PHASE I ENVIRONMENTAL SITE ASSESSMENT

418-ACRE TRACT
(Highway 1/Leonard Road Tract)
CADDO PARISH, LOUISIANA

Prepared for: FRANKS MANAGEMENT COMPANY SHREVEPORT, LOUISIANA

MARCH 2016

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CK Project No. 12980

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EXECUTIVE SUMMARY

CK Associates (CK) has completed a Phase I Environmental Site Assessment (ESA) for Frank Management Co. (Franks) for an approximately 418-acre property located in Caddo Parish, Louisiana (**Figure 1**). For the purpose of this ESA, "the property" refers to the 418 acres of land located in Caddo Parish, Louisiana.

In order to characterize environmental conditions for the project, CK:

- Reviewed federal, state, and local environmental databases;
- Conducted historical research;
- Interviewed pertinent personnel; and
- Performed a site investigation.

CK performed this Phase I ESA in accordance with the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E 1527-13 for Franks on the property located in Caddo Parish, Louisiana. Any exceptions to, or deletions from, this practice are described in the report. Based on the review of federal, state, and local environmental databases, historical research, interviews, and site investigations, this assessment has revealed no evidence of recognized environmental conditions (RECs) in connection with the property except for the following:

• In February 2006 a release of oily saltwater from a wastewater pipeline occurred on the original 433 acre tract from which the subject of this ESA (418 acre tract) has been subdivided from. The release impacted croplands on the remaining 15 acres of the original 433 acre tract as well ditches on the 418 acre tract. The release impacted both soil and groundwater beneath the 433 acre tract. Subsequent soil and groundwater investigations, remedial actions and groundwater monitoring have been conducted under the direction of LDEQ. In June of 2015, Franks requested a No Further Interest or equivalent authorization from LDEQ for the 418 acre tract. On March 15, 2016 LDEQ issued a letter of No Further Interest for the 418 acre tract. LDEQ will continue its oversite of the remediation activities associated with the contaminated adjacent 15 acre tract.

1.0 INTRODUCTION

1.1 Purpose

The purpose of the assessment is to identify any potential RECs located on or in the vicinity of the property located in Caddo Parish, Louisiana, that have, or may have in the past, adversely impacted environmental conditions at the property. The ESA is being conducted in order to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability.

1.2 Scope of Services

CK was retained to investigate the property in order to identify RECs within and adjacent to the property. Investigation procedures comply with ASTM E 1527-13, and the scope of services for this ESA includes the following:

- Research of available federal, state, and local environmental databases for potential RECs on, or within a specified distance of, the property;
- Reviews of historical aerial photographs, Sanborn Fire Insurance Maps, United States Geologic Survey (USGS) topographic maps, and/or published soils and geologic information;
- Interviews with state and local government agency representatives and/or persons knowledgeable of the property regarding documented inspections, violations, incidents, spill response, or past uses of therein;
- Visual observations of accessible portions of the property to identify current and/or historical RECs. Visual observations of accessible portions of properties adjacent to the property were also conducted; and
- Preparation of a written report that identifies whether the property contains potential RECs and whether or not conditions warrant further investigation.

In accordance with the procedures outlined in ASTM E 1527-13, a Phase I ESA typically does not include sampling and analysis of soil and/or groundwater. Additionally, a Phase I ESA typically does not include wetland delineations or surveys for cultural or historic resources, threatened or endangered species, lead based paint, or asbestos containing materials.

1.3 Significant Assumptions

No significant assumptions were made in the preparation of this Phase I ESA.

1.4 Limitations and Exceptions

CK's review of records information and environmental databases included information that was reasonably ascertainable from standard sources. Reasonably ascertainable denotes (1) information that is publicly available, (2) information that is obtainable within reasonable time and cost constraints, and (3) information that is practically reviewable. CK's review included information gathered directly from governmental and regulatory agencies as well as an electronic database search performed by Environmental Database Resources, Inc. (EDR). References used in the preparation of this document are included in Appendix A. Much of this information was gathered from public records and sources maintained by third parties. Although reasonable care was taken to verify this information, CK does not accept responsibility for errors, omissions or inaccurate information.

CK interviewed available individuals identified as having current and historical knowledge of land use, commercial and residential development, and activities and incidents associated with the property. *Available individuals* include (1) persons with whom contact can be made within reasonable time constraints, and (2) persons willing to share information with interviewers. These individuals were selected based on their employment in state and local government, association with, or proximity to, specific properties, or long-time residence in and knowledge of the area. Significant effort was made to identify and contact individuals possessing direct knowledge of sites; however, no guarantee is made or intended that all individuals with pertinent knowledge of sites were identified and interviewed. Additionally, CK makes no guarantee that information provided during the interviews is free of errors, omissions, or inaccurate information.

Observations made during CK's reconnaissance of the property were limited to (1) sites or portions of sites that were accessible to investigators, and (2) evidence that was visible to the investigators. Observations were based on evidence that was visible to inspectors while walking the property. No ground excavation, vegetation clearing, or physical relocation of obstacles was conducted during site investigations. Accordingly, no guarantee is made or intended that all property conditions were observed.

1.5 Special Terms and Conditions

No significant special terms or conditions with respect to ASTM E 1527-13 standards were made.

1.6 User Reliance

In accordance with ASTM E 1527-13 Section 7.5.2.1, *Reliance*, CK is not required to verify independently the information provided by various sources but may rely on the information unless there is actual knowledge that certain information is incorrect or unless it is obvious that certain information is incorrect based on other information obtained during the course of the investigation or otherwise actually known to the investigators conducting the assessment. However, CK has no indications that the information provided by outside sources is incorrect.

Franks is the user of this ESA. This ESA may be relied upon by Franks.

2.0 SITE DESCRIPTION

2.1 Location and Legal Description

The property is located just south of the City of Shreveport, in Caddo Parish, Louisiana. The property is bordered to the northeast by a right of way of the Texas & T&PRR (T&PRR) as well as Louisiana Highway 1 (LA 1), and the southeast by agricultural and residential properties as well as Leonard Road. The property is bound on the south by residential properties and on the southwest by Bayou Pierre and agricultural fields. Bayou Pierre and Sand Beach Bayou bound the property on the northwest. Agricultural land bounds the property on the north.

The property consists of approximately 418 acres located in Sections 10, 11, 14, and 15 of Township 16 North, Range 13 West. This approximate 418 acre tract has been subdivided from an original tract of land consisting of approximately 433 acres. A Site Location Map depicting the approximate 418 acre tract is presented as **Figure 1**. The legal description is provided in property title documents and included in **Appendix B**.

2.2 Site Vicinity and General Characteristics

This is an irregular shaped piece of property with a natural levee along the southwestern boundary which borders Bayou Pierre. The property consists primarily of nearly level deposits of the Red River alluvial plain, which are Holocene in age. The majority of the alluvial plain area on the property ranges in elevation from 150 to 156 feet mean sea level (msl). The property is located just southeast of Shreveport and is surrounded by residences, farmland, Bayou

Pierre, Sand Beach Bayou, a major highway and railroad track and some commercial and industrial operations. The Red River is located less than 2000 feet from the property to the northeast. A man-made levee has been constructed between LA 1 and the Red River, northeast of the property.

2.3 Current Use of Property

The property is currently used for agricultural purposes as well as oil and gas production.

2.4 Description of Structures, Roads, and Other Improvements on Site

The levee road along Sand Beach Bayou and Bayou Pierre is maintained as a dirt road by the Caddo Parish Levee Commission. Multiple field roads located on the property are maintained by the farmer currently leasing the property. There are four gas well facilities located on the property, three of which are active. The gas well facilities have wellheads, storage tanks, separation equipment, and other supporting equipment. The gas well facilities are accessed by gravel-paved roads from LA 1 and Leonard Road. The property is accessed from LA 1 on the east via a railroad crossing of the T&PRR.

Other improvements on the property include the following:

- The banks of the bayou are maintained by the Caddo Parish Levee Commission.
- Multiple man-made ditches are located throughout the property to facilitate field drainage.
- A crude oil pipeline right of way maintained by Magnolia Pipeline runs north and south across the property.
- A natural gas pipeline owned by J-W Gathering Company is located in the Magnolia Pipeline right of way on the property and in the utility servitude maintained by the City of Shreveport.
- An electric transmission line right of way runs north and south across Lot 31 near the western Site boundary adjacent to Twelve Oaks subdivision.
- A 50-foot utility servitude, maintained by the City of Shreveport, is located along the northeast property boundary parallel to the T&PRR and LA-1 right of ways. The utility servitude includes an 18-inch wastewater force main and a 30-inch water line.
- A Chesapeake Operating natural gas gathering line right of way is located just west of and parallels the City of Shreveport 50-foot servitude.
- An inactive City of Shreveport sewer line right of way runs across the west side of the property along Sand Beach Bayou.

2.5 Current Uses of Adjoining Properties

Properties to the north are utilized for agriculture fields. Right of ways of the T&PRR and LA 1 are located adjacent to the northeast property boundary. Across the right of ways are levees and undeveloped land along the Red River. Properties to the southeast and the south are agricultural fields and residential lands as well as Leonard Road. Agricultural fields, a fire station and an oil and gas facility are located on the south side of Leonard Road. To the southwest are agricultural fields and Bayou Pierre. Beyond Bayou Pierre are mixed residential and pecan orchards areas. To the northwest is the confluence of Bayou Pierre and Sand Beach Bayou. Agricultural fields and forested lands lie between and beyond these two water bodies.

3.0 USER PROVIDED INFORMATION

This section describes the information provided by the user, as defined in the ASTM E 1527-13.

3.1 Title Records

A review of title records for the property was not necessary to develop information regarding current or past uses of the property; as such, title information was not requested from Franks. Records at the Caddo Parish Tax Assessor's office were reviewed by CK personnel to determine the history of the property's ownership. Additionally, maps from the Special Archives at Louisiana State University, Shreveport, Louisiana, were used to trace historical ownership of the property.

FIC's predecessor, Franks Realty, Inc., purchased the F.F. Webb Tract from a group of Frederick F. Webb's heirs in 1998. Frederick F. Webb owned the tract from before 1940 until his death in 1943. His heirs owned the tract from that point forward and conveyed the tract to the F.F. Webb Trust in 1973. The Trust granted an oil and gas lease (which is mentioned in the list below) on the Tract which is still partially in effect today. The tract was subsequently transferred from the F.F. Webb Trust back into the F.F. Webb heirs in 1979 and partitioned into 5 different groups of F.F. Webb heirs shortly thereafter. From 1940 to 2015 there have been several utility and pipeline rights-of-way and surface use easements granted which affect the tract. The recording information for those documents is listed below and copies of the easement and right-of-way documents are attached hereto. The tract has been in row crop agricultural production from at least 1940 and remains in row crop agricultural production today. Below is a list of easements that are in effect and active on the property today. The list is arranged by Registry Number as found in the Conveyance

Records of Caddo Parish, Louisiana. This list does not include a full title abstract or full title history — this is for the purposes of the current Phase I ESA only. Easements and Rights-of-Way Affecting the Surface of the 418+/- Acre Tract:

Reg. No. 47234 (Bk. 592, Pg. 632) FF Webb et al to Caddo Levee District (Easement along Bayou Pierre)

Reg. No. 52608 (Bk., Pg.) FF Webb to Interstate Oil Line (Lion Oil Pipeline – Sections 11 & 14)

Reg. No. 128276 Dr. Clarence H. Webb, et al to Caddo Levee Board (60' Easement -1956) November 30, 2015

Reg. No. 535464 FF Webb to Falco, Inc. (J-W Operating Co. Pipeline running parallel to Lion Oil above)

Reg. No. 801767 John Creighton Webb, Jr. et al to City of Shreveport (Wallace Force Main - Sewer)

Reg. No. 1472170 John Creighton Webb, Jr. et al to Caddo-Bossier Parishes Port Commission (Utility easement running parallel to Union Pacific Rail)

Reg. No. 1840851 Franks Realty, Inc. to City of Shreveport (Water line easement along Leonard Road)

Reg. No. 2272353 Franks Investment Company, L.L.C. to Louisiana Midstream Gas Services, L.L.C. (Phase I Gathering Line – Franks 11-16-13 H-1)

Reg. No. 2286330 Franks Investment Company, L.L.C. to Louisiana Midstream Gas Services, L.L.C. (Phase II Gathering Line – Franks 11-16-13 H-1)

Reg. No. 2378023 Franks Investment Company, L.L.C. to Kinderhawk Field Services, L.L.C. (BHP Gathering Line)

Oil and Gas Leases and Related Surface Use Agreements, etc. Affecting the Surface of the 432+/- Acre Tract:

Reg. No. 607848 F.F. Webb Trust to G. E. Buddecke, Jr. et ux (OGL Covering 432+/- acre tract and other tracts)

Reg. No. 1884251 Franks Realty, Inc. to Jack W. Grigsby (OGL Covering Section 14 T16N-R13W)

Reg. No. 1989871 Franks Realty, Inc. to Camterra Resources Partners, LTD (OGL Covering Section 15 T16N-R13W)

Reg. No. 2166011 FICLLC to Twin Cities Development, L.L.C. (OGL Covering 432+/- acre tract and other tracts)

Reg. No. 2246604 FICLLC to Chesapeake Operating, Inc. (Memo of Surface Use Agreement – Section 11 T16N-R13W)

Reg. No. 2411930 FICLLC to Petrohawk Properties, L.L.C. (Surface Use Agreement - Sections 10 & 11 T16N-R13W)

J-W Operating Franks 14#1 Road and Drill site Survey

J-W Operating Franks 14#1 Pipeline Survey

J-W Operating Franks 14#2 Road and Drill site Survey

3.2 Environmental Liens or Activity and Use Limitations

As a result of the title and record search conducted by Franks in the Conveyance Records of Caddo Parish, Louisiana, no evidence of liens that affect the 418+/acre tract were found filed in the Mortgage Records; financial liens, environmental liens, or any other encumbrance.

3.3 Specialized Knowledge

In February 2006 a release of wastewater (oily saltwater) occurred on the eastern-most portion of an approximate 433 acre tract. The 433 acre tract has since been subdivided into 2 separate tracts, an approximate 418 acre tract the subject of this ESA and an approximate 15 acre tract located east of the 418 acre tract. The source of the release was from an existing utility pipeline located along the northeast boundary of the 15 acre tract. The release reportedly covered approximately seven (7) acres (release area) of the 15 acre tract and flowed along the drainage-ways of the adjoining 418 acre tract. Initial response activities included liquids removal and excavation of impacted soils of the release area and drainage-ways. During subsequent sampling of the soils of the excavated areas and sampling of the sub-surface soil and groundwater, samples were analyzed for volatile organic compounds (VOC), Semi-volatile organic compounds (SVOC), Total Petroleum Hydrocarbons (TPH), metals, polychlorinated biphenyl (PCB) and chlorides. Except for chlorides, all the constituents analyzed in the soil and groundwater samples were below the Non-Industrial RECAP Standards. The only remaining constituent of concern impacting soil and groundwater was chlorides. Soil impacts were contained to the release area located on the 15 acre tract and impacted groundwater was present beneath and to the south/southwest of the release area. Soil remediation and confirmatory sampling as well as groundwater monitoring within the release area have been conducted periodically since 2012. Based on this, it appeared that no further investigatory or remedial action was required for the 418 acre tract. In June of 2015 Franks requested a No Further Interest or equivalent authorization from LDEQ for the 418 acre tract. On March 15, 2016 LDEQ issued a letter of No Further Interest for the 418 acre tract (Appendix J). LDEQ will continue its oversite of the remediation activities associated with the contaminated 15 acre tract.

3.4 Commonly Known or Reasonably Ascertainable Information

No commonly known or reasonably ascertainable information regarding the environmental history of the property was conveyed to CK.

3.5 Valuation Reduction for Environmental Issues

There is no indication of a valuation reduction due to environmental issues at

the property.

3.6 Owner, Property Manager, and Occupant Information

The property is owned by Franks. An owner questionnaire completed by a representative of Franks is included in **Appendix I**.

3.7 Reason for Performing Phase I ESA

This Phase I ESA has been conducted to provide due diligence for property transfer and is intended to permit the user, Franks to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability.

3.8 Other

Franks provided CK with a survey of the property. The survey was conducted by registered professional land surveyor, Ben D. Archly Jr., in January, 1999. This survey provides a legal description and information regarding flood zones, pipeline right of ways, the levee easement, sewer easement, and utility servitude. Two areas are marked as Flood Zone "AE". One of these areas runs north and south along Sand Beach Bayou where it merges with Bayou Pierre. The other area runs north and south through the center section of the property. The following note regarding the flood zone was documented with the general notes provided by the Surveyor:

"Located in flood zones "AE" (special flood hazard area inundated by 100-year flood) and "X" (outside 500-year floodplain), according to Panel 245-C of the Flood Insurance Rate Map for Caddo Parish, Louisiana (Community Number 220361), dated May 19, 1997."

The survey documents a pipeline right of way running north and south across the eastern section of the property. The following three companies are associated with the fifty foot right of way:

- Falco Inc.
- Interstate Oil Pipeline Co.
- Exxon Pipeline

The survey shows some fencing located around some portions of the perimeter of the property. A 100-foot levee easement is shown along Sand Beach Bayou and Bayou Pierre. A 50-foot utility servitude is shown near the northeastern tip of the property. The railroad right of way is shown along the northern border of the property.

4.0 RECORDS REVIEW

Historical sources, physical setting sources, and regulatory databases were reviewed to evaluate current and past land uses and assess environmental impacts that have occurred or may potentially occur in association with the property.

4.1 Standard Environmental Record Sources

In accordance with ASTM E 1527-13 Section 8.0, *Records Review*, CK conducted a thorough search of federal, state and local government environmental databases to obtain and review records and/or documents that would aid in the identification of known or potential RECs on or near the property. ASTM E 1527-13 contains a list of records that must be reviewed and the minimum search distance to use.

ASTM E 1527-13 Section 8.2.1, *Standard Federal, State, and Tribal Environmental Record Sources*, requires a review of the following databases and prescribes various search radii:

Federal NPL ¹ Site List	1.0 mi
Federal <i>Delisted</i> NPL Site List	1.0 mi
Federal CERCLIS ² List	0.5 mi
Federal CERCLIS-NFRAP ³ Site List	0.5 mi
Federal RCRA ⁴ CORRACTS ⁵ List	1.0 mi
Federal RCRA Non-CORRACTS TSD ⁶ Site List	0.5 mi
Federal RCRA_LQG/SQG7	0.25 mi
Federal IC/EC ⁸ Registries	0.25 mi
Federal ERNS ⁹ List	0.25 mi
State-Equivalent CERCLIS List (SHWS)	0.5 mi State Landfill
and/or Solid Waste Disposal Site Lists	0.5 mi State Leaking
UST ¹⁰ Lists	0.5 mi
State-Registered UST Lists	0.25 mi
State IC/EC Registries	0.25 mi
State VCP ¹¹	0.5 mi
State Brownfield Sites	0.5 mi

¹National Priority List

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²Comprehensive Environmental Response, Compensation, and Liability Information System

Information generated by the database search conducted by EDR is contained in **Appendix C**. Additional information was obtained through searching the LDEQ's Electronic Document Management System (EDMS).

EDR research of the databases indicated two plottable sites located within the ASTM-recommended search radii. The two plottable sites are listed in multiple databases, when combined result in one physical site. EDR noted one orphan site, which was located within the zip code as the subject property but with insufficient location information to be plotted. CK determined that the orphan site is not located within ASTM-recommended search radii of the subject property. The plottable site is further discussed in Section 7.0.

<u>Facility Name:</u> Leonard Rd Spill

<u>Facility Location:</u> Leonard Rd & HWY 1S

Facility ID: 12411

Database: REM, VCP

Distance/Direction: 0.279 mile ESE

4.2 Additional Environmental Record Sources

ASTM E 1527-13 Section 8.2.3, Additional Federal, State, Tribal, and Local Environmental Record Sources, states that one or more additional state or local sources may be checked to enhance and supplement the federal and state sources identified in ASTM E 1527-13 Section 8.2.1. EDR's records search included a review of several additional federal, state, and local databases; these are included in **Appendix C**. Findings from the additional databases are discussed in Section 7.0.

CK reviewed EDMS for the properties identified by EDR and any files for the property. This information is presented in Section 7.0

³CERCLIS-No Further Remedial Action Planned

⁴Resource Conservation and Recovery Act

⁵Corrective Action Report

⁶Treatment, Storage, and Disposal Facility

⁷Large or Small Quantity Generator

⁸Institutional Control/Engineering Control

⁹Emergency Response Notification System

¹⁰Underground Storage Tank

¹¹Voluntary Cleanup Program

Water well records obtained by EDR from federal and state agencies were reviewed. The well information and a well location map in relation to the property are included in **Appendix C** with the EDR Report. EDR reported 64 USGS wells and state-registered wells located within a one-mile radius of the property. No water wells are located on the property. Well usage includes monitoring, public supply, industrial supply, domestic supply, piezometers, recovery wells, and "other".

Oil and gas well records were obtained by EDR from the Louisiana Department of Natural Resources. The well information and a well location map in relation to the property are included in **Appendix C** with the EDR Report. EDR reported 24 state-registered oil and gas wells located within a one-mile radius of the property. No oil and gas wells are located on the subject property.

4.3 Physical Setting Sources

4.3.1 USGS 7.5 Minute Topographic Map

The most current United States Geological Survey (USGS) 7.5 Minute Series Topographic Map depicting the area in which the property is located is the "SHREVEPORT EAST, LA" Pre-1998 Topographic Map (**Figure 1**). The average elevation of the property ranges from 150 to 156 feet msl.

An unpaved road is shown providing access to the field house from Louisiana Highway 1. An unpaved road is shown on the east bank of Bayou Pierre along the entire Site. The map shows several field ditches in a configuration that is consistent with the current field drainage on the property. Land contours indicate that former water flow from the Red River or from Bayou Pierre have created "river scars". A pipeline is shown to be present along the southern Site boundary, but is not shown as crossing the property.

4.3.2 Soil Conservation Service Soil Map

According to the United States Department of Agriculture Soil Conservation Service, the property is primarily made up of Armistead and Moreland Clay. These are somewhat poorly drained soils that have a clayey or loamy surface layer and clayey or loamy subsoil. Wetness, slow permeability, and poor tilth are the main limitations of this type of soil.

4.3.3 Flood Insurance Rate Maps

Coverage of the property was provided in the Caddo Parish, Louisiana and Incorporated Areas, Panel 489 of 800, and, Panel 495 of 800. These Panels are referenced from Map Number 22017C0489 F, and, Map Number 22017C0495 F, respectively. Both maps have Effective Dates of April 6, 2000.

The majority of the property is primarily classified as Zone X, having areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood. Extending along the banks of Bayou Pierre and along the major drainage pathways on the property is Zone AE. This refers to base flood elevations determined and special flood hazard areas inundated by 100-year flood.

Copies of the applicable sections of the maps are provided as Figure 2, Maps 2A and 2B.

4.4 Historical Use Information on Property and Adjoining Properties

4.4.1 Local Street Directories

CK personnel reviewed records in the Caddo Parish Tax Assessor's office to determine the ownership history of the property. The property was owned by Frederick F. Webb, Jr., John C. Webb, Clarence H. Webb, Robert L. Webb, and Mrs. Doris Yearwood Elgin. The Webb plantation was divided (unevenly) over the years among descendants of the Webb family. In 1998, the property was conveyed to Franks Realty, Inc. The property today is still owned by Franks Realty, Inc. Documentation of the historical tenant search is included in **Appendix D**.

4.4.2 Sanborn® Fire Insurance Maps

Founded in 1867, the Sanborn Fire Insurance Company produced Sanborn® Fire Insurance Maps that document the historical property use of over 12,000 American towns and cities. Known for their tremendous details of size, material composition and minute construction elements of buildings as well as property boundaries and street widths, Sanborn® maps provide a valuable tool for completing an ESA in that land use of a property can be monitored in depth over a long period of time. No Sanborn® maps with coverage of the property were located. Documentation of the search is included in **Appendix E**.

4.4.3 Historical Topographic Maps

CK reviewed historical quadrangles provided by Bank Environmental Data (Banks) for structures, mines, quarries, clearings, wells, and land use in order to (1) ascertain historical development of the project area, and (2) identify indications of possible RECs. USGS historical topographic maps dating back to 1941 (**Appendix F**) were reviewed. The property is located within the Shreveport East, Louisiana quadrangle on the 15-minute series maps and the Wallace Lake quadrangle on the 7.5-minute series maps. Maps from 1941, 1955, 1959, 1969, 1980, 1992, and 2012 were reviewed.

<u>1941</u>. The 1941 map depicts the property as undeveloped. However, a number of un-improved roads are depicted around the perimeter and crossing portions of the property. Small structures or buildings are depicted along the roads. The T&PRR is present in its current configuration northeast of the property. Leonard School is identified on the map and located across LA 1 from the property. A church is depicted as co-located with the school.

1955. The 1955 map depicts the property as undeveloped. A number of the roads and structures depicted on the previous map are no longer depicted. The T&PRR is present in its current configuration east of the property. Leonard School identified in the previous map is now identified as Friendship School on the map and located across LA 1 from the property. A church is depicted as colocated with the school.

<u>1959</u>. The 1959 map depicts the property as undeveloped. A number of the roads and structures depicted on the previous maps are no longer depicted. The T&PRR is present in its current configuration east of the property. Friendship School is no longer depicted on the map. However, the church previously depicted is identified as Friendship Church.

<u>1969</u>. The 1969 map depicts the property as undeveloped. A number of the roads depicted on the previous maps are no longer depicted. No structures are depicted on the property. The T&PRR is present in its current configuration east of the property. Friendship Church is not depicted on the map.

<u>1980</u>. The 1980 map depicts the property as undeveloped. The T&PRR is present in its current configuration east of the property. The Friendship Church is not depicted on the map.

<u>1992</u>. The 1992 map depicts the property as undeveloped. The T&PRR is present in its current configuration east of the property.

<u>2012</u>. The 2012 map depicts the property as undeveloped. The T&PRR is present in its current configuration east of the property.

4.4.4 Historical Aerial Photographs

Historical aerial photographs for the 1939, 1949, 1959, 1966, 1969, 1974, 1989, 1994, 1998, 2002 and 2010 were obtained from Banks and analyzed for information about the property history of the property. The historic aerial photographs obtained from Banks are included in **Appendix G**. Findings are summarized below.

1939

In the 1939 photograph, the property appears as a patch-work of farm plots with a number of roads between plots. Houses or structures could be seen along the roadways. The property west of the property was made up of farmland and Bayou Pierre. No structures were located adjacent to the property on the farmland that borders the western boundaries. The area adjacent to the southeast boundary was farmland with some structures which were likely residences located between the property boundary and the road that runs near the southeastern boundary. No structures were located adjacent to the eastern boundary of the property.

1949

The 1949 photograph was of poor quality where specific features could not be discerned on the property. However, the property west of the property was made up of farmland and Bayou Pierre. No structures were located adjacent to the property on the farmland that borders the western boundaries. The area adjacent to the southeast boundary was farmland with some structures which were likely residences located between the property boundary and the road that runs near the southeastern boundary. No structures were located adjacent to the eastern boundary of the property.

1959

In the 1959 photograph, the property appears as a patch-work of farm plots with a number of roads between plots. Houses or structures could be seen along the roadways. The property to the west of the property was made up of farmland and Bayou Pierre. The area adjacent to the southeast was farmland with some structures which were likely residences located between the property boundary and the road that runs near the southeastern boundary of the property. A major highway ran adjacent to the eastern boundary of the property. Some structures were located on the farmland across the highway from the eastern boundary of the property.

1966

In the 1966 photograph, the property appears as a patch-work of farm plots with a number of roads between plots. Houses or structures could be seen along the roadways. The property to the west of the property was made up of farmland and Bayou Pierre. The area adjacent to the southeast boundary was farmland with some structures which were likely residences located between the property boundary and the road that runs near the southeastern boundary of the property. A major highway ran adjacent to the eastern boundary of the property. Some structures were located on the farmland across the highway from the eastern boundary of the property.

1969

In the 1969 photograph, the property appears as a patch-work of farm plots with a number of roads between plots. Houses or structures could be seen along the roadways. The property to the west of the property was made up of farmland and Bayou Pierre. The area adjacent to the southeast boundary was farmland with some structures which were likely residences located between the property boundary and the road that runs near the southeastern boundary of the property. A major highway ran adjacent to the eastern boundary of the property. Some structures were located on the farmland across the highway from the eastern boundary of the property.

1974

In the 1974 photograph, the property west of the property was made up of farmland and Bayou Pierre. No structures were located adjacent to the property on the farmland that borders the western boundaries. Several structures that appear to be residences were located between the property boundary and a road that runs along the southeastern boundary. A bullet tank that may have been part of an oil and gas facility was located across the road to the south. A major highway ran adjacent to the eastern boundary.

1989

In the 1989 photograph, the property west of the property was made up of farmland and Bayou Pierre. No structures were located adjacent to the property on the farmland that borders the western boundaries. Several structures that appear to be residences were located between the property boundary and a road that runs along the southeastern boundary. A bullet tank that may have been part of an oil and gas facility was located across the road to the south. A major highway ran adjacent to the eastern boundary.

1994

In the 1994 photograph, the property west of the property was made up of farmland and Bayou Pierre. No structures were located adjacent to the property on the farmland that borders the western boundaries. Several structures that appear to be residences were located between the southern property boundary and a road that runs along the southeastern boundary. A bullet tank that may have been part of an oil and gas facility was located across the road to the south. A major highway ran adjacent to the eastern boundary.

1998

In the 1998 photograph, the property to the west was made up of farmland and Bayou Pierre. No structures were located adjacent to the property on the farmland that borders the western boundary. Several structures that appear to be residences were located between the southern property boundary and a road that runs along the southeastern boundary. A major highway ran adjacent to the eastern boundary.

2002

In the 2002 photograph, the property to the west was made up of farmland and Bayou Pierre. No structures were located adjacent to the property on the farmland that borders the western boundary. Several structures that appear to be residences were located between the southern property boundary and a road that runs along the southeastern boundary. A major highway ran adjacent to the eastern boundary.

2010

In the 2010 photograph, the property to the west was made up of farmland and Bayou Pierre. No structures were located adjacent to the property on the farmland that borders the western boundary. Several structures that appear to be residences were located between the southern property boundary and a road that runs along the southeastern boundary. A major highway ran adjacent to the eastern boundary. Major scarring appears between the eastern property boundary and the major highway to the east.

4.4.5 Radon

Current federal and state guidelines indicate that concentrations of radon at less than four picoCurries per liter (pCi/L) are non-threatening to human health, concentrations of radon between four and 20 pCi/L pose a risk of long term exposure, and concentrations of radon greater than 20 pCi/L pose an immediate

threat to human health.

The EDR Area Radon Information (**Appendix C**) identifies Caddo Parish as a Zone 3 area with a predicted indoor average radon level of less than two pCi/L.

5.0 SITE RECONNAISSANCE

In accordance with ASTM E 1527-13 Section 9.0, *Site Reconnaissance*, field investigations were conducted in order to inspect the property and surrounding areas for structures, oil and gas exploration and production, land use, runoff patterns, and indications of environmental impacts. The investigation was conducted October 28, 2015. Photographs from the investigation are presented in **Appendix H**.

5.1 Methodology and Limiting Conditions

The property was investigated in order to identify RECs, current and historical, that have, or may have in the past, adversely impacted environmental conditions at the property. ASTM E 1527-13 Section 9.0, *Site Reconnaissance*, addresses aspects of site field investigations. CK, as described in this report, has investigated the property for RECs based on information gathered during historical research, the environmental database review, interviews with pertinent personnel, and field reconnaissance in accordance with ASTM E 1527-13 standards, as applicable and appropriate.

Observations made during CK's reconnaissance of the property were limited to portions of the property that were accessible to investigators, and evidence that was visible to the investigators. Observations were based on evidence that was visible to inspectors while driving or walking the property. No ground excavation or physical relocation of obstacles was conducted during inspections. Accordingly, no guarantee is made or intended that all property conditions were observed.

5.2 General Site Setting

ASTM E 1527-13 Section 9.4.1, *General Site Setting*, addresses current and past use of the property being assessed, adjoining properties, and surrounding areas. The property is located in Caddo Parish, Louisiana. The property is located in an agricultural area. Uses in the vicinity include residential, agricultural properties and oil and gas exploration and production.

5.3 Exterior Observations

A railroad runs along the eastern boundary of the property. Gravel roads cut through the center of the property leading to oil and gas wells. The majority of the property is used for agricultural purposes. A large drainage runs north and south along the eastern boundary. Another large drainage runs northeast and southwest through the center of the property.

5.3.1 Pits, Ponds, or Lagoons

No pits, ponds or lagoons were observed on the property.

5.3.2 Stained Soil or Pavement

No stained soil was observed on the property.

5.3.3 Stressed Vegetation

No stressed vegetation was observed on the property.

5.3.4 Solid Waste

Trash and debris was observed near an abandoned homestead on the north area of the property.

5.3.5 Wells

No groundwater wells were observed on the property.

5.3.6 Septic Systems

No septic systems were observed on the property.

5.3.7 Oil and Gas Drilling Activities

Three oil and gas well locations were observed on the property.

5.3.8 Storage Tanks

Storage tanks were observed at the oil and gas well locations on the property.

5.3.9 Odors

No strong, pungent, or noxious odors were detected on the property or adjacent

properties during the property reconnaissance.

5.3.10 Pools of Liquid

No pools of liquid other than ponded rain water were observed on the property.

5.3.11 Drums and Containers

No drums or containers were observed at the property.

5.3.12 Unidentified Substance Containers

No unidentified containers were observed.

5.3.13 Polychlorinated Biphenyls (PCBs)

No PCB-containing equipment was observed at the property.

5.4 Interior Observations

There are no buildings in use at the property.

6.0 INTERVIEWS

Mr. Bobby E. Jelks, Manager at Franks Investment Company, L.L.C. and a representative of the property owner, completed an Owner Questionnaire (**Appendix I**) on December 7, 2015. The questionnaire indicates that the owners have no knowledge of any environmental concerns at the property.

7.0 EVALUATION

7.1 Findings

As defined in ASTM E 1527-13 Section 1.1.1, REC means:

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.

7.1.1 Potential RECs Outside Property Limits

<u>Facility Name:</u> Leonard Rd Spill

Facility Location: Leonard Rd & HWY 1S

Facility ID: 12411

Database: REM, VCP

Distance/Direction: 0.279 mile ESE

On February 14, 2006, the current owner was informed of a release of wastewater (oily saltwater) from a pipeline operated by the City of Shreveport. The release covered approximately seven (7) acres of furrowed land and ditches of an original 433 acre tract. The 433 acre tract has since been subdivided into a 418 acre tract, the subject of this ESA and a 15 acre tract. The release impacted croplands on the remaining 15 acres of the original 433 acre tract as well ditches on the 418 acre tract. Emergency response to the spill resulted in excavation of approximately 15,000 cubic yards of soil contaminated with oil and saltwater. The emergency response was conducted at the direction of the pipeline operator, the City of Shreveport. The initial response was completed in July 2006. The responsibility for the cleanup was later assumed by Tervita Corporation. At the direction of the Louisiana Department of Environmental Quality (LDEQ), multiple investigations have been conducted to delineate contamination associated with the oily saltwater release. The investigations document an Area of Interest (AOI) of approximately 22 acres (impacted lands, ditch areas, and buffer areas) associated with the investigation of the release. On August 31, 2010, the LDEQ approved the Revised Remedial Investigation Report (Michael Pisani & Associates, on behalf of Tervita). This Revised Remedial Investigation Report documents that hydrocarbon remediation is completed and hydrocarbons are no longer a risk to human health and the environment. The report further states that residual salt contamination (chlorides and sodium) was present in the soils and groundwater. In November 2012, interim remedial activities were completed to address salt-affected soils. The remedial action generally consisted of the addition of gypsum to displace the salts and the addition of topsoil and organic matter to facilitate returning the land to agricultural use. An Interim Remedial Action Report (MP&A) was submitted to the LDEQ to document completion of the interim soil remediation and was approved by LDEQ on February 21, 2013. Confirmatory sampling of soils is planned to be conducted in fall 2013 and will include chlorides and Total Petroleum Hydrocarbon-Diesel Range Organics. Corrective actions to address chlorides contamination of the groundwater have not yet been proposed. Multiple remedial investigation reports for the property indicate the groundwater under the property is a part of the Red River Alluvial Aquifer and that the water is not used as a drinking water supply in the area, but may be used for irrigation and for drilling rig water supply at oil and gas well sites. In June of 2015 Franks requested a No Further Interest or

equivalent authorization from LDEQ for the 418 acre tract. On March 15, 2016 LDEQ issued a letter of No Further Interest for the 418 acre tract. LDEQ will continue its oversite of the remediation activities associated with the contaminated 15 acre tract.

7.2 Opinion

No other items of environmental significance were observed at the property or found during the assessment of historical activities at this Site or the adjoining properties.

7.3 Data Gaps

Data gaps are defined in ASTM E 1527-13 Section 3.2.21, data gap, as a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. No significant data gaps were encountered during preparation of this ESA.

7.4 Conclusions

CK has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM E 1527-13 for the approximately 418-acre property located in Caddo Parish, Louisiana. Any exceptions to, or deletions from this practice are described in Section 1.4, Limitations and Exceptions, of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

• In February 2006 a release of oily saltwater from a wastewater pipeline occurred on the original 433 acre tract from which the subject of this ESA (418 acre tract) has been subdivided from. The release impacted croplands on the remaining 15 acres of the original 433 acre tract as well ditches on the 418 acre tract. The release impacted both soil and groundwater beneath the 433 acre tract. Subsequent soil and groundwater investigations, remedial actions and groundwater monitoring have been conducted under the direction of LDEQ. In June of 2015 Franks requested a No Further Interest or equivalent authorization from LDEQ for the 418 acre tract. On March 15, 2016 LDEQ issued a letter of No Further Interest for the 418 acre tract (Appendix J). LDEQ will continue its oversite of the remediation activities associated with the contaminated adjacent 15 acre tract.

7.5 Deviations

No deletions or deviations from the ASTM Standard Practice E 1527-13 were made during this investigation.

7.6 Signature and Qualifications of Environmental Professional

"I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312."

"I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

Andrew Hooker

Environmental Scientist II

Mr. Andrew Hooker is an Environmental Scientist with over 9 years of experience in the environmental field and has performed and reviewed numerous environmental studies. Mr. Hooker has a B.S. degree in Environmental Science. Mr. Hooker's resume is presented in **Appendix K**.

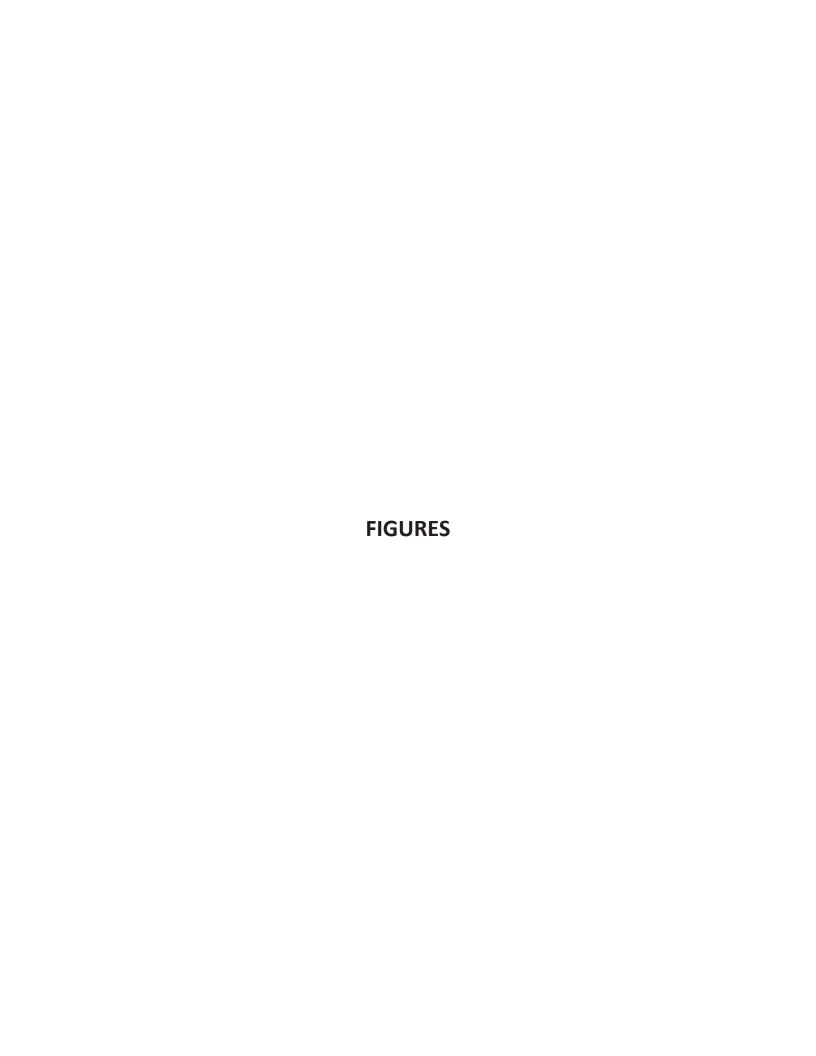


FIGURE 1 SITE VICINITY MAP

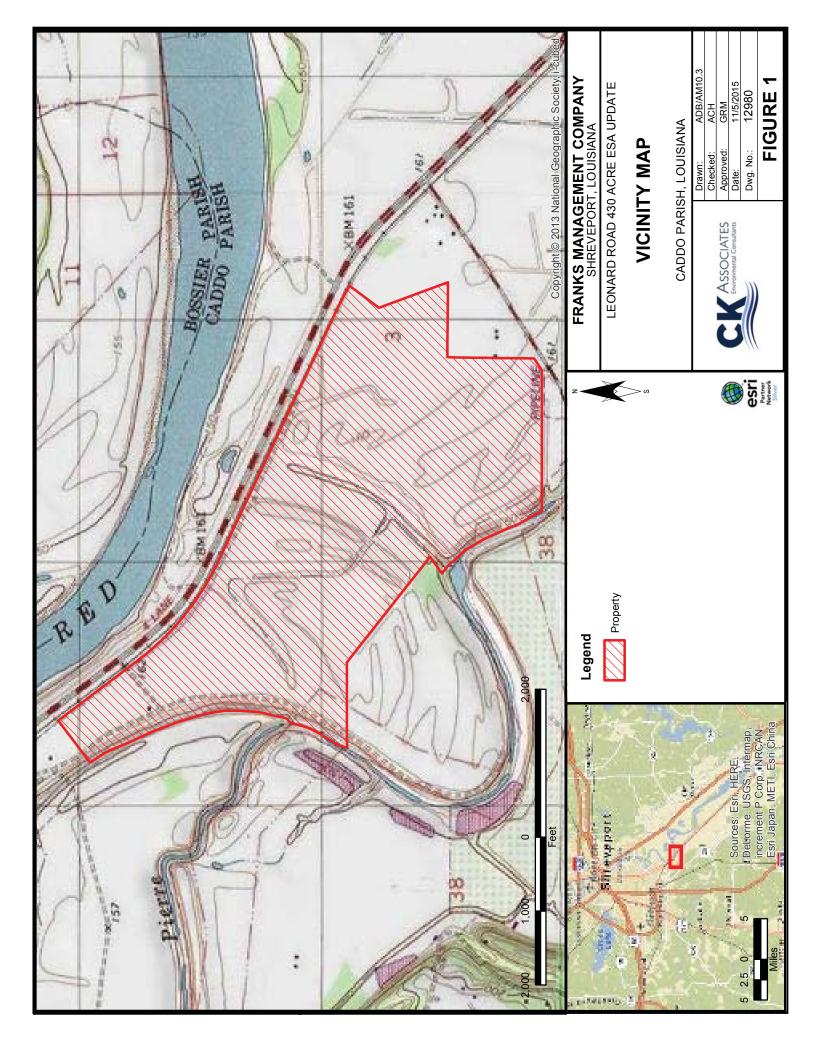
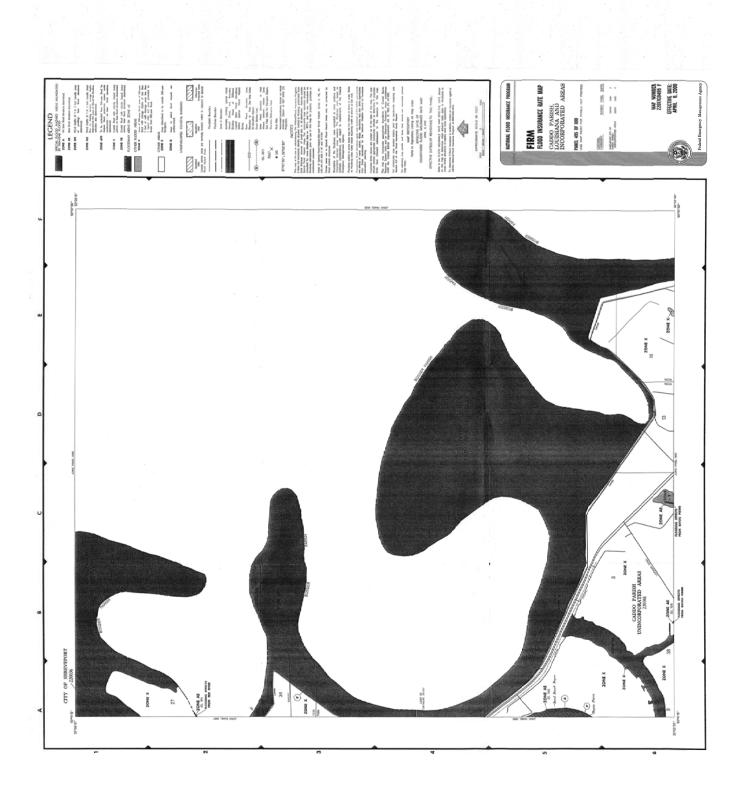
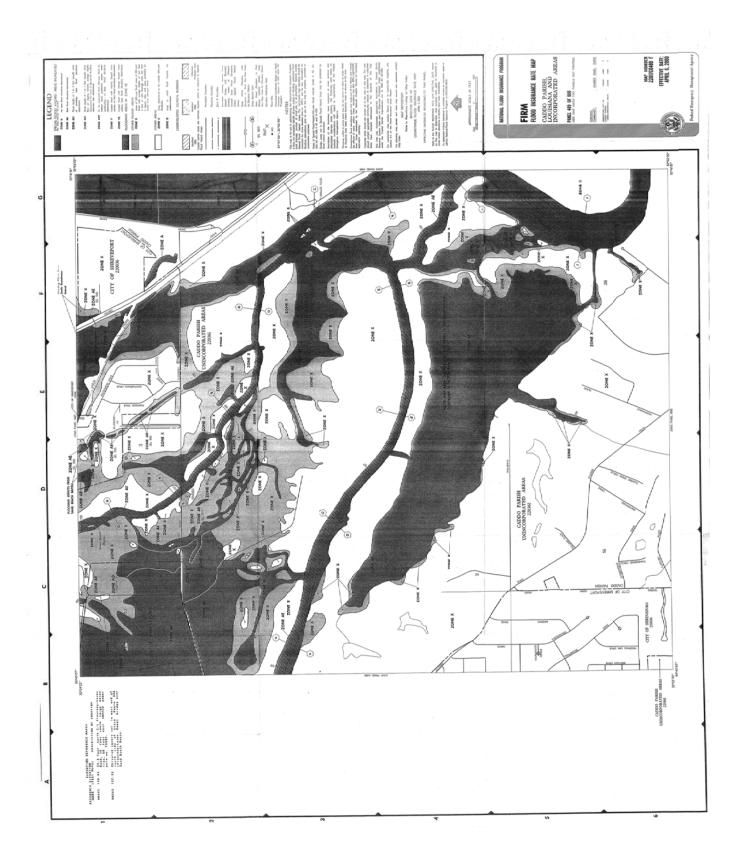


FIGURE 2 FLOOD INSURANCE RATES MAPS







APPENDIX A

REFERENCES

REFERENCES

- Banks Information Solutions, Inc. "Environmental FirstSearch™ Report." Job Number ESO2349. September 13, 2006.
- Environmental Data Resources, Inc., City Directory Image Report, Inquiry Number 4451126.5. October 30,2015.
- Environmental Data Resources, Inc., EDR Radius Map Report with GeoCheck®, Inquiry Number 4451126.2s. October 28, 2015.
- Environmental Data Resources, Inc., Sanborn® Report, Inquiry Number 4451126.3. October 28, 2015.
- Soil Conservation Service (1980) *Soil Survey of Caddo Parish, Louisiana*. U.S. Department of Agriculture Soil Conservation Service. June 1980.
- United States Geological Survey. "SHREVEPORT EAST [LA]" 1:24,000 Topographic Map, 1992.
- Louisiana Department of Transportation, GIS Well Locator, (Internet).
- Louisiana Department of Natural Resources, SONRIS Database, (Internet).

APPENDIX B PROPERTY TITLE INFORMATION

47234

MRS. LILLIAN B. SMITHERWAN ET AL TO BOARD OF COMMISSIONERS OF THE CADDO, LEVEE DISTRICT .

FILED & RECORDED
MAY 11, 1949;
D. B. WEBSTER DY: CLK
& EX OFFICIO DY RECORDER
REC: MC

AGREEMENT

STATE OF LOUISIANA PARISH OF CADDO

AGREEMENT RE: CHANNEL ENLARGEMENT OF BAYOU PIERRE

KNOW ALL MEN BY THESE PRESENTS, That Whereas, the Congress of the United States has heretofore authorized certain work in the vicinity of Shreveport, generally referred to as the Bayou Pierre Project (Public Law 526, 79th Congress, Second Session) under certain conditions heretofore assumed by the Board of Commissioners of the Caddo Levee District, which include the furnishing of a necessary right of way and an agreement to hold the United States harmless from any claim for compensation or damage wich might arise on account of the work to be undertaken, insofar as that portion of the project which lies South of Atlantic Avenue in the City of Shreveport, and

Whereas, the United States has let the contract for the doing of the work with reference to this portion of the project and in carrying out the project it is contemplated that in the widening and deepening of said Bayou it will be necessary to remove a large quantity of earth or spoil.

Now therefore, we, the undersigned owners of land bordering on Bayou Pierre and through which Bayou Pierre runs, hereby agree that in the event the Board of Commissioners of the Caddo Levee District will at its expense, spread the spoil so removed, in the manner hereafter stipulated, we will release and relinquish all claims except as hereinafter set forth which we now have against the Board of Commissioners of the Caddo Levee District and or the United States of America, its officers agents or contractors, for damages and/or compensation or which may hereafter arise or accrue in our favor growing out of, in connection with or in any manner occadioned by the carrying out to completion of said Bayou Pierre Project and including the spreading of the spoil as hereafter stipulated.

The Board of Commissioners of the Gaddo Levee District shall advertise for bids for the spreading of the spoil resulting from the carrying out of the Bayou Pierre Project, the spreading thereof to be done under the supervision of the State Department of Public works in the following manner; Beginning at the landside edge of the berme, the dirt shall be left on a 4-1 slope in accordance with the specifications of the Engineers, The remaining dirt shall be spread out landward creating a uniformly shaped layer which shall not increase the maximum elevation of the land in any general location more than three (3) feet. The surface shall be left reasonably smooth with no holes or humps or abrupt changes in slope. It shall conform to the general shape of the existing terrain except that where it is considered to the advantage of the Levee Board and property holders minor depressions will be filled or other minor variations will be made in the slope of the Land. No such variations will be made except at the direction of the Engineer in charge.

It is agreed that the undersigned will make no claim whatsoever against the Board of Commissioners of the Caddo Levee District and/or the United States of America, its officers, agents or assigns, as a result of the carrying out of the Bayou Pierre Project and or the spreading of the spoil as above contemplated, except as hereinafter set forth.

It is further agreed that upon the completion of the spoil as hereinabove set forth, and in consideration for the spreading of the said spoil, the undersigned land owners, their heirs and assigns, do hereby grant unto the Board of Commissioners of the Caddo Levee District a perpetual servitude and right of way through any and all lands belonging to us, or either of us, bordering on said Bayou Pierre, and through which Bayou Pierre runs to maintain, repair, operate and control the necessary Bayou Pierre Channel and enlargement which perpetual servitude and right of way shall be one hundred (100) feet in width measuring and extending one hundred (100) feet from the new bank of said Bayou Pierre on the East side of the Bayou Pierre channel enlargement work mentioned in the foregoing paragraph of this agreement, the boundaries of which servitude and right of way shall be defined and located by permanent monuments to be erected upon the completion of the work heretofore mentioned, all cost and surveys in connection with the location and erection of said monuments to be borne by the Board of Commissioners of the Caddo Devee District.

It is further agreed by the undersigned land owners, their heirs and assigns, that no buildings and/or obstructions shall be located or placed on the right of way herein granted of any nature which, in the opinion of the Board of Commissioners of the Caddo Levee District will in any manner interfer with the purposes of the rights to maintain repair, operate and control the Bayou Pierre Channel in the future, it being expressly agreed that the undersigned land owners, their heirs and assigns, will hold the said board of Commissioners of the Caddo Levee District harmless for any damages, compensation, rights or claims, except as set forth hereinafter, of any nature whatsoever which they may have, or which may accrue to them in the future growing out of, in connection with or in any manner occasioned by the maintenance, repair, operation or control of the Bayou Pierre Channel and the one hundred (100) feet right of way on the East bank thereof herein granted, this grant and dedication being irrevocable and perpetual.

However, the Board of Commissioners of the Caddo Levee District expressly agree to the following:

- (a) That the landowner shall have the right to cultivate and farm the one hundred (100) foot right of way granted herein.
- (b) That the servitude granted herein shall in no way interfer with landowner's right to explore for and produce oil, gas or other minerals from beneath the land over which a servitude is herein granted; provided the sites of no well to be drilled is actually on the said right of way.
- (c) Further that if, in the use of the servitude herein granted damage is done to private roads (roads maintained by landowner) that the damage shall be repaired; and if crops are destroyed the same shall be paid for. This provision relative to damage to roads and destruction of crops applies solely to land of the landowner lying outside the one hundred (100) foot right of way herein granted and not the right of way itself.
- (d) Should silt or other matter be removed from Canal in later years it will be spread to conform to general pattern as above outlined in paragraph 4.
- (e) It is understood that the landowners right to drain into Bayou Pierre and his drainage canals and ditches for such purposes shall not be interferred with.

Attest: R. H. Smitherman Jr. Fern B. Mahoney

Mrs. Lillian B. Smitherman

Helen C. Dandridge Kathleen Harris F. F. Webb. Jr.

W. B. Sentell G. M. Anderson BOARD OF COMMISSIONERS CADDO LEVEE DISTRICT BY W. E. Glassell President May 10, 1949

47235

JUSTIN R. QUERBES, ET AL TO BOARD OF COMMISSIONERS OF CADDO LEVEE DISTRICT FILED & RECORDED
May 11, 1949
D. B. WEBSTER, DY CLK
& EX OFFICIO DY RECORDER
REC: MC

AGREEMENT

STATE OF LOUISIANA PARISH OF CADDO

AGREEMENT RE: Channel Enlargement of Bayou Pierre

Know All men by these presents That Whereas, the Congress of the United States has heretofore authorized certain work in the vicinity of Shreveport, generally referred to as the Bayou Pierre Project (Public Law 526, 79th Congress, Second Session) under certain conditions heretofore assumed by the Board of Commissioners of the Caddo Levee District, which include the furnishing of a necessary right of way and an agreement to hold the United States harmless from any claim for compensation or damage which might arise on account of the work to be undertaken, insofar as that portion of the project which lies South of Atlantic Avenue in the City of Shreveport, and

Whereas, the United States has let the contract for the doing of the work with reference to this portion of the project and in carrying out the project it is contemplated that in the widening and deepening of said Bayou it will be necessary to remove a large quantity of earth or spoil.

Now therefore, we, the undersigned owners of land bordering on Bayou Pierre and through which Bayou Pierre runs hereby agree that in the event the Board of Commissioners of the Caddo Levee District, will at its expense, spread the spoul so removed in the manner hereafter stipulated, we will release and relinquish all claims which we now have against the Board of Commissioners of the Caddo Levee District and or the United States of America, its officers, agents or contractors, for damages and or compensation or which may hereafter arise or accrue in our favor growing out of, in connection with, or in any manner occasioned by the carrying out to completion of said Bayou Pierre Project and including the spreading of the spoil as hereafter stipulated.

The board of Commissioners of the Caddo Levee District shall advertise for bids for the spreading of the spoil resulting from the carrying out of the Bayou Pierre Project, the spreading thereof to be done under the supervision of the State Department of Public Works in the following manner; Beginning at the landside edge of the berme, the dirt shall be left on a 4-1 slope in accordance with the specifications of the Engineers.

The remaining firt shall be spread out landward, creating a uniformly shaped layer which shall not increase the maximum elevation of the land in any general location more than three (3) feet. The surface shall be left reasonably smooth with no holes or humps or abrupt changes in slope. It shall conform to the general shape of the existing terrain except that where it is considered to the advantage of the Levee Board and property holders minor depressions will be filled or other minor variations will be made in the slope of the Lengineer in such variations will be made except at the direction of the Engineer in charge.

It is agreed that the undersigned will make no claim whatsoever against the Board of Commissioners of the Caddo Levee District and/or the United States of America, its officers, agents or assigns, as a

"The North Half of the Northwest Quarter (N½ of NW¼) of Section 26, Township 17 North, Range 14 West, and all of the Northeast Quarter of the Northeast Quarter (NE¼ of NE½) of Section 27, said township and range lying East of a line parallel to and eight (8) feet east of the Easterly boundary of the right of way of the Houston and Shreveport Railway Company, said eight (8) foot stip being the right of way granted by J.E. Smitherman, et al for pipe line rights of way and less a lot in the Northeasterly corner of said first described property, which lot fronts 100 feet on 70th Street by a depth of 150 feet on Union Street, and being further subject to the rights of way and dedications granted by J.E. Smitherman, et al for 70th and Union Streets, and rights of way for sewer line and gas pipe line presently installed on the premises, said property consisting of eighty-eight (188) acres, more or less, and located in Caddo Parish, Louisiana

for the sum of \$132,000.00, which shall be paid \$33,000.00 cash in hand at the time of the execution of the deed and the remaining \$99,000.00 to be represented by one (1) mortgage note secured by vendor's lien and privilege on the said property, due and payable on or before ten (10) years after the date thereof, with interest at the rate of four (4%) per cent per annum, said interest to be paid on the principal balance due at the end of one (1) year after the date of the execution of said note, the interest thereafter to be paid semi-annually. The payment of the principal of said note shall be accelerated and become immediately due and payable should the maker thereof fail to meet any interest payment within thirty (30) days afterthe due date thereof.

"It is agreed and understood that the above noted payment of \$33,000.00 cash is equal to and shall be treated as the payment of \$375.00 per acre on the property hereinabove described, and J. E. Smitherman, et al agree that upon the payment of an additional sum equal to \$375.00 per acre to subordinate the above described vendor's lien and mortgage from time to time upon units of said property consisting of not less than five (5), nor more than twenty (20) acres for the purpose of allowing Frank J. Zuzak or his nominee to install streets and public untilities, consisting of gas, water, sewerage and electrical lines and racilities upon the particular unit, the mortgage on which is to be so subordinated."

CERTIFICATE

I hereby certify that the above is a true and correct copy of a resolution adopted at a meeting of Sherwood Park Development Co., Inc., held at its offices at 410 First National Bank Building, Shreveport, La., on June 16, 1953, as the same appears on the Minute Book of the Corporation.

In testimony whereof witness my hand and seal on this 14th day of July 1953.

Sam A. Freyer Asst Secretary

#52608

FREDERICKTO. WEBB, JR., et al

INTERSTATE OIL PIPE LINE COMPANY

RIGHT OF WAY

FILED & RECORDED july 15th, 1953 LLOYD D. BURNS DY CLK & EX OFF DY RECORDER REC:LBH

STATE OF LOUISIANA PARISM OF CADLO

KNOW ALL MEN BY THESE PRESENTS: That the undersigned, hereinafter called GRANDR (whether one or more) in consideration of Two Hundred Ninety and No/100 (\$290.00) DOLLARS cash in hand paid, receipt of which is hereby

acknowledged, does hereby grant and convey unto INTERSTATE OIL PIPE LINE COMPANY, a Delaware corporation, with principal orrice at Shreveport, Louisiana, hereinarter called Grantee, a servitude or right of way for the purpose of constructing, maintaining, operating, patrolling, (including aerial patrol) altering, repaining, renewing, and removing in whole or in part a pipe line for the transportation of crude petroleum, its products and derivatives, whether liquid or gaseous, together with the necessary fixtures, equipment and appurtenances across the following described land situated in said State and Parish, to-wit:

Those certain lands in Gaddo Parish, Louisiana, fronting on Red River, near Lucas, presently known as Levy Plantation, more fully described as Lot 15 of the Daniels Lands in Section 10, and Lots 2 and 6 of Daniels Lands, and all that part of Lot 5 of the Daniels Lands East of Bayou Pierre, all in Section Fourteen (14), and a tract fronting one mile on Red River, and located in Sections 10, 11, 13, 14, and 15 said tract having been formerly known as the Norris Tract, and forming a part now of the Levy Plantation, and being the same property less such part thereof as has gone into Red River, acquired by Morris Levy of date August 8, 1863, as per deed in Conveyance Book "O" page 497, of the Records of Gaddo Parish, Louisiana, Less Right of Way to T & P. Railway, and less the Highway adjacent thereto. All of the above described property being situated in Township 16 North, hange 13 West, Caddo Parish, La., Being a portion of that land as described in Book 652, page 413 of Records of Caddo Parish, Section Twp Rge together with the right of ingress and egress to and from Said right of way over and across said lands and adjacent lands of Grantor for any and all purposes herein granted, with the right to maintain the right of way clear of trees, undergrowth, orush and other obstructions so to prevent damage or interference with the efficient operation and patrol of the pipe lines constructed under this grant.

GRANTEE may construct additional lines of pipe, subject to the same rights, terms and conditions as apply to the original line, upon payment to the GRANTOR of a like consideration per rod for each additional line so laid; provided that additional pipe lines constructed shall be located approximately parallel and at a distance of not more than twenty rive (25) reet from the center of the first pipe line hereafter installed. Payment for additional lines may be made by check of Grantee preceding or subsequent to the construction of such additional lines.

All pipe lines constructed under this agreement shall be buried through cultivated land so that they will not interfere with ordinary cultivation and Grantee shall pay for all damages to crops, fences, timber and livestock which may be caused by the constructing, repairing or removing said lines, which payment shall be made after completion of the work.

GRANTOR reserves the right to the full use and enjoyment of said premises except as the same may be necessary for the purposes herein granted; provided that GRANTOR shall not erect over any line or lines of GRANTER any improvements, lake or ponds of a nature such as to interfere with the rights hereby granted.

Nothing herein shall be construed as a conveyance of any part of the mineral rights underlying the above described property and the servitude granted herein is subject to any valid and duly recorded oil, gas and mineral lease.

This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

WITNESS THE EXECUTION HERSOF this 8th day of July 1953.

Witnesses

M. L. Parris Craighton Webb Jr.

J.D.Holland M. L. Parris Signature and Mailing Address of Grantor: Frederick F. Webb, Jr.

John C. Webb Clarence H. Webb Robert L. Webb

Doris learwood Elgin .

55¢ revenue stamps attached hereto and cancelled.

STATE OF LOUISIANA PARISH OF CADDO

BEFORE ME, the undersigned authority, personally appeared M. L. Parris who having first been duly sworn deposed that he saw the foregoing instrument executed by Frederick F. Webb Jr., John C. Webb, Clarence H. Webb, Robert L. Webb and Doris Yearwood Elgin and that Appearer signed at the same time together with the other attesting witness; and that Appearer now recognizes all such signatures to be genuine. M. L. Parris

Sworn to and subscribed before me, this 8th day of July, 1953. Clyde A. Musgrove

Notary Public

R/W No. AFE NO Line name or location code No. Size 113 531 Red Chute Jct .- Finney

Field or Pool

Map No Check No. 684-685 686-687Paid By M. L. Parris

UNITED STATES OF AMERICA TO

#52606

688

ALLEN R. WRIGHTEET AL

FILED & RECORDED JULY 15th, 1953 LLOYD D. BURNS DY CLK & EX OF DY RECORDER REC: LBH

PATENT

THE UNITED STATES OF AMERICA.

To all to whom these presents shall come, Greeting:

KNOW YE, That in pursuance of the Act of Congress, entitled "An act to raise for a limited time an addit onal military force, and for other purposes, approved February 11th, 2047, Aquilla W. Barber, late a sargeant in Captain Reynolds Company, Second Regiment Ohio Volunteers, having deposited in the GENERAL LAND OFFICE a WARRANT in his favor, numbered 7,309

There is Therefore Granted by the United States, unto Allen R. Wright and Samuel Van Bibber, Assignees of said Aquilla W. Barber, and to their heirs, the South East quarter of Section Twenty three, in Township Seventeen, or Range Fourteen. in the District of Lands subject to sale at Natchitoches, Louisiana, containing one hundred and fifty-eight acres and seventy one hundredths of an acre.

according to the official plat of the Survey of the said Land returned to the GENERAL LAND OFFICE by the SURVEYOR GENERAL, which said tract has been located in satisfaction of the above mentioned Warrant, in purusuant of the Act of Congress above mentioned, approved february lith, 1847, TO HAVE AND TO HOLD the said Quarter section of land, with the apputenances thereof, unto the said Allen A. Wright and Samuel Van Bibber, and to their heirs and assigns forever stenants in common, andnot as joint tenants. joint tenants.

IN TESTIMONY WHEREOF, I, Millard Fullmore, PRESIDENT OF THE UNITED STATES OF AMERICA, have caused these Letters to be made Patent, and the Sealeof the General Land Office to be hereunto affixed.

Given under my hand, at the City of Washington, the Tenth day of March, in the year of our Lord one thousand eight hundred and fifty one, and of the Independence of the United States the Seventy-fifth.

BY THE PRESIDENT - Millard Fillmore; By Alex. McCormick Asst Secy. E. S. Terry, Recorder of the General Land Office.

Thus done and passed in the parish of Orleans, State of Louisiana, on the day and date first hereinabove written, and in the presence of Carol O'Neil and Betty Anguzza, competent witnesses, who have hereuntp subscribed their names as such, together with said appearer and me, said authority, after due reading.

WITNESSES:

Carol O'Neil Betty Anguzza Harry X. Bay

Roger J Keller Notary Public in and for the Parish of Orleans, State of Louisiana. My commission is issued for life

STATE OF LOUISIANA PARISH OF CADDO

BE IT KNOWN, that on this 10th day of April 1956, before me, the undersigned authority, and in the presence of the witnesses hereinafter named and undersigned, personally same and appeared James M. Simmons Attorney in fact of GULF NATURAL GAS CORPORATION to me well known, and known to be such Attorney in fact of GULF NATURAL GAS CORPORATION and executed the foregoing instrument, and thereupon the said JAMES M. SIMMONS, as such Attorney in fact, adknowledged that he had signed and executed the same as his act and deed, and as the act and deed of the said corporation for the consideration uses and purposes and on the terms and conditions therein mentioned and in his said capacity.

And the said James M. Simmons being by me first duly sworn, did depose and say that he is the Attorney in fact of GULF NATURAL GAS CORPORATION and that he had signed and executed said instrument in his capacity, and under authority of the Board of Directors of said corporation.

Thus done and passed in the arish of Caddo, State of Louisiana, on the day and date first hereinabove written, and in the presence of K. B. Jones, and Violet Player competent witnesses, who have hereunto subscribed their names as such, together with said appearer and me, said authority, after due reading.

James M Simmons

Witnesses: K. B. Jones Violet Player

Hazen W. Cole
Notary Public in and for the Parish of Caddo, State of Louisiana
My commission expires at death.

#1282,76

DR, CLARENCE H. WEBB ET AL
TO
CADDO LEVEE DISTRICT AND THE

LOUISIANA DEPARTMENT OF PUBLIC WORKS

Filed & Recorded
April 23 1956
W.E.NESOM
DY CLK & EX OFF DY RECORDER
REC:LBH

DRAINAGE RIGHT OF WAY

OLD RIVER-SAND BEACH BAYOU-LATERAL C-6

STATE OF LOUISIANA PARISH OF CADDO

Whereas the Board of Commissioners of Caddo Levee District and the Louisiana Department of P blic Works have determined upon a project for the improvement of drainage by the building or digging of what is known, or will be known, as the Old River-Sand Beach Bayou-Lateral C-6

Drainage Channel in Townships 16 and 17 North, Range 13 West, Caddo Parish, Louisiana, following the approximate course shown in red upon the attached map, we, the undersigned, being the owners, lessees, or occupants of certain lands adjacent to or traversed by said drainage project, and having been requested by the Caddo Levee Board to grant a drainage easement through our properties, do hereby grant unto Caddo Levee District as easement on or through our said respective properties adjacent to or traversed by said project for the restricted purpose of dredging and maintaining the channel thereof, the removal of all obstructions therein, and the piling or spreading of all dirt, upon the following terms and conditions:

- 1. The work to dredge or deepen said channels shall begin at the South or lower end of the project and proceed Northward to the upper end of the project.
- 2. The work shall be done upon the super vision of the Louisiana Department of $P_{\rm U}$ blic Works in accordance with the planss and specifications furnished us by the Louisiana Department of Public Works following roughly the course shown in red upon the attached map.
- 3. Upon the completion of said project the Levee Board shall retain a 60 foot right-of-way on the Westerly side of Lateral C-6 from point "A" at its lower end to point "B" at its uppercend, and upon the stretch of Sand Beach Bayou from Point "B" to its junction with Old River at point "C" A similar 60 foot right-of-way on the retained from the Youwerend of Lateral C-6 (point "A") to a point approximately 3/4 mile North or up-stream from the confluence of Sand Beach Bayou and Bayou Pierre. From this point down stream to the confluence of Bayou Pierre a 60 foot right-of-way shall be retained on the Westerly side of Sand Beach Bayou. This 60 foot right-of-way roughly sketched in blue upon the attached map is retained for future Bredging. Additional right-of-ways along Old River and along other portions of Sand Beach Bayou have been, or will be, handled by other agreements.
 - 4. All underbrush removed in the prosecution of the work contemplated hereunder shall be burned by grantee at such places and in such manner as will not hurt grantor's land or hinder its cultivation.
 - 5. Grantee at its expense will replace or repair any fences on the land of either grantor, which are destroyed or damaged in the course of the work herein contemplated.
 - 6. Neither the Cddo Levee District nor the Louisiana Department of Public Works is obligated to build or maintain any crossings or bridges across said project, but such crossings or bridges can be constructed by the pespective property owners at their own costs, risks and expense, propided they shall not in any way interfere with the flow of water in the channel of said project.
 - 7. The Caddo Levee District is to spread the spoil dirt to not more than two feet above present grade.

This easement is granted in consideration of the benefits to be derived by each of us and our lands from this project and settlement in full with each of us for the damages and loss suffered, the receipt of wich is hereby acknowledged. In addition Caddo Levee District will take care of any damage to the crops, take care of any damage to the pecan trees, and replace the bridge.

This agreement may be executed jointly or severally and in as many counterparts as may be convenient by the divers parties concerned.

Thus done and signed this 12 day of April 1956.

WITNESSES:

Geony I. Whitmore Meyor Armor Daniel O. Magnussen Jr. Robert L. Webb
Colonel Infantry
Dr. Clarence H. Webb
Mrs. Doris Webb Elgin
F.C.Webb (Deceased)
By F.F.Webb Jr.
F.F.Webb Jr.

(Map attached to Sklar & Crow Agreement)

535464

M. C. X

RIGHT OF WAY AGREEMENT

STATE OF LOUISIANA

PARISH OF CADDO

KNOW ALL MEN BY THESE PRESENTS: That the underly signed, hereinafter called GRANTOR (whether one or more) is consideration of Ten and No/100 Dollars (\$10.00) and other good and valuable considerations, in hand paid, receipt of which is hereby acknowledged, does hereby grant and convey unto FALCO, INC., a Louisiana corporation, whose mailing address is P. O. Box 108, Shreveport, Louisiana, its successors and assigns, hereinafter called GRANTEE, a servitude or right of way for the purpose of constructing, maintaining, operating, patrolling, altering, repairing, renewing and removing in whole or in part a pipe line for the transportation of crude petroleum, its products, and: deriviatives, gases or substances which can be transported through a pipe line, together with the necessary fixtures, equipment and appurtenances across the following described land situated in said State and Parish, to-wit:

All that part of the following described land located in Sections 11 and 14, Township 16 North, Range 13 West, lying South of Texas & Pacific Railway Company right of way: Those certain lands in Caddo Parish, Louisiana, fronting on Red River, near Lucas, presently known as Levy Plantation, more fully described as Lot 15 of the Daniels Lands in Section 10, and Lots 2 and 6 of Daniels Lands, and all that part of Lot 5 of the Daniels Lands Bast of Bayou Pierre, all in Section Fourteen (14), and a tract fronting one mile on Red River, and located in Sections 10, 11, 13, 14 and 15 said tract having been formerly known as the Norris Tract, and forming a part now of the Levy Plantation, and being the same property; , less such part thereof as has gone into Red River, acquired by Morris Levy of date August 8, 1863, as per deed in Conveyance Book "O" page 497, of the Records of Caddo Parish, Louisiana, less Right of Way to T & P Railway, and less the Highway adjacent thereto. All of the above described property being situated in Township 16 North, Range 13 West, Caddo Parish, La. Being a portion of that land as described in Book 652 page 413 of Records of Caddo Parish, La.

together with the right of ingress and egress to and from said right of way over and across said lands and adjacent land of GRANTOR for any and all purposes here in granted, with the right to maintain the right of way clear of trees, undergrowth, brush and other obstructions, except usual farm crops, so as to prevent damage or interference with the efficient operation and patrol of the pipe line constructed under this grant.

GRANTEE, its successors and assigns, are hereby expressly given and granted the right to assign this right of way, or any part thereof, or interest herein, and the same shall be divisible among two or more owners, as to any right or rights created hereunder.

The right of way herein granted and conveyed shall be located approximately parallel and at a distance of not more than twenty-five (25) feet from the center of the pipe line constructed by Interstate Oil Pipe Line Company, now owned by Bumble Pipe Line Company, which said pipe line is shown on plat, marked Exhibit "A", attached hereto and made a part hereof.

The pipe line constructed under the agreement shall be buried so it will not interfere with cultivation, and GRANTEE shall pay for all damage to crops, fences, timber, livestock and improvements which may be caused by the constructing, repairing or removing said line, which payment shall be made after completion of the work; said damage, if not mutually agreed upon, to be ascertained and determined by three disinterested parties, one thereof to be appointed by the said GRANTOR, one by the said GRANTEE, and the third by the two so appointed, and the written award of such three appointed parties, or any two of them, shall be final and conclusive.

GRANTOR reserves the right to the full use and enjoyment of said premises except as the same may be necessary for the purposes herein granted; provided that GRANTOR shall not erect over said pipe line of GRANTEE any improvements, lake or ponds of a nature such as to interfere with the rights hereby granted.

GRANTEE has the right to construct only one pipe line.

Nothing herein shall be construed as a conveyance of any part of the mineral rights underlying the above described property and the servitude granted herein is subject to any valid and duly recorded oil, gas and mineral lease.

In the event the pipe line owned by Humble Pipe Line Company described on attached Exhibit "A" is abandoned or removed, then in that event, Grantee agrees, if reguested in writing to do so by Grantor, to move its pipe line to another location on property of Grantor. In the event Grantor requests Grantee to move its pipe line, Grantor agrees to provide a suitable right of way for Grantee's pipe line at a location which will cause minimum inconvenience to Grantor in the development of their property and a minimum inconvenience and expense to Grantee in the relocation of its pipe line.

This agreement may be signed in counterpart, and shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

WITNESS THE EXECUTION HEREOF this3/6T
day of MARCH , 1971.
Mr. R. D. Campbol Clarence H. Webb
Sanice I Bust Robert L. Webb
Janice & Bust Mrs. Lloyd Webb Diamond
Byso Smilton Mrs. Doris Yearwood Elgin
Byrd Samuttam Mrs. R. The Elain Nordyke Ruth Elgin Nordyke
Frederich & Matter , John Creighton Webb, Jr.
Janice & Luit Mrs. Luck Do Webb Day
Mrs. Azalie Webb Crain

WITNESSES:	
	Mrs. Helen Webb Cooley
Ac 2016 Byw Samittan	Frederick F. Webb III
Ryal Samutim	Readen W. Webb
	John L. Webb
	Mrs. Martha Lowe Webb Wann
Byw & Samuton	Sherwood Bruce Loe as Natural Tutor of the Minors Mattie Lou Loe, Mae Catherine Loe and Sherwood Bruce Loe. JR.
(MANAGE AND	
	-

STATE OF LOUISIANA

PARISH OF BOSSIER

BEFORE ME, the undersigned authority, this day personally appeared

personally known to be the identical person whose name is subscribed to the foregoing instrument as an attesting witness, who being first duly sworn on --his- oath, says:

That he subscribed his name to the foregoing instrument as a witness, and that he knows

Clarence H. Webb, Robert L. Webb, Mrs. Lloyd Webb Diamond, Mrs. Doris Yearwood Elgin, Ruth Elgin Nordyke, John

Creighton Webb, Jr., Mrs. Lucille Webb Day, Frederick F. Webb III, Reuben W. Webb and Sherwood Bruce Loe

the Grantor named in said instrument, to be the identical person described therein, and who executed the same, and saw them sign the same as their voluntary act and deed, and that he, the said BYRD HAMILTON subscribed his name to the same at the same time as an attesting witness.

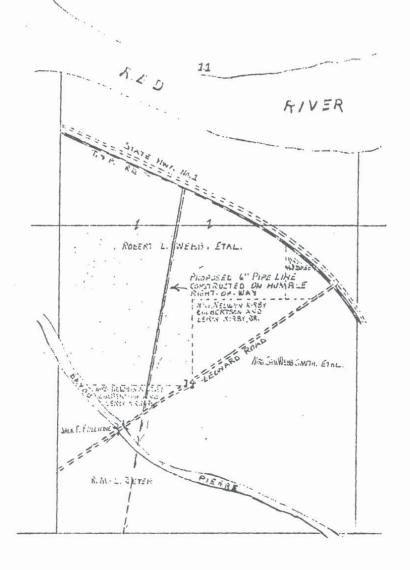
Sworn to and subscribed before
me, this 5th day of April
1971

Notary Public in and for
Bossier parish, Louisianar

STATE OF LOUISIANA	-
PARISH OF	
BEFORE ME, the use Public, personally case	ndersigned authority, a Motary me and appeared
instrument and who de executed the same as	person who executed the foregoing clared and acknowledged that he free act and deed.
	and seal of office on this
	Notary Public in and for

7.(*)

EXH:BIT "A"



TILLON. R. 13 W. CADDO PARISH, LA.

Record

NOT DRAWN TO SMALE

AN AGREEMENT

STATE OF LOUISIANA, PARISH OF CADDO.

801767

JOHN CREIGHTON WEBB, JR

BL IT KNOWN that Tract #5, Partition Reg. #793201

wher(s) of the property hereinafter described, hereby grant(s), convey(s) and transfer(s) to the City of Shreveport, the right to completely install

A 36" Sanitary Sewer Force Main on the property hereafter described as:

A 15 ft. wide permanent easement lying within a tract of land in Section 10, T16N R13W, Caddo Parish, Louisiana, as shown on the attached plat: attached plat.

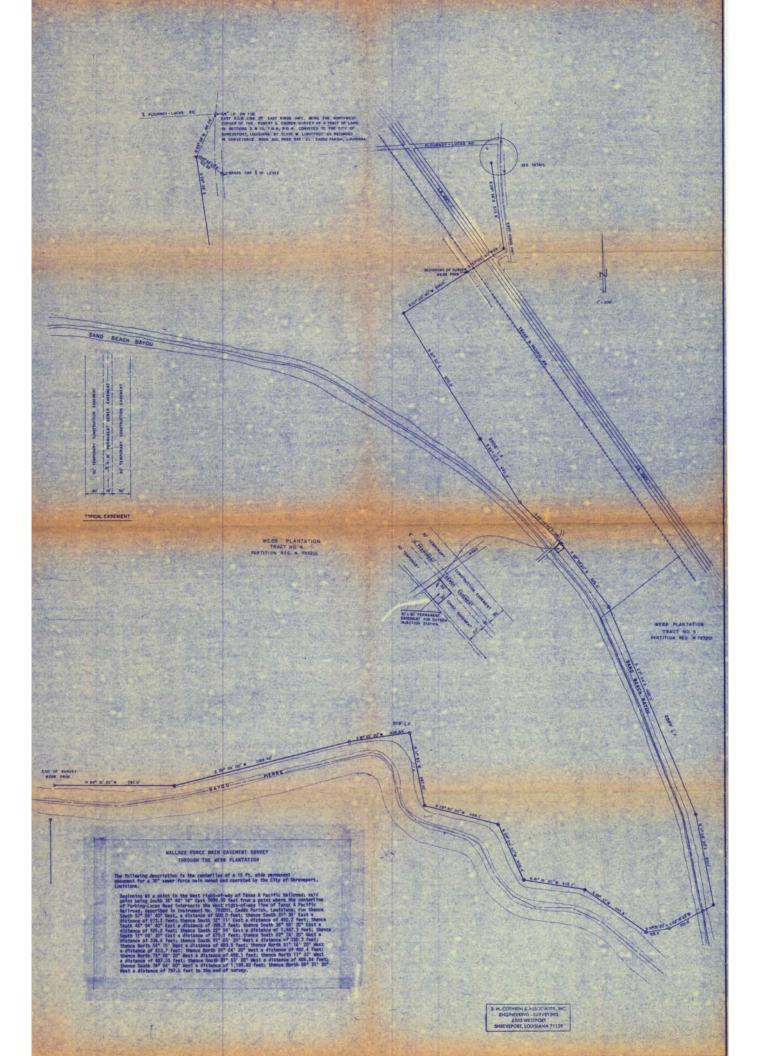
Also a 30 ft. wide temporary construction easement on both sides of the above described permanent easement.

The location of this installation is further shown on the drawings attached hereto and which are made a part of this Agreement. All of the work is to be done under the supervision of the Superintendent of the Department of Water Utilities or authorized engineers of the City of Shreveport: .

Be it further provided that the authorized personnel of the City of Shreveport and/or its contractors shall have the right to enter the above described property at anytime for the purpose of making repairs, alterations, and tests necessary in connection with the operation of this

The City of Shreveport agrees to be responsible for the restoration or all excavations or alterations necessary in the prosecution of this. work and to replace the ground surface, as far as it is practicable, to indemnity the property owner(s) of the described property and any subsequent property owner(s) from all claims resulting from injuries to persons or damages caused to existing improvements or to improvements subsequently placed on the property, or for damages to the property itself connected with the right herein conferred. Nothing contained herein shall be construed to mean that the City is to be held responsible for a depreciation in value of the described property

	This Agreemen				1274	day
of	June.	1979_				
WITNESS	SES:			//		
Sia	nto Pino	2,07		1 In	Ceift.	-2PM
			Jo.	In Creighton	n Webb, Jr.	
1/12) /	CI	TY OF: SHR	EVEPORT	





STATE OF LOUISIANA

PARISH OF CADDO

KNOW ALL MEN BY THESE PRESENTS that:

JOHN CREIGHTON WEBB, JR., husband of Marianne W. Webb, and a resident of Caddo Parish, Louisiana, whose mailing address is 1372 Leonard Road, Shreveport, Louisiana 71115, owning an undivided interest in the property herein.

HELEN WEBB COOLEY, a widow, and a resident of Nueces County, Texas, whose mailing address is 4634 Quincy, Corpus Christi, Texas 78411, owning an undivided interest in the property herein.

AZALIE WEBB CRAIN, wife of George L. Crain, Sr., and a resident of Lafayette Parish, Louisiana, whose mailing address is 106 Canterbury Road, Lafayette, Louisiana, 70501, owning an undivided interest in the property herein.

AZALIE CRAIN HOLLAND, wife of Lawrence William Holland, and a resident of Harris County, Texas, whose mailing address is 2345 Bering Drive, Apt. 746, Houston, Texas 77057, owning an undivided interest in the property herein.

GEORGE CRAIN JR., divorced from Jamie Owen Crain, and a resident of Lafayette Parish, Louisiana, whose mailing address is 625 Rose Lawn Boulevard, Lafayette, Louisiana 70503, owning an undivided interest in the property herein.

LUCILLE WEBB DAY, wife of Phillip George Day, Sr., and a resident of Caddo Parish, Louisiana, whose mailing address is 237 Pennsylvania, Shreveport, Louisiana 71105, owning an undivided interest in the property herein.

ANDREW WEBB DAY, husband of Brigitte M. Day, and a resident of Harris County, Texas, whose mailing address is 7334 Wovenwood Lane, Houston, Texas 77041, owning an undivided interest in the property herein.

JOHN WOODS DAY, divorced from Rosemary Estes Day, and a resident of Walker County, Texas, whose mailing address is 3349 Pine Grove, Huntsville, Texas 77340 owning an undivided interest in the property herein.

PHILLIP GEORGE DAY, JR., husband of Rose Hubley Day, and a resident of Humble County, Texas, whose mailing address is 4018 Brookshadow Drive, Kingswood, Texas 77345 owning an undivided interest in the property herein.

hereinafter called "GRANTOR", for and in consideration of the sum of Ten and No/100 Dollars and other valuable considerations (\$10.00 & OVC), cash in hand paid, the receipt of which is hereby acknowledged, does hereby grant, sell, and convey unto:

CADDO-BOSSIER PARISHES PORT COMMISSION,

hereinafter referred to as "GRANTEE", its successor and assigns, the right to lay, construct, maintain, inspect, repair, operate, remove, replace, or abandon one (1) - 18" or less, sanitary sewerage pipeline, one (1) - 30" or less, potable water pipeline, and one (1) - 10" or less, natural gas (methane) pipeline for the transportation of potable water and sanitary sewerage and natural gas (methane), which can be transported through the pipelines, under and across a certain tract of land situated in Caddo Parish, Louisiana, to-wit:

TRACT P-10:

A certain parcel of land required for permanent utility servitude, located in Section 14, Township 16 North, Range 13 West, Caddo Parish, Louisiana, and being further described as a portion of Tax Assessor's GEO Number 161310-001-0004 and being more particularly described as follows:

Beginning at the most northeasterly corner of Vendor's property, said point being on the southerly line of the Texas and Pacific Railroad; run thence South 00° 36' 57" West a distance of 63.25 feet; run thence North 51° 21' 54" West a distance of 41.39 feet; run thence North 56° 33' 11" West a distance of 392.20 feet; run thence 61° 01' 24" West a distance of 91.45 feet; run thence North 89° North 41' 24" East a distance of 104.23 feet to the south right of way line of the Texas and Pacific Railroad; run thence along said right of way line in a southeasterly direction a distance of 403.10 feet to the point of beginning, containing 0.53 acres, more or less.

TRACT P-12:

A certain parcel of land required for permanent utility servitude, located in Section 10, Township 16 North, Range 13 West, Caddo Parish, Louisiana, and being further described as a portion of Tax Assessor's GEO Number 161310-001-0004 and being more particularly described as follows:

Beginning at the most northwesterly corner of Vendor's property, said point being on the southerly line of the Texas and Pacific Railroad; Run thence along said southerly line the following courses and distances: South 36° 48' 26" East a distance of 1,041.86 feet; South 37° 42' 41" East a distance of 710.50 feet to the point of curvature of a curve to the left, said curve having a radius of 1,860.00 feet; Run thence along said curve and southerly line a distance of 930.44 feet; South 58° 17' 40" East a distance of 153.37 feet; South 61° 06' 38" East a distance of 206.95 feet; South 64° 20' 13" East a distance of 533.67 feet; South 25° 46' 37" West a distance of 25.00 feet; South 64° 43' 38" East a distance of 1,300.03 feet; North 25° 46' 56" East a distance of 25.00 feet and South 64° 42' 23" East a distance of 2,066.01 feet to Vendor's southerly property line; Thence leaving said southerly railroad right of way line run South 54° 24' 04" West along Vendor's southerly property line a distance of 56.45 feet; Run thence North 64° 42' 07" West a distance of 1,582.99 feet; Run thence North 64° 48' 27" West a distance of 405.99 feet; Run thence South 25° 46' 56" West a distance of 25.00 feet; Run thence North 64° 43' 44" West a distance of 1,400.03 feet; Run thence North 25° 46' 37" East a distance of 25.00 feet; Run thence North 64° 41' 50" West a distance of 375.96 feet; Run thence North 62° 55' 04" West a distance of 109.68 feet; Run thence North 61° 06' 38" West a distance of 208.97 feet; Run thence North 58° 17' 40" West a distance of 151.10 feet to the point of curvature of a curve to the right, said curve having a radius of 1,910 feet; Run thence along said curve a distance of 951.90 feet; Run thence North 37° 42' 05" West a distance of 711.09 feet; Run thence North 36° 47' 48" West a distance of 1,042.09 feet; Run thence North 53° 14' 28" East a distance of 50.00 feet to the point of beginning, containing 8.00 acres, more or less.

The right-of-way herein granted shall have such dimensions and shall be located as shown on the drawing marked Exhibit "B", attached hereto and made a part hereof.

Grantor further grants and conveys unto Grantee the full and unrestricted right of ingress and egress on, over, across and through the above-described right-of-way for all purposes necessary or incidental to the exercise of all rights herein granted, but except for emergency repairs, said ingress and egress shall be strictly limited to the right of way hereinabove described.

It is hereby understood that the above consideration includes full payment, settlement and satisfaction for all detriment and damages to grantor of whatever nature and character, including actual damages to growing crops, which may occur upon the construction right-of-way, as a result of or incident to, or in connection with the construction of the pipelines, but does not include off right-of-way damages.

Grantor reserves the right to use and enjoy the above described land except as may be necessary for the purposes herein granted, provided Grantor shall not interfere with nor obstruct Grantee in the exercise of its rights hereunder, and shall not construct nor permit to be constructed any house, structure, reservoir or other obstruction or excavation and shall not substantially change the cover over the pipeline on, over or within the permanent right-of-way and easement.

Grantee agrees to restore the right-of-way to its former condition as nearly as practicable.

Grantee shall have the right to clear, and keep cleared, all trees, undergrowth and other obstructions from the right-of-way, and after the pipelines have been installed, Grantee shall not be liable for damages for clearing trees and undergrowth from the right-of-way.

Grantor grants no warranty of title and no recourse, even as to the return of the amounts paid herewith for the right-of-way purchased and crop damages.

Grantee agrees that before severing or cutting fences of Grantor at each point where same are to be severed or cut, it will staunchly crossbrace the top panels, the one immediately on either side of the point of said fence or fences. Grantee also agrees that such fences as have been cut will be closed at all times except when construction work necessitates an opening therein.

Grantee further agrees that during construction it shall install culverts where necessary for passage of water or for irrigation and/or drainage when such culverts have been made necessary by the operations of Grantee, all at Grantee's cost and expense.

Any private road or roads or headlands of Grantor which are cut by Grantee shall be made available for passage as soon as possible and shall be compacted to 95 modified proctor to a distance 25' either side of and including the existing road.

Grantee further agrees that it shall be responsible for all damages, whether personal injuries, property damages, or crop damages (excluding damages to crops on right of way which have already been compensated therefor), which may occur as a result of Grantee's action or negligence, including strict liability, during its construction, operation, repair or removal of the pipelines contemplated herein, and to hold Grantor harmless from all said suits, claims or expenses, including attorney's fees in connection therewith, and whether such damages be sustained during or after construction of said pipelines. In addition, Grantee agrees to hold Grantor harmless from any and all demands, claims, causes of action or expenses, including attorney's fees which may occur as a result of Grantee's actions or negligence during its construction, operation, repair or removal of said pipelines, in connection with Statewide Order 29-B of the Office of Conservation, Department of Natural Resources, State of Louisiana; the Louisiana Environmental Quality Act; the Louisiana Abandoned Oilfield Waste Site Law; the Comprehensive Environmental Response, Compensation and Recovery Act; the Superfund Amendments and Reauthorization Act of 1986; the Toxic Substance Control Act; if applicable, and/or any other federal, state or local law, ordinance, rule, regulation, order, decree, penalty or requirement concerning, affecting, regulating or involving hazardous, toxic or harmful substances or the environment.

Grantee agrees and guarantees to hold Grantor harmless from any loss, damage or expense including attorney's fees occasioned to others or the property of others by or because of the construction of the pipelines or the use of the rights herein granted.

TO HAVE AND TO HOLD unto Grantee, its successors and assigns, so long as the rights and easements herein granted or any of them shall be used by or be useful to Grantee for the purposes herein granted with ingress and egress on the right-of-way for the purpose of construction, inspecting, repairing, maintaining, and replacing the property of Grantee herein described and the removal of same at will, in whole or in part.

This grant of right-of-way is limited to three pipelines, one of no greater size than one (1) - 18" sanitary sewer, one (1) - 30" potable water, and one (1) - 10" natural gas (methane).

Grantee hereby agrees to bury the pipeline to a depth of not less than sixty (60") inches, that is, the top of the pipeline in question will not be less than sixty (60") inches below the surface of the ground, so as not to interfere with the cultivation of the soil, and to a depth of not less than eight (8') feet below the bottom of any major canal, or ditches crossed by said pipelines and shall maintain said depth for the life of this agreement. Any and all ditches, canals, roads, etc, that are crossed by Grantee shall be returned to as near their former condition as possible as soon as practicable upon completion of said pipelines.

It is clearly understood between the parties hereto that the servitude herein granted is for the construction and maintenance of three pipelines, and no above-ground appurtenances except as indicated on the attached plats, provided however that the man holes for the water valves indicated on the attached plat shall be at grade and except pipeline markers and vent pipes, and these shall be placed only on exterior boundary lines and at road crossings.

Grantee hereby agrees that all trenches which are excavated shall be refilled as soon as possible. After refilling the trenches, they should be firmly tamped, packed and leveled. In the event settling occurs an ruts, trenches, or other indentations occur within twelve (12) months of the termination of construction, Grantee agrees to restore the area promptly to the proper level if so requested by Grantor. Grantee further agrees that any levees or other embankments which are cut shall be refilled, firmly tamped, packed and leveled.

Grantee agrees that all roads, headlands, bridges, drainage ditches and canals, fences and other improvements which may be disturbed by the construction or maintenance of said pipelines shall be restored to as near their original condition as possible as soon as practicable under prevailing circumstances.

Grantor shall have the right to place along, across and over said right-of-way and easement as many roads, streets, sidewalks, passageways, electric light and power lines, water lines, sewer lines, and telephone lines, and any and all other utilities as said Grantor may desire. However, that if the same is placed along, as distinguished from across said easement, they shall not be placed within ten (10') feet of pipelines of Grantee.

During construction Grantee shall construct at its expense, where necessary, vehicular crossings over and across the right-of-way for Grantor's use in crossing from one side of the right-of-way to the other with farm implements and machinery such as tractors, combines, cotton pickers, trucks, discs, etc.

In the construction, maintenance and operation of the pipeline, Grantee agrees to comply with all regulations, including environmental, and directives of state and federal agencies having authority in the premises.

Grantee expressly agrees that following construction, and for a period of two (2) years, should any of Grantor's farm equipment or machinery become bogged down or be damaged, or both, while traversing the right-of-way then Grantee shall cooperate to the

fullest extent with Grantor in remedying the situation and/or repairing the damage or both.

The right-of-way herein granted is subject to any existing mineral or agricultural leases, pipeline rights-of-way, electric line rights-of-way or other existing servitude. Grantee shall be responsible for any and all changes caused to any mineral or agricultural lease(s).

It is further expressly understood and agreed between the parties hereto that the right-of-way herein granted is solely for the purpose set out in this instrument and is not a conveyance of the fee title and it is further expressly understood and agreed that title to the lands described hereinabove will remain vested in Grantor, its successors or assigns, and the exercise of this servitude will in no way cause prescription against Grantor's ownership of the property.

This agreement may be executed in any number of counterparts with the same force and effect as if there were only one single instrument. If counterparts of this agreement are executed, the signature and acknowledgements of the parties as affixed thereto may be combined in and treated and given effect for all purposes as a single instrument.

TO HAVE AND TO HOLD unto Grantee, its successors, or assigns, until abandonment of the pipelines to be constructed on the right-of-way herein granted.

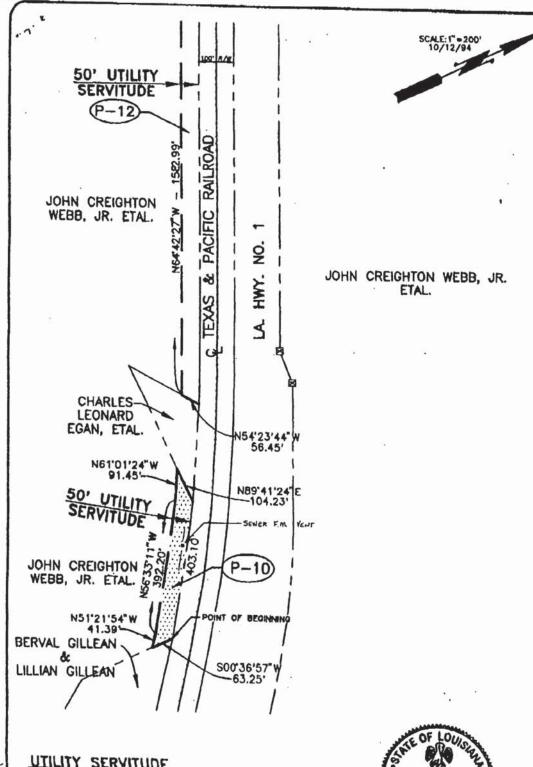
The right of way herein granted shall not be sold, assigned, donated or transferred without the prior written consent of the Grantor, such consent may not be unreasonably withheld. The Grantor agrees that the water and sewerage pipelines may be assigned or donated to the City of Shreveport.

presence of the undersigned competent with	tor has executed this grant of right-of-way in the tnesses, at Surevery, Cado on this ll day of May, 1995.
WITNESSES:	CADDO - BOSSIER PARISHES PORT COMMISSION
Thuanen	By C. Sen /tec_
Dolaw Hoult	Date: 5-11-95
Willy W. Hart Mark E John	JOHN CREIGHTON WEBB, JR., Grantor Date: 5-4-95
	HELEN WEBB COOLEY, Grantor Date:
	AZALIE WEBB CRAIN, Grantor Date:
	AZALIE CRAIN HOLLAND, Grantor Date:

page 5 of 6 pages

GEORGE CRAIN, JR., Grantor Date:
LUCILLE WEBB DAY, Grantor Date:
ANDREW WEBB DAY, Grantor Date:
JOHN WOODS DAY, Grantor Date:
PHILLIP GEORGE DAY, JR., Grantor

STATE OF LOUISIAND
PARISH/COUNTY OF LOCGO
BE IT KNOWN: That on this the day of war, 1995, before me, the undersigned Notary Public duly commissioned and qualified according to law and holding office and acting in and for the above named arish county and State, personally came and appeared Richard A Name to me well known, who, being first dely sworn, deposed and said on oath: That affiant is one of the attesting witnesses to the signature(s) of named in the above and foregoing instrument; that the said parties signed same
as their own true and voluntary act on the day and date therein mentioned, in the presence of the witnesses therein named and for the purposes and considerations therein set forth and expressed; and that the signatures of said parties, of affiant and of the other attesting witness are true and genuine.
Richard A. Nauce
Sworn to and subscribed before me on the day and date first above written. Notary Public in and for Cado Parish County, State of
my Commission is for life

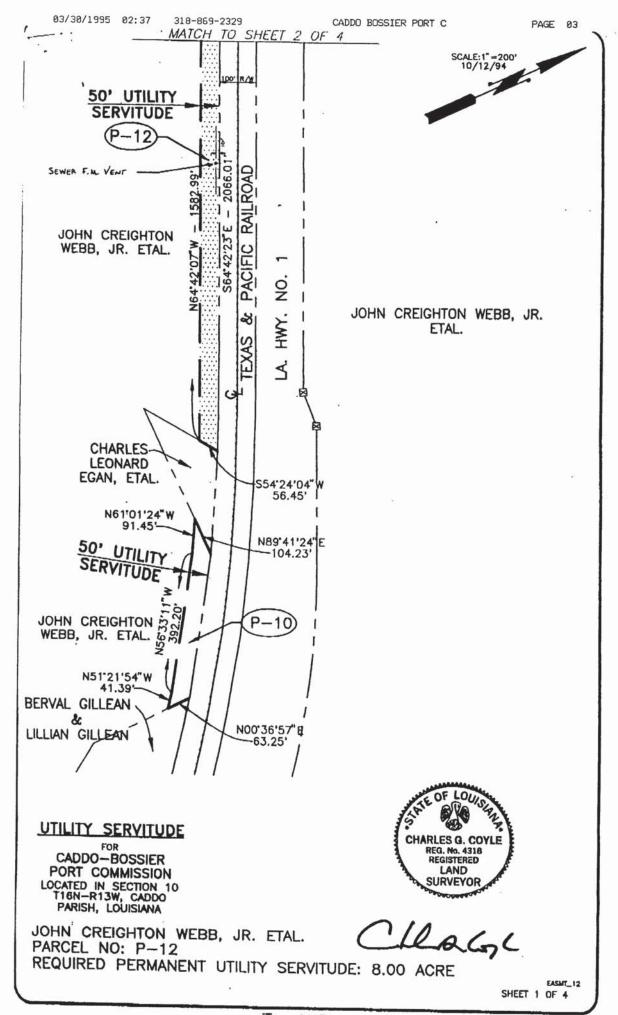


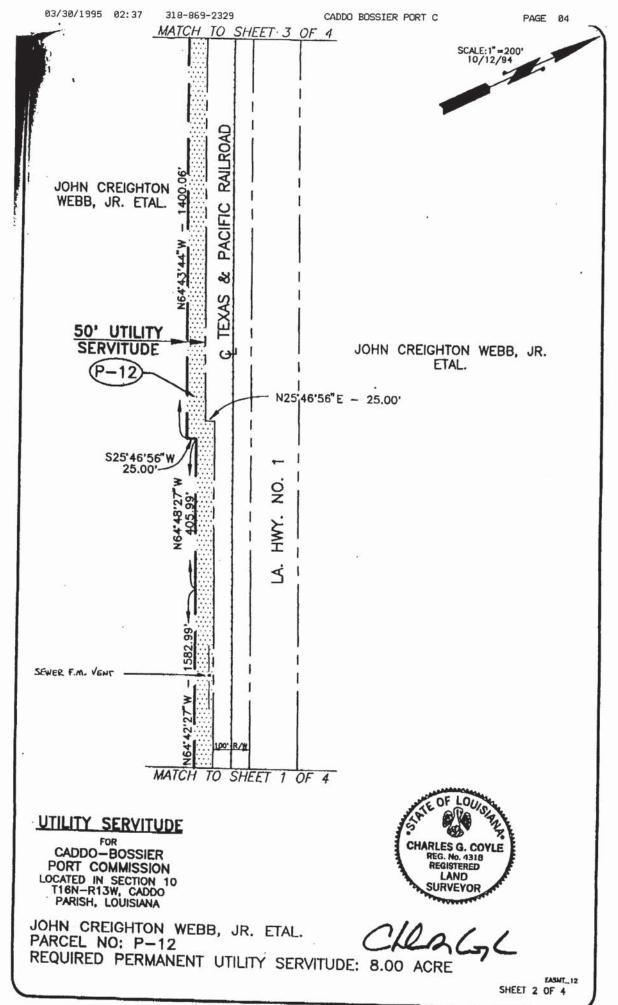
UTILITY SERVITUDE

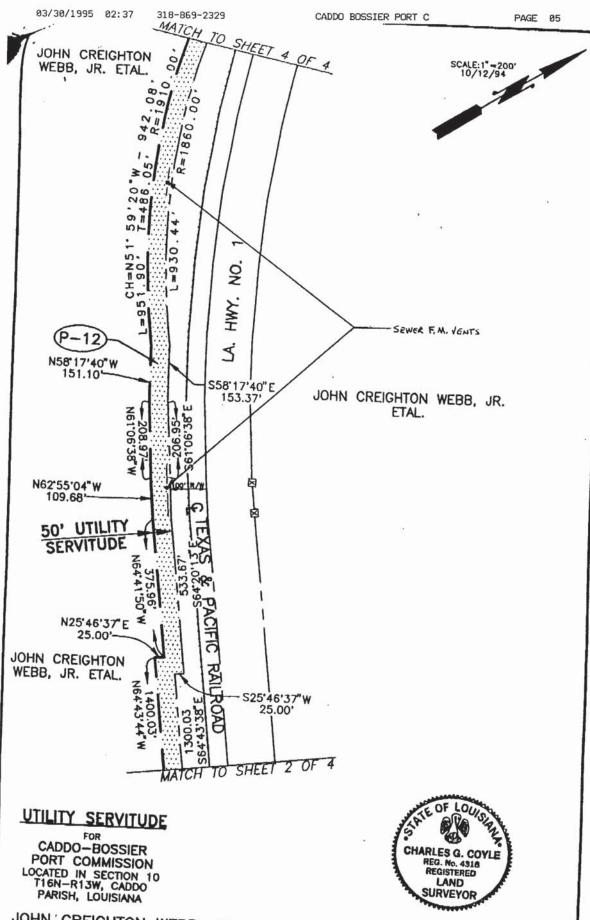
CADDO-BOSSIER PORT COMMISSION LOCATED IN SECTION 14 T16N-R13W, CADDO PARISH, LOUISIANA CHARLES Q. COYLE REGISTERED LAND

JOHN CREIGHTON WEBB, JR. ETAL. PARCEL NO: P-10

REQUIRED PERMANENT UTILITY SERVITUDE: 0.53 ACRE







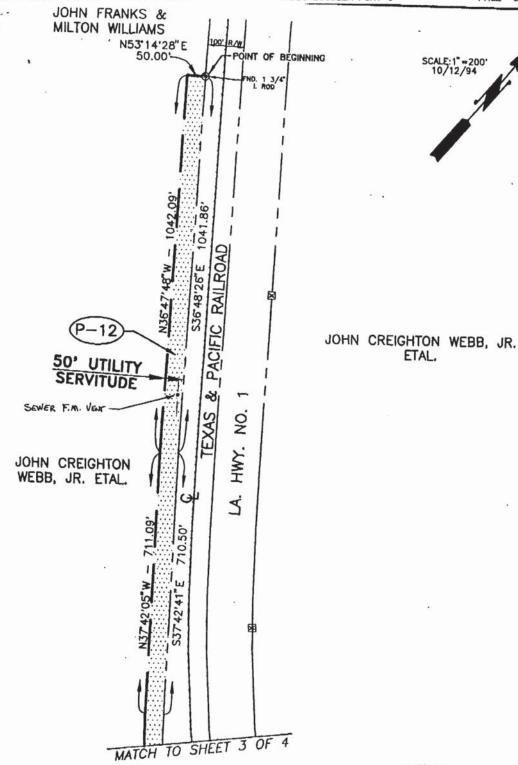
JOHN: CREIGHTON WEBB, JR. ETAL. PARCEL NO: P-12

REQUIRED PERMANENT UTILITY SERVITUDE: 8.00 ACRE

CHRAGE

EASMT_12

SHEET 3 OF 4



UTILITY SERVITUDE

FOR CADDO-BOSSIER PORT COMMISSION LOCATED IN SECTION 10 T16N-R13W, CADDO PARISH, LOUISIANA

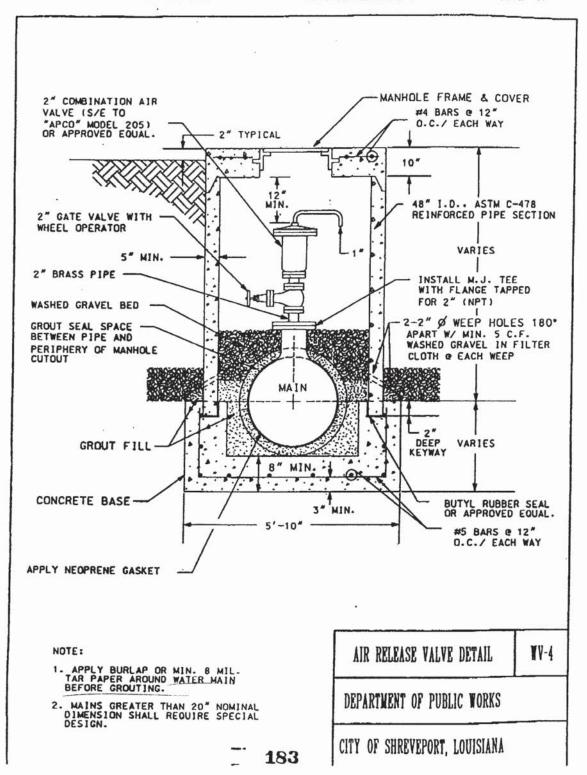
JOHN CREIGHTON WEBB, JR. ETAL. PARCEL NO: P-12 REQUIRED PERMANENT UTILITY SERVITUDE: 8.00 ACRE

CHARLES G. COYLE

REG. No. 4318 REGISTERED LAND

EASMY_12

SHEET 4 OF 4



FILED & NECORDE CADDO PARISH SHREVEPOR LA

C 3582

1840851

2003 FEB - 6 A 9 49

STATE OF LOUISIANA§

PROJECT NAME: Southern Loop
Water Main Extension

PARISH OF CADDO§

PROJECT NO: 99611.00 PARCEL NO: P-18

BE IT KNOWN, that this day before me, the undersigned authority, a Notary Public in and for Caddo Parish, Louisiana, personally came and appeared <u>TOHN FRANKS</u>, an authorized representative of Franks Realty, Inc., with a permanent mailing address of P.O. Box 7665, Shreveport, LA 71137, hereinafter referred to as Grantor, his heirs and assigns, who declared that he does hereby grant unto the CITY OF SHREVEPORT, hereinafter referred to as Grantee, its successors and assigns, the right to lay, maintain, inspect, repair, alter and relay public utility lines on, over, through, upon, across and under the following described property in the Parish of Caddo, State of Louisiana, to-wit:

"AS SHOWN ON THE ATTACHED PLAT AS P-18"

Be it further provided that the authorized personnel of the City of Shreveport and/or its contractors shall have the right of ingress and egress to the above described property at any time for the purpose of making repairs, alterations, and tests necessary in connection with operation of this line.

GRANTEE agrees to be responsible for the restoration of all excavations or alterations necessary in the prosecution of this work and to replace the ground surface, as far as it is practicable, to its original condition.

GRANTEE agrees to provide, at no cost to the Grantor, an 8" tee assembly with valve into the new water main at a location specified prior to construction by the Grantor.

Map Attached

489

GRANTEE hereby agrees and obligates itself to pay any damages which may occur to property, fences or buildings of said Grantor as a result of the exercise of the rights herein granted, the applicable law for any legal disputes or damages which are not mutually agreed upon arising out of this agreement shall be the law of (and all actions hereunder shall be brought in) the State of Louisiana and venue for such disputes shall be in the First Judicial District Court, Shreveport, Louisiana.

GRANTEE agrees to defend, indemnify and hold harmless grantor, its affiliate corporations, representatives, successors and assigns from and against any and all liabilities, losses, damages, suits, expenses, costs and judgements that may be claimed, brought or had against Grantor, its affiliate corporations, representatives, successors and assigns for any injury or death to any person or persons, or any damage to any real or personal property, resulting from or arising out of the operations and activities of the Grantee, its agents, employees or independent contractors upon the premises herein described.

Nothing contained herein shall be construed to mean that the City is to be held responsible for a depreciation in value of the described property occasioned by the existence of the servitude on or through the property. Owner of described property reserves the right to use the surface of the servitude area, pave over it, and make all reasonable uses except placement of permanent improvements thereon.

TO HAVE AND TO HOLD said servitude unto the said Grantee, its successors and assigns until said servitude to be exercised and so long thereafter as the same shall be useful for the above named purposes. This document is executed by both parties under the specified condition that at some point in the future, this servitude may be replaced by a revised servitude such as to accommodate future development more effectively and to the satisfaction of both parties.

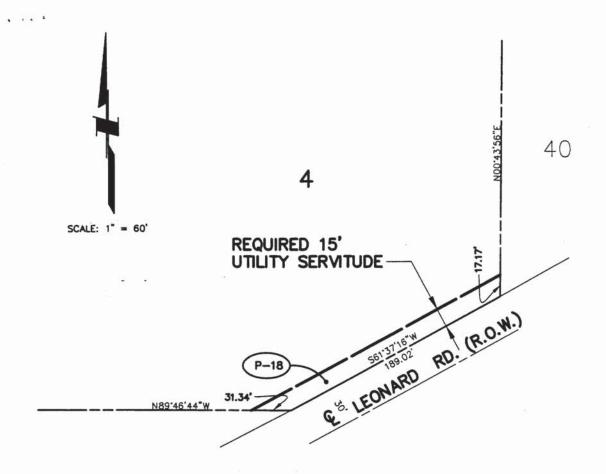
490

THUS DONE AND PASSED in Shreveport on the	27 th day of <u>January</u> , 2003 , in
the presence of Bobby E. Jelks and Misty	Sims, competent witnesses
who hereunto sign their names with the said appearers and	me, Notary, after reading the whole.
Misty Sins	OWNERS: Tranks Realty, Inc.
Diane Marie Fong, Notary Public Caddor Bussier Parishes, Louisiana Commission augures with life. NOTARY PUBLIC	aue Forg
THUS DONE AND PASSED in Shreveport on the	5+ day of February, 2003, in
the presence of Lauren C. Thompson and Ash.	len Wingins, competent
witnesses who hereunto sign their names with the said appear	earers and me, Notary, after reading the
whole.	
WINESSES:	CITY OF SHREVEPORT
Carly Wiggs Melon Flatter	BY: KEITH HIGHTOWER, MAYOR
MOTARI TUBLIC	**************************************

. ...

MALCOLM F. STADTLANDER, No ory Public Caddo Parish, Louisiana My Commission is for Life

491



NOTE: PLAT BASED ON CADDO PARISH RECORDED PROPERTY INFORMATION.

REQUIRED UTILITY SERVITUDE

492 TOCATED IN SECTION 14, T16N, R13W CADDO PARISH, LOUISIANA

OWNERSHIP: FRANKS REALTY, INC.
TAX ASSESSOR TRACT No.: 161310-001-0004
TOTAL AREA: 3,104.28 SQ. FT.

ENGINEERS & SURVEYORS

KIM BURROUGHS DEPUTY CLERK Gary Loftin
Caddo Parish Clerk of Court
2272353
02/10/2010 11:13 AM

SERVITUDE AGREEMENT

STATE OF LOUISIANA

KNOW ALL MEN BY THESE PRESENTS

PARISH OF CADDO

Grantor: FRA

FRANKS INVESTMENT COMPANY, L.L.C.

P. O. Box 7626

Shreveport, LA 71137-7626

Represented herein by Bobby E. Jelks, Manager

Grantee:

LOUISIANA MIDSTREAM GAS SERVICES, L.L.C.

§

8

P.O. Box 54915

Oklahoma City, OK 73154-0915

Represented herein by J. Michael Stice President [Title]

STATE OF LOUISIANA PARISH OF CADDO

I hereby certify this to be a full and true copy of an original instrument filed in my affice on the sate and hour and under the Registry Number stamped hereon to be

Conveyance Re

ecorded in the N

Jec ______

nder my hand and sead of office on said date of filin

BE IT KNOWN, FRANKS INVESTMENT COMPANY, L.L.C., being hereinafter referred to as "Grantor," for and in consideration of the sum of Ten and No/100 Dollars (\$10.00), in hand paid, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and the mutual obligations of the parties undertake herein, and for and upon such other terms and conditions hereinafter expressed does hereby grant, transfer, assign, set over and deliver unto Louisiana Midstream Gas Services, L.L.C., being hereinafter referred to as "Grantee," a servitude on, over and across the property described on Exhibit "A" attached hereto. Further, Grantor and Grantee agree as follows:

- Servitude. Grantor grants to Grantee an exclusive servitude (hereinafter called the "Servitude") over the following: (a) a strip of land Thirty feet (30') in width, being fifteen feet (15') on either side of the midline thereof on, in, over, under, through and across Grantor's land for the purpose of locating, establishing, constructing, laying, installing, operating, using, maintaining, inspecting, testing, protecting, cathodically protecting, repairing, assigning, restoring, renewing, reconstructing, replacing, substituting, changing, altering, converting, relocating within the Servitude, changing the size of, and removing therefrom a pipeline, together with such appliances, equipment and appurtenant facilities (above and below ground) as from time to time deemed by Grantee to be necessary, useful or convenient in connection with the use and convenient operation of the pipeline, and (b) a valve site 75 feet by 84.97 feet by 77.61 feet by 65.03 feet containing 0.13 acres for the pupose of laying, constructing, maintaining, operating, altering, replacing, and removing valves, meters, pig launchers, receivers (with fittings, appliances and appurtenant facilities) and any and all other related equipment, for the transportation and processing of oil, gas petroleum products or any other liquids, gases (including inert gases) or substances which can be transported through a pipeline, the Servitude and the land out of which the Servitude is being acquired ("Grantor's Land") being described in Exhibit "A" and Exhibit "B" attached hereto and made a part hereof; Grantor grants and Grantee accepts the Servitude solely for the transportation of natural gas produced under the terms of the Oil, Gas and Mineral Lease dated June 27, 2008, from Franks Investment Company, L.L.C., as Lessor, to Twin Cities Development, L.L.C., as Lessee, for which a Memorandum of Oil and Gas Lease was recorded at Registry Number 2166011 of the Conveyance Records of Caddo Parish, Louisiana (the "Subject Lease"), or from a unit in which all or any part of the Subject Lease is included, and Grantee agrees that the Servitude shall be used for no other purpose.
- 2. <u>Temporary Construction Servitude</u>. Grantor grants to Grantee a temporary servitude (hereinafter called "Temporary Construction Servitude") on, in, over, under, through and across Grantor's Land for the use and occupancy by Grantee, its agents, employees, contractors and subcontractors, only in connection with and during the original construction of the pipeline on the Servitude, the Temporary Construction Servitude and the land out of which the Servitude is being acquired being described in Exhibit "A" and Exhibit "B" attached hereto and made a part hereof. The Temporary Construction Servitude shall automatically terminate and revert to Grantor, free and clear of any right, title or interest in Grantee, upon whichever first occurs: (a) the completion of construction of the pipeline on the Servitude; or (b) upon one (1) year following the start of construction of the pipeline.
- 3. Grantee's Need for Additional Workspace. Grantor hereby expressly agrees that in the event the route of the pipeline to be constructed hereunder should cross any roads, railroads, creeks, or other waterways located on Grantor's Land or other places requiring extra work space, or if the rights granted to Grantee hereunder require extra work space, then Grantee shall have the right and temporary access to additional working space which may be necessary, useful or convenient therefor, and Grantee agrees to pay Grantor any and all damages which Grantor suffers by reason of Grantee's use of such additional work space.
- 4. Grantee's Access. Grantee shall have the right of ingress and egress to and from Grantor's Land, which right of ingress and egress, except as otherwise provided in this paragraph, shall be limited and confined to the boundaries of the Servitude and to the boundaries of the Temporary Construction Servitude while such Temporary Construction Servitude remains in effect. Grantee shall also have the right, for ingress and egress purposes only, to use any road or roads located now, or in the future, on Grantor's Land, and any gates located on such roads; provided, however, that in the event Grantee's use causes damage to such roads or gates, Grantee shall promptly restore such roads and gates to substantially the same or better condition as the roads and gates were in prior to the use thereof by Grantee.
- 5. <u>Servitude Clean Up.</u> Upon cessation of operations to construct, lay, install, operate, use, maintain, repair, restore, renew, reconstruct, replace, substitute, change, alter, convert, relocate within the Servitude, change the size of, and remove therefrom, together with such appliances, equipment and appurtenant facilities (above and below ground) the pipeline under the rights herein granted, Grantee agrees promptly to restore the surface of the Servitude

herein granted as nearly as practicable to the surface that existed as of the time of commencement of Grantee's operations, including but not limited to the removal of all debris created by such operations. In the event settling of the ground surface occurs as a result of any operations conducted by Grantee, Grantee agrees to restore the area promptly to the proper level if so requested by Grantor.

- 6. Grantee Right to Keep Servitude Clear. Grantee shall have the right from time to time to cut all trees, undergrowth, and the other obstructions that, in its judgment, may injure, endanger or interfere with the exercise by Grantee of the rights, privileges and Servitude herein granted, and Grantee shall not be liable for damages caused on the Servitude by keeping the Servitude clear of trees, undergrowth and brush in the exercise of the rights herein granted. Notwithstanding any other rights and obligations stated herein, Grantor shall have no right to payment for damage to any trees under this section, including trees considered as a growing crop.
- 7. Grantee's Cathodic Protection. Grantee shall have the right to cathodically protect the pipeline within the boundaries of the Servitude, and to install and maintain above-ground pipeline markers, vent pipes, and cathodic protection devices, power poles and test leads within the boundaries of the Servitude only at property line's, creek crossings, road crossings, railroads and at any other location as required by law.
- 8. <u>Pipeline Depth</u>. The pipeline will be buried to a minimum depth of thirty-six inches (36") below the surface of the ground at the time of construction and any then existing drainage ditches, creeks and roads, measured from the top of the pipe to the surface of the ground.
- 9. Grantee Abandonment. Grantee agrees that, in the event of non-use of the pipeline by Grantee, it sucessors or assigns for a period of eighteen consecutive months, the Servitude shall be considered abandoned, and Grantee shall furnish at its expense, upon the written request of Grantor, a release of the Servitude. Within 90 days of abandonment of the Servitude, Grantee shall commence the removal from Grantor's Land of the pipeline and any surface facilities used in connection therewith owned by Grantee, and such removal shall be completed within 90 days thereafter. In the event of the failure to commence removal of the pipeline and other facilities within the said 90 days or to complete such removal within said 90 days thereafter, Grantor may remove same, and Grantee shall liable to reimburse Grantor for the cost of removal.
- 10. Number of Pipelines. This Servitude shall be for one pipeline only.
- 11. <u>Initial and Future Damages Caused by Grantee</u>. Except as set forth in Paragraph 5 above, and after the initial construction, Grantee agrees to pay Grantor for all future damages to livestock, crops, improvements or other property of Grantor permitted to be located on the Servitude by the terms hereof where such damage is caused by Grantee or its agents, servants, employees, contractors or subcontractors in performing such future construction or other pipeline-related activities on the Servitude. Grantor agrees and understands Grantee's consideration herein acknowledged and paid does include payment of and for all initial damages caused by the initial construction of the pipeline and appurtenances, if any, including temporary work space, crop, timber and land surface damages.
- 12. Restrictions on Grantor's Use of Servitude. Except as set forth in Paragraph 13(C) below, without prior, written consent of the Grantee, Grantor shall not construct or permit construction within the boundaries of the Servitude, and Grantee shall have the right to prevent the construction within the boundaries of the Servitude and the right to remove therefrom, any and all types and sizes of houses, barns, buildings, structures, permanent impoundments of water, and natural or man-made obstructions, including but not limited to trees, brush, roots and other growth. Grantor shall not, nor permit third parties to, change the grade of the land or remove the cover over the pipeline or excavate on or near the Servitude without prior written consent of the Grantee, which consent shall not be unreasonably withheld.
- 13. <u>Grantor's Reservation of Rights</u>. Grantee does not acquire by this Servitude, but expressly takes subject to, and Grantor reserves to Grantor and to Grantor's heirs, successors and assigns, each and all of the following rights in and to Grantor's Land:
 - (A) All oil, gas, sulphur, uranium, fissional materials, and other minerals ("Grantor's Minerals") under the surface of the Servitude to be acquired herein; provided, however, that Grantor shall not be permitted to explore, drill, mine, produce or operate for Grantor's Minerals on the surface of the Servitude, but will be permitted to extract Grantor's Minerals from under the Servitude by directional drilling or other means, from land located outside the boundaries of the Servitude, so long as Grantee's use of the Servitude for the purposes set forth herein is not disturbed and the pipeline and facilities located thereon are left with proper, sufficient and permanent support and are not endangered, obstructed, injured or interfered with; and
 - (B) The right to pass back and forth across the Servitude on foot or in passenger cars and trucks; the right to plant, grow and harvest crops and gardens thereon and graze livestock on the Servitude.
 - (C) Grantor shall have the right to place along, across and over said Servitude and Right-of-Way as many roads, streets, sidewalks, passageways, electric light and power lines, water lines, sewer lines, and telephone lines, and any and all other utilities as said Grantor may desire. However, that if the same is placed along, as distinguished from across said Servitude, they shall not be placed within five (5') feet Grantee's pipeline.
- 14. Grantee's Withholding of Certain Taxes. The Internal Revenue Code provides that a Grantee of a real property interest in the United States must withhold tax if the Grantor is a foreign person. Grantor hereby certifies under oath

Line: FRANKS 11 H-1 Tract:LA-CADD-FR11-001.00 and subject to penalties of perjury that Grantor is not a foreign person, foreign corporation, foreign trust or foreign estate, for purposes of Internal Revenue Code compliance.

- 15. Grantee's Assignment. Grantee, and Grantee's successors and assigns, have the right to assign or transfer this Servitude Agreement, and all rights granted or created herein, in whole or in part to or among one or more persons, with each such person having the full rights and privileges herein granted, only after express written consent of Grantor, which consent shall not be unreasonably withheld. No assignment of rights in this Servitude Agreement shall relieve or release the Grantee, or Grantee's successors and assigns, from any obligations owed by Grantee to Grantor under this Servitude Agreement, and any assignment to be made by Grantee and/or by its successors and assigns, shall require the assignee therein to assume any and all obligations imposed on the Grantee to the Grantor in this Servitude Agreement.
- 16. <u>Related Defaults by Grantor</u>. In the event of default of payment by Grantor of any mortgage, deed of trust, taxes or any amount secured by line on the above described lands, the Grantee shall have the right, but not the obligation, at any time, to redeem for Grantor said lands described above and, upon such redemption, Grantee shall be subrogated to the rights of the holder of such mortgage, deed of trust or other line with respect to said lands.
- 17. <u>Binding Effect</u>. The terms and conditions hereof shall extend to and be binding upon and inure to the benefit of the parties hereto and their respective heirs, executors, administrators, devisees, successors, and assigns.
- 18. Entire Agreement. Subject to the terms hereof, Grantee shall have all other rights and benefits necessary, convenient or useful for the full and complete enjoyment and use of the Servitude for the purposes stated herein, including the right to all subsurface lateral support on other adjoining lands of Grantor that are necessary to maintain the pipeline. This document fully sets forth the terms and conditions mutually agreed to by the parties and there are no other oral or written agreements between the Grantor and Grantee which modify, alter or amend this Servitude.

19. Indemnity.

- (a) Grantee shall conduct its operations on the Servitude in compliance with all applicable environmental laws and regulations of any local or parish governing body, the State of Louisiana, United States of America, and all governmental agencies and bodies charged with enforcing environmental regulations. Grantee agrees that the Servitude and Temoporary Construction Servitude will be kept free from any environmental damage, including the presence of any hazardous materials or hazardous substances (as said hazardous materials and hazardous substances are defined under federal and state law), arising out of or resulting from the Grantee's operations on the Servitude or Temporary Construction Servitude. Notwithstanding the foregoing, Grantor understands and acknowledges that certain commercially available products used in the drilling, completion and work over of oil and gas wells ("Drilling Fluids") may contain component substances that are defined as "hazardous waste" or "hazardous substances." The natural gas transported through the pipeline on Grantor's property is raw, unprocessed natural gas received at the wellhead. Such natural gas may include residual amounts of Drilling Fluids from time to time. The transportation of such natural gas through the pipeline on Grantor's property will not be a breach of this covenant. In the event any of the operations of Grantee pursuant to this Servitude Agreement results in a loss or damage to the Grantor and/or the presence of hazardous materials and hazardous substances (as defined herein) placed on the Servitude, the Temporary Construction Servitude or Grantor's Land by Grantee, its employees, or subcontractors, Grantee agrees to hold harmless and indemnify Grantor for any loss or damage suffered by Grantor as a result thereof, including all fines and penalties assessed against Grantor by state or federal governmental agencies charged with enforcing environmental regulations, and all costs incurred to restore the environmental condition of the Servitude, Temporary Construction Servitude or Grantor's Land to the condition existing immediately prior to the execution date of this Servitude Agreement. This indemnification shall include, but not be limited to, any and all judgments or penalties to recover the cost of cleanup of any such release of hazardous materials or hazardous substances (as defined herein) by Grantee, its employees, agents, and subcontractors from or upon the Servitude, Temporary Construction Servitude or Grantor's Land and all expenses incurred by Grantor as a result of any civil action brought against Grantor as a result of Grantee's operations, including, but not limited to Grantor's attorneys' fees and all costs of defense. The duty to defend, hold harmless and indemnify the Grantor arises immediately upon the Grantor's notice of any demand, claim, or lawsuit that comes within the scope of this provision and any reasonable defense costs incurred in defending Grantor, its members, successors, or assigns, shall be paid by Grantee on behalf of Grantor. The indemnity provisions of this paragraph shall not apply if the loss or damage to the Grantor and/or the presence of hazardous materials and hazardous substances (as defined herein) results solely from the gross negligence or willful misconduct of Grantor, its members, successors or assigns.
- (b) Grantee shall be solely responsible for all damage to property and injury to persons, including death, by reason of, or in connection with its operations hereunder, and does hereby agree to protect, save harmless, and indemnify Grantor from and against any and all claims and liabilities for damages to property and injuries, including death, to persons, including, but not limited to, Grantee's employees, agents, and contractors, arising out of Grantee's operations under this Servitude Agreement, and Grantee shall, at Grantee's sole expense, handle all such claims, defend law suits or other actions which may be brought against Grantor therein, pay all judgments rendered against Grantor therein and reimburse Grantor for any expenditures which it may make on account thereof, including but not limited to Grantor's attorneys' fees and costs of defense, unless such damage or injury is caused solely by Grantor's gross negligence or willful misconduct. Grantee agrees it will obtain a comprehensive general liability policy (the "Policy") covering the Grantee's operations as referred to herein, which Policy shall provide for coverage limits of not less than \$5,000,000.00 per occurrence, with Grantor named as an additional insured in the Policy. Such Policy shall be endorsed to be primary over any insurance carried by Grantor. The Policy shall contain a provision that the Grantor shall be given a minimum of ten (10) days written notice by the insurer prior to the cancellation, termination, or change in such insurance. Grantee shall furnish a certificate of insurance to the

Line: FRANKS 11 H-1 Tract:LA-CADD-FR11-001.00

Grantor, which shall confirm that the Policy is in full force and effect, with the appropriate limits of coverage, and that the Grantor is named as an additional named insured in the Policy. Such insurance requirements may be met by a combination of self-insurance, primary and excess insurance policies, provided that (a) the maximum amount of liability exposure which the Grantee, or its successors and assigns, may self-insure against is limited to one million dollars (\$1,000,000.00) and (b) the Grantee's, or its successor's and assign's, obligations to Grantor, its members, successors, or assigns, with respect to indemnification and holding the Grantor, its members, successors, and assigns, harmless apply regardless of whether Grantee, or its successors and assigns, have exhausted applicable selfinsurance. The duty to defend, indemnify and hold Grantor harmless arises immediately upon the Grantor's notice of any demand, claim, or lawsuit that comes within the scope of this provision, and any reasonable defense costs incurred in defending Grantor shall be paid by Grantee on behalf of Grantor.

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals on the dates of their respective acknowledgments but effective as of the Effective Date.

WITNESSES: Mancy S. Duke (Signature of 1st Witness) Nancy S. Duke (Print name of 1st Witness) And J. Mulowe (Signature of 2nd Witness) Diane F. Marlowe (Print name of 2nd Witness)	GRANTOR: Franks Investment Company, L.L.C By: Bobby E.Jelks, Manager
WITNESSES: (Signature of 17 Witness) (Print name of 1st Witness)	GRANTEE: Louisiana Midstream Gas Services, L.L.C. By:
(Signature of 2 nd Witness) Sarah Hodges (Print name of 2 nd Witness)	J. Michael Stice President and Chief Operating Officer

ACKNOWLEDGMENT

PARISH OF On this $\frac{1}{9}$ day of $\frac{1}{10}$, 2010, before two competent witnesses and me, the undersigned authority, duly qualified and acting as such in and for the above parish, state aforesaid, appeared Bobby E. Jelks, to me personally known, who, being by me duly sworn, did say: That he is the duly authorized Manager of Franks Investment Company, L.L.C., a Louisiana limited liability company, that the foregoing instrument was signed by

him on behalf of said company, and that said appearer acknowledged said instrument to be the free act and deed of said company.

STATE OF LOUISIANA

IN WITNESS WHEREOF, I have begreunto set my hand and official seal.

Public in and for the State of Louisiana

Public in and for the State of Louisiana

Public in and for Lol # 05263

(Notary's Printed Name and ID # My Commission Expires:

ACKNOWLEDGMENT

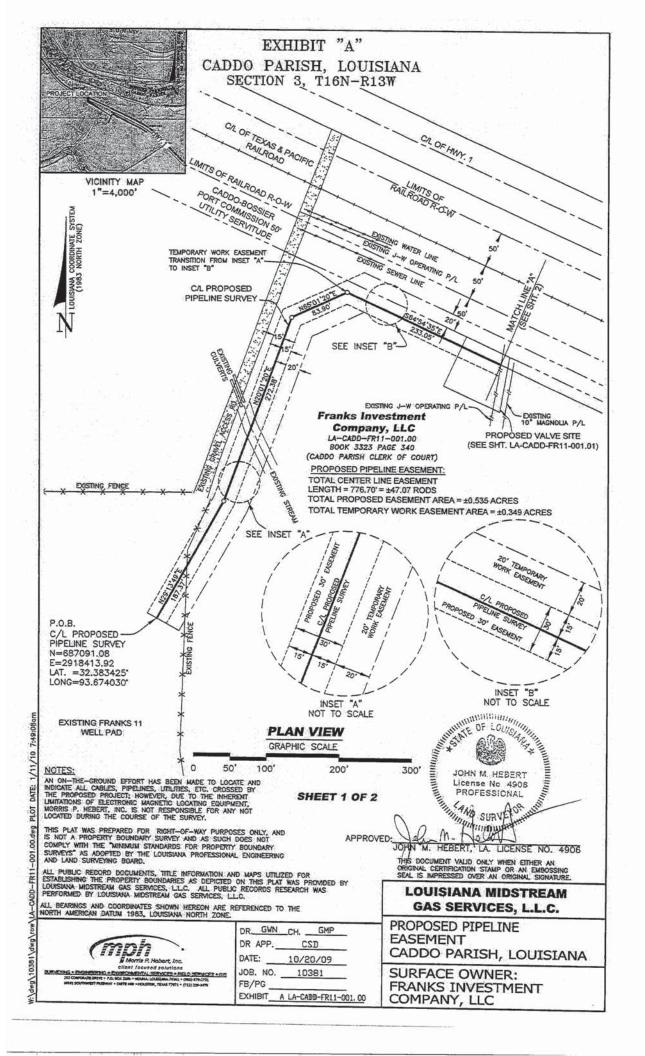
C	PARISHOF OKIALUMA
	On this A day of Low 2010, before two competent witnesses and me, the undersigned authority, duly qualified and acting as such in add for the above parish, state aforesaid, appeared Third Low to me personally known, who, being by me duly sworn, did say: That he is the duly authorized Physical Action of Louisiana Midstream Gas Services, L.L.C., that the foregoing instrument was signed by him on behalf of said company, and that said appearer acknowledged said instrument to be the free act and deed of said company.
	IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

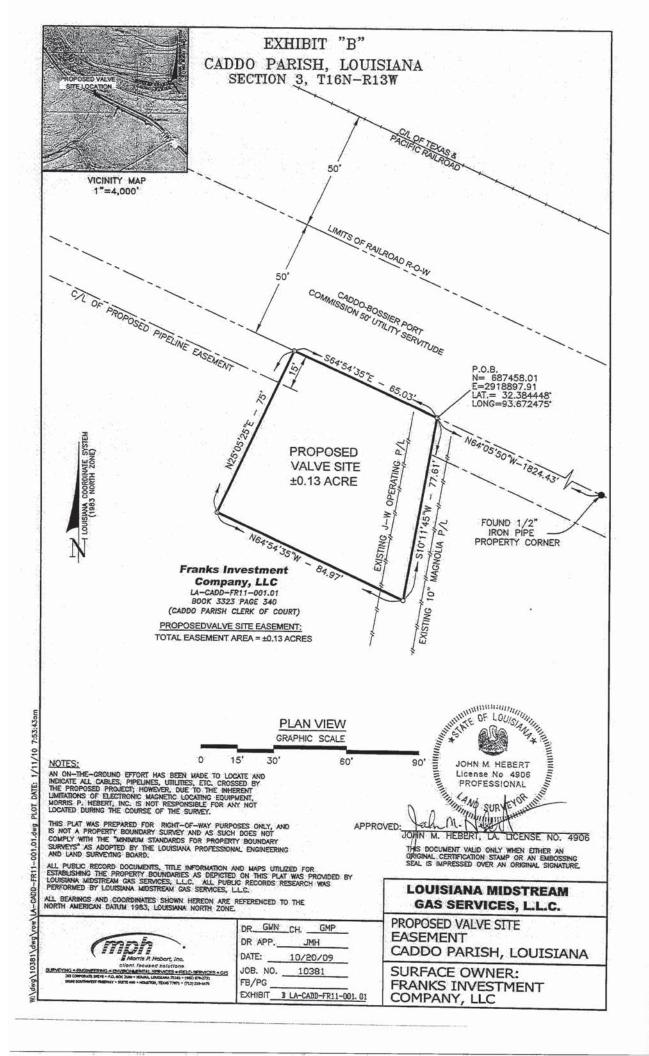
STATE OF LOUISIANA OK (ahoma

Notary Public in and for the State of Louisiana
(Notary's Printed Name and ID #)
My Commission Expires: 2. 20

07001656 EXP. 02/20/11

Line: FRANKS 11 H-1 Tract:LA-CADD-FR11-001.00





Gary Loftin Caddo Parish Clerk of Court

SERVITUDE AGREEMENT

STATE OF LOUISIANA PARISH OF CADDO

recorded in the

STATE OF LOUISIANA

PARISH OF CADDO

KNOW ALL MEN BY THESE PRESENTS! hereby certify this to be a full and true copy of an original instrument filed in my office on the date and hour

and under the Registry Number stamped hereon to be

Grantor:

FRANKS INVESTMENT COMPANY, L.L.C.

P. O. Box 7626

Shreveport, LA 71137-7626

Represented herein by Bobby E. Jelks, Manager

LOUISIANA MIDSTREAM GAS SERVICES, L.L.C.

Grantee:

P.O. Box 54915 Oklahoma City, OK 73154-0915

Represented herein by J. Microsel StickTitle] President of coc

Records.

BE IT KNOWN, FRANKS INVESTMENT COMPANY, L.L.C., being hereinafter referred to as "Grantor," for and in consideration of the sum of Ten and No/100 Dollars (\$10.00), in hand paid, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and the mutual obligations of the parties undertake herein, and for and upon such other terms and conditions hereinafter expressed does hereby grant, transfer, assign, set over and deliver unto Louisiana Midstream Gas Services, L.L.C., being hereinafter referred to as "Grantee," a servitude on, over and across the property described below located in Section 3, T16N, R13W, Caddo Parish, Louisiana. Further, Grantor and Grantee agree as follows:

- Servitude. Grantor grants to Grantee an exclusive servitude (hereinafter called the "Servitude") over the following: (a) a strip of land Thirty feet (30') in width, being fifteen feet (15') on either side of the midline thereof on, in, over, under, through and across Grantor's land for the purpose of locating, establishing, constructing, laying, installing, operating, using, maintaining, inspecting, testing, protecting, cathodically protecting, repairing, assigning, restoring, renewing, reconstructing, replacing, substituting, changing, altering, converting, relocating within the Servitude, changing the size of, and removing therefrom a pipeline, together with such appliances, equipment and appurtenant facilities (above and below ground) as from time to time deemed by Grantee to be necessary, useful or convenient in connection with the use and convenient operation of the pipeline, the Servitude and the land out of which the Servitude is being acquired ("Grantor's Land") being described in Exhibit "A" attached hereto and made a part hereof; Grantor grants and Grantee accepts the Servitude solely for the transportation of natural gas produced under the terms of the Oil, Gas and Mineral Lease dated June 27, 2008, from Franks Investment Company, L.L.C., as Lessor, to Twin Cities Development, L.L.C., as Lessee (the "Lease"), for which a Memorandum of Oil and Gas Lease was recorded at Registry Number 2166011 of the Conveyance Records of Caddo Parish, Louisiana, or from a unit in which any land subject to the Lease is included, and Grantee agrees that the Servitude shall be used for no
- Temporary Construction Servitude. Grantor grants to Grantee a temporary servitude (hereinafter called "Temporary Construction Servitude") on, in, over, under, through and across Grantor's Land for the use and occupancy by Grantee, its agents, employees, contractors and subcontractors, only in connection with and during the original construction of the pipeline on the Servitude, the Temporary Construction Servitude and the land out of which the Servitude is being acquired being described in Exhibit "A" attached hereto and made a part hereof. The Temporary Construction Servitude shall automatically terminate and revert to Grantor, free and clear of any right, title or interest in Grantee, upon whichever first occurs: (a) the completion of construction of the pipeline on the Servitude; or (b) upon one (1) year following the start of construction of the pipeline.
- Grantee's Need for Additional Workspace. Grantor hereby expressly agrees that in the event the route of the pipeline to be constructed hereunder should cross any roads, railroads, creeks, or other waterways located on Grantor's Land or other places requiring extra work space, or if the rights granted to Grantee hereunder require extra work space, then Grantee shall have the right and temporary access to additional working space which may be necessary, useful or convenient therefor, and Grantee agrees to pay Grantor any and all damages which Grantor suffers by reason of Grantee's use of such additional work space.
- Grantee's Access. Grantee shall have the right of ingress and egress to and from Grantor's Land, which right of ingress and egress, except as otherwise provided in this paragraph, shall be limited and confined to the boundaries of the Servitude and to the boundaries of the Temporary Construction Servitude while such Temporary Construction Servitude remains in effect. Grantee shall also have the right, for ingress and egress purposes only, to use any road or roads located now, or in the future, on Grantor's Land, and any gates located on such roads; provided, however, that in the event Grantee's use causes damage to such roads or gates, Grantee shall promptly restore such roads and gates to substantially the same or better condition as the roads and gates were in prior to the use thereof by Grantee.
- Servitude Clean Up. Upon cessation of operations to construct, lay, install, operate, use, maintain, repair, restore, renew, reconstruct, replace, substitute, change, alter, convert, relocate within the Servitude, change the size of, and remove therefrom, together with such appliances, equipment and appurtenant facilities (above and below ground) the pipeline under the rights herein granted, Grantee agrees promptly to restore the surface of the Servitude herein granted as nearly as practicable to the surface that existed as of the time of commencement of Grantee's operations, including but not limited to the removal of all debris created by such operations. In the event settling of the ground surface occurs as a result of any operations conducted by Grantee, Grantee agrees to restore the area promptly to the proper level if so requested by Grantor.

- 6. Grantee Right to Keep Servitude Clear. Grantee shall have the right from time to time to cut all trees, undergrowth, and the other obstructions that, in its judgment, may injure, endanger or interfere with the exercise by Grantee of the rights, privileges and Servitude herein granted, and Grantee shall not be liable for damages caused on the Servitude by keeping the Servitude clear of trees, undergrowth and brush in the exercise of the rights herein granted. Notwithstanding any other rights and obligations stated herein, Grantor shall have no right to payment for damage to any trees under this section, including trees considered as a growing crop.
- 7. Grantee's Cathodic Protection. Grantee shall have the right to cathodically protect the pipeline within the boundaries of the Servitude, and to install and maintain above-ground pipeline markers, vent pipes, and cathodic protection devices, power poles and test leads within the boundaries of the Servitude only at property lines, creek crossings, road crossings, railroads and at any other location as required by law.
- 8. <u>Pipeline Depth</u>. The pipeline will be buried to a minimum depth of sixty inches (60") below the surface of the ground at the time of construction and any then existing drainage ditches, creeks and roads, measured from the top of the pipe to the surface of the ground.
- 9. Grantee Abandonment. Grantee agrees that, in the event of non-use of the pipeline by Grantee, it sucessors or assigns for a period of eighteen consecutive months, the Servitude shall be considered abandoned, and Grantee shall furnish at its expense, upon the written request of Grantor, a release of the Servitude. Within 90 days of abandonment of the Servitude, Grantee shall commence the removal from Grantor's Land of the pipeline and any surface facilities used in connection therewith owned by Grantee, and such removal shall be completed within 90 days thereafter. In the event of the failure to commence removal of the pipeline and other facilities within the said 90 days or to complete such removal within said 90 days thereafter, Grantor may remove same, and Grantee shall liable to reimburse Grantor for the cost of removal.
- 10. Number of Pipelines. This Servitude shall be for one pipeline only.
- 11. <u>Initial and Future Damages Caused by Grantee</u>. Except as set forth in Paragraph 5 above, and after the initial construction, Grantee agrees to pay Grantor for all future damages to livestock, crops, improvements or other property of Grantor permitted to be located on the Servitude by the terms hereof where such damage is caused by Grantee or its agents, servants, employees, contractors or subcontractors in performing such future construction or other pipeline-related activities on the Servitude. Grantor agrees and understands Grantee's consideration herein acknowledged and paid does include payment of and for all initial damages caused by the initial construction of the pipeline and appurtenances, if any, including temporary work space, crop, timber and land surface damages.
- 12. Restrictions on Grantor's Use of Servitude. Except as set forth in Paragraph 13(C) below, without prior, written consent of the Grantee, Grantor shall not construct or permit construction within the boundaries of the Servitude, and Grantee shall have the right to prevent the construction within the boundaries of the Servitude and the right to remove therefrom, any and all types and sizes of houses, barns, buildings, structures, permanent impoundments of water, and natural or man-made obstructions, including but not limited to trees, brush, roots and other growth. Grantor shall not, nor permit third parties to, change the grade of the land or remove the cover over the pipeline or excavate on or near the Servitude without prior written consent of the Grantee, which consent shall not be unreasonably withheld.
- 13. <u>Grantor's Reservation of Rights</u>. Grantee does not acquire by this Servitude, but expressly takes subject to, and Grantor reserves to Grantor and to Grantor's heirs, successors and assigns, each and all of the following rights in and to Grantor's Land:
 - (A) All oil, gas, sulphur, uranium, fissional materials, and other minerals ("Grantor's Minerals") under the surface of the Servitude to be acquired herein; provided, however, that Grantor shall not be permitted to explore, drill, mine, produce or operate for Grantor's Minerals on the surface of the Servitude, but will be permitted to extract Grantor's Minerals from under the Servitude by directional drilling or other means, from land located outside the boundaries of the Servitude, so long as Grantee's use of the Servitude for the purposes set forth herein is not disturbed and the pipeline and facilities located thereon are left with proper, sufficient and permanent support and are not endangered, obstructed, injured or interfered with; and
 - (B) The right to pass back and forth across the Servitude on foot or in passenger cars and trucks; the right to plant, grow and harvest crops and gardens thereon and graze livestock on the Servitude.
 - (C) Grantor shall have the right to place along, across and over said Servitude and Right-of-Way as many roads, streets, sidewalks, passageways, electric light and power lines, water lines, sewer lines, and telephone lines, and any and all other utilities as said Grantor may desire. However, that if the same is placed along, as distinguished from across said Servitude, they shall not be placed within five (5') feet Grantee's pipeline.
- 14. <u>Grantee's Withholding of Certain Taxes</u>. The Internal Revenue Code provides that a Grantee of a real property interest in the United States must withhold tax if the Grantor is a foreign person. Grantor hereby certifies under oath and subject to penalties of perjury that Grantor is not a foreign person, foreign corporation, foreign trust or foreign estate, for purposes of Internal Revenue Code compliance.
- 15. <u>Grantee's Assignment.</u> Grantee, and Grantee's successors and assigns, have the right to assign or transfer this Servitude Agreement, and all rights granted or created herein, in whole or in part to or among one or more persons, with each such person having the full rights and privileges herein granted, only after express written consent of

Grantor, which consent shall not be unreasonably withheld. No assignment of rights in this Servitude Agreement shall relieve or release the Grantee, or Grantee's successors and assigns, from any obligations owed by Grantee to Grantor under this Servitude Agreement, and any assignment to be made by Grantee and/or by its successors and assigns, shall require the assignee therein to assume any and all obligations imposed on the Grantee to the Grantor in this Servitude Agreement.

- 16. Related Defaults by Grantor. In the event of default of payment by Grantor of any mortgage, deed of trust, taxes or any amount secured by line on the above described lands, the Grantee shall have the right, but not the obligation, at any time, to redeem for Grantor said lands described above and, upon such redemption, Grantee shall be subrogated to the rights of the holder of such mortgage, deed of trust or other line with respect to said lands.
- 17. <u>Binding Effect</u>. The terms and conditions hereof shall extend to and be binding upon and inure to the benefit of the parties hereto and their respective heirs, executors, administrators, devisees, successors, and assigns.
- 18. Entire Agreement. Subject to the terms hereof, Grantee shall have all other rights and benefits necessary, convenient or useful for the full and complete enjoyment and use of the Servitude for the purposes stated herein, including the right to all subsurface lateral support on other adjoining lands of Grantor that are necessary to maintain the pipeline. This document fully sets forth the terms and conditions mutually agreed to by the parties and there are no other oral or written agreements between the Grantor and Grantee which modify, alter or amend this Servitude.

19. Indemnity.

- (a) Grantee shall conduct its operations on the Servitude in compliance with all applicable environmental laws and regulations of any local or parish governing body, the State of Louisiana, United States of America, and all governmental agencies and bodies charged with enforcing environmental regulations. Grantee agrees that the Servitude and Temoporary Construction Servitude will be kept free from any environmental damage, including the presence of any hazardous materials or hazardous substances (as said hazardous materials and hazardous substances are defined under federal and state law), arising out of or resulting from the Grantee's operations on the Servitude or Temporary Construction Servitude. Notwithstanding the foregoing, Grantor understands and acknowledges that certain commercially available products used in the drilling, completion and work over of oil and gas wells ("Drilling Fluids") may contain component substances that are defined as "hazardous waste" or "hazardous substances." The natural gas transported through the pipeline on Grantor's property is raw, unprocessed natural gas received at the wellhead. Such natural gas may include residual amounts of Drilling Fluids from time to time. The transportation of such natural gas through the pipeline on Grantor's property will not be a breach of this covenant. In the event any of the operations of Grantee pursuant to this Servitude Agreement results in a loss or damage to the Grantor and/or the presence of hazardous materials and hazardous substances (as defined herein) placed on the Servitude, the Temporary Construction Servitude or Grantor's Land by Grantee, its employees, or subcontractors, Grantee agrees to hold harmless and indemnify Grantor for any loss or damage suffered by Grantor as a result thereof, including all fines and penalties assessed against Grantor by state or federal governmental agencies charged with enforcing environmental regulations, and all costs incurred to restore the environmental condition of the Servitude, Temporary Construction Servitude or Grantor's Land to the condition existing immediately prior to the execution date of this Servitude Agreement. This indemnification shall include, but not be limited to, any and all judgments or penalties to recover the cost of cleanup of any such release of hazardous materials or hazardous substances (as defined herein) by Grantee, its employees, agents, and subcontractors from or upon the Servitude, Temporary Construction Servitude or Grantor's Land and all expenses incurred by Grantor as a result of any civil action brought against Grantor as a result of Grantee's operations, including, but not limited to Grantor's attorneys' fees and all costs of defense. The duty to defend, hold harmless and indemnify the Grantor arises immediately upon the Grantor's notice of any demand, claim, or lawsuit that comes within the scope of this provision and any reasonable defense costs incurred in defending Grantor, its members, successors, or assigns, shall be paid by Grantee on behalf of Grantor. The indemnity provisions of this paragraph shall not apply if the loss or damage to the Grantor and/or the presence of hazardous materials and hazardous substances (as defined herein) results solely from the gross negligence or willful misconduct of Grantor, its members, successors or assigns.
- (b) Grantee shall be solely responsible for all damage to property and injury to persons, including death, by reason of, or in connection with its operations hereunder, and does hereby agree to protect, save harmless, and indemnify Grantor from and against any and all claims and liabilities for damages to property and injuries, including death, to persons, including, but not limited to, Grantee's employees, agents, and contractors, arising out of Grantee's operations under this Servitude Agreement, and Grantee shall, at Grantee's sole expense, handle all such claims, defend law suits or other actions which may be brought against Grantor therein, pay all judgments rendered against Grantor therein and reimburse Grantor for any expenditures which it may make on account thereof, including but not limited to Grantor's attorneys' fees and costs of defense, unless such damage or injury is caused solely by Grantor's gross negligence or willful misconduct. Grantee agrees it will obtain a comprehensive general liability policy (the "Policy") covering the Grantee's operations as referred to herein, which Policy shall provide for coverage limits of not less than \$5,000,000.00 per occurrence, with Grantor named as an additional insured in the Policy. Such Policy shall be endorsed to be primary over any insurance carried by Grantor. The Policy shall contain a provision that the Grantor shall be given a minimum of ten (10) days written notice by the insurer prior to the cancellation, termination, or change in such insurance. Grantee shall furnish a certificate of insurance to the Grantor, which shall confirm that the Policy is in full force and effect, with the appropriate limits of coverage, and that the Grantor is named as an additional named insured in the Policy. Such insurance requirements may be met by a combination of self-insurance, primary and excess insurance policies, provided that (a) the maximum amount of liability exposure which the Grantee, or its successors and assigns, may self-insure against is limited to one million dollars (\$1,000,000.00) and (b) the Grantee's, or its successor's and assign's, obligations to Grantor, its members, successors, or assigns, with respect to indemnification and holding the Grantor, its members, successors, and

assigns, harmless apply regardless of whether Grantee, or its successors and assigns, have exhausted applicable self-insurance. The duty to defend, indemnify and hold Grantor harmless arises immediately upon the Grantor's notice of any demand, claim, or lawsuit that comes within the scope of this provision, and any reasonable defense costs incurred in defending Grantor shall be paid by Grantee on behalf of Grantor.

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals on the dates of their respective acknowledgments but effective as of the Effective Date.

WITNESSES: Co kfy L

(Print name of 1st Witness)

GRANTOR:

ranks investment company, IL.C

Bobby B

(Print name of 2nd Witnes

WITNESSES:

(Signature of 1st Witness)

(Print name of 1st Witnes)

GRANTEE:

Louisiana Midstream Gas Services, L.L.C.

By: Shu Oth

J. Michael Stice

President & Chief Operating Officer

Print name of 2nd Witness)

ACKNOWLEDGMENT

STATE OF LOUSIANA

PARISH OF

On this day of ______, 2010, before two competent witnesses and me, the undersigned authority, duly qualified and acting as such in and for the above parish, state aforesaid, appeared Bobby E. Jelks, to me personally known, who, being by me duly sworn, did say: That he is the duly authorized Manager of Franks Investment Company, L.L.C., a Louisiana limited liability company, that the foregoing instrument was signed by him on behalf of said company, and that said appearer acknowledged said instrument to be the free act and deed of said company.

IN WITNESS WHEREOF, I have hereunt set my hand and official set

Notary Public in and for the State of Louisiana

(Notary's Printed Name and ID #)
My Commission Expires:

F. Drake Lee, Bar ID No. 08263 Notary Public Caddo Parish, Louisiana My Commission Is For Life

ACKNOWLEDGMENT

STATE OF: Dictahoma County OF Oklahoma

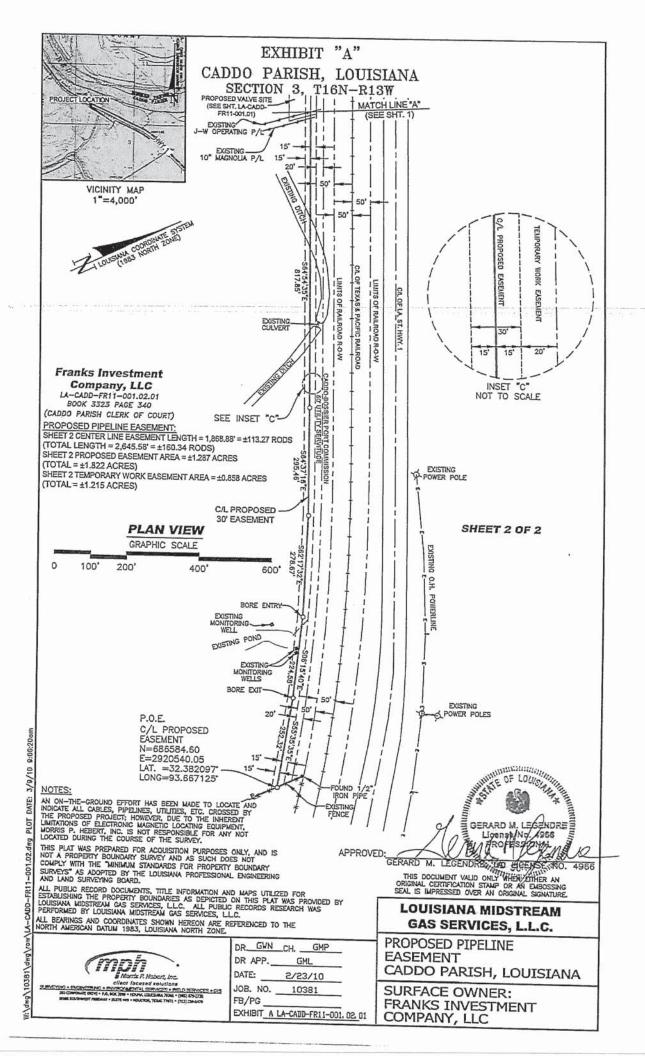
On this 15th day of March, 2010, before two competent witnesses and me, the undersigned authority, duly qualified and acting as such in and for the above parish, state aforesaid, appeared 3- Michael Stice to me personally known, who, being by me duly sworn, did say: That he is the duly authorized President a COO of Louisiana Midstream Gas Services, L.L.C., that the foregoing instrument was signed by him on behalf of said company, and that said appearer acknowledged said instrument to be the free act and deed of said company.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

ARAH BAY TAPE #06002337 EXP. 03/01/14 OF OKL

Notary Public in and for the State of Okichoma
Tarah Bates Obox2337
(Notary's Printed Name and ID #)
My Commission Expires: 03/01/2014

Line: FRANKS 11 H-1 Tract:LA-CADD-FR11-001.02.01



Wallace Lake Ext Phase II AFE# 552363254001001 Tract# 09

SERVITUDE AGREEMENT

STATE OF LOUISIANA PARISH OF CADDO

Caddo Parish Clerk of Court 2378023

Grantor(s):

FRANKS INVESTMENT COMPANY, L.L.C.

§ §

P. O. Box 7626

Shreveport, LA 71137-7626

Represented herein by Bobby E. Jelks, Manager

Grantee:

KINDERHAWK FIELD SERVICES, L.L.C.

519 Highway 57

Haughton, LA 71037-7606

Represented herein by Johnay Make Attagen

WENDY CLARK

BE IT KNOWN, that FRANKS INVESTMENT COMPANY, L.L.C., being hereinafter referred to as "Grantor," for and in consideration of the sum of Ten and No/100 Dollars (\$10.00), in hand paid, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and the mutual obligations of the parties undertaken herein, and for and upon such other terms and conditions hereinafter expressed, do hereby grant, transfer, assign, set over and deliver unto Kinderhawk Field Services, L.L.C., being hereinafter referred to as "Grantee," a servitude upon the following agreed terms and conditions:

- 1. <u>Servitude</u>. Grantor grants to Grantee an exclusive servitude of twenty feet (20') in width (hereinafter called the "Servitude"), on, in, over, under, through and across Grantor's land for the purpose of locating, establishing, constructing, laying, installing, operating, using, maintaining, inspecting, testing, protecting, cathodically protecting, repairing, assigning, restoring, renewing, reconstructing, replacing, substituting, changing, altering, converting, and removing therefrom a Class 4 pipeline, together with such appliances, equipment and appurtenant facilities (above and below ground) as from time to time deemed by Grantee to be necessary, useful or convenient in connection with the use and convenient operation of the pipeline, for the transporation of natural gas and its constituents. The Servitude and the land out of which the Servitude is being acquired ("Grantor's Land") are depicted on Exhibit "A" attached hereto and made a part hereof. As depicted on Exhibit "A," the pipeline shall be constructed such that (a) the portion of Grantor's Land burdened by the Servitude for the location of segments 5 through 10 of the pipeline lies entirely within the bounds of the one-hundred foot drainage maintenance servitude owned by the Caddo Levee District (the "CLD Servitude"); and (b) the location of the pipeline is no closer than ten feet (10') to the outer boundary of the CLD Servitude.
- 2. <u>Temporary Construction Servitude</u>. Grantor also grants to Grantee a temporary servitude (hereinafter called "Temporary Construction Servitude") of forty feet (40') in width on, in, over, under, through and across Grantor's Land immediately adjacent to the Servitude and a fifty foot (50') by two-hundred foot (200') square adjacent to the eastern end of segment 13 of the pipeline for the use and occupancy by Grantee, its agents, employees, contractors and subcontractors, only in connection with and during the original construction of the pipeline on the Servitude. The location of the Temporary Construction Servitude is depicted on Exhibit "A" attached hereto and made a part hereof. The Temporary Construction Servitude shall automatically terminate and revert to Grantor, free and clear of any right, title or interest in Grantee, upon whichever first occurs: (a) the completion of construction of the pipeline on the Servitude; or (b) the expiration of one (1) year following the start of construction of the pipeline.
- 3. <u>Grantee's Access.</u> Grantee's right of ingress and egress to and from Grantor's Land shall be limited and confined to the boundaries of the Servitude and to the boundaries of the Temporary Construction Servitude while such Temporary Construction Servitude remains in effect.
- 4. <u>Verification of Location of Pipeline Prior to Construction</u>. Prior to commencement of construction of the pipeline, Grantee shall stake the following on Grantor's Land: (a) each of the points (the "Points") identified on Exhibit "A" as marking the beginning or ending point of a segment of the pipeline, and (b) for each such point, on a line perpendicular to Bayou Pierre, the outer boundary of the CLD Servitude as identied by Grantee. Grantee shall notify Grantor when the staking has been completed, and within ten days thereafter Grantor shall inspect the location and notify Grantee whether Grantor approves of the pipeline location. In the event any of the Points is determined to be at a location other than as depicted on Exhibit "A," Grantee shall be required to relocate such Point(s) to the proper location.
- 5. <u>Servitude Clean Up.</u> Upon completion of operations to construct the pipeline, or upon completion thereafter of any operations to maintain, repair, restore, renew, reconstruct, replace, substitute, change, alter, or convert the pipeline, Grantee agrees promptly to restore the surface of the Servitude herein granted (and, in the case of the original construction, the surface of the Temporary Construction Servitude herein granted) as nearly as practicable to the surface that existed as of the time of commencement of Grantee's operations, including but not limited to the removal of all debris created by such operations. In the event settling of the ground surface occurs as a result of any operations conducted by Grantee, Grantee agrees to restore the area promptly to the proper level if so requested by Grantor.
- Permits and Licenses. Grantee warrants and represents that (a) it has identified and obtained all permits and licenses required by any local, state or federal agency having jurisdiction to regulate the activities and operations of

Grantee contemplated by this Servitude; and (b) throughout the term of this Servitude all of Grantee's operations shall be conducted in accordance with the terms of such permits and licenses, including but not limited to the terms and specifications of the permit issued by the Caddo Levee District on October 12, 2011, and in accordance with all applicable laws, rules and regulations of any authority having jurisdiction over Grantee's operations.

- 7. Grantee's Cathodic Protection and Signage. Grantee shall have the right to cathodically protect the pipeline within the boundaries of the Servitude, and to install and maintain above-ground pipeline markers (which, to the extent not otherwise required by law, shall be of design approved by Grantor), vent pipes, and cathodic protection devices, power poles and test leads within the boundaries of the Servitude only at property lines, creek crossings, road crossings, railroads and at any other location as required by law.
- 8. <u>Pipeline Size and Depth.</u> The width of the pipeline will be no larger than sixteen inches (16"). It will be buried to a minimum depth of (a) sixty inches (60") below the surface of the ground at the time of construction and any then existing drainage ditches, creeks and roads, measured from the top of the pipe to the surface of the ground; or (b) such depth at any point as may be required by existing law or regulation, whichever is deeper.
- 9. Abandonment and Removal. Grantee agrees that, in the event of non-use of the pipeline by Grantee, it successors or assigns for a period of eighteen consecutive months, the Servitude shall be considered abandoned, and Grantee shall furnish at its expense, upon the written request of Grantor, a release of the Servitude. Within 90 days of abandonment of the Servitude, Grantee shall commence the removal from Grantor's Land of the pipeline and any surface facilities used in connection therewith owned by Grantee, and such removal shall be completed within 90 days thereafter. In the event of the failure to commence removal of the pipeline and other facilities within 90 days of abandonment or to complete such removal within said 90 days thereafter, Grantor may remove the pipeline and other facilities, and Grantee shall be liable to reimburse Grantor for the cost of removal.
- 10. Number of Pipelines. This Servitude shall be for one pipeline only.
- 11. Initial and Future Damages Caused by Grantee. Except as set forth in Paragraph 6, above, and after the initial construction, Grantee agrees to pay Grantor for all future damages to livestock, crops, improvements or other property of Grantor permitted to be located on the Servitude by the terms hereof where such damage is caused by Grantee or its agents, servants, employees, contractors or subcontractors in performing such future construction or other pipeline-related activities on the Servitude. Grantor agrees and understands Grantee's consideration herein acknowledged and paid does include payment of and for all initial damages caused by the initial construction of the pipeline and appurtenances, if any, including temporary work space, crop, timber and land surface damages.
- 12. <u>Grantor's Reservation of Mineral Rights.</u> Grantor reserves to itself, its successors and assigns all of its interest in the oil, gas and other minerals underlying the surface subject to the Servitude ("Grantor's Minerals"); provided, however, that Grantor shall not be permitted to explore, drill, mine, produce or operate for Grantor's Minerals on the surface of the Servitude, but will be permitted to extract Grantor's Minerals from under the Servitude by directional drilling or other means, from land located outside the boundaries of the Servitude, so long as Grantee's use of the Servitude for the purposes set forth herein is not disturbed and the pipeline and facilities located thereon are left with proper, sufficient and permanent support and are not endangered, obstructed, injured or impaired.
- 13. Additional Rights of Grantor. Grantee understands and acknowledges that (a) Grantor's Land subject to and adjacent to the Servitude is presently suitable for agricultural use; (b) residential and/or commercial development is likely to occur at some time during the existence of the Servitude on Grantor's Land adjacent to the Servitude (and in the surrounding area); and (c) in either event, it is essential that the present ability of Bayou Pierre and its tributaries to drain Grantor's Land not be impaired. Therefore, Grantee agrees:
 - (A) Grantee shall construct, operate and maintain the pipeline so as not to interfere with or impair the drainage capacity of any public drainage channel, including Bayou Pierre and its tributaries, to drain Grantor's Land.
 - (B) Grantor shall have the right to plant, grow and harvest crops and gardens thereon and graze livestock on the Servitude.
 - (C) In order to facilitate development of Grantor's Land, Grantor shall have the right to place along, across and over the Servitude as many roads, streets, sidewalks, passageways, and utilities (including water, sewer, electrical distribution and supply, cable, telephone and gas service) as Grantor may desire; provided, however, that (i) if any utility service is placed across the Servitude, it will be spaced a minimum of twelve inches (12") above or below the pipeline; and (ii) if any utility service is placed along Servitude, it will be placed no closer than five feet (5') from the pipeline.
 - (D) To the extent not otherwise prohibited by law, after construction of the pipeline is completed, Grantor shall have the right to construct, plant and maintain aesthetic landscaping within the boundaries of the servitude. Grantee agrees that, in the course of operation and maintenance of the pipeline, Grantee shall neither damage nor destroy any such landscaping unless such damage or destruction is both necessary and essential to the safe operation or maintenance of the pipeline.
- 14. <u>Grantee's Withholding of Certain Taxes</u>. The Internal Revenue Code provides that a Grantee of a real property interest in the United States must withhold tax if the Grantor is a foreign person. Grantor hereby certifies under oath and subject to penalties of perjury that Grantor is not a foreign person, foreign corporation, foreign trust or foreign estate, for purposes of Internal Revenue Code compliance.

- 15. Grantee's Assignment. Grantee, and Grantee's successors and assigns, have the right to assign or transfer this Servitude Agreement, and all rights granted or created herein, in whole or in part to or among one or more persons, with each such person having the full rights and privileges herein granted only upon the express written consent of Grantor. No assignment of rights in this Servitude Agreement shall relieve or release the Grantee, or Grantee's successors and assigns, from any obligations owed by Grantee to Grantor under this Servitude Agreement, and any assignment to be made by Grantee and/or by its successors and assigns, shall require the assignee therein to assume any and all obligations imposed on the Grantee to the Grantor in this Servitude Agreement.
- 16. <u>Binding Effect</u>. The terms and conditions hereof shall extend to and be binding upon and inure to the benefit of the parties hereto and their respective heirs, executors, administrators, devisees, successors, and assigns.
- 17. Entire Agreement. This document fully sets forth the terms and conditions mutually agreed to by the parties and there are no other oral or written agreements between the Grantor and Grantee which modify, alter or amend this Servitude. It may be amended hereafter only by written instrument signed by Grantor and Grantee or their successors in interest.

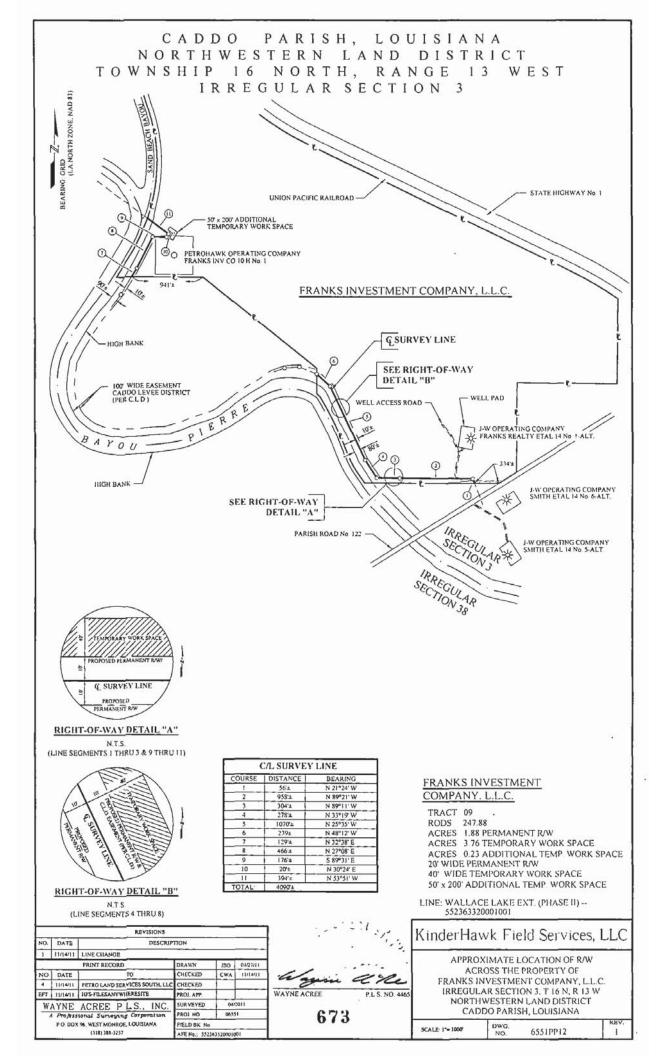
18. Indemnity.

- (a) Grantee shall conduct its operations on the Servitude in compliance with all environmental laws and regulations of any local or parish governing body, the State of Louisiana, United States of America, and all governmental agencies and bodies charged with enforcing environmental regulations. Grantee agrees that the Servitude and Temporary Construction Servitude will be kept free from any environmental damage, including the presence of any hazardous materials or hazardous substances (as such hazardous materials and hazardous substances are defined under federal and state law), arising out of or resulting from the Grantee's operations on the Servitude or Temporary Construction Servitude. In the event any of the operations of Grantee pursuant to this Servitude Agreement results in a loss or damage to the Grantor and/or the presence of hazardous materials and hazardous substances placed on the Servitude, the Temporary Construction Servitude or Grantor's Land caused by Grantee, its employees or subcontractors, Grantee agrees to hold harmless and indemnify Grantor for any loss or damage suffered by Grantor as a result thereof, including all fines and penaltics assessed against Grantor by state or federal governmental agencies charged with enforcing environmental regulations, and all reasonable costs incurred to restore the environmental condition of the Servitude, Temporary Construction Servitude or Grantor's Land to the condition existing prior to the execution of this Servitude Agreement, unless such damage or injury is caused solely by Grantor's gross negligence or willful misconduct. This indemnification shall include, but not be limited to, any and all judgments or penalties to recover the reasonable cost of cleanup of any such release of hazardous materials or hazardous substances by Grantee, its employees, agents, and subcontractors from or upon the Servitude, Temporary Construction Servitude or Grantor's Land and all expenses incurred by Grantor as a result of any civil action brought against Grantor as a result of Grantee's operations, including, but not limited to, Grantor's reasonable attorneys' fees and costs of defense. The provisions of this paragraph shall apply regardless of acquiescence or negligence or allegations thereof on the part of either party and shall apply notwithstanding any other provision of this Servitude Agreement to the contrary, unless such damage or injury is caused solely by Grantor's gross negligence or willful misconduct. The duty to defend, hold harmless and indemnify the Grantor arises immediately upon the Grantor's notice to Grantee of any demand, claim, or lawsuit that comes within the scope of this provision and any reasonable defense costs incurred in defending Grantor, its members, successors, or assigns, shall be paid by Grantee on behalf of Grantor.
- (b) Grantee shall be solely responsible for all damage to property and injury to persons, including death, by reason of, or in connection with, its operations hereunder, and does hereby agree to protect, save harmless, and indemnify Grantor from and against any and all claims and liabilities for damages to property and injuries, including death, to persons, including, but not limited to, Grantee's employees, agents, and contractors, arising out of Grantee's operations under this Servitude Agreement, and Grantee shall, at Grantee's sole expense, handle all such claims, defend lawsuits or other actions which may be brought against Grantor therein, pay all judgments rendered against Grantor therein and reimburse Grantor for any reasonable expenditures which it may make on account thereof, including but not limited to Grantor's reasonable attorneys' fees and costs of defense, unless such damage or injury is caused solely by Grantor's gross negligence or willful misconduct. Grantee agrees it will obtain a comprehensive general liability policy (the "Policy") covering the Grantee's operations as referred to herein, which Policy shall provide for coverage limits of not less than \$5,000,000.00 per occurrence, with Grantor named as an additional insured in the Policy. Such Policy shall be endorsed to be primary over any insurance carried by Grantor. Grantor shall be given a minimum of ten (10) days written notice prior to the cancellation of such insurance. Grantee shall furnish a certificate of insurance to the Grantor, which shall confirm that the Policy is in full force and effect, with the appropriate limits of coverage, and that the Grantor is named as an additional insured in the Policy. Such insurance requirements may be met by a combination of self-insurance, primary and excess insurance policies, provided that (a) the maximum amount of liability exposure which the Grantee, or its successors and assigns, may self-insure against is limited to one million dollars (\$1,000,000.00) and (b) the Grantee's, or its successor's and assign's, obligations to Grantor, its members, successors, or assigns, with respect to indemnification and holding the Grantor, its members, successors, and assigns, harmless apply regardless of whether Grantee, or its successors and assigns, has exhausted applicable self-insurance. The duty to defend, indemnify and hold Grantor harmless arises immediately upon the Grantor's notice of any demand, claim, or lawsuit that comes within the scope of this provision, and any reasonable defense costs incurred in defending Grantor shall be paid by Grantee on behalf of Grantor.

IN WITNESS WHEREOF, Grantor and Grantee had day of, 2011.	ave executed this agreement to be effective as of the
WITNESSES:	GRANTOR:
(Signature of O Witness) Nancy S, Duke (Print name of 1st Witness)	Bobby E. Jelks, Manager
(Signature of 2 nd Witness) D. F. Marlo we (Print name of 2 nd Witness)	4
WITNESSES: (Signature of 1st Witness) FRED M JOHOR Ja	GRANTEE: Kinderhawk Pield Services, L.V.C.
(Print name of 1st Witness) (Signature of 2 nd Witness)	MAL
(Print name of 2 nd Witness)	

ACKNOWLEDGMENT

STATE OF LOUISIANA
On this day of Decel-2011, before two competent witnesses and me, the undersigned authority, duly qualified and acting as such in and for the above parish, state aforesaid, appeared Bobby E. Jelks, to me personally known, who, being by me duly sworn, did say: That he is the duly authorized Manager of Franks Investment Company, L.L.C., a Louisiana limited liability company, that the foregoing instrument was signed by him on behalf of said company, and that said appearer acknowledged said instrument to be the free act and deed of said company. IN WITNESS WHEREOF, I have hereunto set my hand and official seal. Notary Bublic in and for the State of Louisiana (Notary's Printed Name and ID #) My Commission Expires: F. Drake Lee, Bur ID No. 08263 Notary Public Cauddo Parish, Louisiana My Commission is For Life
STATE OF LOUISIANA Courty PARISH OF Harris On this 10 th day of Newerbau, 2011, before two competent witnesses and me, the undersigned authority, duly qualified and acting as such in and for the above parish, state aforesaid, appeared Jahony McCoes
to me personally known, who, being by me duly sworn, did say: That he is the duly authorized Affarne, in Factor of Kinderhawk Field Services, L.L.C., that the foregoing instrument was signed by him on behalf of said company, and that said appearer acknowledged said instrument to be the free act and deed of said company. IN WITNESS WHEREOF, I have hereunto set my hand and official seal.
Notary Public in and for the State of Louisiana Arla 5. Fikac (Notary's Printed Name and ID#) Notary Public in and for Harris Parish, LA
KARLA S. FIKAC Notary Public, State of Texas My Commission Expires October 21, 2012



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F. F. WEBB TRUST, herein represented by CLARENCE H. WEBB, DORIS YEARWOOD ELGIN, JOHN CREIGHTON WEBB, FREDERICK BL III, and CHAS. L. MAYER, as Trustees, whose mailing address Kathy Circle, Shreveport, Louisiana 71105

lessor (whether one or more), and G. E. BUDDECKE, JR., husband of Ellen Simmons lessee, WITNESSETH: Lessor in consideration of ONE THOUSAND and other valuable consideration ----- Dollars

(\$1,000.00 & OVO, in hand paid, of the royalties herein provided, and of the agreement of lessee herein contained? hereby grants, leases and lets exclusively unto lessee for the purposes of investigating, exploring, prospecting, drilling and mining for and producing oil, gas and all other minerals, laying pipe lines, building tanks, power stations, telephone lines, and other structures thereon to produce, save, take care of, treat, transport and own said products and for dredg ing and maintaining canals, constructing roads and bridges, and building houses for its employees, and, in general, for all appliances, structures, equipment, servitudes and privileges which may be necessary, useful or convenient to or in connection with any such operations conducted by lessee thereon, or on any adjacent lands, the following described

__Parish, Louisiana, to-wit:

That certain plantation located at Lucas, Caddo Parish, Louisiana, generally known as the Webb Plantation, and more particularly described as follows:

Those certain lands in Caddo Parish, Louisiana, fronting on Red River, near Lucas, presently known as the Levy Plantation, more fully described as Lot 15 of the Daniel Lands in SECTION 10 and Lots 2 and 6 of Daniel Lands and all that part of Lot 5 of Daniel Lands east of Bayou Pierre, all in SECTION 14; and a tract fronting one mile on Red River and located in SECTIONS 10, 11, 13, 14 and 15, said tract having been formerly known as the Norris Tract, and forming a part now of the Levy Plantation, and being the same property, less such part thereof as has gone into Red River, acquired by Morris Levy of date August 8, 1863 per deed in Conveyance Book "O", page 497 of records of Caddo Parish, Louisiana, made a part hereof by reference, together with any excess lands that may lie between the northerly edge hereof and other lands of the F. F. Webb Estate; and together with and including all alluvian and accretion attached thereto and forming a part thereof, subject to right-of-way of Texas & Pacific Railway and of Model Highway and less 3.8 acres thereof lying south of Bayou Pierre;

All of the above described properties are located in TOWNSHIP 16 NORTH, RANGE 13 WEST, Caddo Parish, Louisiana, containing 586 acres, more or less;

Also a tract of 11.46 acres in NE'z of SECTION 10, TOWNSHIP 16 NORTH, RANGE 13 WEST, lying within the triangle bound on north and east by center line of abandoned railway right-of-way, on SE by northerly line of above described Levy Place and on West by East line of Texas & Pacific Railway Company right-of-way; also all those portions of SECTIONS 8, 9, 10 and 15, TOWNSHIP 16 NORTH, RANGE 13 WEST lying west of Texas & Pacific Railway right-of-way and north and east of Bayou Pierre, save and except the portions of SECTION 10 and 15 contained within Levy Tract hereinabove first described; also all those portions of SECTIONS 3, 4, and 5, TOWNSHIP 16 NORTH RANGE 13 WEST lying west of Texas & Pacific Railway right-of-way, east of Bayou Pierre and south of public road known and designated as Forbing-Lucas Road; also all those portions of SECTION 4, TOWNSHIP 16 NORTH, RANGE 13 WEST lying south of Texas & Pacific Railway right-of-way, west of Sand Beach Bayou, south and east of Mile Bayou and north of public road known and designated as Forbing-Lucas Road; also all that part of SECTION 5, TOWNSHIP 16 NORTH, RANGE 13 WEST lying south of Mile Bayou, east of center line of said section and north of Forbing-Lucas public road; also that part of said SECTION 5 lying north of Mile Bayou and east of Bayou Pierre, save and except Lot 1 of said section, and also all that part of SECTION 32, TOWNSHIP 17 NORTH, RANGE 13 WEST lying south of Texas & Pacific Railway right-of-way and east of Bayou Pierre, all of said lands being located in Caddo Parish, Louisiana and containing 1,173 acres more or less, covering and including also 1-1/3 acres sold F. F. Webb, Jr. (Conveyance Book 337, page 505) & reconveyed by his widow and children.

Also three acres in NW2 of SW2 of SECTION 4, TOWNSHIP 16 NORTH, RANGE 13 WEST, per Accessor's Country Plat No. 178, Tracts 19 and 20, Caddo Parish, Louisiana.

Also tract acquired from Texas & Pacific Railroad Company by exchange deed, dated March 15, 1957, as per Conveyance Book 831, page 508.

The aforesaid tracts of land contain a total of 1762 acres more or less, together with all buildings and improvements thereon.

Less and except 5 acres more or less sold to the Episcopal Diocese as per deed of record in Conveyance Book 1228, page 318 and dated April 1, 1969; and a tract of approximately 12 acres sold to Southwestern Electric Power Company dated September 9, 1970, as per instrument filed of record under Register No. 514247; and a tract consisting of .733 acre sold to State of Louisiana Department of Highways as per instrument dated August 13, 1970, and of record in Conveyance Book 1273, page 486.

Lot 1 of SECTION 5, TOWNSHIP 16 NORTH, RANGE 13 WEST, Caddo Parish, Louisiana, also being described as NE% of NE% of said section, less right-of-way owned by Texas & Pacific Railway Company; and a certain tract or parcel of land being a part of Lots 4 and 5 of the J. R. J. Daniels lands as per original deed recorded in Conveyance Book 109, page 774 of records of Caddo Parish, Louisiana.

(Where the fraction 1/8 appears in Paragraph No. 3 hereof, the same shall read 5/32. The purpose hereof is to cause Lessor to receive 1/32 royalty in addition to the 1/8 provided for in said paragraph.)

For all purposes of this lease the described premises shall be treated as comprising___1,797___acres, whether there be

more or less.

2. Subject to the other provisions herein contained, this lease shall be for a term of xxx/years from this date (called "primary term") and as long thereafter as oil, gas or other minerals are produced from said lands or land with which said land is pooled hereunder.

(a) It is the intention of the parties that this lease shall also extend and apply to all outstanding mineral rights or servitudes affecting the lands herein described as the same may revert to lessors, their heirs or assigns, from time to time.

3. The royalties to be paid by lessee are:

(a) On oil, and other hydrocarbons which are produced at the well in liquid form by ordinary production methods, 1/8 of that produced and saved from said land, same to be delivered at the well in tanks provided by lessor, or to the credit of lessor into the pipe line to which wells may be connected; lessee may from time to time purchase any royalty oil or other liquid hydrocarbons in its possession, paying the market price thereof prevailing for the field where produced, on the date of purchase;

(b) On gas, including casinghead gas and other vaporous or gaseous substances produced from said land as lows:

First: In case lessee shall itself use gas in the manufacture of gasoline or other petroleum products therefrom, 1/8 of the sale price at the plant of the gasoline or other petroleum products manufactured or extracted therefrom and which are saved and marketed, after deducting a fair and reasonable cost for extracting or manufacturing said gasoline or other substance, and 1/8 of the market value of residue gas sold or used by lessee in operations not connected with the land herein leased. No deduction for extraction costs shall be made for liquid hydrocarbons recovered by use of drip, separator or similar apparatus on the flow line of wells, and, except as to gas being used for repressuring or recycling purposes, upon written request by lessor, lessee shall, prior to the sale or use of gas from such wells, install and use such apparatus on any well or wells capable of producing liquid hydrocarbons in paying commercial quantities.

Second: In the event lessee shall sell gas at the wells, 1/8 of the amount received from such sales.

Third: In all other cases when sold or used off the premises, the price received at the well for 1/8 of the gas sold or 1/8 of the fair value of gas used.

(c) Where gas from a well producing gas only is not sold or used because of no market or demand therefor, lessee may pay as royalty \$50.00 per well, per year, payable quarterly, and upon such payment it will be considered that gas is being produced within the meaning of Article 2 of this contract

that gas is being produced within the meaning of Article 2 of this contract.

(d) On all other minerals or kindred products mined, manufactured and marketed, 1/8 either in kind or value

at the well or mine, at lessee's election, except that on sulphur the royalty shall be 50c per long ton.

- (e) Such gas, casinghead gas, residue gas, or gas of any other nature or description whatsoever, as may be disposed of for no consideration to lessee, through unavoidable waste or leakage, or in order to recover oil and other liquid hydrocarbons, or returned to the ground, shall not be deemed to have been sold or used off the premises, within the meaning, expressed or implied, of any part of this lease.
- 4. If operations for drilling are not commenced on said land on or before one year from this date, the lease shall then terminate as to both parties unless on or before such anniversary date lessee shall pay or tender to lessor or to the credit of lessor in The First National Bank of Shreveport, Shreveport, Louisiana (which bank and its successors are lessor's agent and shall continue as the depository for all rentals payable hereunder regardless of changes in ownership of said land or the rentals) the sum of ONE THOUSAND SEVEN HUNDRED

 or tender of rental may be made by the check or draft of lessee mailed or delivered to lessor or to said bank on or before such date of payment. If such bank (or any successor bank), should fail, liquidate or be succeeded by another bank; such date of payment. It such bank (or any successor bank), should fail, handlate of be succeeded by about or for any reason fail or refuse to accept rental, lessee shall not be held in default for failure to make such payment or tender of rental until thirty (30) days after lessor shall deliver to lessee a proper recordable instrument, naming another bank as agent to receive such payments or tenders. The down cash payment is consideration for this lease according to the terms and shall not be allocated as mere rental for a period. Lessee, or any assignee hereunder, may at any time the payment of the depository shave paymed or place of record a release covering any not execute and deliver to lessor, or to the depository above named, or place of record, a release or releases covering any portion or portions of the premises held by him, and thereby surrender this lease as to such portion or portions, and thereby

after the rentals payable by him shall be reduced proportionately.

5. If prior to discovery of oil, gas, sulphur or other mineral on said land, lessee should drill a dry hole or holes. thereon, or if after discovery of oil, gas, sulphur or other mineral, the production thereof should cease from any cause this lease shall not terminate if lessee commences operations for additional drilling or reworking within sixty days there. after or (if it be within the primary term) commences additional drilling operations or commences or resumes the payment or tender of rentals on or before the rental paying date next ensuing after the expiration of three months from date of completion of dry hole or cessation of production. If during the last year of the primary term and prior to the discovery of oil, gas, sulphur or other minerals on said land lessee should drill a dry hole thereon, no rental payment or operations are necessary in order to keep the lease in force during the remainder of the primary term. If at the expiration of the primary term are described by the lease in force during the remainder of the primary term. of the primary term oil, gas or other mineral is not being produced on said land but lessee is then engaged in drilling of reworking operations thereon, the lease shall remain in force so long as operations are prosecuted with no cessation of more than thirty (30) consecutive days, and if they result in the production of oil, gas or other mineral, so long there after as oil, gas or other mineral is produced from said land. In the event a well or wells producing oil or gas in paying quantities should be brought in on adjacent land and draining the leased premises, lessee agrees to drill such offset wells as a reasonably prudent operator would drill under the same or similar circumstances.

If at any time while this lease is in force and effect lessee in its opinion deems it advisable and expedient, in order to form a drilling unit or units to conform to regular or special spacing rules issued by the Commissioner of Conorder to form a drilling unit or units to conform to regular or special spacing rules issued by the Commissioner of Colasservation of the State of Louisiana, or by any other State or Federal authority having control of such matters, or in order to conform to conditions imposed upon the issuance of drilling permits, lessee shall have the right, at its option, to pool or combine the lands covered by this lease, or any portion or part thereof, with other land, lease or leases in the immediate vicinity thereof, whether such land, lease or leases are held by lessee or by others, such pooling to be into a unit or units not exceeding the number of acres, or the land subdivision, whichever may be the larger, allocated to one well by the above mentioned authority or authorities, and to be applicable only to such sands, horizons or stata as are well by the above mentioned authority or authorities, and to be applicable only to such sands, horizons or strata as are covered by such regulations. Lessee shall execute in writing and record in the conveyance records of the parish in which the land herein leased is situated, an instrument identifying and describing the pooled acreage, and shall mail to the named lessor herein at his last known post office address, by registered mail, a certified copy of such instrument As between the parties hereto and except as herein otherwise specifically provided, the entire acreage so pooled into a tract or unit be treated for all purposes as if it were included in this lease. In lieu of the royalties elsewhere herein specified, lessor shall receive, on the production from the unit so pooled, only such proportion of the royalties stipulated herein as the amount of his acreage (mineral rights) placed in the unit bears to the total acreage so pooled in the particular unit involved. Drilling operations on or production of oil gas sulphur or other minerals from any portion of the ticular unit involved. Drilling operations on or production of oil, gas, sulphur or other minerals from any portion of the land covered hereby shall continue this lease in force and effect during or after the primary term as to all of the lands covered hereby, irrespective of whether any portion thereof has been pooled. If operations be conducted on or production be secured from land in such pooled unit other than land covered by this lease, it shall have the same effect as the production of the lands of th to maintaining lessee's rights in force hereunder as if such operations were on or such production from land covered hereby, except that its effect shall be limited to the land covered hereby which is included in such pooled unit. This lease, during any period in which it is being so maintained as to part of the land covered hereby, may be maintained as to the remainder in any manner elsewhere provided for herein; provided, that if it be maintained by rental payment, the rentals may be reduced in proportion to the number of acres in such unit or units as to which this lease is being

maintained by drilling operations or production.

7. Lessee shall have free use of oil, gas and water from said land, except water from lessor's wells, for all operations hereunder, and the royalty on oil and gas shall be computed after deducting any so used. Lessee shall have the right at any time during or after the expiration of this lease to remove all property and fixtures placed by lessee on said land, including the right to draw and remove all casing. When required by lessor, lessee will bury all pipe lines below ordinary plow depth, and no well shall be drilled within two hundred feet of any residence or barn now on said land without lessor's consent, if any other location is practicable. Lessor shall have the privilege at his risk and expense of using gas from any gas well on said land for domestic use in the principal dwelling thereon out of any surplus gas

not needed for operations hereunder.

The rights of either party hereunder may be assigned in whole or in part, and the provisions hereof shall extend to the heirs, successors and assigns of the parties hereto, but no change or division in ownership of the land, rentals or royalties however accomplished shall operate to enlarge the obligations or diminish the rights of lessee; and no such change in ownership shall be binding on lessee nor impair the effectiveness of any payments made hereunder until lessee shall have been furnished, forty-five (45) days before payment is due, a certified copy of recorded instrument evidencing any transfer, inheritance, sale, or other change in ownership. In event of assignment of this lease as to a segregated portion of said land, the rentals payable hereunder shall be apportionable as between the several leasehold owners ratably according to the surface area of each, and default in rental payment by one shall not affect the rights of other leasehold owners hereunder. If six or more parties other than the original lessor become entitled to royalty hereunder, lessee may withhold payment of royalty to such parties unless and until furnished with a recordable instrument

executed by all of such parties designating an agent to receive payment for all.

9. In case of cancellation or termination of this lease from any cause, lessee shall have the right to retain, under 9. In case of cancellation or termination of this lease from any cause, lessee shall have the right to retain, under the terms hereof, around each well producing, being worked on, or drilling hereunder, the number of acres in the form allocated to each such well under spacing and proration rules issued by the Commissioner of Conservation of the State of Louisiana, or any other State or Federal authority having control of such matters; or, in the absence of such rulings, forty (40) acres around each such well in as near a square form as practicable, and in the event lessor considers that operations are not being conducted in compliance with this contract, lessee shall be notified in writing of the facts relied upon as constituting a breach hereof and lessee shall have sixty (60) days after receipt of such notice to comply with the obligations imposed by virtue of this instrument.

with the obligations imposed by virtue of this instrument.

10. Lessor hereby warrants and agrees to defend the title to said land and agrees that lessee at its option may discharge any tax, mortgage or other lien upon said land and in event lessee does so, it shall be subrogated to such lien with the right to enforce same and apply rentals and royalties accruing hereunder toward satisfying same. Without impairment of lessee's rights under the warranty in event of failure of title, it is agreed that if lessor owns an interest in said land less than the entire fee simple estate, then the royalties and rentals to be paid lessor shall be reduced proportionately.

All terms and express or implied covenants of this lease shall be subject to all Rederal and State Laws Executive Orders, Rules or Regulations, and this lease shall not be terminated, in whole or in part, nor Lessee held liable in damages, for failure to comply therewith, if compliance is prevented by, or if such failure is the result of, any such Law, Order, Rule or Regulation.

12. (a) The term "Force Majeure" as used herein shall mean and include: requisition; order, regulation or

12. (a) The term Force Majeure as used herein snail mean and include: requisition, order, regulation of control by governmental authority for National Defense or war purposes resulting in delay in obtaining or inability to obtain either material, equipment or means of transportation normally necessary in prospecting or drilling for oil, gas or other mineral, or in producing, handling or transporting same from leased premises; war; scarcity of or delay in obtaining materials of equipment; lack of labor or means of transportation of labor or material; Acts of God; insurrection; flood; strike, or other thing beyond the control of lessee.

(b) If by reason of Force Majeure as herein defined, lessee is prevented from or delayed in drilling, completifig or producing any well or wells for oil, gas or other mineral on the leased premises, then while so prevented or during the period of such delay lessee shall be relieved from all obligations, whether express or implied, imposed on lessee under this lease, to drill, complete or produce such well or wells on the leased premises, and lessee shall not be liable in damages and this lease shall not be subject to cancellation for failure of lessee to drill, complete or produce such well or wells during the time lessee is relieved from all obligations so to do. Provided, this provision shall not relieve lessee from the necessity of paying rentals during the primary terms in order to continue this lease in force under the specifications of paragraphs 4 and 6 above.

(c) If upon or at any time after the expiration of the primary term hereof, while this lease is in force, less cannot maintain same in effect because prevented by Force Majeure from fulfilling the particular requirement (operations on or continued production from the leased premises, as the case may be) necessary so to do as specified in paralgraph 2 hereof, then while so prevented and for six months thereafter this lease shall nevertheless continue in effect; and if within such six months lessee either commences operations on or resumes production from the leased premises as the case may be, this lease shall continue in effect thereafter as though Force Majeure had not intervened. During any period this lease is continued in force after its primary term by Force Majeure as herein provided, lessee shall pay to the owners of the royalty hereunder, or to the credit of such owners in the depository bank above named, as royalty an amount equal to \$1 per acre per year for each acre retained hereunder. Such payments shall be made annually, and shall become due on each anniversary hereof while such Force Majeure continues, except the first payment shall be made within a reasonable time after occurrence of Force Majeure and shall be proportionate in amount to the unexpired portion of the then current year, if for less than a year. Nothing herein shall impair the right of lessee to release this lease as to all or any portion of the lands covered hereby and be relieved of all obligations thereafter accruing as to the acreage released.

(d) The specification of causes of Force Majeure herein enumerated shall not exclude other causes from con sideration in determining whether lessee has used reasonable diligence wherever required in fulfilling any obligation or conditions of this lease, express or implied, and any delay of not more than six months after termination of Force

Majeure shall be deemed justified.

This lease is specifically subject to the terms and conditions of that certain letter dated May 15, 1973 by and between l'essor and lessee.

IN WITNESS WHEREOF, this instrument is executed on the date first above written. WITNESSES: F. F. WEBB TRUST, LESSOR & & usel John Creighton Webb, Trustee Frederick F. Webb, III, Trustee

Parish, Louisiana

Notary Public in and for_____

OIL GAS AND MINERAL LEASE

OIL, OAO AND MINLIVAL LEAGL		_		
THIS AGREEMENT made this day ofOctober	2003	, between		
Franks Realty, Inc., represented herein by John Franks, President		공유	တ	
Franks Realty, Inc., represented herein by John Flanks, freshenc		<u></u>		
Lessor (whether one or more) whose address is:P. 0. Box 7665, Shreveport, LA 71137		20	~	
and Jack W. Grigsby		2=		Lessee.
whose address is 401 Edwards Street, Suite 1915, Shreveport, LA 71101		202	•	103300,
WITNESSETH: 1. Lessor in consideration of One Hundred Dollars and Other Valuable Considerations (\$100.00 & OVC), in hand paid, of the royaltie Lessee herein contained, hereby grants, leases and lets unto Lessee, the exclusive right to enter upon and use the land hereinafter describe gas, sulphur and all other minerals, together with the use of the surface of the land for all purposes incident to the exploration for a transportation of said minerals (either from said land or acreage pooled therewith), and the right to dispose of sait water, with the right of ing times for such purposes, including for operations hereunder or in connection with similar operations on adjoining land; the land to which this length of the content of the content of the land to which this length of the land to which the land to which the land to which this length of the land to which the	for the exploind production ess and egree	ration for and , ownership as to and from	producti possess n said lar	on of oil, sion and nds at all
See Exhibit "A" attached hereto for Lease Description and Special Pr	ovisio	1s.0		£o∃
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and the above recital of acreage in any tract shall be deemed to be the true acreage thereof. 2. Subject to the other provisions herein contained, this lease shall be for a period of two (2) years from the date hereof (cal (1) oil, gas, sulphur or other mineral is produced from said land hereunder or from land pooled therewith; or (2) it is maintained in force in any. 3. For the consideration hereinabove recited, this lease shall remain in full force and effect during the primary term, without any additional to conduct any operations on the land (either before or after the discovery of minerals), except to drill such wells as might be necessary to p grovided. 4. The royalties to be paid by Lessee are: (a) on oil, and other hydrocarbons which are produced at the well in liquid form by ordin	other manner payment and rotect the land nary production	herein provid without Less of from draina on methods,	ed. see being ge, as he one-eighti	required ereinafter h of that
produced and saved from said land, same to be delivered at the wells or to the credit of Lessor in the pipe line to which the wells may be obear its proportion of any expenses for treating the oil to make it marketable as crude; Lesse may from time to time purchase any roposession, paying the market price therefor prevailing for the field where produced on the date of purchase; (b) on gas, including casinghear from said land and sold or used off the premises or for the extraction of gasoline or other products thereform, the market value at the we provided that on gas sold at the wells the royalty shall be one-eighth of the amount realized from such sale; such gas, casinghead gas, description whatsoever, as may be disposed of for no consideration to Lessee, either through unavoidable waste or leakage, or in order to returned to the ground, shall not be deemed to have been sold or used either on or off the premise within the meaning of this paragraph 4 Imarketed, one-eighth, either in kind or value at the well or mine, at Lessee's election, except that on sulphur the royalty shall be one dollar (\$f\$. 5. If Lessee during or after the primary term should drill a well capable of producing gas or gaseous substances in paying quantities, (or wundate to continue to produce) and should Lessee be unable to operate said well because of lack of market or marketing facilities or govern be maintained beyond or after the primary term without production of minerals or further drilling operations by paying Lessor as royalty a sureovered hereby per year, the first payment being due, if said well should be completed or shut-in after the primary term, within ninety (90) cossation of production and such payment will extend Lessee's rights for one year from the date of such completion or cessation. If such a term, the first payment, if made by Lessee, shall be due within 90 days after such well is shut-in, or before the expiration date of the primary term (if completed after the primary term) or the end of the primary term (if comp	yatty oil or or or gas, or other it of one-eight if of one-eight residue gas, recover oil onereof; (c) or onereof; (c) or onereof; (c) or one of other or of other or other or or or other or or other or or or other or	ther liquid hy gaseous su h of the gas or gas of ar or other liquid all other mon. previously prions, then Lee dollar (1.00 completion ce completed (d, whichever a with the dat	rdrocarbo bstance p so sold y other r hydrocar inerals m coduced L ssee's rig) per acr f such we during the is the lat e of com	ns in its produced or used, nature or bons, or ined and lessee is jihts may e of land ell or the primary er date. poletion of
Pay directly to Lessor at above address				_, which
bank shall be and remain Lessor's agent for such purpose regardless of any change or changes in the ownership of the land or mineral rights date of such payments shall be entitled thereto in proportion to their ownership of said royalty. The provisions of this paragraph shall be recu Should any well producing gas or gaseous substances be completed on a drilling unit which includes any part of the land herein leased, the to all other agreements herein contained allowing the pooling of the above described lands with other lands. 6. If within ninety (90) days prior to the end of the primary term, Lessee should complete or abandon a well on the lands described above previously secured should cease from any cause, this lease shall continue in force and effect for ninety (90) days from such completion or all the expiration of the primary term or at the expiration of the ninety (90) day period provided for in the preceding sentence, oil, cas, subhur or	provisions of or on land population	es during the this paragrap poled therewil r cessation o	life of this h shall be the character of	s lease. e subject roduction ion. If at

- the expiration of the primary term or at the expiration of the ninety (90) day period provided for in the preceding sentence, oil, gas, sulphur or other mineral is not being produced on said land or on all and pooled therewith, but Lessee is then engaged in operations for drilling, completion or reworking thereon, or operations to achieve or restore production, or if production previously secured should cease from any cause after the expiration of the primary term, this lease shall remain in force so long thereafter as Lessee either (a) is engaged in operations for drilling, completion or reworking, or operations to achieve or restore production, with no cessation between operations or between such cessation of production and additional operations of more than ninety (90) consecutive days; or (b) is producing oil, gas, sulphur or other mineral from said land hereunder or from land pooled therewith, this lease shall continue in force and effect so long as Lessee is engaged with due diligence in explorations for and/or erecting a plant for the production of sulphur and thereafter subject to the foregoing provisions hereof so long as oil, gas, sulphur or other mineral is not being produced on said premises or on land pooled therewith.
- and pooled therewith.

 7. Lessee is hereby granted the right as to all or any part of the land described herein, without Lessor's joinder, to combine, pool or unitize the acreage royalty or mineral interest covered by this lease, or any portion thereof, at any time during the life of this lease, with any other land, lease or leases, royalty or mineral interests in or under any other tract or tracts of land in the vicinity thereof, whether owned by Lessee or some other person, or corporation so as to create, by the combination of such lands and leases, one or more operating units sall, in the case of as, including condensate, embrace more than six hundred forty (640) acres; and in the case of as, including condensate, embrace more than eighty (80) acres; and provided further, however, that if any spacing or other rules and regulations of the State or Federal Commission, Agency, or regulatory body having or claiming jurisdiction has heretofere or shall at any time hereafter permit or prescribe a drilling or operating unit or spacing rule in the case of gas, including condensate, greater than six hundred forty (640) acres; or in the case of oil or casinghead gas greater than eighty (80) acres, then the unit or units herein contemplated may have, or may be redesigned so as to have, as the case may be, the same surface content as, but not more than, the unit or the acreage in the spacing rule so prescribed or permitted. However, it is further specifically understood and agreed, anything herein to the contrary notwithstanding, that the Lessee shall have the right to, and the benefit of an acreage tolerance of ten per cent in excess of any drilling or operating unit authorized herein. The commencement of operations for the drilling of a well, or the completion of a well to production of either oil, gas, casinghead gas, condensate, or other minerals therefrom shall have the same effect under the terms of this lease as if a well were commenced, completed or production of oil, gas, casinghead gas, condensate, or other mi 7. Lessee is hereby granted the right as to all or any part of the land described herein, without Lessor's joinder, to combine, pool or unitize the acreage royalty or mineral interest
- 9. Lesses shall have the exclusive right to explore the land herein described by geological, geophysical or other methods, whether similar to those herein specified or not and whether now known or not, including the drilling of holes, use of torsion balance, seismograph explosions, magnetometer, or other geophysical or geological instruments, test or procedures, for

the purpose of securing geological and geophysical information. All information obtained by Lessee as a result of such activity shall be the exclusive property of Lessee, and Lessee may this purpose of securing geological and geophysical information. All information obtained by Lessee as a result of such activity shall be the exclusive property of Lessee, and Lessee may disseminate or sell such information without Lessor's consent. In exploring for, developing, producing and marketing oil, aga and other substances covered hereby on the leased premises or lands pooled or unitized therewith, in primary and/or enhanced recovery, Lessee shall have the right of ingress and egress along with the right to conduct such operations on the leased premises, or on any adjacent or adjoining lands, as may be reasonably necessary for such purpose, including but not limited to the drilling of wells, construction and use of roads, canals, pipelines, tanks, water wells, disposal wells, injection wells, pipel celetric and teleptic and teleptic may be reasonably necessary by Lessee to discover, produce, store, treat and/or transport oil, gas and other substances. Lessee shall have free use of oil, gas, casinghead gas, condensate, and water from said land, except water from Lessor's wells, for all operations hereunder, including repressuring, pressure maintenance and recycling, and the royalty shall be computed after deducting any so used. Lessee shall have the right at any time during or after the expiration of this lease to remove all property and fixtures placed by Lessee on said land, including the right to draw and remove all casing. When required by Lessor, Lessee will bury all pipe limbs below ordinary plow depth, and no well hall be drilled within two hundred feet of any residence or barn now on said land without Lessor consent. In the event a well or wells, producing oil, gas, casinghead gas or condensate in paying quantities should be brought in on adjacent lands not owned by the Lessor and within one hundred fifty feet of and draining the leased premises, Lessee agrees to drill such offset well or wells as a reasonably prudent operator would drill under the same or similar

. . . [

- 10. The rights of either party hereunder may be assigned in whole or in part and the provisions hereof shall extend to the heirs, executors, administrators, successors and assigns, but no change or division in ownership of the land, or royalties, however accomplished shall operate to enlarge the obligations or diminish the rights of Lessee. No such change or division in the ownership of the land, or royalties shall be binding upon Lessee for any purpose until such person acquiring any interest has furnished Lessee, at its principal place of business, with a certified copy of the instrument or instruments, constituting his chain of title from the original Lessor. An assignment of this lease, in whole or in part, shall, to the extent of such assignment, relieve and discharge Lessee of any obligations hereunder to Lessor and, if Lessee or assignee of part or parts hereof shall fail to comply with any other provisions of the lease, such default shall not affect this lease insofar as it covers a part of said lands upon which Lessee or any assignee shall comply with the provisions of the lease, may at any time and from time to time execute and deliver to lessor or file for record a release or releases of this lease as to any part or all of said land or of any mineral or horizon
- thereunder, and thereby be relieved of all obligations as to the released acreage or interest.

 11. In case of suit, adverse claim, dispute or question as to the ownership of the royalties (or some part thereof) payable under this lease, Lessee shall not be held in default in payment of such royalties (or the part thereof in dispute), until such suit, claim, dispute or question has been finally disposed of, and Lessee shall have thirty (30) days after being furnished with a certified copy of the instrument or instruments disposing of such suit, claim or dispute, or affer being furnished with proof sufficient, in Lessee's opinion, to settle such question, within which to make payment. Should the right or interest of Lessee hereunder be disputed by Lessor, or any other person, the time covered by the pendency of such dispute shall not be counted against Lessee either as affecting the term of the lease or for any other purpose, and Lessee may suspend all payments without interest until there is a final adjudication or other determination of such dispute.
- 12. In case of cancellation or termination of this lease from any cause, Lessee shall have the right to retain, under the terms hereof, around each well producing, being worked on, or 1.2. In Case of cancellation or termination of this lease from any bause, bessee shall have the right to retain, under the terminate retainment of acres in the form allocated to each such well under spacing and proration rules issued by the Commissioner of Conservation of the State of Louisiana, or any other State or Federal authority having control of such matters; or any unit or units formed pursuant to paragraph 7 or, in the absence of such rulings, unit or units, forty (40) acres around each such well in as near a square form as practicable, and in the event Lessor considers are not being conducted in compliance with this contract, Lessee shall be notified in writing of the facts relied upon as constituting a breach hereof and Lessee shall have sixty (60) days after receipt of such notice to comply with the obligations imposed by virtue of this instrument
- When drilling, reworking, production or other operations are delayed or interrupted by force majeure, that is, by storm, flood or other acts of God, fire, war, rebellion, insurrection, riot, strikes, differences with workmen, or failure of carriers to transport or furnish facilities for transportation, or as a result of some law, order, rule, regulation, requisition or necessity of government, Federal or State, or as a result of any cause whatsoever beyond the control of the Lessee, the time of such delay or interruption shall not be counted against Lessee, anything in this lease to the contrary notwithstanding, but this lease shall be extended for a period of time equal to that during which Lessee is so prevented from conducting such drilling or reworking operations on, or producing oil, gas, casinghead gas, condensate or other minerals from, the premises; provided that during any period that this lease is continued in force after its primary term solely by force majeure as herein provided, Lessee shall pay to the owners of the royalty hereunder the shut-in royalty provided in paragraph 5 hereof, and in the manner therein provided, without regard to whether or not there is a producing well shut in, located on said land or on land with which the lease premises or any part thereof has been
- see shall pay for actual damages caused by its operations to growing crops and timber on said land leased herein.
- 15. Notwithstanding the death of any party Lessor, or his successor in interest, the payment or tender of all sums accruing hereunder in the manner provided above shall be binding on the heirs, executors and administrators of such person.
- on the neirs, executors and administrators or such person.

 16. Lessor hereby warrants and agrees to defend the title to the lands herein described, and agrees that the Lessee at its option shall have the right to redeem for Lessor, by payment, any mortgage, taxes or other liens on the above described lands, in the event of default of payment by Lessor, and be subrogated to the rights of the holder thereof. In case of payment of any such mortgage, taxes or other liens by Lessee, in addition to the right to subrogation herein granted, Lessee shall also have the right to retain any royalties which become due Lessor hereunder and to repay itself therefrom, and the retention of such royalties by Lessee shall have the same effect as if paid to the Lessor in whose behalf payment of any mortgage, taxes or other liens was made.
- 17. This lease shall be binding upon all who execute it, whether or not named in the body hereof as Lessor, and without regard to whether this same instrument, or any copy thereof shall be executed by any other Lessor named above.

WITNESSES / WITNES	Franks Realty, Inc. By: John Franks, President	72-0682479 SS No. OR TAX ID
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STATE OF Louisiana		SS NO. OR TAX ID
PARISH/COUNTY OF Bossier Potatine 1 Started For Octobery Public Carles (Person Experies Rearis) on Experience With tire Commission experse with tire me known to be the person(s) described in and who executed to		to
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STATE OF		irst duly sworn deposes and says that he/she
who signed the same in his/her presence and that of the o recognizes all said signatures to be true and genuine.	other subscribing witness(es) to such signature(s) whose name(s) (signature	s) are affixed as such, and that he/she now
Sworn to and subscribed before me, notary, on this	Subscribing Witness	
My Commission expires	NOTARY PUBLIC in and for	

EXHIBIT "A"

To Oil, Gas and Mineral Lease, with effective date October 1, 2003, from FRANKS REALTY, INC., represented herein by John Franks, President, as Lessor, and JACK W. GRIGSBY, as Lessee, covering 188.8130 acres, more or less, Caddo Parish, Louisiana.

Section(s) 14, Township 16N-Range 13W

188.813 acres more or less, lying within Section 14, Township 16 North, Range 13 West of 423.617 acres described in that certain Cash Sale Deed between John Creighton Webb, Jr., et al, Grantors, and Franks Realty, Inc., Grantee, dated July 9, 1998 and filed under registry number 1612248 on July 9, 1998; as corrected by Correction of Ratification of Cash Sale Deed between John Creighton Webb, Jr. and Franks Realty, Inc. dated March 16, 1999 and filed under registry number 1656556 on June 3, 1999, all deed referenced made to the Conveyance records of the Caddo Parish Clerk of Court.

Special Provisions

Notwithstanding any provision to the contrary contained in the printed provisions of this oil, gas and mineral lease, the following special provisions shall prevail and govern over all printed provisions of said lease.

- All royalties on oil and gas provided to Lessor herein shall be twenty-seven and one-half percent (27.50%) instead
 of one-eighth (1/8) and wherever the fraction one-eighth (1/8) appears in this lease in any connection with royalty,
 twenty-seven and one-half percent (27.50%) shall be substituted therefor.
- Notwithstanding anything in this lease to the contrary, actual drilling on, or production from any unit or units (formed by private agreement or by state or federal governmental authority, or otherwise) embracing the land covered by this lease only, or both land leased herein and other land, shall maintain this lease in force beyond the expiration of the primary term herein fixed, or any extension of same as provided herein, only as to that portion of Lessor's land included in such unit or units whether or not said drilling or production is on or from the leased premises. This lease may be maintained in force as to the remainder of the land covered hereby in any manner provided for herein. In the event a well (or wells) drilled on the leased premises is produced on a "lease basis", that is without there being a unit established for said well (or wells), said lease basis well (or wells) shall maintain this lease in force beyond the expiration of the primary term herein fixed, or any extension of same as provided herein, only as to an area of forty acres surrounding an oil well (or wells) or an area of one hundred sixty (160) acres surrounding a gas well, which area shall be as nearly as practicable in the shape of a square, with the well in or near the center thereof. No unit shall be declared by Lessee under the terms of this lease without the prior written consent of Lessor.
- 3) This lease shall terminate at the expiration of the primary term herein fixed, or any extension of same as provided herein, as to all strata, zones and depths lying one hundred feet (100') below the deepest depth drilled in any well drilled on the leased premises or on land with which all or a portion of the leased premises has been pooled or unitized for production purposes. This provision of this lease shall be applicable on a well-by-well or unit-by-unit basis as appropriate.
- 4) It is understood and agreed that this lease covers and includes only oil, gas and associated hydrocarbons or constituents thereof that can be or may be produced through the bore of a producing oil or gas well and expressly does not cover coal, lignite or other hard minerals.
- 5) Notwithstanding the provisions of this lease to the contrary, this lease is granted by Lessor and accepted by Lessor without warranty of title whatsoever, expressed or implied, and without any recourse against Lessor even as to the return of any consideration paid for this lease, or any royalties paid hereunder.
- 6) Lessee shall furnish Lessor with a copy of all data including logs, core analyses, daily drilling reports, and/or drill stem tests made in connection with any wells drilled on lands covered by this lease or on lands pooled or unitized with the leased premises.
- 7) As to any well or other operations conducted exclusively pursuant to this lease, Lessee shall prior to commencing such activities, notify Lessor of the proposed activities and the location thereof. Within ten days of receipt of such notification, Lessor shall furnish Lessee with its written consent to the proposed location or with alternative location suggestions for the location of the proposed activities. Upon receipt of timely notification of alternative location suggestions, Lessee shall utilize reasonable efforts to accommodate the Lessee's location suggestions or requests. If Lessor fails to timely furnish the required consent or alternative suggestions, such failure shall \$\epsilon\$ constitute Lessor's consent to the location of the proposed operations. Any damage to the surface of the leased premises, or to improvements, timber or growing crops thereon, incurred as a result of Lessee's operations under this lease, shall be paid for by Lessee within thirty (30) days after submission of charges therefore by Lessor.
- 8) Lessee shall indemnify and hold Lessor harmless from and against all actions or causes of action, claims, losses, and damages of every kind, including costs and attorney's fees, incident to or in any manner resulting in injury to persons (including employees, agents, representatives, invitees, and licensees of Lessee, or other engaged by Lessee) and damages to property, or other legal consequences arising out of the use and occupancy of the leased premises, any and all operations or other work or service undertaken thereon by Lessee, its agents, representatives or others engaged by Lessee to perform the same, including without limitation, all acts of commission or omission of Lessee, its said agents, representatives, invitees, employees, and licensees.
- 9) This lease may not be maintained beyond its primary term for more than two consecutive years solely by the payment of shut-in gas well royalty payments. Shut-in gas well royalty payments shall be calculated on the basis of Ten Dollars (\$10.00) per surface acre so pooled or unitized with each such shut-in gas well.

Baux

SIGNED FOR IDENTIFICATION

FRANKS REALTY, INC.

OHN FRANKS, PRESIDENT

Bath Form Louisiana Spec. 14-BR1-2A-NL Paid up R2/99

3783/41 REGNO. 1989871

OIL. GAS AND MINERAL LEA

THIS AGREEMENT made this	9th day of	June	,2005 _{, between}
FRANKS REALTY, INC. a L	ouisiana Corporat	tion,	
Lessor (whether one or more) whose address is CAMTERRA RESOURCES P		55, Shreveport, Louisiana	71137-7665
and	9, Marshall, Texa	as 76571	Lessee,
Lessee herein contained, hereby grants, lease gas, sulphur and all other minerals, together transportation of said minerals (either from said	s and lets unto Lessee, the exclusi- with the use of the surface of t land or acreage pooled therewith),	siderations (\$100.00 & OVC), in hand paid, of the river right to enter upon and use the land hereinafter define land for all purposes incident to the exploration and the right to dispose of salt water, with the right similar operations on adjoining land; the land to which	scribed for the exploration for and production of oil, for and production, ownership, possession and of ingress and egress to and from said lands at all

REFER, TO ATTACHED EXHIBIT "A" FOR DESCRIPTION AND ADDITIONAL PROVISIONS This lease shall also extend and apply to any interest therein which Lessor may hereafter acquire, including, but not limited to outstanding mineral rights acquired by reversion prescription or otherwise, and includes battures, accretions, roads, highways, easements, right-of-ways and all land. **Any York of the Complete of the Complete or accurate description of said land. For the purposes of determining 142.461 the amount of bonus and the shut-in royalty payment hereunder, said land shall be deemed to contain and the above recital of acreage in any tract shall be deemed to be the true acreage thereof. acres, whether actually containing more or less. 2. Subject to the other provisions herein contained, this lease shall be for a period of three (3) years from the date hereof (called "primary term") and as long thereafter as (1) oil, gas, sulphur or other mineral is produced from said land hereunder or from land pooled therewith; or (2) it is maintained in force in any other manner herein provided.

3. For the consideration hereinabove recited, this lease shall remain in full force and effect during the primary term, without any additional payment and without Lessee being required to conduct any operations on the land (either before or after the discovery of minerals), except to drill such wells as might be necessary to protect the land from drainage, as hereinafter provided. 4. The royalties to be paid by Lessee are: (a) on oil, and other hydrocarbons which are produced at the well in liquid form by ordinary production methods, one-eighth of that produced and saved from said land, same to be delivered at the wells or to the credit of Lessor in the pipe line to which the wells may be connected; Lessor's interest in either case to bear its proportion of any expenses for treating the oil to make it marketable as crude; Lessee may from time to time purchase any royalty oil or other liquid hydrocarbons in its possession, paying the market price therefor prevailing for the field where produced on the date of purchase; (b) on gas, including casinghead gas, or other gaseous substance produced from said land and sold or used off the premises or for the extraction of gasoline or other products therefrom, the market value at the well of one-eighth of the gas so sold or used, provided that on gas sold at the wells the royalty shall be one-eighth of the amount realized from such sale; such gas, casinghead gas, residue gas, or gas of any other nature or description whatsoever, as may be disposed of for no consideration to Lessee, either through unavoidable waste or leakage, or in order to recover oil or other liquid hydrocarbons, or returned to the ground, shall not be deemed to have been sold or used either on or off the premises within the meaning of this paragraph 4 hereof; (c) on all other minerals mined and marketed, one-eighth, either in kind or value at the well or mine, at Lessee's election, except that on sulphur the royalty shall be one dollar (\$1.00) periong ton.

5. If Lessee during or after the primary term should drill a well capable of producing gas or gaseous substances in paying quantities, (or which although previously produced Lessee is marketed, one-eighth, either in kind or value at the well or mine, at Lessee's election, except that on sulphur the royalty shall be one dollar (\$1.00) per long ton.

5. If Lessee's after the primary term should drill a well capable of producing gas or gaseous substances in paying quantities, (or which although previously produced Lessee is unable to continue to produce) and should Lessee be unable to operate said well because of lack of market or marketing facilities or governmental restrictions, then Lessee's rights may be maintained beyond or after the primary term without production of minerals or further drilling operations by paying Lessor as royalty a sum equal to one dollar (1.00) per acre of land covered hereby per year, the first payment being due, if said well should be completed or shut-in after the primary term, within ninety (90) days after the completion of such well or the cessation of production and such payment will extend Lessee's rights for one year from the date of such completion or cessation. If such a well should be completed during the primary term, the first payment, if made by Lessee, shall be due within 90 days after such well is shut-in, or before the expiration date of the primary term herein fixed, whichever is the later date. Thereafter Lessee's rights may be continued from year to year by making annual payments in the amount stated on or before the anniversary date beginning with the date of completion of said well (if completed after the primary term) or the end of the primary term (completed prior thereto) as the case may be; each of such payments to extend Lessee's rights for one year. The annual payments herein provided for may be deposited to Lessee's credit in the Mail Direct to Lessor at the above address Bank of

bank shall be and remain Lessor's agent for such purpose regardless of any change or changes in the ownership of the land or mineral rights therein. The owners of the royalty as of the date of such payments shall be entitled thereto in proportion to their ownership of said royalty. The provisions of this paragraph shall be recurring at all times during the life of this lease. Should any well producing gas or gaseous substances be completed on a drilling unit which includes any part of the land herein leased, the provisions of this paragraph shall be subject to all other agreements herein contained allowing the pooling of the above described lands with other lands.

6. If within ninety (90) days prior to the end of the primary term, Lessee should complete or abandon a well on the lands described above or on land pooled therewith, or if production provided the causer of charged capacity of the production of the control of the control of the capacity of the capac

- o. If within ninety (90) days prior to the end of the primary term, Lessee should complete or abandon a well on the lands described above or on land pooled therewith, or if production previously secured should cease from any cause, this lease shall continue in force and effect for enterty (90) days from such completion or abandonment or cessation of production. If at the expiration of the primary term or at the expiration of the ninety (90) day period provided for in the preceding sentence, oil, gas, sulphur or other mineral is not being produced on said land or on land pooled therewith, but Lessee is then engaged in operations for drilling, completion or reworking thereon, or operations to achieve or restore production, or if production or form any cause after the expiration of the primary term, this lease shall remain in force so long thereafter as Lessee either (a) is engaged in operations for drilling, completion or reworking, or operations to achieve or restore production, with no cessation between operations or between such cessation of production and additional operations from the final production of production and additional operations from the production of sulphur and therewith, this lease shall continue in force and effect so long as Lessee is engaged with due diligence in explorations for and/or erecting a plant for the production of sulphur and thereafter subject to the foregoing provisions hereof so long as oil, gas, sulphur or other mineral is produced from said land hereunder or from land pooled therewith.
- a plant for the production of sulphur and thereafter subject to the foregoing provisions hereof so long as oil, gas, sulphur or other mineral is produced from said land hereunder or from land pooled therewith.

 7. Lessee is hereby granted the right as to all or any part of the land described herein, without Lessor's joinder, to combine, pool or unitize the acreage royalty or mineral interests of land in the vicinity thereof, whether owned by Lessee or some other person, or corporation as a to create, by the combination of such lands and leases, one or more operating units, as to any and all mineral horizons, provided that no one operating unit shall, in the case of gas, including condensate, embrace more than six hundred forty (640) acres, and provided further, however, that if any spacing or other rules and regulations of the State or Federal Commission, Agency, or regulatory body having or claiming jurisdiction has heretofore or shall at any time hereafter permit or prescribe a drilling or operating unit or spacing rule in the case of gas, including condensate, greater than six hundred forty (640) acres, or in the case of oil or casinghead gas greater than eighty (80) acres, then the unit or units herein contemplated may have, or may be redesigned so as to have, as the case may be, the same surface content as, but not more than, the unit or the acreage in the spacing rule is prescribed or permitted. However, it is further specifically understood and agreed, anything herein to the contrary notwithstanding, that the Lessee shall have the right to, and the benefit of an acreage tolerance of ten per cent in excess of any drilling or operating unit authorized herein. The commencement of operations for the drilling of a well, or the completion of a well to production of either oil, gas, casinghead gas, condensate, or other minerals therefrom shall have the same effect under the terms of this lease as if a well were commenced, completed or production of oil, gas, casinghead gas, condensate, or other minerals therefr
- 6. It Lessor owns a less interest in the above described and that the remoral on which Lessor's interest bears to the whole and undivided fee.

 9. Lessee shall have the exclusive right to explore the land herein described by geological, geophysical or other methods, whether similar to those herein specified or not and whether now known or not, including the drilling of holes, use of torsion balance, seismograph explosions, magnetometer, or other geophysical or geological instruments, test or procedures, for

the purpose of securing geological and geophysical information. All information obtained by Lessee as a result of such activity shall be the exclusive property of Lessee, and Lessee may disseminate or self such information without Lessor's consent. In exploring for, developing, producing and marketing oil, gas and other substances covered hereby on the leased premises or lands pooled or unitized therewith, in primary and/or enhanced recovery, Lessee shall have the right of ingress and egress along with the right to conduct such operations on the leased premises, or on any adjacent or adjoining lands, as may be reasonably necessary for such purpose, including but not limited to the drilling of wells, construction and use of roads, canalse, pipelines, tanks, water wells, disposal wells, injection wells, pipel electric and telephone lines, power stations, and other facilities deemed necessary by Lessee to discover, produce, store, treat and/or transport oil, gas and other substances. Lessee shall have free use of oil, gas, casinghead gas, condensate, and water from said land, except water from Lessor's wells, for all operations hereunder, including repressuring, pressure maintenance and recycling, and the royalty shall be computed after deducting any so used. Lessee shall have the right of tax any time during or after the expiration of this lesse to remove all property and futures placed by Lessee on said land, including the right to draw and remove all cassion. have the right at any time during or after the expiration of this lease to remove all property and fixtures placed by Lessee on said land, including the right to draw and remove all casing. When required by Lessor, Lessee will bury all pipe lines below ordinary plow depth, and no well shall be drilled within two hundred feet of any residence or barn now on said land without Lessor consent. In the event a well or wells, producing oil, gas, casinghead gas or condensate in paying quantities should be brought in on adjacent lands not owned by the Lessor and within one hundred fifty feet of and draining the leased premises, Lessee agrees to drill such offset well or wells as a reasonably prudent operator would drill under the same or similar

10. The rights of either party hereunder may be assigned in whole or in part and the provisions hereof shall extend to the heirs, executors, administrators, successors and assigns, but no change or division in ownership of the land, or royalties, however accomplished shall operate to enlarge the obligations or diminish the rights of Lessee. No such change or division in the ownership of the land, or royalties shall be binding upon Lessee for any purpose until such person acquiring any interest has furnished Lessee, at its principal place of business, with a certified copy of the instrument or instruments, constituting his chain of title from the original Lessor. An assignment of this lease, in whole or in part, shall, to the extent of such assignment, relieve and discharge Lessee of any obligations hereunder to Lessor and, if Lessee or assignee of part or parts hereof shall fail to comply with any other provisions of the lease, such default shall not affect this lease insofar as it covers a part of said lands upon which Lessee or any assignee shall comply with the provisions of the lease. In addition, Lessee may at any time and from time to time execute and deliver to lessor or file for record a release or releases of this lease as to any part or all of said land or of any mineral or horizon

thereunder, and thereby be relieved of all obligations as to the released acreage or interest.

11. In case of suit, adverse claim, dispute or question as to the ownership of the royalties (or some part thereof) payable under this lease, Lessee shall not be held in default in payment of such royalties (or the part thereof in dispute), until such suit, claim, dispute or question has been finally disposed of, and Lessee shall have thirty (30) days after being furnished with a certified copy of the instrument or instruments disposing of such solid, claim or dispute, or after being furnished with proof sufficient, in Lessee's opinion, to settle send question, within which to make payment. Should the right or interest of Lessee hereunder be disputed by Lessor, or any other person, the time covered by the pendency of such dispute shall not be counted against Lessee either as affecting the term of the lease or for any other purpose, and Lessee may suspend all payments without interest until there is a final

adjudication or other determination of such dispute.

12. In case of cancellation or termination of this lease from any cause, Lessee shall have the right to retain, under the terms hereof, around each well producing, being worked on, or drilling hereunder, the number of acres in the form allocated to each such well under spacing and proration rules issued by the Commissioner of Conservation of the State of Louisiana, or any other State or Federal authority having control of such matters; or any unit or units formed pursuant to paragraph 7 or, in the absence of such rulings, unit or units, forty (40) acres around each such well in as near a square form as practicable, and in the event Lessor considers that operations are not being conducted in compliance with this contract, Lessee shall be notified in writing of the facts relied upon as constituting a breach hereof and Lessee shall have sixty (60) days after receipt of such notice to comply with the obligations imposed by virtue of this instrument.

13. When drilling, reworking, production or other operations are delayed or interrupted by force majeure, that is, by storm, flood or other acts of God, fire, war, rebellion, insurrection, not, strikes, differences with workmen, or failure of carriers to transport or furnish facilities for transportation, or as a result of some law, order, rule, regulation, requisition or necessity of government, Federal or State, or as a result of any cause whatsoever beyond the control of the Lessee, the time of such delay or interruption shall not be counted against Lessee, anything in this leases to the contrary notwithstanding, but this lease shall be extended for a period of time equal to that during which Lessee is so prevented from conducting such drilling or reworking operations on, or producing oil, gas, casinghead gas, condensate or other minerals from, the premises; provided that during any period that this lease is continued in force after its primary term solely by force majeure as herein provided, Lessee shall pay to the owners of the royalty hereunder the shut-in royalty provided in paragraph 5 hereof, and in the manner therein provided, without regard to whether or not there is a producing well shut in, located on said land or on land with which the lease premises or any part thereof has been

Lessee shall pay for actual damages caused by its operations to growing crops and timber on said land leased herein.
 Notwithstanding the death of any party Lessor, or his successor in interest, the payment or tender of all sums accruing hereunder in the manner provided above shall be binding on the heirs, executors and administrators of such person.

My Commission expires_

16. Lessor hereby warrants and agrees to defend the title to the lands herein described, and agrees that the Lessee at its option shall have the right to redeem for Lessor, by payment, any mortgage, taxes or other liens on the above described lands, in the event of default of payment by Lessor, and be subrogated to the rights of the holder thereof. In case of payment of any such mortgage, taxes or other liens by Lessee, in addition to the right to subrogation herein granted, Lessee shall also have the right to retain any royalties which become due Lessor hereunder and to repay itself therefrom, and the retention of such royalties by Lessee shall have the same effect as if paid to the Lessor in whose behalf payment of any mortgage, taxes or other liens was made.

17. This lease shall be binding upon all who execute it, whether or not named in the body hereof as Lessor, and without regard to whether this same instrument, or any copy thereof.

shall be executed by any other Lessor named above.

WITNESS WHEREOF, this instrument is executed as of the WITNESSES Let a Freeman Leta Freeman	LESSOR (WHETHER ONE OR MORE) FRANKS REALTY, INC. By: Pauwn GibuA	72-0682479
Edward Yarbrough	/ Faith N. Gilbert	SS No. OR TAX ID
	its Secretary / Treasurer	
·		SS No. OR TAX ID
		SS NO. OR TAX ID
	/	SS NO, OR TAX ID
STATE OF LOUSIANA		
PARISH OF CADDO		
personally known, who, being by me duly swor REALTY, INC. and that the above and forgoi	e me personally appeared y Faith N. Gilbert n, did say that he/she is the Secretary/Treasurer ng instrument was signed on behalf of said corporation by said instrument to be the free act and deed of said corpora	y the authority of its Board o
Notary	Printed Name Commissioned in Ca	lotary Public ID # 2731 sveport, LA 71137.7665 kddo Parieti, Loukriana on is for Life

EXHIBIT "A"

ATTACHED TO AND MADE A PART OF THAT CERTAIN OIL, GAS AND MINERAL LEASE DATED JUNE 9, 2005 BETWEEN FRANKS REALTY, INC., AS LESSOR, AND CAMTERRA RESOURCES PARTNERS, LTD., AS LESSEE.

Description:

(Theoretical) SECTION 15, TOWNSHIP 16 NORTH, RANGE 13 WEST

Tract #1: 122.461 acres, more or less, being Lots 1 and 2 and a portion of Lots 3,6,7 and 8, Daniels Succession of Section 15, Township 16 North, Range 13 West, Caddo Parish, Louisiana as recorded in Book S, Page 884 of the Conveyance Records of Caddo Parish, Louisiana, being more particularly described in that certain Deed dated January 30, 2004, from Leroy Kirby, Jr., et ux, in favor of Franks Realty, Inc., recorded in Conveyance Book 3655, Page 364, Registry Number 1900984, of the Conveyance records of Caddo Parish, Louisiana; AND

Tract #2: All that part of the following described land lying in Section 15, Township 16 North, Range 13 West: 432.369 acres more particularly described in that certain Cash Deed dated July 9, 1998, from John Creighton Webb, Jr., etal, in favor of Franks Realty, Inc., recorded in Conveyance Book 3260, Page 436, Registry Number 1612248, of the Conveyance Records of Caddo Parish, Louisiana, as ratified and amended by Ratification and Amendment dated September 14, 1988 by John Woods Day, et al, recorded in Conveyance Book 3273, Page 185, Registry Number 1621270, of the Conveyance Records of Caddo Parish, Louisiana, as corrected by Correction of Ratification of Cash Sale Deed dated March 8, 1999, from Lucille Webb Day, recorded in Conveyance Book 3323, Page 331, Registry Number 1656532, of the Conveyance Records of Caddo Parish, Louisiana, containing 20.00 acres more or less.

The above described property contains in the aggregate 142.461 acres, more or less, and it is the intention of the herein Lessor to lease all lands/minerals owned by them in Section 15, (Theoretical Section 15), Township 16 North, Range 13 West, Caddo Parish, Louisiana, whether properly described herein or not.

Additional Provisions:

Notwithstanding any provision to the contrary contained in the printed provisions of this oil, gas and mineral lease, the following special provisions shall prevail and govern over all printed provisions of said lease:

- 1. a. All royalties on oil and gas provided to Lessor herein shall be one-fourth (1/4) instead of one-eighth (1/8) and wherever the fraction one-eighth (1/8) appears in this lease in any connection with royalty, the fraction one-fourth (1/4) shall be substituted therefor.
 - b. The royalties provided for in this lease shall be determined and delivered to Lessor free of any development, production, wellhead compression, processing, treating, gathering, marketing, transportation, delivery or like costs except such processing, gathering, marketing and transportation or delivery costs incurred by Lessee from unaffiliated Third Parties in which Lessee does not have a beneficial interest; however, such royalties shall bear taxes applicable to Lessor's share of production that are paid by Lessee.
 - c. Accounting and payment to Lessor of royalties from the production of oil and gas shall commence no later than 120 days after the end of the calendar month in which first production occurs from each completed well. Thereafter, unless otherwise specifically provided herein, all accounting and payments of royalties shall be made on or before the last day of the second calendar month following the calendar month in which the production occurred. Any royalties or other payments to Lessor provided for in this lease that are not paid, except where there is a title defect disclosed by an opinion prepared by a title attorney, within the time period specified therefor shall accrue interest at the rate of three percent (3%) in excess of the prime interest rate of Chase Manhattan Bank, New York, New York per annum from due date until paid, provided that such interest rate shall be reduced automatically to the legal maximum rate in the event same ever exceeds such maximum rate. Acceptance by Lessor, its successors, agent, or assigns of royalties that are past due shall not act as a waiver or estoppel of its right to receive or recover interest due thereon under the provision hereof.

- d. Notwithstanding the provisions of this paragraph to the contrary, Lessor shall have the right and option, but not the obligation, to take in kind Lessor's royalty share of all oil and gas produced under the terms of this lease and to separately market such oil or gas for Lessor's own account. Lessor's option may be exercised at any time and from time to time by Lessor giving Lessee written notice not less than thirty (30) days in advance of the beginning of the calendar month in which Lessor elected to royalty gas, Lessee agrees to deliver such gas to Lessor at the wellhead after separation and required to deliver gas to a pipeline purchaser selected by Lessor, Lessor shall be responsible for such compression costs. All other costs and expenses attributable to Lessor's election to separately market Lessor's royalty share of oil and gas production, including but not limited to Lessor's share of transportation fees under the terms of this paragraph, shall be borne by Lessor. Should Lessor elect not to take in kind its royalty portion of any oil, gas or other minerals produced hereunder after having done so, Lessor shall notify Lessee of Lessor's desire to no longer take said royalty in kind not less than 15 days prior to the end of the calendar month in which Lessor will cease to take its production in kind and it shall be Lessee's obligation to market said production for Lessor and to pay Lessor's royalty according to the other terms of this Lease.
- e. Lessee shall not sell or contract for the sale of royalty oil or gas, being Lessor's Royalty Interest of any oil and/or gas produced for a price less than the price received by Lessee for the sale of oil or gas hereunder, nor less than the market value at the well of oil determined as of the date oil is produced and delivered, nor for less than the market value at the well of gas determined as of the date gas is first delivered under such contract. The term "market value" as used herein shall be defined to mean the price received by Lessee as a result of an arms length good faith negotiation with an unaffiliated purchaser in which Lessee does not have a beneficial interest. In no event shall Lessee enter into a contract for the sale of royalty oil or gas which does not provide for at least annual re-determination of the prices paid for gas sold under any such contract. Lessee shall not enter into any contract with any Affiliate relative to the sale, gathering, treating, compressing, marketing, operating, transporting or processing of any oil or gas produced from the Leased Premises without the prior written consent of Lessor. If Lessee enters into any such Affiliate contract without Lessor's prior written consent, Lessor shall have the right to unilaterally declare that all royalties have not been paid and that a default has occurred under the provisions of this lease. Where used herein, the term "Affiliate" means any individual, corporation, joint venture, partnership or other entity or organization controlling, controlled by or under common control of Lessee (the concept of control meaning the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of another, whether through ownership of voting securities, by contract or otherwise).
- Notwithstanding anything in this lease to the contrary, actual drilling on, or production from any unit or units (formed by private agreement or by state or federal governmental authority, or otherwise) embracing the land covered by this lease only, or both land leased herein and other land, shall maintain this lease in force beyond the expiration of the primary term herein fixed, or any extension of same as provided herein, only as to that portion of Lessor's land included in such unit or units whether or not said drilling or production in on or from the leased premises. This lease may be maintained in force as to the remainder of the land covered hereby in any manner provided for herein. In the event a well (or wells) drilled on the leased premises is produced on a "lease basis", that is without there being a unit established for said well (or wells), said lease basis well (or wells) shall maintain this lease in force beyond the expiration of the primary term herein fixed, or any extension of same as provided herein, only as to an area of forty acres surrounding an oil well (or wells) or an area of one hundred sixty (160) acres surrounding a gas well, which area shall be as nearly as practicable in the shape of a square, with the well on or near the center thereof. No unit shall be declared by the Lessee under the terms of this lease without the prior written consent of Lessor.
- 3. This lease shall terminate at the end of the primary term herein fixed, or any extension of same as provided herein, as to all strata, zones and depths lying one hundred feet (100') below the deepest depth drilled in any well drilled on the leased premises or on land with which all or a portion of the leased premises has been pooled or unitized for production purposes. This provision of this lease shall be applicable on a well-by-well or unit-by-unit basis as appropriate. Lessee shall provide Lessor with a recorded release effecting the terms and provisions of this paragraph and enumerated paragraph two (2.) above within 45 days after the expiration of the primary or extended term of this lease, as applicable.

- 4. It is understood and agreed that Lessee may conduct no activity whatsoever on the surface of leased premises without the prior written consent of Lessor. Lessee shall promptly pay to Lessor all damages to the surface and appurtenances of the leased premises and to any other lands and appurtenances of Lessor caused by, or arising out of Lessee's operations under this lease, or any employees, agents, invitees, contractors or other representatives of Lessee on the leased premises or on any adjacent or contiguous premises under the control of, or being operated by Lessee. Such damages shall include, but not by way of limitations, damages to lands, buildings, structures, improvements, crops, timber, livestock, roads, or other properties of any kind. In the event Lessor consents to the placement of property or fixtures by Lessee on the leased premises, Lessee shall have 90 days after the expiration of this lease to remove said property or fixtures. At Lessor's option, if such property is not timely removed, title to same shall revert to the Lessor but only at the option of Lessor.
- 5. The rights of either party hereunder may be assigned in whole or in part and the provisions hereof shall extend to the respective heirs, executors, administrators, successors and assigns of the parties hereto; provided, however, that any such assignment by Lessee shall not become effective if Lessor has not been given written notice and furnished a copy of the assignment. Also, an assignment shall not relieve the Lessee of any duties, liabilities, or obligations owed to Lessor.
- 6. Notwithstanding the provisions of this lease to the contrary, this lease is granted by Lessor and accepted by Lessee without any covenant of title or warranty of title of any kind whatsoever, expressed or implied; and without any recourse against Lessor even as to the return of any consideration paid for this lease, or any royalties paid hereunder.
- 7. This lease covers only oil, gas and other hydrocarbons and/or substances, whether elements, mixtures of compounds in liquid, gaseous or vaporous forms or states, which can be produced through the bore of a well producing oil or gas, it being understood and agreed that coal, lignite, iron ore, gravel and all other hard minerals are excepted from this lease.
- 8. Lessee shall furnish Lessor, within 24 hours of its receipt thereof, a copy of all daily drilling and mud log reports, core and mud samples, complete copies of all logs, results of all drill stem tests, formation tests and core analyses, dipmeter and velocity surveys. Also, Lessee upon written request shall furnish Lessor all permits or forms filed with any regulatory agency, all monthly production and sales reports and all surveys and location plats made in connection with any well drilled on the leased premises or on lands pooled or unitized therewith. Limited to seismic and geophysical work performed by or on behalf of Lessee, Lessee shall furnish Lessor with all proprietary seismic and geophysical date, including tapes and support data. Information furnished to Lessor hereunder may be used for its own purposes, provided such information shall be maintained confidential for a period of 180 days of Lessor's receipt. Lessor, its agents or representatives, shall have full rights of ingress and egress to all areas of operations conducted under the terms of this lease.
- 9. This lease may not be maintained beyond its primary term for more than two consecutive years solely by the payment of shut-in gas well royalty payments. Shut-in gas well royalty payments shall be calculated on the basis of Ten Dollars (\$10.00) per mineral acre so pooled or unitized with each such shut-in gas well.
- 10. Lessee shall indemnify and hold Lessor harmless from and against all actions or causes of action, claims, losses and damages of every kind, including costs and reasonable and necessary attorney's fees, incident to or in any manner resulting in injury to persons (including employees, agents, representatives, invitees, and licensees of Lessee, or others engaged by Lessee) and damages to property, or other legal consequences arising out of the use and occupancy of the leased premises, and any and all operations or other work or service undertaken thereon by Lessee, its agents, representatives or others engaged by Lessee to perform the same, including, without limitation, all acts of commission or omission of Lessee, its said agents, representatives, invitees, employees and licensees.

SIGNED FOR IDENTIFICATION:

FRANKS REALTY, INC.

Faith N. Gilbert, Secretary/Treasurer

SCANNE 002T010

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MEMORANDUM OF OIL AND GAS LEASE

THE STATE OF LOUISIANA §

PARISH OF CADDO

EAETON LATE DEPUTY CLERK

Notice is hereby given that on the 30th day of June 2008, an Oil and Gas Lease was made and entered into by and between Franks Investment Company, L.L.C. whose address is PO Box 7626, Shreveport, La 71137 (hereinaster "Lessor"), and Twin Cities Development, L.L.C., whose address is 401 Edwards Street, Suite 1920, Shreveport, LA 71101 (hereinafter "Lessee"), wherein Lessor grants, leases and lets exclusively to Lessee, for the purpose of exploring for and producing, oil, gas and other products produced in association with oil or gas, in and under those certain lands in Caddo Parish, Louisiana to-wit:

LEGAL DESCRIPTION ATTACHED AS "EXHIBIT A" AND BY REFERENCE MADE A PART HEREOF.

Subject to the other provisions therein contained, said Oil and Gas Lease provides for a primary term of three (3) years and as long thereafter as oil or gas or either of them is produced in paying quantities from the above described property.

Among the other additional terms and conditions of said Oil and Gas Lease:

Upon the expiration of the primary term of this lease, Lessee shall release:

- All lands covered by this lease (as to all depths) lying outside of the geographical boundaries of the producing units, established under the terms and provisions of said lease, and
- b.) All depths covered by this lease not then producing in paying quantities from a Unitized Interval within the geographical boundaries of the producing units established under the terms and provisions of said lease.

THERE WILL BE NEITHER DRILLING NOR SURFACE OPERATIONS OF ANY KIND ON THE LEASED PREMISES, EXCEPT AS PERMITTED HEREAFTER BY A MUTALLY ACCEPTABLE SURFACE USE AGREEMENT BY AND BETWEEN LESSOR AND LESSEE THAT IS REDUCED TO WRITING AND EXECUTED BY LESSOR AND LESSEE.

Originals of the Oil and Gas Lease are in the possession of Lessor and Lessee, at their respective addresses stated above.

This Memorandum is executed for the purpose of filing this instrument of record in the official Records of Caddo Parish Louisiana, to give notice to all third parties dealing with Lessor or Lessee, or with the lands described above, of the existence of the Oil and Gas Lease. The Oil and Gas Lease and this Memorandum shall be binding upon Lessor and Lessee and their respective heirs, successors and assigns.

IN WITNESS WHEREOF, this instrument is executed to be effective as of the date stated herein.

Witnesses:

FRANKS INVESTMENT COMPANY, L.L.C.

Bobby E Jelks, Manager

Witnesses:

DEVELOPMENT, L.L.C.

Matthew Montgomery.

STATE OF LOUISIANA		(2)
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act on behalf of same, who ack limited liability company by at	ne, 2008, before me personally appeared Bobby E. Jelks to me larger of Franks Investment Company, L.L.C., duly authorized to lowledged that said instrument was signed on behalf of said thority of its membership and said Bobby E. Jelks acknowledged that and deed of said limited liability company. Notary Public in and for Ph., LA Diane Marie Fong, Notary Public ID # 2731	@070T2008
STATE OF LOUISIANA	P. O. Box 7665 - Streveport, UA 71137-7665 Commissioned in Caddo Parish, Louisiana Commission is for life,	
to me personally known to be to act on behalf of same, who a limited liability company by an	ne, 2008, before me personally appeared Matthew Montgomery are President of Twin Cities Development, L.L.C., duly authorized eknowledged that said instrument was signed on behalf of said chority of its membership and said Matthew Montgomery to be the free act and deed of said limited liability company. Notary Public in and for Ph., LA	
STATE OF LOUISIANA PARISH OF	Diane Marie Fong, Notary Public ID # 2731 P. O. Box 7665 - Shreveport, LA 71137-7665 Commissioned in Caddo Parish, Louisiana Commission is for life.	
Before me, the undersign being first duly sworn deposes an foregoing instrument by presence and that of the other su	d authority, personally came and appeared who says that he was one of the subscribing witnesses to the execution of the who signed the same in his scribing witness(es) to such signature(s) whose name(s) (signatures) are wrecognizes all said signatures to be true and genuine.	
Sworn to and subscribed before m	, notary, on this, 2008.	
	NOTARY PUBLIC in and for Parish, Louisiana	
	HOTHER I ODDIC III and for	

EXHIBIT 'A'

Attached hereto and made a part of this memorandum dated June 30 , 2008 by and between Franks Investments Company, LLC, as Lessor and Twin Cities Development, LLC, as Lessee

- 1.) That certain tract of land containing 432.617 acres, more or less, located in Sections 10, 11, 14 and 15-T16N-R13W, described in that certain Cash Sale Deed, dated July 9, 1998, by and between John Creighton Webb, Jr. et al, Vendors, and Franks Realty, Inc., Vendee, recorded under Registry No. 1612248 of the Conveyance Records of Caddo Parish, Louisiana, and more particularly described in those various Corrections of Ratification of Cash Sale Deed, recorded under Registry Nos. 1656552-1656559 and 1656561 of the Conveyance Records of Caddo Parish, Louisiana, INSOFAR AND ONLY INSOFAR AS TO THOSE CERTAIN DEPTHS SET FORTH HERRINAFTER:
- a.) As to theoretical Section 14, this Lease covers only those depths and horizons located below 10,663' thereunder. (Leasehold rights above said depths and horizons are subject to those certain oil and gas leases, dated May 15, 1973, and October 1, 2003, recorded, respectively, in Book 1417, Page 394 and under Registry No. 1884251.)
- b.) As to theoretical Section 15, this Lease covers only those depths and horizons located below 10,885' thereunder. (Leasehold rights above said depths and horizons are subject to those certain oil and gas leases, dated May 15,1973, and June 9, 2005, recorded in Book 1417, Page 394 and Book 3783 Page 41, respectively.)
- c.) As to theoretical Sections 10 and 11, this Lease covers only those depths and horizons located below the stratigraphic equivalent of 7,595' as seen on the electric log of the Grigsby Petroleum, Inc.-ROD RD SUA; Egan #1 located in theoretical Section 14-16N-13W. (Leasehold rights above said depths and horizons are subject to that certain oil and gas lease, dated May 15, 1973, recorded in Book 1417, Page 394.)
- 2.) That certain tract of land containing 488.190 acres of land, more or less, located in theoretical sections 3, 4, 9 and 10-T16N-R13W, more particularly described in the certain Deed, dated January 7, 1999, by and between John Franks et ux, Vendors, and Franks Realty, Inc., Vendee, recorded under Registry No. 1636805 of the Conveyance Records of Caddo Parish, Louisiana, INSOFAR AND ONLY INSOFAR AS TO THOSE CERTAIN DEPTHS SET FORTH HEREINAFTER:
- a.) As to all of said 488.190-acre tract, this Lease covers only those depths and horizons located below the stratigraphic equivalent of 7,595' as seen on the electric log of the Grigsby Petroleum, Inc.-ROD RD SUA; Egan #1 located in theoretical Section 14-16N-13W. (Leasehold rights above said depths and horizons are subject to that certain oil and gas lease, dated May 15, 1973, recorded in Book 1417, Page 394, less and except that certain 5-acre tract described by Cash Sale Deed, dated June 2, 1994, under Registry Number 01437115 of the Conveyance Records of Caddo Parish, Louisiana, which 5-acre tract does not appear to be subject to a previous lease.)
- 3. That certain tract of land containing 122.461 acres of land, more or less, located in theoretical section 15-T16N-R13W, more particularly described in that certain Deed, dated January 30, 2004, by and between Le Roy Kirby et ux, as "Sellers", and Franks Realty, Inc., recorded under Registry No. 1900984 of the Conveyance Records of Caddo Parish, Louisiana, INSOFAR AND ONLY INSOFAR AS TO THOSE CERTAIN DEPTHS SET FORTH HEREINAFTER:
- a.) As to all of Lessor's interest in said 122.461-acre tract, this Lease covers only those depths and horizons located below the stratigraphic equivalent of 10,885' thereunder. (Leasehold rights above said depths and horizons are subject to that certain oil and gas lease, dated June 9, 2005, recorded in Book 3783, Page 41.)

- 4. All of Lessor's undivided mineral interest in and to that certain tract of land containing 70.38 acres, more or less, located in theoretical section 4-T16N-R13W, more particularly described in the certain Cash Sale Deed, dated February 11, 1999, by and between John Franks et ux and Multi-Faith Retirement Services, recorded under Registry No. 1641095 of the Conveyance Records of Caddo Parish, Louisiana.
- a.) There is no depth restriction regarding Lessor's interest in this 70.38-acre tract and both Lessor and Lessee recognize that the oil, gas and mineral lease cited in the aforesaid instrument, which lease is recorded in Book 1417, Page 411 of the Conveyance Record of Caddo Parish, has expired on its terms.
- 5.) All of Lessor's undivided mineral interest in and to that certain tract of land containing 36.64 acres, more or less, located in theoretical section 4-T16N-R13W, more particularly described in the certain Credit Sale Deed, dated November 9, 1979, by and between John Franks et ux and Multi-Faith Retirement Services, recorded under Registry No. 814237 of the Conveyance Records of Caddo Parish, Louisiana
- a.) There is no depth restriction regarding Lessor's interest in this 36.64-acre tract and both Lessor and Lessee recognize that the oil, gas and mineral lease cited in the aforesaid instrument, which lease is recorded in Book 1417, Page 405 of the Conveyance Record of Caddo Parish, has expired on its terms.

END OF EXHIBIT "A"

Gary Loftin Caddo Parish Clerk of Court

Prepared By: Chesapeake Exploration, L.L.C. P.O. Box 18496 Oklahoma City, OK 73154

PARISH OF

MEMORANDUM OF SURFACE USE AGREEMENT

THE STATE OF LOUISIANA

9 8 8

L0232501

KIM BURROUGHS DEPUTY CLERK

Notice is hereby given that effective the day of da

A portion of (theoretical) Section 11, Township 16, North, Range 13 West, Caddo Parish, Louisiana, consisting of approximately 5.01 acres (+/-), which area consists of (a) a drillsite pad [4.59 acres (+/-)], and (b) an access road 30 feet in width and 586 feet in length [0.42 acres (+/-)] to access the drillsite pad, all as more fully shown on the survey plat attached as Exhibit A hereto.

Subject to all other provisions thereof, the Surface Use Agreement provides for a term commencing with the effective date of the Surface Use Agreement and continuing so long as that certain oil, gas and mineral lease granted by Surface Owner, as lessor, to Twin Cities Development, L.L.C., as lessee, on June 30, 2008, public notice of which was provided by Memorandum of Oil and Gas Lease filed in the Conveyance Records of Caddo Parish, Louisiana, on June 30, 2008, under Registry Number 2166011, remains in effect over any portion of (theoretical) Sections 11 and 14, Township 16 North, Range 13 West, Caddo Parish, Louisiana, according to its terms.

Originals of the Surface Use Agreement are in the possession of Surface Owner and Operator at their respective addresses stated above.

This Memorandum of Surface Use Agreement is executed for the purpose of filing this instrument of record in the Conveyance Records of Caddo Parish Louisiana, to give notice to all third parties dealing with Surface Owner or Operator, or with the lands described above, of the existence of the Surface Use Agreement. The Surface Use Agreement and this Memorandum of Surface Use Agreement shall be binding upon Surface Owner and Operator and their respective heirs, successors and assigns.

IN WITNESS WHEREOF, this instrument is executed to be effective as of the date stated herein.

WITNESSES:

Signature of 1st Witness)

Diane F. Marlowe
(Print name of 1st Witness)

(Signature of 2nd Witness)

(Print name of 2nd Witness)

SURFACE OWNER:

Franks Investment Company, L.L.C.

Bobby E. Jelks, Manager

WITNESSES:

(Signature of 1st Witness)

(Print name of 1st Witness)

(Print name of 2nd Witness)

OPERATOR:

CHESAPEAKE OPERATING, INC.

By: 4 Andell A May

Randall Rodrigue

Manager - Field, Southern Division

769935

Map Attached

Page 1 of 2

ACKNOWLEDGMENTS

PARISH OF CADDO	
-fh /	SERVER STATE OF THE SERVER
On this / T day of August	, 2009, before two competent witnesses and me

the undersigned authority, duly qualified and acting as such in and for the above parish, state aforesaid, appeared Bobby E. Jelks, to me personally known, who, being by me duly sworn, did say:

That he is the duly authorized Manager of Franks Investment Company, L.L.C., a Louisiana limited liability company, that the foregoing instrument was signed by him on behalf of said company, and that said appearer acknowledged said instrument to be the free act and deed of said company.

IN WITNESS WHEREOF, I have pergunto set my hand and official seal.

Notary Public in and for the State of Louisiana

(Notary's Printed Name and ID #)

My Commission Expires: _____

F. Drake Lee, Bar ID No. 08263 Notary Public Caddo Parish, Louisiana My Commission Is For Life

STATE OF OKLAHOMA

STATE OF LOUISIANA

COUNTY OF OKLAHOMA

On this Aday of Agust, 2009, before two competent witnesses and me, the undersigned authority, duly qualified and acting as such in and for the above parish, state aforesaid, appeared Randall Rodrigue, to me personally known, who, being by me duly swom, did say:

That he is the duly authorized Manager – Field, Southern Division, of Chesapeake Operating, Inc, that the foregoing instrument was signed by him on behalf of said company, and that said appearer acknowledged said instrument to be the free act and deed of said company.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

Notary Public in and for the State of Oklahoma

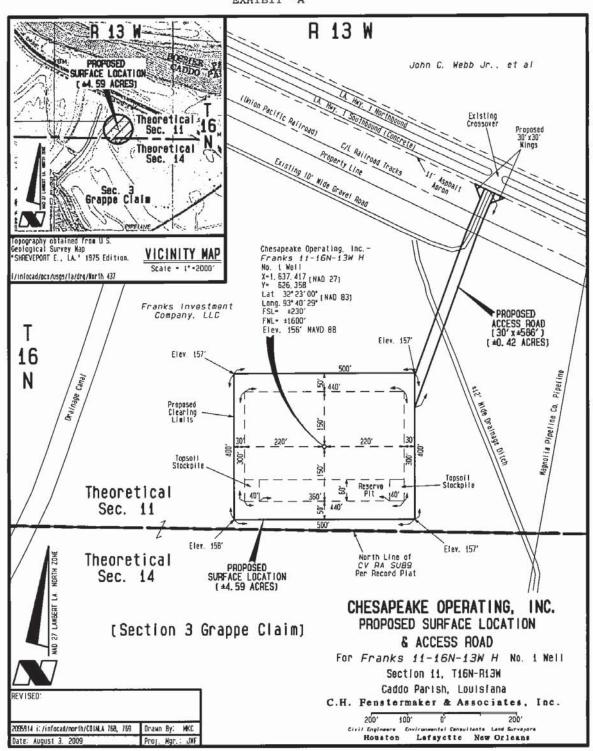
Mandie Shipman appliess,

(Notary's Printed Name and ID #)

My Commission Expires: 12-7-10

06011656 EXP. 12/07/10

769935



Record & Return to: Chesapeake Operating, Inc. P.O. Box 18496 Oklahoma City, OK 73154 Starillantham
DEPUTYCLERK -

SURFACE USE AGREEMENT

4586

This Surface Use Agreement ("Agreement") is made and entered into effective as of May 5, 2011 (the "Effective Date"), by and between the following (hereinafter sometimes referred to collectively as the "Parties"):

Franks Investment Company, L.L.C., a Louisiana Limited Liability Company ("Franks"), whose address is P.O. Box 7626, Shreveport, LA 71137-7626, represented herein by Bobby E. Jelks, its duly authorized Manager; and

Petrohawk Operating Company, a Texas corporation (HK) whose address is 6100 South Yale, Suite 500, Tulsa, Oklahoma 74136, represented herein by Jak Keenan, its duly authorized Vice President-Land

Whereas, Franks has granted Twin Cities Development, L.L.C., ("TCD") an Oil, Gas and Mineral Lease (the "Lease") dated June 30, 2008, covering certain lands in Caddo Parish, Louisiana;

Whereas, a Memorandum of Oil and Gas Lease (the "Memorandum") was filed in the Conveyance Records of Caddo Parish, Louisiana on June 30, 2008, under Registry Number 2166011 to provide notice of the Lease;

Whereas, both the Lease and Memorandum forbid drilling or surface operations on lands covered by the Lease except as permitted by subsequent surface use agreement mutually acceptable to Franks and TCD that is reduced to writing and signed by both Parties;

Whereas, the Lease covers, among other property, certain lands located in (theoretical) Section 10, Township 16 North, Range 13 West, Caddo Parish, Louisiana, all as more fully described in the Lease, the surface of which is owned by Franks (the "Surface Lands");

Whereas TCD has assigned the Lease to Chesapeake Operating, Inc. (COI);

Whereas, HK desires to use and occupy a portion of the Surface Lands consisting of 9.782 acres (+/-) for drilling and surface operations, which area consists of (a) a drillsite pad (the "Drillsite Pad") [5.739 acres (+/-)], and (b) an access road 4493.37 feet in length (the "Access Road") [4.043 acres (+/-)] to access the Drillsite Pad, all as more fully shown on the survey plat attached as Exhibit A hereto;

Now, therefore in consideration of the premises and the mutual covenants and agreements set forth below, the Parties agree as follows:

Surface Use. For payment of the cash consideration described in paragraph 3 below and 1. the premises, Franks grants unto HK, its agents, contractors, employees, and its successors and assigns, a right of use and servitude (hereinafter collectively called the "Right of Use") for ingress and egress on, upon and across the Access Road and Drillsite Pad as may be necessary, useful or convenient to HK in (a) the drilling, completing, recompleting, reworking, maintaining, producing and otherwise operating of directional and horizontal wells (each a "Well"; collectively, the "Wells") from locations on the Drillsite Pad through the subsurface of the Surface Lands to bottom hole locations beneath the Surface Lands or lands pooled therewith, (b) constructing, operating, and maintaining equipment reasonably necessary for its operations, and (c) the storing, transporting, distributing, marketing and selling of oil, gas and other liquid or gaseous hydrocarbons produced from any of the Wells. The Right of Use includes the right to locate an earthen frac water source tank and an earthen frac water flowback tank, herein collectively referred to as "Pits", on the Drillsite Pad. It is contemplated that multiple horizontal wells may be drilled from the Drillsite Pad. All drilling, completion, reworking, and production operations shall be conducted only on the Drillsite Pad. Ingress and egress to the Drillsite Pad shall be on only by the Access Road. All of HK's operations under this Agreement shall be conducted in full compliance with all applicable laws, rules and regulations of any authority having jurisdiction over such operations.

Gary Loftin
Caddo Parish Clerk of Court

2411930

07/09/2012 10:48 AM

- Term. The term of this Agreement shall commence with the Effective Date and shall
 continue for so long as the Lease remains in effect over any portion of the Surface Lands
 in accordance with the terms of the Lease.
- 3. Consideration: As consideration for the Right of Use herein granted, HK shall pay Franks (a) \$75,000.00 upon the Effective Date; and (b) thereafter, on each successive anniversary of the Effective Date during the term of this Agreement, the sum of \$5,000 per acre for each acre included in the Drillsite Pad and Access Road.
- 4. **Special Agreements of HK.** HK agrees that its operations on the Drillsite Pad and Access Road shall be conducted in accordance with the following provisions:
 - 4.1. While drilling or reworking operations are being conducted, HK shall construct and maintain a fence around the area of operations and shall take appropriate measures to insure that only authorized persons have access to the Drillsite Pad. After the completion of a Well, HK shall construct and maintain a substantial fence around all tank batteries, separators, and other surface equipment and shall keep all gates locked. HK shall keep all surface equipment in a good state of repair and painted as often as is necessary to maintain a good appearance. HK shall remove all debris, trash, unused materials, pipe, or equipment from the Drillsite Pad on a continuing basis. HK may not construct any buildings or other structures on the Drillsite Pad except for temporary mobile buildings utilized during drilling and completion operations. HK will use only low profile pumping units and permanent production tanks on the Drillsite Pad. HK shall bury all pipelines located on the Surface Lands, where prudently possible, so that the top of the pipeline is at least 36 inches below the surface.
 - 4.2. Before any drilling equipment is moved to the Drillsite Pad, HK must construct the Access Road as an all-weather, graded gravel road with tinhorns of appropriate diameter placed where necessary. HK shall maintain the Access Road in a good condition.
 - 4.3. HK agrees to keep the Drillsite Pad clean, to keep equipment painted, to fence all Pits until the Pits can be filled and leveled by HK, as provided for below, to repair any fences damaged by HK, and to restore the premises to natural condition insofar as is reasonably practicable upon termination of each operation. Notwithstanding any permanent production tanks allowed for under this Agreement, all salt water produced by operations conducted from the Drillsite Pad may be stored in lined above ground storage containers on a temporary basis and then may be reused in connection with fracture stimulation of additional Wells, or if not so used, must be removed by HK.
 - 4.4. All Pits must be filled to ten inches above ground level by HK within 180 days after completion of each Well, provided however if HK has provided Franks with a development plan outlining a multi-well drilling program which will require the continued use of such Pits, then such Pits may remain open until such program is completed. If the Pits are too wet to cover within 180 days after completion of a Well or Wells, HK agrees to remove to contents of each from the Drillsite Pad and to fill the pits as provided above when the ground is dry.
 - 4.5. HK shall have the right to drill a water well on the Drillsite Pad. Within 30 days of such date as HK ceases to use the water well, HK shall provide Franks written notice tendering the well, free of cost. Upon receipt of that notice Franks shall have 30 days within which to accept the tender. If Franks elects to accept the tender, HK agrees to execute such instrument(s) as may be necessary to convey the well to Franks. If Franks declines to accept the tender, HK shall remain responsible to close the water well in compliance with all applicable laws and regulations.
 - 4.6. HK may not use sand, gravel, or any other materials from the Surface Lands in HK's operations without the prior written consent of Franks. Under no

circumstances may HK, its agents, employees, or contractors bring firearms, dogs or other animals on the Surface Lands or hunt or fish on the Surface Lands.

- 5. Indemnity. As contemplated in paragraph 11 [11.(a) and 11. (b)] of Exhibit B to the Lease, HK undertakes and agrees to be bound by and to perform all indemnification obligations and other obligations imposed upon the "Lessee" therein, which obligations the Parties agree are fully incorporated in this Agreement by reference.
- 6. Plugging and Abandonment and Surface Restoration. HK shall cause any Well drilled pursuant to this Agreement to be plugged and abandoned at the time and in the manner required by applicable laws and regulations unless Franks exercises it right to take over the Well pursuant to the provisions of paragraph 10 of Exhibit B to the Lease. Upon the expiration of the term of this Agreement, HK shall take such steps as are reasonably practicable to restore the ground surface of the Drillsite Pad and Access Road to as near conditions existing before construction thereof, including (as necessary) placement and grading of topsoil and planting of native grasses; provided, however, that Franks shall have the right, but not the requirement, to take over the Access Road "as is, where is."

7. General.

- 7.1. The Right of Use is a limited right of use and servitude and is intended as a covenant running with the Surface Lands (including both surface and underlying minerals in the event of any severance), in accordance with the terms set forth herein and is binding upon and for the benefit of Franks and HK and their successors and assigns.
- 7.2. The rights and obligations of HK under this Agreement may be assigned to one or more third parties only to the extent that the assignment (a) is permitted under paragraph 5 of Exhibit B to the Lease, and (b) requires each assignee to assume and agree to perform its proportionate part of the obligations of HK under this Agreement. The rights of Franks under this Agreement may be assigned to one or more third parties provided that any assignment must require the assignee to assume and agree to perform its proportionate part of the obligations of Franks under this Agreement.
- 7.3. This Agreement is to be performed in Caddo Parish, Louisiana. No obligation of HK to pay money under this Agreement will be excused by reason of force majeure.
- 7.4 Paragraph headings are used in this Agreement for convenience only and are not to be considered in the interpretation or construction of this Agreement. The execution or ratification by Franks of any division order, gas contract, or any other document will not alter any provision of this Agreement unless the intent to do so is expressly stated in the document.
- 7.5. This Agreement, together with attached Exhibit A and the referenced and incorporated provisions of the Lease, constitutes the entire agreement of the Parties with respect to the subject matter hereof, and any other promises, inducements, representations, warranties or agreements with respect to the subject matter hereof have been superseded hereby and are not intended to survive this Agreement. Except as otherwise expressly provided herein, no amendment or modification of this Agreement shall be effective unless set forth in writing and signed by a duly authorized officer of each of the Parties. The invalidity of any one or more of the provisions of this Agreement does not affect the remaining portions of this Agreement, and in case of any such invalidity, this Agreement should be construed as if the invalid provision(s) had not been inserted.
- 7.6. This Agreement shall be governed by and interpreted in accordance with the laws of the State of Louisiana.

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals on the dates of their respective acknowledgments but effective as of the Effective Date.

WITNESSES: (Signature of 1 st Witness) Wancy S. Duke (Print name of 1 st Witness) (Signature of 2 nd Witness) D. F. Marlowe (Print name of 2 nd Witness)	SURFACE OWNER: Franke investment company, L.L.C. By: Bobby E. Joks, Manager
(Signature of 1 st Witness) (Signature of 1 st Witness) (Print name of 1 st Witness) (Signature of 2 nd Witness) (Print name of 2 nd Witness)	Petrohawk Operating Company By: Jak Keenan, Vice President-Land
ACKNOWLEI STATE OF LOUISIANA	OGMENTS
On this day of , 2011, b undersigned authority, duly qualified and acting as aforesaid, appeared Bobby E. Jelks, to me personal say:	
That he is the duly authorized Manager of F Louisiana limited liability company, that the foregor of said company, and that said appearer acknowled deed of said company.	oing instrument was signed by him on behalf
Notary Public in and for to (Notary's Printed Notary Commission Expired Notary)	F. Drake Lee, Bar ID No. 08263 Notary Public Caddo Parish, Louisiana My Commission Is For Life

STATE OF OKLAHOMA

COUNTY OF OKLAHOMA

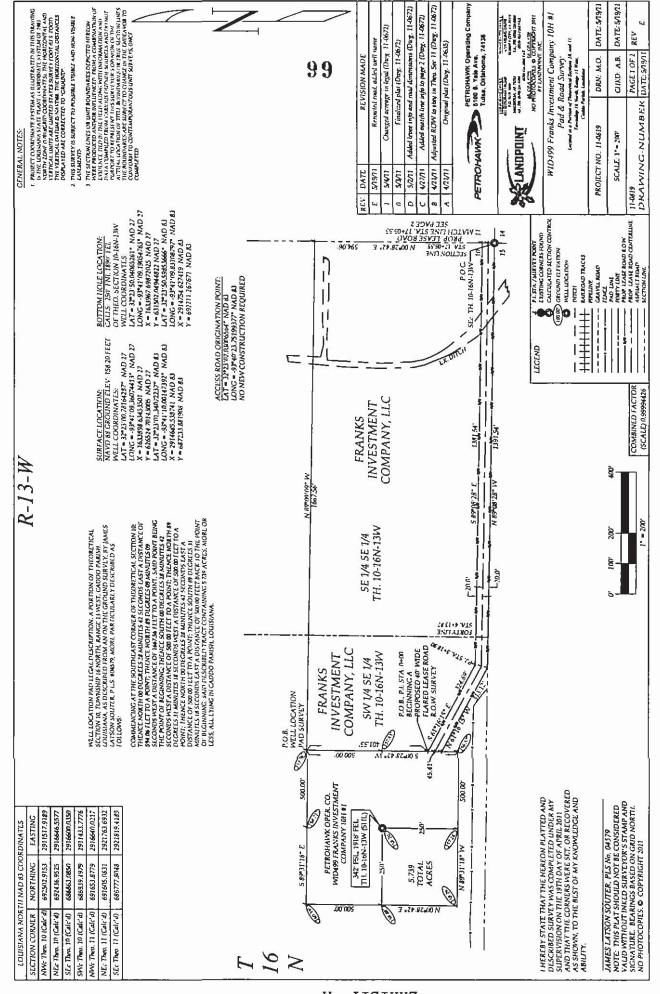
On this day of ______, 2011, before two competent witnesses and me, the undersigned authority, dulf qualified and acting as such in and for the above county and state aforesaid, appeared Jak Keenan, to me personally known, who, being by me duly sworn, did say:

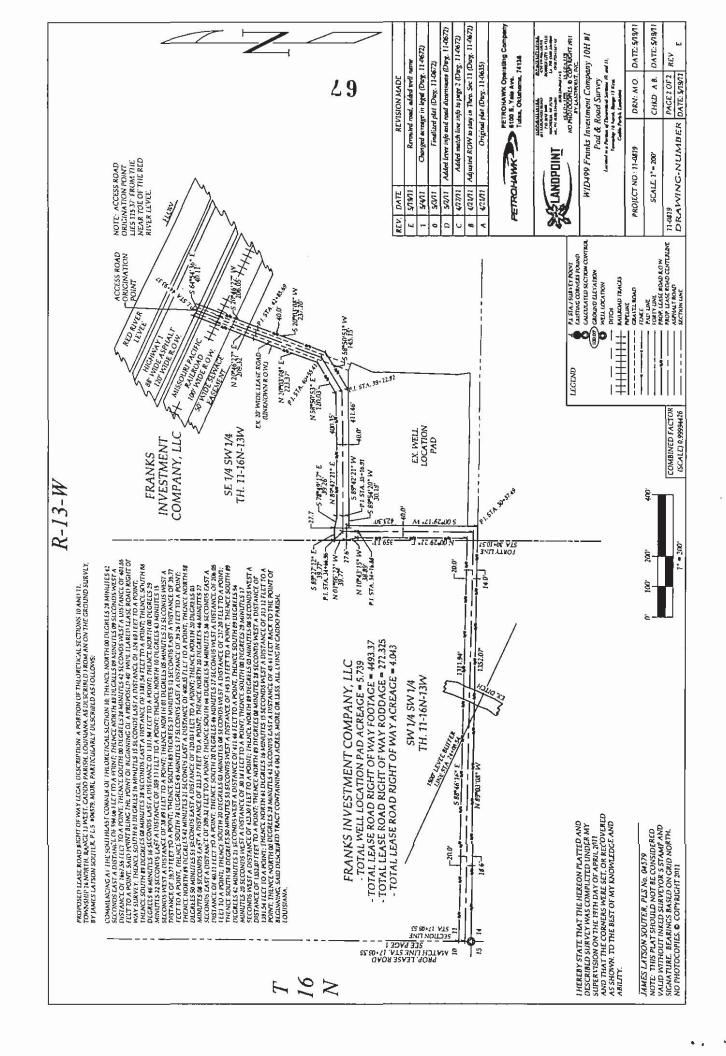
That he is the duly authorized Vice President-Land of Petrohawk Operating Company, that the foregoing instrument was signed by him on behalf of said company, and that said appearer acknowledged said instrument to be the free act and deed of said company.

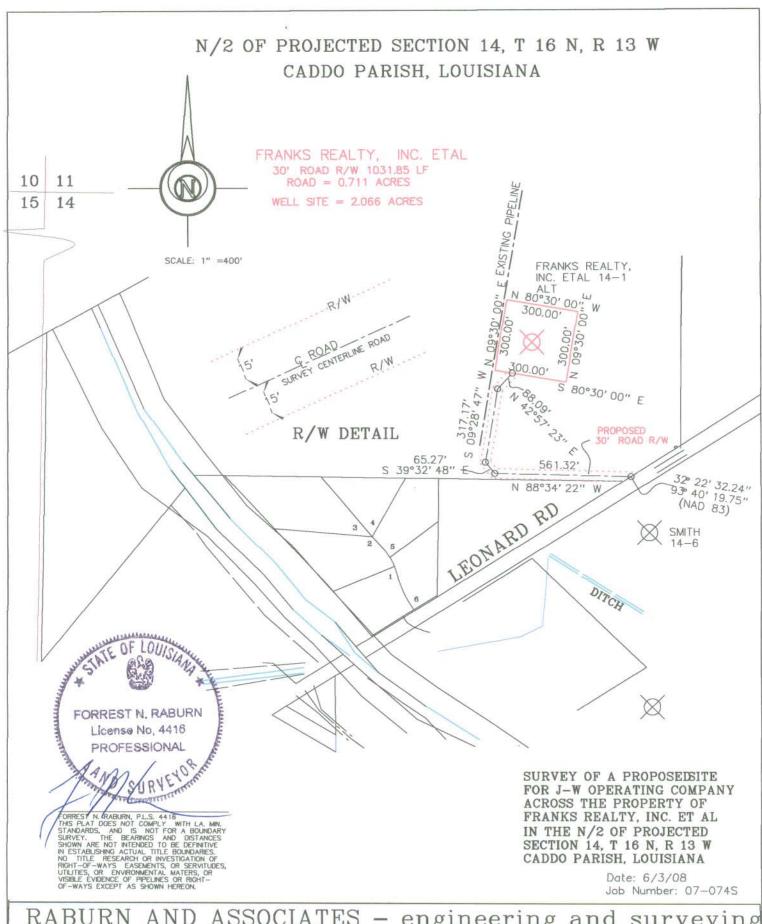
IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

(Notary's Printed Name and ID#)
My Commission Expires: 3/12/2013

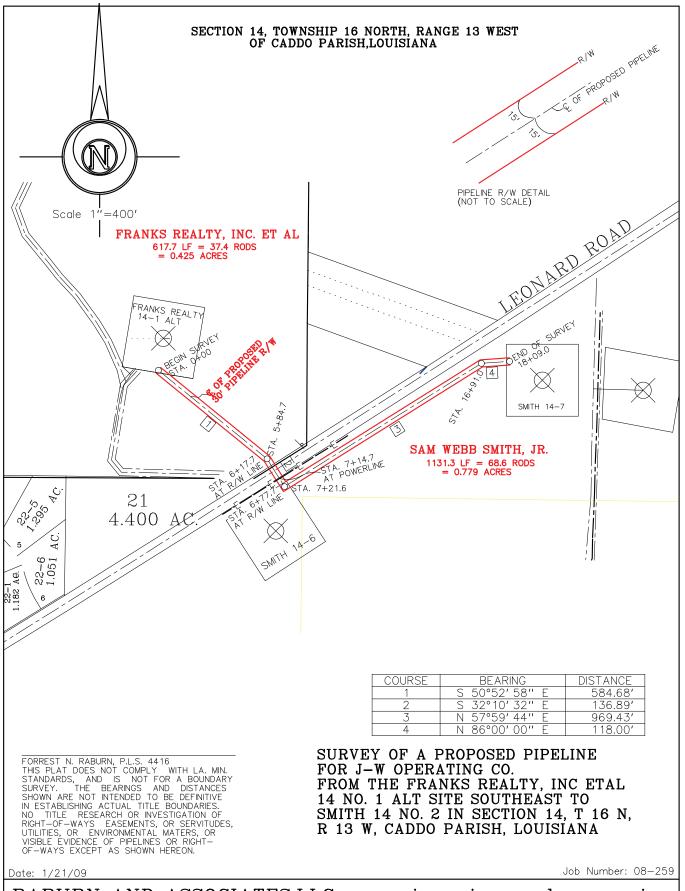
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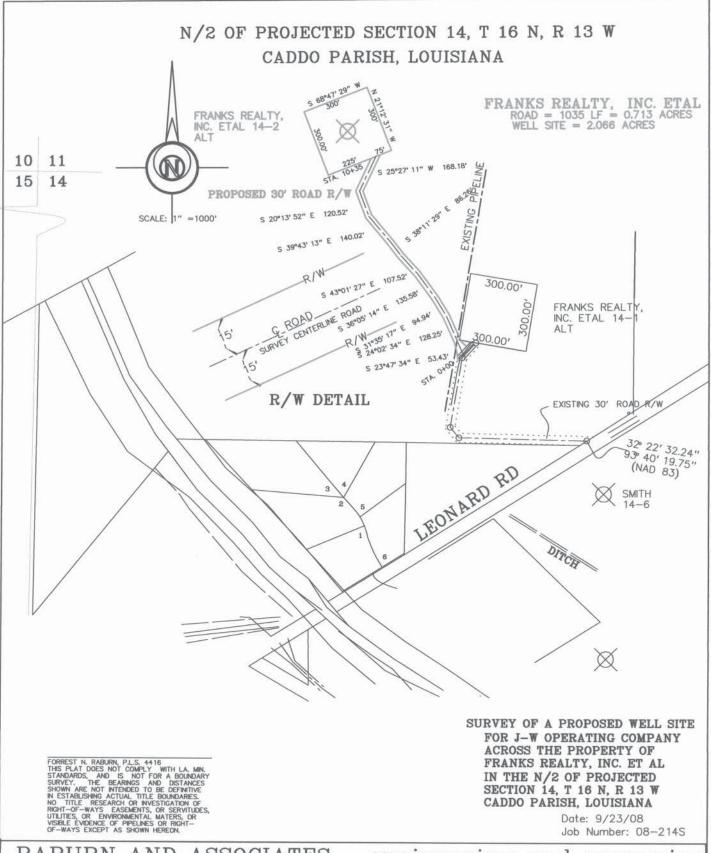




RABURN AND ASSOCIATES - engineering and surveying 3431 PINES ROAD, SHREVEPORT, LA 71119 ~ (318) 636-2537



RABURN AND ASSOCIATES,LLC. — engineering and surveying 3431 PINES ROAD, SHREVEPORT, LA 71119 ~ (318) 636-2537



RABURN AND ASSOCIATES - engineering and surveying

3431 PINES ROAD, SHREVEPORT, LA 71119 ~ (318) 636-2537

APPENDIX C ENVIRONMENTAL DATABASE SEARCH

Leonard Road 417 Acre

Leonard Road Shreveport, LA 71115

Inquiry Number: 4451126.2s

October 28, 2015

The EDR Radius Map™ Report with GeoCheck®

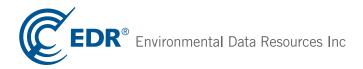


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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

LEONARD ROAD SHREVEPORT, LA 71115

COORDINATES

Latitude (North): 32.3830000 - 32° 22' 58.80" Longitude (West): 93.6788000 - 93° 40' 43.68"

Universal Tranverse Mercator: Zone 15 UTM X (Meters): 436149.7 UTM Y (Meters): 3582903.2

Elevation: 154 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5637505 SHREVEPORT EAST, LA

Version Date: 2012

South Map: 5636247 WALLACE LAKE, LA

Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20100517 Source: USDA

MAPPED SITES SUMMARY

Target Property Address: LEONARD ROAD SHREVEPORT, LA 71115

Click on Map ID to see full detail.

MAF	•			RELATIVE	DIST (ft. & mi.)
ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	ELEVATION	DIRECTION
1	LEONARD RD SPILL	LEONARD RD & HWY 1S	VCP, REM	Higher	1475, 0.279, ESE

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 NPL	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			
CERCLIS	. Comprehensive Environmental Response	Compensation	, and Liability	Information System

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

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-CESQG	RCRA - Conditionally Exempt Small Quantity Generator

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_____Potential and Confirmed Sites List State and tribal landfill and/or solid waste disposal site lists SWF/LF.....Landfill List DEBRIS......LDEQ Approved Debris Sites HIST DEBRIS.....LDEQ Approved Debris Sites State and tribal leaking storage tank listsLeaking Underground Storage Tanks INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land HIST LUST...... Underground Storage Tank Case History Incidents State and tribal registered storage tank lists FEMA UST..... Underground Storage Tank Listing UST......Louisiana Underground Storage Tank Database INDIAN UST......Underground Storage Tanks on Indian Land State and tribal institutional control / engineering control registries AUL..... Conveyance Notice Listing State and tribal voluntary cleanup sites INDIAN VCP..... Voluntary Cleanup Priority Listing State and tribal Brownfields sites BROWNFIELDS..... Brownfields Inventory ADDITIONAL ENVIRONMENTAL RECORDS Local Brownfield lists US BROWNFIELDS..... A Listing of Brownfields Sites Local Lists of Landfill / Solid Waste Disposal Sites SWRCY...... Recycling Directory INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands Open Dump Inventory DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations Local Lists of Hazardous waste / Contaminated Sites

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

CDL..... Clandestine Drug Lab

DEL SHWS..... Deleted Potential & Confirmed Sites

US CDL..... Clandestine Drug Labs

Local Land Records

LIENS..... Environmental Liens LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System

SPILLS..... Emergency Response Section Incidents

SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR______ RCRA - Non Generators / No Longer Regulated

FUDS..... Formerly Used Defense Sites 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

RMP..... Risk Management Plans

RAATS...... RCRA Administrative Action Tracking System

PRP...... Potentially Responsible Parties

ICIS...... Integrated Compliance Information System

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 UMTRA..... Uranium Mill Tailings Sites LEAD SMELTERS....Lead Smelter Sites

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

US MINES..... Mines Master Index File

FINDS..... Facility Index System/Facility Registry System

AIRS..... Air Permit List

ASBESTOS..... Asbestos Projects List COAL ASH..... Coal Ash Disposal Sites DRYCLEANERS..... Drycleaner Facility Listing Financial Assurance Information NPDES..... LPDES Permits Database

UIC...... Underground Injection Wells Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners	EDR Exclusive Historic Dry 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 identified in the following databases.

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

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

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

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

STANDARD ENVIRONMENTAL RECORDS

State and tribal voluntary cleanup sites

VCP: Sites that have entered Department of Environmental Quality's Voluntary Remediation Program

A review of the VCP list, as provided by EDR, and dated 07/20/2015 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LEONARD RD SPILL	LEONARD RD & HWY 1S	ESE 1/4 - 1/2 (0.279 mi.)	1	8
Status: Denied				
DEQ AI #: 142411				
Date Closed: 02/01/2012				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

REM: Facilities or sites come to the Underground Storage Tank and Remediation Divison either through self notification or referral. These sites are designated for remediation via the following regulatory paths: Solid Waste (SW), Hazardous Waste (Haz Waste), Groundwater (Grwater), Inactive & Abandoned Sites (Confirmed or Potential), or Underground Storage Tanks (UST).

A review of the REM list, as provided by EDR, and dated 07/20/2015 has revealed that there is 1 REM site within approximately 0.5 miles of the target property.

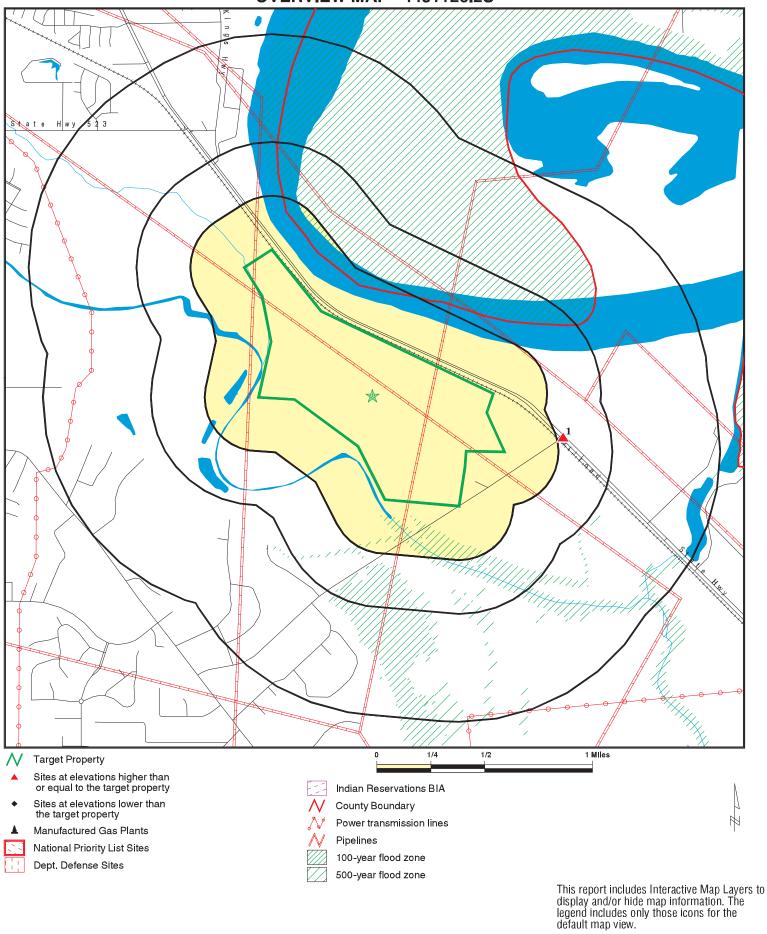
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LEONARD RD SPILL	LEONARD RD & HWY 1S	ESE 1/4 - 1/2 (0.279 mi.)	1	8
Al Num: 142411				

Due to poor or inadequate address information	, the following sites were not mapped. Count: 1 records.
---	--

Site Name Database(s)

TERRA RENEWAL SERVICES INC SWF/LF

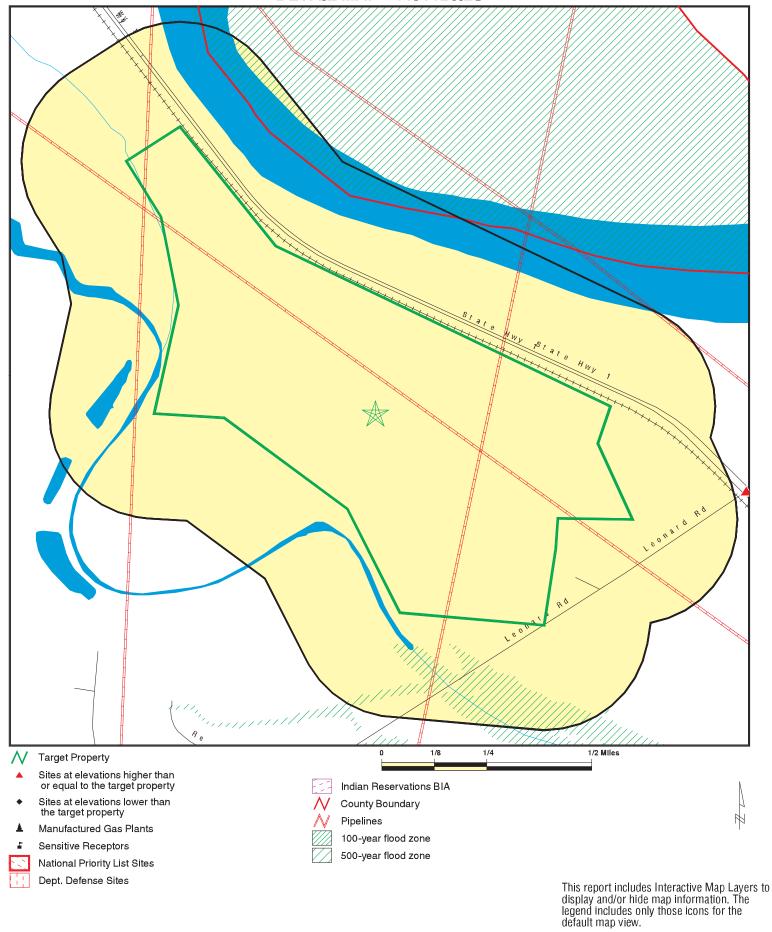
OVERVIEW MAP - 4451126.2S



SITE NAME: Leonard Road 417 Acre

ADDRESS: Leonard Road CONTACT: Andrew Hooker
Shreveport LA 71115 INQUIRY #: 4451126.2s
DATE: October 28, 2015 3:48 pm

DETAIL MAP - 4451126.2S



October 28, 2015 3:50 pm Copyright © 2015 EDR, Inc. © 2010 Tele Atlas Rel. 07/2009.

C-K Associates, Inc.

CLIENT: C-K Associates, CONTACT: Andrew Hooker

INQUIRY#: 4451126.2s

DATE:

SITE NAME: Leonard Road 417 Acre

Leonard Road Shreveport LA 71115

32.383 / 93.6788

ADDRESS:

LAT/LONG:

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENT	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 TP		0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL sit	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY CERCLIS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	P site List							
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	TS facilities li	ist						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-COR	RACTS TSD f	acilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generator	rs list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional controls / engineering controls registries								
LUCIS US ENG CONTROLS US INST 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	lent CERCLIS	3						
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF DEBRIS HIST DEBRIS	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 leaking storage tank lists								
LUST INDIAN LUST	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HIST LUST	0.500		0	0	0	NR	NR	0
State and tribal registere		ık lists	Ü	O	O	IVIX	IVIX	O
FEMA UST UST 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 col		s						
AUL	0.500		0	0	0	NR	NR	0
State and tribal voluntar	y cleanup site	es						
VCP INDIAN VCP	0.500 0.500		0 0	0 0	1 0	NR NR	NR NR	1 0
State and tribal Brownfie	elds sites							
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	ITAL RECORDS	<u> </u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY INDIAN ODI ODI DEBRIS REGION 9	0.500 0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR NR	NR NR NR NR	0 0 0
Local Lists of Hazardous waste / Contaminated Sites								-
US HIST CDL CDL DEL SHWS US CDL	TP TP 1.000 TP		NR NR 0 NR	NR NR 0 NR	NR NR 0 NR	NR NR 0 NR	NR NR NR NR	0 0 0 0
Local Land Records								
LIENS LIENS 2	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
Records of Emergency Release Reports								
HMIRS SPILLS SPILLS 90	TP TP TP		NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Other Ascertainable Records								
RCRA NonGen / NLR FUDS DOD	0.250 1.000 1.000		0 0 0	0 0 0	NR 0 0	NR 0 0	NR NR NR	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
SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV UMTRA LEAD SMELTERS US AIRS US MINES FINDS AIRS ASBESTOS COAL ASH DRYCLEANERS Financial Assurance NPDES REM UIC	0.500 TP TP 0.250 TP TP TP TP 1.000 TP		0 R R O R R R R R R R R R R R R R R R R	0 R R 0 R R R R R R R R R R R R R R R R	0 R R R R R O R R R R R R R R O R R R R	NRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	N N N N N N N N N N N N N N N N N N N	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
EDR HIGH RISK HISTORICAL RECORDS EDR Exclusive Records								
EDR MGP EDR US Hist Auto Stat EDR US Hist Cleaners EDR RECOVERED GOVERN	1.000 0.250 0.250 MENT ARCHIV	'ES	0 0 0	0 0 0	0 NR NR	0 NR NR	NR NR NR	0 0 0
Exclusive Recovered Govt. Archives								
RGA HWS RGA LF	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0

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

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID MAP FINDINGS Direction

Distance

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

LEONARD RD SPILL VCP S112658528 **LEONARD RD & HWY 1S ESE**

142411

Caddo

8

02/01/2012

Paula Sen

08/04/2006

Not reported

Not reported Not reported

Not reported 32 22" 49'

93 40" 11'

12/08/2010

Denied

Leonard Road Spill

Arkla Disposal Service

Remedial Investigaton

1/4-1/2 0.279 mi. 1475 ft.

VCP: Relative:

DEQ AI #: Higher Date Closed:

Actual: Site Also Known As: 160 ft. Facility Parish:

SHREVEPORT, LA

Acres: Applicant name: **DEQ Contact:**

Date of Applicantion: Remedial Investigaton/Action Phase:

Status:

Unrestricted Use: Investigation Approval Date: Use Restrictions/Institutional Controls A:

Use Restrictions/Institutional Controls B: Use Restrictions/Institutional Controls C: Use Restrictions/Institutional Controls D: Use Restrictions/Institutional Controls E: Use Restrictions/Institutional Controls F: Use Restrictions/Institutional Controls G: Use Restrictions/Institutional Controls H: Use Restrictions/Institutional Controls I:

Latitude: Longitude:

REM:

Al Num: 142411 Evaluated And Closed: Not reported **VRP** Program:

EAC Type: Not reported Comments: Not reported **REM** N/A

EDR ID Number

Site Address Zip Database(s)	HWY 117 MISE OF 71115 SWF/LF
EDR ID Site Name Site	TERRA RENEWAL SERVICES INC
City	SHREVEPORT

ORPHAN SUMMARY

Count: 1 records.

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: 03/26/2015 Date Data Arrived at EDR: 04/08/2015

Date Made Active in Reports: 06/22/2015

Number of Days to Update: 75

Source: EPA Telephone: N/A

Last EDR Contact: 07/09/2015

Next Scheduled EDR Contact: 10/19/2015 Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

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

EPA Region 3 **EPA Region 7**

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

EPA Region 4 **EPA Region 8**

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

EPA Region 5 EPA Region 9

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

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

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

Date of Government Version: 03/26/2015 Date Data Arrived at EDR: 04/08/2015

Date Made Active in Reports: 06/22/2015

Number of Days to Update: 75

Source: EPA Telephone: N/A

Last EDR Contact: 07/09/2015

Next Scheduled EDR Contact: 10/19/2015 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: 03/26/2015 Date Data Arrived at EDR: 04/08/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 75

Source: EPA Telephone: N/A

Last EDR Contact: 07/09/2015

Next Scheduled EDR Contact: 10/19/2015 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: 03/26/2015 Date Data Arrived at EDR: 04/08/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 64

Source: Environmental Protection Agency

Telephone: 703-603-8704 Last EDR Contact: 07/10/2015

Next Scheduled EDR Contact: 10/19/2015 Data Release Frequency: Varies

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

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 11/11/2013 Date Made Active in Reports: 02/13/2014

Number of Days to Update: 94

Source: EPA Telephone: 703-412-9810 Last EDR Contact: 05/29/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

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

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 11/11/2013 Date Made Active in Reports: 02/13/2014

Number of Days to Update: 94

Source: EPA Telephone: 703-412-9810 Last EDR Contact: 05/29/2015

Next Scheduled EDR Contact: 09/07/2015 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: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 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: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 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: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015 Number of Days to Update: 82

Source: Environmental Protection Agency Telephone: 214-665-6444 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 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: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - 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). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

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

Date of Government Version: 05/28/2015 Date Data Arrived at EDR: 05/29/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 13

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 08/12/2015

Next Scheduled EDR Contact: 11/30/2015 Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

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

Date of Government Version: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/02/2015

Number of Days to Update: 68

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/31/2015

Next Scheduled EDR Contact: 12/14/2015 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: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/02/2015

Number of Days to Update: 68

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/31/2015

Next Scheduled EDR Contact: 12/14/2015 Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

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

Date of Government Version: 06/22/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Potential and Confirmed Sites List

Confirmed status denotes that assessments have been performed and a determination made that (1) hazardous waste(s) or substance(s) are present at the site and (2) these sites are under the jurisdiction of the LDEQ/RSD. Potential status is an indicator that sites are either waiting to be assessed or the assessment is in progress.

Date of Government Version: 07/20/2015 Date Data Arrived at EDR: 07/22/2015 Date Made Active in Reports: 08/10/2015

Number of Days to Update: 19

Source: Department of Environmental Quality

Telephone: 225-219-3181 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Quarterly

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

SWF/LF: Landfill List

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: 09/11/2015 Date Data Arrived at EDR: 09/14/2015 Date Made Active in Reports: 10/19/2015

Number of Days to Update: 35

Source: Department of Environmental Quality

Telephone: 225-219-3181 Last EDR Contact: 09/10/2015

Next Scheduled EDR Contact: 12/28/2015 Data Release Frequency: Annually

DEBRIS: LDEQ Approved Debris Sites

A listing of LDEQ Approved Debris Sites where hurricane debris is dumped.

Date of Government Version: 08/15/2015 Date Data Arrived at EDR: 09/01/2015 Date Made Active in Reports: 10/19/2015

Number of Days to Update: 48

Source: Department of Environmental Quality Telephone: 225-219-3953

Telephone: 225-219-3953 Last EDR Contact: 09/01/2015

Next Scheduled EDR Contact: 12/14/2015 Data Release Frequency: Varies

HIST DEBRIS: LDEQ Approved Debris Sites

A listing of LDEQ Approved Debris Sites where hurricane debris is dumped.

Date of Government Version: 02/07/2007 Date Data Arrived at EDR: 11/14/2008 Date Made Active in Reports: 11/21/2008

Number of Days to Update: 7

Source: Department of Environmental Quality

Telephone: 225-219-3070 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tanks

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: 07/20/2015 Date Data Arrived at EDR: 07/22/2015 Date Made Active in Reports: 08/10/2015

Number of Days to Update: 19

Source: Department of Environmental Quality

Telephone: 225-219-3181 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

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

Date of Government Version: 04/30/2015 Date Data Arrived at EDR: 05/05/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 48

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015 Date Data Arrived at EDR: 04/28/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 55

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 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: 07/30/2015 Date Data Arrived at EDR: 08/07/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 67

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Semi-Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

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

Date of Government Version: 07/28/2015 Date Data Arrived at EDR: 08/07/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 67

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

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

Date of Government Version: 01/08/2015 Date Data Arrived at EDR: 01/08/2015 Date Made Active in Reports: 02/09/2015

Number of Days to Update: 32

Source: Environmental Protection Agency Telephone: 415-972-3372 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

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

Date of Government Version: 07/21/2015 Date Data Arrived at EDR: 07/29/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 76

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/13/2015 Date Data Arrived at EDR: 08/03/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 71

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

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

Date of Government Version: 02/03/2015 Date Data Arrived at EDR: 04/30/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 53

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

HIST LUST: Underground Storage Tank Case History Incidents

This listing includes detailed information for Leaking Underground Storage Tanks reported through November 1999. It is no longer updated. Current LUST incidents, without detail, can be found in the Leaking Underground Storage Tank Database

Date of Government Version: 11/01/1999 Date Data Arrived at EDR: 02/16/2000 Date Made Active in Reports: 05/01/2000

Number of Days to Update: 75

Source: Department of Environmental Quality

Telephone: N/A

Last EDR Contact: 12/04/2001 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010 Date Data Arrived at EDR: 02/16/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 55

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 07/10/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Varies

UST: Louisiana Underground Storage Tank Database

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: 07/20/2015 Date Data Arrived at EDR: 07/22/2015 Date Made Active in Reports: 08/10/2015

Number of Days to Update: 19

Source: Department of Environmental Quality

Telephone: 225-219-3181 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Quarterly

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: 07/21/2015 Date Data Arrived at EDR: 07/29/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 76

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

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: 05/13/2015 Date Data Arrived at EDR: 08/03/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 71

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Semi-Annually

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: 12/14/2014 Date Data Arrived at EDR: 02/13/2015 Date Made Active in Reports: 03/13/2015

Number of Days to Update: 28

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

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: 02/03/2015 Date Data Arrived at EDR: 04/30/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 53

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/09/2015 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: 07/28/2015 Date Data Arrived at EDR: 08/14/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 60

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

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: 09/23/2014 Date Data Arrived at EDR: 11/25/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 65

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

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

Date of Government Version: 07/30/2015 Date Data Arrived at EDR: 08/07/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 67

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Semi-Annually

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: 07/28/2015 Date Data Arrived at EDR: 08/07/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 67

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

AUL: Listing of Institutional and/or Enginnering Controls

A notice of contamination (nature and levels of contaminants) and restriction of property to non-residential use are placed in the conveyance records for the property.

Date of Government Version: 10/18/2010 Date Data Arrived at EDR: 11/04/2010 Date Made Active in Reports: 11/12/2010

Number of Days to Update: 8

Source: Department of Environmental Quality

Telephone: 225-219-3168 Last EDR Contact: 07/09/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

VCP: Voluntary Remediation Program Sites

Sites that have entered the Department of Environmental Quality's Voluntary Remediation Program

Date of Government Version: 07/20/2015 Date Data Arrived at EDR: 07/22/2015 Date Made Active in Reports: 08/10/2015

Number of Days to Update: 19

Source: Department of Environmental Quality

Telephone: 225-219-3181 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

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

Date of Government Version: 09/29/2014 Date Data Arrived at EDR: 10/01/2014 Date Made Active in Reports: 11/06/2014

Number of Days to Update: 36

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Varies

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

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Inventory

Brownfields are abandoned, idled, or underused industrial or commercial real property, the expansion, redevelopment or reuse of which may be complicated by the presence of or potential presence of a hazardous substance, pollutant, or contaminant

Date of Government Version: 07/20/2015 Date Data Arrived at EDR: 07/22/2015 Date Made Active in Reports: 08/10/2015

Number of Days to Update: 19

Source: New Orleans Office of Environmental Affairs

Telephone: 504-658-4070 Last EDR Contact: 04/15/2015

Next Scheduled EDR Contact: 08/03/2015 Data Release Frequency: Quarterly

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: 06/22/2015 Date Data Arrived at EDR: 06/24/2015 Date Made Active in Reports: 09/02/2015

Number of Days to Update: 70

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 06/24/2015

Next Scheduled EDR Contact: 10/05/2015 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Directory
A listing of recycling facilities.

Date of Government Version: 09/14/2010 Date Data Arrived at EDR: 09/21/2010 Date Made Active in Reports: 10/12/2010

Number of Days to Update: 21

Source: Department of Environmental Quality

Telephone: 225-219-3181 Last EDR Contact: 06/11/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Semi-Annually

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

Location of open dumps on Indian land.

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

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 05/01/2015

Next Scheduled EDR Contact: 08/17/2015 Data Release Frequency: Varies

ODI: Open Dump Inventory

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

Subtitle D Criteria.

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

Number of Days to Update: 39

Source: Environmental Protection Agency

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

Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside

County and northern Imperial County, California.

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

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

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: 06/01/2015 Date Data Arrived at EDR: 06/02/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 106

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/31/2015

Next Scheduled EDR Contact: 12/14/2015 Data Release Frequency: No Update Planned

CDL: Clandestine Drug Lab

A list of residential real properties that have been reported as potentially contaminated.

Date of Government Version: 05/13/2015 Date Data Arrived at EDR: 09/01/2015 Date Made Active in Reports: 10/15/2015

Number of Days to Update: 44

Source: Department of Environmental Quality

Telephone: 225-219-5337 Last EDR Contact: 09/01/2015

Next Scheduled EDR Contact: 12/14/2015 Data Release Frequency: Semi-Annually

DEL SHWS: Deleted Potential & Confirmed Sites

A listing of sites removed from the Potential and Confirmed Listing.

Date of Government Version: 07/20/2015 Date Data Arrived at EDR: 07/22/2015 Date Made Active in Reports: 08/10/2015

Number of Days to Update: 19

Source: Department of Environmental Quality

Telephone: 225-219-3168 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

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

Date of Government Version: 05/15/2015 Date Data Arrived at EDR: 06/02/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 106

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/31/2015

Next Scheduled EDR Contact: 12/14/2015 Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens

An Environmental Lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC ? 9607(1) and similar state or local laws. In other words: a lien placed upon a property's title due to an environmental condition.

Date of Government Version: 07/24/2013 Date Data Arrived at EDR: 10/23/2013 Date Made Active in Reports: 12/12/2013

Number of Days to Update: 50

Source: Department of Environmental Quality

Telephone: N/A

Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Varies

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: 02/18/2014 Date Data Arrived at EDR: 03/18/2014 Date Made Active in Reports: 04/24/2014

Number of Days to Update: 37

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

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

Date of Government Version: 06/24/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/02/2015

Number of Days to Update: 68

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Annually

SPILLS: Emergency Response Section Incidents

Spills and/or releases, to land, reported to the Emergency Response Section.

Date of Government Version: 08/17/2015 Date Data Arrived at EDR: 09/17/2015 Date Made Active in Reports: 10/19/2015

Number of Days to Update: 32

Source: Department of Environmental Quality

Telephone: 225-219-3620 Last EDR Contact: 08/12/2015

Next Scheduled EDR Contact: 11/30/2015

Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 10/30/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 03/07/2013

Number of Days to Update: 63

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

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: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 214-665-6444 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Varies

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: 01/31/2015 Date Data Arrived at EDR: 07/08/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 97

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 09/11/2015

Next Scheduled EDR Contact: 12/21/2015 Data Release Frequency: Varies

DOD: Department of Defense Sites

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

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

Number of Days to Update: 62

Source: USGS

Telephone: 888-275-8747 Last EDR Contact: 07/14/2015

Next Scheduled EDR Contact: 10/28/2015 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: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 07/14/2015

Next Scheduled EDR Contact: 10/28/2015

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

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

Date of Government Version: 03/07/2011 Date Data Arrived at EDR: 03/09/2011 Date Made Active in Reports: 05/02/2011

Number of Days to Update: 54

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 05/21/2015

Next Scheduled EDR Contact: 08/31/2015 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: 06/01/2015 Date Data Arrived at EDR: 06/02/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 106

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 08/12/2015

Next Scheduled EDR Contact: 11/30/2015 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: 08/04/2015

Next Scheduled EDR Contact: 11/23/2015 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: 04/22/2013 Date Data Arrived at EDR: 03/03/2015 Date Made Active in Reports: 03/09/2015

Number of Days to Update: 6

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 05/14/2015

Next Scheduled EDR Contact: 08/24/2015

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: 12/31/2012 Date Data Arrived at EDR: 01/15/2015 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 14

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 06/25/2015

Next Scheduled EDR Contact: 10/05/2015 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: 12/31/2013 Date Data Arrived at EDR: 02/12/2015 Date Made Active in Reports: 06/02/2015

Number of Days to Update: 110

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 01/29/2015

Next Scheduled EDR Contact: 06/08/2015 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: 12/31/2009 Date Data Arrived at EDR: 12/10/2010 Date Made Active in Reports: 02/25/2011

Number of Days to Update: 77

Source: EPA Telephone: 202-564-4203 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 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: 11/25/2013 Date Data Arrived at EDR: 12/12/2013 Date Made Active in Reports: 02/24/2014

Number of Days to Update: 74

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 06/12/2015

Next Scheduled EDR Contact: 09/21/2015 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: 02/01/2015 Date Data Arrived at EDR: 02/13/2015 Date Made Active in Reports: 03/25/2015

Number of Days to Update: 40

Source: Environmental Protection Agency Telephone: 202-564-8600

Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 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: 10/25/2013 Date Data Arrived at EDR: 10/17/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 3

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 05/14/2015

Next Scheduled EDR Contact: 08/24/2015 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: 07/01/2014 Date Data Arrived at EDR: 10/15/2014 Date Made Active in Reports: 11/17/2014

Number of Days to Update: 33

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 10/28/2015 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: 01/23/2015 Date Data Arrived at EDR: 02/06/2015 Date Made Active in Reports: 03/09/2015

Number of Days to Update: 31

Source: Environmental Protection Agency

Telephone: 202-564-5088 Last EDR Contact: 07/09/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the

Agency on a quarterly basis.

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

Number of Days to Update: 25

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

Telephone: 202-566-1667 Last EDR Contact: 05/20/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Quarterly

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

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

Number of Days to Update: 25

Source: EPA

Telephone: 202-566-1667 Last EDR Contact: 05/20/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Quarterly

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: 06/26/2015 Date Data Arrived at EDR: 07/10/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 95

Source: Nuclear Regulatory Commission Telephone: 301-415-7169 Last EDR Contact: 09/03/2015

Next Scheduled EDR Contact: 12/21/2015 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 Date Data Arrived at EDR: 08/07/2009 Date Made Active in Reports: 10/22/2009

Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 07/13/2015

Next Scheduled EDR Contact: 10/28/2015 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: 07/01/2014 Date Data Arrived at EDR: 09/10/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 06/12/2015

Next Scheduled EDR Contact: 09/21/2015 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: 02/01/2011 Date Data Arrived at EDR: 10/19/2011 Date Made Active in Reports: 01/10/2012

Number of Days to Update: 83

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/09/2015

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: 07/07/2015 Date Data Arrived at EDR: 07/09/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 69

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 07/09/2015

Next Scheduled EDR Contact: 10/19/2015 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: 07/31/2012 Date Data Arrived at EDR: 08/07/2012 Date Made Active in Reports: 09/18/2012

Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 08/04/2015

Next Scheduled EDR Contact: 11/16/2015 Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

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

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 04/17/2015 Date Made Active in Reports: 06/02/2015

Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/12/2015

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: 12/31/2013 Date Data Arrived at EDR: 02/24/2015 Date Made Active in Reports: 09/30/2015

Number of Days to Update: 218

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 08/28/2015

Next Scheduled EDR Contact: 12/07/2015 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 12/08/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 34

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 07/14/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Semi-Annually

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: 09/14/2010 Date Data Arrived at EDR: 10/07/2011 Date Made Active in Reports: 03/01/2012

Number of Days to Update: 146

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 05/26/2015

Next Scheduled EDR Contact: 09/07/2015

Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014 Date Data Arrived at EDR: 11/26/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 64

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 07/07/2015

Next Scheduled EDR Contact: 10/19/2015 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: 07/22/2015 Date Data Arrived at EDR: 07/24/2015 Date Made Active in Reports: 09/02/2015

Number of Days to Update: 40

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/05/2015 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 07/22/2015 Date Data Arrived at EDR: 07/24/2015 Date Made Active in Reports: 09/02/2015

Number of Days to Update: 40

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/22/2015 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/14/2015 Date Data Arrived at EDR: 06/03/2015 Date Made Active in Reports: 09/02/2015

Number of Days to Update: 91

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 09/01/2015

Next Scheduled EDR Contact: 12/14/2015 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 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: 703-6

Telephone: 703-648-7709 Last EDR Contact: 06/05/2015

Next Scheduled EDR Contact: 09/14/2015 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 06/05/2015

Next Scheduled EDR Contact: 09/14/2015 Data Release Frequency: Varies

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: 01/18/2015 Date Data Arrived at EDR: 02/27/2015 Date Made Active in Reports: 03/25/2015

Number of Days to Update: 26

Source: EPA

Telephone: (214) 665-2200 Last EDR Contact: 06/10/2015

Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

AIRS: Air Permit List

A listing of facilities with air permits issued by the Air Permits Division

Date of Government Version: 08/24/2015 Date Data Arrived at EDR: 09/17/2015 Date Made Active in Reports: 10/19/2015

Number of Days to Update: 32

Source: Department of Environmental Quality

Telephone: 225-219-3417 Last EDR Contact: 08/24/2015

Next Scheduled EDR Contact: 12/07/2015

Data Release Frequency: Varies

ASBESTOS: Asbestos Projects List

Asbestos demolition and renovation notification projects locations in the state.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 01/20/2015 Date Made Active in Reports: 02/20/2015

Number of Days to Update: 31

Source: Department of Environmental Quality

Telephone: 225-219-3181 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Annually

COAL ASH: Coal Ash Disposal Sites A listing of coal ash impoundments.

Date of Government Version: 07/13/2015 Date Data Arrived at EDR: 08/04/2015 Date Made Active in Reports: 08/24/2015

Number of Days to Update: 20

Source: Department of Environmental Quality

Telephone: 225-219-3168 Last EDR Contact: 07/09/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Varies

DRYCLEANERS: Drycleaner Facility Listing A listing of drycleaner facilities.

Date of Government Version: 07/13/2015 Date Data Arrived at EDR: 07/22/2015 Date Made Active in Reports: 08/18/2015

Number of Days to Update: 27

Source: Department of Environmental Quality

Telephone: 225-219-3168 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 11/02/2015

Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information

Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 08/06/2015 Date Data Arrived at EDR: 08/18/2015 Date Made Active in Reports: 08/24/2015

Number of Days to Update: 6

Source: Department of Environmental Quality

Telephone: 225-219-3168 Last EDR Contact: 07/27/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

Information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 08/06/2015 Date Data Arrived at EDR: 08/18/2015 Date Made Active in Reports: 08/24/2015

Number of Days to Update: 6

Source: Department of Environmental Quality

Telephone: 225-219-3168 Last EDR Contact: 07/27/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

NPDES: LPDES Permits Database

A listing of sites with a Louisiana Pollutant Discharge Elimination System (LPDES) program issued permit.

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

Number of Days to Update: 37

Source: Department of Environmental Quality

Telephone: 225-219-3181 Last EDR Contact: 07/27/2015

Next Scheduled EDR Contact: 11/09/2015

Data Release Frequency: Varies

REM: Division of Remediation Services Database

Facilities or sites come to the Underground Storage Tank and Remediation Divison either through self notification or referral. These sites are designated for remediation via the following regulatory paths: Solid Waste (SW), Hazardous Waste (Haz Waste), Groundwater (Grwater), Inactive & Abandoned Sites (Confirmed or Potential), or Underground Storage Tanks (UST).

Date of Government Version: 07/20/2015 Date Data Arrived at EDR: 07/22/2015 Date Made Active in Reports: 08/10/2015

Number of Days to Update: 19

Source: Department of Environmental Quality

Telephone: 225-219-3168 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Quarterly

UIC: Underground Injection Wells Listing

A listing of underground injection well locations.

Date of Government Version: 07/23/2015 Date Data Arrived at EDR: 07/24/2015 Date Made Active in Reports: 08/10/2015

Number of Days to Update: 17

Source: Department of fNatural Resources

Telephone: 225-342-5515 Last EDR Contact: 07/21/2015

Next Scheduled EDR Contact: 10/12/2015 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 US Hist Auto Stat: EDR Exclusive Historic Gas 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 US Hist Cleaners: EDR Exclusive Historic Dry 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 Louisiana.

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 Louisiana.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/15/2014
Number of Days to Update: 198

Source: Department of Environmental Quality

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Louisiana.

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

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

Source: Department of Environmental Quality

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.

Telephone: N/A

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: 07/30/2013 Date Data Arrived at EDR: 08/19/2013 Date Made Active in Reports: 10/03/2013

Number of Days to Update: 45

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 05/18/2015

Next Scheduled EDR Contact: 08/31/2015

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: 08/01/2015 Date Data Arrived at EDR: 08/06/2015 Date Made Active in Reports: 08/24/2015

Number of Days to Update: 18

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 08/06/2015

Next Scheduled EDR Contact: 11/16/2015 Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/24/2015 Date Made Active in Reports: 08/18/2015

Number of Days to Update: 25

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 07/20/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 03/19/2015 Date Made Active in Reports: 04/07/2015

Number of Days to Update: 19

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 06/11/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation Telephone: 281-546-1505

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

Electric Power Transmission Line Data Source: PennWell Corporation Telephone: 800-823-6277

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 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

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GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

LEONARD ROAD 417 ACRE LEONARD ROAD SHREVEPORT, LA 71115

TARGET PROPERTY COORDINATES

Latitude (North): 32.383 - 32° 22' 58.80" Longitude (West): 93.6788 - 93° 40' 43.68"

Universal Tranverse Mercator: Zone 15 UTM X (Meters): 436149.7 UTM Y (Meters): 3582903.2

Elevation: 154 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5637505 SHREVEPORT EAST, LA

Version Date: 2012

South Map: 5636247 WALLACE LAKE, LA

Version Date: 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 principal investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

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

GROUNDWATER FLOW DIRECTION INFORMATION

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

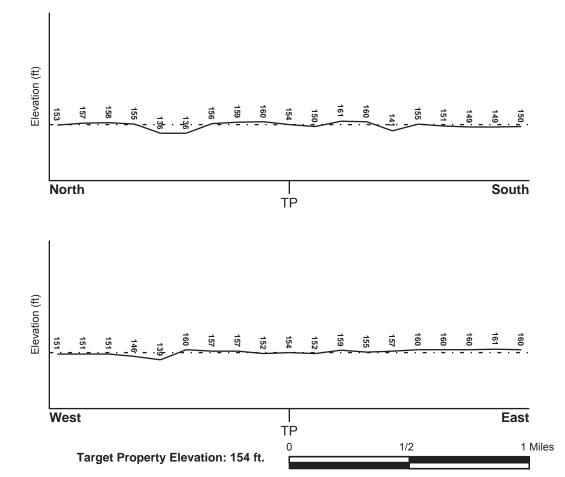
TOPOGRAPHIC INFORMATION

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

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

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

FEMA Flood

Target Property County CADDO, LA

Electronic Data
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:

Not Reported

Additional Panels in search area:

22017C - FEMA DFIRM Flood data 22015C - FEMA DFIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Electronic

NWI Quad at Target Property

Data Coverage

NOT AVAILABLE

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.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

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

 MAP ID
 FROM TP
 GROUNDWATER FLOW

 Not Reported
 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 Category: Stratifed Sequence

System: Quaternary Series: Holocene

Code: Qh (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).

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. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: MORELAND

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class: Somewhat poorly. Soils commonly have a layer with low hydraulic

conductivity, wet state high in profile, etc. Depth to water table is

1 to 3 feet.

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

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

	Soil Layer Information							
	Boundary			Classification				
Layer	Upper Lower		Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)	
1	0 inches	12 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.06 Min: 0.00	Max: 7.80 Min: 6.10	
2	12 inches	50 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.06 Min: 0.00	Max: 8.40 Min: 6.60	
3	50 inches	64 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.20 Min: 0.00	Max: 8.40 Min: 6.60	

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silt loam

silty clay loam

Surficial Soil Types: silt loam

silty clay loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: silt loam

stratified

very fine sandy loam

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
A6	USGS40000412775	1/2 - 1 Mile WSW
C20	USGS40000412751	1/2 - 1 Mile ESE
C21	USGS40000412750	1/2 - 1 Mile ESE
K45	USGS40000412682	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID FROM TP

No PWS System Found

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

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	LATD40000020633	1/4 - 1/2 Mile East
2	LATD40000102284	1/4 - 1/2 Mile ENE
3	LATD40000103643	1/4 - 1/2 Mile West
4	LATD40000149919	1/4 - 1/2 Mile SE
A5	LATD40000126990	1/2 - 1 Mile WSW
7	LATD40000196562	1/2 - 1 Mile SE
B8 C9 C10 D11 B12 13 14 D15 E16 E17 18	LATD40000150326 LATD40000120618 LATD40000020513 LATD40000150929 LATD40000134020 LATD4000019848 LATD40000019602 LATD40000019602 LATD40000019603 LATD40000167068 LATD40000019040	1/2 - 1 Mile East 1/2 - 1 Mile ESE 1/2 - 1 Mile East 1/2 - 1 Mile SSE 1/2 - 1 Mile SSE 1/2 - 1 Mile ESE 1/2 - 1 Mile ESE 1/2 - 1 Mile East 1/2 - 1 Mile East 1/2 - 1 Mile South 1/2 - 1 Mile SSE 1/2 - 1 Mile SSE
F23	LATD40000145518	1/2 - 1 Mile ESE
G24	LATD40000127198	1/2 - 1 Mile East
E25	LATD40000145333	1/2 - 1 Mile East

STATE DATABASE WELL INFORMATION

		LOCATION
MAP ID	WELL ID	FROM TP
H26	LATD40000125083	1/2 - 1 Mile ESE
27	LATD40000020300	1/2 - 1 Mile SE
F28	LATD40000019849	1/2 - 1 Mile ESE
H29	LATD40000019601	1/2 - 1 Mile ESE
G30	LATD40000020512	1/2 - 1 Mile East
F31	LATD40000127393	1/2 - 1 Mile ESE
H32	LATD40000020630	1/2 - 1 Mile ESE
33	LATD40000020237	1/2 - 1 Mile South
34	LATD40000020023	1/2 - 1 Mile SW
35	LATD40000177700	1/2 - 1 Mile ESE
36	LATD40000150126	1/2 - 1 Mile SSE
137	LATD40000017207	1/2 - 1 Mile SW
38	LATD40000020441	1/2 - 1 Mile ESE
139	LATD40000016512	1/2 - 1 Mile SW
140	LATD40000017616	1/2 - 1 Mile SW
J41	LATD40000150530	1/2 - 1 Mile SSW
42	LATD40000016920	1/2 - 1 Mile WSW
J43	LATD40000188970	1/2 - 1 Mile SSW
K44	LATD40000145268	1/2 - 1 Mile South
46	LATD40000016659	1/2 - 1 Mile WSW
L47	LATD40000017872	1/2 - 1 Mile SSW
K48	LATD40000017739	1/2 - 1 Mile South
K49	LATD40000191676	1/2 - 1 Mile South
50	LATD40000124689	1/2 - 1 Mile NW
M51	LATD40000018312	1/2 - 1 Mile SW
52	LATD40000183123	1/2 - 1 Mile ESE
M53	LATD40000018649	1/2 - 1 Mile SW
54	LATD40000178207	1/2 - 1 Mile SE
N55	LATD40000186624	1/2 - 1 Mile SSW
56	LATD40000195489	1/2 - 1 Mile SSE
L57	LATD40000016848	1/2 - 1 Mile SSW
L58	LATD40000143671	1/2 - 1 Mile SSW
N59	LATD40000016424	1/2 - 1 Mile SSW
N60	LATD40000127586	1/2 - 1 Mile SSW
M61	LATD40000094827	1/2 - 1 Mile SW
62	LATD40000190427	1/2 - 1 Mile SSW
N63	LATD40000145485	1/2 - 1 Mile SSW
N64	LATD40000118722	1/2 - 1 Mile SSW

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

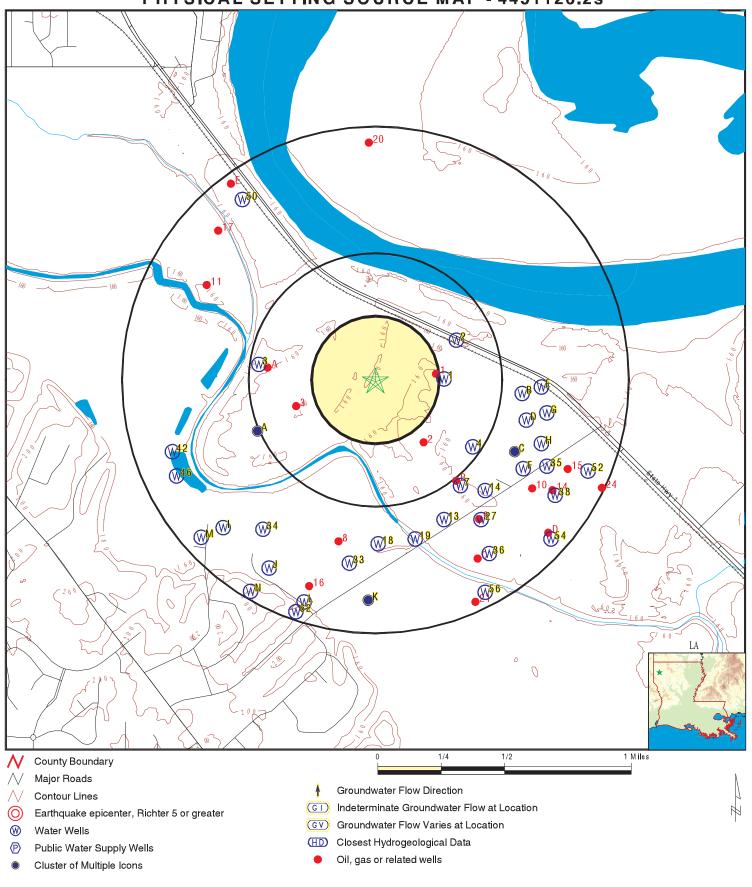
MAP ID	WELL ID	LOCATION FROM TP
1	LAOG90000244298	1/8 - 1/4 Mile East
2	LAOG90000238860	1/4 - 1/2 Mile SE
3	LAOG90000140149	1/4 - 1/2 Mile WSW
A4	LAOG90000252703	1/4 - 1/2 Mile West
A5	LAOG90000251276	1/4 - 1/2 Mile West
B6	LAOG90000236940	1/2 - 1 Mile SE
B7	LAOG90000235821	1/2 - 1 Mile SE
8	LAOG90000239095	1/2 - 1 Mile SSW
9	LAOG90000231287	1/2 - 1 Mile SE

GEOCHECK[®] - PHYSICAL SETTING SOURCE SUMMARY

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
10	LAOG90000237563	1/2 - 1 Mile SE
11	LAOG90000210488	1/2 - 1 Mile WNW
C12	LAOG90000232110	1/2 - 1 Mile SSE
C13	LAOG90000121057	1/2 - 1 Mile SSE
14	LAOG90000235411	1/2 - 1 Mile ESE
15	LAOG90000231245	1/2 - 1 Mile ESE
16	LAOG90000236536	1/2 - 1 Mile SSW
17	LAOG90000143907	1/2 - 1 Mile NW
D18	LAOG90000181327	1/2 - 1 Mile SE
D19	LAOG90000224909	1/2 - 1 Mile SE
20	LAOG90000261341	1/2 - 1 Mile North
21	LAOG90000229393	1/2 - 1 Mile SSE
E22	LAOG90000147149	1/2 - 1 Mile NW
E23	LAOG90000143908	1/2 - 1 Mile NW
24	LAOG90000164733	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 4451126.2s



SITE NAME: Leonard Road 417 Acre ADDRESS: Leonard Road

Shreveport LA 71115 LAT/LONG: 32.383 / 93.6788 CLIENT: C-K Associates, Inc. CONTACT: Andrew Hooker INQUIRY#: 4451126.2s

DATE: October 28, 2015 3:50 pm

Map ID Direction Distance

Elevation Database EDR ID Number

East 1/4 - 1/2 Mile Higher

Slot lengt:

Inspector:

Not Reported

Not Reported

LA WELLS LATD40000020633

Water wel1: 394626 22 Water wel2: 017-11659Z State code: 11659Z Parish num: 017 Local well: 322259093402701 322259 Identifica: Latitude: Longitude: 934027 Sequence n: 01 Owners nam: **CHESAPEAKE** Well depth: 90 Well use: S Well subus: Not Reported 08/09 00000000 Date compl: Geologic u: Available: Driller Log, Water Level Revised la: Not Reported Revised lo: Not Reported Not Reported Elec log: Drill log: D Not Reported Chem analy: Mechanic a: Not Reported Bio analys: Not Reported Pump test: Not Reported Avail info: W Drillers 1: **KEITHVILLE** Drillers 2: 018 Section: 003 Township: 16N Range: 13W Hole depth: 90 Elevation: Not Reported Quad num: 052A Water leve: 13.00 Date measu: 08/26/09 Source of: 2009-09-02 09/09 Date of ad: Date regis: Not Reported Not Reported Date plugg: Plugged b1: Plugged b2: Not Reported Yield: Not Reported Drawdown: Not Reported Casing di1: Casing mat: **PLASTIC** Screen di1: Screen int: 70-90 Serial num: Not Reported FRANKS 11 Latitude d: Owners num: Latitude m: O Latitude s: 0 Longitude1: 0 Longitude2: 0 Not Reported Longitude3: 2010 720 SONRIS_DBA Create dat: Create use: 2012 130 SONRIS DBA Update dat: Update use: Parish cod: 09 Industria1: Not Reported Owner stat: Not Reported Replacemen: Not Reported Not Reported Public su1: Not Reported Industria2: Not Reported Public su2: Pumpdown c: Not Reported Extension1: Not Reported Extension2: Not Reported Extension3: Not Reported Screen typ: Not Reported Gravel pac: Ground eve: Not Reported Not Reported Not Reported Diameter o: Site city: Site zip: Not Reported Site addre: Not Reported Remarks: Not Reported Authorize1: Not Reported Authorize2: 0 Heat pump1: 0 Heat pump2: Not Reported Location I: Not Reported Location m: 0 Location c: Not Reported Cemented f: Not Reported

Slot size:

Not Reported

Inspector: Not Reported

Inspection: 0 Pump setti: Not Reported

Pump motor: Not Reported Pump plan1: 0

Pump plan2:0Pump plan3:Not ReportedPump rate:Not ReportedYield meas:Not Reported

Pump hour1: 0 Pump hour2: 0

Pump stati: Not Reported Pump deter: Not Reported

Pump groun: Not Reported Pump test: 0

X longdd: -93.67416667
Y latdd: 32.38305556
Pump down: Not Reported
Pa remarks: Not Reported

Pa signat1: Not Reported Pa signat2: 0
Pa details: Not Reported

Casing di2: Not Reported Casing len: Not Reported Contact: Not Reported Casing di3: Not Reported

Screen di2: Not Reported

Wwo seq nu: 0

Screen di3: Not Reported Parish nam: CADDO

Aquifer na: [TO BE DETERMINED]
Use descri: oil/gas well rig supply

Well statu: Active Site id: LATD4000020633

2 ENE LA WELLS LATD40000102284

ENE 1/4 - 1/2 Mile Higher

Water wel1:

er

Water wel2: 017-12293Z State code: 22 Parish num: 017 Local well: 12293Z 322307093402401 322307 Identifica: Latitude: 934024 Sequence n: Longitude: OΩ Owners nam: LLOYD WELLS Well depth: 270

Well use: H Well subus: Not Reported Date compl: 01/19/2013 Geologic u: 124WLCX

Available: Not Reported

607865

Revised la: Not Reported Revised lo: Not Reported Elec log: N Drill log: D Mechanic a: N Chem analy: N

Bio analys: N Pump test: N
Avail info: N Drillers 1: COMPLETE WELL & PUMP SERVICE, LLC

Drillers 2: 673 Section: 003 Township: 16N 13W Range: Hole depth: 270 Elevation: 0166 Quad num: 052A Water leve: 120 01/19/2013 Date measu: Source of: D

Date of ad:Not ReportedDate regis:07/28/2013Date plugg:Not ReportedPlugged b1:Not ReportedPlugged b2:Not ReportedYield:Not Reported

Drawdown: Not Reported Casing di1: 4
Casing mat: PLASTIC Screen di1: 4

Screen int: Not Reported Serial num: Not Reported

Owners num: Not Reported Latitude d: 0

Latitude m: 0 Latitude s: 0

Longitude1: 0 Longitude2: 0

Longitude3: Not Reported

Create dat: 2013 712 **TERITH** Create use: Update dat: 2013117 Update use: **TERITH** Parish cod: 09 Industria1: Not Reported

Owner stat: Ν Replacemen:

Industria2: Not Reported Public su1: Not Reported Public su2: Not Reported Pumpdown c: Not Reported Extension1: Not Reported Extension2: Not Reported Extension3: Not Reported Screen typ: **PLASTIC** Ground eve: Not Reported Gravel pac: Ν Not Reported Not Reported Diameter o: Site city:

Site zip: Not Reported Site addre: Not Reported Remarks: Not Reported

Authorize1: TALLEY, JOHN W.

Authorize2: 2013 624 0 Heat pump1:

Location I: HWY 1 & LEONARD RD Heat pump2: Not Reported 1.5

Location m: Location c: **SHREVEPORT** Cemented f: 15

Slot lengt: 20 Slot size: .018

Inspector: PAA Inspector: Not Reported

Inspection: 2013 926 Pump setti: Not Reported

Pump motor: Not Reported Pump plan1: Pump plan2: 0 Pump plan3: Not Reported

Pump rate: Not Reported Yield meas: Not Reported

Pump hour1: Pump hour2: 0

Pump stati: Not Reported Pump deter: Not Reported

Pump groun: Not Reported Pump test:

X longdd: -93.67333333 Y latdd: 32.38527778

Pump down: G Pa remarks: Not Reported

domestic

Pa signat1: Not Reported Pa signat2: 0

Pa details: Not Reported Not Reported Casing di2: 250

Casing len: Contact: Not Reported Casing di3: Not Reported

Screen di2: Not Reported

Wwo seq nu: 51897

Screen di3: Not Reported Parish nam: CADDO

WILCOX AQUIFER Aquifer na:

Well statu: Active Site id: LATD40000102284

West LA WELLS LATD40000103643 1/4 - 1/2 Mile Higher

Water wel1: 557164

Water wel2: 017-12061Z State code: 22 12061Z Parish num: 017 Local well: 322303093411201 Identifica: Latitude: 322302 Longitude: 934112 Sequence n: Not Reported

PETROHAWK Well depth: Owners nam: 60

Well use: Well subus: Not Reported Date compl: 07/28/2011 Geologic u: 112RRVA

Available: Not Reported

Use descri:

Revised la: 322302 Revised lo: 934112

Ν

Aquifer na:

RED RIVER ALLUVIAL AQUIFER

D

Elec log: Drill log: Mechanic a: Ν Chem analy: Ν Bio analys: Ν Pump test: Ν **PINNERGY** Avail info: Ν Drillers 1: Drillers 2: 749 Section: 003 Township: 16N 13W Range: Hole depth: 60 Elevation: 0158 Quad num: 052C Water leve: 15 07/28/2011 D Date measu: Source of: Not Reported 08/19/2011 Date of ad: Date regis: Date plugg: 09/27/2011 Plugged b1: Not Reported 749 Not Reported Plugged b2: Yield: Drawdown: Not Reported Casing di1: **PLASTIC** Screen di1: 4 Casing mat: 243582 Screen int: Not Reported Serial num: FRANKS INVESTMENTS 10 H-1 Latitude d: Owners num: Latitude m: Latitude s: 0 0 Longitude1: 0 Longitude2: Longitude3: Not Reported Create dat: 2011 825 **TERITH** Create use: Update dat: 20121226 Update use: **TERITH** Parish cod: 09 Industria1: Not Reported Owner stat: Ν Replacemen: Ν Industria2: Not Reported Public su1: Not Reported Public su2: Not Reported Pumpdown c: Not Reported Extension1: Not Reported Extension2: Not Reported Not Reported Extension3: Screen typ: **PLASTIC** Gravel pac: N Ground eve: Not Reported Diameter o: Not Reported Site city: Not Reported Not Reported Site addre: Not Reported Site zip: RD. CROSS RAILROAD TRACKS GO TO LEASE ROAD ON RIGHT AROUND CHESAPEAKE LOCATION FOLLOW LEASI Remarks: FETTERMAN, TIM Authorize2: 2011 811 Authorize1: Heat pump1: 0 Heat pump2: Not Reported Location I: INT HWY 1 & 523 GO SOUTH ON HWY 1 1.5 MI TURN RIG Location m: **SHREVEPORT** 50 Location c: Cemented f: Slot lengt: 20 Slot size: .02 Inspector: PAA Inspector: Not Reported Inspection: 2012117 Pump setti: Not Reported Not Reported Pump motor: Pump plan1: Not Reported Pump plan2: 0 Pump plan3: Pump rate: Not Reported Yield meas: Not Reported Pump hour1: Pump hour2: Pump stati: Not Reported Pump deter: Not Reported Pump groun: Not Reported Pump test: -93.68666667 X longdd: 32.38388889 Y latdd: Pump down: Pa remarks: Not Reported Pa signat1: TIM FETTERMAN Pa signat2: 2011107 Pa details: ALL OF CASING LEFT IN HOLE. TREMMIE PIPE TO BOTTOM AND FILLED WITH CEMENT AND BENTONITE SLURRY. Casing di2: Not Reported Casing len: Contact: FETTERMAN, TIM Casing di3: Not Reported Screen di2: Not Reported Wwo seq nu: 3002 Screen di3: Parish nam: **CADDO** Not Reported

Use descri: oil/gas well rig supply

Well statu: Plugged and Abandonded Site id: LATD40000103643

SE LA WELLS LATD40000149919

1/4 - 1/2 Mile Higher

> Water wel1: 394657 017-11690Z Water wel2: State code: 22 Parish num: 017 Local well: 11690Z Identifica: 322245093402001 Latitude: 322245 Longitude: 934020 01 Sequence n: CCS MIDSTREAM Owners nam: Well depth: 64

Well use: Μ Well subus: Not Reported Date compl: 10/09 Geologic u: 00000000

Driller Log, Water Level Available:

Not Reported Revised la: Revised lo: Not Reported

Elec log: Not Reported Drill log: D

Mechanic a: Not Reported Chem analy: Not Reported Bio analys: Not Reported Pump test: Not Reported

Avail info: W Drillers 1: WALKER-HILL(CO)

Drillers 2: 574 Section: 003 Township: 16N 13W Range: Hole depth: 67 Elevation: 159 Quad num: 052A Water leve: 14.00 10/12/09 D Date measu: Source of: 10/09 Date of ad: 2009-10-28 Date regis: Date plugg: Not Reported Plugged b1: Not Reported

Not Reported Not Reported Plugged b2: Yield: Drawdown: Not Reported Casing di1: 2

2 **PLASTIC** Screen di1: Casing mat:

54-64 Not Reported Screen int: Serial num:

Owners num: MW-9B Latitude d:

Latitude m: 0 Latitude s: 0

0 Longitude1: 0 Longitude2:

Longitude3: Not Reported

Create dat: 2010 720 Create use: SONRIS DBA Update dat: 2012 130 Update use: SONRIS_DBA Parish cod: Industria1: Not Reported 09 Not Reported Replacemen: Not Reported Owner stat: Industria2: Not Reported Public su1: Not Reported Public su2: Not Reported Pumpdown c: Not Reported Extension1: Not Reported Extension2: Not Reported Not Reported Screen typ: Not Reported Extension3:

Gravel pac: Ground eve: Not Reported Ν Site city: Diameter o: Not Reported Not Reported Site zip: Not Reported Site addre: Not Reported

Remarks: Not Reported

0 Authorize1: Not Reported Authorize2:

Heat pump1: 0

Location I: Not Reported Heat pump2: Not Reported

Location m:

Location c: Not Reported Cemented f: Not Reported Slot lengt: Not Reported Slot size: Not Reported

Not Reported Inspector:

Inspector: Not Reported

Inspection: 0 Pump setti: Not Reported

Pump motor: Not Reported Pump plan1: 0

Pump plan2:0Pump plan3:Not ReportedPump rate:Not ReportedYield meas:Not Reported

Pump hour1: 0 Pump hour2: 0

Pump stati: Not Reported Pump deter: Not Reported

Pump groun: Not Reported Pump test: 0

X longdd: -93.67222222
Y latdd: 32.37916667
Pump down: Not Reported
Pa remarks: Not Reported

Pa signat1: Not Reported Pa signat2: 0

Pa details: Not Reported
Casing di2: Not Reported Casing len: Not Reported
Contact: Not Reported Casing di3: Not Reported

Screen di2: Not Reported

Wwo seq nu: 0
Screen di3: Not Reported Parish nam: CADDO

Aquifer na: [TO BE DETERMINED]

Use descri: monitor

Well statu: Active Site id: LATD40000149919

A5
WSW
LA WELLS LATD40000126990
1/2 - 1 Mile

Water wel1: 387506

Higher

Water wel2: 017-477 State code: 22 Parish num: 017 Local well: 477 322248 322248093411201 Identifica: Latitude: Sequence n: 01 Longitude: 934112 Owners nam: U S GEOL SURVEY Well depth: 47 Well use: Well subus: PA 112RRVA Date compl: 07/71 Geologic u:

Available : Driller Log, Quality of Water, Water Level

Revised la: Not Reported Revised lo: Not Reported

Elec log: Not Reported Drill log: D Mechanic a: Not Reported Chem analy: Q

Bio analys: Not Reported Pump test: Not Reported Avail info: Drillers 1: U.S.G.S. W 002 Drillers 2: Section: 003 Township: 16N 13W Range: Hole depth: Elevation: 163 Quad num: Not Reported 28.50 Water leve: Date measu: 11/02/71 Source of: Α

2001-10-17 Not Reported Date of ad: Date regis: Date plugg: 08/00 Plugged b1: U.S.G.S. Not Reported Plugged b2: 002 Yield: Drawdown: Not Reported Casing di1: 1.25

Casing mat: Not Reported Casing dil: 1.25

Casing mat: METAL Screen dil: 1.25

Screen int: 44-47 Serial num: Not Reported

Owners num: Not Reported Latitude d: 0

Latitude m: 0 Latitude s: 0

Longitude1: 0 Longitude2: 0

Longitude3: Not Reported

2010 720 SONRIS_DBA Create dat: Create use: Update dat: 2012 130 Update use: SONRIS DBA Parish cod: 09 Industria1: Not Reported Owner stat: Not Reported Replacemen: Not Reported Not Reported Industria2: Not Reported Public su1: Public su2: Not Reported Pumpdown c: Not Reported Extension1: Not Reported Extension2: Not Reported Extension3: Not Reported Screen typ: Not Reported Not Reported Gravel pac: Ν Ground eve: Not Reported Diameter o: Site city: Not Reported Site zip: Not Reported Site addre: Not Reported Remarks: Not Reported Authorize1: Not Reported Authorize2: 0 0 Heat pump1: Not Reported Location I: Not Reported Heat pump2: Location m: 0 Location c: Not Reported Cemented f: Not Reported Slot lengt: Not Reported Slot size: Not Reported Inspector: Not Reported Inspector: Not Reported Inspection: Pump setti: Not Reported Pump motor: Not Reported Pump plan1: Pump plan2: 0 Pump plan3: Not Reported Pump rate: Not Reported Yield meas: Not Reported Pump hour1: Pump hour2: 0 Pump stati: Not Reported Pump deter: Not Reported Pump groun: Not Reported Pump test: -93.68666667 X longdd: Y latdd: 32.38 Pump down: Not Reported Pa remarks: Not Reported Pa signat1: Not Reported Pa signat2: 0 Pa details: Not Reported Casing di2: Not Reported Not Reported Casing len: Contact: Not Reported Casing di3: Not Reported Screen di2: Not Reported Wwo seq nu: Not Reported Screen di3: Parish nam: CADDO Aquifer na: RED RIVER ALLUVIAL AQUIFER Use descri: plugged and abandoned observation Well statu: Plugged and Abandonded Site id: LATD40000126990

••

WSW 1/2 - 1 Mile Higher

Org. Identifier: USGS-LA

Formal name: USGS Louisiana Water Science Center

Monloc Identifier: USGS-322248093411201

Monloc name: Cd- 477
Monloc type: Well
Monloc desc: Not Reported

Huc code:11140202Drainagearea value:Not ReportedDrainagearea Units:Not ReportedContrib drainagearea:Not ReportedContrib drainagearea units:Not ReportedLatitude:32.3801554Longitude:-93.6868447Sourcemap scale:62500

FED USGS

USGS40000412775

Horiz Acc measure: Horiz Acc measure units: seconds Horiz Collection method: Interpolated from map NAD83 163.18 Horiz coord refsys: Vert measure val: Vert measure units: feet Vertacc measure val: .01 Vert accmeasure units: feet Vertcollection method: Level or other surveying method Vert coord refsys: NGVD29 Countrycode: US Aquifername: Alluvial aquifers Red River Alluvial Aquifer Formation type: Unconfined single aquifer Aquifer type: Construction date: 19710720 Welldepth: 47 Welldepth units: ft Wellholedepth: 71

Ground-water levels, Number of Measurements: 104

ft

Wellholedepth units:

Data	Feet below	Feet to	Dete	Feet below	Feet to
Date	Surface	Sealevel 	Date	Surface	Sealevel
2000-08-17	26.05		2000-07-11	25.64	
1995-03-28	25.90		1994-04-04	24.90	
1993-05-06	26.48		1992-04-09	25.95	
1991-04-26	23.61		1990-05-25	25.64	
1990-05-03	25.88		1989-04-03	26.38	
1988-05-03	27.08		1987-09-01	27.52	
1987-06-02	26.75		1987-03-04	25.62	
1986-09-17	27.20		1986-03-11	26.95	
1985-12-17	26.82		1985-09-17	27.45	
1985-06-17	26.62		1985-03-06	26.80	
1985-02-11	26.47		1984-12-06	27.25	
1984-09-11	27.81		1984-03-06	26.56	
1983-12-06	27.75		1983-09-07	27.20	
1983-06-01	26.52		1983-03-09	26.70	
1982-12-07	27.94		1982-09-01	28.03	
1982-06-02	28.05		1982-03-02	27.90	
1981-12-09	28.06		1981-09-01	28.25	
1981-06-02	28.75		1981-03-03	28.87	
1980-12-03	28.87		1980-09-08	28.53	
1980-06-04	27.41		1980-03-04	27.74	
1979-12-05	27.91		1979-08-28	27.55	
1979-06-11	26.89		1979-03-16	27.61	
1978-12-13	28.94		1978-07-26	28.80	
1978-04-12	28.60		1978-01-12	28.60	
1977-10-13	28.40		1977-07-12	28.80	
1977-04-06	27.30		1977-01-13	27.80	
1976-09-21	27.49		1976-09-16	28.60	
1976-06-15	27.50		1976-04-06	27.30	
1976-03-31	27.42		1976-01-21	28.00	
1975-11-05	27.20		1975-10-06	27.30	
1975-09-08	27.20		1975-08-04	26.60	
1975-07-09	27.10		1975-06-03	26.60	
1975-06-02	26.60		1975-05-23	26.30	
1975-05-13	26.41		1975-05-12	26.37	
1975-04-03	26.50		1975-03-12	26.60	
1975-02-12	26.60		1974-10-02	27.10	
1974-08-07	27.20		1974-07-01	27.20	
1974-06-05	26.70		1974-05-08	27.20	
1974-04-03	26.90		1974-03-06	26.70	
1974-02-05	26.30		1974-01-25	25.60	
1973-12-06	26.80		1973-11-14	27.20	

Ground-water levels, continued.							
	Feet below	Feet to				Feet below	Feet to
Date	Surface	Sealevel			Date	Surface	Sealevel
1973-10-03	27.20				1973-08-02	27.10	
1973-07-10	26.80				1973-06-06	27.20	
1973-05-02	27.20				1973-04-03	27.40	
1973-03-08	27.70				1973-02-06	27.80	
1973-01-10	27.70				1972-12-13	27.90	
1972-11-07	28.20				1972-10-03	28.60	
1972-09-06	28.50				1972-08-01	28.00	
1972-07-11	28.20				1972-06-13	28.30	
1972-05-02	28.00				1972-04-04	27.90	
1972-03-01	28.10				1972-02-08	27.90	
1972-01-13	28.00				1971-11-02	28.50	

7 SE LA WELLS LATD40000196562 1/2 - 1 Mile Higher

iigiici			
Water wel1:	394395		
Water wel2:	017-11428Z	State code:	22
Parish num:	017	Local well:	11428Z
Identifica:	322237093402301	Latitude:	322237
Longitude:	934023	Sequence n:	01
Owners nam:	J W OPERATING COMPANY	Well depth:	95
Well use:	S	Well subus:	Not Reported
Date compl:	09/08	Geologic u:	112RRVA
Available :	Driller Log, Water Level	Ü	
Revised la:	322440	Revised lo:	934024
Elec log:	Not Reported	Drill log:	D
Mechanic a:	Not Reported	Chem analy:	Not Reported
Bio analys:	Not Reported	Pump test:	Not Reported
Avail info:	W	Drillers 1:	KEITHVILLE
Drillers 2:	018	Section:	003
Township:	16N	Range:	13W
Hole depth:	95	Elevation:	159
Quad num:	052A	Water leve:	33.00
Date measu:	09/26/08	Source of :	D
Date of ad:	2008-12-31	Date regis:	10/08
Date plugg:	06/03/2011	Plugged b1:	Not Reported
Plugged b2:	208	Yield:	Not Reported
Drawdown:	Not Reported	Casing di1:	4
Casing mat:	PLASTIC	Screen di1:	4
Screen int:	75-95	Serial num:	238806
Owners num:	FRANKS REALTY 14-1	Latitude d:	0
Latitude m:	0		
Latitude s:	0		
Longitude1:	0	Longitude2:	0
Longitude3:	Not Reported		
Create dat:	2010 720	Create use:	SONRIS_DBA
Update dat:	2012 130	Update use:	SONRIS_DBA
Parish cod:	09	Industria1:	Not Reported
Owner stat:	Not Reported	Replacemen:	Not Reported
Industria2:	Not Reported	Public su1:	Not Reported
Public su2:	Not Reported	Pumpdown c:	Not Reported
Extension1:	Not Reported	Extension2:	Not Reported
Extension3:	Not Reported	Screen typ:	Not Reported
Gravel pac:	N	Ground eve:	Not Reported

Diameter o: Not Reported Site city: Not Reported Site zip: Not Reported Site addre: Not Reported

Remarks: Not Reported

Authorize1: Not Reported Authorize2: 0

Heat pump1: 0

Heat pump2: Not Reported Location I: HWY 1 & PR 122

Location m: 1

Location c: SHREVEPORT Cemented f: Not Reported Slot lengt: Not Reported Slot size: Not Reported

Inspector: JB

Inspector: Not Reported

Inspection: 2011 716 Pump setti: Not Reported

Pump motor:Not ReportedPump plan1:0Pump plan2:0Pump plan3:Not ReportedPump rate:Not ReportedYield meas:Not Reported

Pump hour1: 0 Pump hour2: 0

Pump stati:Not ReportedPump deter:Not ReportedPump groun:Not ReportedPump test:0

X longdd: -93.67305556

Y latdd: 32.37694444
Pump down: Not Reported
Pa remarks: Not Reported

Pa signat1: GEORGE HAYWARD Pa signat2: 2011 616

Pa details: PLUGGED 4" WELL FROM BOTTOM TO TOP WITH 9 PORTLAND
Casing di2: Not Reported Casing len: Not Rep

Casing di2: Not Reported Casing len: Not Reported Contact: Not Reported Casing di3: Not Reported

Screen di2: Not Reported

Wwo seq nu: 6861

Screen di3: Not Reported Parish nam: CADDO

Aquifer na: RED RIVER ALLUVIAL AQUIFER

Use descri: oil/gas well rig supply

Well statu: Plugged and Abandonded Site id: LATD40000196562

1/2 - 1 Mile Higher

 Water wel1:
 394614

 Water wel2:
 017-11647Z
 State code:
 22

 Parish num:
 017
 Local well:
 11647Z

 Identifica:
 322255093401001
 Latitude:
 322255

 Longitude:
 934010
 Sequence n:
 01

 Owners nam:
 CCS MIDSTREAM
 Well depth:
 21

Well use: M Well subus: Not Reported Date compl: 06/09 Geologic u: 00000000

Available : Driller Log, Water Level

Revised Ia: Not Reported Revised Io: Not Reported

Elec log: Not Reported Drill log: D

Mechanic a:Not ReportedChem analy:Not ReportedBio analys:Not ReportedPump test:Not ReportedAvail info:WDrillers 1:WALKER-HILL(CO)

Drillers 2: 574 Section: 003 Township: 16N Range: 13W Hole depth: 21 Elevation: 158 13.00 Quad num: 052A Water leve: Date measu: 06/23/09 Source of: D Date of ad: 2009-08-18 Date regis: 08/09

Date plugg: Plugged b2: Drawdown: Casing mat: Screen int: Owners num: Latitude m:	Not Reported Not Reported Not Reported PLASTIC 11-21 MW-3A 0	Plugged b1: Yield: Casing di1: Screen di1: Serial num: Latitude d:	Not Reported Not Reported 2 2 Not Reported 0
Latitude s: Longitude1: Longitude3:	0 0 Not Reported	Longitude2:	0
Create dat: Update dat: Parish cod:	2010 720 2012 130 09	Create use: Update use: Industria1:	SONRIS_DBA SONRIS_DBA Not Reported
Owner stat: Industria2: Public su2:	Not Reported Not Reported Not Reported	Replacemen: Public su1: Pumpdown c:	Not Reported Not Reported Not Reported
Extension1: Extension3: Gravel pac:	Not Reported Not Reported N	Extension2: Screen typ: Ground eve:	Not Reported Not Reported Not Reported
Diameter o: Site zip: Remarks:	Not Reported Not Reported Not Reported	Site city: Site addre:	Not Reported Not Reported
Authorize1: Heat pump1: Heat pump2:	Not Reported 0 Not Reported	Authorize2: Location I:	0 Not Reported
Location m: Location c: Slot lengt:	0 Not Reported Not Reported	Cemented f: Slot size:	Not Reported Not Reported
Inspector: Inspector:	Not Reported Not Reported		·
Inspection: Pump motor: Pump plan2:	0 Not Reported 0	Pump setti: Pump plan1: Pump plan3:	Not Reported 0 Not Reported
Pump rate: Pump hour1: Pump stati:	Not Reported 0 Not Reported	Yield meas: Pump hour2: Pump deter:	Not Reported 0 Not Reported
Pump groun: X longdd: Y latdd: Pump down: Pa remarks:	Not Reported -93.66944444 32.38194444 Not Reported Not Reported	Pump test :	0
Pa signat1: Pa details:	Not Reported Not Reported	Pa signat2:	0
Casing di2: Contact: Screen di2: Wwo seq nu:	Not Reported Not Reported Not Reported 0	Casing len: Casing di3:	Not Reported Not Reported
Screen di3: Aquifer na: Use descri:	Not Reported [TO BE DETERMINED] monitor	Parish nam:	CADDO
Well statu:	Active	Site id:	LATD40000150326

C9 ESE 1/2 - 1 Mile Higher

State code:

22

Water wel1: 394617 Water wel2: 017-11650Z Parish num: 017

 Parish num:
 017
 Local well:
 11650Z

 Identifica:
 322246093401101
 Latitude:
 322246

 Longitude:
 934011
 Sequence n:
 01

 Owners nam:
 CCS MIDSTREAM
 Well depth:
 68

Well use: M Well subus: Not Reported Date compl: Geologic u: Not O0000000

Available : Driller Log, Water Level

Revised la: Not Reported Revised lo: Not Reported

Elec log: Not Reported Drill log: D

Mechanic a:Not ReportedChem analy:Not ReportedBio analys:Not ReportedPump test:Not ReportedAvail info:WDrillers 1:WALKER-HILL(CO)

Drillers 2: 574 003 Section: 16N Township: Range: 13W Hole depth: 73 Elevation: 156 052A 14.00 Quad num: Water leve: 06/23/09 Date measu: Source of: D Date of ad: 2009-08-18 Date regis: 08/09

Date plugg: Not Reported Plugged b1: Not Reported Plugged b2: Not Reported Yield: Not Reported

Drawdown: Not Reported Casing di1: 2
Casing mat: PLASTIC Screen di1: 2

Screen int: 58-68 Serial num: Not Reported

Owners num: MW-5B Latitude d: 0

Latitude m: 0 Latitude s: 0

Longitude1: 0 Longitude2: 0

Longitude3: Not Reported

Create dat: 2010 720 Create use: SONRIS_DBA
Update dat: 2012 130 Update use: SONRIS_DBA
Parish cod: 09 Industria1: Not Reported

Parish cod: Industria1: Not Reported Not Reported Owner stat: Not Reported Replacemen: Industria2: Not Reported Public su1: Not Reported Public su2: Not Reported Pumpdown c: Not Reported Not Reported Extension1: Not Reported Extension2: Not Reported Extension3: Not Reported Screen typ: Gravel pac: Ground eve: Not Reported Ν

Diameter o: Not Reported Site city: Not Reported Site zip: Not Reported Site addre: Not Reported Remarks: Not Reported

Authorize1: Not Reported Authorize2: 0

Heat pump1: 0

Heat pump2: Not Reported Location I: Not Reported

Location m: 0

Location c: Not Reported Cemented f: Not Reported Slot lengt: Not Reported Slot size: Not Reported

Inspector: Not Reported
Inspector: Not Reported

Inspection: 0 Pump setti: Not Reported

Pump motor: Not Reported Pump plan1: 0

Pump plan2: 0 Pump plan3: Not Reported Pump rate: Not Reported Yield meas: Not Reported

Pump hour1: 0 Pump hour2: 0

Pump stati: Not Reported Pump deter: Not Reported

Pump groun: Not Reported Pump test: 0

X longdd: -93.66972222 Y latdd: 32.37944444

Not Reported Pump down: Pa remarks: Not Reported

Pa signat1: Not Reported Pa signat2:

Not Reported Pa details:

Casing di2: Not Reported Casing len: Not Reported Contact: Not Reported Casing di3: Not Reported

Screen di2: Not Reported

Wwo seq nu:

Not Reported Parish nam: **CADDO** Screen di3:

[TO BE DETERMINED] Aquifer na:

Use descri: monitor

Well statu: Active Site id: LATD40000120618

C10 ESE LA WELLS LATD40000020513

1/2 - 1 Mile Higher

> Water wel1: 394616 Water wel2: 017-11649Z State code: 22

Parish num: 017 Local well: 11649Z Identifica: 322245093401101 Latitude: 322245 Longitude: 934011 Sequence n: 01 Owners nam: **CCS MIDSTREAM** Well depth: 22

Well use: Well subus: Not Reported 00000000 Date compl: 06/09 Geologic u:

Driller Log, Water Level Available:

Revised la: Not Reported Revised lo: Not Reported

Elec log: Not Reported Drill log: D

Not Reported Chem analy: Not Reported Mechanic a: Bio analys: Not Reported Pump test: Not Reported

WALKER-HILL(CO) Avail info: W Drillers 1:

Drillers 2: 574 Section: 003 Township: 16N Range: 13W Hole depth: 22 Elevation: 156 Quad num: 052A Water leve: 14.00 06/23/09 Date measu: Source of: D Date of ad: 2009-08-18 Date regis: 08/09

Date plugg: Not Reported Plugged b1: Not Reported Plugged b2: Not Reported Yield: Not Reported

Not Reported Casing di1: 2 Drawdown: Screen di1: **PLASTIC** Casing mat: 2

Screen int: 12-22 Serial num: Not Reported

Owners num: MW-5A Latitude d:

Latitude m: 0

0 Latitude s:

Gravel pac:

0 0 Longitude1: Longitude2:

Longitude3: Not Reported

Ν

SONRIS_DBA Create dat: 2010 720 Create use: 2012 130 SONRIS DBA Update dat: Update use: Not Reported Parish cod: 09 Industria1: Owner stat: Not Reported Replacemen: Not Reported Not Reported Not Reported Industria2: Public su1: Public su2: Not Reported Pumpdown c: Not Reported Extension1: Not Reported Extension2: Not Reported Extension3: Not Reported Screen typ: Not Reported

Ground eve:

TC4451126.2s Page A-22

Not Reported

Diameter o: Not Reported Site city: Not Reported Site addre: Not Reported

Remarks: Not Reported

Authorize1: Not Reported Authorize2: 0

Heat pump1: 0

Heat pump2: Not Reported Location I: Not Reported

Location m: 0

 Location c:
 Not Reported
 Cemented f:
 Not Reported

 Slot lengt:
 Not Reported
 Slot size:
 Not Reported

Inspector: Not Reported Inspector: Not Reported

inspector. Not Re

Inspection: 0 Pump setti: Not Reported

Pump motor:Not ReportedPump plan1:0Pump plan2:0Pump plan3:Not ReportedPump rate:Not ReportedYield meas:Not ReportedPump hour1:0Pump hour2:0

Pump stati: Not Reported Pump deter: Not Reported

Pump groun: Not Reported Pump test: 0

X longdd: -93.66972222 Y latdd: 32.37916667

Pump down: Not Reported
Pa remarks: Not Reported

Pa signat1: Not Reported Pa signat2: 0

Pa details: Not Reported

Casing di2: Not Reported Casing len: Not Reported Contact: Not Reported Casing di3: Not Reported

Screen di2: Not Reported

Wwo seq nu: 0

Screen di3: Not Reported Parish nam: CADDO

Aquifer na: [TO BE DETERMINED]

Use descri: monitor

Well statu: Active Site id: LATD40000020513

D11 ESE LA WELLS LATD40000150929

1/2 - 1 Mile Higher

Water wel1:

 Water wel2:
 017-11652Z
 State code:
 22

 Parish num:
 017
 Local well:
 11652Z

 Identifica:
 322250093400801
 Latitude:
 322250

Longitude: 934008 Sequence n: 01
Owners nam: CCS MIDSTREAM Well depth: 20

Well use: M Well subus: Not Reported Date compl: Geologic u: 00000000

Available : Driller Log, Water Level

394619

Revised la: Not Reported Revised lo: Not Reported

Elec log: Not Reported Drill log: D

Mechanic a:Not ReportedChem analy:Not ReportedBio analys:Not ReportedPump test:Not ReportedAvail info:WDrillers 1:WALKER-HILL(CO)

Drillers 2: 574 Section: 003 Township: 16N Range: 13W Hole depth: 20 Elevation: 157 16.00 Quad num: 052A Water leve: Date measu: 06/23/09 Source of: D Date of ad: 2009-08-18 Date regis: 08/09

Date plugg: Plugged b2:	Not Reported Not Reported	Plugged b1: Yield:	Not Reported Not Reported
Drawdown:	Not Reported	Casing di1:	2
Casing mat:	PLASTIC	Screen di1:	2
Screen int:	10-20	Serial num:	Not Reported
Owners num:	MW-7A	Latitude d:	0
Latitude m:	0		
Latitude s:	0		
Longitude1:	0	Longitude2:	0
Longitude3:	Not Reported		
Create dat:	2010 720	Create use:	SONRIS_DBA
Update dat:	2012 130	Update use:	SONRIS_DBA
Parish cod:	09	Industria1:	Not Reported
Owner stat:	Not Reported	Replacemen:	Not Reported
Industria2:	Not Reported	Public su1:	Not Reported
Public su2:	Not Reported	Pumpdown c:	Not Reported
Extension1:	Not Reported	Extension2:	Not Reported
Extension3:	Not Reported	Screen typ:	Not Reported
Gravel pac:	N	Ground eve:	Not Reported
Diameter o:	Not Reported	Site city:	Not Reported
Site zip:	Not Reported	Site addre:	Not Reported
Remarks:	Not Reported		
Authorize1:	Not Reported	Authorize2:	0
Heat pump1:	0		
Heat pump2:	Not Reported	Location I:	Not Reported
Location m:	0 Nat Danastad	0	Net Devented
Location c:	Not Reported	Cemented f:	Not Reported
Slot lengt:	Not Reported	Slot size:	Not Reported
Inspector:	Not Reported		
Inspector:	Not Reported	Dump actti:	Not Donortod
Inspection:	0 Not Reported	Pump setti:	Not Reported 0
Pump motor:		Pump plan1:	
Pump plan2: Pump rate:	0 Not Reported	Pump plan3: Yield meas:	Not Reported Not Reported
Pump hour1:	0	Pump hour2:	0
Pump stati:	Not Reported	Pump deter:	Not Reported
Pump groun:	Not Reported	Pump test :	0
X longdd:	-93.66888889	i dirip test .	v
Y latdd:	32.38055556		
Pump down :	Not Reported		
Pa remarks:	Not Reported		
Pa signat1:	Not Reported	Pa signat2:	0
Pa details:	Not Reported	g	•
Casing di2:	Not Reported	Casing len:	Not Reported
Contact:	Not Reported	Casing di3:	Not Reported
Screen di2:	Not Reported	9	
Wwo seq nu:	0		
Screen di3:	Not Reported	Parish nam:	CADDO
Aquifer na:	[TO BE DETERMINED]		
Use descri:	monitor		
Well statu:	Active	Site id:	LATD40000150929

B12 East 1/2 - 1 Mile Higher

394610 Water wel1: Water wel2: 017-11643Z

Parish num: 017 Identifica: 322257093400601 Longitude: 934006

Owners nam: CCS MIDSTREAM

Well use: M Date compl: 06/09

Driller Log, Water Level Available:

Not Reported Revised la: Elec log: Not Reported

Not Reported Mechanic a: Bio analys: Not Reported Avail info: W

Drillers 2: 574 16N Township: Hole depth: 20 052A Quad num: 06/23/09 Date measu: Date of ad: 2009-08-18

Date regis: 08/09 Not Reported Plugged b1: Date plugg: Plugged b2: Not Reported Yield:

Drawdown: Not Reported Casing di1: **PLASTIC** Casing mat: Screen di1:

Screen int: 15-20

Owners num: CDM-16 Latitude m: 0

0 Latitude s:

Longitude1: 0 Longitude2: 0

Longitude3: Not Reported Create dat: 2010 720 Update dat: 2012 130

Parish cod: 09 Owner stat: Not Reported

Industria2: Not Reported Public su2: Not Reported Extension1: Not Reported Extension3: Not Reported Gravel pac: Ν Diameter o: Not Reported Site zip: Not Reported

Remarks: Not Reported Authorize1: Not Reported

Heat pump1:

Heat pump2: Not Reported

Location m:

Location c: Not Reported Not Reported Slot lengt:

Inspector: Not Reported Inspector: Not Reported

Inspection: 0

Pump motor: Not Reported Pump plan2: 0

Not Reported

Pump rate:

Pump hour1:

Pump stati:

Not Reported Pump groun: Not Reported

X longdd: -93.66833333 Y latdd: 32.3825

State code: 22 Local well: 11643Z 322257

Latitude: Sequence n: 01 Well depth: 20

Well subus: Not Reported Geologic u: 00000000

Revised Io: Not Reported

Drill log:

Chem analy: Not Reported Pump test: Not Reported Drillers 1: WALKER-HILL(CO)

003 Section: Range: 13W Elevation: 159 11.00 Water leve: Source of: \Box

Not Reported Not Reported

2 2

Serial num: Not Reported

Latitude d:

Create use: SONRIS DBA

Update use: SONRIS_DBA Industria1: Not Reported Not Reported Replacemen: Public su1: Not Reported Pumpdown c: Not Reported Not Reported Extension2: Not Reported Screen typ: Ground eve: Not Reported

Site city: Not Reported Site addre: Not Reported

0 Authorize2:

Location I: Not Reported

Cemented f: Not Reported

Slot size: Not Reported

Pump setti: Not Reported

Pump plan1:

Pump plan3: Not Reported Not Reported Yield meas:

Pump hour2:

Pump deter: Not Reported

Pump test:

Not Reported Pump down: Pa remarks: Not Reported

Pa signat1: Not Reported Pa signat2:

Not Reported Pa details:

Casing di2: Not Reported Casing len: Not Reported Contact: Not Reported Casing di3: Not Reported

Screen di2: Not Reported

Wwo seq nu:

Not Reported Parish nam: **CADDO** Screen di3:

[TO BE DETERMINED] Aquifer na:

Use descri: monitor

Well statu: Active Site id: LATD40000096256

13 SSE LA WELLS LATD40000134020 1/2 - 1 Mile

Lower

Water wel1: 391023 Water wel2: 017-8054Z State code: 22

Parish num: 017 Local well: 8054Z 322230 Identifica: 322230093402701 Latitude: Longitude: 934027 Sequence n: 01 Owners nam: MANASCO CONST Well depth: 150

Well use: Η Well subus: Not Reported Date compl: 07/95 Geologic u: 124WLCX

Driller Log, Water Level Available:

Revised la: Not Reported Revised lo: Not Reported

Elec log: Not Reported Drill log: D

Not Reported Chem analy: Not Reported Mechanic a: Bio analys: Not Reported Pump test: Not Reported

PROFESSIONAL' Avail info: W Drillers 1: Drillers 2: 475 038 Section:

Township: 16N Range: 13W Hole depth: 150 Elevation: 155 052C Quad num: Water leve: 30.00 Date measu: 07/15/95 Source of: D Date of ad: 1996-09-10 Date regis: 07/95

Date plugg: Not Reported Plugged b1: Not Reported Plugged b2: Not Reported Yield: Not Reported

Not Reported Casing di1: Drawdown: **PLASTIC** Screen di1: 1.50 Casing mat:

120-150 Screen int: Serial num: Not Reported

Owners num: Not Reported Latitude d:

Latitude m:

0 Latitude s: 0 Longitude1:

0 Longitude2:

Longitude3: Not Reported Create dat: 2010 720 Create use:

SONRIS_DBA 2012 130 SONRIS DBA Update dat: Update use: Not Reported Parish cod: 09 Industria1: Owner stat: Not Reported Replacemen: Not Reported Not Reported Not Reported Industria2: Public su1: Public su2: Not Reported Pumpdown c: Not Reported Extension1: Not Reported Extension2: Not Reported Extension3: Not Reported Screen typ: Not Reported

Ground eve: Not Reported Gravel pac: Ν

Pump setti:

Not Reported

Diameter o: Not Reported Site city: Not Reported Site zip: Not Reported Site addre: Not Reported

Remarks: Not Reported

Authorize1: Not Reported Authorize2: 0

Heat pump1: 0

Heat pump2: Not Reported Location I: Not Reported

Location m: 0

 Location c:
 Not Reported
 Cemented f:
 Not Reported

 Slot lengt:
 Not Reported
 Slot size:
 Not Reported

Inspector: Not Reported Inspector: Not Reported

Inspection: 0

 Pump motor:
 Not Reported
 Pump plan1:
 0

 Pump plan2:
 0
 Pump plan3:
 Not Reported

 Pump rate:
 Not Reported
 Yield meas:
 Not Reported

 Pump bour1:
 0
 Pump bour2:
 0

Pump hour1:0Pump hour2:0Pump stati:Not ReportedPump deter:Not Reported

Pump groun: Not Reported Pump test: 0

X longdd: -93.67416667

Y latdd: 32.375 Pump down: Not Reported

Pa remarks: Not Reported

Pa signat1: Not Reported Pa signat2: 0

Pa details: Not Reported

Casing di2: Not Reported Casing len: Not Reported Contact: Not Reported Casing di3: Not Reported

Screen di2: Not Reported

Wwo seq nu:

Screen di3: Not Reported Parish nam: CADDO

Aquifer na: WILCOX AQUIFER

Use descri: domestic

Well statu: Active Site id: LATD40000134020

14 SE LA WELLS LATD4000019848

1/2 - 1 Mile Higher

 Water wel1:
 394658

 Water wel2:
 017-11691Z
 State code:
 22

 Parish num:
 017
 Local well:
 11691Z

 Identifica:
 322236093401701
 Latitude:
 322236

Longitude: 934017 Sequence n: 01
Owners nam: CCS MIDSTREAM Well depth: 67

Well use: M Well subus: Not Reported Date compl: Geologic u: 00000000

Available : Driller Log, Water Level

Revised la: Not Reported Revised lo: Not Reported

Elec log: Not Reported Drill log: D

Mechanic a:Not ReportedChem analy:Not ReportedBio analys:Not ReportedPump test:Not ReportedAvail info:WDrillers 1:WALKER-HILL(CO)

Drillers 2: 574 Section: 003 Township: 16N Range: 13W Hole depth: 70 Elevation: 159 Quad num: 052A Water leve: 16.00 Date measu: 10/12/09 Source of: D Date of ad: 2009-10-28 Date regis: 10/09

Date plugg:	Not Reported	Plugged b1:	Not Reported
Plugged b2:	Not Reported	Yield:	Not Reported
Drawdown:	Not Reported	Casing di1:	2
Casing mat:	PLASTIC	Screen di1:	2
Screen int:	57-67	Serial num:	Not Reported
Owners num:	MW-10B	Latitude d:	0
Latitude m:	0		
Latitude s:	0		•
Longitude1:	0	Longitude2:	0
Longitude3:	Not Reported		
Create dat:	2010 720	Create use:	SONRIS_DBA
Update dat:	2012 130	Update use:	SONRIS_DBA
Parish cod:	09	Industria1:	Not Reported
Owner stat:	Not Reported	Replacemen:	Not Reported
Industria2:	Not Reported	Public su1:	Not Reported
Public su2:	Not Reported	Pumpdown c:	Not Reported
Extension1:	Not Reported	Extension2:	Not Reported
Extension3:	Not Reported	Screen typ:	Not Reported
Gravel pac:	N	Ground eve:	Not Reported
Diameter o:	Not Reported	Site city:	Not Reported
Site zip:	Not Reported	Site addre:	Not Reported
Remarks:	Not Reported		
Authorize1:	Not Reported	Authorize2:	0
Heat pump1:	0		
Heat pump2:	Not Reported	Location I:	Not Reported
Location m:	0		
Location c:	Not Reported	Cemented f:	Not Reported
Slot lengt:	Not Reported	Slot size:	Not Reported
Inspector:	Not Reported		
Inspector:	Not Reported		
Inspection:	0	Pump setti:	Not Reported
Pump motor:	Not Reported	Pump plan1:	0
Pump plan2:	0	Pump plan3:	Not Reported
Pump rate:	Not Reported	Yield meas:	Not Reported
Pump hour1:	0	Pump hour2:	0
Pump stati:	Not Reported	Pump deter:	Not Reported
Pump groun:	Not Reported	Pump test :	0
X longdd:	-93.67138889		
Y latdd:	32.37666667		
Pump down :	Not Reported		
Pa remarks:	Not Reported		
Pa signat1:	Not Reported	Pa signat2:	0
Pa details:	Not Reported		
Casing di2:	Not Reported	Casing len:	Not Reported
Contact:	Not Reported	Casing di3:	Not Reported
Screen di2:	Not Reported		
Wwo seq nu:	0		
Screen di3:	Not Reported	Parish nam:	CADDO
Aquifer na:	[TO BE DETERMINED]		
Use descri:	monitor		
Well statu:	Active	Site id:	LATD40000019848

D15 ESE 1/2 - 1 Mile Higher

State code:

Local well:

Sequence n:

Well depth:

Well subus:

Geologic u:

Revised Io:

Latitude:

22

01

20

11641Z

322251

Not Reported

Not Reported

SONRIS DBA

SONRIS_DBA

Not Reported

00000000

Water wel1: 394608 Water wel2: 017-11641Z Parish num: 017

Identifica: 322251093400601 Longitude: 934006

Owners nam: CCS MIDSTREAM Well use: M

Well use: M
Date compl: 06/09

Available : Driller Log, Water Level

Revised la: Not Reported Elec log: Not Reported

Elec log: Not Reported Drill log: D

Mechanic a: Not Reported Chem analy: Not Reported

Bio analys: Not Reported Pump test: Not Reported

Avail info: W Drillers 1: WALKER-HILL(CO)

Drillers 2: 574 003 Section: 16N Township: Range: 13W Hole depth: 20 Elevation: 158 052A 11.00 Quad num: Water leve: 06/23/09 Date measu: Source of: \Box Date of ad: 2009-08-18 Date regis: 08/09 Not Reported Plugged b1: Not Reported Date plugg:

Plugged b2: Not Reported Yield: Not Reported Drawdown: Yield: Not Reported Casing di1: 2

Casing mat: PLASTIC Screen di1: 2
Screen int: 15-20 Serial num: Not Reported

Owners num: CDM-8 Latitude d:

Latitude m: 0 Latitude s: 0

Inspector:

Longitude1: 0 Longitude2: 0

Longitude3:Not ReportedCreate dat:2010 720Create use:Update dat:2012 130Update use:Parish cod:09Industria1:

Not Reported Not Reported Owner stat: Not Reported Replacemen: Industria2: Not Reported Public su1: Not Reported Public su2: Not Reported Pumpdown c: Not Reported Not Reported Extension1: Not Reported Extension2: Not Reported Extension3: Not Reported Screen typ: Gravel pac: Ground eve: Not Reported Ν Diameter o: Not Reported Site city: Not Reported

Site zip: Not Reported Site addre:
Remarks: Not Reported

Not Reported

Authorize1: Not Reported Authorize2: 0

Heat pump1: 0

Heat pump2: Not Reported Location I: Not Reported

Location m: 0
Location c: Not Reported Cemented f: Not Reported
Slot lengt: Not Reported Slot size: Not Reported

Slot lengt: Not Reported Slot size: Not Inspector: Not Reported

Inspection: 0 Pump setti: Not Reported

Pump motor: Not Reported Pump plan1: 0

Pump plan2: 0 Pump plan3: Not Reported Pump rate: Not Reported Yield meas: Not Reported

Pump hour1: 0 Pump hour2: 0

Pump stati: Not Reported Pump deter: Not Reported

Pump groun: Not Reported Pump test: 0

X longdd: -93.66833333
Y latdd: 32.38083333

Not Reported Pump down: Pa remarks: Not Reported

Pa signat1: Not Reported Pa signat2:

Not Reported Pa details:

Casing di2: Not Reported Casing len: Not Reported Contact: Not Reported Casing di3: Not Reported

Screen di2: Not Reported

Wwo seq nu:

Not Reported Parish nam: **CADDO** Screen di3:

[TO BE DETERMINED] Aquifer na:

Use descri: monitor

Well statu: Active Site id: LATD40000019602

E16 LA WELLS LATD40000020511 **East**

1/2 - 1 Mile Higher

> Water wel1: 394613 Water wel2: 017-11646Z State code: 22

Parish num: 017 Local well: 11646Z Identifica: 322257093400401 Latitude: 322257 934004 Longitude: Sequence n: 01 Owners nam: **CCS MIDSTREAM** Well depth: 74

Well use: Well subus: Not Reported 00000000 Date compl: 06/09 Geologic u:

Driller Log, Water Level Available:

Revised la: Not Reported Revised lo: Not Reported

Elec log: Not Reported Drill log: D

Not Reported Chem analy: Not Reported Mechanic a: Bio analys: Not Reported Pump test: Not Reported

WALKER-HILL(CO) Avail info: W Drillers 1:

Drillers 2: 574 Section: 003 Township: 16N Range: 13W Hole depth: 85 Elevation: 159 Quad num: 052A Water leve: 13.00 06/23/09 Date measu: Source of: D 08/09 Date of ad: 2009-08-18 Date regis:

Date plugg: Not Reported Plugged b1: Not Reported Plugged b2: Not Reported Yield: Not Reported

Not Reported Casing di1: 2 Drawdown: PLASTIC Screen di1: Casing mat: 2

64-74 Screen int: Serial num: Not Reported

Owners num: MW-2B Latitude d:

Latitude m: 0

0 Latitude s:

Gravel pac:

0 0 Longitude1: Longitude2:

Longitude3: Not Reported

Ν

SONRIS_DBA Create dat: 2010 720 Create use: 2012 130 SONRIS DBA Update dat: Update use: Not Reported Parish cod: 09 Industria1: Owner stat: Not Reported Replacemen: Not Reported Not Reported Not Reported Industria2: Public su1: Public su2: Not Reported Pumpdown c: Not Reported Extension1: Not Reported Extension2: Not Reported Extension3: Not Reported Screen typ: Not Reported

Ground eve:

Not Reported

Not Reported Diameter o: Site city: Not Reported Site zip: Not Reported Site addre: Not Reported

Remarks: Not Reported

Authorize1: Not Reported Authorize2: 0

Heat pump1: 0

Heat pump2: Not Reported Location I: Not Reported

Location m:

Location c: Not Reported Cemented f: Not Reported Not Reported Not Reported Slot lengt: Slot size:

Not Reported Inspector: Inspector: Not Reported

Inspection:

Pump setti: Not Reported Pump motor: Not Reported Pump plan1: Pump plan2: 0 Pump plan3: Not Reported Not Reported Pump rate: Not Reported Yield meas: Pump hour1: 0 Pump hour2: 0

Pump stati: Not Reported Pump deter: Not Reported

Not Reported Pump groun: Pump test:

X longdd: -93.66777778 Y latdd:

32.3825 Pump down: Not Reported Pa remarks: Not Reported

Pa signat1: Not Reported Pa signat2: 0

Not Reported Pa details:

Casing di2: Not Reported Casing len: Not Reported Contact: Not Reported Casing di3: Not Reported

Screen di2: Not Reported

Wwo seq nu:

Screen di3: Not Reported Parish nam: CADDO

[TO BE DETERMINED] Aquifer na:

Use descri: monitor

Well statu: Active Site id: LATD40000020511

E17 LA WELLS LATD40000019603 **East**

1/2 - 1 Mile Higher

> Water wel1: 394612 Water wel2: 017-11645Z State code: 22 Parish num: 11645Z 017 Local well: 322256 Identifica: 322256093400401 Latitude:

Longitude: 934004 Sequence n: 01 Owners nam: CCS MIDSTREAM Well depth: 21

Well use: Well subus: Not Reported 06/09 Date compl: Geologic u: 00000000

Available: Driller Log, Water Level

Revised la: Not Reported Revised Io: Not Reported

Elec log: Not Reported Drill log:

Mechanic a: Not Reported Chem analy: Not Reported Bio analys: Not Reported Pump test: Not Reported Avail info: W Drillers 1: WALKER-HILL(CO)

Drillers 2: 574 Section: 003 Township: 16N Range: 13W Hole depth: 22 Elevation: 159 Quad num: 052A Water leve: 11.00 Date measu: 06/23/09 Source of: D Date of ad: 2009-08-18 Date regis: 08/09

Date plugg:	Not Reported	Plugged b1:	Not Reported
Plugged b2:	Not Reported	Yield:	Not Reported
Drawdown:	Not Reported	Casing di1:	2
Casing mat:	PLASTIC	Screen di1:	2
Screen int:	11-21	Serial num:	Not Reported
Owners num:	MW-2A	Latitude d:	0
Latitude m:	0		
Latitude s:	0		
Longitude1:	0	Longitude2:	0
Longitude3:	Not Reported		
Create dat:	2010 720	Create use:	SONRIS_DBA
Update dat:	2012 130	Update use:	SONRIS_DBA
Parish cod:	09	Industria1:	Not Reported
Owner stat:	Not Reported	Replacemen:	Not Reported
Industria2:	Not Reported	Public su1:	Not Reported
Public su2:	Not Reported	Pumpdown c:	Not Reported
Extension1:	Not Reported	Extension2:	Not Reported
Extension3:	Not Reported	Screen typ:	Not Reported
Gravel pac:	N	Ground eve:	Not Reported
Diameter o:	Not Reported	Site city:	Not Reported
Site zip:	Not Reported	Site addre:	Not Reported
Remarks:	Not Reported		·
Authorize1:	Not Reported	Authorize2:	0
Heat pump1:	0		
Heat pump2:	Not Reported	Location I:	Not Reported
Location m:	0		
Location c:	Not Reported	Cemented f:	Not Reported
Slot lengt:	Not Reported	Slot size:	Not Reported
Inspector:	Not Reported		
Inspector:	Not Reported		
Inspection:	0	Pump setti:	Not Reported
Pump motor:	Not Reported	Pump plan1:	0
Pump plan2:	0	Pump plan3:	Not Reported
Pump rate:	Not Reported	Yield meas:	Not Reported
Pump hour1:	0	Pump hour2:	0
Pump stati:	Not Reported	Pump deter:	Not Reported
Pump groun:	Not Reported	Pump test :	0
X longdd:	-93.66777778		
Y latdd:	32.38222222		
Pump down :	Not Reported		
Pa remarks:	Not Reported		
Pa signat1:	Not Reported	Pa signat2:	0
Pa details:	Not Reported	r a digitate.	
Casing di2:	Not Reported	Casing len:	Not Reported
Contact:	Not Reported	Casing di3:	Not Reported
Screen di2:	Not Reported	Cacing alo.	Not Roportod
Wwo seg nu:	0		
Screen di3:	Not Reported	Parish nam:	CADDO
Aguifer na:	[TO BE DETERMINED]	. anon nam.	S. 1000
Use descri:	monitor		
Well statu:	Active	Site id:	LATD40000019603
vvoii statu.	/ YOU'VC	One id.	E (1 D-00000 19003

18 South 1/2 - 1 Mile Higher

22

5451Z

 Water wel1:
 388420

 Water wel2:
 017-5451Z
 State code:

 Parish num:
 017
 Local well:

Identifica:322225093404301Latitude:322225Longitude:934043Sequence n:01Owners nam:LEGENDRE, GUYWell depth:152

Well use:HWell subus:Not ReportedDate compl:08/85Geologic u:124WLCX

Available : Driller Log, Water Level

Revised la: Not Reported Revised lo: Not Reported

Elec log: Not Reported Drill log:

Mechanic a:Not ReportedChem analy:Not ReportedBio analys:Not ReportedPump test:Not ReportedAvail info:WDrillers 1:PRESLEY, ROGER

Drillers 2: 102 038 Section: Township: 16N Range: 13W Not Reported Hole depth: 160 Elevation: 052C 60.00 Quad num: Water leve: D Date measu: 08/21/85 Source of: Date of ad: 2000-03-17 Date regis: 10/85 Not Reported Plugged b1: Not Reported Date plugg:

Plugged b2: Not Reported Yield: 10
Drawdown: Not Reported Casing di1: 4
Casing mat: PLASTIC Screen di1: 4

Screen int: 102-152 Serial num: Not Reported

Owners num: Not Reported Latitude d: 0

Latitude m: 0 Latitude s: 0

Y latdd:

Longitude1: 0 Longitude2: 0

Longitude3:Not ReportedCreate dat:2010 720Create use:SONRIS_DBAUpdate dat:2012 130Update use:SONRIS_DBAParish cod:09Industria1:Not Reported

Not Reported Owner stat: Not Reported Replacemen: Industria2: Not Reported Public su1: Not Reported Public su2: Not Reported Pumpdown c: Not Reported Not Reported Extension1: Not Reported Extension2: Not Reported Extension3: Not Reported Screen typ: Gravel pac: Ground eve: Not Reported Ν Diameter o: Not Reported Site city: Not Reported

Site zip: Not Reported Site addre: Not Reported Remarks: Not Reported

Authorize1: Not Reported Authorize2: 0
Heat pump1: 0

Heat pump2: Not Reported Location I: Not Reported

Location m: 0

Location c: Not Reported Cemented f: Not Reported Slot lengt: Not Reported Slot size: Not Reported

Slot lengt: Not Reported Slot size: Not Reported Inspector: Not Reported

Inspector: Not Reported
Inspection: 0 Pump setti: Not

Inspection:0Pump setti:Not ReportedPump motor:Not ReportedPump plan1:0

Pump plan2: 0 Pump plan3: Not Reported

Pump rate: Not Reported Yield meas: Not Reported

Pump hour1:0Pump hour2:0Pump stati:Not ReportedPump deter:Not Reported

Pump groun: Not Reported Pump test: 0

X longdd: -93.67861111

32.37361111

Pump down : Not Reported Pa remarks: Not Reported

Pa signat1: Not Reported Pa signat2: 0

Pa details: Not Reported

Casing di2:Not ReportedCasing len:Not ReportedContact:Not ReportedCasing di3:Not Reported

Screen di2: Not Reported

Wwo seq nu: 0

Screen di3: Not Reported Parish nam: CADDO

Aquifer na: WILCOX AQUIFER

Use descri: domestic

Well statu: Active Site id: LATD40000167068

19
SSE
LA WELLS LATD4000095928
1/2 - 1 Mile

Lower

 Water wel1:
 393233

 Water wel2:
 017-10263Z

 State code:
 22

Parish num: 017 Local well: 10263Z 322226093403401 Identifica: Latitude: 322226 934034 Longitude: Sequence n: 01 Owners nam: PASLEY, PHILLIP Well depth: 80

Well use: I Well subus: Not Reported Date compl: 05/05 Geologic u: 00000000

Available : Driller Log, Water Level

Revised la: Not Reported Revised lo: Not Reported

Elec log: Not Reported Drill log: D

Mechanic a:Not ReportedChem analy:Not ReportedBio analys:Not ReportedPump test:Not ReportedAvail info:WDrillers 1:VOWELL (ROY)

Drillers 2: 251 Section: 038 Township: 16N Range: 13W Hole depth: 80 Elevation: 154 Quad num: 052A Water leve: 45.00 05/11/05 Date measu: Source of: D

Date of ad:2005-08-08Date regis:06/05Date plugg:Not ReportedPlugged b1:Not ReportedPlugged b2:Not ReportedYield:Not Reported

Drawdown: Not Reported Field: Not Reported Casing di1: 4

Casing mat: PLASTIC Screen di1: 4
Screen int: 50-80 Serial num: Not Reported

Owners num: #1 Latitude d: 0

Latitude m: 0

Latitude s: 0
Longitude1: 0

Longitude1: 0 Longitude2: 0
Longitude3: Not Reported

SONRIS_DBA Create dat: 2010 720 Create use: 2012 130 SONRIS DBA Update dat: Update use: Not Reported Parish cod: 09 Industria1: Owner stat: Not Reported Replacemen: Not Reported Not Reported Not Reported Industria2: Public su1: Public su2: Not Reported Pumpdown c: Not Reported

Extension1:Not ReportedExtension2:Not ReportedExtension3:Not ReportedScreen typ:Not ReportedGravel pac:NGround eve:Not Reported

Diameter o: Not Reported Site city: Not Reported Site zip: Not Reported Site addre: Not Reported

Remarks: Not Reported

Authorize1: Not Reported Authorize2: 0

Heat pump1: 0

Heat pump2: Not Reported Location I: Not Reported

Location m: 0

 Location c:
 Not Reported
 Cemented f:
 Not Reported

 Slot lengt:
 Not Reported
 Slot size:
 Not Reported

Inspector: Not Reported Inspector: Not Reported

inspector. Not Rep

Inspection: 0 Pump setti: Not Reported

Pump motor:Not ReportedPump plan1:0Pump plan2:0Pump plan3:Not ReportedPump rate:Not ReportedYield meas:Not ReportedPump hour1:0Pump hour2:0

Pump stati: Not Reported Pump deter: Not Reported

Pump groun: Not Reported Pump test: 0

X longdd: -93.67611111 Y latdd: 32.37388889

Pump down : Not Reported Pa remarks: Not Reported

Pa signat1: Not Reported Pa signat2: 0

Pa details: Not Reported

Casing di2: Not Reported Casing len: Not Reported Contact: Not Reported Casing di3: Not Reported

Screen di2: Not Reported

Wwo seq nu: 0

Screen di3: Not Reported Parish nam: CADDO

Aquifer na: [TO BE DETERMINED]

Use descri: irrigation

Well statu: Active Site id: LATD40000095928

C20
ESE FED USGS USGS40000412751

1/2 - 1 Mile Higher

Org. Identifier: USGS-LA

Formal name: USGS Louisiana Water Science Center

Monloc Identifier: USGS-322242093400802

Monloc name: Cd-7253Z
Monloc type: Well
Monloc desc: Not Reported
Huc code: 11140206

Drainagearea value: Not Reported Drainagearea Units: Not Reported Contrib drainagearea: Not Reported Contrib drainagearea units: Not Reported 32.3784887 Latitude: Longitude: -93.6690666 Sourcemap scale: 62500 Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 155.
Vert measure units: feet Vertacc measure val: 2.5

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

Vert coord refsys: NGVD29 Countrycode: US

Aquifername: Mississippi embayment aquifer system

Formation type: Wilcox Aquifer

Aquifer type: Not Reported

Construction date: 1972 Welldepth: 210

Welldepth units: ft Wellholedepth: Not Reported

Wellholedepth units: Not Reported

Ground-water levels, Number of Measurements: 0

ESE FED USGS USGS40000412750

1/2 - 1 Mile Higher

Org. Identifier: USGS-LA

Formal name: USGS Louisiana Water Science Center

Monloc Identifier: USGS-322242093400801

Monloc name: Cd-7254Z
Monloc type: Well
Monloc desc: Not Reported
Huc code: 11140206

Drainagearea value: Not Reported Drainagearea Units: Not Reported Contrib drainagearea: Not Reported Contrib drainagearea units: Not Reported 32.3784887 Latitude: Longitude: -93.6690666 Sourcemap scale: 62500 Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 155. Vert measure units: feet Vertacc measure val: 2.5

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

Vert coord refsys: NGVD29 Countrycode: US

Aquifername: Alluvial aquifers

Formation type: Red River Alluvial Aquifer

Aquifer type: Not Reported

Construction date: 1972 Welldepth: 90

Welldepth units: ft Wellholedepth: Not Reported

Wellholedepth units: Not Reported

Ground-water levels, Number of Measurements: 0

F22 ESE LA WELLS LATD4000019040

ESE 1/2 - 1 Mile Higher

Water wel1: 390223

Water wel2: 017-7254Z State code: 22 Parish num: 017 Local well: 7254Z Identifica: 322242093400801 322242 Latitude: 934008 Longitude: Sequence n: 01 Owners nam: GILL, HJ Well depth: 90

Well use: H Well subus: Not Reported Date compl: Geologic u: Not Reported 112RRVA

Available: Not Reported

Revised la: Not Reported Revised lo: Not Reported Not Reported Elec log: Drill log: Not Reported Mechanic a: Not Reported Chem analy: Not Reported Bio analys: Not Reported Pump test: Not Reported UNKNOWN Avail info: Not Reported Drillers 1: Drillers 2: 000 Section: 003 Township: 16N Range: 13W

Hole depth: 0 Elevation: 155
Quad num: Not Reported Water leve: 0.00

Date measu: Not Reported Source of: Not Reported Date of ad: 1992-09-17 Date regis: 07/92

Date plugg: Plugged b2:	Not Reported Not Reported	Plugged b1: Yield:	Not Reported Not Reported
Drawdown:	Not Reported	Casing di1:	4
Casing mat:	METAL	Screen di1:	Not Reported
Screen int:	Not Reported	Serial num:	Not Reported
Owners num:	Not Reported	Latitude d:	0
Latitude m:	0		
Latitude s:	0		
Longitude1:	0	Longitude2:	0
Longitude3:	Not Reported		
Create dat:	2010 720	Create use:	SONRIS_DBA
Update dat:	2012 130	Update use:	SONRIS_DBA
Parish cod:	09	Industria1:	Not Reported
Owner stat:	Not Reported	Replacemen:	Not Reported
Industria2:	Not Reported	Public su1:	Not Reported
Public su2:	Not Reported	Pumpdown c:	Not Reported
Extension1:	Not Reported	Extension2:	Not Reported
Extension3:	Not Reported	Screen typ:	Not Reported
Gravel pac:	N	Ground eve:	Not Reported
Diameter o:	Not Reported	Site city:	Not Reported
Site zip:	Not Reported	Site addre:	Not Reported
Remarks:	Not Reported		
Authorize1:	Not Reported	Authorize2:	0
Heat pump1:	0		
Heat pump2:	Not Reported	Location I:	Not Reported
Location m:	0		
Location c:	Not Reported	Cemented f:	Not Reported
Slot lengt:	Not Reported	Slot size:	Not Reported
Inspector:	Not Reported		
Inspector:	Not Reported		
Inspection:	0	Pump setti:	Not Reported
Pump motor:	Not Reported	Pump plan1:	0
Pump plan2:	0	Pump plan3:	Not Reported
Pump rate:	Not Reported	Yield meas:	Not Reported
Pump hour1:	0	Pump hour2:	0
Pump stati:	Not Reported	Pump deter:	Not Reported
Pump groun:	Not Reported	Pump test :	0
X longdd:	-93.66888889		
Y latdd:	32.37833333		
Pump down :	Not Reported		
Pa remarks:	Not Reported	5	
Pa signat1:	Not Reported	Pa signat2:	0
Pa details:	Not Reported	0	N (D) ()
Casing di2:	Not Reported	Casing len:	Not Reported
Contact:	Not Reported	Casing di3:	Not Reported
Screen di2:	Not Reported		
Wwo seq nu:	0 Not Deported	Dariah nami	CADDO
Screen di3:	Not Reported	Parish nam:	CADDO
Aquifer na:	RED RIVER ALLUVIAL AQUIFE	ĸ	
Use descri:	domestic	Sito id:	LATD40000010040
Well statu:	Active	Site id:	LATD40000019040

F23 ESE 1/2 - 1 Mile Higher

390222 Water wel1: Water wel2: 017-7253Z State code: 22 Parish num: 017 Local well: 7253Z 322242093400802 322242 Identifica: Latitude: Longitude: 934008 Sequence n: 02 Owners nam: GILL, H J Well depth: 210 Well use: Well subus: Not Reported Н Date compl: 1972 Geologic u: 124WLCX Not Reported Available: Not Reported Revised Io: Not Reported Revised la: Elec log: Not Reported Drill log: Not Reported Not Reported Chem analy: Not Reported Mechanic a: Bio analys: Not Reported Pump test: Not Reported Avail info: Not Reported Drillers 1: **UNKNOWN** Drillers 2: 000 003 Section: Township: 16N Range: 13W Hole depth: 0 Elevation: 155 0.00 Quad num: Not Reported Water leve: Not Reported Date measu: Source of: Not Reported 1992-09-17 Date of ad: Date regis: 07/92 Not Reported Date plugg: Plugged b1: Not Reported Plugged b2: Not Reported Yield: Not Reported Drawdown: Not Reported Casing di1: Casing mat: **METAL** Screen di1: Not Reported Screen int: Not Reported Serial num: Not Reported Owners num: Not Reported Latitude d: Latitude m: 0 Latitude s: Longitude1: 0 Longitude2: 0 Longitude3: Not Reported Create dat: 2010 720 Create use: SONRIS DBA Update dat: 2012 130 Update use: SONRIS_DBA Parish cod: 09 Industria1: Not Reported Not Reported Owner stat: Not Reported Replacemen: Industria2: Not Reported Public su1: Not Reported Public su2: Not Reported Pumpdown c: Not Reported Extension1: Not Reported Extension2: Not Reported Not Reported Extension3: Not Reported Screen typ: Gravel pac: Ground eve: Not Reported Ν Diameter o: Not Reported Site city: Not Reported Site zip: Not Reported Site addre: Not Reported Remarks: Not Reported 0 Authorize1: Not Reported Authorize2: Heat pump1: Not Reported Location I: Not Reported Heat pump2: Location m: Location c: Not Reported Cemented f: Not Reported Not Reported Slot lengt: Slot size: Not Reported Inspector: Not Reported Inspector: Not Reported Inspection: 0 Pump setti: Not Reported Pump motor: Not Reported Pump plan1: Pump plan2: 0 Pump plan3: Not Reported Pump rate: Not Reported Yield meas: Not Reported Pump hour1: Pump hour2: Pump stati: Not Reported Pump deter: Not Reported Pump groun: Not Reported Pump test: X longdd: -93.66888889

Y latdd:

32.37833333