PHASE I ENVIRONMENTAL SITE ASSESSMENT

80 ACRE BUCHANAN PROPERTY CR N 300 Crescent, OK 73028



Prepared For:



DOLESE BROS. CO. 20 NW 13th Street Oklahoma City, OK, 73135



PO Box 1292 Norman, OK 73070 DECEMBER 23, 2019

TABLE OF CONTENTS

1.0	GENERAL INFORMATION	1
2.0	EXECUTIVE SUMMARY	2
2.1	SUBJECT PROPERTY DESCRIPTION	2
2.2	DATA GAPS	
2.3	FINDINGS	2
2.	3.1 Records Review	2
2.	3.2 Site Reconnaissance	2
	3.3 Interviews	
	3.4 Additional Services	
2.4	OPINIONS & RECOMMENDATIONS	
	4.1 Recognized Environmental Conditions (RECs)	
	4.2 Controlled Recognized Environment Conditions (CRECs)	
	4.3 Historical Recognized Environmental Conditions (HRECs)	
	4.4 Environmental Issues, Concerns, and De Minimis Conditions	
2. 2.5	4.5 Business Environmental Risks CONCLUSIONS	
2.3		
3.0	INTRODUCTION	6
3.1	Purpose	6
3.2	DETAILED SCOPE OF SERVICES	6
3.	2.1 Records Review	6
3.	2.2 Site Reconnaissance	6
	2.3 Interviews	
	2.4 Reporting	
3.3	SIGNIFICANT ASSUMPTIONS	
3.4	LIMITATIONS AND EXPECTATIONS	
3.5	DEVIATIONS	
3.6	SPECIAL TERMS AND CONDITIONS	
3.7	USER RELIANCE	
4.0	SITE DESCRIPTION	
4.1	LOCATION AND LEGAL DESCRIPTION	
4.2	SITE AND VICINITY CHARACTERISTICS	
4.3	CURRENT USE OF THE PROPERTY	
4.4	DESCRIPTION OF STRUCTURES, ROADS AND OTHER IMPROVEMENTS	
4.5	CURRENT USES OF ADJOINING PROPERTY	9
5.0	USER PROVIDED INFORMATION	10
5.1	TITLE RECORDS	10
5.2	ENVIRONMENTAL LIENS OR ACTIVITY & USE LIMITATIONS	
5.3	SPECIALIZED KNOWLEDGE/EXPERIENCE OF THE USER	10
5.4	VALUATION OF THE PROPERTY	10
5.5	COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION ABOUT THE PROPERTY	
5.6	PRESENCE OR LIKELY PRESENCE OF CONTAMINATION	
5.7	OWNER, PROPERTY MANAGER, OCCUPANT INFORMATION	
5.8	REASON FOR PERFORMING THE PHASE I	
5.9	OTHER INFORMATION	10
6.0	RECORDS REVIEW	11
6.1	STANDARD ENVIRONMENTAL RECORDS REVIEWS	11
6.	1.1 Environmental Data Resources Database Review	
6.	1.2 Other Database/Records Review	14
	Voluntary Cleanup Program	14



6.2	PHYSICAL SETTING INFORMATION	14
6.	2.1 Topographic Information	14
6.	2.2 Hydrologic Information	
	Surface Water	
	Ground Water	15
6.	2.3 Geologic Information	15
	Regional Geology	
	Soils	
	Oil and Gas Fields	
6.3	HISTORICAL USE INFORMATION—SUBJECT PROPERTY	
6	3.1 Aerial Photographs	
6	3.2 Historic Topographic Maps	17
6	3.3 Fire Insurance Maps	18
6	3.4 City Directories	18
6.4	HISTORICAL USE INFORMATION—ADJOINING PROPERTIES	18
6.	4.1 Aerial Photographs	18
6.	4.2 Historic Topographic Maps	
6.	4.3 Fire Insurance Maps	
6.	4.4 City Directories	
- 0		
7.0	SITE RECONNAISSANCE	19
7.1	METHODOLOGY AND LIMITING CONDITIONS	19
7.2	GENERAL SITE SETTING	
7.3	EXTERIOR OBSERVATIONS	
	3.1 Site Visit Findings	
/	Hazardous Substances	
	Petroleum Products	
	USTs	
	ASTs	19
	Other Suspect Containers	
	Equipment Likely to Contain PCBs	
	Staining/Corrosion	20
	Discharge Features	
	Pits, Ponds, And Lagoons	
	Solid Waste Dumping/Landfills	
	Stained Soil/Stressed Vegetation	
	Wells	
7	3.2 Adjoining Property and General Vicinity	
7.4	INTERIOR OBSERVATIONS	
8.0	INTERVIEWS	21
8.1	INTERVIEW WITH OWNER	21
8.2	INTERVIEW WITH OWNER	
8.3	INTERVIEWS WITH EOCAL GOVERNMENT OFFICIALS	
0.5	INTERVIEWS WITH OTHERS	21
9.0	FINDINGS	22
9.1	Records Review	22
9.2	SITE RECONNAISSANCE	
9.2 9.3	INTERVIEWS	
10.0	OPINIONS	25
10.1	RECORDS REVIEW	23
10.2	SITE RECONNAISSANCE	23
10.3	Interviews	23
11.0	CONCLUSIONS	71
11.0		44

12.0	DEVIATIONS	25
13.0	ADDITIONAL SERVICES	
14.0	REFERENCES	27
15.0	SIGNATURE OF ENVIRONMENTAL PROFESSIONALS	
16.0	QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS	
16.1	DAVID SPARKS	
16.2	GEOFFREY A. CANTY, PH. D	
17.0	APPENDICES	
17.1	SITE/VICINITY MAPS	
17.2	HISTORICAL RESEARCH DOCUMENTATION—AERIAL PHOTOS & TOPO MAPS	
17.3	SITE PHOTOGRAPHS	47
17.4		51
	REGULATORY RECORDS & SUPPORTING DOCUMENTATION	
17	7.4.1 EDR Study Report and Supporting Documents	
	7.4.1 EDR Study Report and Supporting Documents 7.4.2 User Questionnaire	
17	7.4.1 EDR Study Report and Supporting Documents	



1.0 General Information

Client Information:

Dolese Bros. Co. 20 NW 13th Street Oklahoma City, OK 73135

Site Information: 80 Acre Buchanan Property CR N 300 Crescent, OK 73028

Key Site Manager: Ms. Sharon Buchanan *Consultant Information* CC Environmental, LLC PO Box 1292 Norman, OK 73070

Project No: 2083

Report Date: December 13, 2019



2.0 Executive Summary

2.1 Subject Property Description

CC Environmental (CCE) performed a Phase I Environmental Site Assessment (ESA) in general accordance with ASTM 1527-13 and 40 CFR 312 ("All Appropriate Inquiry") for a property (Property) situated within the NE¹/₄ of Section 18, Township 16N, Range 4W I.M., Logan County (Lat: 35.865823 / Long: -97.661065). More specifically, it is located between County Roads NS-299 and NS-300, and south of EW-790. It is divided by the Cimarron River and consists of approximately 80 acres.

The Property is situated within an agricultural and residential area. Residential properties are located to the north of the Property in Twin Lakes development. Vacant land is located to the east, south and west of the Property.

The Phase I ESA is designed to provide the client with an assessment concerning recognized environmental conditions (limited to those issues identified in the report) as they exist at the Property. A recognized environmental condition (REC) is defined as follows (ASTM 1527-13):

"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; or (3) under conditions that pose a material threat of a future release to the environment."

2.2 Data Gaps

During the course of conducting this assessment, the following data gap was identified:

• A title search was not available at the time writing

2.3 Findings

2.3.1 Records Review

Several state and federal environmental databases were searched to determine the possible existence of RECs. Environmental Data Resources, Inc. (EDR) performed the various database searches for the property. Refer to Table 2-1 for a summary of the EDR findings. Also, other record searches were conducted and summarized below.

- According to the EDR Geocheck search (2019a), there are no sites within the area of study. (See Section 6 for more details.)
- According to the Oklahoma Corporation Commission (OCC) well database search, there is one (1) oil or gas well within the same quarter sections as the Property, and five (5) others in the general area.
- According to the OWRB database search, there are one (1) industrial well, one (1) irrigation well, and six (6) domestic wells located in the vicinity of the Property.
- According to the ODEQ Voluntary Cleanup Program website, no VCP sites are located on or near the Property. The nearest site was located over four (4) miles away.

2.3.2 Site Reconnaissance

A representative of CCE (Mr. David Sparks) conducted the site reconnaissance on December 9, 2019. A set procedure for evaluating the parcels was put in place to foster a representative review and to minimize assessment bias. Several photographs were taken to document the conditions of the site and a sketch map was made to correlate the findings.

• The Property is currently an undeveloped parcel covered in grass and trees and bisected by the Cimarron River.

- There were thick areas of vegetation that hampered access to some parts of the Property.
- One oil well and an associated tank battery were observed on the Property. There were no overt signs of leakage around the well head or the tank battery. No obvious evidence of a reserve pit was observed in the area of the oil well.
- An abandoned box truck was observed on the Property.
- An old metal farm building was observed on site.

2.3.3 Interviews

Interviews were conducted with parties having varying degrees of first-hand knowledge about the site. This included a representative of the owner, local governmental agencies, and other entities (when available).

- The interview with the Property Owner (Mrs. Sharon Buchanan) did not reveal any industrial activities. The Property had only been used for recreational purposes.
- The Logan County Emergency Management Director, Mr. David Ball was contacted by email on December 4, 2019 to inquire about any environmental incidents associated with the Property. Mr. Ball stated that he has no knowledge of any environmental incidents at the Property.

2.3.4 Additional Services

No additional services were requested by the client.

2.4 **Opinions & Recommendations**

2.4.1 Recognized Environmental Conditions (RECs)

As defined by ASTM 1527-13, there were no RECs identified during this environmental site assessment.

2.4.2 Controlled Recognized Environment Conditions (CRECs)

As defined by ASTM 1527-13, there were no CRECs identified on the Property during this environmental site assessment.

2.4.3 Historical Recognized Environmental Conditions (HRECs)

As defined by ASTM 1527-13, there were no HRECs identified on the Property during this environmental site assessment.

2.4.4 Environmental Issues, Concerns, and De Minimis Conditions

Some items identified during an environmental assessment may warrant further discussion or evaluation depending on the User's risk tolerance, but were not necessarily considered to be RECs. The User is strongly encouraged to consider these issues when making investment and development decisions because they may affect future land use and liability.

- The Property is located in a historical oil and gas exploration area. Abandoned oil wells, old gathering lines, and other pipelines may be present on or near the Property. Subsurface contamination and/or other issues may be encountered, but there were no overt indications of such.
- There is assumed to be old reserve pits associated with the active well on the Property. These can have contamination associated with them. However, there were no overt indications of stressed vegetation or pollution identified on the Property. Additional investigation may be warranted depending on the User's risk tolerance.

2.4.5 Business Environmental Risks

Business environmental risks were not specifically defined in the scope of work for this assessment; consequently, no specific opinions were made as part of this report.

2.5 Conclusions¹

We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E1527 of the subject property (described in Section 4). Any exceptions to, or deletions from, this practice are described in Section 12 of this report. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the Property.

December 23, 2019



¹ The user is encouraged to review the entire document, but particularly Section 9.0 and 10.0, for a more detailed discussion of the environmental conditions associated with the subject property and the adjoining properties.

Government Record Searched*	Search Distance (miles)	Result
NPL	1.0	No listed/identified sites
Proposed NPL	1.0	No listed/identified sites
Delisted NPL	1.0	No listed/identified sites
NPL Liens SEM	TP	No listed/identified sites No listed/identified sites
	0.5 0.5	No listed/identified sites
LIENS 2	TP	No listed/identified sites
CORRACTS	1.0	No listed/identified sites
RCRA-TSDF	0.5	No listed/identified sites
RCRA-LQG	0.25	No listed/identified sites
RCRA-SQG	0.25	No listed/identified sites
RCRA-CESQG	0.25	No listed/identified sites
RCRA-NonGen	0.25	No listed/identified sites
US ENG CONTROLS	0.5	No listed/identified sites
US INST CONTROL	0.5	No listed/identified sites
ERNS HMIRS	TP TP	No listed/identified sites No listed/identified sites
DOT OPS	TP	No listed/identified sites
US CDL	TP	No listed/identified sites
US BROWNFIELDS	0.5	No listed/identified sites
DOD	1.0	No listed/identified sites
FUDS	1.0	No listed/identified sites
LUCIS	0.5	No listed/identified sites
CONSENT	1.0	No listed/identified sites
ROD	1.0	No listed/identified sites
UMTRA	0.5	No listed/identified sites
ODI	0.5	No listed/identified sites
TRIS	TP	No listed/identified sites
TSCA	TP	No listed/identified sites
FTTS	TP	No listed/identified sites
HIST FTTS SSTS	TP TP	No listed/identified sites No listed/identified sites
ICIS	TP	No listed/identified sites
PADS	TP	No listed/identified sites
MLTS	TP	No listed/identified sites
MINES	0.25	No listed/identified sites
RADINFO	TP	No listed/identified sites
FINDS	TP	No listed/identified sites
RAATS	TP	No listed/identified sites
State Hazardous Waste	1.0	No listed/identified sites
State Landfill	0.5	No listed/identified sites
LUST	0.5	No listed/identified sites
UST	0.25	No listed/identified sites
HIST UST LAST	0.25 0.5	No listed/identified sites No listed/identified sites
AST	0.25	No listed/identified sites
INST CONTROL	0.5	No listed/identified sites
VCP**	0.5	No listed/identified sites
Drycleaners	0.25	No listed/identified sites
Brownfields	0.5	No listed/identified sites
SWRCY	0.5	No listed/identified sites
AIRS	TP	No listed/identified sites
OK Complaint	TP	No listed/identified sites
TIER 2	TP	No listed/identified sites
ECHO	TP	No listed/identified sites
2020 Cor Action	0.25	No listed/identified sites
INDIAN RESERV	1.0	No listed/identified sites
INDIAN LUST INDIAN UST	0.5	No listed/identified sites No listed/identified sites
Manufactured Gas Plants	0.25 1.0	No listed/identified sites
Historical Auto Stations	0.25	No listed/identified sites
Historical Cleaners	0.25	No listed/identified sites
RGA LUST	TP	No listed/identified sites

Table 2-1:A listing of the government records searched, the search distance around the target
property, and the results (EDR, 2019a):

* Refer to Table 3 for an explanation of the databases and abbreviations.



3.0 INTRODUCTION

3.1 Purpose

CC Environmental (CCE) performed a Phase I Environmental Site Assessment at the request of its client, Dolese Bros. Co. (DBC). DBC was interested in evaluating the Property for *recognized environmental conditions* as part of a real estate transaction. The Property was evaluated for the presence or likely presence of any current or historic recognized environmental conditions.

"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; or (3) under conditions that pose a material threat of a future release to the environment. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

3.2 Detailed Scope of Services

A Phase I investigation was performed in general accordance with American Society for Testing and Materials (ASTM) Practice E 1527-13 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM, 2013) and 40 CFR 312 "All Appropriate Inquiry". Procedures and methods outlined in ASTM Practice E 1527-13 were generally adhered to. This includes review of records, site reconnaissance, interviews, and reporting. However, the client was not interested in any business environmental risk assessment.

3.2.1 Records Review

An inquiry and examination of the property and surrounding areas was performed to identify recognized environmental conditions. The accuracy and completeness depended on the availability and quality of public information and the degree to which it is reasonably obtained and reviewed. Specific activities include:

- <u>Delineation of the Physical Setting</u>—The available United States Geological Survey (USGS) 7.5 Minute Topographic Map(s), the USGS Hydrologic Atlas, and the Natural Resource Conservation Service (NRCS) Soil Survey and other resources are used (when available and when applicable) to describe and graphically present the site.
- <u>Review of the Historic Land Uses</u>—Reasonably attainable aerial photographs, topographic maps, and insurance maps, were used to assess the historic land uses of the property. The review proceeded as far back as possible given the availability of reasonable attainable historic information.
- <u>Review of Oil and Gas Well Information</u>—Topographic maps, on-line information and interviews were used to assess the oil and gas activities on the property and adjoining properties.
- <u>Review of Environmental Records</u>—The databases presented in Table 1 were reviewed for the listed search distances around the property.

3.2.2 Site Reconnaissance

A representative of CCE conducted the site investigation. The purpose was to evaluate the property in order to identify recognized environmental conditions. This included:

• <u>Site Evaluation</u>—An approach was used to, visually and physically, observe the property and any structures located on the site. However, the client was not interested in any business

liabilities. The report documents current conditions and physical characteristics of the following items. This includes but was not limited to roads, water supplies, sewage systems, drums, storage tanks, solid and hazardous wastes, oil and gas wells, and electrical transformers identified on the property. The periphery of the property and all structures were observed from all adjacent thoroughfares—when applicable.

• <u>Observation of Uses and Conditions</u>—The current and past uses of the property, adjoining properties, and the surrounding area were physically and visually assessed based on field observations. Geologic and topographic conditions of the subject area and the general vicinity were also observed and noted.

3.2.3 Interviews

Interviews with appropriate and knowledgeable parties were conducted to ascertain and identify recognized environmental conditions. This includes:

- <u>Interviews with Parties Knowledgeable with the Site</u>—Interviews with current and past occupants, key site managers, or other individuals knowledgeable with the present and past operational practices or present or past condition of the property were conducted. This aspect of the evaluation was subject to the ability to identify appropriate interviewees and their willingness to cooperate.
- <u>Interviews with Government Officials</u>—Governmental officials were contacted to determine if there were any recognized environmental conditions (spills, environmental response calls, or other concerns) associated with the property.

3.2.4 Reporting

• <u>Report Submission</u>—The report arrangement follows, in general, the recommended table of contents and report format presented in ASTM E 1527. Two (2) original copies complete with signatures and an electronic copy will be submitted to the client.

3.3 Significant Assumptions

- Environmental Data Resources, Inc. (EDR) performed the database searches. The assumption was made that the state and federal databases are accurate and up-to-date, and that EDR's record search was performed correctly and accurately.
- Information provided to CCE from the client, interviewees, subcontractors, and other sources are correct and accurate.

3.4 Limitations and Expectations

Information reported in this document is limited by *reasonably ascertainable* information. Reasonably ascertainable is defined as information that is publicly available, obtainable from a source within reasonable time and cost constraints, and practically reviewable. The accuracy and completeness will depend on the availability and quality of ascertainable information and the degree to which it is reasonable obtained and reviewed. Given the fundamental objectives of a Phase I Site Assessment, the findings are limited by: temporal factors governing the project completion date; the availability of historical and public information; federal and state regulatory database searches performed by Environmental Data Resources, Inc. (EDR); site investigation and interpretation of physical observations; and the identification and quality of interviewees among other factors. The information was obtained from limited, but reputable, sources; however, CCE does not guarantee the accuracy of the information. This Phase I site assessment is not intended to identify all environmental liabilities, problems, or concerns. It does not eliminate the possibility for site contamination or the presence of a recognized environmental condition.

The report should be read completely; no section should be relied upon individually.

Since no building material or media samples were collected as part of this Phase I, site observations were unable to specifically evaluate conditions related to asbestos, lead-based paint, radon, or mold. These items are considered out of scope items within the ASTM Standard E-1527-13 standard for Phase I Environmental Site Assessments.

3.5 Deviations

There were no significant deviations from the Scope of Work other than the data gaps discussed in Section 12.0.

3.6 Special Terms and Conditions

The client is responsible for proper or legal disclosure or reporting to public, private or regulatory entities.

The findings and conclusions reported in this document are based on best professional judgment, obtained, and reported following generally accepted procedures and practices. No other representations either expressed or implied can be made governing the information presented in this document. Consequently, CCE is not responsible for other interpretations, conclusions, opinions, and/or recommendations made by independent parties. Furthermore, CCE is not responsible for any regulatory, physical, chemical, or other environmental changes to the site.

This Phase I site investigation generally follows procedures and guidelines presented in ASTM Practice E 1527 and does not include: a complete regulatory compliance audit, wetland delineation, archeological/culturally significant resource ground survey, asbestos survey, radon, noise, or lead sample testing, chain of title search, or any subsurface investigation.

CCE's level of effort is commensurate with the skill and degree of care normally exercised by other environmental professionals working under the same conditions and operating in the same location. If CCE fails to provide this level of effort, CCE will rectify the situation to a limited degree within 60 days of the completion of the Phase I. The total responsibility and reparation for any defective in service shall not exceed the amount paid for the service. No other expressed or implied warranty is made for the professional services offered.

3.7 User Reliance

The assessment and report shall be for the sole use and benefit of the client. No benefits or rights are transferable or created for parties other than the client. Reproduction of this report is prohibited without expressed written permission of the client for whom the document was prepared. CCE specifically disclaims any liability to third parties.



4.0 SITE DESCRIPTION

4.1 Location and Legal Description

The Property of interest consists of a parcel of land situated within the NE¹/₄ of Section 18, Township 16N, Range 4W I.M., Logan County (Lat: 35.865823 / Long: -97.661065) and consists of approximately 80 total acres. The Property is located along the Cimarron River roughly 4 miles southwest of Cimarron City, Oklahoma.

4.2 Site and Vicinity Characteristics

Based on observations made during the site reconnaissance, the land use in the general vicinity is agricultural and residential.

4.3 Current Use of the Property

The Property is currently a parcel of grass and tree covered land with an oil well and associated tank battery and a meatal farm building.

4.4 Description of Structures, Roads and Other Improvements

Access to the Property is from CR N 300. It appears that municipal utilities are not available.

4.5 Current Uses of Adjoining Property

In general, the subject Property was located in a commercial and residential area.

North Boundary:	Residential properties
South Boundary:	Vacant land and the Cimarron River
East Boundary:	Vacant land
West Boundary:	Vacant land and the Cimarron River



5.0 USER PROVIDED INFORMATION

The "User", Dolese Bros. Co. (as reported by Mr. Thomas A. Dupuis) provided the following information regarding the Property.

5.1 Title Records

The User reported a title search has been performed on the Property. CCE was not engaged to perform this aspect.

5.2 Environmental Liens or Activity & Use Limitations

The User did not have knowledge of liens or activity limitations related to the Property.

5.3 Specialized Knowledge/Experience of the User

The User did not have specialized knowledge or experience related to the Property.

5.4 Valuation of the Property

The User reported that the purchase price reflected the fair market value of the Property.

5.5 Commonly Known or Reasonably Ascertainable Information about the Property

The User reported that they did not have knowledge regarding past uses, chemicals used on site, spills or releases, or environmental cleanups associated with the Property.

5.6 Presence or Likely Presence of Contamination

The User reported that they did not know of obvious indicators of contamination at the Property.

5.7 Owner, Property Manager, Occupant Information

- The property is owned by:
- Sharon BuchananThe property is managed by:
- Sharon Buchanan
- The property was occupied by: Not occupied

5.8 Reason for Performing the Phase I

CCE was hired to perform a Phase I Site Assessment at the request of DBC. DBC evaluated the Property as part of a due diligence requirement.

5.9 Other Information

A generic site map was provided by the User.

6.0 **RECORDS REVIEW**

6.1 Standard Environmental Records Reviews

6.1.1 Environmental Data Resources Database Review

As specified in ASTM E 1527, a review of state and federal environmental databases must be performed in order to assess the presence of recognized environmental conditions associated with the subject property and adjoining properties. The ASTM method states that a minimum number of federal (e.g., NPL, CERCLIS, RCRA, ERNS) and state (e.g., state NPL, state CERCLIS, USTs, waste facilities) databases must be searched. For this Phase I Site Assessment, a more thorough investigation was performed in which supplemental data sources were evaluated for both the state and federal levels. Environmental Data Resources, Inc. (EDR) (Shelton, Connecticut) performed the database searches (EDR, 2019a). Results from the EDR database searches are summarized below.

Database List	Subject Property Listings	Total # of listings	Environmental Concern posed to the Subject Property
NPL: National Priority List (< 1 mile) "Superfund" list; search identifies sites listed for priority under the Superfund Program	No	0	None
Proposed NPL: Proposed National Priority List (<1 mile) Search identifies sites that have been proposed for the NPL	No	0	None
Delisted NPL: NPL Deletions (<1 mile) Search identifies sites that have been removed from the NPL because no further response is appropriate	No	0	None
NPL Liens (Target Property only) Search identifies sites that have filed notices of Superfund Liens	No	0	None
SEMS: Superfund Enterprise Management System (<0.5 mile) Search identifies sites that are either proposed to or on the NPL and sites that are in the screening and assessment phase for possible inclusion on the NPL (formerly CERCLIS).	No	0	None
SEMS ARCHIVE: No further remedial Action Planned (<0.5 mile) Search identifies sites that were removed from the CERCLIS list for various reasons (formerly CERCLIS-NFRAP)	No	0	None
LIENS 2 (Target property only) Search identifies sites that had a federal CERCLA lien for investigation of releases and threatened releases	No	0	None
CORRACTS: Corrective Action report (<1 mile) Search identifies hazardous waste handlers with RCRA corrective action activity.	No	0	None
RCRA-TSDF: Resource Conservation and Recovery Act-treat, store, or dispose (0.5 mile) Search identifies selective information on sites which generate transport, store, treat, and/or dispose of hazardous waste as defined by RCRA	No	0	None
RCRA-LQG: RCRA Large Quantity Generator (<0.25 mile) Search identifies selective information on "large quantity generators" sites which generate transport, store, treat, and/or dispose of hazardous waste	No	0	None
RCRA-SQG: RCRA Small Quantity Generator (<0.25 mile) Search identifies selective information on "small quantity generators" sites which generate transport, store, treat, and/or dispose of hazardous waste	No	0	None

Table: 6-1: Environmental Database Summary



Detekses List	Subject Property	Total # of	Environmental Concern
Database List	Listings	listings	posed to the Subject Property
RCRA-CESQG: RCRA Conditionally Exempt Small Quantity Generator (<0.25 mile) Search identifies selective information on "conditionally exempt small quantity generators" sites which generate transport, store, treat, and/or dispose of less than 100 kg of hazardous waste	No	0	None
RCRA-NonGen: RCRA Non Generators (<0.25 mile) Search identifies selective information on "small quantity generators" sites which do not presently generate transport, store, treat, and/or dispose of hazardous waste	No	0	None
US ENG Controls: Engineering Controls Sites List (<0.5 mile) Search identifies sites with engineering controls in place	No	0	None
US INST Controls: Institutional Controls Sites List (<0.5 mile) Search identifies sites with institutional controls in place	No	0	None
HMIRS (Target Property only) Search identifies sites listed in the Hazardous Material Information Reporting System	No	0	None
DOT OPS (Target Property only) Search identifies Dept. of Transportation and Office of Pipeline Safety incident and accident data	No	0	None
CDL (Target Property only) Search identifies records clandestine drug lab locations reported the Dept of Justice. Law enforcement agencies reported chemicals or other items that indicated drug laboratories or dumpsites.	No	0	None
US BROWNFIELDS (<0.5 mile) Search identifies brownfields sites	No	0	None
DOD: Department of Defense (<1 mile) Search identifies sites administered by the Dept. of Defense	No	0	None
FUDS: Formerly Used Defense Sites (<1 mile) Search identifies formerly used defense sites	No	0	None
LUCIS: Land Use Control Information System (<0.5 mile) Search identifies records of land use control information pertaining to the former Navy Base Realignment and Closure properties.	No	0	None
CONSENT: Superfund Consent Decrees (<1 mile) Search identifies major legal settlements that establish responsibility and standards for cleanup at NPL site.	No	0	None
ROD: Record of Decision (<1 mile) Search identifies documents that mandate a permanent remedy at an NPL site.	No	0	None
UMTRA: Uranium Mill Tailings Sites (<0.5 mile) Search identifies Uranium Mill Tailings Sites	No	0	None
<i>ODI:</i> Open Dump Inventory (<0.5 mile) Search identifies sites listed in the open dump inventory	No	0	None
<i>TRIS:</i> Toxic Release Inventory System (Target Property only) Search identifies sites in the Toxic Release Inventory System	No	0	None
TSCA: Toxic Substances Control Act (Target Property only) Search identifies sites that manufacture substances listed in the Toxic Substances Control Act	No	0	None
FTTS: FIFRA/TSCA Tracking System (Target Property only) Search identifies sites with administrative cases and pesticide enforcement actions and compliance activities related to FIFRA,TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act)	No	0	None



Database List	Subject Property	Total # of	Environmental Concern
HIST FTTS: Historical FIFRA/TSCA Tracking	Listings	listings	posed to the Subject Property
System (Target Property only) Search identifies historical sites with administrative cases and pesticide enforcement actions and compliance activities related to FIFRA,TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act)	No	0	None
SSTS: Section Seven Tracking System (Target Property only) Search identifies sites listed within Section 7 of FIFRA	No	0	None
ICIS: Integrated Compliance Information System (Target Property only) Search identifies sites listed in the Integrated Compliance Information System	No	0	None
PADS: PCB Activity Database System (Target Property only) Search identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities	No	0	None
MLTS: Material License Tracking System (Target Property only) Search identifies sites which possess or use radioactive materials and which are subject to NRC licensing requirements.	No	0	None
MINES: Mines Master Index File (<0.25 mile) Search identifies sites with mine identification numbers issued for mines active or opened since 1971.	No	0	None
RADINFO: Radiation Information Database (Target Property only) Search identifies sites that are regulated EPA for radiation and radioactivity.	No	0	None
FINDS: Facility Index System/Facility Registry System (Target Property only) FINDS contains both facility information and 'pointers' to other sources that contain more detail.	No	0	None
RAATS: RCRA Administrative Tracking System (Target Property only) Search identifies records based on enforcement actions issued under RCRA pertaining to major violations and includes administrative and civil actions brought by the EPA	No	0	None
NY MANIFEST: (<0.25 mile) Facility and Manifest Data	No	0	None
WI MANIFEST: (<0.25 mile) Manifest Information	No	0	None
SHWS: State Hazardous Waste Sites (<1 mile) Search identifies sites on the Oklahoma's equivalent to CERCLIS	No	0	None
<i>SWF/LF</i> : State Landfills (<0.5 mile) Search identifies solid waste disposal facilities or landfills.	No	0	None
LUST: Leaking Underground Storage Tanks (<0.5 mile) Search identifies sites within the Leaking Petroleum Storage Tanks database	No	0	None
UST: Underground Storage Tanks (<0.25 mile) Search identifies UST sites regulated under Subtitle I of the RCRA	No	0	None
HIST UST: Historical Underground Storage Tanks (<0.25 mile) Search identifies UST sites on the state historical listing	No	0	None
LAST: Leaking Aboveground Storage Tanks (<0.5 mile) Search identifies leaking aboveground storage tanks	No	0	None
AST: Aboveground Storage Tanks (<0.25 mile) Search identifies registered aboveground storage tanks	No	0	None
INST CONTROL: Sites with Controls (<0.5 mile) Search identifies sites with institutional controls	No	0	None



Database List	Subject Property	Total # of	Environmental Concern
	Listings	listings	posed to the Subject Property
VCP: Voluntary Cleanup Program (<0.5 mile)			
Program which was established to provide	No	0	None
administrative, technical, and legal incentives to encourage the cleanup of contaminated sites.			
Drycleaners (<0.25 mile) Drycleaners registration			
database	No	0	None
Brownfields (<0.5 mile) Search identifies state brownfields sites	No	0	None
OK SWRCY (<0.5 mile) Search identifies recycling			
facility locations	No	0	None
AIRS (Target Property only) Search identifies permitted AIRS facility locations	No	0	None
OK COMPLAINT: Oklahoma Complaint System			
(Target Property only) Search identifies sites listed in	No	0	None
the Oklahoma Complaint system database			
TIER 2 (Target Property only) Search identifies			
facilities which store or manufacture hazardous	No	0	None
materials and submit a chemical inventory report.			
ECHO: Enforcement & Compliance History			
Information (Target Property only) Search provides	No	0	None
integrated compliance and enforcement information.			
INDIAN RESERV: Indian Reservations (<1 mile)			
Search identifies Indian administered lands of the	No	0	None
United States that have an area equal or greater than 640 acres			
INDIAN LUST: LUSTs on Indian Land (<0.5 mile)			
Search identifies LUSTs on Indian Land (<0.5 mile)	No	0	None
INDIAN UST: USTs on Indian Land (<0.25 mile)			
Search identifies USTs on Indian Land	No	0	None
2020 COR ACTION: (<0.25 mile) 2020 Corrective			
Action Program List	No	0	None
Manufactured Gas Plants (<1 mile) Search identifies			
sites with Manufactured Gas Plants	No	0	None
Historical Auto Stations (<0.25 mile) Search	No	0	None
identifies historic gas station, repair, etc.	INU	0	INUTE
Historical Cleaners (<0.25 mile) Search identifies	No	0	None
historic dry cleaners, laundries, etc.	NO	v	
RGA LUST (TP) Search identifies recovered			
government archive Leaking Underground Storage	TP	0	None
Tank.			

6.1.2 Other Database/Records Review Voluntary Cleanup Program

According to the DEQ Voluntary Cleanup Program website, no VCP sites are located on or near the Property. The closest site is four miles away.

6.2 Physical Setting Information

As required by ASTM E 1527, the physical setting was reviewed and evaluated. Important physical setting sources included information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of the subject property and surrounding area.

6.2.1 Topographic Information

Topographic information was determined from one recently obtainable USGS 7.5 Minute Quad map "Cashion, OK" (1:24,000 scale) (USGS, 2018), and from the site visit. The terrain is fairly flat with a slope to the south-southwest and at an elevation of approximately 987 to 955 ft (USGS, 2018).

6.2.2 Hydrologic Information

Surface Water

As predicted from the 2018 USGS Cashion Topo map, surface water would probably flow to the southsouthwest.

Ground Water

According to the Hydrologic Atlas #4, Oklahoma City Quad (USGS 1975), (Scale 1:250,000), this area is underlain primarily by Alluvium. Reported potential yields are 150 to 300 gallons per minute. There was one (1) well in the immediate area. The reported well was 24 ft. deep, with water at 22 ft. deep (USGS 1975).

According to the water well records information provided on the Oklahoma Water Resources Board (OWRB) webpage, there were no reported well on the Property. There was one (1) industrial well, one (1) irrigation well, and six (6) domestic wells within the general vicinity of the Property (Section 18, T16N, R4WIM) (OWRB, 2019).

WELL ID#	COUNTY	OWNER NAME	QUARTERS	SEC-TWP-RGE	DATE CONSTRUCTED	WELL TYPE	USE	TOTAL DEPTH (FT)
28754	Logan	Twin Lake Sport Club	SE-NE-NW	18-16N-04WI	03/17/92	Groundwater Well	Industrial	40
31208	Logan	Bruce Ligon	NW-NW-NW	18-16N-04WI	03/03/94	Groundwater Well	Domestic	36
94718	Logan	Paul Cummings	SW-NE-NW	18-16N-04WI	05/31/05	Groundwater Well	Domestic	43
101427	Logan	Shawnee Indian Health Service	NW-NW-NW	18-16N-04WI	04/01/06	Groundwater Well	Domestic	50
100109	Garfield	Lee Rule	SW-NE-NE	18-16N-04WI	10/27/05	Groundwater Well	Irrigation	45
138727	Logan	Bill Balding	NW-NW-NW	18-16N-04WI	09/20/11	Groundwater Well	Domestic	60
150817	Logan	David Heath	SW-NE-NE	18-16N-04WI	04/09/13	Groundwater Well	Domestic	45
153654	Logan	Henry Rodrigues	SW-NW-NW	18-16N-04WI	06/26/13	Groundwater Well	Domestic	60

 Table: 6-2: A listing of groundwater well information

6.2.3 Geologic Information *Regional Geology*

The Property falls within the Quaternary Series of the Quaternary System of the Cenozoic Era (EDR, 2019a). The code for this stratigraphic unit is Q. According to the Hydrologic Atlas #4, Oklahoma City Quad (USGS 1975), (Scale 1:250,000), this area is underlain by Alluvium.

Soils

The dominant soil types on the Property and in the general area are Goodnight fine sand, Yahola fine sandy loam, and Gaddy fine sandy loam (EDR, 2019a). The Goodnight fine sand soil type is characterized by a high infiltration rate. These soils are deep, well drained to excessively drained sands and gravels. The Yahola fine sandy loam soil type is characterized by a moderate infiltration rate. These soils are deep and moderately deep, moderately well and well drained with moderately coarse textures. The Gaddy fine sandy loam soil type is characterized by a high infiltration rate. These soils are deep, well drained to excessively drained sands and gravels. The Gaddy fine sandy loam soil type is characterized by a high infiltration rate. These soils are deep, well drained to excessively drained sands and gravels. These soils do not meet the requirements of a hydric soil. Refer to the following table for a list of the engineering properties for this soil.

GOODNIGHT FINE SAND								
Layer	Upper (inches)	Lower (inches)	Soil Texture Class	AASHTO Group	Unified Soil	Soil Reaction (pH)		
1	0	7	fine sand	Not Reported	Not Reported	Max: 8.4 Min: 6.1		
2	7	22	fine sand	Not Reported	Not Reported	Max: 8.4 Min: 6.1		
3	22	44	fine sand	Not Reported	Not Reported	Max: 8.4 Min: 6.1		
4	44	79	fine sand	Not Reported	Not Reported	Max: 8.4 Min: 6.1		

Table:	6-3:	Soil	Layer	Information
--------	------	------	-------	-------------

YAHOLA FINE SANDY LOAM						
Layer	Upper (inches)	Lower (inches)	Soil Texture Class	AASHTO Group	Unified Soil	Soil Reaction (pH)
1	0	5	fine sandy loam	Not Reported	Not Reported	Max: 8.4 Min: 7.9
2	5	33	loam	Not Reported	Not Reported	Max: 8.4 Min: 7.9
3	33	79	stratified loamy fine sand to loam	Not Reported	Not Reported	Max: 8.4 Min: 7.9

GADDY FINE SANDY LOAM						
Layer	Upper (inches)	Lower (inches)	Soil Texture Class	AASHTO Group	Unified Soil	Soil Reaction (pH)
1	0	5	fine sandy loam	Not Reported	Not Reported	Max: 8.4 Min: 7.9
2	5	79	Stratified fine sand to clay loam	Not Reported	Not Reported	Max: 8.4 Min: 7.9

Oil and Gas Fields

The Property is located within the Sooner Trend Oil Field. According to the records information provided on the OCC webpage there was one (1) oil and gas related wells within the same quarter sections as the Property, the NE¹/₄ of Section 18, T16N, R4W (OCC, 2019).

The "Zachgo 18" well is located on the Property. There have been no reported spills from this well and the operating company, GLM Energy, Inc. is an open company in good standing with a posted surety bond.

There is one well that adjoins the Property to the east on the north side of the river (API 3508300376), and a second well that adjoins to the south on the south side of the river (API 3508300698). There are several wells listed for the adjacent quarter sections, but many more in the general area.

Table 6-4: OCC Listing of Oil and Gas Wells within SW¹/₄ and SE¹/₄ of Section 18.

Proximity to Property	API #	Well Name	Operator Name	Quarters	Status	Effective Date
NE¼ Section 18, T16N, R4W	3508321578	Zachgo 18 1	GLM Energy, Inc.	SE-NE	Active	01/16/1981

Please note that the OCC record keeping system is inherently inaccurate/incomplete.

6.3 Historical Use Information—Subject Property

6.3.1 Aerial Photographs

Aerial photographs of the Property were reviewed. Maps were obtained from EDR (2019c) (2017, 2013, 2010, 2006, 1995, 1981, 1968, and 1954) and reviewed on Google Earth (1991-2018) (Google 2019). Refer to Table 6-5 for the listing and source of the aerial photographs used in this assessment. Since the photographs have been copied and manipulated to fit within this document, they should not be scaled.

The following generic observations were made:

- 1954 1968: The Property appeared to be agricultural land with one structure. The Cimarron River was located west of the Property in the 1954 aerial and on the Property in the 1968 aerial.
- 1981: The oil well first appears in this aerial.
- 1995 2018: The Property appears as it stands today—in general.

Date	Source	Туре
1991 - 2018	Google Earth	Black and White & Color Photos
2017	EDR	Color Photo
2013	EDR	Color Photo
2010	EDR	Color Photo
2006	EDR	Color Photo
1995	EDR	Black and White Photo
1981	EDR	Color Photo
1968	EDR	Black and White Photo
1954	EDR	Black and White Photo

Table: 6-5:Aerial Photographs for the Property and Surrounding Area.

6.3.2 Historic Topographic Maps

There were at least four (4) topographic maps readily available for the Property from USGS (2019). "Cashion, OK" USGS 7.5 Minute Quad (1:24,000 scale) (2018) (USGS), "Cashion, OK" USGS 7.5 Minute Quad (1:24,000 scale) (1970) (USGS), "Kingfisher, OK" USGS 30 Minute Quad (1:125,000 scale) (1895) (USGS), and "Kingfisher, OK" USGS 30 Minute Quad (1:125,000 scale) (1892) (USGS), Refer to Table 6-6 for the date, scale and name of the topo maps used in this assessment.

The following generic observations were made:

- 1892: The Property appears to be in an undeveloped area.
- 1895: The Property appears to be in an undeveloped area.
- 1970: The Property appears to be undeveloped near a developing area. (The river moved north.)
- 2018: The Property appears to be undeveloped near a developed area.
- Table 6-6:Topographic Maps Obtained from Various Sources for the Property and Surrounding
Area.

Date	Scale	Name
2018	1:24,000	"Cashion, OK"
1970	1:24,000	"Cashion, OK"
1895	1:125,000	"Kingfisher, OK"
1892	1:125,000	"Kingfisher, OK"



6.3.3 Fire Insurance Maps

According to EDR, Inc. (2019b), there were no Sanborn Maps available for the Property.

6.3.4 City Directories

No city directories were reviewed for the Property.

6.4 Historical Use Information—Adjoining Properties

Historic uses of the adjoining property were based on interviews, aerial photographs, topographic maps, and from the site assessment. Refer to the following sections for specific information governing these sources: Section 17 for topographic maps, site maps, aerial photographs and site photos; Section 7.0 for site reconnaissance information; and Section 8.0 for interview documentation.

6.4.1 Aerial Photographs

In general, review of the aerial photographs indicated that the Property was located in an agricultural, residential, and commercial area.

The following generic observations were made:

- 1954: The immediate area and general vicinity appeared to be agricultural and residential. Agricultural land is located to the south, west, north, and east.
- 1968 1981: Residential development continues to the north. The Twin Lake development is present on the 1968 aerial.
- 1995 2018: The vicinity appears as it stands today—in general.

6.4.2 Historic Topographic Maps

In general, review of the topographic maps indicated that the Property was located in an agricultural or undeveloped area with a few structures nearby. The following generic observations were made:

- 1892: The area was located in an undeveloped area.
- 1898: The area was located in an undeveloped area.
- 1970: The area was located in an undeveloped area with residential development to the north.
- 2018: The area was located in an undeveloped area with residential development to the north.

6.4.3 Fire Insurance Maps

According to EDR, Inc. (2019b), there were no Sanborn Maps available for the adjoining properties.

6.4.4 City Directories

No city directories were reviewed for the Property.



7.0 SITE RECONNAISSANCE

7.1 Methodology and Limiting Conditions

A set procedure for evaluating the land was put in place to promote a representative site review and to minimize assessment bias. However, a visual inspection is limited in its ability to identify and assess environmental liabilities and recognized environmental conditions. Notes and sketches were made during the site visit, and photographs were taken to document potential environmental liabilities. The adjoining properties were also visually observed at the time of the visit. No water, soil, or air samples were taken to specifically determine the presence of contaminants, hazardous wastes, compounds of concern, or other environmental liabilities.

A representative of CCE (Mr. David Sparks) conducted the site reconnaissance on December 9, 2019. Field conditions at the time of the visit were cool (~40s °F), cloudy, and with light winds. There were no impediments to the field investigation except areas of thick and impenetrable vegetation.

7.2 General Site Setting

The Property is basically a rectangular-shaped parcel of land approximately 80 acres in size. The Property is located within an agricultural and residential area. The topography at the Property is fairly flat dipping to the south-southwest. The parcel is currently a vacant parcel of grass and tree covered land with an oil well and associated tank battery, an old metal barn, and bisected by the Cimarron River. It appeared that utilities were not available to the Property.

7.3 Exterior Observations

7.3.1 Site Visit Findings

Hazardous Substances

No hazardous substances were observed during the site reconnaissance.

Petroleum Products

The tank battery location did not appear to be in use during the time of the site visit, but there was evidence of petroleum storage.

USTs

No evidence of underground storage tanks was observed on the Property.

ASTs

No evidence of aboveground storage tanks was observed on the Property—other than oilfield tank battery tanks.

Other Suspect Containers

No unlabeled containers were observed during the site reconnaissance.

Equipment Likely to Contain PCBs

No PCB containing equipment was observed during the site reconnaissance.

Staining/Corrosion

No obvious indications of hazardous material or petroleum product releases, such as stained areas, were observed during the site reconnaissance.

Discharge Features

No obvious indications were observed during the site reconnaissance.

Pits, Ponds, And Lagoons

No evidence of sumps or catch basins.

Solid Waste Dumping/Landfills

No visual signs of landfilling were observed during the site reconnaissance.

Stained Soil/Stressed Vegetation

No obvious indications of hazardous material or petroleum product releases, such as stained areas or stressed vegetation, were observed during the site reconnaissance.

Wells

No wells were observed during the site reconnaissance.

Septic System

No septic systems were observed during the site reconnaissance.

7.3.2 Adjoining Property and General Vicinity

The Property was located within an agricultural and residential area. The property immediately adjoining the subject property included the following:

•
Residential properties.
Vacant land and the Cimarron River.
Vacant land.
Vacant land and the Cimarron River.

7.4 Interior Observations

One structure was observed on the Property. An approximately 500 square foot wood framed structure with sheet metal siding was observed on the Property. It appeared that this building may have housed livestock at one time.



8.0 INTERVIEWS

Interviews were conducted with individuals knowledgeable about the site and/or individuals having information governing the existence of environmental liabilities. Interview questions were tailored to the specific interviewee, given their relationship or knowledge base associated with site.

8.1 Interview with Owner

On December 12, 2019, Geoff Canty interviewed the Property Owner, Ms. Sharon Buchanan. The following is a summary of the relevant information.

- She stated that they had owned the Property for 20 to 25 years.
- It has been vacant land and used for recreational purposes.
- She was unaware of environmental violations, stained soil, or PCB containing equipment on site.
- She mentioned her ex-husband parked the box truck on the Property
- She was unaware of any hazardous substances, petroleum products, wastes, batteries or other materials being dumped, buried or burned on the Property other than tires used to stabilize the river bank but they have washed away.
- She was unaware of any USTs or ASTs on the Property other than the oil well tank battery.

8.2 Interviews with Local Government Officials

On December 4, 2019, Mr. David Sparks emailed the Logan County Emergency Management Director, Mr. David Ball in regards to any environmental concerns with the Property. Mr. Ball stated that he has no knowledge of any environmental incidents at the Property.

8.3 Interviews with Others

No others were interviewed.



9.0 FINDINGS

After assessing the environmental databases, performing a site assessment, conducting interviews with pertinent individuals, and reviewing topographic maps and aerial photographs, the following general observations were made:

9.1 Records Review

- According to the EDR Geocheck search (2019a) there were no sites within the area of study.
- According to the OCC well database search there is one (1) oil well within the same quarter sections as the Property and five (5) other wells in the general area.
- According to the OWRB database search, there were one (1) industrial well, one (1) irrigation well, and six (6) domestic wells in the vicinity of the Property.

9.2 Site Reconnaissance

- The Property is currently a parcel of grass and tree covered parcel of land with the Cimarron River bisecting the Property. There were many areas of very heavy vegetation on the Property that hampered access to some parts of the Property.
- One oil well and associated tank battery were observed on the Property. There was no visual signs of leakage around the well head or the tank battery. No evidence of a reserve pit was observed in the area of the oil well.
- An abandoned box truck was observed on the Property.
- An old metal farm building was observed on the Property.

9.3 Interviews

- The interview with the Property Owner (Mrs. Sharon Buchanan) revealed the following:
 - \circ She stated that they had owned the Property for 20 to 25 years.
 - \circ She stated that the Property has been vacant land and used for recreational purposes.
 - o She was unaware of environmental violations, stained soil, or PCB containing equipment on site.
 - She was unaware of any hazardous substances, petroleum products, wastes, batteries or other materials being dumped, buried or burned on the Property other than tires used to stabilize the river bank but they have washed away.
 - She was unaware of any USTs or ASTs on the Property other than the oil well tank battery.



10.0 OPINIONS

Review the following points for a discussion of the items identified during this Phase I evaluation.

10.1 Records Review

- EDR database review.
 - According to the EDR Geocheck search (2019a) there were no sites within the area of study.
- OCC Oilfield Well Database and Oil & Gas Fields:
 - According to the records information provided on the OCC webpage, there was one oil and gas related well within the same quarter section as the Property, the NE¹/₄ of Section 18, T16N, R4W (OCC, 2019). The "Zachgo 18" well is located on the Property. There have been no reported spills from this well and the operating company, GLM Energy, Inc. is an active company in good standing with a posted surety bond. There were no reported or observed releases to the Property. Consequently, this listing was not considered to be a REC.
 - The reserve pit associated with the oil well was not considered to be a REC. Although the OCC allows reserve pits to be closed in-place, there is still the potential to encounter contamination. This could include petroleum, and hazardous substances associated with drilling fluids or the overall drilling process. However, given the age of the well—a couple decades—and the lack of any overt evidence of contamination or stressed soil, the impact is probably minor or *de minimis*. Consequently, the presence of the reserve pits at this stage does not represent a release or a material threat of a release to the Property.
- OWRB Database: According to the OWRB database search, there were no monitoring wells located in Section 18.

10.2 Site Reconnaissance

• No RECs were identified during the site reconnaissance.

10.3 Interviews

• No RECs were identified on the Property during the interview process.



11.0 CONCLUSIONS²

We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E1527 of the subject property (described in Section 4). Any exceptions to, or deletions from, this practice are described in Section 12 of this report. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the Property.

December 23, 2019



 $^{^2}$ The user should read the entire document and review Sections 9.0 and 10.0 for more information about the subject property's environmental condition.

12.0 **DEVIATIONS**

A Phase I investigation was performed in accordance with American Society for Testing and Material (ASTM) Practice E 1527-13 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM, 2005). Procedures and methods outlined in ASTM Practice E 1527-13 were strictly adhered to. Any assumptions, limitations, special terms or conditions are presented in Sections 3.3-3.6. The deviations to the standard ASTM procedure are listed as follows:

• A title search was not provided at the time of writing.



13.0 ADDITIONAL SERVICES

No additional services were requested by the client.



14.0 REFERENCES

ASTM (2013) "Designation: E1527 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", American Society for Testing and Materials, West Conshohocken, PA.

EDR (2019a) "EDR Radius Map with GeoCheck", Inquiry Number 5890570.2s, Environmental Data Resources, Inc., Shelton, CT.

EDR (2019b) "Sanborn Map Report", Inquiry Number 5890570.3, Environmental Data Resources, Inc., Shelton, CT.

EDR (2019c) "Aerial Photo Decade Package", Inquiry Number 5890570.5, Environmental Data Resources, Inc., Shelton, CT.

Google Earth (2019) Google Earth website reviewed December 2019.

OCC (2019) "Oil and Gas Web Application" searchable database available at the Oklahoma Corporation Commission (OCC) website, <u>http://www.occ.state.ok.us/</u>.

OGS (2015) "Map of Oklahoma Oil and Gas Fields", Map GM-39, Oklahoma Geological Survey, Norman, OK.

OWRB (2019) "Water Well Record Search" searchable database available at the Oklahoma Water Resources Board (OWRB) website, <u>http://www.owrb.state.ok.us/</u>.

USGS (1975) "Hydraulic Atlas #4, Reconnaissance of the Water Resources of the Oklahoma City Quadrangle Oklahoma", 1:250,000, Washington, D.C.

USGS (2018) "Cashion, OK", 7.5 Minute Quadrangle, 1:24,000, U.S. Geological Survey, Washington, D.C.

USGS (1970) "Cashion, OK", 7.5 Minute Quadrangle, 1:24,000, U.S. Geological Survey, Washington, D.C.

USGS (1895) "Kingfisher, OK", 30 Minute Quadrangle, 1:125,000, U.S. Geological Survey, Washington, D.C.

USGS (1892) "Kingfisher, OK", 30 Minute Quadrangle, 1:125,000, U.S. Geological Survey, Washington, D.C.

15.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONALS

We, the undersigned, have completed and reviewed the attached report, and represent the information contained herein is true and accurate, to the best of our knowledge.

Date: December 23, 2019

GEOFFREY A. CANTY, Ph.D. Director of Environmental Services

Juril Sr. l.

DAVID SPARKS, B.S. Environmental Specialist

Date: December 23, 2019



16.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR. We have the specific qualification based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in general conformation with the standards and practices set forth in 40 CFR Part 312.

16.1 David Sparks

Mr. Sparks has over twenty (20) years of experience in Environmental Phase I, Phase II, and Phase III investigations. Mr. Sparks also has geotechnical and construction materials experience. Mr. Sparks is a licensed professional geologist, 40 hours HAZWOPER certified, and an Oklahoma licensed asbestos inspector.

16.2 Geoffrey A. Canty, Ph. D.

Mr. Canty has over fifteen (15) years of experience performing environmental assessment and Phase I and Phase II investigations. Mr. Canty has over twenty (20) years of experience in air, water and soil environmental monitoring, is 40 hours HAZWOPER certified, and is an Oklahoma licensed asbestos inspector.



17.0 APPENDICES

17.1 Site/Vicinity Maps

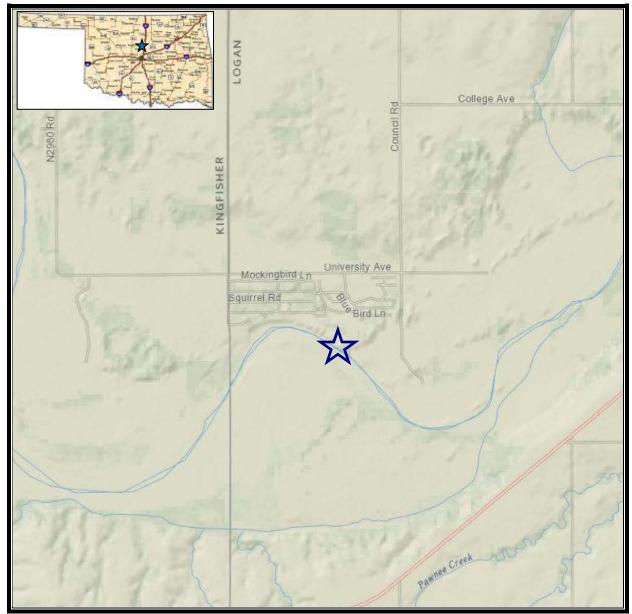


Figure 1: Vicinity Map (approximate location of blue star)



Figure 2: Field Diagram

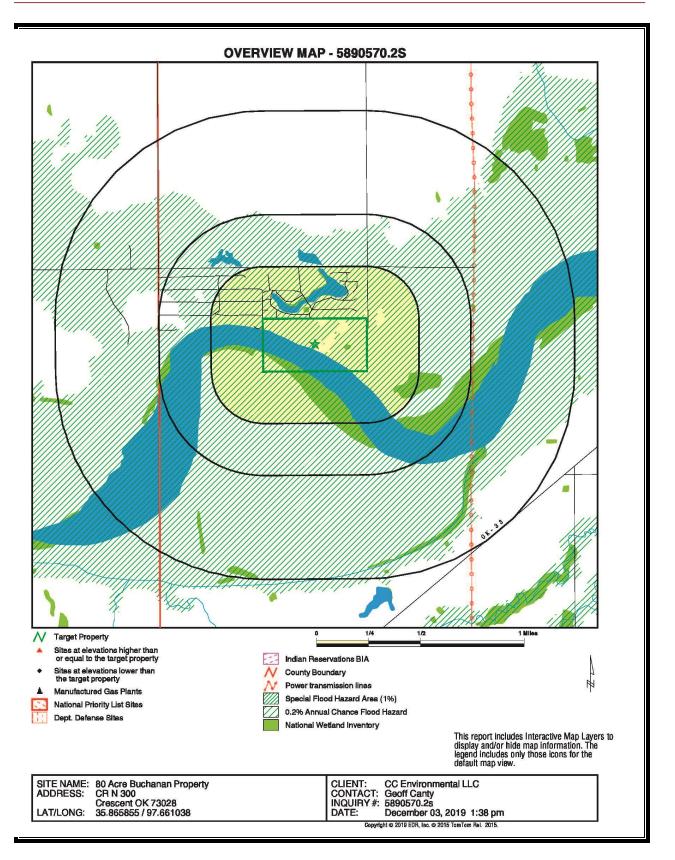


Figure 3: Location map depicting the extended environmental database search radii (EDR, 2019a).



17.2 Historical Research Documentation—Aerial Photos & Topo Maps

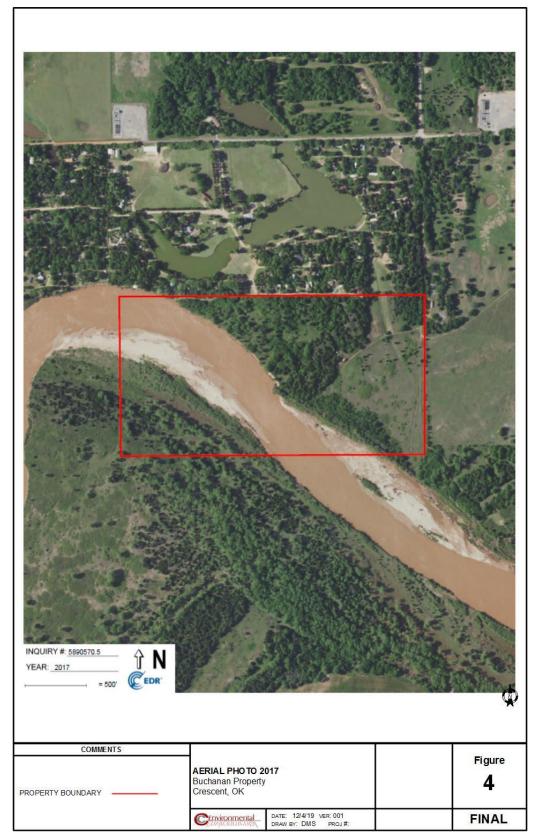


Figure 4: 2017 aerial photograph of subject property (approximate location of red polygon) and the surrounding area (EDR, 2019c).

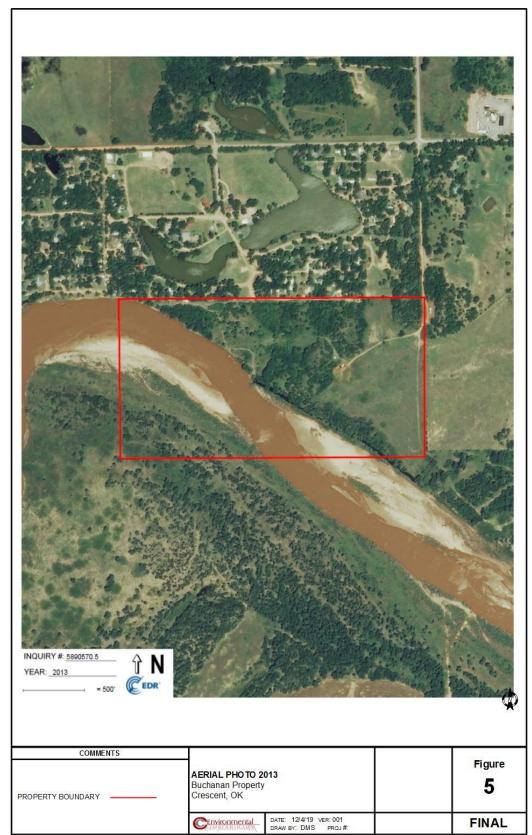


Figure 5:

2013 aerial photograph of subject property (approximate location of red polygon) and the surrounding area (EDR, 2019c).

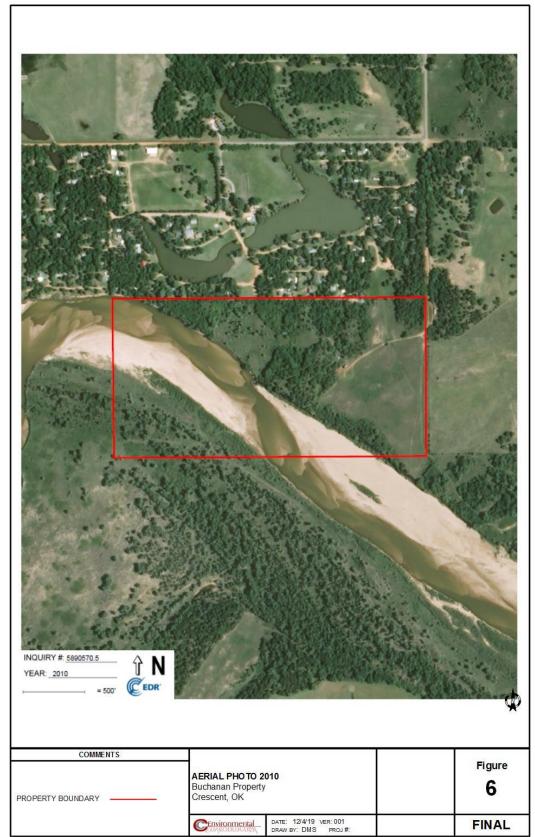


Figure 6:

2010 aerial photograph of subject property (approximate location of red polygon) and the surrounding area (EDR, 2019c).

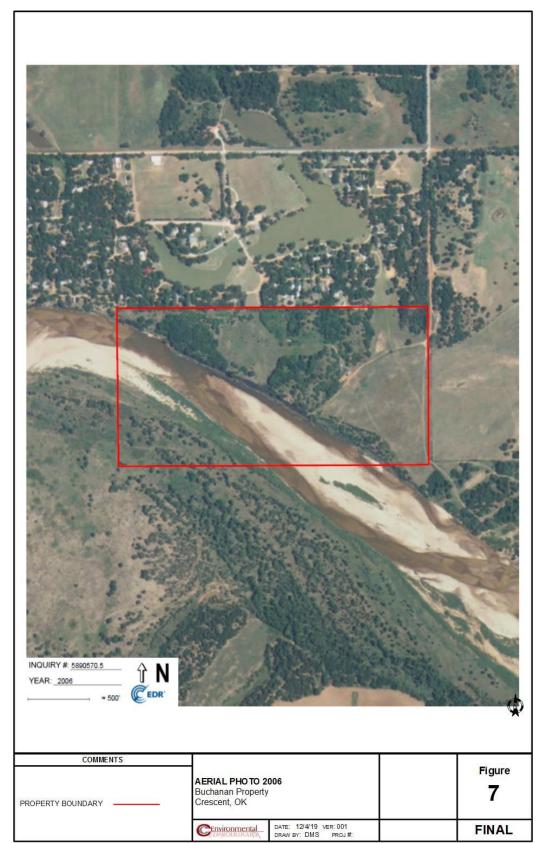


Figure 7: 2006 aerial photograph of subject property (approximate location of red polygon) and the surrounding area (EDR, 2019c).

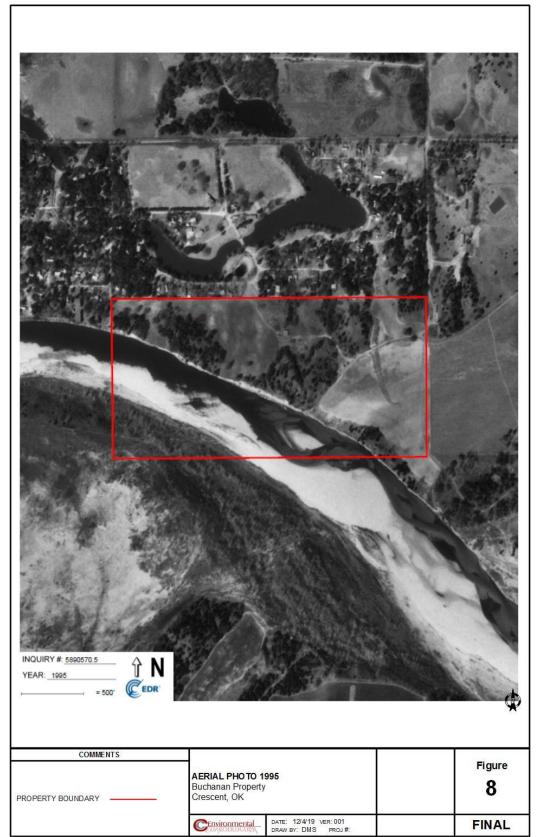


Figure 8:

1995 aerial photograph of subject property (approximate location of red polygon) and the surrounding area (EDR, 2019c).



Figure 9:

1981 aerial photograph of subject property (approximate location of red polygon) and the surrounding area (EDR, 2019c).

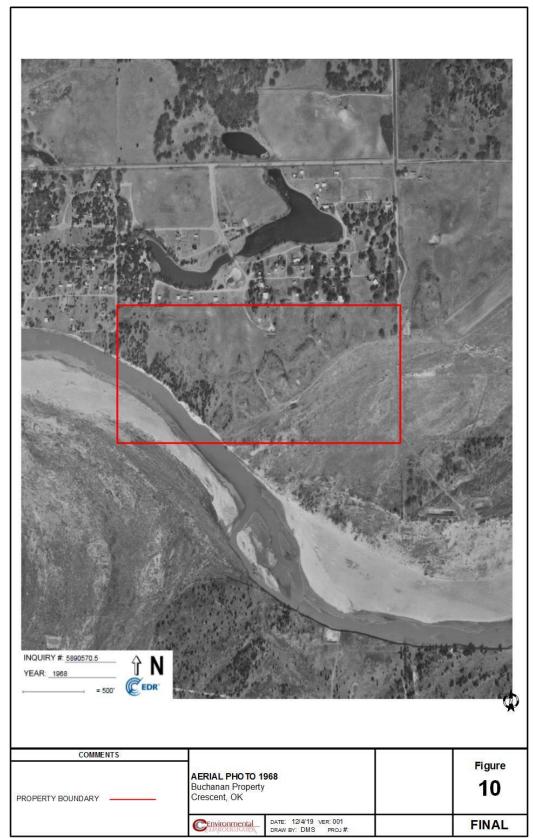


Figure 10: 1968 aerial photograph of subject property (approximate location of red polygon) and the surrounding area (EDR, 2019c).



Figure 11: 1954 aerial photograph of subject property (approximate location of red polygon) and the surrounding area (EDR, 2019c).

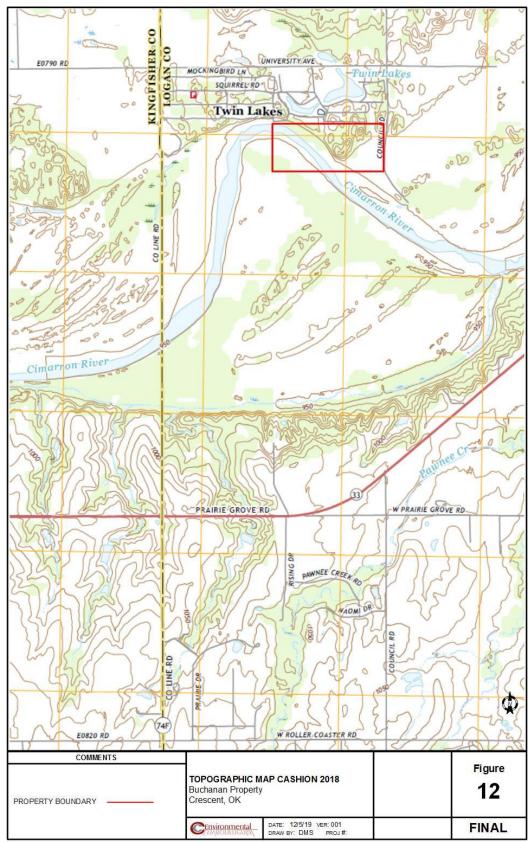


Figure 12: 2018 topographic map of subject property (approximate location of red polygon) and the surrounding area (USGS, 2019).

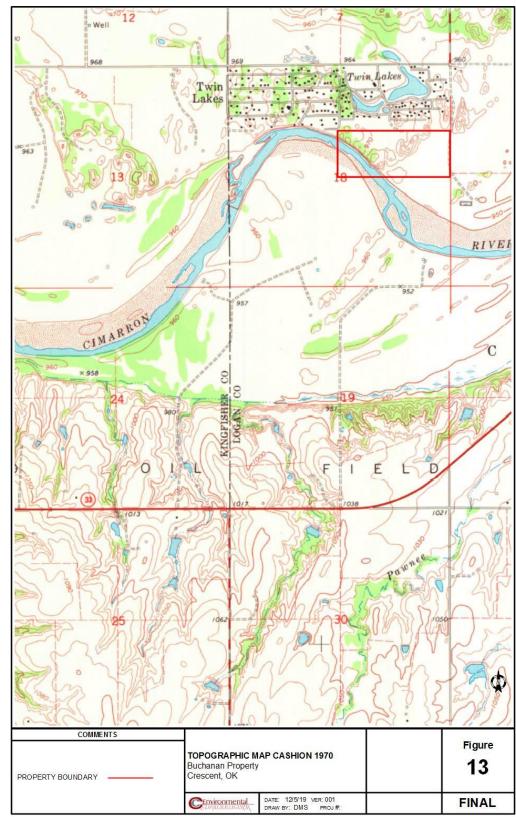


Figure 13: 1970 topographic map of subject property (approximate location of red polygon) and the surrounding area (USGS, 2019).

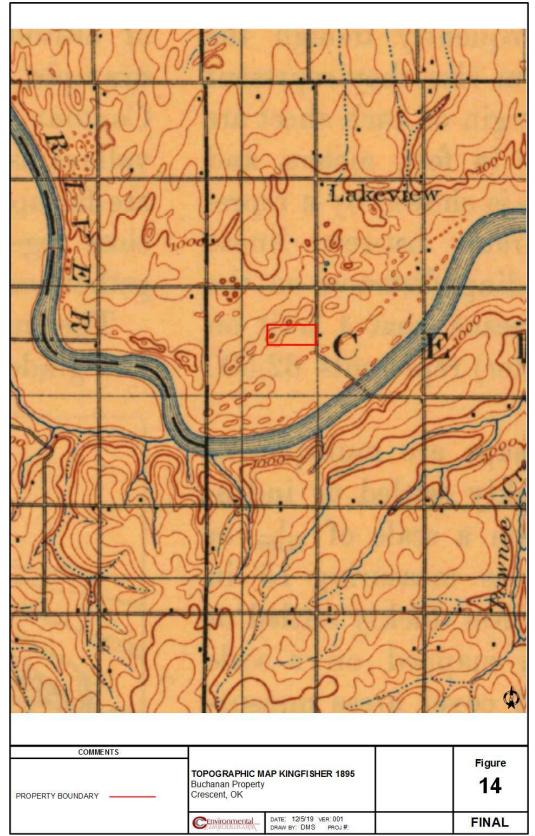


Figure 14: 1895 topographic map of subject property (approximate location of red polygon) and the surrounding area (USGS, 2019).

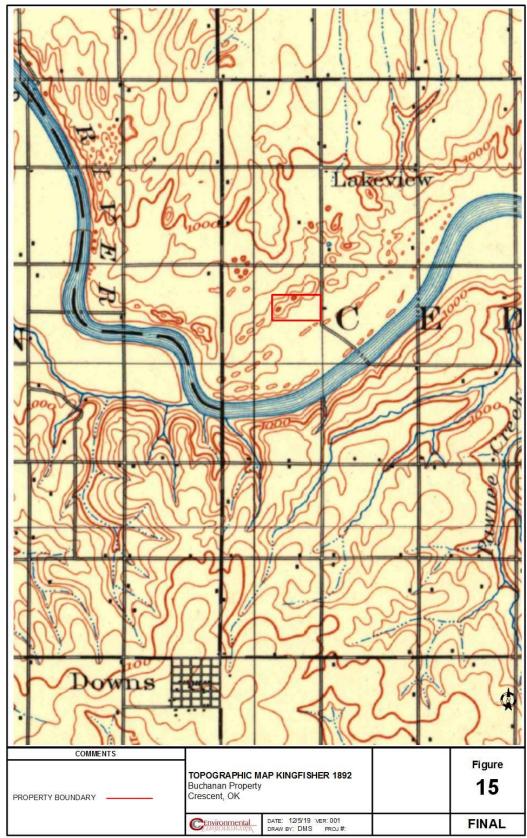


Figure 15: 1892 topographic map of subject property (approximate location of red polygon) and the surrounding area (USGS, 2019).

17.3 Site Photographs





Photo 1: Adjacent north property-vacant land (Twin Lakes)



Photo 2: Adjacent east property-vacant agricultural land



Photo 3: Adjacent south property



Photo 4: Adjacent west property



Photo 5: NE boundary of Property; view to SW



Photo 6: SE boundary of Property; view to NW



Photo 7: SW boundary of Property; view to NE



Photo 8: Oil well on Property



Photo 9: View of the tank battery site



Photo 10: View of the tank battery site



Photo 11: View of well head



Photo 12: View of abandoned box truck



Photo 13: View of possible reserve pit location



Photo 14: View of old farm building/barn

- **17.4** Regulatory Records & Supporting Documentation³
 - 17.4.1 EDR Study Report and Supporting Documents
 - 17.4.2 User Questionnaire
 - 17.4.3 OK Water Resources Board Records
 - 17.4.4 OK Corporation Commission Records

³ Database search information and the entire document have been saved to disk. This information has been included for the User.

17.4.1 EDR Study Report and Supporting Documents



80 Acre Buchanan Property CR N 300 Crescent, OK 73028

Inquiry Number: 5890570.2s December 03, 2019

The EDR Radius Map[™] Report with GeoCheck®



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

FORM-LBD-GXH

TABLE OF CONTENTS

SECTION

PAGE

Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	9
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-11
Physical Setting Source Map Findings	A-13
Physical Setting Source Records Searched	PSGR-1

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

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental St Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

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.

TARGET PROPERTY INFORMATION

ADDRESS

CR N 300 CRESCENT, OK 73028

COORDINATES

Latitude (North):	35.8658550 - 35° 51' 57.07"
Longitude (West):	97.6610380 - 97° 39' 39.73''
Universal Tranverse Mercator:	Zone 14
UTM X (Meters):	620887.9
UTM Y (Meters):	3969697.5
Elevation:	970 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: Version Date: 5926422 CASHION, OK 2012

North Map: Version Date: 5927598 CRESCENT NW, OK 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150623, 20150609
Source:	USDA

DATABASE ACRONYMS

Target Property Address: CR N 300 CRESCENT, OK 73028

Click on Map ID to see full detail.

MAP ID

SITE NAME

ADDRESS

NO MAPPED SITES FOUND

RELATIVE DIST (ft. & mi.) ELEVATION DIRECTION

TARGET PROPERTY SEARCH RESULTS

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

DATABASES WITH NO MAPPED SITES

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

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL	. National Priority List
	Proposed National Priority List Sites
NPL LIENS	Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL_____ National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY______ Federal Facility Site Information listing SEMS______ Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE...... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators
RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity
	Generators)

Federal institutional controls / engineering controls registries

LUCIS...... Land Use Control Information System

US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls

Federal ERNS list

ERNS_____ Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS_____ The Land Report

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

SWF/LF..... Permitted Solid Waste Disposal & Processing Facilities

State and tribal leaking storage tank lists

LUST	Leaking Underground Storage Tank List
LAST	Leaking Aboveground Storage Tanks List
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST	Underground Storage Tank Listing
UST	Underground Storage Tank Listing
AST	Aboveground Storage Tanks
INDIAN UST	Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

INST CONTROL Institutional Control Sites

State and tribal voluntary cleanup sites

INDIAN VCP...... Voluntary Cleanup Priority Listing VCP...... Voluntary Cleanup Site Inventory

State and tribal Brownfields sites

BROWNFIELDS..... Brownfield Sites

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY	Recycling Facilities
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
ODI	Open Dump Inventory
IHS OPEN DUMPS	Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

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

Local Lists of Registered Storage Tanks

HIST UST..... Underground Storage Tank List, List II Version

Local Land Records

LIENS 2_____ CERCLA Lien Information

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
	Oklahoma Complaint System Database

Other Ascertainable Records

FUDS Formerly Used Defense Sites DOD Department of Defense Sites SCRD DRYCLEANERS State Coalition for Remediation of Drycleaners Listing US FIN ASSUR Financial Assurance Information EPA WATCH LIST EPA WATCH LIST 2020 COR ACTION 2020 Corrective Action Program List TSCA Toxic Substances Control Act TRIS Toxic Chemical Release Inventory System SSTS Section 7 Tracking Systems ROD Records Of Decision RMP Risk Management Plans RAATS RCRA Administrative Action Tracking System PRP Potentially Responsible Parties PADS PCB Activity Database System ICIS Integrated Compliance Information System FTTS FIFRA/TSCA Tracking System - FIFRA/ (Federal Insecticide, Fungicide, & Rodenticide Acti/TSCA (Toxic Substances Control Act) MLTS Material Licensing Tracking System COAL ASH EPA Coal Combustion Residues Surface Impoundments List PCB TRANSFORMER PCB Transformer Registration Database RADINFO Radiation Information Database RADINFO Radiation Information Database HIST FTTS FIFRA/		. RCRA - Non Generators / No Longer Regulated
SCRD DRYCLEANERS	FUDS	Formerly Used Defense Sites
US FIN ASSUR	DOD	Department of Defense Sites
US FIN ASSUR	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
2020 COR ACTION. 2020 Corrective Action Program List TSCA. Toxic Substances Control Act TRIS. Toxic Chemical Release Inventory System SSTS Section 7 Tracking Systems ROD. Records Of Decision RMP. Risk Management Plans RAATS. RCRA Administrative Action Tracking System PRP. Potentially Responsible Parties PADS. PCB Activity Database System ICIS. Integrated Compliance Information System FTTS. FIFRA/TSCA Tracking System Control Act) MLTS. Material Licensing Tracking System COAL ASH EPA. Coal Combustion Residues Surface Impoundments List PCB Transformer Registration Database RADINFO. Radiation Information Database RADINFO. Radiation Information Database Incident and Accident Data CONSENT. Superfund (CERCLA) Consent Decrees INDIAN RESERV. Indian Reservations FUSRAP. Formerly Utilized Sites Remedial Action Program UMTRA. Uranium Mill Tailings Sites LEAD SMELTERS. Lead Smelter Sites US AIRS. Aerometric Information Retrieval System Facility Subsystem	US FIN ASSUR	. Financial Assurance Information
TSCA		
TRIS Toxic Chemical Release Inventory System SSTS Section 7 Tracking Systems ROD Records Of Decision RMP Risk Management Plans RAATS RCRA Administrative Action Tracking System PRP Potentially Responsible Parties PADS PCB Activity Database System ICIS Integrated Compliance Information System FTTS FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) MLTS Material Licensing Tracking System COAL ASH DOE Steam-Electric Plant Operation Data COAL ASH EPA Coal Combustion Residues Surface Impoundments List PCB TRANSFORMER PCB Transformer Registration Database RIST FTTS FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS Incident and Accident Data CONSENT Superfund (CERCLA) Consent Decrees INDIAN RESERV Indian Reservations FUSRAP Formerly Utilized Sites Remedial Action Program UMTRA Uranium Mill Tailings Sites LEAD SMELTERS Lead Smelter Sites US AIRS Aerometric Information Retrieval System Facility Subsystem		
SSTS. Section 7 Tracking Systems ROD. Records Of Decision RMP. Risk Management Plans RAATS. RCRA Administrative Action Tracking System PRP. Potentially Responsible Parties PADS. PCB Activity Database System ICIS. Integrated Compliance Information System FTTS. FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act//TSCA (Toxic Substances Control Act) MLTS. Material Licensing Tracking System COAL ASH DOE. Steam-Electric Plant Operation Data COAL ASH EPA Coal Combustion Residues Surface Impoundments List PCB TRANSFORMER. PCB Transformer Registration Database RADINFO. Radiation Information Database HIST FTTS. FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS. Incident and Accident Data CONSENT. Superfund (CERCLA) Consent Decrees INDIAN RESERV. Indian Reservations FUSRAP. Formerly Utilized Sites Remedial Action Program UMTRA. Uranium Mill Tailings Sites LEAD SMELTERS. Lead Smelter Sites US MINES. Aerometric Information Retrieval System Facility Subsystem <td>TSCA</td> <td>Toxic Substances Control Act</td>	TSCA	Toxic Substances Control Act
ROD. Records Of Decision RMP. Risk Management Plans RAATS. RCRA Administrative Action Tracking System PRP. Potentially Responsible Parties PADS. PCB Activity Database System ICIS. Integrated Compliance Information System FTTS. FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) MLTS. Material Licensing Tracking System COAL ASH DOE. Steam-Electric Plant Operation Data COAL ASH EPA. Coal Combustion Residues Surface Impoundments List PCB TRANSFORMER. PCB Transformer Registration Database RADIFO. Radiation Information Database HIST FTTS. FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS. Incident and Accident Data CONSENT Superfund (CERCLA) Consent Decrees INDIAN RESERV. Indian Reservations FUSRAP. Formerly Utilized Sites Remedial Action Program UMTRA. Uranium Mill Tailings Sites LEAD SMELTERS. Lead Smelter Sites US MINES. Mines Master Index File ABANDONED MINES Abandoned Mines	TRIS	Toxic Chemical Release Inventory System
RMP. Risk Management Plans RAATS. RCRA Administrative Action Tracking System PRP. Potentially Responsible Parties PADS. PCB Activity Database System ICIS Integrated Compliance Information System FTTS. FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) MLTS. Material Licensing Tracking System COAL ASH DOE Steam-Electric Plant Operation Data COAL ASH EPA Coal Combustion Residues Surface Impoundments List PCB TRANSFORMER. PCB Transformer Registration Database RADINFO. Radiation Information Database RADINFO. Radiation Information Database HIST FTTS. FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS Incident and Accident Data CONSENT Superfund (CERCLA) Consent Decrees INDIAN RESERV. Indian Reservations FUSRAP Formerly Utilized Sites Remedial Action Program UMTRA Uranium Mill Tailings Sites LEAD SMELTERS Lead Smelter Sites US AIRS Aerometric Information Retrieval System Facility Subsystem US MINES Mines Master Index File		
RAATS. RCRA Administrative Action Tracking System PRP. Potentially Responsible Parties PADS. PCB Activity Database System ICIS. Integrated Compliance Information System FTTS. FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) MLTS. Material Licensing Tracking System COAL ASH DOE. Steam-Electric Plant Operation Data COAL ASH EPA. Coal Combustion Residues Surface Impoundments List PCB TRANSFORMER. PCB Transformer Registration Database RADINFO. Radiation Information Database RADINFO. Radiation Information Database HIST FTTS. FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS. Incident and Accident Data CONSENT. Superfund (CERCLA) Consent Decrees INDIAN RESERV. Indian Reservations FUSRAP. Formerly Utilized Sites Remedial Action Program UMTRA. Uranium Mill Tailings Sites Lead Smelter Sites Lead Smelter Sites US AIRS. Aerometric Information Retrieval System Facility Subsystem US MINES Mines Master Index File ABANDONED MINES. Aba	ROD	Records Of Decision
PRP. Potentially Responsible Parties PADS. PCB Activity Database System ICIS. Integrated Compliance Information System FTTS. FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) MLTS. Material Licensing Tracking System COAL ASH DOE. Steam-Electric Plant Operation Data COAL ASH EPA. Coal Combustion Residues Surface Impoundments List PCB TRANSFORMER. PCB Transformer Registration Database RADINFO. Radiation Information Database HIST FTTS. FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS. Incident and Accident Data CONSENT. Superfund (CERCLA) Consent Decrees INDIAN RESERV. Indian Reservations FUSRAP. Formerly Utilized Sites Remedial Action Program UMTRA. Uranium Mill Tailings Sites LEAD SMELTERS. Lead Smelter Sites US AIRS. Aerometric Information Retrieval System Facility Subsystem US MINES Mines Master Index File ABANDONED MINES. Abandoned Mines		
PADS		
ICIS Integrated Compliance Information System FTTS FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) MLTS Material Licensing Tracking System COAL ASH DOE Steam-Electric Plant Operation Data COAL ASH EPA Coal Combustion Residues Surface Impoundments List PCB TRANSFORMER PCB Transformer Registration Database RADINFO Radiation Information Database HIST FTTS FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS Incident and Accident Data CONSENT Superfund (CERCLA) Consent Decrees INDIAN RESERV Indian Reservations FUSRAP Formerly Utilized Sites Remedial Action Program UMTRA Uranium Mill Tailings Sites LEAD SMELTERS Lead Smelter Sites US AIRS Aerometric Information Retrieval System Facility Subsystem US MINES Mines Master Index File ABANDONED MINES Abandoned Mines		
FTTS. FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) MLTS. Material Licensing Tracking System COAL ASH DOE. Steam-Electric Plant Operation Data COAL ASH EPA. Coal Combustion Residues Surface Impoundments List PCB TRANSFORMER. PCB Transformer Registration Database RADINFO. Radiation Information Database HIST FTTS. FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS. Incident and Accident Data CONSENT. Superfund (CERCLA) Consent Decrees INDIAN RESERV. Indian Reservations FUSRAP. Formerly Utilized Sites Remedial Action Program UMTRA. Uranium Mill Tailings Sites LEAD SMELTERS. Lead Smelter Sites US AIRS. Aerometric Information Retrieval System Facility Subsystem US MINES. Mines Master Index File ABANDONED MINES. Abandoned Mines		
Act)/TSCA (Toxic Substances Control Act) MLTS. Material Licensing Tracking System COAL ASH DOE. Steam-Electric Plant Operation Data COAL ASH EPA. Coal Combustion Residues Surface Impoundments List PCB TRANSFORMER. PCB Transformer Registration Database RADINFO. Radiation Information Database HIST FTTS. FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS. Incident and Accident Data CONSENT. Superfund (CERCLA) Consent Decrees INDIAN RESERV. Indian Reservations FUSRAP. Formerly Utilized Sites Remedial Action Program UMTRA. Uranium Mill Tailings Sites LEAD SMELTERS. Aerometric Information Retrieval System Facility Subsystem US MINES. Mines Master Index File ABANDONED MINES. Abandoned Mines		
MLTSMaterial Licensing Tracking SystemCOAL ASH DOESteam-Electric Plant Operation DataCOAL ASH EPACoal Combustion Residues Surface Impoundments ListPCB TRANSFORMERPCB Transformer Registration DatabaseRADINFORadiation Information DatabaseHIST FTTSFIFRA/TSCA Tracking System Administrative Case ListingDOT OPSIncident and Accident DataCONSENTSuperfund (CERCLA) Consent DecreesINDIAN RESERVIndian ReservationsFUSRAPFormerly Utilized Sites Remedial Action ProgramUMTRAUranium Mill Tailings SitesLEAD SMELTERSLead Smelter SitesUS AIRSAerometric Information Retrieval System Facility SubsystemUS MINESMines Master Index FileABANDONED MINESAbandoned Mines		
COAL ASH DOESteam-Electric Plant Operation DataCOAL ASH EPACoal Combustion Residues Surface Impoundments ListPCB TRANSFORMERPCB Transformer Registration DatabaseRADINFORadiation Information DatabaseHIST FTTSFIFRA/TSCA Tracking System Administrative Case ListingDOT OPSIncident and Accident DataCONSENTSuperfund (CERCLA) Consent DecreesINDIAN RESERVIndian ReservationsFUSRAPFormerly Utilized Sites Remedial Action ProgramUMTRAUranium Mill Tailings SitesLEAD SMELTERSLead Smelter SitesUS AIRSAerometric Information Retrieval System Facility SubsystemUS MINESMines Master Index FileABANDONED MINESAbandoned Mines		Act)/TSCA (Toxic Substances Control Act)
COAL ASH EPACoal Combustion Residues Surface Impoundments ListPCB TRANSFORMERPCB Transformer Registration DatabaseRADINFORadiation Information DatabaseHIST FTTSFIFRA/TSCA Tracking System Administrative Case ListingDOT OPSIncident and Accident DataCONSENTSuperfund (CERCLA) Consent DecreesINDIAN RESERVIndian ReservationsFUSRAPFormerly Utilized Sites Remedial Action ProgramUMTRAUranium Mill Tailings SitesLEAD SMELTERSLead Smelter SitesUS AIRSAerometric Information Retrieval System Facility SubsystemUS MINESMines Master Index FileABANDONED MINESAbandoned Mines	MLTS	. Material Licensing Tracking System
PCB TRANSFORMER. PCB Transformer Registration Database RADINFO. Radiation Information Database HIST FTTS. FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS. Incident and Accident Data CONSENT. Superfund (CERCLA) Consent Decrees INDIAN RESERV. Indian Reservations FUSRAP. Formerly Utilized Sites Remedial Action Program UMTRA. Uranium Mill Tailings Sites LEAD SMELTERS. Lead Smelter Sites US AIRS. Aerometric Information Retrieval System Facility Subsystem US MINES. Mines Master Index File ABANDONED MINES. Abandoned Mines	COAL ASH DOE	Steam-Electric Plant Operation Data
RADINFORadiation Information DatabaseHIST FTTSFIFRA/TSCA Tracking System Administrative Case ListingDOT OPSIncident and Accident DataCONSENTSuperfund (CERCLA) Consent DecreesINDIAN RESERVIndian ReservationsFUSRAPFormerly Utilized Sites Remedial Action ProgramUMTRAUranium Mill Tailings SitesLEAD SMELTERSLead Smelter SitesUS AIRSAerometric Information Retrieval System Facility SubsystemUS MINESMines Master Index FileABANDONED MINESAbandoned Mines	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
HIST FTTS. FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS. Incident and Accident Data CONSENT. Superfund (CERCLA) Consent Decrees INDIAN RESERV. Indian Reservations FUSRAP. Formerly Utilized Sites Remedial Action Program UMTRA. Uranium Mill Tailings Sites LEAD SMELTERS. Lead Smelter Sites US AIRS. Aerometric Information Retrieval System Facility Subsystem US MINES. Mines Master Index File ABANDONED MINES. Abandoned Mines		
DOT OPS Incident and Accident Data CONSENT Superfund (CERCLA) Consent Decrees INDIAN RESERV Indian Reservations FUSRAP Formerly Utilized Sites Remedial Action Program UMTRA Uranium Mill Tailings Sites LEAD SMELTERS Lead Smelter Sites US AIRS Aerometric Information Retrieval System Facility Subsystem US MINES Mines Master Index File ABANDONED MINES Abandoned Mines		
CONSENT	HIST FTTS	- FIFRA/TSCA Tracking System Administrative Case Listing
INDIAN RESERV Indian Reservations FUSRAP Formerly Utilized Sites Remedial Action Program UMTRA Uranium Mill Tailings Sites LEAD SMELTERS Lead Smelter Sites US AIRS Aerometric Information Retrieval System Facility Subsystem US MINES Mines Master Index File ABANDONED MINES Abandoned Mines	DOT OPS	Incident and Accident Data
FUSRAP Formerly Utilized Sites Remedial Action Program UMTRA Uranium Mill Tailings Sites LEAD SMELTERS Lead Smelter Sites US AIRS Aerometric Information Retrieval System Facility Subsystem US MINES Mines Master Index File ABANDONED MINES Abandoned Mines	CONSENT	. Superfund (CERCLA) Consent Decrees
UMTRA Uranium Mill Tailings Sites LEAD SMELTERS Lead Smelter Sites US AIRS Aerometric Information Retrieval System Facility Subsystem US MINES Mines Master Index File ABANDONED MINES Abandoned Mines		
LEAD SMELTERS Lead Smelter Sites US AIRS Aerometric Information Retrieval System Facility Subsystem US MINES Mines Master Index File ABANDONED MINES Abandoned Mines		
US AIRS Aerometric Information Retrieval System Facility Subsystem US MINES Mines Master Index File ABANDONED MINES Abandoned Mines		
US MINES Mines Master Index File ABANDONED MINES Abandoned Mines		
ABANDONED MINES Abandoned Mines	US AIRS	Aerometric Information Retrieval System Facility Subsystem
FINDS Facility Index System/Facility Registry System		
	FINDS	. Facility Index System/Facility Registry System

ECHO	_ Enforcement & Compliance History Information
	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	_ EPA Fuels Program Registered Listing
AIRS	Permitted AIRS Facility Listing
DRYCLEANERS	Drycleaner Facility Listing
Financial Assurance	Financial Assurance Information Listing
TIER 2	
UIC	Underground Injection Wells Database Listing
MINES MRDS	Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner	. EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List
RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

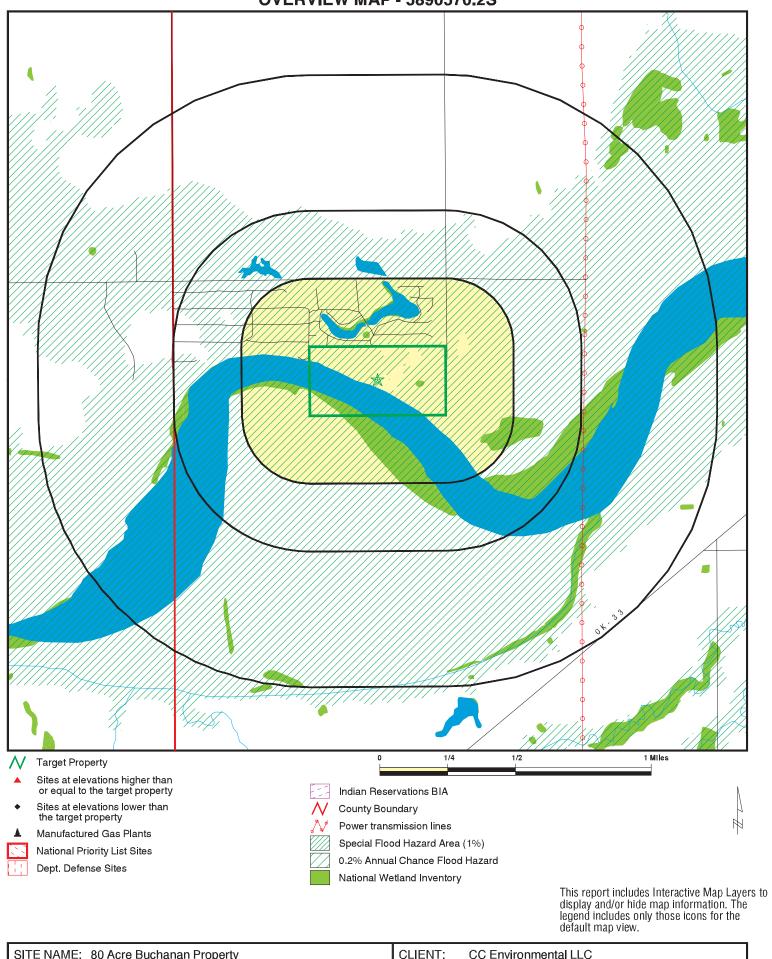
SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

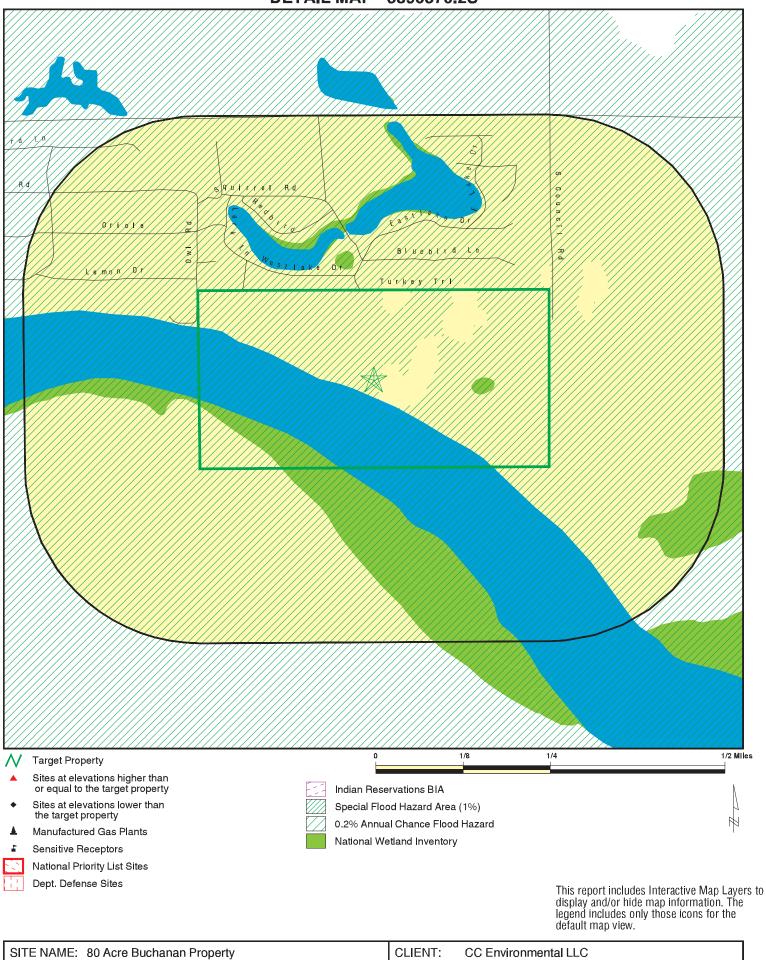
Unmappable (orphan) sites are not considered in the foregoing analysis.

There were no unmapped sites in this report.

OVERVIEW MAP - 5890570.2S



DETAIL MAP - 5890570.2S



SITE NAME:80 Acre Buchanan PropertyCLIENT:CC Environmental LLCADDRESS:CR N 300
Crescent OK 73028CONTACT:Geoff CantyLAT/LONG:35.865855 / 97.661038DATE:December 03, 2019 1:39 pm

Copyright © 2019 EDR, Inc. © 2015 TomTom Rel. 2015.

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted	
STANDARD ENVIRONMENTAL RECORDS									
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 si	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	CTS facilities lis	st							
CORRACTS	1.000		0	0	0	0	NR	0	
Federal RCRA non-COR	RRACTS TSD fa	cilities list							
RCRA-TSDF	0.500		0	0	0	NR	NR	0	
Federal RCRA generato	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 con engineering controls re									
LUCIS US ENG CONTROLS US INST CONTROL	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								
SHWS	1.000		0	0	0	0	NR	0	
State and tribal landfill a solid waste disposal sit									
SWF/LF	0.500		0	0	0	NR	NR	0	
State and tribal leaking	storage tank li	sts							
LUST LAST 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 register	ed storage tan	k 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		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
State and tribal institution control / engineering control / engin		es						
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntar	y cleanup sit	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 ENVIRONMEN	ITAL RECORD	<u>s</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 DEBRIS REGION 9 ODI 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 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 0
Local Lists of Registered	d Storage Tai	nks						
HIST UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency I	Release Repo	orts						
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		0 0 0 NR NR	0 0 0 NR NR	NR 0 0 NR NR	NR 0 NR NR NR	NR NR NR NR NR	0 0 0 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	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	Õ
SSTS	TP		NR	NR	NR	NR	NR	Õ
ROD	1.000		0	0	0	0	NR	Ō
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
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
	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0		NR	0
UMTRA LEAD SMELTERS	0.500 TP		0 NR	0 NR	0 NR	NR NR	NR NR	0 0
US AIRS	TP		NR	NR	NR	NR	NR	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
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	õ
UXO	1.000		0	0	0	0	NR	Ō
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	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 HISTORIC	AL RECORDS							
EDR Exclusive Records	;							
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		Ő	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered G	ovt. Archives							
RGA HWS	TP		NR	NR	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
RGA LF RGA LUST	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
- Totals		0	0	0	0	0	0	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Database(s) E

EDR ID Number EPA ID Number

NO SITES FOUND

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
	_				

NO SITES FOUND

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: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/20/2019 Number of Days to Update: 13 Source: EPA Telephone: N/A Last EDR Contact: 11/07/2019 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

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

EPA Region 1 Telephone 617-918-1143

EPA Region 3 Telephone 215-814-5418

EPA Region 4 Telephone 404-562-8033

EPA Region 5 Telephone 312-886-6686

EPA Region 10 Telephone 206-553-8665 EPA Region 6 Telephone: 214-655-6659

EPA Region 7 Telephone: 913-551-7247

EPA Region 8 Telephone: 303-312-6774

EPA Region 9 Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

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

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/20/2019 Number of Days to Update: 13 Source: EPA Telephone: N/A Last EDR Contact: 11/07/2019 Next Scheduled EDR Contact: 01/13/2020 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: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/20/2019 Number of Days to Update: 13 Source: EPA Telephone: N/A Last EDR Contact: 11/07/2019 Next Scheduled EDR Contact: 01/13/2020 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: 04/03/2019 Date Data Arrived at EDR: 04/05/2019 Date Made Active in Reports: 05/14/2019 Number of Days to Update: 39 Source: Environmental Protection Agency Telephone: 703-603-8704 Last EDR Contact: 10/04/2019 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

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

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/21/2019 Number of Days to Update: 14 Source: EPA Telephone: 800-424-9346 Last EDR Contact: 11/07/2019 Next Scheduled EDR Contact: 01/27/2020 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: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/21/2019 Number of Days to Update: 14 Source: EPA Telephone: 800-424-9346 Last EDR Contact: 11/07/2019 Next Scheduled EDR Contact: 01/27/2020 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: 06/24/2019	Source: EPA
Date Data Arrived at EDR: 06/26/2019	Telephone: 800-424-9346
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/28/2019
Number of Days to Update: 113	Next Scheduled EDR Contact: 01/06/2020
	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: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 113 Source: Environmental Protection Agency Telephone: 214-665-6444 Last EDR Contact: 10/28/2019 Next Scheduled EDR Contact: 01/06/2020 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: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 113 Source: Environmental Protection Agency Telephone: 214-665-6444 Last EDR Contact: 10/28/2019 Next Scheduled EDR Contact: 01/06/2020 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: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 113 Source: Environmental Protection Agency Telephone: 214-665-6444 Last EDR Contact: 10/28/2019 Next Scheduled EDR Contact: 01/06/2020 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: 06/24/2019Source: Environmental Protection AgencyDate Data Arrived at EDR: 06/26/2019Telephone: 214-665-6444Date Made Active in Reports: 10/17/2019Last EDR Contact: 10/28/2019Number of Days to Update: 113Next Scheduled EDR Contact: 01/06/2020Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

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

Date of Government Version: 08/13/2019Source: Department of the NavyDate Data Arrived at EDR: 08/20/2019Telephone: 843-820-7326Date Made Active in Reports: 08/26/2019Last EDR Contact: 11/07/2019Number of Days to Update: 6Next Scheduled EDR Contact: 02/24/2020Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

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

Date of Government Version: 08/19/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/20/2019	Telephone: 703-603-0695
Date Made Active in Reports: 08/26/2019	Last EDR Contact: 11/22/2019
Number of Days to Update: 6	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

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

Date of Government Version: 08/19/2019SDate Data Arrived at EDR: 08/20/2019DDate Made Active in Reports: 08/26/2019DNumber of Days to Update: 6M

Source: Environmental Protection Agency Telephone: 703-603-0695 Last EDR Contact: 11/22/2019 Next Scheduled EDR Contact: 03/09/2020 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: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 09/23/2019 Number of Days to Update: 14 Source: National Response Center, United States Coast Guard Telephone: 202-267-2180 Last EDR Contact: 09/09/2019 Next Scheduled EDR Contact: 01/06/2020 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: 12/31/2009	Source: Department of Environmental Quality
Date Data Arrived at EDR: 05/28/2010	Telephone: 405-702-5100
Date Made Active in Reports: 07/13/2010	Last EDR Contact: 11/11/2019
Number of Days to Update: 46	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: Varies

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: 01/29/2019 Date Data Arrived at EDR: 05/01/2019 Date Made Active in Reports: 06/26/2019 Number of Days to Update: 56 Source: Department of Environmental Quality Telephone: 405-702-5184 Last EDR Contact: 11/01/2019 Next Scheduled EDR Contact: 02/10/2020 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: 09/09/2019	Source: Oklahoma Corporation Commission
Date Data Arrived at EDR: 09/25/2019	Telephone: 405-522-4640
Date Made Active in Reports: 11/25/2019	Last EDR Contact: 09/25/2019
Number of Days to Update: 61	Next Scheduled EDR Contact: 01/06/2020
	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: 09/09/2019 Date Data Arrived at EDR: 09/25/2019 Date Made Active in Reports: 11/25/2019 Number of Days to Update: 61 Source: Oklahoma Corporation Commission Telephone: 405-521-3107 Last EDR Contact: 09/25/2019 Next Scheduled EDR Contact: 01/06/2020 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: 04/12/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies
INDIAN LUST R5: Leaking Underground Storage T Leaking underground storage tanks located or	anks on Indian Land า Indian Land in Michigan, Minnesota and Wisconsin.
Date of Government Version: 04/08/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 79	Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies
INDIAN LUST R1: Leaking Underground Storage T A listing of leaking underground storage tank le	
Date of Government Version: 04/11/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies
INDIAN LUST R8: Leaking Underground Storage T LUSTs on Indian land in Colorado, Montana, N	anks on Indian Land North Dakota, South Dakota, Utah and Wyoming.
Date of Government Version: 05/02/2019 Date Data Arrived at EDR: 10/22/2019 Date Made Active in Reports: 11/11/2019 Number of Days to Update: 20	Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies
INDIAN LUST R10: Leaking Underground Storage LUSTs on Indian land in Alaska, Idaho, Orego	
Date of Government Version: 04/16/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies
INDIAN LUST R6: Leaking Underground Storage T LUSTs on Indian land in New Mexico and Okla	
Date of Government Version: 05/01/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies
INDIAN LUST R9: Leaking Underground Storage T LUSTs on Indian land in Arizona, California, N	
Date of Government Version: 04/08/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: Environmental Protection Agency Telephone: 415-972-3372 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 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: 07/02/2019 Date Data Arrived at EDR: 10/16/2019 Date Made Active in Reports: 10/24/2019 Number of Days to Update: 8	Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 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: 08/27/2019 Date Data Arrived at EDR: 08/28/2019 Date Made Active in Reports: 11/11/2019 Number of Days to Update: 75	Source: FEMA Telephone: 202-646-5797 Last EDR Contact: 10/11/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Varies			
UST: Underground Storage Tank Listing Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.				
Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/25/2019 Date Made Active in Reports: 11/25/2019 Number of Days to Update: 61	Source: Oklahoma Corporation Commission Telephone: 405-521-3107 Last EDR Contact: 09/25/2019 Next Scheduled EDR Contact: 01/06/2020 Data Release Frequency: Varies			
AST: Aboveground Storage Tanks Registered Aboveground Storage Tanks.				
Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/25/2019 Date Made Active in Reports: 11/25/2019 Number of Days to Update: 61	Source: Oklahoma Corporation Commission Telephone: 405-521-3107 Last EDR Contact: 09/25/2019 Next Scheduled EDR Contact: 01/06/2020 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 Iand in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)				

Date of Government Version: 04/12/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020
Number of Days to Update: 80	
	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: 04/08/2019	Source: EPA Region 5
Date Data Arrived at EDR: 07/29/2019	Telephone: 312-886-6136
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	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: 05/01/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 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: 05/02/2019 Source: EPA Region 8 Date Data Arrived at EDR: 10/22/2019 Telephone: 303-312-6137 Last EDR Contact: 10/25/2019 Date Made Active in Reports: 11/11/2019 Next Scheduled EDR Contact: 02/03/2020 Number of Days to Update: 20 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: 04/11/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 79

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 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: 05/02/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

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

Date of Government Version: 04/08/2019 Source: EPA Region 9 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80

Telephone: 415-972-3368 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 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: 04/16/2019 Source: EPA Region 10 Date Data Arrived at EDR: 07/30/2019 Telephone: 206-553-2857 Last EDR Contact: 10/25/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 79 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

INST	CONTROL:	Institution	nal Contr	ol Sites
	Sites with ins	stitutional	controls	in place.

Date of Government Version: 12/28/2018 Date Data Arrived at EDR: 08/13/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 65 Source: Department of Environmental Quality Telephone: 405-702-5100 Last EDR Contact: 11/13/2019 Next Scheduled EDR Contact: 02/24/2020 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: 04/20/2009 Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

VCP: Voluntary Cleanup Site Inventory

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

Date of Government Version: 05/29/2019	Source: Department of Environmental Quality
Date Data Arrived at EDR: 06/13/2019	Telephone: 405-702-5100
Date Made Active in Reports: 08/29/2019	Last EDR Contact: 11/13/2019
Number of Days to Update: 77	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

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

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 09/19/2019
Number of Days to Update: 142	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Varies

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	S
Date Data Arrived at EDR: 09/07/2012	Т
Date Made Active in Reports: 10/10/2012	L
Number of Days to Update: 33	N

Source: Department of Environmental Quality Telephone: 405-702-5100 Last EDR Contact: 11/08/2019 Next Scheduled EDR Contact: 02/24/2020 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: 07/01/2019 Date Data Arrived at EDR: 08/14/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 64 Source: Department of Environmental Quality Telephone: 405-702-5100 Last EDR Contact: 11/11/2019 Next Scheduled EDR Contact: 02/24/2020 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: 06/03/2019 Date Data Arrived at EDR: 06/04/2019 Date Made Active in Reports: 08/26/2019 Number of Days to Update: 83 Source: Environmental Protection Agency Telephone: 202-566-2777 Last EDR Contact: 09/19/2019 Next Scheduled EDR Contact: 12/30/2019 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: 10/18/2019 Next Scheduled EDR Contact: 01/27/2020 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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 10/28/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 02/10/2020
• •	Data Release Frequency: Varies

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: 10/17/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: No Update Planned

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

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	Source: Department of Health & Human Serivces, Indian Health Service Telephone: 301-443-1452
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 11/01/2019
Number of Days to Update: 176	Next Scheduled EDR Contact: 02/10/2020
•	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: 06/11/2019 Date Data Arrived at EDR: 06/13/2019 Date Made Active in Reports: 09/03/2019 Number of Days to Update: 82 Source: Drug Enforcement Administration Telephone: 202-307-1000 Last EDR Contact: 11/20/2019 Next Scheduled EDR Contact: 03/09/2020 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: 06/11/2019 Date Data Arrived at EDR: 06/13/2019 Date Made Active in Reports: 09/03/2019 Number of Days to Update: 82 Source: Drug Enforcement Administration Telephone: 202-307-1000 Last EDR Contact: 11/20/2019 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

HIST UST: Underground Storage Tank List, List II Version

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

Date of Government Version: 03/21/2003 Date Data Arrived at EDR: 04/28/2003 Date Made Active in Reports: 05/27/2003 Number of Days to Update: 29 Source: Oklahoma Corporation Commission Telephone: 405-521-3107 Last EDR Contact: 01/19/2009 Next Scheduled EDR Contact: 04/19/2009 Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

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

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/20/2019 Number of Days to Update: 13 Source: Environmental Protection Agency Telephone: 202-564-6023 Last EDR Contact: 11/07/2019 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Re	port System, HMIRS	contains hazardous material	spill incidents reported to DOT.

Date of Government Version: 06/24/2019	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/26/2019	Telephone: 202-366-4555
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 09/24/2019
Number of Days to Update: 89	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Quarterly

OK COMPLAINT: Oklahoma Complaint System Database

Environmental complaints reported to the Oklahoma Corporation Commission.

Date of Government Version: 06/30/2018	Source: Oklahoma Conservation Commission
Date Data Arrived at EDR: 06/11/2019	Telephone: 405-521-4828
Date Made Active in Reports: 06/17/2019	Last EDR Contact: 11/21/2019
Number of Days to Update: 6	Next Scheduled EDR Contact: 02/24/2020
	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: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 113 Source: Environmental Protection Agency Telephone: 214-665-6444 Last EDR Contact: 10/28/2019 Next Scheduled EDR Contact: 01/06/2020 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: 05/15/2019 Date Data Arrived at EDR: 05/21/2019 Date Made Active in Reports: 08/08/2019 Number of Days to Update: 79 Source: U.S. Army Corps of Engineers Telephone: 202-528-4285 Last EDR Contact: 11/19/2019 Next Scheduled EDR Contact: 03/02/2020 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: 12/31/2005Source: USGSDate Data Arrived at EDR: 11/10/2006Telephone: 888-27Date Made Active in Reports: 01/11/2007Last EDR Contact:Number of Days to Update: 62Next Scheduled ED

Source: USGS Telephone: 888-275-8747 Last EDR Contact: 10/11/2019 Next Scheduled EDR Contact: 01/20/2020 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	Source: U.S. Geological Survey	
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747	
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 10/07/2019	
Number of Days to Update: 574	Next Scheduled EDR Contact: 01/20/2020	
	Data Release Frequency: N/A	
SCRD DRYCLEANERS: State Coalition for Remed	diation 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: 12/02/2019 Next Scheduled EDR Contact: 02/24/2020 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

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

Date of Government Version: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 09/23/2019 Number of Days to Update: 89

Source: Environmental Protection Agency Telephone: 202-566-1917 Last EDR Contact: 09/24/2019 Next Scheduled EDR Contact: 01/06/2020 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

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

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014 Number of Days to Update: 88

Source: Environmental Protection Agency Telephone: 617-520-3000 Last EDR Contact: 10/31/2019 Next Scheduled EDR Contact: 02/17/2020 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: 11/08/2019 Next Scheduled EDR Contact: 02/17/2020 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: 06/21/2017 Date Made Active in Reports: 01/05/2018 Number of Days to Update: 198 Source: EPA Telephone: 202-260-5521 Last EDR Contact: 09/19/2019 Next Scheduled EDR Contact: 12/30/2019 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: 12/31/2017 Date Data Arrived at EDR: 11/16/2018 Date Made Active in Reports: 11/21/2019 Number of Days to Update: 370 Source: EPA Telephone: 202-566-0250 Last EDR Contact: 11/22/2019 Next Scheduled EDR Contact: 03/02/2020 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: 09/30/2018 Date Data Arrived at EDR: 04/24/2019 Date Made Active in Reports: 08/08/2019 Number of Days to Update: 106 Source: EPA Telephone: 202-564-4203 Last EDR Contact: 10/23/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Annually

ROD: Records Of Decision

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

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/20/2019 Number of Days to Update: 13 Source: EPA Telephone: 703-416-0223 Last EDR Contact: 11/07/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Annually

RMP: Risk Management Plans

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

Date of Government Version: 04/25/2019 Date Data Arrived at EDR: 05/02/2019 Date Made Active in Reports: 05/23/2019 Number of Days to Update: 21 Source: Environmental Protection Agency Telephone: 202-564-8600 Last EDR Contact: 10/21/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

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

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995 Number of Days to Update: 35 Source: EPA Telephone: 202-564-4104 Last EDR Contact: 06/02/2008 Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: 202-564-6023
Date Made Active in Reports: 11/21/2019	Last EDR Contact: 11/07/2019
Number of Days to Update: 14	Next Scheduled EDR Contact: 02/17/2020
	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: 03/20/2019	Source: EPA
Date Data Arrived at EDR: 04/10/2019	Telephone: 202-566-0500
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 10/11/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/20/2020
	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: 10/07/2019 Next Scheduled EDR Contact: 01/20/2020 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	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	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	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	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: 06/20/2019	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 06/20/2019	Telephone: 301-415-7169
Date Made Active in Reports: 08/08/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 02/03/2020
	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: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 11/06/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

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

Date of Government Version: 01/12/2017 Date Data Arrived at EDR: 03/05/2019 Date Made Active in Reports: 11/11/2019 Number of Days to Update: 251 Source: Environmental Protection Agency Telephone: N/A Last EDR Contact: 11/25/2019 Next Scheduled EDR Contact: 03/16/2020 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: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 11/06/2019
Number of Days to Update: 15	Next Scheduled EDR Contact: 02/17/2020
	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: 11/12/2019 Next Scheduled EDR Contact: 01/13/2020 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: 07/01/2019	Source: Department of Transporation, Office of Pipeline Safety
Date Data Arrived at EDR: 07/31/2019	Telephone: 202-366-4595
Date Made Active in Reports: 10/24/2019	Last EDR Contact: 10/29/2019
Number of Days to Update: 85	Next Scheduled EDR Contact: 02/10/2020
	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: 06/30/2019	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 07/16/2019	Telephone: Varies
Date Made Active in Reports: 10/02/2019	Last EDR Contact: 10/02/2019
Number of Days to Update: 78	Next Scheduled EDR Contact: 01/20/2020
	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: 12/31/2015 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 09/28/2017 Number of Days to Update: 218 Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 09/16/2019 Next Scheduled EDR Contact: 01/06/2020 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.

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/06/2019
Next Scheduled EDR Contact: 01/19/2020
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: 11/04/2019 Next Scheduled EDR Contact: 02/17/2020 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: 08/01/2019 Date Data Arrived at EDR: 08/21/2019 Date Made Active in Reports: 11/11/2019 Number of Days to Update: 82 Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 11/15/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/25/2019Source:Date Data Arrived at EDR: 11/07/2019TelephoDate Made Active in Reports: 11/20/2019Last EDNumber of Days to Update: 13Next Sc

Source: Environmental Protection Agency Telephone: 703-603-8787 Last EDR Contact: 11/07/2019 Next Scheduled EDR Contact: 01/13/2020 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.

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 Telephone: 202-564-2496 Last EDR Contact: 09/26/2017 Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually
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 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 issue violation information.	ed for mines active or opened since 1971. The data also includes
Date of Government Version: 08/01/2019 Date Data Arrived at EDR: 08/27/2019 Date Made Active in Reports: 11/11/2019 Number of Days to Update: 76	Source: Department of Labor, Mine Safety and Health Administration Telephone: 303-231-5959 Last EDR Contact: 08/27/2019 Next Scheduled EDR Contact: 12/09/2019 Data Release Frequency: Semi-Annually
MINES VIOLATIONS: MSHA Violation Assessmen Mines violation and assessment information. I	it Data Department of Labor, Mine Safety & Health Administration.
Date of Government Version: 06/06/2019 Date Data Arrived at EDR: 06/06/2019 Date Made Active in Reports: 10/24/2019 Number of Days to Update: 140	Source: DOL, Mine Safety & Health Admi Telephone: 202-693-9424 Last EDR Contact: 12/02/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Quarterly
	I mines are facilities that extract ferrous metals, such as iron ous metal mines are facilities that extract nonferrous metals, such
Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008 Number of Days to Update: 49	Source: USGS Telephone: 703-648-7709 Last EDR Contact: 11/22/2019 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: Varies
US MINES 3: Active Mines & Mineral Plants Datab Active Mines and Mineral Processing Plant op of the USGS.	ase Listing perations for commodities monitored by the Minerals Information Team
Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011 Number of Days to Update: 97	Source: USGS Telephone: 703-648-7709 Last EDR Contact: 11/22/2019 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: Varies
ABANDONED MINES: Abandoned Mines An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.	

Date of Government Version: 09/10/2019 Date Data Arrived at EDR: 09/10/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 37 Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 09/10/2019 Next Scheduled EDR Contact: 12/23/2019 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: 05/03/2019	Source: EPA
Date Data Arrived at EDR: 06/05/2019	Telephone: (214) 665-2200
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 09/04/2019
Number of Days to Update: 90	Next Scheduled EDR Contact: 12/16/2019
	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: 07/06/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/09/2019	Telephone: 202-564-2280
Date Made Active in Reports: 10/02/2019	Last EDR Contact: 10/08/2019
Number of Days to Update: 85	Next Scheduled EDR Contact: 01/20/2020
	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: 05/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2018	Telephone: 202-564-0527
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 11/20/2019
Number of Days to Update: 71	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017	Source: Department of Defense
Date Data Arrived at EDR: 01/17/2019	Telephone: 703-704-1564
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 10/10/2019
Number of Days to Update: 74	Next Scheduled EDR Contact: 01/27/2020
	Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/19/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 11/11/2019 Number of Days to Update: 83 Source: EPA Telephone: 800-385-6164 Last EDR Contact: 11/19/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Quarterly

AIRS: Permitted AIRS Facility Listing

A listing of permitted AIRS facility locations.

Date of Government Version: 09/23/2019 Date Data Arrived at EDR: 09/24/2019 Date Made Active in Reports: 11/22/2019 Number of Days to Update: 59	Source: Department of Environmental Quality Telephone: 405-702-4100 Last EDR Contact: 09/23/2019 Next Scheduled EDR Contact: 01/06/2020 Data Release Frequency: Quarterly
DRYCLEANERS: Drycleaner Facilities A listing of drycleaner facility locations.	
Date of Government Version: 09/23/2019 Date Data Arrived at EDR: 09/24/2019 Date Made Active in Reports: 11/22/2019 Number of Days to Update: 59	Source: Department of Environmental Quality Telephone: 405-702-9100 Last EDR Contact: 09/23/2019 Next Scheduled EDR Contact: 01/06/2020 Data Release Frequency: Quarterly
Financial Assurance 1: Financial Assurance Informa Financial Assurance information.	ation Listing
Date of Government Version: 07/25/2014 Date Data Arrived at EDR: 11/06/2014 Date Made Active in Reports: 01/13/2015 Number of Days to Update: 68	Source: Department of Environmental Quality Telephone: 405-702-5105 Last EDR Contact: 11/08/2019 Next Scheduled EDR Contact: 02/24/2020 Data Release Frequency: No Update Planned
	e facilities. Financial assurance is intended to ensure that resources st-closure care, and corrective measures if the owner or operator
Date of Government Version: 12/10/2013 Date Data Arrived at EDR: 12/12/2013 Date Made Active in Reports: 01/24/2014 Number of Days to Update: 43	Source: Department of Environmental Quality Telephone: 405-702-5100 Last EDR Contact: 11/08/2019 Next Scheduled EDR Contact: 02/24/2020 Data Release Frequency: No Update Planned
TIER 2: Tier 2 Data Listing A listing of facilities which store or manufacture	a hazardous materials and submit a chemical inventory report.
Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 09/10/2019 Date Made Active in Reports: 11/21/2019 Number of Days to Update: 72	Source: Department of Environmental Quality Telephone: 405-702-1000 Last EDR Contact: 09/06/2019 Next Scheduled EDR Contact: 12/23/2019 Data Release Frequency: Annually
UIC: Underground Injection Wells Database Listing Class I injection wells. CLASS I wells are used lower most Underground Sources of Drinking V	to inject liquid hazardous and non-hazardous wastes beneath the Vater (USDW).
Date of Government Version: 07/15/2019 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: 405-702-5188 Last EDR Contact: 10/17/2019 Next Scheduled EDR Contact: 01/27/2020 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: 11/22/2019 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: Varies

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 Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Oklahoma.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/03/2014 Number of Days to Update: 186 Source: Department of Environmental Quality Telephone: N/A Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Oklahoma.

Date of Government Version: N/A	Source: Department of Environmental Quality
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/20/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 203	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: 05/14/2019	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 05/14/2019	Telephone: 860-424-3375
Date Made Active in Reports: 08/05/2019	Last EDR Contact: 11/11/2019
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/24/2020
	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: 05/01/2019 Date Made Active in Reports: 06/21/2019 Number of Days to Update: 51 Source: Department of Environmental Conservation Telephone: 518-402-8651 Last EDR Contact: 10/29/2019 Next Scheduled EDR Contact: 02/10/2020 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: 09/06/2019 Next Scheduled EDR Contact: 12/23/2019 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

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.

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.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

80 ACRE BUCHANAN PROPERTY CR N 300 CRESCENT, OK 73028

TARGET PROPERTY COORDINATES

Latitude (North):	35.865855 - 35° 51' 57.08"
Longitude (West):	97.661038 - 97° 39' 39.74"
Universal Tranverse Mercator:	Zone 14
UTM X (Meters):	620887.9
UTM Y (Meters):	3969697.5
Elevation:	970 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5926422 CASHION, OK
Version Date:	2012
North Map: Version Date:	5927598 CRESCENT NW, OK 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- Groundwater flow direction, and
 Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

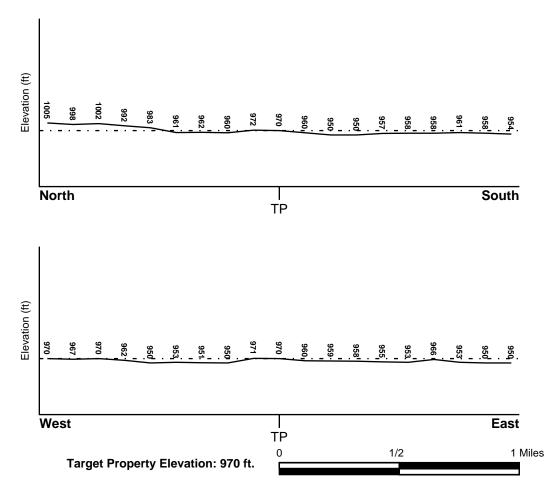
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
40073C0485D	FEMA FIRM Flood data
Additional Panels in search area:	FEMA Source Type
40073C0375D	FEMA FIRM Flood data
NATIONAL WETLAND INVENTORY	
NWI Quad at Target Property CASHION	NWI Electronic <u>Data Coverage</u> YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

MAP ID

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

Not Reported

LOCATION

FROM TP

GENERAL DIRECTION GROUNDWATER FLOW

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era:	Cenozoic Cate	egory:	Stratifed Sequence
System:	Quaternary		
Series:	Quaternary		
Code:	Q (decoded above as Era, System & Series)		

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5890570.2s



SITE NAME: ADDRESS:	80 Acre Buchanan Property CR N 300
	Crescent OK 73028 35.865855 / 97.661038

CLIENT: CONTACT: INQUIRY #: DATE:	CC Environmental LLC Geoff Canty 5890570.2s December 03, 2019 1:39 pm	
Copyright © 2019 EDR, Inc. © 2015 TomTom Rel. 2015.		

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1	
Soil Component Name:	Goodnight
Soil Surface Texture:	fine sand
Hydrologic Group:	Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.
Soil Drainage Class:	Excessively drained
Hydric Status: Partially hydric	
Corrosion Potential - Uncoated Steel:	Low
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

Soil Layer Information							
	Bou	Boundary Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
1	7 inches	22 inches	fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1
2	0 inches	7 inches	fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1
3	22 inches	44 inches	fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1
4	44 inches	79 inches	fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1

Soil Map ID: 2	
Soil Component Name:	Goodnight
Soil Surface Texture:	fine sand
Hydrologic Group:	Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.
Soil Drainage Class:	Excessively drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Soil Layer Information								
Layer	Boundary			Classification		Saturated hydraulic			
	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)		
1	25 inches	64 inches	fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1		
2	9 inches	18 inches	loamy fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1		
3	0 inches	9 inches	loamy fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1		
4	18 inches	25 inches	loamy fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1		
5	64 inches	79 inches	fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1		

Soil	Map	ID: 3
0011	map	10.0

Soil Component Name:	Water
Soil Surface Texture:	water
Hydrologic Group:	Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.
Soil Drainage Class: Hydric Status: Unknown	
Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

	Soil Layer Information									
	Boundary Classification Saturated hydraulic									
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)			
1	0 inches	79 inches	water	Not reported	Not reported	Max: Min:	Max: Min:			

Soil Component Name:	Yahola
Soil Surface Texture:	fine sandy loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Well drained
Hydric Status: Not hydric	
Corrosion Potential - Uncoated Steel:	Low
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

	Soil Layer Information								
	Boundary			Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec			
1	0 inches	5 inches	fine sandy loam	Not reported	Not reported	Max: 42.33 Min: 14.114	Max: 8.4 Min: 7.9		
2	5 inches	33 inches	loam	Not reported	Not reported	Max: 42.33 Min: 14.114	Max: 8.4 Min: 7.9		
3	33 inches	79 inches	stratified loamy fine sand to loam	Not reported	Not reported	Max: 42.33 Min: 14.114	Max: 8.4 Min: 7.9		

Soil Map ID: 5	
Soil Component Name:	Goodnight
Soil Surface Texture:	fine sand
Hydrologic Group:	Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.
Soil Drainage Class:	Excessively drained
Hydric Status: Partially hydric	
Corrosion Potential - Uncoated Steel:	Low
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

	Soil Layer Information									
Layer	Boundary			Classification		Saturated hydraulic				
	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)			
1	0 inches	5 inches	fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1			
2	5 inches	20 inches	fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1			
3	20 inches	79 inches	fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 6.1			

Soil Map ID: 6	
Soil Component Name:	Gaddy
Soil Surface Texture:	fine sandy loam
Hydrologic Group:	Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.
Soil Drainage Class:	Somewhat excessively drained
Hydric Status: Partially hydric	
Corrosion Potential - Uncoated Steel:	Low
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 31 inches

	Soil Layer Information								
	Boundary			Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)		
1	0 inches	5 inches	fine sandy loam	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 7.9		
2	5 inches	79 inches	stratified fine sand to clay loam	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 7.9		

Soil Map ID: 7	
Soil Component Name:	Gaddy
Soil Surface Texture:	stratified fine sand to clay loam
Hydrologic Group:	Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.
Soil Drainage Class:	Somewhat excessively drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Soil Layer Information							
Boundary			Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec		
1	11 inches	29 inches	stratified fine sand to clay loam	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 7.9	
2	0 inches	11 inches	loamy fine sand	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 7.9	
3	29 inches	79 inches	stratified fine sand to clay loam	Not reported	Not reported	Max: 141.14 Min: 42.33	Max: 8.4 Min: 7.9	

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

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

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
3	USGS40000974087	1/4 - 1/2 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

		LOCATION
MAP ID	WELL ID	FROM TP

No PWS System Found

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

GEOCHECK[®] - PHYSICAL SETTING SOURCE SUMMARY

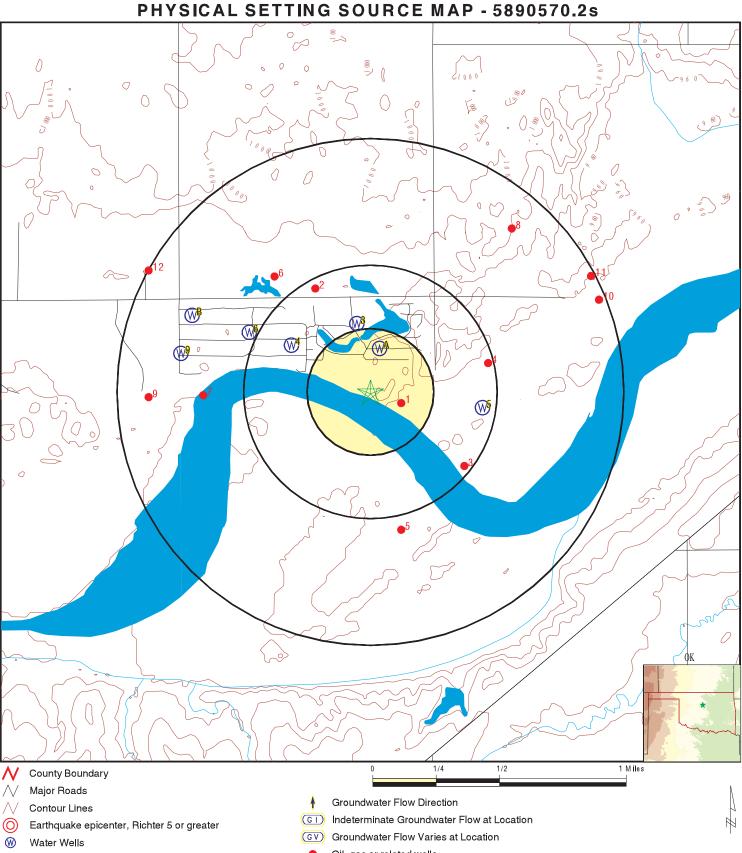
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	OK6000000100433	1/8 - 1/4 Mile North
A2	OK600000133902	1/8 - 1/4 Mile NNE
4	OK600000028228	1/4 - 1/2 Mile WNW
5	OK600000036578	1/4 - 1/2 Mile East
6	OK600000094338	1/2 - 1 Mile WNW
B7	OK600000031017	1/2 - 1 Mile WNW
B8	OK600000099664	1/2 - 1 Mile WNW
9	OK600000151312	1/2 - 1 Mile WNW
B10	OK600000139604	1/2 - 1 Mile WNW

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	OKOG20000193103	1/8 - 1/4 Mile ESE
2	OKOG20000195555	1/4 - 1/2 Mile NNW
3	OKOG20000191187	1/4 - 1/2 Mile SE
4	OKOG20000192677	1/4 - 1/2 Mile ENE
5	OKOG20000191486	1/2 - 1 Mile SSE
6	OKOG20000197468	1/2 - 1 Mile NW
7	OKOG20000193613	1/2 - 1 Mile West
8	OKOG20000193258	1/2 - 1 Mile NE
9	OKOG20000166200	1/2 - 1 Mile West
10	OKOG20000194937	1/2 - 1 Mile ENE
11	OKOG20000191987	1/2 - 1 Mile ENE
12	OKOG20000171323	1/2 - 1 Mile WNW



- Public Water Supply Wells
- Cluster of Multiple Icons

Oil, gas or related wells

ADDRESS: CR N 300 Crescent OK 73028 CONTACT: Geoff Canty LAT/LONG: 35.865855 / 97.661038 DATE: December 03, 2019 1:39 pm

A1				Database	EDR I	D Number
North 1/8 - 1/4 Mile Lower				OK WELLS	OK6000	000100433
Well ID:	100109		Permit #:	Not Repor	rted	
Well Owner:	Lee Rule		Well Type:	Groundwa		
Water Use:	Irrigation		Elevation:	0		
Total Well Depth:	45		Depth to First Water:	0		
Approximate Yield:	15		Construction Date:	20051027		
Aquifer Code:	Not Reported		Basin Code:	Not Repor	rted	
URL:	http://www.owrb.ok.gov/w	d/reporting/printrep	port.php?siteid=100109			
A2 NNE 1/8 - 1/4 Mile Lower				OK WELLS	OK6000	000133902
Well ID:	150817		Permit #:	Not Repor	rtod	
Well Owner:	David Heath		Well Type:	Groundwa		
Water Use:	Domestic		Elevation:	0		
Total Well Depth:	45		Depth to First Water:	0		
Approximate Yield:	16		Construction Date:	2013 4 9		
Aquifer Code:	Not Reported		Basin Code:	Not Report	rted	
URL:	http://www.owrb.ok.gov/w	d/reporting/printrep	oort.php?siteid=150817	·		
3				FED USGS	USGS40	0000974087
North I/4 - 1/2 Mile						
North I/4 - 1/2 Mile _ower	USGS-OK		Organization Name	1150	GS Oklahom	a Water Science Cent
North /4 - 1/2 Mile _ower Organization ID:	USGS-OK 16N-04W-18 ABA 1		Organization Name:			a Water Science Cent
North /4 - 1/2 Mile Lower Organization ID: Monitor Location:	16N-04W-18 ABA 1		Туре:	We	II	a Water Science Cent
North /4 - 1/2 Mile _ower Organization ID: Monitor Location: Description:	16N-04W-18 ABA 1 Not Reported		Type: HUC:	We 110	ll 50002	a Water Science Cent
North /4 - 1/2 Mile _ower Organization ID: Monitor Location: Description: Drainage Area:	16N-04W-18 ABA 1 Not Reported Not Reported		Type: HUC: Drainage Area Units:	Wel 110 Not	ll 50002 Reported	a Water Science Cent
North /4 - 1/2 Mile .ower Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area:	16N-04W-18 ABA 1 Not Reported Not Reported Not Reported		Type: HUC:	Wel 110 Not	ll 50002	a Water Science Cent
North I/4 - 1/2 Mile _ower Organization ID: Monitor Location: Description: Drainage Area:	16N-04W-18 ABA 1 Not Reported Not Reported		Type: HUC: Drainage Area Units:	Wel 110 Not	ll 50002 Reported	a Water Science Cent
North //4 - 1/2 Mile _ower Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer:	16N-04W-18 ABA 1 Not Reported Not Reported Not Reported Not Reported		Type: HUC: Drainage Area Units:	Wel 110 Not Jnts: Not	ll 50002 Reported	a Water Science Cent
North /4 - 1/2 Mile .ower Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type:	16N-04W-18 ABA 1 Not Reported Not Reported Not Reported Not Reported Cimarron Terrace a		Type: HUC: Drainage Area Units: Contrib Drainage Area U	Wel 110 Not Jnts: Not	ll 50002 Reported Reported	a Water Science Cent
lorth /4 - 1/2 Mile .ower Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type: Aquifer Type:	16N-04W-18 ABA 1 Not Reported Not Reported Not Reported Not Reported Cimarron Terrace a Not Reported		Type: HUC: Drainage Area Units: Contrib Drainage Area U Construction Date:	Wel 110 Not Jnts: Not Not ft	ll 50002 Reported Reported	a Water Science Cent
North //4 - 1/2 Mile _ower Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type: Aquifer Type: Well Depth:	16N-04W-18 ABA 1 Not Reported Not Reported Not Reported Ot Reported Cimarron Terrace a Not Reported 27.96 Not Reported		Type: HUC: Drainage Area Units: Contrib Drainage Area U Construction Date: Well Depth Units:	Wei 110 Not Jnts: Not ft Not 198	II 50002 Reported Reported Reported	a Water Science Cent

4 WNW 1/4 - 1/2 Mile Lower

> Well ID: Well Owner: Water Use:

28754 Twin Lake Sport Club Industrial Permit #: Well Type: Elevation: OK WELLS OK600000028228

Not Reported Groundwater Well 0

Permit #:

Well Type:

Elevation:

Permit #:

Well Type:

Elevation:

Basin Code:

Permit #:

Well Type:

Elevation:

Basin Code:

Permit #:

Well Type:

Elevation:

Depth to First Water:

Construction Date:

Total Well Depth: Approximate Yield: Aquifer Code: URL:

38803

42

60

94718

43

25

31208

36

80

Bruce Ligon

Not Reported

Domestic

Domestic

Paul Cummings

Not Reported

Domestic

BRENT HERREN

40 Depth to First Water: 150 Construction Date: Not Reported Basin Code: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=28754

11.8999996185303 1992 317 Not Reported

OK WELLS

OK600000036578

Not Reported

Groundwater Well 0 20 1996 5 8 Not Reported

6 WNW 1/2 - 1 Mile Lower

URL:

5

East 1/4 - 1/2 Mile Lower Well ID:

Well Owner:

Water Use:

Aquifer Code:

Total Well Depth:

Approximate Yield:

Well ID: Well Owner: Water Use: Total Well Depth: Approximate Yield: Aquifer Code: URL:

Not Reported Basin Code: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=38803

http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=94718

http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=31208

OK600000094338 **OK WELLS**

Not Reported Groundwater Well 0 0 2005 531 Not Reported

OK600000031017 **OK WELLS**

Not Reported Groundwater Well 0 6 1994 3 3 Not Reported

B8 WNW

URL:

B7 WNW

1/2 - 1 Mile Higher

Well ID:

Well Owner:

Water Use:

Aquifer Code:

Total Well Depth:

Approximate Yield:

1/2 - 1 Mile Higher

> Well ID: Well Owner: Water Use: Total Well Depth: Approximate Yield:

101427 Shawnee Indian Health Service Domestic 50 40

OK WELLS OK600000099664

Not Reported Groundwater Well 0 0 2006 4 1

Aquifer Code: URL:

Not Reported

Basin Code: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=101427 Not Reported

9 ŴNW 1/2 - 1 Mile Higher

Well ID: Well Owner: Water Use: Total Well Depth: Approximate Yield: Aquifer Code: URL:

153654 Permit #: Henry Rodriques Well Type: Domestic Elevation: 60 Depth to First Water: 20 Construction Date: Basin Code: Not Reported http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=153654

OK WELLS OK600000151312

Not Reported Groundwater Well 0 15 2013 626 Not Reported

B10 WNW 1/2 - 1 Mile Higher

> Well ID: Well Owner: Water Use: Total Well Depth: Approximate Yield: Aquifer Code: URL:

138727 Permit #: Well Type: **Bill Balding** Domestic Elevation: 60 Depth to First Water: Construction Date: 15 Not Reported Basin Code: http://www.owrb.ok.gov/wd/reporting/printreport.php?siteid=138727

OK600000139604 **OK WELLS**

Not Reported Groundwater Well 0 15 2011 920 Not Reported

Map ID Direction Distance

Database EDR ID Number

OIL_GAS

OIL_GAS

OKOG20000195555

OKOG20000191187

1 ESE 1/8 - 1/4 Mile			OIL_GAS	OKOG20000193103
Fid:	193102	Api county:	083	
Api number:	21578	Well name:	ZACHGO	18
Well no:	1	Oper name:	GLM ENE	RGY INC
Oper no:	21301	Status:	AC	
Well class:	Not Reported	Operstatus:	OPEN	
Countycode:	083	Meridan:	Indian	
Section:	18	Township:	16N	
Range:	4W	Quarter1:	NE4	
Quarter2:	SE4	Quarter3:	Not Repor	ted
Quarter4:	Not Reported	Feet ns:	660	
Direct ns:	S	Feet ew:	1980	
Direct ew:	W	Latitude:	35.86517	
Longitude:	-97.65855	G elevatio:	0	
D el:	0	Completion:	0	
Dept:	0	Site id:	OKOG200	00193103

2 NNW 1/4 - 1/2 Mile

Fid:	195554	Api county:	083
Api number:	24223	Well name:	MURRAY
Well no:	2-7-18H	Oper name:	STEPHENS PRODUCTION CO
Oper no:	23030	Status:	AC
Well class:	Not Reported	Operstatus:	OPEN
Countycode:	083	Meridan:	IM
Section:	7	Township:	16N
Range:	4W	Quarter1:	SE
Quarter2:	SW	Quarter3:	SW
Quarter4:	SW	Feet ns:	206
Direct ns:	S	Feet ew:	2464
Direct ew:	E	Latitude:	35.871731
Longitude:	-97.664589	G elevatio:	960
D el:	979	Completion:	2014-02-06
Dept:	1190	Site id:	OKOG20000195555

3 SE

1/4	-	1/2	Mile

1/4 1/2 Mile				
Fid:	191186	Api county:	083	
Api number:	00376	Well name:	ZACHGO	
Well no:	1	Oper name:	GLM ENERGY INC	
Oper no:	21301	Status:	AC	
Well class:	Not Reported	Operstatus:	OPEN	
Countycode:	083	Meridan:	Indian	
Section:	17	Township:	16N	
Range:	4W	Quarter1:	SW4	
Quarter2:	CNW4	Quarter3:	Not Reported	
Quarter4:	Not Reported	Feet ns:	660	
Direct ns:	N	Feet ew:	660	
Direct ew:	W	Latitude:	35.861571	

Longitude: D el: Dept:	-97.65411 0 0	G elevatio: Completion: Site id:	0 1964-09-28 OKOG20000191187	
4 ENE 1/4 - 1/2 Mile			OIL_GAS	OKOG20000192677
Fid: Api number: Well no: Oper no: Well class: Countycode: Section: Range: Quarter2: Quarter2: Quarter4: Direct ns: Direct ew: Longitude: D el: Dept:	192676 21119 1 21301 Not Reported 083 17 4W NW4 SE4 S W -97.65244 0 5978	Api county: Well name: Oper name: Status: Operstatus: Meridan: Township: Quarter1: Quarter1: Quarter3: Feet ns: Feet ew: Latitude: G elevatio: Completion: Site id:	083 HERREN GLM ENE AC OPEN Indian 16N NW4 SE4 1497 1143 35.867463 0 1979-04-1 OKOG200	4
5 SSE 1/2 - 1 Mile			OIL_GAS	OKOG20000191486
Fid: Api number: Well no: Oper no: Well class: Countycode: Section: Range: Quarter2: Quarter2: Quarter4: Direct ns: Direct ew: Longitude: D el: Dept:	191485 00698 1 9998 Not Reported 083 18 4W CSE4 Not Reported Not Reported Not Reported -97.65855 0 0	Api county: Well name: Oper name: Status: Operstatus: Meridan: Township: Quarter1: Quarter1: Quarter3: Feet ns: Feet ew: Latitude: G elevatio: Completion: Site id:	083 MURRAY OTC/OCC NOT ASSIGNED PA Not Reported Indian 16N SE4 Not Reported 0 0 35.857918 0 1964-06-05 OKOG20000191486	

6 NW 1/2 - 1 Mile

Range:

Fid: Api number: Well no: Oper no: Well class: Countycode: Section:

197467 50046 1-7 333 OIL 083 7

4W

Api county: Well name: Oper name: Status: Operstatus: Meridan: Township: Quarter1:

OIL_GAS OKOG20000197468

083 OSWALD C & Y CASING PULLING COMPANY AC OPEN Indian 16N SW4

Quarter2:
Quarter4:
Direct ns:
Direct ew:
Longitude:
D el:
Dept:

7 West

Not Reported S W -97.66746 0 6851

CSE4

Quarter3: Feet ns: Feet ew: Latitude: G elevatio: Completion: Site id:

Not Reported 660 2014 35.872421 961 1964-06-22 OKOG20000197468

OKOG20000193613 OIL_GAS

Fid:	193612	Api county:	083
Api number:	22168	Well name:	TWIN LAKES
Well no:	1	Oper name:	GLM ENERGY INC
Oper no:	21301	Status:	AC
Well class:	Not Reported	Operstatus:	OPEN
Countycode:	083	Meridan:	Indian
Section:	18	Township:	16N
Range:	4W	Quarter1:	NW4
Quarter2:	SW4	Quarter3:	NW4
Quarter4:	SE4	Feet ns:	960
Direct ns:	S	Feet ew:	410
Direct ew:	W	Latitude:	35.865622
Longitude:	-97.67247	G elevatio:	0
D el:	0	Completion:	1982-10-27
Dept:	0	Site id:	OKOG20000193613

8 NE

OKOG20000193258 OIL_GAS 1/2 - 1 Mile Fid: 193257 083 Api county: BASS-ZACHGO UNIT Well name: Api number: 21749 Well no: GLM ENERGY INC Oper name: 1 Oper no: 21301 Status: AC Well class: Not Reported Operstatus: OPEN Meridan: Countycode: 083 Indian Township: Section: 16N 8 4W Quarter1: SW4 Range: Quarter2: NE4 Quarter3: SW4 Quarter4: Not Reported Feet ns: 1650 Direct ns: S Feet ew: 1775 W Latitude: 35.875168 Direct ew: -97.65077 Longitude: G elevatio: 0 1981-07-09 D el: 0 Completion: 0 Site id: OKOG20000193258 Dept:

9

West 1/2 - 1 Mile

Fid:	
Api number:	
Well no:	
Oper no:	

Api county: Well name: Oper name: Status:

OIL_GAS OKOG20000166200

073 BOECKMAN OTC/OCC NOT ASSIGNED AC

Well class:	Not Reported	Operstatus:	Not Reported
Countycode:	073	Meridan:	Indian
Section:	13	Township:	16N
Range:	5W	Quarter1:	NE4
Quarter2:	CSE4	Quarter3:	Not Reported
Quarter4:	Not Reported	Feet ns:	3300
Direct ns:	S	Feet ew:	4620
Direct ew:	W	Latitude:	35.865509
Longitude:	-97.67631	G elevatio:	0
D el:	0	Completion:	1964-03-31
Dept:	0	Site id:	OKOG20000166200

10 ENE 1/2 - 1 Mile

Fid: 194936 083 Api county: Api number: 23605 Well name: RIVERBEND Well no: 2 Oper name: SHIELDS OPERATING INC Oper no: 20721 Status: AC OPEN Well class: OIL Operstatus: Countycode: 083 Meridan: Indian Section: Township: 8 16N Range: 4W Quarter1: SE4 SW4 E2 Quarter2: Quarter3: Quarter4: W2 Feet ns: 0 Direct ns: Not Reported Feet ew: 0 Direct ew: Not Reported Latitude: 35.87109 -97.64464 Longitude: G elevatio: 951 0 D el: Completion: 2002-10-16 5325 Site id: OKOG20000194937 Dept:

11 ENE 1/2 - 1 Mile			OIL_GAS	OKOG20000191987
Fid:	191986	Api county:	083	
Api number:	20369	Well name:	HERREN	
Well no:	1	Oper name:	SHIELDS	OPERATING INC
Oper no:	20721	Status:	AC	
Well class:	Not Reported	Operstatus:	OPEN	
Countycode:	083	Meridan:	Indian	
Section:	8	Township:	16N	
Range:	4W	Quarter1:	SE4	
Quarter2:	CSW4	Quarter3:	Not Report	ted
Quarter4:	Not Reported	Feet ns:	660	
Direct ns:	S	Feet ew:	660	
Direct ew:	W	Latitude:	35.872449	1
Longitude:	-97.6452	G elevatio:	962	
D el:	0	Completion:	1975-04-0	8
Dept:	6691	Site id:	OKOG200	00191987

OIL_GAS

OKOG20000194937

Map ID
Direction
Distance

Database ED

EDR ID Number

12 WNW 1/2 - 1 Mile			OIL_GAS	OKOG20000171323
Fid:	171322	Api county:	073	
Api number:	30209	Well name:	MARTHEN	NA MCCONNELL
Well no:	1	Oper name:	LINDENM	UTH & ASSOCIATES INC
Oper no:	15851	Status:	AC	
Well class:	Not Reported	Operstatus:	OPEN	
Countycode:	073	Meridan:	Indian	
Section:	12	Township:	16N	
Range:	5W	Quarter1:	SE4	
Quarter2:	CSE4	Quarter3:	Not Repor	ted
Quarter4:	Not Reported	Feet ns:	0	
Direct ns:	Not Reported	Feet ew:	0	
Direct ew:	Not Reported	Latitude:	35.872761	
Longitude:	-97.67631	G elevatio:	0	
D el:	0	Completion:	1965-04-0	1
Dept:	0	Site id:	OKOG200	000171323

AREA RADON INFORMATION

State Database: OK Radon

Radon Test Results

Zipcode	Num Tests	# > 4 pCi/L	Maximum	Average
73028	2	0	1	0.95

Federal EPA Radon Zone for LOGAN County: 3

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 73028

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.200 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA Telephone: 877-336-2627 Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS) Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS) This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Reported Well Locations in Oklahoma Source: Oklahoma Water Resources Board Telephone: 405-530-8800

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Listing Source: Oklahoma Corporation Commission Telephone: 405-521-3636 Oil and gas well locations in the state.

Oil and Gas Well Listing Source: Osage Nation Environmental and Natural Resources Telephone: 918-287-5333 Oil and gas well locations.

RADON

State Database: OK Radon Source: Department of Environmental Quality Telephone: 405-702-5100 Radon Information

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency
(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey.
The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones Source: EPA Telephone: 703-356-4020 Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

80 Acre Buchanan Property CR N 300 Crescent, OK 73028

Inquiry Number: 5890570.3 December 03, 2019

Certified Sanborn® Map Report



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

12/03/19 Site Name: Client Name: 80 Acre Buchanan Property CC Environmental LLC CR N 300 P.O. Box 1292 Crescent, OK 73028 Norman, OK 73070 EDR Inquiry # 5890570.3 Contact: Geoff Canty

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by CC Environmental LLC were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 7D6F-42FD-B9A4

NA

PO #

Project 80 Acre Buchanan Property

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results Certification #: 7D6F-42FD-B9A4

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

Library of Congress	
---------------------	--

University Publications of America

EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

CC Environmental LLC (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provide in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

17.4.2 User Questionnaire





CC Environmental, LLC

PHASE I USER QUESTIONNAIRE

PROJECT NAME:	Dolese Bros. Co. Crescent Sand Plant – Buchanan Property Acquisition
SITE LOCATION:	The South Half (S ½) of the Northeast Quarter (NE ¼) of Section Eighteen (18), Township Sixteen (16) North, Range Four (4) West of the Indian Meridian

The following questionnaire is required component of the ASTM Standard E-1527-13, which adheres to the All Appropriate Inquiries Rule. In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001), the *User* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. These inquiries must also be conducted by EPA Brownfield Assessment and Characterization grantees. The user should provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete.

If needed, please use additional paper to explain your answers.

1. Filed or Recorded Environmental Liens Against the Property

Did a search of *recorded land title records* (or judicial records where appropriate, see **Note 1** below) identify any environmental liens filed or recorded against the *property* under federal, tribal, state, or local law?

No

Note 1-In certain jurisdictions, federal, tribal, state or local statutes, or regulations specify that environmental liens and AULs be filed in judicial records rather than in land title records. In such cases judicial records must be searched for environmental liens and AULs.

2. Activity and Land Use Limitations (AULs)

Did a search of *recorded land title records* (or judicial records where appropriate, see **Note 1** above) identify any AULs, such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the *property* and/or have been filed or recorded against the *property* under federal, tribal, state or local law?

No

]	Do you proper	lized Knowledge or Experience a have any specialized knowledge or experience related to the <i>property</i> or nearby ties? For example, are you involved in the same line of business as the current or former <i>unts</i> of the <i>property</i> or an <i>adjoining property</i> so that you would have specialized knowledge chemicals and processes used by this type of business? No
•	Does the pro	rty Purchase Price Related to the Fair Market Value he purchase price being paid for this <i>property</i> reasonably reflect the fair market value of <i>operty</i> ? If you conclude that there is a difference, have you considered whether the lower se price is because contamination is known or believed to be present at the <i>property</i> ? Yes
-		
1	Are yo that wo threate For exa	anly Known or Reasonably Ascertainable Information About the <i>Property</i> u aware of commonly known or <i>reasonably ascertainable</i> information about the <i>property</i> build help the <i>environmental professional</i> to identify conditions indicative of releases or ned releases? ample, as the User: Do you know the past uses of the <i>property</i> ?
1	Are yo that we threate For exa a.	u aware of commonly known or <i>reasonably ascertainable</i> information about the <i>property</i> buld help the <i>environmental professional</i> to identify conditions indicative of releases or ned releases?
1	Are yo that we threate For exa a.	u aware of commonly known or <i>reasonably ascertainable</i> information about the <i>property</i> ould help the <i>environmental professional</i> to identify conditions indicative of releases or ned releases? ample, as the <i>User</i> : Do you know the past uses of the <i>property</i> ? <u>No</u> Do you know of specific chemicals that are present or once were present at the <i>property</i> ?



6. Presence or Likely Presence of Contamination at the *Property*

Based on your knowledge and experience related to the *property* are there any obvious indicators that point to the presence or likely presence of releases at the *property*?

 No

7. Phase I Site Assessment Purpose

Why is this Phase I Site Assessment being conducted (e.g., due diligence, lender requirement, etc...)?

This Phase I Site Assessment is being conducted as part of Dolese Bros. Co.'s proposed acquisition and purchase of the property.

8. Current Owner Information

Please identify the current owner of the <i>property</i> :	Sharon Buchanan
Owner's phone number: (405) 227-5388	
This owner has owned the property since (date):	Unknown

9. Title Search

Has a Title Search been conducted for this <i>property</i> ? Yes	
If yes, would you please provide a copy for review and inclusion in the report?	When Available
If not, would you like us to provide one (out of scope, additional charge)?	

CERTIFICATION

I certify that the responses are accurate to the best of my knowledge.

Name:	Thomas A. Dupuis
Title:	Environmental Advisor
Company:	Dolese Bros. Co.
Signature:	homar_d_DupuisDate: <u>5 December, 2019</u>



17.4.3 OK Water Resources Board Records



Oklahoma Water Resources Board



Download Results to CSV	New Search	Graph Water Levels	Save Wells for Graphing
(ALT-D)	(ALT-N)	(ALT-G)	(ALT-W)

View Drought Monitoring Map and Water Level Graphs

Help & Search Results Key

Search R	Search Results for 18, 16N, 04WI Displaying Results 1 through 8 of 8.												
Well ID	County	Owner Name	Qtrs	SEC-TWP-RGE	Date Const	Well Type	Use	TD (ft)		First Zone	Meas. WL	Est. Yld	WL Graph
28754	Logan	Twin Lake Sport Club	SENENW	18-16N-04WI	03/17/92	Groundwater Well	Industrial	40	n/a	11.9	n/a	150	
31208	Logan	Bruce Ligon	NWNWNW	18-16N-04WI	03/03/94	Groundwater Well	Domestic	36	6	6	n/a	80	
94718	Logan	Paul Cummings	SWNENW	18-16N-04WI	05/31/05	Groundwater Well	Domestic	43	n/a	n/a	n/a	25	
101427	Logan	Shawnee Indian Health Service	NWNWNW	18-16N-04WI	04/01/06	Groundwater Well	Domestic	50	n/a	n/a	n/a	40	
100109	Garfield	Lee Rule	SWNENE	18-16N-04WI	10/27/05	Groundwater Well	Irrigation	45	10	n/a	n/a	15	
138727	Logan	Bill Balding	NWNWNW	18-16N-04WI	09/20/11	Groundwater Well	Domestic	60	15	15	n/a	15	
150817	Logan	David Heath	SWNENE	18-16N-04WI	04/09/13	Groundwater Well	Domestic	45	n/a	n/a	n/a	16	
153654	Logan	Henry Rodriques	SWNWNW	18-16N-04WI	06/26/13	Groundwater Well	Domestic	60	15	15	n/a	20	

Help & Search Results Key

This search does not necessarily contain information about all of the water wells within the area of interest. The multi-purpose well completion report database consists of information submitted to the Board for all well data reported by licensed firms since 1982 and monitoring well data reported since 1988. There could be other wells in the area, which are not included in our database. Wells drilled prior to the licensing requirements for well drillers would not necessarily have had a well log submitted to the OWRB. A field survey may need to be conducted to verify the presence or absence of other water wells.

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

contact OWRB disclaimer

Visit OK.gov, the Official Website of the State of Oklahoma.

©1998-2003, Oklahoma Water Resources Board

17.4.4 OK Corporation Commission Records



Well Information

Basic Well Information											
Dasie wen mitor mation											
						💼 Hor	ne				
API Number 3508321	578						La	cal Location 10		161	
Operator Name GLM EN	Dperator Name GLM ENERGY INC				Operator No. 213	301	Le	gal Location 18 Quarters	16N		
Well Name ZACHGO "18"				Well							
					No	1		Surface Footages		S	
County LOGAN OG Well Status AC					Code 0 Class			Latitude 35	Longitue		
Effective Date								Dist. 0		Elevatio	
				ſ							
					Permits (Completions	Production Al	I Images			
	Legal Lo	cation				-	711N10E or 120	1N24ECM			
				Check to	exclude EC	CM Legal Loca	tions				
	API #			08321578		example: 00	0724967				
	Well Nan	ne				example: "H	Hudson 1-12" or	r "hudson"			
Operator #				example: 01701-0 or 01701							
	District #					• example: 1					
	Effective	Approv	ed								
	Date	~ ~			to	example: 1	/1/2001 or 1/1/2	2001 to 1/31/200)1		
	Scan Dat	e			to	example: 1/	1/2001 or 1/1/2	001 to 1/31/ 200)1		
	Type in	VOUT 600	rch crite	eria then clic	k the 'Sear						
	Sea			Clear		in outton.					
	Page 1 of		4 Doc	uments Fou							
	1										
	ID	Form	Legal	Location	API	Well_Name	Operator_#	Eff/Test_Date	ScanDate		
	<u>1288285</u>	1002A	1816N	04W SE NE	08321578	ZACHGO 18	-1	1/16/1981	12/30/1999		
	<u>1288291</u>	1002A	1816N	04W SE NE	08321578	ZACHGO 18	-1	1/16/1981	12/30/1999		
	1762470					ZACHGO 18		10/15/2004	10/18/2004		
	<u>3202819</u>	1073	1816N	04W SE NE	08321578	ZACHGO 18	-1	4/17/2007	4/24/2007		
	1										
	Home	9									
	6										