



Exhibit 22
Wetlands Determination

WETLAND DETERMINATION

**Point Houmas
Highway 18
Donaldsonville, Louisiana**

**REPORT DATE:
NOVEMBER 19, 2007**

PREPARED FOR:

DUPLANTIS
DESIGN GROUP, PC

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THIBODAUX, LOUISIANA 70301

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November 19, 2007

DUPLANTIS DESIGN GROUP, PC
314 East Bayou Road
Thibodaux, Louisiana 70301

Attention: Mr. Ricky Galloway

RE: Wetland Determination
Point Houmas
Donaldsonville, Ascension Parish, Louisiana
Aquaterra Project No. 9107337

Dear Mr. Galloway:

Aquaterra Engineering, LLC (Aquaterra) has conducted a Wetland Determination on an approximate 987-acre tract of land located along Highway 18 in Donaldsonville, Ascension Parish, Louisiana. The land consists of two areas separated by Highway 18: the Batture Area consisting of approximately 201 acres, and the Main Tract consisting of approximately 761 acres. The Batture Area is undeveloped, and the Main Tract is utilized agriculturally for sugar cane crops and cattle.


This wetland determination was performed to identify the potential presence of wetland(s), wetland habitat(s) and/or 'other waters of the US' at this site that may fall under United States Army Corps of Engineers (USACE) jurisdiction. This wetland determination and scope of work was approved by Mr. Ricky Galloway of Duplantis Design Group, PC.

Based on the findings of our site reconnaissance and our review of available published information as part of this Wetland Determination, Aquaterra has identified wetland habitats within the Batture Area. This preliminary determination has identified potential wetland habitat and if avoidance of this area cannot be incorporated into project development plans, then a full delineation report should be developed and submitted to the USACE for review and issuance of a Jurisdictional Determination (JD) that will identify the regulated wetland habitat(s).

Aquaterra appreciates the opportunity to provide this information to Duplantis Design Group, PC. If you have any questions or require additional information, please feel free to call.

Sincerely,
AQUATERRA ENGINEERING, LLC


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1.0 INTRODUCTION

Aquaterra Engineering, LLC (Aquaterra) was contracted by Duplantis Design Group, PC (Duplantis) to perform wetland determination services on an approximate 987-acre tract of land located along Highway 18 in Donaldsonville, Ascension Parish, Louisiana. This report documents Aquaterra's services to identify wetland habitat and/or jurisdictional waters that may necessitate permits from the United States Army Corps of Engineers (USACE) prior to development activities. The site is primarily utilized agriculturally for sugar cane crops and cattle.

This wetland determination report was prepared for Duplantis to determine the potential presence of wetlands on the subject property as defined in Section 404 of the Clean Water Act (formerly known as the Federal Water Pollution Control Act, 33 U.S.C. 1344). Aquaterra's findings are based on the review of aerial photographs, topographic maps, NRCS soil survey, National Wetland Inventory (NWI) maps, as well as other published information. Additionally, Aquaterra conducted a site reconnaissance to collect site specific vegetation, soil and hydrology data pertinent to identifying wetland habitat and/or jurisdictional waters. However, the findings presented herein should be considered preliminary until such time that the extent of wetlands can be delineated.

1.1 Site Location and Description

The subject parcel is situated along Highway 18 in Donaldsonville, Ascension Parish, Louisiana; specifically located with an approximate center latitude of 30° 06' 59.8" North and longitude of 90° 55' 55.9" West. The site encompasses two areas separated by Highway 18; the main portion of the property is located south of Highway 18, and the Batture Area is located between Highway 18, a levee and the Mississippi River. A map identifying the general location of the subject property is presented as Figure 1. The main portion of the site located south of Highway 18, has three distinct uses. The majority is utilized as a sugar cane field; the southernmost area can be described as pasture for cattle; and a small portion of the property is developed with residential structures. The Batture Area is undeveloped and heavily vegetated. Figure 2 depicts the layout of the site, and photographs of the site are included in Appendix A.

1.2 Scope of Work and Methodology

The wetland determination methods used in this report generally follow the procedures outlined in Part IV of the Corps of Engineers Wetlands Delineation Manual, dated 1987, including subsequent revisions through year 1997. Additionally, recent proposed changes due to *Rapanos and Carabell* have been reviewed and implemented as appropriate; however the general procedures of this wetland delineation were performed in accordance with the 1987 guidance. Sources of information utilized in this preliminary wetland delineation included the following:

- United States Geological Survey (USGS) Topographic Maps
- Soil classification information from the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS)

- Aerial photographs (obtained from LSU Cartographic Information Center (LSU CIC) and Environmental Data Resources (EDR), and the Louisiana Department of Natural Resources (LDNR) Strategic Online Natural Resources Integrated Systems (SONRIS))
- National Wetlands Inventory (NWI) map
- Site reconnaissance

1.3 Limitations

The findings and conclusions contained in this report are based on conditions observed at the time of the site reconnaissance; "good faith" reliance upon information gathered from the records and sources identified above, the information reasonably ascertainable within the time and cost constraints for the project, and the limitations of the procedures and methodologies utilized.

Based on these limitations, this report cannot be construed as a warranty that no wetland permitting issues or problems remain undiscovered, or that the United States Army Corps of Engineers (USACE) will concur with the findings presented herein. The only warranty made by us in connection with the services provided, is that we have used that degree of care and skill ordinarily exercised under similar conditions by reputable members of our profession practicing in the same or similar locality. No other warranty, expressed or implied, is made or intended.

2.0 WETLAND DETERMINATION

The wetland determination consisted of reviewing information available to the public: NRCS soil survey data, aerial photographs, topographic maps, NWI map, and other sources as deemed necessary. Additionally, in accordance with the USACE Wetland Delineation Manual, a site reconnaissance was performed to identify site specific wetland habitat data.

2.1 Data Review

2.1.1 Topographic Maps

Historical Topographic maps dating 1939, 1962, 1981, 1994, and 1999 were reviewed. The site was depicted on the Donaldsonville, LA 15-Minute quadrant; and on both the Donaldsonville and Gonzales, LA 7.5-Minute quadrants. A portion of the 1999 USGS 7.5-minute series Topographic Map is provided as Figure 1. These topographic maps were reviewed to help in determining low-lying areas and drainage patterns on the site. The topographic maps indicated a lower lying area at the southernmost portion of the site. The topographic gradient within the main portion of the property appears to be toward the south. Within the Batture area, the topographic maps depict the area as predominantly wooded with multiple lagoons.

2.1.2 NWI Maps

In 1981, NWI maps were prepared by the U.S. Department of Interior Fish and Wildlife Service, based on stereoscopic analysis of aerial photographs (not by actual field verification). NWI maps are useful in determining areas which should be investigated for potential wetlands. A review of the NWI map for this site (see Figure 3) revealed multiple wetland habitats throughout the property. Two areas located within the main portion of the property were identified as Freshwater Forested/Shrub Wetlands, and were located on the southwestern portion of the property, and within the wooded tract along the west of Highway 18. These areas were indicated to be temporarily flooded during the growing season, with partial drainage as a result of extensive drainage ditches. Based on the site reconnaissance, Aquaterra does not believe these areas to be wetlands.

The majority of the Batture was indicated to be wetland habitat. The area along the Mississippi River, to the east and west of the point, and an area adjacent to the levee, was indicated to be Emergent Persistent wetland habitats, revealing that the vegetation is dominated by species that remain throughout the growing/ wet season through the next growing season. The area adjacent to the levee was indicated to have altered hydrology based on the human-induced impoundments. The remainder of the Batture Area depicted to be wetland habitat was indicated to be forested and temporarily flooded during the growing season. The presence of wetland habitat along the Mississippi River, and in the low lying areas within the Batture, was confirmed during the site reconnaissance.

2.1.3 Aerial Photos

Historical Aerial photographs dated 1941, 1953, 1957, 1975, 1978, 1983, 1990, 1998, 2004, and 2005 were reviewed to aid in the determination of land use, general type and aerial extent of plant communities, and degree of potential inundation of the area. Based on review of these photos, it appears that use of the main portion of the site was primarily

agricultural with row crops dating back to 1941. The southernmost portion of the site appeared to not contain row crops, but remained naturally vegetated. Constructed drainage ditches throughout the main portion of the property were observed in all of the photographs. Tree lines were observed along the drainage ditches in the southern portion of the site beginning in 1990. Wooded areas first appeared in the 1975 aerial photograph along the southwestern property boundary and in the eastern portion of the property. The Batture area appeared to be predominantly heavily vegetated, with visible paths and lagoons dating back to 1941.

2.1.4 Soil Survey

Information presented in the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey, indicated seven different soil map units on-site. A copy of the NRCS Soil Survey map depicting the soil map units on-site is included as Figure 4. The southern portion of the site containing the pasture area and some of the crop area is indicated to be Sharkey soils with a clay texture or a silty clay loam texture. Sharkey soils are classified with poor to very poor drainage, with very slow permeability. Sharkey clay and Sharkey silty clay loam soils are listed on the hydric soils list (updated February 2007) for Ascension Parish for floodplains. Observation Points T-1, T-2 and T-3 were located within the Sharkey clay soils.

Commerce soils with a silt loam and silty clay loam texture are located adjacent to the Sharkey soils and Highway 18. Commerce soils are somewhat poorly drained with moderately slow permeability. Commerce soils are not listed on the hydric soils list for Ascension Parish.

Approximately 20.6 acres located near the western portion of the site east of Highway 18, was indicated to be Vacherie silt loam soil. Vacherie soils are somewhat poorly drained, with very slow permeability. Vacherie soils are not listed on the hydric soils list for Ascension Parish.

The remainder of the property was indicated to consist of Convent soils. Within the main portion of the site, approximately 148 acres was indicated to be Convent silt loam, while the entire Batture area was classified as Convent soils, frequently flooded. Convent soils are somewhat poorly drained with moderate permeability. Convent silt loam soils are not listed on the hydric soils list for Ascension Parish. However, the Convent soil, frequently flooded, as indicated for the Batture Area, was listed on the hydric soils list for Ascension Parish floodplains. Observation Points T-4, T-5 and T-6 were located within the area designated as Convent soil, frequently flooded.

2.2 Site Reconnaissance

Site reconnaissance activities were performed on October 31, 2007 and November 5, 2007 by Aquaterra personnel. The site can be divided into three areas based on vegetation communities and a developed area utilized for residences and machinery associated with the agriculture. The majority of the site, approximately 50%, is planted with sugar cane crop, with fields in various stages of development. Approximately 25% of the site is considered pasture with field grasses. The pasture area does contain some large trees within the constructed drainage ditches. The third area is wooded with hardwood trees and an understory of herbaceous vegetation and vines. This wooded area, is predominantly located within the Batture (approximately 20% of the site), with 3% of woods on the main property.

Based on the desktop review of published information prior to the site reconnaissance, the site was divided into two classifications, suspect wetland and non-suspect wetland. During the site reconnaissance, a visual inspection of non-suspect wetland areas was conducted, to confirm the lack of wetland characteristics; this area consisted of the residential developed area and the sugar cane fields (See Appendix A, Photographs 1 through 4).

In the suspect wetland areas, determined from the desktop review, the soils, vegetation, and hydrology were observed and recorded to determine the potential presence of wetland habitat(s). Field notes were recorded on standard forms and included herein as Appendix B. Six observation points were randomly selected in different vegetation communities within the suspect wetland areas. At each observation point, dominant vegetation was noted, and hydrology indicators were recorded. Additionally, a pit was excavated to a depth of approximately 15 to 24 inches below ground surface (bgs) to observe the soil horizons.

During the site reconnaissance, areas which displayed dominant wetland characteristics were only visually observed. Within the Batture, there were numerous low lying areas which displayed classic characteristics of wetland habitat (See Appendix A, Photographs 5 through 8). Fringe wetland habitat was also located adjacent to the lagoons within the Batture (See Appendix A, Photograph 9).

2.3 Vegetation

At the time of the site reconnaissance, the vegetation in the pasture area consisted on predominantly field grasses with larger shrubs and trees along the ditches. Observation point T-2 was located within this grassy pasture area (See Appendix A, Photograph 10). Observation points T-1 and T-3 were located within two areas wooded tracts with an understory within the designated pasture area. Sugar cane crops with some herbaceous vegetation along the main drainage ditches were observed throughout the majority of the site (50%). Within the Batture, the vegetation was wooded with a thick understory. Stands of willow trees (*Salix*) were observed fringing the Mississippi River.

At the location of each observation point, as identified on Figure 3, an area approximately 30 feet on each side of the transect was assessed to determine plant species and growth density. The following discussion outlines the identified wetland indicator vegetation present at each observation point location.

1) Observation Point T-1

Vegetation at this location primarily consisted of herbaceous, shrub/sapling and tree stratum plants, and was within a wooded area. The dominant herbaceous was Poison Oak (*Toxicodendron*), a facultative upland indicator species. The sapling/shrub stratum was dominated by facultative upland indicator vegetation; Sassafras (*Sassafras albidum*) and Poison Oak. The tree stratum was dominated by three species with different wetland indicators. Water Oak (*Quercus nigra*) is a facultative wetland species; Sugar Maple (*Acer saccharum*) is a facultative upland species; and Sugarberry (*Celtis laevigata*) is a facultative wetland species.

The dominant plant species are not supportive of wetland habitat.

2) Observation Point T-2

This observation point was located in a topographically low area where the vegetation consisted of herbaceous stratum. The dominant plants were indicated to be

facultative, facultative wetland, and facultative upland species. Dominant species included: tievine (*ipomoea cordataotrilioba*), Common aster, Royal Flatsedge (*cyperus elegans*), Sanbur (*cenchrus*), bristlegrass (*setaria parviflora*), and October flower (*polygonella polygana*).

The dominant plant species are somewhat supportive of wetland habitat; however no obligate species were identified.

3) Observation Point T-3

This observation point was located in a wooded area, consisting of herbaceous, shrub/sapling and tree stratum. The dominant herbaceous species was *Zephyranthes atamasca*, a facultative wetland species. The sapling/ shrub stratum was mixed with a facultative species, Water Oak; and with a facultative upland species; Sassafras. The tree stratum had facultative plus, and facultative wetland indicator species; Sugarberry and the Pecan Tree (*Carya illinoensis*).

The dominant plant species are somewhat supportive of wetland habitat; however no obligate species were identified.

4) Observation Point T-4

This observation point was located in a topographically low area where the vegetation consisted of herbaceous stratum within the Batture. The dominant plants were indicated to be facultative species; Poison Ivy, Field bindweed (*convolvulus arvensis*), Lady Fern (*athyrium filliz-femia*), and Virginia Creeper (*Paclhenocissus quinquefolia*).

The dominant plant species are somewhat supportive of wetland habitat; however no obligate species were identified.

5) Observation Point T-5

This observation point was located adjacent to Observation Point T-4 on a ridge, and consisted of mixed herbaceous and tree vegetation. The dominant herbaceous plants were indicated to be facultative species; Poison Ivy, and Lady Fern. The dominant trees were indicated to be facultative plus and facultative wetland minus species; Cottonwood (*populus*) and American Sycamore (*Platanus occidentalis*).

The dominant plant species are somewhat supportive of wetland habitat; however no obligate species were identified.

6) Observation Point T-6

This observation point was located in a topographically high area where the vegetation community was wooded with an understory. The dominant herbaceous plants were indicated to be facultative species and facultative upland species; Virginia Creeper, Cocklebur (*xanthium strumarium*), and Snakeroot (*ageratina altissima*). The dominant sapling species, Sugarberry, is a facultative wetland indicator species. The tree stratum consisted of sugarberry and Cottonwood, facultative wetland and facultative plus indicator species.

The dominant plant species are somewhat supportive of wetland habitat; however no obligate species were identified.

The vegetation encountered at observation point T-1, was not supportive of a wetland, with facultative upland indicator species dominating. Vegetation encountered at all other observation points are somewhat indicative of a wetland, although none of the dominant

species encountered were obligate¹ wetland indicators with a mixture of facultative wetland and upland indicator species.

2.4 Soils

The following discussion identifies the soil properties specific to wetland determinations for the soil horizons encountered at each observation point as identified on Figure 2.

1) Observation Point T-1

Soil horizon O₂ was encountered from ground surface to approximately 1 inch bgs and consisted of black (7.5YR 2.5 /1) topsoil with organic material. Soil horizon A₂ was encountered from 1 inch to 15 inches bgs, and consisted of a dark gray (7.5YR 4/1) firm clay which transitioned to a gray (10YR 5/1) hue around 6 inches bgs. No hydric soil indicators were observed.

This soil regime is not typical of a wetland.

2) Observation Point T-2

Soil horizon A₁ was encountered from ground surface to approximately 6 inches bgs and consisted of a dark gray (7.5YR 4/1) silty clay, with no roots or mottling encountered. A dark gray (5Y 4/1) soft silty clay within soil horizon A₂ was encountered from 6 inches to approximately 24 inches bgs, with approximately 5% brown (7.5YR 4/4) mottling. No hydric soil indicators were observed.

This soil regime is not typical of a wetland.

3) Observation Point T-3

Soil horizon A₂ was encountered from ground surface to approximately 15 inches bgs and consisted of a dark gray (7.5YR 4/1) silty clay, with approximately 15% strong brown (7.5YR 5/6) mottles from 7 to 15 inches bgs. No hydric soil indicators were observed.

This soil regime is not typical of a wetland.

4) Observation Point T-4

Soil horizon O₂ was encountered from ground surface to approximately 2 inches bgs and consisted of a very dark grayish brown (10YR 3/2) topsoil. Soil horizon A₂ was encountered from 2 to 16 inches bgs, and consisted of a dark greenish gray (GLEY 1 4/10Y) silty clay with approximately 10-15% of yellowish red (5YR 4/6) mottles.

This soil regime is typical of a wetland.

5) Observation Point T-5

Soil horizon A₂ was encountered from ground surface to approximately 16 inches bgs. A dark grayish brown (10YR 4/2) stiff silty clay was encountered from ground surface to 8 inches bgs. Approximately 2 inches of a brown (10YR 4/3) sandy clay followed, with a brown (10YR 4/3) clayey sand continued until 16 inches bgs. No hydric soil indicators were observed.

¹ Wetland vegetation is classified as "obligate" (OBL), "facultative wetland" (FACW or FAC+), "facultative" (FAC), and several subdivisions thereof with OBL being the most representative of a wetland, and decreasing respectively to FAC and FAC-. Other vegetation is supportive of uplands and classified as "UPL".

This soil regime is not typical of a wetland.

6) Observation Point T-6

Soil horizon O₂ was encountered from ground surface to approximately 2 inches bgs and consisted of a very dark gray (7.5YR 3/1) topsoil. An A2 soil horizon consisting of a brown (7.5YR 4/2) silty clay was encountered from 2 inches to 16 inches bgs. No hydric soil indicators were observed.

This soil regime is not typical of a wetland.

The soils encountered at T-4 had multiple indicators of hydric soils, and were thus indicative of a wetland. The soils encountered at all other observation points were not indicative of a wetland soil. There was some mottled soil observed, however the mottles were not within a gleyed matrix or other indicator of a reducing² soil environment.

2.5 Hydrology

During the site walkover and specifically at the location of each observation point test pit, the ground surface was inspected for indications specific to wetland hydrology. The hydrology within the main portion of the site is controlled by constructed drainage ditches, observed throughout the sugar cane fields and pasture areas. In the Batture, distinct gullies were observed with no distinct pattern, no standing water was observed in the gullies during the site reconnaissance (See Appendix A, Photograph 11). Observation Point T-4 was located within a gully. Numerous drainage swales were observed extending from the toe of the levee towards the Mississippi River. Multiple lagoons were observed within the Batture, with standing water (See Appendix A, Photograph 9).

The following discussion outlines the wetland hydrology indicators observed at each observation point location as identified on Figure 2.

1) Observation Point T-1

No primary or secondary wetland hydrology indicators were observed. No surficial water or evidence of surficial water was observed. Free water did not accumulate in the test pit, nor was saturated soil observed in the test pit.

The lack of primary hydrologic indicators does not support this area being a wetland.

2) Observation Point T-2

No primary or secondary wetland hydrology indicators were observed. No surficial water or evidence of surficial water was observed. Free water did not accumulate in the test pit, nor was saturated soil observed in the test pit.

The lack of primary hydrologic indicators does not support this area being a wetland.

3) Observation Point T-3

No primary wetland hydrology indicators were observed. No surficial water or evidence of surficial water was observed. Free water did not accumulate in the test pit, nor was saturated soil observed in the test pit.

The lack of primary hydrologic indicators does not support this area being a wetland.

² Wetland soils are normally found within a reducing soil environment as opposed to an oxidizing environment. Typically reducing environments are also low pH environments.

4) Observation Point T-4

This observation point was located within a visible gully, and did display characteristics of wetland drainage, a primary wetland hydrology indicator. This gully displayed characters of holding water during wet periods based on the drainage pattern visible, and the erosion of the side walls. Secondary wetland indicators included oxidized root channels in the upper 12 inches, and water stained leaves. No surficial water was observed during the site reconnaissance; free water did not accumulate in the test pit, nor were saturated soils observed.

The primary and secondary hydrologic indicators present support this area being a wetland.

5) Observation Point T-5

No primary wetland hydrology indicators were observed. No surficial water or evidence of surficial water was observed. Free water did not accumulate in the test pit, nor was saturated soil observed in the test pit.

The lack of primary hydrologic indicators does not support this area being a wetland.

6) Observation Point T-6

No primary wetland hydrology indicators were observed. No surficial water or evidence of surficial water was observed. Free water did not accumulate in the test pit, nor was saturated soil observed in the test pit.

The lack of primary hydrologic indicators does not support this area being a wetland.

Observation point T-4 revealed primary and secondary wetland indicators, supporting the presence of a wetland. None of the other observation points revealed primary or secondary hydrologic indicators. The lack of primary hydrologic indicators and secondary hydrologic indicators in the vicinity of these observation points does not support the presence of a wetland in these areas.

3.0 SUMMARY OF FINDINGS

The subject site was assessed to determine the potential presence of wetlands and wetland habitat. Based on the scope of work for this wetland determination, Aquaterra did identify the presence of wetlands and wetland habitat within the Batture Area. Predominant wetland characteristics were observed as fringe wetlands along the Mississippi River, and throughout the gullies and topographic lows. The topographic higher areas within the Batture area did not display prominent wetland characteristics.

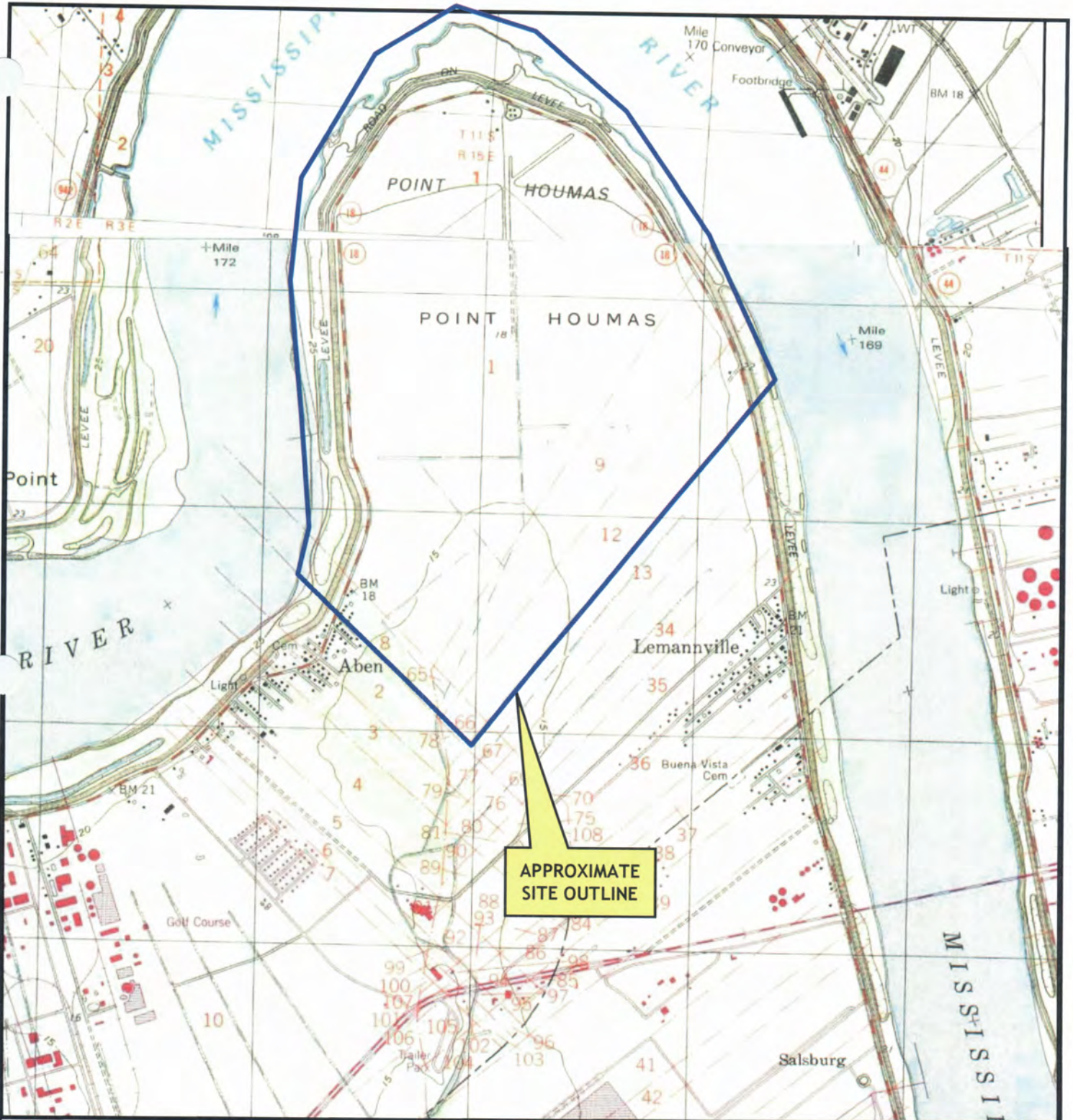
Aquaterra has not identified the presence of wetlands or wetland habitats within the main portion of the property (located south of Highway 18) consisting of the Pasture and Sugar Cane areas. Although vegetation that can be somewhat supportive of wetland habitat was discovered at the observation points within these areas, no hydric soils or wetland hydrology was encountered. The hydrology within this portion of the site is controlled by the constructed drainage ditches utilized for agricultural purposes, dating back to at least 1941.

Aquaterra has identified potential wetland habitat within the Batture Area. This preliminary wetland determination did not identify any wetland habitat with the main portion of the site. Therefore, development would not impact wetlands or wetland habitat if it is limited to the main property (not including the Batture Area). Based on these findings, Aquaterra offers the following recommendations:

- If avoidance of the Batture Area in development plans is not possible, a full delineation report should be developed and submitted to the USACE for review and jurisdictional determination (JD). Aquaterra can assist Duplantis with the delineation of the Batture Area, and preparation and submittal of the necessary paperwork requesting a JD from the USACE.



FIGURES



APPROXIMATE
SITE OUTLINE



Reference: USGS 7.5 Minute Topographic Map
Donaldsonville, LA Quadrangle
1999 Edition

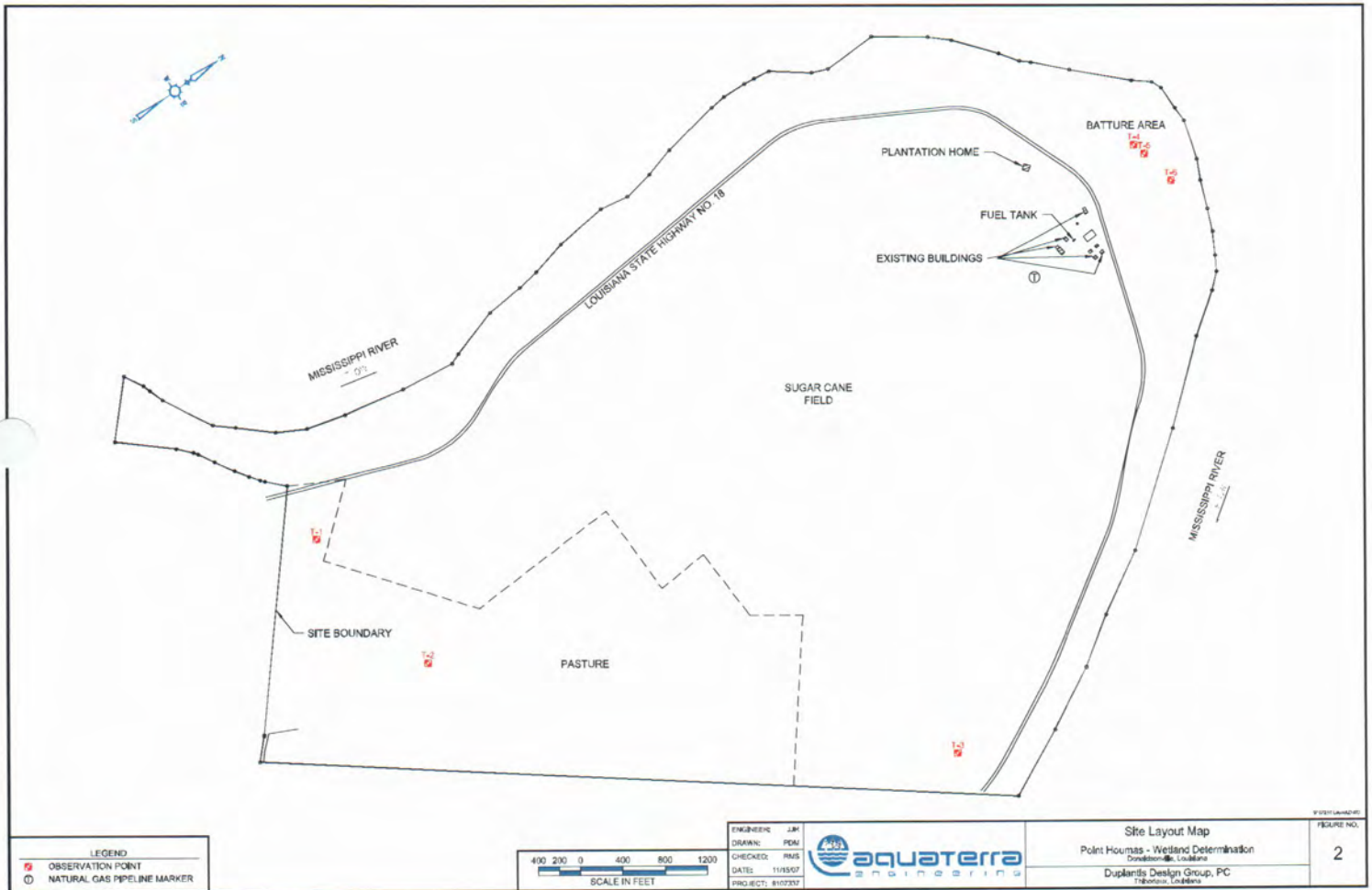
1999 TOPOGRAPHIC MAP

Phase I Environmental Site Assessment
Point Houmas
Donaldsonville, Louisiana

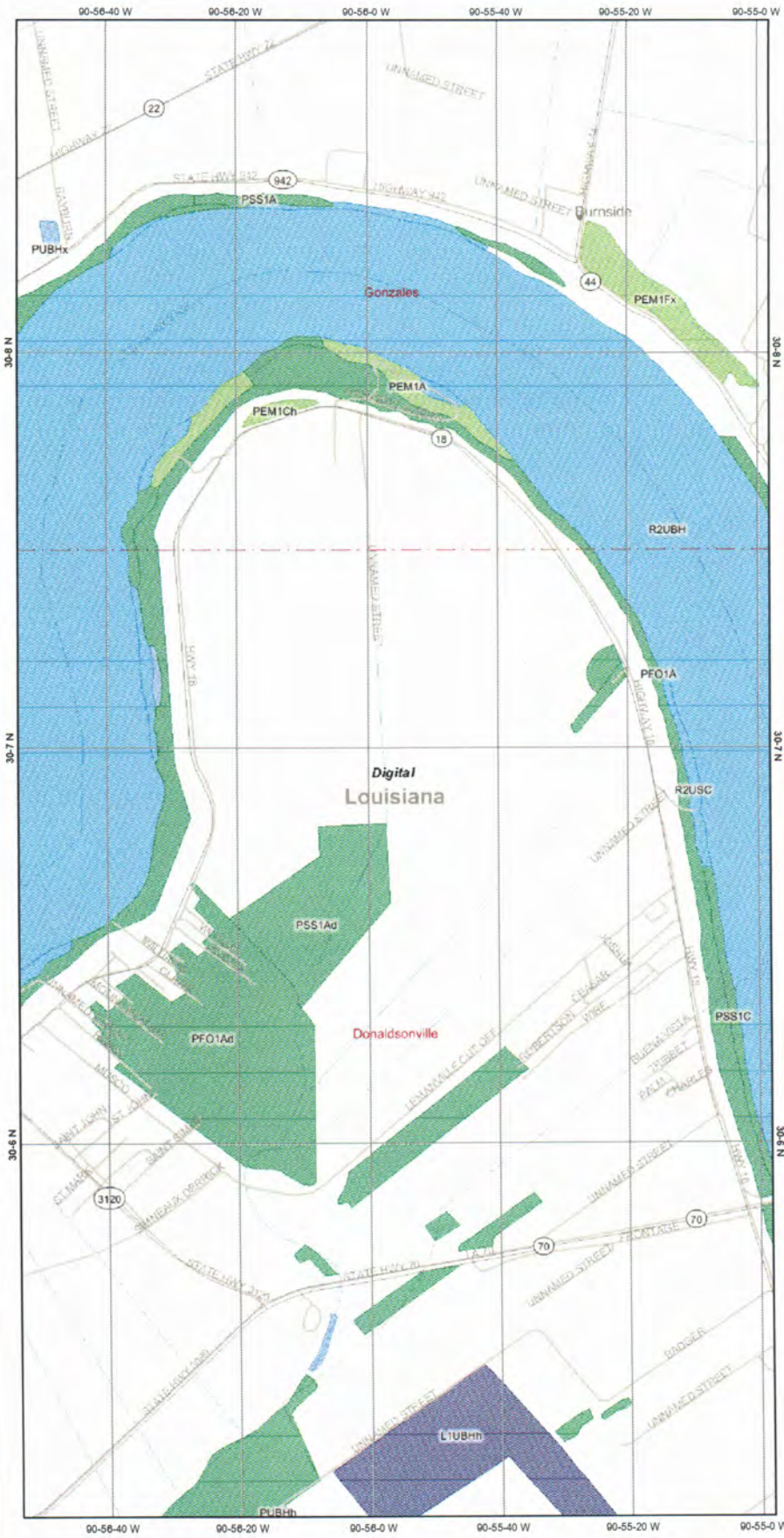
Project No.
9107337



Fig No.
1



Internet Mapping Framework



Legend

- CONUS_wet_scan**
- 0
 - 1
 - Out of range
 - Interstate
 - Major Roads
 - Other Road
 - Interstate
 - State highway
 - US highway
 - Roads
 - Cities
 - USGS Quad Index 24K
 - Lower 48 Wetland Polygons
 - Estuarine and Marine Deepwater
 - Estuarine and Marine Wetland
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Lake
 - Other
 - Riverine
 - Lower 48 Available Wetland Data
 - Non-Digital
 - Digital
 - No Data
 - Scan
 - NHD Streams
 - Counties 100K
 - States 100K
 - South America
 - North America

Map center: 30° 6' 57" N, 90° 55' 56" W



Scale: 1:19,605

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Figure
3



MAP LEGEND

- Area of Interest (AOI)
 - Area of Interest (AOI)
- Soils
 - Soil Map Units
- Special Point Features
 - Blowout
 - Borrow Pit
 - Clay Spot
 - Closed Depression
 - Gravel Pit
 - Gravelly Spot
 - Landfill
 - Lava Flow
 - Marsh
 - Mine or Quarry
 - Miscellaneous Water
 - Perennial Water
 - Rock Outcrop
 - Saline Spot
 - Sandy Spot
 - Severely Eroded Spot
 - Ditch/Levee
 - Slide or Slip
 - Sodic Spot
 - Spoil Area
 - Stony Spot
- Special Line Features
 - Ditch
 - Short Steep Slope
 - Other
- Political Features
 - Municipalities
 - Cities
 - Urban Areas
- Water Features
 - Oceans
 - Streams and Canals
- Transportation
 - Rails
- Roads
 - Interstate Highways
 - US Routes
 - State Highways
 - Local Roads
 - Other Roads



Map Unit Symbol	Map Unit Name
Cm	Commerce silt loam
Co	Commerce silty clay loam
Cs	Convent silt loam
CV	Convent soils, frequently flooded
Sa	Sharkey silty clay loam
Sc	Sharkey clay
Va	Vachere silt loam
W	Water



Soil Map
 Point Houmas
 Donaldsonville, Ascension Parish, Louisiana
 Duplantier Design Group, PC
 Thibodaux, Louisiana

FIGURE NO. 4



APPENDIX A
Photographic Record



Photograph 1: View south along main road on property.



Photograph 2: View of sugar cane crop.



Photograph 3: View of vegetated drainage ditch.



Photograph 4: View of drainage between crop rows.



Photograph 5: View of Willow stand along Mississippi River.



Photograph 6: View of wetland habitat along the Mississippi River.



Photograph 7: View of low lying wetland habitat.



Photograph 8: View of cracked soils in low lying area.



Photograph 9: View of lagoon and surrounding wetland habitat..



Photograph 10: View of vegetated pasture area.



Photograph 11: View of a gully extending toward the Mississippi River.



APPENDIX B
Field Notes

Wetland Determination
Duplantis Design Group
Point Houmas - Highway 18
Donaldsonville, Ascension Parish, Louisiana

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

T-1

Project/Site: <u>Point Houmas</u> Applicant/Owner: _____ Investigator: <u>J. Rury</u>	Date: <u>10.31.07</u> County: <u>Ascension</u> State: <u>Louisiana</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: <u>wooded</u> Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>water oak (Quercus nigra)</u>	<u>T</u>	<u>FAC</u>	9. _____	_____	_____
2. <u>Sagittaria albidum</u>	<u>S</u>	<u>FACU</u>	10. _____	_____	_____
3. <u>Poison Oak (Toxicodendron)</u>	<u>H</u>	<u>FACU</u>	11. _____	_____	_____
4. <u>Poison oak (Toxicodendron)</u>	<u>S</u>	<u>FACU</u>	12. _____	_____	_____
5. <u>Sugar maple (Acer saccharum)</u>	<u>T</u>	<u>FACU</u>	13. _____	_____	_____
6. <u>Sugar berry (Celtis laevigata)</u>	<u>T</u>	<u>FACW</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

"Percent of Dominant Species that are OBL, FACW or FAC" 2/6
 (excluding FAC-).

Remarks:
FACU dominant in herb & shrub/sapling
Tree stratum mixed. Overall dominance non-wetland

HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>—</u> (in.) Depth to Free Water in Pit: <u>—</u> (in.) <u>(15mm)</u> Depth to Saturated Soil: <u>—</u> (in.)	

Remarks:
NO hydrology features.

T-1

SOILS

Map Unit Name (Series and Phase): <u>Sharkey clay</u>		Drainage Class Field Observations Confirm Mapped Type?	<u>poor</u>	Yes	No
Taxonomy (Subgroup)					

Profile Descriptions:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-1	O ₂	7.5 YR 2.5/1	—		organic - hard set top soil
1-10	A	7.5 YR 4/1	—		firm clay #1
10-15	A	10 YR 5/1	—		firm clay

Hydric Soil Indicators:	
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input checked="" type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)

Remarks
 Sharkey clay is listed on ^{Feb} 2007 Hydric list for floodplains in Ascension Parish, no field observations to support hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	<input type="radio"/> No <input checked="" type="radio"/> (Circle)	Is this Sampling Point Within a Wetland?	Yes	<input type="radio"/> No <input checked="" type="radio"/> (Circle)
Wetland Hydrology Present?	Yes	<input type="radio"/> No <input checked="" type="radio"/> (Circle)		Yes	<input type="radio"/> No <input checked="" type="radio"/> (Circle)
Hydric Soils Present?	Yes	<input type="radio"/> No <input checked="" type="radio"/> (Circle)		Yes	<input type="radio"/> No <input checked="" type="radio"/> (Circle)
Remarks					

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

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Project/Site: <u>Point Houmas</u> Applicant/Owner: _____ Investigator: <u>J. Rury</u>	Date: <u>10.31.07</u> County: <u>Ascension</u> State: <u>Louisiana</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: <u>Pasture</u> Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>tievine (ipomoea cordatotriloba)</u>	<u>H</u>	<u>FACU</u>	9. _____	_____	_____
2. <u>ASTER</u>	<u>H</u>	<u>FAC</u>	10. _____	_____	_____
3. <u>Royal Peltandra (cyperus elegans)</u>	<u>H</u>	<u>FACW</u>	11. _____	_____	_____
4. <u>Sandbar (cernuus)</u>	<u>H</u>	<u>FAC-</u>	12. _____	_____	_____
5. <u>Bristlegrass (setaria parviflora)</u>	<u>H</u>	<u>FAC</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. <u>October Flower (polygonella polygona)</u>	<u>H</u>	<u>-</u>	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

"Percent of Dominant Species that are OBL, FACW or FAC"
 (excluding FAC-).

Remarks:

Dominant vegetation could support wetland, but no obligate species were observed.

HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input checked="" type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks:

Some cracks in soil observed. no other hydrology indicators.

SOILS

Map Unit Name (Series and Phase): snarkey clay Drainage Class poor
 Taxonomy (Subgroup) _____ Field Observations _____
 Confirm Mapped Type? Yes No

Profile Descriptions:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-10	A	10YR 4/1	—	—	Soft to firm clay
10-24	A	7.5Y 4/1	7.5YR 4/4	5%	Soft clay

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input checked="" type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks
 Listed on Feb 2007 Hydric List for floodplains in Ascension Parish, no field observations to support hydric status.
 soils moist > 18" bgs.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)	Is this Sampling Point Within a Wetland?	Yes <input checked="" type="radio"/> No (Circle)
Wetland Hydrology Present?	Yes <input checked="" type="radio"/> No (Circle)		
Hydric Soils Present?	Yes <input checked="" type="radio"/> No (Circle)		

Remarks

DATA FORM
ROUTINE WETLAND DETERMINATION
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Project/Site: <u>Point Houmas</u> Applicant/Owner: _____ Investigator: <u>J RURY</u>	Date: <u>10.31.07</u> County: <u>Ascension</u> State: <u>Louisiana</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: <u>wooded</u> Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Zephyranthes atamasca</u>	<u>H</u>	<u>FACW</u>	9. _____	_____	_____
2. _____	_____	_____	10. _____	_____	_____
3. <u>wateroak</u>	<u>S</u>	<u>FAC</u>	11. _____	_____	_____
4. <u>Sassafras</u>	<u>S</u>	<u>FACU</u>	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. <u>Sugarberry</u>	<u>T</u>	<u>FACW</u>	14. _____	_____	_____
7. <u>Pecan (carya illinensis)</u>	<u>T</u>	<u>FAC+</u>	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

"Percent of Dominant Species that are OBL, FACW or FAC" 4/5
 (excluding FAC-).

Remarks:
no obligate species observed.

HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><u>X</u> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12 Inches</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	

Remarks:
No hydrology features

SOILS

Map Unit Name (Series and Phase): Sharkey Silty Clay Loam Drainage Class: poor

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes No

Profile Descriptions:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-7	A	7.5YR 4/1	—	—	Silty clay
7-15	A	7.5YR 4/1	7.5YR 5/10	15% ₁₀	Silty clay

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input checked="" type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks
 Listed on Feb 2007 Hydric list for floodplains in Ascension parish.
 NO field observations to support hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)

Wetland Hydrology Present? Yes No (Circle)

Hydric Soils Present? Yes No (Circle)

Is this Sampling Point Within a Wetland? Yes No (Circle)

Remarks
 dominant plants supportive of wetlands, but no obligate species or other wetland indicators.

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Project/Site: <u>Point Houmas</u> Applicant/Owner: _____ Investigator: <u>J. Rury</u>	Date: <u>11.5.07</u> County: <u>Ascension</u> State: <u>Louisiana</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: <u>gully bottom (Batture)</u> Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Poison Ivy</u>	<u>H</u>	<u>FAC</u>	9. _____	_____	_____
2. <u>Field bindweed (Convolvulus arvensis)</u>	<u>H</u>	<u>-</u>	10. _____	_____	_____
3. <u>Jack-in-the-box (Athyrium filix-femina)</u>	<u>H</u>	<u>FAC</u>	11. _____	_____	_____
4. <u>Virginia Creeper (Parthenocissus quinquefolia)</u>	<u>H</u>	<u>FAC</u>	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

"Percent of Dominant Species that are OBL, FACW or FAC"
 (excluding FAC-).

Remarks: Vegetation is predominantly facultative, supportive of wetland.

HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input checked="" type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: wetland hydrology present

SOILS

Map Unit Name (Series and Phase): Convent soils, frequently flooded

Drainage Class: somewhat poor

Taxonomy (Subgroup): _____

Field Observations: _____

Confirm Mapped Type? Yes No

Profile Descriptions:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-2	O ₂	10YR 3/2	-	-	top soil
2-16	A	6.5Y 4/10Y	5YR 4/6	10-15%	silty clay

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks: gleyed soils present, abundant Fe concretions & oxidized root channels. soil listed on hydric list (February 2007)

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	(Circle)	
Wetland Hydrology Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	(Circle)	
Hydric Soils Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	(Circle)	
				Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No

Remarks: _____

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Project/Site: <u>Point Houmas</u> Applicant/Owner: _____ Investigator: <u>J. Rury</u>	Date: <u>11.5.07</u> County: <u>Ascension</u> State: <u>Louisiana</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: <u>Gulley Ridge (batture)</u> Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Poison Ivy</u>	<u>H</u>	<u>FAC</u>	9. _____	_____	_____
2. <u>Lady fern</u>	<u>H</u>	<u>FAC</u>	10. _____	_____	_____
3. <u>Sycamore</u>	<u>T</u>	<u>FACW-</u>	11. _____	_____	_____
4. <u>poplar / cottonwood</u>	<u>T</u>	<u>FAC+</u>	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

"Percent of Dominant Species that are OBL, FACW or FAC"
 (excluding FAC-). 100%

Remarks:
No obligate species observed.

HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>—</u> (in.) Depth to Free Water in Pit: <u>—</u> (in.) Depth to Saturated Soil: <u>—</u> (in.)	

Remarks:
No hydrology features. Test point located on ridge of obvious gully.

T-5

SOILS

Map Unit Name (Series and Phase): Convent soils, frequently flooded Drainage Class somewhat poor

Taxonomy (Subgroup) _____ Field Observations _____ Confirm Mapped Type? Yes No

Profile Descriptions:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-8	A	10YR 4/2	—	—	st. silty clay
8-10	A	10YR 4/3	—	—	sandy clay
10-16	A	10YR 4/3	—	—	clay sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input checked="" type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks
 Convent soils are listed on the Feb 2007 hydric list for floodplains in Ascension parish, no field observations to support hydric soils here.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)

Wetland Hydrology Present? Yes No (Circle)

Hydric Soils Present? Yes No (Circle)

Is this Sampling Point Within a Wetland? Yes No (Circle)

Remarks

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

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Project/Site: <u>Point Holmes</u> Applicant/Owner: _____ Investigator: <u>J. Rury</u>	Date: <u>11.5.07</u> County: <u>Acension</u> State: <u>Louisiana</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: <u>hardwood (Batture)</u> Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>sugarberry</u>	<u>T</u>	<u>FACW</u>	9. _____	_____	_____
2. <u>poplar/cottonwood</u>	<u>T</u>	<u>FAC+</u>	10. _____	_____	_____
3. <u>swampberry</u>	<u>S</u>	<u>FACW</u>	11. _____	_____	_____
4. <u>Virginia Creeper</u>	<u>H</u>	<u>FAC</u>	12. _____	_____	_____
5. <u>cocklebur (xanthoxylum strumarium)</u>	<u>A</u>	<u>FAC</u>	13. _____	_____	_____
6. <u>snakeroot (ageratina altissima)</u>	<u>H</u>	<u>FACW-</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

"Percent of Dominant Species that are OBL, FACW or FAC"
 (excluding FAC-).

Remarks:

Dominant vegetation supports wetland, but no obligate species were observed.

HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <p>Secondary Indicators (2 or more required):</p> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input checked="" type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<p>Field Observations:</p> Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks:

No wetland hydrology present

T-6

SOILS

Map Unit Name (Series and Phase): Convent soils, frequently flooded Drainage Class somewhat poor

Taxonomy (Subgroup) _____ Field Observations Confirm Mapped Type? Yes No

Profile Descriptions:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-2	O ₂	7.5YR 3/1			topsoil
2-14	A	7.5YR 4/2	—		silty clay

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input checked="" type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks
 Convent soils is listed on Feb 2007 Hydric list for floodplains in Ascension parish, but no field observation support this classification here.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)

Wetland Hydrology Present? Yes No (Circle)

Hydric Soils Present? Yes No (Circle)

Is this Sampling Point Within a Wetland? Yes No (Circle)

Remarks