US-70 over Lake Texoma

ODOT JP 33873(04)

Marshall and Bryan County, OK

December 27, 2021

Terracon Project No. 03207182



Prepared for:

Garver LLC Tulsa, Oklahoma

Prepared by:

Terracon Consultants, Inc. Oklahoma City, Oklahoma

terracon.com



Environmental Facilities Geotechnical Materials

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EXECUTIVE SUMMARY

This Initial Site Assessment (ISA) was performed in accordance with our Master Services Agreement dated July 27, 2020 and Terracon Proposal No. P03207182 dated November 6, 2020 and was conducted consistent with the procedures included in ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and in general conformance with Oklahoma Department of Transportation's (ODOT's) *Hazardous Waste Scope of Services* dated September 18, 2014. The ISA was conducted under the supervision or responsible charge of Philip D. Wood, Environmental Professional. Victoria R. Jolly performed the site reconnaissance on December 2, 2021.

Findings and Opinions

A summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

Site Description and Use

The site includes an approximate 4.5-mile long stretch of US-70 over Lake Texoma, approaches to the bridge, a filling station located south of the main roadway, vacant land, wooded land, and portions of Lake Texoma to the north and south of the roadway. The site is approximately 415 acres.

The existing bridge on US-70 over Lake Texoma (NBI 10965) is a 24-foot wide 87-span bridge consisting of a Warren through truss central span, 63 steel girder spans, and 23 tower spans. The bridge has a sufficiency rating of 42.3 and is at risk of becoming structurally deficient. The bridge is classified as functionally obsolete. The vertical clearance on the truss span is 14 feet 9 inches which does not meet today's standards. The bridge has been determined eligible for listing in the National Register of Historic Places. The US-70 approach roadway is 38 feet wide, consisting of two 12-foot-wide driving lanes and 7-foot-wide shoulders. The existing average annual daily traffic (AADT) on US-70 is 8,500 vehicles per day (vpd) with a 20-year future projected AADT of 13,200 vpd. The purpose of this project is to correct the narrow, at-risk bridge, provide adequate vertical clearance, and accommodate existing and future traffic demand.

Because the bridge is an eligible historic resource, several alternatives to improve the existing bridge are under consideration. These alternatives include rehabilitation (including a widened option), reuse as part of a one-way pair, reuse as a pedestrian/bicycle facility, and preservation as a historic monument. Should none of these alternatives be determined prudent or feasible, replacement options will be considered. New right-of-way will be required. The roadway will remain open during construction.

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Historical Information

Based on a review of the historical information, the site was historically developed with the existing US-70 roadway and bridge built in 1942, and Lake Texoma was created in 1945. Vacant land and portions of adjoining roadways and properties were visible from at least 1952. By 1963, a portion of an outdoor amphitheater was present on the southwestern portion of the site in addition to a potential commercial building or filling station. By 1981, the amphitheater was no longer visible and the existing filling station on the southwest portion of the site was apparent. The site has since remained developed with the roadway and bridge over the lake, a filling station, vacant and wooded lands, and portions of adjoining roadways and properties.

The surrounding area was historically developed with roadways, vacant land, and wooded land from at least 1952. By 1963 a residence and campgrounds were visible to the north of the site and an airplane landing strip, amphitheater, and commercial building were visible to the south of the site. The amphitheater was no longer present in 1981. A golf course was developed to the south of the site by 1984, an amusement park was developed to the east by 1995, and another golf course was developed to the north of the site by 2003. The large commercial building to the south was not visible by 2010 and appeared to be a vacant lot since. Since 2010, the adjoining properties have remained relatively similar.

Records Review

Selected federal and state environmental regulatory databases, as well as responses from state and local regulatory agencies were reviewed. The site was not identified in the regulatory databases. Based on distance, environmental setting and/or facility characteristics, the remaining identified facilities and inquiry results from the local agencies do not constitute RECs in connection with the site at this time.

Site Reconnaissance

During the site reconnaissance Lake Texoma, pole-mounted transformers, four monitoring wells, two solid waste disposal dumpsters, three USTs, and one AST was observed. Based on the age and potential for a release, the three USTs located at Catfish Bay Marina Mart represent a moderate-risk REC to the site. Based on visual observations during the site reconnaissance, the remaining observations do not represent RECs in connection with the site.

Adjoining Properties

The adjoining properties were observed to consist of vacant and commercial properties to the east and west, and wooded land and Lake Texoma to the north and south. RECs were not observed in connection with the adjoining properties.

Significant Data Gaps

No significant data gaps were identified.

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Conclusions

We have performed an ISA consistent with the procedures included in ASTM Practice E 1527-13 and in general conformance with *ODOT's Hazardous Waste Scope of Services* dated September 18, 2014 at US-70 over Lake Texoma, Marshall and Bryan Counties, Oklahoma, the site. The following Recognized Environmental Conditions (RECs) or Controlled RECs (CRECs) were identified in connection with the site:

High Risk:

No high-risk RECs were identified.

Moderate Risk:

On-site USTs and filling station: The Catfish Bay Marina Mart, located at 2048 Marine Road on the site, was identified as currently operating two 5,000-gallon gasoline USTs installed in approximately 1976 and one 4,000-gallon gasoline UST installed on January 25, 1988. Numerous notices of violations have been issued in the past that have been resolved, the majority of which pertain to the presence of water in the USTs or leak detection compliance. Based on the age of the tanks (33 and 45 years old), the documented water intrusion issue, and the material threat of release on the site, the USTs at this facility represent a moderate-risk REC to the site.

Low Risk:

No low-risk RECs were identified.

Recommendations

Based on the scope of services, limitations, and conclusions of this assessment, Terracon recommends the following additional actions:

Additional Investigation: Terracon recommends conducting additional investigation to evaluate subsurface conditions associated with the identified REC.

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1.0 INTRODUCTION

1.1 Site Description

Site Name	US-70 over Lake Texoma JP 33873(04)
Site Location/Address	US-70, Marshall and Bryan Counties, Oklahoma
Land Area	Approximately 415 acres
Site Improvements	Improved with an approximate 4.5-mile long stretch of US-70 over Lake Texoma, approaches, a filling station, vacant lands, wooded lands, and portions of Lake Texoma
Anticipated Future Site Use	Modification of US-70 Bridge and approaches
Purpose of the ISA	To identify RECs that could affect construction at the site

The location of the site is depicted on Exhibit 1 of Appendix A, which was reproduced from a portion of the USGS 7.5-minute series topographic map. The site and adjoining properties are depicted on the Site Diagram, which is included as Exhibit 2 of Appendix A. Acronyms and terms used in this report are described in Appendix F.

The existing bridge on US-70 over Lake Texoma (NBI 10965) is a 24-foot wide 87-span bridge consisting of a Warren through truss central span, 63 steel girder spans, and 23 tower spans. The bridge has a sufficiency rating of 42.3 and is at risk of becoming structurally deficient. The bridge is classified as functionally obsolete. The vertical clearance on the truss span is 14 feet 9 inches which does not meet today's standards. The bridge has been determined eligible for listing in the National Register of Historic Places. The US-70 approach roadway is 38 feet wide, consisting of two 12-foot-wide driving lanes and 7-foot-wide shoulders. The existing average annual daily traffic (AADT) on US-70 is 8,500 vehicles per day (vpd) with a 20-year future projected AADT of 13,200 vpd. The purpose of this project is to correct the narrow, at-risk bridge, provide adequate vertical clearance, and accommodate existing and future traffic demand.

Because the bridge is an eligible historic resource, several alternatives to improve the existing bridge are under consideration. These alternatives include rehabilitation (including a widened option), reuse as part of a one-way pair, reuse as a pedestrian/bicycle facility, and preservation as a historic monument. Should none of these alternatives be determined prudent or feasible, replacement options will be considered. New right-of-way will be required. The roadway will remain open during construction.

1.2 Scope of Services

This ISA was performed in accordance with our Master Services Agreement dated July 27, 2020 and Terracon Proposal No. P03207182 dated November 6, 2020 and was conducted

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consistent with the procedures included in ASTM E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and in general conformance with Oklahoma Department of Transportation's (ODOT's) Hazardous Waste Scope of Services dated September 18, 2014. The purpose of this ISA was to assist the client in developing information to identify RECs in connection with the site as reflected by the scope of this report. This purpose was undertaken through user-provided information, a regulatory database review, historical and physical records review, interviews, including local government inquiries, as applicable, and a visual noninvasive reconnaissance of the site and adjoining properties. Limitations, ASTM deviations, and significant data gaps (if identified) are noted in the applicable sections of the report.

ASTM E1527-13 contains a new definition of "migrate/migration," which refers to "the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface." By including this explicit reference to migration in ASTM E1527-13, the Standard clarifies that the potential for vapor migration should be addressed as part of a ISA. This ISA has considered vapor migration in evaluation of RECs associated with the site.

1.3 Standard of Care

This ISA was performed in accordance with generally accepted practices of this profession, undertaken in similar studies at the same time and in the same geographical area. We have endeavored to meet this standard of care, but may be limited by conditions encountered during performance, a client-driven scope of work, or inability to review information not received by the report date. Where appropriate, these limitations are discussed in the text of the report, and an evaluation of their significance with respect to our findings has been conducted.

ISAs, such as the one performed at this site, are of limited scope, are noninvasive, and cannot eliminate the potential that hazardous, toxic, or petroleum substances are present or have been released at the site beyond what is identified by the limited scope of this ISA. In conducting the limited scope of services described herein, certain sources of information and public records were not reviewed. It should be recognized that environmental concerns may be documented in public records that were not reviewed. No ISA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs. No warranties, express or implied, are intended or made. The limitations herein must be considered when the user of this report formulates opinions as to risks associated with the site or otherwise uses the report for any other purpose. These risks may be further evaluated – but not eliminated – through additional research or assessment. We will, upon request, advise you of additional research or assessment options that may be available and associated costs.

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1.4 Additional Scope Limitations, ASTM Deviations and Data Gaps

Based upon the agreed-on scope of services, this ISA did not include subsurface or other invasive assessments, vapor intrusion assessments or indoor air quality assessments (i.e. evaluation of the presence of vapors within a building structure), business environmental risk evaluations, or other services not particularly identified and discussed herein. Credentials of the company (Statement of Qualifications) have not been included in this report but are available upon request. Pertinent documents are referred to in the text of this report, and a separate reference section has not been included. Reasonable attempts were made to obtain information within the scope and time constraints set forth by the client; however, in some instances, information requested is not, or was not, received by the issuance date of the report. Information obtained for this ISA was received from several sources that we believe to be reliable; nonetheless, the authenticity or reliability of these sources cannot and is not warranted hereunder. This ISA was further limited by the following:

- Due to dense vegetation and steep cliffs, the shores of Lake Texoma on the east and west portions of the site could not be accessed and surface conditions could not be observed.
- Reasonable attempts were made to contact local government officials; however, at the issuance of this report, interviews with local government officials were not performed.
- During the site reconnaissance, portions of the site could not be observed due to vehicular obstructions and some portions were not able to be accessed safely due to traffic.

An evaluation of the significance of limitations and missing information with respect to our findings has been conducted, and where appropriate, significant data gaps are identified and discussed in the text of the report. However, it should be recognized that an evaluation of significant data gaps is based on the information available at the time of report issuance, and an evaluation of information received after the report issuance date may result in an alteration of our conclusions, recommendations, or opinions. We have no obligation to provide information obtained or discovered by us after the issuance date of the report, or to perform any additional services, regardless of whether the information would affect any conclusions, recommendations, or opinions in the report. This disclaimer specifically applies to any information that has not been provided by the client.

This report represents our service to you as of the report date and constitutes our final document; its text may not be altered after final issuance. Findings in this report are based upon the site's current utilization, information derived from the most recent reconnaissance and from other activities described herein; such information is subject to change. Certain indicators of the presence of hazardous substances or petroleum products may have been latent, inaccessible, unobservable, or not present during the most recent reconnaissance and may subsequently

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become observable (such as after site renovation or development). Further, these services are not to be construed as legal interpretation or advice.

1.5 Reliance

This ISA report is prepared for the exclusive use and reliance of Garver, LLC and the Oklahoma Department of Transportation (ODOT). Use or reliance by any other party is prohibited without the written authorization of Garver, LLC, ODOT, and Terracon Consultants, Inc. (Terracon).

Reliance on the ISA by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the proposal, ISA report, and Terracon's Master Services Agreement. The limitation of liability defined in the Master Services Agreement is the aggregate limit of Terracon's liability to the client and all relying parties.

Continued viability of this report is subject to ASTM E1527-13 Sections 4.6 and 4.8. If the ISA will be used by a different user (third party) than the user for whom the ISA was originally prepared, the third party must also satisfy the user's responsibilities in Section 6 of ASTM E1527-13.

1.6 Client Provided Information

Prior to the site visit, Ms. Kirsten McCullough, client's representative, was asked to provide the following user questionnaire information as described in ASTM E1527-13 Section 6.

Client Questionnaire Responses

Client Questionnaire Item	Client Did Not	Client's Response	
	Respond	Yes	No
Specialized Knowledge or Experience that is material to a REC in connection with the site.	X		
Actual Knowledge of Environmental Liens or Activity Use Limitations (AULs) that may encumber the site.	Х		
Actual Knowledge of a Lower Purchase Price because contamination is known or believed to be present at the site.	Х		
Commonly Known or Reasonably Ascertainable Information that is material to a REC in connection with the site.	Х		
Obvious Indicators of Contamination at the site.	Х		

The client did not respond to the questions on the ASTM questionnaire as Garver, LLC is not the owners of the site. After reviewing the EDR Database information and conducting site reconnaissance, this does not pose a significant data gap to the ISA.

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2.0 PHYSICAL SETTING

Physica	l Setting Information	Source		
	Topography			
Site Elevation	Approximately 620-700 feet above sea level	USGS Topographic Map, Little City		
Topographic Gradient	Steeply sloping towards the center of the site	Platter, Kingston South, and Kingston North, OK Quadrangles, 2012		
Closest Surface Water	Lake Texoma, located in the center of the site.	(Appendix A)		
	Soil Characteristics			
Soil Type	Primarily Pit Series, Karma Series, Boxville Series, and the Durant Series			
Description	The Pit series consists of very deep, poorly drained soils that formed in fine-textured alluvium weathered from extrusive and basic igneous rocks. Pit soils are on flood plains and in basins. Slopes range from 0 to 5 percent. The mean annual precipitation is about 12 inches and the mean annual air temperature is about 47 degrees F. The Karma series is a deep fine sandy loam that is well drained and formed from loamy alluvium on paleoterraces. The Boxville series is a fine sandy loam to silty clay with slopes ranging from 1 to 8 percent. The Boxville formed from loamy and/or clayey alluvium in stream terraces and is well drained. This series is prime farmland and rarely floods or ponds. The Durant series consists of very deep, moderately well drained, very slowly permeable soils that formed in material weathered from clayey sediments and shales of Cretaceous age. These brown, nearly level to sloping soils are on upland flats and slightly convex broad ridges in the Grand Prairie.	Marshall and Bryan Counties, OK USDA-NRCS Web Soil Survey issued May 26 and 27, 2021		

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Physical	Setting Information	Source		
Geology/Hydrogeology				
Formation	Bokchito Formation and Older Alluvium			
Description	The Bokchito Formation is mostly clay and clayshale, with some tancolored limestones and fine-grained sandstones. Subdivided in descending order in the Pawpaw Clay at the sop, the Quarry Limestone, the Weno Clay, and the Denton Clay at the base. Only the lower 60 meters is exposed. Older Alluvium is unconsolidated deposits consisting of locally derived clays, silt, sand, and rarely gravel-sized sedimentary material; represent slightly older terrace deposits then those formed in modern flood plains; predominantly found adjacent to and above modern alluvial deposits of major drainage systems. Areas rarely subject to flooding.	Preliminary Geologic Map of the Tishomingo 30'x60' Quadrangle, Oklahoma, Oklahoma Geological Survey, 2013		
Estimated Depth to First Occurrence of Groundwater	Estimated depth to the first occurrence of groundwater is within the first 25 feet of the surface.	Oklahoma Water Resources Board General Viewer http://www.owrb.ok.gov/maps/index.php		
*Hydrogeologic Gradient Not known - may be inferred to be parallel to topographic gradient (primari the center of the site).				

^{*} The groundwater flow direction and the depth to shallow, unconfined groundwater, if present, would likely vary depending upon seasonal variations in rainfall and other hydrogeological features. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

3.0 HISTORICAL USE INFORMATION

Terracon reviewed the following historical sources to develop a history of the previous uses of the site and surrounding area, in order to help identify RECs associated with past uses. Copies of selected historical documents are included in Appendix C.

3.1 Historical Topographic Maps, Aerial Photographs, Sanborn Maps

Readily available historical USGS topographic maps and selected historical aerial photographs (at approximately 10- to 15-year intervals) were reviewed to evaluate land development and obtain information concerning the history of development on and near the site. Reviewed historical topographic maps and aerial photographs are summarized below.

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Historical fire insurance maps produced by the Sanborn Map Company were requested from EDR to evaluate past uses and relevant characteristics of the site and surrounding properties. Based upon inquiries to the above-listed Sanborn provider, Sanborn maps were not available for the site.

- Topographic map: Tishomingo, Indian Territory, **1901** (1:125,000)
- Aerial photograph: USGS, 1952, scale approximately 1"=1000"
- Aerial photograph: USGS, 1954, scale approximately 1"=1000"
- Topographic map: Denison Dam, Oklahoma, **1958** (1:62,500)
- Aerial photograph: USGS, 1963, scale approximately 1"=1000"
- Topographic map: Tishomingo SW, Little City, and Kingston North, Oklahoma, 1967 (1:24,000)
- Aerial photograph: USGS, 1976, scale approximately 1"=1000"
- Aerial photograph: USGS, 1981, scale approximately 1"=1000"
- Topographic map: Kingston South and Platter, Oklahoma, **1982** (1:24,000)
- Aerial photograph: USGS, 1984, scale approximately 1"=1000"
- Aerial photograph: USGS/DOQQ, 1995, scale approximately 1"=1000"
- Aerial photograph: USGS/NAIP, 2003, scale approximately 1"=1000"
- Aerial photograph: USGS/NAIP, 2010, scale approximately 1"=1000"
- Topographic map: Platter, Little City, Kingston South, and Kingston North, Oklahoma, 2012/2013 (1:24,000)
- Aerial photograph: USGS/NAIP, 2013, scale approximately 1"=1000"
- Aerial photograph: USGS/NAIP, 2017, scale approximately 1"=1000"

Historical Maps and Aerial Photographs

Direction	Description
	1901: The site was not depicted
	1952-1958 : The site was developed with the roadway and bridge over the lake, vacant land, and portions of adjoining roadways
Site	1963-1976 : Developed with a paved lot and commercial building (potential filling station), portion of a potential outdoor amphitheater, roadway and bridge over the lake, vacant land, wooded land, and portions of adjoining roadways
	1981-2017 : Amphitheater was no longer visible. Developed with a filling station, outbuilding, roadway and bridge over the lake, vacant land, wooded land, and portions of adjoining roadways
	1901: The area was not depicted
	1952-1958: Vacant land, wooded land, roadways, and Lake Texoma
North	1963-1995: Residence, vacant and wooded lands, roadways, Lake Texoma, and a campground
North	2003-2010 : Golf course, roadways, residence, vacant and wooded lands, Lake Texoma, and a campground
	2013-2017 : Residence was no longer visible. Golf course, roadways, vacant and wooded lands, Lake Texoma, and a campground

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Direction	Description
East	1901: The area was not depicted
	1952-2017: Roadway, vacant land, and wooded land
	1901: The area was not depicted
	1952-1958: Vacant land, wooded land, roadways, and Lake Texoma
	1963-1976 : Airplane landing strip, roadways, outdoor amphitheater, commercial building (potential tourist shop or state park welcome building), vacant land, wooded land, and Lake Texoma
South	1981 : Amphitheater was no longer present. Developed with airplane landing strip, outbuildings, commercial building, roadways, vacant land, wooded land, and Lake Texoma
	1984-2003 : Golf course, airplane landing strip, outbuildings, commercial building, roadways, vacant land, wooded land, and Lake Texoma
	2010-2017 : Commercial building was no longer visible. Golf course, airplane landing strip, outbuildings, cleared lot, roadways, vacant land, wooded land, and Lake Texoma
	1901: The area was not depicted
West	1952-1984: Roadways and vacant land
	1995-2017: Developed with an amusement park, roadways, and vacant land

3.2 Historical City Directories

The EDR Digital Archive records used in this study were made available through Environmental Data Resources, Inc. (EDR) (selected years reviewed: 1992-2017) and were reviewed at approximate five-year intervals, if readily available. Street listings not available prior to 2010. The current street address for the site was identified as US-70, with an on-site building addressed at 6037 US-70.

Historical City Directories

Direction	Description		
Site	6037 US-70 : No listings		
North	12428 Chickasaw Point Road: No listings 215 Johnson Road: No listings		
East	3263 US-70: Texoma Oakwood Lodge (2010), Lake Texoma Lodge and Resort (2014-2017)		
	6215 US-70 : No listings		
South	11934 State Park Road: No listings		
South	11500 Park Office Road: No listings		
	266 Willow Springs Road: No listings		
West	6303 US-70 : No listings		
	1945 US-70 : No listings		

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3.3 Site Ownership

Based on a review of information obtained from the Marshall and Bryan County assessor's records and the client, the site is currently owned is by multiple entities including Ponte Vista Development, Oklahoma Tourism and Recreation Department, Lake Texoma Association, United State of America in Trust for the Chickasaw Nation, and the US Army Corps of Engineers where the site extends north and south from the right of ways. Previous owners were not identified.

3.4 Title Search

At the direction of the client, a title search was not included as part of the scope of services. Unless notified otherwise, we assume that the client is evaluating this information outside the scope of this report.

3.5 Environmental Liens and Activity and Use Limitations

The EDR regulatory database report included a review of both Federal and State Engineering Control (EC) and Institutional Control (IC) databases. Based on a review of the database report, the site was not listed on the EC or IC databases. Please note that in addition to these federal and state listings, AULs can be recorded at the county and municipal level that may not be listed in the regulatory database report. Environmental lien and activity and use limitation records recorded against the site were not provided by the client. At the direction of the client, performance of a review of these records was not included as part of the scope of services and unless notified otherwise, we assume that the client is evaluating this information outside the scope of this report.

3.6 Interviews Regarding Current and Historical Site Uses

The following individuals were interviewed regarding the current and historical use of the site.

Interviews

Interviewer	Name / Phone #	Title	Date/Time
Victoria Jolly	Cindy Gammons / 580-272-5456	Chickasaw Nation Environmental Specialist	December 2, 2021 at 11:00AM

Terracon interviewed Ms. Cindy Gammons, Chickasaw Nation Environmental Specialist, during the site reconnaissance. Ms. Gammons noted that she was unaware of any pending, threatened, or past environmental litigation, possible violations of environmental laws, possible environmental liability, or any potential environmental concerns. Ms. Gammons provided access to the portions of the site owned by the Chickasaw Nation and stated that the areas of construction were a future restaurant, hotel, gift shop, and gaming facility.

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3.7 Prior Report Review

Terracon requested the client provide any previous environmental reports they are aware of for the site. Previous reports were not provided by the client to Terracon for review.

4.0 RECORDS REVIEW

Regulatory database information was provided by EDR, a contract information services company. The purpose of the records review was to identify RECs in connection with the site. Information in this section is subject to the accuracy of the data provided by the information services company and the date at which the information is updated. The scope herein did not include confirmation of facilities listed as "unmappable" by regulatory databases.

In some of the following subsections, the words up-gradient, cross-gradient and down-gradient refer to the topographic gradient in relation to the site. As stated previously, the groundwater flow direction and the depth to shallow groundwater, if present, would likely vary depending upon seasonal variations in rainfall and the depth to the soil/bedrock interface. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

4.1 Federal and State/Tribal Databases

Listed below are the facility listings identified on federal and state/tribal databases within the ASTM-required search distances from the approximate site boundaries. Database definition, descriptions, and the database search report are included in Appendix D.

Federal Databases

Database	Description	Distance (miles)	Listings
CERCLIS	Comprehensive Environmental Response, Compensation, & Liability Information System	0.5	0
CERCLIS / NFRAP	Comprehensive Environmental Response, Compensation, & Liability Information System/No Further Remedial Action Planned	0.5	0
ERNS	Emergency Response Notification System	Site	0
IC / EC	Institutional Control/Engineering Control	Site	0
NPL	National Priorities List	1	0
NPL (Delisted)	National Priorities Delisted List	0.5	0
RCRA CORRACTS/ TSD	RCRA Corrective Action Activity	1	0

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Database	Description	Distance (miles)	Listings
RCRA Generators	Resource Conservation and Recovery Act	Site and adjoining properties	0
RCRA Non- CORRACTS/ TSD	RCRA Non-Corrective Action Activity	0.5	0
RCRA NonGen / NLR	RCRA Non-Generator / No Longer Regulated	Site	1
FINDS	Facility Index System/Facility Registry System	Site	2
ECHO	Enforcement and Compliance History Information	Site	1
DOD	Department of Defense Sites	Site	1

State/Tribal Databases

Database	Description	Distance (miles)	Listings
Brownfields	Brownfields Sites	0.5	0
IC	Institutional Control Sites	Site	0
LUST	Leaking Underground Storage Tanks	0.5	0
SHWS	State Hazardous Waste Site	1	0
SWF/LF	Solid Waste Facilities/Landfills	0.5	0
UST	Underground Storage Tanks	Site and adjoining properties	2
VCP	Voluntary Cleanup Program	0.5	0

In addition to the above ASTM-required listings, Terracon reviewed other federal, state, local, and proprietary databases provided by the database firm. A list of the additional reviewed databases is included in the regulatory database report included in Appendix D.

The following table summarizes the site-specific information provided by the database and/or gathered by this office for identified facilities. Facilities are listed in order of proximity to the site. Additional discussion for selected facilities follows the summary table.

Listed Facilities

Facility Name And Location	Estimated Distance / Direction/Gradient	Database Listings	Is a REC, CREC, or HREC to the Site
Catfish Bay Marina Mart		UST	Moderate-risk REC –
2048 Marina Road (4 Miles			see below
East Hwy 70)	Site		
Lake Texoma		DOD	No REC – see below

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Facility Name And Location	Estimated Distance / Direction/Gradient	Database Listings	Is a REC, CREC, or HREC to the Site
AE3899 Kingston Bridge		FINDS	No REC – see below
Pointe (orphan listing)			
E of Int. Between Hwy 70			
and Chickasaw Point Road			
Oklahoma DOT/Omega		RCRA	No REC – see below
Coating and Construction		NonGen/NLR,	
NBI#10965 (orphan listing)		FINDS, ECHO	
US Hwy 70 over Lake			
Texoma			
Oklahoma Texoma State		RCRA NonGen /	No REC – see below
Resort	South adjoining property /	NLR	
Hwy 70, 5 Mi E	, , ,		
Texoma State Park	cross-gradient	UST, HIST UST	No REC – see below
Hwy 70, 4 Mi East of			
Kingston, OK			
Cumberland Cove Resort	Approximately 3.5 miles north	UST, HIST UST	No REC based on
Rt 2 Box 307	/ up-gradient (mis-marked by		distance
	EDR)		

Catfish Bay Marina Mart, 2048 Marina Road (4 Miles East Hwy 70); Lake Texoma, AE3899 Kingston Bridge Pointe, Oklahoma DOT/Omega Coating and Construction

The facility located at 2048 Marina Road on the site was identified as currently operating three USTs under OCC Facility ID 4807884. According to records from the OCC, this facility has two 5,000-gallon gasoline USTs which were installed in approximately 1976 and one 4,000-gallon gasoline UST which was installed on January 25, 1988. At the issuance of this report and according to the most recent OCC UST Compliance Inspection Report dated May 6, 2021 and OCC Station Inspection Report dated September 30, 2021, the facility is in good standing. However, numerous notices of violations have been issued in the past that have been resolved, the majority of which pertain to the presence of water in the USTs or leak detection compliance. Based on the age of the tanks (33 and 45 years old), the documented water intrusion issue, and the material threat of release on the site, the USTs at this facility represent a moderate-risk REC to the site.

Lake Texoma, parts of which are included within the site, is operated and maintained by the U.S. Army Corps of Engineers, an agency of the Department of Defense. The operation and maintenance of the lake by this government agency does not represent a REC to the site.

The AE3899 Kingston Bridge Pointe listing identified a part of the US-70 roadway on the western portion of the site in the FINDS system, which is a compilation of data from other systems. This listing relates to stormwater construction National Pollutant Discharge Elimination System (NPDES) permits issued to Centerpoint Energy in 2019 during construction.

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The Oklahoma DOT/Omega Coating and Construction listing identified the site as a former generator of hazardous wastes including ignitable waste, lead, methyl ethyl ketone, and spent nonhalogenated solvents in apparent association with road improvements. No violations or evaluation actions were found in association with this listing. The ECHO and FINDS systems are compilations of data from other systems and relate to the former RCRA generator listing. Based on the nature of these listings and because no violations were identified, these activities do not represent RECs to the site.

Oklahoma Texoma State Resort and Texoma State Park

The south adjoining property was identified as formerly operating five USTs ranging from 1,000 gallons to 7,000 gallons containing gasoline, diesel, and heating oil. According to the regulatory database report and the OCC, this facility has permanently removed the USTs from the ground. According to the tank closure report submitted on July 11, 1994, four tanks were removed from the ground on June 12, 1994 and a site assessment was completed which indicated no evidence of leaks. During removal of the 1,000-gallon UST in 1999, two soil samples were collected from beneath the tank and analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) and total petroleum hydrocarbons (TPH), none of which were identified. Because the tanks have been removed from the ground, no evidence of release was identified during closure activities, and based on its cross-gradient location from the site, the south adjoining tanks do not represent a REC to the site.

The remaining facilities listed in the database report do not appear to represent RECs to the site at this time based upon regulatory status, apparent topographic gradient, and/or distance from the site.

Unmapped facilities are those that do not contain sufficient address or location information to evaluate the facility listing locations relative to the site. The report listed eleven facilities in the unmapped section. Determining the location of unmapped facilities is beyond the scope of this assessment; however, four of these listings were identified as the site. These facilities have been discussed above. The remaining facilities were not identified as the site or adjacent properties. These facilities are listed in the database report in Appendix D.

4.2 Local Agency Inquiries

Agency Contacted/		
Contact Method	Response	
Oklahoma Department of Environmental Quality (ODEQ) / https://gis.deq.ok.gov/maps/	A review of the ODEQ Data Viewer did not indicate any records of concern for the site or adjoining properties, and therefore does not represent a REC to the site.	
Oklahoma Water Well Records Search (OWRB) / www.owrb.ok.gov	A review of the OWRB Well Database indicated the presence of approximately fourteen wells at or near the site boundaries. Six of these wells were identified as geotechnical borings and eight of these wells were identified monitoring wells. A copy of the OWRB well map is included in Appendix C.	

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Agency Contacted/	
Contact Method	Response
National Pipeline Mapping System (NPMS) / https://pvnpms.phmsa.dot.gov/PublicVie wer/	Based on a review of the NPMS Public Viewer, no gas transmission or hazardous liquid pipelines are present on or adjacent to the site. No accidents or incidents have been reported in the vicinity of the site in relation to the pipeline according to the NPMS Public Viewer.

5.0 SITE RECONNAISSANCE

5.1 General Site Information

Information contained in this section is based on a visual reconnaissance conducted while walking through the site and the accessible interior areas of structures, if any, located on the site. The site and adjoining properties are depicted on the Site Diagram, which is included in Exhibit 2 of Appendix A. Photo documentation of the site at the time of the visual reconnaissance is provided in Appendix B. Credentials of the individuals planning and conducting the site visit are included in Appendix E.

General Site Information

Site Reconnaissance				
Field Personnel	Victoria R. Jolly			
Reconnaissance Date	December 2, 2021			
Weather Conditions	Sunny and windy, approximately 60° F			
Site Contact/Title	Cindy Gammons / Chickasaw Nation Environmental Specialist			

Building Description				
Building Identification	Building Use	Approx. Construction Date	Number of Stories	Approx. Size (ft²)
Catfish Bay Marina Mart	Convenience Store and Filling Station	1963-1976	1	3,400
Site Utilities				
Drinking Water	Marshall County Water (Marshall County Water Corporation		
Wastewater	Marshall County Water (Marshall County Water Corporation		
Electric	OG&E or Rural Electric	OG&E or Rural Electric Association		
Natural Gas	OG&E			

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5.2 Overview of Current Site Occupants and Operations

The site includes an approximate 4.5-mile long stretch of US-70 over Lake Texoma, approaches to the bridge, a filling station located south of the main roadway, vacant land, wooded land, and portions of Lake Texoma to the north and south of the roadway. The site is approximately 415 acres.

5.3 Site Observations

The following table summarizes site observations and interviews. Affirmative responses (designated by an "X") are discussed in more detail following the table.

Site Characteristics

Category	Item or Feature	Observed or Identified
	Emergency generators	
	Elevators	
	Air compressors	
	Hydraulic lifts	
	Dry cleaning	
	Photo processing	
	Ventilation hoods and/or incinerators	
	Waste treatment systems and/or water treatment systems	
Site Operations,	Heating and/or cooling systems	
Processes, and Equipment	Paint booths	
	Sub-grade mechanic pits	
	Wash-down areas or carwashes	
	Pesticide/herbicide production or storage	
-	Printing operations	
	Metal finishing (e.g., electroplating, chrome plating, galvanizing, etc.)	
	Salvage operations	
	Oil, gas or mineral production	
	Other processes or equipment	
Aboveground	Aboveground storage tanks	Χ
Chemical or Waste	Drums, barrels and/or containers ≥ 5 gallons	
Storage	MSDS or SDS	

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Category	Item or Feature	Observed or Identified
Underground	Underground storage tanks or ancillary UST equipment	X
	Sumps, cisterns, French drains, catch basins and/or dry wells	
	Grease traps	
Chemical or Waste Storage, Drainage	Septic tanks and/or leach fields	
or Collection Systems	Oil/water separators, clarifiers, sand traps, triple traps, interceptors	
	Pipeline markers	
	Interior floor drains	
Electrical Transformers/	Transformers and/or capacitors	X
PCBs	Other equipment	
	Stressed vegetation	
	Stained soil	
	Stained pavement or similar surface	
	Leachate and/or waste seeps	
Releases or	Trash, debris and/or other waste materials	Х
Potential Releases	Dumping or disposal areas	
	Construction/demolition debris and/or dumped fill dirt	
	Surface water discoloration, odor, sheen, and/or free floating product	
	Strong, pungent or noxious odors	
	Exterior pipe discharges and/or other effluent discharges	
	Surface water bodies	X
Other Notable Site	Quarries or pits	
Features	Wastewater lagoons	
	Wells	Х

Aboveground Chemical or Waste Storage

Aboveground storage tanks

One AST was observed on the southeast portion of the site in an area of construction during site reconnaissance. The AST was labelled to contain 1,000-gallons of diesel fuel and was used for construction equipment. The AST was observed to be on dirt and gravel. No leaks, stains, or releases were evident at the time of site reconnaissance. The AST was mounted on a track for portability and did not appear to be a permanent fixture on the site. Based on the lack of releases and intended use of the AST, this observation does not represent a REC to the site at this time.

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Underground Chemical or Waste Storage, Drainage or Collection Systems

Underground storage tanks or ancillary UST equipment

Surface indications of three USTs were observed at Catfish Bay Marina Mart on the southwest portion of the site during the site reconnaissance. Further information about the capacity, contents, and age of the USTs was previously discussed in Section 4.1. As previously discussed, the three USTs on the site represent a moderate-risk REC to the site based on their age and potential of release.

Electrical Transformers/PCBs

Transformers and/or capacitors

During Terracon's site visit, multiple pole-mounted transformers, owned and serviced by the local utility, were observed along the roadway on the east and west portions of the site; however, no information with regard to PCB content of the transformer fluids was observed. Some transformers contain mineral oil which may contain PCBs.

The local utility maintains responsibility for the transformers, and if the transformers were "PCB contaminated," utility the local utility is not required to replace the transformer fluids until a release is identified. However, evidence of current or prior releases was not observed in the vicinity of the electrical equipment during the site reconnaissance.

Releases or Potential Releases

Trash, debris and/or other waste materials

Two solid waste dumpsters were observed at the Catfish Bay Marina Mart and appeared to be serviced by the Oklahoma State Park department. The solid waste dumpsters did not appear to have hazardous materials, releases, or noxious odors at the time of site reconnaissance.

Other Notable Site Features

Surface water bodies

A lake was observed in the center of the site on the site, which is Lake Texoma. No indications of chemical sheens were observed on the surface of the waters, and no noxious odors were noted emanating from within the lake at the time of the site reconnaissance.

Wells

Approximately four monitoring wells were observed at the filling station on the western portion of the site surrounding the tank pit and dispensers. The four well(s) were in good condition at the time of the site reconnaissance.

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6.0 ADJOINING PROPERTY RECONNAISSANCE

Visual observations of adjoining properties (from site boundaries) are summarized below.

Adjoining Properties

Direction	Description
North	Chickasaw Pointe Golf Course, area of construction, Lake Texoma, wooded land, and recreation area
East	Wooded land
South	Wooded land, Lake Texoma, Lake Texoma State Park recreation area, and airplane landing strip
West	Wooded land and commercial properties

RECs were not observed with the adjoining properties.

7.0 ADDITIONAL SERVICES

Per the agreed scope of services specified in the proposal, additional services (e.g. asbestos sampling, lead-based paint sampling, wetlands evaluation, lead in drinking water testing, radon testing, vapor encroachment screening, etc.) were not conducted.

8.0 SUMMARY

We have performed an ISA consistent with the procedures included in ASTM Practice E 1527-13 and in general conformance with *ODOT's Hazardous Waste Scope of Services* dated September 18, 2014 at US-70, Kingston and Mead, Marshall and Bryan County, Oklahoma, the site. The following Recognized Environmental Conditions (RECs) or Controlled RECs (CRECs) were identified in connection with the site:

High Risk:

No high-risk RECs were identified.

Moderate Risk:

On-site USTs and filling station: The Catfish Bay Marina Mart, located at 2048 Marine Road on the site, was identified as currently operating two 5,000-gallon gasoline USTs installed in approximately 1976 and one 4,000-gallon gasoline UST installed on January 25, 1988. Numerous notices of violations have been issued in the past that have been resolved, the majority of which pertain to the presence of water in the USTs or leak detection compliance. Based on the age of the tanks (33 and 45 years old), the documented water intrusion issue, and

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the material threat of release on the site, the USTs at this facility represent a moderate-risk REC to the site.

Low Risk:

No low-risk RECs were identified.

Recommendations

Based on the scope of services, limitations, and conclusions of this assessment, Terracon recommends the following additional actions:

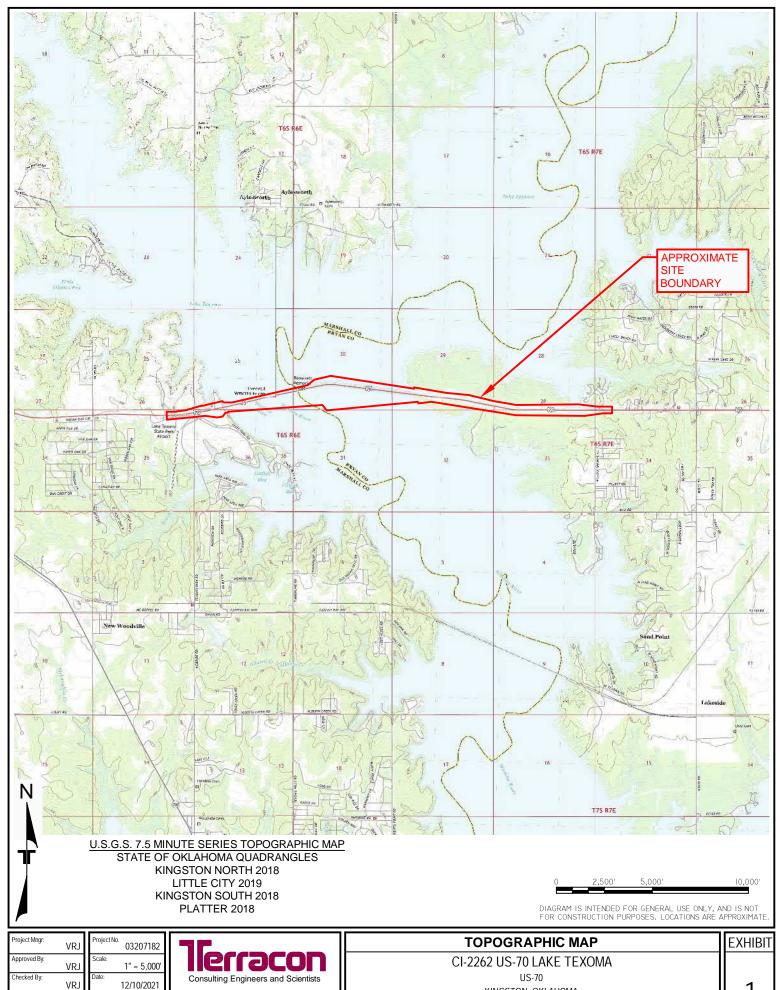
Additional Investigation: Terracon recommends conducting additional investigation to evaluate subsurface conditions associated with the identified REC.

9.0 DECLARATION

I, Philip D. Wood, declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312; and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the site. I have developed and performed the All Appropriate Inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Philip D. Wood Senior Engineer

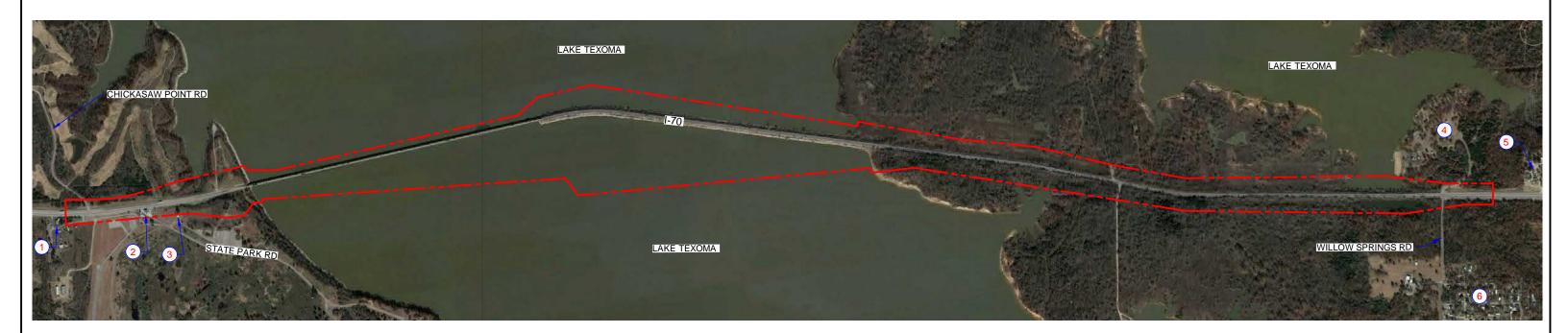
APPENDIX A EXHIBIT 1 – TOPOGRAPHIC MAP EXHIBIT 2 – SITE DIAGRAM



VRJ Drawn By: DBM

Consulting Engineers and Scientists 4701 N. Stilies Ave Oklahoma City, OK 73105

US-70 KINGSTON, OKLAHOMA



LEGEND

——— APPROXIMATE SITE BOUNDARY

- 1 6303 US-70, VACANT
- 2 CATFISH BAY MARINA MART
- 3 LAKE TEXOMA ASSOCIATION
- 4 JOHNSON CREEK CAMPGROUNDS
- 5 LAKE TEXOMA LODGE AND RESORT
- 6 RESIDENTIAL

Or Consulting Engineers and Scientists

Oklahoma City, Ok 73105

Oklahoma City, Ok 73105

Oklahoma City, Ok 73105

SITE DIAGRAM

CI-2262 US-70 LAKE TEXOMA

US-70
KINGSTON, OKLAHOMA

2

APPENDIX B SITE PHOTOGRAPHS

US-70 over Lake Texoma JP 33873 (04) ■ Bryan and Marshall Counties, OK Photos Taken: December 2, 2021 ■ Terracon Project No. 03207182





Photo 1 Overview of the site.



Photo 2 View of the bridge approach and signage.



Photo 3 View of the site from the eastern boundary.



Photo 4 View of the eastern portion of the site.



Photo 5 Typical view of the site.



Photo 6 View of Lake Texoma.

US-70 over Lake Texoma JP 33873 (04) ■ Bryan and Marshall Counties, OK Photos Taken: December 2, 2021 ■ Terracon Project No. 03207182





Photo 7 View of Catfish Bay Marina Mart filling station.



Photo 8 View of solid waste dumpsters.



Photo 9 View of a monitoring well.



Photo 10 View of UST vent pipes.



Photo 11 View of area of construction.



Photo 12 View of diesel AST.

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Photo 13 View of north adjoining campground.



Photo 14 View of north adjoining wooded land.



Photo 15 View of south adjoining airplane landing strip.



Photo 16 View of south adjoining state park visitors center.



Photo 17 View of east adjoining roadway.



Photo 18 View of west adjoining amusement park.

APPENDIX C HISTORICAL DOCUMENTATION, USER QUESTIONNAIRE, LAND USE WINDSHIELD SURVEY, SOIL SURVEY, AND WELL MAP

US-70 Over Lake Texoma Roosevelt Bridge

US-70, Bryan and Marshall Counties Mead, OK 73449

Inquiry Number: 6714549.4

October 25, 2021

The EDR Aerial Photo Decade Package



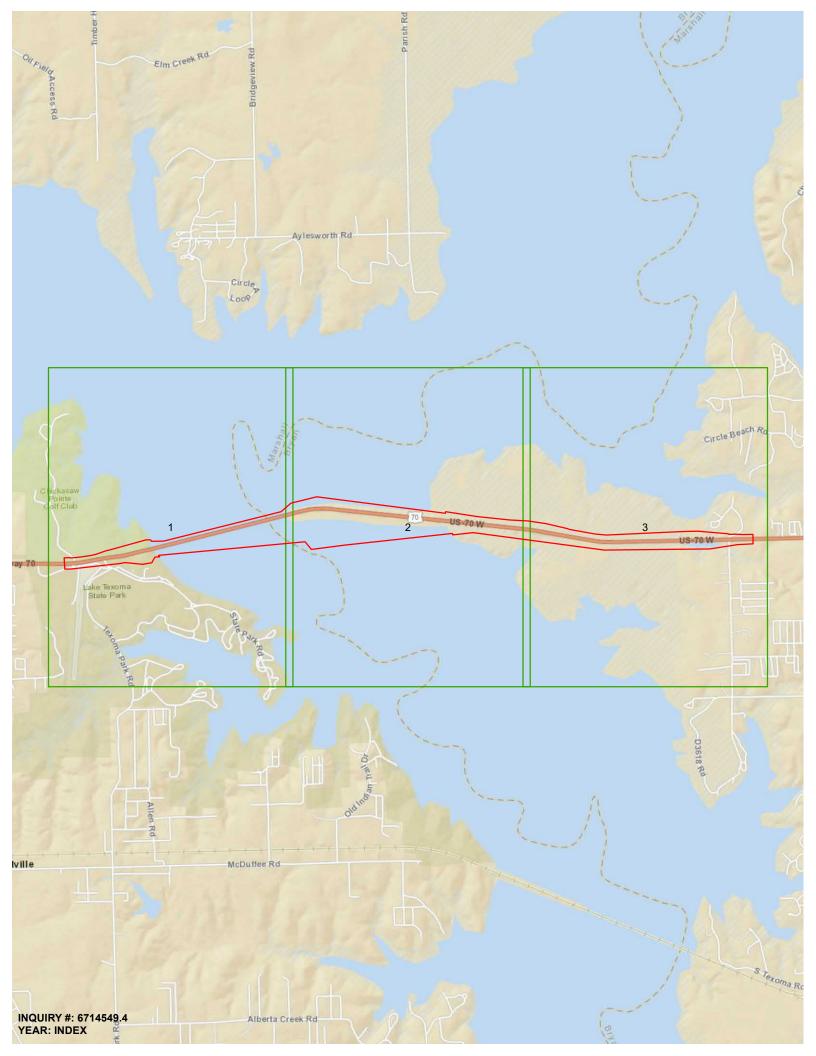
Date EDR Searched Historical Sources:

Aerial Photography October 25, 2021

Target Property:

US-70, Bryan and Marshall Counties Mead, OK 73449

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1952	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1952	USGS
1954	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1954	USGS
1963	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1963	USGS
1976	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1976	USGS
1981	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1981	USGS
1984	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1984	USGS
1995	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1995	USGS/DOQQ
2003	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2003	USGS/NAIP
2010	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2010	USGS/NAIP
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2017	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2017	USGS/NAIP















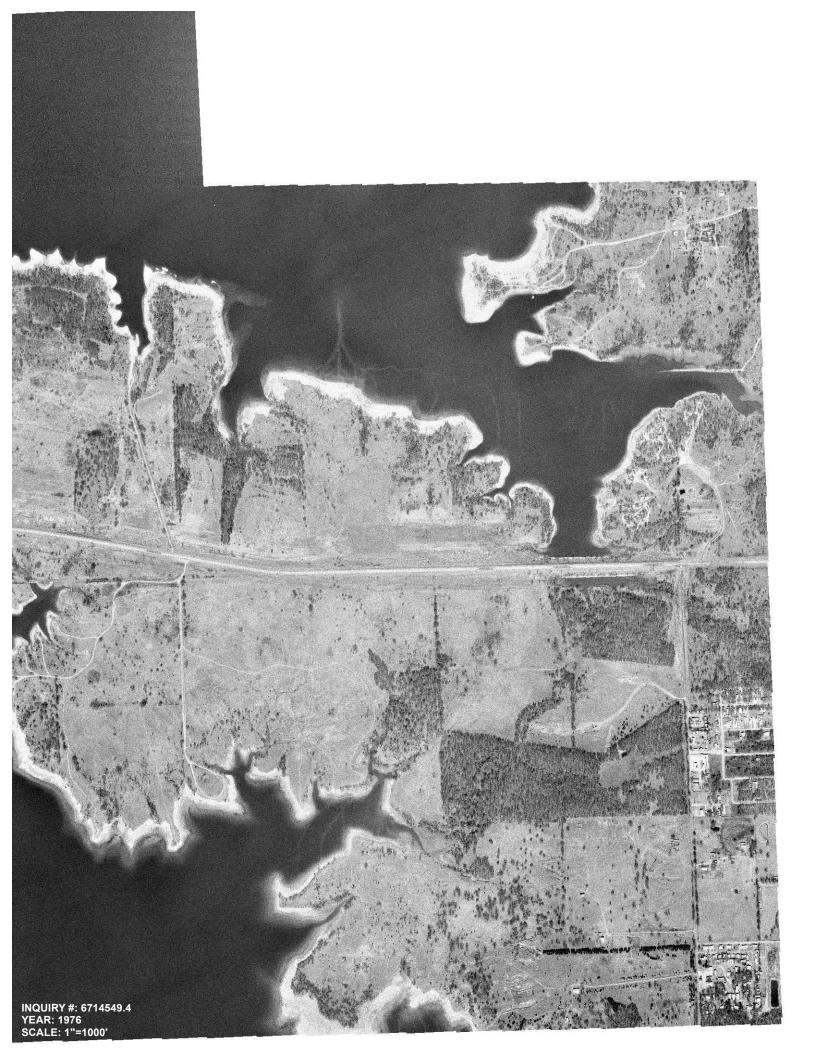






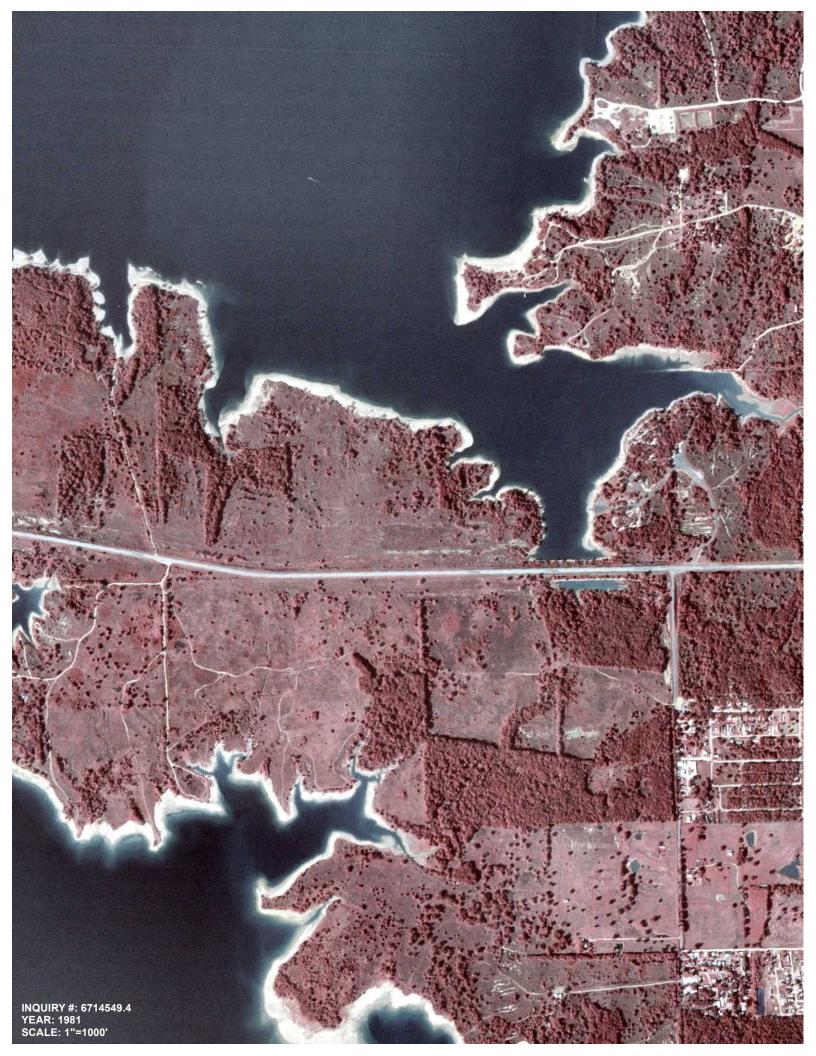


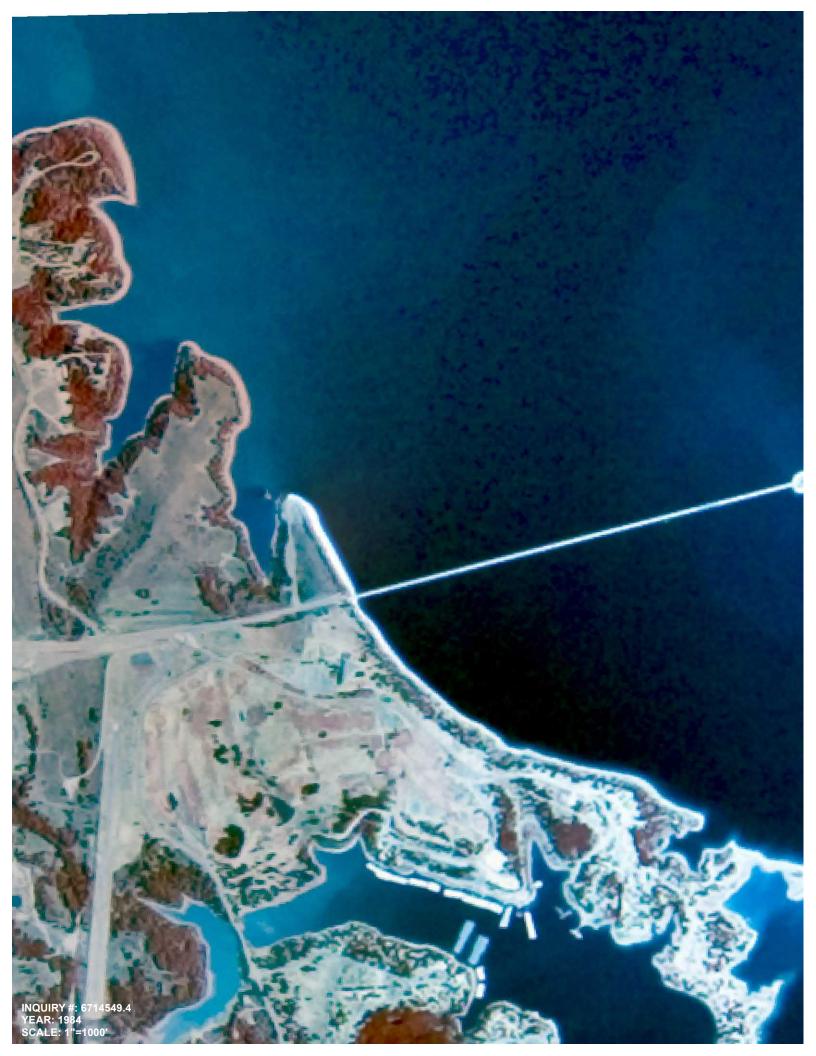


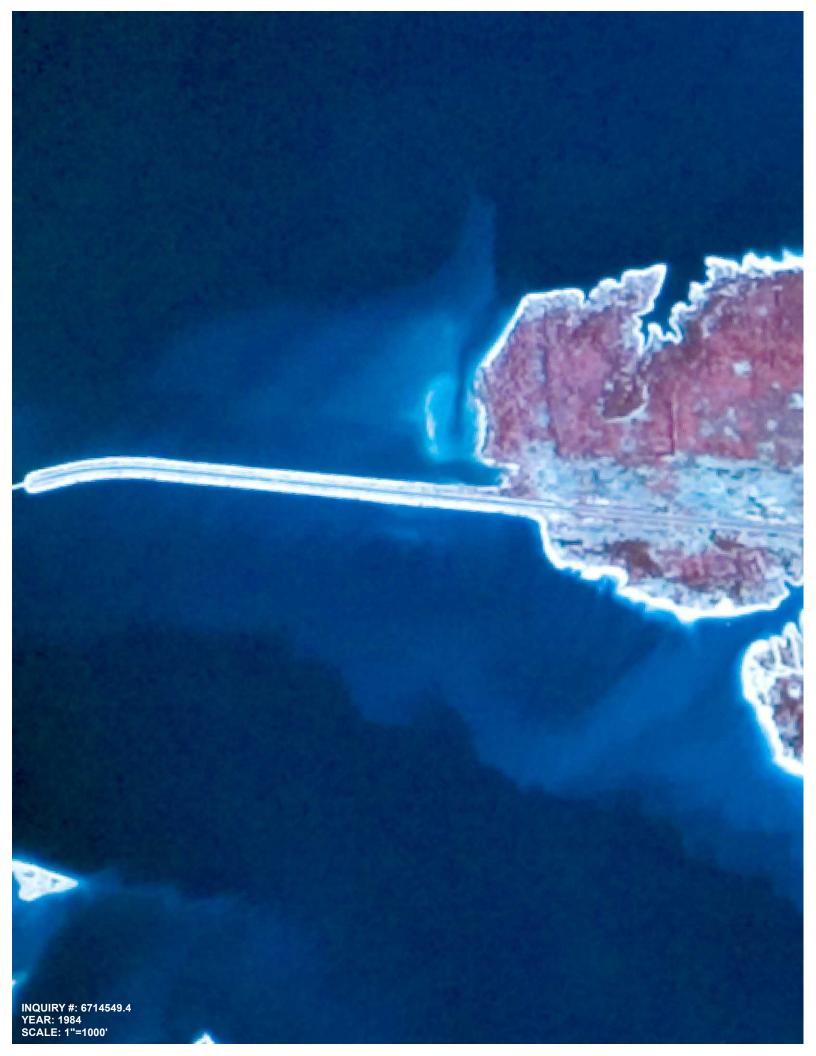




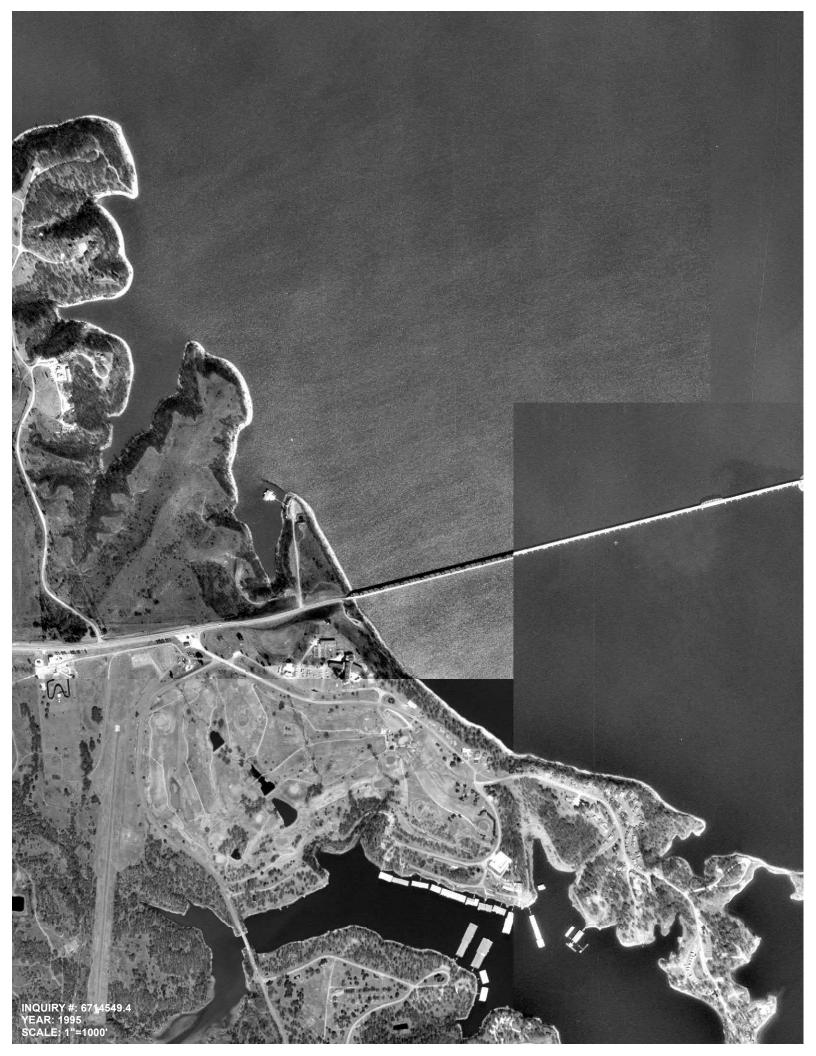


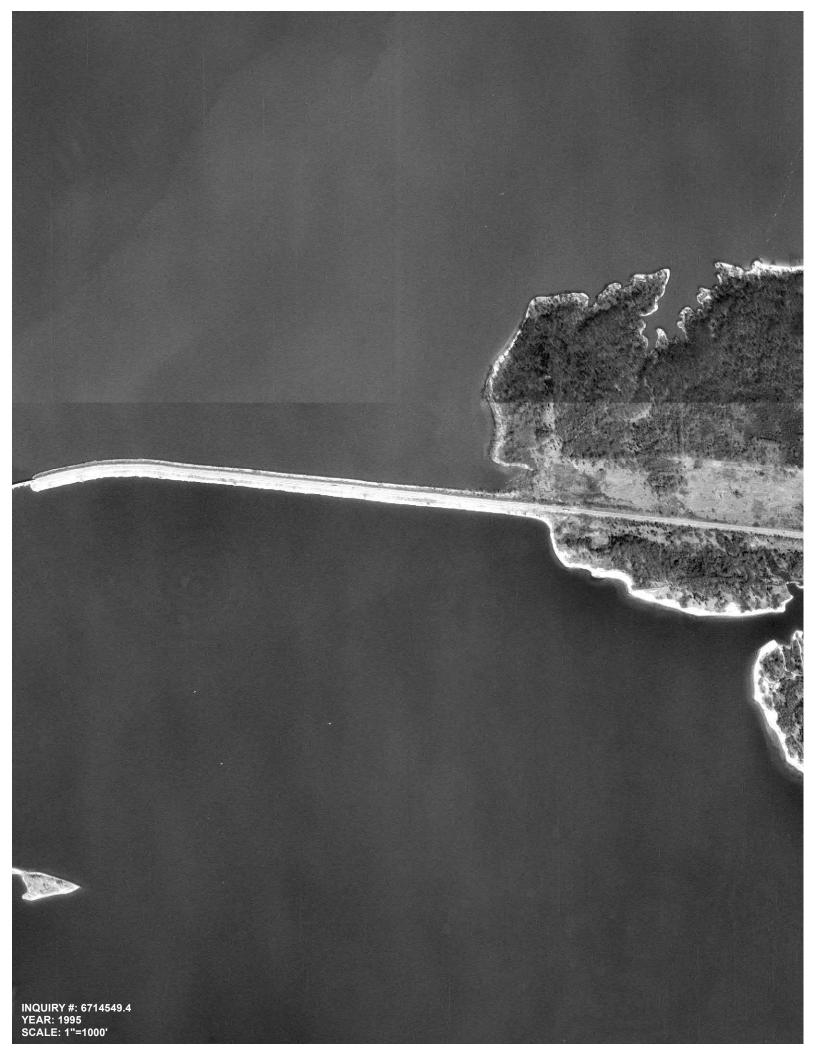




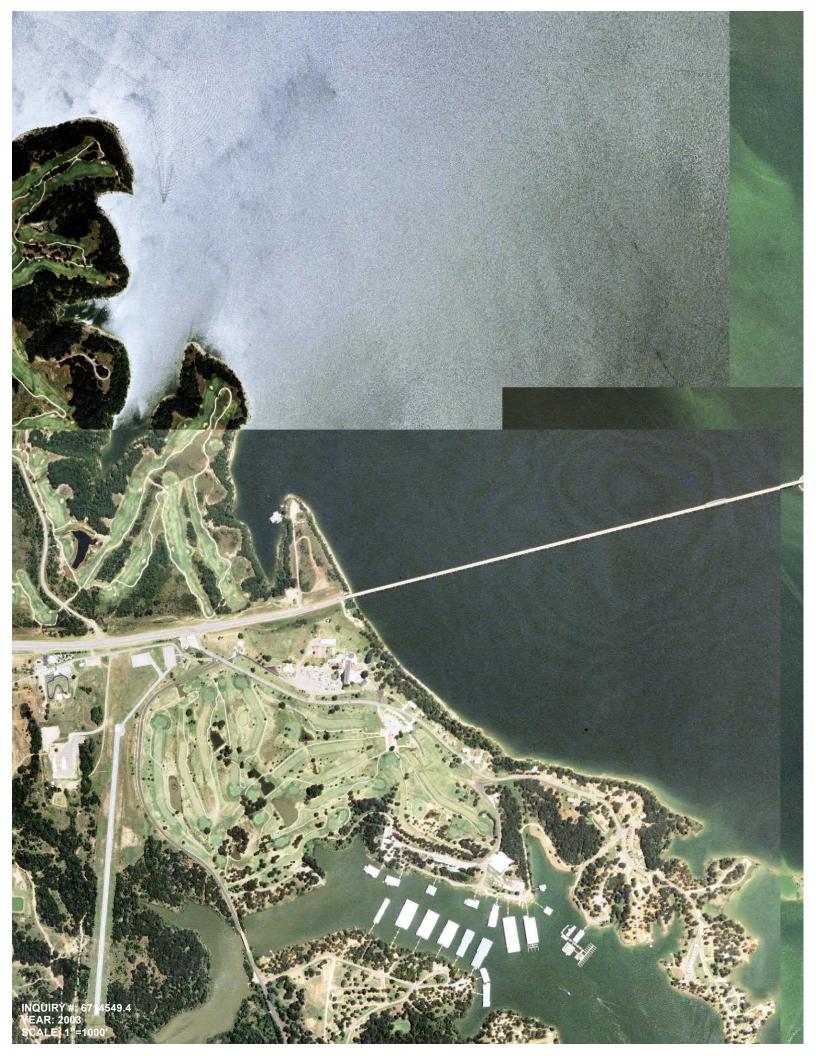


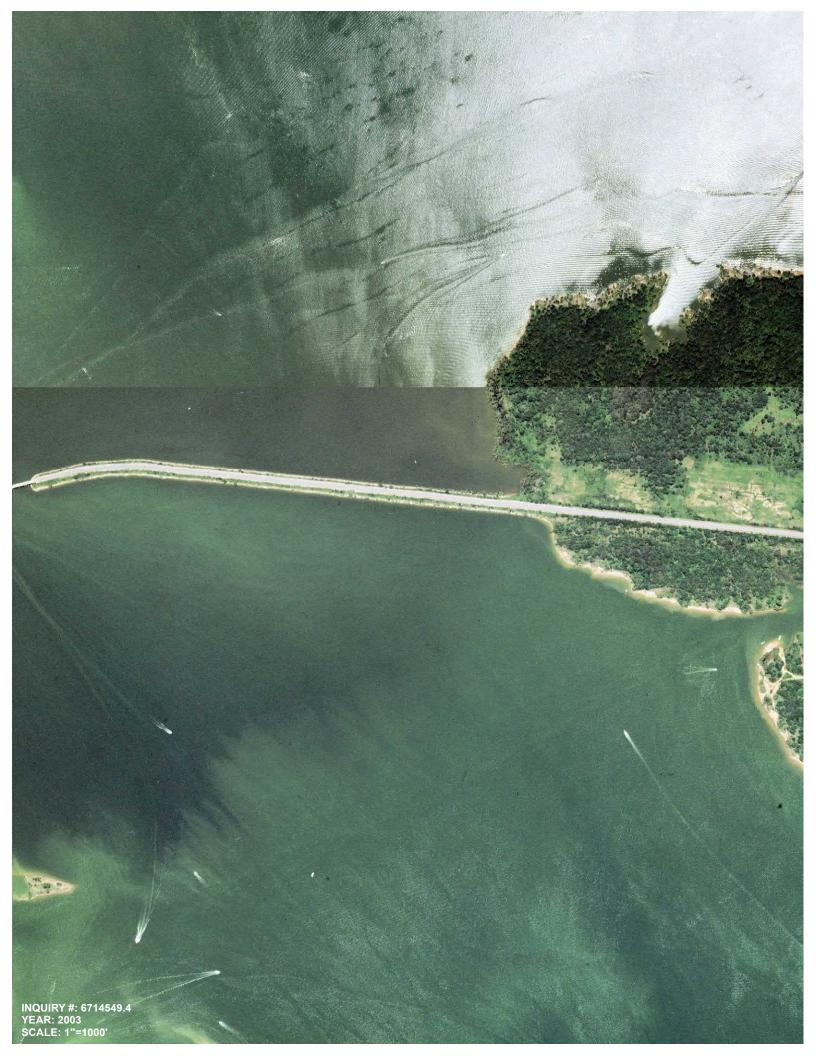




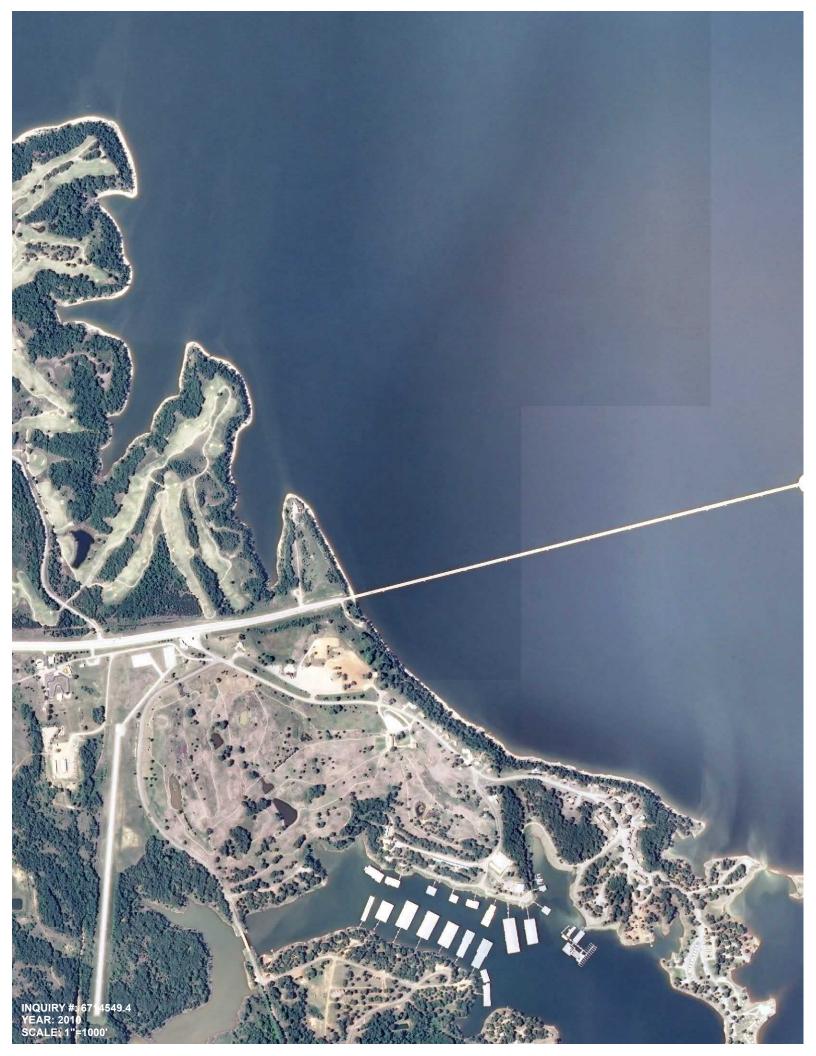


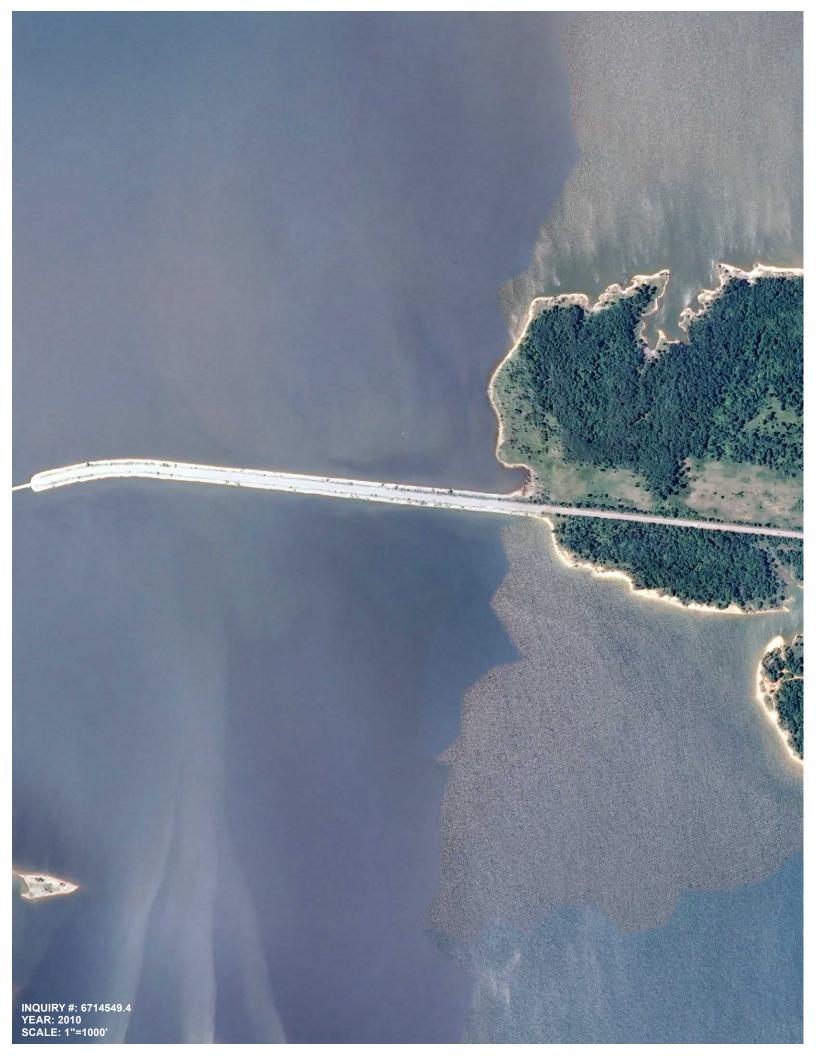


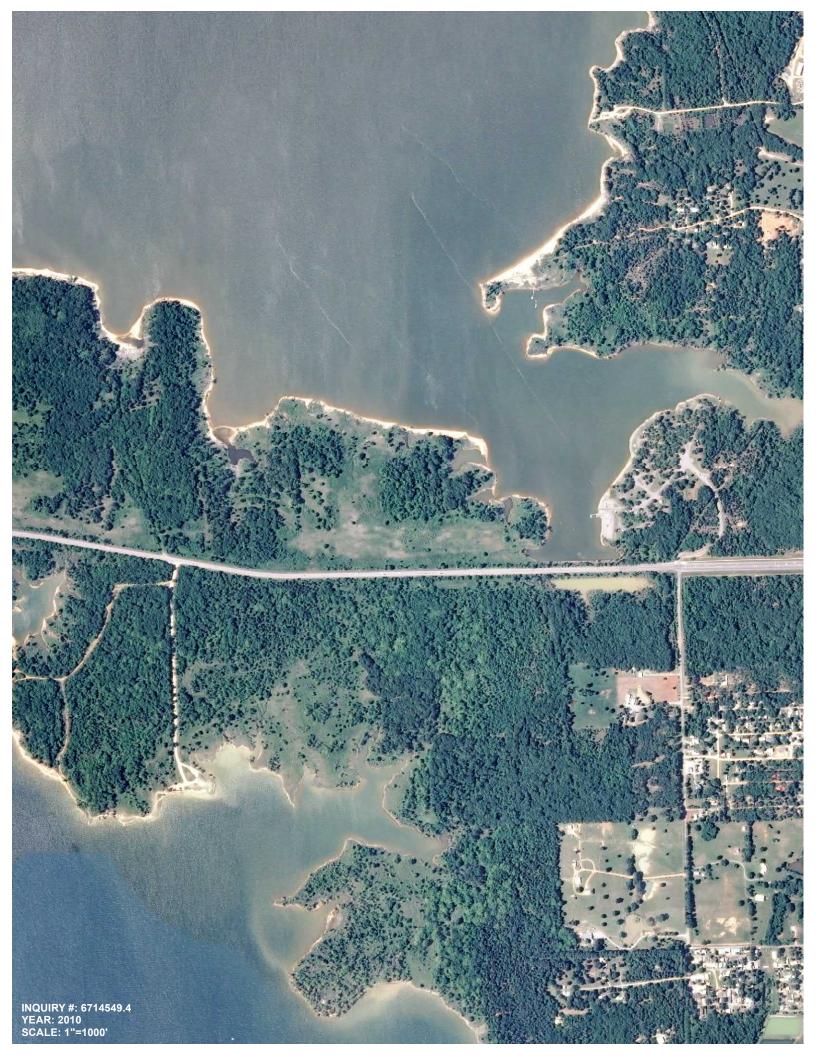


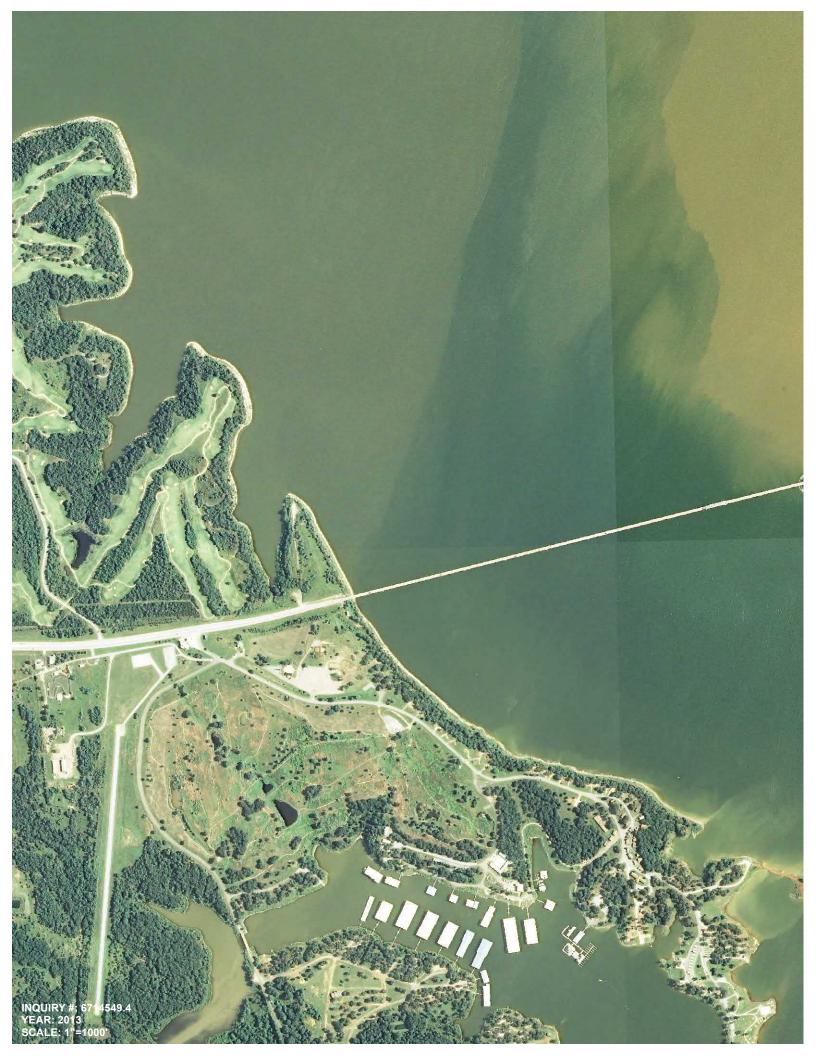


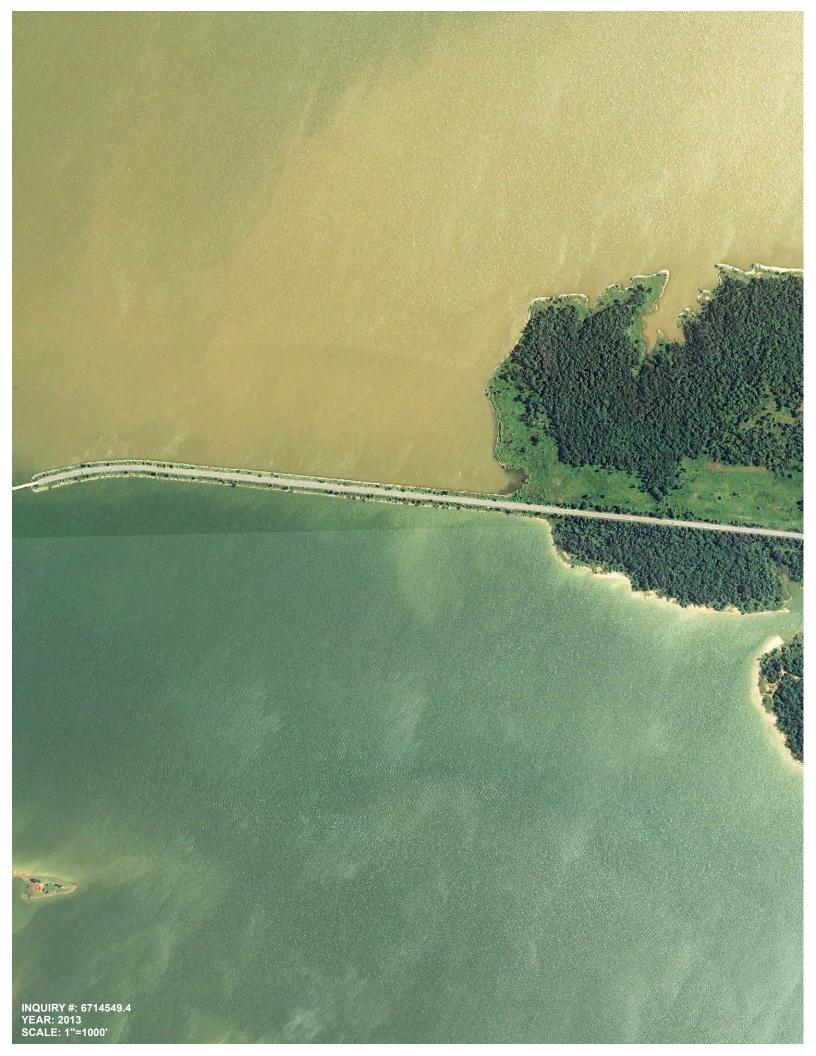




















US-70 Over Lake Texoma Roosevelt Bridge US-70, Bryan and Marshall Counties Mead, OK 73449

Inquiry Number: 6714549.1

October 21, 2021

EDR Historical Topo Map Report

with QuadMatch™



EDR Historical Topo Map Report

10/21/21

Site Name: Client Name:

US-70 Over Lake Texoma Roc US-70, Bryan and Marshall Co

Mead, OK 73449

EDR Inquiry # 6714549.1

Terracon

4701 North Stiles Avenue

Oklahoma City, OK 73105-0000

Contact: Victoria Jolly



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Terracon were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:	Coordinates:

P.O.# NA **Latitude**: 34 34° 0' 0" North

Project: 03207182 **Longitude:** -96.605833 -96° 36' 21" West

 UTM Zone:
 Zone 14 North

 UTM X Meters:
 721120.43

 UTM Y Meters:
 3764740.28

Elevation: 617.00' above sea level

Maps Provided:

2012, 2013

2012

1982

1967

1958

1901

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012, 2013 Source Sheets



Platter 2012 7.5-minute, 24000



Little City 2012 7.5-minute, 24000



Kingston South 2013 7.5-minute, 24000



Kingston North 2013 7.5-minute, 24000

1982 Source Sheets



Kingston South 1982 7.5-minute, 24000 Aerial Photo Revised 1976



Platter 1982 7.5-minute, 24000 Aerial Photo Revised 1976

1967 Source Sheets



Tishomingo SW 1967 7.5-minute, 24000 Aerial Photo Revised 1963



Little City 1967 7.5-minute, 24000 Aerial Photo Revised 1963



Kingston North 1967 7.5-minute, 24000 Aerial Photo Revised 1963

1958 Source Sheets



Denison Dam 1958 15-minute, 62500 Aerial Photo Revised 1956

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1901 Source Sheets

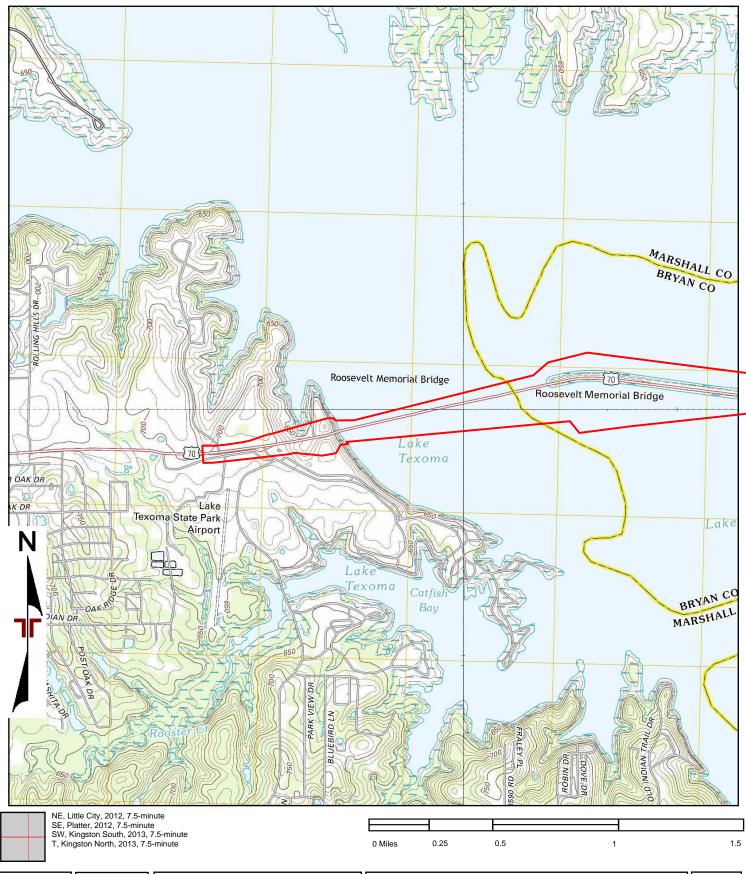


Tishomingo 1901 30-minute, 125000



Denison 1901 30-minute, 125000





Project Manager:	Project No.
Drawn by:	Scale:
Checked by:	File Name:
Approved by:	Date: 2012, 2013

Terracon

2012, 2013 TOPOGRAPHIC MAP



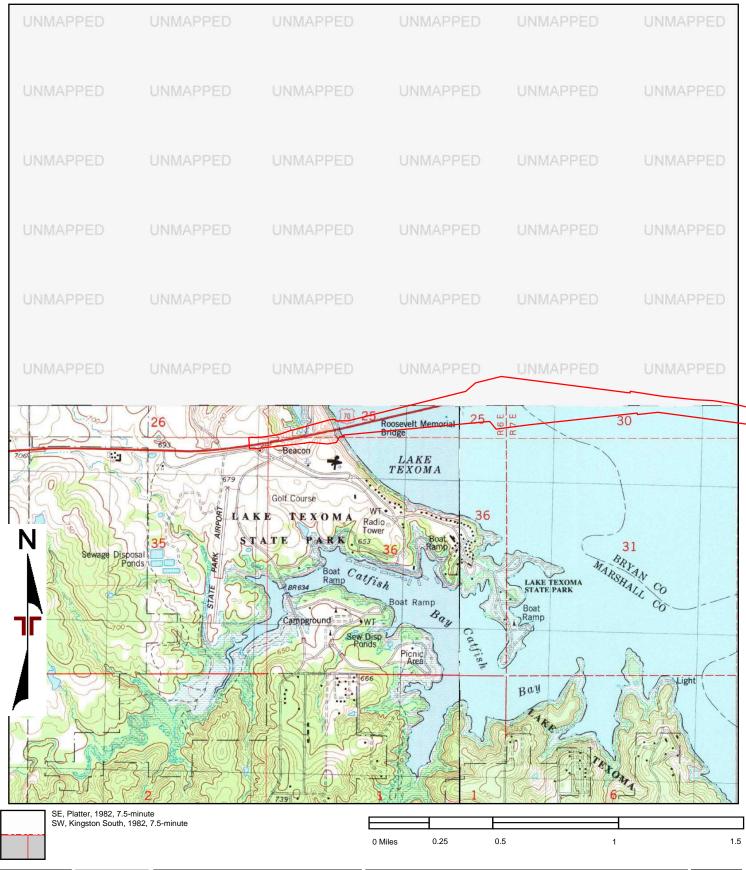


Project Manager:	Project No.
Drawn by:	Scale:
Checked by:	File Name:
Approved by:	Date: 2012



2012 TOPOGRAPHIC MAP	





Project Manager:	Project No.
Drawn by:	Scale:
Checked by:	File Name:
Approved by:	Date: 1982



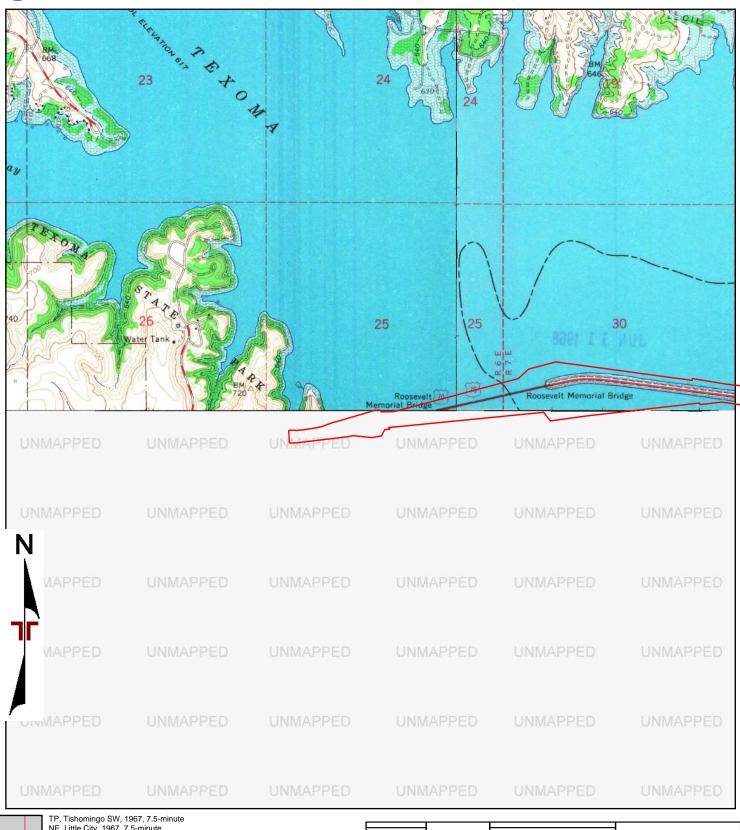
1982 TOPOGRAPHIC MAP	

page 7



UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED
				The last last	
UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED
UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED
UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED
UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED
UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED	UNMAPPED
TP, Platter, 1982, 7.5	32 5-minute		Boat Ramp Sew Disp (Ponds). Willow Spring Public Use Ar	Sew Disp Pond	
Project Manager: Project No. Drawn by: Scale:		racon		POGRAPHIC MAP	1.





TP, Tishomingo SW, 1967, 7.5-minute NE, Little City, 1967, 7.5-minute TP, Kingston North, 1967, 7.5-minute

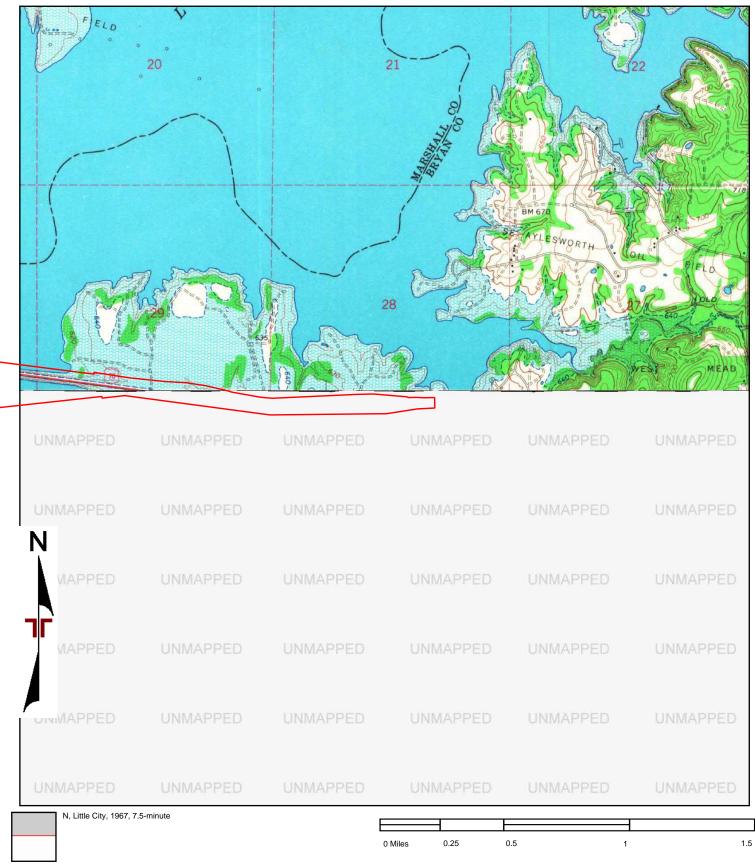
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Approved by:	Date: 1967



1967 TOPOGRAPHIC MAP	



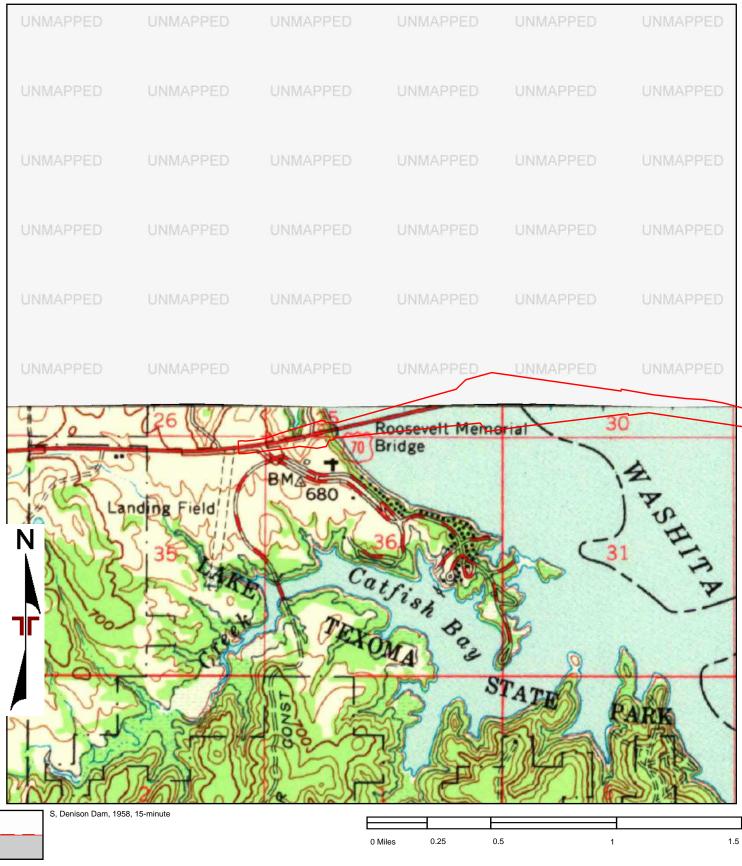


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Terracon

1967 TOPOGRAPHIC MAP	





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Approved by:	Date: 1958

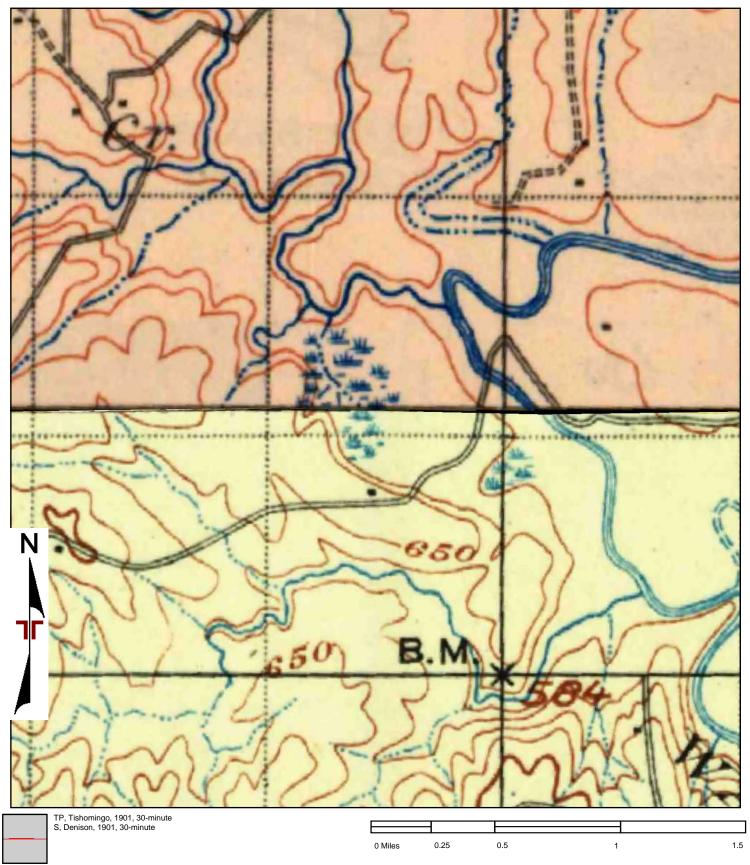


1958 TOPOGRAPHIC MAP		
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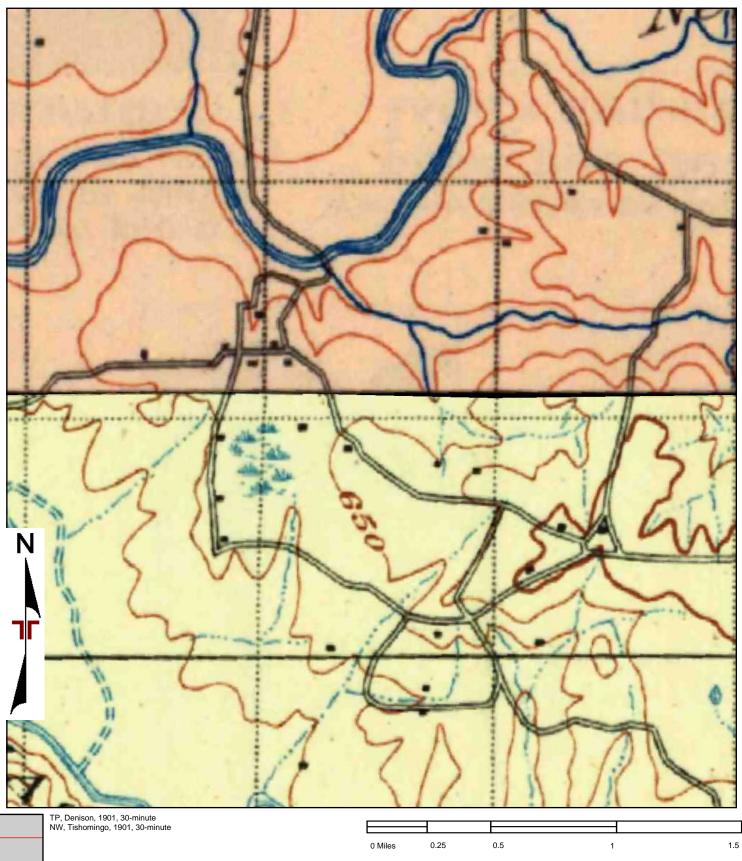
Date:

1901

Terracon

1901 TOPOGRAPHIC MAP





Project Manager:

Drawn by:

Checked by:

Approved by:

Date:

1901

Terracon

1901 TOPOGRAPHIC MAP

Attachment B - Scope of Services and Fee Estimates Page 16 of 32

Client/User Required Questionnaire



Person Completing Questionnaire	Name:	Phone:						
Site Name	Company:	Email:						
Site Name	JP 33873(04) US-70 Lake Texhoma							
Site Address	Marshal County, OK							
Point of Contact for Access	Name:	Phone: Email:						
Access Restrictions or Special Site	Company: NoYes (If yes, please explain)	Liliali.						
Requirements?								
Confidentiality Requirements?	NoYes (If yes, please explain)							
Current Site Owner	Name: Company:	Phone: Email:						
Current Site Operator	Name:	Phone:						
Current Site Operator	Company:	Email:						
Reasons for ESA								
(e.g., financing, acquisition, lease, etc.)								
Anticipated Future Site Use								
Relevant Documents?	Please provide Terracon copies of prior F	Phase I or II ESAs. Asbestos Surveys.						
	Environmental Permits or Audit documents,	-						
	Geotechnical Investigations, Site Surveys	, Diagrams or Maps, or other relevant						
	reports or documents.							
In order to qualify for one of the Landowner L	ASTM User Questionnaire iability Protections (LLPs) offered by the Small Busi	ness Relief and Brownfields Revitalization Act						
	the user must respond to the following question							
	gnificant data gaps, which may limit our ability to							
resulting in a determination that "all appropriated by the comparison of the control of the cont	ate inquiry" is not complete. This form represents a to the extent of their actual knowledge.	type of interview and as such, the user has an						
	ecords (or judicial records where appropriate)	identify any environmental liens filed or						
recorded against the property under fed	eral, tribal, state, or local law (40 CFR 312.25))?						
	and send Terracon a copy of the title records							
	ecords (or judicial records where appropriate and use restrictions, or institutional controls that							
, , ,	erty under federal, tribal, state, or local law (40							
	and send Terracon a copy of the title records							
	lge or experience related to the site or nearby							
	the current or former occupants of the site or							
nave specialized knowledge of the chen NoYes (If yes, explain below)	nicals and processes used by this type of busi	ness (40 CFR 312-28)?						
	ower purchase price because contamination	is known or believed to be present at the						
site (40 CFR 312.29)?								
NoYesNot applicable (If yes or Not applicable, explain below)								
· · · · · · · · · · · · · · · · · · ·	5) Are you aware of commonly known or reasonably ascertainable information about the site that would help the environmental professional to identify conditions indicative of releases or threatened releases (40 CFR 312.30)?							
NoYes (If yes, explain below)		eleases (40 OFN 312.30) !						
	ience related to the site, are there any obviou	is indicators that point to the presence or						
likely presence of contamination at the s								
NoYes (If yes, explain below)								
Comments or explanations:								

Please return this form with the signed authorization to proceed.

Proposal No. P03207182

		Land Us	se Windshield Surve	Y Terracon Proj. 03207182		
ODOT Project No.: County: Nearest City:	CI-2262 JP 33873(04) Marshall County Kingston/Mead		Parcel ID: Site Name: Site Address/Legals:	US-70 over Lake Texoma ~5.0 miles along US-70 between Kingston and Mead, OK		
LAND USE CHARAC	Agricultural Wooded Cleared Lot	X X	Oil/Gas Production (wellsi Industrial (describe) Commercial (describe) Government (describe): Utility (describe) Other (describe)	Filling station Poad ways		
EVIDENCE OF OIL OUSTS X X X X X X X X X X X X X X X X X X	Multi-Unit OR HAZARDOUS MATERIALS: Fill cap(s) (indicate #) 3 Y Vent pipe(s) (indicate #) 3 Y Pedestal (#, size, contents b At grade (#, size, contents b 2nd Containment? (Y/N)	(11 ports lent Pifes lelow)	Fuel Dispen Container/D	risers (indicate #) * Dis perseys Product Types (Gasoline) diesel/other: Orum Storage (interior/exterior - covered/uncovered) e, contents below)		
X Sanitar X Natural	(cublic) - cap/meter/valve box)(prival y waste (cublic) - cap/manhole)(prival gas (public) - cap/meter/valve box)(ceverhead/below grade) Transformers (pole/pad)	ate - septic t	/wellhouse) other: ank/vent/lagoon) other:	eratorb/u fuel tank (describe)		
EVIDENCE OF ENVIRONMENTAL INVESTIGATIONS/RELEASES: Monitoring wells (indicate #, locations) Remedial system (trailer/shed/extraction wells/public notice) other: Remedial system active? (Y/N) Other overt evidence of a release (ex. Dumping, burial pits, stained soil, stressed vegetation, etc.):						
Contact Name: Title/Organization: Phone Number: Comments/Additional Port Comments/Additional	of the lake, some reporters, and Caffi Manna Mart, a Gill	nsists of	of VS-70 Road ared vacanut maxina max	lway o Bridge over lake Texoma lots, forested land, portions of t. SIs containing gasoum and 4		

		Land Use Windshield St	urvey Terracon Proj. 03207182
ODOT Project No.: County: Nearest City:	CI-2262 JP 33873(04) Marshall County Kingston/Mead	Parcel ID: Site Name: Site Address/Legals	US-70 over Lake Texoma ~5.0 miles along US-70 between Kingston and Mead, OK
LAND USE CHARA	ACTERISTICS:		
	nt Land Agricultural Wooded Cleared Lot lential Single Family Multi-Unit	Oil/Gas Production (Industrial (describe) X Commercial (describ Government (describ Utility (describe) Other (describe)	
	OR HAZARDOUS MATERIALS: Still cap(s) (indicate #) Vent pipe(s) (indicate #) Pedestal (#, size, contents book at grade (#, siz	pelow)Contai	Pispensers (indicate #) Product Types (Gasoline/diesel/other: iner/Drum Storage (interior/exterior - covered/uncovered) e, size, contents below)
Sanita Natur	r (public - cap/meter/valve box)(priva ary waste (public - cap/manhole)(priv al gas (public - cap/meter/valve box) ric (overhead/below grade) Transformers (pole/pad)	/ate - septic tank/vent/lagoon) othe (private - propane tank) other:	p generatorb/u fuel tank (describe)
Monit Reme	vironmental investigations/ coring wells (indicate #, locations) edial system (trailer/shed/extraction w Remedial system active? (Y. r overt evidence of a release (ex. Dur	vells/public notice) other: //N)	ssed vegetation, etc.):
FIELD INTERVIEW NOTE: IF COOPE Contact Name: Title/Organization: Phone Number: Comments/Addition	RATIVE, CONTACT MAY ASSIST IN	N COMPLETION ABOVE CHECKL	IST (INTERVIEWER'S DISCRETION)

			Land Us	se Windshield Su	ırvey		Terraco	n Proj. 03207182
ODOT Projec	t No.:	CI-2262 JP 33873(04)		Parcel ID:				
County:		Marshall County		Site Name:		US-70 over La	ake Texoma	
Nearest City:		Kingston/Mead		Site Address/Legals:		~5.0 miles alo	ng US-70 between	en Kingston
						and Mead, Ok		
LAND USE C	HARACTER	ISTICS:						
	Vacant Land	l .		Oil/Gas Production (\	wellsite	/tank battery); oth	ner:	
		_Agricultural		Industrial (describe)				
		Wooded		Commercial (describe				
		Cleared Lot	ж	Government (describ	oe):	Roadway	· Public co	ampgrounds.
	Residential	=:		Utility (describe).		Boatla	unch	
		Single Family		Other (describe)				
		Multi-Unit		_	-			
EVIDENCE O	FOIL OR H	AZARDOUS MATERIALS:						
USTs	NIA	Fill cap(s) (indicate #)		Fuel Di	ispense	ers (indicate #)		
	1	Vent pipe(s) (indicate #)				Product Types (0	Gasoline/diesel/othe	er:)
ASTs		Pedestal (#, size, contents l	pelow)	Contair	ner/Dru	m Storage (interi	or/exterior - covere	d/uncovered)
		At grade (#, size, contents t	elow)	(#, type	e, size,	contents below)		,
i i		2nd Containment? (Y/N)		Other:		•		
		-		}.				
UTILITIES:								
X		c - cap/meter/valve box)(priva				-		
X	-	ste (public - cap/manhole)(priv			r:			
X	_	(public - cap/meter/valve box)	(private - pro	pane tank) other:				
×	Electric (ove	erhead/below grade)						
		_Transformers (pole/pad)		backup	o genera	ator	b/u fuel	tank (describe)
A 2004 CO.	F ENVIRON	MENTAL INVESTIGATIONS	RELEASES	 :				
MA	Monitoring w	rells (indicate #, locations)						
	Remedial sy	stem (trailer/shed/extraction v	-	otice) other:	_			
1 1 .		Remedial system active? (Y						
1	Other overt	evidence of a release (ex. Du	mping, burial	plts, stained soil, stres	ssed ve	getation, etc.):		
FIELD INTER	VIEW:							
NOTE: IF CO	OPERATIVE	E, CONTACT MAY ASSIST IN	COMPLETI	ON ABOVE CHECKLI	IST (IN	TERVIEWER'S D	ISCRETION)	
Contact Name					,		ŕ	
Title/Organiza	tion:			-				
Phone Number				-				
Comments/Ad	Iditional Deta	ails:		-				

			Land Us	se Windshi	eld Surve	у	Terracon Proj. 0320718
							•
ODOT Projec	nt No.	CI 2062 ID 22072/04\		Parcel ID:			
County:	CL NO	CI-2262 JP 33873(04) Marshall County		Site Name:		US-70 over La	ake Tevoma
Nearest City:				Site Address/	l egale:		ong US-70 between Kingston
INCAICSI CILY.	•	Kingston/Mead		Sile Address/	Legais.	and Mead, Ok	
						and Mead, Or	
LAND USE	CHARACTER	ISTICS:					
	Vacant Land	I		Oil/Gas Produ	action (wellsi	ite/tank battery); oth	ner:
	-	Agricultural		- Industrial (de:			
		Wooded		Commercial (-		
		Cleared Lot		Government	(describe):		
X	Residential	- .		Utility (descril			
	X	Single Family		Other (descri	oe)		
		Multi-Unit		-	•		
		-					
EVIDENCE (OF OIL OR H	AZARDOUS MATERIALS:					
USTs	MA	Fill cap(s) (indicate #)		·	Fuel Dispen	sers (indicate #)	
		_Vent pipe(s) (indicate #)				Product Types (C	Gasoline/diesel/other:)
ASTs		_Pedestal (#, size, contents l	below)		Container/D	rum Storage (interi	or/exterior - covered/uncovered)
		At grade (#, size, contents t	pelow)		(#, type, size	e, contents below)	
		2nd Containment? (Y/N)		Other:			
				12			
UTILITIES:							
_ X	-	c - cap/meter/valve box)(priva				-	
<u> </u>	-	ste (public - cap/manhole)(pri					
X	-	(public - cap/meter/valve box))(private - pro	pane tank) oth	er:	-	
У.	_Electric (ove	erhead/below grade)					
		Transformers (pole/pad)			backup gene	erator	b/u fuel tank (describe)
EVIDENCE O	OF ENVIRON	MENTAL INVESTIGATIONS	/RELEASES:	:			
MA		rells (indicate #, locations)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•			
	_	stem (trailer/shed/extraction \	wells/public n	otice) other:			
1	_,,	Remedial system active? (Y					
١ ١	Other overt	evidence of a release (ex. Du		pits, stained so	oil. stressed v	vegetation, etc.):	
		(0.0000		p.,, .,	,	regetation, etc.,	
FIELD INTER	RVIEW:						
NOTE: IF CO	OOPERATIVE	E, CONTACT MAY ASSIST IN	N COMPLETI	ON ABOVE C	HECKLIST (I	NTERVIEWER'S D	ISCRETION)
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Title/Organiz	ation:			=			
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ODOT Projec	et No.:	CI-2262 JP 33873(04)		Parcel ID:				
County:		Marshall County		Site Name:		US-70 over	ake Texor	na
Nearest City:		Kingston/Mead		Site Address/	l egals:	(between Kingston
		Mildoninian			9	and Mead, C		DOM OUT TAINGUID
LAND USE O	CHARACTER	ISTICS:						
)	Vacant Land			Oil/Gas Produ	uction (wells	ite/tank battery); c	other:	
- 3	-	Agricultural .		Industrial (de:		,,,	_	
		Wooded		Commercial (•	0		
		Cleared Lot		Government	-			
	Residential	_ Oldarda Edi		Utility (descril		7		
	- Kesideriliai	Single Family		Other (descri	-	C-		
		Single Family Multi-Unit		_Outer (descri	Je)	8		
						-		
		AZARDOUS MATERIALS:						
USTs	MA	Fill cap(s) (indicate #)			Fuel Disper	nsers (indicate #)		
		Vent pipe(s) (indicate #)		ā		Product Types	-	· ·
ASTs		Pedestal (#, size, contents b						covered/uncovered)
		At grade (#, size, contents b	elow)		(#, type, siz	e, contents below)	
)	2nd Containment? (Y/N)		Other:				
UTILITIES:								
MA		c - cap/meter/valve box)(priva				_		
		te (public - cap/manhole)(priv	•	-				
\	•	(public - cap/meter/valve box)	(private - pro	pane tank) oth	er:	_		
1	Electric (ove	erhead/below grade)						
		_Transformers (pole/pad)			backup gen	erator _		o/u fuel tank (describe)
EVIDENCE C	OF ENVIRON	MENTAL INVESTIGATIONS	RELEASES:					
NIA	Monitoring w	rells (indicate #, locations)						
1	Remedial sy	stem (trailer/shed/extraction v	vells/public no	otice) other:				
1		Remedial system active? (Y		,				
A.	Other overt	evidence of a release (ex. Dur	•	nits, stained so	il. stressed	vegetation, etc.):		
		The office of a foldado (on Dai	inpinig, outlier	pito, otalitoa ot	, ou ocoou	vogotation, oto.j.	-	
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Phone Numb	er:			.				
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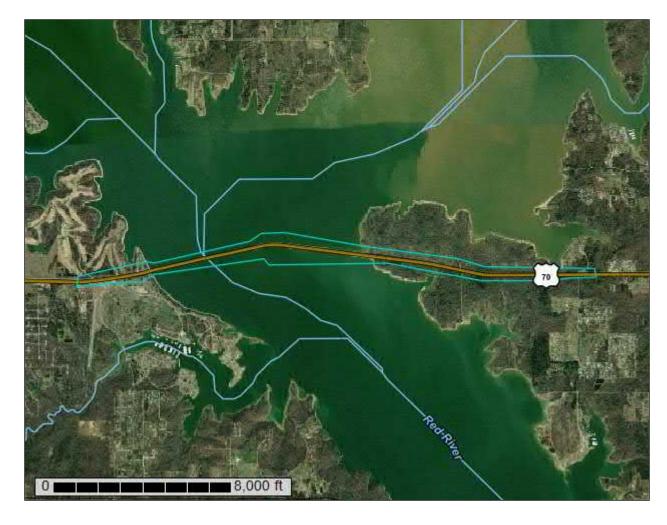
			Land Us	se Windshie	eld Surve	у	Terracon Proj. 03207182
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ODOT Project	at blo .	CI 2262 ID 22972/04)		Darred ID:			
ODOT Project County:	CI NO.:	CI-2262 JP 33873(04) Marshall County		Parcel ID: Site Name:		US-70 over L	ake Tevoma
Nearest City:		Kingston/Mead	ć.	Site Address/	eusis.		ong US-70 between Kingston
Trourout only.	•	INIGSTOTIVICAC		Oilo / (darooo/	Loguio.	and Mead, O	
LAND USE	CHARACTER	ISTICS:					
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	X	Wooded		Commercial (
		_Cleared Lot		Government (-		
	Residential			_Utility (describ	-	0	
		_Single Family		Other (describ	e)		
		Multi-Unit				0	
EMBENCE (DE OIL OR H	AZARDOUS MATERIALS:					
USTs	171 /-	Fill cap(s) (indicate #)			Fuel Dienen	sers (indicate #)	
0013	1	Vent pipe(s) (indicate #)			i dei Disperi		Gasoline/diesel/other:)
ASTs		Pedestal (#, size, contents l	helow)		Container/D		rior/exterior - covered/uncovered)
A013	-+	At grade (#, size, contents t	-			e, contents below)	•
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	-			0 1101.			
UTILITIES:							
MA	Water (public	c - cap/meter/valve box)(priva	ate - wellhead	l/wellhouse) oth	er:		
1	-	ste (public - cap/manhole)(priv					
	Natural gas	(public - cap/meter/valve box)	(private - pro	pane tank) othe	er:		_
1	Electric (ove	erhead/below grade)					
		_Transformers (pole/pad)			backup gene	erator	b/u fuel tank (describe)
77 024		MENTAL INVESTIGATIONS	RELEASES:	•			
MIA	-	rells (indicate #, locations)		7			
1	Remedial sy	stem (trailer/shed/extraction v		otice) other:		7	
		Remedial system active? (Y	•				
1	Other overt	evidence of a release (ex. Du	mping, burial	pits, stained so	il, stressed v	vegetation, etc.):	
FIELD INTER	2)/(E)A/.						
		E, CONTACT MAY ASSIST IN	I COMPLETE	ON ABOVE CH	IECKI IST (I	NTERVIEWER'S	DISCRETION)
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			Land U	Jse Windshield Surve	Эу	Terracon Proj. 03207182
ODOT Proje	ect No.:	CI-2262 JP 33873(04)		Parcel ID:		
County:		Marshall County		Site Name:	US-70 over Lake	e Texoma
Nearest City	<i>r</i> :	Kingston/Mead		Site Address/Legals:	~5.0 miles along	US-70 between Kingston
				-	and Mead, OK	-
LAND USE	CHARACTE	RISTICS:				
	_Vacant La	nd		Oil/Gas Production (wells	site/tank battery); other:	
		Agricultural		Industrial (describe)		
		Wooded		Commercial (describe)		
		Cleared Lot		Government (describe):		
	Residentia	<u>.</u>		Utility (describe)		
		Single Family	K	Other (describe)	Lake Texa	ma
	-	Multi-Unit				
		HAZARDOUS MATERIALS:				
USTs	MIA			Fuel Disper	nsers (indicate #)	
	1	Vent pipe(s) (indicate #)			Product Types (Gas	soline/diesel/other:)
ASTs		Pedestal (#, size, contents b	elow)	Container/[Drum Storage (interior/	exterior - covered/uncovered)
		At grade (#, size, contents b	elow)	(#, type, siz	ze, contents below)	
		2nd Containment? (Y/N)		Other:		
UTILITIES:						
MA	-	blic - cap/meter/valve box)(prival		· ·		
-	_	/aste (public - cap/manhole)(priv			· ·	
	_	s (public - cap/meter/valve box)((private - pr	opane tank) other:		
	_Electric (c	overhead/below grade)				
		Transformers (pole/pad)		backup ger	nerator	b/u fuel tank (describe)
		NMENTAL INVESTIGATIONS/	RELEASES	> :		
NIE	_	wells (indicate #, locations)				
- 1	Remedial	system (trailer/shed/extraction w	/ells/public /	notice) other:	(<u> </u>	
		Remedial system active? (Y/	-			
1	Other over	rt evidence of a release (ex. Dun	nping, buria	ıl pits, stained soil, stressed	vegetation, etc.):	22
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FIELD INTE		YE CONTACT MAY ACCIOT IN	· COMPLET	FIGH ABOVE CHECKINET (/INTERVIEWEDIS DIS	ODETION)
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Comments/A	Additional De	stails: VOLK LEX	oma	10 N . I OF	WS-70 14	sad way



VRCS

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants Custom Soil Resource Report for Bryan County, Oklahoma, and Marshall County, Oklahoma



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2 053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

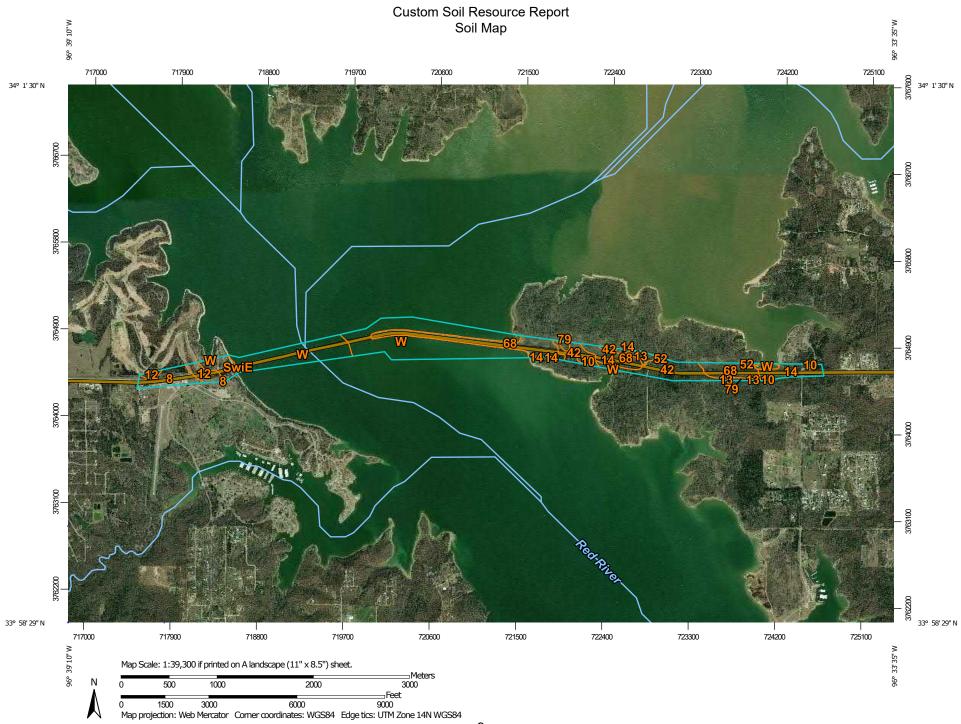
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

C Landfill
≜ Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

+ Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

OLIVE

Spoil Area

Stony Spot



Very Stony Spot



Wet Spot Other

Δ

Special Line Features

Water Features

Streams and Canals

Transportation

+++ Rails

Interstate Highways

✓ US Routes
✓ Major Roads

Local Roads

Background

90

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

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

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Bryan County, Oklahoma Survey Area Data: Version 17, Aug 26, 2021

Soil Survey Area: Marshall County, Oklahoma Survey Area Data: Version 17, Aug 27, 2021

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 17, 2015—Nov 29, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
10	Bernow fine sandy loam, 3 to 8 percent slopes, severely eroded	3.9	0.9%
13	Boxville fine sandy loam, 1 to 3 percent slopes	6.3	1.5%
14	Boxville fine sandy loam, 3 to 8 percent slopes	25.5	6.2%
42	Karma fine sandy loam, 1 to 3 percent slopes	46.9	11.4%
52	Larton loamy fine sand, 3 to 5 percent slopes	0.5	0.1%
68	Pits	81.6	19.8%
79	Woodson silt loam, 0 to 1 percent slopes	3.9	0.9%
W	Water	133.3	32.4%
Subtotals for Soil Survey A	rea	301.8	73.3%
Totals for Area of Interest		411.5	100.0%

Map Unit Symbol Map Unit Name		Acres in AOI	Percent of AOI
8	Durant clay loam, 1 to 5 percent slopes, eroded	22.6	5.5%
12	Ferris-Tarrant complex, 5 to 12 percent slopes	13.4	3.3%
SwiE	Swink very cobbly clay loam, 2 to 15 percent slopes		3.4%
W	Water	59.7	14.5%
Subtotals for Soil Survey Are	ea .	109.7	26.7%
Totals for Area of Interest		411.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some

observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The

pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Bryan County, Oklahoma

10—Bernow fine sandy loam, 3 to 8 percent slopes, severely eroded

Map Unit Setting

National map unit symbol: dt8s Elevation: 300 to 1,000 feet

Mean annual precipitation: 42 to 48 inches Mean annual air temperature: 61 to 62 degrees F

Frost-free period: 220 to 230 days

Farmland classification: Not prime farmland

Map Unit Composition

Bernow, severely eroded, and similar soils: 75 percent

Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bernow, Severely Eroded

Setting

Landform: Paleoterraces

Landform position (three-dimensional): Riser

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Sandy and loamy alluvium

Typical profile

A - 0 to 4 inches: fine sandy loam
Bt - 4 to 37 inches: sandy clay loam

Bt and E' - 37 to 72 inches: sandy clay loam

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: B

Ecological site: R087BY003TX - Sandy Loam

Hydric soil rating: No

Minor Components

Bosville, severely eroded

Percent of map unit: 10 percent Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R087BY003TX - Sandy Loam

Hydric soil rating: No

Gullied land

Percent of map unit: 10 percent Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope Microfeatures of landform position: Gullies

Down-slope shape: Linear Across-slope shape: Concave

Hydric soil rating: No

Karma, severely eroded

Percent of map unit: 5 percent Landform: Paleoterraces

Landform position (three-dimensional): Riser

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R118BY862OK - Eroded Loamy Savannah - Legacy

Hydric soil rating: No

13—Boxville fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: dt8w Elevation: 300 to 1,000 feet

Mean annual precipitation: 42 to 48 inches Mean annual air temperature: 61 to 62 degrees F

Frost-free period: 220 to 230 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Boxville and similar soils: 90 percent Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Boxville

Setting

Landform: Stream terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Concave

Parent material: Loamy and/or clayey alluvium

Typical profile

Ap - 0 to 9 inches: fine sandy loam

Bt - 9 to 19 inches: clay Btss - 19 to 35 inches: clay

Btk - 35 to 57 inches: clay BCk - 57 to 70 inches: silty clay

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Ecological site: R087BY002TX - Claypan Savannah

Hydric soil rating: No

Minor Components

Bosville

Percent of map unit: 5 percent Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R087BY003TX - Sandy Loam

Hydric soil rating: No

Karma

Percent of map unit: 5 percent Landform: Paleoterraces

Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R118BY004OK - Loamy Terrace

Hydric soil rating: No

14—Boxville fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: dt8x Elevation: 300 to 1,000 feet

Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 61 to 62 degrees F

Frost-free period: 220 to 230 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Boxville and similar soils: 90 percent Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Boxville

Setting

Landform: Stream terraces

Landform position (three-dimensional): Riser

Down-slope shape: Linear Across-slope shape: Concave

Parent material: Loamy and/or clayey alluvium

Typical profile

Ap - 0 to 8 inches: fine sandy loam

Bt - 8 to 19 inches: clay Btss - 19 to 35 inches: clay Btk - 35 to 57 inches: clay BCk - 57 to 70 inches: silty clay

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: R087BY002TX - Claypan Savannah

Hydric soil rating: No

Minor Components

Bernow

Percent of map unit: 5 percent Landform: Paleoterraces

Landform position (three-dimensional): Riser

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R087BY003TX - Sandy Loam

Hydric soil rating: No

Karma

Percent of map unit: 3 percent Landform: Paleoterraces

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Convex

Ecological site: R118BY004OK - Loamy Terrace

Hydric soil rating: No

Bosville

Percent of map unit: 2 percent Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R087BY003TX - Sandy Loam

Hydric soil rating: No

42—Karma fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: dt9x Elevation: 300 to 1.000 feet

Mean annual precipitation: 42 to 48 inches Mean annual air temperature: 61 to 62 degrees F

Frost-free period: 220 to 230 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Karma and similar soils: 90 percent Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Karma

Setting

Landform: Paleoterraces

Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Convex Parent material: Loamy alluvium

Typical profile

Ap - 0 to 11 inches: fine sandy loam

Bt1 - 11 to 30 inches: clay loam

Bt2 - 30 to 52 inches: sandy clay loam

Bt3 - 52 to 65 inches: fine sandy loam

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Ecological site: R118BY004OK - Loamy Terrace

Hydric soil rating: No

Minor Components

Okay

Percent of map unit: 10 percent

Landform: Paleoterraces

Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Linear

Ecological site: R112XY060OK - Loamy prairie (Southeast) PE 62-80

Hydric soil rating: No

52—Larton loamy fine sand, 3 to 5 percent slopes

Map Unit Setting

National map unit symbol: dtb8 Elevation: 300 to 1,000 feet

Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 61 to 62 degrees F

Frost-free period: 220 to 230 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Larton and similar soils: 95 percent Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Larton

Setting

Landform: Paleoterraces

Landform position (three-dimensional): Riser

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy and sandy alluvium and/or eolian deposits

Typical profile

A - 0 to 11 inches: loamy fine sand E - 11 to 27 inches: loamy fine sand Bt1 - 27 to 62 inches: fine sandy loam Bt2 - 62 to 75 inches: sandy clay loam

Properties and qualities

Slope: 3 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: A

Ecological site: R118BY007OK - Sand Dune Upland

Hydric soil rating: No

Minor Components

Eufaula

Percent of map unit: 5 percent

Landform: Dunes on dune fields on terraces

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R084BY018OK - Deep sand savannah PE 44-64

Hydric soil rating: No

68—Pits

Map Unit Setting

National map unit symbol: dtbt Elevation: 300 to 1.000 feet

Mean annual precipitation: 42 to 48 inches Mean annual air temperature: 61 to 62 degrees F

Frost-free period: 220 to 230 days

Farmland classification: Not prime farmland

Map Unit Composition

Pits: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pits

Setting

Parent material: Mine spoil or earthy fill

Typical profile

A - 0 to 60 inches: variable

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

79—Woodson silt loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: dtc6 Elevation: 300 to 1,000 feet

Mean annual precipitation: 42 to 48 inches Mean annual air temperature: 61 to 62 degrees F

Frost-free period: 220 to 230 days

Farmland classification: Not prime farmland

Map Unit Composition

Woodson and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Woodson

Setting

Landform: Paleoterraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Silty and/or clayey alluvium

Typical profile

Ap - 0 to 9 inches: silt loam Bt1 - 9 to 25 inches: clay Bt2 - 25 to 39 inches: clay Bty - 39 to 50 inches: clay Btky - 50 to 80 inches: clay

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low

(0.00 to 0.06 in/hr)

Depth to water table: About 2 to 12 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: D

Ecological site: R112XY010OK - Claypan prairie PE 62-80

Hydric soil rating: No

Minor Components

Dennis

Percent of map unit: 4 percent Landform: Hillslopes on hills

Landform position (two-dimensional): Summit

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R112XY060OK - Loamy prairie (Southeast) PE 62-80

Hydric soil rating: No

Parsons

Percent of map unit: 3 percent Landform: Paleoterraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Convex

Ecological site: R112XY010OK - Claypan prairie PE 62-80

Hydric soil rating: No

Durant

Percent of map unit: 3 percent Landform: Plains on paleoterraces

Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R085XY056OK - Loamy Upland 38-42 PZ

Hydric soil rating: No

W—Water

Map Unit Setting

National map unit symbol: dtcb Elevation: 300 to 1,000 feet

Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 61 to 62 degrees F

Frost-free period: 220 to 230 days

Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Setting

Landform: Valleys

Typical profile

W - 0 to 80 inches: water

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

Marshall County, Oklahoma

8—Durant clay loam, 1 to 5 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2wn9h Elevation: 500 to 1,200 feet

Mean annual precipitation: 37 to 45 inches
Mean annual air temperature: 60 to 64 degrees F

Frost-free period: 210 to 230 days

Farmland classification: Not prime farmland

Map Unit Composition

Durant, eroded, and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Durant, Eroded

Setting

Landform: Ridges

Landform position (two-dimensional): Shoulder, backslope Landform position (three-dimensional): Interfluve, side slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Clayey residuum weathered from shale and/or claystone

Typical profile

Ap - 0 to 5 inches: clay loam BA - 5 to 10 inches: clay loam Bt1 - 10 to 55 inches: clay Bt2 - 55 to 80 inches: clay

Properties and qualities

Slope: 1 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low

(0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 2 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 6.0

Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: D

Ecological site: R085XY056OK - Loamy Upland 38-42 PZ

Hydric soil rating: No

Minor Components

Clarita

Percent of map unit: 8 percent

Landform: Ridges

Landform position (two-dimensional): Shoulder, backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R085XY002OK - Clay Upland 38-42 PZ

Hydric soil rating: No

Garvin

Percent of map unit: 2 percent

Landform: Flood plains

Landform position (three-dimensional): Tread

Down-slope shape: Linear Across-slope shape: Concave

Ecological site: R080AY045OK - Clay Bottomland

Hydric soil rating: No

12—Ferris-Tarrant complex, 5 to 12 percent slopes

Map Unit Setting

National map unit symbol: dwgf Elevation: 300 to 2,400 feet

Mean annual precipitation: 20 to 42 inches
Mean annual air temperature: 62 to 70 degrees F

Frost-free period: 210 to 275 days

Farmland classification: Not prime farmland

Map Unit Composition

Ferris and similar soils: 70 percent Tarrant and similar soils: 20 percent Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ferris

Setting

Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Calcareous clayey residuum weathered from shale

Typical profile

A - 0 to 8 inches: clay Bw - 8 to 24 inches: clay Bss - 24 to 43 inches: clay

BCss - 43 to 60 inches: clay

Properties and qualities

Slope: 5 to 12 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low

(0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Gypsum, maximum content: 5 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 5.0

Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: D

Ecological site: R085XY002OK - Clay Upland 38-42 PZ

Hydric soil rating: No

Description of Tarrant

Setting

Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Clayey residuum weathered from limestone

Typical profile

A - 0 to 6 inches: very cobbly clay
Ak - 6 to 11 inches: very cobbly clay

R - 11 to 60 inches: bedrock

Properties and qualities

Slope: 5 to 12 percent

Depth to restrictive feature: 6 to 20 inches to lithic bedrock

Drainage class: Well drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm) Available water supply, 0 to 60 inches: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: D

Ecological site: R085XY098OK - Very Shallow 38-42 PZ

Hydric soil rating: No

Minor Components

Purves

Percent of map unit: 4 percent Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R085XY083OK - Shallow Upland 38-42 PZ

Hydric soil rating: No

Burleson

Percent of map unit: 3 percent Landform: Paleoterraces

Landform position (three-dimensional): Riser

Down-slope shape: Linear Across-slope shape: Convex

Ecological site: R085XY002OK - Clay Upland 38-42 PZ

Hydric soil rating: No

Heiden

Percent of map unit: 3 percent Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R085XY002OK - Clay Upland 38-42 PZ

Hydric soil rating: No

SwiE—Swink very cobbly clay loam, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2zh77 Elevation: 700 to 2.400 feet

Mean annual precipitation: 20 to 44 inches Mean annual air temperature: 57 to 70 degrees F

Frost-free period: 210 to 260 days

Farmland classification: Not prime farmland

Map Unit Composition

Swink and similar soils: 85 percent *Minor components:* 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Swink

Setting

Landform: Ridges

Landform position (two-dimensional): Shoulder, backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Residuum weathered from limestone

Typical profile

A - 0 to 9 inches: very cobbly clay loam Bw - 9 to 22 inches: very cobbly clay loam

R - 22 to 32 inches: bedrock

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: 14 to 22 inches to lithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 25 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm) Available water supply, 0 to 60 inches: Very low (about 1.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: C

Ecological site: R085XY083OK - Shallow Upland 38-42 PZ

Hydric soil rating: No

Minor Components

Slidell

Percent of map unit: 5 percent Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R085XY002OK - Clay Upland 38-42 PZ

Hydric soil rating: No

Purves

Percent of map unit: 5 percent Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R085XY083OK - Shallow Upland 38-42 PZ

Hydric soil rating: No

Sanger

Percent of map unit: 5 percent Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Ecological site: R085XY002OK - Clay Upland 38-42 PZ

Hydric soil rating: No

W-Water

Map Unit Setting

National map unit symbol: 2xslv Elevation: 300 to 2,350 feet

Mean annual precipitation: 1 to 2 inches

Mean annual air temperature: 61 to 67 degrees F

Frost-free period: 181 to 270 days

Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

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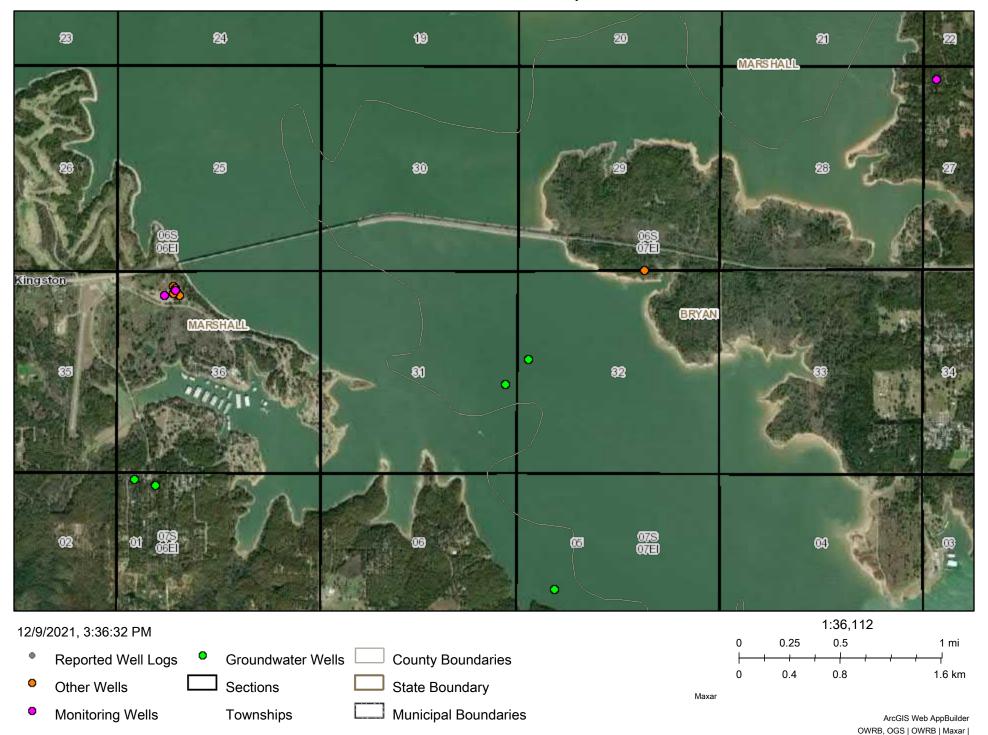
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ArcGIS Web Map



APPENDIX D ENVIRONMENTAL DATABASE INFORMATION

US-70 Over Lake Texoma Roosevelt Bridge

US-70, Bryan and Marshall Counties Mead, OK 73449

Inquiry Number: 6714549.6s

October 21, 2021

EDR Area / Corridor Report



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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 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

SUBJECT PROPERTY INFORMATION

ADDRESS

US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

TARGET PROPERTY SEARCH RESULTS

The Target Property was identified in the following databases.

Page Numbers and Map Identifications refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DOD: Department of Defense Sites

A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
LAKE TEXOMA		Region / 3,2,4,5,1,7,8,9,10	26

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Page Numbers and Map Identifications refer to the EDR Area/Corridor 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

STANDARD ENVIRONMENTAL RECORDS

State and tribal registered storage tank lists

UST: Underground Storage Tank Listing

A review of the UST list, as provided by EDR, and dated 06/07/2021 has revealed that there are 3 UST sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
TEXOMA STATE PARK Facility Id: 4813746 TankStatus: POU	HWY 70 4 MI EAST OF	S 0 - 1/8 (0.036 mi.)	A1/7	26
CATFISH BAY MARINA M Facility Id: 4807884 TankStatus: CIU	2048 MARINA RD (4MIL	N 0 - 1/8 (0.041 mi.)	3/7	31
CUMBERLAND COVE RESO Facility Id: 4806940 TankStatus: POU	RT 2 BOX 307	N 0 - 1/8 (0.059 mi.)	4/7	32

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

HIST UST: Underground Storage Tank List, List II Version

A review of the HIST UST list, as provided by EDR, and dated 03/21/2003 has revealed that there are 2 HIST UST sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
TEXOMA STATE PARK Facility Id: 9913256 Tank Status: Temporarily Out of L	HWY 70 4 MI EAST OF	S 0 - 1/8 (0.036 mi.)	A1/7	26
CUMBERLAND COVE RESO Facility Id: 4806940 Tank Status: Temporarily Out of U	RT 2 BOX 307 Use	N 0 - 1/8 (0.059 mi.)	4/7	32

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 09/13/2021 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
OKLAHOMA TEXOMA STAT	HWY 70 5M E	S 0 - 1/8 (0.036 mi.)	A2 / 7	29

EXECUTIVE SUMMARY

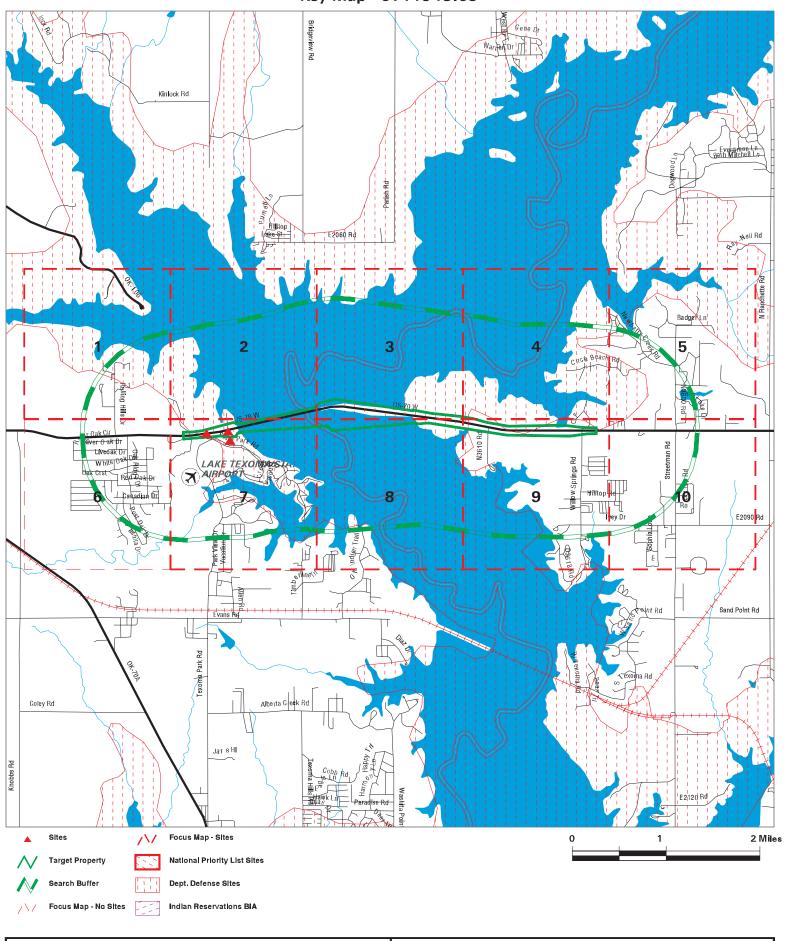
EPA ID:: OKD980698906

MAPPED SITES SUMMARY

Target Property: US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

MAP ID / FOCUS MAP Reg / Multiple	SITE NAME LAKE TEXOMA	ADDRESS	DATABASE ACRONYMS DOD		(ft. & n	
A1 / 7	TEXOMA STATE PARK	HWY 70 4 MI EAST OF	UST, HIST UST	188	0.036	South
A2 / 7	OKLAHOMA TEXOMA STAT	HWY 70 5M E	RCRA NonGen / NLR	188	0.036	South
3/7	CATFISH BAY MARINA M	2048 MARINA RD (4MIL	UST	216	0.041	North
4 / 7	CUMBERLAND COVE RESO	RT 2 BOX 307	UST, HIST UST	312	0.059	North

Key Map - 6714549.6s



SITE NAME: US-70 Over Lake Texoma Roosevelt Bridge ADDRESS: US-70, Bryan and Marshall Counties

CITY/STATE: Mead OK ZIP: 73449

CLIENT: Terracon CONTACT: Victoria Jolly INQUIRY #: 6714549.6s DATE: 10/21/21

3:33 PM

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONME	NTAL RECORDS	<u>s</u>						
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 1.000		0 0 0	0 0 0	0 0 0	0 0 0	NR NR NR	0 0 0
Federal Delisted NPL sit	te list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	P site list							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	TS facilities li	ist						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generator	rs list							
RCRA-LQG RCRA-SQG RCRA-VSQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional cor engineering controls re								
LUCIS US ENG CONTROLS US INST CONTROLS	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equiva	alent CERCLIS	8						
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill a solid waste disposal site								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking	storage tank l	ists						
LAST LUST INDIAN LUST	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
State and tribal registere	ed storage tar	ık lists						
FEMA UST	0.250		0	0	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST AST INDIAN UST	0.250 0.250 0.250		3 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	3 0 0
State and tribal institution control / engineering control /		s						
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary	y cleanup site	es						
INDIAN VCP VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal Brownfie	elds sites							
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONME	NTAL RECORE	<u>os</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	Solid							
SWRCY INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS	0.500 0.500 0.500 0.500 0.500		0 0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0
Local Lists of Hazardous Contaminated Sites	s waste /							
US HIST CDL US CDL	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0
Local Lists of Registered	l Storage Tan	ks						
HIST UST	0.250		2	0	NR	NR	NR	2
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency F	Release Repo	rts						
HMIRS OK COMPLAINT	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST	0.250 1.000 1.000 0.500 TP TP	1	1 0 0 0 NR NR	0 0 0 0 NR NR	NR 0 0 0 NR NR	NR 0 0 NR NR NR	NR NR NR NR NR	1 0 1 0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.230 TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	Ö
RAATS	TP		NR	NR	NR	NR	NR	Ö
PRP	TP		NR	NR	NR	NR	NR	Ö
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA LEAD SMELTERS	0.500		0	0 ND	0 NR	NR	NR	0
US AIRS	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NŘ	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	Ö
FUELS PROGRAM	0.250		0	0	NR	NR	NR	Ö
AIRS	TP		NR	NR	NR	NR	NR	0
ASBESTOS	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
TIER 2	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORIO	CAL RECORDS							
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NŘ	NR	NR	0
EDR Hist Cleaner	0.125		Ö	NR	NR	NR	NR	Ö
EDR RECOVERED GOVE	RNMENT ARCH	IVES						
Exclusive Recovered Go	ovt. Archives							
RGA HWS	TP		NR	NR	NR	NR	NR	0
1.3/(1100	11		1417	1417	1417	1417	1417	J

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals		1	6	0	0	0	0	7

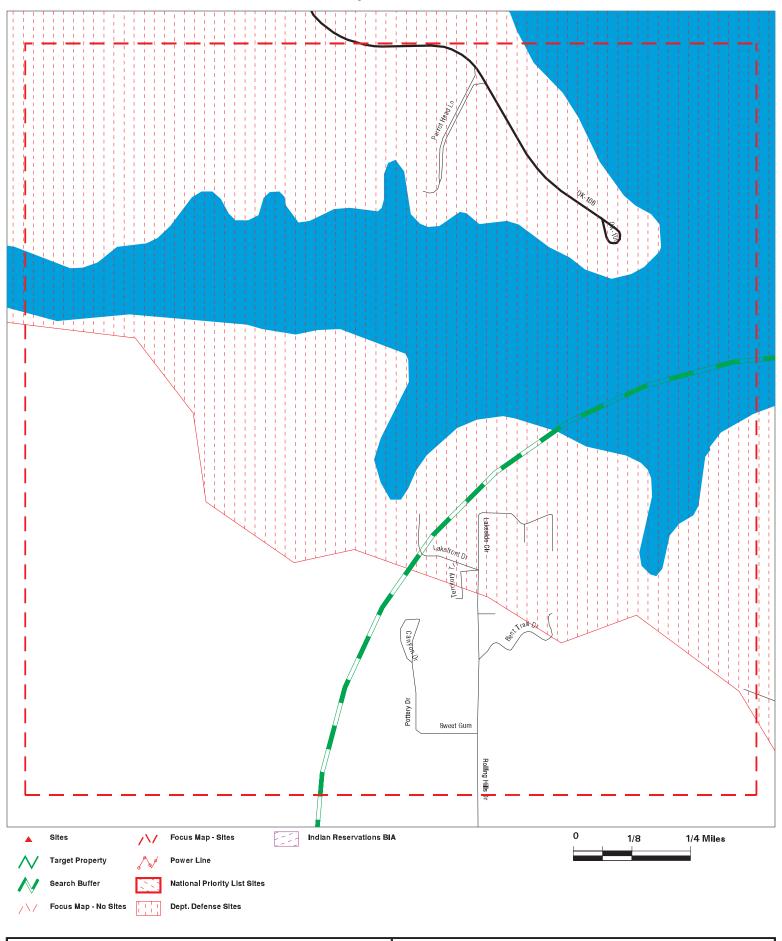
NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Focus Map - 1 - 6714549.6s



SITE NAME: US-70 Over Lake Texoma Roosevelt Bridge ADDRESS: US-70, Bryan and Marshall Counties

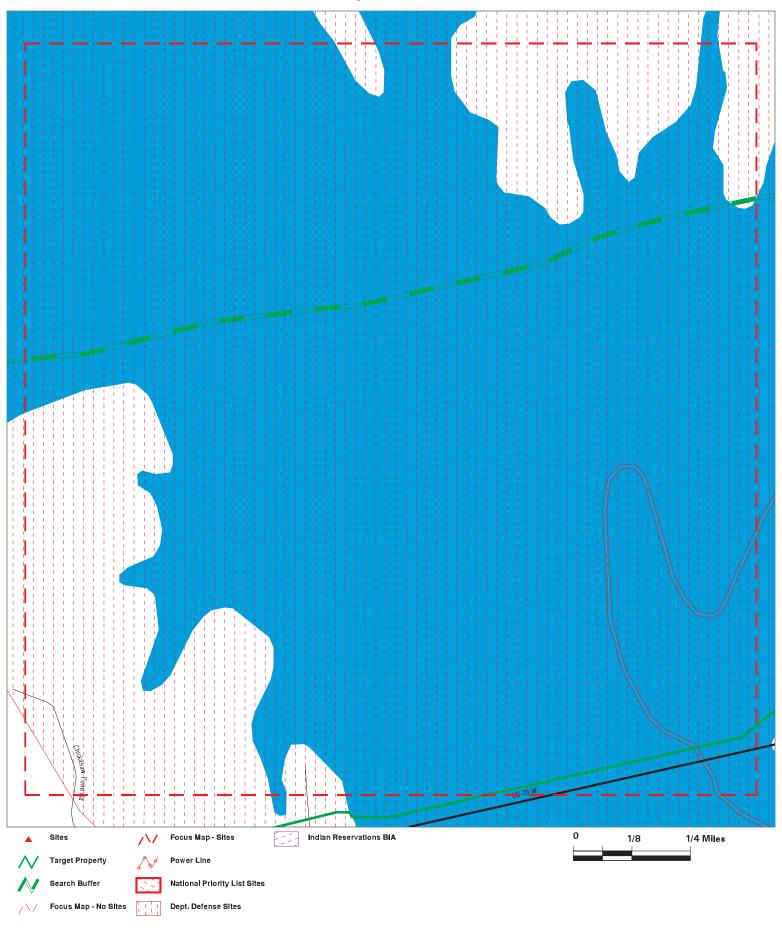
CITY/STATE: Mead OK ZIP: 73449 CLIENT: Terracon CONTACT: Victoria Jolly INQUIRY #: 6714549.6s DATE: 10/21/21

MAPPED SITES SUMMARY - FOCUS MAP 1

Target Property: US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

MAP ID /				DIST (ft. & mi.)
FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIRECTION
Reg / Multiple	LAKE TEXOMA		DOD	TP

Focus Map - 2 - 6714549.6s



SITE NAME: US-70 Over Lake Texoma Roosevelt Bridge ADDRESS: US-70, Bryan and Marshall Counties

CITY/STATE: Mead OK ZIP: 73449

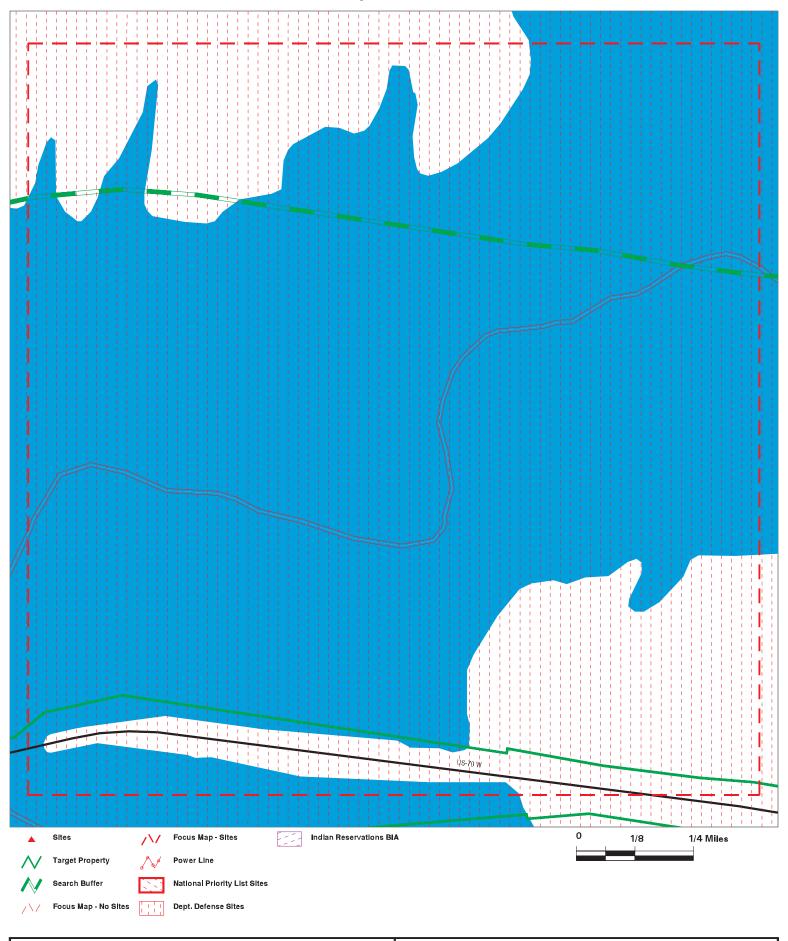
CLIENT: Terracon
CONTACT: Victoria Jolly
INQUIRY#: 6714549.6s
DATE: 10/21/21

MAPPED SITES SUMMARY - FOCUS MAP 2

Target Property: US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

MAP ID /				DIST (ft. & mi.)
FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIRECTION
Reg / Multiple	LAKE TEXOMA		DOD	TP

Focus Map - 3 - 6714549.6s



SITE NAME: US-70 Over Lake Texoma Roosevelt Bridge ADDRESS: US-70, Bryan and Marshall Counties

CITY/STATE: Mead OK ZIP: 73449

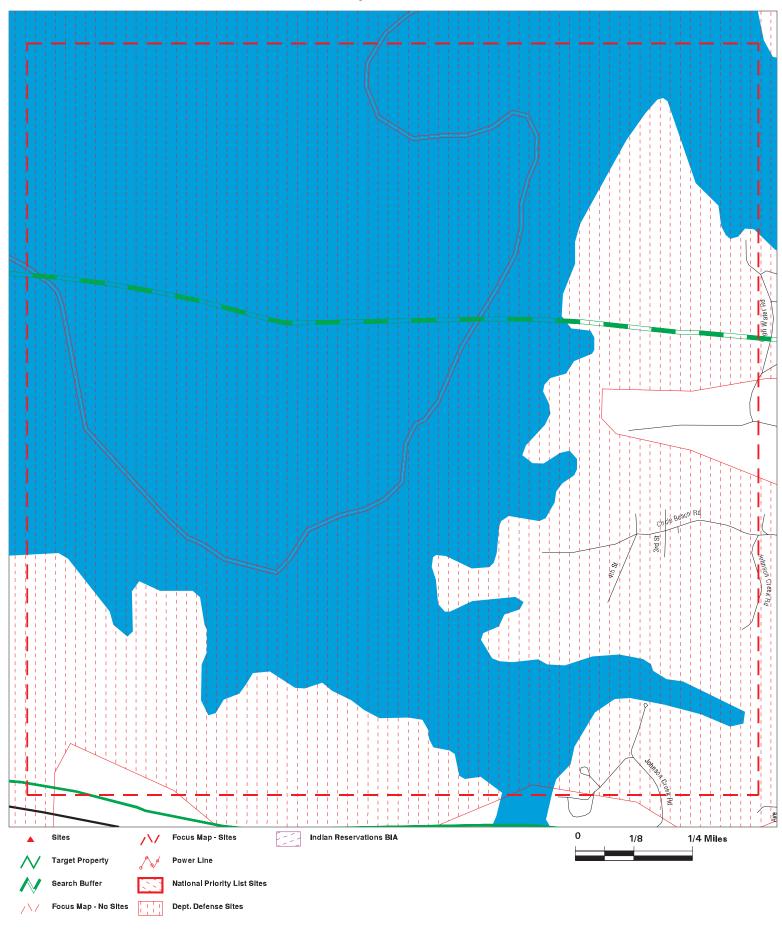
CLIENT: Terracon CONTACT: Victoria Jolly INQUIRY#: 6714549.6s DATE: 10/21/21

MAPPED SITES SUMMARY - FOCUS MAP 3

Target Property: US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

MAP ID /				DIST (ft. & mi.)
FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIRECTION
Reg / Multiple	LAKE TEXOMA		DOD	TP

Focus Map - 4 - 6714549.6s



SITE NAME: US-70 Over Lake Texoma Roosevelt Bridge ADDRESS: US-70, Bryan and Marshall Counties

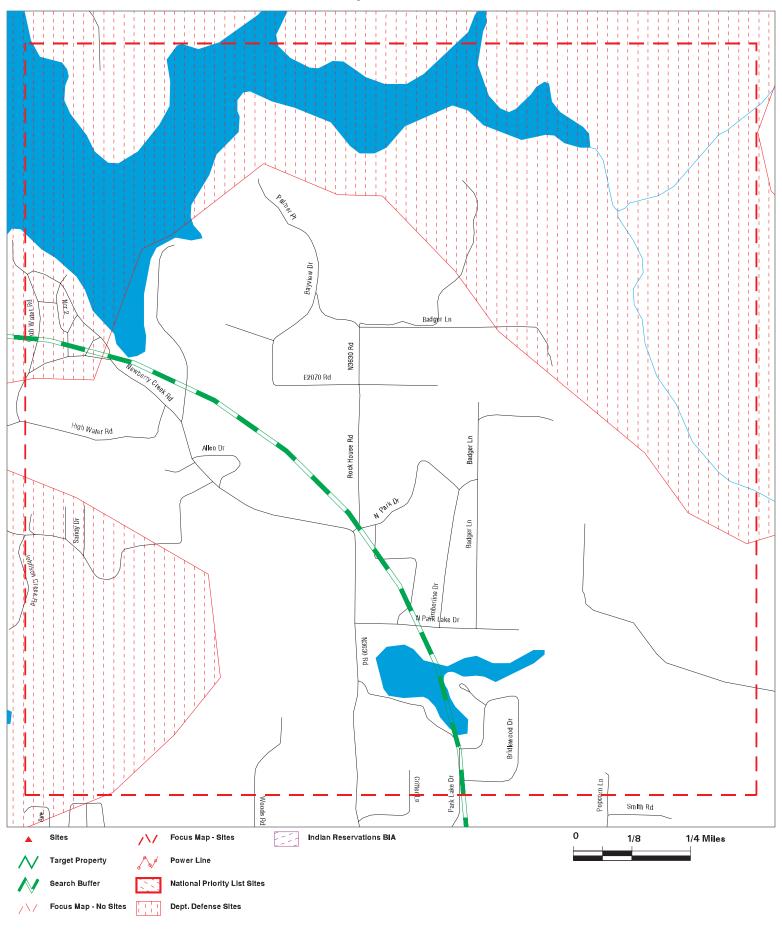
CITY/STATE: Mead OK ZIP: 73449 CLIENT: Terracon CONTACT: Victoria Jolly INQUIRY #: 6714549.6s DATE: 10/21/21

MAPPED SITES SUMMARY - FOCUS MAP 4

Target Property: US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

MAP ID /				DIST (ft. & mi.)
FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIRECTION
Reg / Multiple	LAKE TEXOMA		DOD	TP

Focus Map - 5 - 6714549.6s



SITE NAME: US-70 Over Lake Texoma Roosevelt Bridge ADDRESS: US-70, Bryan and Marshall Counties

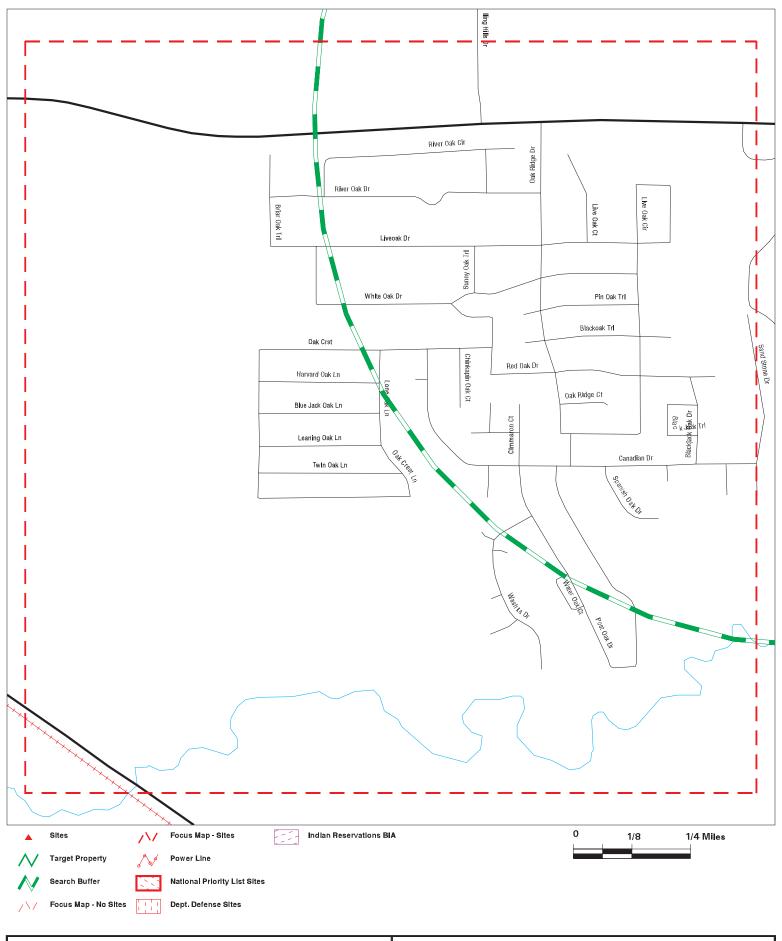
CITY/STATE: Mead OK ZIP: 73449 CLIENT: Terracon
CONTACT: Victoria Jolly
INQUIRY#: 6714549.6s
DATE: 10/21/21

MAPPED SITES SUMMARY - FOCUS MAP 5

Target Property: US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

MAP ID /				DIST (ft. & mi.)
FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIRECTION
Reg / Multiple	LAKE TEXOMA	_	DOD	TP

Focus Map - 6 - 6714549.6s



SITE NAME: US-70 Over Lake Texoma Roosevelt Bridge ADDRESS: US-70, Bryan and Marshall Counties

CITY/STATE: Mead OK ZIP: 73449

CLIENT: Terracon CONTACT: Victoria Jolly INQUIRY #: 6714549.6s DATE: 10/21/21

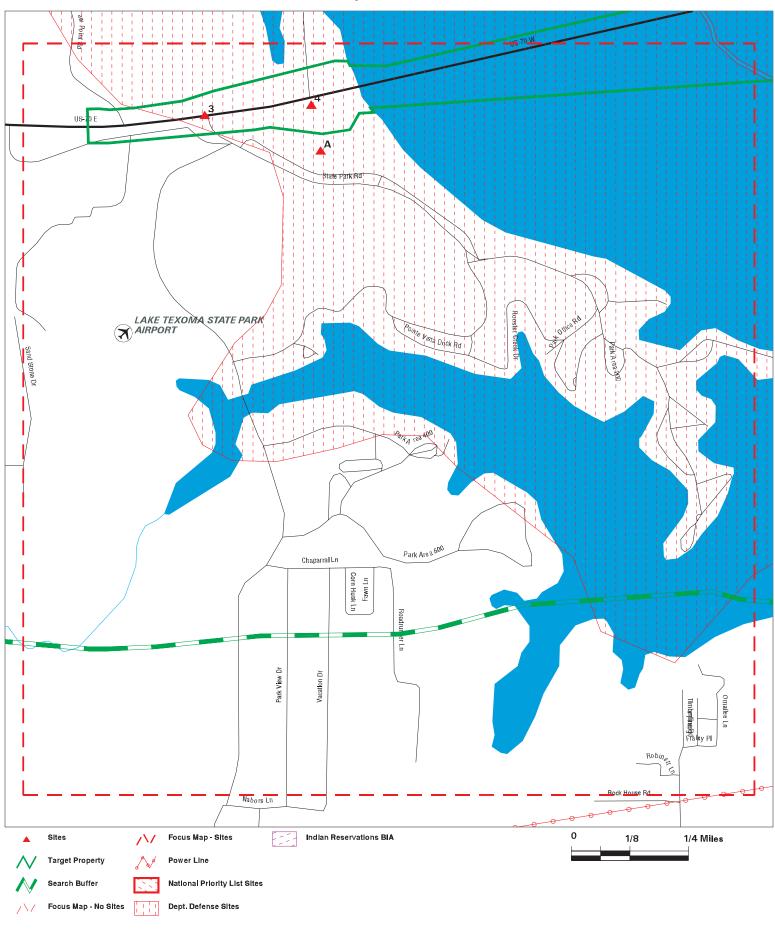
MAPPED SITES SUMMARY - FOCUS MAP 6

Target Property: US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

MAP ID / DIST (ft. & mi.)
FOCUS MAP SITE NAME ADDRESS DATABASE ACRONYMS DIRECTION

NO MAPPED SITES FOUND

Focus Map - 7 - 6714549.6s



SITE NAME: US-70 Over Lake Texoma Roosevelt Bridge ADDRESS: US-70, Bryan and Marshall Counties

CITY/STATE: Mead OK ZIP: 73449

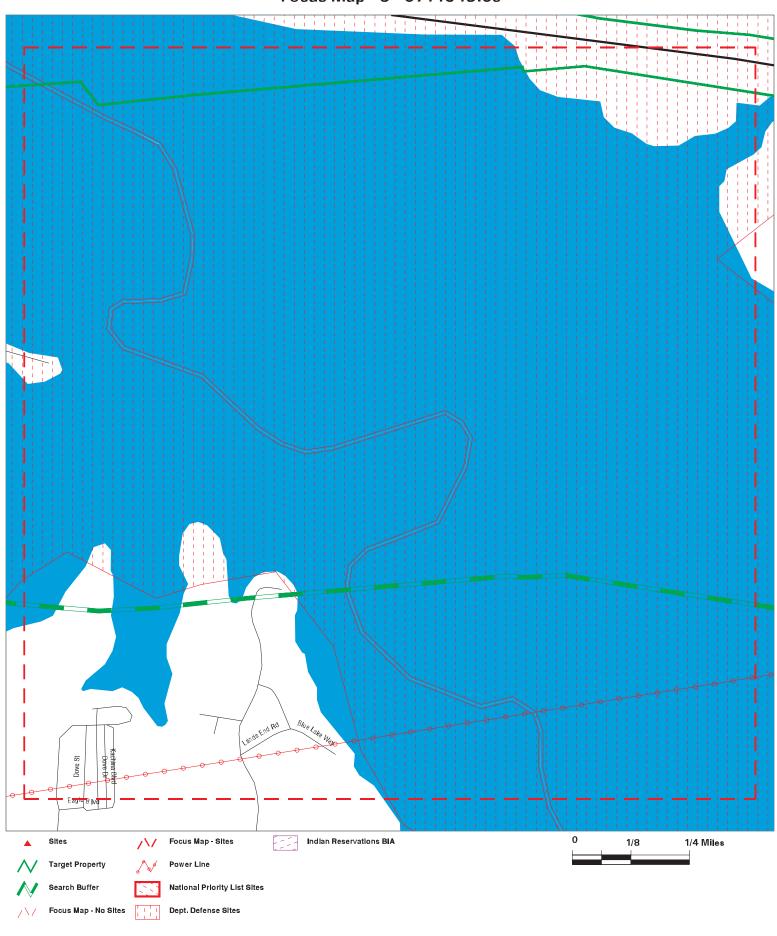
CLIENT: Terracon CONTACT: Victoria Jolly INQUIRY #: 6714549.6s DATE: 10/21/21

MAPPED SITES SUMMARY - FOCUS MAP 7

Target Property: US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

MAP ID / FOCUS MAP Reg / Multiple	SITE NAME LAKE TEXOMA	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION TP		
A1 / 7	TEXOMA STATE PARK	HWY 70 4 MI EAST OF	UST, HIST UST	188	0.036	South
A2 / 7	OKLAHOMA TEXOMA STAT	HWY 70 5M E	RCRA NonGen / NLR	188	0.036	South
3/7	CATFISH BAY MARINA M	2048 MARINA RD (4MIL	UST	216	0.041	North
4 / 7	CUMBERLAND COVE RESO	RT 2 BOX 307	UST, HIST UST	312	0.059	North

Focus Map - 8 - 6714549.6s



SITE NAME: US-70 Over Lake Texoma Roosevelt Bridge ADDRESS: US-70, Bryan and Marshall Counties

CITY/STATE: Mead OK ZIP: 73449

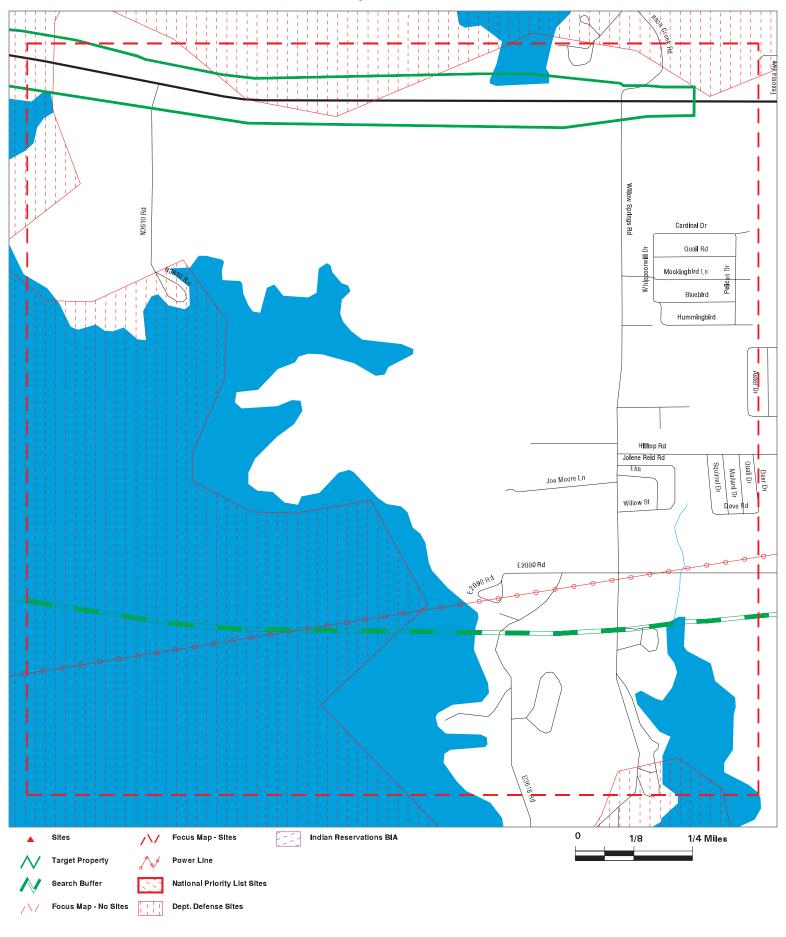
CLIENT: Terracon
CONTACT: Victoria Jolly
INQUIRY #: 6714549.6s
DATE: 10/21/21

MAPPED SITES SUMMARY - FOCUS MAP 8

Target Property: US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

MAP ID /				DIST (ft. & mi.)
FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIRECTION
Reg / Multiple	LAKE TEXOMA	-	DOD	TP

Focus Map - 9 - 6714549.6s



SITE NAME: US-70 Over Lake Texoma Roosevelt Bridge ADDRESS: US-70, Bryan and Marshall Counties

CITY/STATE: Mead OK ZIP: 73449

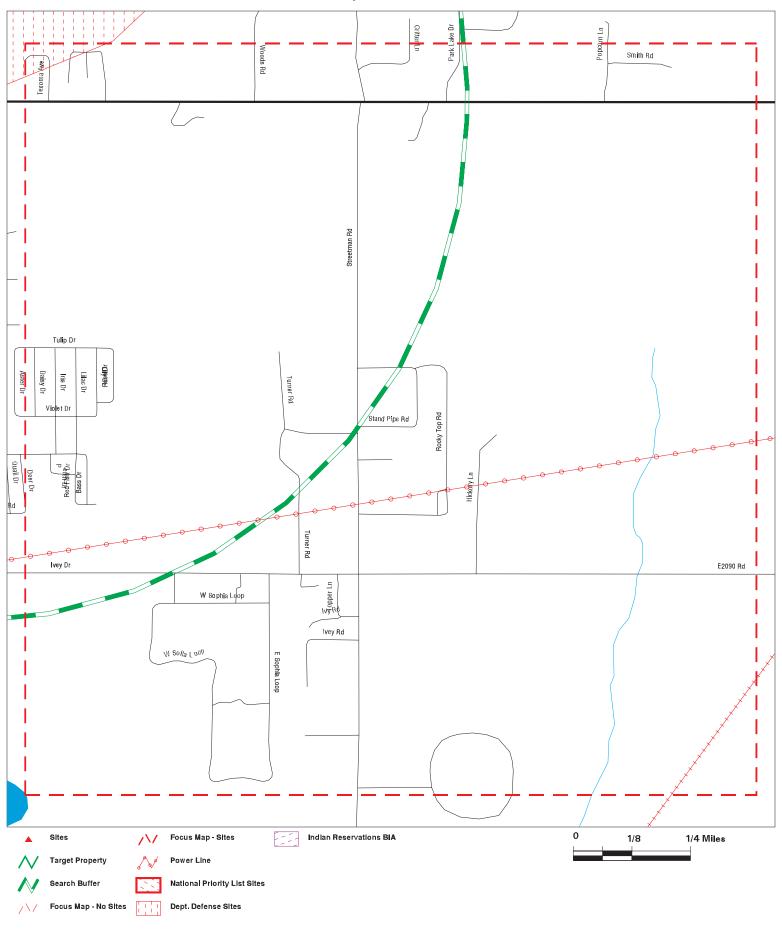
CLIENT: Terracon CONTACT: Victoria Jolly INQUIRY #: 6714549.6s DATE: 10/21/21

MAPPED SITES SUMMARY - FOCUS MAP 9

Target Property: US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

MAP ID /				DIST (ft. & mi.)
FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIRECTION
Reg / Multiple	LAKE TEXOMA	-	DOD	TP

Focus Map - 10 - 6714549.6s



SITE NAME: US-70 Over Lake Texoma Roosevelt Bridge ADDRESS: US-70, Bryan and Marshall Counties

CITY/STATE: Mead OK ZIP: 73449

CLIENT: Terracon
CONTACT: Victoria Jolly
INQUIRY#: 6714549.6s
DATE: 10/21/21

MAPPED SITES SUMMARY - FOCUS MAP 10

Target Property: US-70, BRYAN AND MARSHALL COUNTIES MEAD, OK 73449

MAP ID /				DIST (ft. & mi.)
FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIRECTION
Reg / Multiple	LAKE TEXOMA	-	DOD	TP

MAP FINDINGS Map ID

Direction Distance

Elevation Site Database(s) **EPA ID Number**

DOD **LAKE TEXOMA** DOD CUSA143070 N/A

Region

LAKE TEXOMA (County), OK **Target**

Property

DOD:

Feature 1: Army Corps of Engineers DOD

Not reported Feature 2: Not reported Feature 3: Focus Map: 3,2,4,5,1,7,8,9,10 URL: Not reported Name 1: Lake Texoma

Name 2: Not reported Name 3: Not reported State: OK-TX DOD Site: Yes

Tile name: **TXGRAYSON**

Α1 **TEXOMA STATE PARK**

HWY 70 4 MI EAST OF KINGSTON, OK South

KINGSTON, OK 73439 < 1/8

0.036 mi.

188 ft. Site 1 of 2 in cluster A

Actual: UST:

689 ft. Facility ID: 4813746

Contact Name: Dept Of Tourism State Of Oklahoma Focus Map:

Contact Address: PO BOX 52002 Contact Telephone: 4055212973

> Contact City, St, Zip: Oklahoma City, OK 73152 33.9977999 / -96.642799 Lat/Long:

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 1000 Substance: Gasoline Not reported Date Installed: Tank Type: UST Closed Date: 05/03/1999

Decode of Tank Status: Permanently out of use Tank Removed From Ground Closure Status:

Single Walled Tank Construction: Unknown Tank Material: Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 2

Tank Status: Permanently Out Of Use

Total Capacity: 4136 Heating Oil Substance: Not reported Date Installed: Tank Type: UST Closed Date: 06/23/1994

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Single Walled Tank Construction: Tank Material: Steel Pipe Construction: Not reported Pipe Material: Not reported

Tank ID: 3 **EDR ID Number**

U003182412

N/A

UST

HIST UST

Map ID MAP FINDINGS

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

TEXOMA STATE PARK (Continued)

U003182412

Tank Status: Permanently Out Of Use

Total Capacity: 4136
Substance: Heating Oil
Date Installed: Not reported
Tank Type: UST
Closed Date: 06/23/1994

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Not reported Pipe Material: Not reported

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 5640
Substance: Not reported
Date Installed: Not reported
Tank Type: UST
Closed Date: 06/23/1994

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Not reported Pipe Material: Not reported

Tank ID: 5

Tank Status: Permanently Out Of Use

Total Capacity: 1033
Substance: Heating Oil
Date Installed: Not reported
Tank Type: UST
Closed Date: 06/23/1994

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Not reported Pipe Material: Not reported

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 7000
Substance: Diesel
Date Installed: Not reported
Tank Type: UST
Closed Date: 06/14/1994

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 7

Tank Status: Permanently Out Of Use

Map ID MAP FINDINGS

Direction Distance

Elevation Site Database(s) EPA ID Number

TEXOMA STATE PARK (Continued)

U003182412

EDR ID Number

Total Capacity: 7000
Substance: Diesel
Date Installed: Not reported
Tank Type: UST
Closed Date: 06/14/1994

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID: 8

Tank Status: Permanently Out Of Use

Total Capacity: 5000
Substance: Not reported
Date Installed: Not reported
Tank Type: UST
Closed Date: 06/14/1994

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID:

Tank Status: Permanently Out Of Use

Total Capacity: 2000
Substance: Not reported
Date Installed: Not reported
Tank Type: UST
Closed Date: 06/14/1994

Decode of Tank Status: Permanently out of use Closure Status: Tank Removed From Ground

Tank Construction: Single Walled Tank Material: Steel Pipe Construction: Single-Walled

Pipe Material: Steel

HIST UST:

Facility ID: 9913256

Owner Name: DEPT OF TOURISM STATE OF OKLAHOMA

Owner Address: 2401 N LINCOLN BLVD SUITE 500

Owner City, St, Zip: Oklahoma City, OK 73105

Tank ID:

Tank Status: Temporarily Out of Use

Installed Date: Not reported
Tank Capacity: 1000
Product: Gasoline

Map ID MAP FINDINGS

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

A2 OKLAHOMA TEXOMA STATE RESORT RCRA NonGen / NLR 1000882583 South **HWY 70 5M E** OKD980698906

KINGSTON, OK 73439 < 1/8

0.036 mi.

188 ft. Site 2 of 2 in cluster A Actual: RCRA NonGen / NLR:

689 ft. Date Form Received by Agency: 19830228 Handler Name: OKLAHOMA TEXOMA STATE RESORT

Focus Map:

Handler Address: HWY 70 5M E Handler City, State, Zip: KINGSTON, OK 73439

EPA ID: OKD980698906 KRIS MAREK Contact Name: Contact Address: **PO BOX 248**

Contact City, State, Zip: KINGSTON, OK 73439 Contact Telephone: 405-521-2973 Contact Fax: Not reported Contact Email: Not reported

Contact Title: Not reported EPA Region: 06 Land Type: Private

Federal Waste Generator Description: Not a generator, verified

Non-Notifier: Not reported Biennial Report Cycle: Not reported Accessibility: Not reported Active Site Indicator: Not reported Not reported State District Owner: State District: Not reported Mailing Address: **PO BOX 248**

Mailing City, State, Zip: KINGSTON, OK 73439 Owner Name: STATE OF OKLAHOMA

Owner Type: State Operator Name: Not reported Operator Type: Not reported

Short-Term Generator Activity: No Importer Activity: No Mixed Waste Generator: No Transporter Activity: No Transfer Facility Activity: No Recycler Activity with Storage: No Small Quantity On-Site Burner Exemption: No Smelting Melting and Refining Furnace Exemption: No **Underground Injection Control:** No Off-Site Waste Receipt: No Universal Waste Indicator: No Universal Waste Destination Facility: No Federal Universal Waste: No

Active Site Fed-Reg Treatment Storage and Disposal Facility: Not reported Active Site Converter Treatment storage and Disposal Facility: Not reported Active Site State-Reg Treatment Storage and Disposal Facility: Not reported Active Site State-Reg Handler:

Federal Facility Indicator: Not reported Hazardous Secondary Material Indicator: NN

Sub-Part K Indicator: Not reported

Commercial TSD Indicator: No

Treatment Storage and Disposal Type: Not reported 2018 GPRA Permit Baseline: Not on the Baseline 2018 GPRA Renewals Baseline: Not on the Baseline Permit Renewals Workload Universe: Not reported

Map ID MAP FINDINGS

Distance

Elevation Site Database(s) EPA ID Number

OKLAHOMA TEXOMA STATE RESORT (Continued)

1000882583

EDR ID Number

Permit Workload Universe:

Permit Progress Universe:

Post-Closure Workload Universe:

Closure Workload Universe:

Not reported
Not reported
Not reported

202 GPRA Corrective Action Baseline:

Corrective Action Workload Universe:

No Subject to Corrective Action Universe:

No Non-TSDFs Where RCRA CA has Been Imposed Universe:

No TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:

No TSDFs Only Subject to CA under Discretionary Auth Universe:

No

Corrective Action Priority Ranking: No NCAPS ranking

Environmental Control Indicator:

Institutional Control Indicator:

No
Human Exposure Controls Indicator:

N/A
Groundwater Controls Indicator:

N/A

Operating TSDF Universe:

Full Enforcement Universe:

Not reported

Not reported

Significant Non-Complier Universe:

Unaddressed Significant Non-Complier Universe:

No Addressed Significant Non-Complier Universe:

No Significant Non-Complier With a Compliance Schedule Universe:

No

Financial Assurance Required:
Handler Date of Last Change:
Recognized Trader-Importer:
Recognized Trader-Exporter:
Importer of Spent Lead Acid Batteries:
No
Exporter of Spent Lead Acid Batteries:
No
No

Recycler Activity Without Storage: Not reported Manifest Broker: Not reported

Sub-Part P Indicator: No

Hazardous Waste Summary:

Waste Code: D001

Waste Description: IGNITABLE WASTE

Handler - Owner Operator:

Owner/Operator Indicator: Owner

Owner/Operator Name: STATE OF OKLAHOMA

Legal Status:StateDate Became Current:Not reportedDate Ended Current:Not reported

Owner/Operator Address: 500 WILL ROGERS BLD
Owner/Operator City, State, Zip: OKLAHOMA CITY, OK 73105

Owner/Operator Telephone: 405-521-2973
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 19830228 Handler Name: OKLAHOMA TEXOMA STATE RESORT

Federal Waste Generator Description: Not a generator, verified

State District Owner: Not reported

Large Quantity Handler of Universal Waste: No Recognized Trader Importer: No

Map ID MAP FINDINGS

Direction Distance

Elevation Site Database(s) EPA ID Number

OKLAHOMA TEXOMA STATE RESORT (Continued)

1000882583

UST

U004174877

N/A

EDR ID Number

Recognized Trader Exporter:

Spent Lead Acid Battery Importer:

No
Spent Lead Acid Battery Exporter:

No
Current Record:

No

Non Storage Recycler Activity: Not reported Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

3 CATFISH BAY MARINA MART

North 2048 MARINA RD (4MILES EAST HWY 70)

< 1/8 KINGSTON, OK 73439

0.041 mi.

216 ft.

Actual: UST: 705 ft. Facil

705 ft. Facility ID: 4807884
FOCUS Map: Contact Name: Pointe Vista Marinas Llc

Focus Map:

Contact Address: PO Box 1009
Contact Telephone: 4054264365
Contact City,St,Zip: Kingston, OK 73439

Lat/Long: Kingston, OK 73439
33.9977999 / -96.639700

Tank ID:

Tank Status: Currently In Use

Total Capacity: 5000

Substance: Gasoline 100%
Date Installed: 05/01/1976
Tank Type: UST
Closed Date: Not reported
Decode of Tank Status: Currently in use
Closure Status: Not reported
Tank Construction: Single Walled

Tank Material: Steel

Pipe Construction: Single-Walled
Pipe Material: Steel ,Fiberglass

Tank ID: 2

Tank Status: Currently In Use

Total Capacity: 5000

Substance: Gasoline 100%
Date Installed: 05/01/1976
Tank Type: UST
Closed Date: Not reported
Decode of Tank Status: Currently in use
Closure Status: Not reported
Tank Construction: Single Walled

Tank Material: Steel

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CATFISH BAY MARINA MART (Continued)

U004174877

UST

HIST UST

U001883906

N/A

Pipe Construction: Single-Walled Steel ,Fiberglass Pipe Material:

Tank ID:

Tank Status: Currently In Use

Total Capacity: 4000

Gasoline 100% Substance: 01/01/1982 Date Installed: Tank Type: UST Closed Date: Not reported Currently in use Decode of Tank Status: Not reported Closure Status: Single Walled Tank Construction: Tank Material: Steel

Pipe Construction: Single-Walled Pipe Material: Steel ,Fiberglass

CUMBERLAND COVE RESORT

North **RT 2 BOX 307** < 1/8 **MADILL, OK 73446**

0.059 mi. 312 ft.

UST: Actual: 668 ft.

Focus Map:

Facility ID: 4806940 Campbell Oil Co. Contact Name: Contact Address: P O Box 698 Contact Telephone: 5802236066

Contact City, St, Zip: Ardmore, OK 73402 34.0563 / -96.584199 Lat/Long:

Tank ID:

Permanently Out Of Use Tank Status:

Total Capacity: 4000 Gasoline Substance: 04/28/1985 Date Installed: Tank Type: UST Closed Date: 12/01/1998

Decode of Tank Status: Permanently out of use Tank Closed In Place Closure Status:

Single Walled Tank Construction:

Tank Material: Steel

Pipe Construction: Single-Walled

Pipe Material: Steel

Tank ID:

Permanently Out Of Use Tank Status:

Total Capacity: 4000 Substance: Gasoline 04/28/1985 Date Installed: Tank Type: UST Closed Date: 12/01/1998

Decode of Tank Status: Permanently out of use Tank Closed In Place Closure Status:

Tank Construction: Single Walled Tank Material: Steel

Single-Walled Pipe Construction:

Pipe Material: Steel Map ID MAP FINDINGS Direction

Distance Elevation Site

Database(s) **EPA ID Number**

CUMBERLAND COVE RESORT (Continued)

U001883906

EDR ID Number

HIST UST:

Facility ID: 4806940 Owner Name: Campbell Oil Co. Owner Address: P. O. Box 698 Owner City, St, Zip: Ardmore, OK 73402

Tank ID:

Tank Capacity:

Tank Status: Temporarily Out of Use Installed Date: 4/28/1985 0:00:00 4000

Product: Gasoline Facility ID: 4806940

Owner Name: Campbell Oil Co. Owner Address: P. O. Box 698 Owner City, St, Zip: Ardmore, OK 73402

Tank ID:

Tank Status: Temporarily Out of Use 4/28/1985 0:00:00 Installed Date:

8000 Tank Capacity: Product: Gasoline Count: 11 records ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
KINGSTON	U001228320	CATFISH BAY MARINA GAS DOCK	INSIDE TEXOMA STATE PARK	73439	HIST UST
KINGSTON	1025997268	AE3899 KINGSTON BRIDGE POINTE	E OF INT. BETWEEN HWY 70 & CHICKASAW POINT RD	73439	FINDS
MADILL	2007444607	HIGHWAY 70 AND LITTKE GLASSES	HIGHWAY 70 AND LITTKE GLASSES		HMIRS
MEAD	1024892984	LAKE TEXOMA TRUCK RECOVERY SITE HYW 70, ROOSEVELT BRIDGE.	E. HIGHWAY 70	73449	RCRA NonGen / NLR
MEAD	1025888028	OKLAHOMA DOT/OMEGA COATING & CONSTRUCTIO NBI# 10965	BRIDGE A, NBIP(527)PM, US HIGHWAY 70 OVER LAKE TEX	73449	RCRA NonGen / NLR
MEAD	1024702560	LAKE TEXOMA TRUCK RECOVERY SITE HYW 70, ROOSEVELT BRIDGE.	E. HIGHWAY 70	73449	FINDS
MEAD	1026109151	OKLAHOMA DOT/OMEGA COATING & CONSTRUCTIO NBI# 10965	BRIDGE A, NBIP(527)PM, US HIGHWAY 70 OVER LAKE TEX	73449	FINDS
MEAD	1026036333	OKLAHOMA DOT/OMEGA COATING & CONSTRUCTIO NBI# 10965	BRIDGE A, NBIP(527)PM, US HIGHWAY 70 OVER LAKE TEX	73449	ECHO
MEAD	1024164026	LAKE TEXOMA TRUCK RECOVERY SITE HYW 70, ROOSEVELT BRIDGE.	E. HIGHWAY 70	73449	ECHO
MEAD	S112051857	ROLL-OFFS USA, INC.	FOUR MILES WEST OF DURANT, OK ON US-70	73449	TIER 2
MEAD	S122889896	CINGULARMEAD - USID77615	HIGHWAY 70 EAST AND STMAN ROAD	73449	TIER 2

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

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: 07/29/2021 Source: EPA
Date Data Arrived at EDR: 08/04/2021 Telephone: N/A

Number of Days to Update: 27 Next Scheduled EDR Contact: 01/10/2022
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/29/2021 Source: EPA
Date Data Arrived at EDR: 08/04/2021 Telephone: N/A

Next Scheduled EDR Contact: 01/10/2022
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA

Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Federal Delisted NPL site list

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: 07/29/2021 Date Data Arrived at EDR: 08/04/2021 Date Made Active in Reports: 08/31/2021

Number of Days to Update: 27

Source: EPA Telephone: N/A

Last EDR Contact: 10/01/2021

Next Scheduled EDR Contact: 01/10/2022 Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021 Date Data Arrived at EDR: 06/24/2021 Date Made Active in Reports: 09/20/2021

Number of Days to Update: 88

Source: Environmental Protection Agency Telephone: 703-603-8704

Last EDR Contact: 10/01/2021

Next Scheduled EDR Contact: 01/10/2022 Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

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

Date of Government Version: 07/29/2021 Date Data Arrived at EDR: 08/04/2021 Date Made Active in Reports: 08/31/2021

Number of Days to Update: 27

Source: EPA Telephone: 800-424-9346

Last EDR Contact: 10/01/2021

Next Scheduled EDR Contact: 01/24/2022 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/29/2021 Date Data Arrived at EDR: 08/04/2021 Date Made Active in Reports: 08/31/2021

Number of Days to Update: 27

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 10/01/2021

Next Scheduled EDR Contact: 01/24/2022 Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2021 Date Data Arrived at EDR: 09/15/2021 Date Made Active in Reports: 10/12/2021

Number of Days to Update: 27

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 09/15/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/13/2021 Date Data Arrived at EDR: 09/15/2021 Date Made Active in Reports: 10/12/2021

Number of Days to Update: 27

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 09/15/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2021 Date Data Arrived at EDR: 09/15/2021 Date Made Active in Reports: 10/12/2021

Number of Days to Update: 27

Source: Environmental Protection Agency Telephone: 214-665-6444 Last EDR Contact: 09/15/2021

Next Scheduled EDR Contact: 01/03/2022

Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/13/2021 Date Data Arrived at EDR: 09/15/2021 Date Made Active in Reports: 10/12/2021

Number of Days to Update: 27

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 09/15/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation
and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database
includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste
as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate
less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2021 Date Data Arrived at EDR: 09/15/2021 Date Made Active in Reports: 10/12/2021

Number of Days to Update: 27

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 09/15/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/10/2021 Date Data Arrived at EDR: 05/13/2021 Date Made Active in Reports: 08/03/2021

Number of Days to Update: 82

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 08/05/2021

Next Scheduled EDR Contact: 11/22/2021 Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/17/2021 Date Data Arrived at EDR: 05/21/2021 Date Made Active in Reports: 08/11/2021

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/23/2021

Next Scheduled EDR Contact: 12/06/2021 Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

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

Date of Government Version: 05/17/2021 Date Data Arrived at EDR: 05/21/2021 Date Made Active in Reports: 08/11/2021

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/23/2021

Next Scheduled EDR Contact: 12/06/2021

Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous

substances.

Date of Government Version: 06/14/2021 Date Data Arrived at EDR: 06/17/2021 Date Made Active in Reports: 08/17/2021

Number of Days to Update: 61

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 09/21/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Voluntary Cleanup & Superfund Site Status Report

Land restoration projects carried out in several DEQ programs.

Date of Government Version: 06/01/2020 Date Data Arrived at EDR: 08/11/2020 Date Made Active in Reports: 11/02/2020

Number of Days to Update: 83

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 08/13/2021

Next Scheduled EDR Contact: 11/22/2021 Data Release Frequency: No Update Planned

State and tribal landfill and/or solid waste disposal site lists

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: 05/19/2021 Date Data Arrived at EDR: 06/22/2021 Date Made Active in Reports: 09/16/2021

Number of Days to Update: 86

Source: Department of Environmental Quality

Telephone: 405-702-5184 Last EDR Contact: 09/22/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Annually

State and tribal leaking storage tank lists

LAST: Leaking Aboveground Storage Tanks List Leaking aboveground storage tank site locations.

> Date of Government Version: 06/07/2021 Date Data Arrived at EDR: 06/22/2021 Date Made Active in Reports: 09/15/2021

Number of Days to Update: 85

Source: Oklahoma Corporation Commission

Telephone: 405-522-4640 Last EDR Contact: 09/22/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Varies

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: 06/07/2021 Date Data Arrived at EDR: 06/22/2021 Date Made Active in Reports: 09/15/2021

Number of Days to Update: 85

Source: Oklahoma Corporation Commission

Telephone: 405-521-3107 Last EDR Contact: 09/22/2021

Next Scheduled EDR Contact: 01/03/2022

Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 05/27/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/27/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 06/01/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/27/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/06/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/28/2021 Date Data Arrived at EDR: 06/22/2021 Date Made Active in Reports: 09/20/2021

Number of Days to Update: 90

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 06/17/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/17/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/29/2021 Date Data Arrived at EDR: 02/17/2021 Date Made Active in Reports: 03/22/2021

Number of Days to Update: 33

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 09/30/2021

Next Scheduled EDR Contact: 01/17/2022 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: 06/07/2021 Date Data Arrived at EDR: 06/22/2021 Date Made Active in Reports: 09/15/2021

Number of Days to Update: 85

Source: Oklahoma Corporation Commission

Telephone: 405-521-3107 Last EDR Contact: 09/22/2021

Next Scheduled EDR Contact: 01/03/2022

Data Release Frequency: Varies

AST: Aboveground Storage Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 06/07/2021 Date Data Arrived at EDR: 06/22/2021 Date Made Active in Reports: 09/15/2021

Number of Days to Update: 85

Source: Oklahoma Corporation Commission

Telephone: 405-521-3107 Last EDR Contact: 09/22/2021

Next Scheduled EDR Contact: 01/03/2022

Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/06/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/28/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/27/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 06/01/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/27/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021

Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 05/27/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/28/2021 Date Data Arrived at EDR: 06/22/2021 Date Made Active in Reports: 09/20/2021

Number of Days to Update: 90

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 06/17/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/17/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021

Number of Days to Update: 88

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 06/11/2021

Next Scheduled EDR Contact: 11/01/2021 Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

INST CONTROL: Institutional Control Sites Sites with institutional controls in place.

Date of Government Version: 05/08/2021 Date Data Arrived at EDR: 05/12/2021 Date Made Active in Reports: 07/30/2021

Number of Days to Update: 79

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 08/10/2021

Next Scheduled EDR Contact: 11/22/2021 Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 07/08/2021

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 09/29/2015 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 09/15/2021

Next Scheduled EDR Contact: 01/03/2022

Data Release Frequency: Varies

VCP: Voluntary Cleanup Site Inventory

Investigations and cleanups by groups or individuals participating in the Voluntary Cleanup Program (VCP).

Date of Government Version: 04/29/2021 Date Data Arrived at EDR: 05/05/2021 Date Made Active in Reports: 05/06/2021

Number of Days to Update: 1

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 08/10/2021

Next Scheduled EDR Contact: 11/22/2021 Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Brownfield Sites

Brownfields are defined by Oklahoma law as abandoned, idled or under used industrial or commercial facilities or other real property at which expansion or redevelopment of the real property is complicated by environmental contamination caused by regulated substances. This program provides a means for private parties and government entities to voluntarily investigate and if warranted, clean up properties that may be contaminated with hazardous wastes. The formal Brownfields Program provides specific state liability relief and protects the property from federal Superfund actions.

Date of Government Version: 09/07/2012 Date Data Arrived at EDR: 09/07/2012 Date Made Active in Reports: 10/10/2012

Number of Days to Update: 33

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 08/06/2021

Next Scheduled EDR Contact: 11/22/2021 Data Release Frequency: No Update Planned

BROWNFIELDS 2: Brownfields Public Record Listing

The Brownfields program provides a means for private parties and government entities to voluntarily investigate and if warranted, clean up properties that may be contaminated with hazardous wastes. The formal Brownfields Program provides specific state liability relief and protects the property from federal Superfund actions.

Date of Government Version: 04/06/2021 Date Data Arrived at EDR: 05/12/2021 Date Made Active in Reports: 07/30/2021

Number of Days to Update: 79

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 08/09/2021

Next Scheduled EDR Contact: 11/22/2021 Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/10/2021 Date Data Arrived at EDR: 06/10/2021 Date Made Active in Reports: 08/17/2021

Number of Days to Update: 68

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 09/14/2021

Next Scheduled EDR Contact: 12/27/2021 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Facilities

A listing of recycling facility locations.

Date of Government Version: 07/10/2019 Date Data Arrived at EDR: 07/17/2019 Date Made Active in Reports: 08/29/2019

Number of Days to Update: 43

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 10/15/2021

Next Scheduled EDR Contact: 01/24/2022 Data Release Frequency: Varies

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

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 07/20/2021

Next Scheduled EDR Contact: 11/08/2021 Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 10/14/2021

Next Scheduled EDR Contact: 01/31/2022 Data Release Frequency: No Update Planned

Source: Department of Health & Human Serivces, Indian Health Service

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014 Date Data Arrived at EDR: 08/06/2014 Date Made Active in Reports: 01/29/2015 Number of Days to Update: 176

Telephone: 301-443-1452 Last EDR Contact: 07/20/2021

Next Scheduled EDR Contact: 11/08/2021 Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/18/2021 Date Data Arrived at EDR: 05/18/2021 Date Made Active in Reports: 08/03/2021

Number of Days to Update: 77

Source: Drug Enforcement Administration Telephone: 202-307-1000

Last EDR Contact: 08/17/2021

Next Scheduled EDR Contact: 12/06/2021 Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/18/2021 Date Data Arrived at EDR: 05/18/2021 Date Made Active in Reports: 08/03/2021

Number of Days to Update: 77

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/17/2021

Next Scheduled EDR Contact: 12/06/2021 Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

HIST UST: Underground Storage Tank List, List II Version

This underground storage tank listing includes tank information through March 2003. This listing is no longer updated by the Oklahoma Corporation Commission.

Date of Government Version: 03/21/2003 Date Data Arrived at EDR: 04/28/2003 Date Made Active in Reports: 05/27/2003

Number of Days to Update: 29

Source: Oklahoma Corporation Commission

Telephone: 405-521-3107 Last EDR Contact: 01/19/2009

Next Scheduled EDR Contact: 04/19/2009 Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/29/2021 Date Data Arrived at EDR: 08/04/2021 Date Made Active in Reports: 08/31/2021

Number of Days to Update: 27

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 10/01/2021

Next Scheduled EDR Contact: 01/10/2022 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

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

Date of Government Version: 09/12/2021 Date Data Arrived at EDR: 09/13/2021 Date Made Active in Reports: 09/28/2021

Number of Days to Update: 15

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 09/13/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Quarterly

OK COMPLAINT: Oklahoma Complaint System Database

Environmental complaints reported to the Oklahoma Corporation Commission.

Date of Government Version: 06/30/2020 Date Data Arrived at EDR: 04/28/2021 Date Made Active in Reports: 07/20/2021

Number of Days to Update: 83

Source: Oklahoma Conservation Commission

Telephone: 405-521-4828 Last EDR Contact: 07/28/2021

Next Scheduled EDR Contact: 11/22/2021 Data Release Frequency: Annually

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/13/2021 Date Data Arrived at EDR: 09/15/2021 Date Made Active in Reports: 10/12/2021

Number of Days to Update: 27

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 09/15/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/04/2021 Date Data Arrived at EDR: 05/18/2021 Date Made Active in Reports: 08/11/2021

Number of Days to Update: 85

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 08/17/2021

Next Scheduled EDR Contact: 11/29/2021 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS Telephone: 888-275-8

Telephone: 888-275-8747 Last EDR Contact: 10/15/2021

Next Scheduled EDR Contact: 01/24/2022 Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018 Date Data Arrived at EDR: 04/11/2018 Date Made Active in Reports: 11/06/2019

Number of Days to Update: 574

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 10/05/2021

Next Scheduled EDR Contact: 01/17/2022

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 63

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 08/06/2021

Next Scheduled EDR Contact: 11/22/2021 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/13/2021 Date Data Arrived at EDR: 09/15/2021 Date Made Active in Reports: 09/28/2021

Number of Days to Update: 13

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 09/15/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 07/26/2021

Next Scheduled EDR Contact: 11/15/2021 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 05/08/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 73

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 08/06/2021

Next Scheduled EDR Contact: 11/15/2021

Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 06/17/2020 Date Made Active in Reports: 09/10/2020

Number of Days to Update: 85

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 09/17/2021

Next Scheduled EDR Contact: 12/27/2021 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 08/14/2020 Date Made Active in Reports: 11/04/2020

Number of Days to Update: 82

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 08/17/2021

Next Scheduled EDR Contact: 11/29/2021 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/19/2021 Date Data Arrived at EDR: 07/19/2021 Date Made Active in Reports: 10/12/2021

Number of Days to Update: 85

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 10/20/2021

Next Scheduled EDR Contact: 01/31/2022 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/29/2021 Date Data Arrived at EDR: 08/04/2021 Date Made Active in Reports: 08/31/2021

Number of Days to Update: 27

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 10/01/2021

Next Scheduled EDR Contact: 12/13/2021 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/07/2021 Date Data Arrived at EDR: 05/13/2021 Date Made Active in Reports: 08/03/2021

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 10/18/2021

Next Scheduled EDR Contact: 01/31/2022 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 12/30/2020 Date Data Arrived at EDR: 01/14/2021 Date Made Active in Reports: 03/05/2021

Number of Days to Update: 50

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 10/01/2021

Next Scheduled EDR Contact: 11/15/2021 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: 11/19/2020 Date Data Arrived at EDR: 01/08/2021 Date Made Active in Reports: 03/22/2021

Number of Days to Update: 73

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 10/08/2021

Next Scheduled EDR Contact: 01/17/2022 Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016 Date Data Arrived at EDR: 11/23/2016 Date Made Active in Reports: 02/10/2017

Number of Days to Update: 79

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 09/30/2021

Next Scheduled EDR Contact: 01/17/2022 Data Release Frequency: Quarterly

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

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA Telephone: 202-566-1667

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/08/2021 Date Data Arrived at EDR: 03/11/2021 Date Made Active in Reports: 05/11/2021

Number of Days to Update: 61

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 10/18/2021

Next Scheduled EDR Contact: 01/31/2022 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019 Date Data Arrived at EDR: 12/01/2020 Date Made Active in Reports: 02/09/2021

Number of Days to Update: 70

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 09/03/2021

Next Scheduled EDR Contact: 12/13/2021 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019

Number of Days to Update: 251

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 08/31/2021

Next Scheduled EDR Contact: 12/13/2021 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019 Date Data Arrived at EDR: 11/06/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 96

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 08/06/2021

Next Scheduled EDR Contact: 11/15/2021 Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019 Date Data Arrived at EDR: 07/01/2019 Date Made Active in Reports: 09/23/2019

Number of Days to Update: 84

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 09/27/2021

Next Scheduled EDR Contact: 01/10/2022 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020 Date Data Arrived at EDR: 01/28/2020 Date Made Active in Reports: 04/17/2020

Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 07/23/2021

Next Scheduled EDR Contact: 11/08/2021 Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2021 Date Data Arrived at EDR: 07/14/2021 Date Made Active in Reports: 07/16/2021

Number of Days to Update: 2

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 09/30/2021

Next Scheduled EDR Contact: 01/17/2022 Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 06/22/2020 Date Made Active in Reports: 11/20/2020

Number of Days to Update: 151

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 09/15/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater

than 640 acres.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/14/2015 Date Made Active in Reports: 01/10/2017

Number of Days to Update: 546

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 10/05/2021

Next Scheduled EDR Contact: 01/17/2022 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017 Date Data Arrived at EDR: 09/11/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 3

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 07/23/2021

Next Scheduled EDR Contact: 11/15/2021

Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019 Date Data Arrived at EDR: 11/15/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 74

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 08/12/2021

Next Scheduled EDR Contact: 11/29/2021 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/29/2021 Date Data Arrived at EDR: 08/04/2021 Date Made Active in Reports: 08/31/2021

Number of Days to Update: 27

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 10/01/2021

Next Scheduled EDR Contact: 01/10/2022

Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health

Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Telephone: 202-564-2496

Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/03/2021 Date Data Arrived at EDR: 05/25/2021 Date Made Active in Reports: 08/11/2021

Number of Days to Update: 78

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 08/24/2021

Next Scheduled EDR Contact: 12/06/2021 Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 06/30/2021 Date Data Arrived at EDR: 07/01/2021 Date Made Active in Reports: 09/28/2021

Number of Days to Update: 89

Source: DOL, Mine Safety & Health Admi

Telephone: 202-693-9424 Last EDR Contact: 09/09/2021

Next Scheduled EDR Contact: 12/13/2021 Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020 Date Data Arrived at EDR: 05/27/2020 Date Made Active in Reports: 08/13/2020

Number of Days to Update: 78

Source: USGS Telephone: 703-648-7709

Last EDR Contact: 08/26/2021

Next Scheduled EDR Contact: 12/06/2021 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 08/26/2021

Next Scheduled EDR Contact: 12/06/2021 Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/15/2021 Date Data Arrived at EDR: 06/16/2021 Date Made Active in Reports: 08/17/2021

Number of Days to Update: 62

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 09/14/2021

Next Scheduled EDR Contact: 12/20/2021 Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/05/2021 Date Data Arrived at EDR: 05/18/2021 Date Made Active in Reports: 08/17/2021

Number of Days to Update: 91

Source: EPA Telephone: (214) 665-2200 Last EDR Contact: 08/31/2021

Next Scheduled EDR Contact: 12/13/2021 Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/26/2021 Date Data Arrived at EDR: 07/01/2021 Date Made Active in Reports: 09/28/2021

Number of Days to Update: 89

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 10/05/2021

Next Scheduled EDR Contact: 01/17/2022 Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021 Date Data Arrived at EDR: 05/21/2021 Date Made Active in Reports: 08/11/2021

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 202-564-0527 Last EDR Contact: 08/26/2021

Next Scheduled EDR Contact: 12/06/2021 Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020

Number of Days to Update: 77

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 10/07/2021

Next Scheduled EDR Contact: 01/24/2022 Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/14/2021 Date Data Arrived at EDR: 05/14/2021 Date Made Active in Reports: 08/03/2021

Number of Days to Update: 81

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 08/13/2021

Next Scheduled EDR Contact: 11/29/2021 Data Release Frequency: Quarterly

AIRS: Permitted AIRS Facility Listing

A listing of permitted AIRS facility locations.

Date of Government Version: 06/16/2021 Date Data Arrived at EDR: 06/16/2021 Date Made Active in Reports: 06/22/2021

Number of Days to Update: 6

Source: Department of Environmental Quality

Telephone: 405-702-4100 Last EDR Contact: 09/15/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Quarterly

ASBESTOS: Asbestos Notification Asbestos project site locations

> Date of Government Version: 07/01/2021 Date Data Arrived at EDR: 07/01/2021 Date Made Active in Reports: 09/23/2021

Number of Days to Update: 84

Source: Department of Labor Telephone: 405-521-6467 Last EDR Contact: 10/04/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Varies

DRYCLEANERS: Drycleaner Facilities
A listing of drycleaner facility locations.

Date of Government Version: 06/16/2021 Date Data Arrived at EDR: 06/16/2021 Date Made Active in Reports: 09/13/2021

Number of Days to Update: 89

Source: Department of Environmental Quality

Telephone: 405-702-9100 Last EDR Contact: 09/20/2021

Next Scheduled EDR Contact: 01/03/2022 Data Release Frequency: Quarterly

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information.

Date of Government Version: 07/25/2014 Date Data Arrived at EDR: 11/06/2014 Date Made Active in Reports: 01/13/2015

Number of Days to Update: 68

Source: Department of Environmental Quality

Telephone: 405-702-5105 Last EDR Contact: 08/06/2021

Next Scheduled EDR Contact: 11/22/2021 Data Release Frequency: No Update Planned

Financial Assurance 2: Financial Assurance Information Listing

Financial Assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/10/2013 Date Data Arrived at EDR: 12/12/2013 Date Made Active in Reports: 01/24/2014

Number of Days to Update: 43

Source: Department of Environmental Quality

Telephone: 405-702-5100 Last EDR Contact: 08/06/2021

Next Scheduled EDR Contact: 11/22/2021 Data Release Frequency: No Update Planned

TIER 2: Tier 2 Data Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2020 Date Data Arrived at EDR: 06/07/2021 Date Made Active in Reports: 08/31/2021

Number of Days to Update: 85

Source: Department of Environmental Quality

Telephone: 405-702-1000 Last EDR Contact: 09/01/2021

Next Scheduled EDR Contact: 12/20/2021 Data Release Frequency: Annually

UIC: Underground Injection Wells Database Listing

Class I injection wells. CLASS I wells are used to inject liquid hazardous and non-hazardous wastes beneath the lower most Underground Sources of Drinking Water (USDW).

Date of Government Version: 06/14/2021 Date Data Arrived at EDR: 07/14/2021 Date Made Active in Reports: 10/06/2021

Number of Days to Update: 84

Source: Department of Environmental Quality

Telephone: 405-702-5188 Last EDR Contact: 10/11/2021

Next Scheduled EDR Contact: 01/24/2022 Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014 Date Data Arrived at EDR: 01/06/2015 Date Made Active in Reports: 05/06/2015

Number of Days to Update: 120

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/30/2021

Next Scheduled EDR Contact: 01/17/2022 Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 02/05/2015 Date Made Active in Reports: 03/06/2015

Number of Days to Update: 29

Source: EPA

Telephone: 202-564-2497 Last EDR Contact: 09/30/2021

Next Scheduled EDR Contact: 01/17/2022 Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018 Date Data Arrived at EDR: 10/21/2019 Date Made Active in Reports: 10/24/2019

Number of Days to Update: 3

Source: USGS

Telephone: 703-648-6533 Last EDR Contact: 08/26/2021

Next Scheduled EDR Contact: 12/06/2021 Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011 Date Data Arrived at EDR: 08/05/2011 Date Made Active in Reports: 09/29/2011

Number of Days to Update: 55

Source: EPA, Office of Water Telephone: 202-564-2496 Last EDR Contact: 09/30/2021

Next Scheduled EDR Contact: 01/17/2022 Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Source: EDR, Inc.

Date Data Arrived at EDR: N/A Telephone: N/A

Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Oklahoma.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/03/2014 Number of Days to Update: 186 Source: Department of Environmental Quality

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Oklahoma.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/20/2014
Number of Days to Update: 203

Source: Department of Environmental Quality

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Oklahoma Corporation Commission in Oklahoma.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 12/27/2013 Number of Days to Update: 179

Source: Oklahoma Corporation Commission

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 03/24/2021 Date Data Arrived at EDR: 05/11/2021 Date Made Active in Reports: 07/28/2021

Number of Days to Update: 78

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 08/10/2021

Next Scheduled EDR Contact: 11/22/2021 Data Release Frequency: No Update Planned

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: 01/01/2019 Date Data Arrived at EDR: 04/29/2020 Date Made Active in Reports: 07/10/2020

Number of Days to Update: 72

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 07/29/2021

Next Scheduled EDR Contact: 11/08/2021 Data Release Frequency: Quarterly

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 06/19/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 76

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 09/01/2021

Next Scheduled EDR Contact: 12/20/2021 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are

comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Centers Source: Department of Human Services

Telephone: 405-521-3561

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

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APPENDIX E CREDENTIALS

PHILIP D. WOOD P.E. OKLAHOMA CITY OFFICE SENIOR ENGINEER

PROFESSIONAL EXPERIENCE

Mr. Wood is a Senior Principal in the Oklahoma City office. He provides technical review and management of major projects of various types. His Masters degree in Civil Engineering was an emphasis in Soil Mechanics and Foundation Engineering. Mr. Wood has over 30 years of experience with projects involving construction of all types, waste management, soil and groundwater investigations, landfill design, lagoon assessment and closure, remedial system design, asbestos, lead-based paint, hazardous waste facility design and closure, industrial wastewater treatment, indoor air quality and health and safety related industrial hygiene services. He has served commercial, military, public and private industrial sector clients throughout the United States and abroad.

Mr. Wood has provided various consulting services for clients including local, state and federal agencies. He has also provided services for private sector clients including aerospace, agricultural, chemical, oil and gas, waste management, plating, food products, metals refining, nuclear fuels processing, nuclear weapons assembly, real estate and tire manufacturing.

Mr. Wood has performed and managed projects involving design and construction of various types of structures, comprehensive remedial design and implementation services for various contaminant types and under different regulatory jurisdictions, including RCRA, consent order and voluntary cleanup programs. He has also performed large scale wastewater characterization studies for industrial clients, and designed and implemented wastewater treatment systems.

PROJECT EXPERIENCE

Groundwater and Soil Remediation System Design

- Pumping and pilot tests to enable design of recovery systems
- Design, installation and start-up of comprehensive groundwater remediation systems, including pumping systems for water and product, air stripping, carbon absorption, vapor extraction and air sparging
- Vapor mitigation system and sub-slab depressurization system design and installation oversight.

Risk Assessment

- Risk analysis, negotiation, closure determination at industrial facilities
- Risk-based corrective action analysis at underground storage tank sites
- Fate and transport modeling, receptor surveys
- Management of properties in voluntary cleanup programs in Oklahoma, Texas and Kansas

Solid Waste Experience

- Liner design and installation management
- Leachate system upgrades
- New cell design and installation management
- Certifying QA/QC engineer, various municipal solid waste landfills

Education

Master of Science, Civil Engineering, 1981, Oklahoma State University

Bachelor of Science, Civil Engineering, 1979, Oklahoma State University

Registrations

Professional Engineer: Oklahoma and Kansas

Oklahoma Corporation Commission: Environmental Consultant License (lapsed)

Certifications

40-Hour OSHA Hazardous Waste Operations Training

Affiliations

American Society of Civil Engineers

Commercial Real Estate Council

Society for Marketing Professional Services

Work History

Terracon, Office Manager, 2003present

Terracon, Environmental Manager, 1999-2003

CRA Services, Regional Manager, 1997-1999

ATEC Associates, District Manager/Associate Vice-President, 1995-1997

Roberts/Schornick & Associates, Inc., Director of Environmental Engineering, 1989-1994

Terracon, Project Geotechnical Engineer/Manager, 1985-1989

McClelland Engineers, Project Geotechnical Engineer, 1982-1985



- Permit Modifications for Vertical and Horizontal Expansions Various Landfills, Oklahoma
- Hydrogeologic Study, Design and Permitting, Fly ash Landfill Cedar Rapids, Iowa
- Clients include Waste Management, Allied Waste, BFI, Waste Connections

Hazardous Waste Experience

- · Permitting, including preparation of contingency plans, sampling and analysis plans and closure plans
- Tank design, installation management and certification of installation
- Integrity certification of existing tank systems
- Tank system closure plans and certification of closures
- RCRA surface impoundment closure plans, closure supervision and closure certifications
- RCRA closure cost estimates for waste pile, tank and surface impoundment closures
- RCRA waste pile closure plans, construction management and certification of closures

Agricultural Experience

- · Livestock facility design and permitting
- · Dairy permitting and compliance
- Feed lot permitting and compliance
- Lagoon design, construction oversight and certifications
- Due diligence assessments for hog production and dairy facilities
- Lagoon certifications required by Oklahoma Department of Agriculture; Texas Council on Environmental Quality
- · Monitor well installation and sampling
- Investigation of lagoon seepage, including design and implementation of repairs
- Emergency lagoon construction
- · Synthetic liner re-certifications after liner damage

Seepage and Drainage Experience

- Evaluation of groundwater seepage for temporary and permanent below grade facilities, including determination of seepage quantities, piping and drain system design, and temporary and permanent pumping system design. Studies for various sizes and types of facilities across the United States, including gymnasiums, high rise office buildings, museums, and sewer lines
- Evaluation of leaking dam, subsurface exploration, stability analysis, evaluation and recommendations for repair options
- Earthen dam inspection in accordance with Oklahoma Water Resources Board criteria. Inspection of dams and evaluation of hazards for Corps of Engineers, Beckham and Washita Counties, Oklahoma
- Seepage investigation, 25 foot high dam, including recommendations for repairs
- Investigation of lagoon seepage, including field measurements of seepage, and recommendations for repair where needed for several agricultural waste lagoons
- Pump tests, seepage analysis, and design of systems for control of water flow for hydroelectric plant below Corps of Engineers dam

Oil and Gas Experience

- Facility Response Plan and Vulnerability Analysis, 700-mile Pipeline Texas, Oklahoma, Missouri
- Design and implementation of groundwater remediation system, drip tank site
- Pre-purchase assessment and sensitive receptor surveys, 270- and 1,000-mile Texas crude oil pipelines
- Former and current gas plant regulatory, soil and groundwater assessments
- Spill prevention control and countermeasures (SPCC) plans, producing properties, refining, treatment, and pumping facilities
- Mercury meter assessments and remediation
- Erosion study and design of remedies for 90-mile pipeline

Assessments/Audit

 Multi-media compliance audits for industrial facilities, including hazardous waste treatment and recycling facility



- Site assessments for commercial, industrial and manufacturing facilities throughout the United States
- Fiber optic lines and regeneration stations, including NEPA screens

Storm Water Permitting

- Pollution prevention plan development, numerous industrial facilities including manufacturing, refining and chemical
- Notice of Intent preparation
- · Storm water evaluations including flow monitoring, mass balances and determination of contaminant inflow

Industrial Wastewater Management

- Wastewater characterization, bench scale studies, design, permitting and start-up for various treatment systems, including unit operations of settling, precipitation, separation, neutralization and flotation
- Wastewater evaluations for industrial facilities including secondary metals facility, nuclear fuels processing facility, military aircraft manufacturing



APPENDIX F DESCRIPTION OF TERMS AND ACRONYMS

Term/Acronym	Description
ACM	Asbestos Containing Material. Asbestos is a naturally occurring mineral, three varieties of which (chrysotile, amosite, crocidolite) have been commonly used as fireproofing or binding agents in construction materials. Exposure to asbestos, as well as ACM, has been documented to cause lung diseases including asbestosis (scarring of the lung), lung cancer and mesothelioma (a cancer of the lung lining).
	Regulatory agencies have generally defined ACM as a material containing greater that one (1) percent asbestos, however some states (e.g. California) define ACM as materials having 0.1% asbestos. In order to define a homogenous material as non-ACM, a minimum number of samples must be collected from the material dependent upon its type and quantity. Homogenous materials defined as non-ACM must either have 1) no asbestos identified in all of its samples or 2) an identified asbestos concentration below the appropriate regulatory threshold. Asbestos concentrations are generally determined using polarized light microscopy or transmission electron microscopy. Point counting is an analytical method to statistically quantify the percentage of asbestos in a sample. The asbestos component of ACM may either be friable or non-friable. Friable materials, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure and have a higher potential for a fiber release than non-friable ACM. Non-friable ACM are materials that are firmly bound in a matrix by plastic, cement, etc. and, if handled carefully, will not become friable.
	Federal and state regulations require that either all suspect building materials be presumed ACM or that an asbestos survey be performed prior to renovation, dismantling, demolition, or other activities that may disturb potential ACM. Notifications are required prior to demolition and/or renovation activities that may impact the condition of ACM in a building. ACM removal may be required if the ACM is likely to be disturbed or damaged during the demolition or renovation. Abatement of friable or potentially friable ACM must be performed by a licensed abatement contractor in accordance with state rules and NESHAP. Additionally, OSHA regulations for work classification, worker training and worker protection will apply.
AHERA	Asbestos Hazard Emergency Response Act
AST	Aboveground Storage Tanks. ASTs are generally described as storage tanks less than 10% of which are below ground (i.e., buried). Tanks located in a basement, but not buried, are also considered ASTs. Whether, and the extent to which, an AST is regulated, is determined on a case-by-case basis and depends upon tank size, its contents and the jurisdiction of its location.
BGS	Below Ground Surface
Brownfields	State and/or tribal listing of Brownfield properties addressed by Cooperative Agreement Recipients or Targeted Brownfields Assessments.
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes. BTEX are VOC components found in gasoline and commonly used as analytical indicators of a petroleum hydrocarbon release.
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (a.k.a. Superfund). CERCLA is the federal act that regulates abandoned or uncontrolled hazardous waste sites. Under this Act, joint and several liability may be imposed on potentially responsible parties for cleanup-related costs.
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System. An EPA compilation of sites having suspected or actual releases of hazardous substances to the environment. CERCLIS also contains information on site inspections, preliminary assessments and remediation of hazardous waste sites. These sites are typically reported to EPA by states and municipalities or by third parties pursuant to CERCLA Section 103.
CESQG	Conditionally Exempt Small Quantity Generators
CFR	Code of Federal Regulations

Term/Acronym	Description
CREC	Controlled Recognized Environmental Condition is defined in ASTM E1527-13 as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report."
DOT	U.S. Department of Transportation
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System. An EPA-maintained federal database which stores information on notifications of oil discharges and hazardous substance releases in quantities greater than the applicable reportable quantity under CERCLA. ERNS is a cooperative datasharing effort between EPA, DOT, and the National Response Center.
ESA	Environmental Site Assessment
FRP	Fiberglass Reinforced Plastic
Hazardous Substance	As defined under CERCLA, this is (A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title; (C) any hazardous waste having characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (with some exclusions); (D) any toxic pollutant listed under section 1317(a) of Title 33; (E) any hazardous air pollutant listed under section 112 of the Clean Air Act; and (F) any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action under section 2606 of Title 15. This term does not include petroleum, including crude oil or any fraction thereof which is not otherwise listed as a hazardous substance under subparagraphs (A) through (F) above, and the term include natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).
Hazardous Waste	This is defined as having characteristics identified or listed under section 3001 of the Solid Waste Disposal Act (with some exceptions). RCRA, as amended by the Solid Waste Disposal Act of 1980, defines this term as a "solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."
HREC	Historical Recognized Environmental Condition is defined in ASTM E1527-13 as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time of the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition."

Term/Acronym	Description
IC/EC	A listing of sites with institutional and/or engineering controls in place. IC 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. EC 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.
ILP	Innocent Landowner/Operator Program
LQG	Large Quantity Generators
LUST	Leaking Underground Storage Tank. This is a federal term set forth under RCRA for leaking USTs. Some states also utilize this term.
MCL	Maximum Contaminant Level. This Safe Drinking Water concept (and also used by many states as a ground water cleanup criteria) refers to
	the limit on drinking water contamination that determines whether a supplier can deliver water from a specific source without treatment.
Mene	Material Safety Data Sheets. Written/printed forms prepared by chemical manufacturers, importers and employers which identify the physical
MSDS	and chemical traits of hazardous chemicals under OSHA's Hazard Communication Standard.
NESHAP	National Emissions Standard for Hazardous Air Pollutants (Federal Clean Air Act). This part of the Clean Air Act regulates emissions of
NESHAF	hazardous air pollutants.
NFRAP	Facilities where there is "No Further Remedial Action Planned," as more particularly described under the Records Review section of this report.
NOV	Notice of Violation. A notice of violation or similar citation issued to an entity, company or individual by a state or federal regulatory body
NOV	indicating a violation of applicable rule or regulations has been identified.
NPDES	National Pollutant Discharge Elimination System (Clean Water Act). The federal permit system for discharges of polluted water.
NPL	The NPL is the EPA's database of uncontrolled or abandoned hazardous waste facilities that have been listed for priority remedial actions
INFL	under the Superfund Program.
OSHA	Occupational Safety and Health Administration or Occupational Safety and Health Act
PACM	Presumed Asbestos-Containing Material. A material that is suspected of containing or presumed to contain asbestos but which has not been
	analyzed to confirm the presence or absence of asbestos.
	Polychlorinated Biphenyl. A halogenated organic compound commonly in the form of a viscous liquid or resin, a flowing yellow oil, or a waxy
	solid. This compound was historically used as dielectric fluid in electrical equipment (such as electrical transformers and capacitors, electrical
PCB	ballasts, hydraulic and heat transfer fluids), and for numerous heat and fire sensitive applications. PCB was preferred due to its durability,
ГОВ	stability (even at high temperatures), good chemical resistance, low volatility, flammability, and conductivity. PCBs, however, do not break
	down in the environment and are classified by the EPA as a suspected carcinogen. 1978 regulations, under the Toxic Substances Control Act,
	prohibit manufacturing of PCB-containing equipment; however, some of this equipment may still be in use today.
pCi/L	picoCuries per Liter of Air. Unit of measurement for Radon and similar radioactive materials.
PLM	Polarized Light Microscopy (see ACM section of the report, if included in the scope of services)
PST	Petroleum Storage Tank. An AST or UST that contains a petroleum product.

Term/Acronym	Description
Radon	A radioactive gas resulting from radioactive decay of naturally-occurring radioactive materials in rocks and soils containing uranium, granite, shale, phosphate, and pitchblende. Radon concentrations are measured in picoCuries per Liter of Air. Exposure to elevated levels of radon creates a risk of lung cancer; this risk generally increases as the level of radon and the duration of exposure increases. Outdoors, radon is diluted to such low concentrations that it usually does not present a health concern. However, radon can accumulate in building basements or similar enclosed spaces to levels that can pose a risk to human health. Indoor radon concentrations depend primarily upon the building's construction, design and the concentration of radon in the underlying soil and ground water. The EPA recommended annual average indoor "action level" concentration for residential structures is 4.0 pCi/l.
RCRA	Resource Conservation and Recovery Act. Federal act regulating solid and hazardous wastes from point of generation to time of disposal ('cradle to grave"). 42 U.S.C. 6901 et seq.
RCRA Generators	The RCRA Generators database, maintained by the EPA, lists facilities that generate hazardous waste as part of their normal business practices. Generators are listed as either large (LQG), small (SQG), or conditionally exempt (CESQG). LQG produce at least 1000 kg/month of non-acutely hazardous waste or 1 kg/month of acutely hazardous waste. SQG produce 100-1000 kg/month of non-acutely hazardous waste.
RCRA CORRACTS/TS Ds	The USEPA maintains a database of RCRA facilities associated with treatment, storage, and disposal (TSD) of hazardous materials which are undergoing "corrective action". A "corrective action" order is issued when there is a release of hazardous waste or constituents into the environment from a RCRA facility.
RCRA Non- CORRACTS/TS Ds	The RCRA Non-CORRACTS/TSD Database is a compilation by the USEPA of facilities which report storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.
RCRA Violators List	RAATS. RCRA Administrative Actions Taken. RAATS information is now contained in the RCRIS database and includes records of administrative enforcement actions against facilities for noncompliance.
RCRIS	Resource Conservation and Recovery Information System, as defined in the Records Review section of this report.
REC	Recognized Environmental Conditions are defined by ASTM E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment. De minimis conditions are not recognized environmental conditions."
SCL	State "CERCLIS" List (see SPL /State Priority List, below).
SPCC	Spill Prevention, Control and Countermeasures. SPCC plans are required under federal law (Clean Water Act and Oil Pollution Act) for any facility storing petroleum in tanks and/or containers of 55-gallons or more that when taken in aggregate exceed 1,320 gallons. SPCC plans are also required for facilities with underground petroleum storage tanks with capacities of over 42,000 gallons. Many states have similar spill prevention programs, which may have additional requirements.
SPL	State Priority List. State list of confirmed sites having contamination in which the state is actively involved in clean up activities or is actively pursuing potentially responsible parties for clean up. Sometimes referred to as a State "CERCLIS" List.
SQG	Small Quantity Generator
SWF/LF	State and/or Tribal database of Solid Waste/Landfill facilities. The database information may include the facility name, class, operation type, area, estimated operational life, and owner.
TPH	Total Petroleum Hydrocarbons
TRI	Toxic Release Inventory. Routine EPA report on releases of toxic chemicals to the environment based upon information submitted by entities subject to reporting under the Emergency Planning and Community Right to Know Act.

Term/Acronym	Description
TSCA	Toxic Substances Control Act. A federal law regulating manufacture, import, processing and distribution of chemical substances not specifically
	regulated by other federal laws (such as asbestos, PCBs, lead-based paint and radon). 15 U.S.C 2601 et seq.
USACE	United States Army Corps of Engineers
USC	United States Code
USGS	United States Geological Survey
USNRCS	United States Department of Agriculture-Natural Resource Conservation Service
UST	Underground Storage Tank. Most federal and state regulations, as well as ASTM E1527-13, define this as any tank, incl., underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10% or more beneath the surface of the ground (i.e., buried).
VCP	State and/or Tribal facilities included as Voluntary Cleanup Program sites.
VOC	Volatile Organic Compound
Wetlands	Areas that are typically saturated with surface or ground water that creates an environment supportive of wetland vegetation (i.e., swamps, marshes, bogs). The <u>Corps of Engineers Wetlands Delineation Manual</u> (Technical Report Y-87-1) defines wetlands as areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. For an area to be considered a jurisdictional wetland, it must meet the following criteria: more than 50 percent of the dominant plant species must be categorized as Obligate, Facultative Wetland, or Facultative on lists of plant species that occur in wetlands; the soil must be hydric; and, wetland hydrology must be present.
	The federal Clean Water Act which regulates "waters of the US," also regulates wetlands, a program jointly administered by the USACE and the EPA. Waters of the U.S. are defined as: (1) waters used in interstate or foreign commerce, including all waters subject to the ebb and flow of tides; (2) all interstate waters including interstate wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, etc., which the use, degradation, or destruction could affect interstate/ foreign commerce; (4) all impoundments of waters otherwise defined as waters of the U.S., (5) tributaries of waters identified in 1 through 4 above; (6) the territorial seas; and (7) wetlands adjacent to waters identified in 1 through 6 above. Only the USACE has the authority to make a final wetlands jurisdictional determination.