: Not reported Operator Name: Not reported State Fund: Not reported Enforcement: Not reported Not reported District: Comp Against: Not reported Comp Email: Not reported Comp WPHN: Not reported Comp HPHN: Not reported Comp MBHN: Not reported Comp Email 2: Not reported Confirm WB: Not reported Branch: Not reported Transmit: Not reported Not reported Entered By: Ref Number: Not reported Ref Type: Not reported Date ERC: Not reported Telephone Number: Not reported Investigation Assigned: Not reported Not reported Referred Another Agency: Investigation: Not reported Letters Received: Not reported Telephone Number of Comp: Not reported Type of Complaint?: Not reported Field0: Not reported Open Date: Not reported Closed Date: Not reported Reason for Closure: Not reported Start Time: Not reported End Time: Not reported Anonymous Confidential or Unrestricted: Not reported Not reported Creation Date: Not reported Creator: Edit Date: Not reported Editor: Not reported Allegation: Not reported

3 OK COMPLAINT S116278572 N/A

# < 1/8 OKLAHOMA (County), OK 1 ft.

1158 ft.

OK COMPLAINT:

Relative:Name:Not reportedLowerAddress:Not reportedActual:City,State,Zip:OK

Agency Receiving Complaint: Not reported Agency with Jurisdiction: Not reported Complaint Number: Not reported Complaint Number: Not reported Complaint Number 2: Not reported Complaint Date Closed: Not reported Agency Person Contacted: Not reported Date Referred to Agency: Not reported Date Agency Received: Not reported

MAP FINDINGS Map ID Direction

Distance Elevation

Site Database(s) **EPA ID Number** 

(Continued) S116278572

Anonymous Complaint: Not reported Confirmation Status: Not reported Not reported Complainant Name: Complainant Address: Not reported Complainant Work Phone: Not reported Not reported Complainant Home Phone: Complainant City, St, Zip: Not reported Date Complaint was Received: Not reported Time Complaint was Received: Not reported Source and Type of Complaint: Not reported Name of Affected Waterbody: Not reported Waterbody was affected: Not reported Fish or Wildlife Kill Occured: Not reported Legal Subdivition of Complaint Site: Not reported Section, Township, Range: Not reported Township: Not reported Range: Not reported Lat/Long (dms): Not reported Latitude Decimal: Not reported Longitude Decimal: Not reported Date Agency Responded: Not reported First Response Time: Not reported Referred To: Not reported Date Referred: Not reported Pollution: Not reported Locate Meridian: Not reported Date Investigation: Not reported Officer Name: Not reported Investigator Initials: Not reported Responsible Party Telephone: Not reported Responsible Party Telephone2: Not reported Leased Well Name: Not reported Facility Contact: Not reported Date Under Investigation: 08/01/2012 Date Under Litigation: Not reported Date Under Remediation: Not reported Date Under Mediation: Not reported Date Resolved: Not reported Confirmation Status: Not reported County Number: Not reported General Location: Not reported Not reported Locate QT1: Locate QT2: Not reported Locate QT3: Not reported Not reported Locate QT4: Fiscal Year: 2013 Comp Date Closed: Not reported Mobile: Not reported Latitude Measure: 35.461486

97.476447 Longitude Measure: Identifier: 121523 Source cat Code: 29240

Description: Self-reported Spills / Releases

Inquiry Category Name: Anonymous Inquiry Status Name: Closed Inquiry Nature Name: Spill Responsible Party Address Suite Number: Not reported

MAP FINDINGS Map ID Direction

Distance Elevation

Site Database(s) **EPA ID Number** 

(Continued) S116278572

Complainant Address Suite Number: Not reported Not reported Incident No: Incident Type: Not reported Incident Status: Not reported Event: Not reported Not reported **Event Date:** Not reported Saltwater Purge:

Finding: Not reported

Not reported

Recommendations: Well ID: Not reported Well Type: Not reported Well Status: Not reported Not reported Well Number: Operator Name: Not reported State Fund: Not reported Not reported Enforcement: District: Not reported Comp Against: Not reported Comp Email: Not reported Comp WPHN: Not reported Comp HPHN: Not reported Comp MBHN: Not reported Comp Email 2: Not reported Confirm WB: Not reported Not reported Branch: Transmit: Not reported Entered By: Not reported Ref Number: Not reported Ref Type: Not reported Date ERC: Not reported Not reported Telephone Number: Investigation Assigned: Not reported Referred Another Agency: Not reported Investigation: Not reported Letters Received: Not reported Telephone Number of Comp: Not reported Type of Complaint?: Not reported Field0: Not reported Open Date: Not reported Closed Date: Not reported Reason for Closure: Not reported Start Time: Not reported End Time: Not reported Anonymous Confidential or Unrestricted: Not reported Not reported Creation Date: Not reported Creator: Edit Date: Not reported Editor: Not reported Allegation: Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

**EVANS TRANSPORT GASOLINE SPILL, 135S-140W, OKC, EC** S112431655 N/A

**ENE** I-35 SOUTH AT I-40 WEST OKLAHOMA CITY, OK < 1/8

0.008 mi. 41 ft.

Relative: VCP:

Higher EVANS TRANSPORT GASOLINE SPILL, I35S-I40W, OKC, ECLS# 121095 Name:

I-35 SOUTH AT I-40 WEST Address: Actual: OKLAHOMA CITY, OK City,State,Zip: 1167 ft.

Site ID: Not reported Object ID: Not reported

Status: Project inactive. Details of closure or withdrawal from VCP are not

known without referring to the individual file.

Start Date: 06/09/2012 Inactive Date: 07/12/2013 Not reported Maco Date: 07/12/2013 Complete Date: Consent Order Date: Not reported Case Number: Not reported

Issue Description: Hydrocarbon in soil: Gasoline tanker truck overturned and spilled

gasoline onto median between I-35 southbound and I-40 westbound.

Brownfields: Not reported Not reported Institutional Controls: Project Manager: J. Paul Davis

35.463872000000002 Latitude: -97.472239000000002 Longitude:

Α5 **RED ROCK PET CO NO 2 FILL STA** EDR Hist Auto 1014168398

34 GRAND AVE E N/A

**East** < 1/8 OKLAHOMA CITY, OK

0.050 mi.

263 ft. Site 1 of 5 in cluster A

Relative: **EDR Hist Auto** 

Higher

Year: Name: Type:

Actual: GASOLINE AND OIL SERVICE STATIONS 1186 ft. 1940 RED ROCK PET CO NO 2 FILL STA

Α6 STEPHENS E F FILLING STA **EDR Hist Auto** 1014196894 **East** 

131 GRAND AVE E N/A

< 1/8 OKLAHOMA CITY, OK

0.051 mi.

267 ft. Site 2 of 5 in cluster A

Relative: **EDR Hist Auto** Higher

Year: Name: Type: Actual:

**AUTOMOBILE FILLING STATIONS** 1925 STEPHENS E F FILLING STA 1178 ft.

Direction Distance

**EDR ID Number** Elevation Site **EPA ID Number** Database(s)

Α7 127 29 PEERYS SERVICE STATION **EDR Hist Auto** 1014178652

127 GRAND AVE E N/A

OKLAHOMA CITY, OK < 1/8

0.051 mi.

**East** 

268 ft. Site 3 of 5 in cluster A Relative: **EDR Hist Auto** 

Higher

Year: Name: Type: Actual:

1935 127 29 PEERYS SERVICE STATION GASOLINE AND OIL SERVICE STATIONS 1179 ft.

GASOLINE AND OIL SERVICE STATIONS 1940 127 29 PEERYS SERVICE STATION

1950 PEERYS TIRE & BATTERY **GASOLINE STATIONS** PERRYS SERV STA **GASOLINE STATIONS** 1954 1960 PEERYS SERV STA A CE **GASOLINE STATIONS** 

**GIPSON BROS SERV STA 4 CE EDR Hist Auto B8** 1014176078

East 201 GRAND AVE E N/A OKLAHOMA CITY, OK < 1/8

0.054 mi.

Site 1 of 2 in cluster B 287 ft. **EDR Hist Auto** Relative:

Higher

Year: Name: Type: Actual: O K SERVICE STATION GASOLINE AND OIL SERVICE STATIONS 1935 1182 ft.

GASOLINE AND OIL SERVICE STATIONS 1945 JOHNNIES TRUCK STOP

> 1954 **GIPSON SERV STA GASOLINE STATIONS**

GIPSON BROS SERV STA 4 CE **GASOLINE STATIONS** 1960

В9 **KLEIN OIL CO NO 6 EDR Hist Auto** 1014162503

**East** 203 GRAND AVE E

< 1/8 OKLAHOMA CITY, OK

0.055 mi.

290 ft. Site 2 of 2 in cluster B **EDR Hist Auto** Relative:

Higher

Year: Name: Type: Actual:

**AUTOMOBILE FILLING STATIONS** 1925 KLEIN OIL CO NO 6 1182 ft.

**HAWK J C SERV FILL STA** A10 **EDR Hist Auto** 1014176246 **East** 100 GRAND AVE E N/A

< 1/8 OKLAHOMA CITY, OK

0.069 mi.

363 ft. Site 4 of 5 in cluster A

**EDR Hist Auto** 

Relative: Higher

Year: Name: Type: Actual:

1183 ft. 1940 MC LAUGHLIN RICHD M FILLING STA GASOLINE AND OIL SERVICE STATIONS

GASOLINE AND OIL SERVICE STATIONS 1945 **GUHLSTORF RUDOLPH E FILL STA** HAWK J C SERV FILL STA **GASOLINE STATIONS** 1950 1954 HAWK J C SERV STA **GASOLINE STATIONS** 1960 HAWK J C SERV STA A CE **GASOLINE STATIONS** 

N/A

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

A11 **ARROW CLEANERS EDR Hist Cleaner** 1014153140

110 GRAND AVE E N/A

OKLAHOMA CITY, OK < 1/8

0.069 mi.

**East** 

363 ft. Site 5 of 5 in cluster A Relative: **EDR Hist Cleaner** 

Higher

Year: Name: Type: Actual:

1945 ARROW CLEANERS **CLOTHES PRESSERS AND CLEANERS** 1182 ft.

1950 MARTINS CLNRS **CLEANERS AND DYERS** 1954 MARTINS CLEANERS **CLEANERS AND DYERS** 

12 AICCM LAND DEVELOPMENT, LLC INST CONTROL \$128533258 N/A

South

< 1/8 **OKLAHOMA (County), OK** 

0.077 mi. 404 ft.

Relative: INST:

Higher AICCM LAND DEVELOPMENT, LLC Name:

Address: Not reported Actual: City,State,Zip: OK 1168 ft.

LPD Site ID: 102204 15015 Book Number: 475-481 Pages: **Document Number:** Not reported Brownfields Program:

Collection: reported by deg personnel

Date Filled: 12/28/2021

https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Bro Link:

wnfields/AICCMLandDevelopmentLLC.PDF

Latitude: 35.458834 Longitude: -97.476952

1014192789 303 5 PREST MACH: WKS CO **EDR Hist Auto** 303 GRAND AVE E N/A

**East** < 1/8 OKLAHOMA CITY, OK

0.088 mi.

C13

466 ft. Site 1 of 3 in cluster C

Relative: **EDR Hist Auto** 

Higher

Actual: Year: Name: Type:

**AUTOMOBILE REPAIRERS** 1916 303 5 PREST MACH: WKS CO 1172 ft.

C14 **BUTLER SERV STA EQUIP REPR EDR Hist Auto** 1014175051 N/A

East 302 GRAND AVE E < 1/8 OKLAHOMA CITY, OK

0.099 mi.

521 ft. Site 2 of 3 in cluster C

Relative: **EDR Hist Auto** 

Higher

Year: Name: Type: Actual:

**REPAIR SHOPS** 1950 **BUTLER SERV STA EQUIP REPR** 1176 ft.

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

D15 **UNDERWOOD GARY D EDR Hist Auto** 1021411493 North

**1948 E RENO** N/A **OKLAHOMA CITY, OK 73117** 

0.102 mi.

< 1/8

536 ft. Site 1 of 5 in cluster D

Relative: Higher

**EDR Hist Auto** 

Year: Name: Type: Actual:

1971 UNDERWOOD GARY D Gasoline Service Stations 1172 ft.

1972 UNDERWOOD GARY D Gasoline Service Stations 1973 UNDERWOOD GARY D Gasoline Service Stations UNDERWOOD GARY D 1974 **Gasoline Service Stations** 

**TRADE WINDS MOBIL** D16 **EDR Hist Auto** 1014197130

**1948 RENO AVE E** North N/A

< 1/8 **OKLAHOMA CITY, OK 73104** 

0.102 mi.

536 ft. Site 2 of 5 in cluster D

Relative:

**EDR Hist Auto** Higher

Year: Name: Type: Actual:

1975 TRADE WINDS MOBIL **GASOLINE STATIONS** 1172 ft.

TRADEWINDS MOBIL GAS STA 1981 **GASOLINE STATIONS** 1986 TRADEWINDS MOBIL GAS ST **GASOLINE STATIONS** 

U001884561 D17 **GARY DALES 66** LUST North **1948 E RENO** UST N/A

**OKLAHOMA CITY, OK 73117** < 1/8

0.102 mi.

536 ft. Site 3 of 5 in cluster D

LUST: Relative:

Higher **GARY DALES 66** Name: Address: 1948 E RENO Actual:

OKLAHOMA CITY, OK 73117 City, State, Zip: 1172 ft.

Facility ID: 5505096 Case Number: 064-1334

Confirmed Release Case Type:

Tank Type: UST 02/09/1995 Release Date: 01/26/2000 **Close Date:** 35.4638 / -97.4943 Lat/Long:

Status: Closed

UST:

Facility ID: 5505096

Contact Name: Gary Dale Underwood Contact Address: 1948 E. Reno Avenue

Contact Telephone: 4052360136

Contact City, St, Zip: Oklahoma City, OK 73117 Lat/Long: 35.4638 / -97.4943

Tank ID:

Permanently Out Of Use Tank Status:

Total Capacity: 4000 Substance: Gasoline **HIST UST** 

Direction Distance Elevation

vation Site Database(s) EPA ID Number

#### **GARY DALES 66 (Continued)**

U001884561

**EDR ID Number** 

 Date Installed:
 04/19/1971

 Tank Type:
 UST

 Closed Date:
 04/22/1988

Decode of Tank Status: Permanently out of use Closure Status: Tank Closed In Place

Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 2

Tank Status: Permanently Out Of Use

Total Capacity: 10000
Substance: Gasoline
Date Installed: 04/19/1971
Tank Type: UST
Closed Date: 04/22/1988

Decode of Tank Status: Permanently out of use Closure Status: Tank Closed In Place

Tank Construction: Single Walled Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 3

Tank Status: Permanently Out Of Use

Total Capacity: 8000
Substance: Gasoline
Date Installed: 04/19/1971
Tank Type: UST
Closed Date: 04/22/1988

Decode of Tank Status: Permanently out of use Closure Status: Tank Closed In Place

Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

HIST UST:

Facility ID: 5505096

Owner Name: Gary Dale Underwood
Owner Address: 1948 E. Reno Avenue
Owner City,St,Zip: Oklahoma City, OK 73117

Tank ID:

Tank Status: Permanently Out of Use Installed Date: 4/19/1971 0:00:00

Tank Capacity: 4000 Product: Gasoline

Facility ID: 5505096

Owner Name: Gary Dale Underwood
Owner Address: 1948 E. Reno Avenue
Owner City,St,Zip: Oklahoma City, OK 73117

Tank ID: 2

Tank Status: Permanently Out of Use Installed Date: 4/19/1971 0:00:00

Tank Capacity: 10000
Product: Gasoline

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

**GARY DALES 66 (Continued)** U001884561

Facility ID: 5505096

Gary Dale Underwood Owner Name: Owner Address: 1948 E. Reno Avenue Owner City,St,Zip: Oklahoma City, OK 73117

Tank ID:

Permanently Out of Use Tank Status:

4/19/1971 0:00:00 Installed Date:

Tank Capacity: 8000 Product: Gasoline

C18 **PRATTS AUTOREPRS EDR Hist Auto** 1014172951

**East** 320 GRAND AVE E N/A

< 1/8 OKLAHOMA CITY, OK

0.106 mi.

561 ft. Site 3 of 3 in cluster C

Relative:

**EDR Hist Auto** 

Higher

Year: Name: Type: Actual:

PRATTS AUTOREPRS **AUTOMOBILE REPAIRING** 1954 1177 ft.

**UNIFIRST CORPORATION 825** 19 AIRS S119133795

ΝE 2130 E. CALIFORNIA AVE. **DRYCLEANERS** N/A < 1/8 **OKLAHOMA CITY, OK 73117** TIER 2

CAINE

0.112 mi. 589 ft.

Relative: AIRS: Higher Name:

UNIFIRST CORP OKC PLT Address: 2130 E CALIFORNIA AVE Actual: City, State, Zip: OKLAHOMA CITY, OK 73129 1171 ft.

**UNIFIRST CORP** Company: Operating Status: Operating NAICS Code: 812332 SIC Code: 7218 Permit Number: 2016-1053-O Issue Date: 03/23/2017 Contact First Name: **TRACY** 

Contact Phone: (405) 272-0422 Latitude: 35.46506 Longitude: -97.472872

AIRS Emission:

Contact Last Name:

Year: 2017 Facility ID: 16589

Facility Name: UNIFIRST CORP OKC PLT Facility Address: 2130 E CALIFORNIA AVE Facility City: **OKLAHOMA CITY** 

Facility State: OK Facility Zip: 73129

Facility County: **OKLAHOMA** Company ID: 4158

**UNIFIRST CORP** Company:

7218 SIC: SOx Tons: 0 NOx Tons: 0.86

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## **UNIFIRST CORPORATION 825 (Continued)**

S119133795

CO Tons: 0.73 PM10 Tons: 4.438 PM25 Tons: 2.468 **HAPS Tons:** 0.363 VOC Total Tons: 2.03 **HAP Toxic Tons:** 0 Toxic Tons: 0 Other Tons: 0 Classification: Syn-Min Latitude: 35.46506 -97.47287 Longitude:

Year: 2016 Facility ID: 16589

Facility Name: UNIFIRST CORP OKC PLT Facility Address: 2130 E CALIFORNIA AVE Facility City: OKLAHOMA CITY

Facility State: OK Facility Zip: 73129 Facility County: OKLAHOMA Company ID: 4158

**UNIFIRST CORP** Company:

SIC: 7218 SOx Tons: 0 0.94 NOx Tons: CO Tons: 0.78 PM10 Tons: 8.07 PM25 Tons: 4.47 0.511 HAPS Tons: VOC Total Tons: 2.811 HAP Toxic Tons: 0 Toxic Tons: 0 Other Tons: Classification: Syn-Min 35.46506 Latitude: -97.47287 Longitude:

Year: 2020 Facility ID: 16589

Facility Name: UNIFIRST CORP OKC PLT 2130 E CALIFORNIA AVE Facility Address: Facility City: OKLAHOMA CITY

Facility State: OK Facility Zip: 73129 Facility County: **OKLAHOMA** 

Company ID: 4158

**UNIFIRST CORP** Company:

SIC: 7218 SOx Tons: n NOx Tons: 0.869 CO Tons: 0.73 PM10 Tons: 6.424 PM25 Tons: 3.579 HAPS Tons: 0.338 VOC Total Tons: 2.479 HAP Toxic Tons: 0.11 Toxic Tons: 0

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## **UNIFIRST CORPORATION 825 (Continued)**

S119133795

Other Tons: 0 Syn-Min Classification: 35.46506 Latitude: Longitude: -97.47287

Year: 2018 Facility ID: 16589

Facility Name: UNIFIRST CORP OKC PLT Facility Address: 2130 E CALIFORNIA AVE Facility City: OKLAHOMA CITY

Facility State: OK Facility Zip: 73129 Facility County: OKLAHOMA Company ID:

**UNIFIRST CORP** Company:

SIC: 7218 SOx Tons: 0 NOx Tons: 0.77 CO Tons: 0.65 PM10 Tons: 4.78 PM25 Tons: 2.66 HAPS Tons: 0.19 VOC Total Tons: 1.967 **HAP Toxic Tons:** 0 Toxic Tons: 0 Other Tons: Λ

Syn-Min Classification: Latitude: 35.46506 -97.47287 Longitude:

Name: UNIFIRST CORP OKC PLT Address: 2130 E CALIFORNIA AVE City,State,Zip: OKLAHOMA CITY, OK 73129

Facility ID: 16589 Facility Status: Operating Company Name: UNIFIRST CORP Plant Phone: Not reported SIC Code: 7218

812332 NAICS Code:

Industrial Launderers NAICS:

Latitude: 35.46506 Longitude: -97.47287

OK TIER 2:

Facility ID: Not reported **UNIFIRST CORPORATION 825** Test: 2130 E. CALIFORNIA AVE. Address:

OKLAHOMA CITY City: Facilty Country: Not reported All Chems. Same as Last Year: Not reported Date Tier 2 Signed: Not reported Dike/Other Safeguards Employed: Not reported Facility Department: Not reported Facility Date Modified: Not reported State Fees Total: Not reported Not reported Facility Fire District:

Distance Elevation Site

e Database(s) EPA ID Number

#### **UNIFIRST CORPORATION 825 (Continued)**

S119133795

**EDR ID Number** 

Mailing Address: Not reported Mailing City, St, Zip: Not reported Not reported Mailing Country: Latitude: 35.465203 Longitude: -97.472283 Lat/Long Location Description: Not reported Lat/Long Method: Not reported Number of Employees on Site: Not reported 2078757 Object ID: Notes: Not reported Validation Report: Not reported Reporting Year: 2020 Site Coordinate Abbrvtions Submitted: Not reported State 1Require Contact: Not reported Not reported Facility Type: Not reported Facility Desctription: Not reported Facility Last Modified: Not reported

Contact Record ID: Not reported
Contact Name: Not reported
Contact Email: Not reported
Contact Mail Address: Not reported
Contact Mail City,St,Zip: Not reported
Contact Mail Country: Not reported
Contact Type: Not reported
Contact Modified Date: Not reported

Acute Health Risks: Not reported Average Daily Amount: Not reported Average Daily Amount Code: Not reported Not reported Chemical Inventory Record ID: Chemical Same As Last Year: Not reported Chronic Heath Risks: Not reported CAS Number: Not reported **EHS Substance:** Not reported Last Modified: Not reported State Max Daily Amt Required: Not reported Not reported State Unit Required: Days on Site: Not reported Chemical Name: Not reported Fire Hazard: Not reported Gas: Not reported Not reported Liquid: Max Daily Amount: Not reported Max Daily Amount Code: Not reported Max Amount in Largest Container: Not reported Mixture Form: Not reported "Sudden Release of Preasue" Hazard: Not reported Pure Form: Not reported Reactive Hazard: Not reported Not reported Solid: State Contact Field: Not reported State Contact Comment: Not reported State EHS Comment: Not reported State Label Code: Not reported Max Daily Amount Required: Not reported State Mac Per Container Required: Not reported State Req Heading: Not reported

Direction Distance Elevation

tion Site Database(s) EPA ID Number

## **UNIFIRST CORPORATION 825 (Continued)**

S119133795

**EDR ID Number** 

Trade Secret: Not reported Mixture Chemical: Not reported Not reported Mixture Percentage: Mixture CAS: Not reported Mixture EHS: Not reported Mixture Last Modified: Not reported Amount of Substnce: Not reported Amount Units: Not reported Not reported Type of Storage: Number Code for Storage Pressure: Not reported Number Code for Storage Temperature: Not reported Last Modified: Not reported Location: Not reported

Facility ID: Not reported
Test: UNIFIRST CORPORATION 825
Address: 2130 E. CALIFORNIA AVE.

City: **OKLAHOMA CITY** Facilty Country: Not reported All Chems. Same as Last Year: Not reported Date Tier 2 Signed: Not reported Dike/Other Safeguards Employed: Not reported Facility Department: Not reported Facility Date Modified: Not reported State Fees Total: Not reported Facility Fire District: Not reported

Mailing Address: 2130 E. CALIFORNIA AVE.
Mailing City,St,Zip: OKLAHOMA CITY, OK 73117

Not reported

Not reported Latitude: Longitude: Not reported Lat/Long Location Description: Not reported Lat/Long Method: Not reported Number of Employees on Site: Not reported Object ID: Not reported Notes: Not reported Not reported Validation Report: Reporting Year: 2017 Site Coordinate Abbrytions Submitted: Not reported Not reported State 1Require Contact: ID: Not reported Not reported Facility Type: Facility Desctription: Not reported Facility Last Modified: Not reported

Contact Record ID: Not reported Contact Name: Not reported Contact Email: Not reported Contact Mail Address: Not reported Contact Mail City, St, Zip: Not reported Contact Mail Country: Not reported Contact Type: Not reported Contact Modified Date: Not reported

Mailing Country:

Acute Health Risks:

Average Daily Amount:

Average Daily Amount Code:

Chemical Inventory Record ID:

Chemical Same As Last Year:

Not reported

Not reported

Not reported

Distance Elevation

n Site Database(s) EPA ID Number

## **UNIFIRST CORPORATION 825 (Continued)**

S119133795

**EDR ID Number** 

Chronic Heath Risks: Not reported CAS Number: Not reported Not reported EHS Substance: Not reported Last Modified: State Max Daily Amt Required: Not reported State Unit Required: Not reported Days on Site: Not reported Chemical Name: Not reported Fire Hazard: Not reported Gas: Not reported Liquid: Not reported Max Daily Amount: Not reported Max Daily Amount Code: Not reported Max Amount in Largest Container: Not reported Mixture Form: Not reported "Sudden Release of Preasue" Hazard: Not reported Pure Form: Not reported Reactive Hazard: Not reported Solid: Not reported State Contact Field: Not reported State Contact Comment: Not reported State EHS Comment: Not reported Not reported State Label Code: Max Daily Amount Required: Not reported State Mac Per Container Required: Not reported State Req Heading: Not reported Trade Secret: Not reported Mixture Chemical: Not reported Mixture Percentage: Not reported Not reported Mixture CAS: Mixture EHS: Not reported Mixture Last Modified: Not reported Amount of Substnce: Not reported Amount Units: Not reported Type of Storage: Not reported Number Code for Storage Pressure: Not reported Number Code for Storage Temperature: Not reported Last Modified: Not reported Location: Not reported

Facility ID: Not reported

Test: UNIFIRST CORPORATION 825

Address: 2130 E. CALIFORNIA AVE.

City: OKLAHOMA CITY Facilty Country: Not reported

All Chems. Same as Last Year: Not reported Date Tier 2 Signed: Not reported Dike/Other Safeguards Employed: Not reported **Facility Department:** Not reported Facility Date Modified: Not reported State Fees Total: Not reported Facility Fire District: Not reported Mailing Address: Not reported Mailing City, St, Zip: Not reported Mailing Country: Not reported 35.465203 Latitude: Longitude: -97.472283

Direction Distance Elevation

tion Site Database(s) EPA ID Number

Not reported

## **UNIFIRST CORPORATION 825 (Continued)**

Lat/Long Location Description:

S119133795

**EDR ID Number** 

Lat/Long Method: Not reported Number of Employees on Site: Not reported Object ID: Not reported Notes: Not reported Validation Report: Not reported Reporting Year: 2018 Site Coordinate Abbrytions Submitted: Not reported Not reported State 1Require Contact: ID: Not reported Facility Type: Not reported Facility Desctription: Not reported Facility Last Modified: Not reported

Contact Record ID: Not reported
Contact Name: Not reported
Contact Email: Not reported
Contact Mail Address: Not reported
Contact Mail City,St,Zip: Not reported
Contact Mail Country: Not reported
Contact Type: Not reported
Contact Modified Date: Not reported

Acute Health Risks: Not reported Average Daily Amount: Not reported Average Daily Amount Code: Not reported Chemical Inventory Record ID: Not reported Chemical Same As Last Year: Not reported Chronic Heath Risks: Not reported CAS Number: Not reported **EHS Substance:** Not reported Not reported Last Modified: State Max Daily Amt Required: Not reported State Unit Required: Not reported Days on Site: Not reported Chemical Name: Not reported Fire Hazard: Not reported Not reported Gas: Liquid: Not reported Max Daily Amount: Not reported Max Daily Amount Code: Not reported Max Amount in Largest Container: Not reported Not reported Mixture Form: "Sudden Release of Preasue" Hazard: Not reported Pure Form: Not reported Reactive Hazard: Not reported Not reported Solid: State Contact Field: Not reported State Contact Comment: Not reported State EHS Comment: Not reported State Label Code: Not reported Not reported Max Daily Amount Required: State Mac Per Container Required: Not reported State Req Heading: Not reported Trade Secret: Not reported Mixture Chemical: Not reported Mixture Percentage: Not reported Mixture CAS: Not reported

Not reported

Mixture EHS:

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

**UNIFIRST CORPORATION 825 (Continued)** 

S119133795

1014196911

N/A

Mixture Last Modified: Not reported Amount of Substnce: Not reported Amount Units: Not reported Type of Storage: Not reported Number Code for Storage Pressure: Not reported Number Code for Storage Temperature: Not reported Last Modified: Not reported Location: Not reported

D20 **WOOLF PEARL R FILL STA EDR Hist Auto** 1014197376 NNW

1900 RENO AVE E N/A

< 1/8 OKLAHOMA CITY, OK

0.114 mi.

604 ft. Site 4 of 5 in cluster D Relative: **EDR Hist Auto** 

Higher

Year: Name: Type: Actual:

WOOLF PEARL R FILL STA GASOLINE AND OIL SERVICE STATIONS 1173 ft. 1940

SUNSHINE TRUCK STOP E21 **EDR Hist Auto** 

NNW 1903 RENO AVE E < 1/8 **OKLAHOMA CITY S, OK 73104** 

**EDR Hist Auto** 

0.121 mi.

639 ft. Site 1 of 2 in cluster E

Relative: Higher

Year: Name: Type:

Actual: 1993 SUNSHINE TRUCK STOP **GASOLINE STATIONS** 1174 ft.

D22 FREDRICK WILSON LUST U001230055

North **1935 E RENO** UST N/A **OKLAHOMA CITY, OK 73117 HIST UST** 1/8-1/4

0.126 mi.

665 ft. Site 5 of 5 in cluster D

LUST: Relative:

Higher Name: FREDRICK WILSON Address: 1935 E RENO Actual:

City, State, Zip: OKLAHOMA CITY, OK 73117 1172 ft. Facility ID: 5508258

Case Number: 064-0602

Confirmed Release Case Type:

UST Tank Type: Release Date: 08/24/1992 Close Date: 11/22/1996 Lat/Long: 35.4642 / -97.4770

Status: Closed

UST:

Facility ID: 5508258 Contact Name: Mirza Beg Contact Address: 1901 E Reno Ave

MAP FINDINGS Map ID Direction

Distance

Elevation Site Database(s) **EPA ID Number** 

## FREDRICK WILSON (Continued)

U001230055

**EDR ID Number** 

Contact Telephone: 4052355070

Oklahoma City, OK 73117 Contact City,St,Zip:

35.4642 / -97.477 Lat/Long:

Tank ID:

Temporarily Out Of Use Tank Status:

Total Capacity: 12000 Gasoline Substance: Date Installed: 02/22/1988 Tank Type: UST Closed Date: Not reported

Temporarily out of use Decode of Tank Status:

Not reported Closure Status: Tank Construction: Single Walled

Fiberglass Reinforced Plastic Tank Material:

Single-Walled Pipe Construction: Pipe Material: **Fiberglass** 

Tank ID:

Temporarily Out Of Use Tank Status:

Total Capacity: 10000 Substance: Gasoline Date Installed: 02/22/1988 Tank Type: UST Closed Date: Not reported Decode of Tank Status: Temporarily out of use

Closure Status: Not reported Tank Construction: Single Walled

Fiberglass Reinforced Plastic Tank Material:

Single-Walled Pipe Construction: Pipe Material: Fiberglass

Tank ID:

Tank Status: Temporarily Out Of Use

10000 Total Capacity: Gasoline Substance: Date Installed: 02/22/1988 Tank Type: UST Not reported

Closed Date:

Decode of Tank Status: Temporarily out of use

Closure Status: Not reported Tank Construction: Single Walled

Tank Material: Fiberglass Reinforced Plastic

Single-Walled Pipe Construction: Fiberglass Pipe Material:

Tank ID:

Temporarily Out Of Use Tank Status:

10000 Total Capacity: Substance: Gasoline 02/22/1988 Date Installed: Tank Type: Closed Date: Not reported

Decode of Tank Status: Temporarily out of use

Closure Status: Not reported Tank Construction: Single Walled

Tank Material: Fiberglass Reinforced Plastic

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## FREDRICK WILSON (Continued)

U001230055

Pipe Construction: Single-Walled Pipe Material: Fiberglass

HIST UST:

Facility ID: 5508258

Owner Name: JACK MASTERS INC 2132 A WEST MAIN Owner Address: Owner City, St, Zip: Norman, OK 73070

Tank ID:

Tank Status: Currently in Use Installed Date: 2/22/1988 0:00:00

Tank Capacity: 12000 Product: Gasoline

Facility ID: 5508258

JACK MASTERS INC Owner Name: Owner Address: 2132 A WEST MAIN Owner City, St, Zip: Norman, OK 73070

Tank ID:

Tank Status: Currently in Use Installed Date: 2/22/1988 0:00:00

10000 Tank Capacity: Product: Gasoline

5508258 Facility ID:

JACK MASTERS INC Owner Name: Owner Address: 2132 A WEST MAIN Owner City, St, Zip: Norman, OK 73070

Tank ID:

Tank Status: Currently in Use 2/22/1988 0:00:00 Installed Date:

Tank Capacity: 10000 Product: Gasoline

Facility ID: 5508258

JACK MASTERS INC Owner Name: 2132 A WEST MAIN Owner Address: Owner City, St, Zip: Norman, OK 73070

Tank ID:

Tank Status: Currently in Use 2/22/1988 0:00:00 Installed Date:

Tank Capacity: 10000 Product: Gasoline

F23 YELLOW FREIGHT SYSTEM, INC. HIST UST U001229809 N/A

WNW **1600 E RENO** 

**OKLAHOMA CITY, OK 73117** 1/8-1/4

0.127 mi.

Site 1 of 2 in cluster F 673 ft.

HIST UST: Relative:

Higher Facility ID: 5507078

Owner Name: YELLOW FREIGHT SYSTEM INC Actual:

ATTN ENVIRONMENTAL SERVICES 10990 ROE AVE Owner Address: 1180 ft.

Owner City, St, Zip: Shawnee Mission, KS 66207

Tank ID:

Tank Status: Permanently Out of Use

Installed Date: Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## YELLOW FREIGHT SYSTEM, INC. (Continued)

U001229809

Tank Capacity: 10000 Product: Diesel

Facility ID: 5507078

Owner Name: YELLOW FREIGHT SYSTEM INC

ATTN ENVIRONMENTAL SERVICES 10990 ROE AVE Owner Address:

Owner City, St, Zip: Shawnee Mission, KS 66207

Tank ID:

Tank Status: Permanently Out of Use

Installed Date: Not reported 10000 Tank Capacity: Diesel Product:

Facility ID: 5507078

YELLOW FREIGHT SYSTEM INC Owner Name:

Owner Address: ATTN ENVIRONMENTAL SERVICES 10990 ROE AVE

Owner City, St, Zip: Shawnee Mission, KS 66207

Tank ID:

Tank Status: Permanently Out of Use

Installed Date: Not reported 10000 Tank Capacity: Product: Diesel

Facility ID: 5507078

Owner Name: YELLOW FREIGHT SYSTEM INC

ATTN ENVIRONMENTAL SERVICES 10990 ROE AVE Owner Address:

Owner City, St, Zip: Shawnee Mission, KS 66207

Tank ID:

Tank Status: Permanently Out of Use

Installed Date: Not reported 20000 Tank Capacity: Product: Diesel

Facility ID: 5507078

YELLOW FREIGHT SYSTEM INC Owner Name:

ATTN ENVIRONMENTAL SERVICES 10990 ROE AVE Owner Address:

Owner City,St,Zip: Shawnee Mission, KS 66207

Tank ID:

Permanently Out of Use Tank Status:

Installed Date: Not reported 20000 Tank Capacity: Product: Diesel

F24 YELLOW FREIGHT SYSTEM, INC.

WNW **1600 E RENO** 

1/8-1/4 **OKLAHOMA CITY, OK 73117** 

0.127 mi.

673 ft. Site 2 of 2 in cluster F

Relative: LUST:

Higher Name: YELLOW FREIGHT SYSTEM, INC.

Address: 1600 E RENO Actual:

OKLAHOMA CITY, OK 73117 City,State,Zip: 1180 ft.

Facility ID: 5507078 Case Number: 064-AJ

Case Type: Confirmed Release

Tank Type: UST Release Date: 10/06/1989 U004133019

N/A

LUST

UST

Distance

Elevation Site Database(s) EPA ID Number

YELLOW FREIGHT SYSTEM, INC. (Continued)

U004133019

**EDR ID Number** 

**Close Date:** 10/24/1994 Lat/Long: 35.4636 / -97.4818

Status: Closed

UST:

Facility ID: 5507078

Contact Name: Yellow Transportation Inc

Contact Address: ATTN ENVIRONMENTAL SERVICES 10990 ROE AVE MS A605

Contact Telephone: 9133443521

Contact City,St,Zip: Overland Park, KS 66211 Lat/Long: 35.4636 / -97.4818

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 10000
Substance: Diesel
Date Installed: Not reported
Tank Type: UST
Closed Date: 04/01/1990

Decode of Tank Status: Permanently out of use
Closure Status: Tank Removed From Ground

Tank Construction:

Tank Material:

Pipe Construction:

Single Walled
Steel

Single-Walled
Pipe Material:

Not reported

Tank ID: 2

Tank Status: Permanently Out Of Use

Total Capacity: 10000
Substance: Diesel
Date Installed: Not reported
Tank Type: UST
Closed Date: 04/01/1990

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled
Tank Material: Steel
Pipe Construction: Single-Walled
Pipe Material: Not reported

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 10000
Substance: Diesel
Date Installed: Not reported
Tank Type: UST
Closed Date: 04/01/1990

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 4

Tank Status: Permanently Out Of Use

Total Capacity: 20000

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## YELLOW FREIGHT SYSTEM, INC. (Continued)

U004133019

LUST

**UST** 

**HIST UST** 

U003181990

N/A

Substance: Diesel Date Installed: Not reported Tank Type: UST Closed Date: 02/01/1995

Decode of Tank Status: Permanently out of use Tank Removed From Ground Closure Status:

**Double Walled** Tank Construction: Tank Material: Unknown Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID:

Permanently Out Of Use Tank Status:

Total Capacity: 20000 Substance: Diesel Date Installed: Not reported Tank Type: UST 02/01/1995 Closed Date:

Decode of Tank Status: Permanently out of use Tank Removed From Ground Closure Status:

Tank Construction: **Double Walled** Tank Material: Unknown Double-Walled Pipe Construction: Pipe Material: Not reported

E25 **CHECKERS TRUCK STOP INC** 

NNW **1901 E RENO** 1/8-1/4

**OKLAHOMA CITY, OK 73117** 

0.129 mi.

680 ft. Site 2 of 2 in cluster E

Relative: LUST: Higher Name:

Address: 1901 E RENO Actual: City,State,Zip: OKLAHOMA CITY, OK 73117

1175 ft. Facility ID: 5510187

Case Number: 064-0166

Case Type: Confirmed Release

Tank Type: UST Release Date: 04/12/1991 Close Date: 12/27/1999 Lat/Long: 35.4643 / -97.4788

Status: Closed

CHECKERS TRUCK STOP INC Name:

CHECKERS TRUCK STOP INC

1901 E RENO Address:

City, State, Zip: OKLAHOMA CITY, OK 73117

Facility ID: 5510187 Case Number: 064-1663

Confirmed Release Case Type: Tank Type:

**UST** Release Date: 12/04/1990 Close Date: 12/27/1999 Lat/Long: 35.4643 / -97.4788

Status: Closed

CHECKERS TRUCK STOP INC Name:

1901 E RENO Address:

City,State,Zip: OKLAHOMA CITY, OK 73117

Direction Distance

Elevation Site Database(s) EPA ID Number

**CHECKERS TRUCK STOP INC (Continued)** 

Facility ID: 5510187 Case Number: 064-X3

Case Type: Confirmed Release

 Tank Type:
 UST

 Release Date:
 08/08/1989

 Close Date:
 04/25/1991

 Lat/Long:
 35.4643 / -97.4788

Status: Closed

Name: CHECKERS TRUCK STOP INC

Address: 1901 E RENO

City, State, Zip: OKLAHOMA CITY, OK 73117

Facility ID: 5510187 Case Number: 6C-531

Case Type: Suspicion of Release

Tank Type: UST
Release Date: 06/22/1993
Close Date: 10/06/1993
Lat/Long: 35.4643 / -97.4788

Status: Closed

Name: CHECKERS TRUCK STOP INC

Address: 1901 E RENO

City, State, Zip: OKLAHOMA CITY, OK 73117

Facility ID: 5510187 Case Number: 064-2823

Case Type: Confirmed Release

 Tank Type:
 UST

 Release Date:
 03/29/2004

 Close Date:
 03/27/2006

 Lat/Long:
 35.4643 / -97.4788

Status: Closed

Name: CHECKERS TRUCK STOP INC

Address: 1901 E RENO

City, State, Zip: OKLAHOMA CITY, OK 73117

Facility ID: 5510187 Case Number: 064-E4

Case Type: Confirmed Release

Tank Type: UST
Release Date: 10/24/1988
Close Date: 03/01/1989
Lat/Long: 35.4643 / -97.4788

Status: Closed

Name: CHECKERS TRUCK STOP INC

Address: 1901 E RENO

City, State, Zip: OKLAHOMA CITY, OK 73117

Facility ID: 5510187 Case Number: SOR-2571

Case Type: Suspicion of Release

Tank Type: UST
Release Date: 11/06/2001
Close Date: 06/03/2002
Lat/Long: 35.4643 / -97.4788

Status: Closed

**EDR ID Number** 

Direction Distance Elevation

tance EDR ID Number vation Site Database(s) EPA ID Number

## **CHECKERS TRUCK STOP INC (Continued)**

U003181990

UST:

Facility ID: 5510187

Contact Name: Checkers Truck Stop Inc Contact Address: 1901 E. Reno Ave. Contact Telephone: 4052355070

Contact City, St, Zip: Oklahoma City, OK 73117 Lat/Long: 35.4643 / -97.4788

Tank ID:

Tank Status: Currently In Use

12000 Total Capacity: Substance: E-10 Date Installed: 05/06/1981 Tank Type: UST Closed Date: Not reported Currently in use Decode of Tank Status: Not reported Closure Status: Tank Construction: Single Walled Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Fiberglass

Tank ID:

Tank Status: Currently In Use

Total Capacity: 12000 E-10 Substance: Date Installed: 05/06/1981 Tank Type: UST Not reported Closed Date: Decode of Tank Status: Currently in use Closure Status: Not reported Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Fiberglass

Tank ID:

Tank Status: Currently In Use

Total Capacity: 12000

Substance: Gasoline 100% Date Installed: 05/06/1981 Tank Type: UST Closed Date: Not reported Decode of Tank Status: Currently in use Closure Status: Not reported Single Walled Tank Construction: Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Fiberglass

Tank ID:

Tank Status: Currently In Use

Total Capacity: 12000
Substance: Diesel
Date Installed: 05/06/1981
Tank Type: UST
Closed Date: Not reported

Direction Distance Elevation

Site Database(s) **EPA ID Number** 

#### **CHECKERS TRUCK STOP INC (Continued)**

Decode of Tank Status: Currently in use Closure Status: Not reported Single Walled Tank Construction:

Tank Material: Steel

Pipe Construction: Single-Walled **Fiberglass** Pipe Material:

Tank ID:

Tank Status: Currently In Use

20000 Total Capacity: Substance: Diesel Date Installed: 05/06/1981 Tank Type: UST Closed Date: Not reported Currently in use Decode of Tank Status: Closure Status: Not reported Tank Construction: Single Walled Steel Tank Material:

Double-Walled Pipe Construction:

Fiberglass Pipe Material:

Tank ID:

Tank Status: Currently In Use

20000 Total Capacity: Substance: Diesel Date Installed: 05/06/1981 Tank Type: UST Closed Date: Not reported Currently in use Decode of Tank Status: Closure Status: Not reported Tank Construction: Single Walled Steel

Tank Material:

Pipe Construction: Double-Walled Pipe Material: Fiberglass

Tank ID:

Tank Status: Currently In Use

**Total Capacity:** 20000 Substance: Diesel 05/06/1981 Date Installed: Tank Type: UST Closed Date: Not reported Decode of Tank Status: Currently in use Not reported Closure Status: Single Walled Tank Construction:

Steel Tank Material:

Pipe Construction: Double-Walled Pipe Material: **Fiberglass** 

Tank ID:

Currently In Use Tank Status:

20000 Total Capacity: Substance: Diesel Date Installed: 05/06/1981 Tank Type: UST Closed Date: Not reported Decode of Tank Status: Currently in use **EDR ID Number** 

Direction Distance

Elevation Site Database(s) **EPA ID Number** 

#### **CHECKERS TRUCK STOP INC (Continued)**

Closure Status: Not reported Single Walled Tank Construction:

Steel Tank Material:

Double-Walled Pipe Construction: Pipe Material: **Fiberglass** 

Tank ID:

Tank Status: Currently In Use

Total Capacity: 20000 Substance: Diesel 05/06/1981 Date Installed: Tank Type: UST Not reported Closed Date: Decode of Tank Status: Currently in use Not reported Closure Status: Tank Construction: Single Walled Tank Material: Steel

Double-Walled Pipe Construction: Pipe Material: **Fiberglass** 

HIST UST:

Facility ID:

5510187

PILOT TRAVEL CENTERS LLC Owner Name:

Owner Address: P O BOX 10146 Owner City, St, Zip: Knoxville, TN 37939

Tank ID:

Tank Status: Currently in Use 5/6/1981 0:00:00 Installed Date:

Tank Capacity: 12000 Product: Gasoline

Facility ID: 5510187

Owner Name: PILOT TRAVEL CENTERS LLC

Owner Address: P O BOX 10146 Owner City, St, Zip: Knoxville, TN 37939

Tank ID:

Tank Status: Currently in Use 5/6/1981 0:00:00 Installed Date:

Tank Capacity: 12000 Product: Gasoline

Facility ID: 5510187

Owner Name: PILOT TRAVEL CENTERS LLC

Owner Address: P O BOX 10146 Knoxville, TN 37939 Owner City, St, Zip:

Tank ID:

Tank Status: Currently in Use Installed Date: 5/6/1981 0:00:00

12000 Tank Capacity: Product: Gasoline

Facility ID: 5510187

Owner Name: PILOT TRAVEL CENTERS LLC

P O BOX 10146 Owner Address: Owner City, St, Zip: Knoxville, TN 37939

Tank ID:

Tank Status: Currently in Use 5/6/1981 0:00:00 Installed Date:

TC7204954.2s Page 34

**EDR ID Number** 

Direction Distance Elevation

levation Site Database(s) EPA ID Number

## **CHECKERS TRUCK STOP INC (Continued)**

Tank Capacity: 12000 Product: Diesel

Facility ID: 5510187

Owner Name: PILOT TRAVEL CENTERS LLC

Owner Address: P O BOX 10146 Owner City,St,Zip: Knoxville, TN 37939

Tank ID: 5

Tank Status: Currently in Use Installed Date: 5/6/1981 0:00:00

Tank Capacity: 20000 Product: Diesel

Facility ID: 5510187

Owner Name: PILOT TRAVEL CENTERS LLC

Owner Address: P O BOX 10146 Owner City,St,Zip: Knoxville, TN 37939

Tank ID: 6

Tank Status: Currently in Use Installed Date: 5/6/1981 0:00:00

Tank Capacity: 20000 Product: Diesel

Facility ID: 5510187

Owner Name: PILOT TRAVEL CENTERS LLC

Owner Address: P O BOX 10146 Owner City,St,Zip: Knoxville, TN 37939

Tank ID: 7

Tank Status: Currently in Use Installed Date: 5/6/1981 0:00:00

Tank Capacity: 20000 Product: Diesel

Facility ID: 5510187

Owner Name: PILOT TRAVEL CENTERS LLC

Owner Address: P O BOX 10146 Owner City,St,Zip: Knoxville, TN 37939

Tank ID: 8

Tank Status: Currently in Use Installed Date: 5/6/1981 0:00:00

Tank Capacity: 20000 Product: Diesel

Facility ID: 5510187

Owner Name: PILOT TRAVEL CENTERS LLC

Owner Address: P O BOX 10146 Owner City,St,Zip: Knoxville, TN 37939

Tank ID:

Tank Status: Currently in Use Installed Date: 5/6/1981 0:00:00

Tank Capacity: 20000 Product: Diesel **EDR ID Number** 

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

**G26 PHILLIPS O.C. PRODUCTION** HIST UST U001884817 **East 2700 E RENO** 

N/A

1/8-1/4 **OKLAHOMA CITY, OK 73117** 

0.153 mi.

810 ft. Site 1 of 2 in cluster G

HIST UST: Relative:

Higher 5508348 Facility ID:

Phillips 66 Company Owner Name: Actual: Owner Address: P.O. Box 2400 1197 ft. Owner City,St,Zip: Bartlesville, OK 74004

Tank ID:

Tank Status: Permanently Out of Use

5/5/1946 0:00:00 Installed Date:

Tank Capacity: 500 Product: Diesel

**G27 PHILLIPS O.C. PRODUCTION** UST U004132963 N/A

**East 2700 E RENO** 

**OKLAHOMA CITY, OK 73117** 1/8-1/4

0.153 mi.

810 ft. Site 2 of 2 in cluster G

Relative: UST:

Higher 5508348 Facility ID:

Phillips 66 Company Contact Name: Actual: Contact Address: P.O. Box 2400 1197 ft.

Contact Telephone: 5807637665

Contact City, St, Zip: Bartlesville, OK 74004 Lat/Long: 35.4637 / -97.4639

Tank ID:

Tank Status: Permanently Out Of Use

**Total Capacity:** 500 Diesel Substance: 05/05/1946 Date Installed: Tank Type: UST Closed Date: 10/17/1989

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Single Walled Tank Construction: Tank Material: Unknown Pipe Construction: Single-Walled Pipe Material: Not reported

H28 STANDARD IRON & METAL CO. **SWRCY** S123301856 N/A

WNW **1501 E. RENO AVE** 

OKLAHOMA CITY, OK 73117 1/8-1/4

0.163 mi.

Site 1 of 4 in cluster H 863 ft.

Relative: SWRCY:

Higher Telephone Number: 4052324216

Aluminum: Actual:

Aluminum Cans: Not reported 1173 ft. Not reported Antifreeze: Asphalt: Not reported Asphalt Shingles: Not reported

Auto Parts: Х

Distance Elevation Site

Database(s)

EDR ID Number EPA ID Number

S123301856

#### STANDARD IRON & METAL CO. (Continued)

Brown Paper Bags: Not reported

Brass: x Car Batteries: x

Cardboard: Not reported
Carpet: Not reported
CDs, DVDs, and Cassettes: Not reported
Cell Phones: Not reported
Clothes/Household: Not reported
Computers: Not reported

Copper: x

Electric Appliances: Not reported Not reported Electronics: Not reported Eyeglasses: Glass: Not reported Not reported Hard Drives: Not reported Hardcover Books: Household Chemicals: Not reported Not reported Ink/Toner Cartridge: Iron: Not reported Not reported Lead: Light Bulbs: Not reported Magazines: Not reported Mercury: Not reported Mercury Thermostat: Not reported Not reported Metal: Motor Oil: Not reported Not reported New Paint: Newspaper: Not reported Not reported Paper: Phone Books: Not reported Plastic: Not reported Plastic Bags: Not reported Plastic Hangers: Not reported Rechargeable Batteries: Not reported

Stainless Steel: x

Steel: Not reported Styrofoam Peanuts: Not reported Tin Cans: Not reported Not reported Tires: Transmission Fluid: Not reported **Used Paint:** Not reported Wood: Not reported Wood Chips: Not reported Not reported Books: Curbside: Not reported Drop Off: Not reported Recyclables Accepted: Not reported Website: Not reported Latitude: 35.4642522121

Longitude: -97.485297902499994

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

H29 STANDARD IRON & METAL CO INC LUST U001884599

WNW 1501 E RENO UST N/A

1/8-1/4 OKLAHOMA CITY, OK 73117 HIST UST

0.163 mi. 863 ft. Site 2 of 4 in cluster H

Relative: LUST:
Higher Name: STANDARD IRON & METAL CO INC

Actual: Address: 1501 E RENO

1173 ft. City,State,Zip: OKLAHOMA CITY, OK 73117

Facility ID: 5505351 Case Number: 064-0208

Case Type: Confirmed Release

Tank Type: UST
Release Date: 05/31/1991
Close Date: 10/14/2003
Lat/Long: 35.4646 / -97.4864

Status: Closed

Name: STANDARD IRON & METAL CO INC

Address: 1501 E RENO

City, State, Zip: OKLAHOMA CITY, OK 73117

Facility ID: 5505351 Case Number: 064-0950

Case Type: Confirmed Release

Tank Type: UST

Release Date: 09/30/1993 Close Date: 03/23/1994 Lat/Long: 35,4646 / -97,4864

Status: Closed

UST:

Facility ID: 5505351

Contact Name: Standard Iron & Metal Company Inc.

Contact Address: PO Box 302 Contact Telephone: 4052324216

Contact City, St, Zip: Oklahoma City, OK 73101 Lat/Long: 35.4646 / -97.4864

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 5000
Substance: Diesel
Date Installed: 01/02/1974
Tank Type: UST
Closed Date: 09/24/1993

Decode of Tank Status: Permanently out of use
Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Single-Walled

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 2

Tank Status: Currently In Use

Total Capacity: 3000
Substance: Diesel
Date Installed: 09/16/1988
Tank Type: UST

Direction Distance Elevation

Site Database(s) **EPA ID Number** 

## STANDARD IRON & METAL CO INC (Continued)

U001884599

**EDR ID Number** 

Closed Date: Not reported Currently in use Decode of Tank Status: Not reported Closure Status: Tank Construction: Single Walled Tank Material: Steel

Single-Walled Pipe Construction: Fiberglass Pipe Material:

Tank ID:

Tank Status: Currently In Use

3000 **Total Capacity:** Substance: Gasoline 10/20/1988 Date Installed: Tank Type: UST Closed Date: Not reported Decode of Tank Status: Currently in use Not reported Closure Status: Tank Construction: Single Walled Tank Material: Steel

Single-Walled Pipe Construction: Pipe Material: Fiberglass

Tank ID:

Tank Status: Permanently Out Of Use

**Total Capacity:** 

Substance: Not Listed Date Installed: Not reported Tank Type: UST

Closed Date: Not reported

Decode of Tank Status: Permanently out of use

Not Listed Closure Status: Tank Construction: Single Walled Tank Material: Unknown Pipe Construction: Single-Walled Pipe Material: Not reported

HIST UST:

5505351 Facility ID:

Owner Name: Standard Iron & Metal company Inc.

P.O .Box 302 Owner Address:

Owner City, St, Zip: Oklahoma City, OK 73101

Tank ID:

Tank Status: Permanently Out of Use

1/2/1974 0:00:00 Installed Date:

Tank Capacity: 5000 Product: Diesel

Facility ID: 5505351

Standard Iron & Metal company Inc. Owner Name:

P.O .Box 302 Owner Address:

Owner City, St, Zip: Oklahoma City, OK 73101

Tank ID:

Tank Status: Currently in Use 9/16/1988 0:00:00 Installed Date:

3000 Tank Capacity: Product: Diesel

Facility ID: 5505351

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# STANDARD IRON & METAL CO INC (Continued)

U001884599

U001230281

N/A

LUST

UST

**HIST UST** 

Owner Name: Standard Iron & Metal company Inc.

P.O .Box 302 Owner Address:

Owner City, St, Zip: Oklahoma City, OK 73101

Tank ID:

Tank Status: Currently in Use Installed Date: 10/20/1988 0:00:00

Tank Capacity: 3000 Product: Gasoline

Facility ID: 5505351

Owner Name: Standard Iron & Metal company Inc.

P.O .Box 302 Owner Address:

Owner City, St, Zip: Oklahoma City, OK 73101

Tank ID:

Permanently Out of Use Tank Status:

Installed Date: Not reported Tank Capacity: Not reported Product: Not Listed

H30 **ELLIS PROPERTY (VACANT TRUCK ST)** 

WNW 1501 RENO

1/8-1/4 **OKLAHOMA CITY, OK 73117** 

0.163 mi.

863 ft. Site 3 of 4 in cluster H

LUST: Relative:

Higher Name: ELLIS PROPERTY (VACANT TRUCK ST)

Address: 1501 RENO Actual:

City,State,Zip: OKLAHOMA CITY, OK 73117 1173 ft.

Facility ID: 5510419 Case Number: 064-0482

Case Type: Confirmed Release

Tank Type: UST Release Date: 04/09/1992 01/11/2001 Close Date: Lat/Long: 35.4643 / -97.5394

Status: Closed

UST:

Facility ID: 5510419 Contact Name: Evelyn R Ellis Contact Address: RT 1, BX 562 Contact Telephone: 9184523513 Contact City, St, Zip: Eufaula, OK 74432 Lat/Long: 35.4643 / -97.5394

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 4000 Substance: Not Listed Date Installed: 05/01/1946 Tank Type: UST Closed Date: 12/22/1986

Decode of Tank Status: Permanently out of use

Closure Status: Not Listed Tank Construction: Single Walled Tank Material: Steel

Distance

Elevation Site Database(s) EPA ID Number

# ELLIS PROPERTY (VACANT TRUCK ST) (Continued)

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 4000
Substance: Not Listed
Date Installed: 05/01/1946
Tank Type: UST
Closed Date: 12/22/1986

Decode of Tank Status: Permanently out of use

Closure Status: Not Listed
Tank Construction: Single Walled
Tank Material: Steel
Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 3

Tank Status: Permanently Out Of Use

Total Capacity: 4000
Substance: Not Listed
Date Installed: 05/01/1946
Tank Type: UST
Closed Date: 12/22/1986

Decode of Tank Status: Permanently out of use

Closure Status: Not Listed
Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 4000
Substance: Not Listed
Date Installed: 05/01/1946
Tank Type: UST
Closed Date: 12/22/1986

Decode of Tank Status: Permanently out of use

Closure Status: Not Listed
Tank Construction: Single Walled
Tank Material: Steel
Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 5

Tank Status: Permanently Out Of Use

Total Capacity: 4000
Substance: Not Listed
Date Installed: 05/01/1946
Tank Type: UST
Closed Date: 12/22/1986

Decode of Tank Status: Permanently out of use

Closure Status: Not Listed
Tank Construction: Single Walled
Tank Material: Steel

Pipe Construction: Single-Walled

**EDR ID Number** 

U001230281

Direction Distance

Elevation Site Database(s) EPA ID Number

# ELLIS PROPERTY (VACANT TRUCK ST) (Continued)

U001230281

**EDR ID Number** 

Pipe Material: Steel

Tank ID: 6

Tank Status: Permanently Out Of Use

Total Capacity: 2000
Substance: Not Listed
Date Installed: Not reported
Tank Type: UST
Closed Date: 08/31/1993

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Single-Walled Pipe Material: Not reported

HIST UST:

Facility ID: 5510419
Owner Name: EVELYN R ELLIS
Owner Address: RT 1, BX 562
Owner City, St, Zip: Eufaula, OK 74432

Tank ID: 1

Tank Status: Permanently Out of Use

Installed Date: 5/1/1946 0:00:00

Tank Capacity: 4000 Product: Not Listed

Facility ID: 5510419
Owner Name: EVELYN R ELLIS
Owner Address: RT 1, BX 562
Owner City,St,Zip: Eufaula, OK 74432

Tank ID: 2

Tank Status: Permanently Out of Use Installed Date: 5/1/1946 0:00:00

Tank Capacity: 4000 Product: Not Listed

Facility ID: 5510419
Owner Name: EVELYN R ELLIS
Owner Address: RT 1, BX 562
Owner City,St,Zip: Eufaula, OK 74432

Tank ID:

Tank Status: Permanently Out of Use

Installed Date: 5/1/1946 0:00:00

Tank Capacity: 4000 Product: Not Listed

Facility ID: 5510419

Owner Name: EVELYN R ELLIS
Owner Address: RT 1, BX 562
Owner City,St,Zip: Eufaula, OK 74432

Tank ID: 4

Tank Status: Permanently Out of Use Installed Date: 5/1/1946 0:00:00

Tank Capacity: 4000 Product: Not Listed

Facility ID: 5510419

Direction Distance

**EDR ID Number** Elevation Site **EPA ID Number** Database(s)

# **ELLIS PROPERTY (VACANT TRUCK ST) (Continued)**

U001230281

Owner Name: **EVELYN R ELLIS** Owner Address: RT 1, BX 562 Owner City, St, Zip: Eufaula, OK 74432

Tank ID:

Tank Status: Permanently Out of Use Installed Date: 5/1/1946 0:00:00

Tank Capacity: 4000 Product: Not Listed

Facility ID: 5510419

**EVELYN R ELLIS** Owner Name: Owner Address: RT 1, BX 562 Owner City, St, Zip: Eufaula, OK 74432

Tank ID:

Tank Status: Permanently Out of Use

Installed Date: Not reported 2000 Tank Capacity: Product: Not Listed

H31 STANDARD IRON & METAL CO INC CORRACTS 1000893242 WNW **1501 E RENO** RCRA NonGen / NLR OKD990699423 1/8-1/4 **OKLAHOMA CITY, OK 73117 US AIRS** 

0.163 mi.

863 ft. Site 4 of 4 in cluster H

CORRACTS: Relative:

Higher Name: STANDARD IRON & METAL CO INC

Address: 1501 E RENO Actual: Address 2: Not reported 1173 ft. EPA ID: OKD990699423 Area Name: **ENTIRE FACILITY** 

> Corrective Action: STABILIZATION CONSTRUCTION COMPLETED

Actual Date: 19981203 Air Release Indicator: Not reported Groundwater Release Indicator: Not reported Soil Release Indicator: Surface Water Release Indicator: Not reported

STANDARD IRON & METAL CO INC Name:

1501 E RENO Address: Address 2: Not reported EPA ID: OKD990699423 Area Name: **ENTIRE FACILITY** 

Corrective Action: HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS

DATE

Actual Date: 19981203 Air Release Indicator: Not reported Groundwater Release Indicator: Not reported

Soil Release Indicator:

Surface Water Release Indicator: Not reported

STANDARD IRON & METAL CO INC Name:

Address: 1501 E RENO Address 2: Not reported EPA ID: OKD990699423 Area Name: **ENTIRE FACILITY** 

CA PROCESS IS TERMINATED-REMEDIAL ACTIVITIES COMPLETE Corrective Action:

Actual Date: 19981203

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# STANDARD IRON & METAL CO INC (Continued)

1000893242

Air Release Indicator: Not reported Not reported Groundwater Release Indicator: Υ

Soil Release Indicator: Surface Water Release Indicator: Not reported

STANDARD IRON & METAL CO INC Name:

Address: 1501 E RENO Address 2: Not reported EPA ID: OKD990699423 Area Name: **ENTIRE FACILITY** 

FINANCIAL and LIABILITY INSURANCE RECEIVED Corrective Action:

Actual Date: 19980716 Air Release Indicator: Not reported Groundwater Release Indicator: Not reported

Soil Release Indicator:

Surface Water Release Indicator: Not reported

RCRA Listings:

Date Form Received by Agency: 19800818 Handler Name: STANDARD IRON & METAL CO INC

1501 E RENO Handler Address:

Handler City, State, Zip: OKLAHOMA CITY, OK 73117

EPA ID: OKD990699423 Contact Name: ALBERT SKALOVSKY

Contact Address: PO BOX 302

Contact City, State, Zip: OKLAHOMA CITY, OK 73101

405-232-4216 Contact Telephone: Contact Fax: Not reported Contact Email: Not reported Contact Title: Not reported

EPA Region: 06

Land Type: Not reported

Federal Waste Generator Description: Not a generator, verified

Non-Notifier: Not reported Biennial Report Cycle: Not reported Accessibility: Not reported Active Site Indicator: Not reported State District Owner: Not reported State District: Not reported Mailing Address: **PO BOX 302** 

Mailing City, State, Zip: OKLAHOMA CITY, OK 73101

Owner Name: STANDARD IRON & METAL CO Owner Type: Private

Operator Name: Not reported

Operator Type: Not reported

Short-Term Generator Activity: No Importer Activity: No Mixed Waste Generator: No Transporter Activity: No Transfer Facility Activity: No Recycler Activity with Storage: No Small Quantity On-Site Burner Exemption: No Smelting Melting and Refining Furnace Exemption: No **Underground Injection Control:** Nο Off-Site Waste Receipt: No Universal Waste Indicator: No Universal Waste Destination Facility: No

Direction Distance Elevation

Site Database(s) EPA ID Number

# STANDARD IRON & METAL CO INC (Continued)

1000893242

**EDR ID Number** 

Federal Universal Waste: No

Active Site Fed-Reg Treatment Storage and Disposal Facility:
Active Site Converter Treatment storage and Disposal Facility:
Not reported
Not reported
Not reported

Active Site State-Reg Handler: --

Federal Facility Indicator:

Hazardous Secondary Material Indicator:

Not reported
NN

Sub-Part K Indicator: Not reported

Commercial TSD Indicator: No

Treatment Storage and Disposal Type:

2018 GPRA Permit Baseline:

2018 GPRA Renewals Baseline:

Permit Renewals Workload Universe:

Permit Workload Universe:

Permit Progress Universe:

Post-Closure Workload Universe:

Not reported

Not reported

Not reported

Not reported

Not reported

Closure Workload Universe:

202 GPRA Corrective Action Baseline:

No
Corrective Action Workload Universe:

Subject to Corrective Action Universe:

No
Non-TSDFs Where RCRA CA has Been Imposed Universe:

No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:

No

TSDFs Only Subject to CA under Discretionary Auth Universe:

No
No NCAPS ranking:

No No NCAPS ranking

Environmental Control Indicator:

Institutional Control Indicator:

No
Human Exposure Controls Indicator:

Groundwater Controls Indicator:

N/A

Operating TSDF Universe:

Full Enforcement Universe:

Not reported
Not reported

Significant Non-Complier Universe: No
Unaddressed Significant Non-Complier Universe: No
Addressed Significant Non-Complier Universe: No
Significant Non-Complier With a Compliance Schedule Universe: No

Financial Assurance Required: Not reported

Handler Date of Last Change:

Recognized Trader-Importer:

No
Recognized Trader-Exporter:

No
Importer of Spent Lead Acid Batteries:

No
Exporter of Spent Lead Acid Batteries:

No

Recycler Activity Without Storage: Not reported Manifest Broker: Not reported

Sub-Part P Indicator: No

Hazardous Waste Summary:

Waste Code: D000
Waste Description: Not Defined

Waste Code: D008 Waste Description: LEAD

Handler - Owner Operator:

Owner/Operator Indicator: Owner
Owner/Operator Name: STANDARD IRON & METAL CO
Legal Status: Private

Direction Distance

Elevation Site Database(s) EPA ID Number

# STANDARD IRON & METAL CO INC (Continued)

1000893242

**EDR ID Number** 

Date Became Current:

Date Ended Current:

Owner/Operator Address:

Not reported

UNKNOWN

Owner/Operator City, State, Zip: UNKNOWN, OK 00000-0000

Owner/Operator Telephone: 000-000-0000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 19800818 Handler Name: STANDARD IRON & METAL CO INC

Federal Waste Generator Description: Not a generator, verified

State District Owner: Not reported

Large Quantity Handler of Universal Waste: No Recognized Trader Importer: No Recognized Trader Exporter: No Spent Lead Acid Battery Importer: No Spent Lead Acid Battery Exporter: No Current Record: Yes Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 331111

NAICS Description: IRON AND STEEL MILLS

Facility Has Received Notices of Violation:

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined: 19921002 Actual Return to Compliance Date: 19980917 Return to Compliance Qualifier: Not Resolved Violation Responsible Agency: State Scheduled Compliance Date: 19981001 Enforcement Identifier: 000 Date of Enforcement Action: 19970917 Enforcement Responsible Agency: State **Enforcement Docket Number:** Not reported **Enforcement Attorney:** OK Corrective Action Component: No

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY

Enforcement Responsible Person: OKTGJ
Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount:
SEP Scheduled Completion Date:
Not reported
Not reported

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

STANDARD IRON & METAL CO INC (Continued)

1000893242

SEP Actual Date:

SEP Defaulted Date:

SEP Type:

SEP Type Description:

Proposed Amount:

Final Monetary Amount:

Not reported

Final Count: 1 Final Amount: 25000

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined:19920721Actual Return to Compliance Date:19980917Return to Compliance Qualifier:Not ResolvedViolation Responsible Agency:State

Scheduled Compliance Date:

Enforcement Identifier:

Date of Enforcement Action:

Enforcement Responsible Agency:

Enforcement Docket Number:

Not reported

Enforcement Attorney: OKJG

Corrective Action Component: No
Appeal Initiated Date: Not reported

Appeal Resolution Date:

Disposition Status Date:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person: OKKRW
Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Not reported Proposed Amount: Not reported Not reported Final Monetary Amount: Not reported Paid Amount: Final Count: Not reported Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined:

Actual Return to Compliance Date:

Return to Compliance Qualifier:

Violation Responsible Agency:

Scheduled Compliance Date:

19920721

19980917

Not Resolved

State

Scheduled Compliance Date:

Not reported

Enforcement Identifier: 000

Distance
Elevation Site

Database(s)

EDR ID Number EPA ID Number

# STANDARD IRON & METAL CO INC (Continued)

1000893242

Date of Enforcement Action:

Enforcement Responsible Agency:

Enforcement Docket Number:

Enforcement Docket Number:

OKJG

Corrective Action Component:

No

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported Enforcement Type: INITIAL 3008(A) COMPLIANCE Enforcement Responsible Person: OKKRW Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported Not reported SEP Type Description: Proposed Amount: 117900 Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: No

Agency Which Determined Violation: Not reported Violation Short Description: Not reported Date Violation was Determined: Not reported Actual Return to Compliance Date: Not reported Not reported Return to Compliance Qualifier: Violation Responsible Agency: Not reported Scheduled Compliance Date: Not reported Enforcement Identifier: Not reported Date of Enforcement Action: Not reported Enforcement Responsible Agency: Not reported Not reported **Enforcement Docket Number: Enforcement Attorney:** Not reported Corrective Action Component: Not reported Appeal Initiated Date: Not reported Appeal Resolution Date: Not reported Disposition Status Date: Not reported Disposition Status: Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person: Not reported Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount:
SEP Scheduled Completion Date:
Not reported
Not reported

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

# STANDARD IRON & METAL CO INC (Continued)

1000893242

SEP Actual Date: Not reported Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Proposed Amount: Not reported Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: No

Agency Which Determined Violation: Not reported Violation Short Description: Not reported Date Violation was Determined: Not reported Actual Return to Compliance Date: Not reported Return to Compliance Qualifier: Not reported Violation Responsible Agency: Not reported Scheduled Compliance Date: Not reported Enforcement Identifier: Not reported Date of Enforcement Action: Not reported Enforcement Responsible Agency: Not reported **Enforcement Docket Number:** Not reported Not reported **Enforcement Attorney:** Corrective Action Component: Not reported Appeal Initiated Date: Not reported Not reported Appeal Resolution Date: Disposition Status Date: Not reported **Disposition Status:** Not reported Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person: Not reported Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported Not reported SEP Type Description: Proposed Amount: Not reported Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined:

Actual Return to Compliance Date:

Return to Compliance Qualifier:

Violation Responsible Agency:

Scheduled Compliance Date:

Enforcement Identifier:

19920721

19980917

Not Resolved

State

19981001

Enforcement Identifier:

000

Distance

Elevation Site Database(s) EPA ID Number

# STANDARD IRON & METAL CO INC (Continued)

1000893242

**EDR ID Number** 

Date of Enforcement Action: 19970917
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: OK
Corrective Action Component: No

Appeal Initiated Date:
Appeal Resolution Date:
Disposition Status Date:
Disposition Status:
Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY

Enforcement Responsible Person: OKTGJ
Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported Not reported SEP Type Description: Proposed Amount: Not reported Final Monetary Amount: 25000 Paid Amount: Not reported

Final Count: 1
Final Amount: 25000

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined: 19921002 Actual Return to Compliance Date: 19980917 Return to Compliance Qualifier: Not Resolved Violation Responsible Agency: State Scheduled Compliance Date: Not reported Enforcement Identifier: 000 19930115 Date of Enforcement Action: Enforcement Responsible Agency: State Not reported **Enforcement Docket Number:** OKJG **Enforcement Attorney:** 

Corrective Action Component:

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Not reported

Not reported

Not reported

Not reported

Disposition Status Description: Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported

Enforcement Type: Not reported

Enforcement Responsible Person: OKKRW
Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount:
SEP Scheduled Completion Date:
Not reported
Not reported

Direction Distance Elevation

nce EDR ID Number tition Site Database(s) EPA ID Number

# STANDARD IRON & METAL CO INC (Continued)

1000893242

SEP Actual Date: Not reported Not reported SEP Defaulted Date: Not reported SEP Type: Not reported SEP Type Description: Proposed Amount: Not reported Final Monetary Amount: Not reported Not reported Paid Amount: Final Count: Not reported Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State

Violation Short Description: Generators - General

Date Violation was Determined:

Actual Return to Compliance Date:

Return to Compliance Qualifier:

Violation Responsible Agency:

19921002

19980917

Not Resolved

Violation Responsible Agency:

State

Scheduled Compliance Date:

Scheduled Compliance Date:

Not reported

Enforcement Identifier:

Date of Enforcement Action:

Enforcement Responsible Agency:

Enforcement Docket Number:

State

Not reported

Not reported

OKJG

Corrective Action Component:

Appeal Initiated Date:

Appeal Resolution Date:

Disposition Status Date:

Disposition Status:

Not reported

Consent/Final Order Sequence Number:Not reported

Consent/Final Order Respondent Name: Not reported Consent/Final Order Lead Agency: Not reported Enforcement Type: INITIAL 3008(A) COMPLIANCE Enforcement Responsible Person: OKKRW Enforcement Responsible Sub-Organization: Not reported

SEP Sequence Number: Not reported

SEP Expenditure Amount: Not reported SEP Scheduled Completion Date: Not reported SEP Actual Date: Not reported SEP Defaulted Date: Not reported SEP Type: Not reported Not reported SEP Type Description: Proposed Amount: 117900 Final Monetary Amount: Not reported Paid Amount: Not reported Final Count: Not reported Final Amount: Not reported

**Evaluation Action Summary:** 

Evaluation Date: 19920721
Evaluation Responsible Agency: State
Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: OKKRW
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 19980917
Scheduled Compliance Date: 19981001

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

# STANDARD IRON & METAL CO INC (Continued)

1000893242

Date of Request:

Date Response Received:

Request Agency:

Former Citation:

Not reported

Not reported

Not reported

Not reported

Evaluation Date: 19920721
Evaluation Responsible Agency: State
Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: **OKKRW** Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 19980917 Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 19920721
Evaluation Responsible Agency: State
Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: **OKKRW** Evaluation Responsible Sub-Organization: Not reported 19980917 Actual Return to Compliance Date: Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Evaluation Date: 19921002
Evaluation Responsible Agency: State
Found Violation: No

Evaluation Type Description: SIGNIFICANT NON-COMPLIER

Evaluation Responsible Person Identifier: Not reported Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: Not reported Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Not reported Request Agency: Former Citation: Not reported

Evaluation Date: 19980917
Evaluation Responsible Agency: State
Found Violation: No

Evaluation Type Description: NOT A SIGNIFICANT NON-COMPLIER

Evaluation Responsible Person Identifier: Not reported Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: Not reported Scheduled Compliance Date: Not reported Not reported Date of Request: Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# STANDARD IRON & METAL CO INC (Continued)

1000893242

**Evaluation Date:** 19920721 Evaluation Responsible Agency: State Found Violation: Yes

**Evaluation Type Description:** COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: **OKKRW** Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 19980917 Scheduled Compliance Date: 19981001 Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

**Evaluation Date:** 19920721 Evaluation Responsible Agency: State Found Violation: Yes

Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Evaluation Responsible Person Identifier: **OKKRW** Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 19980917 Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

**Evaluation Date:** 19920721 **Evaluation Responsible Agency:** State Found Violation: Yes

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation Type Description:

Evaluation Responsible Person Identifier: **OKKRW** Evaluation Responsible Sub-Organization: Not reported Actual Return to Compliance Date: 19980917 Scheduled Compliance Date: Not reported Date of Request: Not reported Date Response Received: Not reported Request Agency: Not reported Former Citation: Not reported

US AIRS MINOR:

Envid: 1000893242

Region Code: 06

AIR OK0000004010900033 Programmatic ID:

Facility Registry ID: 110009343308 D and B Number: Not reported Primary SIC Code: 5093 423930 NAICS Code: Default Air Classification Code: MIN Facility Type of Ownership Code: POF Air CMS Category Code: Not reported **HPV Status:** Not reported

US AIRS MINOR:

Region Code: 06

Programmatic ID: AIR OK0000004010900033

Facility Registry ID: 110009343308

Direction Distance

Elevation Site Database(s) EPA ID Number

### STANDARD IRON & METAL CO INC (Continued)

1000893242

**EDR ID Number** 

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1984-11-15 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

nounty Gladas.

Region Code: 06

Programmatic ID: AIR OK0000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1985-05-16 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK0000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1985-11-20 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1987-02-12 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1988-02-16 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

### STANDARD IRON & METAL CO INC (Continued)

1000893242

**EDR ID Number** 

Region Code: 06

Programmatic ID: AIR OK000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1989-05-05 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1990-02-09 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1991-03-21 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1991-03-22 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK0000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1991-10-18 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring

Direction Distance

Elevation Site Database(s) EPA ID Number

# STANDARD IRON & METAL CO INC (Continued)

1000893242

**EDR ID Number** 

Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1993-02-24 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK0000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1994-06-29 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1996-01-29 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK0000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1996-02-20 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

### STANDARD IRON & METAL CO INC (Continued)

1000893242

Activity Date: 1996-02-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 06

Programmatic ID: AIR OK000004010900033

Facility Registry ID: 110009343308

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2008-06-16 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

 I32
 PARAWAX REFINERY
 SEMS-ARCHIVE
 1003873725

 SSE
 700 S IRVING
 PRP
 OKD062270590

SSE 700 S IRVING 1/8-1/4 OKLAHOMA CIT

0.188 mi.

Relative:

OKLAHOMA CITY, OK 73160

SEMS Archive:

991 ft. Site 1 of 2 in cluster I

 Higher
 Site ID:
 0601121

 Actual:
 EPA ID:
 OKD062270590

1213 ft. Name: PARAWAX REFINERY
Address: 700 S IRVING

Address 2: Not reported

City,State,Zip: OKLAHOMA CITY, OK 73160

 Cong District:
 04

 FIPS Code:
 40109

 FF:
 N

NPL: Not on the NPL

Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

 Region:
 06

 Site ID:
 0601121

 EPA ID:
 OKD062270590

 Site Name:
 PARAWAX REFINERY

 NPL:
 N

 FF:
 N

 OU:
 00

 Action Code:
 VS

Action Name: ARCH SITE SEQ: 1

Start Date:
Not reported
Finish Date:
1994-06-16 04:00:00
Qual:
Not reported
Current Action Lead:
EPA Perf In-Hse

 Region:
 06

 Site ID:
 0601121

 EPA ID:
 OKD062270590

 Site Name:
 PARAWAX REFINERY

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

**PARAWAX REFINERY (Continued)** 

1003873725

NPL: Ν FF: Ν OU: 00 Action Code: ٧S

**ARCH SITE** Action Name:

SEQ:

Start Date: Not reported Finish Date: 2007-10-31 04:00:00 Qual: Not reported **Current Action Lead:** EPA Perf In-Hse

Region: 06 Site ID: 0601121 EPA ID: OKD062270590 PARAWAX REFINERY Site Name:

NPL: FF: Ν OU: 00 Action Code: RV Action Name: RMVL

SEQ:

2001-03-02 05:00:00 Start Date: Finish Date: 2002-03-09 05:00:00

Qual:

Current Action Lead: **EPA Perf** 

Region: 06 Site ID: 0601121 EPA ID: OKD062270590 PARAWAX REFINERY Site Name:

NPL: FF: Ν OU: 00 Action Code: DS DISCVRY Action Name: SEQ:

Start Date: 1980-07-01 04:00:00 Finish Date: 1980-07-01 04:00:00 Not reported Qual:

Current Action Lead: EPA Perf

Region: 06 Site ID: 0601121 EPA ID: OKD062270590 Site Name: PARAWAX REFINERY

NPL: Ν FF: Ν OU: 00 Action Code: PΑ Action Name: PΑ SEQ:

1980-07-01 04:00:00 Start Date: 1980-07-01 04:00:00 Finish Date:

Qual:

Current Action Lead: **EPA Perf** 

Region: 06

Direction Distance

Elevation Site Database(s) **EPA ID Number** 

**PARAWAX REFINERY (Continued)** 

1003873725

SEMS-ARCHIVE 1003073120

OK0000605326

**EDR ID Number** 

Site ID: 0601121 EPA ID: OKD062270590 Site Name: PARAWAX REFINERY

NPL: FF: Ν OU: 00 Action Code: SI Action Name: SI SEQ:

Start Date: 1982-03-01 05:00:00 1982-03-01 05:00:00 Finish Date:

Qual: Current Action Lead: **EPA Perf** 

PRP:

DAVID STEELMAN PRP Name: MR. DAVID STEELMAN

133 **PARAWAS REFINERY** SSE **801 SOUTH IRVING STREET** 1/8-1/4 **OKLAHOMA CITY, OK 73129** 

0.235 mi. 1243 ft. Site 2 of 2 in cluster I

Relative: SEMS Archive: Higher Site ID:

EPA ID: OK0000605326 Actual: PARAWAS REFINERY Name: 1219 ft. Address: 801 SOUTH IRVING STREET

Address 2: Not reported

City, State, Zip: OKLAHOMA CITY, OK 73129

Cong District: Not reported FIPS Code: Not reported FF:

NPL: Not on the NPL

Non NPL Status: Addressed as Part of Another non-NPL Site

0605326

SEMS Archive Detail:

Region: 06 Site ID: 0605326 EPA ID: OK0000605326 Site Name: PARAWAS REFINERY

NPL: FF: Ν OU: 00 Action Code: ٧S Action Name: ARCH SITE

SEQ:

Start Date: Not reported Finish Date: 2007-10-31 04:00:00 Qual: Not reported Current Action Lead: EPA Perf In-Hse

Region: 06 Site ID: 0605326 EPA ID: OK0000605326 PARAWAS REFINERY Site Name:

NPL: Ν

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

**PARAWAS REFINERY (Continued)** 

1003073120

FF: Ν OU: 00 Action Code: DS Action Name: **DISCVRY** 

SEQ:

Start Date: 2000-03-15 05:00:00 Finish Date: 2000-03-15 05:00:00 Not reported Qual: Current Action Lead: **EPA Perf** 

J34 **FORMER ICX** UST U004132696 WNW **1315 E RENO AVENUE** N/A

1/8-1/4 **OKLAHOMA CITY, OK 73117** 

0.241 mi.

1273 ft. Site 1 of 2 in cluster J

UST: Relative: Higher Facility ID:

5520961 Standard Iron & Metal Company Inc. Contact Name: Actual:

Contact Address: PO Box 302 1180 ft. Contact Telephone: 4052324216

Oklahoma City, OK 73101 Contact City, St, Zip:

35.4644 / -97.4881 Lat/Long:

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 0 Substance: Diesel Date Installed: Not reported Tank Type: UST Closed Date: 05/01/1991

Decode of Tank Status: Permanently out of use Tank Removed From Ground Closure Status:

Single Walled Tank Construction: Tank Material: Unknown Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: Substance: Diesel Date Installed: Not reported Tank Type: UST 05/01/1991 Closed Date:

Decode of Tank Status: Permanently out of use Tank Removed From Ground Closure Status:

Tank Construction: Single Walled Tank Material: Unknown Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID:

Tank Status: Permanently Out Of Use

**Total Capacity:** Substance: Gasoline Date Installed: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number** 

FORMER ICX (Continued) U004132696

Tank Type: UST 05/01/1991 Closed Date:

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Unknown Pipe Construction: Single-Walled Pipe Material: Not reported

HIST UST U003859604 J35 FORMER ICX N/A

WNW 1315 E RENO AVENUE 1/8-1/4 **OKLAHOMA CITY, OK 73117** 

0.241 mi.

1273 ft. Site 2 of 2 in cluster J

Relative: HIST UST:

Higher Facility ID: 9919638

Owner Name: Standard Iron & Metal company Inc. Actual:

Owner Address: P.O .Box 302 1180 ft.

Owner City, St, Zip: Oklahoma City, OK 73101

Tank ID:

Tank Status: Permanently Out of Use

Installed Date: Not reported Tank Capacity: Not reported Diesel Product:

9919638 Facility ID:

Owner Name: Standard Iron & Metal company Inc.

Owner Address: P.O .Box 302

Owner City, St, Zip: Oklahoma City, OK 73101

Tank ID:

Tank Status: Permanently Out of Use

Installed Date: Not reported Not reported Tank Capacity: Product: Diesel

Facility ID: 9919638

Owner Name: Standard Iron & Metal company Inc.

P.O .Box 302 Owner Address:

Owner City, St, Zip: Oklahoma City, OK 73101

Tank ID:

Tank Status: Permanently Out of Use

Installed Date: Not reported Tank Capacity: Not reported Product: Gasoline

LUST U001884994 PETRO OKLAHOMA CITY #316 NNE 20 S MARTIN LUTHER KING BLVD **LAST** N/A

1/8-1/4 **OKLAHOMA CITY, OK 73117** 0.242 mi. 1280 ft.

**AST HIST UST** TIER 2

UST

Relative:

Higher LUST:

36

Name: PETRO OKLAHOMA CITY #316 Actual: Address: 20 S MARTIN LUTHER KING BLVD 1171 ft. City,State,Zip: OKLAHOMA CITY, OK 73117

TC7204954.2s Page 61

**EDR ID Number** 

Direction Distance

Elevation Site Database(s) EPA ID Number

# PETRO OKLAHOMA CITY #316 (Continued)

U001884994

**EDR ID Number** 

Facility ID: 5511197 Case Number: 064-3550

Case Type: Confirmed Release

 Tank Type:
 UST

 Release Date:
 11/24/2009

 Close Date:
 05/10/2017

 Lat/Long:
 35.4668 / -97.4761

Status: Closed

Name: PETRO OKLAHOMA CITY #316
Address: 20 S MARTIN LUTHER KING BLVD
City, State, Zip: OKLAHOMA CITY, OK 73117

Facility ID: 5511197 Case Number: 064-3286

Case Type: Confirmed Release

 Tank Type:
 UST

 Release Date:
 09/06/2007

 Close Date:
 02/29/2008

 Lat/Long:
 35.4668 / -97.4761

Status: Closed

Name: PETRO OKLAHOMA CITY #316
Address: 20 S MARTIN LUTHER KING BLVD
City,State,Zip: OKLAHOMA CITY, OK 73117

Facility ID: 5511197 Case Number: SOR-3550

Case Type: Suspicion of Release

 Tank Type:
 UST

 Release Date:
 10/20/2009

 Close Date:
 12/08/2009

 Lat/Long:
 35.4668 / -97.4761

Status: Closed

LAST:

Name: PETRO OKLAHOMA CITY #316
Address: 20 S MARTIN LUTHER KING BLVD
City,State,Zip: OKLAHOMA CITY, OK 73117

Case Number: 064-3424

Case Type: Confirmed Release

Facility ID: 5511197
Status: Closed

Lat/Long: 35.4668 / -97.4761

Tank Type: AST
Release Date: 09/28/2008
Close Date: 07/16/2009

UST:

Facility ID: 5511197

Contact Name: TA Operating Corporation Dba Travelcenters Of Amer

Contact Address: 24601 CENTER RIDGE ROAD

Contact Telephone: 4408084431 Contact City, St, Zip: Westlake, OH 44145 Lat/Long: 35.4668 / -97.4761

Tank ID:

Tank Status: Currently In Use

Direction Distance Elevation

**EDR ID Number** Site Database(s) **EPA ID Number** 

# PETRO OKLAHOMA CITY #316 (Continued)

U001884994

Total Capacity: 20000 Substance: Diesel 03/30/1988 Date Installed: Tank Type: UST Closed Date: Not reported Decode of Tank Status: Currently in use Not reported Closure Status:

Secondarily Contained / Jacketed Tank Construction:

Tank Material: Steel With Fiberglass Pipe Construction: Double-Walled Pipe Material: **Fiberglass** 

Tank ID:

Tank Status: Currently In Use

20000 **Total Capacity:** Substance: Diesel Date Installed: 03/30/1988 Tank Type: UST Closed Date: Not reported

Decode of Tank Status: Currently in use Closure Status: Not reported

Secondarily Contained / Jacketed Tank Construction:

Steel With Fiberglass Tank Material: Pipe Construction: Double-Walled Pipe Material: Fiberglass

Tank ID:

Tank Status: Currently In Use

10000 Total Capacity:

Substance: Gasoline 100% Date Installed: 03/30/1988 Tank Type: UST Closed Date: Not reported Decode of Tank Status: Currently in use Not reported Closure Status:

Secondarily Contained / Jacketed Tank Construction: Fiberglass Reinforced Plastic Tank Material:

Pipe Construction: Single-Walled Pipe Material: Fiberglass

Tank ID:

Tank Status: Currently In Use

Total Capacity: 10000

Gasoline 100% Substance: 03/30/1988 Date Installed: UST Tank Type:

Closed Date: Not reported Decode of Tank Status: Currently in use Closure Status: Not reported

Tank Construction: Secondarily Contained / Jacketed Fiberglass Reinforced Plastic Tank Material:

Pipe Construction: Single-Walled Pipe Material: Fiberglass

Tank ID:

Tank Status: Currently In Use

**Total Capacity:** 10000

Direction Distance Elevation

tion Site Database(s) EPA ID Number

# PETRO OKLAHOMA CITY #316 (Continued)

U001884994

**EDR ID Number** 

Substance: Gasoline 100%
Date Installed: 03/30/1988
Tank Type: UST
Closed Date: Not reported
Decode of Tank Status: Currently in use
Closure Status: Not reported

Tank Construction: Secondarily Contained / Jacketed Tank Material: Fiberglass Reinforced Plastic

Pipe Construction: Single-Walled Pipe Material: Fiberglass

Tank ID:

Tank Status: Currently In Use

Total Capacity: 10000
Substance: Diesel
Date Installed: 03/30/1988
Tank Type: UST
Closed Date: Not reported

Decode of Tank Status:

Closure Status:

Not reported

Currently in use

Not reported

Tank Construction: Secondarily Contained / Jacketed Tank Material: Fiberglass Reinforced Plastic

Pipe Construction: Single-Walled Pipe Material: Fiberglass

Tank ID:

Tank Status: Currently In Use

Total Capacity: 8000
Substance: Motor Oil
Date Installed: 03/30/1988
Tank Type: UST
Closed Date: Not reported
Decode of Tank Status: Currently in use
Closure Status: Not reported

Tank Construction: Secondarily Contained / Jacketed Tank Material: Fiberglass Reinforced Plastic

Pipe Construction: Double-Walled Pipe Material: Fiberglass

Tank ID: 8

Tank Status: Currently In Use

Total Capacity: 8000
Substance: Motor Oil
Date Installed: 03/30/1988
Tank Type: UST
Closed Date: Not reported

Closed Date: Not reported
Decode of Tank Status: Currently in use
Closure Status: Not reported

Tank Construction: Secondarily Contained / Jacketed Tank Material: Fiberglass Reinforced Plastic

Pipe Construction: Double-Walled Pipe Material: Fiberglass

Tank ID: 9

Tank Status: Currently In Use

Total Capacity: 8000 Substance: Used Oil

Direction Distance

Elevation Site Database(s) EPA ID Number

# PETRO OKLAHOMA CITY #316 (Continued)

U001884994

**EDR ID Number** 

Date Installed: 03/30/1988
Tank Type: UST
Closed Date: Not reported
Decode of Tank Status: Currently in use
Closure Status: Not reported

Tank Construction: Secondarily Contained / Jacketed Tank Material: Fiberglass Reinforced Plastic

Pipe Construction: Single-Walled Pipe Material: Fiberglass

AST:

Facility ID: 5511197

Contact Name: TA Operating Corporation Dba Travelcenters Of Amer

Contact Address: 24601 CENTER RIDGE ROAD

 Contact Telephone:
 4408084431

 Contact City,St,Zip:
 Westlake, OH 44145

 Lat/Long:
 35.4668 / -97.4761

Tank ID: 10

Tank Status: Currently In Use

350000 Total Capacity: Diesel Substance: 05/01/1988 Install Date: Tank Type: **AST** Closed Date: Not reported Decode of Tank Status: Currently in use Closure Status: Not reported Single Walled Tank Construction:

Tank Material: Steel
Pipe Construction: Single-Walled
Pipe Material: Fiberglass

Tank ID:

Tank Status: Currently In Use

Total Capacity: 1000 Substance: Motor Oil Install Date: 06/01/1996 Tank Type: **AST** Closed Date: Not reported Currently in use Decode of Tank Status: Not reported Closure Status: Single Walled Tank Construction: Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Copper

HIST UST:

Facility ID: 5511197

Owner Name: PETRO STOPPING CENTERS LP

Owner Address: 6080 SURETY DRIVE Owner City,St,Zip: El Paso, TX 79905 Tank ID: 1

Tank Status: Currently in Use Installed Date: 3/30/1988 0:00:00

Tank Capacity: 20000 Product: Diesel

Facility ID: 5511197

Direction Distance

Elevation Site Database(s) EPA ID Number

# PETRO OKLAHOMA CITY #316 (Continued)

Owner Name: PETRO STOPPING CENTERS LP

Owner Address: 6080 SURETY DRIVE Owner City,St,Zip: El Paso, TX 79905

Tank ID: 2

Tank Status: Currently in Use Installed Date: 3/30/1988 0:00:00

Tank Capacity: 20000 Product: Diesel

Facility ID: 5511197

Owner Name: PETRO STOPPING CENTERS LP

Owner Address: 6080 SURETY DRIVE Owner City,St,Zip: El Paso, TX 79905

Tank ID:

Tank Status: Currently in Use Installed Date: 3/30/1988 0:00:00

Tank Capacity: 10000 Product: Gasoline

Facility ID: 5511197

Owner Name: PETRO STOPPING CENTERS LP

Owner Address: 6080 SURETY DRIVE
Owner City,St,Zip: El Paso, TX 79905
Tank ID: 4
Tank Status: Currently in Use

Installed Date: 3/30/1988 0:00:00

Tank Capacity: 10000 Product: Gasoline

Facility ID: 5511197

Owner Name: PETRO STOPPING CENTERS LP

Owner Address: 6080 SURETY DRIVE Owner City,St,Zip: El Paso, TX 79905

Tank ID: 5

Tank Status: Currently in Use Installed Date: 3/30/1988 0:00:00

Tank Capacity: 10000 Product: Gasoline

Facility ID: 5511197

Owner Name: PETRO STOPPING CENTERS LP

Owner Address: 6080 SURETY DRIVE Owner City,St,Zip: El Paso, TX 79905

Tank ID: 6

Tank Status: Currently in Use Installed Date: 3/30/1988 0:00:00 Tank Capacity: 10000

Product: Diesel

Facility ID: 5511197

Owner Name: PETRO STOPPING CENTERS LP

Owner Address: 6080 SURETY DRIVE Owner City,St,Zip: El Paso, TX 79905

Tank ID:

Tank Status: Currently in Use Installed Date: 3/30/1988 0:00:00

Tank Capacity: 8000

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**EDR ID Number** 

U001884994

Direction Distance

Elevation Site Database(s) EPA ID Number

# PETRO OKLAHOMA CITY #316 (Continued)

U001884994

**EDR ID Number** 

Product: Other

Facility ID: 5511197

Owner Name: PETRO STOPPING CENTERS LP

Owner Address: 6080 SURETY DRIVE Owner City,St,Zip: El Paso, TX 79905

Tank ID: 8

Tank Status: Currently in Use Installed Date: 3/30/1988 0:00:00

Tank Capacity: 8000 Product: Other

Facility ID: 5511197

Owner Name: PETRO STOPPING CENTERS LP

Owner Address: 6080 SURETY DRIVE Owner City, St, Zip: El Paso, TX 79905

Tank ID: 9

Tank Status: Currently in Use Installed Date: 3/30/1988 0:00:00

Tank Capacity: 8000 Product: Used Oil

OK TIER 2:

Facility ID: FATR20111FYFBW021KTZ

Test: BLUE BEACON TRUCK WASH OF OKLAHOMA CITY SOUTH

Address: 20 S. MARTIN LUTHER KING

City: OKLAHOMA CITY

Facilty Country:

All Chems. Same as Last Year:

Date Tier 2 Signed:

Dike/Other Safeguards Employed:

Facility Department:

Facility Date Modified:

State Fees Total:

USA

Not reported

Not reported

6/20/2012

30

Facility Fire District:

Mailing Address:

Mailing City,St,Zip:

Not reported
PO BOX 856
SALINA, KS 67402

Mailing Country:

Latitude:

Longitude:

Longitude:

Long Location Description:

VSA

35.467719

-97.472293

Not reported

Lat/Long Method: A1 - Address Matching (House Number)

Number of Employees on Site: 37

Object ID: Not reported Notes: Not reported Validation Report: Not reported Reporting Year: 2011 Site Coordinate Abbrytions Submitted: Not reported State 1Require Contact: Not reported 7542 ID: Facility Type: SIC

Facility Description:

Not reported

Facility Last Modified:

2/11/2002

ID:

070900105

Facility Type:

Dun & Bradstreet

Facility Description:

Not reported

Facility Last Modified:

2/11/2002

Direction Distance

Elevation Site Database(s) EPA ID Number

# PETRO OKLAHOMA CITY #316 (Continued)

U001884994

**EDR ID Number** 

ID: 45

Facility Type: Community Right to Know #

Facility Desctription: Not reported Facility Last Modified: 2/11/2002 ID: 811192 Facility Type: **NAICS** Facility Desctription: Not reported Facility Last Modified: 1/16/2009 Contact Record ID: CTTR20111FRHC00371XE Contact Name: Gen Mgr John Butler

Contact Email: Not reported

Contact Mail Address: 20 S. Martin Luther King Contact Mail City, St, Zip: Oklahoma City, OK 73117

Contact Mail Country: USA

Contact Type: Owner / Operator
Contact Type: Emergency Contact

Contact Modified Date: 3/20/2012

Contact Record ID: CTTR20112TDVQV0016YA

Contact Name: Environmental Compliance Mgr. Tina Dorf

Contact Email: tinad@bluebeacon.com

Contact Mail Address: PO Box 856 Contact Mail City,St,Zip: Salina, KS 67402

Contact Mail Country: USA

State Req Heading:

Contact Type: Regulatory Point of Contact

Contact Type: Parent Company

Contact Modified Date: 2/8/2010

Acute Health Risks: Not reported Average Daily Amount: Not reported Average Daily Amount Code: Not reported Not reported Chemical Inventory Record ID: Chemical Same As Last Year: Not reported Chronic Heath Risks: Not reported CAS Number: Not reported **EHS Substance:** Not reported Last Modified: Not reported Not reported State Max Daily Amt Required: State Unit Required: Not reported Days on Site: Not reported Chemical Name: Not reported Fire Hazard: Not reported Gas: Not reported Liquid: Not reported Max Daily Amount: Not reported Max Daily Amount Code: Not reported Max Amount in Largest Container: Not reported Mixture Form: Not reported "Sudden Release of Preasue" Hazard: Not reported Pure Form: Not reported Reactive Hazard: Not reported Not reported Solid: State Contact Field: Not reported State Contact Comment: Not reported State EHS Comment: Not reported State Label Code: Not reported Max Daily Amount Required: Not reported State Mac Per Container Required: Not reported

Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# PETRO OKLAHOMA CITY #316 (Continued)

U001884994

Trade Secret: Not reported Not reported Mixture Chemical: Mixture Percentage: Not reported Mixture CAS: Not reported Mixture EHS: Not reported Mixture Last Modified: Not reported Amount of Substnce: Not reported Amount Units: Not reported Type of Storage: Not reported Number Code for Storage Pressure: Not reported Number Code for Storage Temperature: Not reported Not reported Last Modified: Location: Not reported

37 **TOWNLEY DAIRY** LUST U004133145 **400 S ECKROAT** UST **ESE** N/A

1/4-1/2 **OKLAHOMA CITY, OK 73129** 

0.296 mi. 1564 ft.

Relative: LUST: Higher Name: **TOWNLEY DAIRY** Address: 400 S ECKROAT Actual: City,State,Zip: OKLAHOMA CITY, OK 73129 1202 ft.

Facility ID: 5502145

Case Number: 064-0939

Case Type: Confirmed Release

Tank Type: UST Release Date: 09/13/1993 Close Date: 10/29/2002 Lat/Long: 35.4630 / -97.4647

Status: Closed

UST:

Facility ID: 5502145 Contact Name: Mr Guy Townley

TOWNELY'S PO BOX 26148 Contact Address:

Contact Telephone: 4056703667 Contact City, St, Zip: Smoot, WY 83126 Lat/Long: 35.463 / -97.4647

Tank ID:

Permanently Out Of Use Tank Status:

Total Capacity: 8000 Substance: Gasoline Date Installed: 04/02/1976 Tank Type: UST Closed Date: 09/03/1993

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID:

Tank Status: Permanently Out Of Use

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

**TOWNLEY DAIRY (Continued)** 

U004133145

**Total Capacity:** 5000 Gasoline Substance: Date Installed: 04/02/1970 Tank Type: UST Closed Date: 09/03/1993

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Single Walled Tank Construction: Tank Material: Steel Pipe Construction: Single-Walled Not reported Pipe Material:

K38 MID AMERICA CHEMICAL INCORPORATED

LUST S109417837 1801 SKYLINE DR LAST N/A

**AST** 

**OKLAHOMA CITY, OK 73129** 1/4-1/2 0.343 mi.

1811 ft. Site 1 of 2 in cluster K **OK COMPLAINT** TIER 2

LUST: Relative: Higher Name:

SSW

RED ROCK DISTRIBUTING Address: 1801 SE SKYLINE DR Actual: City,State,Zip: OKLAHOMA CITY, OK 73129 1216 ft.

Facility ID: 5514905 Case Number: SOR-1335

Case Type: Suspicion of Release Tank Type: Not reported

Release Date: 11/12/1999 Close Date: 03/09/2000 35.4530 / -97.4802 Lat/Long:

Status: Closed

LAST:

RED ROCK DISTRIBUTING Name: 1801 SE SKYLINE DR Address: City,State,Zip: OKLAHOMA CITY, OK 73129

Case Number: 064-2379 Case Type: Confirmed Release

Facility ID: 5514905 Status: Closed

Lat/Long: 35.4530 / -97.4802

Tank Type: **AST** 12/13/1999 Release Date: 05/20/2011 **Close Date:** 

AST:

Facility ID: 5514905

Contact Name: Red Rock Distributing Contact Address: PO Box 18755 Contact Telephone: 4056773373

Contact City, St, Zip: Oklahoma City, OK 73154 Lat/Long: 35.453 / -97.4802

Tank ID:

Tank Status: Permanently Out of Use

Total Capacity: 2000 Gasoline Substance: 01/01/1980 Install Date: Tank Type: **AST** 

Distance

Elevation Site Database(s) EPA ID Number

# MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

**EDR ID Number** 

Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 10

Tank Status: Permanently Out of Use

Total Capacity: 5700
Substance: Diesel
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel
Pipe Construction: Single-Walled
Pipe Material: Not reported

Tank ID: 11

Tank Status: Permanently Out of Use

Total Capacity: 10000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2003

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 12

Tank Status: Permanently Out of Use

Total Capacity: 10000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 13

Tank Status: Permanently Out of Use

Total Capacity: 10000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Direction Distance Elevation

on Site Database(s) EPA ID Number

### MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

**EDR ID Number** 

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 14

Tank Status: Permanently Out of Use

Total Capacity: 5700
Substance: Diesel
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 15

Tank Status: Permanently Out of Use

Total Capacity: 10000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 16

Tank Status: Permanently Out of Use

Total Capacity: 10000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel
Pipe Construction: Single-Walled

Pipe Construction: Single-Walled Not reported

Tank ID: 17

Tank Status: Permanently Out of Use

Total Capacity: 10000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use

Direction Distance Elevation

Site Database(s) EPA ID Number

# MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

**EDR ID Number** 

Closure Status: Change In Service
Tank Construction: Single Walled
Tank Material: Steel
Pipe Construction: Single-Walled
Pipe Material: Not reported

Tank ID: 18

Tank Status: Permanently Out of Use

Total Capacity: 10000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel
Pipe Construction: Single-Walled
Pipe Material: Not reported

Tank ID: 19

Tank Status: Permanently Out of Use

Total Capacity: 10000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2003

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 2

Tank Status: Permanently Out of Use

Total Capacity: 1800
Substance: Gasoline
Install Date: 01/01/1999
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service
Tank Construction: Single Walled
Tank Material: Steel

Pipe Construction: Single-Walled
Pipe Material: Not reported

Tank ID: 20

Tank Status: Permanently Out of Use

Total Capacity: 10000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service

Direction Distance Elevation

vation Site Database(s) EPA ID Number

# MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

**EDR ID Number** 

Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 2

Tank Status: Permanently Out of Use

Total Capacity: 10000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status:

Closure Status:

Change In Service

Tank Construction:

Tank Material:

Pipe Construction:

Single Walled

Steel

Pipe Construction:

Single-Walled

Not reported

Tank ID: 22

Tank Status: Permanently Out of Use

Total Capacity: 5000
Substance: Not Listed
Install Date: 09/28/1999
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 23

Tank Status: Permanently Out of Use

Total Capacity: 5000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 24

Tank Status: Permanently Out of Use

Total Capacity: 6100
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Direction Distance Elevation

vation Site Database(s) EPA ID Number

# MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

**EDR ID Number** 

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 25

Tank Status: Permanently Out of Use

Total Capacity: 6100
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel
Pipe Construction: Single-Walled
Pipe Material: Not reported

Tank ID: 26

Tank Status: Permanently Out of Use

Total Capacity: 8000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 27

Tank Status: Permanently Out of Use

Total Capacity: 8000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status:

Closure Status:

Tank Construction:

Tank Material:

Pipe Construction:

Permanently out of use
Change In Service
Single Walled
Steel
Single-Walled

Tank ID: 28

Pipe Material:

Tank Status: Permanently Out of Use

Not reported

Total Capacity: 8000
Substance: Not Listed
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Distance

Elevation Site Database(s) EPA ID Number

# MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

**EDR ID Number** 

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 29

Tank Status: Permanently Out of Use

Total Capacity: 350
Substance: Used Oil
Install Date: 01/01/1990
Tank Type: AST
Closed Date: 12/31/2003

Decode of Tank Status:

Closure Status:

Tank Construction:

Tank Material:

Permanently out of use
Change In Service
Single Walled
Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID:

Tank Status: Permanently Out of Use

Total Capacity: 6000
Substance: Gasoline
Install Date: 01/01/1989
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Construction. Single walled Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 30

Tank Status: Permanently Out of Use

 Total Capacity:
 350

 Substance:
 Used Oil

 Install Date:
 01/01/1990

 Tank Type:
 AST

 Closed Date:
 12/31/2002

Decode of Tank Status:

Closure Status:

Tank Construction:

Tank Material:

Permanently out of use
Change In Service
Single Walled
Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID:

Tank Status: Permanently Out of Use

Total Capacity: 2000
Substance: Gasoline
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Distance Elevation

on Site Database(s) EPA ID Number

# MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

**EDR ID Number** 

Pipe Material: Not reported

Tank ID:

Tank Status: Permanently Out of Use

 Total Capacity:
 7800

 Substance:
 Gasoline

 Install Date:
 01/01/1980

 Tank Type:
 AST

 Closed Date:
 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel
Pipe Construction: Single-Walled
Pipe Material: Not reported

Tank ID: 6

Tank Status: Permanently Out of Use

Total Capacity: 15000
Substance: Gasoline
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID:

Tank Status: Permanently Out of Use

Total Capacity: 15000
Substance: Gasoline
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status:

Closure Status:

Change In Service

Single Walled

Steel

Pipe Construction:

Single-Walled

Single-Walled

Not reported

Tank ID:

Tank Status: Permanently Out of Use

Total Capacity: 12000
Substance: Diesel
Install Date: 01/01/1980
Tank Type: AST
Closed Date: 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

# MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

**EDR ID Number** 

Tank ID:

Tank Status: Permanently Out of Use

 Total Capacity:
 12000

 Substance:
 Kerosene

 Install Date:
 01/01/1980

 Tank Type:
 AST

 Closed Date:
 12/31/2002

Decode of Tank Status: Permanently out of use Closure Status: Change In Service Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

OK COMPLAINT:

Name: MID AMERICA CHEMICAL INCORPORATED

Address: 1801 SKYLINE DR

City, State, Zip: OKLAHOMA CITY, OK 73129-

Agency Receiving Complaint: 040 Agency with Jurisdiction: 040

Complaint Number: PMRPA0110

Complaint Number: 173

Complaint Number 2: PMR-10-00173
Complaint Date Closed: 03/12/2010
Agency Person Contacted: Not reported
Date Referred to Agency: Not reported
Date Agency Received: Not reported

Anonymous Complaint: No
Confirmation Status: No
Complainant Name: ODAFF

Complainant Address: 1801 SKYLINE DR
Complainant Work Phone: Not reported
Complainant Home Phone: Not reported

Complainant City,St,Zip: OKLAHOMA CITY, OK

Date Complaint was Received: 1/27/2010
Time Complaint was Received: Not reported

Source and Type of Complaint: NOT DETERMINED AT THIS TIME

Name of Affected Waterbody: Not reported

Waterbody was affected: No Fish or Wildlife Kill Occured: No

Legal Subdivition of Complaint Site: Not reported Section, Township, Range: Not reported Township: Not reported Range: Not reported Lat/Long (dms): Not reported Latitude Decimal: Not reported Not reported Longitude Decimal: Date Agency Responded: 03/12/2010 First Response Time: Not reported Referred To: Not reported Date Referred: Not reported Pollution: Not reported Locate Meridian: Not reported Not reported Date Investigation: Officer Name: Not reported Investigator Initials: Not reported Responsible Party Telephone: Not reported Responsible Party Telephone2: Not reported

Distance Elevation

vation Site Database(s) EPA ID Number

### MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

**EDR ID Number** 

Leased Well Name: Not reported Mike Vandeventer Facility Contact: Date Under Investigation: Not reported Date Under Litigation: Not reported Date Under Remediation: Not reported Not reported Date Under Mediation: Not reported Date Resolved: Uncomfirmed Confirmation Status:

County Number: 55

General Location: Not reported Locate QT1: Not reported Locate QT2: Not reported Locate QT3: Not reported Locate QT4: Not reported Fiscal Year: 2010 Comp Date Closed: Not reported Not reported Mobile: Latitude Measure: Not reported Longitude Measure: Not reported Identifier: Not reported Source cat Code: Not reported Description: Not reported Inquiry Category Name: Not reported Inquiry Status Name: Not reported Inquiry Nature Name: Not reported Responsible Party Address Suite Number: Not reported Complainant Address Suite Number: Not reported Incident No: Not reported Incident Type: Not reported Incident Status: Not reported Event: Not reported **Event Date:** Not reported Saltwater Purge: Not reported

Finding: Not reported

Recommendations: Not reported Not reported Well ID: Well Type: Not reported Well Status: Not reported Well Number: Not reported Operator Name: Not reported State Fund: Not reported Enforcement: Not reported District: Not reported Not reported Comp Against: Comp Email: Not reported Comp WPHN: Not reported Comp HPHN: Not reported Comp MBHN: Not reported Comp Email 2: Not reported Confirm WB: Not reported Branch: Not reported Transmit: Not reported Not reported Entered By: Ref Number: Not reported Ref Type: Not reported Date ERC: Not reported Telephone Number: Not reported

Direction Distance Elevation

tion Site Database(s) EPA ID Number

# MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

**EDR ID Number** 

Investigation Assigned: Not reported Referred Another Agency: Not reported Investigation: Not reported Letters Received: Not reported Telephone Number of Comp: Not reported Type of Complaint?: Not reported Field0: Not reported Open Date: Not reported Closed Date: Not reported Reason for Closure: Not reported Start Time: Not reported End Time: Not reported Anonymous Confidential or Unrestricted: Not reported Creation Date: Not reported Creator: Not reported Edit Date: Not reported Not reported Editor: Allegation: Not reported

# OK TIER 2:

City:

Facility ID: FATR20113J2XFR002VNH
Test: MID-AMERICA CHEMICAL, INC.
Address: 1801 SKYLINE DRIVE

OKC

Facilty Country: USA All Chems. Same as Last Year: Not reported Date Tier 2 Signed: 2/27/2012 Dike/Other Safeguards Employed: Not reported Facility Department: OKC Facility Date Modified: 6/20/2012 State Fees Total: Not reported Facility Fire District: Not reported Mailing Address: Not reported Mailing City, St, Zip: Not reported Mailing Country: Not reported 35.453992 Latitude: Longitude: -97.480035 Lat/Long Location Description: Not reported Not reported Lat/Long Method: Not reported Number of Employees on Site: Object ID: Not reported Notes: Not reported Validation Report: Not reported Reporting Year: 2011 Site Coordinate Abbrytions Submitted: Not reported State 1Require Contact: Not reported

ID: 2899 Facility Type: SIC

Facility Desctription: CHEMICALS & CHEM PREP, NEC

Facility Last Modified: 1/31/2005
ID: Not reported
Facility Type: Dun & Bradstreet
Facility Desctription: Not reported
Facility Last Modified: 1/31/2005
ID: 325199
Facility Type: NAICS

Facility Desctription: All Other Basic Organic Chemical Manufacturing

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

Facility Last Modified: 2/10/2010 CTTR20113J2Z0Q005PKQ Contact Record ID: OWNER ROBERT WARD Contact Name: Contact Email: robertward5452@att.net Contact Mail Address: P.O. BOX 2365

Contact Mail City, St, Zip: OKC, OK 73101

Contact Mail Country: USA

Contact Type: Owner / Operator

Contact Modified Date: 3/20/2012

Contact Record ID: CTTR20113J323F00M9G6 PRESIDENT ROBERT WARD Contact Name:

Contact Email: Not reported Contact Mail Address: Not reported Contact Mail City, St, Zip: Not reported

Contact Mail Country: USA

Contact Type: **Emergency Contact** 

Contact Modified Date: 3/20/2012

Contact Record ID: CTTR20113J324M00S9RM

Contact Name: **OPS MANAGER ROBERT BARNES** 

Contact Email: Not reported Contact Mail Address: Not reported Contact Mail City, St, Zip: Not reported

Contact Mail Country: USA

Trade Secret:

Contact Type: **Emergency Contact** 

Contact Modified Date: 3/20/2012

Acute Health Risks: Not reported Average Daily Amount: Not reported Average Daily Amount Code: Not reported Chemical Inventory Record ID: Not reported Not reported Chemical Same As Last Year: Chronic Heath Risks: Not reported CAS Number: Not reported EHS Substance: Not reported Last Modified: Not reported State Max Daily Amt Required: Not reported Not reported State Unit Required: Not reported Days on Site: Chemical Name: Not reported Fire Hazard: Not reported Gas: Not reported Liquid: Not reported Max Daily Amount: Not reported Max Daily Amount Code: Not reported Not reported Max Amount in Largest Container: Not reported Mixture Form: "Sudden Release of Preasue" Hazard: Not reported Pure Form: Not reported Reactive Hazard: Not reported Solid: Not reported State Contact Field: Not reported State Contact Comment: Not reported State EHS Comment: Not reported State Label Code: Not reported Max Daily Amount Required: Not reported State Mac Per Container Required: Not reported State Reg Heading: Not reported

Not reported

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# MID AMERICA CHEMICAL INCORPORATED (Continued)

S109417837

Mixture Chemical: Not reported Mixture Percentage: Not reported Mixture CAS: Not reported Mixture EHS: Not reported Mixture Last Modified: Not reported Amount of Substnce: Not reported Not reported Amount Units: Not reported Type of Storage: Number Code for Storage Pressure: Not reported Number Code for Storage Temperature: Not reported Last Modified: Not reported Location: Not reported

**BRUCE RYAN NOMINEE** LUST U004133086 39 WNW **100 SOUTH LOTTIE** UST N/A

**BRUCE RYAN NOMINEE** 

100 SOUTH LOTTIE

1/4-1/2 0.353 mi. 1862 ft.

1182 ft.

OKLAHOMA CITY, OK 73117

Relative: LUST: Higher Name: Address: Actual:

OKLAHOMA CITY, OK 73117 City,State,Zip:

Facility ID: 5503040 Case Number: 064-2094

Case Type: Confirmed Release

Tank Type: **UST** 06/19/1998 Release Date: 08/18/1999 Close Date: Lat/Long: 35.4656 / -97.4890

Status: Closed

UST:

Facility ID: 5503040 Contact Name: Bruce Ryan Contact Address: 100 S. Lottie Contact Telephone: 4052358561

Contact City, St, Zip: Oklahoma City, OK 73117

Lat/Long: 35.4656 / -97.489

Tank ID:

Permanently Out Of Use Tank Status:

Total Capacity: 6000 Gasoline Substance: Date Installed: 04/11/1971 Tank Type: UST Closed Date: 06/04/1998

Decode of Tank Status: Permanently out of use Tank Removed From Ground Closure Status:

Tank Construction: Single Walled Steel Tank Material: Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID:

Permanently Out Of Use Tank Status:

Total Capacity: 10000

MAP FINDINGS Map ID

Direction Distance

Elevation Site Database(s) **EPA ID Number** 

**BRUCE RYAN NOMINEE (Continued)** 

U004133086

**EDR ID Number** 

Substance: Diesel 04/11/1971 Date Installed: Tank Type: UST Closed Date: 06/04/1998

Decode of Tank Status: Permanently out of use Tank Removed From Ground Closure Status:

Tank Construction: Single Walled

Tank Material: Steel

Single-Walled Pipe Construction: Pipe Material: Not reported

L40 **DOUBLE EAGLE REFINERY** SHWS S106799116 N/A

North

1/4-1/2 OKLAHOMA CITY, OK

0.358 mi.

1889 ft. Site 1 of 2 in cluster L

Relative: SHWS:

Higher Name: DOUBLE EAGLE REFINERY Address: Not reported

Actual: 1171 ft.

OKLAHOMA CITY, OK City,State,Zip: Facility Type: NPL-Superfund

**DEQ Contact:** Amy Johnson/Dennis Datin 4057025133/4057025125 **DEQ Contact Phone:** 

**Ecological Unit:** Not reported Soil Status: Not reported Ground Water Status: Not reported

Soil Unit: Remedial Action ongoing

Facility Status: Not reported Not reported Source Control: EPA ID: Not reported URL: Not reported Latitude: Not reported Longitude: Not reported

Facility Description: These two Superfund sites are contiguous property in south central

Oklahoma City. Both operated as oil re-refiners over many years, one beginning in 1929 and the other in 1940. Because the sites share common ground water monitoring wells, they are listed here together. Historical operations resulted in widespread deposition of residual waste, mostly in pits, on both sites. These pits were generally acidic tar sludges with high lead concentrations. On both sites, the acidic sludges were neutralized, stabilized and disposed of in an off-site landfill. The excavated areas were filled with clean soil and vegetated. The surface is considered clean and available for

reuse.

Facility Description2: Not reported

DOUBLE EAGLE REFINERY Name:

Not reported Address:

OKLAHOMA CITY, OK City,State,Zip: Facility Type: NPL-Superfund

**DEQ Contact:** Amy Brittain, Dennis Datin **DEQ Contact Phone:** 4057025133, 4057025125

**Ecological Unit:** Not reported Soil Status: Not reported Ground Water Status: Not reported Soil Unit: Not reported Facility Status: Not reported

Source Control: Remedial Action complete

Direction Distance

Elevation Site Database(s) **EPA ID Number** 

# **DOUBLE EAGLE REFINERY (Continued)**

S106799116

**EDR ID Number** 

EPA ID: Not reported Not reported URL: Not reported Latitude: Not reported Longitude:

Facility Description: These two Superfund sites in south central Oklahoma City border each

other. Both operated as oil re-refiners over many years, one beginning in 1929 and the other in 1940. Because the sites share common ground water monitoring wells, they are listed here together. Historical operations resulted in widespread deposition of residual waste, mostly in pits, on both sites. These pits were generally acidic tar sludges with high lead concentrations. On both sites, the acidic sludges were neutralized, stabilized and disposed of in an off-site landfill. The excavated areas were filled with clean soil and vegetated. The surface is considered clean and available for reuse. The ground water in the alluvial and shallow Garber-Wellington aquifers under the site are contaminated with chlorinated solvents, hydrocarbons and metals from the refining operations. DEQ sampled the 13 wells for five years to established background levels and last year completed three additional years of semi-annual monitoring. At the end of 2004, DEQ drilled four additional shallow wells and sampled the ground water to identify possible off-site contaminant sources and to evaluate vapor intrusion as a possible pathway for contamination. This area is part of Oklahoma City's Empowerment Zone. which is a local, state, and federal initiative to promote redevelopment. The results of the sampling will assist all parties in developing appropriate reuse and long-term monitoring strategies. The seventeen monitoring wells onthe site were closed out and plugged in the fall of 2005. This is the first step to deleting the sites from

the Superfund National Priorities List.

Facility Description2: Not reported

L41 **DOUBLE EAGLE** INST CONTROL \$127284521 North N/A

1/4-1/2 **OKLAHOMA (County), OK** 

0.358 mi.

1889 ft. Site 2 of 2 in cluster L

INST: Relative: Higher DOUBLE EAGLE Name: Address: Not reported Actual: City, State, Zip: OK 1171 ft.

LPD Site ID: 30004 Book Number: 8127 1769-1771 Pages: Document Number: Not reported Program: Superfund

reported by deg personnel Collection:

Date Filled: 06/21/2001

Link: https://applications.deg.ok.gov/webdata/LPD/Institutional Controls/Sup

erfund/DoubleEagleDeedNotice.pdf

Latitude: 35.467631 Longitude: -97.477367

Direction Distance

Elevation Site Database(s) EPA ID Number

K42 SAIA MOTOR FREIGHT LINES LUST U001884609 SSW 1715 S SKYLINE DRIVE UST N/A

1/4-1/2 0.358 mi.

1892 ft. Site 2 of 2 in cluster K

**OKLAHOMA CITY, OK 73117** 

Relative: LUST: Higher Name:

HigherName:SAIA MOTOR FREIGHT LINESActual:Address:1715 S SKYLINE DRIVE1216 ft.City,State,Zip:OKLAHOMA CITY, OK 73117

Facility ID: 5505434 Case Number: 064-FD

Case Type: Confirmed Release

 Tank Type:
 UST

 Release Date:
 01/17/1990

 Close Date:
 03/15/1990

 Lat/Long:
 35.4540 / -97.4805

Status: Closed

UST:

Facility ID: 5505434

Contact Name: SAIA Motor Freight Line Contact Address: 11465 Johns Creek PK

Contact Telephone: 6155016841

Contact City, St, Zip: Johns Creek, GA, GA 30097

Lat/Long: 35.454 / -97.4805

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 10000
Substance: Diesel
Date Installed: 04/18/1951
Tank Type: UST
Closed Date: 01/16/1990

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 2

Tank Status: Currently In Use

**Total Capacity:** 10000 Substance: Diesel 01/11/1990 Date Installed: Tank Type: UST Closed Date: Not reported Decode of Tank Status: Currently in use Not reported Closure Status: Single Walled Tank Construction: Steel With Fiberglass Tank Material: Pipe Construction: Single-Walled Pipe Material: Fiberglass

HIST UST:

Facility ID: 5505434

Owner Name: SAIA MOTOR FREIGHT LINE
Owner Address: 104 WOODLAWN RANCH RD

**EDR ID Number** 

**HIST UST** 

TIER 2

Direction Distance

Elevation Site Database(s) EPA ID Number

# SAIA MOTOR FREIGHT LINES (Continued)

U001884609

**EDR ID Number** 

Owner City, St, Zip: Houma, LA 70363

Tank ID:

Tank Status: Permanently Out of Use Installed Date: 4/18/1951 0:00:00

Tank Capacity: 10000 Product: Diesel

Facility ID: 5505434

Owner Name: SAIA MOTOR FREIGHT LINE
Owner Address: 104 WOODLAWN RANCH RD

Owner City, St, Zip: Houma, LA 70363

Tank ID: 2

Tank Status: Currently in Use Installed Date: 1/1/1990 0:00:00

Tank Capacity: 12000 Product: Diesel

#### OK TIER 2:

Facility ID: FATR20118EQH72002QZ7
Test: SAIA MOTOR FREIGHT LINE, INC.
Address: 1715 S. SKYLINE DRIVE

City: OKLAHOMA CITY

Facilty Country: USA All Chems. Same as Last Year: Not reported Date Tier 2 Signed: 2/21/2012 Dike/Other Safeguards Employed: Not reported Facility Department: Saia Facility Date Modified: 6/20/2012 State Fees Total: Not reported Facility Fire District: Not reported

Mailing Address: 11465 JOHNS CREEK STE. 400
Mailing City,St,Zip: JOHNS CREEK, GA 30097

Mailing Country: USA
Latitude: 35.454276
Longitude: -97.481151

Lat/Long Location Description: PG - Plant Entrance (General)
Lat/Long Method: A2 - Address Matching (Block Face)

Number of Employees on Site: Not reported Not reported Object ID: Not reported Notes: Validation Report: Not reported Reporting Year: 2011 Site Coordinate Abbrvtions Submitted: Not reported State 1Require Contact: Not reported ID: 484122 Facility Type: **NAICS** 

Facility Description: General Freight Trucking, Long-Distance, Less Than Truckload

Facility Last Modified: 2/21/2012 ID: 4213 Facility Type: SIC

Facility Desctription: TRUCKING, EXCEPT LOCAL

Facility Last Modified: 2/21/2012
ID: Not reported
Facility Type: Dun & Bradstreet
Facility Desctription: Not reported
Facility Last Modified: 2/21/2012
Contact Record ID: CTTR20118EQJC7006LMG

Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

### SAIA MOTOR FREIGHT LINES (Continued)

U001884609

**EDR ID Number** 

Contact Name: Terminal Manager Bill Gaige
Contact Email: BGaige@Saia.com
Contact Mail Address: 1715 S. Skyline Drive
Contact Mail City,St,Zip: Oklahoma City, OK 73129

Contact Mail Country: USA

Contact Type: Owner / Operator

Contact Modified Date: 3/20/2012

Contact Record ID: CTTR20117QV5HC00BASX
Contact Name: Director of Safety Karla Staver

Contact Email: KStaver@Saia.com
Contact Mail Address: 11465 Johns Creek PKWY

Contact Mail City, St, Zip: Duluth, GA 30097

Contact Mail Country: USA

Contact Type: Regulatory Point of Contact

Contact Modified Date: 2/17/2011

Contact Record ID: CTTR20118EPV2700RGM5

Contact Name: Regional Safety Manager Darvin Brinkley

Contact Email: Not reported
Contact Mail Address: 1002 W. Oakdale
Contact Mail City, St, Zip: Grand Prairie, TX 75050

Contact Mail Country: USA

Mixture Percentage:

Contact Type: Emergency Contact

Contact Modified Date: 3/20/2012

Acute Health Risks: Not reported Average Daily Amount: Not reported Average Daily Amount Code: Not reported Chemical Inventory Record ID: Not reported Chemical Same As Last Year: Not reported Chronic Heath Risks: Not reported Not reported CAS Number: EHS Substance: Not reported Last Modified: Not reported State Max Daily Amt Required: Not reported State Unit Required: Not reported Days on Site: Not reported Chemical Name: Not reported Fire Hazard: Not reported Gas: Not reported Liquid: Not reported Not reported Max Daily Amount: Max Daily Amount Code: Not reported Max Amount in Largest Container: Not reported Mixture Form: Not reported "Sudden Release of Preasue" Hazard: Not reported Pure Form: Not reported Reactive Hazard: Not reported Solid: Not reported State Contact Field: Not reported State Contact Comment: Not reported State EHS Comment: Not reported State Label Code: Not reported Max Daily Amount Required: Not reported State Mac Per Container Required: Not reported State Req Heading: Not reported Trade Secret: Not reported Mixture Chemical: Not reported

Not reported

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

SAIA MOTOR FREIGHT LINES (Continued)

U001884609

Mixture CAS: Not reported Not reported Mixture EHS: Mixture Last Modified: Not reported Amount of Substnce: Not reported **Amount Units:** Not reported Not reported Type of Storage: Not reported Number Code for Storage Pressure: Number Code for Storage Temperature: Not reported Last Modified: Not reported Location: Not reported

M43 **PIE NATIONWIDE** LUST U004133077 South 1925 SE SKYLINE UST N/A

1/4-1/2 **OKLAHOMA CITY, OK 73129** 

0.359 mi.

Site 1 of 2 in cluster M 1895 ft.

LUST: Relative: Higher PIE NATIONWIDE Name: Address: 1925 SE SKYLINE Actual:

City,State,Zip: OKLAHOMA CITY, OK 73129 1203 ft.

Facility ID: 5502761 Case Number: 064-0214

Case Type: Confirmed Release

Tank Type: UST Release Date: 05/24/1991 Close Date: 07/14/1994 Lat/Long: 35.4536 / -97.4789

Status: Closed

UST:

5502761 Facility ID: Contact Name: N.W.I.C.

4161 CARMICHAEL AVE., SUTIE 157 Contact Address:

Contact Telephone: 9043965500

Contact City, St, Zip: Jacksonville, FL 32207 35.4536 / -97.4789 Lat/Long:

Tank ID:

Tank Status: Permanently Out Of Use

**Total Capacity:** 20000 Substance: Diesel 12/21/1984 Date Installed: Tank Type: UST Closed Date: 04/03/1991

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Single-Walled Not reported Pipe Material:

Tank ID:

Tank Status: Permanently Out Of Use

**Total Capacity:** 20000 Substance: Diesel Date Installed: 12/21/1984

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

PIE NATIONWIDE (Continued)

U004133077

Tank Type: UST 04/03/1991 Closed Date:

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Steel Tank Material:

Single-Walled Pipe Construction:

Pipe Material: Not reported

**GRISBY HOLDINGS CORP** M44 1905 E SKYLINE DR South 1/4-1/2 **OKLAHOMA CITY, OK 73129** 

LUST U001229097 UST N/A **HIST UST** 

0.364 mi.

Actual: 1208 ft.

1924 ft. Site 2 of 2 in cluster M

Relative: LUST: Higher Name:

**GRISBY HOLDINGS CORP** Address: 1905 E SKYLINE DR City,State,Zip: OKLAHOMA CITY, OK 73129

5500989 Facility ID: Case Number: 064-L3

Case Type: Confirmed Release

Tank Type: **UST** 02/28/1989 Release Date: 06/11/1991 Close Date: Lat/Long: 35.4535 / -97.4791

Status: Closed

UST:

Facility ID: 5500989

Contact Name: Grisby Holdings Corporation

Contact Address: 72 E BROADWAY Contact Telephone: 5028210507

Madisonville, KY 42431 Contact City, St, Zip: 35.4535 / -97.4791 Lat/Long:

Tank ID:

Permanently Out Of Use Tank Status:

**Total Capacity:** 7841 Substance: Diesel Date Installed: 03/20/1973 Tank Type: UST Closed Date: 07/18/1998

Decode of Tank Status: Permanently out of use Tank Removed From Ground Closure Status:

Tank Construction: Single Walled Tank Material: Steel Single-Walled Pipe Construction:

Pipe Material: Steel

Tank ID:

Permanently Out Of Use Tank Status:

Total Capacity: 7841 Substance: Not Listed Date Installed: 03/20/1973 Tank Type: UST 07/18/1998 Closed Date:

Decode of Tank Status: Permanently out of use

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

**GRISBY HOLDINGS CORP (Continued)** 

Closure Status: Tank Removed From Ground

Tank Construction: Single Walled
Tank Material: Steel
Pipe Construction: Single-Walled
Pipe Material: Steel

HIST UST:

Facility ID: 5500989

Owner Name: GRISBY HOLDINGS CORPORATION

Owner Address: 72 E BROADWAY
Owner City,St,Zip: Madisonville, KY 42431
Tank ID: 1
Tank Status: Permanently Out of Lice

Tank Status: Permanently Out of Use Installed Date: 3/20/1973 0:00:00

Tank Capacity: 7841
Product: Diesel

Facility ID: 5500989

Owner Name: GRISBY HOLDINGS CORPORATION

Owner Address: 72 E BROADWAY Owner City,St,Zip: Madisonville, KY 42431

Tank ID: 2

Tank Status: Permanently Out of Use Installed Date: 3/20/1973 0:00:00

Tank Capacity: 7841 Product: Other

45 DEL PAINT MANUFACTURING CORP.

East 3105 E RENO

1/4-1/2 OKLAHOMA CITY, OK 73117 0.402 mi.

0.402 mi. 2121 ft.

Relative: LUST: Higher Name:

 Actual:
 Address:
 3105 E RENO

 1181 ft.
 City,State,Zip:
 OKLAHOMA CITY, OK 73117

Facility ID: 5508558
Case Number: 064-1306

Case Type: Confirmed Release

 Tank Type:
 UST

 Release Date:
 12/12/1994

 Close Date:
 11/26/2001

Lat/Long: 35.4642 / -97.4580

Status: Closed

Name: DEL PAINT MANUFACTURING CORP.

DEL PAINT MANUFACTURING CORP.

Address: 3105 E RENO

City, State, Zip: OKLAHOMA CITY, OK 73117

Facility ID: 5508558 Case Number: 064-BD

Case Type: Confirmed Release

Tank Type: UST
Release Date: 10/16/1989
Close Date: 07/11/1991
Lat/Long: 35.4642 / -97.4580

Status: Closed

U001884833

N/A

LUST

UST

**HIST UST** 

Distance

Elevation Site Database(s) EPA ID Number

# **DEL PAINT MANUFACTURING CORP. (Continued)**

U001884833

**EDR ID Number** 

UST:

Facility ID: 5508558

Contact Name: Del Paint Manufacturing Company

 Contact Address:
 3105 E. Reno

 Contact Telephone:
 4056721431

 Contact City,St,Zip:
 Del City, OK 73115

 Lat/Long:
 35.4642 / -97.458

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 1000

Substance: Hazardous Material

 Date Installed:
 05/07/1974

 Tank Type:
 UST

 Closed Date:
 10/01/1989

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 10

Tank Status: Permanently Out Of Use

Total Capacity: 1000

Substance: Hazardous Material

 Date Installed:
 05/07/1974

 Tank Type:
 UST

 Closed Date:
 10/01/1989

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 3000

Substance: Hazardous Material

Date Installed: 05/07/1974
Tank Type: UST
Closed Date: 10/01/1989

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 6015

Substance: Hazardous Material

 Date Installed:
 05/07/1974

 Tank Type:
 UST

 Closed Date:
 10/01/1989

Direction Distance Elevation

vation Site Database(s) EPA ID Number

# **DEL PAINT MANUFACTURING CORP. (Continued)**

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 3000

Substance: Hazardous Material

 Date Installed:
 05/07/1974

 Tank Type:
 UST

 Closed Date:
 10/01/1989

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 5

Tank Status: Permanently Out Of Use

Total Capacity: 4000

Substance: Hazardous Material

 Date Installed:
 05/07/1974

 Tank Type:
 UST

 Closed Date:
 10/01/1989

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 1000

Substance: Hazardous Material

 Date Installed:
 05/07/1974

 Tank Type:
 UST

 Closed Date:
 10/01/1989

Decode of Tank Status: Permanently out of use
Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 7

Tank Status: Permanently Out Of Use

Total Capacity: 1000

Substance: Hazardous Material

 Date Installed:
 05/07/1974

 Tank Type:
 UST

 Closed Date:
 10/01/1989

Decode of Tank Status: Permanently out of use

**EDR ID Number** 

Direction Distance

Elevation Site Database(s) EPA ID Number

### **DEL PAINT MANUFACTURING CORP. (Continued)**

Closure Status: Tank Removed From Ground

Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 1000

Substance: Hazardous Material

 Date Installed:
 05/07/1974

 Tank Type:
 UST

 Closed Date:
 10/01/1989

Decode of Tank Status: Permanently out of use
Closure Status: Tank Removed From Ground

Tank Construction: Single Walled

Tank Material: Steel
Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 1000

Substance: Hazardous Material

 Date Installed:
 05/07/1974

 Tank Type:
 UST

 Closed Date:
 10/01/1989

Decode of Tank Status: Permanently out of use
Closure Status: Tank Removed From Ground

Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

HIST UST:

Facility ID: 5508558

Owner Name: Del Paint Manufacturing Company

Owner Address: 3105 E. Reno Owner City,St,Zip: Del City, OK 73115

Tank ID: 1

Tank Status: Permanently Out of Use Installed Date: 5/7/1974 0:00:00

Tank Capacity: 1000

Product: Hazardous Substance

Facility ID: 5508558

Owner Name: Del Paint Manufacturing Company

Owner Address: 3105 E. Reno Owner City,St,Zip: Del City, OK 73115

Tank ID: 2

Tank Status: Permanently Out of Use Installed Date: 5/7/1974 0:00:00

Tank Capacity: 3000

Product: Hazardous Substance

Facility ID: 5508558

Owner Name: Del Paint Manufacturing Company

Owner Address: 3105 E. Reno

**EDR ID Number** 

Direction Distance

Elevation Site Database(s) EPA ID Number

# **DEL PAINT MANUFACTURING CORP. (Continued)**

Owner City, St, Zip: Del City, OK 73115

Tank ID: 3

Tank Status: Permanently Out of Use Installed Date: 5/7/1974 0:00:00

Tank Capacity: 6015

Product: Hazardous Substance

Facility ID: 5508558

Owner Name: Del Paint Manufacturing Company

Owner Address: 3105 E. Reno Owner City,St,Zip: Del City, OK 73115

Tank ID:

Tank Status: Permanently Out of Use Installed Date: 5/7/1974 0:00:00

Tank Capacity: 3000

Product: Hazardous Substance

Facility ID: 5508558

Owner Name: Del Paint Manufacturing Company

Owner Address: 3105 E. Reno Owner City,St,Zip: Del City, OK 73115

Tank ID: 5

Tank Status: Permanently Out of Use

Installed Date: 5/7/1974 0:00:00

Tank Capacity: 4000

Product: Hazardous Substance

Facility ID: 5508558

Owner Name: Del Paint Manufacturing Company

Owner Address: 3105 E. Reno Owner City,St,Zip: Del City, OK 73115

Tank ID: 6

Tank Status: Permanently Out of Use Installed Date: 5/7/1974 0:00:00

Tank Capacity: 1000

Product: Hazardous Substance

Facility ID: 5508558

Owner Name: Del Paint Manufacturing Company

Owner Address: 3105 E. Reno Owner City,St,Zip: Del City, OK 73115

Tank ID: 7

Tank Status: Permanently Out of Use Installed Date: 5/7/1974 0:00:00

Tank Capacity: 1000

Product: Hazardous Substance

Facility ID: 5508558

Owner Name: Del Paint Manufacturing Company

Owner Address: 3105 E. Reno Owner City,St,Zip: Del City, OK 73115

Tank ID:

Tank Status: Permanently Out of Use Installed Date: 5/7/1974 0:00:00

Tank Capacity: 1000

Product: Hazardous Substance

**EDR ID Number** 

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **DEL PAINT MANUFACTURING CORP. (Continued)**

U001884833

SEMS-ARCHIVE 1000289331

**FINDS** 

**ECHO** 

OKD060778065

Facility ID: 5508558

Owner Name: **Del Paint Manufacturing Company** 

Owner Address: 3105 E. Reno Owner City,St,Zip: Del City, OK 73115

Tank ID:

Tank Status: Permanently Out of Use 5/7/1974 0:00:00 Installed Date:

Tank Capacity: 1000

Product: Hazardous Substance

Facility ID: 5508558

Del Paint Manufacturing Company Owner Name:

3105 E. Reno Owner Address: Owner City, St, Zip: Del City, OK 73115

Tank ID:

Tank Status: Permanently Out of Use 5/7/1974 0:00:00 Installed Date:

Tank Capacity: 1000

Product: Hazardous Substance

46 PHILLIPS PETROLEUM CO - PHILLIPS DITCH

SE 910 S FAIRMONT 1/4-1/2

RCRA NonGen / NLR OKLAHOMA CITY, OK 73129

0.402 mi. 2121 ft.

Relative: SEMS Archive:

Higher Site ID: 0601116 EPA ID: OKD060778065 Actual:

Name: PHILLIPS PETROLEUM CO - PHILLIPS DITCH 1222 ft.

910 S FAIRMONT Address: Address 2: Not reported

City,State,Zip: OKLAHOMA CITY, OK 73129

Cong District: 05 FIPS Code: 40109 FF:

NPL: Not on the NPL

Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

06 Region: Site ID: 0601116 EPA ID: OKD060778065

Site Name: PHILLIPS PETROLEUM CO - PHILLIPS DITCH

NPL: Ν FF: Ν OU: 00 Action Code: VS

Action Name: ARCH SITE

SEQ: Start Date: Not reported 1983-12-01 05:00:00 Finish Date: Not reported Qual: Current Action Lead: EPA Perf In-Hse

Region: 06 Site ID: 0601116 OKD060778065 EPA ID:

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# PHILLIPS PETROLEUM CO - PHILLIPS DITCH (Continued)

1000289331

Site Name: PHILLIPS PETROLEUM CO - PHILLIPS DITCH

NPL: Ν FF: Ν OU: 00 Action Code: DS Action Name: **DISCVRY** 

SEQ:

Start Date: 1980-09-01 04:00:00 Finish Date: 1980-09-01 04:00:00 Qual: Not reported **Current Action Lead: EPA Perf** 

06 Region: Site ID: 0601116 EPA ID: OKD060778065

PHILLIPS PETROLEUM CO - PHILLIPS DITCH Site Name:

NPL: Ν FF: Ν OU: 00 Action Code: PΑ Action Name: PΑ SEQ:

Start Date: 1980-07-01 04:00:00 Finish Date: 1980-07-01 04:00:00

Qual:

**Current Action Lead: EPA Perf** 

Region: 06 0601116 Site ID: OKD060778065 EPA ID:

Site Name: PHILLIPS PETROLEUM CO - PHILLIPS DITCH

NPL: FF: Ν OU: 00 Action Code: SI Action Name: SI SEQ:

1983-12-01 05:00:00 Start Date: 1983-12-01 05:00:00 Finish Date:

Qual: Current Action Lead: **EPA Perf** 

RCRA Listings:

Date Form Received by Agency: 19800818 Handler Name: PHILLIPS 66 OKLAHOMA PLANT

Handler Address: 910 S FAIRMONT

Handler City, State, Zip: OKLAHOMA CITY, OK 73129

OKD060778065 EPA ID: Contact Name: **GE FINK** 

Contact Address: 910 S FAIRMONT

Contact City, State, Zip: OKLAHOMA CITY, OK 73125 Contact Telephone: 918-661-6269

Contact Fax: Not reported Contact Email: Not reported Contact Title: Not reported

EPA Region: 06

MAP FINDINGS Map ID Direction

**EDR ID Number** Distance Elevation Site Database(s) **EPA ID Number** 

PHILLIPS PETROLEUM CO - PHILLIPS DITCH (Continued)

1000289331

Land Type: Not reported

Federal Waste Generator Description: Not a generator, verified

Non-Notifier: Not reported Biennial Report Cycle: Not reported Accessibility: Not reported Active Site Indicator: Not reported State District Owner: Not reported State District: Not reported S FAIRMONT Mailing Address:

Mailing City, State, Zip: OKLAHOMA CITY, OK 73125

PHILLIPS 66 NTRL GAS Owner Name:

Owner Type: Private

Operator Name: Not reported

Operator Type: Not reported

Short-Term Generator Activity: No Importer Activity: No Mixed Waste Generator: Nο Transporter Activity: No Transfer Facility Activity: No Recycler Activity with Storage: No Small Quantity On-Site Burner Exemption: No Smelting Melting and Refining Furnace Exemption: No **Underground Injection Control:** No Off-Site Waste Receipt: No Universal Waste Indicator: No Universal Waste Destination Facility: Nο Federal Universal Waste: Nο

Active Site Fed-Reg Treatment Storage and Disposal Facility: Not reported Active Site Converter Treatment storage and Disposal Facility: Not reported Active Site State-Reg Treatment Storage and Disposal Facility: Not reported

Active Site State-Reg Handler:

Federal Facility Indicator: Not reported Hazardous Secondary Material Indicator: NN

Sub-Part K Indicator: Not reported

Commercial TSD Indicator: No

Treatment Storage and Disposal Type: Not reported 2018 GPRA Permit Baseline: Not on the Baseline 2018 GPRA Renewals Baseline: Not on the Baseline Permit Renewals Workload Universe: Not reported Permit Workload Universe: Not reported Permit Progress Universe: Not reported Post-Closure Workload Universe: Not reported

Not reported 202 GPRA Corrective Action Baseline: No Corrective Action Workload Universe: No Subject to Corrective Action Universe: No Non-TSDFs Where RCRA CA has Been Imposed Universe: No TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: No

Closure Workload Universe:

TSDFs Only Subject to CA under Discretionary Auth Universe: No Corrective Action Priority Ranking: No NCAPS ranking

**Environmental Control Indicator:** No Institutional Control Indicator: No Human Exposure Controls Indicator: N/A Groundwater Controls Indicator: N/A Operating TSDF Universe: Not reported

Not reported Full Enforcement Universe:

Significant Non-Complier Universe: No

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# PHILLIPS PETROLEUM CO - PHILLIPS DITCH (Continued)

1000289331

Unaddressed Significant Non-Complier Universe: No Addressed Significant Non-Complier Universe: No Significant Non-Complier With a Compliance Schedule Universe: No

Financial Assurance Required: Not reported

Handler Date of Last Change: 20150414 Recognized Trader-Importer: No Recognized Trader-Exporter: No Importer of Spent Lead Acid Batteries: No Exporter of Spent Lead Acid Batteries: No

Recycler Activity Without Storage: Not reported Manifest Broker: Not reported

Sub-Part P Indicator: No

Hazardous Waste Summary:

Waste Code: D000 Waste Description: Not Defined

Waste Code: D001

Waste Description: **IGNITABLE WASTE** 

Waste Code: F001

Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING:

TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED

FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED

IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE

SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: P090 Waste Description: Not Defined

U013 Waste Code: Waste Description: Not Defined

Waste Code: U230 Waste Description: Not Defined

Handler - Owner Operator:

Owner/Operator Indicator: Owner

Owner/Operator Name: PHILLIPS 66 NTRL GAS

Legal Status: Private Date Became Current: Not reported **Date Ended Current:** Not reported UNKNOWN Owner/Operator Address: UNKNOWN Owner/Operator City, State, Zip: Owner/Operator Telephone: 000-000-0000 Owner/Operator Telephone Ext: Not reported Owner/Operator Fax: Not reported Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 19800818 PHILLIPS 66 OKLAHOMA PLANT Handler Name:

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# PHILLIPS PETROLEUM CO - PHILLIPS DITCH (Continued)

1000289331

Federal Waste Generator Description: Not a generator, verified

Not reported State District Owner:

Large Quantity Handler of Universal Waste: No Recognized Trader Importer: No Recognized Trader Exporter: No Spent Lead Acid Battery Importer: No Spent Lead Acid Battery Exporter: No Current Record: Yes

Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 32411

NAICS Description: PETROLEUM REFINERIES

Facility Has Received Notices of Violations:

Violations: No Violations Found

**Evaluation Action Summary:** 

No Evaluations Found Evaluations:

FINDS:

110009433210 Registry ID:

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000289331 Registry ID: 110009433210

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110009433210

PHILLIPS 66 OKLAHOMA PLANT Name:

Address: 910 S FAIRMONT

City,State,Zip: OKLAHOMA CITY, OK 73129

N47 **INTEGRITY METALS** SWRCY S123301530 WNW 1101 E. RENO N/A

1/4-1/2 **OKLAHOMA CITY, OK 73124** 

0.404 mi.

2132 ft. Site 1 of 5 in cluster N

Relative: SWRCY:

Higher Telephone Number: 4052352424

Aluminum: Actual:

Not reported 1185 ft. Aluminum Cans: Antifreeze: Not reported

MAP FINDINGS Map ID Direction

Distance Elevation

Site Database(s) **EPA ID Number** 

# **INTEGRITY METALS (Continued)**

S123301530

**EDR ID Number** 

Asphalt: Not reported Asphalt Shingles: Not reported Not reported Auto Parts: Brown Paper Bags: Not reported Brass:

Not reported Car Batteries: Cardboard: Not reported Not reported Carpet: CDs, DVDs, and Cassettes: Not reported Cell Phones: Not reported Clothes/Household: Not reported Computers: Not reported

Copper: Electric Appliances: Not reported Not reported Electronics: Eyeglasses: Not reported Glass: Not reported Not reported Hard Drives: Hardcover Books: Not reported Household Chemicals: Not reported Ink/Toner Cartridge: Not reported Iron: Not reported

Lead:

Light Bulbs: Not reported Magazines: Not reported Mercury: Not reported Mercury Thermostat: Not reported Metal: Not reported Motor Oil: Not reported New Paint: Not reported Not reported Newspaper: Paper: Not reported Phone Books: Not reported Plastic: Not reported Not reported Plastic Bags: Plastic Hangers: Not reported Rechargeable Batteries: Not reported

Stainless Steel:

Not reported Steel: Styrofoam Peanuts: Not reported Tin Cans: Not reported Tires: Not reported Transmission Fluid: Not reported **Used Paint:** Not reported Not reported Wood: Wood Chips: Not reported Books: Not reported Curbside: Not reported Drop Off: Not reported Recyclables Accepted: Not reported Website: Not reported

Latitude: 35.464293441099997 -97.490969617999994 Longitude:

Direction Distance

Elevation Site Database(s) EPA ID Number

N48 INTERSTATE METALS CORPORATION LUST U001884535

WNW 1101 E RENO UST N/A

1/4-1/2 OKLAHOMA CITY, OK 73117 BROWNFIELDS 0.404 mi. BROWNFIELDS

2132 ft. Site 2 of 5 in cluster N

Relative: LUST:
Higher Name: INTERSTATE METALS CORPORATION

Actual: Address: 1101 E RENO

1185 ft. City,State,Zip: OKLAHOMA CITY, OK 73117

Facility ID: 5504605 Case Number: 064-2008

Case Type: Confirmed Release

Tank Type: UST
Release Date: 01/06/1998
Close Date: 11/22/2019
Lat/Long: 35.4646 / -97.4925

Status: Closed

UST:

Facility ID: 5504605

Contact Name: Interstate Metals Corporation

Contact Address: 1101 E. Reno Contact Telephone: 4052352424

Contact City, St, Zip: Oklahoma City, OK 73124 Lat/Long: 35.4646 / -97.4925

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 1000
Substance: Diesel
Date Installed: 04/16/1966
Tank Type: UST
Closed Date: 04/13/1990

Decode of Tank Status: Permanently out of use
Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 2

Tank Status: Permanently Out Of Use

Total Capacity: 1000
Substance: Gasoline
Date Installed: 04/16/1966
Tank Type: UST
Closed Date: 04/02/1998

Decode of Tank Status: Permanently out of use Closure Status: Tank Closed In Place

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Single-Walled Pipe Material: Steel

BROWNFIELDS 2:

Name: INTERSTATE METALS
Address: 1101 EAST RENO

City, State, Zip: OKLAHOMA CITY, OK

**EDR ID Number** 

**AIRS** 

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

# INTERSTATE METALS CORPORATION (Continued)

U001884535

Region: 2

Certificate Of No Action Necessary: Not reported

Allowable Use: Commercial/Industrial

Institutional Controls: Certificate of No Action Necessary and Land Use Disclosure issued

April 6, 2021 filed in County Land Records

HIST UST:

Facility ID: 5504605

Owner Name: Interstate Metals Corporation

Owner Address: 1101 E. Reno

Owner City, St, Zip: Oklahoma City, OK 73124

Tank ID:

Tank Status: Permanently Out of Use

Installed Date: 4/16/1966 0:00:00

Tank Capacity: 1000 Product: Diesel

Facility ID: 5504605

Owner Name: Interstate Metals Corporation

Owner Address: 1101 E. Reno

Owner City, St, Zip: Oklahoma City, OK 73124

Tank ID:

Tank Status: Permanently Out of Use Installed Date: 4/16/1966 0:00:00

Tank Capacity: 1000 Product: Gasoline

AIRS:

Name: 1101 E RENO ALUMINUM SMELTER

Address: 1101 E RENO

City,State,Zip: OKLAHOMA CITY, OK 73117
Company: INTERSTATE METALS CORP

Operating Status: Operating NAICS Code: 423930 SIC Code: 5093 Permit Number: 95-510-O Issue Date: 02/08/1996 Contact First Name: **MICHAEL** Contact Last Name: **GALOOB** Contact Phone: (405) 235-2424 Latitude: 35.4645 Longitude: -97.49755

 N49
 INTERSTATE METALS
 US BROWNFIELDS
 1023667308

 WNW
 1101 E RENO AVENUE
 FINDS
 N/A

WNW 1101 E RENO AVENUE 1/4-1/2 OKLAHOMA CITY, OK 73117

0.404 mi.

2132 ft. Site 3 of 5 in cluster N

Relative: US BROWNFIELDS:

 Higher
 Name:
 INTERSTATE METALS

 Actual:
 Address:
 1101 E RENO AVENUE

 1185 ft.
 City,State,Zip:
 OKLAHOMA CITY, OK 73117

Recipient Name: Oklahoma Department of Environmental Quality

Grant Type: BCRLF
Property Number: R133604620
Parcel size: 13.68

Distance

Elevation Site Database(s) EPA ID Number

**INTERSTATE METALS (Continued)** 

1023667308

**EDR ID Number** 

Latitude: 35.465338 Longitude: -97.491153

Highlights: This Petroleum Storage Tank Facility was a small part of the larger

site, and the only part of the larger Interstate Metals site

addressed by the OCC. Facility #5504605, Case #064-2008. Case closed by the OCC PSTD staff on November 11, 2019. Former Use: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future. This site went through DEQ's Brownfields Revolving Loan Fund (BRLF), Tire Recycling Program, and Brownfield Certificate Program. 3,617 waste tires were removed from the site through DEQ's Tire Recycling Program. An Interim Remedial Measures (IRM) Work Plan for the removal and treatment of 16,958 tons of lead-contaminated dross and soil was addressed with a loan from DEQ's BRLF and in DEQ's Brownfield Certificate Program (the developer paid for the rest of the cleanup). TPH contaminated soils were also addressed in DEQ's

Brownfield Certificate Program.

Datum:

Start Date:

Acres Property ID: 232903

IC Data Access: https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Bro

 $wn fields/Interstate Metals\_Cert$ 

6/15/2016

Redev Completition Date:

Completed Date: 5/30/2017 Acres Cleaned Up: 13.68 Cleanup Funding: 18973

Cleanup Funding Source: State of Oklahoma

Assessment Funding:

Assessment Funding Source:

Redevelopment Funding:

Redev. Funding Source:

Redev. Funding Entity Name:

Redevelopment Start Date:

Assessment Funding Entity:

Cleanup Funding Entity: State/Tribal Funding (non-section 128(a))

Grant Type:

Accomplishment Type: Accomplishment Count: -

Cooperative Agreement Number: 98684801
Start Date: Ownership Entity: Private

Ownership Entity: Private Completion Date: -

Current Owner: East Reno and Lottie LLC and 1101 East Reno LLC

Did Owner Change: N
Cleanup Required: Y
Video Available: Photo Available: Institutional Controls Required: Y
IC Category Proprietary Controls: IC Cat. Info. Devices: Y

Distance Elevation

e EDR ID Number on Site Database(s) EPA ID Number

### **INTERSTATE METALS (Continued)**

1023667308

IC Cat. Gov. Controls:

IC Cat. Enforcement Permit Tools:

IC in place date: 4/6/2021

State/tribal program date: 2/1/2016

State/tribal program ID: 16-007
State/tribal NFA date: 12/31/2019

Air cleaned: Asbestos found: Asbestos cleaned: Controled substance found: Controled substance cleaned: Drinking water affected: Drinking water cleaned: Groundwater affected: Groundwater cleaned: Lead contaminant found: Lead cleaned up: No media affected: Unknown media affected: Other cleaned up: Other metals found: Other metals cleaned: Other contaminants found:

Other contams found description: Dross, slag

PAHs found:

PAHs cleaned up:

PCBs found:

PCBs cleaned up:

Petro products found:

Petro products cleaned:

Sediments found:

Sediments cleaned:

Soil affected:

Soil cleaned up:

Y
Surface water cleaned:

VOCs found:

Cleanup other description: Dross, slag

VOCs cleaned:

Future use residential acreage:
Future use commercial acreage:
Future use industrial acreage:
Future use industrial acreage:
Superfund Fed. landowner flag:
Arsenic cleaned up:
Cadmium cleaned up:
Chromium cleaned up:
Copper cleaned up:
Iron cleaned up:
mercury cleaned up:
Nickel Cleaned Up:

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

**INTERSTATE METALS (Continued)** 

1023667308

No clean up: Pesticides cleaned up: Selenium cleaned up: SVOCs cleaned up: Unknown clean up: Arsenic contaminant found: Cadmium contaminant found: Chromium contaminant found: Copper contaminant found: Iron contaminant found: Mercury contaminant found: Nickel contaminant found: No contaminant found: Pesticides contaminant found: Selenium contaminant found: SVOCs contaminant found: Unknown contaminant found: Future Use: Multistory Media affected Bluiding Material: Media affected indoor air: Building material media cleaned up: Indoor air media cleaned up: Unknown media cleaned up: Past Use: Multistory

Property Description:

Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in

the future.

 Below Poverty Number:
 0

 Below Poverty Percent:
 0

 Meidan Income:
 203

 Meidan Income Number:
 1

 Meidan Income Percent:
 25

 Vacant Housing Number:
 1

 Vacant Housing Percent:
 29.56

 Unemployed Number:
 0

 Unemployed Percent:
 0

Name: INTERSTATE METALS
Address: 1101 E RENO AVENUE
City, State, Zip: OKLAHOMA CITY, OK 73117

Recipient Name: Oklahoma Department of Environmental Quality

 Grant Type:
 BCRLF

 Property Number:
 R133604620

 Parcel size:
 13.68

 Latitude:
 35.465338

 Longitude:
 -97.491153

HCM Label: Map Scale: Point of Reference: -

Highlights: This Petroleum Storage Tank Facility was a small part of the larger

site, and the only part of the larger Interstate Metals site

addressed by the OCC. Facility #5504605, Case #064-2008. Case closed by the OCC PSTD staff on November 11, 2019. Former Use: Formerly

Direction Distance Elevation

Site Database(s) EPA ID Number

# **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future. This site went through DEQ's Brownfields Revolving Loan Fund (BRLF), Tire Recycling Program, and Brownfield Certificate Program. 3,617 waste tires were removed from the site through DEQ's Tire Recycling Program. An Interim Remedial Measures (IRM) Work Plan for the removal and treatment of 16,958 tons of lead-contaminated dross and soil was addressed with a loan from DEQ's BRLF and in DEQ's Brownfield Certificate Program (the developer paid for the rest of the cleanup). TPH contaminated soils were also addressed in DEQ's Brownfield Certificate Program.

Datum: -

Acres Property ID: 232903

IC Data Access: https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Bro

wnfields/InterstateMetals\_Cert

Start Date: Redev Completition Date: Completed Date: Acres Cleaned Up: Cleanup Funding: Cleanup Funding Source: Assessment Funding: -

Assessment Funding:
Assessment Funding Source:
Redevelopment Funding:
Redev. Funding Source:
Redev. Funding Entity Name:
Redevelopment Start Date:
Assessment Funding Entity:
Cleanup Funding Entity:
Grant Type:

Accomplishment Count: -

Cooperative Agreement Number: 98684801

Start Date:

Accomplishment Type:

Ownership Entity: Private Completion Date: -

Current Owner: East Reno and Lottie LLC and 1101 East Reno LLC

Did Owner Change:

Cleanup Required:

Video Available:

Photo Available:

Institutional Controls Required:

IC Category Proprietary Controls:

IC Cat. Info. Devices:

IC Cat. Gov. Controls:

IC Cat. Enforcement Permit Tools:

IC in place date: 4/6/2021
IC in place: Y
State/tribal program date: 2/1/2016

State/tribal program ID: 16-007 State/tribal NFA date: 12/31/2019

Air cleaned: Asbestos found: -

Distance Elevation Site

Database(s)

1023667308

**EDR ID Number** 

**EPA ID Number** 

#### **INTERSTATE METALS (Continued)**

Other contaminants found:

Asbestos cleaned:

Controled substance found:

Controled substance cleaned:

Drinking water affected:

Drinking water cleaned:

Groundwater affected:

Groundwater cleaned:

Lead contaminant found:

Lead cleaned up:

No media affected:

Unknown media affected:

Other cleaned up:

Y

Other metals found:

Other metals cleaned:

Other contams found description: Dross, slag

PAHs found:
PAHs cleaned up:
PCBs found:
PCBs cleaned up:
Petro products found:
Petro products cleaned:
Sediments found:
Sediments cleaned:
Soil affected:
Soil cleaned up:
Y
Soil cleaned up:
Y
Surface water cleaned:
VOCs found:
VOCs cleaned:

Cleanup other description: Dross, slag

Num. of cleanup and re-dev. jobs: Past use greenspace acreage: Past use residential acreage: Surface Water: Past use commercial acreage: Past use industrial acreage: 13.68 Future use greenspace acreage: Future use residential acreage: Future use commercial acreage: Future use industrial acreage: 1.5 Superfund Fed. landowner flag: Arsenic cleaned up: Cadmium cleaned up: Chromium cleaned up: Copper cleaned up: Iron cleaned up: mercury cleaned up: Nickel Cleaned Up: No clean up: Pesticides cleaned up: Selenium cleaned up: SVOCs cleaned up: Unknown clean up: Arsenic contaminant found: Cadmium contaminant found: Chromium contaminant found:

Copper contaminant found:

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

# **INTERSTATE METALS (Continued)**

1023667308

Iron contaminant found:

Mercury contaminant found:

Nickel contaminant found:

Pesticides contaminant found:

Selenium contaminant found:

SVOCs contaminant found:

VUnknown contaminant found:

Future Use: Multistory

Media affected Bluiding Material:

Media affected indoor air:

Building material media cleaned up:

Indoor air media cleaned up:

Unknown media cleaned up:

- SVOCs contaminant found:

- VY

- VINANOWN CONTAMINANT CONTA

Property Description: Formerly operated as a ferrous metals wholesaler, scrap yard, and

smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a

prominent developer of the Oklahoma City area to build office space in

the future.

Below Poverty Number: 0
Below Poverty Percent: 0
Meidan Income: 203
Meidan Income Number: 1
Meidan Income Percent: 25
Vacant Housing Number: 1
Vacant Housing Percent: 29.56
Unemployed Number: 0
Unemployed Percent: 0

Name:INTERSTATE METALSAddress:1101 E RENO AVENUECity,State,Zip:OKLAHOMA CITY, OK 73117Recipient Name:Oklahoma Corporation Commission

Grant Type: Section 128(a) State/Tribal

 Property Number:
 R133604620

 Parcel size:
 13.68

 Latitude:
 35.465338

 Longitude:
 -97.491153

HCM Label: Map Scale: Point of Reference: -

Highlights: This Petroleum Storage Tank Facility was a small part of the larger

site, and the only part of the larger Interstate Metals site

addressed by the OCC. Facility #5504605, Case #064-2008. Case closed by the OCC PSTD staff on November 11, 2019. Former Use: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future. This site went through DEQ's Brownfields Revolving Loan Fund (BRLF), Tire Recycling Program, and Brownfield Certificate Program. 3,617 waste tires were removed from the site through DEQ's Tire

Direction Distance Elevation

on Site Database(s) EPA ID Number

### **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

Recycling Program. An Interim Remedial Measures (IRM) Work Plan for the removal and treatment of 16,958 tons of lead-contaminated dross and soil was addressed with a loan from DEQ's BRLF and in DEQ's Brownfield Certificate Program (the developer paid for the rest of the cleanup). TPH contaminated soils were also addressed in DEQ's

Brownfield Certificate Program.

Datum:

Acres Property ID: 232903

IC Data Access: https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Bro

wnfields/InterstateMetals\_Cert

Start Date: -

Redev Completition Date: Completed Date: Acres Cleaned Up: Cleanup Funding: Cleanup Funding Source: Assessment Funding: Assessment Funding Source: Redevelopment Funding: Redev. Funding Source: Redev. Funding Entity Name: Redevelopment Start Date: Assessment Funding Entity: Cleanup Funding Entity: Grant Type: Accomplishment Type: Accomplishment Count:

Cooperative Agreement Number: 01F50801

Start Date:

Ownership Entity: Private

Completion Date:

Current Owner: East Reno and Lottie LLC and 1101 East Reno LLC

Did Owner Change:

Cleanup Required:

Yideo Available:

Photo Available:

Institutional Controls Required:

IC Category Proprietary Controls:

IC Cat. Info. Devices:

IC Cat. Enforcement Permit Tools:

IC in place date: 4/6/2021

IC in place: Y

State/tribal program date: 2/1/2016 State/tribal program ID: 16-007 State/tribal NFA date: 12/31/2019

Air cleaned:

Asbestos found:

Asbestos cleaned:

Controled substance found:

Controled substance cleaned:

Drinking water affected:

Drinking water cleaned:

Groundwater affected:

Groundwater cleaned:

Lead contaminant found:

Y

Lead cleaned up:

MAP FINDINGS Map ID Direction

Distance Elevation Site Database(s)

**INTERSTATE METALS (Continued)** 

1023667308

**EDR ID Number** 

**EPA ID Number** 

No media affected: Unknown media affected: Other cleaned up: Other metals found: Other metals cleaned: Other contaminants found:

Other contams found description: Dross, slag

PAHs found: PAHs cleaned up: PCBs found: PCBs cleaned up: Petro products found: Petro products cleaned: Sediments found: Sediments cleaned: Soil affected: Soil cleaned up: Surface water cleaned: VOCs found: VOCs cleaned:

Dross, slag

Cleanup other description: Num. of cleanup and re-dev. jobs: Past use greenspace acreage: Past use residential acreage: Surface Water: Past use commercial acreage: Past use industrial acreage: 13.68 Future use greenspace acreage: Future use residential acreage: Future use commercial acreage: Future use industrial acreage: 1.5 Superfund Fed. landowner flag: Arsenic cleaned up: Cadmium cleaned up: Chromium cleaned up: Copper cleaned up: Iron cleaned up: mercury cleaned up: Nickel Cleaned Up: No clean up: Pesticides cleaned up: Selenium cleaned up: SVOCs cleaned up: Unknown clean up:

Arsenic contaminant found: Cadmium contaminant found: Chromium contaminant found: Copper contaminant found: Iron contaminant found: Mercury contaminant found: Nickel contaminant found: No contaminant found: Pesticides contaminant found: Selenium contaminant found: SVOCs contaminant found: Unknown contaminant found: Future Use: Multistory

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

**INTERSTATE METALS (Continued)** 

1023667308

Media affected Bluiding Material:

Media affected indoor air:

Building material media cleaned up:

Indoor air media cleaned up:

Unknown media cleaned up:

Past Use: Multistory

Property Description:

Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future.

Below Poverty Number: 0
Below Poverty Percent: 0
Meidan Income: 203
Meidan Income Number: 1
Meidan Income Percent: 25
Vacant Housing Number: 1
Vacant Housing Percent: 29.56
Unemployed Number: 0
Unemployed Percent: 0

Name: INTERSTATE METALS
Address: 1101 E RENO AVENUE
City, State, Zip: OKLAHOMA CITY, OK 73117
Recipient Name: Oklahoma Corporation Commission
Grant Type: Section 128(a) State/Tribal

 Property Number:
 R133604620

 Parcel size:
 13.68

 Latitude:
 35.465338

 Longitude:
 -97.491153

HCM Label: Map Scale: Point of Reference: -

Highlights: This Petroleum Storage Tank Facility was a small part of the larger

site, and the only part of the larger Interstate Metals site

addressed by the OCC. Facility #5504605, Case #064-2008. Case closed by the OCC PSTD staff on November 11, 2019. Former Use: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future. This site went through DEQ's Brownfields Revolving Loan Fund (BRLF), Tire Recycling Program, and Brownfield Certificate Program. 3,617 waste tires were removed from the site through DEQ's Tire Recycling Program. An Interim Remedial Measures (IRM) Work Plan for the removal and treatment of 16.958 tons of lead-contaminated dross and soil was addressed with a loan from DEQ's BRLF and in DEQ's Brownfield Certificate Program (the developer paid for the rest of the cleanup). TPH contaminated soils were also addressed in DEQ's

Brownfield Certificate Program.
- -

Acres Property ID: 232903

IC Data Access: https://applications.deg.ok.gov/webdata/LPD/Institutional\_Controls/Bro

Direction Distance Elevation

ce EDR ID Number ion Site Database(s) EPA ID Number

# **INTERSTATE METALS (Continued)**

1023667308

wnfields/InterstateMetals\_Cert

Redev. Funding Entity Name: Redevelopment Start Date: -

Assessment Funding Entity: US EPA - State & Tribal Section 128(a) Funding

Cleanup Funding Entity: Grant Type: -

Accomplishment Type: Supplemental Assessment

Accomplishment Count: Y

Cooperative Agreement Number: 01F50801 Start Date: 2/27/2019 Ownership Entity: Private Completion Date: 12/31/2019

Current Owner: East Reno and Lottie LLC and 1101 East Reno LLC

Did Owner Change: N
Cleanup Required: Y
Video Available: Photo Available: Institutional Controls Required: Y
IC Category Proprietary Controls: IC Cat. Info. Devices: Y
IC Cat. Gov. Controls: IC Cat. Enforcement Permit Tools: -

IC in place date: 4/6/2021
IC in place: Y
State/tribal program date: 2/1/2016
State/tribal program ID: 16-007
State/tribal NFA date: 12/31/2019

Air cleaned: Asbestos found: Asbestos cleaned: Controled substance found: Controled substance cleaned: Drinking water affected: Drinking water cleaned: Groundwater affected: Groundwater cleaned: Lead contaminant found: Lead cleaned up: No media affected: Unknown media affected: Other cleaned up: Other metals found: Other metals cleaned: Other contaminants found:

Other contams found description: Dross, slag

PAHs found: -PAHs cleaned up: -

MAP FINDINGS Map ID Direction

Distance Elevation Site

Database(s)

**INTERSTATE METALS (Continued)** 

VOCs cleaned:

Nickel Cleaned Up:

1023667308

**EDR ID Number** 

**EPA ID Number** 

PCBs found: PCBs cleaned up: Petro products found: Petro products cleaned: Sediments found: Sediments cleaned: Soil affected: Soil cleaned up: Surface water cleaned: VOCs found:

Cleanup other description: Dross, slag

Num. of cleanup and re-dev. jobs: Past use greenspace acreage: Past use residential acreage: Surface Water:

Past use commercial acreage: Past use industrial acreage: 13.68 Future use greenspace acreage: Future use residential acreage:

Future use commercial acreage: Future use industrial acreage: 1.5 Superfund Fed. landowner flag: Arsenic cleaned up: Cadmium cleaned up: Chromium cleaned up: Copper cleaned up: Iron cleaned up: mercury cleaned up:

No clean up: Pesticides cleaned up: Selenium cleaned up: SVOCs cleaned up: Unknown clean up: Arsenic contaminant found:

Cadmium contaminant found: Chromium contaminant found: Copper contaminant found: Iron contaminant found: Mercury contaminant found: Nickel contaminant found: No contaminant found:

Pesticides contaminant found: Selenium contaminant found: SVOCs contaminant found: Unknown contaminant found: Future Use: Multistory Media affected Bluiding Material:

Media affected indoor air: Building material media cleaned up: Indoor air media cleaned up: Unknown media cleaned up: Past Use: Multistory

Property Description:

Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a

mom and pop operation and passed down in the family. It was eventually

MAP FINDINGS Map ID Direction

Distance Elevation

**EDR ID Number** Site **EPA ID Number** Database(s)

# **INTERSTATE METALS (Continued)**

1023667308

purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future.

Below Poverty Number: 0 Below Poverty Percent: 0 Meidan Income: 203 Meidan Income Number: Meidan Income Percent: 25 Vacant Housing Number: Vacant Housing Percent: 29.56 **Unemployed Number:** 0 **Unemployed Percent:** 0

Name: INTERSTATE METALS 1101 E RENO AVENUE Address: OKLAHOMA CITY, OK 73117 City, State, Zip: Oklahoma Corporation Commission Recipient Name:

Grant Type: Section 128(a) State/Tribal

R133604620 Property Number: Parcel size: 13.68 Latitude: 35.465338 -97.491153 Lonaitude:

HCM Label: Map Scale: Point of Reference:

Highlights: This Petroleum Storage Tank Facility was a small part of the larger

site, and the only part of the larger Interstate Metals site

addressed by the OCC. Facility #5504605, Case #064-2008. Case closed by the OCC PSTD staff on November 11, 2019. Former Use: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future. This site went through DEQ's Brownfields Revolving Loan Fund (BRLF), Tire Recycling Program, and Brownfield Certificate Program. 3,617 waste tires were removed from the site through DEQ's Tire Recycling Program. An Interim Remedial Measures (IRM) Work Plan for the removal and treatment of 16,958 tons of lead-contaminated dross and soil was addressed with a loan from DEQ's BRLF and in DEQ's Brownfield Certificate Program (the developer paid for the rest of the cleanup). TPH contaminated soils were also addressed in DEQ's Brownfield Certificate Program.

Datum:

Acres Property ID: 232903

IC Data Access: https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Bro

wnfields/InterstateMetals\_Cert

Start Date:

Redev Completition Date: Completed Date: Acres Cleaned Up: Cleanup Funding: Cleanup Funding Source: Assessment Funding: Assessment Funding Source:

Distance

Elevation Site Database(s) EPA ID Number

# **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

Redevelopment Funding:
Redev. Funding Source:
Redev. Funding Entity Name:
Redevelopment Start Date:
Assessment Funding Entity:
Cleanup Funding Entity:
Grant Type:
Accomplishment Type:

Accomplishment Count: -

Cooperative Agreement Number: 01F50801

Start Date:

Ownership Entity: Private

Completion Date: -

Current Owner: East Reno and Lottie LLC and 1101 East Reno LLC

Did Owner Change:

Cleanup Required:

Video Available:

Photo Available:

Institutional Controls Required:

IC Category Proprietary Controls:

IC Cat. Info. Devices:

IC Cat. Gov. Controls:

IC Cat. Enforcement Permit Tools:

IC in place date: 4/6/2021
IC in place: Y
State/tribal program date: 2/1/2016
State/tribal program ID: 16-007
State/tribal NFA date: 12/31/2019

Air cleaned: Asbestos found: Asbestos cleaned: Controled substance found: Controled substance cleaned: Drinking water affected: Drinking water cleaned: Groundwater affected: Groundwater cleaned: Lead contaminant found: Lead cleaned up: No media affected: Unknown media affected: Other cleaned up: Other metals found: Other metals cleaned: Other contaminants found:

Other contams found description: Dross, slag

PAHs found:
PAHs cleaned up:
PCBs found:
PCBs cleaned up:
Petro products found:
Petro products cleaned:
Sediments found:
Sediments cleaned:
Soil affected:
Soil cleaned up:
Y
Surface water cleaned:

Distance Elevation Site

Database(s)

EDR ID Number EPA ID Number

#### **INTERSTATE METALS (Continued)**

1023667308

VOCs found: - VOCs cleaned: -

Cleanup other description: Dross, slag

Num. of cleanup and re-dev. jobs:

Past use greenspace acreage:

Past use residential acreage:

Surface Water:

Surrace water:

Past use commercial acreage:

Past use industrial acreage:

Future use greenspace acreage:

Future use residential acreage:

Future use commercial acreage:

Future use industrial acreage:

Future use industrial acreage:

Superfund Fed. landowner flag:

Arsenic cleaned up:

Cadmium cleaned up:

Chromium cleaned up:

-

Critoriium cleaned up:

Copper cleaned up:

Iron cleaned up:

mercury cleaned up:

Nickel Cleaned Up:

No clean up:

Pesticides cleaned up:

Selenium cleaned up:

SVOCs cleaned up:

Y Unknown clean up:

Arsenic contaminant found:

Cadmium contaminant found:

Chromium contaminant found:

Copper contaminant found:

Iron contaminant found:

Mercury contaminant found:

Nickel contaminant found:

No contaminant found:

Pesticides contaminant found:

Selenium contaminant found:

SVOCs contaminant found:

Y

Unknown contaminant found:

Media affected Bluiding Material:

Media affected indoor air:

Building material media cleaned up:

Indoor air media cleaned up:

Unknown media cleaned up:

Past Use: Multistory

Future Use: Multistory

Property Description: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a

mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in

the future.

Below Poverty Number: 0
Below Poverty Percent: 0
Meidan Income: 203
Meidan Income Number: 1
Meidan Income Percent: 25

Distance Elevation

on Site Database(s) EPA ID Number

# **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

Vacant Housing Number: 1
Vacant Housing Percent: 29.56
Unemployed Number: 0
Unemployed Percent: 0

Name:INTERSTATE METALSAddress:1101 E RENO AVENUECity, State, Zip:OKLAHOMA CITY, OK 73117Recipient Name:Oklahoma Corporation Commission

Grant Type: Section 128(a) State/Tribal

 Property Number:
 R133604620

 Parcel size:
 13.68

 Latitude:
 35.465338

 Longitude:
 -97.491153

Highlights: This Petroleum Storage Tank Facility was a small part of the larger

site, and the only part of the larger Interstate Metals site

addressed by the OCC. Facility #5504605, Case #064-2008. Case closed by the OCC PSTD staff on November 11, 2019. Former Use: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future. This site went through DEQ's Brownfields Revolving Loan Fund (BRLF), Tire Recycling Program, and Brownfield Certificate Program. 3,617 waste tires were removed from the site through DEQ's Tire Recycling Program. An Interim Remedial Measures (IRM) Work Plan for the removal and treatment of 16.958 tons of lead-contaminated dross and soil was addressed with a loan from DEQ's BRLF and in DEQ's Brownfield Certificate Program (the developer paid for the rest of the cleanup). TPH contaminated soils were also addressed in DEQ's Brownfield Certificate Program.

Datum: -

Acres Property ID: 232903

IC Data Access: https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Bro

wnfields/InterstateMetals\_Cert

Cleanup Funding Entity: Grant Type: Accomplishment Type: Accomplishment Count: -

Direction Distance Elevation

nce EDR ID Number tition Site Database(s) EPA ID Number

INTERSTATE METALS (Continued)

1023667308

Cooperative Agreement Number: 01F50801 Start Date: -Ownership Entity: Private

Completion Date: - Filval

Current Owner: East Reno and Lottie LLC and 1101 East Reno LLC

Did Owner Change:

Cleanup Required:

Video Available:

Photo Available:

Institutional Controls Required:

IC Category Proprietary Controls:

IC Cat. Info. Devices:

IC Cat. Gov. Controls:

IC Cat. Enforcement Permit Tools:

IC in place date: 4/6/2021
IC in place: Y
State/tribal program date: 2/1/2016
State/tribal program ID: 16-007
State/tribal NFA date: 12/31/2019

Air cleaned: Asbestos found: Asbestos cleaned: Controled substance found: Controled substance cleaned: Drinking water affected: Drinking water cleaned: Groundwater affected: Groundwater cleaned: Lead contaminant found: Lead cleaned up: No media affected: Unknown media affected: Other cleaned up: Other metals found: Other metals cleaned: Other contaminants found:

Other contams found description: Dross, slag

Cleanup other description: Dross, slag

Num. of cleanup and re-dev. jobs:

Past use greenspace acreage:

Past use residential acreage:

Surface Water:

Past use commercial acreage:

Past use industrial acreage:

13.68

Distance Elevation

Site Database(s) EPA ID Number

# **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

Future use greenspace acreage: Future use residential acreage: Future use commercial acreage: Future use industrial acreage: 1.5 Superfund Fed. landowner flag: Arsenic cleaned up: Cadmium cleaned up: Chromium cleaned up: Copper cleaned up: Iron cleaned up: mercury cleaned up: Nickel Cleaned Up: No clean up: Pesticides cleaned up: Selenium cleaned up: SVOCs cleaned up: Unknown clean up: Arsenic contaminant found: Cadmium contaminant found: Chromium contaminant found: Copper contaminant found: Iron contaminant found: Mercury contaminant found: Nickel contaminant found: No contaminant found: Pesticides contaminant found: Selenium contaminant found: SVOCs contaminant found: Unknown contaminant found: Future Use: Multistory Media affected Bluiding Material: Media affected indoor air: Building material media cleaned up: Indoor air media cleaned up: Unknown media cleaned up:

Past Use: Multistory Property Description:

Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future.

Below Poverty Number: 0
Below Poverty Percent: 0
Meidan Income: 203
Meidan Income Number: 1
Meidan Income Percent: 25
Vacant Housing Number: 1
Vacant Housing Percent: 29.56
Unemployed Number: 0
Unemployed Percent: 0

Name:INTERSTATE METALSAddress:1101 E RENO AVENUECity,State,Zip:OKLAHOMA CITY, OK 73117

Recipient Name: Oklahoma Department of Environmental Quality

Direction Distance

Elevation Site Database(s) EPA ID Number

# **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

 Grant Type:
 BCRLF

 Property Number:
 R133604620

 Parcel size:
 13.68

 Latitude:
 35.465338

 Longitude:
 -97.491153

Highlights: This Petroleum Storage Tank Facility was a small part of the larger

site, and the only part of the larger Interstate Metals site

addressed by the OCC. Facility #5504605, Case #064-2008. Case closed by the OCC PSTD staff on November 11, 2019. Former Use: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future. This site went through DEQ's Brownfields Revolving Loan Fund (BRLF), Tire Recycling Program, and Brownfield Certificate Program. 3,617 waste tires were removed from the site through DEQ's Tire Recycling Program. An Interim Remedial Measures (IRM) Work Plan for the removal and treatment of 16.958 tons of lead-contaminated dross and soil was addressed with a loan from DEQ's BRLF and in DEQ's Brownfield Certificate Program (the developer paid for the rest of the cleanup). TPH contaminated soils were also addressed in DEQ's

Brownfield Certificate Program.

Datum:

Acres Property ID: 232903

IC Data Access: https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Bro

wnfields/InterstateMetals\_Cert

Start Date: 6/15/2016

Redev Completition Date:

Completed Date: 5/30/2017
Acres Cleaned Up: 13.68
Cleanup Funding: 740000
Cleanup Funding Source: EPA
Assessment Funding: Assessment Funding: Redevelopment Funding: Redev. Funding Source: Redev. Funding Entity Name: Redevelopment Start Date: Assessment Funding Entity: -

Cleanup Funding Entity: Brownfields RLF Program Income Loaned

Grant Type:

Accomplishment Type: Accomplishment Count: -

Cooperative Agreement Number: 98684801
Start Date: Ownership Entity: Private

Completion Date:

Current Owner: East Reno and Lottie LLC and 1101 East Reno LLC

Did Owner Change:

Cleanup Required:

Video Available:

Photo Available:

-

Direction Distance Elevation

ce EDR ID Number ion Site Database(s) EPA ID Number

#### **INTERSTATE METALS (Continued)**

1023667308

Institutional Controls Required: Y
IC Category Proprietary Controls:
IC Cat. Info. Devices: Y
IC Cat. Gov. Controls:
IC Cat. Enforcement Permit Tools:

IC in place date: 4/6/2021
IC in place: Y
State/tribal program date: 2/1/2016
State/tribal program ID: 16-007
State/tribal NFA date: 12/31/2019

Air cleaned: Asbestos found: Asbestos cleaned: Controled substance found: Controled substance cleaned: Drinking water affected: Drinking water cleaned: Groundwater affected: Groundwater cleaned: Lead contaminant found: Lead cleaned up: No media affected: Unknown media affected: Other cleaned up: Other metals found: Other metals cleaned: Other contaminants found:

Other contams found description: Dross, slag

Cleanup other description: Dross, slag

Num. of cleanup and re-dev. jobs: Past use greenspace acreage: Past use residential acreage: Surface Water: Past use commercial acreage: Past use industrial acreage: 13.68 Future use greenspace acreage: Future use residential acreage: Future use commercial acreage: Future use industrial acreage: 1.5 Superfund Fed. landowner flag: Arsenic cleaned up: Cadmium cleaned up: Chromium cleaned up: Copper cleaned up:

Distance Elevation

Site Database(s) EPA ID Number

# **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

Iron cleaned up: mercury cleaned up: Nickel Cleaned Up: No clean up: Pesticides cleaned up: Selenium cleaned up: SVOCs cleaned up: Unknown clean up: Arsenic contaminant found: Cadmium contaminant found: Chromium contaminant found: Copper contaminant found: Iron contaminant found: Mercury contaminant found: Nickel contaminant found: No contaminant found: Pesticides contaminant found: Selenium contaminant found: SVOCs contaminant found: Unknown contaminant found: Future Use: Multistory Media affected Bluiding Material: Media affected indoor air: Building material media cleaned up: Indoor air media cleaned up: Unknown media cleaned up: Past Use: Multistory

Property Description: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a

mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a

prominent developer of the Oklahoma City area to build office space in

the future.

Below Poverty Number: 0 Below Poverty Percent: n Meidan Income: 203 Meidan Income Number: Meidan Income Percent: 25 Vacant Housing Number: 1 Vacant Housing Percent: 29.56 Unemployed Number: 0 **Unemployed Percent:** 0

Name: INTERSTATE METALS
Address: 1101 E RENO AVENUE
City, State, Zip: OKLAHOMA CITY, OK 73117

Recipient Name: Oklahoma Department of Environmental Quality

 Grant Type:
 BCRLF

 Property Number:
 R133604620

 Parcel size:
 13.68

 Latitude:
 35.465338

 Longitude:
 -97.491153

HCM Label: Map Scale: Point of Reference: -

Highlights: This Petroleum Storage Tank Facility was a small part of the larger

Distance
Elevation Site

EDR ID Number
Database(s) EPA ID Number

#### **INTERSTATE METALS (Continued)**

1023667308

site, and the only part of the larger Interstate Metals site addressed by the OCC. Facility #5504605, Case #064-2008. Case closed by the OCC PSTD staff on November 11, 2019. Former Use: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future. This site went through DEQ's Brownfields Revolving Loan Fund (BRLF), Tire Recycling Program, and Brownfield Certificate Program. 3,617 waste tires were removed from the site through DEQ's Tire Recycling Program. An Interim Remedial Measures (IRM) Work Plan for the removal and treatment of 16,958 tons of lead-contaminated dross and soil was addressed with a loan from DEQ's BRLF and in DEQ's Brownfield Certificate Program (the developer paid for the rest of the cleanup). TPH contaminated soils were also addressed in DEQ's Brownfield Certificate Program.

Datum: -

Acres Property ID: 232903

IC Data Access: https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Bro

wnfields/InterstateMetals Cert

Start Date: Redev Completition Date: Completed Date: Acres Cleaned Up: Cleanup Funding: Cleanup Funding Source: -

Cleanup Funding Source:

Assessment Funding:

Assessment Funding Source:

Redevelopment Funding:

Redev. Funding Source:

Redev. Funding Source:

Redev. Funding Entity Name:

Redevelopment Start Date:

Assessment Funding Entity:

Cleanup Funding Entity:

Grant Type:

Accomplishment Type:

Cooperative Agreement Number: 98684801

Start Date:

Accomplishment Count:

Ownership Entity: Private
Completion Date: -

Current Owner: East Reno and Lottie LLC and 1101 East Reno LLC

Did Owner Change:

Cleanup Required:

Y
Video Available:

Photo Available:

Institutional Controls Required:

Y
IC Category Proprietary Controls:

IC Cat. Info. Devices:

Y
IC Cat. Gov. Controls:

IC Cat. Enforcement Permit Tools:

IC in place date: 4/6/2021
IC in place: Y
State/tribal program date: 2/1/2016

State/tribal program date: 2/1/2016 State/tribal program ID: 16-007

Distance Elevation

Site Database(s) EPA ID Number

#### **INTERSTATE METALS (Continued)**

Other metals cleaned:
Other contaminants found:

1023667308

**EDR ID Number** 

State/tribal NFA date: 12/31/2019 Air cleaned: Asbestos found: Asbestos cleaned: Controled substance found: Controled substance cleaned: Drinking water affected: Drinking water cleaned: Groundwater affected: Groundwater cleaned: Lead contaminant found: Lead cleaned up: No media affected: Unknown media affected: Other cleaned up: Other metals found:

Other contams found description: Dross, slag

PAHs found:
PAHs cleaned up:
PCBs found:
PCBs cleaned up:
Petro products found:
Petro products cleaned:
Sediments found:
Sediments cleaned:
Soil affected:
Y
Soil cleaned up:
Y
Surface water cleaned:
VOCs found:
VOCs cleaned:

Cleanup other description: Dross, slag

Num. of cleanup and re-dev. jobs: Past use greenspace acreage: Past use residential acreage: Surface Water: Past use commercial acreage: Past use industrial acreage: 13.68 Future use greenspace acreage: Future use residential acreage: Future use commercial acreage: Future use industrial acreage: 1.5 Superfund Fed. landowner flag: Arsenic cleaned up: Cadmium cleaned up: Chromium cleaned up: Copper cleaned up: Iron cleaned up: mercury cleaned up: Nickel Cleaned Up: No clean up: Pesticides cleaned up: Selenium cleaned up: SVOCs cleaned up: Unknown clean up: Arsenic contaminant found:

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

INTERSTATE METALS (Continued)

1023667308

Cadmium contaminant found: Chromium contaminant found: Copper contaminant found: Iron contaminant found: Mercury contaminant found: Nickel contaminant found: No contaminant found: Pesticides contaminant found: Selenium contaminant found: SVOCs contaminant found: Unknown contaminant found: Future Use: Multistory Media affected Bluiding Material: Media affected indoor air: Building material media cleaned up: Indoor air media cleaned up: Unknown media cleaned up: Past Use: Multistory

Property Description: Formerly operated as a ferrous metals wholesaler, scrap yard, and

smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated

as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in

the future.

Below Poverty Number: Λ Below Poverty Percent: n Meidan Income: 203 Meidan Income Number: Meidan Income Percent: 25 Vacant Housing Number: Vacant Housing Percent: 29.56 **Unemployed Number:** 0 **Unemployed Percent:** 0

Name:INTERSTATE METALSAddress:1101 E RENO AVENUECity,State,Zip:OKLAHOMA CITY, OK 73117

Recipient Name: Oklahoma Department of Environmental Quality

 Grant Type:
 BCRLF

 Property Number:
 R133604620

 Parcel size:
 13.68

 Latitude:
 35.465338

 Longitude:
 -97.491153

HCM Label: Map Scale: Point of Reference: -

Highlights: This Petroleum Storage Tank Facility was a small part of the larger

site, and the only part of the larger Interstate Metals site

addressed by the OCC. Facility #5504605, Case #064-2008. Case closed by the OCC PSTD staff on November 11, 2019. Former Use: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the

Direction Distance Elevation

ion Site Database(s) EPA ID Number

# **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

future. This site went through DEQ's Brownfields Revolving Loan Fund (BRLF), Tire Recycling Program, and Brownfield Certificate Program. 3,617 waste tires were removed from the site through DEQ's Tire Recycling Program. An Interim Remedial Measures (IRM) Work Plan for the removal and treatment of 16,958 tons of lead-contaminated dross and soil was addressed with a loan from DEQ's BRLF and in DEQ's Brownfield Certificate Program (the developer paid for the rest of the cleanup). TPH contaminated soils were also addressed in DEQ's Brownfield Certificate Program.

Datum:

Acres Property ID: 232903

IC Data Access: https://applications.deg.ok.gov/webdata/LPD/Institutional\_Controls/Bro

wnfields/InterstateMetals\_Cert

Start Date: Redev Completition Date: Completed Date: Acres Cleaned Up: Cleanup Funding: Cleanup Funding Source: -

Assessment Funding: 2500

Assessment Funding Source: 1101 E Reno LLC and East Reno and Lottie LLC

Redevelopment Funding: Redev. Funding Source: Redev. Funding Entity Name: Redevelopment Start Date: -

Assessment Funding Entity: Private/Other Funding

Cleanup Funding Entity:

Grant Type:

Completion Date:

Accomplishment Type: Phase I Environmental Assessment

Accomplishment Count:

Cooperative Agreement Number:

Start Date:

Ownership Entity:

N
98684801
8/1/2015
Private

Current Owner: East Reno and Lottie LLC and 1101 East Reno LLC

Did Owner Change:

Cleanup Required:

Video Available:

Photo Available:

Institutional Controls Required:

IC Category Proprietary Controls:

IC Cat. Info. Devices:

IC Cat. Gov. Controls:

IC Cat. Enforcement Permit Tools:

IC in place date: 4/6/2021
IC in place: Y
State/tribal program date: 2/1/2016
State/tribal program ID: 16-007
State/tribal NFA date: 12/31/2019

Air cleaned:

Asbestos found:

Asbestos cleaned:

Controled substance found:

Controled substance cleaned:

Drinking water affected:

Drinking water cleaned:

Groundwater affected:

-

Distance Elevation

Site Database(s) EPA ID Number

# **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

Groundwater cleaned:

Lead contaminant found:

Y

Lead cleaned up:

No media affected:

Unknown media affected:

Other cleaned up:

Other metals found:

Other metals cleaned:

Other contaminants found:

Y

Other contams found description: Dross, slag

Cleanup other description: Dross, slag

Num. of cleanup and re-dev. jobs: Past use greenspace acreage: Past use residential acreage: Surface Water: Past use commercial acreage: Past use industrial acreage: 13.68 Future use greenspace acreage: Future use residential acreage: Future use commercial acreage: Future use industrial acreage: 1.5 Superfund Fed. landowner flag: Arsenic cleaned up: Cadmium cleaned up: Chromium cleaned up: Copper cleaned up: Iron cleaned up: mercury cleaned up: Nickel Cleaned Up: No clean up: Pesticides cleaned up: Selenium cleaned up: SVOCs cleaned up: Unknown clean up: Arsenic contaminant found: Cadmium contaminant found: Chromium contaminant found: Copper contaminant found: Iron contaminant found: Mercury contaminant found: Nickel contaminant found: No contaminant found: Pesticides contaminant found:

Selenium contaminant found:

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

#### **INTERSTATE METALS (Continued)**

1023667308

SVOCs contaminant found:

Unknown contaminant found:

Future Use: Multistory

Media affected Bluiding Material:

Media affected indoor air:

Building material media cleaned up:

Indoor air media cleaned up:

Unknown media cleaned up:

Past Use: Multistory

-

Property Description:

Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future.

Below Poverty Number: 0
Below Poverty Percent: 0
Meidan Income: 203
Meidan Income Number: 1
Meidan Income Percent: 25
Vacant Housing Number: 1
Vacant Housing Percent: 29.56
Unemployed Number: 0
Unemployed Percent: 0

Name: INTERSTATE METALS
Address: 1101 E RENO AVENUE
City,State,Zip: OKLAHOMA CITY, OK 73117

Recipient Name: Oklahoma Department of Environmental Quality

 Grant Type:
 BCRLF

 Property Number:
 R133604620

 Parcel size:
 13.68

 Latitude:
 35.465338

 Longitude:
 -97.491153

HCM Label: Map Scale: Point of Reference: -

Highlights: This Petroleum Storage Tank Facility was a small part of the larger

site, and the only part of the larger Interstate Metals site

addressed by the OCC. Facility #5504605, Case #064-2008. Case closed by the OCC PSTD staff on November 11, 2019. Former Use: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future. This site went through DEQ's Brownfields Revolving Loan Fund (BRLF), Tire Recycling Program, and Brownfield Certificate Program. 3,617 waste tires were removed from the site through DEQ's Tire Recycling Program. An Interim Remedial Measures (IRM) Work Plan for the removal and treatment of 16,958 tons of lead-contaminated dross and soil was addressed with a loan from DEQ's BRLF and in DEQ's Brownfield Certificate Program (the developer paid for the rest of the cleanup). TPH contaminated soils were also addressed in DEQ's

Brownfield Certificate Program.

Distance Elevation

nce EDR ID Number ation Site Database(s) EPA ID Number

#### **INTERSTATE METALS (Continued)**

1023667308

Datum: -

Acres Property ID: 232903

IC Data Access: https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Bro

wnfields/InterstateMetals\_Cert

Start Date:

Accomplishment Type: Accomplishment Count: -

Grant Type:

Cooperative Agreement Number: 98684801
Start Date: Ownership Entity: Private

Completion Date:

Current Owner: East Reno and Lottie LLC and 1101 East Reno LLC

Did Owner Change: N
Cleanup Required: Y
Video Available: Photo Available: Institutional Controls Required: Y
IC Category Proprietary Controls: IC Cat. Info. Devices: Y
IC Cat. Gov. Controls: IC Cat. Enforcement Permit Tools: -

IC in place date: 4/6/2021
IC in place: Y
State/tribal program date: 2/1/2016
State/tribal program ID: 16-007
State/tribal NFA date: 12/31/2019

Air cleaned: Asbestos found: Asbestos cleaned: Controled substance found: Controled substance cleaned: Drinking water affected: Drinking water cleaned: Groundwater affected: Groundwater cleaned: Lead contaminant found: Lead cleaned up: No media affected: Unknown media affected: Other cleaned up: Other metals found: Other metals cleaned: Other contaminants found:

Distance Elevation

Site Database(s) EPA ID Number

#### **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

Other contams found description: Dross, slag PAHs found: -

Cleanup other description: Dross, slag

Num. of cleanup and re-dev. jobs:

Past use greenspace acreage:

Past use residential acreage:

Surface Water:

Past use commercial acreage:
Past use industrial acreage:
13.68
Future use greenspace acreage:
Future use residential acreage:
Future use commercial acreage:
-

Nickel Cleaned Up:

No clean up:

Pesticides cleaned up:

Selenium cleaned up:

SVOCs cleaned up:

Unknown clean up:

Arsenic contaminant found:

Cadmium contaminant found:

Chromium contaminant found:

Copper contaminant found:

Iron contaminant found:

Mercury contaminant found:

Nickel contaminant found:

No contaminant found:

Pesticides contaminant found:

Selenium contaminant found:

SVOCs contaminant found:

Unknown contaminant found:

Future Use: Multistory

Media affected Bluiding Material:

Media affected indoor air:

Building material media cleaned up:
Indoor air media cleaned up:
Unknown media cleaned up:

Direction Distance Elevation

vation Site Database(s) EPA ID Number

# **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

Property Description: Formerly operated as a ferrous metals wholesaler, scrap yard, and

smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in

the future.

Below Poverty Number: 0 Below Poverty Percent: 0 Meidan Income: 203 Meidan Income Number: 1 Meidan Income Percent: 25 Vacant Housing Number: Vacant Housing Percent: 29.56 Unemployed Number: 0 **Unemployed Percent:** 0

Click this hyperlink while viewing on your computer to access 4 additional US BROWNFIELDS: record(s) in the EDR Site Report.

Name: INTERSTATE METALS
Address: 1101 E RENO AVENUE
City,State,Zip: OKLAHOMA CITY, OK 73117
Recipient Name: Oklahoma Corporation Commission

Grant Type: Section 128(a) State/Tribal

 Property Number:
 R133604620

 Parcel size:
 13.68

 Latitude:
 35.465338

 Longitude:
 -97.491153

Highlights: This Petroleum Storage Tank Facility was a small part of the larger

site, and the only part of the larger Interstate Metals site

addressed by the OCC. Facility #5504605, Case #064-2008. Case closed by the OCC PSTD staff on November 11, 2019. Former Use: Formerly operated as a ferrous metals wholesaler, scrap yard, and smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in the future. This site went through DEQ's Brownfields Revolving Loan Fund (BRLF), Tire Recycling Program, and Brownfield Certificate Program. 3,617 waste tires were removed from the site through DEQ's Tire Recycling Program. An Interim Remedial Measures (IRM) Work Plan for the removal and treatment of 16,958 tons of lead-contaminated dross and soil was addressed with a loan from DEQ's BRLF and in DEQ's Brownfield Certificate Program (the developer paid for the rest of the cleanup). TPH contaminated soils were also addressed in DEQ's Brownfield Certificate Program.

Datum:

Acres Property ID: 232903

IC Data Access: https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Bro

wnfields/InterstateMetals\_Cert

Start Date: -

Redev Completition Date: -

MAP FINDINGS Map ID Direction

Distance

Elevation Site Database(s) **EPA ID Number** 

# **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

Completed Date: Acres Cleaned Up: Cleanup Funding: Cleanup Funding Source: Assessment Funding: Assessment Funding Source:

Redevelopment Funding: 677000

Redev. Funding Source: 1101 East Reno LLC Redev. Funding Entity Name: Private/Other Funding

Redevelopment Start Date: 2/1/2016

Assessment Funding Entity: Cleanup Funding Entity: Grant Type: Accomplishment Type: Accomplishment Count:

Cooperative Agreement Number: 01F50801

Start Date:

Ownership Entity: Private

Completion Date:

East Reno and Lottie LLC and 1101 East Reno LLC Current Owner:

12/31/2019

Did Owner Change: Ν Cleanup Required: Υ Video Available: Photo Available: Institutional Controls Required: IC Category Proprietary Controls: IC Cat. Info. Devices: IC Cat. Gov. Controls: IC Cat. Enforcement Permit Tools:

IC in place date: 4/6/2021 IC in place: State/tribal program date: 2/1/2016 State/tribal program ID: 16-007 State/tribal NFA date:

Air cleaned: Asbestos found: Asbestos cleaned: Controled substance found: Controled substance cleaned: Drinking water affected: Drinking water cleaned: Groundwater affected: Groundwater cleaned: Lead contaminant found: Lead cleaned up: No media affected: Unknown media affected: Other cleaned up: Other metals found: Other metals cleaned: Other contaminants found:

Other contams found description: Dross, slag

PAHs found: PAHs cleaned up: PCBs found: PCBs cleaned up: Petro products found:

MAP FINDINGS Map ID Direction

Distance Elevation

Site Database(s) **EPA ID Number** 

#### **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

Petro products cleaned: Sediments found: Sediments cleaned: Soil affected: Soil cleaned up: Surface water cleaned: VOCs found:

Dross, slag

VOCs cleaned: Cleanup other description: Num. of cleanup and re-dev. jobs: Past use greenspace acreage: Past use residential acreage: Surface Water: Past use commercial acreage: Past use industrial acreage: 13.68 Future use greenspace acreage: Future use residential acreage: Future use commercial acreage: Future use industrial acreage: 1.5 Superfund Fed. landowner flag: Arsenic cleaned up: Cadmium cleaned up: Chromium cleaned up: Copper cleaned up: Iron cleaned up: mercury cleaned up: Nickel Cleaned Up: No clean up: Pesticides cleaned up: Selenium cleaned up: SVOCs cleaned up: Unknown clean up: Arsenic contaminant found: Cadmium contaminant found: Chromium contaminant found: Copper contaminant found: Iron contaminant found:

Selenium contaminant found: SVOCs contaminant found: Unknown contaminant found: Future Use: Multistory Media affected Bluiding Material: Media affected indoor air: Building material media cleaned up: Indoor air media cleaned up: Unknown media cleaned up: Past Use: Multistory

Mercury contaminant found: Nickel contaminant found: No contaminant found: Pesticides contaminant found:

Property Description: Formerly operated as a ferrous metals wholesaler, scrap yard, and

smelter. The facility started operations in 1963. The facility was a mom and pop operation and passed down in the family. It was eventually purchased by a prominent developer of the Oklahoma City area. Operated

as a former ferrous metals wholesaler. Recently purchased by a prominent developer of the Oklahoma City area to build office space in

Direction Distance

Elevation Site Database(s) **EPA ID Number** 

#### **INTERSTATE METALS (Continued)**

1023667308

**EDR ID Number** 

the future.

Below Poverty Number: 0 Below Poverty Percent: O Meidan Income: 203 Meidan Income Number: Meidan Income Percent: 25 Vacant Housing Number: 29.56 Vacant Housing Percent: Unemployed Number: 0 **Unemployed Percent:** 0

> Click this hyperlink while viewing on your computer to access 4 additional US BROWNFIELDS: record(s) in the EDR Site Report.

FINDS:

110070081568 Registry ID:

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES)

is an federal online database for Brownfields Grantees to

electronically submit data directly to EPA.

Click this hyperlink while viewing on your computer to access

additional FINDS: detail in the EDR Site Report.

**DERICHEBOURG RECYCLING** 50

100 N BATH AVE 1/4-1/2 **OKLAHOMA CITY, OK 73149** 

0.416 mi. 2195 ft.

NW

Relative: SWRCY:

Higher 4052397144 Telephone Number: Aluminum: Х Actual:

1181 ft. Aluminum Cans:

> Antifreeze: Not reported Asphalt: Not reported Asphalt Shingles: Not reported

Auto Parts:

Brown Paper Bags: Not reported

Brass: Car Batteries: Not reported

Cardboard: Not reported Not reported Carpet: CDs, DVDs, and Cassettes: Not reported Not reported Cell Phones: Clothes/Household: Not reported Computers: Not reported

Copper: Х

Electric Appliances: Not reported Electronics: Not reported Eyeglasses: Not reported Glass: Not reported Hard Drives: Not reported Hardcover Books: Not reported Household Chemicals: Not reported Not reported Ink/Toner Cartridge:

SWRCY S109997308

N/A

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **DERICHEBOURG RECYCLING (Continued)**

S109997308

Iron: Not reported Not reported Lead: Light Bulbs: Not reported Magazines: Not reported Mercury: Not reported Mercury Thermostat: Not reported

Metal: Motor Oil: Not reported New Paint: Not reported Newspaper: Not reported Paper: Not reported Phone Books: Not reported Not reported Plastic: Plastic Bags: Not reported Plastic Hangers: Not reported Not reported Rechargeable Batteries: Stainless Steel: Not reported Not reported Steel: Styrofoam Peanuts: Not reported Tin Cans: Not reported Tires: Not reported Transmission Fluid: Not reported **Used Paint:** Not reported Wood: Not reported Wood Chips: Not reported Books: Not reported

Drop Off: Not reported Recyclables Accepted: Not reported Website: Not reported Latitude: 35.466905002300003 Longitude: -97.484118840099995

N51 **INTERSTATE METALS INST CONTROL** S127748640 N/A

Not reported

West

1/4-1/2 **OKLAHOMA (County), OK** 

Curbside:

0.424 mi.

Site 4 of 5 in cluster N 2237 ft.

Relative: INST:

Higher Name: INTERSTATE METALS Address: Not reported Actual:

City,State,Zip: OK 1185 ft. LPD Site ID: 101442 Book Number: 14689 Pages: 380-398 **Document Number:** Not reported

Program:

Collection: reported by deg personnel

Brownfields

Date Filled: 04/05/2021

Link: https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Bro

wnfields/InterstateMetals\_Cert.pdf

Latitude: 35.464364 Longitude: -97.492402

Direction Distance

Elevation Site Database(s) **EPA ID Number** 

N52 OKLAHOMA DEPARTMENT OF TRANSPOR LUST U004133129 UST N/A

West **1100 E RENO** 

1/4-1/2 **OKLAHOMA CITY, OK 73117** 

0.425 mi.

2242 ft. Site 5 of 5 in cluster N

LUST: Relative: Higher

OKLAHOMA DEPARTMENT OF TRANSPOR Name: 1100 E RENO

5501515

Address: Actual:

OKLAHOMA CITY, OK 73117 City,State,Zip:

1186 ft. Facility ID: Case Number:

064-1347 Case Type: Confirmed Release

Tank Type: **UST** Release Date: 02/16/1995 **Close Date:** 01/23/1996 35.4648 / -97.4602 Lat/Long:

Status: Closed

UST:

Facility ID: 5501515

Contact Name: Okla Dept Of Transportation-Division 4

Contact Address: PO Box 471 5803367340 Contact Telephone: Contact City, St, Zip: Perry, OK 73077 35.4648 / -97.4602 Lat/Long:

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 1000 Substance: Diesel 04/02/1982 Date Installed: Tank Type: UST Closed Date: 01/01/1991

Permanently out of use Decode of Tank Status: Tank Removed From Ground Closure Status:

Tank Construction: Single Walled Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID:

Tank Status: Permanently Out Of Use

**Total Capacity:** 500 Substance: Gasoline Date Installed: 04/02/1982 Tank Type: UST Closed Date: 01/01/1991

Decode of Tank Status: Permanently out of use Tank Removed From Ground Closure Status:

Single Walled Tank Construction: Tank Material: Steel Pipe Construction: Single-Walled Pipe Material: Not reported

**EDR ID Number** 

Direction Distance

Distance Elevation Site EDR ID Number Database(s) EPA ID Number

53 CARTER & SONS FREIGHTWAYS LUST U004133109
ESE 2420 SE 8TH STR UST N/A

1/4-1/2 OKLAHOMA CITY, OK 73129

0.428 mi. 2262 ft.

Relative: LUST:
Higher Name: CARTER & SONS FREIGHTWAYS

Actual: Address: 2420 SE 8TH STR

**1211 ft.** City,State,Zip: OKLAHOMA CITY, OK 73129

Facility ID: 5503943 Case Number: 064-N2

Case Type: Confirmed Release

Tank Type: UST
Release Date: 03/23/1989
Close Date: 04/01/1989
Lat/Long: 35.4571 / -97.4698

Status: Closed

UST:

Facility ID: 5503943

Contact Name: Carter & Sons Freightways
Contact Address: 1325 W BELTLINE
Contact Telephone: 9723231001
Contact City, St, Zip: Carrollton, TX 75006

Contact City,St,Zip: Carrollton, TX 75006 Lat/Long: 35.4571 / -97.4698

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 5000
Substance: Diesel
Date Installed: 04/11/1975
Tank Type: UST
Closed Date: 11/03/1998

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Unknown Pipe Construction: Single-Walled Pipe Material: Not reported

Tank ID: 2

Tank Status: Permanently Out Of Use

Total Capacity: 10000
Substance: Diesel
Date Installed: 04/11/1975
Tank Type: UST
Closed Date: 11/03/1998

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Unknown Pipe Construction: Single-Walled Pipe Material: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

54 FOURTH STREET ABANDONED REFINERY Delisted NPL 1000370122
NNE 2200 BLOCK NE 4TH SEMS OKD980696470

1/4-1/2 OKLAHOMA CITY, OK 73117 US ENG CONTROLS
0.433 mi.
2287 ft. US INST CONTROLS
ROD

Relative: Delisted NPL:
Higher EPA Region:

 Actual:
 EPA ID:
 OKD980696470

 1161 ft.
 Site ID:
 601297

Name: FOURTH STREET ABANDONED REFINERY

6

Address: 2200 BLOCK NE 4TH
City, State, Zip: OKLAHOMA CITY, OK 73117

Federal Description:

Latitude: 35.470278 NAI: N

Native American Entity: Not reported Longitude: -97.473056

Deleted Date: 2008-08-21 00:00:00

Narr:

Site Name: Fourth Street Abandoned Refinery

 Site EPA ID:
 OKD980696470

 Deletion Date:
 8/21/2008

 Site Score:
 30.67

Site List URL: https://semspub.epa.gov/src/document/06/300266

Site Progress URL: https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0601297
Notice URL: http://www.gpo.gov/fdsys/pkg/FR-2008-06-13/pdf/E8-13371.pdf
Delete URL: http://www.gpo.gov/fdsys/pkg/FR-2008-08-21/pdf/E8-19419.pdf

Site Location URL: https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd

1b4c3a8b51d416956c41f1&query=Superfund\_National\_Priorities\_List\_\_NPL\_\_ Sites\_with\_Status\_Information\_7557,SITE\_EPA\_ID=%27OKD980696470%27

Federal Facility Indicator: No

SEMS:

 Site ID:
 0601297

 EPA ID:
 OKD980696470

Name: FOURTH STREET ABANDONED REFINERY

Address: 2200 BLOCK NE 4TH

Address 2: Not reported

City,State,Zip: OKLAHOMA CITY, OK 73117

 Cong District:
 05

 FIPS Code:
 40109

 Latitude:
 35.470278

 Longitude:
 -97.473056

FF: N

NPL: Deleted from the Final NPL

Non NPL Status: Not reported

SEMS Detail:

 Region:
 06

 Site ID:
 0601297

 EPA ID:
 OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 TG

 Action Name:
 TA GRANT

**EDR ID Number** 

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

SEQ: 3

Start Date: 1998-05-08 04:00:00 Finish Date: 2001-05-31 04:00:00 Qual: Not reported **EPA Perf** Current Action Lead:

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 00 Action Code: ND **DELETION** Action Name:

SEQ:

Start Date: 2007-10-02 04:00:00 Finish Date: 2008-08-21 05:00:00 Qual: Not reported Current Action Lead: **EPA Perf** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 00 Action Code: FE Action Name: 5 YEAR SEQ:

Start Date: 2006-10-17 04:00:00 Finish Date: 2007-05-15 04:00:00 Qual: Not reported EPA Perf Current Action Lead:

Region: 06 Site ID: 0601297

OKD980696470 EPA ID: Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 00 Action Code: FΕ Action Name: 5 YEAR

SEQ:

Start Date: 2001-06-28 04:00:00 2002-07-29 04:00:00 Finish Date: Qual: Not reported EPA Perf **Current Action Lead:** 

Region: 06 0601297 Site ID:

EPA ID: OKD980696470 Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

#### FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

OU: 00 Action Code: TG

Action Name: **TA GRANT** 

SEQ:

Start Date: 1991-06-11 04:00:00 2000-02-29 05:00:00 Finish Date: Not reported Qual: **Current Action Lead:** EPA Perf

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 00 Action Code: AR

Action Name: **ADMIN REC** 

SEQ:

Start Date: 1991-09-03 04:00:00 Finish Date: 1991-09-03 04:00:00

Qual:

Current Action Lead: **EPA Perf** 

06 Region: 0601297 Site ID: EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: D FF: Ν OU: 00 Action Code: CM Action Name: **PCOR** SEQ:

Start Date: 1996-09-27 04:00:00 Finish Date: 1996-09-27 04:00:00 Qual: Not reported

**Current Action Lead: EPA Perf** 

06 Region: Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: D FF: Ν OU: 01 Action Code: CO Action Name: RI/FS SEQ:

1989-12-29 05:00:00 Start Date: Finish Date: 1992-09-28 04:00:00 Qual: Not reported EPA Perf Current Action Lead:

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

FOURTH STREET ABANDONED REFINERY Site Name:

NPL: D FF: Ν OU: 00 Action Code: RS

**RV ASSESS** Action Name:

SEQ:

Start Date: 1993-09-30 04:00:00 Finish Date: 1993-09-30 04:00:00 Qual: Not reported EPA Perf **Current Action Lead:** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

FOURTH STREET ABANDONED REFINERY Site Name:

NPL: FF: Ν OU: 00 Action Code: RV Action Name: **RMVL** 

SEQ:

Start Date: 1989-09-05 04:00:00 Finish Date: 1989-09-27 04:00:00

Qual: S

**EPA Perf Current Action Lead:** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 00 Action Code: SI Action Name: SI SEQ:

1985-05-01 05:00:00 Start Date: Finish Date: 1985-05-01 05:00:00

Qual: Current Action Lead: **EPA Perf** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 00 Action Code: SI Action Name: SI SEQ:

Start Date: 1986-11-01 05:00:00 Finish Date: 1988-09-01 04:00:00

Qual: Н

Current Action Lead: **EPA Perf** 

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

#### FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

 Region:
 06

 Site ID:
 0601297

 EPA ID:
 OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 TG

 Action Name:
 TA GRANT

SEQ:

 Start Date:
 1994-06-18 04:00:00

 Finish Date:
 1997-05-31 04:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

Region: 06
Site ID: 0601297
EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

 NPL:
 D

 FF:
 N

 OU:
 01

 Action Code:
 TS

Action Name: TRTSTUDY

SEQ:

 Start Date:
 1991-09-25 04:00:00

 Finish Date:
 1992-09-28 04:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601297

 EPA ID:
 OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 RS

Action Name: RV ASSESS

SEQ:

 Start Date:
 1989-09-05 04:00:00

 Finish Date:
 1989-09-05 04:00:00

 Qual:
 Not reported

Current Action Lead: EPA Perf

 Region:
 06

 Site ID:
 0601297

 EPA ID:
 OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 RS

Action Name: RV ASSESS

SEQ: 2

Start Date: 1989-12-13 05:00:00 Finish Date: 1990-06-28 04:00:00

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

Qual: Not reported Current Action Lead: EPA Perf

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 00 Action Code: RS

Action Name: **RV ASSESS** 

SEQ:

Start Date: 1991-02-15 05:00:00 1991-02-15 05:00:00 Finish Date: Qual: Not reported EPA Perf **Current Action Lead:** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 00 Action Code: CQ Action Name: **CLSOUT R** 

SEQ:

Start Date: 2006-03-07 05:00:00 2006-03-07 05:00:00 Finish Date: Qual: Not reported **Current Action Lead: EPA Perf** 

Region: 06 0601297 Site ID: EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: D FF: Ν OU: 00 Action Code: CR Action Name: CI SEQ:

Start Date: 1989-09-29 04:00:00 Finish Date: 1999-12-01 05:00:00 Qual: Not reported **Current Action Lead: EPA Perf** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

FOURTH STREET ABANDONED REFINERY Site Name:

NPL: D FF: Ν OU: 02 Action Code: CO Action Name: RI/FS

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

SEQ: 2

Start Date: 1992-06-29 04:00:00 Finish Date: 1993-09-30 04:00:00 Qual: Not reported **EPA Perf** Current Action Lead:

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: D FF: Ν OU: 01 Action Code: RD Action Name: RD SEQ:

Start Date: 1993-06-21 04:00:00 Finish Date: 1994-08-10 04:00:00 Qual: Not reported Current Action Lead: **EPA Perf** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 02 Action Code: RD Action Name: RD SEQ:

Start Date: 1994-03-28 05:00:00 Finish Date: 1995-03-17 05:00:00 Qual: Not reported Current Action Lead: EPA Perf

Region: 06 0601297 Site ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 01 Action Code: RO Action Name: ROD SEQ:

EPA ID:

Start Date: 1992-09-28 04:00:00 1992-09-28 04:00:00 Finish Date: Not reported Qual:

EPA Perf **Current Action Lead:** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

#### FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

OU: 02 Action Code: RO Action Name: ROD SEQ:

Start Date: 1993-09-30 04:00:00 Finish Date: 1993-09-30 04:00:00

Qual: R Current Action Lead: **EPA Perf** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 00 Action Code: PΑ Action Name: PΑ SEQ:

Start Date: 1985-05-01 05:00:00 Finish Date: 1985-05-01 05:00:00

Qual:

Current Action Lead: **EPA Perf** 

06 Region: Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: D FF: Ν OU: 01 Action Code: RA Action Name: RA SEQ:

Start Date: 1994-09-20 04:00:00 Finish Date: 1996-03-21 05:00:00 Qual: Not reported **Current Action Lead: EPA Perf** 

06 Region: Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: D FF: Ν OU: 02 Action Code: RΑ Action Name: RA SEQ:

Start Date: 1995-07-17 04:00:00 Finish Date: 1997-02-20 05:00:00 Qual: Not reported EPA Perf Current Action Lead:

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

FOURTH STREET ABANDONED REFINERY Site Name:

NPL: D FF: Ν OU: 01 Action Code: ED Action Name: R/H ASMT

SEQ:

Start Date: 1992-05-02 04:00:00 Finish Date: 1992-05-02 04:00:00 Qual: Not reported **Current Action Lead: EPA Perf** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

FOURTH STREET ABANDONED REFINERY Site Name:

NPL: D FF: Ν OU: 01 Action Code: ED R/H ASMT Action Name:

SEQ:

Start Date: 1993-07-15 04:00:00 Finish Date: 1993-07-15 04:00:00 Qual: Not reported EPA Perf **Current Action Lead:** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

FOURTH STREET ABANDONED REFINERY Site Name:

NPL: FF: Ν OU: 00 Action Code: FΕ Action Name: 5 YEAR SEQ:

2000-10-18 04:00:00 Start Date: Finish Date: 2000-10-18 04:00:00 Qual: Not reported Current Action Lead: EPA Perf

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 01 Action Code: JF Action Name: **ECO RISK** 

SEQ:

Start Date: 1992-05-02 04:00:00 Finish Date: 1992-05-02 04:00:00 Qual: Not reported

Current Action Lead: **EPA Perf** 

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

#### FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

 Region:
 06

 Site ID:
 0601297

 EPA ID:
 OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

 NPL:
 D

 FF:
 N

 OU:
 01

 Action Code:
 JF

 Action Name:
 ECO RISK

SEQ: 2

 Start Date:
 1993-07-15 04:00:00

 Finish Date:
 1993-07-15 04:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601297

 EPA ID:
 OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

 NPL:
 D

 FF:
 N

 OU:
 02

 Action Code:
 LR

 Action Name:
 LT RESP

SEQ:

 Start Date:
 1997-02-01 05:00:00

 Finish Date:
 2006-03-30 05:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601297

 EPA ID:
 OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 NF

 Action Name:
 NPL FINL

SEQ: 1

 Start Date:
 1989-03-31 05:00:00

 Finish Date:
 1989-03-31 05:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601297

 EPA ID:
 OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 NP

Action Name: PROPOSED

SEQ:

Start Date: 1988-06-24 04:00:00 Finish Date: 1988-06-24 04:00:00

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

Qual: Not reported Current Action Lead: EPA Perf

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 00 Action Code: FΕ Action Name: 5 YEAR SEQ:

Start Date: 2011-09-20 04:00:00 2012-05-15 05:00:00 Finish Date: Qual: Not reported EPA Perf **Current Action Lead:** 

Region: 06 0601297 Site ID: EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: FF: Ν OU: 00 Action Code: HR Action Name: **HAZRANK** 

SEQ:

Start Date: 1988-06-24 04:00:00 1988-06-24 04:00:00 Finish Date:

Qual: **Current Action Lead: EPA Perf** 

Region: 06 0601297 Site ID: EPA ID: OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

NPL: D FF: Ν OU: 00 Action Code: TU Action Name: NOID SEQ:

Start Date: 2008-06-13 05:00:00 Finish Date: 2008-06-13 05:00:00 Qual: Not reported **Current Action Lead: EPA Perf** 

Region: 06 Site ID: 0601297 EPA ID: OKD980696470

FOURTH STREET ABANDONED REFINERY Site Name:

NPL: D FF: Ν OU: 00 Action Code: FE Action Name: 5 YEAR

Direction Distance

Elevation Site Database(s) EPA ID Number

# FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

**EDR ID Number** 

SEQ: 5

 Start Date:
 2016-05-05 05:00:00

 Finish Date:
 2017-05-12 05:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601297

 EPA ID:
 OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 DS

 Action Name:
 DISCVRY

SEQ:

 Start Date:
 1980-07-01 04:00:00

 Finish Date:
 1980-07-01 04:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601297

 EPA ID:
 OKD980696470

Site Name: FOURTH STREET ABANDONED REFINERY

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 FE

 Action Name:
 5 YEAR

 SEQ:
 6

 Start Date:
 2021-10-31 05:00:00

 Finish Date:
 2022-09-26 05:00:00

 Qual:
 Not reported

Current Action Lead: EPA Perf

SIte:

Name: FOURTH STREET ABANDONED REFINERY

Address: 2200 BLOCK NE 4TH

Address 2: Not reported

City, State, Zip: OKLAHOMA CITY, OK 73117

 Event Code:
 Not reported

 Action Taken Date:
 01/19/2006

 EPA ID:
 OKD980696470

Action Name: Explanation of Significant Differences

Action ID: 1
Operable Unit: 02

Contaminated Media: Groundwater
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: N

Federal Facility: N
Fiscal Year: 2006

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.470278

Direction Distance

Elevation Site Database(s) EPA ID Number

# FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

**EDR ID Number** 

Longitude: -97.473056

Media:

EPA ID: OKD980696470 Contaminated Media: Groundwater

Action ID: 1
Operable Unit: 02

Action Name: Explanation of Significant Differences

Action Taken Date: 01/19/2006

Event Code: Not reported

Contact Name: Not reported

Contact Telephone: Not reported

Event: Not reported

Federal Facility: N

Fiscal Year: N

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.470278 Longitude: -97.473056

EPA ID: OKD980696470

Contaminated Media: Sludge
Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

09/28/1992

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N
Latitude: 35.470278
Longitude: -97.473056

EPA ID: OKD980696470

Contaminated Media: Soil
Action ID: 1
Operable Unit: 01

Action Name:
Record of Decision
Action Taken Date:
09/28/1992
Event Code:
Not reported
Contact Name:
Not reported
Contact Telephone:
Not reported
Event:
Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N
Latitude: 35.470278
Longitude: -97.473056

EPA ID: OKD980696470 Contaminated Media: Solid Waste

Action ID: 1
Operable Unit: 01

Distance

Elevation Site Database(s) EPA ID Number

### FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

**EDR ID Number** 

Action Name:
Record of Decision
Action Taken Date:
09/28/1992
Event Code:
Not reported
Contact Name:
Not reported
Contact Telephone:
Not reported
Event:
Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N
Latitude: 35.470278
Longitude: -97.473056

EPA ID: OKD980696470

Contaminated Media: Sludge
Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

09/28/1992

Not reported

Not reported

Not reported

Not reported

Event:

Not reported

Not reported

Not reported

Not reported

Not reported

Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement:

Latitude: 35.470278 Longitude: -97.473056

EPA ID: OKD980696470

Contaminated Media: Soil
Action ID: 1
Operable Unit: 01

Action Name:
Record of Decision
Action Taken Date:
09/28/1992
Event Code:
Not reported
Contact Name:
Not reported
Contact Telephone:
Not reported
Event:
Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.470278 Longitude: -97.473056

EPA ID: OKD980696470
Contaminated Media: Solid Waste
Action ID: 1

Operable Unit: 01

Action Name: Record of Decision
Action Taken Date: 09/28/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Distance Elevation

ion Site Database(s) EPA ID Number

# FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

**EDR ID Number** 

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.470278 Longitude: -97.473056

EPA ID: OKD980696470

Contaminated Media: Soil
Action ID: 1
Operable Unit: 01

Action Name:
Record of Decision
Action Taken Date:
09/28/1992
Event Code:
Not reported
Contact Name:
Not reported
Contact Telephone:
Not reported
Event:
Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.470278 Longitude: -97.473056

EPA ID: OKD980696470

Contaminated Media: Sludge
Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

09/28/1992

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

 Latitude:
 35.470278

 Longitude:
 -97.473056

EPA ID: OKD980696470 Contaminated Media: Solid Waste

Action ID: 1
Operable Unit: 01

Action Name: Record of Decision
Action Taken Date: 09/28/1992

Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.470278 Longitude: -97.473056

Direction Distance

Elevation Site Database(s) EPA ID Number

# FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

**EDR ID Number** 

EPA ID: OKD980696470

Contaminated Media: Soil
Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

09/28/1992

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.470278 Longitude: -97.473056

EPA ID: OKD980696470
Contaminated Media: Solid Waste

Action ID: 1
Operable Unit: 01

Action Name: Record of Decision
Action Taken Date: 09/28/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.470278 Longitude: -97.473056

EPA ID: OKD980696470

Contaminated Media: Sludge
Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Not reported

Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N Latitude: 35.470278 Longitude: -97.473056

EPA ID: OKD980696470

Contaminated Media: Soil
Action ID: 1
Operable Unit: 01

Action Name: Record of Decision Action Taken Date: 09/28/1992

MAP FINDINGS Map ID Direction

Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

Event Code: Not reported Contact Name: Not reported Contact Telephone: Not reported Event: Not reported

Federal Facility: Ν Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement:

Latitude: 35.470278 Longitude: -97.473056

EPA ID: OKD980696470 Contaminated Media: Solid Waste

Action ID: Operable Unit: 01

Action Name: Record of Decision Action Taken Date: 09/28/1992 Not reported **Event Code:** Contact Name: Not reported Contact Telephone: Not reported Event: Not reported Federal Facility: Ν

Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement:

35.470278 Latitude: Longitude: -97.473056

EPA ID: OKD980696470 Contaminated Media: Solid Waste

Action ID: Operable Unit: 01

Action Name: Record of Decision Action Taken Date: 09/28/1992 Not reported Event Code: Not reported Contact Name: Contact Telephone: Not reported Event: Not reported

Federal Facility: Ν Fiscal Year: 1992

Deleted from the Final NPL NPL Status:

Superfund Alternative Agreement:

Latitude: 35.470278 -97.473056 Longitude:

EPA ID: OKD980696470 Contaminated Media: Groundwater

Action ID: Operable Unit: 02

Action Name: Record of Decision Action Taken Date: 09/30/1993 **Event Code:** Not reported Not reported Contact Name: Contact Telephone: Not reported Event: Not reported

Federal Facility: Ν Fiscal Year: 1993

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

### FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: Ν

Latitude: 35.470278 Longitude: -97.473056

EPA ID: OKD980696470 Contaminated Media: Groundwater

Action ID: Operable Unit: 02

Action Name: Record of Decision 09/30/1993 Action Taken Date: Not reported **Event Code:** Not reported Contact Name: Contact Telephone: Not reported Event: Not reported

Federal Facility: Fiscal Year: 1993

Deleted from the Final NPL NPL Status:

Superfund Alternative Agreement:

35.470278 Latitude: Longitude: -97.473056

US INST CONTROLS:

FOURTH STREET ABANDONED REFINERY Name:

2200 BLOCK NE 4TH Address:

Address 2: Not reported

OKLAHOMA CITY, OK 73117 City, State, Zip:

EPA ID: OKD980696470

**Explanation of Significant Differences** Action Name:

Action ID: 2 Operable Unit: 01

05/14/2008 Actual Date: Contaminated Media: Soil Not reported Event Code: Not reported Contact Name: Contact Telephone: Not reported Event: Not reported

Federal Facility: Ν Fiscal Year: 2008

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement:

35.470278 Latitude: Longitude: -97.473056

ROD:

FOURTH STREET ABANDONED REFINERY Name:

2200 BLOCK NE 4TH Address: City,State,Zip: OKLAHOMA CITY, OK 73117

EPA ID: OKD980696470

RG: Site ID: 601297

Action: GOVT Decision Document (ROD)

Operable Unit Number: SOURCE CONTROL

SEQ ID:

Action Completion: 1992-09-28 00:00:00

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

### FOURTH STREET ABANDONED REFINERY (Continued)

1000370122

NPL Status: Deleted Non NPL Status: Not reported

FOURTH STREET ABANDONED REFINERY Name:

Address: 2200 BLOCK NE 4TH City, State, Zip: OKLAHOMA CITY, OK 73117

EPA ID: OKD980696470

RG: Site ID: 601297

Action: GOVT Decision Document (ROD)

**GROUNDWATER** Operable Unit Number:

SEQ ID:

1993-09-30 00:00:00 Action Completion:

NPL Status: Deleted Non NPL Status: Not reported

FOURTH STREET ABANDONED REFINERY Name:

2200 BLOCK NE 4TH Address: City, State, Zip: OKLAHOMA CITY, OK 73117

OKD980696470 EPA ID:

RG: 6

Site ID: 601297 Action: **GOVT ESD** Operable Unit Number: **GROUNDWATER** 

SEQ ID:

Action Completion: 2006-01-19 00:00:00

NPL Status: Deleted Non NPL Status: Not reported

FOURTH STREET ABANDONED REFINERY Name:

2200 BLOCK NE 4TH Address: City,State,Zip: OKLAHOMA CITY, OK 73117

EPA ID: OKD980696470

RG: Site ID: 601297 **GOVT ESD** Action:

Operable Unit Number: SOURCE CONTROL

SEQ ID:

2008-05-14 00:00:00 Action Completion:

NPL Status: Deleted Non NPL Status: Not reported

55 **FUEL AT THE FLAG #5** LUST U001884613 South 1113 S EASTERN **UST** N/A 1/4-1/2 **OKLAHOMA CITY, OK 73129 HIST UST** 

0.446 mi. 2354 ft.

Relative: LUST:

Higher Name: FUEL AT THE FLAG #5 Address: 1113 S EASTERN Actual: City,State,Zip: 1205 ft. OKLAHOMA CITY, OK 73129

Facility ID: 5505556 Case Number: 064-0637

Case Type: Confirmed Release

Tank Type: **UST** 09/18/1992 Release Date: **Close Date:** 04/03/2002

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# FUEL AT THE FLAG #5 (Continued)

U001884613

Lat/Long: 35.4499 / -97.4772

Status: Closed

UST:

Facility ID: 5505556 Contact Name: Rodney Wood

8100 EAGLE WOOD DR Contact Address:

4052100187 Contact Telephone:

Contact City,St,Zip: Oklahoma City, OK 73150 Lat/Long: 35.4499 / -97.4772

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 10600 Gasoline Substance: Date Installed: 04/25/1971 Tank Type: UST Closed Date: 03/05/2008

Decode of Tank Status: Permanently out of use Tank Removed From Ground Closure Status:

Tank Construction: Single Walled Steel Tank Material: Pipe Construction: Single-Walled Pipe Material: Fiberglass

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 10100 Substance: Gasoline 04/25/1971 Date Installed: Tank Type: UST Closed Date: 03/05/2008

Permanently out of use Decode of Tank Status: Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Steel Tank Material:

Pipe Construction: Single-Walled Pipe Material: Fiberglass

Tank ID:

Permanently Out Of Use Tank Status:

**Total Capacity:** 10100 Substance: Diesel Date Installed: 04/25/1971 Tank Type: UST Closed Date: 03/05/2008

Decode of Tank Status: Permanently out of use Tank Removed From Ground Closure Status:

Single Walled Tank Construction: Tank Material: Steel Pipe Construction: Single-Walled Pipe Material: **Fiberglass** 

HIST UST:

Facility ID: 5505556

Owner Name: **BARNEY U BROWN TRUST** 

Owner Address: PO BOX 82337

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

FUEL AT THE FLAG #5 (Continued)

U001884613

Owner City, St, Zip: Oklahoma City, OK 73148

Tank ID:

Tank Status: Temporarily Out of Use Installed Date: 4/25/1971 0:00:00

Tank Capacity: 10600 Product: Gasoline

Facility ID: 5505556

Owner Name: BARNEY U BROWN TRUST

Owner Address: PO BOX 82337

Owner City, St, Zip: Oklahoma City, OK 73148

Tank ID:

Temporarily Out of Use Tank Status: Installed Date: 4/25/1971 0:00:00

Tank Capacity: 10100 Product: Gasoline

Facility ID: 5505556

Owner Name: BARNEY U BROWN TRUST

Owner Address: PO BOX 82337

Owner City, St, Zip: Oklahoma City, OK 73148

Tank ID:

Tank Status: Temporarily Out of Use Installed Date: 4/25/1971 0:00:00

10100 Tank Capacity: Product: Diesel

**O56** VCP S109376735 **HEARN MACHINE WORKS** N/A

3201 E. RENO AVE. **East DEL CITY, OK** 

1/4-1/2

0.477 mi.

2519 ft. Site 1 of 2 in cluster O

VCP: Relative:

Higher HEARN MACHINE WORKS Name: Address: 3201 E. RENO AVE. Actual: 1196 ft. City, State, Zip: DEL CITY, OK

Site ID: Not reported Object ID: Not reported

Project inactive. Details of closure or withdrawal from VCP are not Status:

known without referring to the individual file.

Start Date: 07/21/1999 12/16/1999 Inactive Date: Maco Date: Not reported Complete Date: Not reported Consent Order Date: Not reported Not reported Case Number: Issue Description: Hс

Brownfields: Not reported Institutional Controls: Not reported Project Manager: Dale Johnson Latitude: 35.464222999999997 Longitude: -97.456173000000007

VCP:

Organization Contact Name: Not reported Organization Contact Company: Not reported Organization Contact Phone: Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

#### **HEARN MACHINE WORKS (Continued)**

S109376735

Organization Contact Ext: Not reported Not reported Organization Contact Street: Organization Contact City: Not reported Organization Contact State: Not reported Organization Contact Zip: Not reported Site Contact Name: Not reported Not reported Site Contact Email: Site Contact Company: Not reported Site Contact Phone: Not reported Site Contact Ext: Not reported Site Contact Street: Not reported

Site Name: HEARN MACHINE WORKS

Site Contact City: Not reported Site Contact State: Not reported Location: 3201 E. Reno Ave. Site Contact Zip: Not reported Not reported Other Contact Name: Other Contact Email: Not reported Other Contact Company: Not reported Other Contact Phone: Not reported Other Contact Ext: Not reported Other Contact Street: Not reported Other Contact City: Not reported Other Contact State: Not reported Other Contact Zip: Not reported

**O57** SEMS-ARCHIVE 1000240208 **DW HEARN MACHINE WORKS 3201 E RENO** RCRA NonGen / NLR OKD007194517 **East** 

1/4-1/2 0.477 mi.

**OKLAHOMA CITY, OK 73117** 

2519 ft. Site 2 of 2 in cluster O

SEMS Archive: Relative: Higher Site ID: 0601034 EPA ID: OKD007194517 Actual:

1196 ft. Name: DW HEARN MACHINE WORKS

> 3201 E RENO Address: Address 2: Not reported

City,State,Zip: OKLAHOMA CITY, OK 73117

Cong District: 05 FIPS Code: 40109 FF:

NPL: Not on the NPL

Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region: 06 Site ID: 0601034 EPA ID: OKD007194517

Site Name: DW HEARN MACHINE WORKS

NPL: Ν FF: Ν OU: 00 Action Code: VS

Action Name: ARCH SITE

SEQ:

Start Date: Not reported **FINDS** 

**ECHO** 

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **DW HEARN MACHINE WORKS (Continued)**

1000240208

Finish Date: 1980-07-01 04:00:00 Qual: Not reported Current Action Lead: EPA Perf In-Hse

Region: 06 0601034 Site ID: EPA ID: OKD007194517

Site Name: DW HEARN MACHINE WORKS

NPL: FF: Ν OU: 00 Action Code: DS Action Name: **DISCVRY** 

SEQ:

Start Date: 1980-07-01 04:00:00 1980-07-01 04:00:00 Finish Date: Qual: Not reported **Current Action Lead: EPA Perf** 

Region: 06 Site ID: 0601034 EPA ID: OKD007194517

Site Name: DW HEARN MACHINE WORKS

NPL: FF: Ν OU: 00 Action Code: PΑ Action Name: PΑ SEQ:

1980-07-01 04:00:00 Start Date: Finish Date: 1980-07-01 04:00:00

Qual: Current Action Lead: **EPA Perf** 

RCRA Listings:

Date Form Received by Agency: 20000313

Handler Name: DW HEARN MACHINE WORKS

Handler Address: 3201 E RENO

Handler City, State, Zip: OKLAHOMA CITY, OK 73117

EPA ID: OKD007194517 Contact Name: DW HEARN Contact Address: 3201 E RENO

OKLAHOMA CITY, OK 73117 Contact City, State, Zip:

Contact Telephone: 405-677-6684 Contact Fax: Not reported Contact Email: Not reported Not reported Contact Title: 06 EPA Region:

Land Type: Not reported Federal Waste Generator Description: Not a generator, verified

Non-Notifier: Not reported Not reported Biennial Report Cycle: Accessibility: Not reported Active Site Indicator: Not reported State District Owner: Not reported Not reported State District:

Distance EDR ID Number
Elevation Site EPA ID Number

**DW HEARN MACHINE WORKS (Continued)** 

1000240208

Mailing Address: E RENO

Mailing City, State, Zip: OKLAHOMA CITY, OK 73117

Owner Name: DW HEARN

Owner Type: Private
Operator Name: Not reported

Operator Type: Not reported

Short-Term Generator Activity: No Importer Activity: No Mixed Waste Generator: No Transporter Activity: No Transfer Facility Activity: No Recycler Activity with Storage: No Small Quantity On-Site Burner Exemption: No Smelting Melting and Refining Furnace Exemption: No **Underground Injection Control:** No Off-Site Waste Receipt: No Universal Waste Indicator: Nο Universal Waste Destination Facility: No

Federal Universal Waste: No

Active Site Fed-Reg Treatment Storage and Disposal Facility:
Active Site Converter Treatment storage and Disposal Facility:
Active Site State-Reg Treatment Storage and Disposal Facility:
Not reported
Not reported

Active Site State-Reg Handler:

Federal Facility Indicator:
Hazardous Secondary Material Indicator:
Sub-Part K Indicator:
Not reported
Not reported

Commercial TSD Indicator: No

Treatment Storage and Disposal Type: Not reported 2018 GPRA Permit Baseline: Not on the Baseline 2018 GPRA Renewals Baseline: Not on the Baseline Permit Renewals Workload Universe: Not reported Permit Workload Universe: Not reported Permit Progress Universe: Not reported Post-Closure Workload Universe: Not reported Closure Workload Universe: Not reported

202 GPRA Corrective Action Baseline:

Corrective Action Workload Universe:

No Subject to Corrective Action Universe:

No Non-TSDFs Where RCRA CA has Been Imposed Universe:

No TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:

TSDFs Only Subject to CA under Discretionary Auth Universe:

No

Corrective Action Priority Ranking: No NCAPS ranking

Environmental Control Indicator:

Institutional Control Indicator:

No
Human Exposure Controls Indicator:

N/A
Groundwater Controls Indicator:

N/A

Operating TSDF Universe:

Not reported
Full Enforcement Universe:

Not reported

Significant Non-Complier Universe:

Unaddressed Significant Non-Complier Universe:

Addressed Significant Non-Complier Universe:

No Significant Non-Complier With a Compliance Schedule Universe With a Compliance With a Com

Financial Assurance Required: Not reported

Handler Date of Last Change:

Recognized Trader-Importer:

No
Recognized Trader-Exporter:

No
Importer of Spent Lead Acid Batteries:

No

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

**DW HEARN MACHINE WORKS (Continued)** 

1000240208

Exporter of Spent Lead Acid Batteries: No

Recycler Activity Without Storage: Not reported Manifest Broker: Not reported

Sub-Part P Indicator: No

Hazardous Waste Summary:

Waste Code: D001

Waste Description: IGNITABLE WASTE

Handler - Owner Operator:

Owner/Operator Indicator: Owner

Owner/Operator Name: DW HEARN

Legal Status:PrivateDate Became Current:Not reportedDate Ended Current:Not reportedOwner/Operator Address:UNKNOWN

Owner/Operator City, State, Zip: UNKNOWN, OK 00000-0000

Owner/Operator Telephone: 000-000-0000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 20000313

Handler Name: DW HEARN MACHINE WORKS

Federal Waste Generator Description: Not a generator, verified

State District Owner: Not reported

Large Quantity Handler of Universal Waste:

Recognized Trader Importer:

No
Recognized Trader Exporter:

No
Spent Lead Acid Battery Importer:

No
Spent Lead Acid Battery Exporter:

No
Current Record:

Yes

Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

FINDS:

Registry ID: 110004745697

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **DW HEARN MACHINE WORKS (Continued)**

1000240208

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000240208 Registry ID: 110004745697

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004745697

DW HEARN MACHINE WORKS Name:

Address: 3201 E RENO

OKLAHOMA CITY, OK 73117 City, State, Zip:

**FOURTH STREET** 

Not reported

P58 **INST CONTROL FOURTH STREET** S127284788 N/A

NNE

1/4-1/2 **OKLAHOMA (County), OK** 

0.485 mi.

1161 ft.

2562 ft. Site 1 of 2 in cluster P

INST: Relative: Higher Name: Address: Actual: City, State, Zip:

> 30005 LPD Site ID: Book Number: 8127 1772-1774 Pages: **Document Number:** Not reported Program: Superfund

Collection: reported by deg personnel

OK

Date Filled: 06/21/2001

https://applications.deq.ok.gov/webdata/LPD/Institutional\_Controls/Sup Link:

erfund/FourthStreetDeedNotice.pdf

Latitude: 35.471249 Longitude: -97.472605

S106799117 P59 **FOURTH STREET REFINERY** SHWS

NNE 1/4-1/2

OKLAHOMA CITY, OK

0.485 mi.

2562 ft. Site 2 of 2 in cluster P

SHWS: Relative:

Higher FOURTH STREET REFINERY Name:

Address: Not reported Actual:

City,State,Zip: OK 1161 ft.

Facility Type: Not reported DEQ Contact: Not reported DEQ Contact Phone: Not reported **Ecological Unit:** Not reported Soil Status: Not reported Ground Water Status: Not reported Soil Unit: Not reported Facility Status: Not reported N/A

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

#### **FOURTH STREET REFINERY (Continued)**

S106799117

Source Control: Not reported OKD980696470 EPA ID:

URL: https://www.deq.ok.gov/land-protection-division/cleanup-redevelopment/

superfund/fourth-street-refinery-superfund-site/

Latitude: 35.47124867 -97.47260483 Longitude: Facility Description: Not reported Facility Description2: Not reported

Name: FOURTH STREET REFINERY

Address: Not reported

 $\stackrel{\cdot}{\mathsf{OKLAHOMA}}$  CITY,  $\mathop{\mathsf{OK}}$ City, State, Zip: Facility Type: NPL-Superfund

**DEQ Contact:** Amy Johnson/Dennis Datin 4057025133/4057025125 **DEQ Contact Phone:** 

Not reported **Ecological Unit:** Not reported Soil Status: Ground Water Status: Not reported Soil Unit: Not reported Facility Status: Not reported Source Control: Not reported EPA ID: Not reported Not reported URL: Latitude: Not reported Longitude: Not reported

Facility Description: The ground water in the alluvial and shallow Garber-Wellington

> aguifers under the site are contaminated with chlorinated solvents, hydrocarbons and metals from the refining operations. DEQ sampled the

13 wells for five years to establish background and last year

completed three years of semiannual monitoring. At the end of 2004, DEQ drilled additional shallow wells and sampled the ground water to identify possible off-site contaminant sources and to evaluate vapor intrusion as a possible pathway for contamination. This area is part of Oklahoma City's Empowerment Zone, which is in part a local, state, and federal initiative to allow for redevelopment. The results of the sampling will assist all parties in developing appropriate reuse and

long-term monitoring strategies.

Facility Description2: Not reported

FOURTH STREET REFINERY Name:

Address: Not reported

OKLAHOMA CITY, OK City, State, Zip:

Facility Type: NPL-Superfund

**DEQ Contact:** Amy Brittain, Dennis Datin **DEQ Contact Phone:** 4057025133, 4057025125

**Ecological Unit:** Not reported Soil Status: Not reported Ground Water Status: Not reported Soil Unit: Not reported Facility Status: Not reported

Source Control: Remedial Action complete

EPA ID: Not reported URL: Not reported Latitude: Not reported Longitude: Not reported

These two Superfund sites in south central Oklahoma City border each Facility Description:

other. Both operated as oil re-refiners over many years, one

Direction Distance

**EDR ID Number** Elevation **EPA ID Number** Site Database(s)

# **FOURTH STREET REFINERY (Continued)**

S106799117

SEMS

PRP

1012209984

OKN000607040

beginning in 1929 and the other in 1940. Because the sites share common ground water monitoring wells, they are listed here together. Historical operations resulted in widespread deposition of residual waste, mostly in pits, on both sites. These pits were generally acidic tar sludges with high lead concentrations. On both sites, the acidic sludges were neutralized, stabilized and disposed of in an off-site landfill. The excavated areas were filled with clean soil and vegetated. The surface is considered clean and available for reuse. The ground water in the alluvial and shallow Garber-Wellington aquifers under the site are contaminated with chlorinated solvents, hydrocarbons and metals from the refining operations. DEQ sampled the 13 wells for five years to established background levels and last year completed three additional years of semi-annual monitoring. At the end of 2004, DEQ drilled four additional shallow wells and sampled the ground water to identify possible off-site contaminant sources and to evaluate vapor intrusion as a possible pathway for contamination. This area is part of Oklahoma City's Empowerment Zone, which is a local, state, and federal initiative to promote redevelopment. The results of the sampling will assist all parties in developing appropriate reuse and long-term monitoring strategies. The seventeen monitoring wells onthe site were closed out and plugged in the fall of 2005. This is the first step to deleting the sites from the Superfund National Priorities List.

Facility Description2: Not reported

60 HENLEY'S SEALANT/ZONOLITE WR GRACE

North **200 WISCONSIN** 

1/4-1/2 **OKLAHOMA CITY, OK 73117** 

0.488 mi. 2576 ft.

Relative: SEMS:

Higher 0607040 Site ID: EPA ID: OKN000607040 Actual:

HENLEY'S SEALANT/ZONOLITE WR GRACE Name: 1170 ft.

Address: 200 WISCONSIN Address 2: Not reported

City, State, Zip: OKLAHOMA CITY, OK 73117

Cong District: 05 FIPS Code: 40109 Latitude: 35.471402 Longitude: -97.477531 FF:

NPL: Not on the NPL

Non NPL Status: Removal Only Site (No Site Assessment Work Needed)

SEMS Detail:

Region: 06 Site ID: 0607040 EPA ID: OKN000607040

Site Name: HENLEY'S SEALANT/ZONOLITE WR GRACE

NPL: Ν FF: N OU: 00 Action Code: RV Action Name: **RMVL** SEQ:

2010-03-26 04:00:00 Start Date:

Direction Distance

Elevation Site Database(s) EPA ID Number

HENLEY'S SEALANT/ZONOLITE WR GRACE (Continued)

2011-07-29 05:00:00

Qual: C

Finish Date:

Current Action Lead: EPA Perf

 Region:
 06

 Site ID:
 0607040

 EPA ID:
 OKN000607040

Site Name: HENLEY'S SEALANT/ZONOLITE WR GRACE

 NPL:
 N

 FF:
 N

 OU:
 00

 Action Code:
 BB

 Action Name:
 PRP RV

SEQ:

 Start Date:
 2017-08-06 05:00:00

 Finish Date:
 2018-05-31 04:00:00

Qual:

Current Action Lead: EPA Ovrsght

PRP:

61

NNW

PRP Name: W R GRACE & CO

DOUBLE EAGLE REFINERY CO.

Delisted NPL 1009968898

301 N RHODE ISLAND

SEMS OKD007188717

 1/2-1
 OKLAHOMA CITY, OK 73152
 US ENG CONTROLS

 0.518 mi.
 US INST CONTROLS

 2734 ft.
 RCRA NonGen / NLR

Relative:
Higher

Actual:
1180 ft.

ROD
PRP
ICIS
FINDS
FINDS
ECHO

Delisted NPL:

EPA Region: 6

EPA ID: OKD007188717

Site ID: 601029

Name: DOUBLE EAGLE REFINERY CO. Address: 301 N RHODE ISLAND

City, State, Zip: OKLAHOMA CITY, OK 73152

Federal Description: N

Latitude: 35.468331

NAI:

Native American Entity: Not reported Longitude: -97.478331

Deleted Date: 2008-08-21 00:00:00

Narr:

Site Name: Double Eagle Refinery Co.

 Site EPA ID:
 OKD007188717

 Deletion Date:
 8/21/2008

 Site Score:
 30.83

Site List URL: https://semspub.epa.gov/src/document/06/300263

Site Progress URL: https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0601029
Notice URL: http://www.gpo.gov/fdsys/pkg/FR-2008-06-13/pdf/E8-13366.pdf
Delete URL: http://www.gpo.gov/fdsys/pkg/FR-2008-08-21/pdf/E8-19420.pdf

Site Location URL: https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd

1b4c3a8b51d416956c41f1&query=Superfund\_National\_Priorities\_List\_\_NPL\_\_

**EDR ID Number** 

1012209984

Direction
Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

### **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

Sites\_with\_Status\_Information\_7557,SITE\_EPA\_ID=%27OKD007188717%27

Federal Facility Indicator: No

SEMS:

Site ID: 0601029 EPA ID: 0KD007188717

Name: DOUBLE EAGLE REFINERY CO. Address: 301 N RHODE ISLAND

Address 2: Not reported

City, State, Zip: OKLAHOMA CITY, OK 73152

 Cong District:
 05

 FIPS Code:
 40109

 Latitude:
 35.468331

 Longitude:
 -97.478331

 FF:
 N

NPL: Deleted from the Final NPL

Non NPL Status: Not reported

SEMS Detail:

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 FE

 Action Name:
 5 YEAR

 SEQ:
 2

 Start Date:
 2006-10-17 04:00:00

 Finish Date:
 2007-05-15 04:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 CR

 Action Name:
 CI

 SEQ:
 2

 Start Date:
 1991-04-01 05:00:00

 Finish Date:
 1999-09-01 04:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

Action Code: TG TA GRANT Action Name:

SEQ: 2

Start Date: 1994-06-01 04:00:00 Finish Date: 1997-05-31 04:00:00 Not reported Qual: **Current Action Lead:** EPA Perf

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 00 Action Code: RV Action Name: **RMVL** SEQ:

1994-03-29 05:00:00 Start Date: Finish Date: 1994-04-03 05:00:00

Qual: S

**Current Action Lead: EPA Perf** 

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 01 Action Code: ED Action Name: R/H ASMT

SEQ:

Start Date: 1993-05-15 04:00:00 Finish Date: 1993-05-15 04:00:00 Not reported Qual: Current Action Lead: EPA Perf

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 00 Action Code: FΕ Action Name: 5 YEAR

SEQ:

2001-06-28 04:00:00 Start Date: Finish Date: 2002-07-29 04:00:00 Not reported Qual: **Current Action Lead: EPA Perf** 

Region: 06 0601029 Site ID: EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

#### **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

NPL: D FF: Ν OU: 01 Action Code: JF

**ECO RISK** Action Name:

SEQ:

Start Date: 1992-06-02 04:00:00 Finish Date: 1992-06-02 04:00:00 Qual: Not reported **Current Action Lead: EPA Perf** 

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

DOUBLE EAGLE REFINERY CO. Site Name:

NPL: FF: Ν OU: 01 Action Code: JF

ECO RISK Action Name:

SEQ:

Start Date: 1993-05-15 04:00:00 Finish Date: 1993-05-15 04:00:00 Qual: Not reported EPA Perf Current Action Lead:

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

DOUBLE EAGLE REFINERY CO. Site Name:

NPL: FF: Ν OU: 02 Action Code: RD Action Name: RD SEQ:

Start Date: 1994-06-02 04:00:00 Finish Date: 1995-03-17 05:00:00 Qual: Not reported Current Action Lead: EPA Perf

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: D FF: Ν OU: 01 Action Code: RO Action Name: ROD SEQ:

Start Date: 1992-09-28 04:00:00 1992-09-28 04:00:00 Finish Date: Qual: Not reported Current Action Lead: **EPA** Perf

Region: 06

Direction Distance

Elevation Site Database(s) EPA ID Number

# **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 02

 Action Code:
 RO

 Action Name:
 ROD

 SEQ:
 2

Start Date: 1994-04-19 04:00:00 Finish Date: 1994-04-19 04:00:00

Qual: R
Current Action Lead: EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 RS

Action Name: RV ASSESS

SEQ:

 Start Date:
 1989-01-23 05:00:00

 Finish Date:
 1989-02-16 05:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 RS

Action Name: RV ASSESS

SEQ: 2

 Start Date:
 1990-03-21 05:00:00

 Finish Date:
 1990-06-28 04:00:00

 Qual:
 Not reported

Current Action Lead: EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 01

 Action Code:
 TS

 Action Name:
 TRTSTUDY

SEQ:

 Start Date:
 1991-09-25 04:00:00

 Finish Date:
 1992-09-28 04:00:00

 Qual:
 Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**Current Action Lead: EPA Perf** 

06 Region: Site ID: 0601029 OKD007188717 EPA ID:

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 00 Action Code: CR Action Name: CI SEQ:

Start Date: 1999-11-01 05:00:00 Finish Date: 1999-12-21 05:00:00 Not reported Qual: EPA Perf **Current Action Lead:** 

06 Region: 0601029 Site ID: OKD007188717 EPA ID:

DOUBLE EAGLE REFINERY CO. Site Name:

NPL: FF: Ν OU: 01 Action Code: ED R/H ASMT Action Name:

SEQ:

Start Date: 1992-06-02 04:00:00 1992-06-02 04:00:00 Finish Date: Not reported Qual:

Current Action Lead: EPA Perf

Region: 06 Site ID: 0601029 OKD007188717 EPA ID:

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 02 Action Code: LR Action Name: LT RESP SEQ:

Start Date: 1995-07-17 04:00:00 2006-03-30 05:00:00 Finish Date: Not reported Qual:

Current Action Lead: EPA Perf

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 00 Action Code: ND Action Name: **DELETION** 

SEQ:

Direction Distance

Elevation Site Database(s) EPA ID Number

# **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

 Start Date:
 2007-10-02 04:00:00

 Finish Date:
 2008-08-21 05:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 NF

 Action Name:
 NPL FINL

SEQ:

 Start Date:
 1989-03-31 05:00:00

 Finish Date:
 1989-03-31 05:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 NP

Action Name: PROPOSED

SEQ:

 Start Date:
 1988-06-24 04:00:00

 Finish Date:
 1988-06-24 04:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 02

 Action Code:
 RA

 Action Name:
 RA

 SEQ:
 3

 Start Date:
 1995-07-17 04:00:00

 Finish Date:
 1997-02-20 05:00:00

 Qual:
 Not reported

 Current Action Lead:
 EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 01

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

Action Code: RD RD Action Name: SEQ:

Start Date: 1993-06-21 04:00:00 Finish Date: 1997-04-30 04:00:00 Not reported Qual: **Current Action Lead:** EPA Perf

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 01 Action Code: RA Action Name: RA SEQ:

1997-09-30 04:00:00 Start Date: Finish Date: 2000-03-29 05:00:00 Qual: Not reported **Current Action Lead: EPA** Perf

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 02 Action Code: CO Action Name: RI/FS SEQ:

Start Date: 1992-06-29 04:00:00 1993-07-28 04:00:00 Finish Date: Not reported Qual: Current Action Lead: EPA Perf

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: D FF: Ν OU: 00 Action Code: CM Action Name: **PCOR** SEQ:

1999-09-07 04:00:00 Start Date: Finish Date: 1999-09-07 04:00:00 Not reported Qual: **Current Action Lead: EPA Perf** 

Region: 06 0601029 Site ID: EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

NPL: D FF: Ν OU: 01 Action Code: CO Action Name: RI/FS SEQ:

Start Date: 1989-12-29 05:00:00 Finish Date: 1992-09-28 04:00:00

Qual: Μ **Current Action Lead: EPA Perf** 

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 00 Action Code: TG TA GRANT Action Name:

SEQ:

Start Date: 1991-06-18 04:00:00 Finish Date: 2000-05-31 04:00:00 Qual: Not reported

EPA Perf Current Action Lead:

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

DOUBLE EAGLE REFINERY CO. Site Name:

NPL: FF: Ν OU: 00 Action Code: CQ CLSOUT R Action Name:

SEQ:

Start Date: 2006-03-07 05:00:00 Finish Date: 2006-03-07 05:00:00 Not reported Qual:

Current Action Lead: EPA Perf

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: D FF: Ν OU: 00 Action Code: FΕ Action Name: 5 YEAR SEQ:

2011-09-20 04:00:00 Start Date: 2012-05-15 05:00:00 Finish Date: Qual: Not reported Current Action Lead: **EPA** Perf

Region: 06

Direction Distance

Elevation Site Database(s) EPA ID Number

# **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 TU

 Action Name:
 NOID

 SEQ:
 1

 Start Date:
 2008-06-13 05:00:00

 Finish Date:
 2008-06-13 05:00:00

 Qual:
 Not reported

Current Action Lead: EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 FE

 Action Name:
 5 YEAR

 SEQ:
 4

Start Date: 2016-05-05 05:00:00 Finish Date: 2017-05-12 05:00:00

Qual: Not reported Current Action Lead: EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 DS

 Action Name:
 DISCVRY

SEQ:

 Start Date:
 1980-06-01 04:00:00

 Finish Date:
 1980-06-01 04:00:00

 Qual:
 Not reported

Current Action Lead: Rot reported
EPA Perf

 Region:
 06

 Site ID:
 0601029

 EPA ID:
 OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 TA

Action Name: TECH ASSIST

SEQ:

 Start Date:
 2015-02-12 05:00:00

 Finish Date:
 2015-02-12 05:00:00

 Qual:
 Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

### **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

Current Action Lead: **EPA Perf** 

06 Region: Site ID: 0601029 OKD007188717 EPA ID:

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 00 Action Code: FΕ Action Name: 5 YEAR SEQ:

Start Date: 2021-10-30 05:00:00 2022-09-26 05:00:00 Finish Date: Not reported Qual:

EPA Perf **Current Action Lead:** 

06 Region: 0601029 Site ID: OKD007188717 EPA ID:

DOUBLE EAGLE REFINERY CO. Site Name:

NPL: FF: Ν OU: 00 Action Code: BB PRP RV Action Name:

SEQ:

1989-01-23 05:00:00 Start Date: 1989-02-16 05:00:00 Finish Date:

Qual:

Current Action Lead: **EPA Ovrsght** 

Region: 06 Site ID: 0601029 EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 00 Action Code: MA Action Name: ST COOP

SEQ:

Start Date: 1994-03-31 05:00:00 Finish Date: 2009-09-30 04:00:00 Not reported Qual:

Current Action Lead: St Perf

Region: 06 0601029 Site ID: EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

NPL: FF: Ν OU: 00 Action Code: PΑ Action Name: PΑ SEQ: 1

Direction Distance

Elevation Site Database(s) EPA ID Number

# **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

Start Date: 1980-05-01 04:00:00 Finish Date: 1980-05-01 04:00:00

Qual: H
Current Action Lead: H
St Perf

Region: 06
Site ID: 0601029
EPA ID: OKD007188717

Site Name: DOUBLE EAGLE REFINERY CO.

 NPL:
 D

 FF:
 N

 OU:
 00

 Action Code:
 SI

 Action Name:
 SI

 SEQ:
 1

Start Date: 1980-05-01 04:00:00 Finish Date: 1980-05-01 04:00:00

Qual: H
Current Action Lead: St Perf

SIte:

Name: DOUBLE EAGLE REFINERY CO. Address: 301 N RHODE ISLAND

Address 2: Not reported

City, State, Zip: OKLAHOMA CITY, OK 73152

Event Code: Not reported
Action Taken Date: 01/19/2006
EPA ID: OKD007188717

Action Name: Explanation of Significant Differences

Action ID: 1
Operable Unit: 02

Contaminated Media: Groundwater
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: N
Fiscal Year: 2006

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

Media:

EPA ID: OKD007188717

Contaminated Media: Soil
Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

09/28/1992

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Direction Distance Elevation

evation Site Database(s) EPA ID Number

# **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

Superfund Alternative Agreement: N
Latitude: 35.468331
Longitude: -97.478331

EPA ID: OKD007188717
Contaminated Media: Sediment

Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

09/28/1992

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

EPA ID: OKD007188717

Contaminated Media: Sludge Action ID: 1 Operable Unit: 01

Action Name:

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Action Record of Decision

09/28/1992

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N
Latitude: 35.468331
Longitude: -97.478331

EPA ID: OKD007188717
Contaminated Media: Groundwater

Action ID: 1
Operable Unit: 02

Action Name: Explanation of Significant Differences

Action Taken Date: 01/19/2006

Event Code: Not reported

Contact Name: Not reported

Contact Telephone: Not reported

Event: Not reported

Federal Facility: N

Fiscal Year: 2006

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

EPA ID: OKD007188717
Contaminated Media: Buildings/Structures

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

Action ID: Operable Unit: 01

Action Name: Record of Decision Action Taken Date: 09/28/1992 **Event Code:** Not reported Not reported Contact Name: Contact Telephone: Not reported Not reported Event:

Federal Facility: Ν Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

01

Superfund Alternative Agreement: 35.468331 Latitude: Longitude: -97.478331

OKD007188717 EPA ID: Contaminated Media: Sediment Action ID:

Record of Decision Action Name: Action Taken Date: 09/28/1992 **Event Code:** Not reported Contact Name: Not reported Contact Telephone: Not reported Not reported Event: Federal Facility: Ν

Fiscal Year: 1992

Operable Unit:

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: Latitude: 35.468331

Longitude: -97.478331

EPA ID: OKD007188717 Contaminated Media: **Buildings/Structures** 

Action ID: Operable Unit: 01

Action Name: Record of Decision Action Taken Date: 09/28/1992 Not reported Event Code: Contact Name: Not reported Contact Telephone: Not reported Event: Not reported

Federal Facility: Ν 1992 Fiscal Year:

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: Latitude: 35.468331 Longitude: -97.478331

OKD007188717 EPA ID: Contaminated Media: **Buildings/Structures** 

Action ID: Operable Unit: 01

Record of Decision Action Name: Action Taken Date: 09/28/1992 **Event Code:** Not reported Contact Name: Not reported

Direction Distance Elevation

vation Site Database(s) EPA ID Number

# **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

Contact Telephone: Not reported Event: Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

EPA ID: OKD007188717
Contaminated Media: Buildings/Structures

Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

09/28/1992

Not reported

Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N
Latitude: 35.468331
Longitude: -97.478331

EPA ID: OKD007188717

Contaminated Media: Soil
Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Action Taken Date:

09/28/1992

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N
Latitude: 35.468331
Longitude: -97.478331

EPA ID: OKD007188717
Contaminated Media: Sediment
Action ID: 1
Operable Unit: 01

Action Name:
Action Name:
Action Taken Date:

Event Code:
Contact Name:
Contact Telephone:

Event:

Record of Decision
09/28/1992

Not reported
Not reported
Not reported
Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement:

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

#### **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

Latitude: 35.468331 Longitude: -97.478331

EPA ID: OKD007188717

Contaminated Media: Soil
Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

09/28/1992

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

EPA ID: OKD007188717
Contaminated Media: Sediment
Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

09/28/1992

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N
Latitude: 35.468331
Longitude: -97.478331

EPA ID: OKD007188717

Contaminated Media: Soil Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Federal Facility:

New York Telephone:

Not reported

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

EPA ID: OKD007188717 Contaminated Media: Sediment

Action ID: 1

Distance

Elevation Site Database(s) EPA ID Number

# **DOUBLE EAGLE REFINERY CO. (Continued)**

Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

09/28/1992

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N
Latitude: 35.468331
Longitude: -97.478331

EPA ID: OKD007188717

Contaminated Media: Sludge
Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

O9/28/1992

Event Code:

Contact Name:

Contact Telephone:

Event:

Not reported

Fiscal Year: N
Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

EPA ID: OKD007188717

Contaminated Media: Soil
Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

09/28/1992

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

EPA ID: OKD007188717

Contaminated Media: Air Action ID: 1 Operable Unit: 01

Action Name: Record of Decision
Action Taken Date: 09/28/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported

**EDR ID Number** 

1009968898

Direction Distance Elevation

evation Site Database(s) EPA ID Number

# **DOUBLE EAGLE REFINERY CO. (Continued)**

Event:

Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N
Latitude: 35.468331
Longitude: -97.478331

EPA ID: OKD007188717 Contaminated Media: Liquid Waste

Action ID: 1
Operable Unit: 01

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Not reported

Fiscal Year: N
1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

EPA ID: OKD007188717
Contaminated Media: Surface Water

Action ID: 1
Operable Unit: 01

Action Name:
Record of Decision
Action Taken Date:
09/28/1992
Event Code:
Not reported
Contact Name:
Not reported
Contact Telephone:
Not reported
Event:
Not reported

Federal Facility: N Fiscal Year: 1992

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

EPA ID: OKD007188717 Contaminated Media: Groundwater

Action ID: 2
Operable Unit: 02

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Record of Decision

04/19/1994

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1994

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331

**EDR ID Number** 

1009968898

Distance Elevation

ation Site Database(s) EPA ID Number

## **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

Longitude: -97.478331

EPA ID: OKD007188717
Contaminated Media: Groundwater

Action ID: 2
Operable Unit: 02

Action Name:

Action Taken Date:

Event Code:

Contact Name:

Contact Telephone:

Event:

Action Taken Date:

Od/19/1994

Not reported

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1994

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

EPA ID: OKD007188717
Contaminated Media: Groundwater
Action ID: 2

Operable Unit: 02

Action Name:

Action Taken Date:

Od/19/1994

Event Code:

Contact Name:

Contact Telephone:

Event:

Not reported

Not reported

Not reported

Not reported

Federal Facility: N Fiscal Year: 1994

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N Latitude: 35.468331

Longitude: -97.478331

EPA ID: OKD007188717
Contaminated Media: Groundwater

Action ID: 2
Operable Unit: 02

Action Name:

Action Taken Date:

Od/19/1994

Event Code:

Contact Name:

Contact Telephone:

Event:

Not reported

Fiscal Year: 1994

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N
Latitude: 35.468331
Longitude: -97.478331

US INST CONTROLS:

Name: DOUBLE EAGLE REFINERY CO.

Address: 301 N RHODE ISLAND

Direction Distance

Elevation Site Database(s) EPA ID Number

## **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

Address 2: Not reported

City, State, Zip: OKLAHOMA CITY, OK 73152

EPA ID: OKD007188717

Action Name: Explanation of Significant Differences

Action ID:

Operable Unit:
O1
Actual Date:
O5/19/2008
Contaminated Media:
Event Code:
Contact Name:
Contact Telephone:
Not reported
Event:
Not reported
Not reported
Not reported

Federal Facility: N Fiscal Year: 2008

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N

Latitude: 35.468331 Longitude: -97.478331

Name: DOUBLE EAGLE REFINERY CO.

Address: 301 N RHODE ISLAND

Address 2: Not reported

City, State, Zip: OKLAHOMA CITY, OK 73152

EPA ID: OKD007188717

Action Name: Explanation of Significant Differences

Action ID: 2
Operable Unit: 01
Actual Date: 05/19/2008
Contaminated Media: Soil

Event Code: Not reported Contact Name: Not reported Contact Telephone: Not reported Event: Not reported

Federal Facility: N Fiscal Year: 2008

NPL Status: Deleted from the Final NPL

Superfund Alternative Agreement: N
Latitude: 35.468331
Longitude: -97.478331

Name: DOUBLE EAGLE REFINERY CO.

Address: 301 N RHODE ISLAND

Address 2: Not reported

City, State, Zip: OKLAHOMA CITY, OK 73152

EPA ID: OKD007188717
Action Name: Record of Decision

Action ID: 2 Operable Unit: 02 04/19/1994 Actual Date: Contaminated Media: Groundwater Not reported **Event Code:** Contact Name: Not reported Not reported Contact Telephone: Event: Not reported

Federal Facility: N Fiscal Year: 1994

NPL Status: Deleted from the Final NPL

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

Superfund Alternative Agreement: 35.468331 Latitude: Longitude: -97.478331

RCRA Listings:

Date Form Received by Agency: 19801203 DOUBLE EAGLE REFINING COMPANY Handler Name:

Handler Address: 1900 NE 1ST ST

Handler City, State, Zip: OKLAHOMA CITY, OK 73136

EPA ID: OKD007188717 Contact Name: MICHAEL-L KERRAN Contact Address: PO BOX 11257

Contact City, State, Zip: OKLAHOMA CITY, OK 73136

Contact Telephone: 405-232-0244 Contact Fax: Not reported Contact Email: Not reported Contact Title: Not reported EPA Region:

Land Type: Not reported

Federal Waste Generator Description: Not a generator, verified

Non-Notifier: Not reported

Biennial Report Cycle: Not reported Accessibility:

Active Site Indicator: Not reported State District Owner: Not reported State District: Not reported PO BOX 11257 Mailing Address:

Mailing City, State, Zip: OKLAHOMA CITY, OK 73136

No

Owner Name: Not reported

Owner Type: Not reported

Operator Name: Not reported

Short-Term Generator Activity:

Operator Type: Not reported

Importer Activity: No Mixed Waste Generator: No Transporter Activity: No Transfer Facility Activity: No Recycler Activity with Storage: No Small Quantity On-Site Burner Exemption: No Smelting Melting and Refining Furnace Exemption: No **Underground Injection Control:** No Off-Site Waste Receipt: No Universal Waste Indicator: No Universal Waste Destination Facility: No Federal Universal Waste: Nο

Active Site Fed-Reg Treatment Storage and Disposal Facility: Not reported Active Site Converter Treatment storage and Disposal Facility: Not reported Active Site State-Reg Treatment Storage and Disposal Facility: Not reported

Active Site State-Reg Handler:

Federal Facility Indicator: Not reported

Hazardous Secondary Material Indicator: NN Sub-Part K Indicator: Not reported

Commercial TSD Indicator: No

Treatment Storage and Disposal Type: Not reported 2018 GPRA Permit Baseline: Not on the Baseline 2018 GPRA Renewals Baseline: Not on the Baseline Permit Renewals Workload Universe: Not reported

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

Permit Workload Universe: Not reported Permit Progress Universe: Not reported Post-Closure Workload Universe: Not reported Closure Workload Universe: Not reported

202 GPRA Corrective Action Baseline: No Corrective Action Workload Universe: No Subject to Corrective Action Universe: No Non-TSDFs Where RCRA CA has Been Imposed Universe: No TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: No TSDFs Only Subject to CA under Discretionary Auth Universe: No

Corrective Action Priority Ranking: No NCAPS ranking

Environmental Control Indicator: No Institutional Control Indicator: No Human Exposure Controls Indicator: N/A Groundwater Controls Indicator: N/A

Operating TSDF Universe: Not reported Full Enforcement Universe: Not reported Significant Non-Complier Universe: No

Unaddressed Significant Non-Complier Universe: No Addressed Significant Non-Complier Universe: No Significant Non-Complier With a Compliance Schedule Universe: No

Financial Assurance Required: Not reported

Handler Date of Last Change: 20150414 Recognized Trader-Importer: No Recognized Trader-Exporter: No Importer of Spent Lead Acid Batteries: No Exporter of Spent Lead Acid Batteries: No

Recycler Activity Without Storage: Not reported Manifest Broker: Not reported

Sub-Part P Indicator: No

Historic Generators:

19801203 Receive Date: DOUBLE EAGLE REFINING COMPANY Handler Name:

Federal Waste Generator Description: Not a generator, verified

State District Owner: Not reported

Large Quantity Handler of Universal Waste: No Recognized Trader Importer: No Recognized Trader Exporter: No Spent Lead Acid Battery Importer: No Spent Lead Acid Battery Exporter: No Current Record: Yes

Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 32411

NAICS Description: PETROLEUM REFINERIES

Facility Has Received Notices of Violations:

Violations: No Violations Found

**Evaluation Action Summary:** 

Evaluations: No Evaluations Found

Direction Distance Elevation

evation Site Database(s) EPA ID Number

### **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

ROD:

Name: DOUBLE EAGLE REFINERY CO.

Address: 301 N RHODE ISLAND
City,State,Zip: OKLAHOMA CITY, OK 73152

EPA ID: OKD007188717

RG: 6

Site ID: 601029

Action: GOVT Decision Document (ROD)

Operable Unit Number: SOURCE CONTROL SEQ ID: 1

Action Completion: 1992-09-28 00:00:00

NPL Status: Deleted
Non NPL Status: Not reported

Name:DOUBLE EAGLE REFINERY CO.Address:301 N RHODE ISLANDCity,State,Zip:OKLAHOMA CITY, OK 73152

EPA ID: OKD007188717

RG: 6 Site ID: 601029

Action: GOVT Decision Document (ROD)

Operable Unit Number: GROUNDWATER

SEQ ID: 2

Action Completion: 1994-04-19 00:00:00

NPL Status: Deleted
Non NPL Status: Not reported

Name: DOUBLE EAGLE REFINERY CO.

Address: 301 N RHODE ISLAND
City,State,Zip: OKLAHOMA CITY, OK 73152

EPA ID: OKD007188717

RG: 6

Site ID: 601029
Action: GOVT ESD
Operable Unit Number: GROUNDWATER

SEQ ID:

Action Completion: 2006-01-19 00:00:00

NPL Status: Deleted
Non NPL Status: Not reported

Name: DOUBLE EAGLE REFINERY CO.

Address: 301 N RHODE ISLAND
City,State,Zip: OKLAHOMA CITY, OK 73152

EPA ID: OKD007188717

RG: 6
Site ID: 601029
Action: GOVT ESD

Operable Unit Number: SOURCE CONTROL

SEQ ID: 2

Action Completion: 2008-05-19 00:00:00

NPL Status: Deleted
Non NPL Status: Not reported

PRP:

PRP Name: 3M

ЗМ

Direction Distance

Elevation Site Database(s) EPA ID Number

## **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

ADCOR DRILLING INC.
ADCOR DRILLING INC.
ADCOR DRILLING INC.
ADCOR DRILLING INC.
ALBERT INVESTMENTS, INC.
ALBERT INVESTMENTS, INC.
AMERICAN AIRLINES, INC.
AMERICAN FAC MASTER

APAC-ARKANSAS, INC. AND APAC-OKLAHOMA, INC AROUND THE CLOCK FREIGHTLINER GROUP

AT&T
AT&T
AT&T
AT&T
AT&T CORP.
B.C. IMPORTS, INC.

BELL HELICOPTER TEXTRON INC

BFI WASTE SYSTEMS BFI WASTE SYSTEMS

Click this hyperlink while viewing on your computer to access 234 additional PRP: record(s) in the EDR Site Report.

ICIS:

Enforcement Action ID: 06-2002-2754 FRS ID: 110004745483

Action Name: DOUBLE EAGLE REFINERY COMPANY SUPERFUND SITE

Facility Name: DOUBLE EAGLE REFINING COMPANY

Facility Address: 1900 NE 1ST ST

OKLAHOMA CITY, OK 73136

Enforcement Action Type: CERCLA 122G1A Agrmt For De Minimus Cr

Facility County: OKLAHOMA

Program System Acronym: ICIS

Enforcement Action Forum Desc: Administrative - Formal

122G1A EA Type Code: Facility SIC Code: 2911 Federal Facility ID: Not reported Latitude in Decimal Degrees: 35.47036 Longitude in Decimal Degrees: -97.480919 Permit Type Desc: Not reported 9438 Program System Acronym: Facility NAICS Code: Not reported Tribal Land Code: Not reported

Enforcement Action ID: 06-2001-2558 FRS ID: 110004745483

Action Name: DOUBLE EAGLE REFINERY COMPANY, INC., AN OKLAHOMA CORPORATION

Facility Name: DOUBLE EAGLE REFINING COMPANY

Facility Address: 1900 NE 1ST ST

OKLAHOMA CITY, OK 73136 CERCLA 107L Filing Of Lien

Facility County: OKLAHOMA

Program System Acronym: ICIS

Enforcement Action Type:

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: 107L
Facility SIC Code: 2911
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.47036
Longitude in Decimal Degrees: -97.480919

Direction Distance

Elevation Site Database(s) EPA ID Number

## **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

Permit Type Desc:
Program System Acronym:
Facility NAICS Code:
Tribal Land Code:
Not reported
Not reported
Not reported

Enforcement Action ID: 06-1989-0300 FRS ID: 110004745483

Action Name: DOUBLE EAGLE REFINERY; OKLAHOMA CITY

Facility Name: DOUBLE EAGLE REFINING COMPANY

Facility Address: 1900 NE 1ST ST

OKLAHOMA CITY, OK 73136

Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz

Facility County: OKLAHOMA

Program System Acronym: ICIS

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: 106
Facility SIC Code: 2911
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.47036
Longitude in Decimal Degrees: -97.480919
Permit Type Desc: Not reported
Program System Acronym: 9438

Facility NAICS Code: Not reported Tribal Land Code: Not reported

Facility Name: DOUBLE EAGLE REFINERY SUPERFUND SITE

Address: 1900 NE 1ST ST

Tribal Indicator: N Fed Facility: No

NAIC Code: Not reported SIC Code: 2911

Facility Name: DOUBLE EAGLE REFINERY SUPERFUND SITE

Address: 1900 NE 1ST ST

Tribal Indicator: N Fed Facility: No

NAIC Code: Not reported SIC Code: 2911

Facility Name: DOUBLE EAGLE REFINERY SUPERFUND SITE

Address: 1900 NE 1ST ST

Tribal Indicator: N Fed Facility: No

NAIC Code: Not reported SIC Code: 2911

Facility Name: DOUBLE EAGLE REFINERY SUPERFUND SITE

Address: 1900 NE 1ST ST

Tribal Indicator: N Fed Facility: No

NAIC Code: Not reported SIC Code: 2911

Facility Name: DOUBLE EAGLE REFINERY SUPERFUND SITE

Address: 1900 NE 1ST ST

Tribal Indicator: N

Direction Distance Elevation

ation Site Database(s) EPA ID Number

## **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

**EDR ID Number** 

Fed Facility: No NAIC Code: Not re

NAIC Code: Not reported SIC Code: 2911

Facility Name: DOUBLE EAGLE REFINERY SUPERFUND SITE

Address: 1900 NE 1ST ST

Tribal Indicator: N Fed Facility: No

NAIC Code: Not reported SIC Code: 2911

Facility Name: DOUBLE EAGLE REFINERY SUPERFUND SITE

Address: 1900 NE 1ST ST

Tribal Indicator: N Fed Facility: No

NAIC Code: Not reported

SIC Code: 2911

Facility Name: DOUBLE EAGLE REFINERY SUPERFUND SITE

Address: 1900 NE 1ST ST

Tribal Indicator: N Fed Facility: No

NAIC Code: Not reported

SIC Code: 2911

Facility Name: DOUBLE EAGLE REFINERY SUPERFUND SITE

Address: 1900 NE 1ST ST

Tribal Indicator: N Fed Facility: No

NAIC Code: Not reported SIC Code: 2911

FINDS:

Registry ID: 110004745483

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include;

Map ID MAP FINDINGS Direction

Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## **DOUBLE EAGLE REFINERY CO. (Continued)**

1009968898

Incident Tracking, Compliance Assistance, and Compliance Monitoring.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1009968898 Registry ID: 110004745483

http://echo.epa.gov/detailed-facility-report?fid=110004745483 DOUBLE EAGLE REFINERY SUPERFUND SITE DFR URL:

Name:

Address: 1900 NE 1ST ST

City,State,Zip: OKLAHOMA CITY, OK 73136 Count: 8 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
OKLAHOMA CITY	1007445106	CUSTOM EQUIPMENT COMPANY SANITARY	72ND SOUTH BRYANT		ODI
OKLAHOMA CITY	S120898512	KIWANIS	2411 FIRST		VCP
OKLAHOMA CITY	S128533277	ALTEC LANSING	10500 RENO		VCP
OKLAHOMA COUNTY	S106496824	AMERICAN MEDICAL DISPOSAL, INC.	LOTS 41 - 44, SWASTIKA ADDITIO		SWF/LF
OKLAHOMA COUNTY	S106496818	LAND RECLAIMERS, INC. LANDFILL	NW/4 NE/4 NW/4 & E/2 NE/4 NE/4		SWF/LF
OKLAHOMA COUNTY	S106496820	VILLA LANDFILL	NW/4 OF S31 T12N R3W (NW 10TH		SWF/LF
OKLAHOMA COUNTY	S106496809	CITY OF DEL CITY LANDFILL	NW/4 OF S32 T12N R2W LYING NOR		SWF/LF
OKLAHOMA COUNTY	S106496815	CITY OF DEL CITY MUNICIPAL INCINER	NE/4 SW/4 OF S32 T12N R2W(1/4		SWF/LF

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/27/2022 Source: EPA
Date Data Arrived at EDR: 11/01/2022 Telephone: N/A

Number of Days to Update: 14 Next Scheduled EDR Contact: 01/09/2023
Data Release Frequency: Quarterly

**NPL Site Boundaries** 

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/27/2022 Source: EPA
Date Data Arrived at EDR: 11/01/2022 Telephone: N/A

Date Made Active in Reports: 11/15/2022 Last EDR Contact: 12/01/2022

Number of Days to Update: 14 Next Scheduled EDR Contact: 01/09/2023
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA

Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

### Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: EPA Telephone: N/A

Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 01/09/2023 Data Release Frequency: Quarterly

### Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 08/25/2022 Date Data Arrived at EDR: 09/06/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 90

Source: Environmental Protection Agency

Telephone: 703-603-8704 Last EDR Contact: 09/06/2022

Next Scheduled EDR Contact: 01/10/2023 Data Release Frequency: Varies

### SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Quarterly

#### Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Quarterly

#### Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

#### Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

## Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

#### RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation
and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database
includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste
as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate
less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

### Federal institutional controls / engineering controls registries

#### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/16/2022 Date Data Arrived at EDR: 08/22/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 63

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 11/01/2022

Next Scheduled EDR Contact: 02/20/2023 Data Release Frequency: Varies

#### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/15/2022 Date Data Arrived at EDR: 08/17/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 68

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 11/16/2022

Next Scheduled EDR Contact: 03/06/2023 Data Release Frequency: Varies

### US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/15/2022 Date Data Arrived at EDR: 08/17/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 68

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 11/16/2022

Next Scheduled EDR Contact: 03/06/2023

Data Release Frequency: Varies

#### Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous

substances.

Date of Government Version: 06/14/2022 Date Data Arrived at EDR: 06/15/2022 Date Made Active in Reports: 06/21/2022

Number of Days to Update: 6

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 12/14/2022

Next Scheduled EDR Contact: 04/03/2023 Data Release Frequency: Quarterly

#### Lists of state- and tribal hazardous waste facilities

SHWS: Voluntary Cleanup & Superfund Site Status Report
Land restoration projects carried out in several DEQ programs.

Date of Government Version: 08/08/2022 Date Data Arrived at EDR: 08/09/2022 Date Made Active in Reports: 10/25/2022

Number of Days to Update: 77

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 11/08/2022

Next Scheduled EDR Contact: 02/20/2023 Data Release Frequency: No Update Planned

#### Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: Permitted Solid Waste Disposal & Processing Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 07/25/2022 Date Data Arrived at EDR: 09/20/2022 Date Made Active in Reports: 12/08/2022

Number of Days to Update: 79

Source: Department of Environmental Quality

Telephone: 405-702-5184 Last EDR Contact: 09/20/2022

Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Annually

## Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 09/05/2022 Date Data Arrived at EDR: 09/20/2022 Date Made Active in Reports: 12/08/2022

Number of Days to Update: 79

Source: Oklahoma Corporation Commission

Telephone: 405-521-3107 Last EDR Contact: 09/20/2022

Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Varies

LAST: Leaking Aboveground Storage Tanks List Leaking aboveground storage tank site locations.

> Date of Government Version: 09/05/2022 Date Data Arrived at EDR: 09/20/2022 Date Made Active in Reports: 12/08/2022

Number of Days to Update: 79

Source: Oklahoma Corporation Commission

Telephone: 405-522-4640 Last EDR Contact: 09/20/2022

Next Scheduled EDR Contact: 01/02/2023

Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/20/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 06/02/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/31/2022

Number of Days to Update: 79

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/11/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/28/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023

Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

### Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021 Date Data Arrived at EDR: 11/05/2021 Date Made Active in Reports: 02/01/2022

Number of Days to Update: 88

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 09/27/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

UST: Underground Storage Tank Listing

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 09/05/2022 Date Data Arrived at EDR: 09/20/2022 Date Made Active in Reports: 12/07/2022

Number of Days to Update: 78

Source: Oklahoma Corporation Commission

Telephone: 405-521-3107 Last EDR Contact: 09/20/2022

Next Scheduled EDR Contact: 01/02/2023

Data Release Frequency: Varies

AST: Aboveground Storage Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 09/05/2022 Date Data Arrived at EDR: 09/20/2022 Date Made Active in Reports: 12/07/2022

Number of Days to Update: 78

Source: Oklahoma Corporation Commission

Telephone: 405-521-3107 Last EDR Contact: 09/20/2022

Next Scheduled EDR Contact: 01/02/2023

Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 06/02/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/31/2022

Number of Days to Update: 79

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/14/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023

Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/07/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023

Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/11/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023

Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/28/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022

Number of Days to Update: 64

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 12/06/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

### State and tribal institutional control / engineering control registries

INST CONTROL: Institutional Control Sites Sites with institutional controls in place.

Date of Government Version: 08/08/2022 Date Data Arrived at EDR: 08/09/2022 Date Made Active in Reports: 10/25/2022

Number of Days to Update: 77

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 11/08/2022

Next Scheduled EDR Contact: 02/20/2023 Data Release Frequency: Quarterly

#### Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 07/08/2021

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

VCP: Voluntary Cleanup Site Inventory

Investigations and cleanups by groups or individuals participating in the Voluntary Cleanup Program (VCP).

Date of Government Version: 08/08/2022 Date Data Arrived at EDR: 08/09/2022 Date Made Active in Reports: 10/25/2022

Number of Days to Update: 77

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 11/08/2022

Next Scheduled EDR Contact: 02/20/2023 Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 09/29/2015 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 12/13/2022

Next Scheduled EDR Contact: 04/03/2023

Data Release Frequency: Varies

SCAP: Site Cleanup Assistance program Listing

SCAP remediates abandoned hazardous waste sites and closed armories and provides other cleanup assistance to public entities around the state.

Date of Government Version: 09/19/2022 Date Data Arrived at EDR: 09/20/2022 Date Made Active in Reports: 12/08/2022

Number of Days to Update: 79

Source: Department of Environmental Quality

Telephone: 405-702-5138 Last EDR Contact: 09/20/2022

Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Varies

## Lists of state and tribal brownfield sites

**BROWNFIELDS: Brownfield Sites** 

Brownfields are defined by Oklahoma law as abandoned, idled or under used industrial or commercial facilities or other real property at which expansion or redevelopment of the real property is complicated by environmental contamination caused by regulated substances. This program provides a means for private parties and government entities to voluntarily investigate and if warranted, clean up properties that may be contaminated with hazardous wastes. The formal Brownfields Program provides specific state liability relief and protects the property from federal Superfund actions.

Date of Government Version: 09/07/2012 Date Data Arrived at EDR: 09/07/2012 Date Made Active in Reports: 10/10/2012

Number of Days to Update: 33

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 11/02/2022

Next Scheduled EDR Contact: 02/20/2023 Data Release Frequency: No Update Planned

### BROWNFIELDS 2: Brownfields Public Record Listing

The Brownfields program provides a means for private parties and government entities to voluntarily investigate and if warranted, clean up properties that may be contaminated with hazardous wastes. The formal Brownfields Program provides specific state liability relief and protects the property from federal Superfund actions.

Date of Government Version: 06/09/2022 Date Data Arrived at EDR: 08/11/2022 Date Made Active in Reports: 10/25/2022

Number of Days to Update: 75

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 11/10/2022

Next Scheduled EDR Contact: 02/20/2023

Data Release Frequency: Varies

### ADDITIONAL ENVIRONMENTAL RECORDS

#### Local Brownfield lists

## US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022 Date Data Arrived at EDR: 03/10/2022 Date Made Active in Reports: 03/10/2022

Number of Days to Update: 0

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 12/07/2022

Next Scheduled EDR Contact: 03/27/2023 Data Release Frequency: Semi-Annually

### Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Facilities

A listing of recycling facility locations.

Date of Government Version: 07/10/2019 Date Data Arrived at EDR: 07/14/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 78

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 10/13/2022

Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 10/20/2022

Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside

County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014 Date Data Arrived at EDR: 08/06/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service

Telephone: 301-443-1452 Last EDR Contact: 10/28/2022

Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Varies

### Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 07/29/2022 Date Data Arrived at EDR: 08/18/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 67

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 11/16/2022

Next Scheduled EDR Contact: 03/06/2023 Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/29/2022 Date Data Arrived at EDR: 08/18/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 67

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 11/16/2022

Next Scheduled EDR Contact: 03/06/2023 Data Release Frequency: Quarterly

## Local Lists of Registered Storage Tanks

HIST UST: Underground Storage Tank List, List II Version

This underground storage tank listing includes tank information through March 2003. This listing is no longer updated by the Oklahoma Corporation Commission.

Date of Government Version: 03/21/2003 Date Data Arrived at EDR: 04/28/2003 Date Made Active in Reports: 05/27/2003

Number of Days to Update: 29

Source: Oklahoma Corporation Commission

Telephone: 405-521-3107 Last EDR Contact: 01/19/2009

Next Scheduled EDR Contact: 04/19/2009 Data Release Frequency: No Update Planned

#### Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 01/09/2023 Data Release Frequency: Semi-Annually

### Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/19/2022 Date Data Arrived at EDR: 09/19/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 11

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 12/14/2022

Next Scheduled EDR Contact: 04/03/2023 Data Release Frequency: Quarterly

OK COMPLAINT: Oklahoma Complaint System Database

Environmental complaints reported to the Oklahoma Corporation Commission.

Date of Government Version: 06/30/2021 Date Data Arrived at EDR: 07/28/2021 Date Made Active in Reports: 10/28/2021

Number of Days to Update: 92

Source: Oklahoma Conservation Commission

Telephone: 405-521-4828 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 02/20/2023 Data Release Frequency: Annually

#### Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 11/21/2022 Date Data Arrived at EDR: 11/21/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 08/11/2022 Date Data Arrived at EDR: 08/11/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 50

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 11/10/2022

Next Scheduled EDR Contact: 02/27/2023

Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021 Date Data Arrived at EDR: 07/13/2021 Date Made Active in Reports: 03/09/2022

Number of Days to Update: 239

Source: USGS

Telephone: 888-275-8747 Last EDR Contact: 10/13/2022

Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018 Date Data Arrived at EDR: 04/11/2018 Date Made Active in Reports: 11/06/2019

Number of Days to Update: 574

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 10/03/2022 Next Scheduled EDR Contact: 01/16/2023

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 63

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 11/03/2022

Next Scheduled EDR Contact: 02/20/2023 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 08/31/2022

Number of Days to Update: 71

Source: Environmental Protection Agency Telephone: 202-566-1917

Last EDR Contact: 12/14/2022

Next Scheduled EDR Contact: 04/03/2023 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 10/28/2022

Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 05/08/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 73

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 10/28/2022

Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 06/17/2020 Date Made Active in Reports: 09/10/2020 Number of Days to Update: 85

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 12/12/2022

Next Scheduled EDR Contact: 03/27/2023 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Source: EPA

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 08/14/2020

Telephone: 202-566-0250

Date Made Active in Reports: 11/04/2020 Number of Days to Update: 82

Last EDR Contact: 11/01/2022

Next Scheduled EDR Contact: 02/27/2023 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/18/2022 Date Data Arrived at EDR: 07/18/2022

Date Made Active in Reports: 07/29/2022

Number of Days to Update: 11

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 10/18/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 03/13/2023 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022 Date Data Arrived at EDR: 05/04/2022 Date Made Active in Reports: 05/10/2022

Number of Days to Update: 6

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 10/27/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

#### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

### PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Quarterly

#### PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2022 Date Data Arrived at EDR: 01/20/2022 Date Made Active in Reports: 03/25/2022

Number of Days to Update: 64

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Annually

### ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016 Date Data Arrived at EDR: 11/23/2016 Date Made Active in Reports: 02/10/2017

Number of Days to Update: 79

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 09/27/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/26/2022 Date Data Arrived at EDR: 11/22/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 13

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 10/11/2022

Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020 Date Data Arrived at EDR: 11/30/2021 Date Made Active in Reports: 02/22/2022

Number of Days to Update: 84

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 11/29/2022

Next Scheduled EDR Contact: 03/13/2023 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017 Date Data Arrived at EDR: 03/05/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 251

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 11/23/2022

Next Scheduled EDR Contact: 03/13/2023 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019 Date Data Arrived at EDR: 11/06/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 96

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 11/03/2022

Next Scheduled EDR Contact: 02/13/2023 Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019 Date Data Arrived at EDR: 07/01/2019 Date Made Active in Reports: 09/23/2019

Number of Days to Update: 84

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 09/21/2022

Next Scheduled EDR Contact: 01/10/2023 Data Release Frequency: Quarterly

### HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008

Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

### DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020 Date Data Arrived at EDR: 01/28/2020 Date Made Active in Reports: 04/17/2020

Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 10/24/2022

Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Quarterly

#### CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2022 Date Data Arrived at EDR: 07/21/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 71

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 09/27/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

### BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019 Date Data Arrived at EDR: 03/02/2022 Date Made Active in Reports: 03/25/2022

Number of Days to Update: 23

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater

than 640 acres.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/14/2015 Date Made Active in Reports: 01/10/2017

Number of Days to Update: 546

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021 Date Data Arrived at EDR: 07/27/2021 Date Made Active in Reports: 10/22/2021

Number of Days to Update: 87

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 10/27/2022

Next Scheduled EDR Contact: 02/16/2023

Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019 Date Data Arrived at EDR: 11/15/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 74

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 11/09/2022

Next Scheduled EDR Contact: 02/27/2023

Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/27/2022 Date Data Arrived at EDR: 11/01/2022 Date Made Active in Reports: 11/15/2022

Number of Days to Update: 14

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 01/09/2023

Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health

Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Telephone: 202-564-2496

Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/03/2022 Date Data Arrived at EDR: 08/17/2022 Date Made Active in Reports: 08/31/2022

Number of Days to Update: 14

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 11/17/2022

Next Scheduled EDR Contact: 03/06/2023 Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 08/01/2022 Date Data Arrived at EDR: 08/02/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 59

Source: DOL, Mine Safety & Health Admi

Telephone: 202-693-9424 Last EDR Contact: 11/28/2022

Next Scheduled EDR Contact: 03/13/2023 Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020 Date Data Arrived at EDR: 05/27/2020 Date Made Active in Reports: 08/13/2020

Number of Days to Update: 78

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 03/06/2023 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 11/21/2022

Next Scheduled EDR Contact: 03/06/2023

Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/13/2022 Date Data Arrived at EDR: 09/14/2022 Date Made Active in Reports: 12/05/2022

Number of Days to Update: 82

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 12/13/2022

Next Scheduled EDR Contact: 03/20/2023 Data Release Frequency: Quarterly

### FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Source: EPA

Date of Government Version: 08/03/2022 Date Data Arrived at EDR: 08/25/2022 Date Made Active in Reports: 10/24/2022

Number of Days to Update: 60

Telephone: (214) 665-2200 Last EDR Contact: 11/29/2022

Next Scheduled EDR Contact: 03/13/2023 Data Release Frequency: Quarterly

#### **UXO: Unexploded Ordnance Sites**

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020 Date Data Arrived at EDR: 01/11/2022 Date Made Active in Reports: 02/14/2022

Number of Days to Update: 34

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 10/05/2022

Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Varies

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/25/2022 Date Data Arrived at EDR: 07/01/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 91

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 09/30/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Quarterly

#### DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021 Date Data Arrived at EDR: 05/21/2021 Date Made Active in Reports: 08/11/2021

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 202-564-0527 Last EDR Contact: 11/15/2022

Next Scheduled EDR Contact: 03/06/2023 Data Release Frequency: Varies

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/11/2022 Date Data Arrived at EDR: 08/11/2022 Date Made Active in Reports: 09/30/2022

Number of Days to Update: 50

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 11/10/2022

Next Scheduled EDR Contact: 02/27/2023 Data Release Frequency: Quarterly

#### PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 02/23/2022 Date Data Arrived at EDR: 07/08/2022 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 123

Source: Environmental Protection Agency

Telephone: 703-603-8895 Last EDR Contact: 10/04/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

## PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 02/23/2022 Date Data Arrived at EDR: 03/31/2022 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 222

Source: Environmental Protection Agency

Telephone: 202-272-0167 Last EDR Contact: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

#### PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 01/03/2022 Date Data Arrived at EDR: 03/31/2022 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 222

Source: Environmental Protection Agency

Telephone: 202-272-0167 Last EDR Contact: 10/04/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

### PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST HANDLING INSTR), Non-hazardous waste description (NON HAZ WASTE DESCRIPTION), DOT printed information (DOT\_PRINTED\_INFORMATION), Waste line handling instructions (WASTE\_LINE\_HANDLING\_INSTR), Waste residue comments (WASTE\_RESIDUE\_COMMENTS).

Date of Government Version: 01/03/2022 Date Data Arrived at EDR: 03/31/2022 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 222

Source: Environmental Protection Agency

Telephone: 202-272-0167 Last EDR Contact: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

#### PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020 Date Data Arrived at EDR: 03/17/2021 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 601

Source: Department of Health & Human Services

Telephone: 202-741-5770 Last EDR Contact: 10/28/2022

Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Varies

## PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 01/03/2022 Date Data Arrived at EDR: 03/31/2022 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 222

Source: Environmental Protection Agency

Telephone: 202-272-0167 Last EDR Contact: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits.

Date of Government Version: 01/03/2022 Date Data Arrived at EDR: 03/31/2022 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 222

Source: Environmental Protection Agency

Telephone: 202-272-0167 Last EDR Contact: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023

Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 01/03/2022 Date Data Arrived at EDR: 03/31/2022 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 222

Source: Environmental Protection Agency

Telephone: 202-272-0167 Last EDR Contact: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 08/22/2018 Date Data Arrived at EDR: 03/31/2022 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 222

Source: Environmental Protection Agency

Telephone: 202-272-0167 Last EDR Contact: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023

Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 08/22/2018 Date Data Arrived at EDR: 10/26/2022 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 13

Source: Environmental Protection Agency

Telephone: 202-272-0167 Last EDR Contact: 10/26/2022

Next Scheduled EDR Contact: 01/16/2023

Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 02/23/2022 Date Data Arrived at EDR: 03/31/2022 Date Made Active in Reports: 11/08/2022

Number of Days to Update: 222

Source: Environmental Protection Agency

Telephone: 202-272-0167 Last EDR Contact: 10/06/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of sites where PFAS contaminants has been detected to date.

Date of Government Version: 06/23/2021 Date Data Arrived at EDR: 06/23/2021 Date Made Active in Reports: 12/14/2021

Number of Days to Update: 174

Source: Department of Environment Quality

Telephone: 405-702-5100 Last EDR Contact: 09/22/2022

Next Scheduled EDR Contact: 01/10/2023 Data Release Frequency: Varies

AIRS: Permitted AIRS Facility Listing

A listing of permitted AIRS facility locations.

Date of Government Version: 09/13/2022 Date Data Arrived at EDR: 09/14/2022 Date Made Active in Reports: 12/07/2022

Number of Days to Update: 84

Source: Department of Environmental Quality

Telephone: 405-702-4100 Last EDR Contact: 12/13/2022

Next Scheduled EDR Contact: 04/03/2023 Data Release Frequency: Quarterly

ASBESTOS: Asbestos Notification Asbestos project site locations

> Date of Government Version: 07/11/2022 Date Data Arrived at EDR: 07/12/2022 Date Made Active in Reports: 09/26/2022

Number of Days to Update: 76

Source: Department of Labor Telephone: 405-521-6467 Last EDR Contact: 12/13/2022

Next Scheduled EDR Contact: 04/03/2023

Data Release Frequency: Varies

DRYCLEANERS: Drycleaner Facilities
A listing of drycleaner facility locations.

Date of Government Version: 09/13/2022 Date Data Arrived at EDR: 09/14/2022 Date Made Active in Reports: 12/07/2022

Number of Days to Update: 84

Source: Department of Environmental Quality

Telephone: 405-702-9100 Last EDR Contact: 12/13/2022

Next Scheduled EDR Contact: 04/03/2023 Data Release Frequency: Quarterly

Financial Assurance 1: Financial Assurance Information Listing Financial Assurance information.

Date of Government Version: 07/25/2014 Date Data Arrived at EDR: 11/06/2014

Date Made Active in Reports: 01/13/2015 Number of Days to Update: 68 Source: Department of Environmental Quality

Telephone: 405-702-5105 Last EDR Contact: 11/02/2022

Next Scheduled EDR Contact: 02/02/2023 Data Release Frequency: No Update Planned

Financial Assurance 2: Financial Assurance Information Listing

Financial Assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/10/2013 Date Data Arrived at EDR: 12/12/2013 Date Made Active in Reports: 01/24/2014

Number of Days to Update: 43

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 11/02/2022

Next Scheduled EDR Contact: 02/20/2023 Data Release Frequency: No Update Planned

TIER 2: Tier 2 Data Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2020 Date Data Arrived at EDR: 06/07/2021 Date Made Active in Reports: 08/31/2021

Number of Days to Update: 85

Source: Department of Environmental Quality

Telephone: 405-702-1000 Last EDR Contact: 12/09/2022

Next Scheduled EDR Contact: 03/20/2023 Data Release Frequency: Annually

UIC: Underground Injection Wells Database Listing

Class I injection wells. CLASS I wells are used to inject liquid hazardous and non-hazardous wastes beneath the lower most Underground Sources of Drinking Water (USDW).

Date of Government Version: 06/16/2022 Date Data Arrived at EDR: 07/12/2022 Date Made Active in Reports: 09/26/2022

Number of Days to Update: 76

Source: Department of Environmental Quality

Telephone: 405-702-5188 Last EDR Contact: 10/10/2022

Next Scheduled EDR Contact: 01/23/2023

Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014 Date Data Arrived at EDR: 01/06/2015 Date Made Active in Reports: 05/06/2015

Number of Days to Update: 120

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/28/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018 Date Data Arrived at EDR: 10/21/2019 Date Made Active in Reports: 10/24/2019

Number of Days to Update: 3

Source: USGS

Telephone: 703-648-6533 Last EDR Contact: 11/22/2022

Next Scheduled EDR Contact: 03/06/2023 Data Release Frequency: Varies

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 02/05/2015 Date Made Active in Reports: 03/06/2015

Number of Days to Update: 29

Source: EPA

Telephone: 202-564-2497 Last EDR Contact: 09/28/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011 Date Data Arrived at EDR: 08/05/2011 Date Made Active in Reports: 09/29/2011

Number of Days to Update: 55

Source: EPA, Office of Water Telephone: 202-564-2496 Last EDR Contact: 09/28/2022

Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually

#### **EDR HIGH RISK HISTORICAL RECORDS**

#### **EDR Exclusive Records**

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Source: EDR, Inc.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A

Telephone: N/A Last EDR Contact: N/A Number of Days to Update: N/A

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

### EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

#### **EDR RECOVERED GOVERNMENT ARCHIVES**

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Oklahoma.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/03/2014 Number of Days to Update: 186

Source: Department of Environmental Quality

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Oklahoma.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/20/2014 Number of Days to Update: 203

Source: Department of Environmental Quality

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Oklahoma Corporation Commission in Oklahoma.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 12/27/2013 Number of Days to Update: 179

Source: Oklahoma Corporation Commission

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/08/2022 Date Data Arrived at EDR: 08/08/2022 Date Made Active in Reports: 10/21/2022

Telephone: 860-424-3375 Last EDR Contact: 11/16/2022

Number of Days to Update: 74

Next Scheduled EDR Contact: 02/20/2023 Data Release Frequency: No Update Planned

Source: Department of Environmental Conservation

Source: Department of Energy & Environmental Protection

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD

Date of Government Version: 01/01/2019 Date Data Arrived at EDR: 10/29/2021 Date Made Active in Reports: 01/19/2022

Telephone: 518-402-8651

Last EDR Contact: 10/28/2022

Number of Days to Update: 82

Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Quarterly

## **GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING**

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 06/19/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 76

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 12/01/2022

Next Scheduled EDR Contact: 03/20/2023 Data Release Frequency: Annually

#### Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

#### Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

#### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

#### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

#### **Public Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Centers Source: Department of Human Services

Telephone: 405-521-3561

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

## **GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING**

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

#### STREET AND ADDRESS INFORMATION

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## **GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM**

#### **TARGET PROPERTY ADDRESS**

MAPS 4 RIVER FRON FIRST AMERICANS BLVD OKLAHOMA CITY, OK 73117

#### TARGET PROPERTY COORDINATES

Latitude (North): 35.461916 - 35<sup>27</sup> 42.90" Longitude (West): 97.476905 - 97<sup>28</sup> 28' 36.86"

Universal Tranverse Mercator: Zone 14 UTM X (Meters): 638208.0 UTM Y (Meters): 3925136.8

Elevation: 1159 ft. above sea level

#### **USGS TOPOGRAPHIC MAP**

Target Property Map: 12543169 MIDWEST CITY, OK

Version Date: 2018

West Map: 12543181 OKLAHOMA CITY, OK

Version Date: 2018

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

## **GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

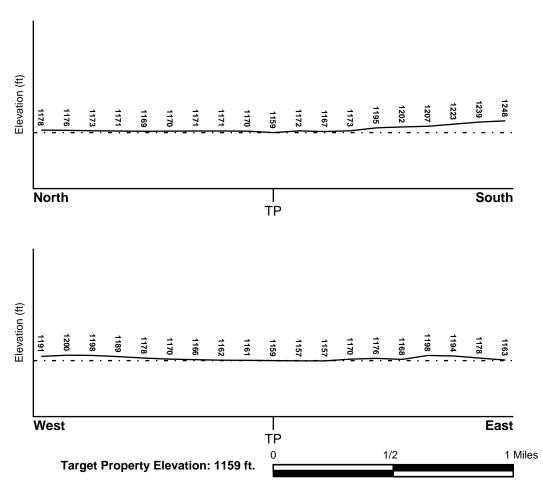
#### **TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ESE

#### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

#### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

#### **FEMA FLOOD ZONE**

Flood Plain Panel at Target Property FEMA Source Type

40027C0075H FEMA FIRM Flood data

Additional Panels in search area: FEMA Source Type

Not Reported

**NATIONAL WETLAND INVENTORY** 

NWI Quad at Target Property Data Coverage

MIDWEST CITY YES - refer to the Overview Map and Detail Map

#### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

LOCATION GENERAL DIRECTION

MAP ID FROM TP GROUNDWATER FLOW

Not Reported

## **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

## GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

## **GEOLOGIC AGE IDENTIFICATION**

Era: Paleozoic Category: Stratifed Sequence

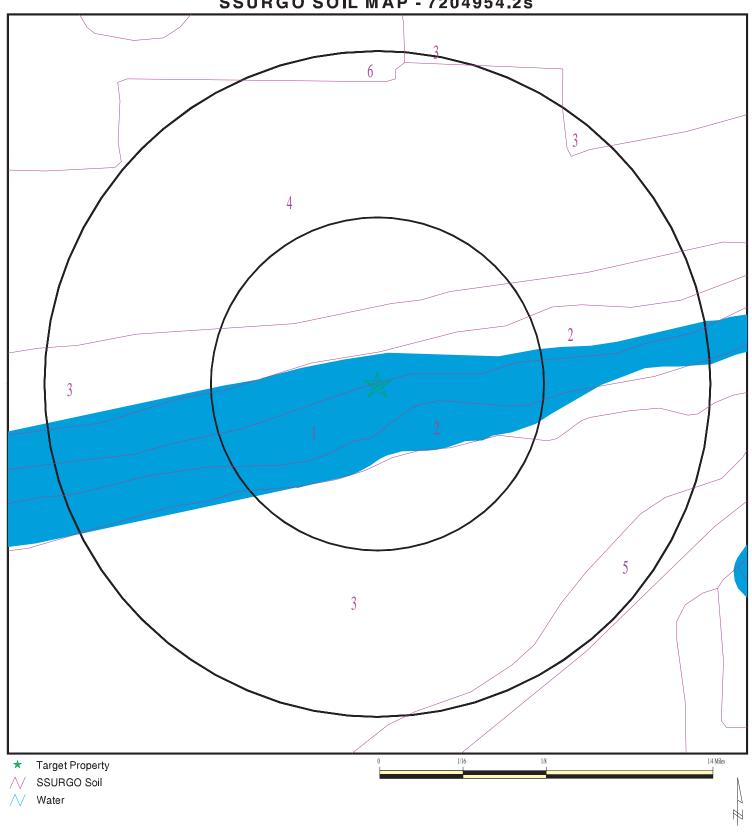
System: Permian

Series: Lower part of Leonardian Series

Code: P2a (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

## **SSURGO SOIL MAP - 7204954.2s**



SITE NAME: MAPS 4 River Fron ADDRESS: First Americans Blvd Oklahoma City OK 73117 35.461916 / 97.476905 LAT/LONG:

CLIENT: Triad Design Group CONTACT: Diane Abernathy INQUIRY #: 7204954.2s

DATE: December 15, 2022 10:42 am

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Water

Soil Surface Texture: water

Hydrologic Group: Not reported

Soil Drainage Class: Hydric Status: All hydric

Depth to Watertable Min:

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

	Soil Layer Information							
	Roundary		Saturated hydraulic					
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)	
1	0 inches	79 inches	water	Not reported	Not reported	Max: Min:	Max: Min:	

## Soil Map ID: 2

Soil Component Name: Gaddy

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to

> 0 inches

excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 31 inches

	Soil Layer Information								
Boundary				Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec			
1	0 inches	7 inches	loamy fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 7.9		
2	18 inches	79 inches	stratified fine sand to clay loam	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 7.9		
3	7 inches	18 inches	stratified fine sand to clay loam	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 7.9		

Soil Map ID: 3

Soil Component Name: Yahola

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Soil Layer Information								
	Bou	ındary		Classi	Classification				
Layer U	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	hydraulic conductivity micro m/sec			
1	3 inches	22 inches	fine sandy loam	Not reported	Not reported	Max: 42.33 Min: 14.114	Max: 8.4 Min: 7.9		
2	0 inches	3 inches	loam	Not reported	Not reported	Max: 42.33 Min: 14.114	Max: 8.4 Min: 7.9		
3	22 inches	48 inches	fine sandy loam	Not reported	Not reported	Max: 42.33 Min: 14.114	Max: 8.4 Min: 7.9		
4	48 inches	79 inches	stratified loamy fine sand to loam	Not reported	Not reported	Max: 42.33 Min: 14.114	Max: 8.4 Min: 7.9		

Soil Map ID: 4

Soil Component Name: Urban land

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class: Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boui	ndary	Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	79 inches	variable	Not reported	Not reported	Max: 14.114 Min: 0	Max: Min:

Soil Map ID: 5

Soil Component Name: Darsil

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Excessively drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Soil Layer Information								
	Bou	ındary		Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)		
1	0 inches	5 inches	loamy fine sand	Not reported	Not reported	Max: 14.114 Min: 1.4114	Max: Min:		
2	5 inches	9 inches	loamy fine sand	Not reported	Not reported	Max: 14.114 Min: 1.4114	Max: Min:		
3	9 inches	14 inches	bedrock	Not reported	Not reported	Max: 14.114 Min: 1.4114	Max: Min:		

Soil Map ID: 6

Soil Component Name: Latrass

Soil Surface Texture: loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Soil Layer Information								
Boundary		ındary		Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity Soi	Soil Reaction (pH)		
1	0 inches	5 inches	loam	Not reported	Not reported	Max: 0.4233 Min: 0.0106	Max: 8.4 Min: 7.4		
2	22 inches	42 inches	clay	Not reported	Not reported	Max: 0.4233 Min: 0.0106	Max: 8.4 Min: 7.4		
3	42 inches	79 inches	variable	Not reported	Not reported	Max: 0.4233 Min: 0.0106	Max: 8.4 Min: 7.4		

	Soil Layer Information							
	Boui	ndary	Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity	Soil Reaction (pH)	
4	5 inches	22 inches	clay loam	Not reported	Not reported	Max: 0.4233 Min: 0.0106	Max: 8.4 Min: 7.4	

## **LOCAL / REGIONAL WATER AGENCY RECORDS**

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

## FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
F18	USGS40000969846	1/8 - 1/4 Mile North
F26	USGS40000969856	1/8 - 1/4 Mile North
I56	USGS40000969737	1/8 - 1/4 Mile SW
143	USGS40000969922	1/4 - 1/2 Mile NNE
Z169	USGS40000969656	1/2 - 1 Mile South
AB191	USGS40000969895	1/2 - 1 Mile WNW
Z192	USGS40000969651	1/2 - 1 Mile South
AF193	USGS40000969691	1/2 - 1 Mile SE
AG194	USGS40000969941	1/2 - 1 Mile NW
AF196	USGS40000969690	1/2 - 1 Mile SE
AN256	USGS40000969977	1/2 - 1 Mile NNE
AF257	USGS40000969692	1/2 - 1 Mile SE
273	USGS40000969751	1/2 - 1 Mile East
AT305	USGS40000969685	1/2 - 1 Mile WSW
323	USGS40000970028	1/2 - 1 Mile North
342 470 CF529	USGS40000969633 USGS40000969726 USGS40000969898	1/2 - 1 Mile SSE 1/2 - 1 Mile WSW 1/2 - 1 Mile WNW 1/2 - 1 Mile WNW
CF530	USGS40000969899	1/2 - 1 WITE WINW

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID FROM TP

No PWS System Found

Note: PWS System location is not always the same as well location.

		LOCATION
MAP ID	WELL ID	FROM TP
1	OK70000000046054	0 - 1/8 Mile WSW
2	OK7000000194808	0 - 1/8 Mile ESE
A3	OK700000189258	0 - 1/8 Mile NNE
A4	OK700000191213	0 - 1/8 Mile NNE
A5	OK700000155268	0 - 1/8 Mile NNE
B6	OK700000155837	0 - 1/8 Mile NNW
B7	OK700000152407	0 - 1/8 Mile NNW
B8	OK700000046055	0 - 1/8 Mile NNW
C9	OK7000000191766	1/8 - 1/4 Mile SSE
10	OK7000000123651	1/8 - 1/4 Mile SSW
C11	OK700000137796	1/8 - 1/4 Mile SSE
B12	OK7000000172769	1/8 - 1/4 Mile NNW
B13	OK700000125894	1/8 - 1/4 Mile NNW
D14	OK7000000191765	1/8 - 1/4 Mile ESE
D15	OK7000000195336	1/8 - 1/4 Mile ESE
E16	OK7000000116611	1/8 - 1/4 Mile West
E17	OK7000000117059	1/8 - 1/4 Mile West
G19	OK7000000125396	1/8 - 1/4 Mile NNW
G20	OK700000125395	1/8 - 1/4 Mile NNW
G21	OK700000120149	1/8 - 1/4 Mile NNW
G22 G23	OK7000000172878 OK700000174960	1/8 - 1/4 Mile NNW 1/8 - 1/4 Mile NNW
G23 G24	OK7000000174960 OK7000000174959	1/8 - 1/4 Mile NNW
G25	OK7000000174959 OK7000000174958	1/8 - 1/4 Mile NNW
G27	OK7000000174338 OK7000000192024	1/8 - 1/4 Mile NNW
G28	OK700000132024 OK700000190909	1/8 - 1/4 Mile NNW
G29	OK700000193013	1/8 - 1/4 Mile NNW
G30	OK700000192048	1/8 - 1/4 Mile NNW
G31	OK700000188172	1/8 - 1/4 Mile NNW
G32	OK700000113190	1/8 - 1/4 Mile NNW
G33	OK700000190908	1/8 - 1/4 Mile NNW
G34	OK700000189209	1/8 - 1/4 Mile NNW
G35	OK700000196887	1/8 - 1/4 Mile NNW
G36	OK700000194554	1/8 - 1/4 Mile NNW
G37	OK7000000203464	1/8 - 1/4 Mile NNW
G38	OK7000000203222	1/8 - 1/4 Mile NNW
G39	OK700000194545	1/8 - 1/4 Mile NNW
G40	OK7000000193428	1/8 - 1/4 Mile NNW
G41	OK7000000194553	1/8 - 1/4 Mile NNW
G42	OK7000000194551	1/8 - 1/4 Mile NNW
F43	OK700000186039	1/8 - 1/4 Mile NNE
F44	OK700000186529	1/8 - 1/4 Mile NNE
F45	OK700000184323	1/8 - 1/4 Mile NNE

MAP ID			LOCATION
F47 OK700000184213 1/8 - 1/4 Mile NNE F48 OK700000187176 1/8 - 1/4 Mile NNE F49 OK700000187176 1/8 - 1/4 Mile NNE F50 OK700000200631 1/8 - 1/4 Mile NNE F50 OK700000200529 1/8 - 1/4 Mile NNE F51 OK700000193006 1/8 - 1/4 Mile NNE F52 OK700000193006 1/8 - 1/4 Mile NNE F53 OK700000193333 1/8 - 1/4 Mile NNE F53 OK700000196333 1/8 - 1/4 Mile South H55 OK700000199734 1/8 - 1/4 Mile South D57 OK700000191767 1/8 - 1/4 Mile SW H59 OK700000123652 1/8 - 1/4 Mile SW H69 OK700000149020 1/4 - 1/2 Mile SW H69 OK700000149020 1/4 - 1/2 Mile SW H61 OK700000149020 1/4 - 1/2 Mile SW H63 OK700000149019 1/4 - 1/2 Mile WNW H61 OK700000149019 1/4 - 1/2 Mile SW H64 OK700000194019 1/4 - 1/2 Mile WNW H64 OK700000194019 1/4 - 1/2 Mile WNW H64 OK70000018762 1/4 - 1/2 Mile NW L65 OK70000018762 1/4 - 1/2 Mile NW L66 OK70000018762 1/4 - 1/2 Mile NW L66 OK70000018762 1/4 - 1/2 Mile NW L67 OK700000184175 1/4 - 1/2 Mile NW L68 OK700000192007 1/4 - 1/2 Mile NW L69 OK700000192007 1/4 - 1/2 Mile NW L70 OK700000192007 1/4 - 1/2 Mile NW K72 OK700000182874 1/4 - 1/2 Mile NW K73 OK700000187484 1/4 - 1/2 Mile NW K74 OK700000187483 1/4 - 1/2 Mile North K75 OK700000187483 1/4 - 1/2 Mile North K76 OK700000187483 1/4 - 1/2 Mile North K76 OK700000187483 1/4 - 1/2 Mile North K78 OK700000187483 1/4 - 1/2 Mile North K80 OK700000194080 1/4 - 1/2 Mile North K81 OK700000194080 1/4 - 1/2 Mile North K85 OK700000194080 1/4 - 1/2 Mile North K86 OK700000194087 1/4 - 1/2 Mile North K89 OK700000194080 1/4 - 1/2 Mile North K89 OK700	MAP ID	WELL ID	
F47 OK700000184213 1/8 - 1/4 Mile NNE F48 OK700000187176 1/8 - 1/4 Mile NNE F49 OK700000187176 1/8 - 1/4 Mile NNE F50 OK700000200631 1/8 - 1/4 Mile NNE F50 OK700000200529 1/8 - 1/4 Mile NNE F51 OK700000193006 1/8 - 1/4 Mile NNE F52 OK700000193006 1/8 - 1/4 Mile NNE F53 OK700000193333 1/8 - 1/4 Mile NNE F53 OK700000196333 1/8 - 1/4 Mile South H55 OK700000199734 1/8 - 1/4 Mile South D57 OK700000191767 1/8 - 1/4 Mile SW H59 OK700000123652 1/8 - 1/4 Mile SW H69 OK700000149020 1/4 - 1/2 Mile SW H69 OK700000149020 1/4 - 1/2 Mile SW H61 OK700000149020 1/4 - 1/2 Mile SW H63 OK700000149019 1/4 - 1/2 Mile WNW H61 OK700000149019 1/4 - 1/2 Mile SW H64 OK700000194019 1/4 - 1/2 Mile WNW H64 OK700000194019 1/4 - 1/2 Mile WNW H64 OK70000018762 1/4 - 1/2 Mile NW L65 OK70000018762 1/4 - 1/2 Mile NW L66 OK70000018762 1/4 - 1/2 Mile NW L66 OK70000018762 1/4 - 1/2 Mile NW L67 OK700000184175 1/4 - 1/2 Mile NW L68 OK700000192007 1/4 - 1/2 Mile NW L69 OK700000192007 1/4 - 1/2 Mile NW L70 OK700000192007 1/4 - 1/2 Mile NW K72 OK700000182874 1/4 - 1/2 Mile NW K73 OK700000187484 1/4 - 1/2 Mile NW K74 OK700000187483 1/4 - 1/2 Mile North K75 OK700000187483 1/4 - 1/2 Mile North K76 OK700000187483 1/4 - 1/2 Mile North K76 OK700000187483 1/4 - 1/2 Mile North K78 OK700000187483 1/4 - 1/2 Mile North K80 OK700000194080 1/4 - 1/2 Mile North K81 OK700000194080 1/4 - 1/2 Mile North K85 OK700000194080 1/4 - 1/2 Mile North K86 OK700000194087 1/4 - 1/2 Mile North K89 OK700000194080 1/4 - 1/2 Mile North K89 OK700		OK7000000184313	1/0 1/4 Mile NINE
F48 OK700000187176			
F49			
F50			
F51 OK700000197614 1/8 - 1/4 Mile NNE F52 OK700000193006 1/8 - 1/4 Mile NNE F53 OK7000000193033 1/8 - 1/4 Mile NNE H54 OK700000184973 1/8 - 1/4 Mile NNE H55 OK70000019734 1/8 - 1/4 Mile South H55 OK700000019767 1/8 - 1/4 Mile South H55 OK700000019767 1/8 - 1/4 Mile South H59 OK7000000193652 1/8 - 1/4 Mile SW H59 OK7000000149020 1/4 - 1/2 Mile SW H69 OK700000149020 1/4 - 1/2 Mile SW H61 OK700000184764 1/4 - 1/2 Mile SW H61 OK700000184764 1/4 - 1/2 Mile SW H61 OK700000184718 1/4 - 1/2 Mile SW H62 OK700000184718 1/4 - 1/2 Mile SW H63 OK700000184718 1/4 - 1/2 Mile WNW H63 OK700000191504 1/4 - 1/2 Mile WNW L65 OK700000191504 1/4 - 1/2 Mile WNW L66 OK700000185782 1/4 - 1/2 Mile NW L66 OK700000184715 1/4 - 1/2 Mile NW L67 OK70000018475 1/4 - 1/2 Mile NW L68 OK700000192007 1/4 - 1/2 Mile NW L68 OK700000192007 1/4 - 1/2 Mile NW L70 OK700000192072 1/4 - 1/2 Mile NW L70 OK700000192072 1/4 - 1/2 Mile NW L71 OK700000189259 1/4 - 1/2 Mile NW K72 OK700000184784 1/4 - 1/2 Mile NW K73 OK700000184783 1/4 - 1/2 Mile NW K74 OK700000184783 1/4 - 1/2 Mile North K75 OK700000184783 1/4 - 1/2 Mile North K76 OK700000184783 1/4 - 1/2 Mile North K77 OK700000185786 1/4 - 1/2 Mile North K78 OK700000184783 1/4 - 1/2 Mile North K78 OK700000184935 1/4 - 1/2 Mile North K78 OK700000184936 1/4 - 1/2 Mile North K79 OK700000184936 1/4 - 1/2 Mile North K80 OK700000184936 1/4 - 1/2 Mile North K81 OK700000184936 1/4 - 1/2 Mile North K82 OK700000184936 1/4 - 1/2 Mile North K84 OK700000194936 1/4 - 1/2 Mile North K85 OK700000184936 1/4 - 1/2 Mile North K86 OK700000184936 1/4 - 1/2 Mile North K86 OK700000194936 1/4 - 1/2 Mile North K88 OK700000194936 1/4 - 1/2 Mile North K89 OK700000194086 1/4 - 1/2 Mile North K89 OK700000194086 1/4 - 1/2 Mile North K89 OK700000185796 1/4 - 1/2 Mile North W89 OK700000185999 1/4 - 1/2 Mile North W89 OK700000185999 1/4 - 1/2 M	_		.,,
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F53			
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D57  OK700000191767			
158	H55	OK700000199734	1/8 - 1/4 Mile South
H59	D57	OK700000191767	1/8 - 1/4 Mile ESE
J60 OK700000187064 1/4 - 1/2 Mile SSW H61 OK700000123656 1/4 - 1/2 Mile SSW 62 OK700000184718 1/4 - 1/2 Mile WNW 63 OK700000149019 1/4 - 1/2 Mile WNW 63 OK700000149019 1/4 - 1/2 Mile SSE K64 OK700000191504 1/4 - 1/2 Mile NW L65 OK700000185782 1/4 - 1/2 Mile NW L66 OK700000185782 1/4 - 1/2 Mile NW L67 OK700000184175 1/4 - 1/2 Mile NW L68 OK700000192007 1/4 - 1/2 Mile NW L69 OK700000192007 1/4 - 1/2 Mile NW L70 OK700000192007 1/4 - 1/2 Mile NW L71 OK700000192874 1/4 - 1/2 Mile NW L71 OK700000192072 1/4 - 1/2 Mile NW K72 OK700000187484 1/4 - 1/2 Mile NW K73 OK700000187484 1/4 - 1/2 Mile North K73 OK700000187483 1/4 - 1/2 Mile North K75 OK700000187483 1/4 - 1/2 Mile North K76 OK700000187483 1/4 - 1/2 Mile North K77 OK700000187483 1/4 - 1/2 Mile North K78 OK700000187482 1/4 - 1/2 Mile North K79 OK700000187482 1/4 - 1/2 Mile North K79 OK700000187483 1/4 - 1/2 Mile North K80 OK700000191211 1/4 - 1/2 Mile North K81 OK700000194936 1/4 - 1/2 Mile North K81 OK700000194936 1/4 - 1/2 Mile North K81 OK700000194934 1/4 - 1/2 Mile North K82 OK700000194934 1/4 - 1/2 Mile North K83 OK700000194934 1/4 - 1/2 Mile North K84 OK700000194086 1/4 - 1/2 Mile North K85 OK700000194087 1/4 - 1/2 Mile North K86 OK700000194087 1/4 - 1/2 Mile North K87 OK700000187000 1/4 - 1/2 Mile North K88 OK700000194087 1/4 - 1/2 Mile North K86 OK700000194087 1/4 - 1/2 Mile North K87 OK700000194087 1/4 - 1/2 Mile North K88 OK700000194087 1/4 - 1/2 Mile North K89 OK700000194087 1/4 - 1/2 Mile North W90 OK700000194089 1/4 - 1/2 Mile North W90 OK700000194089 1/4 - 1/2 Mile North W90 OK700000193099 1/4 - 1/2 Mile North W96 OK700000123648 1/4 - 1/2 Mile North W96 OK700000116871 1/4 - 1/2 Mile SW	I58	OK700000123652	1/8 - 1/4 Mile SW
H61	H59	OK700000149020	
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63         OK700000149019         1/4 - 1/2 Mile SSE           K64         OK700000200991         1/4 - 1/2 Mile NNE           L65         OK700000191504         1/4 - 1/2 Mile NW           L66         OK7000000185782         1/4 - 1/2 Mile NW           L67         OK7000000182007         1/4 - 1/2 Mile NW           L68         OK7000000192007         1/4 - 1/2 Mile NW           L69         OK7000000192874         1/4 - 1/2 Mile NW           L70         OK7000000192072         1/4 - 1/2 Mile NW           K72         OK7000000187484         1/4 - 1/2 Mile North           K73         OK7000000187484         1/4 - 1/2 Mile North           K74         OK7000000189259         1/4 - 1/2 Mile North           K75         OK7000000187483         1/4 - 1/2 Mile North           K76         OK7000000187483         1/4 - 1/2 Mile North           K77         OK700000187482         1/4 - 1/2 Mile North           K78         OK7000000187482         1/4 - 1/2 Mile North           K79         OK7000000187482         1/4 - 1/2 Mile North           K80         OK7000000194936         1/4 - 1/2 Mile North           K81         OK70000001949436         1/4 - 1/2 Mile North           K82         OK700000194086 <t< td=""><td>_</td><td></td><td></td></t<>	_		
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K74       OK7000000191210       1/4 - 1/2 Mile North         K75       OK7000000187483       1/4 - 1/2 Mile North         K76       OK7000000184935       1/4 - 1/2 Mile North         K77       OK7000000185796       1/4 - 1/2 Mile North         K78       OK7000000187482       1/4 - 1/2 Mile North         K79       OK7000000191211       1/4 - 1/2 Mile North         K80       OK7000000194936       1/4 - 1/2 Mile North         K81       OK7000000198483       1/4 - 1/2 Mile North         K82       OK7000000194934       1/4 - 1/2 Mile North         K83       OK7000000194934       1/4 - 1/2 Mile North         K84       OK7000000194086       1/4 - 1/2 Mile North         K85       OK7000000194087       1/4 - 1/2 Mile North         K86       OK7000000187001       1/4 - 1/2 Mile North         K88       OK7000000187000       1/4 - 1/2 Mile North         K89       OK700000019147       1/4 - 1/2 Mile North         K90       OK700000019330       1/4 - 1/2 Mile North         K91       OK700000019330       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile SSW         93       OK7000000183999       1/4 - 1/2 Mile SW         N97       OK700000012365			
K75       OK700000187483       1/4 - 1/2 Mile North         K76       OK7000000184935       1/4 - 1/2 Mile North         K77       OK7000000185796       1/4 - 1/2 Mile North         K78       OK7000000187482       1/4 - 1/2 Mile North         K79       OK7000000191211       1/4 - 1/2 Mile North         K80       OK7000000194936       1/4 - 1/2 Mile North         K81       OK7000000198483       1/4 - 1/2 Mile North         K82       OK7000000194934       1/4 - 1/2 Mile North         K83       OK7000000194934       1/4 - 1/2 Mile North         K85       OK7000000194086       1/4 - 1/2 Mile North         K86       OK7000000194087       1/4 - 1/2 Mile North         K87       OK7000000187001       1/4 - 1/2 Mile North         K88       OK700000187000       1/4 - 1/2 Mile North         K89       OK700000192330       1/4 - 1/2 Mile North         K90       OK7000000192330       1/4 - 1/2 Mile North         K91       OK700000123648       1/4 - 1/2 Mile SSW         93       OK70000001369399       1/4 - 1/2 Mile North         M96       OK700000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE			
K76       OK700000184935       1/4 - 1/2 Mile North         K77       OK700000185796       1/4 - 1/2 Mile North         K78       OK700000187482       1/4 - 1/2 Mile North         K79       OK700000191211       1/4 - 1/2 Mile North         K80       OK700000194936       1/4 - 1/2 Mile North         K81       OK7000000198483       1/4 - 1/2 Mile North         K82       OK700000198484       1/4 - 1/2 Mile North         K83       OK700000194934       1/4 - 1/2 Mile North         K84       OK700000191212       1/4 - 1/2 Mile North         K85       OK700000194086       1/4 - 1/2 Mile North         K86       OK700000194087       1/4 - 1/2 Mile North         K87       OK7000000187001       1/4 - 1/2 Mile North         K88       OK700000187000       1/4 - 1/2 Mile North         K89       OK70000019147       1/4 - 1/2 Mile North         K90       OK700000192330       1/4 - 1/2 Mile North         K91       OK700000192330       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile SSW         94       OK700000193793       1/4 - 1/2 Mile North         M96       OK700000123657       1/4 - 1/2 Mile SW         N97       OK7000000116871       <			
K77       OK7000000185796       1/4 - 1/2 Mile North         K78       OK7000000187482       1/4 - 1/2 Mile North         K79       OK7000000191211       1/4 - 1/2 Mile North         K80       OK7000000194936       1/4 - 1/2 Mile North         K81       OK7000000198483       1/4 - 1/2 Mile North         K82       OK700000198484       1/4 - 1/2 Mile North         K83       OK700000194934       1/4 - 1/2 Mile North         K84       OK700000191212       1/4 - 1/2 Mile North         K85       OK700000194086       1/4 - 1/2 Mile North         K86       OK700000194087       1/4 - 1/2 Mile North         K87       OK700000187001       1/4 - 1/2 Mile North         K88       OK700000187000       1/4 - 1/2 Mile North         K89       OK700000191477       1/4 - 1/2 Mile North         K90       OK700000195482       1/4 - 1/2 Mile North         K91       OK700000192330       1/4 - 1/2 Mile North         K91       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000133648       1/4 - 1/2 Mile SSW         94       OK700000133648       1/4 - 1/2 Mile North         M96       OK700000123657       1/4 - 1/2 Mile SW         N97       OK700000116871			
K78       OK7000000187482       1/4 - 1/2 Mile North         K79       OK7000000191211       1/4 - 1/2 Mile North         K80       OK7000000194936       1/4 - 1/2 Mile North         K81       OK7000000198483       1/4 - 1/2 Mile North         K82       OK700000198484       1/4 - 1/2 Mile North         K83       OK700000194934       1/4 - 1/2 Mile North         K84       OK700000191212       1/4 - 1/2 Mile North         K85       OK700000194086       1/4 - 1/2 Mile North         K86       OK700000194087       1/4 - 1/2 Mile North         K87       OK700000187001       1/4 - 1/2 Mile North         K88       OK700000187000       1/4 - 1/2 Mile North         K89       OK70000019147       1/4 - 1/2 Mile North         K90       OK700000195482       1/4 - 1/2 Mile North         K91       OK700000192330       1/4 - 1/2 Mile North         K91       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000183999       1/4 - 1/2 Mile North         M96       OK700000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE			
K79       OK7000000191211       1/4 - 1/2 Mile North         K80       OK7000000194936       1/4 - 1/2 Mile North         K81       OK7000000198483       1/4 - 1/2 Mile North         K82       OK7000000198484       1/4 - 1/2 Mile North         K83       OK700000194934       1/4 - 1/2 Mile North         K84       OK700000191212       1/4 - 1/2 Mile North         K85       OK700000194086       1/4 - 1/2 Mile North         K86       OK700000194087       1/4 - 1/2 Mile North         K87       OK700000187001       1/4 - 1/2 Mile North         K88       OK700000187000       1/4 - 1/2 Mile North         K89       OK70000019147       1/4 - 1/2 Mile North         K90       OK700000195482       1/4 - 1/2 Mile North         K91       OK700000192330       1/4 - 1/2 Mile North         K91       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000133793       1/4 - 1/2 Mile SSW         94       OK700000183999       1/4 - 1/2 Mile North         M96       OK7000000123657       1/4 - 1/2 Mile SW         N97       OK7000000116871       1/4 - 1/2 Mile SE			
K80       OK7000000194936       1/4 - 1/2 Mile North         K81       OK7000000198483       1/4 - 1/2 Mile North         K82       OK7000000198484       1/4 - 1/2 Mile North         K83       OK7000000194934       1/4 - 1/2 Mile North         K84       OK700000191212       1/4 - 1/2 Mile North         K85       OK7000000194086       1/4 - 1/2 Mile North         K86       OK7000000194087       1/4 - 1/2 Mile North         K87       OK700000187001       1/4 - 1/2 Mile North         K88       OK700000187000       1/4 - 1/2 Mile North         K89       OK700000191147       1/4 - 1/2 Mile North         K90       OK700000195482       1/4 - 1/2 Mile North         K91       OK700000192330       1/4 - 1/2 Mile North         J92       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000133793       1/4 - 1/2 Mile East         K95       OK700000183999       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE			
K82       OK7000000198484       1/4 - 1/2 Mile North         K83       OK7000000194934       1/4 - 1/2 Mile North         K84       OK7000000191212       1/4 - 1/2 Mile North         K85       OK7000000194086       1/4 - 1/2 Mile North         K86       OK700000194087       1/4 - 1/2 Mile North         K87       OK700000187001       1/4 - 1/2 Mile North         K88       OK7000000187000       1/4 - 1/2 Mile North         K89       OK700000191147       1/4 - 1/2 Mile North         K90       OK700000195482       1/4 - 1/2 Mile North         K91       OK700000192330       1/4 - 1/2 Mile North         J92       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000193793       1/4 - 1/2 Mile East         K95       OK700000183999       1/4 - 1/2 Mile North         M96       OK7000000123657       1/4 - 1/2 Mile SW         N97       OK7000000116871       1/4 - 1/2 Mile SE		OK700000194936	1/4 - 1/2 Mile North
K83       OK7000000194934       1/4 - 1/2 Mile North         K84       OK7000000191212       1/4 - 1/2 Mile North         K85       OK7000000194086       1/4 - 1/2 Mile North         K86       OK7000000194087       1/4 - 1/2 Mile North         K87       OK700000187001       1/4 - 1/2 Mile North         K88       OK700000187000       1/4 - 1/2 Mile North         K89       OK700000191147       1/4 - 1/2 Mile North         K90       OK700000195482       1/4 - 1/2 Mile North         K91       OK700000192330       1/4 - 1/2 Mile North         J92       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000193793       1/4 - 1/2 Mile East         K95       OK700000183999       1/4 - 1/2 Mile North         M96       OK700000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE	K81	OK700000198483	1/4 - 1/2 Mile North
K84       OK7000000191212       1/4 - 1/2 Mile North         K85       OK7000000194086       1/4 - 1/2 Mile North         K86       OK7000000194087       1/4 - 1/2 Mile North         K87       OK7000000187001       1/4 - 1/2 Mile North         K88       OK700000187000       1/4 - 1/2 Mile North         K89       OK700000191147       1/4 - 1/2 Mile North         K90       OK700000195482       1/4 - 1/2 Mile North         K91       OK700000192330       1/4 - 1/2 Mile North         J92       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000193793       1/4 - 1/2 Mile East         K95       OK700000183999       1/4 - 1/2 Mile North         M96       OK700000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE	K82	OK700000198484	1/4 - 1/2 Mile North
K85       OK7000000194086       1/4 - 1/2 Mile North         K86       OK7000000194087       1/4 - 1/2 Mile North         K87       OK7000000187001       1/4 - 1/2 Mile North         K88       OK7000000187000       1/4 - 1/2 Mile North         K89       OK700000191147       1/4 - 1/2 Mile North         K90       OK700000195482       1/4 - 1/2 Mile North         K91       OK700000192330       1/4 - 1/2 Mile North         J92       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000193793       1/4 - 1/2 Mile East         K95       OK700000183999       1/4 - 1/2 Mile North         M96       OK7000000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE	K83	OK700000194934	1/4 - 1/2 Mile North
K86       OK7000000194087       1/4 - 1/2 Mile North         K87       OK7000000187001       1/4 - 1/2 Mile North         K88       OK7000000187000       1/4 - 1/2 Mile North         K89       OK7000000191147       1/4 - 1/2 Mile North         K90       OK700000195482       1/4 - 1/2 Mile North         K91       OK700000192330       1/4 - 1/2 Mile North         J92       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000193793       1/4 - 1/2 Mile East         K95       OK700000183999       1/4 - 1/2 Mile North         M96       OK700000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE		OK700000191212	
K87       OK7000000187001       1/4 - 1/2 Mile North         K88       OK7000000187000       1/4 - 1/2 Mile North         K89       OK7000000191147       1/4 - 1/2 Mile North         K90       OK7000000195482       1/4 - 1/2 Mile North         K91       OK700000192330       1/4 - 1/2 Mile North         J92       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000193793       1/4 - 1/2 Mile East         K95       OK700000183999       1/4 - 1/2 Mile North         M96       OK700000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE			
K88       OK7000000187000       1/4 - 1/2 Mile North         K89       OK7000000191147       1/4 - 1/2 Mile North         K90       OK7000000195482       1/4 - 1/2 Mile North         K91       OK7000000192330       1/4 - 1/2 Mile North         J92       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000193793       1/4 - 1/2 Mile East         K95       OK700000183999       1/4 - 1/2 Mile North         M96       OK700000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE			
K89       OK7000000191147       1/4 - 1/2 Mile North         K90       OK7000000195482       1/4 - 1/2 Mile North         K91       OK7000000192330       1/4 - 1/2 Mile North         J92       OK700000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000193793       1/4 - 1/2 Mile East         K95       OK700000183999       1/4 - 1/2 Mile North         M96       OK700000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE			
K90       OK7000000195482       1/4 - 1/2 Mile North         K91       OK7000000192330       1/4 - 1/2 Mile North         J92       OK7000000150050       1/4 - 1/2 Mile SSW         93       OK700000123648       1/4 - 1/2 Mile West         94       OK700000193793       1/4 - 1/2 Mile East         K95       OK700000183999       1/4 - 1/2 Mile North         M96       OK700000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE			
K91       OK7000000192330       1/4 - 1/2 Mile North         J92       OK7000000150050       1/4 - 1/2 Mile SSW         93       OK7000000123648       1/4 - 1/2 Mile West         94       OK700000193793       1/4 - 1/2 Mile East         K95       OK700000183999       1/4 - 1/2 Mile North         M96       OK7000000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE			.,,
J92       OK7000000150050       1/4 - 1/2 Mile SSW         93       OK7000000123648       1/4 - 1/2 Mile West         94       OK7000000193793       1/4 - 1/2 Mile East         K95       OK7000000183999       1/4 - 1/2 Mile North         M96       OK7000000123657       1/4 - 1/2 Mile SW         N97       OK700000116871       1/4 - 1/2 Mile SE			
93 OK700000123648 1/4 - 1/2 Mile West 94 OK700000193793 1/4 - 1/2 Mile East K95 OK700000183999 1/4 - 1/2 Mile North M96 OK700000123657 1/4 - 1/2 Mile SW N97 OK700000116871 1/4 - 1/2 Mile SE			.,,
94 OK700000193793 1/4 - 1/2 Mile East K95 OK700000183999 1/4 - 1/2 Mile North M96 OK700000123657 1/4 - 1/2 Mile SW N97 OK700000116871 1/4 - 1/2 Mile SE			
K95       OK7000000183999       1/4 - 1/2 Mile North         M96       OK7000000123657       1/4 - 1/2 Mile SW         N97       OK7000000116871       1/4 - 1/2 Mile SE			
M96 OK700000123657 1/4 - 1/2 Mile SW N97 OK700000116871 1/4 - 1/2 Mile SE			
N97 OK7000000116871 1/4 - 1/2 Mile SE			
1/4 - 1/2 WIII SE			
	1400	J.1. 000000 1 10070	1/T 1/Z WING OL

		LOCATION
MAP ID	WELL ID	FROM TP
		_
N99	OK7000000116869	1/4 - 1/2 Mile SE
N100	OK700000116994	1/4 - 1/2 Mile SE
N101	OK700000116992	1/4 - 1/2 Mile SE
N102	OK700000116991	1/4 - 1/2 Mile SE
O103	OK700000186223	1/4 - 1/2 Mile North
O104	OK7000000201998	1/4 - 1/2 Mile North
105	OK700000123653	1/4 - 1/2 Mile WSW
K106	OK700000191544	1/4 - 1/2 Mile North
K107	OK700000197676	1/4 - 1/2 Mile North 1/4 - 1/2 Mile NNW
O108 M109	OK700000176012	
O110	OK700000184717 OK700000176011	1/4 - 1/2 Mile SW 1/4 - 1/2 Mile NNW
M111	OK7000000178011 OK7000000184716	1/4 - 1/2 Mile SW
M112	OK7000000184716 OK7000000184864	1/4 - 1/2 Mile SW
P113	OK7000000184804 OK7000000184719	1/4 - 1/2 Mile SW
O114	OK7000000184719 OK7000000176007	1/4 - 1/2 Mile Svv
115	OK7000000176007 OK7000000198842	1/4 - 1/2 Mile NNW
Q116	OK7000000198042	1/4 - 1/2 Mile NNE
Q117	OK7000000182033	1/4 - 1/2 Mile NNE
Q118	OK7000000163530	1/4 - 1/2 Mile NNE
Q119	OK7000000178715	1/4 - 1/2 Mile NNE
Q120	OK7000000176715	1/4 - 1/2 Mile NNE
Q121	OK700000184055	1/4 - 1/2 Mile NNE
R122	OK700000187065	1/4 - 1/2 Mile SSW
123	OK700000123284	1/4 - 1/2 Mile South
R124	OK700000138601	1/4 - 1/2 Mile SSW
P125	OK700000123658	1/4 - 1/2 Mile SW
126	OK700000123647	1/4 - 1/2 Mile West
Q127	OK700000139501	1/4 - 1/2 Mile NE
Q128	OK700000137222	1/4 - 1/2 Mile NE
Q129	OK700000141956	1/4 - 1/2 Mile NE
Q130	OK700000148882	1/4 - 1/2 Mile NE
Q131	OK700000148307	1/4 - 1/2 Mile NE
R132	OK700000123285	1/4 - 1/2 Mile SSW
R133	OK700000151518	1/4 - 1/2 Mile SSW
134	OK700000119117	1/4 - 1/2 Mile NW
135	OK700000124868	1/4 - 1/2 Mile WSW
S136	OK700000176008	1/4 - 1/2 Mile NNE
T137	OK700000190409	1/4 - 1/2 Mile NE
S138	OK7000000176009	1/4 - 1/2 Mile NNE
U139	OK700000196888	1/4 - 1/2 Mile North
U140	OK700000184174	1/4 - 1/2 Mile North
U141	OK7000000202595	1/4 - 1/2 Mile North
S142	OK700000194365	1/4 - 1/2 Mile North
144	OK700000127692	1/4 - 1/2 Mile WNW
V145	OK700000188855	1/4 - 1/2 Mile NNW
V146	OK700000196093	1/4 - 1/2 Mile NNW
S147	OK700000162393	1/4 - 1/2 Mile NNE
S148	OK700000162392	1/4 - 1/2 Mile NNE
S149	OK700000164275	1/4 - 1/2 Mile NNE
W150 W151	OK700000169303 OK700000173879	1/2 - 1 Mile SW 1/2 - 1 Mile SW
WISI	OK100000113019	1/2 - 1 Wille 344

		LOCATION
MAP ID	WELL ID	FROM TP
W152	OK7000000169302	1/2 - 1 Mile SW
W153	OK7000000123287	1/2 - 1 Mile SW
W154	OK7000000168643	1/2 - 1 Mile SW
X155	OK7000000176092	1/2 - 1 Mile SSW
X156	OK700000176091	1/2 - 1 Mile SSW
157	OK700000150455	1/2 - 1 Mile NW
T158	OK7000000176013	1/2 - 1 Mile NE
Y159	OK7000000123281	1/2 - 1 Mile WSW
Y160	OK7000000127065	1/2 - 1 Mile WSW
X161	OK700000180408	1/2 - 1 Mile SSW
Z162	OK7000000161547	1/2 - 1 Mile South
Z163	OK7000000158081	1/2 - 1 Mile South
Z164	OK7000000156859	1/2 - 1 Mile South
X165	OK7000000184350	1/2 - 1 Mile SSW
X166	OK700000182633	1/2 - 1 Mile SSW
X167	OK7000000183845	1/2 - 1 Mile SSW
X168	OK700000180972	1/2 - 1 Mile SSW
X170	OK7000000176096	1/2 - 1 Mile SSW
X171	OK7000000180409	1/2 - 1 Mile SSW
W172	OK700000184974	1/2 - 1 Mile SW
X173	OK7000000173180	1/2 - 1 Mile SSW
X174	OK7000000173750	1/2 - 1 Mile SSW
X175	OK7000000173752	1/2 - 1 Mile SSW
X176	OK7000000173751	1/2 - 1 Mile SSW
X177	OK700000176095	1/2 - 1 Mile SSW
AA178	OK700000133685	1/2 - 1 Mile North
AB179	OK7000000188608	1/2 - 1 Mile NW
AB180	OK700000196092	1/2 - 1 Mile NW
AB181	OK700000199322	1/2 - 1 Mile NW
X182	OK700000164422	1/2 - 1 Mile SSW
X183	OK700000176093	1/2 - 1 Mile SSW
X184	OK700000176094	1/2 - 1 Mile SSW
AC185	OK7000000117177	1/2 - 1 Mile NE
AC186	OK700000117176	1/2 - 1 Mile NE
AC187	OK700000117175	1/2 - 1 Mile NE
AC188	OK700000201725	1/2 - 1 Mile NE 1/2 - 1 Mile NE
AD189 AE190	OK700000164017	
195	OK700000123627 OK700000134237	1/2 - 1 Mile West 1/2 - 1 Mile South
AH197		1/2 - 1 Mile South
	OK700000154630 OK700000154631	1/2 - 1 Mile SW
AH198		
AH199 AH200	OK700000154632	1/2 - 1 Mile SW 1/2 - 1 Mile SW
AH200 AH201	OK700000123288 OK700000154628	1/2 - 1 Mile SW
AH201 AH202	OK7000000154628 OK7000000154629	1/2 - 1 Mile SW
AH202 AH203	OK7000000154629 OK7000000155831	1/2 - 1 Mile SW
A1203 A1204	OK7000000133831 OK7000000046056	1/2 - 1 Mile Svv
AA205	OK700000048038 OK7000000201750	1/2 - 1 Mile North
AA205 AA206	OK7000000201730	1/2 - 1 Mile North
AA200 AA207	OK7000000183434 OK7000000203223	1/2 - 1 Mile North
AI207 AI208	OK7000000203223 OK7000000189690	1/2 - 1 Mile North
Al206 Al209	OK7000000189690 OK7000000189178	1/2 - 1 Mile North
AIZUU	311100000103110	I/Z - I WIIIG INUIUI

		LOCATION	
MAP ID	WELL ID	FROM TP	
Al210	OK7000000190833	1/2 - 1 Mile North	
Al211	OK700000192488	1/2 - 1 Mile North	
Al212	OK7000000190834	1/2 - 1 Mile North	
Al213	OK7000000180004	1/2 - 1 Mile North	
Al214	OK7000000184979	1/2 - 1 Mile North	
Al214 Al215	OK7000000184579	1/2 - 1 Mile North	
Al216	OK7000000184313 OK7000000185617	1/2 - 1 Mile North	
Al217	OK700000188840	1/2 - 1 Mile North	
Al217 Al218	OK7000000188840 OK7000000185618	1/2 - 1 Mile North	
_	OK7000000183618 OK7000000194367	1/2 - 1 Mile North	
Al219 Al220			
	OK700000194366	1/2 - 1 Mile North	
Al221	OK700000196186	1/2 - 1 Mile North	
Al222	OK700000199784	1/2 - 1 Mile North	
Al223	OK700000198173	1/2 - 1 Mile North	
Al224	OK7000000192873	1/2 - 1 Mile North	
Al225	OK7000000192489	1/2 - 1 Mile North	
Al226	OK7000000194272	1/2 - 1 Mile North	
Al227	OK700000194364	1/2 - 1 Mile North	
Al228	OK7000000194363	1/2 - 1 Mile North	
229	OK7000000175346	1/2 - 1 Mile SSW	
230	OK7000000116832	1/2 - 1 Mile WNW	
AA231	OK7000000176001	1/2 - 1 Mile North	
AA232	OK7000000176000	1/2 - 1 Mile North	
233	OK700000125318	1/2 - 1 Mile ENE	
AA234	OK700000133661	1/2 - 1 Mile North 1/2 - 1 Mile WSW	
AJ235 AA236	OK700000190697	1/2 - 1 Mile WSW	
	OK7000000176003 OK7000000198553	1/2 - 1 Mile North	
AJ237 AA238	OK7000000198553	1/2 - 1 Mile WSW	
AK230 AK239	OK7000000170930 OK7000000187066	1/2 - 1 Mile North	
AK240	OK7000000187000 OK7000000199735	1/2 - 1 Mile SW	
AD241	OK7000000199733 OK7000000176010	1/2 - 1 Mile SW	
AL242	OK7000000170010 OK7000000174606	1/2 - 1 Mile NL	
AD243	OK7000000174000 OK7000000172156	1/2 - 1 Mile NRW	
AA244	OK7000000172130 OK7000000176004	1/2 - 1 Mile North	
AA245	OK700000017000 <del>4</del> OK7000000170927	1/2 - 1 Mile North	
AH246	OK7000000170327 OK7000000199279	1/2 - 1 Mile North	
AM247	OK7000000133273	1/2 - 1 Mile Svv	
AE248	OK7000000133002	1/2 - 1 Mile West	
AN249	OK7000000147003	1/2 - 1 Mile West	
AN250	OK7000000194434 OK7000000203329	1/2 - 1 Mile NNE	
AJ251	OK7000000203329 OK7000000140789	1/2 - 1 Mile WSW	
AJ252	OK7000000140703	1/2 - 1 Mile WSW	
AM253	OK7000000123202 OK7000000187412	1/2 - 1 Mile Wow	
AM254	OK7000000187412	1/2 - 1 Mile North	
AM255	OK7000000103072	1/2 - 1 Mile North	
AL258	OK7000000131037	1/2 - 1 Mile NOW	
AL259	OK7000000202650	1/2 - 1 Mile NNW	
AG260	OK700000190165	1/2 - 1 Mile NW	
AG261	OK7000000191364	1/2 - 1 Mile NW	
AM262	OK7000000176002	1/2 - 1 Mile North	
AM263	OK7000000175882	1/2 - 1 Mile North	
		.=	

		LOCATION
MAP ID	WELL ID	FROM TP
AM264	OK7000000170928	1/2 - 1 Mile North
AM265	OK7000000170929	1/2 - 1 Mile North
AO266	OK700000153887	1/2 - 1 Mile South
AO267	OK7000000157615	1/2 - 1 Mile South
AN268	OK7000000175883	1/2 - 1 Mile NNE
269	OK700000113255	1/2 - 1 Mile NW
270	OK700000120994	1/2 - 1 Mile NNW
AP271	OK700000190408	1/2 - 1 Mile NNE
AQ272	OK700000198554	1/2 - 1 Mile WSW
AK274	OK700000187067	1/2 - 1 Mile SW
AR275	OK700000176005	1/2 - 1 Mile NE
AR276	OK700000176006	1/2 - 1 Mile NE
AM277	OK700000133683	1/2 - 1 Mile North
AM278	OK7000000135218	1/2 - 1 Mile North
AK279	OK700000123291	1/2 - 1 Mile SW
AS280	OK700000133684	1/2 - 1 Mile North
281	OK7000000123649	1/2 - 1 Mile West
AT282	OK7000000156289	1/2 - 1 Mile SW
AT283	OK700000123289	1/2 - 1 Mile SW
AT284	OKWR1000009205	1/2 - 1 Mile SW
AT285	OK700000151519	1/2 - 1 Mile SW
286	OK700000199342	1/2 - 1 Mile WNW 1/2 - 1 Mile NNE
AP287 AP288	OK7000000140373 OK7000000139034	1/2 - 1 Mile NNE
289	OK7000000139034 OK7000000123654	1/2 - 1 Mile NNE
AP290	OK7000000123034 OK7000000148680	1/2 - 1 Mile WSW
AU291	OK7000000140000 OK7000000165314	1/2 - 1 Mile WNW
AU292	OK700000165313	1/2 - 1 Mile WNW
AU293	OK700000165652	1/2 - 1 Mile WNW
AU294	OK700000165651	1/2 - 1 Mile WNW
AS295	OK700000196139	1/2 - 1 Mile North
AV296	OK7000000201726	1/2 - 1 Mile North
AV297	OK7000000203349	1/2 - 1 Mile North
AW298	OK700000199733	1/2 - 1 Mile WSW
AX299	OK7000000116830	1/2 - 1 Mile NW
AY300	OK7000000122031	1/2 - 1 Mile NW
AX301	OK7000000140911	1/2 - 1 Mile NW
AQ302	OK7000000139992	1/2 - 1 Mile WSW
AW303	OK7000000150116	1/2 - 1 Mile WSW
AQ304	OK700000123283	1/2 - 1 Mile WSW
AY306	OK700000146797	1/2 - 1 Mile NW
AZ307	OK700000199487	1/2 - 1 Mile SE
308 AZ309	OK7000000123292 OK700000185783	1/2 - 1 Mile SW 1/2 - 1 Mile SE
AZ310	OK7000000103783	1/2 - 1 Mile SE
BA311	OK7000000197793	1/2 - 1 Mile SL 1/2 - 1 Mile WNW
BA312	OK700000198847	1/2 - 1 Mile WNW
BB313	OK700000128183	1/2 - 1 Mile South
BB314	OK700000129034	1/2 - 1 Mile South
BC315	OK700000134493	1/2 - 1 Mile NNW
BC316	OK700000134085	1/2 - 1 Mile NNW
BC317	OK700000159757	1/2 - 1 Mile NNW

		LOCATION
MAP ID	WELL ID	FROM TP
		_
BC318	OK7000000134540	1/2 - 1 Mile NNW
BD319	OK7000000192376	1/2 - 1 Mile SW
BE320	OK7000000135254	1/2 - 1 Mile WSW
BE321	OK700000198555	1/2 - 1 Mile WSW
AZ322	OK700000193521	1/2 - 1 Mile SE
BD324	OK700000123290	1/2 - 1 Mile WSW
BF325 BG326	OK7000000190304 OK7000000176058	1/2 - 1 Mile SSW 1/2 - 1 Mile SSW
BG327	OK7000000176036 OK7000000126768	1/2 - 1 Mile SSW
BF328	OK7000000126766 OK7000000185304	1/2 - 1 Mile SSW
BF329	OK7000000183304 OK7000000193764	1/2 - 1 Mile SSW
BF330	OK7000000133704	1/2 - 1 Mile SSW
BH331	OK7000000173142	1/2 - 1 Mile ESE
BH332	OK7000000121340	1/2 - 1 Mile ESE
BI333	OK700000138098	1/2 - 1 Mile SSW
BI334	OK700000138097	1/2 - 1 Mile SSW
BI335	OK7000000147687	1/2 - 1 Mile SSW
BI336	OK700000140850	1/2 - 1 Mile SSW
BI337	OK700000140849	1/2 - 1 Mile SSW
BB338	OK700000150852	1/2 - 1 Mile South
BF339	OK700000138321	1/2 - 1 Mile SSW
BF340	OK700000145256	1/2 - 1 Mile SSW
341	OK700000123650	1/2 - 1 Mile West
BJ343	OK700000139982	1/2 - 1 Mile NW
BJ344	OK700000194711	1/2 - 1 Mile NW
345	OK7000000190410	1/2 - 1 Mile NE
BK346	OK7000000098933	1/2 - 1 Mile South
BL347	OK7000000185621	1/2 - 1 Mile NE
BL348	OK700000199783	1/2 - 1 Mile NE
BM349 350	OK700000116831	1/2 - 1 Mile NW 1/2 - 1 Mile West
BK351	OK7000000123655 OK7000000197246	1/2 - 1 Mile West
BK352	OK7000000197240 OK7000000185293	1/2 - 1 Mile South
BK353	OK7000000183293 OK7000000185292	1/2 - 1 Mile South
BK354	OK7000000103232	1/2 - 1 Mile South
BK355	OK700000201049	1/2 - 1 Mile South
BK356	OK7000000185294	1/2 - 1 Mile South
BB357	OK7000000147226	1/2 - 1 Mile South
BK358	OK700000185058	1/2 - 1 Mile South
BK359	OK700000190026	1/2 - 1 Mile South
360	OK700000123929	1/2 - 1 Mile East
BF361	OK700000153511	1/2 - 1 Mile SSW
BN362	OK700000192010	1/2 - 1 Mile NNW
BN363	OK7000000188356	1/2 - 1 Mile NNW
BN364	OK7000000199489	1/2 - 1 Mile NNW
BD365	OK7000000194859	1/2 - 1 Mile WSW
BO366	OK700000182865	1/2 - 1 Mile NW
BP367	OK7000000122350 OK7000000122352	1/2 - 1 Mile SSE
BP368 BP369	OK7000000122352 OK7000000122351	1/2 - 1 Mile SSE 1/2 - 1 Mile SSE
BQ370	OK7000000122351 OK7000000133518	1/2 - 1 Mile SSE 1/2 - 1 Mile North
BQ371	OK7000000133516 OK7000000134536	1/2 - 1 Mile North
20011	311 000000 10-1000	1/2 I WING NOTH

		LOCATION
MAP ID	WELL ID	FROM TP
BQ372	OK700000159760	1/2 - 1 Mile North
373	OK700000193126	1/2 - 1 Mile North 1/2 - 1 Mile South
BB374	OK700000200454	1/2 - 1 Mile South
BB375 BJ376	OK700000190471 OK700000132413	1/2 - 1 Mile South
BR377	OK7000000132413 OK7000000199732	1/2 - 1 Mile SW
BM378	OK7000000199732 OK7000000132406	1/2 - 1 Mile SW
BR379	OK7000000132406 OK7000000123293	1/2 - 1 Mile NVV
BO380	OK7000000123293 OK7000000132407	1/2 - 1 Mile SW
BM381	OK7000000132407 OK7000000132408	1/2 - 1 Mile NW
BS382	OK7000000132408 OK7000000178392	1/2 - 1 Mile NVV
BO383	OK7000000176332	1/2 - 1 Mile NW
BT384	OK7000000102000	1/2 - 1 Mile WNW
BT385	OK7000000050494	1/2 - 1 Mile WNW
386	OK7000000140448	1/2 - 1 Mile NNE
BQ387	OK7000000127234	1/2 - 1 Mile North
BO388	OK7000000182866	1/2 - 1 Mile NW
BU389	OK7000000147208	1/2 - 1 Mile WNW
BO390	OK7000000132412	1/2 - 1 Mile NW
BU391	OK7000000141790	1/2 - 1 Mile WNW
BO392	OK700000183211	1/2 - 1 Mile NW
BV393	OK7000000148715	1/2 - 1 Mile SW
BV394	OK700000142163	1/2 - 1 Mile SW
BV395	OK700000150921	1/2 - 1 Mile SW
BV396	OK700000150553	1/2 - 1 Mile SW
BV397	OK700000148716	1/2 - 1 Mile SW
BU398	OK7000000203211	1/2 - 1 Mile WNW
BU399	OK700000140189	1/2 - 1 Mile WNW
BU400	OK700000197863	1/2 - 1 Mile WNW
BU401	OK700000135188	1/2 - 1 Mile WNW
BS402	OK700000178391	1/2 - 1 Mile South
BU403	OK7000000203376	1/2 - 1 Mile WNW
404	OK700000163648	1/2 - 1 Mile NNW
BU405	OK700000140188	1/2 - 1 Mile WNW
BO406	OK700000132410	1/2 - 1 Mile NW
BU407	OK700000196763	1/2 - 1 Mile WNW
BU408	OK700000184519	1/2 - 1 Mile WNW
BU409	OK700000184518	1/2 - 1 Mile WNW
BU410	OK700000137365	1/2 - 1 Mile WNW
BO411	OK700000132411	1/2 - 1 Mile NW
BU412	OK7000000200620	1/2 - 1 Mile WNW
BW413	OK700000132957	1/2 - 1 Mile NW
BX414	OK700000140975	1/2 - 1 Mile SSW
BX415	OK7000000140976	1/2 - 1 Mile SSW
BX416	OK7000000140973	1/2 - 1 Mile SSW
BX417	OK7000000140974	1/2 - 1 Mile SSW
BX418	OK700000142181	1/2 - 1 Mile SSW
BX419	OK700000143990	1/2 - 1 Mile SSW
BX420	OK700000140977	1/2 - 1 Mile SSW
BX421	OK700000141963	1/2 - 1 Mile SSW
BX422 BX423	OK700000138734 OK700000138735	1/2 - 1 Mile SSW 1/2 - 1 Mile SSW
DA423	OK/00000130/33	1/2 - 1 1/1116 33//

		LOCATION
MAP ID	WELL ID	FROM TP
BX424	OK7000000137317	1/2 - 1 Mile SSW
BX425	OK7000000137317 OK7000000137318	1/2 - 1 Mile SSW
BX426	OK7000000137310	1/2 - 1 Mile SSW
BX427	OK7000000139740	1/2 - 1 Mile SSW
BX428	OK7000000139740	1/2 - 1 Mile SSW
BX429	OK700000138737	1/2 - 1 Mile SSW
BX430	OK700000148728	1/2 - 1 Mile SSW
BX431	OK700000148729	1/2 - 1 Mile SSW
BX432	OK700000148726	1/2 - 1 Mile SSW
BX433	OK700000148727	1/2 - 1 Mile SSW
BX434	OK700000149722	1/2 - 1 Mile SSW
BX435	OK700000149723	1/2 - 1 Mile SSW
BX436	OK700000148730	1/2 - 1 Mile SSW
BX437	OK700000148731	1/2 - 1 Mile SSW
BX438	OK700000148725	1/2 - 1 Mile SSW
BX439	OK700000145288	1/2 - 1 Mile SSW
BX440	OK700000146110	1/2 - 1 Mile SSW
BX441	OK7000000145286	1/2 - 1 Mile SSW
BX442	OK7000000145287	1/2 - 1 Mile SSW
BX443	OK7000000146653	1/2 - 1 Mile SSW
BX444	OK7000000146654	1/2 - 1 Mile SSW
BX445	OK700000146651	1/2 - 1 Mile SSW
BX446 BS447	OK700000146652	1/2 - 1 Mile SSW 1/2 - 1 Mile South
BO448	OK7000000180552 OK700000182964	1/2 - 1 Mile South
BS449	OKWR10000009425	1/2 - 1 Mile NVV
BO450	OK70000009423	1/2 - 1 Mile South
BS451	OK7000000132414 OK7000000038907	1/2 - 1 Mile NW
452	OK7000000046057	1/2 - 1 Mile WSW
BU453	OK700000145626	1/2 - 1 Mile WNW
BW454	OK700000152021	1/2 - 1 Mile NW
BO455	OK700000132409	1/2 - 1 Mile NW
BX456	OK700000134177	1/2 - 1 Mile SSW
BY457	OK7000000201782	1/2 - 1 Mile NE
BY458	OK700000197826	1/2 - 1 Mile NE
BY459	OK7000000196739	1/2 - 1 Mile NE
BY460	OK7000000203004	1/2 - 1 Mile NE
BY461	OK7000000202598	1/2 - 1 Mile NE
BZ462	OK700000182864	1/2 - 1 Mile NW
BZ463	OK7000000182369	1/2 - 1 Mile NW
BZ464	OK700000188684	1/2 - 1 Mile NW
BZ465	OK700000195547	1/2 - 1 Mile NW
CA466	OK700000128181	1/2 - 1 Mile West
CA467	OK700000129996	1/2 - 1 Mile West
BZ468 469	OK7000000182867 OK700000159758	1/2 - 1 Mile NW 1/2 - 1 Mile NNW
469 471	OK7000000159758 OK7000000132395	1/2 - 1 Mile NAW
BX472	OK7000000132393 OK7000000175742	1/2 - 1 Mile West
BX472 BX473	OK7000000173742 OK7000000128430	1/2 - 1 Mile SSW
474	OK7000000120430	1/2 - 1 Mile WNW
CB475	OK700000190243	1/2 - 1 Mile East
CB476	OK700000188986	1/2 - 1 Mile East

		LOCATION
MAP ID	WELL ID	FROM TP
	OK7000000188907	1/2 - 1 Mile East
CB478	OK7000000190757	1/2 - 1 Mile East
CB479	OK700000191238	1/2 - 1 Mile East
CB480	OK7000000191237	1/2 - 1 Mile East
CB481	OK7000000191237	1/2 - 1 Mile East
CB482	OK700000185252	1/2 - 1 Mile East
CB483	OK7000000185123	1/2 - 1 Mile East
CB484	OK700000184725	1/2 - 1 Mile East
CB485	OK700000185253	1/2 - 1 Mile East
CB486	OK700000188036	1/2 - 1 Mile East
CB487	OK700000187210	1/2 - 1 Mile East
CB488	OK700000185385	1/2 - 1 Mile East
CB489	OK700000191567	1/2 - 1 Mile East
CB490	OK700000199841	1/2 - 1 Mile East
CB491	OK700000197265	1/2 - 1 Mile East
CB492	OK700000197264	1/2 - 1 Mile East
CB493	OK7000000200933	1/2 - 1 Mile East
CB494	OK7000000203164	1/2 - 1 Mile East
CB495	OK7000000201886	1/2 - 1 Mile East
CB496	OK7000000201885	1/2 - 1 Mile East
CB497	OK700000195695	1/2 - 1 Mile East
CB498	OK700000195694	1/2 - 1 Mile East
CB499	OK700000194681	1/2 - 1 Mile East
CB500	OK700000195696	1/2 - 1 Mile East
CB501	OK700000197263	1/2 - 1 Mile East
CB502	OK700000197262	1/2 - 1 Mile East
CB503	OK700000195697	1/2 - 1 Mile East
CC504	OK700000154277	1/2 - 1 Mile SE
CC505	OK700000154279	1/2 - 1 Mile SE
CD506	OK700000185746	1/2 - 1 Mile ENE
CD507	OK700000185641	1/2 - 1 Mile ENE
CD508	OK700000199104	1/2 - 1 Mile ENE
CD509	OK700000198044	1/2 - 1 Mile ENE
510	OK700000192695	1/2 - 1 Mile North
CE511	OK700000180525	1/2 - 1 Mile SSW
CE512	OK7000000181954	1/2 - 1 Mile SSW
CE513	OK700000181953	1/2 - 1 Mile SSW
CE514	OK700000182778	1/2 - 1 Mile SSW
CE515	OK7000000182777	1/2 - 1 Mile SSW
CE516	OK700000182004	1/2 - 1 Mile SSW
517	OK7000000159759	1/2 - 1 Mile North
CE518	OK7000000173524	1/2 - 1 Mile SSW
CE519	OK7000000172090	1/2 - 1 Mile SSW
520	OK7000000159756	1/2 - 1 Mile NW
521	OK7000000200122	1/2 - 1 Mile SE
CE522	OK700000180767	1/2 - 1 Mile SSW
CE523	OK7000000177316	1/2 - 1 Mile SSW
CE524	OK700000180768	1/2 - 1 Mile SSW
CE525	OK700000180771	1/2 - 1 Mile SSW
CE526	OK700000180770	1/2 - 1 Mile SSW
CE527	OK700000180769	1/2 - 1 Mile SSW
528	OK700000142322	1/2 - 1 Mile West

## STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

 CG531
 OK7000000138666
 1/2 - 1 Mile South

 CG532
 OK7000000140187
 1/2 - 1 Mile South

 CG533
 OK7000000146894
 1/2 - 1 Mile South

## OTHER STATE DATABASE INFORMATION

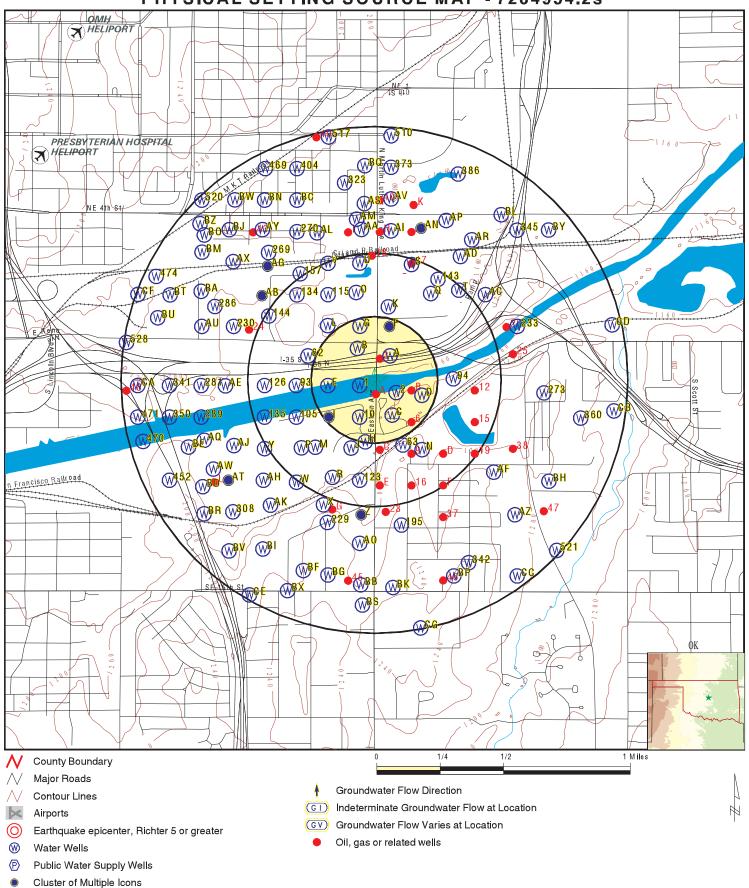
## STATE OIL/GAS WELL INFORMATION

MADID	WELLID	LOCATION
MAP ID	WELL ID	FROM TP
A1	OKOG20000261533	0 - 1/8 Mile SSE
A2	OKOG20000261540	0 - 1/8 Mile South
3	OKOG20000261542	0 - 1/8 Mile NNE
B4	OKOG20000261512	1/8 - 1/4 Mile ESE
B5	OKOG20000261547	1/8 - 1/4 Mile ESE
6	OKOG20000261511	1/8 - 1/4 Mile SE
C7	OKOG20000261520	1/4 - 1/2 Mile South
C8	OKOG20000261513	1/4 - 1/2 Mile South
9	OKOG20000261516	1/4 - 1/2 Mile SSE
D11	OKOG20000261543	1/4 - 1/2 Mile SE
D10	OKOG20000261514	1/4 - 1/2 Mile SE
12	OKOG20000261538	1/4 - 1/2 Mile East
E13	OKOG20000261536	1/4 - 1/2 Mile South
E14	OKOG20000261549	1/4 - 1/2 Mile South
15	OKOG20000261519	1/4 - 1/2 Mile ESE
16	OKOG20000261515	1/4 - 1/2 Mile SSE
17	OKOG20000256812	1/4 - 1/2 Mile NNE
18	OKOG20000258529	1/4 - 1/2 Mile North
19	OKOG20000261518	1/4 - 1/2 Mile SE
F20	OKOG20000256769	1/4 - 1/2 Mile SSE
F21	OKOG20000261507	1/4 - 1/2 Mile SSE
G22	OKOG20000256792	1/2 - 1 Mile SSW
23	OKOG20000261503	1/2 - 1 Mile South
24	OKOG20000260183	1/2 - 1 Mile WNW
25	OKOG20000261500	1/2 - 1 Mile East
26	OKOG20000260224	1/2 - 1 Mile ENE
G27	OKOG20000259767	1/2 - 1 Mile SSW
H28	OKOG20000256825	1/2 - 1 Mile North
H29	OKOG20000260216	1/2 - 1 Mile North
H30	OKOG20000260228	1/2 - 1 Mile North
I31	OKOG20000260156	1/2 - 1 Mile North
132	OKOG20000256761	1/2 - 1 Mile North
J34	OKOG20000256811	1/2 - 1 Mile NNE
J35	OKOG20000260218	1/2 - 1 Mile NNE
J33	OKOG20000260211	1/2 - 1 Mile NNE
J36	OKOG20000260217	1/2 - 1 Mile NNE
37	OKOG20000256768	1/2 - 1 Mile SSE
38	OKOG20000261504	1/2 - 1 Mile ESE
K39	OKOG20000260214	1/2 - 1 Mile NNE
40	OKOG20000260227	1/2 - 1 Mile North
K41	OKOG20000260226	1/2 - 1 Mile NNE
L42	OKOG20000256703	1/2 - 1 Mile SW
43	OKOG20000260208	1/2 - 1 Mile NW
L44	OKOG20000256779	1/2 - 1 Mile WSW

## STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
45	OKOG20000259725	1/2 - 1 Mile South
46	OKOG20000261526	1/2 - 1 Mile SSE
47	OKOG20000261553	1/2 - 1 Mile SE
48	OKOG20000256817	1/2 - 1 Mile West
49	OKOG20000260196	1/2 - 1 Mile NNW

## PHYSICAL SETTING SOURCE MAP - 7204954.2s



SITE NAME: MAPS 4 River Fron ADDRESS: First Americans Blvd Oklahoma City OK 73117 LAT/LONG: 35.461916 / 97.476905

CLIENT: Triad Design Group CONTACT: Diane Abernathy INQUIRY#: 7204954.2s

DATE: December 15, 2022 10:42 am

Map ID Direction Distance

Elevation EDR ID Number Database

wsw 0 - 1/8 Mile

**OK WELLS** OK700000046054

Lower

Well ID: 50616 Well Type: Groundwater Well Not Reported Well Owner: City of Oklahoma Permit #: Observation Well Elevation: Water Use:

Total Well Depth: 30 Date to First Water:

Approximate Yield: 0 Construction Date: 11-MAR-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=50616

ĒSE **OK WELLS** OK700000194808

0 - 1/8 Mile Higher

> Monitoring Well Well ID: 144906 Well Type:

Not Reported Permit #: Well Owner: American Indian Cultural Cente

Elevation: Site Assessment Water Use: 0

Total Well Depth: 25 Date to First Water:

Approximate Yield: 0 Construction Date: 09-MAY-12 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=144906

A3 NNE **OK WELLS** OK700000189258

0 - 1/8 Mile Higher

Well ID: 180064 Well Type: Monitoring Well Well Owner: Permit #: Not Reported TA Operating LLC Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Not Reported Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180064

NNE **OK WELLS** OK7000000191213

0 - 1/8 Mile Higher

> Well ID: 180072 Well Type: Monitoring Well Permit #: Not Reported Well Owner: TA Operating LLC Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water: 0

Construction Date: Approximate Yield: 0 Not Reported Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180072

Map ID Direction Distance

Elevation EDR ID Number Database

A5 NNE

**OK WELLS** OK700000155268

0 - 1/8 Mile Higher

> Well ID: 49422 Well Type: Monitoring Well Not Reported Well Owner: Cardinal Permit #: Water Quality Elevation: Water Use: Total Well Depth: 25 Date to First Water:

Approximate Yield: 0 Construction Date: 08-OCT-99 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=49422

NNW 0 - 1/8 Mile **OK WELLS** OK700000155837

Higher

Monitoring Well Well ID: 47715 Well Type: C P Integrated Not Reported Permit #: Well Owner: Elevation: Water Use: Water Quality 0

Total Well Depth: 25 Date to First Water:

14-SEP-99 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=47715

NNW 0 - 1/8 Mile Higher

0 - 1/8 Mile

Well ID: Well Type: 39643 Monitoring Well Well Owner: Permit #: Not Reported Red Rock Dist. Elevation: Water Quality

0 Water Use: Total Well Depth: 23 Date to First Water:

Approximate Yield: 0 18-MAR-98 Construction Date: Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=39643

NNW **OK WELLS** OK700000046055

Higher Well ID: 50617 Well Type: Groundwater Well Permit #: Not Reported Well Owner: City of OKC

Elevation: 0 Water Use: Observation Well Total Well Depth: 39 Date to First Water: 0

Construction Date: Approximate Yield: 0 21-MAR-00 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=50617 **OK WELLS** 

OK700000152407

Map ID Direction Distance

Elevation Database EDR ID Number

C9 SSE

1/8 - 1/4 Mile Higher

**OK WELLS** 

OK7000000191766

Well ID: 144909 Well Type: Monitoring Well
Permit #: Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 12 Date to First Water: 0

Approximate Yield: 0 Construction Date: 09-MAY-12
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=144909

10 SSW OK WELLS OK7000000123651

SSW 1/8 - 1/4 Mile Higher

Well ID: 79765 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79765

C11 SSE OK WELLS OK7000000137796

1/8 - 1/4 Mile Higher

Well ID: 179482 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: AICCM
Elevation: 0 Water Use: Soil Evaluation
Total Well Depth: 20 Date to First Water: 0
Approximate Yield: 0 Construction Date: 13-FEB-17

Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=179482

B12 NNW OK WELLS OK700000172769

1/8 - 1/4 Mile Higher

Well ID:95166Well Type:Monitoring WellPermit #:Not ReportedWell Owner:JRS Travel CenterElevation:0Water Use:Site Assessment

Total Well Depth: 25 Date to First Water: 16
Approximate Yield: 0 Construction Date: 16-JUN-05
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=95166

Map ID Direction Distance

Elevation Database EDR ID Number

B13 NNW

W OK WELLS OK700000125894

1/8 - 1/4 Mile Higher

Well ID:95167Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:JRS Travel CenterElevation:0Water Use:Soil Evaluation

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-JUN-05
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=95167

D14 ESE 1/8 - 1/4 Mile Higher

Well ID: 144907 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 09-MAY-12
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=144907

ESE 1/8 - 1/4 Mile Higher

Well ID: 144911 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=144911

E16
West OK WELLS OK7000000116611
1/8 - 1/4 Mile

Higher

Well ID: 56062 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: For Omni Plan Project Manageme

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 21.5 Date to First Water: 0

Approximate Yield: 0 Construction Date: 02-NOV-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=56062

**OK WELLS** 

**OK WELLS** 

OK700000191765

OK7000000195336

Map ID Direction Distance

EDR ID Number Elevation Database

West

E17 **OK WELLS** OK700000117059 1/8 - 1/4 Mile

Higher

Well ID: 47638 Well Type: Geotechnical Boring Not Reported Well Owner: Williams Communications Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 10 Date to First Water:

Approximate Yield: 0 Construction Date: 10-NOV-99 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=47638

F18 **FED USGS** USGS40000969846 North

1/8 - 1/4 Mile Higher

> Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 12N-03W-36 CC 1 Type: Well Description: Not Reported HUC: 11100302 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Garber Sandstone Aquifer Type: Not Reported Construction Date: Not Reported

Well Depth: 812 Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: Level reading date: 1943-06-28 1 Feet below surface: Feet to sea level: Not Reported

231 Note: Not Reported

G19 NNW 1/8 - 1/4 Mile

Higher Well ID: 86996 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: **Double Eagle Refinery** Elevation: Water Use: Soil Evaluation

Total Well Depth: 30 Date to First Water:

28-JUL-03 Approximate Yield: 0 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=86996

1/8 - 1/4 Mile Higher

> Well ID: 86994 Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: **Double Eagle Refinery** Water Use: Soil Evaluation Elevation: 0

Total Well Depth: 27 Date to First Water: 0

TC7204954.2s Page A-28

**OK WELLS** 

**OK WELLS** 

OK700000125396

OK700000125395

Approximate Yield: 0 Construction Date: 28-JUL-03
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=86994

G21
NNW
OK WELLS
OK700000120149

1/8 - 1/4 Mile Higher

Well ID: 71526 Well Type: Cathodic Protection or Anode Well

Permit #: Not Reported Well Owner: Pilot Store #325
Elevation: 0 Water Use: Corrosion Protection

Total Well Depth: 47 Date to First Water: 0

Approximate Yield: 0 Construction Date: 26-APR-02
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=71526

G22
NNW
OK WELLS
OK7000000172878
1/8 - 1/4 Mile

Higher

Well ID:98609Well Type:Monitoring WellPermit #:Not ReportedWell Owner:JRS Travel CenterElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 21-DEC-05
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=98609

G23
NNW
OK WELLS
OK7000000174960

1/8 - 1/4 Mile Higher

Well ID:99469Well Type:Monitoring WellPermit #:Not ReportedWell Owner:JRS Travel CenterElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=99469

G24
NNW OK WELLS OK7000000174959

1/8 - 1/4 Mile Higher

Well ID:99468Well Type:Monitoring WellPermit #:Not ReportedWell Owner:JRS Travel CenterElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=99468

G25 NNW OK WELLS OK7000000174958

1/8 - 1/4 Mile Higher

Well ID:99467Well Type:Monitoring WellPermit #:Not ReportedWell Owner:JRS Travel CenterElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0
Approximate Yield: 0 Construction Date: 14-FEB-06

Aquifer Code: Not Reported Basin Code: Not Reported URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=99467

F26
North
FED USGS USGS40000969856
1/8 - 1/4 Mile

Higher

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 12N-03W-36 CC 2 Type: Well Description: Not Reported HUC: 11100302 Not Reported Drainage Area Units: Not Reported Drainage Area: Contrib Drainage Area: Contrib Drainage Area Unts: Not Reported Not Reported Garber Sandstone Aquifer: Not Reported Formation Type:

Aquifer Type: Not Reported Construction Date: 19430628
Well Depth: 212 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

G27
NNW OK WELLS OK700000192024

1/8 - 1/4 Mile Higher

Well ID: 196302 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Texaco Refining & Marketing In

Elevation: 0 Water Use: Water Quality

Total Well Depth: 24 Date to First Water: 0

Approximate Yield: 0 Construction Date: 07-AUG-92 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196302

G28
NNW
OK WELLS
OK7000000190909

1/8 - 1/4 Mile Higher

Well ID:196314Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Cardon Oil Co.Elevation:0Water Use:Water Quality

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 03-SEP-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196314

G29
NNW OK WELLS OK7000000193013

1/8 - 1/4 Mile Higher

Well ID: 196545 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Johnney Todds Circle J.

Elevation: 0 Water Use: Water Quality
Total Well Depth: 14 Date to First Water: 0
Approximate Yield: 0 Construction Date: 14-OCT-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196545

G30
NNW
OK WELLS
OK7000000192048
1/8 - 1/4 Mile

Higher

Well ID:196313Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Cardon Oil Co.Elevation:0Water Use:Water Quality

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 08-NOV-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196313

G31 NNW OK WELLS OK7000000188172

1/8 - 1/4 Mile Higher

Well ID: 196295 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Texaco Refining & Marketing In

Elevation: 0 Water Use: Water Quality

Total Well Depth: 23 Date to First Water: 0

Approximate Yield: 0 Construction Date: 06-AUG-92
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196295

G32 NNW OK WELLS OK7000000113190

1/8 - 1/4 Mile Higher

Well ID: 196315 Well Type: Groundwater Well

Permit #: Not Reported Well Owner: Texaco

Elevation: 0 Water Use: Observation Well

Total Well Depth: 4 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-FEB-99
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196315

Map ID Direction Distance

EDR ID Number Elevation Database

**G33** NNW

**OK WELLS** OK700000190908

1/8 - 1/4 Mile Higher

> Well ID: 196294 Well Type: Monitoring Well

Texaco Refining & Marketing In Not Reported Well Owner: Permit #:

Elevation: Water Use: Water Quality

Total Well Depth: 23 Date to First Water:

Approximate Yield: 0 Construction Date: 05-AUG-92 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196294

G34 NNW 1/8 - 1/4 Mile Higher

Well ID: 196544 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Cardon Oil Compant Elevation: Water Use: Water Quality 0

Total Well Depth: 25 Date to First Water:

Approximate Yield: 0 Construction Date: 08-OCT-96 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196544

**G35** NNW 1/8 - 1/4 Mile Higher

> 196304 Well Type: Well ID: Monitoring Well

Well Owner: Permit #: Not Reported Texaco Refining & Marketing In

Elevation: 0 Water Use: Water Quality

Total Well Depth: 24 Date to First Water:

Approximate Yield: 0 07-AUG-92 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196304

**OK WELLS** OK700000194554 NNW

1/8 - 1/4 Mile Higher

> Well ID: 196551 Well Type: Monitoring Well Johnny Todds Circle J. Permit #: Not Reported Well Owner:

Elevation: 0 Water Use: Water Quality

Total Well Depth: 14 Date to First Water: 0

0 Construction Date: Approximate Yield: 14-OCT-96 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196551 OK700000189209

OK700000196887

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

**G37** NNW

1/8 - 1/4 Mile

Higher

Well ID: 196548 Well Type: Monitoring Well Not Reported Well Owner: Johnny Todds Circle J Permit #:

Water Quality Elevation: Water Use:

Total Well Depth: 14 Date to First Water:

Approximate Yield: 0 Construction Date: 14-OCT-96 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196548

G38 NNW 1/8 - 1/4 Mile Higher

> Well ID: 196317 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Cardon Oil Company

Elevation: Water Use: Water Quality 0

Total Well Depth: 25 Date to First Water:

Approximate Yield: 0 Construction Date: 08-OCT-96 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196317

G39 NNW 1/8 - 1/4 Mile Higher

> Well Type: Well ID: 196293 Monitoring Well Well Owner: Permit #: Not Reported Jack Mastus, Inc. Water Quality Elevation: 0 Water Use:

Total Well Depth: 26 Date to First Water: 18 Approximate Yield: 0 25-OCT-93 Construction Date: Not Reported Aquifer Code: Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196293

**OK WELLS** OK7000000193428 NNW

1/8 - 1/4 Mile Higher

> Well ID: 196296 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Texaco Refining & Marketing In

Elevation: 0 Water Use: Water Quality

Total Well Depth: 24 Date to First Water: 0

Construction Date: Approximate Yield: 0 06-AUG-92 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196296 **OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK7000000203464

OK7000000203222

OK7000000194545

Map ID Direction Distance

Elevation Database EDR ID Number

G41 NNW

NW OK WELLS OK7000000194553

1/8 - 1/4 Mile Higher

Well ID: 196546 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Cardon Oil Company

Elevation: 0 Water Use: Water Quality

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 04-SEP-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196546

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G42 NNW 1/8 - 1/4 Mile

Higher

Well ID: 196520 Well Type: Monitoring Well

Well ID:196520Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Cardon Oil CompanyElevation:0Water Use:Water Quality

Elevation: 0 Water Use: W Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 08-OCT-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196520

F43

NNE 1/8 - 1/4 Mile Higher

Well ID:153136Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA OperatingElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-JUN-13
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=153136

F44
NNE
OK WELLS
OK7000000186529
1/8 - 1/4 Mile

Higher

Well ID:139373Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-NOV-11
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=139373

**OK WELLS** 

**OK WELLS** 

OK700000194551

OK700000186039

Map ID Direction Distance

EDR ID Number Elevation Database

F45 NNE

**OK WELLS** OK7000000184323 1/8 - 1/4 Mile

Higher

Well ID: 155982 Well Type: Monitoring Well Not Reported Well Owner: **TA Operating** Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 06-NOV-13 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=155982

F46 OK7000000184212

NNE 1/8 - 1/4 Mile Higher

> Well ID: 139371 Well Type: Monitoring Well Permit #: Not Reported Well Owner: TA Operating LLC Elevation: Water Use: Site Assessment 0

Total Well Depth: 25 Date to First Water:

Approximate Yield: 0 Construction Date: 01-NOV-11 Not Reported Aquifer Code: Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=139371

**OK WELLS** OK7000000184213

NNE 1/8 - 1/4 Mile Higher

> 139372 Well Type: Well ID: Monitoring Well Well Owner: Permit #: Not Reported TA Operating LLC Site Assessment Elevation: 0 Water Use:

Total Well Depth: 20 Date to First Water:

01-NOV-11 Approximate Yield: 0 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=139372

**OK WELLS** OK700000187176 NNE 1/8 - 1/4 Mile

Higher

Well ID: 142243 Well Type: Monitoring Well Permit #: Not Reported Well Owner: TA Operating LLC Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water: 0

Construction Date: Approximate Yield: 0 23-MAR-12 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=142243 **OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

F49 NNE

**OK WELLS** 1/8 - 1/4 Mile

Higher

Well ID: 145824 Well Type: Monitoring Well Not Reported Well Owner: TA Operating, LLC Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 15 Date to First Water:

Approximate Yield: 0 Construction Date: 28-AUG-12 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=145824

F50 OK7000000203529 **OK WELLS** NNE

1/8 - 1/4 Mile Higher

> Well ID: 152433 Well Type: Monitoring Well Permit #: Not Reported Well Owner: **TA Operating** Elevation: Water Use: Site Assessment 0

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 12-JUN-13 Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=152433

F51 NNE **OK WELLS** OK7000000197614

1/8 - 1/4 Mile Higher

> Well ID: 155985 Well Type: Monitoring Well Well Owner: Permit #: Not Reported **TA Operating** Elevation: 0 Water Use: Site Assessment

Total Well Depth: 15 Date to First Water:

06-NOV-13 Approximate Yield: 0 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=155985

**OK WELLS** OK700000193006 NNE

1/8 - 1/4 Mile Higher

> Well ID: 153137 Well Type: Monitoring Well Permit #: Not Reported Well Owner: **TA Operating** Elevation: 0 Water Use: Site Assessment

Total Well Depth: 16 Date to First Water: 0

0 Construction Date: Approximate Yield: 12-JUN-13 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=153137

Map ID Direction Distance

Elevation EDR ID Number Database

NNE

**OK WELLS** OK7000000196333 1/8 - 1/4 Mile

Higher

Well ID: 153135 Well Type: Monitoring Well Permit #: Not Reported Well Owner: **TA Operating** Site Assessment Elevation: Water Use:

Total Well Depth: 18 Date to First Water:

Approximate Yield: 0 Construction Date: 12-JUN-13 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=153135

H54 **OK WELLS** OK7000000184973 South

1/8 - 1/4 Mile Higher

> Well ID: 136960 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: Water Use: Water Quality 0

Total Well Depth: 15 Date to First Water:

Approximate Yield: 0 Construction Date: 16-MAY-11 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136960

H55

South 1/8 - 1/4 Mile Higher

> 136979 Well Type: Well ID: Monitoring Well

Well Owner: Permit #: Not Reported American Indian Cultural Cente

Elevation: 0 Water Use: Water Quality

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 18-MAY-11 Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136979

**FED USGS** USGS40000969737

1/8 - 1/4 Mile Higher

> Organization ID: Organization Name: USGS-OK USGS Oklahoma Water Science Center

Monitor Location: 11N-03W-02 ADB 1 Type: Well Description: Not Reported HUC: 11100302 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Not Reported

Formation Type: Fairmont Shale Member of Hennessey Shale

Aquifer Type: Not Reported Construction Date: Not Reported

Well Depth: Well Depth Units: 527

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

**OK WELLS** 

Map ID Direction Distance

Elevation EDR ID Number Database

**D57 ESE** 

1/8 - 1/4 Mile

**OK WELLS** OK700000191767

Higher

Well ID: 144910 Well Type: Monitoring Well

Not Reported Well Owner: American Indian Cultural Cente Permit #:

Site Assessment Elevation: Water Use:

Total Well Depth: 16 Date to First Water:

Approximate Yield: 0 Construction Date: 09-MAY-12 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=144910

158 SW 1/8 - 1/4 Mile

OK700000123652 **OK WELLS** Higher

Well ID: 79766 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: Soil Evaluation Water Use: 0

Total Well Depth: 64 Date to First Water:

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79766

H59 South 1/4 - 1/2 Mile Higher

Higher

179485 Well Type: Well ID: Geotechnical Boring

Well Owner: Permit #: Not Reported **AICCM** Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 15 Date to First Water: Approximate Yield: 0 06-MAR-17 Construction Date: Basin Code: Not Reported

Aquifer Code: Not Reported URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=179485

SSW 1/4 - 1/2 Mile

Well ID: 136961 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: Water Use: Water Quality 0

Total Well Depth: 10.5 Date to First Water: 0

Construction Date: Approximate Yield: 0 16-MAY-11 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136961 **OK WELLS** 

**OK WELLS** 

OK700000149020

Map ID Direction Distance

EDR ID Number Elevation Database

**H61** SSW

**OK WELLS** OK700000123656

1/4 - 1/2 Mile Higher

> Well ID: 79770 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural 7 Edu

Soil Evaluation Elevation: Water Use:

Total Well Depth: 64 Date to First Water:

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79770

62 WNW **OK WELLS** 1/4 - 1/2 Mile

Well ID: 132970 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: Site Assessment Water Use: 0

Total Well Depth: 36 Date to First Water:

Approximate Yield: 0 Construction Date: 05-NOV-10 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=132970

63 SSE **OK WELLS** OK700000149019

1/4 - 1/2 Mile Higher

Higher

Well ID: 179481 Well Type: Geotechnical Boring

Well Owner: Permit #: Not Reported **AICCM** Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 11.5 Date to First Water:

Approximate Yield: 0 Construction Date: 13-FEB-17 Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=179481

**OK WELLS** OK7000000200991 NNE

1/4 - 1/2 Mile Higher

> Well ID: 137208 Well Type: Monitoring Well Permit #: Not Reported Well Owner: TA Operating LLC Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water: 0

Construction Date: Approximate Yield: 0 06-JUL-11 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=137208

Map ID Direction Distance

Elevation Database EDR ID Number

L65 NW

1/4 - 1/2 Mile Higher OK WELLS OK700000191504

Well ID:

Well ID: 196134 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Gary DAle Elevation: 0 Water Use: Water Quality
Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 21-FEB-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196134

L66 NW 1/4 - 1/2 Mile Higher

OK WELLS OK7000000185782 /4 - 1/2 Mile

Well ID:196320Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Cardon Oil CompanyElevation:0Water Use:Water Quality

Elevation: 0 Water Use: Wa Total Well Depth: 23 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-APR-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196320

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L67 NW 1/4 - 1/2 Mile Higher

Well ID: 196342 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Cardon Oil Company

Elevation: 0 Water Use: Water Quality

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-APR-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196342

L68 NW 1/4 - 1/2 Mile Higher

Well ID: 196340 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Cardon Oil Company

Elevation: 0 Water Use: Water Quality

Total Well Depth: 22.5 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-APR-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196340

**OK WELLS** 

**OK WELLS** 

OK7000000184175

Map ID Direction Distance

EDR ID Number Elevation Database

L69 NW

1/4 - 1/2 Mile Higher

**OK WELLS** OK7000000200820

Well ID: 197796 Well Type: Monitoring Well Not Reported Well Owner: Happy Food #11 Permit #: Water Quality Elevation: Water Use: Total Well Depth: 30 Date to First Water:

Approximate Yield: 0 Construction Date: 05-OCT-94 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197796

L70 **OK WELLS** OK700000192874 NW 1/4 - 1/2 Mile

Higher

Well ID: 195854 Well Type: Monitoring Well Not Reported Permit #: Well Owner: Happy Foods #1 Elevation: Water Use: Water Quality 0

Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195854

L71 NW **OK WELLS** OK700000192072

1/4 - 1/2 Mile Higher

Higher

197797 Well ID: Well Type: Monitoring Well Well Owner: Permit #: Not Reported Happy Food Elevation: 0 Water Use: Water Quality Total Well Depth:

29 Date to First Water: 28-OCT-94 Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197797

OK700000187484

K72 **OK WELLS** North 1/4 - 1/2 Mile

Well ID: 180077 Well Type: Monitoring Well Permit #: Not Reported Well Owner: TA Operating LLC Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water: 0

Construction Date: Approximate Yield: 0 Not Reported Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180077

Map ID Direction Distance

Elevation Database EDR ID Number

K73 North

OK WELLS OK700000189259

**OK WELLS** 

OK700000191210

OK700000184935

1/4 - 1/2 Mile Higher

Well ID:180065Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180065

K74

North 1/4 - 1/2 Mile Higher

Well ID: 180066 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: TA Operating LLC Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180066

K75 North OK WELLS OK7000000187483

1/4 - 1/2 Mile Higher

Well ID:180076Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180076

K76 North 1/4 - 1/2 Mile Higher

Well ID:180071Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180071

**OK WELLS** 

Map ID Direction Distance

Elevation Database EDR ID Number

K77 North 1/4 - 1/2 Mile

OK WELLS OK700000185796

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Monitoring Well

OK700000187482

OK7000000191211

OK700000194936

Higher

Well ID:180073Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180073

K78 North 1/4 - 1/2 Mile

Well ID:

Higher

Well Type:

Permit #: Not Reported Well Owner: TA Operating LLC Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180075

K79

North 1/4 - 1/2 Mile Higher

Well ID:180067Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180067

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K80 North 1/4 - 1/2 Mile Higher

180075

Well ID:180104Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180104

Map ID Direction Distance

Elevation Database EDR ID Number

K81 North 1/4 - 1/2 Mile

OK WELLS OK7000000198483

Higher

Well ID:180062Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180062

K82 North OK WELLS OK700000198484

North 1/4 - 1/2 Mile Higher

Well ID:180063Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180063

K83

North 1/4 - 1/2 Mile Higher

Well ID:180074Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180074

K84
North OK WELLS OK700000191212

1/4 - 1/2 Mile Higher

Well ID:180070Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180070

**OK WELLS** 

Map ID Direction Distance

Elevation Database EDR ID Number

K85 North

orth OK WELLS OK7000000194086

1/4 - 1/2 Mile Higher

Well ID:180068Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180068

K86

North 1/4 - 1/2 Mile Higher

Well ID:180069Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating LLC

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water: 0
Approximate Yield: 0 Construction Date: Not Reported
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=180069

K87 North 1/4 - 1/2 Mile Higher

Well ID:148852Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA OperatingElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-JAN-13
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148852

K88

North 1/4 - 1/2 Mile Higher

Well ID:148851Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA OperatingElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-JAN-13
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148851

OK700000194087

OK7000000187001

OK700000187000

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

K89 North 1/4 - 1/2 Mile

**OK WELLS** OK700000191147

Higher

Well ID: 148853 Well Type: Monitoring Well Not Reported Well Owner: **TA Operating** Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 16-JAN-13 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148853

K90 North 1/4 - 1/2 Mile

**OK WELLS** OK700000195482

Higher

Well ID: 148854 Well Type: Monitoring Well Permit #: Not Reported Well Owner: **TA Operating** Elevation: Water Use: Site Assessment 0

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 16-JAN-13 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148854

K91 North 1/4 - 1/2 Mile Higher

> Well ID: 148850 Well Type: Monitoring Well Well Owner: Permit #: Not Reported **TA Operating** Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 16-JAN-13 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=148850

SSW 1/4 - 1/2 Mile Higher

> Well ID: 198842 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: N/A

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 15 Date to First Water: 0

0 Construction Date: Approximate Yield: 16-DEC-19 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=198842 **OK WELLS** 

**OK WELLS** 

OK700000192330

Map ID Direction Distance

Elevation Database EDR ID Number

93 West

1/4 - 1/2 Mile Higher

Well ID:

Geotechnical Boring

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000123648

OK700000193793

OK700000183999

OK700000123657

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Well Type:

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79762

79762

94 East 1/4 - 1/2 Mile Higher

Well ID: 144908 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 16 Date to First Water: 0

Approximate Yield: 0 Construction Date: 09-MAY-12
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=144908

K95 North 1/4 - 1/2 Mile Higher

Well ID:132706Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating, LLCElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 0
Approximate Yield: 0 Construction Date: 27-OCT-10
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=132706

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M96 SW 1/4 - 1/2 Mile Higher

Well ID: 79771 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native Anerican Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79771

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Map ID Direction Distance

EDR ID Number Elevation Database

**N97** 

**OK WELLS** OK700000116871

1/4 - 1/2 Mile Higher

> Well ID: 53214 Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: JJS & C Inc. Soil Evaluation Elevation: Water Use:

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 19-JUN-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=53214

N98

SE 1/4 - 1/2 Mile OK700000116870 **OK WELLS** 

Higher

Well ID: 53213 Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: JJS & C iNC. Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 12 Date to First Water:

Approximate Yield: 0 Construction Date: 19-JUN-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=53213

N99 SE

**OK WELLS** OK700000116869

1/4 - 1/2 Mile Higher

> Well ID: 53212 Well Type: Geotechnical Boring

Well Owner: Permit #: Not Reported JJS & C Inc. Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 14 Date to First Water:

0 Approximate Yield: 19-JUN-00 Construction Date: Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=53212

N100

1/4 - 1/2 Mile

Higher

Geotechnical Boring Well ID: 53218 Well Type: Permit #: Not Reported Well Owner: JJS & C Inc.

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 16.5 Date to First Water: 0 Approximate Yield: 0 Construction Date: 19-JUN-00 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=53218 **OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

N101

1/4 - 1/2 Mile

**OK WELLS** OK700000116992

Higher

Well ID: 53216 Well Type: Geotechnical Boring Not Reported Well Owner: JJS & C Inc. Permit #: Soil Evaluation Elevation: Water Use:

Total Well Depth: 5 Date to First Water:

Approximate Yield: 0 Construction Date: 20-JUN-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=53216

N102 SE 1/4 - 1/2 Mile

OK700000116991 **OK WELLS** 

Higher

Well ID: 53215 Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: JJS & C Inc. Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 6 Date to First Water:

Approximate Yield: 0 Construction Date: 20-JUN-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=53215

O103 North 1/4 - 1/2 Mile

Higher

202297 Well Type: Well ID: Monitoring Well Well Owner: Permit #: Not Reported **USEPA** 

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 24.29999924 Date to First Water: 12-NOV-90 Approximate Yield: 0 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202297

**O104** North 1/4 - 1/2 Mile Higher

> Well ID: 202615 Well Type: Monitoring Well Permit #: Not Reported Well Owner: **Double Eagle Refinery** Elevation: 0 Water Use: Site Assessment

Total Well Depth: 36 Date to First Water: 0

17-NOV-90 Construction Date: Approximate Yield: 0 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202615 **OK WELLS** 

**OK WELLS** 

OK700000186223

Map ID Direction Distance

Elevation Database EDR ID Number

105 WSW 1/4 - 1/2 Mile

SW OK WELLS OK700000123653

Higher

Well ID: 79767 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79767

K106 North 1/4 - 1/2 Mile

1/4 - 1/2 Mile Higher

Higher

Well ID:134632Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating, LLCElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 28-FEB-11
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=134632

K107 North 1/4 - 1/2 Mile Higher

Higher

Well ID: 202201 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: The City of Oklahoma City

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 29.39999962 Date to First Water: 19
Approximate Yield: 0 Construction Date: 27-JAN-95
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202201

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O108 NNW 1/4 - 1/2 Mile

Well ID: 97480 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 149 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97480

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000191544

OK7000000197676

Map ID Direction Distance

Elevation Database EDR ID Number

M109 SW

SW OK WELLS OK700000184717 1/4 - 1/2 Mile

1/4 - 1/2 Mile Higher

Well ID: 132969 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 38 Date to First Water: 33

Approximate Yield: 0 Construction Date: 04-NOV-10 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=132969

O110 NNW

1/4 - 1/2 Mile Higher

Well ID: 97479 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 69 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97479

M111 SW OK WELLS

SW 1/4 - 1/2 Mile Higher

Higher

Well ID: 132968 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 36 Date to First Water: 31
Approximate Yield: 0 Construction Date: 04-NOV-10
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=132968

M112 SW OK WELLS 1/4 - 1/2 Mile

Well ID: 132967 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 38 Date to First Water: 33

Approximate Yield: 0 Construction Date: 04-NOV-10

Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=132967

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**OK WELLS** 

OK7000000176011

OK7000000184716

Map ID Direction Distance

Elevation Database EDR ID Number

P113 SW

1/4 - 1/2 Mile

Higher

Well ID: 132971 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 38 Date to First Water: 33

Approximate Yield: 0 Construction Date: 05-NOV-10
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=132971

O114 North 1/4 - 1/2 Mile Higher

Well ID: 97474 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 41 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97474

115 NNW 1/4 - 1/2 Mile Higher

Well ID: 196343 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Charles Malone/Cardon Oil

Elevation: 0 Water Use: Water Quality

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 28-MAY-98
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196343

Q116 NNE 1/4 - 1/2 Mile Higher

Well ID:126958Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TA Operating, LLCElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 20-NOV-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126958

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK7000000184719

OK700000176007

OK700000198842

Map ID Direction Distance

EDR ID Number Elevation Database

Q117 NNE

1/4 - 1/2 Mile

Higher

Well ID: 128705 Well Type: Monitoring Well Not Reported Well Owner: TA Operating, LLC Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 15-MAR-10 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=128705

Q118 NNE 1/4 - 1/2 Mile Higher

> Well ID: 66697 Well Type: Monitoring Well

Bart Canellas (6SF-LP) United Permit #: Not Reported Well Owner:

Elevation: Water Use: Water Quality 0

Total Well Depth: 130 Date to First Water:

Approximate Yield: 0 Construction Date: 05-NOV-01 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=66697

Q119 NNE 1/4 - 1/2 Mile Higher

> Well Type: Well ID: 114680 Monitoring Well Well Owner: Permit #: Not Reported PETRO TRUCK STOP Elevation: 0 Water Use: Site Assessment

Total Well Depth: 22 Date to First Water: 0

Approximate Yield: 0 23-JAN-08 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=114680

Q120

NNE 1/4 - 1/2 Mile Higher

> Well ID: 128706 Well Type: Monitoring Well Permit #: Not Reported Well Owner: TA Operating, LLC Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water: 0

Construction Date: Approximate Yield: 0 15-MAR-10 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=128706 **OK WELLS** 

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000183350

OK700000164894

OK7000000178715

Map ID Direction Distance

EDR ID Number Elevation Database

Q121 NNE

1/4 - 1/2 Mile

Higher

Well ID: 131630 Well Type: Monitoring Well Not Reported Well Owner: TA Operating, LLC Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 01-SEP-10 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=131630

R122 SSW 1/4 - 1/2 Mile Higher

> Well ID: 136963 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: Water Use: Water Quality 0

Total Well Depth: 13 Date to First Water:

Approximate Yield: 0 Construction Date: 16-MAY-11 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136963

123

South 1/4 - 1/2 Mile Higher

> Well Type: Well ID: 79776 Geotechnical Boring

Well Owner: Permit #: Not Reported Native American Cultural Educa

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 64 Date to First Water:

Approximate Yield: 0 01-AUG-03 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79776

R124 SSW 1/4 - 1/2 Mile Higher

Well ID: 179483 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: **AICCM** Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 25 Date to First Water: Construction Date: Approximate Yield: 0 06-MAR-17 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=179483 **OK WELLS** 

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

0

OK700000184055

OK700000187065

OK700000123284

Map ID Direction Distance

EDR ID Number Elevation Database

P125

1/4 - 1/2 Mile

Higher

Well ID: 79772 Well Type: Geotechnical Boring

Not Reported Well Owner: Native American Cultural & Edu Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 64 Date to First Water:

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79772

126 West 1/4 - 1/2 Mile Higher

> Well ID: 79761 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: Soil Evaluation Water Use: 0

Total Well Depth: 64 Date to First Water:

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79761

Q127 1/4 - 1/2 Mile Higher

> Well ID: 152844 Well Type: Geotechnical Boring Well Owner: Permit #: Not Reported Blue Beacon Truck Wash

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 10 Date to First Water: 5

Approximate Yield: 0 Construction Date: 28-JUN-13 Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=152844

Q128 1/4 - 1/2 Mile Higher

> Well ID: 152843 Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: Blue Beacon Truck Wash

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 10 Date to First Water: 8

0 Construction Date: Approximate Yield: 28-JUN-13 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=152843 **OK WELLS** 

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000123658

OK700000123647

OK700000139501

Map ID Direction Distance

EDR ID Number Elevation Database

Q129 NE

**OK WELLS** OK700000141956

1/4 - 1/2 Mile Higher

> Well ID: 152845 Well Type: Geotechnical Boring Not Reported Well Owner: Blue Beacon Truck Wash Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 10 Date to First Water:

Approximate Yield: 0 Construction Date: 28-JUN-13 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=152845

Q130 ΝE

**OK WELLS** OK700000148882 1/4 - 1/2 Mile

Higher

Well ID: 152847 Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: Blue Beacon Truck Wash

Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 10 Date to First Water:

Approximate Yield: 0 Construction Date: 28-JUN-13 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=152847

Q131 NE 1/4 - 1/2 Mile Higher

> Well ID: 152846 Well Type: Geotechnical Boring

> Well Owner: Permit #: Not Reported Blue Beacon Truck Wash Water Use: Elevation: 0 Soil Evaluation

Total Well Depth: 10 Date to First Water: 8

Approximate Yield: 0 Construction Date: 28-JUN-13 Basin Code: Aquifer Code: Not Reported Not Reported URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=152846

R132 SSW 1/4 - 1/2 Mile Higher

> Well ID: 79777 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native Anerican Cultural & Edu

Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 64 Date to First Water: 0

Construction Date: Approximate Yield: 0 01-AUG-03 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79777 **OK WELLS** 

**OK WELLS** 

OK700000148307

Map ID Direction Distance

Elevation Database EDR ID Number

R133 SSW

OK WELLS OK7000000151518

1/4 - 1/2 Mile Higher

Well ID: 179484 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: AICCM
Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 06-MAR-17
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=179484

134 NW 1/4 - 1/2 Mile Higher

Well ID: 75069 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: CFF Recycling Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-DEC-02
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=75069

135 WSW OK WELLS

1/4 - 1/2 Mile Higher

1/4 - 1/2 Mile Higher

Well ID:89134Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:Cardinal Engineering

Permit #: Not Reported Well Owner: Cardinal Engineering
Elevation: 0 Water Use: Soil Evaluation
Total Well Depth: 59 Date to First Water: 0

Approximate Yield: 0 Construction Date: 17-AUG-04
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=89134

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\$136 NNE OK WELLS OK7000000176008

Well ID: 97475 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 159 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97475

OK700000119117

OK7000000124868

**OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

T137 NE

1/4 - 1/2 Mile

Higher

Well ID: 202023 Well Type: Monitoring Well Not Reported Well Owner: Flour Daniel Permit #: Water Quality Elevation: Water Use: Total Well Depth: 50 Date to First Water: 12

Approximate Yield: 0 Construction Date: 06-APR-92 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202023

**S138** 

NNE 1/4 - 1/2 Mile Higher

> Well ID: 97476 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: Water Use: Site Assessment 0

Total Well Depth: 57 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97476

11139 North 1/4 - 1/2 Mile Higher

Higher

Well Type: Well ID: 196305 Monitoring Well Well Owner: Permit #: **Double Eagle Refinery** 

Not Reported Elevation: 0 Water Use: Water Quality Total Well Depth: 38.70000076 Date to First Water:

09-NOV-90 Approximate Yield: 0 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196305

U140

**OK WELLS** OK700000184174 North 1/4 - 1/2 Mile

Well ID: 196318 Well Type: Monitoring Well Permit #: Not Reported Well Owner: % Fluor Daniel GTI Elevation: Water Use: Water Quality 0

Total Well Depth: 150 Date to First Water: 0

Construction Date: 10-SEP-96 Approximate Yield: 0 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196318 **OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000190409

OK700000176009

Map ID Direction Distance

Elevation Database EDR ID Number

U141 North

OK WELLS OK700000202595

1/4 - 1/2 Mile Higher

Well ID: 202296 Well Type: Monitoring Well Permit #: Not Reported Well Owner: USEPA

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 17 Date to First Water: 0

Approximate Yield: 0 Construction Date: 08-NOV-90
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202296

S142 North OK WELLS OK7000000194365

North 1/4 - 1/2 Mile Higher

well ID: 194981 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Fluor Daniel GTI
Elevation: 0 Water Use: Site Assessment

Total Well Depth: 160 Date to First Water: 0

Approximate Yield: 0 Construction Date: 21-AUG-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194981

143 NNE FED USGS USGS40000969922

1/4 - 1/2 Mile Higher

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 12N-03W-36 C 1 Type: Well **GAMMA RAY LOG** Description: HUC: 11100302 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Not Reported Construction Date: Aquifer Type: Not Reported Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

144 WNW OK WELLS OK700000127692

WNW 1/4 - 1/2 Mile Higher

Well ID: 102138 Well Type: Groundwater Test Hole

Permit #: Not Reported Well Owner: Landmark Con c/o Jerry Hancock

Elevation: 0 Water Use: Water Location

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: 13-APR-06 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=102138

Map ID Direction Distance

Elevation Database EDR ID Number

V145 NNW 1/4 - 1/2 Mile

NW OK WELLS OK700000188855

Higher

Well ID:196120Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Flour DanielElevation:0Water Use:Water QualityTotal Well Depth:49Date to First Water:8

Approximate Yield: 0 Construction Date: 07-APR-92
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196120

V146 NNW 1/4 - 1/2 Mile Higher

 gher

 Well ID:
 196307

 Well Type:
 Monitoring Well

Permit #: Not Reported Well Owner: Flour Daniel
Elevation: 0 Water Use: Water Quality

Total Well Depth: 74 Date to First Water: 12

Approximate Yield: 0 Construction Date: 07-APR-92
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196307

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\$147 NNE 1/4 - 1/2 Mile Higher

Well ID:65045Well Type:Monitoring WellPermit #:Not ReportedWell Owner:TerraconElevation:0Water Use:Water QualityTotal Well Depth:130Date to First Water:0

Total Well Depth: 130 Date to First Water: 0
Approximate Yield: 0 Construction Date: 05-NOV-01
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=65045

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S148 NNE 1/4 - 1/2 Mile

Higher

Well ID: 65044

Well Type: Monitoring Well

Permit #: Well Owner: Not Reported Terracon Elevation: 0 Water Use: Water Quality Total Well Depth: 146 Date to First Water: 138 Construction Date: Approximate Yield: 0 09-NOV-01 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=65044

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000196093

OK700000162393

Map ID Direction Distance

Elevation Database EDR ID Number

S149 NNE

1/4 - 1/2 Mile Higher

Monitoring Well

OK700000164275

OK700000169303

OK700000173879

OK700000169302

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Well ID: 65776 Well Type:

Permit #: Not Reported Well Owner: Bart Canellas (6SF-LP) United

Elevation: 0 Water Use: Water Quality
Total Well Depth: 146 Date to First Water: 138
Approximate Yield: 0 Construction Date: 09-NOV-01
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=65776

W150 SW 1/2 - 1 Mile Higher

Well ID: 84398 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Red Rock Distibuting

Elevation: 0 Water Use: Site Assessment Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 18-MAR-04
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=84398

W151 SW 1/2 - 1 Mile Higher

Well ID:93861Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Red Rock Dist.Elevation:0Water Use:Water Quality

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 18-MAR-05
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=93861

W152 SW 1/2 - 1 Mile Higher

Well ID: 84397 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Red Rock Distributing
Elevation: 0 Water Use: Site Assessment

Total Well Depth: 35 Date to First Water: 25

Approximate Yield: 0 Construction Date: 18-MAR-04
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=84397

Map ID Direction Distance

EDR ID Number Elevation Database

W153

**OK WELLS** OK700000123287

1/2 - 1 Mile Higher

> Well ID: 79779 Well Type: Geotechnical Boring

Not Reported Well Owner: Native American Cultural & Edu Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 64 Date to First Water:

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79779

W154 SW

**OK WELLS** OK700000168643 1/2 - 1 Mile

Higher

Well ID: 84637 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Red Rock Distributing Elevation: Water Use: Site Assessment 0

Total Well Depth: 35 Date to First Water:

Approximate Yield: 0 Construction Date: 18-MAR-04 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=84637

X155 SSW 1/2 - 1 Mile Higher

Higher

101744 Well Type: Well ID: Monitoring Well

Well Owner: Red Rock Distributing Co. Permit #: Not Reported

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 35 Date to First Water:

Approximate Yield: 0 11-MAY-06 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=101744

X156 **OK WELLS** SSW 1/2 - 1 Mile

Well ID: 101742 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Red Rock Distributing Co.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 35 Date to First Water: 27 Construction Date: Approximate Yield: 0 22-MAY-06 Aquifer Code: Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=101742

Not Reported

Not Reported

**OK WELLS** 

28

OK700000176092

Map ID Direction Distance

Elevation Database EDR ID Number

157 NW

1/2 - 1 Mile Higher OK WELLS OK700000150455

OK7000000176013

OK700000123281

OK700000127065

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Well ID:185168Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:New recycling ctrElevation:0Water Use:Soil EvaluationTotal Well Depth:60Date to First Water:18.5

Approximate Yield: 2 Construction Date: 03-JAN-18
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=185168

T158 NE 1/2 - 1 Mile Higher

Well ID: 97481 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 145 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97481

Y159 WSW 1/2 - 1 Mile Higher

Well ID: 79773 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation
Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03

Approximate Yield: 0 Construction Date: 01-AUG-03
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79773

Y160 WSW 1/2 - 1 Mile Higher

Well ID:90576Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:Cardinal Eng.Elevation:0Water Use:Soil Evaluation

Total Well Depth: 70 Date to First Water: 0

Approximate Yield: 0 Construction Date: 28-OCT-04
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=90576

Map ID Direction Distance

Elevation Database EDR ID Number

X161 SSW

1/2 - 1 Mile

Higher

Well ID:122096Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Red Rock Dist.Elevation:0Water Use:Site Assessment

Total Well Depth: 17 Date to First Water: 0

Approximate Yield: 0 Construction Date: 25-FEB-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=122096

Z162 South 1/2 - 1 Mile Higher

Well ID:64084Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Red Rock Distributing

Elevation: 0 Water Use: Water Quality

Total Well Depth: 20 Date to First Water: 9

Approximate Yield: 0 Construction Date: 19-JUL-01
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=64084

Z163 South 1/2 - 1 Mile Higher

Well ID: 58338 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Red Rock Distributing

Elevation: 0 Water Use: Water Quality

Total Well Depth: 20 Date to First Water: 10
Approximate Yield: 0 Construction Date: 16-JAN-01
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=58338

Z164 South 1/2 - 1 Mile Higher

Well ID: 53565 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Red Rock Petroleum

Elevation:0Water Use:Water QualityTotal Well Depth:20Date to First Water:10

Approximate Yield: 0 Construction Date: 26-JUN-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=53565

**OK WELLS** 

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OK700000180408

OK700000161547

OK700000158081

Map ID Direction Distance

Elevation Database EDR ID Number

X165 SSW

OK WELLS OK7000000184350

1/2 - 1 Mile Higher

Well ID:132636Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Red Rock DistributingElevation:0Water Use:Site Assessment

Total Well Depth: 30 Date to First Water: 12

Approximate Yield: 0 Construction Date: 28-OCT-10 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=132636

X166 SSW 1/2 - 1 Mile Higher

Well ID:126661Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Red Rock DistributingElevation:0Water Use:Site Assessment

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 26-OCT-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126661

X167 SSW 1/2 - 1 Mile Higher

Well ID:132637Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Red Rock DistributingElevation:0Water Use:Site Assessment

Total Well Depth: 25 Date to First Water: 12

Approximate Yield: 0 Construction Date: 28-OCT-10
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=132637

X168 SSW 1/2 - 1 Mile Higher

Well ID:122098Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Red Rock Dist.Elevation:0Water Use:Site Assessment

Total Well Depth: 17 Date to First Water: 0

Approximate Yield: 0 Construction Date: 24-FEB-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=122098

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000182633

OK700000183845

Map ID Direction Distance

EDR ID Number Elevation Database

Z169 South 1/2 - 1 Mile Higher

**FED USGS** USGS40000969656

USGS Oklahoma Water Science Center

OK700000176096

OK700000180409

OK7000000184974

Organization ID: USGS-OK Organization Name: Monitor Location: 11N-03W-02 DAD 2

Well Type:

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Monitoring Well

GEOPHYSICAL LOGS USED FOR STRUCTURE CONTOUR MAPS Description:

HUC: 11100302 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Oscar Sandstone Aquifer Type: Not Reported Construction Date: Well Depth: Not Reported 6511 Well Hole Depth: Well Depth Units: 6511 ft

Well Hole Depth Units: ft

SSW 1/2 - 1 Mile Higher

Well ID: Well Type: Permit #: Not Reported Well Owner: Red Rock Distributing Co.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 24 Date to First Water:

11-MAY-06 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=101750

X171 SSW 1/2 - 1 Mile

101750

Well ID: 122097 Well Type: Monitoring Well Permit #: Well Owner: Red Rock Dist. Not Reported Site Assessment Elevation: 0 Water Use:

Total Well Depth: 17 Date to First Water:

Approximate Yield: 0 Construction Date: 24-FEB-09 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=122097

W172 SW 1/2 - 1 Mile Higher

Higher

Well ID: 136964 Well Type: Monitoring Well

Well Owner: Permit #: Not Reported American Indian Cultural Cente

Elevation: Water Use: Water Quality 0

Total Well Depth: 10 Date to First Water:

Approximate Yield: 0 Construction Date: 16-MAY-11 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136964

Map ID Direction Distance

Elevation Database EDR ID Number

X173 SSW

1/2 - 1 Mile

OK WELLS OK700000173180

OK700000173750

OK700000173752

OK7000000173751

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Higher

 Well ID:
 96242
 Well Type:
 Monitoring Well

 Permit #:
 Not Reported
 Well Owner:
 Red Rock Distributing

 Elevation:
 0
 Water Use:
 Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-AUG-05
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=96242

X174 SSW 1/2 - 1 Mile Higher

Well ID:96540Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Red Rock DistributingElevation:0Water Use:Site Assessment

Total Well Depth: 18 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-AUG-05
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=96540

X175 SSW 1/2 - 1 Mile Higher

Well ID: 96542 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Red Rock Distributing
Elevation: 0 Water Use: Site Assessment

Total Well Depth: 18 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-AUG-05
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=96542

X176

SSW 1/2 - 1 Mile Higher

Well ID: 96541 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Red Rock Distributing
Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-AUG-05
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=96541

Map ID Direction Distance

Elevation Database EDR ID Number

X177 SSW

OK WELLS OK7000000176095

1/2 - 1 Mile Higher

Well ID: 101748 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Red Rock Distributing Co.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 22 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-MAY-06 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=101748

AA178 North 1/2 - 1 Mile

Higher

Well ID: 129132 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: EPA Region 6
Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 6 Date to First Water: 0

Approximate Yield: 0 Construction Date: 20-APR-10
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=129132

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AB179 NW 1/2 - 1 Mile Higher

Well ID:202299Well Type:Monitoring WellPermit #:Not ReportedWell Owner:USEPA

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 24.29999924 Date to First Water: 0

Approximate Yield: 0 Construction Date: 14-NOV-90 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202299

AB180 NW 1/2 - 1 Mile Higher

Well ID: 196306 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Double Eagle Refinery

Elevation: 0 Water Use: Water Quality

Total Well Depth: 39.20000076 Date to First Water: 0

Approximate Yield: 0 Construction Date: 18-NOV-90

Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196306

OK700000133685

OK700000188608

OK700000196092

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

AB181 NW

**OK WELLS** OK700000199322

1/2 - 1 Mile Higher

> Well ID: 202298 Well Type: Monitoring Well Not Reported Well Owner: **USEPA** Permit #:

> Elevation: Water Use: Site Assessment

Total Well Depth: 24.29999924 Date to First Water:

Approximate Yield: 0 Construction Date: 12-NOV-90 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202298

X182 SSW 1/2 - 1 Mile

Higher

Well ID: Well Type: Monitoring Well Permit #: Not Reported Well Owner: Red Rock District Elevation: Water Use: Water Quality 0

Total Well Depth: 20 Date to First Water: 20

29-APR-02 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=71482

71482

X183 SSW 1/2 - 1 Mile Higher

> Well Type: Well ID: 101746 Monitoring Well

Well Owner: Red Rock Distributing Co. Permit #: Not Reported

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 52.5 Date to First Water: 0

Approximate Yield: 15-MAY-06 0 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=101746

X184 SSW 1/2 - 1 Mile Higher

> Well ID: 101747 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Red Rock Distributing Co.

Elevation: Water Use: Site Assessment 0

Total Well Depth: 30 Date to First Water: 0

Construction Date: Approximate Yield: 0 12-MAY-06 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=101747 **OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000164422

OK700000176093

Map ID Direction Distance

EDR ID Number Elevation Database

AC185

NE **OK WELLS** OK700000117177 1/2 - 1 Mile

Higher

Well ID: 52572 Well Type: Geotechnical Boring

Not Reported Well Owner: Oklahoma Dept. of Transportati Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 41.5 Date to First Water:

0 Construction Date: 19-MAY-00 Approximate Yield: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=52572

AC186 NE 1/2 - 1 Mile Higher

Well ID: 52571 Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: Okla. Dept. of Transportation

Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 40.29999924 Date to First Water:

Approximate Yield: Construction Date: 19-MAY-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=52571

AC187 NE 1/2 - 1 Mile Higher

> Well ID: 52570 Well Type: Geotechnical Boring

Well Owner: Permit #: Not Reported Oklahoma Dept. of Transportati

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 46.5 Date to First Water: 0

Approximate Yield: 0 19-MAY-00 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=52570

AC188 1/2 - 1 Mile Higher

> Well ID: 202022 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Flour Daniel Elevation: 0 Water Use: Water Quality

Total Well Depth: 55 Date to First Water: 10 0 Approximate Yield: Construction Date: 07-APR-92 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202022 OK7000000117176

OK7000000117175

OK7000000201725

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

Elevation Database EDR ID Number

AD189 NE

OK WELLS OK700000164017

1/2 - 1 Mile Higher

Well ID: 65731 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Bart Canellas (6SF-LP) United

Elevation: 0 Water Use: Water Quality

Total Well Depth: 130 Date to First Water: 0

Approximate Yield: 0 Construction Date: 05-NOV-01
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=65731

AE190
West OK WELLS OK700000123627

West 1/2 - 1 Mile Higher

Well ID: 79759 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79759

AB191 WNW FED USGS USGS40000969895

1/2 - 1 Mile Higher

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 11N-03W-02 ABB 1 Type: Well Description: Not Reported HUC: 11100302 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Not Reported

Formation Type: Fairmont Shale Member of Hennessey Shale

Aquifer Type: Not Reported Construction Date: Not Reported

Well Depth: 571 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Z192
South FED USGS USGS40000969651
1/2 - 1 Mile
Higher

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

11N-03W-02 DAD 1 Monitor Location: Type: Well HUC: Description: Not Reported 11100302 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Formation Type: Aquifer: Not Reported Garber Sandstone Aquifer Type: Not Reported Construction Date: Not Reported

Well Depth: 651 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

AF193 SE FED USGS USGS40000969691

1/2 - 1 Mile Higher

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 11N-03W-01 CAA 2 Type: Well Description: Not Reported HUC: 11100302 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Contrib Drainage Area Unts: Not Reported Not Reported Aquifer: Not Reported Formation Type: Garber Sandstone Aquifer Type: Not Reported Construction Date: Not Reported

Well Depth: 162 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1982-06-03 Feet below surface: 153.05 Feet to sea level: Not Reported

Note: Not Reported

AG194 NW FED USGS USGS40000969941 1/2 - 1 Mile Higher

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 12N-03W-35 DBC 1 Type: Well

Description: NAWQA ALLUVIUM AND TERRACE SAMPLING

HUC: 11100302 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Quaternary Alluvium Aquifer Type: Not Reported

Construction Date: 19841115 Well Depth: 60
Well Depth Units: ft Well Hole Depth: 60

Well Hole Depth Units: ft

Ground water levels, Number of Measurements: 2 Level reading date: 1989-07-28

Feet below surface: 13.98 Feet to sea level: Not Reported

Note: Not Reported

Level reading date: 1984-11-15 Feet below surface: 20

Feet to sea level: Not Reported Note: Not Reported

195
South OK WELLS OK7000000134237
1/2 - 1 Mile
Higher

Well ID: 127496 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Verizon
Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 45 Date to First Water: 0

Approximate Yield: 0 Construction Date: 20-NOV-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=127496

AF196 SE FED USGS USGS40000969690

1/2 - 1 Mile Higher

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

11N-03W-01 CA 1 Monitor Location: Type: Well Description: Not Reported HUC: 11100302 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Not Reported

Aquifer Type:Not ReportedConstruction Date:1928Well Depth:800Well Depth Units:ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 2 Level reading date: 1942-11-17 Feet below surface: 218.2 Feet to sea level: Not Reported

Feet below surface: 218.2 Note: Not Reported

Note: Not Reported

Level reading date: 1935-08-27 Feet below surface: 125
Feet to sea level: Not Reported Note: Not Reported

20 45 20

AH197 SW OK WELLS OK7000000154630

1/2 - 1 Mile Higher

Well ID: 50461 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Consolidated Freightways - c/o

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 18 Date to First Water: 0

Approximate Yield: 0 Construction Date: 08-MAR-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=50461

AH198 SW OK WELLS OK7000000154631

SW 1/2 - 1 Mile Higher

Well ID: 50462 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Consolidated Freightways c/o R

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 08-MAR-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=50462

Map ID Direction Distance

EDR ID Number Elevation Database

AH199

**OK WELLS** OK7000000154632

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000123288

OK7000000154628

OK700000154629

1/2 - 1 Mile Higher

> Well ID: 50463 Well Type: Monitoring Well

Not Reported Well Owner: Consolidated Freightways c/o R Permit #:

Elevation: Water Use: Site Assessment

Total Well Depth: 17.5 Date to First Water:

Approximate Yield: 0 Construction Date: 08-MAR-00 Aquifer Code: Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=50463

**AH200** SW 1/2 - 1 Mile Higher

Well ID: Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: Native Anerican Cultural & Edu

Elevation: Soil Evaluation Water Use: 0

Total Well Depth: 64 Date to First Water:

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79780

AH201 SW 1/2 - 1 Mile Higher

> 50459 Well Type: Well ID: Monitoring Well

Well Owner: Permit #: Not Reported Consolidated Freightways - c/o

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 19 Date to First Water: 0

Approximate Yield: 0 09-MAR-00 Construction Date: Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=50459

AH202 SW 1/2 - 1 Mile Higher

79780

Well ID: 50460 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Consolidated Greightways c/o R

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 09-MAR-00 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=50460

TC7204954.2s Page A-74

Map ID Direction Distance

EDR ID Number Elevation Database

AH203

**OK WELLS** OK7000000155831

1/2 - 1 Mile Higher

> Well ID: 46059 Well Type: Monitoring Well

Not Reported Well Owner: Consol Freightway c/o Robert/S Permit #:

Water Quality Elevation: Water Use:

Total Well Depth: 18 Date to First Water:

Approximate Yield: 0 Construction Date: 16-NOV-98 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=46059

AI204 OK700000046056 **OK WELLS** 

North 1/2 - 1 Mile Higher

> Well ID: 50618 Well Type: Groundwater Well Permit #: Not Reported Well Owner: City of OKC Elevation: Water Use: Observation Well 0

Total Well Depth: 39 Date to First Water:

Approximate Yield: 0 Construction Date: 20-MAR-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=50618

**AA205 OK WELLS** OK7000000201750

North 1/2 - 1 Mile Higher

> Well Type: Well ID: 196321 Monitoring Well Well Owner: Permit #: Not Reported % Fluor Daniel GTI

Elevation: 0 Water Use: Water Quality

Total Well Depth: 71 Date to First Water:

07-SEP-96 Approximate Yield: 0 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196321

**AA206** North **OK WELLS** OK700000185434 1/2 - 1 Mile

Basin Code:

Higher

Well ID: 197798 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Flour Danie Elevation: Water Use: Water Quality 0 Total Well Depth: 60 Date to First Water: 15 Construction Date: Approximate Yield: 0 08-APR-92

Aquifer Code: URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197798

Not Reported

Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

AA207 North 1/2 - 1 Mile

OK WELLS OK7000000203223

Higher

 Well ID:
 196323
 Well Type:
 Monitoring Well

 Permit #:
 Not Reported
 Well Owner:
 % Fluor Daniel GTI

 Elevation:
 0
 Water Use:
 Water Quality

Total Well Depth: 149 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-AUG-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196323

Al208

North 1/2 - 1 Mile Higher

Well ID:195019Well Type:Monitoring WellPermit #:Not ReportedWell Owner:4th Street RefineryElevation:0Water Use:Site Assessment

Total Well Depth: 15 Date to First Water: 8

Approximate Yield: 0 Construction Date: 15-FEB-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195019

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North 1/2 - 1 Mile Higher

AI209

Well ID: 195919 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: 4th Stret Refinery c/o Fluor D

Elevation: 0 Water Use: Water Quality Total Well Depth: 30 Date to First Water: 17

Total Well Depth: 30 Date to First Water: 17
Approximate Yield: 0 Construction Date: 12-FEB-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195919

Al210 North 1/2 - 1 Mile Higher

Well ID:194980Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Fluor Daniel GTIElevation:0Water Use:Site Assessment

Total Well Depth: 150 Date to First Water: 0

Approximate Yield: 0 Construction Date: 06-SEP-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194980

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000189690

OK7000000189178

Map ID Direction Distance

Elevation Database EDR ID Number

Al211 North 1/2 - 1 Mile

OK WELLS OK700000192488

Not Reported

**OK WELLS** 

OK700000189167

Higher

Well ID: 194965 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: 4th Street Refinery c/o Fluro

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 15 Date to First Water: 8

Approximate Yield: 0 Construction Date: 15-FEB-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194965

Al212 North OK WELLS OK7000000190834

North 1/2 - 1 Mile Higher

Well ID:195008Well Type:Monitoring WellPermit #:Not ReportedWell Owner:\$th Street Refinery

Elevation:0Water Use:Site AssessmentTotal Well Depth:15Date to First Water:10Approximate Yield:0Construction Date:13-FEB-96

Aquifer Code: Not Reported Basin Code: URL: Basin Code: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195008

Al213 North 1/2 - 1 Mile Higher

Well ID:195017Well Type:Monitoring WellPermit #:Not ReportedWell Owner:4th Street Refinery

Elevation: 0 Water Use: Site Assessment Total Well Depth: 20 Date to First Water: 15

Approximate Yield: 0 Construction Date: 12-FEB-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195017

Al214
North
OK WELLS OK7000000184979

1/2 - 1 Mile Higher

Well ID:195015Well Type:Monitoring WellPermit #:Not ReportedWell Owner:4th Street RefineryElevation:0Water Use:Site Assessment

Total Well Depth:20Date to First Water:15Approximate Yield:0Construction Date:12-FEB-96Aquifer Code:Not ReportedBasin Code:Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195015

Map ID Direction Distance

Elevation Database EDR ID Number

Al215 North

OK WELLS OK7000000184513

1/2 - 1 Mile Higher

Well ID:194978Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Fluor Daniel GTIElevation:0Water Use:Site Assessment

Total Well Depth: 150 Date to First Water: 0

Approximate Yield: 0 Construction Date: 03-SEP-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194978

Al216
North
OK WELLS
OK7000000185617

North 1/2 - 1 Mile Higher

Well ID: 194970 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: ?

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 58 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-JUN-99
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194970

AI217
North OK WELLS OK700000188840

1/2 - 1 Mile Higher

Well ID:195021Well Type:Monitoring WellPermit #:Not ReportedWell Owner:4th Street RefineryElevation:0Water Use:Site Assessment

Total Well Depth: 15 Date to First Water: 8

Approximate Yield: 0 Construction Date: 15-FEB-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195021

Al218
North
OK WELLS
OK7000000185618

Higher

Well ID:194971Well Type:Monitoring WellPermit #:Not ReportedWell Owner:4th Street RefineryElevation:0Water Use:Site Assessment

Total Well Depth:35Date to First Water:26Approximate Yield:0Construction Date:14-FEB-96Aquifer Code:Not ReportedBasin Code:Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194971

Map ID Direction Distance

EDR ID Number Elevation Database

AI219 North

**OK WELLS** OK700000194367 1/2 - 1 Mile

Higher

Well ID: 195013 Well Type: Monitoring Well Not Reported Well Owner: 4th Street Refinery Permit #: Elevation: Water Use: Site Assessment

Total Well Depth: 25 Date to First Water: 15

Approximate Yield: 0 Construction Date: 12-FEB-96 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195013

A1220 **OK WELLS** OK700000194366 North

1/2 - 1 Mile Higher

> Well ID: 195011 Well Type: Monitoring Well Permit #: Not Reported Well Owner: 4th Street Refinery Elevation: Water Use: Site Assessment 0

Total Well Depth: 15 Date to First Water: Approximate Yield: 0 Construction Date: 13-FEB-96 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195011

AI221 North **OK WELLS** OK7000000196186

1/2 - 1 Mile Higher

> 194979 Well Type: Well ID: Monitoring Well Well Owner: Permit #: Not Reported Flur Daniel GTI Elevation: 0 Water Use: Site Assessment

Total Well Depth: 43 Date to First Water:

06-SEP-96 Approximate Yield: 0 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194979

**AI222 OK WELLS** OK700000199784

North 1/2 - 1 Mile Higher

> Well ID: 195014 Well Type: Monitoring Well Permit #: Not Reported Well Owner: 4th Street Refinery Elevation: Water Use: Site Assessment 0

Total Well Depth: 20 Date to First Water: 12 Construction Date: Approximate Yield: 0 13-FEB-96 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195014

Map ID Direction Distance

EDR ID Number Elevation Database

AI223

**OK WELLS** OK7000000198173 North 1/2 - 1 Mile

Higher

Well ID: 195018 Well Type: Monitoring Well Not Reported Well Owner: 4th Street Refinery Permit #: Elevation: Water Use: Site Assessment

Total Well Depth: 15 Date to First Water:

Approximate Yield: 0 Construction Date: 15-FEB-96 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195018

A1224 **OK WELLS** OK700000192873 North

1/2 - 1 Mile Higher

> Well ID: 194966 Well Type: Monitoring Well Permit #: Not Reported Well Owner: \$th Street Refinery Elevation: Water Use: Site Assessment 0

Total Well Depth: 15 Date to First Water:

Approximate Yield: 0 Construction Date: 14-FEB-96 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194966

AI225 North **OK WELLS** OK700000192489

1/2 - 1 Mile Higher

> 194967 Well Type: Well ID: Monitoring Well Well Owner: Permit #: Not Reported \$th Street Refinery Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water: 12

Approximate Yield: 0 13-FEB-96 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194967

AI226 **OK WELLS** OK700000194272 North 1/2 - 1 Mile

Higher

Well ID: 195020 Well Type: Monitoring Well Permit #: Not Reported Well Owner: 4th Street Refinery Elevation: 0 Water Use: Site Assessment

Total Well Depth: 15 Date to First Water: 8

0 Construction Date: Approximate Yield: 15-FEB-96 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195020

Map ID Direction Distance

Elevation Database EDR ID Number

Al227 North

1/2 - 1 Mile

OK WELLS OK700000194364

OK700000194363

OK7000000175346

OK700000116832

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Higher Well ID:

Well ID:194969Well Type:Monitoring WellPermit #:Not ReportedWell Owner:\$th Street RefineryElevation:0Water Use:Site Assessment

Total Well Depth: 15 Date to First Water: 8

Approximate Yield: 0 Construction Date: 15-FEB-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194969

Al228 North 1/2 - 1 Mile Higher

Well ID:194968Well Type:Monitoring WellPermit #:Not ReportedWell Owner:\$th Street RefineryElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 12.5
Approximate Yield: 0 Construction Date: 14-FEB-96
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194968

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229 SSW 1/2 - 1 Mile Higher

Well ID: 101745 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Red Rock Distributing Co.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 22 Date to First Water: 0

Approximate Yield: 0 Construction Date: 11-MAY-06
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=101745

WNW 1/2 - 1 Mile Higher

Well ID: 60208 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: Washington Group Int'l

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 33.90000153 Date to First Water: 0

Approximate Yield: 0 Construction Date: 15-DEC-00
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=60208

Map ID Direction Distance

Elevation Database EDR ID Number

AA231 North 1/2 - 1 Mile

OK WELLS OK700000176001

1/2 - 1 Mile Higher

Well ID: 97468 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 149 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97468

AA232 North 1/2 - 1 Mile Higher

Well ID: 97467 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 70 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97467

ENE 1/2 - 1 Mile Higher

Well ID: 89397 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: Standard Testing & Eng

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 40 Date to First Water: 0

Approximate Yield: 0 Construction Date: 23-MAR-04
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=89397

AA234 North 1/2 - 1 Mile Higher

Well ID:129128Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:EPA Region 6Elevation:0Water Use:Soil Evaluation

Total Well Depth: 6 Date to First Water: 0

Approximate Yield: 0 Construction Date: 19-APR-10
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=129128

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000176000

OK7000000125318

Map ID Direction Distance

Elevation Database EDR ID Number

AJ235 WSW

OK WELLS OK700000190697

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000176003

OK700000198553

OK700000170930

1/2 - 1 Mile Higher

Well ID: 136972 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Water Quality

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 17-MAY-11
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136972

AA236 North 1/2 - 1 Mile Higher

Well ID: 97470 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 70 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97470

AJ237 WSW 1/2 - 1 Mile Higher

Well ID: 136967 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Water Quality

Total Well Depth: 20 Date to First Water: 0
Approximate Yield: 0 Construction Date: 17-MAY-11

Approximate Yield: 0 Construction Date: 17-MAY-11
Aquifer Code: Not Reported Basin Code: Not Reported
URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136967

AA238 North 1/2 - 1 Mile Higher

Well ID: 91760 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 70 Date to First Water: 18
Approximate Yield: 0 Construction Date: 15-DEC-04
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=91760

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Map ID Direction Distance

Elevation Database EDR ID Number

AK239 SW

OK WELLS OK7000000187066

1/2 - 1 Mile Higher

Well ID: 136966 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Water Quality

Total Well Depth: 10 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-MAY-11
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136966

AK240 SW OK WELLS

1/2 - 1 Mile Higher

Well ID: 136980 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Water Quality

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 18-MAY-11
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136980

AD241 NE 1/2 - 1 Mile Higher

Well ID: 97478 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 45 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97478

AL242 NNW 1/2 - 1 Mile Higher

Well ID: 99301 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Okla. Housing Authority

Elevation: 0 Water Use: Site Assessment

Total Well Depth:15Date to First Water:0Approximate Yield:0Construction Date:19-AUG-05Aquifer Code:Not ReportedBasin Code:Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=99301

**OK WELLS** 

**OK WELLS** 

OK700000199735

OK7000000176010

Map ID Direction Distance

EDR ID Number Elevation Database

AD243

**OK WELLS** OK7000000172156

OK700000176004

OK700000170927

OK700000199279

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

1/2 - 1 Mile Higher

> Well ID: 97477 Well Type: Monitoring Well

Not Reported Well Owner: OK Dept of Environmental Qual. Permit #:

Site Assessment Elevation: Water Use:

Total Well Depth: 148 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97477

**AA244** North 1/2 - 1 Mile Higher

> Well ID: 97471 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: Water Use: Site Assessment 0

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97471

**AA245** North 1/2 - 1 Mile

91757 Well Type: Well ID: Monitoring Well

Well Owner: Permit #: Not Reported OK Dept of Environmental Qual.

Site Assessment Elevation: 0 Water Use:

Total Well Depth: 20 Date to First Water: 10

Approximate Yield: 0 13-DEC-04 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=91757

**AH246** 

SW 1/2 - 1 Mile Higher

Higher

Well ID: 136977 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Water Quality

Total Well Depth: 15 Date to First Water: 0

Construction Date: Approximate Yield: 0 18-MAY-11 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136977

Map ID Direction Distance

Elevation Database EDR ID Number

AM247 North 1/2 - 1 Mile

OK WELLS OK700000133682

OK700000147803

OK700000194454

OK7000000203329

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

1/2 - 1 Mile Higher

 Well ID:
 129129
 Well Type:
 Geotechnical Boring

 Permit #:
 Not Reported
 Well Owner:
 EPA Region 6

 Elevation:
 0
 Water Use:
 Soil Evaluation

Total Well Depth: 6 Date to First Water: 0

Approximate Yield: 0 Construction Date: 19-APR-10 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=129129

AE248 West 1/2 - 1 Mile Higher

Well ID: 198843 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: N/A

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 17-DEC-19
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=198843

AN249 NNE 1/2 - 1 Mile Higher

Higher

Well ID: 202194 Well Type: Monitoring Well Permit #: Not Reported Well Owner: USEPA

Elevation: 0 Water Use: Site Assessment
Total Well Depth: 39.5 Date to First Water: 0

Total Well Depth: 39.5 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-NOV-90

Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202194

AN250 NNE 1/2 - 1 Mile

Well ID: 202195 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Fourth Street Superfund Site

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 35 Date to First Water: 0

Approximate Yield: 0 Construction Date: 14-NOV-90 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202195

Map ID Direction Distance

Elevation Database EDR ID Number

AJ251 WSW

OK WELLS OK700000140789

**OK WELLS** 

**OK WELLS** 

OK700000123282

OK7000000187412

OK700000185072

1/2 - 1 Mile Higher

Well ID: 179487 Well Type: Geotechnical Boring

Permit #:Not ReportedWell Owner:AICCMElevation:0Water Use:Soil EvaluationTotal Well Depth:15Date to First Water:0

Approximate Yield: 0 Construction Date: 06-MAR-17
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=179487

AJ252 WSW 1/2 - 1 Mile Higher

her

Well ID: 79774 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79774

AM253 North 1/2 - 1 Mile Higher

Higher

Well ID: 178617 Well Type: Monitoring Well Permit #: Not Reported Well Owner: OCURA

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 30 Date to First Water: 0
Approximate Yield: 0 Construction Date: 27-JAN-17
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=178617

AM254
North
1/2 - 1 Mile

Well ID:178616Well Type:Monitoring WellPermit #:Not ReportedWell Owner:OCURA

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 27-JAN-17
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=178616

Map ID Direction Distance

EDR ID Number Elevation Database

AM255 North 1/2 - 1 Mile

**OK WELLS** OK700000191097

USGS40000969977

**FED USGS** 

Higher

Well ID: 178615 Well Type: Monitoring Well Not Reported Well Owner: **OCURA** Permit #: Site Assessment

Elevation: Water Use:

Total Well Depth: 15 Date to First Water:

0 Construction Date: 27-JAN-17 Approximate Yield: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=178615

AN256

NNE 1/2 - 1 Mile Higher

> Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 12N-03W-12 BCD 1 Type: Well Description: Not Reported HUC: 11100302 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Not Reported Formation Type: Garber Sandstone Aquifer: Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

AF257 **FED USGS** USGS40000969692

1/2 - 1 Mile Higher

> Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 11N-03W-01 DBB 1 Type: Well Description: Not Reported HUC: 11100302 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: 1934

Well Depth: Well Depth Units: 886

Well Hole Depth: Well Hole Depth Units: Not Reported Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1934

Feet below surface: 300 Feet to sea level: Not Reported

Note: Not Reported

**AL258** 

NNW 1/2 - 1 Mile Higher

> Well ID: 177293 Geotechnical Boring Well Type: Well Owner: Permit #: Not Reported Eve Patterson

> > TC7204954.2s Page A-88

**OK WELLS** 

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 5.19999981 Date to First Water: 0

Approximate Yield: 0 Construction Date: 08-SEP-16
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=177293

AL259 NNW OK WELLS OK7000000202650

1/2 - 1 Mile Higher

Well ID:177291Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Eve PattersonElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 08-SEP-16
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=177291

AG260 NW OK WELLS OK7000000190165

1/2 - 1 Mile Higher

Well ID:197874Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Double Eagle Refinery

Elevation: 0 Water Use: Water Quality

Total Well Depth: 32.20000076 Date to First Water: 0

Approximate Yield: 0 Construction Date: 08-NOV-90 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197874

AG261 NW OK WELLS OK7000000191364

1/2 - 1 Mile Higher

Well ID:202614Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Double Eagle RefineryElevation:0Water Use:Site Assessment

Total Well Depth: 39.79999924 Date to First Water: 0

Approximate Yield: 0 Construction Date: 07-NOV-90 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202614

AM262 North OK WELLS OK7000000176002

1/2 - 1 Mile Higher

Well ID: 97469 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 70 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97469

AM263 **OK WELLS** OK700000175882 North

1/2 - 1 Mile Higher

> Well ID: 97465 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment Total Well Depth: 70 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97465

AM264 **OK WELLS** OK700000170928 North

1/2 - 1 Mile Higher

> Well ID: 91758 Well Type: Monitoring Well

Well Owner: OK Dept of Environmental Qual. Permit #: Not Reported

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 70 Date to First Water: Approximate Yield: 0 Construction Date: 13-DEC-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=91758

**AM265 OK WELLS** OK700000170929 North

1/2 - 1 Mile Higher

> Well ID: 91759 Well Type: Monitoring Well

Permit #: Well Owner: OK Dept of Environmental Qual. Not Reported

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 70 Date to First Water:

Approximate Yield: Construction Date: 14-DEC-04 Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=91759

AO266 South 1/2 - 1 Mile Higher **OK WELLS** OK700000153887

49974 Well ID: Well Type: Monitoring Well Well Owner: Permit #: Red Rock Not Reported Elevation: 0 Water Use: Water Quality

Total Well Depth: 20 Date to First Water:

02-FEB-00 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=49974

AO267 South 1/2 - 1 Mile OK7000000157615 **OK WELLS** 

Higher

Well ID: 53654 Well Type: Monitoring Well Fule At The Flag #5 Permit #: Not Reported Well Owner: Elevation: Water Use: Water Quality Total Well Depth: 15 Date to First Water: 10 11-JUL-00 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=53654

**AN268** NNE 1/2 - 1 Mile Higher

> Well ID: 97466 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: Water Use: Site Assessment

Total Well Depth: 45 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97466

269 1/2 - 1 Mile Higher

> Well ID: Groundwater Well 190732 Well Type: Permit #: Not Reported Well Owner: MARIE MCGUIRE PLAZA

Irrigation Elevation: 0 Water Use: Total Well Depth: 260 Date to First Water: 80 Approximate Yield: 15 Construction Date: 11-SEP-18 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=190732

NNW 1/2 - 1 Mile Higher

Well ID: 67488 Well Type: Geotechnical Boring

Well Owner: Permit #: Not Reported **OCHA** Elevation: Water Use: 0 Soil Evaluation Total Well Depth: 20 Date to First Water: 13

Approximate Yield: Construction Date: 27-NOV-01 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=67488 **OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000175883

OK700000113255

Map ID Direction Distance

EDR ID Number Elevation Database

**AP271** NNE

1/2 - 1 Mile Higher

**OK WELLS** OK700000190408

OK700000198554

USGS40000969751

OK700000187067

**OK WELLS** 

**FED USGS** 

Well ID: 202021 Well Type: Monitoring Well Not Reported Well Owner: 4th Street Superfund Site Permit #:

Elevation: Water Use: Site Assessment

Total Well Depth: 39.20000076 Date to First Water:

Approximate Yield: 0 Construction Date: 15-NOV-90 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202021

AQ272 WSW 1/2 - 1 Mile Higher

> Well ID: 136968 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: Water Use: Water Quality 0

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 17-MAY-11 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136968

273

**East** 1/2 - 1 Mile Higher

> Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 11N-03W-01 ABD 1 Type: Well Description: NAWQA URBAN SAMPLING HUC: 11100302 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Formation Type: Garber Sandstone Not Reported

Construction Date: Aquifer Type: Not Reported 19500000

Well Depth: Well Depth Units: 191 Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: Level reading date: 1982-06-04 1 Feet below surface: 103.00 Feet to sea level: Not Reported

Note: Not Reported

**AK274** 

1/2 - 1 Mile Higher

> Well ID: 136976 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Water Use: Water Quality Elevation: 0

Total Well Depth: 15 Date to First Water: 0

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**OK WELLS** 

Approximate Yield: 0 Construction Date: 18-MAY-11 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136976

**AR275 OK WELLS** OK700000176005

1/2 - 1 Mile Higher

> Well ID: 97472 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: OK Dept of Environmental Qual.

Elevation: 0 Water Use: Site Assessment Total Well Depth: 41 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97472

**AR276 OK WELLS** OK700000176006

1/2 - 1 Mile Higher

> Well ID: 97473 Well Type: Monitoring Well

Well Owner: OK Dept of Environmental Qual. Permit #: Not Reported

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 149 Date to First Water:

Approximate Yield: Construction Date: Not Reported 0 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97473

**AM277 OK WELLS** OK700000133683 North

1/2 - 1 Mile Higher

> Well ID: 129130 Well Type: Geotechnical Boring EPA Region 6 Permit #: Well Owner: Not Reported Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 3.5 Date to First Water:

Approximate Yield: Construction Date: 19-APR-10 Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=129130

**AM278** North 1/2 - 1 Mile Higher **OK WELLS** OK700000135218

Well ID: 199576 Well Type: Geotechnical Boring

Well Owner: Permit #: **OCURA** Not Reported Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water:

13-MAR-20 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=199576

AK279 SW OK WELLS OK7000000123291

1/2 - 1 Mile Higher

Well ID: 79783 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation:0Water Use:Soil EvaluationTotal Well Depth:64Date to First Water:0Approximate Yield:0Construction Date:01-AUG-03Aquifer Code:Not ReportedBasin Code:Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79783

AS280 North 1/2 - 1 Mile

Well ID:129131Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:EPA Region 6Elevation:0Water Use:Soil Evaluation

Total Well Depth: 3.5 Date to First Water: 0

Approximate Yield: 0 Construction Date: 19-APR-10
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=129131

281
West OK WELLS OK700000123649

west 1/2 - 1 Mile Higher

Higher

Well ID: 79763 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79763

AT282 SW OK WELLS OK7000000156289 1/2 - 1 Mile

Higher

Well ID: 54332

Well Type:

Well ID:54332Well Type:Monitoring WellPermit #:Not ReportedWell Owner:City of OKCElevation:0Water Use:Water Quality

Total Well Depth: 19.5 Date to First Water: 0

Approximate Yield: 0 Construction Date: 18-AUG-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=54332

Map ID Direction Distance

Elevation Database EDR ID Number

AT283 SW

OK WELLS OK700000123289

1/2 - 1 Mile Higher

Well ID: 79781 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79781

AT284 SW 1/2 - 1 Mile Higher

 gher
 Permit #:
 19340064

Permit Record Type: Permit Water Code: Groundwater OWRB Permit Type: **Entity Name:** Phillips Petroleum Co Prior Right Primary Water Use Purpose: Industrial Date Permit Application Filed: 31-DEC-34 Date Permit Issued: 10-MAR-81 Hydrologic Unit Code: 11100302

Stream System ID: 2051 Water Allocated to Permit: 304 acre-feet per year

\_\_\_\_\_

AT285 SW 1/2 - 1 Mile Higher

Well ID: 179490 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: AICCM

Elevation: 0 Water Use: Soil Evaluation
Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 06-MAR-17
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=179490

286 WNW 1/2 - 1 Mile Higher

Well ID: 196344 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Bruce Ryan, nominee

Elevation: 0 Water Use: Water Quality

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 07-JUL-98
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196344

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OKWR1000009205

OK7000000151519

Map ID Direction Distance

EDR ID Number Elevation Database

**AP287** NNE

**OK WELLS** OK700000140373

1/2 - 1 Mile Higher

> Well ID: 188015 Well Type: Geotechnical Boring Not Reported Well Owner: **Project Maverick** Permit #: Soil Evaluation Elevation: Water Use:

Total Well Depth: 5 Date to First Water:

Approximate Yield: 0 Construction Date: 25-JUN-18 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=188015

**AP288** NNE 1/2 - 1 Mile Higher

> Well ID: 188013 Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: Project Maverick Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 5 Date to First Water:

Approximate Yield: 0 Construction Date: 25-JUN-18 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=188013

289 wsw 1/2 - 1 Mile Higher

> 79768 Well Type: Well ID: Geotechnical Boring

Well Owner: Permit #: Not Reported Native American Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 64 Date to First Water:

Approximate Yield: 0 01-AUG-03 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79768

**AP290 OK WELLS** OK700000148680 NNE

1/2 - 1 Mile Higher

> Geotechnical Boring Well ID: 188014 Well Type: Permit #: Not Reported Well Owner: Project Maverick Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 5 Date to First Water: 0

0 Construction Date: Approximate Yield: 25-JUN-18 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=188014 OK700000139034

OK700000123654

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

Elevation Database EDR ID Number

AU291 WNW 1/2 - 1 Mile

OK WELLS OK7000000165314

1/2 - 1 Mile Higher

Well ID: 71262 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Alber Skalovsky c/o Enercon Se

Elevation: 0 Water Use: Water Quality

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 03-JUL-02
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=71262

AU292 WNW 1/2 - 1 Mile Higher

Well ID: 71261 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: 4lbert Skalovsky c/o Enercon S

Elevation: 0 Water Use: Water Quality

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 09-JUL-02
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=71261

AU293 WNW 1/2 - 1 Mile Higher

Well ID: 71264 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Albert Skalovsky c/o Enercon S

Elevation: 0 Water Use: Water Quality

Total Well Depth: 20 Date to First Water: 0
Approximate Yield: 0 Construction Date: 03-JUL-02

Aquifer Code: Not Reported Basin Code: Not Reported URL: Not Reported http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=71264

AU294 WNW 1/2 - 1 Mile Higher

Well ID: 71263 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Albert Skalovsky c/o Enercon S

Elevation: 0 Water Use: Water Quality

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 03-JUL-02
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=71263

OK7000000165313

OK700000165652

OK700000165651

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

**AS295** North

**OK WELLS** OK7000000196139

1/2 - 1 Mile Higher

> Well ID: 197794 Well Type: Monitoring Well

Not Reported Well Owner: The City of Oklahoma City Permit #:

Elevation: Water Use: Water Quality

Total Well Depth: 58 Date to First Water:

Approximate Yield: 0 Construction Date: 09-APR-94 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197794

AV296 North 1/2 - 1 Mile Higher

**OK WELLS** OK7000000201726

Well ID: 202206 Well Type: Monitoring Well Permit #: Not Reported Well Owner: The City of OKC Elevation: Water Use: Site Assessment 0

Total Well Depth: 49.5 Date to First Water: Approximate Yield: 0 Construction Date: 29-JAN-97 Not Reported Aquifer Code: Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202206

AV297 North 1/2 - 1 Mile Higher

> Well Type: Well ID: 202197 Monitoring Well Well Owner: Permit #: Not Reported Flour Daniel Elevation: 0 Water Use: Site Assessment

Total Well Depth: 50 Date to First Water: 10

08-APR-92 Approximate Yield: 0 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202197

AW298 **WSW** 1/2 - 1 Mile Higher

Well ID: 136978 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Water Quality

Total Well Depth: 15 Date to First Water: 0

0 Construction Date: Approximate Yield: 18-MAY-11 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136978 **OK WELLS** 

**OK WELLS** 

OK7000000203349

Map ID Direction Distance

EDR ID Number Elevation Database

AX299

NW **OK WELLS** OK700000116830 1/2 - 1 Mile

Higher

Well ID: 60206 Well Type: Geotechnical Boring Well Owner: Washington Gropu Int'l Permit #: Not Reported

Soil Evaluation Elevation: Water Use:

Total Well Depth: 48.79999924 Date to First Water:

Approximate Yield: 0 Construction Date: 18-DEC-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=60206

AY300 NW 1/2 - 1 Mile OK700000122031 **OK WELLS** 

Higher

Well ID: 72686 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Sturm Engineering Company

Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 43.79999924 Date to First Water:

Approximate Yield: Construction Date: 24-AUG-02 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=72686

AX301 NW 1/2 - 1 Mile Higher

Higher

Well ID: 135115 Well Type: Geothermal or Heat Pump Well

Well Owner: Permit #: Not Reported Comfort Works Elevation: 0 Water Use: Heat Exchange

Total Well Depth: 400 Date to First Water:

Approximate Yield: 0 25-MAR-11 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=135115

AQ302 **OK WELLS** wsw 1/2 - 1 Mile

Well ID: 179486 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: **AICCM** Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 20 Date to First Water: 0 Construction Date: Approximate Yield: 0 06-MAR-17

Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=179486 **OK WELLS** 

OK700000140911

Map ID Direction Distance

Elevation Database EDR ID Number

AW303 WSW

OK WELLS OK700000150116

OK700000123283

USGS40000969685

OK700000146797

**OK WELLS** 

**FED USGS** 

1/2 - 1 Mile Higher

Well ID: 179489 Well Type: Geotechnical Boring

Permit #:Not ReportedWell Owner:AICCMElevation:0Water Use:Soil EvaluationTotal Well Depth:15Date to First Water:0

Approximate Yield: 0 Construction Date: 06-MAR-17
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=179489

AQ304 WSW 1/2 - 1 Mile Higher

Well ID: 79775 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79775

AT305

WSW 1/2 - 1 Mile Higher

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 11N-03W-02 CAB 1 Type: Well Description: Not Reported HUC: 11100302 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Formation Type: Not Reported Garber Sandstone Construction Date: Aquifer Type: Not Reported Not Reported

Well Depth: 416 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1936-03-01 Feet below surface: 130 Feet to sea level: Not Reported

Note: Not Reported

AY306

NW 1/2 - 1 Mile Higher

Well ID: 183296 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: METCO
Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 21.5 Date to First Water: 0

**OK WELLS** 

Approximate Yield: 0 Construction Date: 26-OCT-17
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=183296

AZ307 SE OK WELLS OK7000000199487

1/2 - 1 Mile Higher

Well ID:197562Well Type:Monitoring WellPermit #:Not ReportedWell Owner:ABF Freight SystemsElevation:0Water Use:Site Assessment

Total Well Depth: 40 Date to First Water: 0

Approximate Yield: 0 Construction Date: 09-DEC-19
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197562

308 SW OK WELLS OK7000000123292

1/2 - 1 Mile Higher

Well ID: 79784 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79784

AZ309
SE OK WELLS OK7000000185783

1/2 - 1 Mile Higher

Well ID:198560Well Type:Monitoring WellPermit #:Not ReportedWell Owner:ABC Freight System IncElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=198560

AZ310 SE OK WELLS OK7000000197795

1/2 - 1 Mile Higher

Well ID:198561Well Type:Monitoring WellPermit #:Not ReportedWell Owner:ABC Freight System IncElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=198561

BA311
WNW OK WELLS OK7000000193429
1/2 - 1 Mile

1/2 - 1 Mi Higher

> Well ID: 196515 Monitoring Well Well Type: Well Owner: Permit #: Not Reported Bruce Ryan Elevation: Water Use: Water Quality Total Well Depth: 20 Date to First Water: 07-JUL-98 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196515

BA312

WNW 1/2 - 1 Mile Higher

Well ID:196516Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Bruce RyanElevation:0Water Use:Water Quality

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 07-JUL-98
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196516

BB313 South OK WELLS OK7000000128183

1/2 - 1 Mile Higher

Well ID: 108161 Well Type: Geotechnical Boring
Permit #: Well Owner: Benham Companies, LLC

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 80 Date to First Water: 0

Approximate Yield: 0 Construction Date: 09-NOV-06
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=108161

BB314
South OK WELLS OK7000000129034
1/2 - 1 Mile

Higher

Well ID: 108162 Well Type: Geotechnical Boring
Permit #: Well Owner: Benham Companies, LLC

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 80 Date to First Water: 0

Approximate Yield: 0 Construction Date: 31-OCT-06
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=108162

**OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

**BC315** NNW

**OK WELLS** OK700000134493

**OK WELLS** 

**OK WELLS** 

OK700000134085

OK700000159757

1/2 - 1 Mile Higher

> Well ID: 132990 Well Type: Geothermal or Heat Pump Well

Not Reported Well Owner: Habitat for Humanity Permit #: Elevation: Water Use: Heat Exchange Total Well Depth: 400 Date to First Water:

Approximate Yield: 0 Construction Date: 01-NOV-10 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=132990

BC316 NNW 1/2 - 1 Mile Higher

> Well ID: 132989 Well Type: Geothermal or Heat Pump Well

Permit #: Not Reported Well Owner: Habitat for Humanity Elevation: Heat Exchange Water Use: 0

Total Well Depth: 400 Date to First Water:

Approximate Yield: 0 Construction Date: 01-NOV-10 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=132989

BC317 NNW 1/2 - 1 Mile Higher

> 67519 Well Type: Well ID: Monitoring Well Well Owner: Permit #: Not Reported **OCURA** Water Quality Elevation: 0 Water Use:

Total Well Depth: 25 Date to First Water: 19 Approximate Yield: 0 27-NOV-01 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=67519

**BC318 OK WELLS** OK700000134540 NNW

1/2 - 1 Mile Higher

> Well ID: 133037 Well Type: Geothermal or Heat Pump Well

Permit #: Not Reported Well Owner: Habitat for Humanity Elevation: Water Use: Heat Exchange 0

Total Well Depth: 400 Date to First Water: 0

Construction Date: Approximate Yield: 0 03-NOV-10 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=133037

Map ID Direction Distance

Elevation Database EDR ID Number

BD319 SW

OK WELLS OK700000192376

**OK WELLS** 

**OK WELLS** 

OK700000135254

OK700000198555

OK700000193521

1/2 - 1 Mile Higher

Well ID: 136971 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Water Quality

Total Well Depth: 10 Date to First Water: 0

Approximate Yield: 0 Construction Date: 17-MAY-11
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136971

BE320 WSW 1/2 - 1 Mile Higher

Well ID: 179488 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: AICCM
Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 06-MAR-17
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=179488

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BE321 WSW 1/2 - 1 Mile Higher

1/2 - 1 Mile

Well ID: 136969 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Water Quality

Total Well Depth: 19 Date to First Water: 0
Approximate Yield: 0 Construction Date: 17-MAY-11

Approximate Yield: 0 Construction Date: 17-MAY-11
Aquifer Code: Not Reported Basin Code: Not Reported
URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136969

AZ322 SE OK WELLS

 Well ID:
 196738
 Well Type:
 Monitoring Well

 Permit #:
 Not Reported
 Well Owner:
 ABF Freight System Inc.

Elevation: 0 Water Use: Site Assessment Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 11-SEP-19
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=196738

Map ID Direction Distance

EDR ID Number Elevation Database

323 North

**FED USGS** USGS40000970028

OK700000123290

OK700000190304

OK700000176058

**OK WELLS** 

**OK WELLS** 

1/2 - 1 Mile Higher

> Organization ID: **USGS-OK** Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 12N-03W-35 AD 1 Type: Well HUC: Description: GAMMA RAY LOG 11100302 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Well Depth Units: Not Reported Not Reported Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

**BD324** WSW 1/2 - 1 Mile Higher

> Geotechnical Boring Well ID: 79782 Well Type:

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: Water Use: Soil Evaluation

Total Well Depth: Date to First Water: 64

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79782

**BF325** SSW 1/2 - 1 Mile

Higher

Well ID: Monitoring Well 150464 Well Type: Permit #: Not Reported Well Owner: Beaver Express

Elevation: 0 Water Use: Site Assessment Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=150464

**BG326 OK WELLS** 1/2 - 1 Mile

Higher Well ID: 100270 Well Type: Monitoring Well

Well Owner: Permit #: Not Reported Beaver Express Elevation: 0 Water Use: Site Assessment 14 Total Well Depth: Date to First Water: 0

Approximate Yield: Construction Date:

22-JUL-05 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=100270

Map ID Direction Distance

EDR ID Number Elevation Database

**BG327** SSW

**OK WELLS** 1/2 - 1 Mile

Higher

Well ID: 97995 Well Type: Geotechnical Boring Not Reported Well Owner: Nabholz Construction Corp. Permit #:

Elevation: Water Use: Soil Evaluation

Total Well Depth: 20.5 Date to First Water:

Approximate Yield: 0 Construction Date: 10-NOV-05 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97995

BF328 SSW 1/2 - 1 Mile Higher

Well ID: 150059 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Beaver Express Services, LLC

Elevation: Water Use: Site Assessment 0

Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=150059

BF329 SSW 1/2 - 1 Mile Higher

> 147346 Well Type: Well ID: Monitoring Well

Well Owner: Permit #: Not Reported Beaver Express Service, LLC

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 25 Date to First Water:

16-NOV-12 Approximate Yield: 0 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=147346

**BF330 OK WELLS** OK7000000175142 SSW

1/2 - 1 Mile Higher

> Well ID: 97258 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Beaver Express / Dittner Site Assessment

Elevation: 0 Water Use: Total Well Depth: 14 Date to First Water: 0

0 Construction Date: 04-OCT-05 Approximate Yield: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=97258 OK7000000126768

OK700000185304

OK700000193764

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

Elevation Database EDR ID Number

Well Type:

Well Owner:

BH331 ESE

1/2 - 1 Mile Higher

Approximate Yield:

OK WELLS OK700000121940

OK700000127066

OK700000138098

Geotechnical Boring

Scott Mfg.

**OK WELLS** 

**OK WELLS** 

Soil Evaluation

Soil Evaluation

Well ID: 75701

0

Permit #: Not Reported Elevation: 0
Total Well Depth: 25

Water Use:
Date to First Water:
Construction Date:

Construction Date: 21-JAN-03
Basin Code: Not Reported

Aquifer Code: Not Reported Basin Code: URL: Basin Code: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=75701

BH332 ESE 1/2 - 1 Mile Higher

Well ID: 96034 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: T-Mobile Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 45 Date to First Water: 0

Approximate Yield: 0 Construction Date: 24-AUG-05 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=96034

BI333

SSW 1/2 - 1 Mile Higher

Well ID: 202627 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 16-SEP-20
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202627

BI334
SSW OK WELLS OK7000000138097
1/2 - 1 Mile

Higher

Well ID: 202626 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-SEP-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202626

Map ID Direction Distance

Elevation Database EDR ID Number

BI335 SSW

1/2 - 1 Mile Higher OK WELLS OK700000147687

OK700000140850

Geotechnical Boring

**OK WELLS** 

Well ID: 202625 Well Type:

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 30 Date to First Water:

Approximate Yield: 0 Construction Date: 16-SEP-20
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202625

BI336 SSW 1/2 - 1 Mile Higher

Well ID: 202628 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 35 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-SEP-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202628

BI337 SSW OK WELLS OK700000140849

1/2 - 1 Mile Higher

Well ID: 202624 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II
Elevation: 0 Water Use: Soil Evaluation

Elevation: 0 Water Use: Soil Eval Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-SEP-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202624

BB338
South OK WELLS OK7000000150852

1/2 - 1 Mile Higher

Well ID: 136150 Well Type: Geothermal or Heat Pump Well Permit #: Well Owner: Crooked Oak Schools phase 2

Elevation: 0 Water Use: Heat Exchange

Total Well Depth: 400 Date to First Water: 10
Approximate Yield: 20 Construction Date: 20-MAY-11
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136150

Map ID Direction Distance

Elevation Database EDR ID Number

BF339 SSW

OK WELLS OK700000138321

1/2 - 1 Mile Higher

Well ID: 202630 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-SEP-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202630

BF340 SSW OK WELLS OK7000000145256 1/2 - 1 Mile

1/2 - 1 M Higher

Well ID: 202629 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 35 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-SEP-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202629

341 West OK WELLS OK7000000123650

West 1/2 - 1 Mile Higher

Well ID: 79764 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu Elevation: 0 Water Use: Soil Evaluation

Elevation: 0 Water Use: S
Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79764

342 SSE FED USGS USGS40000969633

1/2 - 1 Mile Higher

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 11N-03W-01 CDD 1 OKC GW Well on SE 15TH

Type: Well

Description: VANDALISED JAN 1990. OBSTRUCTION AROUND 200 FT.

HUC: 11100302 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Garber Sandstone Aquifer Type: Not Reported

Construction Date: 19750521 Well Depth: 354 Well Depth Units: ft Well Hole Depth: 354

Well Hole Depth Units: ft

Ground water levels, Number of N Feet below surface:	Measurements: 485 Not Reported	Level reading date: Feet to sea level:	1990-03-05 Not Reported
Note:	An obstruction was encountered in th	e well above the water surface (no	•
Level reading date:	1989-07-26	Feet below surface:	218.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-06-28	Feet below surface:	218.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-05-31 Not Reported	Feet below surface:	218.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date: Feet to sea level:	1989-03-17 Not Reported	Feet below surface: Note:	219.62 Not Reported
	Not Reported		Not Reported
Level reading date: Feet to sea level:	1989-01-20 Not Reported	Feet below surface: Note:	219.77 Not Reported
	•		·
Level reading date: Feet to sea level:	1988-10-31 Not Reported	Feet below surface: Note:	220.63 Not Reported
Laurahara Para data	•	Factbalancesta	·
Level reading date: Feet to sea level:	1988-05-31 Not Reported	Feet below surface: Note:	219.14 Not Reported
Loyal randing data:	1988-03-24	Feet below surface:	218.68
Level reading date: Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-01-28	Feet below surface:	219.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-01-28	Feet below surface:	219.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-11-06	Feet below surface:	220.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-09-30	Feet below surface:	222.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-06-30	Feet below surface:	224.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-03-31	Feet below surface:	222.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date: Feet to sea level:	1987-01-14 Not Reported	Feet below surface: Note:	223.15 Not Reported
	Not Reported	Note.	·
Level reading date: Feet to sea level:	1986-10-21 Not Reported	Feet below surface: Note:	224.85 Not Reported
	·		·
Level reading date: Feet to sea level:	1984-08-20 Not Reported	Feet below surface: Note:	228.08 Not Reported
	•		·
Level reading date: Feet to sea level:	1984-08-15 Not Reported	Feet below surface: Note:	228.35 Not Reported
Level reading date:	108/1-08-10	Feet below surface:	·
Level reading date:	1984-08-10	r eet below suitace:	228.48

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-08-05	Feet below surface:	228.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-07-31	Feet below surface:	228.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-07-20	Feet below surface:	228.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-07-10	Feet below surface:	228.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-07-05	Feet below surface:	228.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-06-30	Feet below surface:	228.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-06-25	Feet below surface:	228.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-06-20	Feet below surface:	228.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-06-15	Feet below surface:	228.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-06-10	Feet below surface:	228.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-06-05	Feet below surface:	228.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-05-31	Feet below surface:	228.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-05-25	Feet below surface:	228.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-05-20	Feet below surface:	228.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-05-15	Feet below surface:	228.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-05-05	Feet below surface:	227.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-04-30	Feet below surface:	228.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-04-25	Feet below surface:	227.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-04-20	Feet below surface:	227.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-04-15	Feet below surface:	228.42
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1984-04-10	Feet below surface:	228.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-04-05	Feet below surface:	228.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-31	Feet below surface:	229.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-25	Feet below surface:	229.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-20	Feet below surface:	229.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-15	Feet below surface:	229.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-10	Feet below surface:	229.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-05	Feet below surface:	229.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-29	Feet below surface:	229.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-25	Feet below surface:	229.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-20	Feet below surface:	230.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-05	Feet below surface:	230.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-31	Feet below surface:	230.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-25	Feet below surface:	230.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-20	Feet below surface:	230.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-15	Feet below surface:	230.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-10	Feet below surface:	230.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-05	Feet below surface:	229.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-12-31	Feet below surface:	229.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-12-25	Feet below surface:	229.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-12-20	Feet below surface:	229.10
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1983-12-15	Feet below surface:	228.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-12-05	Feet below surface:	228.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-30	Feet below surface:	228.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-25	Feet below surface:	228.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-20	Feet below surface:	228.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-15	Feet below surface:	228.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-10	Feet below surface:	228.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-05	Feet below surface:	228.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-10-31	Feet below surface:	228.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-10-25	Feet below surface:	228.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-10-20	Feet below surface:	228.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-10-15	Feet below surface:	228.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-09-05	Feet below surface:	228.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-31	Feet below surface:	228.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-25	Feet below surface:	228.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-20	Feet below surface:	227.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-15	Feet below surface:	227.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-10	Feet below surface:	227.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-05	Feet below surface:	227.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-31	Feet below surface:	227.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-25	Feet below surface:	226.91
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1983-07-20	Feet below surface:	226.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-15	Feet below surface:	226.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-10	Feet below surface:	226.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-05	Feet below surface:	226.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-06-30	Feet below surface:	226.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-06-25	Feet below surface:	225.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-06-20	Feet below surface:	225.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-06-15	Feet below surface:	225.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-06-10	Feet below surface:	225.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-06-05	Feet below surface:	225.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-05-31	Feet below surface:	225.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-05-25	Feet below surface:	225.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-05-20	Feet below surface:	225.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-05-15	Feet below surface:	225.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-05-10	Feet below surface:	225.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-05-05	Feet below surface:	225.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-04-30	Feet below surface:	225.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-04-25	Feet below surface:	225.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-04-20	Feet below surface:	225.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-04-15	Feet below surface:	225.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-04-10	Feet below surface:	225.48
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1983-03-31	Feet below surface:	225.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-03-25	Feet below surface:	225.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-03-20	Feet below surface:	226.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-03-15	Feet below surface:	225.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-03-10	Feet below surface:	226.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-03-05	Feet below surface:	225.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-02-28	Feet below surface:	226.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-02-25	Feet below surface:	226.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-02-20	Feet below surface:	226.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-02-15	Feet below surface:	226.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-02-10	Feet below surface:	225.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-02-05	Feet below surface:	225.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-01-31	Feet below surface:	224.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-01-25	Feet below surface:	224.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-01-20	Feet below surface:	224.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-01-15	Feet below surface:	224.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-01-10	Feet below surface:	224.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-01-05	Feet below surface:	224.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-12-31	Feet below surface:	224.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-12-25	Feet below surface:	224.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-12-20	Feet below surface:	224.32
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1982-12-15	Feet below surface:	224.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-12-10	Feet below surface:	224.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-11-30	Feet below surface:	224.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-11-25	Feet below surface:	225.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-11-20	Feet below surface:	224.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-11-15	Feet below surface:	225.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-11-10	Feet below surface:	225.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-11-05	Feet below surface:	225.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-10-31	Feet below surface:	225.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-10-25	Feet below surface:	225.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-10-20	Feet below surface:	225.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-10-15	Feet below surface:	225.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-10-10	Feet below surface:	225.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-10-05	Feet below surface:	225.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-09-30	Feet below surface:	224.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-09-25	Feet below surface:	224.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-09-20	Feet below surface:	224.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-09-15	Feet below surface:	224.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-09-10	Feet below surface:	223.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-08-31	Feet below surface:	222.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-08-25	Feet below surface:	222.77
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1982-08-20	Feet below surface:	222.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-08-15	Feet below surface:	222.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-08-10	Feet below surface:	222.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-08-05	Feet below surface:	222.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-07-31	Feet below surface:	222.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-07-25	Feet below surface:	221.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-07-20	Feet below surface:	221.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-07-15	Feet below surface:	220.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-07-10	Feet below surface:	220.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-07-05	Feet below surface:	220.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-06-30	Feet below surface:	220.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-06-25	Feet below surface:	220.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-06-20	Feet below surface:	220.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-06-15	Feet below surface:	220.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-06-10	Feet below surface:	220.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-06-05	Feet below surface:	220.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-05-31	Feet below surface:	220.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-05-25	Feet below surface:	219.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-05-20	Feet below surface:	219.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-05-15	Feet below surface:	219.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-05-10	Feet below surface:	219.53
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1982-05-05	Feet below surface:	218.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-04-30	Feet below surface:	218.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-04-25	Feet below surface:	218.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-04-20	Feet below surface:	218.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-04-15	Feet below surface:	217.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-04-10	Feet below surface:	217.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-04-05	Feet below surface:	217.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-03-30	Feet below surface:	216.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-03-25	Feet below surface:	216.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-03-15	Feet below surface:	216.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-03-10	Feet below surface:	216.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-03-05	Feet below surface:	217.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-02-28	Feet below surface:	217.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-02-25	Feet below surface:	217.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-02-20	Feet below surface:	217.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-02-10	Feet below surface:	218.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-01-25	Feet below surface:	218.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-01-20	Feet below surface:	218.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-01-15	Feet below surface:	219.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-01-10	Feet below surface:	220.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-01-05	Feet below surface:	219.46
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1981-12-30	Feet below surface:	219.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-12-25	Feet below surface:	220.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-12-15	Feet below surface:	220.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-12-10	Feet below surface:	220.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-12-05	Feet below surface:	220.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-10-15	Feet below surface:	221.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-10-10	Feet below surface:	221.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-10-05	Feet below surface:	222.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-09-30	Feet below surface:	222.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-09-25	Feet below surface:	222.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-09-20	Feet below surface:	223.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-09-15	Feet below surface:	223.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-09-10	Feet below surface:	223.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-09-05	Feet below surface:	224.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-08-31	Feet below surface:	223.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-08-25	Feet below surface:	224.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-08-10	Feet below surface:	224.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-07-25	Feet below surface:	223.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-07-20	Feet below surface:	223.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-06-15	Feet below surface:	222.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-06-10	Feet below surface:	221.37
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1981-06-05	Feet below surface:	221.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-05-31	Feet below surface:	221.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-05-25	Feet below surface:	221.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-05-20	Feet below surface:	222.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-05-15	Feet below surface:	221.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-05-10	Feet below surface:	221.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-05-05	Feet below surface:	221.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-04-30	Feet below surface:	220.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-04-25	Feet below surface:	220.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-04-20	Feet below surface:	220.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-03-15	Feet below surface:	230.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-02-05	Feet below surface:	220.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-01-30	Feet below surface:	220.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-01-25	Feet below surface:	220.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-01-20	Feet below surface:	220.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-01-15	Feet below surface:	220.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-01-10	Feet below surface:	220.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-12-05	Feet below surface:	219.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-11-30	Feet below surface:	219.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-11-25	Feet below surface:	219.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-11-20	Feet below surface:	219.32
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1980-11-15	Feet below surface:	219.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-11-10	Feet below surface:	219.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-11-05	Feet below surface:	219.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-10-20	Feet below surface:	221.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-10-15	Feet below surface:	221.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-10-10	Feet below surface:	221.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-10-05	Feet below surface:	222.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-09-30	Feet below surface:	222.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-09-25	Feet below surface:	222.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-09-20	Feet below surface:	221.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-09-15	Feet below surface:	221.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-09-10	Feet below surface:	221.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-09-05	Feet below surface:	221.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-08-30	Feet below surface:	221.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-08-25	Feet below surface:	221.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-08-20	Feet below surface:	220.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-08-15	Feet below surface:	220.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-08-10	Feet below surface:	220.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-08-05	Feet below surface:	219.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-07-30	Feet below surface:	219.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-07-25	Feet below surface:	218.22
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1980-07-20	Feet below surface:	217.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-07-15	Feet below surface:	217.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-07-10	Feet below surface:	216.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-07-05	Feet below surface:	215.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-06-25	Feet below surface:	215.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-06-20	Feet below surface:	215.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-06-15	Feet below surface:	215.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-06-10	Feet below surface:	215.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-06-05	Feet below surface:	215.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-05-31	Feet below surface:	214.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-05-25	Feet below surface:	213.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-05-20	Feet below surface:	213.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-05-15	Feet below surface:	211.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-05-10	Feet below surface:	210.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-04-10	Feet below surface:	212.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-04-05	Feet below surface:	212.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-03-31	Feet below surface:	212.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-03-25	Feet below surface:	213.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-03-20	Feet below surface:	213.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-03-15	Feet below surface:	213.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-03-10	Feet below surface:	213.49
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1980-03-05	Feet below surface:	213.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-02-29	Feet below surface:	214.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-02-25	Feet below surface:	214.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-02-15	Feet below surface:	214.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-01-20	Feet below surface:	215.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-01-10	Feet below surface:	215.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-01-05	Feet below surface:	215.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-12-31	Feet below surface:	215.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-12-25	Feet below surface:	215.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-12-20	Feet below surface:	215.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-12-15	Feet below surface:	216.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-12-10	Feet below surface:	216.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-12-05	Feet below surface:	216.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-10-15	Feet below surface:	215.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-10-10	Feet below surface:	215.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-10-05	Feet below surface:	214.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-08-15	Feet below surface:	217.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-08-10	Feet below surface:	216.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-08-05	Feet below surface:	215.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-06-30	Feet below surface:	214.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-06-25	Feet below surface:	214.47
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1979-06-20	Feet below surface:	214.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-06-15	Feet below surface:	213.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-06-10	Feet below surface:	213.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-06-05	Feet below surface:	211.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-31	Feet below surface:	212.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-25	Feet below surface:	212.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-20	Feet below surface:	212.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-15	Feet below surface:	212.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-10	Feet below surface:	212.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-05	Feet below surface:	212.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-30	Feet below surface:	213.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-25	Feet below surface:	213.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-20	Feet below surface:	213.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-15	Feet below surface:	213.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-10	Feet below surface:	213.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-05	Feet below surface:	214.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-03-31	Feet below surface:	214.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-03-25	Feet below surface:	214.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-03-20	Feet below surface:	214.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-03-15	Feet below surface:	215.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-03-10	Feet below surface:	215.48
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1979-03-05	Feet below surface:	215.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-02-28	Feet below surface:	215.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-02-25	Feet below surface:	216.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-02-20	Feet below surface:	216.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-02-15	Feet below surface:	216.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-02-10	Feet below surface:	216.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-02-05	Feet below surface:	216.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-01-31	Feet below surface:	216.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-01-25	Feet below surface:	215.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-01-20	Feet below surface:	215.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-01-15	Feet below surface:	216.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-01-10	Feet below surface:	216.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-31	Feet below surface:	215.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-25	Feet below surface:	215.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-20	Feet below surface:	215.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-15	Feet below surface:	215.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-10	Feet below surface:	215.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-09-15	Feet below surface:	216.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-09-10	Feet below surface:	215.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-08-31	Feet below surface:	216.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-08-25	Feet below surface:	215.29
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1978-08-20	Feet below surface:	214.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-08-15	Feet below surface:	214.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-08-10	Feet below surface:	214.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-08-05	Feet below surface:	214.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-07-15	Feet below surface:	212.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-07-10	Feet below surface:	211.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-31	Feet below surface:	210.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-25	Feet below surface:	211.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-20	Feet below surface:	211.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-15	Feet below surface:	210.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-10	Feet below surface:	211.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-05	Feet below surface:	211.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-30	Feet below surface:	211.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-25	Feet below surface:	211.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-20	Feet below surface:	211.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-15	Feet below surface:	211.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-10	Feet below surface:	211.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-05	Feet below surface:	212.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-03-31	Feet below surface:	212.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-03-25	Feet below surface:	212.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-03-20	Feet below surface:	212.65
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1978-03-10	Feet below surface:	210.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-03-05	Feet below surface:	211.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-02-28	Feet below surface:	211.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-02-25	Feet below surface:	211.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-02-15	Feet below surface:	211.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-02-10	Feet below surface:	212.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-02-05	Feet below surface:	212.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-12-15	Feet below surface:	212.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-12-10	Feet below surface:	212.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-12-05	Feet below surface:	213.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-30	Feet below surface:	212.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-25	Feet below surface:	212.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-20	Feet below surface:	212.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-15	Feet below surface:	212.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-10	Feet below surface:	212.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-11-05	Feet below surface:	212.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-31	Feet below surface:	211.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-25	Feet below surface:	212.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-20	Feet below surface:	212.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-15	Feet below surface:	212.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-10	Feet below surface:	212.71
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-09-30	Feet below surface:	212.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-09-25	Feet below surface:	212.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-09-20	Feet below surface:	212.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-09-15	Feet below surface:	212.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-09-10	Feet below surface:	213.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-09-05	Feet below surface:	213.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-31	Feet below surface:	213.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-25	Feet below surface:	213.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-20	Feet below surface:	214.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-15	Feet below surface:	214.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-10	Feet below surface:	214.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-05	Feet below surface:	214.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-07-31	Feet below surface:	215.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-07-25	Feet below surface:	214.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-07-20	Feet below surface:	212.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-07-15	Feet below surface:	211.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-07-10	Feet below surface:	211.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-07-05	Feet below surface:	211.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-06-30	Feet below surface:	211.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-06-25	Feet below surface:	211.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-06-20	Feet below surface:	211.13
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-06-15	Feet below surface:	210.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-06-10	Feet below surface:	211.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-06-05	Feet below surface:	211.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-31	Feet below surface:	211.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-21	Feet below surface:	211.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-20	Feet below surface:	211.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-15	Feet below surface:	212.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-10	Feet below surface:	212.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-05-05	Feet below surface:	211.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-30	Feet below surface:	212.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-25	Feet below surface:	212.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-15	Feet below surface:	212.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-10	Feet below surface:	213.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-03-31	Feet below surface:	213.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-03-25	Feet below surface:	213.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-03-20	Feet below surface:	213.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-02-25	Feet below surface:	211.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-02-20	Feet below surface:	211.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-02-15	Feet below surface:	211.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-02-10	Feet below surface:	210.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-02-05	Feet below surface:	210.07
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-01-31	Feet below surface:	209.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-01-25	Feet below surface:	209.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-01-20	Feet below surface:	209.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-01-15	Feet below surface:	209.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-01-10	Feet below surface:	209.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-01-05	Feet below surface:	209.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-31	Feet below surface:	209.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-25	Feet below surface:	209.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-20	Feet below surface:	210.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-15	Feet below surface:	210.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-10	Feet below surface:	210.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-05	Feet below surface:	210.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-11-30	Feet below surface:	211.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-11-15	Feet below surface:	211.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-11-10	Feet below surface:	211.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-11-05	Feet below surface:	212.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-31	Feet below surface:	212.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-25	Feet below surface:	212.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-20	Feet below surface:	213.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-15	Feet below surface:	213.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-30	Feet below surface:	212.85
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1976-09-25	Feet below surface:	213.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-20	Feet below surface:	213.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-15	Feet below surface:	214.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-10	Feet below surface:	214.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-05	Feet below surface:	214.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-31	Feet below surface:	215.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-25	Feet below surface:	214.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-20	Feet below surface:	214.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-15	Feet below surface:	212.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-10	Feet below surface:	212.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-08-05	Feet below surface:	212.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-10	Feet below surface:	211.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-05	Feet below surface:	211.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-30	Feet below surface:	210.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-25	Feet below surface:	209.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-20	Feet below surface:	209.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-15	Feet below surface:	208.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-10	Feet below surface:	209.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-05	Feet below surface:	209.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-31	Feet below surface:	208.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-25	Feet below surface:	209.00
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1976-05-20	Feet below surface:	209.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-15	Feet below surface:	208.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-10	Feet below surface:	209.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-05	Feet below surface:	209.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-30	Feet below surface:	209.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-25	Feet below surface:	209.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-20	Feet below surface:	209.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-15	Feet below surface:	209.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-10	Feet below surface:	210.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-05	Feet below surface:	210.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-31	Feet below surface:	211.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-25	Feet below surface:	211.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-20	Feet below surface:	211.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-15	Feet below surface:	210.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-10	Feet below surface:	210.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-05	Feet below surface:	210.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-02-29	Feet below surface:	209.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-02-25	Feet below surface:	210.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-02-20	Feet below surface:	209.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-02-15	Feet below surface:	210.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-02-10	Feet below surface:	210.35
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date: 1976-02-05 Feet below surface: 210.65
Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1976-01-31 Feet below surface: 210.65

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1976-01-25 Feet below surface: 210.77

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1975-05-21 Feet below surface: 216

Feet to sea level: Not Reported Note: Not Reported

BJ343 NW OK WELLS OK7000000139982

1/2 - 1 Mile Higher

Well ID: 135117 Well Type: Geothermal or Heat Pump Well

Permit #: Not Reported Well Owner: Comfort Works
Elevation: 0 Water Use: Heat Exchange

Total Well Depth: 400 Date to First Water: 0

Approximate Yield: 0 Construction Date: 24-MAR-11
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=135117

BJ344 NW OK WELLS OK700000194711

1/2 - 1 Mile Higher

Higher

Well ID: 197795 Well Type: Monitoring Well
Permit #: Well Owner: Tartan Sales Company

Elevation: 0 Water Use: Water Quality Total Well Depth: Date to First Water: 25 15.5 Approximate Yield: 0 Construction Date: 24-JUN-94 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197795

245

345 NE OK WELLS OK700000190410 1/2 - 1 Mile

Well ID:202025Well Type:Monitoring WellPermit #:Not ReportedWell Owner:4th Street Superfund

Elevation: 0 Water Use: Water Quality
Total Well Depth: 39 20000076 Date to First Water: 0

Total Well Depth: 39.20000076 Date to First Water: 0
Approximate Yield: 0 Construction Date: 13-NOV-90

Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202025

Map ID Direction Distance

EDR ID Number Elevation Database

**BK346** South

**OK WELLS** OK700000098933

1/2 - 1 Mile Higher

> Well ID: 184471 Well Type: Groundwater Well Not Reported Well Owner: Sharon Cornell Permit #: Domestic Elevation: Water Use: Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=184471

**BL347** ΝE 1/2 - 1 Mile Higher

**OK WELLS** OK700000185621

Well ID:

194976 Well Type: Monitoring Well Not Reported Permit #: Well Owner: Circle J #2 Elevation: Water Use: Site Assessment 0

Total Well Depth: 28 Date to First Water: Approximate Yield: 0 Construction Date: 01-FEB-99 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194976

**BL348** 

NE 1/2 - 1 Mile Higher

> Well ID: 195010 Well Type: Monitoring Well Well Owner: Permit #: Not Reported 4th Street Refinery Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water: 10

Approximate Yield: 0 13-FEB-96 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195010

BM349 1/2 - 1 Mile Higher

> Well ID: 60207 Well Type: Geotechnical Boring Permit #: Well Owner: Washington Group Int'l Not Reported

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 30.29999924 Date to First Water: 0

Construction Date: Approximate Yield: 0 14-DEC-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=60207 **OK WELLS** 

**OK WELLS** 

OK700000199783

Map ID Direction Distance

EDR ID Number Elevation Database

350 West

**OK WELLS** OK700000123655

OK700000197246

OK700000185293

**OK WELLS** 

**OK WELLS** 

1/2 - 1 Mile Higher

> Well ID: 79769 Well Type: Geotechnical Boring

Not Reported Well Owner: Native American Cultural Educa Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 64 Date to First Water:

Approximate Yield: 0 Construction Date: 01-AUG-03 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79769

**BK351** South 1/2 - 1 Mile

Higher Well ID: 173183 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Sharon Cornell Elevation: Water Use: Site Assessment 0

Total Well Depth: 22 Date to First Water:

Approximate Yield: 0 Construction Date: 29-MAR-16 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=173183

BK352

South 1/2 - 1 Mile Higher

> 195067 Well Type: Well ID: Monitoring Well Well Owner: Permit #: Not Reported **Sharon Cornell** Site Assessment Elevation: 0 Water Use:

Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Not Reported Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195067

**BK353 OK WELLS** OK700000185292

South 1/2 - 1 Mile Higher

> Well ID: 195066 Well Type: Monitoring Well Permit #: Not Reported Well Owner: **Sharon Cornell** Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water: 0

Construction Date: Approximate Yield: 0 Not Reported Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195066

Map ID Direction Distance

EDR ID Number Elevation Database

South 1/2 - 1 Mile

**BK354 OK WELLS** OK7000000201050

Higher

Well ID: 195071 Well Type: Monitoring Well Not Reported Well Owner: **Sharon Cornell** Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195071

**BK355** South 1/2 - 1 Mile Higher

Well ID: 195069 Well Type: Monitoring Well Not Reported Permit #: Well Owner: **Sharon Cornell** 

Elevation: Water Use: Site Assessment 0 Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195069

**BK356** South 1/2 - 1 Mile Higher

Higher

195068 Well Type: Well ID: Monitoring Well Well Owner: Permit #: Not Reported **Sharon Cornell** Site Assessment Elevation: 0 Water Use:

Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Not Reported Construction Date: Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195068

**BB357** South 1/2 - 1 Mile

Geotechnical Boring Well ID: 158070 Well Type: Permit #: Not Reported Well Owner: Crooked Oak Public School

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20.5 Date to First Water: 7

Construction Date: Approximate Yield: 0 24-SEP-13 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=158070 **OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK7000000201049

OK700000185294

Map ID Direction Distance

EDR ID Number Elevation Database

**BK358** South 1/2 - 1 Mile

**OK WELLS** OK700000185058

Higher

Well ID: 175335 Well Type: Monitoring Well Not Reported Well Owner: **Sharon Cornell** Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 28-JUL-16 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=175335

**BK359** South 1/2 - 1 Mile

Well ID: 175336 Well Type: Monitoring Well Permit #: Not Reported Well Owner: **Sharon Cornell** Elevation: Water Use: Site Assessment

0 Total Well Depth: 25 Date to First Water:

Approximate Yield: 0 Construction Date: 28-JUL-16 Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=175336

360 East 1/2 - 1 Mile Higher

1/2 - 1 Mile

Higher

87417 Well Type: Well ID: Geotechnical Boring Well Owner: **CP INTEGRATED** Permit #: Not Reported

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 22-MAY-04 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=87417

**BF361 OK WELLS** OK7000000153511 SSW

Higher Well ID: 46201 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Waggoner Trucking Facility

Elevation: 0 Water Use: Water Quality

Total Well Depth: 40 Date to First Water: 0

0 Construction Date: Approximate Yield: 31-AUG-99 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=46201 **OK WELLS** 

**OK WELLS** 

OK700000190026

Map ID Direction Distance

EDR ID Number Elevation Database

**BN362** NNW

**OK WELLS** OK7000000192010

1/2 - 1 Mile Higher

> Well ID: 197210 Well Type: Monitoring Well Not Reported Well Owner: First Oklahoma Corp. Permit #:

Water Quality Elevation: Water Use:

Total Well Depth: 37 Date to First Water: 17

Approximate Yield: 0 Construction Date: 19-OCT-93 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197210

**BN363** 

NNW 1/2 - 1 Mile Higher

> Well ID: 197211 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: First Oklahoma Corporation

Elevation: Water Use: Water Quality 0

Total Well Depth: 35 Date to First Water: 17

19-OCT-93 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197211

**BN364** NNW 1/2 - 1 Mile Higher

> 197687 Well Type: Well ID: Monitoring Well

Well Owner: Permit #: Not Reported First Oklahoma Corporation

Elevation: 0 Water Use: Water Quality

Total Well Depth: 43 Date to First Water: 0 Approximate Yield: 0 20-OCT-93 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197687

**BD365 OK WELLS** OK700000194859

wsw 1/2 - 1 Mile Higher

> Well ID: 177559 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Cabbiness Engineering

Elevation: Water Use: Site Assessment 0 Total Well Depth: 31.5 Date to First Water: 15

Construction Date: Approximate Yield: 0 25-AUG-16 Not Reported Aquifer Code: Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=177559 **OK WELLS** 

**OK WELLS** 

OK700000188356

Map ID Direction Distance

EDR ID Number Elevation Database

**BO366** NW

**OK WELLS** OK700000182865

1/2 - 1 Mile Higher

> Well ID: 126806 Well Type: Monitoring Well Not Reported Well Owner: City of Oklahoma City Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 30 Date to First Water:

Approximate Yield: 0 Construction Date: 12-NOV-09 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126806

**BP367** OK700000122350 **OK WELLS** SSE 1/2 - 1 Mile

Higher

74057 Well ID: Well Type: Geotechnical Boring Rick Metheny Permit #: Not Reported Well Owner: Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 15 Date to First Water:

Approximate Yield: 0 Construction Date: 16-OCT-02 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=74057

**BP368 OK WELLS** OK700000122352

SSE 1/2 - 1 Mile Higher

> 74059 Well ID: Well Type: Geotechnical Boring Well Owner: Permit #: Not Reported Rick Metheny Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 35 Date to First Water: 0

Approximate Yield: 0 16-OCT-02 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=74059

**BP369** SSE **OK WELLS** OK7000000122351

1/2 - 1 Mile Higher

> Geotechnical Boring Well ID: 74058 Well Type: Permit #: Not Reported Well Owner: Rick Metheny Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 20 Date to First Water: 0

Construction Date: Approximate Yield: 0

16-OCT-02 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=74058

Map ID Direction Distance

Elevation Database EDR ID Number

BQ370 North

OK WELLS OK700000133518

1/2 - 1 Mile Higher

Well ID: 128517 Well Type: Geothermal or Heat Pump Well Permit #: Not Reported Well Owner: Central Okla. Habitat For Huma

Elevation: 0 Water Use: Heat Exchange

Total Well Depth: 400 Date to First Water: 0

Approximate Yield: 0 Construction Date: 11-MAR-10
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=128517

BQ371
North OK WELLS OK7000000134536

North 1/2 - 1 Mile Higher

Well ID: 132991 Well Type: Geothermal or Heat Pump Well

Permit #: Not Reported Well Owner: Habitat for Humanity
Elevation: 0 Water Use: Heat Exchange

Total Well Depth: 400 Date to First Water: 0

Approximate Yield: 0 Construction Date: 02-NOV-10 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=132991

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BQ372 North 1/2 - 1 Mile Higher

Well ID: 67533 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: OCURA

Water Quality Elevation: 0 Water Use: Total Well Depth: 25 Date to First Water: 19 Approximate Yield: 0 27-NOV-01 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=67533

373 North 1/2 - 1 Mile Higher

Well ID:202208Well Type:Monitoring WellPermit #:Not ReportedWell Owner:The City of OKCElevation:0Water Use:Site Assessment

Total Well Depth: 63.79999924 Date to First Water: 19

Approximate Yield: 0 Construction Date: 01-FEB-97
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202208

**OK WELLS** 

**OK WELLS** 

OK700000159760

Map ID Direction Distance

EDR ID Number Elevation Database

**BB374** South

**OK WELLS** OK7000000200454

OK700000190471

OK7000000132413

OK7000000199732

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

1/2 - 1 Mile Higher

> Well ID: 163664 Well Type: Monitoring Well

Not Reported Well Owner: Gore Petroleum Land & Enviro Permit #:

Elevation: Water Use: Site Assessment

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 20-OCT-14 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=163664

**BB375** South 1/2 - 1 Mile Higher

Monitoring Well Well ID: Well Type: Permit #: Not Reported Well Owner: Gore Petroleum Land & Enviro

Elevation: Water Use: Site Assessment 0

Total Well Depth: 20 Date to First Water:

20-OCT-14 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=163663

163663

**BJ376** NW 1/2 - 1 Mile Higher

> 126056 Well Type: Well ID: Geotechnical Boring Well Owner: Permit #: Not Reported City of OKC & OKC NE Inc.

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 25 Date to First Water: 20

14-SEP-09 Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126056

**BR377** 

1/2 - 1 Mile Higher

> Well ID: 136970 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: American Indian Cultural Cente

Elevation: 0 Water Use: Water Quality

Total Well Depth: 15 Date to First Water: 0

0 Construction Date: Approximate Yield: 17-MAY-11 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=136970

Map ID Direction Distance

Elevation Database EDR ID Number

BM378 NW

OK WELLS OK700000132406

1/2 - 1 Mile Higher

Well ID: 126047 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: City of OKC & OKC NE Inc.

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 10

Approximate Yield: 0 Construction Date: 15-SEP-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126047

BR379 SW 1/2 - 1 Mile Higher

Well ID: 79785 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Native American Cultural & Edu

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 64 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-AUG-03
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=79785

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BO380 NW 1/2 - 1 Mile Higher

Well ID: 126048 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: City of OKC & OKC NE Inc.

Elevation: 0 Water Use: Soil Evaluation
Total Well Depth: 20 Date to First Water: 12
Approximate Viold: 0 Construction Potes: 45 SER 00

Approximate Yield: 0 Construction Date: 15-SEP-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126048

BM381

NW 1/2 - 1 Mile Higher

Well ID: 126049 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: City of OKC & OKC NE Inc.

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 13
Approximate Yield: 0 Construction Date: 15-SEP-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126049

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000123293

OK700000132407

Map ID Direction Distance

Elevation Database EDR ID Number

BS382 South 1/2 - 1 Mile

OK WELLS OK7000000178392

Higher

Well ID: Monitoring Well

Permit #: Not Reported Well Owner: Cardinal Engineering, Inc.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water: 1

Approximate Yield: 0 Construction Date: 04-APR-08 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=116025

BO383 NW 1/2 - 1 Mile

Higher

Well ID: 126811 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: City of Oklahoma City
Elevation: 0 Water Use: Site Assessment

Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-NOV-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126811

BT384 WNW 1/2 - 1 Mile Higher

Well ID: 71903 Well Type: Groundwater Well
Permit #: Not Reported Well Owner: Dolese Concrete

The office of the control of th

Elevation: 0 Water Use: Commercial
Total Well Depth: 48 Date to First Water: 31
Approximate Yield: 25 Construction Date: 10-MAY-02

Aquifer Code: Not Reported Basin Code: Not Reported URL: Not Reported http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=71903

BT385
WNW OK WELLS OK700000050494

WNW
1/2 - 1 Mile
Higher

Well ID: 70881 Well Type: Groundwater Well Permit #: 20010555 Well Owner: **Dolese Concrete** Elevation: 0 Water Use: Commercial Total Well Depth: 48 Date to First Water: 31

Approximate Yield: 25 Construction Date: 10-MAY-02 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=70881

**OK WELLS** 

**OK WELLS** 

OK700000182868

Map ID Direction Distance

Elevation Database EDR ID Number

386 NNE

1/2 - 1 Mile

Higher

Well ID: 140558 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: City of OKC Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 4 Date to First Water: 0

Approximate Yield: 0 Construction Date: 09-JAN-12
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=140558

BQ387 North 1/2 - 1 Mile Higher

Well ID: 106303 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Central Urban Development, Inc

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 28 Date to First Water: 0

Approximate Yield: 0 Construction Date: 02-JAN-07
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=106303

BO388 NW 1/2 - 1 Mile Higher

Well ID: 126807 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: City of Oklahoma City

Elevation: 0 Water Use: Site Assessment Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-NOV-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126807

BU389 WNW 1/2 - 1 Mile Higher

Well ID: 191128 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: 1101 E Reno LLC
Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-DEC-18
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=191128

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000140448

OK700000127234

OK700000182866

Map ID Direction Distance

EDR ID Number Elevation Database

**BO390** NW

**OK WELLS** OK700000132412

1/2 - 1 Mile Higher

> Well ID: 126055 Well Type: Geotechnical Boring Not Reported Well Owner: City of OKC & OKC NE Inc. Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 20 Date to First Water: 13 Approximate Yield: 0 Construction Date: 14-SEP-09 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126055

BU391 **OK WELLS** OK7000000141790 WNW

1/2 - 1 Mile Higher

> Well ID: 191121 Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: 1101 E Reno LLC Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 15 Date to First Water:

Approximate Yield: 0 Construction Date: 11-DEC-18 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=191121

**BO392** NW 1/2 - 1 Mile Higher

Elevation:

Well Type: Well ID: 126803 Monitoring Well Well Owner: Permit #: Not Reported City of Oklahoma City

Water Use:

Total Well Depth: 25 Date to First Water:

12-NOV-09 Approximate Yield: 0 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126803

0

BV393 **OK WELLS** OK700000148715

1/2 - 1 Mile Higher

> Well ID: 202619 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 35 Date to First Water: 0

0 Construction Date: 16-SEP-20 Approximate Yield: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202619 **OK WELLS** 

Site Assessment

Map ID Direction Distance

Elevation Database EDR ID Number

BV394 SW

OK WELLS OK700000142163

**OK WELLS** 

OK700000150921

OK700000148716

1/2 - 1 Mile Higher

Well ID: 202622 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 35 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-SEP-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202622

BV395

SW 1/2 - 1 Mile Higher

Well ID: 202620 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-SEP-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202620

BV396 SW OK WELLS OK7000000150553

SW 1/2 - 1 Mile Higher

Well ID: 202623 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II
Elevation: 0 Water Use: Soil Evaluation

Elevation: 0 Water Use: Total Well Depth: 25 Date to First Water:

Approximate Yield: 0 Construction Date: 16-SEP-20
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202623

BV397 SW 1/2 - 1 Mile Higher

Well ID: 202621 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-SEP-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202621

Map ID Direction Distance

Elevation Database EDR ID Number

BU398 WNW 1/2 - 1 Mile

OK WELLS OK700000203211

OK700000140189

OK700000197863

OK700000135188

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

1/2 - 1 Mile Higher

Well ID:195798Well Type:Monitoring WellPermit #:Not ReportedWell Owner:1101 East Reno LLCElevation:0Water Use:Site Assessment

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-AUG-19
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195798

BU399 WNW 1/2 - 1 Mile Higher

Well ID:191129Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:1101 E Reno LLCElevation:0Water Use:Soil Evaluation

Total Well Depth: 10 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-DEC-18
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=191129

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BU400 WNW 1/2 - 1 Mile Higher

Well ID:197332Well Type:Monitoring WellPermit #:Not ReportedWell Owner:1101 East Reno LLCElevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197332

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BU401 WNW 1/2 - 1 Mile Higher

Well ID:191122Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:1101 E Reno LLCElevation:0Water Use:Soil Evaluation

Total Well Depth: 12.5 Date to First Water: 0

Approximate Yield: 0 Construction Date: 11-DEC-18
Aquifer Code: Not Reported Basin Code: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

South 1/2 - 1 Mile

**BS402** 

OK WELLS OK700000178391

OK7000000203376

OK7000000163648

OK700000140188

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Higher

Well ID: 116024 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Cardinal Engineering, Inc.

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water: 1

Approximate Yield: 0 Construction Date: 04-APR-08 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=116024

BU403 WNW 1/2 - 1 Mile Higher

2 - 1 Mile

Well ID: 197333 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: 1101 East Reno LLC
Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=197333

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404 NNW 1/2 - 1 Mile Higher

Well ID: 70548 Well Type: Monitoring Well Permit #: Not Reported Well Owner: GMR

Permit #: Not Reported **GMR** Water Quality Elevation: 0 Water Use: Total Well Depth: 30 Date to First Water: 20 Approximate Yield: 0 Construction Date: 03-DEC-01 Basin Code: Not Reported Aquifer Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=70548

BU405 WNW 1/2 - 1 Mile

 Well ID:
 191127
 Well Type:
 Geotechnical Boring

 Permit #:
 Not Reported
 Well Owner:
 1101 E Reno LLC

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 12.5 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-DEC-18
Aquifer Code: Not Reported Basin Code: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

BO406 NW

OK WELLS OK700000132410

1/2 - 1 Mile Higher

Well ID: 126052 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: City of OKC & OKC NE Inc.

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 14

Approximate Yield: 0 Construction Date: 14-SEP-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126052

BU407 WNW 1/2 - 1 Mile Higher

Well ID: 161365 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: Interstate Metals Trust
Elevation: 0 Water Use: Site Assessment

Elevation: 0 Water Use: S
Total Well Depth: 18 Date to First Water: 8

Approximate Yield: 0 Construction Date: 15-JUL-14
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=161365

BU408 WNW 1/2 - 1 Mile Higher

Well ID:195796Well Type:Monitoring WellPermit #:Not ReportedWell Owner:1101 East Reno LLCElevation:0Water Use:Site Assessment

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 15-AUG-19
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195796

BU409 WNW 1/2 - 1 Mile Higher

Well ID:195795Well Type:Monitoring WellPermit #:Not ReportedWell Owner:1101 East Reno LLCElevation:0Water Use:Site Assessment

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 15-AUG-19
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195795

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000196763

OK7000000184519

Map ID Direction Distance

Elevation Database EDR ID Number

BU410 WNW 1/2 - 1 Mile

OK WELLS OK700000137365

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000132411

OK7000000200620

OK700000132957

1/2 - 1 Mile Higher

Well ID:191124Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:1101 E Reno LLCElevation:0Water Use:Soil Evaluation

Total Well Depth: 10 Date to First Water: 0

Approximate Yield: 0 Construction Date: 11-DEC-18
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=191124

BO411 NW 1/2 - 1 Mile

Higher

Well ID: 126053 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: City of OKC & OKC NE Inc.

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 14
Approximate Yield: 0 Construction Date: 14-SEP-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126053

BU412 WNW 1/2 - 1 Mile Higher

Well ID: 195797 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: 1101 East Reno LLC
Elevation: 0 Water Use: Site Assessment

Total Well Depth: 15 Date to First Water:

Approximate Yield: 0 Construction Date: 16-AUG-19
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=195797

BW413 NW 1/2 - 1 Mile Higher

Well ID: 127089 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Council Grove Elementary Schoo

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 21.5 Date to First Water: 0

Approximate Yield: 0 Construction Date: 28-SEP-09
Aquifer Code: Not Reported Basin Code: Not Reported

Map ID Direction Distance

EDR ID Number Elevation Database

**BX414** SSW

**OK WELLS** OK700000140975

1/2 - 1 Mile Higher

> Well ID: 203797 Well Type: Geotechnical Boring

Not Reported Well Owner: Waggoner Family Properties II Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 30 Date to First Water:

Approximate Yield: 0 Construction Date: 04-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203797

**BX415** SSW 1/2 - 1 Mile Higher

Well ID:

Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 10 Date to First Water:

Approximate Yield: 0 Construction Date: 04-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203805

203805

**BX416** SSW 1/2 - 1 Mile Higher

> Well Type: Well ID: 203770 Geotechnical Boring

Well Owner: Permit #: Not Reported Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 12 Date to First Water:

30-NOV-20 Approximate Yield: 0 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203770

**BX417** 

SSW 1/2 - 1 Mile Higher

> Well ID: 203771 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 16.5 Date to First Water: 15.5 Construction Date: Approximate Yield: 0 30-NOV-20 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203771 OK700000140976

OK700000140973

OK700000140974

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

**BX418** SSW

**OK WELLS** OK700000142181

**OK WELLS** 

**OK WELLS** 

Geotechnical Boring

OK700000143990

OK700000140977

1/2 - 1 Mile Higher

> Well ID: 203767 Well Type: Geotechnical Boring

Not Reported Well Owner: Waggoner Family Properties II Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 15 Date to First Water:

Approximate Yield: 0 Construction Date: 30-NOV-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203767

**BX419** SSW 1/2 - 1 Mile Higher

Well ID:

Well Type:

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 25 Date to First Water:

30-NOV-20 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203765

203765

**BX420** 

SSW 1/2 - 1 Mile Higher

URL:

Higher

Well Type: Well ID: 203806 Geotechnical Boring

Well Owner: Permit #: Not Reported Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 10 Date to First Water: Approximate Yield: 0 Construction Date: 04-DEC-20

Aquifer Code: Basin Code: Not Reported Not Reported

http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203806

**BX421 OK WELLS** OK700000141963

SSW 1/2 - 1 Mile

Well ID: 203804 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 25 Date to First Water: 0

0 Construction Date: Approximate Yield: 04-DEC-20 Aquifer Code: Basin Code: Not Reported Not Reported

Map ID Direction Distance

EDR ID Number Elevation Database

**BX422** SSW 1/2 - 1 Mile

**OK WELLS** OK700000138734

OK700000138735

OK700000137317

OK7000000137318

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Higher

Well ID: 203772 Well Type: Geotechnical Boring

Not Reported Well Owner: Waggoner Family Properties II Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 30-NOV-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203772

**BX423** SSW 1/2 - 1 Mile Higher

Well ID: Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 20 Date to First Water: Approximate Yield: 0 Construction Date: 01-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203776

203776

**BX424** SSW 1/2 - 1 Mile Higher

> 203775 Well Type: Well ID: Geotechnical Boring

Well Owner: Permit #: Not Reported Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 10 Date to First Water:

30-NOV-20 Approximate Yield: 0 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203775

**BX425** SSW 1/2 - 1 Mile Higher

> Well ID: 203781 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 18.5 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-DEC-20 Aquifer Code: Basin Code: Not Reported Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

BX426 SSW

OK WELLS OK7000000139739

1/2 - 1 Mile Higher

Well ID: 203784 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 02-DEC-20
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203784

BX427 SSW 1/2 - 1 Mile Higher

her

Well ID: 203787 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 02-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203787

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BX428 SSW 1/2 - 1 Mile Higher

Well ID: 203777 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation
Total Well Depth: 20 Date to First Water: 16

Approximate Yield: 0 Construction Date: 01-DEC-20
Aquifer Code: Not Reported Basin Code: Not Reported
URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203777

BX429 SSW OK WELLS OK7000000138737

SSW 1/2 - 1 Mile Higher

Well ID: 203778 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 25 Date to First Water: 10.5

Approximate Yield: 0 Construction Date: 01-DEC-20

Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203778

**OK WELLS** 

**OK WELLS** 

OK700000139740

Map ID Direction Distance

EDR ID Number Elevation Database

**BX430** SSW

**OK WELLS** OK700000148728

1/2 - 1 Mile Higher

> Well ID: 203782 Well Type: Geotechnical Boring

Not Reported Well Owner: Waggoner Family Properties II Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 01-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203782

**BX431** SSW 1/2 - 1 Mile Higher

Well ID: 203783 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 01-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203783

**BX432** SSW 1/2 - 1 Mile Higher

> 203779 Well Type: Well ID: Geotechnical Boring

Well Owner: Permit #: Not Reported Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 25 Date to First Water: Approximate Yield: 0 01-DEC-20 Construction Date:

Aquifer Code: Basin Code: Not Reported Not Reported URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203779

**BX433** OK700000148727

**OK WELLS** SSW

1/2 - 1 Mile Higher

> Well ID: 203780 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 0

Construction Date: Approximate Yield: 0 01-DEC-20 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203780 OK700000148729

OK700000148726

**OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

**BX434** SSW

**OK WELLS** OK700000149722

OK7000000149723

OK700000148730

OK700000148731

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

1/2 - 1 Mile Higher

> Well ID: 203764 Well Type: Geotechnical Boring

Not Reported Well Owner: Waggoner Family Properties II Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 25 Date to First Water:

Approximate Yield: 0 Construction Date: 30-NOV-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203764

**BX435** SSW 1/2 - 1 Mile Higher

Well ID: Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 14.5 Date to First Water:

Approximate Yield: 0 Construction Date: 02-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203799

203799

**BX436** SSW 1/2 - 1 Mile Higher

> Well Type: Well ID: 203800 Geotechnical Boring

Well Owner: Permit #: Not Reported Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 19 Date to First Water:

Approximate Yield: 0 02-DEC-20 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203800

**BX437** 

SSW 1/2 - 1 Mile Higher

> Well ID: 203807 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 10 Date to First Water: 0

0 Construction Date: Approximate Yield: 04-DEC-20 Aquifer Code: Basin Code: Not Reported Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

BX438 SSW

OK WELLS OK700000148725

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Soil Evaluation

OK700000145288

OK7000000146110

OK700000145286

1/2 - 1 Mile Higher

Well ID: 203774 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 12

Approximate Yield: 0 Construction Date: 30-NOV-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203774

BX439

SSW 1/2 - 1 Mile Higher

Well ID: 203803 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 0

Approximate Yield: 0 Construction Date: 04-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203803

BX440 SSW 1/2 - 1 Mile Higher

Well ID: 203788 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use:
Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 02-DEC-20
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203788

BX441 SSW 1/2 - 1 Mile

Higher

Well ID: 203789 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 7 Date to First Water: 0

Approximate Yield: 0 Construction Date: 02-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

Map ID Direction Distance

EDR ID Number Elevation Database

**BX442** SSW

**OK WELLS** OK700000145287

1/2 - 1 Mile Higher

> Well ID: 203802 Well Type: Geotechnical Boring

Not Reported Well Owner: Waggoner Family Properties II Permit #:

Soil Evaluation Elevation: Water Use:

Total Well Depth: 9 Date to First Water:

Approximate Yield: 0 Construction Date: 02-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203802

**BX443** SSW 1/2 - 1 Mile Higher

Well ID:

Well Type: Geotechnical Boring Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: Water Use: Soil Evaluation 0

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 02-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203786

203786

**BX444** SSW 1/2 - 1 Mile Higher

> Well Type: Well ID: 203801 Geotechnical Boring

Well Owner: Permit #: Not Reported Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 15 Date to First Water:

Approximate Yield: 0 02-DEC-20 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203801

**BX445** SSW 1/2 - 1 Mile Higher

Well ID: 203773 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 11.5 Date to First Water: 0

Construction Date: Approximate Yield: 0 30-NOV-20 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203773 OK700000146653

OK700000146654

OK700000146651

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

Elevation Database EDR ID Number

BX446 SSW

OK WELLS OK700000146652

1/2 - 1 Mile Higher

Well ID: 203785 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: Waggoner Family Properties II

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 02-DEC-20 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=203785

BS447 South OK WELLS OK700000180552

South 1/2 - 1 Mile Higher

Well ID:116605Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Cardinal EngineeringElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 12

Approximate Yield: 0 Construction Date: 02-MAY-08 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=116605

BO448 NW OK WELLS OK700000182964

1/2 - 1 Mile Higher

Well ID:126800Well Type:Monitoring WellPermit #:Not ReportedWell Owner:City of Oklahoma CityElevation:0Water Use:Site Assessment

Total Well Depth: 30 Date to First Water:

Approximate Yield: 0 Construction Date: 28-SEP-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126800

BS449
South OK WELLS OKWR1000009425

BS449 South 1/2 - 1 Mile Higher

Record ID: 23168 Permit #: 19640233 Permit Record Type: Water Code: Groundwater Permit **Entity Name:** Oklahoma County Water Co OWRB Permit Type: Prior Right Primary Water Use Purpose: Public Supply Date Permit Application Filed: 27-MAR-64

Date Permit Issued: 10-MAR-81 Hydrologic Unit Code: 11100302

Stream System ID: 2051 Water Allocated to Permit: 242 acre-feet per year

Map ID Direction Distance

Elevation Database EDR ID Number

BO450 NW

OK WELLS OK700000132414

1/2 - 1 Mile Higher

Well ID: 126057 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: City of OKC & OKC NE Inc.

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 15

Approximate Yield: 0 Construction Date: 14-SEP-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126057

BS451 South 1/2 - 1 Mile Higher

Well ID:41395Well Type:Groundwater WellPermit #:640233Well Owner:Oklahoma Co Water CoElevation:0Water Use:Public Water Supply

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: 01-JAN-50
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=41395

WSW 1/2 - 1 Mile Higher

Well ID:50619Well Type:Groundwater WellPermit #:Not ReportedWell Owner:City of Oklahoma CityElevation:0Water Use:Observation Well

Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 04-APR-00 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=50619

BU453 WNW 1/2 - 1 Mile Higher

Well ID:191126Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:1101 E Reno LLCElevation:0Water Use:Soil Evaluation

Total Well Depth: 14 Date to First Water: 0

Approximate Yield: 0 Construction Date: 11-DEC-18
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=191126

OK700000038907

OK700000046057

OK700000145626

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

Elevation Database EDR ID Number

BW454 NW

N OK WELLS OK700000152021

1/2 - 1 Mile Higher

Well ID: 141550 Well Type: Geothermal or Heat Pump Well Permit #: Well Owner: ctrl ok habitat for humanity

Elevation: 0 Water Use: Heat Exchange

Total Well Depth: 400 Date to First Water:

Approximate Yield: 0 Construction Date: 22-FEB-12
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=141550

BO455

NW 1/2 - 1 Mile Higher

Well ID: 126050 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: City of OKC & OKC NE Inc.

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 20 Date to First Water: 14
Approximate Yield: 0 Construction Date: 14-SEP-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126050

BX456 SSW 1/2 - 1 Mile Higher

Well ID:124166Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:Ramsey Family TrustElevation:0Water Use:Soil Evaluation

Elevation: 0 Water Use: S Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 13-MAR-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=124166

BY457

NE 1/2 - 1 Mile Higher

Well ID:202649Well Type:Monitoring WellPermit #:Not ReportedWell Owner:APOGEEElevation:0Water Use:Site Assessment

Total Well Depth: 20 Date to First Water: 10
Approximate Yield: 0 Construction Date: 11-FEB-94
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202649

OK700000132409

OK700000134177

OK7000000201782

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

**BY458** NE

**OK WELLS** OK7000000197826

1/2 - 1 Mile Higher

> Well ID: 202651 Well Type: Monitoring Well Not Reported Well Owner: **APOGEE** Permit #: Elevation: Water Use: Site Assessment

Total Well Depth: 18 Date to First Water: 12

Approximate Yield: 0 Construction Date: 11-FEB-94 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202651

**BY459** ΝE 1/2 - 1 Mile Higher

> Well ID: 202616 Well Type: Monitoring Well Not Reported **APOGEE** Permit #: Well Owner: Elevation: Water Use:

Site Assessment Total Well Depth: 20 Date to First Water: 13 Approximate Yield: 0 Construction Date: 11-FEB-94 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202616

0

BY460 NE 1/2 - 1 Mile Higher

> Well ID: 202650 Well Type: Monitoring Well Well Owner: APOGEE Permit #: Not Reported

> Elevation: 0 Water Use: Site Assessment Total Well Depth: 15 Date to First Water: 70 Approximate Yield: 0 11-JAN-94 Construction Date: Aquifer Code: Not Reported Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202650

**BY461** NE 1/2 - 1 Mile Higher

> Well ID: 202652 Well Type: Monitoring Well Permit #: Not Reported Well Owner: **APOGEE** Elevation: 0 Water Use: Site Assessment

Total Well Depth: 15 Date to First Water:

0 Approximate Yield: Construction Date: 11-FEB-94 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202652 OK700000196739

OK7000000203004

OK7000000202598

**OK WELLS** 

**OK WELLS** 

Map ID Direction Distance

EDR ID Number Elevation Database

**BZ462** NW

1/2 - 1 Mile Higher

**OK WELLS** OK700000182864

Well ID: 126795 Well Type: Monitoring Well Not Reported Well Owner: City of Oklahoma City Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 30 Date to First Water:

Approximate Yield: 0 Construction Date: 12-NOV-09 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126795

**BZ463 OK WELLS** OK700000182369 NW

1/2 - 1 Mile Higher

> Well ID: 126812 Well Type: Monitoring Well Not Reported City of Oklahoma City Permit #: Well Owner: Elevation: Water Use: Site Assessment 0

Total Well Depth: 25 Date to First Water:

Approximate Yield: 0 Construction Date: 12-NOV-09 Not Reported Aquifer Code: Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126812

**BZ464** NW 1/2 - 1 Mile Higher

> Well ID: 145253 Well Type: Monitoring Well

Well Owner: Permit #: Not Reported Oklahoma Gas and Electric

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water:

Approximate Yield: 0 Not Reported Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=145253

**BZ465 OK WELLS** OK700000195547

1/2 - 1 Mile Higher

> Well ID: 145254 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: Oklahoma Gas and Electric

Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water: 0

Construction Date: Approximate Yield: 0 Not Reported Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=145254 **OK WELLS** 

Map ID Direction Distance

Elevation Database EDR ID Number

CA466 West

OK WELLS OK700000128181

OK700000129996

OK700000182867

OK7000000159758

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Geotechnical Boring

1/2 - 1 Mile Higher

Well ID: 108159 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: Benham Companies, LLC

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 85 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-OCT-06 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=108159

CA467 West 1/2 - 1 Mile Higher

Well ID:

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Well Type:

Permit #: Not Reported Well Owner: Baham Companies, LLC Elevation: 0 Water Use: Soil Evaluation

Elevation: 0 Water Use: Soil I Total Well Depth: 85 Date to First Water: 0

Approximate Yield: 0 Construction Date: 20-OCT-06
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=106770

106770

BZ468 NW 1/2 - 1 Mile Higher

Well ID: 126809 Well Type: Monitoring Well
Permit #: Not Reported Well Owner: City of Oklahoma City
Elevation: 0 Water Use: Site Assessment

Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 12-NOV-09
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=126809

469 NNW 1/2 - 1 Mile Higher

Well ID:67521Well Type:Monitoring WellPermit #:Not ReportedWell Owner:OCURAElevation:0Water Use:Water Quality

Total Well Depth: 20 Date to First Water: 12
Approximate Yield: 0 Construction Date: 27-NOV-01
Aquifer Code: Not Reported Basin Code: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

470 WSW 1/2 - 1 Mile Higher

FED USGS USGS40000969726

OK700000132395

OK700000175742

OK700000128430

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

Organization ID:

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 11N-03W-02 BCC 1 Type: Well HUC: Description: Not Reported 11100302 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported

Well Depth: 260 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

-

471 West 1/2 - 1 Mile Higher

Mile

Well ID: 117350 Well Type: Geotechnical Boring
Permit #: Well Owner: Benham Companies, LLC

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 69.19999695 Date to First Water: 0

Approximate Yield: 0 Construction Date: 19-JAN-08
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=117350

BX472 SSW 1/2 - 1 Mile Higher

Well ID:107575Well Type:Monitoring WellPermit #:Not ReportedWell Owner:FRENCHElevation:0Water Use:Site Assessment

Total Well Depth: 15 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-FEB-07
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=107575

BX473 SSW 1/2 - 1 Mile Higher

Well ID: 107574 Well Type: Geotechnical Boring

Permit #: Not Reported Well Owner: FRENCH Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 16-FEB-07
Aquifer Code: Not Reported Basin Code: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

474 WNW 1/2 - 1 Mile

OK WELLS OK700000068796

OK700000190243

**OK WELLS** 

1/2 - 1 Mile Higher

> Well ID: 109494 Well Type: Groundwater Well 20010555 Well Owner: Dolese Bros. Permit #: Industrial Elevation: 0 Water Use: Total Well Depth: 658 Date to First Water: 221 Approximate Yield: 150 Construction Date: 11-MAY-07 Aquifer Code: Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=109494

CB475

East 1/2 - 1 Mile Higher

Well ID:167929Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 72 Date to First Water:

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167929

CB476
East OK WELLS OK7000000188986

East 1/2 - 1 Mile Higher

Well ID:167926Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 80 Date to First Water:

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167926

CB477
East OK WELLS OK7000000188907

1/2 - 1 Mile Higher

Well ID:167950Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 54 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

CB478 East 1/2 - 1 Mile

OK WELLS OK700000190757

1/2 - 1 Mile Higher

Well ID:167930Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 88 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-APR-15 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167930

CB479
East OK WELLS OK7000000191238

East 1/2 - 1 Mile Higher

Well ID:167949Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 56 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167949

CB480
East OK WELLS OK7000000191237

East 1/2 - 1 Mile Higher

Well ID:167945Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 64 Date to First Water:

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167945

CB481
East OK WELLS OK7000000190758
1/2 - 1 Mile

Higher

Well ID:167948Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 62 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

**CB482** East 1/2 - 1 Mile

**OK WELLS** OK700000185252

OK7000000185123

OK700000185253

**OK WELLS** 

Higher

Well ID: 167923 Well Type: Monitoring Well Not Reported Well Owner: Southeast Landfill Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 79 Date to First Water:

Approximate Yield: 0 Construction Date: 30-APR-15 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167923

**CB483** 

East 1/2 - 1 Mile Higher

> 167931 Well ID: Well Type: Monitoring Well Permit #: Not Reported Well Owner: Southeast Landfill Elevation: Water Use: Site Assessment 0

Total Well Depth: 73 Date to First Water:

30-APR-15 Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167931

**CB484 OK WELLS** OK700000184725

East 1/2 - 1 Mile Higher

Higher

167947 Well ID: Well Type: Monitoring Well Well Owner: Permit #: Not Reported Southeast Landfill Elevation: 0 Water Use: Site Assessment

Total Well Depth: 60 Date to First Water:

30-APR-15 Approximate Yield: 0 Construction Date: Basin Code: Aquifer Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167947

**CB485 OK WELLS** East 1/2 - 1 Mile

Well ID: 167946 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Southeast Landfill Elevation: 0 Water Use: Site Assessment

Total Well Depth: 62 Date to First Water: 0

30-APR-15 Construction Date: Approximate Yield: 0 Aquifer Code: Basin Code: Not Reported Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

CB486 East 1/2 - 1 Mile

OK WELLS OK700000188036

1/2 - 1 Mile Higher

Well ID:167927Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 85 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167927

CB487
East OK WELLS OK7000000187210

East 1/2 - 1 Mile Higher

Well ID:167944Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 68 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167944

CB488
East OK WELLS OK7000000185385

East 1/2 - 1 Mile Higher

Well ID:167925Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 84 Date to First Water:

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167925

CB489
East OK WELLS OK7000000191567

1/2 - 1 Mile Higher

Well ID:167941Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 76 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

CB490 East 1/2 - 1 Mile

OK WELLS OK700000199841

Higher

Well ID:167928Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 87 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-APR-15 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167928

East 1/2 - 1 Mile Higher

Well ID:167951Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 46 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167951

CB492
East OK WELLS OK7000000197264

East 1/2 - 1 Mile Higher

Well ID:167939Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 68 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167939

CB493
East OK WELLS OK7000000200933
1/2 - 1 Mile

Higher

Well ID:167936Well Type:Monitoring WellPermit #:Not ReportedWell Owner:Southeast LandfillElevation:0Water Use:Site Assessment

Total Well Depth: 74 Date to First Water: 0

Approximate Yield: 0 Construction Date: 30-APR-15
Aquifer Code: Not Reported Basin Code: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

**CB494** 

East 1/2 - 1 Mile **OK WELLS** OK7000000203164

Higher

Well ID: 167952 Well Type: Monitoring Well Not Reported Well Owner: Southeast Landfill Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 39 Date to First Water:

Approximate Yield: 0 Construction Date: 30-APR-15 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167952

**CB495 OK WELLS** OK7000000201886

East 1/2 - 1 Mile Higher

> 167954 Well ID: Well Type: Monitoring Well Permit #: Not Reported Well Owner: Southeast Landfill Elevation: Water Use: Site Assessment 0

Total Well Depth: 65 Date to First Water:

30-APR-15 Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167954

**CB496** 

East 1/2 - 1 Mile Higher

> 167935 Well ID: Well Type: Monitoring Well Well Owner: Permit #: Not Reported Southeast Landfill Water Use: Elevation: 0 Site Assessment

Total Well Depth: 83 Date to First Water:

30-APR-15 Approximate Yield: 0 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167935

**CB497 OK WELLS** OK700000195695 East

1/2 - 1 Mile Higher

> Well ID: 167934 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Southeast Landfill Elevation: 0 Water Use: Site Assessment

Total Well Depth: 78 Date to First Water: 0

30-APR-15 0 Construction Date: Approximate Yield: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167934 **OK WELLS** 

Map ID Direction Distance

Elevation Database EDR ID Number

**CB498** 

**OK WELLS** OK700000195694

East 1/2 - 1 Mile Higher

> Well ID: 167933 Well Type: Monitoring Well Not Reported Well Owner: Southeast Landfill Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 74 Date to First Water:

Approximate Yield: 0 Construction Date: 30-APR-15 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167933

**CB499 OK WELLS** OK700000194681

East 1/2 - 1 Mile Higher

> 167953 Well ID: Well Type: Monitoring Well Permit #: Not Reported Well Owner: Southeast Landfill Elevation: Water Use: Site Assessment 0

Total Well Depth: 39 Date to First Water:

30-APR-15 Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code:

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167953

**CB500 OK WELLS** OK700000195696

East 1/2 - 1 Mile Higher

> 167942 Well ID: Well Type: Monitoring Well Well Owner: Permit #: Not Reported Southeast Landfill Elevation: 0 Water Use: Site Assessment

Total Well Depth: 88 Date to First Water:

30-APR-15 Approximate Yield: 0 Construction Date: Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167942

**CB501 OK WELLS** OK700000197263 East

1/2 - 1 Mile Higher

> Well ID: 167938 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Southeast Landfill Elevation: 0 Water Use: Site Assessment

Total Well Depth: 75 Date to First Water: 0

30-APR-15 0 Construction Date: Approximate Yield: Aquifer Code: Basin Code: Not Reported Not Reported

Map ID Direction Distance

Elevation EDR ID Number Database

**CB502** 

**OK WELLS** OK700000197262

**OK WELLS** 

**OK WELLS** 

OK700000195697

OK700000154277

East 1/2 - 1 Mile Higher

> Well ID: 167932 Well Type: Monitoring Well Not Reported Well Owner: Southeast Landfill Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 89 Date to First Water:

Approximate Yield: 0 Construction Date: 30-APR-15 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167932

**CB503** 

East 1/2 - 1 Mile Higher

> Well ID: 167943 Well Type: Monitoring Well Not Reported Permit #: Well Owner: Southeast Landfill Elevation: Water Use: Site Assessment 0

Total Well Depth: 69 Date to First Water:

30-APR-15 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=167943

CC504 SE

1/2 - 1 Mile Higher

> 47042 Well ID: Well Type: Monitoring Well

Well Owner: Circle K Store c/o Trust Env. Permit #: Not Reported

Elevation: 0 Water Use: Water Quality

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 05-OCT-99 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=47042

CC505 **OK WELLS** OK700000154279

1/2 - 1 Mile Higher

> Well ID: 47044 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Circle K Store Co. Elevation: 0 Water Use: Water Quality

Total Well Depth: 25 Date to First Water: 0

0 Construction Date: 06-OCT-99 Approximate Yield: Aquifer Code: Basin Code: Not Reported Not Reported

Map ID Direction Distance

Elevation EDR ID Number Database

**CD506** 

**OK WELLS** OK700000185746 **ENE** 

1/2 - 1 Mile Higher

Well ID:

1/2 - 1 Mile

Well ID: 186815 Well Type: Monitoring Well

Not Reported Well Owner: State of Okla. Dept of Transpo Permit #:

Water Quality Elevation: Water Use:

Total Well Depth: 20 Date to First Water: 15

Approximate Yield: 0 Construction Date: 31-MAR-95 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=186815

**CD507 ENE** 

194977

1/2 - 1 Mile Higher

Well Type:

Permit #: Not Reported Well Owner: State of Oklahoma DOT Elevation: Site Assessment Water Use: 0

Total Well Depth: 20 Date to First Water:

Approximate Yield: 0 Construction Date: 31-MAR-95 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=194977

**CD508** ENE 1/2 - 1 Mile Higher

Well Type: Well ID: 186812 Monitoring Well

Well Owner: Permit #: Not Reported State of Oklahoma Dept of Tran

Elevation: 0 Water Use: Water Quality

Total Well Depth: 20 Date to First Water: 14 Approximate Yield: 0 31-MAR-95 Construction Date:

Basin Code: Aquifer Code: Not Reported Not Reported URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=186812

**CD509 OK WELLS** OK700000198044 **ENE** 

Higher Well ID: 186814 Well Type: Monitoring Well

Permit #: Not Reported Well Owner: State of Okla. Dept of Transpo

Elevation: 0 Water Use: Water Quality

Total Well Depth: 20 Date to First Water: 14 Construction Date: Approximate Yield: 0 31-MAR-95 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=186814 **OK WELLS** 

**OK WELLS** 

Monitoring Well

OK700000185641

Map ID Direction Distance

EDR ID Number Elevation Database

510 North

**OK WELLS** OK700000192695

1/2 - 1 Mile Higher

> Well ID: 202205 Well Type: Monitoring Well

Not Reported Well Owner: The City of oklahoma City Permit #:

Site Assessment Elevation: Water Use:

Total Well Depth: 60 Date to First Water:

Approximate Yield: 0 Construction Date: 29-JAN-97 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=202205

**CE511** 

SSW 1/2 - 1 Mile Higher

> Well ID: 117476 Well Type: Monitoring Well Permit #: Not Reported Well Owner: Dee French Elevation: Water Use: Site Assessment

Total Well Depth: 25 Date to First Water:

Approximate Yield: 0 Construction Date: 02-JUN-08 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=117476

0

CE512 SSW 1/2 - 1 Mile Higher

Higher

124659 Well Type: Well ID: Monitoring Well Well Owner: FRENCH DIST. Permit #: Not Reported Elevation: 0 Water Use: Vapor Extraction

Total Well Depth: 0 Date to First Water:

Not Reported Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=124659

**CE513 OK WELLS** OK700000181953

SSW 1/2 - 1 Mile

Well ID: 124658 Well Type: Monitoring Well Permit #: Not Reported Well Owner: FRENCH DIST. Elevation: 0 Water Use: Site Assessment

Total Well Depth: 0 Date to First Water: 0

Construction Date: Not Reported Approximate Yield: 0 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=124658 **OK WELLS** 

**OK WELLS** 

OK700000180525

Map ID Direction Distance

Elevation Database EDR ID Number

CE514 SSW

OK WELLS OK700000182778

1/2 - 1 Mile Higher

Well ID:124697Well Type:Monitoring WellPermit #:Not ReportedWell Owner:FRENCH DIST.Elevation:0Water Use:Vapor Extraction

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=124697

CE515 SSW 1/2 - 1 Mile Higher

Well ID:124696Well Type:Monitoring WellPermit #:Not ReportedWell Owner:FRENCH DIST.Elevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=124696

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CE516 SSW 1/2 - 1 Mile Higher

Well ID:124680Well Type:Monitoring WellPermit #:Not ReportedWell Owner:FRENCH DIST.Elevation:0Water Use:Site Assessment

Total Well Depth: 0 Date to First Water: 0

Approximate Yield: 0 Construction Date: Not Reported Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=124680

517

North 1/2 - 1 Mile Higher

> Well ID: 67532 Well Type: Monitoring Well Permit #: Not Reported Well Owner: **OCURA** Elevation: 0 Water Use: Water Quality Total Well Depth: 25 Date to First Water: 19

Approximate Yield: 0 Construction Date: 27-NOV-01
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=67532

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

OK700000182777

OK700000182004

Map ID Direction Distance

Database EDR ID Number Elevation

**CE518** SSW

**OK WELLS** OK700000173524

OK700000172090

OK700000159756

OK7000000200122

**OK WELLS** 

**OK WELLS** 

**OK WELLS** 

1/2 - 1 Mile Higher

> Well ID: 95437 Well Type: Monitoring Well Not Reported Well Owner: Former Sunoco #23 Permit #: Site Assessment Elevation: Water Use:

Total Well Depth: 25 Date to First Water:

Approximate Yield: 0 Construction Date: 21-JUL-05 Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=95437

**CE519** SSW 1/2 - 1 Mile

Higher

Well ID: Well Type: Monitoring Well Permit #: Not Reported Well Owner: 15th Street Shamrock Elevation: Water Use: Site Assessment 0

Total Well Depth: 25 Date to First Water:

16-JAN-06 Approximate Yield: 0 Construction Date: Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=98702

98702

520 NW 1/2 - 1 Mile Higher

> 67518 Well ID: Well Type: Monitoring Well Well Owner: Permit #: Not Reported **OCURA** Water Use: Elevation: 0 Water Quality

> Total Well Depth: 25 Date to First Water: 19 Approximate Yield: 0 Construction Date: 27-NOV-01 Aquifer Code: Basin Code: Not Reported Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=67518

521 1/2 - 1 Mile Higher

> Well ID: 168716 Well Type: Monitoring Well Permit #: Not Reported Well Owner: **Building Solutions** Elevation: 0 Water Use: Site Assessment

Total Well Depth: 20 Date to First Water: 0

Construction Date: Approximate Yield: 0 08-JUL-15 Aquifer Code: Basin Code: Not Reported Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

CE522 SSW

OK WELLS OK700000180767

1/2 - 1 Mile Higher

Well ID:119272Well Type:Monitoring WellPermit #:Not ReportedWell Owner:French DistributingElevation:0Water Use:Site Assessment

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 25-SEP-08
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=119272

CE523 SSW OK WELLS OK7000000177316

SSW 1/2 - 1 Mile Higher

Well ID:119271Well Type:Monitoring WellPermit #:Not ReportedWell Owner:French DistributingElevation:0Water Use:Site Assessment

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 26-SEP-08
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=119271

CE524 SSW OK WELLS OK7000000180768

1/2 - 1 Mile Higher

Well ID:119273Well Type:Monitoring WellPermit #:Not ReportedWell Owner:French DistributingElevation:0Water Use:Site Assessment

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 24-SEP-08
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=119273

CE525 SSW OK WELLS OK7000000180771 1/2 - 1 Mile

Higher

Well ID:119276Well Type:Monitoring WellPermit #:Not ReportedWell Owner:French DistributingElevation:0Water Use:Site Assessment

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 22-SEP-08
Aquifer Code: Not Reported Basin Code: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

CE526 SSW

OK WELLS OK700000180770

1/2 - 1 Mile Higher

Well ID:119275Well Type:Monitoring WellPermit #:Not ReportedWell Owner:French DistributingElevation:0Water Use:Site Assessment

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 22-SEP-08
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=119275

CE527
SSW OK WELLS OK7000000180769
1/2 - 1 Mile

Higher

Well ID:119274Well Type:Monitoring WellPermit #:Not ReportedWell Owner:French DistributingElevation:0Water Use:Site Assessment

Total Well Depth: 25 Date to First Water: 0

Approximate Yield: 0 Construction Date: 23-SEP-08
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=119274

528 West OK WELLS OK700000142322

1/2 - 1 Mile Higher

Well ID:140967Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:Branch Communications

Elevation: 0 Water Use: Soil Evaluation Total Well Depth: 53.5 Date to First Water: 0

Approximate Yield: 0 Construction Date: 26-JAN-12
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=140967

CF529
WNW FED USGS USGS40000969898

1/2 - 1 Mile Higher

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 12N-03W-35 CCB 1 Type: Well Description: GAMMA RAY LOG HUC: 11100302 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Contrib Drainage Area Unts: Not Reported Not Reported Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Well Hole Depth Units: Not Reported Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

CF530 WNW 1/2 - 1 Mile

FED USGS USGS40000969899

OK700000138666

OK700000146894

**OK WELLS** 

Higher

Organization ID: USGS-OK Organization Name: USGS Oklahoma Water Science Center

Monitor Location: 12N-03W-35 CBB 2 Type: Well HUC: Description: **GAMMA RAY LOGS** 11100302 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Well Depth Units: Not Reported Not Reported Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

CG531 South 1/2 - 1 Mile Higher

Mile r

Well ID: 188831 Well Type: Geotechnical Boring
Permit #: Not Reported Well Owner: N/A

Elevation: 0 Water Use: Soil Evaluation

Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 07-AUG-18
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=188831

CG532 South 1/2 - 1 Mile Higher

Well ID:191119Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:2101 Associates LLCElevation:0Water Use:Soil Evaluation

Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 04-DEC-18
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=191119

CG533

CG533 South 1/2 - 1 Mile Higher

Well ID:191118Well Type:Geotechnical BoringPermit #:Not ReportedWell Owner:2101 Associates LLCElevation:0Water Use:Soil Evaluation

Total Well Depth: 30 Date to First Water: 0

Approximate Yield: 0 Construction Date: 04-DEC-18
Aquifer Code: Not Reported Basin Code: Not Reported

URL: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=191118

**OK WELLS** 

Map ID Direction Distance

Database EDR ID Number

A1 SSE

OIL\_GAS OKOG20000261533 0 - 1/8 Mile

Fid: 261532 Api county: 109 Api number: 37667 Well name: **HASTING** 

OTC/OCC NOT ASSIGNED Well no: Oper name:

Oper no: 9998 Status:

Not Reported Well class: Not Reported Operstatus: Countycode: 109 Meridan: Indian Section: Township: 11N Range: 3W Quarter1: NW4 Quarter2: NW4 Quarter3: SW4 1250 Quarter4: Not Reported Feet ns: Direct ns: Feet ew: 70 W 35.461255 Direct ew: Latitude: -97.47621 G elevatio: n

Longitude: D el: 0 Completion: 1930-08-08

0 Site id: OKOG20000261533 Dept:

South 0 - 1/8 Mile

OIL\_GAS OKOG20000261540

Fid: 261539 Api county: 109 37674 Well name: **ATKINSON** Api number:

Well no: Oper name: OTC/OCC NOT ASSIGNED 1

Oper no: 9998 Status: PΑ

Not Reported Not Reported Well class: Operstatus: 109 Meridan: Indian Countycode: Section: 1 Township: 11N Range: 3W Quarter1: NW4 NW4 Quarter3: SW4 Quarter2: SW4 Quarter4: Feet ns: 1320 Direct ns: S Feet ew: 330 Direct ew: W Latitude: 35.46082

Longitude: -97.47677 G elevatio: 0

1930-09-30 0 Completion: D el:

OKOG20000261540 0 Site id: Dept:

NNE OIL\_GAS OKOG20000261542

0 - 1/8 Mile Fid: 261541 Api county: 109

BAKER-TOWNSEND(BAKER #1) Well name: Api number: 37676 TNT OPERATING COMPANY INC Well no: Oper name: 1

Oper no: 19087 Status: AC Well class: 0IL Operstatus: **OPEN** Countycode: 109 Meridan: Indian Section: Township: 1 11N Range: 3W Quarter1: NW4 Quarter2: NW4 Quarter3: NW4 Quarter4: Not Reported Feet ns: 125

Direct ns: Ν Feet ew: 125 Direct ew: W Latitude: 35.463068

Longitude: -97.47621 G elevatio: 0

 D el:
 0
 Completion:
 1930-08-04

 Dept:
 0
 Site id:
 OKOG20000261542

B4
ESE OIL\_GAS OKOG20000261512
1/8 - 1/4 Mile

 Fid:
 261511
 Api county:
 109

 Api number:
 37646
 Well name:
 BAKER

Well no: 5 Oper name: OTC/OCC NOT ASSIGNED

 Oper no:
 9998
 Status:
 PA

 Well class:
 Not Reported
 Operstatus:
 Not

Well class: Not Reported Meridan: Countycode: 109 Indian Section: Township: 11N Range: 3W Quarter1: NW4 Quarter2: NW4 Quarter3: SE4 Quarter4: Not Reported Feet ns: 616 Direct ns: S Feet ew: 518 Direct ew: Ε Latitude: 35.461256

 Longitude:
 -97.474
 G elevatio:
 0

 D el:
 0
 Completion:
 1930-10-07

Dept: 0 Site id: OKOG20000261512

ESE OIL\_GAS OKOG20000261547
1/8 - 1/4 Mile

 Fid:
 261546
 Api county:
 109

 Api number:
 37682
 Well name:
 BAKER TOWNSEND SWD

Well no: 6 Oper name: TNT OPERATING COMPANY INC

Oper no: 19087 Status: AC Well class: Operstatus: **OPEN** 2DCm Meridan: Countycode: 109 Indian Section: Township: 11N 1 Range: 3W Quarter1: NW4 Quarter2: NW4 Quarter3: SE4 Quarter4: Not Reported Feet ns: 1350 Direct ns: Feet ew: S 925 W Direct ew: Latitude: 35.461256 Longitude: -97.474 G elevatio: 1163 D el: Completion: 1977-12-01

Dept: 7400 Site id: OKOG20000261547

6 SE OIL\_GAS OKOG20000261511

1/8 - 1/4 Mile

 Fid:
 261510
 Api county:
 109

 Api number:
 37645
 Well name:
 BAKER

Well no: 4 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Well class:Not ReportedOperstatus:Not ReportedCountycode:109Meridan:IndianSection:1Township:11NRange:3WQuarter1:NW4

Quarter2: SW4 NE4 Quarter3: Quarter4: Not Reported Feet ns: 1058 Direct ns: S Feet ew: 975 W Direct ew: Latitude: 35.459443 -97.474 Longitude: G elevatio: 0

D el: 0 Completion: 1930-08-04
Dept: 0 Site id: OKOG20000261511

C/
South OIL\_GAS OKOG20000261520
1/4 - 1/2 Mile

 Fid:
 261519
 Api county:
 109

 Api number:
 37654
 Well name:
 PESTHOUSE

Well no: 1-1 Oper name: RAINBO SERVICE COMPANY

Oper no: 20111 Status: AC Well class: Operstatus: **OPEN** 2DCm Countycode: 109 Meridan: Indian Section: Township: 11N 1 Range: 3W Quarter1: NW4 Quarter2: SW4 Quarter3: SW4 Quarter4: N2 Feet ns: 550 Direct ns: S Feet ew: 295 Direct ew: W Latitude: 35.458082

 Longitude:
 -97.47621
 G elevatio:
 0

 D el:
 0
 Completion:
 1954-11-09

Dept: 7141 Site id: OKOG20000261520

C8
South OIL\_GAS OKOG20000261513
1/4 - 1/2 Mile

 Fid:
 261512
 Api county:
 109

 Api number:
 37647
 Well name:
 A CRAWFORD

Well no: 1 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PΑ Well class: Not Reported Operstatus: Not Reported Meridan: Countycode: 109 Indian Section: Township: 11N 1 3W Quarter1: NW4 Range: Quarter2: SW4 Quarter3: SW4

 Quarter4:
 Not Reported
 Feet ns:
 165

 Direct ns:
 S
 Feet ew:
 330

 Direct ew:
 W
 Latitude:
 35.457629

 Longitude:
 -97.47621
 G elevatio:
 0

D el: 0 Completion: 1935-01-27

Dept: 0 Site id: OKOG20000261513

9 SSE OIL\_GAS OKOG20000261516

Fid: 261515 Api county: 109

Api number: 37650 Well name: MILNER

Well no: 1 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

1/4 - 1/2 Mile

Well class: Not Reported Not Reported Operstatus: Countycode: 109 Meridan: Indian Section: Township: 11N Quarter1: NW4 Range: 3W SE4 Quarter2: SW4 Quarter3: Quarter4: Not Reported Feet ns: 158 Direct ns: S Feet ew: 978 Direct ew: W Latitude: 35.457629 -97.474 G elevatio: Longitude: 0

D el: 0 Completion: 1930-08-12

Dept: 0 Site id: OKOG20000261516

D11
SE OIL\_GAS OKOG20000261543
1/4 - 1/2 Mile

Fid: 261542 Api county: 109

Api number:37677Well name:BAKERWell no:2Oper name:OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Well class: Not Reported Operstatus: Not Reported Meridan: Countycode: 109 Indian Section: Township: 11N Range: 3W Quarter1: NW4 SE4 Quarter2: Quarter3: SW4 Quarter4: Not Reported Feet ns: 495 Direct ns: S Feet ew: 990

Direct ew: E Latitude: 35.45763 Longitude: -97.47178 G elevatio: 0

D el: 0 Completion: 1930-08-12

Dept: 0 Site id: OKOG20000261543

D10
SE
OIL\_GAS
OKOG20000261514
1/4 - 1/2 Mile

1/4 - 1/2 Mile

 Fid:
 261513
 Api county:
 109

 Api number:
 37648
 Well name:
 DVNIVEN

Well no: 1 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Well class: Not Reported Operstatus: Not Reported Countycode: 109 Meridan: Indian Section: Township: 11N Range: 3W Quarter1: NW4 SW4 Quarter2: SE4 Quarter3: Quarter4: Not Reported Feet ns: 120 S Direct ns: Feet ew: 990 Ε Direct ew: Latitude: 35.45763

Longitude: -97.47178 G elevatio: 0

D el: 0 Completion: 1935-01-25

Dept: 0 Site id: OKOG20000261514

Map ID Direction Distance

Database EDR ID Number

12 **East** 1/4 - 1/2 Mile

OIL\_GAS OKOG20000261538

Fid: 261537 Api county: 109 Api number: 37672 Well name: **GLEASON** 

BARON EXPLORATION COMPANY Well no: Oper name:

Oper no: 17195 Status: Not Reported **OPEN** Well class: Operstatus: Countycode: 109 Meridan: Indian Section: Township: 11N Range: 3W Quarter1: NW4 Quarter2: NE4 Quarter3: SE4 Quarter4: 990 Not Reported Feet ns: Direct ns: Feet ew: 200

Ε 35.461256 Direct ew: Latitude: -97.46957 G elevatio: Longitude: n

D el: 0 Completion: 1937-03-09

0 Site id: OKOG20000261538 Dept:

E13 South 1/4 - 1/2 Mile

OIL\_GAS OKOG20000261536

Fid: 261535 Api county: 109 37670 Well name: Api number: **BAILEY** 

Well no: Oper name: OTC/OCC NOT ASSIGNED 1

Oper no: 9998 Status: PΑ

Not Reported Not Reported Well class: Operstatus: 109 Meridan: Indian Countycode: Section: 1 Township: 11N Range: 3W Quarter1: SW4 NW4 Quarter3: NW4 Quarter2: Quarter4: Not Reported Feet ns: 341

Direct ns: Ν Feet ew: 346 Direct ew: W Latitude: 35.455816 Longitude: -97.47621 G elevatio:

1930-04-29 0 Completion: D el:

OKOG20000261536 0 Site id: Dept:

E14 South OIL\_GAS OKOG20000261549 1/4 - 1/2 Mile

261548 Api county: Fid: 109 37684 Well name:

**HARRIGAN** Api number: Well no: Oper name: 1

TNT OPERATING COMPANY INC Oper no: 19087 Status: AC

Well class: OIL Operstatus: **OPEN** Countycode: 109 Meridan: Indian Section: Township: 1 11N 3W Range: Quarter1: SW4 Quarter2: NW4 Quarter3: NW4

Quarter4: Not Reported Feet ns: 0 Direct ns: Ν Feet ew: 0

Direct ew: W Latitude: 35.455816

-97.47621 Longitude: G elevatio:

D el: 0 Completion: 1956-11-20 Dept: 0 Site id: OKOG20000261549

OIL\_GAS OKOG20000261519 1/4 - 1/2 Mile

261518 Fid: Api county: 109 Api number: 37653 Well name:

**TOWNSEND** Well no: 2 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Operstatus: Well class: Not Reported Not Reported Meridan: Countycode: 109 Indian Section: Township: 11N Range: 3W Quarter1: NW4 Quarter3: Quarter2: SE4 NE4

Quarter4: Not Reported Feet ns: 990 Direct ns: S Feet ew: 330 Direct ew: Ε Latitude: 35.459443 -97.46957 Longitude: G elevatio: 0

0 D el: Completion: 1930-12-23

0 Site id: OKOG20000261519 Dept:

SSE OIL\_GAS OKOG20000261515

261514 Api county: 109 Fid:

1/4 - 1/2 Mile

1/4 - 1/2 Mile

37649 Well name: **HOUGHTON** Api number:

Well no: 1 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status:

Well class: Operstatus: Not Reported Not Reported Meridan: Countycode: 109 Indian Section: Township: 11N 1 Range: 3W Quarter1: SW4 Quarter2: NW4 Quarter3: NE4 Quarter4: Not Reported Feet ns: 158 Direct ns: Feet ew: 978 Ν

W Direct ew: Latitude: 35.455816 Longitude: -97.474 G elevatio:

D el: 0 Completion: 1934-03-15

Dept: 0 Site id: OKOG20000261515

17 NNE OIL\_GAS OKOG20000256812

256811 Api county: 109

**LUCAS** Api number: 00775 Well name:

Oper name: OTC/OCC NOT ASSIGNED Well no:

Oper no: 9998 Status: PA

Well class: Not Reported Operstatus: Not Reported 109 Countycode: Meridan: IM Section: Township: 36 12N

Range: 3W Quarter1: Not Reported

Quarter2: SE NW Quarter3: Quarter4: SW Feet ns: 0 Not Reported Direct ns: Feet ew: 0

Not Reported 35.468507 Direct ew: Latitude:

-97.474000 Longitude: G elevatio: 0

0

D el:

Dept: 0 Site id: OKOG20000256812

North OIL\_GAS OKOG20000258529 1/4 - 1/2 Mile

Completion:

1801-01-01

109

Fid: 258528 Api county: 22034 Well name: PAGE HEIRS Api number: **RKK PRODUCTION COMPANY** Well no: 1-35 Oper name: Oper no: 17184 Status: AC

Well class: GAS Operstatus: **OPEN** Countycode: 109 Meridan: Indian Section: 36 Township: 12N Range: 3W Quarter1: SW4 Quarter2: NW4 Quarter3: SW4 Quarter4: 1665 NW4 Feet ns: Direct ns: Feet ew: 205 S Direct ew: W Latitude: 35.468961 Longitude: -97.47677 G elevatio: 1168 0 Completion: 1997-05-29 D el:

Dept: 5720 Site id: OKOG20000258529

OIL\_GAS OKOG20000261518 1/4 - 1/2 Mile

Fid: 261517 109 Api county:

Well name: **TOWNSEND** Api number: 37652

OTC/OCC NOT ASSIGNED Well no: Oper name: 1 Oper no: 9998 Status: PΑ

Well class: Not Reported Operstatus: Not Reported Meridan: Countycode: 109 Indian Section: Township: 11N 1 3W Quarter1: NW4 Range: Quarter2: SE4 Quarter3: SE4

Quarter4: Not Reported Feet ns: 420 Direct ns: S Feet ew: 330 Ε 35.45763 Direct ew: Latitude: Longitude: -97.46957 G elevatio:

1930-06-23 D el: 0 Completion: 0 OKOG20000261518 Dept: Site id:

F20 OIL\_GAS OKOG20000256769 1/4 - 1/2 Mile

256768 Api county:

00724 **CUNNINGHAM-COOK** Api number: Well name: OTC/OCC NOT ASSIGNED Well no: Oper name: 2

Oper no: 9998 Status: PΑ

Well class: Not Reported Operstatus: Not Reported

 Countycode:
 109
 Meridan:
 IM

 Section:
 1
 Township:
 11N

 Range:
 3W
 Quarter1:
 Not R

Not Reported Quarter2: NW Quarter3: ΝE Quarter4: SW Feet ns: 2542 Direct ns: S Feet ew: 1937 Direct ew: W Latitude: 35.455816

Longitude: -97.471782 G elevatio: 0

D el: 0 Completion: 1930-05-20

Dept: 0 Site id: OKOG20000256769

F21 SSE OIL\_GAS OKOG20000261507 1/4 - 1/2 Mile

Fid: 261506 Api county: 109

Api number: 37641 Well name: CUNNINGHAM

Well no: 2 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Well class: Not Reported Operstatus: Not Reported Meridan: Countycode: 109 Indian Section: Township: 11N Range: 3W Quarter1: SW4 Quarter2: NE4 Quarter3: NW4 Quarter4: Not Reported Feet ns: 130 Direct ns: Ν Feet ew: 1023 35.455817 Direct ew: Ε Latitude:

Longitude: -97.47178 G elevatio: 0

D el: 0 Completion: 1930-07-30

Dept: 0 Site id: OKOG20000261507

G22 SSW OIL\_GAS OKOG20000256792

Fid: 256791 Api county: 109

1/2 - 1 Mile

Api number:00750Well name:THEIMERWell no:3Oper name:OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Well class: Not Reported Operstatus: Not Reported Countycode: Meridan: IM

Section: 2 Township: 11N Range: 3W Quarter1: Not Reported

Quarter2: Not Reported Quarter3: ΝE Quarter4: SE Feet ns: 1980 S Direct ns: Feet ew: 610 Е 35.454893 Direct ew: Latitude:

Longitude: -97.479540 G elevatio: 0

D el: 0 Completion: 1958-04-20

Dept: 0 Site id: OKOG20000256792

Map ID Direction Distance

Database EDR ID Number

23 South 1/2 - 1 Mile

Fid: 261502 Api county: 109

Api number: 37637 Well name: **SULLIVAN** 

OTC/OCC NOT ASSIGNED Well no: Oper name:

Oper no: 9998 Status:

Not Reported Not Reported Well class: Operstatus: Countycode: 109 Meridan: Indian Section: Township: 11N Range: 3W Quarter1: SW4 Quarter2: NW4 Quarter3: SW4 Quarter4: 1090 Not Reported Feet ns: Direct ns: Feet ew: 560 W 35.4543 Direct ew: Latitude: -97.4758 G elevatio: Longitude: Ω D el: 0 Completion: 1933-12-04

Dept: 0 Site id: OKOG20000261503

WNW

OIL\_GAS OKOG20000260183 1/2 - 1 Mile

Fid: 260182 Api county: 109 36264 Well name: Api number:

PAGE-TUCKER Well no: Oper name: TNT OPERATING COMPANY INC 1

Oper no: 19087 Status: AC **OPEN** Well class: OIL Operstatus: 109 Meridan: Indian Countycode: Section: 35 Township: 12N Range: 3W Quarter1: SE4 SW4 Quarter3: SW4 Quarter2: Quarter4: Not Reported Feet ns: 192 Direct ns: S Feet ew: 111

Direct ew: W Latitude: 35.46473

Longitude: -97.48536 G elevatio: 0

1930-10-28 0 Completion: D el:

OKOG20000260183 0 Site id: Dept:

25 East

OIL\_GAS OKOG20000261500 1/2 - 1 Mile

Fid: 261499 Api county: 109 **HAYES** 37634 Well name: Api number:

OTC/OCC NOT ASSIGNED Well no: Oper name: 1

Oper no: 9998 Status: PΑ

Well class: Not Reported Operstatus: Not Reported Countycode: 109 Meridan: Indian Section: Township: 1 11N 3W Range: Quarter1: NE4 Quarter2: NW4 Quarter3: NW4

Quarter4: Not Reported Feet ns: 330 Direct ns: Ν Feet ew: 40 Direct ew: W Latitude: 35.46333

OIL\_GAS

OKOG20000261503

Longitude: -97.4669 G elevatio: 0

 D el:
 0
 Completion:
 1936-01-15

 Dept:
 0
 Site id:
 OKOG20000261500

26
ENE OIL\_GAS OKOG20000260224
1/2 - 1 Mile

 Fid:
 260223
 Api county:
 109

 Api number:
 36306
 Well name:
 SCHOOL LAND

Well no: 1 Oper name: BLACKWELL GAS COMPANY

Oper no: 6235 Status: PA Operstatus: Well class: Not Reported **CLOSED** Countycode: 109 Meridan: Indian Section: 36 Township: 12N Range: 3W Quarter1: SE4 Quarter3: Quarter2: SW4 SW4 Quarter4: Not Reported Feet ns: 330

 Quarter4:
 Not Reported
 Feet ns:
 330

 Direct ns:
 S
 Feet ew:
 330

 Direct ew:
 W
 Latitude:
 35.464882

 Longitude:
 -97.46735
 G elevatio:
 0

D el: 0 Completion: 1933-11-01

Dept: 0 Site id: OKOG20000260224

G27 SSW OIL\_GAS OKOG20000259767

 Fid:
 259766
 Api county:
 109

 Api number:
 35828
 Well name:
 THEIMER

1/2 - 1 Mile

Well no: 2 Oper name: The live it is a company inc

Oper no: 19087 Status: AC Well class: Operstatus: **OPEN** OIL Meridan: Countycode: 109 Indian Section: 2 Township: 11N Range: 3W Quarter1: SE4 Quarter2: NE4 Quarter3: S2 Quarter4: Not Reported Feet ns: 0 Direct ns: Feet ew: S 0

Direct ew: W Latitude: 35.453987

 Longitude:
 -97.47954
 G elevatio:
 0

 D el:
 0
 Completion:
 1947-12-12

Dept: 0 Site id: OKOG20000259767

H28
North OIL\_GAS OKOG20000256825

1/2 - 1 Mile

 Fid:
 256824
 Api county:
 109

 Api number:
 00788
 Well name:
 LUCAS

Well no: 3 Oper name: REDHEN OIL COMPANY

Oper no: 1796 Status: AC Well class: OIL Operstatus: **OPEN** Countycode: 109 Meridan: IM Township: Section: 36 12N Range: 3W Quarter1: SW

 Quarter2:
 NW
 Quarter3:
 NE

 Quarter4:
 Not Reported
 Feet ns:
 276

 Direct ns:
 N
 Feet ew:
 750

 Direct ew:
 W
 Latitude:
 35.470321

Longitude: -97.47622 G elevatio: 0

0

D el:

Dept: 0 Site id: OKOG20000256825

H29
North
OIL\_GAS OKOG20000260216
1/2 - 1 Mile

Completion:

1935-12-09

 Fid:
 260215
 Api county:
 109

 Api number:
 36298
 Well name:
 LUCAS

Well no: 4 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Operstatus: Well class: OIL Not Reported Countycode: 109 Meridan: Indian Section: 36 Township: 12N Range: 3W Quarter1: SW4 Quarter2: NW4 Quarter3: NE4 Not Reported Quarter4: Feet ns: 0 Not Reported Direct ns: Feet ew: 0

Direct ew: Not Reported Latitude: 35.470321

Longitude: -97.47622 G elevatio: 0

 D el:
 0
 Completion:
 1936-07-02

 Dept:
 0
 Site id:
 OKOG20000260216

H30
North
OIL\_GAS
OKOG20000260228
1/2 - 1 Mile

Fid:260227Api county:109Api number:36310Well name:LUCAS

Well no: 7 Oper name: REDHEN OIL COMPANY

Oper no: 1796 Status: AC Well class: OIL Operstatus: **OPEN** 109 Meridan: Indian Countycode: Township: Section: 36 12N Quarter1: SW4 Range: 3W Quarter2: NW4 Quarter3: NW4 Quarter4: Not Reported Feet ns: 0

 Direct ns:
 S
 Feet ew:
 0

 Direct ew:
 W
 Latitude:
 35.470321

 Longitude:
 -97.47622
 G elevatio:
 1166

 D el:
 0
 Completion:
 1951-01-08

Dept: 6415 Site id: OKOG20000260228

I31
North OIL\_GAS OKOG20000260156

1/2 - 1 Mile

 Fid:
 260155
 Api county:
 109

 Api number:
 36237
 Well name:
 TROSPER

Well no: 1 Oper name: REDHEN OIL COMPANY

Oper no: 1796 Status: AC

Well class: OIL **OPEN** Operstatus: Countycode: 109 Meridan: Indian Section: 35 Township: 12N Quarter1: Range: 3W SE4 Quarter2: NE4 Quarter3: NE4 Quarter4: Not Reported Feet ns: 80 Direct ns: Ν Feet ew: 128 Direct ew: Е Latitude: 35.470305

 Longitude:
 -97.47843
 G elevatio:
 0

 D el:
 0
 Completion:
 1938-01-26

Dept: 6431 Site id: OKOG20000260156

132 North OIL\_GAS OKOG20000256761 1/2 - 1 Mile

 Fid:
 256760
 Api county:
 109

 Api number:
 00715
 Well name:
 SCRUGGS

Well no: 1 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Well class:Not ReportedOperstatus:Not ReportedCountycode:109Meridan:IM

Section: 35 Township: 12N Range: 3W Quarter1: Not Reported

 Quarter2:
 NE
 Quarter3:
 NE

 Quarter4:
 SE
 Feet ns:
 0

 Direct ns:
 Not Reported
 Feet ew:
 0

Direct ew: Not Reported Latitude: 35.470305

Longitude: -97.478433 G elevatio: 0

D el: 0 Completion: 1930-11-07

Dept: 0 Site id: OKOG20000256761

J34
NNE
OIL\_GAS
OKOG20000256811
1/2 - 1 Mile

 Fid:
 256810
 Api county:
 109

 Api number:
 00774
 Well name:
 LUCAS

Well no: 1 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Well class: Not Reported Operstatus: Not Reported Countycode: 109 Meridan: IM

Section: 36 Township: 12N
Range: 3W Quarter1: Not Reported

 Quarter2:
 NE
 Quarter3:
 NW

 Quarter4:
 SW
 Feet ns:
 0

 Direct ns:
 Not Reported
 Feet ew:
 0

Direct ew: Not Reported Latitude: 35.470321

Longitude: -97.474 G elevatio: 0

D el: 0 Completion: 1937-04-08

Dept: 0 Site id: OKOG20000256811

Map ID Direction

Distance Database EDR ID Number

J35 NNE 1/2 - 1 Mile

OIL\_GAS OKOG20000260218

 Fid:
 260217
 Api county:
 109

 Api number:
 36300
 Well name:
 LUCAS

Well no: 1-A Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA
Well class: Not Reported Operstatus: No

Not Reported Not Reported Countycode: 109 Meridan: Indian Section: 36 Township: 12N 3W Range: Quarter1: SW4 Quarter2: NW4 Quarter3: NE4 644 Quarter4: Not Reported Feet ns: Direct ns: Feet ew: 1250 W 35.470321 Direct ew: Latitude: -97.474 G elevatio: Longitude:

D el: 0 Completion: 1936-03-18

Dept: 0 Site id: OKOG20000260218

J33 NNE

NNE OIL\_GAS OKOG20000260211 1/2 - 1 Mile

 Fid:
 260210
 Api county:
 109

 Api number:
 36293
 Well name:
 LUCAS

Well no: 1 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Not Reported Not Reported Well class: Operstatus: 109 Meridan: Countycode: Indian Section: 36 Township: 12N Range: 3W Quarter1: SW4 NW4 Quarter3: NE4 Quarter2: Quarter4: Not Reported Feet ns: 510 Direct ns: Ν Feet ew: 1150

Direct ew: W Latitude: 35.470321 Longitude: -97.474 G elevatio: 0

D el: 0 Completion: 1935-12-31

Dept: 0 Site id: OKOG20000260211

J36

NNE OIL\_GAS OKOG20000260217 1/2 - 1 Mile

 Fid:
 260216
 Api county:
 109

 Api number:
 36299
 Well name:
 LUCAS

Well no: 2 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Well class: Not Reported Operstatus: Not Reported Countycode: 109 Meridan: Indian Section: Township: 36 12N SW4 Range: 3W Quarter1: Quarter2: NW4 Quarter3: NE4 Quarter4: Not Reported Feet ns: 276

Direct ew: W Latitude: 35.470321

Longitude: -97.474 G elevatio: 0

 D el:
 0
 Completion:
 1935-10-02

 Dept:
 0
 Site id:
 OKOG20000260217

37 SSE OIL\_GAS OKOG20000256768 1/2 - 1 Mile

 Fid:
 256767
 Api county:
 109

 Api number:
 00723
 Well name:
 CUNNINGHAM-COOK

 Well no:
 1
 Oper name:
 OTC/OCC NOT ASSIGNED

Oper no:9998Status:PAWell class:Not ReportedOperstatus:Not Reported

Countycode: 109 Meridan: IM Section: 1 Township: 11N

Range: 3W Quarter1: Not Reported Quarter3: Quarter2: SW ΝE Quarter4: SW Feet ns: 1851 Direct ns: S Feet ew: 1612 Direct ew: W Latitude: 35.454003

Longitude: -97.471782 G elevatio: 0

 D el:
 0
 Completion:
 1930-03-23

 Dept:
 0
 Site id:
 OKOG20000256768

\_\_\_\_

38 ESE OIL\_GAS OKOG20000261504 1/2 - 1 Mile

 Fid:
 261503
 Api county:
 109

 Api number:
 37638
 Well name:
 A M GUSTIN

Well no: 1 Oper name: A M GUSTIN

Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA
Well class: Not Reported Operstatus: Not Reported

Meridan: Countycode: 109 Indian Section: Township: 11N 1 Range: 3W Quarter1: NE4 Quarter2: SW4 Quarter3: SW4 Quarter4: Not Reported Feet ns: 330 Direct ns: Feet ew: S 321 W Direct ew: Latitude: 35.45791

 Longitude:
 -97.4669
 G elevatio:
 0

 D el:
 0
 Completion:
 1936-02-12

Dept: 0 Site id: OKOG20000261504

K39
NNE
OIL\_GAS
OKOG20000260214

1/2 - 1 Mile

 Fid:
 260213
 Api county:
 109

 Api number:
 36296
 Well name:
 FAIR PARK

Well no: 1 Oper name: OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Well class: OIL Operstatus: Not Reported Countycode: 109 Meridan: Indian Section: Township: 12N 36 Range: 3W Quarter1: NW4

Quarter2: SW4 SW4 Quarter3: Quarter4: Not Reported Feet ns: 625 Direct ns: S Feet ew: 265 W Direct ew: Latitude: 35.471611 Longitude: -97.473694 G elevatio: 0

D el: 0 Completion: 1944-02-15 Dept: 6431 Site id: OKOG20000260214

North OIL\_GAS OKOG20000260227 1/2 - 1 Mile

Fid: 260226 Api county: 109 36309 Well name: HODGES FAIRPARK Api number:

Well no: Oper name: BARON EXPLORATION COMPANY

17195 Status: Oper no: AC Operstatus: **OPEN** Well class: OIL Countycode: 109 Meridan: Indian Section: 36 Township: 12N Range: 3W Quarter1: NW4 Quarter2: SW4 Quarter3: SW4 Quarter4: Not Reported Feet ns: 355 Direct ns: Feet ew: 425 S Direct ew: W Latitude: 35.472134

Longitude: -97.47622 G elevatio: 1168 0 1978-12-11 D el: Completion:

Dept: 6297 Site id: OKOG20000260227

K41 NNE OIL\_GAS OKOG20000260226

Fid: 260225 Api county: 109 Well name: **FAIRPARK** Api number: 36308

1/2 - 1 Mile

BARON EXPLORATION COMPANY Well no: Oper name: 1

Oper no: 17195 Status: AC Well class: Not Reported Operstatus: **OPEN** 109 Meridan: Indian Countycode: Township: Section: 36 12N Range: 3W Quarter1: NW4 Quarter2: SW4 Quarter3: SE4

Quarter4: Not Reported Feet ns: 100 Direct ns: S Feet ew: 900 W Direct ew: Latitude: 35.472134 Longitude: -97.474 G elevatio:

D el: 0 Completion: 1954-03-23

0 OKOG20000260226 Dept: Site id:

L42 OIL\_GAS OKOG20000256703

SW 1/2 - 1 Mile

256702 Api county: 00652 **ED DILLON COMMUNITY** Api number: Well name:

BENT TWIG OPERATING CORPORATION Well no: Oper name:

Oper no: 5934 Status: AC

Well class: OIL CLOSED Operstatus: Countycode: 109 Meridan: Indian Section: 2 Township: 11N Quarter1: Range: 3W SW4 Quarter2: NE4 Quarter3: NE4 Quarter4: Not Reported Feet ns: 2300 Direct ns: S Feet ew: 2310 Direct ew: W Latitude: 35.4558 -97.4873 G elevatio: Longitude: 0

D el: 0 Completion: 1930-09-30

Dept: 6545 Site id: OKOG20000256703

43 NW OIL\_GAS OKOG20000260208 1/2 - 1 Mile

 Fid:
 260207
 Api county:
 109

 Api number:
 36289
 Well name:
 HILDRETH

Well no: 1 Oper name: TNT OPERATING COMPANY INC

Oper no: 19087 Status: AC 2DNC **OPEN** Well class: Operstatus: 109 Meridan: Countycode: Indian Section: Township: 12N 35 Range: 3W Quarter1: SE4 Quarter2: NW4 Quarter3: NW4 Not Reported Feet ns: 2415 Quarter4: Direct ns: S Feet ew: 600 W Latitude:

 Direct ns:
 S
 Feet ew:
 600

 Direct ew:
 W
 Latitude:
 35.470305

 Longitude:
 -97.48508
 G elevatio:
 1183

 D el:
 0
 Completion:
 1952-10-01

Dept: 6550 Site id: OKOG20000260208

L44
WSW
OIL\_GAS
OKOG20000256779
1/2 - 1 Mile

Fid: 256778 Api county: 109

Api number: 00736 Well name: ED DILLION COMMUNITY

TNT OPERATING COMPANY INC Well no: Oper name: 2 19087 Oper no: Status: AC Well class: GAS Operstatus: **OPEN** Countycode: 109 Meridan: Indian Section: 2 Township: 11N 3W Quarter1: SW4 Range: NW4

Quarter2: NE4 Quarter3: Quarter4: Not Reported Feet ns: 2300 S Direct ns: Feet ew: 1802 W Direct ew: Latitude: 35.45621 Longitude: -97.48825 G elevatio: 1177 0 Completion: 2006-04-25 D el:

Dept: 6600 Site id: OKOG20000256779

Map ID Direction Distance

Distance Database EDR ID Number

45 South 1/2 - 1 Mile

Fid: 259724 Api county: 109

Api number:35785Well name:THEIMERWell no:1Oper name:OTC/OCC NOT ASSIGNED

Oper no: 9998 Status: PA

Not Reported Well class: OIL Operstatus: Countycode: 109 Meridan: Indian Section: 2 Township: 11N Range: 3W Quarter1: SE4 Quarter2: SE4 Quarter3: SE4 330 Quarter4: Not Reported Feet ns: Direct ns: S Feet ew: 330 Е 35.450361 Direct ew: Latitude:

Longitude: -97.47843 G elevatio: 0

D el: 0 Completion: 1930-03-18

Dept: 0 Site id: OKOG20000259725

SSE OIL\_GAS OKOG20000261526 1/2 - 1 Mile

 Fid:
 261525
 Api county:
 109

 Api number:
 37660
 Well name:
 ECKELS

Well no: 1 Oper name: TNT OPERATING COMPANY INC Oper no: 19087 Status: AC

**OPEN** OIL Well class: Operstatus: 109 Meridan: Indian Countycode: Section: 1 Township: 11N Range: 3W Quarter1: SW4 SE4 Quarter3: SW4 Quarter2: Quarter4: Not Reported Feet ns: 330 Direct ns: S Feet ew: 1725 Direct ew: W Latitude: 35.450377 Longitude: -97.47178 G elevatio: 1223

 D el:
 0
 Completion:
 1945-04-17

 Dept:
 6535
 Site id:
 OKOG20000261526

47 8E

SE OIL\_GAS OKOG20000261553 1/2 - 1 Mile

 Fid:
 261552
 Api county:
 109

 Api number:
 37688
 Well name:
 THEIMER A

 Well no:
 9
 Oper name:
 STEPHENS & JOHNSON OPERATING CO

 Oper no:
 19113
 Status:
 AC

AC Well class: OIL Operstatus: **OPEN** Countycode: 109 Meridan: Indian Section: Township: 1 11N Range: 3W Quarter1: SE4 Quarter2: NW4 Quarter3: SE4 Quarter4: Not Reported Feet ns: 1650

Direct ns: S Feet ew: 990
Direct ew: W Latitude: 35.45434

OIL\_GAS

OKOG20000259725

 Longitude:
 -97.46474
 G elevatio:
 1202

 D el:
 0
 Completion:
 1949-06-14

 Dept:
 6519
 Site id:
 OKOG20000261553

48
West OIL\_GAS OKOG20000256817
1/2 - 1 Mile

 Fid:
 256816
 Api county:
 109

 Api number:
 00780
 Well name:
 MEYERS

Well no: 0TC/OCC NOT ASSIGNED

 Oper no:
 9998
 Status:
 PA

 Well class:
 Not Reported
 Operstatus:
 Not Reported

Countycode:109Meridan:IMSection:2Township:11N

Range: 3W Quarter1: Not Reported Quarter2: SW Quarter3: NW

Quarter2: NW Feet ns: 0
Direct ns: Not Reported Feet ew: 0

Direct ew: Not Reported Latitude: 35.461238 Longitude: -97.493943 G elevatio: 0

 Longitude:
 -97.493943
 G elevatio:
 0

 D el:
 0
 Completion:
 1932-06-18

Dept: 0 Site id: OKOG20000256817

49
NNW
OIL\_GAS OKOG20000260196
1/2 - 1 Mile

 Fid:
 260195
 Api county:
 109

 Api number:
 36277
 Well name:
 HINCHEE

Well no: 1 Oper name: TNT OPERATING COMPANY INC Oper no: 19087 Status: AC

Well class: Operstatus: **OPEN** OIL Meridan: Countycode: 109 Indian Section: Township: 35 12N Range: 3W Quarter1: NE4 Quarter2: NE4 Quarter3: SW4 Quarter4: Not Reported Feet ns: 1549 Direct ns: Feet ew: 1866 S W Latitude: 35.475744 Direct ew:

Longitude: -97.48065 G elevatio: 0

D el: 0 Completion: 1938-04-01

Dept: 6380 Site id: OKOG20000260196

# AREA RADON INFORMATION

State Database: OK Radon

Radon Test Results

Zipcode	Num Tests	# > 4 pCi/L	Maximum	Average
	<del></del>			
73117	2	0	1.5	1.3

Federal EPA Radon Zone for OKLAHOMA County: 3

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 73117

Number of sites tested: 1

Area Average Activity % <4 pCi/L % 4-20 pCi/L % >20 pCi/L Living Area - 1st Floor 1.100 pCi/L 100% 0% 0% Living Area - 2nd Floor Not Reported Not Reported Not Reported Not Reported 1.500 pCi/L Basement 100% 0% 0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### **TOPOGRAPHIC INFORMATION**

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

#### **HYDROLOGIC INFORMATION**

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

#### HYDROGEOLOGIC INFORMATION

AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

#### **GEOLOGIC INFORMATION**

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### LOCAL / REGIONAL WATER AGENCY RECORDS

#### FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

#### STATE RECORDS

Reported Well Locations in Oklahoma

Source: Oklahoma Water Resources Board

Telephone: 405-530-8800

#### OTHER STATE DATABASE INFORMATION

Oil and Gas Well Listing

Source: Oklahoma Corporation Commission

Telephone: 405-521-3636

Oil and gas well locations in the state.

Oil and Gas Well Listing

Source: Osage Nation Environmental and Natural Resources

Telephone: 918-287-5333 Oil and gas well locations.

#### **RADON**

State Database: OK Radon

Source: Department of Environmental Quality

Telephone: 405-702-5100 Radon Information

Area Radon Information Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at

private sources such as universities and research institutions.

**EPA Radon Zones** 

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

# OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared

in 1975 by the United State Geological Survey

#### STREET AND ADDRESS INFORMATION

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# Appendix B Photographs



Photo 1: Penthouse Oil Well (Well #4 in Figure 2)



Photo 2: Penthouse Salt Water Disposal Well (Well #4 in **Figure 2**)



Photo 3: Buried Salt Water Line Marker



Photo 4: Looking South from Salt Water Line Marker to Baker Townsend Salt Water Disposal Well



Photo 5: Baker Townsend Salt Water Disposal Well

# Appendix C EDR Certified Sanborn Map Report, June 14, 2023

Oklahoma River 659 First Americans Blvd Oklahoma City, OK 73117

Inquiry Number: 7365124.1

June 14, 2023

# **Certified Sanborn® Map Report**



# **Certified Sanborn® Map Report**

06/14/23

Site Name: Client Name:

Oklahoma River Abernathy Consulting Services LLC 659 First Americans Blvd 2634 9th Ave NE

Oklahoma City, OK 73117 Norman, OK 73071

EDR Inquiry # 7365124.1 Contact: Diane Abernathy



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Abernathy Consulting Services LLC were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

#### Certified Sanborn Results:

Certification # 425A-4A9C-8FA2

PO# NA

Project Oklahoma River

#### **UNMAPPED PROPERTY**

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: 425A-4A9C-8FA2

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

✓ Library of Congress

✓ University Publications of America

EDR Private Collection

The Sanborn Library LLC Since 1866™

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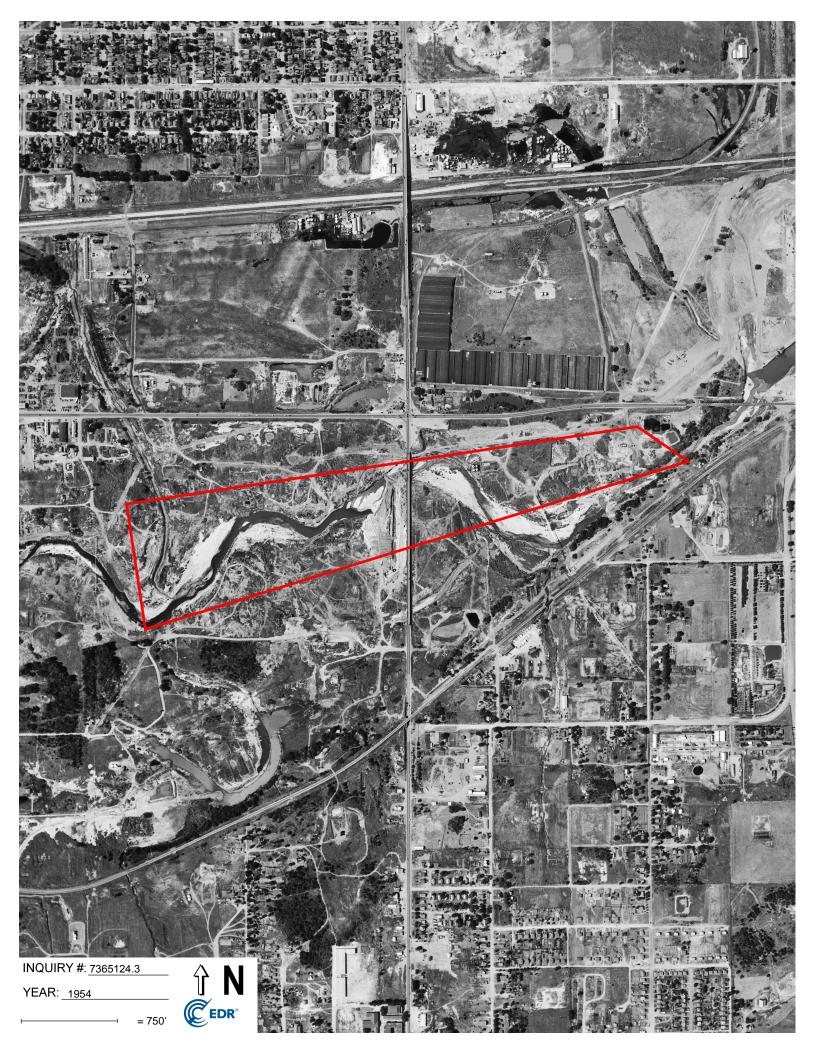
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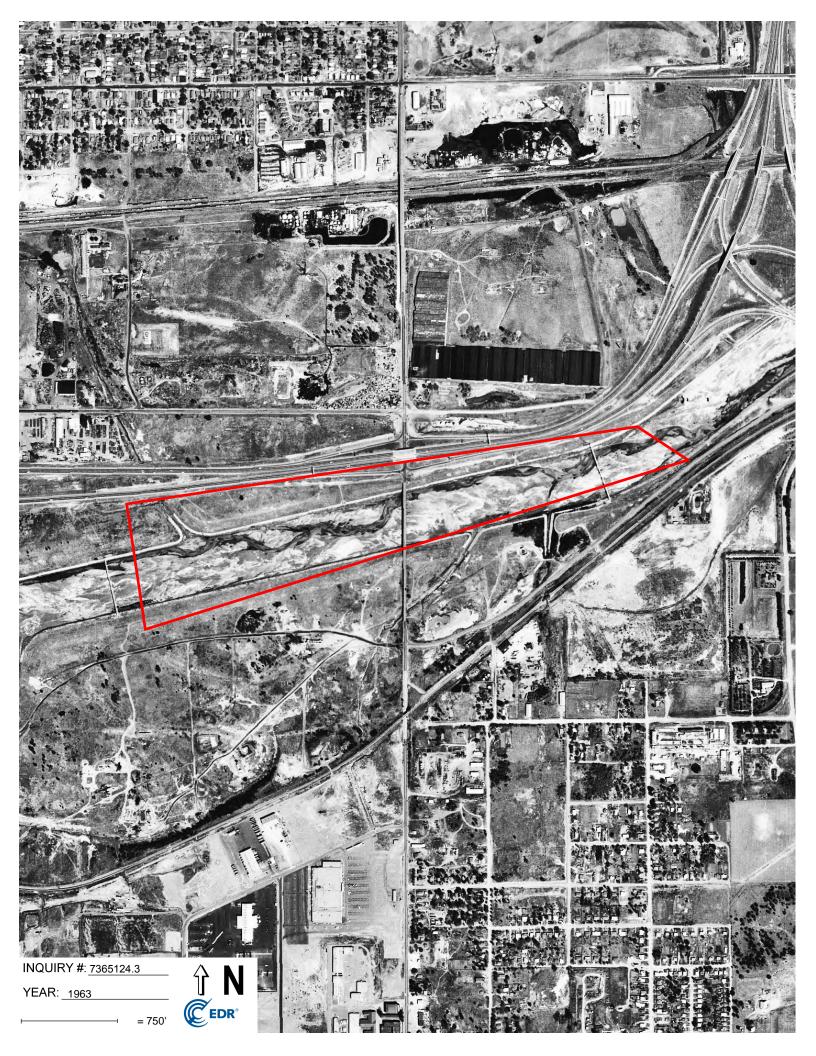
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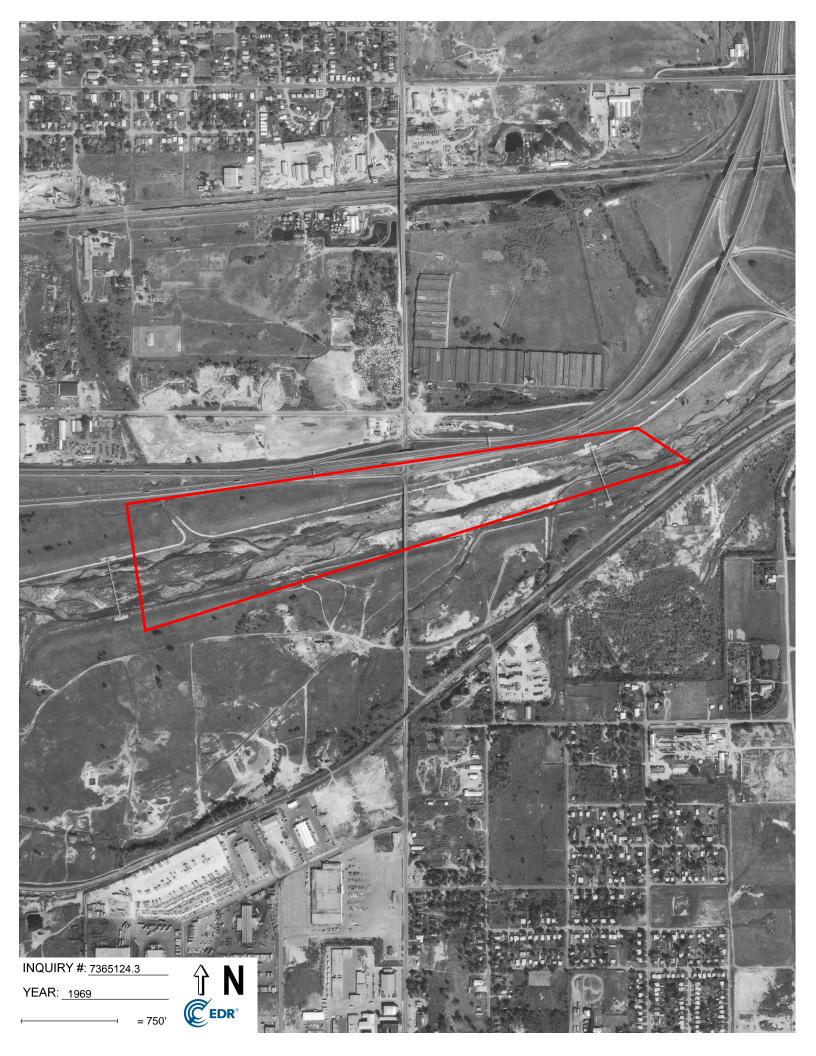
page 2

# Appendix D The EDR Aerial Photo Decade Package, June 15, 2023

















# Appendix E Diane Abernathy Resume

405-919-0481 (Cell) diane.abernathy@hotmail.com

#### **EXPERIENCE**

#### **Abernathy Consulting Services LLC**

2021 - Present

Norman, OK

**PRESIDENT / OWNER.** Provide environmental compliance services to existing and new clients, with the advantage of assisting engineering design clients in meeting their DBE (Disadvantaged Business Enterprise) requirements on Federally funded contracts. Continue to support several long-time private industrial clients with their environmental compliance programs.

#### **TEIM / Triad Design Group**

2014 - 2020

Oklahoma City, OK

**SENIOR ENVIRONMENTAL PROJECT MANAGER, 2014 – PRESENT.** Responsible for environmental review and clearance for Federally funded design projects, including highway, bridge, city street, and wastewater/drinking water system improvements. Developed and implemented numerous public involvement programs for these projects, which included planning and conducting stakeholder and public meetings, open houses, and public hearings, using both in-person and virtual platforms. Continued to provide environmental compliance services to two long-time private industrial clients.

## LEIDOS / SAIC / The Benham Group / RSA

1990 - 2014

Norman, OK

**ENVIRONMENTAL COMPLIANCE ENGINEER, 1990 - 1998.** Provided consulting services to private industrial clients, including storm water and wastewater permitting, RCRA permit compliance program development/implementation, and SARA reporting.

**ENVIRONMENTAL COMPLIANCE GROUP MANAGER, 1998 - 2014.** Directed a group of professionals responsible for assisting industrial/commercial clients in achieving waste and water regulatory compliance. Responsible for the public involvement and communications program implemented for a highly-controversial industrial site with offsite groundwater impacts. Functioned as Project Manager for installation of groundwater collection/treatment remediation projects at three major industrial facilities. Conducted several environmental regulatory compliance audits for a major fertilizer manufacturer. Supported the civil engineering branch of the company by providing environmental review and clearance of Federally funded transportation projects.

# **Diane Abernathy** Resume - Page 2 of 2

#### **EXPERIENCE** (continued)

#### **AT&T Manufacturing**

1984 - 1990

Oklahoma City, OK

**PROCESS ENGINEER, 1984 – 1987.** Responsible for solvent cleaning/recycling operations at this circuit board manufacturing facility.

**ENVIRONMENTAL ENGINEER, 1987 – 1990.** Responsible for facility's environmental regulatory compliance, including OKC wastewater discharge permit and hazardous/solid waste RCRA program development and implementation.

#### **EDUCATION**

University of Oklahoma Health & Sciences Center Master of Science, Environmental Health

1992

**University of Oklahoma** 

1984

Bachelor of Science, Chemical Engineering

## PROFESSIONAL REGISTRATION / MEMBERSHIP / CERTIFICATIONS

Professional Engineer, #17194, Oklahoma

1994

WTS Oklahoma Chapter

**2017 – Present** 

Oklahoma Certified Disadvantaged Business Enterprise (DBE)

2021

## APPENDIX G-1 FEDERAL TRANSIT ADMINISTRATION CATEGORICAL EXCLUSION DOCUMENTATION (BOAT DOCK)



REGION VI Arkansas, Louisiana, New Mexico, Oklahoma, Texas 819 Taylor St., Suite 14A02 Fort Worth, TX 76102 (817) 978-0550 (817) 978-0575 (fax)

#### **Categorical Exclusion Checklist**

This checklist is to help Federal Transit Administration (FTA) grantees comply with the National Environmental Policy Act (NEPA). The checklist helps determine whether a proposed project may qualify for a Categorical Exclusion, that is, an action that normally does not have a significant effect on the human environment. Please contact your FTA Community Planner if you need help completing the checklist.

#### **Step 1: Describe the project:**

Project Name: First American Museum River Ferry Landing

Sponsoring Agency: Central Oklahoma Transportation and Parking Authority

Point of Contact: Cory Hubert

Anticipated Source of Federal Funds: COTPA FY 2020 Passenger Ferry Boat Grant - Section 5307(h) Competitive" and "FY 2021 Section 5337 State of Good Repair - Central Oklahoma Transportation and Parking Authority - Architectural & Engineering Services - Landing at First Americans Museum.

Project Description: New Ferry Landing on the Southside of the River near the First American Museum and Hotel.

- Expansion of Ferry Services
- Ferryboat Dock Basic Dock, ADA Compliant, Signage, Access Control with Surveillance, Rip Rap, Stairs with Rails, Reflecting Pond, Walkways, Ticket Booth and Lighting.
- Location See attachment "Exhibit A Legal Description"

□ No, no property acquisition has or will be done for the project.

# Step 2: Answer the following questions: Will the project have a significant effect on the project area or its resources? □ Unknown, contact FTA. This project may not qualify for a categorical exclusion. □ Yes, contact FTA. This project may not qualify for a categorical exclusion. ☑ No. Is the project likely to generate intense public discussion, concern, or present extraordinary circumstances which may pose a significant effect? □ Unknown, contact FTA. □ Yes, contact FTA. This project may still be categorically excluded. ☑ No. Will the project involve property acquisition? ☑ We already own the property. □ Yes, we intend to acquire property. Note that FTA generally prohibits property acquisition prior to the completion of NEPA.

Form Updated: October 2021 Page 1 of 12

4.	Is the project the type of activity that has the potential to cause effects on historic properties, assuming historic properties are present?  ☐ Unknown, contact FTA.  ☐ Yes, contact FTA regarding consultation under Section 106 of the National Historic Preservation Act.  ☑ No.
5.	Does the project involve the use of land from publicly owned parks, recreation areas, wildlife and waterfowl refuges, or public or private historic sites?  ☐ Unknown, contact FTA.  ☐ Yes, contact FTA regarding requirements under Section 4(f) of the DOT Act of 1966.  ☑ No.
6.	Will the project have disproportionately high and adverse impacts on minority/low income populations?  ☐ Unknown, contact FTA.  ☐ Yes, contact FTA regarding requirements for Environmental Justice.  ☑ No, continue.
7.	Will the project be located within a 100-year floodplain?  ☐ Unknown, contact FTA.  ☐ Yes, contact FTA regarding further evaluation under Executive Order 11988.  ☑ No, continue.
Ste	ep 3: Select the appropriate c-list Categorical Exclusion, if it applies:
	tions listed under 23 CFR 771.118(c), c-list CEs, usually require minimal supporting cumentation. However, other environmental requirements may require documentation.
Uti	ility and Similar Appurtenance Action (1) Acquisition, installation, operation, evaluation, replacement, and improvement of discrete utilities and similar appurtenances (existing and new) within or adjacent to existing transportation right-of-way, such as: utility poles, underground wiring, cables, and information systems; and power substations and utility transfer stations.
Peo	destrian or Bicycle Action  (2) Acquisition, construction, maintenance, rehabilitation, and improvement or limited expansion of stand-alone recreation, pedestrian, or bicycle facilities, such as: a multiuse pathway, lane, trail, or pedestrian bridge; and transit plaza amenities.

Environmental Mitigation of Stewardship Activity

	(3) Activities designed to mitigate environmental harm that cause no harm themselves or to maintain and enhance environmental quality and site aesthetics, and employ construction best management practices, such as: noise mitigation activities; rehabilitation of public transportation buildings, structures, or facilities; retrofitting for energy or other resource conservation; and landscaping or re-vegetation.
Plaı □	(4) Planning and administrative activities which do not involve or lead directly to construction, such as: training, technical assistance and research; promulgation of rules, regulations, directives, or program guidance; approval of project concepts; engineering; and operating assistance to transit authorities to continue existing service or increase service to meet routine demand.
Act □	ion Promoting Safety, Security, Accessibility (5) Activities, including repairs, replacements, and rehabilitations, designed to promote transportation safety, security, accessibility and effective communication within or adjacent to existing right-of-way, such as: the deployment of Intelligent Transportation Systems and components; installation and improvement of safety and communications equipment, including hazard elimination and mitigation; installation of passenger amenities and traffic signals; and retrofitting existing transportation vehicles, facilities or structures, or upgrading to current standards.
Acc	(6) Acquisition or transfer of an interest in real property that is not within or adjacent to recognized environmentally sensitive areas (e.g., wetlands, non-urban parks, wildlife management areas) and does not result in a substantial change in the functional use of the property or in substantial displacements, such as: acquisition for scenic easements or historic sites for the purpose of preserving the site. This CE extends only to acquisitions and transfers that will not limit the evaluation of alternatives for future FTA-assisted projects that make use of the acquired or transferred property.
Acc	quisition, Maintenance of Vehicles/Equipment  (7) Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.
Mai	intenance, Rehabilitation, Reconstruction of Facilities (8) Maintenance, rehabilitation, and reconstruction of facilities that occupy substantially the same geographic footprint and do not result in a change in functional use, such as: improvements to bridges, tunnels, storage yards, buildings, stations, and terminals; construction of platform extensions, passing track, and retaining walls; and improvements to tracks and railbeds.

## Assembly or Construction of Facilities

(9) Assembly or construction of facilities that is consistent with existing land use and zoning requirements (including floodplain regulations) and uses primarily land disturbed for transportation use, such as: buildings and associated structures; bus transfer stations or intermodal centers; busways and streetcar lines or other transit investments within areas of the right-of-way occupied by the physical footprint of the existing facility or otherwise maintained or used for transportation operations; and parking facilities.

#### Joint Development of Facilities

(10) Development of facilities for transit and non-transit purposes, located on, above, or adjacent to existing transit facilities, that are not part of a larger transportation project and do not substantially enlarge such facilities, such as: police facilities, daycare facilities, public service facilities, amenities, and commercial, retail, and residential development.

#### **Emergency Recovery Actions**

- $\Box$  (11) The following actions for transportation facilities damaged by an incident resulting in an emergency declared by the Governor of the State and concurred in by the Secretary, or a disaster or emergency declared by the President pursuant to the Robert T. Stafford Act (42 U.S.C. 5121):
  - (i) Emergency repairs under 49 U.S.C. 5324; and
  - (ii) The repair, reconstruction, restoration, retrofitting, or replacement of any road, highway, bridge, tunnel, or transit facility (such as a ferry dock or bus transfer station), including ancillary transportation facilities (such as pedestrian/bicycle paths and bike lanes), that is in operation or under construction when damaged and the action:
    - (A) Occurs within the existing right-of-way and in a manner that substantially conforms to the preexisting design, function, and location as the original (which may include upgrades to meet existing codes and standards as well as upgrades warranted to address conditions that have changed since the original construction); and
    - (B) Is commenced within a 2-year period beginning on the date of the declaration.

#### Actions within Existing Operational Right-of-Way

☐ (12) Projects, as defined in 23 U.S.C. 101, that would take place entirely within the existing operational right-of-way. Existing operational right-of-way refers to right-of-way that has been disturbed for an existing transportation facility or is maintained for a transportation purpose. This area includes the features associated with the physical footprint of the transportation facility (including the roadway, bridges, interchanges, culverts, drainage, fixed guideways, mitigation areas, etc.) and other areas maintained for transportation purposes such as clear zone, traffic control signage, landscaping, any rest areas with direct access to a controlled access highway, areas maintained for safety and security of a transportation facility, parking facilities with direct access to an existing transportation facility, transit power substations, transit venting structures, and transit maintenance facilities. Portions of the right-of-way that have not been disturbed or that are not maintained for transportation purposes are not in the existing operational right-of-way.

#### Actions with Limited Federal Funding

☐ (13) Federally-funded projects:

- (i) That receive less than \$5,000,000 of Federal funds; or
- (ii) With a total estimated cost of not more than \$30,000,000 and Federal funds comprising less than 15 percent of the total estimated project cost.

#### Bridge Removal and Related Activities

☐ (14) Bridge removal and bridge removal related activities, such as in-channel work, disposal of materials and debris in accordance with applicable regulations, and transportation facility realignment.

#### Preventative Maintenance of Culverts/Channels

☐ (15) Preventative maintenance, including safety treatments, to culverts and channels within and adjacent to transportation right-of-way to prevent damage to the transportation facility and adjoining property, plus any necessary channel work, such as restoring, replacing, reconstructing, and rehabilitating culverts and drainage pipes; and, expanding existing culverts and drainage pipes.

#### Geotechnical and Other Similar Investigations

☐ (16) Localized geotechnical and other investigations to provide information for preliminary design and for environmental analyses and permitting purposes, such as drilling test bores for soil sampling; archeological investigations for archeology resources assessment or similar survey; and wetland surveys.

If your project falls within one or more of the c-list Categorical Exclusions above, skip to Step 5.

#### **Step 4: Select the appropriate d-list Categorical Exclusion, if it applies:**

Actions listed under 23 CFR 771.118(d), d-list CEs, generally require additional documentation demonstrating the requisite criteria are met. This is not an exhaustive list of all actions that may qualify as a d-list Categorical Exclusion. Again, other environmental requirements may apply.

#### **Highway Modernization**

(1) Modernization of a highway by resurfacing, restoring, rehabilitating, or reconstructing shoulders or auxiliary lanes (e.g., lanes for parking, weaving, turning, climbing).

#### Bridge Replacement or Rail Grade Separation

☐ (2) Bridge replacement or the construction of grade separation to replace existing at-grade railroad crossings.

#### Hardship or Protection Property Acquisition

□ (3) Acquisition of land for hardship or protective purposes. Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisition qualify for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed.

- (i) Hardship acquisition is early acquisition of property by the applicant at the property owner's request to alleviate particular hardship to the owner, in contrast to others, because of an inability to sell his property. This is justified when the property owner can document on the basis of health, safety or financial reasons that remaining in the property poses an undue hardship compared to others.
- (ii) Protective acquisition is done to prevent imminent development of a parcel which may be needed for a proposed transportation corridor or site. Documentation must clearly demonstrate that development of the land would preclude future transportation use and that such development is imminent. Advance acquisition is not permitted for the sole purpose of reducing the cost of property for a proposed project.

Acq	uisition of Right-of-Way
	(4) Acquisition of right-of-way. No project development on the acquired right-of-way may proceed until the NEPA process for such project development, including the consideration of alternatives, has been completed.
	(5) [Reserved] – Do not use
Fac	ility Modernization
	(6) Facility modernization through construction or replacement of existing components.
Mir	or Facility Realignment for Rail Safety Purposes
	(7) Minor transportation facility realignment for rail safety reasons, such as improving vertical and horizontal alignment of railroad crossings, and improving sight distance at railroad crossings.
Fac	ility Modernization/Expansion Outside Existing ROW

(8) Modernization or minor expansions of transit structures and facilities outside existing right-of-way, such as bridges, stations, or rail yards.

#### Other

☑ Categorically excluded, though not otherwise identified (no specific category applies). You must provide supporting documentation.

If your project does not meet the criteria listed above, it may not qualify as a d-listed Categorical Exclusion. Contact FTA if questions.

#### Step 5. Provide supporting documentation, as necessary:

Include documentation, as applicable, for the areas of concern below:

A. Property Acquisition/Relocations: (Refer to FAQs on Real Property Acquisition) Document compliance with the Uniform Relocation Assistance and Real Property Acquisition Act.

- Indicate whether property, in any form of ownership, has already been acquired or whether acquisition will result in relocation of individuals or businesses.
- Attach maps or graphs of affected parcel(s), including relocations.

Response – Property is owned by the Central Oklahoma Transportation and Parking Authority, property was leased to AICCM Land Development, LLC on November 5, 2021 for an initial period of thirty (30) years with a renewal of forty-five (45) years upon mutual, written agreement of the parties.

#### **B.** Land Use and Zoning Impacts:

Document that the project is consistent with surround land use and zoning.

- Attach a land use map showing the project location and its surrounding parcel's land use classification.
- Attach a zoning map showing/describing the project's zoning classification.

Response – See attached file labeled "Exhibit A – Legal Description".

#### C. Traffic and Parking Impacts:

Document potential traffic and parking impacts.

- Indicate whether the existing roadways have adequate capacity to handle increased bus or other vehicular traffic.
- Is there any loss of parking? Loss of general-purpose travel lane?
- Describe connectivity to other transportation facilities and modes, and coordination with relevant agencies.
- If the project will modify an existing roadway configuration include a map/diagram.
- How does the project address safety of the users of all transportation modes (motorists, transit users, bicyclists and pedestrians)?

Response – Parking and related traffic needs for the Ferry Landing are being included in the Okana Resort & Indoor Waterpark currently under construction. The project is expanding the roadways and increasing the parking to accommodate the visitors of facility. This facility will have about 1,400 parking spaces and feature an 404-room hotel, five-acre outdoor adventure lagoon, 33,000 square-foot entertainment center, 100,000 square-foot indoor waterpark, 39,000 square-feet of conference center space, spa, golf simulator, multiple retail outlets and dining options.

#### D. Air Quality:

Document that requirements of the Clear Air Act have been met.

- Describe any impacts to air quality resulting from the project.
- Is the project located in an Environmental Protection Agency-designated non-attainment or maintenance area? If so, indicate the criteria pollutant below and contact FTA to determine if a hot spot analysis is necessary.

☐ Carbon Monoxide (CO)
$\square$ Ozone (O <sub>3</sub> )
☐ Particulate Matter (PM <sub>2.5</sub> )

☐ Particulate Matter (PM <sub>10</sub> )	
☐ Nitrogen Dioxide (NO <sub>2</sub> )	
☐ Sulfur Dioxide (SO <sub>2</sub> )	
Response – No impact.	
<ul> <li>Does the project require conformity analysis?</li> <li>☑ No, it is exempt from conformity analysis under 40 CFR 93.12</li> <li>☐ Yes</li> </ul>	6
<ul> <li>If the non-attainment area is also in a metropolitan area, was the proj MPO's Transportation Improvement Program air quality conformity         □ N/A         ☑ No</li> </ul>	,
$\square$ Yes, date of conformity finding: Click here to enter a date.	

- **E.** Historic/Cultural Resources: (Refer to FTA's procedure on the Section 106 process) Document compliance with Section 106 of the National Historic Preservation Act.
  - Describe any cultural, historic, or archaeological resources that are in or around the immediate vicinity of the project.
  - Describe the potential for the project to affect that resource. Attach any relevant documentation and correspondence.
  - Document any consultation and determinations or findings made.

Response – No impact. See attachments labeled "Exhibit B - SHPO – Determination – FAM Landing" from the Oklahoma Historical Society – State Historic Preservation Office and "Exhibit C - Oklahoma Archeological Survey – Determination – FAM Landing" from Oklahoma Archeological Survey – The University of Oklahoma.

- **F. Section 4(f) finding:** (Refer to <u>FTA's procedure on Section 4(f) Evaluations</u>)

  Document compliance with Section 4(f) of the Department of Transportation Act of 1966.
  - If the project is located in or adjacent to a publicly-owned park, recreation area or wildlife or waterfowl refuge, or a publicly or privately owned historic district/ property, document any use of that resource.
  - Describe the potential impacts so FTA can make a Section 4(f) finding

Response – This project is located on the Oklahoma River east, downstream, of Riversport Adventures on the southside of the river. The Ferry Landing will provide additional travel options to the visitors of the Okana Resort.

- G. Environmental Justice: (Refer to FTA's Circular on Environmental Justice)
  - Determine the presence of minority/low-income populations within the project area.
  - Indicate whether the project will have disproportionately high and adverse impacts on minority/low-income populations.

• Describe any outreach efforts targeted specifically at minority/low-income populations

Response – The area is undeveloped land that boarded by minimal residents.

#### H. Hazardous Materials: (Refer to FTA's procedure on Contaminated Properties)

Document if there is any known or potential contamination (e.g., lead/ asbestos, above/ underground storage tanks, a history of industrial use) at the project site?

- Describe the analysis used to determine whether hazardous materials were present.
- Describe mitigation and clean-up measures that will be taken to remove hazardous materials. If the project includes property acquisition, a Phase I Environmental Site Assessment may be required for the land to be acquired.

Response – Property has not been developed, last know construction in the area was when the river was built which was completed prior to 2007. Should any hazardous materials be found they will be mitigated in compliance with all regulations.

#### I. Noise/Vibration: (Refer to FTA's Noise and Vibration Manual)

Document whether the project has the potential for noise or vibration impacts.

- Identify receptors within the screening distance.
- Attach a general noise or vibration assessment.
- Describe impacts, if any, proposed mitigation measures, and remaining impacts after mitigation.

Response – No impact.

#### J. Floodplain Impacts: (Refer to FTA's guidance on Floodplain Management)

Document compliance with US DOT Order 5650.2, Floodplain Management and Protection.

• Is the project located within the 100-year floodplain? If so, provide the appropriate Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM).

Response – Area has been designated as Zone X, Minimal Flood Hazard of .2 %. See attached file labeled "Exhibit D - OKC\_Ferry\_FAM\_Landing\_100yr\_flod\_map\_zoom".

#### K. Biological Resources: (Refer to FTA's procedure on Biological Resources)

Document project effects on protected wildlife and plant species and/or their habitats.

- Describe if there are any species located within the project vicinity that are listed as threatened or endangered under the Endangered Species Act.
- Describe any critical habitat, essential fish habitat or other ecologically sensitive areas within or near the project area.

Response – Area will no effects on protected wildlife, plant species and/or their habitats.

#### L. Water Resources: (Refer to FTA's procedure on Water Resources)

Document that requirements of the Clean Water Act have been met.

- Describe the project's potential to impact water quality, including during construction.
- Describe potential impacts and best management practices that will be in place.

- Will there be an increase in new impervious surface or restored pervious surface?
- Describe potential impacts and proposed treatment for storm water runoff
- Document whether the project will affect on-site or adjacent wetlands. Include any findings by the U.S. Army Corps of Engineers.
- Is the project located near an EPA-designated sole source aquifer? Provide the name of the aquifer which the project is in and describe any potential impacts to the aquifer. Also, include the approximate amount of new impervious surface created by the project.

Response – Walkways and a plaza will be constructed of impervious surfaces; all such storm water runoff will be directed to storm drains under construction for the Okana Resort.

#### M. Visual and Aesthetics Impacts:

• Describe the project's effects on the existing visual/aesthetic character or quality of the site, its surrounding, and/or recognized view sheds.

Response – The architectural elements of the landing will blend into the resort as the architect for the Resort has partnered with the engineering firm working on the design of the landing.

#### N. Utilities:

- Describe any relocations to utility lines or facilities.
- Describe coordination done with utility providers.

Response – None.

#### O. Prime and Unique Farmlands: (Refer to Farmland Protection Policy Act)

- Does the proposal involve the use of any prime or unique farmlands?
- If so, describe potential impacts and any coordination with the Soil Conservation Service of the U.S. Department of Agriculture.

Response – None.

#### P. Safety/Security: (See <u>FTA's Transit Safety and Oversight webpage</u> for more information)

• Describe all measures that would need to be taken and that have been included for the safe and secure operation of the project (e.g., pedestrian and traffic hazards, as well as user and employee security issues).

Response – First American Museum has on-site security 24 hours a day, seven days a week. At all times there is a minimum of two officers who utilize patrol and technology to ensure the safety and security of the staff, guests and property.

#### **Q.** Construction Impacts:

- Describe temporary impacts associated with construction activities, such as noise, air quality, sidewalk and road closures, traffic detour/access change, construction schedules.
- Describe mitigation measures to address the impacts.

Response – Construction activity for the landing will be coordinated with the construction of the resort. The landing will be completed prior to the Resorts completion thus not impacting the public. It may be possible that the lowering of eastern basin will be needed during the construction phase of the landing, with will be determined by the general contractor.

- **R. Public Involvement:** (Refer to <u>FTA's procedure on Public and Agency Comments</u>)

  Document public meetings, project websites, public notices, and general response given.
  - Describe any public outreach done and/or coordination with partner agencies.

Response – Public outreach to the community pertaining to the building of First American Museum Landing has not been completed as it will be apart of the benefits offered to all visitors of the resort.

#### S. Mitigation Measures:

• Describe any other measures taken to mitigate project impacts.

Response – As the entire area is a construction project underway and the landing's construction will be completed prior to resort only environmental mitigation will take place.

#### **Step 6. Date and Submit for FTA Review:**

Date:

2/3/2023

**Submitted by: Cory Hubert** 

Title:

**Parking Services Manager** 

Please note that submitting this checklist does not mean that NEPA is complete. FTA determines whether a project qualifies as a Categorical Exclusion. Upon review, FTA will provide you with our final determination, signaling NEPA is complete. If you have any questions, please contact your FTA representative below.

#### **Region 6 Contacts:**

David Bartels
Director of Planning and
Program Development
david.bartels@dot.gov
(817) 978-0572

Ronisha Hodge Community Planner ronisha.hodge@dot.gov (817) 978-0576 Marc Oliphant Community Planner <u>marc.oliphant@dot.gov</u> (817) 978-0501 Lynn Hayes Community Planner <u>lynn.hayes@dot.gov</u> (817) 978-0565 Tony Ogboli Community Planner tony.ogboli@dot.gov (817) 978-0566 Terence Plaskon Environmental Protection Specialist terence.plaskon@dot.gov (817) 978-0573

## EXHIBIT A

#### LEGAL DESCRIPTION Ferry Lease Tract October 12, 2021

A tract of land being a part of the Northeast Quarter (NE/4) of Section Two (2), Township Eleven (11) North, Range Three (3) West of the Indian Meridian, Oklahoma City, Oklahoma County, Oklahoma, being more particularly described as follows:

Commencing at the Northeast (NE) Corner of said Northeast Quarter (NE/4);

THENCE South 00°21'09" West, along and with the East line of said Northeast Quarter (NE/4), a distance of 1,800.00 feet;

THENCE North 89°38'51" West, departing said East line, a distance of 150.00 feet to a point on the West right-of-way line of Eastern Avenue;

THENCE North 00°21'09" East, along and with the West right-of-way line of Eastern Avenue, a distance of 508.81 feet;

THENCE North 89°38'51" West, departing said West right-of-way line, a distance of 150.00 feet:

THENCE North 00°21'09" East, a distance of 110.00 feet to the South bank of the Oklahoma River:

THENCE South 77°45'18" West, along and with the South bank of the Oklahoma River, a distance of 526.39 feet to the POINT OF BEGINNING:

THENCE South 11°49'31" East, departing said South bank, a distance of 40.37 feet;

THENCE South 78°05'11" West, a distance of 65.11 feet:

THENCE on a curve to the left having a radius of 200.00 feet, a chord bearing of South 68°38'44" West, a chord length of 65.61 feet and an arc length of 65.91 feet;

THENCE South 59°12'17" West, a distance of 234.91 feet:

THENCE North 63°46'51" West, a distance of 96.05 feet:

THENCE South 59°11'46" West, a distance of 187.75 feet;

THENCE North 64°02'09" West, a distance of 202.29 feet to a point on the South bank of the Oklahoma River:

THENCE North 77°45'18" East, along and with the South bank of the Oklahoma River, a distance of 97.84 feet;

THENCE South 64°02'09" East, departing said South bank, a distance of 77.53 feet;

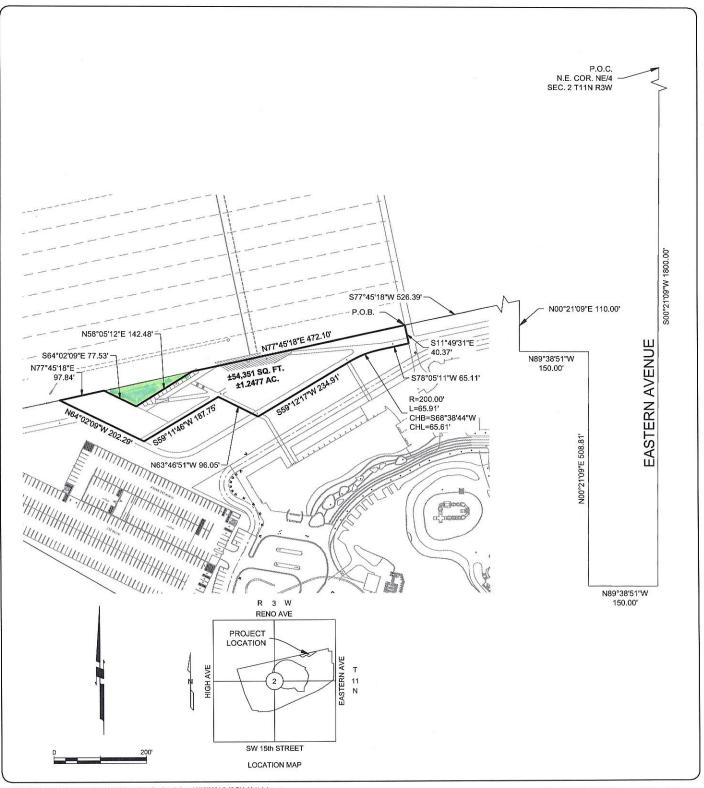
THENCE North 58°05'12" East, a distance of 142.48 feet to a point on the South bank S:\4427\4427003\4427003-Ferry Lease Legal2.docx Prepared by Matthew Johnson P.L.S. 1807 Johnson & Associates Certificate of Authorization No. 1484 (Expires 6-30-23)

of the Oklahoma River;

THENCE North 77°45'18" East, along and with the South bank of the Oklahoma River, a distance of 472.10 feet to the POINT OF BEGINNING.

Containing 54,351 square feet or 1.2477 acres, more or less.

Basis of Bearing: Grid North as established by state plane datum (Oklahoma State Plane North Zone NAD83)



ACAD FILE: H:\u00e4427\u00e4427003\u00e4xhbit\u00e4427-Ferry Landing Legal.dwg, 10/12/2021 2:48 PM, Matt Johnson XREFS LOADED: 4427003-bdy.dwg OKANA SITE.dwg L-SP-FAM-1.dwg OKANA TOPO-Model-2010.dwg FAM Master Plan.dwg

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Proj. No.: 4427003

Date: 10-12-21

Scale: 1"=200'

#### **FERRY LEASE TRACT**

OKLAHOMA CITY, OKLAHOMA COUNTY, OKLAHOMA

**EXHIBIT** 



Johnson & Associates
1 E. Sheridan Ave., Suite 200
Oklahoma City, OK 73104
(405) 235-8075 FAX (405) 235-8078 www.jaoke.c

(405) 235-8075 FAX (405) 235-8078 www.jackc.com Certificate of Authorization #1484 Exp. Date: 06-30-2023

· ENGINEERS · SURVEYORS · PLANNERS ·

# **EXHIBIT B SHPO Determination**



## Oklahoma Historical Society

Founded May 27, 1893

**State Historic Preservation Office** 

Oklahoma History Center • 800 Nazih Zuhdi Drive • Oklahoma City, OK 73105-7917 (405) 521-6249 • Fax (405) 522-0816 • www.okhistory.org/shpo/shpom.htm

September 28, 2022

Ms. Jeanne Smith, Interim Finance Manager COTPA/Embark 2000 South May Avenue Oklahoma City, OK 73108

RE:

File #2676-22; COTPA Proposed New Ferry Landing at the First Americans Museum

in Oklahoma City

Dear Ms. Smith:

We have received and reviewed the documentation submitted on the referenced project in Oklahoma County. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office. We find that there are no known historic properties affected within the referenced project's area of potential effect.

In addition to our review, you must contact the Oklahoma Archeological Survey (OAS), 111 East Chesapeake, #102, Norman OK 73019-5111 (#405/325-7211, FAX #405/325-7604), to obtain a determination about the presence of prehistoric resources that may be eligible for the National Register of Historic Places. Should the OAS conclude that there are no prehistoric archaeological sites or other types of "historic properties," as defined in 36 CFR Part 800.16(l), which are eligible for inclusion in the National Register of Historic Places within the project area and that such sites are unlikely to occur, we concur with that opinion.

The OAS may conclude that an on-site investigation of all or part of the project impact area is necessary to determine the presence of archaeological resources. In the event that such an investigation reveals the presence of prehistoric archaeological sites, we will defer to the judgment of the OAS concerning whether or not any of the resources should be considered "historic properties" under the Section 106 review process. If sites dating from the historic period are identified during the survey or are encountered during implementation of the project, additional assessments by the State Historic Preservation Office will be necessary.

Should further correspondence pertaining to this project be necessary, please reference the above underlined file number. If you have any questions, please contact Kristina Wyckoff, Historical Archaeologist, at 405/521-6381. Thank you.

Sincerely,

Deputy State Historic Preservation Officer

LO:pm

# **EXHIBIT C OAS Determination**



October 12, 2022

COTPA Attn: Jeanne L. Smith Interim Finance Manager 2000 South May OKC, OK 73108

Re:

OAS FY22-2693 Proposed Ferry Landing at First Americans Museum.

Legal Description: NW 1/4 SE 1/4 NE 1/4 Section 2, T11N, R3W, Oklahoma County, Oklahoma.

Dear Ms. Smith:

The Community Assistance Program staff of the Oklahoma Archeological Survey has reviewed the above referenced project to identify areas that may potentially contain prehistoric or historic archeological materials (historic properties). The location of your project has been crosschecked with the state site files containing approximately 26,500 archaeological sites, which are currently recorded for the state of Oklahoma. No Sites are listed as occurring within your project area, and based on the topographic and hydrologic setting, no archaeological materials are likely to be encountered. Thus, an archaeological field inspection is not considered necessary. Please contact this office at (405) 325-7211 if buried archaeological materials such as chipped stone tools, pottery, bone, historic crockery, glass, metal items or building materials are exposed during construction activities.

This environmental review and evaluation are done in cooperation with the State Historic Preservation Office, Oklahoma Historical Society. The responsible federal agency or their official delegate must also have a letter from that office to document consultation pursuant to Section 106 of the National Historic Preservation Act.

In addition to our review comments, under 36CFR Part 800.3 you are reminded of your responsibility to consult with the appropriate Native American tribe/groups to identify any concerns they may have pertaining to this undertaking and potential impacts to properties of traditional and/or ceremonial value.

Sincerely

Daniel Lestarjette

Staff Archaeologist

Kary L. Stacke beck, P State Archaeologist

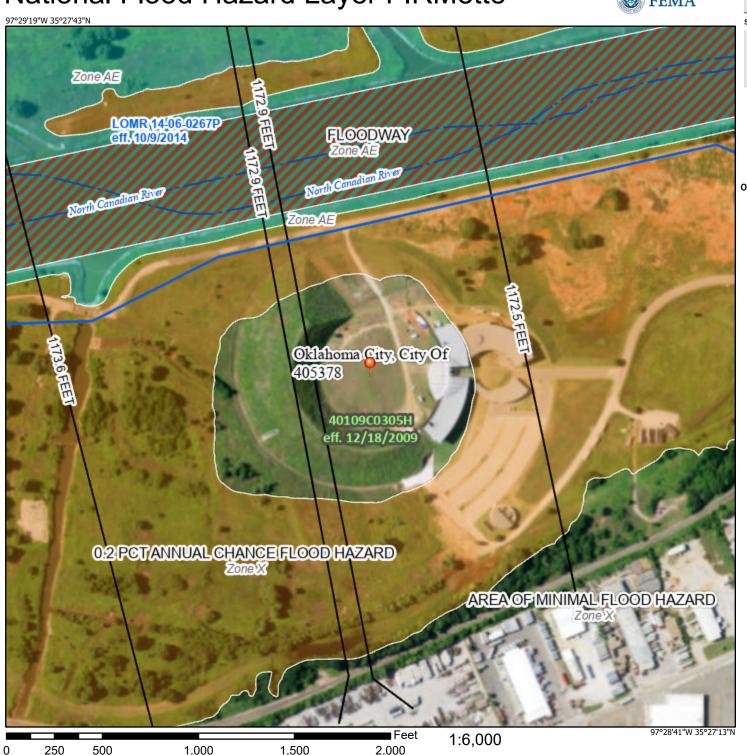
cc: SHPO

# **EXHIBIT D National Flood Hazard Layer Firmette**

## National Flood Hazard Layer FIRMette

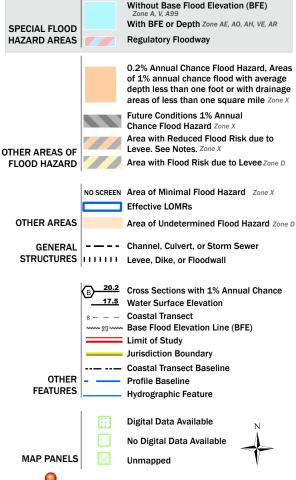


Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



#### Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap

accuracy standards

The pin displayed on the map is an approximate point selected by the user and does not represent

an authoritative property location.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/8/2022 at 8:40 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

## APPENDIX G-2 1993 OKLAHOMA CITY RIVERFRONT REDEVELOPMENT AUTHORITY'S NORTH CANADIAN RIVER RIVERFRONT CORRIDOR PLAN

# North Canadian River Riverfront Corridor Plan

# NORTH CANADIAN RIVER RIVERFRONT CORRIDOR PLAN

An update to the Master Plan for the Development of the North Canadian River 1979 and 1987

1993

Prepared for:

The Oklahoma City
Riverfront Redevelopment Authority

RGDC, Inc., Architects, Engineers, Planners

Sub-consultants:

Great Plains Design

Master Planners, Riverfront Designers
River planning design, graphics and
artwork prepared by GPD.

Johnson & Associates, Engineers
Hydrology study

J.F. Harp & Associates
Hydrolic study

# This study is prepared under the jurisdiction of the City of Oklahoma City for the Oklahoma City Riverfront Redevelopment Authority

#### CITY COUNCIL

#### Ronald J. Norick, Mayor

Ward 1: F.O. "Frosty" Peak
Ward 5: Jerry W. Foshee
Ward 2: Mark Schwartz
Ward 6: Beverly Hodges
Ward 3: Jack W. Cornett
Ward 7: Willa Johnson
Ward 4: Frances Lowrey
Ward 8: Jackie Carey

Donald D. Bown, City Manager

Past Council Members:

Jim Scott Walter J. Morris I.G. Purser Daniel D. Fine Goree James

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#### OKLAHOMA CITY RIVERFRONT REDEVELOPMENT AUTHORITY

David R. "Dusty" Martin, Chair

Jack W. Cornett W. Bryan Arnn Don Kaspereit Don E. Porter Bert Cooper
Daniel D. Fine
(thru May, 1993)
Frances Lowery
(begin June, 1993)

Patrick Downes, General Manager

## **CERTIFICATE OF ADOPTION**

OKLAHOMA CITY RIVERFRONT REDEV This document was adopted by the City of the 6th day of January, 1993.	ELOPMENT AUTHORITY Oklahoma City Riverfront Redevelopment Authority	y on
	David R. Dusty Mentini Chair	
PLANNING COMMISSION This document was adopted by the City of O of , 1993, as a component of the C	klahoma City Planning Commission on the OKC Plan (1989–2010).	day
	Chair	_
CITY COUNCIL  Adopted and approved by the Mayor and Council  of , 1993, as a component of the great component of the great component.	uncil of the City of Oklahoma City on the OKC Plan (1989–2010).	day
THE COLUMN	Mayor	-

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### **FORWARD**

When undertaking an urban redevelopment project of this magnitude, a sense of perspective is essential. While it may be true that the North Canadian River is presently the only river in the United States that has to be mowed twice a year, there is nonetheless a tremendous potential for renaissance along Oklahoma City's riverfront.

Water changes everything it touches. In addition to its obvious role in sustaining life, water holds a certain aesthetic fascination for most of humanity. Projects such as Los Colinas in suburban Dallas, and the Inner Harbor at Baltimore, would certainly not enjoy such a high degree of popularity if located away from their respective bodies of water.

Many cities have experienced significant revitalization as a direct result of their efforts to reclaim urban rivers as sites for primary public assembly and recreation. Communities as diverse as Denver, Indianapolis, Wichita, and, of course, San Antonio have achieved noteworthy success with their riverfront redevelopment efforts. And, while it would be easy to believe these cities have experienced "overnight success" with their projects, such would be far from the truth. In fact, among all similar urban rivers, the single common element has been the length of time required to reach fruition.

Those who hail San Antonio's Riverwalk as a recent achievement have forgotten that much of the San Antonio River was originally a W.P.A. project on the 1930's, and that there was a strong push to eliminate much of the channel in favor of underground storm drainage and public parking facilities. In the late 1950's and early 1960's, some sections of the old San Antonio River were posted "off limits" to the military personnel due to the high crime rate. Now, the San Antonio Riverwalk is considered the most successful project of its kind in the world, reigning as the number one convention and tourism destination in the State of Texas. It did not happen overnight.

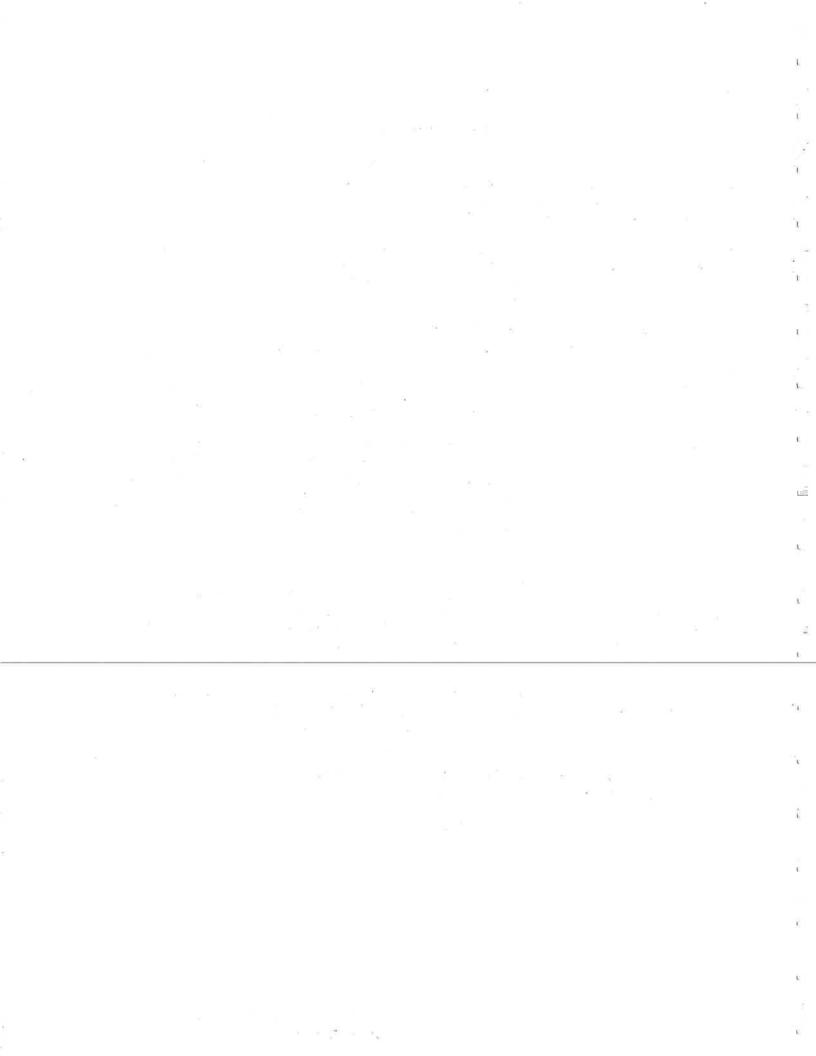
Perhaps the most important lesson Oklahoma City can learn from its sister river cities is that persistence pays handsome dividends. Oklahoma City's first references to river development plans date back to the C.H. Dunn Parks Master Plan, adopted by Mayor and Council in 1909. From that time until 1990, the City has considered at least a dozen riverfront development schemes, but without the necessary engineering, environmental, and hydrological studies to confirm feasibility or establish estimated costs.

The adoption of this Master Plan stands as a milestone event in Oklahoma City's efforts to improve its image through improvement of its river. Within this document, the feasibility questions are asked and answered, the timing issues are addressed, and the cost estimates are based on sound construction engineering principals.

It seems the only question remaining relates to the resolve of the community: Are we willing to accept the challenges and the opportunities contained in these plans?

On behalf of the Trustee, the answer is a resounding "YES!".

Pat Downes General Manager OCRRA



# **PREFACE**

The North Canadian River offers unique and special economic, visual and recreational opportunities for the residents of Oklahoma City and the region. These attributes have long been recognized. In 1975, the Central City Plan for Oklahoma City recommended a chain of recreational lakes be created through a series of low water dams. The Oklahoma City Plan prepared in 1976 expanded on this and recommended the entire North Canadian River be developed for recreational and general urban uses. The String of Pearls, a Master Development Plan (1979 and 1987) for the river corridor from Overholser Lake to Sooner Road on the east, reaffirmed the vision of a riverfront corridor awash in green parklands and recreation spaces sloping into a water-filled river anchored with cultural activities and commercial enterprises. The *North Canadian River Riverfront Corridor Plan* continues this vision. Concentrating on the urban area of the river corridor, the Plan details goals and plans for development. Fully developed, the River Corridor will become the ultimate centerpiece of the City and even the region.

The following report is the culmination of research, analysis, and planning efforts initiated in early 1992 by the Oklahoma Riverfront Redevelopment Authority. The resulting concepts and recommendations encompass the **North Canadian River Riverfront Corridor Plan**, which will be generally abbreviated as the *Riverfront Corridor Plan*, or, simply, the **Plan**, in the following discussion.

As outlined on the *Concept Plans* at the end of this report, the urban area of the riverfront parklands is a seven mile expanse fronting both north and south of the River from Meridian Avenue to Eastern Avenue. The three low-water dams and the lakes created, as well as the Bricktown canal feature and other development features, will be catalysts toward a great adventure in public development and opportunity for public-private development. The many benefits of these improvements are:

- 1. Bring people to the river to enjoy the water, the trails and public spaces.
- 2. Bring reinvestment and redevelopment to neighborhoods, both residential and commercial.
- 3. Provide varied forms of entertainment, recreational and cultural opportunities, visual amenities and improvement of the environment through reforestation of barren riverbanks.
- 4. Support the many facilities already existing near the river: Downtown, Bricktown, the Stockyards, I-40 & Meridian area, State Fair Park and Capitol Hill.
- 5. Attract tourists and compete in the tourist market both locally and nationally through the unique features and experiences proposed to be located in a very unique setting.

An important feature of the Plan is the proposed *linkage* improvements. The *Myriad/Bricktown Linkage Canal Plan* is a major feature component of the Riverfront Corridor Plan, although because of its special public-private joint development potential, it may be implemented somewhat independently of the implementation program anticipated for the riverfront. Additional improvements recommended include linkages to the State Fair Park, the Capital Hill area, and streetscape linkages.

Implementation of the riverfront and linkage canal components will be an exciting challenge for the community as a whole and for the Oklahoma City Riverfront Redevelopment Authority.

With development along the proposed Bricktown Canal corridor, future participation of Oklahoma City's Second Century Inc., other city agencies, and the private sector overall will ne required. The Bricktown Association and the Myriad Convention Center will need to be closely consulted at each stage of canal corridor design and implementation, to ensure that both Bricktown and the Convention Center are beneficially supported throughout.

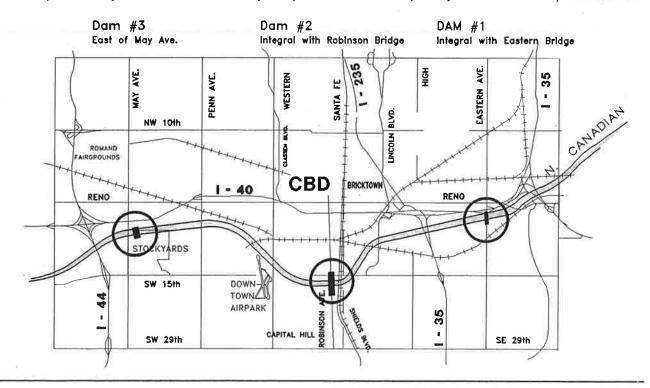
A revitalization plan for the historic warehouse district was prepared by Oklahoma City Planning Commission and approved by City Council in February, 1992. The *Bricktown Plan* calls for land use compatibility in new development, as well as improvements in infrastructure, streetscape, lighting, and other aspects of the district. As will be seen, the Myriad/Bricktown River Linkage Canal, Bricktown Festival Market, and improved streetscape linkages between the Canal/Market and Bricktown proper that are proposed in the Riverfront Redevelopment Plan are wholly supportive and beneficially interactive with Bricktown revitalization goals.

Other major participants will be needed as cooperators in the development of the other proposed major features of the riverfront parklands and of its urban edge redevelopment recommended outside of the City's ownership boundaries. Among others, this includes the Oklahoma Institute of Indian Heritage, Oklahoma City Chamber of Commerce, South Oklahoma City Chamber of Commerce, Oklahoma City All Sports Association, members of Oklahoma's oil industry, the Union Pacific Railroad and other railroad companies, private developers, the Stockyards City, and neighborhood and civic associations.

The potential roles of these important cooperative entities are more extensively described in the Implementation section of this report.

Finally, it should be observed that the Riverfront Corridor Plan, as a component of the North Canadian Riverfront Redevelopment Project, is directly dependent on the plans for the dams, canal and navigational lock, whitewater chute, bridges, and other engineering features of the system. To the extent that the locations or elevations of these features must be altered, riverfront parkland and canal characteristics may need to be changed accordingly.

Over the last several months, the Oklahoma City Riverfront Redevelopment Authority (OCRRA) along with its consultants have been working toward completion of this project. At this time, final heights on the dams have been set, the impact of the dams on such items as sediment control and FEMA (Flood Emergency Management Act) requirements have been reviewed, and the Corps of Engineers required 404 Permit has been obtained. Planning and engineering consultants have completed conceptual design of the river improvements, proposed amenities and preliminary dam design. Included in this report are preliminary cost estimates for major improvements and a priority schedule for implementation.



# SUMMARY OF MAJOR RECOMMENDATIONS

Situated in the geographic middle of Oklahoma City between Meridian Avenue on the west Eastern/MLK Avenue on the East, the Riverfront Parklands will become the ultimate centerpiece of Oklahoma's capitol city, a seven-mile long armature of green and blue. With three low-water dams and the lakes they create, the river corridor will be transformed by thousands of new trees reforesting presently barren riverbanks, renaturalized topography and new, wooded islands. There also will be a good number of greater and lesser features which will attract and serve the recreational, aesthetic, environmental, and cultural interests of the people of Oklahoma City and their visitors from within and outside the region.

### ı Landscaping:

The changes proposed by past plans as well as the Riverfront Corridor Plan are long overdue. Landscape improvements have waited to fall into place along the banks of the channelized North Canadian River ever since the 1950's when the dredging and flood protection components of the U.S. Army Corps of Engineers project were completed.

### ı Linkages:

Now the very same disadvantaged neighborhoods, abandoned industrial lands, and areas of neglect that have stood in despair over the years can look forward to healing and revival. Along the river, new opportunities for play, relaxation, diversion, and environmental renourishment will give people who live within walking distance of the river a new sense of well-being. The public at large should also come to perceive these close-in neighborhoods as more desirable locations then they may seem today. This changed perception will in turn reinforce the support the river neighborhoods receive at City Hall, increase the likelihood of greater support by lending institutions for home and business improvements and for community redevelopment and reinvestment in these areas, and strengthen the motivation and resolve local owners and other residents need to help raise the image and fortunes of the neighborhoods through their own actions.

#### Parkland Assets

Benefits from Riverfront Corridor Plan improvements will not be restricted to the river neighborhoods. The entire length of the parklands will attract people from all parts of the city, for they will recognize in the river corridor new parkland assets which they do not have elsewhere. Jogging and bicycle paths, separated from each other to minimize biker-pedestrian conflicts and safety hazards, will emerge throughout the parkland on each bank. Linked to bridge crossings, the paths will create continuous loops. New opportunities for rowing and paddling will be possible. Boathouses are recommended to accommodate Oklahoman interest in 6-oar and 8-oar shell rowing and in singles and doubles sculling.

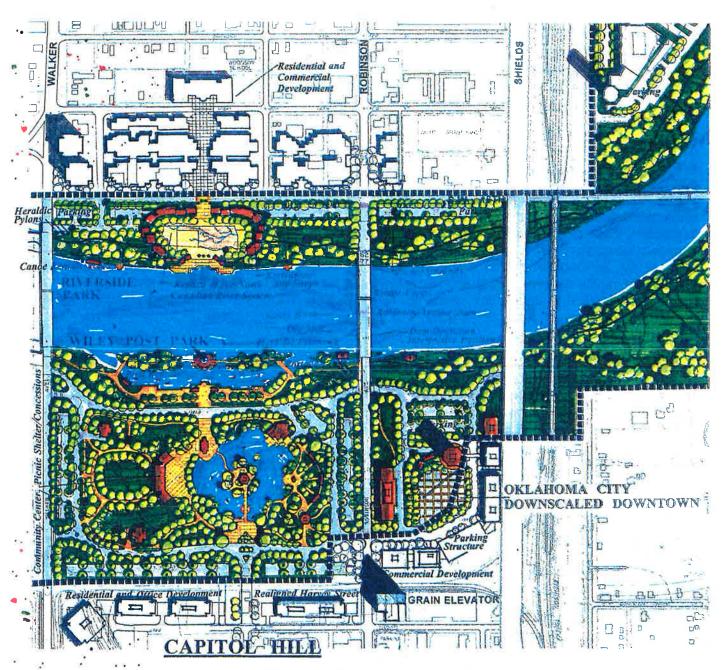
#### Enhance Water Recreation:

Canoe put-ins will be spotted at a dozen points along the river's reach, each at a landmark dock, with canoe rentals available. The canoe landing at the planned Indian Cultural Center, will allow visitors the chance to set out in a birch-bark or dug-out canoe or on a raft crafted by Native Americans. Kayaking has attracted growing numbers of Oklahoma Citizens in recent years, but kayakers are compelled to travel to neighboring Colorado and Arkansas to taste whitewater. The proposed whitewater boat chute at the planned May Avenue Dam could change that and make the City one of a growing number of U.S. cities that provides whitewater facilities on flat-water rivers. The chute would do more than create opportunities for kayakers throughout the region; it would attract spectators and sightseers from far and wide.

Boathouses are landmark features in many great American riverfront cities. Three boathouses are recommended in the Plan. Given quality architectural treatment, they will create the enriching experience that has brought universal attention to the Schuylkill River in Philadelphia, the Charles River in Boston/Cambridge, the Potomac River in Georgetown/D.C., and other great river cities.

Canoeing, rowing, kayaking, boardsailing, these and other non-motorized boating activities will become part and parcel of Oklahoma's new claim to fame as a river city.

There will be power on the river, however, in the form of tour boats and perhaps a ferry, to energize the river and make speedy access to various focal points a reality.



Wiley Post Park Improvements Include a Dam at Robinson Bridge

#### I Access and Tourism:

Nothing emphasizes the present-day lack of access to the river as much as does the relative remoteness of the Downtown from the North Canadian River. The Myriad/Bricktown River Linkage canal will end that isolation. From the river close by Byers Bridge up to Bricktown and under the Atchison, Topeka, and Santa Fe Railroad to the doorstep of the Myriad Convention Center, the Canal will create the river access that the City has long sought. But even more, the Canal will create an array of attractions along its entire length, beginning with a grand plaza at the Convention Center terminus, embracing a 4-block long festival market along the Bricktown edge, and ending with a unique river tower and embayment on the river. All along the canal, pedestrian canal walks and small plazas will open onto restaurants and cafes, shops and theaters, offices and exhibition spaces, and much more.

To anchor visitor interest in the Canal in the vicinity of its navigational lock, a major theme center is proposed. Railroads and canals have long fascinated Americans of all ages. At the American Railroading and Canal Building Theme Center, they will have a unique chance to see state-of-the-art, high-tech exhibitry in an exposition of the best that this country has accomplished in these two great areas of American's transportation history; and to see why they came together in Oklahoma City.

Flanking the Riverfront Corridor at Western Avenue, on the river's south bank, will be a second major attraction. The proposed Petroleum/Energy and Environment Theme Center would be the largest "oil museum" in the country, far superior to other such existing facilities in the high-tech state of its exhibitry and its exposition of industry environmental safeguards and management.

A marsh-fringed embayment created between the theme center and the river would be the site of model drilling rigs and demonstrations of wildlife protection techniques. This "mini-Epcott" Center will draw large numbers of appreciative visitors to the adjacent river parkland and other features of the Riverfront Corridor. Compatible office, retail, restaurant, and hotel development in its vicinity can also be envisioned.

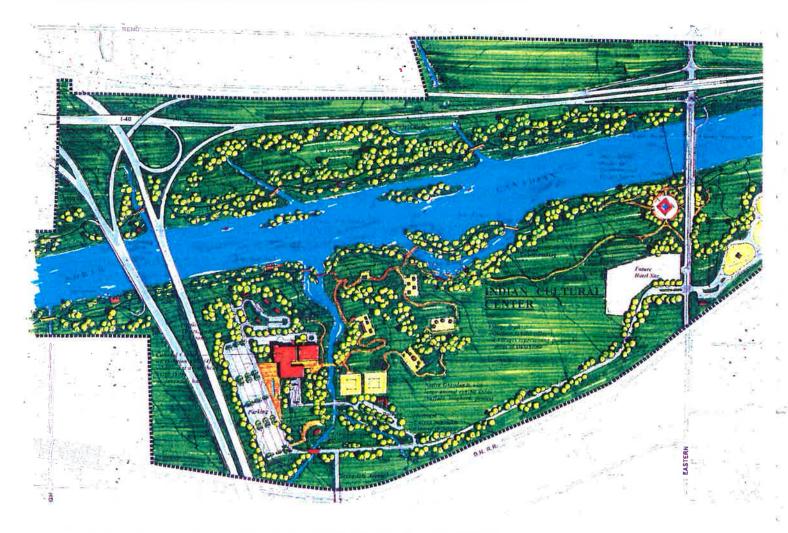
The Plan also proposes the development of an Equestrian Park on the south bank, between I-44 and Portland Avenue. The park, similar to the Equestrian Pearl concept of the 1980's Plan, will create an important regional magnet and support facilities for equestrian and rodeo competitions and audiences. Its riding school, stables, and equestrian trails, some of which extend along the riverside, will offer riding opportunities for all enthusiasts.

# Development:

The planned Indian Cultural Center will serve as a significant component of the revitalized Riverfront Corridor. Although an independently-created facility, the Center is in an anchor position at the downstream terminus of the Riverfront Corridor, at Eastern Avenue. The Center will be one of the Corridor's principal magnet attractions. Its museum and exhibit space for art and artifacts, educational facilities, conference rooms, ceremonial grounds, wildlife areas, and possible canoe making and rental sites will be important features.

Access between the Indian Cultural Center and the downtown will be significantly enhanced through the provision of tour boats navigating the proposed Myriad/Bricktown River Linkage Canal. This form, connecting the City's modern downtown/Convention Center with a center of Native American heritage and with historic Bricktown and the proposed American Railroading and Canal Building Theme Center on route, will be easily recognized as a new sight-seeing opportunity of national importance.

The drawing on the following page illustrates the planned Indian Cultural Center and the dam at eastern Avenue. Site planning and design of the Center, proposed by the Oklahoma Institute of Indian Heritage, is underway with construction of the facility planed to begin within two years.



The Indian Cultural Center Site, West of the Eastern Avenue Bridge

#### Dams and Lakes:

Lastly, it is recommended that the new lakes to be created through the Riverfront Redevelopment project be appropriately named.

- ► The upper lake, which begins at Meridian Avenue, could well be named **Meridian Lake**, in reference to the Avenue at its edge and to the important geographical location of Oklahoma City in the American West.
- ► The middle lake appropriately should be named **Centennial Lake**; the name given is a grass-roots effort in the Capital Hill area. The name appropriately references the history of the beginning of Oklahoma City.
- ► The lower lake would suitably be called **American Lake**. The name would pay homage to the Native American facility of the Indian Cultural Center and to the historic routes of the Plains nations in Oklahoma. But it would also pay homage to all Americans and to the great nation of which we are all a part.

The reader is invited to continue through the remainder of this report and to carefully consider its analysis, Plan component, and implementation recommendations.

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# INTRODUCTION

### Great river cities are made, not born, to be what they are.

Cities like Paris and Amsterdam cut their riverfront teeth from infancy. Others, like Boston and San Antonio, have had to deliberately put their civic shoulders to the wheel to create the unique riverfront they now possess. Boston and San Antonio, moreover, and many other cities which have revitalized their riverfront over the last fifty years began their climb to river fame with river corridors in a state of poor quality, some in extreme degradation. Boston's Charles River estuary and the mouths of the Stony Brook and Muddy River tributaries which flowed into it were rimmed with malodorous mud flats and desolate banks at the turn of the 20th century. Vision, commitment, and the investment of substantial capital improvements turned this polluted and unusable eyesore into the magnificent Charles River Basin that has driven the recreational, residential, economic, and aesthetic values of downtown Boston and Cambridge ever since. The key to Boston's success, as it now will prove to be Oklahoma City's, was the public's willingness to invest in a dam to impound the river and in landscaping and beautification programs for its shores — the same programs that have given Boston and the world the Charles River Esplanade, the Hatch Music Shell, the river's boat houses, and all the Basin's other charismatic delights.

The San Antonio River began the 1930's in similar poor shape. Urban pollution and flooding problems had taken their toll. The river's downtown "horseshoe" bend was renowned as a mosquito-dominated gathering ground for vagrants. All that changed, however, with the inspired vision of architect Robert Huggeman and the civic and financial commitment of the City and of the private investors who understood the river corridor's potential. Today, the draw of San Antonio's Riverwalk is believed to be responsible for 1.5 billion visitor dollars annually.

Oklahoma City is a far younger city than either Boston or San Antonio. It, too, begins its river story with adversity and environmental undesirability. Yet it, too, has the potential to emerge as one of America's truly great river cities. Public commitment to build the three dams essential for the North Canadian Riverfront Redevelopment Project is one key to that better future. Implementing the visionary plan described on the following pages for reforestation, recreational development, and landscape beautification of the riverfront corridor is a second key. The third key is the adoption of the Plan's approach for encouraging suitable commercial, institutional, and residential development at strategic locations along the corridor and its linkages with the downtown.

There are those who would say that the vision is unachievable. The North Canadian, the doubters would say, is too desolate. Its neighborhoods are too deteriorated, its adjacent industrial lands too uninviting to allow the corridor to rejuvenate and flourish. To such criticism, the City should call upon the examples of Boston and San Antonio, which began with similar adversities. In Chicago, a century ago, the prominent builder and innovator Daniel Birnham replied, when asked what might be done with that city's despoiled lakeshore, "Make no small plans!" With that advice and the support of Chicago's public and businesses, the famed Chicago Columbian Exposition of 1893 was launched. Among the Exposition's many achievements: the city's beautiful Lakeshore parkland, prominent cultural and recreational facilities, and quality residential areas bordering Lake Michigan.

Committing to river corridor rehabilitation often requires a leap of faith, but with that commitment comes ample reward. In the 1960's, few people believed the Nashua River, of Massachusetts and New Hampshire, would ever emerge from its then highly polluted state; that its riverbanks would ever be desirable for either park and recreational or residential development. Uncontrolled paper mill effluent changed the color of the river from day to day and choked out its aquatic life while thick layers of decomposing pulp covered the forested flood plains along its banks. "Too thick to drink, too thin to

plow" was the frequently repeated country saying used to depict the Nashua. Yet within a single decade, the Nashua was turned from an embarrassment into a centerpiece of the region, with quality water, continuous greenways along its banks, clusters of residential development sprouting throughout the corridor, and new tourism and sightseeing activities emerging around the historic cities of the valley and their still economically viable paper mills.

#### All it took was commitment.

#### GOALS & OBJECTIVES

The 1980's Plan for the redevelopment of the River included many far reaching goals. The North Canadian Riverfront Redevelopment Plan continues to pursue those stated goals, being more specific on strategies for implementation. This 1990's Plan is intended to provide the strongest possible aesthetic, recreational, and habitat rehabilitation program of the river corridor at reasonable public cost and with the highest possible beneficial impact on adjacent urban edges. To achieve this goal, the Riverfront Corridor Plan has been designed to meet the following objectives:

#### ı Landscaping:

Transform the presently desolate terrain of spoil berms and terraces along the river's banks, through extensive reforestation and creative landscape architectural design, into quality naturalized shorelands. Provide wooded riverbanks as habitat for birdlife and other compatible wildlife, while leveled and gently rolling park terrain will open visual access between the river and its urban edges.

# ı Linkages:

Strengthen and beautify existing linkages between the riverfront and key urban centers; create new linkages where these are critical for reinforcement and enhancement of the downtown's economic and cultural vitality. The proposed Myriad/Bricktown River Linkage Canal will be such a critical new linkage, for it follows the only alignment where a canal, or any substantial linkage between the Myriad Convention Center and the river, could be built. It will be comparable to the San Antonio Riverwalk and its canal extensions to the San Antonio Convention Center and the RiverCentre Marketplace. Without the Myriad/Bricktown Canal, the potential of the redeveloped riverfront to directly benefit the downtown is substantially limited.

### ı Parkland Assets:

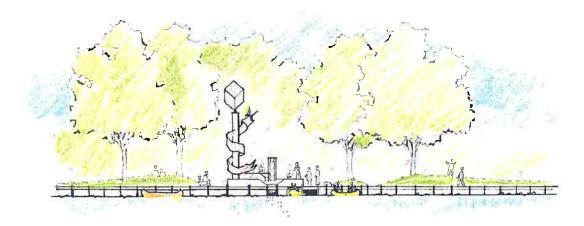
Create a continuous green fabric of quality river "parkland" from Meridian Avenue to Eastern/MLK Avenue. The parkland will provide abundant opportunities for leisure, respite, and recreation for residents, employees, and visitors.

#### I Access and Tourism:

Encourage public capital improvements and private redevelopment adjacent to the Riverfront Corridor which will attract growing numbers of residents, employees, and visitors in proximity to the River. The presence of a motivated and concerned constituency along the Riverfront Corridor is a principal key to the Corridor's success. Thus, quality housing, hotels, office buildings, attractive cafes and restaurants, and arts and entertainment facilities are suitable ingredients for future growth. At the same time, the negative implications of incompatible uses should be recognized. Large-scale sports facilities, for example, and other single-purpose, infrequently visited structures with large parking lots, are highly detrimental to adjacent riverfront/canal "parkland" and residential redevelopment since the edges of such facilities are generally perceived as undesirable sites for either living or leisure.

#### I Enhance Water Recreation:

Introduce visual and recreational excitement at the river's edge. Twelve "landmark docks" (boat landings with pylon markers, fountains, and amenities), boat houses, several islands, cafes, music sheds, and other elements will help achieve this.



Canoe Dock & Landing

#### Development:

Create or redevelop centers of cultural and urban interest along the riverfront and the Myriad/Bricktown Canal that meet important Oklahoma City needs and are regionally or nationally unique. The Bricktown Festival Market, for example, will draw large numbers of riverfront, canal, and downtown visitors to the edge of Bricktown, where they can walk on foot to Bricktown's restaurants, shops and galleries. The Penn Meadows Music Shell is one of two concert sites that will meet the interest of many for musical enjoyments on the beautiful river landscape of tomorrow. But other centers will also open new ground for public interest and activity. The American Railroading and Canal Building Theme Center, along the Canal, will be a nationally unique development. So will the Petroleum/Energy and the Environment Theme Center proposed for the North Canadian's south bank at Walker Avenue. Both could be comparable to Epcott Center in Orlando, Florida, and would draw national and international visitors to Oklahoma City.

#### ı Dams and Lakes:

Enhance the attractiveness and appeal of the North Canadian River to all observers. The impoundment of the river by the three planned dams will be the principal means by which this objective will be met. Other Plan elements will further improve river aesthetics. Among these will be the waterfall–like discharges of the three dams, heraldic pylons/gateway markers (special high columns surmounted by sculptured figures) to call the attention of visitors and travelers to the quality blue of the North Canadian and the whitewater boat chute proposed for the May Avenue Dam.

The Riverfront Redevelopment Plan's grand design for revitalization draws upon and follows the vision and groundwork of the String of Pearls Master Plan. The dedication of those who saw the importance of revitalizing the North Canadian River, from the 1950's on, and the commitment of the people of Oklahoma City today, will be the true keys to a new era of urban vitality and quality of life in and near the heart of this great

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# THE RIVER AND ITS SETTING

### OKLAHOMA CITY AND THE NORTH CANADIAN RIVER

Historically, the North Canadian River has been less than an asset to Oklahoma City. Inherent problems included recurrent costly flood damage, and transportation routes inconveniently crossed as many as 12 times by river loops. It has also been a haven for homeless who found refuge in shacks, boxes, and caves along the river's edge.

Floods periodically ravaged the city, with the most disastrous occurring twice in 1923, then again in 1932, 1941, and 1953. From Oklahoma City's beginnings, its citizens continuously fought to subdue their wild river, which meandered across its alluvial plain in huge loops and oxbows. The 1923 flood, caused by the dam break at Lake Overholser, drastically relocated and straightened the river's course. Wiley Post Park emerged from reclaimed riverbottom lands.

Responding to continued flooding, Depression-era crews straightened the channel for improved water flow. They shoveled a new 3,600-foot-long channel between Pennsylvania Avenue and the Santa Fe tracks near Robinson, cleared brush, and piled up 15-foot levees to contain the floodwaters.

Despite a 1940 Federal grant of \$12,689,420 to aid development of upstream holding ponds, construction of a channel to drain upstream floodwaters into Lake Hefner, and constant dredging efforts, flooding continued. Repeated inundation of a zoo at Wiley Post Park caused public outcry.

In the mid-1950s, voters approved a park bond issue allowing the City of Oklahoma City to acquire all the land it presently owns from Portland eastward for river channelization. Subsequently, the Army Corps of Engineers deepened and channelized the North Canadian for a distance of 15 miles. The old river channel was buried beneath spoil material from the new channel; its mature forest destroyed and wildlife uprooted. The new channel was sown in grass and mowed three times a year. Today's riverbed lies deep beneath wide terraced, riprapped banks surmounted by spoil berms composed of dredged river sands. Linearity, inaccessibility, and lack of flora and fauna make it appear bland and uninviting. In terms of aesthetics and citizen accessibility, this was the single greatest blow.

Yet, creating parkland from the reclaimed land has been a City goal since the early 1900's. In 1902, James Wheeler donated 43 acres of riverbottom land for use as a park. A resounding social success, it featured a large zoo, picnic grounds, grassy lawns, tree-lined walking paths, vaudeville acts, skating rink, magic mirror parlor, miniature railroad, and the only zoological gardens in Oklahoma Territory. As early as 1909, Oklahoma City's first parks master plan was completed by C.H. Dunn of Kansas City (then famous for its extensive park system). C. A. McNabb, city councilman, enthusiastically reflected its visionary character: "For each 1,000 inhabitants, we will have 20 acres of public park with the final completion of the system worked out by our energetic park board."

Like a re-emerging spring flower, focus of the community during the 1960's and 1970's changed from flood control to aesthetic improvements along the river. The City Council commissioned comprehensive master planning studies and reports, such as the Central City Plan and the I. M. Pei plan. These plans each made reference to beautifying the river parklands while making it an integral part of a central city, urban land-use program.

In 1978–1979, the Mayor and City Council, prompted by formation of several citizens' committees, authorized the first focused comprehensive overview of the river corridor. This study produced the String of Pearls Master Plan, which laid the groundwork for subsequent improvements and continued planning. Because of the scarcity of funds in the 1980's, however, plan implementation proceeded slowly. Oklahoma City Community Development Department staff member, Pat Downes, spearheaded a "Trail Drive" to encourage riverside property owners west of Portland to donate or dedicate a trail easement for river corridor development, culminating in the receipt of four miles of river frontage. In 1985, the Oklahoma City Riverfront Redevelopment Authority was created to manage, promote, and develop the river project. The City Planning Department planted 500 trees and installed irrigation along Wheeler Park's riverbank edge in 1986. By 1987, land south of Overholser Dam was acquired and developed into an accessible park area using Authority funds. Basic infrastructure necessary to develop an equine park was installed at SW 15th and Interstate 44.

1992 is a year which has seen considerable progress on the North Canadian. Plans for the Indian Cultural Center have taken form and several engineering and geotechnical studies have been completed. At the Authority's request, the recently completed U. S. Army Corps of Engineers conducted the North Canadian River at Oklahoma City Reconnaissance Study, which reports the Corps' recommendations for restoration of bottomland hardwoods and riverine wetlands for improved fish and wildlife habitat. The study also defines the federal interest in cost sharing under such restoration efforts.

The Riverfront Redevelopment Project is thus the most current of a long chain of significant efforts to conserve, revitalize, and beautify this most valuable of Oklahoma City resources.

# THE RIVER

During the course of history, the North Canadian River has been known by many names:2

- ► "Canohatino" (Red River) by the Caddo Indians
- ► "Rio Nutrio" (Beaver River) by Coronado's conquistadors
- ▶ "Beaver River" by pioneers and explorers
- ► "North Fork of the Canadian River" before statehood
- ► "North Canadian", a present-day shortened version

The name "Canadian" seems to have originated from "Cañada", a Spanish word for "narrow valley" and often applied to a streambed. "Cañada" printed without the tilde (") reads "Canada"; hence the origin of the adjective "Canadian". This reasoning also applies to the name of the Canadian Escarpment near the river's source.<sup>3</sup>

Originating from tributaries in the grasslands of New Mexico and Texas, the North Canadian River proper begins with the merger of Wolf and Beaver Creeks at Fort Supply, Oklahoma. Flowing almost the entirety of its 843 miles within the state, and draining a narrow basin higher in altitude than lands on either side, it finally joins the Canadian River at Lake Eufaula just prior to its confluence with the McClellan-Kerr Arkansas River Navigation System.

### HYDROLOGY

The hydrology of the North Canadian River has considerable bearing on corridor planning and design.

River regime is sporadic. The river swells during spring and early summer rains and dwindles to a trickle in the fall and winter droughts. The river's normally meager appearance is deceiving, however, because much of it flows unseen through the alluvial sands beneath its placid surface. When the river is in flood stage, the sand of the riverbed and floodway becomes fluid, moving with the river and redepositing into new sandbars, shoals, and sand islands upon the flood's subsidence. A management plan will be implemented for new river dams, regulating their pre-release of water in advance of heavy forecasted flood flows. Flood flows on several tributaries, including Brock, Twin, and Lightning Creeks, are often considerable.

### Floodway Concerns

All 100-year floods are contained within the existing North Canadian River floodway, which lies between existing riprap revetments. Since all parkland development other than the proposed landmark docks, boathouse docks, and landings will be above riprap elevation, flood overflows onto the river parkland are not anticipated.

Any islands conceived for the Riverfront Parklands must be offset by the excavation of adjacent embayments in the existing floodway edge, so the overall floodway cross-section is maintained and the flood-carrying capacity of the river is not diminished.

Island design must be undertaken with particular attention to shoreline stabilization, especially with respect to sand liquification during flood events. The use of wood bulkheading, steel sheetpiling, and stabilizing shore vegetation should be considered; in some cases in a combined design approach. Use of high clay-content soil backfill along the island perimeters also should be evaluated and used, if suitable, as a tool for island stabilization.

Water movement on the river will be more visible to the eye in the future than it is today. The planned "pelican"-type dam gates will release water in attractive arcs that spill over the dam crests. The planned whitewater boat chute at the May Avenue dam will be an attention-grabbing feature. At landmark docks, fountains spilling recirculated and aerated water back to the river/lake will provide water action and aesthetic interest. (See Section 2, WATER QUALITY, and the six Concept Plans.)

The regrading and lowering of the spoil berms will also open up new and exciting views of the river.

Far below Oklahoma City lies the Garber-Wellington Aquifer, an alluvium unconsolidated sand aquifer where subsurface water pools between the sand grains. In the draughty summer, water is discharged into the river from the aquifer. OG & E's Mustang Power Plant near Lake Overholser adds an average half million gallons of water per day, and an unquantified amount flows through the gates of the Overholser dam.<sup>4</sup> These sources make up the summer trickle visible in the river. The rest of the year, the river charges the aquifer. Carbon-14 dating done on water retrieved from 1,000-foot deep Bethany wells drilled into the Garber aquifer reveals that water entered that aquifer 25,00-30,000 years ago, is still there today, and is drinkable without treatment just as it comes out of the ground.<sup>5</sup> Oklahoma City does not rely upon aquifer water for public drinking supply; it uses only surface water released from reservoirs. Nearby smaller cities do use the aquifer water, and care should be taken to protect the quality of these waters.

### **Hydrology of Impounded Water**

In December, 1991, a hydrology study of the North Canadian River was completed taking into account the proposal to place three dams along the river in preselected sites. Although planning and engineering design of the dams continue, the information provided by this intensive study is valuable to the success and viability of the overall development plans for the river.

#### Study Design and Analysis

The "Assessment of Groundwater Conditions and Elevations along the North Canadian River", is a report which presents a review and summary of findings resulting from an investigation of subsurface conditions and groundwater elevations along the North Canadian River between Eastern Avenue and Portland Avenue. As part of the continuing riverfront corridor plan, the scope of this investigation was designed to assess increases in groundwater levels anticipated as a result of impounding water behind dams at three sites on the North Canadian River.

Impounding water behind proposed dams at Eastern Avenue and at approximately May Avenue is unlikely to produce a significant impact on the groundwater table in the area. However, impounding water behind these two dams will affect surface features such as tributary creeks and storm sewer outlets. Increases in groundwater elevations caused by these two dams will occur in areas where development is limited, thus reducing concern about adverse impacts.

Data obtained during the investigative phase of the study was used to create a three-dimensional computer model of the subsurface aquifer in the study area. The study depth was limited to 65 feet below the ground surface throughout the area to be modeled. The model represents a study area approximately 25,000 feet square. The computer model was generated in a format which used layers defined as regions of like soil permeability.

An area selected for intensive study was the area roughly bounded by SE 15th Street on the east and Exchange Bridge on the west. This area was selected for several reasons, among them: the Central Business District is the area most likely to be directly affected by an increase in the North Canadian River water surface elevation; deep basements and passageways in the downtown area may require special attention to prevent damage from rising groundwater; and the proximity of the river to the Myriad Gardens complex (including its below-grade lake) demands accurate knowledge of groundwater elevations in the area.

Data upon which analysis and conclusions for the report are based were generated from soil samples and groundwater elevations taken during drilling of 16 new bores completed for the study. Additional data was drawn from records of 52 previous drill sites in the study area. Soil samples from each of the more recent drill sites were analyzed for particle gradation and water saturation levels. The values recorded for differing soil types at various levels in each borehole were correlated with historic data when possible. Soil and saturation data, were converted to permeability, conductivity and transmissivity for use in the computer model of the Downtown groundwater aquifer.

The three dams are to be located in an alluvial plain created over thousands of years by the meandering of the North Canadian River. Impounding water anywhere within this alluvial plain will cause increases in the groundwater elevations in the immediate vicinity of the created lake. The magnitude and extent of the influence generated by the lake will vary with the permeability of the soils and the slope of the gradient along which the groundwater flows.

#### I Conclusions and Recommendations from the Hydrology Study

Based on the information and analyses provided in the hydrology report, site selection and construction techniques for the three low water dams may be made with an understanding of the river , its subsurface and unique characteristics. Several computer simulations were created to review the groundwater impacts of various dam locations in regard to the effect impounding water behind each potential dam site might have. Although none of the simulations or models created indicated extreme water surface increases likely as a result of constructing the dams, an area of direct influence on the downtown area aquifer was defined. Further the computer models indicated that construction of a low water dam in the river at a location east of Shields Boulevard and west of the confluence of Lightning creek is likely to create significant increases in groundwater elevations between the Myriad Gardens area and the north bank of the river.

As a primary effort, several computer simulations were created to review the groundwater impacts of various dam locations in regard to the effect impounded water may have on the downtown area. The result of the simulations were consistent with the conclusion that a dam located at least as far west as Walker Avenue would provide the least increase in the level of groundwater in the downtown area. All the simulations showed increased surface water elevations on the river produced minimal effects on groundwater elevations south of the river. A relatively impervious and steeply sloping containment region near the river banks on the south result in limited impacts in this area.

Water impounded by dams proposed for sites near Eastern Avenue and near May Avenue will have little or no effect on the Downtown aquifer. No existing buildings or other structures in the immediate vicinity of the Eastern Avenue and May Avenue dams are put at risk by groundwater increases caused by impounding water. However, future construction should be monitored to prevent potential conflicts.

The computer model upon which this report is based clearly indicated that the critical groundwater elevation in the area of intensive study was 1172.0. Groundwater elevations hovering near the 1172.0 elevation in the study area fluctuate independent of riverine aquifer in most cases. This means that under existing conditions groundwater levels in the Myriad Gardens area require pumping during periods of wet weather (1172 is the "normal" elevation of groundwater in the Myriad Gardens area.

The need for a pumping regime will not change with the installation of a low water dam as proposed at Walker Avenue. Peak elevations of groundwater in the Myriad Gardens area may rise 0.3 feet higher than under current high water conditions according to the computer model. The "normal" groundwater level in the Myriad Gardens area will remain at or near 1172.0. The increase in the maximum peak groundwater level may create pumping requirements different from those currently used to control the level of the Myriad Gardens Lake.

Other computer models showed that: 1) moving the dam west to a site near Robinson Avenue reduces the direct effect on the Myriad Gardens area, 2) installing an impermeable barrier along the river from a point on the Robinson Street dam, west will abate negative effects on the groundwater in the area.

Given the information now available, computer simulations of subsurface conditions in the Downtown area show that construction of low water dams will increase groundwater elevations on the north and south sides of the lakes created by the dams. The magnitude and extent of the increases varies with the final elevations of the lakes and the soil conditions through which the groundwater flows.

#### WATER QUALITY

Water is a magnet that attracts people. Expanses of cool, clear water of high quality are essential for user enjoyment, aesthetics, fish stocking, and wildlife management. The City is involved in continuing efforts to improve water quality through new regulations, a history of ongoing monitoring, and by diverting industrial runoff to sanitary sewers.

The North Canadian River water within the Riverfront Corridor Plan is classified by the Oklahoma Water Resource Board under Oklahoma's Water Quality Standards, 1991, Oklahoma Administrative Code 785:45, as potentially suitable for "emergency water supply, warm water aquatic [fisheries] community, agriculture, municipal and industrial process [and] cooling water, primary recreation and aesthetics." "Primary recreation" is defined as direct body contact with water; this classification would thus permit wading, swimming, and boating.

Existing water quality conditions between Portland and Eastern/MLK, however, appear to be marginal. Although ambient quality has been reported to be free from turbidity, bad odor and taste, and fish detriments in some tests, other samples indicate varying levels of degradation.

The City's commitment to monitor the new lakes will need to be implemented with regularity and measures taken to intercept storm sewer pollution before it reaches the lakes. Agricultural runoff and other upstream sources of pollution should also be curtailed. Most important will be the set of management measures that will need to be established for the lakes. The lake aeration functions of the 12 landmark docks proposed in the Plan (See Section 4, Generic Elements, 4 Landmark Docks) will help to some degree in maintaining water quality, but more extensive aeration and other management measures may be necessary.

Because of the questionable quality of water in the corridor, swimming and other contact water sports are not planned at this time, other than the kayaking run at the proposed whitewater boat chute at the May Avenue Dam. As experience allows, once the lakes have been formed, and management and monitoring measures are in place, additional activities may be added.

## **Irrigation Potential**

River water may be used as a source for overhead irrigation of plant material. It should be noted that the water is alkaline (Ph 7.0 – 8.8) and high in dissolved water solids, evidenced by a visually detracting crusty grey residue clinging to plant leaves upon drying.<sup>6</sup> Its use does not affect plants other than cosmetically. While weekly watering-effects may not be noticeable, daily watering coats plant foliage. Water sprayed against structures causes reddish water stains to appear on buildings. Irrigation managers could carry out suitable measures for maintaining irrigation equipment free of scale buildup. Overhead irrigation with river water could be used, but settling ponds or an electronic Free-flow water conditioner (filter) which changes polarity of water molecules are important countermeasures to accumulation of high concentrations of dissolved solids in this water.<sup>7</sup>

### Fish Stocking Potential

The river may be stocked with channel catfish, hybrid red-ear sunfish, crappie, largemouth bass (bass only if the proposed three lakes are developed), all of which are species presently found along the length of the river between Lake Overholser and Lake Eufaula.

Two factors affecting feasibility of fish population growth in the river are:

- ► Fish stocked in a river tend to swim away downstream if they can escape impoundment during rises in water level or during any dam discharge.
- ▶ Sands moving along the river bottom create an unstable subsurface; high-velocity flow transports great quantities of sand. Under low flow conditions, Lake Overholser traps river sediments. During high flow conditions, Overholser is bypassed, allowing sediments to tumble downstream unharnessed. These sands then cover the structures/brush that fish use for shelters, depleting fish numbers.<sup>8</sup> Because of the Pelican-type construction of the proposed dams, however, constant maintenance dredging will be minimized within the Riverfront Corridor.

### **WETLANDS**

The 1981 National Wetlands Inventory identified a number of wetland areas along the river and several of its small creeks. Several of these sites have been filled or otherwise modified since the inventory's publication.

The Corridor's few remaining small wetlands should be recognized as important environmental resources linked to the river, providing both aesthetic interest and ecological context. Of particular value to wildlife, they may serve a significant role in the future for nesting and visitor bird life. Preservation and rehabilitation of these remaining small wetland areas can secure a diverse and interesting native landscape, a valuable adjunct to the recreational and scenic qualities of the parklands.

#### TOPOGRAPHY

Because the Great Plains region is an eastward-sloping depositional plain, its rivers run generally west to east, emptying eventually into the Father of Waters, the Mississippi River. The North Canadian river valley lies within an east/west upland higher in elevation than any other drainage system in Oklahoma. The gentle slopes within this upland terminate abruptly at the bluffs of the North Canadian at approximately NW 10th and SW 29th Streets. Almost 75 feet below, the river now tamely arcs within its more-than-a-mile-wide floodplain.

The riverbed is narrowed in places by exposed sand flats and restricted by a riprapped channel. Topping the riprap is a flat middle terrace level behind which spoil berms are uniformly piled like levees paralleling the river.

Since the spoil berms are not actual levees, they provide no flood management function and can be altered. Regrading of the berms will dismantle these sight barriers and replace them with low, rolling landscape elements, opening crucial vistas to the river.

### GEOLOGY

At Oklahoma City, the North Canadian River flows through the Redbed Plains and Osage Plains, which are the southwest extension of the Central Lowlands physiographic province. These plains are characterized by nearly horizontal sandstone and shale rock layers which dip downward toward the west. Bedrock in the downtown area descends from 10 feet deep at the edge of the river's escarpment to 45 feet deep at the river's edge, where it is covered with silty/sandy clays.<sup>9</sup>

The Nemaha Ridge, a large anticline 12 miles wide, 150 miles long and about 2,000 feet deep, overlays the oil strata of the rich Oklahoma City Field. A large fault on the eastern side of the oil field trends NW/SE, while few other faults cross the system. Seismic activity historically has been minimal.

### Soils

Soil borings along the corridor right-of-way (ROW) vicinity reveal soil consistencies ranging from hard pan shale to large grain gravel. These soil variations affect land use planning that involves engineering considerations. In fact, a proposed dam location has been moved from Shields to Robinson because of structural limitations inherent in physical size of soil particles.

Topsoil within the ROW consists primarily of the Dale-Canadian-Port Association. Lying within the present day floodplain, it consists of deep, nearly level loamy soils that formed in alluvium. These bottomland soils are well drained, have moderate to moderately rapid permeability, and are excellent for promoting growth of tall grasses and woody plants.

Coarse sandy soils are found close to the river, because heavier sediments (large sand particles) are dropped first when the river overflows. The sharp sands are suitable for use in creating landforms due to their ability to hold a specific slope. Fine sands are rounded, incohesive, and unable to retain an angle of repose, and become quicksand during flooding. Sand mining west of Walker Avenue has removed the larger sand particles and left only unstable fines. Because the spoil berms consist of sharp river sands, and because the shape of these berms will be altered to open views to the river, their sands could be used as a source to create new landforms.

The water table within the corridor is three to six feet from the surface on sandy soils and deeper on clay soils. It averages 15' below ground surface.

Wind erosion is a greater soils problem than water erosion; prevailing south winds will deposit unstabilized river sands on uplands to the north. To counteract effects of wind erosion, ground covers, plants with dense branching to the ground, and plants with shallow, fibrous roots systems to secure the soil should be considered.

#### **VEGETATION**

Reforestation of the river parklands is strongly recommended. Woodlands on Maywood Hill (near Stiles Circle at NE 8th Street and Stiles Avenue) provided earliest community gathering spots; later, the shady river bottom became parkland precisely because it was wooded. Only a sprinkling of aged sycamores remains to flag the location of the old river channel in Wheeler Park and Tolan Park, historic "dinosaurs" from the now-extinct riparian forest.

Today, native trees such as hackberry, elm, and cottonwood can be found only along neglected fence rows of private property bordering the river corridor edge. The large trees that once densely covered the North Canadian river bottom have been destroyed by channelization. With the exception of the sandbar willows in the unchannelized portion of the river between Meridian and Portland Avenues, the banks of the river corridor are uniformly covered with uninterrupted Bermuda grass, the result of the repetitive use of gang mowers which routinely destroy tree seedlings. Vegetative bleakness, coupled with the harsh linearity of the river, has discouraged recreational use in the past. By returning a sense of "country" to the urbanized downtown environment, comprehensive reforestation will attract people to the river and provide shelter for wildlife. Through the imaginative marshalling of Oklahoma's botanical heritage, much of the flora and fauna of Oklahoma's original riparian landscape can be reestablished along the river.

The key to plant survival in Oklahoma's harsh, erratic weather extremes is the use of native plants. Annual temperatures vary between -17 to +115 degrees F. Drying winds quickly sap plant moisture. The City's low average annual rainfall of 30.5" produces grassland instead of forest, which requires 30" to 60" annual rainfall. Due to the high water table along the river, reforestation will be easier to accomplish closer to the river. Because hardwood forest once flourished naturally in the loamy soils, planting indigenous species already adapted to bottomland conditions improves planting success: winged elm (*Ulmus alata*), cottonless cottonwood (*Populus deltoides* male), pecan (*Carya illinoinensis*), willow (*Salix babylonia, S. interior*), river birch (*Betula nigra*), sycamore (*Platanus occidentalis*), and hackberry (*Celtis occidentalis*). Upland plantings should include trees such as cottonless cottonwood, hackberry, redbud (*Cercis canadensis*), and wild plum (*Prunus americana, P. gracilis, P. mexicana*); and native grasses such as switchgrass (*Panicum virgatum*), Indian grass (*Sorghastrum nutans*), big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scoparium*), blue grama (*Bouteloua gracilis*), side oats grama (*B. curtipendula*), tall dropseed (*Sporobolus asper*), and buffalo grass (*Buchloe dactyloides*).

The Indian Cultural Center site exhibits the greatest diversity of indigenous tree species: cottonless cottonwood, cedar elm (*Ulmus crassifolia*), redbud, western soapberry (*Sapindus drummondii*), sandbar willow, Kentucky coffeetree (*Gymnocladus dioicus*), and hackberry. Because of their historic uses in Indian culture and heritage, these trees are important to retain for interpretive purposes and should be reinforced with new plantings of the same species.

Small, site-specific barren areas at the south of the River, east of I-35 and the Bricktown area are caused by saline surface soils resulting from improper saltwater disposal related to oil production. To be successfully replanted, saline soils can be removed or improved by the addition of organic matter. Native grasses recommended for saline soils are big bluestem, sand bluestem (Andropogon hallii), switchgrass, and little bluestem. Non-native grasses recommended are inland salt grass (5-6" tall and similar to buffalo grass), alkaline sacaton (15-25" tall), and tall wheat grass (30" maximum, cool season grass). Recommended native shrubs include silvery wormwood (Artemisia filifolia), fragrant sumac (Rhus aromatica), smooth sumac (R. glabra), buckbrush (Symphoricarpos orbiculatus), and yucca (Yucca glauca). Recommended native trees include hackberry (Celtis occidentalis), green ash (Fraxinus pennsylvanica), honey locust (Gleditsia triacanthos), black locust (Robinia pseudoacacia), and cottonless cottonwood (Populus deltoides male), and non-native tree salt cedar (Tamarix gallica).

#### WILDLIFE

Less than a century and a half ago, travelers though Oklahoma County found antelope, elk, deer, raccoon, opossum, coyote, wolf, skunk, prairie dog, buffalo, badger, mink, squirrel, otter, beaver, rabbit, and bear; wild turkeys, quail, ducks, geese, prairie chickens, and passenger pigeons.

Along the river today, one can find the following:

#### Birds:

**Breeding birds** — scissor-tailed flycatcher (*Muscivora forfic*), dickcissel (*Spiza americana*), northern cardinal (*Richmondena cardinalis*), northern oriole (*Icterus spp.*), northern mockingbird (*Mimus polyglottos*), Carolina chickadee (*Parus carolinensis*), barn swallow (*Hirundo rustica*), western kingbird (*Tyrannus verticalis*), mourning dove (*Zenaidura macroura*), killdeer (*Charadrius vociferus*).

**Wading birds** — snowy egret (*Leucophoyx thula*), great blue heron (*Ardea herodias*), little blue heron (*Florida caerulea*), greenback heron (*Butorides virescens*).

Raptors -- red-tailed hawk (Buteo jamaicensis).

Wintering birds -- song sparrow (*Melospiza melodia*), white crowned sparrow (*Zonotrichia leucophrys*), American goldfinch (*Spinus tristis*), great blue heron (*Ardea herodias*).

Gulls -- ring-billed (Larus delawarensis), herring (Larus argentatus).

**Ducks** — maliard (*Anas platyrhynchos*), common goldeneye (*Bucephala clangula*), bufflehead (*Bucephala albeola*), American widgeon (*Mareca americana*), double-crested cormorant (*Phalacrocorax auritus*).

#### Fish:

Channel catfish, hybrid redear sunfish, crappie, largemouth bass.

#### Mammais:

Eastern cottontail (Sylvilagus floridanus), raccoon (Procyon lotor), opossum (Didelphis virginiana), gray fox (Urocyon cinereoargenteus), fox squirrel (Sciurus niger), white-footed mouse.

### Reptiles and amphibians:

Too numerous to list.

Within this urban river corridor, emphasis will be placed on recreation and other human uses. On the other hand, wildlife attraction measures, such as nesting boxes in lagoon and embayment areas, can be adopted. Wildlife will be attracted by judicious choice of plants that provide food and shelter; tree plantings alone will attract numerous birds. The endangered bald eagle (*Haliaeetus leucocephalus*) may become an infrequent visitor that we might be fortunate enough to see. Fourteen or more species of hawks might frequent the corridor more often as field mice and other small mammals return.

### VISUAL RESOURCES

At this point in time, the river is characterized more by negative elements than by positive qualities. Long, levee-like spoil berms devoid of trees and other woody vegetation, appear as utilitarian rather than sympathetic landscape features. Marginal sewage conduits, oil pipelines, and stormwater conduits cross tributary creeks and drainages, all open to the visitor's view along the river. Muddy flats and debris-strewn sand flats occur at various points within the river floodway. Occasionally, the riverbank has eroded, as has the river's riprap flood revetments.

The spoil berms also prevent clear views of the river from neighboring lands and clear views of the city from the river. In some instances, the view barrier acts beneficially to obscure undesirable views of adjacent automotive stockpiling, scrap metal, and other industrial artifacts.

Contrasting with these liabilities are a number of positive visual assets. Between Meridian and Portland Avenues, in the unchanneled reach of the river, trees still stand in good number. At Wiley Post Park, Wheeler Park, and River Park, trees and other park-like features are welcome elements and a token of the broader, continuous landscape to come. Finally, the river and its bridges are here, the rudiments of a future lake, dam, and bridge panorama.

As planning for the corridor proceeds, each negative feature should be eliminated or screened, while the positive visual assets of the corridor are protected, enlarged, and reinforced.

#### ACCESS

#### Vehicular Access

Public vehicular access is nonexistent along ten north/south arterials crossing the river: Meridian, Portland, I-44, May, Exchange, Pennsylvania, Shields, Byers, High, and I-35. All lack riverside ingress/egress and parking spaces close to the river. The sole east/west arterial crossing the river, S. 15th Street, exhibits a similar lack. At this time, no riverside drive exists to allow drive-by access for pleasure viewing.

Public vehicular access is available to seven riverside recreational sites. Although accessible at these sites, the river is not the users' actual destination; it is merely an incidental occurrence adjacent to these sports facilities.

- Drexel Court west of May (All-Terrain)
- Villa to River Park (ATV's, softball)
- Western to the BMX facility (BMX)
- Western to Wheeler Park (softball)
- Robinson to Wiley Post Park (softball, open space)
- ► SE 18th west of Byers to Wiley Post Park (open space)
- Eastern/MLK Avenue to ICC site (ATV's)

Industrial access for sandmining is available from Western eastward at the south side of the river via an unpaved trail.

#### Visual Access

Water has a magnetic quality, but people must see or hear the river before they will be drawn to it. Spoil berms along the edge of the North Canadian block out the view of the river, thus diminishing its appeal as a destination. Because the spoil berms do not perform flood control, their recontouring would be an improvement to river enjoyment.

## ADJACENT LAND USE

The Riverfront Redevelopment Project area, extending from Meridian to Eastern, can be typified as bordered by industrial, transportation, commercial, and storage land uses. Low density residential neighborhoods are found along many river reaches. Hotels, restaurants, and commercial sérvices are found largely at the Meridian Avenue Corridor, while commercial and automotive service uses are found along several parallel and crossing streets. Oklahoma State University's Oklahoma City campus and State Fair Park are the only major institutional uses adjacent to the corridor.

The Riverside neighborhood, one of the oldest in the city, is typified by one-story wood frame houses, many in poor condition, small scale commercial and industrial properties, and open storage areas, including scrap metal yards and used vehicle depots. The most architecturally pleasing and significant structures are Little Flower Catholic Church and the vacant Riverside School. The neighborhood features Manuel Perez Park and a Hispanic community center. Adjacent to the river is a block of vacant, woody land, a resource of potential value to riverfront revitalization.

Capitol Hill, the residential neighborhood immediately south of downtown, is in transition. It has a concentration of elderly and persons under 16, the two population groups with the most leisure time. This neighborhood provides a base of people who could use the new river facilities. The Capitol Hill Neighborhood Plan recommended new bike paths with access to riverside bike paths.

The Santa Fe industrial area is zoned I-3: heaviest industrial zoning with outside storage permitted. It contains an active cottonseed oil processing complex, a large automobile salvage yard, and the City's Street Maintenance Division River Yard. The River Yard stores large street construction items, earth, sand, and gravel. There is considerable in-and-out truck traffic for materials.

Stockyards City, with a distinct western image, is a blending of industrial, residential, and commercial uses. It is a destination for agrarian businessmen and curious tourists. Stockyards City is the site of the first urban Main Street program in Oklahoma and is striving for rehabilitation.

According to the 1991 City of Oklahoma City Housing Conditions Survey, housing conditions in all neighborhoods adjacent to the south side of the river between I-44 and S. Shields are "experiencing extreme amounts of deterioration" and require "significant amounts of rehabilitation in order for them to meet City environmental and construction codes." North of the river, these same conditions apply only to riverside housing south of Main between May and Western, in the areas north of SW 8th between Shartel and Shields, and between Shields and I-35 stretching diagonally southward to SE 15th. Housing north of the river and west of I-44 is considered to be "sound, with only general maintenance needed". South of the river and west of I-44, the housing is "moderately deteriorated, or mostly sound with a few structures needing significant amounts of rehabilitation." This description also applies to housing in the Riverside neighborhood.

Crime and public safety concerns along the river corridor relate to adjacent activities. Adjacent neighborhoods are predominately lower income with high ethnic concentrations. Several have federally-subsidized housing. Most crimes are property-related, not violent. The Oklahoma City Police Department states it is not an activity's location that is problematic; but the type of activity or the crowd it draws. Along the river corridor, police patrols will be adjusted as activities change.<sup>11</sup>

The City's investment in the corridor will lead to physical and social improvements of the adjacent neighborhoods, and therefore, hopefully, to a reduction in crimes and safety concerns. The Scenic River Overlay District along with improved site planning and design standards with appropriate guidelines will create better compatibility in many adjacent land uses and help resolve existing negative aesthetic/blighting issues.

# OIL EXTRACTION AND INDUSTRIAL ACTIVITY

Oklahoma City has had a long and significant history of oil extraction east of Shields Avenue.

The Oklahoma City Oil Field discovery of December 4, 1928, triggered an oil boom that brought national recognition to Oklahoma and diluted the effects of the Depression for Oklahoma City. A forest of derricks quickly erupted over a 13,325 acre area. Interspersed among the derricks were the tiny shotgun houses of hundreds of oil workers, often bathed in oil from well blowouts which sprayed for miles across the city. The Field became the most prolific of all U.S. oil fields except for Prudhoe Bay in Alaska, by 1968 producing 733,706,000 barrels of oil and 1,700,000,000,000 cubic feet of gas.

Boomtime drilling methods, executed prior to the environmental regulations of today, often resulted in surface contamination by oil or salt water spills at inadequately-spaced wellsites. Improperly abandoned or plugged wells have or potentially could contaminate groundwater.<sup>12</sup>

Currently, an oil collection facility west of Walker, oil and gas pipelines crossing the river, a few remnant derricks south of the Byers bridge, and a number of active wells are evidence of the past and present importance of oil to Oklahoma's heritage.

These remaining oilfield artifacts have the potential for interesting future visitors in both Oklahoma's great oil history and in the relationships between oil and the environment.

Agriculturally-related industry along the river corridor includes the cottonseed oil producers' processing plant east of Shields Boulevard, two grain elevators, and the famed stockyards of Stockyards City.

A number of industrial activities of the past have left their scars, including an old refinery and a drum cleaning operation near Byers and I-40, which resulted in soil and groundwater contamination that was cleaned up in 1988. No other known contamination sites have been discovered to date within the planned river and canal corridors. A number of landfills line both sides of the river corridor, which in some cases have caused land subsidence.

Other types of industrial and commercial land uses along the river corridor may need to be screened from view, such as the huge used car lot at Portland, power substations, oil tanks, and other visually disruptive elements.

The following are notes on selected industrial uses:

- ▶ Downtown Airpark, used for small private aircraft, can bring many visitors to the river corridor.
- ► Cotton Producers Cottonseed Oil Processing plant is a source of some odor and considerable semi-trailer traffic, but would not otherwise affect the corridor.
- ▶ Burlington Northern Railroad marshalling yard east of Byers is used to compile trains by coupling railroad cars.
- ► Farmers' Market, a hub for semi-trailer and automotive traffic, is a facility with exciting potential for visitor destination that could interrelate with the river corridor.
- ► A number of other light industrial commercial edges and a power substation present either a neutral or negative interface with the corridor. Without opportunity for people access through these edges, they could be considered barriers between the City and its river.

# UTILITIES AND BRIDGE/STREET WIDENINGS

#### Utilities

The visual quality of the corridor is impaired by above-ground utilities: electrical transmission towers and power lines, oil and gas pipelines, and the sanitary sewer lines and exposed manholes all follow the river corridor. No major trunk line expansions are planned.

The substation at May Avenue near I-40, the key substation in the Oklahoma City downtown area, will remain on the corridor. Barring a large influx of commercial development, it will not be expanded during the next three years.<sup>13</sup>

Utility relocation can be anticipated at Canal Square near the Myriad Convention Center, and in the canal area between Bricktown and the river. Sanitary sewer lines crossed by the proposed canal alignment will need to be restructured to allow their functioning across this alignment. Some major utility lines will be relocated as part of Dam #2 construction. A major storm sewer outfall line, the Lee Avenue storm sewer, will be relocated as part of the Dam #2 construction.

Oil pipelines at the river's edge, crossing Wiley Post Park and the Indian Cultural Center site at Eastern/MLK Avenue, will need to be relocated. Pipelines crossing the effluence of each creek could be covered by pedestrian footbridges.

Relocation or improvement of utilities (public and private) may require additional easements, and in some areas, vacation of existing easements. The Authority should determine minimum requirements as plans for such improvements are finalized or as each affected utility company makes requests. The Authority should make determinations of new easement locations with minimal negative impact on existing or future uses.

# **Bridge and Street Widenings**

NE 4th Street will be widened from Broadway to I-235, where it presently becomes a boulevard and intersects with Eastern/MLK, allowing easy access to the Indian Cultural Center. Interstate-40 frontage roads between Walker and Shields (NW 2nd and NW 3rd Streets) will be improved for better circulation. Portland Avenue will be widened to five lanes, and west of Portland, SW 15th Street will be constructed with four lanes. Byers bridge is currently under construction. The Eastern/MLK, Robinson, and SE 15th Street bridges are scheduled for immediate replacement, with the Eastern/MLK bridge being widened from two lanes to five to provide improved turn-off to the proposed Indian Cultural Center.

Improved access and transportation facilities may require additional easements or rights-of-way at bridge or dam locations. The Authority should determine minimum requirements as plans for such improvements are finalized. The Authority should also determine appropriate maintenance, lighting, and landscaping needs in affected areas.

#### ADJACENT CULTURAL RESOURCES

Cultural facilities are absent from the river corridor, a historical pattern resulting from political, hydrological, public health, sociological, topographical, and economic reasons. At the time of settlement, the river divided the city into two distinct towns, Oklahoma City and Capitol Hill, their downtown business districts distanced by the width of the floodplain. Because of frequent flooding and threat of typhoid fever, the riverbanks became a dumping ground for the populace and a last resort for over 3,000 homeless during the Depression. Railroads, running parallel with the riverbed to avoid steep climbs, eventually attracted industrial uses to the river corridor. Reclaimed after channelization efforts, the river corridor was officially designated for continuous parkland, a dream since the early 1900's.

Intriguing nuggets of local flavor await refinement and display at appropriate cultural facilities. Widely-known themes and little-known oddities each have their own story to tell. The Riverfront Corridor's theme should draw upon, interpret, and celebrate Oklahoma City's local uniqueness and heritage.

#### **Prehistoric Resources**

The Oklahoma Archeological Survey (OAS) has recorded no prehistoric Indian sites in the river corridor. However, before the establishment of the OAS in 1972, no efforts were made to document such sites, and by then, major disturbance of the riverbanks had already occurred. The river bluffs are the most logical location for such undiscovered sites. The only bluffs within the right-of-way are on the proposed Indian Cultural Center site at Eastern/MLK and I-35. Because OAS has expressed a desire to investigate there, every effort should be made to preserve possible unseen remains.

#### Now-vanished Early Settlement Resources

Many riverside cultural sites, formed in Oklahoma City's infancy, have vanished: Wheeler Park's gardens, lawns, stage, zoo, and walking paths; the doomed 1898 six-mile hand-dug "Grand Canal", called the "most gigantic undertaking in Oklahoma Territory", with its gristmill and power generating plant; Bricktown's cemetery where coffins eroded out of the riverbank; and Hell's Half-Acre with its brothels, saloons, and gambling dens, a once-thriving gathering spot which gave birth to today's Myriad Convention Center. Memories of features such as these, or existing remnants if they can be found, educate and arouse imagination when they are brought to public attention through site design. As unique design elements, they pique curiosity, allow glimpses of time past, add value to the remnant, and instill a desire for its preservation.

#### **Existing Cultural Resources**

Along today's river corridor, particular cultural enclaves remain. Stockyards City preserves a legendary way of life idealized across generations, while the Farmers' Market presents a scene rare in modern urban America. The State Fair Park is a communal "show-and-tell" gathering place. The Oklahoma City Oil Field contributes a legacy of blackened derricks, shotgun houses, remembered wealth, lessons learned, and riches still to be tapped.

Adroit design of the river corridor can blend these cultural resources into a cultural synthesis, weaving together art, recreation, museums, history, Indian culture, gardens, music, water, railroads, industry, and commerce, creating a distinctive tapestry illustrative of Oklahoma City alone.

#### ADJACENT PARK AND RECREATION RESOURCES

Last year's Needs Assessment by the Oklahoma City Parks Department reveals that citizens want large parks, preferably near sizable scenic bodies of water, with picnic areas, playgrounds, jogging trails, and opportunities to observe and feed ducks and small mammals. Among the most preferred activities cited by respondents were hiking, outdoor cooking, picnicking, photography, and bird watching. Lack of leisure time and lack of security were cited as the main deterrents to park use.<sup>14</sup>

Four parks lie within the river corridor:

- ▶ River Park -- 14 acres. 3 softball fields, 1 soccer field.
- ▶ Wheeler Park -- 43 acres. 6 softball fields.
- ► Wiley Post Park -- 50 acres. 1 softball field.
- ► Elm Grove Park -- 6.6 acres. 1 softball field.

The City's Parks and Recreation Department's policy for major recreational facilities has been to locate them in large complexes in the suburbs, closer to major arterials. Because this approach best supports today's team sports needs, only one soccer field is being proposed for the river area at this time.

The few recreation and athletic facilities available at the parks located along the river, as listed above, are restricted in the number of users they can accommodate, or attract. The dammed portion of the river will also have characteristics — long lakes suitable for rowing, for example — that are not extensively available throughout the metropolitan region at present.

The basic program for the North Canadian River, with three lakes and abundant shoreland destined for development of trails and open parkland, would thus seem to carry high potential for satisfying Oklahoma City citizens' interests.

One special purpose recreation area has developed along the river without public funding or management: the BMX trailbike fields between Western Avenue and Exchange Avenue, on the river's north bank. Active in state-wide and interstate competition, the parent-supported BMX association interfaces with the annual Grand National Indoor Championships held annually at the Myriad. To satisfy BMX rider interest and also to disinterest all-terrain vehicle (ATV) users from abusing portions of the river corridor, the Plan should examine how ATV use could be accommodated in a centralized location, such as the present site, with appropriate oversight and environmental management.

SECTION 3

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#### THE DAMS

Three dams planned for the river will act as the formative structure for the new lake system. The installation of the three dams is proposed in the Oklahoma City urban area. The riverine corridor to be affected will extend from about Portland Avenue on the west to Eastern Avenue on the east. See map of dam location on page ii of the **PREFACE**.

Two dams will be integral with two new bridge/dam structures to be erected as a part of the total enhancement project. These two dams will be integral with the proposed new bridge at Eastern Avenue and with the proposed new bridge at Robinson Avenue. One dam, just east of May Avenue, will be free-standing. Each of these structures will be four 100 foot spans with five piers, each span will encompass pelican type flood gates that will lower almost completely out of the floodwater flow area. Each dam will provide a conservation pool just upstream for recreation, enterprise and aesthetic riverine corridor enhancement. By design considerations, the outflow from each structure will be regulated by telemetry whereby no flooding will be permitted.

Besides flooding abatement and storm water management considerations, the mitigation of sedimentation and siltation will be accomplished. This effort will be initially conceived as an upstream sediment pool with continuous sand mining operations as an economic enterprise effort.

The shoreline will be protected by appropriate and suitable measures that will be consistent with the configuration and attributes that will be expected within the North Canadian River conceptual plans. *Concept Plans*, found at the end of this report, indicate a desirable shoreline that will be achievable by various strategies from place to place along the banks that will be deemed desirable on a local basis.

The proposed riverfront project will produce increased ground water recharge and subsequent underflow profiles that will extend both right and left from the river pool enhancements. This will require special consideration and will be treated as a separate report document. The local watertable controls the conservation pool elevations.

The implications of this construction program on recreational development are considerable: for the first time since the river's channelization, real and substantial boating opportunities will emerge and extensive corridor development will be possible. One dam, at least, would have the potential to serve whitewater boating activity (see **Section 4, Concept Plan**).

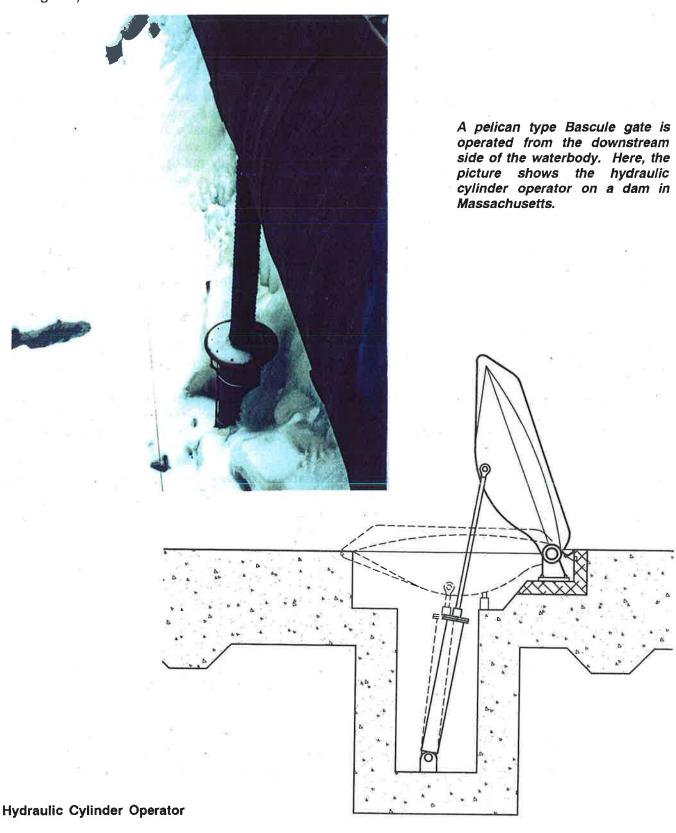
An aesthetically pleasing design will allow the dams to emerge as positive visual resources within the river landscape.

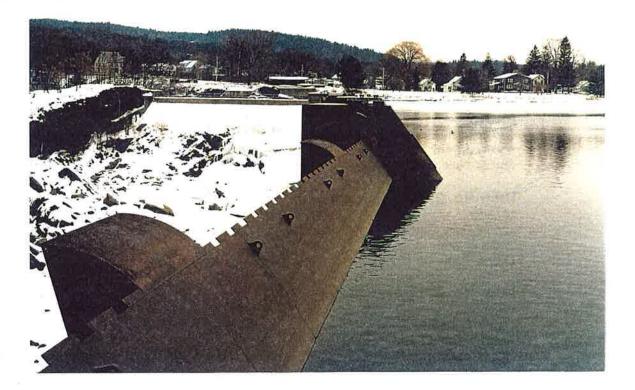
#### DAM STATISTICS

Three "pelican" type Bascule gates are proposed within the channelized portion of the North Canadian River. Table 3.1 is a summary of the dam statistics. A dam profile is shown at the end of this **Section** with portions of the preliminary plans and profiles.

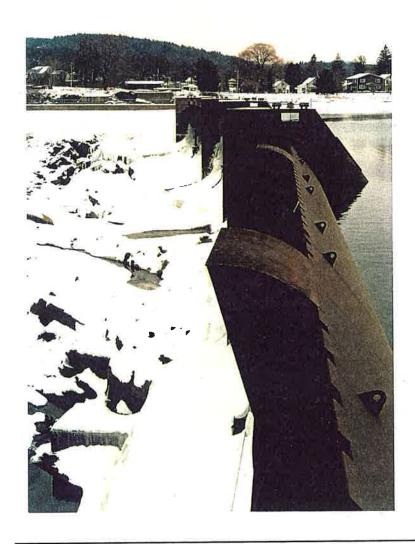
A pelican type Bascule gate is a versatile surface water impoundment feature. The "gates" are tailored to automatically control and regulate such items as: water level, flow, and differential head across the gate. Pelican gates are automatically controlled by means of a level-sensing device, so a predetermined pond level is maintained within close tolerances.

Three equal length gates will be used at each dam site. Each gate will be a manufactured steel section with its lower edge hinged along the bottom of the gate (Pelican gates are also referred to as hinged crest gates).





Downstream is to the left in both pictures.



These two pictures show the pelican type "gates" of a free-standing Bascule dam. The hydraulic cylinders hold the gates in an upright position, impounding the water to form a lake.

# Table 3.1 Dam Statistics

Dam No. 1, Lower Lake

Location:

Top of Dam Elevation:

Width of Dam:

End of Pool:

Integral with Eastern Avenue Bridge

1,162 Mean Sea Level

Robinson Street Dam

Dam No. 2, Middle Lake

Location:

Top of Dam Elevation:

Width of Dam:

End of Pool:

Integral with Robinson Street Bridge

1,172 Mean Sea Level

At Dam No. 3 (May Avenue)

Dam No. 3, Upper Lake

Location:

Top of Dam Elevation:

Width of Dam:

End of Pool:

Approximately 300 feet east of May Avenue

1,184 Mean Sea Level

Approximately 600 feet east of Meridian Avenue

#### **DAM PERMITS**

Prior to construction of the proposed dams, required permitting must be in place. In January, 1993, the State of Oklahoma Water Resources Board issued the 401 Certification for the riverfront project. The United States Corps of Engineers followed in March, 193 with the permit required by Section 404 of the Clean Water Act. Preliminary plans are underway for the Lower Dam (Dam No. 1) as final plans for replacing the Eastern Avenue Bridge are nearing completion.

#### BACKWATER CONSIDERATIONS

The initial backwater analysis for the North Canadian River has been performed and is reiterated here as a matter of convenience. HEC-2 computer runs have been performed using two additional considerations:

The first consideration adds the three dams into the original study using normal bridge routines. The original structures at May Avenue, Robinson Street and Eastern Avenue have simply been replaced with the new anticipated structures which will serve as dams. Each of the three dams will be a pelican type structure which will lower sufficiently so there will be virtually no backwater effects upstream from the bridge/dam structures' suitable freeboard.

The second consideration anticipates a widening of the riverine conservation pool. This preliminary widening has been estimated at 150 percent. Therefore another HEC-2 run has been made by using the 150 percent cross section modification option just upstream from each dam.

Table 3.2 elucidates the analysis results. As seen from Table 3.2, the original run, the dams' run, and the pool enlargement and dams' configuration run indicate no significant changes to be produced by the project design. Summary HEC-2 runs are available from the engineer.

Table 3.2 HEC-2 Analyses of Riverine Changes

<b>Cross Section</b>	Original FIS Run	Dams Only	Pools and Dams
264.09	1171.42	1171.42	1171.42
Dam 1, Dam/Bridg	e at Eastern Avenue		
264.38	1172.14	1171.96	1171.96
264.55	1172.62	1172.35	1172.66*
264.56	1172.55	1172.27	1172.63*
264.57	1172.77	1172.50	1172.71*
264.75	1173.30	1172.94	1172.90
266.29	1179.35	1179.59	1179.50
Dam 2, Dam/Bridg	ge at Robinson Street		
266.32	1179.51	1179.84	1179.76
266.44	1179.56	1179.94	1180.24*
266.45	1179.81	1179.98	1180.26*
266.45	1179.94	1179.92	1180.01*
266.45	1179.76	1179.93	1180.02
269.53	1190.41	1190.42	1190.43
Dam 3, Dam at Ma	y Avenue		
269.67	1190.85	1190.54	1190.96
269.68	1190.88	1190.57	1191.19*
269.84	1191.47	1191.20	1191.52*
269.97	1191.76	1191.51	1190.88

<sup>\*</sup>Indicated cross sections are widened by 150 percent on the pools and dams run only.

As seen from Table 3.2, the presence of the dams alone, and the widening effects and dam effects together show negligible effects from the proposed riverine enhancement project.

Table 3.2 substantiates the conclusions and remarks below:

#### **Preliminary Shoreline Concept**

The concept plan indicates a shoreline that extends from the upstream project beginning near May Avenue to the downstream project culmination at Eastern Avenue. The upstream backwater elevation effects from the dams are only minuscule in magnitude difference and therefore will only require appropriate bank and wave protection measures. The established conservation pool elevations at each dam will mandate bank protection from both river current attack during flood events and wave action during conservation pool sustained elevation.

Appropriate bank protection methodology will be applied that will satisfy both freeboard requirements and also wave action resistance.

#### **Backwater Elevation**

Water surface elevations will be, on a preliminary basis, as indicated in Table 3.2. As is also noted from Table 3.2, these elevations are only slightly different in magnitude compared to the 100 year flood event water surface elevations. These elevations are indicative of the amount of bank protection that will be required for permanent conservation pool residence. The widening effect built into the HEC-2 computer model assumes 150 percent widening as a preliminary design concept. The existing cross sections were simply widened by a factor of 1.5 to demonstrate that the wide pool elevations will be acceptable within the recreational requirements along the riverine reaches.

#### **Conservation Pool Elevations**

The elevations of the conservation pool at the three lakes are determined by ground water elevation constraints and are an element that must be consistent with the design of the pelican gates that are anticipated with the proposed dam configurations. The elevations are 1162.0 for the Lower Lake at Eastern Avenue, 1172.0 for the Middle Lake, and 1184.0 for the Upper Lake. The increased conservation pool elevations as suggested by the Corps of Engineers, and a 4th dam near Walker Street are not feasible at this time. Any increases in conservation pool elevations will produce intolerable ground water effects in the adjacent urban Oklahoma City.

#### SEDIMENTATION CONSIDERATIONS

Sedimentation, siltation and the attendant problems that are always associated with sediment laden stream flow, such as exists along the North Canadian River, must be dealt with as an important part of the project detail.

#### **Sediment Transportation**

Sediment transport depends on the velocity of the water and the size of the sediment as well as many other factors. The sediment transported by the North Canadian River is affected by Lake Overholser and by erosion of sediment from the bed and banks of the river between the lake and the urban area where the dams are to be located. Flooding causes time and space varying discharges as well as varying sediment load. Generally, as water slows, it drops its sediment load to be in equilibrium with the transport capacity of the water. If sediment is removed then water will pick up sediment again to regain equilibrated sediment transport capacity.

The North Canadian Riverfront project with moveable dams will slow water in the river during low flow. During high flows the dams will be lowered, resulting in little restriction of the flow and therefore no appreciable entrapment of the sediment. Thus, the low flow periods are the major concern when modeling the effects of the three dams composing the corridor. Because each dam has the potential to trap sediment during low flow, sediment removal above the upstream dam is the most acceptable alternate. Flowing water carries less than its transport capacity and has the potential to pick up sediment between the dams. Stream bank rip rap is thus recommended to protect the reaches of the river bank between the dams and also between the lower most Dam at Eastern Avenue and the sediment removal area.

#### **Transport Modeling**

Sediment transport is a complex process affected by many factors that are not easy to measure or predict. Thus, simplified methods have been devised that functionally represent the process. The Colby Method (Vanoni, 1977) is such a method that relies on the flow depth, velocity and mean sediment diameter to predict sedimentation processes. This method is applicable to bed load transport which is anticipated to be the major sediment load since the small particle size is estimated to be in the range of 0.062 – 2.0 mm.

The mean sediment size modeled was selected based on the study by Harp and Laguros (1978) during a Canadian River study for the City of Norman. The size distribution was found to fall within a fine sand between 0.062 mm to 1.0 mm by actual field measurements. Because of the similar geographic region drained by the Canadian and the North Canadian River, and the drainage areas being roughly equivalent, the sediment characteristics are deemed to be similar.

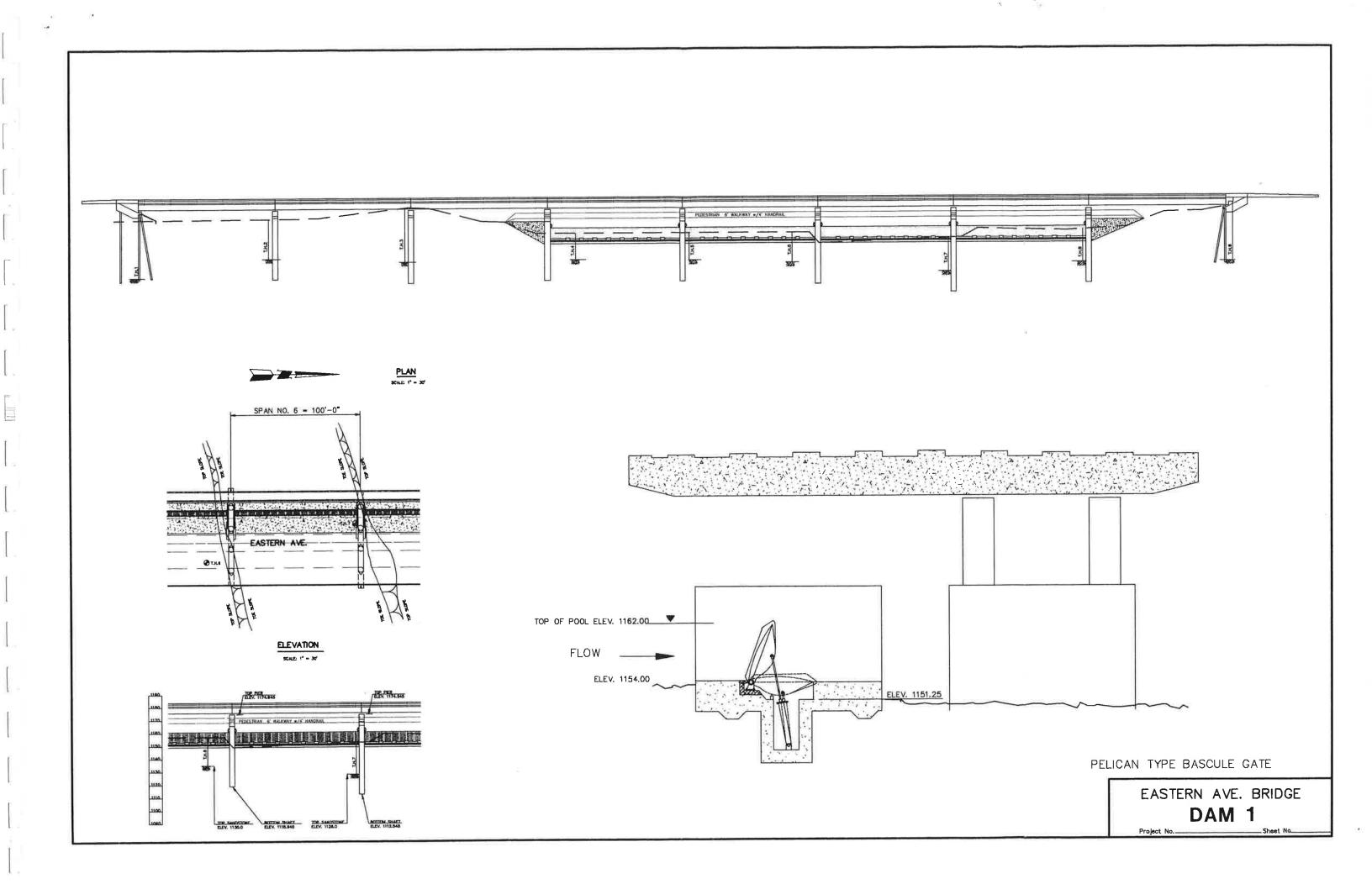
Colby presented the graphical relation for sediment discharge rates as a function of flow depth, velocity and median grain size. The relation shown for the 1 foot depth is equivalent to:

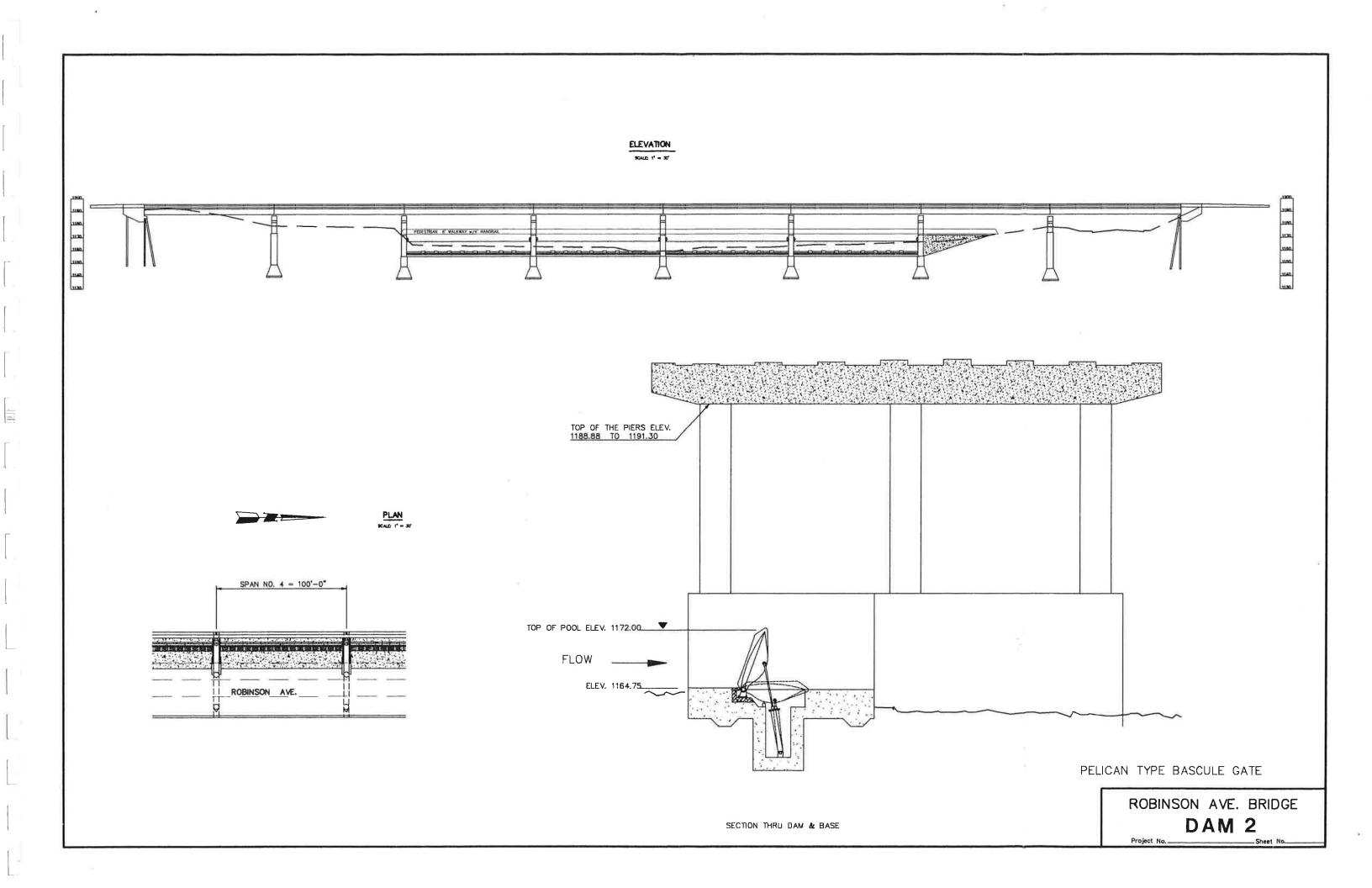
$$qs = 0.386 \text{ v.}058$$

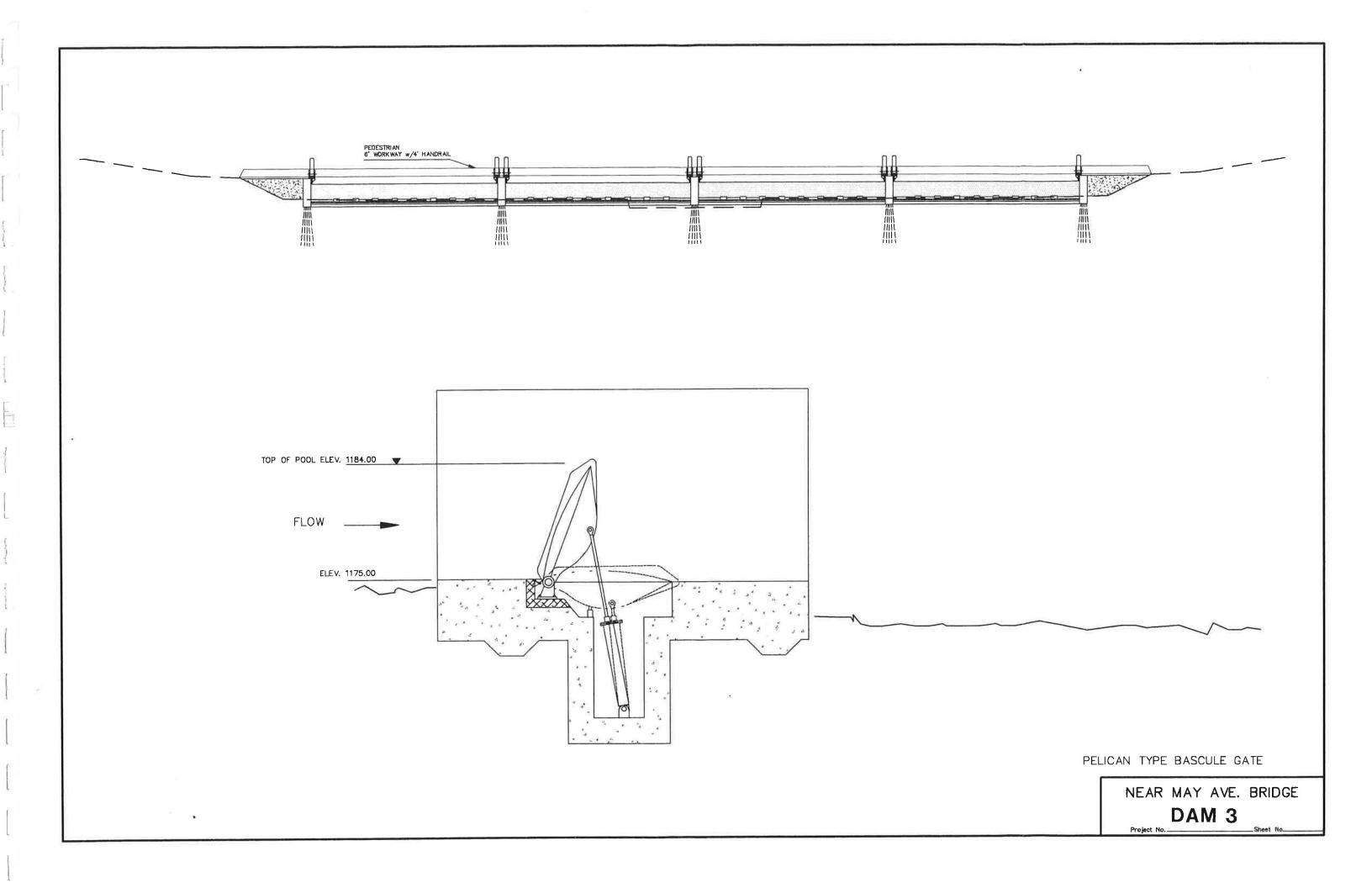
where v is velocity in fps. The range of applicability of Equation 1 is between about 1 to 3 fps.

Sediment discharges are therefore a function of velocity and depth. Using the velocities derived from the HEC-2 studies for the dams-in-place condition, sediment discharge rates were computed for the North Canadian between river miles 255.67 to 270.00.

By computing the sediment discharge rates using Equation 1 and plotting them versus the river mile areas of both high and low transport rates may be seen. It should be noted that where the sediment discharge rate is high this is due to local constrictions at bridge abutments. These effects are limited to local scour because immediately downstream the transport capacity reduces significantly resulting in sediment deposition. The sediment discharges shown in Figure 4 represent the transport capacity associated with the base flow of about 1000 cfs. The full study with HEC-2 runs, charts and sediment transportation mechanics are available from the Riverfront Redevelopment Authority.







SECTION 4

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# For the North Canadian River Riverfront Corridor

Initially, it was envisioned that redevelopment of the North Canadian River would be fully underway by 1989 – Oklahoma City's centennial year. Much progress has been made; coordinated efforts are in full swing and public acceptance and backing of the Riverfront Plan is growing.

The 1987 Plan did many things: presented a "vision" for riverfront development, identified benefits in land use planning along the river, spoke to weaknesses (with recommendations) in areas such as security and maintenance, and laid foundation for the Scenic River Overlay District, approval by the Corps of Engineers of a 404 Permit for the dam construction, and the approval of the first sandmining lease on the river with a direct benefit to the river and the citizens of Oklahoma City. The 1987 Plan also adopted *Design Standards* (Chapter 10, Implementation) for implementation of riverfront development which are still valid today. These Standards should be used in concert with and referenced as development of the following conceptual plans progresses.

With the construction of the three dams and completion of the proposed river corridor and linkage canal system, Oklahoma City will have launched the revitalization of its riverfront corridor. The parklands, canal linkage system, and urban development features of the Plan can be best described as falling into two basic groups of components:

- ► GENERIC ELEMENTS
- ► MAJOR FEATURES AND SPECIAL ELEMENTS

The features and elements identified and described in this Section may be found in the six *Concept Plan* sheets at the end of this report.

#### GENERIC ELEMENTS

Generic elements of the linear corridor are as important as its major features, for without them, the system would lack both the kinds of resource areas for which many visitors come, and the continuity that will hold the system together to make it accessible and enjoyable throughout its length.

Ten basic Riverfront Corridor generic elements are proposed and described below.

- 1 The New Shoreline
- 2 The Main Body of the Corridor
- 3 Paths and Trails
- 4 Landmark Docks
- 5 Boating Opportunities
- 6 Music/Performance Sites
- 7 Heraldic Pylons
- 8 Bridge Crest
- 9 Playfields and Open Area Recreation
- 10 Amenities

### **1** The New Shoreline

The creation of the North Canadian River's three new lakes will establish new shorelines in each reach of the river between Meridian and Eastern/MLK Avenues, as previously discussed. In each lake, the character of the new shoreline will be determined in part by the character of surrounding land use and in part by the features of the corridor planned for that location.

#### I Meridian Lake (Upper Lake)

The Meridian Avenue bridge serves as a key gateway to visitors arriving from the Oklahoma City airport and to many other travelers and commuters. A view from the bridge of Meridian Lake's broad, blue waters, accentuated by landmark design features, would provide a strong positive statement to all on the quality nature of Oklahoma City. Accordingly, the shoreline at Meridian will be hard-edged, providing a landing for boats and space for crowd activity, and crowned by heraldic pylons and public art sited for clear visibility from the bridge. Eastward in this reach to the beginning of the River's channelization just west of Portland, the River's semi-natural shoreline will be reinforced with cottonwoods, willows and bank-stabilizing shrubs. From the beginning of channelization to the May Avenue Dam, the riprap flood revetments that will mark the lower half of the lake's shores will be softened visually by seeding or sprigging of water-edge suitable grasses. Grassy edges will harmonize areas below the riprap, but above the water line, with the main greenspace area above the riprap.

#### I Centennial Lake (Middle Lake)

This lake will have three shoreline edge types: riprap edges with grass and shrub stabilization/aesthetic enhancement, hard-edged landings, and indented shorelines with new islands.

The islands will be an important improvement, creating aesthetic interest and sheltered embayments where special features are to be found. They will be located just to the west of Walker Avenue: on the north bank near the mouth of Twin Creek, a new island will shelter a small canoe "harbor"; on the south bank at the mouth of Brock Creek, two new islands and an indented bay shoreline will aid in forming appropriate conditions for a simulated fresh water estuary. The latter will be planted with emergent and terrestrial marsh grasses representative of fresh water estuaries on the U.S. coastline. The estuary will serve both as an educational nature trail component of the corridor trail system and an adjunct to the proposed Petroleum/Energy and the Environment Theme Center, to be situated along its western edge.

#### 1 American Lake (Lower Lake)

The shoreline of American Lake will also have three shoreline edge types: riprap edges with grass and shrub stabilization/aesthetic enhancement, hard-edged landings, and new islands.

The islands will be formed along the site of the planned Indian Cultural Center (ICC), primarily to:

- ► screen the I-40 elevated highway from ICC viewing points
- ► create island stop-off opportunities for canoeists on the river
- ► create additional points of visual interest for travelers on I-40, I-35, Eastern Avenue Bridge.

These islands, and those formed in Centennial Lake, will be planted densely with cottonwoods, black willows, and other suitable trees and shrubs, with clearings sited appropriately for landings, picnic areas, and paths. Bulkheading will be necessary for shoreline durability, but the tree and shrub plantings, as well as naturalized design of island configuration will partially naturalize this hard edging.

# **2** The Main Body of the Corridor

Natural qualities will typify the main body of the riverfront corridor and its greenspace.

Corridor landforms will be gently rolling in landscape patterns that are typical of central Oklahoma. To achieve this, the high, rigid spoil berms that line the present river edges will be re-graded. Most will be spread over much of the right-of-way land on which they presently stand, resulting in low land profiles that are no higher than 2 to 3 feet above background land elevations. This will be in contrast to the view-blocking heights of 8 to 10 feet or higher that now exist. In certain locations, high points will be created for visual interest and the enhancement of viewing opportunities, but these will be bordered by swales or meadows brought down to background land elevations. In this manner, new visual communication between the River and the City can be sustained without significant interruption.

Bold and extensive reforestation will be the second hallmark of the riverfront corridor. Hundreds of shade trees will be planted to create a strong, natural signature for the greenspace. The trees will provid shade vital to joggers, bicyclists, picnickers, and others. Vegetation will dramatically transform the corridor from its present utilitarian and barren state, marred by the proximity of unwanted industrial and blighted areas, to one of rich environmental character.

This transformation will allow the river corridor to have a quality sense of place; to become a realm apart from the industrial and commercial busy-ness of the City's downtown and thus provide all who visit it a welcome measure of relief from its hardness and intensity.

The new trees, shrubs, grasses, and other corridor vegetation will also reestablish the vital ecological functions of the original North Canadian River:

- ▶ stabilization of soil against erosion
- ► sustenance of wildlife, including migratory and non-migratory birds
- ► cooling of temperatures within the micro-climatic areas of the new forest
- ► contribution, however limited, to the absorption of automotive exhausts from the surrounding downtown atmosphere

Meadows and other open spaces will also be designed as natural, informal areas as a rule, with sites associated with a number of major features and other special elements being the exception.

### **3** Paths and Trails

Most paths and trails along the linear corridor will be informal and naturalistic in character, creating an enjoyable atmosphere of relaxation for the user. They will also further reinforce the naturalistic qualities established by the new landforms and reforestation. Formal geometry will be more typical of canal walkways, the centers of major feature areas, and key river landings.

Foot travel and bicycling will be accommodated on separate paths to minimize conflicts and collisions between walkers and bicyclists, an element proposed for the corridor in the earlier 1980' Plan.

#### I Footpaths

Footpaths will extend to all parts of the corridor system. Composed of either a bituminous wearing surface for more intensive—use locations or a stone dust (stone fines), unpaved surface for less—intensive and natural areas. These paths will be dedicated to pedestrian use and signed accordingly at intersections of common foot/bike paths. Footpaths will be between 6 and 8 feet wide and will wind sharply near intersections with common foot/bike paths to discourage bicyclists from turning onto them.

#### I Bike Paths

Bike paths will also extend throughout the corridor greenspace system. Paved with bituminous materials at a standard 12 foot width and striped along their center lines, they will serve 2-way bike traffic and accommodate security and service vehicles. Rollerbladers and skateboarders will discouraged on any of these broad paths.

#### I Equestrian Trails

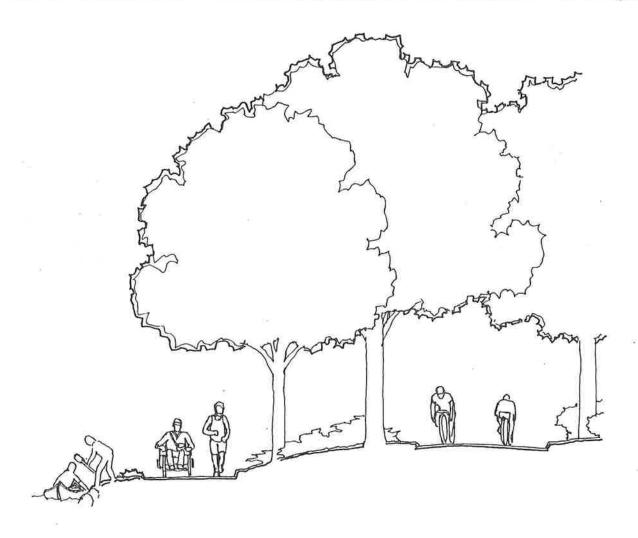
Extending between the Equestrian Park riding facilities and the Old West Town Street proposed at the Stockyards riverfront, the riverside equestrian trail will be about a mile in length. It will join subsidiary equestrian trails leading into the Equestrian Park, affording easy access to riders interested in horseback outings along the river corridor or in visiting Stockyards City. The same interest, in reverse, would be generated among visitors to Stockyards City, who might find mounts at a Stockyards Stable.

Coach and buckboard rides would also be available on the equestrian trail between Equestrian Park and the Old West Town Street (See Major Features and Other Special Elements, below).

#### I Canal Walkways

These promenades will be the functional armature of the canal system, just as the canal itself will be its principal attraction. Designed appropriately with adequate width (varying from area to area according to the intensity of development anticipated) and aesthetic character, the canal walkways will draw visitors to a multitude of scenic views and experiences along the canal. These will include cafes, restaurants, and shops developed by private investment along the walkways. Special features sill include the proposed American Railroading and Canal Building Theme Center, the navigational lock, and the canal's termini at the Myriad Convention Center and at the North Canadian River.

The walkways are recommended as surfaced in concrete, with the addition of artfully designed pavers and other features, for aesthetic accent, in frequent locations.



**Dual Path System** 

#### Footbridges

Numerous footbridges will be required in the system and may be recognized in three categories: footbridges across tributary creeks and drainages, footbridges across the canal, and footbridges across the North Canadian River.

Footbridges crossing creeks and drainages will be of prefabricated wood construction. Canal crossings are recommended as concrete and masonry design, with attractive ironwork railings and other artful elements. The river crossings, necessary in several instances to supplement access opportunities where distances between existing street bridges are too great, occur at three locations: between Meridian and Portland, to improve access between the two sides of Meridian Riverside Park; along the western edge of the I-35 viaduct; and east of the Eastern/MLK Avenue Bridge. The last-mentioned would be desirable as a means of providing optimum views for path users of the working elements of the Eastern/MLK Avenue Dam.

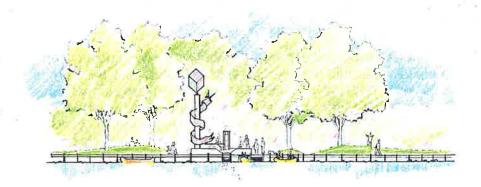
In addition to the proposed free-standing footbridges, it is recommended that future vehicular bridge reconstruction projects, such as those planned for Robinson Avenue and Byers Avenue, accommodate ample and attractive walkways, shielded to a suitable degree from adjacent bridge traffic. (See also **8 Bridge Crests**, below).

### 4 Landmark Docks

Providing focal points of unique visual and recreational interest at key locations along the corridor, the 12 landmark docks of the lake system will offer attractive gathering points for parkland visitors.

Each landmark dock will comprise a geometric wood deck suitable for canoe access and displaying a design unique to its given location. Its landmark feature will be a pylon marker to orient both boaters and path users. A fountain element will serve to aerate the lake water and maintain water quality in the dock's vicinity. It will also create an attractive and restful water element as an interlude on the long path routes taken by walkers and runners. Integrated attractively with the fountain will be a modestly–sized work of art celebrating one or another feature of Oklahoma's Native American or Sooner Settler history. Lastly, a cluster of rest area amenities, including shade trees, benches, a bike rack, trash receptacles, and emergency telephone, will provide corridor users with respite and convenience.





Landmark Dock

### **5** Boating Opportunities

With construction of the low-water dams of the Riverfront Redevelopment Project, a variety of boating opportunities emerges, filling the existing North Canadian River vacuum with significant new public recreation choices.

Because of the relative narrowness of the lakes created by the impoundments, motorized boating is not recommended, excepting the tour boats proposed for the American and Centennial Lakes, and occasional water ski or jet ski exhibitions.

The opportunities are abundant for non-motorized boating, however, in a number of categories:

#### I Canoes and Rowboats

The narrow lakes are ideal for canoeing and rowboating. Landmark docks that are in proximity to parking facilities will afford the best opportunities for canoe-owner access. Rental concessions at several locations will offer opportunities to rent canoes, rowboats, and electric-motorized craft. Portages at the dams will be mapped and signed to inform and attract canoe enthusiasts.

#### I Sculls and Shells

These specialized forms of rowing craft have attracted Americans for generations and have become even more popular with the 1992 Olympic Summer Games. At present only the straight river section along the east edge of Lake Overholser serves shell and scull rowing, but the dammed section of the North Canadian River could serve regional rowing teams more satisfactorily, with a clean reach of a mile extending both upstream and downstream from the proposed boathouse locations just to the east of Pennsylvania Avenue. The inclusion of the boathouse locations in the Plan will hopefully encourage area collegiate institutions to reinforce or initiate rowing programs to take advantage of the new opportunities. In addition, northern state universities could potentially be interested in bringing their rowing teams to Oklahoma City for Fall or Spring training, much as the University of Wisconsin team trains in winter on Town Lake in Austin, Texas.

Potential also exists for interest in both individual sculling and team rowing among Oklahoma City's general public. For this reason, one of the three boathouses recommended is conceived as a community boathouse, accessible to all.

#### ı Kayaks

Kayak enthusiasts residing in Oklahoma City presently travel to Arkansas and Colorado for whitewater opportunities, using the flat waters of area lakes for paddling practice or amusement only. The creation of a whitewater opportunity on the City's North Canadian River, however, would draw local kayakers and create an attraction for old and new kayakers throughout the region. The attraction of a whitewater element within the Riverfront Corridor would also draw large numbers of spectators and media attention, affording an opportunity to home viewers to enjoy the river's new assets.

The whitewater boat chute proposed is located at the May Avenue dam and would be an integral component of that dam. A landmark dock located on the south bank just upstream of the dam would serve as a put-in, while another landmark dock situated several hundred yards downstream of the dam would serve as a take-out point.

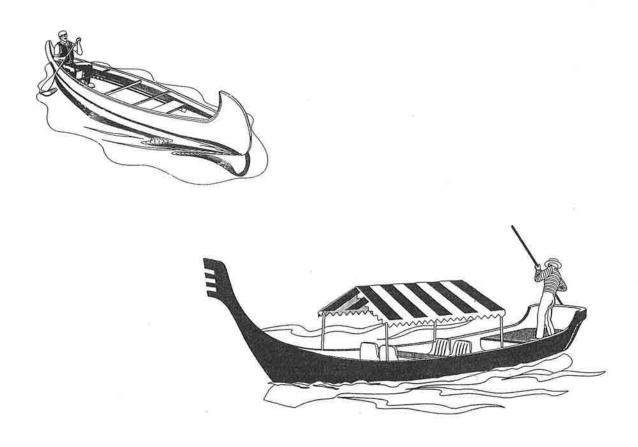
#### I Canal Barges, Tour Boats, and Ferries

Featured as a key attraction of the Myriad/Bricktown Linkage Canal, the canal barges will be designed to navigate both the canal and the North Canadian River's American Lake, which the barges will access through the canal's navigational lock.

Picturesquely designed, perhaps in the fashion of a 19th century American canal packet boat, the barges will be capable of accommodating tables for evening candlelight dining, musicians, and other amenities associated with such successful canal barge venues as the San Antonio River.

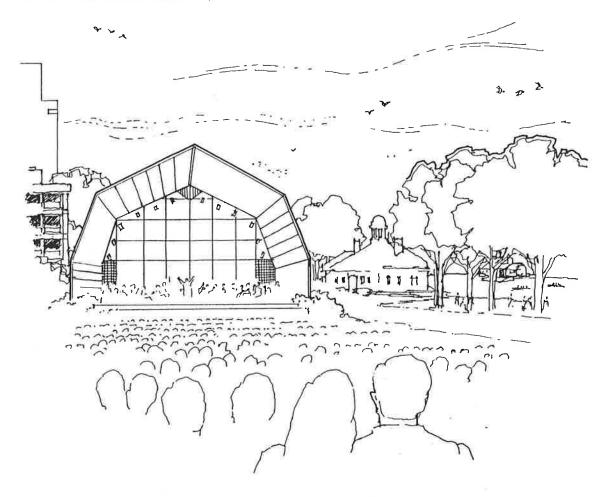
A tour boat, or more than one tour boat if demand warrants, will ply the waters between the river terminus of the canal, the Indian Cultural Center, and the Robinson Avenue dam. A second tour boat operation could exist on Centennial Lake, moving visitors between the Wiley Post Park Landing, the Riverside Landing, the Petroleum/Energy and the Environment Theme Center, and the Penn Meadows concert grounds and other upstream destinations.

The tour boat could potentially be designed as a scaled-down replica of the Lucy Walker, a river steamboat owned in the mid-1800's by Rich Joe Vann, a wealthy, devil-may-care Cherokee. This historic steamboat, which transported many Cherokees down the Trail of Tears, exploded during a steamboat race after Rich Joe ordered the boiler stoked beyond what it could withstand, killing all aboard but the stoker, who jumped. A ferry, possibly in the form of a chain ferry similar to those operated by Cherokees, Creeks and Choctaws on Oklahoma rivers, could also possibly be installed between the new island proposed adjacent to the Indian Cultural Center (ICC) and the River's north shore, as an additional linkage between the Myriad/Bricktown area and the ICC.



### 6 Music/Performance Sites

Music, dance, and drama are ingredients that can complete a successful formula for the Riverfront Corridor. A new greenspace system, however green, cannot be deemed a success unless it can draw large numbers of people to it under enjoyable circumstances. Music and the other performance arts can help achieve that success and draw people to the many other features of the greenspace and river as they visit to attend one or another performance.



Penn Meadows Music Shell

The Plan conceives a number of major and minor sites as suitable for music, dance, and drama. The two major sites are a music/performance stage and lawn to the west of Walker Avenue, just across from Wiley Post Park, and a music/performance stage with shell and lawn at Penn Meadows, to the east of Pennsylvania Avenue. Both may be suitable for both popular and classical music concerts, but the Penn Meadows shell may be more similar to the Hatch Shell in Boston and to other stages of this type. Therefore, it may attract more easily those audiences seeking light classical or classical programs, such as those that may be presented by the Oklahoma City Philharmonic Orchestra and their guests.

Minor sites are to be found in many locations, including the proposed Myriad Convention Center Canal Square, other niches in the canal corridor, Wiley Post Park, Meridian Riverfront Park, and elsewhere. Appropriate rules and regulations should be considered to beneficially manage music and other performances within the new territories.

7 Heraldic Pylons (gateway markers)



Heraldic Pylons (gateway landmarks)
Red-tailed Hawk

• Pronghorn

The Plan conceives locating a pair of heraldic pylons (the term *pylon* is derived from the Greek word for a column at an entrance or for a gateway as such) at each bridge crossing, as well as at each end of the Myriad/Bricktown Linkage Canal.

A number of the world's great river cities have become particularly noted for the special columns and the heraldic emblems that adorn their crests, which mark special places within them. Venice, Italy, has its twin heraldic columns at the entrance to the Piazzetta di San Marco. Stockholm, Sweden, has similar heraldic columns. Cincinnati, Ohio, placed a similar claim to fame when, in the 1980's, it erected a good number of columns along a portion of its riverfront with heraldic emblems in the form of one of the city's early economic planks — the pig. Baton Rouge, Louisiana, is currently considering riverfront master plan recommendations for pylons on its river to represent its "red stick" (baton rouge) eponym.

Oklahoma City could similarly make its mark — and place its signs, so to speak — along the river. There are a number of beautiful creatures of the wild, as well as livestock (but not the pig) which could serve as the heraldic emblems of this great city's past and future: the bison, the prairie dog, the eagle, the red-tailed hawk, the pronghorn antelope, the longhorn steer, the scissor-tail flycatcher, and many others. Bronze replicas of these emblematic animals, as well as replicas of the tools used by Oklahomans over the years: the covered wagon, the plow, the oil derrick, the windmill, could be placed on top of pylons set at "gateway" points along the river and thereby draw attention to both the river and its greenspace, and to the unique creativity of Oklahoma City.

### **8** Bridge Crests

In the course of the study on which this Plan is based, suggestions were made by a number of Oklahoma City residents that new bridges across the North Canadian be embellished in the manner of some of the older bridges — such as the Robinson Avenue Bridge, with its attractive balustrades, and the Byers Avenue Bridge with its ironwork railings. The Plan therefore recommends that future bridge designers execute appropriate artful design of selected elements of any new bridge. In the case of the new Robinson Avenue Bridge, new balustrade type retaining edges similar to those of the existing bridge ought to be considered.

Along the Canal, the new footbridges and vehicular bridges will each have the potential for significantly marking the experience of the visitor and leaving with the visitor a measure of comparison between Oklahoma and other renowned riverfront cities. Each of these bridges should therefore be designed with remarkable artfulness, if not actually as a work of art. As a cost-conscious means of achieving this end, the Plan conceives the visible side of each bridge as being faced with colored panels, graphics or art, and artful inscriptions. In addition, wrought iron "crests", rising overhead above each bridge, could bear an emblem (the bald eagle is shown in the illustration **Section 4**, page 23) meaningful to the visitor and possibly related to the specific location within the river or canal corridor.

# **9** Playfields and Open Area Recreation

Active play areas conceived in the Plan occur in a number of areas within the river corridor.

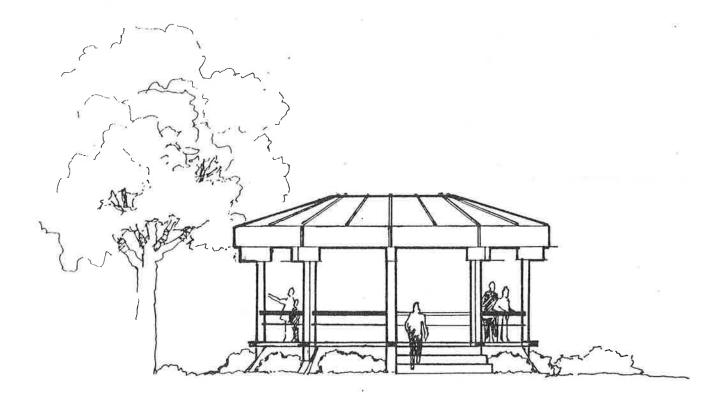
- ▶ Ballfields: one soccer field has been recommended within the corridor to supplement the three existing baseball fields in River Park between Agnew and Pennsylvania Avenues.
- ▶ Basketball Courts: two basketball courts are proposed for Meridian Riverside Park.
- ▶ Neighborhood Playscapes: one playscape is proposed for Meridian Riverside Park. Another would be developed at River Park. Playscape elements are also feasible in other locations and could be planned in advanced phases of design if required. Typical playscapes include, climbing mazes, swings, slides, other play equipment, seating, drinking fountains, shade trees, and other amenities suitable for parent–accompanied young children.
- ► Skateboard Court: one is proposed at Meridian Riverside Park.
- ► Exercise Course: exercise courses could be established along several locations within the Parklands. The estimated costs accounts for two such courses, each half a mile in length.
- ► Frisbee Golf Course: one is proposed at Meridian Riverside Park.
- ▶ 9-Hole Golf Course: a regulation 9-hole golf course is proposed immediately to the south of Meridian Riverside Park, across S.W. 15th Street. Par-designed to attract the interest of executive travelers lodging at the numerous hotels and motels along Meridian and Portland Avenues and elsewhere in the west downtown, the course and clubhouse would be open to the general public. This proposal would be coordinated with the Oklahoma City Golf Commission.

### **10** Amenities

Standard parkland amenities include benches, drinking fountains, bicycle racks, and trash containers. Shelters, some with restrooms, are proposed at several locations. Emergency telephones should be installed strategically at remote sites.

Amenities will not be provided at all points along the 7-mile system, but are recommended at major facilities and other special features.

Viewing decks, roofed and serving as weather shelters, are also proposed for reaches of the corridor where other facilities are non-existent or infrequent.



#### Viewing Deck/Shelter

Lighting is recommended only at select major facilities. Irrigation is recommended only for special plantings at select features.

#### MAJOR FEATURES AND SPECIAL ELEMENTS

Fourteen major features and special elements are proposed for the Riverfront Corridor.

- 1 Meridian Riverfront Park
- 2 Equestrian Park
- 3 May Avenue Dam Whitewater Boat Chute
- 4 Old West Town Street
- 5 Penn Meadows Park
- 6 Eco-arboretum of Oklahoma Plant Life
- 7 Trail Bike Competition Park
- 8 Walker Avenue Meadows
- 9 Wiley Post Park
- 10 Riverside Park
- 11 Lightning Creek Riverfront Park
- 12 Southeast Waterfront
- 13 Indian Cultural Center
- 14 Eastern/MLK Avenue Campgrounds

Six proposed features are partly or entirely outside the Authority's present boundaries:

- 15 Meridian Public Golf Course
- 16 Penn Meadows Mixed-Use Development
- 17 Petroleum/Energy and the Environment Theme Center
- 18 Oklahoma City Downscaled Downtown and Mixed-Use Development
- 19 Myriad/Bricktown River Linkage Canal and Mixed-Use Development
- 20 American Railroading and Canal Building Theme Center

### **1** Meridian Riverfront Park

Announced by the appearance of heraldic pylons (gateway markers) bearing emblems of the river and region, Meridian Riverfront Park will be the "flagship" of the river corridor, fixed at its western terminus. Here, broad, terraced stone landings invite nearby restaurant and hotel guests to indulge in after dinner strolls along the river. The landings will be a favorite tie-up point for canoeists and boaters. The attraction of a bank-full lake in Meridian Avenue's vicinity will catch the eye of every traveler heading in from the airport, every patron and customer visiting area businesses and motels.

Two wind sculptures, one on each side of the river, will accentuate the quality of the river landscape, bear testimony to Oklahoma City's stature as a city of the arts, and underscore the deep intimacy between urban settlement and the natural environment that is uniquely Oklahoman.

Moving easterly along the river one will see the north bank as primarily forested and undisturbed by extensive recreational development. Here, the remnant of a wooded wetland and hundreds of new trees will provide quiet respite for the jogger and nature hiker.

Along the south bank one quickly discovers a different setting. Here, a flooded sand extraction pit becomes a model sailboat pond where children and grown-ups show off their skills much as they do in E. B. White's masterpiece, *Stuart Little*, of the famed model boat sailing pond in New York City's Central Park. One will also see an artfully designed refreshment pavilion flanked by concession stands and amenities. Dozens of people are at ease at tables shaded by colorful cafe umbrellas, while in the broad green beyond, dozens more are demonstrating frisbee skills and general enjoyment. Under wide-crowned shade trees throughout, families and friends open their picnic hampers, and, on the river's edge beyond, park visitors are settling into canoes they have just rented, pushing off from the uniquely designed landmark dock marked by the column with a Meridian insignia. There are basketball courts, a model-car racing course surrounded by dozens of children and adults clutching remote controls, a frisbee golf course, and a playscape sited at the far eastern end of the park in close proximity to the Oak Grove neighborhood.

# **2** Equestrian Park

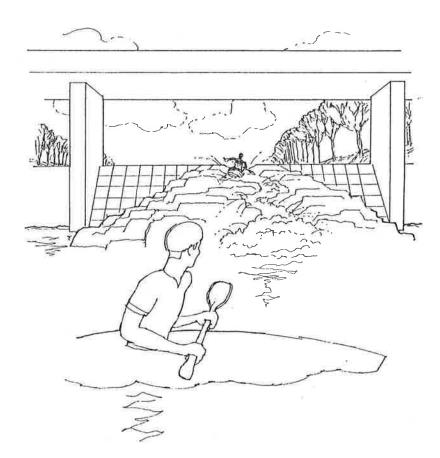
This park is no surprise to us, since it is based on Equestrian Pearl plan which had originally been conceived for this site. Here, at the Portland Avenue end, we find stables and riding school, outdoor arena, horse hotel, hotel for two-legged guests, exercise corrals, ample parking, and other features. These will combine to make this facility a successful regional attraction for the many hundreds of people and horses involved in showing, rodeo, and the other equestrian activities sponsored at the State Fair Park, elsewhere in the region, and at Equestrian Park.

The location of the Park, compactly located on the south bank of the river only, will be a strong draw for many as they drive their horse vans and trailers the short distance from the State Fair Park or the Interstate highway system a stone's throw away.

Many visitors will take advantage of the fine equestrian trail, crossing two drainages by handsome wood bridges, between the Park and the Old West Town Street at the edge of Stockyard City, to visit the Stockyards and enjoy the City's restored historic Main Street.

Development of the Park will be achieved by public/private partnership. Private investment will work under a long-term lease with the Authority.

# **3** May Avenue Dam Whitewater Boat Chute



Whitewater Boat Chute

Riding horseback along the comfortable equestrian trail, we pass another landmark dock, just upstream of the May Avenue Bridge, where several kayakers and whitewater canoeists are putting in with their brightly colored craft. As we pass beneath the bridge, we see two kayakers negotiating the boat chute, which is frothing in whitewater and appears to be, for all intents and purposes, a natural feature of the river. It is, however, a carefully designed assemblage of naturalized cast stone (concrete) forms and rocks that provides the only dedicated whitewater between Colorado and Arkansas.

A safety boom is installed on the river above the dam to prevent unintentional passage through the chute. (Booms are also found at the other dams.) A small operable weir matched to the width of the chute allows shutting down after dark and during other prohibited periods.

### 4 Old West Town Street

Nearing this replica of an Old West town street, we see a locomotive taking on water from a trackside water tower at the head of the street. We take our mounts off the trail to let a stagecoach pass. It and a buckboard following it along are carrying tourists and other visitors keen on traveling old-style between the Stockyards and Equestrian Park. As we enter the Street, we see the same visitors disembark and join a good number of others moving about among the various proprietorships on either side. This is by no means a ghost town: a general store, "saloon" and restaurant, feed (and garden supply) store, Stockyards jerked meat shop, blacksmith and livery, telegraph (and FAX) office, and so on, will call to mind the boom days of a century ago.



Old West Town Street
Visitor Gateway to Stockyards/Equestrian Park

The Old West Town Street would be developed by private investors under a long-term lease with the Authority.

### **5** Penn Meadows Park

Just east of the Pennsylvania Avenue bridge, this major feature stands at a pivotal location within the river corridor. From the river bend, slightly curving rowing courses project to the west and east for about a mile in either direction. Located here are three boathouses, two on the south bank, one on the north. Two are collegiate rowing boathouses, and the third is a community boat house, where a rowing club and the general public share the facilities. We can also see a finely designed landing on the bank between the boathouses where scullers are sharing attention with canoeists and with dozens of visitors enjoying the view of the river, that is, the Centennial Lake.

Not more than a few dozen yards behind the south shore is a lively terrace restaurant that serves the dining and refreshment needs of boaters, park users at large, the shoppers at the private mall behind the public river edge, and the many music lovers who come to attend outdoor concerts at the Penn Meadows Music Shell. The Shell, a first-rate performance stage with a vast seating lawn to its east and southeast, can easily become the pride of the city's music community and a favored summer concert series venue for the Oklahoma City Symphony Orchestra.

A small portion of the proposed music shell and lawn site lies on private property. The reader is referred to **Section 3**, **Features**, **16 Penn Meadows Mixed-Use Development**, for discussion on options for public acquisition of this area.

### 6 Eco-Arboretum of Oklahoma Plant Life

If one would wander along the north bank between the landmark dock east of May Avenue and Exchange Avenue, one would find a remarkable transformation. Where once the land was treeless and remarkable only for its spoil berm, with open views of the adjacent industrial landscape, a wonderful forest with pleasant prairie–like glades and rolling terrain now dips down to touch the river's edge. Planted exclusively with the native trees and other flora of Oklahoma, in plant communities and associations that allow the visitor to learn of and enjoy the knowledge and beauty of the State's greater landscape, the Eco–Arboretum will have numerous interpretive signs. Individual plant identification markers will explain the ecological significance of important species, communities, and associations. For this reason, the term *eco–arboretum* has been coined and applied to this unique made landscape.

A dense screen of Eastern red cedars (*Juniperus virginiana*), deciduous shrubs, and perimeter fencing will augment land grading to cloak the eco-arboretum from adjacent industrial areas.

At the Eco-Arboretum's eastern end, just east of Exchange Avenue, a chain of meadows and edging trees will also be found where outdoor festivals of all kinds take place. This 'festival hollow' will become a highly visible corner of the Riverfront Corridor, serving as a venue for city-wide festivals, as well as other special and neighborhood events.

### Walker Avenue Meadows

On the south bank, just west of Walker, a great lawn, concert stage, concession structures, and parking can be found. This music venue will be a popular one, easily accessed and situated on a scenic point on the south riverbank. The "great lawn" and the canoe rental dock situated at the mouth of Brock Creek will invite general park use as well.

### **8** Trail Bike Competition Park

Here an improved biking area has emerged. Where previously BMX and other trail and mountain bike owners exercised and competed on an open field and the river spoil berm, now a park dedicated to the bike sport exists. The landform has been regraded into seven or so small hills, with a new road access and parking at Western Avenue and bleachers for spectators.

The park's improvements will allow it to continue to serve as the site for the Grand National BMX Championships and as a multi-state attraction.

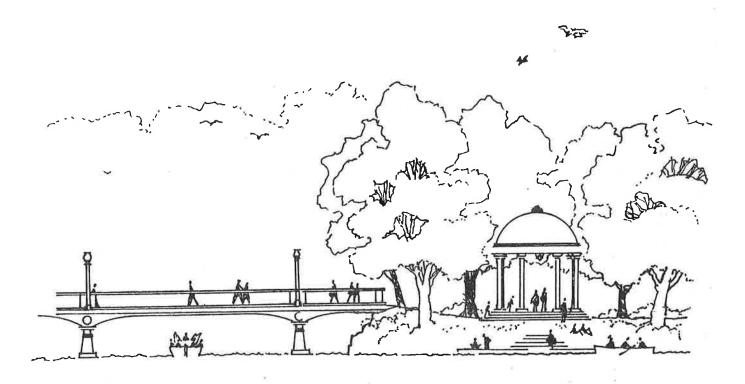
Edge mounds and trees will buffer views and some of the sound of bike activity from other riverfront corridor users. Some measure of maintenance, including light regrading and grass hydromulching, may be required periodically. Funding of maintenance and management of the park, and installation of any night lighting, should become the direct responsibility of the user association responsible for park programs, under lease agreement with the Authority.

# **9** Wiley Post Park

This charismatic, turn-of-the-Century styled park will certainly be seen as the heart of the riverfront corridor, situated at the corridor center and halfway between the central downtown and Capitol Hill. Moreover, it will be a park element with the personality and character that will earn the affection of all of Oklahoma City. Featuring beaux arts and art nouveau architectural elements and embellishments popular in America and Oklahoma a century ago, the park will welcome visitors enjoyment of a beautiful pond with a central islet reached by three foot bridges, "buffalo boats" (which might be compared to the "swan boats" of Boston's famed Public Gardens), and pond edge irises and lilies in great profusion. Flowering plants will be found elsewhere in wonderful displays, nestled among the park's existing trees, most of which will be saved in spite of the extensive changes planned. A grand picnic pavilion will shelter visitors enjoying refreshments offered by concessions in flanking structures. On the northeast corner of the pond, a terrace restaurant will offer more substantial dining possibilities, while picturesque vendor carts can be expected to satisfy visitor palates along the various paved gathering places of the park. Numerous benches and amenities will be found and peripheral parking will allow hundreds of visitors to access the park with convenience.

A small *loggia*, designed in classical style with attractive columns, will provide visitors with shade and rain shelter as well as a point of visual reference near the north edge of the park, where they would cross the shore road to walk to the park's riverside lagoon. Here they will find an embankment with terraced steps leading down to the lagoon and paths leading across footbridges at either end to link across the chain of narrow islets which form the lagoon's outer edge. Small boats, some powered by electric motors, would be available at the embankment.

Sculpture or other three-dimensional art will be found at key vista points within the park — on the pond's islet, at the park's south entrance (at the foot of realigned Harvey Avenue — see **Section 5**, **Linkages**), at the *loggia* and elsewhere, to help orient visitors and to edify them, very much in the manner of the City Beautiful period of a century ago. The central islet on the lagoon's edge will also display a prominent work of art, perhaps a statue of an individual or a group significant in the City's history, that will visually link up with the embankment landing directly across the river on the Riverside Park edge.



Wiley Post Park Pond and Island

The north shore embankment, along the Riverside Park edge, will lie on an axis that moves directly into the center of the new residential and commercial development that can be anticipated on the north edge of Riverside Park. In this way, the parks and their visual assets can help stimulate the emergence of new community growth on their peripheries and lead, reciprocally, to new constituencies of area residents and employees using and supporting the new parkland.

### 10 Riverside Park

The north bank counterpoint to Wiley Post Park, Riverside Park, a narrower section of parkland, will have an equally rejuvenating impact on tourism and neighboring urban areas.

Here, between the park's embankment landing and S.E. 15th Street, visitors will find a remarkable scale model of the North Canadian River/Canadian River system. They will be able to walk across the State of Oklahoma, hop across the flowing waters of the rivers, find their hometown or city laid out to scale with prominent features and arterial streets named, and obtain a sense of the grandness of Oklahoma and the Great Plains regional landscape in which it lies. At the western edge of the model, which will be about 400 feet in length, there will be three–dimensional representations of the New Mexico mountains in which the river headwaters lie. At the eastern edge, a representation of the Arkansas River and its continuing run to the Mississippi River will be seen.

The model, although much smaller in size than a comparable creation on Mud Island in Memphis, Tennessee, will be equally successful in attracting tourists and other visitors. Encircled in part by arcs of cafes, restaurants, and specialty shops, the river system replica will be a much visited and powerfully aesthetic focal point in the Riverfront Corridor.

# **11** Lightning Creek Riverfront Park

Emerging out of old oil field and industrial lands now poorly accessible and abused, this park between Shields Boulevard and SE 15th Street will contribute considerable change of image and value enhancement to the adjoining neighborhoods and commercial edges. With community interest and support, the park will be well visited and should enjoy a measure of safety and security.

### 12 Southeast Waterfront

This area is situated opposite Lightning Creek on the river's north bank, on land presently utilized by the Street Maintenance Division River Yard for materials and equipment storage. The pie-shaped area, bordered by the river and two railroads, is conceived as a new extension of central downtown with high potential for commercial, office, and retail activity. New urban development would meet the river with an urbane waterfront featuring paved public promenades, ample tree plantings and landscaping, fountains and other embellishments, sitting and viewing areas, and night lighting.

To increase the attractiveness of the area for private development, access would need to be strongly upgraded. Santa Fe Avenue widening, improved Santa Fe intersections with S.E. 7th and S.E. 15th Streets, and improvements of these and other area streets would be needed.

The area will be visually improved with the creation of American Lake (the lower lake). Additional planning and urban design efforts will be needed to ensure the immediate environment of the Southeast Waterfront is significantly upgraded and made conducive to investment.

One element of such upgrading is the riverbank landscape shown on *Concept Plan 4*. In the event that the Southeast Waterfront redevelopment opportunities are not exploited, as described above, the parkland could be maintained as presently planned or improved in keeping with its function as a transitional landscape between Riverside Park and the Myriad/Bricktown River Linkage Canal.

### 13 Indian Cultural Center

The Indian Cultural Center (ICC) will be the downstream anchor of the Riverfront Corridor, bringing the cultural and spiritual heritage of Oklahoma native nations and tribes into focus along the river.

The Center, will orient visitors to the facilities, resources, and event s the various Native American nations and tribes offer the public outside of Oklahoma City. Archaeological and historical exhibits, artifact restoration, a research facility, and an educational center will be housed here. Riverside paths and tour boat access on American Lake will supplement public access to the Center. Tour boats, as described earlier, will optionally bring visitors directly from the Myriad Convention Center, Bricktown, and the Downtown via the Canal. A chain ferry might also be operated here.

The Center's canoe making and canoe rental activities will also certainly be of interest to riverfront visitors. These would be accommodated (see *Concept Plan 5*) in the protected and secluded lee of a new island close to the south bank.

At the eastern end of the ICC, near Eastern Avenue, a site is proposed for Native American public art and environmental design. The site would be an appropriate end point for the south bank and a potentially effective message bearer to travelers leaving the Interstate to visit the Center.

# 14 Eastern/MLK Avenue Campgrounds

The RV and tent campground situated on the river's right bank just below Eastern/MLK Avenue will help meet both ICC visitor and general public needs. Its siting away from Eastern/MLK Avenue and from the river will provide some measure of buffering for the campgrounds from vehicular traffic and from hikers and bicyclists along the North Canadian River.

The following major features are those that are partly or entirely outside the present boundaries of the Authority's land:

# 15 Meridian Public Golf Course

Conceived as a daily fee, nine-hole, executive golf course with potential appeal to hotel guests and corporate visitors in the Meridian and Portland hotel/motel and office building areas, this facility could serve as an aid to the economic vitality of the area. It could also be welcomed by Oklahoma Cityans eager for additional golfing options.

In addition to the course, clubhouse, and parking, a number of tennis courts could also be constructed, if the acreage and parking capacity of the facility allow.

The location and layout of the property, as conceived, is shown on *Concept Plan 1*. Other configurations and sizes are possible, of course.

The concept is recommended for consideration and further study by the Authority.

# 16 Penn Meadows Mixed-Use Development

Conceived as sited primarily within the boundaries of a vacated shantytown, where only brick and clay remnants offer a clue to past habitation and economic activity, this mixed-use development would take advantage of the charismatic assets in its vicinity. These would include the Penn Meadows Music Shell and concert lawn, collegiate and general community boathouses, a public landing, terrace restaurant in the adjacent park, and the overall improved and newly scenic Riverfront Corridor.

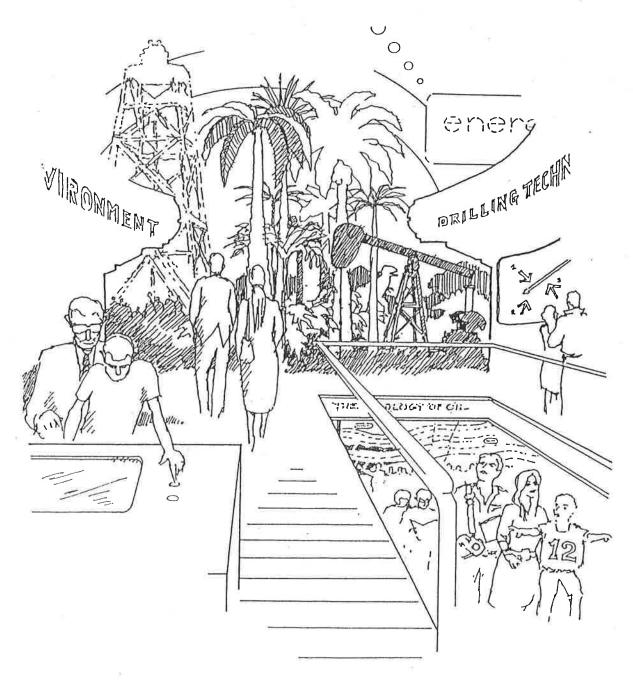
The new development would comprise residential and office towers, lower level shops and dining establishments, and structured parking. It could perhaps incorporate Penn Meadows in its own name, drawing from the area's new park-like character and in turn helping to reinforce the viability of the area's new image.

In addition to the lower level retail, a gallery building could offer works of art for sale, appealing to the frequently visiting lovers of music at the nearby music shell and lawn.

The music shell (or shed) and lawn, as conceived, lies partly on City land, partly on private land. One potential method of acquisition would be the trading of the private land to the City in return for City development of the approach street and utility infrastructure necessary for project development.

## 17 Petroleum/Energy and the Environment Theme Center

The Center will serve as a unique opportunity for the oil industry and the city, as well as the State of Oklahoma, to showcase the industry's accomplishments over this past century. Also demonstrated would be measures for environmental protection and management currently undertaken by American oil companies, and the important issues of energy in the global environment. The Center would be a high-tech, state-of-the-art exhibition complex that could draw world attention.



Petroleum/Energy and the Environment Theme Center

Each aspect of oil/energy and its environmental context could be interpreted and displayed with world-class exhibitry. The Age of the Dinosaurs, why we need to understand geology, the processes of exploration, drilling and well technologies, and the fine science of lubrication could all become outstanding displays. Extraction and collection, transportation, refraction, energy and the future, environmental protection, oil spill containment and mitigation, biological oil digestion, and the measures taken by the industry to protect wildlife habitat are other subjects would could excite the visiting public and improve its understanding of energy in the world today. Oil derricks and pumps could be installed at the site to simulate working conditions; these could include a historic derrick, a modern-day derrick, and a (scaled-down version of a) submersible platform rig. The latter could stand at the edge of the fresh-water estuary proposed in *Concept Plan 3*, where the relationships of oil exploration and the environment could be interpreted. (A fresh water estuary would be feasible; a saline or salt-water environment would not be achievable on the river).

The site conceived for the theme center is adjacent to the Downtown Airpark, east of Western Avenue. Mostly owned by the Airpark, a small portion lies within the City's riverfront property boundary. Under one possibility, the present owners, together with interested investors and the guidance of the oil industry, would develop the theme center. Developed as proposed, the center could become a profitable attraction, increase shuttle traffic through the Downtown Airpark, and serve as a beneficial adjunct to the Riverfront Corridor and central Oklahoma City revitalization.

## 18 Oklahoma City's Downscaled Downtown and Mixed-Use Development

This relatively small section of City-owned land south of the river between Robinson Avenue and Shields Boulevard is separated physically and psychologically from Wiley Post Park. In this somewhat isolated state, therefore, it would benefit from development of positive urban activity that would safeguard and supplement public open space elements. Although other solutions may possibly satisfy the same objectives, the Plan conceives of a unique public open space element that will also be a notable "design event", a model of Oklahoma City's Downtown built to scale —created as a central plaza in the foreground of a mixed commercial-residential development.

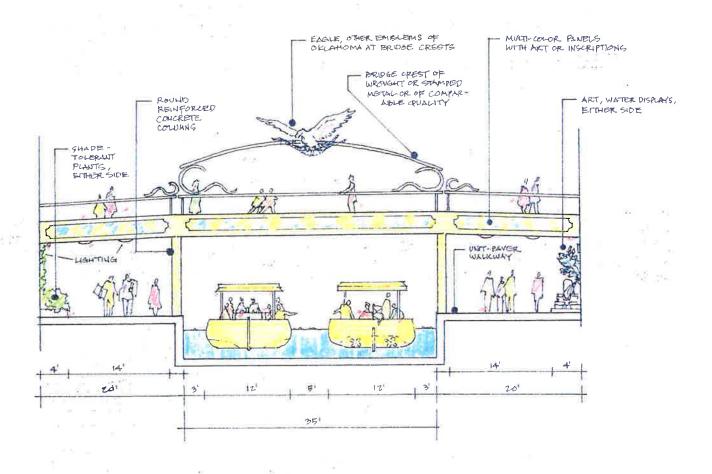
The scale model could be built progressively over the years as money allowed. Each building model could potentially be paid for by the actual building owner, and gas companies, chain store owners, and other entities could fund other appropriate components.

There is an obvious tourist and sightseeing value in this development. Madurodam in the Netherlands is an example of another city where scale models of significant architecture results each year in tens of thousands of visitors and a large tourist income component. The Downscaled Downtown could thus be expected to draw good numbers of visitors, generate revenue, and stimulate and reinforce adjacent development. (See the graphic of this area in the Summary of MAJOR RECOMENDATIONS.

## 19 Myriad/Bricktown River Linkage Canal

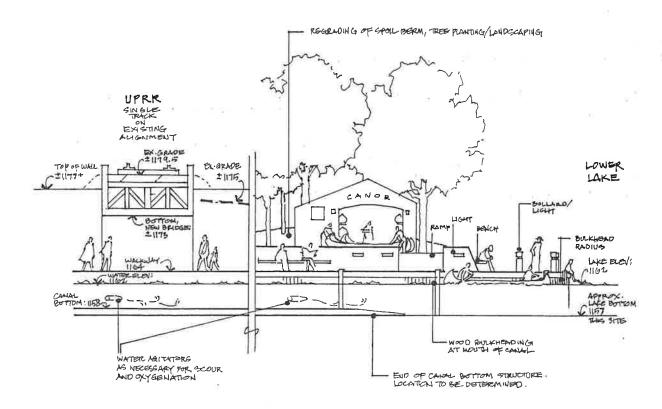
If Wiley Post Park is the heart of the Riverfront Corridor's coming of age and the new Meridian Riverfront Park its future flagship, the Myriad/Bricktown Canal is destined to be its center stage.

Extending from the North Canadian River to an exciting plaza packed with visual delight at the threshold of the Myriad Convention Center, the Canal will be more than mere linkage. The Canal and its proposed Bricktown Festival Market will create a mix of shopping, sightseeing, dining, and environmental attractions designed to reinforce and draw interest to a successful Bricktown revival.



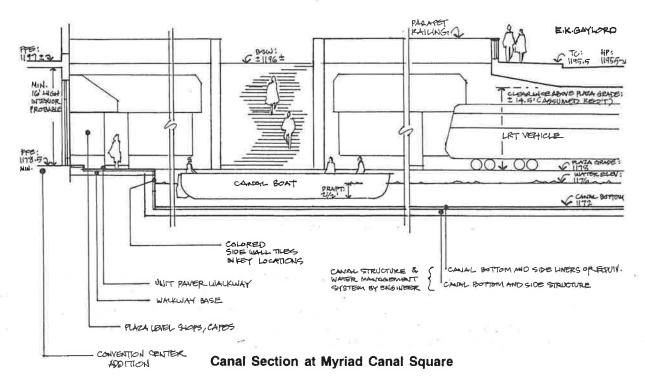
Canal Cross-Section at Typical Crossing Bridge

Recapturing what is for the most part a large acreage of vacant land, the Canal project will transform an urban liability into new areas of opportunity for sightseeing and entertainment related activity. The San Antonio Riverwalk, Ottawa's Rideau Canal, Cambridge, Massachusetts' Lechmere Canal, Indianapolis' Central Canal, and Georgetown's C & O Canal have all proven how effective canal development or restoration can be in revitalizing or creating urban vitality.



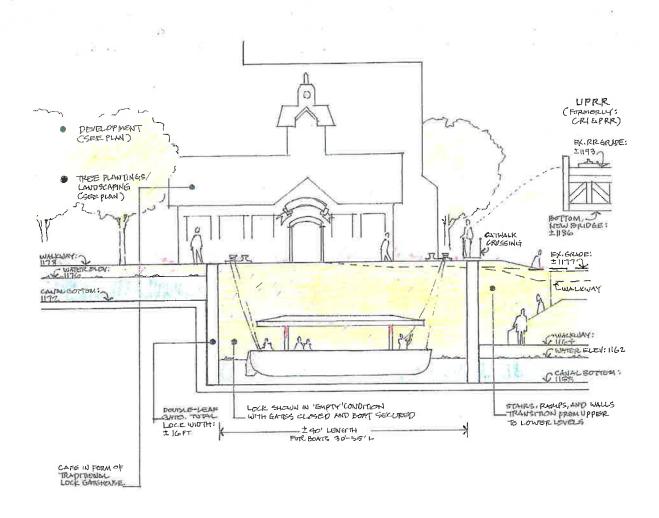
Canal Section, Lower End

A focus of public and tourism interest along the Canal will be its navigation lock, where dining barges, tour boats, and pleasure craft will rise 14 feet from the river's American Lake level to the northern reach of the Canal. At the Lake's edge, they will have passed a unique Tower, comparable to the *campanile*, or bell tower of Venice's Piazza San Marco, which will serve as a landmark for the Canal's entry and lower turning basin.



But it is at its northern terminus where most visitors will find the greatest visual excitement. Moving on a canal barge through new and well-lit underpasses beneath the Atchison Topeka and Santa Fe Railroad embankment and beneath E. K. Gaylord Boulevard, tourists and their Oklahoma City hosts and friends will arrive at a unique water plaza at the doorstep of an expanded wing of the Myriad Convention Center. Here, at Myriad Canal Square, shopping arcades, cafes, and other dining establishments will rim the plaza on two or three levels, while festive flags and banners, beautiful ornamental trees, outstanding floral installations, heraldic pylons, and public art all proclaim the uniqueness and stamp of quality that is Oklahoma City's very own. Such comparable developments as RiverCentre on the San Antonio River have proven how successful this concept can be.

The final run of the Canal, from Bricktown to the Convention Center, will be joined by trackage of the City's planned light rail transit system. This, too, will have its terminus at the new Myriad Canal Square, affording conventioneers and others the chance to travel directly and swiftly between the Myriad and the State Capitol and to other area landmarks.

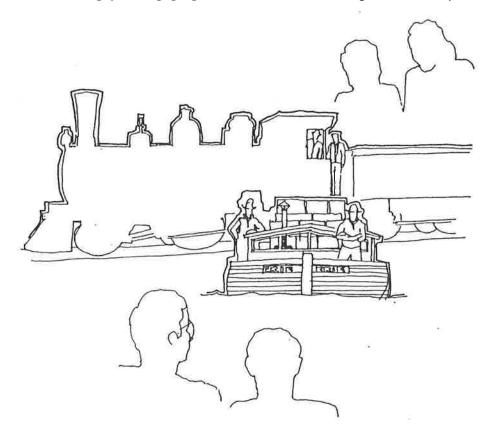


Canal Section at Lock - North Side of Union Pacific Railroad Bridge

## **20** American Railroading/Canal Building Theme Center

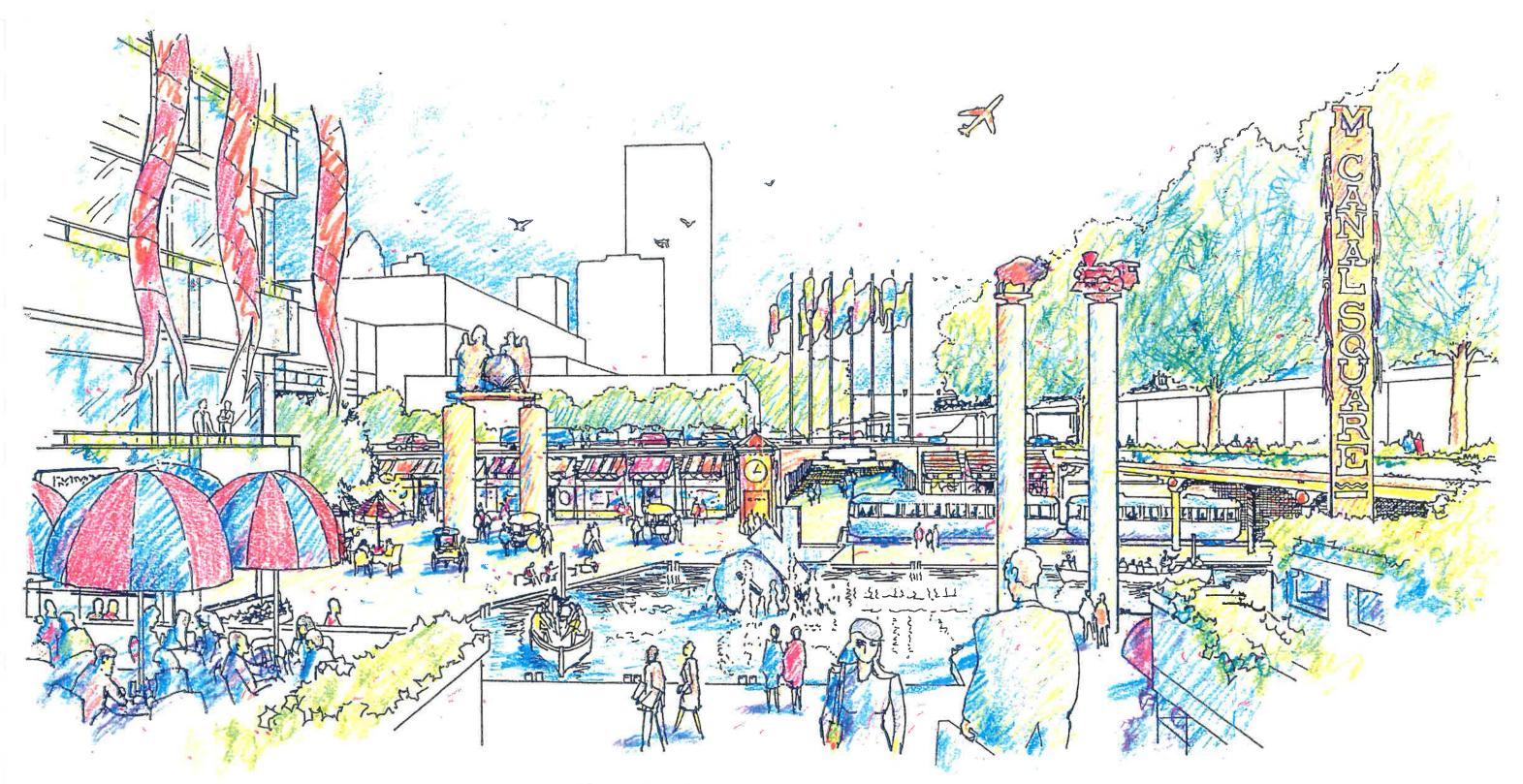
One of the key attractions on the Myriad/Bricktown Canal will be a world of interest all in its own right. Inspired by the one-time presence of five of the nation's great railroads crossing the Canal project area, and by the knowledge that canals preceded railroads in the United States in a critical period of the young nation's development, the American Railroading and Canal Building Theme Center will be a national, not simply an Oklahoman, attraction.

Standing along both the Canal and the Union Pacific Railroad line, (formerly the Chicago, Rock Island, & Pacific), the theme center would take advantage of being within the sound of a train's whistle of three other famed railroads (Atchison, Topeka, & Santa Fe; St. Louis – San Francisco; and Missouri, Kansas, & Texas). Electronic displays could announce the movement of trains, their origins and destinations. A roundhouse within the center could exhibit the insides of a cut-away locomotive, showing how engines are both built and repaired. Operative scale models of trains, from the historic "Rocket" to the diesel of today and the bullet-trains of tomorrow, could entrance visitors. The history of canal building would be displayed three-dimensionally, with a working model of the Myriad/Bricktown Canal, and other models of great canals of the world, including perhaps George Washington's own Powtawmack Canal and the great elevated Llangollen Canal of Wales. An IMAX or similar 3–D film presentation would have wonderful action subjects from which to work: speeding trains crossing yawning gorges and canal locks letting boats sail up mountain slopes.



American Railroading/Canal Building Theme Center

The Center is conceived as being privately developed under a long term lease with the Authority.



Myriad Canal Square

SECTION 5

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## LINKAGES Key to Public Enjoyment and Urban Revitalization

No great urban river parkland can thrive, or survive, without being intimately linked to the neighborhoods and districts through which it passes.

Great crowds of visitors — families and friends, exercisers and casual strollers, youngsters and oldsters, sightseers and old-timers, people from uptown and all over town, people from downtown — all these are the life blood of a living, successful, popular riverfront parkland. This principle of community proximity has been exemplified in Boston, where the adjacent Beacon Hill and Back Bay neighborhoods and busy Boylston and Newbury Streets sustain the vitality and quality of the Charles River Esplanade.

One very important linkage is the Myriad/Bricktown River Linkage Canal, a primary destination of the Riverfront Corridor system. The system's other linkages, unlike the Canal, are not destinations themselves, but streets along which the public can be encouraged to move on foot or by vehicle between major urban locations and the Riverfront Corridor. "Streetscape beautification" is the term most generally applied to the improvement of such streets.

#### RECOMMENDED FOR LINKAGE IMPROVEMENT

## 1 The State Fair Park Linkage

#### I The Setting

The State Fair Park is located between I-44 and May Avenue, bounded by NW 10th and Reno. Moved to this location from NE 10th and Eastern/MLK Avenue in 1957 for the celebration of Oklahoma's semicentennial, its theme of "Arrows to Atoms" recalls how the state moved from Indian Territory into the atomic age within a 50-year period. While its location on the Union Pacific railroad allowed easy shipment of circus animals, the railroad also serves to split the site into two distinct parts. Its southern edge is less than one mile from the river.

#### I Street and Adjacent Land Use

May Avenue is a six-lane divided arterial running north/south along the east side of the State Fair Park with trees and canna bulbs planted in the medians clustered near the two State Fair Park entrances. Reno Avenue is a six-lane divided arterial running east/west along the south side of the State Fair Park. Its grassy median contains a deep drainage ditch.

Between 10th Street and Reno, the east side of May is devoted to small businesses, large-scale industry, and one of the city's first industrial parks, now a vast sea of unused parking lot surrounding a few commercial establishments. Between Reno and the river are the Carver Center TADD, small businesses, I-40, and a small low-income neighborhood. The entire parcel of land bounded by I-40, May, Reno, and a drainage approximately one-half mile west of May was vacated by Leeway Trucking and is now for sale or lease.

#### 1 Opportunities

Because many horse shows are held at the State Fair Park, an equestrian link with the Equestrian Park and the Stockyards has been under consideration for several years.

- Since May and Reno Avenues have heavy vehicular traffic, an equestrian trail along a drainage connecting the State Fair Park with the river, running through culverts beneath Reno and I-40, has been identified as one alternative linkage. Although this drainage runs within the Authority's right-of-way (ROW) from the south side of Reno to the River, it is not a feasible linkage because the culvert inverts beneath Reno and I-40 are inundated and the height of the culvert does not provide adequate headroom for passage of mounted riders. Constructing separate and adequately sized horse/rider underpasses beneath Reno and I-40 would be costly, probably more so than other alternatives. Also, the isolated and difficult to observe alignment near the drainage bottom would create hard to resolve safety and security problems for users.
- A second alternative linkage is to make the Gordon Cooper/May Avenue intersection a horse crossing with traffic signal controls at a height accessible to riders and create an equestrian trail along the east side of May. While the railroad viaduct allows ample room beneath it for equestrians, the I-40 bridge does not. It slopes directly down onto a narrow sidewalk along May Avenue, allowing only single-file pass-through by horses or pedestrians. This sloping bank could be modified by constructing a vertical retaining wall to match that of the railroad viaduct.

The May Avenue bridge cannot accommodate horses. A separate equestrian bridge, possibly constructed downstream of the whitewater boat chute, would be very costly.

■ A third alternative linkage is an equestrian trail along Lime Creek, which exits the State Fair Park at Main Street and empties into the river just west of Pennsylvania Avenue. A horse crossing at the May/General Pershing Boulevard intersection could feature traffic lights with signal controls accessible to mounted riders. However, relocation of Lime Creek from the center of this easement over to one edge in order to build the trail at the other edge may be required. Frequent use of dredging equipment in this narrow area also poses crowding and noise problems for skittish horses. Where Lime Creek leaves Main and enters the Carver neighborhood, the trail would follow the east side of the creek. Crossing Reno beneath the extensive I–40 bridges is very dangerous even with traffic signals; Reno is a very heavily travelled street where drivers would not think about slowing down for mounted riders.

#### I Plan Concepts

For the above reasons, May Avenue should be improved solely as a pedestrian and vehicular streetscape linkage; a horse-and-rider connection does not appear feasible. The easiest solution for an improved State Fair Park/Equestrian Park connection is simply to trailer horses between the two facilities.

May Avenue, between General Pershing and the North Canadian River, should be lined along both sides with a double row of shade trees. Creating a linear progression to the river, they would articulate the importance of May Avenue as a vehicular linkage between State Fair Park and the river. At the intersection of General Pershing with May Avenue, the photogenic view of the city skyline above Lime Creek should be preserved by omitting ROW trees except for a planned enframement. The median should be enhanced with appropriate City floral plantings. At the river, May Avenue is accented with heraldic pylons serving as gateway markers.

## **2** Linkage between Capitol Hill and River--South Harvey Avenue

#### I The Setting

South Harvey Avenue is a second potential linkage between SW 29th and Wiley Post Park. It is free from streetscape deterioration problems and offers a surprisingly clear vista of the downtown Oklahoma City skyline when traveling toward Wiley Post Park.

#### Street and Adjacent Land Use Quality

- South Harvey is already a planted street between SW Grand and SW 29th Street.
- Between SW 29th and SW 25th Streets, South Harvey does not continue as a tree-planted boulevard. Streetscape features homes and a junior high school.
- Between SW 25th and the alley north of SW 23rd, South Harvey features a wide right-of-way (ROW). The streetscape is neat and quiet, with homes, cottage industries, and a well-kept but abandoned hospital featuring decorative brickwork and Art Deco trim. Here the street features a rare vista of the downtown Oklahoma City skyline.
- Between 21st Street and the alley north of 23rd Street, a steep terrace on the east side of the street prevents tree planting unless a short retaining wall is built. The west side allows ample planting space and features ornamental landscaping in front of a high-rise senior citizens' home.
- Both vista and entry into Wiley Post Park are blocked at SW 21st Street by a metal building, used as a trucking office and a film transit company. The location of this large trucking concern is an incompatible intrusion into the residential neighborhood edge and the park periphery. If future land use changes would allow, beneficial views and direct access into the park could become feasible.

#### Opportunities

At 21st Street, given future changes in land use, South Harvey could be extended straight into Wiley Post Park, eliminating the existing dog-leg. With this transformation, the vista of the City skyline and the view into the park from Capitol Hill would be reclaimed. The Park would become a welcoming sight at the foot of South Harvey; a visible destination and investment incentive for Capitol Hill.

#### Plan Concept

Because of its Oklahoma City downtown skyline vista, ample right-of-way, and nearly direct access into Wiley Post Park, Harvey Avenue should be improved as a pedestrian and vehicular streetscape linkage. Between SW 29th and SW 25th Streets, South Harvey could be continued as a tree-planted boulevard, tree-lined on both sides of the street. Between SW 25th and the alley north of SW 23rd, South Harvey features a wide right-of-way (ROW) with ample space for tree plantings. Its vista of the downtown Oklahoma City skyline should be preserved; therefore smaller trees should be strategically located along the east side of the street so their canopies do not obstruct this vista. The west side of the street should be fully treed between SW 25th and Wiley Post Park.

## 3 Myriad/Bricktown River Canal Linkage

#### The Setting

The linkage between the Myriad Convention Center/Bricktown area and the North Canadian River is a major feature in the Riverfront Corridor Plan (see Section 4, Feature 19). The development of this linkage will aid in the continued viability and growth of the Bricktown area and the Central Business District (CBD). (Bricktown is a booming warehouse redevelopment area just east of the CBD core). Conceptual Plans show the canal beginning on a plaza directly south of the Myriad Convention Center, extending east through the southern portion of Bricktown and flowing south to tie to the North Canadian River. Other options encourage the canal to extend (through vehicular and pedestrian routes) further north through Bricktown. The canal is envisioned to be a very open and "people oriented" space providing building sites for private development along either side of the canal. Boat docks, fountains and other amenities will be featured along the canal leading south to tie into the River.

#### I Street and Adjacent Land Use

Reno Avenue is a major arterial which runs east to west along the plaza area. Old rail and paper warehouses, and storage yards dot Reno in this area. The canal is proposed to be located approximately one-half mile east of Santa Fe Avenue, next to the Santa Fe industrial area. Outside storage, an active cottonseed oil processing plant, and salvage areas are located in this area. The property on which the canal would be located is currently vacant and overgrown. Railroads cross the site; Interstate-40 crosses over the area; and Byers Avenue is located to the east of the canal area.

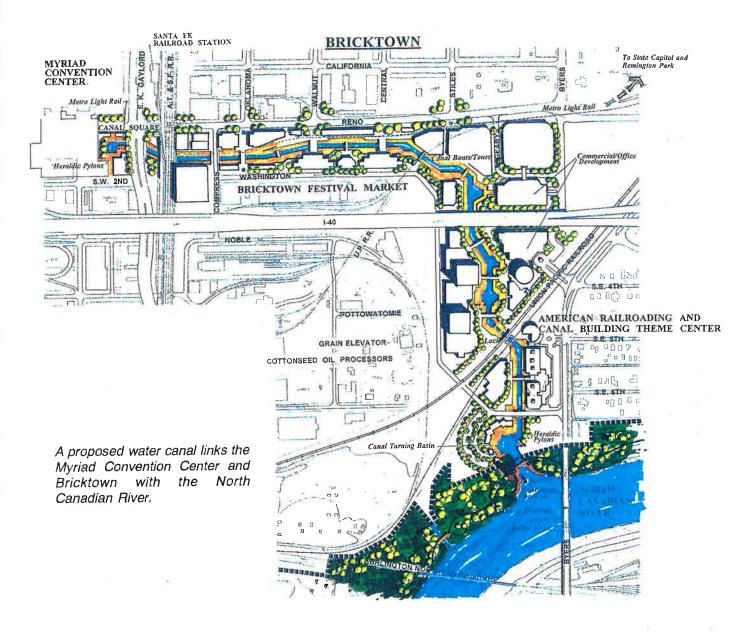
#### Opportunities

The opportunities are abundant for enhancement of the river, providing a festival marketplace, and transforming an urban liability into new areas for sightseeing and entertainment activity. The canal will provide a much needed linkage direct to the heart of Oklahoma City – the downtown. (see **Section 4**, Feature 19 for more complete details on the canal).

#### I Plan Concept

Because of its great importance to the Riverfront Corridor Plan, the canal linkage should be improved with the features proposed. **Section 4**, Feature 19 gives an indepth review of proposed improvements related to the canal.

As can be noted in the illustration on the following page, the canal will provide many opportunities for public/private partnership. As a focus of tourism and public interest, the canal's linkage to the river, and will also provide a linkage to the site of the Indian Cultural Center to the east. Tour boats or rental canoes will use this linkage to meander between the exhibits of Native American heritage to the shopping arcades, dining opportunities and festival atmosphere of the canal and Bricktown.



### 4 Other Access

Other access improvements of the corridor would be needed. Of note, the new SE 15th Street access ramp onto northbound I-35 could be lengthened into an I-35 frontage road accessing the Indian Cultural Center on the west.

In addition to the priority projects discussed above, the following streets should be considered by the City as deserving streetscape beautification and be improved at suitable funding levels.

- Byers Avenue: a street that can become increasingly important as a linkage when area uses intensify in the future, particularly when the canal is in place.
- Eastern/MLK Avenue: primary access route to the Indian Cultural Center.
- Exchange Avenue: an important connector to the Farmers' Market and Stockyards City.
- Martin Luther King Avenue: connector between Remington Park, Kirkpatrick Center, Lincoln Park Zoo, several museums (north of I-40) and the Indian Cultural Center.

#### LINKAGES RECOMMENDED LONG-RANGE

## **1** Robinson Avenue (North of the river)

For shuttling between the downtown/Myriad Convention Center and the river, Robinson Avenue (designated one-way south) is an apparent natural linkage. Its central location and adjacency to the Convention Center and Myriad Gardens enables the visitor to find easy orientation to the riverfront. However, for most of its length, Robinson is presently a narrow right-of-way edged by sidewalks of minimum widths, visual clutter, and automotive and other unsightly land uses. For these reasons, Robinson Avenue (North) is not recommended for linkage streetscape improvements at this time. However, comprehensive planning for the Robinson Avenue corridor and the district south of I-40 should be undertaken. With new land uses and street widening, Robinson Avenue in the future could become a vital and attractive linkage to the riverfront and the district as a whole.

## **2** Robinson Avenue (South of the river)

Between Wiley Post Park and Capitol Hill at SW 25th Street, the Robinson Avenue streetscape has become quite deteriorated. The street's visual and economic condition does not encourage river corridor visitors to continue south to Capitol Hill. Comprehensive planning for the street corridor and Capitol Hill are recommended. With future reinvestment in and redevelopment of the area, the emergence of an attractive Robinson Avenue (South) linkage with the river would become feasible and desirable. Street and landscaping improvements should be considered at that time.

## **3** Walker Avenue (North of the river)

North of the river, Walker is a two-way, four-lane arterial until it intersects with SW 3rd Street near the I-40 viaducts. There, it becomes a one-way, four-lane street heading north. Because of its lane capacity, it is an acceptable vehicular route from the river to the downtown. However, its sidewalks are narrow, and fronting land uses are, as a rule, industrial or wholesale commercial. The street also has minimal landscaping and few attractive buildings. Comprehensive planning for the street's corridor and this area could, however, lead to new development, with which future streetscape beautification would be compatible. It is recommended that such a comprehensive study be undertaken to push for revitalization of the area.

## **4** Walker Avenue (South of the river)

South of the river, Walker is a two-way four-lane arterial. It makes a very strong connection between the river and the business district of Capitol Hill, which runs perpendicular to Walker along SW 25th (Commerce Street). Thus, Walker Avenue functions well as a vehicular linkage south of the river. However, as in the case of Walker Avenue (North), sidewalks are narrow and in disrepair. There are few retail or other uses which could appeal to the river visitor and tourist. Streetscape beautification would therefore not be cost-effective at this time.

In the future, as land use and ownership change, the City and abutting owners could bring about positive streetscape changes. Serious consideration should be given to the broadening of sidewalks, tree plantings, and general pedestrian improvement and beautification of these two important approaches.

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#### **IMPLEMENTATION**

The Authority will need to consider implementation of the Riverfront Corridor Plan at several levels:

- I plan approval for areas within and outside the Authority's jurisdiction
- prioritization and phasing of Plan elements
- funding
- I recommendations on adjacent area revitalization and streetscape improvement

#### PLAN APPROVAL

#### Areas Within the Authority's Jurisdiction

The first step in Plan implementation will be consideration by the Authority for approval of Plan areas which are within the Authority's present administrative jurisdiction, that is, in City title.

The areas of the Plan that are presently in City title and within the Authority's administrative jurisdiction are estimated to be approximately 90 percent of total Plan lands.

#### Areas Outside the Authority's Jurisdiction

A number of significant Plan components will require either the acquisition of some land to become reality or the partnership with private developers:

#### I Meridian Riverfront Park

The extent of acreage in City title has not been determined at this time: some acreage may need to be acquired.

#### Meridian Public Golf Course

If constructed, acquisition of approximately 45 acres would be needed, with land bordering SW 15th Street on the north and Portland Avenue on the east.

#### I Penn Meadows Park

Acquisition of approximately 31 acres is recommended. This is a portion of the masonry storage area that will be needed for the Penn Meadows Music Shell and Lawn. One means of acquisition would be the trading of this private land to the City in exchange for City development of the approach street and utility infrastructure necessary for development of the remaining private property (the proposed Penn Meadows Mixed–Use Development).

The second strategy for implementation would be the creation of a private/public partnership, under which the private land would become available for the Music Shell and Lawn under a perpetual lease to the City. Private investment and City capital improvements would be coordinated to develop both Penn Meadows Park and the Penn Meadows Mixed—Use Development. The increase in tax base at the project and its vicinity would eventually recapture the City's investment.

#### Myriad/Bricktown River Linkage Canal:

Acquisition of approximately 24 acres in fee title is recommended:

- ▶ Union Pacific Railroad property at Reno Avenue
- ► Other private land
- ► An easement underneath the Atchison, Topeka and Santa Fe Railroad embankment may be needed. Total area of this easement is approximately 0.2 acres

No easement beneath city streets is believed to be necessary if the Canal and adjoining walkways are developed by the City proper. In the event a public corporation or other independent authority is the Canal developer, easements beneath City or State rights-of-way (ROW) would need to be secured by that entity.

Approvals by the Oklahoma Department of Transportation and the U.S. Department of Transportation for Canal development beneath the I-40 elevated expressway would be needed.

Three sanitary sewer lines aligned in a more or less east-west direction presently cross the proposed Canal alignment. Engineering of solutions for the modification of these crossings would be required. Other utilities will be crossed, but most of these are within the E. K. Gaylord ROW. If the major utilities are within six feet of street grade at this point, it is believed that no design difficulty would be encountered in bringing both the Canal and Light Rail Vehicles into the proposed Myriad Canal Square beneath the thoroughfare and its utilities.

#### PRIORITIZATION AND PHASING OF PLAN ELEMENTS

The following Priority Phasing Plan, along with preliminary cost estimates, is based on the current assumption that the Eastern Avenue dam (Lower dam) will be developed first, with the Robinson Avenue dam and May Avenue dam developed afterwards, in sequence. Refer to the development proposals identified in the six *Concept Plans* at the end of this report to locate improvements. As noted in the *Concept Plans*, there are various passive recreational and institutional proposals sited along the river parkway. There is a great amount of flexibility in the exact location of several of the proposed uses. For example, the "concert shell" depicted on the South side of the River on *Concept Plan 3* may also be appropriate on the north side of the river, in the area labeled "Seasonal Festivals".

- Priority 1: Dam No. 1, related infrastructure (including bank improvements, dredging and sediment control, utility relocation, trail and bikeway systems, landscaping, etc.) and required infrastructure improvements to support the Oklahoma Indian Cultural Center site.
- Priority 1A: Myriad/Bricktown Linkage including the canal and locks, infrastructure along the canal (utility relocation, sidewalks, landscaping, trails, etc.).
- Priority 2: Dam No. 2 and related infrastructure improvements (including bank improvements, dredging and sediment control, utility relocation, trail and bikeway systems, landscaping, etc.), Wiley Post Park improvements, docks, Old West Town street (Old West Town is proposed as private investment), soccer fields and the Eco-Arboretum, concert stage and riverfront landing.
- Priority 3: Dam No. 3 and related infrastructure improvements (including bank improvements, dredging and sediment control, utility relocation, trail and bikeway systems, landscaping, etc.), architectural features such as wind sculptures and heraldic pylons, basketball courts, bleachers and playscape at Meridian Riverside Park, docks and viewing decks and the May Avenue Linkage. The proposed golf course and tennis center are proposed as private investment.

#### **Priority 1**

The Lower Dam (Dam No. 1), located at Eastern Avenue Bridge, and related infrastructure is identified as the first priority area. Due to the extreme deteriorated condition of the existing Eastern Avenue Bridge, final plans are currently in progress for the its replacement. The dam, proposed to be structurally integrated into the new bridge, is set at an elevation of 1162 feet. The water behind the dam will be approximately 12.5 feet in depth. The area west of Dam No. 1, south of the river, is the location of the proposed Oklahoma Indian Cultural Center. The Oklahoma City Riverfront Redevelopment Authority (OCRRA or Authority) and the Oklahoma City Council recently approved a lease for this property with the Oklahoma Institute of Indian Heritage (OIIH). An environmental study recently completed indicates the site has minimal environmental problems with some oil related clean—up necessary. Infrastructure improvements include landscaping, trails, river bank improvement, internal streets and utility improvements.

•	Dam No. 1, structure (tied to new Eastern Bridge),	\$7,000,000.00
	Bank Improvements, Dredging & Sediment Control	on activities
•	Oklahoma Institute of Indian Heritage Site*	1,750,000.00
	Relocation of Utilities, Infrastructure, etc.	11 3 × 0
	Trails, Landscaping	1,630,000.00
	Parking, Docks, Lighting, Viewing Decks	1,037,000.00
•	Miscellaneous Improvements and Contingency	1,183,000.00
	<u> </u>	

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Sub 12,600,000.00

Private improvements not included.

#### **Priority 1A**

The Myriad/Bricktown Linkage Canal is a major feature related to the Lower Dam (Dam No. 1). The development of this linkage will aid in the continued viability and growth of the Bricktown area and the Central Business District (see Section 5, Linkages). The Concept Plan shows the canal beginning on a plaza directly south of the Myriad Convention Center, extending east through the southern portion of Bricktown and flowing south to tie to the North Canadian River. Other options encourage the canal to extend (through vehicular and pedestrian routes) further north through Bricktown. The canal is envisioned to be a very open and "people oriented" space providing building sites for private development along either side of the canal. Boat docks, fountains and other amenities will be featured along the canal leading south to tie into the River.

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Myriad/Bricktown River Linkage Canal

\$9,000,000.00

Private investment not included.

#### **Priority 2**

The Middle Dam, or Dam No. 2, is located at and is structurally integrated into the new Robinson Street Bridge. Set at an elevation of 1172 feet, the water behind the dam will pool to a depth of approximately 13 feet. Major features associated with the Middle Dam include: intensive improvements to Wiley Post Park (see graphic of Wiley Post area in the **Preface**), private development sites available both north and south of the river, an OKC Downtown Replica park, canoe docks, boat houses and a natural amphitheater. Additional parking areas, trails, shelters and viewing areas will make the river more accessible to the public. An "Old West Town Street" is proposed to be situated near Stockyards City. The western theme street would be a visitors' gateway to the Stockyards and to the Equestrian Park at Portland Avenue.

Many of the features proposed are anticipated to be developed privately. Many of the boat docks, concession features, and possible the "Old West Town Street" may be built and run for profit through a private lease with the Authority.

A primary feature of the riverfront project is the landscaping and trail system. Much of the area is proposed to be planted in native trees and grasses adding to the natural beauty of the area, turning it back to a more natural state. The Corps of Engineers is currently reviewing a study which identifies how the Corps might participate in an effort to return the banks of the river to a more natural state. Extensive damage was done to the wildlife habitat and natural vegetation when the river was widened in the 1950's for flood control.

•	Dam No. 2 (Robinson Street Bridge), Storm Sewer,	\$13,000,000.00
	Bank Improvements, Dredging & Sediment Control	
•	Tilley I dot I will improve morne	2,095,000.00
•	Trails and Landscaping	1,820,000.00
•	Parking, Docks, Lighting, Viewing Decks	502,000.00
•	Roadway Improvements to serve Parking	263,000.00
•	Street Improvement east of Agnew/Riverside Park	190,000.00
•	New Street w/parking east of Pennsylvania	161,000.00
•	Street Improvements at May and SW 9th	125,000.00
•	Roadway and Paving at Old West Town*	76,000.00
•	Miscellaneous Improvements and Contingency	2,283,000.00

Sub \$20,515,000.00

The Petroleum World Theme Center is a proposed private/institutional investment under leases with the Trust and/or private land owner. Costs estimates not included in this report.

<sup>\*</sup>Private improvements not included.

#### **Priority 3**

The Upper Dam (Dam No. 3), located just East of May Avenue, is listed as the third priority in the funding sequence. This dam is set at an elevation of 1184 feet and the water behind the dam will pool to a depth of approximately 14 feet. Major features associated with the this dam include: an Equestrian Park with an arena and hotel, public play areas with picnic facilities, basketball courts, and frisbee golf, a public golf course and tennis courts (property to be acquired), private restaurant sites, pavilions and boat docks.

The Authority controls very little property west of Portland. Therefore, many of the proposed developments are located on property which would have to be acquired for improvements such as the proposed public golf course and tennis center.

•	Dam No. 3 (East of May Avenue), Bank		\$6,500,000.00
•	Improvements, Drainage & Sediment Control Trails and Landscaping Parking, Docks, Lighting, Viewing Decks May Avenue Linkage Miscellaneous Improvements and Contingency		1,120,000.00 495,000.00 328,000.00 1,234,000.00
		Sub	\$9.677.000.00

\*Cost estimates for private investment such as restaurants are not included in this report.

\*\*\*9 Hole Course and Tennis Courts (Land and Facilities) are not included in costs estimates.

Investment may be Public and/or Private interests.

#### FUNDING REQUIREMENTS AND RESOURCES

The budget required for Plan implementation, as detailed above, may be summarized by Phase:

► Priority 1	\$12,600,000.00
► Priority 1A	9,000,000.00
► Priority 2	20,515,000.00
► Priority 3	9,677,000.00

Total \$51,792,000.00

As part of the implementation process, possible funding sources for various public improvements are continuously being identified and pursued. As each phase within the scope of the riverfront project is begun, viable funding opportunities will be identified as there are numerous ways to fund the improvements proposed in this study, not all appropriate or viable. Many funding opportunities involve governmental grants, loans or assistance. Others involve private/public cooperation and partnership. The following identifies several of the funding and implementation mechanisms available with a general description.

#### Oklahoma City Riverfront Redevelopment Authority

The major burden for development of the Riverfront Corridor will fall upon the Authority, which is structured for this purpose. The Authority may raise funds for development of the riverfront in a number of ways. It may receive grants and loans, issue bonds, and raise revenue through leases and concession fees. The Authority's funding strategy and schedule will be vital to the financing of the Riverfront Redevelopment Program.

#### Federal Assistance

Some funding for landscape and recreation elements associated with the dams and lake shoreline retention or erosion control may possibly be funded by the U. S. Army Corps of Engineers with Congressional authorization, in conjunction with funding for the dams. The Corps of Engineers, with the City, might favorably consider assistance for the construction of the Dam Operations Pavilion.

Some funding for landmark dock fountains (aeration devices to maintain water quality in near Lake areas) may be considered for demonstration grant funding by the Environmental Protection Agency.

#### State Assistance

Funding for reconstruction of the Byers Avenue Bridge and the Eastern Avenue Bridge has been authorized for the Oklahoma Department of Transportation. The Authority should review funding avenues for aesthetically appropriate bridge balustrades, railings, and crests and confer with the Oklahoma Department of Transportation on their inclusion in bridge design.

#### Local Assistance

The City's Capital Improvements Program, funded by several sources under approval of the City Council, is a possible framework of implementation for many elements, including the construction, improvement, or relocation of streets, parking areas, and utility infrastructure.

The sale or exchange of lands may be a viable method to acquire property. Two areas presently owned by the City would support Plan implementation more effectively if they were sold to private interests agreeable to pursuing development of these sites consistent with the Plan and with Scenic River Overlay District requirements:

- A small area (± 5 acres) between Robinson Avenue and Shields Boulevard, which would be suitably developed in commercial and office use, with public related uses, including restaurants, on the ground floor. This mix would draw appropriate public activity to the sites surrounding the proposed Oklahoma City Downscaled Downtown.
- An area (± 31 acres) bordered by Santa Fe Avenue on the west and a boundary near the Burlington Northern Railroad on the north, presently utilized in large part by the City of Oklahoma City Street Maintenance Division River Yard for materials and equipment storage. This land could more suitably be used for commercial and office use, with sale proceeds and new tax revenue generated by private development. Development would be drawn to the site by the development of the riverfront parklands and Myriad/Bricktown Canal, immediately adjacent to this area. Any land transaction should require adherence by the new owners to Scenic River Overlay District regulations and specific urban design and river landscape interface guidelines prepared prior to the transaction.

#### **Revenue from Leases and Concessions**

The following are recommendable for the riverfront parklands system at this juncture:

#### I Leases

Long term ground leases for the development of suitable elements, such as one or both of the music shed/stage facilities, collegiate boathouses, and in-the-park restaurants, should be considered.

#### I Concessions

Licenses for the operation of certain Riverfront Parkland elements should be considered. These would include: refreshment stands, canoe/bicycle rental facilities, tour boat operations, community boat house use, and other elements suitable for licensing.

#### I Fees

Fees may be directly assessed in a number of instances: The City may receive a certain fee or percentage of revenue from the operation of its future Light Rail Transit line along the Canal to Myriad Canal Square. Certain user fees could also be assessed, but such fees should be carefully weighed with City policies for free public access to riverfront parkland. Such user fees might be changed, for example, for attendance at the music venues.

#### ADJACENT AREA REVITALIZATION AND STREETSCAPE IMPROVEMENTS

The non-public elements of the Riverfront Redevelopment Project Plan, of which the Riverfront Corridor Plan is the armature, are as vital to the success of area revitalization adjacent to the river corridor as it is important to the emergence of the riverfront parklands as a desirable place to visit and enjoy, a safe and accessible oasis in the city's center.

#### **Theme Centers**

The two centers proposed in the Plan (American Railroading and Canal Building Theme Center, Petroleum/Energy and the Environment Theme Center) are magnet attractions that will have highly beneficial interfaces with the riverfront parklands and the Riverfront Corridor as a whole. Compatible commercial and restaurant development can be expected in their vicinity. Security provisions for the centers will have positive influences on the Canal and riverfront parkland at their edges.

#### Canal Corridor

The Canal's public right-of-way concept is a basic key to the revitalization of the entire Canal corridor and the vacant and under-utilized lands southeast of Downtown. It is modeled after the highly successful San Antonio Riverwalk corridor, in which the City of San Antonio's right-of-way encompasses the riverbanks, walkways, footbridges, and the several public areas adjoining the Riverwalk. All private property abutting this central armature is subject to both zoning regulations and explicit urban design and use guidelines. Private owners, under the guidelines, are encouraged to create their own plazas, open spaces, and public-oriented uses, such as restaurants, hotel lower lobbies, cafes, and retail venues, that can attract people and thus benefit the public armature of the Riverwalk, which in turn benefits them.

The armature of the canal, canal walks, and other public spaces of the Myriad/Bricktown Canal will average 80 feet in width. Other areas would be privately developed under appropriate Oklahoma City zoning regulations and a set of urban design and use guidelines specifically developed for the Canal.

The Canal will be developed in several phases with the public improvements being constructed first. Private improvements including a hotel, restaurants, and other commercial and office space would be completed thereafter.

Canal Square, west of E. K. Gaylord and south of the Myriad Convention Center, may be built in advance of Myriad Convention Center expansion, but would be coordinated with advance planning for the expansion by the center directorate. The Square and the proposed Bricktown Festival Market should become highly visited urban spaces, will benefit existing Bricktown business, and will serve as a foundation for interest and investment in the Canal corridor. Later phases may include streetscape improvements between Reno and Bricktown proper, along Oklahoma and other north-south streets.

#### Riverside District and Southeast Waterfront

The Riverside District is located north of the river and generally between Shields Boulevard and Shartel Avenue. The Southeast Waterfront is the area located east of the Santa Fe Tracks, north of the river. Comprehensive revitalization planning for these two areas is highly recommended. Their emergence in the future as dynamic and attractive extensions of the downtown would be highly effective in reinforcing the downtown as well as the Riverfront Redevelopment program overall.

The Authority should consider recommending to the City an appropriate comprehensive community planning, street and traffic, and economic redevelopment study be undertaken for the two areas.

The emphasis recommended for the Riverside district should be directed to community revitalization in the broadest sense. Riverside's future character will be most compatible with riverfront parkland land use if quality community fabric is restored with highly improved streets and sidewalks, lighting, and police surveillance. New commercial and office uses, compatible with quality neighborhood development, will be indispensable. Nodes of restaurant and special retail uses would be expected on both the downtown and riverfront edges.

If quality revitalization is achieved, positive support for the riverfront parklands should be expected from within the Riverside community.

#### **Penn Meadows**

It is recommended that the Authority and the Department of Planning jointly undertake a comprehensive economic, traffic, and community study of the Penn Meadows area and explore the potential for coordinated public and private revitalization, consistent with the Riverfront Redevelopment Plan.

#### Streetscape Improvements/River Linkages

It is recommended that the Authority undertake jointly with the Department of Neighborhood and Community Planning and the Department of Public Works detailed planning for streetscape/linkage improvements along May Avenue between the State Fair Park and the river, and along South Harvey Avenue between SW 25th Street and Wiley Post Park.

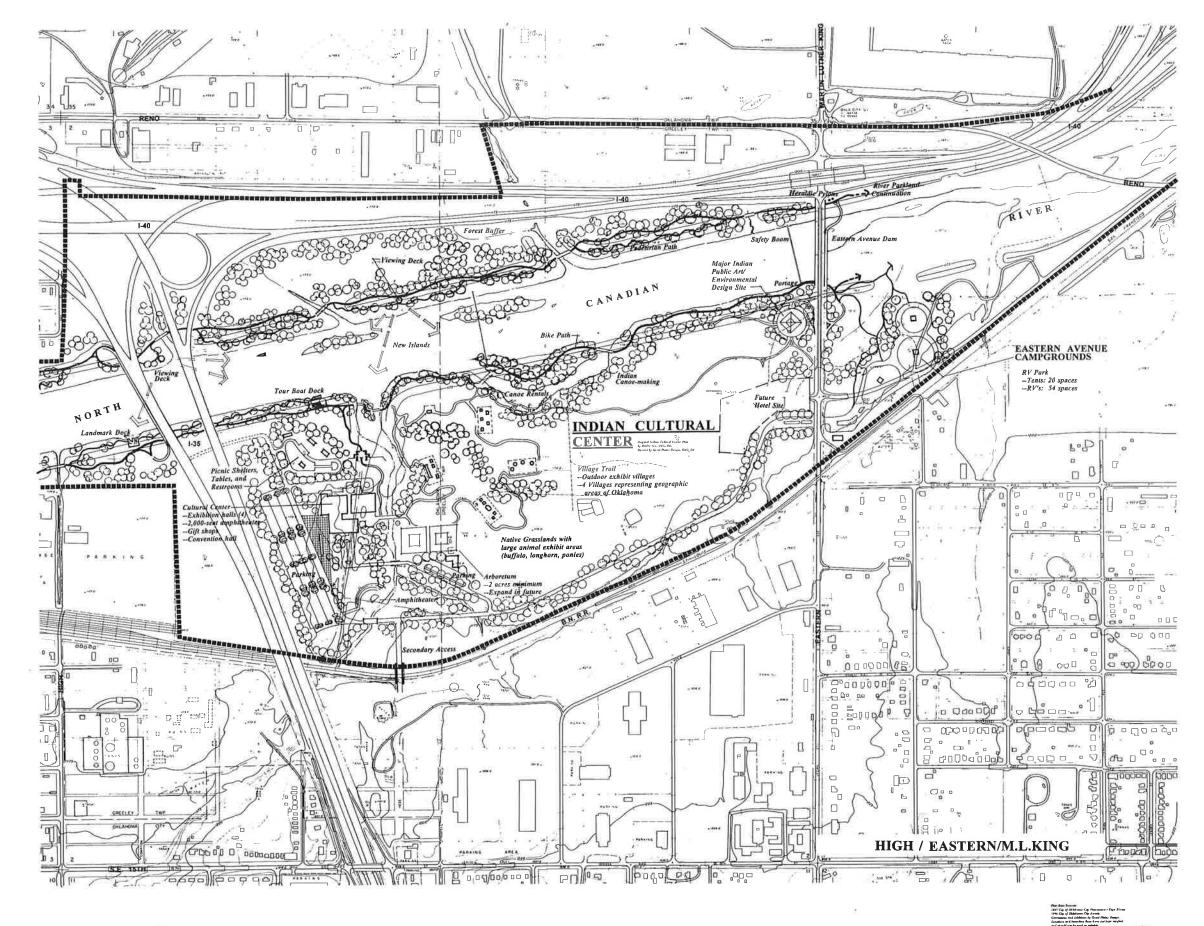
#### Amendments to the Scenic River Overlay District Ordinance

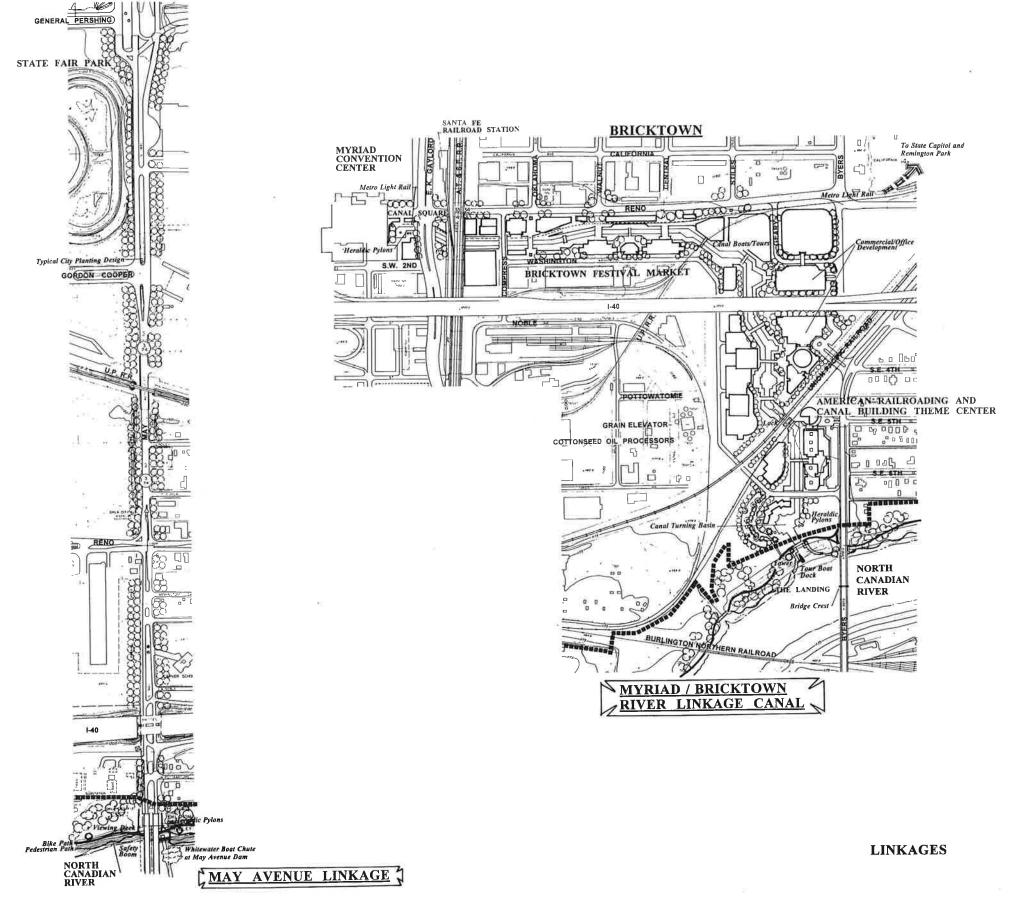
The ordinance adequately establishes use compatibility for areas adjacent to the Riverfront Corridor within the Scenic River Overlay District (SROD). The District ordinance states the need for special planning and use of Planned Unit Developments to address site planning and design concerns. However, the SROD does not specifically address additional regulations for the height of buildings, exposure of parking facilities, signage, glare-creating and other architectural materials that may create visual nuisances for corridor users, ground-floor use, fencing, and other matters of potential concern to riverside planning.

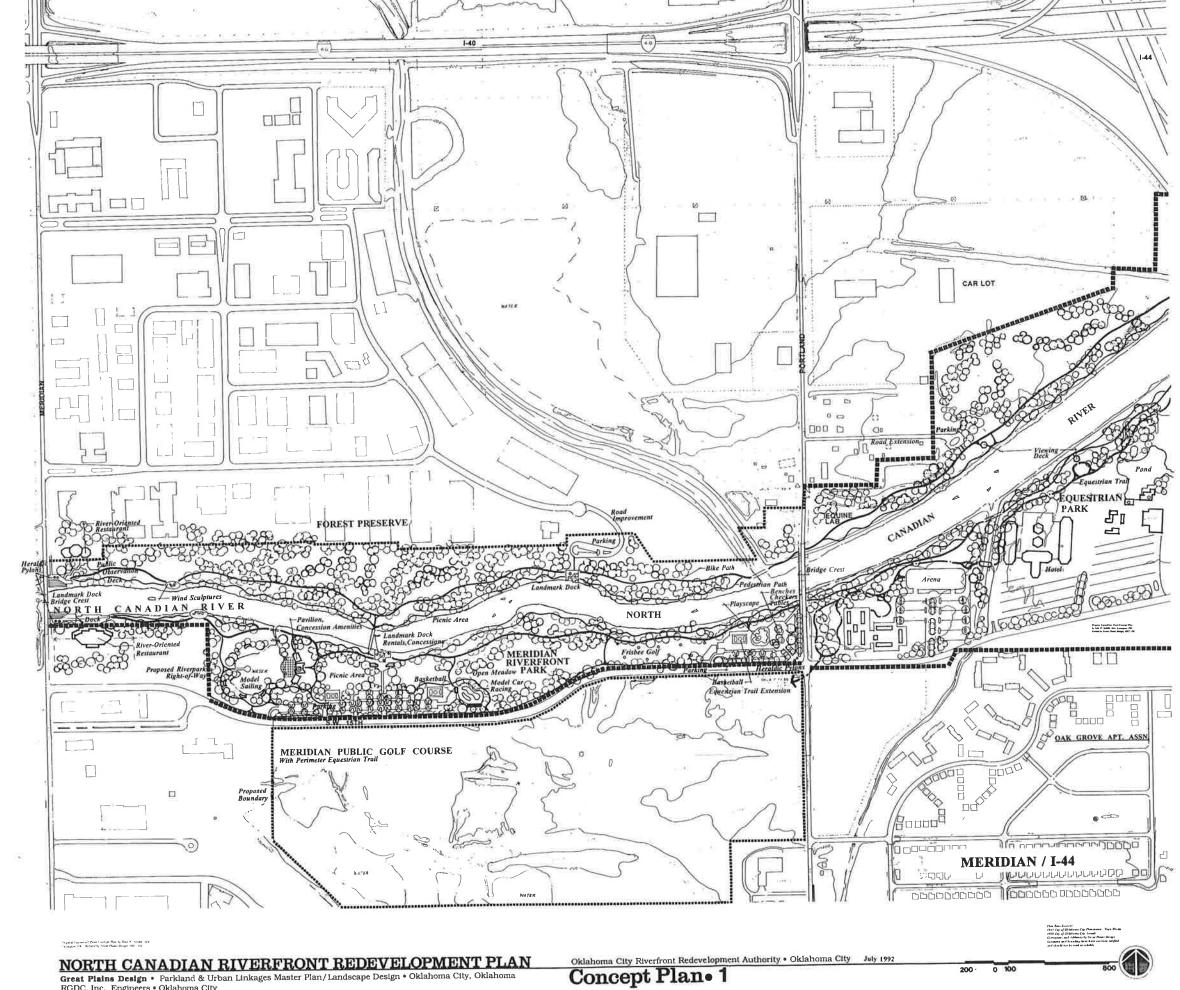
It is recommended that the Authority review the Ordinance and consider if amendments are necessary that would help ensure a development edge along the riverfront to encourage pedestrians and the public in general to use the area.

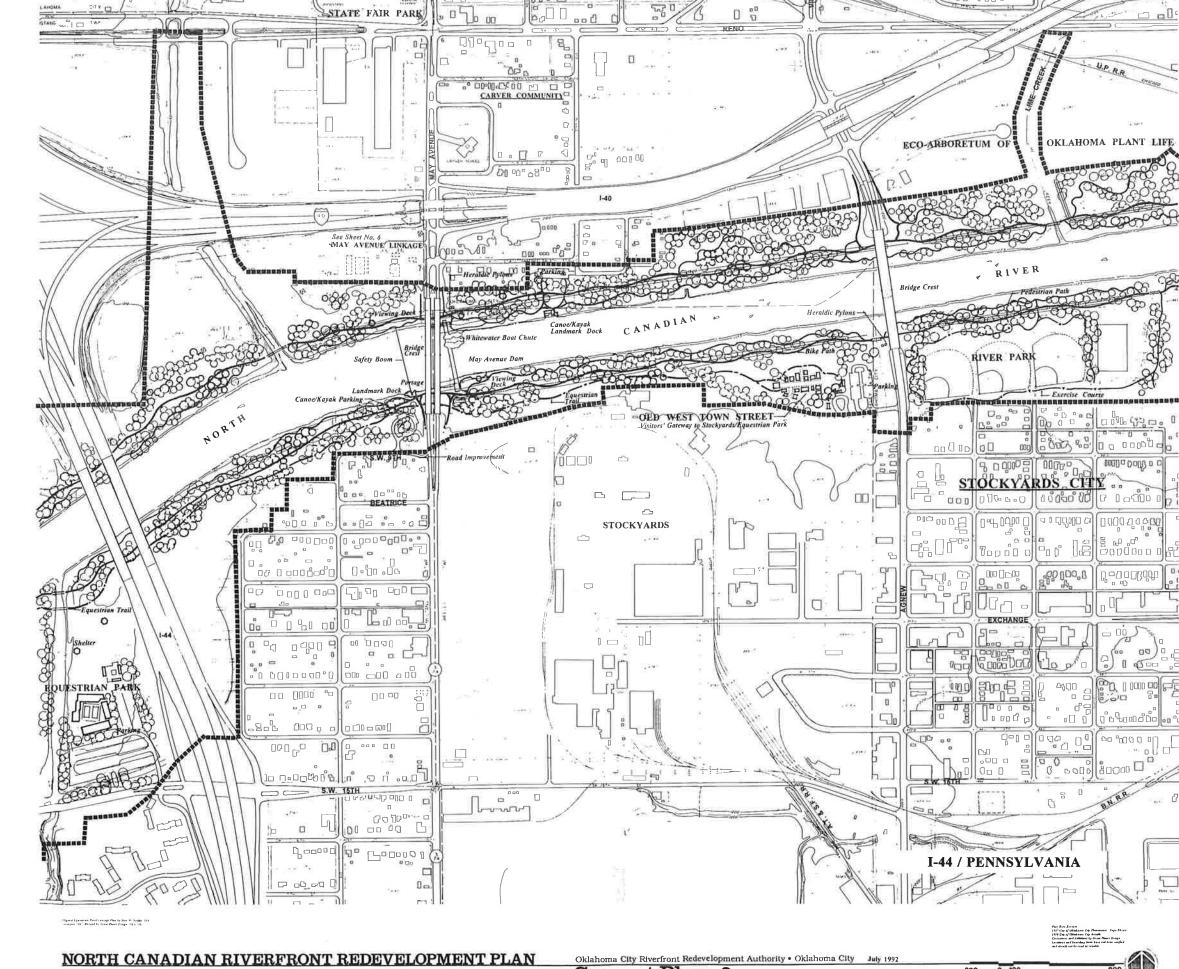
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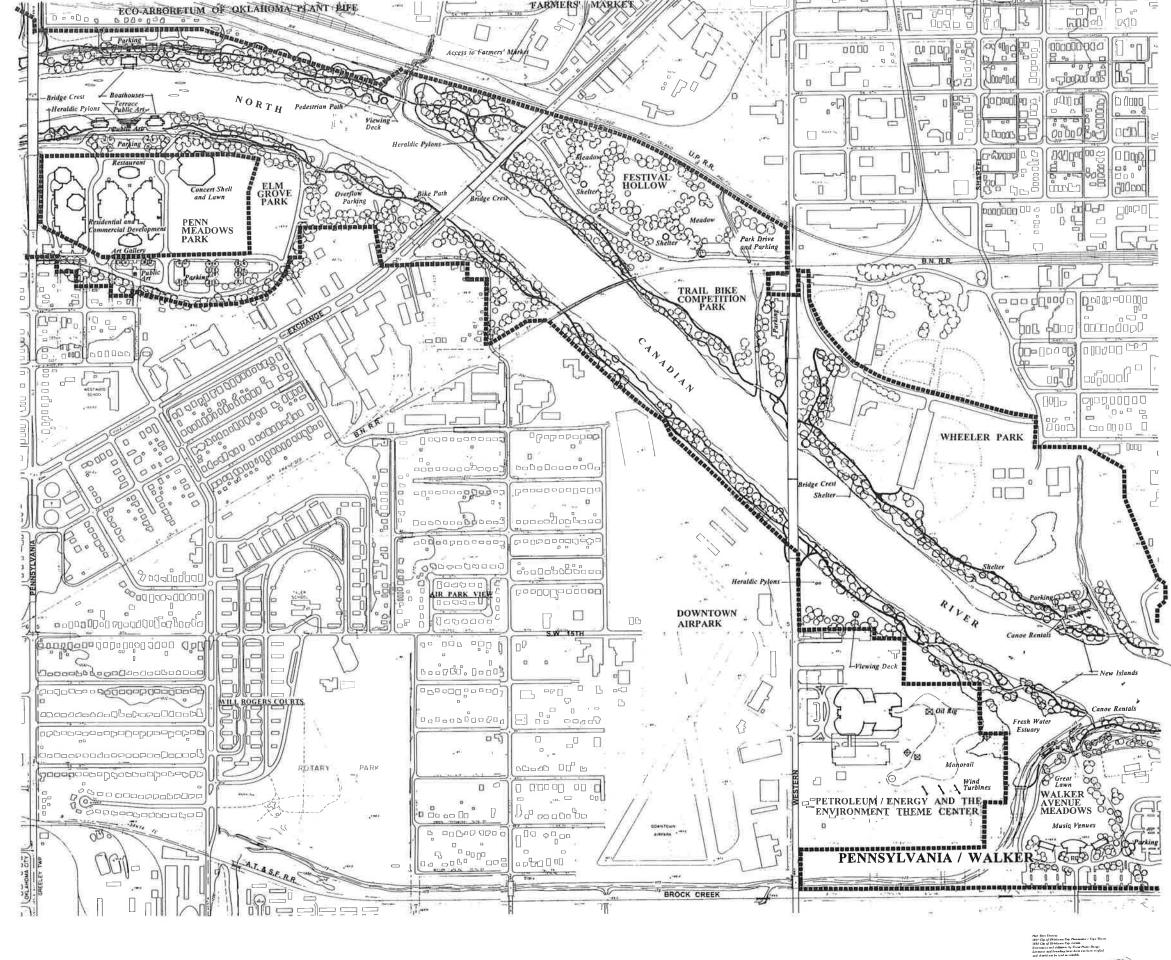


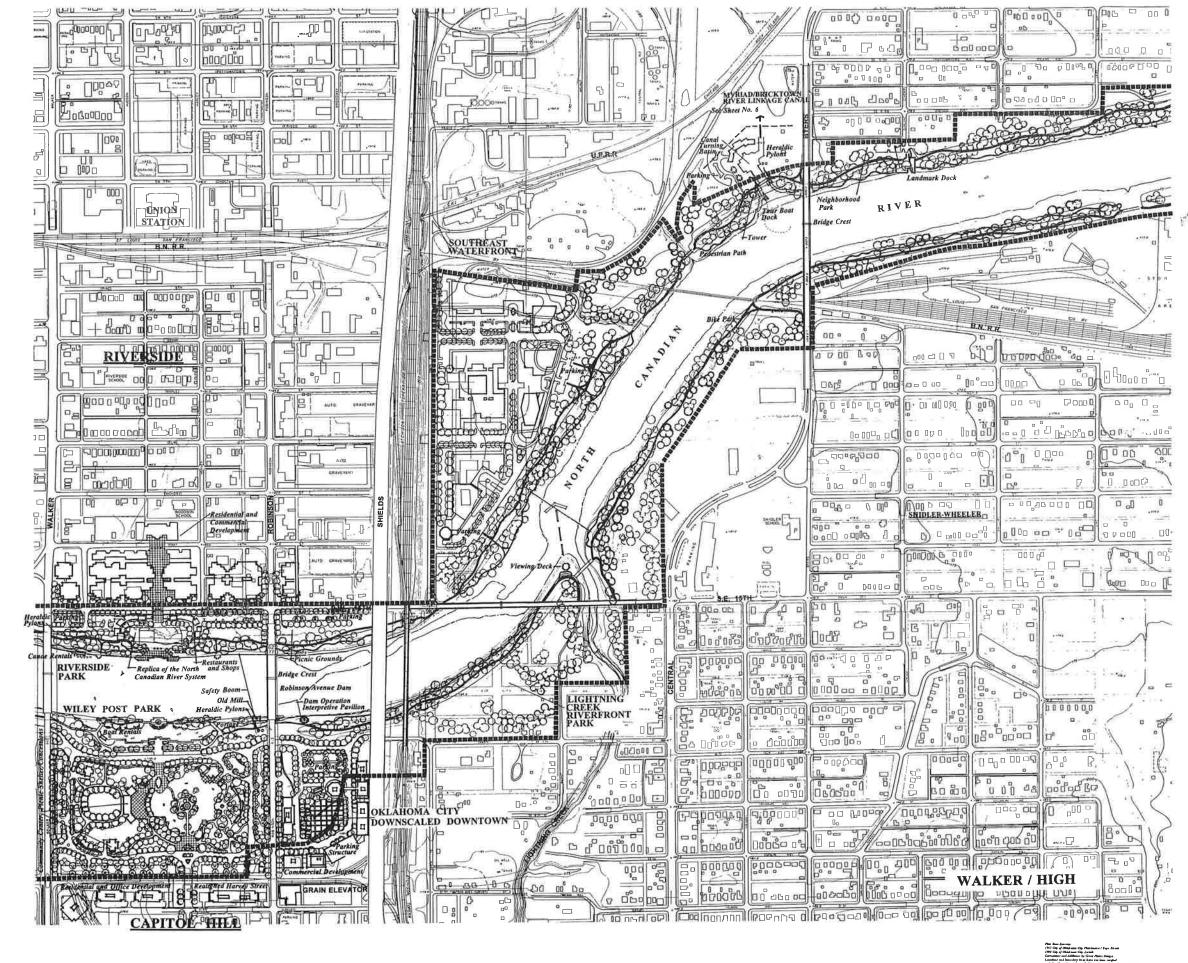




Concept Plan• 2







NORTH CANADIAN RIVERFRONT REDEVELOPMENT PLAN

Oklahoma City Riverfront Redevelopment Authority • Oklahoma City July 1992

Concept Plane 4



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Oklahoma City Riverfront Redevelopment Authority

## APPENDIX G-3 NEWS ARTICLE WITH ARTIST RENDERINGS OF DEVELOPED AREAS

# Chickasaw Nation unveils plans for development of an expansive resortstyle destination development adjacent to First Americans Museum in OKC

Published Thursday, October 21, 2021 by Staff Reports



Chickasaw Nation Governor Bill Anoatubby today unveiled plans for a major resort-style development to be located adjacent to the newly-opened First Americans Museum. Situated along the Oklahoma River near downtown Oklahoma City, OKANA Resort & Indoor Waterpark will be a \$300+ million tourist destination designed to continue the momentum of economic development in Oklahoma City.

"Strong partnerships and diligent effort among city and state officials and private entities have been integral to the launch of the First Americans Museum," said Gov. Anoatubby. "With this world-class First Americans Museum now in operation, we are ready to turn our focus to what we believe will be another significant tourism and hospitality venue. It is our vision that the OKANA Resort will enhance the experience for visitors from not only our region, but across North America and around the world."

"OKANA Resort & Indoor Waterpark has been designed to complement the First Americans Museum's focus on cultural experience as well as connect visitors to other entertainment experiences along this established and vibrant part of the Oklahoma River."

Plans announced detailed the first phase of the project, which is scheduled to develop approximately 40 acres of the total 140 acres held by AICCM Land Development, LLC, a wholly owned subsidiary of the Chickasaw Nation.

The resort-hotel will feature an 11-story, 404-room hotel, providing guests with luxurious accommodations, riverfront and lagoon views and proximity to the heart of Oklahoma City and the Boathouse District. A five-acre outdoor adventure lagoon designed for relaxation and play will sit at the center of the property and will be comprised of one main body of water and two smaller bodies of water – all lined with sandy beaches. A pedestrian bridge will stretch across the main body of water, allowing guests to easily move throughout the property. The resort also will feature a 33,000 square-foot family entertainment center, over 100,000 square-feet indoor waterpark, 39,000 square-feet of conference center space, spa and golf simulator, and multiple retail outlets, and dining options.



Chickasaw Nation Secretary of Commerce Bill Lance said that cooperation between local and state government and business leaders made this type of investment possible.

"Undoubtedly, an entertainment and lodging complex of this magnitude will add significantly to the exciting progress going on in Oklahoma City. Initially, the resort is projected to employ 400 people and the annualized economic

impact year one is projected to be \$97 million. Additionally, estimates for the 10-year economic impact of this development are projected to exceed \$1 billion, with full-time employment expanding to approximately 700-800."

The development also will feature a Native American Market and amphitheater. The market provides a space for First American artists to showcase works of art or other creations. The amphitheater and outdoor lawn will accommodate roughly 1,500 people. These venues are meant to augment the museum's programming with local artist performances, festivals, lectures and similar events.

Lance noted that the development will connect easily with the Boathouse District through a new Oklahoma River Cruises Ferry Landing funded through a \$4 million grant from the Federal Transit Administration. Additional access to the area will be available through the trails system from both the north and the south. With the property located directly on the Oklahoma River, visitors will have a front-row seat to the starting line for U.S. Rowing National High Performance Center's 2000-meter course.



Wynne/Jackson, a Dallas-based real estate development firm, is assisting in the development design for the entire project. New York-based Aquatic Development Group is the hotel developer, while Wisconsin-based ADCI is the hotel and waterpark architect. Benchmark Hospitality will operate the hotel and waterpark, which is expected to employ about 500 people in its operations. CallisonRTKL also is assisting in the master planning of the entire project and serving as architect for the Native American Marketplace and retail and dining components. Johnson & Associates from Oklahoma City assisted with site preparation and ongoing work.

Project funding, including site remediation, infrastructure and development, will come from both private and public sources. Public funding will include tax increment funds, MAPS4, federal transportation grants and funds from existing general obligation bonds.

The plans submitted today estimate a project completion in the late spring of 2024.

City and business leaders commented on the announcement of OKANA Resort & Indoor Waterpark.

"The caliber of this development is world-class and truly worthy of America's 22nd-largest city," said Oklahoma City Mayor David Holt. "FAM's opening was just the first step in establishing this site's potential for our community. The announcement of the development plan illustrates how Oklahoma City can emerge as an international destination for Native and Indigenous culture. This development helps to further create a place where Native and Indigenous people will come together, and a place where all people will experience that culture. On behalf of the people of Oklahoma City, we are so grateful to the Chickasaw Nation for its vision and its commitment to this project. Our mutual partnership is something that Oklahoma City deeply values."

"We are excited to see the area around the First Americans Museum (FAM) be developed with care and appreciation for the architectural integrity of the museum. Our new neighbors, the AICCM Land Development, LLC, a wholly owned subsidiary of the Chickasaw Nation, have been collaborative and inclusive with FAM as the project has been designed. The FAM team has played an advisory role throughout the process. FAM, as well as the surrounding communities, will greatly benefit from the presence of the conference hotel and water park," said James Pepper Henry, First Americans Museum Director and CEO.

Roy Williams, Greater Oklahoma City Chamber President and CEO said, "The number of hospitality and lodging options available for OKC visitors of all types has exploded in the past few years. And, soon, the OKANA resort will bring an additional experience that complements our unique new museum. The economic impact of a commercial development of this magnitude, especially in proximity to the new park and the First Americans Museum, builds on the momentum achieved in our city in recent years. It is a tribute to the "can do" spirit of OKC public and private sector leaders, including especially our partners at the Chickasaw Nation."

Oklahoma City Convention and Visitors Bureau President Zac Craig said, "As the world emerges from the pandemic, we expect the competition in the convention space will be intense for several years. But I can say with confidence that OKC

stands ready with world class attractions for both leisure travel and convention business to compete with any city in this region and beyond. The OKANA project is a welcome and exciting addition to OKC's hospitality and entertainment portfolio and will further magnify the economic vitality of our city."