

FINAL

**ENVIRONMENTAL CONDITION OF
PROPERTY REPORT**

**HARRY L. TWADDLE
ARMED FORCES RESERVE CENTER (OK017)
5316 SOUTH DOUGLAS BOULEVARD
OKLAHOMA CITY, OKLAHOMA 73150-3409**

Prepared For:

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FEBRUARY 26, 2007

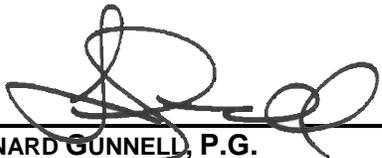
CERTIFICATION

All information/documentation provided accurately reflects the environmental condition of the property. This Environmental Condition of Property (ECP) Report is in general accordance with the U.S. Department of Defense (DoD) requirements for completion of an ECP Report.

JAMES WHEELER II
Chief, Environmental Division
90th Regional Readiness Command

DATE

The undersigned certifies the contents of this report are in general accordance with DoD policies for the completion of an ECP Report.



LENARD GUNNELL, P.G.
Project Geologist
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DATE

March 13, 2007

EXECUTIVE SUMMARY

The Terraine-EnSafe Joint Venture (TEJV), under contract to the U.S. Army Corps of Engineers Louisville District, has prepared this Environmental Condition of Property (ECP) Report for the Harry L. Twaddle Armed Forces Reserve (AFR) Center (Facility ID OK017), hereafter referred to as the "Site" or "AFR Center." The Site is at 5316 South Douglas Boulevard in Oklahoma City, Oklahoma. The Site is rectangular in shape and encompasses approximately 25 acres.

This ECP Report was conducted in conformance with primary Department of Defense (DoD) and Army guidance, the DoD's Base Redevelopment and Realignment Manual, DoD 4165.77-M, Army regulations, and the American Society for Testing and Materials Designation D 6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Surveys* as secondary guidance when it was not inconsistent with the primary guidance.

This ECP Report details the history of the property, including the AFR and any prior tenant uses of the Site and the resulting environmental condition of the property.

The AFR Center is on approximately 25 acres of land and contains the following permanent structures: a 142,766-square-foot Administration Building, a 2,743-square-foot Marine organizational maintenance shop (OMS), a 3,440-square-foot Navy OMS, an 8,150-square-foot Marine Artillery Vehicle Building, a 2,000-square-foot Marine Equipment Storage Building, and a 1,305-square-foot Army Equipment Storage Building. The Site is currently occupied by multiple detachments of the 95th Division.

Based on a review of aerial photographs and U.S. Geological Survey topographical maps dating back to 1938, the Site was undeveloped prior to the 1971 land lease by the U.S. government. According to interviews with AFR personnel, initial construction of AFR Center Administration Buildings began in 1971 and was completed in 1974. An addition to the Administration Building and construction of other Site buildings were completed in 1991.

Areas of potential environmental concern were reviewed and the TEJV found the following relating to the environmental condition of the property:

- A *Property Inspection Checklist for Environmental Baseline Studies* was prepared by "USARC Safety" in 1997 in preparation for the transfer of approximately 59 acres to Tinker Air Force Base (AFB). The 59 acres adjoined the AFR Center property. The checklist reported dirt/debris mounds, ground depressions, and landfills/waste piles on the 59-acre property. No clarification was made as to the exact location of the noted items. No evidence of those features was observed on the 25-acre AFR Center property during the Site reconnaissance.

- Tinker AFB has been present west of the Site, across South Douglas Boulevard, since at least 1957. Tinker AFB is listed on multiple environmental databases. Activities at Tinker AFB have resulted in release(s) of contaminants to the environment. An investigation is ongoing relative to chlorinated hydrocarbons in groundwater from a former industrial waste evaporation basin. The most recent (2004) available data as well as previous (2002) data show chlorinated hydrocarbons are present in groundwater monitoring wells located on and adjacent to the AFR Center property. Sample data since 2004 was not available for review to determine the extent to which the plume has migrated to the AFR Center from Tinker AFB.

In accordance with DoD policy defining the classifications (See Sherri Goodman Memorandum dated 21 October 1996), the Site property has been classified as Type 7. This classification does not include categorizing the property based on *de minimis* conditions that generally do not present material risk of harm to the public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

This classification was selected because pertinent reports and/or other documentation were not available during the ECP survey. The presence of the chlorinated hydrocarbons plume in groundwater from the Tinker AFB continues to pose a high risk for migration to the AFR Center. The 2004 data is not recent enough to accurately reflect current conditions.

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List of Acronyms and Abbreviations

ACM	asbestos-containing material
AFB	Air Force Base
AFR	Armed Forces Reserve
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
BRAC	Base Realignment and Closure
BRRM	Base Redevelopment and Realignment Manual
C&D	Construction & Demolition
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	CERCLA Information System
CESQG	conditionally exempt small-quantity generator
CFR	Code of Federal Regulations
CORRACTS	Corrective Action Sites
DoD	Department of Defense
ECP	Environmental Condition of Property
EDR	Environmental Data Resources, Inc.
ERNS	Emergency Response Notification System
FEMA	Federal Emergency Management Agency
hazmat	hazardous materials
IFR	indoor firing range
kg	kilogram
LBP	lead-based paint
LQG	large-quantity generator
LUST	leaking underground storage tank
MEP	military equipment parking
NFRAP	No Further Remedial Action Planned
NPL	National Priorities List
NRCS	Natural Resource Conservation Service
NWI	National Wetlands Inventory
OCC	Oklahoma Corporation Commission

ODEQ	Oklahoma Department of Environmental Quality
OMS	organizational maintenance shop
OWS	oil-water separator
Parsons	Parsons Engineering Science, Inc.
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
POL	petroleum, oil, and lubricants
POV	privately owned vehicle
ppb	parts per billion
PWS	Public Water Supply
RCRA	Resource Conservation and Recovery Act
REC	Record of Environmental Consideration
RQ	reportable quantity
RRC	Regional Readiness Command
SQG	small-quantity generator
SVOC	semi-volatile organic compound
SWMU	solid waste management unit
TEJV	Terraine-EnSafe Joint Venture
TSD	treatment, storage, and disposal
URB	Urban Landfill
USACE	U.S. Army Corps of Engineers
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
USAR	U.S. Army Reserve
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
VCP	Voluntary Cleanup Program
VOC	volatile organic compound
VWR	vehicle wash rack

1.0 INTRODUCTION

The Terraine-EnSafe Joint Venture (TEJV), under contract to the U.S. Army Corps of Engineers (USACE) Louisville District, was authorized to prepare an Environmental Condition of Property (ECP) Report for the Harry L. Twaddle U.S. Armed Forces Reserve (AFR) Center (Facility ID OK017), in response to the Base Realignment and Closure Act (BRAC) 2005 legislation. The work was performed under Contract No. W912QR-04-D-0044, Delivery Order No. 0008. The facility at 5316 South Douglas Boulevard in Oklahoma City, Oklahoma, is herein referred to as the "Site" or "AFR Center." In support of the ECP, a visual reconnaissance of the Site was conducted on August 9, 2006. The purpose of the reconnaissance was to visually obtain information indicating the likelihood of recognized environmental conditions in connection with the Site.

1.1 PURPOSE OF ENVIRONMENTAL CONDITION OF PROPERTY

The Military Department with real property accountability shall assess, determine, and document the environmental condition of all transferable property in an ECP Report. This ECP Report is based on readily available information. Pursuant to the Department of Defense (DoD) policy, set forth in the Base Redevelopment and Realignment Manual (DoD 4165.66-M, March 1, 2006) Section C8.3 (BRRM), the primary purposes of the ECP Report include the following:

- Provide the Army with information it may use to make disposal decisions.
- Provide the public with information relative to the environmental condition of the property.
- Assist in community planning for the reuse of BRAC property.
- Assist federal agencies during the property screening process.
- Provide information for prospective buyers.
- Assist prospective new owners in meeting the requirements under the U.S. Environmental Protection Agency's (USEPA's) "All Appropriate Inquiry" regulations.
- Provide information about completed remedial and corrective actions at the property.
- Assist in determining appropriate responsibilities, asset valuation, and liabilities with other parties to a transaction.

The ECP Report contains the information required to comply with the provisions of 40 Code of Federal Regulations (CFR) Part 373, which require that a notice accompany contracts for the sale of, and deeds entered into, for the transfer of federal property on which any hazardous substance was stored, released or disposed of. The Comprehensive

Environmental Response, Compensation, and Liability Act (CERCLA), Section 120(h) stipulates that a notice is required if certain quantities of designated hazardous substances have been stored on the property for one year or more – specifically, quantities exceeding 1,000 kilograms (kg) or the reportable quantity (RQ), whichever is greater, of the substances specified in 40 CFR 302.4 or one kg of acutely hazardous waste as defined in 40 CFR 261.30. A notice is also required if hazardous substances have been disposed of or released on the property in an amount greater than or equal to the RQ. Army Regulation 200-1 requires that the ECP Report address asbestos, lead-based paint (LBP), radon and other substances potentially hazardous to human health.

This ECP Report used the American Society for Testing and materials (ASTM) Designation D 6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Surveys* as a guideline when not inconsistent with the BRRM, CERCLA §120, Army regulations, and other applicable Army guidance.

1.2 SCOPE OF SERVICES

This ECP covers the approximately 25-acre AFR Center at 5316 South Douglas Boulevard in Oklahoma City, Oklahoma. The property is bounded by Tinker Air Force Base (AFB) property on all sides. South Douglas Boulevard trends north to south immediately west of the Site, with Tinker AFB property beyond. A general Site location map, Site building layout maps, historical topographic maps and aerial photographs, a Federal Emergency Management Agency (FEMA) flood plain map, and a U.S. Fish and Wildlife Service (USFWS) wetland map are provided in Appendix A. Appendix B provides photographs taken during the August 2006 visual Site reconnaissance. Appendix C provides a lease termination and land acquisition for the Site and chain-of-title information. Historical environmental documents and reports as well as miscellaneous information are provided in Appendix D. The environmental database report is provided in Appendix E.

This ECP report classifies the property into one of seven DoD Environmental ECP categories as defined by the S.W. Goodman Memorandum dated October 21, 1996. The property classification categories are as follows:

- Category 1: Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
- Category 2: Areas where only release or disposal of petroleum products has occurred.
- Category 3: Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.

- Category 4: Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.
- Category 5: Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are underway, but all required remedial actions have not yet been taken.
- Category 6: Areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented.
- Category 7: Areas that are not evaluated or require additional evaluation.

1.3 ASSUMPTIONS AND LIMITATIONS

This report was prepared to permit formulation of an opinion of the environmental condition of the Site. Opinions on the environmental conditions at the Site are based on information from the visual reconnaissance, interviews, and collection and review of readily available information. New information or changes in Site use could require a review and possible modification of the findings and conclusions contained in this report.

The information obtained from the AFR, the AFR's representatives, individuals interviewed and prior environmental reports was considered to be accurate unless reasonable inquiries indicated otherwise. Conditions observed were considered representative of areas that were not accessible unless otherwise indicated.

This ECP Report presents a summary of readily available information on the environmental conditions of, and concerns relative to, the land, facilities, and real property assets at the AFR Center. Its findings are based on a record search of readily available documents, a thorough review of the applicable and relevant documents, a visual reconnaissance conducted on August 9, 2006, and interviews with personnel knowledgeable about the Site and its history. Extensive environmental investigations and reports and Site historical documents were reviewed in support of this ECP. Information obtained from these other studies is reflected within this report by reference. A complete list of references is provided as Section 9.0.

All Site buildings were visually inspected during the visual reconnaissance. However, a 100% visual reconnaissance of each building (e.g., attics, crawl spaces, etc.) was not practical due to accessibility restrictions. No sampling or analysis of any media was conducted during this survey.

2.0 SITE LOCATION AND PHYSICAL DESCRIPTION

The visual reconnaissance included a driving tour of the facility and the surrounding area, and a walking assessment of the developed area of the Site and buildings including the Administration Building (north and south areas), the organizational maintenance shops (OMSs), and all storage/warehouse buildings. The visual reconnaissance was conducted by TEJV personnel on August 9, 2006, to field-verify information produced in the document review and to identify recognized environmental conditions of property.

A reconnaissance of the Site perimeter was conducted to evaluate adjacent property uses that could contribute to any environmental contamination on the Site. TEJV personnel drove on accessible roads along the perimeter and in the surrounding area to visually identify any contiguous properties that appear, in the TEJV's professional judgment, to have contamination that could migrate to the Site. The findings of the perimeter survey are presented in Section 4.0.

2.1 SITE LOCATION

The Site is located at 5316 South Douglas Boulevard in Oklahoma City, Oklahoma County, Oklahoma. The Site is in southeast Oklahoma City. As shown on Figure 1 in Appendix A, the Site is surrounded by Tinker AFB. The Site is bordered to the west by South Douglas Boulevard, with the developed portion of Tinker AFB beyond. The area to the south was an open field until recently; a new building for Tinker AFB was being constructed on the property during the visual Site reconnaissance. South Douglas Boulevard was closed to traffic south of the Site. An area east of the Site is wooded and appears to have been used for a motocross track. Approximately 500 feet north of the Tinker AFB open field to the north are some industrial/commercial buildings.

2.2 ASSET INFORMATION

Facility Name and Address: Harry L. Twaddle AFR Center
5316 South Douglas Boulevard
Oklahoma City, Oklahoma 73150-3409

Property Owner: United States Government

Date of Ownership: June 5, 2005

Current Occupant: Multiple Detachments of the 95th Division

Zoning: R-1, Single Family Residential

County, State: Oklahoma County, Oklahoma

USGS Quadrangle: Choctaw, Oklahoma

Section/Township/Range: Section 24, Township 11 North, Range 2 West

Latitude/Longitude: 35°24' 45.0" N; 97°22' 9.1" W

Historical Legal Description: All those certain pieces or parcels of land being the West ½ of the Southwest ¼ of Section 24, Township 11 North, Range 2 West, lying and situate in the City of Oklahoma, County of Oklahoma, State of Oklahoma.

Historical Assessor's Parcel Numbers: 168502300 and 168502310

2.3 PHYSICAL DESCRIPTION

A Site layout plan and floor layout plans of the AFR Center are provided as Figures 2 through 7 in Appendix A. Photographs 1 through 10 show the exterior of the Administration Building and surrounding area. Photographs 11 through 18 show specific rooms and conditions within the Administration Building including: the mechanical room and former Indoor Firing Range (IFR). Photographs 19 and 20 show the track area on the east side of the Site. Photographs 21 through 38 show the exterior of buildings and general layout of facilities in the military equipment parking (MEP) area on the south side of the Site. Photographs 39 through 54 show the interior of some facilities and other environmental features on the south side of the Site. Photographs 55 through 62 show land use of property adjacent to the Site.

The AFR Center is on approximately 25 acres and contains multiple structures including the 142,766-square-foot Administration Building, the 2,743-square-foot Marine OMS and the 3,440-square-foot Navy OMS. The Administration Building and Marine OMS have concrete block walls with brick veneer. The Navy OMS is constructed with concrete block walls and masonry veneer. Other buildings on the Site include an 8,150-square-foot Marine Artillery Vehicle Building, a 2,000-square-foot Marine Equipment Storage Building, and a 1,305-square-foot Army Equipment Storage Building.

Other ancillary buildings and improvements on the Site include a guard shack; pavilions; storage buildings; flammable material, chemical, and hazardous materials (hazmat) storage buildings and sheds; a vehicle wash rack (VWR), and a grease rack.

Initial construction of the Administration Building began in 1971 and was completed in 1974. A major expansion of the Administration Building and other facilities on the Site was completed in 1991. As shown on Figure 2 in Appendix A, the south area was the initial part of the Administration Building; the north area was added in 1991. The general layout and exterior views of the Administration Building are shown on Photographs 1 through 9 in Appendix B. A privately owned vehicle (POV) parking lot is located east of the Administration Building as shown on Figure 2 in Appendix A. Representative views of the POV parking lot are shown on Photographs 9 and 10 in Appendix B.

A Site map of the AFR Center is presented on Figure 2 in Appendix A. Vehicle access is via two driveways on the north and south ends of the Administration Building. The driveways connect South Douglas Boulevard to the POV parking lot on the west side of the Administration Building. The large POV parking lot on the east side of the Administration Building is enclosed by a gated chain-link security fence topped with barbed wire. Gates on the driveways connecting the west POV lot to the east POV lot restrict vehicle access. As shown on Photograph 6 in Appendix B, there is a guard shack at the gate on the south driveway.

Approximately one-third of the Site is covered by impervious surface features (e.g., asphalt parking areas, driveways, concrete walkways, building footprints, etc.). The area around the buildings and parking lots is generally covered by grassed lawn area; there are landscaped shrubs immediately adjacent to the Administration Building. There are some larger (over 25 feet tall) trees around the perimeter of the Administration Building.

Topographically, the Site is relatively flat. No signs of erosion, excavation, or fill were observed on the Site. According to interviews with AFR personnel, no soil or fill material from offsite sources has been brought onto the Site, nor has any significant re-grading occurred on the Site.

As shown on Figures 3, 4, 5, and 6 in Appendix A, the Administration Building includes classrooms, restrooms, offices, administrative areas, a small-arms vault, mechanical room, and other areas. The interior of the building appeared to be well maintained during the visual reconnaissance; there were no obvious signs of disrepair. General views of the hallways in the Administration Building are shown on Photographs 11 and 12 in Appendix B.

The only peeling paint observed was in the mechanical room. The mechanical room is located on the first floor near the center of the Administration Building and contains the heating, ventilation, and air-conditioning system, water heaters, chillers, and the fire prevention system equipment. The mechanical room is accessible from an outside door. The room is equipped with floor drains to convey the condensate/blowdown/leakage from the various pieces of mechanical equipment to the public sewer system. Floor drains and some equipment and piping in the mechanical room are shown on Photographs 13, 14, and 15 in Appendix B. The condensate, blowdown, and leakage are piped directly from the equipment to floor drains to prevent water from accumulating on the floor. Floor drains are also located in the restrooms to facilitate floor cleaning. The floor drains discharge into the public sanitary sewer that serves the Site.

A supply storage area is shown on Photograph 16. A Memorial Room (Photograph 17 in Appendix B) replaced an IFR which, as described in Section 3.5.2, was removed and approved for alternate use. The arms vault door is shown on Photograph 18; firearms and ammunition were previously stored in the vault. Cleaning supplies and chemicals are stored in a janitor's closet. No evidence of chemical or petroleum releases was observed inside any room in the Administration Building.

Site representatives said that no live ammunition is stored on the Site and that all lead contamination from previous shooting activities has been abated. As described in section 3.5.7 of this report, all the fluorescent light fixtures on the Site are non-polychlorinated biphenyl (PCB)-containing.

As shown on Figure 2 in Appendix A and Photographs 19 and 20 in Appendix B, there is a one-quarter mile running track on the east side of the Site. The area surrounding the track is mowed and maintained. There are bleachers near, and a picnic pavilion northwest of, the track. The grassed areas north, east, and south of the track extend to the chain-link fence at the Site boundary.

The south side of the Site contains a MEP area that is enclosed by a chain link fence (separate from the POV parking lot) and includes multiple maintenance and storage facilities. The layout of the Site is shown on Figure 2 and individual structures are shown on Photographs 21 through 38 in Appendix B. The south side of the Site contains the following (generally from west to east):

- Marine OMS
- Flammable Materials Storage Shed
- Chemical Storage Building
- VWR
- Grease rack
- One hazmat and two equipment storage sheds
- Marine Artillery Vehicle Building
- Marine Equipment Storage Building
- Navy OMS
- Army Equipment Storage Building
- Flammable Materials Storage Unit

The Marine OMS (Photographs 21 through 24) is on the west side of the MEP area. As shown on Photograph 24, the Flammable Materials Storage Shed and Chemical Storage Building are located south of the Marine OMS. These facilities are shown on Photographs 25 and 26, respectively. As shown on Photograph 24, the VWR is located south of the Marine OMS and adjacent to the grease rack. The VWR and grease rack are shown on Photographs 27 and 28 respectively. The VWR was in use during the visual Site reconnaissance. There are two oil-water separators (OWSs) in this area to handle discharge from the floor drains in the Marine OMS and wash water from the VWR. One OWS is northwest of the Marine OMS and receives wastewater from the floor drains. The other OWS is northwest of the Marine OMS, outside the MEP fence. Discharge from both OWSs is conveyed to a wastewater treatment facility at Tinker AFB.

There are two equipment storage sheds and one hazmat storage shed on the south side of the Site between the edge of the pavement and the boundary fence. The metal sheds are shown on Photographs 29 and 30 in Appendix B. Empty missile casings are stockpiled

west of those sheds. The Marine Artillery Vehicle Building is east of the sheds and extends to the south MEP fence, as shown on Figure 2 in Appendix A and Photographs 31 and 32 in Appendix B. Eight vehicle bay doors on the north side of Marine Artillery Vehicle Building open onto the MEP area.

The Marine Equipment Storage Building is located north of the Marine Artillery Vehicle Building and is shown on Photographs 32 through 34. During the visual reconnaissance, a mobile command unit was parked just west of the Marine Equipment Storage Building.

The Navy OMS is shown on Photographs 35 and 36. The Navy OMS vehicle bay doors open to the POV parking lot to the north and the MEP area to the south. Further east of the Navy OMS is the Army Equipment Storage Building; it is located on the east side of the MEP and is shown on Photograph 37. A Flammable Materials Storage Building is located further south along the east fence line of the MEP, as shown on Photograph 38.

The Marine OMS is a one-story, L-shaped structure on the west side of the MEP area. A floor plan of the building is shown on Figure 7 in Appendix A. There are three vehicle doors on the east side of the OMS facing the MEP area and one each on the north and south sides. Pedestrian doors are located on the south, east, and west sides. A flammable materials storage room comprises a small wing on the south side of the OMS. The OMS has a bare concrete floor and concrete block walls. Vehicle maintenance is performed on military vehicles within the OMS. There are equipment and devices within the OMS to control and manage hazmat used and generated during maintenance activities. Some of the equipment and devices include:

- Floor drains to collect drainage within building – Photograph 39
- OWS northwest of OMS – Photograph 40
- Used fluids and battery accumulation area – Photograph 41
- Aerosol and paints storage locker in OMS – Photograph 42

The Marine Artillery Vehicle Building is a metal frame and sheet metal building. The building is used to store and prepare vehicles with missile launch capability. The interior of the building is shown on Photographs 43 and 44 in Appendix B.

Typical views of the interiors of chemical storage sheds are shown on Photographs 45 and 46 in Appendix B.

The Navy OMS is a one-story, rectangular-shaped structure on the east side of the MEP area. There are vehicle doors on the north and south sides that open to the POV parking lot and MEP area, respectively. The OMS has a bare concrete floor and concrete block walls. Vehicle maintenance is performed on military vehicles within the OMS. There is an OWS near the northwest corner of the building which receives discharge from the floor drains. Effluent from the OWS is pumped to Tinker AFB for treatment. There are equipment and devices within the OMS to control and manage hazmat used and generated

during maintenance activities. Some of the equipment and devices associated with the Navy OMS include:

- Floor drains to collect drainage within building – Photograph 47
- Battery storage room and hazmat storage locker – Photograph 48
- Liquid and petroleum, oil, and lubricants (POL) storage area – Photograph 49
- OWS at northwest corner – Photograph 50
- Lift station for OMS – Photograph 51

The interior of an equipment storage shed is shown on Photograph 52. The interiors of other hazmat storage areas are shown on Photographs 53 and 54.

Military equipment including vehicles and container storage units were located throughout the MEP area during the visual reconnaissance.

2.4 SITE HYDROLOGY AND GEOLOGY

2.4.1 Surface Water Characteristics

The Site is in the Lower North Canadian watershed. This watershed is drained by the North Canadian River whose closest point is located approximately 5 miles north of the Site and flows in an easterly direction.

Figure 1 in Appendix A presents a topographic map of the Site and surrounding area. As shown on the map, there are no surface water bodies on the Site. The Site generally slopes to the southeast and is approximately 1,258 feet above mean sea level. The Site storm water drains and culverts flow toward intermittent streams located to the southeast and east. The streams then flow east to Soldier Creek located approximately 2,000 feet east of the Site. Soldier Creek continues approximately 5 miles north to the North Canadian River. The Northern Canadian River then flows east to the Arkansas River, which ultimately discharges to the Mississippi River.

According to the FEMA Flood Insurance Rate Map for Oklahoma County, Oklahoma and Incorporated Areas (Map Number 40109C0415 G, Effective Date July 22, 2002), the Site is in Zone X. FEMA classifies Zone X as “Areas determined to be outside the 500-year flood plain.” Figure 8 in Appendix A provides a map depicting the extents of the nearest 100-year and 500-year flood plains in the area of the Site.

2.4.2 Hydrogeological Characteristics

TEJV visited the Oklahoma City Service Center of the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) in Oklahoma City, where soils maps for the Site were reviewed. Additionally, the Oklahoma County Assessor Records geographical information system and the NRCS Soil Survey Geographic Database were consulted. Based on these sources, the predominant soil type on the Site is Urban Land Fill (URB).

URB soils are classified as Hydrologic Group Class D. Class D has very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer. The soil does not meet the requirement for hydric soil.

There are no wetlands on the Site according to Figure 9 in Appendix A, which is a copy of the National Wetlands Inventory (NWI) Map of the Site area.

The primary aquifer in the Oklahoma City area is the Central Oklahoma Aquifer, also known as the Garber-Wellington Aquifer. This aquifer is located in the center of Oklahoma. It covers an area of about 8,000 square kilometers in the Central Lowland Physiographic Province. It is located under the counties of Canadian, Cleveland, Kingfisher, Lincoln, Logan, Oklahoma, Payne, and Pottawatomie. The main source for recharge is by infiltration of precipitation and percolation of surface water crossing an outcrop area. The recharge flows west from an unconfined part of the aquifer to a confined one. Water is then diverted to the north and south underneath the confining layer and discharges into a few major streams. Generally, the flow in the unconfined portion of the aquifer itself is from west to east and controlled by the natural topography.

No public wells or springs were observed on the Site. Potable water is provided to the Site from Tinker AFB.

A search was also conducted for wells within 1 mile of the Site (Environmental Data Resources, Inc. [EDR] Report in Appendix E). The environmental database report included a search of the following well databases: federal U.S. Geological Survey (USGS), Federal Reporting Data System — Public Water Supply (PWS) System, and State Database. The search identified 22 USGS wells and 138 state database wells within 1 mile of the Site; no PWS wells were identified. Of the identified wells, two State Database wells were observed on the Site.

The USGS wells range in construction date from 1942 to 1995 and the only applicable data reported were water levels. Most of the state database wells are associated with groundwater investigations as a result of releases at Tinker AFB. Two of those wells were identified on the Site. The wells are associated with a chlorinated hydrocarbon investigation in the upper and lower saturated zones as a result of a former industrial waste evaporation basin. Well numbers 2-322B and 2-332A are associated with the upper and lower saturated zones, respectively, and are located on the northwest corner of the Site and midway along the north property fence line of the Site, respectively. Well 2-322B is in the grass median adjacent to South Douglas Boulevard and well 2-332A is in the grass field just east of the corner of the east POV lot. An additional well was observed offsite in the wooded area northeast of the Site.

TEJV visited the Oklahoma Department of Environmental Quality (ODEQ) where files for the Tinker AFB investigation were reviewed. Additionally, sampling and analysis reports were provided to TEJV by U.S. Army Reserve (USAR) personnel. The ODEQ file information included a 2002 monitoring report that indicated that chlorinated hydrocarbons

were detected in well 2-322B at a concentration of 2 parts per billion (ppb). The specific compound was not listed. Chlorinated hydrocarbons were not detected in well 2-332A. The next closest well to the Site is located on Tinker AFB. The well is labeled 2-108B, is approximately 400 feet to the north-northwest, and contained 493.99 ppb of chlorinated hydrocarbons.

The sampling and analysis reports provided by USAR personnel are dated April 2005 (representing data collected in 2004) and December 2003 (representing data collected in October 2001 and August 2002). The reports indicate the detection of the volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) in monitoring well 2-322B and SVOCs in well 2-332A. Table 1 lists the concentrations of VOCs and SVOCs. The sampling reports and information obtained at the ODEQ are provided in Appendix D.

Well ID	Date Sampled	Constituent	Concentration (ppb)
2-322B	10/03/2001	bis(2-Ethylhexyl)phthalate	2.1
	10/03/2001	Trichloroethylene	4.6
	08/09/2002	Trichloroethylene	2.0
	08/09/2002	Toluene	0.65
	08/24/2004	Trichloroethylene	1.5
	2002	Total Chlorinated Hydrocarbons	2.0
2-332A	08/24/2004	bis(2-Ethylhexyl)phthalate	9.4

2.5 SITE UTILITIES

The Site is served by utilities provided by Tinker AFB.

2.6 WATER SUPPLY WELLS AND SEPTIC SYSTEMS

As described in Section 2.4.2, there are no PWS wells within 1 mile of the Site. The Site is served by the Tinker AFB sanitary sewer system, there are no septic systems on the Site, and no known septic systems were identified in the area.

3.0 SITE HISTORY

3.1 HISTORY OF OWNERSHIP

Land titles for the Site were reviewed back to 1900 and ownership was discussed with AFR Center personnel. Appendix C contains a Historical Chain-of-Title Report prepared for the Site and Appendix D contains a Record of Communication regarding ownership of the Site. According to USAR personnel, the United States of America is the current owner of the 25.63 acres of property that contains the Harry L. Twaddle AFR Center.

Based upon review of historical records, it appears that the City of Oklahoma acquired the title to the property prior to 1900; however, no records were discovered transferring ownership to the City of Oklahoma. The chain-of-title report identified a land lease on November 9, 1971, from the City of Oklahoma to the United States of America. According to a Record of Environmental Consideration (REC) dated January 16, 2004, the Army Reserve proposed to terminate its land lease on the property containing the Harry L. Twaddle AFR Center. In exchange for the lease termination, the remaining property would be under the control and responsibility of Oklahoma City Water Utilities Trust.

A USAR representative stated it was leasing approximately 79 acres from the City of Oklahoma, but only using approximately 25 acres. In 2004, an agreement was reached to transfer ownership of approximately 25.63 acres to the U.S. government as described in the REC. This agreement was reportedly finalized on June 5, 2005. The U.S. government terminated the lease on the remaining land at that time. TEJV did not obtain any formal documentation regarding completion of this transaction during the ECP.

No environmental liens or, institutional or engineering controls were found on record.

3.2 PAST USES AND OPERATIONS

Pertinent major dates in the facility's development, administration, and mission are summarized in Table 2.

Year	Description
1971	Site property was leased by the United States of America and construction of the Administration Building began
1974	South area of Administration Building was completed
1991	Major expansion of the Administration Building was completed
1991	MEP area and buildings were constructed on south side of Site
1997	Cleanup of IFR completed
2005	U.S. government takes ownership of property comprising the Harry L. Twaddle AFR Center

Historical information sources suggest that the Site was undeveloped until the U.S. government leased it in 1971.

Historical uses of the AFR Center included administrative and educational operations, maintenance of military vehicles including vehicle washing, and an IFR. The Site was historically used by reservists for drill activities on various weekends throughout the year. As discussed in Section 3.5.2, the IFR was closed in 1997 by American Asbestos, Inc.

Historical topographic maps and aerial photographs provided information about the Site and surrounding area. Figures 10 through 14 in Appendix A present topographical maps of the Site and surrounding area dated 1938, 1956, 1969, 1975, and 1986, respectively. Figures 15 through 21 present aerial photographs of the Site and surrounding areas dated 1957, 1963, 1970, 1984, 1995, 2003, and 2005, respectively.

Pertinent observations on the historical USGS topographic maps are summarized below.

- **1938 (Figure 10).** The Site is part of a large, undeveloped tract of land within eastern Boone Township.
- **1956 (Figure 11).** The Site is an undeveloped parcel of property on the east side of South Douglas Boulevard. Tinker AFB is located across South Douglas Boulevard to the west.
- **1969 (Figure 12).** The Site remains undeveloped. A road (SE 49th Street) has been developed to the north with two new buildings shown south of the intersection with South Douglas Boulevard. New buildings are present at Tinker AFB to the west. A structure is present south of the Site.
- **1975 (Figure 13).** The Site is developed as the AFR Center. The map shows the south area of the Administration Building completed and in place. Smaller buildings are shown on the Site north and south of the Administration Building; based on a Historic Architectural Report, both of the buildings are OMSs. The OMS to the north included an associated VWR and OWS. The OMS to the south is in the location of the current Marine OMS. New structures are present at Tinker AFB. New buildings are present near the intersection of South Douglas Boulevard and SE 49th Street.
- **1986 (Figure 14).** The Site and surrounding properties are similar to the 1975 map. Additional structures and runways are present at Tinker AFB.

Pertinent observations on the historical aerial photographs are summarized below.

- **1957 (Figure 15).** The Site property is an agricultural field. The associated farm buildings are just north of the Site along South Douglas Boulevard. Adjacent properties to the north, east, and south are agricultural. Tinker AFB is on the west side of South Douglas Boulevard.

- **1963 (Figure 16).** The Site appears to be a pasture. An unimproved road extends from the northwest corner of the Site to a small structure, possibly a feed trough, in the center of the field. The property to the east appears to be undeveloped agricultural land. A structure is discernible on the former farm to the north, the surrounding property appears to be disturbed. Disturbed land is also apparent south of the Site. Tinker AFB is to the west.
- **1970 (Figure 17).** The Site and the eastern adjacent property appear to be unchanged from the 1963 aerial photograph. Development of properties near the intersection of South Douglas Boulevard and SE 49th Street to the north has occurred with the addition of new buildings. The property to the south is undeveloped, but past evidence of disturbance are present. Tinker AFB is to the west.
- **1984 (Figure 18).** The Site has been developed as the AFR Center. The south area of the Administration Building, parking areas, and other buildings are visible. Properties to the north along SE 49th Street have been further developed. The property to the far northeast of the Site, the Midwest Construction & Demolition (C&D) Landfill, is shown disturbed. Unimproved trails or roads are present on property to the east. Tinker AFB is to the west.
- **1995 (Figure 19).** The Administration Building is shown expanded to its current size. Other buildings and parking areas are shown and appear similar to current conditions. The running track on the east side of the Site is clearly visible. Development of surrounding properties is apparent with the presence of additional structures north of the Site along South Douglas Boulevard and SE 49th Street. The Midwest C&D Landfill is present northeast of the Site. Several trails or unimproved roads are visible on the wooded property to the east. Property to the southeast is disturbed, but structures are not evident. The adjacent property to the south appears undeveloped. Tinker AFB is to the west.
- **2003 (Figure 20).** The AFR Center and surrounding properties appear similar to current conditions. The Site is located within an area of mixed land use.
- **2005 (Figure 21).** The AFR Center and surrounding properties are similar to current conditions. The Administration Building, OMSs, MEP areas, POV lots, and the running track are clearly visible. Adjacent property to the north is undeveloped, but several buildings are located along SE 49th Street further to the north. The Midwest C&D Landfill is still visible. Several trails are visible on the wooded property to the east and the disturbed property to the southeast; the trails appear to be a motocross track. The property to the south is undeveloped. Tinker AFB is to the west across South Douglas Boulevard.

The available business directory, Polk's city directories, was reviewed by EDR (EDR's research spanned roughly five-year intervals between 1953 through 2006). The city

directories did not list the Site address from 1953 to 1989. The first listing for the Site address was in 1996. No historical Sanborn fire insurance maps were available for this Site.

3.3 PAST USE, STORAGE, DISPOSAL, AND RELEASE OF HAZARDOUS SUBSTANCES

Information related to the past use and storage of hazardous substances at the Site was compiled through review of available Site records, search of federal and state environmental databases, and interviews with AFR Center personnel.

Activities historically conducted at the Site may have been different or included other activities than those observed on the Site during the visual reconnaissance and/or described by current AFR and USAR personnel. The closure and/or removal status of facilities and materials which were known to be located on the Site cannot be verified without documentation. Interviews with current Site personnel indicate that no potentially contaminated equipment was ever stored at the Site; and that all environmental systems are operating properly.

3.3.1 Past Use and Storage of Hazardous Substances

Chemicals formerly used and stored at the Site in the MEP area were associated with vehicle and facility maintenance activities, and were stored in designated areas, buildings, sheds, and lockers. Janitorial chemicals and building maintenance-related products were also stored in the designated storage areas within the janitor's closets in the Administration Building.

A 1998 Historical Architectural Report contained a map dated September 7, 1989. The 1989 map shows:

- **USAR Center** – Currently the AFR Center Administration Building south area.
- **Maintenance Shop** (north) – Located in the current Administration Building north area.
- **Maintenance Shop** (south) – Located in the current Marine OMS area.

The figure also contained the following waste management and environmental concern areas:

1. **VWR with OWS** - Near north Maintenance Shop
2. **Print Room** - Located within the current south area of the Administration Building
3. **Photo Lab** - Located within the current south area of the Administration Building
4. **Flammable Locker** - Located in the south Maintenance Shop
5. **Flammable Locker** - Located in the south Maintenance Shop
6. **Battery Room** - Located in the south Maintenance Shop
7. **Storage Shed** - Located near the current Flammable Materials Storage Shed
8. **Flammable Storage** - Located in a current vacant area

No documentation was obtained during the ECP survey regarding the apparent removal and closure of the north Maintenance Shop or items 1, 2, 3, and 8.

Certain types of chemical products used and stored at the Site would have contained CERCLA hazardous substances and would have been stored on a rotational basis in amounts necessary to support the unit through direct-support-level maintenance. However, there is no indication that CERCLA hazardous substances were stored at the Site for one year or more in excess of corresponding RQs.

3.3.2 Past Disposal and Release of Hazardous Substances

Information related to past disposal and potential release of hazardous substances at the Site was compiled through review of available Site records, search of federal and state environmental databases, and interviews with AFR Center personnel. According to AFR Center personnel and Site records, onsite disposal of hazardous materials or hazardous wastes has not occurred at the Site.

A 1997 Property Inspection Checklist for Environmental Baseline Studies was prepared by "USARC Safety" in preparation for the transfer of approximately 59 acres to Tinker AFB. The Checklist reported that the Twaddle AFR Center property was north and higher than subject property for transfer. It also reported dirt/debris mounds, ground depressions, landfills/waste piles, automotive batteries, and groundwater monitoring wells on the 59 acres. No evidence of those features was observed on the 25-acre AFR Center property during the Site reconnaissance.

As indicated in Section 3.3.1, a figure contained in a 1998 Historical Architectural Report illustrated the layout of the Site in 1989. A Maintenance Shop and associated VWR and OWS were shown on the north side of the Site in the current north area of the Administration Building. Other hazardous materials and hazardous waste management facilities also shown on the Site included a print room and photo lab in the Administration Building, and hazardous waste storage areas in and around a second Maintenance Shop located on the south side of the Site in the area of the current Marine OMS. The Maintenance Shop, VWR, and OMS on the north side of the Site were removed for the expanded Administration Building and some of the other hazardous materials/waste facilities have also been removed. No records were identified during the ECP regarding releases from these facilities or their proper closure.

No stained soil or stressed vegetation was observed during the visual Site reconnaissance. The MEP and POV parking areas did not show any signs of staining, and no noxious or foul odors were noted.

3.4 PAST BULK PETROLEUM STORAGE TANKS

Based upon a review of available Site records, a search of federal and state environmental databases, and interviews with AFR Center personnel, it does not appear that bulk petroleum aboveground storage tanks (ASTs) were on the Site. Three bulk

petroleum underground storage tanks (USTs) have been on the Site: one 5,000-gallon gasoline UST, and two 500-gallon waste oil USTs. The two waste oil USTs were installed May 5, 1973, and the date the gasoline UST was installed is unknown. The 1988 closure of all three USTs are described in Sections 5.2.2 and 5.2.3.

3.5 REVIEW OF PREVIOUS ENVIRONMENTAL REPORTS

A review of Site records produced several applicable reports pertaining to the Site. The following subsections provide a brief summary of these reports. Copies of the reports, unless otherwise specified, are provided in Appendix D. Only pertinent sections of reports that addressed multiple sites are presented in Appendix D.

3.5.1 Architectural Assessment Report

Parsons Engineering Science, Inc. (Parsons) performed a *Historic Architectural Resources Assessment of the 90th Regional Support Command Facilities in Oklahoma* for the Department of the Army. The findings of the assessment were compiled in a report issued February 1998. The report concluded that the buildings on the Site were not eligible for placement on the National Register of Historic Places because they did not meet the 50-year age criteria and they did not appear to possess exceptional historical importance. No further architectural surveys were recommended for this Site until its age reached 50 years. The Oklahoma State Historic Preservation Officer concurred with the Parsons report recommendations in a letter dated February 2, 1998.

The architectural report indicated that the Twaddle AFR Center was known as the "Army, Marine, and Navy Center" and contained three buildings owned by the USAR. The 1989 map (Figure 23 of that report) showed three buildings, a POV parking area, two fenced MEP areas, and eight waste management and environmental concern areas on the Site. Information related to those areas was summarized in Section 3.3.1 of this report.

3.5.2 Indoor Firing Range Report

An IFR was formerly located in the south area of the Administration Building. The IFR was closed in 1997 by American Asbestos, Inc., and approved for alternate use. The abatement, cleanup, and encapsulation of all lead-containing dust and work items were documented in the report titled *Final Submittals Presented in Connection with: Prepare Indoor Firing Ranges for Alternate Use at Various Locations in OK & TX, Contract DABT 39-96-C-3046, 0001AB OKC Twaddle USARC*. That report was dated May 21, 1997.

Steel panels, plates, and equipment were removed and collected for transportation to a local reclamation site, where they were recycled. All debris from sand and bullet traps were containerized then transported to American Asbestos, Inc.'s, Oklahoma City facility for temporary storage prior to shipment to Encycle Recycling in Corpus Christi, Texas. The air exhaust system from the IFR was also removed. Final clearance certification of the IFR

was issued by the Department of the Army via memorandum on June 19, 1997. A copy of the memorandum is contained in Appendix D of this report.

3.5.3 Lead and LBP Assessment and Management

ETC Engineers, Inc., of Little Rock, Arkansas, performed a LBP assessment of the AFR Center/Twaddle USAR Center for the USACE, Little Rock District. The results were summarized in a *Report of Findings, Lead-Based Paint and Ozone Depleting Chemicals Assessment and Management, Armed Forces Reserve Center/Twaddle USARC Oklahoma City, Oklahoma*, issued January 1994. The report stated that the dates of construction for the building were 1989 through 1991, and that a "marine and navy garage" was part of the facility. The assessment documented materials/surfaces containing LBP in the Administration Building.

Paint samples collected from seven locations demonstrated positive test results above the U.S. Housing and Urban Development regulatory action level of 1 milligram of lead per square centimeter. Those concentrations were discovered in samples collected from the ceiling, deflectors, stair risers, stair stringers, stair treads, columns, and exterior door jam. The report recommended implementation of a management plan for LBP identified at the Site to reduce the risk of release and exposure to lead through normal activities. The report recommended abatement of the locations containing LBP.

Wipe samples were also collected from the floor and backstop area of the IFR; those samples tested positive for lead. This sampling was performed before the IFR cleanup was performed in 1997, as described in section 3.5.2 of this report. The report recommended abatement of the lead dust in the IFR.

3.5.4 Radon Report

Radon screening was performed from June 11 to June 14, 1990, at 20 locations in the Administration Building. The results were issued on November 6, 1991, in a one-page summary that is labeled only as "Midwest City." The results ranged from 0.50 to 1.60 picocuries per liter (pCi/L).

3.5.5 Asbestos Report

An asbestos inspection was performed at the Twaddle AFR Center in December 1999 by the USAR. The results were summarized in *Asbestos Building Survey, Twaddle Armed Forces Reserve Center, Midwest City, Oklahoma*, issued December 1999. As part of the inspection, 30 samples were collected for asbestos analysis; five of the samples contained asbestos above 1%. Four of the positive samples were collected from "190 Cage Area" of the Administration Building (northeast corner of south area). The asbestos-containing material (ACM) from that area was determined to be white floor tile, green floor tile, and associated mastic. The other ACM was from the floor tile in the office in the Marine OMS. All ACM was classified as "non-friable" and the report stated that, "the nonfriable floor tiles and mastics in all locations are significantly damaged with a high probability for

disturbance.” The report also stated that the Navy warehouse was inaccessible the day of the survey. No recommendations for abatement were made in the report.

3.5.6 Cultural Resources Report

Parsons performed an assessment and prepared a *Management Summary, Cultural Resources Assessment of 90th Regional Support Command, Facilities in Arkansas, Louisiana, New Mexico, Oklahoma and Texas* for the Department of the Army. The assessments were compiled and issued February 1998. The assessment concluded that there were no architectural issues at the Twaddle AFR Center; the buildings on the Site were not eligible for the National Register of Historic Places. However, the assessment concluded that the Site had a “high” archeological potential and indicated archaeological issues were associated at the Site.

3.5.7 Polychlorinated Biphenyls Report

The U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) performed a *Polychlorinated Biphenyls (PCB) Assessment No. 37-08-5615-97* for the USAR facilities in Arkansas, Louisiana, Oklahoma, New Mexico, and Texas. The assessments were compiled and issued on September 30, 1997. The assessment addressed the source of power and fluorescent lighting on the Site. Electric power is provide to the Site by Oklahoma Gas and Electric through Tinker AFB. Fluorescent lighting at the Site is operated by non-PCB-containing ballasts. No transformers that could contain PCBs were identified on the Site.

3.5.8 BRAC 05 Installation NEPA Information Needs Questionnaire

A “*BRAC 05 Installation NEPA Information Needs Questionnaire*” was completed by the 90th Regional Readiness Command (RRC) for Closure of the “MG Harry L. Twaddle AFRC.” The questionnaire provided baseline information for National Environmental Policy Act Plans of Action. The questionnaire described the Site as follows: “The MG Harry L. Twaddle USARC is located at 5316 South Douglas Blvd, Oklahoma City, OK 73150-3409 in Oklahoma City, Oklahoma County, OK, in the Choctaw Quadrangle. The three buildings located on this 79-acre property are the AFR Center, always used for training and administration; the maintenance shop, always used for maintenance; and the storage shed, always used for storage. All buildings were constructed in 1974. Tinker AFB is north of the property and Mishak Cemetery is south/southeast of the property.” The checklist did not reveal specific information with regards to the environmental condition of the Site, but did confirm findings provided in other documentation, specifically architectural and cultural resource information.

3.5.9 Checklist for Environmental Baseline Survey

A *Property Inspection Checklist for Environmental Baseline Studies* was prepared by “USARC Safety” in preparation for the transfer of approximately 59 acres to Tinker AFB. The Checklist reported that the 25-acre Twaddle AFR Center property was north and higher than 59-acre property proposed for transfer. It also reported dirt/debris mounds,

ground depressions, landfills/waste piles, automotive batteries, and groundwater monitoring wells on the 59-acre property. No clarification was made as to the exact location of those identified items.

3.5.10 Oil/Water Separators

In May 2000, EnSafe Inc. generated a report for the 90th Regional Support Command entitled *Oil/Water Separator Evaluation*. The OWS associated with the VWR was identified in the report and described as follows: "The OWS, installed in 1972, is a 1,600-gallon, concrete rectangular vessel with two wooden baffles dividing the OWS into three chambers: an influent chamber, a separation chamber (quiescent zone), and an effluent chamber. The influent chamber receives rinse water from the wash rack and the effluent chamber discharges into the sanitary sewer system."

4.0 ADJACENT PROPERTIES

According to Site personnel, all adjoining properties are owned by Tinker AFB. Figure 21 in Appendix A provides a 2005 aerial photograph of the Site and adjacent properties. As shown on the photograph, the Site is bounded by South Douglas Boulevard to the west, then the developed Tinker AFB property. The Site is bounded by an undeveloped field to the immediate north, with a Fina gas station beyond at the intersection of South Douglas Boulevard and Southeast 49th Street. Further north of and along Southeast 49th Street are industrial and commercial properties. The properties further to the northeast include the closed Midwest C&D Landfill; details of this property are in Section 5.2.1.

A wooded area is located to the east and southeast beyond the AFR Center fence. As evidenced in Figure 21, this area operated as a motocross track at least as early as 1995.

The area immediately south of the Site was most recently an undeveloped field. A new hangar for Tinker AFB was being constructed in this area during the August 2006 visual reconnaissance. South Douglas Boulevard has been terminated at the southern entrance to the AFR Center; the road has been excavated indicating that the road closure is permanent. This section of South Douglas Boulevard is in the new hangar construction zone and will, in conjunction with the new hangar area, become contiguous with Tinker AFB.

Appendix A provides historical aerial photographs and topographic maps and Appendix E presents an environmental database report that was used to evaluate potential environmental impacts from adjacent and surrounding properties that may have also impacted the environmental conditions at the Site. Some land use changes have occurred over the past 50 years, most noticeably the transition of rural/agricultural properties to commercial to the north, the development the landfill to the northeast, and the development of Tinker AFB in all directions. As described in Section 2.4.2, facilities at Tinker AFB may have impacted the environmental conditions of the AFR Center property.

Table 3 provides a list of adjacent properties with their directional location from the Site and zoning. A zoning map of the area is presented on Figure 22 in Appendix A. As shown on that figure, the Site is zoned R-1, Single Family Residential.

Table 3
List of Adjacent Properties

Direction From Site	Name/Type of Property	Addresses	Zoning
North	Undeveloped Tinker AFB land immediately north of the Site. Industrial facilities are located on Southeast 49 th Street approximately 500 feet north of the Site	Southeast 49 th Street	I-2 (Moderate Industrial). I-2 areas are for the conduct of light manufacturing, assembling, and fabrication, and for warehousing, wholesale, and service uses. AE-1 (Airport Environs Zone 1). AE-1 areas are exposed to a projected annual average noise level in excess of 65 decibels.
West	South Douglas Boulevard is immediately west of the Site. Tinker AFB is on the west side of South Douglas Boulevard.	4900 to 5900 South Douglas Boulevard	R-1 (Single Family Residential). R-1 are areas for single-family residential housing in restrictive residential areas. PUD (Planned Unit Development). PUDs are special zoning districts that provide development in accordance with a master design statement or a master development plan.
South	Recently undeveloped. Now under development for Tinker AFB (hangar construction)	Southeast 49 th Street	PUD (Planned Unit Development). PUDs are special zoning districts that provide development in accordance with a master design statement or a master development plan.
East	Vacant land – former motocross track	South Berryman Road	PUD and R-1

5.0 REVIEW OF REGULATORY INFORMATION

A component of the ECP is the review of all reasonably obtainable federal, state, and local government records for the Site and surrounding properties where there has been a release or likely release of any hazardous substance or any petroleum product and that are likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product on the federal real property. An environmental database summary was obtained from EDR on July 31, 2006. The environmental database summary consolidates standard federal, state, local, and tribal environmental record sources based on ASTM-defined minimum search distances from the Site. A copy of the complete EDR report is included in Appendix E.

TEJV interviewed AFR personnel and reviewed reasonably accessible government environmental documents, ODEQ files, Oklahoma Corporation Commission (OCC) records, and historical aerial photographs and maps to investigate environmental conditions at the Site and surrounding area. Available information and the potential impact of environmental conditions on the Site were each assessed.

There were no environmental permits issued for the Site; therefore, there were no permit applications or associated permit documentation available for review. The Site did not participate in the Installation Restoration Program, Military Munitions Response Program, or a Compliance Cleanup program. However, there were previous environmental issues at the Site that required environmental cleanup and/or remediation. These issues included removal and cleanup of the IFR and USTs on the Site. As described in Section 3.5.2, the IFR was abated in 1997. The USTs that were on the Site are described in Sections 5.2.2 and 5.2.3 below.

TEJV conducted multiple interviews with relevant personnel to discuss general environmental interest and specific areas of interest identified during the records review and visual reconnaissance. Copies of the interview reports are included in Appendix D. Section 9.0 of this report identifies the individuals interviewed with respect to conditions and operations at the Site and the information from those interviews incorporated into this report.

5.1 FEDERAL ENVIRONMENTAL RECORDS

5.1.1 Federal National Priorities List Sites within One Mile

The National Priorities List (NPL) is a subset of the CERCLA Information System (CERCLIS) and identifies more than 1,200 sites for priority cleanup under the Superfund Program. NPL sites are targeted for long-term remedial action under CERCLA. According to the environmental database report, the Harry L. Twaddle AFR Center is not an NPL site.

Tinker AFB is listed on the NPL due to a chlorinated hydrocarbon release associated with the disposal of various wastes in industrial waste pits at the site. According to the environmental database search report, the Record of Decision for Tinker AFB was completed on August 15, 1990.

5.1.2 Federal CERCLIS Sites within One-Half Mile

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies, and persons, pursuant to Section 103 of CERCLA. CERCLIS contains sites that are either proposed to be or are on the NPL, sites that are in the screening and assessment phase for possible inclusion on the NPL, and sites that are in the screening and assessment phase for possible inclusion on the NPL. According to the environmental database report, the Harry L. Twaddle AFR Center is not a CERCLIS site.

The Tinker AFB, located west across South Douglas Boulevard from the Site, is listed as a CERCLIS site.

CERCLIS No Further Remedial Action Planned (NFRAP) sites have been removed and archived from CERCLIS. NFRAP status indicates that, to the best of USEPA's knowledge, assessment at a site has been completed and that no further steps will be taken to list this site on the 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 the site; it means that, based on available information, the location is not judged to be a potential NPL site. According to the environmental database report, the AFR Center is not a CERCLIS NFRAP site and there are no CERCLIS NFRAP sites within one-half mile of the Site.

One orphan site was listed on the CERCLIS NFRAP list. That site, the 137th Tactical Airlift Wing, was reported as located at an undisclosed address on Douglas Boulevard at Building 3767. Internet research conducted on the 137th Tactical Airlift Wing did not identify the location of the identified site. The address suggests it is located on Tinker AFB property.

5.1.3 Resource Conservation and Recovery Act Corrective Action Sites within One Mile

Resource Conservation and Recovery Act (RCRA) Corrective Action Sites (CORRACTS) represent facilities that have generated or managed hazardous wastes and require corrective action. According to the environmental database report, the AFR Center is not a CORRACTS.

Tinker AFB was the only identified CORRACTS within one mile. According to the environmental database search, based on current and reasonably expected conditions, current human exposures at the Tinker AFB site are minimal. The generation and management of hazardous wastes at Tinker AFB are not considered to represent a threat to human exposure at the AFR Center.

5.1.4 RCRA Transport, Treatment, Storage, and/or Disposal Facilities within One-Half Mile

The RCRA Information Database includes selective information on sites that generate, transport, treat, store, and/or dispose (TSD) of hazardous waste as defined by RCRA. According to the environmental database report, the AFR Center is not a RCRA TSD site.

Tinker AFB is the only identified TSD facility within one-half mile of the Site. The environmental database search indicated that 14 TSD violations were reported for the Tinker AFB facility. The TSD areas of violation at Tinker AFB included oversight requirements, container requirements, general requirements, tanks requirements, and closure/ post-closure requirements.

5.1.5 Federal RCRA Small- and Large-Quantity Generators List within One-Quarter Mile

Conditionally exempt small-quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste, per month. RCRA small-quantity generators (SQGs) are defined as facilities generating between 100 kg and 1,000 kg of hazardous waste per month, while a large-quantity generator (LQG) is defined as a facility generating more than 1,000 kg of hazardous waste, or over 1 kg of acutely hazardous waste, per month. According to the environmental database report, the AFR Center is not an SQG or LQG. However, USAR personnel indicated that the Site is a CESQG. According to USAR personnel, all potentially hazardous wastes and POLs generated at the Site are transported offsite for disposal or recycling. No wastes are disposed of onsite.

One RCRA SQG, Sooner Stripping, was identified within one-quarter mile of the Site. No violations were reported for Sooner Stripping.

Tinker AFB was the only RCRA LQG identified within one-quarter mile of the Site.

5.1.6 Federal Emergency Response Notification System List

The federal Emergency Response Notification System (ERNS) provides information on reported releases of oil and hazardous substances. According to the environmental database report, the USAR Center is not listed on the ERNS.

5.2 STATE AND LOCAL ENVIRONMENTAL RECORDS

The regulatory information presented below was obtained from the environmental database report. Supplemental information was also provided from research at the ODEQ.

5.2.1 State-Registered Landfills or Solid Waste Disposal Sites within One-Half Mile

According to the environmental database report, no solid waste landfills, incinerators, or transfer stations are within one-half mile of the Site. There is no solid waste landfill, incinerator, or transfer station on the Site. However, three of the unmapped sites (see Section 5.4) included solid waste facilities estimated to be within one-half mile of the Site.

The Midwest C&D landfill was identified approximately 500 feet northeast of the Site; this landfill is also listed as the Midwest Maintenance and Construction Company C&D landfill on the unmapped list. The Tinker AFB Landfill was determined to be south of SE 59th Street, approximately 2,200 feet south of the Site.

The ODEQ, Land Protection Division, Solid Waste Compliance and Inspection Section was contacted and confirmed that the Midwest Maintenance and Construction Company C&D landfill was permitted in November 1973 and is now closed. The date of closure was not provided. Given the nature of the landfill (C&D waste only) and its apparent downgradient direction from the Site, it is not considered to represent a potential impact to the Site.

Based on review of a 2005 aerial photograph, the Tinker AFB landfill did not appear active. According to the 2004 Tinker AFB Community Relations Plan, the landfill, labeled Landfill 6 (solid waste management unit [SWMU]-1), operated from 1970 to 1979 and is now in the Air Force's long term monitoring program. The landfill received general refuse and industrial waste. The former landfill location can be seen in the ODEQ file information included in Appendix D. The landfill is shown to have an associated groundwater chlorinated hydrocarbon plume. This plume is not associated with the former industrial waste evaporation basin. The Landfill 6/SWMU-1 plume is shown to be defined and has not impacted the AFR Center.

5.2.2 State-Registered Leaking UST Sites within One-Half Mile

The Site is listed in the state leaking UST (LUST) database. According to the environmental database report, no other LUST sites are located within one-half mile of the Site. A records search at the OCC indicated that the Site was categorized as a LUST site by the OCC due to the presence of contaminated soils discovered during the closure of one 5,000-gallon gasoline UST. The age of the tank is unknown. According to an August 22, 1988 OCC memorandum discovered in the file, at the time of removal, nine 14-

yard loads (126 cubic yards) of petroleum-impacted soil were excavated and disposed at Laidlaw Landfill at SE 4th and Bryant. The tank was removed by Joe's Backhoe and disposed by City Metals. A handwritten note on the memorandum indicates "closed 8/23/88." No analytical data were discovered during the file search. According to the environmental database search report, the LUST incident at the Site has been closed. A formal letter from OCC to this effect was not found during the file search; however, OCC personnel indicated that file information could be missing or misplaced. The existing documentation of this closure is provided in Appendix D.

5.2.3 State-Registered UST Sites within One-Quarter Mile

USTs are regulated under RCRA Subtitle I and must be registered with the state department responsible for administering the UST program. The Site is listed in the state UST database. Three USTs were present on the Site in the past; one 5,000-gallon gasoline UST, and two 500-gallon waste oil USTs. The closure of the gasoline UST is described in Section 5.2.2. The two waste oil USTs were installed May 5, 1973. A Facility Summary Report retrieved from the OCC files indicates that the waste oil USTs were "removed from the ground – 07/1988." No documentation was found detailing any soil analyses that may have been conducted at that time.

The environmental database report identified one state-registered UST site within one-quarter mile: Midwest Maintenance and Construction Company at 5500 South Douglas Boulevard. This UST site is reportedly approximately 1,292 feet south of the Site, at a lower topographic elevation. However, the Midwest Maintenance and Construction Company location was determined to be approximately 500 feet northeast of the Site, at the C&D landfill. According to the environmental database report, the UST is permanently out of use. There are no reported releases associated with this site and it represents a low potential environmental risk to the Site.

An unmapped registered UST site is located at 7410 Patrol Road at the Tinker AFB. The environmental database was not able to map this site and therefore listed it under the unmapped site category. TEJV was not able to locate the address; however, portions of Patrol Road are located within one-half mile of the Site. The registered UST at 7410 Patrol Road is also listed on the historical UST database but not the LUST database.

5.2.4 State Hazardous Waste Sites within One Mile

According to the environmental database report, no hazardous waste sites are within one mile of the Site. The Site is not classified as a hazardous waste site.

5.2.5 State AST Sites within One-Quarter Mile

According to the environmental database report there are no state-registered ASTs within one-quarter mile of the Site.

5.2.6 State Sites with Institutional Controls within One-Half Mile

Institutional controls include administrative procedures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post-remediation care requirements intended to prevent exposure to contaminants remaining onsite. According to the environmental database report, no state-registered sites with Institutional Controls are within one-half mile of the Site.

5.2.7 State Voluntary Cleanup Program Sites within One-Half Mile

There are no State Voluntary Cleanup Program (VCP) sites with one-half mile of the AFR Center. According to the environmental database report, the Site is not listed on the VCP list.

5.2.8 State Brownfields Program Sites within One-Half Mile

Included in the listing are brownfields properties addressed by Cooperative Agreement Recipients and brownfields properties targeted by Targeted Brownfields Assessments. According to the environmental database report, no state-registered Brownfield Program Sites are within one-half mile of the Site. According to the environmental database report, the Site is not listed on the brownfields list.

5.3 TRIBAL ENVIRONMENTAL RECORDS

According to the environmental database report, no designated Indian Reservations are within one mile of the Site.

5.4 UNMAPPED SITES

The environmental database search yielded 29 unmapped sites. Unmapped sites are those with address information sufficient to identify them within the same zip code of the target Site. Further research was conducted using maps of the Site and surrounding area. Of the 29 sites listed, five were estimated to be within the corresponding ASTM D 6008-recommended minimum search distances for the databases on which they were listed. One of the unmapped sites, the 137th Tactical Airlift Wing Building 3767, was discussed in Section 5.1.2. The unmapped registered UST site on Patrol Road was discussed in Section 5.2.3. The other three unmapped landfill sites were discussed in Section 5.2.1.

5.5 SUMMARY OF PROPERTIES EVALUATED TO DETERMINE RISK TO SITE

During review of environmental information summarized in this section, multiple databases and sites were reviewed to evaluate potential risks to the Site. The site with the highest potential to adversely affect the Site is the groundwater contamination associated with the Tinker AFB NPL Site. According to existing reports, elevated concentrations of chlorinated hydrocarbons are present immediately across South Douglas Boulevard from the Site and, as of 2004, low concentrations had migrated to the Site, which is an established risk. The 2004 data is not recent enough to accurately reflect current conditions.

6.0 SITE INVESTIGATION AND REVIEW OF HAZARDS

Findings documented in the following subsections are based on the August 9, 2006, Site and area reconnaissance, review of available Site records, and information obtained from AFR and USAR personnel.

6.1 UNDERGROUND AND ABOVEGROUND STORAGE TANKS

Based on observations and interviews, no petroleum USTs or ASTs are currently located on Site. Three OWSs are currently being used at the site. They are located at the VWR, the Marine OMS, and the Navy OMS. There is no documentation regarding the operation, maintenance, inspection or integrity of the OWSs located on the Site.

6.2 INVENTORY OF CHEMICALS/HAZARDOUS SUBSTANCES

During the August 9, 2006, visual reconnaissance, chemicals and hazardous substances were observed in designated areas throughout the Site. These included cleaning materials in the Administration Building, and POLs, vehicle maintenance compounds, and other materials in the designated areas of the OMS buildings, hazmat and chemical storage buildings, and sheds in the MEP area of the Site. Chemical inventories are provided in Appendix D.

6.3 WASTE DISPOSAL SITES

No signs of landfilling or illegal waste disposal activities were observed on the Site during TEJV's visual Site reconnaissance.

6.4 PITS, SUMPS, DRY WELLS, AND CATCH BASINS

The Site is served by a sanitary sewer system from Tinker AFB. Wastewater from the buildings discharges to the sanitary sewer system. Liquids entering floor drains in the OMSs and wash water from the VWR are conveyed to an OWS before entering the wastewater system.

Runoff from the Site generally drains into a storm water system that discharges to the east side of the Site.

6.5 ASBESTOS-CONTAINING MATERIAL

As described in Section 3.5.5, ACM was detected in the Administration Building and the Marine OMS in a 1999 Asbestos Survey. No documentation was made available for review regarding any removal of asbestos from the Site.

6.6 PCB-CONTAINING EQUIPMENT

As described in Section 3.5.7, there are no electrical transformers on the Site; electric power is provided by Tinker AFB. The previous USACHPPM PCB assessment indicated that fluorescent light fixtures on the Site are non-PCB-containing. No other PCB-containing equipment was identified on the Site.

6.7 LEAD

As described in Section 3.5.3, LBP was detected in the Administration Building during an assessment by ETC Engineers, Inc., in 1994 and recommendations were made for mitigation measures to reduce the risk of release and exposure to lead through normal activities. LBP was identified in the ceiling, entrance door frames, stair stringers, risers, and deflectors, stair tread, and a column. The TEJV was not provided any documentation regarding the implementation of those recommendations. During TEJV's visual Site reconnaissance, the observed painted surfaces in the Administration Building appeared to be in good condition.

An IFR was previously located on the Site and was closed in 1997 by American Asbestos, Inc., as described in Section 3.5.2. The lead abatement, cleanup, and encapsulation were completed and the area approved for alternate use via a Department of the Army memo dated June 19, 1997. The former IFR area was converted to the 95th Infantry Division Memorial which was dedicated October 2, 1993. The memorial was observed during TEJV's Site reconnaissance.

6.8 RADON

As described in Section 3.5.4, radon tests were performed which determined the Site-specific radon levels to be less than the USEPA-recommended federal action level of 4.0 pCi/L. The Site-specific radon levels were consistent with area/county radon levels reported by the USEPA.

6.9 UNEXPLODED ORDNANCE

No indications were found during the Site reconnaissance or during the review of records to indicate the presence of munitions and explosives of concern at the Site.

6.10 RADIOACTIVE MATERIALS

During the August 9, 2006 visual Site reconnaissance and records review process, no indications were found of the past storage or use of radiological commodities at the Site.

7.0 REVIEW OF SPECIAL RESOURCES

7.1 LAND USE

The Site is zoned R1 single family residential as shown on Figure 22 in Appendix A and described in Section 4.0 of this Report. The areas south and east of the Site of the Site are zoned PUD - Planned Use Development. The parcel of land to the north of the Site is zoned I2 for Moderate Industrial. The parcel of land located northeast of the Site containing the Midwest C&D landfill is zoned AA for Agriculture. The parcel of land located west of the Site across South Douglas Boulevard where Tinker AFB is located is zoned AE-1 for Airport Environs Zone 1 and R-1.

7.2 COASTAL ZONE MANAGEMENT

There is no coastal zone management plan for Oklahoma.

7.3 WETLANDS

The Site is upland and well drained. According to the USFWS NWI map, no jurisdictional wetland areas are identified on the Site, or adjacent properties. The nearest wetland is located approximately 1,000 feet east of the Site. Figure 9 in Appendix A provides a map of wetlands in the area of the Site.

7.4 100-YEAR FLOODPLAIN

According to the FEMA Flood Insurance Rate Map for Oklahoma County, Oklahoma and Incorporated Areas (Map Number 40109C0415 G, Effective Date July 22, 2002), the Site is in Zone X. FEMA describes Zone X as "Areas determined to be outside the 500-year flood plain." Figure 8 in Appendix A provides a map depicting the extents of the nearest 100-year and 500-year flood plains in the area of the Site.

7.5 NATURAL RESOURCES

According to the USFWS, the following the following threatened, endangered species, and/or de-listed species are listed in Oklahoma County:

- American peregrine falcon (*Falco peregrinus anatum*)
- Arkansas River Shiner (*Notropis girandi*)
- Bald eagle (*Haliaeetus leucophalus*)
- least tern (*Sterna antillarun*)
- Piping Plover (*Charadrius melodus*)
- Whooping Crane (*Grus americana*)

The Site is developed and maintained. Except for potential incidental use by migrants, the listed species are unlikely to occur at the Site.

7.6 CULTURAL RESOURCES

As described in Section 3.5.6, cultural resource assessments were performed on the Site. The assessments were compiled and issued February 1998. The assessments concluded that there were no architectural issues at the AFR Center; the buildings on the Site were not eligible for the National Register of Historic Places. The assessment also concluded that the Site was determined to have a “high” archeological potential. The assessment reported that, at that time, the Site included 79 total acres of which 70.7 acres were undeveloped. Despite the “high” archeological potential, no part of the 70.7 acres was recommended for further archeological survey. The report indicated that the U.S. government owned the buildings but not the surrounding land. The Oklahoma Archeologic Survey, in a letter dated July 14, 1997, concurred with the recommendation for this Site.

7.7 OTHER SPECIAL RESOURCES

There are no other known resources that could affect the Site.

8.0 CONCLUSIONS

The TEJV, under contract to the USACE Louisville District, was authorized to prepare an ECP Report for the 25-acre Harry L. Twaddle AFR Center (Facility ID OK017) at 5316 South Douglas Boulevard in Oklahoma City, Oklahoma County, Oklahoma. The Site is currently active and is occupied by various Detachments of the 95th Division. Buildings on the Site include the Administration Building, a Marine OMS, a Navy OMS, an Army Equipment Storage Building, a Marine Equipment Storage Building, and a Marine Artillery Vehicle Building. The Site has functioned as an administrative, educational, storage and vehicle maintenance facility.

Findings of this ECP are based on existing environmental information, including visual observations, Site records, and federal, state, and local database and file information related to the storage, release, treatment, or disposal of hazardous substances or petroleum products or derivatives on the Site. The following present the findings related to areas of potential environmental concern that were evaluated during the ECP process.

- **Hazardous Substances.** Chemicals containing CERCLA hazardous substances are used and stored at the Site in amounts necessary to support unit-level vehicle and building maintenance activities. However, the quantities stored for one year or more do not exceed 1,000 kg or the RQ of designated hazardous substances, or one kg of acutely hazardous waste. There is no evidence that the chemicals used or stored were ever improperly handled, released, or disposed at the Site.
- **UST/AST.** Three petroleum USTs were formerly located on the AFR Center property: one 5,000-gallon gasoline UST and two 500-gallon waste oil USTs. All tanks were removed in 1988 as documented by file information retrieved from the OCC. The documentation also confirms the removal of contaminated soils associated with the gasoline UST. No specific analytical data were found during the file review confirming the condition of the soils in the areas of the removed USTs. No ASTs have historically been, or are currently, located on the Site.
- **Non-UST/AST Petroleum Storage.** Petroleum storage has occurred and continues in designated areas of OMSs and within designated POL storage sheds and buildings. No documentation was available for review that would indicate that non-UST/AST petroleum products in excess of 55 gallons were stored for one year or more onsite, or that petroleum products were spilled or disposed in the OMS area.
- **VWR and OWSs.** One VWR and three OWSs were identified on the Site. The VWR appears to be used frequently. The OWSs are at the VWR, the Marine OMS, and the Navy OMS. No inspection records were obtained regarding the VWR or OWSs. No problems or issues were identified during the ECP survey; however, limited documentation was available regarding their operation, routine maintenance, cleanout, or integrity. An additional OMS, VWR, and associated OWS were previously located on the Site north of the original Administration Building. This area

is currently occupied by the north portion of the Administration Building. The OMS, VWR, and OWS facilities were apparently removed when the Administration Building was expanded in 1991. No records were made available regarding operation or closure of these facilities during the ECP survey.

- **Polychlorinated Biphenyls.** A PCB assessment was performed by the USACHPPM in 1997. The assessment addressed the source of power to the AFR Center and the condition of the fluorescent lights on the Site. The report indicates that power is supplied to the Site from the adjacent Tinker AFB and that the fluorescent lighting is operated by non-PCB containing fixtures. No electrical transformers are on the AFR Center property.
- **Asbestos-Containing Material.** A 1999 *Asbestos Building Survey* on the Site found ACM in the Administration Building and the Marine OMS. The report also stated that the Navy warehouse was inaccessible the day of the survey. TEJV was not provided with any documentation regarding additional ACM sampling or implementation of abatement measures.
- **Lead-Based Paint.** ETC Engineers, Inc. performed a LBP assessment of the Twaddle AFR Center in 1994. The assessment documented LBP in the Administration Building and presented abatement recommendations and a management plan. Two wipe samples collected from the IFR within the Administration Building also tested positive for lead. No documentation was provided during the ECP survey indicating that the LBP abatement measures and/or the management plan were ever implemented; therefore, verification of LBP removal and/or abatement could not be documented during the ECP survey. However, during the August 2006 visual reconnaissance the painted surfaces in the buildings were generally observed to be in good condition.
- **Indoor Firing Range.** An IFR was previously located in the south area of the Administration Building. The IFR was removed and the area cleaned and approved for alternate uses in 1997. A report by American Asbestos, Inc. documented the abatement, cleanup, and encapsulation of all lead-containing dust and other issues. Final clearance certification of the IFR was issued by the Department of the Army via memorandum on June 19, 1997.
- **Radiological Materials.** No radiological materials were identified during the visual reconnaissance. There is no evidence of any release of radiological materials at the Site.
- **Radon.** In 1990, radon tests were performed at 20 locations in the Administration Building. The results ranged from 0.50 to 1.60 pCi/L, which are below the USEPA-recommended action level of 4.0 pCi/L. The Site is in the USEPA Radon Zone 3. Zone 3 has "Low Potential" for radon. Based on actual measurements provided for

review during the ECP survey, and the general location of the Site, radon is not an environmental concern at the Site.

- **Munitions and Explosives.** No evidence was found during the Site reconnaissance or records review process of the past presence of munitions and explosives of concern.
- **Surrounding Properties.** Potential environmental sites of concern, located within corresponding ASTM D 6008-recommended minimum search distances from the Site, were evaluated. Land use on the adjacent and nearby properties includes Tinker AFB which occupies all surrounding properties and has been present west of the Site across South Douglas Boulevard since at least 1957, and the Midwest C&D landfill located approximately 500 feet northeast of the Site. Tinker AFB is documented in multiple environmental databases. Activities at Tinker AFB have resulted in release of contaminants to the environment. An investigation is ongoing relative to chlorinated hydrocarbons in groundwater from an industrial waste evaporation basin formerly located approximately 600 feet northwest of the Site, and from SWMU-1, a closed landfill formerly operated by Tinker AFB. The most recent available data indicates detection of chlorinated hydrocarbons in the groundwater monitoring wells located on and adjacent to the AFR Site. The Midwest C&D landfill is reported to have accepted only C&D waste and is located in what appears to be a downgradient direction from the Site and is therefore not considered a risk to the Site.

A *Property Inspection Checklist for Environmental Baseline Studies* was prepared by "USARC Safety" in preparation for the transfer of approximately 59 acres to Tinker AFB; the checklist was approved on April 21, 1997. The checklist reported dirt/debris mounds, ground depressions, landfills/waste piles, automotive batteries, and groundwater monitoring wells on the 59-acre property. No clarification was made as to the exact location of these noted items. The checklist suggests that the identified items were confined to the 59 acres pending transfer.

Based on the information revealed in this ECP survey and in accordance with DoD policy defining the classifications (see the S.W. Goodman Memorandum dated October 21, 1996), the Site has been classified as Category 7. This classification does not include categorizing the property based on *de minimis* conditions that generally do not present material risk of harm to the public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. This classification was selected because the presence of the chlorinated hydrocarbons plume in groundwater from the Tinker AFB continues to pose a high risk for migration to the AFR Center, and the 2004 data is not recent enough to accurately reflect current conditions.

9.0 REFERENCES

Persons Contacted

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- Mr. Jerry Hughes. Environmental Scientist, Engineering & Environment, Inc. (USAR Contractor), Oklahoma City, OK. Phone No. 405-946-4967. Meeting on August 9, 2006.
- Mr. Ed Wagner, Area Facility Operational Specialist (AFOS), 90th Regional Readiness Command, Oklahoma City, OK, Phone No. 405-948-1003. Meeting on August 9, 2006.

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- U.S. Fish & Wildlife Services. *Endangered Species List for Oklahoma County, Oklahoma*

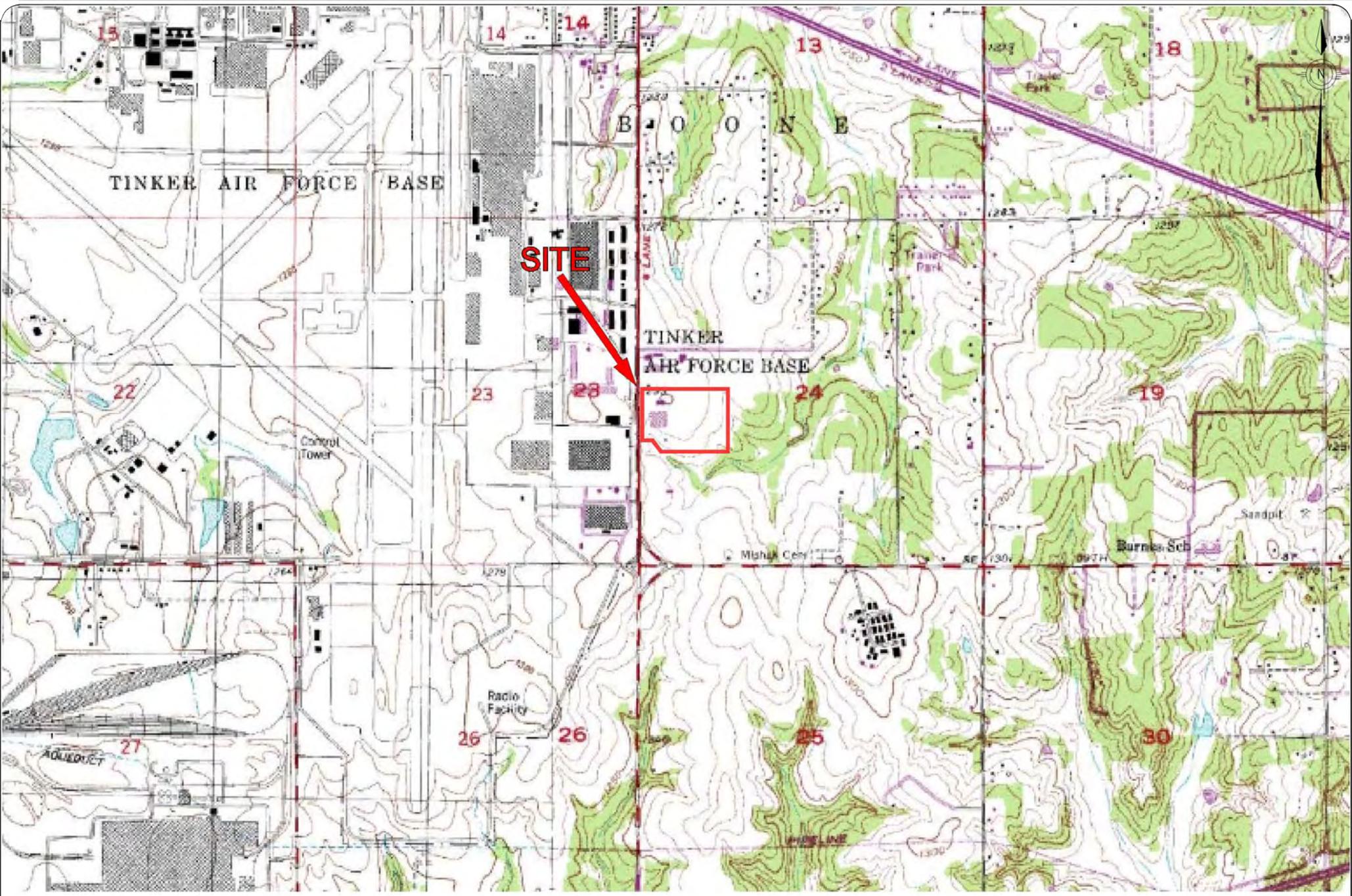
Agencies Contacted

- U.S. Department of Agriculture, Natural Resource Conservation Service, Soil Survey of Oklahoma County
- Oklahoma Corporation Commission, Petroleum Storage Tank Division
- City of Oklahoma City, Oklahoma
- Oklahoma Department of Libraries
- United States Fish and Wildlife Service, Department of Interior
- Federal Emergency Management Agency
- Oklahoma Department of Environmental Quality, Water Quality Division
- Oklahoma Department of Environmental Quality, Land Protection Division, Solid Waste Compliance and Inspection Section

Appendix A
Figures

FIGURES

Figure 1	General Site Location Map
Figure 2	Site Layout Plan
Figure 3	First Floor Layout of Existing North Training Building
Figure 4	Second Floor Layout of Existing North Training Building
Figure 5	First Floor Layout of Existing South Training Building
Figure 6	Second Floor Layout of Existing South Training Building
Figure 7	Layout of Existing O.M.S. Bldg.
Figure 8	Flood Plain Map
Figure 9	National Wetland Inventory Map
Figure 10	1938 Topographic Map
Figure 11	1956 Topographic Map
Figure 12	1969 Topographic Map
Figure 13	1975 Topographic Map
Figure 14	1986 Topographic Map
Figure 15	1957 Aerial Photograph
Figure 16	1963 Aerial Photograph
Figure 17	1970 Aerial Photograph
Figure 18	1984 Aerial Photograph
Figure 19	1995 Aerial Photograph
Figure 20	2003 Aerial Photograph
Figure 21	2005 Aerial Photograph
Figure 22	Zoning Map



MAP SOURCE:
U.S.G.S. 7.5 MINUTE QUADRANGLE
MIDWEST CITY, OKLAHOMA 1986
SPENCER, OKLAHOMA 1986

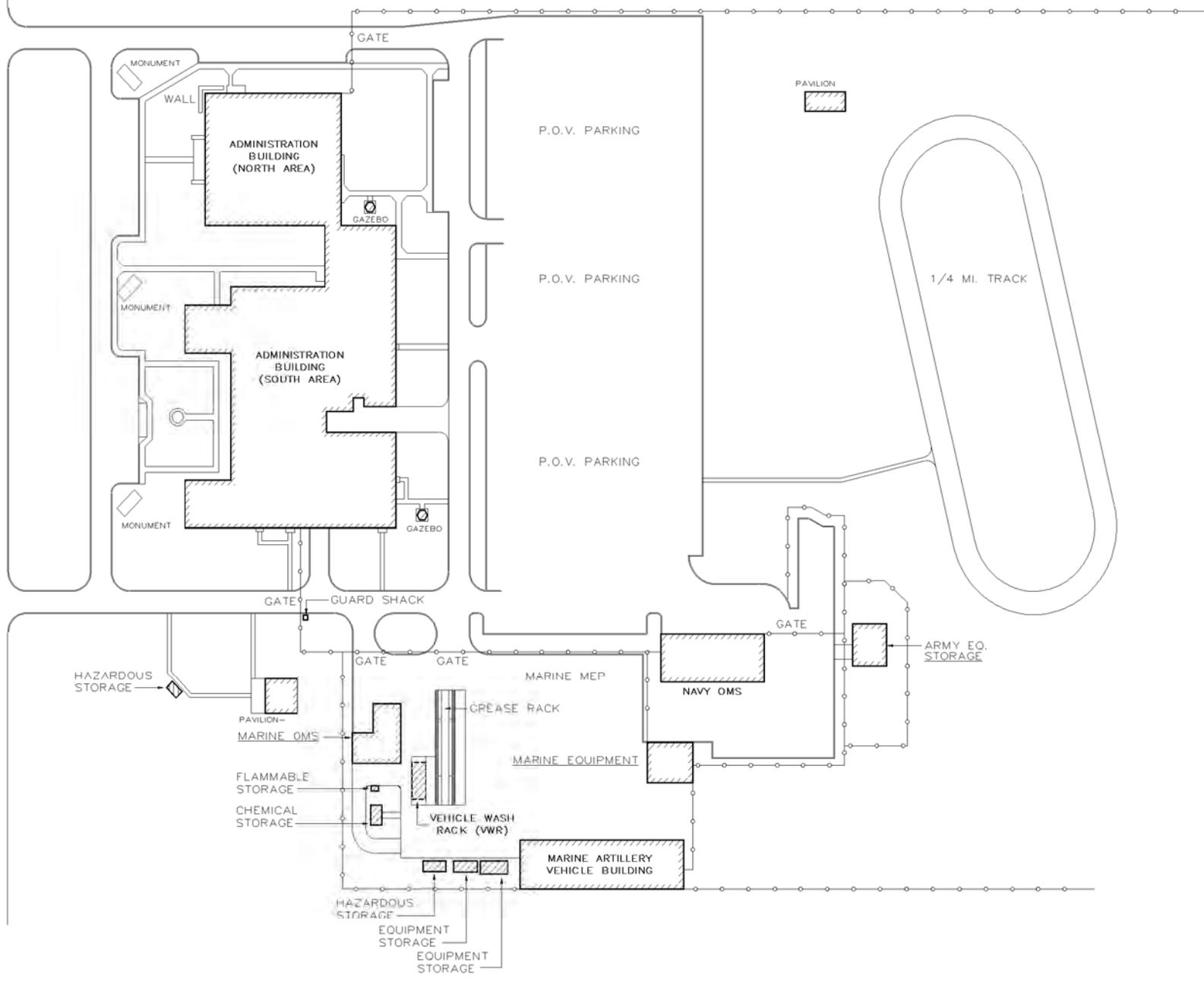
FIGURE 1
GENERAL SITE LOCATION MAP
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





S. DOUGLAS BLVD.



LEGEND

 BUILDING

 FENCE LINE

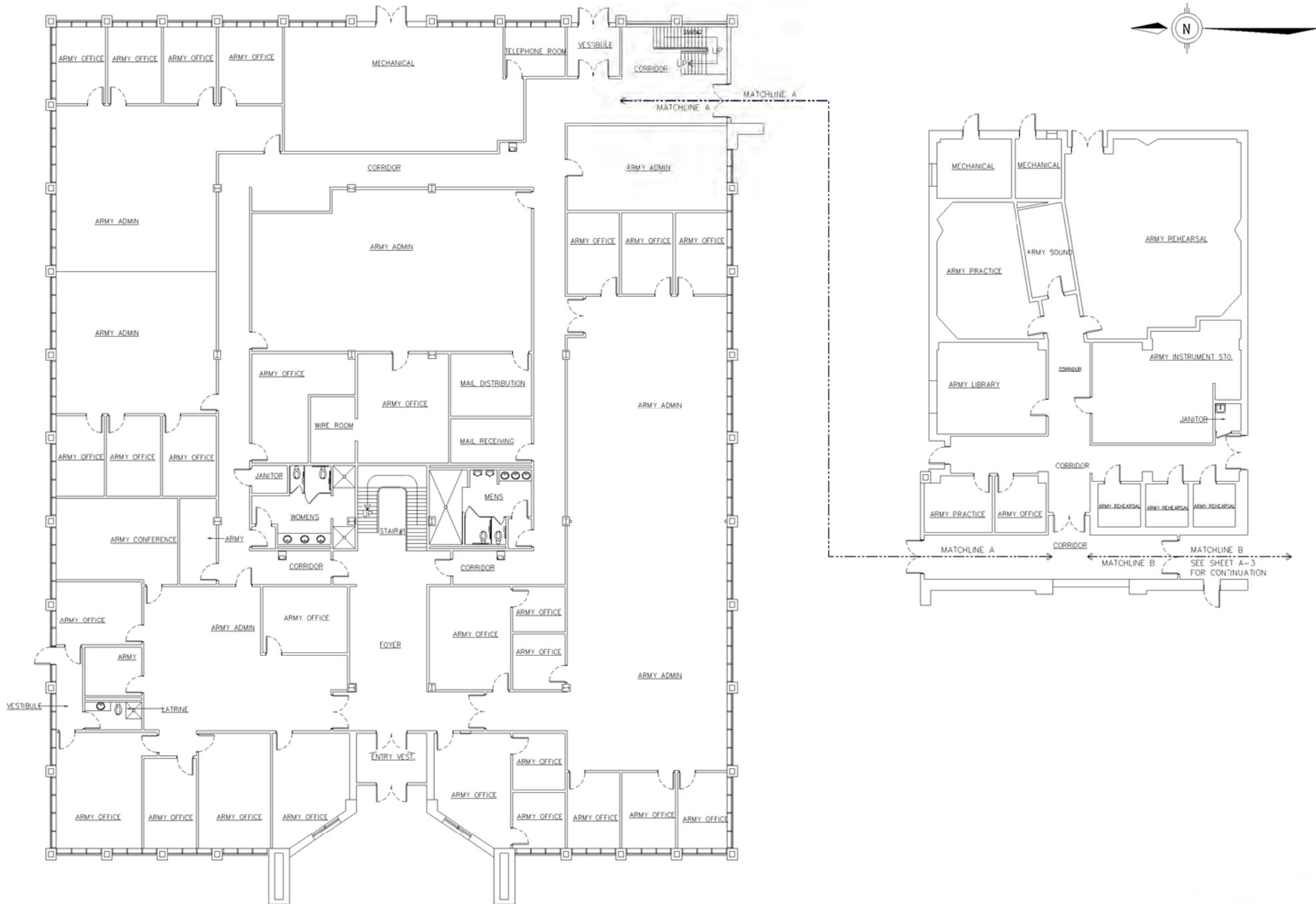


SOURCE:
90TH RRC
(OCTOBER 5, 2001)

FIGURE 2
SITE LAYOUT PLAN
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





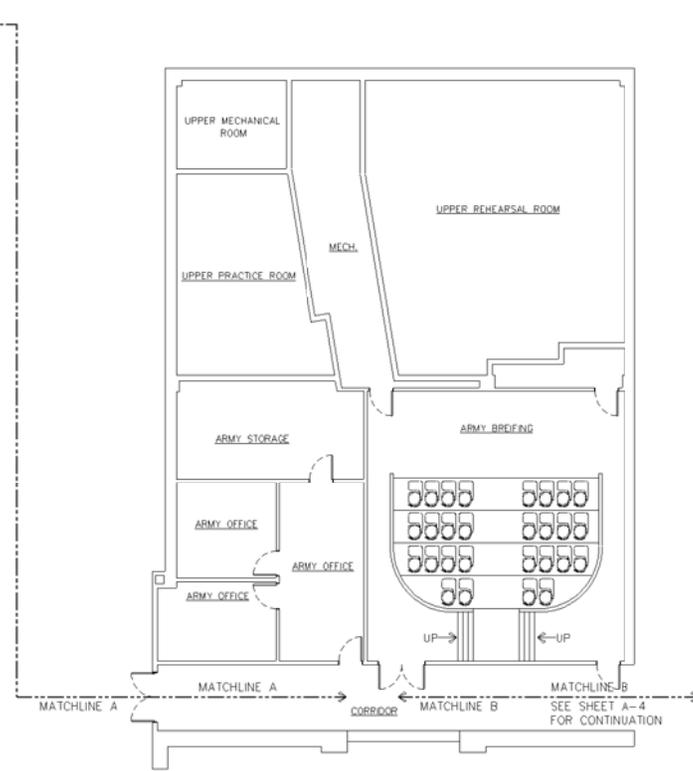
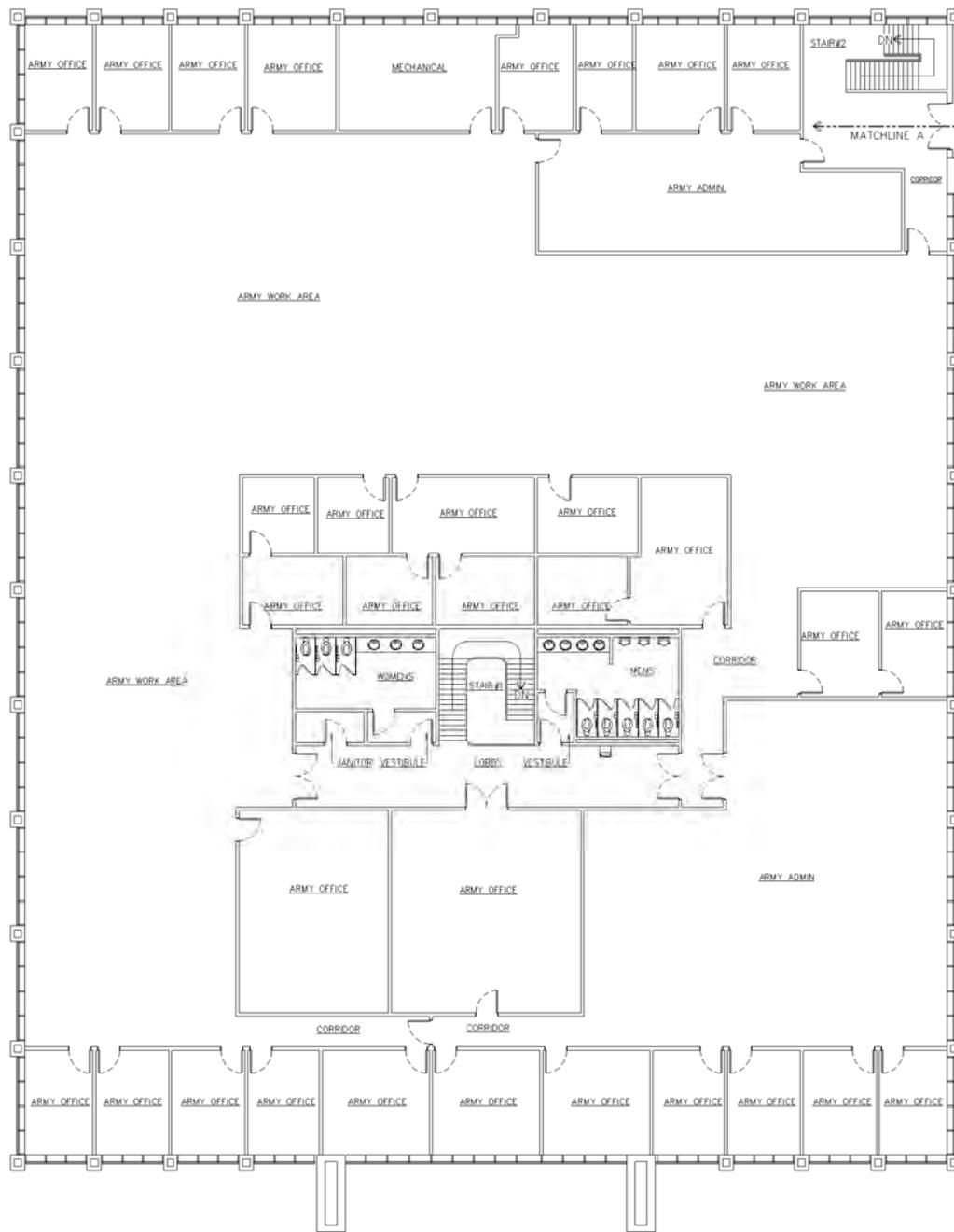
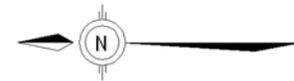
SOURCE:
90TH RRC
(OCTOBER 5, 2001)



FIGURE 3
FIRST FLOOR LAYOUT OF
ADMINISTRATION BUILDING (NORTH AREA)
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





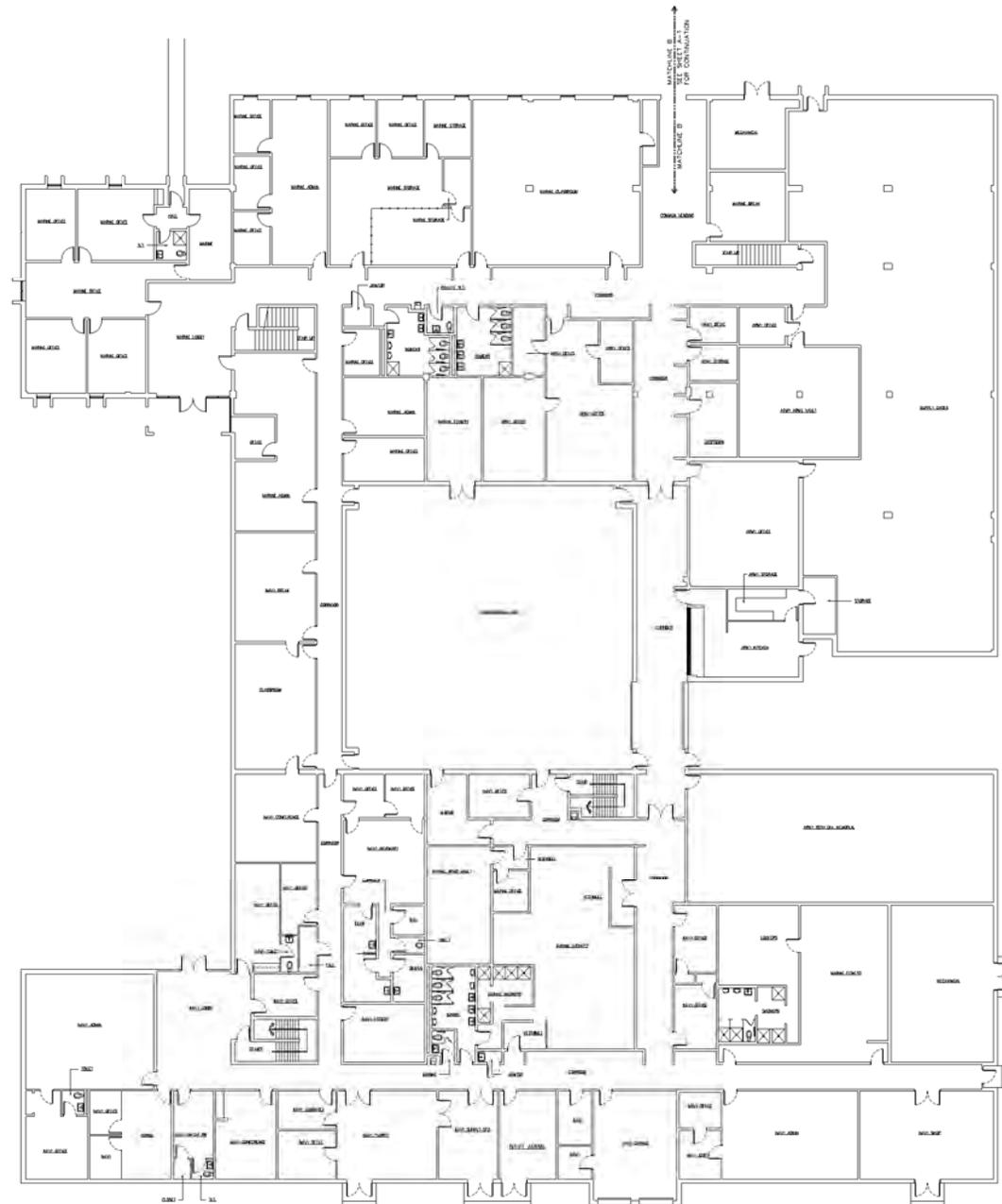
SOURCE:
90TH RRC
(OCTOBER 23, 2001)



FIGURE 4
SECOND FLOOR LAYOUT OF
ADMINISTRATION BUILDING (NORTH AREA)
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





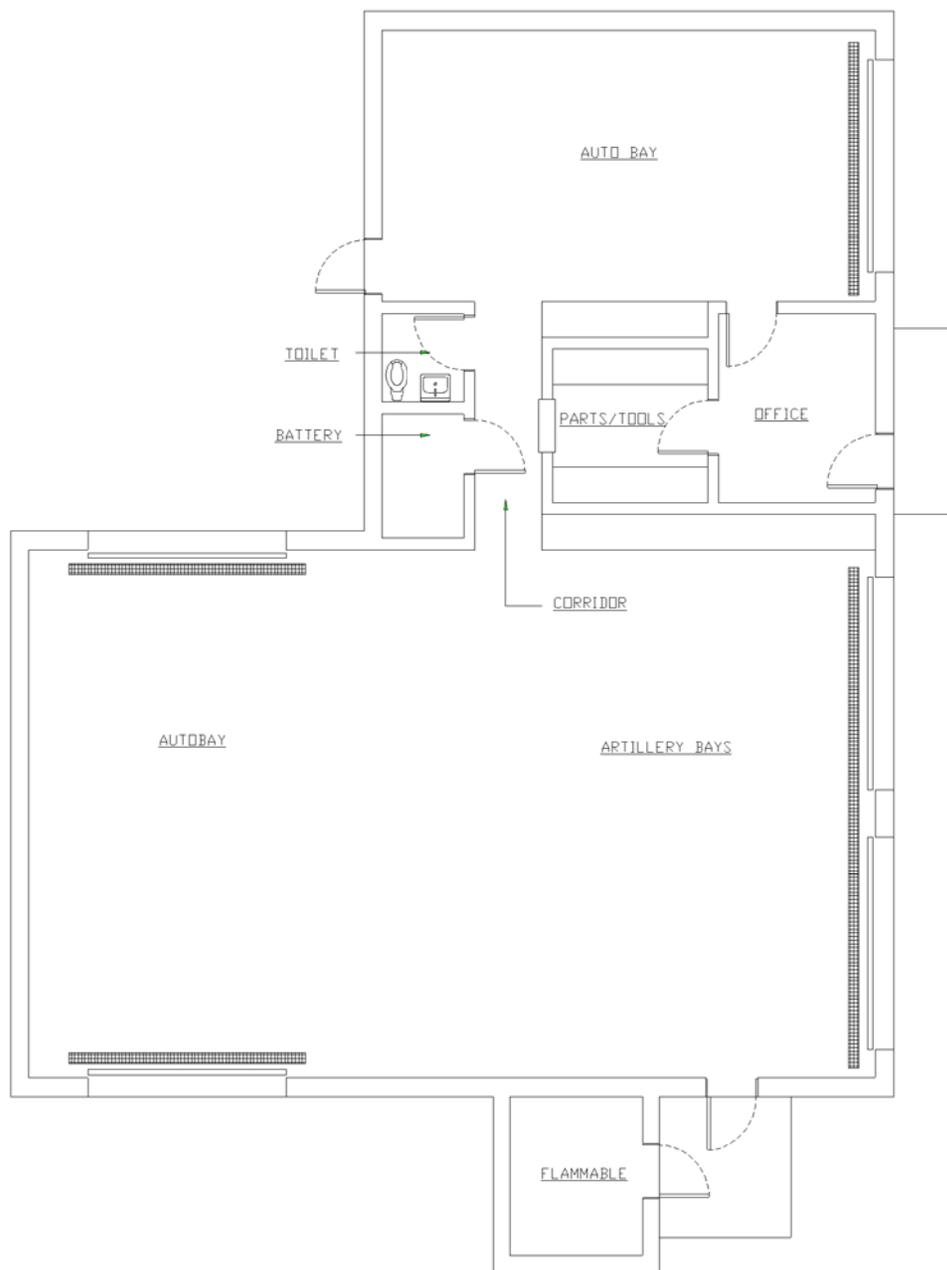
SOURCE:
90TH RRC
(AUGUST 30, 2001)



FIGURE 5
FIRST FLOOR LAYOUT OF
ADMINISTRATION BUILDING (SOUTH AREA)
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





SOURCE:
90TH RRC
(OCTOBER 25, 2001)



FIGURE 7
LAYOUT OF MARINE O.M.S.
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017



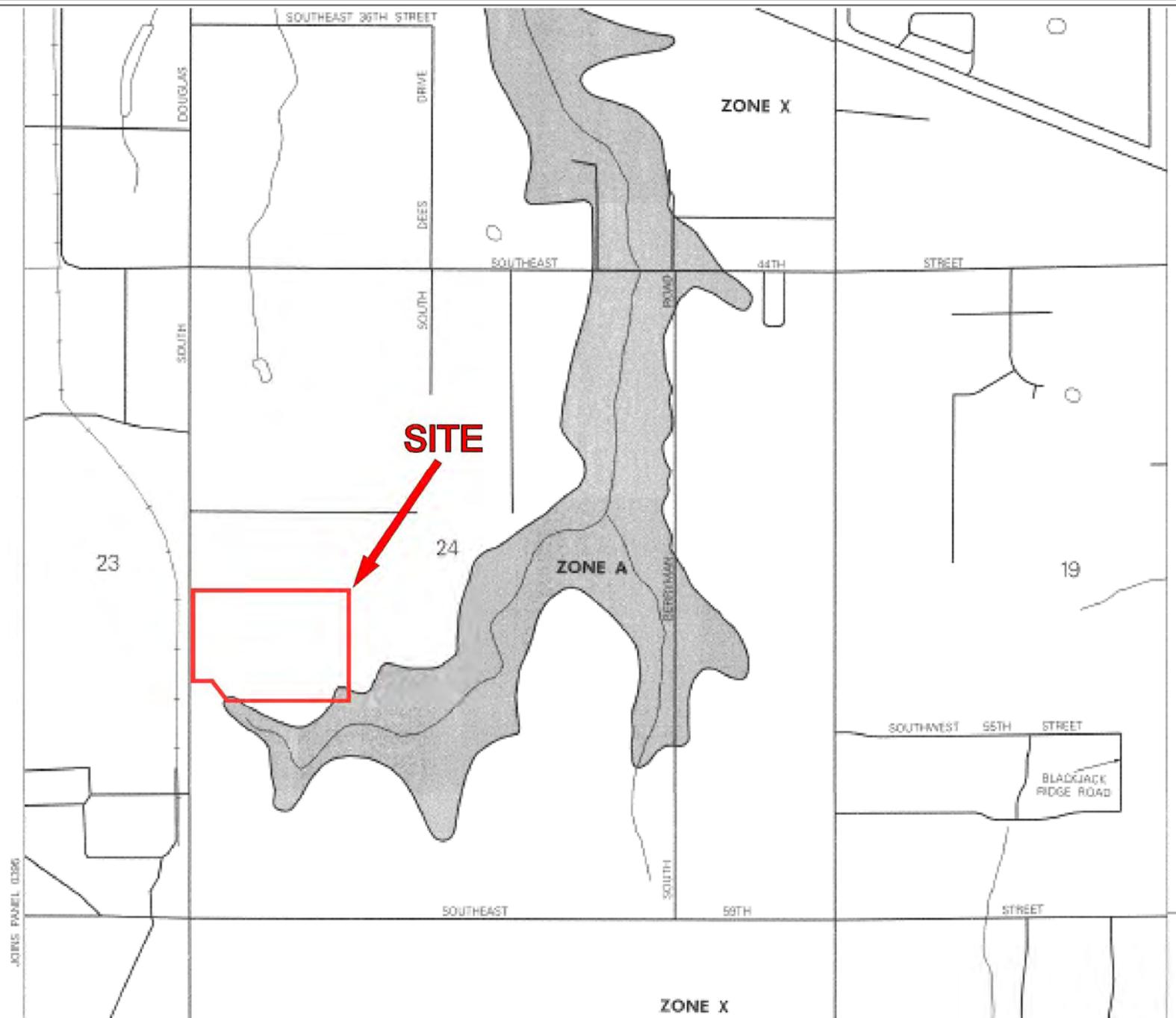
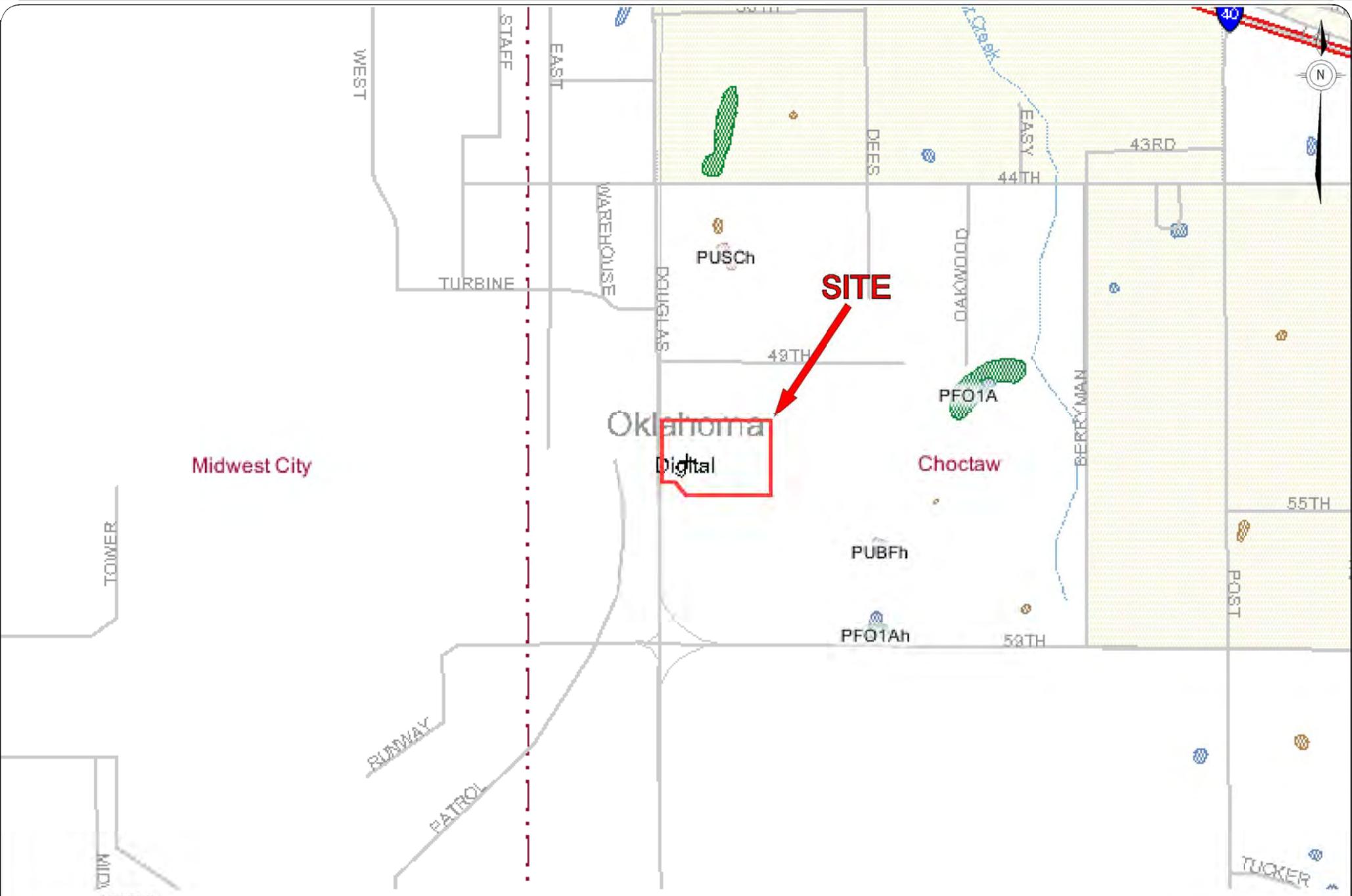


FIGURE 8
FLOOD PLAIN MAP
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017



SOURCE:
F.E.M.A. 2002 FLOOD INSURANCE RATE MAP



LEGEND

-  FRESHWATER POND
-  FRESHWATER FORESTED/SHRUB WETLAND
-  OTHER

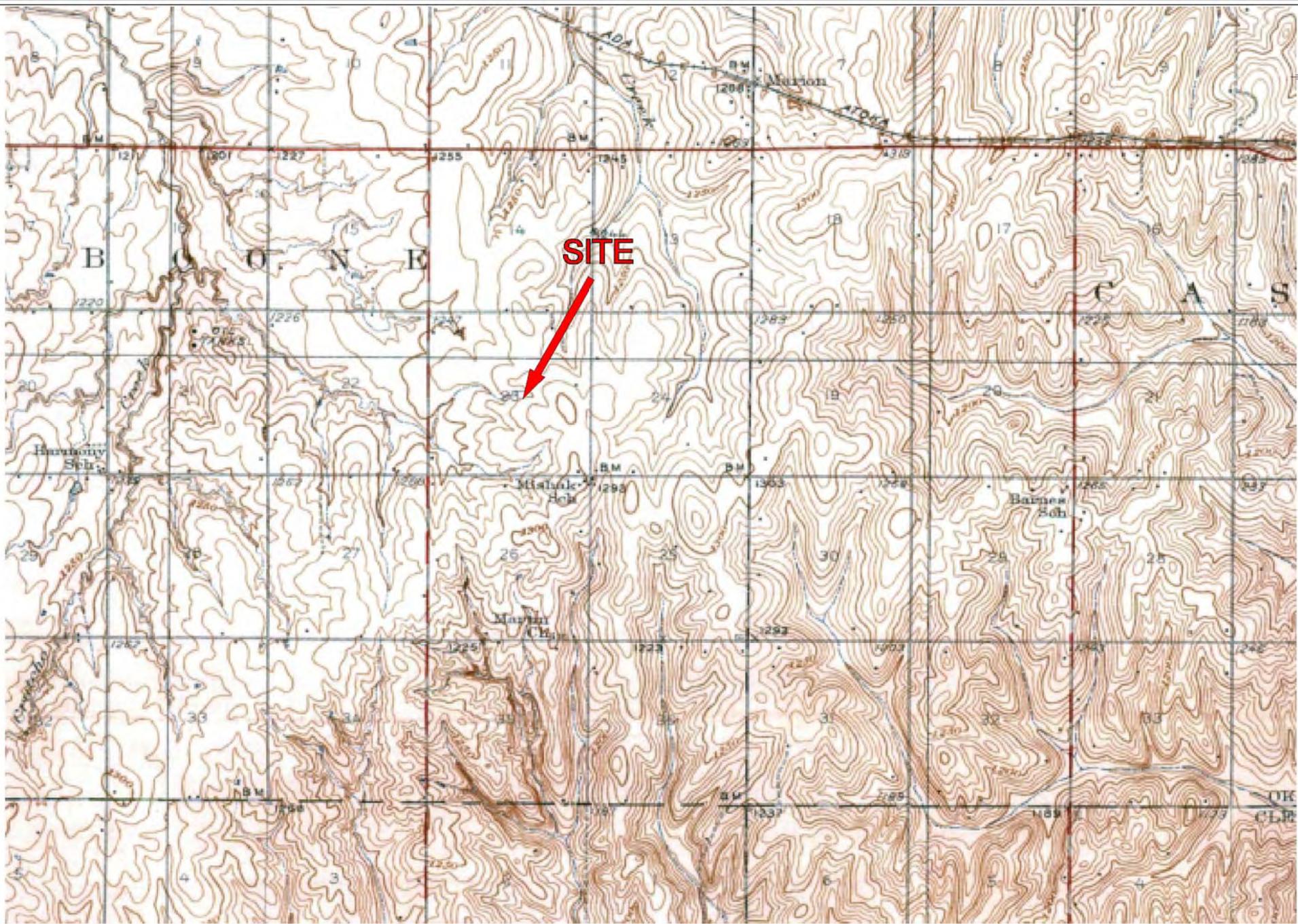
SOURCE:
U.S. FISH & WILDLIFE SERVICE



FIGURE 9
NATIONAL WETLAND INVENTORY MAP
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017



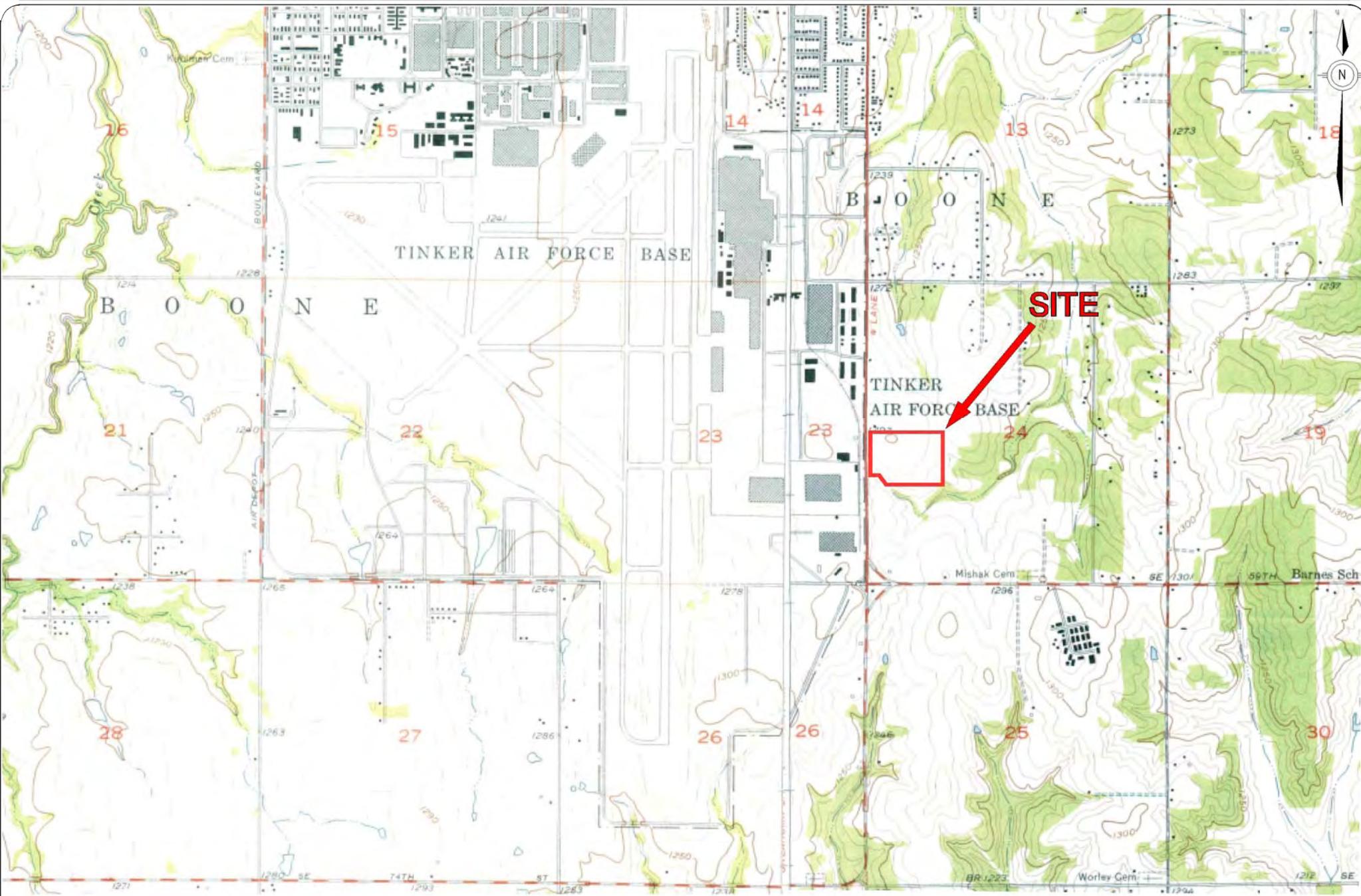


MAP SOURCE:
U.S.G.S. 15 MINUTE QUADRANGLE
MOORE, OKLAHOMA 1938

FIGURE 10
1938 TOPOGRAPHIC MAP
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





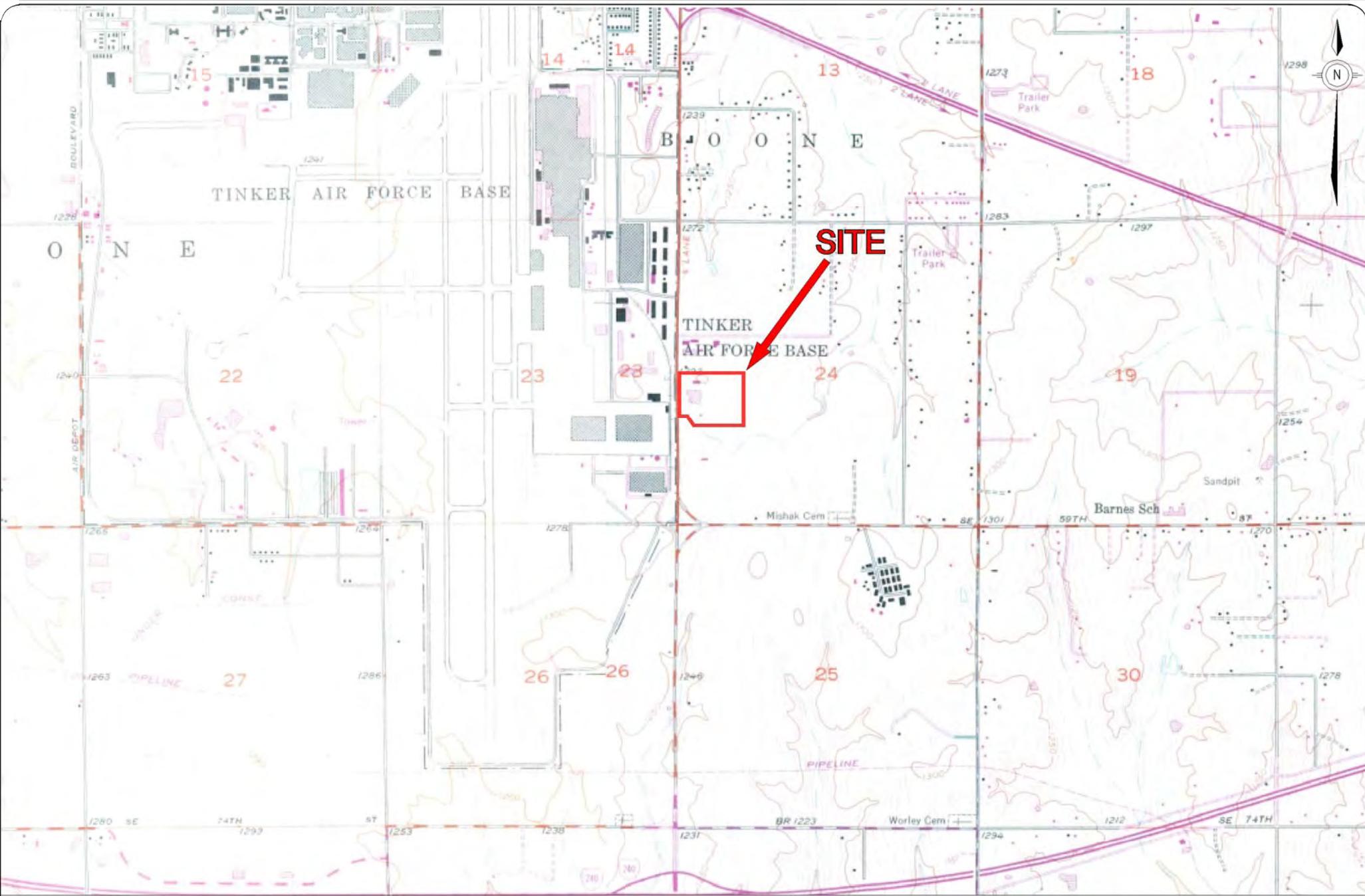
MAP SOURCE:
 U.S.G.S. 7.5 MINUTE QUADRANGLE
 MIDWEST CITY, OKLAHOMA 1956
 CHOCTAW, OKLAHOMA 1956



FIGURE 11
 1956 TOPOGRAPHIC MAP
 ENVIRONMENTAL CONDITION OF PROPERTY
 HARRY L. TWADDLE AFRC
 OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
 DRAWN BY: WOLSKI
 DWG DATE: 08/14/06
 DWG NO: OK017



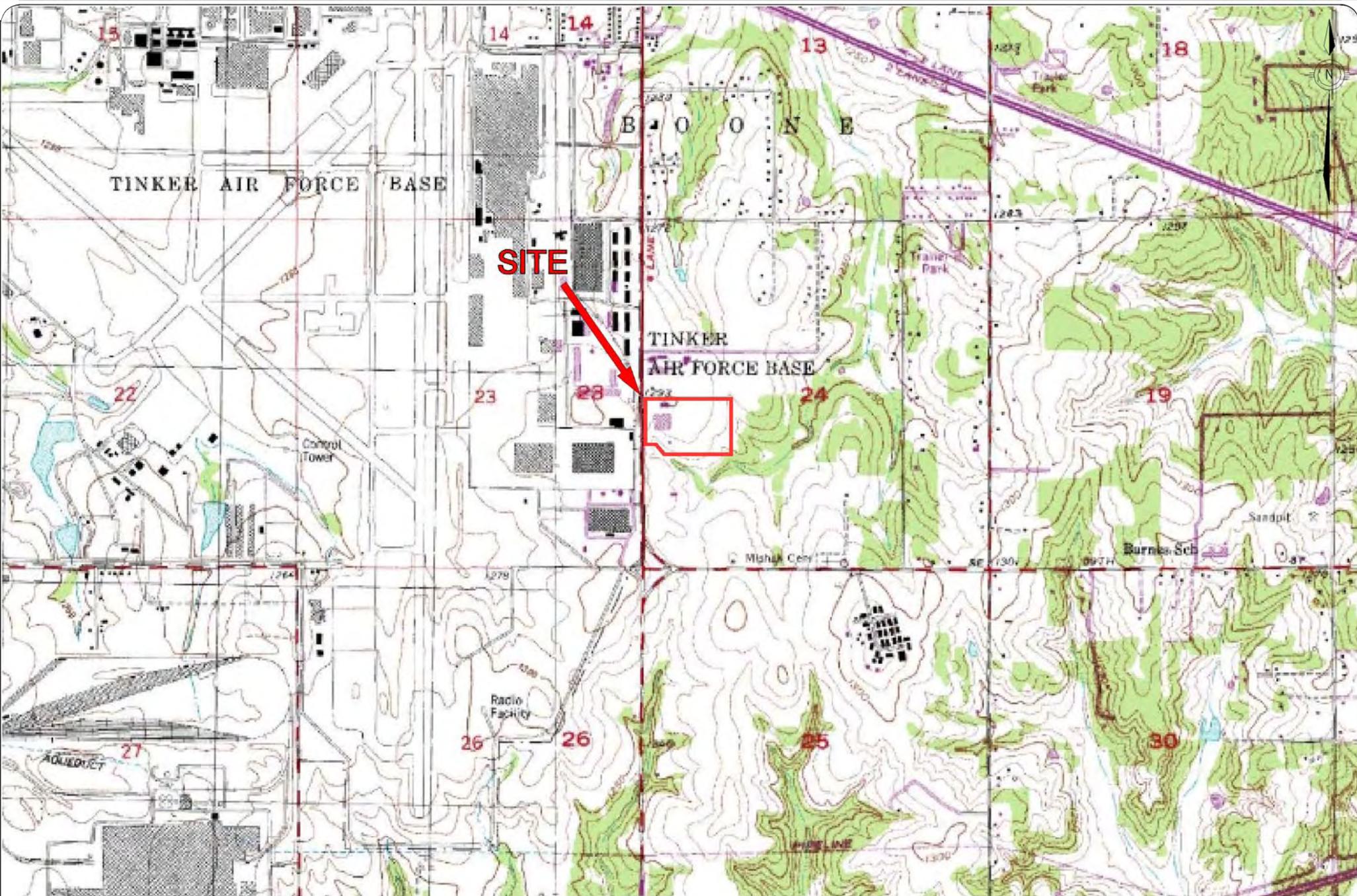


MAP SOURCE:
 U.S.G.S. 7.5 MINUTE QUADRANGLE
 CHOCTAW, OKLAHOMA 1975 - PHOTOREVISED FROM 1956
 MIDWEST CITY, OKLAHOMA 1975 - PHOTOREVISED FROM 1956

FIGURE 13
 1975 TOPOGRAPHIC MAP
 ENVIRONMENTAL CONDITION OF PROPERTY
 HARRY L. TWADDLE AFRC
 OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
 DRAWN BY: WOLSKI
 DWG DATE: 08/14/06
 DWG NO: OK017



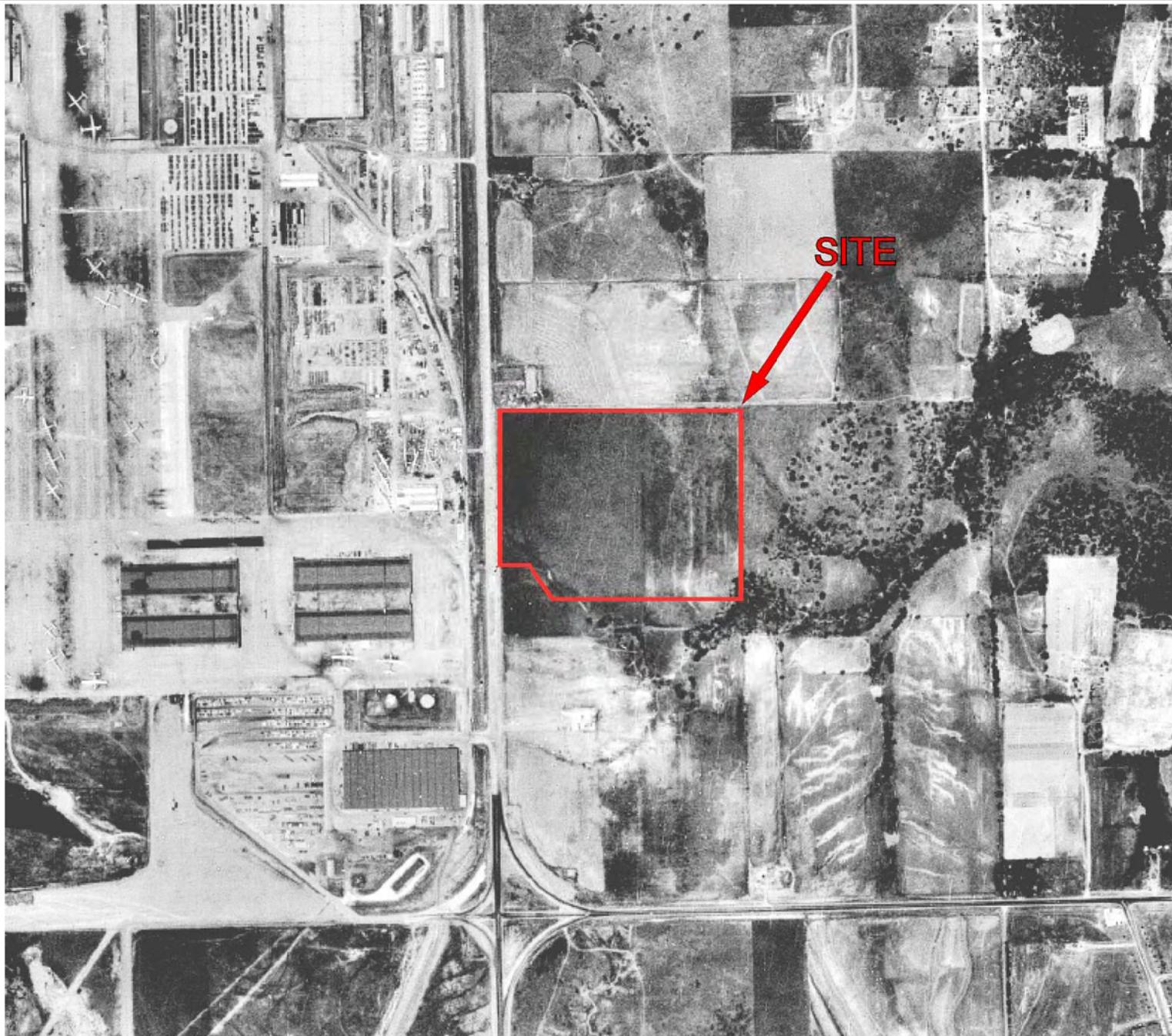


MAP SOURCE:
U.S.G.S. 7.5 MINUTE QUADRANGLE
MIDWEST CITY, OKLAHOMA 1986
CHOCTAW, OKLAHOMA 1986

FIGURE 14
1986 TOPOGRAPHIC MAP
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





SOURCE:
EDR

FIGURE 15
1957 AERIAL PHOTOGRAPH
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





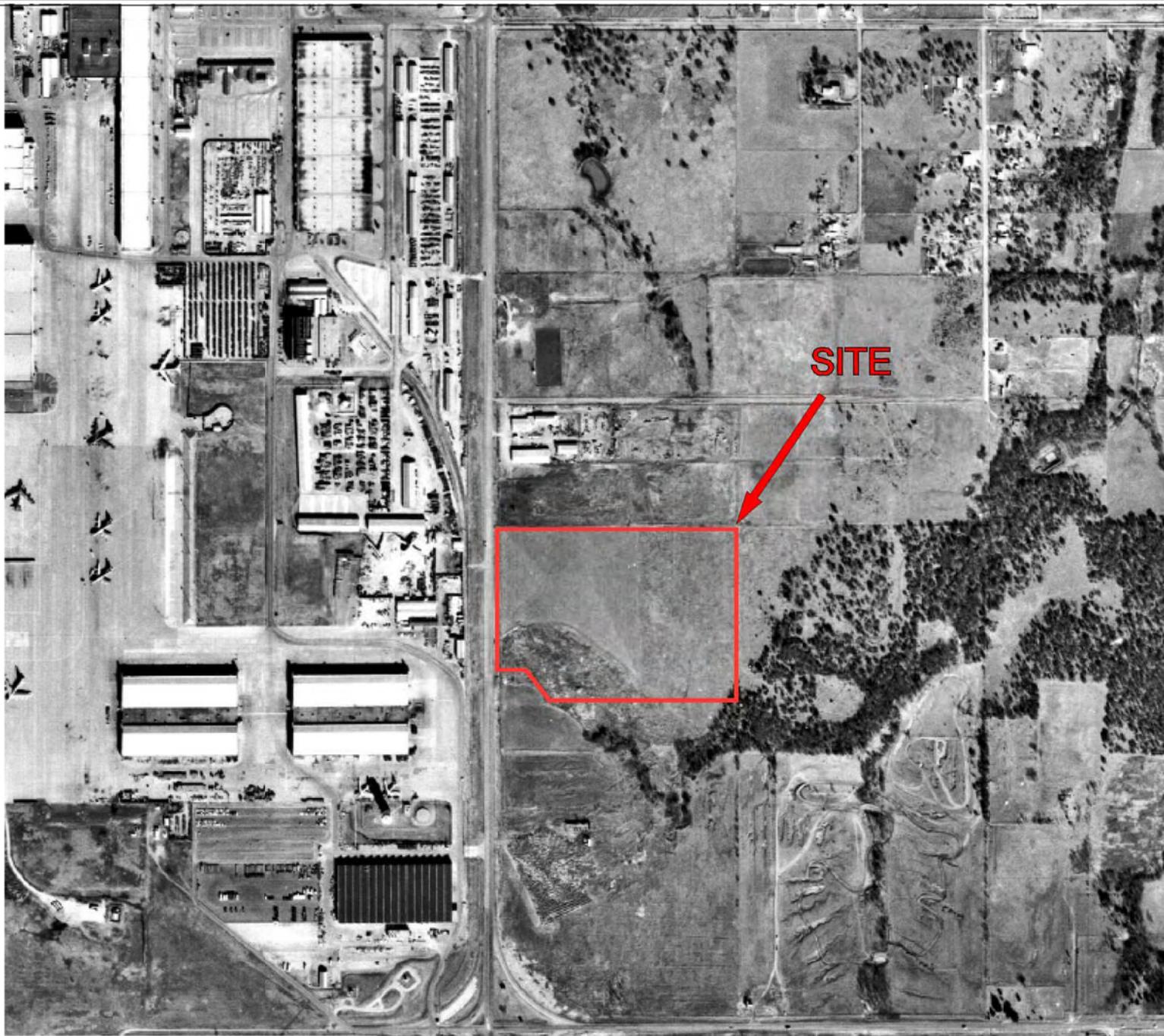
0 0.25
SCALE IN MILES

FIGURE 16
1963 AERIAL PHOTOGRAPH
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017



SOURCE:
EDR



SOURCE:
EDR

FIGURE 17
1970 AERIAL PHOTOGRAPH
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





SOURCE:
EDR

FIGURE 18
1984 AERIAL PHOTOGRAPH
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





SOURCE:
EDR

FIGURE 19
1995 AERIAL PHOTOGRAPH
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





SITE



SOURCE:
U.S.G.S. 2003 AERIAL IMAGERY

FIGURE 20
2003 AERIAL PHOTOGRAPH
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





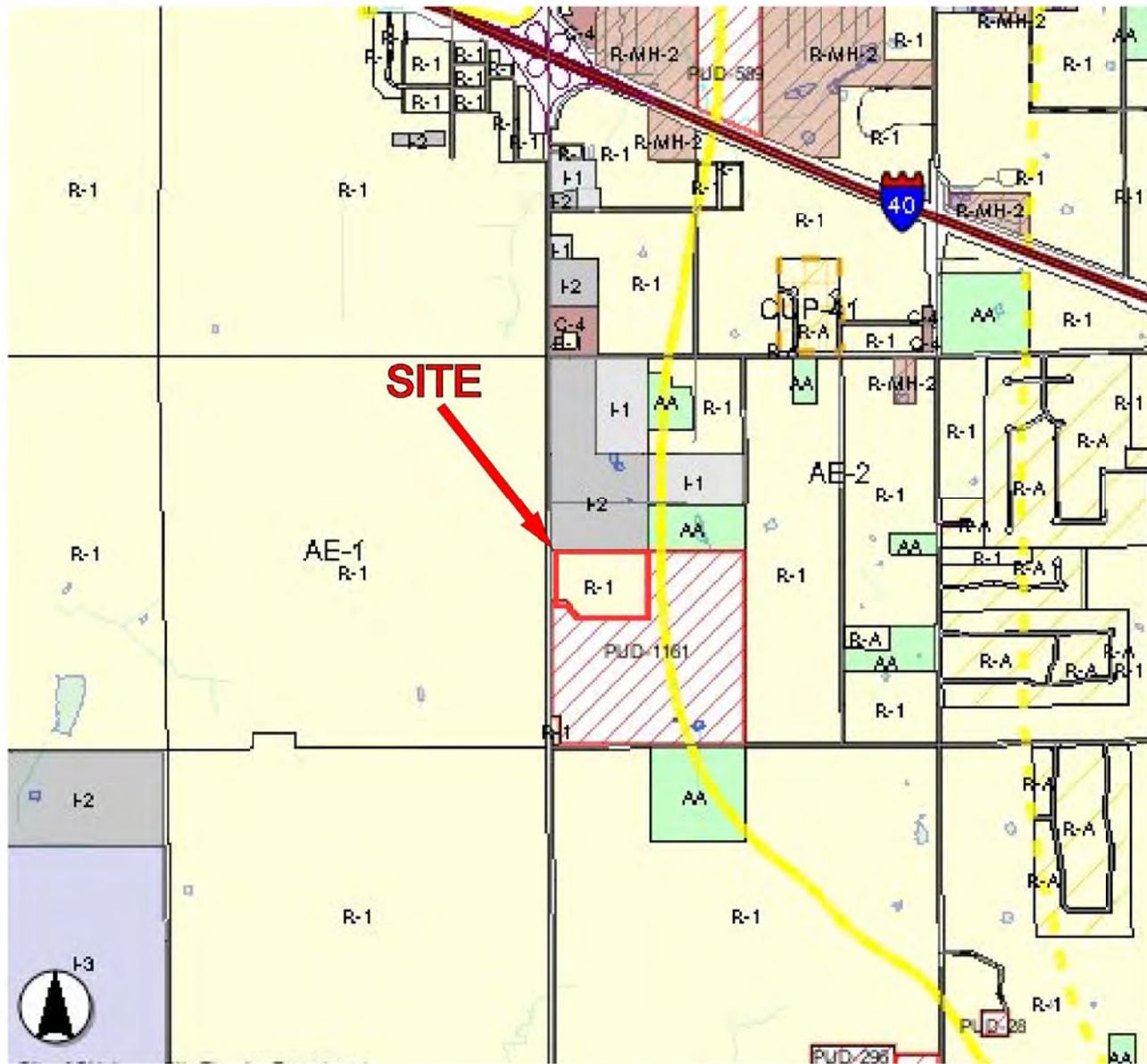
SOURCE:
OKLAHOMA COUNTY ASSESSOR

0 0.1
SCALE IN MILES

FIGURE 21
2005 AERIAL PHOTOGRAPH
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017





SOURCE:
CITY OF OKLAHOMA CITY PLANNING DEPARTMENT

FIGURE 22
ZONING MAP
ENVIRONMENTAL CONDITION OF PROPERTY
HARRY L. TWADDLE AFRC
OKLAHOMA CITY, OKLAHOMA

REQUESTED BY: SHIPP
DRAWN BY: WOLSKI
DWG DATE: 08/14/06
DWG NO: OK017



Appendix B
Site Photographs



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1009.jpg

Photo Number:
1

Description: Harry L. Twaddle AFRC in Oklahoma City, Oklahoma



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1045.jpg

Photo Number:
2

Description: Facing south at north side of Administration Building from field north of Site



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1016.jpg

Photo Number:
3

Description: Facing northeast at Administration Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1014.jpg

Photo Number:
4

Description: Facing southeast at southwest side of Administration Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1031.jpg

Photo Number:
5

Description: Facing north at south side of Administration Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1037.jpg

Photo Number:
6

Description: Facing northeast at south side of Administration Building from picnic pavilion. Gate and guard shack on left side of photo



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1059.jpg

Photo Number:
7

Description: Facing southwest at southeast corner of Administration Building. Electrical equipment near center of photograph.



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1053.jpg

Photo Number:
8

Description: Facing west at east side of Administration Building from POV parking lot



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1048.jpg

Photo Number:
9

Description: Facing southwest at Administration Building from POV parking lot



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1072.jpg

Photo Number:
10

Description: Facing northeast at POV parking lot. Administration Building beyond left side of photograph.



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
--1845.jpg

Photo Number:
11

Description: Typical interior hallway in Administration Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
--1846.jpg

Photo Number:
12

Description: Hall and door between north and south areas of Administration Building



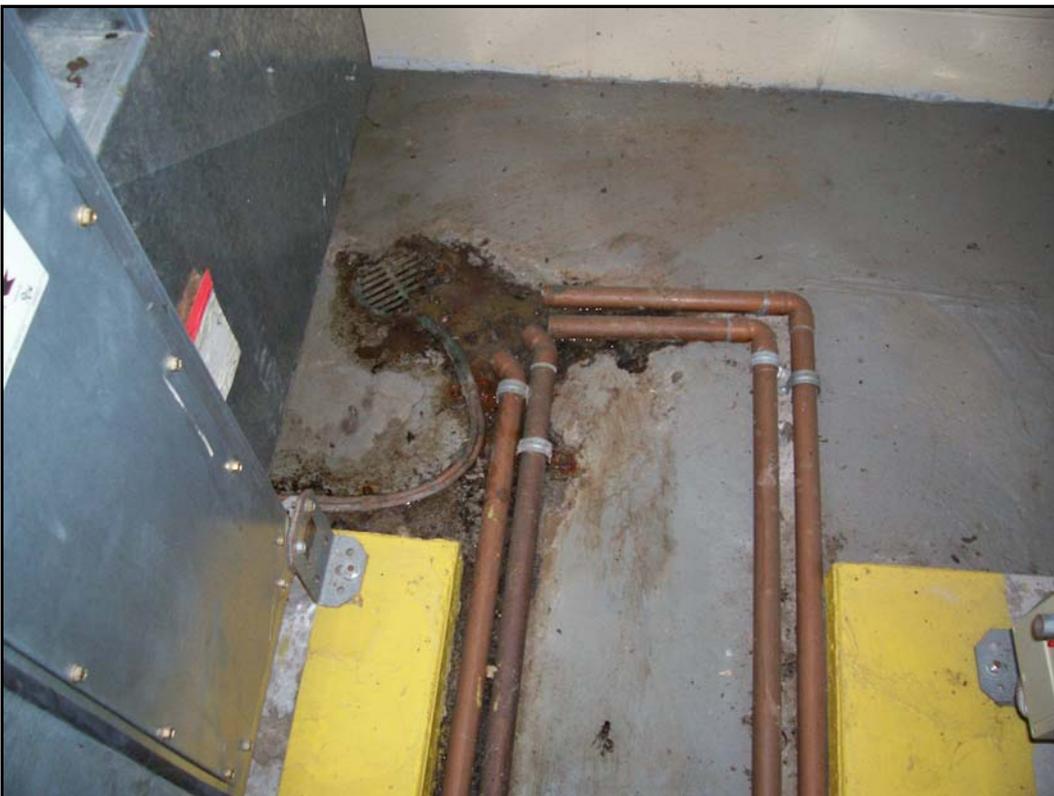
Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
--1851.jpg

Photo Number:
13

Description: Equipment and peeling paint in Mechanical Room in Administration Building



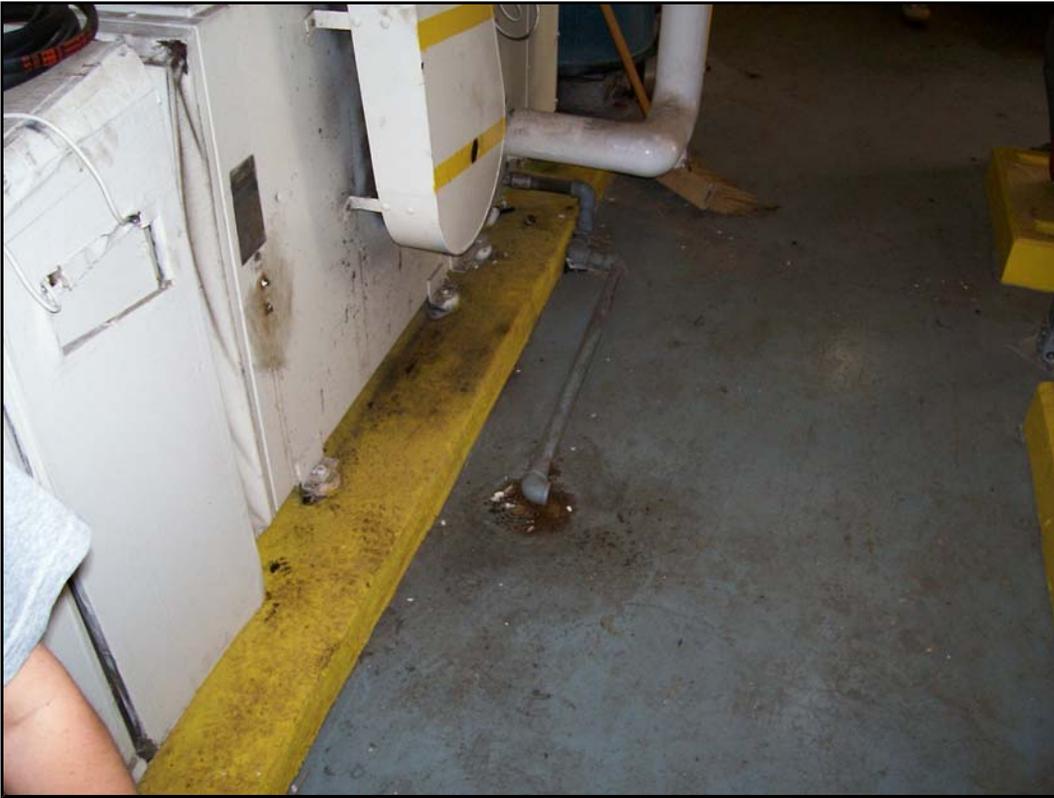
Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1892.jpg

Photo Number:
14

Description: Floor drain in Mechanical Room



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
--1850.jpg

Photo Number:
15

Description: Equipment and floor drain in Mechanical Room in Administration Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
--1847.jpg

Photo Number:
16

Description: Supply storage in first floor of Administration Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
--1849.jpg

Photo Number:
17

Description: Memorial Room located in area of former Indoor Firing Range (IFR) in Administration Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
--1848.jpg

Photo Number:
18

Description: Arms vault in first floor of Administration Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1051.jpg

Photo Number:
19

Description: Facing east at track and training field from POV parking lot



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1086.jpg

Photo Number:
20

Description: Facing east at shelter and field north of track on east side of Site



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1042.jpg

Photo Number:
21

Description: Facing southeast at Marine OMS. Guard Shack and gate on left side of photograph.



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1032.jpg

Photo Number:
22

Description: Facing west from southeast corner of Site. Marine OMS on left side of photograph.



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1858.jpg

Photo Number:
23

Description: Facing west at Marine OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1067.jpg

Photo Number:
24

Description: Facing northwest at Marine OMS. Vehicle Wash Rack (VWR) on right side of photograph in foreground. Chemical Storage Building on left side of photograph.



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1871.jpg

Photo Number:
25

Description: Facing southwest at Flammable Materials Storage Shed south of Marine OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1866.jpg

Photo Number:
26

Description: Facing west at Chemical Storage Building south of Marine OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1860.jpg

Photo Number:
27

Description: Facing south at Vehicle Wash Rack (VWR) west of Marine OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1859.jpg

Photo Number:
28

Description: Facing south at Grease Rack west of VWR and west of Marine OMS.



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1040.jpg

Photo Number:
29

Description: Facing northwest from south of Site. Missile casings on left side of photograph. Hazardous storage shed (middle) and two equipment storage sheds (right side of photograph) on west side of Marine Artillery Vehicle Building.



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1064.jpg

Photo Number:
30

Description: Facing south at two equipment storage sheds (left side of photograph). Hazardous storage shed on right side of photograph.



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1069.jpg

Photo Number:
31

Description: Facing south at Marine Artillery Vehicle Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1065.jpg

Photo Number:
32

Description: Facing east across MEP area. Marine Equipment Storage Building on left side of photograph. Marine Artillery Vehicle Building on right side of photograph.



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1070.jpg

Photo Number:
33

Description: Facing east at Marine Equipment Storage Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1071.jpg

Photo Number:
34

Description: Mobile command unit next to Marine Equipment Storage Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1055.jpg

Photo Number:
35

Description: Facing south at MEP area from POV parking lot. Navy OMS on left side of photograph. Marine Artillery Vehicle Building on right side. Building construction at Tinker AFB south of Site in background.



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1074.jpg

Photo Number:
36

Description: Facing south at Navy OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1075.jpg

Photo Number:
37

Description: Facing east at Army Equipment Storage Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1076.jpg

Photo Number:
38

Description: Navy flammable materials storage shed south of Army Storage Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
--1852.jpg

Photo Number:
39

Description: Trench drain in Marine OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1034.jpg

Photo Number:
40

Description: Facing east at OWS in grassed area just northwest of Marine OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1855.jpg

Photo Number:
41

Description: Used fluids and battery accumulation area in Marine OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1875.jpg

Photo Number:
42

Description: Aerosals and paints in locker in Marine OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1880.jpg

Photo Number:
43

Description: Equipment in Marine Artillery Vehicle Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1882.jpg

Photo Number:
44

Description: Interior of Marine Artillery Vehicle Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1080.jpg

Photo Number:
45

Description: Interior of Chemical Storage Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1867.jpg

Photo Number:
46

Description: Interior of Chemical Storage Building



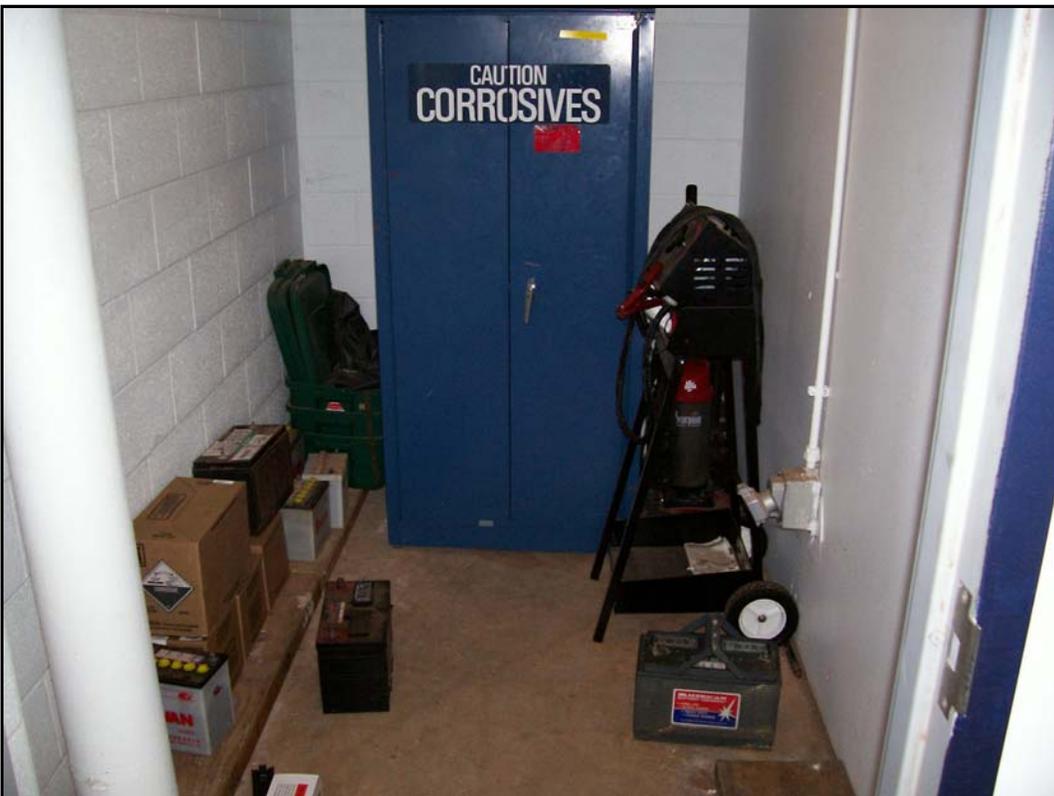
Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1886.jpg

Photo Number:
47

Description: Interior of Navy OMS with trench drain



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1887.jpg

Photo Number:
48

Description: Battery storage room and locker in Navy OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1888.jpg

Photo Number:
49

Description: Liquid and POL storage in Navy OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1895.jpg

Photo Number:
50

Description: OWS at northwest corner of Navy OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1884.jpg

Photo Number:
51

Description: Lift station at Navy OMS



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1878.jpg

Photo Number:
52

Description: Interior of equipment storage shed



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1870.jpg

Photo Number:
53

Description: POL stored in Marine Chemical Storage Building



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1079.jpg

Photo Number:
54

Description: POLs in Navy flammable storage shed



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1019.jpg

Photo Number:
55

Description: Facing east at north Site boundary



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1044.jpg

Photo Number:
56

Description: Facing north from Site at open field on adjacent property



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1046.jpg

Photo Number:
57

Description: Facing west at northern Site boundary. Tinker AFB in background.



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1018.jpg

Photo Number:
58

Description: Facing south at South Douglas Boulevard along western Site boundary



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1011.jpg

Photo Number:
59

Description: Facing west across South Douglas Boulevard at Tinker AFB west of Site



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1029.jpg

Photo Number:
60

Description: Facing south from Site at new construction on adjacent property



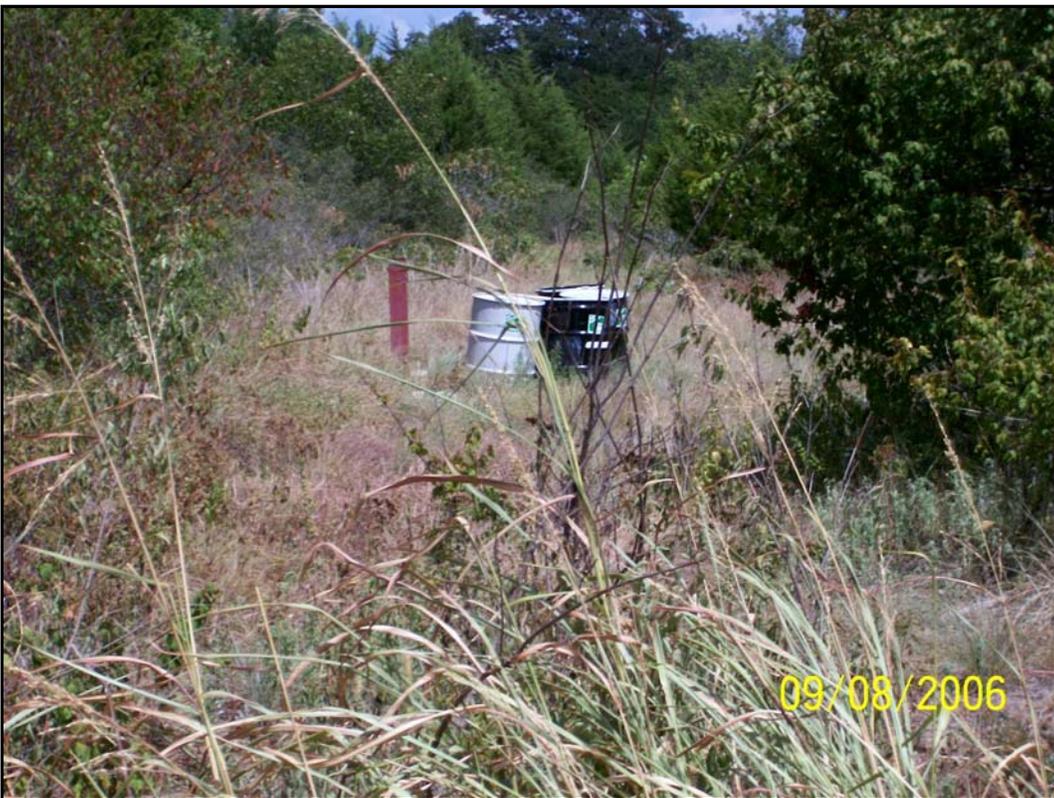
Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1041.jpg

Photo Number:
61

Description: Facing east at southern Site boundary



Project Number:
TEJV/LOUI/0008

Tract Number:
Twaddle,
OKLAHOMA CITY,
OK - OK017

File Name:
TEJV-LOUI-0008-
Twaddle,
OKLAHOMA CITY,
OK - OK017-
1087.jpg

Photo Number:
62

Description: Facing east from east property line viewing stickup groundwater monitoring well 55-gal steel drums

Appendix C
Chain-of-Title Report



2055 East Rio Salado Parkway, Suite 201
Tempe, Arizona 85281
Phone: (480) 967-6752
Fax Number: (480) 966-9422
Web Site: www.netronline.com

HISTORICAL CHAIN OF TITLE REPORT

**TWADDLE AFRC
5316 S DOUGLAS BLVD
OKLAHOMA CITY, OKLAHOMA**

Submitted to:

**ENVIRONMENTAL DATA RESOURCES, INC.
C/O
TERRAINE, INC.
4002 Sutherland Ave
Knoxville, Tennessee 37919
(800) 531-1242**

Attention: James Young

Project No. N06-4910

Wednesday, August 02, 2006

NETR- Real Estate Research & Information hereby submits the following ASTM historical chain-of-title to the land described below, subject to the leases/miscellaneous shown in Section 2. Title to the estate or interest covered by this report appears to be vested in:

CITY OF OKLAHOMA CITY

The following is the current property legal description:

All those certain pieces or parcels of land being the West ½ of the Southwest ¼ of Section 24, Township 11 North, Range 2 West, lying and situate in the City of Oklahoma, County of Oklahoma, State of Oklahoma.

Assessor's Parcel No's: 168502300 and 168502310

1. HISTORICAL CHAIN OF TITLE

1. The Current owner of the subject property is the City of Oklahoma. Records were searched at the Oklahoma County Recorder's office back to 1900. No conveyances were found of record transferring fee title ownership to the City of Oklahoma. Based on our research it appears that the City of Oklahoma acquired title to the property prior to 1900.

2. LEASES AND MISCELLANEOUS

1. LEASE:

DATED: 11-09-1971
LESSOR: City of Oklahoma City
LESSEE: United States of America
INSTRUMENT: Unrecorded

2. No environmental liens, institutional controls or engineering controls were found of record.

3. LIMITATION

This report was prepared for the use of Environmental Data Resources, Inc., and Terraine, Inc., exclusively. This report is neither a guarantee of title, a commitment to insure, or a policy of title insurance. NETR- Real Estate Research & Information does not guarantee nor include any warranty of any kind whether expressed or implied, about the validity of all information included in this report since this information is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.

Record of Environmental Consideration (REC)

Date: 16 January 2004

To: Jim Wheeler

From: Doug Benson

Facility ID: OK017

Project Title: Lease Termination and Land Acquisition for the Twaddle Armed Forces Reserve Center (AFRC)

Description: The Army Reserve will terminate its land lease on approximately 100-acres of land at 5316 South Douglas Boulevard, Oklahoma City, Oklahoma. In exchange for the lease termination, the Oklahoma City Water Utilities Trust (the current land owner of the property) will transfer ownership of the approximately 25-acres on which the Twaddle AFRC is located to the Department of Army. No immediate land use changes are expected from this transfer of ownership. An evaluation of cultural and natural resources on the 25-acres has been completed, finding no cultural or natural impacts related to this action (see attached Natural and Cultural evaluation). Once required real estate documentation is completed, the remaining 75-acres will be under the control and responsibility of the Oklahoma City Water Utilities Trust.

Anticipated date and/or duration of proposed action: FY 2004

Reason for using a record of environmental consideration:

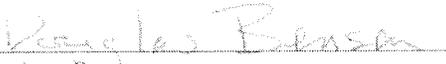
This action is categorically excluded under the provisions of 32 CFR Part 651 [Army Regulation 200-2] Appendix B (f)(5): Acquisition of real property (including facilities) where the land use will not change substantially or where the land acquired will not exceed 40 acres and the use will be similar to current or ongoing Army activities on adjacent land (REC required).


Environmental Project Manager


Date


Installation Environmental Coordinator


Date


Project Proponent


Date

Table 6-1
Oklahoma Oil-Water Separators

Facility ID	Facility Name	Type	Size (gal.) ¹	Material of Construction	Mfr.	Model No.	Year Installed ²	Influent Sources	Effluent Discharge	Permit Required
OK001	Edward D. Watson Memorial USARC	Rectangular	600	Concrete	N/A	N/A	N/A	Wash rack	POTW	No
OK002	George C. Farr Memorial USARC	Rectangular	600	Concrete	N/A	N/A	N/A	Wash rack	POTW	No
OK003	Horace H. Sayre Memorial USARC	Rectangular	600	Concrete	N/A	N/A	N/A	Wash rack	POTW	No
OK004	Ernest L. Ripley Memorial USARC (wash rack)	Rectangular	350	Concrete	N/A	N/A	N/A	Wash rack	POTW	No
OK004	Ernest L. Ripley Memorial USARC (shop)	Cylindrical	1,000	Steel, FRP	McTighe	OWS1000 DWEL	N/A	Floor drains	POTW	No
OK005	Broken Arrow AFRC/MSA 20	Cylindrical	1,000	Steel, FRP	McTighe	OWS1000 DWEL	1995	Wash rack	POTW	No
OK016	Franklin L. Weeks Memorial USARC	Rectangular	600	Concrete	N/A	N/A	N/A	Wash rack	POTW	No
OK017	MG Harry Twaddle Memorial AFRC	Rectangular	1,600	Concrete	N/A	N/A	1972	Wash rack	POTW	No
OK018	Alton M. Ashworth Memorial USARC	Rectangular	600	Concrete	N/A	N/A	N/A	Wash rack	POTW	No
OK020	Joe A. Smalley Memorial USARC	Rectangular	5,600	Concrete	N/A	N/A	N/A	Wash rack	POTW	No
OK023	Manuel A. Perez Jr. Memorial USARC	Rectangular	600	Concrete	N/A	N/A	N/A	Wash rack	POTW	No
OK024	Billy A. Krowse Memorial USARC	Rectangular	600	Concrete	N/A	N/A	N/A	Wash rack	POTW	No
OK032	John N. Reese Jr. Memorial USARC	Rectangular	600	Concrete	N/A	N/A	N/A	Wash rack	POTW	No

Notes:

- 1 — Estimated based on vessel dimensions and height of effluent pipe.
- 2 — Approximate date based on discussions with facility personnel and file review.
- N/A — Not available
- POTW — Publicly owned treatment works
- FRP — Fiberglass reinforced polyester resin

6.7 MG Harry Twaddle AFRC (OK017)

Site Description

One OWS is located on the Tinker Air Force Base, at the Harry Twaddle AFRC, 5316 South Douglas Boulevard, Oklahoma City, Oklahoma. The OWS, in the southern portion of the property and northwest of the maintenance building, receives wash/rinse water from a wash rack, southeast of the maintenance building. The wash rack, used to wash military vehicles and equipment, has a canopy and 6-inch curbing/speed reducer structures along the perimeter to minimize storm water infiltration. Another wash rack, on the north side of the maintenance building, east of the OWS has been abandoned and the piping has been removed. Figure 6-7 shows the OWS location and details. Photographs follow the figure.

EnSafe personnel visited the site on January 11, 2000. The following descriptions are based on field observations, interviews with facility personnel, and files reviewed at the 90th RSC.

OWS Description

The OWS, installed in 1972, is a 1,600-gallon, concrete rectangular vessel with two wooden baffles dividing the OWS into three chambers: an influent chamber, a separation chamber (quiescent zone), and an effluent chamber. The influent chamber receives rinse water from the wash rack and the effluent chamber discharges into the sanitary sewer system. At the time of the site visit, the inlet and effluent chambers of the OWS contained 3 inches of sludge. The separation chamber contained approximately 6 inches of sludge. According to facility personnel, the OWS/wash rack has not been used in several years. No records or manifests documenting OWS cleaning/servicing were available.

Influent Sources

Influent sources for the OWS are limited to wash/rinse water from the wash rack. Two 1-inch-diameter water hoses supply water to the wash rack.

Effluent Discharges

OWS effluent discharges to the Tinker Air Force Base (AFB) sewer system, which is connected to the Oklahoma City sanitary sewer system.

Regulatory Requirements

This discharge is covered under the City's sewer use ordinance, which does not require a permit or sewer use agreement. The City's sewer use ordinance limits the discharge oil and grease to 100 mg/L. However, no monitoring or reporting is required.

Recommendations

- Remove all liquids and sludge from the oil-water separator and have system inspected and cleaned, as necessary.
- Establish schedule for routine sludge/oil and sediment removal based on usage and material accumulation.
- Inspect OWS system annually.
- Develop site-specific written program, which describes procedures and management practices used to ensure compliance with the CWA.

Appendix E
Regulatory Database Search Reports



EDR® Environmental
Data Resources Inc

The EDR Radius Map with GeoCheck®

**Twaddle AFRC
5316 S. Douglas Blvd.
Oklahoma City, OK 73150**

Inquiry Number: 1725896.2s

July 31, 2006

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: 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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EXECUTIVE SUMMARY

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 (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

5316 S. DOUGLAS BLVD.
OKLAHOMA CITY, OK 73150

COORDINATES

Latitude (North): 35.412600 - 35° 24' 45.4"
Longitude (West): 97.369200 - 97° 22' 9.1"
Universal Transverse Mercator: Zone 14
UTM X (Meters): 648072.4
UTM Y (Meters): 3919823.0
Elevation: 1298 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 35097-D3 CHOCTAW, OK
Most Recent Revision: 1975

West Map: 35097-D4 MIDWEST CITY, OK
Most Recent Revision: 1975

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following government records. For more information on this property see page 6 of the attached EDR Radius Map report:

<u>Site</u>	<u>Database(s)</u>	<u>EPA ID</u>
ARMED FORCES RESERVE CENTER 5316 S DOUGLAS BLVD OKLAHOMA CITY, OK 73150	LUST Facility Status: Confirmed Release Closed Facility Status: Confirmed Release Opened UST HIST UST	N/A

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:

FEDERAL RECORDS

Proposed NPL..... Proposed National Priority List Sites

EXECUTIVE SUMMARY

Delisted NPL	National Priority List Deletions
NPL RECOVERY	Federal Superfund Liens
CERC-NFRAP	CERCLIS No Further Remedial Action Planned
ERNS	Emergency Response Notification System
HMIRS	Hazardous Materials Information Reporting System
US INST CONTROL	Sites with Institutional Controls
FUDS	Formerly Used Defense Sites
US BROWNFIELDS	A Listing of Brownfields Sites
CONSENT	Superfund (CERCLA) Consent Decrees
UMTRA	Uranium Mill Tailings Sites
ODI	Open Dump Inventory
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
MINES	Mines Master Index File
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System

STATE AND LOCAL RECORDS

SHWS	Voluntary Cleanup & Superfund Site Status Report
SWF/LF	Permitted Solid Waste Disposal & Processing Facilities
LAST	Leaking Aboveground Storage Tanks List
AST	Aboveground Storage Tanks
INST CONTROL	Institutional Control Sites
VCP	Voluntary Cleanup Site Inventory
DRYCLEANERS	Drycleaner Facility Listing
BROWNFIELDS	Brownfield Sites
OK COMPLAINT	Oklahoma Complaint System Database
TIER 2	Tier 2 Data Listing

TRIBAL RECORDS

INDIAN RESERV	Indian Reservations
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land
INDIAN UST	USTs on Indian Land

EDR PROPRIETARY RECORDS

Manufactured Gas Plants... EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

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.

EXECUTIVE SUMMARY

FEDERAL RECORDS

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 04/19/2006 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
US AIR FORCE TINKER AFB	OC ALC/EMCO 7701 E 2ND	0 - 1/8 W	0	7

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 02/01/2006 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
US AIR FORCE TINKER AFB	OC ALC/EMCO 7701 E 2ND	0 - 1/8 W	0	7

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 03/15/2006 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
US AIR FORCE TINKER AFB	OC ALC/EMCO 7701 E 2ND	0 - 1/8 W	0	7

RCRAInfo: 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. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). 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). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. 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.

A review of the RCRA-TSDF list, as provided by EDR, and dated 03/09/2006 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
US AIR FORCE TINKER AFB	OC ALC/EMCO 7701 E 2ND	0 - 1/8 W	0	7

RCRAInfo: 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. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). 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). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. 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.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/09/2006 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
US AIR FORCE TINKER AFB	OC ALC/EMCO 7701 E 2ND	0 - 1/8 W	0	7

RCRAInfo: 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. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). 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). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. 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.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/09/2006 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
SOONER STRIPPING	5000 S DOUGLAS BLVD	1/8 - 1/4N	3	22

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 03/21/2006 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
US AIR FORCE TINKER AFB	OC ALC/EMCO 7701 E 2ND	0 - 1/8 W	0	7

EXECUTIVE SUMMARY

DOD: 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.

A review of the DOD list, as provided by EDR, and dated 12/31/2004 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
TINKER AIR FORCE BASE		0 - 1/8	0	7

RODS: 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 04/13/2006 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>US AIR FORCE TINKER AFB</i>	<i>OC ALC/EMCO 7701 E 2ND</i>	<i>0 - 1/8 W</i>	<i>0</i>	<i>7</i>

STATE AND LOCAL RECORDS

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 03/03/2006 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>MIDWEST MAIN & CONST CO.</i>	<i>5500 S DOUGLAS BLVD</i>	<i>0 - 1/8</i>	<i>2</i>	<i>21</i>

OK UST HIST: 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 is 1 HIST UST site within approximately 0.25 miles of the target property.

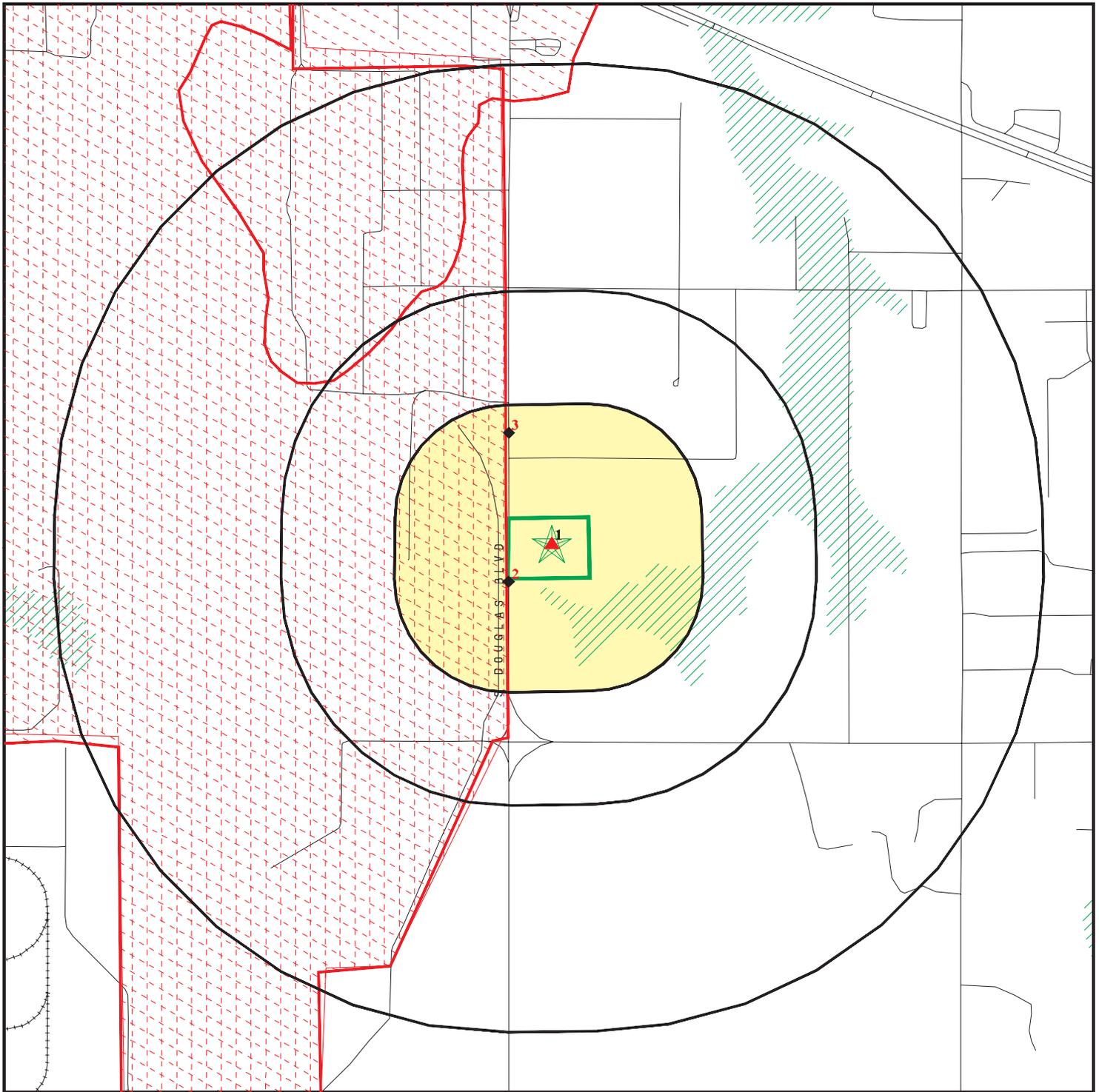
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>MIDWEST MAIN & CONST CO.</i>	<i>5500 S DOUGLAS BLVD</i>	<i>0 - 1/8</i>	<i>2</i>	<i>21</i>

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Database(s)</u>
OKC WAREHOUSE TIRE FIRE	CERCLIS
137TH TACICAL AIRLIFT WING	CERC-NFRAP
TOWN OF HARRAH DISPOSAL SITE	SWF/LF
PICKERING ENVIRONMENTAL SOIL WASHERS	SWF/LF
RUFUS BRYANT & SON LANDFILL	SWF/LF
SPANN LANDFILL	SWF/LF
AMERICAN MEDICAL DISPOSAL, INC.	SWF/LF
OKLAHOMA CITY SLUDGE LANDFILL #1	SWF/LF
LAND RECLAIMERS, INC. LANDFILL	SWF/LF
TINKER AFB LANDFILL	SWF/LF
EDMOND YARD WASTE COMPOSTING FACILITY	SWF/LF
A-1 SANITARY LANDFILL	SWF/LF
CITY OF MIDWEST CITY LANDFILL	SWF/LF
CUSTOM EQUIPMENT COMPANY LANDFILL	SWF/LF
CITY OF DEL CITY LANDFILL	SWF/LF
OKLAHOMA CITY LANDFILL COMPANY	SWF/LF
MIDWEST C/D LANDFILL	SWF/LF
VILLA LANDFILL	SWF/LF
STOCKYARDS RECYCLERS, L.L.C.	SWF/LF
CITY OF OKLAHOMA CITY HOUSEHOLD HAZARDOU	SWF/LF
DAYTON TIRE & RUBBER COMPANY	SWF/LF
MIDWEST MAINTENANCE & CONSTRUCTION COMPA	SWF/LF
CITY OF DEL CITY MUNICIPAL INCINERATOR	SWF/LF
EDMOND SOLID WASTE TRANSFER STATION	SWF/LF
CMI ENERGY CONVERSION SYSTEMS WASTE-TO-E	SWF/LF
SOUTHEAST LANDFILL	SWF/LF
WMO-MOSLEY ROAD LANDFILL	SWF/LF
NORTH CANADIAN WW TREATMENT PLANT	SWF/LF
AAFES SHOPETTE #3	UST, HIST UST

OVERVIEW MAP - 1725896.2s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Landfill Sites
-  Dept. Defense Sites



-  Indian Reservations BIA
-  Oil & Gas pipelines
-  100-year flood zone
-  500-year flood zone

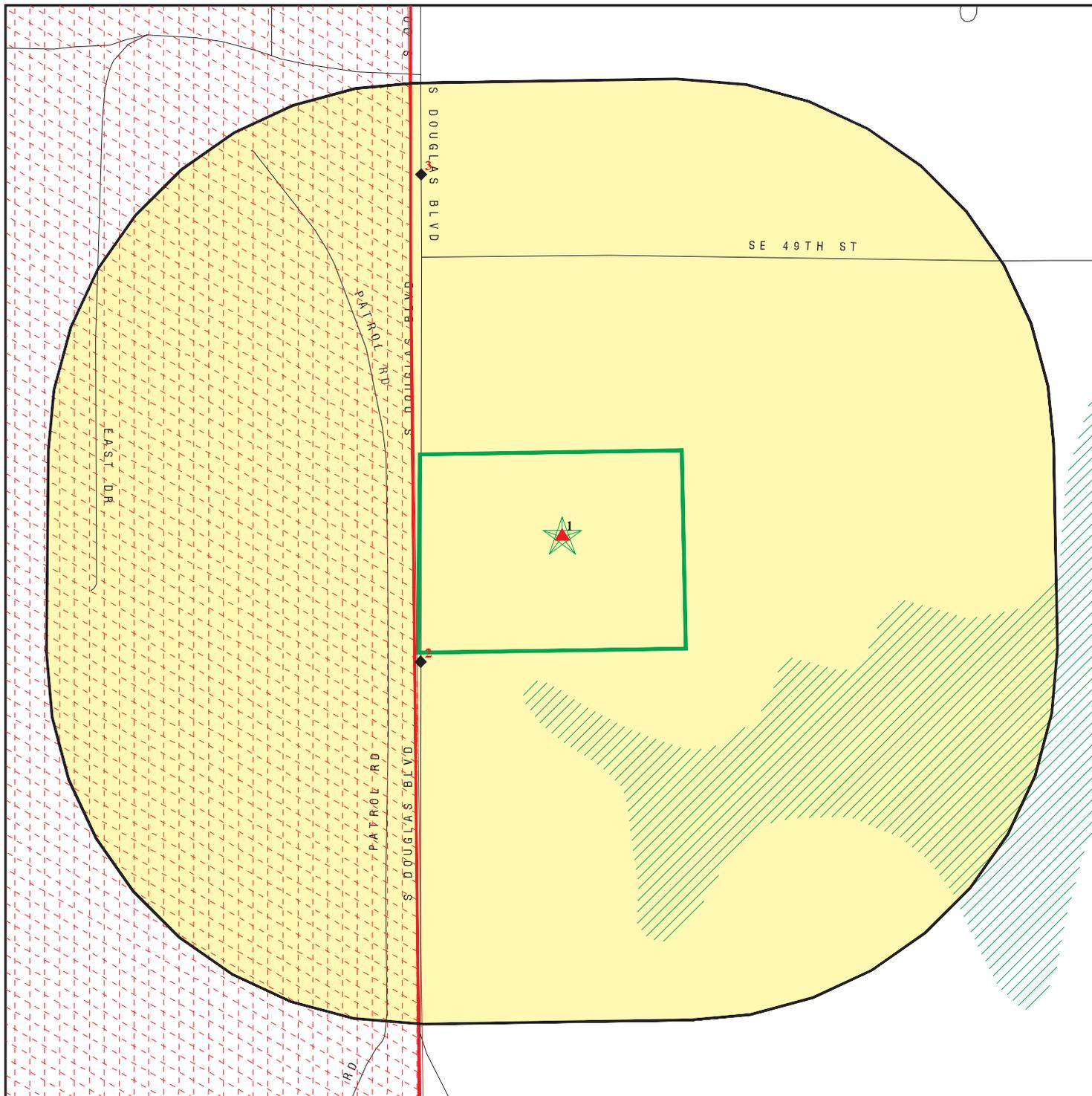


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Twaddle AFRC
 ADDRESS: 5316 S. Douglas Blvd.
 Oklahoma City OK 73150
 LAT/LONG: 35.4126 / 97.3692

CLIENT: ENSAFE
 CONTACT: Phil Hardy
 INQUIRY #: 1725896.2s
 DATE: July 31, 2006

DETAIL MAP - 1725896.2s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Landfill Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Oil & Gas pipelines
-  100-year flood zone
-  500-year flood zone

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Twaddle AFRC
 ADDRESS: 5316 S. Douglas Blvd.
 Oklahoma City OK 73150
 LAT/LONG: 35.4126 / 97.3692

CLIENT: ENSAFE
 CONTACT: Phil Hardy
 INQUIRY #: 1725896.2s
 DATE: July 31, 2006

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>FEDERAL RECORDS</u>								
NPL		1.000	1	0	0	0	NR	1
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL RECOVERY		TP	NR	NR	NR	NR	NR	0
CERCLIS		0.500	1	0	0	NR	NR	1
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	1	0	0	0	NR	1
RCRA TSD		0.500	1	0	0	NR	NR	1
RCRA Lg. Quan. Gen.		0.250	1	0	NR	NR	NR	1
RCRA Sm. Quan. Gen.		0.250	0	1	NR	NR	NR	1
ERNS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	1	0	0	NR	NR	1
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	1	0	0	0	NR	1
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	1	0	0	0	NR	1
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
<u>STATE AND LOCAL RECORDS</u>								
SHWS		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
LUST	X	0.500	0	0	0	NR	NR	0
UST	X	0.250	1	0	NR	NR	NR	1
HIST UST	X	0.250	1	0	NR	NR	NR	1
LAST		0.500	0	0	0	NR	NR	0
AST		0.250	0	0	NR	NR	NR	0
INST CONTROL		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
BROWNFIELDS		0.500	0	0	0	NR	NR	0
OK Complaint		TP	NR	NR	NR	NR	NR	0
TIER 2		TP	NR	NR	NR	NR	NR	0
<u>TRIBAL RECORDS</u>								
INDIAN RESERV		1.000	0	0	0	0	NR	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
<u>EDR PROPRIETARY RECORDS</u>								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
 EPA ID Number

ARMED FORCES RESERVE CENTER (Continued)

U001229966

Facility ID: 5507991
 Tank ID: 2
 Lat/Long : 35.41224 / -97.37097
 AST: False
 Lat/Long Degrees : 35° 24' 44" / 97° 22' 15.49200"
 Contact Name: U S ARMY FIELD ARTILLERY CENTER
 Contact Address: (USAFACFS) ATTN ATZR-EC
 Contact City,St,Zip: Fort Sill, OK 73503

DOD
Region

 < 1/8
 5 ft.

TINKER AIR FORCE BASE

DOD CUSA039423
N/A

TINKER AIR FORCE BASE (County), OK

FEDERAL LANDS:

Feature 1: Air Force DOD
 Feature 2: Not reported
 Feature 3: Not reported
 Agency: DOD
 URL: Not reported
 Name 1: Tinker Air Force Base
 Name 2: Not reported
 Name 3: Not reported
 State: OK

NPL
Region
West
 < 1/8
 13 ft.

US AIR FORCE TINKER AFB
OC ALC/EMCO 7701 E 2ND ST
TINKER AIR FORCE BASE, OK 73145

PADS 1000269284
CERCLIS OK1571724391
FINDS
NPL
RCRA-LQG
RCRA-TSDF
CORRACTS
ROD
US ENG CONTROLS
NY MANIFEST
WI MANIFEST
CT MANIFEST

CERCLIS Classification Data:

Federal Facility: Federal Facility
 Non NPL Status: Not reported
 NPL Status: Currently on the Final NPL
 Contact: Sing N. Chia Contact Tel: (214) 665-8301
 Contact Title: Not reported

CERCLIS Assessment History:

Assessment: DISCOVERY	Completed: 01/01/1980
Assessment: NPL RP SEARCH	Completed: 11/15/1984
Assessment: PROPOSAL TO NPL	Completed: 04/10/1985
Assessment: PRELIMINARY ASSESSMENT	Completed: 03/01/1987
Assessment: SITE INSPECTION	Completed: 03/01/1987
Assessment: FINAL LISTING ON NPL	Completed: 07/22/1987
Assessment: FEDERAL INTERAGENCY AGREEMENT	Completed: 12/09/1988
Assessment: IAG NEGOTIATIONS	Completed: 12/09/1988
Assessment: REMOVAL ASSESSMENT	Completed: 05/23/1990
Assessment: FF RI/FS	Completed: 08/15/1990

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

MAP FINDINGS

US AIR FORCE TINKER AFB (Continued)

EDR ID Number
 EPA ID Number

Database(s)

1000269284

Assessment:	RECORD OF DECISION	Completed:	08/15/1990
Assessment:	FF RD	Completed:	11/16/1992
Assessment:	FF RI/FS	Completed:	09/14/1993
Assessment:	RECORD OF DECISION	Completed:	09/14/1993
Assessment:	FF RD	Completed:	09/29/1994
Assessment:	FF RI/FS	Completed:	07/31/1998
Assessment:	FF RI/FS	Completed:	08/10/1998
Assessment:	FF COMMUNITY INVOLVEMENT	Completed:	12/21/1999
Assessment:	FF FIVE YEAR REVIEW	Completed:	09/25/2002
Assessment:	FF FIVE YEAR REVIEW	Completed:	01/25/2005

CERCLIS Site Status:
 Not reported

CERCLIS Alias Name(s):
 USAF TINKER AIR FORCE BASE
 TINKER AIR FORCE (SOLDIER CR/BLDG 300)
 TINKER AIR FORCE(SOLDIER CR/BLDG 300)
 TINKER AIR FORCE BASE (SOLDIER CREEK/BUILDING 3001)
 TINKER AIR FORCE BASE

CORRACTS Data:

EPA Id: OK1571724391
 Region: 06
 Area Name: CG37
 Actual Date: 01/13/2004
 Corrective Action: CA300 - CMS Workplan Approved
 2002 NAICS Title: Other Support Activities for Air Transportation

EPA Id: OK1571724391
 Region: 06
 Area Name: CG39
 Actual Date: 01/22/2003
 Corrective Action: CA200 - RFI Approved
 2002 NAICS Title: Other Support Activities for Air Transportation

EPA Id: OK1571724391
 Region: 06
 Area Name: 4 FUEL SITE AREA
 Actual Date: 01/22/2004
 Corrective Action: CA300 - CMS Workplan Approved
 2002 NAICS Title: Other Support Activities for Air Transportation

EPA Id: OK1571724391
 Region: 06
 Area Name: WASTEWATER TREATMENT FACILITY
 Actual Date: 02/17/2004
 Corrective Action: CA350 - CMS Approved
 2002 NAICS Title: Other Support Activities for Air Transportation

EPA Id: OK1571724391
 Region: 06
 Area Name: CG39
 Actual Date: 02/20/2004
 Corrective Action: CA200 - RFI Approved
 2002 NAICS Title: Other Support Activities for Air Transportation

[Click this hyperlink](#) while viewing on your computer to access
 74 additional CORRACTS record(s) in the EDR Site Report.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

US AIR FORCE TINKER AFB (Continued)

1000269284

US Engineering Control Sites:

EPA ID: OK1571724391
Site ID: 0601510
EPA Region: 06
County: OKLAHOMA
Event Code : Not reported
Actual Date: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 08/15/1990
Planned Completion date: 09/30/1990
Operable Unit: 01
Contaminated Media: Liquid Waste
Contam. Media num.: 6270608.00000
Engineering Control: Containment, (N.O.S.)

NPL:

EPA ID: OK1571724391
Region: 06
Federal: Federal
Final Date: 07/22/1987

EPA ID: OK1571724391
Region: 06
Federal: Federal
Final Date: 07/22/1987

Category Details:

Site ID: Not reported
NPL Status: Currently on the Final NPL
Categ. Description: Depth To Aquifer-> 50 And <= 100 Feet
Categ. Value: 100

Site ID: Not reported
NPL Status: Currently on the Final NPL
Categ. Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Categ. Value: 10

Site Details:

Site Name: TINKER AIR FORCE BASE (SOLDIER CREEK/BUILDING 3001)
Site Status: Final
Status Date: 07/22/1987
Site City: OKLAHOMA CITY
Site State: OK
Federal Site: Federal Facility
HRS Score: 42.24
GW Score: 73.08
SW Score: 0.00
Air Score: Not reported
Soil Score: Not reported
DC Score: Not reported
FE Score: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

US AIR FORCE TINKER AFB (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000269284

Substance Details:

Site ID:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	A020
CAS #:	Not reported
Substance:	CHROMIUM AND COMPOUNDS
Pathway:	GROUND WATER PATHWAY
Scoring:	3
Site ID:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	A020
CAS #:	Not reported
Substance:	CHROMIUM AND COMPOUNDS
Pathway:	SURFACE WATER PATHWAY
Scoring:	2
Site ID:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	U037
CAS #:	108-90-7
Substance:	CHLOROBENZENE
Pathway:	GROUND WATER PATHWAY
Scoring:	2
Site ID:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	U044
CAS #:	67-66-3
Substance:	CHLOROFORM
Pathway:	GROUND WATER PATHWAY
Scoring:	3
Site ID:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	U077
CAS #:	107-06-2
Substance:	DICHLOROETHANE, 1,2-
Pathway:	GROUND WATER PATHWAY
Scoring:	2
Site ID:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	U078
CAS #:	75-35-4
Substance:	DICHLOROETHENE, 1,1-
Pathway:	NO PATHWAY INDICATED
Scoring:	1
Site ID:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	U210
CAS #:	127-18-4
Substance:	TETRACHLOROETHENE
Pathway:	GROUND WATER PATHWAY
Scoring:	2
Site ID:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	U210
CAS #:	127-18-4

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

MAP FINDINGS

Database(s)
 EDR ID Number
 EPA ID Number

US AIR FORCE TINKER AFB (Continued)

1000269284

Substance:	TETRACHLOROETHENE
Pathway:	SURFACE WATER PATHWAY
Scoring:	2
Site ID:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	U228
CAS #:	79-01-6
Substance:	TRICHLOROETHYLENE (TCE)
Pathway:	GROUND WATER PATHWAY
Scoring:	2
Site ID:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	Not reported
CAS #:	Not reported
Substance:	Not reported
Pathway:	Not reported
Scoring:	Not reported

Summary Details:

" Conditions at proposal (April 10, 1985): Tinker Air Force Base covers 4,277 acres adjacent to Oklahoma City, Oklahoma County, Oklahoma. The base is within the North Canadian River drainage basin and drains into Crutcho and Soldier Creeks . It overlies the Garber-Wellington Formation. This NPL site is bounded by 59th Street, Douglas Boulevard, Building 3001, and the base boundary to the north. Building 3001 is used for aircraft maintenance and jet engine rebuilding. Organic solvents, including trichloroethylene (TCE), tetrachloroethylene, and 1,2-dichloroethylene, were used for degreasing and aircraft maintenance. In the past, waste oils, solvents, paint sludges, and plating waste generated from maintenance activities were disposed in Industrial Waste Pits Numbers 1 and 2, located about 1 mile south of Soldier Creek and Building 3001. Current waste is disposed off-site at landfills permitted under the Resource Conservation and Recovery Act (RCRA) or the State. The base acquired Interim Status under RCRA Subtitle C when it filed an application for a permit to store hazardous wastes. Tests conducted by a contractor to the Air Force detected TCE in a water supply well located within Building 3001. The Air Force has taken this well out of service. The municipal water system serving 55,400 customers in Midwest City draws water from the contaminated aquifer within 3 miles of the base. The Air Force has detected heavy metals (chromium, nickel, cadmium) in Soldier Creek at Douglas Boulevard. The Air Force is participating in the Installation Restoration Program, established in 1978. Under this program, the Department of Defense seeks to identify, investigate, and clean up contamination from hazardous materials. The Air Force has completed Phase I (records search) and is currently involved in Phase II (problem confirmation). Status (July 22, 1987): Phase IV (Operations Phase) is underway, and work on Phase II continues. Phase IV includes installation of additional cover at a landfill thought to be contributing contamination to a private well. Within the boundaries of this Federal facility, there are areas subject to the Subtitle C corrective action authorities of RCRA. However, no such areas were included in scoring this specific site. Therefore, this Federal facility

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

US AIR FORCE TINKER AFB (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000269284

site is being placed on the Federal section of the NPL under the NPL/RCRA policy announcement on September 8, 1983 (48 FR 40662)."

Site Status Details:

NPL Status: Final
Proposed Date: 04/10/1985
Final Date: 07/22/1987
Deleted Date: Not reported

ROD:

Full-text of USEPA Record of Decision(s) is available from EDR.

RCRAInfo Corrective Action Summary:

Event: CMI Workplan Approved
Event Date: 07/23/2004

Event: CMS Approved
Event Date: 04/08/2004

Event: CMS Approved
Event Date: 02/26/2004

Event: RFI Approved
Event Date: 02/20/2004

Event: CMS Approved
Event Date: 02/17/2004

Event: CMS Workplan Approved
Event Date: 01/22/2004

Event: CMS Workplan Approved
Event Date: 01/13/2004

Event: RFI Approved
Event Date: 07/30/2003

Event: RFI Approved
Event Date: 05/20/2003

Event: CMS Workplan Approved
Event Date: 03/24/2003

Event: RFI Approved
Event Date: 01/22/2003

Event: CMS Approved
Event Date: 11/21/2002

Event: Corrective Action Process Terminated, No Further Action
Event Date: 08/12/2002

Event: RFI Approved
Event Date: 08/01/2001

Event: CMS Approved
Event Date: 07/10/2001

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

MAP FINDINGS

US AIR FORCE TINKER AFB (Continued)

EDR ID Number
 EPA ID Number

Database(s)

1000269284

<p>Event: CMS Approved Event Date: 07/06/2001</p> <p>Event: CMS Approved Event Date: 06/29/2001</p> <p>Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility. Event Date: 11/16/2000</p> <p>Event: Igration of Contaminated Groundwater under Control, Unacceptable migration of contaminated groundwater is observed or expected. Event Date: 11/16/2000</p> <p>Event: RFI Workplan Approved Event Date: 11/05/1999</p> <p>Event: CMS Approved Event Date: 04/28/1999</p> <p>Event: Current Human Exposures under Control, More information is needed to make a determination. Event Date: 08/27/1996</p> <p>Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination. Event Date: 08/27/1996</p> <p>Event: Stabilization Construction Completed Event Date: 09/15/1995</p> <p>Event: RFI Workplan Approved Event Date: 07/10/1995</p> <p>Event: RFI Workplan Approved Event Date: 05/31/1995</p> <p>Event: RFI Workplan Approved Event Date: 04/26/1995</p> <p>Event: RFI Workplan Approved Event Date: 04/24/1995</p> <p>Event: RFI Workplan Approved Event Date: 03/31/1995</p> <p>Event: RFI Workplan Approved Event Date: 03/17/1995</p> <p>Event: RFI Approved Event Date: 09/22/1994</p> <p>Event: RFI Approved Event Date: 09/06/1994</p>	<p>Site</p>
--	-------------

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

MAP FINDINGS

US AIR FORCE TINKER AFB (Continued)

EDR ID Number
 EPA ID Number

Database(s)

1000269284

- Event: Stabilization Measures Implemented, Primary measure is source removal and/or treatment (e.g., soil or waste excavation, in-situ soil treatment, off-site treatment).
- Event Date: 08/12/1994
- Event: RFI Workplan Approved
- Event Date: 11/04/1993
- Event: RFI Workplan Approved
- Event Date: 11/16/1992
- Event: Stabilization Construction Completed
- Event Date: 10/31/1992
- Event: Stabilization Measures Evaluation, This facility is amenable to stabilization activity based on the status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations.
- Event Date: 09/24/1992
- Event: Stabilization Measures Implemented, Primary measure is source removal and/or treatment (e.g., soil or waste excavation, in-situ soil treatment, off-site treatment).
- Event Date: 06/30/1992
- Event: CA Prioritization, Facility or area was assigned a high corrective action priority.
- Event Date: 02/24/1992
- Event: RFI Imposition
- Event Date: 07/01/1991
- Event: RFA Completed
- Event Date: 06/19/1989
- Event: RFA Determination Of Need For An RFI, RFI is Necessary;
- Event Date: 06/19/1989

RCRAInfo:
 Owner: DEFENSE PROPERTY DISPOSAL OFFICE
 (405) 734-7882
 EPA ID: OK1571724391
 Contact: CATHY-L TAYLOR
 (405) 734-3201

Classification: Large Quantity Generator, TSDF
 TSDF Activities: Not reported

BIENNIAL REPORTS:

Last Biennial Reporting Year: 2003

<u>Waste</u>	<u>Quantity (Lbs)</u>	<u>Waste</u>	<u>Quantity (Lbs)</u>
D001	1772502.00	D002	87421.00
D003	7024.00	D006	1388712.00
D007	495286611.98	D008	930552.00
D009	428078.00	D011	710299.00
D018	661638.00	D035	1649714.00
D039	710764.00	F001	2006342.00
F002	495901620.98	F003	3016626.00
F004	7515.00	F005	2911251.00
F006	1369598.00	F009	105523.00
U047	7024.00	U151	10285.00

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

MAP FINDINGS

US AIR FORCE TINKER AFB (Continued)

EDR ID Number
 EPA ID Number

Database(s)

1000269284

U160	7024.00	U220	7024.00
Violation Status: Violations exist			
Regulation Violated:	262.20(a)		
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)		
Date Violation Determined:	12/14/1998		
Actual Date Achieved Compliance:	01/15/1999		
Enforcement Action:	WRITTEN INFORMAL		
Enforcement Action Date:	03/26/2001		
Penalty Type:	Not reported		
Enforcement Action:	EPA TO STATE ADMINISTRATIVE REFERRAL		
Enforcement Action Date:	05/04/1988		
Penalty Type:	Not reported		
Enforcement Action:	WRITTEN INFORMAL		
Enforcement Action Date:	05/17/1988		
Penalty Type:	Not reported		
Regulation Violated:	252.12(c)		
Area of Violation:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)		
Date Violation Determined:	12/14/1998		
Actual Date Achieved Compliance:	01/15/1999		
Enforcement Action:	WRITTEN INFORMAL		
Enforcement Action Date:	03/26/2001		
Penalty Type:	Not reported		
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER		
Enforcement Action Date:	10/31/1988		
Penalty Type:	Not reported		
Regulation Violated:	262.23(A)(1)262.20+APP.IX		
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS		
Date Violation Determined:	06/24/1991		
Actual Date Achieved Compliance:	07/26/1991		
Enforcement Action:	WRITTEN INFORMAL		
Enforcement Action Date:	06/24/1991		
Penalty Type:	Not reported		
Regulation Violated:	264.77(C)		
Area of Violation:	TSD-CONTAINERS REQUIREMENTS		
Date Violation Determined:	06/24/1991		
Actual Date Achieved Compliance:	07/26/1991		
Enforcement Action:	WRITTEN INFORMAL		
Enforcement Action Date:	06/24/1991		
Penalty Type:	Not reported		
Regulation Violated:	264.175(B)(3);270.15		
Area of Violation:	TSD-CONTAINERS REQUIREMENTS		
Date Violation Determined:	06/24/1991		
Actual Date Achieved Compliance:	07/26/1991		
Enforcement Action:	WRITTEN INFORMAL		
Enforcement Action Date:	06/24/1991		
Penalty Type:	Not reported		
Regulation Violated:	Not reported		
Area of Violation:	TSD-GENERAL STANDARDS		
Date Violation Determined:	09/17/1990		
Actual Date Achieved Compliance:	10/15/1991		

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

US AIR FORCE TINKER AFB (Continued)

1000269284

Enforcement Action: EPA TO STATE ADMINISTRATIVE REFERRAL
Enforcement Action Date: 06/20/1989
Penalty Type: Not reported

Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 11/29/1990
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 09/17/1990
Penalty Type: Not reported

Regulation Violated: Not reported
Area of Violation: TSD-TANKS REQUIREMENTS
Date Violation Determined: 09/17/1990
Actual Date Achieved Compliance: 10/15/1991

Enforcement Action: EPA TO STATE ADMINISTRATIVE REFERRAL
Enforcement Action Date: 06/20/1989
Penalty Type: Not reported

Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 11/29/1990
Penalty Type: Not reported

Regulation Violated: Not reported
Area of Violation: TSD-CONTAINERS REQUIREMENTS
Date Violation Determined: 09/17/1990
Actual Date Achieved Compliance: 10/15/1991

Enforcement Action: EPA TO STATE ADMINISTRATIVE REFERRAL
Enforcement Action Date: 06/20/1989
Penalty Type: Not reported

Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 11/29/1990
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 09/17/1990
Penalty Type: Not reported

Regulation Violated: Not reported
Area of Violation: TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 03/13/1990
Actual Date Achieved Compliance: 10/15/1991

Enforcement Action: EPA TO STATE ADMINISTRATIVE REFERRAL
Enforcement Action Date: 06/20/1989
Penalty Type: Not reported

Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 11/29/1990
Penalty Type: Not reported

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 09/17/1990
Penalty Type: Not reported

Regulation Violated: Not reported
Area of Violation: TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 03/13/1990
Actual Date Achieved Compliance: 10/15/1991

Enforcement Action: EPA TO STATE ADMINISTRATIVE REFERRAL

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
 EPA ID Number

US AIR FORCE TINKER AFB (Continued)

1000269284

Enforcement Action Date:	06/20/1989
Penalty Type:	Not reported
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	11/29/1990
Penalty Type:	Not reported
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	09/17/1990
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
Date Violation Determined:	03/13/1989
Actual Date Achieved Compliance:	11/27/1989
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	09/22/1989
Penalty Type:	Not reported
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	05/30/1989
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	03/13/1989
Actual Date Achieved Compliance:	11/27/1989
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	09/22/1989
Penalty Type:	Not reported
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	05/30/1989
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	08/31/1988
Actual Date Achieved Compliance:	11/04/1988
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	03/26/2001
Penalty Type:	Not reported
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	10/31/1988
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	04/11/1988
Actual Date Achieved Compliance:	08/03/1988
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	03/26/2001
Penalty Type:	Not reported
Enforcement Action:	EPA TO STATE ADMINISTRATIVE REFERRAL
Enforcement Action Date:	05/04/1988
Penalty Type:	Not reported
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	05/17/1988

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

MAP FINDINGS

US AIR FORCE TINKER AFB (Continued)

EDR ID Number
 EPA ID Number

Database(s)

1000269284

Penalty Type: Not reported

There are 14 violation record(s) reported at this site:

<u>Evaluation</u>	<u>Area of Violation</u>	<u>Date of Compliance</u>
Facility Self Disclosure	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19990115
	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19990115
Compliance Evaluation Inspection	GENERATOR-GENERAL REQUIREMENTS	19910726
	TSD-CONTAINERS REQUIREMENTS	19910726
	TSD-CONTAINERS REQUIREMENTS	19910726
Compliance Evaluation Inspection	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19911015
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19911015
	TSD-GENERAL STANDARDS	19911015
	TSD-CONTAINERS REQUIREMENTS	19911015
	TSD-TANKS REQUIREMENTS	19911015
Compliance Evaluation Inspection	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19891127
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19891127
Non-Financial Record Review	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19881104
Compliance Evaluation Inspection	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19880803

FINDS:

Other Pertinent Environmental Activity Identified at Site:

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

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; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

PCS (Permit Compliance System) 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.

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

US AIR FORCE TINKER AFB (Continued)

1000269284

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.

TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

NY MANIFEST:

Document ID: NYB5863095
Manifest Status: C
Trans1 State ID: Not reported
Trans2 State ID: Not reported
Generator Ship Date: 931207
Trans1 Recv Date: 931207
Trans2 Recv Date: Not reported
TSD Site Recv Date: 931210
Part A Recv Date: Not reported
Part B Recv Date: 931220
Generator EPA ID: OK1571724391
Trans1 EPA ID: ARD981908551
Trans2 EPA ID: Not reported
TSD ID: NYD000632372
Waste Code: P078 - NITROGEN DIOXIDE
Quantity: 00280
Units: P - Pounds
Number of Containers: 027
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Year: 93
Facility Type: Generator
EPA ID: OK1571724391
Facility Name: UNITED STATES MILITARY-TINKER AIR FORCE
Facility Address: BASE DPDO/L11
Facility City: OKLAHOMA CITY
Facility Zip 4: Not reported
Country: Not reported
County: Not reported
Mailing Name: UNITED STATES MILITARY-TINKER AIR FORCE
Mailing Contact: Not reported
Mailing Address: BASE DPDO/L11
Mailing City: OKLAHOMACITY
Mailing State: OK
Mailing Zip: 73145
Mailing Zip4: Not reported
Mailing Country: Not reported
Mailing Phone: 405-739-2204

[Click this hyperlink](#) while viewing on your computer to access 2 additional NY MANIFEST: record(s) in the EDR Site Report.

WI MANIFEST:

Year: 04
EPA ID: OK1571724391
FID: 0

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

US AIR FORCE TINKER AFB (Continued)

1000269284

ACT Code: 201
ACT Status: A
ACT Code 1: 201
ACT Name: HW Generator - Large
Contact First Name: Not reported
Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: Not reported
Contact Telephone: Not reported
Contact Extention: Not reported
Contact Email Address: Not reported
WI MANIFEST SHIP: -
Year: 04
Manifest DOC ID: 0
Copy Type: 3
Gen EPA ID: OK1571724391
Gen Date: 12/08/2004
TSD Date: 12/09/2004
TSD EPA ID: WIR000000356
GEN Copy Revd Date: 3/4/2005
TSG Copy Revd Date: 03/10/2005
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

WI MANIFEST TRANS: -
Year: Not reported
Mifest DOC ID: Not reported
TRAN EPA ID: Not reported
TRAN ORDER NO: Not reported
TRAN Date: Not reported

Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

CT MANIFEST:
Year: 1995
Manifest ID: MAG253061
TSDF EPA ID: CTD000604488
TSDF Name: CLEAN HARBORS OF CONNECTICUT, INC.
TSDF Address: 51 BRODERICK RD
TSDF City,St,Zip: BRISTOL, CT 06010

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
 EPA ID Number

US AIR FORCE TINKER AFB (Continued)

1000269284

TSDf Country: USA
 TSDf Telephone: Not reported
 Transport Date: 03/08/95
 Transporter EPA ID: OKD981605363
 Transporter Name: ENVIRONMENTAL TRANSPORTATION SERVICE
 Transporter Country: USA
 Transporter Phone: Not reported
 Trans 2 Date: 03/13/95
 Trans 2 EPA ID: Not reported
 Trans 2 Name: Not reported
 Trans 2 Address: Not reported
 Trans 2 City,St,Zip: CT
 Trans 2 Country: USA
 Trans 2 Phone: Not reported
 Generator EPA ID: OK1571724391
 Generator Phone: 4057392204
 Generator Address: Not reported
 Generator City,State,Zip: Not reported
 Generator Country: Not reported
 Special Handling: Not reported
 Discrepancies: Not reported
 Date Shipped: 03/08/95
 Date Received: 03/22/95
 Last modified date: 04/26/04
 Last modified by: IG
 Comments: Not reported

[Click this hyperlink](#) while viewing on your computer to access
 3 additional CT MANIFEST: record(s) in the EDR Site Report.

2 **MIDWEST MAIN & CONST CO.**
5500 S DOUGLAS BLVD
MIDWEST CITY, OK 73110

UST **U001230301**
HIST UST **N/A**

< 1/8
 1 ft.

Relative:
Lower

HIST UST:

Facility ID: 5510519 Tank ID: 1
 Installed Date: 5/27/1981 0:00:00 Tank Capacity: 1000
 Tank Status: Permanently Out of Use
 Owner: Cecile L. Curtis
 Owner Address: 2629 N.W. 59th Street

Oklahoma City, OK 73112

Product: Gasoline

UST:

Facility ID: 5510519
 Tank ID: 1
 Lat/Long : 35.41188 / -97.37067
 AST: False
 Lat/Long Degrees : 35° 24' 42.78000" / 97° 22' 14.43000"
 Contact Name: Cecile L. Curtis
 Contact Address: 2629 N.W. 59th Street
 Contact City,St,Zip: Oklahoma City, OK 73112

MAP FINDINGS

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

3
North
1/8-1/4
995 ft.

SOONER STRIPPING
5000 S DOUGLAS BLVD
OKLAHOMA CITY, OK 73150

RCRA-SQG **1000313227**
FINDS **OKD982760050**

Relative:
Lower

RCRAInfo:
 Owner: GEORGE BURROUGHS
 (000) 000-0000
 EPA ID: OKD982760050
 Contact: GEORGE BURROUGHS
 (405) 733-1511

Actual:
1287 ft.

Classification: Small Quantity Generator
 TSD Activities: Not reported
 Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

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.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
OKLAHOMA CITY	1008341418	OKC WAREHOUSE TIRE FIRE	14TH ST. & ROBIN AVE.		CERCLIS
OKLAHOMA CITY	1002995727	137TH TACICAL AIRLIFT WING	DOUGLAS BLVD BLDG 3767	73145	CERC-NFRAP
OKLAHOMA COUNTY	S107030615	TOWN OF HARRAH DISPOSAL SITE	CORNER OF HOLDEN STREET / COUNTY ROAD ST		SWF/LF
OKLAHOMA COUNTY	S106496826	PICKERING ENVIRONMENTAL SOIL WASHERS	SW CORNER OF SE/4 OF S31 T12N R4W (8301		SWF/LF
OKLAHOMA COUNTY	S106496811	RUFUS BRYANT & SON LANDFILL	GOVERNMENT LOTS 7 / 8 IN NW/4 OF S31 T12		SWF/LF
OKLAHOMA COUNTY	S106496805	SPANN LANDFILL	LOTS 6, 7, 11 - 49, BLOCK 32, EAST OKLAH		SWF/LF
OKLAHOMA COUNTY	S106496824	AMERICAN MEDICAL DISPOSAL, INC.	LOTS 41 - 44, SWASTIKA ADDITION, A SUBDI		SWF/LF
OKLAHOMA COUNTY	S107030616	OKLAHOMA CITY SLUDGE LANDFILL #1	N/2 NE/4 OF S21 T12N R2W		SWF/LF
OKLAHOMA COUNTY	S106496818	LAND RECLAIMERS, INC. LANDFILL	NW/4 NE/4 NW/4 / E/2 NE/4 NE/4 NW/4 OF S		SWF/LF
OKLAHOMA COUNTY	S106496813	TINKER AFB LANDFILL	NE/4 NW/4 OF S25 T11N R2W		SWF/LF
OKLAHOMA COUNTY	S106496825	EDMOND YARD WASTE COMPOSTING FACILITY	NE/4 NW/4 OF S16 T14N R3W		SWF/LF
OKLAHOMA COUNTY	S106496808	A-1 SANITARY LANDFILL	NE/4 OF S21 T12N R2W		SWF/LF
OKLAHOMA COUNTY	S106496806	CITY OF MIDWEST CITY LANDFILL	SW/4 OF S15 T12N R2W		SWF/LF
OKLAHOMA COUNTY	S106496807	CUSTOM EQUIPMENT COMPANY LANDFILL	SE/4 OF S25 T11N R3W		SWF/LF
OKLAHOMA COUNTY	S106496809	CITY OF DEL CITY LANDFILL	NW/4 OF S32 T12N R2W LYING NORTH OF FRIS		SWF/LF
OKLAHOMA COUNTY	S106496817	OKLAHOMA CITY LANDFILL COMPANY	NE/4 OF S8 T11N R4W / GOVERNMENT LOTS 5,		SWF/LF
OKLAHOMA COUNTY	S106496819	MIDWEST C/D LANDFILL	NW/4 OF S24 T11N R2W		SWF/LF
OKLAHOMA COUNTY	S106496820	VILLA LANDFILL	NW/4 OF S31 T12N R3W (NW 10TH / VILLA)		SWF/LF
OKLAHOMA COUNTY	S106496821	STOCKYARDS RECYCLERS, L.L.C.	SW/4 OF S6 T11N R3W		SWF/LF
OKLAHOMA COUNTY	S106496828	CITY OF OKLAHOMA CITY HOUSEHOLD HAZARDOU	NE/4 OF S11 T11N R4W		SWF/LF
OKLAHOMA COUNTY	S106496830	DAYTON TIRE & RUBBER COMPANY	W/2 OF S8 T11N R4W		SWF/LF
OKLAHOMA COUNTY	S106496810	MIDWEST MAINTENANCE & CONSTRUCTION COMPA	S/2 S/2 NW/4 OF S24 T11N R2W		SWF/LF
OKLAHOMA COUNTY	S106496815	CITY OF DEL CITY MUNICIPAL INCINERATOR	NE/4 SW/4 OF S32 T12N R2W		SWF/LF
OKLAHOMA COUNTY	S106496827	EDMOND SOLID WASTE TRANSFER STATION	S/2 SW/4 SW/4, / SW/4 SE/4 SW/4, & S 50'		SWF/LF
OKLAHOMA COUNTY	S106496822	CMI ENERGY CONVERSION SYSTEMS WASTE-TO-E	S6 T11N R3W (801 S. AGNEW)		SWF/LF
OKLAHOMA COUNTY	S106496823	SOUTHEAST LANDFILL	S25 T11N R3W		SWF/LF
OKLAHOMA COUNTY	S106496812	WMO-MOSLEY ROAD LANDFILL	S21 T12N R2W		SWF/LF
OKLAHOMA COUNTY	S106496816	NORTH CANADIAN WW TREATMENT PLANT	S16 T13N R1W		SWF/LF
TINKER AFB	U003885918	AAFES SHOPETTE #3	7410 PATROL RD	73145	UST, HIST UST

EPA Waste Codes Addendum

Code	Description
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D002	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
D003	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
D006	CADMIUM
D007	CHROMIUM
D008	LEAD
D009	MERCURY
D011	SILVER
D018	BENZENE
D035	METHYL ETHYL KETONE
D039	TETRACHLOROETHYLENE
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, 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.
F002	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY

EPA Waste Codes Addendum

Code	Description
	VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F004	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F006	WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
F009	SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
U047	BETA-CHLORONAPHTHALENE
U047	NAPHTHALENE, 2-CHLORO-
U151	MERCURY
U160	2-BUTANONE, PEROXIDE (R,T)
U160	METHYL ETHYL KETONE PEROXIDE (R,T)
U220	BENZENE, METHYL-
U220	TOLUENE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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.

FEDERAL RECORDS

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: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 05/05/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 07/31/2006
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

Date of Government Version: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 05/05/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 07/31/2006
	Data Release Frequency: Quarterly

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: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 05/05/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 07/31/2006
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPL RECOVERY: 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	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 05/23/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/01/2006	Source: EPA
Date Data Arrived at EDR: 03/21/2006	Telephone: 703-413-0223
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 06/22/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

Date of Government Version: 02/01/2006	Source: EPA
Date Data Arrived at EDR: 03/21/2006	Telephone: 703-413-0223
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 06/23/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2006	Source: EPA
Date Data Arrived at EDR: 03/17/2006	Telephone: 800-424-9346
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 05/21/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/04/2006
	Data Release Frequency: Quarterly

RCRA: Resource Conservation and Recovery Act Information

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). 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). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site 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: 03/09/2006	Source: EPA
Date Data Arrived at EDR: 04/27/2006	Telephone: 800-424-9346
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/28/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: Quarterly

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: 12/31/2005	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/12/2006	Telephone: 202-260-2342
Date Made Active in Reports: 02/21/2006	Last EDR Contact: 07/25/2006
Number of Days to Update: 40	Next Scheduled EDR Contact: 10/23/2006
	Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2005	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-366-4555
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 07/19/2006
Number of Days to Update: 46	Next Scheduled EDR Contact: 10/16/2006
	Data Release Frequency: Annually

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: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 07/03/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional 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.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 07/03/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 12/31/2004	Source: USGS
Date Data Arrived at EDR: 02/08/2005	Telephone: 703-692-8801
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 05/12/2006
Number of Days to Update: 177	Next Scheduled EDR Contact: 08/07/2006
	Data Release Frequency: Semi-Annually

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: 12/05/2005	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 01/19/2006	Telephone: 202-528-4285
Date Made Active in Reports: 02/21/2006	Last EDR Contact: 07/17/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients--States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 04/26/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/27/2006	Telephone: 202-566-2777
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/12/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 09/11/2006
	Data Release Frequency: Semi-Annually

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: 12/14/2004	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 02/15/2005	Telephone: Varies
Date Made Active in Reports: 04/25/2005	Last EDR Contact: 07/24/2006
Number of Days to Update: 69	Next Scheduled EDR Contact: 10/23/2006
	Data Release Frequency: Varies

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: 04/13/2006	Source: EPA
Date Data Arrived at EDR: 04/28/2006	Telephone: 703-416-0223
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 07/06/2006
Number of Days to Update: 32	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 11/04/2005	Source: Department of Energy
Date Data Arrived at EDR: 11/28/2005	Telephone: 505-845-0011
Date Made Active in Reports: 01/30/2006	Last EDR Contact: 06/21/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 09/18/2006
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 03/09/2006	Source: EPA
Date Data Arrived at EDR: 04/13/2006	Telephone: 202-564-6064
Date Made Active in Reports: 05/19/2006	Last EDR Contact: 07/06/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Quarterly

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.

Date of Government Version: 12/31/2003	Source: EPA
Date Data Arrived at EDR: 07/13/2005	Telephone: 202-566-0250
Date Made Active in Reports: 08/17/2005	Last EDR Contact: 06/22/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Annually

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 site.

Date of Government Version: 12/31/2002	Source: EPA
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-260-5521
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 07/17/2006
Number of Days to Update: 46	Next Scheduled EDR Contact: 10/16/2006
	Data Release Frequency: Every 4 Years

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: 03/29/2006	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/26/2006	Telephone: 202-566-1667
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/19/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 03/31/2006	Source: EPA
Date Data Arrived at EDR: 04/26/2006	Telephone: 202-566-1667
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/19/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Quarterly

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: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 05/11/2006	Telephone: 202-564-4203
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 07/17/2006
Number of Days to Update: 11	Next Scheduled EDR Contact: 10/16/2006
	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: 02/13/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/21/2006	Telephone: 202-564-5088
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 07/17/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 10/16/2006
	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: 12/27/2005	Source: EPA
Date Data Arrived at EDR: 02/08/2006	Telephone: 202-566-0500
Date Made Active in Reports: 02/27/2006	Last EDR Contact: 06/28/2006
Number of Days to Update: 19	Next Scheduled EDR Contact: 08/07/2006
	Data Release Frequency: Annually

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: 04/12/2006	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 04/26/2006	Telephone: 301-415-7169
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 07/03/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Quarterly

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: 02/09/2006	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 03/29/2006	Telephone: 303-231-5959
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/28/2006
Number of Days to Update: 62	Next Scheduled EDR Contact: 09/25/2006
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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).

Date of Government Version: 04/27/2006	Source: EPA
Date Data Arrived at EDR: 05/02/2006	Telephone: N/A
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/03/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 07/03/2006
	Data Release Frequency: Quarterly

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	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/05/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/04/2006
	Data Release Frequency: No Update Planned

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: 12/31/2003	Source: EPA/NTIS
Date Data Arrived at EDR: 06/17/2005	Telephone: 800-424-9346
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 07/21/2006
Number of Days to Update: 48	Next Scheduled EDR Contact: 09/11/2006
	Data Release Frequency: Biennially

STATE AND LOCAL RECORDS

SHWS: Voluntary Cleanup & Superfund Site Status Report

Date of Government Version: 12/31/2005	Source: Department of Environmental Quality
Date Data Arrived at EDR: 04/10/2006	Telephone: 405-702-5100
Date Made Active in Reports: 05/12/2006	Last EDR Contact: 06/13/2006
Number of Days to Update: 32	Next Scheduled EDR Contact: 06/12/2006
	Data Release Frequency: Varies

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: 05/19/2006	Source: Department of Environmental Quality
Date Data Arrived at EDR: 05/31/2006	Telephone: 405-702-5184
Date Made Active in Reports: 07/03/2006	Last EDR Contact: 05/30/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 08/28/2006
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 05/08/2006	Source: Oklahoma Corporation Commission
Date Data Arrived at EDR: 05/08/2006	Telephone: 405-521-3107
Date Made Active in Reports: 05/26/2006	Last EDR Contact: 07/24/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 10/23/2006
	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: 03/03/2006	Source: Oklahoma Corporation Commission
Date Data Arrived at EDR: 03/03/2006	Telephone: 405-521-3107
Date Made Active in Reports: 04/03/2006	Last EDR Contact: 07/24/2006
Number of Days to Update: 31	Next Scheduled EDR Contact: 10/23/2006
	Data Release Frequency: Varies

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	Source: Oklahoma Corporation Commission
Date Data Arrived at EDR: 04/28/2003	Telephone: 405-521-3107
Date Made Active in Reports: 05/27/2003	Last EDR Contact: 07/24/2006
Number of Days to Update: 29	Next Scheduled EDR Contact: 10/23/2006
	Data Release Frequency: No Update Planned

LAST: Leaking Aboveground Storage Tanks List

Date of Government Version: 05/08/2006	Source: Oklahoma Corporation Commission
Date Data Arrived at EDR: 05/08/2006	Telephone: 405-522-4640
Date Made Active in Reports: 05/26/2006	Last EDR Contact: 07/24/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 10/23/2006
	Data Release Frequency: Varies

AST: Aboveground Storage Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 03/03/2006	Source: Oklahoma Corporation Commission
Date Data Arrived at EDR: 03/03/2006	Telephone: 405-521-3107
Date Made Active in Reports: 04/03/2006	Last EDR Contact: 07/24/2006
Number of Days to Update: 31	Next Scheduled EDR Contact: 10/23/2006
	Data Release Frequency: Varies

INST CONTROL: Institutional Control Sites

Sites with institutional controls in place.

Date of Government Version: 06/12/2006	Source: Department of Environmental Quality
Date Data Arrived at EDR: 06/13/2006	Telephone: 405-702-5100
Date Made Active in Reports: 07/17/2006	Last EDR Contact: 06/12/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/11/2006
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Site Inventory

Date of Government Version: 06/12/2006	Source: Department of Environmental Quality
Date Data Arrived at EDR: 06/13/2006	Telephone: 405-702-5100
Date Made Active in Reports: 07/17/2006	Last EDR Contact: 06/12/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/11/2006
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DRYCLEANERS: Drycleaner Facilities

A listing of drycleaner facility locations.

Date of Government Version: 04/12/2006
Date Data Arrived at EDR: 04/13/2006
Date Made Active in Reports: 05/12/2006
Number of Days to Update: 29

Source: Department of Environmental Quality
Telephone: 405-702-9100
Last EDR Contact: 07/11/2006
Next Scheduled EDR Contact: 10/09/2006
Data Release Frequency: Varies

BROWNFIELDS: Brownfield Sites

Date of Government Version: 12/13/2005
Date Data Arrived at EDR: 12/13/2005
Date Made Active in Reports: 01/23/2006
Number of Days to Update: 41

Source: Department of Environmental Quality
Telephone: 405-702-5100
Last EDR Contact: 06/30/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Semi-Annually

OK COMPLAINT: Oklahoma Complaint System Database

Environmental complaints reported to the Oklahoma Corporation Commission.

Date of Government Version: 03/27/2006
Date Data Arrived at EDR: 04/05/2006
Date Made Active in Reports: 05/12/2006
Number of Days to Update: 37

Source: Oklahoma Corporation Commission
Telephone: 405-521-2384
Last EDR Contact: 07/03/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Varies

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: 04/03/2006
Date Data Arrived at EDR: 05/31/2006
Date Made Active in Reports: 07/17/2006
Number of Days to Update: 47

Source: Department of Environmental Quality
Telephone: 405-702-1000
Last EDR Contact: 04/03/2006
Next Scheduled EDR Contact: 08/28/2006
Data Release Frequency: Varies

TRIBAL RECORDS

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: 12/31/2004
Date Data Arrived at EDR: 02/08/2005
Date Made Active in Reports: 08/04/2005
Number of Days to Update: 177

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 05/12/2006
Next Scheduled EDR Contact: 08/07/2006
Data Release Frequency: Semi-Annually

INDIAN LUST: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahmoa.

Date of Government Version: 01/04/2005
Date Data Arrived at EDR: 01/21/2005
Date Made Active in Reports: 02/28/2005
Number of Days to Update: 38

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/23/2006
Next Scheduled EDR Contact: 08/21/2006
Data Release Frequency: Varies

INDIAN UST: USTs on Indian Land

Date of Government Version: 12/14/2005
Date Data Arrived at EDR: 12/14/2005
Date Made Active in Reports: 01/23/2006
Number of Days to Update: 40

Source: Environmental Protection Agency, Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/23/2006
Next Scheduled EDR Contact: 08/21/2006
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: 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

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: 12/31/2004
Date Data Arrived at EDR: 02/17/2006
Date Made Active in Reports: 04/07/2006
Number of Days to Update: 49

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 06/14/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Annually

NY MANIFEST: 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: 05/02/2006
Date Data Arrived at EDR: 05/31/2006
Date Made Active in Reports: 06/27/2006
Number of Days to Update: 27

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/31/2006
Next Scheduled EDR Contact: 08/28/2006
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 03/17/2006
Date Made Active in Reports: 05/02/2006
Number of Days to Update: 46

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 07/25/2006
Next Scheduled EDR Contact: 10/09/2006
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: PennWell Corporation
Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

TWADDLE AFRC
5316 S. DOUGLAS BLVD.
OKLAHOMA CITY, OK 73150

TARGET PROPERTY COORDINATES

Latitude (North):	35.41260 - 35° 24' 45.4"
Longitude (West):	97.3692 - 97° 22' 9.1"
Universal Transverse Mercator:	Zone 14
UTM X (Meters):	648072.4
UTM Y (Meters):	3919823.0
Elevation:	1298 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	35097-D3 CHOCTAW, OK
Most Recent Revision:	1975

West Map:	35097-D4 MIDWEST CITY, OK
Most Recent Revision:	1975

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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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).

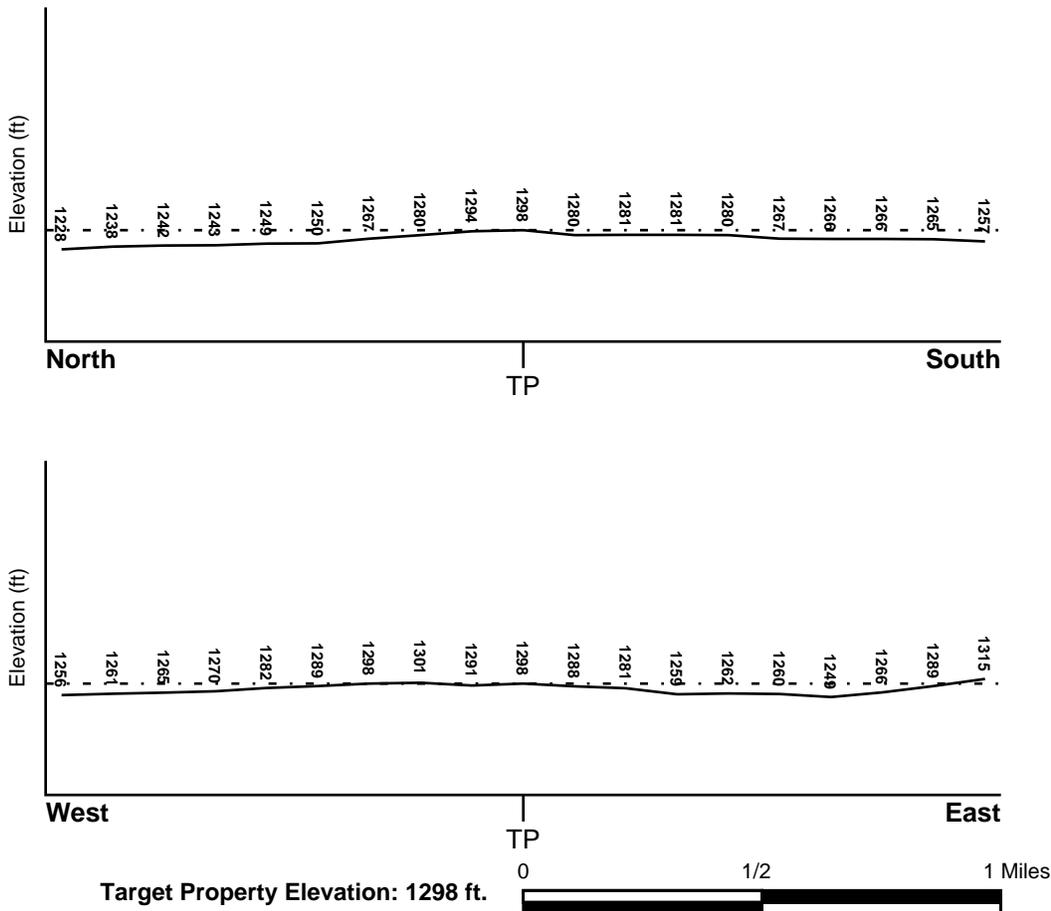
TOPOGRAPHIC INFORMATION

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 East

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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

<u>Target Property County</u>	<u>FEMA Flood Electronic Data</u>
OKLAHOMA, OK	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 4053780080C

Additional Panels in search area: 4053780110C

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
CHOCTAW	Not Available

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.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

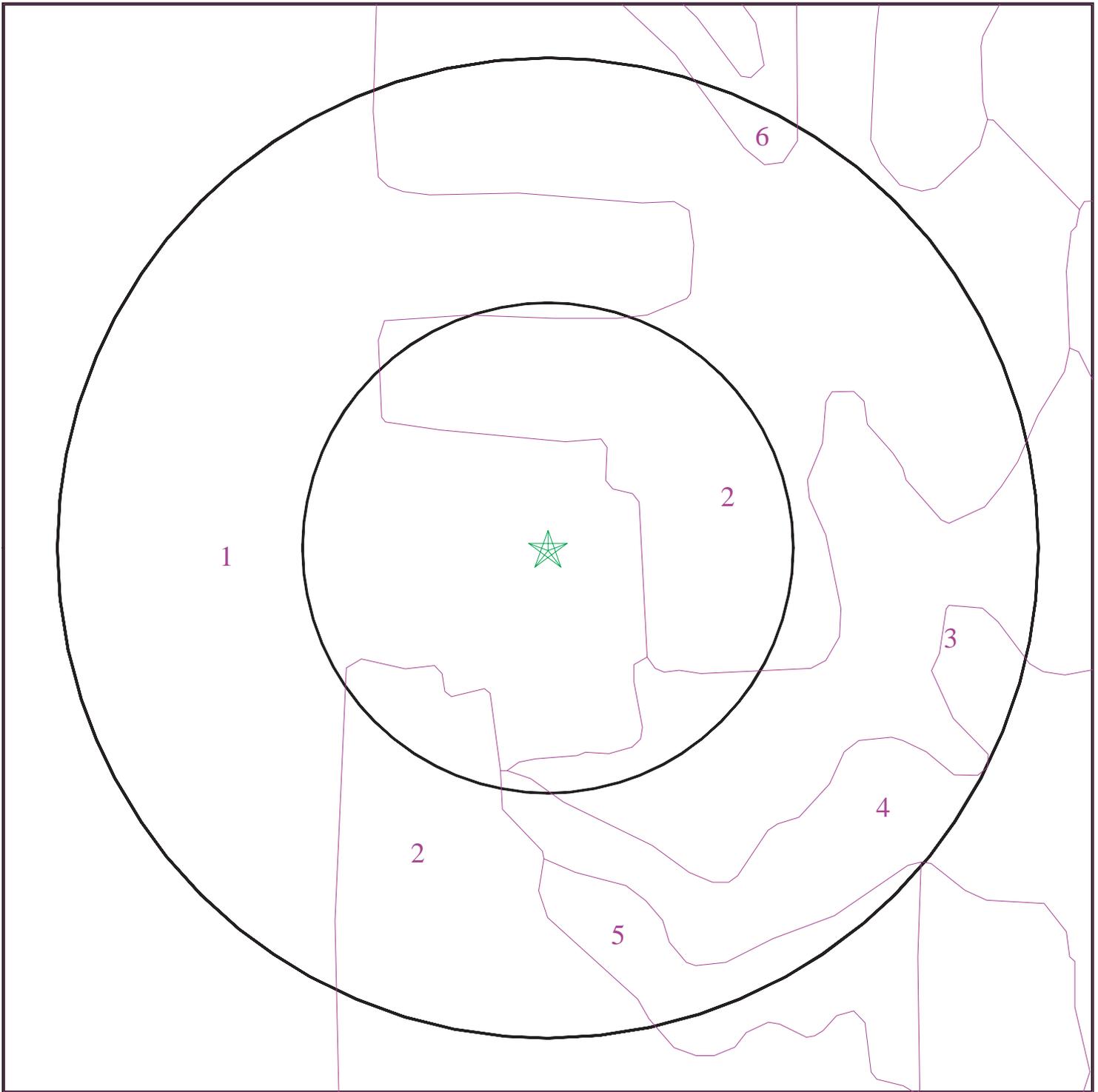
Era: Paleozoic
System: Permian
Series: Lower part of Leonardian Series
Code: P2a (*decoded above as Era, System & Series*)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

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 - 1725896.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Twaddle AFRC
ADDRESS: 5316 S. Douglas Blvd.
Oklahoma City OK 73150
LAT/LONG: 35.4126 / 97.3692

CLIENT: ENSAFE
CONTACT: Phil Hardy
INQUIRY #: 1725896.2s
DATE: July 31, 2006

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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: 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: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Bedrock Max: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	60 inches	variable	Not reported	Not reported	Max: 2.00 Min: 0.06	Max: 0.00 Min: 0.00

Soil Map ID: 2

Soil Component Name: RENTHIN

Soil Surface Texture: silty clay 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. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 40 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	8 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.60 Min: 0.20	Max: 7.30 Min: 6.10
2	8 inches	12 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.60 Min: 0.20	Max: 7.80 Min: 6.10
3	12 inches	19 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.06 Min: 0.00	Max: 8.40 Min: 6.60
4	19 inches	55 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.06 Min: 0.00	Max: 8.40 Min: 7.90
5	55 inches	60 inches	weathered bedrock	Not reported	Not reported	Max: 0.06 Min: 0.00	Max: 0.00 Min: 0.00

Soil Map ID: 3

Soil Component Name: STEPHENVILLE

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. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 20 inches

Depth to Bedrock Max: > 40 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 6.00 Min: 2.00	Max: 6.50 Min: 5.10
2	5 inches	8 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 20.00 Min: 2.00	Max: 6.50 Min: 5.10
3	8 inches	27 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 6.00 Min: 4.50
4	27 inches	32 inches	weathered bedrock	Not reported	Not reported	Max: 0.60 Min: 0.20	Max: 0.00 Min: 0.00

Soil Map ID: 4

Soil Component Name: HARRAH

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. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 0 inches

Depth to Bedrock Max: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	6 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 6.00 Min: 2.00	Max: 7.30 Min: 4.50
2	6 inches	19 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 6.00 Min: 2.00	Max: 7.30 Min: 4.50
3	19 inches	44 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 7.30 Min: 4.50
4	44 inches	84 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 7.30 Min: 4.50

Soil Map ID: 5

Soil Component Name: STEPHENVILLE

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. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 20 inches

Depth to Bedrock Max: > 40 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	3 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 6.00 Min: 2.00	Max: 6.50 Min: 5.10
2	3 inches	26 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 6.00 Min: 4.50
3	26 inches	42 inches	weathered bedrock	Not reported	Not reported	Max: 0.60 Min: 0.20	Max: 0.00 Min: 0.00

Soil Map ID: 6

Soil Component Name: STEPHENVILLE

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. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 20 inches

Depth to Bedrock Max: > 40 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	4 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 6.00 Min: 2.00	Max: 6.50 Min: 5.10
2	4 inches	29 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 6.00 Min: 4.50
3	29 inches	31 inches	weathered bedrock	Not reported	Not reported	Max: 0.60 Min: 0.20	Max: 0.00 Min: 0.00

Soil Map ID: 7

Soil Component Name: STEPHENVILLE

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. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 20 inches

Depth to Bedrock Max: > 40 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	4 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 6.00 Min: 2.00	Max: 6.50 Min: 5.10
2	4 inches	30 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 6.00 Min: 4.50
3	30 inches	40 inches	weathered bedrock	Not reported	Not reported	Max: 0.60 Min: 0.20	Max: 0.00 Min: 0.00

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

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS2725151	0 - 1/8 Mile WNW
B6	USGS2725138	1/8 - 1/4 Mile SSW
B7	USGS2725143	1/8 - 1/4 Mile SW
10	USGS2725160	1/4 - 1/2 Mile WNW
11	USGS2725136	1/4 - 1/2 Mile SW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C12	USGS2725152	1/4 - 1/2 Mile West
C13	USGS2725153	1/4 - 1/2 Mile West
17	USGS2725129	1/4 - 1/2 Mile SSW
E22	USGS2725140	1/4 - 1/2 Mile WSW
E23	USGS2725139	1/4 - 1/2 Mile WSW
H31	USGS2725125	1/4 - 1/2 Mile SW
53	USGS2725124	1/2 - 1 Mile SW
54	USGS2725003	1/2 - 1 Mile NW
68	USGS2724992	1/2 - 1 Mile SSE
69	USGS2725117	1/2 - 1 Mile SSW
M70	USGS2725176	1/2 - 1 Mile NNW
85	USGS2725165	1/2 - 1 Mile WNW
M86	USGS2725024	1/2 - 1 Mile NNW
96	USGS2725109	1/2 - 1 Mile South
106	USGS2725028	1/2 - 1 Mile NW
T142	USGS2725168	1/2 - 1 Mile NNW
U143	USGS2725034	1/2 - 1 Mile NNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	OK00058791	1/8 - 1/4 Mile NW
A3	OK00058649	1/8 - 1/4 Mile East
A4	OK00058311	1/8 - 1/4 Mile East
A5	OK00058314	1/8 - 1/4 Mile East
8	OK00061494	1/8 - 1/4 Mile ESE
9	OK00056945	1/4 - 1/2 Mile NNE
14	OK00055290	1/4 - 1/2 Mile East
D15	OK00057542	1/4 - 1/2 Mile NW
D16	OK00058491	1/4 - 1/2 Mile NW
D18	OK00061340	1/4 - 1/2 Mile WNW
19	OK00055865	1/4 - 1/2 Mile East
D20	OK00061341	1/4 - 1/2 Mile WNW
21	OK00057541	1/4 - 1/2 Mile West
24	OK00057543	1/4 - 1/2 Mile WNW
F25	OK00061343	1/4 - 1/2 Mile WNW
F26	OK00061342	1/4 - 1/2 Mile WNW
G27	OK00056944	1/4 - 1/2 Mile NW
G28	OK00056941	1/4 - 1/2 Mile NW
G29	OK00056942	1/4 - 1/2 Mile NW
G30	OK00056943	1/4 - 1/2 Mile NW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H32	OK00056607	1/4 - 1/2 Mile SW
F33	OK00058492	1/4 - 1/2 Mile WNW
34	OK00055288	1/2 - 1 Mile SE
I35	OK00059259	1/2 - 1 Mile NNW
I36	OK00059260	1/2 - 1 Mile NNW
I37	OK00059257	1/2 - 1 Mile NNW
I38	OK00059258	1/2 - 1 Mile NNW
J39	OK00057725	1/2 - 1 Mile SSE
J40	OK00057721	1/2 - 1 Mile SSE
J41	OK00057507	1/2 - 1 Mile SSE
J42	OK00057731	1/2 - 1 Mile SSE
J43	OK00057730	1/2 - 1 Mile SSE
J44	OK00057729	1/2 - 1 Mile SSE
J45	OK00057733	1/2 - 1 Mile SSE
J46	OK00057745	1/2 - 1 Mile SSE
J47	OK00057732	1/2 - 1 Mile SSE
J48	OK00057727	1/2 - 1 Mile SSE
J49	OK00057750	1/2 - 1 Mile SSE
J50	OK00057726	1/2 - 1 Mile SSE
J51	OK00057728	1/2 - 1 Mile SSE
52	OK00058533	1/2 - 1 Mile NNE
K55	OK00057734	1/2 - 1 Mile SE
K56	OK00057746	1/2 - 1 Mile SE
K57	OK00057747	1/2 - 1 Mile SE
K58	OK00057748	1/2 - 1 Mile SE
K59	OK00057749	1/2 - 1 Mile SE
K60	OK00057722	1/2 - 1 Mile SE
K61	OK00057635	1/2 - 1 Mile SE
K62	OK00057724	1/2 - 1 Mile SE
K63	OK00057723	1/2 - 1 Mile SE
L64	OK00055863	1/2 - 1 Mile West
L65	OK00055864	1/2 - 1 Mile West
66	OK00055289	1/2 - 1 Mile ESE
67	OK00060344	1/2 - 1 Mile North
71	OK00055286	1/2 - 1 Mile ESE
N72	OK00057937	1/2 - 1 Mile NNW
N73	OK00057938	1/2 - 1 Mile NNW
N74	OK00057939	1/2 - 1 Mile NNW
N75	OK00057936	1/2 - 1 Mile NNW
N76	OK00057930	1/2 - 1 Mile NNW
N77	OK00057931	1/2 - 1 Mile NNW
N78	OK00057935	1/2 - 1 Mile NNW
N79	OK00057953	1/2 - 1 Mile NNW
N80	OK00057954	1/2 - 1 Mile NNW
N81	OK00057955	1/2 - 1 Mile NNW
N82	OK00057952	1/2 - 1 Mile NNW
N83	OK00057940	1/2 - 1 Mile NNW
N84	OK00057951	1/2 - 1 Mile NNW
87	OK00058797	1/2 - 1 Mile WSW
88	OK00055287	1/2 - 1 Mile East
89	OK00060795	1/2 - 1 Mile NW
O90	OK00060278	1/2 - 1 Mile North

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

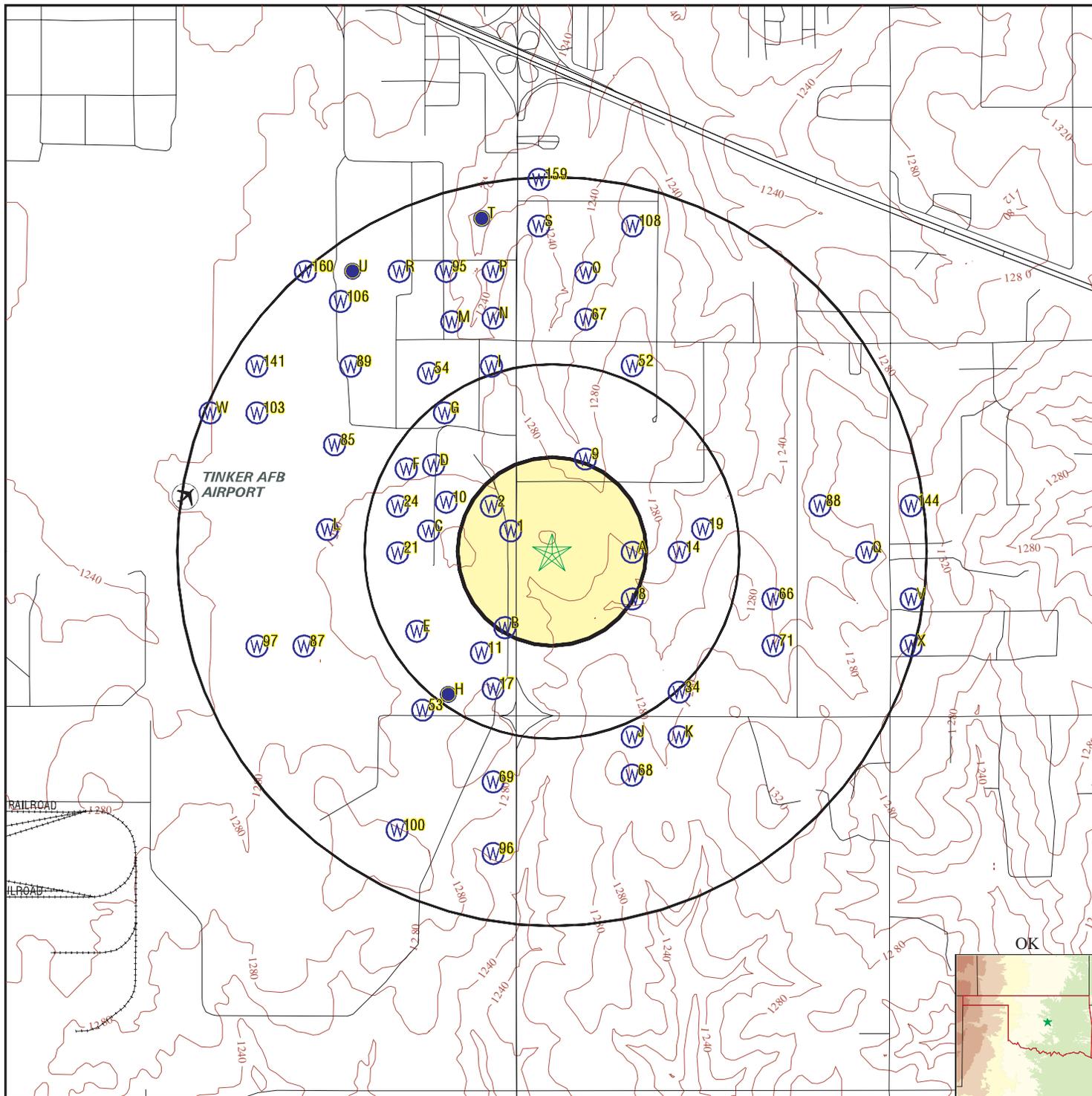
MAP ID	WELL ID	LOCATION FROM TP
O91	OK00060311	1/2 - 1 Mile North
O92	OK00055277	1/2 - 1 Mile North
P93	OK00060614	1/2 - 1 Mile NNW
P94	OK00060649	1/2 - 1 Mile NNW
95	OK00060580	1/2 - 1 Mile NNW
97	OK00057715	1/2 - 1 Mile WSW
Q98	OK00055285	1/2 - 1 Mile East
Q99	OK00055284	1/2 - 1 Mile East
100	OK00058796	1/2 - 1 Mile SSW
R101	OK00060564	1/2 - 1 Mile NNW
R102	OK00060581	1/2 - 1 Mile NNW
103	OK00057807	1/2 - 1 Mile WNW
S104	OK00057023	1/2 - 1 Mile North
S105	OK00060343	1/2 - 1 Mile North
T107	OK00060687	1/2 - 1 Mile North
108	OK00060313	1/2 - 1 Mile NNE
U109	OK00059798	1/2 - 1 Mile NW
U110	OK00059797	1/2 - 1 Mile NW
U111	OK00060579	1/2 - 1 Mile NW
U112	OK00059799	1/2 - 1 Mile NW
U113	OK00060566	1/2 - 1 Mile NW
U114	OK00060565	1/2 - 1 Mile NW
U115	OK00060578	1/2 - 1 Mile NW
U116	OK00060577	1/2 - 1 Mile NW
U117	OK00060635	1/2 - 1 Mile NW
U118	OK00060636	1/2 - 1 Mile NW
U119	OK00060633	1/2 - 1 Mile NW
U120	OK00060634	1/2 - 1 Mile NW
U121	OK00059719	1/2 - 1 Mile NW
U122	OK00060763	1/2 - 1 Mile NW
U123	OK00059796	1/2 - 1 Mile NW
U124	OK00060760	1/2 - 1 Mile NW
U125	OK00060762	1/2 - 1 Mile NW
U126	OK00060529	1/2 - 1 Mile NW
U127	OK00060504	1/2 - 1 Mile NW
U128	OK00060533	1/2 - 1 Mile NW
U129	OK00060531	1/2 - 1 Mile NW
U130	OK00060524	1/2 - 1 Mile NW
U131	OK00060527	1/2 - 1 Mile NW
U132	OK00060528	1/2 - 1 Mile NW
U133	OK00060525	1/2 - 1 Mile NW
U134	OK00060526	1/2 - 1 Mile NW
U135	OK00060534	1/2 - 1 Mile NW
U136	OK00060553	1/2 - 1 Mile NW
U137	OK00060552	1/2 - 1 Mile NW
U138	OK00060530	1/2 - 1 Mile NW
U139	OK00060535	1/2 - 1 Mile NW
U140	OK00060551	1/2 - 1 Mile NW
141	OK00060799	1/2 - 1 Mile WNW
144	OK00054965	1/2 - 1 Mile East
V145	OK00054955	1/2 - 1 Mile East
V146	OK00055755	1/2 - 1 Mile East

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
W147	OK00058559	1/2 - 1 Mile WNW
W148	OK00058183	1/2 - 1 Mile WNW
X149	OK00056501	1/2 - 1 Mile ESE
X150	OK00057106	1/2 - 1 Mile ESE
X151	OK00056428	1/2 - 1 Mile ESE
X152	OK00056430	1/2 - 1 Mile ESE
X153	OK00054956	1/2 - 1 Mile ESE
X154	OK00055820	1/2 - 1 Mile ESE
X155	OK00056469	1/2 - 1 Mile ESE
X156	OK00057768	1/2 - 1 Mile ESE
X157	OK00057767	1/2 - 1 Mile ESE
X158	OK00058537	1/2 - 1 Mile ESE
159	OK00059710	1/2 - 1 Mile North
160	OK00060615	1/2 - 1 Mile NW

PHYSICAL SETTING SOURCE MAP - 1725896.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

SITE NAME: Twaddle AFRC
 ADDRESS: 5316 S. Douglas Blvd.
 Oklahoma City OK 73150
 LAT/LONG: 35.4126 / 97.3692

CLIENT: ENSAFE
 CONTACT: Phil Hardy
 INQUIRY #: 1725896.2s
 DATE: July 31, 2006

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1
WNW
0 - 1/8 Mile
Lower

FED USGS USGS2725151

Agency cd:	USGS	Site no:	352448097221501
Site name:	11N-02W-23 DAA 2		
Latitude:	352448		
Longitude:	0972215	Dec lat:	35.41339667
Dec lon:	-97.3711453	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	NENESES23 T11N R02W I
Location map:	CHOCTAW	Map scale:	24000
Altitude:	1294	Altitude method:	L
Altitude accuracy:	1	Altitude datum:	NGVD29
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Hilltop		
Site type:	Ground-water other than Spring	Date construction:	1943
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	850	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1943-05-01	Ground water data end date:	1943-05-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1943-05-01	390	

2
NW
1/8 - 1/4 Mile
Lower

OK WELLS OK00058791

Well id:	74520	County:	Oklahoma
Well name:	n/a	Qtrs:	SESENE
Owner name:	Tinker AFB	Latitude:	35.414354
Sec twp rge:	23-11N-02WI	Date const:	09/06/02
Longitude:	-97.372058	Usage:	Water Quality
Dpc no:	DPC-0283	Td:	47
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A3
East
1/8 - 1/4 Mile
Lower

OK WELLS OK00058649

Well id:	66695	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNESW
Owner name:	Tinker AFB c/o Tetra Tech Inc.	Latitude:	35.412568
Sec twp rge:	24-11N-02WI	Date const:	11/08/01
Longitude:	-97.365393	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	85
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

A4
East
1/8 - 1/4 Mile
Lower

OK WELLS OK00058311

Well id:	65212	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNESW
Owner name:	Tinker AFB c/o Tetra Tech Inc.	Latitude:	35.412568
Sec twp rge:	24-11N-02WI	Date const:	11/12/01
Longitude:	-97.365393	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	95
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

A5
East
1/8 - 1/4 Mile
Lower

OK WELLS OK00058314

Well id:	65215	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNESW
Owner name:	Tinker AFB c/o Tetra Tech Inc.	Latitude:	35.412568
Sec twp rge:	24-11N-02WI	Date const:	11/08/01
Longitude:	-97.365393	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	85
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

B6
SSW
1/8 - 1/4 Mile
Lower

FED USGS USGS2725138

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	352434097221501
Site name:	11N-02W-23 DDA 3		
Latitude:	352434		
Longitude:	0972215	Dec lat:	35.40950778
Dec lon:	-97.371145	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	NESESES23 T11N R02W I
Location map:	CHOCTAW	Map scale:	24000
Altitude:	1283	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Hilltop		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	800	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Real time data flag:	Not Reported		
Daily flow data begin date:	Not Reported		
Daily flow data end date:	Not Reported		
Peak flow data begin date:	Not Reported		
Peak flow data count:	Not Reported		
Water quality data end date:	Not Reported		
Water quality data count:	Not Reported		
Ground water data begin date:	Not Reported		
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

**B7
SW
1/8 - 1/4 Mile
Lower**

FED USGS USGS2725143

Agency cd:	USGS	Site no:	352435097221701
Site name:	11N-02W-23 ADB 1		
Latitude:	352435		
Longitude:	0972217	Dec lat:	35.40978556
Dec lon:	-97.3717006	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	NWSENES23 T11N R02W I
Location map:	CHOCTAW	Map scale:	24000
Altitude:	1271.90	Altitude method:	L
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19420829
Date inventoried:	19420829	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	1030	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Real time data flag:	Not Reported		
Daily flow data begin date:	Not Reported		
Daily flow data end date:	Not Reported		
Peak flow data begin date:	Not Reported		
Peak flow data count:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Peak flow data count: Not Reported
 Water quality data end date: Not Reported
 Ground water data begin date: Not Reported
 Ground water data count: Not Reported

Water quality data begin date: Not Reported
 Water quality data count: Not Reported
 Ground water data end date: Not Reported

Ground-water levels, Number of Measurements: 0

8

ESE

**1/8 - 1/4 Mile
Lower**

OK WELLS

OK00061494

Well id:	92566	County:	Oklahoma
Well name:	Paine	Qtrs:	SWNESW
Owner name:	Citizen Pott. Nation	Latitude:	35.410761
Sec twp rge:	24-11N-02WI	Date const:	03/11/05
Longitude:	-97.365393	Usage:	Domestic
Dpc no:	DPC-0127	Td:	140
Well type:	Groundwater Well	Est yld:	12
Static wl:	n/a		
Surf elev:	n/a		

9

NNE

**1/4 - 1/2 Mile
Lower**

OK WELLS

OK00056945

Well id:	36661	County:	Oklahoma
Well name:	n/a	Qtrs:	NESWNW
Owner name:	TINKER AFB	Latitude:	35.416182
Sec twp rge:	24-11N-02WI	Date const:	01/03/94
Longitude:	-97.36761	Usage:	Public Water Supply
Dpc no:	DPC-0099	Td:	720
Well type:	Groundwater Well	Est yld:	300
Static wl:	n/a		
Surf elev:	n/a		

10

WNW

**1/4 - 1/2 Mile
Lower**

FED USGS

USGS2725160

Agency cd:	USGS	Site no:	352452097222601
Site name:	11N-02W-23 ADC 1	Dec lat:	35.41450778
Latitude:	352452	Coor meth:	M
Longitude:	0972226	Latlong datum:	NAD27
Dec lon:	-97.3742008	District:	40
Coor accr:	F	County:	109
Dec latlong datum:	NAD83	Land net:	SWSENES23 T11N R02W I
State:	40	Map scale:	24000
Country:	US	Altitude method:	M
Location map:	CHOCTAW	Altitude datum:	NGVD29
Altitude:	1290	Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.
Altitude accuracy:	5	Topographic:	Undulating
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	CST

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	1070	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	464000200
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1979-03-13	Ground water data end date:	1984-03-31
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel

1984-03-31					
Note: The measurement was discontinued.					
1983-03-09	273.56		1982-03-11	251.02	
1979-03-13	271.84				

**11
SW
1/4 - 1/2 Mile
Higher**

FED USGS USGS2725136

Agency cd:	USGS	Site no:	352431097222001
Site name:	11N-02W-23 DDA 1		
Latitude:	352431	Dec lat:	35.40867444
Longitude:	0972220	Coor meth:	M
Dec lon:	-97.3725339	Latlong datum:	NAD27
Coor accr:	S	District:	40
Dec latlong datum:	NAD83	County:	109
State:	40	Land net:	NESESES23 T11N R02W I
Country:	US	Map scale:	24000
Location map:	CHOCTAW	Altitude method:	M
Altitude:	1293	Altitude datum:	NGVD29
Altitude accuracy:	5		
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	800	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

C12
West
1/4 - 1/2 Mile
Lower

FED USGS USGS2725152

Agency cd:	USGS	Site no:	352448097222901
Site name:	11N-02W-23 BAB 1		
Latitude:	352448		
Longitude:	0972229	Dec lat:	35.41339667
Dec lon:	-97.3750342	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	NWNENWS23 T11N R02W I
Location map:	CHOCTAW	Map scale:	24000
Altitude:	1297	Altitude method:	L
Altitude accuracy:	1	Altitude datum:	NGVD29
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Hilltop		
Site type:	Ground-water other than Spring	Date construction:	1942
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	1070	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	464008200
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1951-10-10
Water quality data end date:	1951-10-10	Water quality data count:	1
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

C13
West
1/4 - 1/2 Mile
Lower

FED USGS USGS2725153

Agency cd:	USGS	Site no:	352448097222905
Site name:	11N-02W-23 DAB 5		
Latitude:	352448		
Longitude:	0972229	Dec lat:	35.41339667
Dec lon:	-97.3750342	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	NWNESES23 T11N R02W I
Location map:	CHOCTAW	Map scale:	24000
Altitude:	Not Reported	Altitude method:	Not Reported
Altitude accuracy:	Not Reported	Altitude datum:	Not Reported
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	CST

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	1070	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

**14
East
1/4 - 1/2 Mile
Lower**

OK WELLS OK00055290

Well id:	6484	County:	Oklahoma
Well name:	n/a	Qtrs:	NENESW
Owner name:	Drpaer Lake Bapt.	Latitude:	35.412568
Sec twp rge:	24-11N-02WI	Date const:	08/21/86
Longitude:	-97.363176	Usage:	Domestic
Dpc no:	n/a	Td:	125
Well type:	Groundwater Well	Est yld:	60
Static wl:	n/a		
Surf elev:	n/a		

**D15
NW
1/4 - 1/2 Mile
Lower**

OK WELLS OK00057542

Well id:	46988	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSENE
Owner name:	Tinker AFB c/o Terra Tech Inc.	Latitude:	35.416161
Sec twp rge:	23-11N-02WI	Date const:	09/23/99
Longitude:	-97.374275	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	125
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**D16
NW
1/4 - 1/2 Mile
Lower**

OK WELLS OK00058491

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	67534	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSENE
Owner name:	Tinker AFB	Latitude:	35.416161
Sec twp rge:	23-11N-02WI	Date const:	11/27/01
Longitude:	-97.374275	Usage:	Water Quality
Dpc no:	DPC-0197	Td:	35
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

17
SSW
1/4 - 1/2 Mile
Higher

FED USGS USGS2725129

Agency cd:	USGS	Site no:	352426097221801
Site name:	11N-02W-23 DAA 1		
Latitude:	352426	Dec lat:	35.40728556
Longitude:	0972218	Coor meth:	M
Dec lon:	-97.3719783	Latlong datum:	NAD27
Coor accr:	S	District:	40
Dec latlong datum:	NAD83	County:	109
State:	40	Country:	US
Country:	US	Land net:	NENESES23 T11N R02W I
Location map:	CHOCTAW	Map scale:	24000
Altitude:	1290	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	850	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

D18
WNW
1/4 - 1/2 Mile
Lower

OK WELLS OK00061340

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	92131	County:	Oklahoma
Well name:	2-501A	Qtrs:	NWSENE
Owner name:	Tinker Air Force Base	Latitude:	35.415737153
Sec twp rge:	23-11N-02WI	Date const:	10/22/04
Longitude:	-97.375292141	Usage:	Water Quality
Dpc no:	DPC-0060	Td:	110
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	96		
Surf elev:	n/a		

19
East
1/4 - 1/2 Mile
Lower

OK WELLS OK00055865

Well id:	22700	County:	Oklahoma
Well name:	n/a	Qtrs:	SWSESE
Owner name:	SWM & Sons	Latitude:	35.413472
Sec twp rge:	24-11N-02WI	Date const:	08/28/89
Longitude:	-97.362067	Usage:	Domestic
Dpc no:	n/a	Td:	160
Well type:	Groundwater Well	Est yld:	35
Static wl:	n/a		
Surf elev:	n/a		

D20
WNW
1/4 - 1/2 Mile
Lower

OK WELLS OK00061341

Well id:	92132	County:	Oklahoma
Well name:	2-501B	Qtrs:	NWSENE
Owner name:	Tinker Air Force Base	Latitude:	35.415736965
Sec twp rge:	23-11N-02WI	Date const:	10/26/04
Longitude:	-97.37532429	Usage:	Water Quality
Dpc no:	DPC-0060	Td:	50
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	25		
Surf elev:	n/a		

21
West
1/4 - 1/2 Mile
Lower

OK WELLS OK00057541

Well id:	46987	County:	Oklahoma
Well name:	n/a	Qtrs:	NENWSE
Owner name:	Tinker AFB c/o Tetra Tech Inc	Latitude:	35.412547
Sec twp rge:	23-11N-02WI	Date const:	09/20/99
Longitude:	-97.376493	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	120
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

E22
WSW
 1/4 - 1/2 Mile
 Lower

FED USGS USGS2725140

Agency cd:	USGS	Site no:	352434097223102
Site name:	11N-02W-23 DCA 2		
Latitude:	352434		
Longitude:	0972231	Dec lat:	35.40950778
Dec lon:	-97.3755897	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	NESWSES23 T11N R02W I
Location map:	MIDWEST CITY	Map scale:	24000
Altitude:	Not Reported	Altitude method:	Not Reported
Altitude accuracy:	Not Reported	Altitude datum:	Not Reported
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported		
Source of depth data:	Not Reported		
Real time data flag:	Not Reported		
Daily flow data end date:	Not Reported		
Peak flow data begin date:	Not Reported		
Peak flow data count:	Not Reported		
Water quality data end date:	Not Reported		
Ground water data begin date:	Not Reported		
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

E23
WSW
 1/4 - 1/2 Mile
 Lower

FED USGS USGS2725139

Agency cd:	USGS	Site no:	352434097223101
Site name:	11N-02W-23 DCA 1		
Latitude:	352434		
Longitude:	0972231	Dec lat:	35.40950778
Dec lon:	-97.3755897	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	NESWSES23 T11N R02W I
Location map:	MIDWEST CITY	Map scale:	24000
Altitude:	1297	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	CST

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	800	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	464008200
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1951-10-17
Water quality data end date:	1951-10-17	Water quality data count:	1
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

**24
WNW
1/4 - 1/2 Mile
Lower**

OK WELLS OK00057543

Well id:	46989	County:	Oklahoma
Well name:	n/a	Qtrs:	SESWNE
Owner name:	Tinker AFB c/o Tetra Tech Inc.	Latitude:	35.414354
Sec twp rge:	23-11N-02WI	Date const:	09/28/99
Longitude:	-97.376493	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	140
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**F25
WNW
1/4 - 1/2 Mile
Lower**

OK WELLS OK00061343

Well id:	92134	County:	Oklahoma
Well name:	2-502B	Qtrs:	NESWNE
Owner name:	Tinker Air Force Base	Latitude:	35.415618706
Sec twp rge:	23-11N-02WI	Date const:	10/26/04
Longitude:	-97.37586864	Usage:	Water Quality
Dpc no:	DPC-0060	Td:	50
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	32		
Surf elev:	n/a		

**F26
WNW
1/4 - 1/2 Mile
Lower**

OK WELLS OK00061342

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	92133	County:	Oklahoma
Well name:	2-502A	Qtrs:	NESWNE
Owner name:	Tinker Air Force Base	Latitude:	35.415621571
Sec twp rge:	23-11N-02WI	Date const:	11/03/04
Longitude:	-97.3758961	Usage:	Water Quality
Dpc no:	DPC-0060	Td:	110
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	77		
Surf elev:	n/a		

**G27
NW
1/4 - 1/2 Mile
Lower**

OK WELLS OK00056944

Well id:	36660	County:	Oklahoma
Well name:	n/a	Qtrs:	SWNENE
Owner name:	TIKER AFB	Latitude:	35.417968
Sec twp rge:	23-11N-02WI	Date const:	11/10/93
Longitude:	-97.374275	Usage:	Domestic
Dpc no:	DPC-0363	Td:	27
Well type:	Groundwater Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**G28
NW
1/4 - 1/2 Mile
Lower**

OK WELLS OK00056941

Well id:	36657	County:	Oklahoma
Well name:	n/a	Qtrs:	SWNENE
Owner name:	TINKER AFB	Latitude:	35.417968
Sec twp rge:	23-11N-02WI	Date const:	11/11/93
Longitude:	-97.374275	Usage:	Domestic
Dpc no:	DPC-0363	Td:	23.5
Well type:	Groundwater Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**G29
NW
1/4 - 1/2 Mile
Lower**

OK WELLS OK00056942

Well id:	36658	County:	Oklahoma
Well name:	n/a	Qtrs:	SWNENE
Owner name:	TINKER AFB	Latitude:	35.417968
Sec twp rge:	23-11N-02WI	Date const:	11/10/93
Longitude:	-97.374275	Usage:	Domestic
Dpc no:	DPC-0363	Td:	26
Well type:	Groundwater Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

G30
NW
 1/4 - 1/2 Mile
 Lower

OK WELLS OK00056943

Well id:	36659	County:	Oklahoma
Well name:	n/a	Qtrs:	SWNE
Owner name:	TINKER AFB	Latitude:	35.417968
Sec twp rge:	23-11N-02WI	Date const:	11/11/93
Longitude:	-97.374275	Usage:	Domestic
Dpc no:	DPC-0363	Td:	20.5
Well type:	Groundwater Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

H31
SW
 1/4 - 1/2 Mile
 Lower

FED USGS USGS2725125

Agency cd:	USGS	Site no:	352425097222501
Site name:	11N-02W-23 DDC 1		
Latitude:	352425	Dec lat:	35.40700778
Longitude:	0972225	Coor meth:	M
Dec lon:	-97.373923	Latlong datum:	NAD27
Coor accr:	S	District:	40
Dec latlong datum:	NAD83	County:	109
State:	40	Land net:	SWSESES23 T11N R02W I
Country:	US	Map scale:	24000
Location map:	CHOCTAW	Altitude method:	M
Altitude:	1300	Altitude datum:	NGVD29
Altitude accuracy:	5		
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	790	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

H32
SW
 1/4 - 1/2 Mile
 Lower

OK WELLS OK00056607

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	33393	County:	Oklahoma
Well name:	n/a	Qtrs:	SWSESE
Owner name:	Brown & Root Environmental	Latitude:	35.407126
Sec twp rge:	23-11N-02WI	Date const:	08/14/96
Longitude:	-97.374275	Usage:	Domestic
Dpc no:	DPC-269	Td:	178
Well type:	Groundwater Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**F33
WNW
1/4 - 1/2 Mile
Lower**

OK WELLS OK00058492

Well id:	67535	County:	Oklahoma
Well name:	n/a	Qtrs:	NESWNE
Owner name:	Tinker AFB	Latitude:	35.416161
Sec twp rge:	23-11N-02WI	Date const:	11/27/01
Longitude:	-97.376493	Usage:	Water Quality
Dpc no:	DPC-0197	Td:	25
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**34
SE
1/2 - 1 Mile
Lower**

OK WELLS OK00055288

Well id:	6482	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESW
Owner name:	Russ Winegarten	Latitude:	35.407147
Sec twp rge:	24-11N-02WI	Date const:	09/19/87
Longitude:	-97.363176	Usage:	Domestic
Dpc no:	n/a	Td:	125
Well type:	Groundwater Well	Est yld:	35
Static wl:	n/a		
Surf elev:	n/a		

**I35
NNW
1/2 - 1 Mile
Lower**

OK WELLS OK00059259

Well id:	79929	County:	Oklahoma
Well name:	n/a	Qtrs:	NENENE
Owner name:	Tinker AFB c/o URS Group Inc.	Latitude:	35.419775
Sec twp rge:	23-11N-02WI	Date const:	06/06/03
Longitude:	-97.372058	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	124
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

I36
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00059260

Well id:	79930	County:	Oklahoma
Well name:	n/a	Qtrs:	NENENE
Owner name:	tinker AFB c/o URS Group Inc.	Latitude:	35.419775
Sec twp rge:	23-11N-02WI	Date const:	07/01/03
Longitude:	-97.372058	Usage:	Site Assessment
Dpc no:	DPC-0269	Td:	133
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

I37
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00059257

Well id:	79927	County:	Oklahoma
Well name:	n/a	Qtrs:	NENENE
Owner name:	Tinker AFB c/o URS Group Inc.	Latitude:	35.419775
Sec twp rge:	23-11N-02WI	Date const:	07/02/03
Longitude:	-97.372058	Usage:	Site Assessment
Dpc no:	DPC-0269	Td:	130
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

I38
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00059258

Well id:	79928	County:	Oklahoma
Well name:	n/a	Qtrs:	NENENE
Owner name:	Tinker AFB	Latitude:	35.419775
Sec twp rge:	23-11N-02WI	Date const:	06/09/03
Longitude:	-97.372058	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	20
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

J39
SSE
1/2 - 1 Mile
Lower

OK WELLS OK00057725

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	51963		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NWNENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.365406	Date const:	03/28/00
Dpc no:	DPC-0269	Usage:	Air Sparging
Well type:	Monitoring Well	Td:	10
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

**J40
SSE
1/2 - 1 Mile
Lower**

OK WELLS OK00057721

Well id:	51959		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NWNENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.365406	Date const:	03/27/00
Dpc no:	DPC-0269	Usage:	Air Sparging
Well type:	Monitoring Well	Td:	10
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

**J41
SSE
1/2 - 1 Mile
Lower**

OK WELLS OK00057507

Well id:	48582		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NWNENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.365406	Date const:	10/07/99
Dpc no:	DPC-0269	Usage:	Water Quality
Well type:	Monitoring Well	Td:	30
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

**J42
SSE
1/2 - 1 Mile
Lower**

OK WELLS OK00057731

Well id:	51969		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NWNENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.365406	Date const:	04/10/00
Dpc no:	DPC-0269	Usage:	Air Sparging
Well type:	Monitoring Well	Td:	10
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

J43
SSE
1/2 - 1 Mile
Lower

OK WELLS OK00057730

Well id:	51968	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNENW
Owner name:	Tinker AFB c/o URS Greiner Woo	Latitude:	35.40542
Sec twp rge:	25-11N-02WI	Date const:	03/28/00
Longitude:	-97.365406	Usage:	Air Sparging
Dpc no:	DPC-0269	Td:	4
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

J44
SSE
1/2 - 1 Mile
Lower

OK WELLS OK00057729

Well id:	51967	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNENW
Owner name:	Tinker AFB c/o URS Greiner Woo	Latitude:	35.40542
Sec twp rge:	25-11N-02WI	Date const:	03/28/00
Longitude:	-97.365406	Usage:	Air Sparging
Dpc no:	DPC-0269	Td:	4.5
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

J45
SSE
1/2 - 1 Mile
Lower

OK WELLS OK00057733

Well id:	51971	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNENW
Owner name:	Tinker AFB c/o URS Greiner Woo	Latitude:	35.40542
Sec twp rge:	25-11N-02WI	Date const:	04/10/00
Longitude:	-97.365406	Usage:	Air Sparging
Dpc no:	DPC-0269	Td:	6.5
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

J46
SSE
1/2 - 1 Mile
Lower

OK WELLS OK00057745

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	51991		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NWNENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.365406	Date const:	04/10/00
Dpc no:	DPC-0269	Usage:	Water Quality
Well type:	Monitoring Well	Td:	10
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

**J47
SSE
1/2 - 1 Mile
Lower**

OK WELLS OK00057732

Well id:	51970		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NWNENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.365406	Date const:	04/10/00
Dpc no:	DPC-0269	Usage:	Air Sparging
Well type:	Monitoring Well	Td:	7
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

**J48
SSE
1/2 - 1 Mile
Lower**

OK WELLS OK00057727

Well id:	51965		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NWNENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.365406	Date const:	03/28/00
Dpc no:	DPC-0269	Usage:	Air Sparging
Well type:	Monitoring Well	Td:	7
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

**J49
SSE
1/2 - 1 Mile
Lower**

OK WELLS OK00057750

Well id:	51996		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NWNENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.365406	Date const:	04/07/00
Dpc no:	DPC-0269	Usage:	Air Sparging
Well type:	Monitoring Well	Td:	10
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

J50
SSE
1/2 - 1 Mile
Lower

OK WELLS OK00057726

Well id:	51964	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNENW
Owner name:	Tinker AFB c/o URS Greiner Woo	Latitude:	35.40542
Sec twp rge:	25-11N-02WI	Date const:	03/28/00
Longitude:	-97.365406	Usage:	Air Sparging
Dpc no:	DPC-0269	Td:	9
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

J51
SSE
1/2 - 1 Mile
Lower

OK WELLS OK00057728

Well id:	51966	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNENW
Owner name:	Tinker AFB c/o URS Greiner Woo	Latitude:	35.40542
Sec twp rge:	25-11N-02WI	Date const:	03/28/00
Longitude:	-97.365406	Usage:	Air Sparging
Dpc no:	DPC-0269	Td:	5
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

52
NNE
1/2 - 1 Mile
Lower

OK WELLS OK00058533

Well id:	67192	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNENW
Owner name:	Loyd Payne	Latitude:	35.419797
Sec twp rge:	24-11N-02WI	Date const:	06/12/01
Longitude:	-97.365393	Usage:	Domestic
Dpc no:	DPC-0189	Td:	180
Well type:	Groundwater Well	Est yld:	50
Static wl:	n/a		
Surf elev:	n/a		

53
SW
1/2 - 1 Mile
Lower

FED USGS USGS2725124

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	352423097223001
Site name:	11N-02W-23 DDC 4		
Latitude:	352423		
Longitude:	0972230	Dec lat:	35.4064522
Dec lon:	-97.3753119	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	SWSESES23 T11N R02W I
Location map:	MIDWEST CITY	Map scale:	24000
Altitude:	1297	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Hilltop		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	790	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Real time data flag:	Not Reported		
Daily flow data begin date:	Not Reported		
Daily flow data end date:	Not Reported		
Peak flow data begin date:	Not Reported		
Peak flow data count:	Not Reported		
Water quality data end date:	Not Reported		
Water quality data count:	Not Reported		
Ground water data begin date:	Not Reported		
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

**54
NW
1/2 - 1 Mile
Lower**

FED USGS USGS2725003

Agency cd:	USGS	Site no:	352510097222901
Site name:	11N-02W-23 AAC 1		
Latitude:	352510		
Longitude:	0972229	Dec lat:	35.4195075
Dec lon:	-97.3750342	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	SWNENES23 T11N R02W I
Location map:	CHOCTAW	Map scale:	24000
Altitude:	1258	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	1942
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	669	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Real time data flag:	Not Reported		
Daily flow data begin date:	Not Reported		
Daily flow data end date:	Not Reported		
Peak flow data begin date:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Peak flow data count: Not Reported
 Water quality data end date: Not Reported
 Ground water data begin date: Not Reported
 Ground water data count: Not Reported

Water quality data begin date: Not Reported
 Water quality data count: Not Reported
 Ground water data end date: Not Reported

Ground-water levels, Number of Measurements: 0

K55
SE
1/2 - 1 Mile
Lower

OK WELLS OK00057734

Well id:	51989	County:	Oklahoma
Well name:	n/a	Qtrs:	NENENW
Owner name:	Tinker AFB c/o URS Greiner Woo	Latitude:	35.40542
Sec twp rge:	25-11N-02WI	Date const:	04/10/00
Longitude:	-97.363189	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	6
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

K56
SE
1/2 - 1 Mile
Lower

OK WELLS OK00057746

Well id:	51992	County:	Oklahoma
Well name:	n/a	Qtrs:	NENENW
Owner name:	Tinker AFB c/o URS Greiner Woo	Latitude:	35.40542
Sec twp rge:	25-11N-02WI	Date const:	04/10/00
Longitude:	-97.363189	Usage:	Air Sparging
Dpc no:	DPC-0269	Td:	9
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

K57
SE
1/2 - 1 Mile
Lower

OK WELLS OK00057747

Well id:	51993	County:	Oklahoma
Well name:	n/a	Qtrs:	NENENW
Owner name:	Tinker AFB c/o URS Greiner Woo	Latitude:	35.40542
Sec twp rge:	25-11N-02WI	Date const:	04/10/00
Longitude:	-97.363189	Usage:	Air Sparging
Dpc no:	DPC-0269	Td:	7.5
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

K58
SE
1/2 - 1 Mile
Lower

OK WELLS OK00057748

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	51994		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NENENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.363189	Date const:	04/10/00
Dpc no:	DPC-0269	Usage:	Air Sparging
Well type:	Monitoring Well	Td:	5
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

K59
SE
1/2 - 1 Mile
Lower

OK WELLS OK00057749

Well id:	51995		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NENENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.363189	Date const:	04/10/00
Dpc no:	DPC-0269	Usage:	Air Sparging
Well type:	Monitoring Well	Td:	4.5
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

K60
SE
1/2 - 1 Mile
Lower

OK WELLS OK00057722

Well id:	51960		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NENENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.363189	Date const:	03/21/00
Dpc no:	DPC-0269	Usage:	Air Sparging
Well type:	Monitoring Well	Td:	10
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

K61
SE
1/2 - 1 Mile
Lower

OK WELLS OK00057635

Well id:	51627		
Well name:	n/a	County:	Oklahoma
Owner name:	Tinker AFB c/o URS Greiner Woo	Qtrs:	NENENW
Sec twp rge:	25-11N-02WI	Latitude:	35.40542
Longitude:	-97.363189	Date const:	04/20/00
Dpc no:	DPC-0269	Usage:	Water Quality
Well type:	Monitoring Well	Td:	15
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

K62
SE
1/2 - 1 Mile
Lower

OK WELLS OK00057724

Well id:	51962	County:	Oklahoma
Well name:	n/a	Qtrs:	NENENW
Owner name:	Tinker AFB c/o URS Greiner Woo	Latitude:	35.40542
Sec twp rge:	25-11N-02WI	Date const:	03/21/00
Longitude:	-97.363189	Usage:	Air Sparging
Dpc no:	DPC-0269	Td:	5
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

K63
SE
1/2 - 1 Mile
Lower

OK WELLS OK00057723

Well id:	51961	County:	Oklahoma
Well name:	n/a	Qtrs:	NENENW
Owner name:	Tinker AFB c/o URS Greiner Woo	Latitude:	35.40542
Sec twp rge:	25-11N-02WI	Date const:	03/21/00
Longitude:	-97.363189	Usage:	Air Sparging
Dpc no:	DPC-0269	Td:	9
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

L64
West
1/2 - 1 Mile
Lower

OK WELLS OK00055863

Well id:	22698	County:	Oklahoma
Well name:	n/a	Qtrs:	SWNESW
Owner name:	Jean Green	Latitude:	35.413451
Sec twp rge:	23-11N-02WI	Date const:	07/18/89
Longitude:	-97.379819	Usage:	Domestic
Dpc no:	n/a	Td:	140
Well type:	Groundwater Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

L65
West
1/2 - 1 Mile
Lower

OK WELLS OK00055864

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	22699	County:	Oklahoma
Well name:	n/a	Qtrs:	SWSESW
Owner name:	Shady Nook	Latitude:	35.413451
Sec twp rge:	23-11N-02WI	Date const:	07/02/89
Longitude:	-97.379819	Usage:	Domestic
Dpc no:	n/a	Td:	140
Well type:	Groundwater Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

66
ESE
1/2 - 1 Mile
Lower

OK WELLS OK00055289

Well id:	6483	County:	Oklahoma
Well name:	n/a	Qtrs:	SEWSE
Owner name:	Reverend Berryman	Latitude:	35.410761
Sec twp rge:	24-11N-02WI	Date const:	07/25/86
Longitude:	-97.358741	Usage:	Domestic
Dpc no:	n/a	Td:	100
Well type:	Groundwater Well	Est yld:	30
Static wl:	n/a		
Surf elev:	n/a		

67
North
1/2 - 1 Mile
Lower

OK WELLS OK00060344

Well id:	83925	County:	Oklahoma
Well name:	MW-C	Qtrs:	SESWSW
Owner name:	Steve Peterson	Latitude:	35.421593
Sec twp rge:	13-11N-02WI	Date const:	02/28/90
Longitude:	-97.3676	Usage:	Site Assessment
Dpc no:	n/a	Td:	24
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

68
SSE
1/2 - 1 Mile
Higher

FED USGS USGS2724992

Agency cd:	USGS	Site no:	352500097230015
Site name:	11N-02W-25 CAB 1		
Latitude:	352414.16	Dec lat:	35.4039333
Longitude:	0972155.46	Coor meth:	G
Dec lon:	-97.3654056	Latlong datum:	NAD83
Coor accr:	H	District:	40
Dec latlong datum:	NAD83	County:	109
State:	40	Land net:	NWNESWS25 T11N R02W I
Country:	US	Map scale:	24000
Location map:	CHOCTAW		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Altitude:	1302.29	Altitude method:	L
Altitude accuracy:	.03	Altitude datum:	NAVD88
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19950114
Date inventoried:	20040316	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	179.70	Hole depth:	179.70
Source of depth data:	owner	Project number:	8642AR7
Real time data flag:	Not Reported		
Daily flow data begin date:	Not Reported		
Daily flow data end date:	Not Reported		
Peak flow data begin date:	Not Reported		
Peak flow data count:	Not Reported		
Water quality data begin date:	Not Reported		
Water quality data end date:	Not Reported		
Ground water data begin date:	Not Reported		
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

69
SSW
1/2 - 1 Mile
Lower

FED USGS USGS2725117

Agency cd:	USGS	Site no:	352413097221801
Site name:	11N-02W-26 AAD 1		
Latitude:	352413		
Longitude:	0972218	Dec lat:	35.4036747
Dec lon:	-97.3719783	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	SENESES26 T11N R02W I
Location map:	CHOCTAW	Map scale:	24000
Altitude:	1279.57	Altitude method:	L
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Little. Oklahoma. Area = 976 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19511010
Date inventoried:	19511010	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	770	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Real time data flag:	Not Reported		
Daily flow data begin date:	Not Reported		
Daily flow data end date:	Not Reported		
Peak flow data begin date:	Not Reported		
Peak flow data count:	Not Reported		
Water quality data begin date:	Not Reported		
Water quality data end date:	Not Reported		
Ground water data begin date:	Not Reported		
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

M70
NNW
1/2 - 1 Mile
Lower

FED USGS USGS2725176

Agency cd:	USGS	Site no:	352500097230011
Site name:	11N-02W-14 ADD 1		
Latitude:	352515.57		
Longitude:	0972226.20	Dec lat:	35.42099167
Dec lon:	-97.3739444	Coor meth:	G
Coor accr:	H	Latlong datum:	NAD83
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	SESENWS14 T11N R02W I
Location map:	CHOCTAW	Map scale:	24000
Altitude:	1268.22	Altitude method:	L
Altitude accuracy:	.03	Altitude datum:	NAVD88
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19931025
Date inventoried:	20040315	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported		
Source of depth data:	Not Reported		
Real time data flag:	Not Reported		
Daily flow data end date:	Not Reported		
Peak flow data begin date:	Not Reported		
Peak flow data count:	Not Reported		
Water quality data end date:	Not Reported		
Ground water data begin date:	Not Reported		
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

71
ESE
1/2 - 1 Mile
Lower

OK WELLS OK00055286

Well id:	6480		
Well name:	n/a	County:	Oklahoma
Owner name:	Dreggs Pump	Qtrs:	NESWSE
Sec twp rge:	24-11N-02WI	Latitude:	35.408954
Longitude:	-97.358741	Date const:	05/10/85
Dpc no:	n/a	Usage:	Domestic
Well type:	Groundwater Well	Td:	100
Static wl:	n/a	Est yld:	n/a
Surf elev:	n/a		

N72
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00057937

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	58240	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	02/01/01
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	35
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**N73
NNW
1/2 - 1 Mile
Lower**

OK WELLS OK00057938

Well id:	58241	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	01/19/01
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	34
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**N74
NNW
1/2 - 1 Mile
Lower**

OK WELLS OK00057939

Well id:	58242	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	01/31/01
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	34
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**N75
NNW
1/2 - 1 Mile
Lower**

OK WELLS OK00057936

Well id:	58239	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	01/26/01
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	34
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

N76
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00057930

Well id:	57326	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	12/12/00
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	35
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

N77
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00057931

Well id:	57330	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB C/O Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	10/11/00
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	34
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

N78
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00057935

Well id:	58238	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	02/02/01
Longitude:	-97.371985	Usage:	Vapor Extraction
Dpc no:	DPC-0269	Td:	35
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

N79
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00057953

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	58246	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	01/26/01
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	34
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**N80
NNW
1/2 - 1 Mile
Lower**

OK WELLS OK00057954

Well id:	58247	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	01/23/01
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	34
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**N81
NNW
1/2 - 1 Mile
Lower**

OK WELLS OK00057955

Well id:	58248	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	01/19/01
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	35
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**N82
NNW
1/2 - 1 Mile
Lower**

OK WELLS OK00057952

Well id:	58245	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	01/22/01
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	34.5
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

N83
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00057940

Well id:	58243	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	01/31/01
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	34
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

N84
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00057951

Well id:	58244	County:	Oklahoma
Well name:	n/a	Qtrs:	SESESE
Owner name:	Tinker AFB c/o Surbec Env.	Latitude:	35.421639
Sec twp rge:	14-11N-02WI	Date const:	01/22/01
Longitude:	-97.371985	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	34
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

85
WNW
1/2 - 1 Mile
Lower

FED USGS USGS2725165

Agency cd:	USGS	Site no:	352500097224501
Site name:	11N-02W-23 ABC 1		
Latitude:	352500	Dec lat:	35.4167297
Longitude:	0972245	Coor meth:	M
Dec lon:	-97.3794789	Latlong datum:	NAD27
Coor accr:	F	District:	40
Dec latlong datum:	NAD83	County:	109
State:	40	Land net:	SWNWNES23 T11N R02W I
Country:	US	Map scale:	24000
Location map:	MIDWEST CITY	Altitude method:	M
Altitude:	1275	Altitude datum:	NGVD29
Altitude accuracy:	5		
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	1942
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	768	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Peak flow data count: Not Reported
 Water quality data end date: Not Reported
 Ground water data begin date: Not Reported
 Ground water data count: Not Reported

Water quality data begin date: Not Reported
 Water quality data count: Not Reported
 Ground water data end date: Not Reported

Ground-water levels, Number of Measurements: 0

**M86
 NNW
 1/2 - 1 Mile
 Lower**

FED USGS USGS2725024

Agency cd:	USGS	Site no:	352519097222501
Site name:	11N-02W-14 DDC 1		
Latitude:	352519		
Longitude:	0972225	Dec lat:	35.4220075
Dec lon:	-97.373923	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	SWSESES14 T11N R02W I
Location map:	CHOCTAW	Map scale:	24000
Altitude:	1263.92	Altitude method:	L
Altitude accuracy:	.01	Altitude datum:	NGVD29
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19420723
Date inventoried:	19531126	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	879	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Real time data flag:	0	Project number:	464008200
Daily flow data end date:	0000-00-00	Daily flow data begin date:	0000-00-00
Peak flow data begin date:	0000-00-00	Daily flow data count:	0
Peak flow data count:	0	Peak flow data end date:	0000-00-00
Water quality data end date:	1990-05-22	Water quality data begin date:	1988-04-26
Ground water data begin date:	0000-00-00	Water quality data count:	3
Ground water data count:	0	Ground water data end date:	0000-00-00

Ground-water levels, Number of Measurements: 0

**87
 WSW
 1/2 - 1 Mile
 Lower**

OK WELLS OK00058797

Well id:	74529	County:	Oklahoma
Well name:	n/a	Qtrs:	NESESW
Owner name:	Tinker AFB	Latitude:	35.408933
Sec twp rge:	23-11N-02WI	Date const:	09/23/02
Longitude:	-97.380927	Usage:	Water Quality
Dpc no:	DPC-0283	Td:	59
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

88
East
1/2 - 1 Mile
Lower

OK WELLS OK00055287

Well id:	6481	County:	Oklahoma
Well name:	n/a	Qtrs:	SWSENE
Owner name:	T. J. Lockhart	Latitude:	35.414375
Sec twp rge:	24-11N-02WI	Date const:	09/02/87
Longitude:	-97.356524	Usage:	Domestic
Dpc no:	n/a	Td:	100
Well type:	Groundwater Well	Est yld:	50
Static wl:	n/a		
Surf elev:	n/a		

89
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060795

Well id:	86426	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNWNE
Owner name:	Tinker Air Force Base	Latitude:	35.419775
Sec twp rge:	23-11N-02WI	Date const:	11/25/03
Longitude:	-97.37871	Usage:	Site Assessment
Dpc no:	DPC-0197	Td:	27
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

O90
North
1/2 - 1 Mile
Lower

OK WELLS OK00060278

Well id:	83804	County:	Oklahoma
Well name:	TOB-18CR	Qtrs:	NESWSW
Owner name:	Tinker AFB	Latitude:	35.423401
Sec twp rge:	13-11N-02WI	Date const:	10/29/94
Longitude:	-97.3676	Usage:	Site Assessment
Dpc no:	DPC-0159	Td:	145
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

O91
North
1/2 - 1 Mile
Lower

OK WELLS OK00060311

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	83859	County:	Oklahoma
Well name:	TOB-18AR	Qtrs:	NESWSW
Owner name:	Tinker AFB	Latitude:	35.423401
Sec twp rge:	13-11N-02WI	Date const:	10/27/93
Longitude:	-97.3676	Usage:	Site Assessment
Dpc no:	DPC-0159	Td:	103
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

O92
North
1/2 - 1 Mile
Lower

OK WELLS OK00055277

Well id:	6471	County:	Oklahoma
Well name:	n/a	Qtrs:	NESWSW
Owner name:	Mrs. Thompson	Latitude:	35.423401
Sec twp rge:	13-11N-02WI	Date const:	03/19/85
Longitude:	-97.3676	Usage:	Domestic
Dpc no:	n/a	Td:	100
Well type:	Groundwater Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

P93
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00060614

Well id:	86112	County:	Oklahoma
Well name:	MW-1-68C	Qtrs:	NESESE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	10/29/94
Longitude:	-97.371985	Usage:	Site Assessment
Dpc no:	DPC-0159	Td:	165
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

P94
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00060649

Well id:	86125	County:	Oklahoma
Well name:	MW-168B	Qtrs:	NESESE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	09/09/93
Longitude:	-97.371985	Usage:	Site Assessment
Dpc no:	DPC-0159	Td:	53
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

95
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00060580

Well id:	86019	County:	Oklahoma
Well name:	MW-20C	Qtrs:	NWSESE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	10/13/93
Longitude:	-97.374203	Usage:	Site Assessment
Dpc no:	DPC-0159	Td:	149
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

96
South
1/2 - 1 Mile
Lower

FED USGS USGS2725109

Agency cd:	USGS	Site no:	352403097221801
Site name:	11N-02W-26 ADD 1		
Latitude:	352403	Dec lat:	35.40089694
Longitude:	0972218	Coor meth:	M
Dec lon:	-97.3719783	Latlong datum:	NAD27
Coor accr:	F	District:	40
Dec latlong datum:	NAD83	County:	109
State:	40	Land net:	SESENE26 T11N R02W I
Country:	US	Map scale:	24000
Location map:	CHOCTAW	Altitude method:	M
Altitude:	1257	Altitude datum:	NGVD29
Altitude accuracy:	5		
Hydrologic:	Little. Oklahoma. Area = 976 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	1943
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER-WELLINGTON AQUIFER		
Well depth:	764	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

97
WSW
1/2 - 1 Mile
Lower

OK WELLS OK00057715

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	51066	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSESW
Owner name:	Tinker - AFB Bldg. 3001	Latitude:	35.408933
Sec twp rge:	23-11N-02WI	Date const:	03/16/00
Longitude:	-97.383144	Usage:	Water Quality
Dpc no:	DPC-0197	Td:	30
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

Q98
East
1/2 - 1 Mile
Lower

OK WELLS OK00055285

Well id:	6479	County:	Oklahoma
Well name:	n/a	Qtrs:	NENESE
Owner name:	Pete Choates	Latitude:	35.412568
Sec twp rge:	24-11N-02WI	Date const:	01/31/84
Longitude:	-97.354306	Usage:	Domestic
Dpc no:	n/a	Td:	180
Well type:	Groundwater Well	Est yld:	35
Static wl:	n/a		
Surf elev:	n/a		

Q99
East
1/2 - 1 Mile
Lower

OK WELLS OK00055284

Well id:	6478	County:	Oklahoma
Well name:	n/a	Qtrs:	NENESE
Owner name:	Ward Petroleum	Latitude:	35.412568
Sec twp rge:	24-11N-02WI	Date const:	09/02/88
Longitude:	-97.354306	Usage:	Domestic
Dpc no:	n/a	Td:	260
Well type:	Groundwater Well	Est yld:	75
Static wl:	n/a		
Surf elev:	n/a		

100
SSW
1/2 - 1 Mile
Higher

OK WELLS OK00058796

Well id:	74525	County:	Oklahoma
Well name:	n/a	Qtrs:	NESWNE
Owner name:	Tinker AFB	Latitude:	35.401808
Sec twp rge:	26-11N-02WI	Date const:	09/16/02
Longitude:	-97.376517	Usage:	Water Quality
Dpc no:	DPC-0283	Td:	18.5
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

R101
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00060564

Well id:	85185	County:	Oklahoma
Well name:	SWT-GW-3	Qtrs:	NESWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/26/94
Longitude:	-97.376421	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

R102
NNW
1/2 - 1 Mile
Lower

OK WELLS OK00060581

Well id:	86020	County:	Oklahoma
Well name:	MW-1-15AR	Qtrs:	NESWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	10/19/93
Longitude:	-97.376421	Usage:	Site Assessment
Dpc no:	DPC-0159	Td:	119
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

103
WNW
1/2 - 1 Mile
Lower

OK WELLS OK00057807

Well id:	54788	County:	Oklahoma
Well name:	n/a	Qtrs:	SWNENW
Owner name:	Tinker AFB c/o Tetra Tech Inc.	Latitude:	35.417968
Sec twp rge:	23-11N-02WI	Date const:	07/17/00
Longitude:	-97.383145	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	50
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

S104
North
1/2 - 1 Mile
Lower

OK WELLS OK00057023

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	39639	County:	Oklahoma
Well name:	n/a	Qtrs:	SWNWSW
Owner name:	Ample Storage	Latitude:	35.425208
Sec twp rge:	13-11N-02WI	Date const:	03/12/98
Longitude:	-97.369818	Usage:	Water Quality
Dpc no:	DPC-0197	Td:	22
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

S105
North
1/2 - 1 Mile
Lower

OK WELLS OK00060343

Well id:	83924	County:	Oklahoma
Well name:	MW-B	Qtrs:	SWNWSW
Owner name:	Steve Peterson	Latitude:	35.425208
Sec twp rge:	13-11N-02WI	Date const:	02/28/88
Longitude:	-97.369818	Usage:	Site Assessment
Dpc no:	n/a	Td:	24
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

106
NW
1/2 - 1 Mile
Lower

FED USGS USGS2725028

Agency cd:	USGS	Site no:	352520097224401
Site name:	11N-02W-14 DCB 1		
Latitude:	352520	Dec lat:	35.42228528
Longitude:	0972244	Coor meth:	M
Dec lon:	-97.3792011	Latlong datum:	NAD27
Coor accr:	F	District:	40
Dec latlong datum:	NAD83	County:	109
State:	40	Land net:	NWSWSES14 T11N R02W I
Country:	US	Map scale:	24000
Location map:	MIDWEST CITY	Altitude method:	L
Altitude:	1276	Altitude datum:	NGVD29
Altitude accuracy:	1		
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Hilltop		
Site type:	Ground-water other than Spring	Date construction:	1942
Date inventoried:	Not Reported	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	GARBER SANDSTONE		
Well depth:	837	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	464008200
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Peak flow data count: Not Reported
 Water quality data end date: Not Reported
 Ground water data begin date: Not Reported
 Ground water data count: Not Reported

Water quality data begin date: Not Reported
 Water quality data count: Not Reported
 Ground water data end date: Not Reported

Ground-water levels, Number of Measurements: 0

T107
North
1/2 - 1 Mile
Lower

OK WELLS OK00060687

Well id:	85390	County:	Oklahoma
Well name:	1-150DR	Qtrs:	SENESE
Owner name:	Tinker AFB	Latitude:	35.425254
Sec twp rge:	14-11N-02WI	Date const:	12/16/94
Longitude:	-97.371985	Usage:	Site Assessment
Dpc no:	DPC-0269	Td:	253
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

108
NNE
1/2 - 1 Mile
Lower

OK WELLS OK00060313

Well id:	83866	County:	Oklahoma
Well name:	MW-A	Qtrs:	SWNESW
Owner name:	Steve Peterson	Latitude:	35.425208
Sec twp rge:	13-11N-02WI	Date const:	02/28/90
Longitude:	-97.365382	Usage:	Site Assessment
Dpc no:	n/a	Td:	28.5
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U109
NW
1/2 - 1 Mile
Lower

OK WELLS OK00059798

Well id:	84906	County:	Oklahoma
Well name:	SWT-19	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	10/20/93
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	33
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U110
NW
1/2 - 1 Mile
Lower

OK WELLS OK00059797

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	84898	County:	Oklahoma
Well name:	SWT17	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	10/20/93
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	33
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U111
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060579

Well id:	85232	County:	Oklahoma
Well name:	1-115	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/18/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U112
NW
1/2 - 1 Mile
Lower

OK WELLS OK00059799

Well id:	84907	County:	Oklahoma
Well name:	SWT-20	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	10/20/93
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	33
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U113
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060566

Well id:	85189	County:	Oklahoma
Well name:	1-099	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/17/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

U114
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060565

Well id:	85186	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/17/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U115
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060578

Well id:	85230	County:	Oklahoma
Well name:	1-109	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/26/96
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U116
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060577

Well id:	85227	County:	Oklahoma
Well name:	1-100	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/28/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U117
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060635

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	85239	County:	Oklahoma
Well name:	1-119	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/19/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**U118
NW
1/2 - 1 Mile
Lower**

OK WELLS OK00060636

Well id:	85240	County:	Oklahoma
Well name:	1-123	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/25/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**U119
NW
1/2 - 1 Mile
Lower**

OK WELLS OK00060633

Well id:	85236	County:	Oklahoma
Well name:	1-116	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/18/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**U120
NW
1/2 - 1 Mile
Lower**

OK WELLS OK00060634

Well id:	85238	County:	Oklahoma
Well name:	1-117	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/22/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

U121
NW
1/2 - 1 Mile
Lower

OK WELLS OK00059719

Well id:	84846	County:	Oklahoma
Well name:	SWT2	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	02/23/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	33
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U122
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060763

Well id:	85471	County:	Oklahoma
Well name:	1-098	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/24/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U123
NW
1/2 - 1 Mile
Lower

OK WELLS OK00059796

Well id:	84870	County:	Oklahoma
Well name:	SWT-16	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	10/20/93
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	33
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U124
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060760

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	85448	County:	Oklahoma
Well name:	1-121	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	09/01/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**U125
NW
1/2 - 1 Mile
Lower**

OK WELLS OK00060762

Well id:	85469	County:	Oklahoma
Well name:	1-122	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/30/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**U126
NW
1/2 - 1 Mile
Lower**

OK WELLS OK00060529

Well id:	85947	County:	Oklahoma
Well name:	1-108	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	09/02/95
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**U127
NW
1/2 - 1 Mile
Lower**

OK WELLS OK00060504

Well id:	85860	County:	Oklahoma
Well name:	1-101	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/22/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

U128
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060533

Well id:	85958	County:	Oklahoma
Well name:	1-105	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/19/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U129
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060531

Well id:	85952	County:	Oklahoma
Well name:	1-113	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/30/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U130
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060524

Well id:	85918	County:	Oklahoma
Well name:	SWT-GW-1	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/23/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U131
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060527

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	85930	County:	Oklahoma
Well name:	SWT-GW-4	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/19/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**U132
NW
1/2 - 1 Mile
Lower**

OK WELLS OK00060528

Well id:	85946	County:	Oklahoma
Well name:	SWT-GW-2	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/29/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**U133
NW
1/2 - 1 Mile
Lower**

OK WELLS OK00060525

Well id:	85921	County:	Oklahoma
Well name:	SWT-GW-6	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/17/96
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

**U134
NW
1/2 - 1 Mile
Lower**

OK WELLS OK00060526

Well id:	85923	County:	Oklahoma
Well name:	SWT-GW-5	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/24/95
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

U135
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060534

Well id:	85961	County:	Oklahoma
Well name:	1-114	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/25/95
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U136
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060553

Well id:	85970	County:	Oklahoma
Well name:	SWT-GW-8	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/17/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U137
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060552

Well id:	85969	County:	Oklahoma
Well name:	SWT-GW-7	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/24/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U138
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060530

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	85949	County:	Oklahoma
Well name:	1-110	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/29/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U139
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060535

Well id:	85966	County:	Oklahoma
Well name:	1-118	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/18/94
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

U140
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060551

Well id:	85968	County:	Oklahoma
Well name:	1-124	Qtrs:	NWSWSE
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	08/19/93
Longitude:	-97.378638	Usage:	Site Assessment
Dpc no:	n/a	Td:	38
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

141
WNW
1/2 - 1 Mile
Lower

OK WELLS OK00060799

Well id:	86434	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNENW
Owner name:	Tinker Air Force Base	Latitude:	35.419775
Sec twp rge:	23-11N-02WI	Date const:	11/25/03
Longitude:	-97.383145	Usage:	Site Assessment
Dpc no:	DPC-0197	Td:	34
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

T142
NNW
1/2 - 1 Mile
Lower

FED USGS USGS2725168

Agency cd:	USGS	Site no:	352500097230003
Site name:	11N-02W-14 DAC 1		
Latitude:	352532.72		
Longitude:	0972222.99	Dec lat:	35.42575556
Dec lon:	-97.37305278	Coor meth:	R
Coor accr:	H	Latlong datum:	NAD83
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	1246.16	Altitude method:	R
Altitude accuracy:	.01	Altitude datum:	NAVD88
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19940111
Date inventoried:	20030909	Mean greenwich time offset:	CST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	154	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Real time data flag:	0	Project number:	8642AR7
Daily flow data end date:	0000-00-00	Daily flow data begin date:	0000-00-00
Peak flow data begin date:	0000-00-00	Daily flow data count:	0
Peak flow data count:	0	Peak flow data end date:	0000-00-00
Water quality data end date:	2003-09-09	Water quality data begin date:	2003-09-09
Ground water data begin date:	0000-00-00	Water quality data count:	1
Ground water data count:	0	Ground water data end date:	0000-00-00

Ground-water levels, Number of Measurements: 0

U143
NNW
1/2 - 1 Mile
Lower

FED USGS USGS2725034

Agency cd:	USGS	Site no:	352526097224101
Site name:	11N-02W-14 DAB 1		
Latitude:	352526		
Longitude:	0972241	Dec lat:	35.42395194
Dec lon:	-97.3783678	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	40
State:	40	County:	109
Country:	US	Land net:	NWNESES14 T11N R02W I
Location map:	MIDWEST CITY	Map scale:	24000
Altitude:	1269	Altitude method:	L
Altitude accuracy:	1	Altitude datum:	NGVD29
Hydrologic:	Lower North Canadian. Oklahoma. Area = 1830 sq.mi.		
Topographic:	Hilltop		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	CST

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	938	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	464008200
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

144
East
1/2 - 1 Mile
Higher

OK WELLS OK00054965

Well id:	6371		
Well name:	n/a	County:	Oklahoma
Owner name:	Earl Rooms	Qtrs:	SWSWNW
Sec twp rge:	19-11N-01WI	Latitude:	35.414375
Longitude:	-97.352209	Date const:	05/05/85
Dpc no:	n/a	Usage:	Domestic
Well type:	Groundwater Well	Td:	130
Static wl:	n/a	Est yld:	30
Surf elev:	n/a		

V145
East
1/2 - 1 Mile
Lower

OK WELLS OK00054955

Well id:	6361		
Well name:	n/a	County:	Oklahoma
Owner name:	Craftsmanship Homes	Qtrs:	SWNWSW
Sec twp rge:	19-11N-01WI	Latitude:	35.410761
Longitude:	-97.352209	Date const:	04/24/89
Dpc no:	n/a	Usage:	Domestic
Well type:	Groundwater Well	Td:	220
Static wl:	n/a	Est yld:	40
Surf elev:	n/a		

V146
East
1/2 - 1 Mile
Lower

OK WELLS OK00055755

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	17641	County:	Oklahoma
Well name:	n/a	Qtrs:	SWNWSW
Owner name:	Mid City Bank	Latitude:	35.410761
Sec twp rge:	19-11N-01WI	Date const:	10/11/89
Longitude:	-97.352209	Usage:	Domestic
Dpc no:	n/a	Td:	180
Well type:	Groundwater Well	Est yld:	20
Static wl:	n/a		
Surf elev:	n/a		

W147
WNW
1/2 - 1 Mile
Lower

OK WELLS OK00058559

Well id:	65728	County:	Oklahoma
Well name:	n/a	Qtrs:	SENWNW
Owner name:	Tinker AFB c/o Tetra Tech Inc.	Latitude:	35.417968
Sec twp rge:	23-11N-02WI	Date const:	05/15/01
Longitude:	-97.385362	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	50
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

W148
WNW
1/2 - 1 Mile
Lower

OK WELLS OK00058183

Well id:	61423	County:	Oklahoma
Well name:	n/a	Qtrs:	SENWNW
Owner name:	Tinker AFB C/O Tetra Tech Inc.	Latitude:	35.417968
Sec twp rge:	23-11N-02WI	Date const:	05/15/01
Longitude:	-97.385362	Usage:	Water Quality
Dpc no:	DPC-0269	Td:	50
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

X149
ESE
1/2 - 1 Mile
Higher

OK WELLS OK00056501

Well id:	31968	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSWSW
Owner name:	Jim Isaac Homes	Latitude:	35.408954
Sec twp rge:	19-11N-01WI	Date const:	07/20/94
Longitude:	-97.352209	Usage:	Domestic
Dpc no:	DPC-0003	Td:	220
Well type:	Groundwater Well	Est yld:	40
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

X150
ESE
1/2 - 1 Mile
Higher

OK WELLS OK00057106

Well id:	39170	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSWSW
Owner name:	JIM ISAAC HOMES	Latitude:	35.408954
Sec twp rge:	19-11N-01WI	Date const:	07/29/92
Longitude:	-97.352209	Usage:	Domestic
Dpc no:	DPC-0003	Td:	220
Well type:	Groundwater Well	Est yld:	35
Static wl:	n/a		
Surf elev:	n/a		

X151
ESE
1/2 - 1 Mile
Higher

OK WELLS OK00056428

Well id:	31391	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSWSW
Owner name:	Jim Isaac Homes	Latitude:	35.408954
Sec twp rge:	19-11N-01WI	Date const:	11/11/93
Longitude:	-97.352209	Usage:	Domestic
Dpc no:	DPC-003	Td:	200
Well type:	Groundwater Well	Est yld:	40
Static wl:	n/a		
Surf elev:	n/a		

X152
ESE
1/2 - 1 Mile
Higher

OK WELLS OK00056430

Well id:	31393	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSWSW
Owner name:	Tom Jordan Homes	Latitude:	35.408954
Sec twp rge:	19-11N-01WI	Date const:	08/26/93
Longitude:	-97.352209	Usage:	Domestic
Dpc no:	DPC-0003	Td:	220
Well type:	Groundwater Well	Est yld:	40
Static wl:	n/a		
Surf elev:	n/a		

X153
ESE
1/2 - 1 Mile
Higher

OK WELLS OK00054956

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	6362	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSWSW
Owner name:	SWM & Sons Homes	Latitude:	35.408954
Sec twp rge:	19-11N-01WI	Date const:	10/09/88
Longitude:	-97.352209	Usage:	Domestic
Dpc no:	n/a	Td:	160
Well type:	Groundwater Well	Est yld:	35
Static wl:	n/a		
Surf elev:	n/a		

**X154
ESE
1/2 - 1 Mile
Higher**

OK WELLS OK00055820

Well id:	25064	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSWSW
Owner name:	Craftsmanship Homes	Latitude:	35.408954
Sec twp rge:	19-11N-01WI	Date const:	04/29/91
Longitude:	-97.352209	Usage:	Domestic
Dpc no:	n/a	Td:	220
Well type:	Groundwater Well	Est yld:	40
Static wl:	n/a		
Surf elev:	n/a		

**X155
ESE
1/2 - 1 Mile
Higher**

OK WELLS OK00056469

Well id:	29335	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSWSW
Owner name:	n/a	Latitude:	35.408954
Sec twp rge:	19-11N-01WI	Date const:	05/13/93
Longitude:	-97.352209	Usage:	Domestic
Dpc no:	n/a	Td:	220
Well type:	Groundwater Well	Est yld:	35
Static wl:	n/a		
Surf elev:	n/a		

**X156
ESE
1/2 - 1 Mile
Higher**

OK WELLS OK00057768

Well id:	52860	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSWSW
Owner name:	Jordan Homeg	Latitude:	35.408954
Sec twp rge:	19-11N-01WI	Date const:	08/24/94
Longitude:	-97.352209	Usage:	Domestic
Dpc no:	n/a	Td:	220
Well type:	Groundwater Well	Est yld:	40
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

X157
ESE
1/2 - 1 Mile
Higher

OK WELLS OK00057767

Well id:	52859	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSWSW
Owner name:	Anthony Bowdler	Latitude:	35.408954
Sec twp rge:	19-11N-01WI	Date const:	06/30/94
Longitude:	-97.352209	Usage:	Domestic
Dpc no:	n/a	Td:	220
Well type:	Groundwater Well	Est yld:	40
Static wl:	n/a		
Surf elev:	n/a		

X158
ESE
1/2 - 1 Mile
Higher

OK WELLS OK00058537

Well id:	65647	County:	Oklahoma
Well name:	n/a	Qtrs:	NWSWSW
Owner name:	Jack Fry Homes	Latitude:	35.408954
Sec twp rge:	19-11N-01WI	Date const:	07/22/94
Longitude:	-97.352209	Usage:	Domestic
Dpc no:	DPC-0003	Td:	220
Well type:	Groundwater Well	Est yld:	40
Static wl:	n/a		
Surf elev:	n/a		

159
North
1/2 - 1 Mile
Lower

OK WELLS OK00059710

Well id:	84009	County:	Oklahoma
Well name:	n/a	Qtrs:	NWNWSW
Owner name:	Rashidifard	Latitude:	35.427015
Sec twp rge:	13-11N-02WI	Date const:	05/24/95
Longitude:	-97.369818	Usage:	Site Assessment
Dpc no:	DPC-0155	Td:	20
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

160
NW
1/2 - 1 Mile
Lower

OK WELLS OK00060615

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well id:	86113	County:	Oklahoma
Well name:	MW-1-7BR	Qtrs:	NESESW
Owner name:	Tinker AFB	Latitude:	35.423446
Sec twp rge:	14-11N-02WI	Date const:	09/03/94
Longitude:	-97.380856	Usage:	Site Assessment
Dpc no:	DPC-0159	Td:	43
Well type:	Monitoring Well	Est yld:	n/a
Static wl:	n/a		
Surf elev:	n/a		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: OK Radon

Radon Test Results

Zip	Total Sites	# Sites>4 pCi/L	Max pCi/L	Average pCi/L
73150	5	0	1.4	0.94

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: 73150

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

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.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R 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 Services

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 Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, 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

Public Water Supply Well Data

Source: Oklahoma Water Resources Board

Telephone: 405-530-8800

OTHER STATE DATABASE INFORMATION

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.

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

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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EDR® Environmental
Data Resources Inc

The EDR-City Directory
Abstract

Twaddle AFRC
5316 S. Douglas Blvd.
Oklahoma City, OK 73150

Inquiry Number: 1725896.6

Wednesday, August 02, 2006

**The Standard in
Environmental Risk
Management Information**

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EDR City Directory Abstract

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening report designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

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SUMMARY

- ***City Directories:***

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1953 through 2006. (These years are not necessarily inclusive.) A summary of the information obtained is provided in the text of this report.

Date EDR Searched Historical Sources: August 2, 2006

Target Property:

5316 S. Douglas Blvd.
Oklahoma City, OK 73150

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1953	Street Not Listed in Research Source	Polk's City Directory
1963	Street Not Listed in Research Source	Polk's City Directory
1968	Street Not Listed in Research Source	Polk's City Directory
1973	Street Not Listed in Research Source	Polk's City Directory
1978	Street Not Listed in Research Source	Polk's City Directory
1983	Street Not Listed in Research Source	Polk's City Directory
1989	Street Not Listed in Research Source	Polk's City Directory
1996	Prior Service Marine Recruit	Polk's City Directory
	US Dept Of Navy	Polk's City Directory
	US Naval Reserve	Polk's City Directory
	US Marine Corps Reserve Training	Polk's City Directory
	US Army Reserve Center	Polk's City Directory
2001	Mobile Inshore Undersea	Polk's City Directory
	Shaw nee Main Office Recruiting	Polk's City Directory
	US Dept Of Navy	Polk's City Directory
2006	US Army Reserve	Polk's City Directory
	US Marine Corps Reserve Training	Polk's City Directory
	US Naval Reserve Recruiting	Polk's City Directory

<u>Year</u>	<u>Uses</u>	<u>Source</u>
-------------	-------------	---------------

Adjoining Properties

SURROUNDING

Multiple Addresses
Oklahoma City, OK 73150

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1953	Street Not Listed in Research Source	Polk's City Directory
1963	Street Not Listed in Research Source	Polk's City Directory
1968	Street Not Listed in Research Source	Polk's City Directory
1973	Street Not Listed in Research Source	Polk's City Directory
1978	Street Not Listed in Research Source	Polk's City Directory
1983	Street Not Listed in Research Source	Polk's City Directory
1989	Street Not Listed in Research Source	Polk's City Directory
1996	<u>**S DOUGLAS BLVD**</u>	Polk's City Directory
	Aleen's Foods (5204)	Polk's City Directory
	No other addresses 5200-5499	Polk's City Directory
2001	<u>**S DOUGLAS BLVD**</u>	Polk's City Directory
	Aleen's Foods (5204)	Polk's City Directory
	Fraze Enterprises (5204)	Polk's City Directory
	No other addresses 5200-5499	Polk's City Directory
2006	<u>**S DOUGLAS BLVD**</u>	Polk's City Directory
	Big Bud's Convenience Store (5204)	Polk's City Directory
	No other addresses 5200-5499	Polk's City Directory



EDR® Environmental
Data Resources Inc

The EDR Aerial Photo Decade Package

**Twaddle AFRC
5316 S. Douglas Blvd.
Oklahoma City, OK 73150**

Inquiry Number: 1725896.5

July 31, 2006

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDRs professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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with any questions or comments.

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Date EDR Searched Historical Sources:

Aerial Photography July 31, 2006

Target Property:

5316 S. Douglas Blvd.

Oklahoma City, OK 73150

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1957	Aerial Photograph. Scale: 1"=750'	Panel #: 2435097-D3/Flight Date: July 15, 1957	EDR
1963	Aerial Photograph. Scale: 1"=750'	Panel #: 2435097-D3/Flight Date: April 21, 1963	EDR
1970	Aerial Photograph. Scale: 1"=750'	Panel #: 2435097-D3/Flight Date: January 31, 1970	EDR
1984	Aerial Photograph. Scale: 1"=750'	Panel #: 2435097-D3/Flight Date: June 16, 1984	EDR
1995	Aerial Photograph. Scale: 1"=833'	Panel #: 2435097-D3/Flight Date: February 20, 1995	EDR



EDR® Environmental
Data Resources Inc

EDR Historical Topographic Map Report

**Twaddle AFRC
5316 S. Douglas Blvd.
Oklahoma City, OK 73150**

Inquiry Number: 1725896.4

August 02, 2006

The Standard in Environmental Risk Management Information

**440 Wheelers Farms Road
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EDR Historical Topographic Map Report

Environmental Data Resources, Inc.'s (EDR) Historical Topographic Map Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR Historical Topographic Map Report includes a search of available public and private color historical topographic map collections. For more than a century, the USGS has been creating and revising topographic maps for the entire country at a variety of scales. There are about 60,000 U.S. Geological Survey (USGS) produced topographic maps covering the United States.

References

To meet the prior use requirements of ASTM E 1527-05, Section 8.3.2, the following *standard historical sources* may be used: aerial photographs, fire insurance maps, property tax files, land title records (although these cannot be the sole historical source consulted), topographic maps, city directories, building department records, or zoning/land use records. ASTM E 1527-05, Section 8.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. ASTM E 1527-05 requires *"All obvious uses of the property shall be identified from the present, back to the property's first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary and both reasonably ascertainable and likely to be useful."* (ASTM E 1527-05, Section 8.3.2) *Reasonably ascertainable means information that is publicly available, obtainable from a source within reasonable time and cost constraints, and practically reviewable.*

EPA's Standards and Practices for All Appropriate Inquiries (AAI), Section § 312.24, identifies the historical sources of information necessary to achieve the objectives and performance factors of § 312.20. According to AAI, *"historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."*

References

In order to address data gaps, additional sources of information may be consulted. According to the AAI, Section § 312.20 (g), *"to the extent there are data gaps (as defined in § 312.10) in the information developed...that affect the ability of persons (including the environmental professional) conducting the all appropriate inquiries to identify conditions indicative of releases or threatened releases...such persons should identify such data gaps, identify the sources of information consulted to address such data gaps, and comment upon the significance of such data gaps."* According to ASTM E 1527-05, Section 8.3.2.3, *"historical research is complete when either: (1) the objectives in 8.3.1 through 8.3.2.2 are achieved; or (2) data failure is encountered. Data failure occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the objectives have not been met....If data failure is encountered, the report shall document the failure and, if any of the standard historical sources were excluded, give the reasons for their exclusion."*

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Quadrangle Relation Chart

Inquiry # 1725896.4

