# Exhibit EE. Blue Andrus Property Wetlands Delineation Report





# Blue Andrus Property Wetlands Delineation Report

# WETLAND DELINEATION BLUE ANDRUS PROPERTY GRAND COTEAU, ST. LANDRY PARISH, LOUISIANA

Prepared for:

One Acadiana 804 East St. Mary Blvd. Lafayette, Louisiana 70503

April 17, 2018

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Senior Engineer

Cleveland R. Hoffpauir

**Environmental Scientist** 

Prepared by:

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#### **SUMMARY**

An approximate 46-acre tract located east of Interstate 49 in Grand Coteau, St. Landry Parish, Louisiana was evaluated for the presence of jurisdictional wetlands. The majority of the property is herbaceous (non-woody), and void of any trees, shrubs, or vines. The northeastern portion of the property is forested. Soils present on the property, as mapped by the United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) include Calhoun silt loam; Coteau silt loam, 0 to 1 percent slopes; Coteau silt loam, 1 to 3 percent slopes; Memphis silt loam, 0 to 1 percent slopes; Memphis silt loam, 5 to 8 percent slopes; and Memphis silt loam, 8 to 20 percent slopes. The investigated property is undeveloped and is currently used for livestock pasture.

The wetland delineation was performed in accordance with the procedures and methods as described in the U.S. Department of the Army Corps of Engineers (COE) 1987 Manual for Wetland Delineations and the Atlantic and Gulf Coastal Plain Regional Supplement 2010.

Based on the results of this delineation, approximately 0.96 acres of wetlands are present within the property boundary. In addition to wetlands, approximately 2,200 linear feet of a tributary of Bayou Bourbeux is also present on the investigated property. This tributary will likely be considered Section 404 non-wetland waters by the COE.

#### 1.0 INTRODUCTION

Arabie Environmental Solutions, LLC (Arabie Environmental) was retained by One Acadiana to conduct a wetland delineation of property located along Interstate 49 in Grand Coteau, St. Landry Parish. The property is located in Section 65, Township 07 South, Range 04 East. The center of the property is located at Latitude 30° 25' 49.01" Longitude 93° 3' 38.11". The purpose of the delineation was to evaluate the tract for the potential presence of wetlands. A site location map is included as **Figure 1** and a site diagram is included as **Figures 2**. LIDAR imagery was also reviewed and is included as **Figure 3**.

Cleve Hoffpauir of Arabie Environmental performed the field evaluation on April 9<sup>th</sup> and 10<sup>th</sup>, 2018. Mr. Hoffpauir has a Bachelors of Science Degree in Environmental Science and has had specialized training in environmental investigations. Mr Hoffpauir has been performing wetland delineations for approximately ten years. Blaine Johnson managed the project. Mr. Johnson has over twenty years experience in environmental investigation and permitting, with over fifteen years experience in wetland permitting. Copies of the applicable Certificates of Training are included as **Attachment A**.

## 2.0 METHODOLOGY

The wetland delineation performed by Arabie Environmental was conducted in accordance with technical guidelines and methods for wetland delineations set forth by the COE in the 1987 Manual for Wetland Delineations and the Atlantic and Gulf Coastal Plains Regional Supplement 2010. These technical guidelines and methods utilize a multi-parameter

approach to identify and delineate wetlands for the purposes of Section 404 of the Clean Water Act.

According to the COE 1987 Manual for Wetland Delineations, a site must have hydrophytic vegetation, hydric soils, and wetland hydrology in order for it to be classified as a wetland. The following definitions are from the COE 1987 Manual for Wetland Determinations:

**Hydrophytic vegetation** – the sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. When hyrophytic vegetation comprises a community where indicators of hydric soils and wetland hydrology also occur, the area has wetland vegetation.

**Wetland soils** – a soil that is saturated, flooded, ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation (US Department of Agriculture – Soil Conservation Service 1985). Hydric soils that occur in areas having positive indicators of hydrophytic vegetation and wetland hydrology are wetland soils.

**Wetland hydrology** – the sum total of wetness characteristics in areas that are inundated or have saturated soils for sufficient duration to support hydrophytic vegetation.

Prior to the site visit, the St. Landry Parish Soil Survey prepared by the USDA-NRCS was reviewed. The purpose of that review was to determine the soil types as mapped by USDA. As indicated by the Soil Survey for St. Landry Parish, soils on the delineated site include six soil types: Calhoun silt loam (Cc); Coteau silt loam, 0 to 1 percent slopes (Co); Coteau silt loam, 1 to 3 percent slopes (Cp); Memphis silt loam, 0 to 1 percent slopes (Mc); Memphis silt loam, 5 to 8 percent slopes (Me); and Memphis silt loam, 8 to 20 percent slopes (Mf). Cc soils are listed as hydric in St. Landry Parish. In addition to the soils map, infrared aerial photography was reviewed. The soil maps and infrared photographs are included as **Attachment B**.

The delineation was begun by traversing the site and making a general evaluation of the topography and drainage features. Sample points were selected at appropriate locations to properly characterize the soil, vegetation, and hydrology on the investigated property. Six representative sample points were selected and detailed evaluations were conducted at these locations. The data collected at these sample points were recorded on Wetland Data Forms and the location of each sample plot was marked with a Trimble Global Positioning Unit (GPS). The Wetland Data Forms are included as **Attachment C**.

After a general evaluation of the tract and conducting data points, a Trimble GPS was utilized to map the wetland areas. Once GPS mapping was completed, geospatial data was imported into ArcView GIS for graphical display and land cover analysis.

#### 3.0 SITE DESCRIPTION

The delineated property is located adjacent to and east of Interstate 49 in Grand Coteau, St. Landry Parish. The tract is irregular in shape and encompasses approximately 46 acres. Based on aerial photography review, and the site investigation, the majority of the property is utilized as livestock pasture. As noted earlier in this report, the USDA-NRCS soil maps indicate that soils on the property consist of six soil types: Cc, Co, Cp, Mc, Me, and Mf. Cc soils are listed as hydric in St. Landry Parish. The property is made up of two habitats, forest and pasture. The dominant vegetation present in the pasture areas of the property consists of Bahia grass (Paspalum notatum) and Smut grass (Sporobolus indicus) which are facultative upland (FACU) species. FACU species do not thrive in wet conditions. The forested portions of the property consisted of Water Oak (Quercus nigra), Sweetgum (Liquidambar styraciflua), American Elm (Ulmus americana), and Chinese Tallow (Triadica sebifera). Four wetland areas were identified on the property. The dominant vegetation in these wetland areas consisted of rushes (Juncus sp.), sedges (Carex sp.) and carpet grass (Axonopus fissifolius), which are obligate wetland and facultative wetland species. These species commonly occur in wetlands. The majority of the property is well drained and did not demonstrate wetland characteristics. A tributary of Bayou Bourbeux is located in the northeastern portion of the property.

Photographs of the sample locations were taken and are included as **Attachment D**.

#### 4.0 FINDINGS

The tract of land was inspected with respect to the potential presence of wetlands. Six sample points were selected to characterize the site. At these sample points, the soils, hydrology and vegetation were characterized and the information recorded on Wetland Data Forms. The findings of the delineation are described in the following sections.

#### 4.1 VEGETATION

The typical dominant plant species that were encountered at the site included the following:

#### FACULTATIVE UPLAND

Paspalum notatum (Bahia grass) Sporobolus indicus (Smut grass) Lolium perenne (Perennial Ryegrass)

#### **FACULTATIVE**

Paspalum urvillei (Vasey's grass)
Quercus nigra (Water Oak)
Liquidambar styraciflua (Sweetgum)
Andropogon virginicus (Broom-sedge)
Vitis rotundifolia (Muscadine)

#### FACULTATIVE WETLAND

Axonopus fissifolius (Carpet grass)
Juncus effusus (Lamp Rush)

#### **OBLIGATE WETLAND**

Carex vulpinoidea (Brown sedge)

Three of the six sample points had a dominance of hydrophytic vegetation.

#### 4.2 SOILS

The review of the Soil Survey indicated that the delineated tract is located on six soil types. Below is a brief description of the soils from the Soil Survey of St. Landry Parish.

- Calhoun silt loam (Cc): Cc soil is level, poorly drained on broad flats or in depressional areas on the terrace uplands. Slopes are less than 1 percent. Cc soil is listed as hydric in St. Landry Parish.
- Coteau silt loam, 0 to 1 percent slopes (Co): Co soil is level and somewhat poorly drained. It is on broad, slightly convex ridgetops on the terrace uplands. Co soil is not listed as hydric in St. Landry Parish.
- Coteau silt loam, 1 to 3 percent slopes (Cp): Cp soil is very gently sloping and somewhat poorly drained. It is on the convex ridgetops and side slopes on the terrace uplands. Cp soil is not listed as hydric in St. Landry Parish.
- Memphis silt loam, 0 to 1 percent slopes (Mc): Mc soil is nearly level and well drained. It is on broad, convex ridgetops on the terrace uplands. Although Mc soil is not listed as hydric in St. Landry Parish, a small wetland area was identified in an area mapped Mc soil.
- Memphis silt loam, 5 to 8 percent slopes (Me): Me soil is moderately sloping and well drained. This soil is on side slopes and narrow, convex ridgetops on the terrace uplands. Me soil is not listed as hydric in St. Landry Parish, however, a small wetland area was identified in an area of the property mapped Me.
- Memphis silt loam, 8 to 20 percent slopes (Mf): Mf soil is strongly sloping to moderately steep. This well drained soil is on short side slopes along major entrenched drainageways on the terrace uplands and on the escarpment between the terrace uplands and the alluvial plains. Mf soil is not listed as hydric in St. Landry Parish.

#### 4.3 HYDROLOGY

General observations and inspections of soil samples were performed to evaluate for wetland hydrology. Potential primary indicators include inundated areas, saturated soil in the upper 12 inches, free water in the soil, water marks, drainage patterns of wetlands, and sediment deposits. Sample plots 1, 4, and 6 exhibited primary wetland hydrology indicators such as saturation, and surface water. The secondary wetland hydrology indicator crawfish burrows was present in sample plots 1 and 4. One primary indicator or two secondary indicators must be present for an area to have wetland hydrology.

#### 5.0 CONCLUSIONS

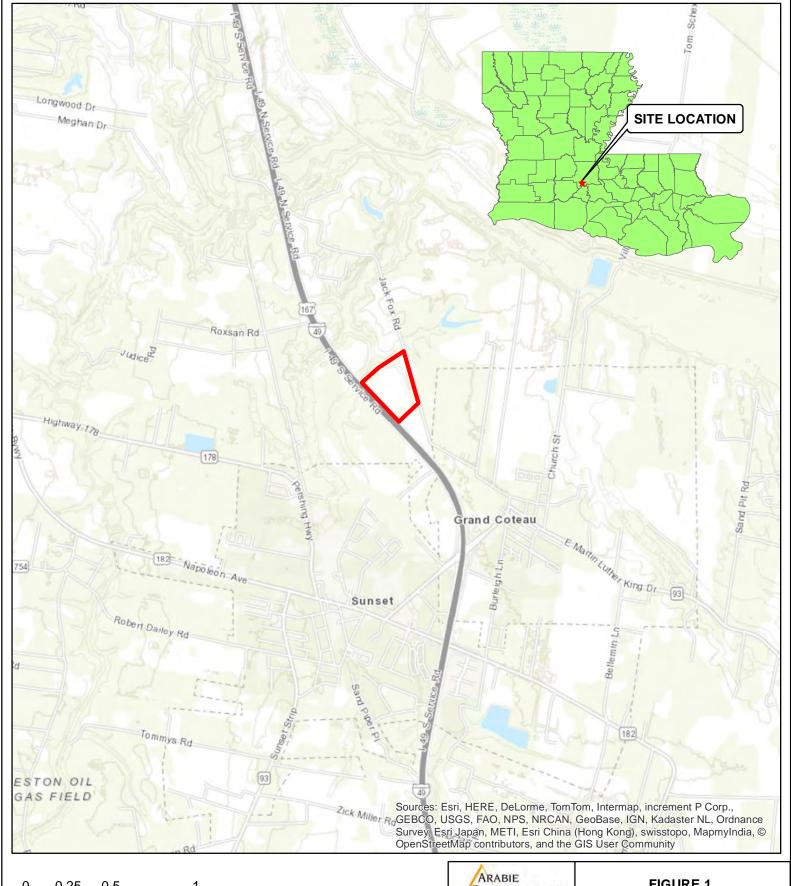
An approximate 46-acre tract located along Interstate 49 in Grand Coteau was evaluated for the presence of jurisdictional wetlands. The wetland delineation was performed in accordance with the procedures and methods as described in the COE 1987 Manual for Wetland Delineations

The investigated property is comprised of pasture and forest. The majority of the property did not demonstrate characteristics typical of a wetland. A few depressional areas located on the property were determined to contain wetlands. These depressional areas demonstrated hydrophytic vegetation, wetland hydrology, and hydric soils and were determined to be wetlands. In addition to wetlands, a tributary of Bayou Bourbeux is located on the property and will likely be considered Sec. 404 non-wetland waters by the COE.

Based on the results of this delineation, 45.34 acres of non-wetlands, 0.92 acre of wet pasture, 0.04 acre of forested wetland and 2,200 linear feet of non-wetland waters are present on the investigated property.

# FIGURE 1

Site Location Map









#### ARABIE ENVIRONMENTAL SOLUTIONS

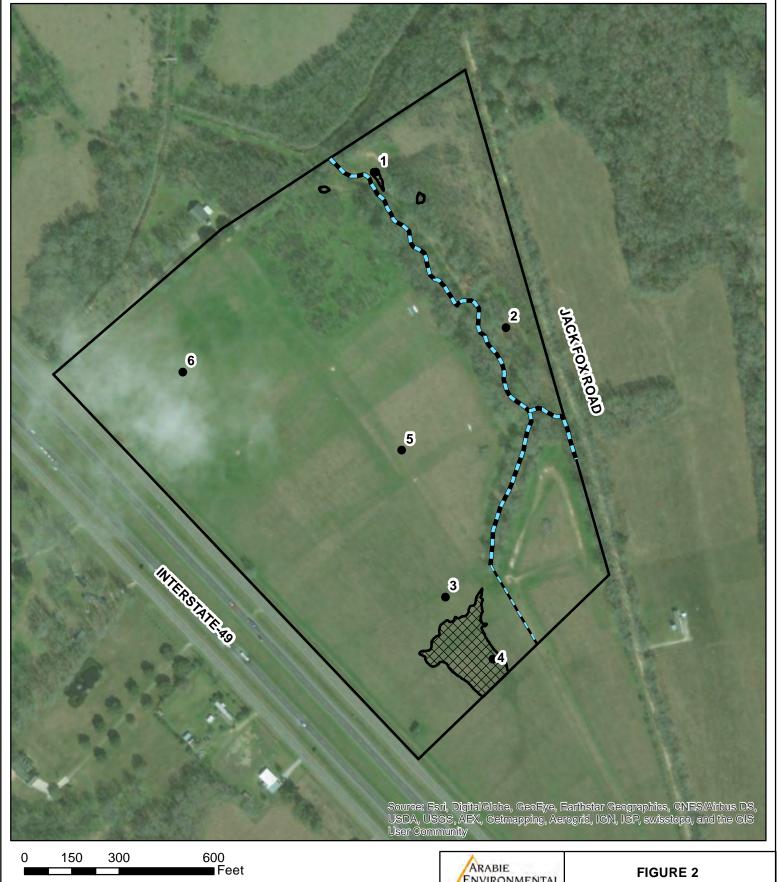
# FIGURE 1 SITE LOCATION MAP

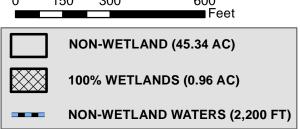
WETLAND DELINEATION
ONE ACADIANA
BLUE ANDRUS PROPERTY
ST. LANDRY PARISH, LOUISIANA

Drawn By: CRH	Date:	04/11/18	AES Project #	11662
Checked By: CBJ	Date:	04/11/18	Revised:	

# FIGURE 2

Site Diagram









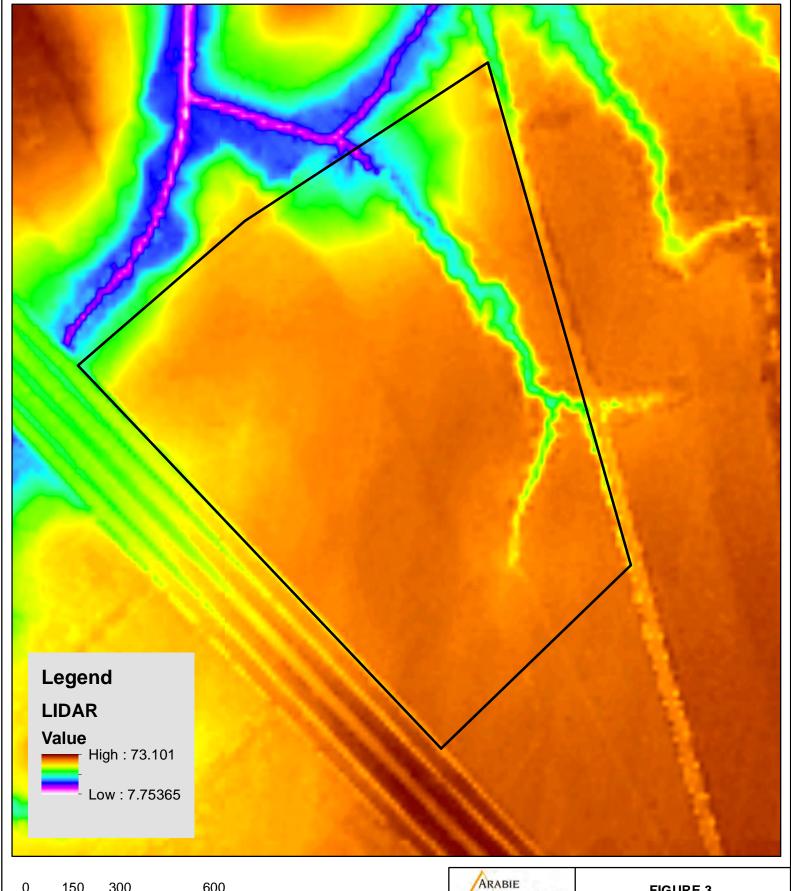
# **SITE DIAGRAM**

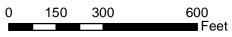
WETLAND DELINEATION ONE ACADIANA BLUE ANDRUS PROPERTY ST. LANDRY PARISH, LOUISIANA

Drawn By: CRH	Date: 4/11/18	AES Project # 11662
Checked By: CBJ	Date: 4/11/18	Revised:

# FIGURE 3

LIDAR Imagery





SITE LOCATION



### ARABIE ENVIRONMENTAL SOLUTIONS

### FIGURE 3 LIDAR IMAGERY

WETLAND DELINEATION ONE ACADIANA BLUE ANDRUS PROPERTY ST. LANDRY PARISH, LOUISIANA

Drawn By: CRH	Date: 04/11/18	AES Project # 11662
Checked By: CBJ	Date: 04/11/18	Revised:

# ATTACHMENT A

Certificates of Training

# Richard Chinn Environmental Training, Inc.

certifies that

# Cleve Hoffpauir

has successfully completed a

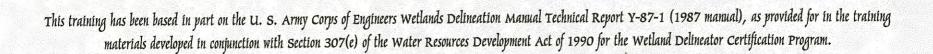
4 day 38 hour Army Corps of Engineers Wetland Delineation Training Program

issued Certificate No. 4666 and 3.8 CEUs on this first day of June, 2007, in Austin, Texas

Richard Chinn, PWS, CET,

Richard Chinn Environmental Training, Inc. 804 Cottage Hill Way, Brandon, FL 33511-8098

1.800.427.0307 • FAX: 1.888.457.6331 • info@richardchinn.com • http://www.richardchinn.com





# Certificate of Training Hydric Soil Updates

This certifies that

# Cleveland Hoffpauir

has participated in 2 hours of instruction.

Date: March 22, 2018



RALEIGH, NC 27603 1-877-479-2673

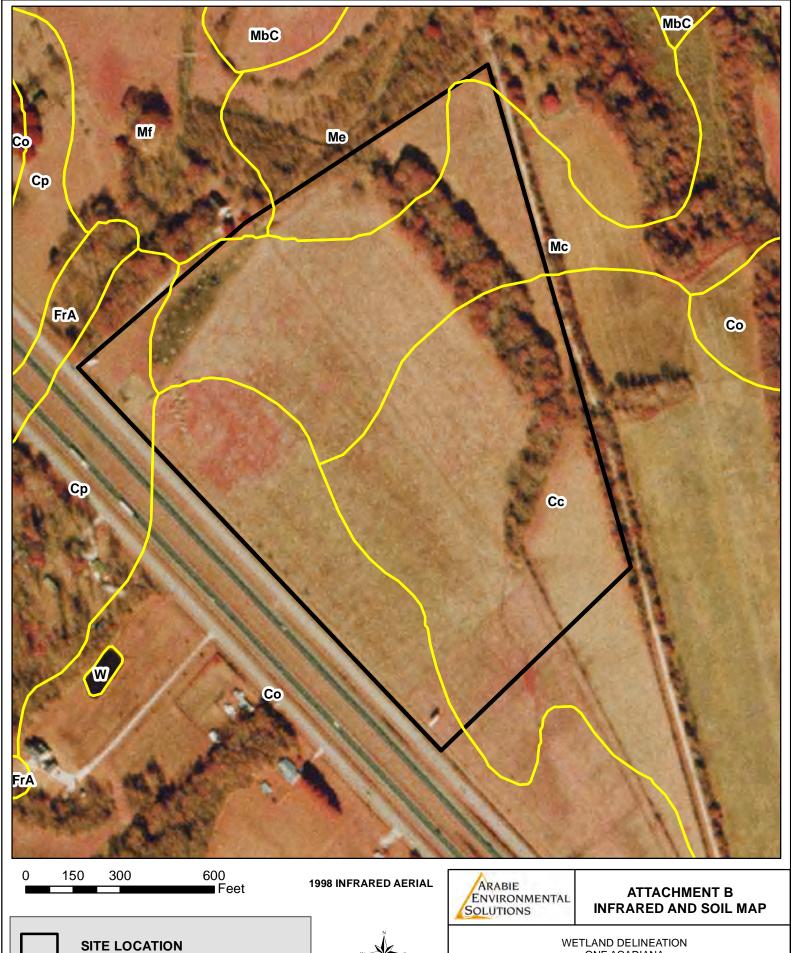


Marc Delinger

SIGNATURE OF AUTHORIZATION

# ATTACHMENT B

Infrared and Soil Maps



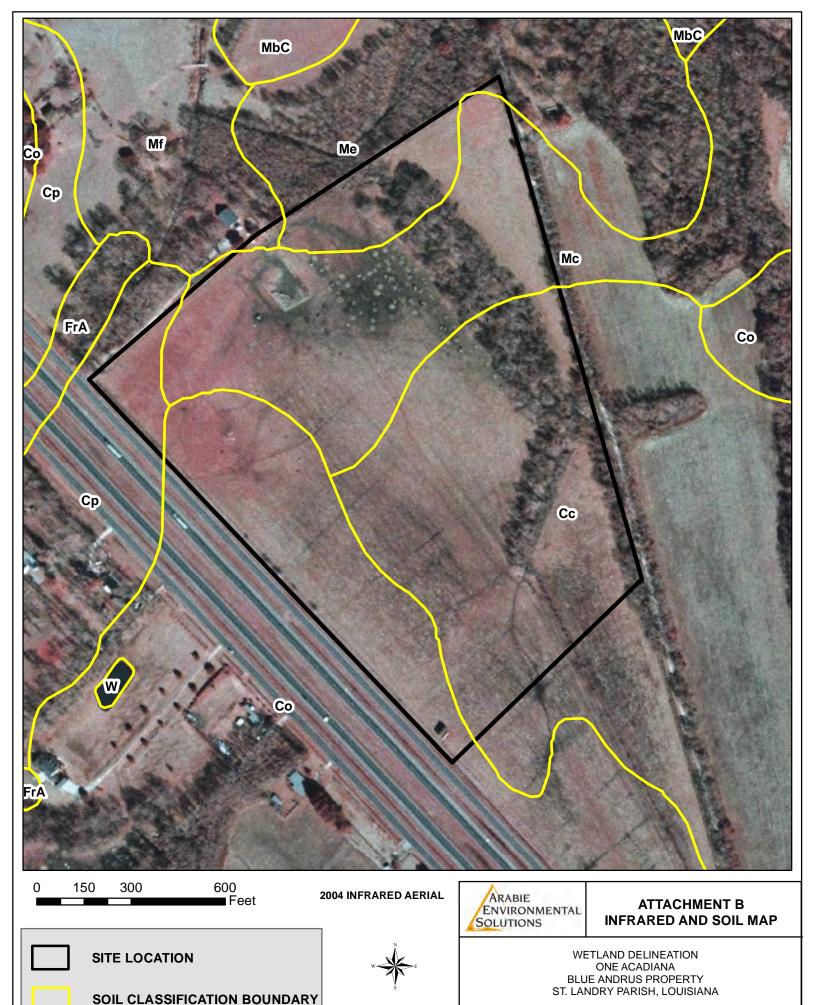
SITE LOCATION

SOIL CLASSIFICATION BOUNDARY



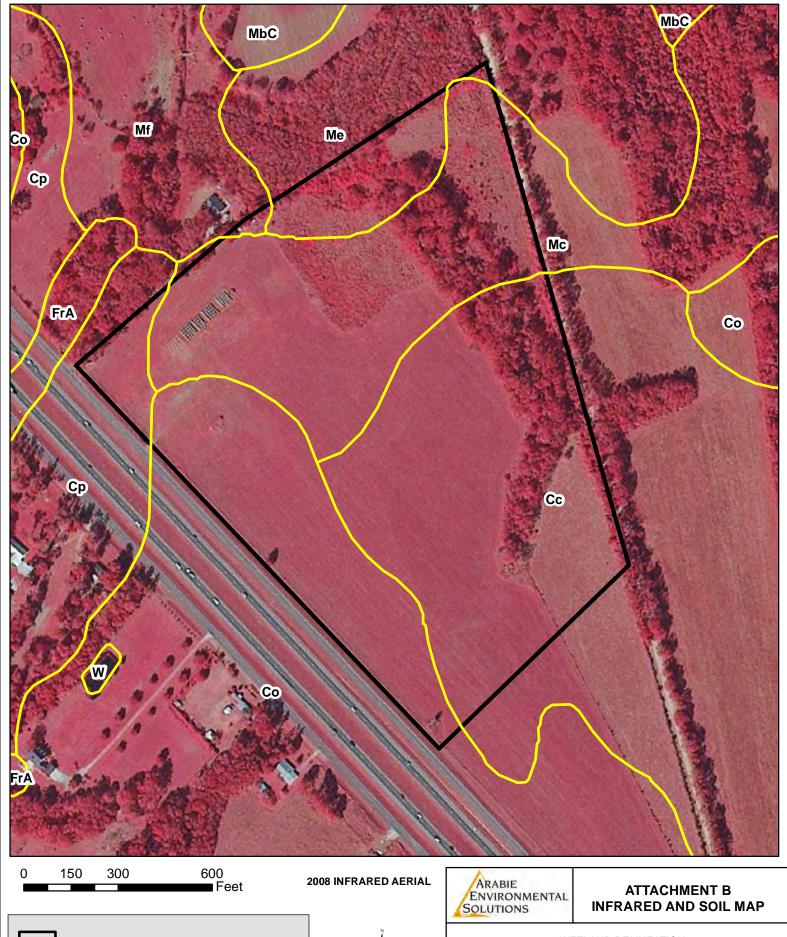
WETLAND DELINEATION ONE ACADIANA BLUE ANDRUS PROPERTY ST. LANDRY PARISH, LOUISIANA

Drawn By: CRH	Date:	04/11/18	AES Project #	11662	
Checked By: CBJ	Date:	04/11/18	Revised:		



 Drawn By:
 CRH
 Date:
 04/11/18
 AES Project #
 11662

 Checked By:
 CBJ
 Date:
 04/11/18
 Revised:



SITE LOCATION

SOIL CLASSIFICATION BOUNDARY



WETLAND DELINEATION ONE ACADIANA BLUE ANDRUS PROPERTY ST. LANDRY PARISH, LOUISIANA

Drawn By:	CRH	Date:	04/11/18	AES Project #	11662
Checked By:	CBJ	Date:	04/11/18	Revised:	

# ATTACHMENT C

Wetland Data Forms

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Blue Andrus Property	Citv/Co	ounty: Grand Coteau/St	t. Landry	Sampling Date: 4-9-18
Applicant/Owner: One Acadiana		Str	ate: LA	Sampling Point: 1
Investigator(s): C. Hoffpauir	Section	n, Township, Range: Sec		
Landform (hillslope, terrace, etc.): Slight Depres Subregion (LRR or MLRA): LRR-T	sion Local re	elief (concave, convex, no	one): Concave	Slope (%): 0
Subregion (LRR or MLRA): LRR-T	Lat. 3367098.32	Long. 59	0201.78	Datum: UTM NAD 83
Soil Map Unit Name: Me	Lut	2511g	NWI classific	ation. None
Are climatic / hydrologic conditions on the site typic	cal for this time of year? Ye			
Are Vegetation No , Soil No , or Hydrology				
Are Vegetation No , Soil No , or Hydrology	No naturally problemat	ic? (If needed ex	olain any answei	
SUMMARY OF FINDINGS – Attach sit				
Hydrophytic Vegetation Present? Yes X	No			
Hydric Soil Present? Yes X	No No	Is the Sampled Area	V	
Hydric Soil Present?  Wetland Hydrology Present?  Yes X  Yes X	No	within a Wetland?	Yes _^	No
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:			econdary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required;	check all that apply)	Γ	Surface Soil	· · · · · · · · · · · · · · · · · · ·
Surface Water (A1)	Aquatic Fauna (B13)		_	getated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (LRR	U)	Drainage Pat	
Saturation (A3)	Hydrogen Sulfide Odor (C	1)	Moss Trim Li	
Water Marks (B1)	Oxidized Rhizospheres ald	ong Living Roots (C3)	Dry-Season \	Water Table (C2)
	Presence of Reduced Iron	(- ')	Crayfish Burr ☐	, ,
Drift Deposits (B3)	Recent Iron Reduction in T	illed Soils (C6)	_	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surface (C7) Other (Explain in Remarks	., <u>Г</u>	☐ Geomorphic     ☐ Shallow Aqui	, ,
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Nemarks	, [	FAC-Neutral	
Water-Stained Leaves (B9)		Ī	_	noss (D8) <b>(LRR T, U)</b>
Field Observations:				
	Depth (inches):			
	Depth (inches):			V
Saturation Present? Yes X No (includes capillary fringe)	Depth (inches): 0-16	Wetland Hy	drology Presen	t? Yes X No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previ	ious inspections), if availa	ble:	
Remarks:				

EGETATION (Four Strata) – Use scientific na		Dominant	Indicator	Dominance Test worksheet:	pling Point: 1	
ree Stratum (Plot size: 8'X10' )		Species?				
None				Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
				mat Ale OBE, I AOV, OI I AO.		_ (/\)
				Total Number of Dominant	2	(D)
				Species Across All Strata:	2	_ (B)
				Percent of Dominant Species	400	
				That Are OBL, FACW, or FAC:	100	_ (A/E
				Prevalence Index worksheet:	•	
				Total % Cover of:		
				OBL species		
	· ·	= Total Cov				
50% of total cover:	20% of	total cover	:	FACW species		
apling/Shrub Stratum (Plot size: 8'X10' )				FAC species		
None				FACU species		
				UPL species	x 5 =	_
				Column Totals:	(A)	(B
				Drovolor as Inday D/A		
				Prevalence Index = B/A		
				Hydrophytic Vegetation India		
•				1 - Rapid Test for Hydroph	-	
				2 - Dominance Test is >50		
				3 - Prevalence Index is ≤3.	.0 <sup>1</sup>	
		= Total Cov		Problematic Hydrophytic V	egetation <sup>1</sup> (Expla	ain)
50% of total cover:	20% of	total cover	:			
Herb Stratum (Plot size: 8'X10' )				<sup>1</sup> Indicators of hydric soil and we	etland hydrology	must
Juncus effusus	40	Yes	FACW	be present, unless disturbed or	r problematic.	
Carex vulpinoidea	40	Yes	OBL	Definitions of Four Vegetatio	n Strata:	
Solidago sempervirens	5	No	FACW	Tree Mondy plants systemin	avines 2 in (7.6	S am) .
. Rubus argutus	5	No	FAC	<b>Tree</b> – Woody plants, excluding more in diameter at breast height		
Ranunculus sardous	5	No	FAC	height.	y (= = : :), : = g= :	
	-			Sapling/Shrub – Woody plants	o ovoludina vino	o loor
				than 3 in. DBH and greater tha		
				<b>Herb</b> – All herbaceous (non-wood of size, and woody plants less		ardles
·				or size, and woody plants less	111a11 3.20 11 tail.	
0				Woody vine – All woody vines	greater than 3.2	8 ft in
1				height.		
2						
	95	= Total Cov	/er			
50% of total cover: 47.5	20% of	total cover	: 19			
Voody Vine Stratum (Plot size: 8'X10' )						
None						
•						
				Hydrophytic		
		= Total Cov		Vegetation Present? Yes X	No	
50% of total cover:	20% of	total cover	:			
emarks: (If observed, list morphological adaptations belo	ow).					
Remarks: (If observed, list morphological adaptations belo	OW).					

SOIL Sampling Point: 1

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirn	n the absence	of indicators	i.)	
Depth	Matrix		Redo	x Feature	es					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup> _	Loc <sup>2</sup>	Texture		Remarks	
0-4	10YR 4/4	90	10YR 6/2	10	_ <u>D</u>	M	Silt Loam	Saturated		
4-6	10YR 5/2	90	7.5YR 4/6	10	С	М	Silt Loam	Saturated		
6-16	10YR 5/2	95	7.5YR 4/6	5	С	M, PL	Silty Clay	Saturated		
						·				
			_			· ——				
					_	<del></del>				
						·				
					_					
<sup>1</sup> Type: C=Co	oncentration, D=De	oletion, RM	=Reduced Matrix, M	S=Maske	d Sand G	rains.	<sup>2</sup> Location:	PL=Pore Lini	ng, M=Matrix	
Hydric Soil	Indicators: (Applic	cable to all	LRRs, unless othe	rwise no	ted.)		Indicators	for Problema	atic Hydric S	oils³:
☐ Histosol	(A1)		Polyvalue Be	elow Surfa	ace (S8) <b>(</b> I	LRR S, T, U	J) 🔲 1 cm N	Muck (A9) (LRI	R 0)	
Histic Ep	pipedon (A2)		Thin Dark Su	urface (S9	) (LRR S	T, U)	2 cm N	Muck (A10) <b>(LF</b>	RR S)	
Black Hi	stic (A3)		Loamy Muck	y Mineral	(F1) <b>(LR</b> I	R O)	Reduc	ed Vertic (F18	3) (outside M	LRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix	(F2)		<u></u> ☐ Piedm	ont Floodplain	Soils (F19)	(LRR P, S, T)
	d Layers (A5)		✓ Depleted Ma	trix (F3)			L Anoma	alous Bright Lo	oamy Soils (F	20)
Organic	Bodies (A6) (LRR F	P, T, U)	Redox Dark	Surface (	F6)			RA 153B)		
	ıcky Mineral (A7) <b>(L</b>							arent Material		
	esence (A8) (LRR I	J)	Redox Depre	,	<del>-</del> 8)			Shallow Dark S	•	2)
	ick (A9) (LRR P, T)		Marl (F10) <b>(L</b>	-			U Other	(Explain in Re	marks)	
=	d Below Dark Surface	ce (A11)	Depleted Oc							
=	ark Surface (A12)		Iron-Mangan				•	cators of hydro		
	rairie Redox (A16) (		_					tland hydrology		
	Mucky Mineral (S1) (	LRR O, S)	Delta Ochric					ess disturbed	or problemat	C.
	Sleyed Matrix (S4)		Reduced Ve							
	ledox (S5)		Piedmont Flo					452D)		
=	Matrix (S6) rface (S7) (LRR P,	C T II\	Anomalous E	Bright Loa	arny Solis	(F20) <b>(IVILR</b>	RA 149A, 153C	, 1530)		
	_ayer (if observed)									
	Layer (II Observed)									
Type:	ahaa).		<del></del>				Hydric Soil	Dragant? \	Yes X	No
Depth (inc	cnes):						nyaric Soil	Present?	res	No
Remarks:										

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Blue Andrus F	roperty	City/C	ounty: Grand Cote	eau/St. Landry	Sampling Date: 4-9-18
Applicant/Owner: One Acadia	ana		-	State: LA	Sampling Point: 2
Investigator(s): C. Hoffpauir		Section		e: Sec. 6, Town. 7S	
Landform (hillslope, terrace, etc	Gentle Slope				Slope (%): 1-3
Subregion (LRR or MLRA). LR	R-T				Datum: UTM NAD 83
Soil Map Unit Name: Cc				NWI classific	nation: None
Are climatic / hydrologic condition	one on the cite typical for	this time of year? V	X No	(If no explain in P	Pomarke )
Are Vegetation No , Soil No					
Are Vegetation No , Soil No					
					s, important features, etc.
	Y				· · · · · · · · · · · · · · · · · · ·
Hydrophytic Vegetation Prese	nt? Yes	No No _X	Is the Sampled A		V
Hydric Soil Present? Wetland Hydrology Present?	Yes	No X	within a Wetland?	? Yes	No X
Remarks:	100	110			
Plot located near trib	outary				
Area forested.	ratary.				
/ liou forootou.					
HYDROLOGY					
Wetland Hydrology Indicato					ators (minimum of two required)
Primary Indicators (minimum o					
Surface Water (A1)		atic Fauna (B13)			getated Concave Surface (B8)
High Water Table (A2) Saturation (A3)		Deposits (B15) (LRF ogen Sulfide Odor (C		☐ Drainage Pa☐ Moss Trim L	
Water Marks (B1)		ized Rhizospheres a	•		Water Table (C2)
Sediment Deposits (B2)		ence of Reduced Iro		Crayfish Bur	
Drift Deposits (B3)		ent Iron Reduction in	` '	= '	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin	Muck Surface (C7)		Geomorphic	Position (D2)
Iron Deposits (B5)		r (Explain in Remark	as)	Shallow Aqu	itard (D3)
Inundation Visible on Aeri	0 , , ,			FAC-Neutral	, ,
Water-Stained Leaves (B	9)				noss (D8) <b>(LRR T, U)</b>
Field Observations:	Yes No X	Danth (inches)			
Surface Water Present?	Yes No X				
Water Table Present? Saturation Present?	Yes No X			nd Hydrology Preser	nt? Yes No_X
(includes capillary fringe)				,	it! TesNO
Describe Recorded Data (stre	am gauge, monitoring we	ell, aerial photos, pre	vious inspections), if	f available:	
Devente					
Remarks:					

<b>VEGETATION</b> (	(Four Strata)	– Use	scientific	names o	of plants.

221	Absolute	Dominant		Dominance Test worksheet:
(Plot size: 30')		Species?		Number of Dominant Species
Quercus nigra	20	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
Liquidambar styraciflua	30	Yes	FAC	Total Number of Dominant
Ulmus americana	10	No	FAC	Species Across All Strata: 6 (B)
Prunus serotina	5	No	FACU	Percent of Dominant Species
Triadica sebifera	5	No	FAC	That Are OBL, FACW, or FAC: 100 (A/
				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
	70	= Total Cov	er	OBL species x 1 =
50% of total cover: 35	20% of	total cover:	14	FACW species x 2 =
apling/Shrub Stratum (Plot size: 30' )				FAC species x 3 =
Liquidambar styraciflua	40	Yes	FAC	FACU species x 4 =
Quercus nigra	30	Yes	FAC	UPL species x 5 =
Triadica sebifera	5	No	FAC	Column Totals: (A) (E
				Dravalance Index D/A
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	7.5	= Total Cov	or	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 37.5				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	20% 01	total cover.		
lerb Stratum (Plot size: 30') Andropogon virginicus	20	Yes	FAC	¹Indicators of hydric soil and wetland hydrology must
Chasmanthium laxum	10	No	FACW	be present, unless disturbed or problematic.
	5			Definitions of Four Vegetation Strata:
Liquidambar styraciflua		No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm)
Rubus argutus	_ 5	No	FAC	more in diameter at breast height (DBH), regardless
Campsis radicans	_ 5	No	FAC	height.
Ulmus americana	_ 5	No	FAC	Sapling/Shrub – Woody plants, excluding vines, less
Solidago altissima	5	No	FACU	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Eupatorium capillifolium	5	No	FACU	Herb - All herbaceous (non-woody) plants, regardles
Cirsium vulgare	2	No	FACU	of size, and woody plants less than 3.28 ft tall.
0. Oxalis violacea	2	No	NI	Woody vine – All woody vines greater than 3.28 ft in
1. Vicia ludoviciana	2	No	FACU	height.
2				
	95	= Total Cov	er	
50% of total cover: 47.5	20% of	total cover	19	
/oody Vine Stratum (Plot size: 30' )				
	2	Yes	FAC	
Vitis rotundifolia				
				H. danskaria
		- Total Cov		Hydrophytic Vegetation
Vitis rotundifolia  50% of total cover: 1		= Total Cov		Hydrophytic Vegetation Present?  Yes X  No

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

i rome best	ription: (Describe	to the depti	n needed to document th	e indicator or confirm	n the absence of indicators.)
Depth	Matrix		Redox Featu	res	
(inches)	Color (moist)	%	Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-12	10YR 4/4	100			Silty Clay
12-16	10YR 5/4	100			Silty Clay
<sup>1</sup> Type: C=Co	oncentration, D=De	oletion, RM=I	Reduced Matrix, MS=Mask	ed Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless otherwise n	oted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Below Sur	face (S8) <b>(LRR S, T, l</b>	U) 1 cm Muck (A9) (LRR O)
Histic Ep	pipedon (A2)		Thin Dark Surface (S	69) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Hi	stic (A3)		Loamy Mucky Miner	al (F1) <b>(LRR 0)</b>	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleyed Matri	x (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
_	d Layers (A5)		Depleted Matrix (F3)		LA Anomalous Bright Loamy Soils (F20)
_	Bodies (A6) (LRR F		Redox Dark Surface	` '	(MLRA 153B)
	ucky Mineral (A7) <b>(L</b>		Depleted Dark Surfa		Red Parent Material (TF2)
	esence (A8) (LRR I	J)	Redox Depressions	(F8)	
	uck (A9) (LRR P, T)		Marl (F10) (LRR U)		
	d Below Dark Surfac	ce (A11)	Depleted Ochric (F1		31 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
=	ark Surface (A12)		=	sses (F12) (LRR O, P,	
_	rairie Redox (A16) (				wetland hydrology must be present,
	Mucky Mineral (S1) (	LKK (J, 5)	Delta Ochric (F17) (I		unless disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)			i) <b>(MLRA 150A, 150B)</b> Soils (F19) <b>(MLRA 1</b> 4	
	l Matrix (S6)				49A) RA 149A, 153C, 153D)
=	rface (S7) <b>(LRR P,</b>	S T II)	Anomaious Bright Lo	Dailiy Solis (F20) (IVILR	(A 149A, 133C, 133D)
	Layer (if observed)				
ixestrictive i	Layer (ii observed)	-			
Tunar	,				
Type:			<u> </u>		W
Depth (inc					Hydric Soil Present? Yes No X
			_		Hydric Soil Present? Yes No X
Depth (inc			_		Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X
Depth (inc					Hydric Soil Present? Yes No X

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Blue Andrus Property	Citv/Co	ounty: Grand Coteau/	'St. Landry	Sampling Date: 4-9-18			
Applicant/Owner: One Acadiana		City/County: Grand Coteau/St. Landry State: LA Sampling Date: 4-9-18 Sampling Point: 3					
C Hoffpauir	Section, Township, Range: Sec. 6, Town. 7S, Range 4E						
Landform (hillslope, terrace, etc.). Relatively Flat	Local re	elief (concave, convey	none). None	Slope (%): 0-1			
Subregion (LRR or MLRA): LRR-T	lat: 3366687.64	Long: 5	590268.73	Datum: UTM NAD 83			
Soil Map Unit Name: CC		2019	NWI classific	ation. None			
Are climatic / hydrologic conditions on the site typical fo	r this time of year? Ye						
Are Vegetation No , Soil No , or Hydrology No							
Are Vegetation No , Soil No , or Hydrology No			explain any answe				
SUMMARY OF FINDINGS – Attach site ma							
Hudrophytic Vegetation Present?	No X						
Hydric Soil Present? Yes X	No III	Is the Sampled Area		V			
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes  Yes  Yes	No X	within a Wetland?	Yes	No X			
Remarks:	<u> </u>						
Pasture							
LIVERGLOOV							
HYDROLOGY			Canadam da miladiaa	to no (pointing on a fitting no province)			
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check	all that apply)		Surface Soil	tors (minimum of two required)			
	atic Fauna (B13)			getated Concave Surface (B8)			
	I Deposits (B15) (LRR	U)	Drainage Par				
	rogen Sulfide Odor (C1		Moss Trim Li				
	dized Rhizospheres alo			Water Table (C2)			
Sediment Deposits (B2)	sence of Reduced Iron	(C4)	Crayfish Buri	rows (C8)			
	ent Iron Reduction in T	Filled Soils (C6)		sible on Aerial Imagery (C9)			
	Muck Surface (C7)			Position (D2)			
	er (Explain in Remarks)	5)	Shallow Aqui				
Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)			FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)				
Field Observations:			<u> </u>	1000 (B0) (Ent. 1, 0)			
Surface Water Present? Yes No X	Depth (inches):						
Water Table Present? Yes No X	Depth (inches):						
Saturation Present? Yes No X	Depth (inches):	Wetland H	lydrology Presen	t? Yes No X			
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previ	ious inspections), if ava	ilable:				
Door. Do riodo a Data (on dani gaago, momening ii	on, donal proteo, provi	,,,,					
Remarks:							

VEGETATION (Four Strata) – Use scientific names of plants.
--

50% of total cover: \_\_\_

50% of total cover: 46

\_\_\_\_\_)

Tree Stratum (Plot size: 30'

Sapling/Shrub Stratum (Plot size: 30'

Herb Stratum (Plot size: 30' 1. Paspalum notatum

2. Sporobolus indicus

Ranunculus sardous

Andropogon virginicus

Woody Vine Stratum (Plot size: 30'

Medicago lupulina

Vicia Iudoviciana

Lolium perenne

Cirsium vulgare

10.

1. None

3. Trifolium repens

1. None

Absolute Dominant Indicator

% Cover Species? Status

\_\_\_\_ = Total Cover \_\_\_\_ 20% of total cover: \_\_\_\_

\_\_ = Total Cover

FAC

**FACW** 

FAC

FAC

FAC FAC

**FACU** 

**FACU** 

FACU

FACU

NΙ

Yes

Yes

No

No

No

No

No

No

No

= Total Cover

\_\_ 20% of total cover: 18.4

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_

20

10

10

,	Samulian Dainte 3	
Dominance Test workshe	Sampling Point: 3	
Number of Dominant Speci		
That Are OBL, FACW, or F		_ (A)
Total Number of Dominant Species Across All Strata:	2	_ (B)
Percent of Dominant Speci That Are OBL, FACW, or F		_ (A/B)
Prevalence Index worksh	eet:	
Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)
Prevalence Index = E	B/A =	
Hydrophytic Vegetation II	ndicators:	
1 - Rapid Test for Hydr	ophytic Vegetation	
2 - Dominance Test is	>50%	
3 - Prevalence Index is	s ≤3.0 <sup>1</sup>	
Problematic Hydrophyt	tic Vegetation <sup>1</sup> (Expl	ain)
<sup>1</sup> Indicators of hydric soil an be present, unless disturbe		must
Definitions of Four Veget	ation Strata:	
Tree – Woody plants, exclumore in diameter at breast height.		
Sapling/Shrub – Woody pl than 3 in. DBH and greater		
Herb – All herbaceous (nor of size, and woody plants le		ardless
Woody vine – All woody vi height.	nes greater than 3.2	28 ft in
Hydrophytic Vegetation Present? Yes	No X	

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

#### **Pasture**

SOIL Sampling Point: 3

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirn	n the absence of indi	cators.)	
Depth	Matrix			x Feature	es				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks	
0-5	10YR 6/2	90	7.5YR 4/6	10	<u>C</u>	M, PL	Silty Clay		
5-16	10YR 6/2	90	10YR 4/4	10	С	M	Silt Loam		
	-				_				
				_					
<sup>1</sup> Type: C=C	oncentration D=De	oletion RM	=Reduced Matrix, M	S=Maske	d Sand G	rains	<sup>2</sup> Location: PL=Pc	ore Lining, M=Matr	ix
			LRRs, unless othe			rairio.	Indicators for Pro		
☐ Histosol			Polyvalue Be		•	I RR S. T. I		•	
_	pipedon (A2)		Thin Dark S				2 cm Muck (A		
_	stic (A3)		Loamy Muck					ic (F18) (outside I	MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix	(F2)		Piedmont Floo	odplain Soils (F19)	(LRR P, S, T)
_	d Layers (A5)		✓ Depleted Ma					ight Loamy Soils (	(F20)
	Bodies (A6) (LRR I		Redox Dark				(MLRA 153		
	ucky Mineral (A7) (L						Red Parent M	, ,	
	esence (A8) (LRR I	J)	Redox Depr	,	<del>-</del> 8)			Dark Surface (TF1	2)
	uck (A9) (LRR P, T)	20 (111)	Marl (F10) (I		/MIDA 1	IE4\	U Other (Explain	n in Remarks)	
_	d Below Dark Surfac ark Surface (A12)	ce (ATT)	Depleted Oc Iron-Mangar				T) <sup>3</sup> Indicators o	f hydrophytic vege	tation and
	rairie Redox (A16) (	MLRA 150					•	drology must be p	
_	Mucky Mineral (S1)		Delta Ochric					urbed or problema	
	Gleyed Matrix (S4)		Reduced Ve				)	•	
Sandy F	Redox (S5)		Piedmont Fl	oodplain \$	Soils (F19	) <b>(MLRA 1</b> 4	49A)		
	l Matrix (S6)		Anomalous I	Bright Loa	amy Soils	(F20) <b>(MLR</b>	RA 149A, 153C, 153D)		
	rface (S7) (LRR P,								
Restrictive	Layer (if observed)	):							
Type:								V	
Depth (in	ches):						Hydric Soil Preser	nt? Yes X	No
Remarks:									

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Blue Andrus Property	City/Coun	ty: Grand Coteau/St.	Landry	Sampling Date: 4-9-18	
Applicant/Owner: One Acadiana	City/County: Grand Coteau/St. Landry Sampling Date: 4-9-18 State: LA Sampling Point: 4				
Investigator(s): C. Hoffpauir	Section, T	Township, Range: Sec.	6, Town. 7S,	Range 4E	
Landform (hillslope, terrace, etc.): Slight Depression Subregion (LRR or MLRA): LRR-T	Local relie	ef (concave, convex, nor	ne): Concave	Slope (%): 0	
Subregion (LRR or MLRA): LRR-T	Lat: 3366687.76	Long: 590	314.76	Datum: UTM NAD 83	
Soil Map Unit Name: Cc			NWI classific	ation: None	
Are climatic / hydrologic conditions on the site typical fo	r this time of year? Yes				
Are Vegetation No , Soil No , or Hydrology No					
Are Vegetation No , Soil No , or Hydrology No	naturally problematic?	(If needed, exp			
SUMMARY OF FINDINGS - Attach site m					
Hydrophytic Vegetation Present? Yes X	No				
Hydric Soil Present? Yes X	- No Is t	the Sampled Area	Y		
Hydric Soil Present?         Yes X           Wetland Hydrology Present?         Yes X	No	thin a Wetland?	Yes _^	No	
Remarks:					
Pasture					
HYDROLOGY					
Wetland Hydrology Indicators:		<u>Se</u>	1	tors (minimum of two required)	
Primary Indicators (minimum of one is required; check			Surface Soil		
	iatic Fauna (B13) I Deposits (B15) <b>(LRR U)</b>	<u> </u>	Drainage Pat	etated Concave Surface (B8)	
Saturation (A3)	drogen Sulfide Odor (C1)		Moss Trim Li		
Water Marks (B1) Oxid	dized Rhizospheres along	Living Roots (C3)	1	Water Table (C2)	
	sence of Reduced Iron (C		1		
	cent Iron Reduction in Tille	ed Soils (C6)	Saturation Vi	sible on Aerial Imagery (C9)	
	n Muck Surface (C7)	Ļ	Geomorphic		
	er (Explain in Remarks)	L	Shallow Aqui		
Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)		<u> </u>	FAC-Neutral	lest (D5) loss (D8) <b>(LRR T, U)</b>	
Field Observations:			<u>ı</u> Spriagrium i	1055 (D0) (LKK 1, <b>0)</b>	
Surface Water Present? Yes X No	Depth (inches): 0-2"				
Water Table Present? Yes No X					
	Depth (inches): 0-14"	Wetland Hyd	rology Presen	t? Yes X No	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring w	vell aerial photos previou	s inspections) if availab	ıle.		
Beschibe Recorded Bata (Stream gauge, monitoring w	cii, aciiai priotos, previou	is inspections), it availab	no.		
Remarks:					
Areas near Plot 4 inundated.					

EGETATION (Four Strata) – Use scientific na					npling Point: 4	
ree Stratum (Plot size: 30' )		Dominant Species?		Dominance Test worksheet:		
None (Flot size)				Number of Dominant Species That Are OBL, FACW, or FAC	: 2	_ (A
				Total Number of Dominant		
				Species Across All Strata:	2	_ (E
				Percent of Dominant Species		
				That Are OBL, FACW, or FAC	100	(A
				Prevalence Index worksheet		
				Total % Cover of:	Multiply by:	
		= Total Cov	er	OBL species		
50% of total cover:	20% of	total cover	:	FACW species		
apling/Shrub Stratum (Plot size: 30' )					x 3 =	
None				FACU species		
				UPL species		
				Column Totals:	(A)	—
				Prevalence Index = B/A	=	
				Hydrophytic Vegetation Indi		_
				1 - Rapid Test for Hydropl		
				2 - Dominance Test is >50		
				3 - Prevalence Index is ≤3		
		= Total Cov	er	Problematic Hydrophytic \		lain)
50% of total cover:	20% of	total cover:	:		( )	,
erb Stratum (Plot size: 30' )				<sup>1</sup> Indicators of hydric soil and w	etland hydrology	v mu
Axonopus fissifolius	40	Yes	FACW	be present, unless disturbed o		
Paspalum urvellei	20	Yes	FAC	Definitions of Four Vegetation	on Strata:	
Ranunculus sardous	5	No	FAC	Tree – Woody plants, excluding	na vines 3 in (7	6 cm
Sporobolus indicus	5	No	FACU	more in diameter at breast hei		
Juncus marginatus	5	No	FACW	height.		
Andropogon glomeratus	2	No	FACW	Sapling/Shrub – Woody plant	s, excluding vine	es, le
Andropogon virginicus	2	No	FAC	than 3 in. DBH and greater tha		
Juncus brachycarpus	2	No	FACW	Herb – All herbaceous (non-w	roody) plants, rec	nardl
				of size, and woody plants less	than 3.28 ft tall.	, u. u.
)				Woody vine – All woody vines	s areater than 3 '	28 ft
•				height.	s greater than 3.2	2011
l						
	81	= Total Cov	er			
50% of total cover: 40.5						
/oody Vine Stratum (Plot size: 30' )						
None						
				Lludrombutio		
		= Total Cov		Hydrophytic Vegetation		
50% of total cover:				Present? Yes X	No	į.
50 /o UI (Utai CUVEI).	20 /0 01	iolai COVEI.		i		

SOIL Sampling Point: 4

Profile Desc	cription: (Describe	to the dep	h needed to docur	nent the	indicator	or confirm	n the absence	of indicate	ors.)	
Depth	Matrix			x Feature	es					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-4	10YR 6/2	80	7.5YR 4/6	20	<u>C</u>	M, PL	Silt Loam	Fe/Mn m	asses	
4-14	10YR 6/1	85	7.5YR 4/6	15	С	M, PL	Silt Loam	Fe/Mn m	asses	
										_
-	-									
	-			-		<del></del>				
				· ·						
¹Type: C=C	oncentration. D=De	pletion. RM=	Reduced Matrix, MS	S=Maske	d Sand G	rains.	<sup>2</sup> Location:	PL=Pore L	ining, M=Matr	x.
			LRRs, unless other						matic Hydric	
☐ Histosol	(A1)		Polyvalue Be	low Surfa	ace (S8) <b>(</b> I	LRR S, T, L	J) 🔲 1 cm N	Muck (A9) (I	_RR O)	
Histic E	pipedon (A2)		Thin Dark Su				2 cm N	Muck (A10)	(LRR S)	
	istic (A3)		Loamy Muck			R O)				VILRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		(F2)					(LRR P, S, T)
	d Layers (A5)		✓ Depleted Ma		==\			_	Loamy Soils (	F20)
	Bodies (A6) (LRR I		Redox Dark				1 1 '	RA 153B) arent Mater	ial (TEO)	
	ucky Mineral (A7) <b>(L</b> esence (A8) <b>(LRR I</b>		Depleted Dai						ıaı (1F2) k Surface (TF1	2)
	uck (A9) (LRR P, T)		Marl (F10) (L	,	0)			(Explain in l	,	2)
	d Below Dark Surfa		Depleted Ocl	,	(MLRA 1	51)		(=//p//////////////////////////////////	tomamo,	
Thick Da	ark Surface (A12)		✓ Iron-Mangan	ese Mass	ses (F12)	(LRR O, P,	T) <sup>3</sup> India	cators of hyd	drophytic vege	tation and
	rairie Redox (A16) (								ogy must be p	
	/lucky Mineral (S1)	(LRR O, S)	Delta Ochric					ess disturbe	ed or problema	tic.
	Gleyed Matrix (S4)		Reduced Ver							
	Redox (S5)		Piedmont Flo					4 E 2 D \		
	Matrix (S6) rface (S7) (LRR P,	S T II)	Anomalous E	sright Loa	imy Solis	(F20) <b>(WLR</b>	A 149A, 153C	, 1530)		
	Layer (if observed)									
Type:	_ayo. ( oboo! roa)	,-								
Depth (in	chas).						Hydric Soil	Present?	Yes X	No
Remarks:	ones).						Tiyano oon	T TOOCHE.	100	
S	aturated 0-14	<b>!</b> "								

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Blue Andrus F	roperty	City/C	ounty: Grand Cotea	au/St. Landry	Sampling Date: 4-9-18
Applicant/Owner: One Acadia				State: LA	Sampling Point: 5
Investigator(s): C. Hoffpauir		Section	on, Township, Range:		
Landform (hillslope, terrace, etc	Gentle Slope				Slope (%): 1-3
Subregion (LRR or MLRA). LR	R-T				Datum: UTM NAD 83
Soil Map Unit Name: Cc				NWI classific	hation: None
Are climatic / hydrologic condition	one on the cite typical for	this time of year? V			
Are Vegetation No , Soil No					
Are Vegetation No , Soil No					
					s, important features, etc.
		·	.pg po	,	, important router oo, otor
Hydrophytic Vegetation Prese	nt? Yes	No X No No X	Is the Sampled Are		
Hydric Soil Present?	Yes ^	No	within a Wetland?	Yes	No X
Wetland Hydrology Present?  Remarks:	res	NO <u>^</u>			
Pasture					
HYDROLOGY					
Wetland Hydrology Indicato	ors:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum o	of one is required; check	all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	SupA 🛄	atic Fauna (B13)		Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)		Deposits (B15) (LRF		Drainage Pa	tterns (B10)
Saturation (A3)		ogen Sulfide Odor (0	•	Moss Trim L	, ,
Water Marks (B1)			long Living Roots (C3		Water Table (C2)
Sediment Deposits (B2)		ence of Reduced Iron	` '	Crayfish Bur	, ,
Drift Deposits (B3) Algal Mat or Crust (B4)		ent Iron Reduction in	Tilled Soils (C6)		isible on Aerial Imagery (C9) Position (D2)
Iron Deposits (B5)		Muck Surface (C7) r (Explain in Remark	·c)	Shallow Aqu	` '
Inundation Visible on Aeri		(Explain in Remain	.3)	FAC-Neutral	
Water-Stained Leaves (B	0 , , ,			=	noss (D8) <b>(LRR T, U)</b>
Field Observations:	·				, , ,
Surface Water Present?	Yes No X	Depth (inches):			
Water Table Present?	Yes No X	Depth (inches):			
Saturation Present?	Yes No X	Depth (inches):	Wetlan	d Hydrology Preser	nt? Yes No X
(includes capillary fringe)  Describe Recorded Data (stre	am gauge, monitoring we	ell, aerial photos, pre	vious inspections), if a	available.	
200000 11000	an gaage, memering ne	,,, aona, protes, pro	,,		
Remarks:					

VEGETATION (	(Four Strata)	– Use scientific	names of plants.
VEGETATION (	i oui otiutu		marries of plants.

50% of total cover: \_\_\_\_

50% of total cover: 44.5

50% of total cover:

\_\_\_\_)

Tree Stratum (Plot size: 30'

Sapling/Shrub Stratum (Plot size: 30'

Herb Stratum (Plot size: 30' 1. Paspalum notatum

Ranunculus sardous

Sporobolus indicus

Axonopus fissifolius

8. Geranium carolinianum

Medicago lupulina

Vicia ludoviciana

2. Trifolium repens

1. None

1. None

Absolute Dominant Indicator

% Cover Species? Status

= Total Cover

\_\_\_\_ 20% of total cover: \_\_\_\_

\_\_\_\_\_ = Total Cover

Yes

No

No

No

No

No

No

No

89 = Total Cover 20% of total cover: 17.8

\_\_\_\_\_ = Total Cover

\_\_ 20% of total cover:

**FACU** 

**FACU** 

FAC

**FACU** 

**FACW** 

FACU

FACU

Hydrophytic

Vegetation Present?

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_

10

10

10

10

5

2

S	Sampling Point: 5					
Dominance Test workshe	et:					
Number of Dominant Specie That Are OBL, FACW, or FA	es AC: <u>0</u>	(A)				
Total Number of Dominant Species Across All Strata:	1	(B)				
Percent of Dominant Specie That Are OBL, FACW, or FA		(A/B)				
Prevalence Index workshe	eet:					
Total % Cover of:						
	_ x 1 =					
FACW species						
	_ x 3 =					
	_ x 4 =					
	_ x 5 =					
Column Totals:	_ (A)	(B)				
Prevalence Index = B						
Hydrophytic Vegetation In	idicators:					
1 - Rapid Test for Hydro	ophytic Vegetation					
2 - Dominance Test is :	>50%					
3 - Prevalence Index is ≤3.0 <sup>1</sup>						
Problematic Hydrophyti	c Vegetation <sup>1</sup> (Expla	nin)				
<sup>1</sup> Indicators of hydric soil and be present, unless disturbed	d wetland hydrology d or problematic.	must				
Definitions of Four Vegeta	ation Strata:					
Tree – Woody plants, exclu more in diameter at breast height.						
Sapling/Shrub – Woody plathan 3 in. DBH and greater	ants, excluding vines than 3.28 ft (1 m) tal	s, less I.				
Herb – All herbaceous (non of size, and woody plants le		ardless				
Woody vine – All woody vin height.	nes greater than 3.28	3 ft in				

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

Woody Vine Stratum (Plot size: 30')

## **Pasture**

1. None

Yes No X

SOIL Sampling Point: 5

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	the absence of inc	licators.)	
Depth	Matrix			ox Feature	es				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks	
0-7	10YR 5/2	90	7.5YR 4/6	10	<u>C</u>	M, PL	Silt Loam		
7-16	10YR 4/3	95	7.5YR 4/6	5	С	M, PL	Silt Loam		_
				_					
					-	-			
					_				
<sup>1</sup> Type: C=C	oncentration D=Der	oletion RM	=Reduced Matrix, M	S=Maske	d Sand G	rains	<sup>2</sup> l ocation: Pl =P	ore Lining, M=Matr	ix
			LRRs, unless othe			idiilo.		roblematic Hydric	
☐ Histosol			Polyvalue B		•	IRRS T. I		-	
_	oipedon (A2)		Thin Dark S					410) <b>(LRR S)</b>	
Black Hi			Loamy Mucl					rtic (F18) (outside	MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gley			•		oodplain Soils (F19)	
Stratified	d Layers (A5)		Depleted Ma				Anomalous E	Bright Loamy Soils	(F20)
	Bodies (A6) (LRR F		Redox Dark				(MLRA 15		
	ıcky Mineral (A7) <b>(L</b>							Material (TF2)	
	esence (A8) (LRR U	J)	Redox Depr	`	<del>-</del> 8)		— '	Dark Surface (TF1	2)
	ick (A9) (LRR P, T)	(Δ44)	Marl (F10) (I		AND DA 4	E4\	U Other (Expla	in in Remarks)	
_	d Below Dark Surfac ark Surface (A12)	ce (ATT)	Depleted Oc Iron-Mangar				T) <sup>3</sup> Indicators	of hydrophytic vege	tation and
	rairie Redox (A16) <b>(</b>	MI RA 150					•	ydrology must be p	
_	lucky Mineral (S1) <b>(</b>		Delta Ochric					sturbed or problema	
	Gleyed Matrix (S4)		Reduced Ve					7.u.20u 0. p.02.0	
	Redox (S5)		Piedmont FI						
	Matrix (S6)						A 149A, 153C, 153E	))	
Dark Su	rface (S7) (LRR P,	S, T, U)							
Restrictive	Layer (if observed)	:							
Type:			<u></u>						
Depth (in	ches):						Hydric Soil Prese	ent? Yes X	No
Remarks:							1		

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Blue Andrus Prope	rty	Citv/C	ounty: Grand Cotea	au/St. Landry	Sampling Date: 4-9-18
Applicant/Owner: One Acadiana				State: LA	Sampling Point: 6
Investigator(s): C. Hoffpauir		Section	on, Township, Range:		
Landform (hillslope terrace etc.): Ric		Local	relief (concave, conve	ex none). Convex	Slone (%): 1-3
Landform (hillslope, terrace, etc.): Ric Subregion (LRR or MLRA): LRR-T		1 at: 3366904.80	) Long	. 590014.92	Datum: UTM NAD 83
Soil Map Unit Name: MC		_ Lat	Long	NWI classific	ation: None
Are climatic / hydrologic conditions on	the site typical for	this time of year? V			
Are Vegetation No , Soil No , c					
Are Vegetation No , Soil No , o				d, explain any answe	
SUMMARY OF FINDINGS –					
Hadrania dia Vanatalia a Brassa (0		N. X			
Hydric Soil Present?	Yes	No 7	Is the Sampled Are		V
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes	No X	within a Wetland?	Yes	No X
Remarks:					
Pasture					
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one	is required; check:	all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	☐ Aqua	tic Fauna (B13)		Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)		Deposits (B15) (LRF		☐ Drainage Pa	
Saturation (A3)		ogen Sulfide Odor (0		Moss Trim L	
Water Marks (B1) Sediment Deposits (B2)		ence of Reduced Iro	long Living Roots (C3	Crayfish Bur	Water Table (C2)
Drift Deposits (B3)		ent Iron Reduction in	` '	= '	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Muck Surface (C7)	,		Position (D2)
Iron Deposits (B5)	Othe	r (Explain in Remark	s)	Shallow Aqu	itard (D3)
Inundation Visible on Aerial Ima	gery (B7)			FAC-Neutral	
Water-Stained Leaves (B9)				<u>∐</u> Sphagnum n	noss (D8) <b>(LRR T, U)</b>
Field Observations: Surface Water Present? Yes	No X	Depth (inches):			
		Depth (inches):			
Saturation Present? Yes	No	Depth (inches):	Wetland	d Hydrology Preser	nt? Yes No X
(includes capillary fringe)					
Describe Recorded Data (stream ga	uge, monitoring we	ell, aerial photos, pre	vious inspections), if a	available:	
Remarks:					
Remarks.					

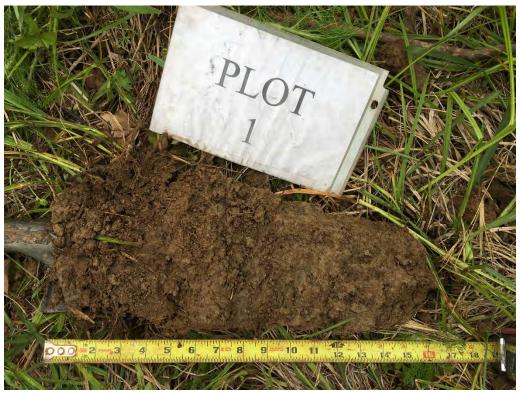
EGETATION (Four Strata) – Use scientific na	· ·		La d'a d	Sampling Po	
ree Stratum (Plot size: 30' )		Dominant Species?		Dominance Test worksheet:	
None				Number of Dominant Species That Are OBL, FACW, or FAC:  0	(A)
				mat Are OBL, I AGW, OF LAC.	(^)
•				Total Number of Dominant	(D)
•				Species Across All Strata: 2	(B)
•				Percent of Dominant Species	
•				That Are OBL, FACW, or FAC: 0	(A/I
				Prevalence Index worksheet:	
				Total % Cover of: Multi	nly by:
				OBL species x 1 =	
		= Total Cov		FACW species x 2 =	
50% of total cover:	20% of	total cover	·	FAC species x 3 =	
apling/Shrub Stratum (Plot size: 30'				FACU species x 4 =	
None					
				UPL species x 5 =	
				Column Totals: (A)	(E
				Prevalence Index = B/A =	
	_			Hydrophytic Vegetation Indicators:	
				1 - Rapid Test for Hydrophytic Veg	etation
				2 - Dominance Test is >50%	Clation
				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
		= Total Cov	er	Problematic Hydrophytic Vegetatio	n <sup>1</sup> (Evaloin)
50% of total cover:	<u> </u>			Problematic Hydrophytic Vegetatio	II (⊏xpiaiII)
lerb Stratum (Plot size: 30' )	20,0 0.		-	1	
Paspalum notatum	30	Yes	FACU	<sup>1</sup> Indicators of hydric soil and wetland hy be present, unless disturbed or problem	
Lolium perenne	20	Yes	FACU	Definitions of Four Vegetation Strata	
Trifolium repens	10	No	FACU	Definitions of Four Vegetation of ata	•
Vicia ludoviciana	5	No	FACU	Tree – Woody plants, excluding vines,	
Trifolium incarnatum	5	No	NI	more in diameter at breast height (DBH height.	), regardless (
Phalaris caroliniana	5	No	FACW		
Ranunculus sardous	5	No	FACU	Sapling/Shrub – Woody plants, exclude than 3 in. DBH and greater than 3.28 ft	
Sporobolus indicus	2	No	NI	than 3 in. DBH and greater than 3.20 it	(1 III) tall.
				Herb - All herbaceous (non-woody) pla	
Sorghum halepense	_ 2	No	FACU	of size, and woody plants less than 3.2	3 ft tall.
D. Trifolium pratense	_ 2	No	FAC	Woody vine – All woody vines greater	than 3.28 ft in
1. Rumex crispus	_ 2	No	FAC	height.	
2. Cirsium vulgare	2	No	FACU		
		= Total Cov			
50% of total cover: 45	20% of	total cover	18		
/oody Vine Stratum (Plot size: 30' )					
None					
				Hydrophytic	
		= Total Cov	er	Vegetation	
50% of total cover:				Present? Yes No	X
temarks: (If observed, list morphological adaptations bel					
	OVV).				
asture					

SOIL Sampling Point: 6

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confir	rm the absence of indicators.)	
Depth	Matrix			ox Feature	es		_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 4/3	100					Silt Loam_	
6-12	10YR 6/2	90	7.5YR 4/6	10	С	М	Silt Loam	
12-15	10YR 4/2	95	10YR 4/4	5	С	M	Silt Loam	
				_		-	<del></del>	
			-					-
			-	_				-
<sup>1</sup> Type: C=Co	oncentration, D=De	pletion, RM	=Reduced Matrix, M	IS=Maske	d Sand G	rains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil	ndicators: (Appli	cable to all	LRRs, unless other	rwise no	ted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
☐ Histosol	(A1)		Polyvalue B	elow Surfa	ace (S8) <b>(</b> I	LRR S, T,	, <b>U)</b> 1 cm Muck (A9) <b>(LRR O)</b>	
Histic Ep	pipedon (A2)		Thin Dark S	urface (S9	) (LRR S	, T, U)	2 cm Muck (A10) (LRR S)	
Black Hi	stic (A3)		Loamy Muc	ky Mineral	l (F1) <b>(LR</b> I	R O)	Reduced Vertic (F18) (outside MLRA 150)	A,B)
Hydroge	n Sulfide (A4)		Loamy Gley	ed Matrix	(F2)		Piedmont Floodplain Soils (F19) (LRR P, S	, T)
Stratified	l Layers (A5)		✓ Depleted Ma					
	Bodies (A6) (LRR I		Redox Dark	Surface (	F6)		(MLRA 153B)	
	icky Mineral (A7) <b>(L</b>		Depleted Da	ark Surfac	e (F7)		Red Parent Material (TF2)	
	esence (A8) (LRR		Redox Depr	`	<del>-</del> 8)			
	ick (A9) (LRR P, T)						Other (Explain in Remarks)	
	Below Dark Surfa	ce (A11)	Depleted Oc					
=	ark Surface (A12)		Iron-Mangai					
	rairie Redox (A16) (						wetland hydrology must be present,	
	lucky Mineral (S1)	LRR O, S)	Delta Ochrid				unless disturbed or problematic.	
	lleyed Matrix (S4)		Reduced Ve					
	edox (S5)		Piedmont FI					
	Matrix (S6) rface (S7) (LRR P,	C T II\	Anomalous	Bright Loa	arny Solis	(FZU) <b>(IVILI</b>	.RA 149A, 153C, 153D)	
	_ayer (if observed)							
	Layer (II Observed)	,.						
Type:	ahaa).						Hydric Soil Present? Yes X No	
Depth (inc	cnes):						Hydric Soil Present? Yes X No	
Remarks:								

## ATTACHMENT D

Site Photographs



Photograph 1 Sample Plot 1



Photograph 2 General View of Plot 1



Photograph 3 Sample Plot 2



Photograph 4
General View of Plot 2



Photograph 5 Sample Plot 3



Photograph 6 General View of Plot 3



Photograph 7 Sample Plot 4



Photograph 8 General View of Plot 4



Photograph 9 Sample Plot 5



Photograph 10 General View of Plot 5



Photograph 11 Sample Plot 6



Photograph 12 General View of Plot 6



Photograph 13 View of Tributary Facing North



Photograph 14 View of Tributary Facing South