

# Exhibit EE. Highway 1 Leonard Road Site Wetlands Delineation Report & Jurisdictional Determination







#### DEPARTMENT OF THE ARMY

U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT 4155 CLAY STREET VICKSBURG, MISSISSIPPI 39183-3435

November 4, 2020

**Regulatory Division** 

SUBJECT: Department of the Army Regulatory Requirements – Franks Investment Company, Commercial Development Site, Highway 1 and Leonard Road Tract, Shreveport, Louisiana; MVK-2013-429 (2020)

Mr. Elliott Boudreaux CSRS Incorporated 6767 Perkins Road, Suite 200 Baton Rouge, Louisiana 70808

## Highway 1 Leonard Road Site Wetlands Delineation Report & Jurisdictional Determination

Dear Mr. Boudreaux:

I refer to your request for a determination of Department of the Army permit requirements for the subject project area. The project site is located in section 3, T16N-R11W, Caddo Parish, Louisiana.

Based upon the information provided, it appears there are jurisdictional areas within the proposed project area subject to regulation pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. The site location and approximate extent of jurisdictional waters of the United States is depicted on the enclosed preliminary map (enclosure 1). Any work involving the discharge of dredged or fill material (land clearing, ditching, filling, leveeing, etc.) within the limits of the jurisdictional areas identified will require a Department of the Army Section 10/404 permit prior to beginning work. Please note that this jurisdictional determination is preliminary and should be used for planning purposes. A final determination of permit requirements will be made upon submission of a completed permit application, including final project plans. I have enclosed a copy of an appeals form (enclosure 2).

This delineation/determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

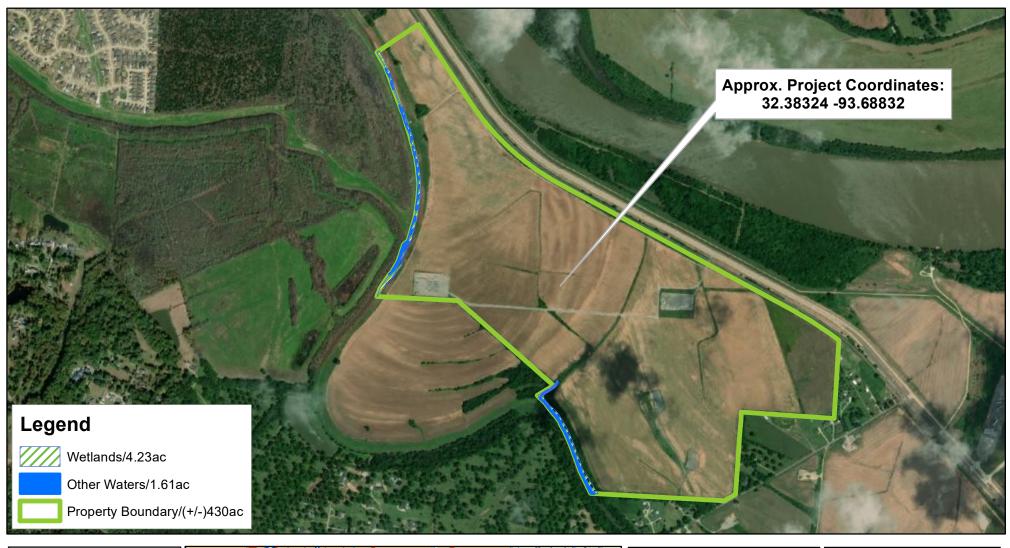
For your convenience, I am enclosing a Department of the Army permit application (enclosure 3). Your application for any proposed work in wetlands or other waters of the United States should be submitted at least 120 days in advance of the proposed starting date. To expedite the evaluation process, please refer to Identification No. MVK-2013-429 (2020) when submitting the application or requesting project updates.

If you need additional assistance in this matter, please contact Mr. Robert Ulmer of this office, telephone (601) 631-5637 or e-mail address robert.g.ulmer@usace.army.mil.

Sincerely,

Charles R. Allred, Jr. Chief, Enforcement and Compliance Branch Regulatory Division

**Enclosures** 





#### November 4 2020 MVK-2013-429-2020

Applicant: Franks Investment Company, LLC

> Proposed Work: Commercial Development

Location: Sections 3 , T16N-R13W Shreveport East, Quadrangle Caddo Parish, LA

Map Background: NAIP Aerial Imagery (2004)

#### Preliminary Jurisdictional Determination

Prepared by: Robert G. Ulmer, Jr.

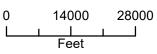


US Army Corps of Engineers



#### **Regulatory Branch**

**Enforcement Section** 



### NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

App	licant: Franks Investment Company	File Number: MVK-2013-429-2020	Date: 04 Nov 2020
Atta	ched is:		See Section Below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permit)	ermission)	A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)	В	
	PERMIT DENIAL		С
	APPROVED JURISDICTIONAL DETERMINATION		D
X	PRELIMINARY JURISDICTIONAL DETERMINATION		Е

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

- A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.
- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations (JD) associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B: PROFFERED PERMIT: You may accept or appeal the permit.
- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.
- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTION	S TO AN INITIAL PI	ROFFERED PERMIT
REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for a permit in clear concise statements. You may attach additional information to addressed in the administrative record.)		
ADDITIONAL INFORMATION: The appeal is limited to a review of the ac	Iministrative record, the Cor	ns memorandum for the record of the
appeal conference or meeting, and any supplemental information that the rev	iew officer has determined is	s needed to clarify the administrative
record. Neither the appellant nor the Corps may add new information or ana information to clarify the location of information that is already in the admin		r, you may provide additional
POINT OF CONTACT FOR QUESTIONS OR INFORM		
If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions may also contact:	s regarding the appeal process you
Robert Ulmer		
U.S. Army Corps of Engineers		opeals Review Officer
Regulatory Branch 4155 Clay Street		ppi Valley Division fice Box 80
Vicksburg, MS 39183-3435		arg, MS 39181-0080
(601) 631-5637	(601)634	
RIGHT OF ENTRY: Your signature below grants the right of entry to Co		
to conduct investigations of the project site during the course of the appearinvestigation, and will have the opportunity to participate in all site investigation.		ovided a 15 day notice of any site
investigation, and will have the opportunity to participate in an site inves	Date:	Telephone number:
Signature of appellant or agent.		

# Highway 1 Leonard Road Site Wetlands Delineation Report & Jurisdictional Determination

FRANKS INVESTMENT CO., LLC.

WETLAND DATA REPORT
LOT 4 (+/- 430 ACRE TRACT,
a.k.a. "Highway 1/Leonard Road Tract")
CADDO PARISH, LOUISIANA

May 2013

Prepared by:



C-K Associates' Project No. 8902

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#### **ATTACHMENTS**

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#### **Attachments**

Wetland Determination Data Forms and Photographs A.

#### 1.0 INTRODUCTION

The following report summarizes a wetland delineation conducted by C-K Associates, LLC (C-K), on an approximate 430-acre tract identified as Lot 4 (a.k.a., Highway 1/Leonard Road Tract). The purpose of this report is to identify areas that contain potential wetlands and other potential "Waters of the United States" as defined in 33 CFR 328.3. The survey area is located south of Shreveport in Caddo Parish, Louisiana and is located in Section 3, Township 16 North, Range 13 West (Figure 1).

Waters of the United States are aquatic areas that are either navigable or have a significant nexus to a navigable water. These areas are regulated by the United States Army Corps of Engineers (USACE). Navigable waters are "those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce" (33 CFR 329.4). Any area below the ordinary high water mark, as defined in 33 CFR 328.3(e), may fall under Federal jurisdiction as a navigable water [33 CFR 329.11(a)].

Waters of the United States, regardless of navigability, can generally be categorized as either: 1) deepwater aquatic habitats, 2) special aquatic sites, or 3) other waters of the United States. Deepwater aquatic habitats are "areas that are permanently inundated at mean annual water depths greater than 6.6 feet or permanently inundated areas, less than or equal to 6.6 feet in depth that do not support rooted-emergent or woody plant species". Special aquatic sites include 1) sanctuaries and refuges, 2) wetlands, 3) mudflats, 4) vegetated shallows, 5) coral reefs and 6) riffle and pool complexes. Other waters of the United States include, but are not limited to 1) isolated wetlands and lakes, 2) intermittent streams, 3) prairie potholes and 4) other waters that are not part of a tributary system to interstate waters or navigable waters of the United States (USACE 1987).

Wetlands are classified as a special aquatic site and are defined as "areas that are inundated or saturated by surface or groundwater 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" (USACE 1987). These areas are referred to as "wetlands" throughout this report whereas deepwater aquatic habitats, special aquatic sites, streams, and other waters of the United States are referred to as "other waters" in this report.

Three mandatory technical criteria for determining the presence of a wetland are, with exceptions, 1) hydrophytic vegetation, 2) wetland hydrology, and 3) hydric soils (USACE 1987). Hydrophytic vegetation is defined as "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" (USACE 1987). The term wetland hydrology encompasses "the sum total of wetness characteristics in areas that are inundated or have saturated soils for a sufficient duration to support hydrophytic vegetation" (USACE

1987). A hydric soil is defined as "a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (U.S. Department of Agriculture [USDA] 2010).

#### 2.0 PHYSIOGRAPHY, CLIMATE, AND SITE DESCRIPTION

Caddo Parish is located in northwest Louisiana. The parish is bordered by Miller County, Arkansas to the north; Cass, Marion, Harrison and Panola Counties, Texas to the west; Desoto and Red River Parishes, Louisiana to the south; and Bossier Parish, Louisiana to the east. The parish generally consists of uplands, stream terraces and alluvial plains. Elevations in the parish range from 140 feet above sea-level on the Red River floodplain in the southeast part to 465 feet above sea-level in the uplands in the northern part of the parish. The nearly level alluvial plain of the Red River and its major distributaries makes up nearly one-third of the area in the parish (Soil Conservation Service [SCS] 1980).

Caddo Parish has a humid, subtropical climate. The parish is dominated by warm, moist, maritime tropical air from the Gulf of Mexico. The average annual precipitation is 44.7 inches and the growing season is approximately 220 days (SCS 1980).

The survey area is located in the eastern part of the parish on natural levee deposits of the Red River alluvial floodplain. Elevations for the property range from approximately 134 feet above sea level along Bayou Pierre and Sand Beach Bayou to approximately 160 feet above sea level on the crest of the natural levees. The subject area is typically planted in crops such as cotton or soybeans during the growing season. Oilfield well pads, pipeline right of ways and paved gravel lease roads are recent developments on the property. The property is drained by a system of ditches which eventually empty into Sand Beach Bayou and Bayou Pierre. Sand Beach Bayou enters the property on the north and parallels and forms northwest boundary of the property. Sand Beach Bayou then empties into Bayou Pierre further south along this boundary line on the northwest. Bayou Pierre exits the property a short distance further south. Bayou Pierre again enters the property on the south where it parallels and forms the properties boundary on the southwest. Bayou Pierre is identified as a navigable stream by USACE (2003).

#### 3.0 METHODS

C-K conducted a site visit on January 22 and 23, 2013 to determine the extent of potential wetlands and other Waters of the United States within the survey area. The wetland delineation followed routine onsite field procedures as outlined by the USACE (1987 and 2010). Soil references include the NRCS (1980, 2013a, 2013b, and 2013c), and USDA (2010). Plant nomenclature and wetland indicator status is taken from USACE (2012).

Prior to conducting the field investigation, C-K reviewed available aerial photography, soil survey data, elevation data (Light Detection and Ranging [LIDAR] contours and Digital Elevation Models [DEM]), topographic maps (Figures 3, 3A, 3B, and 3C), and National Wetland Inventory (NWI) data. Data points were established within the dominant plant communities of the project area. Observations of soils, vegetation, and hydrology were documented at each data point location (Attachment A). Potential Waters of the United States, including wetlands, and data point locations were mapped utilizing Trimble GeoXT Differential Global Positioning System (DGPS) utilizing real-time corrections. Acreage was obtained by exporting the data from the DGPS unit into ESRI ArcMap Version 10.1. Digital photographs were taken of the soil profile and surrounding vegetation at each data point (Attachment A).

All vegetative species present within each data point plot were documented for each vegetation strata, including the tree stratum, sapling /shrub stratum, herbaceous stratum, and woody vines. Percent absolute cover for each species was determined by ocular estimation. Plant communities met hydrophytic vegetation criteria if greater than 50% of all dominant species from all strata were classified as obligatory, facultative-wet, or facultative species or the prevalence index is 3.0 or less (USACE 2010). Dominant species were selected using the "50/20 rule" described by the USACE (2010).

Hydrologic criteria were based on the observation of wetland hydrology indicators, as described by the USACE (2010). Wetland hydrologic criteria were met if one primary indicator was observed or a minimum of two secondary indicators was observed.

Soil profiles were obtained by excavating an approximate 14-inch soil pit. Soil color was recorded by matching soil samples throughout the profile to color chips contained in a Munsell soil color chart. The presence or absence of hydric soils was determined utilizing the methods and procedures outlined by the USACE (2010), including, but not limited to, the observation of the hydric soil indicators described by the USACE (2010).

#### 4.0 RESULTS

Twenty-two data points (DP) were collected during the field investigation. DP3, DP15, DP17, DP18 and DP21 were located within wetlands. DP1-DP2, DP4-DP14, DP16, DP19-DP20 and DP22 were located within non-wetlands.

#### 4.1 Hydrology

Primary wetland hydrology indicators such as: saturation, iron deposits, sediment deposits, drift deposits, or water-stained leaves were observed. Secondary wetland hydrology indicators such as FAC-Neutral Test, and crayfish burrows were observed as well.

#### 4.2 Vegetation

The majority of data points were located in plowed fields which exhibited little or no vegetation at the time of the site visit. However, supplemental offset data sources such as un-plowed field fringes were used to determine plant communities.

Wetland habitat is dominated by black willow (Salix nigra), sugarberry (Celtis laevigata) and groundsel (Baccharis halimifolia) in the sapling/shrub stratum. The herbaceous stratum is composed of groundsel, tall fescue (Festuca arundinaceus), Ragweed (Ambrosia trifida), and cattail (Typha domingensis). The woody vine stratum is composed of trumpetcreeper (Campsis radicans), peppervine (Ampelopsis arborea), dewberry (Rubis flagellaris), and horsebrier (Smilax rotundifolia).

Non-wetland areas are dominated by tall fescue, Bermudagrass (*Cynodon dactylon*), ryegrass (*Lolium perenne*), sowthistle (*Sonchus asper*) and Henbit deadnettle (*Lamium amplexicaule*) in the herbaceous stratum. Dewberry and horsebrier composed the woody vine stratum.

#### 4.3 Soils

The survey area is underlain by the following soils:

Map Unit Symbol	Map Unit Name
2	Armistead Clay
14	Gallion silt loam
15	Gallion silty clay loam
20	Moreland clay, gently undulating
22	Moreland silt loam
23	Moreland silty clay loam
24	Moreland clay
27	Norwood silt loam
33	Severn very fine sandy loam

None of the soil mapping unit are designated as hydric by the NRCS (2013c). The Depleted Matrix soil indicator was observed at DP3, DP15, DP17, DP18 and DP21.

#### 5.0 CONCLUSION

Based on field observations, the approximate 430-acre survey area contains 4.07 acres of wetlands and 6.97 acres of Other Waters of the United States (Figures 2). A detailed breakdown of all potential wetland and waterbody impacts within the survey area is included as Attachment B. This acreage is influenced by the accuracy of the DGPS unit utilizing real-time corrections and ESRI® ArcMap Version 10.1 drafting software.

The USACE under the authority of the Clean Water Act, Section 404 and the Rivers and Harbor Act, Section 10 has the responsibility to make the final determination of the location and extent of jurisdictional wetlands and navigable waters within the project area, respectively. This report represents the opinion of the investigators and should be considered preliminary until final concurrence is obtained from the Vicksburg District Army Corps of Engineers office.

#### 6.0 LITERATURE CITED

- Natural Resources Conservation Services [NRCS]. 1980. Soil Survey of Caddo Parish. U.S. Department of Agriculture, Natural Resources Conservation Service.
- Natural Resources Conservation Service [NRCS]. 2013a. National Hydric Soils List. U.S. Department of Agriculture, Natural Resources Conservation Service, Soil Survey Staff. <a href="http://websoilsurvey.nrcs.usda.gov/app/">http://websoilsurvey.nrcs.usda.gov/app/</a>. Accessed 21 January 2013.
- Natural Resources Conservation Service [NRCS]. 2013b. Official Soil Series

  Descriptions. U.S. Department of Agriculture, Natural Resource Conservation
  Service. <a href="http://soils.usda.gov/technical/classification/osd/index.html">http://soils.usda.gov/technical/classification/osd/index.html</a>>.

  Accessed 21 January 2013.
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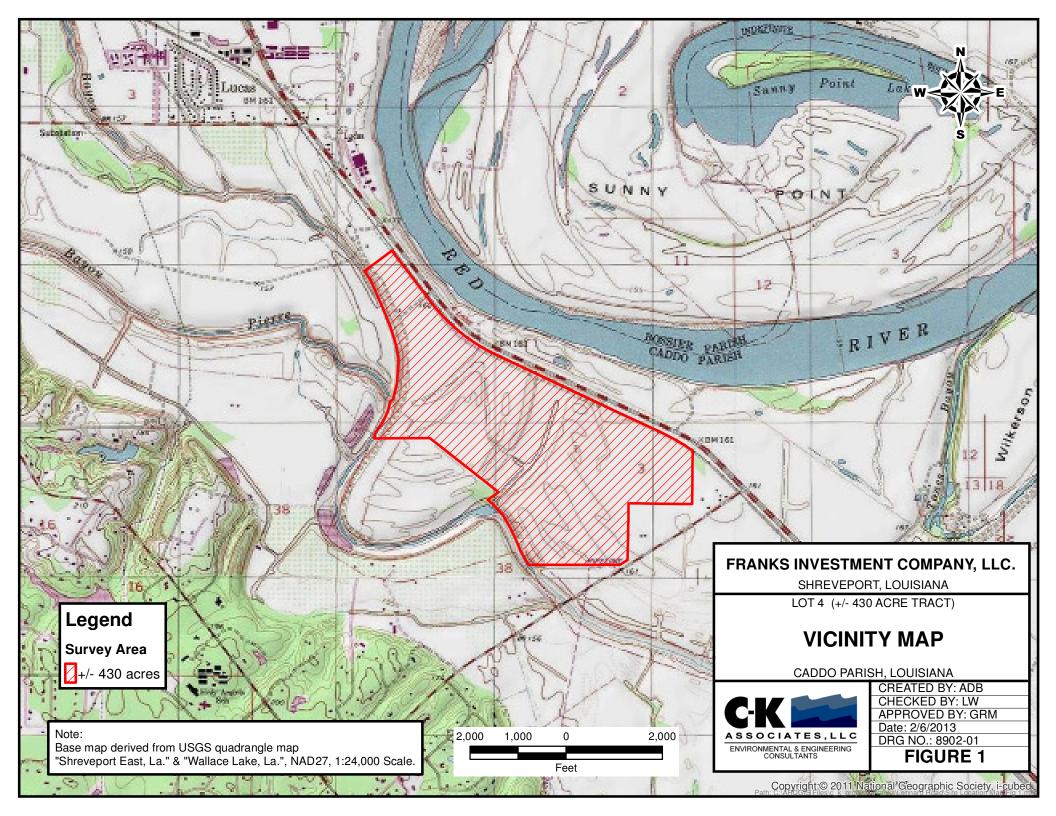
  Department of Agriculture, Natural Resources Conservation Service, Soil Survey Staff. <a href="http://websoilsurvey.nrcs.usda.gov/app/">http://websoilsurvey.nrcs.usda.gov/app/</a>. Accessed 21 January 2013.
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#### **FIGURES**

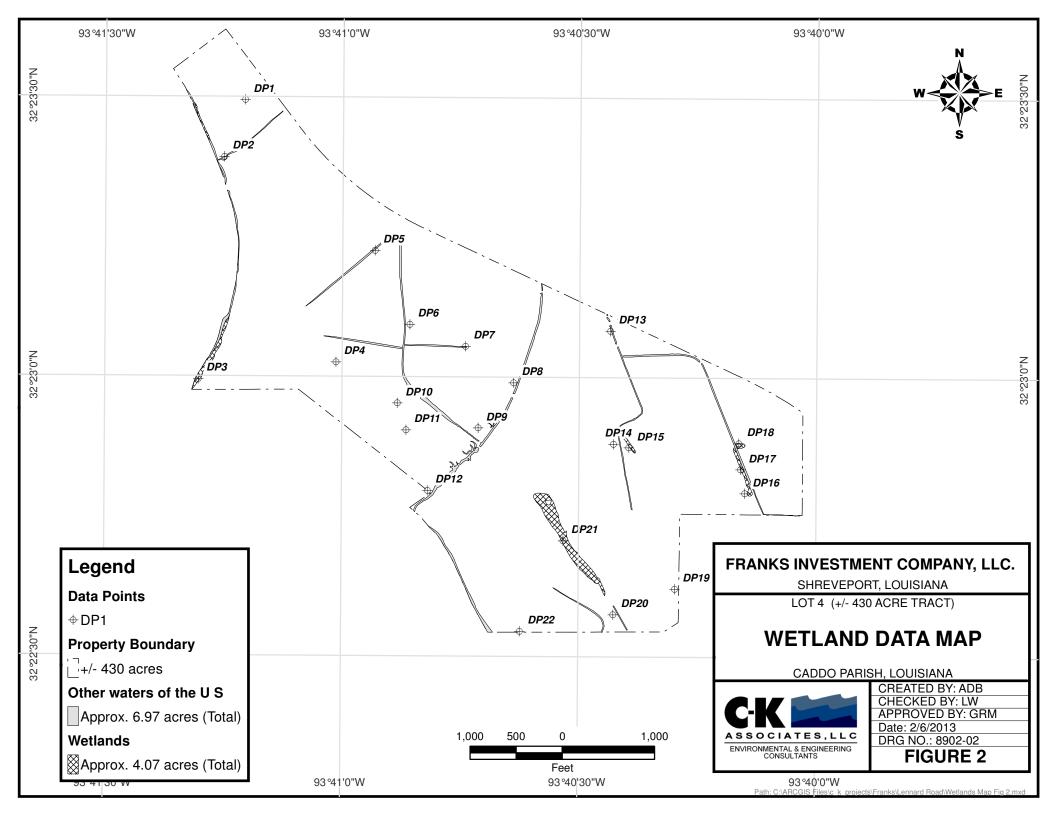
#### FIGURE 1

**VICINITY MAP** 



#### FIGURE 2

**WETLANDS MAP** 



#### **ATTACHMENT A**

## WETLAND DETERMINATION DATA FORMS AND PHOTOGRAPHS

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

	Lot 4 (430 acre tract)	City/County: Caddo	o Parish	▼	Sampling Date: _	1/22/2013	
Applicant/Owner:	Franks Investment (	Company, LLC	State: _	La	Sampling Point:	DP1	
Investigator(s):	Alan Bickham	Section, Township,			3; T16N-R13W		
Landform (hillslope, terrace, e	Matural lavas	Local relief (concav			Slone	e (%): <u>0-1</u>	
	RR O Lat:		e, convex, none).		B" W Date		
Soil Map Unit Name: (33) Sev					ation:		
Are climatic / hydrologic condi	itions on the site typical for this ti						
Are Vegetation, Soil _	, or Hydrology sign	ificantly disturbed?	re "Normal Circun	nstances" p	resent? Yes	No	
Are Vegetation, Soil _	, or Hydrology natu	urally problematic? (I	f needed, explain	any answer	s in Remarks.)		
SUMMARY OF FINDIN	GS – Attach site map sh	owing sampling poir	nt locations, ti	ransects.	important fe	atures, etc.	
	100 to 10		<u> </u>		<u> </u>		
Hydrophytic Vegetation Pres		Is the Samp	oled Area				
Hydric Soil Present?	Yes No _	within a We	tland?	Yes	No	.	
Wetland Hydrology Present?	? Yes No _		7,0100000000000000000000000000000000000		-1 0000000		
Remarks: Point taken in drainage swal	e in nlowed field						
onit taken in dramage swar	e in piowed field.						
HYDROLOGY							
Wetland Hydrology Indicat	tors:		Secon	dary Indicat	tors (minimum of t	wo required)	
Primary Indicators (minimum	n of one is required; check all tha	t apply)	Sı	urface Soil (	Cracks (B6)		
Surface Water (A1)	Aquatic Fa	una (B13)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Marl Depos	sits (B15) (LRR U)	Drainage Patterns (B10)				
Saturation (A3)	Hydrogen	Sulfide Odor (C1)	Moss Trim Lines (B16)				
Water Marks (B1)	Oxidized R	hizospheres along Living Ro	Roots (C3) Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Presence of	of Reduced Iron (C4)	Crayfish Burrows (C8)				
Drift Deposits (B3)	Recent Iron	n Reduction in Tilled Soils (C	C6) Sa	aturation Vis	sible on Aerial Ima	gery (C9)	
Algal Mat or Crust (B4)	Thin Muck	Surface (C7)	G	eomorphic I	Position (D2)		
Iron Deposits (B5)	Other (Exp	lain in Remarks)	SI	hallow Aquit	tard (D3)		
Inundation Visible on As	erial Imagery (B7)		F/	AC-Neutral	Test (D5)		
Water-Stained Leaves (	B9)		s <sub>l</sub>	phagnum m	oss (D8) <b>(LRR T,</b>	U)	
Field Observations:							
Surface Water Present?	Yes No Depth	(inches):					
Water Table Present?	Yes No Depth	CONT					
Saturation Present?	Yes No Depth	(inches):	Wetland Hydrolo	ogy Presen	t? Yes	No	
(includes capillary fringe)  Describe Recorded Data (st	ream gauge, monitoring well, aer	ial photos, previous inspecti	ons), if available:				
	NAIP imagery, USGS quadrang		5.10), ii u vallasio.				
Remarks:							
T tomanto.							
1							

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: <sup>1</sup>Indicators of hydric soil and wetland hydrology must 70 yes 🔽 FAC 1. Festuca arundinaceus be present, unless disturbed or problematic. 2. Lamium amplexicaule 5 no **▼** FAC  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 75 \_ = Total Cover 50% of total cover: 37.5 20% of total cover: Woody Vine Stratum (Plot size: \_\_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

SOIL Sampling Point: DP1

Profile Des	cription: (Describ	e to the depth	needed to docu	ment the i	ndicator	or confirn	n the absence o	f indicators.)		
Depth	<u>Matrix</u>			x Features		<del> </del>		_		
(inches)	Color (moist)		Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> _	Ren	narks	
4	5R 3/3	100					sandy loam			
16	5R 4/4	100				lacksquare	sandy loam			
						▼				
	-									
	·					_=				
					$\blacksquare$	▼				
					$\blacksquare$	$\blacksquare$				
<sup>1</sup> Type: C=C	Concentration, D=De	pletion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ins.	<sup>2</sup> Location: F	PL=Pore Lining, M	1=Matrix.	
Hydric Soil	Indicators: (Appli	icable to all L	RRs, unless othe	rwise note	ed.)			or Problematic F		
Histoso	l (A1)		Polyvalue Be	elow Surfac	ce (S8) <b>(L</b>	RR S, T, l	J) 1 cm Mu	ick (A9) (LRR O)		
Histic E	pipedon (A2)		. Thin Dark S	urface (S9)	(LRR S,	T, U)	2 cm Mu	ick (A10) (LRR S	)	
Black H	listic (A3)		Loamy Muck	y Mineral (	(F1) <b>(LRR</b>	O)		d Vertic (F18) <b>(ou</b>		
	en Sulfide (A4)		Loamy Gley		F2)			nt Floodplain Soils	, , ,	P, S, T)
	d Layers (A5)	D T !!	Depleted Ma		(C)			ous Bright Loamy	Soils (F20)	
	Bodies (A6) (LRR		Redox Dark Depleted Da	,	,		,	<b>A 153B)</b> ent Material (TF2	1	
	ucky Mineral (A7) <b>(I</b> resence (A8) <b>(LRR</b>		Redox Depr		` '			ent Material (1F∠ allow Dark Surfac		
	uck (A9) (LRR P, T)	,	Marl (F10) (I		,			xplain in Remark		
	d Below Dark Surfa		Depleted Oc		(MLRA 15	1)			-,	
	ark Surface (A12)	, ,	Iron-Mangar				T) <sup>3</sup> Indicat	tors of hydrophyti	c vegetation a	and
Coast F	Prairie Redox (A16)	(MLRA 150A)				U)	wetla	nd hydrology mu:	st be present,	
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric					s disturbed or pro	oblematic.	
	Gleyed Matrix (S4)		Reduced Ve							
	Redox (S5) d Matrix (S6)		Piedmont Fl			•	ıяд) RA 149A, 153C, 1	153D)		
	u Matrix (30) urface (S7) <b>(LRR P,</b>	S T III	Anomalous	ongni Loan	rry Golls (r	20) (WEN	A 143A, 133C, 1	1330)		
	Layer (if observed									
Type:										
	nches):						Hydric Soil P	resent? Yes_	No	•
Remarks:	· -		<u> </u>				1 -	<b>_</b>		<u> </u>



**DP1 Soil Profile** 



DP1 Surrounding vegetation, view looking north.



View of vegetation at DP1 facing west

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

Project/Site:	Lot 4 (430 acre tract)	City/County: Caddo	o Parish		Sampling Date: _	1/22/2013		
Applicant/Owner:	Franks Investment Con				Sampling Point:			
Investigator(s):	Alan Bickham	Section, Township,			3; T16N-R13W			
Landform (hillslope, terrace		Local relief (concav			Slope	e (%): 0-1		
Subregion (LRR or MLRA)								
Soil Map Unit Name: (14)			Long	NA# -1	ation:	um. <u></u>		
	onditions on the site typical for this time							
Are Vegetation, So	il, or Hydrology signific	antly disturbed?	re "Normal Circu	umstances" p	resent? Yes	No		
Are Vegetation, So	il, or Hydrology natural	ly problematic? (	lf needed, explai	n any answei	rs in Remarks.)			
SUMMARY OF FIND	INGS – Attach site map show	ving sampling poir	nt locations,	transects	, important fe	atures, etc.		
	- V V							
Hydrophytic Vegetation F			oled Area		.,			
Hydric Soil Present? Wetland Hydrology Prese	Yes No ent? Yes No	within a We	etland?	Yes	No	-		
Remarks:	nes							
	cent to Sand Beach Bayou							
HYDROLOGY								
Wetland Hydrology Ind	icators:		Seco	ondary Indica	tors (minimum of	two required)		
	num of one is required; check all that ap	(vlac		Surface Soil	•	.wo roquirou,		
Surface Water (A1)	Aquatic Fauna		Sparsely Vegetated Concave Surface (B8)					
High Water Table (A				Drainage Patterns (B10)				
Saturation (A3)	Hydrogen Sulf			Moss Trim Lines (B16)				
Water Marks (B1)		ospheres along Living R						
Sediment Deposits (				Crayfish Burr				
Drift Deposits (B3)		eduction in Tilled Soils (	_	•	sible on Aerial Ima	agery (C9)		
Algal Mat or Crust (E					Position (D2)	.go.y (00)		
Iron Deposits (B5)	Other (Explain			Shallow Aqui	, ,			
Inundation Visible or		, , , , , , , , , , , , , , , , , , , ,		FAC-Neutral				
Water-Stained Leave					noss (D8) (LRR T,	U)		
Field Observations:		T			. ,,			
Surface Water Present?	Yes No Depth (inc	ches):						
Water Table Present?	Yes No Depth (inc	ches):						
Saturation Present?	Yes No Depth (inc	986-	Wetland Hydro	logy Presen	t? Yes	No		
(includes capillary fringe)								
	(stream gauge, monitoring well, aerial p		ions), if available	Σ.				
·	010 NAIP imagery, USGS quadrangle r	пар, LIDAR. —————						
Remarks:								
1								

VEGETATION (Four Strata) - Use scientific names of plants. DP2 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant Species Across All Strata: \_ (B) Percent of Dominant Species 66 (A/B) That Are OBL, FACW, or FAC:  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_0 (A) \_\_\_  $\blacksquare$  $\blacksquare$ Prevalence Index = B/A = \_\_\_  $\blacksquare$ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Herb Stratum (Plot size: <sup>1</sup>Indicators of hydric soil and wetland hydrology must \_\_\_\_\_ 45 1. Cynodon dactylon yes ▼ FAC ▼ be present, unless disturbed or problematic. 40 yes 💌 7 Fescue arundinaceus FAC  $\blacksquare$ Definitions of Four Vegetation Strata: 3. Lamium amplexicaule **▼** FAC Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ more in diameter at breast height (DBH), regardless of **V**  $\blacksquare$  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 90 = Total Cover 50% of total cover: \_\_\_45 \_\_ 20% of total cover: \_\_ Woody Vine Stratum (Plot size: \_\_\_\_\_) 5 yes **▼** UPL **▼** 1. Rubis flagellaris  $\blacksquare$  $\blacksquare$ Hydrophytic 5 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: 2.5 20% of total cover: Remarks: (If observed, list morphological adaptations below).

SOIL Sampling Point: DP2

Depth (inches)	Matrix		Red	ox Feature:			n the absence		ŕ		
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks		
4	5YR 3/3	100					fn sandy loa				
16	5YR 4/4	100				<b>V</b>	fn sandy loa				
	-										
					▼						
				_		$\blacksquare$					
					▼	-					
						<u> </u>					
1											
	Concentration, D=De					ins.			ining, M=Matri		
=	Indicators: (Appli	cable to all L			-				matic Hydric	SOIIS":	
Histoso	1 7		Polyvalue B				-	, , ,	•		
	pipedon (A2)		Thin Dark S	, ,				/luck (A10)	. ,		
	listic (A3)		Loamy Muc	-		0)		,	F18) <b>(outside l</b> ain Soils (F19)		
	en Sulfide (A4) d Layers (A5)		Loamy Gley Depleted Ma		F2)		_	•	ain Solis (F19) :Loamy Soils (	•	, 5, 1)
	Bodies (A6) (LRR	P T II)	Redox Dark	` '	:6)			RA 153B)	Loanly Colls (	20)	
, –	ucky Mineral (A7) (L	, , ,	Depleted Da	,	,		•	arent Mater	ial (TF2)		
	resence (A8) (LRR		Redox Depr		. ,				k Surface (TF1	2)	
	uck (A9) (LRR P, T)	,	Marl (F10) (	,	,			(Explain in	,	,	
Deplete	d Below Dark Surfa	ce (A11)	Depleted O	chric (F11)	(MLRA 15	1)					
	ark Surface (A12)		Iron-Manga	nese Mass	es (F12) <b>(L</b>	.RR O, P,	T) <sup>3</sup> Indic	ators of hy	drophytic veget	ation an	d
	Prairie Redox (A16)			, , ,		U)		-	ogy must be pi		
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochrid		-			ess disturbe	ed or problema	tic.	
	Gleyed Matrix (S4)		Reduced Ve								
	Redox (S5)		Piedmont Fi				•	452D)			
	d Matrix (S6)	e T III	Anomalous	Bright Loar	ny Solis (F	20) (IVI L R	A 149A, 153C	, 1530)			
	urface (S7) (LRR P, Layer (if observed						1				
	Edyci (ii obaci vod	,.									
Туре:			<del></del> '					<b>5</b> 40	V -		/
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No _	<u> </u>
Туре:			<del></del> '				Hydric Soil	Present?	Yes	No _	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No _	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No _	<u>/</u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No _	
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No _	
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No _	<u>v</u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	<u>v</u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No _	
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No _	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No _	<u> </u>
Type: Depth (ir			<del></del> '				Hydric Soil	Present?	Yes	No _	<u> </u>



DP 2 Soil profile



Vegetation at DP2, view facing north.



Vegetation at DP2, view facing west.





Vegetation at DP2, view is to south, along Sand Beach Bayou.

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

1 TOJCOBORO.	Lot 4 (430 acre tract)	City/County: Caddo Parish	Sampling Date:1/22/2013
Applicant/Owner:	Franks Investment Compar	ny, LLC	State: La Sampling Point: DP3
Investigator(s):	Alan Bickham	Section, Township, Range:	O O T4011 D40114
Landform (hillslope, terrace, e	tc.): hillslope	Local relief (concave, conve	x, none): Slope (%):0-1
Subregion (LRR or MLRA): LF	RR O 互 Lat:3	32° 22' 59.70" N Long:	000 441 40 4011 141
Soil Map Unit Name: (2) Armi			NWI classification:
Are climatic / hydrologic condi	tions on the site typical for this time of ye	ear? Yes No	(If no, explain in Remarks.)
Are Vegetation, Soil _	, or Hydrology significantly	y disturbed? Are "Norm	al Circumstances" present? Yes No
Are Vegetation, Soil _	, or Hydrology naturally pr	roblematic? (If needed	, explain any answers in Remarks.)
SUMMARY OF FINDING	GS – Attach site map showing	g sampling point locat	ions, transects, important features, et
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes No		Yes No
Point taken on bottom of slop	pe adjacent to Bayou Pierre		
HYDROLOGY			
Wetland Hydrology Indicat	ors:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum	of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B1		Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B1		Drainage Patterns (B10)
Saturation (A3)	Hydrogen Sulfide 0		Moss Trim Lines (B16)
Water Marks (B1)		heres along Living Roots (C3)	
Sediment Deposits (B2)			✓ Crayfish Burrows (C8)
Drift Deposits (B3)		ction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surface Other (Explain in F	1 1	<ul><li>Geomorphic Position (D2)</li><li>Shallow Aquitard (D3)</li></ul>
Inundation Visible on Ae		(Ciliarks)	FAC-Neutral Test (D5)
Water-Stained Leaves (	T (5) A) (5		Sphagnum moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present?	Yes No Depth (inches	s):	
Water Table Present?	Yes No Depth (inches	s):	
Saturation Present? (includes capillary fringe)	Yes No Depth (inches		Hydrology Present? Yes No
	ream gauge, monitoring well, aerial phot	tos, previous inspections), if a	vailable:
1998 CIR, 2004 CIR & 2010	NAIP imagery, USGS quadrangle map	, LIDAR.	
Remarks:			
1			

VEGETATION (Four Strata) - Use scientific names of plants. DP3 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant Species Across All Strata: \_ (B) Percent of Dominant Species \_ (A/B) That Are OBL, FACW, or FAC:  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_0 (A) \_\_\_  $\blacksquare$  $\blacksquare$ Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Herb Stratum (Plot size: <sup>1</sup>Indicators of hydric soil and wetland hydrology must \_\_\_\_\_40 <u>yes</u> ▼ FAC ▼ 1. Festuca arundinaceus be present, unless disturbed or problematic. 2. Typha domingensis 10 yes 🔽 OBL  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$  $\blacksquare$ Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$ of size, and woody plants less than 3.28 ft tall.  $\blacksquare$ Woody vine - All woody vines greater than 3.28 ft in heiaht. 50 = Total Cover 50% of total cover: \_\_\_\_25\_\_\_ 20% of total cover: \_\_\_ Woody Vine Stratum (Plot size: \_\_\_\_\_\_) 1 Rubis flagellaris yes 🔽 UPL 🔽 2. Ampelosis arborea 5 yes ▼ FAC ▼  $\blacksquare$  $\blacksquare$  $\blacksquare$ Hydrophytic 15 \_ = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_7.5 \_\_\_ 20% of total cover: Remarks: (If observed, list morphological adaptations below).

SOIL Sampling Point: DP3

Profile Des	cription: (Describ	e to the aej	oth needed to docu	ment the	muicator	JI CUIIIIII	າ the absence	of indicate	ors.)	
Depth	Matrix		Rede	ox Feature	es					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
4	5YR 3/3	95	5YR 4/3	5	C 🔽	M 🔽	clay			
	-		EVD 4/4		- —		<u> </u>			
16	5YR 4/4	<u>95</u>	5YR 4/1	_ 5	D 🔽	M <b>▼</b>	clay			
-				_		一一				
					▼					
					$\blacksquare$					
						<b>T</b>				
					=	=				
		<u> </u>		_		$\blacksquare$				
Type: C=0	Concentration D=D	enletion RM	=Reduced Matrix, M	S=Maske	d Sand Gra	ains	<sup>2</sup> Location:	PI =Pore I	ining, M=Matri	x
	· · · · · · · · · · · · · · · · · · ·		LRRs, unless othe			x			matic Hydric \$	
		ioabio to ai							=	30113 .
Histoso	, ,		Polyvalue B		, , ,			/luck (A9) (I		
l —	pipedon (A2)		Thin Dark S					/luck (A10)	. ,	
I —	listic (A3)		Loamy Mucl			O)		,	<sup>-</sup> 18) <b>(outside N</b>	
	en Sulfide (A4)		Loamy Gley		(F2)				ain Soils (F19)	
l ——	ed Layers (A5)		Depleted Ma	, ,				-	Loamy Soils (	=20)
	Bodies (A6) (LRR		Redox Dark	,			•	RA 153B)		
5 cm M	lucky Mineral (A7) (	LRR P, T, U			` '		_	arent Mater	, ,	
Muck P	resence (A8) (LRR	U)	Redox Depr	essions (F	<del>-</del> 8)		Very S	hallow Dar	k Surface (TF1	2)
1 cm M	luck (A9) <b>(LRR P, T</b>	)	Marl (F10) (	LRR U)			Other	(Explain in	Remarks)	
Deplete	ed Below Dark Surfa	ace (A11)	Depleted Oc	chric (F11)	(MLRA 1	51)				
Thick D	ark Surface (A12)		Iron-Mangar	nese Mass	ses (F12) (	LRR O, P,	T) <sup>3</sup> Indic	ators of hy	drophytic veget	ation and
Coast F	Prairie Redox (A16)	(MLRA 150	A) Umbric Surf	ace (F13)	(LRR P, T	, U)	wet	land hydrol	ogy must be pr	esent,
Sandy	Mucky Mineral (S1)	(LRR O, S)		(F17) <b>(M</b>	LRA 151)		unl	ess disturbe	ed or problema	tic.
Sandy	Gleyed Matrix (S4)	, , ,	Reduced Ve			0A, 150B)			•	
1 '	Redox (S5)		Piedmont FI							
1	d Matrix (S6)				, ,	•	A 149A, 153C	. 153D)		
1 ' ' '	urface (S7) (LRR P	S T III		g	, (.	, (	,	,,		
	Layer (if observed									
l _		47.								
Type:										
Depth (ir	nches):						Hydric Soil	Present?	Yes	No
Remarks:							1			



Soil Profile at DP3.



Vegetation at DP3, view facing north along Pierre Bayou.



Vegetation at DP3, view is facing south along Bayou Pierre.



Vegetation at DP3, view facing east.



Vegetation at DP3, view facing west toward Bayou Pierre.

Project/Site:	Lot 4 (430 acre tract)	ity/County: Caddo Parish	<b>T</b>	Sampling Date:1/22/2013
Applicant/Owner:	Franks Investment Company,	LLC	State: La	Sampling Point: DP4
Investigator(s):	Alan Bickham S	Section, Township, Range:		3; T16N-R13W
Landform (hillslope, terrace, e	etc.): Natural levee L			Slope (%):0-1
Subregion (LRR or MLRA):	RR O <b>Lat</b> :32	° 23' 1.56" N Long:	93° 41' 0.78	" W Datum: NAD83
	reland clay, gently undulating			ation:
Are climatic / hydrologic cond	itions on the site typical for this time of year	r? Yes No	(If no, explain in Re	emarks.)
Are Vegetation, Soil _	, or Hydrology significantly d	isturbed? Are "Norma	l Circumstances" p	resent? Yes No
	, or Hydrology naturally prob		explain any answer	
SUMMARY OF FINDIN	GS – Attach site map showing	sampling point location	ons, transects,	important features, etc.
Hydrophytic Vegetation Pre- Hydric Soil Present? Wetland Hydrology Present	Yes No	Is the Sampled Area within a Wetland?	Yes	No
Remarks: Point taken in drainage swa	le in plowed field			
LIVERGLOOV				
HYDROLOGY				
Wetland Hydrology Indica				tors (minimum of two required)
	n of one is required; check all that apply)		Surface Soil (	
Surface Water (A1)	Aquatic Fauna (B13)			etated Concave Surface (B8)
High Water Table (A2) Saturation (A3)	Marl Deposits (B15) Hydrogen Sulfide Od		Drainage Pate Moss Trim Lir	
Water Marks (B1)		res along Living Roots (C3)		Vater Table (C2)
Sediment Deposits (B2)			Crayfish Burn	
Drift Deposits (B3)	Recent Iron Reduction			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Geomorphic I	
Iron Deposits (B5)	Other (Explain in Rei		Shallow Aquit	
Inundation Visible on A			FAC-Neutral	
Water-Stained Leaves	(B9)		Sphagnum m	oss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?	Yes No Depth (inches):			
Water Table Present?	Yes No Depth (inches):			
Saturation Present? (includes capillary fringe)	Yes No Depth (inches):		Hydrology Presen	t? Yes No
	ream gauge, monitoring well, aerial photos		ailable:	
	NAIP imagery, USGS quadrangle map, L	IDAR.		
Remarks:				

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ • Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: <sup>1</sup>Indicators of hydric soil and wetland hydrology must 70 yes 🔽 FAC 1. Festuca arundinaceus be present, unless disturbed or problematic. 2. Lamium amplexicaule 5 no **▼** FAC  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 75 \_ = Total Cover 50% of total cover: 37.5 20% of total cover: Woody Vine Stratum (Plot size: \_\_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

Profile Desc	cription: (Describe	to the depth	n needed to docur	nent the i	ndicator o	or confirm	the absence	of indicato	rs.)		
Depth	Matrix			x Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>		Remarks		
16	5YR 4/4	100					fn sandy loa				
						<b>-</b>					
					_=						
					$\blacksquare$						
					<b>—</b>	▼					
	-				<del>-=</del>	_=					
				- ——	<b>V</b>	$\blacksquare$					
	oncentration, D=Dep					ins.			ining, M=Mat		
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless othe	rwise note	ed.)		Indicators 1	for Proble	matic Hydric	: Soils <sup>3</sup> :	
Histosol	(A1)		Polyvalue Be	low Surfac	ce (S8) <b>(L</b> l	RR S, T, U	J) 1 cm M	uck (A9) <b>(L</b>	.RR O)		
Histic Ep	oipedon (A2)		ຸ Thin Dark Sເ	ırface (S9)	(LRR S,	T, U)	2 cm M	uck (A10) (	LRR S)		
Black Hi	stic (A3)		Loamy Muck	y Mineral (	F1) (LRR	O)	Reduce	ed Vertic (F	18) (outside	MLRA 1	50A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (I	F2)		Piedmo	nt Floodpla	ain Soils (F19	) (LRR I	P, S, T)
	d Layers (A5)		Depleted Ma	, ,					Loamy Soils	(F20)	
	Bodies (A6) (LRR F		Redox Dark	,	*		•	A 153B)			
	icky Mineral (A7) <b>(L</b>		Depleted Da					rent Materi	` '		
	esence (A8) (LRR U	J)	Redox Depre		3)				Surface (TF	12)	
	ick (A9) (LRR P, T)	- (444)	Marl (F10) <b>(L</b>		(84) 5 8 45	41	Other (	Explain in f	Remarks)		
	d Below Dark Surfac	ce (ATT)	Depleted Oc				T) 3In dias	store of his	lrophytic veg	station a	n d
	ark Surface (A12) rairie Redox (A16) <b>(</b>	MI DA 450A\	Iron-Mangan				•	-	ogy must be		nu
	fairle Redox (A10) ( flucky Mineral (S1) (	•				Ο,		-	d or problem		
	Gleyed Matrix (S4)	LIKIK O, O,	Delta Ochric Reduced Vei		-	14 150R)		33 distuibe	a or problem	alic.	
	Redox (S5)		Piedmont Flo								
	Matrix (S6)					•	A 149A, 153C,	153D)			
	rface (S7) (LRR P,	S, T, U)			(.	, (	, ,	,			
	Layer (if observed)										
Туре:											
	ches):						Hydric Soil	Present?	Yes	No	<b>/</b>
Remarks:							1				
Nomana.											



Soil profile at DP4.



Vegetation at DP4, view facing west.



Vegetation at DP4, view facing northeast.



Vegetation at DP4, view is to southeast.

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ • Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: \_\_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 70 yes 🔽 FAC 🔽 1. Festuca arundinaceus be present, unless disturbed or problematic. 2. Lamium amplexicaule 10 no **▼** FAC  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 80 = Total Cover 50% of total cover: 40 20% of total cover: Woody Vine Stratum (Plot size: \_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

	cription: (Describe	to the depti	i needed to docume	ili tile illulcator c		n the absence of i		
Depth	Matrix		Redox F	eatures				
(inches)	Color (moist)	%	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remar	ks
8	5YR 3/4	100		▼		clay		
16	5YR 34	100		<u> </u>	<u> </u>	clay with silt		
					_=	— — —		
					<b>\\</b>			
				$\blacksquare$	<b> </b>			
-	-				<u> </u>			
					_=			
				▼				
¹Type: C=C	oncentration D=De	nletion RM=I	Reduced Matrix, MS=I	Masked Sand Gra		2l ocation: Pl	=Pore Lining, M=M	1atriy
			.RRs, unless otherwi		1113.		Problematic Hyd	
					T		=	
Histosol	, ,			w Surface (S8) (Li			(A40) (LRR O)	
	pipedon (A2)		•	ice (S9) <b>(LRR S,</b> 1		<del></del>	(A10) <b>(LRR S)</b>	do MI DA 150A D\
	istic (A3) en Sulfide (A4)			Mineral (F1) (LRR	<del>.,</del>		, , ,	de MLRA 150A,B)
ı —	d Layers (A5)		Loamy Gleyed				rioodpiain Solis (r s Bright Loamy So	(19) (LRR P, S, T)
l ——	a Layers (A5) Bodies (A6) <b>(LRR</b>	D T IIV	Depleted Matrix	` '		<del></del>		113 (FZU)
	: Bodies (A6) <b>(LRK</b> ucky Mineral (A7) <b>(L</b>		Redox Dark Su	1 /		(MLRA 1	nt Material (TF2)	
	ucky Minerai (A7) <b>(L</b> resence (A8) <b>(LRR</b>		Depleted Dark \$ Redox Depress			_	it Material (1F2) ow Dark Surface (	TE12)
_	uck (A9) <b>(LRR P, T</b> )	•	Marl (F10) (LRI	, ,				1512)
	d Below Dark Surfa			c (F11) (MLRA 15	4.)	Other (Ext	olain in Remarks)	
ı —	ark Surface (A12)	ce (ATT)		e Masses (F12) (L		T) <sup>3</sup> Indicato	rs of hydrophytic v	egetation and
l — ·	rairie Redox (A16)	(MI RA 150A)					d hydrology must b	-
	Mucky Mineral (S1)	•	Delta Ochric (F		Ο,		disturbed or proble	
	Gleyed Matrix (S4)	(EI(I( 0, 0)		(F18) (MLRA 150	Δ 150R)		disturbed of proble	induc.
	Redox (S5)			dplain Soils (F19) (				
	d Matrix (S6)					RA 149A, 153C, 15	3D)	
	ırface (S7) (LRR P,	S. T. U)	/ aromarodo Brig	,iii 20amy 00ii0 (i		5 ( 140) (, 1000, 10	· · ·	
	Layer (if observed					T		
		,.						
Time:								
Type:	ah a a \		<u> </u>			Undria Call Dra	t2 V	No. V
Depth (in	ches):		<u> </u>			Hydric Soil Pre	sent? Yes	No
l	ches):		<del>_</del>			Hydric Soil Pre	esent? Yes	No
Depth (in	ches):		_			Hydric Soil Pre	esent? Yes	No
Depth (in	ches):		_			Hydric Soil Pre	sent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No
Depth (in	ches):					Hydric Soil Pre	esent? Yes	No



Soil profile at DP5.



Vegetation at DP5, view is facing north. field ditch in foreground.



Vegetation at DP5, view is to the east.



Vegetation at DP5, view is facing south.

Project/Site:	Lot 4 (430 acre tract)	City/County: Cadd	o Parish	S	ampling Date:	1/23/2013
Applicant/Owner:			State:	La s	ampling Point: _	DP6
Investigator(s):	Alan Bickham		, Range:	_ =====================================	3; T16N-R13W	
Landform (hillslope, terrace, e	etc.):Natural levee		ve, convex, none): C		▼ Slope	(%):0-1
Subregion (LRR or MLRA): LI	RR O 🗷 Lat:	32° 23' 5.63" N			W Datu	m: NAD83
Soil Map Unit Name: (22) Mo					ion:	
Are climatic / hydrologic condi	itions on the site typical for this time of ye	ear? Yes N	No (If no, ex	plain in Rem	narks.)	
Are Vegetation, Soil _	, or Hydrology significantly	disturbed?	Are "Normal Circums	stances" pre	sent? Yes	No
Are Vegetation, Soil _	, or Hydrology naturally pro	oblematic?	(If needed, explain a	ny answers	in Remarks.)	
SUMMARY OF FINDIN	GS – Attach site map showing	g sampling poi	nt locations, tra	ınsects, i	mportant fea	itures, etc.
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present?	Yes No	Is the Sam within a W		/es	_ No	
Remarks: Point taken in drainage swal	e in plowed field.					
HYDROLOGY						
Wetland Hydrology Indicat	ors:		Seconda	ary Indicator	rs (minimum of tw	vo required)
	of one is required; check all that apply)		Sur	face Soil Cra	acks (B6)	
Surface Water (A1)	Aquatic Fauna (B1				ated Concave Su	urface (B8)
High Water Table (A2)	Marl Deposits (B15			inage Patter		
Saturation (A3)	Hydrogen Sulfide (			ss Trim Line		
Water Marks (B1)	Oxidized Rhizosph				ater Table (C2)	
Sediment Deposits (B2)				yfish Burrow		(00)
Drift Deposits (B3)	Recent Iron Reduc				ole on Aerial Imaç	gery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surface Other (Explain in F			omorphic Po allow Aquitar		
Inundation Visible on As		(cinarks)		C-Neutral Te		
Water-Stained Leaves (			_		ss (D8) <b>(LRR T, U</b>	ור
Field Observations:					(==, (=====,	-,
Surface Water Present?	Yes No Depth (inches	s):				
Water Table Present?	Yes No Depth (inches					
Saturation Present?	Yes No Depth (inches	201	Wetland Hydrolog	y Present?	Yes	No
(includes capillary fringe)						
	ream gauge, monitoring well, aerial photo		tions), if available:			
0	NAIP imagery, USGS quadrangle map,	, LIDAR. 				
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. DP6 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ • Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: \_\_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 70 yes 🔽 FAC 🔽 1. Festuca arundinaceus be present, unless disturbed or problematic. 2. Lamium amplexicaule 10 no **▼** FAC  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 80 = Total Cover 50% of total cover: 40 20% of total cover: Woody Vine Stratum (Plot size: \_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

Depth	Matrix		Red	ox Feature:	\$		n the absence			
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	_Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
8	5YR 3/4	100			$\blacksquare$	<b> </b>	clay			
 16	5YR 34	100			▼	<b>T</b>	clay with silt			
						_=	<u> </u>			
	-					<u> </u>				
						$\blacksquare$				
					$\blacksquare$	<b>V</b>				
						<u> </u>				
						_=				
						▼				
Type: C=C	oncentration, D=D	epletion, RM=F	Reduced Matrix, M	1S=Maskec	l Sand Gra	ins.	<sup>2</sup> Location:	PL=Pore Li	ning, M=Mati	rix.
Hydric Soil	Indicators: (Appl	icable to all L	RRs, unless other	erwise note	ed.)		Indicators	for Probler	natic Hydric	Soils <sup>3</sup> :
Histosol	l (A1)		Polyvalue B	elow Surfa	ce (S8) <b>(LF</b>	RR S, T, L	J) 1 cm M	uck (A9) <b>(L</b>	RR O)	
Histic E	pipedon (A2)		. Thin Dark S	urface (S9)	(LRR S, 1	Γ, U)	2 cm M	uck (A10) (	LRR S)	
Black H	istic (A3)		Loamy Muc	ky Mineral	(F1) <b>(LRR</b>	O)	Reduce	d Vertic (F	18) <b>(outside</b>	MLRA 150A
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix (	F2)		Piedmo	nt Floodpla	in Soils (F19	) (LRR P, S,
	d Layers (A5)		Depleted Ma	, ,					Loamy Soils	(F20)
	Bodies (A6) (LRR		Redox Dark	•	*		,	A 153B)		
	ucky Mineral (A7) (		Depleted Da		` '			rent Materi		
	resence (A8) (LRR	,	Redox Depr	•	8)				Surface (TF	12)
	uck (A9) <b>(LRR P, T</b>		Marl (F10) (	,	(MIL D.A. 45	4.	Other (	Explain in F	Remarks)	
	d Below Dark Surfa	ace (A11)	Depleted O		•	•	T) <sup>3</sup> India	store of bud	lrophytic vod	station and
	ark Surface (A12) Prairie Redox (A16)	(MI DA 150A)	_				•	_	rophytic vege ogy must be p	
	Mucky Mineral (S1)			٠, ,	, ,	Ο,		-	d or problem:	
	Gleyed Matrix (S4)	(21111 0, 0,	Delta Ochrid			A 150B)		33 distai be	a or problem	auo.
	Redox (S5)		Piedmont Fi							
	d Matrix (S6)		Anomalous	•			•	153D)		
Dark Su	ırface (S7) (LRR P	, S, T, U)	_	•	• ,	•		•		
Dootel-4l	Layer (if observed	d):								
Restrictive	Fakei (II opseived									
		,								
Туре:							Hydric Soil	Present?	Yes	No 🗸
Type: Depth (in			<u> </u>				Hydric Soil	Present?	Yes	_ No _ 🗸
Туре:			<u> </u>				Hydric Soil	Present?	Yes	_ No <u> </u>
Type: Depth (in			_				Hydric Soil	Present?	Yes	_ No <u> </u>
Type: Depth (in			_				Hydric Soil	Present?	Yes	_ No 🗸
Type: Depth (in							Hydric Soil	Present?	Yes	_ No <u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No <u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No <u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _ 🗸
Туре: Depth (in							Hydric Soil	Present?	Yes	_ No _ 🗸
Туре: Depth (in			_				Hydric Soil	Present?	Yes	_ No _ 🗸
Туре: Depth (in							Hydric Soil	Present?	Yes	_ No _ 🗸
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _ 🗸
Type: Depth (in							Hydric Soil	Present?	Yes	_ No
Type: Depth (in							Hydric Soil	Present?	Yes	_ No
Туре: Depth (in							Hydric Soil	Present?	Yes	_ No <u> </u>
Туре: Depth (in							Hydric Soil	Present?	Yes	_ No
Type: Depth (in							Hydric Soil	Present?	Yes	No V
Type: Depth (in							Hydric Soil	Present?	Yes	No V
Type: Depth (in							Hydric Soil	Present?	Yes	No V
Туре: Depth (in							Hydric Soil	Present?	Yes	No V
Type: Depth (in							Hydric Soil	Present?	Yes	_ No
Type: Depth (in							Hydric Soil	Present?	Yes	No V
Туре: Depth (in							Hydric Soil	Present?	Yes	_ No
Type: Depth (in							Hydric Soil	Present?	Yes	_ No



Soil profile at DP6.



Vegetation at DP6 view is facing south.

1 TOJCOD ORC.	Lot 4 (430 acre tract)	City/County: Caddo Parish	Sampling Date:1/23/2013
Applicant/Owner:	Franks Investment Company	y, LLC	State:La Sampling Point:DP7
Investigator(s):	Alan Bickham	Section, Township, Range:	
Landform (hillslope, terrace, et	c.):Natural levee	Local relief (concave, convex,	
Subregion (LRR or MLRA): LR	RO 🔽 Lat:3		93° 40' 44.39" W Datum: NAD83
Soil Map Unit Name: (15) Gall			NWI classification:
Are climatic / hydrologic condit	ons on the site typical for this time of year	ar? Yes No	(If no, explain in Remarks.)
Are Vegetation, Soil	, or Hydrology significantly	disturbed? Are "Norma	ll Circumstances" present? Yes No
Are Vegetation, Soil	, or Hydrology naturally pro	blematic? (If needed,	explain any answers in Remarks.)
SUMMARY OF FINDING	SS – Attach site map showing	sampling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Prese Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes No	Is the Sampled Area within a Wetland?	Yes No
Point taken in low area adjace	ent to field drainage ditch.		
HYDROLOGY			
Wetland Hydrology Indicate	ors:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum	of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B13		Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15)	) (LRR U)	Drainage Patterns (B10)
Saturation (A3)	Hydrogen Sulfide O	Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1)	Oxidized Rhizosphe	eres along Living Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduce	ed Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduct	tion in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface		Geomorphic Position (D2)
Iron Deposits (B5)	Other (Explain in Re	emarks)	Shallow Aquitard (D3)
Inundation Visible on Aer			FAC-Neutral Test (D5)
Water-Stained Leaves (E	(9)		Sphagnum moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present?	Yes No Depth (inches)		
Water Table Present?	Yes No Depth (inches)	27 27 27 27 27 27 27 27 27 27 27 27 27 2	V
Saturation Present? (includes capillary fringe)	Yes No Depth (inches)		Hydrology Present? Yes No
	eam gauge, monitoring well, aerial photo NAIP imagery, USGS quadrangle map,		aliable:
0	NAIP imagery, 0363 quadrangle map,	LIDAR.	
Remarks:			

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ • Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: \_\_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 90 1. Festuca arundinaceus yes 🔽 FAC 🔽 be present, unless disturbed or problematic. 2. Lamium amplexicaule 10 no **▼** FAC  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$ of size, and woody plants less than 3.28 ft tall.  $\blacksquare$ Woody vine - All woody vines greater than 3.28 ft in heiaht. 100 = Total Cover 50% of total cover: 50 20% of total cover: Woody Vine Stratum (Plot size: \_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

Profile Des	oniperonic (Booonibo					i tile abselice			
Depth	Matrix			Features					
(inches)	Color (moist)	%(	Color (moist)	% Type	e <sup>1</sup> Loc <sup>2</sup>	Texture		Remarks	
6	5YR 3/4	100			<b>T</b>	clay			
	-				=-=				
16	5YR 3/4	_ 100			<b>T</b>	clay with silt			
					▼				
-					= -=				
					<u> </u>				
					$\overline{}$				
					<u> </u>				
					= -=				
<sup>1</sup> Type: C=C	Concentration, D=De	oletion RM=Red	luced Matrix MS:	=Masked Sand	Grains	<sup>2</sup> l ocation:	PI =Pore Li	ning, M=Matri	ix
	Indicators: (Appli				Graino.			natic Hydric	
		Jabie to all Etti			. (I BB 6 T I			_	<b>C</b> 0113 .
Histoso	, ,	_		ow Surface (S8					
I —	pipedon (A2)		Thin Dark Surf	, , ,			luck (A10) (	•	
_	listic (A3)	_		Mineral (F1) (L	RR O)		•	, •	VILRA 150A,B)
	en Sulfide (A4)	_	Loamy Gleyed						(LRR P, S, T)
	ed Layers (A5)	_	_ Depleted Matr	* *			_	Loamy Soils (	F20)
	Bodies (A6) (LRR I	· · · · —	_ Redox Dark S	, ,		•	(A 153B)		
5 cm M	lucky Mineral (A7) <b>(L</b>	RR P, T, U) _	Depleted Dark	, ,			rent Materi	, ,	
Muck F	Presence (A8) (LRR I		_ Redox Depres	sions (F8)		Very SI	hallow Dark	Surface (TF1	2)
1 cm M	luck (A9) (LRR P, T)	_	Marl (F10) <b>(LF</b>	RR U)		Other (	Explain in F	Remarks)	
Deplete	ed Below Dark Surfac	ce (A11) _	_ Depleted Ochr	ic (F11) <b>(MLR</b> /	<del>(</del> 151)				
Thick D	ark Surface (A12)	_	Iron-Mangane	se Masses (F1:	2) <b>(LRR O, P,</b>	T) <sup>3</sup> Indica	ators of hyd	lrophytic vege	tation and
Coast F	Prairie Redox (A16) (	MLRA 150A) _	Umbric Surfac	e (F13) <b>(LRR F</b>	P, T, U)	wetl	and hydrolo	ogy must be p	resent,
Sandy	Mucky Mineral (S1) (	LRR O, S)	Delta Ochric (I	=17) <b>(MLRA 1</b> 5	1)	unle	ss disturbe	d or problema	tic.
Sandy	Gleyed Matrix (S4)	_		c (F18) <b>(MLRA</b>					
1 "	Redox (S5)		•	dplain Soils (F					
	d Matrix (S6)	_				A 149A, 153C,	153D)		
1 ' ' '	, ,	S T II)	_	,	,,,	, ,	,		
Dark Si	urface (SZ) (LRR P								
	urface (S7) (LRR P, Laver (if observed)								
Restrictive	Layer (if observed)								
Restrictive	Layer (if observed)	:	-						
Restrictive	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No 💆
Restrictive Type: Depth (in	Layer (if observed)	:	- -			Hydric Soil	Present?	Yes	No 💆
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No 💆
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No 💆
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No 🔽
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No V
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No V
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No V
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No V
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No V
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No V
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No V
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No V
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No V
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No V
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No
Restrictive Type: Depth (in	Layer (if observed)	:	-			Hydric Soil	Present?	Yes	No



Soil profile at DP7.



Vegetation at DP7, view is facing west.

Project/Site:	Lot 4 (430 acre tract)	City/County: Caddo Parish	Sampling Date: _	1/23/2013
Applicant/Owner:	Franks Investment Company	y, LLC	State: La Sampling Point:	DP8
Investigator(s):	Alan Bickham	Section, Township, Range: _	0 0 74011 74014	
Landform (hillslope, terrace,	etc.): Natural levee I	Local relief (concave, convex		e (%):0-1
Subregion (LRR or MLRA): L	.RR O 💌 Lat:32	2° 22' 59.41" N Long:	93° 40' 38.28" W Dat	um: NAD83
Soil Map Unit Name: (23) Mo			NWI classification:	
Are climatic / hydrologic cond	ditions on the site typical for this time of year	ar? Yes No	(If no, explain in Remarks.)	
Are Vegetation, Soil	, or Hydrology significantly of	disturbed? Are "Norma	l Circumstances" present? Yes	No
	, or Hydrology naturally pro		explain any answers in Remarks.)	
SUMMARY OF FINDIN	IGS – Attach site map showing	sampling point locati	ons, transects, important fe	atures, etc.
Hydrophytic Vegetation Pre Hydric Soil Present? Wetland Hydrology Presen	Yes No	Is the Sampled Area within a Wetland?	Yes No	-
Remarks:	cent to field drainage ditch.			
HADBOI OCA				
HYDROLOGY				
Wetland Hydrology Indica			Secondary Indicators (minimum of	(wo required)
	m of one is required; check all that apply)		Surface Soil Cracks (B6)	. ( (D0)
Surface Water (A1)	Aquatic Fauna (B13		Sparsely Vegetated Concave S	зипасе (В8)
<ul><li>High Water Table (A2)</li><li>Saturation (A3)</li></ul>	Marl Deposits (B15) Hydrogen Sulfide O		Drainage Patterns (B10) Moss Trim Lines (B16)	
Water Marks (B1)		eres along Living Roots (C3)	Dry-Season Water Table (C2)	
Sediment Deposits (B2			Crayfish Burrows (C8)	
Drift Deposits (B3)	Recent Iron Reducti		Saturation Visible on Aerial Ima	agery (C9)
Algal Mat or Crust (B4)			Geomorphic Position (D2)	, (,
Iron Deposits (B5)	Other (Explain in Re	1 1	Shallow Aquitard (D3)	
Inundation Visible on A			FAC-Neutral Test (D5)	
Water-Stained Leaves	(B9)		Sphagnum moss (D8) (LRR T,	U)
Field Observations:				
Surface Water Present?	Yes No Depth (inches):	:		
Water Table Present?	Yes No Depth (inches):	:		
Saturation Present? (includes capillary fringe)	Yes No Depth (inches):		Hydrology Present? Yes	No
	tream gauge, monitoring well, aerial photo		ailable:	
0	NAIP imagery, USGS quadrangle map, l	LIDAR.		
Remarks:				

VEGETATION (Four Strata) - Use scientific names of plants. DP8 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ • Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: \_\_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 75 yes 🔽 FAC 🔽 1. Festuca arundinaceus be present, unless disturbed or problematic. 2. Lamium amplexicaule 10 no **▼** FAC  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  $\blacksquare$ Woody vine - All woody vines greater than 3.28 ft in heiaht. 85 = Total Cover 50% of total cover: 42.5 20% of total cover: Woody Vine Stratum (Plot size: \_\_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

nches) Color (moist) % Color (moist) % Type <sup>1</sup> Loc <sup>2</sup> Texture Remarks	Depth	Matrix		Red	ox Features	6				
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  yciric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosci (A1) Histosci (A1) Histosci (A2) Histosci (A3) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)  To muck (A9) (LRR P, T, U) Redox Dark Surface (F1) Mark (F1) (LRR U) To muck (A9) (LRR P, T) Depleted Dark Surface (F1) Thick Dark Surface (A8) (LRR U) Depleted Othric (F11) (MLRA 151) Thick Dark Surface (A8) (LRR Q, T) Depleted Othric (F11) (MLRA 151) Thick Dark Surface (A8) Sandy Mucky Mineral (F1) (LRR Q, S) Sandy Gleyed Matrix (S3) Depleted Othric (F11) (MLRA 151) Depleted Dark Surface (F13) (LRR P, T, U) Depleted Othric (F11) (MLRA 151) Thick Dark Surface (A8) Sandy Mucky Mineral (S1) (LRR Q, S) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Sardy Mucky Mineral (S7) (LRR P, S, T, U) Depleted Othric (F17) (MLRA 151) Sandy Gleyed Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F17) (MLRA 151) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F17) (MLRA 150B) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F17) (MLRA 150B) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (S7) (LRR P, S, T, U) Depleted Dark Surface (S7) (LRR P, S, T, U) Dark Surface (S7) (LRR P, S, T, U)	(inches)	Color (moist)	%				Loc <sup>2</sup>	<u>Texture</u>		Remarks
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Coasty Grains Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Torm Muck (A9) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR V, T)  Marl (F10) (LRR V)  Thick Dark Surface (A12)  Thick Dark Surface (A12)  Thick Dark Surface (A12)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR A, S)  Sandy Gleyed Matrix (S4)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Deptheted Dark Surface (F13) (LRR P, T, U)  Depleted Oberic (F13) (LRR P, T, U)  Depleted Oberic (F13) (LRR P, T, U)  Depleted Matrix (S6)  Anomalous Bright Loamy Soils (F20)  Tron-Manganese Masses (F12) (LRR O, P, T)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S6)  Depleted Oberic (F13) (LRR P, T, U)  Detal Coast Prairie Redox (A16) (MLRA 150A)  Serious Mucky Mineral (S1) (LRR P, S, T, U)  Detal Condition: PL=Pore Lining, M=Matrix.  PLeotation: PL=Pore Lining, M=Matrix.  PLeotation: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils*:  Anomalous Bright Loamy Soils (F20)  MLRA 150B,  Pled Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Pled Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Umbric Surface (F13) (LRR P, T, U)  wetland hydrology must be present, unless disturbed or problematic.  Sandy Gleyed Matrix (S6)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  From Muck (A3) (LRR P, T, U)  Destrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes	6	5YR 4/4	100					clay		
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Coasty Grains Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Torm Muck (A9) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR V, T)  Marl (F10) (LRR V)  Thick Dark Surface (A12)  Thick Dark Surface (A12)  Thick Dark Surface (A12)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR A, S)  Sandy Gleyed Matrix (S4)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Deptheted Dark Surface (F13) (LRR P, T, U)  Depleted Oberic (F13) (LRR P, T, U)  Depleted Oberic (F13) (LRR P, T, U)  Depleted Matrix (S6)  Anomalous Bright Loamy Soils (F20)  Tron-Manganese Masses (F12) (LRR O, P, T)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S6)  Depleted Oberic (F13) (LRR P, T, U)  Detal Coast Prairie Redox (A16) (MLRA 150A)  Serious Mucky Mineral (S1) (LRR P, S, T, U)  Detal Condition: PL=Pore Lining, M=Matrix.  PLeotation: PL=Pore Lining, M=Matrix.  PLeotation: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils*:  Anomalous Bright Loamy Soils (F20)  MLRA 150B,  Pled Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Pled Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Umbric Surface (F13) (LRR P, T, U)  wetland hydrology must be present, unless disturbed or problematic.  Sandy Gleyed Matrix (S6)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  From Muck (A3) (LRR P, T, U)  Destrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes							<b>T</b>			
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Coraginic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F1) Lome Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S9) Sandy Mucky Mineral (S9) Sandy Mucky Mineral (S9) Sandy Redox (S5) Sandy Redox (S5) Derived Matrix (S9) Derive		_				_=	_=			
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic Epipedon (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Crganic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F6)  Muck Presence (A8) (LRR P, T)  Marl (F10) (LRR U)  Depleted Dark Surface (F11) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Depleted Ochric (F11) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR O, S)  Striged Matrix (S4)  Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  Depleted Dark Surface (F13) (MLRA 150A, 150B)  Sandy Redox (S7) (LRR P, S, T, U)  Depth (inches):  Hydric Soil Present? Yes No✓  No✓  Hydric Soil Present? Yes No✓  No✓  Histosol (A1)  Loamy Mucky Mineral (A7) (LRR P, S, T, U)  1 cm Muck (A9) (LRR P, T, U)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Other (Explain in Remarks)  Pindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type:  Depth (inches):										
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Black Histic Epipedon (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Crganic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F6)  Muck Presence (A8) (LRR P, T)  Marl (F10) (LRR U)  Depleted Dark Surface (F11) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Depleted Ochric (F11) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR O, S)  Striged Matrix (S4)  Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  Depleted Dark Surface (F13) (MLRA 150A, 150B)  Sandy Redox (S7) (LRR P, S, T, U)  Depth (inches):  Hydric Soil Present? Yes No✓  No✓  Hydric Soil Present? Yes No✓  No✓  Histosol (A1)  Loamy Mucky Mineral (A7) (LRR P, S, T, U)  1 cm Muck (A9) (LRR P, T, U)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Other (Explain in Remarks)  Pindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type:  Depth (inches):						$\blacksquare$	<b>\Pi</b>			
yer: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)										
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Thick Dark Surface (A12)  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Thick Dark Surface (A12)  Type: C=Concentration, D=Depletion And Surface (S8) (LRR S, T, U)  Indicators for Problematic Hydric Soils <sup>2</sup> :  Indicators for Problematic Hydric Soils <sup>3</sup> :  Indicators for Problematic Hydric Soils F20 (MLRA 153B)  Type: C=Concentration Hydrology Matrix (F0)  Hydric Soil Present? Yes No C=Concentration Hydric Soils Present? Yes No C=Concentration Hydric Soil Present? Yes No C=Concentration Hydric Soils Present? Yes No C=Concentration Hydric Soil Present		_					_=			
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)						$\blacksquare$				
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)		- '					<b>T</b>			
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)		-								
Histosol (A1)		· · · · · · · · · · · · · · · · · · ·					ins.			
Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Stratified Layers (A5) (LRR P, T, U) Redox Dark Surface (F6) Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Deptth (inches):  Deptth (inches): Hydric Soil Present? Yes No	ydric Soi	l Indicators: (Appl	licable to all L	RRs, unless othe	erwise note	ed.)		Indicators	for Problema	atic Hydric Soils":
Black Histic (A3)	Histoso	ol (A1)		Polyvalue B	elow Surfac	ce (S8) <b>(Li</b>	RR S, T, L	J) 1 cm N	/luck (A9) (LR	R O)
Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox Depressions (F8)  Urbric Surface (F1) (MLRA 151)  Delta Ochric (F1) (MLRA 151)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No	Histic E	Epipedon (A2)		. Thin Dark S	urface (S9)	(LRR S, 1	Γ, U)	2 cm N	luck (A10) <b>(Li</b>	RR S)
Stratified Layers (A5)	Black I	Histic (A3)		Loamy Muc	ky Mineral (	(F1) (LRR	O)	Reduc	ed Vertic (F18	3) (outside MLRA 150
Stratified Layers (A5)	Hydrog	gen Sulfide (A4)		Loamy Gley	ed Matrix (	F2)		Piedm	ont Floodplain	Soils (F19) (LRR P,
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B)  5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2)  Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12)  1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks)  Depleted Below Dark Surface (A11) Iron-Manganese Masses (F12) (LRR O, P, T) Iron-Manganese Masses (F12) (LRR O, P, T) Wetland hydrology must be present, Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic.  Sandy Redox (S5) Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No	Stratifie	ed Layers (A5)				,		— Anoma	alous Bright Lo	pamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P, T, U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type:  Depth (inches):  Depthed Dark Surface (F7)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12)  Very Shallow Dark Surface (F12)  (LRR O, P, T)  3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 1510)  Numbers disturbed or problematic.  Reduced Vertic (F18) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Figure 1  Depth (inches):  Hydric Soil Present? Yes No		- '	P. T. U)			6)				
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12)  1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks)  Depleted Below Dark Surface (A11) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and Vegetation Albert (F13) (LRR P, T, U) Vegetation and Vegetation Albert (F13) (LRR P, T, U) Vegetation Albert (F13) (LRR P, T, U) Vegetation Albert (F14) (MLRA 151) Vegetation Albert (F15) (MLRA 151) Vegetation Albert (F16) (MLRA 150A, 150B) Vegetation Albert (F17) (MLRA 150A, 150B) Vegetation Albert (F18) (MLRA 149A) Vegetation Albert (F18) (MLRA 149A) Vegetation Albert (F18) (MLRA 149A, 153C, 153D) Vegetation Albert (F18) (MLRA 151) Vegetation Albert (F18)		, , ,			,	*		•	•	(TF2)
										* '
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):  Type: Depth (inches):  Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Iron-Manganese Masses (F12) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic. Matrix (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Yes No						-,				
Thick Dark Surface (A12)				_ ` '	,	/MIDA 15	4)	Other	(Explain in ite	marks)
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, Delta Ochric (F17) (MLRA 151) unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  estrictive Layer (if observed):  Type:  Depth (inches): Hydric Soil Present? Yes No			ace (ATT)			•	•	T) 315 dia	ators of budge	unhytia valaatatian and
			(001 D.0.450.0)	_				•	-	
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  estrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes No ✓					, , ,	, ,	U)			•
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Depth (inches): Hydric Soil Present? Yes No		• , ,	(LKK O, S)						ess aisturbea	or problematic.
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  estrictive Layer (if observed):										
								•		
Depth (inches):   No		` '		Anomalous	Bright Loar	ny Soils (F	20) <b>(MLR</b>	A 149A, 153C	, 153D)	
Type:										
Depth (inches): No	Restrictive	Layer (if observed	d):							
	Туре:			_						
	Depth (i	nches):						Hydric Soil	Present?	Yes No
		,		<del></del>				1 ,		
	tomants.									



Soil profile at DP8.



Vegetation at DP8 view is to the east.



Vegetation at DP8, view is to the north.



Vegetation at DP8, view is to the south.



Vegetation at DP8, view is to the west.

Project/Site:	Lot 4 (430 acre tract)	City/County: Caddo Parish	Sampling Date:1/23/2013
Applicant/Owner:	Franks Investment Company,	, LLC	State:La Sampling Point:DP9
Investigator(s):	Alan Bickham s	Section, Township, Range:	
	etc.): Natural levee L		
Subregion (LRR or MLRA):	RR O <b>Lat</b> : 32°	° 22' 54.54" N Long:	
Soil Map Unit Name: (15) Ga			NWI classification:
Are climatic / hydrologic cond	litions on the site typical for this time of yea	r? Yes No	(If no, explain in Remarks.)
Are Vegetation, Soil _	, or Hydrology significantly d	isturbed? Are "Norma	al Circumstances" present? Yes No
	, or Hydrology naturally prob		explain any answers in Remarks.)
SUMMARY OF FINDIN	GS – Attach site map showing	sampling point locati	ons, transects, important features, etc.
Hydrophytic Vegetation Pre Hydric Soil Present? Wetland Hydrology Present	Yes No	Is the Sampled Area within a Wetland?	Yes No
Remarks: Point taken in low area adja	cent to field drainage ditch		
LIVERGLOGY			
HYDROLOGY			
Wetland Hydrology Indica			Secondary Indicators (minimum of two required)
	n of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15)		Drainage Patterns (B10)
Saturation (A3) Water Marks (B1)	Hydrogen Sulfide Oo	res along Living Roots (C3)	Moss Trim Lines (B16) Dry-Season Water Table (C2)
Sediment Deposits (B2			Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction		Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Geomorphic Position (D2)
Iron Deposits (B5)	Other (Explain in Re		Shallow Aquitard (D3)
Inundation Visible on A			FAC-Neutral Test (D5)
Water-Stained Leaves	(B9)		Sphagnum moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present?	Yes No Depth (inches):		
Water Table Present?	Yes No Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes No Depth (inches):		Hydrology Present? Yes No
	tream gauge, monitoring well, aerial photos		ailable:
0	NAIP imagery, USGS quadrangle map, L	.IDAR. 	
Remarks:			

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_0 (A) \_\_\_  $\blacksquare$  $\blacksquare$ • Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50%  $\blacksquare$ \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Herb Stratum (Plot size: \_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must \_\_\_\_\_\_75 1. Festuca arundinaceus yes ▼ FAC ▼ be present, unless disturbed or problematic. 2. Lamium amplexicaule 10 no FAC lacksquareDefinitions of Four Vegetation Strata: \_\_\_\_\_1\_\_\_no 3. Sonchus asper **▼** FAC Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ more in diameter at breast height (DBH), regardless of **V**  $\blacksquare$  $\blacksquare$ Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht.  $\blacksquare$ 86 = Total Cover 50% of total cover: 43 20% of total cover: 17.2 Woody Vine Stratum (Plot size: \_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

Profile Desc	ription: (Describe	to the dept	n needed to docume	nt the indicator o	r confirn	n the absence o	of indicato	rs.)	
Depth	Matrix		Redox F	- - - - - - - - - - - - - - - - - - -					
(inches)	Color (moist)	%	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
16	5YR 4/4	100		<b>▼</b>		clay w/ silt			
					<u> </u>	<del>,</del> .			_
					_=				
					<b>V</b>				_
					$\blacksquare$				_
				<b>_</b>	▼				
				▼					
					Ī▼Ī				
1Type: C=C	oncentration D-Dec	oletion DM-		Masked Sand Gra	ine	2l ocation: I	DI -Dore I i	ning, M=Matr	iv
			RRs, unless otherw					natic Hydric	
Histosol		Jabio to all E		w Surface (S8) <b>(Li</b>	реті				<b>3</b> 0113 .
	pipedon (A2)			w Surface (38 <i>)</i> <b>(Lr</b> ace (S9) <b>(LRR S,</b> 1		· —	uck (A9) (L uck (A10) (		
	• • •		•						MI DA 450A D\
Black Hi	. ,			Mineral (F1) (LRR	0)				MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleyed						(LRR P, S, T)
	d Layers (A5)		Depleted Matrix				_	Loamy Soils	(F20)
	Bodies (A6) (LRR I		Redox Dark Su	, ,		•	A 153B)		
	ıcky Mineral (A7) <b>(L</b>		Depleted Dark	` '			rent Materi		
Muck Pr	esence (A8) (LRR I	J)	Redox Depress	sions (F8)		Very Sh	iallow Dark	Surface (TF	12)
1 cm Mu	ick (A9) <b>(LRR P, T)</b>		Marl (F10) <b>(LR</b> l	R U)		Other (E	Explain in F	Remarks)	
Depleted	d Below Dark Surfac	ce (A11)	Depleted Ochri	c (F11) <b>(MLRA 15</b>	1)				
Thick Da	ark Surface (A12)		Iron-Manganes	e Masses (F12) (L	RR O, P,	T) <sup>3</sup> Indica	itors of hyd	lrophytic vege	tation and
Coast P	rairie Redox (A16) (	MLRA 150A	) Umbric Surface	(F13) (LRR P, T,	U)	wetla	and hydrolo	ogy must be p	resent,
Sandy M	lucky Mineral (S1) (	LRR O, S)	Delta Ochric (F	17) (MLRA 151)		unle	ss disturbe	d or problema	ıtic.
	Bleyed Matrix (S4)			(F18) <b>(MLRA 15</b> 0	A, 150B)	1			
	Redox (S5)			dplain Soils (F19) (					
	Matrix (S6)			ght Loamy Soils (F			153D)		
	rface (S7) (LRR P,	s T U)		g (.	, (	,	,		
	Layer (if observed)								
		·•							
Type:	-h\.					I I I I I I I I I I I I I I I I I I I	3	V	N
	ches):					Hydric Soil F	-ieseiit?	Yes	. No
Remarks:									



Soil profile at DP9.



Vegetation at DP9, view is to northwest.



Vegetation at DP9, view is to northeast.



Vegetation at DP9, view is to southwest.

Project/Site:	Lot 4 (430 acre tract)	City/County: Caddo	Parish	Sampling Date:1/23/2013			
Applicant/Owner:	Franks Investment Compa	ny, LLC	State:La	Sampling Point: DP10			
Investigator(s):				ec 3; T16N-R13W			
	etc.): natural levee	Local relief (concave	e, convex, none): concave	Slope (%):0-1			
Subregion (LRR or MLRA):	_RR O Lat: 3	32° 22' 57.17" N	Long: 93° 40' 52.9	97" W Datum: NAD83			
	oreland clay, gently undulating			cation:			
Are climatic / hydrologic con	ditions on the site typical for this time of y	ear? Yes No	(If no, explain in F	Remarks.)			
Are Vegetation, Soil	, or Hydrology significantly	y disturbed? Ar	re "Normal Circumstances"	present? Yes No			
	, or Hydrology naturally pr		needed, explain any answe				
SUMMARY OF FINDI	NGS – Attach site map showing	g sampling poin	t locations, transects	s, important features, etc.			
Hydrophytic Vegetation Pro Hydric Soil Present? Wetland Hydrology Presen	Yes No	Is the Sampl within a Wet		No			
Remarks: Point taken in swale in plov							
LIVERSI GOV							
HYDROLOGY							
Wetland Hydrology Indic			•	ators (minimum of two required)			
	m of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LRR U)			Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)				
<ul><li>High Water Table (A2)</li><li>Saturation (A3)</li></ul>	Man Deposits (B)						
Water Marks (B1)		heres along Living Ro	Moss Trim Lines (B16)  Roots (C3) Dry-Season Water Table (C2)				
Sediment Deposits (B2			Crayfish Burrows (C8)				
Drift Deposits (B3)	Recent Iron Reduc		· · · · · · · · · · · · · · · · · · ·				
Algal Mat or Crust (B4			Geomorphic Position (D2)				
Iron Deposits (B5)	Other (Explain in F	1 1	Shallow Aqu				
Inundation Visible on A			FAC-Neutra				
Water-Stained Leaves	(B9)		Sphagnum	moss (D8) (LRR T, U)			
Field Observations:							
Surface Water Present?	Yes No Depth (inches	s):					
Water Table Present?	Yes No Depth (inches	s):					
Saturation Present? (includes capillary fringe)							
	stream gauge, monitoring well, aerial phot		ons), if available:				
10	0 NAIP imagery, USGS quadrangle map	, LIDAR.					
Remarks:							

VEGETATION (Four Strata) - Use scientific names of plants. DP10 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_0 (A) \_\_\_  $\blacksquare$  $\blacksquare$ • Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: \_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1. Festuca arundinaceus yes ▼ FAC ▼ be present, unless disturbed or problematic. 2. Lolium perenne 10 no FACU 🔻 **V** Definitions of Four Vegetation Strata: 3. Lamium amplexicaule 3 \_\_\_no **▼** FAC Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ more in diameter at breast height (DBH), regardless of **V**  $\blacksquare$  $\blacksquare$ Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 73 = Total Cover 50% of total cover: 36.5 20% of total cover: 14.6 Woody Vine Stratum (Plot size: \_\_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the ii	ndicator c	or confirm	the absence	of indicate	rs.)		
Depth	Matrix			x Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>		Remarks		
16	5YR 4/4	100					clay w/ silt				
						V					
								-			
					_=	<u> </u>					
					<b>V</b>	$\blacksquare$					
					▼	<b>▼</b>					
					<del>-=</del>	_=					
					$\blacksquare$	$\blacksquare$		-			
	oncentration, D=Dep					ins.			ining, M=Ma		
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless othe	rwise note	d.)		Indicators	for Proble	matic Hydri	: Soils	
Histosol	(A1)		Polyvalue Be	low Surfac	e (S8) <b>(LI</b>	RR S, T, U	I) 1 cm IV	luck (A9) <b>(L</b>	.RR O)		
Histic Ep	pipedon (A2)		່ Thin Dark Su	ırface (S9)	(LRR S,	Γ, U)	2 cm N	luck (A10) (	(LRR S)		
Black Hi	stic (A3)		Loamy Muck	y Mineral (	F1) (LRR	O)	Reduce	ed Vertic (F	18) <b>(outside</b>	MLRA 1	50A,B)
	n Sulfide (A4)		Loamy Gleye		F2)				ain Soils (F19	, .	P, S, T)
	d Layers (A5)		Depleted Ma	, ,					Loamy Soils	(F20)	
	Bodies (A6) (LRR F		Redox Dark	,	*		•	RA 153B)			
	ıcky Mineral (A7) <b>(L</b>		Depleted Da		` '			rent Materi	` '		
	esence (A8) (LRR L	J)	Redox Depre		3)				Surface (TF	12)	
	ick (A9) (LRR P, T)	- (444)	Marl (F10) <b>(L</b>		(841 15 8 45	43	Other (	Explain in f	Remarks)		
	d Below Dark Surfac	e (ATT)	Depleted Oc			-	T) <sup>3</sup> In dia	otoro of bur	drophytic veg	atation a	- d
	ark Surface (A12) rairie Redox (A16) <b>(</b>	MI DA 450A\	Iron-Mangan				•	-	ogy must be		na
	lucky Mineral (S1) (	,	Delta Ochric	, , ,	, ,	Ο,		-	d or problem		
	Gleyed Matrix (S4)	Litit O, O,	Reduced Ver		-	1A 150B)		,33 distarbe	d of problem	iatic.	
	ledox (S5)		Piedmont Flo								
	Matrix (S6)						A 149A, 153C,	153D)			
	rface (S7) (LRR P,	S, T, U)		Ū	`	, (	, ,	,			
	Layer (if observed)										
Type:											
Depth (in	ches):						Hydric Soil	Present?	Yes	No	•
Remarks:											
rtomants.											



Soil profile at DP10.



Vegetation at DP10, view is to west along lease road with swale in foreground.



Vegetation at DP10, view is to southwest.



Vegetation at DP10, view is to northeast.

Project/Site:	Lot 4 (430 acre tract) City	y/County: Caddo Parish	Sampling Date:1/23/2013				
Applicant/Owner:	Franks Investment Company, L	LC	State:La Sampling Point:DP11				
Investigator(s):	Alan Bickham Se	ction, Township, Range:					
	etc.): natural levee Loc		_				
Subregion (LRR or MLRA):	RR O	22' 54.29" N Long: _	000 401 54 058144				
Soil Map Unit Name: (15) Ga			NWI classification:				
Are climatic / hydrologic cond	litions on the site typical for this time of year?	Yes No	(If no, explain in Remarks.)				
Are Vegetation, Soil _	, or Hydrology significantly dis	turbed? Are "Norma	ll Circumstances" present? Yes No				
	, or Hydrology naturally proble		explain any answers in Remarks.)				
SUMMARY OF FINDIN	GS – Attach site map showing sa	ampling point location	ons, transects, important features, etc.				
Hydrophytic Vegetation Pre Hydric Soil Present? Wetland Hydrology Present	Yes No	Is the Sampled Area within a Wetland?	Yes No				
Remarks:							
HYDROLOGY							
Wetland Hydrology Indica	tors:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimus	n of one is required; check all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1) Aquatic Fauna (B13)			Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Marl Deposits (B15) (L		Drainage Patterns (B10)				
Saturation (A3) Hydrogen Sulfide Odor (C1)			Moss Trim Lines (B16)				
Water Marks (B1)		s along Living Roots (C3)					
Sediment Deposits (B2			Crayfish Burrows (C8)				
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C Algal Mat or Crust (B4) Thin Muck Surface (C7)			C6) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)				
Iron Deposits (B5)	Other (Explain in Rem		Shallow Aquitard (D3)				
Inundation Visible on A		unto	FAC-Neutral Test (D5)				
Water-Stained Leaves	5 (50) V		Sphagnum moss (D8) (LRR T, U)				
Field Observations:	. ,						
Surface Water Present?	Yes No Depth (inches): _						
Water Table Present?	Yes No Depth (inches): _						
Saturation Present?	Yes No Depth (inches): _	Wetland I	Wetland Hydrology Present? Yes No				
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
	neam gauge, momoring well, aerial photos, p NAIP imagery, USGS quadrangle map, LID		aliable.				
Remarks:	TVAIR Imagery, 0303 quadrangle map, Ele	JAIX.					
Kemarks.							

VEGETATION (Four Strata) - Use scientific names of plants. DP11 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_0 (A) \_\_\_  $\blacksquare$  $\blacksquare$ Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50%  $\blacksquare$ \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: \_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1. Festuca arundinaceus yes 🔽 FAC 🔽 be present, unless disturbed or problematic. 2. Lolium perenne 10 no FACU 🔻 **V** Definitions of Four Vegetation Strata: \_\_\_\_\_1\_\_\_no 3. Lamium amplexicaule **▼** FAC Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ more in diameter at breast height (DBH), regardless of **V**  $\blacksquare$  $\blacksquare$ Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 81 = Total Cover 50% of total cover:  $\underline{\phantom{0}40.5\phantom{0}}$  20% of total cover:  $\underline{\phantom{0}16.2\phantom{0}}$ Woody Vine Stratum (Plot size: \_\_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

Profile Des	cription: (Describe	to the depth	needed to docu	nent the ir	ndicator o	or confirm	n the absence	of indicators	.)		
Depth	Matrix			x Features		12	T		D		
(inches)	Color (moist)		Color (moist)		Type'	Loc <sup>2</sup>	Texture		Remarks		
10	5YR 4/4	_ 100 _					clay w/ silt				
16	5YR 5/6	_ 100			▼	<b>V</b>	sand				
					~	<b>T</b>					
						<u> </u>					
						_=					
					▼						
						▼					
<sup>1</sup> Type: C=C	oncentration, D=De	pletion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ins.	<sup>2</sup> Location:	PL=Pore Lini	ng, M=Matrix.		
Hydric Soil	Indicators: (Appli	cable to all L	RRs, unless othe	rwise note	d.)		Indicators	for Problema	tic Hydric S	oils³:	
Histoso	l (A1)		Polyvalue Be	elow Surfac	e (S8) <b>(L</b> l	RR S, T, L	J) 1 cm M	luck (A9) <b>(LR</b>	R O)		
	pipedon (A2)		ุ Thin Dark Sเ	, ,				luck (A10) <b>(LF</b>	•		
	istic (A3)		Loamy Muck			O)		ed Vertic (F18			
	en Sulfide (A4)		Loamy Gleye		<del>-</del> 2)			ont Floodplain	, , ,		, S, T)
	d Layers (A5) : Bodies (A6) <b>(LRR</b>	D T IIV	Depleted Ma Redox Dark		e)			lous Bright Lo	oamy Soils (F	ZU)	
	: Bodies (A6) <b>(LRR</b> ucky Mineral (A7) <b>(L</b>		Depleted Da	,	,		,	(A 153B) Trent Material	(TF2)		
	resence (A8) (LRR		Redox Depre		` '			hallow Dark S		)	
	uck (A9) (LRR P, T)	,	Marl (F10) (L		,			Explain in Re	•	,	
	d Below Dark Surfa		Depleted Oc		MLRA 15	1)			,		
	ark Surface (A12)		Iron-Mangan					ators of hydro			d
	rairie Redox (A16)	. ,	_	, , ,	, ,	U)		and hydrology	•		
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric					ss disturbed	or problemation	С.	
	Gleyed Matrix (S4)		Reduced Ve								
	Redox (S5) d Matrix (S6)		Piedmont Flo	•		•	19A) RA 149A, 153C,	153D)			
	ırface (S7) <b>(LRR P,</b>	S. T. U)	Anomalous	ongni Loan	13 OOH3 (F	ZO) (IVIEN	170A, 1000,	1550)			
	Layer (if observed										
	ches):						Hydric Soil	Present?	/es	No	<b>/</b>
Remarks:	<del></del>		_ <del>_</del>								



Soil profile at DP11.



Vegetation at DP11, view is to northwest.



Vegetation at DP11, view is to northeast.



Vegetation at DP11, view is to southwest.

Project/Site:	Lot 4 (430 acre tract)	City/County:	Caddo Parish	•	Sampling Date: _	1/23/2013
Applicant/Owner:	Franks Investm	nent Company, LLC		State: La		
Investigator(s):		Section, Tov			c 3; T16N-R13W	
Landform (hillslope, terrace				, none): concave	Slope	e (%):0-1
Subregion (LRR or MLRA):		Lat: 32° 22' 47.81'			3" W Date	
			Long		cation:	
			/ 11-			
	nditions on the site typical for t			(If no, explain in R		
	l, or Hydrology			al Circumstances" p		No
Are Vegetation, Soi	I, or Hydrology	_ naturally problematic?	(If needed,	explain any answe	rs in Remarks.)	
SUMMARY OF FIND	NGS - Attach site ma	p showing sampling	g point locati	ons, transects	, important fe	atures, etc.
Hudaankatia Vanatatian D		N.				
Hydrophytic Vegetation P Hydric Soil Present?	resent? Yes Yes	No Is the	e Sampled Area		J	
Wetland Hydrology Prese		No withi	n a Wetland?	Yes	No	-
Remarks:	103	140				
Point taken in plowed field	adjacent to ditch.					
·	•					
LIVEROLOGY						
HYDROLOGY	not a rou			Casandan, Indias	stara (minimum of I	huo roquirod\
Wetland Hydrology India		II dhad aan h A			ators (minimum of t	(wo required)
	um of one is required; check a		<del></del>	Surface Soil		(D0)
Surface Water (A1)		tic Fauna (B13)			getated Concave S	surface (B8)
High Water Table (A2		Deposits (B15) (LRR U)		Drainage Pa		
Saturation (A3)		ogen Sulfide Odor (C1)	. i D (00)	Moss Trim L		
Water Marks (B1)		zed Rhizospheres along L			Water Table (C2)	
Sediment Deposits (E		ence of Reduced Iron (C4)		Crayfish Bur		(00)
Drift Deposits (B3) Algal Mat or Crust (B-		nt Iron Reduction in Tilled	Solis (Co)		isible on Aerial Ima	agery (C9)
Iron Deposits (B5)		Muck Surface (C7) (Explain in Remarks)		Shallow Agu	Position (D2)	
Inundation Visible on		(Explain in Remarks)		FAC-Neutral	, ,	
Water-Stained Leave				_	noss (D8) (LRR T,	III
Field Observations:	5 (D9)			Opinagrium ii	1035 (DO) (ERR 1,	0,
Surface Water Present?	Yes No [	Depth (inches):				
Water Table Present?		Depth (inches):				
Saturation Present?		Depth (inches):	27	Hydrology Preser	at? Voc	No V
(includes capillary fringe)					itr les	NO
Describe Recorded Data	(stream gauge, monitoring we	ll, aerial photos, previous i	nspections), if av	ailable:		
1998 CIR, 2004 CIR & 20	10 NAIP imagery, USGS quad	drangle map, LIDAR.				
Remarks:						

VEGETATION (Four Strata) - Use scientific names of plants. DP12 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant  $\blacksquare$ \_ (B) Species Across All Strata: Percent of Dominant Species 100 That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ \_\_\_\_0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) 25 yes 🔽 FACW🔽 FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_ 1. Celtis laevigata UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$ 2. \_\_\_\_\_\_ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ Prevalence Index = B/A = \_\_\_  $\blacksquare$ **V** 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 25 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: 12.5 20% of total cover: Herb Stratum (Plot size: \_\_\_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1. Festuca arundinaceus 80 yes 🔽 FAC 🔽 be present, unless disturbed or problematic.  $\blacksquare$ lacksquareDefinitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ more in diameter at breast height (DBH), regardless of **V**  $\blacksquare$  $\blacksquare$  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 80 = Total Cover 50% of total cover: 40 20% of total cover: Woody Vine Stratum (Plot size: \_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

. Iome Degr	ription: (Describe	to the depth	needed to document	the indicator or	contirm	the absence	ot indicator	5.)	
Depth	Matrix		Redox Fe	atures					
(inches)	Color (moist)	%		% Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
16	5YR 4/3	100			<b>V</b>	clay			
<del></del>	<del></del>			— <del>-</del>	=:				
				<del>_</del> _					
					$\blacksquare$				_
					<b>V</b>				
				— <del>—</del>					
					lacksquare				
<sup>1</sup> Type: C=C	oncentration, D=Dep	letion, RM=F	educed Matrix, MS=M	asked Sand Graii	ns.			ning, M=Matrix	
Hydric Soil	Indicators: (Applic	able to all Li	RRs, unless otherwis	e noted.)		Indicators t	for Problem	natic Hydric S	oils³:
Histosol	(A1)		Polyvalue Below	Surface (S8) <b>(LR</b>	R S, T, U	I) 1 cm M	uck (A9) (LF	RR O)	
Histic Ep	pipedon (A2)		Thin Dark Surface	e (S9) <b>(LRR S, T</b> ,	, U)	2 cm M	uck (A10) (L	_RR S)	
Black Hi	stic (A3)		Loamy Mucky Mir	neral (F1) <b>(LRR (</b>	<b>D</b> )	Reduce	d Vertic (F1	8) (outside M	LRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleyed M			Piedmo	nt Floodplai	n Soils (F19)	LRR P, S, T)
Stratified	Layers (A5)		Depleted Matrix (					oamy Soils (F	
	Bodies (A6) (LRR P	. T. U)	Redox Dark Surfa	*			A 153B)	,	,
	icky Mineral (A7) (LI		Depleted Dark Su	, ,		,	rent Materia	ıl (TF2)	
	esence (A8) (LRR L		Redox Depressio	, ,				Surface (TF12	))
	ick (A9) (LRR P, T)	',	Marl (F10) (LRR	, ,			Explain in R		-/
	d Below Dark Surfac	ρ (Δ11)	Depleted Ochric (	•	<b>Y</b>	Other (	Explain in it	cinarks)	
	ark Surface (A12)	C (A11)	Iron-Manganese		-	T) <sup>3</sup> Indica	ators of hydr	ophytic veget:	ation and
	rairie Redox (A12)	MI DA 450A)				•	-		
	, , ,				u)			gy must be pro	
	lucky Mineral (S1) (	LRR O, S)	Delta Ochric (F17				ss disturbed	l or problemat	C.
	Gleyed Matrix (S4)		Reduced Vertic (						
	Redox (S5)		Piedmont Floodp						
Stripped	Matrix (S6)		Anomalous Brigh	Loamy Soils (F2	20) <b>(MLR</b>	A 149A, 153C,	153D)		
Dark Su	rface (S7) <b>(LRR P, \$</b>	S, T, U)							
Restrictive I	Layer (if observed)								
Туре:			_						
Depth (in	ches):		_			Hydric Soil	Present?	Yes	No 🖊
Remarks:						1			



Soil profile at DP12.



Vegetation at DP12, view is to northwest.



Vegetation at DP12, view is to northeast.



Vegetation at DP12, view is to southeast.



Vegetation at DP12, view is to southwest.

Project/Site:	Lot 4 (430 acre tract)	ity/County: Caddo Parish	Sampling Date:1/23/2013
Applicant/Owner:			State:La Sampling Point:DP13
Investigator(s):	Alan Bickham S	Section, Township, Range:	0 0 74011 74014
Landform (hillslope, terrace, e	etc.): natural levee L	ocal relief (concave, convex	, none): Slope (%):0-1
Subregion (LRR or MLRA):	RR O <b>Lat</b> :32	l° 23' 5.03" N Long:	000 401 00 000 144
Soil Map Unit Name: (24) Mo			NWI classification:
Are climatic / hydrologic cond	itions on the site typical for this time of year	r? Yes No	(If no, explain in Remarks.)
Are Vegetation, Soil _	, or Hydrology significantly d	isturbed? Are "Norma	al Circumstances" present? Yes No
Are Vegetation, Soil _	, or Hydrology naturally prob	lematic? (If needed,	explain any answers in Remarks.)
SUMMARY OF FINDIN	GS – Attach site map showing	sampling point locati	ons, transects, important features, et
Hydrophytic Vegetation Pre- Hydric Soil Present? Wetland Hydrology Present	Yes No	Is the Sampled Area within a Wetland?	Yes No
Remarks: Point taken in plowed field a	djacent to ditch.		
HYDROLOGY			
Wetland Hydrology Indica	tors:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum	n of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15)	(LRR U)	Drainage Patterns (B10)
Saturation (A3)	Hydrogen Sulfide Od	lor (C1)	Moss Trim Lines (B16)
Water Marks (B1)	Oxidized Rhizospher	res along Living Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduce	d Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction	on in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (	C7)	Geomorphic Position (D2)
Iron Deposits (B5)	Other (Explain in Re	marks)	Shallow Aquitard (D3)
Inundation Visible on A	erial Imagery (B7)		FAC-Neutral Test (D5)
Water-Stained Leaves	(B9)		Sphagnum moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present?	Yes No Depth (inches):		
Water Table Present?	Yes No Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes No Depth (inches):		Hydrology Present? Yes No
	ream gauge, monitoring well, aerial photos		ailable:
	NAIP imagery, USGS quadrangle map, L	IDAR.	
Remarks:			

VEGETATION (Four Strata) - Use scientific names of plants. **DP13** Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant Species Across All Strata: \_ (B) Percent of Dominant Species 100 That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ \_\_\_\_0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) 5 yes 🔽 OBL 🔽 FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_ 1. salix negra UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$ 2. \_\_\_\_\_ Column Totals: \_\_\_\_\_0 (A) \_\_\_  $\blacksquare$  $\blacksquare$ Prevalence Index = B/A = \_\_\_ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ \_\_\_\_  $\blacksquare$ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 5 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: 2.5 20% of total cover: Herb Stratum (Plot size: \_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 40 1. Festuca arundinaceus yes ▼ FAC ▼ be present, unless disturbed or problematic. 2. Ambrosia trifida 10 no  $\blacksquare$  $\blacksquare$ FAC Definitions of Four Vegetation Strata: 3. Lamium amplexicaule 2 \_\_\_no **▼** FAC Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ more in diameter at breast height (DBH), regardless of **V**  $\blacksquare$  $\blacksquare$ Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht.  $\blacksquare$ 52 = Total Cover 50% of total cover: 26 20% of total cover: 10.4 Woody Vine Stratum (Plot size: \_\_\_\_\_) 40 yes **▼** FAC **▼**  Campsis radicans  $\blacksquare$  $\blacksquare$ Hydrophytic 40 \_ = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_20 \_\_\_ 20% of total cover: Remarks: (If observed, list morphological adaptations below).

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the ii	ndicator c	or confirm	the absence	of indicato	rs.)		
Depth	Matrix			x Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	<u>Loc<sup>2</sup></u>	<u>Texture</u>		Remarks		
16	5YR 3/3	100					clay, fat				
						V					
					_=	<u> </u>					
					<b>V</b>	$\blacksquare$					
						<u> </u>					
					_=	_=					
					<b>V</b>	$\overline{\mathbf{v}}$					
	oncentration, D=Dep					ins.			ining, M=Mat		
Hydric Soil	Indicators: (Applic	able to all Li	RRs, unless other	rwise note	ed.)		Indicators	for Proble	matic Hydric	Soils':	
Histosol	(A1)		Polyvalue Be	low Surfac	ce (S8) <b>(Li</b>	RR S, T, U	I) 1 cm M	luck (A9) <b>(L</b>	.RR O)		
Histic Ep	pipedon (A2)		. Thin Dark Su	ırface (S9)	(LRR S,	Γ, U)	2 cm M	luck (A10) <b>(</b>	LRR S)		
	stic (A3)		Loamy Muck	-		O)		,	18) <b>(outside</b>		
	n Sulfide (A4)		Loamy Gleye		F2)			•	ain Soils (F19	, ,	P, S, T)
	d Layers (A5)		Depleted Ma	, ,					Loamy Soils	(F20)	
	Bodies (A6) (LRR F		Redox Dark	,	*		,	(A 153B)	-1 /T50\		
	ıcky Mineral (A7) (L		Depleted Da		` '			rent Materi	` '	4.0%	
	esence (A8) (LRR U	J)	Redox Depre		3)				Surface (TF	12)	
	ick (A9) <b>(LRR P, T)</b> d Below Dark Surfac	o (A11)	Marl (F10) (L Depleted Oc		(MI DA 45	4)	Other (	Explain in F	Remarks)		
	ark Surface (A12)	e (ATT)	Iron-Mangan			-	T) <sup>3</sup> Indica	ators of hyd	rophytic vege	etation a	nd
	rairie Redox (A16) (	MIRA 150A)					•	-	ogy must be p		iu
	lucky Mineral (S1) (	•	Delta Ochric	, , ,	, ,	Ο,		-	d or problem		
	Gleyed Matrix (S4)		Reduced Ver		-	A. 150B)			- с. р. с		
	Redox (S5)		Piedmont Flo								
	Matrix (S6)						A 149A, 153C,	153D)			
Dark Su	rface (S7) (LRR P,	S, T, U)	_	_							
Restrictive	Layer (if observed)	:									
Туре:											
Depth (in	ches):						Hydric Soil	Present?	Yes	No	<b>'</b>
Remarks:											



Soil profile at DP13.



Vegetation at DP13, view is to north.



Vegetation at DP13, view is to east.



Vegetation at DP13, view is to west.

Project/Site:	Lot 4 (430 acre tract)	City/County: Caddo Par	ish 🔽	Sampling Date:1/23/2013
Applicant/Owner:	Franks Investment Compan	ıy, LLC	State:La	Sampling Point: DP14
Investigator(s):	Alan Bickham	Section, Township, Rang		c 3; T16N-R13W
	etc.):natural levee			Slope (%):0-1
Subregion (LRR or MLRA):	_RR O <u> </u>	32° 22' 52.89" N	ong: 93° 40' 25.6	52" W Datum: NAD83
Soil Map Unit Name: (15) G				cation:
Are climatic / hydrologic con	ditions on the site typical for this time of ye	ar? Yes No	(If no, explain in F	Remarks.)
Are Vegetation, Soil	, or Hydrology significantly	disturbed? Are "N	lormal Circumstances"	present? Yes No
Are Vegetation, Soil	, or Hydrology naturally pro	oblematic? (If nee	ded, explain any answe	ers in Remarks.)
SUMMARY OF FINDI	NGS – Attach site map showing	sampling point lo	cations, transects	s, important features, etc.
Hydrophytic Vegetation Pro Hydric Soil Present? Wetland Hydrology Presen	Yes No	Is the Sampled A		No
Remarks: Point taken in swale in plov	16.11			
LIVEROLOGY				
HYDROLOGY				
Wetland Hydrology Indic			-	ators (minimum of two required)
	m of one is required; check all that apply)	75 SV1		Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B1			getated Concave Surface (B8)
<ul><li>High Water Table (A2)</li><li>Saturation (A3)</li></ul>	Marl Deposits (B15 Hydrogen Sulfide C		Moss Trim L	itterns (B10)
Water Marks (B1)		neres along Living Roots (		Water Table (C2)
Sediment Deposits (B2			Crayfish Bur	
Drift Deposits (B3)		ction in Tilled Soils (C6)		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4				Position (D2)
Iron Deposits (B5)	Other (Explain in R	Remarks)	Shallow Aqu	
Inundation Visible on A	erial Imagery (B7)		FAC-Neutra	Test (D5)
Water-Stained Leaves	(B9)		Sphagnum r	noss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?	Yes No Depth (inches	·):		
Water Table Present?	Yes No Depth (inches	·):		.,
Saturation Present? (includes capillary fringe)	Yes No Depth (inches		and Hydrology Prese	nt? Yes No
	stream gauge, monitoring well, aerial photo		it available:	
10	0 NAIP imagery, USGS quadrangle map,	LIDAR.		
Remarks:				

VEGETATION (Four Strata) - Use scientific names of plants. DP14 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_\_ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: <sup>1</sup>Indicators of hydric soil and wetland hydrology must 40 yes 🔽 FAC 🔽 1. Festuca arundinaceus be present, unless disturbed or problematic. 2. Lamium amplexicaule 5 no **▼** FAC  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$ of size, and woody plants less than 3.28 ft tall.  $\blacksquare$ Woody vine - All woody vines greater than 3.28 ft in heiaht. 45 = Total Cover 50% of total cover: 22.5 20% of total cover: Woody Vine Stratum (Plot size: \_\_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

Profile Desc	cription: (Describe	to the depth	needed to docur	nent the ii	ndicator c	r confirm	the absence	of indicate	ors.)		
Depth	Matrix			x Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks		
16	5YR 4/4	100					clay, fat				
						Ī▼Ī					
						T		-			
					_=	<u> </u>					
					<b>V</b>	$\blacksquare$					
						$\blacksquare$					
						Ī▼Ī					
						_=					
						▼					
	oncentration, D=Dep					ins.			ining, M=Mat		
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless othe	rwise note	ed.)		Indicators	for Proble	matic Hydric	Soils':	
Histosol	(A1)		Polyvalue Be	low Surfac	ce (S8) <b>(LI</b>	RR S, T, U	I) 1 cm I/	luck (A9) <b>(L</b>	.RR O)		
	pipedon (A2)		Thin Dark Su	, ,				luck (A10) (	. ,		
	stic (A3)		Loamy Muck	-		O)		•	18) <b>(outside</b>		
	en Sulfide (A4)		Loamy Gleye		F2)				ain Soils (F19	, ,	P, S, T)
	d Layers (A5)		Depleted Ma	, ,	<b>-</b> \				Loamy Soils	(F20)	
	Bodies (A6) (LRR F		Redox Dark	,	*		•	RA 153B)	ial (TEO)		
	icky Mineral (A7) <b>(L</b>		Depleted Da		` '			rent Materi	` '	:40)	
	esence (A8) <b>(LRR l</b> ick (A9) <b>(LRR P, T)</b>	J)	Redox Depre		))				(Surface (TF	12)	
	d Below Dark Surfac	se (Δ11)	Depleted Oc		MIRA 15	1)	Other (	Explain in F	(Ciliaiks)		
	ark Surface (A12)	<i>(</i> (A11)	Iron-Mangan				T) <sup>3</sup> Indic:	ators of hyd	drophytic veg	etation a	nd
	rairie Redox (A16) (	MLRA 150A)					•	-	ogy must be		
	lucky Mineral (S1) (		Delta Ochric	, , ,		-,		-	d or problem		
	Bleyed Matrix (S4)	, ,	Reduced Ver		-	A, 150B)			·		
	Redox (S5)		Piedmont Flo								
Stripped	Matrix (S6)		Anomalous E	Bright Loan	ny Soils (F	20) <b>(MLR</b>	A 149A, 153C,	153D)			
Dark Su	rface (S7) (LRR P,	S, T, U)									
Restrictive	Layer (if observed)	:									
Туре:			_								
Depth (in	ches):						Hydric Soil	Present?	Yes	_ No_	<b>✓</b>
Remarks:							-1				



Vegetation at DP14, view is to northwest.

Project/Site:	Lot 4 (430 acre trad	ct) c	City/County: Cado	do Parish		Sampling Date: _	1/23/2013		
Applicant/Owner:	Franks	Investment Company,	, LLC		State: La	Sampling Point: _	DP15		
Investigator(s):	Alan Bickham	n s				c 3; T16N-R13W			
Landform (hillslope, terrace,					none): concave	Slope	e (%): <u>0-1</u>		
Subregion (LRR or MLRA):				Long:		57" W Dat			
		Lat:	22 02.10 11	Long: _					
Soil Map Unit Name: (24) M		h 1002a 4007501 30 00		800		cation:			
Are climatic / hydrologic con	ditions on the site typ	ical for this time of yea			(If no, explain in R				
Are Vegetation, Soil	, or Hydrology	significantly d	listurbed?	Are "Norma	l Circumstances" p	present? Yes	No		
Are Vegetation, Soil	, or Hydrology	naturally prob	olematic?	(If needed,	explain any answe	ers in Remarks.)			
SUMMARY OF FINDI	NGS – Attach si	te map showing	sampling poi	int location	ons, transects	. important fe	atures, etc.		
		<u> </u>				,			
Hydrophytic Vegetation Pro		No	Is the Sam	pled Area					
Hydric Soil Present?		No	within a W	etland?	Yes	No	.		
Wetland Hydrology Preser	t? Yes _	No	977 (100) 4 (100) (100) (100) (100)		3.5 3333				
Remarks: Point taken in swale in plov	ved field								
Foilit taken in swale in ploy	rea neia.								
HYDROLOGY									
Wetland Hydrology Indic	ators:				Secondary Indica	ators (minimum of	two required)		
Primary Indicators (minimu	m of one is required;	check all that apply)		Surface Soil Cracks (B6)					
Surface Water (A1)	_	_ Aquatic Fauna (B13)	)		Sparsely Ve	getated Concave S	Surface (B8)		
High Water Table (A2)	_	Marl Deposits (B15)	(LRR U)		Drainage Pa	tterns (B10)			
Saturation (A3)	_	_ Hydrogen Sulfide Od	dor (C1)		Moss Trim L	ines (B16)			
Water Marks (B1)	_	Oxidized Rhizospher	res along Living F	Roots (C3)	(C3) Dry-Season Water Table (C2)				
Sediment Deposits (B	2)	Presence of Reduce	d Iron (C4)		Crayfish Bur	rows (C8)			
Drift Deposits (B3)	_	Recent Iron Reduction	on in Tilled Soils	(C6)	Saturation V	isible on Aerial Ima	agery (C9)		
Algal Mat or Crust (B4	_	_ Thin Muck Surface (	C7)		Geomorphic	Position (D2)			
Iron Deposits (B5)	_	Other (Explain in Re	marks)		Shallow Aqu	itard (D3)			
Inundation Visible on A	Verial Imagery (B7)				FAC-Neutral	Test (D5)			
✓ Water-Stained Leaves	(B9)				Sphagnum n	noss (D8) (LRR T,	U)		
Field Observations:									
Surface Water Present?	Yes No _	Depth (inches):							
Water Table Present?		Depth (inches):							
Saturation Present?	Yes No _	Depth (inches):	3	Wetland I	Hydrology Preser	nt? Yes	No		
(includes capillary fringe)  Describe Recorded Data (s	stream gauge, monito	ring well, aerial photos	, previous inspec	tions), if ava	ailable:				
1998 CIR, 2004 CIR & 201				***					
Remarks:									

VEGETATION (Four Strata) - Use scientific names of plants. DP15 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant Species Across All Strata: \_ (B) Percent of Dominant Species 100 That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Herb Stratum (Plot size: \_\_\_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1. Festuca arundinaceus be present, unless disturbed or problematic. 2. Ambrosia trifida 35 yes **▼** FAC  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub – Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 75 = Total Cover 50% of total cover: \_\_\_37.5 \_\_ 20% of total cover: \_\_\_ Woody Vine Stratum (Plot size: \_\_\_\_\_) 25 yes 🔽 FAC 🔽 Campsis radicans  $\blacksquare$  $\blacksquare$ Hydrophytic 25 \_ = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: 12.5 20% of total cover: Remarks: (If observed, list morphological adaptations below).

Profile Des	cription: (Describe	to the de	oth needed to docu	ment the	indicator	or confirm	n the absence	of indicators.)
Depth	Matrix			ox Feature		12	T4	D
(inches)	Color (moist)		Color (moist)		Type'	Loc²	Texture	Remarks
3	5YR 3/3	95	5YR 4/1	>2	- <u>D</u>	<u>M</u> <u>▼</u> .	clay, fat	
16	5YR 3/3	_ 100		_				
						▼		
						$\blacksquare$		
					<u> </u>			
				-	- <del>-</del>			
1					- —		2	
	· · · · · · · · · · · · · · · · · · ·		=Reduced Matrix, M			ains.		PL=Pore Lining, M=Matrix.
-	`	cable to all	LRRs, unless othe		•	DD 0 T 1		for Problematic Hydric Soils <sup>3</sup> :
Histosol	pipedon (A2)		Polyvalue Bo				· —	luck (A9) <b>(LRR O)</b> luck (A10) <b>(LRR S)</b>
	istic (A3)		Loamy Muck	,				ed Vertic (F18) (outside MLRA 150A,B)
I —	en Sulfide (A4)		Loamy Gley			,	_	ont Floodplain Soils (F19) (LRR P, S, T)
ı <del>—</del>	d Layers (A5)		Depleted Ma				_	lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Dark	,	,		,	(A 153B)
	ucky Mineral (A7) (L				` '		_	rent Material (TF2)
	resence (A8) (LRR	,	Redox Depr		-8)			hallow Dark Surface (TF12)
	uck (A9) <b>(LRR P, T)</b> d Below Dark Surfa		Marl (F10) (I Depleted Oc		(MIRA 1	51)	Otner (	Explain in Remarks)
	ark Surface (A12)	CC (A11)	Iron-Mangar		-		T) <sup>3</sup> Indica	ators of hydrophytic vegetation and
	, ,	MLRA 150	A) Umbric Surfa				•	and hydrology must be present,
Sandy N	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric	(F17) <b>(M</b>	LRA 151)		unle	ess disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve					
	Redox (S5)		Piedmont Fl			•	•	452D)
	d Matrix (S6) Irface (S7) (LRR P,	S T II)	Anomaious	Bright Loa	ımy solis (	F20) (WILF	RA 149A, 153C,	1930)
	Layer (if observed							
Type:								
	ches):						Hvdric Soil	Present? Yes No
Remarks:			<del></del> -				1,	



Soil profile at DP15.



Vegetation at DP15, view is to northwest.



Vegetation at DP15, view is to northeast.



Vegetation at DP15, view is to southwest.

Project/Site:	Lot 4 (430 acre tract)	City/County: Caddo Parish	<b>T</b>	Sampling Date:1/23/2013
Applicant/Owner:	Franks Investment Compa	ny, LLC		Sampling Point: DP16
Investigator(s):	Alan Bickham	Section, Township, Range:		c 3; T16N-R13W
Landform (hillslope, terrace,	etc.): natural levee	Local relief (concave, conve	x, none): concave	▼_ Slope (%):0-1
Subregion (LRR or MLRA): L	.RR O Lat:	32° 22' 47.63" N Long:	93° 40' 9.0′	1" W Datum: NAD83
Soil Map Unit Name: (22) Mo				eation:
Are climatic / hydrologic cond	ditions on the site typical for this time of y	ear? Yes No	(If no, explain in R	emarks.)
Are Vegetation, Soil _	, or Hydrology significantly	y disturbed? Are "Norm	al Circumstances" p	present? Yes No
Are Vegetation, Soil _	, or Hydrology naturally pr	roblematic? (If needed	, explain any answe	rs in Remarks.)
SUMMARY OF FINDIN	IGS – Attach site map showing	g sampling point locat	ions, transects	, important features, etc.
Hydrophytic Vegetation Pre Hydric Soil Present? Wetland Hydrology Present	Yes No	Is the Sampled Area within a Wetland?		No
Remarks: Point taken in swale in plow	16.11			
LIVEROLOGY.				
HYDROLOGY				
Wetland Hydrology Indica			•	ators (minimum of two required)
	m of one is required; check all that apply)		Surface Soil	
Surface Water (A1)	Aquatic Fauna (B			getated Concave Surface (B8)
High Water Table (A2) Saturation (A3)	Marl Deposits (B1 Hydrogen Sulfide		Drainage Pat Moss Trim Li	
Water Marks (B1)		heres along Living Roots (C3)		Water Table (C2)
Sediment Deposits (B2			Crayfish Buri	7.000.000.000.000.000.000.000
Drift Deposits (B3)		ction in Tilled Soils (C6)		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)				Position (D2)
Iron Deposits (B5)	Other (Explain in I		Shallow Aqui	
Inundation Visible on A			FAC-Neutral	
Water-Stained Leaves	(B9)		Sphagnum m	noss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?	Yes No Depth (inches	s):		
Water Table Present?	Yes No Depth (inches	s):		ا م
Saturation Present? (includes capillary fringe)	Yes No Depth (inches		Hydrology Presen	nt? Yes No
	tream gauge, monitoring well, aerial phot		vailable:	
0	NAIP imagery, USGS quadrangle map	o, LIDAR.		
Remarks:				

VEGETATION (Four Strata) - Use scientific names of plants. **DP16** Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_\_ (B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: <sup>1</sup>Indicators of hydric soil and wetland hydrology must 40 yes 🔽 FAC 🔽 1. Festuca arundinaceus be present, unless disturbed or problematic. 2. Lamium amplexicaule 5 no **▼** FAC  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$  $\blacksquare$ of size, and woody plants less than 3.28 ft tall.  $\blacksquare$ Woody vine - All woody vines greater than 3.28 ft in heiaht. 45 = Total Cover 50% of total cover: 22.5 20% of total cover: Woody Vine Stratum (Plot size: \_\_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

	onpuom (Booombo	to the depti	h needed to docui	illelit tile li	naicator	or commit	n the absence	oi illaicato	,		Į.
Depth	Matrix			x Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>		Remarks		
16	5YR 4/4	100					clay w/ silt				
						<b>V</b>					_
								-			
					_=	<u> </u>					
					▼						
					▼	<b> </b>					
						_=					
					▼	▼.					
	oncentration, D=De					ins.			ining, M=Mat		
Hydric Soil	Indicators: (Appli	cable to all L	.RRs, unless othe	rwise note	d.)		Indicators	for Probler	matic Hydric	: Soils <sup>3</sup> :	
Histosol	(A1)		Polyvalue Be	elow Surfac	e (S8) <b>(L</b> l	RR S, T, L	J) 1 cm N	luck (A9) <b>(L</b>	.RR O)		
Histic E	pipedon (A2)		ุ Thin Dark Sเ	urface (S9)	(LRR S,	Γ, U)	2 cm M	luck (A10) <b>(</b>	LRR S)		
Black H	istic (A3)		Loamy Muck	y Mineral (	F1) <b>(LRR</b>	O)	Reduce	ed Vertic (F	18) (outside	MLRA 1	50A,B)
	en Sulfide (A4)		Loamy Gleye		F2)		_		ain Soils (F19	, ,	P, S, T)
	d Layers (A5)		Depleted Ma	, ,					Loamy Soils	(F20)	
	Bodies (A6) (LRR I		Redox Dark	,	*		•	RA 153B)			
	ucky Mineral (A7) (L		Depleted Da		` '			rent Materi	` '		
	resence (A8) (LRR	,	Redox Depre		3)				Surface (TF	12)	
	uck (A9) <b>(LRR P, T)</b>		Marl (F10) (L		(841 15 8 45	4.	Other (	Explain in F	Remarks)		
	d Below Dark Surfa	ce (ATT)	Depleted Oc		-	-	T) <sup>3</sup> India	atora of bud	lrophytic veg	otation a	
	ark Surface (A12) rairie Redox (A16) (	MI DA 450A	Iron-Mangan				•	-	ogy must be		iu
	/lucky Mineral (S1)		Delta Ochric	, , ,	, ,	Ο,		-	d or problem		
	Gleyed Matrix (S4)	LIKIK O, O,	Reduced Ve		-	A 150B)		,33 distarbe	a or problem	alio.	
	Redox (S5)		Piedmont Flo								
	Matrix (S6)						RA 149A, 153C,	153D)			
	rface (S7) (LRR P,	S, T, U)		ū	•	, ,	,	,			
							_				
Restrictive	Layer (if observed)	):									
Restrictive		):									
Туре:			_				Hydric Soil	Present?	Yes	No	•
Type: Depth (in			<u>-</u>				Hydric Soil	Present?	Yes	_ No _	<u> </u>
Туре:							Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in			_				Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in			_				Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in			_				Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	<u> </u>
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	
Type: Depth (in							Hydric Soil	Present?	Yes	_ No _	



Soil profile at DP16.



Vegetation at DP16, view is to southwest.



Vegetation at DP16, view is to northwest.



Vegetation at DP16, view is to northeast.

Project/Site:	Lot 4 (430 acre tract)	City/County: Caddo F	Parish	▼	Sampling Date: _	1/23/2013		
Applicant/Owner:	Franks Investment Com				Sampling Point:	DD4-		
Investigator(s):	Alan Bickham	Section, Township, R			3; T16N-R13W			
	, etc.): natural levee	Local relief (concave,			Slope	e (%):0-1		
Subregion (LRR or MLRA):								
Soil Map Unit Name: (22) N			Long.	\//\ -\:E	ation:	uiii		
NA 144772 75 7647	nditions on the site typical for this time of					•		
	, or Hydrology significa		e "Normal Circum	nstances" pr	resent? Yes	No		
Are Vegetation, Soil	, or Hydrology naturall	y problematic? (If r	needed, explain	any answer	s in Remarks.)			
SUMMARY OF FINDI	NGS – Attach site map show	ing sampling point	locations, tr	ransects,	important fe	atures, etc.		
Hydrophytic Vegetation Pr	Yes No Yes No	is the Samble	ed Area	./				
Hydric Soil Present? Wetland Hydrology Preser	and the second s	within a Wetla	and?	Yes	No			
Remarks:	16510							
Point taken in plowed field	adjacent to ditch.							
HYDROLOGY								
Wetland Hydrology India	ators:		Secon	dary Indicat	tors (minimum of	two required)		
	um of one is required; check all that ap	ply)	Sı	urface Soil (	Cracks (B6)			
Surface Water (A1)	Aquatic Fauna				etated Concave S	Surface (B8)		
High Water Table (A2				rainage Patt		(20)		
Saturation (A3)	Hydrogen Sulfi			Moss Trim Lines (B16)				
Water Marks (B1)		ospheres along Living Roo						
Sediment Deposits (B				rayfish Burro				
Drift Deposits (B3)		eduction in Tilled Soils (C6			sible on Aerial Ima	agery (C9)		
Algal Mat or Crust (B4			,		Position (D2)			
Iron Deposits (B5)	Other (Explain			hallow Aquit				
Inundation Visible on		áv.		AC-Neutral <sup>-</sup>				
Water-Stained Leaves					oss (D8) (LRR T,	U)		
Field Observations:								
Surface Water Present?	Yes No Depth (inc	ches):						
Water Table Present?	Yes No Depth (inc	ches):						
Saturation Present?	Yes No Depth (inc		Vetland Hydrolo	gy Present	t? Yes	No		
(includes capillary fringe)	stream gauge, monitoring well, aerial p	hataa muujaya inamaatia	na) if available.					
	stream gauge, monitoring well, aerial p 0 NAIP imagery, USGS quadrangle n		ris), ii avaliable.					
Remarks:		тар, шодіх.						
FAC - Neutral 1:0								

VEGETATION (Four Strata) - Use scientific names of plants. DP17 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant Species Across All Strata: \_ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ \_\_\_\_0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_ 20 yes ▼ OBL ▼ 1. Salix nigra UPL species \_\_\_\_\_ x 5 = \_\_\_\_ 2 Baccharis halimifolia 5 yes 🔽 FAC Column Totals: \_\_\_\_\_0 (A) \_\_\_  $\blacksquare$ ▼ Prevalence Index = B/A = \_\_\_  $\blacksquare$ **V** 5. \_\_\_\_\_ \_\_\_ \_\_\_\_ \_\_\_\_\_ Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 25 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) Herb Stratum (Plot size: \_\_\_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1. Ambrosia trifida be present, unless disturbed or problematic. 2. Baccharis halimifolia 10 no FAC  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$  $\blacksquare$ Sapling/Shrub – Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 80 = Total Cover 50% of total cover: \_\_\_\_40 \_\_\_ 20% of total cover: \_\_\_ Woody Vine Stratum (Plot size: 30 ft ) 5 yes 🔽 FAC 🔽 1. Smilax rotundifolia  $\blacksquare$  $\blacksquare$ Hydrophytic 5 \_\_\_ = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_2.5 \_\_ 20% of total cover: Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)												
DepthMatrix		Redox Features										
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks			
3	5YR 3/3	95	5YR 4/1	5	D 🔽	M 🔽	clay					
16	5YR 3/3	100					clay					
<del></del>				_	- —	_=						
					▼							
				_								
					$\blacksquare$	$\blacksquare$						
				_								
					· — <del>=</del>	=						
						$\blacksquare$						
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Li	ning, M=Matrix	ζ.		
Hydric Soil I	ndicators: (Applic	able to all	LRRs, unless othe	rwise not	ed.)		Indicators 1	for Probler	natic Hydric S	Soils <sup>3</sup> :		
Histosol	(A1)		Polyvalue Be	elow Surfa	ce (S8) <b>(L</b>	.RR S, T, I	U) 1 cm M	uck (A9) <b>(L</b>	RR O)			
Histic Ep	pipedon (A2)		. Thin Dark Si	urface (S9	) (LRR S,	T, U)	2 cm M	uck (A10) (	LRR S)			
Black Hi	stic (A3)		Loamy Muck	y Mineral	(F1) <b>(LRF</b>	(O)	Reduce	d Vertic (F	18) (outside N	ILRA 150A,B)		
Hydroge	n Sulfide (A4)		Loamy Gley	ed Matrix	(F2)		Piedmo	nt Floodpla	in Soils (F19)	(LRR P, S, T)		
	l Layers (A5)		Depleted Ma	trix (F3)			Anomal	Anomalous Bright Loamy Soils (F20)				
	Bodies (A6) (LRR P		Redox Dark	,	,		•	A 153B)				
	cky Mineral (A7) (LI		<del></del>		, ,			rent Materi				
Muck Pr	esence (A8) <b>(LRR L</b>	J)	Redox Depre	essions (F	8)		Very Sh	nallow Dark	Surface (TF12	2)		
	ck (A9) (LRR P, T)		Marl (F10) <b>(I</b>				Other (I	Explain in F	Remarks)			
	d Below Dark Surfac	e (A11)	Depleted Oc				3					
	rk Surface (A12)		Iron-Mangar				•	-	rophytic veget			
	rairie Redox (A16) (I		· <b>—</b>			', U)		-	ogy must be pro			
	lucky Mineral (S1) (	LRR O, S)						ss disturbe	d or problemat	IC.		
	leyed Matrix (S4)		Reduced Ve									
	edox (S5)		Piedmont Fl			•	•	450B)				
	Matrix (S6)	S T 11)	Anomaious i	Bright Loa	my Solls (	F2U) (IVILF	RA 149A, 153C,	1ט3ט)				
	face (S7) (LRR P,						1					
	_ayer (if observed)	•										
Туре:												
Depth (inc	ches):						Hydric Soil I	Present?	Yes	No		
Remarks:							•					



Soil profile at DP17.



Vegetation at DP17, view is to northeast.



Vegetation at DP17, view is to southwest.



Depleted matrix in soil at DP17.



Vegetation at DP17, view is to northwest.

Project/Site:	Lot 4 (430 acre tract)	City/County: Caddo Parish	Sampling Date:1/23/2013								
Applicant/Owner:	Franks Investment Compar		State: La Sampling Point: DP18								
Investigator(s):	Alan Bickham	Section, Township, Range:	Sec 3; T16N-R13W								
	etc.): natural levee	Local relief (concave, convex									
Subregion (LRR or MLRA):	LRR O		93° 40' 9.79" W Datum: NAD83								
		Long.	NWI classification:								
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)											
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No											
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)											
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.											
Hadron budie We wetetien D	- Var V Na										
Hydrophytic Vegetation Pr Hydric Soil Present?	esent? Yes No Yes No	is the Sambled Area	•								
Wetland Hydrology Preser		within a Wetland?	Yes No								
Remarks:	100 110										
Point taken in plowed field	adjacent to ditch.										
HYDROLOGY											
Wetland Hydrology India	ators:		Secondary Indicators (minimum of two required)								
Primary Indicators (minimi	um of one is required; check all that apply)		Surface Soil Cracks (B6)								
Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (I											
High Water Table (A2			Drainage Patterns (B10)								
✓ Saturation (A3)	Hydrogen Sulfide		Moss Trim Lines (B16)								
Water Marks (B1)		neres along Living Roots (C3)	Dry-Season Water Table (C2)								
Sediment Deposits (B	Crayfish Burrows (C8)										
Drift Deposits (B3)	Recent Iron Reduc	ction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)								
Algal Mat or Crust (B4	Thin Muck Surface	e (C7)	Geomorphic Position (D2)								
Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3)											
Inundation Visible on	Aerial Imagery (B7)		FAC-Neutral Test (D5)								
✓ Water-Stained Leaves	s (B9)		Sphagnum moss (D8) (LRR T, U)								
Field Observations:											
Surface Water Present?	Yes No Depth (inches	· — —									
Water Table Present?	Yes No Depth (inches										
Saturation Present?	Yes No Depth (inches	s): Wetland	Hydrology Present? Yes No								
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
1998 CIR, 2004 CIR & 2010 NAIP imagery, USGS quadrangle map, LIDAR.											
Remarks:											

VEGETATION (Four Strata) - Use scientific names of plants. **DP18** Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant  $\blacksquare$ Species Across All Strata: \_\_ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ • Prevalence Index = B/A = \_\_\_  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators: **V** 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_ <sup>30 ft</sup> \_\_\_) Herb Stratum (Plot size: \_\_\_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1. Ambrosia trifida 70 yes 🔽 FAC 🔽 be present, unless disturbed or problematic.  $\blacksquare$ lacksquareDefinitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ more in diameter at breast height (DBH), regardless of **V**  $\blacksquare$  $\blacksquare$  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 70 = Total Cover 50% of total cover: \_\_\_\_\_\_ 20% of total cover: \_\_\_ Woody Vine Stratum (Plot size: \_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

Profile Desc	cription: (Describe	to the de	oth needed to docu			or confiri	m the absence	of indicators.)	
Depth	Matrix			x Feature		15-2	Tantona	Damanda	
(inches)	Color (moist)		Color (moist)	<u> </u>	Type'	Loc <sup>2</sup>	<u>Texture</u>	Remarks	
3	5YR 3/3	95	5YR 4/1	5	. 🖳 🔼	M 🔽	clay		
16	5YR 3/3	_ 100			<b>▼</b>				
					$\blacksquare$				
						<b>T</b>	<u> </u>		
				-	_ <u></u>				
					- —		·		
				-					
<sup>1</sup> Type: C=C	oncentration, D=De	pletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Appli	cable to al	LRRs, unless othe	rwise no	ted.)		Indicators	for Problematic Hydric So	ils³:
Histosol	(A1)		Polyvalue Be	elow Surfa	ace (S8) <b>(L</b>	RR S, T,	U) 1 cm N	luck (A9) (LRR O)	
Histic E	oipedon (A2)		. Thin Dark Su	urface (SS	) (LRR S,	T, U)	2 cm M	luck (A10) <b>(LRR S)</b>	
	istic (A3)		Loamy Muck			R O)	_	ed Vertic (F18) <b>(outside ML</b>	
	en Sulfide (A4)		Loamy Gleye		(F2)			ont Floodplain Soils (F19) <b>(L</b>	
	d Layers (A5)	D T !!	<u>✓</u> Depleted Ma		FC)			lous Bright Loamy Soils (F2	!0)
	Bodies (A6) (LRR		Redox Dark	,	*		•	RA 153B)	
	ucky Mineral (A7) <b>(L</b> resence (A8) <b>(LRR</b>		) Depleted Da Redox Depre		. ,		_	arent Material (TF2) hallow Dark Surface (TF12)	
	ick (A9) (LRR P, T)	,	Marl (F10) (I		·)			Explain in Remarks)	
	d Below Dark Surfa		Depleted Oc		(MLRA 1	51)	•• \	Explain in Fromunto,	
	ark Surface (A12)	` ′	Iron-Mangan		-		, <b>T)</b> <sup>3</sup> Indic	ators of hydrophytic vegetat	ion and
Coast P	rairie Redox (A16)	(MLRA 150	A) Umbric Surfa	ace (F13)	(LRR P, T	-, U)	wetl	and hydrology must be pres	sent,
	lucky Mineral (S1)	(LRR O, S)	Delta Ochric					ess disturbed or problemation	
	Sleyed Matrix (S4)		Reduced Ve						
	Redox (S5)		Piedmont Flo			•	•	450D)	
	Matrix (S6)	C T II)	Anomalous I	Bright Loa	my Soils (	F20) (IVIL)	RA 149A, 153C,	153D)	
	rface (S7) (LRR P, Layer (if observed						1		
Type:									
							Uvdria Cail	Present? Yes	No
	ches):						Hyunc Sun	FIESEIL? TES	NU
Remarks:									



Soil profile at DP18.



Depleted matrix in soil profile at DP18.



Vegetation at DP18, view is to southwest.



Vegetation at DP18, view is to north.

Project/Site:	Lot 4 (430 acre tract)	ty/County: Caddo Parish	Sampling Date:1/23/2013				
Applicant/Owner:	Franks Investment Company,		State: La Sampling Point: DP19				
Investigator(s):	Alan Bickham Se	ection, Township, Range:	Sec 3; T16N-R13W				
Landform (hillslope, terrace, e	tc.): natural levee	ocal relief (concave, convex					
Subregion (LRR or MLRA): LF	₹R O		93° 40' 17.80" W Datum: NAD83				
Soil Map Unit Name: (15) Gal		Long	NWI classification:				
		· · · · · ·	The state of the s				
	tions on the site typical for this time of year						
10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	, or Hydrology significantly di		al Circumstances" present? Yes No				
Are Vegetation, Soil _	, or Hydrology naturally probl	lematic? (If needed,	explain any answers in Remarks.)				
SUMMARY OF FINDING	GS – Attach site map showing s	sampling point locati	ons, transects, important features, etc.				
Hadron basic Noncotation Deco	- No. Vo.						
Hydrophytic Vegetation Pres Hydric Soil Present?	Yes No	Is the Sampled Area	<b>~</b>				
Wetland Hydrology Present?		within a Wetland?	Yes No				
Remarks:							
Point taken in plowed field a	djacent to swale.						
HYDROLOGY							
Wetland Hydrology Indicat	ors:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum	of one is required; check all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Marl Deposits (B15) (		Drainage Patterns (B10)				
✓ Saturation (A3)	Hydrogen Sulfide Odo		Moss Trim Lines (B16)				
Water Marks (B1)		es along Living Roots (C3)					
Sediment Deposits (B2)	Presence of Reduced	d Iron (C4)	Crayfish Burrows (C8)				
Drift Deposits (B3)	Recent Iron Reductio	n in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Thin Muck Surface (C	27)	Geomorphic Position (D2)				
Iron Deposits (B5)	Other (Explain in Ren	marks)	Shallow Aquitard (D3)				
Inundation Visible on As	rial Imagery (B7)		FAC-Neutral Test (D5)				
Water-Stained Leaves (	B9)		Sphagnum moss (D8) (LRR T, U)				
Field Observations:							
Surface Water Present?	Yes No Depth (inches): _	<u></u>					
Water Table Present?	Yes No Depth (inches): _						
Saturation Present?	Yes No Depth (inches): _	Wetland	Hydrology Present? Yes No				
(includes capillary fringe)  Describe Recorded Data (str	ream gauge, monitoring well, aerial photos,	previous inspections), if av	ailable:				
	NAIP imagery, USGS quadrangle map, LI						
Remarks:							
Saturation likely from recent	ain events.						

VEGETATION (Four Strata) - Use scientific names of plants. **DP19** Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant Species Across All Strata: \_\_ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ • Prevalence Index = B/A =  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators: **V** \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation \_\_ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ <sup>30 ft</sup> \_\_\_) Herb Stratum (Plot size: <sup>1</sup>Indicators of hydric soil and wetland hydrology must 80 1. Cynodon dactylon yes 🔽 FACU 🔽 be present, unless disturbed or problematic. 2. Festuca arundinaceus 5 no  $\blacksquare$  $\blacksquare$ FAC Definitions of Four Vegetation Strata: \_\_\_\_\_\_1\_\_\_\_no 3. Sonchus asper **▼** FAC Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ more in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht.  $\blacksquare$ 86 = Total Cover 50% of total cover: 43 20% of total cover: 17.2 Woody Vine Stratum (Plot size: \_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic Vegetation Yes \_\_\_\_\_ No \_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

Profile Desc	cription: (Describe	to the depth	needed to docur	nent the ir	ndicator c	r confirm	the absence	of indicato	rs.)		
Depth	Matrix			x Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks		
16	5YR 3/4	95				$\blacksquare$	clay				
						<u> </u>					
						_=					
					_=						
						lacksquare					
						$\blacksquare$					
						<u> </u>					
					<del>-=</del>	_=					
						$\blacksquare$					
<sup>1</sup> Type: C=C	oncentration, D=De	oletion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ins.	<sup>2</sup> Location:	PL=Pore L	ining, M=Matr	ix.	
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless other	wise note	d.)		Indicators	for Proble	matic Hydric	Soils <sup>3</sup> :	
Histosol	(A1)		Polyvalue Be	low Surfac	e (S8) <b>(Li</b>	RR S, T, U	J) 1 cm M	luck (A9) <b>(L</b>	.RR O)		
Histic Ep	oipedon (A2)		Thin Dark Su	ırface (S9)	(LRR S, 1	Γ, U)	2 cm M	luck (A10) (	LRR S)		
Black Hi	istic (A3)		Loamy Muck	y Mineral (	F1) <b>(LRR</b>	O)	Reduce	ed Vertic (F	18) <b>(outside</b>	MLRA 1	50A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (f	<del>-</del> 2)		Piedmo	ont Floodpla	ain Soils (F19	) (LRR F	P, S, T)
	d Layers (A5)		Depleted Ma						Loamy Soils	(F20)	
	Bodies (A6) (LRR I		Redox Dark	•	*		•	(A 153B)			
	ucky Mineral (A7) <b>(L</b>		Depleted Da		` '			rent Materi	, ,		
	esence (A8) (LRR I	٦)	Redox Depre		3)				Surface (TF	12)	
	ıck (A9) (LRR P, T)	- (0.4.4)	Marl (F10) <b>(L</b>			4.	Other (	Explain in f	Remarks)		
	d Below Dark Surfac ark Surface (A12)	e (ATT)	Depleted Oct				T) <sup>3</sup> India	otors of by	lrophytic vege	station o	
	rairie Redox (A16) <b>(</b>	MI PA 150A)					•	-	ogy must be p		liu
,	/ucky Mineral (S1) (		Delta Ochric			Ο,		-	d or problema		
	Gleyed Matrix (S4)	21111 0, 0,	Reduced Ver		-	A. 150B)		os alstarbe	a or problem	a.i.o.	
	Redox (S5)		Piedmont Flo								
	l Matrix (S6)			•			A 149A, 153C,	153D)			
	rface (S7) (LRR P,	S, T, U)		ū	`	, (	, ,	,			
	Layer (if observed)										
Type:											
Depth (in	ches):						Hydric Soil	Present?	Yes	No	•
Remarks:			<u> </u>								
rtomanto.											



Soil profile at DP19.



Vegetation at DP19, view is to northwest.



Vegetation at DP19, view is to east.



Vegetation at DP9, view is to west.

Project/Site:	Lot 4 (430 acre tract) Cit	y/County: Caddo Parish	Sampling Date:1/23/2013				
Applicant/Owner:	Franks Investment Company, l		State: La Sampling Point: DP20				
Investigator(s):	Alan Bickham Se		Sec 3; T16N-R13W				
Landform (hillslope, terrace, e	etc.): natural levee	cal relief (concave, convex					
Subregion (LRR or MLRA): L	RR O		93° 40' 25.55" W Datum: NAD83				
Soil Map Unit Name: (15) Ga		Long	NWI classification:				
			The state of the s				
N. 18870 W. 1866	itions on the site typical for this time of year?						
	, or Hydrology significantly dis		al Circumstances" present? Yes No				
Are Vegetation, Soil _	, or Hydrology naturally proble	ematic? (If needed,	explain any answers in Remarks.)				
SUMMARY OF FINDIN	GS - Attach site map showing s	ampling point locati	ons, transects, important features, etc.				
II. dan baria Vanadaria Bar							
Hydrophytic Vegetation Pres		Is the Sampled Area	•				
Hydric Soil Present? Wetland Hydrology Present	Yes No ? Yes No	within a Wetland?	Yes No				
Remarks:	res No						
Point taken in plowed field a	djacent to swale.						
HYDROLOGY							
Wetland Hydrology Indica	tors:		Secondary Indicators (minimum of two required)				
	n of one is required; check all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Marl Deposits (B15) (I	RR III					
Saturation (A3)	Hydrogen Sulfide Odo		Drainage Patterns (B10) Moss Trim Lines (B16)				
Water Marks (B1)	Oxidized Rhizosphere						
Sediment Deposits (B2)			Crayfish Burrows (C8)				
Drift Deposits (B3)	Recent Iron Reduction		Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)			Geomorphic Position (D2)				
Iron Deposits (B5)	Other (Explain in Rem		Shallow Aquitard (D3)				
Inundation Visible on A		,	FAC-Neutral Test (D5)				
Water-Stained Leaves	• , , ,		Sphagnum moss (D8) (LRR T, U)				
Field Observations:	*		_ , , , , , ,				
Surface Water Present?	Yes No Depth (inches): _						
Water Table Present?	Yes No Depth (inches): _						
Saturation Present?	Yes No Depth (inches): _		Hydrology Present? Yes No				
(includes capillary fringe)	90 (W) (C) (		300000000000000000000000000000000000000				
	ream gauge, monitoring well, aerial photos,		allable:				
í ,	NAIP imagery, USGS quadrangle map, LI	JAR. 					
Remarks: Saturation likely from recent	rain events.						
			· · · · · · · · · · · · · · · · · · ·				

VEGETATION (Four Strata) - Use scientific names of plants. DP20 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant Species Across All Strata: \_ (B) Percent of Dominant Species 50 \_\_\_ (A/B) That Are OBL, FACW, or FAC:  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$  $\blacksquare$ • Prevalence Index = B/A =  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators: **V** \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation \_\_ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: \_\_\_\_\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1. Festuca arundinaceus 60 yes 🔽 FAC 🔽 be present, unless disturbed or problematic. 2. Cynodon dactylon 20 yes ▼ FACU ▼ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub - Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 80 = Total Cover 50% of total cover: 40 20% of total cover: Woody Vine Stratum (Plot size: \_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_\_ No \_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

nches)			Red	ox Features	;				
<u> </u>	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>		Remarks
	5YR 3/4	95					clay		
						▼			
					_=	_=			
					▼				
						<b>V</b>			
						<u> </u>			
						_=			
					<b>V</b>				
						▼			
• •	•	•	educed Matrix, M			ins.			ing, M=Matrix.
/dric Soil In	idicators: (Appl	icable to all Li	RRs, unless othe	erwise note	(d.)		Indicators	for Problema	atic Hydric Soils <sup>3</sup> :
_ Histosol (/	A1)		Polyvalue B	elow Surfac	e (S8) (LF	RR S, T, L	l) 1 cm N	luck (A9) (LR	RO)
_ Histic Epip	pedon (A2)		Thin Dark S	urface (S9)	(LRR S, 1	Γ, U)	2 cm N	luck (A10) <b>(L</b> l	RR S)
Black Hist	tic (A3)		Loamy Mucl	ky Mineral (	F1) (LRR	O)	Reduc	ed Vertic (F18	B) (outside MLRA 150
Hydrogen	Sulfide (A4)		Loamy Gley	ed Matrix (	F2)		Piedm	ont Floodplain	Soils (F19) (LRR P,
Stratified I	Layers (A5)		Depleted Ma		,		— Anoma	lous Bright Lo	oamy Soils (F20)
	odies (A6) (LRR	P. T. U)	Redox Dark	, ,	6)			RA 153B)	, , ,
	ky Mineral (A7) (		Depleted Da	,	*		,	arent Material	(TF2)
	sence (A8) (LRR		Redox Depr		` '				Surface (TF12)
	k (A9) (LRR P, T		Marl (F10) (	,	,,			Explain in Re	
	Below Dark Surfa		Depleted O	,	MIDA 45	4 \	Other	Lxpiaiii iii ite	anaiks)
		ace (ATT)	Depleted Or		•	•	<b></b> 31		
•	k Surface (A12)	(BAL DA 450A)	_				•	-	ophytic vegetation and
	irie Redox (A16)			. , .	, ,	U)			y must be present,
-	ıcky Mineral (S1)	(LRR O, S)	Delta Ochrid					ess aisturbea	or problematic.
	eyed Matrix (S4)		Reduced Ve						
Sandy Re			Piedmont FI	•			•		
	Matrix (S6)		Anomalous	Bright Loan	ny Soils (F	20) <b>(MLR</b>	A 149A, 153C	, 153D)	
	ace (S7) (LRR P								
strictive La	ayer (if observed	d):							
Туре:									
Depth (inch	nes):						Hydric Soil	Present?	Yes No
marks:									
mants.									



Soil profile at DP20.



Vegetation at DP20, view is to south.



Vegetation at DP20, view is to northeast.



Vegetation at DP20, view is to west.



Vegetation at DP20, view is to north.

Project/Site:	Lot 4 (430 acre tract)	City/County: Cadd	o Parish	Sampling I	Date:1/23/2013			
Applicant/Owner:	Franks Investment Com	pany, LLC	State:	La Sampling F	Point: DP21			
Investigator(s):	Alan Bickham	Section, Township		NO. 100.000.000.000.000				
Landform (hillslope, terrace, e	etc.): natural levee				Slope (%):0-1			
Subregion (LRR or MLRA):	RR O Lat:	32° 22' 42.50" N	Long: 93° 4	40' 31.93" W	Datum: NAD83			
Soil Map Unit Name: (14) Ga				classification:				
Are climatic / hydrologic cond	itions on the site typical for this time of	of year? Yes N	No (If no, expl	ain in Remarks.)				
Are Vegetation, Soil _	, or Hydrology significa	antly disturbed?	Are "Normal Circumsta	ances" present? Y	es No			
Are Vegetation, Soil _	, or Hydrology naturally	y problematic?	(If needed, explain any	answers in Remar	·ks.)			
SUMMARY OF FINDIN	GS – Attach site map show	ring sampling poi	nt locations, tran	sects, importa	ınt features, etc.			
Hydrophytic Vegetation Pre- Hydric Soil Present? Wetland Hydrology Present Remarks:	Yes No			es No_				
	owed field adjacent to ponded area.							
HYDROLOGY								
Wetland Hydrology Indica	tors:		Secondar	y Indicators (minim	um of two required)			
	n of one is required; check all that app			ice Soil Cracks (B6)				
Surface Water (A1)	Aquatic Fauna			sely Vegetated Con				
High Water Table (A2)	Marl Deposits (			Drainage Patterns (B10)				
Saturation (A3)	Hydrogen Sulfi			Trim Lines (B16)	(00)			
Water Marks (B1)		spheres along Living R		Season Water Table	3 (C2)			
Sediment Deposits (B2)				fish Burrows (C8)	rial Imageny (CO)			
Drift Deposits (B3) Algal Mat or Crust (B4)		eduction in Tilled Soils (		ration Visible on Aei norphic Position (D2				
Iron Deposits (B5)	Other (Explain	1. 1.		ow Aquitard (D3)				
Inundation Visible on A	0	iii rtomarko)		Neutral Test (D5)				
✓ Water-Stained Leaves			_	gnum moss (D8) (L	RR T, U)			
Field Observations:				3 71				
Surface Water Present?	Yes No Depth (inc	:hes):3						
Water Table Present?	Yes No Depth (inc	:hes): surface						
Saturation Present? (includes capillary fringe)	Yes No Depth (inc	thes): surface	Wetland Hydrology	Present? Yes _	No			
	ream gauge, monitoring well, aerial p		tions), if available:					
·	NAIP imagery, USGS quadrangle m	nap, LIDAR.						
Remarks:								

VEGETATION (Four Strata) - Use scientific names of plants. DP21 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant Species Across All Strata: \_ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ \_\_\_\_0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) 5 yes 🔽 FACW🔽 FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_ 1. Celtis laevigata UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$ 2. \_\_\_\_\_ Column Totals: \_\_\_\_\_0 (A) \_\_\_  $\blacksquare$  $\blacksquare$ Prevalence Index = B/A = \_\_\_ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ \_\_\_\_  $\blacksquare$ **V** Hydrophytic Vegetation Indicators:  $\blacksquare$ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 5 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: <sup>1</sup>Indicators of hydric soil and wetland hydrology must 80 yes FAC 1. Festuca arundinaceus be present, unless disturbed or problematic. 2. Ambrosia trifida 20 yes 🔽 FAC  $\blacksquare$ Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ lacksquaremore in diameter at breast height (DBH), regardless of **V**  $\blacksquare$ Sapling/Shrub – Woody plants, excluding vines, less  $\blacksquare$ than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht.  $\blacksquare$ 100 = Total Cover 50% of total cover: \_\_\_\_50\_\_ 20% of total cover: \_\_ Woody Vine Stratum (Plot size: \_\_\_\_\_) 20 yes ▼ FAC ▼ 1. Campsis radicans  $\blacksquare$  $\blacksquare$ Hydrophytic 20 \_ = Total Cover Vegetation Yes \_\_\_\_ No \_\_\_\_ Present? 50% of total cover: 10 20% of total cover: Remarks: (If observed, list morphological adaptations below).

Profile Des	cription: (Describ	e to the dep	oth needed to docu	ment the	indicator	or confi	irm t	he absence	of indicators.)
Depth	Matrix	<del></del>	Color (moist)	ox Feature		Loc <sup>2</sup>	_	Texture	Remarks
<u>(inches)</u> 4	Color (moist) 5YR 3/3	95	5YR 4/1	- <u>%</u> 5	<u>Type'</u> RM☑	M 🔽	T 2	lay	Remarks
			311(4/1	- 5	- —		<b>=</b>		
16	5YR 3/3	_ 100					-	clay	
							<u> </u>		
					▼	~	<u> </u>		
						•			
						<b>_</b>	ī -		
					- <u>-</u>		- 1		
1		<del></del>					٠	2	
			=Reduced Matrix, M LRRs, unless othe			ains.			PL=Pore Lining, M=Matrix.  for Problematic Hydric Soils <sup>3</sup> :
_	`	cable to all	,		,	DD 6 T			-
Histosol	pipedon (A2)		Polyvalue B Thin Dark S		. , .		, u)		uck (A9) <b>(LRR O)</b> uck (A10) <b>(LRR S)</b>
	listic (A3)		Loamy Mucl						ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley			-,			ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		✓ Depleted Ma					Anomal	ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Dark	,	,			,	A 153B)
	ucky Mineral (A7) (I				. ,				rent Material (TF2)
	resence (A8) <b>(LRR</b> uck (A9) <b>(LRR P, T</b> )	•	Redox Depr Marl (F10) (		-8)				nallow Dark Surface (TF12) Explain in Remarks)
	d Below Dark Surfa		Nail (F10) (		(MIRA 1	51)		Other (	Explain in Remarks)
	ark Surface (A12)	(00 (/ (1 1 )	Iron-Mangar				P, T	) <sup>3</sup> Indica	ators of hydrophytic vegetation and
Coast P	Prairie Redox (A16)	(MLRA 150	A) Umbric Surf	ace (F13)	(LRR P, T	, U)		wetl	and hydrology must be present,
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochrid					unle	ss disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve					Ē.)	
	Redox (S5) d Matrix (S6)		Piedmont FI			•		•	453D)
	urface (S7) <b>(LRR P,</b>	S T III	Allomaious	DIIGIII LOS	iiiy Solis (	F20) (IVI	LKA	149A, 153C,	1550)
	Layer (if observed						Т		
Туре:	-	•							
	nches):							Hydric Soil	Present? Yes No
Remarks:									



Soil profile at DP21.



Vegetation at DP21, view is to northwest.



Vegetation at DP21, view is to northeast.



Vegetation at DP21, view is to southeast.



Vegetation at DP21, view is to west.

Project/Site:	Lot 4 (430 acre tract)	ity/County: Caddo Parish		Sampling Date:1/23/2013
Applicant/Owner:			State: La	Sampling Point: DP22
Investigator(s):	Alan Bickham S	ection, Township, Range: _		3; T16N-R13W
Landform (hillslope, terrace, e	etc.): natural levee Lo	ocal relief (concave, convex	, none): concave	Slope (%):0-1
Subregion (LRR or MLRA): LI	RR O <b>Lat</b> : 32°	22' 32.71" N Long:	93° 40' 37.37	" W Datum: NAD83
Soil Map Unit Name: (2) Armi				ation:
Are climatic / hydrologic condi	itions on the site typical for this time of year	? Yes No	(If no, explain in Re	marks.)
Are Vegetation, Soil _	, or Hydrology significantly di	isturbed? Are "Norma	al Circumstances" pr	resent? Yes No
Are Vegetation, Soil _	, or Hydrology naturally probl	lematic? (If needed,	explain any answers	s in Remarks.)
SUMMARY OF FINDIN	GS – Attach site map showing s	sampling point locati	ons, transects,	important features, etc.
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present?	Yes No	Is the Sampled Area within a Wetland?	Yes	No
Remarks: Point taken in low area of plo	owed field			
HYDROLOGY				
Wetland Hydrology Indicat				ors (minimum of two required)
	n of one is required; check all that apply)		Surface Soil C	
Surface Water (A1)	Aquatic Fauna (B13)			etated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (		Drainage Patt	
Saturation (A3)	Hydrogen Sulfide Od		Moss Trim Lin	
Water Marks (B1) Sediment Deposits (B2)		es along Living Roots (C3)	Crayfish Burro	Vater Table (C2)
Drift Deposits (B3)	Recent Iron Reductio			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (0		Geomorphic F	
Iron Deposits (B5)	Other (Explain in Rer		Shallow Aquit	
Inundation Visible on As			FAC-Neutral	
Water-Stained Leaves (	B9)		Sphagnum mo	oss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?	Yes No Depth (inches):			
Water Table Present?	Yes No Depth (inches):			
Saturation Present? (includes capillary fringe)	Yes No Depth (inches):		Hydrology Present	? Yes No
	ream gauge, monitoring well, aerial photos,		ailable:	
0	NAIP imagery, USGS quadrangle map, LI	IDAR. 		
Remarks:				

VEGETATION (Four Strata) - Use scientific names of plants. DP22 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 ft ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: lacksquare $\blacksquare$ Total Number of Dominant \_\_ (B) Species Across All Strata: Percent of Dominant Species 0 (A/B) That Are OBL, FACW, or FAC:  $\blacksquare$ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ 0 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30 ft ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_  $\blacksquare$ UPL species \_\_\_\_\_ x 5 = \_\_\_\_  $\blacksquare$  $\blacksquare$ Column Totals: \_\_\_\_\_ (A) \_\_\_  $\blacksquare$  $\blacksquare$ **V** Prevalence Index = B/A =  $\blacksquare$ 5. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Hydrophytic Vegetation Indicators: **V** \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation \_\_ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 0 = Total Cover \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_ Herb Stratum (Plot size: <sup>1</sup>Indicators of hydric soil and wetland hydrology must 60 1. Cynodon dactylon yes ▼ FACU ▼ be present, unless disturbed or problematic. 10 no 7 Festuca arundinaceus  $\blacksquare$  $\blacksquare$ FAC Definitions of Four Vegetation Strata: 3. Lamium amplexicaule **▼** FAC Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or  $\blacksquare$ more in diameter at breast height (DBH), regardless of **V**  $\blacksquare$  $\blacksquare$ Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless  $\blacksquare$ of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in heiaht. 75 \_ = Total Cover 50% of total cover: 37.5 20% of total cover: Woody Vine Stratum (Plot size: \_\_\_\_\_\_30 ft )  $\blacksquare$  $\blacksquare$ Hydrophytic 0 = Total Cover Vegetation Yes \_\_\_\_\_ No \_\_\_ Present? 50% of total cover: \_\_\_\_\_ 20% of total cover: \_ Remarks: (If observed, list morphological adaptations below).

Profile Desc	cription: (Describe	to the depth	needed to docur	nent the ii	ndicator c	or confirm	the absence	of indicato	rs.)		
Depth	Matrix			x Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>		Remarks		
16	5YR 3/4	100					clay				
						<u> </u>					_
						_=					
					_=						
						$\blacksquare$					
						$\blacksquare$					
					<del>-=</del>	_=					
					<b>T</b>	$\blacksquare$					
<sup>1</sup> Type: C=Ce	oncentration, D=Dep	oletion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ins.	<sup>2</sup> Location:	PL=Pore Li	ining, M=Matı	ix.	
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless othe	rwise note	d.)		Indicators	for Proble	matic Hydric	Soils <sup>3</sup> :	
Histosol	(A1)		Polyvalue Be	low Surfac	e (S8) <b>(Li</b>	RR S, T, U	I) 1 cm I/	luck (A9) <b>(L</b>	.RR O)		
Histic Ep	pipedon (A2)		Thin Dark Su	ırface (S9)	(LRR S, 1	Γ, U)	2 cm N	luck (A10) (	LRR S)		
Black Hi	stic (A3)		Loamy Muck	y Mineral (	F1) (LRR	O)	Reduce	ed Vertic (F	18) (outside	MLRA 1	50A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (I	F2)		Piedmo	ont Floodpla	ain Soils (F19	(LRR F	P, S, T)
Stratified	d Layers (A5)		Depleted Ma	trix (F3)			Anoma	lous Bright	Loamy Soils	(F20)	
Organic	Bodies (A6) (LRR F	P, T, U)	Redox Dark	,	*		•	(A 153B)			
	ıcky Mineral (A7) <b>(L</b>		Depleted Da	rk Surface	(F7)			rent Materi	` /		
	esence (A8) (LRR I	J)	Redox Depre		3)				Surface (TF	12)	
	ıck (A9) <b>(LRR P, T)</b>		Marl (F10) (L				Other (	Explain in F	Remarks)		
	d Below Dark Surfac	e (A11)	Depleted Oc		-	-	9				
	ark Surface (A12)	MI DA 450A)	Iron-Mangan				•	-	lrophytic vege		nd
	rairie Redox (A16) (			, , ,		U)		-	ogy must be p		
	Mucky Mineral (S1) (	LKK (), (5)	Delta Ochric		-	) A 450D\		ss disturbe	d or problema	atic.	
	Gleyed Matrix (S4) Redox (S5)		Reduced Ver								
	Matrix (S6)						эд) A 149A, 153C,	153D)			
	rface (S7) <b>(LRR P,</b> :	S T II)		Jingin Loui	19 00113 (1	20) (10121)	A 140A, 1000,	1550)			
	Layer (if observed)						1				
Type:		•									
	ches):						Hudria Sail	Dracant?	Yes	No	/
	unes)						nyunc 3011	FIESEILT	165	- 110_	
Remarks:											



Soil profile at DP22.



Vegetation at DP22, view is to east.



Vegetation at DP22, view is to south.



Vegetation at DP22, view is to north.



Vegetation at DP22, view is to west.