APPENDIX D SUPPORTING DOCUMENTATION

NRCS Web Soil Survey Custom Soil Resource Report
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USFWS Custom IPaC Trust Resources Report
USFWS List of Threatened and Endangered Species

Louisiana Department of Wildlife and Fisheries Rare Species List
National Oceanic and Atmospheric Administration Essential Fish Habitat Mapper
Department of Health and Human Services 2016 Poverty Guidelines

West Hackberry Brine Disposal Pipeline Replacement Project – DOE/EA-2039

APPENDIX D SUPPORTING DOCUMENTATION

NRCS Web Soil Survey Custom Soil Resource Report



Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Cameron Parish, Louisiana

West Hackberry Brine Disposal Pipeline Replacement Project



Preface

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

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

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

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

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

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

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How Soil Surveys Are Made

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

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

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

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

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

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

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

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

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

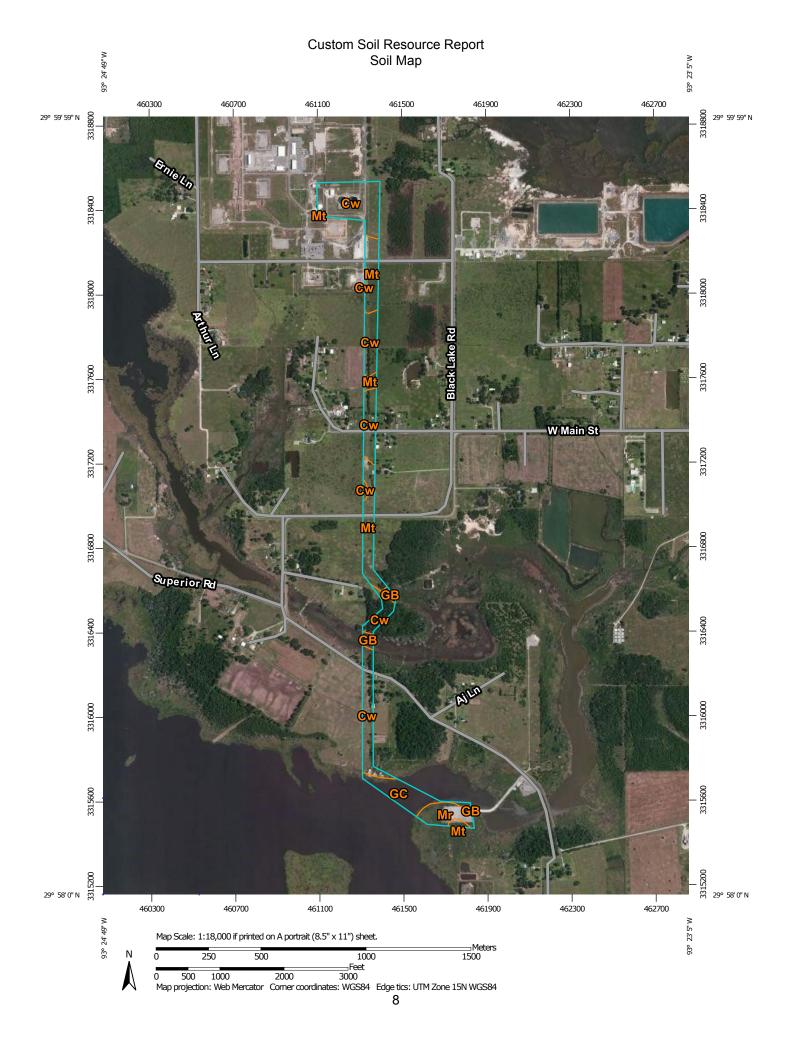
While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the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

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

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

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



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

Special Point Features

Blowout



Clay Spot 36

 \Diamond Closed Depression

× Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

å

Spoil Area Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

Water Features

Streams and Canals

Transportation

Rails Interstate Highways



US Routes



Major Roads Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Cameron Parish, Louisiana Survey Area Data: Version 13, Sep 28, 2015

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

Date(s) aerial images were photographed: Feb 7, 2011—May 26, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Cameron Parish, Louisiana (LA023)				
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
Cw	Crowley-Vidrine complex, 0 to 1 percent slopes	35.4	54.4%	
GB	Ged mucky clay	Ged mucky clay 1.6		
GC	Gentilly muck, 0 to 0.5 percent slopes, very frequently flooded	7.6	11.7%	
Mr	Edgerly loam, 0 to 1 percent slopes	5.3	8.2%	
Mt	Mowata-Vidrine complex, 0 to 1 percent slopes	15.2	23.3%	
Totals for Area of Interest		65.0	100.0%	

Map Unit Descriptions

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

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

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

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

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

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

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

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

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

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

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

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

Cameron Parish, Louisiana

Cw—Crowley-Vidrine complex, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2thq2

Elevation: 10 to 80 feet

Mean annual precipitation: 59 to 65 inches Mean annual air temperature: 67 to 70 degrees F

Frost-free period: 240 to 300 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Crowley and similar soils: 55 percent Vidrine and similar soils: 35 percent Minor components: 10 percent

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

Description of Crowley

Setting

Landform: Terraces

Landform position (three-dimensional): Riser Microfeatures of landform position: Bars

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

Parent material: Pleistocene age clayey fluviomarine deposits derived from igneous,

metamorphic and sedimentary rock

Typical profile

Ap - 0 to 7 inches: silt loam
Eg - 7 to 17 inches: silt loam
Btg1 - 17 to 40 inches: silty clay
Btg2 - 40 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 1 percent

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

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to

0.06 in/hr)

Depth to water table: About 6 to 9 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum in profile: 2 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 10.0

Available water storage in profile: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Description of Vidrine

Setting

Landform: Flats

Landform position (three-dimensional): Rise Microfeatures of landform position: Mounds

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

Parent material: Loamy eolian deposits over clayey fluviomarine deposits of

pleistocene age

Typical profile

A - 0 to 6 inches: silt loam
E - 6 to 14 inches: silt loam
Bt/E - 14 to 18 inches: silty clay
Btg - 18 to 65 inches: silty clay
BCtg - 65 to 80 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent

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

Runoff class: Very high

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

low (0.00 to 0.01 in/hr)

Depth to water table: About 14 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Salinity, maximum in profile: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 8.0

Available water storage in profile: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: D

Minor Components

Edgerly

Percent of map unit: 3 percent

Landform: Flats

Landform position (three-dimensional): Dip

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

Acadiana

Percent of map unit: 3 percent Landform: Stream terraces

Landform position (three-dimensional): Riser

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

Frost

Percent of map unit: 2 percent

Landform: Depressions

Landform position (three-dimensional): Dip

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

Mowata

Percent of map unit: 2 percent

Landform: Depressions

Landform position (three-dimensional): Dip

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

GB—Ged mucky clay

Map Unit Setting

National map unit symbol: 1vvgb

Mean annual precipitation: 43 to 61 inches Mean annual air temperature: 59 to 77 degrees F

Frost-free period: 259 to 313 days

Farmland classification: Not prime farmland

Map Unit Composition

Ged and similar soils: 80 percent Minor components: 20 percent

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

Description of Ged

Setting

Landform: Marshes
Down-slope shape: Linear
Across-slope shape: Linear

Parent material: Fluid clayey alluvium

Typical profile

H1 - 0 to 14 inches: mucky clay H2 - 14 to 44 inches: clay H3 - 44 to 60 inches: clay

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches Natural drainage class: Very poorly drained

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

low (0.00 to 0.06 in/hr)

Depth to water table: About 0 inches Frequency of flooding: Frequent Frequency of ponding: Frequent

Available water storage in profile: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: D

Minor Components

Minor components

Percent of map unit: 20 percent

GC—Gentilly muck, 0 to 0.5 percent slopes, very frequently flooded

Map Unit Setting

National map unit symbol: 2tpnh

Elevation: 0 feet

Mean annual precipitation: 59 to 67 inches Mean annual air temperature: 63 to 79 degrees F

Frost-free period: 219 to 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Gentilly, very frequently flooded, and similar soils: 80 percent

Minor components: 20 percent

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

Description of Gentilly, Very Frequently Flooded

Setting

Landform: Marshes

Landform position (three-dimensional): Dip

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

Parent material: Thin herbaceous organic material over semifluid clayey over

consolidated clayey alluvium

Typical profile

Oa - 0 to 10 inches: muck Cg1 - 10 to 40 inches: clay Cg2 - 40 to 79 inches: clay

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches Natural drainage class: Very poorly drained

Runoff class: Negligible

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

(0.01 to 0.06 in/hr)

Depth to water table: About 0 inches Frequency of flooding: Very frequent Frequency of ponding: Frequent

Salinity, maximum in profile: Slightly saline to strongly saline (4.0 to 16.0 mmhos/

cm)

Sodium adsorption ratio, maximum in profile: 16.0

Available water storage in profile: High (about 10.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: D

Minor Components

Clovelly, very frequently flooded

Percent of map unit: 15 percent

Landform: Marshes

Landform position (three-dimensional): Dip

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

Lafitte, very frequently flooded

Percent of map unit: 5 percent

Landform: Marshes

Landform position (three-dimensional): Dip

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

Mr—Edgerly loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2qrt8

Elevation: 0 to 20 feet

Mean annual precipitation: 52 to 66 inches Mean annual air temperature: 57 to 79 degrees F

Frost-free period: 245 to 304 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Edgerly and similar soils: 82 percent Minor components: 18 percent

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

Description of Edgerly

Setting

Landform: Flats

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

Parent material: Loamy fluviomarine deposits of pleistocene age

Typical profile

Ap - 0 to 7 inches: loam Bt - 7 to 31 inches: loam

Btg - 31 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Runoff class: Low

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

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: Rare Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 4.0

Available water storage in profile: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): 3w Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Minor Components

Leton

Percent of map unit: 6 percent Landform: Flats, drainageways

Kaplan

Percent of map unit: 4 percent

Landform: Ridges

Vidrine

Percent of map unit: 3 percent Landform: Ridges, flats

Microfeatures of landform position: Mounds

Midland

Percent of map unit: 2 percent Landform: Flats, depressions

Crowley

Percent of map unit: 2 percent

Landform: Ridges

Mowata

Percent of map unit: 1 percent Landform: Drainageways, flats

Mt—Mowata-Vidrine complex, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2thq6

Elevation: 10 to 80 feet

Mean annual precipitation: 59 to 66 inches

Mean annual air temperature: 67 to 72 degrees F

Frost-free period: 240 to 304 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Mowata and similar soils: 60 percent Vidrine and similar soils: 30 percent Minor components: 10 percent

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

Description of Mowata

Setting

Landform: Drainageways

Landform position (three-dimensional): Dip

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

Parent material: Late pleistocene age loamy fluviomarine deposits derived from

igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 8 inches: silt loam
Eg - 8 to 18 inches: silt loam
Btg/E - 18 to 34 inches: clay loam
Btg - 34 to 80 inches: silty clay

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Runoff class: Negligible

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

low (0.00 to 0.06 in/hr)

Depth to water table: About 0 to 24 inches

Frequency of flooding: Rare Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 2.0

Available water storage in profile: High (about 11.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Description of Vidrine

Setting

Landform: Flats

Landform position (three-dimensional): Rise Microfeatures of landform position: Mounds

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

Parent material: Loamy eolian deposits over clayey fluviomarine deposits of

pleistocene age

Typical profile

A - 0 to 6 inches: silt loam
E - 6 to 19 inches: silt loam
Bt/E - 19 to 22 inches: silt loam
Btg - 22 to 60 inches: silty clay
BCtg - 60 to 80 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent

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

Runoff class: Very high

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

low (0.00 to 0.01 in/hr)

Depth to water table: About 14 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Salinity, maximum in profile: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 8.0

Available water storage in profile: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: D

Minor Components

Crowley

Percent of map unit: 3 percent

Landform: Terraces

Landform position (three-dimensional): Riser Microfeatures of landform position: Bars

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

Leton

Percent of map unit: 3 percent

Landform: Depressions

Landform position (three-dimensional): Dip

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

Edgerly

Percent of map unit: 2 percent

Landform: Flats

Landform position (three-dimensional): Dip

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

Midland

Percent of map unit: 2 percent

Landform: Terraces

Landform position (three-dimensional): Tread

Microfeatures of landform position: Open depressions

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

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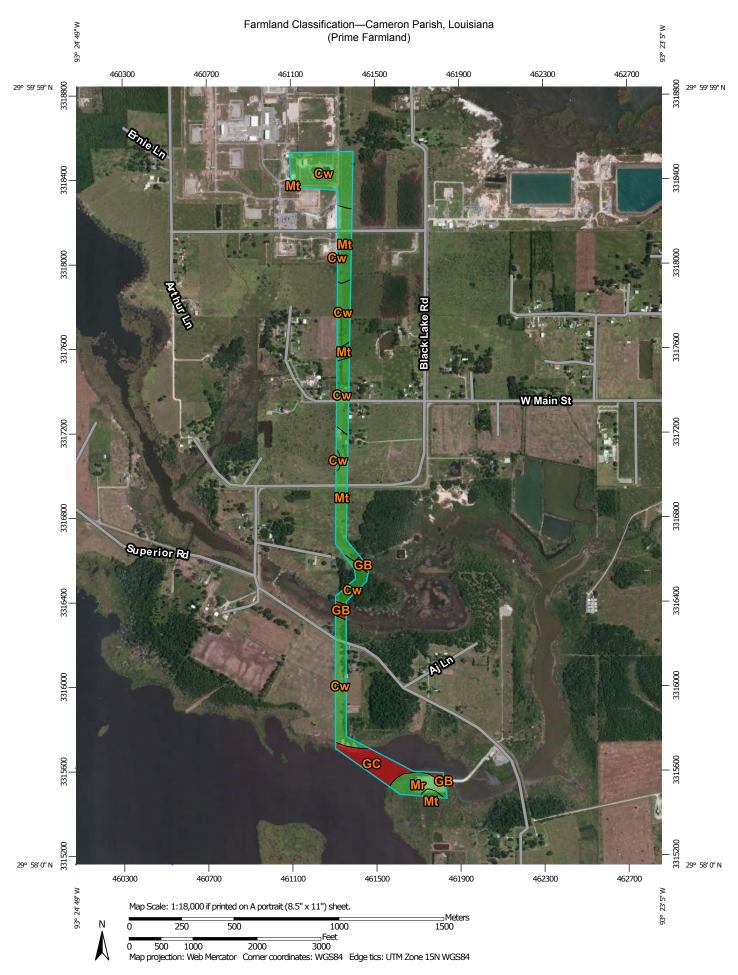
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APPENDIX D SUPPORTING DOCUMENTATION

NRCS Web Soil Prime Farmland



		MAP LEGEND		
Area of Interest (AOI) Area of Interest (AOI) Is Is ioil Rating Polygons Not prime farmland All areas are prime farmland Prime farmland if drained Prime farmland if protected from flooding or not frequently flooded during the growing season Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated and drained Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season	All areas are prime farmland	Prime farmland if protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated and drained Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season Prime farmland if subsoiled, completely removing the root inhibiting soil layer Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	Prime farmland if irrigated and reclaimed of excess salts and sodium Farmland of statewide importance Farmland of local importance Farmland of unique importance Not rated or not available Soil Rating Points Not prime farmland All areas are prime farmland Prime farmland if drained Prime farmland if protected from flooding or not frequently flooded during the growing season Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	Prime farmland if irrigated and drained Prime farmland if irrigated and either protected from flooding or not frequently flood during the growing season Prime farmland if subsoiled, completely removing the root inhibiting soil layer Prime farmland if irrigated and the product of I (soil erodibility) x (climate factor) does nexceed 60 Prime farmland if irrigated and reclaimed excess salts and sodicting farmland of statewide importance Farmland of local importance Farmland of unique importance Not rated or not availa Water Features

MAP INFORMATION

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Streams and Canals

Transportation

- - -

Rails

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Interstate Highways

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US Routes

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Major Roads

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Local Roads

Background

Ma.

Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Cameron Parish, Louisiana Survey Area Data: Version 13, Sep 28, 2015

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

Date(s) aerial images were photographed: Feb 7, 2011—May 26, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Farmland Classification— Summary by Map Unit — Cameron Parish, Louisiana (LA023)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Cw	Crowley-Vidrine complex, 0 to 1 percent slopes	All areas are prime farmland	35.4	54.4%
GB	Ged mucky clay	Not prime farmland	1.6	2.4%
GC	Gentilly muck, 0 to 0.5 percent slopes, very frequently flooded	Not prime farmland	7.6	11.7%
Mr	Edgerly loam, 0 to 1 percent slopes	All areas are prime farmland	5.3	8.2%
Mt	Mowata-Vidrine complex, 0 to 1 percent slopes	All areas are prime farmland	15.2	23.3%
Totals for Area of Interest		65.0	100.0%	

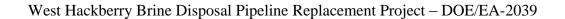
Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower



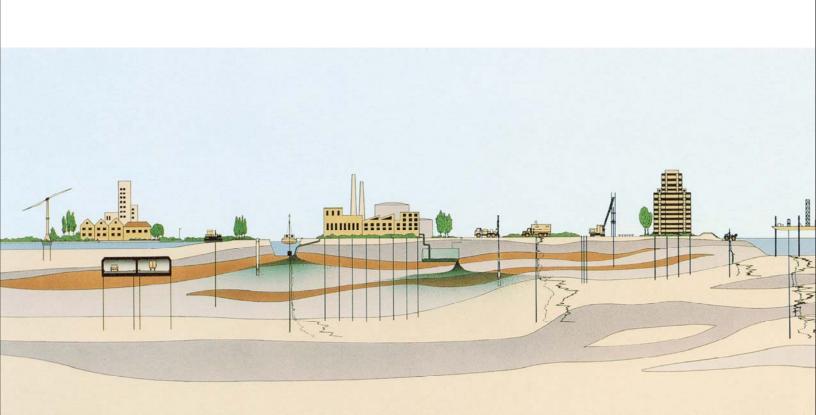
APPENDIX D SUPPORTING DOCUMENTATION

GeoTechnical Report



GEOTECHNICAL STUDY 24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT STRATEGIC PETROLEUM RESERVE HACKBERRY, LOUISIANA

VALI COOPER INTERNATIONAL HARAHAN, LOUISIANA



FUGRO CONSULTANTS, INC.



Project No. 04.50160005 July 8, 2016 916 Sampson Street Suite E Westlake, Louisiana 70669 Tel: (337) 439 1731 Fax: (337) 433 3313

VALI COOPER INTERNATIONAL

880 West Commerce Drive, Suite 402 Harahan, Louisiana 70123

Attention: Mr. Laren M. Tushim, P.E.

Geotechnical Study
24-Inch Brine Disposal Pipeline Replacement
Strategic Petroleum Reserve
Hackberry, Louisiana

Introduction

Fugro Consultants, Inc. (Fugro) is pleased to submit this report of our geotechnical services for the above referenced project. Authorization for these services was provided through the issuance of Vali Cooper International, LLC. (VCI) Task Order No. TO.004e.01. We performed this study in general accordance with our Proposal No. 04.50160005 (Rev. 1). This report contains discussions and results of our geotechnical field exploration and laboratory testing programs. This report also presents lateral earth pressure design parameters to guide in the design of temporary shoring and bracing or relatively shallow excavations.

Project Description

We understand that VCI is assisting with the design and installation of a 24-inch brine pipeline that will include horizontal directional drilling (HDD) methods beneath four roadway locations and possibly a segment of Black Lake. The proposed HDD locations are generally located along the pipeline replacement alignment that traverses a corridor from the eastern side of the existing West Hackberry Strategic Petroleum Reserve (SPR) facility on the north side of Black Lake Road in a southern direction for a distance of about 2.1-miles to the SPR brine disposal well area, south of Maggie Hebert Road in Hackberry, Louisiana. A *Site Vicinity Map*, showing the general project area, is provided on Plate 1 of this report.



Purposes and Scope

The purposes of this study were to: 1) explore subsurface conditions at the project site, 2) present soil boring logs containing laboratory test results, and 3) prepare a geotechnical submittal that presents a summary of our services and lateral earth pressure design parameters. We accomplished these purposes by:

- drilling seven (7) exploratory soil borings (Borings B-1 thru B-7) to explore subsurface conditions and to obtain soil samples for field and laboratory testing (Note: The proposed boring south of Black Lake Road associated with the Targa Resources Inc. property was eliminated from the scope by VCI at the time of field exploration);
- performing field and laboratory tests on selected soil samples to assess pertinent geotechnical engineering properties; and
- preparing this report summarizing our findings and recommendations.

Environmental assessment, compliance with State and Federal Regulatory requirements, assessment of potential migration, and/or environmental analyses were beyond the scope of this geotechnical study. A geological fault study was also beyond the scope of our services.

Applicability of Report

The explorations and analyses for this study, as well as the conclusions and recommendations in this report, were selected or developed based on our understanding of the project as described above and in later sections of this report. If pertinent details of the project differ from the descriptions provided in this report, we should be authorized to review the discrepancies and, if necessary, modify our conclusions and recommendations.

Fugro's scope of work does not include the investigation, detection, or design related to the presence of any biological pollutants. The term 'biological pollutants' includes, but is not limited to, mold, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.

We have prepared this report exclusively for VCI. We have conducted this study using the standard level of care and diligence normally practiced by recognized engineering firms performing similar services under similar circumstances. We intend for this report, including all illustrations, to be used in its entirety. The observations, conclusions, and recommendations provided in this report may not be applicable at locations not explored by borings or in areas outside the project boundaries. This report should be made available for information only and not as a warranty of subsurface conditions.





Field Exploration

Our field activities are discussed in this section. We have included a general discussion as well as discussions on drilling methods, sampling methods, and borehole completion.

General. Fugro explored subsurface conditions at the project area from May 31 thru June 2, 2016 as well as June 6 and June 7, 2016 by drilling six (6) soil borings (Borings B-1 thru B-6) to a depth of about 30 ft each below existing grade and one (1) soil boring (Boring B-7) to a depth of about 100 ft. The approximate locations of the borings performed for this project are shown on the *Plans of Borings* provided on Plates 2a, 2b, and 2c of this report. Representatives of VCI provided the proposed boring locations and boring depths. Representatives of VCI surveyed and staked the proposed pipeline right-of-way as well as the approximate locations of the borings completed for this project. Also, representatives of VCI eliminated the boring south of Black Lake Road associated with the Targa Resources Inc. property from the scope at the time of field exploration.

Drilling Methods. Borings B-1 thru B-5 were drilled with rubber-tired ATV-mounted drilling equipment using dry-auger and wet-rotary drilling techniques. We initially use dry-auger drilling methods in an effort to determine depth-to-water levels at borehole locations. Wet-rotary drilling techniques are used to efficiently remove cuttings, clean out borings, and prevent boreholes from caving. A discussion on the interpreted depth-to-water observations is provided later in this report.

Borings B-6 and B-7 were drilled with track-mounted marsh ATV equipment using wet-rotary drilling techniques. Since water was encountered at or above existing grade at Borings B-6 and B-7, dry-auger techniques were not applicable at these locations. A discussion on water depth observations is provided later in this report.

Sampling Methods. Soil sampling is conducted at about 2-ft intervals to a depth of 16 ft below existing grade and at 5-ft intervals thereafter to the completion depths. Detailed descriptions of the soils encountered in the borings drilled for this project are presented on the boring logs on Plates 3 thru 9 of this report. A key identifying the terms and symbols used on the boring logs is presented on Plates 10a and 10b herein.

Cohesionless soil samples and undisturbed samples of cohesive soils were obtained by hydraulically pushing a 3-inch diameter thin-walled tube sampler a distance of about 24 inches. Our field procedure for tube sampling was conducted in general accordance with ASTM D1587, "Standard Practice for Thin-Walled Tube Sampling of Soils." The samples were extruded in the field and visually classified by our Professional Geologist. We obtained field estimates of the undrained shear strength of the recovered cohesive samples using a hand penetrometer or Torvane. Where applicable, our penetrometer readings were modified for overconsolidated, natural, cohesive soils as described on Plate 10b. Portions of each recovered soil sample were placed into appropriate containers for transportation to our laboratory.





Cohesionless soil samples and disturbed samples of cohesive soils were obtained using the Standard Penetration Test (SPT), as described on Plate 10b. Our field professionals recorded the hammer blows for each sample interval. The SPT N-values are recorded on the boring logs. The soil samples obtained from the split-barrel sampler were then visually classified and placed into appropriate containers for transportation to our laboratory. Our field procedure for split-barrel soil sampling was conducted in general accordance with ASTM D1586, "Standard Method for Penetration Test and Split-Barrel Sampling of Soils."

Borehole Completion. The borings were backfilled with cement-bentonite grout from the bottom up using a tremie pipe upon completion of soil sampling.

Laboratory Testing

The laboratory-testing program for this study was directed primarily toward evaluating the classification properties of the subsurface soils, undrained shear strength of the cohesive soils, and the pH, chloride ion concentration, sulfate ion concentration, and electrical resistivity of the soils. The laboratory tests were performed in general accordance with applicable American Society for Testing and Materials (ASTM) standards as tabulated at the end of this section.

Classification Tests. The classification tests included tests for moisture content, liquid and plastic limits (collectively termed Atterberg Limits), unit weight, material finer than the No. 200 sieve, and particle-size analyses. These tests aid in classifying the soils and are used to correlate the results of other tests performed on samples taken from different borings and/or depths. The results of the classification tests are presented on the boring logs on Plates 3 thru 9 of this report. The particle-size distribution curves are presented in Appendix A.

Undrained Shear Strength Tests. We measured the undrained shear strength of selected undisturbed samples of cohesive soils by performing unconfined compression tests and unconsolidated-undrained triaxial compression tests. The results of the undrained shear strength tests are presented on the boring logs on Plates 3 thru 9 herein.

Soil Chemical Analyses and Electrical Resistivity Tests. A series of laboratory tests consisting of soil pH, chloride ion concentration, sulfate ion concentration, and electrical resistivity tests were performed on soil samples from the borings drilled for this project. The results of the soil chemical analyses and the electrical resistivity tests are presented in Appendix B of this report. Discussions on soil corrosion potential based on the results of the soil pH, chloride ion concentration, sulfate ion concentration, and electrical resistivity tests are presented in the *Soil Corrosion Potential* section of this report.

Summary of Laboratory Testing. The laboratory-testing program performed for this study and the applicable ASTM standards are summarized in the following table:





Type of Test	Number of Tests	Test Designation
Moisture Content	27	ASTM D2216
Atterberg Limits	27	ASTM D4318
Percent Finer than a No. 200 sieve	24	ASTM D1140
Particle-Size Analysis	14	ASTM D6913
Unit Weight	26	ASTM D2937
Unconfined Compression Test	10	ASTM D2166
UU-Triaxial Compression	16	ASTM D2850
Soil pH	10	ASTM G51
Chloride Ion Concentration	10	ASTM D512
Sulfate Ion Concentration	10	ASTM D516
Electrical Resistivity	10	ASTM G57

General Site Conditions

The interpreted site and subsurface soil conditions are discussed in this section. Our interpretation of the general site and subsurface conditions are based on the results of our field exploration and laboratory testing programs and our experience. This section also includes a discussion on the interpreted depth-to-water and water depth conditions at the time of our field exploration.

Site Location and Description. The project area is located near the Strategic Petroleum Reserve along the north side of Black Lake Road, and the proposed pipeline alignment traverses in a southern direction across four roadway locations and a portion of Black Lake to the Strategic Petroleum Reserve's brine disposal area in Hackberry, Louisiana. The *Site Vicinity Map*, provided on Plate 1 of this report, shows the approximate location of the project area. The *Plans of Borings*, provided on Plates 2a, 2b, and 2c show the approximate boring locations relative to existing features. Surficial conditions at the project site consisted of grassy, maintained vegetation at the locations of Borings B-1 thru B-6 and grassy marsh vegetation at the location of Boring B-7.

Subsurface Conditions. Subsurface conditions encountered within Boring B-1 generally consisted of natural, cohesionless soils to a depth of about 2 ft below existing grade. Below the surficial cohesionless soils, natural, firm to stiff cohesive soils were encountered to a depth of about 8 ft below existing grade. Beneath the cohesive soils, natural, medium-dense cohesionless/granular soils were encountered to a depth of about 30 ft below existing grade, the completion depth of Boring B-1.

The generalized subsurface conditions encountered within Borings B-2, B-3, B-4, and B-5 were somewhat similar and primarily consisted of natural, firm to stiff cohesive soils with intermittent





loose to medium-dense cohesionless/granular soil layers to a depth of about 30-ft, the completion depth of the borings.

Subsurface conditions encountered within Borings B-6 and B-7 primarily consisted of natural, firm to stiff cohesive soils to depths ranging from about 7 ft to 8 ft below the existing grade/mudline. Beneath the cohesive soils, natural, medium-dense cohesionless/granular soils were encountered to depths ranging from about 10 ft to 12 ft below the existing grade/mudline. Beneath the cohesionless/granular soils, natural, firm to stiff cohesive soils were encountered to a depth of about 100 ft below the existing grade/mudline, the completion depth of Boring B-7.

Based on our review of both the field observations and laboratory tests performed on the soils encountered in the borings drilled for this study and based on published correlations for similar soil types, we have generalized the subsurface conditions for each boring in Appendix C on Plates C-1 thru C-7. Material descriptions, approximate strata interfaces, total unit weight, buoyant unit weight, cohesion, friction angle, and shear modulus estimates are presented.

We have also provided a *Generalized Subsurface Profile*, representing the soil conditions of the proposed portion of the replacement pipeline crossing a portion of Black Lake, on Plate 11 of this report. This profile provides the general subsurface lithology for Borings B-6 and B-7, provides a distance scale on its horizontal axis representing the linear distance between each of the borings, and provides an elevation scale on its vertical axis relative to the borehole lithology. For the profile, we assumed elevations of 2-ft and 1-ft at the surface of Borings B-6 and B-7, respectively, based on topographic information from Google Earth.

Interpreted Depth-to-Water and Water Depth Conditions. Water was initially encountered within Borings B-1 thru B-5 at depths ranging from about 8 ft to 12 ft below existing grade at the boring locations. Subsurface water within Borings B-1 thru B-5 rose to depths ranging from about 2.5 ft to 8 ft below existing grade after a period of about 15 minutes. Water was encountered at the existing ground surface at the location of Boring B-6 and about 6-inches above the existing ground surface at the location of Boring B-7.

Short-term water levels recorded in the open boreholes should not be considered to represent a long-term condition because the water levels may not have had enough time to approach equilibrium. More accurate determinations of groundwater levels are usually made from long-term standpipe piezometer readings. It should be stated that groundwater levels will fluctuate with seasonal variations in rainfall and surface runoff, especially during extended periods of inclement weather.

Variations in Subsurface Conditions. Our interpretations of subsurface conditions, as described in this report, are based on data obtained from our visual observations, the sample borings, laboratory tests, and our experience. Although we have allowed for minor variations in the





subsurface conditions, our recommendations may not be appropriate for subsurface conditions other than those reported herein. It is likely that some variations in subsurface conditions may occur away from and between the boring locations, especially with respect to the depth, consistency, and lateral extent of the surficial soils and cohesionless layers. We recommend careful observations during construction to verify our interpretations. If variations in subsurface conditions are encountered during construction, we should be notified and authorized to evaluate what, if any, revisions should be made to our submittal.

Soil Corrosion Potential

Steel and concrete elements in contact with soil are subject to degradation due to corrosion or chemical attack. Therefore, buried steel and concrete elements should be designed to resist corrosion and degradation based on accepted practices.

Soil pH, chloride ion concentration tests, sulfate ion concentration tests and electrical resistivity tests were performed on soil samples obtained from the borings drilled for this project. The laboratory tests results are presented in Appendix B on Plate B-1 of this report. The results of the pH, chloride ion concentration, sulfate ion concentration, and electrical resistivity tests were used to generally assess the potential of the onsite soils to corrode buried steel and degrade buried concrete based on a comparison of the laboratory tests results with published guidelines as discussed herein.

Corrosion of Steel. Corrosion is a major factor in the life of steel elements in contact with soil. Corrosion is caused by migration of electrons from the steel into the surrounding soil. Three commonly measured soil properties that indicate the corrosion potential for steel in contact with soil are: 1) pH, 2) chloride ion concentration, and 3) electrical resistivity. It is generally accepted that corrosion of steel is most likely in environments that have low pH, chloride ions (even in low concentrations), and/or low resistivity.

The following table presents some general guidelines concerning the corrosion potential of a soil as a function of pH, chloride ion concentration, and electrical resistivity¹. Each of the columns in this table should be used independently of the others when evaluating soil corrosion potential. For example, it is not necessary to have a resistivity between 0 and 1,000 ohm-cm <u>and</u> a pH between 0 and 4.5 to indicate a very high potential for corrosion.



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Palmer, J. F., "Soil Resistivity Measurements and Analysis," Materials Performance, Vol. 13, January 1974.



	Corrosion Po	otential of Soil on Ste	el
рН	Chloride Content (ppm)	Resistivity (ohm-cm)	Corrosion Potential
0 - 4.5		0 - 1,000	Very High
4.5 - 5.5	> 500	1,000 - 2,000	High
5.5 - 6.5	< 500	2,000 - 5,000	Moderate
> 6.5		> 5,000	Mild

The results of the pH tests, chloride ion concentration, and electrical resistivity tests indicate that the corrosion potential of steel in contact with the soils tested at various depths ranges from moderate to very high at the site. Based on the results of these analyses, the soils tested will generally exhibit an aggressive tendency to corrode buried steel. Fugro recommends that a Corrosion Engineer review the test results discussed herein when designing appropriate methods of protecting buried steel.

Degradation of Concrete. The degradation of concrete is caused by chemical agents in the soil or groundwater that reacts with concrete to either dissolve the cement paste or precipitate larger compounds that cause cracking and flaking. The concentration of water-soluble sulfates in the soils is a good indicator of the potential for chemical attack of concrete. Sulfate concentrations in soil can be used to evaluate the need for protection of concrete based on the following table²

Sulfate Concentration (ppm)	Degradation Potential
> 20,000	Very Severe
2,000 - 20,000	High
1,000 - 2,000	Moderate
0 - 1,000	Low

The results of the sulfate ion concentration tests indicate that the potential for the degradation of concrete is generally low at the site. Although the results of the sulfate ion concentration analysis indicate the soils at the site appear to exhibit a non-aggressive tendency to degrade buried concrete, Fugro recommends that a Corrosion Engineer be consulted to determine if a sulfate resistant concrete is warranted.

Shallow Excavations and Lateral Earth Pressure

This section presents discussions on shallow excavations and discussions on lateral earth pressures to aid in the design of temporary shoring.

The excavations should be designed in accordance with all applicable local, state, and federal trenching regulations, including the Federal Occupational Safety and Health Administration



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² ACI Manual of Concrete Practice, Part 1, Section 201.2R-12, American Concrete Institute, 1992.



(OSHA) requirements for excavations presented in 29 CFR Part 1926, Subpart P, *Excavations*. Based on OSHA regulations, excavations deeper than 20 ft must be addressed individually and a qualified registered engineer will be required to design each excavation system. We would be pleased to review the proposed excavation system designs before construction.

Based on our interpretation of the regulations and the near-surface soil conditions encountered in the borings drilled for this study, the natural, firm to stiff cohesive soils may be classified as Type B and the natural, cohesionless (silty/sandy) soils may be classified as Type C. The OSHA regulations do not generally require shallow excavations to depths of 4 ft or less to be sloped back or shored/braced. However, if sloughing and caving is experienced, we recommend the slopes should be cut back or shored/braced. Excavations deeper than 4 ft are required to be braced or sloped back at 1-horizontal to 1-vertical for Type B soils and 1.5-horizontal to 1-vertical for Type C soils. Flatter slopes or bracing should be used if sloughing or raveling is observed.

Temporary shoring will experience lateral earth pressures resulting from a combination of soil pressure, hydrostatic water pressure, and any surcharge loads. Soil and hydrostatic water pressures behind the shoring walls will impose a triangular stress distribution on the walls while surcharge loads will impose a rectangular stress distribution. For this project, we have assumed that a braced shoring system will be utilized. If a cantilevered system is planned, we should be contacted for additional discussions and recommendations.

For the design of temporary shoring walls, we recommend a coefficient of active lateral earth pressure (ka) of 1.0 for the cohesive soils encountered onsite, 0.5 for the cohesionless/silty soils encountered onsite, and 0.35 for the granular/sandy soils encountered onsite.

For braced sheeting, the penetration of sheeting below the excavation bottom should be sufficient to provide moment equilibrium about the lowest bracing level, assuming a hinge in the wall at that level and applying the lateral pressures. In addition, the penetration of braced sheeting should be such that all vertical loads applied to the wall (e.g. dead weight of sheeting, vertical bracing components, wall weight) are supported by the embedded portion of the wall below excavation grade. Also, it may be beneficial to install the sheeting to a deeper penetration that will assist with any dewatering efforts.

* * *





The following illustrations and appendices are attached and complete this report:

ILLUSTRATIONS

	<u>Plate</u>
Site Vicinity Map	1
Plan of Borings	2
Logs of Borings	3 thru 9
Terms and Symbols Used on Boring Logs	10a and 10b
Subsurface Profile – Black Lake Crossing (Borings B-6 and B-7)	11
<u>APPENDICES</u>	
Particle-Size Analyses	Appendix A
Laboratory Soil Chemical Analyses and Electrical Resistivity Tests	Appendix B
Generalized Soil Parameters	Appendix C





Closing

Mr. Tushim, P.E., we appreciate the opportunity to be of service on this project. Please contact us if you have any questions concerning this report or when we may be of further service.

Sincerely,

FUGRO CONSULTANTS, INC.

Michael P. Hollier, P.E. Activity Center Manager

7/8/2016

PROFESSIONAL

Trent Whitley, E.I.

Project Professional

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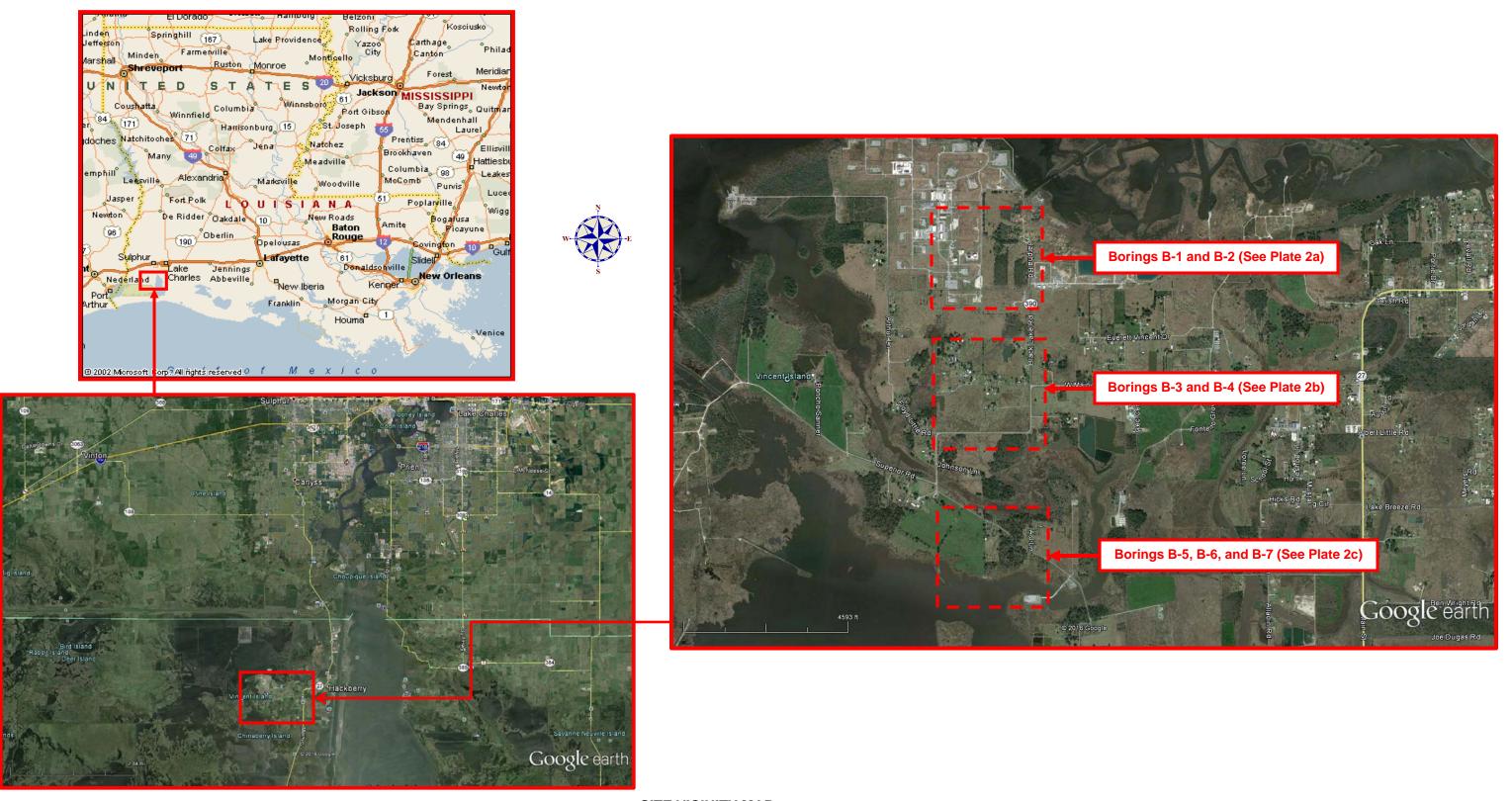




ILLUSTRATIONS







SITE VICINITY MAP 24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT STRATEGIC PETROLEUM RESERVE HACKBERRY, LOUISIANA





Image obtained from Google Earth. Not-to-scale. Boring locations are approximate.

PLAN OF BORINGS

24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT (BORINGS B-1 AND B-2 LOCATIONS)
STRATEGIC PETROLEUM RESERVE
HACKBERRY, LOUISIANA





Image obtained from Google Earth. Not-to-scale. Boring locations are approximate.

PLAN OF BORINGS

24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT (BORINGS B-3 AND B-4 LOCATIONS)
STRATEGIC PETROLEUM RESERVE
HACKBERRY, LOUISIANA





Image obtained from Google Earth. Not-to-scale. Boring locations are approximate.

PLAN OF BORINGS

24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT (BORINGS B-5, B-6, AND B-7 LOCATIONS)
STRATEGIC PETROLEUM RESERVE
HACKBERRY, LOUISIANA

	ير			~	LOCATION: See Plate 2			CLA	ASSIF	ICAT	ION		,	SHEA	AR S	TREN	GTF	ł
7, FT	WATER LEVE	30L	LES	BLOWS PER FOOT	COORDINATES: Not Available	STRATUM DEPTH, FT	WT,	0.% O:	%	_		Σ.(ic		netrom	eter	Ur	nconfir	ned ▼ xial ●
DEPTH,	TER	SYMBOL	SAMPLES	-0WS	SURFACE EL.: Not Available	TRA	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT,	LIQUID	PLASTIC	PLASTICITY INDEX (PI)		eld Van	е	Miniat		
	× A		(")	В	STRATUM DESCRIPTION		l IN	PAS 200	700	_	Δ.	ÄΞ	,		IPS PE	R SQ F		.5
	± 1				SILT (ML), dark brown with rootlets		-					_		.5 1.	.0 1	.5 2.	0 2	.5
- ·	_				FAT CLAY with sand (CH), stiff, reddish-brown and gray	2.0	94	83	37 27	99	26	73] y		
- · -5 -	▼				- light brown with silt pockets below 4'		- "					_						
					SANDY LEAN CLAY (CL), firm to stiff, light brown with silty sand pockets	6.0	115		17 17	24	14	10		[• [
_ _ _10 _	-			N=12	SILTY CLAYEY SAND (SC-SM), medium-dense, light brown	8.0	-	22				_						
				N=15			- -	17				-						
<u> </u>				N=18			-					-						
—15 —				N=24			-					-						
					SILT with sand (ML), loose, light brown with clay seams and pockets	17.0												
 20	1			N=7	seams and pockets		Ŀ	71				-						
	1						-					-						
<u> </u>	1			N-0								-						
25 -	1			N=9			-					-						
					SILTY SAND (SM), medium-dense, brown with shell fragments and clay seams	27.0	_											
- 30			X	N=12	Sileii iraginenis and day seams	30.0	<u>-</u>					- 						
- ·	}	سلنظ				00.0						-						
	1						-					-						
 35							L					_						
												_						
	7						F					-						
	1. ∑	<u>-</u> : V			Noticed. ▼: Depth To Water after 15 minutes. bols defined on Plates 10a and 10b.			1		TOTA CAVI DRY WET BACI	AL DE ED DI AUG ROT KFILL	ne 7, 2 EPTH: EPTH: ER: 0 ARY: : Cen M. Al	30' Not to 10' 10' to	0' o 30'				1
Fugr	Fu			20	STRATEGIC PETROLEUM RES	SERV	E			L	OG	OF	во	RIN	IG N	10.	B-	1
					24-INCH BRINE DISPOSAL PIPE	ELINE	RE	PLA	ACE	ME	NT							
Fugr	o Co	ons	ultar	nts, Inc.	HACKBERRY, LOUISIANA					ject No .50		005			PL	ATE	Ξ 3	3



	~	LOCATION: See Plate 2			CLA	SSIF	ICAT	ION		S	SHEA	R ST	RENG	TH
DEPTH, FT WATER LEVEL SYMBOL SAMPLES	BLOWS PER FOOT	COORDINATES: Not Available SURFACE EL.: Not Available	STRATUM DEPTH, FT	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID	PLASTIC LIMIT	PLASTICITY INDEX (PI)	♦Ton	netrome vane d Vane			onfined ▼ Triaxial ● e Vane ▲
DE S	BLC	STRATUM DESCRIPTION	유	LINU	PASS 200 S	CON	= =	PL	PLAS		KIF	S PER	SQ FT	
		LEAN CLAY with sand (CL), firm, light gray			81	27	39	23	16	0.6	_	1.5	2.0	2.5
		- with rootlets to 2' - stiff below 2'		108		23	00	20	-					
- 5 - - - - - - - - - -		- with silt pockets from 6' to 8'		- - - _ 107	83	22 22	41	17	24				•	
- -10 -		- with silty sand seams and pockets below 8'		- - -					-					
- 		SILT (ML), light brown with clay seams	12.0		98				_			Ī		
- -15 -		SANDY LEAN CLAY (CL), firm to stiff, light brown with silty sand seams and pockets	14.0	97	67	36 28	28	19	9 _	•	,			
		SILT (ML), light brown and light gray with clay seams and pockets	17.0	 - -	90				-			- 1		
-25		FAT CLAY with sand (CH), stiff, light brown - with silt laminations to 24'	- 22.0	- - -					-					
-30		- with silt seams and pockets below 28' - with shell fragments at 30'	30.0	- - - - _ 92_	75	27 30	50 — —	20	30]					_ +
3				- - - -										
				- - -					- - -					
2. Terms a		loticed. ▼: Depth To Water after 15 minutes. bols defined on Plates 10a and 10b.					TOTA CAVI DRY WET BACI	AL DE ED DE AUGI ROT KFILL	ne 7, 2 EPTH: EPTH: ER: 0' ARY: : Cem	30' Not A' to 14' 14' to nent-B	30'			
Fugro Consultar	50	STRATEGIC PETROLEUM RES	ERVE	Ξ			L	OG	OF	BOI	RING	G N	O. I	B-2
		24-INCH BRINE DISPOSAL PIPE	LINE	RE	PLA									
Fugro Consultar	nts, Inc.	HACKBERRY, LOUISIANA					.50		005			PL	4TE	4

	ير			~	LOCATION: See Plate 2			CLA	SSIF	ICAT	ION		S	HE/	AR S	TREN	IGTH	1
, F	WATER LEVE	30F	LES	BLOWS PER FOOT	COORDINATES: Not Available	STRATUM DEPTH, FT	WT,	0,%	%		0	È€	□Pen		neter	Uı	nconfir Tria	ned ▼ xial ●
DEPTH,	TER	SYMBOL	SAMPLES	.0W8 F00	SURFACE EL.: Not Available	TRA	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT,	LIQUID	PLASTIC LIMIT	PLASTICITY INDEX (PI)	△ Fiel		ie	Miniat		
	×		\	BI	STRATUM DESCRIPTION		l IN	PAS 200	700	_	₾.	∃ ≧	0.5		IPS PE	R SQ F		5
	11				SILT with sand (ML), light brown with rootlets			75				_	•		.0 1	.5 2.	0 2	5
			1		FAT CLAY with sand (CH), stiff, light gray and brown	2.0						-						
 -5-			1		- light brown below 4'		<u> </u>	79	22	58	17	41_						
					- with silt pockets below 6'		106		23			-				7		
	<u>¥</u>			N=11	SILTY SAND (SM), medium-dense, brown	8.0		61				-						
- 10 -				N=12			F					_						
		1	M	N=8	SANDY SILT (ML), loose, brown	12.0	_	59	29	NP	NP	NP -						
- 15				N=14	SILTY SAND (SM), medium-dense, brown with sandy clay seams and pockets	14.0	_					_						
					FAT CLAY (CH), stiff, light brown	17.0												
-					- with silt seams and laminations from 18' to 20'		-					-						
—20 —							-					-						
					- light brown and gray, slickensided below 23'		<u> </u>	94	38	90	29	- 61						
- 25					- light brown and gray, slickensided below 25		93	94	29	90	29	- "						
							-					-						
							-					-						
_30 −			1			30.0	<u></u> -									_		
1	$\left\ \cdot \right\ $											_						
2610.G	7						-					-						
-35 –	1						F					_						
EMP 	11						-					-						
DAIA							-					-						
NOT				- -	letteral - Death T W. 1 C. 17 C. 1							ne 7, 2 EPTH:						
GPJ 1					Noticed. T: Depth To Water after 15 minutes. bols defined on Plates 10a and 10b.					CAVI	ED DI	EPTH:	Not		licable	Э		
BKINE												ER: 0 ARY:						
I M										BACI	KFILL	.: Cen	nent-B		onite	Grout		
04:50160005 - WH BKINE.GFJ FUGKO DATA I EMPLATE 042610.GBD										LOG	JER:	M. Al	iien					
Fundal) Revort	ū	G	<u> </u>	20	STRATEGIC PETROLEUM RES	SERV	E			L	OG	OF	BOF	RIN	IG N	10.	B-	3
7 (FIR					24-INCH BRINE DISPOSAL PIP	ELINE	RE	PLA										
Fugr	о Сс	nsu	Itan	ts, Inc.	HACKBERRY, LOUISIANA					.50		005			PL	ATI	Ξ 5	5



	یر			~	LOCATION: See Plate 2			CLA	SSIF	ICAT	ION		,	SHE	AR S	TREN	IGTH	í
, F	WATER LEVE	30L	2	BLOWS PER FOOT	COORDINATES: Not Available	STRATUM DEPTH, FT	WT,	ò.,	%			Ì ≿≘		netro	meter	Uı	nconfin	ned ▼ xial ●
DEPTH,	TER	SYMBOL	אוא	-0.0 -0.0 -0.0	SURFACE EL.: Not Available	TRA	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, 1	LIQUID	PLASTIC	PLASTICITY INDEX (PI)		eld Va		Miniat	ure Va	
	× A			В	STRATUM DESCRIPTION		l E	PAS 200	700	_		∃ Z			KIPS PE			5
					LEAN CLAY (CL), gray with rootlets		-					-			1.0 1	.5 2.	0 2.	<u> </u>
	V				FAT CLAY with sand (CH), stiff to very stiff, light brown	2.0	100	84	31 26	71	20	51			<u> </u>		_	
- -5 -	-				- light brown and light gray with silty sand pockets below 4'	6.0	- 100		20			_)	·	
					SANDY LEAN CLAY (CL), stiff, light brown and light gray with silty sand seams and pockets	- 6.0	-				40	-						
	+ [- soft to stiff at 10'		101	52	23	28	16	12 -	•		Р			
—10 —			X	N=5	SILT with sand (ML), loose, light brown with sandy clay seams	10.0	_	73				-						
	ľ				FAT CLAY (CH), stiff, light brown	12.0						_						
 15 - ·	- - -				- with silt seams and pockets from 14' to 16'		- - -					- -						
- - -20 -					- brown from 18' to 28' - stiff to very stiff at 20' - stiff below 20'		- - 89	100	34 34	77	26	51 _					•	
- - - -25 -	- - - -				- with silty sand seams and shell fragments from 23' to 25'		- - - - 84	96	35			- - -						
- · · · · · · · · · · · · · · · · · · ·	- - - -				- brown and gray below 28' - with shell fragments at 30'	- 30.0	- - - 81	100	38 42	68 — —	23	45	<u> </u> 		[ļ
	_						- - -					- -						
-35 –							- - -					- - -						
A LEMPLA	-						-					-						
S DA							<u> </u>			D 4 T	<u> </u>		2042					
04.50160005 - WH BRINE. GP.	1. 💆	<u>7</u> : Wa			Noticed. ▼: Depth To Water after 15 minutes. sbols defined on Plates 10a and 10b.					TOTA CAVI DRY WET BAC	AL DE ED DI AUG ROT KFILL	ne 7, 2 EPTH: EPTH: ER: 0 'ARY: .: Cen M. Al	30' : Not ' to 1: 12' to nent-l	2' o 30	,			
Fundal) REV01	Fu	JG	;	20	STRATEGIC PETROLEUM RES	ERV	Ξ			L	.OG	OF	во	RII	NG N	10 .	B-	4
OG (FINA					24-INCH BRINE DISPOSAL PIPE	ELINE	RE	PLA										
Fugr	o Co	onsul	tant	ts, Inc.	HACKBERRY, LOUISIANA					ject No . 50		005			PL	ATI	Ξ 6	;



	닒			~	LOCATION: See Plate 2			CLA	ASSIF	ICAT	ION			SHE	AR S	TREN	IGTH	1
H, FT	WATER LEVE	30L	LES	BLOWS PER FOOT	COORDINATES: Not Available	STRATUM DEPTH, FT	WT,	0.% N	%		0	È€		netron	neter	U	nconfi Tria	ned ▼ ıxial ●
DEPTH,	TER	SYMBOL	SAMPLES	PO	SURFACE EL.: Not Available	STRA	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT,	LIQUID	PLASTIC LIMIT	PLASTICITY INDEX (PI)		eld Var	ie	Minia	ture V	
	×		()	В	STRATUM DESCRIPTION		Š	PAS 200	-00		Δ.	김목	۱ ,		IPS PE			2.5
	± 1				SILT (ML), dark brown with rootlets, shell fragments, and clay pockets		-	86				-	ľ		.0 1	.5 2	.0 2	3.8
					FAT CLAY (CH), stiff, brown with sandy silt	2.0												
-]				seams and pockets		[90	24	62	21	41						
-5-			4		- stiff to very stiff at 6'	6.0	104	90	24	02	21	4'-					•	
					SANDY LEAN CLAY (CL), stiff, light brown - with silt pockets to 8'	0.0	-					-			<u>}</u>			
							-	69	25	33	18	15		l .	<u> </u>			
—10 —	-					11.0	_102		26			_			⊅ ▼			
	∇				FAT CLAY (CH), stiff, light brown SANDY LEAN CLAY (CL), firm, light brown with	+ 11.0 + 12.0												
- 					silty sand seams and pockets		Ŀ					-	ł					
-15 -	-						F					_	<u> </u>					
 						17.0						-						
	-				LEAN CLAY (CL), firm to stiff, light brown with silt seams and pockets	17.0	ŀ	89	27	34	21	13						
 20							96		28			-		•				
	+ [-					-						
 					OND VOILT (ALL VIII)	23.0						-						
	$+ \parallel$				SANDY SILT (ML), light brown		ŀ	58	27	NP	NP	NP -						
—25 — - -	1						F					_						
	+		 		LEAN CLAY (CL), stiff, gray with silt pockets	27.0	-						<u> </u>					
] [-					-						
—30 —	}		1			30.0		 						'	<u> </u>			+-
	$+ \mid$						ŀ					-						
- 	1											-						
- 35 -	$+ \parallel$						F					_						
 	11						-					-						
	$+ \ $						-					-						
NOT			Nata	r Eiret N	Noticed. ▼: Depth To Water after 15 minutes.							ne 1, 2 EPTH:						
					nbols defined on Plates 10a and 10b.							EPTH:			licable	Э		
												ER: 0 ARY:						
										BACI	KFILL	.: Cen	nent-		onite	Grout	:	
										LOG	GER:	M. A	llen					
4	Tu			20	STRATEGIC PETROLEUM RES	ERV	E			L	OG	OF	во	RIN	IG N	10.	B-	5
					24-INCH BRINE DISPOSAL PIPE	ELINE	RE	PLA	\CE	ME	NT							
Fugr	o Co	ons	ultar	ts, Inc.	HACKBERRY, LOUISIANA					ject No 50		005			PL	AT	E 7	7



T TO THE TOURDINATES NOT AVAILABLE TO THE TOUR OF THE TOUR TO THE	See Plate 2		닖											_	,	LOCATION: See Plate 2			CLA	ASSIF	ICAT	ION			SHE	AR S	TRE	NGTI	-	
STRATUM DESCRIPTION	TES: Not Available	5	LEVE		<u></u>	Ť Ľ	Ť Ľ	- - -		LEVE	S	7 2			T	COORDINATES: Not Available	MD.+	, M	ō.%	%			Σ≘	. –			ι	Jnconfi	ined ▼ axial ●	
STRATUM DESCRIPTION	EL.: Not Available	7447	TER		EPT	ਜ ፫	ਜ ፫			TER	SVME		Ā	0,00	9 9 9 9 9	SURFACE EL.: Not Available	TRA:	DRY	SING P	VATER	LIMIT	LASTIC	ASTICI DEX (F				Minia			
FAT CLAY (CH), firm, gray and brown - stiff, light brown and light gray with calcareous nodules below 2' - with organic nodules below 4' - LEAN CLAY (CL), firm, light gray with silty sand seams and pockets SILTY SAND (SM), medium-dense, brown - loose, with sandy clay seams and pockets below 10' - CLAYEY SAND (SC), brown and gray with silty sand seams and pockets - loose, with sandy clay seams and pockets below 10' - LEAN CLAY (CL), firm to stiff, brown and gray with silty sand seams and pockets to 16' - loose, with sandy clay seams and pockets - loose, with sandy clay seams and			WA	MA	Ω	ב	ב	ב		Ν		, (ומ	٥	4	STRATUM DESCRIPTION	\ \oldsymbol{\sigma} \oldsymbol{\sigma}	N N	PAS 200	>00		<u> </u>	_ <u>7</u> <u>≅</u>							
- stiff, light brown and light gray with calcareous nodules below 2' - with organic nodules below 4' LEAN CLAY (CL), firm, light gray with silty sand seams and pockets SILTY SAND (SM), medium-dense, brown - loose, with sandy clay seams and pockets below 10' CLAYEY SAND (SC), brown and gray with silty sand seams and pockets LEAN CLAY (CL), firm to stiff, brown and gray - with silty sand seams and pockets to 16' - brown with silt laminations below 18' SANDY LEAN CLAY (CL), firm to stiff, brown with silt sand pockets and shell fragments FAT CLAY (CH), stiff, brown with silt laminations 7.0 - 20 - 25 - 30	CH), firm, gray and brown			+				_		Н	Z					FAT CLAY (CH), firm, gray and brown								_	_	1.0	1.5 2	1.0 2	2.5	
LEAN CLAY (CL), firm, light gray with silty sand seams and pockets SILTY SAND (SM), medium-dense, brown N=10 -loose, with sandy clay seams and pockets below 10' CLAYEY SAND (SC), brown and gray with silty sand seams and pockets LEAN CLAY (CL), firm to stiff, brown and gray - with silty sand seams and pockets to 16' -brown with silt laminations below 18' SANDY LEAN CLAY (CL), firm to stiff, brown with silty sand pockets and shell fragments FAT CLAY (CH), stiff, brown with silt laminations 27.0 FAT CLAY (CH), stiff, brown with silt laminations 32 33 21 12	prown and light gray with calcareous elow 2'			_					-							- stiff, light brown and light gray with calcareous nodules below 2'		101	90		61	17	44			-				
LEAN CLAY (CL), firm, light gray with silty sand seams and pockets SILTY SAND (SM), medium-dense, brown -loose, with sandy clay seams and pockets below 10' CLAYEY SAND (SC), brown and gray with silty sand seams and pockets LEAN CLAY (CL), firm to stiff, brown and gray with silty sand seams and pockets to 16' -15 LEAN CLAY (CL), firm to stiff, brown and gray with silty sand seams and pockets LEAN CLAY (CL), firm to stiff, brown and gray with silty sand seams and pockets to 16' -brown with silt laminations below 18' SANDY LEAN CLAY (CL), firm to stiff, brown with silt laminations FAT CLAY (CH), stiff, brown with silt laminations 7.0 30.0	ic nodules below 4'			_	5 –	5 -	5 -	5 –	\overline{a}							- with organic nodules below 4'		_					_]	1					
N=12 N=12 N=12 N=10 N=	I pockets				-			-	-							seams and pockets		93			33	21	12	-1	†					
N=10 -loose, with sandy clay seams and pockets below 10' CLAYEY SAND (SC), brown and gray with silty sand seams and pockets LEAN CLAY (CL), firm to stiff, brown and gray - with silty sand seams and pockets to 16' -brown with silt laminations below 18' SANDY LEAN CLAY (CL), firm to stiff, brown with silt laminations SANDY LEAN CLAY (CL), firm to stiff, brown with silt sand pockets and shell fragments FAT CLAY (CH), stiff, brown with silt laminations 72.0 30.0	O (SM), medium-dense, brown			-	-			-	-				M	N	=12			-	21				-							
CLAYEY SAND (SC), brown and gray with slity sand seams and pockets sand seams and pockets to 16' LEAN CLAY (CL), firm to stiff, brown and gray - with slity sand seams and pockets to 16' -brown with slit laminations below 18' SANDY LEAN CLAY (CL), firm to stiff, brown with slity sand pockets and shell fragments SANDY LEAN CLAY (CL), firm to stiff, brown with slity sand pockets and shell fragments FAT CLAY (CH), stiff, brown with slit laminations 77.0 FAT CLAY (CH), stiff, brown with slit laminations					- 10 - -	0 -	0 -	0 - -	· —							- loose, with sandy clay seams and pockets below 10'	12.0	_ - 					-							
- with silty sand seams and pockets to 16' - brown with silt laminations below 18' SANDY LEAN CLAY (CL), firm to stiff, brown with silty sand pockets and shell fragments SANDY LEAN CLAY (CL), firm to stiff, brown with silty sand pockets and shell fragments FAT CLAY (CH), stiff, brown with silt laminations 30.0	inD (SC), brown and gray with slity is and pockets	/	, . , .	-	-			-	-		/	//				CLAYEY SAND (SC), brown and gray with silty sand seams and pockets		-	63				-	-1	1					
SANDY LEAN CLAY (CL), firm to stiff, brown with silty sand pockets and shell fragments 22.0 SANDY LEAN CLAY (CL), firm to stiff, brown with silty sand pockets and shell fragments 27.0 FAT CLAY (CH), stiff, brown with silt laminations 30.0	(CL), firm to stiff, brown and gray				- 15 -	5 -	5 -	5 -	;							LEAN CLAY (CL), firm to stiff, brown and gray - with silty sand seams and pockets to 16'	+ 14.0	97	95		42	19	23_	-	,					
SANDY LEAN CLAY (CL), firm to stiff, brown with silty sand pockets and shell fragments SANDY LEAN CLAY (CL), firm to stiff, brown with silty sand pockets and shell fragments Part Clay (CH), stiff, brown with silt laminations 27.0 30.0	silt laminations below 18'				-			-								- brown with silt laminations below 18'		- -					- -				Τ			
SANDY LEAN CLAY (CL), firm to stirr, brown with silty sand pockets and shell fragments 25 28 31 18 13 2 2 2 2 31 2 3 2 3 3 3 3 3 3 3 3 3 3				_	20 —	20 –	20 –	0 –	-									-					-							
FAT CLAY (CH), stiff, brown with silt laminations 30.0	IN CLAY (CL), firm to stiff, brown			-	-				-								22.0	-		25	31	18	13			 				
FAT CLAY (CH), stirr, brown with slit laminations				_	- 25 –	25 –	25 –	5 -	-									95		28			_	•	•	+				
	CH), stiff, brown with silt laminations			_	-				-							FAT CLAY (CH), stiff, brown with silt laminations	27.0	_					_							
				1	30 –	80 –	80 –	0 –	, =								30.0	<u>-</u>						-		-		<u> </u>	 	
								-										_					-							
				_	35 -	35 –	35 –	5 -										 - -					- -	-						
				_				-	_									-					-							
				-	-			-	-									-					-							
DATE: lune 1 2016																					DATI		201	2016				<u></u>		
NOTES: 1. Terms and symbols defined on Plates 10a and 10b. 2. Water was encountered at the surface of the boring at the time of field exploration. DATE: June 1, 2016 TOTAL DEPTH: 30' CAVED DEPTH: Not Applicable DRY AUGER: Not Applicable WET ROTARY: 0' to 30' BACKFILL: Cement-Bentonite Grout LOGGER: M. Allen		Te	. T	1.					1		Ге				•		eld expl	oration	n.	CAVED DEPTH: Not Applicable DRY AUGER: Not Applicable WET ROTARY: 0' to 30' BACKFILL: Cement-Bentonite Grout										
-Figure STRATEGIC PETROLEUM RESERVE LOG OF BORING NO. E	GIC PETROLEUM RESE		=-	<u>_</u>	_				_	=		_	_	_	_	STRATEGIC PETROI FUM RES	FRV	<u> </u>				OG	OF	 B0		 VG	 NO	— В.	<u> </u>	
24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT		I	U							U	I	5							PI A	\CF					- 411			_	_	
Fugro Consultants, Inc. HACKBERRY, LOUISIANA Project No. 04.50160005 PLATE		on	с Со	gro C	Fugr	ugi	ugi	ugr	gro	o C	on	sul	tan	nts	, Inc.					Pro	ject No	0.	005			— Pl	 _AT	— E {	— 3	



			LOCATION: See Plate 2			CLA	ASSIF	ICAT	ION			SHEAI	R STE	RENG	STH
ОЕРТН, FT	WATER LEVEL SYMBOL SAMPLES	BLOWS PER FOOT	COORDINATES: Not Available	STRATUM DEPTH, FT	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	ER NT, %	음트	TIC	PLASTICITY INDEX (PI)	♦Tor	netromel rvane eld Vane			onfined ▼ Triaxial ● re Vane ▲
DEP	SYI	3LOV FC	SURFACE EL.: Not Available	STR	NT DR	ASSIN 00 SIE	WATER CONTENT,	LIQUID	PLASTIC LIMIT	LAST	ΔFIE		' S PER		e vane 🛋
	>		STRATUM DESCRIPTION		5	9.9	O				0.				2.5
-	- ///		LEAN CLAY (CL), stiff to very stiff, gray		101	88	27 26	42	16	26					
-	-		- light gray and brown below 2'	4.0	- 101		20			-				ľ	
- -5-			FAT CLAY (CH), stiff, light gray and brown	4.0		94	29 29	54	17	37_			1		
-			- with silt pockets at 7'	7.0	95		29			-			- T		
_			SILT (ML), light gray and brown with clay seams and pockets	7.0		98				_					
- 10 -	-		·	10.0	_	90				-					
- 10 -	-		FAT CLAY (CH), stiff, light gray and brown	10.0	-					-					
-					-					-			_		
-	-		LEAN CLAY (CL), stiff, light gray and brown	14.0		98	24	40	17	23				+	
—15 - -			- with silt seams and pockets to 25'		103		23	40	''						
-	- 1				-					-					
										-			4		
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-										-					
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-	- 1				-					-					
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—30 -					ļ.					_			T		
-	- 6//				-					-					
-			FAT CLAY (CH), stiff to very stiff, gray - with shell fragments from 33' to 38'	33.0		86	34	54	22	32		+			
-35	- //		- stiff to very stiff at 35'		105		22			_					3.1
-			- stiff from 35' to 79'		<u> </u>					-					
-			- gray and brown from 38' to 48'		-	100				-					
<u></u>			- with silt laminations from 38' to 40'		<u> </u>	100				_					
								DATE	=· N/-	v 31	2016				

NOTES:

FCLC_LOG (FINAL) REV01 04:50160005 - WH BRINE.GPJ FUGRO DATA TEMPLATE 042610.GDT 7/7/16

1. Terms and symbols defined on Plates 10a and 10b.

2. The water depth encountered at the boring location was on the order of 0.5-ft above the existing mudline at the time of field exploration.

DATE: May 31, 2016 TOTAL DEPTH: 100'

CAVED DEPTH: Not Applicable DRY AUGER: Not Applicable WET ROTARY: 0' to 100'

BACKFILL: Cement-Bentonite Grout

LOGGER: M. Allen



STRATEGIC PETROLEUM RESERVE

LOG OF BORING NO. B-7

24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT

HACKBERRY, LOUISIANA

Project No. 04.50160005

PLATE 9a

				LOCATION: See Plate 2			CLA	ASSIF	ICAT	ION		5	SHEA	R STR	ENGT	Н
ᇤ	WATER LEVEL SYMBOL	ES	BLOWS PER FOOT	COORDINATES: Not Available	≥F.	Ļ,	0.%	%			> -	□Per	netrome	eter	Uncon	fined ▼
DEPTH, FT	ER L	MPL	WS -00-		STRATUM DEPTH, FT	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT,	LIQUID	PLASTIC LIMIT	PLASTICITY INDEX (PI)		vane d Vane	. Mi	Tri niature \	axial ● /ane ▲
吕	VATE	SA	BLO	SURFACE EL.: Not Available	ST	I N	ASSII 200 SI	CONT	음크	PL	PLAS		KIF	PS PER S	Q FT	
	>	\bigvee		STRATUM DESCRIPTION			E (4	Ŭ				0.5				2.5
- · · · · · · · · · · · · · · · · · · ·				FAT CLAY (CH), stiff, gray and brown - light gray from 48' to 63'		- - - - - - - - - - - - - - - - - - -	97	25	54	18	- - - - - - - - - - - - - - - - - - -					
55 - - - 60 -				- slickensided below 58'		- - - - -	97	25	34	10						
- · · - 65 - - · - ·				- light gray and light brown from 63' to 83'		- - - - -					- - - - -					
70 - - - 75 - -				- very stiff at 79' - stiff from 79' to 89'		- - - - - -					- - - - - -					
-				- Suii from 79° to 89°					DAT	=. N#-	N/ 21	2016			9	
NOT	<u>ΓΕS:</u>		d	hala defined an Eletes 10e and 10h							ay 31, PTH:					

1. Terms and symbols defined on Plates 10a and 10b.

2. The water depth encountered at the boring location was on the order of 0.5-ft above the existing mudline at the time of field exploration.

TOTAL DEPTH: 100'

CAVED DEPTH: Not Applicable DRY AUGER: Not Applicable WET ROTARY: 0' to 100'

BACKFILL: Cement-Bentonite Grout

LOGGER: M. Allen



FCLC_LOG (FINAL) REV01 04.50160005 - WH BRINE.GPJ FUGRO DATA TEMPLATE 042610.GDT 7/7/16

STRATEGIC PETROLEUM RESERVE

LOG OF BORING NO. B-7

24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT

HACKBERRY, LOUISIANA

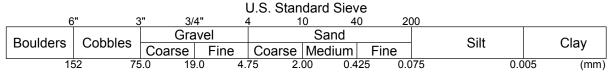
Project No. 04.50160005

PLATE 9b

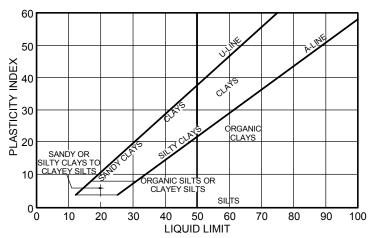
	یے		~	LOCATION: See Plate 2			CLA	ASSIF	ICAT	ION		,	SHE	AR S	TREN	GTH		
, F	WATER LEVE	IES LES	BLOWS PER FOOT	COORDINATES: Not Available	STRATUM DEPTH, FT	۸T,	ō,%	%			≿≘		netron	neter	Ur	nconfined ▼		
DEPTH, F1	ER I	SYMBOL SAMPLES	DWS	SURFACE EL.: Not Available	IRA]	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID	PLASTIC	PLASTICITY INDEX (PI)		rvane eld Van	ne	Miniat	Triaxial ● ure Vane ▲		
	WAT	SS	BL(STRATUM DESCRIPTION	SB	IN T	PASS 200 S	CON	= -	7	PLA		K	IPS PE	ER SQ F	Т		
	+			FAT CLAY (CH), stiff, light gray and light brown								0.	.5 1	.0 1	1.5 2.0	0 2.5		
-						-					-							
-				- gray and brown from 83' to 93'		-					-				<u> </u>			
85						Ē					_							
<u> </u>						-					-							
						-	99	36	77	27	50 -							
 90				- stiff to very stiff at 90'		82		40	''		-					•		
				- very stiff below 90'		-					-							
				- gray below 93'		-					-							
				- gray below 93		-					-							
—95 — - -						F					-							
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	<u>Ц</u>					<u> </u>			DATI	 =: Ma	ay 31,	2016						
NOT			and sym	abols defined on Plates 10a and 10b.					TOT	AL DE	PTH:	100'						
2				h encountered at the boring location was on the order at the time of field exploration.	er of 0.5	-ft abo	ve the	е			EPTH: ER: N				е			
	C	, iotii i	y muumi	at the time of field exploration.					WET	ROT	ARY:	0' to	100'					
								WET ROTARY: 0' to 100' BACKFILL: Cement-Bentonite Grout LOGGER: M. Allen										
1	T	G	RO	STRATEGIC PETROLEUM RES	ERVI				L	OG	OF	во	RIN	IG I	NO.	B-7		
V				24-INCH BRINE DISPOSAL PIPE	LINE	RE	PLA		ME ject N									
Fugr	o Co	nsulta	nts, Inc.	HACKBERRY, LOUISIANA							005			PLA	ATE	9c		



SOIL TYPES SAMPLER TYPES Sandy, lean clay, low to Lean clay, Fat clay, Low to high plasticity Partial Recovery low to Thin-Auger moderate moderate moderate walled plasticity silt plasticity plasticity Tube ∐w/ Tube ∏Split-ΠNο Pitcher Clayey sand Clayey sand Silty Sand Recovery barrel to silty sand Geoprobe Piston Liner **SOIL GRAIN SIZE**



PLASTICITY CHART



SOIL STRUCTURE

Fissured Containing shrinkage or relief cracks, often filled with fine sand or silt; usually more or less vertical. Pocket Inclusion of material of different texture that is smaller than the diameter of the sample. Parting Inclusion less than 1/8 inch thick extending through the sample. Seam Inclusion 1/8 inch to 3 inches thick extending through the sample. Layer Inclusion greater than 3 inches thick extending through the sample. Laminated Soil sample composed of alternating partings or seams of different soil type. Interlayered Soil sample composed of alternating layers of different soil type. Intermixed Soil sample composed of pockets of different soil type and layered or laminated structure is not evident. Calcareous Having appreciable quantities of carbonate.	Slickensided · · · · · · · · · · · · · · · · · ·	Having planes of weakness that appear slick and glossy.
Parting Inclusion less than 1/8 inch thick extending through the sample. Seam Inclusion 1/8 inch to 3 inches thick extending through the sample. Layer Inclusion greater than 3 inches thick extending through the sample. Laminated Soil sample composed of alternating partings or seams of different soil type. Interlayered Soil sample composed of alternating layers of different soil type. Intermixed Soil sample composed of pockets of different soil type and layered or laminated structure is not evident.	Fissured·····	Containing shrinkage or relief cracks, often filled with fine sand or silt; usually more or less vertical.
Seam	Pocket·····	Inclusion of material of different texture that is smaller than the diameter of the sample.
Layer	Parting · · · · · · · · · · · · · · · · · · ·	Inclusion less than 1/8 inch thick extending through the sample.
Laminated Soil sample composed of alternating partings or seams of different soil type. Interlayered Soil sample composed of alternating layers of different soil type. Intermixed Soil sample composed of pockets of different soil type and layered or laminated structure is not evident.	Seam·····	Inclusion 1/8 inch to 3 inches thick extending through the sample.
Interlayered Soil sample composed of alternating layers of different soil type. Intermixed Soil sample composed of pockets of different soil type and layered or laminated structure is not evident.	Layer·····	Inclusion greater than 3 inches thick extending through the sample.
Intermixed ······ Soil sample composed of pockets of different soil type and layered or laminated structure is not evident.	Laminated · · · · · · · · · · · · · · · · · · ·	Soil sample composed of alternating partings or seams of different soil type.
	Interlayered · · · · · · · · · · · · · · · · · · ·	Soil sample composed of alternating layers of different soil type.
Calcareous ······ Having appreciable quantities of carbonate.	Intermixed · · · · · · · · · · · · · · · · · · ·	Soil sample composed of pockets of different soil type and layered or laminated structure is not evident.
	Calcareous	Having appreciable quantities of carbonate.

-fugeo	TERMS AND SYMBOLS USED	ON BORING LOGS
	SOIL CLASSIFICA	TION (1 of 2)
Fugro Consultants, Inc.	Project No. 04.50160005	PLATE 10a

Carbonate Having more than 50% carbonate content.

STANDARD PENETRATION TEST (SPT)

A 2-in.-OD, 1-3/8-ID split spoon sampler is driven 1.5 ft into undisturbed soil with a 140-pound hammer free falling 30 in. After the sampler is seated 6 in. into undisturbed soil, the number of blows required to drive the sampler the last 12 in. is the Standard Penetration Resistance or "N" value, which is recorded as blows per foot as described below.

SPLIT-BARREL SAMPLER DRIVING RECORD

Blows Per Foot	Description
25 · · · · · · · · · · · · · · · · · · ·	25 blows drove sampler 12 inches, after initial 6 inches of seating.
50/7" · · · · · · · · · · · · · · · · · · ·	50 blows drove sampler 7 inches, after initial 6 inches of seating.
Ref/3" · · · · · · · · · · · · · · · · · · ·	

NOTE: To avoid damage to sampling tools, driving is limited to 50 blows during or after seating interval.

DENSITY OF GRANULAR SOILS

STRENGTH OF COHESIVE SOILS

Descriptive Term	*Relative Density, %	**Blows Per Foot (SPT)	Term	Undrained Shear Strength, ksf	Blows Per Foot (SPT) (approximate)
Very Loose······	15	······0 to 4	Very Soft ·····	·····< 0.25 ······	0 to 2
Loose·····	·····15 to 35 ·····	·····5 to 10	Soft·····	·····0.25 to 0.50 ······	·····2 to 4
Medium Dense	·····-35 to 65 ·····	·····11 to 30	Firm·····	······ 0.50 to 1.00 ······	·····4 to 8
Dense	·····65 to 85 ·····	·····31 to 50	Stiff ·····	······1.00 to 2.00 ······	·····8 to 16
Very Dense······	·····> 85 ·····	·····> 50	Very Stiff ·····	·····-2.00 to 4.00 ······	·····16 to 32
*Estimated from	m sampler driving re	ecord	Hard ······	·····> 4.00 ·····	> 32

^{**}Requires correction for depth, groundwater level, and grain size.

SHEAR STRENGTH TEST METHOD

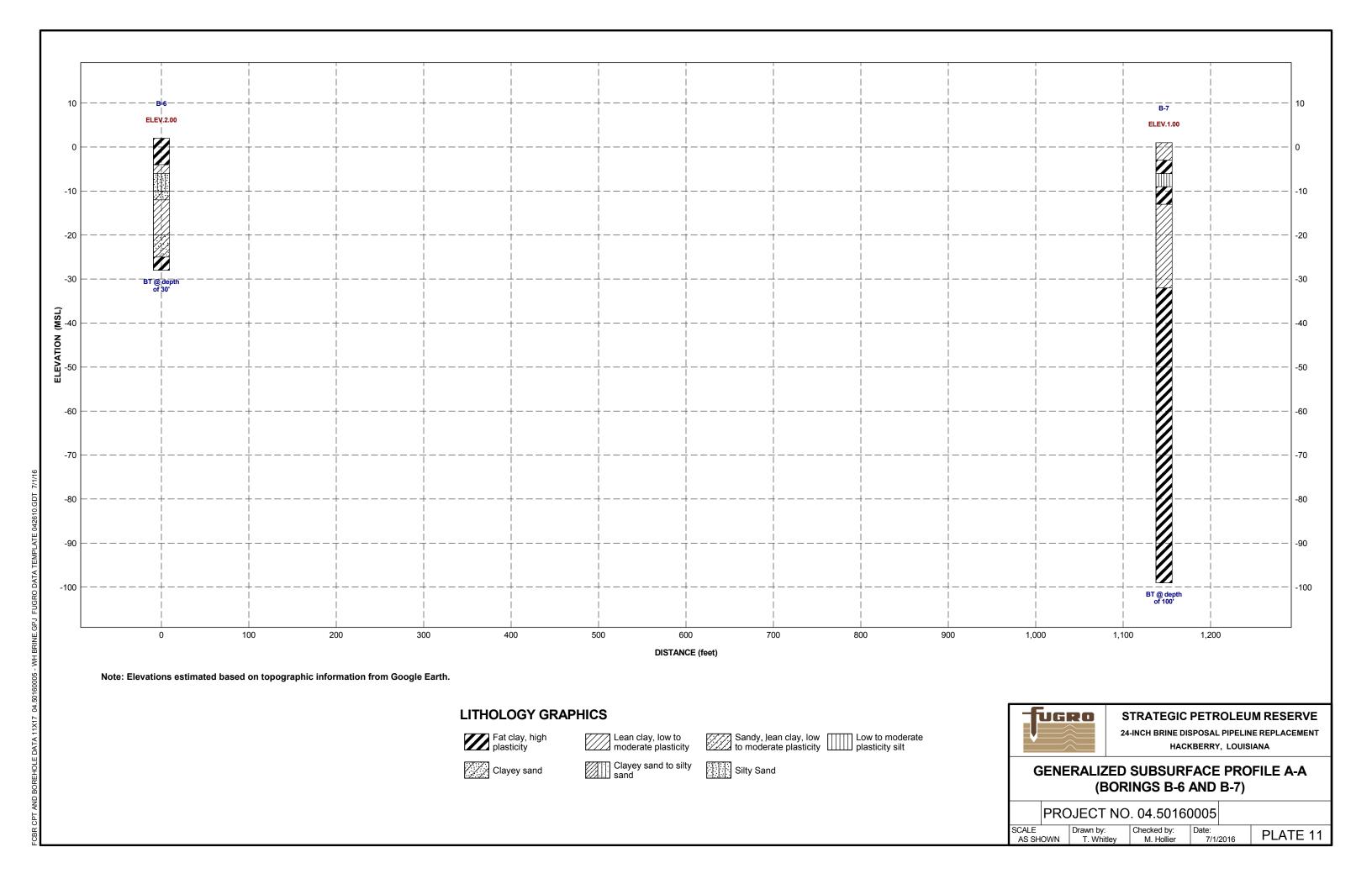
U = Unconfined Q = Unconsolidated - Undrained Triaxial
P = Pocket Penetrometer T = Torvane V = Miniature Vane F = Field Vane

HAND PENETROMETER CORRECTION

Our experience has shown that the hand penetrometer generally overestimates the in-situ undrained shear strength of over consolidated Pleistocene Gulf Coast clays. These strengths are partially controlled by the presence of macroscopic soil defects such as slickensides, which generally do not influence smaller scale tests like the hand penetrometer. Based on our experience, we have adjusted these field estimates of the undrained shear strength of natural, overconsolidated Pleistocene Gulf Coast soils by multiplying the measured penetrometer reading by a factor of 0.6. These adjusted strength estimates are recorded in the "Shear Strength" column on the boring logs. Except as described in the text, we have not adjusted estimates of the undrained shear strength for projects located outside of the Pleistocene Gulf Coast formations.

Information on each boring log is a compilation of subsurface conditions and soil or rock classifications obtained from the field as well as from laboratory testing of samples. Strata have been interpreted by commonly accepted procedures. The stratum lines on the logs may be transitional and approximate in nature. Water level measurements refer only to those observed at the time and places indicated, and can vary with time, geologic condition, or construction activity.

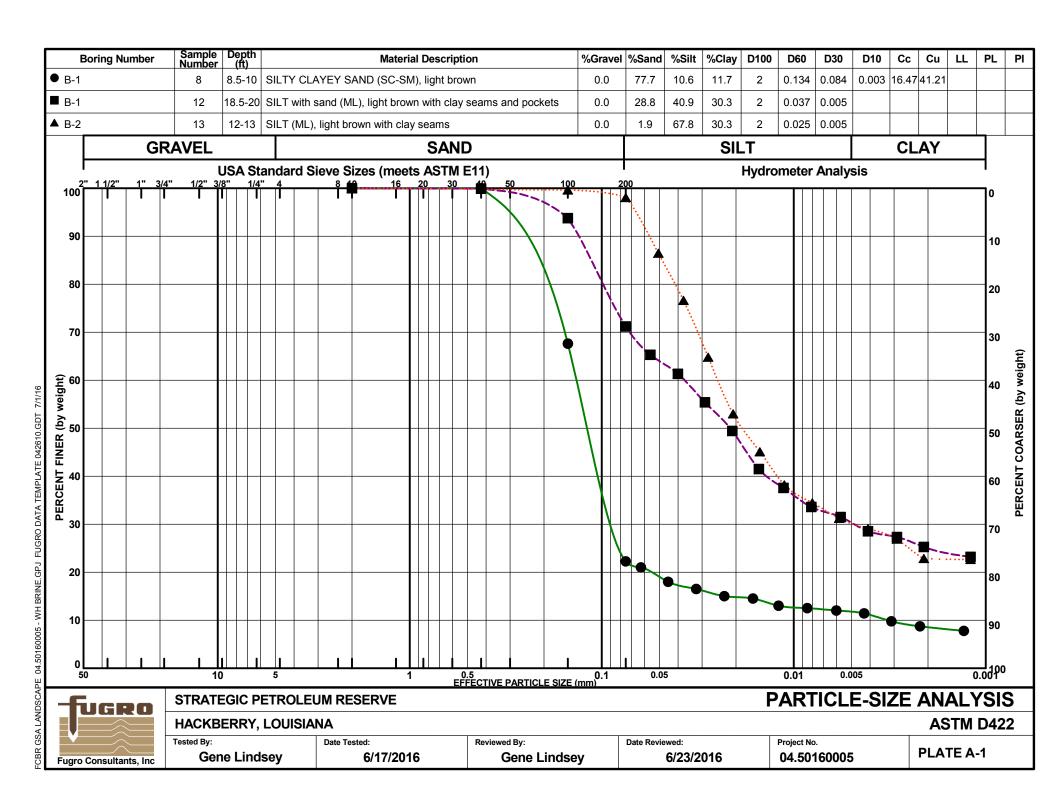
fucko	TERMS AND SYMBOLS USED	ON BORING LOGS
	SOIL CLASSIFICA	ATION (2 of 2)
Fugro Consultants, Inc.	Project No. 04.50160005	PLATE 10b

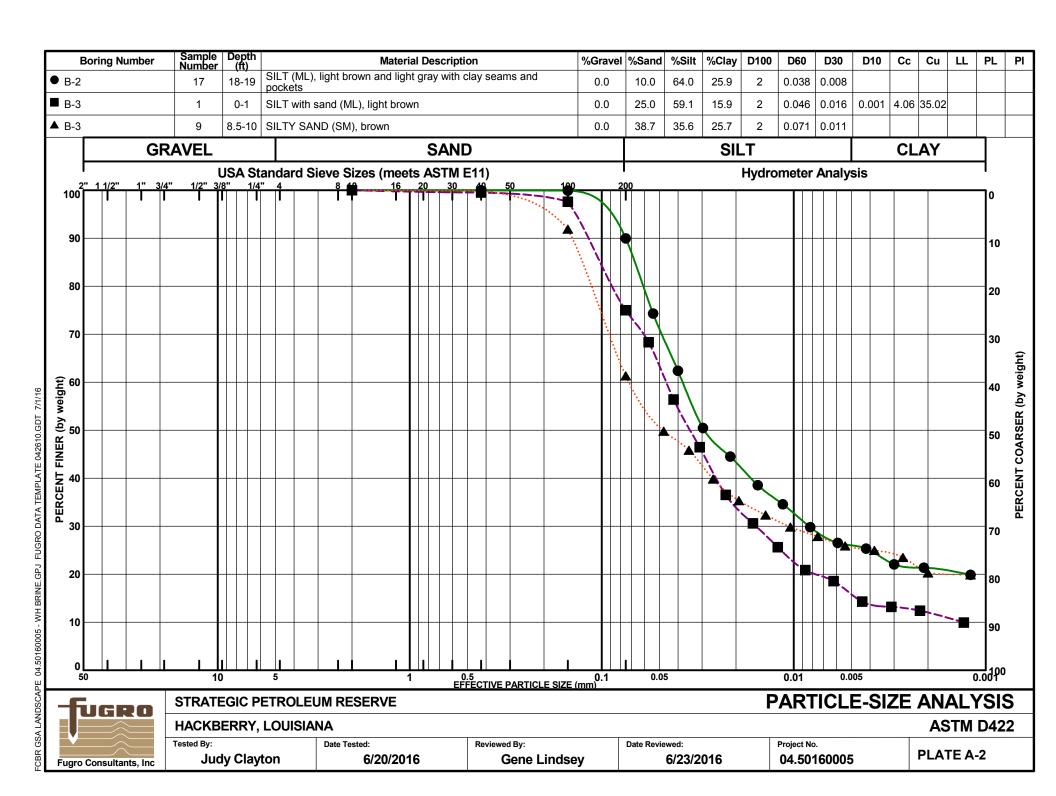


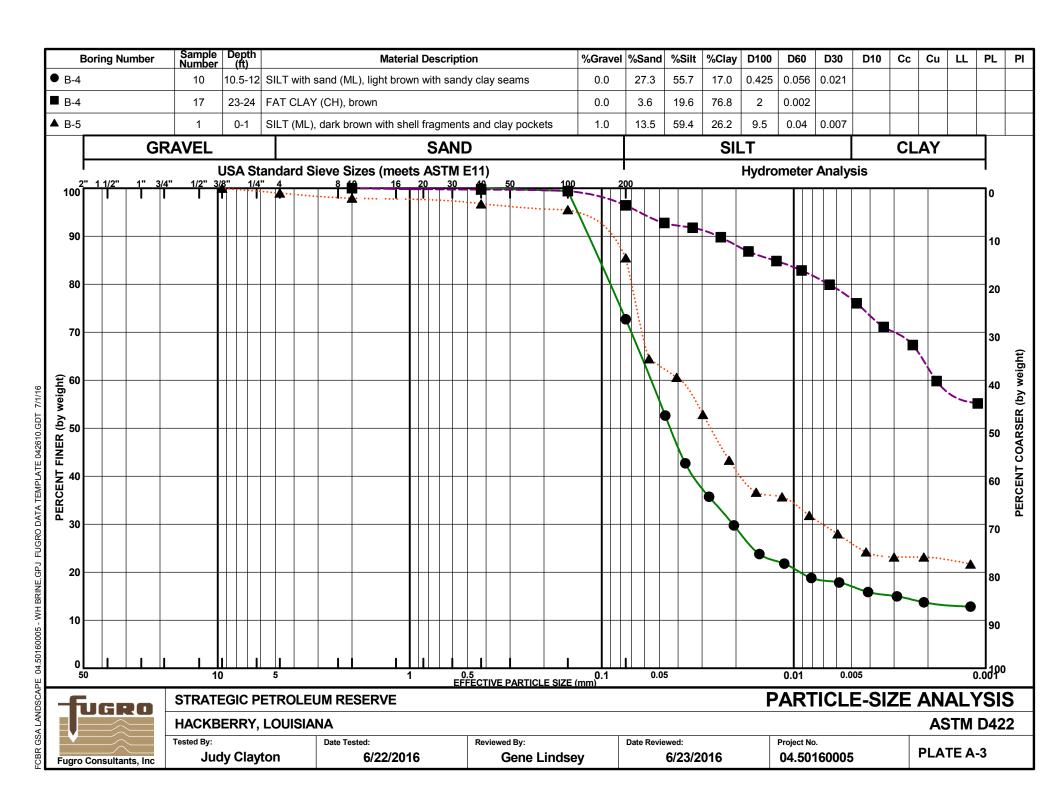


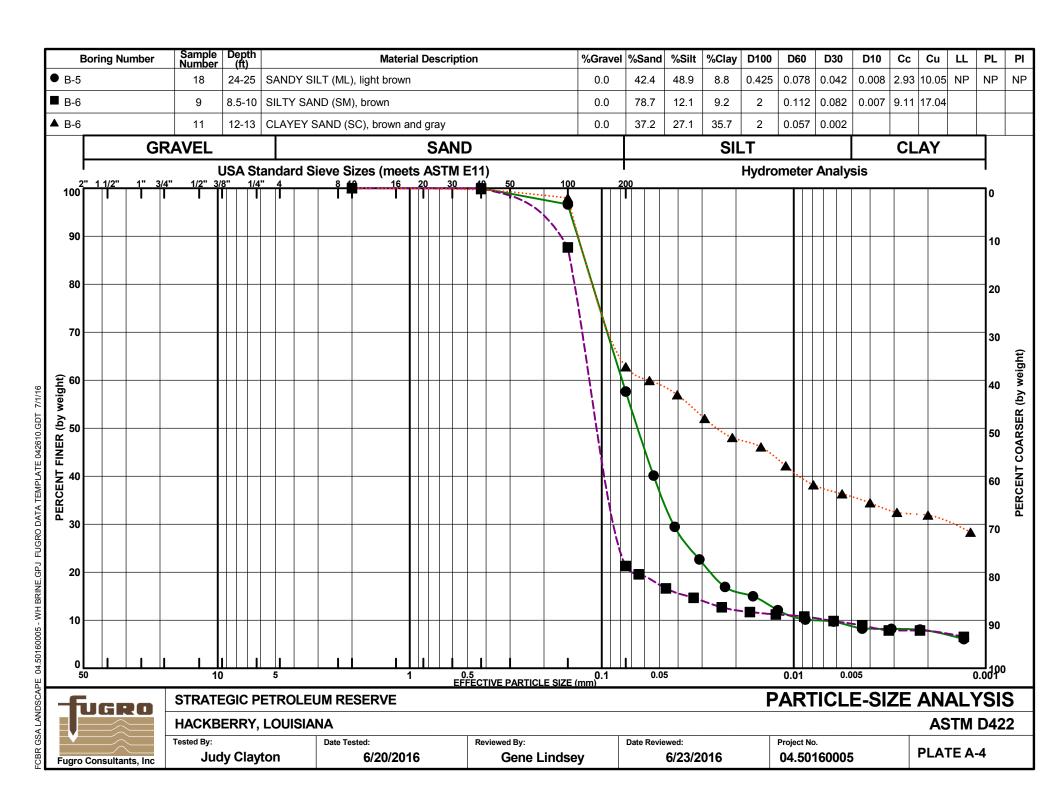
APPENDIX A

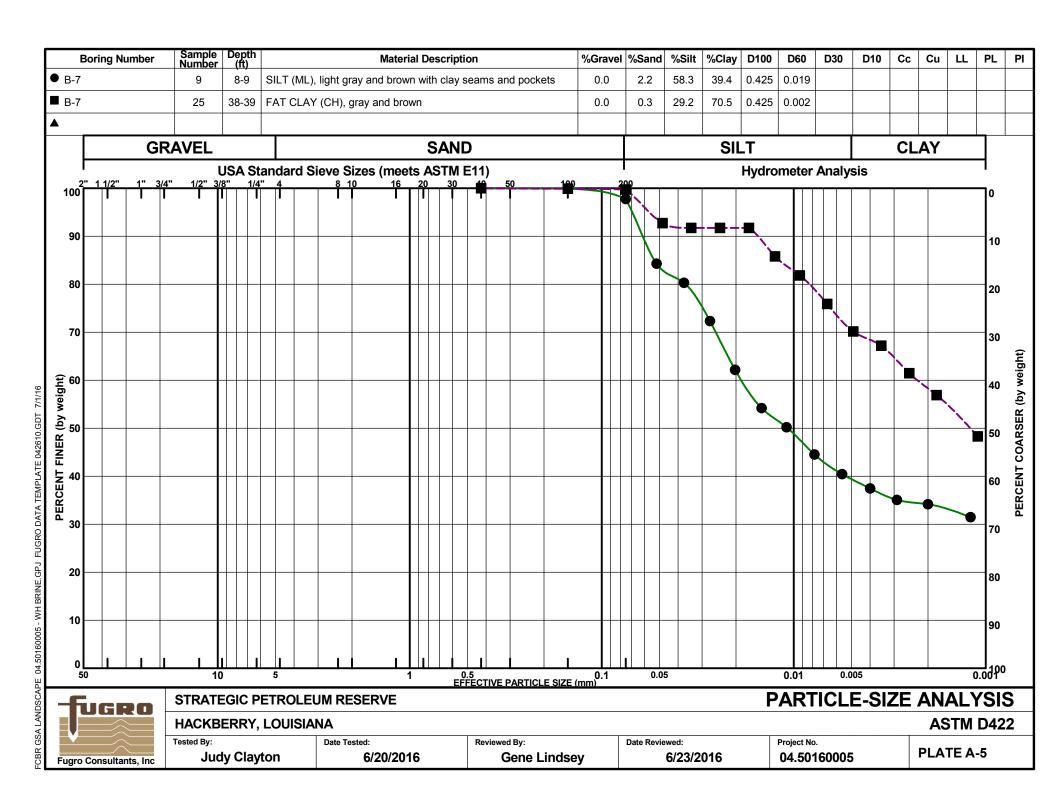














APPENDIX B





Boring ID	Depth	Material Description	рН	Ion Concentration (ppm)		Electrical Resistivity (ohm-cm)
	(ft)			Chloride	Sulfate	(Olilli-Cili)
B-1	5-6	Fat Clay with sand (CH)	5.5	< 100*	< 100*	2,676
B-2	3-4	Lean Clay with sand (CL)	7.3	230*	177*	825
B-3	19-20	Fat Clay (CH)	8.0	< 100*	112*	1,424
B-4	5-6	Fat Clay with sand (CH)	7.1	< 100*	< 100*	1,643
B-4	15-16	Fat Clay (CH)	7.9	< 100*	106*	1,424
B-5	1-2	Silt (ML)	6.6	< 100*	< 100*	2,599
B-5	29-30	Lean Clay (CL)	8.3	< 100*	< 100*	2,582
B-6	29-30	Fat Clay (CH)	7.8	< 100*	676*	651
B-7	3-4	Lean Clay (CL)	7.2	790*	786*	328
B-7	74-75	Fat Clay (CH)	7.7	149*	< 100*	925

^{*} Results based on dry weight.

LABORATORY SOIL CHEMICAL ANALYSES AND ELECTRICAL RESISTIVITY TESTS

24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT STRATEGIC PETROLEUM RESERVE HACKBERRY, LOUISIANA





APPENDIX C





	Generalized Soil Parameters (Boring B-1)								
Depth (ft)	Material Description	Unit Weight (pcf)	Buoyant Unit Weight (pcf)	Cohesion (psf)	Friction Angle (degrees)	Shear Modulus ⁽¹⁾ (psf)			
0 to 2	Silt (ML)	120	58	-	20	437,900			
2 to 6	Fat Clay with sand (CH)	119	57	1,200 to 1,500	-	400,000			
6 to 8	Sandy Lean Clay (CL)	135	73	700 to 1,000	-	1,020,000			
8 to 17	Silty Clayey Sand (SC-SM)	120	58	-	25	1,623,000			
17 to 27	Silt with sand (ML)	120	58	-	20	1,557,000			
27 to 30	Silty Sand (SM)	120	58	-	25	1,974,000			

Notes:

GENERALIZED SOIL PARAMETERS (BORING B-1)

24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT STRATEGIC PETROLEUM RESERVE HACKBERRY, LOUISIANA



¹⁾ In order to calculate estimated shear modulus values, we used Table 6-5 (P.234) and Table 6-6 (P. 235) from *Geotechnical Earthquake Engineering (Kramer, Steven L., 1996, Prentice-Hall, Inc.).* For the clayey soils, we used an average cohesion based on our ranges of values, and we assumed an Overconsolidation Ratio (OCR) of about 1.0.



	Generalized Soil Parameters (Boring B-2)								
Depth (ft)	Material Description	Unit Weight (pcf)	Buoyant Unit Weight (pcf)	Cohesion (psf)	Friction Angle (degrees)	Shear Modulus ⁽¹⁾ (psf)			
0 to 12	Lean Clay with sand (CL)	132	70	500 to 1,700	-	990,000			
12 to 14	Silt (ML)	120	58	-	20	1,302,200			
14 to 17	Sandy Lean Clay (CL)	124	62	500 to 1,500	-	1,125,000			
17 to 22	Silt (ML)	120	58	-	20	1,498,800			
22 to 30	Fat Clay with sand (CH)	120	58	1,200 to 1,500	-	776,250			

GENERALIZED SOIL PARAMETERS (BORING B-2) 24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT STRATEGIC PETROLEUM RESERVE



¹⁾ In order to calculate estimated shear modulus values, we used Table 6-5 (P.234) and Table 6-6 (P. 235) from Geotechnical Earthquake Engineering (Kramer, Steven L., 1996, Prentice-Hall, Inc.). For the clayey soils, we used an average cohesion based on our ranges of values, and we assumed an Overconsolidation Ratio (OCR) of about 1.0.



	Generalized Soil Parameters (Boring B-3)								
Depth (ft)	Material Description	Unit Weight (pcf)	Buoyant Unit Weight (pcf)	Cohesion (psf)	Friction Angle (degrees)	Shear Modulus ⁽¹⁾ (psf)			
0 to 2	Silt with sand (ML)	120	58	-	20	437,900			
2 to 8	Fat Clay with sand (CH)	130	68	1,200 to 1,700	-	652,500			
8 to 12	Silty Sand (SM)	120	58	-	25	1,228,000			
12 to 14	Sandy Silt (ML)	120	58	-	20	1,223,000			
14 to 17	Silty Sand (SM)	120	58	-	25	1,561,400			
17 to 30	Fat Clay (CH)	120	58	1,400 to 1,700	-	465,000			

Notes:

GENERALIZED SOIL PARAMETERS (BORING B-3) 24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT STRATEGIC PETROLEUM RESERVE HACKBERRY, LOUISIANA



¹⁾ In order to calculate estimated shear modulus values, we used Table 6-5 (P.234) and Table 6-6 (P. 235) from *Geotechnical Earthquake Engineering (Kramer, Steven L., 1996, Prentice-Hall, Inc.).* For the clayey soils, we used an average cohesion based on our ranges of values, and we assumed an Overconsolidation Ratio (OCR) of about 1.0.



	Generalized Soil Parameters (Boring B-4)								
Depth (ft)	Material Description	Unit Weight (pcf)	Buoyant Unit Weight (pcf)	Cohesion (psf)	Friction Angle (degrees)	Shear Modulus ⁽¹⁾ (psf)			
0 to 2	Lean Clay (CL)	127	65	500 to 1,000	-	525,000			
2 to 6	Fat Clay with sand (CH)	126	64	1,000 to 2,200	-	600,000			
6 to 10	Sandy Lean Clay (CL)	127	65	500 to 1,200	-	935,000			
10 to 12	Silt with sand (ML)	120	58	-	20	941,300			
12 to 30	Fat Clay (CH)	116	54	1,000 to 2,100		697,500			

Notes:

GENERALIZED SOIL PARAMETERS (BORING B-4) 24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT STRATEGIC PETROLEUM RESERVE HACKBERRY, LOUISIANA



¹⁾ In order to calculate estimated shear modulus values, we used Table 6-5 (P.234) and Table 6-6 (P. 235) from *Geotechnical Earthquake Engineering (Kramer, Steven L., 1996, Prentice-Hall, Inc.).* For the clayey soils, we used an average cohesion based on our ranges of values, and we assumed an Overconsolidation Ratio (OCR) of about 1.0.



	Generalized Soil Parameters (Boring B-5)								
Depth (ft)	Material Description	Unit Weight (pcf)	Buoyant Unit Weight (pcf)	Cohesion (psf)	Friction Angle (degrees)	Shear Modulus ⁽¹⁾ (psf)			
0 to 2	Silt (ML)	120	58	-	20	437,800			
2 to 6	Fat Clay (CH)	129	67	1,200 to 2,100	-	742,500			
6 to 11	Sandy Lean Clay (CL)	129	67	1,000 to 1,500	-	1,375,000			
11 to 12	Fat Clay (CH)	129	67	1,000	-	450,000			
12 to 23	Sandy Lean Clay (CL) and Lean Clay (CL)	122	60	500 to 1,500	-	1,100,000			
23 to 27	Sandy Silt (ML)	120	58	-	20	1,760,000			
27 to 30	Lean Clay (CL)	122	60	1,000	-	1,100,000			

Notes:

1) In order to calculate estimated shear modulus values, we used Table 6-5 (P.234) and Table 6-6 (P. 235) from *Geotechnical* Earthquake Engineering (Kramer, Steven L., 1996, Prentice-Hall, Inc.). For the clayey soils, we used an average cohesion based on our ranges of values, and we assumed an Overconsolidation Ratio (OCR) of about 1.0.

GENERALIZED SOIL PARAMETERS (BORING B-5)

24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT STRATEGIC PETROLEUM RESERVE HACKBERRY, LOUISIANA





		Generalized	Soil Paramete	rs (Boring B-6)	
Depth (ft)	Material Description	Unit Weight (pcf)	Buoyant Unit Weight (pcf)	Cohesion (psf)	Friction Angle (degrees)	Shear Modulus ⁽¹⁾ (psf)
0 to 6	Fat Clay (CH)	127	65	500 to 1,500	-	450,000
6 to 8	Lean Clay (CL)	123	61	500 to 900	-	715,000
8 to 14	Silty Sand (SM) and Clayey Sand (SC)	120	58	-	25	1,164,400
14 to 22	Lean Clay (CL)	121	59	1,000 to 1,600	-	910,000
22 to 27	Sandy Lean Clay (CL)	122	60	500 to 1,000	-	825,000
27 to 30	Fat Clay (CH)	120	58	1,500 to 1,600	-	697,500

Notes:

GENERALIZED SOIL PARAMETERS (BORING B-6) 24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT STRATEGIC PETROLEUM RESERVE HACKBERRY, LOUISIANA



¹⁾ In order to calculate estimated shear modulus values, we used Table 6-5 (P.234) and Table 6-6 (P. 235) from *Geotechnical Earthquake Engineering (Kramer, Steven L., 1996, Prentice-Hall, Inc.).* For the clayey soils, we used an average cohesion based on our ranges of values, and we assumed an Overconsolidation Ratio (OCR) of about 1.0.



		Generalized	Soil Paramete	rs (Boring B-7)		
Depth (ft)	Material Description	Unit Weight (pcf)	Buoyant Unit Weight (pcf) Cohesion (psf)		Friction Angle (degrees)	Shear Modulus ⁽¹⁾ (psf)	
0 to 4	Lean Clay (CL)	127	65	1,200 to 2,000	-	1,120,000	
4 to 7	Fat Clay (CH)	123	60	1,200 to 1,500	-	607,500	
7 to 10	Silt (ML)	120	58	-	20	1,276,600	
10 to 14	Fat Clay (CH)	123	58	1,200 to 1,500	-	607,500	
14 to 33	Lean Clay (CL)	127	65	1,200 to 1,500	-	945,000	
33 to 100	Fat Clay (CH)	122	60	1,200 to 2,200	-	510,000	

Notes:

GENERALIZED SOIL PARAMETERS (BORING B-7) 24-INCH BRINE DISPOSAL PIPELINE REPLACEMENT STRATEGIC PETROLEUM RESERVE HACKBERRY, LOUISIANA



¹⁾ In order to calculate estimated shear modulus values, we used Table 6-5 (P.234) and Table 6-6 (P. 235) from *Geotechnical Earthquake Engineering (Kramer, Steven L., 1996, Prentice-Hall, Inc.).* For the clayey soils, we used an average cohesion based on our ranges of values, and we assumed an Overconsolidation Ratio (OCR) of about 1.0.



APPENDIX D SUPPORTING DOCUMENTATION

Floodplain Statement of Findings

Floodplain Statement of Findings

This Floodplain Statement of Findings summarizes the potential impacts of the proposed brine disposal pipeline replacement project on floodplains with the project area which were analyzed in in accordance with 10 CFR 1022.13 and the steps to be taken to minimize potential harm to or within the associated floodplain areas.

According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map, FIRM Panel Number 22023C0375H, dated 2012, all but six areas of the proposed brine disposal pipeline ROW are designated within the 1% Annual Chance Flood Hazard of the Gulf Intracoastal Waterway floodplain (see Appendix A, Exhibit 6 – Floodplain Map). Land within the 1% Annual Chance Flood Hazard refers to areas determined to be in special flood hazard inundated by the 100-year flood. Four areas are located in areas within the 0.2% Annual Chance Flood Hazard (500-year floodplain) and two areas are determined to be outside of the 500-year floodplain. Cameron Parish is a participant in the National Flood Insurance Program.

The majority of the proposed project area is located within the 100-year floodplain of the Gulf Intracoastal Waterway. The proposed brine disposal pipeline generally follows the alignment of the existing brine disposal pipeline. Avoidance of floodplain areas is not possible as areas of the existing pipeline alignment are located within the 100-year floodplain of the Gulf Intracoastal Waterway. The No Build Alternative would not impact floodplain areas beyond those areas which were impacted when the existing brine disposal pipeline was originally installed.

Construction in the floodplain would be limited to open trenching along the proposed alignment and jack and bore techniques beneath roadways. Side cast soils resulting from the trenching activities would be temporary, would be returned to pre-construction grade after construction activities, and would not permanently or significantly impact water flow, boat traffic or biological productivity. Construction activities would result in negative short-term impacts which may lead to increased erosion and sedimentation to nearby waterbodies; however, Best Manageable Practices (BMPs) for erosion and sedimentation would be in place to limit such occurrences. Construction areas would be returned to the pre-construction grade after the implementation of the proposed project; therefore, no long-term impacts to local drainage or the storage capacity within the floodplain would occur.

Two areas along the proposed brine disposal pipeline (one north of Black Lake Road and one south of Maggie Hebert Road) are classified as upland habitats and is utilized primarily as pastureland for cattle or developed properties (residential or light industrial). Since these areas are located outside of the 500-year floodplain, such areas will not be further assessed in this floodplain assessment.

The potential impacts to floodplains would result from the placement of the proposed brine disposal pipeline within the proposed pipeline ROW and potential construction equipment within the adjacent temporary construction easement to support the proposed pipeline installation activities. All effects on floodplains resulting from the implementation of the proposed action are expected to consist of short-term impacts without any irreversible effects. The proposed action is limited temporally and spatially; therefore, any effects would be limited to the area comprising

the perpetual pipeline ROW and temporary construction easement. The potential for any long-term, irreversible degradation of the floodplain during implementation of the proposed action is minimal.

The impacts to floodplains by the proposed project are summarized in the following table. Impacts are categorized as positive or negative, direct or indirect, and long-term or short-term as required by 10 CFR 1022.13 (a) (2).

Floodplain Impacts – Build Alternative

	Temporary (Short-Term)	Permanent (Long-Term)
Positive	None	None
Negative (Direct)	Yes – Construction Activities	None
Negative (Indirect)	Yes – Construction Activities	None
Negative (Cumulative)	None	None

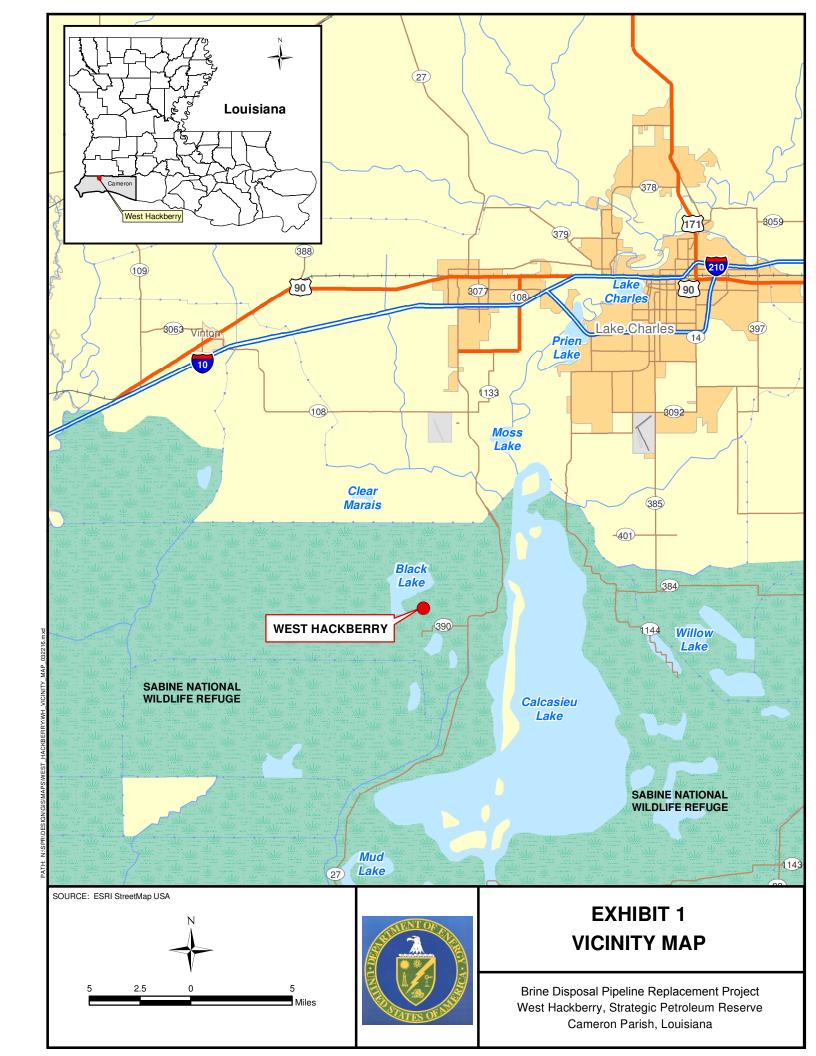
Floodplain Impacts - No Build Alternative

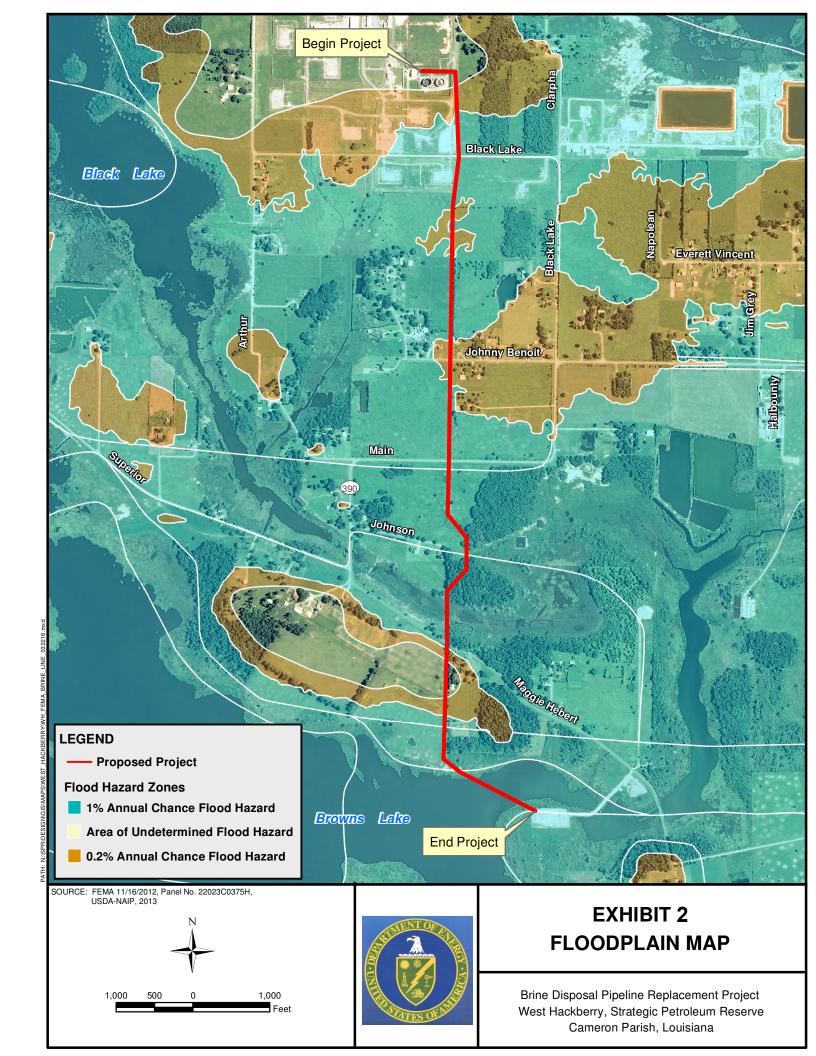
	Temporary (Short-Term)	Permanent (Long-Term)
Positive	Yes – Avoids Construction Impacts	None
Negative (Direct)	None	None
Negative (Indirect)	None	Negative Impact to SPR Mission
Negative (Cumulative)	None	None

Attachments

Exhibit 1 – Vicinity Map

Exhibit 2 – Floodplain Map





West Hackberry Brine Disposal Pipeline Replacement Project – DOE/EA-2039

APPENDIX D SUPPORTING DOCUMENTATION

Final 2014 Integrated Report of Water Quality in Louisiana

Final 2014 Louisiana Water Quality Integrated Report

Appendix A

Appendix A:

Final 2014 Integrated Report of Water Quality in Louisiana

Description of Codes and Acronyms:

Water Body Types: R = Rivers; L = Lakes; E = Estuaries; W = Wetlands Use

Water Body Sizes: R = Miles; L = Acres; E = Square Miles; W = Acres

Designated Use PCR = PCR (swimming) **Descriptions:** SCR = SCR (boating)

FWP = FWP (fishing)

DWS = DWS

ONR = Outstanding Natural Resource

OYS = OYS

AGR = Agriculture

LAL = Limited Aquatic Life and Wildlife

Use Support Codes for Designated Uses: F = Fully supporting designated use

N = Not supporting designated use

I = Insufficient data to make reliable determination

X = No data

Follow-up Data Comments: CTM Full: Lead = Follow-up ultra-clean metals

DOCM Full = Follow-up dissolved oxygen continuous

monitoring data indicates full support.

IR Category for Suspected Causes: IRC 5=303(d) List

IRC 5RC=303(d) List but criteria revisions (Revise Criteria (RC)) are planned

IRC 4a=TMDL completed

IRC 4b=Other corrective actions in place

IRC 3=Insufficient data to make a reliable determination IRC 1 (No code)=No impairment, fully supporting all uses

				I	Desig	gnate	ed V	Vater	Body	ody Uses						
Subsegment Number	Subsegment Description	Water Body Type	Size	PCR	SCR	FWP	DWS	ONR	OYS	AGR	LAL	Follow-up Data Comments	Impaired Use for Suspected Cause	Suspected Causes of Impairment	IR Category for Suspected Causes	Suspected Sources of Impairment
LA010101_00	Atchafalaya River Headwaters and Floodplain-From Old River Control Structure to Simmesport; includes Old River Diversion Channel, Lower Red River, Lower Old River	W	86,400	F	F	F										
LA010201_00	Atchafalaya River Mainstem-From Simmesport to Whiskey Bay Pilot Channel at mile 54	R	51	F	F	F										
LA010301_00	West Atchafalaya Basin Floodway-From Simmesport to Butte LaRose Bay and Henderson Lake	W	199,040	F	F	N							FWP	Mercury in Fish Tissue	IRC 4a	Atmospheric Deposition - Toxics
LA010301_00	West Atchafalaya Basin Floodway-From Simmesport to Butte LaRose Bay and Henderson Lake	W	199,040	F	F	N							FWP	Mercury in Fish Tissue	IRC 4a	Source Unknown
LA010301_00	West Atchafalaya Basin Floodway-From Simmesport to Butte LaRose Bay and Henderson Lake	W	199,040	F	F	N							FWP	Oxygen, Dissolved	IRC 4a	Source Unknown

Final 2014 Louisiana Water Quality Integrated Report

Appendix A

					Designa		ted W	Vater	Body Us		es	1	Impaired				
Subsegment Number	Subsegment Description	Water Body Type	Size	PCR	SCR	FWP	DWS	ONR	OYS	AGR	LAL	Follow-up Data Comments	Ugo for	Suspected Causes of Impairment	IR Category for Suspected Causes		Suspected Sources of Impairment
LA030306_00	Bayou Verdinesouth of the Houston River Canal to the Calcasieu River (Estuarine)	R		3 N	N	N							FWP	Oxygen, Dissolved	IRC 5	L	Discharges from Municipal Separate Storm Sewer Systems (MS4)
LA030306_00	Bayou Verdinesouth of the Houston River Canal to the Calcasieu River (Estuarine)	R		3 N	N	N							FWP	Oxygen, Dissolved	IRC 5	L	Sewage Discharges in Unsewered Areas
LA030306_00	Bayou Verdinesouth of the Houston River Canal to the Calcasieu River (Estuarine)	R		3 N	N	N							FWP	Phenols	IRC 4a		Industrial Point Source Discharge
LA030306_00	Bayou Verdinesouth of the Houston River Canal to the Calcasieu River (Estuarine)	R		3 N	N	N							FWP	Polychlorinated biphenyls	IRC 4a		Industrial Point Source Discharge
LA030306_00	Bayou Verdinesouth of the Houston River Canal to the Calcasieu River (Estuarine)	R		3 N	N	N							FWP	Polychlorinated biphenyls	IRC 4a		Source Unknown
LA030306_00	Bayou Verdinesouth of the Houston River Canal to the Calcasieu River (Estuarine)	R		3 N	N	N							FWP	Polycyclic Aromatic Hydrocarbons (PAHs) (Aquatic Ecosystems)	IRC 4a		Industrial Point Source Discharge
LA030306_00	Bayou Verdinesouth of the Houston River Canal to the Calcasieu River (Estuarine)	R		3 N	N	N							FWP	Polycyclic Aromatic Hydrocarbons (PAHs) (Aquatic Ecosystems)	IRC 4a		Source Unknown
LA030306_00	Bayou Verdinesouth of the Houston River Canal to the Calcasieu River (Estuarine)	R		3 N	N	N							PCR	1,2-Dichloroethane	IRC 4a		Industrial Point Source Discharge
LA030306_00	Bayou Verdinesouth of the Houston River Canal to the Calcasieu River (Estuarine)	R		3 N	N	N							SCR	1,2-Dichloroethane	IRC 4a		Industrial Point Source Discharge
LA030401_00	Calcasieu River-From below Moss Lake to the Gulf of Mexico; includes Ship Channel and Monkey Island Loop (Estuarine)	R	20	5 F	F	F			F								
LA030402_00	Calcasieu Lake	E	6	7 F	F	F			F								
LA030403_00	Black Lake (Estuarine)	E		3 F	F	F											
LA030501_00	Whiskey Chitto Creek-From headwaters to southern boundary of Fort Polk Military Reservation	R	1	7 N	N	F							PCR	Fecal Coliform	IRC 4a		Wildlife Other than Waterfow
LA030501_00	Whiskey Chitto Creek-From headwaters to southern boundary of Fort Polk Military Reservation	R	1	7 N	N	F							SCR	Fecal Coliform	IRC 4a		Wildlife Other than Waterfow
LA030502_00	Whiskey Chitto Creek-From the southern boundary of Fort Polk Military Reservation to the Calcasieu River (Scenic)	R	70) F	F	F		F									
LA030503_00	Six Mile Creek-East and West Forks from headwaters to the southern boundary of Fort Polk Military Reservation	R	10	5 N	N	N							FWP	pH, Low	IRC 5	L	Naturally Occurring Organic Acids

West Hackberry Brine Disposal Pipeline Replacement Project – DOE/EA-2039

APPENDIX D SUPPORTING DOCUMENTATION

Wetland Statement of Findings

Wetland Statement of Findings

This Wetland Statement of Findings summarizes the potential impacts of the proposed brine disposal pipeline replacement project on waters of the U.S., including wetlands, with the project area which were analyzed in accordance with 10 CFR 1022.13 and the steps to be taken to minimize potential harm to or within the associated waters of the U.S., including wetlands.

Two areas of waters of the U.S., including wetlands, would be affected by the activities included in this Wetland Statement of Findings; however, all impacts would be temporary (see Exhibit 1 – Vicinity Map and Exhibit 2 – National Wetland Inventory Map). The first area, a wetland area, is located within pastureland immediately north of Maggie Hebert Road. The pipeline would be installed utilizing open cut trenching in this area which would be returned to preconstruction grades following construction activities.

The second area, a waters of the U.S., consists of Browns Lake and two adjacent fringe wetlands located north of the brine injections wells near the southern project limits. The pipeline would be installed utilizing open cut trenching which would be returned to preconstruction grades following construction activities and would not permanently or significantly impact water flow, boat traffic (if any) or biological productivity. The water depth is approximately 1.5 feet in this area. Mobile aquatic organisms would return to the area upon completion of construction activities. Construction activities would result in negative direct and indirect, short-term impacts. After completion of the construction activity there would be no negative long-term impacts to the wetlands, primary and secondary contact recreation, and/or fish and wildlife propagation in Browns Lake.

The potential for impacts to functional waters of the U.S., including wetlands, would result from the placement of the proposed brine disposal pipeline within the proposed pipeline ROW and potential construction equipment within the temporary construction easement to support the proposed pipeline installation. This area consists of both upland habitat and wetland habitat. Acreage calculations of potential impacts to these areas would be identified during the wetland delineation activity at a later date. All permanent and temporary impacts could be calculated by utilizing the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps/data. The NWI is a geospatial database which depicts potential wetland and open water habitats and was developed by the USFWS to be used for management, research, policy development, education and planning activities.

All effects on wetlands resulting from the implementation of the proposed action are expected to be negative, short-term and without any irreversible effects. The proposed action is limited temporally and spatially; therefore, any effects would be limited to the area comprising the permanent and temporary construction easement. The potential for any long-term, irreversible degradation of aquatic resources during implementation of the proposed action is minimal.

The impacts to waters of the U.S., including wetlands, by the proposed project are summarized in the following tables. Impacts are categorized as positive or negative, direct or indirect, and long-term or short-term as required by 10 CFR 1022.13 (a) (2).

Wetland Impacts – Build Alternative

	Temporary (Short-Term)	Permanent (Long-Term)
Positive	None	None
Negative (Direct)	Yes – Construction Activities	None
Negative (Indirect)	Yes – Construction Activities	None
Negative (Cumulative)	None	None

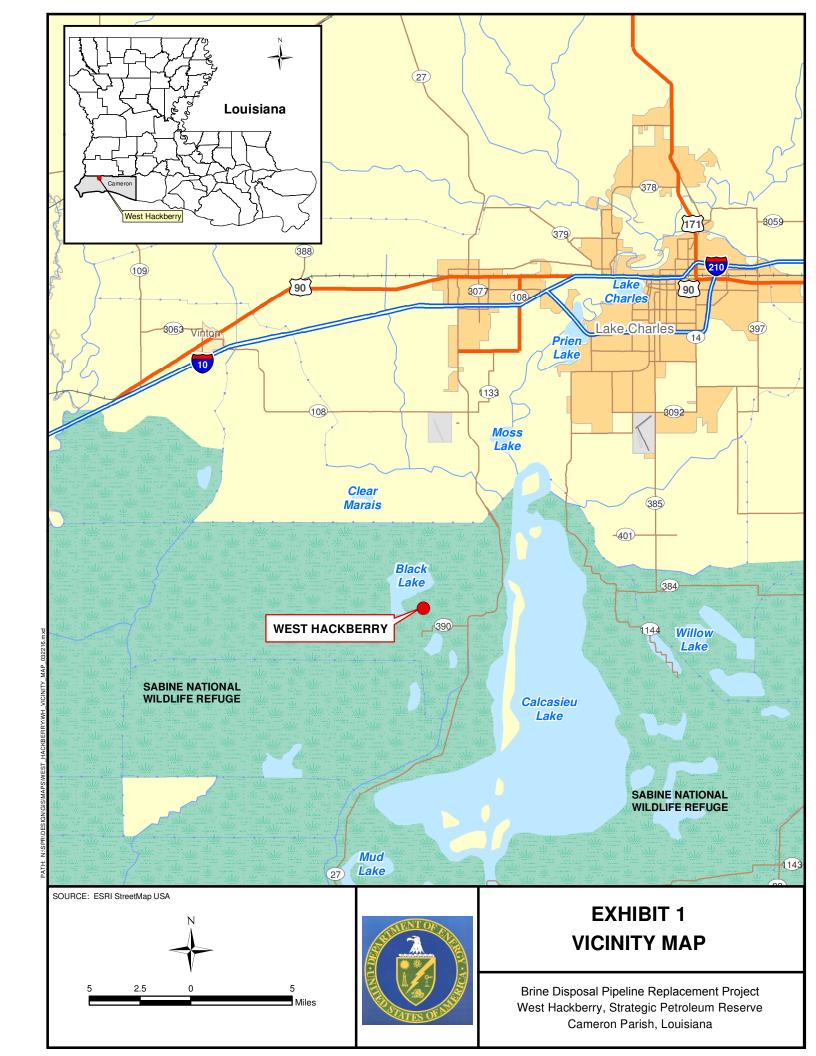
Wetland Impacts – No Build Alternative

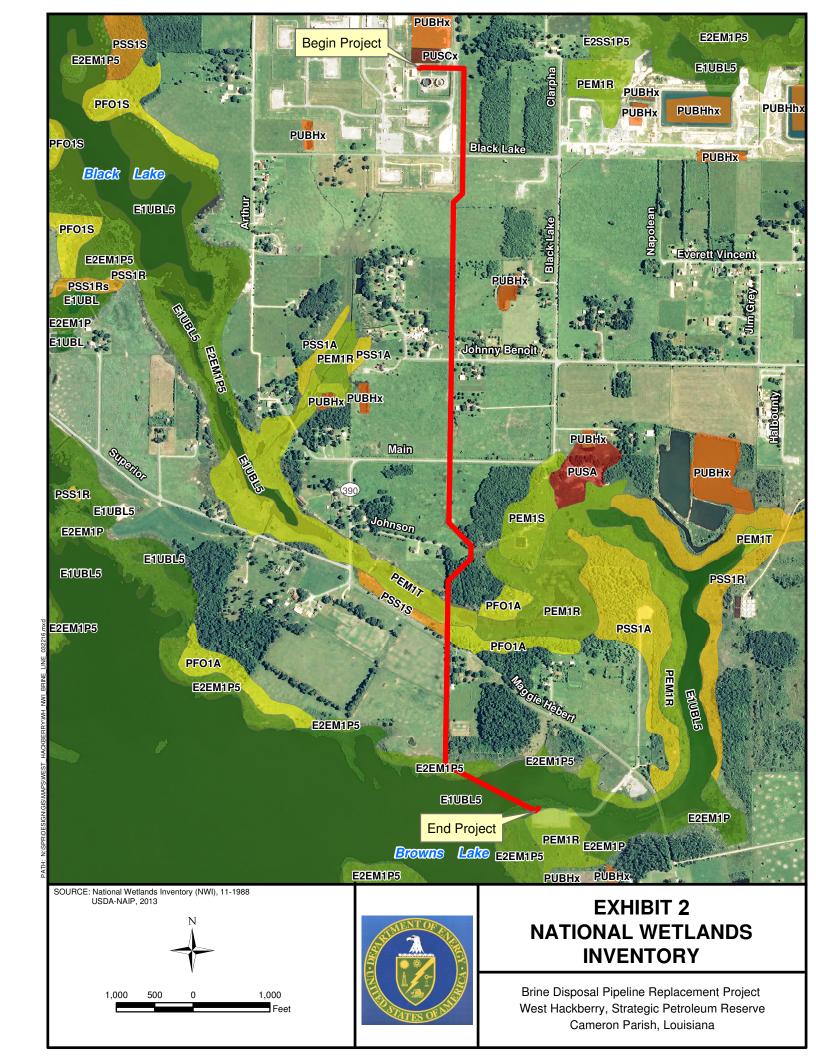
	Temporary (Short-Term)	Permanent (Long-Term)
Positive	Yes – Avoids Construction Impacts	None
Negative (Direct)	None	None
Negative (Indirect)	None	Negative Impact to SPR Mission
Negative (Cumulative)	None	None

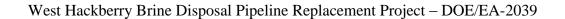
Attachments

Exhibit 1 – Vicinity Map

Exhibit 2 – National Wetland Inventory Map

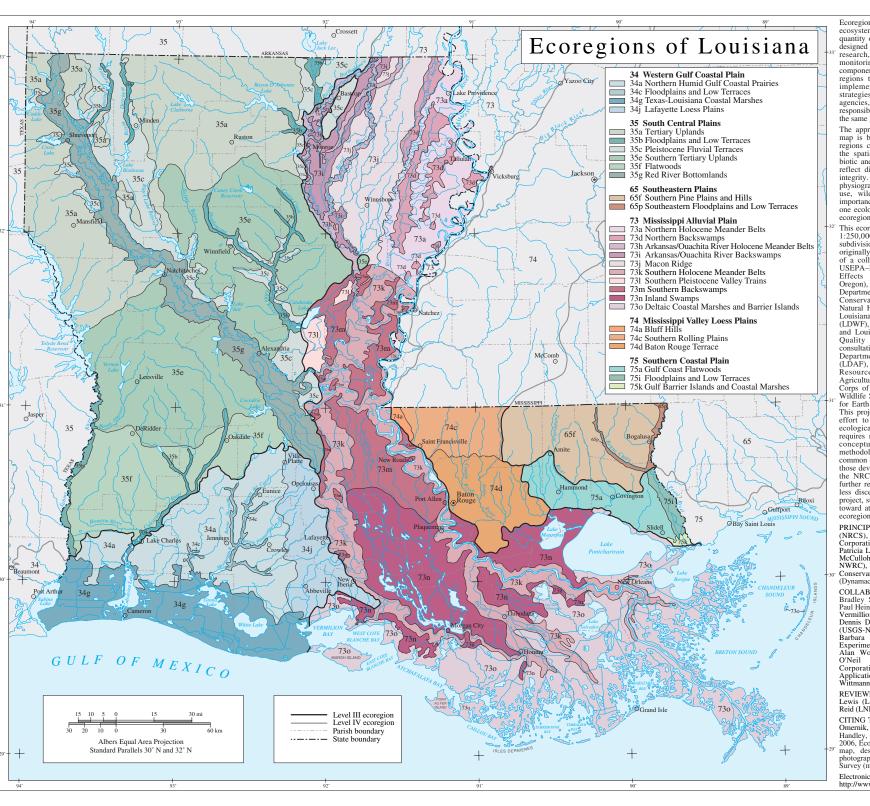






APPENDIX D SUPPORTING DOCUMENTATION

Ecoregions of Louisiana Map



Ecoregions denote areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources. They are designed to serve as a spatial framework for the research, assessment, management, and monitoring of ecosystems and ecosystem components. Ecoregions are general purpose regions that are critical for structuring and implementing ecosystem management strategies across federal agencies, state agencies, and nongovernment organizations responsible for different types of resources in the same geographical areas.

The approach used to compile the ecoregion map is based on the premise that ecological regions can be identified through analysis of the spatial patterns and the composition of biotic and abiotic characteristics that affect or reflect differences in ecosystem quality and integrity. These characteristics include geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology. The relative importance of each characteristic varies from one ecological region to another regardless of ecoregion hierarchical level.

This ecoregion map was compiled at a scale of 1:250,000, and depicts revisions and subdivisions of level III ecoregions that were originally compiled at a smaller scale. It is part of a collaborative project primarily between USEPA-National Health and Environmental Effects Research Laboratory (Corvallis, Oregon), U.S. Geological Survey (USGS), U.S. Department of Agriculture-Natural Resources Conservation Service (NRCS), Louisiana Natural Heritage Program (LNHP) within the Louisiana Department of Wildlife and Fisheries (LDWF), Louisiana Geological Survey (LGS), and Louisiana Department of Environmental Quality (LDEQ). Collaboration and consultation also occurred with the Louisiana Department of Agriculture and Forestry (LDAF), Louisiana Department of Natural Resources, U.S. Department of Agriculture–Forest Service (USFS), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), and USGS-Center for Earth Resources Observation and Science. This project is associated with an interagency effort to develop a common framework of ecological regions. Reaching that objective requires recognition of the differences in the conceptual approaches and mapping methodologies applied to develop the most common ecoregion-type frameworks, including those developed by the USFS, the USEPA, and the NRCS. As each of these frameworks is further refined, their differences are becoming less discernible. Each collaborative ecoregion project, such as this one in Louisiana, is a step toward attaining consensus and consistency in ecoregion frameworks for the entire nation.

PRINCIPAL AUTHORS: Jerry J. Daigle (NRCS), Glenn E. Griffith (Dynamac Corporation), James M. Omernik (USGS), Patricia L. Faulkner (LNHP-LDWF), Richard P. McCulloh (LGS), Lawrence R. Handley (USGS-NWRC), Latimore M. Smith (The Nature Conservancy), and Shannen S. Chapman (Dynamac Corporation).

COLLABORATORS AND CONTRIBUTORS: Bradley Spicer (LDAF), Sue Smith (LDEQ), Paul Heinrich (LGS), John Nvoosad (USFS), Bill Vermillion (USFWS), Charles Demas (USGS), Dennis Demcheck (USGS), C. Edward Proffitt (USGS-NWRC), Philip Crocker (USEPA), Barbara Kleiss (USACE, ERDC-Waterways Experiment Station), Jan Boydston (LDEQ), Alan Woods (Oregon State University), Pat O'Neil (USGS), Brian Moran (Indus Corporation), John Hutchinson (Science Applications International Corporation), Jack Wittmann (USGS), and Tom Loveland (USGS).

REVIEWERS: Martin Floyd (NRCS), Anthony Lewis (Louisiana State University), and Chris Reid (LNHP-LDWF).

CITING THIS MAP: Daigle, J.J., Griffith, G.E., Omernik, J.M., Faulkner, P.L., McCulloh, R.P., Handley, L.R., Smith, L.M., and Chapman, S.S., 2006, Ecoregions of Louisiana (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,000,000).

Electronic files of ecoregion maps are available at http://www.epa.gov/wed/pages/ecoregions.htm.

est Hacl	kberry Brine Disposal Pipeline Replacement Project – DOE/EA-2039
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	APPENDIX D
	SUPPORTING DOCUMENTATION
Pl	ants Observed Within or Near the Proposed Brine Disposal Pipeline ROW

Plants Observed Within or Near the Proposed Brine Disposal Pipeline ROW

Scientific Name	Common Name	Wetland Indicator Status
Croton capitatus	Hogwort	UPL
Lepidium virginicum	Virginia Pepperweed	UPL
Medicago lupulina	Black Medick	UPL
Oenothera speciosa	Pinkladies	UPL
Rosa bracteata	Macartney Rose	UPL
Verbena brasiliensis	Brazilian Vervain	UPL
Anagallis arvensis	Scarlet Pimpernel	FACU
Cynodon dactylon	Bermudagrass	FACU
Lolium perenne	Perennial Ryegrass	FACU
Nothoscordum bivalve	Crowpoison	FACU
Quercus virginiana	Live Oak	FACU
Rubus trivialis	Southern Dewberry	FACU
Solidago altissima	Canada Goldenrod	FACU
Trifolium repens	White Clover	FACU
Vachellia farnesiana	Sweet Acacia	FACU
Ĭ I		
Ambrosia psilostachya	Cuman Ragweed	FAC
Baccharis halimifolia	Eastern Baccharis	FAC
Cirsium horridulum	Yellow Thistle	FAC
Ilex vomitoria	Yaupon	FAC
Juncus tenuis	Poverty Rush	FAC
Morella cerifera	Wax Myrtle	FAC
Nekemias arborea	Peppervine	FAC
Rumex crispus	Curly Dock	FAC
Triadica sebifera	Chinese Tallow	FAC
Vitis rotundifolia	Muscadine	FAC
Andropogon glomeratus	Bushy Bluestem	FACW
Axonopus fissifolius	Common Carpetgrass	FACW
Celtis laevigata	Sugarberry	FACW
Hydrocotyle bonariensis	Largeleaf Pennywort	FACW
Iva frutescens	Jesuit's Bark	FACW
Juncus brachycarpus	Whiteroot Rush	FACW
Limnosciadium pinnatum	Tansy Dogshade	FACW
Phragmites australis	Common Reed	FACW
Pluchea camphorata	Camphor Pluchea	FACW
Sesbania drummondii	Poisonbean	FACW
Sesuvium protulacastrum	Shoreline Seapurslane	FACW
Setaria parviflora	Marsh Bristlegrass	FACW
Solidago sempervirens	Seaside Goldenrod	FACW
Spartina patens	Saltmeadow cordgrass	FACW

Scientific Name	Common Name	Wetland Indicator Status
Solidago sempervirens	Seaside Goldenrod	FACW
Batis maritime	Turtleweed	OBL
Bolboschoenus robustus	Sturdy Bulrush	OBL
Borrichia frutescens	Bushy Seaside Tansy	OBL
Cyperus sp.	Flatsedge	OBL/FACW
Cyperus articulates	Jointed Flatsedge	OBL
Distichlis spicata	Saltgrass	OBL
Eleocharis sp.	Spikerush	OBL
Eleocharis quadrangulata	Squarestem Spikerush	OBL
Kosteletzkya virginica	Virginia Saltmarsh Mallow	OBL
Ludwigia peploides	Floating Primrose-willow	OBL
Paspalum denticulatum	Longtom/Pull-and-be-Damned	OBL
Polygonum/Persicaria sp.	Smartweed	OBL
Schoenoplectus sp.	Bulrush	OBL
Schoenoplectus californicus	California Bulrush	OBL
<i>Typha</i> sp.	Cattail	OBL

Wetland Indicator Status

On June 1, 2012, the 2012 National Wetland Plant List replaced the 1988 U.S. Fish and Wildlife Service's *National list of plant species that occur in wetlands* (U.S. Fish & Wildlife Service Biological Report 88 (24)) for all wetland determinations and delineations performed for Section 404 of the Clean Water Act, the Swampbuster provisions of the Food Security Act, and the National Wetland Inventory. This list was developed by the U.S. Army Corps of Engineers, the Fish and Wildlife Service (FWS), the Environmental Protection Agency, and the Natural Resources Conservation Service using taxonomic and distribution data from the Biota of North America program (BONAP) and legacy information from the FWS, and is directed by the Corps of Engineers. The 2012 list included changes in the names of species, the recognition of new species, changes in wetland regions, and changes in the wetland indicator statuses of species. This list was updated again on July 11, 2013, and April 3, 2014. These updates included more changes in the names of species, the addition of new species, and the removal of species that were listed as Upland in all regions.

Indicator categories

Indicator Code	Indicator Status	Designation	Comment
OBL	Obligate Wetland	Hydrophyte	Almost always occur in wetlands
FACW	Facultative	Hydrophyte	Usually occur in wetlands, but may
	Wetland		occur in non-wetlands
FAC	Facultative	Hydrophyte	Occur in wetlands and non-
			wetlands
FACU	Facultative Upland	Nonhydrophyte	Usually occur in non-wetlands, but
			may occur in wetlands
UPL	Obligate Upland	Nonhydrophyte	Almost never occur in wetlands

These indicator statuses are used to designate a plant species' preference for occurrence in a wetland or upland. The information supporting the indicator status assignments for the 1988 wetland list was qualitative, not quantitative. To better reflect the supporting information, the new category definitions are based on qualitative descriptions.

Regions and subregions

The wetland regions, the states wholly or partly in each region, and the definition of each region are listed below. Most of the regions are now defined by the boundaries of Land Resource Regions (LRRs) and Major Land Resource Areas (MLRAs) recognized by the Natural Resources Conservation Service. LRRs are groups of MLRAs.

Region Geographic areas in region Definition of region

Atlantic and Gulf Coastal Plain AL, AR, DC, DE, FL, GA, IL, LRR O, LRR P except MLRA KY, LA, MD, MS, MO, NC, 136, MLRA 149A of LRR S, NJ, OK, PA, SC, TN, TX, VA LRRs T, U

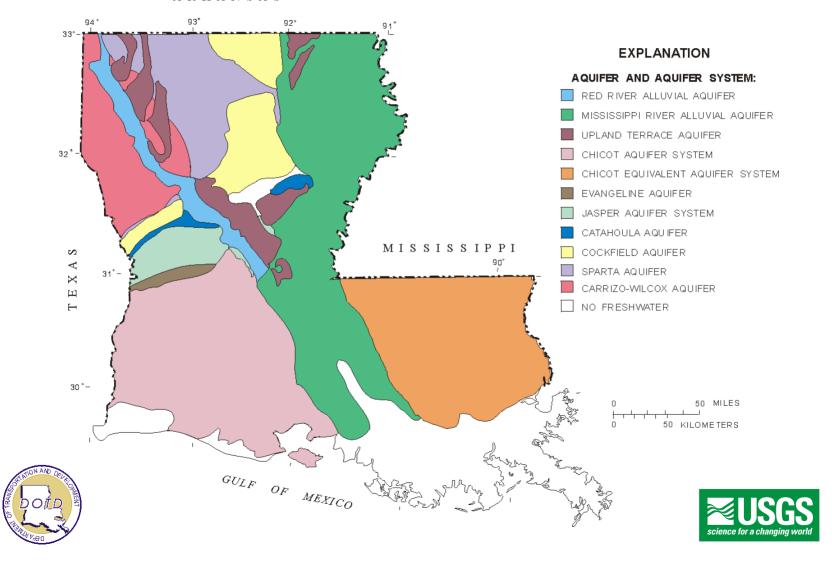
West Hackberry Brine Disposal Pipeline Replacement Project – DOE/EA-2039

APPENDIX D SUPPORTING DOCUMENTATION

U.S. Geological Service Louisiana Aquifer System Map

Surface extent of Louisiana's aquifers and aquifer systems





West Hackberry Brine Disposal Pipeline Replacement Project – DOE/EA-2039

APPENDIX D SUPPORTING DOCUMENTATION

USFWS Custom IPaC Trust Resources Report

West Hackberry Brine Disposal Pipeline Replacement Project

IPaC Trust Resources Report

Generated November 18, 2016 09:50 AM MST, IPaC v3.0.9

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species is a required project review.



IPaC - Information for Planning and Conservation (https://ecos.fws.gov/ipac/): A project planning tool to help streamline the U.S. Fish & Wildlife Service environmental review process.

Table of Contents

F	PaC Trust Resources Report
	Project Description
	Endangered Species
	Migratory Birds
	Refuges & Hatcheries
	Wetlands

U.S. Fish & Wildlife Service

IPaC Trust Resources Report

NAME

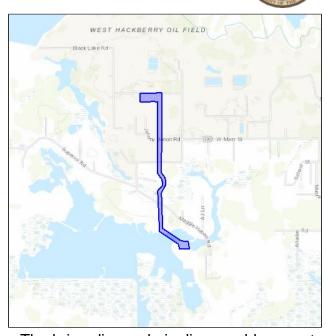
West Hackberry Brine Disposal Pipeline Replacement Project

LOCATION

Cameron County, Louisiana

DESCRIPTION

The purpose of the project is to replace an existing brine disposal pipeline which is functionally obsolete. The proposed project would involve the installation of approximately 2.1 miles of 24-inch pipeline by open cut trench and jack and bore to replace the existing pipeline which would be



removed from service but remain in place. The brine disposal pipeline would support the activities associated with the Strategic Petroleum Reserve (SPR) West Hackberry (WH) facility located near Hackberry, Cameron Parish, Louisiana.

IPAC LINK

https://ecos.fws.gov/ipac/project/ S3MTR-5GJQR-HL5JI-VEKEA-4KXEFE

U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

Louisiana Ecological Services Field Office

646 Cajundome Boulevard, Suite 400 Lafayette, LA 70506-4290 (337) 291-3100

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the <u>Endangered Species Program</u> of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

<u>Section 7</u> of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Documents section in IPaC or from the local field office directly.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Birds

Piping Plover Charadrius melodus

Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B079

Red Knot Calidris canutus rufa

Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DM

Fishes

Atlantic Sturgeon (gulf Subspecies) Acipenser oxyrinchus

Threatened

(=oxyrhynchus) desotoi

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E04W

Mammals

West Indian Manatee Trichechus manatus

Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A007

Reptiles

Green Sea Turtle Chelonia mydas

Resolved Taxon

CRITICAL HABITAT

No critical habitat has been designated for this species.

Hawksbill Sea Turtle Eretmochelys imbricata

Endangered

CRITICAL HABITAT

There is final critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C00E

Kemp's Ridley Sea Turtle Lepidochelys kempii

Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C000

Leatherback Sea Turtle Dermochelys coriacea

Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C00F

Loggerhead Sea Turtle Caretta caretta

Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C00U

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the <u>Migratory Bird Treaty Act</u> and the <u>Bald and Golden Eagle</u> <u>Protection Act</u>.

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish & Wildlife Service.^[1] There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern
 http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds
 http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.isp

The following species of migratory birds could potentially be affected by activities in this location:

American Oystercatcher Haematopus palliatus

Bird of conservation concern

Season: Year-round

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0G8

American Bittern Botaurus lentiginosus Bird of conservation concern

Season: Wintering

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F3

Bald Eagle Haliaeetus leucocephalus Bird of conservation concern

Season: Year-round

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008

Black Rail Laterallus jamaicensis

Bird of conservation concern

Season: Year-round

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B09A

Black Skimmer Rynchops niger

Season: Year-round

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EO

Brown-headed Nuthatch Sitta pusilla

Season: Year-round

Dickcissel Spiza americana

Season: Breeding

Fox Sparrow Passerella iliaca

Season: Wintering

Gull-billed Tern Gelochelidon nilotica

Season: Year-round

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JV

Henslow's Sparrow Ammodramus henslowii

Season: Wintering

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B09D

Hudsonian Godwit Limosa haemastica

Season: Migrating

Le Conte's Sparrow Ammodramus leconteii

Season: Wintering

Least Bittern Ixobrychus exilis

Season: Breeding

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B092

Lesser Yellowlegs Tringa flavipes

Season: Wintering

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MD

Loggerhead Shrike Lanius Iudovicianus

Season: Year-round

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FY

Long-billed Curlew Numenius americanus

Season: Wintering

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06S

Marbled Godwit Limosa fedoa

Season: Wintering

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JL

Mississippi Kite Ictinia mississippiensis

Season: Breeding

Nelson's Sparrow Ammodramus nelsoni

Season: Wintering

Painted Bunting Passerina ciris

Season: Breeding

Bird of conservation concern

Peregrine Falcon Falco peregrinus

Season: Wintering

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU

Prothonotary Warbler Protonotaria citrea

Season: Breeding

Red Knot Calidris canutus rufa

Season: Wintering

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DM

Red-headed Woodpecker Melanerpes erythrocephalus

Season: Wintering

Reddish Egret Egretta rufescens

Season: Year-round

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06U

Rusty Blackbird Euphagus carolinus

Season: Wintering

Sedge Wren Cistothorus platensis

Season: Wintering

Short-billed Dowitcher Limnodromus griseus

Season: Wintering

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JK

Short-eared Owl Asio flammeus

Season: Wintering

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD

Snowy Plover Charadrius alexandrinus

Season: Wintering

Swainson's Warbler Limnothlypis swainsonii

Season: Breeding

Whimbrel Numenius phaeopus

Season: Wintering

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JN

Wilson's Plover Charadrius wilsonia

Season: Year-round

Worm Eating Warbler Helmitheros vermivorum

Season: Migrating

Yellow Rail Coturnicops noveboracensis

Season: Wintering

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JG

Bird of conservation concern

Bird of conservation concern

Bird of conservation concern

Bird of conservation concern

Bird of conconvation comcon-

Bird of conservation concern

Wildlife refuges and fish hatcheries

There are no refuges or fish hatcheries in this location

Wetlands in the National Wetlands Inventory

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

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

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

This location overlaps all or part of the following wetlands:

Estuarine And Marine Deepwater E1UBL5

Estuarine And Marine Wetland **E2EM1P5**

Freshwater Emergent Wetland

PEM1R PEM1T

Freshwater Forested/shrub Wetland

PFO1A PSS1S

A full description for each wetland code can be found at the National Wetlands Inventory website: http://107.20.228.18/decoders/wetlands.aspx

West Hackberry Brine Disposal Pipeline Replacement Project – DOE/EA-2039

APPENDIX D SUPPORTING DOCUMENTATION

USFWS List of Threatened and Endangered Species

USFWS THREATENED/ENDANGERED SPECIES TABLE FOR CAMERON PARISH (as of 05-04-2016)

Group	Name	Population	Status	Lead Office	Recovery Plan Name	Recovery Plan Stage
Birds	Brown Pelican (Pelecanus occidentalis)	except U.S. Atlantic coast, FL, AL	Recovery	Ventura Fish and Wildlife Office		
Birds	Piping Plover (Charadrius melodus)	except Great Lakes watershed	Threatened	Office of the Regional Director	Piping Plover Atlantic Coast Population Revised Recovery Plan	Final Revision 1
Birds	Piping Plover (Charadrius melodus)	except Great Lakes watershed	Threatened	Office of the Regional Director	Volume I: Draft Revised Recovery Plan for the Northern Great Plains Piping Plover (<i>Charadrius melodus</i>)	Draft Revision 1
Birds	Red Knot (Calidris canutus rufa)		Threatened	New Jersey Ecological Services Field Office		
Fish	Atlantic Sturgeon – Gulf Subspecies (Acipenser oxyrinchus – oxyrhynchus desotoi)	Entire	Threatened	Panama City Ecological Services Field Office	Gulf Sturgeon	Final
Mammals	West Indian Manatee (Trichechus manatus)	Entire	Endangered	North Florida Ecological Services Field Office	Florida Manatee Recovery Plan, Third Revision	Final Revision 3
Mammals	West Indian Manatee (Trichechus manatus)	Entire	Endangered	North Florida Ecological Services Field Office	Recovery Plan Puerto Rican Population of the West Indian (Antillean) Manatee	Final
Mammals	Louisiana Black Bear (Ursus americanus luteolus)	Entire	Recovery	Louisiana Ecological Services Field Office	Louisiana Black Bear	Final
Reptiles	Hawksbill Sea Turtle (Eretmochelys imbricata)	Entire	Endangered	North Florida Ecological Services Field Office	Recovery Plan for U.S. Pacific Populations of the Hawksbill Turtle	Final Revision 1
Reptiles	Hawksbill Sea Turtle (Eretmochelys imbricata)	Entire	Endangered	North Florida Ecological Services Field Office	Recovery Plan for the Hawksbill Turtle in the U.S. Caribbean, Atlantic and Gulf of Mexico	Final Revision 1
Reptiles	Leatherback Sea Turtle (Dermochelys coriacea)	Entire	Endangered	North Florida Ecological Services Field Office	Recovery Plan for Leatherback Turtles in the U.S. Caribbean, Atlantic, and Gulf of Mexico	Final Revision 1

Group	Name	Population	Status	Lead Office	Recovery Plan Name	Recovery Plan Stage
Reptiles	Leatherback Sea Turtle (Dermochelys coriacea)	Entire	Endangered	North Florida Ecological Services Field Office	Recovery Plan for U.S. Pacific Populations of the Leatherback Turtle	Final Revision 1
Reptiles	Kemp's Ridley Sea Turtle (Lepidochelys kempii)	Entire	Endangered	Texas Coastal Ecological Services Field Office	Bi-National Recovery Plan for the Kemp's Ridley Sea Turtle (<i>Lepidochelys kempii</i>); Second Revision	Final Revision 2
Reptiles	Green Sea Turtle (Chelonia mydas)	Except where endangered	Threatened	North Florida Ecological Services Field Office	Recovery Plan for U.S. Pacific Populations of the Green Turtle	Final Revision 1
Reptiles	Green Sea Turtle (Chelonia mydas)	Except where endangered	Threatened	North Florida Ecological Services Field Office	Recovery Plan for U.S. Population of Atlantic Green Turtle	Final Revision 1
Reptiles	Loggerhead Sea Turtle (Caretta caretta)	Northwest Atlantic Ocean DPS	Threatened	North Florida Ecological Services Field Office	Recovery Plan for the Northwest Atlantic Population of the Loggerhead Sea Turtle (<i>Caretta</i> caretta); Second Revision	Final Revision 2

West Hackberry Brine Disposal Pipeline Replacement Project – DOE/EA-2039
APPENDIX D
SUPPORTING DOCUMENTATION
Louisiana Department of Wildlife and Fisheries Rare Species List
Louisiana Department of Wildlife and Fisheries Rare Species List
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Published on Louisiana Department of Wildlife and Fisheries (http://www.wlf.louisiana.gov)

Home > Species by Parish List

Species by Parish List



Explanation of Ranking Categories Employed by Natural Heritage Programs Nationwide

Federal Ranks (USESA FIELD):

Global Element Ranks:

State Element Ranks:

State Protection Status:

Filter By Parish Filter by			Type					
Cameron	▼	<any></any>		▼ Ap	ply			
				Rare Pla	ant Speci	es		
Scientific	Com	mon	<u>State</u>	<u>Global</u>	<u>State</u>	<u>Federal</u>		
Name [3]	Nam		Rank	<u>Rank</u>	Status	Status	Fact Sheet	Parishes
Amaranthus greggii [9]	Greg Ama	gg's Iranth	S3	G4?			Amaranthus greggii [10]	Cameron, Jefferson, Lafourche
Astragalus nuttallianus [11]	A Mi	lk-vetch	S2S3	G5			Astragalus nuttallianus [12]	Cameron
Canna flaccida	Gold	len Canna	S4?	G4?			Canna flaccida [14]	Cameron, Jefferson, Lafourche, Plaquemines, St. Charles, St. Mary, Vermilion
Cenchrus tribuloides [15]	Dune	e Sandbur	S2	G5			Cenchrus tribuloides [16]	Cameron, Jefferson, Lafourche, Plaquemines, St. Bernard, Terrebonne
Chamaesyce bombensis [17]	Sand Spur	d Dune rge	S1	G4G5			Chamaesyce bombensis [18]	Cameron, Jefferson, Plaquemines, St. Bernard,

2016			Species by Parish List		
					Terrebonne
<u>Dalea</u> emarginata [19]	Wedge-leaf Prairie-clover	S2	G5	Dalea emarginata [20]	Cameron
<u>Draba</u> <u>cuneifolia</u> [21]	Wedge-leaf Whitlow-grass	S1	G5	Draba cuneifolia [22]	Caddo, Cameron, Winn
Eleocharis elongata [23]	Slim Spike- rush	S3	G5?	Eleocharis elongata [24]	Cameron, St. Tammany, Vermilion
Eriochloa punctata [25]	Punctate Cupgrass	S2	G5	Eriochloa punctata [26]	Cameron, Plaquemines, Vermilion
Lithospermum incisum [27]	Narrow- leaved Puccoon	S1	G5	Lithospermum incisum [28]	Cameron, Natchitoches
Ludwigia sphaerocarpa	Grapefruit Primrosewilow	S2	G5	Ludwigia sphaerocarpa	Calcasieu, Cameron, Vermilion
Monanthochloe littoralis [31]	Saltflat-grass	S1	G4G5	Monanthochloe littoralis [32]	Cameron
Nymphaea elegans [33]	Blue Water Lily	S2S4	G4?	Nymphaea elegans [34]	Calcasieu, Cameron, Vermilion
Pediomelum rhombifolium	Roundleaf Scarf-pea	S2S3	G5	Pediomelum rhombifolium	Cameron
Physostegia correllii [37]	Correll's False Dragon-head	S1	G2	Physostegia correllii [38]	Cameron, St. Charles, St. James, St. Tammany
Pterocaulon virgatum [39]	Wand Blackroot	S2	G5	Pterocaulon virgatum [40]	Acadia, Beauregard, Calcasieu, Cameron, DeSoto, Evangeline
Ratibida peduncularis	Mexican Hat	S2S3	G4G5	Ratibida peduncularis	Cameron, Vermilion
Rhynchospora globularis var. pinetorum [43]	Small's Beaksedge	S1	G5? T3?		Acadia, Calcasieu, Cameron
Rhynchospora microcarpa [44]	Southern Beaksedge	S3	G5		Cameron, Vermilion

Brackish Marsh [59]		S3	G4?			₫ <u>Bra</u> <u>Marsh</u>	ckish Lafourch	eu, Cameron, he, nines, St.
	Common Name [4]	State Rank	Globa Rank	latural Com State Status	Federal Status	Fact Sheet	Parishe	s
Uniola paniculata [57]	Sea Oa	ats	S2	G5	147		Uniola paniculata [58]	Cameron, Jefferson, Lafourche, Plaquemines, St. Bernard, St. Tammany, Terrebonne
Tidestromia lanuginosa [58	Woolly Honeys		S1	G5			Tidestromia	- Cameron
Thalia dealba	a <u>ta</u> Powde Thalia	ry	S2S3	G4			Thalia dealbata [54]	Acadia, Cameron, East Baton Rouge, East Feliciana, Iberia, Iberville, Jefferson Davis, Lafayette, Morehouse, St. Landry, St. Martin, Vermilion,
Sideroxylon reclinatum [51	Florida	bully	S1	G4G5			Sideroxylor reclinatum [52]	<u>Cameron</u>
Sida elliottii [4	ısı Elliott S	Sida	SH	G4G5			Sida elliotti	Cameron, East Baton Rouge, East Feliciana, St. Tammany
Samolus ebracteatus	Brookv	veed	S1	G4G5			Samolus ebracteatus [4	Calcasieu, 8] Cameron
Sabatia arenicola [45]	Sand F gentiar		S1	G3G5			Sabatia arenicola [46]	Cameron, Jefferson, Lafourche, Orleans, Plaquemines, St. Bernard, St. Tammany, Terrebonne
								Camaran

2010				Spe	cies by Failsii Lisi	ι				
									Bernard, Vermilion	St. Charles,
Coastal Dune Grassland	(S1	G2G	3			Coas Dune Grassla		Cameron Plaquem Bernard,	•
Coastal Live Oak- Hackberry Forest [63]	\$	S 1	G2				Coas Live Oa Hackbe Forest	ak- erry	Orleans, Plaquem Bernard, Tammany	, Lafourche, ines, St. St.
Coastal Prairie [65]		S1	G2Q				d Coas Prairie		Acadia, A Calcasieu Jefferson Vermilion	u, Cameron, Davis,
Freshwater Marsh [67]	\$	S2	G3G	4			<mark>∄</mark> Freshw Marsh լ		Plaquem Charles, Tammany Tangipah	St. Mary, St. y,
				Rare An	imal Specie	s				
Scientific Name [3]	Common Name [4]	<u>Stat</u> Ran		Global Rank	State Status [7]		<u>deral</u> atus	Fact	t Sheet	Parishes
Canis rufus [69]	Red Wolf	SX		G1Q					Canis 1 <u>S</u> (70)	Calcasieu, Cameron, Grant, Lafourche, LaSalle, Madison, Natchitoches, Terrebonne, Vermilion, Winn
Caracara cheriway [71]	Crested Caracara	S1		G5					Caracara riway [72]	Calcasieu, Cameron
Charadrius alexandrinus	Snowy Plove	er S1E	3,S2N	G4					aradrius kandrinus	Cameron, Jefferson, Lafourche, Plaquemines, St. Bernard, St. Mary, Terrebonne, Vermilion
										Cameron,

Cameron,

Charadrius melodus [75]	Piping Plover	S2N	G3	T/E	Т	Charadrius melodus [76]	Lafourche, Plaquemines, St. Bernard, St. Mary, Terrebonne, Vermilion
Charadrius wilsonia	Wilson's Plover	S2B, S1N	G5			Charadrius wilsonia [78]	Cameron, Lafourche, Plaquemines, Terrebonne
Columbina passerina [79]	Common Ground-Dove	S1B,S2N	G5			Columbina passerina [80]	Cameron, Iberia
Grus canadensis [81]	Sandhill Crane	S2N	G5			Grus canadensis	Calcasieu, Cameron, Franklin, Madison, Morehouse, Rapides, Vermilion
Malaclemys terrapin [83]	Diamondback Terrapin	S3	G4	Restricted Harvest		Malaclemys terrapin [84]	Cameron, Jefferson, Jefferson Davis, Lafourche, Orleans, St. Bernard, St. Tammany, Terrebonne, Vermilion
Pelecanus occidentalis	Brown Pelican	S3	G4	Е	Delisted	Pelecanus occidentalis	Cameron, Jefferson, Lafourche, Plaquemines, St. Bernard, Terrebonne
Platalea ajaja [87]	Roseate Spoonbill	S3	G5			Platalea ajaja [88]	Calcasieu, Cameron, Evangeline, Iberia, Jefferson Davis, Lafourche, Plaquemines, St. Bernard, St. Martin, St. Mary, Terrebonne, Vermilion

2016			Op	ecies by Parish Lis	,,		
Plegadis falcinellus [89]	Glossy Ibis	S2	G5			Plegadis falcinellus [90]	Cameron, Orleans
Polyodon spathula [91]	Paddlefish	S4	G4			Polyodon spathula [92]	Acadia, Avoyelles, Caddo, Calcasieu, Cameron, Catahoula, Concordia, Evangeline, Franklin, Iberia, Jefferson Davis, LaSalle, Orleans, Ouachita, Rapides, Sabine, St. Bernard, St. Charles, St. John the Baptist, St. Martin, St. Mary, St. Tammany, Tangipahoa, Tensas, Union
Spilogale putorius [93]	Eastern Spotted Skunk	S1	G5			Spilogale putorius [94]	Ascension, Calcasieu, Cameron, Livingston, Tangipahoa, Washington, West Feliciana
Sternula antillarum athalassos	Interior Least Tern	S4BT1	G4T20) E	E		Avoyelles, Bossier, Caddo, Cameron, Concordia, East Baton Rouge, East Carroll, East Feliciana, Grant, Iberville, Madison, Natchitoches, Pointe

Terrapene ornata [96]	Ornate Box Turtle	S1	G5	Restricted Harvest		Terrapene ornata [97]	Calcasieu, Cameron
Trichechus manatus [98]	Manatee	S1N	G2	E	E	Trichechus manatus [99]	Ascension, Cameron, East Baton Rouge, East Feliciana, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Tammany, Tangipahoa, Terrebonne

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Links:

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- [3] http://www.wlf.louisiana.gov/print/33310?order=title&sort=asc&tid=218&type 1=All
- [4] http://www.wlf.louisiana.gov/print/33310?order=field com name value&sort=asc&tid=218&type 1=All
- [5] http://www.wlf.louisiana.gov/print/33310?order=field_srank_value&sort=asc&tid=218&type_1=All
- [6] http://www.wlf.louisiana.gov/print/33310?order=field_grank_value&sort=asc&tid=218&type_1=All
- [7] http://www.wlf.louisiana.gov/print/33310?order=field_s_status_value&sort=asc&tid=218&type_1=All
- [8] http://www.wlf.louisiana.gov/print/33310?order=field_fed_status_value&sort=asc&tid=218&type_1=All_
- [9] http://www.wlf.louisiana.gov/fact-sheet-rare-plant/amaranthus-greggii
- [10] http://www.wlf.louisiana.gov/sites/default/files/pdf/fact_sheet_plant/31770-Amaranthus greggii/amaranthus_greggii.pdf
- [11] http://www.wlf.louisiana.gov/fact-sheet-rare-plant/astragalus-nuttallianus
- [12] http://www.wlf.louisiana.gov/sites/default/files/pdf/fact_sheet_plant/31875-Astragalus
- nuttallianus/astragalus_nuttallianus.pdf
- [13] http://www.wlf.louisiana.gov/fact-sheet-rare-plant/canna-flaccida
- [14] http://www.wlf.louisiana.gov/sites/default/files/pdf/fact_sheet_plant/32011-Canna flaccida/canna_flaccida.pdf

- [15] http://www.wlf.louisiana.gov/fact-sheet-rare-plant/cenchrus-tribuloides
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elongata/eleocharis elongata.pdf

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rhombifolium/pediomelum_rhombifolium.pdf

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Forest/coastal_live_oak_hackberry_forest.pdf

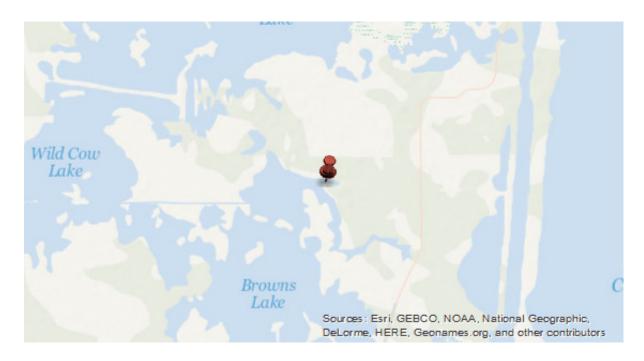
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manatus/trichechus_manatus.pdf

West Hackberry Brine Disposal Pipeline Replacement Project – DOE/EA-2039					
APPENDIX D					
SUPPORTING DOCUMENTATION					
National Oceanic and Atmospheric Administration Essential Fish Habitat Mapper					

5/16/2016 EFH Mapper

EFH Data Notice: Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional Fishery Management Councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.



Query Results

Map Scale = 1:144,448

Degrees, Minutes, Seconds: Latitude = 29°58'13" N, Longitude = 94°36'6" W Decimal Degrees: Latitude = 29.97, Longitude = -93.40

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

EFH

No Essential Fish Habitats (EFH) were identified at the report location.

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

	APPENDIX D
SUPPOI	RTING DOCUMENTATION
Department of H	Health and Human Services 2016 Poverty Guidelines

are working to improve language accessibility within their states; and

• Recommendations for state-specific capacity building for the 20 states intended to enhance statewide language access, which will include the development of language access plans.

An objective review of was conducted that assessed the grantee's application using criteria related to the project's approach, the organization's capacity, and the development of costs for the project's budget.

Statutory Authority: Section 310 of the Family Violence Prevention and Services Act, as amended by Section 201 of the CAPTA Reauthorization Act of 2010, Pub. L. 111–320.

Christopher Beach,

Senior Grants Policy Specialist, Division of Grants Policy, Office of Administration. [FR Doc. 2016–01329 Filed 1–22–16; 8:45 am]

BILLING CODE 4184-32-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

Annual Update of the HHS Poverty Guidelines

AGENCY: Department of Health and Human Services.

ACTION: Notice.

SUMMARY: This notice provides an update of the Department of Health and Human Services (HHS) poverty guidelines to account for last calendar year's increase in prices as measured by the Consumer Price Index.

DATES: Effective Date: January 25, 2016, unless an office administering a program using the guidelines specifies a different effective date for that particular program.

ADDRESSES: Office of the Assistant Secretary for Planning and Evaluation, Room 404E, Humphrey Building, Department of Health and Human Services, Washington, DC 20201.

FOR FURTHER INFORMATION CONTACT: For information about how the guidelines are used or how income is defined in a particular program, contact the Federal, state, or local office that is responsible for that program. For information about poverty figures for immigration forms, the Hill-Burton Uncompensated Services Program, and the number of people in poverty, use the specific telephone numbers and addresses given below.

For general questions about the poverty guidelines themselves, contact Kendall Swenson, Office of the Assistant Secretary for Planning and Evaluation, Room 422F.5, Humphrey Building, Department of Health and Human Services, Washington, DC 20201—telephone: (202) 690–7507—or visit http://aspe.hhs.gov/poverty/.

For information about the percentage multiple of the poverty guidelines to be used on immigration forms such as USCIS Form I–864, Affidavit of Support, contact U.S. Citizenship and Immigration Services at 1–800–375–5283.

For information about the Hill-Burton Uncompensated Services Program (free or reduced-fee health care services at certain hospitals and other facilities for persons meeting eligibility criteria involving the poverty guidelines), contact the Health Resources and Services Administration Information Center at 1–800–275–4772. You also may visit http://www.hrsa.gov/gethealthcare/affordable/hillburton/.

For information about the number of people in poverty, visit the Poverty section of the Census Bureau's Web site at http://www.census.gov/hhes/www/poverty/poverty.html or contact the Census Bureau's Customer Service Center at 1–800–923–8282 (toll-free) and https://ask.census.gov for further information.

SUPPLEMENTARY INFORMATION:

Background

Section 673(2) of the Omnibus Budget Reconciliation Act (OBRA) of 1981 (42 U.S.C. 9902(2)) requires the Secretary of the Department of Health and Human Services to update the poverty guidelines at least annually, adjusting them on the basis of the Consumer Price Index for All Urban Consumers (CPI-U). The poverty guidelines are used as an eligibility criterion by the Community Services Block Grant program and a number of other Federal programs. The poverty guidelines issued here are a simplified version of the *poverty* thresholds that the Census Bureau uses to prepare its estimates of the number of individuals and families in poverty.

As required by law, this update is accomplished by increasing the latest published Census Bureau poverty thresholds by the relevant percentage change in the Consumer Price Index for All Urban Consumers (CPI-U). The guidelines in this 2016 notice reflect the 0.1 percent price increase between calendar years 2014 and 2015. After this inflation adjustment, the guidelines are rounded and adjusted to standardize the differences between family sizes. In rare circumstances, the rounding and standardizing adjustments in the formula result in small decreases in the poverty guidelines for some household

sizes even when the inflation factor is not negative. In order to prevent a reduction in the guidelines in these rare circumstances, a minor adjustment was implemented to the formula beginning this year. In cases where the year-to-year change in inflation is not negative and the rounding and standardizing adjustments in the formula result in reductions to the guidelines from the previous year for some household sizes, the guidelines for the affected household sizes are fixed at the prior year's guidelines. As in prior years, these 2016 guidelines are roughly equal to the poverty thresholds for calendar year 2015 which the Census Bureau expects to publish in final form in September 2016.

The poverty guidelines continue to be derived from the Census Bureau's current official poverty thresholds; they are not derived from the Census Bureau's new Supplemental Poverty Measure (SPM).

The following guideline figures represent annual income.

2016 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA

Persons in family/household	Poverty guideline
1	\$11,880 16,020 20,160 24,300 28,440 32,580 36,730
8	40,890

For families/households with more than 8 persons, add \$4,160 for each additional person.

2016 POVERTY GUIDELINES FOR ALASKA

ty ne
840
020
200
380
560
740
920
120

For families/households with more than 8 persons, add \$5,200 for each additional person.

2016 POVERTY GUIDELINES FOR HAWAII

Persons in family/household	Poverty guideline
1	\$13,670 18,430 23,190 27,950 32,710 37,470 42,230
8	47,010

For families/households with more than 8 persons, add \$4,780 for each additional person.

Separate poverty guideline figures for Alaska and Hawaii reflect Office of Economic Opportunity administrative practice beginning in the 1966–1970 period. (Note that the Census Bureau poverty thresholds—the version of the poverty measure used for statistical purposes—have never had separate figures for Alaska and Hawaii.) The poverty guidelines are not defined for Puerto Rico or other outlying jurisdictions. In cases in which a Federal program using the poverty guidelines serves any of those jurisdictions, the Federal office that administers the program is generally responsible for deciding whether to use the contiguous-states-and-DC guidelines for those jurisdictions or to follow some other procedure.

Due to confusing legislative language dating back to 1972, the poverty guidelines sometimes have been mistakenly referred to as the "OMB" (Office of Management and Budget) poverty guidelines or poverty line. In fact, OMB has never issued the guidelines; the guidelines are issued each year by the Department of Health and Human Services. The poverty guidelines may be formally referenced as "the poverty guidelines updated periodically in the **Federal Register** by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2).'

Some federal programs use a percentage multiple of the guidelines (for example, 125 percent or 185 percent of the guidelines), as noted in relevant authorizing legislation or program regulations. Non-Federal organizations that use the poverty guidelines under their own authority in non-Federally-funded activities also may choose to use a percentage multiple of the guidelines.

The poverty guidelines do not make a distinction between farm and non-farm families, or between aged and non-aged units. (Only the Census Bureau poverty thresholds have separate figures for aged

and non-aged one-person and two-person units.)

Note that this notice does not provide definitions of such terms as "income" or "family," because there is considerable variation in defining these terms among the different programs that use the guidelines. These variations are traceable to the different laws and regulations that govern the various programs. This means that questions such as "Is income counted before or after taxes?", "Should a particular type of income be counted?", and "Should a particular person be counted as a member of the family/household?" are actually questions about how a specific program applies the poverty guidelines. All such questions about how a specific program applies the guidelines should be directed to the entity that administers or funds the program, since that entity has the responsibility for defining such terms as "income" or "family," to the extent that these terms are not already defined for the program in legislation or regulations.

Dated: January 21, 2016.

Sylvia M. Burwell,

Secretary of Health and Human Services. [FR Doc. 2016–01450 Filed 1–22–16; 8:45 am]

BILLING CODE 4150-05-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Allergy and Infectious Diseases; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Microbiology, Infectious Diseases and AIDS Initial Review Group; Microbiology and Infectious Diseases Research Committee.

Date: February 18–19, 2016.

Time: 8:00 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: The Ritz-Carlton Hotel, Plaza II, 1150 22nd Street NW., Washington, DC 20037.

Contact Person: Frank S. De Silva, Ph.D., Scientific Review Officer, Scientific Review Program, Division of Extramural Activities, Room #3E72A, National Institutes of Health/ NIAID, 5601 Fishers Lane, MSC 9834, Bethesda, MD 20892934, (240) 669–5023, fdesilva@niaid.nih.gov.

Name of Committee: National Institute of Allergy and Infectious Diseases Special Emphasis Panel; "Comprehensive Resources for HIV Microbicides and Biomedical Prevention (N01)".

Date: February 18, 2016.

Time: 10:30 a.m. to 5:00 p.m.

Agenda: To review and evaluate contract proposals.

Place: National Institutes of Health Room 3F100, 5601 Fishers Lane, Rockville, MD 20892 (Telephone Conference Call).

Contact Person: Jay R. Radke, Ph.D., AIDS Review Branch, Scientific Review Program, Division of Extramural Activities, Room #3G11B, National Institutes of Health, NIAID, 5601 Fishers Lane, MSC–9823, Bethesda, MD 20892–9823, (240) 669–5046, jay.radke@nih.gov.

(Catalogue of Federal Domestic Assistance Program Nos. 93.855, Allergy, Immunology, and Transplantation Research; 93.856, Microbiology and Infectious Diseases Research, National Institutes of Health, HHS)

Dated: January 19, 2016.

Natasha M. Copeland,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2016–01313 Filed 1–22–16; 8:45 am]

BILLING CODE 4140-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Submission for OMB Review; 30-Day Comment Request; Media-Smart Youth Leaders Program

SUMMARY: Under the provisions of section 3507(a)(1)(D) of the Paperwork Reduction Act of 1995, the *Eunice* Kennedy Shriver National Institute of Child Health and Human Development. National Institutes of Health (NIH) has submitted to the Office of Management and Budget (OMB) a request for review and approval of the information collection listed below. This proposed information collection was previously published in the **Federal Register** on October 16, 2015, pages 62541–62542, and allowed 60 days for public comment. One public comment was received. The purpose of this notice is to allow an additional 30 days for public comment. The Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, may not conduct or

APPENDIX E

REGULATORY DATABASE SEARCH RESULTS AND HISTORIC DOCUMENTS

GeoSearch Radius Report
GeoSearch Fire Insurance Maps
GeoSearch GeoPlus Oil and Gas Report
GeoSearch GeoPlus Water Well Report
GeoSearch Historical Aerial Photographs Package
GeoSearch Historic Topographic Maps Package



Radius Report

Satellite view

Target Property:

2.1 Mile Corridor Hackberry, Cameron Parish, Louisiana 70645

Prepared For:

S&B Infrastructure-Houston

Order #: 67530 Job #: 146779 Date: 05/24/2016

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Target Property Summary
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Ortho Map
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Unlocated Sites Summary
Environmental Records Definitions
Unlocatable Report
Zip Report

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR §312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal, state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR §312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

2.1 Mile Corridor Hackberry, Louisiana 70645

Coordinates

Corridor

USGS Quadrangle

Browns Lake, LA

Geographic Coverage Information

County/Parish: Cameron (LA)

ZipCode(s):

Hackberry LA: 70645

Radon

* Target property is located in Radon Zone .

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	<u>ERNSLA</u>	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	<u>EC</u>	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	<u>LUCIS</u>	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
NO LONGER REGULATED RCRA GENERATOR FACILITIES	<u>NLRRCRAG</u>	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR FACILITIES	RCRAGR06	1	1	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON- GENERATOR FACILITIES	RCRANGR06	0	1	0.1250
BROWNFIELDS MANAGEMENT SYSTEM	<u>BF</u>	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	<u>DNPL</u>	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	<u>NLRRCRAT</u>	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	<u>RCRAT</u>	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	<u>SEMS</u>	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	<u>SEMSARCH</u>	1	0	0.5000
NATIONAL PRIORITIES LIST	<u>NPL</u>	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	<u>NLRRCRAC</u>	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	<u>PNPL</u>	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	<u>RCRAC</u>	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	<u>RCRASUBC</u>	0	О	1.0000
	ī			
SUB-TOTAL		2	2	

Additional Environmental Records

Database	Acronym	Locatable	Uniocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	<u>AIRSAFS</u>	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	<u>BRS</u>	0	0	TP/AP
CERCLIS LIENS	<u>SFLIENS</u>	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	<u>CDL</u>	0	0	TP/AP
EPA DOCKET DATA	<u>DOCKETS</u>	0	0	TP/AP
FACILITY REGISTRY SYSTEM	<u>FRSLA</u>	0	0	TP/AP



Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR06	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	<u>ICIS</u>	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	<u>ICISNPDES</u>	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	<u>MLTS</u>	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR06	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	<u>PADS</u>	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR06	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	<u>SSTS</u>	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	<u>TRI</u>	0	0	TP/AP
HISTORICAL GAS STATIONS	<u>HISTPST</u>	0	0	0.2500
OPEN DUMP INVENTORY	<u>ODI</u>	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	<u>DOD</u>	0	0	1.0000
FORMERLY USED DEFENSE SITES	<u>FUDS</u>	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	0	0	1.0000
SUB-TOTAL		0	0	

STATE (LA) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
SITES WITH CONTROLS	<u>/C</u>	0	0	TP/AP
NO LONGER REPORTED UNDERGROUND STORAGE TANKS	<u>NLRUST</u>	1	0	0.2500
UNDERGROUND STORAGE TANKS	<u>UST</u>	0	0	0.2500
APPROVED HURRICANE DEBRIS DUMP SITES	ADS	1	0	0.5000
HISTORICAL LEAKING UNDERGROUND STORAGE TANKS	<u>HLUST</u>	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	<u>LUST</u>	0	0	0.5000
SOLID WASTE LANDFILLS	<u>SWLF</u>	0	0	0.5000
VOLUNTARY REMEDIATION PROGRAM SITES	<u>VRP</u>	0	0	0.5000
CONFIRMED AND POTENTIAL SITES INVENTORY	<u>CPI</u>	0	0	1.0000
SUB-TOTAL	1	2	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
Database	Actonym	Localable	Uniocatable	(IIIIes)
ASBESTOS DEMOLITION AND RENOVATION NOTIFICATION PROJECTS	<u>ASBESTOS</u>	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	<u>CDL</u>	0	0	TP/AP
LISTING OF LOUISIANA DEQ LIENS	<u>LIENS</u>	0	0	TP/AP
SPILLS LISTING	<u>SPILLS</u>	0	0	TP/AP
WASTE TIRE GENERATOR LIST	<u>WASTETIRE</u>	0	0	TP/AP
DRYCLEANING FACILITIES	<u>DCR</u>	0	0	0.2500
RECYCLING FACILITIES	<u>RCY</u>	1	0	0.5000
WASTE PITS	<u>WP</u>	44	0	0.5000
SUB-TOTAL		45	0	

LOCAL LISTING

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
CITY OF NEW ORLEANS MARKETABLE BROWNFIELD PROPERTIES	<u>MBF</u>	0	0	0.5000
CITY OF NEW ORLEANS POTENTIAL BROWNFIELD PROPERTIES	<u>PBF</u>	0	0	0.5000
CITY OF WESTWEGO BROWNFIELD RENEWAL PROJECTS	<u>WBF</u>	0	0	0.5000
SUB-TOTAL		0	0	

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	<u>USTR06</u>	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	<u>LUSTR06</u>	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	<u>ODINDIAN</u>	0	0	0.5000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	
000 101112		Ü	<u> </u>	
TOTAL		49	2	

FEDERAL LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	0.0200	О	NS	NS	NS	NS	NS	О
ERNSLA	0.0200	О	NS	NS	NS	NS	NS	o
FRSLA	0.0200	0	NS	NS	NS	NS	NS	0
HMIRSR06	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	0.0200	О	NS	NS	NS	NS	NS	o
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDESR06	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR06	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	0.0200	О	NS	NS	NS	NS	NS	o
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
NLRRCRAG	0.1250	О	О	NS	NS	NS	NS	o
RCRAGR06	0.1250	О	1	NS	NS	NS	NS	1
RCRANGR06	0.1250	О	О	NS	NS	NS	NS	o
HISTPST	0.2500	0	0	О	NS	NS	NS	0
BF	0.5000	О	О	o	o	NS	NS	o
DNPL	0.5000	О	О	o	o	NS	NS	o
NLRRCRAT	0.5000	О	О	o	o	NS	NS	o
ODI	0.5000	0	0	О	0	NS	NS	0
RCRAT	0.5000	О	О	o	0	NS	NS	o
SEMS	0.5000	О	О	o	o	NS	NS	o
SEMSARCH	0.5000	О	1	o	o	NS	NS	1
DOD	1.0000	0	0	О	О	0	NS	0
FUDS	1.0000	0	0	О	0	0	NS	0
NLRRCRAC	1.0000	О	О	o	o	o	NS	o
NPL	1.0000	О	О	o	0	0	NS	o

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
PNPL	1.0000	0	0	0	О	0	NS	0
RCRAC	1.0000	o	0	o	o	o	NS	0
RCRASUBC	1.0000	0	0	0	О	o	NS	0
RODS	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	2	0	0	0	0	2

STATE (LA) LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ASBESTOS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
IC	0.0200	О	NS	NS	NS	NS	NS	o
LIENS	0.0200	0	NS	NS	NS	NS	NS	0
SPILLS	0.0200	0	NS	NS	NS	NS	NS	0
WASTETIRE	0.0200	0	NS	NS	NS	NS	NS	0
DCR	0.2500	0	0	0	NS	NS	NS	0
NLRUST	0.2500	О	1	o	NS	NS	NS	1
UST	0.2500	О	o	o	NS	NS	NS	o
ADS	0.5000	О	o	o	1	NS	NS	1
HLUST	0.5000	О	o	o	o	NS	NS	o
LUST	0.5000	О	o	o	О	NS	NS	o
RCY	0.5000	0	0	0	1	NS	NS	1
SWLF	0.5000	О	o	o	o	NS	NS	o
VRP	0.5000	О	o	o	o	NS	NS	o
WP	0.5000	1	10	7	26	NS	NS	44
CPI	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		1	11	7	28	0	0	47

LOCAL LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
MBF	0.5000	0	0	0	0	NS	NS	0
PBF	0.5000	0	0	0	0	NS	NS	0
WBF	0.5000	0	0	0	0	NS	NS	0
SUB-TOTAL		0	0	0	0	0	0	0

TRIBAL LISTING

Standard environmental records are displayed in bold.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR06	0.2500	0	0	0	NS	NS	NS	0
LUSTR06	0.5000	0	0	0	o	NS	NS	o
ODINDIAN	0.5000	0	0	0	o	NS	NS	o
INDIANRES	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0

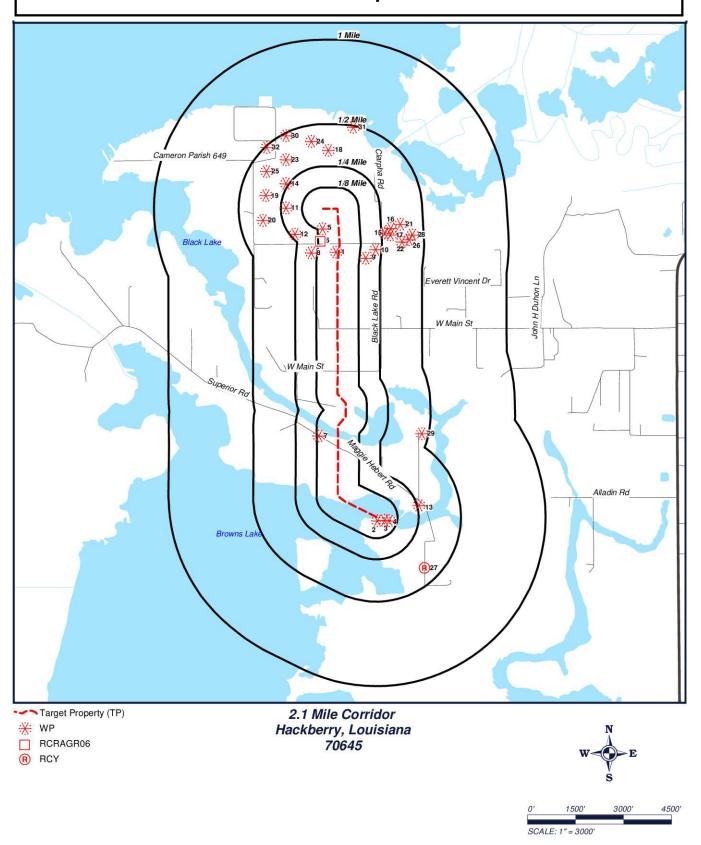
TOTAL	1	13	7	28	0	0	49

NOTES:

NS = NOT SEARCHED

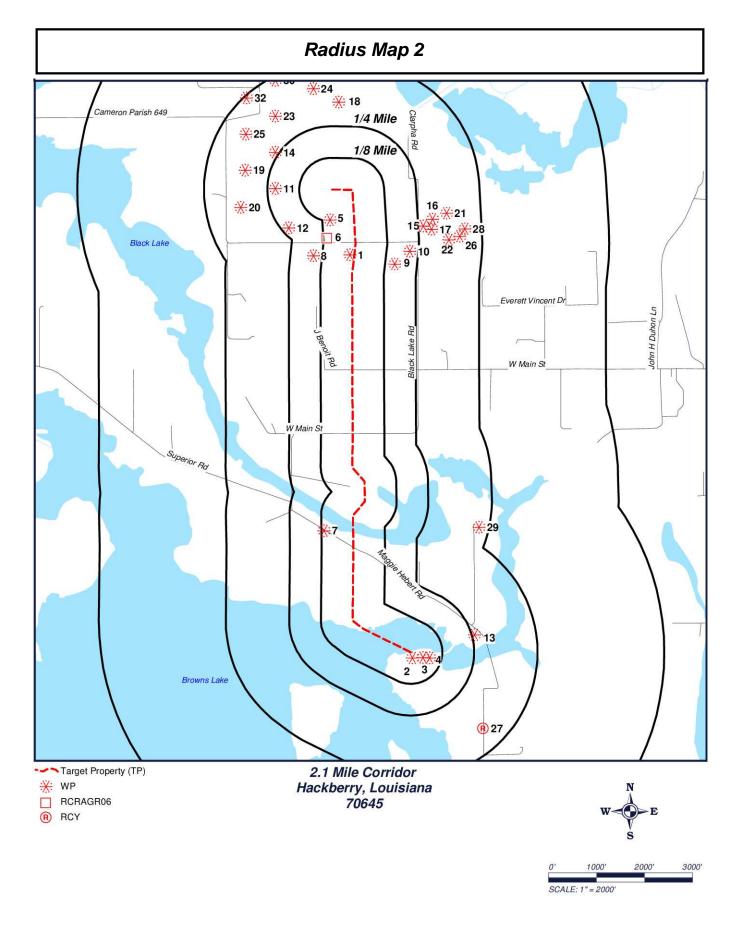
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



Click here to access Satellite view





Click here to access Satellite view



Ortho Map

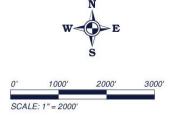




RCRAGR06

RCY

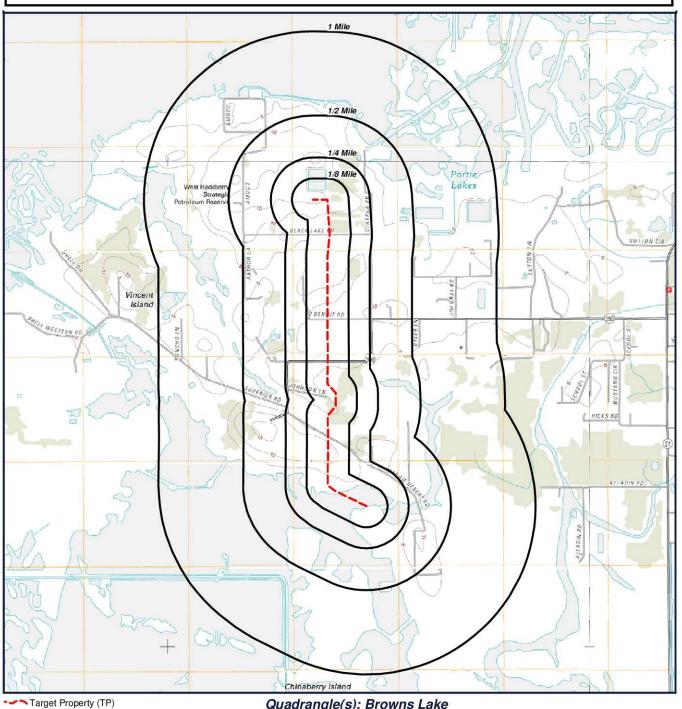
Quadrangle(s): Browns Lake 2.1 Mile Corridor Hackberry, Louisiana 70645



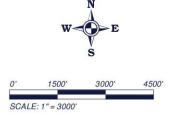
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Topographic Map



Quadrangle(s): Browns Lake Source: USGS, 03/29/2012 2.1 Mile Corridor Hackberry, Louisiana 70645



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Located Sites Summary

NOTE: Standard environmental records are displayed in **bold**.

Map ID#	Database Name	Site ID#	Distance From Site	Site Name	Address	PAGE #
1	WP	12_w_18795	0.02 mi. SW (106 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>19</u>
2	WP	12_w_18757	0.04 mi. SE (211 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>20</u>
2	WP	12_w_18756	0.03 mi. SE (158 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>21</u>
3	WP	12_w_18758	0.06 mi. SE (317 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>22</u>
4	WP	12_w_18760	0.09 mi. E (475 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>23</u>
<u>4</u>	WP	12_w_18761	0.08 mi. E (422 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>24</u>
4	WP	12_w_18759	0.07 mi. E (370 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>25</u>
<u>5</u>	WP	12_w_18792	0.1 mi. W (528 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>26</u>
<u>5</u>	WP	12_w_18793	0.1 mi. W (528 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>27</u>
<u>5</u>	WP	12_w_18791	0.1 mi. W (528 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>28</u>
<u>6</u>	RCRAGR06	LA2890032582	0.11 mi. W (581 ft.)	US DOE SPR W HACKBERRY	1450 BLACK LAKE RD, HACKBERRY, LA 70645	
<u>6</u>	SEMSARCH	LA2890032582	0.11 mi. W (581 ft.)	WEST HACKBERRY SPRING	3.8 MI W OF HACKBERRY, HWY 390, HACKBERRY, LA 70645	<u>32</u>
<u>6</u>	NLRUST	12-009739	0.11 mi. W (581 ft.)	WEST HACKBERRY STRATEGIC PETR. R	BLACK LAKE ROAD, OFF HWY 390, HACKBERRY, LA 70645	<u>33</u>
7	WP	12_mh_18487	0.12 mi. W (634 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	<u>35</u>
8	WP	12_w_18794	0.17 mi. W (898 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>36</u>
9	WP	12_mh_18450	0.17 mi. E (898 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	<u>37</u>
<u>9</u>	WP	12_f_18451	0.17 mi. E (898 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	<u>38</u>
10	WP	12_mh_18449	0.22 mi. E (1162 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	<u>39</u>
11	WP	12_w_18787	0.22 mi. W (1162 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>40</u>
<u>12</u>	WP	12_w_18790	0.24 mi. SW (1267 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>41</u>
<u>12</u>	WP	12_w_18789	0.23 mi. SW (1214 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>42</u>
<u>13</u>	WP	12_w_18754	0.27 mi. E (1426 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>43</u>
<u>13</u>	WP	12_w_18755	0.27 mi. E (1426 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>44</u>
<u>13</u>	WP	12_w_18616	0.27 mi. E (1426 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>45</u>

Located Sites Summary

14	WP	12_w_18785	0.27 mi. NW (1426 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>46</u>
<u>15</u>	WP	12_tb_18467	0.28 mi. E (1478 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	
<u>16</u>	WP	12_f_18468	0.31 mi. E (1637 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	<u>48</u>
<u>17</u>	WP	12_w_18469	0.31 mi. E (1637 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	
<u>18</u>	WP	12_w_18766	0.35 mi. N (1848 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	
<u>18</u>	WP	12_w_18767	0.35 mi. N (1848 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	
<u>18</u>	WP	12_w_18765	0.36 mi. N (1901 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	
<u>19</u>	WP	12_w_18786	0.35 mi. W (1848 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	
<u>20</u>	WP	12_w_18788	0.37 mi. W (1954 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	
<u>21</u>	WP	12_w_18471	0.37 mi. E (1954 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	<u>55</u>
<u>22</u>	WP	12_mh_18470	0.37 mi. E (1954 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	
<u>23</u>	WP	12_w_18783	0.37 mi. NW (1954 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>57</u>
24	WP	12_w_18763	0.43 mi. N (2270 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	
<u>24</u>	WP	12_w_18764	0.41 mi. N (2165 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	
24	WP	12_w_18762	0.43 mi. N (2270 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	
<u>25</u>	WP	12_w_18784	0.41 mi. NW (2165 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	
<u>26</u>	WP	12_f_18473	0.42 mi. E (2218 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	
<u>27</u>	RCY	15430	0.43 mi. SE (2270 ft.)	CAMERON PARISH POLICE JURY - HACKBERRY DUMP	495 MAGGIE HEBERT RD, HACKBERRY, LA 70645	
<u>27</u>	ADS	15430	0.43 mi. SE (2270 ft.)	CAMERON PARISH POLICE JURY- MAGGIE HEBERT RD.	MAGGIE HEBERT RD, HACKBERRY, LA 70645	
<u>28</u>	WP	12_w_18472	0.44 mi. E (2323 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	
<u>29</u>	WP	12_w_18485	0.47 mi. E (2482 ft.)	WARREN PETROLEUM COMPANY	HACKBERRY, LA 70645	
<u>30</u>	WP	12_w_18775	0.49 mi. NW (2587 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>67</u>

Located Sites Summary

<u>31</u>	WP	12_w_18770	0.5 mi. N (2640 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>68</u>
<u>31</u>	WP	12_w_18769	0.5 mi. N (2640 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>69</u>
<u>32</u>	WP	12_w_18782	0.5 mi. NW (2640 ft.)	U. S. DEPARTMENT OF ENERGY	HACKBERRY, LA 70645	<u>70</u>

MAP ID# 1

Distance from Property: 0.02 mi. (106 ft.) SW

SITE INFORMATION

ID#: 12_w_18795

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: WRT ENERGY CORPORATION

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971303, WELL #112

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 11:03

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 7'X7' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971303, WELL #112 HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 50

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 2

Distance from Property: 0.04 mi. (211 ft.) SE

SITE INFORMATION

ID#: 12_w_18757

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U. S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED**COMMENTS: **S.N. 971144, WELL #2C**

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 8:42

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: NONE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971144, WELL #2C HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 2

Distance from Property: 0.03 mi. (158 ft.) SE

SITE INFORMATION

ID#: 12_w_18756

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U. S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED COMMENTS: S.N. 971159, WELL #2-E

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 8:40

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: NONE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971159, WELL #2-E HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 3

Distance from Property: 0.06 mi. (317 ft.) SE

SITE INFORMATION

ID#: 12_w_18758

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U. S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED** COMMENTS: **S.N. 971308, WELL #2**

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 8:44

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: NONE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971308, WELL #2
HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 4

Distance from Property: 0.09 mi. (475 ft.) E

SITE INFORMATION

ID#: 12_w_18760

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U. S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED**COMMENTS: **S.N. 971143, WELL #2B**

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 8:47

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: NONE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971143, WELL #2B HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 4

Distance from Property: 0.08 mi. (422 ft.) E

SITE INFORMATION

ID#: 12_w_18761

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U. S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED**COMMENTS: **S.N. 971145, WELL #2D**

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 8:48

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: NONE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971145, WELL #2D HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 4

Distance from Property: 0.07 mi. (370 ft.) E

SITE INFORMATION

ID#: 12_w_18759

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U. S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED**COMMENTS: **S.N. 971142, WELL #2A**

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 8:45

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: NONE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971142, WELL #2A HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 5

Distance from Property: 0.1 mi. (528 ft.) W

SITE INFORMATION

ID#: 12_w_18792

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED**COMMENTS: **S.N. 086594, WELL #11**

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:50

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 8'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 086594, WELL #11
HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 50

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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MAP ID# 5

Distance from Property: 0.1 mi. (528 ft.) W

SITE INFORMATION

ID#: 12_w_18793

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971321, WELL #11B

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:53

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 8'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971321, WELL #11B HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 50

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 5

Distance from Property: 0.1 mi. (528 ft.) W

SITE INFORMATION

ID#: 12_w_18791

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 086594, WELL #11A

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:48

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 6'X7' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 086594, WELL #11A HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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Resource Conservation & Recovery Act - Generator Facilities (RCRAGR06)

MAP ID# 6

Distance from Property: 0.11 mi. (581 ft.) W

FACILITY INFORMATION

EPA ID#: LA2890032582 OWNER TYPE: FEDERAL

NAME: US DOE SPR W HACKBERRY OWNER NAME: US DEPT OF ENERGY

ADDRESS: 1450 BLACK LAKE RD OPERATOR TYPE: FEDERAL

HACKBERRY, LA 70645 OPERATOR NAME: DRAVO UTILITY CONSTRUCTORS

INC

CONTACT NAME: LEVI GABRE

CONTACT ADDRESS: 1450 BLACK LAKE RD

HACKBERRY LA 70645

CONTACT PHONE: 3375583201

NON-NOTIFIER: NOT A NON-NOTIFIER

DATE RECEIVED BY AGENCY: 06/18/2014

CERTIFICATION

CERTIFICATION NAME: CERTIFICATION TITLE: CERTIFICATION SIGNED DATE:

 JAMES E LEEMANN
 ENV DIR
 06/18/2014

 WILLIAM E BOZZO
 MGR, ENV. DEPT.
 02/26/1996

INDUSTRY CLASSIFICATION (NAICS)

42271 - PETROLEUM BULK STATIONS AND TERMINALS 42471 - PETROLEUM BULK STATIONS AND TERMINALS

SITE HISTORY (INCLUDES GENERATORS AND NON-GENERATORS)

DATE RECEIVED BY AGENCY: 06/18/2014
NAME: US DOE SPR W HACKBERRY

GENERATOR CLASSIFICATION: LARGE QUANTITY GENERATOR

DATE RECEIVED BY AGENCY: 02/26/1996

NAME: U.S.DEPT.OF ENERGY WEST HACKBERRY SITE

GENERATOR CLASSIFICATION: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR

DATE RECEIVED BY AGENCY: 03/21/1991
NAME: US DOE SPR W HACKBERRY

GENERATOR CLASSIFICATION: LARGE QUANTITY GENERATOR

CURRENT ACTIVITY INFORMATION

GENERATOR STATUS: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR LAST UPDATED DATE: 04/14/2015

SUBJECT TO CORRECTIVE ACTION UNIVERSE: NO

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: NO

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: ${f NO}$

NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: NO

CORRECTIVE ACTION WORKLOAD UNIVERSE: NO

IMPORTER: NO UNDERGROUND INJECTION: NO

MIXED WASTE GENERATOR: NO UNIVERSAL WASTE DESTINATION FACILITY: NO

RECYCLER: NO TRANSFER FACILITY: NO
TRANSPORTER: NO USED OIL FUEL BURNER: NO
ONSITE BURNER EXEMPTION: NO USED OIL PROCESSOR: NO

FURNACE EXEMPTION: **NO**USED OIL FUEL MARKETER TO BURNER: **NO**USED OIL REFINER: **NO**SPECIFICATION USED OIL MARKETER: **NO**

GeoSearch www.geo-search.com 888-396-0042

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Resource Conservation & Recovery Act - Generator Facilities (RCRAGR06)

USED OIL TRANSFER FACILITY: NO

USED OIL TRANSPORTER: NO

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS - NO EVALUATIONS REPORTED -

VIOLATIONS - NO VIOLATIONS REPORTED -

ENFORCEMENTS - NO ENFORCEMENTS REPORTED -

HAZARDOUS WASTE

D001 IGNITABLE WASTE
D002 CORROSIVE WASTE
D003 REACTIVE WASTE
D004 ARSENIC

 D005
 BARIUM

 D007
 CHROMIUM

 D008
 LEAD

 D009
 MERCURY

 D011
 SILVER

D018 BENZENE
D022 CHLOROFORM

D027 1,4-DICHLOROBENZENE
D028 1,2-DICHLOROETHANE
D030 2,4-DINITROTOLUENE
D032 HEXACHLOROBENZENE
D033 HEXACHLOROBUTADIENE
D034 HEXACHLOROETHANE

D036 NITROBENZENE

D038 PYRIDINE

D039 TETRACHLOROETHYLENE D042 2,4,6-TRICHLOROPHENOL

F001 THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING:

TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE ANDCHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL;

ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS

FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

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Resource Conservation & Recovery Act - Generator Facilities (RCRAGR06)

THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

F006 WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

P105 SODIUM AZIDE

U080 METHANE, DICHLORO-U080 METHYLENE CHLORIDE U122 FORMALDEHYDE U220 BENZENE, METHYL-U220 TOLUENE

U226 ETHANE, 1,1,1-TRICHLORO-U226 METHYL CHLOROFORM U239 BENZENE, DIMETHYL- (I,T)

U239 XYLENE (I)

<u>UNIVERSAL WASTE</u> - NO UNIVERSAL WASTE REPORTED -

CORRECTIVE ACTION AREA - NO CORRECTIVE ACTION AREA INFORMATION REPORTED -

CORRECTIVE ACTION EVENT - NO CORRECTIVE ACTION EVENT REPORTED -

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Superfund Enterprise Management System Archived Site Inventory (SEMSARCH)

MAP ID# 6

Distance from Property: 0.11 mi. (581 ft.) W

FACILITY INFORMATION

EPA ID#: **LA2890032582**SITE ID#: **0600775**

NAME: WEST HACKBERRY SPRING

ADDRESS: 3.8 MI W OF HACKBERRY, HWY 390

HACKBERRY, LA 70645

COUNTY: CAMERON

FEDERAL FACILITY: FEDERAL FACILITY

NPL: NOT ON THE NPL

NON NPL STATUS: NFRAP-SITE DOES NOT QUALIFY FOR THE NPL BASED ON EXISTING INFORMATION

Below information was gathered from the prior NFRAP update completed in 10/2013 update:

ACTION START DATE COMPLETION DATE RESPONSIBILITY

PA - PRELIMINARY ASSESSMENT 10/1/1985 10/1/1985 FED FAC

SI - SITE INSPECTION 8/1/1985 8/1/1985 FED FAC

DS - DISCOVERY NOT REPORTED 11/1/1984 EPA FUND
VS - ARCHIVE SITE NOT REPORTED 10/1/1985 EPA IN-HOUSE

ACTION DESCRIPTIONS

- PA (PRELIMINARY ASSESSMENT) COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.
- SI (SITE INSPECTION) THE PROCESS OF COLLECTING SITE DATA AND SAMPLES TO CHARACTERIZE THE SEVERITY OF THE HAZARD FOR THE HAZARD RANKING SCORE AND/OR ENFORCEMENT SUPPORT.
- DS (DISCOVERY) THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.
- VS (ARCHIVE SITE) THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

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No Longer Reported Underground Storage Tanks (NLRUST)

OWNER INFORMATION

NAME: U.S. DEPARTMENT OF ENERGY SPR

ADDRESS: 900 EAST COMMERCE ROAD

OWNER OPERATING STATUS: (A) ACTIVE

, LA, 70123

OWNER ID #: 00300500

PHONE: 504 734-4353

MAP ID# 6

Distance from Property: 0.11 mi. (581 ft.) W

* DATA USED IN THIS REPORT ORIGINATES FROM A NO LONGER ACTIVE FILING SYSTEM OF THE LOUISIANA DEQ. THIS DATA WAS LAST UPDATED IN FEBRUARY OF 2004.

FACILITY INFORMATION

ID#: **12-009739**

NAME: WEST HACKBERRY STRATEGIC PETR. R
ADDRESS: BLACK LAKE ROAD, OFF HWY 390

HACKBERRY, LA 70645

PARISH: CAMERON

REGION: 5

FACILITY OPERATING STATUS: (E)

OF TANKS: 3

INDIAN LAND: (.) NOT ON INDIAN LAND
MANAGER NAME: ALLEN FRUGE
MANAGER TITLE: SR. SITE REP.
MANAGER PHONE: (318) 762-4406

FORM AMMENDED: X

FORM SIGNED BY: DWAYNE GRAY
TITLE SIGNED BY: ASSIS. PROJECT
FROM SIGNED DATE: 03-27-90

TANK INFORMATION

TANK ID#: 26087 CAPACITY (GAL): 6006

USE: IN USE CONTENTS:

INSTALLED: 80/05/05 REPLACEMENT: (N) NOT A REPLACEMENT

OPERATING STATUS: NOT REPORTED

EMPTY STATUS: (.) NOT EMPTY

LEAKING: (N) NO

TANK MATERIAL: **STEEL**INTERIOR PROTECTION: **LINED**

EXTERIOR PROTECTION: CATHODIC

PIPING NETWORK: CATHODICALLY PROTECTED

TANK INFORMATION

TANK ID#: 26088 CAPACITY (GAL): 1008

USE: IN USE CONTENTS:

INSTALLED: 80/05/05 REPLACEMENT: Y

OPERATING STATUS: NOT REPORTED

EMPTY STATUS: (.) NOT EMPTY

LEAKING: (N) NO

TANK MATERIAL: STEEL

INTERIOR PROTECTION: LINED EXTERIOR PROTECTION: CATHODIC

PIPING NETWORK: CATHODICALLY PROTECTED

TANK INFORMATION

TANK ID#: 26089 CAPACITY (GAL): 793

USE: IN USE CONTENTS:

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No Longer Reported Underground Storage Tanks (NLRUST)

INSTALLED: 80/05/05 REPLACEMENT: (N) NOT A REPLACEMENT

OPERATING STATUS: NOT REPORTED EMPTY STATUS: (.) NOT EMPTY

LEAKING: **(N) NO**TANK MATERIAL: **STEEL**INTERIOR PROTECTION: **NONE**EXTERIOR PROTECTION: **PAINTED**PIPING NETWORK: **NOT REPORTED**

REPLACEMENT INFORMATION

REPLACEMENT DATE: NOT REPORTED REPLACEMENT AGE: NOT REPORTED

REPLACEMENT LEAK: (.) NO LEAK WHEN REPLACED SOIL CONTAMINATION: (.) NO LEAK WHEN REPLACED

REPLACEMENT INFORMATION

REPLACEMENT DATE: NOT REPORTED REPLACEMENT AGE: NOT REPORTED

REPLACEMENT LEAK: (.) NO LEAK WHEN REPLACED SOIL CONTAMINATION: (.) NO LEAK WHEN REPLACED

REPLACEMENT INFORMATION

REPLACEMENT DATE: NOT REPORTED REPLACEMENT AGE: NOT REPORTED

REPLACEMENT LEAK: (.) NO LEAK WHEN REPLACED SOIL CONTAMINATION: (.) NO LEAK WHEN REPLACED

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MAP ID# 7

Distance from Property: 0.12 mi. (634 ft.) W

SITE INFORMATION

ID#: 12_mh_18487

OPERATOR: WARREN PETROLEUM COMPANY

LAND OWNER: VINCENT HEIRS INC.

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: MANIFOLD HEADER - A DEVICE (USUALLY A PIPE OR PIPE SEGMENTS) THAT SERVES AS A MOUNTING POINT

FOR VALVES LEADING TO CONNECTING PIPELINES

PIT DESCRIPTION: NOT REPORTED COMMENTS: NOT REPORTED

INSPECTION DATE: 09/09/1997 INSPECTION TIME: 10:12

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: YES

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, CHAIN LINK FENCE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: **NOT REPORTED**HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): **45**

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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MAP ID# 8

Distance from Property: 0.17 mi. (898 ft.) W

SITE INFORMATION

ID#: 12_w_18794

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: WRT ENERGY CORPORATION

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971299, WELL #108

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:58

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 6'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971299, WELL #108 HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 9

Distance from Property: 0.17 mi. (898 ft.) E

SITE INFORMATION

ID#: 12_mh_18450

OPERATOR: WARREN PETROLEUM COMPANY

LAND OWNER: TRIDENT NGL, INC.

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: MANIFOLD HEADER - A DEVICE (USUALLY A PIPE OR PIPE SEGMENTS) THAT SERVES AS A MOUNTING POINT

FOR VALVES LEADING TO CONNECTING PIPELINES

PIT DESCRIPTION: NOT REPORTED COMMENTS: NOT REPORTED

INSPECTION DATE: 09/05/1997 INSPECTION TIME: 14:33

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: YES

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, BARBED WIRE FENCE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: NOT REPORTED

HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 9

Distance from Property: 0.17 mi. (898 ft.) E

SITE INFORMATION

ID#: 12_f_18451

OPERATOR: WARREN PETROLEUM COMPANY

LAND OWNER: TRIDENT NGL, INC.

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: FACILITY - A PLACE WHERE PETROLEUM IS PROCESSED AND/OR SEPARATED PRIOR TO DISTRIBUTION AND/OR

TRANSPORTATION BY PIPELINES OR BARGES

PIT DESCRIPTION: SEE COMMENTS

COMMENTS: WELL #5, PROPANE WELL AND PIPELINE HEADER INSPECTION DATE: 09/05/1997 INSPECTION TIME: 14:43

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: YES

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, PIPE RAIL
DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: WELL #5, PROPANE WELL AND PIPELINE HEADER

HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 50

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 10

Distance from Property: 0.22 mi. (1,162 ft.) E

SITE INFORMATION

ID#: 12_mh_18449

OPERATOR: WARREN PETROLEUM COMPANY

LAND OWNER: TRIDENT NGL, INC.

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: MANIFOLD HEADER - A DEVICE (USUALLY A PIPE OR PIPE SEGMENTS) THAT SERVES AS A MOUNTING POINT

FOR VALVES LEADING TO CONNECTING PIPELINES

PIT DESCRIPTION: NOT REPORTED COMMENTS: NOT REPORTED

INSPECTION DATE: 09/05/1997 INSPECTION TIME: 14:22

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: YES

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, PIPE RAIL
DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: NOT REPORTED

HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 50

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 11

Distance from Property: 0.22 mi. (1,162 ft.) W

SITE INFORMATION

ID#: 12_w_18787

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971296, WELL #105

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:31

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 7'X7' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971296, WELL #105 HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 12

Distance from Property: 0.24 mi. (1,267 ft.) SW

SITE INFORMATION

ID#: 12_w_18790

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971198, WELL #117A

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:43

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 7'X7' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971198, WELL #117A HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 12

Distance from Property: 0.23 mi. (1,214 ft.) SW

SITE INFORMATION

ID#: 12_w_18789

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971199, WELL #117B

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:40

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 7'X7' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971199, WELL #117B HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 13

Distance from Property: 0.27 mi. (1,426 ft.) E

SITE INFORMATION

ID#: 12_w_18754

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U. S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED COMMENTS: S.N. 971141, WELL #1-C

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 8:14

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: NONE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971141, WELL #1-C HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

Order# 67530 Job# 146779 43 of 86

MAP ID# 13

Distance from Property: 0.27 mi. (1,426 ft.) E

SITE INFORMATION

ID#: 12_w_18755

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U. S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED COMMENTS: S.N. 971140, WELL #1-B

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 8:17

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: NONE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971140, WELL #1-B HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 13

Distance from Property: 0.27 mi. (1,426 ft.) E

SITE INFORMATION

ID#: 12_w_18616

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED COMMENTS: S.N. 971139, WELL #1-A

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 8:09

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: NONE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971139, WELL #1-A HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

Order# 67530 Job# 146779 45 of 86

MAP ID# 14

Distance from Property: 0.27 mi. (1,426 ft.) NW

SITE INFORMATION

ID#: 12_w_18785

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED COMMENTS: S.N. 971292, WELL #101

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:24

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 8'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971292, WELL #101 HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

Order# 67530 Job# 146779 46 of 86

MAP ID# 15

Distance from Property: 0.28 mi. (1,478 ft.) E

SITE INFORMATION

ID#: 12_tb_18467

OPERATOR: WARREN PETROLEUM COMPANY

LAND OWNER: TRIDENT NGL, INC.

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: TANK BATTERY - A GROUP OF OIL STORAGE TANKS

PIT DESCRIPTION: NOT REPORTED

COMMENTS: 1 TANK

INSPECTION DATE: 09/08/1997 INSPECTION TIME: 13:05

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: YES

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: LEVEE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: 42"

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: 1 TANK

HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 16

Distance from Property: 0.31 mi. (1,637 ft.) E

SITE INFORMATION

ID#: 12_f_18468

OPERATOR: WARREN PETROLEUM COMPANY

LAND OWNER: TRIDENT NGL, INC.

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: FACILITY - A PLACE WHERE PETROLEUM IS PROCESSED AND/OR SEPARATED PRIOR TO DISTRIBUTION AND/OR

TRANSPORTATION BY PIPELINES OR BARGES
PIT DESCRIPTION: 1 SEPARATOR, 1 FLARE

COMMENTS: NOT REPORTED

INSPECTION DATE: 09/08/1997 INSPECTION TIME: 1:11

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: YES

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: NONE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: NOT REPORTED
HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 50

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 17

Distance from Property: 0.31 mi. (1,637 ft.) E

SITE INFORMATION

ID#: 12_w_18469

OPERATOR: WARREN PETROLEUM COMPANY

LAND OWNER: TRIDENT NGL, INC.

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED

COMMENTS: WELL #3 (BUTANE), FAXYWC, FAPRMA, FAHIST, FASTRD, SURVEY PLAT, AND P AND A REPORT WAS

RESEARCHED AND IS ATTACHED IN THE FINAL REPORT.

INSPECTION DATE: 09/08/1997 INSPECTION TIME: 13:15

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, PIPE RAIL
DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: WELL #3 (BUTANE), FAXYWC, FAPRMA, FAHIST, FASTRD, SURVEY PLAT, AND P AND A REPORT WAS RESEARCHED AND IS ATTACHED IN THE FINAL REPORT.

HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 18

Distance from Property: 0.35 mi. (1,848 ft.) N

SITE INFORMATION

ID#: 12_w_18766

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED** COMMENTS: **S.N.** 032032, **WELL** #8

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 9:20

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 8'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 032032, WELL #8
HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 18

Distance from Property: 0.35 mi. (1,848 ft.) N

SITE INFORMATION

ID#: 12_w_18767

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED**COMMENTS: **S.N. 971316, WELL #8A**

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 9:23

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 8'X10' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971316, WELL #8A HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 18

Distance from Property: 0.36 mi. (1,901 ft.) N

SITE INFORMATION

ID#: 12_w_18765

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED COMMENTS: S.N. 971317, WELL #8B

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 9:18

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 8'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971317, WELL #8B HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 19

Distance from Property: 0.35 mi. (1,848 ft.) W

SITE INFORMATION

ID#: 12_w_18786

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971295, WELL #104

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:27

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 7'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971295, WELL #104 HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 20

Distance from Property: 0.37 mi. (1,954 ft.) W

SITE INFORMATION

ID#: 12_w_18788

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971297, WELL #106

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:36

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 6'X6' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971297, WELL #106 HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 21

Distance from Property: 0.37 mi. (1,954 ft.) E

SITE INFORMATION

ID#: 12_w_18471

OPERATOR: WARREN PETROLEUM COMPANY

LAND OWNER: TRIDENT NGL, INC.

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED

COMMENTS: S.N. 972315, WELL #12, BRINE WELL

INSPECTION DATE: 09/08/1997 INSPECTION TIME: 13:29

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, PIPE RAIL
DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 972315, WELL #12, BRINE WELL

HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 50

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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MAP ID# 22

Distance from Property: 0.37 mi. (1,954 ft.) E

SITE INFORMATION

ID#: 12_mh_18470

OPERATOR: WARREN PETROLEUM COMPANY

LAND OWNER: TRIDENT NGL, INC.

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: MANIFOLD HEADER - A DEVICE (USUALLY A PIPE OR PIPE SEGMENTS) THAT SERVES AS A MOUNTING POINT

FOR VALVES LEADING TO CONNECTING PIPELINES

PIT DESCRIPTION: NOT REPORTED

COMMENTS: 4" ASSEMBLY

INSPECTION DATE: 09/08/1997 INSPECTION TIME: 13:20

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: YES

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: NONE

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: 4" ASSEMBLY

HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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MAP ID# 23

Distance from Property: 0.37 mi. (1,954 ft.) NW

SITE INFORMATION

ID#: 12_w_18783

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971294, WELL #103

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:17

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 6'X6' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971294, WELL #103 HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 24

Distance from Property: 0.43 mi. (2,270 ft.) N

SITE INFORMATION

ID#: 12_w_18763

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U. S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED

COMMENTS: S.N. 971318, WELL #9A, NO SIGN; FAXYWC, FAPRMA, FAHIST, FASTRD, SURVEY PLAT, AND P AND A REPORT

WAS RESEARCHED AND IS ATTACHED IN THE FINAL REPORT.
INSPECTION DATE: 09/25/1997 INSPECTION TIME: 9:11

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 8'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971318, WELL #9A, NO SIGN; FAXYWC, FAPRMA, FAHIST, FASTRD, SURVEY PLAT,

AND P AND A REPORT WAS RESEARCHED AND IS ATTACHED IN THE FINAL REPORT.

HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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MAP ID# 24

Distance from Property: 0.41 mi. (2,165 ft.) N

SITE INFORMATION

ID#: 12_w_18764

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED** COMMENTS: **S.N.** 032661, **WELL** #9

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 9:13

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 6'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 032661, WELL #9
HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 24

Distance from Property: 0.43 mi. (2,270 ft.) N

SITE INFORMATION

ID#: 12_w_18762

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U. S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED**COMMENTS: **S.N. 971319, WELL #9B**

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 9:08

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 6'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971319, WELL #9B HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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MAP ID# 25

Distance from Property: 0.41 mi. (2,165 ft.) NW

SITE INFORMATION

ID#: 12_w_18784

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971293, WELL #102

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:20

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 7'X7' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971293, WELL #102 HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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MAP ID# 26

Distance from Property: 0.42 mi. (2,218 ft.) E

SITE INFORMATION

ID#: 12_f_18473

OPERATOR: WARREN PETROLEUM COMPANY

LAND OWNER: TRIDENT NGL, INC.

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: FACILITY - A PLACE WHERE PETROLEUM IS PROCESSED AND/OR SEPARATED PRIOR TO DISTRIBUTION AND/OR

TRANSPORTATION BY PIPELINES OR BARGES

PIT DESCRIPTION: SEE COMMENTS
COMMENTS: 3 SEPARATORS, 4 PUMPS

INSPECTION DATE: 09/08/1997 INSPECTION TIME: 13:38

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: YES

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: CONCRETE CURB DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: 6"

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: 3 SEPARATORS, 4 PUMPS HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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Recycling Facilities (RCY)

MAP ID# 27

Distance from Property: 0.43 mi. (2,270 ft.) SE

SITE INFORMATION

GEOSEARCH ID: 15430

Al: 15430

NAME: CAMERON PARISH POLICE JURY - HACKBERRY DUMP

ADDRESS: 495 MAGGIE HEBERT RD HACKBERRY, LA 70645

SITE DETAILS

ACT NUMBER: PER19990001

SIC CODE: 4953

PERMIT: 0560-00160-00 START DATE: 9/23/1999 END DATE: 4/19/2016 PROGRAM: AIR REGION: SOUTHWEST

MAIL ADDRESS: PO BOX 1280 CAMERON, LA 70631

DESCRIPTION: STATE PERMIT (UNSPECIFIED)

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Approved Hurricane Debris Dump Sites (ADS)

MAP ID# 27

Distance from Property: 0.43 mi. (2,270 ft.) SE

SITE INFORMATION

ID#: 15430

NAME: CAMERON PARISH POLICE JURY-MAGGIE HEBERT RD.

ADDRESS: MAGGIE HEBERT RD

HACKBERRY, LA 70645

PARISH: CAMERON

SITE DETAILS

CATEGORY: NEW TEMPORARY SITE

PERMIT NUMBER: NOT REPORTED

REQUESTED ACTIVITY: STAGE, BURN (ACD)
SITE OPERATOR: CAMERON PARISH POLICE JURY
SITE OWNER: CAMERON PARISH POLICE JURY

SITE OWNER ADDRESS: P. O. BOX 1280, CAMERON, LA 70631

SITE OWNER PHONE: 337-249-9695
CONTACT NAME: NOT REPORTED
CONTACT PHONE: NOT REPORTED

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MAP ID# 28

Distance from Property: 0.44 mi. (2,323 ft.) E

SITE INFORMATION

ID#: 12_w_18472

OPERATOR: WARREN PETROLEUM COMPANY

LAND OWNER: TRIDENT NGL, INC.

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED

COMMENTS: S.N. 972086 WELL #1, RAW PRODUCT, FAXYWC, FAPRMA, FAHIST, FASTRD, SURVEY PLAT, AND P AND A

REPORT WAS RESEARCHED AND IS ATTACHED IN THE FINAL REPORT.

INSPECTION DATE: 09/08/1997 INSPECTION TIME: 13:35

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2
GENERAL DESCRIPTION OF CONTAINMENT: BARRIER

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 972086 WELL #1, RAW PRODUCT, FAXYWC, FAPRMA, FAHIST, FASTRD, SURVEY PLAT, AND P AND A REPORT WAS RESEARCHED AND IS ATTACHED IN THE FINAL REPORT.

HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 55

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

Back to Report Summary

MAP ID# 29

Distance from Property: 0.47 mi. (2,482 ft.) E

SITE INFORMATION

ID#: 12_w_18485

OPERATOR: WARREN PETROLEUM COMPANY LAND OWNER: HELEN NOBLES SAUCIER

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED** COMMENTS: **S.N. 972463, WELL #1**

INSPECTION DATE: 09/09/1997 INSPECTION TIME: 10:00

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: OTHER, PIPE RAIL
DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 972463, WELL #1
HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 50

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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MAP ID# 30

Distance from Property: 0.49 mi. (2,587 ft.) NW

SITE INFORMATION

ID#: 12_w_18775

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971300, WELL #109

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 9:49

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 6'X6' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971300, WELL #109 HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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MAP ID# 31

Distance from Property: 0.5 mi. (2,640 ft.) N

SITE INFORMATION

ID#: 12_w_18770

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED**COMMENTS: **S.N. 971315, WELL #7B**

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 9:32

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 8'X10' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971315, WELL #7B HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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MAP ID# 31

Distance from Property: 0.5 mi. (2,640 ft.) N

SITE INFORMATION

ID#: 12_w_18769

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: **NOT REPORTED**COMMENTS: **S.N.** 031739, **WELL** #7

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 9:30

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 8'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 031739, WELL #7
HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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MAP ID# 32

Distance from Property: 0.5 mi. (2,640 ft.) NW

SITE INFORMATION

ID#: 12_w_18782

OPERATOR: U. S. DEPARTMENT OF ENERGY LAND OWNER: U.S. DEPARTMENT OF ENERGY

PARISH: CAMERON

OIL FIELD NAME: W. HACKBERRY

PIT TYPE: WELL - AN OIL AND/OR GAS WELL

PIT DESCRIPTION: NOT REPORTED
COMMENTS: S.N. 971298, WELL #107

INSPECTION DATE: 09/25/1997 INSPECTION TIME: 10:13

STATUS: ACTIVE

IS PIT PROPERLY MARKED WITH AN ID SIGN OR PLAQUE?: YES

IS THERE A SITE PLAN FOR THE FACILITY?: NO

IS THE AREAS AFFECTED BY SPILLS MAPPED ON THE SITE PLAN?: NO

HAVE THE ENVIRONMENTALLY SENSITIVE AREAS (E.G. WETLAND) NEAR THE FACILITY BEEN MAPPED?: NO

NUMBER OF PHOTOS TAKEN OF FACILITY/SITE: 2

GENERAL DESCRIPTION OF CONTAINMENT: BARRIER, 6'X8' CONCRETE SUMP

DEPTH OF FLUID NECESSARY TO OVERFLOW COTAINMENT: NONE

CONDITION OF CONTAINMENT: ADEQUATE

CONTAINMENT BREACHED?: NO

GENERAL COMMENTS ABOUT SITE: S.N. 971298, WELL #107 HAZARD / CLEANUP RANKING (RANGE OF VALUES 0 - 90): 45

REMEDIAL ACTION INFORMATION

NO DATA REPORTED

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Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

Database Name	Site ID#	Site Name	Address	City/State/Zip/County
RCRAGR06	LAR000068759*G	USEPA HURRICANE IKE 2ND BAYOU STAGING AREA	WEST END OF 2ND BAYOU RD	HACKBERRY 70645 Cameron
RCRANGR06	LAD980745160*N G	SHELL OIL CO CRUDE OIL TERMINAL	CHALKLEY TERMINAL	HACKBERRY 70645 Cameron

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance.

BRS Biennial Reporting System

VERSION DATE: 12/31/11

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 01/20/16

The U.S. Department of Justice ("the Department") provides this information 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. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 08/03/15

This database includes site locations where Engineering and/or Institutional Controls have been identified as part



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of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ERNSLA Emergency Response Notification System

VERSION DATE: 02/21/16

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSLA Facility Registry System

VERSION DATE: 02/03/16

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR06 Hazardous Materials Incident Reporting System

VERSION DATE: 11/08/15

The HMIRS database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 12/06/15

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

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ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 12/20/15

In 2006, the Integrated Compliance Information System (ICIS) - National Pollutant Discharge Elimination System (NPDES) became the NPDES national system of record for select states, tribes and territories. ICIS-NPDES is an information management system maintained by the United States Environmental Protection Agency's Office of Compliance to track permit compliance and enforcement status of facilities regulated by the NPDES under the Clean Water Act. ICIS-NPDES is designed to support the NPDES program at the state, regional, and national levels.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 02/12/16

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States Nuclear Regulatory Commission (NRC) licensing requirements.

NPDESR06 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Information in this database is extracted from the Water Permit Compliance System (PCS) database which is used by United States Environmental Protection Agency to track surface water permits issued under the Clean Water Act. This database includes permitted facilities located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. The NPDES database was collected from December 2002 until April 2007. Refer to the PCS and/or ICIS-NPDES database as source of current data.

PADS PCB Activity Database System

VERSION DATE: 07/01/14

The PCB Activity Database System (PADS) is used by the United States Environmental Protection Agency to monitor the activities of polychlorinated biphenyls (PCB) handlers.

PCSR06 Permit Compliance System

VERSION DATE: 08/01/12

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The Permit Compliance System is used in tracking enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act and is maintained by the United States Environmental Protection Agency's Office of Compliance. PCS is designed to support the NPDES program at the state, regional, and national levels. This database includes permitted facilities located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. PCS has been modernized, and no longer exists. National Pollutant Discharge Elimination System (ICIS-NPDES) data can now be found in Integrated Compliance Information System (ICIS).

RCRASC RCRA Sites with Controls

VERSION DATE: 02/23/16

This list of Resource Conservation and Recovery Act sites with institutional controls in place is provided by the U.S. Environmental Protection Agency.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency 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. This database contains those CERCLIS sites where the Lien on Property action is complete.

SSTS Section Seven Tracking System

VERSION DATE: 12/08/14

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/14

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/06

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site.

NLRRCRAGNo Longer Regulated RCRA Generator Facilities

VERSION DATE: 02/09/16

This database includes RCRA Generator facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly generated hazardous waste.

Large Quantity Generators: Generate 1,000 kg or more of hazardous waste during any calendar month; or Generate more than 1 kg of acutely hazardous waste during any calendar month; or Generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month; or Generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1kg of acutely hazardous waste at any time; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Small Quantity Generators: Generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or Generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.

Conditionally Exempt Small Quantity Generators: Generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or Generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

RCRAGR06 Resource Conservation & Recovery Act - Generator Facilities

VERSION DATE: 02/09/16

This database includes sites listed as generators of hazardous waste (large, small, and exempt) in the RCRAInfo



system. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). This database includes sites located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

Large Quantity Generators: Generate 1,000 kg or more of hazardous waste during any calendar month; or Generate more than 1 kg of acutely hazardous waste during any calendar month; or Generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month; or Generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1kg of acutely hazardous waste at any time; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Small Quantity Generators: Generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or Generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.

Conditionally Exempt Small Quantity Generators: Generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or Generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

RCRANGR06

Resource Conservation & Recovery Act - Non-Generator Facilities

VERSION DATE: 02/09/16

This database identifies RCRAInfo system sites that only handle hazardous waste, such as transporters, without generating any amount hazardous waste. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). This database includes sites located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

HISTPST

Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes



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Cities Service filling stations that were located throughout the United States in 1930.

BF Brownfields Management System

VERSION DATE: 01/28/16

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. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

DNPL Delisted National Priorities List

VERSION DATE: 03/07/16

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 02/09/16

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 02/09/16

This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste in the RCRAInfo system. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of



1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

SEMS Superfund Enterprise Management System

VERSION DATE: 03/07/16

The U.S. Environmental Protections Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 03/16/16

The Superfund Enterprise Management System Archive listing (SEMS-ARCHIVE) has replaced the CERCLIS NFRAP reporting system in 2015. This listing reflect sites that have been assessed and no further remediation is planned and is of no further interest under the Superfund program.

DOD Department of Defense Sites

VERSION DATE: 06/21/10

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 06/01/15

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

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NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 02/09/16

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NPL National Priorities List

VERSION DATE: 03/07/16

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL Proposed National Priorities List

VERSION DATE: 03/07/16

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 02/09/16

This database includes all hazardous waste sites with ongoing corrective action activity and where corrective action is statutorily required to be address but have not had corrective action imposed in the RCRAInfo system. The Corrective Action Program requires owners or operators of RCRA facilities (or treatment, storage, and disposal facilities) to investigate and cleanup contamination in order to protect human health and the environment. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 02/09/16

This database includes hazardous waste sites which are potentially subject to corrective action regardless of whether they have correction action underway, plus any sites showing a corrective action event of RFI or beyond in the RCRAInfo system. Sites conducting corrective action under analogous state authorities are also included. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and



reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

RODS Record of Decision System

VERSION DATE: 07/01/13

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

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Environmental Records Definitions - STATE (LA)

ASBESTOS

Asbestos Demolition and Renovation Notification Projects

VERSION DATE: 02/10/16

This listing of Asbestos Demolition and Renovation Projects is provided by the Louisiana Department of Environmental Quality (DEQ). In accordance with the DEQ Air Quality Regulations, LAC 33:III.5151.F.1.f, any contractor performing removal of asbestos containing material that involves Regulated Asbestos Containing Material (see definition in LAC 33:III.5151.B) must become licensed by the Louisiana State Licensing Board for Contractors.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 02/13/16

This list of Clandestine Methamphetamine Labs is provided by the Louisiana Department of Environmental Quality. These residential real properties have been reported as potentially contaminated:

IC Sites With Controls

VERSION DATE: 12/15/15

This site listing is maintained by the Louisiana Department of Environmental Quality's Remediation Division. Institutional controls (IC) are administrative and/or legal measures in place to safeguard the public and the environment from potential contamination. In certain circumstances, local zoning or ordinances can serve as an IC. This listing may also include locations where Engineering Controls are in effect, such as a cap, barrier, or other engineering device to prevent access, exposure, or continued migration of contamination.

LIENS Listing of Louisiana DEQ Liens

VERSION DATE: 08/25/15

A listing of liens filed against properties by the Remediation Services Division of the Louisiana Department of Environmental Quality.

SPILLS Spills Listing

VERSION DATE: 03/23/16

The Louisiana Department of Environmental Quality provides this database. Information includes releases of hazardous or potential hazardous chemical/materials into the environment.

WASTETIRE Waste Tire Generator List

VERSION DATE: 03/16/16

This listing of registered waste tire generators is maintained by the Louisiana Department of Environmental Quality.



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Environmental Records Definitions - STATE (LA)

DCR Drycleaning Facilities

VERSION DATE: 04/18/16

This listing of drycleaning facilities was provided by the Louisiana Department of Environmental Quality.

NLRUST No Longer Reported Underground Storage Tanks

VERSION DATE: 02/01/04

This Underground Storage Tank listing originates from the no longer active PEL filing sytem of the Louisiana Department of Environmental Quality.

UST Underground Storage Tanks

VERSION DATE: 03/03/16

The Underground Storage Tank database includes a listing of registered underground storage tanks maintained by the Louisiana Department of Environmental Quality.

ADS Approved Hurricane Debris Dump Sites

VERSION DATE: 02/24/16

This Louisiana Department of Environmental Quality listing of hurricane debris sites contains the temporary and the permitted landfills in the state that can currently accept hurricane debris (C&D, chipping, grinding, burning, staging, woodwaste). These landfills include Type I (Non-hazardous Industrial), Type II (Municipal) and Type III (Construction and Demolition Debris and Wood Waste).

HLUST Historical Leaking Underground Storage Tanks

VERSION DATE: 03/26/99

The Historical Leaking Underground Storage Tank database provides descriptive leaking facility reports from the Louisiana Department of Environmental Quality's Underground Storage Tanks Case History System. This database has not been updated since 1999. Please refer to LUST database as source of current data.

LUST Leaking Underground Storage Tanks

VERSION DATE: 03/02/16

This database contains facilities with reported leaking underground storage tanks and is maintained by the by the Louisiana Department of Environmental Quality.

RCY Recycling Facilities

VERSION DATE: 04/01/16

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Environmental Records Definitions - STATE (LA)

This listing of recycling facilities is maintained by the Louisiana Department of Environmental Quality.

SWLF Solid Waste Landfills

VERSION DATE: 05/11/16

This Louisiana Department of Environmental Quality solid waste facility listing includes type I, II, and III landfills. A type I facility is used for the disposal of industrial solid waste. A type II facility is used for the disposal of residential or commercial solid waste. A type III facility is defined in LAC 33:VII.115 as a facility used for disposing or processing of construction/demolition debris or wood waste, composting organic waste to produce a usable material, or separating recyclable wastes. Residential, commercial, or industrial solid waste must not be disposed in a type III facility.

VRP Voluntary Remediation Program Sites

VERSION DATE: 12/15/15

The Louisiana Department of Environmental Quality's Voluntary Remediation Program (VRP) provides a mechanism by which property owners (or potential owners) or others can clean up contaminated properties and receive a release of liability for further cleanup of historical contamination at a site. This release of liability flows to future owners of the property as well.

WP Waste Pits

VERSION DATE: 01/01/99

This listing is from a 1999 Louisiana Oil Spill Coordinator's Office (LOSCO) study, which identified statewide abandoned non-hazardous waste pits and facilities that have the potential to initiate an oil spill.

CPI Confirmed and Potential Sites Inventory

VERSION DATE: 04/25/16

The Inactive and Abandoned Sites Division of the Louisiana Department of Environmental Quality maintains the confirmed and potential sites inventory. This listing contains state-equivalent CERCLIS hazardous wastes sites.

MBF City of New Orleans Marketable Brownfield Properties

VERSION DATE: 03/15/07

This listing of marketable brownfield properties is maintained by the City of New Orleans Office of Environmental Affairs. All properties included on this listing are or are alleged to be closed service stations.

PBF City of New Orleans Potential Brownfield Properties

VERSION DATE: NR

The Brownfields database is maintained by the City of New Orleans Office of Environmental Affairs. This listing of potential brownfields includes abandoned or underused industrial or commercial properties with possible environmental contamination. The Louisiana Department of Environmental Quality and the United States Environmental Protection Agency provide support to the City of New Orleans for the redevelopment of these properties. The information contained within this listing was complied sometime between 2002 and 2003.

WBF City of Westwego Brownfield Renewal Projects

VERSION DATE: 10/01/08

The Westwego Brownfields Renewal Project was started in October 2000, funded by a \$200,000 EPA Grant from Region VI. Mayor Robert Billiot and the Westwego City Council are committed to identifying and restoring the brownfield sites in Westwego. This is being done in conjunction with the redevelopment of the City's historic Salaville area.

USTR06 Underground Storage Tanks On Tribal Lands

VERSION DATE: 05/13/15

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

LUSTR06 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 04/01/15

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

INDIANRES Indian Reservations

VERSION DATE: 01/01/00

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.



Date: 05/23/16

GS Job Number: 67530

Company Name: S&B Infrastructure-Houston

Project Number:

Site Information: 2.1 Mile Corridor

Cameron Parish, Hackberry, Louisiana, 70645

The collections of fire insurance maps listed below were reviewed according to the site information supplied by client. Based on the information provided, no coverage is available.

Library of Congress University Publications of America Other Libraries (universities, state, local, etc.).

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GeoPlus Oil & Gas Report

Satellite view

Target Property:

2.1 Mile Corridor Hackberry, Cameron Parish, Louisiana 70645

Prepared For:

S&B Infrastructure-Houston

Order #: 67530 Job #: 146783 Date: 05/24/2016

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Target Property Summary

Target Property Information

2.1 Mile Corridor Hackberry, Louisiana 70645

Coordinates

Corridor

USGS Quadrangle

Browns Lake, LA

Geographic Coverage Information

County/Parish: Cameron (LA)

ZipCode(s):

Hackberry LA: 70645

Radon

* Target property is located in Radon Zone .

Database Radius Summary

STATE (LA) LISTING

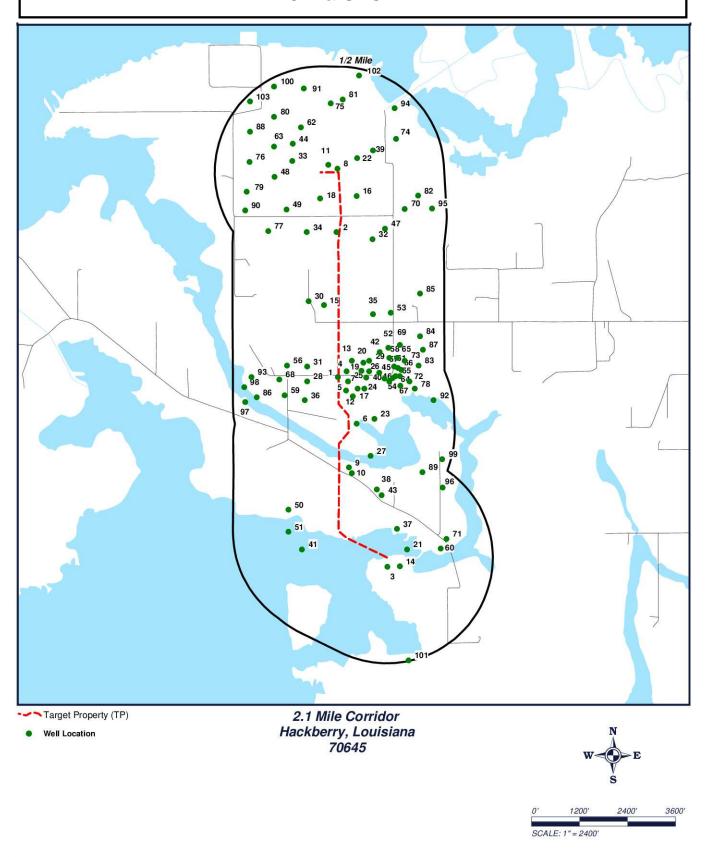
Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
OG	0.5000	2	26	45	65	NS	NS	138
SUB-TOTAL		2	26	45	65	0	0	138

TOTAL	2	26	45	65	0	0	138

NOTES:

NS = NOT SEARCHED TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

OIL & GAS MAP



Click here to access Satellite view



Map ID#	Database Name	Site ID#	Distance From Site	Site Name	Address
1	OG	21241	0.01 mi. N (53 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
2	OG	971303	0.02 mi. SW (106 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
3	OG	971144	0.03 mi. SE (158 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
3	OG	971159	0.03 mi. SE (158 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
4	OG	66625	0.04 mi. E (211 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
5	OG	12453	0.04 mi. SE (211 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
5	OG	12246	0.04 mi. SE (211 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
6	OG	12118	0.04 mi. NE (211 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
7	OG	53386	0.05 mi. SE (264 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
8	OG	16616	0.04 mi. N (211 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
9	OG	19373	0.05 mi. E (264 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
10	OG	140752	0.06 mi. E (317 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
11	OG	16617	0.06 mi. N (317 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
12	OG	12832	0.07 mi. E (370 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
13	OG	16964	0.07 mi. NE (370 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
14	OG	971143	0.08 mi. SE (422 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
14	OG	971142	0.07 mi. E (370 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
14	OG	971145	0.08 mi. E (422 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
15	OG	127227	0.07 mi. W (370 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
16	OG	126782	0.09 mi. NE (475 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
17	OG	131098	0.1 mi. SE (528 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
18	OG	86594	0.1 mi. W (528 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
18	OG	971320	0.1 mi. W (528 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
18	OG	973120	0.1 mi. W (528 ft.)		ASSUMPTION COUNTY, BELLE ROSE, LA 70341
18	OG	971321	0.1 mi. W (528 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645
19	OG	12621	0.13 mi. E (686 ft.)		CAMERON COUNTY, HACKBERRY, LA 70645

OG	12537	0.11 mi. E (581 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	13701	0.12 mi. E (634 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	28238	0.12 mi. NE (634 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	29320	0.13 mi. NE (686 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	12540	0.13 mi. E (686 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	12605	0.13 mi. E (686 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	65591	0.14 mi. E (739 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	12569	0.13 mi. E (686 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	12542	0.16 mi. E (845 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	12622	0.15 mi. E (792 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	14536	0.14 mi. SE (739 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	74240	0.15 mi. W (792 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	21727	0.15 mi. E (792 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	10657	0.17 mi. W (898 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	69827	0.15 mi. W (792 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	89355	0.15 mi. W (792 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	972090	0.16 mi. E (845 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	10492	0.16 mi. NW (845 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	971299	0.16 mi. W (845 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	53342	0.17 mi. E (898 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	18984	0.17 mi. W (898 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	114659	0.17 mi. NE (898 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	19565	0.18 mi. E (950 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	29540	0.19 mi. NE (1003 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	29532	0.21 mi. NE (1109 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
OG	12488	0.19 mi. E	CAMERON COUNTY, HACKBERRY, LA 70645
	OG O	OG 13701 OG 28238 OG 29320 OG 12540 OG 12605 OG 65591 OG 12569 OG 12542 OG 12622 OG 14536 OG 74240 OG 21727 OG 10657 OG 69827 OG 89355 OG 972090 OG 10492 OG 971299 OG 53342 OG 18984 OG 114659 OG 19565 OG 29540 OG 29532	(581 ft.) OG 13701 0.12 mi. E (634 ft.) OG 28238 0.12 mi. NE (634 ft.) OG 29320 0.13 mi. NE (686 ft.) OG 12540 0.13 mi. E (686 ft.) OG 12605 0.13 mi. E (686 ft.) OG 12605 0.13 mi. E (686 ft.) OG 12569 0.13 mi. E (686 ft.) OG 12569 0.13 mi. E (686 ft.) OG 12542 0.16 mi. E (6845 ft.) OG 12622 0.15 mi. E (792 ft.) OG 14536 0.14 mi. SE (739 ft.) OG 74240 0.15 mi. W (792 ft.) OG 0 10657 0.17 mi. W (792 ft.) OG 10667 0.15 mi. W (792 ft.) OG 10657 0.15 mi. W (792 ft.) OG 10659 0.16 mi. E (845 ft.) OG 972090 0.16 mi. E (845 ft.) OG 10492 0.16 mi. W (845 ft.) OG 10492 0.16 mi. W (845 ft.) OG 10492 0.17 mi. W (898 ft.) OG 18984 0.17 mi. W (898 ft.) OG 18984 0.17 mi. W (898 ft.) OG 19565 0.18 mi. E (9950 ft.)

40	OG	21281	0.2 mi. E (1056 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
40	OG	12518	0.22 mi. E (1162 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
41	OG	75405	0.19 mi. W (1003 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
42	OG	66987	0.2 mi. E (1056 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
43	OG	13867	0.21 mi. E (1109 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
14	OG	67841	0.21 mi. NW (1109 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
45	OG	12519	0.22 mi. E (1162 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
46	OG	68425	0.25 mi. E (1320 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
47	OG	972089	0.22 mi. E (1162 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
48	OG	971296	0.22 mi. W (1162 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
49	OG	971198	0.24 mi. SW (1267 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
19	OG	971199	0.23 mi. SW (1214 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
50	OG	46275	0.24 mi. W (1267 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
51	OG	73947	0.24 mi. W (1267 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
52	OG	64719	0.24 mi. E (1267 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
53	OG	12570	0.25 mi. E (1320 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
53	OG	57177	0.25 mi. E (1320 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
54	OG	12484	0.26 mi. E (1373 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
55	OG	12485	0.25 mi. E (1320 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
55	OG	12464	0.27 mi. E (1426 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
55	OG	12487	0.25 mi. E (1320 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
55	OG	12486	0.26 mi. E (1373 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
56	OG	93878	0.25 mi. W (1320 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
57	OG	12460	0.27 mi. E (1426 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
58	OG	52059	0.25 mi. E (1320 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
59	OG	12319	0.26 mi. W (1373 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645

60	OG	971139	0.27 mi. E (1426 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
60	OG	971140	0.27 mi. E (1426 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
60	OG	971141	0.26 mi. E (1373 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
60	OG	971138	0.26 mi. E (1373 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
61	OG	12360	0.28 mi. E (1478 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
62	OG	126845	0.26 mi. NW (1373 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
63	OG	10491	0.27 mi. NW (1426 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
63	OG	971292	0.27 mi. NW (1426 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
64	OG	12562	0.29 mi. E (1531 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
64	OG	12495	0.29 mi. E (1531 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
65	OG	51100	0.28 mi. E (1478 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
66	OG	12529	0.3 mi. E (1584 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
67	OG	21481	0.3 mi. E (1584 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
68	OG	12676	0.29 mi. W (1531 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
69	OG	66402	0.29 mi. E (1531 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
70	OG	972088	0.31 mi. E (1637 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
71	OG	971308	0.31 mi. E (1637 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
72	OG	40861	0.34 mi. E (1795 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
72	OG	41028	0.34 mi. E (1795 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
72	OG	12489	0.32 mi. E (1690 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
73	OG	12845	0.32 mi. E (1690 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
74	OG	16287	0.33 mi. NE (1742 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
74	OG	16618	0.33 mi. NE (1742 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
75	OG	971316	0.35 mi. N (1848 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
75	OG	971317	0.35 mi. N (1848 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
75	OG	32032	0.35 mi. N (1848 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645

76	OG	971295	0.35 mi. W (1848 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
77	OG	29372	0.35 mi. W (1848 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
78	OG	12375	0.36 mi. NE (1901 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
79	OG	971297	0.36 mi. W (1901 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
79	OG	971661	0.37 mi. W (1954 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
80	OG	971294	0.36 mi. NW (1901 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
81	OG	54573	0.37 mi. N (1954 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
82	OG	972315	0.38 mi. E (2006 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
83	OG	15295	0.38 mi. E (2006 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
84	OG	85808	0.39 mi. E (2059 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
84	OG	68852	0.39 mi. E (2059 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
85	OG	126995	0.39 mi. E (2059 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
86	OG	92057	0.39 mi. W (2059 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
87	OG	21379	0.4 mi. E (2112 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
88	OG	971293	0.4 mi. NW (2112 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
89	OG	84389	0.4 mi. E (2112 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
90	OG	22151	0.4 mi. SW (2112 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
91	OG	32661	0.43 mi. N (2270 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
91	OG	971319	0.44 mi. N (2323 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
91	OG	971318	0.41 mi. N (2165 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
92	OG	12346	0.42 mi. E (2218 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
93	OG	112805	0.42 mi. W (2218 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
94	OG	10611	0.43 mi. NE (2270 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
95	OG	972086	0.44 mi. E (2323 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
96	OG	85306	0.44 mi. NE (2323 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
96	OG	972464	0.45 mi. NE (2376 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645

97	OG	74362	0.45 mi. W (2376 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
98	OG	54439	0.45 mi. W (2376 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
99	OG	972463	0.46 mi. E (2429 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
100	OG	971300	0.49 mi. NW (2587 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
101	OG	95510	0.49 mi. S (2587 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
102	OG	971315	0.5 mi. N (2640 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
102	OG	31739	0.5 mi. N (2640 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645
103	OG	971298	0.5 mi. NW (2640 ft.)	CAMERON COUNTY, HACKBERRY, LA 70645

MAP ID	API#	WELL NAME AND NUMBER	WELL TYPE	PERMIT DATE	SPUD DATE	COMP. DAT	E T.D.	STR	LATITUDE	LONGITUDE
1	00000000000000	LUDGER DUHON	NO PRODUCT SPECIFIED	05/07/38	NR	NR	0	T12S S29 R10	29.9830	-93.4009
2	17023880810000	DOE SPR	NO PRODUCT SPECIFIED	10/16/79	11/22/80	02/28/81	5050	T12S S20 R10	29.9929	-93.4010
3	17023880550000	DOE SWD	NO PRODUCT SPECIFIED	05/22/79	05/16/78	10/21/78	6284	T12S S33 R10	29.9700	-93.3967
3	17023880570000	DOE SWD	NO PRODUCT SPECIFIED	08/11/78	08/11/78	NR	6718	T12S S33 R10	29.9700	-93.3970
4	17023015870000	VERNIE H SUDUWISCHER	OIL	06/24/57	06/24/57	07/24/57	3058	T12S S28 R10	29.9834	-93.4002
5	17023015840000	LUDGER DUHON	NO PRODUCT SPECIFIED	02/06/29	NR	NR	0	T12S S28 R10	29.9823	-93.4002
5	17023015850000	LUDGER DUHON	OIL	11/05/28	11/02/28	NR	3168	T12S S28 R10	29.9820	-93.4003
6	17023015880000	LUDGER DUHON	NO PRODUCT SPECIFIED	08/25/28	08/21/28	NR	4017	T12S S28 R10	29.9798	-93.3994
7	17023015830000	LUDGER DUHONE ET AL	NO PRODUCT SPECIFIED	08/26/54	NR	NR	0	T12S S28 R10	29.9827	-93.4001
8	00000000000000	J C ELENDER	NO PRODUCT SPECIFIED	01/10/34	03/30/34	04/29/34	2655	T12S S20 R10	29.9972	-93.4009
9	17023015550000	DROZAN HEBERT	NO PRODUCT SPECIFIED	10/14/36	10/24/36	12/12/36	6026	T12S S33 R10	29.9768	-93.4000
10	17023206870000	HEBERT ESTATE	NO PRODUCT SPECIFIED	09/01/72	09/06/72	09/16/72	6260	T12S S33 R10	29.9764	-93.3998
11	00000000000000	CLARA NELLENDER	NO PRODUCT SPECIFIED	01/10/34	05/01/34	06/04/34	0	T12S S20 R10	29.9975	-93.4016
12	00000000000000	LUDGER DUHON	NO PRODUCT SPECIFIED	07/06/29	07/15/29	NR	3424	T12S S28 R10	29.9816	-93.3997
13	17023015860000	KAOUGH	NO PRODUCT SPECIFIED	05/24/34	07/07/34	11/13/35	3172	T12S S28 R10	29.9841	-93.3998
14	17023880540000	DOE SWD	NO PRODUCT SPECIFIED	05/22/79	09/03/78	10/20/78	5837	T12S S33 R10	29.9699	-93.3958
14	17023880530000	DOE SWD	NO PRODUCT SPECIFIED	05/22/79	07/02/78	09/27/78	7684	T12S S33 R10	29.9700	-93.3960
14	17023880560000	DOE SWD	NO PRODUCT SPECIFIED	05/22/79	08/07/78	10/20/78	6239	T12S S33 R10	29.9699	-93.3958
15	17023202800000	LENARD HUGHES	NO PRODUCT SPECIFIED	12/13/68	NR	NR	0	T12S S29 R10	29.9879	-93.4020
16	17023202650000	B LYONS PALMER	NO PRODUCT SPECIFIED	11/13/68	11/30/68	12/27/68	1630	T12S S21 R10	29.9954	-93.3994
17	17023204260000	LUDGER DUHON	NO PRODUCT SPECIFIED	11/12/69	11/12/69	11/21/69	3968	T12S S28 R10	29.9822	-93.3993
18	17023014720000	DOE SPR	NO PRODUCT SPECIFIED	09/12/61	10/07/61	01/18/62	4000	T12S S20 R10	29.9951	-93.4023
18	17023880960000	DOE SPR	NO PRODUCT SPECIFIED	06/09/78	08/25/78	11/04/78	3744	T12S S20 R10	29.9952	-93.4023
18	17007880600000	DOW BRINE	NO PRODUCT SPECIFIED	05/08/02	NR	NR	4000	T12S S42 R13	29.9952	-93.4023
18	17023880970000	DOE SPR	NO PRODUCT SPECIFIED	06/09/78	11/13/78	01/09/79	3760	T12S S20 R10	29.9949	-93.4023
19	17023015920000	KAOUGH	NO PRODUCT SPECIFIED	04/23/29	04/22/29	NR	3293	T12S S28 R10	29.9834	-93.3988
19	17023015930000	KAOUGH	OIL	03/14/29	03/19/29	NR	3029	T12S S28 R10	29.9834	-93.3990
20	00000000000000	SANNER	OIL	04/21/30	NR	NR	0	T12S S28 R10	29.9839	-93.3989
21	17023015570000	JOHN D HEBERT	NO PRODUCT SPECIFIED	03/26/43	04/04/43	05/22/43	9710	T12S S33 R10	29.9712	-93.3954
22	00000000000000	J C ELLENDER	NO PRODUCT SPECIFIED	04/27/44	NR	NR	0	T12S S21 R10	29.9980	-93.3994
23	17023025080000	LUGER DUHON	OIL	03/18/29	03/19/29	NR	3197	T12S S28 R10	29.9801	-93.3980
24	00000000000000	LUDGER DUHON	NO PRODUCT SPECIFIED	04/13/29	NR	NR	0	T12S S28 R10	29.9822	-93.3988
25	17023015950000	VERNIE H SUBWISCHER	NO PRODUCT SPECIFIED	04/03/57	03/30/57	04/10/57	3030	T12S S28 R10	29.9829	-93.3985
25	17023015940000	LUDGER DUHON	OIL	04/03/29	04/19/29	NR	3170	T12S S28 R10	29.9829	-93.3987
25	17023015960000	LUGER DUHON	OIL	03/19/29	03/02/29	NR	3140	T12S S28 R10	29.9828	-93.3983
26	17023015910000	KAOUGH	OIL	04/23/29	04/24/29	NR	3152	T12S S28 R10	29.9834	-93.3984

27	17023015530000	C HEBERT EST	NO PRODUCT SPECIFIED	03/06/31	NR	NR	0	T12S S33 R10 29.9776	-93.3983
28	17023015340000	BEULAH DUHON DUGAS	NO PRODUCT SPECIFIED	03/17/59	03/16/59	03/21/59	3150	T12S S29 R10 29.9827	-93.4033
29	17023015970000	DORISSE KAOUGH	OIL	09/27/38	10/12/38	11/14/38	3040	T12S S28 R10 29.9841	-93.3984
30	17023015400000	LITTLE	NO PRODUCT SPECIFIED	02/12/27	02/25/27	NR	1838	T12S S29 R10 29.9884	-93.4036
30	17023015270000	JASPER LITTLE ET AL	NO PRODUCT SPECIFIED	03/18/58	03/20/58	04/01/58	1833	T12S S29 R10 29.9882	-93.4032
31	17023015450000	DUGAS, ET AL	OIL	03/22/62	03/26/62	04/08/62	3353	T12S S29 R10 29.9837	-93.4033
32	17023881250000	LPG STORAGE	NO PRODUCT SPECIFIED	03/14/59	03/29/59	04/24/59	3344	T12S S28 R10 29.9924	-93.3981
33	17023014710000	CLARA ELLENDER	NO PRODUCT SPECIFIED	12/10/26	12/17/26	NR	1639	T12S S20 R10 29.9978	-93.4045
34	17023880770000	DOE SPR	NO PRODUCT SPECIFIED	09/11/79	03/15/80	05/29/80	5060	T12S S29 R10 29.9929	-93.4033
35	17023016210000	BLAKE OIL-BENOIT	NO PRODUCT SPECIFIED	08/20/54	08/10/54	08/14/54	2002	T12S S28 R10 29.9873	-93.3981
36	17023015410000	L DUHON A	NO PRODUCT SPECIFIED	06/08/36	06/28/36	08/06/36	5378	T12S S29 R10 29.9814	-93.4035
37	17023024650000	ARMOGENE HEBERT	NO PRODUCT SPECIFIED	04/13/66	05/04/66	05/11/66	7501	T12S S33 R10 29.9726	-93.3962
38	17023015540000	CHRISTINE-HEBERT	NO PRODUCT SPECIFIED	01/02/37	01/17/37	02/26/37	6553	T12S S33 R10 29.9753	-93.3978
39	00000000000000	J C ELLENDER	NO PRODUCT SPECIFIED	07/17/44	NR	NR	0	T12S S21 R10 29.9982	-93.3984
39	17023014790000	CLARA N ELLENDER	NO PRODUCT SPECIFIED	07/14/44	07/13/44	07/20/44	1645	T12S S21 R10 29.9985	-93.3981
40	00000000000000	KAOUGH	OIL	02/25/29	03/10/29	NR	3251	T12S S28 R10 29.9830	-93.3977
40	17023016010000	DORISSE KAOUGH	OIL	05/18/38	07/23/38	08/17/38	3060	T12S S28 R10 29.9833	-93.3976
40	17023016020000	MRS DORIS KAOUGH	NO PRODUCT SPECIFIED	03/10/29	NR	NR	0	T12S S28 R10 29.9833	-93.3973
41	17023015480000	ARMOGEN HERBERT	NO PRODUCT SPECIFIED	06/11/59	06/30/59	08/25/59	7360	T12S S32 R10 29.9712	-93.4037
42	17023016220000	VERNIE HEBERT SUDWISCHER	OIL	07/18/57	07/14/57	08/26/57	3055	T12S S28 R10 29.9847	-93.3976
43	17023015520000	HEBERT	NO PRODUCT SPECIFIED	06/05/30	06/06/30	NR	7834	T12S S33 R10 29.9749	-93.3974
44	00000000000000	CLARE N ELENDER	NO PRODUCT SPECIFIED	09/18/57	10/14/57	07/01/58	1525	T12S S20 R10 29.9989	-93.4045
45	17023016030000	LUDGER DUHON	OIL	03/10/29	NR	NR	3209	T12S S28 R10 29.9829	-93.3972
46	17023016040000	LUDGER DUHON	NO PRODUCT SPECIFIED	11/05/57	11/13/57	01/04/58	3451	T12S S28 R10 29.9827	-93.3968
47	17023881240000	LPG STORAGE	NO PRODUCT SPECIFIED	03/03/58	02/20/58	03/12/58	3200	T12S S28 R10 29.9931	-93.3972
48	17023880740000	DOE SPR	NO PRODUCT SPECIFIED	09/11/79	05/04/80	07/15/80	4594	T12S S20 R10 29.9967	-93.4059
49	17023880610000	DOE STORAGE	NO PRODUCT SPECIFIED	09/26/83	10/21/83	12/27/83	5050	T12S S20 R10 29.9943	-93.4050
49	17023880620000	DOE STORAGE	NO PRODUCT SPECIFIED	09/26/83	01/05/84	03/08/84	4592	T12S S20 R10 29.9944	-93.4050
50	17023015500000	BENSON VINCENT C	NO PRODUCT SPECIFIED	07/08/52	07/26/52	08/19/52	6624	T12S S32 R10 29.9739	-93.4048
51	17023015490000	FLAVIA REEDS	NO PRODUCT SPECIFIED	02/20/59	04/12/59	04/27/59	6456	T12S S32 R10 29.9724	-93.4048
52	17023016250000	VERNIE HEBERT SUDWISER	OIL	01/16/57	01/16/57	01/31/57	3283	T12S S28 R10 29.9850	-93.3969
53	17023016270000	JOHNIE BENOIT	NO PRODUCT SPECIFIED	04/03/29	04/08/29	04/18/29	2147	T12S S28 R10 29.9871	-93.3967
53	17023016280000	V H SUDWISCHER	NO PRODUCT SPECIFIED	06/22/55	06/21/55	06/19/57	3088	T12S S28 R10 29.9874	-93.3967
54	17023016050000	LUGER DUHON	OIL	02/25/29	02/25/29	NR	3273	T12S S28 R10 29.9829	-93.3965
55	17023016060000	MRS DORIS KAOUGH	OIL	02/25/29	02/28/29	NR	3214	T12S S28 R10 29.9832	-93.3966
55	00000000000000	R VINCENT	OIL	02/16/29	NR	NR	0	T12S S28 R10 29.9830	-93.3963
55	0000000000000	MRS DORIS KAOUGH	OIL	02/25/29	02/26/29	NR	3597	T12S S28 R10 29.9836	-93.3968
55	17023016200000	MRS DORIS KAOUGH	OIL	02/25/29	02/24/29	NR	3280	T12S S28 R10 29.9835	-93.3966

56	17022015460000	EI WATTS ET AL	OIL	12/21/62	12/24/62	01/24/63	2830	T12S S20 D10, 20 0020	-93.4049
56 57	17023015460000	E L WATTS, ET AL SANNER	OIL	02/14/29	12/24/62 NR	01/24/63 NR	0	T12S S29 R10 29.9838 T12S S28 R10 29.9837	-93.4049 -93.3965
58	17023016240000	VERNIE HEBERT SUDWISCHER	OIL	04/27/54	04/20/54	06/11/54	3125	T12S S28 R10 29.9843	-93.3968
59	17023015250000	BENSON VINCENT	NO PRODUCT SPECIFIED	12/08/28	12/19/28	NR	3825	T12S S29 R10 29.9817	-93.4051
60	17023880500000	DOE SWD	NO PRODUCT SPECIFIED	05/22/79	04/17/78	10/17/78	8141	T12S S33 R10 29.9711	-93.3927
60	17023880510000	DOE SWD	NO PRODUCT SPECIFIED	05/22/79	11/07/78	02/21/79	7013	T12S S33 R10 29.9712	-93.3928
60	17023880520000	DOE SWD	NO PRODUCT SPECIFIED	05/22/79	07/24/78	10/26/78	7445	T12S S33 R10 29.9711	-93.3928
60	00000000000000	DOE SWD	NO PRODUCT SPECIFIED	05/22/79	06/27/77	08/13/77	6285	T12S S33 R10 29.9709	-93.3929
61	17023016180000	R SAUNER	OIL	01/04/29	01/04/29	NR	3159	T12S S28 R10 29.9836	-93.3962
62	17023202680000	AGNES E LOWREY	NO PRODUCT SPECIFIED	11/15/68	11/29/68	12/27/68	1595	T12S S20 R10 30.0001	-93.4038
63	17023022330000	A M BARBE	NO PRODUCT SPECIFIED	12/10/26	12/18/26	NR	1645	T12S S20 R10 29.9991	-93.4056
63	17023880700000	DOE SPR	NO PRODUCT SPECIFIED	09/11/79	04/10/80	06/21/80	5045	T12S S20 R10 29.9987	-93.4059
64	00000000000000	NOBLE	OIL	03/28/29	03/29/29	NR	3289	T12S S28 R10 29.9827	-93.3961
64	00000000000000	VINCENT	OIL	02/27/29	03/05/29	04/08/29	3437	T12S S28 R10 29.9830	-93.3960
65	17023016330000	RAYMOND SANNER ET AL	NO PRODUCT SPECIFIED	01/26/54	01/22/54	01/22/54	3300	T12S S28 R10 29.9843	-93.3962
66	17023016130000	RAYMOND SAUNER	OIL	03/12/29	03/12/29	04/10/29	3237	T12S S28 R10 29.9835	-93.3959
67	17023016400000	CORA E LYONS ET AL	NO PRODUCT SPECIFIED	07/13/38	NR	NR	0	T12S S28 R10 29.9824	-93.3960
68	17023015260000	BENSON VINCENT	NO PRODUCT SPECIFIED	05/18/29	05/22/29	NR	3455	T12S S29 R10 29.9828	-93.4055
69	17023016310000	NATALIE VICENT ET AL B	OIL	06/05/57	07/16/57	08/15/57	3129	T12S S28 R10 29.9852	-93.3960
70	17023881230000	LPG STORAGE	NO PRODUCT SPECIFIED	03/14/57	05/22/57	06/23/57	3050	T12S S21 R10 29.9945	-93.3956
71	17023880860000	DOE SWD	NO PRODUCT SPECIFIED	07/27/77	07/29/77	08/23/77	7011	T12S S33 R10 29.9719	-93.3923
72	17023016120000	RAYMOND VINCENT	NO PRODUCT SPECIFIED	05/29/50	06/07/50	07/27/50	3822	T12S S28 R10 29.9833	-93.3953
72	17023016090000	RAYMOND VINCENT	OIL	06/21/50	06/21/50	06/27/50	3572	T12S S28 R10 29.9827	-93.3952
72	17023016100000	R VINCENT	OIL	02/25/29	03/08/29	NR	3308	T12S S28 R10 29.9830	-93.3955
73	17023016170000	R SAUNER	OIL	07/10/29	07/12/29	NR	3087	T12S S28 R10 29.9841	-93.3956
74	000000000000000	ARCHIE LITTLE	NO PRODUCT SPECIFIED	08/12/33	09/02/33	09/30/33	3003	T12S S21 R10 29.9994	-93.3964
74	17023025150000	GRANGER	NO PRODUCT SPECIFIED	01/10/34	02/03/34	03/07/34	0	T12S S21 R10 29.9993	-93.3963
75 75	17023880920000 17023880930000	DOE SPR DOE SPR	NO PRODUCT SPECIFIED NO PRODUCT	02/03/78	04/29/78	06/01/78	3459	T12S S20 R10 30.0016 T12S S20 R10 30.0017	-93.4017 -93.4014
75 75	000000000000000000000000000000000000000	DOE SPR	SPECIFIED NO PRODUCT	06/01/78	06/01/78 NR	06/22/78 NR	3456	T12S S20 R10 30.0017 T12S S20 R10 30.0017	-93.4014 -93.4016
76	17023880730000	DOE SPR	SPECIFIED NO PRODUCT	09/11/79	04/10/80	08/28/80	5060	T12S S20 R10 30.0017	-93.4079
76	1702301530000	ARCHIE LITTLE	SPECIFIED NO PRODUCT	05/16/44	05/24/44	05/30/44	1777	T12S S20 R10 29.9977	-93.4079
78	17023015380000	R VINCENT	SPECIFIED NO PRODUCT	01/09/29	03/24/44	NR	4142	T12S S28 R10 29.9822	-93.3948
78	17023015980000	DOE SPR	SPECIFIED NO PRODUCT	09/11/79	03/15/80	09/07/80	2250	T12S S28 R10 29.9822 T12S S20 R10 29.9956	-93.4080
79	17023881080000	DOE SPR	SPECIFIED NO PRODUCT	09/11/79	09/13/80	09/07/80 NR	4336	T12S S20 R10 29.9956	-93.4081
80	17023880720000	DOE SPR	SPECIFIED NO PRODUCT	09/11/79	06/08/80	08/07/80	5079	T12S S20 R10 29.9930	-93.4059
81	17023007840000	J C ELLENDER	SPECIFIED NO PRODUCT	11/24/54	12/01/54	12/06/54	1550	T12S S20 R10 30.0000	-93.4005
	020001010000		SPECIFIED		.2,01704	.2.30,04		1.20 02. 1.10 00.0020	

82	17023881380000	TARGA LPG STORAGE	NO PRODUCT SPECIFIED	09/19/91	10/08/91	11/03/91	3900	T12S S21 R10 29.9954	-93.3945
83	17023025090000	SANNER	NO PRODUCT SPECIFIED	06/28/32	NR	NR	0	T12S S28 R10 29.9838	-93.3945
84	17023016290000	NATALIE VINCENT ET AL	NO PRODUCT SPECIFIED	07/28/61	08/02/61	02/16/62	3209	T12S S28 R10 29.9858	-93.3944
84	17023016290000	NATALIE VINCENT ET AL B	OIL	12/10/57	12/17/57	12/29/57	3315	T12S S28 R10 29.9858	-93.3944
85	17023202760000	GLADYS TRAHAN	NO PRODUCT SPECIFIED	11/25/68	NR	12/27/68	1933	T12S S28 R10 29.9887	-93.3944
86	17023015470000	VINCENT EST A	OIL	09/04/62	10/16/62	02/15/63	3000	T12S S29 R10 29.9816	-93.4073
87	00000000000000	R VINCENT	OIL	06/14/38	06/20/38	07/14/38	3159	T12S S28 R10 29.9848	-93.3942
88	17023880710000	DOE SPR	NO PRODUCT SPECIFIED	09/11/79	05/01/80	08/28/80	5060	T12S S20 R10 29.9998	-93.4078
89	17023015560000	MAGGIE HEBERT ET AL	NO PRODUCT SPECIFIED	04/28/61	05/21/61	06/03/61	6789	T12S S33 R10 29.9765	-93.3942
90	17023014730000	D KAOUGH C	NO PRODUCT SPECIFIED	02/11/39	02/16/39	04/04/39	7313	T12S S30 R10 29.9944	-93.4082
91	00000000000000	DOE SPR	NO PRODUCT SPECIFIED	11/19/46	NR	NR	3578	T12S S20 R10 30.0028	-93.4032
91	17023880950000	DOE SPR	NO PRODUCT SPECIFIED	03/29/78	03/21/78	04/28/78	0	T12S S20 R10 30.0027	-93.4036
91	17023880940000	DOE SPR	NO PRODUCT SPECIFIED	02/03/78	02/01/78	03/19/78	3548	T12S S20 R10 30.0024	-93.4034
92	17023015890000	PERKINS	NO PRODUCT SPECIFIED	12/27/28	01/06/29	NR	4585	T12S S28 R10 29.9814	-93.3933
93	17023024340000	ARTHUR LITTLE ET AL	NO PRODUCT SPECIFIED	11/30/65	11/26/65	12/02/65	3500	T12S S29 R10 29.9830	-93.4077
94	17023007870000	U A BELL	NO PRODUCT SPECIFIED	01/22/27	01/28/27	NR	1605	T12S S21 R10 30.0014	-93.3964
95	17023881210000	LPG STORAGE	NO PRODUCT SPECIFIED	03/14/57	04/08/57	05/20/57	3000	T12S S21 R10 29.9945	-93.3934
96	17023015510000	MAGGIE HEBERT ET AL	NO PRODUCT SPECIFIED	06/27/61	07/02/61	07/13/61	6802	T12S S33 R10 29.9755	-93.3929
96	17023881450000	TRIDENT SWD	NO PRODUCT SPECIFIED	09/02/93	NR	NR	0	T12S S33 R10 29.9754	-93.3926
97	17023015390000	BENSON VINCENT HEIRS	NO PRODUCT SPECIFIED	03/26/59	03/30/59	04/10/59	2937	T12S S29 R10 29.9813	-93.4082
98	17023015280000	BENSON VINCENT ETAL	OIL	11/15/54	11/14/54	02/14/55	2983	T12S S29 R10 29.9823	-93.4083
99	17023881440000	TARGA SWD	NO PRODUCT SPECIFIED	09/02/93	11/03/93	12/15/93	6000	T12S S33 R10 29.9773	-93.3926
100	17023880780000	DOE SPR	NO PRODUCT SPECIFIED	10/16/79	09/05/80	11/23/80	5090	T12S S20 R10 30.0028	-93.4059
101	17023015590000	WM T BURTON IND INC	NO PRODUCT SPECIFIED	04/10/63	04/18/63	11/18/63	13520	T13S S4 R10 29.9636	-93.3953
102	17023880910000	DOE SPR	NO PRODUCT SPECIFIED	01/17/78	12/31/77	01/31/78	0	T12S S21 R10 30.0036	-93.3991
102	00000000000000	DOE SPR	NO PRODUCT SPECIFIED	05/07/46	NR	NR	10196	T12S S21 R10 30.0036	-93.3992
103	17023880760000	DOE SPR	NO PRODUCT SPECIFIED	09/11/79	07/26/80	11/12/80	5059	T12S S20 R10 30.0018	-93.4078

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Environmental Records Definitions - STATE (LA)

OG Oil and Gas Wells

VERSION DATE: 03/05/16

This database contains over 230,000 permitted oil and gas wells and is maintained by the Louisiana Department of Natural Resources, Office of Conservation. The information has been carefully prepared from the best available sources of data. It is intended for general informational purposes only and should not be considered authoritative for navigational, engineering, other site-specific uses, or any other uses. The Louisiana Department of Natural Resources (DNR) does not warrant or guarantee its accuracy, nor does DNR assume any responsibility or liability for any reliance thereon.



GeoPlus Water Well Report

Satellite view

Target Property:

2.1 Mile Corridor Hackberry, Cameron Parish, Louisiana 70645

Prepared For:

S&B Infrastructure-Houston

Order #: 67530 Job #: 146782 Date: 05/24/2016

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Target Property Summary

Target Property Information

2.1 Mile Corridor Hackberry, Louisiana 70645

Coordinates

Corridor

USGS Quadrangle

Browns Lake, LA

Geographic Coverage Information

County/Parish: Cameron (LA)

ZipCode(s):

Hackberry LA: 70645

Radon

* Target property is located in Radon Zone .

Database Radius Summary

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
NWIS	0.5000	0	2	0	3	NS	NS	5
SUB-TOTAL		0	2	0	3	0	0	5

Database Radius Summary

STATE (LA) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
WW	0.5000	1	23	50	37	NS	NS	111
SUB-TOTAL		1	23	50	37	0	0	111

TOTAL	1	25	50	40	0	0	116

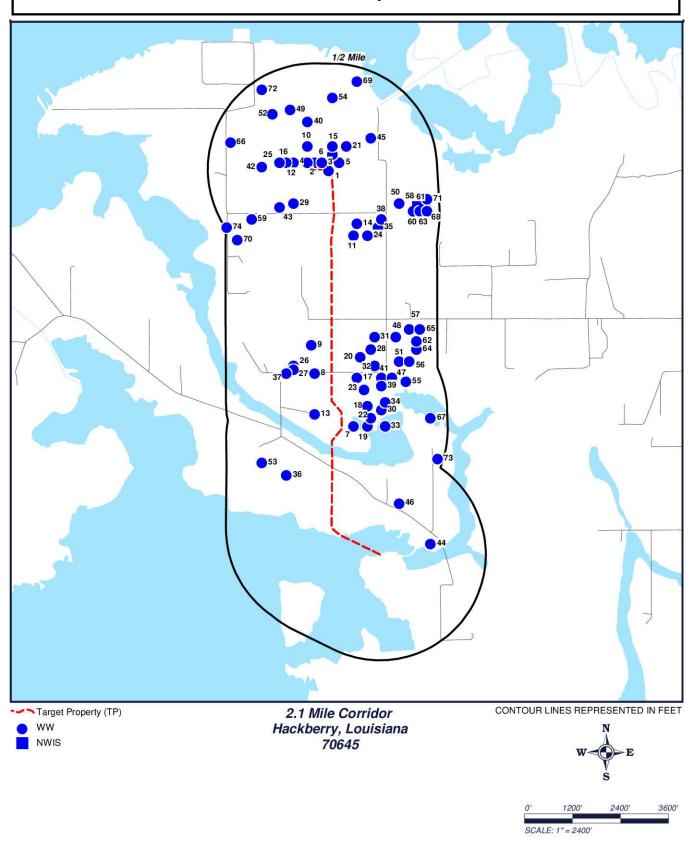
NOTES:

NS = NOT SEARCHED

TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

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Waterwell Map



Click here to access Satellite view

GeoSearch www.geo-search.com 888-396-0042

Map ID#	Database Name	Site ID#	Distance From Site	Site Name	Address	PAGE #
1	WW	2959480932404 01	0.01 mi. W (53 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>10</u>
<u>2</u>	WW	2959500932408 01	0.04 mi. NW (211 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	11
2	WW	2959500932408 02	0.04 mi. NW (211 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>12</u>
3	WW	2959500932406 02	0.04 mi. NW (211 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>13</u>
<u>3</u>	WW	2959500932406 01	0.04 mi. NW (211 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>14</u>
4	WW	2959500932410 02	0.05 mi. NW (264 ft.)	BOEING PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>15</u>
<u>4</u>	WW	2959500932410 01	0.05 mi. NW (264 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>16</u>
<u>5</u>	WW	2959500932400 01	0.07 mi. NE (370 ft.)	DOMINION GAS	CAMERON COUNTY, HACKBERRY, LA 70645	<u>17</u>
<u>5</u>	NWIS	00774852	0.07 mi. NE (370 ft.)	CN- 69		<u>18</u>
<u>5</u>	WW	2959500932401 01	0.06 mi. NE (317 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>19</u>
<u>6</u>	WW	2959510932403 01	0.06 mi. N (317 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>20</u>
<u>6</u>	WW	2959520932403 01	0.08 mi. N (422 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>21</u>
7	WW	2958450932357 01	0.06 mi. SE (317 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>22</u>
<u>8</u>	WW	2958580932408 01	0.09 mi. SW (475 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>23</u>
9	WW	2959050932409 01	0.1 mi. W (528 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>24</u>
<u>10</u>	WW	2959540932410 02	0.12 mi. N (634 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>25</u>
<u>10</u>	WW	2959540932410 01	0.12 mi. N (634 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>26</u>
<u>10</u>	WW	2959530932411 01	0.11 mi. NW (581 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>27</u>
11	WW	2959320932357 01	0.11 mi. SE (581 ft.)	WARREN PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>28</u>
<u>12</u>	NWIS	00774853	0.12 mi. NW (634 ft.)	CN- 192		<u>29</u>
<u>12</u>	WW	2959500932414 01	0.11 mi. W (581 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>30</u>
<u>13</u>	WW	2958480932408 01	0.11 mi. W (581 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>31</u>
14	WW	2959340932356 01	0.12 mi. SE (634 ft.)	WARREN PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>32</u>
<u>14</u>	WW	2959350932356 01	0.12 mi. SE (634 ft.)	WARREN PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>33</u>

<u>15</u>	WW	2959540932403 01	0.12 mi. N (634 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>34</u>
<u>16</u>	WW	2959500932416 01	0.14 mi. W (739 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>35</u>
<u>17</u>	WW	2958570932356 01	0.12 mi. E (634 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>36</u>
<u>18</u>	WW	2958500932353 01	0.13 mi. E (686 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>37</u>
<u>18</u>	WW	2958500932353 01	0.13 mi. E (686 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>38</u>
<u>18</u>	WW	2958500932353 01	0.13 mi. E (686 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>39</u>
<u>18</u>	WW	2958500932353 01	0.13 mi. E (686 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>40</u>
<u>19</u>	WW	2958450932353 01	0.13 mi. E (686 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>41</u>
20	WW	2959020932355 01	0.14 mi. E (739 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>42</u>
<u>20</u>	WW	2959020932355 01	0.14 mi. E (739 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>43</u>
<u>20</u>	WW	2959020932355 01	0.14 mi. E (739 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>44</u>
21	WW	2959540932359 02	0.14 mi. NE (739 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>45</u>
<u>21</u>	WW	2959540932359 01	0.14 mi. NE (739 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>46</u>
<u>22</u>	WW	2958470932352 01	0.14 mi. E (739 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>47</u>
<u>23</u>	WW	2958540932354 01	0.16 mi. E (845 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>48</u>
24	WW	2959330932353 01	0.17 mi. E (898 ft.)	WARREN PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>49</u>
24	WW	2959320932353 01	0.17 mi. E (898 ft.)	WARREN PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>50</u>
<u>25</u>	WW	2959500932418 01	0.17 mi. W (898 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>51</u>
<u>26</u>	WW	2959010932414 01	0.19 mi. W (1003 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>52</u>
<u>26</u>	WW	2959000932414 01	0.19 mi. W (1003 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>53</u>
<u>26</u>	WW	2959010932414 01	0.19 mi. W (1003 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>54</u>
<u>26</u>	WW	2959010932414 01	0.19 mi. W (1003 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>55</u>

<u>27</u>	WW	2958590932414	0.19 mi. W	TALBOT	CAMERON COUNTY, HACKBERRY, LA 70645	<u>56</u>
		01	(1003 ft.)	CARMOUCHE & MARCELLO		
<u>7</u>	WW	2958590932414 01	0.19 mi. W (1003 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>57</u>
<u>7</u>	WW	2958590932414 01	0.19 mi. W (1003 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>58</u>
-	WW	2958590932414 01	0.19 mi. W (1003 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>59</u>
3	WW	2959040932352 01	0.19 mi. E (1003 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>60</u>
3	WW	2959040932352 01	0.19 mi. E (1003 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>61</u>
3	WW	2959040932352 01	0.19 mi. E (1003 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>62</u>
<u>9</u>	WW	2959400932414 01	0.19 mi. W (1003 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>63</u>
<u>)</u>	WW	2958490932349 01	0.2 mi. E (1056 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>64</u>
L	WW	2959070932351 01	0.21 mi. E (1109 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>65</u>
2	WW	2959000932351 01	0.21 mi. E (1109 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>66</u>
2	WW	2959000932351 01	0.21 mi. E (1109 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>67</u>
2	WW	2959000932351 01	0.21 mi. E (1109 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>68</u>
2	WW	2959010932350 01	0.22 mi. E (1162 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>69</u>
3	WW	2958450932348 01	0.21 mi. E (1109 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>70</u>
4	WW	2958510932348 01	0.22 mi. E (1162 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>71</u>
<u> </u>	WW	2959340932350 01	0.22 mi. E (1162 ft.)	WARREN PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>72</u>
<u> </u>	WW	2958330932416 01	0.22 mi. W (1162 ft.)	TALBOT	CAMERON COUNTY, HACKBERRY, LA 70645	<u>73</u>
<u>5</u>	WW	2958330932416 00	0.22 mi. W (1162 ft.)	TALBOT	CAMERON COUNTY, HACKBERRY, LA 70645	<u>74</u>
7	WW	2958580932416 01	0.22 mi. W (1162 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>75</u>
<u>7</u>	WW	2958580932416 01	0.22 mi. W (1162 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>76</u>
3	WW	2959360932349 01	0.23 mi. E (1214 ft.)	WARREN PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>77</u>

<u>39</u>	WW	2958550932349 01	0.23 mi. NE (1214 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>78</u>
<u>40</u>	WW	300000932410 02	0.24 mi. N (1267 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>79</u>
<u>40</u>	WW	3000000932410 01	0.24 mi. N (1267 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>80</u>
<u>41</u>	WW	2958570932349 01	0.24 mi. E (1267 ft.)	TALBOT CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>81</u>
<u>42</u>	WW	2959490932423 01	0.25 mi. W (1320 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>82</u>
<u>43</u>	WW	2959390932418 01	0.25 mi. SW (1320 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>83</u>
<u>44</u>	WW	2958160932335 01	0.25 mi. E (1320 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>84</u>
<u>45</u>	WW	2959560932352 01	0.25 mi. NE (1320 ft.)	DOMINION GAS	CAMERON COUNTY, HACKBERRY, LA 70645	<u>85</u>
<u>46</u>	WW	2958260932344 01	0.27 mi. NE (1426 ft.)	BROWN, KENNY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>86</u>
<u>47</u>	WW	2958560932346 01	0.29 mi. E (1531 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>87</u>
<u>47</u>	WW	2958570932346 01	0.29 mi. E (1531 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>88</u>
<u>48</u>	WW	2959070932345 01	0.31 mi. E (1637 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>89</u>
<u>48</u>	WW	2959070932345 01	0.31 mi. E (1637 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>90</u>
<u>48</u>	WW	2959070932345 01	0.31 mi. E (1637 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>91</u>
<u>49</u>	WW	3000030932415 01	0.31 mi. NW (1637 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>92</u>
<u>50</u>	WW	2959400932343 01	0.33 mi. E (1742 ft.)	WARREN PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>93</u>
<u>50</u>	WW	2959400932344 01	0.32 mi. E (1690 ft.)	WARREN PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>94</u>
<u>51</u>	WW	2959010932344 01	0.32 mi. E (1690 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>95</u>
<u>52</u>	WW	3000020932420 01	0.33 mi. NW (1742 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>96</u>
<u>53</u>	WW	2958360932423 01	0.34 mi. W (1795 ft.)	TALBOT	CAMERON COUNTY, HACKBERRY, LA 70645	<u>97</u>
<u>53</u>	WW	2958360932423 00	0.34 mi. W (1795 ft.)	TALBOT	CAMERON COUNTY, HACKBERRY, LA 70645	<u>98</u>
<u>54</u>	WW	3000060932403 01	0.35 mi. N (1848 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	99
<u>55</u>	WW	2958560932342 01	0.35 mi. NE (1848 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	100
<u>56</u>	WW	2959000932341 01	0.37 mi. E (1954 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>101</u>
<u>56</u>	WW	2959010932341 01	0.37 mi. E (1954 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>102</u>
<u>57</u>	WW	2959090932341 01	0.37 mi. E (1954 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	103

<u>58</u>	NWIS	00774806	0.37 mi. E (1954 ft.)	CN- 65		<u>104</u>
<u>58</u>	WW	2959380932340 01	0.38 mi. E (2006 ft.)	OXY USA	CAMERON COUNTY, HACKBERRY, LA 70645	<u>105</u>
<u>59</u>	WW	2959360932426 01	0.38 mi. SW (2006 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>106</u>
<u>60</u>	NWIS	00774805	0.4 mi. E (2112 ft.)	CN- 64		<u>107</u>
<u>61</u>	WW	2959380932338 01	0.41 mi. E (2165 ft.)	TRIDENT NGL	CAMERON COUNTY, HACKBERRY, LA 70645	<u>108</u>
<u>62</u>	WW	2959060932339 01	0.41 mi. E (2165 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>109</u>
<u>63</u>	NWIS	00774804	0.44 mi. E (2323 ft.)	CN- 66		<u>110</u>
<u>64</u>	WW	2959030932338 01	0.42 mi. E (2218 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	111
<u>64</u>	WW	2959040932339 01	0.41 mi. E (2165 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>112</u>
<u>65</u>	WW	2959090932338 01	0.42 mi. E (2218 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>113</u>
<u>65</u>	WW	2959090932338 01	0.42 mi. E (2218 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>114</u>
<u>65</u>	WW	2959090932338 01	0.42 mi. E (2218 ft.)	DAVID V CURRIE	CAMERON COUNTY, HACKBERRY, LA 70645	<u>115</u>
<u>66</u>	WW	2959550932432 01	0.42 mi. W (2218 ft.)	LA STORAGE, LLC	CAMERON COUNTY, HACKBERRY, LA 70645	<u>116</u>
<u>67</u>	WW	2958470932335 01	0.43 mi. E (2270 ft.)	TALBOT, CARMOUCHE & MARCELLO	CAMERON COUNTY, HACKBERRY, LA 70645	117
<u>68</u>	WW	2959380932336 01	0.45 mi. E (2376 ft.)	TRIDENT NGL	CAMERON COUNTY, HACKBERRY, LA 70645	<u>118</u>
<u>69</u>	WW	3000100932356 01	0.44 mi. N (2323 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>119</u>
<u>70</u>	WW	2959310932430 01	0.45 mi. W (2376 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>120</u>
<u>71</u>	WW	2959400932335 01	0.46 mi. E (2429 ft.)	WARREN PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>121</u>
<u>71</u>	WW	2959410932336 01	0.45 mi. E (2376 ft.)	WARREN PETRO	CAMERON COUNTY, HACKBERRY, LA 70645	<u>122</u>
<u>72</u>	WW	3000080932423 01	0.46 mi. NW (2429 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>123</u>
<u>73</u>	WW	2958370932333 01	0.48 mi. E (2534 ft.)	TRIDENT NGL	CAMERON COUNTY, HACKBERRY, LA 70645	<u>124</u>
<u>74</u>	WW	2959340932433 01	0.5 mi. SW (2640 ft.)	U S DEPT ENERGY	CAMERON COUNTY, HACKBERRY, LA 70645	<u>125</u>

MAP ID# 1

Distance from Property: 0.01 mi. (53 ft.) W

ID NUMBER: 295948093240401

LOCAL WELL: **5641Z** PARISH NUM: **023**

OWNER NAME: US DEPT ENERGY

WELL USE: RECOVERY

USE DESCRIPTION: ENVIRONMENTAL RECOVERY

DRILLER NAME: GRIFFIN
WELL STATUS: ACTIVE
WELL DEPTH: 50
WATER LEVEL: 15.50
YIELD: NOT REPORTED

HOLE DEPTH: **54** ELEVATION: **17**

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 11/91
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 40-50
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.996666670 LONGITUDE: -93.401111110

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MAP ID# 2

Distance from Property: 0.04 mi. (211 ft.) NW

ID NUMBER: 295950093240801

LOCAL WELL: **5635Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: RECOVERY

USE DESCRIPTION: PLUGGED AND ABANDONED RECOVERY

DRILLER NAME: GRIFFIN

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 31
WATER LEVEL: 17.31
YIELD: NOT REPORTED
HOLE DEPTH: 32

ELEVATION: 23

PLUGGED BY: FUGRO (GS)

DATE PLUGGED: 11/06

DATE COMPLETED: 11/91

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 20-30
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997222220 LONGITUDE: -93.402222220

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MAP ID# 2

Distance from Property: 0.04 mi. (211 ft.) NW

ID NUMBER: 295950093240802

LOCAL WELL: **5636Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: RECOVERY

USE DESCRIPTION: PLUGGED AND ABANDONED RECOVERY

DRILLER NAME: GRIFFIN

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 57
WATER LEVEL: 25.70
YIELD: NOT REPORTED

HOLE DEPTH: 61
ELEVATION: 23

PLUGGED BY: FUGRO (GS)

DATE PLUGGED: 11/06

DATE COMPLETED: 11/91

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 47-57
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997222220 LONGITUDE: -93.402222220

Back to Report Summary

MAP ID# 3

Distance from Property: 0.04 mi. (211 ft.) NW

ID NUMBER: 295950093240602

LOCAL WELL: **5638Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: RECOVERY

USE DESCRIPTION: PLUGGED AND ABANDONED RECOVERY

DRILLER NAME: GRIFFIN

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 55
WATER LEVEL: 25.50
YIELD: NOT REPORTED
HOLE DEPTH: 59

ELEVATION: 23

PLUGGED BY: FUGRO (GS)

DATE PLUGGED: 11/06

DATE COMPLETED: 11/91

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 45-55
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997222220 LONGITUDE: -93.401666670

Back to Report Summary

MAP ID# 3

Distance from Property: 0.04 mi. (211 ft.) NW

ID NUMBER: 295950093240601

LOCAL WELL: **5637Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: RECOVERY

USE DESCRIPTION: ENVIRONMENTAL RECOVERY

DRILLER NAME: GRIFFIN
WELL STATUS: ACTIVE
WELL DEPTH: 43
WATER LEVEL: 18.32
YIELD: NOT REPORTED

HOLE DEPTH: 44
ELEVATION: 23

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 11/91
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 33-43
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997222220 LONGITUDE: -93.401666670

Back to Report Summary

MAP ID# 4

Distance from Property: 0.05 mi. (264 ft.) NW

ID NUMBER: 295950093241002

LOCAL WELL: **5455Z** PARISH NUM: **023**

OWNER NAME: BOEING PETRO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: STAMM-SCHEELE

WELL STATUS: ACTIVE
WELL DEPTH: 50
WATER LEVEL: 10.00
YIELD: NOT REPORTED
HOLE DEPTH: 50

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/88
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 40-50
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997222220 LONGITUDE: -93.402777780

Back to Report Summary

MAP ID# 4

Distance from Property: 0.05 mi. (264 ft.) NW

ID NUMBER: 295950093241001

LOCAL WELL: **5454Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: STAMM-SCHEELE

WELL STATUS: ACTIVE
WELL DEPTH: 30
WATER LEVEL: 6.00
YIELD: NOT REPORTED
HOLE DEPTH: 30

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 01/88
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 20-30
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997222220 LONGITUDE: -93.402777780

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MAP ID# 5

Distance from Property: 0.07 mi. (370 ft.) NE

ID NUMBER: 295950093240001

LOCAL WELL: 69 PARISH NUM: 023

OWNER NAME: **DOMINION GAS**

WELL USE: INDUSTRIAL

USE DESCRIPTION: INDUSTRIAL
DRILLER NAME: LAYNE (LA)
WELL STATUS: ACTIVE
WELL DEPTH: 479
WATER LEVEL: 46.97

YIELD: 1000 HOLE DEPTH: 505

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 09/59

DRAWDOWN: 16.6

CASING DIAMETER: 16X8X8
CASING MATERIAL: METAL
SCREEN DIAMETER: 8
SCREEN INTERVAL: 399-479
GEOLOGIC UNIT: 11205LC
QUAD NUM: NOT REPORTED

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.997222220 LONGITUDE: -93.400000000

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United States Geological Survey National Water Information System (NWIS)

MAP ID# 5

Distance from Property: 0.07 mi. (370 ft.) NE

REPORTING AGENCY: US GEOLOGICAL SURVEY

SITE NUMBER: 295950093240001

STATION NAME: CN- 69 SITE TYPE: WELL

LATITUDE: 29.997435200 LONGITUDE: -93.400156300

DATE DRILLED: 1959-09-01
WELL DEPTH: 479 FEET
HOLE DEPTH: 505 FEET

LOCAL AQUIFER: 200-FOOT SAND OF LAKE CHARLES AREA

Back to Report Summary

MAP ID# 5

Distance from Property: 0.06 mi. (317 ft.) NE

ID NUMBER: 295950093240101

LOCAL WELL: **5642Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: GRIFFIN
WELL STATUS: ACTIVE
WELL DEPTH: 49
WATER LEVEL: 17.50
YIELD: NOT REPORTED

HOLE DEPTH: **54** ELEVATION: **15**

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 11/91
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 38-49
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997222220 LONGITUDE: -93.400277780

Back to Report Summary

MAP ID# 6

Distance from Property: 0.06 mi. (317 ft.) N

ID NUMBER: 295951093240301

LOCAL WELL: **5640Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: RECOVERY

USE DESCRIPTION: ENVIRONMENTAL RECOVERY

DRILLER NAME: GRIFFIN
WELL STATUS: ACTIVE
WELL DEPTH: 52
WATER LEVEL: 19.95
YIELD: NOT REPORTED
HOLE DEPTH: 54

ELEVATION: **17**PLUGGED BY: **NOT REPORTED**

DATE PLUGGED: **NOT REPORTED**DATE COMPLETED: **11/91**

DRAWDOWN: **NOT REPORTED**CASING DIAMETER: **4**

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 42-52
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997500000 LONGITUDE: -93.400833330

Back to Report Summary

MAP ID# 6

Distance from Property: 0.08 mi. (422 ft.) N

ID NUMBER: 295952093240301

LOCAL WELL: **5639Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: RECOVERY

USE DESCRIPTION: ENVIRONMENTAL RECOVERY

DRILLER NAME: GRIFFIN
WELL STATUS: ACTIVE
WELL DEPTH: 51
WATER LEVEL: 34.40
YIELD: NOT REPORTED

HOLE DEPTH: **55** ELEVATION: **16**

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 11/91
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 40-51
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997777780 LONGITUDE: -93.400833330

Back to Report Summary

MAP ID# 7

Distance from Property: 0.06 mi. (317 ft.) SE

ID NUMBER: 295845093235701

LOCAL WELL: **6618Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 33
WATER LEVEL: 5.57
YIELD: NOT REPORTED

HOLE DEPTH: 48 ELEVATION: 0001

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/12/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.979166670 LONGITUDE: -93.399166670

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MAP ID# 8

Distance from Property: 0.09 mi. (475 ft.) SW

ID NUMBER: 295858093240801

LOCAL WELL: **6617Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 36
WATER LEVEL: 7.07
YIELD: NOT REPORTED

HOLE DEPTH: **36** ELEVATION: **0005**

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/06/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.982777780 LONGITUDE: -93.4022222220

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MAP ID# 9

Distance from Property: 0.1 mi. (528 ft.) W

ID NUMBER: 295905093240901

LOCAL WELL: **7157Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 17
WATER LEVEL: .75
YIELD: NOT REPORTED
HOLE DEPTH: 28
ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.984722220 LONGITUDE: -93.402500000

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MAP ID# 10

Distance from Property: 0.12 mi. (634 ft.) N

ID NUMBER: 295954093241002

LOCAL WELL: **5453Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: STAMM-SCHEELE

WELL STATUS: ACTIVE
WELL DEPTH: 48
WATER LEVEL: 15.00
YIELD: NOT REPORTED
HOLE DEPTH: 50

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 01/88
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 38-48
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.998333330 LONGITUDE: -93.402777780

Back to Report Summary

MAP ID# 10

Distance from Property: 0.12 mi. (634 ft.) N

ID NUMBER: 295954093241001

LOCAL WELL: **5452Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: STAMM-SCHEELE

WELL STATUS: ACTIVE
WELL DEPTH: 30
WATER LEVEL: 6.00
YIELD: NOT REPORTED
HOLE DEPTH: 30

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 01/88
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 20-30
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.998333330 LONGITUDE: -93.402777780

Back to Report Summary

MAP ID# 10

Distance from Property: 0.11 mi. (581 ft.) NW

ID NUMBER: 295953093241101

LOCAL WELL: **5500Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: GUICHARD
WELL STATUS: ACTIVE
WELL DEPTH: 25
WATER LEVEL: 13.00
YIELD: NOT REPORTED
HOLE DEPTH: 26

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 03/89
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 5

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 5
SCREEN INTERVAL: 15-25
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.998055560 LONGITUDE: -93.403055560

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MAP ID# 11

Distance from Property: 0.11 mi. (581 ft.) SE

ID NUMBER: 295932093235701

LOCAL WELL: **5807Z** PARISH NUM: **023**

OWNER NAME: WARREN PETRO

WELL USE: PIEZOMETER

USE DESCRIPTION: PIEZOMETER DRILLER NAME: PROFESSIONAL-

WELL STATUS: ACTIVE
WELL DEPTH: 15
WATER LEVEL: 2.00
YIELD: NOT REPORTED
HOLE DEPTH: 15

ELEVATION: 12

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 08/97

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 0.50

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 1.50

SCREEN INTERVAL: 12-15

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.992222220 LONGITUDE: -93.399166670

Back to Report Summary

United States Geological Survey National Water Information System (NWIS)

MAP ID# 12

Distance from Property: 0.12 mi. (634 ft.) NW

REPORTING AGENCY: US GEOLOGICAL SURVEY

SITE NUMBER: 295950093241401

STATION NAME: CN- 192

SITE TYPE: WELL

LATITUDE: 29.997435200 LONGITUDE: -93.404045200

DATE DRILLED: NOT REPORTED
WELL DEPTH: 380. FEET
HOLE DEPTH: 380. FEET

LOCAL AQUIFER: 200-FOOT SAND OF LAKE CHARLES AREA

Back to Report Summary

MAP ID# 12

Distance from Property: 0.11 mi. (581 ft.) W

ID NUMBER: 295950093241401

LOCAL WELL: 192
PARISH NUM: 023

OWNER NAME: USDEPT ENERGY

WELL USE: INDUSTRIAL

USE DESCRIPTION: INDUSTRIAL
DRILLER NAME: UNKNOWN
WELL STATUS: ACTIVE
WELL DEPTH: 380
WATER LEVEL: 0.00
YIELD: NOT REPORTED
HOLE DEPTH: 380

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 1977

DRAWDOWN: NOT REPORTED

CASING DIAMETER: NOT REPORTED

CASING MATERIAL: NOT REPORTED

SCREEN DIAMETER: NOT REPORTED

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 11202LC

QUAD NUM: 214

ELEVATION: 21

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997222220 LONGITUDE: -93.403888890

Back to Report Summary

MAP ID# 13

Distance from Property: 0.11 mi. (581 ft.) W

ID NUMBER: 295848093240801

LOCAL WELL: **6628Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 28
WATER LEVEL: 10.14
YIELD: NOT REPORTED

HOLE DEPTH: 40 ELEVATION: 0007

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/07/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.980000000 LONGITUDE: -93.402222220

Back to Report Summary

MAP ID# 14

Distance from Property: 0.12 mi. (634 ft.) SE

ID NUMBER: 295934093235601

LOCAL WELL: **5806Z** PARISH NUM: **023**

OWNER NAME: WARREN PETRO

WELL USE: PIEZOMETER

USE DESCRIPTION: PIEZOMETER DRILLER NAME: PROFESSIONAL-

WELL STATUS: ACTIVE
WELL DEPTH: 15
WATER LEVEL: 2.00
YIELD: NOT REPORTED
HOLE DEPTH: 15

ELEVATION: 11

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 08/97
DRAWDOWN: NOT REPORTED
CASING DIAMETER: 0.50
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: 1.50
SCREEN INTERVAL: 12-15
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.992777780 LONGITUDE: -93.398888890

Back to Report Summary

MAP ID# 14

Distance from Property: 0.12 mi. (634 ft.) SE

ID NUMBER: 295935093235601

LOCAL WELL: **5805Z** PARISH NUM: **023**

OWNER NAME: WARREN PETRO

WELL USE: PIEZOMETER

USE DESCRIPTION: PIEZOMETER DRILLER NAME: PROFESSIONAL-

WELL STATUS: ACTIVE
WELL DEPTH: 15
WATER LEVEL: 2.00
YIELD: NOT REPORTED
HOLE DEPTH: 15

ELEVATION: 11

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 08/97

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 0.50

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 1.50

SCREEN INTERVAL: 12-15

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.993055560 LONGITUDE: -93.398888890

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MAP ID# 15

Distance from Property: 0.12 mi. (634 ft.) N

ID NUMBER: 295954093240301

LOCAL WELL: **5443Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: PLUGGED AND ABANDONED MONITOR

DRILLER NAME: UNKNOWN

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 50
WATER LEVEL: 17.80
YIELD: NOT REPORTED
HOLE DEPTH: 100
ELEVATION: 9

PLUGGED BY: STAMM-SCHEELE

DATE PLUGGED: 06/89

DATE COMPLETED: 04/81

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 3
SCREEN INTERVAL: 40-50
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.998333330 LONGITUDE: -93.400833330

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MAP ID# 16

Distance from Property: 0.14 mi. (739 ft.) W

ID NUMBER: 295950093241601

LOCAL WELL: **5499Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: GUICHARD
WELL STATUS: ACTIVE
WELL DEPTH: 24
WATER LEVEL: 13.50
YIELD: NOT REPORTED
HOLE DEPTH: 24

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 03/89
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 2

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 2
SCREEN INTERVAL: 14-24
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997222220 LONGITUDE: -93.40444440

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MAP ID# 17

Distance from Property: 0.12 mi. (634 ft.) E

ID NUMBER: 295857093235601

LOCAL WELL: **6629Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 40
WATER LEVEL: 9.39
YIELD: NOT REPORTED
HOLE DEPTH: 44

ELEVATION: 0007
PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/07/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC

CASING MATERIAL: PLASTIC SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.982500000 LONGITUDE: -93.398888890

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MAP ID# 18

Distance from Property: 0.13 mi. (686 ft.) E

ID NUMBER: 295850093235301

LOCAL WELL: **6626Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 22
WATER LEVEL: 7.22
YIELD: NOT REPORTED

HOLE DEPTH: 22 ELEVATION: 0002

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/11/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.980555560 LONGITUDE: -93.398055560

Back to Report Summary

MAP ID# 18

Distance from Property: 0.13 mi. (686 ft.) E

ID NUMBER: 295850093235301

LOCAL WELL: **6626Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 22
WATER LEVEL: 7.22
YIELD: NOT REPORTED

HOLE DEPTH: 22 ELEVATION: 0002

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/11/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.980555560 LONGITUDE: -93.398055560

Back to Report Summary

MAP ID# 18

Distance from Property: 0.13 mi. (686 ft.) E

ID NUMBER: 295850093235301

LOCAL WELL: **6626Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 22
WATER LEVEL: 7.22
YIELD: NOT REPORTED

HOLE DEPTH: 22 ELEVATION: 0002

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/11/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 75

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.980555560 LONGITUDE: -93.398055560

Back to Report Summary

MAP ID# 18

Distance from Property: 0.13 mi. (686 ft.) E

ID NUMBER: 295850093235301

LOCAL WELL: **6626Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 22
WATER LEVEL: 7.22
YIELD: NOT REPORTED

HOLE DEPTH: 22 ELEVATION: 0002

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/11/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.980555560 LONGITUDE: -93.398055560

Back to Report Summary

MAP ID# 19

Distance from Property: 0.13 mi. (686 ft.) E

ID NUMBER: 295845093235301

LOCAL WELL: **6619Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 33
WATER LEVEL: 4.65
YIELD: NOT REPORTED

HOLE DEPTH: 48 ELEVATION: 0001

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/08/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.979166670 LONGITUDE: -93.398055560

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MAP ID# 20

Distance from Property: 0.14 mi. (739 ft.) E

ID NUMBER: 295902093235501

LOCAL WELL: **7154Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 16
WATER LEVEL: 1.1
YIELD: NOT REPORTED
HOLE DEPTH: 54

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.983888890 LONGITUDE: -93.398611110

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Order# 67530 Job# 146782 42 of 127

MAP ID# 20

Distance from Property: 0.14 mi. (739 ft.) E

ID NUMBER: 295902093235501

LOCAL WELL: **7154Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 16
WATER LEVEL: 1.1
YIELD: NOT REPORTED
HOLE DEPTH: 54
ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.983888890 LONGITUDE: -93.398611110

Back to Report Summary

MAP ID# 20

Distance from Property: 0.14 mi. (739 ft.) E

ID NUMBER: 295902093235501

LOCAL WELL: **7154Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 16
WATER LEVEL: 1.1
YIELD: NOT REPORTED
HOLE DEPTH: 54

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.983888890 LONGITUDE: -93.398611110

Back to Report Summary

MAP ID# 21

Distance from Property: 0.14 mi. (739 ft.) NE

ID NUMBER: 295954093235902

LOCAL WELL: **5539Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: GERAGHTY

WELL STATUS: ACTIVE

WELL DEPTH: 46

WATER LEVEL: 0.00

YIELD: NOT REPORTED

HOLE DEPTH: 50

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: **05/90**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 5

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 5
SCREEN INTERVAL: 36-46
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.998333330 LONGITUDE: -93.399722220

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Order# 67530 Job# 146782 45 of 127

MAP ID# 21

Distance from Property: 0.14 mi. (739 ft.) NE

ID NUMBER: 295954093235901

LOCAL WELL: **5538Z** PARISH NUM: **023**

OWNER NAME: US DEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: GERAGHTY
WELL STATUS: ACTIVE
WELL DEPTH: 23
WATER LEVEL: 0.00
YIELD: NOT REPORTED

HOLE DEPTH: 23

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: **05/90**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 5

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 5
SCREEN INTERVAL: 13-23
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.998333330 LONGITUDE: -93.399722220

Back to Report Summary

Order# 67530 Job# 146782 46 of 127

MAP ID# 22

Distance from Property: 0.14 mi. (739 ft.) E

ID NUMBER: 295847093235201

LOCAL WELL: **6620Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 38
WATER LEVEL: 5.31
YIELD: NOT REPORTED

HOLE DEPTH: 48 ELEVATION: 0001

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/12/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.979722220 LONGITUDE: -93.397777780

Back to Report Summary

MAP ID# 23

Distance from Property: 0.16 mi. (845 ft.) E

ID NUMBER: 295854093235401

LOCAL WELL: **6630Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 40
WATER LEVEL: 6.44
YIELD: NOT REPORTED
HOLE DEPTH: 44

ELEVATION: 0004
PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/07/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.981666670 LONGITUDE: -93.398333330

Back to Report Summary

MAP ID# 24

Distance from Property: 0.17 mi. (898 ft.) E

ID NUMBER: 295933093235301

LOCAL WELL: **5809Z** PARISH NUM: **023**

OWNER NAME: WARREN PETRO

WELL USE: PIEZOMETER

USE DESCRIPTION: PIEZOMETER DRILLER NAME: PROFESSIONAL-

WELL STATUS: ACTIVE
WELL DEPTH: 15
WATER LEVEL: 2.00
YIELD: NOT REPORTED

HOLE DEPTH: 15
ELEVATION: 10

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 08/97

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 0.50

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 1.50

SCREEN INTERVAL: 12-15

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.992500000 LONGITUDE: -93.398055560

Back to Report Summary

MAP ID# 24

Distance from Property: 0.17 mi. (898 ft.) E

ID NUMBER: 295932093235301

LOCAL WELL: **5808Z** PARISH NUM: **023**

OWNER NAME: WARREN PETRO

WELL USE: PIEZOMETER

USE DESCRIPTION: PIEZOMETER DRILLER NAME: PROFESSIONAL-

WELL STATUS: ACTIVE
WELL DEPTH: 15
WATER LEVEL: 2.00
YIELD: NOT REPORTED

HOLE DEPTH: 15
ELEVATION: 10

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 08/97

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 0.50

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 1.50

SCREEN INTERVAL: 12-15

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.992222220 LONGITUDE: -93.398055560

Back to Report Summary

MAP ID# 25

Distance from Property: 0.17 mi. (898 ft.) W

ID NUMBER: 295950093241801

LOCAL WELL: **5537Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: GERAGHTY
WELL STATUS: ACTIVE
WELL DEPTH: 47
WATER LEVEL: 0.00
YIELD: NOT REPORTED

HOLE DEPTH: 49

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: **05/90**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 5

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 5
SCREEN INTERVAL: 37-47
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.997222220 LONGITUDE: -93.405000000

Back to Report Summary

MAP ID# 26

Distance from Property: 0.19 mi. (1,003 ft.) W

ID NUMBER: 295901093241401

LOCAL WELL: **6613Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 13
WATER LEVEL: 7.61
YIELD: NOT REPORTED

HOLE DEPTH: 13 ELEVATION: 0005

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/06/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.983611110 LONGITUDE: -93.403888890

Back to Report Summary

MAP ID# 26

Distance from Property: 0.19 mi. (1,003 ft.) W

ID NUMBER: 295900093241401

LOCAL WELL: **7156Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 15
WATER LEVEL: .2
YIELD: NOT REPORTED
HOLE DEPTH: 15
ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/22/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.983333330 LONGITUDE: -93.403888890

Back to Report Summary

MAP ID# 26

Distance from Property: 0.19 mi. (1,003 ft.) W

ID NUMBER: 295901093241401

LOCAL WELL: **6613Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 13
WATER LEVEL: 7.61
YIELD: NOT REPORTED

HOLE DEPTH: 13 ELEVATION: 0005

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/06/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 75

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.983611110 LONGITUDE: -93.403888890

Back to Report Summary

MAP ID# 26

Distance from Property: 0.19 mi. (1,003 ft.) W

ID NUMBER: 295901093241401

LOCAL WELL: **6613Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 13
WATER LEVEL: 7.61
YIELD: NOT REPORTED

HOLE DEPTH: 13 ELEVATION: 0005

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/06/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.983611110 LONGITUDE: -93.403888890

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MAP ID# 27

Distance from Property: 0.19 mi. (1,003 ft.) W

ID NUMBER: 295859093241401

LOCAL WELL: **6615Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 16
WATER LEVEL: 7.35
YIELD: NOT REPORTED
HOLE DEPTH: 16

ELEVATION: 0005

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/05/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.983055560 LONGITUDE: -93.403888890

Back to Report Summary

MAP ID# 27

Distance from Property: 0.19 mi. (1,003 ft.) W

ID NUMBER: 295859093241401

LOCAL WELL: **6615Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 16
WATER LEVEL: 7.35
YIELD: NOT REPORTED
HOLE DEPTH: 16

ELEVATION: 0005

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/05/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.983055560 LONGITUDE: -93.403888890

Back to Report Summary

MAP ID# 27

Distance from Property: 0.19 mi. (1,003 ft.) W

ID NUMBER: 295859093241401

LOCAL WELL: 6615Z PARISH NUM: 023

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 16
WATER LEVEL: 7.35
YIELD: NOT REPORTED
HOLE DEPTH: 16

ELEVATION: 0005

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/05/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.983055560 LONGITUDE: -93.403888890

Back to Report Summary

MAP ID# 27

Distance from Property: 0.19 mi. (1,003 ft.) W

ID NUMBER: 295859093241401

LOCAL WELL: **6615Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 16
WATER LEVEL: 7.35
YIELD: NOT REPORTED
HOLE DEPTH: 16

ELEVATION: 0005

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/05/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.983055560 LONGITUDE: -93.403888890

Back to Report Summary

MAP ID# 28

Distance from Property: 0.19 mi. (1,003 ft.) E

ID NUMBER: 295904093235201

LOCAL WELL: **7149Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 18
WATER LEVEL: 3.74
YIELD: NOT REPORTED
HOLE DEPTH: 18

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.984444440 LONGITUDE: -93.397777780

Back to Report Summary

MAP ID# 28

Distance from Property: 0.19 mi. (1,003 ft.) E

ID NUMBER: 295904093235201

LOCAL WELL: **7149Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 18
WATER LEVEL: 3.74
YIELD: NOT REPORTED
HOLE DEPTH: 18

ELEVATION: 0004
PLUGGED BY: NOT REPORTED
DATE PLUGGED: NOT REPORTED
DATE COMPLETED: 01/15/2015
DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.984444440 LONGITUDE: -93.397777780

Back to Report Summary

MAP ID# 28

Distance from Property: 0.19 mi. (1,003 ft.) E

ID NUMBER: 295904093235201

LOCAL WELL: **7149Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 18
WATER LEVEL: 3.74
YIELD: NOT REPORTED
HOLE DEPTH: 18

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.984444440 LONGITUDE: -93.397777780

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MAP ID# 29

Distance from Property: 0.19 mi. (1,003 ft.) W

ID NUMBER: 295940093241401

LOCAL WELL: **5171Z** PARISH NUM: **023**

OWNER NAME: U S DEPT ENERGY WELL USE: BOREHOLE/PILOT HOLE

USE DESCRIPTION: PLUGGED AND ABANDONED BOREHOLE

DRILLER NAME: UNKNOWN

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 200
WATER LEVEL: 0.00
YIELD: NOT REPORTED
HOLE DEPTH: 200
ELEVATION: 12

PLUGGED BY: HOUSTON SERVICE

DATE PLUGGED: 01/84

DATE COMPLETED: NOT REPORTED

DRAWDOWN: NOT REPORTED

CASING DIAMETER: NOT REPORTED

SCREEN DIAMETER: NOT REPORTED

SCREEN INTERVAL: NOT REPORTED

MOT REPORTED

GEOLOGIC UNIT: 11200NWM

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.994444440 LONGITUDE: -93.403888890

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MAP ID# 30

Distance from Property: 0.2 mi. (1,056 ft.) E

ID NUMBER: 295849093234901

LOCAL WELL: **6621Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 36
WATER LEVEL: 3.7
YIELD: NOT REPORTED

HOLE DEPTH: 40 ELEVATION: 0001

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/12/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.980277780 LONGITUDE: -93.396944440

Back to Report Summary

MAP ID# 31

Distance from Property: 0.21 mi. (1,109 ft.) E

ID NUMBER: 295907093235101

LOCAL WELL: **7148Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 18
WATER LEVEL: 3.86
YIELD: NOT REPORTED
HOLE DEPTH: 44

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.985277780 LONGITUDE: -93.397500000

Back to Report Summary

MAP ID# 32

Distance from Property: 0.21 mi. (1,109 ft.) E

ID NUMBER: 295900093235101

LOCAL WELL: **7152Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 19
WATER LEVEL: 01
YIELD: NOT REPORTED
HOLE DEPTH: 44

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.983333330 LONGITUDE: -93.397500000

Back to Report Summary

MAP ID# 32

Distance from Property: 0.21 mi. (1,109 ft.) E

ID NUMBER: 295900093235101

LOCAL WELL: **7152Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 19
WATER LEVEL: 01
YIELD: NOT REPORTED
HOLE DEPTH: 44
ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.983333330 LONGITUDE: -93.397500000

Back to Report Summary

MAP ID# 32

Distance from Property: 0.21 mi. (1,109 ft.) E

ID NUMBER: 295900093235101

LOCAL WELL: **7152Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 19
WATER LEVEL: 01
YIELD: NOT REPORTED
HOLE DEPTH: 44

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.983333330 LONGITUDE: -93.397500000

Back to Report Summary

MAP ID# 32

Distance from Property: 0.22 mi. (1,162 ft.) E

ID NUMBER: 295901093235001

LOCAL WELL: **7151Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 18
WATER LEVEL: .85
YIELD: NOT REPORTED
HOLE DEPTH: 18
ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.983611110 LONGITUDE: -93.397222220

Back to Report Summary

MAP ID# 33

Distance from Property: 0.21 mi. (1,109 ft.) E

ID NUMBER: 295845093234801

LOCAL WELL: **6625Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 27
WATER LEVEL: 3.21
YIELD: NOT REPORTED

HOLE DEPTH: 40 ELEVATION: 0001

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/12/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 75

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.979166670 LONGITUDE: -93.396666670

Back to Report Summary

MAP ID# 34

Distance from Property: 0.22 mi. (1,162 ft.) E

ID NUMBER: 295851093234801

LOCAL WELL: **6622Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 36
WATER LEVEL: 4.8
YIELD: NOT REPORTED

HOLE DEPTH: 48 ELEVATION: 0001

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/11/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.980833330 LONGITUDE: -93.396666670

Back to Report Summary

MAP ID# 35

Distance from Property: 0.22 mi. (1,162 ft.) E

ID NUMBER: 295934093235001

LOCAL WELL: **5810Z** PARISH NUM: **023**

OWNER NAME: WARREN PETRO

WELL USE: PIEZOMETER

USE DESCRIPTION: PIEZOMETER DRILLER NAME: PROFESSIONAL-

WELL STATUS: ACTIVE
WELL DEPTH: 15
WATER LEVEL: 2.00
YIELD: NOT REPORTED
HOLE DEPTH: 15

ELEVATION: 11

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 08/97
DRAWDOWN: NOT REPORTED
CASING DIAMETER: 0.50
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: 1.50
SCREEN INTERVAL: 12-15
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.992777780 LONGITUDE: -93.397222220

Back to Report Summary

MAP ID# 36

Distance from Property: 0.22 mi. (1,162 ft.) W

ID NUMBER: 295833093241601

LOCAL WELL: **6405Z** PARISH NUM: **023**

OWNER NAME: TALBOT WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON
WELL STATUS: ACTIVE
WELL DEPTH: 26
WATER LEVEL: 10.59
YIELD: NOT REPORTED
HOLE DEPTH: 26

ELEVATION: 4

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 10/09

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: .75
SCREEN INTERVAL: 16-26
GEOLOGIC UNIT: 00000000

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 033 10W

LATITUDE: 29.975833330 LONGITUDE: -93.404444440

Back to Report Summary

MAP ID# 36

Distance from Property: 0.22 mi. (1,162 ft.) W

ID NUMBER: 295833093241600

LOCAL WELL: **6404Z** PARISH NUM: **023**

OWNER NAME: TALBOT WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON
WELL STATUS: ACTIVE
WELL DEPTH: 50
WATER LEVEL: 0.75
YIELD: NOT REPORTED
HOLE DEPTH: 50

ELEVATION: 4

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 10/09

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: .75

SCREEN DIAMETER: .75
SCREEN INTERVAL: 40-50
GEOLOGIC UNIT: 00000000

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 033 10W

LATITUDE: 29.975833330 LONGITUDE: -93.404444440

Back to Report Summary

MAP ID# 37

Distance from Property: 0.22 mi. (1,162 ft.) W

ID NUMBER: 295858093241601

LOCAL WELL: **6612Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 38
WATER LEVEL: 7.55
YIELD: NOT REPORTED
HOLE DEPTH: 40

ELEVATION: 0005

PLUGGED BY: NOT REPORTED

DATE PLUGGED: 02/17/2015

DATE COMPLETED: 07/05/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 75

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.982777780 LONGITUDE: -93.404444440

Back to Report Summary

MAP ID# 37

Distance from Property: 0.22 mi. (1,162 ft.) W

ID NUMBER: 295858093241601

LOCAL WELL: **6612Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 38
WATER LEVEL: 7.55
YIELD: NOT REPORTED
HOLE DEPTH: 40

ELEVATION: 0005

PLUGGED BY: NOT REPORTED
DATE PLUGGED: 02/17/2015
DATE COMPLETED: 07/05/2011
DRAWDOWN: NOT REPORTED
CASING DIAMETER: .75

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.982777780 LONGITUDE: -93.404444440

Back to Report Summary

MAP ID# 38

Distance from Property: 0.23 mi. (1,214 ft.) E

ID NUMBER: 295936093234901

LOCAL WELL: **5811Z** PARISH NUM: **023**

OWNER NAME: WARREN PETRO

WELL USE: PIEZOMETER

USE DESCRIPTION: PIEZOMETER DRILLER NAME: PROFESSIONAL-

WELL STATUS: ACTIVE
WELL DEPTH: 15
WATER LEVEL: 2.00
YIELD: NOT REPORTED
HOLE DEPTH: 15

ELEVATION: 11

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 08/97
DRAWDOWN: NOT REPORTED
CASING DIAMETER: 0.50
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: 1.50
SCREEN INTERVAL: 12-15
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.993333330 LONGITUDE: -93.396944440

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MAP ID# 39

Distance from Property: 0.23 mi. (1,214 ft.) NE

ID NUMBER: 295855093234901

LOCAL WELL: **6624Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 38
WATER LEVEL: 5.68
YIELD: NOT REPORTED

HOLE DEPTH: 40 ELEVATION: 0002

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/08/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.981944440 LONGITUDE: -93.396944440

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MAP ID# 40

Distance from Property: 0.24 mi. (1,267 ft.) N

ID NUMBER: 30000093241002

LOCAL WELL: **5541Z** PARISH NUM: **023**

OWNER NAME: US DEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: GERAGHTY
WELL STATUS: ACTIVE
WELL DEPTH: 22
WATER LEVEL: 0.00
YIELD: NOT REPORTED

HOLE DEPTH: 22

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: **05/90**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 5

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 5
SCREEN INTERVAL: 12-22
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 30.000000000 LONGITUDE: -93.402777780

Back to Report Summary

MAP ID# 40

Distance from Property: 0.24 mi. (1,267 ft.) N

ID NUMBER: 30000093241001

LOCAL WELL: **5540Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: GERAGHTY
WELL STATUS: ACTIVE
WELL DEPTH: 47
WATER LEVEL: 0.00
YIELD: NOT REPORTED

HOLE DEPTH: 50

ELEVATION: **NOT REPORTED**PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: **05/90**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 5

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 5
SCREEN INTERVAL: 37-47
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 30.000000000 LONGITUDE: -93.402777780

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MAP ID# 41

Distance from Property: 0.24 mi. (1,267 ft.) E

ID NUMBER: 295857093234901

LOCAL WELL: **6623Z** PARISH NUM: **023**

OWNER NAME: TALBOT CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: ACTIVE
WELL DEPTH: 11
WATER LEVEL: 6.56
YIELD: NOT REPORTED

HOLE DEPTH: 11
ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/07/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 75

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.982500000 LONGITUDE: -93.396944440

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MAP ID# 42

Distance from Property: 0.25 mi. (1,320 ft.) W

ID NUMBER: 295949093242301

LOCAL WELL: **5771Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: LAYNE (ENV)
WELL STATUS: ACTIVE
WELL DEPTH: 18
WATER LEVEL: 10.50
YIELD: NOT REPORTED

HOLE DEPTH: 18 ELEVATION: 23

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: **04/96**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 2

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 2
SCREEN INTERVAL: 6-16
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.996944440 LONGITUDE: -93.406388890

Back to Report Summary

MAP ID# 43

Distance from Property: 0.25 mi. (1,320 ft.) SW

ID NUMBER: 295939093241801

LOCAL WELL: **5442Z** PARISH NUM: **023**

OWNER NAME: US DEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: UNKNOWN
WELL STATUS: ACTIVE
WELL DEPTH: 30
WATER LEVEL: 8.30
YIELD: NOT REPORTED
HOLE DEPTH: 30

ELEVATION: 14

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: **04/81**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 3
SCREEN INTERVAL: 20-30
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.994166670 LONGITUDE: -93.405000000

Back to Report Summary

MAP ID# 44

Distance from Property: 0.25 mi. (1,320 ft.) E

ID NUMBER: 295816093233501

LOCAL WELL: **5772Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: PLUGGED AND ABANDONED MONITOR

DRILLER NAME: LAYNE (ENV)

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 20
WATER LEVEL: 10.50
YIELD: NOT REPORTED
HOLE DEPTH: 25

ELEVATION: 7

PLUGGED BY: LAYNE (ENV)
DATE PLUGGED: 11/96
DATE COMPLETED: 04/96

DRAWDOWN: **NOT REPORTED**CASING DIAMETER: **2**

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 2
SCREEN INTERVAL: 8-18
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 033 10W

LATITUDE: 29.971111110 LONGITUDE: -93.393055560

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MAP ID# 45

Distance from Property: 0.25 mi. (1,320 ft.) NE

ID NUMBER: 295956093235201

LOCAL WELL: **5001Z** PARISH NUM: **023**

OWNER NAME: DOMINION GAS

WELL USE: OTHER

USE DESCRIPTION: PLUGGED AND ABANDONED

DRILLER NAME: LAYNE (LA)

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 476
WATER LEVEL: 0.00
YIELD: NOT REPORTED
HOLE DEPTH: 476

ELEVATION: **NOT REPORTED**PLUGGED BY: **WATER RESOURCES**

DATE PLUGGED: 12/75

DATE COMPLETED: 05/46

DRAWDOWN: NOT REPORTED

CASING DIAMETER: NOT REPORTED

CASING MATERIAL: NOT REPORTED

SCREEN DIAMETER: NOT REPORTED

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 11205LC

QUAD NUM: NOT REPORTED

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.998888890 LONGITUDE: -93.397777780

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MAP ID# 46

Distance from Property: 0.27 mi. (1,426 ft.) NE

ID NUMBER: 295826093234401

LOCAL WELL: **5856Z** PARISH NUM: **023**

OWNER NAME: BROWN, KENNY

WELL USE: DOMESTIC

USE DESCRIPTION: DOMESTIC

DRILLER NAME: J & R
WELL STATUS: ACTIVE
WELL DEPTH: 325
WATER LEVEL: 38.00
YIELD: NOT REPORTED
HOLE DEPTH: 325
ELEVATION: 7

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 12/98
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 2

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 2
SCREEN INTERVAL: 320-325
GEOLOGIC UNIT: 11202LC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 033 10W

LATITUDE: 29.973888890 LONGITUDE: -93.395555560

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MAP ID# 47

Distance from Property: 0.29 mi. (1,531 ft.) E

ID NUMBER: 295856093234601

LOCAL WELL: **7147Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 35
WATER LEVEL: .2
YIELD: NOT REPORTED
HOLE DEPTH: 35
ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/22/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.982222220 LONGITUDE: -93.396111110

Back to Report Summary

MAP ID# 47

Distance from Property: 0.29 mi. (1,531 ft.) E

ID NUMBER: 295857093234601

LOCAL WELL: **7146Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 35
WATER LEVEL: .69
YIELD: NOT REPORTED
HOLE DEPTH: 35
ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/21/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.982500000 LONGITUDE: -93.396111110

Back to Report Summary

MAP ID# 48

Distance from Property: 0.31 mi. (1,637 ft.) E

ID NUMBER: 295907093234501

LOCAL WELL: **7137Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 16
WATER LEVEL: 3.62
YIELD: NOT REPORTED
HOLE DEPTH: 48

ELEVATION: **0004**PLUGGED BY: **NOT REPORTED**

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.985277780 LONGITUDE: -93.395833330

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MAP ID# 48

Distance from Property: 0.31 mi. (1,637 ft.) E

ID NUMBER: 295907093234501

LOCAL WELL: **7137Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 16
WATER LEVEL: 3.62
YIELD: NOT REPORTED
HOLE DEPTH: 48

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC

CASING MATERIAL: PLASTIC SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.985277780 LONGITUDE: -93.395833330

Back to Report Summary

MAP ID# 48

Distance from Property: 0.31 mi. (1,637 ft.) E

ID NUMBER: 295907093234501

LOCAL WELL: **7137Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 16
WATER LEVEL: 3.62
YIELD: NOT REPORTED
HOLE DEPTH: 48

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.985277780 LONGITUDE: -93.395833330

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MAP ID# 49

Distance from Property: 0.31 mi. (1,637 ft.) NW

ID NUMBER: 300003093241501

LOCAL WELL: **5440Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: UNKNOWN
WELL STATUS: ACTIVE
WELL DEPTH: 30
WATER LEVEL: 8.90
YIELD: NOT REPORTED

HOLE DEPTH: **30** ELEVATION: **17**

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: **04/81**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 3
SCREEN INTERVAL: 20-30
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 177

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 30.000833330 LONGITUDE: -93.404166670

Back to Report Summary

MAP ID# 50

Distance from Property: 0.33 mi. (1,742 ft.) E

ID NUMBER: 295940093234301

LOCAL WELL: **5813Z** PARISH NUM: **023**

OWNER NAME: WARREN PETRO

WELL USE: PIEZOMETER

USE DESCRIPTION: PIEZOMETER DRILLER NAME: PROFESSIONAL-

WELL STATUS: ACTIVE
WELL DEPTH: 15
WATER LEVEL: 2.00
YIELD: NOT REPORTED

HOLE DEPTH: 15
ELEVATION: 9

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 08/97

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 0.50

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 1.50

SCREEN INTERVAL: 12-15

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.994444440 LONGITUDE: -93.395277780

Back to Report Summary

MAP ID# 50

Distance from Property: 0.32 mi. (1,690 ft.) E

ID NUMBER: 295940093234401

LOCAL WELL: **5812Z** PARISH NUM: **023**

OWNER NAME: WARREN PETRO

WELL USE: PIEZOMETER

USE DESCRIPTION: PIEZOMETER DRILLER NAME: PROFESSIONAL-

WELL STATUS: ACTIVE
WELL DEPTH: 15
WATER LEVEL: 2.00
YIELD: NOT REPORTED
HOLE DEPTH: 15

ELEVATION: 10

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 08/97

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 0.50

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 1.50

SCREEN INTERVAL: 12-15

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.994444440 LONGITUDE: -93.395555560

Back to Report Summary

MAP ID# 51

Distance from Property: 0.32 mi. (1,690 ft.) E

ID NUMBER: 295901093234401

LOCAL WELL: **7142Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 18
WATER LEVEL: 1.42
YIELD: NOT REPORTED
HOLE DEPTH: 18

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/21/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.983611110 LONGITUDE: -93.395555560

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Order# 67530 Job# 146782 95 of 127

MAP ID# 52

Distance from Property: 0.33 mi. (1,742 ft.) NW

ID NUMBER: 300002093242001

LOCAL WELL: **5441Z** PARISH NUM: **023**

OWNER NAME: US DEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: UNKNOWN
WELL STATUS: ACTIVE
WELL DEPTH: 30
WATER LEVEL: 8.30
YIELD: NOT REPORTED
HOLE DEPTH: 30

ELEVATION: 17
PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 04/81

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 3
SCREEN INTERVAL: 20-30
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 177

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 30.000555560 LONGITUDE: -93.405555560

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Order# 67530 Job# 146782 96 of 127

MAP ID# 53

Distance from Property: 0.34 mi. (1,795 ft.) W

ID NUMBER: 295836093242301

LOCAL WELL: 6407Z
PARISH NUM: 023

OWNER NAME: TALBOT WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON
WELL STATUS: ACTIVE
WELL DEPTH: 26
WATER LEVEL: 12.52
YIELD: NOT REPORTED
HOLE DEPTH: 26

ELEVATION: 4

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 10/09

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: .75

SCREEN INTERVAL: 16-26

QUAD NUM: 214A

GEOLOGIC UNIT: 00000000

TOWNSHIP/SECTION/RANGE: 12S 033 10W

LATITUDE: 29.976666670 LONGITUDE: -93.406388890

Back to Report Summary

MAP ID# 53

Distance from Property: 0.34 mi. (1,795 ft.) W

ID NUMBER: 295836093242300

LOCAL WELL: 6406Z
PARISH NUM: 023

OWNER NAME: TALBOT WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON
WELL STATUS: ACTIVE
WELL DEPTH: 49
WATER LEVEL: 12.51
YIELD: NOT REPORTED

HOLE DEPTH: **49** ELEVATION: **4**

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 10/09
DRAWDOWN: NOT REPORTED
CASING DIAMETER: .75

CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75
SCREEN INTERVAL: 39-49
GEOLOGIC UNIT: 00000000

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 033 10W

LATITUDE: 29.976666670 LONGITUDE: -93.406388890

Back to Report Summary

MAP ID# 54

Distance from Property: 0.35 mi. (1,848 ft.) N

ID NUMBER: 300006093240301

LOCAL WELL: **5765Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: PLUGGED AND ABANDONED MONITOR

DRILLER NAME: LAYNE (ENV)

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 20
WATER LEVEL: 10.00
YIELD: NOT REPORTED
HOLE DEPTH: 20

ELEVATION: 12

PLUGGED BY: LAYNE (ENV)

DATE PLUGGED: 11/96

DATE COMPLETED: 04/96

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 2

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 2
SCREEN INTERVAL: 8-18
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 177C

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 30.001666670 LONGITUDE: -93.400833330

Back to Report Summary

MAP ID# 55

Distance from Property: 0.35 mi. (1,848 ft.) NE

ID NUMBER: 295856093234201

LOCAL WELL: **7144Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 15
WATER LEVEL: .1
YIELD: NOT REPORTED
HOLE DEPTH: 15
ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/21/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.982222220 LONGITUDE: -93.395000000

Back to Report Summary

MAP ID# 56

Distance from Property: 0.37 mi. (1,954 ft.) E

ID NUMBER: 295900093234101

LOCAL WELL: **7143Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 13
WATER LEVEL: .01
YIELD: NOT REPORTED
HOLE DEPTH: 13

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.983333330 LONGITUDE: -93.394722220

Back to Report Summary

MAP ID# 56

Distance from Property: 0.37 mi. (1,954 ft.) E

ID NUMBER: 295901093234101

LOCAL WELL: **7158Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 15
WATER LEVEL: .1
YIELD: NOT REPORTED
HOLE DEPTH: 28
ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.983611110 LONGITUDE: -93.394722220

Back to Report Summary

MAP ID# 57

Distance from Property: 0.37 mi. (1,954 ft.) E

ID NUMBER: 295909093234101

LOCAL WELL: **7136Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 18
WATER LEVEL: 3.59
YIELD: NOT REPORTED
HOLE DEPTH: 44

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.985833330 LONGITUDE: -93.394722220

Back to Report Summary

United States Geological Survey National Water Information System (NWIS)

MAP ID# 58

Distance from Property: 0.37 mi. (1,954 ft.) E

REPORTING AGENCY: US GEOLOGICAL SURVEY

SITE NUMBER: 295938093234001

STATION NAME: CN- 65

SITE TYPE: WELL

LATITUDE: **29.994102040** LONGITUDE: -93.394600600

DATE DRILLED: 1958-01-22 WELL DEPTH: 235 FEET HOLE DEPTH: NOT REPORTED

LOCAL AQUIFER: 200-FOOT SAND OF LAKE CHARLES AREA

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Order# 67530 Job# 146782 104 of 127

MAP ID# 58

Distance from Property: 0.38 mi. (2,006 ft.) E

ID NUMBER: 295938093234001

LOCAL WELL: **65** PARISH NUM: **023**

OWNER NAME: OXY USA WELL USE: DOMESTIC

USE DESCRIPTION: PLUGGED AND ABANDONED DOMESTIC

DRILLER NAME: UNKNOWN

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 235
WATER LEVEL: 29.93
YIELD: NOT REPORTED

HOLE DEPTH: 0

ELEVATION: NOT REPORTED
PLUGGED BY: LAYNE (MS)
DATE PLUGGED: 09/91
DATE COMPLETED: 04/57
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: NOT REPORTED

SCREEN DIAMETER: 4
SCREEN INTERVAL: 215-235
GEOLOGIC UNIT: 11202LC
QUAD NUM: NOT REPORTED

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.993888890 LONGITUDE: -93.394444440

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MAP ID# 59

Distance from Property: 0.38 mi. (2,006 ft.) SW

ID NUMBER: 295936093242601

LOCAL WELL: **5446Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: DOMESTIC

USE DESCRIPTION: PLUGGED AND ABANDONED DOMESTIC

DRILLER NAME: UNKNOWN

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 172
WATER LEVEL: 0.00
YIELD: NOT REPORTED

HOLE DEPTH: **0**ELEVATION: **14**

PLUGGED BY: **SOIL TESTING** DATE PLUGGED: **07/88**

DATE COMPLETED: **NOT REPORTED**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 2
CASING MATERIAL: STEEL

SCREEN DIAMETER: NOT REPORTED SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTS

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.993333330 LONGITUDE: -93.407222220

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United States Geological Survey National Water Information System (NWIS)

MAP ID# 60

Distance from Property: 0.4 mi. (2,112 ft.) E

REPORTING AGENCY: US GEOLOGICAL SURVEY

SITE NUMBER: 295938093233801

STATION NAME: CN- 64 SITE TYPE: WELL

LATITUDE: **29.994102040** LONGITUDE: -93.394045000

DATE DRILLED: 1957-09-26 WELL DEPTH: 505 FEET HOLE DEPTH: 512 FEET

LOCAL AQUIFER: 200-FOOT SAND OF LAKE CHARLES AREA

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MAP ID# 61

Distance from Property: 0.41 mi. (2,165 ft.) E

ID NUMBER: 295938093233801

LOCAL WELL: **64** PARISH NUM: **023**

OWNER NAME: TRIDENT NGL
WELL USE: INDUSTRIAL

USE DESCRIPTION: PLUGGED AND ABANDONED INDUSTRIAL

DRILLER NAME: LAYNE (LA)

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 504
WATER LEVEL: 45.80
YIELD: NOT REPORTED
HOLE DEPTH: 512

ELEVATION: NOT REPORTED
PLUGGED BY: LAYNE (MS)
DATE PLUGGED: 03/92
DATE COMPLETED: 03/57
DRAWDOWN: NOT REPORTED
CASING DIAMETER: 10X4
CASING MATERIAL: STEEL
SCREEN DIAMETER: 4
SCREEN INTERVAL: 461-504
GEOLOGIC UNIT: 11205LC

QUAD NUM: NOT REPORTED

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.993888890 LONGITUDE: -93.393888890

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MAP ID# 62

Distance from Property: 0.41 mi. (2,165 ft.) E

ID NUMBER: 295906093233901

LOCAL WELL: **7133Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 18
WATER LEVEL: 3.44
YIELD: NOT REPORTED
HOLE DEPTH: 44

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.985000000 LONGITUDE: -93.394166670

Back to Report Summary

United States Geological Survey National Water Information System (NWIS)

MAP ID# 63

Distance from Property: 0.44 mi. (2,323 ft.) E

REPORTING AGENCY: US GEOLOGICAL SURVEY

SITE NUMBER: 295938093233601

STATION NAME: CN- 66 SITE TYPE: WELL

LATITUDE: **29.994102040** LONGITUDE: -93.393489500

DATE DRILLED: 1957-04-21 WELL DEPTH: 503 FEET HOLE DEPTH: 506 FEET

LOCAL AQUIFER: 200-FOOT SAND OF LAKE CHARLES AREA

Back to Report Summary

MAP ID# 64

Distance from Property: 0.42 mi. (2,218 ft.) E

ID NUMBER: 295903093233801

LOCAL WELL: **7140Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 14
WATER LEVEL: .1
YIELD: NOT REPORTED
HOLE DEPTH: 14

ELEVATION: NOT REPORTED
PLUGGED BY: NOT REPORTED
DATE PLUGGED: NOT REPORTED
DATE COMPLETED: 01/20/2015
DRAWDOWN: NOT REPORTED
CASING DIAMETER: .75

CASING DIAMETER: .75

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC
QUAD NUM: NOT REPORTED

TOWNSHIP/SECTION/RANGE: NOT REPORTED NOT REPORTED

LATITUDE: 29.984166670 LONGITUDE: -93.393888890

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MAP ID# 64

Distance from Property: 0.41 mi. (2,165 ft.) E

ID NUMBER: 295904093233901

LOCAL WELL: **7139Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 19
WATER LEVEL: .09
YIELD: NOT REPORTED
HOLE DEPTH: 19

ELEVATION: NOT REPORTED
PLUGGED BY: NOT REPORTED
DATE PLUGGED: NOT REPORTED
DATE COMPLETED: 01/20/2015
DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC
QUAD NUM: NOT REPORTED

TOWNSHIP/SECTION/RANGE: NOT REPORTED NOT REPORTED

LATITUDE: 29.984444440 LONGITUDE: -93.394166670

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MAP ID# 65

Distance from Property: 0.42 mi. (2,218 ft.) E

ID NUMBER: 295909093233801

LOCAL WELL: **7134Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 18
WATER LEVEL: 5.49
YIELD: NOT REPORTED
HOLE DEPTH: 18

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.985833330 LONGITUDE: -93.393888890

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Order# 67530 Job# 146782 113 of 127

MAP ID# 65

Distance from Property: 0.42 mi. (2,218 ft.) E

ID NUMBER: 295909093233801

LOCAL WELL: **7134Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 18
WATER LEVEL: 5.49
YIELD: NOT REPORTED
HOLE DEPTH: 18

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 75

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.985833330 LONGITUDE: -93.393888890

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MAP ID# 65

Distance from Property: 0.42 mi. (2,218 ft.) E

ID NUMBER: 295909093233801

LOCAL WELL: **7134Z** PARISH NUM: **023**

OWNER NAME: DAVID V CURRIE

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: ICON ENVIRONMENTAL SERVICES, INC

WELL STATUS: NOT REPORTED

WELL DEPTH: 18
WATER LEVEL: 5.49
YIELD: NOT REPORTED
HOLE DEPTH: 18

ELEVATION: 0004

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 01/15/2015

DRAWDOWN: NOT REPORTED

CASING DIAMETER: .75
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: .75

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 028 10W

LATITUDE: 29.985833330 LONGITUDE: -93.393888890

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Order# 67530 Job# 146782 115 of 127

MAP ID# 66

Distance from Property: 0.42 mi. (2,218 ft.) W

ID NUMBER: 295955093243201

LOCAL WELL: **263** PARISH NUM: **023**

OWNER NAME: LA STORAGE, LLC

WELL USE: TEST HOLE

USE DESCRIPTION: TEST HOLE

DRILLER NAME: GRINER DRILLING SERVICE, INC.

WELL STATUS: NOT REPORTED

WELL DEPTH: 807
WATER LEVEL: 53
YIELD: 147

HOLE DEPTH: 1000 ELEVATION: 0020

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 08/12/2015

DRAWDOWN: 107

CASING DIAMETER: 6

CASING MATERIAL: STEEL

SCREEN DIAMETER: 4

SCREEN INTERVAL: 760-800

GEOLOGIC UNIT: 11200NWM

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 29.998611110 LONGITUDE: -93.408888890

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MAP ID# 67

Distance from Property: 0.43 mi. (2,270 ft.) E

ID NUMBER: 295847093233501

LOCAL WELL: **6881Z** PARISH NUM: **023**

OWNER NAME: TALBOT, CARMOUCHE & MARCELLO

WELL USE: MONITOR

USE DESCRIPTION: MONITOR

DRILLER NAME: **DEVONIAN GROUP, L.L.C.**

WELL STATUS: ACTIVE
WELL DEPTH: 14
WATER LEVEL: 7.9
YIELD: NOT REPORTED
HOLE DEPTH: 14

ELEVATION: 0001

PLUGGED BY: NOT REPORTED

DATE PLUGGED: NOT REPORTED

DATE COMPLETED: 07/20/2011

DRAWDOWN: NOT REPORTED

CASING DIAMETER: 1

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 1

SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112PRIR

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 030 10W

LATITUDE: 29.979722220 LONGITUDE: -93.393055560

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Order# 67530 Job# 146782 117 of 127

MAP ID# 68

Distance from Property: 0.45 mi. (2,376 ft.) E

ID NUMBER: 295938093233601

LOCAL WELL: 66 PARISH NUM: 023

OWNER NAME: TRIDENT NGL
WELL USE: INDUSTRIAL

USE DESCRIPTION: INDUSTRIAL
DRILLER NAME: LAYNE (LA)
WELL STATUS: ACTIVE
WELL DEPTH: 503

YIELD: 2000 HOLE DEPTH: 506 ELEVATION: 9

WATER LEVEL: 37.00

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 04/57

DRAWDOWN: 21

CASING DIAMETER: 22X10

CASING MATERIAL: NOT REPORTED

SCREEN DIAMETER: 10
SCREEN INTERVAL: 423-503
GEOLOGIC UNIT: 11205LC
QUAD NUM: NOT REPORTED

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.993888890 LONGITUDE: -93.393333330

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Order# 67530 Job# 146782 118 of 127

MAP ID# 69

Distance from Property: 0.44 mi. (2,323 ft.) N

ID NUMBER: 300010093235601

LOCAL WELL: **5766Z** PARISH NUM: **023**

OWNER NAME: US DEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: LAYNE (ENV)
WELL STATUS: ACTIVE
WELL DEPTH: 20
WATER LEVEL: 6.00

YIELD: NOT REPORTED
HOLE DEPTH: 20
ELEVATION: 7

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 04/96
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 2

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 2
SCREEN INTERVAL: 8-18
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 177C

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 30.002777780 LONGITUDE: -93.398888890

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MAP ID# 70

Distance from Property: 0.45 mi. (2,376 ft.) W

ID NUMBER: 295931093243001

LOCAL WELL: **5445Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: DOMESTIC

USE DESCRIPTION: PLUGGED AND ABANDONED DOMESTIC

DRILLER NAME: UNKNOWN

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 166
WATER LEVEL: 0.00
YIELD: NOT REPORTED

HOLE DEPTH: 0
ELEVATION: 11

PLUGGED BY: **SOIL TESTING** DATE PLUGGED: **07/88**

DATE COMPLETED: **NOT REPORTED**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 2
CASING MATERIAL: STEEL

SCREEN DIAMETER: NOT REPORTED SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTS

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.991944440 LONGITUDE: -93.408333330

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MAP ID# 71

Distance from Property: 0.46 mi. (2,429 ft.) E

ID NUMBER: 295940093233501

LOCAL WELL: **5815Z** PARISH NUM: **023**

OWNER NAME: WARREN PETRO

WELL USE: PIEZOMETER

USE DESCRIPTION: PIEZOMETER DRILLER NAME: PROFESSIONAL-

WELL STATUS: ACTIVE
WELL DEPTH: 15
WATER LEVEL: 2.00
YIELD: NOT REPORTED

HOLE DEPTH: 15
ELEVATION: 10

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 08/97
DRAWDOWN: NOT REPORTED
CASING DIAMETER: 0.50
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: 1.50
SCREEN INTERVAL: 12-15
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.994444440 LONGITUDE: -93.393055560

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Order# 67530 Job# 146782 121 of 127

MAP ID# 71

Distance from Property: 0.45 mi. (2,376 ft.) E

ID NUMBER: 295941093233601

LOCAL WELL: **5814Z** PARISH NUM: **023**

OWNER NAME: WARREN PETRO

WELL USE: PIEZOMETER

USE DESCRIPTION: PIEZOMETER DRILLER NAME: PROFESSIONAL-

WELL STATUS: ACTIVE
WELL DEPTH: 15
WATER LEVEL: 2.00
YIELD: NOT REPORTED
HOLE DEPTH: 15

ELEVATION: 11

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: 08/97
DRAWDOWN: NOT REPORTED
CASING DIAMETER: 0.50
CASING MATERIAL: PLASTIC
SCREEN DIAMETER: 1.50
SCREEN INTERVAL: 12-15
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214A

TOWNSHIP/SECTION/RANGE: 12S 021 10W

LATITUDE: 29.994722220 LONGITUDE: -93.393333330

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Order# 67530 Job# 146782 122 of 127

MAP ID# 72

Distance from Property: 0.46 mi. (2,429 ft.) NW

ID NUMBER: 300008093242301

LOCAL WELL: **5770Z** PARISH NUM: **023**

OWNER NAME: US DEPT ENERGY

WELL USE: MONITOR

USE DESCRIPTION: MONITOR
DRILLER NAME: LAYNE (ENV)
WELL STATUS: ACTIVE
WELL DEPTH: 18
WATER LEVEL: 10.50
YIELD: NOT REPORTED

HOLE DEPTH: 18 ELEVATION: 17

PLUGGED BY: **NOT REPORTED**DATE PLUGGED: **NOT REPORTED**

DATE COMPLETED: **04/96**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 2

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 2
SCREEN INTERVAL: 6-16
GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 177C

TOWNSHIP/SECTION/RANGE: 12S 020 10W

LATITUDE: 30.002222220 LONGITUDE: -93.406388890

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Louisiana Water Well Registry (WW)

MAP ID# 73

Distance from Property: 0.48 mi. (2,534 ft.) E

ID NUMBER: 295837093233301

LOCAL WELL: **5683Z** PARISH NUM: **023**

OWNER NAME: TRIDENT NGL
WELL USE: RIG SUPPLY

USE DESCRIPTION: PLUGGED AND ABANDONED RIG SUPPLY

DRILLER NAME: RIG WATER

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 546
WATER LEVEL: 55.00
YIELD: NOT REPORTED
HOLE DEPTH: 560

ELEVATION: NOT REPORTED
PLUGGED BY: RIG WATER
DATE PLUGGED: 12/93
DATE COMPLETED: 10/93
DRAWDOWN: NOT REPORTED

CASING DIAMETER: 4

CASING MATERIAL: PLASTIC

SCREEN DIAMETER: 4
SCREEN INTERVAL: 526-546
GEOLOGIC UNIT: 11205LC
QUAD NUM: NOT REPORTED

TOWNSHIP/SECTION/RANGE: 12S 033 10W

LATITUDE: 29.976944440 LONGITUDE: -93.392500000

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Order# 67530 Job# 146782 124 of 127

Louisiana Water Well Registry (WW)

MAP ID# 74

Distance from Property: 0.5 mi. (2,640 ft.) SW

ID NUMBER: 295934093243301

LOCAL WELL: **5444Z** PARISH NUM: **023**

OWNER NAME: USDEPT ENERGY

WELL USE: DOMESTIC

USE DESCRIPTION: PLUGGED AND ABANDONED DOMESTIC

DRILLER NAME: UNKNOWN

WELL STATUS: PLUGGED AND ABANDONDED

WELL DEPTH: 32
WATER LEVEL: 0.00
YIELD: NOT REPORTED

HOLE DEPTH: 0
ELEVATION: 15

PLUGGED BY: **SOIL TESTING** DATE PLUGGED: **07/88**

DATE COMPLETED: **NOT REPORTED**DRAWDOWN: **NOT REPORTED**

CASING DIAMETER: 6

CASING MATERIAL: NOT REPORTED
SCREEN DIAMETER: NOT REPORTED
SCREEN INTERVAL: NOT REPORTED

GEOLOGIC UNIT: 112CHCTC

QUAD NUM: 214

TOWNSHIP/SECTION/RANGE: 12S 029 10W

LATITUDE: 29.992777780 LONGITUDE: -93.409166670

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Environmental Records Definitions - FEDERAL

NWIS United States Geological Survey National Water Information System

VERSION DATE: 05/14/15

This USGS National Water Information System database only includes groundwater wells. The USGS defines this well type as: A hole or shaft constructed in the earth intended to be used to locate, sample, or develop groundwater, oil, gas, or some other subsurface material. The diameter of a well is typically much smaller than the depth. Wells are also used to artificially recharge groundwater or to pressurize oil and gas production zones. Additional information about specific kinds of wells should be recorded under the secondary site types or the Use of Site field. Underground waste-disposal wells should be classified as waste-injection wells.

Environmental Records Definitions - STATE (LA)

ww Louisiana Water Well Registry

VERSION DATE: 04/02/16

The Statewide Water Well Registration data file is maintained by the Louisiana Department of Natural Resources, Office of Conservation (DNR). This database includes wells registered with the Louisiana Department of Transportation and Development (DOTD), along with the Louisiana District of the United States Geological Survey, prior to March 1, 2010 and wells registered with the DNR after March 1, 2010. The information has been carefully prepared from the best available sources of data. It is intended for general informational purposes only and should not be considered authoritative for navigational, engineering, other sitespecific uses, or any other uses. The DNR does not warrant or guarantee its accuracy, nor does DNR assume any responsibility or liability for any reliance thereon.



Historical Aerials Package

http://www.geo-search.net/QuickMap/index.htm?DataID=Standard0000146786

Click on link above to access the map and satellite view of current property

Target Property:

2.1 Mile Corridor Hackberry, Cameron Parish, Louisiana 70645

Prepared For:

S&B Infrastructure-Houston

Order #: 67530 Job #: 146786

Date: 05/24/2016

phone: 888-396-0042 · fax: 512-472-9967 · www.geo-search.com

TARGET PROPERTY SUMMARY

2.1 Mile Corridor

Hackberry, Cameron Parish, Louisiana 70645

USGS Quadrangle: **Browns Lake, LA** Target Property Geometry: **Corridor**

Target Property Longitude(s)/Latitude(s):

 $\begin{array}{l} (-93.402310,\ 29.996727),\ (-93.400890,\ 29.996720),\ (-93.400687,\ 29.993669),\ (-93.400906,\ 29.991898), \\ (-93.400893,\ 29.989738),\ (-93.400896,\ 29.986393),\ (-93.400871,\ 29.982836),\ (-93.400884,\ 29.980880), \\ (-93.400091,\ 29.980072),\ (-93.400063,\ 29.978937),\ (-93.400859,\ 29.978141),\ (-93.400822,\ 29.976341), \\ (-93.400878,\ 29.972140),\ (-93.400178,\ 29.971675),\ (-93.397053,\ 29.970341) \end{array}$

County/Parish Covered:

Cameron (LA)

Zipcode(s) Covered: Hackberry LA: 70645

State(s) Covered:

LA

*Target property is located in Radon Zone 3.

Zone 3 areas have a predicted average indoor radon screening level less than 2 pCi/L (picocuries per liter).

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SITE: 2.1 MILE CORRIDOR SOURCE: USDA DATE: 2015 COUNTY: CAMERON PARISH, LA SCALE: 1" = 1,000'



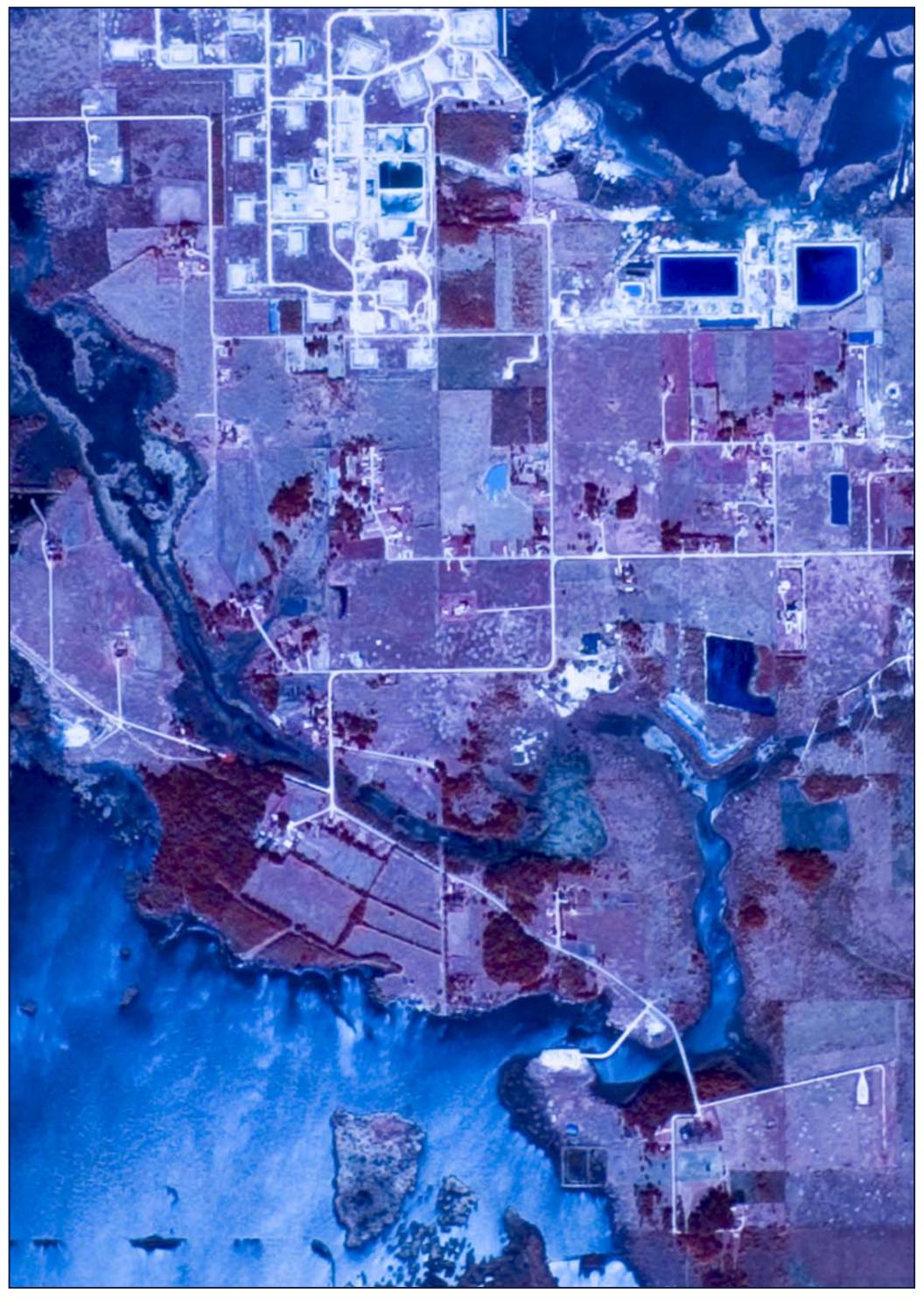


SITE: 2.1 MILE CORRIDOR SOURCE: USDA DATE: 2003 COUNTY: CAMERON PARISH, LA SCALE: 1" = 1,000'





SITE: 2.1 MILE CORRIDOR SOURCE: LOSCO DATE: 02/08/1998 COUNTY: CAMERON PARISH, LA SCALE: 1" = 1,000'





SITE: 2.1 MILE CORRIDOR SOURCE: USGS

DATE: 11/23/1989 COUNTY: CAMERON PARISH, LA SCALE: 1" = 1,000'





SITE: 2.1 MILE CORRIDOR

SOURCE: USGS

DATE: 03/10/1983 COUNTY: CAMERON PARISH, LA

SCALE: 1" = 1,000'





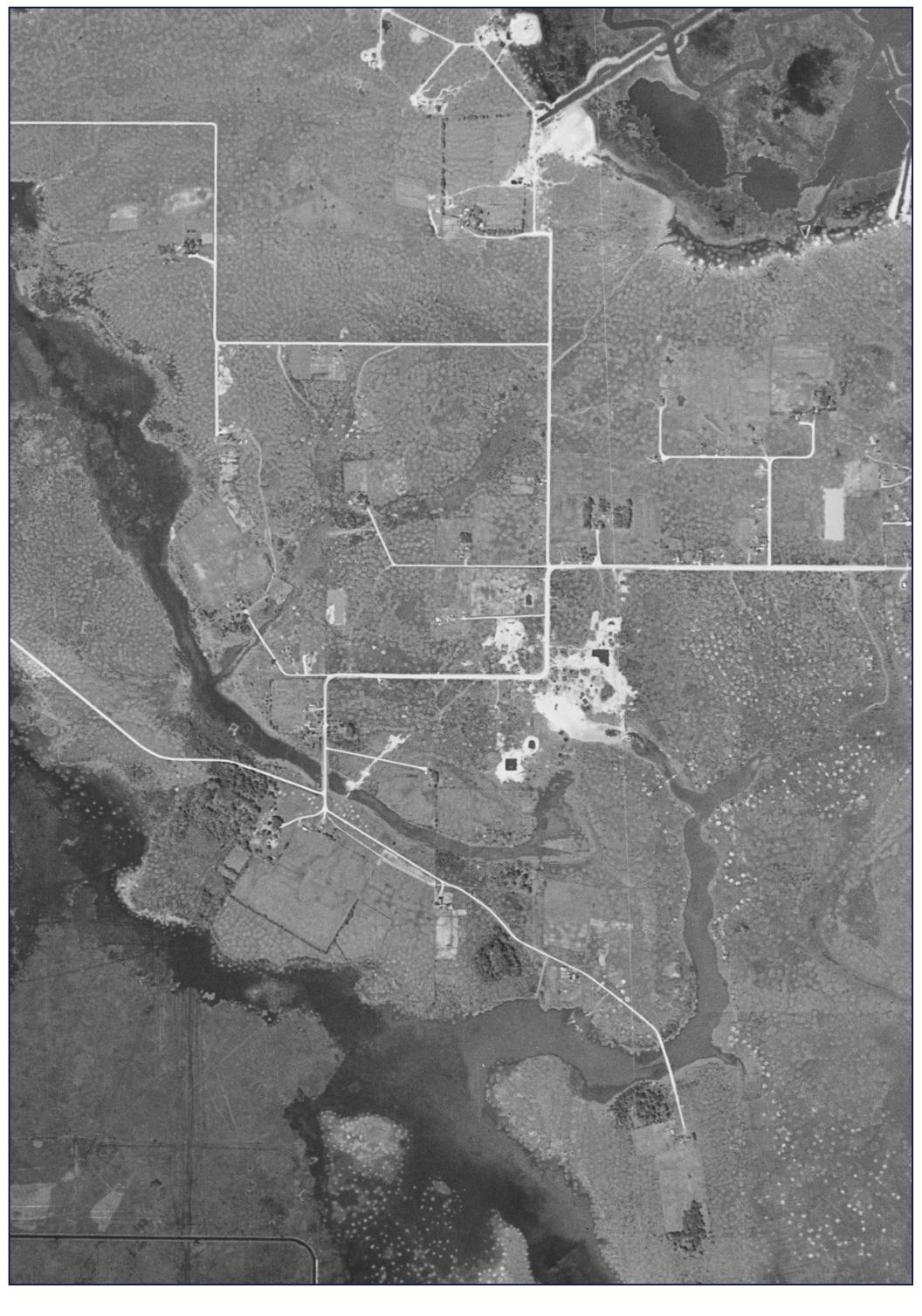
SITE: 2.1 MILE CORRIDOR SOURCE: USGS DATE: 05/09/1978 COUNTY: CAMERON PARISH, LA SCALE: 1" = 1,000'

GeoSearch





SITE: 2.1 MILE CORRIDOR SOURCE: USGS DATE: 03/02/1975 COUNTY: CAMERON PARISH, LA SCALE: 1" = 1,000'





SITE: 2.1 MILE CORRIDOR SOURCE: AMS DATE: 03/24/1952 COUNTY: CAMERON PARISH, LA SCALE: 1" = 1,000'



Historical Topographic Maps

http://www.geo-search.net/QuickMap/index.htm?DataID=Standard0000146781

Click on link above to access the map and satellite view of current property

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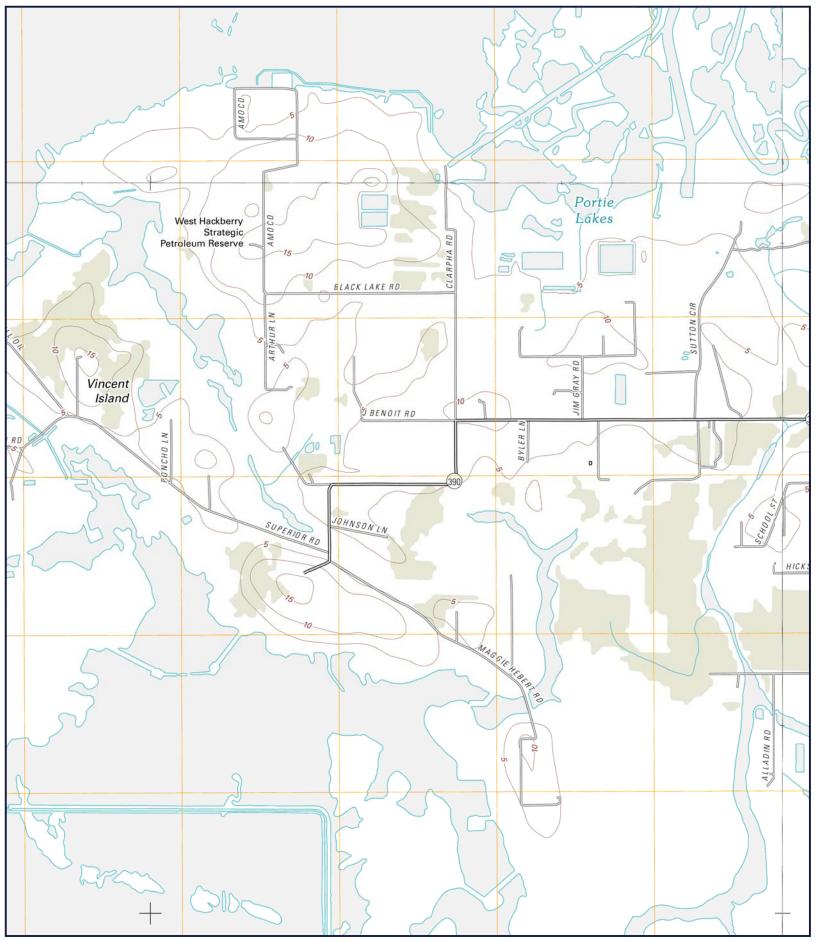
LA

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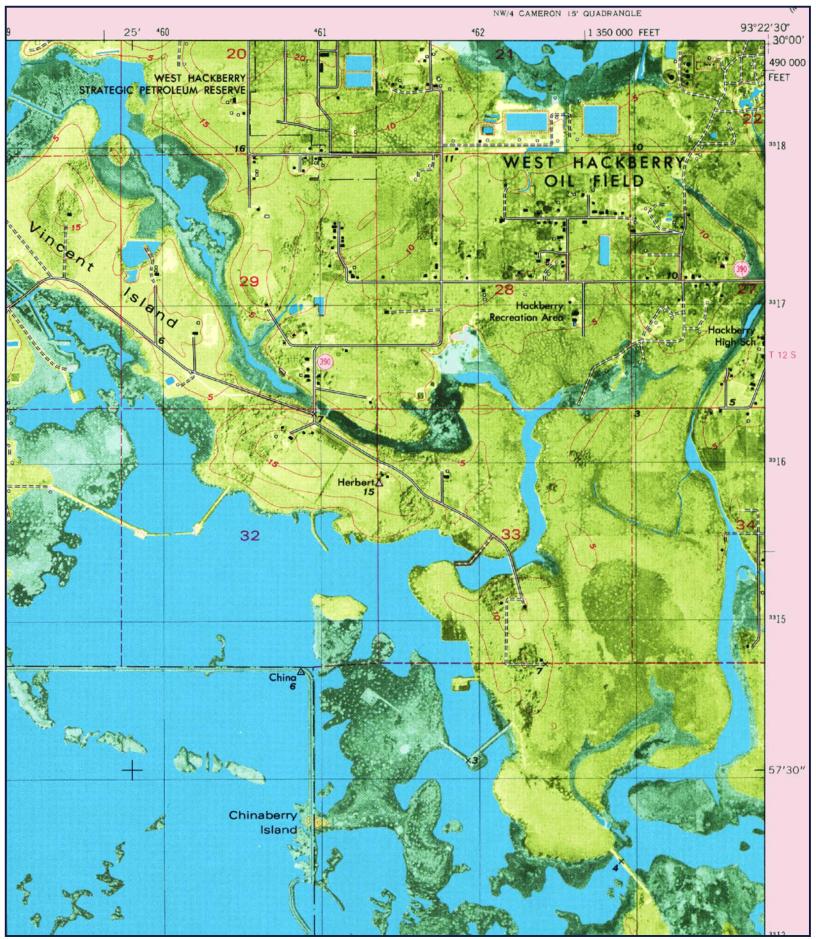


SITE: 2.1 MILE CORRIDOR

QUAD: BROWNS LAKE, LA; BLACK LAKE, LA

DATE: 2012 SCALE: 1:24,000



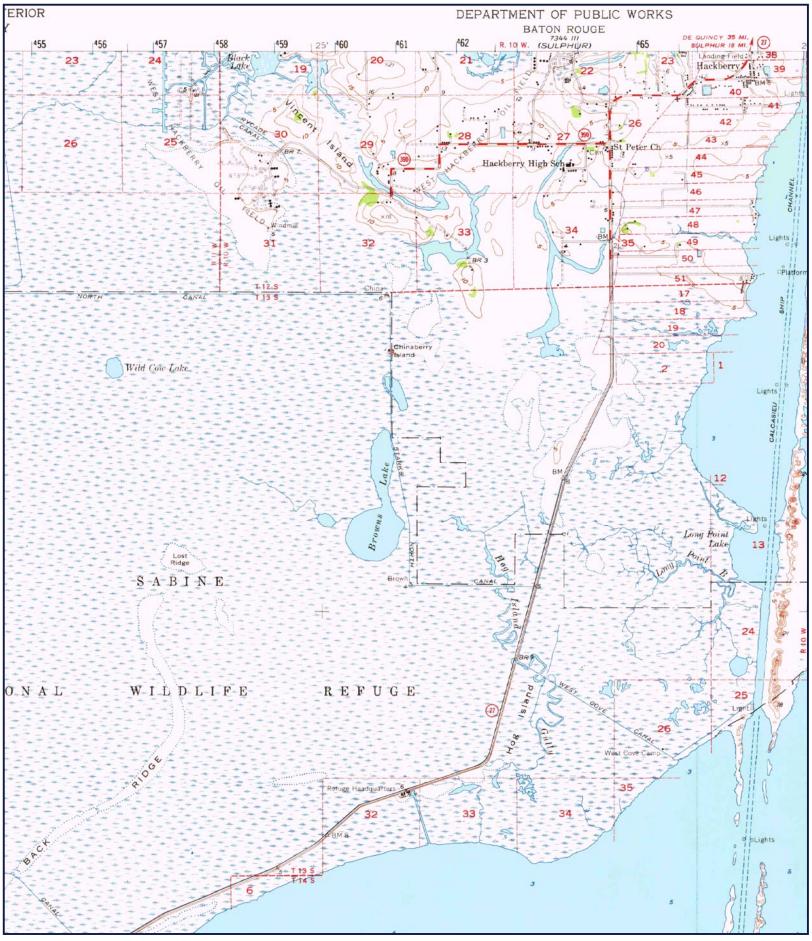




SITE: 2.1 MILE CORRIDOR QUAD: BROWNS LAKE, LA

DATE: 1982 SCALE: 1:24,000



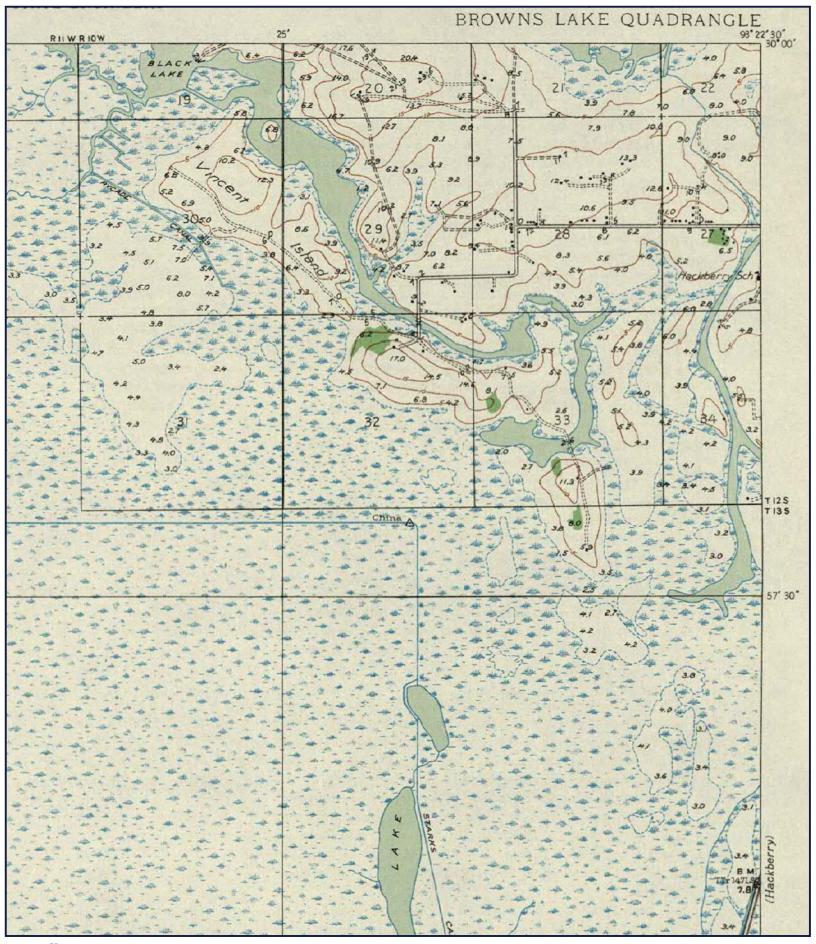




SITE: 2.1 MILE CORRIDOR QUAD: CAMERON, LA

DATE: 1955 SCALE: 1:62,500



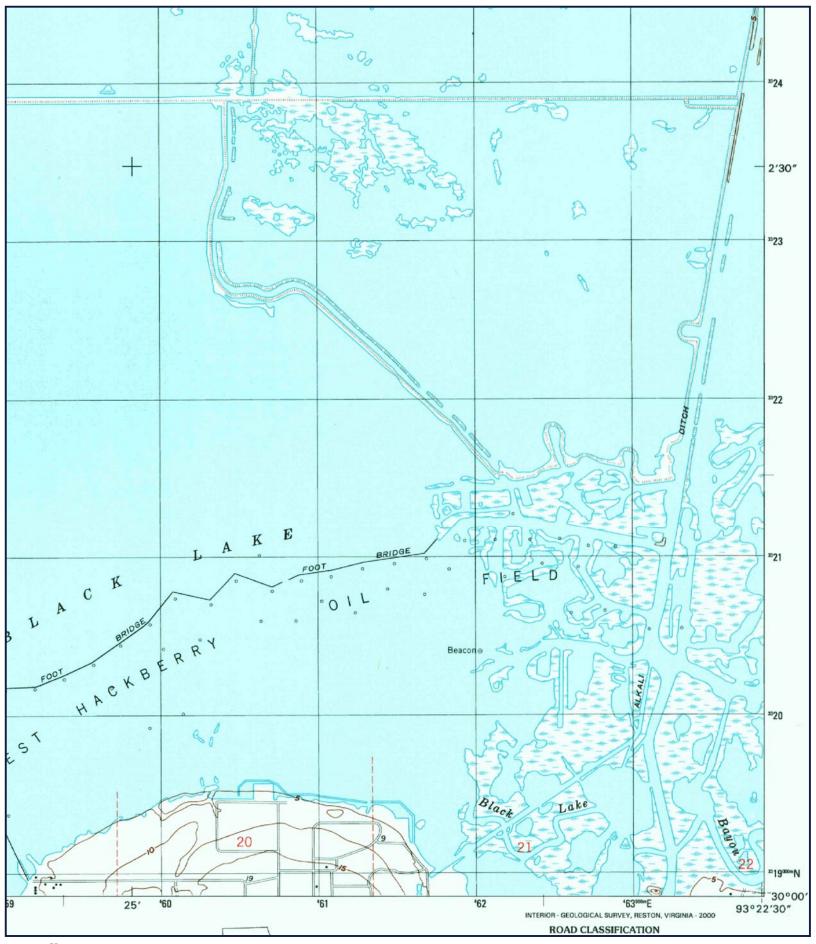




SITE: 2.1 MILE CORRIDOR QUAD: BROWNS LAKE, LA

DATE: 1935 SCALE: 1:31,680







DATE: 1998 SCALE: 1:24,000



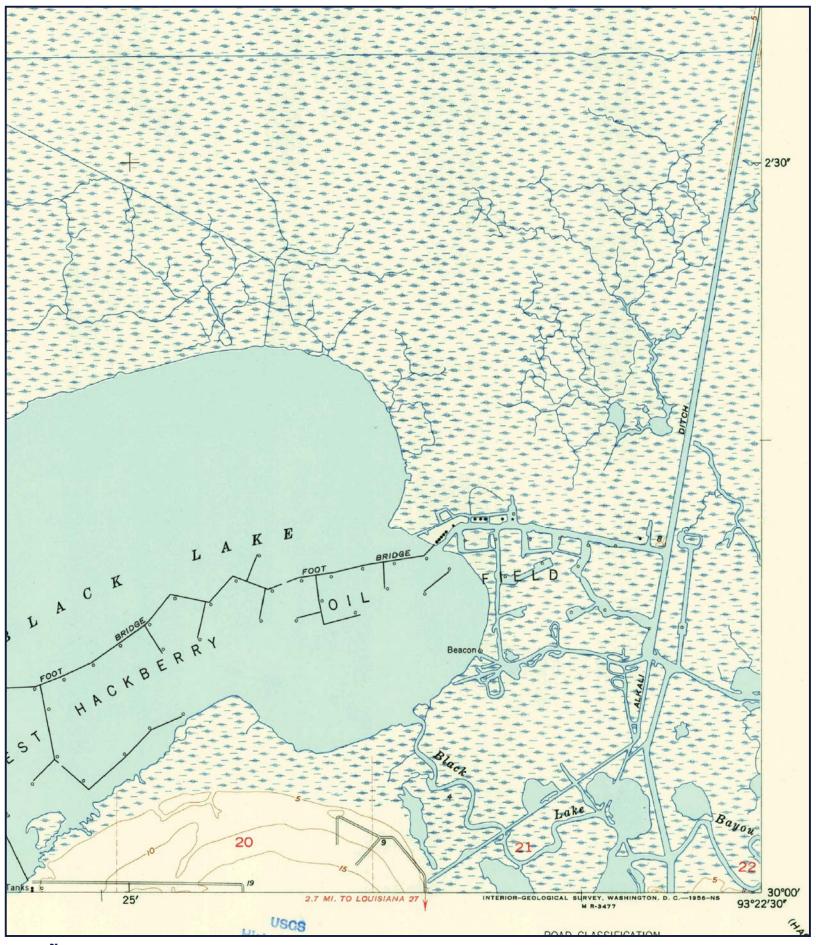




DATE: 1955 PHOTOREVISED 1975

SCALE: 1:24,000

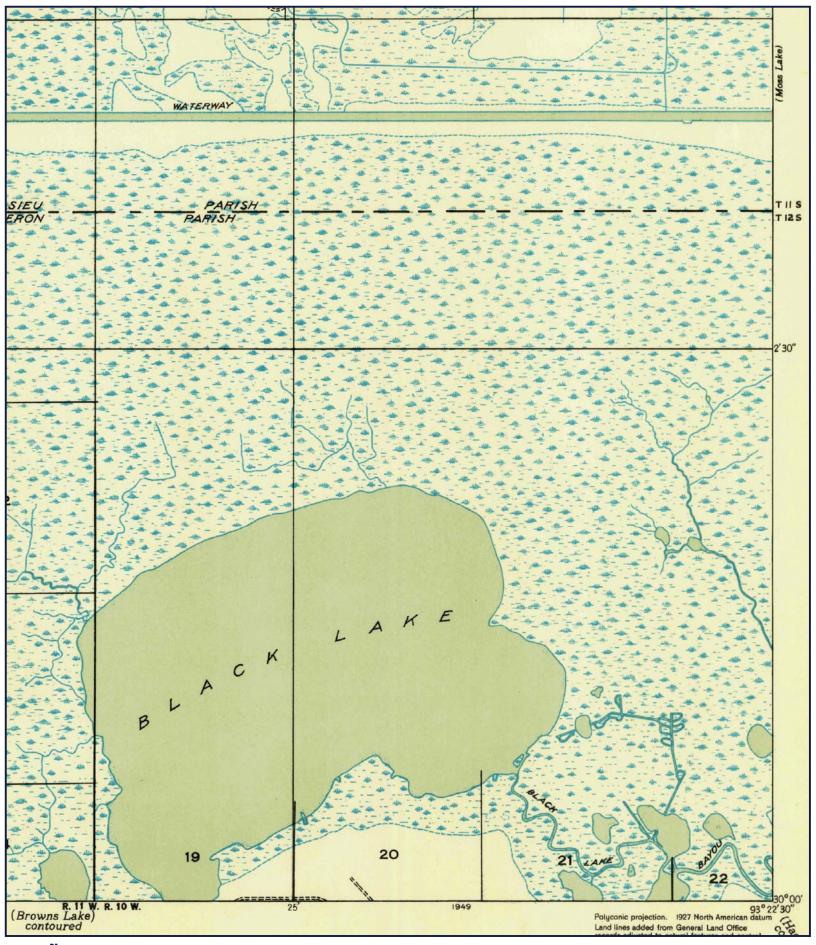






DATE: 1955 SCALE: 1:24,000







DATE: 1949 SCALE: 1:31,680

