SJB GROUP, LLC

QUALITY BY DESIGN

April 30, 2015

Mr. Larry Henson
Louisiana Economic Development (LED)
1051 North Third St.
Baton Rouge, LA 70802-5239

Mr. David Conner
Southwest Economic Development Alliance (SWLA)
P.O. Box 3110
Lake Charles, LA 70602

RE: B11-Chennault Sites 2 & 2A (185 Acres)
Wetlands Delineation Report

Dear Gentlemen:

SJB Group, LLC (SJB) has been authorized by Louisiana Economic Development (LED and Southwest Louisiana Economic Alliance (SWLA) to perform due diligence investigations to determine the existence of fatal flaws, if any, that would inhibit the development of Chennault Site 2 & 2A (+/- 185 acres), located southeast of the City of Lake Charles in Calcasieu Parish, Louisiana.

The attached report presents the findings of the Wetlands Delineation efforts for the site. The Wetlands Delineation was performed by SJB Group, LLC of Baton Rouge, LA.

Please feel free to contact me at (225) 769-3400, at any time, should you have any questions or need further information.

Sincerely,

SJB GROUP, LLC

Michael L. Thompson, P.E., C.E.T.
Engineering Department Manager

Enclosure: Wetlands Delineation Report

G:\ENGPROJ\LDD\11341_0 B11-Chennault Site 2-2A 185Acres\Wetlands\Cover Letter-Wetlands.docx

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www.sjbgroup.com

Wetland Delineation

± 185.0 acre site B-11 (Chennault SW 2 & 2a)
Located along E. Prien Lake Road
Lake Charles, Calcasieu Parish, Louisiana

for

Mr. David Conner
SWLA Economic Development Alliance
4310 Ryan Street
Lake Charles, LA 70605

Mr. Larry Henson
Louisiana Economic Development (LED)
1051 North Third Street
Baton Rouge, LA 70802-5239

Submitted by:

Jason LeBourgeois
Engineering designer/Inspector

Prepared by:

SJB GROUP, LLC
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JUNE 2014
Ref. 11341.1

WETLAND DELINEATION REPORT

± 185.0 acre site B-11 (Chennault SW 2 & 2a)
Located along E. Prien Lake Road
Lake Charles, Calcasieu Parish, Louisiana

For

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TABLE OF CONTENTS

PAGE

1.0 INTRODUCTION 1
- 1.1 GENERAL 1
- 1.2 SCOPE AND PURPOSE 1

2.0 SITE DESCRIPTION 2
- 2.1 LOCATION 2
- 2.2 DESCRIPTION 2

3.0 SITE INSPECTION 3
- 3.1 GENERAL 3
- 3.2 PRELIMINARY DATA GATHERING 3
- 3.3 SAMPLE LOCATIONS 3
- 3.4 FIELD PERSONNEL 3

4.0 SITE DATA 4
- 4.1 SOILS 4
- 4.2 VEGETATION 4

5.0 FINDINGS AND CONCLUSIONS 5
- 5.1 FINDINGS 5
- 5.2 CONCLUSIONS 6

6.0 REFERENCES 7

LIST OF FIGURES

FIGURE 1	VICINITY MAP
FIGURE 2	SITE PLAN

LIST OF APPENDICES

APPENDIX A	ROUTINE WETLAND DELINEATION DATA FORMS

LIST OF EXHIBITS

EXHIBIT 1	AERIAL PHOTOGRAPH
EXHIBIT 2	SOIL SURVEY MAP

PHOTOGRAPHS 1 THROUGH 10

1.0 INTRODUCTION

1.1 GENERAL

This report details the investigation of the presence of wetlands under the jurisdiction of the United States Army Corps of Engineers (USACE) for a ±185 acre tract of land located along E. Prien Lake Road, Lake Charles, Calcasieu Parish, Louisiana. This report was prepared by SJB Group, LLC (SJB) of Baton Rouge, Louisiana at the request of Louisiana Economic development (LED), and SWLA Economic Development Alliance (SWLA).

1.2 SCOPE AND PURPOSE

The purpose of this report is to present the field data that was collected, to evaluate the three diagnostic characteristics of wetlands, and to give an opinion on the presence and potential extent of jurisdictional wetlands on the site. However, the New Orleans District of the USACE has the ultimate authority to make an official determination of wetlands or jurisdiction over property in Calcasieu Parish, Louisiana. This report was prepared in accordance with guidance found in the USACE's Wetlands Delineation Manual (Environmental Laboratory, 1987) and Interim Regional Supplement to the USACE's Wetland Delineation Manual (Environmental Laboratory, 2008).

Wetlands are defined as "areas that are inundated or saturated at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (40 CFR 230.3). The three diagnostic characteristics of wetlands are soils, vegetation, and hydrology. Wetlands must exhibit hydric soils, a prevalence of hydrophytic vegetation, and periodic soil saturation. Each of these characteristics as well as observations on modifications to normal circumstances will be described for the Site. Supporting data collected from 5 sample locations are presented in Appendix A.

2.0 SITE DESCRIPTION

2.1 LOCATION

The site is located in Lake Charles, Calcasieu Parish, Louisiana. It is geographically located at latitude 30.201167 and longitude -93.151064. The site is in Section 11, Township 10 South, Range 8 West, Calcasieu Parish. Figure 1 is a vicinity map showing the location of the site.

2.2 DESCRIPTION

The site is ±185.0 acres located on the north side of E. Prien Lake Road and southeast of Mallard Cove Drive. It is irregular in shape with rough dimensions of 4,900 feet by 1,700 feet. The site has 4,300 feet of frontage along E. Prien Lake Road which it is accessible. The site consists of maintained open pastures throughout the site. The Site was previously vacant grasslands. The site is maintain by the Chennault Airport and is leased out for cattle grazing.

According to aerial photographs, the site has been vacant maintained grasslands habitat (see Figure 1, Exhibit 1, and Exhibit 2). There are no structures on the site. Photographs of the site are provided as an attachment.

3.0 SITE INSPECTION

3.1 GENERAL

On May 7th, 2014, SJB's wetland specialists inspected the site. Five representative locations (shown in Figure 2) were chosen for making field observations and collecting soil samples in order to characterize the site. At each sample location, vegetation species were recorded, soil samples were collected for identification and determination of hydric properties, and observations were made on hydrologic conditions. Each sample location was photographed (see attachment provided at the end of the report).

3.2 PRELIMINARY DATA GATHERING

Prior to conducting any fieldwork, SJB conducted a desktop investigation of the site using a series of maps. These maps included a 1998 USGS 7.5-minute topographic map (USGS, 1998), a 1995 USDA soil survey (USDA, 1995), and a 2013 aerial photograph (USGS, 2014).

3.3 SAMPLE LOCATIONS

During the field investigation, SJB conducted an cursory evaluation of the entire site. After becoming familiar with the landscape features of the site, five sampling locations were chosen to characterize large homogeneous areas of habitat and to define potential wetland/non-wetland boundaries. A GPS unit was used to determine any potential wetland boundaries and soil samples were taken to identify soil types. All sample locations and wetland boundaries were flagged and mapped. The data collected during the site visit is included in the figures, exhibits, and appendices of this report.

3.4 FIELD PERSONNEL

Field data was collected by Paul LeBlanc III. Mr. LeBlanc has a Bachelor's degree in Fisheries from Louisiana State University. He has successfully completed a Wetland Delineation Certification Program conducted by the Wetland Training Institute. He has been conducting Wetland Delineations for the past 7 years.

4.0 SITE DATA

4.1 SOILS

According to the soil survey developed by the USDA Soil Conservation Services (SCS), the site is underlain by Mowata-Vidrine silt loam and Edgerly loam soils. Mowata-Vidrine silt loam consists of poorly drained soils with high runoff potential. Edgerly loam consists of soils that are poorly drained and high runoff potential. Mowata-Vidrine silt loams are listed as hydric soils only along terraces that are dominated with Mowata-Vidrine soils (USDA, 1995). Edgerly loams are not listed as hydric soils (USDA, 1995).

SJB collected soil samples up to 16 inches deep for each of the four sample locations. The depth of each sample was sufficient to determine changes in the upper horizons and to observe field indicators of hydric soils. Soil samples were described and compared to descriptions and maps in the soil survey. Field observations confirm that the majority of the site appears to be underlain by Mowata-Vidrine silt loam and Edgerly loams.

4.2 VEGETATION

The site is comprised of range and pasture land. Species observed during the inspection of the herbaceous shrub/seedling stratum include: broom-sedge (*Andropogon virginicus*), Soft Rush (*Juncus effuses*), Bahai grass (*Paspalum notatum*), Bull Thistle (*Cirsium vulgare*), include Drummond Rattlebox (*Sesbania drummondii*), Chinese Privet (*Ligustrum sinense*), Tallow Tree (*Sapium serbiferum*), and Golden Rod (*Solidago austrina*).

Woody vines present during the inspection included Louisiana blackberry (*Rubus louisianus*). The wetland indicator status for the species ranges from facultative wetlands (FACW) to facultative (FAC). FACW species are typically found in both wetlands and non-wetland areas. FAC species typically grow in non-wetland areas but can also be found in wetlands.

4.3 HYDROLOGY

The average elevation on the site is approximately 15 feet above mean sea level. The site slopes in a westerly direction and has small drainage swell located near the wooded area boundary and managed grassland. A roadside drainage ditch runs along the southern border of the property along Hwy 12.

SJB observed no positive indicators of wetland hydrology at the five sample locations.

5.0 FINDINGS AND CONCLUSIONS

5.1 FINDINGS

Data was gathered and observations were made on the three diagnostic characteristics of jurisdictional wetlands on the ±185.0-acre site. The findings include:

Soils: The soils observed on the site (Mowata-Vidrine silt loam and Edgerly loam) are consistent with soil surveys developed by the USDA SCS (USDA, Service 1995). The soil survey is provided in Exhibit 2. Field data indicate that the majority of the site is underlain by Mowata-Vidrine silt loam, which is listed as hydric soils in areas along terraces. The hydric criteria for wetlands soils were not met for the five sample locations.

Vegetation: Facultative vegetation is present throughout the entire site with hydrophytic vegetation located in range and pasture land areas. Vegetation is primarily classified as facultative and facultative-wetland. The majority of the vegetation that is present on the site is considered hydrophytic. The vegetation criterion for wetlands was met at all sample locations.

Hydrology: Surface runoff throughout the site appears to drain in westerly direction. Indicators of wetland hydrology were not present at the sample locations throughout the site. The hydrology criteria for wetlands were not met at five sample locations.

Potential Wetlands: The site appears to have no areas identifiable as potential jurisdictional wetlands. (Figure 2).

5.2 CONCLUSIONS

Based on the information reviewed and the field data collected, there are no potential jurisdictional wetlands on the site. Positive evidence of the all three diagnostic characteristics for jurisdictional wetlands was not found at each of the sample locations shown on Figure 2.

The USACE, under the authority of the Clean Water Act, Section 404 and the Rivers and Harbors Act, Section 10 has the responsibility to make a final determination of the location and extent of jurisdictional wetlands and navigable waters on this property. This report represents the opinion of the investigators and should be considered preliminary until final determination is obtained from the USACE New Orleans District.

6.0 REFERENCES

Environmental Laboratory, 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, MS. 1987.

Environmental Laboratory, 2008. Interim Regional Supplement to the Corp of Engineers Wetland Delineation Manual: Atlantic and Gulf Coast Plain Region. Vicksburg, MS. October 2008.

U.S. Department of Agriculture, black-and-white aerial photography from 1940.

U.S. Department of Agriculture, Soil Conservation Service. 1995. Soil mapping Units and Hydric Soils Designations, Louisiana. Third edition. 1995.

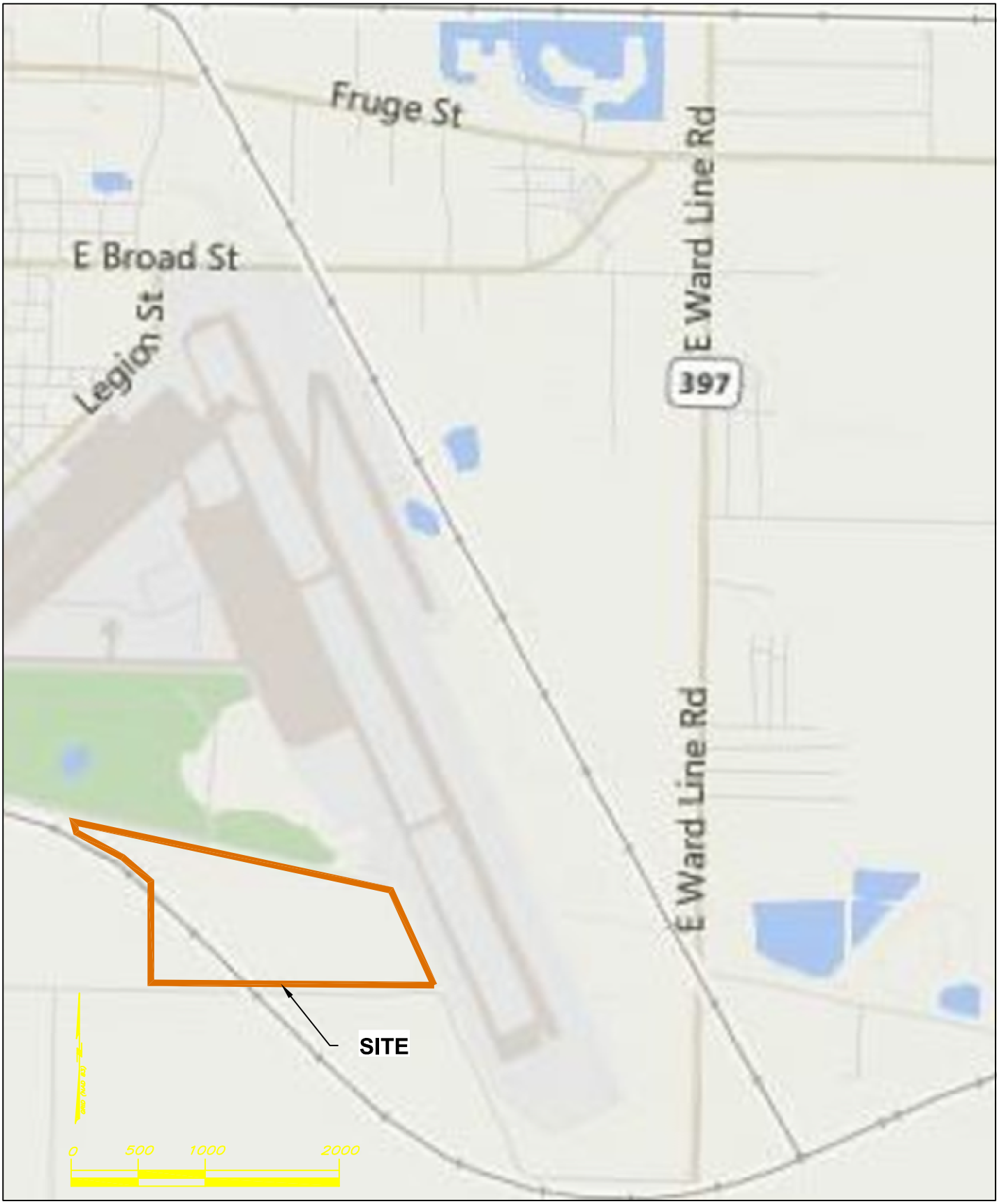
U.S. Geological Survey. "Lake Charles, Louisiana," 7.5-minute topographic quadrangle map, 1994.

United States Geological Survey, color aerial photography from 2013.

B-11 CHENNAULT SW SITES 2&2A
(185 ACRES)

WETLAND DELINEATION

FIGURES, ROUTINE DATA FORMS, EXHIBITS, PHOTOGRAPHS



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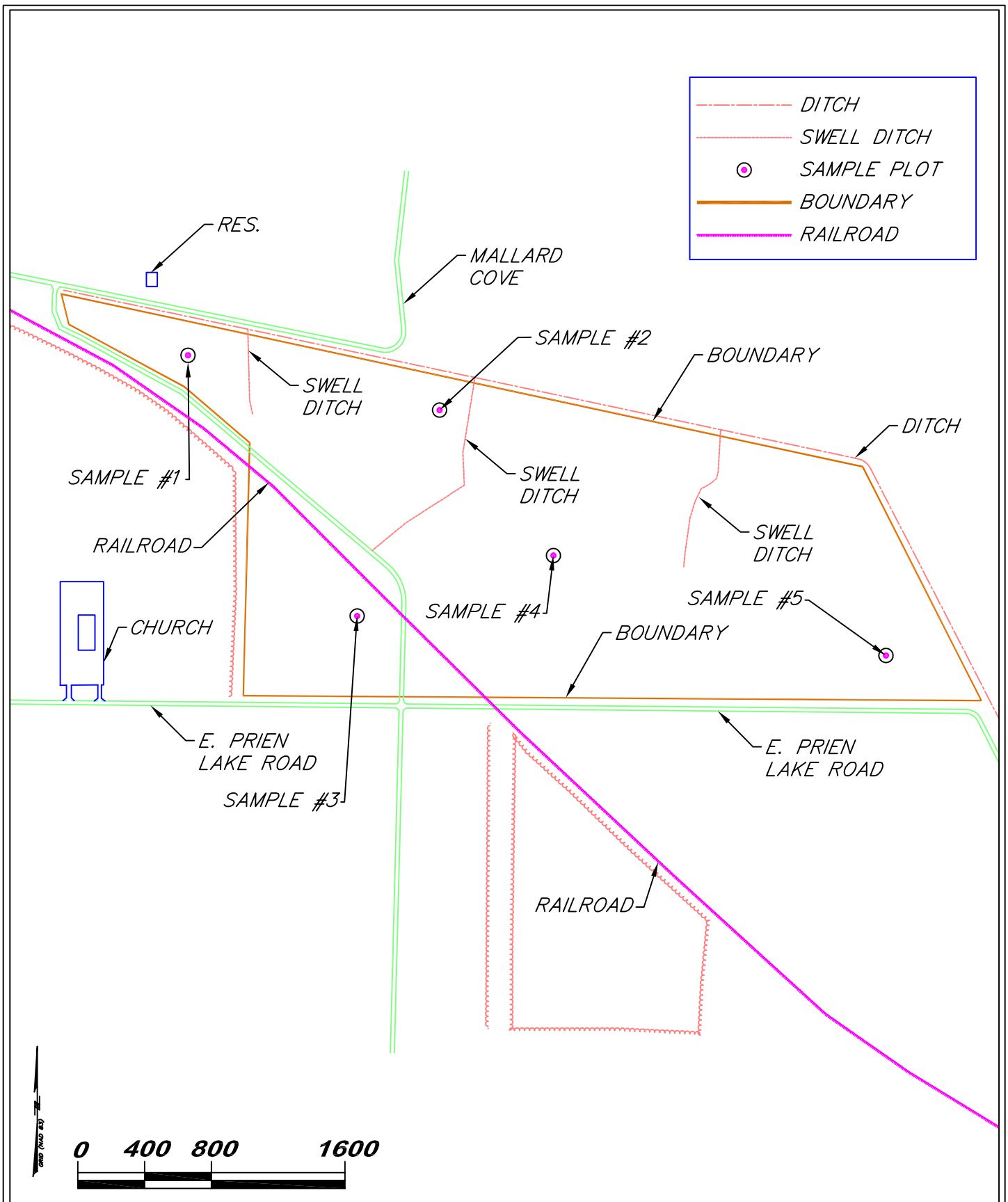
WETLAND DELINEATION
VICINITY MAP
B11 CHENNAULT SITE 2
LAKE CHARLES, LOUISIANA

FIGURE

1



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WETLAND DELINEATION
SITE PLAN
SW 2 &2A CHENNAULT SITE 2& 2A
LAKE CHARLES, LOUISIANA

FIGURE

2

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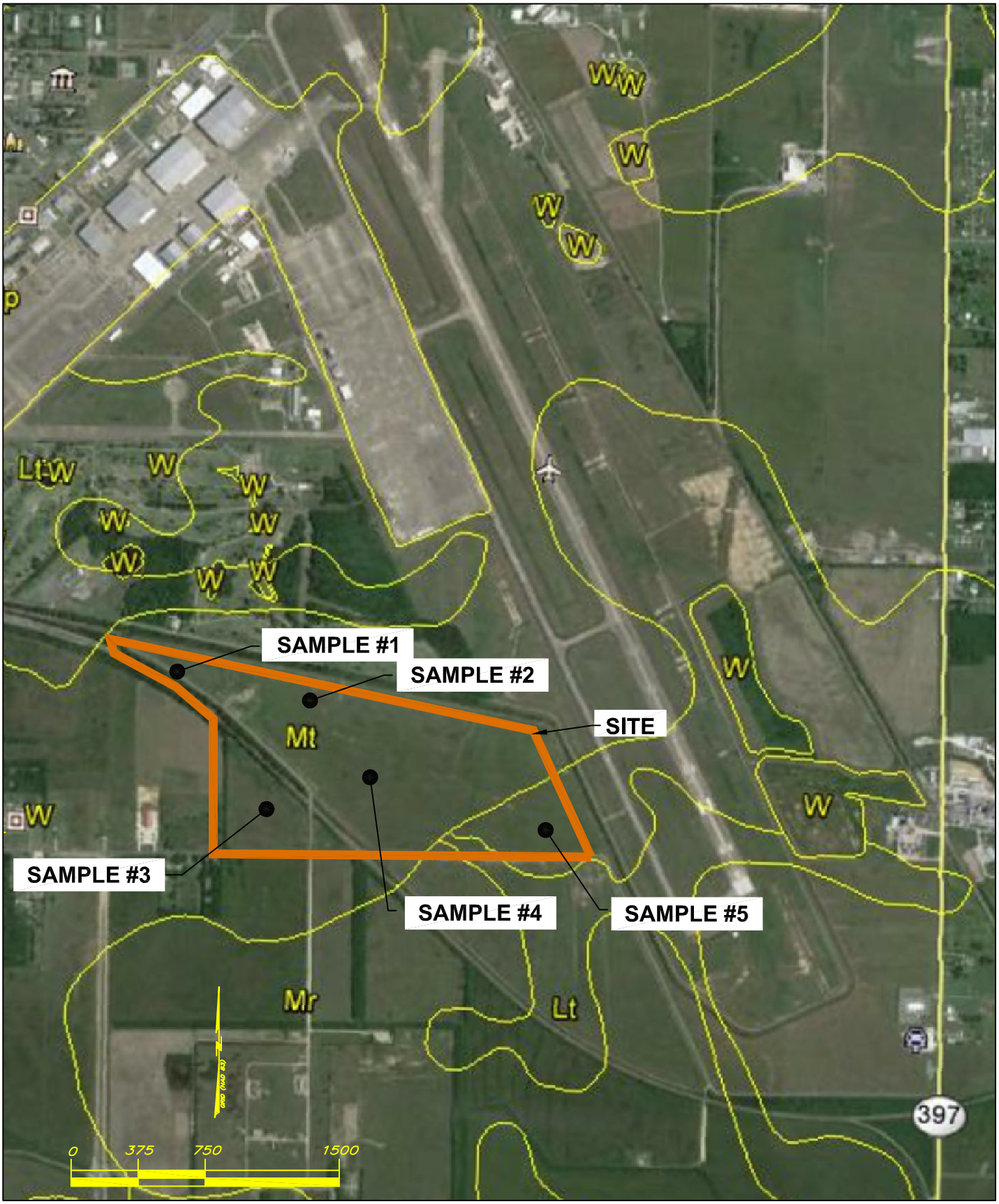
WETLAND DELINEATION
2013 AERIAL PHOTOGRAPH
B11 CHENNAULT SITE 2
LAKE CHARLES, LOUISIANA

EXHIBIT

1



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WETLAND DELINEATION
SOILS MAP
B11 CHENNAULT SITE 2
LAKE CHARLES, LOUISIANA

EXHIBIT

2

PHOTOGRAPH 1: View of the gravel road used to enter the property.

PHOTOGRAPH 2: View of the habitat to the northwest corner of the site.

PHOTOGRAPH 3: Typical view of the habitat upland habitat across the site.

PHOTOGRAPH 4: View of the soil type taken near Sample Location #3.

PHOTOGRAPH 5: View of drainage swell that runs through the center of the site.

PHOTOGRAPH 6: View of a portion of the site in which fill material was added.

PHOTOGRAPH 7: View of hydric indicators scattered throughout the site.

PHOTOGRAPH 8: View of soils near Sample Location #4.

PHOTOGRAPH 9: View of the site facing east.

PHOTOGRAPH 10 : View of Soils near Sample Location # 5.

DATA FORM
ROUTINE WETLAND DETERMINATION
(Atlantic and Gulf Coast Plain Region)
SAMPLE LOCATION 1

Project/Site:	185 acres-locatedE. Prien Lake Road Site 2	Date:	6/13/2012
Applicant/Owner:	David Conner and Larry Henson	Parish:	Calcasieu
Investigator:	P. LeBlanc; J.LeBourgeois	State:	Louisiana
		Sample Location:	1
Landform (hillslope, terrace, etc.):	Plains Slope: 1%	Section, Township, Range:	Sect 11, Twn 10 South, Range 8 West
Subregion (LRR or MLRA):	LRR Lat:	Long:	Datum:
Soil Map Unit Name:	Mowata-Vidrine silt loam	NWI classification:	None
Are climatic hydrological conditions on the site typical for this time of year?		(Yes) No	(If no, explain in Remarks)
Are Vegetation No, Soil No , Hydrology No significantly disturbed?		Are Normal Circumstances present on the site?	
Are Vegetation No, Soil No , Hydrology No naturally problematic?		(Yes) No	

SUMMARY OF FINDINGS: WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present?	(Yes)	No	
Wetland Hydrology Present?	Yes	(No)	
Hydric Soils Present?	(Yes)	No	Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

Sample Plot #1 located at the northwestern portion of the Site.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)	___ Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)
___ High Water Table (A2)	___ Aquatic Fauna (B13)	___ Sparsely Vegetated Surfaces (Concave)
___ Saturated in Upper 12 inches (A3)	___ Hydrogen Sulfide Odor (C1)	___ Drainage Patterns (B10)
___ Water Marks (B1)	___ Oxidized Root Channels upper 12 in. (C3)	___ Moss Trim Lines (B16)
___ Sediment Deposits (B2)	___ Presence of Reduced Iron (C4)	___ Dry-Season Water Table (C2)
___ Drift Deposits (B3)	___ Recent Iron Reduction in Tilled Soils (C6)	x Crayfish Burrows (C8)
___ Algal Mat or Crust (B4)	___ Thin Muck Surface (C7)	___ Saturation Visible on Aerial Imagery
___ Iron Deposits (B5)	___ Other (Explain Remarks)	___ Geomorphic Position (D2)
___ Inundated Visible on Aerial Imagery (B7)		___ Shallow Aquitard (D3)
		x FAC-Neutral Test (D5)

Secondary Indicators (minimum 2 required)

Field Observations:

Surface Water Present? Yes (No) _____ (in.)
Depth of Free Water in Pit? Yes (No) _____ (in.)
Saturated Soil Present? Yes (No) _____ (in.)
(includes capillary fringe)

Wetland Hydrology Present? Yes (No)

Describe Recorded Data (stream guage, monitoring wells, aerial photos, previous inspections), if available:

Remarks: Aerial photographs used to determine break in habitat types and historical use of Site.

VEGETATION- Scientic Names of Plants **SAMPLE LOCATION** **1**

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
Mowata-Vidrine silt loam	= Total Cover		
Sapling Stratum (Plot size: 30ft)			
1. *Sapium serbiferum*	10	No	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Shrub Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 30ft)			
1. *Paspalum notatum*	10	Yes	FAC
2. *Cirsium vulgare*	10	No	FAC
3. *Andropogon virginicus*	15	Yes	FAC
4. *Sorghum halpense*	15	Yes	FAC
5. *Solidago austrina*	10	Yes	FAC
6. *Cynodon doctylon*	30	Yes	FAC
7.			
	90% = Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Rubus louisianus*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC 6 (A)

Total Number of Dominant Species across All Strata 6 (B)

% of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

OBL species		x1	
FACW species		x2	
FAC species	8	x3	24
FACU species		x4	
UPL species		x5	
Column Totals:	8 (A)		24 (B)
Prevalence Index: B/A =			3

Hydrophytic Vegetation Indicators:

Y Dominance Test is >50%

Y Prevalence Index is <= 3.0 *

N Problematic Hydrophytic Vegetation *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding vines, approximately 20 ft (6m) or more in height and 3 inch (7.6 cm) or larger in diameter at breast height (DBH).

Sapling-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH

Shrub-Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6m) in height.

Herb- All herbaceous (non-woody) plants, including herbaceousvines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1m) in height.

Woody Vine- All woody vines, regardless of height.

Remarks: (If observed, list morphological adaptations below).

Hydrophytic Vegetation Present? Yes X. No____.

SOILS **SAMPLE LOCATION 1**

Map Unit Name (Series and Phase): Mowata Series

Drainage Class: Poorly drained

Taxonomy (Subgroup): Mowata-Vidrine silt loam

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

REDOX FEATURES

Depth (inches)	Matrix Color (Munsell Moistidrin	%	Mottle Colors (Munsell Moist)	Mottle (Type* / Location**)	Texture / Remarks
0-8	10 YR 4/2	90	10 YR 5/1	C.M.	Silt loam
8-16	10 YR 5/2	85	10 YR 5/4	C.M.	Silt loam
16-20	10 YR 4/3	85	10 YR 7/2	C.M.	Silt loam

*Type:C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Gra ** Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Streaking in Sandy Soils (A6)
- ___ 5 cm Mucky Mineral (A7)
- ___ 1 cm Muck (A9)
- ___ Depleted below Dark Surface (A11)
- ___ Thick Dark Surface (12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- x Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depression (F8)
- ___ Depleted Ochric (F11)
- ___ Iron-Maganese Masses (F12)
- ___ Umbric Surface (F13)

Indicators for Problematic Hydric Soils*

- ___ 1 cm Muck (A9)
- ___ 2 cm Muck (A10)
- ___ Piedmont Floodplain Soils (F19)
- ___ Piedmont Floodplain Soils (F19)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

* Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

WETLAND DETERMINATION

Restrictive Layer (if observed):
Type: ____
Depth (inches): ____.

(Circle)

Hydric Soils Present? (Yes) No

Remarks: Soil listed as Hydric.

DATA FORM
ROUTINE WETLAND DETERMINATION
(Atlantic and Gulf Coast Plain Region)
SAMPLE LOCATION 2

Project/Site:	185 acres-locatedE. Prien Lake Road Site 2	Date:	6/13/2012
Applicant/Owner:	David Conner and Larry Henson	Parish:	Calcasieu
Investigator:	P. LeBlanc; J.LeBourgeois	State:	Louisiana
		Sample Location:	2
Landform (hillslope, terrace, etc.):	Plains Slope: 1%	Section, Township, Range:	Sect 11, Twn 10 South, Range 8 West
Subregion (LRR or MLRA):	LRR Lat:	Long:	Datum:
Soil Map Unit Name:	Mowata-Vidrine silt loam	NWI classification:	None
Are climatic hydrological conditions on the site typical for this time of year?		(Yes) No	(If no, explain in Remarks)
Are Vegetation No, Soil No , Hydrology No significantly disturbed?		Are Normal Circumstances present on the site?	
Are Vegetation No, Soil No , Hydrology No naturally problematic?		(Yes) No	

SUMMARY OF FINDINGS: WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present?	(Yes)	No	
Wetland Hydrology Present?	Yes	(No)	
Hydric Soils Present?	(Yes)	No	Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

Sample Plot #1 located at the northwestern portion of the Site.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)	___ Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)
___ High Water Table (A2)	___ Aquatic Fauna (B13)	___ Sparsley Vegetated Surfaces (Concave)
___ Saturated in Upper 12 inches (A3)	___ Hydrogen Sulfide Odor (C1)	___ Drainage Patterns (B10)
___ Water Marks (B1)	___ Oxidized Root Channels upper 12 in. (C3)	___ Moss Trim Lines (B16)
___ Sediment Deposits (B2)	___ Presence of Reduced Iron (C4)	___ Dry-Season Water Table (C2)
___ Drift Deposits (B3)	___ Recent Iron Reduction in Tilled Soils (C6)	x Crayfish Burrows (C8)
___ Algal Mat or Crust (B4)	___ Thin Muck Surface (C7)	___ Saturation Visible on Aerial Imagery
___ Iron Deposits (B5)	___ Other (Explain Remarks)	___ Geomorphic Position (D2)
___ Inundated Visible on Aerial Imagery (B7)		___ Shallow Aquitard (D3)
		x FAC-Neutral Test (D5)

Secondary Indicators (minimum 2 required)

Field Observations:

Surface Water Present? Yes (No) _____ (in.)
Depth of Free Water in Pit? Yes (No) _____ (in.)
Saturated Soil Present? Yes (No) _____ (in.)
(includes capillary fringe)

Wetland Hydrology Present? Yes (No)

Describe Recorded Data (stream guage, monitoring wells, aerial photos, previous inspections), if available:

Remarks: Aerial photographs used to determine break in habitat types and historical use of Site.

VEGETATION- Scientic Names of Plants **SAMPLE LOCATION** **2**

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
Mowata-Vidrine silt loam	= Total Cover		
Sapling Stratum (Plot size: 30ft)			
1. *Sapium serbiferum*	10	No	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Shrub Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 30ft)			
1. *Paspalum notatum*	10	Yes	FAC
2. *Cirsium vulgare*	10	No	FAC
3. *Andropogon virginicus*	15	Yes	FAC
4. *Sorghum halpense*	15	Yes	FAC
5. *Solidago austrina*	10	Yes	FAC
6. *Cynodon doctylon*	30	Yes	FAC
7.			
	90% = Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Rubus louisianus*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC 6 (A)

Total Number of Dominant Species across All Strata 6 (B)

% of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

OBL species		x1	
FACW species		x2	
FAC species	8	x3	24
FACU species		x4	
UPL species		x5	
Column Totals:	8 (A)		24 (B)

Prevalence Index: B/A = 3

Hydrophytic Vegetation Indicators:

Y Dominance Test is >50%

Y Prevalence Index is <= 3.0 *

N Problematic Hydrophytic Vegetation *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding vines, approximately 20 ft (6m) or more in height and 3 inch (7.6 cm) or larger in diameter at breast height (DBH).

Sapling-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH

Shrub-Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6m) in height.

Herb- All herbaceous (non-woody) plants, including herbaceousvines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1m) in height.

Woody Vine- All woody vines, regardless of height.

Remarks: (If observed, list morphological adaptations below).

Hydrophytic Vegetation Present? Yes X. No____.

SOILS **SAMPLE LOCATION 2**

Map Unit Name (Series and Phase): Mowata Series

Drainage Class: Poorly drained

Taxonomy (Subgroup): Mowata-Vidrine silt loam

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

REDOX FEATURES

Depth (inches)	Matrix Color (Munsell Moist/dri	%	Mottle Colors (Munsell Moist)	Mottle (Type* / Location**)	Texture / Remarks
0-8	10 YR 4/2	90	10 YR 5/1	C.M.	Silt loam
8-16	10 YR 5/2	85	10 YR 5/4	C.M.	Silt loam
16-20	10 YR 4/3	85	10 YR 7/2	C.M.	Silt loam

*Type:C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Gra ** Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Streaking in Sandy Soils (A6)
- ___ 5 cm Mucky Mineral (A7)
- ___ 1 cm Muck (A9)
- ___ Depleted below Dark Surface (A11)
- ___ Thick Dark Surface (12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- x Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depression (F8)
- ___ Depleted Ochric (F11)
- ___ Iron-Maganese Masses (F12)
- ___ Umbric Surface (F13)

Indicators for Problematic Hydric Soils*

- ___ 1 cm Muck (A9)
- ___ 2 cm Muck (A10)
- ___ Piedmont Floodplain Soils (F19)
- ___ Piedmont Floodplain Soils (F19)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

* Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

WETLAND DETERMINATION

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____.

(Circle)

Hydric Soils Present? (Yes) No

Remarks: Soil listed as Hydric.

DATA FORM
ROUTINE WETLAND DETERMINATION
(Atlantic and Gulf Coast Plain Region)
SAMPLE LOCATION 3

Project/Site:	185 acres-locatedE. Prien Lake Road Site 2	Date:	6/13/2012
Applicant/Owner:	David Conner and Larry Henson	Parish:	Calcasieu
Investigator:	P. LeBlanc; J.LeBourgeois	State:	Louisiana
		Sample Location:	3
Landform (hillslope, terrace, etc.):	Plains Slope: 1%	Section, Township, Range:	Sect 11, Twn 10 South, Range 8 West
Subregion (LRR or MLRA):	LRR Lat:	Long:	Datum:
Soil Map Unit Name:	Mowata-Vidrine silt loam	NWI classification:	None
Are climatic hydrological conditions on the site typical for this time of year?		(Yes) No	(If no, explain in Remarks)
Are Vegetation No, Soil No , Hydrology No significantly disturbed?		Are Normal Circumstances present on the site?	
Are Vegetation No, Soil No , Hydrology No naturally problematic?		(Yes) No	

SUMMARY OF FINDINGS: WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present?	(Yes)	No	
Wetland Hydrology Present?	Yes	(No)	
Hydric Soils Present?	(Yes)	No	Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

Sample Plot #1 located at the northwestern portion of the Site.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)	___ Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)
___ High Water Table (A2)	___ Aquatic Fauna (B13)	___ Sparsley Vegetated Surfaces (Concave)
___ Saturated in Upper 12 inches (A3)	___ Hydrogen Sulfide Odor (C1)	___ Drainage Patterns (B10)
___ Water Marks (B1)	___ Oxidized Root Channels upper 12 in. (C3)	___ Moss Trim Lines (B16)
___ Sediment Deposits (B2)	___ Presence of Reduced Iron (C4)	___ Dry-Season Water Table (C2)
___ Drift Deposits (B3)	___ Recent Iron Reduction in Tilled Soils (C6)	x Crayfish Burrows (C8)
___ Algal Mat or Crust (B4)	___ Thin Muck Surface (C7)	___ Saturation Visible on Aerial Imagery
___ Iron Deposits (B5)	___ Other (Explain Remarks)	___ Geomorphic Position (D2)
___ Inundated Visible on Aerial Imagery (B7)		___ Shallow Aquitard (D3)
		x FAC-Neutral Test (D5)

Secondary Indicators (minimum 2 required)

Field Observations:

Surface Water Present? Yes (No) _____ (in.)
Depth of Free Water in Pit? Yes (No) _____ (in.)
Saturated Soil Present? Yes (No) _____ (in.)
(includes capillary fringe)

Wetland Hydrology Present? Yes (No)

Describe Recorded Data (stream guage, monitoring wells, aerial photos, previous inspections), if available:

Remarks: Aerial photographs used to determine break in habitat types and historical use of Site.

VEGETATION- Scientic Names of Plants **SAMPLE LOCATION** **3**

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
Mowata-Vidrine silt loam	= Total Cover		
Sapling Stratum (Plot size: 30ft)			
1. *Sapium serbiferum*	10	No	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Shrub Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 30ft)			
1. *Paspalum notatum*	10	Yes	FAC
2. *Cirsium vulgare*	10	No	FAC
3. *Andropogon virginicus*	15	Yes	FAC
4. *Sorghum halpense*	15	Yes	FAC
5. *Solidago austrina*	10	Yes	FAC
6. *Cynodon doctylon*	30	Yes	FAC
7.			
	90% = Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Rubus louisianus*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC 6 (A)

Total Number of Dominant Species across All Strata 6 (B)

% of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

OBL species		x1	
FACW species		x2	
FAC species	8	x3	24
FACU species		x4	
UPL species		x5	
Column Totals:	8 (A)		24 (B)

Prevalence Index: B/A = 3

Hydrophytic Vegetation Indicators:

Y Dominance Test is >50%

Y Prevalence Index is <= 3.0 *

N Problematic Hydrophytic Vegetation *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding vines, approximately 20 ft (6m) or more in height and 3 inch (7.6 cm) or larger in diameter at breast height (DBH).

Sapling-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH

Shrub-Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6m) in height.

Herb- All herbaceous (non-woody) plants, including herbaceousvines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1m) in height.

Woody Vine- All woody vines, regardless of height.

Remarks: (If observed, list morphological adaptations below).

Hydrophytic Vegetation Present? Yes X. No____.

SOILS **SAMPLE LOCATION 3**

Map Unit Name (Series and Phase): Mowata Series

Drainage Class: Poorly drained

Taxonomy (Subgroup): Mowata-Vidrine silt loam

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

REDOX FEATURES

Depth (inches)	Matrix Color (Munsell Moist/dri	%	Mottle Colors (Munsell Moist)	Mottle (Type* / Location**)	Texture / Remarks
0-8	10 YR 4/2	90	10 YR 5/1	C.M.	Silt loam
8-16	10 YR 5/2	85	10 YR 5/4	C.M.	Silt loam
16-20	10 YR 4/3	85	10 YR 7/2	C.M.	Silt loam

*Type:C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Gra ** Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Organic Streaking in Sandy Soils (A6)
___ 5 cm Mucky Mineral (A7)
___ 1 cm Muck (A9)
___ Depleted below Dark Surface (A11)
___ Thick Dark Surface (12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)

___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
x Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depression (F8)
___ Depleted Ochric (F11)
___ Iron-Maganese Masses (F12)
___ Umbric Surface (F13)

Indicators for Problematic Hydric Soils*

___ 1 cm Muck (A9)
___ 2 cm Muck (A10)
___ Piedmont Floodplain Soils (F19)
___ Piedmont Floodplain Soils (F19)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

* Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

WETLAND DETERMINATION

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____.

(Circle)

Hydric Soils Present? (Yes) No

Remarks: Soil listed as Hydric.

DATA FORM
ROUTINE WETLAND DETERMINATION
(Atlantic and Gulf Coast Plain Region)
SAMPLE LOCATION 4

Project/Site:	185 acres-locatedE. Prien Lake Road Site 2	Date:	6/13/2012
Applicant/Owner:	David Conner and Larry Henson	Parish:	Calcasieu
Investigator:	P. LeBlanc; J.LeBourgeois	State:	Louisiana
		Sample Location:	4
Landform (hillslope, terrace, etc.):	Plains Slope: 1%	Section, Township, Range:	Sect 11, Twn 10 South, Range 8 West
Subregion (LRR or MLRA):	LRR Lat:	Long:	Datum:
Soil Map Unit Name:	Mowata-Vidrine silt loam	NWI classification:	None
Are climatic hydrological conditions on the site typical for this time of year?		(Yes) No	(If no, explain in Remarks)
Are Vegetation No, Soil No , Hydrology No significantly disturbed?		Are Normal Circumstances present on the site?	
Are Vegetation No, Soil No , Hydrology No naturally problematic?		(Yes) No	

SUMMARY OF FINDINGS: WETLAND DETERMINATION

	(Circle)			(Circle)
Hydrophytic Vegetation Present?	(Yes)	No		
Wetland Hydrology Present?	Yes	(No)		
Hydric Soils Present?	(Yes)	No	Is this Sampling Point Within a Wetland?	Yes (No)

Remarks:

Sample Plot #1 located at the northwestern portion of the Site.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)	___ Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)
___ High Water Table (A2)	___ Aquatic Fauna (B13)	___ Sparsley Vegetated Surfaces (Concave)
___ Saturated in Upper 12 inches (A3)	___ Hydrogen Sulfide Odor (C1)	___ Drainage Patterns (B10)
___ Water Marks (B1)	___ Oxidized Root Channels upper 12 in. (C3)	___ Moss Trim Lines (B16)
___ Sediment Deposits (B2)	___ Presence of Reduced Iron (C4)	___ Dry-Season Water Table (C2)
___ Drift Deposits (B3)	___ Recent Iron Reduction in Tilled Soils (C6)	x Crayfish Burrows (C8)
___ Algal Mat or Crust (B4)	___ Thin Muck Surface (C7)	___ Saturation Visible on Aerial Imagery
___ Iron Deposits (B5)	___ Other (Explain Remarks)	___ Geomorphic Position (D2)
___ Inundated Visible on Aerial Imagery (B7)		___ Shallow Aquitard (D3)
		x FAC-Neutral Test (D5)

Secondary Indicators (minimum 2 required)

Field Observations:

Surface Water Present? Yes (No) _____ (in.)
Depth of Free Water in Pit? Yes (No) _____ (in.)
Saturated Soil Present? Yes (No) _____ (in.)
(includes capillary fringe)

Wetland Hydrology Present? Yes (No)

Describe Recorded Data (stream guage, monitoring wells, aerial photos, previous inspections), if available:

Remarks: Aerial photographs used to determine break in habitat types and historical use of Site.

VEGETATION- Scientic Names of Plants **SAMPLE LOCATION** **4**

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
Mowata-Vidrine silt loam	= Total Cover		
Sapling Stratum (Plot size: 30ft)			
1. *Sapium serbiferum*	10	No	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Shrub Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 30ft)			
1. *Paspalum notatum*	10	Yes	FAC
2. *Cirsium vulgare*	10	No	FAC
3. *Andropogon virginicus*	15	Yes	FAC
4. *Sorghum halpense*	15	Yes	FAC
5. *Solidago austrina*	10	Yes	FAC
6. *Cynodon doctylon*	30	Yes	FAC
7.			
	90% = Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Rubus louisianus*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC 6 (A)

Total Number of Dominant Species across All Strata 6 (B)

% of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

OBL species		x1	
FACW species		x2	
FAC species	8	x3	24
FACU species		x4	
UPL species		x5	
Column Totals:	8 (A)		24 (B)

Prevalence Index: B/A = 3

Hydrophytic Vegetation Indicators:

Y Dominance Test is >50%

Y Prevalence Index is <= 3.0 *

N Problematic Hydrophytic Vegetation *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding vines, approximately 20 ft (6m) or more in height and 3 inch (7.6 cm) or larger in diameter at breast height (DBH).

Sapling-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH

Shrub-Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6m) in height.

Herb- All herbaceous (non-woody) plants, including herbaceousvines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1m) in height.

Woody Vine- All woody vines, regardless of height.

Remarks: (If observed, list morphological adaptations below).

Hydrophytic Vegetation Present? Yes X. No____.

SOILS **SAMPLE LOCATION 4**

Map Unit Name (Series and Phase): Mowata Series

Drainage Class: Poorly drained

Taxonomy (Subgroup): Mowata-Vidrine silt loam

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

REDOX FEATURES

Depth (inches)	Matrix Color (Munsell Moist/dri	%	Mottle Colors (Munsell Moist)	Mottle (Type* / Location**)	Texture / Remarks
0-8	10 YR 4/2	90	10 YR 5/1	C.M.	Silt loam
8-16	10 YR 5/2	85	10 YR 5/4	C.M.	Silt loam
16-20	10 YR 4/3	85	10 YR 7/2	C.M.	Silt loam

*Type:C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Gra ** Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Streaking in Sandy Soils (A6)
- ___ 5 cm Mucky Mineral (A7)
- ___ 1 cm Muck (A9)
- ___ Depleted below Dark Surface (A11)
- ___ Thick Dark Surface (12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8)
- ___ Thin Dark Surface (S9)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- x Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depression (F8)
- ___ Depleted Ochric (F11)
- ___ Iron-Maganese Masses (F12)
- ___ Umbric Surface (F13)

Indicators for Problematic Hydric Soils*

- ___ 1 cm Muck (A9)
- ___ 2 cm Muck (A10)
- ___ Piedmont Floodplain Soils (F19)
- ___ Piedmont Floodplain Soils (F19)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

* Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

WETLAND DETERMINATION

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____.

(Circle)

Hydric Soils Present? (Yes) No

Remarks: Soil listed as Hydric.

DATA FORM
ROUTINE WETLAND DETERMINATION
(Atlantic and Gulf Coast Plain Region)
SAMPLE LOCATION 5

Project/Site:	185 acres-locatedE. Prien Lake Road Site 2	Date:	6/13/2012
Applicant/Owner:	David Conner and Larry Henson	Parish:	Calcasieu
Investigator:	P. LeBlanc; J.LeBourgeois	State:	Louisiana
		Sample Location:	5
Landform (hillslope, terrace, etc.):	Plains Slope: 1%	Section, Township, Range:	Sect 11, Twn 10 South, Range 8 West
Subregion (LRR or MLRA):	LRR Lat:	Long:	Datum:
Soil Map Unit Name:	Edgerly silt loam	NWI classification:	None
Are climatic hydrological conditions on the site typical for this time of year?		(Yes) No	(If no, explain in Remarks)
Are Vegetation No, Soil No , Hydrology No significantly disturbed?		Are Normal Circumstances present on the site?	
Are Vegetation No, Soil No , Hydrology No naturally problematic?		(Yes) No	

SUMMARY OF FINDINGS: WETLAND DETERMINATION

	(Circle)		(Circle)
Hydrophytic Vegetation Present?	(Yes)	No	
Wetland Hydrology Present?	Yes	(No)	
Hydric Soils Present?	Yes	(No)	Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

Sample Plot #1 located at the northwestern portion of the Site.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)	___ Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)
___ High Water Table (A2)	___ Aquatic Fauna (B13)	___ Sparsley Vegetated Surfaces (Concave)
___ Saturated in Upper 12 inches (A3)	___ Hydrogen Sulfide Odor (C1)	___ Drainage Patterns (B10)
___ Water Marks (B1)	___ Oxidized Root Channels upper 12 in. (C3)	___ Moss Trim Lines (B16)
___ Sediment Deposits (B2)	___ Presence of Reduced Iron (C4)	___ Dry-Season Water Table (C2)
___ Drift Deposits (B3)	___ Recent Iron Reduction in Tilled Soils (C6)	x Crayfish Burrows (C8)
___ Algal Mat or Crust (B4)	___ Thin Muck Surface (C7)	___ Saturation Visible on Aerial Imagery
___ Iron Deposits (B5)	___ Other (Explain Remarks)	___ Geomorphic Position (D2)
___ Inundated Visible on Aerial Imagery (B7)		___ Shallow Aquitard (D3)
		___ FAC-Neutral Test (D5)

Secondary Indicators (minimum 2 required)

Field Observations:

Surface Water Present? Yes (No) _____ (in.)
Depth of Free Water in Pit? Yes (No) _____ (in.)
Saturated Soil Present? Yes (No) _____ (in.)
(includes capillary fringe)

Wetland Hydrology Present? Yes (No)

Describe Recorded Data (stream guage, monitoring wells, aerial photos, previous inspections), if available:

Remarks: Aerial photographs used to determine break in habitat types and historical use of Site.

VEGETATION- Scientic Names of Plants **SAMPLE LOCATION** **5**

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
Mowata-Vidrine silt loam			
	= Total Cover		
Sapling Stratum (Plot size: 30ft)			
1. *Sapium serbiferum*	10	No	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Shrub Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 30ft)			
1. *Paspalum notatum*	10	Yes	FAC
2. *Cirsium vulgare*	10	No	FAC
3. *Andropogon virginicus*	15	Yes	FAC
4. *Sorghum halpense*	15	Yes	FAC
5. *Solidago austrina*	10	Yes	FAC
6. *Cynodon doctylon*	30	Yes	FAC
7.			
	90% = Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Rubus louisianus*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species across All Strata: 6 (B)

% of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

OBL species		x1	
FACW species		x2	
FAC species	8	x3	24
FACU species		x4	
UPL species		x5	
Column Totals:	8 (A)		24 (B)

Prevalence Index: B/A = 3

Hydrophytic Vegetation Indicators:

Y Dominance Test is >50%

Y Prevalence Index is <= 3.0 *

N Problematic Hydrophytic Vegetation *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding vines, approximately 20 ft (6m) or more in height and 3 inch (7.6 cm) or larger in diameter at breast height (DBH).

Sapling-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH

Shrub-Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6m) in height.

Herb- All herbaceous (non-woody) plants, including herbaceousvines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1m) in height.

Woody Vine- All woody vines, regardless of height.

Remarks: (If observed, list morphological adaptations below).

Hydrophytic Vegetation Present? Yes X. No____.

SOILS **SAMPLE LOCATION 5**

Map Unit Name
(Series and Phase): Edgerly Series

Drainage Class: Poorly drained

Taxonomy (Subgroup): Edgerly silt loam

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

REDOX FEATURES

Depth (inches)	Matrix Color (Munsell Moistidrin	%	Mottle Colors (Munsell Moist)	Mottle (Type* / Location**)	Texture / Remarks
0-7	10 YR 3/2	95	10 YR 6/2	C.M.	Silt loam
7-17	10 YR 3/1	85	7.5 YR 4/6	C.M.	Silt loam
17-20	10 YR 3/1	85	7.5 YR 4/4	C.M.	Silt loam

*Type:C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Gra ** Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Organic Streaking in Sandy Soils (A6)
___ 5 cm Mucky Mineral (A7)
___ 1 cm Muck (A9)
___ Depleted below Dark Surface (A11)
___ Thick Dark Surface (12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depression (F8)
___ Depleted Ochric (F11)
___ Iron-Maganese Masses (F12)
___ Umbric Surface (F13)

Indicators for Problematic Hydric Soils*

___ 1 cm Muck (A9)
___ 2 cm Muck (A10)
___ Piedmont Floodplain Soils (F19)
___ Piedmont Floodplain Soils (F19)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

* Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

WETLAND DETERMINATION

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____.

(Circle)
Hydric Soils Present? Yes (No)

Remarks: Soil listed as non-hydric.