Draft

BAYOU MANCHAC WATERSHED PHASE I TMDLS FOR CHLORIDES and SULFATES

SUBSEGMENT 040201

TMDL REPORT

By:
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Water Permits Division
Office of Environmental Services
Louisiana Department of Environmental Quality

DECEMBER 28, 2011

TECHNICAL SUMMARY

Bayou Manchac, Subsegment 040201, was on the Final 2008 Integrated Report (combined 305(b) and 303(d) reports) and EPA's Consent Decree list of impaired waterbodies. Subsegment 040201 was found to be "not supporting" any of its designated uses of Primary Contact Recreation, Secondary Contact Recreation, and Fish and Wildlife Propagation. Bayou Manchac was subsequently scheduled for Total Maximum Daily Load (TMDL) development with other listed waters in the Lake Pontchartrain Basin. The suspected causes of impairment are low dissolved oxygen (DO), and elevated nitrate/nitrite, total phosphorous, chlorides, sulfates, total dissolved solids, total ammonia, and total fecal coliform. The suspected sources are Site Clearance (Land Development or Redevelopment), On-site Treatment Systems (Septic Systems and Similar Decentralized Systems), Sanitary Sewer Overflows (Collection System Failures), and unknown sources. Subsegment 040201 is also listed on the Draft 2010 Integrated Reports. The listings are presented in Tables 1 and 2. This TMDL report addresses the chlorides and sulfates impairments.

Subsegment 040201 lies within East Baton Rouge, Ascension, and Iberville Parishes. Subsegment 040201 drains into the Amite River, which is the border between Livingston Parish and East Baton Rouge and Ascension Parishes.

At the time of this report, the contributions of individual sources of chlorides and sulfates within the Bayou Manchac watershed were not certain. Several industrial facilities are known to have concentrations of the referenced pollutants in their discharges, however other sources may exist within the watershed, including many sewage treatment plants and equipment and/or vehicle wash water outfalls. LDEQ currently has no data on these other potential sources within the watershed, as chlorides and sulfates limits are not typically included in permits for these types of facilities. However, TMDL survey data obtained for other facilities within the Lake Pontchartrain Basin indicate that sewage treatment plants may contribute measurable loads of chlorides and sulfates.

One of the suspected sources of chlorides and sulfates loading in the Bayou Manchac watershed is the potable water source, groundwater. All homes, businesses, and public agencies within the watershed utilize groundwater as the potable water source. Drinking water data from local groundwater wells was obtained from the Department of Health and Hospitals. The data indicated that the groundwater contained significant concentrations of chlorides and sulfates. Some of these values were above the criteria for the watershed. This indicates that each home and business within the watershed is receiving water that contains these constituents and that water is then sent to local sewage treatment plants (STP). The STP then becomes responsible for the additional pollutant loading, regardless of the treatment process utilized by the facility. Additional sources of the loading may include people watering their lawns, washing cars or buildings, recreational uses of potable water, and individual home sewage treatment units.

Another suspected source of chlorides and sulfates is the disinfection process that may be utilized for the hundreds of sewage treatment outfalls located within the watershed. Disinfection and dechlorination processes often involve chemicals that may provide chloride and sulfate ions once the wastewater reaches the ambient waterbody. The cost of treating the wastewater for chlorides and sulfates may be cost prohibitive.

Table 1. Final 2008 Integrated Report (305(b)/303(d)) Listing for Subsegment 040201

Subsegment Number	Subsegment Description	Type	Size (miles)	PCR	SCR	FWP	DWS	ONR	OYS	AGR	LAL	Impaired Use for Suspected Cause	Suspected Causes of Impairment	IR Category for Suspected Causes	TMDL Due Date	TMDL Priority	Suspected Sources of Impairment
LA040201	Bayou Manchac-From headwaters to Amite River	River	18	N0t supporting	Fully supporting	N0t supporting						FWP	Ammonia (Total)	IRC 5	2011	High	On-site Treatment Systems (Septic Systems and Similar Decentralized Systems)
												FWP	Ammonia (Total)	IRC 5	2011	High	Site Clearance (Land Development or Redevelopment)
												FWP	Chlorides	IRC 5	2011	High	Site Clearance (Land Development or Redevelopment)
												PCR	Fecal Coliform	IRC 5	2011	High	On-site Treatment Systems (Septic Systems and Similar Decentralized Systems)
												PCR	Fecal Coliform	IRC 5	2011	High	Sanitary Sewer Overflows (Collection System Failures)
												FWP	Nitrate/Nitrite (Nitrite + Nitrate as N)	IRC 5	2011	High	On-site Treatment Systems (Septic Systems and Similar Decentralized Systems)
												FWP	Nitrate/Nitrite (Nitrite + Nitrate as N)	IRC 5	2011	High	Site Clearance (Land Development or Redevelopment)
												FWP	Oxygen, Dissolved	IRC 5	2011	High	On-site Treatment Systems (Septic Systems and Similar Decentralized Systems)
												FWP	Oxygen, Dissolved	IRC 5	2011	High	Site Clearance (Land Development or Redevelopment)
												FWP	Phosphorus (Total)	IRC 5	2011	High	On-site Treatment Systems (Septic Systems and Similar Decentralized Systems)
												FWP	Phosphorus (Total)	IRC 5	2011	High	Site Clearance (Land Development or Redevelopment)
												FWP	Sulfates	IRC 5	2011	High	Site Clearance (Land Development or Redevelopment)
												FWP	Total Dissolved Solids	IRC 5	2011	High	Site Clearance (Land Development or Redevelopment)

[A] Note: PCR=Primary Contact Recreation; SCR=Secondary Contact Recreation; FWP=Fish and Wildlife Propagation; DWS=Drinking Water Source; ONR=Outstanding Natural Resource; OYS=Oyster Propagation; AGR=Agriculture; LAL= Limited Aquatic Life and Wildlife Use

Table 2. Draft 2010 Integrated Report (305(b)/303(d)) Listing for Subsegment 040201

Subsegment Number	Subsegment Description	Type	Size (miles)	Designated Water Body Uses								Impaired Use for Suspected Cause	Suspected Causes of Impairment	IR Category for Suspected Causes	TMDL Due Date	TMDL Priority	Suspected Sources of Impairment
				PCR	SCR	FWP	DWS	ONR	OYS	AGR	LAL						
LA040201	Bayou Manchac-From headwaters to Amite River	River	18	N0t supporting	Fully supporting	N0t supporting						FWP	Chlorides	IRC 5	2012	High	Site Clearance (Land Development or Redevelopment)
												PCR	Fecal Coliform	IRC 5	2012	High	On-site Treatment Systems (Septic Systems and Similar Decentralized Systems)
												PCR	Fecal Coliform	IRC 5	2012	High	Sanitary Sewer Overflows (Collection System Failures)
												FWP	Oxygen, Dissolved	IRC 5	2012	High	On-site Treatment Systems (Septic Systems and Similar Decentralized Systems)
												FWP	Oxygen, Dissolved	IRC 5	2012	High	Site Clearance (Land Development or Redevelopment)
												FWP	Sulfates	IRC 5	2012	High	Site Clearance (Land Development or Redevelopment)
												FWP	Total Dissolved Solids	IRC 5	2012	High	Site Clearance (Land Development or Redevelopment)

[A] Note: PCR=Primary Contact Recreation; SCR=Secondary Contact Recreation; FWP=Fish and Wildlife Propagation; DWS=Drinking Water Source; ONR=Outstanding Natural Resource; OYS=Oyster Propagation; AGR=Agriculture; LAL= Limited Aquatic Life and Wildlife Use

Due to the lack of existing facility/outfall data, the uncertainty associated with load contributions from individual outfalls, the updated criteria for chlorides and sulfates, concerns of a high in-stream counts of fecal coliform bacteria from man-made sources (sanitation issue), and prohibitive treatment costs, LDEQ is utilizing a phased TMDL approach for Bayou Manchac as shown in Table 3. This approach will allow LDEQ to gather more data from individual dischargers and instream water quality data. The additional discharger and water quality data will be used to provide additional justification for the updated minerals criteria outlined below, and if necessary, allow for refinement of the updated criteria prior to final rulemaking. At the same time, LDEQ will be able to develop meaningful and implementable TMDLs based upon the appropriate chlorides and sulfates criteria, in accordance with EPA's Consent Decree (E. D. La. 2002) deadlines. LDEQ expects it will lead to improved water quality while providing local governments and businesses the opportunity to prepare and adjust to new permit requirements that will be implemented as a result of the TMDLs developed in Phases I and II. Future updates to the implementation of this TMDL may be made through updates to the WQMP.

LDEQ has re-evaluated the minerals (i.e., chlorides, sulfates, and TDS) criteria for Bayou Manchac, Subsegment 040201. EPA guidance (1985) and literature supports a toxicity-based approach to protecting aquatic life use from harmful effects of minerals. Additionally, literature indicates that individual ions are appropriate to characterize aquatic life toxicity related to minerals and total dissolved solids (TDS). LDEQ reviewed the development of toxicity-based minerals criteria (EPA 1985) in Iowa and Illinois and determined a similar approach is appropriate for implementation in Louisiana. Therefore, LDEQ is proposing a variance to the minerals criteria for Bayou Manchac (Subsegment 040201). Justification for the variance is provided in Appendix E. LDEQ used toxicity data for Louisiana species and used Bayou Manchac ambient water quality data to determine the following chloride and sulfate criteria for the protection of the fish and wild life propagation use in Bayou Manchac: chloride acute criterion = 476 mg/L; chloride chronic criterion = 338 mg/L; sulfate criterion = 500 mg/L. LDEQ also determined, as did Iowa and Illinois, that criteria for individual ions are protective and the criteria for TDS are not warranted. LDEQ will continue to research minerals toxicity information and any additional adjustments to the criteria will be reflected in the final water quality standards revision recommendations.

This Phase I TMDL will include the development of total maximum daily loads (TMDLs) and wasteload allocations (WLAs) for chlorides and sulfates based on the updated criteria. Implementation will occur in a phased manner. Phase I will serve as the first step towards meeting the updated chlorides and sulfates criteria in Bayou Manchac. The implementation of point source requirements will occur according to the following strategy.

Table 3. Bayou Manchac Phased TMDL Approach

Stage / Phase	Cl Criteria (mg/L)	SO_4 Criteria (mg/L)	Implementation Date
Phase I	**338**	**500**	**Phase I implementation required upon EPA approval of the TMDL and subsequent update of Louisiana's Water Quality Management Plan**
Primary Activities – Cl and SO_4 criteria revised and promulgated			
Phase II	**Apjusted, if needed, toxicity-based criteria**		**Phase II implementation required upon EPA approval of Phase II of the TMDL and subsequent update of Louisiana's Water Quality Management Plan**

Phase I Permit Implementation

All TMDL, permitting, and enforcement activities will be conducted in accordance with the Clean Water Act, the Louisiana Environmental Regulatory Code, and applicable state laws. If at any time, LDEQ determines that the implementation strategy presented in this TMDL is not appropriate due to socioeconomic reasons or otherwise, LDEQ may revise the implementation strategy through an update of the State's Water Quality Management Plan. LDEQ will be responsible for ensuring that any updates to the Water Quality Management Plan will meet the goals of the TMDL.

1. New discharges of chlorides or sulfates loads:

   Due to LDEQ's minerals criteria revisions, the lack of knowledge regarding the loading contributions from various types of facilities, natural sources, and the contributions from the local potable water source, permits for new facility outfalls will typically require only annual monitoring during the first full permitting cycle that occurs during Phase I. However, before the subsequent renewal of each permit, an assessment of chlorides and sulfates monitoring data from designated outfalls may be conducted to determine if permit limits are appropriate during Phase I. Permit limits will be established based on regulatory guidelines and in accordance with LDEQ's Permitting Guidance Document For Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3. Facilities with new discharges may be required to submit an environmental impact assessment to LDEQ's Water Permits Division. Once the TMDL is approved by EPA and LDEQ has determined that permit limits are needed, new facilities may have up to 3 years from their next permit renewal date to meet the Phase I permit limits. Applicable General Permit schedules may be updated to meet the requirements of the TMDL upon the first renewal of each series following the TMDL approval date. Examples of facility outfalls that may be considered are provided below.

   a. Annual monitoring will be required for outfall types included in, but not limited to, the list provided below. Upon renewal of each permit, existing facility data will be compared to the values of 338 mg/L (chlorides) and 500 mg/L (sulfates). Permit limits will be considered for a facility if the monitoring data exceeds the referenced values. If the monitoring data is below the referenced values, the monitoring requirement may be eliminated or the frequency may be reduced.

      i. Sanitary

      ii. Vehicle or equipment wash water

      iii. Wash rack wastewater

b. Technology-based permit limits may be established for outfall types included in, but not limited to, the list provided below. Permit limits will be based on current regulatory guidelines and departmental procedures.

i. Industrial process outfalls that have demonstrated a reasonable potential to discharge wastewater that will contain concentrations of chlorides or sulfates.

ii. Contact stormwater for facilities identified according to item 1.b.i above.

iii. Any other type of wastewater that has demonstrated a reasonable potential to contain concentrations of chlorides or sulfates.

2. Existing discharges of chlorides or sulfates loads:

Below are the limits and monitoring implementation activities for existing facility outfalls in the Bayou Manchac watershed. Existing unpermitted facility outfalls discovered to be discharging chlorides and/or sulfates loads without LPDES permit limits as of the TMDL approval date and unpermitted facility outfalls that are newly activated or reactivated and discharging chlorides and/or sulfates loads after the TMDL approval date are to be permitted according to the guidelines established herein for existing outfalls with permits. Permit limits will be established based on regulatory guidelines and accordance with LDEQ's Permitting Guidance Document For Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3.

a. The following 4 facilities had one or more outfalls with permit limits or monitoring for chlorides and/or sulfates. Based on the TMDL, their permit limits or monitoring requirements during Phase I will be as shown below for the designated outfalls. Upon permit renewal, LDEQ will review and revise these requirements as needed to ensure that all regulatory requirements and water quality criteria are being met in Bayou Mancahc (040201).

i. Harcros Chemicals, Inc. (AI No. 2055, LPDES Permit No. LA0110825) – Outfall 001 – Chlorides and Sulfates - report only.

ii. Reagent Chemical & Research, Inc – St. Gabriel Facility (AI No. 2407, LPDES Permit No. LA0059579) – Outfall 001, 002, 006, and 007 – Chlorides 338 mg/L (monthly average), 500 mg/L (daily maximum).

iii. Kinder Morgan Liquids Terminals St. Gabriel, LLC (AI No. 39978, LPDES Permit No. LA0052353) - Outfall 001 and 005 – Chlorides -

report chlorides concentration when commodities containing chlorides are stored on site.

iv. St. Gabriel Dehydration & NGL Production Facility (AI No. 138856, LPDES Permit No. LAG33A602)) - Outfall 001 – Chlorides 500 mg/L (daily max.).

b. All other facilities will conduct annual monitoring as described in item 1 above. Once the TMDL is approved by EPA and LDEQ has determined that permit limits are necessary, existing facilities may have up to 3 years from their next permit renewal date to meet the Phase I permit limits.

3. LDEQ reassesses Subsegment 040201 (Bayou Manchac). If, at a future date, LDEQ determines that Subsegment 040201 is meeting the appropriate chlorides and/or sulfates criteria and designated uses and/or impairments for these parameters do not exist, permit limit requirements for chlorides and/or sulfates may be reevaluated and/or ommitted.

Phase II will be developed based on the revised criteria for Subsegment 040201. Chlorides and sulfates TMDLs for Subsegment 040201 have a court-ordered due date of March 31, 2012. These new criteria will be developed and promulgated no later than three (3) years after the approval of the TMDL and criteria variance.

LDEQ recognizes there may be unpermitted sources of chlorides and/or sulfates loading within the Lake Pontchartrain Basin, including the Bayou Manchac watershed. These sources may include unpermitted facilities (privately owned treatment units for subdivisions or businesses). LDEQ has been locating unpermitted facilities and updating location information on permitted facilities in the Lake Pontchartrain Basin. The unpermitted facilities are required to apply for the appropriate LPDES (Louisiana Pollutant Discharge Elimination System) permits. LDEQ may conduct field surveys to gather additional information on facilities within the Bayou Manchac watershed in the future. These unpermitted sources of loading may also include individual treatment units for residential homes and small businesses. LDEQ is also aware of potential historical loading from the St. Gabriel Oil Field. The ability to accurately quantify the loads provided from these potential sources is difficult due to lack of reliable information and data. These potential unpermitted and historical sources of loading add to the uncertainty of this TMDL and provide additional justification for the use of the phased TMDL approach.

The large-scale regionalization of sewage collection and treatment and the rehabilitation and upgrade of existing problematic (leaks, overflows, improperly sized pipes, etc.) sewage collection systems may help to reduce the chlorides and sulfates loadings to Bayou Manchac. This would consolidate the sewage treatment process into larger plants where alternative forms of disinfection may be cost effective. Large-scale regionalization for sewage treatment would only reduce the contributions from the disinfection and dechlorination processes. Reductions from additional sources may be needed. Such reductions may be cost prohibitive.

Loading attributed to any MS4 will be included in the WLA. Due to the variable nature of stormwater, this loading is not intended to be converted into permit limits or utilized as a target value for the MS4 permittees to achieve. The MS4 permittee must apply the appropriate BMPs to reduce the nonpoint source loading into the watershed as well as eliminate illicit dischargers. This may include the establishment of a cost effective monitoring program. It is recognized that many permitted and unpermitted facilities discharge into the areas regulated by the MS4 permits referenced in Tables 4 and 5. Permitted dischargers affected by this TMDL are presented in Tables 4 and 5.

Table 4. Subsegment 040201 - Total Maximum Daily Loads for Chlorides and Sulfates

Parameter	Criteria (mg/L)	Required Load Reductions (%)	WLA (lbs./day)	LA (lbs./day)	MOS (lbs./day)	**TMDL (lbs./day)**
Chlorides	338	0	13,822.9	1,710.7	3,883.4	**19,417.0**
Sulfates	500	0	20,448.0	2,530.7	5,744.7	**28,723.4**

ALLOCATIONS	Chlorides		Sulfates	
	% Reduction Required	Loading (lbs/day)	% Reduction Required	Loading (lbs/day)
Point Source Wasteload Allocation (WLA)	0	11,223.00	0	16,602.00
Point Source Reserve MOS (20%)		2,806.00		4,151.00
East Baton Rouge Parish MS4 WLA (LAS000101; Nonpoint Loads; 60744.57 acres)	0	2,371.98	0	3,508.88
East Baton Rouge Parish MS4 MOS (LAS000101; Nonpoint Source Reserve MOS=20%)		592.86		876.94
Ascension Parish MS4 WLA (LAR041034; Nonpoint Loads; 5836.91 acres)	0	227.92	0	337.17
Ascension Parish MS4 MOS (LAR041034; Nonpoint Source Reserve MOS=20%)		56.97		84.27
Nonpoint Loads	0	1,710.71	0	2,530.66
Nonpoint Source Reserve MOS (20%)		427.58		632.47
TMDL		**19,417.0**		**28,723.4**

Table 5. Subsegment 040201 Point Sources With Potential to Discharge Chlorides or Sulfates Loads

Note a - TMDL concentrations presented in this table do not represent permit limits. Permit Limits are discussed in the Phase I Permit Implementation Strategy. Note b - due to the uncertainty of loading sources and the variable nature of stromwater, permit limits were not provided for the MS4 permits. The WLAs provided are not intended to be used as permit limits or targets. All requirement are expected to be met through the use of Best Management Practices (BMPs).											TMDL Concentration Limits (mg/L) - a		WLA (lbs/day)		MOS (lbs/day)	
Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
1		LAS000101	East Baton Rouge Parish MS4 – b	MS4	Various bayous, creeks, ditches, and canals	--	--	--	Variable	multi-ple	--	--	110,937.0	164,109.4	27,734.3	41,027.1
2		LAR041034	Ascension Parish MS4 - b	MS4	Various bayous, creeks, ditches, and canals	--	--	--	Variable	multi-ple	--	--	10,660.0	15,769.2	2,665.0	3,942.3
3	1694	LA0037923	Kleinpeter Farms Dairy LLC	Process wastewater, eqpt and vehicle washwater	Drainage ditch, Old Ward's Creek, Ward's Creek Diversion Canal	48,400	0.0484	0.0605	2,500	1	338	500	136.4357	201.8280	34.1089	50.4570
	1694	LA0037923	Kleinpeter Farms Dairy LLC	Sanitary	Drainage ditch, Old Ward's Creek, Ward's Creek Diversion Canal	864	0.0009	0.0011		2	338	500	2.4355	3.6029	0.6089	0.9007
4	1980	LAG531612	Industrial Coatings Contractors Inc	Sanitary	Local drainage to Welsh Gully to Bayou Manchac	400	0.0004	0.0005	2,500	101	338	500	1.1276	1.6680	0.2819	0.4170
5	2055	LA0110825	Harcros Chemicals Inc	Stormwater	unnamed ditch to Bayou Braud to Spanish Lake	12,822	0.0128	0.0160	Intermittent	001	338	500	36.1442	53.4677	9.0360	13.3669
	2055	LA0110825	Harcros Chemicals Inc	Sanitary	unnamed ditch to Bayou Braud to Spanish Lake	500	0.0005	0.0006	Intermittent	003	338	500	1.4095	2.0850	0.3524	0.5213
6	2283	LA0059544	Ohmstede Ltd - St Gabriel Plant	Sanitary wastewater, hydrostatic test wastewater, small volume shop wastewater, and compressor condensate.	Bayou Braud into Spanish Lake	2,400	0.0024	0.0030	2,500	001	338	500	6.7654	10.0080	1.6914	2.5020
7	2407	LA0059579	Reagent Chemical & Research Inc - St Gabriel Facility	Wash rack water	Unnamed ditch to Bayou Braud	1,700	0.0017	0.0021	Report	001	338	500	4.7922	7.0890	1.1980	1.7723

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
	2407	LA0059579	Reagent Chemical & Research Inc - St Gabriel Facility	Rinse water and stormwater from the loading pad.	Unnamed ditch to Bayou Braud	30,400	0.0304	0.0380	Report	002	338	500	85.6952	126.7680	21.4238	31.6920
	2407	LA0059579	Reagent Chemical & Research Inc - St Gabriel Facility	Treated sanitary wastewater	Unnamed ditch to Bayou Braud	90	0.0001	0.0001	Report	003	338	500	0.2537	0.3753	0.0634	0.0938
	2407	LA0059579	Reagent Chemical & Research Inc - St Gabriel Facility	Lab rinse water	Unnamed ditch to Bayou Braud	1,000	0.0010	0.0013	Report	004	338	500	2.8189	4.1700	0.7047	1.0425
	2407	LA0059579	Reagent Chemical & Research Inc - St Gabriel Facility	Stormwater runoff from containment area on the west side of the facility.	Unnamed ditch to Bayou Braud	5,900	0.0059	0.0074	Report	006	338	500	16.6316	24.6030	4.1579	6.1508
	2407	LA0059579	Reagent Chemical & Research Inc - St Gabriel Facility	Stormwater runoff from containment area on the east side of the facility.	Unnamed ditch to Bayou Braud	5,900	0.0059	0.0074	Report	007	338	500	16.6316	24.6030	4.1579	6.1508
8	2605	LAG470127	Gene's Car Care	Treated exterior vehicle wash wastewater	Storm drain then to Dawson Creek	5,000	0.0050	0.0063	Report	001	338	500	14.0946	20.8500	3.5237	5.2125
9	3492	LA0045942	LBC Baton Rouge LLC - Sunshine Terminal	Treated sanitary wastewater.	Bayou Paul	3,000	0.0030	0.0038	Report	005	338	500	8.4568	12.5100	2.1142	3.1275
10	3521	LAG530123	Allways Properties LLC	Treated sanitary wastewater	Geigy Road ditch to Hwy 30 ditch to Bayou Braud to Alligator Bayou to Bayou Manchac	200	0.0002	0.0003	<5,000	001	338	500	0.5638	0.8340	0.1409	0.2085
11	4339	LA0103462	Brenntag Southwest Inc	Treated sanitary wastewater	Unnamed ditch to Bayou Paul to Bayou Braud to Bayou Manchac	25	0.0000	0.0000	Report	004	338	500	0.0705	0.1043	0.0176	0.0261

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
	4339	LA0103462	Brenntag Southwest Inc	Treated sanitary wastewater	Unnamed ditch to Bayou Paul to Bayou Braud to Bayou Manchac	20	0.0000	0.0000	Report	005	338	500	0.0564	0.0834	0.0141	0.0209
12	6872	LAG530000	South Central Bell Btrglald	Treated sanitary wastewater	local drainage to Bayou Fountain	1,300	0.0013	0.0016	<2500	001	338	500	3.6646	5.4210	0.9161	1.3553
13	6882	LAG470214	All Star Toyota of Baton Rouge	Treated washrack wastewater	Wards Creek to Bayou Manchac	200	0.0002	0.0003		001	338	500	0.5638	0.8340	0.1409	0.2085
14	7191	LAG470211	Hollingsworth Richards Ford	Treated washrack wastewater	North Branch ditch to Wards Creek to Bayou Manchac	350	0.0004	0.0004		001	338	500	0.9866	1.4595	0.2467	0.3649
15	10356	LAG530000	Mistras Group	Treated sanitary wastewater	Airline Highway roadside ditch, then to Muddy Creek, then to Bayou Manchac	260	0.0003	0.0003	<5000 gpd	001	338	500	0.7329	1.0842	0.1832	0.2711
16	11081	LAG570452	Aerial Access Equipment Inc	Treated sanitary wastewater	Wards Creek to Bayou Manchac to Amite River	300	0.0003	0.0004	Report	002	338	500	0.8457	1.2510	0.2114	0.3128
17	12340	LAG480211	Southern Valve Service Inc.	Treated sanitary wastewater	Open ditch to roadside ditch to Bayou Manchac	720	0.0007	0.0009	<5000 gpd	002	338	500	2.0296	3.0024	0.5074	0.7506
	12340	LAG480211	Southern Valve Service Inc	Valve washwater	Open ditch to roadside ditch to Bayou Manchac	1,900	0.0019	0.0024		101	338	500	5.3559	7.9230	1.3390	1.9808
18	13340	LAG480345	ExxonMobil Oil Corp #51020	Exterior vehicle and equipment wash wastewater	Wards Creek	2,797	0.0028	0.0035		001	338	500	7.8845	11.6635	1.9711	2.9159
19	13375	LAG750424	ExxonMobil Oil Corp #52398	Exterior vehicle and equipment wash wastewater	Wards Creek to Bayou Manchac to Amite River	800	0.0008	0.0010		001	338	500	2.2551	3.3360	0.5638	0.8340

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
20	13698	LAG750574	Circle K #2709721	Exterior Vehicle Wash Wastewater	Wards Creek	851	0.0009	0.0011		001	338	500	2.3989	3.5487	0.5997	0.8872
21	13756	LA0103071	Industrial Electric Motor Service Inc (Outfall 1) Treated Sanitary wastewater	Treated sanitary wastewater	Into Ward's Creek via local drainage, then into Bayou Manchac	3,000	0.0030	0.0038	Report	001	338	500	8.4568	12.5100	2.1142	3.1275
	13756	LA0103071	Industrial Electric Motor Service Inc (Outfall 3) Dynamometer cooling water	Dynamometer cooling water	Into Ward's Creek via local drainage, then into Bayou Manchac	1,000	0.0010	0.0013	Report	003	338	500	2.8189	4.1700	0.7047	1.0425
22	14505	LAG750386	RR Cassidy Inc	Exterior Vehicle Wash Wastewater	Bayou Manchac	200	0.0002	0.0003		001	338	500	0.5638	0.8340	0.1409	0.2085
	14505	LAG750386	RR Cassidy Inc	Treated Sanitary Wastewater	Bayou Manchac	5,000	0.0050	0.0063		002	338	500	14.0946	20.8500	3.5237	5.2125
23	14882	LAG750616	Enterprise Rent A Car - Enterprise Leasing Co of New Orleans	Exterior Vehicle Wash Wastewater	Bayou Manchac to Amite River	400	0.0004	0.0005		001	338	500	1.1276	1.6680	0.2819	0.4170
24	15121	LAG750518	Louisiana Lift & Equipment Inc	Exterior vehicle and equipment wash wastewater	Bayou Manchac to Amite River	1,000	0.0010	0.0013		001	338	500	2.8189	4.1700	0.7047	1.0425
	15121	LAG750518	Louisiana Lift & Equipment Inc	Treated Sanitary Wastewater	Bayou Manchac to Amite River	340	0.0003	0.0004	<5,000 gpd	002	338	500	0.9584	1.4178	0.2396	0.3545
25	15667	LAG750389	ExxonMobil Corp - RAS #53838	Exterior Vehicle Wash Wastewater	Dawson Creek	1,027	0.0010	0.0013		001	338	500	2.8950	4.2826	0.7238	1.0706
26	16225	LAG470155	Gerry Lane Chevrolet	Washrack wastewater, shop floor washdown, paint booth washdown, and wet sanding wastewaters.	Wards Creek to Bayou Manchac	3,350	0.0034	0.0042		001	338	500	9.4434	13.9695	2.3608	3.4924
27	17972	LA009461	Ewing Distributors Inc - Roundoak Shopping Center	Vehicle wash wastewater and treated sanitary wastewater	Ward Creek to Bayou Manchac via local drainage	6,582	0.0066	0.0082	Report	001	338	500	18.5541	27.4469	4.6385	6.8617

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
28	18100	LAG40519	Motel 6 LP	Treated sanitary wastewater	Wards Creek then to Bayou Manchac	12,950	0.0130	0.0162	<25,000	001	338	500	36.5050	54.0015	9.1263	13.5004
29	18133	LAG750237	Hammond Aire Auto Spa	Treated exterior vehicle wash wastewater	Wards Creek	18,000	0.0180	0.0225	Report	001	338	500	50.7406	75.0600	12.6851	18.7650
30	18589	LAG540163	World-Wide Environmental Services LLC - Woodhaven Subdivision	Treated sanitary wastewater	Ditch, Muddy Creek, Bayou Manchac	8,000	0.0080	0.0100	<25,000	001	338	500	22.5514	33.3600	5.6378	8.3400
31	18601	LAG570086	World-Wide Environmental Solutions LLC - Perkins Oak Subdivision	Treated sanitary wastewater	Unnamed ditch then to Welsh Gully	78,800	0.0788	0.0985	<100,000	001	338	500	222.1309	328.5960	55.5327	82.1490
32	18626	LAG540161	World-Wide Environmental Solutions LLC - Tall Timbers Subdivision	Treated sanitary wastewater	A Highway 42 roadside ditch, then to Henderson Bayou, then to the Amite River	20,000	0.0200	0.0250	25,000 gpd	001	338	500	56.3784	83.4000	14.0946	20.8500
33	18950	LAG540152	World-Wide Environmental Solutions LLC - Jefferson Estates Subdivision	Treated sanitary wastewater	Highway 73 roadside ditch, then to an unnamed ditch, then to Muddy Creek, then to Bayou Manchac	14,400	0.0144	0.0180	<25,000	001	338	500	40.5924	60.0480	10.1481	15.0120
34	19084	LAG532986	Lamar Advertising Co Inc (Outfall 1)	Treated sanitary wastewater	To an unnamed ditch, then to Wards Creek Diversional Canal, then to Bayou Manchac	20	0.0000	0.0000	<2,500 gpd	001	338	500	0.0564	0.0834	0.0141	0.0209
	19084	LAG532986	Lamar Advertising Co Inc (Outfall 5)	Treated sanitary wastewater	To an unnamed ditch, then to Wards Creek Diversional Canal, then to Bayou Manchac	400	0.0004	0.0005	<2,500 gpd	005	338	500	1.1276	1.6680	0.2819	0.4170

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
35	19291	LAG750044	MKL Enterprises LLC	Exterior vehicle wash wastewater	Bayou Manchac	1,400	0.0014	0.0018		001	338	500	3.9465	5.8380	0.9866	1.4595
36	19568	LAG570038	Holiday Inn Siegen Lane	Treated sanitary wastewater	Roadside ditch, Claycut Bayou, then to Bayou Manchac	8,140	0.0081	0.0102	<100,000	001	338	500	22.9460	33.9438	5.7365	8.4860
37	19731	LAG530180	EBR Sheriff's Office - Kleinpeter Substation	Treated sanitary wastewater	Unnamed ditch, then into unnamed canal, then into Bayou Manchac	300	0.0003	0.0004	<5,000 gpd	001	338	500	0.8457	1.2510	0.2114	0.3128
38	20039	LAG570082	Mo-Dad Utilities LLC - Willow Lake Subdivision	Treated sanitary wastewater	Open ditch, then to unnamed ditch, local drainage, then to Spanish Lake	91,200	0.0912	0.1140	<100,000 god	001	338	500	257.0855	380.3040	64.2714	95.0760
39	20321	LAG480427	Jacobs Engineering Group Inc	Cooling tower blowdown	Bayou Manchac to Amite River	3,700	0.0037	0.0046	<25,000 gpd	006	338	500	10.4300	15.4290	2.6075	3.8573
40	20619	LAG750251	College Chevron	Exterior Vehicle Wash Wastewater	Dawson Creek to Ward Creek to Bayou Manchac	200	0.0002	0.0003		001	338	500	0.5638	0.8340	0.1409	0.2085
41	22414	LAG750196	ExxonMobil Oil Corp #52186	Exterior Vehicle Wash Wastewater	Corporation Canal to Bayou Duplantier	1,097	0.0011	0.0014		001	338	500	3.0924	4.5745	0.7731	1.1436
42	22750	LAG530510	EDO Specialty Plastics - Perkins Road Facility	Treated Sanitary Wastewater	Wards Creek	1,020	0.0010	0.0013	<5,000 gpd	001	338	500	2.8753	4.2534	0.7188	1.0634
43	22795	LAG480226	Pathway Surfaces Inc.	Treated Sanitary Wastewater	Wards Creek to Bayou Manchac	3,000	0.0030	0.0038	<5,000 gpd	001	338	500	8.4568	12.5100	2.1142	3.1275
	22795	LAG480226	Pathway Surfaces Inc.	Equipment Wash Water	Wards Creek to Bayou Manchac	2,000	0.0020	0.0025	Report	002	338	500	5.6378	8.3400	1.4095	2.0850
44	16202	LAG470715;	Check Engine (Automotive Dealership)	Shop floor wastewater and sanitary wastewater	Ditch to Welsh Gully to Bayou Manchac	280	0.0003	0.0004		001	338	500	0.7893	1.1676	0.1973	0.2919

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
45	25186	LAG532241	CMC Construction Services - Concrete Accessories	Treated Sanitary Wastewater	Via pipe to local drainage, then to Bayou Manchac Diversion Canal	2,000	0.0020	0.0025	<5,000 gpd	001	338	500	5.6378	8.3400	1.4095	2.0850
46	25270	LAG750125	Wild's Car Care	Treated carwash wastewater	Wards Creek	3,782	0.0038	0.0047	Report	001	338	500	10.6612	15.7709	2.6653	3.9427
47	25952	LAG750366	Deep South Crane & Rigging	Exterior vehicle and equipment wash wastewater	Ward Creek	2,800	0.0028	0.0035		001	338	500	7.8930	11.6760	1.9732	2.9190
	25952	LAG750366	Deep South Crane & Rigging	Sanitary wastewater		1,440	0.0014	0.0018		002	338	500	4.0592	6.0048	1.0148	1.5012
	25952	LAG750366	Deep South Crane & Rigging	Wastewater from portable vehicle washing operations	Ward Creek	1,116	0.0011	0.0014		003	338	500	3.1459	4.6537	0.7865	1.1634
	25952	LAG750366	Deep South Crane & Rigging	Commingle vehicle washwater and sanitary wastewater		1,000	0.0010	0.0013		004	338	500	2.8189	4.1700	0.7047	1.0425
48	26080	LA0100901	USDA ARS Honey Bee Breeding Lab	Treated sanitary wastewater, lab washwater, equipment washwater, and floor washdown.	Unnamed ditch, to Elbow Bayou, then to Bayou Fountain, then to Bayou Manchac	4,320	0.0043	0.0054	Report	001	338	500	12.1777	18.0144	3.0444	4.5036
49	26617	LAG480211	Southern Valve Service Inc	Treated sanitary wastewater	Unnamed ditch to Wards Creek to Bayou Manchac	450	0.0005	0.0006	<5,000	001	338	500	1.2685	1.8765	0.3171	0.4691
	26617	LAG480211	Southern Valve Service Inc	Equipment washwater	Unnamed ditch to Wards Creek to Bayou Manchac	2,028	0.0020	0.0025	Report	002	338	500	5.7168	8.4568	1.4292	2.1142
50	26632	LAG530539	Dana Suttles Truck Leasing LLC	Treated sanitary wastewater	Highway ditch then tributary of Bayou Braud	1,200	0.0012	0.0015	<5,000 gpd	001	338	500	3.3827	5.0040	0.8457	1.2510

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
51	26984	LAG532773	St Gabriel Holdings LLC - St Gabriel Site	Treated sanitary wastewater	Facility via pipe to local drainage then to Bayou Braud	2,340	0.0023	0.0029	Report	001	338	500	6.5963	9.7578	1.6491	2.4395
52	29822	LAG531105	LSU Fire & Emergency Training Institute	Treated sanitary wastewater	Elbow Bayou then into Bayou Fountain	3,500	0.0035	0.0044	<5,000 gpd	001	338	500	9.8662	14.5950	2.4666	3.6488
53	31120	LA0103179	Geo Heat Exchangers LLC	Treated sanitary wastewater, hydrostatic test water, washdown with no detergents, compressor condensate & small volume shop wastewaters.	Bayou Braud	3,200	0.0032	0.0040	Report	001	338	500	9.0205	13.3440	2.2551	3.3360
54	31173	LAG750304	Industrial Enterprises Inc	Exterior Vehicle Wash Wastewater	Hurricane Creek	8,520	0.0085	0.0107		001	338	500	24.0172	35.5284	6.0043	8.8821
55	33567	LA0092690	Natural Resources Recovery - Pecue Lane Site	Treated sanitary wastewater	Wards Creek to Wards Creek Diversion Canal	20	0.0000	0.0000	Report	103	338	500	0.0564	0.0834	0.0141	0.0209
56	33621	LAG110051	Dolese Brothers Co - Prairieville Plant (Concrete)	Stormwater and aggregate spray	Muddy Creek to Bayou Manchac	1,680	0.0017	0.0021		001	338	500	4.7358	7.0056	1.1839	1.7514
	33621		Dolese Brothers Co - Prairieville Plant (Concrete)	Stormwater and aggregate spray		1,680	0.0017	0.0021		002	338	500	4.7358	7.0056	1.1839	1.7514
57	33727	LAG750055	Take 5 Oil Change	Exterior vehicle wash wastewater	Dawson Creek to Ward Creek to Bayou Manchac	1,000	0.0010	0.0013		001	338	500	2.8189	4.1700	0.7047	1.0425
58	33740	LA0103845	St Gabriel City of - Sunshine WWTP	Treated sanitary wastewater	Drainage canal, then into Bayou Paul, then into Bayou Braud, then into Bayou Manchac	126,000	0.1260	0.1575	Report	001	338	500	355.1839	525.4200	88.7960	131.3550
59	34054	LAG480240	Analytic Stress Relieving	Treated sanitary wastewater	Bluff Swamp	1,000	0.0010	0.0013	<5,000 gpd for sanitary	001	338	500	2.8189	4.1700	0.7047	1.0425
	34054	LAG480240	Analytic Stress Relieving	Treated sanitary wastewater		1,000	0.0010	0.0013		002	338	500	2.8189	4.1700	0.7047	1.0425

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
60	37099	LA0108898	Sorrento Super Stop	Treated sanitary (see comment for flow)	Panama Canal vial local drainage	13,000	0.0130	0.0163	Report	001	338	500	36.6460	54.2100	9.1615	13.5525
	37099	LA0108898	Sorrento Super Stop	Combined washwater and stormwater		308	0.0003	0.0004		002	338	500	0.8682	1.2844	0.2171	0.3211
61	37987	LAG531072	Popeye's Cajun Provisions Inc	Treated sanitary wastewater	Local drainage then to Bayou Manchac	1,750	0.0018	0.0022	<5,000 gpd	001	338	500	4.9331	7.2975	1.2333	1.8244
62	38304	LA0104701	Entek Environmental Laboratories	Treated sanitary wastewater, once through non-contact cooling water, and laboratory wastewater	By pipe to local drainage then into Wards Creek	700	0.0007	0.0009	<5,000 for sanitary	001	338	500	1.9732	2.9190	0.4933	0.7298
63	39978	LA0052353	Kinder Morgan Liquids Terminals St Gabriel LLC	Intermittent discharge of stormwater runoff from the diked tand farm stroage area and truck loading areas, area washdown water, and previously monitored effluent from outfall 101.		366,425	0.3664	0.4580		001	338	500	1,032.9228	1,527.9923	258.2307	381.9981
	39978	LA0052353	Kinder Morgan Liquids Terminals St Gabriel LLC	Discharge of stormwater runoff from the non-diked area on the north side of the facility including the urea ammonium nitrate (UAN) rail spur pipeline pump area, area washdown water, and previously monitored effluent from outfalls 102 and 202.		13,433	0.0134	0.0168		002	338	500	37.8666	56.0156	9.4666	14.0039
	39978	LA0052353	Kinder Morgan Liquids Terminals St Gabriel LLC	Discharge of stormwater from the nondiked area on the south side of the facility and previously monitored effluent from outfall 103		26,982	0.0270	0.0337		003	338	500	76.0601	112.5149	19.0150	28.1287
	39978	LA0052353	Kinder Morgan Liquids Terminals St Gabriel LLC	Treated sanitary wastewater		500	0.0005	0.0006		004	338	500	1.4095	2.0850	0.3524	0.5213

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
	39978	LA0052353	Kinder Morgan Liquids Terminals St Gabriel LLC	Discharge of stormwater from the nondiked area on the north central side of the facility including the hazardous waste storage pad.		16,000	0.0160	0.0200		005	338	500	45.1027	66.7200	11.2757	16.6800
64	40115	LAG750604	Coast Machinery Inc	Exterior vehicle wash wastewater	Ditch to Wards Creek to Bayou Manchac	100	0.0001	0.0001		001	338	500	0.2819	0.4170	0.0705	0.1043
65	40464	LAG540067	Total Environmental Solutions Inc - Plantation Gardens Subdivision	Treated sanitary wastewater	Unnamed ditch then into Bayou Paul	21,200	0.0212	0.0265	<25,000 gpd	001	338	500	59.7611	88.4040	14.9403	22.1010
66	40625	LAG110087	Ascension Ready Mix Plant #1	Process wastewater and process area stormwater	Ditch to Bluff Swamp	100	0.0001	0.0001		001	338	500	0.2819	0.4170	0.0705	0.1043
67	40646	LAG540030	World-Wide Environmental Solutions LLC - Manchac Estate Campsites	Treated sanitary wastewater (oxidation pond)	Unnamed ditch then to Bayou Manchac	11,800	0.0118	0.0148		001	338	500	33.2633	49.2060	8.3158	12.3015
68	41303	LAG570143	Mo-Dad Utilities LLC - The Lake at Manchac Subdivision	Treated sanitary wastewater	Highway ditch then into Bluff Swamp	39,600	0.0396	0.0495	<100,000 gpd	001	338	500	111.6292	165.1320	27.9073	41.2830
69	41307	LAG540885	Mo-Dad Utilities LLC - Cypress Lake Subdivision	Treated sanitary wastewater	Muddy Creek	22,800	0.0228	0.0285	<25,000 gpd	001	338	500	64.2714	95.0760	16.0678	23.7690
70	41334	LAG530181	Arlington Preperatory Academy	Treated sanitary wastewater	Unnamed ditch, Bayou Fountain, Bayou Manchac	2,140	0.0021	0.0027	<5,000 gpd	001	338	500	6.0325	8.9238	1.5081	2.2310
71	41853	LAG540620	Total Environmental Solutions Inc - Old Perkins Place Subdivision	Treated sanitary wastewater	Unnamed ditch then to Welsh Gully	12,400	0.0124	0.0155	<25,000 gpd	001	338	500	34.9546	51.7080	8.7387	12.9270
72	41864	LAG530700	Hydrochem Industrial Service Inc	Treated sanitary wastewater	Local drainage then to the Amite River	800	0.0008	0.0010	<5,000 gpd	001	338	500	2.2551	3.3360	0.5638	0.8340
73	41922	LAG750126	Isle of Louisiane Car Wash LLC (Carwash)	Exterior vehicle wash wastewater	Bayou Duplantier	910	0.0009	0.0011		001	338	500	2.5652	3.7947	0.6413	0.9487

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
74	42009	LAG570195	Wastewater Treatment Utilities Inc - Brightside Crossing Apartments STP	Treated sanitary wastewater	Elbow Bayou then into Bayou Fountain	90,000	0.0900	0.1125	<100,000 gpd	001	338	500	253.7028	375.3000	63.4257	93.8250
75	42238	LAG530981	Lake Market Inc Grocery	Treated sanitary wastewater	Unnamed drainage ditch then to White Cypress Swamp Canal	2,985	0.0030	0.0037	<5,000 gpd	001	338	500	8.4145	12.4475	2.1036	3.1119
76	42328	LAG750073	Terrace Properties	Exterior Vehicle Wash Wastewater	North Branch to Wards Creek to Bayou Manchac	253	0.0003	0.0003	Report	001	338	500	0.7132	1.0550	0.1783	0.2638
77	42439	LAG530364	McBR Management Co - McDonald's	Treated sanitary wastewater	Highway 948 roadside ditch, then to Ward's Creek, then to Bayou Manchac	4,300	0.0043	0.0054	<5,000 gpd	001	338	500	12.1214	17.9310	3.0303	4.4828
78	42601	LAG750680	Auger Services	Exterior Vehicle Wash Wastewater	Local drainage then into Muddy Creek	500	0.0005	0.0006	Report	001	338	500	1.4095	2.0850	0.3524	0.5213
79	43000	LAG540943	Raybons Village	Treated sanitary wastewater	Through local drainage then into Bluff Swamp	12,000	0.0120	0.0150	<25,000 gpd	001	338	500	33.8270	50.0400	8.4568	12.5100
80	43111	LAG530821	S&T Property Inc	Treated sanitary wastewater	Local drainage then into Old Ward's Creek	3,200	0.0032	0.0040	<5,000 gpd	001	338	500	9.0205	13.3440	2.2551	3.3360
81	43147	LAG540929	Mo-Dad Utilities LLC - The Reserves at Willow Lake	Treated sanitary wastewater	Local drainage then into Muddy Creek	16,400	0.0164	0.0205	<25,000 gpd	001	338	500	46.2303	68.3880	11.5576	17.0970
82	43148	LAG540927	Mo-Dad Utilities LLC - Manchac Highlands Subdivision	Treated sanitary wastewater	Local drainage then into Alligator Bayou	14,000	0.0140	0.0175	<25,000 gpd	001	338	500	39.4649	58.3800	9.8662	14.5950
83	43265	LAG530838	Sonic Drive-In	Treated sanitary wastewater	Local drainage then into the Amite River	1,200	0.0012	0.0015	<5,000 gpd	001	338	500	3.3827	5.0040	0.8457	1.2510
84	43308	LAG530653	Royal Motel	Treated sanitary wastewater	Unnamed ditch then to Bayou Manchac	4,300	0.0043	0.0054	<5,000 gpd	001	338	500	12.1214	17.9310	3.0303	4.4828

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
85	43362	LA0103853	St Gabriel City of - WWTP	Treated sanitary wastewater	Drainage canal, to Bayou Braud, to Bayou Manchac	100,000	0.1000	0.1250	100,000 gpd	001	338	500	281.8920	417.0000	70.4730	104.2500
86	43423	LAG530776	Sterling Prop	Treated sanitary wastewater	Local drainage then into Bayou Manchac	40	0.0000	0.0001	<2,500 gpd	001	338	500	0.1128	0.1668	0.0282	0.0417
87	43456	LAG540704	Strategic Restuarants Acquisition Co LLC - Burger King Restaurant #10762	Treated sanitary wastewater	Highway 73 roadside ditch, then to Johnson Bayou, then to Jim Bayou, then by local drainage to Bayou Manchac	8,000	0.0080	0.0100	<25,000 gpd	001	338	500	22.5514	33.3600	5.6378	8.3400
88	43864	LAG540820	Wastewater Treatment Utilities Inc - Ridgewood Subdivision STP	Treated sanitary wastewater	Local drainage then into Muddy Creek	12,000	0.0120	0.0150	<25,000 gpd	001	338	500	33.8270	50.0400	8.4568	12.5100
89	43865	LAG540819	Wastewater Treatment Utilities Inc - Lamonte Subdivision STP	Treated sanitary wastewater	Local drainage then into Jim Bayou	10,000	0.0100	0.0125	<25,000 gpd	001	338	500	28.1892	41.7000	7.0473	10.4250
90	43877	LAG570298	Wastewater Treatment Utilities Inc - Jefferson Oaks Subdivision STP	Treated sanitary wastewater	Local drainage, then into Muddy Creek, then into Bayou Manchac	30,000	0.0300	0.0375	<100,000 gpd	001	338	500	84.5676	125.1000	21.1419	31.2750
91	43879	LAG540829	Wastewater Treatment Utilities Inc - St Andrews Subdivision STP	Treated sanitary wastewater	Local drainage then into Bayou Manchac	12,000	0.0120	0.0150	<25,000 gpd	001	338	500	33.8270	50.0400	8.4568	12.5100
92	43880	LAG570079	Wastewater Treatment Utilities Inc - Hunter's Trace Subdivision STP	Treated sanitary wastewater	Local drainage then into Muddy Creek	40,800	0.0408	0.0510	<100,000 gpd	001	338	500	115.0119	170.1360	28.7530	42.5340
93	43881	LAG540830	Wastewater Treatment Utilities Inc - Lake at Twin Oaks Subdivision STP	Treated sanitary wastewater	Local drainage then into Johnson Bayou	13,200	0.0132	0.0165	<25,000 gpd	001	338	500	37.2097	55.0440	9.3024	13.7610

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
94	43882	LAG540818	Wastewater Treatment Utilities Inc - Willow Cove Subdivision STP	Treated sanitary wastewater	Local drainage then into Muddy Creek	8,000	0.0080	0.0100	<25,000 gpd	001	338	500	22.5514	33.3600	5.6378	8.3400
95	43883	LAG570096	Wastewater Treatment Utilities Inc - Manchac Plantation Subdivision STP	Treated sanitary wastewater	Unnamed ditch then into Bayou Manchac	49,600	0.0496	0.0620	<100,000 gpd	001	338	500	139.8184	206.8320	34.9546	51.7080
96	43884	LAG570097	Wastewater Treatment Utilities Inc - Manchac Crossing Subdivision STP	Treated sanitary wastewater	Unnamed ditch then into Bayou Manchac	49,600	0.0496	0.0620	<100,000 gpd	001	338	500	139.8184	206.8320	34.9546	51.7080
97	52328	LA0110817	River City Equestrian Center LLC	treated sanitary wastewater and equus caballus washwater	Muddy Creek	200	0.0002	0.0003	2,500	001	338	500	0.5638	0.8340	0.1409	0.2085
98	69881	LAG110042	LA Concrete Products	Process wastewater and process area stormwater	Local drainage to Ward's Creek	350	0.0004	0.0004	<5,000 sanitary	001	338	500	0.9866	1.4595	0.2467	0.3649
	69881	LAG110042	LA Concrete Products	Treated sanitary wastewater		600	0.0006	0.0008		005	338	500	1.6914	2.5020	0.4228	0.6255
99	70008	LAG750575	Circle K #2709726	Exterior Vehicle Wash Wastewater	North Branch	720	0.0007	0.0009		001	338	500	2.0296	3.0024	0.5074	0.7506
100	70009	LAG750572	Circle K #2709718	Exterior Vehicle Wash Wastewater	Dawson Creek	720	0.0007	0.0009		001	338	500	2.0296	3.0024	0.5074	0.7506
101	79062	LAG541339	WalMart Supercenter #5056	treated sanitary wastewater	Welsh Gully to Bayou Manchac	14,500	0.0145	0.0181	25,000	001	338	500	40.8743	60.4650	10.2186	15.1163
102	79176	LAG532331	Dutchtown Tiger Mart	treated sanitary wastewater	Effluent pipe to Hwy 73 ditch to Johnson Bayou	2,160	0.0022	0.0027	5,000	001	338	500	6.0889	9.0072	1.5222	2.2518
103	79640	LAG750390	Circle K #2709728	Exterior Vehicle Wash Wastewater	Open parish ditch via Airline Highway then into Bayou Manchac then into the Amite River then into Lake Maurepas	720	0.0007	0.0009	Report	001	338	500	2.0296	3.0024	0.5074	0.7506

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
	79640	LAG750390	Circle K #2709728	Sanitary	Open parish ditch via Highland Road into Airline Highway ditch then into Bayou Manchac then into the Amite River then into Lake Maurepas	1,000	0.0010	0.0013	5,000	002	338	500	2.8189	4.1700	0.7047	1.0425
104	80044	LAG750321	Auto Spa LLC	Commingled treated Exterior Vehicle Wash and sanitary Wastewater	Local drainage then into Bayou Narcisse	4,950	0.0050	0.0062	Report	001	338	500	13.9537	20.6415	3.4884	5.1604
105	83310	LAG750614	Sam's Club #6527	Exterior Vehicle Wash Wastewater	On Site store sewer system (RCP Pipes) then into local parish drainage then into Ward Creek then into Lake Pontchartrain	500	0.0005	0.0006	Report	001	338	500	1.4095	2.0850	0.3524	0.5213
106	83712	LAG470147	Brian Harris BMW	Commingled washrack wastewater and shop floor washwater	Unnamed ditch then to Claycut Bayou then to the Amite River	163	0.0002	0.0002		001	338	500	0.4595	0.6797	0.1149	0.1699
107	84679	LAG750579	Circle K #2709716	Exterior Vehicle Wash Wastewater	Effluent pipe then into drainage ditch then into Clay Cut Bayou then into the Amite River	690	0.0007	0.0009	Report	001	338	500	1.9451	2.8773	0.4863	0.7193
108	85011	LAG480200	Shaw Constructors Inc - Equipment Yard	Truck wash rack washwater	Unnamed ditch to Bluff Swamp to Bayou Manchac	440	0.0004	0.0006		001	338	500	1.2403	1.8348	0.3101	0.4587
	85011	LAG480200	Shaw Constructors Inc - Equipment Yard	Treated Sanitary Wastewater	Unnamed ditch to Bluff Swamp to Bayou Manchac	210	0.0002	0.0003	5,000	002	338	500	0.5920	0.8757	0.1480	0.2189
	85011	LAG480200	Shaw Constructors Inc - Equipment Yard	Treated Sanitary Wastewater	Unnamed ditch to Bluff Swamp to Bayou Manchac	360	0.0004	0.0005		003	338	500	1.0148	1.5012	0.2537	0.3753

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
	85011	LAG480200	Shaw Constructors Inc - Equipment Yard	Treated Sanitary Wastewater	Unnamed ditch to Bluff Swamp to Bayou Manchac	750	0.0008	0.0009		004	338	500	2.1142	3.1275	0.5285	0.7819
	85011	LAG480200	Shaw Constructors Inc - Equipment Yard	Treated Sanitary Wastewater	Unnamed ditch to Bluff Swamp to Bayou Manchac	3,000	0.0030	0.0038		005	338	500	8.4568	12.5100	2.1142	3.1275
	85011	LAG480200	Shaw Constructors Inc - Equipment Yard	Treated Sanitary Wastewater	Unnamed ditch to Bluff Swamp to Bayou Manchac	150	0.0002	0.0002		006	338	500	0.4228	0.6255	0.1057	0.1564
	85011	LAG480200	Shaw Constructors Inc - Equipment Yard	Treated Sanitary Wastewater	Unnamed ditch to Bluff Swamp to Bayou Manchac	250	0.0003	0.0003		007	338	500	0.7047	1.0425	0.1762	0.2606
109	85249	LA0109053	Dixie Landin' LLC	Treated sanitary wastewater, food service wastewater, condensate from air conditioners	drainage ditch to Ward's Creek	35,000	0.0350	0.0438		001	338	500	98.6622	145.9500	24.6656	36.4875
	85249	LA0109053	Dixie Landin' LLC	backwash filters, pool filter backwash, maintenance wastewater, pool overflow and draining, and stormwater runoff	drainage ditch to Ward's Creek	167,000	0.1670	0.2088		002	338	500	470.7596	696.3900	117.6899	174.0975
	85249	LA0109053	Dixie Landin' LLC	backwash filters, pool filter backwash, maintenance wastewater, pool overflow and draining, and stormwater runoff	drainage ditch to Ward's Creek	167,000	0.1670	0.2088		003	338	500	470.7596	696.3900	117.6899	174.0975
110	85526	LAG531084	McBR Management Co - McDonald's	Sanitary	local drainage to Bluff Swamp to Bayou Manchac	3,800	0.0038	0.0048	5,000	001	338	500	10.7119	15.8460	2.6780	3.9615
111	85763	LAG750363	ISC Properties LLC	commingled treated Exterior Vehicle Wash and sanitary Wastewater	Unnamed diitch then to Bayou Manchac	6,000	0.0060	0.0075	Report	001	338	500	16.9135	25.0200	4.2284	6.2550
	85763	LAG750363	ISC Properties LLC	Sanitary Wastewater	Unnamed diitch then to Bayou Manchac	1,300	0.0013	0.0016	Report	002	338	500	3.6646	5.4210	0.9161	1.3553

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
112	86164	LAG750577	Circle K #2709722	Exterior Vehicle Wash Wastewater	Efffluent Pipe then into drainage ditch then into Bayou Fountain	720	0.0007	0.0009	Report	001	338	500	2.0296	3.0024	0.5074	0.7506
113	86559	LAG531113	Dynasty Restaurant LLC	Sanitary	ditch along Airline Hwy to Bluff Swamp to Bayou Manchac	4,200	0.0042	0.0053	5,000	001	338	500	11.8395	17.5140	2.9599	4.3785
114	86631	LAG531911	Bethany World Prayer Center	Sanitary	unnamed ditch to Ward's Creek Diversion Canal to Bayou Manchac	1,200	0.0012	0.0015	5,000	001	338	500	3.3827	5.0040	0.8457	1.2510
115	86645	LAG570271	Ascension Wastewater Treatment, Inc - Jefferson Crossing Subdivision STP	Sanitary	local drainage to Muddy Creek to Bayou Manchac	72,000	0.0720	0.0900	100,000	001	338	500	202.9622	300.2400	50.7406	75.0600
116	86783	LAG750342	Extreme Clean Car Wash - Lee Dr LLC	Exterior Vehicle Wash Wastewater	Bayou Duplantier	1,916	0.0019	0.0024	Report	001	338	500	5.4011	7.9897	1.3503	1.9974
117	86995	LAG570279	Ascension Wastewater Treatment, Inc - Bluff Oaks Plantation Subdivision STP	Sanitary	Bluff Swamp, Bayou Manchac	26,000	0.0260	0.0325	100,000	001	338	500	73.2919	108.4200	18.3230	27.1050
118	87066	LAG531134	Giovonni Mucciacciaro - GE Railroad Property	Sanitary	parish ditch to Diversion Canal to Bayou Manchac	480	0.0005	0.0006	5,000	001	338	500	1.3531	2.0016	0.3383	0.5004
119	87100	LAG531652	Barringer Foreman Technology Park LLC	Sanitary	unnamed ditch to Ward's Creek to Bayou Manchac	2,000	0.0020	0.0025	5,000	001	338	500	5.6378	8.3400	1.4095	2.0850
120	87126	LAG750350	Benny's Car Wash LLC - Perkins Express	Exterior Vehicle Wash Wastewater	Local drainage then to Dawson Creek	22,251	0.0223	0.0278		001	338	500	62.7238	92.7867	15.6809	23.1967
121	87676	LAG470089	All Star Automotive Group - All Star Ford Lincoln - Mercury	Sanitary and vehicle washwater	Bayou Manchac	288	0.0003	0.0004		001	338	500	0.8118	1.2010	0.2030	0.3002

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
122	87818	LAG532233	Donna L Kleinpeter DVM	Sanitary	Via effluent lift station through 2 inch effluent forced main pipe approximately 200 feet then into Diversion Canal	1,000	0.0010	0.0013	2,500	001	338	500	2.8189	4.1700	0.7047	1.0425
	87818	LAG532233	Donna L Kleinpeter DVM	Sanitary	Via Pipe into Ward's Creek	1,000	0.0010	0.0013	2,500	002	338	500	2.8189	4.1700	0.7047	1.0425
	87818	LAG532233	Donna L Kleinpeter DVM	Sanitary	Via Pipe into Ward's Creek	500	0.0005	0.0006	2,500	003	338	500	1.4095	2.0850	0.3524	0.5213
123	88249	LAG531172	American Alloy Steel Inc	Sanitary	Bayou Braud into Spanish Lake	160	0.0002	0.0002	2,500	001	338	500	0.4510	0.6672	0.1128	0.1668
124	90164	LAG570217	Dutch Town High School	Sanitary	Johnson Bayou to Jim Bayou to Bluff Swamp	31,600	0.0316	0.0395	100,000	001	338	500	89.0779	131.7720	22.2695	32.9430
125	90596	LAG541264	Ascension Wastewater Treatment, Inc - The Bluffs Subdivision STP	Treated Sanitary Wastewater	Unnamed ditch to Bluff Swamp to Bayou Manchac	24,000	0.0240	0.0300	25,000	001	338	500	67.6541	100.0800	16.9135	25.0200
126	92989	LA0115771	St Gabriel City of - Carville Wastewater Treatment Facility	Sanitary	Community Canal to Bayou Braud to Bayou Manchac	150,000	0.1500	0.1875	150,000	001	338	500	422.8380	625.5000	105.7095	156.3750
127	93789	LAG570291	Ascension Wastewater Treatment, Inc - Le Chenier Subdivision STP	Sanitary	Muddy Creek to Bayou Manchac	60,000	0.0600	0.0750	100,000	001	338	500	169.1352	250.2000	42.2838	62.5500
128	93814	LAG570278	Ascension Wastewater Treatment, Inc - Cobblestone Parc Subdivision STP	Sanitary	unnamed ditch to Johnson Bayou	50,000	0.0500	0.0625	100,000	001	338	500	140.9460	208.5000	35.2365	52.1250

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
129	93821	LAG570272	Ascension Wastewater Treatment, Inc - Lakes at Ascension Subdivision STP	Sanitary	local drainage to Johnson Bayou	50,000	0.0500	0.0625	100,000	001	338	500	140.9460	208.5000	35.2365	52.1250
130	93823	LA0124753	Ascension Wastewater Treatment, Inc - Meadow Ridge Subdivision STP	Sanitary	Muddy Creek to Bayou Manchac	41,200	0.0412	0.0515	100,000	001	338	500	116.1395	171.8040	29.0349	42.9510
131	93827	LAG570281	Ascension Wastewater Treatment, Inc - Spanish Oaks Subdivision STP	Sanitary	Bluff Swamp, Bayou Manchac	32,000	0.0320	0.0400	100,000	001	338	500	90.2054	133.4400	22.5514	33.3600
132	93828	LAG570300	Ascension Wastewater Treatment, Inc - Twelve Oaks Subdivision STP	Sanitary	Bayou Manchac	60,000	0.0600	0.0750	100,000	001	338	500	169.1352	250.2000	42.2838	62.5500
133	93873	LAG541262	Ascension Wastewater Treatment, Inc - Village at Willow Lake Subdivision STP	Sanitary	unnamed ditch to Muddy Creek to Bayou Manchac	24,000	0.0240	0.0300	25,000	001	338	500	67.6541	100.0800	16.9135	25.0200
134	93884	LAG570302	Ascension Wastewater Treatment, Inc - Manchac Harbor Subdivision STP - 1st & 2nd Filings	Sanitary	Muddy Creek to Bayou Manchac	98,000	0.0980	0.1225	100,000	001	338	500	276.2542	408.6600	69.0635	102.1650
135	93885	LA0124761	Ascension Wastewater Treatment, Inc - Manchac Place Subdivision STP	Sanitary	Unnamed ditch to Bluff Swamp to Bayou Manchac	50,000	0.0500	0.0625	100,000	001	338	500	140.9460	208.5000	35.2365	52.1250
136	93886	LAG570274	Ascension Wastewater Treatment, Inc - Fountain Hill Subdivision STP	Sanitary	local drainage to Bluff Swamp to Bayou Manchac	72,000	0.0720	0.0900	100,000	001	338	500	202.9622	300.2400	50.7406	75.0600

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
137	94155	LAG750400	College Town Car Wash	Exterior Vehicle Wash Wastewater	Bayou Fountain	44	0.0000	0.0001		001	338	500	0.1240	0.1835	0.0310	0.0459
138	94424	LAG750397	Lambert & Miles LLC - Burbank Car Wash	Exterior Vehicle Wash Wastewater	Local drainage then to Bayou Fountain	111	0.0001	0.0001		001	338	500	0.3129	0.4629	0.0782	0.1157
139	97865	LAG541211	Prairieville Middle School	Sanitary	local drainage to Muddy Creek to Bayou Manchac	12,580	0.0126	0.0157	25,000	001	338	500	35.4620	52.4586	8.8655	13.1147
140	98734	LAG541133	SJK & T Enterprises LLC - Lynch's Mobile Home Park	Sanitary	local drainage to Muddy Creek to Bayou Manchac	19,500	0.0195	0.0244	25,000	001	338	500	54.9689	81.3150	13.7422	20.3288
141	100324	LA0117731	Ascension Wastewater Treatment, Inc - Cloverhill Subdivision STP	Sanitary	local drainage to Ward's Creek Diversion Canal	36,000	0.0360	0.0450	100,000	001	338	500	101.4811	150.1200	25.3703	37.5300
142	103849	LAG570237	Total Environmental Solutions Inc - Lakes at Dutchtown Subdivision	Sanitary	unnamed ditch to Johnson Bayou	45,600	0.0456	0.0570	100,000	001	338	500	128.5428	190.1520	32.1357	47.5380
143	103925	LAG750855	AAA Rent All	Exterior Vehicle Wash Wastewater	Pipe, ditch, Dawson Creek	250	0.0003	0.0003		001	338	500	0.7047	1.0425	0.1762	0.2606
144	104416	LAG531406	TNT Performance & Repair LLC - Diesel Performance Facility	Sanitary	Unnamed ditch to Bayou Manchac	140	0.0001	0.0002	2,500	001	338	500	0.3946	0.5838	0.0987	0.1460
145	106648	LAG541224	Prairieville Plaza Shopping Center	Sanitary	Roadside ditch, Welsh Gully	10,700	0.0107	0.0134	25,000	001	338	500	30.1624	44.6190	7.5406	11.1548
146	108610	LAG541143	Commercial Sewage Treatment Plant - Siegen Green Shopping Center	Sanitary	local drainage to Ward's Creek to Bayou Manchac	5,220	0.0052	0.0065	25,000	001	338	500	14.7148	21.7674	3.6787	5.4419
147	116991	LAG541139	Cyrus Bonakchi Retail Complex WWTS	Sanitary	roadside ditch to Ward's Creek to Ward's Creek Diversion Canal to Bayou Manchac	16,000	0.0160	0.0200	25,000	001	338	500	45.1027	66.7200	11.2757	16.6800

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
148	117898	LAG531533	Chase Highland Branch	Sanitary	unnamed ditch to Bayou Fountain to Bayou Manchac	500	0.0005	0.0006	2,500	001	338	500	1.4095	2.0850	0.3524	0.5213
149	117999	LAG541362	Parks Apartments II - WWTP	Sanitary	unnamed ditch to Dawson Creek to Ward Creek to Ward Creek Diversion to Bayou Manchac	6,400	0.0064	0.0080	25,000	001	338	500	18.0411	26.6880	4.5103	6.6720
150	118197	LAG750847	On The Run - Exxon RAS #70132	Sanitary	Unnamed ditch to Bayou Manchac	4,080	0.0041	0.0051	5,000	002	338	500	11.5012	17.0136	2.8753	4.2534
151	118197	LAG750847	On The Run - Exxon RAS #70132	Exterior Vehicle Wash Wastewater	Unnamed ditch to Bayou Manchac	1,609	0.0016	0.0020	variable	001	338	500	4.5356	6.7095	1.1339	1.6774
152	118273	LAG541269	Ascension Wastewater Treatment Inc - Crestview Estates Subdivision STP	Sanitary	local drainage to Jim Bayou	18,400	0.0184	0.0230	25,000	001	338	500	51.8681	76.7280	12.9670	19.1820
153	118381	LAG570308	Ascension Wastewater Treatment, Inc - Dutchtown Villas Subdivision STP	Sanitary	local drainage to Johnson Bayou	30,000	0.0300	0.0375	100,000	001	338	500	84.5676	125.1000	21.1419	31.2750
154	119110	LAG531557	St George Fire Protection District #2 - Highlandia Drive Station #68	Sanitary	Bayou Manchac	175	0.0002	0.0002		001	338	500	0.4933	0.7298	0.1233	0.1824
155	119486	LAG531797	Ascension Wastewater Treatment Inc - Ultima Plaza	Sanitary	Welsh Gully to Bayou Manchac	4,000	0.0040	0.0050	5,000	001	338	500	11.2757	16.6800	2.8189	4.1700
156	119612	LAG532019	Kinder Garden LLC	Sanitary	local drainage to Muddy Creek to Bayou Manchac	2,040	0.0020	0.0026	5,000	001	338	500	5.7506	8.5068	1.4376	2.1267
157	120032	LAG531805	Cypress Heights Academy	Sanitary	local drainage to Wards Creek to Bayou Manchac	2,790	0.0028	0.0035	5000	001	338	500	7.8648	11.6343	1.9662	2.9086
158	120065	LAG541320	Achord's Bluff Road Trailer Park	Sanitary	Unnamed ditch to Bluff Swamp to Bayou Manchac	13,500	0.0135	0.0169	25,000	001	338	500	38.0554	56.2950	9.5139	14.0738

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
159	120263	LAG541321	Oak Grove Primary School	Sanitary	unnamed ditch to unnamed canal to Bayou Manchac	14,255	0.0143	0.0178	25,000	001	338	500	40.1837	59.4434	10.0459	14.8608
160	120326	LAG470219	Infinity of Baton Rouge	Treated washrack wastewater	Ward Creek	350	0.0004	0.0004		001	338	500	0.9866	1.4595	0.2467	0.3649
161	121616	LAG531813	Domino's Pizza	Sanitary	Unnamed ditch then to Welsh Gully	800	0.0008	0.0010	5,000	001	338	500	2.2551	3.3360	0.5638	0.8340
162	121645	LAG531650	Dutchtown Baptist Church - WWTP	Sanitary	Unnamed ditch, then Jim Bayou, then Johnson Bayou	2,000	0.0020	0.0025	2,500	001	338	500	5.6378	8.3400	1.4095	2.0850
163	121672	LAG541220	Frank's Restaurant & Banquet Hall	Sanitary	Local drainage then to Bayou Manchac	10,355	0.0104	0.0129	25,000	001	338	500	29.1899	43.1804	7.2975	10.7951
164	124896	LAG541266	Ascension Wastewater Treatment, Inc - Bluff Meadows Subdivision	Sanitary	Parish drainage then into Jim Bayou	8,800	0.0088	0.0110	25,000	001	338	500	24.8065	36.6960	6.2016	9.1740
165	124899	LAG531704	LA Towing	Sanitary	Local drainage, Bayou Paul, Bayou Braud, Spanish Lake	40	0.0000	0.00005	2,500	001	338	500	0.1128	0.1668	0.0282	0.0417
166	124995	LA0123404	K-TEC LLC	Water jet abrasive wastewater, hydrostatic water pressure test system wastewater, and sanitary wastewater from machine shop	Pipe to Welsh Gully, to Bayou Manchac, then to Amite River	1,650	0.0017	0.0021		001	338	500	4.6512	6.8805	1.1628	1.7201
167	125092	LAG532510	US Postal Service - Commerce Park Post Office	Sanitary	unnamed ditch to Dawson Creek to Ward Creek to Ward Creek Diversion to Bayou Manchac	2,500	0.0025	0.0031	5,000	001	338	500	7.0473	10.4250	1.7618	2.6063
168	125403	LAG541268	Ascension Wastewater Treatment Inc - Arlington Plantation Condos	Sanitary	Parish drainage then into Muddy Creek	19,200	0.0192	0.0240	25,000	001	338	500	54.1233	80.0640	13.5308	20.0160

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
169	125432	LAG570333	Ascension Wastewater Treatment Inc - Legacy Hills Subdivision STP	Sanitary	Unnamed ditch, then to Johnson Bayou, then to Jim Bayou	26,000	0.0260	0.0325	100,000	001	338	500	73.2919	108.4200	18.3230	27.1050
170	127024	LAG541489	Ascension Wastewater Treatment Inc - Oak Grove Courtyard	Sanitary	local drainage to Bluff Swamp to Bayou Manchac	6,800	0.0068	0.0085	25,000	001	338	500	19.1687	28.3560	4.7922	7.0890
171	127036	LAG541461	Ascension Wastewater Treatment, Inc - Manchac Harbor Subdivision - 3rd & 4th Filings	Sanitary	Muddy Creek to Bayou Manchac	23,600	0.0236	0.0295	25,000	001	338	500	66.5265	98.4120	16.6316	24.6030
172	127204	LAG541297	R&D Property Development LLC - Highlandia Office/Retail Center	Sanitary	Unnamed ditch, then to highway ditch, then to Bayou Manchac	20,000	0.0200	0.0250	25,000	001	338	500	56.3784	83.4000	14.0946	20.8500
173	127459	LAG541328	Greg Martrain Strip Shopping Mall	Sanitary	Highway 190 roadside ditch then to Bayou Manchac	6,120	0.0061	0.0077	25,000	001	338	500	17.2518	25.5204	4.3129	6.3801
174	129104	LAG531991	Gulf Coast Event Services	Sanitary	Local drainage, to roadside ditch, to Johnson Bayou	500	0.0005	0.0006	2,500	001	338	500	1.4095	2.0850	0.3524	0.5213
175	132705	LAG570416	Ascension Wastewater Treatment Inc - Wrenwood Subdivision	Sanitary	ditch to Muddy Creek to Bayou Manchac	26,800	0.0268	0.0335	100,000	001	338	500	75.5471	111.7560	18.8868	27.9390
176	132934	LAG541468	Ascension Wastewater Treatment Inc - Perkins Condos	Sanitary	Local drainage to Bayou Manchac	19,200	0.0192	0.0240	25,000	001	338	500	54.1233	80.0640	13.5308	20.0160
177	133058	LAG532323	Garcia Management Group LLC	Sanitary	ditch at Swamp Road to Bayou Manchac	1,000	0.0010	0.0013	5,000	001	338	500	2.8189	4.1700	0.7047	1.0425
178	133959	LAG532007	Prairieville Investment LLC - Ascension Marketplace	Sanitary	Unnamed ditch, Welsh Gully, Bayou Manchac	400	0.0004	0.0005	2,500	001	338	500	1.1276	1.6680	0.2819	0.4170

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
179	134379	LAG541547	LA Lagniappe Restaurant Inc - LA Lagniappe Restaurant	Sanitary	Parish ditch, Ward Creek	7,335	0.0073	0.0092	25,000	001	338	500	20.6768	30.5870	5.1692	7.6467
180	135121	LAG570362	Rapps Enterprises LLC - Home Depot Out Parcels/Restaurant & Retail	Sanitary	Storm drain, local drainage, Ward Creek	33,012	0.0330	0.0413	100,000	001	338	500	93.0582	137.6600	23.2645	34.4150
181	136290	LAG531998	CVS Pharmacy	Sanitary	Bluff Swamp, Bayou Manchac	160	0.0002	0.0002	2,500	001	338	500	0.4510	0.6672	0.1128	0.1668
182	136481	LAG532107	Airwal Properties LLC - Prairieville Retail Center	Sanitary	Pipe to Welsh Gully	4,895	0.0049	0.0061	5,000	001	338	500	13.7986	20.4122	3.4497	5.1030
183	137507	LAG570415	Ascension Wastewater Treatment, Inc - Moss Point Subdivision	Sanitary	ditch to Johnson Bayou to Jim Bayou to Bluff Swamp to Bayou Manchac	39,600	0.0396	0.0495	100,000	001	338	500	111.6292	165.1320	27.9073	41.2830
184	137952	LAG532063	Iberia Bank	Sanitary	Unnamed ditch to Welsh Gully	200	0.0002	0.0003	2,500	001	338	500	0.5638	0.8340	0.1409	0.2085
185	138856	LAG33A602	St. Gabriel Dehydration & NGL Production Facility	Dewatering effluent from reserve pits which have not been used since 12/15/96.	Braud Bayou	1,500	0.0015	0.0019		001	338	500	4.2284	6.2550	1.0571	1.5638
	138856	LAG33A602	St. Gabriel Dehydration & NGL Production Facility	Treated sanitary wastewater	Braud Bayou	500	0.0005	0.0006		04A	338	500	1.4095	2.0850	0.3524	0.5213
	138856	LAG33A602	St. Gabriel Dehydration & NGL Production Facility	Treated sanitary wastewater	Braud Bayou	500	0.0005	0.0006		04B	338	500	1.4095	2.0850	0.3524	0.5213

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
	138856	LAG33A602	St. Gabriel Dehydration & NGL Production Facility	Deck drainage	Braud Bayou	870	0.0009	0.0011		002	338	500	2.4525	3.6279	0.6131	0.9070
	138856	LAG33A602	St. Gabriel Dehydration & NGL Production Facility	Discharge of formation test fluids	Braud Bayou	1,000	0.0010	0.0013		003	338	500	2.8189	4.1700	0.7047	1.0425
	138856	LAG33A602	St. Gabriel Dehydration & NGL Production Facility	Discharge of domestic waste water	Braud Bayou	500	0.0005	0.0006		005	338	500	1.4095	2.0850	0.3524	0.5213
	138856	LAG33A602	St. Gabriel Dehydration & NGL Production Facility	Discharge of hydrostatic test water	Braud Bayou	1,000	0.0010	0.0013		006	338	500	2.8189	4.1700	0.7047	1.0425
	138856	LAG33A602	St. Gabriel Dehydration & NGL Production Facility	Miscellaneous Discharges-boiler blowdown, non-contact cooling water, bilge water, uncontaminated ballast	Braud Bayou	1,000	0.0010	0.0013		007	338	500	2.8189	4.1700	0.7047	1.0425
186	139566	LAG541469	Ascension Wastewater Treatment Inc - Quail Hollow Subdivision STP	Sanitary	Muddy Creek	13,200	0.0132	0.0165	25,000	001	338	500	37.2097	55.0440	9.3024	13.7610
187	143342	LAG541533	Ascension Wastewater Treatment Inc - Retreat at Ascension Subdivision	Sanitary	Bluff Swamp, Bayou Manchac	8,000	0.0080	0.0100	25,000	001	338	500	22.5514	33.3600	5.6378	8.3400
188	143343	LAG570400	Ascension Wastewater Treatment Inc - Oaks on the Bluff Subdivision WWTP	Sanitary	Parish Drainage to Jim Bayou	56,400	0.0564	0.0705	100,000	001	338	500	158.9871	235.1880	39.7468	58.7970
189	143945	LAG532143	The Business Park at Oak Grove Condominium Association - The Business Park at Oak Grove	Sanitary	Parish Drainage, Muddy Creek	300	0.0003	0.0004	2,500	001	338	500	0.8457	1.2510	0.2114	0.3128

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
190	144464	LAG541519	Baudry Property Development LLC - Oak Grove Village & Professional Park	Sanitary	Roadside ditch, Welsh Gully	6,960	0.0070	0.0087	25,000	001	338	500	19.6197	29.0232	4.9049	7.2558
191	146248	LAG541586	Ascension Wastewater Treatment Inc - Bluff Heritage (residential subdivision)	Sanitary	Jim Bayou to Bluff Swamp to Spanish Lake to Alligator Bayou to Bayou Manchac	14,800	0.0148	0.0185	25,000	001	338	500	41.7200	61.7160	10.4300	15.4290
192	147413	LAG532678	Ascension Wastewater Treatment Inc - Taco Bell	Sanitary	unnamed ditch to Jim Bayou	2,400	0.0024	0.0030	5,000	001	338	500	6.7654	10.0080	1.6914	2.5020
193	148008	LAG532198	Ascension Wastewater Treatment Inc - Dutchtown Point Shopping Center WWTP	Sanitary	Bluff Swamp, Bayou Manchac	1,000	0.0010	0.0013	2,500	001	338	500	2.8189	4.1700	0.7047	1.0425
194	148996	LAG750597	LA Grove Fuel Lube & Carwash	Exterior Vehicle Wash Wastewater	Unnamed ditch to Bayou Manchac	250	0.0003	0.0003		001	338	500	0.7047	1.0425	0.1762	0.2606
	148996	LAG750597	LA Grove Fuel Lube & Carwash	Treated Sanitary Wastewater	Unnamed ditch to Bayou Manchac	250	0.0002	0.0003	5,000	002	338	500	0.7042	1.0417	0.1760	0.2604
195	149454	LAG532230	The Learning Tree at Oak Grove LLC - Learning Tree Daycare	Sanitary	Hwy 73 ditch to Welsh Gully	2,010	0.0020	0.0025	2,500	001	338	500	5.6660	8.3817	1.4165	2.0954
196	151677	LA0123684	Ascension Wastewater Treatment Inc - Manchac Harbor Crossing	Sanitary	ditch to Cotton Bayou to Bayou Manchac	29,200	0.0292	0.0365	100,000	001	338	500	82.3125	121.7640	20.5781	30.4410
197	151737	LAG750613	Enterprise Rent a Car	Exterior Vehicle Wash Wastewater	Bayou Manchac	400	0.0004	0.0005		001	338	500	1.1276	1.6680	0.2819	0.4170
198	151794	LAG750612	Benny's Car Wash - Essen Full Service	Exterior Vehicle Wash Wastewater	Wards Creek	28,126	0.0281	0.0352		001	338	500	79.2849	117.2854	19.8212	29.3214

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Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
199	151923	LAG532296	Legacy Oaks LLC - The Highlands @ New Richmond	Sanitary	Bayou Fountain	440	0.0004	0.0006	2,500	001	338	500	1.2403	1.8348	0.3101	0.4587
200	151924	LAG532294	Legacy Oaks LLC - Legacy Oaks	Sanitary	Bayou Fountain	380	0.0004	0.0005	2,500	001	338	500	1.0712	1.5846	0.2678	0.3962
201	152058	LAG570431	Ascension Wastewater Treatment, Inc - Summerlynn Place	Sanitary	unnamed slough to Muddy Creek	22,800	0.0228	0.0285	100,000	001	338	500	64.2714	95.0760	16.0678	23.7690
202	152516	LAG470247	Goodyear Regional Dist Office - Goodyear Tire & Rubber Co	Exterior Vehicle Wash Wastewater	Wards Creek to Bayou Manchac	500	0.0005	0.0006		002	338	500	1.4095	2.0850	0.3524	0.5213
	152516	LAG470247	Goodyear Regional Dist Office - Goodyear Tire & Rubber Co	Sanitary		5,000	0.0050	0.0063		005	338	500	14.0946	20.8500	3.5237	5.2125
203	153571	LAG570425	Ascension Wastewater Treatment Inc - Maplewood Estates Subdivision	Sanitary	ditch to sloughtoWelsh Gully to Bayou Manchac	44,800	0.0448	0.0560	100,000	001	338	500	126.2876	186.8160	31.5719	46.7040
204	153573	LAG570424	Ascension Wastewater Treatment, Inc - Montrachet Subdivision	Sanitary	ditch to slough to Bayou Manchac	51,200	0.0512	0.0640	100,000	001	338	500	144.3287	213.5040	36.0822	53.3760
205	154124	LAG570437	Ascension Wastewater Treatment Inc - Landing At Mallard Lakes - WWTP	Sanitary	ditch to Bayou Manchac	9,600	0.0096	0.0120	100,000	001	338	500	27.0616	40.0320	6.7654	10.0080
206	154183	LAG541631	Ascension Wastewater Treatment Inc - Dutchtown Gardens Subdivision	Sanitary	ditch to Johnson Bayou to Jim Bayou to Bluff Swamp to Bayou Manchac	18,800	0.0188	0.0235	100,000	001	338	500	52.9957	78.3960	13.2489	19.5990

Note a - TMDL concentrations presented in this table do not represent permit limits. Permit Limits are discussed in the Phase I Permit Implementation Strategy. Note b - due to the uncertainty of loading sources and the variable nature of stromwater, permit limits were not provided for the MS4 permits. The WLAs provided are not intended to be used as permit limits or targets. All requirement are expected to be met through the use of Best Management Practices (BMPs).											TMDL Concentration Limits (mg/L) - a		WLA (lbs/day)		MOS (lbs/day)	
Entry No.	Agency Interest No.	Permit No.	Facility Name	Effluent Type	Path	Expected Flow (gpd)	Expected Flow (MGD)	TMDL Flow (MGD)	Permit Flow (gpd)	Out-fall	Chlorides	Sulfates	Chlorides (based on criterion of 338 mg/L)	Sulfates (based on criterion of 500 mg/L)	Chlorides	Sulfates
207	154213	LAG750631	Oak Grove Express Lube LLC - Oak Grove Carwash	Exterior Vehicle Wash Wastewater	Highway 42 storm drain to unnamed branch then to Muddy Creek then to Bayou Manchac then to the Amite River to Lake Maurepas	2,880	0.0029	0.0036	Report	001	338	500	8.1185	12.0096	2.0296	3.0024
208	154276	LA0123749	Ascension Wastewater Treatment Inc - Commerce Center	Treated Sanitary Wastewater	Bluff Swamp, Bayou Manchac	200,000	0.2000	0.2500	200,000	001	338	500	563.7840	834.0000	140.9460	208.5000
209	154703	LA0124940	Ascension Wastewater Treatment Inc - The Lakes At Jamestown - WWTP	Treated Sanitary Wastewater	ditch to Wards Creek to Bayou Manchac	33,200	0.0332	0.0415	100,000	001	338	500	93.5881	138.4440	23.3970	34.6110
210	155461	LAG532584	Louisiana Machinery Co LLC	Sanitary	pond to Bluff Swamp, Bayou Manchac	1,000	0.0010	0.0013	2,500	001	338	500	2.8189	4.1700	0.7047	1.0425
211	158088	LAG541855	Mo-Dad Utilities LLC - DeGage Condominiums	Sanitary	ditch to Muddy Creek to Bayou Manchac	8,000	0.0080	0.0100	100,000	001	338	500	22.5514	33.3600	5.6378	8.3400
												Totals for point sources	11,223	16,602	2,806	4,151

Total Point Source WLA + MOS for chlorides (lbs/day) =	14,029
Total Point Source WLA + MOS for sulfates (lbs/day) =	20,753

EXECUTIVE SUMMARY

This report presents the results of a watershed-based analysis of Bayou Manchac. The analysis was conducted to establish TMDLs for chlorides and sulfates for the Bayou Manchac watershed. Bayou Manchac is located in south Louisiana and this subsegment includes Bayou Fountain, Ward Creek, Ward Creek Diversion Canal, Welsh Gully, Cotton Bayou, Muddy Creek, and several unnamed tributaries. Bayou Manchac (Subsegment 040201) is in the Lake Pontchartrain Basin and its drainage area includes the southern portions of East Baton Rouge Parish and the northern portions of Ascension Parish including Spanish Lake and the surrounding areas. The area is heavily populated and land use is primarily agriculture, grassland, vegetated urban, and wetland forest deciduous. Areas along the mainstem of Bayou Manchac are mostly comprised of wetland deciduous forest.

This report establishes TMDLs, wasteload allocations, load allocations, and margins of safety for chlorides and sulfates. In addition, this report discusses likely sources of the pollutants, potential affects on aquatic life, and the reductions in pollutant loads required to meet the updated criteria. The implementation of this TMDL through wastewater discharge permits and Best Management Practices (BMPs) to control and reduce the loading of chlorides and sulfates will be discussed in Section 7.

As shown in Tables 1 and 2, Bayou Manchac, Subsegment 040201, is listed on the Final 2008 and Draft 2010 Integrated Reports, as well as EPA's Consent Decree.

Potential sources of chlorides include potable water source for the area (groundwater), sanitary STPs that disinfect, and industrial facilities. Potential sources of sulfates include potable water source for the watershed (groundwater), sanitary STPs that dechlorinate, and industrial facilities permitted to discharge sulfate.

It has been noted that the sewage collection lines in some areas of southern East Baton Rouge Parish have had problems with overflows, leaks, and bypasses. Given that the sourcewater for the watershed typically contains chlorides and sulfates, these overflows, leaks, and bypasses are likely pathways for such pollutants to enter the Bayou Manchac watershed. Much of the loading is reaching Bayou Manchac via tributaries. LDEQ recognizes that East Baton Rouge Parish is conducting a series of projects to upgrade the South Plant and its collection system that are intended to address unauthorized discharges from leaks, overflows, and bypasses. These projects are expected to contribute to the overall improved water quality in the Bayou Manchac watershed, possibly contributing to reduced levels of chlorides and sulfates. The potential change in loadings brought on by these projects also justify the use of the phased TMDL approach.

The watershed drains areas that are regulated by two MS4 permits. The areas covered by these MS4 permits include many permitted and unpermitted facilities. While LDEQ does assume responsibility for these facilities, partial responsibility belongs to the MS4 permittee to ensure that water draining from the area of coverage does not impact the named waterbody. Other activities utilizing the potable water may also contribute to the MS4 loading. These activities may include the watering of lawns, washing of cars or buildings, and recreational use of potable water. Reductions in the loading presented in this report also apply to MS4 regulated areas.

The impact of stormwater loading on the waterbody under critical conditions is difficult to determine. Extensive monitoring can be monetarily and logistically prohibitive and the loading is variable.

Therefore it is impractical to set MS4 permit limits. In addition, this phased TMDL indicates that there is uncertainty associated with the load contributions of existing sources. LDEQ intends that the MS4 requirements of this TMDL be met through the use of BMPs. Appropriate BMP measures shall be implemented in accordance with applicable MS4 permit(s) to minimize the impacts of stormwater loading on water quality. Such BMP measures should include locating all loading sources, the elimination of illicit wastewater discharges, the regionalization of wastewater treatment, rehabilitating and upgrading sewer collection system lines, a cost-effective monitoring program, and other appropriate activities.

The various data and spreadsheets that were used to develop the TMDL may be found in the appendices. Chloride and sulfate data from LDEQ's Ambient Water Quality Network WQN Site 0142 was used in this study. Additional groundwater data was obtained from the Louisiana Department of Health and Hospitals.

LDEQ will work with other agencies such as local Soil Conservation Districts to implement agricultural best management practices in the watershed through the 319 programs, where appropriate. LDEQ will continue to work with local governments and facilities to ensure that all water quality goals are met while minimizing economic impacts. LDEQ will also continue to monitor the waterbodies to determine whether standards are being attained.

In accordance with Section 106 of the Federal Clean Water Act and under the authority of the Louisiana Environmental Quality Act, the LDEQ has established a comprehensive program for monitoring the quality of the state's surface waters. The LDEQ collects surface water samples at various locations, utilizing appropriate sampling methods and procedures for ensuring the quality of the data collected. The objectives of the surface water monitoring program are to determine the quality of the state's surface waters, to develop a long-term data base for water quality trend analysis, and to monitor the effectiveness of pollution controls. The data obtained through the surface water monitoring program is used to develop the state's biennial 305(b) report (*Water Quality Inventory*) and the 303 (d) list of impaired waters, also known as the Integrated Report. This information is also utilized in establishing priorities for the LDEQ nonpoint source program.

The LDEQ is continuing to implement a watershed approach to the surface water quality monitoring. Currently, LDEQ utilizes a four year sampling cycle. Approximately one quarter of the states watersheds will be sampled in each year so that all of the states watersheds will be sampled within the four year cycle. This will allow the LDEQ to determine whether there has been any improvement in water quality following implementation of the TMDLs. As the monitoring results are evaluated at the end of each year, waterbodies may be added to or removed from the 303(d) list.

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1. Definitions/Acronyms/Abbreviations

BAC	Bacterial Criteria
BMP	Best Management Practices
Cl	Chlorides
DO	Dissolved Oxygen
EPA	United States Environmental Protection Agency
LA	Load Allocation (Nonpoint source loads)
LDEQ	Louisiana Department of Environmental Quality
LMRAP	Lower Mississippi River Alluvial Plain
LTP	Louisiana Total Daily Maximum Daily Load Technical Procedures SOP
MS4	Stormwater Discharge From Municipal Separate Storm Sewer System
NPS	Nonpoint Source
NPDES	National Pollutant Discharge Elimination System
POTW	Publically Owned Treatment Works
SO_4	Sulfates
SOP	Standard Operating Procedure
STP	Sewage Treatment Plant
TEMPO	Tools for Environmental Management and Protection Organizations
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load = WLA + LA + MOS
USGS	United States Geological Survey
UV	Ultraviolet Radiation
WLA	Wasteload Allocation (Point source loads)
WQN	Water Quality Network
WWTP	Wastewater Treatment Plant

2. Introduction

Bayou Manchac, Subsegment 040201, is listed on the Final 2008, and Draft 2010 Integrated Reports, in addition to EPA's Consent Decree. The impairments listed in the Integrated Reports and their suspected causes are shown in Tables 1 and 2. Based on previous criteria for chlorides and sulfates, monitoring data for this subsegment indicated criteria were not being met, which requires the development of total maximum daily loads (TMDLs) for those parameters. Minerals criteria have been updated based on new scientific information (Appendix E). This report presents the TMDL development and results based on the updated minerals criteria for Bayou Manchac.

3. Study Area Description

3.1 General Information

"The Lake Pontchartrain Basin, located in southeastern Louisiana, consists of the tributaries and distributaries of Lake Pontchartrain, a large estuarine lake. The basin is bounded on the north by the Mississippi state line, on the west and south by the east bank Mississippi River levee, on the east by the Pearl River Basin and on the southeast by Breton and Chandeleur Sounds. This basin includes Lake Borgne, Breton Sound, Chandeleur Sound and the Chandeleur Islands. The northern part of the basin consists of wooded uplands, both pine and hardwood forests. The southern portions of the basin consist of cypress-tupelo swamps and lowlands and brackish and saline marshes. The marshes of the southeastern part of the basin constitute the most rapidly eroding area along the Louisiana coast. Elevations in this basin range from minus five feet at New Orleans to over two hundred feet near the Mississippi border." (LA DEQ, 2000)

This TMDL addresses Bayou Manchac, located in the Lake Pontchartrain Basin between the Mississippi River and the Amite River, south of Baton Rouge, Louisiana. This area is typical of the basin and is primarily comprised of pasture, wetlands, and residential as documented in Table 6 (LADEQ, 1999).

A detailed land cover map of Subsegment 040201 is also included in Appendix D2. Average annual precipitation in the segment, based on the nearest Louisiana Climatic Station, is 60-64 inches based on a 30-year period of record (LSU, 1999). There is a Louisiana average annual precipitation map located in Appendix D3.

3.2 Water Quality Standards

The Water Quality criteria and designated uses for Bayou Manchac Watershed are shown in Table 7. As noted in the table, the updated chlorides and sulfate criteria for Bayou Manchac are 338 and 500 mg/L, respectively.

The justification for LDEQ's variance to the existing minerals criteria and the updated minerals criteria applicable to Bayou Manchac are presented in Appendix E.

Figure 1. Map of Study Area

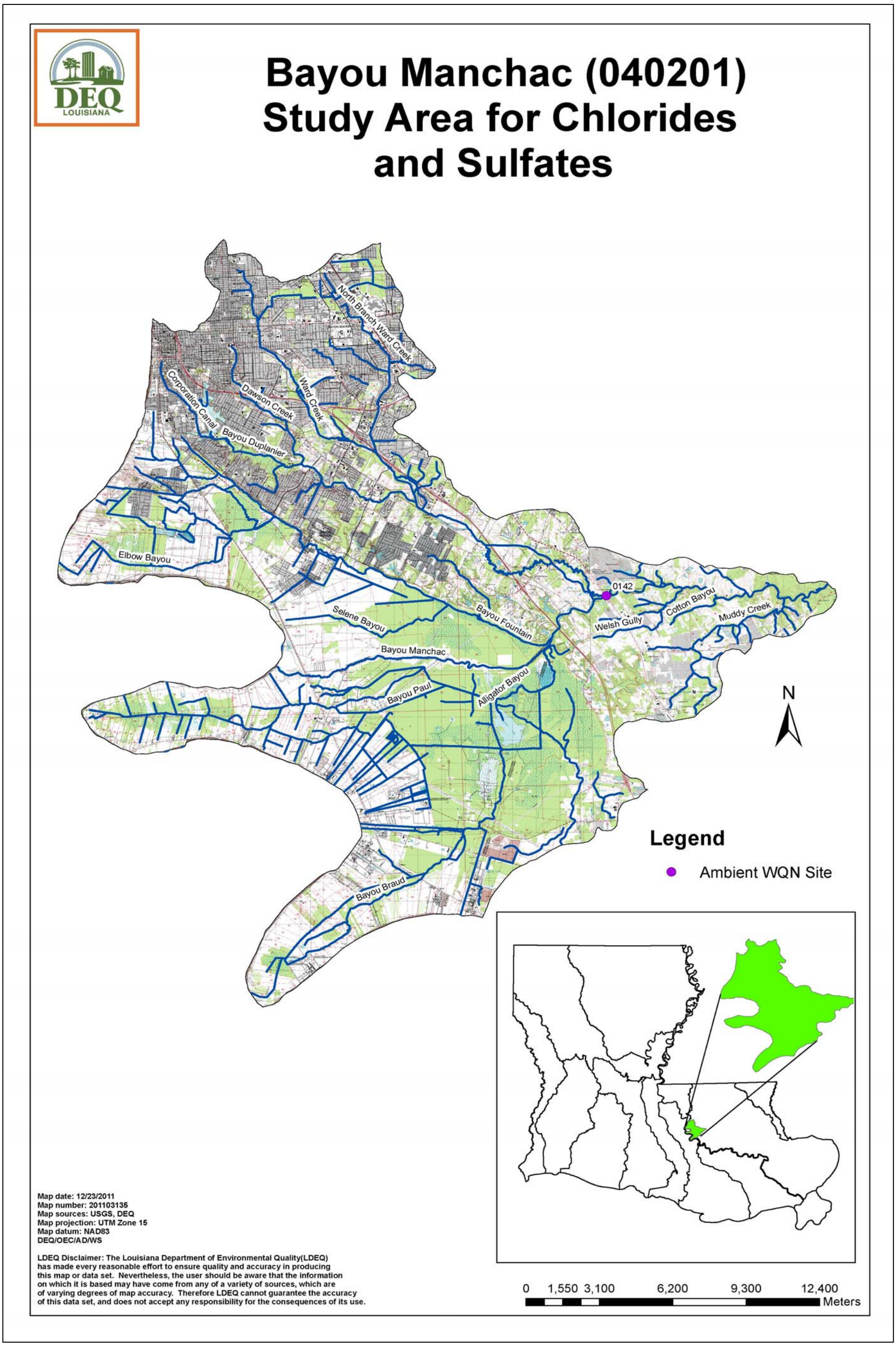

Table 6. Land Uses in Segment 040201

Land Type	Acres 040201	Percent Land use 040201
Agriculture/Cropland/Grassland	32597.70	29.53
Vegetated urban	25850.47	23.42
Wetland Forest Deciduous	23712.37	21.48
Non-Vegetated Urban	8249.95	7.47
Water	4904.69	4.44
Upland Forest Mixed	3295.22	2.99
Upland Forest Deciduous	3240.07	2.94
Wetland S/S Deciduous	2507.94	2.27
Upland Forest Evergreen	2193.48	1.99
Upland S/S Mixed	1876.12	1.70
Fresh Marsh	909.59	0.82
Upland Barren	514.18	0.47
Upland S/S Evergreen	342.27	0.31
Upland S/S Deciduous	164.35	0.15
Wetland Forest Mixed	24.69	0.02
Wetland Barren	7.78	0.01

Table 7. Water Quality Numerical Criteria and Designated Uses

Parameter	Value
Designated Uses	A B C
DO, mg/L	5.0
Cl, mg/L	338
SO_4, mg/L	500
pH	6.0 – 8.5
BAC	1*
Temperature, deg Celsius	32

USES: A – primary contact recreation; B - secondary contact recreation; C – propagation of fish and wildlife; D – drinking water supply; E – oyster propagation; F – agriculture; G – outstanding natural resource water; L – limited aquatic life and wildlife use.

*Note 1 – No more than 25% of samples collected on a monthly or near-monthly basis shall exceed a fecal coliform density of 400 colonies/100mL for the period May through October; No more than 25% of samples collected on a monthly or near-monthly basis shall exceed a fecal coliform density of 2,000 colonies/100mL for the period November through April.

3.3 Suspected Sources

3.3.1 Permitted Facilities

Based upon research of LDEQ's TEMPO database and its Electronic Document Management System (EDMS), 257 permitted outfalls at 211 facilities are being provided with wasteload allocations in this

TMDL. In addition, wasteload allocations have been provided for 2 MS4 permittees. LDEQ's EDMS indicated that there were 4 industrial facilities that had monitoring or permit limits for chlorides or sulfates at a total of 8 outfalls and 7 facilities that had permit limits for total residual chlorine (TRC). One hundred and eighty-six (186) sanitary outfalls are addressed in this TMDL. Other outfalls addressed in this TMDL include wash water/utility water, hydrostatic test water, and cooling water/cooling tower blowdown. LDEQ estimates that approximately 127 of these facilities are small businesses which will be subject to the permit requirements established in this TMDL report.

LDEQ is updating current information on permitted facilities and locating unpermitted facilities in the Lake Pontchartrain Basin.

3.3.1.1 Municipal Separate Stormwater Sewer Systems (MS4)

Loading from local MS4s may be attributed to leaking potable water distribution systems, sanitary sewer systems, and stormwater systems. Additional loading may come from land clearing and development.

Phase I and II stormwater systems are additional possible point source contributors in the Lake Pontchartrain Basin. Stormwater discharges are generated by runoff from urban land and impervious areas such as paved streets, parking lots, and rooftops during precipitation events. Stormwater discharges from urban areas can contribute chlorides and sulfates loads, including home fertilizer applications. Chlorides and sulfates may also come from problematic or leaking drinking water distribution lines or sewer collection lines. These discharges often contain concentrations of pollutants that can eventually enter nearby waterbodies. Most stormwater discharges are considered point sources and require coverage by a Louisiana Pollutant Discharge Elimination System (LPDES) permit.

Under the LPDES stormwater program, operators of large, medium, and regulated small municipal separate storm sewer systems (MS4s) must obtain authorization to discharge pollutants. The Stormwater Phase I Rule (55 Federal Register 47990, November 16, 1990) required all operators of medium and large MS4s to obtain an NPDES/LPDES permit and develop a stormwater management program. Medium and large MS4s are defined by the size of the population within the MS4 area, not including the population served by combined sewer systems. A medium MS4 has a population between 100,000 and 249,999; a large MS4 has a population of 250,000 or more.

Phase II required a select subset of small MS4s to obtain an NPDES/LPDES stormwater permit. A small MS4 is any MS4 not already covered by the Phase I program as a medium or large MS4. The Phase II rule automatically covers all small MS4s in urbanized areas (UAs), as defined by the Bureau of the Census, and also includes small MS4s outside a UA that are so designated by NPDES permitting authorities.

In Louisiana, there are two ways that an MS4 can be identified as a regulated, small MS4. This category includes all cities within UAs and any small MS4 area outside UAs with a population of at least 10,000 and a population density of at least 1,000 people per square mile (LDEQ 2002). MS4 permittees in the Bayou Manchac watershed include the city of Baton Rouge, Permit # LAS000101 and Ascension Parish, Permit # LAR041034.

The Baton Rouge MS4 permit covers the entire parish, however it can only regulate the urbanized areas (as defined by the 2010 U.S. Census). Ascension Parish has MS4 permit coverage, but their permit coverage is limited to the Baton Rouge Urbanized Area within Ascension Parish, excluding the incorporated town of Ganzales, which maintains a separate MS4 permit. Allocations for each MS4 permit were provided by partitioning the nonpoint loading based on the percentage of the subsegment regulated by each MS4 permit. The Baton Rouge MS4 permit regulates approximately 55% of the subsegment, while the Ascension Parish MS4 permit regulates approximately 5.3% of the subsegment.

EPA's stormwater permitting regulations require municipalities to obtain permit coverage for all stormwater discharges from MS4s. For each MS4 in the basin, a gross load was computed by dividing the acreage of the permitted area in the subsegment by the total area of the subsegment and multiplying the nonpoint source allocation by this percentage. Note that these values are estimates that can be refined in the future as more information about MS4s and land-use-specific loadings becomes available. Note that MS4s are permitted dischargers but function similarly to nonpoint sources (through storm-driven processes). EPA and LDEQ expect that the MS4 WLAs will be achieved through BMPs and adaptive management.

The National Pollutant Discharge Elimination System (NPDES) permitting program for stormwater discharges was established under the Clean Water Act as the result of a 1987 amendment. The Act specifies the level of control to be incorporated into the NPDES stormwater permitting program depending on the source (industrial versus municipal stormwater). These programs contain specific requirements for the regulated communities/facilities to establish a comprehensive stormwater management program (SWMP) or storm water pollution prevention plan (SWPPP) to implement any requirements of the total maximum daily load (TMDL) allocation. [See 40 CFR §130.]

Stormwater discharges are highly variable both in terms of flow and pollutant concentration, and the relationships between discharges and water quality can be complex. For municipal stormwater discharges in particular, the current use of system-wide permits and a variety of jurisdiction-wide BMPs, including educational and programmatic BMPs, does not easily lend itself to the existing methodologies for deriving numeric water quality-based effluent limitations. These methodologies were designed primarily for process wastewater discharges which occur at predictable rates with predictable pollutant loadings under low flow conditions in receiving waters. EPA recognized these problems and developed permitting guidance for stormwater permits. [See "Interim Permitting Approach for Water Quality-Based Effluent Limitations in Stormwater Permits" (EPA-833-D-96-00, Date published: 09/01/1996)]

Due to the nature of storm water discharges, and the typical lack of information on which to base numeric water quality-based effluent limitations (expressed as concentration and mass), LDEQ considers an permitting approach for NPDES storm water permits which is based on best management practices (BMPs). (The permitting approach uses BMPs in first-round storm water permits, and expanded or better-tailored BMPs in subsequent permits, where necessary, to provide for the attainment of water quality standards.) These BMPs should include the location of all stormwater outfalls associated with the MS4, elimination of all illicit discharges, regionalization of sewage collection and treatment, and the rehabilitation of all problematic sewage collection lines within the MS4 regulated area. Other BMPs can be found in the respective permits.

A monitoring component may also be included in the recommended BMP approach. "Each storm water permit should include a coordinated and cost-effective monitoring program to gather necessary information to determine the extent to which the permit provides for attainment of applicable water quality standards and to determine the appropriate conditions or limitations for subsequent permits." The details of this approach can be found in a guidance memo issued in 2002. [See Memorandum from Robert Wayland, Director of OWOW and James Hanlon, Director of OWM to Regional Water Division Directors: "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit requirements Based on Those WLAs " (Date published: 11/22/2002)] "The policy outlined in this memorandum affirms the appropriateness of an iterative, adaptive management BMP approach, whereby permits include effluent limits (e.g., a combination of structural and nonstructural BMPs) that address storm water discharges, implement mechanisms to evaluate the performance of such controls, and make adjustments (i.e., more stringent controls or specific BMPs) as necessary to protect water quality. …… If it is determined that a BMP approach (including an iterative BMP approach) is appropriate to meet the storm water component of the TMDL, LDEQ makes sure the TMDL reflect this." This BMP-based approach to stormwater sources in TMDLs is also recognized and described in the most recent EPA guidance. [See "TMDLs To Stormwater Permits Handbook" (DRAFT), EPA, November 2008]

LDEQ recommends that all requirements of the MS4s referenced in Tables 4 and 5 should be met through the implementation of appropriate and cost effective BMPs. Recent EPA memos regarding stormwater guidance, indicate where numeric effluent limitations should be applied to MS4 permits. However, as a result of this TMDL, no numeric effluent limitations are required for municipal stormwater discharge permits as a result of this TMDL.

3.3.1.2 Sanitary Dischargers

The chloride ion is found in most human and animal waste. Dischargers of sanitary wastewater accounted for approximately 186 permitted outfalls within the Bayou Manchac watershed. This typically consists of privately owned treatment facilities for businesses or residential subdivisions and publically owned wastewater treatment facilities that service small town or portions of cities. Some of the sanitary outfalls were located at industrial businesses. A review of permitting documents through LDEQ's EDMS indicated that disinfection by chlorination was part of the treatment process for 127 of the sanitary outfalls. The number of facilities using chlorination may be higher, when considering that many facilities may use chlorination without indicating it in their permit application documents. When chlorine is used for disinfection, it can eventually reach ambient waters. Under such circumstances, the chlorine can be converted to the chloride ion by obtaining one electron, thereby contributing to loading of the chloride ion within the Bayou Manchac watershed.

After chlorination, some facilities may provide additional treatment to dechlorinate the wastewater. Compounds such as sulfur dioxide or sulfite salts (sodium metabisulfite, and sodium bisulfate) are often used in the dechlorination process. Some of these compounds may be converted to sulfate upon entering ambient water, thus contributing to the sulfate loading. A review of permitting documents revealed that 1 of the permitted sanitary outfalls included dechlorination in its treatment process.

For the reasons stated above, dischargers of sanitary wastewater are likely contributors to the chlorides and sulfate loading in the Bayou Manchac watershed.

3.3.1.3 Industrial Dischargers

Research of LDEQ's TEMPO and EDMS databases indicated that there are 30 industrial facilities containing 67 outfalls that have the potential to contributing loads of chlorides and sulfates. These included outfalls for sanitary wastewater, wash water/utility water, hydrostatic test water, and stormwater.

Many of the industrial facilities contained one or more outfalls for sanitary discharges. For the reasons stated in 3.3.1.2, these discharges may be contributing chlorides and sulfate loads to the Bayou Manchac watershed.

There was one industrial facility that had permit limits for chlorides at four of its outfalls. Three industrial facilities had permits that required monitoring for chlorides at one of their outfalls. One facility had a permit that required sulfate monitoring at one outfall. Typically, the monitoring was required if compounds containing either chlorides or sulfates were being stored at the facility.

3.3.2 Potable Water Sources

Groundwater is is the exclusive source of potable water throughout the Bayou Manchac watershed. All water is obtained from aquifers located hundreds or thousands of feet below the Earth's surface. These aquifers are typically located between impermeable formations and often contain significant concentrations of chlorides and sulfates.

Groundwater data collected from wells utilized within the watershed was obtained from the Louisiana Department of Health and Hospitals. The data was collected from October 17, 1994 to January 19, 2011 at multiple well sites located in the Baton Rouge area. According to the data, 26 of 261 (10%) chlorides samples and 58 of 261 (22%) sulfates samples were exceeding the previous ambient background-based criteria for the Bayou Manchac watershed. Some values were higher than values observed at LDEQ's ambient WQN site 0142. The samples were taken at the well sites after extraction. Reportedly, no additional filtering of the water is conducted to remove any of these constituents before distribution. In addition, the water is typically treated with chlorine (primary disinfection) and chloramines (secondary disinfection) in preparation for distribution. Both of these chemical compounds contain chlorine, which can disassociate to the chloride ion once in ambient waters.

Groundwater serves as the only source of potable water in the Baton Rouge area, supplying water for all residential and commercial uses and many of the industrial uses. As a result, groundwater sources are suspected of contributing chlorides and sulfates loads to the Bayou Manchac watershed. Much of the loading is routed through municipal and private wastewater treatment plants. This means that these facilities are probably receiving raw wastewater that is high in chlorides and sulfates concentrations. Additional loading may be introduced by people washing their cars and houses or watering their lawns.

3.3.3 Potential Nonpoint Sources

Natural sources can also provide chlorides and sulfate loads. Natural sources may include items such as rock formations, soil deposits, mineral springs, carbonate deposits, and salt deposits. Other than soil deposits, these sources are generally not present within the Bayou Manchac watershed and are not expected to introduce a significant amount of loading. Chlorides and sulfates can leach from soils into the water column. Soil in the Bayou Manchac watershed is typically Mississippi River Alluvial Soils. LDEQ obtained soil information from the Natural Resource Conservation Center (NRCS) and the National Cooperative Soil Survey (NCSS). Soils within watershed are expected to have a k-factor in the range of 0.3 to 0.5, indicating a relatively high degree of erodability. The K-factor attribute is a component of the Universal Soil Loss Equation and is commonly used to measure a soils natural susceptibility to erosion. Erosion is also influenced by rainfall and runoff, land slope, vegetative cover, hydrologic modifications, and land management practices. Some of the soils may contain concentrations of Cl^- and/or SO_4, indicating that soils are a potential source of loading. (National Cooperative Soil Survey, 2011)

Additional nonpoint loading may include individual residential sewage treatment systems.
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3.3.4 Other Potential Sources

Sodium chloride, calcium chloride, and magnesium chloride are often used by transportation agencies and local governments to control icing on bridges during the winter season. The Louisiana Department of Transportation and Development intends to use ethylene glycol and potassium acetate as anti-icing or de-icing agents in both East Baton Rouge and Ascension Parishes. Neither of these compounds will contribute to the chlorides loading in Bayou Manchac. The commercial, residential, and industrial use of bleaches may be introduced through typical wastewater discharges.

In addition, LDEQ is aware of the St. Gabriel Oil Field near Bayou Braud. This potential source has been investigated. Specific conductivity values indicate the increased levels of salts may have been contained to the area in the immediate vicinity of the oil field during the TMDL survey and ambient water quality monitoring activities.

3.4 Water Quality Conditions/Assessment

Bayou Manchac, Subsegment 040201, is listed on the Final 2008 and Draft 2010 Integrated Reports, in addition to EPA's Consent Decree. The impairments listed in the Integrated Reports and their suspected causes are shown in Tables 1 and 2. Based on previous criteria for chlorides and sulfates, monitoring data for this subsegment indicated criteria were not being met, which requires the development of a total maximum daily loads (TMDLs) for those parameters. This report presents the TMDL development and results based on the updated minerals criteria for Bayou Manchac. Justification for the updated criteria is found in Appendix E.

3.5 Prior Studies

A TMDL for dissolved oxygen was completed and approved on May 11, 2011. The survey was conducted on June 5-8, 2007.

LDEQ has one monthly water quality sampling station on Bayou Manchac. LDEQ Water Quality Site 0142, Bayou Manchac near Prairieville, Louisiana, has a period of record from July 1985 to September 2009. For the dissolved oxygen TMDL, water quality data was collected during the Eularian survey conducted in June 2007. This data is presented in Appendix C1.

In 1984, a survey was conducted throughout the Amite River watershed and included several sites along Bayou Manchac. Beginning in 1997 and ending in 2005, mercury samples were collected from fish, water, and sediment as a part of a mercury study. In 2008, ambient fish kill sampling was conducted in response to Hurricane Gustav.

4. TMDL, WLA, LA, and MOS Development Process

4.1 Critical Flow and Seasonality

Regulations governing TMDL development are presented at 40 CFR 130.7 and Section 303(d) of the Federal Clean Water Act. Regulations at 40 CFR 130.7 require that TMDL reports take into account critical stream conditions. Those conditions may include stream flow, loading, and water quality parameters.

Based on tidal prism calculations, the critical flow for Bayou Manchac is 10.66 cfs (7 MGD). Calculations are shown in Appendix B.

According to the regulations at both 40 CFR 130.7 and Section 303(d) of the Federal Clean Water Act, TMDLs must consider seasonal variations for meeting water quality standards. The updated water quality criteria for chlorides and sulfates are based on equations that use ambient conditions of hardness, sulfates, and chlorides and therefore could account for seasonal variations based on these variables. However, seasonal trends were not detected in the water quality data for WQN Site 0142 and the updated criteria are based on median environmental conditions for hardness, sulfates, and chlorides. Therefore, these TMDLs were developed on an annual basis.

4.2 TMDL Calculations

The TMDL for each parameter was developed using the equation below:

TMDL = criteria x critical flow x conversion factor

where:

criteria = criteria for parameter in question
critical flow = one-third of the average tidal flow (MGD)
Conversion factor = 8.34 lb/million gallons/mg/L

The resulting TMDLs and WLAs for Bayou Manchac are presented in Tables 4 and 5 in the Technical Summary.

The WLAs for all existing facilities were calculated based on the updated criteria, their expected flow, and a unit conversion factor. A margin of safety of 20% was applied to all facilities and the MS4

permittees. The LA (nonpoint loads) was calculates by subtracting the total point source loads from the TMDL. The MS4 loads were then partitioned from the nonpoint loads based on the drainage area ratios. The resulting WLAs are presented in Tables 4 and 5. The TMDLs calculations are presented in Appendix A.

5. Load Reductions Analysis

5.1 Existing Conditions

In order to establish existing conditions, LDEQ evaluated data obtained at ambient monitoring station 0142, Bayou Manchac near Prairieville. The data covered a period of time spanning from 1986 to 2009. Graphs of the historical ambient data from station 0142 are shown in Figures 2 and 3. Both graphs and data are presented in Appendix C2.

Laboratory data collected during the TMDL survey was also reviewed but not utilized for the load reduction calculations. This survey was conducted June 5-7, 2007. Data collected during the TMDL survey is presented in Appendix C1.

5.2 Reductions

Ambient monitoring data was evaluated for potential load reductions. The ambient data was charted in an EXCEL spreadsheet and graphed. Based on the chlorides and sulfates criteria of 338 mg/L and 500 mg/L, respectively, Figures 2 and 3 indicate that load reductions are not required for chlorides and sulfates in Subsegment 040201.

6. Treatment Costs and Benefits

The primary form of treatment for chlorides and sulfates is reverse osmosis. This treatment method is extremely expensive and cost prohibitive. Another option may include changing the primary form of disinfection to ultraviolet radiation (UV) on all permitted sanitary outfalls. However, UV radiation would be cost prohibitive when conducted on many smaller, individual facility outfalls.

LDEQ does recognize that the regionalization of sewage collection and treatment may offer benefits. UV radiation or other alternative forms of disinfection may provide an adequate benefit for the cost when conducted for a large regional sewage treatment plant. However, alternative forms of disinfection have their limitations and they would have to be evaluated accordingly. In addition, the cost of the regional collection and treatment system will be significant.

Figure 2. Ambient Station 0142 – Chlorides Graph

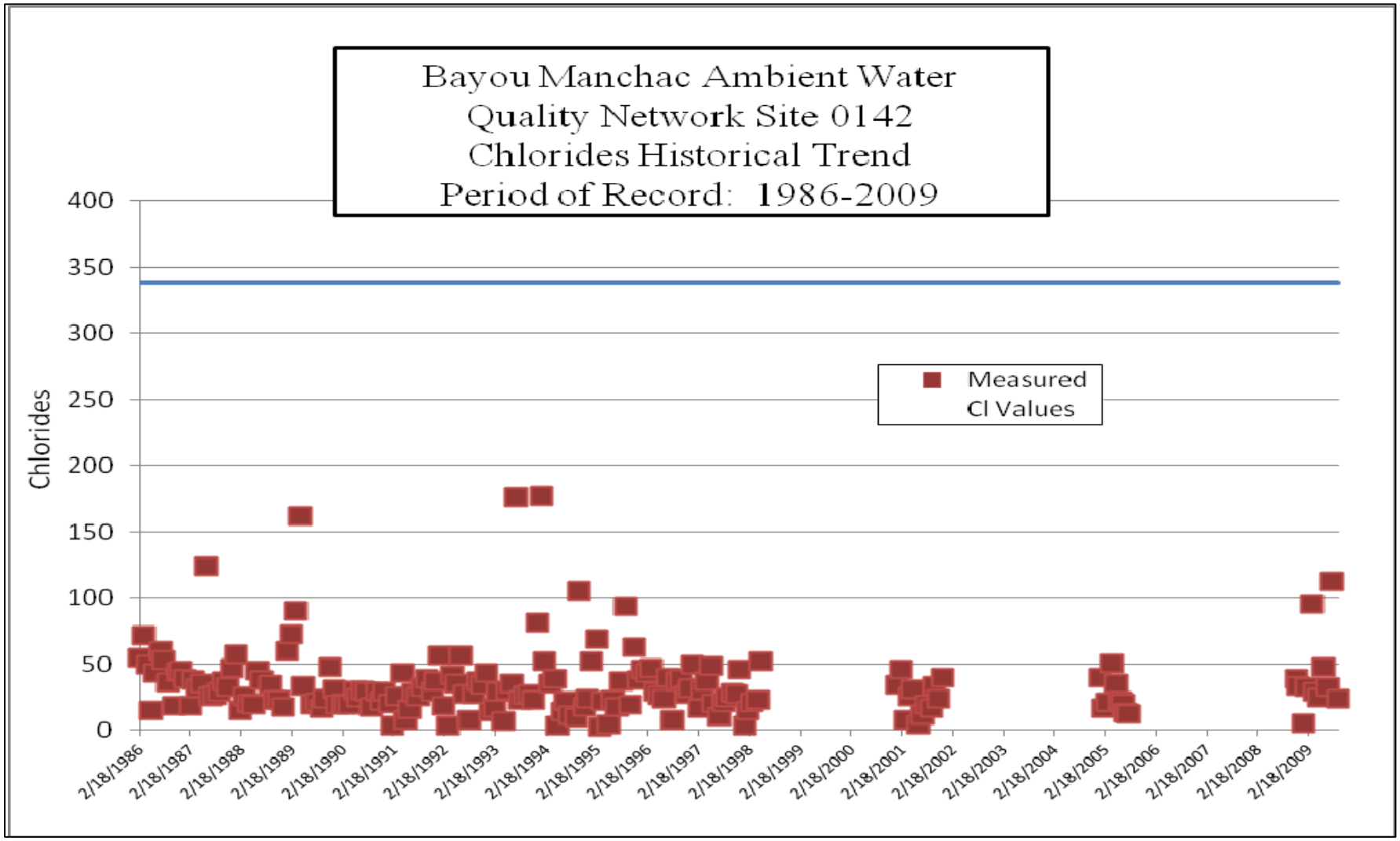
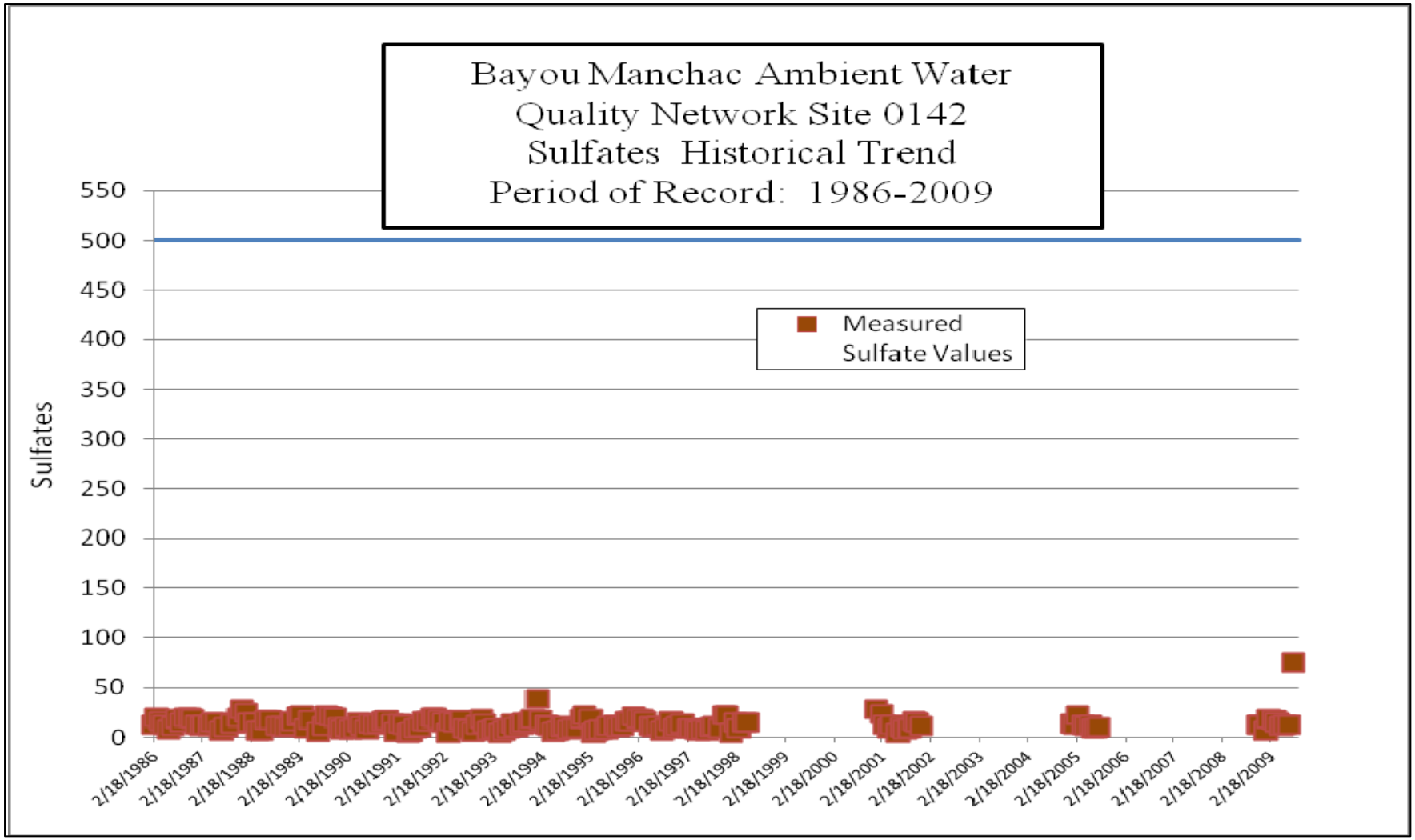


Figure 3. Ambient Station 0142 – Sulfates Graph



7. Implementation

The source of all potable water within the watershed is groundwater. Data obtained from samples of this water source indicate that the potable water source is contributing chlorides and sulfates loads to the Bayou Manchac watershed.

Many of the permitted sanitary outfalls are disinfecting with chlorine and some of these facilities are dechlorinating with a sulfate compound. The rate at which chlorine and sulfate disassociate in ambient water to produce chlorides and sulfates in the water column is unknown and may vary from facility to facility. However, none of these facilities are currently permitted for chlorides or sulfates and LDEQ has no data to determine the chlorides and sulfates loads that these facilities are currently contributing to the watershed. One industrial facility currently has permit limits for chlorides.

The process of chlorination and dechlorination is conducted to alleviate fecal coliform impairments. Providing permit limits for chlorides and sulfates may inhibit the ability of facilities to disinfect sanitary wastewater, thereby producing a less desirable sanitary issue and imposing danger to the public.

Due to the lack of existing facility/outfall data, the uncertainty associated with load contributions from individual outfalls, the updated criteria for chlorides and sulfates, concerns of a high in-stream counts of fecal coliform bacteria from man-made sources (sanitation issue), and prohibitive treatment costs, LDEQ is utilizing a phased TMDL approach for Bayou Manchac as shown in Table 3. This approach will allow LDEQ to gather more data from individual dischargers and instream water quality data. The additional discharger and water quality data will be used to provide additional justification for the updated minerals criteria outlined below, and if necessary, allow for refinement of the updated criteria prior to final rulemaking. At the same time, LDEQ will be able to develop meaningful and implementable TMDLs based upon the appropriate chlorides and sulfates criteria, in accordance with EPA's Consent Decree (E. D. La. 2002) deadlines. LDEQ expects it will lead to improved water quality while providing local governments and businesses the opportunity to prepare and adjust to new permit requirements that will be implemented as a result of the TMDLs developed in Phases I and II. Future updates to the implementation of this TMDL may be made through updates to the WQMP.

LDEQ has re-evaluated the minerals (i.e., chlorides, sulfates, and TDS) criteria for Bayou Manchac, Subsegment 040201. EPA guidance (1985) and literature supports a toxicity-based approach to protecting aquatic life use from harmful effects of minerals. Additionally, literature indicates that individual ions are appropriate to characterize aquatic life toxicity related to minerals and total dissolved solids (TDS). LDEQ reviewed the development of toxicity-based minerals criteria (EPA 1985) in Iowa and Illinois and determined a similar approach is appropriate for implementation in Louisiana. Therefore, LDEQ is proposing a variance to the minerals criteria for Bayou Manchac (Subsegment 040201). Justification for the variance is provided in Appendix E. LDEQ used toxicity data for Louisiana species and used Bayou Manchac ambient water quality data to determine the following chloride and sulfate criteria for the protection of the fish and wild life propagation use in Bayou Manchac: chloride acute criterion = 476 mg/L; chloride chronic criterion = 338 mg/L; sulfate criterion = 500 mg/L. LDEQ also determined, as did Iowa and Illinois, that criteria for individual ions are protective and the criteria for TDS are not warranted. LDEQ will continue to research minerals

toxicity information and any additional adjustments to the criteria will be reflected in the final water quality standards revision recommendations.

This Phase I TMDL will include the development of total maximum daily loads (TMDLs) and wasteload allocations (WLAs) for chlorides and sulfates based on the updated criteria. Implementation will occur in a phased manner. Phase I will serve as the first step towards meeting the proposed chlorides and sulfates criteria in Bayou Manchac. The implementation of point source requirements will occur according to the following strategy.

Phase I Permit Implementation

All TMDL, permitting, and enforcement activities will be conducted in accordance with the Clean Water Act, the Louisiana Environmental Regulatory Code, and applicable state laws. If at any time, LDEQ determines that the implementation strategy presented in this TMDL is not achievable due to socioeconomic reasons or otherwise, LDEQ may revise the implementation strategy through an update of the State's Water Quality Management Plan. LDEQ will be responsible for ensuring that any updates to the Water Quality Management Plan will meet the goals of the TMDL.

1. New discharges of chlorides and/or sulfates loads:

   Due to LDEQ's minerals criteria revisions, the lack of knowledge regarding the loading contributions from various types of facilities, natural sources, and the contributions from the local potable water source, permits for new facility outfalls will typically require only annual monitoring during the first full permitting cycle that occurs during Phase I. However, before the subsequent renewal of each permit, an assessment of chlorides and sulfates monitoring data from designated outfalls may be conducted to determine if permit limits are appropriate during Phase I. Permit limits will be established based on regulatory guidelines and in accordance with LDEQ's Permitting Guidance Document For Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3. Facilities with new discharges may be required to submit an environmental impact assessment to LDEQ's Water Permits Division. Once the TMDL is approved by EPA and LDEQ has determined that permit limits are needed, new facilities may have up to 3 years from their next permit renewal date to meet the Phase I permit limits. Applicable General Permit schedules may be updated to meet the requirements of the TMDL upon the first renewal of each series following the TMDL approval date. Examples of facility outfalls that may be considered are provided below.

   a. Annual monitoring will be required for outfall types included in, but not limited to, the list provided below. Upon renewal of each permit, existing facility data will be compared to the values of 338 mg/L (chlorides) and 500 mg/L (sulfates). Permit limits will be considered for a facility if the

monitoring data exceeds the referenced values. If the monitoring data is below the referenced values, the monitoring requirement may be eliminated or the frequency may be reduced.

i. Sanitary

ii. Vehicle or equipment wash water

iii. Wash rack wastewater

b. Technology-based permit limits may be established for outfall types included in, but not limited to, the list provided below. Permit limits will be based on current regulatory guidelines and departmental procedures.

i. Industrial process outfalls that have demonstrated a reasonable potential to discharge wastewater that will contain concentrations of chlorides and/or sulfates.

ii. Contact stormwater for facilities identified according to item 1.b.i above.

iii. Any other type of wastewater that has a reasonable potential to contain concentrations of chlorides and/or sulfates.

2. Existing discharges of chlorides and/or sulfates loads:

Below are the limits and monitoring implementation activities for existing facility outfalls in the Bayou Manchac watershed. Existing unpermitted facility outfalls discovered to be discharging chlorides and/or sulfates loads without LPDES permit limits as of the TMDL approval date and unpermitted facility outfalls that are newly activated or reactivated and discharging chlorides and/or sulfates loads after the TMDL approval date are to be permitted according to the guidelines established herein for existing outfalls with permits. Permit limits will be established based on regulatory guidelines and accordance with LDEQ's Permitting Guidance Document For Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3.

a. The following 4 facilities had one or more outfalls with permit limits or monitoring for chlorides and/or sulfates. Based on the TMDL, their permit limits or monitoring requirements during Phase I will be as shown below for the designated outfalls. Upon permit renewal, LDEQ will review and revise these requirements as needed to ensure that all regulatory requirements and water quality criteria are being met in Bayou Mancahc (040201).

i. Harcros Chemicals, Inc. (AI No. 2055, LPDES Permit No. LA0110825) - Outfall 001 – Chlorides and Sulfates - report only.

ii. Reagent Chemical & Research, Inc – St. Gabriel Facility (AI No. 2407, LPDES Permit No. LA0059579) – Outfall 001, 002, 006, and 007 – Chlorides 338 mg/L (monthly average), 500 mg/L (daily maximum).

iii. Kinder Morgan Liquids Terminals St. Gabriel, LLC (AI No. 39978, LPDES Permit No. LA0052353) - Outfall 001 and 005 – Chlorides - report chlorides concentration when commodities containing chlorides are stored on site.

iv. St. Gabriel Dehydration & NGL Production Facility (AI No. 138856, LPDES Permit No. LAG33A602)) - Outfall 001 – Chlorides 500 mg/L (daily max.).

b. All other facilities will conduct annual monitoring as described in item 1 above. Once the TMDL is approved by EPA and LDEQ has determined that permit limits are necessary, existing facilities may have up to 3 years from their next permit renewal date to meet the Phase I permit limits.

3. LDEQ reassesses Subsegment 040201 (Bayou Manchac). If, at a future date, LDEQ determines that Subsegment 040201 is meeting the appropriate chlorides and/or sulfates criteria and designated uses and/or impairments for these parameters do not exist, the use of permit limits for chlorides and/or sulfates may be reevaluated and/or omitted.

Phase II will be developed based on the revised and promulgated criteria for Subsegment 040201. Chlorides and sulfates TMDLs for Subsegment 040201 have a court ordered due date of March 31, 2012. These new criteria are will be developed and promulgated no later than three (3) years after the approval of the TMDL and criteria variance.

8. Conclusions

This TMDL establishes wasteload allocations for chlorides and sulfates and recommends a permitting implementation plan. The implementation of this TMDL will occur through monitoring of wastewater discharges and the application of wastewater discharge permits limits as indicated in the Phase I Permit Implementation Plan. All requirements of MS4 permittees are expected to be met through BMPs.

The watershed drains areas that are regulated by two MS4 permits. The areas covered by these MS4 permits include many permitted and unpermitted facilities. While LDEQ does assume responsibility for these facilities, partial responsibility belongs to the MS4 permittee to ensure that water draining from the area of coverage does not impact the named waterbody. Reductions in the nonpoint loading presented in this report should apply to MS4 regulated areas.

The impact of stormwater loading on the waterbody under critical conditions (low flow, high temperature) is difficult to determine. Frequent monitoring can be monetarily and logistically prohibitive. Due to the variable nature of stormwater, it is impractical to set MS4 permit limits or target values. However, appropriate BMP measures shall be implemented in accordance with MS4 permit(s) to minimize the impacts loads emanating from the MS4 regulated areas on the water quality in Bayou Manchac. Such BMP measures may include the elimination of illicit wastewater discharges, the regionalization of wastewater treatment, rehabilitating and upgrading sewer collection system lines, and other appropriate activities. BMPs included in MS4 permits should also include measures to reduce the impact of stormwater loading on the water quality of Bayou Manchac. A cost-effective monitoring component may be required.

LDEQ is updating current information on permitted facilities and actively locating unpermitted facilities in the Lake Pontchartrain Basin. The unpermitted facilities are required to apply for the appropriate LPDES permit.

LDEQ will work with other agencies such as local Soil Conservation Districts to implement agricultural best management practices in the watershed through the 319 programs. LDEQ will also continue to monitor the waters to determine whether standards are being attained.

In accordance with Section 106 of the Federal Clean Water Act and under the authority of the Louisiana Environmental Quality Act, the LDEQ has established a comprehensive program for monitoring the quality of the state's surface waters. The LDEQ collects surface water samples at various locations, utilizing appropriate sampling methods and procedures for ensuring the quality of the data collected. The objectives of the surface water monitoring program are to determine the quality of the state's surface waters, to develop a long-term database for water quality trend analysis, and to monitor the effectiveness of pollution controls. The data obtained through the surface water monitoring program is used to develop the state's biennial 305(b) report (*Water Quality Inventory*) and the 303(d) list of impaired waters. This information is also utilized in establishing priorities for the LDEQ nonpoint source program.

The LDEQ is continuing to implement a watershed approach to surface water quality monitoring. In 2004 a four year sampling cycle replaces the previous five year cycle. Approximately one quarter of the states watersheds will be sampled each year so that all of the state's watersheds will be sampled within the four year cycle. This will allow LDEQ to determine whether there has been any improvement in water quality following implementation of the TMDLs. As the monitoring results are evaluated by LDEQ and approved by EPA, waterbodies may be added to or removed from the 303(d) list.

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10. Appendices

Appendix A – TMDL Calculations

Bayou Manchac is tidal, however for purposes of the flow, it was assumed (BPJ) that there is a net advective flow.

Critical flow for Bayou Manchac (tidal,< 100 cfs)	10.66	ft3/sec	=	7	MGD
East Baton Rouge Parish MS4 Drainage area =	60,744.57	acres			
Ascension Parish MS4 Drainage area =	5836.91	acres			
Total area of Subsegment 040201 =	110,391.50	acres			

Parameter	Criteria (mg/L)	TMDL (lb/day)	MOS (lbs/day)	Sum of Point Source WLAs (lbs/day)	Sum of Point Source MOS (lbs/day)	Total Nonpoint Source LA (lbs/day)	Total Nonpoint Source MOS (lbs/day)	East Baton Rouge Parish MS4 WLA (lbs.day)	East Baton Rouge Parish MS4 MOS (lbs.day)	Ascension Parish MS4 WLA (lbs.day)	AscensionParish MS4 MOS (lbs.day)	Remaining Nonpoint Load LA (lbs/day)	Remaining Nonpoint Load MOS (lbs/day)
Chlorides	338	19,417.0	3,883.4	11,223.0	2,806.0	4,310.6	1,077.4	2,372.0	592.9	227.9	57.0	1,710.7	427.6
Sulfates	500	28,723.4	5,744.7	16,602.0	4,151.0	6,376.7	1,593.7	3,508.9	876.9	337.2	84.3	2,530.7	632.5
	Check vs facility sprdsht			14,029.0									
	Check vs facility sprdsht			20,753.0									

Appendix B – Critical Flow Calculations

Bayou Manchac Subsegment 040201

Critical Flow Calculations

Tidal Amplitudes	
Site #	**Estimated average tidal amplitude (ft)**
USGS 07378746 Bayou Manchac at Alligator Bayou near Kleinpeter, LA (near survey site BMO1,)	0.30
USGS 07380101 Bayou Manchac near Little Prairie, LA (near survey site BMO7,)	0.33
A. Average tidal amplitude (ft) =	0.315

Bayou Manchac 040201

Field Data Summary -- Widths

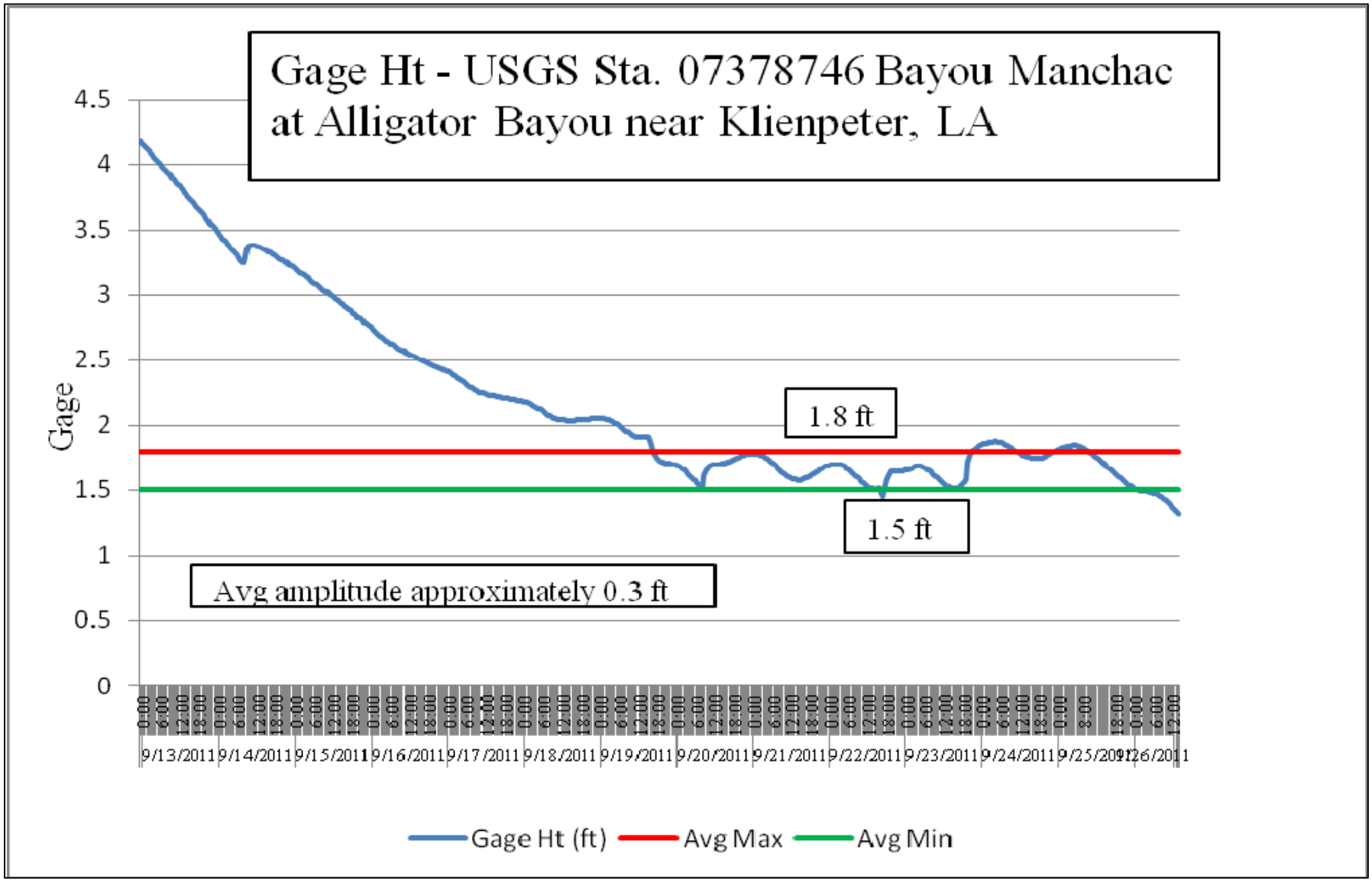
Site #	Width (ft)
BM02 - 3472	63.00
BM03 - 0142	71.00
BM04 - 3466	78.00
BM05 - 3468	82.00
BM06 - 3469	77.00
BM07 - 3470	122.00
BM08 - 3462	102.00
B. Average width (ft) =	85.00

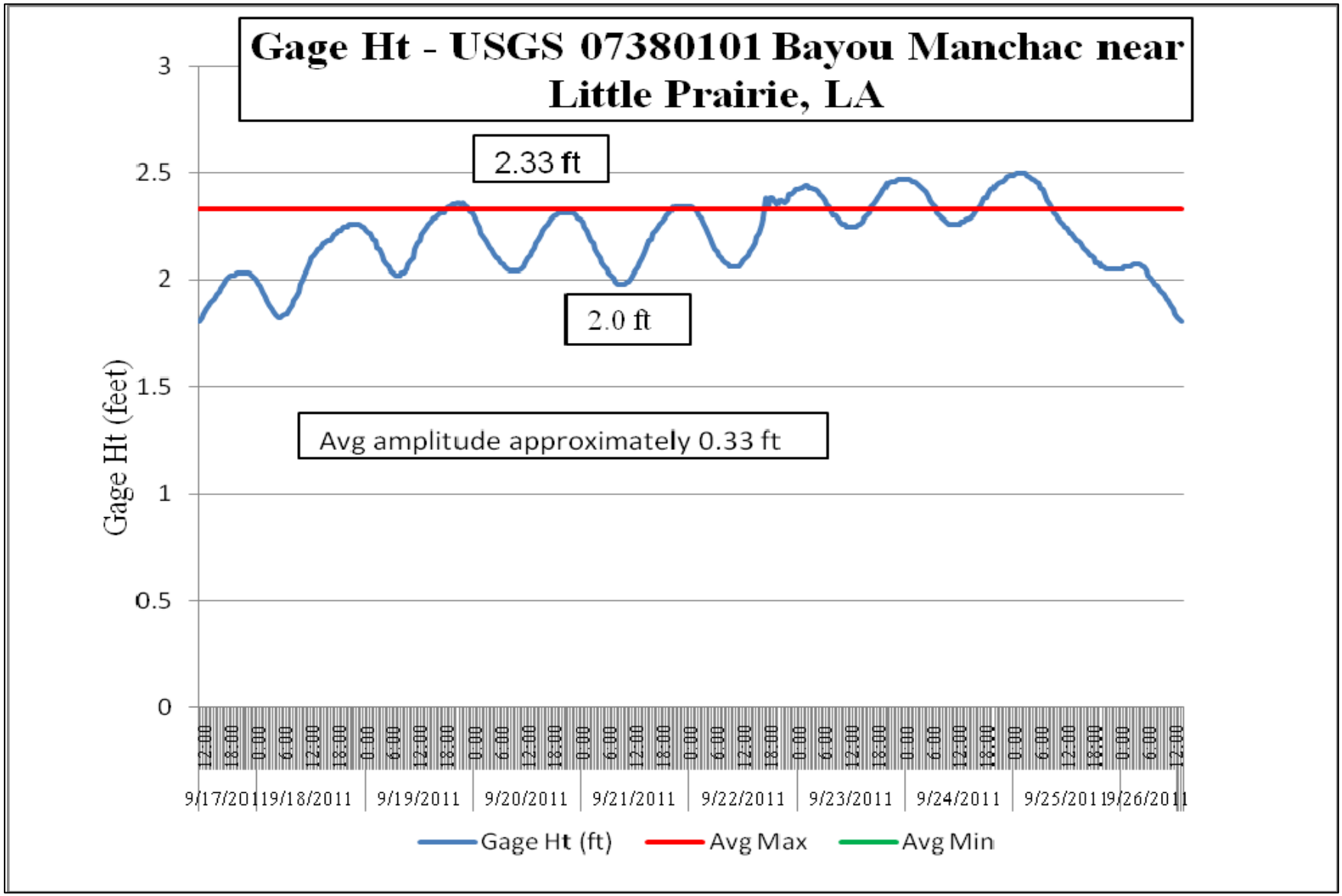
C. Length of Bayou Manchac (mainstem) =	16.7	kilometers =	54,801.74	feet
D. Tidal volume (ft^3) = A x B x C =	1,467,316.59			
E. Period of tidal rise (based on USGS data =	12.75	hours =	45,900	seconds
F. Average tidal flow (cfs) = D/E	31.97			
G. Critical Flow (cfs) = 1/3 of avg tidal flow = F/3 =	10.66			

Notes:

1. Width data obtained during TMDL survey for dissolved oxygen (6/5-8/2007). Dates for USGS gage data selected to represent normal conditions, void of stormwater impacts.

2. Assumed tidal rise into Bayou Fountain and Wards Creek are negligible.


Gage Ht - USGS Sta. 07378746 Bayou Manchac at Alligator Bayou near Klienpeter, LA
Gage
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1.8 ft
1.5 ft
Avg amplitude approximately 0.3 ft
9/13/2011
9/14/2011
9/15/2011
9/16/2011
9/17/2011
9/18/2011
9/19/2011
9/20/2011
9/21/2011
9/22/2011
9/23/2011
9/24/2011
9/25/2011
9/26/2011
Gage Ht (ft)
Avg Max
Avg Min


Gage Ht - USGS 07380101 Bayou Manchac near Little Prairie, LA
2.33 ft
2.0 ft
Avg amplitude approximately 0.33 ft
Gage Ht (feet)
3
2.5
2
1.5
1
0.5
0
9/17/2011
9/18/2011
9/19/2011
9/20/2011
9/21/2011
9/22/2011
9/23/2011
9/24/2011
9/25/2011
9/26/2011
Gage Ht (ft)
Avg Max
Avg Min

Appendix C – Data

Appendix C1 – Water Quality Analysis Results Samples Obtained During the Dissolved Oxygen TMDL Survey Conducted on June 5-8, 2007

Bayou Manchac 040201 Water Quality Data Summary

LEAU Site #	DEQ Site #	Chlorides	Sulfate	Hardness	Alkalinity	pH	Conductivity	Sodium	TOC	TP	TDS	Nit Nit	TKN	Ammonia	Color	Turbidity	TSS	Chl A
3473	BM01	35.6	12.9	95.1	103.0	7.67	337.0	33.0	17.1	0.59	220	ND	1.38	0.29	60	7.1	8.5	16.4
3472	BM02	33.8	6.9	92.1	97.7	7.60	310.0	36.3	15.2	0.59	200	0.07	1.37	0.34	60	12.5	17.5	26.1
142	BM03	36.3	10.5	98.9	130.0	7.80	378.0	46.1	13.8	0.51	230	0.1	1.18	0.41	42	10.7	10.5	14.2
3466	BM04	36.7	11.7	111.0	121.0	7.66	369.0	41.7	14.1	0.45	229	0.08	1.09	0.46	45	15.2	19.0	12.4
3469	BM06	39.5	11.4	93.1	127.0	7.79	387.0	44.7	16.8	0.50	250	0.07	1.47	0.38	50	11.8	14.0	10.2
3470	BM07	26.8	9.7	85.9	105.0	7.61	305.0	33.6	15.2	0.61	193	0.05	1.63	0.34	55	11.6	15.5	37.8
3462	BM08	12.9	4.5	39.5	45.8	7.47	142.0	14.3	7.5	0.26	101	ND	0.62	0.19	40	18.3	20.5	34.4
3467	WCDC	17.8	11.4	79.4	104.0	7.75	274.0	32.6	11.4	0.51	154	0.11	0.72	0.29	28	10.6	13.5	27.5
3461	AR01	8.0	2.1	20.6	17.9	7.44	71.9	7.2	3.7	0.09	54	0.06	0.28	ND	20	14.3	12.0	25.9

Site	Lab_ID	Sample_Type	Analysis_Name	Result	Units
0142	AK14521	TRG	TSS	10.5	ppm
0142	AK14521	TRG	TDS	230	ppm
0142	AK14521	TRG	Alkalinity	130	ppm
0142	AK14521	TRG	Turbidity	10.7	NTU
0142	AK14521	TRG	Specific Conductance	378	umhos/cm
0142	AK14521	TRG	True Color	42	PCU
0142	AK14521	TRG	Chloride by IC	36.3	ppm
0142	AK14521	TRG	Sulfate	10.5	ppm
0142	AK14522	TRG	Sodium	46.1	ppm
0142	AK14523	TRG	Hardness	98.9	ppm
0142	AK14523	TRG	Nitrate+Nitrite Nitrogen	0.10	ppm
0142	AK14523	TRG	TP	0.51	ppm
0142	AK14523	TRG	TKN	1.18	ppm
0142	AK14523	TRG	Ammonia-Nitrogen	0.41	ppm
0142	AK14524	TRG	TOC	13.8	ppm
0142	AK14525	TRG	pH, Ultimate BOD survey	7.80	pH units
0142	AK14525	TRG	TOC (60 Day BOD)	9.4	ppm
0142	AK14525	TRG	TKN (60 Day BOD)	0.39	ppm
0142	AK14525	TRG	NO2NO3 - Initial Reading	0.13	ppm
0142	AK14525	TRG	NO2NO3 - Reading 1	0.12	ppm
0142	AK14525	TRG	NO2NO3 - Reading 2	0.13	ppm
0142	AK14525	TRG	NO2NO3 - Reading 3	0.15	ppm
0142	AK14525	TRG	NO2NO3 - Reading 4	0.33	ppm
0142	AK14525	TRG	NO2NO3 - Reading 5	0.69	ppm
0142	AK14525	TRG	NO2NO3 - Reading 6	0.79	ppm
0142	AK14525	TRG	NO2NO3 - Reading 7	0.82	ppm
0142	AK14525	TRG	NO2NO3 - Reading 8	0.87	ppm
0142	AK14525	TRG	NO2NO3 - Reading 9	0.92	ppm
0142	AK14525	TRG	NO2NO3 - Reading 10	0.96	ppm
0142	AK14525	TRG	NO2NO3 - Final	1.02	ppm
0142	AK14525	TRG	Non-Filtered BOD 60 - Reading 1	0.7	ppm
0142	AK14525	TRG	Non-Filtered BOD 60 - Reading 2	2.5	ppm
0142	AK14525	TRG	Non-Filtered BOD 60 - Reading 3	3.0	ppm
0142	AK14525	TRG	Non-Filtered BOD 60 - Reading 4	4.4	ppm
0142	AK14525	TRG	Non-Filtered BOD 60 - Reading 5	6.9	ppm
0142	AK14525	TRG	Non-Filtered BOD 60 - Reading 6	7.9	ppm
0142	AK14525	TRG	Non-Filtered BOD 60 - Reading 7	8.9	ppm
0142	AK14525	TRG	Non-Filtered BOD 60 - Reading 8	10.2	ppm
0142	AK14525	TRG	Non-Filtered BOD 60 - Reading 9	11.5	ppm
0142	AK14525	TRG	Non-Filtered BOD 60 - Reading 10	12.4	ppm
0142	AK14525	TRG	Non-Filtered BOD 60 - Final	12.9	ppm
0142	AK14526	TRG	Chlorophyll A (calculated)	14.2	ug/L
0142	AK14526	TRG	Chlorophyll A (raw)	354	ug/L
0142	AK14526	TRG	Volume of sample, Chlorophyll A (raw)	250	ml
3461	AK14527	TRG	TSS	12.0	ppm
3461	AK14527	TRG	TDS	54.0	ppm
3461	AK14527	TRG	Alkalinity	17.9	ppm
3461	AK14527	TRG	Turbidity	14.3	NTU
3461	AK14527	TRG	Specific Conductance	71.9	umhos/cm

3461	AK14527	TRG	True Color	20	PCU
3461	AK14527	TRG	Chloride by IC	8.0	ppm
3461	AK14527	TRG	Sulfate	2.1	ppm
3461	AK14528	TRG	Sodium	7.2	ppm
3461	AK14529	TRG	Hardness	20.6	ppm
3461	AK14529	TRG	Nitrate+Nitrite Nitrogen	0.06	ppm
3461	AK14529	TRG	TP	0.09	ppm
3461	AK14529	TRG	TKN	0.28	ppm
3461	AK14529	TRG	Ammonia-Nitrogen	ND	ppm
3461	AK14530	TRG	TOC	3.7	ppm
3461	AK14531	TRG	pH, Ultimate BOD survey	7.44	pH units
3461	AK14531	TRG	TOC (60 Day BOD)	2.5	ppm
3461	AK14531	TRG	TKN (60 Day BOD)	ND	ppm
3461	AK14531	TRG	NO2NO3 - Initial Reading	0.07	ppm
3461	AK14531	TRG	NO2NO3 - Reading 1	0.07	ppm
3461	AK14531	TRG	NO2NO3 - Reading 2	0.08	ppm
3461	AK14531	TRG	NO2NO3 - Reading 3	0.08	ppm
3461	AK14531	TRG	NO2NO3 - Reading 4	0.08	ppm
3461	AK14531	TRG	NO2NO3 - Reading 5	0.08	ppm
3461	AK14531	TRG	NO2NO3 - Reading 6	0.12	ppm
3461	AK14531	TRG	NO2NO3 - Reading 7	0.24	ppm
3461	AK14531	TRG	NO2NO3 - Reading 8	0.28	ppm
3461	AK14531	TRG	NO2NO3 - Reading 9	0.32	ppm
3461	AK14531	TRG	NO2NO3 - Reading 10	0.34	ppm
3461	AK14531	TRG	NO2NO3 - Final	0.37	ppm
3461	AK14531	TRG	Non-Filtered BOD 60 - Reading 1	0.6	ppm
3461	AK14531	TRG	Non-Filtered BOD 60 - Reading 2	1.9	ppm
3461	AK14531	TRG	Non-Filtered BOD 60 - Reading 3	2.2	ppm
3461	AK14531	TRG	Non-Filtered BOD 60 - Reading 4	2.5	ppm
3461	AK14531	TRG	Non-Filtered BOD 60 - Reading 5	2.9	ppm
3461	AK14531	TRG	Non-Filtered BOD 60 - Reading 6	3.6	ppm
3461	AK14531	TRG	Non-Filtered BOD 60 - Reading 7	4.5	ppm
3461	AK14531	TRG	Non-Filtered BOD 60 - Reading 8	5.2	ppm
3461	AK14531	TRG	Non-Filtered BOD 60 - Reading 9	5.8	ppm
3461	AK14531	TRG	Non-Filtered BOD 60 - Reading 10	6.2	ppm
3461	AK14531	TRG	Non-Filtered BOD 60 - Final	6.4	ppm
3461	AK14532	TRG	Volume of sample, Chlorophyll A (raw)	250	ml
3461	AK14532	TRG	Chlorophyll A (calculated)	25.9	ug/L
3461	AK14532	TRG	Chlorophyll A (raw)	648	ug/L
3462	AK14533	TRG	TSS	20.5	ppm
3462	AK14533	TRG	TDS	101	ppm
3462	AK14533	TRG	Alkalinity	45.8	ppm
3462	AK14533	TRG	Turbidity	18.3	NTU
3462	AK14533	TRG	Specific Conductance	142	umhos/cm
3462	AK14533	TRG	True Color	40	PCU
3462	AK14533	TRG	Chloride by IC	12.9	ppm
3462	AK14533	TRG	Sulfate	4.5	ppm
3462	AK14534	TRG	Sodium	14.3	ppm
3462	AK14535	TRG	Hardness	39.5	ppm
3462	AK14535	TRG	Nitrate+Nitrite Nitrogen	ND	ppm
3462	AK14535	TRG	TP	0.26	ppm
3462	AK14535	TRG	TKN	0.62	ppm

3462	AK14535	TRG	Ammonia-Nitrogen	0.19	ppm
3462	AK14536	TRG	TOC	7.5	ppm
3462	AK14537	TRG	pH, Ultimate BOD survey	7.47	pH units
3462	AK14537	TRG	TOC (60 Day BOD)	6.1	ppm
3462	AK14537	TRG	TKN (60 Day BOD)	0.21	ppm
3462	AK14537	TRG	NO2NO3 - Initial Reading	0.06	ppm
3462	AK14537	TRG	NO2NO3 - Reading 1	0.06	ppm
3462	AK14537	TRG	NO2NO3 - Reading 2	0.07	ppm
3462	AK14537	TRG	NO2NO3 - Reading 3	0.07	ppm
3462	AK14537	TRG	NO2NO3 - Reading 4	0.15	ppm
3462	AK14537	TRG	NO2NO3 - Reading 5	0.34	ppm
3462	AK14537	TRG	NO2NO3 - Reading 6	0.39	ppm
3462	AK14537	TRG	NO2NO3 - Reading 7	0.42	ppm
3462	AK14537	TRG	NO2NO3 - Reading 8	0.48	ppm
3462	AK14537	TRG	NO2NO3 - Reading 9	0.52	ppm
3462	AK14537	TRG	NO2NO3 - Reading 10	0.55	ppm
3462	AK14537	TRG	NO2NO3 - Final	0.58	ppm
3462	AK14537	TRG	Non-Filtered BOD 60 - Reading 1	0.8	ppm
3462	AK14537	TRG	Non-Filtered BOD 60 - Reading 2	2.8	ppm
3462	AK14537	TRG	Non-Filtered BOD 60 - Reading 3	3.3	ppm
3462	AK14537	TRG	Non-Filtered BOD 60 - Reading 4	4.1	ppm
3462	AK14537	TRG	Non-Filtered BOD 60 - Reading 5	5.7	ppm
3462	AK14537	TRG	Non-Filtered BOD 60 - Reading 6	6.5	ppm
3462	AK14537	TRG	Non-Filtered BOD 60 - Reading 7	7.3	ppm
3462	AK14537	TRG	Non-Filtered BOD 60 - Reading 8	8.3	ppm
3462	AK14537	TRG	Non-Filtered BOD 60 - Reading 9	9.1	ppm
3462	AK14537	TRG	Non-Filtered BOD 60 - Reading 10	9.8	ppm
3462	AK14537	TRG	Non-Filtered BOD 60 - Final	10.2	ppm
3462	AK14538	TRG	Chlorophyll A (calculated)	34.4	ug/L
3462	AK14538	TRG	Chlorophyll A (raw)	859	ug/L
3462	AK14538	TRG	Volume of sample, Chlorophyll A (raw)	250	ml
3466	AK14539	TRG	TSS	19.0	ppm
3466	AK14539	TRG	TDS	229	ppm
3466	AK14539	TRG	Alkalinity	121	ppm
3466	AK14539	TRG	Turbidity	15.2	NTU
3466	AK14539	TRG	Specific Conductance	369	umhos/cm
3466	AK14539	TRG	True Color	45	PCU
3466	AK14539	TRG	Chloride by IC	36.7	ppm
3466	AK14539	TRG	Sulfate	11.7	ppm
3466	AK14540	TRG	Sodium	41.7	ppm
3466	AK14541	TRG	Hardness	111	ppm
3466	AK14541	TRG	Nitrate+Nitrite Nitrogen	0.08	ppm
3466	AK14541	TRG	TP	0.45	ppm
3466	AK14541	TRG	TKN	1.09	ppm
3466	AK14541	TRG	Ammonia-Nitrogen	0.46	ppm
3466	AK14542	TRG	TOC	14.1	ppm
3466	AK14543	TRG	pH, Ultimate BOD survey	7.66	pH units
3466	AK14543	TRG	TOC (60 Day BOD)	12.7	ppm
3466	AK14543	TRG	TKN (60 Day BOD)	0.51	ppm
3466	AK14543	TRG	NO2NO3 - Initial Reading	0.10	ppm
3466	AK14543	TRG	NO2NO3 - Reading 1	0.09	ppm
3466	AK14543	TRG	NO2NO3 - Reading 2	0.10	ppm

3466	AK14543	TRG	NO2NO3 - Reading 3	0.13	ppm
3466	AK14543	TRG	NO2NO3 - Reading 4	0.37	ppm
3466	AK14543	TRG	NO2NO3 - Reading 5	0.74	ppm
3466	AK14543	TRG	NO2NO3 - Reading 6	0.80	ppm
3466	AK14543	TRG	NO2NO3 - Reading 7	0.84	ppm
3466	AK14543	TRG	NO2NO3 - Reading 8	0.90	ppm
3466	AK14543	TRG	NO2NO3 - Reading 9	0.95	ppm
3466	AK14543	TRG	NO2NO3 - Reading 10	1.00	ppm
3466	AK14543	TRG	NO2NO3 - Final	1.04	ppm
3466	AK14543	TRG	Non-Filtered BOD 60 - Reading 1	0.8	ppm
3466	AK14543	TRG	Non-Filtered BOD 60 - Reading 2	2.5	ppm
3466	AK14543	TRG	Non-Filtered BOD 60 - Reading 3	3.0	ppm
3466	AK14543	TRG	Non-Filtered BOD 60 - Reading 4	4.8	ppm
3466	AK14543	TRG	Non-Filtered BOD 60 - Reading 5	7.2	ppm
3466	AK14543	TRG	Non-Filtered BOD 60 - Reading 6	8.1	ppm
3466	AK14543	TRG	Non-Filtered BOD 60 - Reading 7	9.2	ppm
3466	AK14543	TRG	Non-Filtered BOD 60 - Reading 8	10.8	ppm
3466	AK14543	TRG	Non-Filtered BOD 60 - Reading 9	12.3	ppm
3466	AK14543	TRG	Non-Filtered BOD 60 - Reading 10	13.2	ppm
3466	AK14543	TRG	Non-Filtered BOD 60 - Final	13.9	ppm
3466	AK14544	TRG	Volume of sample, Chlorophyll A (raw)	250	ml
3466	AK14544	TRG	Chlorophyll A (calculated)	12.4	ug/L
3466	AK14544	TRG	Chlorophyll A (raw)	310	ug/L
3467	AK14545	TRG	TSS	13.5	ppm
3467	AK14545	TRG	TDS	154	ppm
3467	AK14545	TRG	Alkalinity	104	ppm
3467	AK14545	TRG	Turbidity	10.6	NTU
3467	AK14545	TRG	Specific Conductance	274	umhos/cm
3467	AK14545	TRG	True Color	28	PCU
3467	AK14545	TRG	Chloride by IC	17.8	ppm
3467	AK14545	TRG	Sulfate	11.4	ppm
3467	AK14546	TRG	Sodium	32.6	ppm
3467	AK14547	TRG	Hardness	79.4	ppm
3467	AK14547	TRG	Nitrate+Nitrite Nitrogen	0.11	ppm
3467	AK14547	TRG	TP	0.51	ppm
3467	AK14547	TRG	TKN	0.72	ppm
3467	AK14547	TRG	Ammonia-Nitrogen	0.29	ppm
3467	AK14548	TRG	TOC	11.4	ppm
3467	AK14549	TRG	pH, Ultimate BOD survey	7.75	pH units
3467	AK14549	TRG	TOC (60 Day BOD)	7.5	ppm
3467	AK14549	TRG	TKN (60 Day BOD)	0.34	ppm
3467	AK14549	TRG	NO2NO3 - Initial Reading	0.11	ppm
3467	AK14549	TRG	NO2NO3 - Reading 1	0.12	ppm
3467	AK14549	TRG	NO2NO3 - Reading 2	0.13	ppm
3467	AK14549	TRG	NO2NO3 - Reading 3	0.15	ppm
3467	AK14549	TRG	NO2NO3 - Reading 4	0.23	ppm
3467	AK14549	TRG	NO2NO3 - Reading 5	0.54	ppm
3467	AK14549	TRG	NO2NO3 - Reading 6	0.63	ppm
3467	AK14549	TRG	NO2NO3 - Reading 7	0.66	ppm
3467	AK14549	TRG	NO2NO3 - Reading 8	0.70	ppm
3467	AK14549	TRG	NO2NO3 - Reading 9	0.74	ppm
3467	AK14549	TRG	NO2NO3 - Reading 10	0.77	ppm

3467	AK14549	TRG	NO2NO3 - Final	0.82	ppm
3467	AK14549	TRG	Non-Filtered BOD 60 - Reading 1	0.8	ppm
3467	AK14549	TRG	Non-Filtered BOD 60 - Reading 2	2.6	ppm
3467	AK14549	TRG	Non-Filtered BOD 60 - Reading 3	3.2	ppm
3467	AK14549	TRG	Non-Filtered BOD 60 - Reading 4	4.3	ppm
3467	AK14549	TRG	Non-Filtered BOD 60 - Reading 5	6.5	ppm
3467	AK14549	TRG	Non-Filtered BOD 60 - Reading 6	7.5	ppm
3467	AK14549	TRG	Non-Filtered BOD 60 - Reading 7	8.4	ppm
3467	AK14549	TRG	Non-Filtered BOD 60 - Reading 8	9.6	ppm
3467	AK14549	TRG	Non-Filtered BOD 60 - Reading 9	10.8	ppm
3467	AK14549	TRG	Non-Filtered BOD 60 - Reading 10	11.6	ppm
3467	AK14549	TRG	Non-Filtered BOD 60 - Final	12.2	ppm
3467	AK14550	TRG	Volume of sample, Chlorophyll A (raw)	250	ml
3467	AK14550	TRG	Chlorophyll A (raw)	688	ug/L
3467	AK14550	TRG	Chlorophyll A (calculated)	27.5	ug/L
3469	AK14551	TRG	TSS	14.0	ppm
3469	AK14551	TRG	TDS	250	ppm
3469	AK14551	TRG	Alkalinity	127	ppm
3469	AK14551	TRG	Turbidity	11.8	NTU
3469	AK14551	TRG	Specific Conductance	387	umhos/cm
3469	AK14551	TRG	True Color	50	PCU
3469	AK14551	TRG	Chloride by IC	39.5	ppm
3469	AK14551	TRG	Sulfate	11.4	ppm
3469	AK14552	TRG	Sodium	44.7	ppm
3469	AK14553	TRG	Hardness	93.1	ppm
3469	AK14553	TRG	Nitrate+Nitrite Nitrogen	0.07	ppm
3469	AK14553	TRG	TP	0.50	ppm
3469	AK14553	TRG	TKN	1.47	ppm
3469	AK14553	TRG	Ammonia-Nitrogen	0.38	ppm
3469	AK14554	TRG	TOC	16.8	ppm
3469	AK14555	TRG	pH, Ultimate BOD survey	7.79	pH units
3469	AK14555	TRG	TOC (60 Day BOD)	10.2	ppm
3469	AK14555	TRG	TKN (60 Day BOD)	0.57	ppm
3469	AK14555	TRG	NO2NO3 - Initial Reading	0.08	ppm
3469	AK14555	TRG	NO2NO3 - Reading 1	0.08	ppm
3469	AK14555	TRG	NO2NO3 - Reading 2	0.09	ppm
3469	AK14555	TRG	NO2NO3 - Reading 3	0.12	ppm
3469	AK14555	TRG	NO2NO3 - Reading 4	0.31	ppm
3469	AK14555	TRG	NO2NO3 - Reading 5	0.68	ppm
3469	AK14555	TRG	NO2NO3 - Reading 6	0.76	ppm
3469	AK14555	TRG	NO2NO3 - Reading 7	0.80	ppm
3469	AK14555	TRG	NO2NO3 - Reading 8	0.86	ppm
3469	AK14555	TRG	NO2NO3 - Reading 9	0.91	ppm
3469	AK14555	TRG	NO2NO3 - Reading 10	0.97	ppm
3469	AK14555	TRG	NO2NO3 - Final	1.01	ppm
3469	AK14555	TRG	Non-Filtered BOD 60 - Reading 1	1.0	ppm
3469	AK14555	TRG	Non-Filtered BOD 60 - Reading 2	3.5	ppm
3469	AK14555	TRG	Non-Filtered BOD 60 - Reading 3	4.2	ppm
3469	AK14555	TRG	Non-Filtered BOD 60 - Reading 4	5.8	ppm
3469	AK14555	TRG	Non-Filtered BOD 60 - Reading 5	8.3	ppm
3469	AK14555	TRG	Non-Filtered BOD 60 - Reading 6	9.4	ppm
3469	AK14555	TRG	Non-Filtered BOD 60 - Reading 7	10.5	ppm

3469	AK14555	TRG	Non-Filtered BOD 60 - Reading 8	12.1	ppm
3469	AK14555	TRG	Non-Filtered BOD 60 - Reading 9	13.7	ppm
3469	AK14555	TRG	Non-Filtered BOD 60 - Reading 10	14.8	ppm
3469	AK14555	TRG	Non-Filtered BOD 60 - Final	15.4	ppm
3469	AK14556	TRG	Volume of sample, Chlorophyll A (raw)	250	ml
3469	AK14556	TRG	Chlorophyll A (calculated)	10.2	ug/L
3469	AK14556	TRG	Chlorophyll A (raw)	256	ug/L
3470	AK14557	TRG	TSS	15.5	ppm
3470	AK14557	TRG	TDS	193	ppm
3470	AK14557	TRG	Alkalinity	105	ppm
3470	AK14557	TRG	Turbidity	11.6	NTU
3470	AK14557	TRG	Specific Conductance	305	umhos/cm
3470	AK14557	TRG	True Color	55	PCU
3470	AK14557	TRG	Chloride by IC	26.8	ppm
3470	AK14557	TRG	Sulfate	9.7	ppm
3470	AK14558	TRG	Sodium	33.6	ppm
3470	AK14559	TRG	Hardness	85.9	ppm
3470	AK14559	TRG	Nitrate+Nitrite Nitrogen	0.05	ppm
3470	AK14559	TRG	TP	0.61	ppm
3470	AK14559	TRG	TKN	1.63	ppm
3470	AK14559	TRG	Ammonia-Nitrogen	0.34	ppm
3470	AK14560	TRG	TOC	15.2	ppm
3470	AK14561	TRG	pH, Ultimate BOD survey	7.61	pH units
3470	AK14561	TRG	TOC (60 Day BOD)	9.9	ppm
3470	AK14561	TRG	TKN (60 Day BOD)	0.60	ppm
3470	AK14561	TRG	NO2NO3 - Initial Reading	0.06	ppm
3470	AK14561	TRG	NO2NO3 - Reading 1	0.06	ppm
3470	AK14561	TRG	NO2NO3 - Reading 2	0.06	ppm
3470	AK14561	TRG	NO2NO3 - Reading 3	0.09	ppm
3470	AK14561	TRG	NO2NO3 - Reading 4	0.24	ppm
3470	AK14561	TRG	NO2NO3 - Reading 5	0.68	ppm
3470	AK14561	TRG	NO2NO3 - Reading 6	0.77	ppm
3470	AK14561	TRG	NO2NO3 - Reading 7	0.81	ppm
3470	AK14561	TRG	NO2NO3 - Reading 8	0.89	ppm
3470	AK14561	TRG	NO2NO3 - Reading 9	0.92	ppm
3470	AK14561	TRG	NO2NO3 - Reading 10	0.99	ppm
3470	AK14561	TRG	NO2NO3 - Final	1.05	ppm
3470	AK14561	TRG	Non-Filtered BOD 60 - Reading 1	1.3	ppm
3470	AK14561	TRG	Non-Filtered BOD 60 - Reading 2	4.2	ppm
3470	AK14561	TRG	Non-Filtered BOD 60 - Reading 3	4.9	ppm
3470	AK14561	TRG	Non-Filtered BOD 60 - Reading 4	6.5	ppm
3470	AK14561	TRG	Non-Filtered BOD 60 - Reading 5	9.4	ppm
3470	AK14561	TRG	Non-Filtered BOD 60 - Reading 6	10.5	ppm
3470	AK14561	TRG	Non-Filtered BOD 60 - Reading 7	11.7	ppm
3470	AK14561	TRG	Non-Filtered BOD 60 - Reading 8	13.6	ppm
3470	AK14561	TRG	Non-Filtered BOD 60 - Reading 9	15.3	ppm
3470	AK14561	TRG	Non-Filtered BOD 60 - Reading 10	16.3	ppm
3470	AK14561	TRG	Non-Filtered BOD 60 - Final	17.1	ppm
3470	AK14562	TRG	Chlorophyll A (calculated)	37.8	ug/L
3470	AK14562	TRG	Chlorophyll A (raw)	944	ug/L
3470	AK14562	TRG	Volume of sample, Chlorophyll A (raw)	250	ml
3472	AK14563	TRG	TSS	17.5	ppm

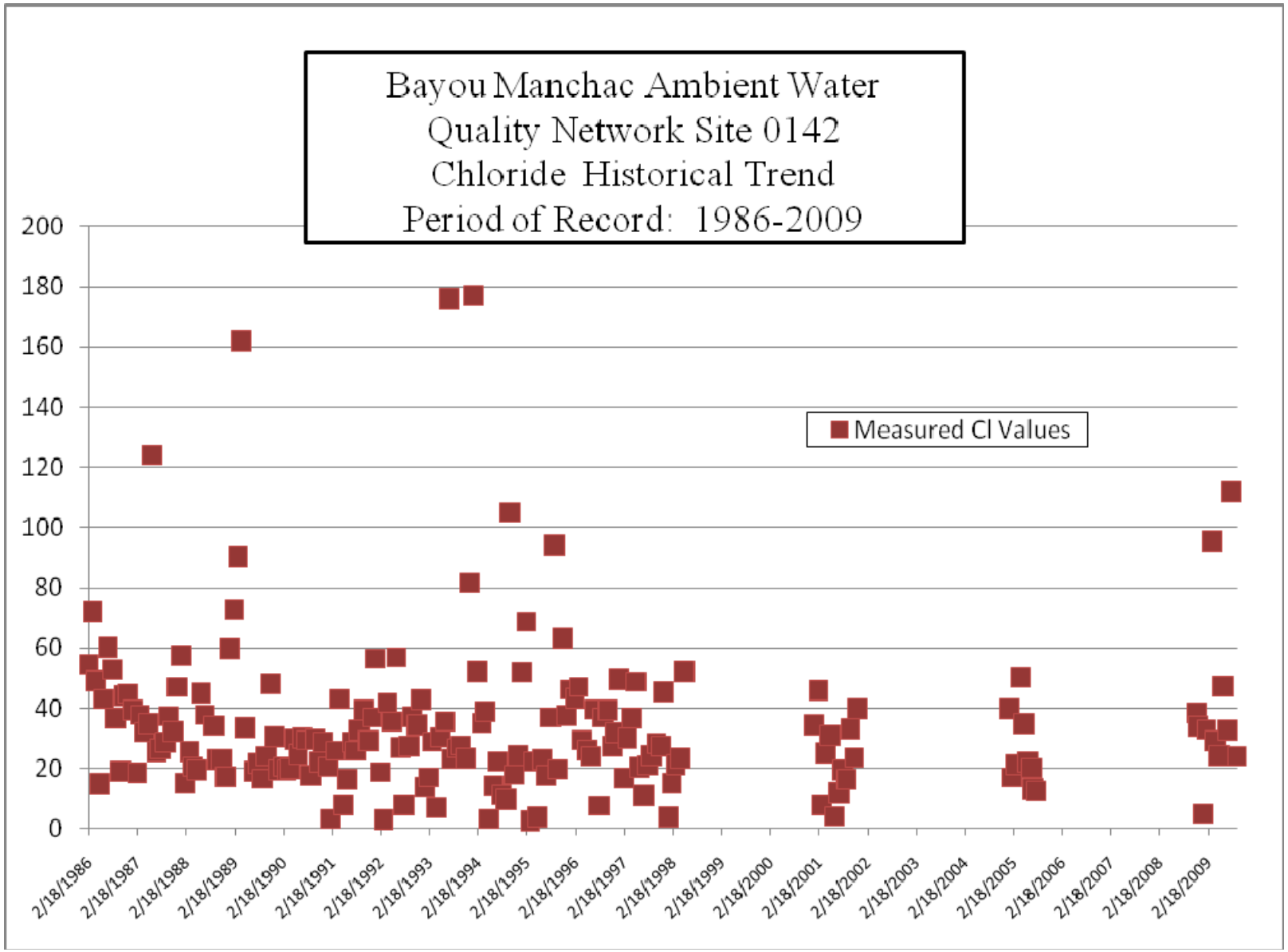
3472	AK14563	TRG	TDS	200	ppm
3472	AK14563	TRG	Alkalinity	97.7	ppm
3472	AK14563	TRG	Turbidity	12.5	NTU
3472	AK14563	TRG	Specific Conductance	310	umhos/cm
3472	AK14563	TRG	True Color	60	PCU
3472	AK14563	TRG	Chloride by IC	33.8	ppm
3472	AK14563	TRG	Sulfate	6.9	ppm
3472	AK14564	TRG	Sodium	36.3	ppm
3472	AK14565	TRG	Hardness	92.1	ppm
3472	AK14565	TRG	Nitrate+Nitrite Nitrogen	0.07	ppm
3472	AK14565	TRG	TP	0.59	ppm
3472	AK14565	TRG	TKN	1.37	ppm
3472	AK14565	TRG	Ammonia-Nitrogen	0.34	ppm
3472	AK14566	TRG	TOC	15.2	ppm
3472	AK14567	TRG	pH, Ultimate BOD survey	7.60	pH units
3472	AK14567	TRG	TOC (60 Day BOD)	9.6	ppm
3472	AK14567	TRG	TKN (60 Day BOD)	0.54	ppm
3472	AK14567	TRG	NO2NO3 - Initial Reading	0.07	ppm
3472	AK14567	TRG	NO2NO3 - Reading 1	0.08	ppm
3472	AK14567	TRG	NO2NO3 - Reading 2	0.10	ppm
3472	AK14567	TRG	NO2NO3 - Reading 3	0.12	ppm
3472	AK14567	TRG	NO2NO3 - Reading 4	0.34	ppm
3472	AK14567	TRG	NO2NO3 - Reading 5	0.53	ppm
3472	AK14567	TRG	NO2NO3 - Reading 6	0.61	ppm
3472	AK14567	TRG	NO2NO3 - Reading 7	0.66	ppm
3472	AK14567	TRG	NO2NO3 - Reading 8	0.72	ppm
3472	AK14567	TRG	NO2NO3 - Reading 9	0.74	ppm
3472	AK14567	TRG	NO2NO3 - Reading 10	0.79	ppm
3472	AK14567	TRG	NO2NO3 - Final	0.84	ppm
3472	AK14567	TRG	Non-Filtered BOD 60 - Reading 1	0.9	ppm
3472	AK14567	TRG	Non-Filtered BOD 60 - Reading 2	2.8	ppm
3472	AK14567	TRG	Non-Filtered BOD 60 - Reading 3	3.5	ppm
3472	AK14567	TRG	Non-Filtered BOD 60 - Reading 4	5.1	ppm
3472	AK14567	TRG	Non-Filtered BOD 60 - Reading 5	6.8	ppm
3472	AK14567	TRG	Non-Filtered BOD 60 - Reading 6	7.9	ppm
3472	AK14567	TRG	Non-Filtered BOD 60 - Reading 7	9.1	ppm
3472	AK14567	TRG	Non-Filtered BOD 60 - Reading 8	10.7	ppm
3472	AK14567	TRG	Non-Filtered BOD 60 - Reading 9	12.1	ppm
3472	AK14567	TRG	Non-Filtered BOD 60 - Reading 10	13.1	ppm
3472	AK14567	TRG	Non-Filtered BOD 60 - Final	13.9	ppm
3472	AK14568	TRG	Chlorophyll A (raw)	652	ug/L
3472	AK14568	TRG	Volume of sample, Chlorophyll A (raw)	250	ml
3472	AK14568	TRG	Chlorophyll A (calculated)	26.1	ug/L
3473	AK14569	FB	TSS	ND	ppm
3473	AK14569	FB	TDS	ND	ppm
3473	AK14569	FB	Alkalinity	ND	ppm
3473	AK14569	FB	Turbidity	ND	NTU
3473	AK14569	FB	Specific Conductance	ND	umhos/cm
3473	AK14569	FB	True Color	ND	PCU
3473	AK14569	FB	Chloride by IC	ND	ppm
3473	AK14569	FB	Sulfate	ND	ppm
3473	AK14570	FB	Sodium	ND	ppm

3473	AK14571	FB	Hardness	ND	ppm
3473	AK14571	FB	Nitrate+Nitrite Nitrogen	ND	ppm
3473	AK14571	FB	TP	ND	ppm
3473	AK14571	FB	TKN	ND	ppm
3473	AK14571	FB	Ammonia-Nitrogen	ND	ppm
3473	AK14572	FB	TOC	ND	ppm
3473	AK14573	FB	pH, Ultimate BOD survey	7.44	pH units
3473	AK14573	FB	TOC (60 Day BOD)	ND	ppm
3473	AK14573	FB	TKN (60 Day BOD)	ND	ppm
3473	AK14573	FB	NO2NO3 - Initial Reading	ND	ppm
3473	AK14573	FB	NO2NO3 - Reading 1	ND	ppm
3473	AK14573	FB	NO2NO3 - Reading 2	0.05	ppm
3473	AK14573	FB	NO2NO3 - Reading 3	ND	ppm
3473	AK14573	FB	NO2NO3 - Reading 4	ND	ppm
3473	AK14573	FB	NO2NO3 - Reading 5	ND	ppm
3473	AK14573	FB	NO2NO3 - Reading 6	ND	ppm
3473	AK14573	FB	NO2NO3 - Reading 7	ND	ppm
3473	AK14573	FB	NO2NO3 - Reading 8	ND	ppm
3473	AK14573	FB	NO2NO3 - Reading 9	ND	ppm
3473	AK14573	FB	NO2NO3 - Reading 10	ND	ppm
3473	AK14573	FB	NO2NO3 - Final	ND	ppm
3473	AK14573	FB	Non-Filtered BOD 60 - Reading 1	0.1	ppm
3473	AK14573	FB	Non-Filtered BOD 60 - Reading 2	0.4	ppm
3473	AK14573	FB	Non-Filtered BOD 60 - Reading 3	0.3	ppm
3473	AK14573	FB	Non-Filtered BOD 60 - Reading 4	0.3	ppm
3473	AK14573	FB	Non-Filtered BOD 60 - Reading 5	0.3	ppm
3473	AK14573	FB	Non-Filtered BOD 60 - Reading 6	0.4	ppm
3473	AK14573	FB	Non-Filtered BOD 60 - Reading 7	0.5	ppm
3473	AK14573	FB	Non-Filtered BOD 60 - Reading 8	0.5	ppm
3473	AK14573	FB	Non-Filtered BOD 60 - Reading 9	0.6	ppm
3473	AK14573	FB	Non-Filtered BOD 60 - Reading 10	0.7	ppm
3473	AK14573	FB	Non-Filtered BOD 60 - Final	0.7	ppm
3473	AK14575	TRG	TSS	8.5	ppm
3473	AK14575	TRG	TDS	220	ppm
3473	AK14575	TRG	Alkalinity	103	ppm
3473	AK14575	TRG	Turbidity	7.1	NTU
3473	AK14575	TRG	Specific Conductance	337	umhos/cm
3473	AK14575	TRG	True Color	60	PCU
3473	AK14575	TRG	Chloride by IC	35.6	ppm
3473	AK14575	TRG	Sulfate	12.9	ppm
3473	AK14576	TRG	Sodium	33.0	ppm
3473	AK14577	TRG	Hardness	95.1	ppm
3473	AK14577	TRG	Nitrate+Nitrite Nitrogen	ND	ppm
3473	AK14577	TRG	TP	0.59	ppm
3473	AK14577	TRG	TKN	1.38	ppm
3473	AK14577	TRG	Ammonia-Nitrogen	0.29	ppm
3473	AK14578	TRG	TOC	17.1	ppm
3473	AK14579	TRG	pH, Ultimate BOD survey	7.67	pH units
3473	AK14579	TRG	TOC (60 Day BOD)	13.4	ppm
3473	AK14579	TRG	TKN (60 Day BOD)	0.84	ppm
3473	AK14579	TRG	NO2NO3 - Initial Reading	0.05	ppm
3473	AK14579	TRG	NO2NO3 - Reading 1	ND	ppm

3473	AK14579	TRG	NO2NO3 - Reading 2	0.06	ppm
3473	AK14579	TRG	NO2NO3 - Reading 3	0.06	ppm
3473	AK14579	TRG	NO2NO3 - Reading 4	0.14	ppm
3473	AK14579	TRG	NO2NO3 - Reading 5	0.39	ppm
3473	AK14579	TRG	NO2NO3 - Reading 6	0.54	ppm
3473	AK14579	TRG	NO2NO3 - Reading 7	0.58	ppm
3473	AK14579	TRG	NO2NO3 - Reading 8	0.65	ppm
3473	AK14579	TRG	NO2NO3 - Reading 9	0.69	ppm
3473	AK14579	TRG	NO2NO3 - Reading 10	0.74	ppm
3473	AK14579	TRG	NO2NO3 - Final	0.78	ppm
3473	AK14579	TRG	Non-Filtered BOD 60 - Reading 1	0.8	ppm
3473	AK14579	TRG	Non-Filtered BOD 60 - Reading 2	2.5	ppm
3473	AK14579	TRG	Non-Filtered BOD 60 - Reading 3	2.9	ppm
3473	AK14579	TRG	Non-Filtered BOD 60 - Reading 4	4.0	ppm
3473	AK14579	TRG	Non-Filtered BOD 60 - Reading 5	5.8	ppm
3473	AK14579	TRG	Non-Filtered BOD 60 - Reading 6	7.2	ppm
3473	AK14579	TRG	Non-Filtered BOD 60 - Reading 7	8.2	ppm
3473	AK14579	TRG	Non-Filtered BOD 60 - Reading 8	10.0	ppm
3473	AK14579	TRG	Non-Filtered BOD 60 - Reading 9	11.7	ppm
3473	AK14579	TRG	Non-Filtered BOD 60 - Reading 10	12.8	ppm
3473	AK14579	TRG	Non-Filtered BOD 60 - Final	13.6	ppm
3473	AK14580	TRG	Chlorophyll A (raw)	410	ug/L
3473	AK14580	TRG	Volume of sample, Chlorophyll A (raw)	250	ml
3473	AK14580	TRG	Chlorophyll A (calculated)	16.4	ug/L
3473	AK14581	FD	TSS	8.0	ppm
3473	AK14581	FD	TDS	224	ppm
3473	AK14581	FD	Alkalinity	104	ppm
3473	AK14581	FD	Turbidity	7.3	NTU
3473	AK14581	FD	Specific Conductance	338	umhos/cm
3473	AK14581	FD	True Color	60	PCU
3473	AK14581	FD	Chloride by IC	35.6	ppm
3473	AK14581	FD	Sulfate	12.9	ppm
3473	AK14582	FD	Sodium	34.3	ppm
3473	AK14583	FD	Hardness	103	ppm
3473	AK14583	FD	Nitrate+Nitrite Nitrogen	ND	ppm
3473	AK14583	FD	TP	0.56	ppm
3473	AK14583	FD	TKN	1.49	ppm
3473	AK14583	FD	Ammonia-Nitrogen	0.31	ppm
3473	AK14584	FD	TOC	18.6	ppm
3473	AK14585	FD	pH, Ultimate BOD survey	7.73	pH units
3473	AK14585	FD	TOC (60 Day BOD)	11.9	ppm
3473	AK14585	FD	TKN (60 Day BOD)	0.93	ppm
3473	AK14585	FD	NO2NO3 - Initial Reading	0.05	ppm
3473	AK14585	FD	NO2NO3 - Reading 1	0.05	ppm
3473	AK14585	FD	NO2NO3 - Reading 2	0.06	ppm
3473	AK14585	FD	NO2NO3 - Reading 3	0.06	ppm
3473	AK14585	FD	NO2NO3 - Reading 4	0.14	ppm
3473	AK14585	FD	NO2NO3 - Reading 5	0.41	ppm
3473	AK14585	FD	NO2NO3 - Reading 6	0.58	ppm
3473	AK14585	FD	NO2NO3 - Reading 7	0.63	ppm
3473	AK14585	FD	NO2NO3 - Reading 8	0.71	ppm
3473	AK14585	FD	NO2NO3 - Reading 9	0.75	ppm

3473	AK14585	FD	NO2NO3 - Reading 10	0.78	ppm
3473	AK14585	FD	NO2NO3 - Final	0.84	ppm
3473	AK14585	FD	Non-Filtered BOD 60 - Reading 1	0.9	ppm
3473	AK14585	FD	Non-Filtered BOD 60 - Reading 2	2.8	ppm
3473	AK14585	FD	Non-Filtered BOD 60 - Reading 3	3.3	ppm
3473	AK14585	FD	Non-Filtered BOD 60 - Reading 4	4.3	ppm
3473	AK14585	FD	Non-Filtered BOD 60 - Reading 5	6.2	ppm
3473	AK14585	FD	Non-Filtered BOD 60 - Reading 6	7.7	ppm
3473	AK14585	FD	Non-Filtered BOD 60 - Reading 7	8.9	ppm
3473	AK14585	FD	Non-Filtered BOD 60 - Reading 8	10.5	ppm
3473	AK14585	FD	Non-Filtered BOD 60 - Reading 9	12.0	ppm
3473	AK14585	FD	Non-Filtered BOD 60 - Reading 10	13.2	ppm
3473	AK14585	FD	Non-Filtered BOD 60 - Final	14.0	ppm

Appendix C2 – Ambient / Historical Ambient Data


Bayou Manchac Ambient Water Quality Network Site 0142 Chloride Historical Trend Period of Record: 1986-2009
Measured Cl Values
200
180
160
140
120
100
80
60
40
20
0
2/18/1986
2/18/1987
2/18/1988
2/18/1989
2/18/1990
2/18/1991
2/18/1992
2/18/1993
2/18/1994
2/18/1995
2/18/1996
2/18/1997
2/18/1998
2/18/1999
2/18/2000
2/18/2001
2/18/2002
2/18/2003
2/18/2004
2/18/2005
2/18/2006
2/18/2007
2/18/2008
2/18/2009

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/18/1986	54.6	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/18/1986	72	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/15/1986	49.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/13/1986	15.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/10/1986	43	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/15/1986	60.2	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/12/1986	52.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/9/1986	36.6	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/14/1986	18.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/17/1986	44.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/8/1986	44.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/12/1987	39.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/16/1987	18.5	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/9/1987	37.7	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/13/1987	32	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/11/1987	35	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/8/1987	124	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/13/1987	25.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/10/1987	26.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/14/1987	28.8	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/12/1987	37.4	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/16/1987	32.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/14/1987	47	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/11/1988	57.4	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/8/1988	15.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/14/1988	25.6	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/11/1988	20.5	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/9/1988	19.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/13/1988	45	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/11/1988	37.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/12/1988	34.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/10/1988	23	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/14/1988	23	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/12/1988	17.3	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/9/1989	59.7	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/13/1989	72.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/14/1989	90.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/10/1989	162	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/8/1989	33.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/11/1989	19.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/15/1989	21.5	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/12/1989	16.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/10/1989	24.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/13/1989	48.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/11/1989	30.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/8/1990	19.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/12/1990	20.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/12/1990	19.5	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/9/1990	19.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/14/1990	29.7	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/11/1990	24.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/9/1990	30.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/13/1990	29.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/10/1990	17.7	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/15/1990	29.5	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/13/1990	22.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/10/1990	28.7	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/15/1991	20.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/5/1991	3.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/12/1991	25.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/16/1991	43.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/14/1991	8	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/11/1991	16.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/16/1991	28.6	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/13/1991	25.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/10/1991	32.6	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/15/1991	39.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/19/1991	29.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/10/1991	36.8	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/6/1992	56.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/11/1992	18.7	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/10/1992	3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/7/1992	41.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/12/1992	35.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/16/1992	56.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/14/1992	27	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/11/1992	7.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/15/1992	27.4	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/13/1992	37.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/17/1992	34.4	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/15/1992	42.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/12/1993	13.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/9/1993	17	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/9/1993	29	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/13/1993	6.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/11/1993	30.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/15/1993	35.6	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/13/1993	176	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/10/1993	23.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/14/1993	26.8	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/12/1993	27.6	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/16/1993	23.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/14/1993	81.6	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/11/1994	177	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/8/1994	52.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/15/1994	35.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/12/1994	38.8	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/10/1994	3.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/14/1994	14.4	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/12/1994	22.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/9/1994	11.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/13/1994	9.7	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/11/1994	105	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/15/1994	17.8	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/13/1994	24.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/10/1995	51.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/14/1995	68.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/14/1995	2.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/4/1995	22.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/9/1995	3.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/13/1995	22.9	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/11/1995	17.6	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/15/1995	36.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/11/1995	94.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/9/1995	19.7	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/13/1995	63.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/11/1995	37.6	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/9/1996	46.2	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/12/1996	43.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/11/1996	47	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/8/1996	29.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/13/1996	26.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/10/1996	24.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/8/1996	39.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/12/1996	7.6	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/9/1996	36.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/14/1996	39.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/18/1996	27.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/9/1996	31.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/6/1997	49.4	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/17/1997	16.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/10/1997	30	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/14/1997	36.7	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/12/1997	48.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/9/1997	20.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/14/1997	10.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/11/1997	21	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/8/1997	24.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/13/1997	28.2	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/17/1997	27.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/9/1997	45.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/13/1998	3.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/9/1998	15.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/9/1998	21.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/13/1998	23.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/11/1998	52.1	CHLORIDE, ION CHROMATOGRAPH	

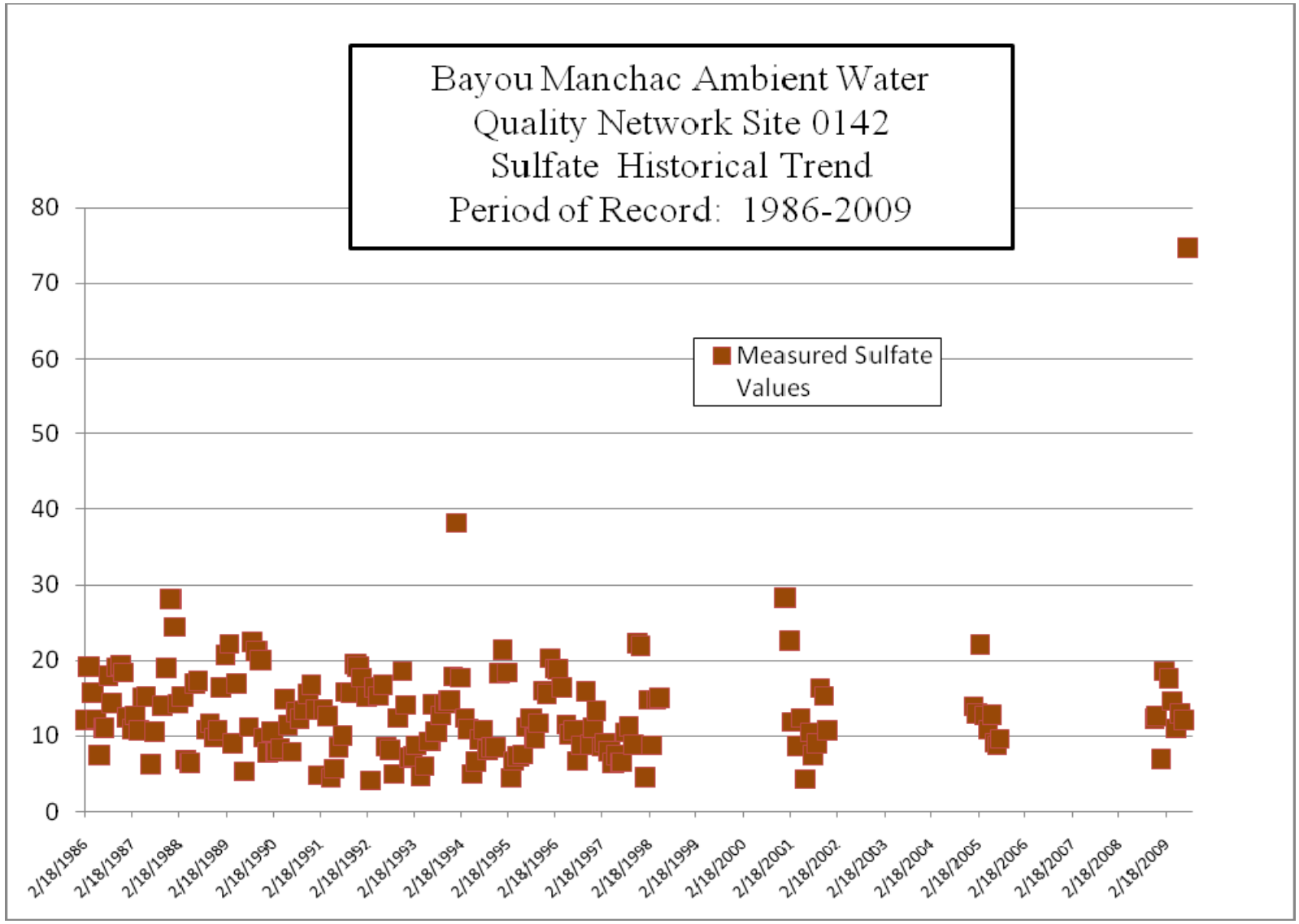
Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/9/2001	34.5	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/13/2001	45.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/13/2001	7.9	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/9/2001	25.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/8/2001	31	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/12/2001	4.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/17/2001	11.8	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/14/2001	19.3	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/10/2001	16.4	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/9/2001	33.2	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/6/2001	23.7	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/3/2001	39.8	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/12/2005	39.7	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/2/2005	17	CHLORIDE, ION CHROMATOGRAPH	Unfiltered

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/1/2005	21.3	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/6/2005	50.1	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/4/2005	35	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/2/2005	22	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/28/2005	20	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/12/2005	13.1	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/2/2005	12.5	CHLORIDE, ION CHROMATOGRAPH	Unfiltered

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/18/2008	38.5	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/2/2008	33.9	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/7/2009	5	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/3/2009	32.9	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/11/2009	95.5	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/7/2009	29.1	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/5/2009	24.3	CHLORIDE, ION CHROMATOGRAPH	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/2/2009	47.4	CHLORIDE, ION CHROMATOGRAPH	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/7/2009	32.7	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/4/2009	112	CHLORIDE, ION CHROMATOGRAPH	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/15/2009	24	CHLORIDE, ION CHROMATOGRAPH	Unfiltered


Bayou Manchac Ambient Water Quality Network Site 0142 Sulfate Historical Trend Period of Record: 1986-2009
Measured Sulfate Values
80
70
60
50
40
30
20
10
0
2/18/1986
2/18/1987
2/18/1988
2/18/1989
2/18/1990
2/18/1991
2/18/1992
2/18/1993
2/18/1994
2/18/1995
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2/18/1999
2/18/2000
2/18/2001
2/18/2002
2/18/2003
2/18/2004
2/18/2005
2/18/2006
2/18/2007
2/18/2008
2/18/2009

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/18/1986	12.1	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/18/1986	19.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/15/1986	15.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/13/1986	12.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/10/1986	7.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/15/1986	11.1	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/12/1986	18	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/9/1986	14.4	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/14/1986	19.1	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/17/1986	19.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/8/1986	18.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/12/1987	12.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/16/1987	10.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/9/1987	12.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/13/1987	10.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/11/1987	15.1	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/8/1987	15.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/13/1987	6.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/10/1987	10.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/12/1987	14	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/16/1987	19	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/14/1987	28.1	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/11/1988	24.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/8/1988	14.3	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/14/1988	15.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/11/1988	6.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/9/1988	6.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/13/1988	16.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/11/1988	17.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/12/1988	10.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/10/1988	11.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/14/1988	9.8	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/12/1988	10.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/9/1989	16.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/13/1989	20.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/14/1989	22.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/10/1989	9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/8/1989	16.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/11/1989	5.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/15/1989	11.2	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/12/1989	22.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/10/1989	21.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/13/1989	20	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/11/1989	9.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/8/1990	7.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/12/1990	10.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/12/1990	7.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/9/1990	8.3	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/14/1990	14.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/11/1990	11.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/9/1990	7.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/13/1990	13.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/10/1990	12.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/15/1990	13.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/13/1990	15.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/10/1990	16.8	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/15/1991	13.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/5/1991	4.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/12/1991	13.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/16/1991	12.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/14/1991	4.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/11/1991	5.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/16/1991	8.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/13/1991	10.1	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/10/1991	15.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/15/1991	15.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/19/1991	19.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/10/1991	19.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/6/1992	17.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/11/1992	15.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/10/1992	4.1	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/7/1992	16.4	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/12/1992	15.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/16/1992	16.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/14/1992	8.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/11/1992	8.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/15/1992	5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/13/1992	12.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/17/1992	18.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/15/1992	14.1	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/12/1993	7.1	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/9/1993	7.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/9/1993	8.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/13/1993	4.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/11/1993	6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/15/1993	9.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/13/1993	14.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/10/1993	10.6	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/14/1993	12.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/12/1993	14.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/16/1993	14.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/14/1993	17.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/11/1994	38.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/8/1994	17.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/15/1994	12.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/12/1994	10.9	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/10/1994	5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/14/1994	6.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/12/1994	9.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/9/1994	10.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/13/1994	8.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/11/1994	8.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/15/1994	8.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/13/1994	18.3	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/10/1995	21.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/14/1995	18.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/14/1995	4.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/4/1995	6.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/9/1995	7.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/13/1995	7.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/11/1995	11.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/15/1995	12.4	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/11/1995	9.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/9/1995	11.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/13/1995	16	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/11/1995	15.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/9/1996	20.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/12/1996	18.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/11/1996	18.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/8/1996	16.4	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/13/1996	11.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/10/1996	10.2	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/8/1996	10.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/12/1996	6.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/9/1996	8.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/14/1996	15.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/18/1996	8.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/9/1996	11.1	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/6/1997	13.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/17/1997	8.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/10/1997	9.1	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/14/1997	8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/12/1997	6.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/9/1997	7.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/14/1997	6.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/11/1997	10.5	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/8/1997	11.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/13/1997	8.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/17/1997	22.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/9/1997	21.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/13/1998	4.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/9/1998	14.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/9/1998	8.8	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/13/1998	14.8	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/11/1998	15	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/9/2001	28.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/13/2001	22.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/13/2001	11.9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/9/2001	8.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/8/2001	12.4	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/12/2001	4.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/17/2001	10.5	SULFATE	

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/14/2001	7.5	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/10/2001	9	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	10/9/2001	16.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/6/2001	15.3	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/3/2001	10.7	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/12/2005	13.9	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/2/2005	13	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/1/2005	22.1	SULFATE	Unfiltered

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/6/2005	12.7	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/4/2005	10.8	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/2/2005	12.8	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/28/2005	9.1	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/12/2005	8.8	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/2/2005	9.6	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	11/18/2008	12.3	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	12/2/2008	12.6	SULFATE	Unfiltered

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	1/7/2009	7	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	2/3/2009	18.6	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	3/11/2009	17.6	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	4/7/2009	14.6	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	5/5/2009	11	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	6/2/2009	13	SULFATE	
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	7/7/2009	12.1	SULFATE	Unfiltered
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	8/4/2009	74.7	SULFATE	Unfiltered

Site Name	Subsegment	Site#	Collection Date	Result (ppm, mg/L)	Parameter	Filtration Method
Bayou Manchac near Prairieville, Louisiana	LA040201_00	142	9/15/2009		SULFATE	Unfiltered

Appendix C3 – Land Use Summary

Land Use Summary

Subsegment 40201

Data Source Name: LA-GAP June 2000

Grid Name	Area (Acres)	% Land Use
Agriculture/Cropland/Grassland	32597.70	29.53
Vegetated Urban	25850.47	23.42
Wetland Forest Deciduous	23712.37	21.48
Non-Vegetated Urban	8249.95	7.47
Water	4904.69	4.44
Upland Forest Mixed	3295.22	2.99
Upland Forest Deciduous	3240.07	2.94
Wetland S/S Deciduous	2507.94	2.27
Upland Forest Evergreen	2193.48	1.99
Upland S/S Mixed	1876.12	1.70
Fresh Marsh	909.59	0.82
Upland Barren	514.18	0.47
Upland S/S Evergreen	342.27	0.31
Upland S/S Deciduous	164.35	0.15
Wetland Forest Mixed	24.69	0.02
Wetland Barren	7.78	0.01

Appendix C4 – Groundwater Data

Groundwater Chloride Data

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	10/17/94	AB36930	1.5	MG/L	1017	CHLORIDE	2CFB	CONVENTION 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/17/94	AB36935	2.2	MG/L	1017	CHLORIDE	2CFC	CONVENTION 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/17/94	AB36940	2.5	MG/L	1017	CHLORIDE	2CGE	ONEAL LANE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/17/94	AB36945	2.4	MG/L	1017	CHLORIDE	2MKY	LAFAYETTE 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/17/94	AB36950	2.6	MG/L	1017	CHLORIDE	2MKZ	GOVERNMENT 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/5/95	AB46084	2.8	MG/L	1017	CHLORIDE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/5/95	AB46089	3.1	MG/L	1017	CHLORIDE	2CFJ	GOVERNMENT 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/5/95	AB46099	3.3	MG/L	1017	CHLORIDE	2CFN	INTERSTATE 002	RW
LA1033005	BATON ROUGE	GW	6/5/95	AB46104	2.9	MG/L	1017	CHLORIDE	2CGO	STAN AUBIN 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	WATER COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47828	3.7	MG/L	1017	CHLORIDE	2CFD	CORTANA 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47833	2.8	MG/L	1017	CHLORIDE	2CFE	CORTANA 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47838	6.5	MG/L	1017	CHLORIDE	2CFF	CORTANA 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47843	5.2	MG/L	1017	CHLORIDE	2CFG	CORTANA 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47848	6.3	MG/L	1017	CHLORIDE	2CFH	CORTANA 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47853	5.8	MG/L	1017	CHLORIDE	2CFL	GREENRIDGE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47858	7.1	MG/L	1017	CHLORIDE	2CFZ	N. SHARP 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47863	6.4	MG/L	1017	CHLORIDE	2CGA	N. SHARP 002	RW
LA1033005	BATON ROUGE WATER	GW	7/18/95	AB47868	7.1	MG/L	1017	CHLORIDE	2MKK	S CHOCTAW 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47873	3.9	MG/L	1017	CHLORIDE	2MLB	S CHOCTAW 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/24/95	AB48302	3.2	MG/L	1017	CHLORIDE	2CGP	STAN AUBIN 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/24/95	AB48307	5.6	MG/L	1017	CHLORIDE	2CGQ	STUMBERG 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/24/95	AB48312	3.8	MG/L	1017	CHLORIDE	2CGR	TOULON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/24/95	AB48317	5.3	MG/L	1017	CHLORIDE	2CGS	TOULON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/24/95	AB48322	10.8	MG/L	1017	CHLORIDE	2CGT	WESTMINSTER 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/2/95	AB48638	4	MG/L	1017	CHLORIDE	2CEV	BANKSTON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/2/95	AB48643	6.2	MG/L	1017	CHLORIDE	2CEW	BANKSTON 002	RW
LA1033005	BATON ROUGE WATER	GW	8/2/95	AB48648	6	MG/L	1017	CHLORIDE	2CEX	BANKSTON 003	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	8/2/95	AB48653	6.2	MG/L	1017	CHLORIDE	2CEY	BANKSTON 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/2/95	AB48658	5.3	MG/L	1017	CHLORIDE	2CEZ	BANKSTON 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48950	3.6	MG/L	1017	CHLORIDE	2CFA	BANKSTON 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48970	134.9	MG/L	1017	CHLORIDE	2CFO	LAFAYETTE 015	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48975	3.3	MG/L	1017	CHLORIDE	2CGB	OLOL 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48980	2.6	MG/L	1017	CHLORIDE	2CGC	OLOL 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48955	3.2	MG/L	1017	CHLORIDE	2CGI	ROBIN ST. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48960	188.8	MG/L	1017	CHLORIDE	2CGJ	ROBIN ST. 002	RW
LA1033005	BATON ROUGE WATER	GW	8/9/95	AB48965	64.7	MG/L	1017	CHLORIDE	2CGN	SOUTHERN UNIV. 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48985	20.3	MG/L	1017	CHLORIDE	2MKH	LAFAYETTE 014	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48990	3.3	MG/L	1017	CHLORIDE	2MKV	BR METRO AIRPORT WEL	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49940	3.2	MG/L	1017	CHLORIDE	2CFP	LULA 017	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49945	2.9	MG/L	1017	CHLORIDE	2CFQ	LULA 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49950	4.3	MG/L	1017	CHLORIDE	2CFR	LULA 019	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49955	3.4	MG/L	1017	CHLORIDE	2CFS	LULA 020	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49960	3.1	MG/L	1017	CHLORIDE	2CFT	LULA 021	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49915	3.1	MG/L	1017	CHLORIDE	2CFU	LULA 022	RW
LA1033005	BATON ROUGE WATER	GW	8/23/95	AB49920	3.6	MG/L	1017	CHLORIDE	2CFV	LULA 023	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49925	3	MG/L	1017	CHLORIDE	2CFW	N. 45TH 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49930	3	MG/L	1017	CHLORIDE	2CFX	N. 45TH 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49935	3.3	MG/L	1017	CHLORIDE	2CFY	N. 45TH 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/6/95	AB50355	3.2	MG/L	1017	CHLORIDE	2CGD	ONEAL LANE 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/6/95	AB50360	2.9	MG/L	1017	CHLORIDE	2CGF	RIDGECREST 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/6/95	AB50365	2.8	MG/L	1017	CHLORIDE	2CGG	RIDGECREST 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/6/95	AB50370	2.5	MG/L	1017	CHLORIDE	2CGH	RIDGECREST 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/6/95	AB50375	3.1	MG/L	1017	CHLORIDE	2CGK	ROBIN ST. 003	RW
LA1033005	BATON ROUGE WATER	GW	9/20/95	AB51296	3.8	MG/L	1017	CHLORIDE	2CFK	GOVERNMENT 006	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	9/20/95	AB51316	2.7	MG/L	1017	CHLORIDE	2MKG	GOVERNMENT 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/2/98	AB80715	5.8	MG/L	1017	CHLORIDE	2CFW	N. 45TH 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/2/98	AB80735	3.5	MG/L	1017	CHLORIDE	2MOQ	N. 45TH 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/8/98	AB80889	2	MG/L	1017	CHLORIDE	2CFD	CORTANA 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/8/98	AB80894	2.2	MG/L	1017	CHLORIDE	2CFE	CORTANA 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/8/98	AB80909	3.3	MG/L	1017	CHLORIDE	2CFH	CORTANA 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81139	104.3	MG/L	1017	CHLORIDE	2CFO	LAFAYETTE 015	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81129	2.7	MG/L	1017	CHLORIDE	2CGB	OLOL 001	RW
LA1033005	BATON ROUGE WATER	GW	6/15/98	AB81134	2.5	MG/L	1017	CHLORIDE	2CGC	OLOL 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81154	3	MG/L	1017	CHLORIDE	2CGI	ROBIN ST. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81159	178.7	MG/L	1017	CHLORIDE	2CGJ	ROBIN ST. 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81164	5.4	MG/L	1017	CHLORIDE	2CGK	ROBIN ST. 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81169	59.6	MG/L	1017	CHLORIDE	2CGN	SOUTHERN UNIV. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81144	11.2	MG/L	1017	CHLORIDE	2MKH	LAFAYETTE 014	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81174	15.5	MG/L	1017	CHLORIDE	2MKV	BR METRO AIRPORT WEL	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81149	2.8	MG/L	1017	CHLORIDE	2MKY	LAFAYETTE 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81300	3.7	MG/L	1017	CHLORIDE	2CEW	BANKSTON 002	RW
LA1033005	BATON ROUGE WATER	GW	6/22/98	AB81305	3.4	MG/L	1017	CHLORIDE	2CEX	BANKSTON 003	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81315	3.4	MG/L	1017	CHLORIDE	2CEZ	BANKSTON 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81320	3.1	MG/L	1017	CHLORIDE	2CFA	BANKSTON 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81325	2.3	MG/L	1017	CHLORIDE	2CFB	CONVENTION 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81330	17.7	MG/L	1017	CHLORIDE	2CFC	CONVENTION 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81335	2.7	MG/L	1017	CHLORIDE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/6/98	AB81780	3.4	MG/L	1017	CHLORIDE	2CFK	GOVERNMENT 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/6/98	AB81815	3.1	MG/L	1017	CHLORIDE	2CFS	LULA 020	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/6/98	AB81820	2.8	MG/L	1017	CHLORIDE	2CFT	LULA 021	RW
LA1033005	BATON ROUGE WATER	GW	7/6/98	AB81795	2.3	MG/L	1017	CHLORIDE	2MKG	GOVERNMENT 005	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	7/6/98	AB81800	2.5	MG/L	1017	CHLORIDE	2MKZ	GOVERNMENT 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82041	2.7	MG/L	1017	CHLORIDE	2CFN	INTERSTATE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82046	2.8	MG/L	1017	CHLORIDE	2CGF	RIDGECREST 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82051	2.8	MG/L	1017	CHLORIDE	2CGG	RIDGECREST 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82056	2.4	MG/L	1017	CHLORIDE	2CGH	RIDGECREST 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82061	2.1	MG/L	1017	CHLORIDE	2CGO	STAN AUBIN 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82066	3.1	MG/L	1017	CHLORIDE	2CGP	STAN AUBIN 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82076	2.3	MG/L	1017	CHLORIDE	2CGR	TOULON 001	RW
LA1033005	BATON ROUGE WATER	GW	7/13/98	AB82081	2.8	MG/L	1017	CHLORIDE	2CGS	TOULON 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82086	30.4	MG/L	1017	CHLORIDE	2CGT	WESTMINSTER 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/27/98	AB82979	3	MG/L	1017	CHLORIDE	2CGD	ONEAL LANE 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/27/98	AB82994	4.2	MG/L	1017	CHLORIDE	2MKK	S CHOCTAW 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/27/98	AB82989	3.3	MG/L	1017	CHLORIDE	2MLB	S CHOCTAW 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/27/98	AB86479	2.9	MG/L	1017	CHLORIDE	2MOZ	INTERSTATE 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/18/00	AC06984	2.1	MG/L	1017	CHLORIDE	2MPG	INTERSTATE 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/18/00	AC06989	6.2	MG/L	1017	CHLORIDE	2MPH	STUMBERG 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/1/01	AC12970	3	MG/L	1017	CHLORIDE	2CGD	ONEAL LANE 001	RW
LA1033005	BATON ROUGE WATER	GW	5/1/01	AC12975	3.8	MG/L	1017	CHLORIDE	2CGE	ONEAL LANE 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	5/1/01	AC12980	2.7	MG/L	1017	CHLORIDE	2CGF	RIDGECREST 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/1/01	AC12985	2.9	MG/L	1017	CHLORIDE	2CGG	RIDGECREST 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/1/01	AC12990	4.6	MG/L	1017	CHLORIDE	2MKK	S CHOCTAW 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/2/01	AC13020	3.4	MG/L	1017	CHLORIDE	2MLB	S CHOCTAW 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/8/01	AC13206	2.5	MG/L	1017	CHLORIDE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/8/01	AC13216	2.6	MG/L	1017	CHLORIDE	2CGH	RIDGECREST 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/9/01	AC13211	3.6	MG/L	1017	CHLORIDE	2CFK	GOVERNMENT 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/16/01	AC13367	2.7	MG/L	1017	CHLORIDE	2CFJ	GOVERNMENT 003	RW
LA1033005	BATON ROUGE WATER	GW	5/16/01	AC13377	2.5	MG/L	1017	CHLORIDE	2MKZ	GOVERNMENT 007	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	5/23/01	AC13489	47.3	MG/L	1017	CHLORIDE	2CGT	WESTMINSTER 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/11/01	AC14009	3.3	MG/L	1017	CHLORIDE	2CGQ	STUMBERG 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/11/01	AC14029	2.5	MG/L	1017	CHLORIDE	2MKG	GOVERNMENT 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/13/01	AC22161	2.6	MG/L	1017	CHLORIDE	2MPT	N. 45TH 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/19/01	AC22443	2	MG/L	1017	CHLORIDE	2CFB	CONVENTION 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/19/01	AC22448	2.3	MG/L	1017	CHLORIDE	2CFW	N. 45TH 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/19/01	AC22453	2.7	MG/L	1017	CHLORIDE	2CFX	N. 45TH 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/19/01	AC22458	2.5	MG/L	1017	CHLORIDE	2CFY	N. 45TH 003	RW
LA1033005	BATON ROUGE WATER	GW	11/19/01	AC22463	2.6	MG/L	1017	CHLORIDE	2MOQ	N. 45TH 004	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	11/26/01	AC22553	2.3	MG/L	1017	CHLORIDE	2CFD	CORTANA 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/26/01	AC22558	3.1	MG/L	1017	CHLORIDE	2CFE	CORTANA 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/26/01	AC22563	3.8	MG/L	1017	CHLORIDE	2CFF	CORTANA 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/26/01	AC22568	2.8	MG/L	1017	CHLORIDE	2CFG	CORTANA 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/26/01	AC22573	3.6	MG/L	1017	CHLORIDE	2CFH	CORTANA 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/11/01	AC22931	47.5	MG/L	1017	CHLORIDE	2CFC	CONVENTION 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/11/01	AC22936	3.8	MG/L	1017	CHLORIDE	2CFL	GREENRIDGE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/11/01	AC22941	4.2	MG/L	1017	CHLORIDE	2CFZ	N. SHARP 001	RW
LA1033005	BATON ROUGE WATER	GW	12/11/01	AC22946	4.4	MG/L	1017	CHLORIDE	2CGA	N. SHARP 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	12/11/01	AC22951	58	MG/L	1017	CHLORIDE	2CGN	SOUTHERN UNIV. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/8/02	AC23511	5.6	MG/L	1017	CHLORIDE	2CEV	BANKSTON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/8/02	AC23516	4	MG/L	1017	CHLORIDE	2CEW	BANKSTON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/8/02	AC23521	4.7	MG/L	1017	CHLORIDE	2CEY	BANKSTON 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/8/02	AC23526	4.2	MG/L	1017	CHLORIDE	2CEZ	BANKSTON 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/8/02	AC23531	4.5	MG/L	1017	CHLORIDE	2CFA	BANKSTON 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/22/02	AC23918	3.5	MG/L	1017	CHLORIDE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/22/02	AC23923	2.3	MG/L	1017	CHLORIDE	2CFJ	GOVERNMENT 003	RW
LA1033005	BATON ROUGE WATER	GW	1/22/02	AC23928	2.3	MG/L	1017	CHLORIDE	2CFN	INTERSTATE 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	1/22/02	AC23933	5.7	MG/L	1017	CHLORIDE	2CFO	LAFAYETTE 015	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/22/02	AC23938	9	MG/L	1017	CHLORIDE	2MKY	LAFAYETTE 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/13/02	AC24520	10.5	MG/L	1017	CHLORIDE	2CFP	LULA 017	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/13/02	AC24525	3.4	MG/L	1017	CHLORIDE	2CFQ	LULA 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/13/02	AC24530	34.6	MG/L	1017	CHLORIDE	2CFR	LULA 019	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/13/02	AC24535	3.1	MG/L	1017	CHLORIDE	2CFT	LULA 021	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/13/02	AC24540	10.7	MG/L	1017	CHLORIDE	2CFU	LULA 022	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/26/02	AC24810	3.3	MG/L	1017	CHLORIDE	2CEX	BANKSTON 003	RW
LA1033005	BATON ROUGE WATER	GW	2/26/02	AC24815	3.3	MG/L	1017	CHLORIDE	2CFS	LULA 020	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	2/26/02	AC24820	3.3	MG/L	1017	CHLORIDE	2CFV	LULA 023	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/26/02	AC24825	4.3	MG/L	1017	CHLORIDE	2CFZ	N. SHARP 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/26/02	AC24830	5.1	MG/L	1017	CHLORIDE	2CGA	N. SHARP 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/5/02	AC25021	2.4	MG/L	1017	CHLORIDE	2CGC	OLOL 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/5/02	AC25026	3.6	MG/L	1017	CHLORIDE	2CGI	ROBIN ST. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/5/02	AC25031	160	MG/L	1017	CHLORIDE	2CGJ	ROBIN ST. 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/5/02	AC25036	3.4	MG/L	1017	CHLORIDE	2CGK	ROBIN ST. 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/13/02	AC25016	2.4	MG/L	1017	CHLORIDE	2CGB	OLOL 001	RW
LA1033005	BATON ROUGE WATER	GW	3/13/02	AC25266	2.1	MG/L	1017	CHLORIDE	2CGO	STAN AUBIN 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	3/13/02	AC25271	3.1	MG/L	1017	CHLORIDE	2CGP	STAN AUBIN 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/13/02	AC25276	2.5	MG/L	1017	CHLORIDE	2CGR	TOULON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/20/02	AC25359	4.2	MG/L	1017	CHLORIDE	2CGS	TOULON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/20/02	AC25374	3.7	MG/L	1017	CHLORIDE	2MOR	S. HAROLDS FERRY 00	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/20/02	AC25379	2.2	MG/L	1017	CHLORIDE	2MOZ	INTERSTATE 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/9/03	AC41563	31.1	MG/L	1017	CHLORIDE	2MPH	STUMBERG 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/14/03	AC43743	0	MG/L	1017	CHLORIDE	2MPG	INTERSTATE 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/3/04	AC47126	0	MG/L	1017	CHLORIDE	2POO	SOUTER WELL 001	RW
LA1033005	BATON ROUGE WATER	GW	2/25/04	AC47745	0	MG/L	1017	CHLORIDE	2MKK	S CHOCTAW 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	2/25/04	AC47750	0	MG/L	1017	CHLORIDE	2MLB	S CHOCTAW 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/11/04	AC49691	0	MG/L	1017	CHLORIDE	2CGD	ONEAL LANE 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/11/04	AC49696	0	MG/L	1017	CHLORIDE	2CGE	ONEAL LANE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/11/04	AC49701	0	MG/L	1017	CHLORIDE	2CGF	RIDGECREST 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/11/04	AC49706	0	MG/L	1017	CHLORIDE	2CGG	RIDGECREST 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/11/04	AC49711	0	MG/L	1017	CHLORIDE	2CGH	RIDGECREST 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/9/04	AC50538	0	MG/L	1017	CHLORIDE	2CFK	GOVERNMENT 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/9/04	AC50543	0	MG/L	1017	CHLORIDE	2CGQ	STUMBERG 001	RW
LA1033005	BATON ROUGE WATER	GW	6/9/04	AC50548	140.6	MG/L	1017	CHLORIDE	2CGT	WESTMINSTER 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	6/9/04	AC50553	0	MG/L	1017	CHLORIDE	2MKG	GOVERNMENT 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/9/04	AC50558	0	MG/L	1017	CHLORIDE	2MKZ	GOVERNMENT 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/3/04	AC56420	0	MG/L	1017	CHLORIDE	2CFD	CORTANA 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/3/04	AC56425	0	MG/L	1017	CHLORIDE	2CFE	CORTANA 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/3/04	AC56430	0	MG/L	1017	CHLORIDE	2CFF	CORTANA 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/3/04	AC56435	0	MG/L	1017	CHLORIDE	2CFG	CORTANA 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/3/04	AC56440	0	MG/L	1017	CHLORIDE	2CFH	CORTANA 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/30/04	AC57255	0	MG/L	1017	CHLORIDE	2CFW	N. 45TH 001	RW
LA1033005	BATON ROUGE WATER	GW	11/30/04	AC57260	0	MG/L	1017	CHLORIDE	2CFX	N. 45TH 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	11/30/04	AC57280	0	MG/L	1017	CHLORIDE	2CFY	N. 45TH 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/30/04	AC57290	0	MG/L	1017	CHLORIDE	2MOQ	N. 45TH 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/30/04	AC57295	0	MG/L	1017	CHLORIDE	2MPT	N. 45TH 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/14/04	AC57740	0	MG/L	1017	CHLORIDE	2CFB	CONVENTION 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/14/04	AC57745	159.2	MG/L	1017	CHLORIDE	2CFC	CONVENTION 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/14/04	AC57750	0	MG/L	1017	CHLORIDE	2CFL	GREENRIDGE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/14/04	AC57755	69.3	MG/L	1017	CHLORIDE	2CGN	SOUTHERN UNIV. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58768	0	MG/L	1017	CHLORIDE	2CFN	INTERSTATE 002	RW
LA1033005	BATON ROUGE WATER	GW	1/19/05	AC58798	10.9	MG/L	1017	CHLORIDE	2CFP	LULA 017	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58803	10.5	MG/L	1017	CHLORIDE	2CFQ	LULA 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58808	56.1	MG/L	1017	CHLORIDE	2CFR	LULA 019	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58813	0	MG/L	1017	CHLORIDE	2CFS	LULA 020	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58818	15.2	MG/L	1017	CHLORIDE	2CFT	LULA 021	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58773	16.2	MG/L	1017	CHLORIDE	2CFU	LULA 022	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58778	0	MG/L	1017	CHLORIDE	2CFV	LULA 023	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59513	0	MG/L	1017	CHLORIDE	2CEV	BANKSTON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59518	0	MG/L	1017	CHLORIDE	2CEW	BANKSTON 002	RW
LA1033005	BATON ROUGE WATER	GW	2/23/05	AC59523	0	MG/L	1017	CHLORIDE	2CEX	BANKSTON 003	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59528	0	MG/L	1017	CHLORIDE	2CEY	BANKSTON 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59533	0	MG/L	1017	CHLORIDE	2CEZ	BANKSTON 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59483	0	MG/L	1017	CHLORIDE	2CFA	BANKSTON 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59488	0	MG/L	1017	CHLORIDE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59493	13.9	MG/L	1017	CHLORIDE	2CFJ	GOVERNMENT 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59498	178.3	MG/L	1017	CHLORIDE	2CFO	LAFAYETTE 015	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59503	0	MG/L	1017	CHLORIDE	2MKY	LAFAYETTE 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/2/05	AC59727	0	MG/L	1017	CHLORIDE	2CGB	OLOL 001	RW
LA1033005	BATON ROUGE WATER	GW	3/2/05	AC59732	0	MG/L	1017	CHLORIDE	2CGC	OLOL 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	3/2/05	AC59737	0	MG/L	1017	CHLORIDE	2CGI	ROBIN ST. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/2/05	AC59742	253.9	MG/L	1017	CHLORIDE	2CGJ	ROBIN ST. 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/2/05	AC59747	0	MG/L	1017	CHLORIDE	2CGK	ROBIN ST. 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/3/05	AC59757	0	MG/L	1017	CHLORIDE	2CGO	STAN AUBIN 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/3/05	AC59762	0	MG/L	1017	CHLORIDE	2CGP	STAN AUBIN 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/3/05	AC59767	0	MG/L	1017	CHLORIDE	2CGR	TOULON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/3/05	AC59772	0	MG/L	1017	CHLORIDE	2CGS	TOULON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/3/05	AC59777	0	MG/L	1017	CHLORIDE	2MOR	S. HAROLDS FERRY 00	RW
LA1033005	BATON ROUGE WATER	GW	3/16/05	AC60158	0	MG/L	1017	CHLORIDE	2CFZ	N. SHARP 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	3/16/05	AC60163	0	MG/L	1017	CHLORIDE	2CGA	N. SHARP 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/17/05	AC60173	0	MG/L	1017	CHLORIDE	2MOZ	INTERSTATE 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/7/08	AD22707	0	MG/L	1017	CHLORIDE	2CFN	INTERSTATE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/7/08	AD22712	0	MG/L	1017	CHLORIDE	2CGQ	STUMBERG 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/7/08	AD22727	0	MG/L	1017	CHLORIDE	2MOZ	INTERSTATE 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/7/08	AD22717	0	MG/L	1017	CHLORIDE	2MPG	INTERSTATE 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/7/08	AD22722	188.7	MG/L	1017	CHLORIDE	2MPH	STUMBERG 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/20/09	AD28520	0	MG/L	1017	CHLORIDE	2MKK	S CHOCTAW 001	RW
LA1033005	BATON ROUGE WATER	GW	7/20/09	AD28525	0	MG/L	1017	CHLORIDE	2MLB	S CHOCTAW 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	12/7/09	AD34643	102	MG/L	1017	CHLORIDE	2CGT	WESTMINSTER 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/14/09	AD35235	8	MG/L	1017	CHLORIDE	2MOR	S. HAROLDS FERRY 00	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/15/10	AD36092	0	MG/L	1017	CHLORIDE	2CEX	BANKSTON 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/15/10	AD36097	0	MG/L	1017	CHLORIDE	2CEY	BANKSTON 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/15/10	AD36102	0	MG/L	1017	CHLORIDE	2CEZ	BANKSTON 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/15/10	AD36107	0	MG/L	1017	CHLORIDE	2CFA	BANKSTON 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/15/10	AD36112	0	MG/L	1017	CHLORIDE	2CFZ	N. SHARP 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/1/10	AD36422	0	MG/L	1017	CHLORIDE	2CGB	OLOL 001	RW
LA1033005	BATON ROUGE WATER	GW	3/1/10	AD36427	0	MG/L	1017	CHLORIDE	2CGC	OLOL 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	3/29/10	AD37217	0	MG/L	1017	CHLORIDE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/29/10	AD37222	64.7	MG/L	1017	CHLORIDE	2CFJ	GOVERNMENT 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/29/10	AD37227	0	MG/L	1017	CHLORIDE	2CFL	GREENRIDGE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/29/10	AD37232	0	MG/L	1017	CHLORIDE	2CGO	STAN AUBIN 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/29/10	AD37237	0	MG/L	1017	CHLORIDE	2CGR	TOULON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/5/10	AD37367	69.2	MG/L	1017	CHLORIDE	2CFC	CONVENTION 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/5/10	AD37372	0	MG/L	1017	CHLORIDE	2CFS	LULA 020	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/5/10	AD37377	0	MG/L	1017	CHLORIDE	2CFT	LULA 021	RW
LA1033005	BATON ROUGE WATER	GW	4/5/10	AD37382	0	MG/L	1017	CHLORIDE	2CGA	N. SHARP 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	4/5/10	AD37387	0	MG/L	1017	CHLORIDE	2CGS	TOULON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/19/10	AD37910	0	MG/L	1017	CHLORIDE	2AAX	SOUTER DRIVE 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/19/10	AD37915	0	MG/L	1017	CHLORIDE	2CGP	STAN AUBIN 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/19/10	AD37920	0	MG/L	1017	CHLORIDE	2XYN	SOUTER WELL 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/19/10	AD37925	0	MG/L	1017	CHLORIDE	2XYO	SOUTER WELL 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/19/10	AD37930	0	MG/L	1017	CHLORIDE	2XYP	SOUTER WELL 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/26/10	AD38191	38.6	MG/L	1017	CHLORIDE	2CFP	LULA 017	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/26/10	AD38196	0	MG/L	1017	CHLORIDE	2CFQ	LULA 018	RW
LA1033005	BATON ROUGE WATER	GW	4/26/10	AD38201	0	MG/L	1017	CHLORIDE	2CFR	LULA 019	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										
LA1033005	BATON ROUGE WATER COMPANY	GW	4/26/10	AD38206	114.2	MG/L	1017	CHLORIDE	2CFU	LULA 022	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/26/10	AD38211	0	MG/L	1017	CHLORIDE	2CFV	LULA 023	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/3/10	AD38395	0	MG/L	1017	CHLORIDE	2CGI	ROBIN ST. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/1/10	AD48194	0	MG/L	1017	CHLORIDE	2CFB	CONVENTION 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/11	AD50185	0	MG/L	1017	CHLORIDE	2CEV	BANKSTON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/11	AD50190	0	MG/L	1017	CHLORIDE	2CEW	BANKSTON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/11	AD50195	251.3	MG/L	1017	CHLORIDE	2CGJ	ROBIN ST. 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/11	AD50200	0	MG/L	1017	CHLORIDE	2CGK	ROBIN ST. 003	RW
LA1033005	BATON ROUGE WATER	GW	1/19/11	AD50205	0	MG/L	1017	CHLORIDE	2MKY	LAFAYETTE 018	RW

PWS ID	PWD NAME	SOUR CE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
	COMPANY										

Groundwater Sulfate data

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	10/17/94	AB36930	12	MG/L	1055	SULFATE	2CFB	CONVENTION 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/17/94	AB36935	11	MG/L	1055	SULFATE	2CFC	CONVENTION 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/17/94	AB36940	14	MG/L	1055	SULFATE	2CGE	ONEAL LANE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/17/94	AB36945	13	MG/L	1055	SULFATE	2MKY	LAFAYETTE 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/17/94	AB36950	12	MG/L	1055	SULFATE	2MKZ	GOVERNMENT 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/5/95	AB46084	10	MG/L	1055	SULFATE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/5/95	AB46089	9	MG/L	1055	SULFATE	2CFJ	GOVERNMENT 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/5/95	AB46099	12	MG/L	1055	SULFATE	2CFN	INTERSTATE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/5/95	AB46104	11	MG/L	1055	SULFATE	2CGO	STAN AUBIN 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47828	11	MG/L	1055	SULFATE	2CFD	CORTANA 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47833	8	MG/L	1055	SULFATE	2CFE	CORTANA 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47838	7	MG/L	1055	SULFATE	2CFF	CORTANA 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47843	6	MG/L	1055	SULFATE	2CFG	CORTANA 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47848	7	MG/L	1055	SULFATE	2CFH	CORTANA 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47853	8	MG/L	1055	SULFATE	2CFL	GREENRIDGE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47858	7	MG/L	1055	SULFATE	2CFZ	N. SHARP 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47863	8	MG/L	1055	SULFATE	2CGA	N. SHARP 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47868	8	MG/L	1055	SULFATE	2MKK	S CHOCTAW 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	7/18/95	AB47873	7	MG/L	1055	SULFATE	2MLB	S CHOCTAW 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/24/95	AB48302	7	MG/L	1055	SULFATE	2CGP	STAN AUBIN 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/24/95	AB48307	7	MG/L	1055	SULFATE	2CGQ	STUMBERG 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/24/95	AB48312	9	MG/L	1055	SULFATE	2CGR	TOULON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/24/95	AB48317	11	MG/L	1055	SULFATE	2CGS	TOULON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/24/95	AB48322	11	MG/L	1055	SULFATE	2CGT	WESTMINSTER 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/2/95	AB48638	8	MG/L	1055	SULFATE	2CEV	BANKSTON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/2/95	AB48643	9	MG/L	1055	SULFATE	2CEW	BANKSTON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/2/95	AB48648	7	MG/L	1055	SULFATE	2CEX	BANKSTON 003	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	8/2/95	AB48653	8	MG/L	1055	SULFATE	2CEY	BANKSTON 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/2/95	AB48658	7	MG/L	1055	SULFATE	2CEZ	BANKSTON 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48950	7	MG/L	1055	SULFATE	2CFA	BANKSTON 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48970	9	MG/L	1055	SULFATE	2CFO	LAFAYETTE 015	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48975	11	MG/L	1055	SULFATE	2CGB	OLOL 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48980	10	MG/L	1055	SULFATE	2CGC	OLOL 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48955	9	MG/L	1055	SULFATE	2CGI	ROBIN ST. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48960	4	MG/L	1055	SULFATE	2CGJ	ROBIN ST. 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48965	6	MG/L	1055	SULFATE	2CGN	SOUTHERN UNIV. 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48985	11	MG/L	1055	SULFATE	2MKH	LAFAYETTE 014	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/9/95	AB48990	8	MG/L	1055	SULFATE	2MKV	BR METRO AIRPORT WEL	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49940	10	MG/L	1055	SULFATE	2CFP	LULA 017	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49945	11	MG/L	1055	SULFATE	2CFQ	LULA 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49950	10	MG/L	1055	SULFATE	2CFR	LULA 019	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49955	9	MG/L	1055	SULFATE	2CFS	LULA 020	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49960	9	MG/L	1055	SULFATE	2CFT	LULA 021	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49915	11	MG/L	1055	SULFATE	2CFU	LULA 022	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49920	9	MG/L	1055	SULFATE	2CFV	LULA 023	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49925	10	MG/L	1055	SULFATE	2CFW	N. 45TH 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49930	10	MG/L	1055	SULFATE	2CFX	N. 45TH 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	8/23/95	AB49935	11	MG/L	1055	SULFATE	2CFY	N. 45TH 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/6/95	AB50355	11	MG/L	1055	SULFATE	2CGD	ONEAL LANE 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/6/95	AB50360	8	MG/L	1055	SULFATE	2CGF	RIDGECREST 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/6/95	AB50365	9	MG/L	1055	SULFATE	2CGG	RIDGECREST 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/6/95	AB50370	10	MG/L	1055	SULFATE	2CGH	RIDGECREST 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/6/95	AB50375	7	MG/L	1055	SULFATE	2CGK	ROBIN ST. 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/20/95	AB51296	9	MG/L	1055	SULFATE	2CFK	GOVERNMENT 006	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	9/20/95	AB51316	9	MG/L	1055	SULFATE	2MKG	GOVERNMENT 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/2/98	AB80715	11	MG/L	1055	SULFATE	2CFW	N. 45TH 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/2/98	AB80735	12	MG/L	1055	SULFATE	2MOQ	N. 45TH 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/8/98	AB80889	13	MG/L	1055	SULFATE	2CFD	CORTANA 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/8/98	AB80894	9	MG/L	1055	SULFATE	2CFE	CORTANA 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/8/98	AB80909	12	MG/L	1055	SULFATE	2CFH	CORTANA 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81139	12	MG/L	1055	SULFATE	2CFO	LAFAYETTE 015	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81129	15	MG/L	1055	SULFATE	2CGB	OLOL 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81134	24	MG/L	1055	SULFATE	2CGC	OLOL 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81154	9	MG/L	1055	SULFATE	2CGI	ROBIN ST. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81159	6	MG/L	1055	SULFATE	2CGJ	ROBIN ST. 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81164	9	MG/L	1055	SULFATE	2CGK	ROBIN ST. 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81169	16	MG/L	1055	SULFATE	2CGN	SOUTHERN UNIV. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81144	12	MG/L	1055	SULFATE	2MKH	LAFAYETTE 014	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81174	8	MG/L	1055	SULFATE	2MKV	BR METRO AIRPORT WEL	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/15/98	AB81149	13	MG/L	1055	SULFATE	2MKY	LAFAYETTE 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81300	13	MG/L	1055	SULFATE	2CEW	BANKSTON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81305	7	MG/L	1055	SULFATE	2CEX	BANKSTON 003	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81315	8	MG/L	1055	SULFATE	2CEZ	BANKSTON 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81320	8	MG/L	1055	SULFATE	2CFA	BANKSTON 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81325	11	MG/L	1055	SULFATE	2CFB	CONVENTION 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81330	9	MG/L	1055	SULFATE	2CFC	CONVENTION 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/22/98	AB81335	9	MG/L	1055	SULFATE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/6/98	AB81780	15	MG/L	1055	SULFATE	2CFK	GOVERNMENT 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/6/98	AB81815	10	MG/L	1055	SULFATE	2CFS	LULA 020	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/6/98	AB81820	17	MG/L	1055	SULFATE	2CFT	LULA 021	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/6/98	AB81795	16	MG/L	1055	SULFATE	2MKG	GOVERNMENT 005	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	7/6/98	AB81800	16	MG/L	1055	SULFATE	2MKZ	GOVERNMENT 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82041	12	MG/L	1055	SULFATE	2CFN	INTERSTATE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82046	14	MG/L	1055	SULFATE	2CGF	RIDGECREST 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82051	13	MG/L	1055	SULFATE	2CGG	RIDGECREST 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82056	11	MG/L	1055	SULFATE	2CGH	RIDGECREST 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82061	13	MG/L	1055	SULFATE	2CGO	STAN AUBIN 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82066	9	MG/L	1055	SULFATE	2CGP	STAN AUBIN 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82076	10	MG/L	1055	SULFATE	2CGR	TOULON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82081	9	MG/L	1055	SULFATE	2CGS	TOULON 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	7/13/98	AB82086	11	MG/L	1055	SULFATE	2CGT	WESTMINSTER 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/27/98	AB82979	10	MG/L	1055	SULFATE	2CGD	ONEAL LANE 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/27/98	AB82994	9	MG/L	1055	SULFATE	2MKK	S CHOCTAW 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/27/98	AB82989	9	MG/L	1055	SULFATE	2MLB	S CHOCTAW 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/27/98	AB86479	8	MG/L	1055	SULFATE	2MOZ	INTERSTATE 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/18/00	AC06984	10	MG/L	1055	SULFATE	2MPG	INTERSTATE 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/18/00	AC06989	11	MG/L	1055	SULFATE	2MPH	STUMBERG 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/1/01	AC12970	10	MG/L	1055	SULFATE	2CGD	ONEAL LANE 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/1/01	AC12975	9	MG/L	1055	SULFATE	2CGE	ONEAL LANE 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	5/1/01	AC12980	9	MG/L	1055	SULFATE	2CGF	RIDGECREST 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/1/01	AC12985	10	MG/L	1055	SULFATE	2CGG	RIDGECREST 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/1/01	AC12990	9	MG/L	1055	SULFATE	2MKK	S CHOCTAW 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/2/01	AC13020	8	MG/L	1055	SULFATE	2MLB	S CHOCTAW 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/8/01	AC13206	11	MG/L	1055	SULFATE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/8/01	AC13216	10	MG/L	1055	SULFATE	2CGH	RIDGECREST 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/9/01	AC13211	10	MG/L	1055	SULFATE	2CFK	GOVERNMENT 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/16/01	AC13367	10	MG/L	1055	SULFATE	2CFJ	GOVERNMENT 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/16/01	AC13377	10	MG/L	1055	SULFATE	2MKZ	GOVERNMENT 007	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	5/23/01	AC13489	11	MG/L	1055	SULFATE	2CGT	WESTMINSTER 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/11/01	AC14009	7	MG/L	1055	SULFATE	2CGQ	STUMBERG 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/11/01	AC14029	10	MG/L	1055	SULFATE	2MKG	GOVERNMENT 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/13/01	AC22161	11	MG/L	1055	SULFATE	2MPT	N. 45TH 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/19/01	AC22443	12	MG/L	1055	SULFATE	2CFB	CONVENTION 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/19/01	AC22448	10	MG/L	1055	SULFATE	2CFW	N. 45TH 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/19/01	AC22453	9	MG/L	1055	SULFATE	2CFX	N. 45TH 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/19/01	AC22458	9	MG/L	1055	SULFATE	2CFY	N. 45TH 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/19/01	AC22463	10	MG/L	1055	SULFATE	2MOQ	N. 45TH 004	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	11/26/01	AC22553	12	MG/L	1055	SULFATE	2CFD	CORTANA 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/26/01	AC22558	10	MG/L	1055	SULFATE	2CFE	CORTANA 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/26/01	AC22563	9	MG/L	1055	SULFATE	2CFF	CORTANA 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/26/01	AC22568	8	MG/L	1055	SULFATE	2CFG	CORTANA 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/26/01	AC22573	9	MG/L	1055	SULFATE	2CFH	CORTANA 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/11/01	AC22931	9	MG/L	1055	SULFATE	2CFC	CONVENTION 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/11/01	AC22936	9	MG/L	1055	SULFATE	2CFL	GREENRIDGE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/11/01	AC22941	8	MG/L	1055	SULFATE	2CFZ	N. SHARP 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/11/01	AC22946	7	MG/L	1055	SULFATE	2CGA	N. SHARP 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	12/11/01	AC22951	4	MG/L	1055	SULFATE	2CGN	SOUTHERN UNIV. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/8/02	AC23511	11	MG/L	1055	SULFATE	2CEV	BANKSTON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/8/02	AC23516	9	MG/L	1055	SULFATE	2CEW	BANKSTON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/8/02	AC23521	10	MG/L	1055	SULFATE	2CEY	BANKSTON 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/8/02	AC23526	10	MG/L	1055	SULFATE	2CEZ	BANKSTON 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/8/02	AC23531	9	MG/L	1055	SULFATE	2CFA	BANKSTON 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/22/02	AC23918	10	MG/L	1055	SULFATE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/22/02	AC23923	10	MG/L	1055	SULFATE	2CFJ	GOVERNMENT 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/22/02	AC23928	11	MG/L	1055	SULFATE	2CFN	INTERSTATE 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	1/22/02	AC23933	10	MG/L	1055	SULFATE	2CFO	LAFAYETTE 015	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/22/02	AC23938	10	MG/L	1055	SULFATE	2MKY	LAFAYETTE 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/13/02	AC24520	9	MG/L	1055	SULFATE	2CFP	LULA 017	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/13/02	AC24525	9	MG/L	1055	SULFATE	2CFQ	LULA 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/13/02	AC24530	9	MG/L	1055	SULFATE	2CFR	LULA 019	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/13/02	AC24535	9	MG/L	1055	SULFATE	2CFT	LULA 021	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/13/02	AC24540	10	MG/L	1055	SULFATE	2CFU	LULA 022	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/26/02	AC24810	7	MG/L	1055	SULFATE	2CEX	BANKSTON 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/26/02	AC24815	9	MG/L	1055	SULFATE	2CFS	LULA 020	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	2/26/02	AC24820	8	MG/L	1055	SULFATE	2CFV	LULA 023	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/26/02	AC24825	8	MG/L	1055	SULFATE	2CFZ	N. SHARP 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/26/02	AC24830	8	MG/L	1055	SULFATE	2CGA	N. SHARP 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/5/02	AC25021	11	MG/L	1055	SULFATE	2CGC	OLOL 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/5/02	AC25026	8	MG/L	1055	SULFATE	2CGI	ROBIN ST. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/5/02	AC25031	4	MG/L	1055	SULFATE	2CGJ	ROBIN ST. 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/5/02	AC25036	8	MG/L	1055	SULFATE	2CGK	ROBIN ST. 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/13/02	AC25016	11	MG/L	1055	SULFATE	2CGB	OLOL 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/13/02	AC25266	11	MG/L	1055	SULFATE	2CGO	STAN AUBIN 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	3/13/02	AC25271	9	MG/L	1055	SULFATE	2CGP	STAN AUBIN 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/13/02	AC25276	10	MG/L	1055	SULFATE	2CGR	TOULON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/20/02	AC25359	11	MG/L	1055	SULFATE	2CGS	TOULON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/20/02	AC25374	9	MG/L	1055	SULFATE	2MOR	S. HAROLDS FERRY 00	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/20/02	AC25379	12	MG/L	1055	SULFATE	2MOZ	INTERSTATE 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	9/9/03	AC41563	11	MG/L	1055	SULFATE	2MPH	STUMBERG 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	10/14/03	AC43743	10	MG/L	1055	SULFATE	2MPG	INTERSTATE 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/3/04	AC47126	8	MG/L	1055	SULFATE	2POO	SOUTER WELL 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/25/04	AC47745	8	MG/L	1055	SULFATE	2MKK	S CHOCTAW 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	2/25/04	AC47750	7	MG/L	1055	SULFATE	2MLB	S CHOCTAW 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/11/04	AC49691	8	MG/L	1055	SULFATE	2CGD	ONEAL LANE 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/11/04	AC49696	8	MG/L	1055	SULFATE	2CGE	ONEAL LANE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/11/04	AC49701	9	MG/L	1055	SULFATE	2CGF	RIDGECREST 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/11/04	AC49706	9	MG/L	1055	SULFATE	2CGG	RIDGECREST 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/11/04	AC49711	10	MG/L	1055	SULFATE	2CGH	RIDGECREST 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/9/04	AC50538	7	MG/L	1055	SULFATE	2CFK	GOVERNMENT 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/9/04	AC50543	5	MG/L	1055	SULFATE	2CGQ	STUMBERG 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/9/04	AC50548	8	MG/L	1055	SULFATE	2CGT	WESTMINSTER 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	6/9/04	AC50553	7	MG/L	1055	SULFATE	2MKG	GOVERNMENT 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	6/9/04	AC50558	7	MG/L	1055	SULFATE	2MKZ	GOVERNMENT 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/3/04	AC56420	11	MG/L	1055	SULFATE	2CFD	CORTANA 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/3/04	AC56425	10	MG/L	1055	SULFATE	2CFE	CORTANA 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/3/04	AC56430	8	MG/L	1055	SULFATE	2CFF	CORTANA 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/3/04	AC56435	7	MG/L	1055	SULFATE	2CFG	CORTANA 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/3/04	AC56440	7	MG/L	1055	SULFATE	2CFH	CORTANA 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/30/04	AC57255	9	MG/L	1055	SULFATE	2CFW	N. 45TH 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/30/04	AC57260	8	MG/L	1055	SULFATE	2CFX	N. 45TH 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	11/30/04	AC57280	9	MG/L	1055	SULFATE	2CFY	N. 45TH 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/30/04	AC57290	9	MG/L	1055	SULFATE	2MOQ	N. 45TH 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/30/04	AC57295	9	MG/L	1055	SULFATE	2MPT	N. 45TH 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/14/04	AC57740	11	MG/L	1055	SULFATE	2CFB	CONVENTION 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/14/04	AC57745	9	MG/L	1055	SULFATE	2CFC	CONVENTION 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/14/04	AC57750	8	MG/L	1055	SULFATE	2CFL	GREENRIDGE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/14/04	AC57755	4	MG/L	1055	SULFATE	2CGN	SOUTHERN UNIV. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58768	10	MG/L	1055	SULFATE	2CFN	INTERSTATE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58798	7	MG/L	1055	SULFATE	2CFP	LULA 017	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58803	7	MG/L	1055	SULFATE	2CFQ	LULA 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58808	7	MG/L	1055	SULFATE	2CFR	LULA 019	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58813	7	MG/L	1055	SULFATE	2CFS	LULA 020	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58818	7	MG/L	1055	SULFATE	2CFT	LULA 021	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58773	8	MG/L	1055	SULFATE	2CFU	LULA 022	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/05	AC58778	7	MG/L	1055	SULFATE	2CFV	LULA 023	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59513	7	MG/L	1055	SULFATE	2CEV	BANKSTON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59518	8	MG/L	1055	SULFATE	2CEW	BANKSTON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59523	6	MG/L	1055	SULFATE	2CEX	BANKSTON 003	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59528	7	MG/L	1055	SULFATE	2CEY	BANKSTON 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59533	6	MG/L	1055	SULFATE	2CEZ	BANKSTON 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59483	6	MG/L	1055	SULFATE	2CFA	BANKSTON 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59488	8	MG/L	1055	SULFATE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59493	8	MG/L	1055	SULFATE	2CFJ	GOVERNMENT 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59498	7	MG/L	1055	SULFATE	2CFO	LAFAYETTE 015	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/23/05	AC59503	9	MG/L	1055	SULFATE	2MKY	LAFAYETTE 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/2/05	AC59727	8	MG/L	1055	SULFATE	2CGB	OLOL 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/2/05	AC59732	9	MG/L	1055	SULFATE	2CGC	OLOL 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	3/2/05	AC59737	7	MG/L	1055	SULFATE	2CGI	ROBIN ST. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/2/05	AC59742	0	MG/L	1055	SULFATE	2CGJ	ROBIN ST. 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/2/05	AC59747	6	MG/L	1055	SULFATE	2CGK	ROBIN ST. 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/3/05	AC59757	9	MG/L	1055	SULFATE	2CGO	STAN AUBIN 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/3/05	AC59762	7	MG/L	1055	SULFATE	2CGP	STAN AUBIN 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/3/05	AC59767	8	MG/L	1055	SULFATE	2CGR	TOULON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/3/05	AC59772	8	MG/L	1055	SULFATE	2CGS	TOULON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/3/05	AC59777	8	MG/L	1055	SULFATE	2MOR	S. HAROLDS FERRY 00	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/16/05	AC60158	7	MG/L	1055	SULFATE	2CFZ	N. SHARP 001	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	3/16/05	AC60163	7	MG/L	1055	SULFATE	2CGA	N. SHARP 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/17/05	AC60173	9	MG/L	1055	SULFATE	2MOZ	INTERSTATE 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/7/08	AD22707	11	MG/L	1055	SULFATE	2CFN	INTERSTATE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/7/08	AD22712	8	MG/L	1055	SULFATE	2CGQ	STUMBERG 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/7/08	AD22727	11	MG/L	1055	SULFATE	2MOZ	INTERSTATE 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/7/08	AD22717	11	MG/L	1055	SULFATE	2MPG	INTERSTATE 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/7/08	AD22722	9	MG/L	1055	SULFATE	2MPH	STUMBERG 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/20/09	AD28520	8	MG/L	1055	SULFATE	2MKK	S CHOCTAW 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	7/20/09	AD28525	7	MG/L	1055	SULFATE	2MLB	S CHOCTAW 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	12/7/09	AD34643	9	MG/L	1055	SULFATE	2CGT	WESTMINSTER 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	12/14/09	AD35235	0	MG/L	1055	SULFATE	2MOR	S. HAROLDS FERRY 00	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/15/10	AD36092	6	MG/L	1055	SULFATE	2CEX	BANKSTON 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/15/10	AD36097	8	MG/L	1055	SULFATE	2CEY	BANKSTON 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/15/10	AD36102	6	MG/L	1055	SULFATE	2CEZ	BANKSTON 006	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/15/10	AD36107	7	MG/L	1055	SULFATE	2CFA	BANKSTON 007	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	2/15/10	AD36112	6	MG/L	1055	SULFATE	2CFZ	N. SHARP 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/1/10	AD36422	9	MG/L	1055	SULFATE	2CGB	OLOL 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/1/10	AD36427	9	MG/L	1055	SULFATE	2CGC	OLOL 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	3/29/10	AD37217	9	MG/L	1055	SULFATE	2CFI	GOVERNMENT 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/29/10	AD37222	9	MG/L	1055	SULFATE	2CFJ	GOVERNMENT 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/29/10	AD37227	8	MG/L	1055	SULFATE	2CFL	GREENRIDGE 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/29/10	AD37232	10	MG/L	1055	SULFATE	2CGO	STAN AUBIN 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	3/29/10	AD37237	9	MG/L	1055	SULFATE	2CGR	TOULON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/5/10	AD37367	8	MG/L	1055	SULFATE	2CFC	CONVENTION 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/5/10	AD37372	7	MG/L	1055	SULFATE	2CFS	LULA 020	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/5/10	AD37377	8	MG/L	1055	SULFATE	2CFT	LULA 021	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/5/10	AD37382	7	MG/L	1055	SULFATE	2CGA	N. SHARP 002	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	4/5/10	AD37387	9	MG/L	1055	SULFATE	2CGS	TOULON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/19/10	AD37910	7	MG/L	1055	SULFATE	2AAX	SOUTER DRIVE 005	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/19/10	AD37915	8	MG/L	1055	SULFATE	2CGP	STAN AUBIN 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/19/10	AD37920	8	MG/L	1055	SULFATE	2XYN	SOUTER WELL 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/19/10	AD37925	7	MG/L	1055	SULFATE	2XYO	SOUTER WELL 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/19/10	AD37930	0	MG/L	1055	SULFATE	2XYP	SOUTER WELL 004	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/26/10	AD38191	7	MG/L	1055	SULFATE	2CFP	LULA 017	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/26/10	AD38196	8	MG/L	1055	SULFATE	2CFQ	LULA 018	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/26/10	AD38201	8	MG/L	1055	SULFATE	2CFR	LULA 019	RW

PWS ID	PWD NAME	SOURCE	COLLECTION DATE	SAMPLE ID	REPORTED MSR	UOM	ANALYTE CODE	TSAANLYT NAME	POC	FACILITY NAME	WATER TYPE
LA1033005	BATON ROUGE WATER COMPANY	GW	4/26/10	AD38206	8	MG/L	1055	SULFATE	2CFU	LULA 022	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	4/26/10	AD38211	7	MG/L	1055	SULFATE	2CFV	LULA 023	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	5/3/10	AD38395	7	MG/L	1055	SULFATE	2CGI	ROBIN ST. 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	11/1/10	AD48194	9	MG/L	1055	SULFATE	2CFB	CONVENTION 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/11	AD50185	8	MG/L	1055	SULFATE	2CEV	BANKSTON 001	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/11	AD50190	8	MG/L	1055	SULFATE	2CEW	BANKSTON 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/11	AD50195	2	MG/L	1055	SULFATE	2CGJ	ROBIN ST. 002	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/11	AD50200	8	MG/L	1055	SULFATE	2CGK	ROBIN ST. 003	RW
LA1033005	BATON ROUGE WATER COMPANY	GW	1/19/11	AD50205	11	MG/L	1055	SULFATE	2MKY	LAFAYETTE 018	RW

Appendix C5 – Soil Information

Ascension Parish

Physical Soil Properties

Ascension Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
Ac:														
Acy	0-6	---	---	10-27	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	6-41	---	---	27-35	1.35-1.60	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	41-65	---	---	14-35	1.35-1.70	1.41-4.23	0.20-0.22	0.0-2.9	0.0-0.5	.32	.32			
At:														
Aquents	---	---	---	---	---	---	---	---	---	---	---	5	8	0
BA:														
Barbary	0-5	---	---	---	0.15-0.50	14.11-42.34	0.20-0.50	0.0-2.9	30-70	---	---	5	8	0
	5-77	1-3	---	60-95	0.25-1.00	0.00-0.42	0.18-0.20	0.0-2.9	2.0-25	.32	.32			
Ca:														
Calhoun	0-19	---	---	10-27	1.30-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	19-51	---	---	22-35	1.30-1.70	0.42-1.41	0.20-0.22	3.0-5.9	0.5-1.0	.43	.43			
	51-75	---	---	10-30	1.40-1.70	1.41-4.23	0.21-0.23	0.0-2.9	0.0-0.5	.43	.43			
Cm:														
Commerce	0-10	---	---	14-27	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.43	.43	5	6	56
	10-38	---	---	14-39	1.35-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	38-75	---	---	14-40	1.35-1.65	1.41-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
Co:														
Commerce	0-10	---	---	27-39	1.25-1.45	1.41-4.23	0.15-0.19	3.0-5.9	0.5-4.0	.37	.37	5	7	38
	10-38	---	---	14-39	1.35-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	38-60	---	---	14-40	1.35-1.65	1.41-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			

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Physical Soil Properties

Ascension Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
Cs:														
Convent	0-14	---	---	0-18	1.30-1.65	4.23-14.11	0.18-0.23	0.0-2.9	0.5-3.0	.43	.43	5	5	56
	14-36	---	---	0-18	1.30-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
	36-76	---	---	0-18	1.30-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
CV:														
Convent	0-14	---	---	0-18	1.30-1.65	4.23-14.11	0.18-0.23	0.0-2.9	0.5-3.0	.43	.43	5	5	56
	14-36	---	---	0-18	1.30-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
	36-76	---	---	0-18	1.30-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
Dp:														
Deerford	0-12	---	---	5-27	1.30-1.70	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	3	5	56
	12-45	---	---	10-35	1.30-1.80	0.42-1.41	0.12-0.18	3.0-5.9	0.5-1.0	.49	.49			
	45-65	---	---	10-35	1.30-1.80	1.41-4.23	0.12-0.18	3.0-5.9	0.0-0.5	.49	.49			
Patoutville	0-8	---	---	8-15	1.35-1.65	1.41-4.23	0.20-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	8-36	---	---	18-35	1.35-1.65	0.42-1.41	0.20-0.22	3.0-5.9	0.0-0.5	.37	.37			
	36-60	---	---	18-35	1.35-1.65	0.42-4.23	0.20-0.22	3.0-5.9	0.0-0.5	.37	.37			
Dv:														
Deerford	0-12	---	---	5-27	1.30-1.70	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	3	5	56
	12-45	---	---	10-35	1.30-1.80	0.42-1.41	0.12-0.18	3.0-5.9	0.5-1.0	.49	.49			
	45-65	---	---	10-35	1.30-1.80	1.41-4.23	0.12-0.18	3.0-5.9	0.0-0.5	.49	.49			
Verdun	0-4	---	---	5-20	1.35-1.65	1.41-4.23	0.21-0.24	0.0-2.9	0.5-2.0	.49	.49	3	5	56
	4-27	---	---	18-35	1.35-1.65	0.00-0.42	0.11-0.20	3.0-5.9	0.0-0.5	.49	.49			
	27-60	---	---	15-35	1.35-1.65	0.42-1.41	0.10-0.20	0.0-2.9	0.0-0.5	.49	.49			

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Physical Soil Properties

Ascension Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
Es:														
Essen	0-7	---	---	10-26	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-2.0	.49	.49	5	5	56
	7-47	---	---	18-30	1.35-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.0-0.5	.37	.37			
	47-66	---	---	18-30	1.35-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.0-0.5	.37	.37			
FA:														
Fausse	0-2	1-3	---	40-95	0.80-1.45	0.00-0.42	0.18-0.20	9.0-25.0	2.0-15	.20	.20	5	4	86
	2-9	1-3	---	40-95	0.80-1.45	0.00-0.42	0.18-0.20	9.0-25.0	1.0-3.0	.20	.20			
	9-35	1-3	---	60-95	1.10-1.35	0.00-0.42	0.18-0.20	9.0-25.0	0.5-1.0	.24	.24			
	35-76	---	---	35-95	1.10-1.45	0.00-1.41	0.18-0.22	9.0-25.0	0.0-0.5	.24	.24			
FG:														
Fausse	0-2	1-3	---	40-95	0.80-1.45	0.00-0.42	0.18-0.20	9.0-25.0	2.0-15	.20	.20	5	4	86
	2-9	1-3	---	40-95	0.80-1.45	0.00-0.42	0.18-0.20	9.0-25.0	1.0-3.0	.20	.20			
	9-35	1-3	---	60-95	1.10-1.35	0.00-0.42	0.18-0.20	9.0-25.0	0.5-1.0	.24	.24			
	35-76	---	---	35-95	1.10-1.45	0.00-1.41	0.18-0.22	9.0-25.0	0.0-0.5	.24	.24			
Galvez	0-6	---	---	27-39	1.40-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.5-4.0	.37	.37	5	7	38
	6-43	---	---	14-39	1.35-1.70	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	43-62	---	---	20-50	1.20-1.70	1.41-4.23	0.20-0.23	3.0-5.9	0.0-0.5	.32	.32			
Fo:														
Foley	0-11	---	---	10-20	1.25-1.60	4.23-14.11	0.16-0.22	0.0-2.9	0.5-2.0	.43	.43	3	5	56
	11-23	---	---	5-20	1.25-1.50	1.41-4.23	0.16-0.24	0.0-2.9	0.5-1.0	.43	.43			
	23-42	---	---	20-35	1.25-1.50	0.00-0.42	0.18-0.22	3.0-5.9	0.5-1.0	.43	.43			
	42-65	---	---	15-25	1.25-1.50	0.00-0.42	0.16-0.22	0.0-2.9	0.5-1.0	.49	.49			

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Physical Soil Properties

Ascension Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
Fo:														
Deerford	0-12	---	---	5-27	1.30-1.70	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	3	5	56
	12-45	---	---	10-35	1.30-1.80	0.42-1.41	0.12-0.18	3.0-5.9	0.5-1.0	.49	.49			
	45-65	---	---	10-35	1.30-1.80	1.41-4.23	0.12-0.18	3.0-5.9	0.0-0.5	.49	.49			
Fr:														
Frost	0-8	---	---	8-22	1.35-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	8-64	---	---	18-35	1.35-1.70	0.42-1.41	0.20-0.22	3.0-5.9	0.5-1.0	.37	.37			
Ga:														
Galvez	0-6	---	---	14-27	1.35-1.70	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.43	.43	5	5	56
	6-43	---	---	14-39	1.35-1.70	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	43-62	---	---	20-50	1.20-1.70	1.41-4.23	0.20-0.23	3.0-5.9	0.0-0.5	.32	.32			
Gb:														
Galvez	0-6	---	---	27-39	1.40-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.5-4.0	.37	.37	5	7	38
	6-43	---	---	14-39	1.35-1.70	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	43-62	---	---	20-50	1.20-1.70	1.41-4.23	0.20-0.23	3.0-5.9	0.0-0.5	.32	.32			
Je:														
Jeanerette	0-7	---	---	10-26	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	7-37	---	---	18-35	1.35-1.70	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.37	.37			
	37-62	---	---	14-35	1.35-1.70	1.41-4.23	0.20-0.23	3.0-5.9	0.5-1.0	.37	.37			
MeE:														
Memphis	0-7	---	---	8-22	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	7-12	---	---	20-35	1.30-1.50	4.23-14.11	0.20-0.22	0.0-2.9	0.0-0.5	.49	.49			
	12-70	---	---	12-25	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.0-0.5	.49	.49			

USDA Natural Resources Conservation Service

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Tabular Data Version: 5
Tabular Data Version Date: 04/12/2007

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Physical Soil Properties

Ascension Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
Ov:														
Olivier	0-5	---	---	8-18	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	3	5	56
	5-25	---	---	18-35	1.35-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
	25-61	---	---	14-27	1.40-1.80	0.42-1.41	0.11-0.15	0.0-2.9	0.0-0.5	.43	.43			
Sa:														
Sharkey	0-9	---	---	27-35	1.35-1.55	1.41-4.23	0.20-0.22	3.0-5.9	0.5-4.0	.37	.37	5	7	38
	9-44	1-3	---	60-90	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.0-0.5	.28	.28			
	44-62	---	---	25-90	1.20-1.70	0.42-1.41	0.12-0.22	6.0-8.9	0.0-0.5	.28	.28			
Sc:														
Sharkey	0-9	---	---	40-60	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.5-4.0	.32	.32	5	4	86
	9-44	1-3	---	60-90	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.0-0.5	.28	.28			
	44-62	---	---	25-90	1.20-1.70	0.42-1.41	0.12-0.22	6.0-8.9	0.0-0.5	.28	.28			
Sf:														
Sharkey	0-9	---	---	40-60	1.20-1.50	0.00-0.42	0.12-0.18	9.0-25.0	0.5-4.0	.32	.32	5	4	86
	9-44	1-3	---	60-90	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.0-0.5	.28	.28			
	44-62	---	---	25-90	1.20-1.65	0.42-1.41	0.12-0.18	6.0-8.9	0.0-0.5	.28	.28			
Tu:														
Tunica	0-9	---	---	35-75	1.45-1.55	0.00-0.42	0.15-0.20	6.0-8.9	1.0-3.0	.32	.32	5	4	86
	9-28	---	---	35-75	1.45-1.55	0.00-0.42	0.15-0.20	6.0-8.9	0.0-0.5	.32	.32			
	28-60	---	---	10-32	1.40-1.50	0.42-14.11	0.10-0.22	0.0-2.9	0.0-0.5	.32	.32			
Va:														
Vacherie	0-26	---	---	10-18	1.35-1.70	4.23-14.11	0.11-0.24	0.0-2.9	0.5-2.0	.43	.43	5	5	56
	26-64	---	---	40-65	1.20-1.60	0.00-0.42	0.08-0.19	9.0-25.0	0.0-0.5	.32	.32			

USDA Natural Resources Conservation Service

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Tabular Data Version: 5
Tabular Data Version Date: 04/12/2007

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Physical Soil Properties

Ascension Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
W:														
Water, large	---	---	---	---	---	---	---	---	---	---	---	---	---	---

USDA Natural Resources Conservation Service

Tabular Data Version: 5
Tabular Data Version Date: 04/12/2007

This report shows only the major soils in each map unit. Others may exist.

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*** Primary Characterization Data ***

Pedon ID: 95LA005001 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM

Sampled as : Lemanville ; Clayey over loamy, montmorillonitic, nonacid, hyperthermic Vertic Epiaquept
Revised to :

SSL - Project CP95LA277 LOUISIANA-MLRA 131 NO. 1
- Site ID 95LA005001 Lat: 30° 6' 14.30" north Long: 90° 56' 7.80" west MLRA: 131
- Pedon No. 95P1074
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Natural Resources Conservation Service
National Soil Survey Center
Soil Survey Laboratory
Lincoln, Nebraska 68508-3866

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
95P06409	Ap	Ap	0-14				C	C
95P06410	Ass	Ass	14-31				C	C
95P06411	Bss1	Bss1	31-41				C	C
95P06412	Bss2	Bss2	41-57				C	C
95P06413	Bss3	Bss3	57-76				C	SIC
95P06414	2Bwb	2Bwb	76-99				SIL	SIL
95P06415	2C	2C	99-131				SIL	SIL
95P06416	3C1	3C1	131-150				SICL	SICL
95P06417	3C2	3C2	150-180				C	SIC
95P06418	3Cg	3Cg	180-195				C	SIC
95P06419	4C	4C	195-215				SIC	SIC

Pedon Calculations

Calculation Name	Result	Units of Measure
Weighted Particles, 0.1-75mm, 75 mm Base	1	% wt
Clay, total, Weighted Average	51	% wt
Volume, >2mm, Weighted Average	0	% vol
Clay, carbonate free, Weighted Average	51	% wt
CEC Activity, CEC7/Clay, Weighted Average	0.79	(NA)

Weighted averages based on control section: 25-100 cm

*** Primary Characterization Data ***

Pedon ID: 95LA005001 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM
Sampled As : Lemanville Clayey over loamy, montmorillonitic, nonacid, hyperthermic Vertic Epiaquept
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 95P1074

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002	-2- Silt .002 -.05	-3- Sand .05 -2	-4- Fine < .0002	-5- CO_3 < .002	-6- Fine .002 -.02	-7- Coarse .02 -.05	-8- VF .05 -.10	-9- F .10 -.25	-10- M .25 -.50	-11- C .5 -1	-12- VC 1 -2	-13- 2 -5	-14- 5 -20	-15- 20 -75	-16- .1-75	-17- >2 mm wt % whole soil
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - -)					(Rock Fragments (mm))				
				(- % of <2mm Mineral Soil -)												(- - - - - - - Weight - - - - - - - -)				
																(- - - - - - - % of <75mm - - - - - -)				
				3A1	3A1	3A1			3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
95P06409	0-14	Ap	S	67.6	31.2	1.2			23.4	7.8	0.8	0.1	0.1	tr	0.2	--	--	--	tr	--
95P06410	14-31	Ass	S	70.3	28.6	1.1			21.2	7.4	0.9	0.1	0.1	tr	tr	--	--	--	tr	--
95P06411	31-41	Bss1	S	81.9	17.3	0.8			12.5	4.8	0.4	0.1	0.1	0.1	0.1	--	--	--	tr	--
95P06412	41-57	Bss2	S	75.7	23.6	0.7			21.3	2.3	0.3	0.2	0.1	tr	0.1	--	--	--	tr	--
95P06413	57-76	Bss3	S	46.1	52.4	1.5			38.7	13.7	1.0	0.3	0.1	0.1	tr	--	--	--	1	--
95P06414	76-99	2Bwb	S	20.7	74.0	5.3			40.5	33.5	4.5	0.5	0.2	0.1	tr	--	--	--	1	--
95P06415	99-131	2C	S	23.6	72.9	3.5			46.1	26.8	2.7	0.5	0.2	0.1	tr	--	--	--	1	--
95P06416	131-150	3C1	S	31.8	66.8	1.4			61.3	5.5	0.4	0.4	0.3	0.2	0.1	--	--	--	1	--
95P06417	150-180	3C2	S	40.9	57.9	1.2			55.5	2.4	0.4	0.3	0.3	0.1	0.1	--	--	--	1	--
95P06418	180-195	3Cg	S	53.2	45.0	1.8			43.7	1.3	0.5	0.7	0.4	0.2	tr	--	--	--	1	--
95P06419	195-215	4C	S	54.1	45.1	0.8			43.8	1.3	0.3	0.2	0.2	0.1	--	--	--	--	1	--

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- 33 kPa	-2- Oven Dry	-3- Cole Whole Soil	-4- 6 kPa	-5- 10 kPa	-6- 33 kPa	-7- 1500 kPa	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil	-11- Aggst Stabl 2-0.5mm	-12- CEC7	-13- 1500 kPa
				(Bulk Density)			(- - - - - - - - - - - Water Content - - - - - - - - - - -)								(- - Ratio/Clay - -)	
				(- - - g cm^{-3} - - -)			(- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)						cm^3 cm^{-3}	%		
				4A1d	4A1h				4B1c	4B2a		4B5	4C1		8D1	8D1
95P06409	0-14	Ap	S	1.21	1.87	0.156			39.1	27.6		1.054	0.14		0.73	0.41
95P06410	14-31	Ass	S	1.21	1.92	0.166			40.3	28.6		1.057	0.14		0.71	0.41
95P06411	31-41	Bss1	S	1.11	1.80	0.175			45.6	32.6		1.066	0.14		0.67	0.40
95P06412	41-57	Bss2	S	1.06	1.84	0.202			52.3	30.6		1.059	0.23		0.66	0.40
95P06413	57-76	Bss3	S	1.11	1.76	0.166			49.7	22.4		1.041	0.30		0.75	0.49
95P06414	76-99	2Bwb	S	1.48	1.54	0.013			27.4	12.8		1.025	0.22		0.99	0.62
95P06415	99-131	2C	S	1.14	1.53	0.103			46.1	14.4		1.027	0.36		0.92	0.61
95P06416	131-150	3C1	S	1.37	1.56	0.044			34.7	18.5		1.033	0.22		0.83	0.58
95P06417	150-180	3C2	S	1.27	1.61	0.082			38.6	22.2		1.038	0.21		0.78	0.54
95P06418	180-195	3Cg	S	1.18	1.69	0.127			43.1	26.1		1.045	0.20		0.74	0.49
95P06419	195-215	4C	S							26.0		1.047			0.71	0.48

*** Primary Characterization Data ***

Pedon ID: 95LA005001 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM
Sampled As : Lemanville Clayey over loamy, montmorillonitic, nonacid, hyperthermic Vertic Epiaquept
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 95P1074

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
				pct <0.4mm		(- - - - - - - - g cm^{-3} - - - - - - -)			(- % of < 2mm -)							
				4F1	4F											
95P06409	0-14	Ap	S	75	50											
95P06409[1]	0-14		S	75	50											
95P06414	76-99	2Bwb	S	38	17											
95P06414[2]	76-99		S	38	17											
95P06417	150-180	3C2	S	59	34											
95P06417[3]	150-180		S	59	34											

[1,2,3] Multiple values present due to instrumentation or analyzed size fraction. See laboratory for more information.

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C	-2- N	-3- S	-4- Org C	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe	-7- Al	-8- Mn	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn	-15- (- - - Na Pyro-Phosphate - - -) C	-16- Fe	-17- Al	-18- Mn
				(- - - - - - % of <2 mm - - - - - -)					(- % of < 2mm - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - - - % of < 2mm - - - - -)			
				6A2e	6B4a		6A1c														
95P06409	0-14	Ap	S	1.73	0.214		1.62	8													
95P06410	14-31	Ass	S	1.26	0.175		1.13	6													
95P06411	31-41	Bss1	S	0.67	0.118		0.58	5													
95P06412	41-57	Bss2	S	0.57	0.115		0.48	4													
95P06413	57-76	Bss3	S	0.53	0.089		0.44	5													
95P06414	76-99	2Bwb	S	0.71	0.070		0.42	6													
95P06415	99-131	2C	S	0.80	0.065		0.42	6													
95P06416	131-150	3C1	S	0.82	0.084		0.51	6													
95P06417	150-180	3C2	S	0.78	0.097		0.69	7													
95P06418	180-195	3Cg	S	1.02	0.112		1.05	9													
95P06419	195-215	4C	S	0.87	0.114		0.80	7													

*** Primary Characterization Data ***

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Sampled As : Lemanville Clayey over loamy, montmorillonitic, nonacid, hyperthermic Vertic Epiaquept
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 95P1074

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- Sum Bases	-6- Acid-ity	-7- Extr Al	-8- KCl Mn	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Sat Sum	-14- Base Sat NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)								CEC8	CEC7	ECEC		(- - - - Base - - - -)	
																(- Saturation -)	
				(- - - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)		
				6N2e	6O2d	6P2b	6Q2b		6H5a			5A3a	5A8c			5C3	5C1
95P06409	0-14	Ap	S	34.4	10.9	0.3	1.1	46.7	11.4			58.1	49.4			80	95
95P06410	14-31	Ass	S	37.9*	11.8	0.4	1.0	51.1	2.9			54.0	49.9			95	100
95P06411	31-41	Bss1	S	43.3*	14.1	0.6	1.2		2.6				54.6			96	100
95P06412	41-57	Bss2	S	37.8*	12.8	0.6	1.1		3.7				49.9			93	100
95P06413	57-76	Bss3	S	29.6*	11.5	0.6	0.8		1.5				34.5			97	100
95P06414	76-99	2Bwb	S	30.1*	8.1	0.4	0.4		1.7				20.4			96	100
95P06415	99-131	2C	S	43.3*	8.1	0.4	0.5						21.8			100	100
95P06416	131-150	3C1	S	41.1*	10.1	0.3	0.7		1.3				26.5			98	100
95P06417	150-180	3C2	S	29.6*	11.8	0.3	0.8		3.1				32.1			93	100
95P06418	180-195	3Cg	S	30.6*	10.2	0.3	1.0	42.1	3.3			45.4	39.6			93	100
95P06419	195-215	4C	S	29.6*	9.9	0.4	1.0	40.9	3.3			44.2	38.5			93	100

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na %	-20- SAR
				(- Water Extracted From Saturated Paste -)																			
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)								(- - - - % - - - -)		(- - dS m^{-1} - -)			
																						5D2	
95P06409	0-14	Ap	S																			1	
95P06410	14-31	Ass	S																			1	
95P06411	31-41	Bss1	S																			1	
95P06412	41-57	Bss2	S																			1	
95P06413	57-76	Bss3	S																			2	
95P06414	76-99	2Bwb	S																			2	
95P06415	99-131	2C	S																			2	
95P06416	131-150	3C1	S																			1	
95P06417	150-180	3C2	S																			1	
95P06418	180-195	3Cg	S																			1	
95P06419	195-215	4C	S																			1	

*** Primary Characterization Data ***

Pedon ID: 95LA005001 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM

Sampled As : Lemanville Clayey over loamy, montmorillonitic, nonacid, hyperthermic Vertic Epiaquept

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 95P1074

pH & Carbonates

Layer	Depth (cm)	Horz	Prep	-1- KCl	-2- $CaCl_2$ 0.01M 1:2 4C1a2a	-3- H_2O 1:1 4C1a2a	-4- Sat Paste	-5- Sulf	-6- NaF	-7- Carbonate As $CaCO_3$ <2mm (% 6E1g)	-8- Carbonate As $CaCO_3$ <20mm (%)	-9- Gypsum As $CaSO_4*2H_2O$ <2mm (%)	-10- Gypsum As $CaSO_4*2H_2O$ <20mm (%)	-11- Resist ohms cm^{-1}
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
95P06409	0-14	Ap	S		6.2	6.5								
95P06410	14-31	Ass	S		7.2	7.5				tr				
95P06411	31-41	Bss1	S		7.5	7.8				1				
95P06412	41-57	Bss2	S		7.4	7.8				1				
95P06413	57-76	Bss3	S		7.4	7.9				1				
95P06414	76-99	2Bwb	S		7.4	8.2				3				
95P06415	99-131	2C	S		7.5	8.2				4				
95P06416	131-150	3C1	S		7.5	7.9				3				
95P06417	150-180	3C2	S		7.3	7.8				1				
95P06418	180-195	3Cg	S		7.1	7.6				tr				
95P06419	195-215	4C	S		7.0	7.5				tr				

*** Primary Characterization Data ***

Pedon ID: 95LA005001 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM

Sampled As : Lemanville Clayey over loamy, montmorillonitic, nonacid, hyperthermic Vertic Epiaquept

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 95P1074

Clay Mineralogy (<.002 mm)

Layer	Depth (cm)	Horz	Fraction	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
						X-Ray					Thermal					Elemental				EGME	Interpretation
													SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	K_2O	Na_2O	Retn	
						7A2i															
				(- - - - - - - - - peak size - - - - - - - - - -)					(- - - - - - - - - % - - - - - - - - - -)				(- - - - - - - - - - - - - - - - - - - % - - - - - - - - - - - - - - - - - - -)							mg g^{-1}	
95P06409	0-14	Ap	tcly	MT 3	KK 3	MI 3	VR 2	QZ 2													
95P06412	41-57	Bss2	tcly	MT 3	KK 3	MM 2	MI 2	QZ 2													
95P06415	99-131	2C	tcly	MT 3	MI 3	KK 2	VR 2	MM 2													
				QZ 1																	

FRACTION INTERPRETATION:

tcly - Total Clay, <0.002 mm

MINERAL INTERPRETATION:

KK - Kaolinite MI - Mica MM - Montmorillonite-Mica MT - Montmorillonite QZ - Quartz

VR - Vermiculite

RELATIVE PEAK SIZE: 5 Very Large 4 Large 3 Medium 2 Small 1 Very Small 6 No Peaks

*** Primary Characterization Data ***

Pedon ID: 97LA005002 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM

Sampled as : Cancienne ; Fine-silty, mixed, nonacid, hyperthermic Fluvaquentic Epiaquept
Revised to :

SSL - Project CP97LA097 LOUISIANA HYPERTHERMIC 1
- Site ID 97LA005002 Lat: 30° 10' 14.90" north Long: 90° 59' 7.10" west MLRA: 131
- Pedon No. 97P0457
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Natural Resources Conservation Service
National Soil Survey Center
Soil Survey Laboratory
Lincoln, Nebraska 68508-3866

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
97P02712	Ap	Ap	0-16				SIL	SIL
97P02713	A	A	16-34				SIL	SIL
97P02714	Bw1	Bw1	34-68				SICL	SIL
97P02715	Bw2	Bw2	68-91				SIL	SIL
97P02716	Bw3	Bw3	91-107				SIL	SIL
97P02717	Bw4	Bw4	107-134				SIC	SIL
97P02718	Bw5	Bw5	134-139				SIC	SIL
97P02719	Bw6	Bw6	139-156				SIL	SIL
97P02720	2Bssg1	2Bssg1	156-180				C	SICL
97P02721	2Bssg2	2Bssg2	180-207				C	SIC
97P02722	2Bssg3	2Bssg3	207-239				C	SIC

Pedon Calculations

Calculation Name	Result	Units of Measure
Clay, total, Weighted Average	20	% wt
LE, Whole Soil, Summed to 1m	3	cm/m
Weighted Particles, 0.1-75mm, 75 mm Base	1	% wt
Volume, >2mm, Weighted Average	0	% vol
Clay, carbonate free, Weighted Average	20	% wt
CEC Activity, CEC7/Clay, Weighted Average	1.1	(NA)

Weighted averages based on control section: 25-100 cm

*** Primary Characterization Data ***

Pedon ID: 97LA005002 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM
Sampled As : Cancienne Fine-silty, mixed, nonacid, hyperthermic Fluvaquentic Epiaquept
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0457

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002	-2- Silt .002 -.05	-3- Sand .05 -2	-4- Clay Fine < .0002	-5- CO_3 < .002	-6- Silt Fine .002 -.02	-7- Silt Coarse .02 -.05	-8- Sand VF .05 -.10	-9- Sand F .10 -.25	-10- Sand M .25 -.50	-11- Sand C .5 -1	-12- Sand VC 1 -2	-13- Rock Fragments (mm) Weight 2 -5	-14- 5 -20	-15- 20 -75	-16- .1-75	-17- >2 mm wt % whole soil
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - -)					(Rock Fragments (mm))				
				(- % of <2mm Mineral Soil -)												(- - - - - - - % of <75mm - - - - - -)				
				3A1	3A1	3A1			3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
97P02712	0-16	Ap	S	14.1	72.1	13.8			26.8	45.3	13.2	0.5	0.1	tr	--	--	--	--	1	--
97P02713	16-34	A	S	17.7	70.7	11.6			28.5	42.2	11.2	0.4	tr	--	tr	--	--	--	tr	--
97P02714	34-68	Bw1	S	21.5	62.7	15.8			27.7	35.0	14.9	0.7	0.2	tr	tr	--	--	--	1	--
97P02715	68-91	Bw2	S	19.9	65.6	14.5			29.9	35.7	13.7	0.7	0.1	--	tr	--	--	--	1	--
97P02716	91-107	Bw3	S	16.9	72.7	10.4			27.5	45.2	9.8	0.4	0.1	0.1	tr	--	--	--	1	--
97P02717	107-134	Bw4	S	19.6	69.6	10.8			28.5	41.1	10.3	0.4	0.1	tr	tr	--	--	--	1	--
97P02718	134-139	Bw5	S	22.1	67.2	10.7			29.3	37.9	10.1	0.5	0.1	tr	--	--	--	--	1	--
97P02719	139-156	Bw6	S	20.6	75.3	4.1			35.6	39.7	3.8	0.2	0.1	tr	--	--	--	--	tr	--
97P02720	156-180	2Bssg1	S	39.7	59.6	0.7			42.4	17.2	0.6	0.1	tr	--	--	--	--	--	tr	--
97P02721	180-207	2Bssg2	S	58.7	40.6	0.7			34.4	6.2	0.6	0.1	tr	tr	--	--	--	--	tr	--
97P02722	207-239	2Bssg3	S	50.5	48.7	0.8			40.2	8.5	0.5	0.2	0.1	tr	--	--	--	--	tr	--

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- 33 kPa	-2- Oven Dry	-3- Cole Whole Soil	-4- 6 kPa	-5- 10 kPa	-6- 33 kPa	-7- 1500 kPa	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil	-11- Aggst Stabl 2-0.5mm	-12- CEC7	-13- 1500 kPa
				(Bulk Density)			(- - - - - - - - - - - Water Content - - - - - - - - - - -)								(- - Ratio/Clay - -)	
				(- - - g cm^{-3} - - -)			(- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)						cm^3 cm^{-3}	%		
				4A1d	4A1h				4B1c	4B2a		4B5	4C1		8D1	8D1
97P02712	0-16	Ap	S	1.35	1.46	0.026			30.7	8.1		1.017	0.31		1.28	0.57
97P02713	16-34	A	S	1.44	1.55	0.025			26.5	8.8		1.022	0.25		1.13	0.50
97P02714	34-68	Bw1	S	1.34	1.46	0.029			28.7	11.6		1.028	0.23		1.10	0.54
97P02715	68-91	Bw2	S	1.40	1.49	0.021			28.6	10.6		1.024	0.25		1.08	0.53
97P02716	91-107	Bw3	S	1.33	1.45	0.029			31.6	9.5		1.024	0.29		1.12	0.56
97P02717	107-134	Bw4	S	1.31	1.45	0.034			32.5	10.9		1.027	0.28		1.10	0.56
97P02718	134-139	Bw5	S	1.30	1.43	0.032			32.4	12.0		1.028	0.27		1.07	0.54
97P02719	139-156	Bw6	S	1.28	1.44	0.040			33.5	11.4		1.028	0.28		1.12	0.55
97P02720	156-180	2Bssg1	S	1.21	1.69	0.118			40.7	20.2		1.046	0.25		0.92	0.51
97P02721	180-207	2Bssg2	S	1.18	1.80	0.151			42.4	25.3		1.067	0.20		0.86	0.43
97P02722	207-239	2Bssg3	S	1.16	1.75	0.147			41.8	23.6		1.059	0.21		0.90	0.47

*** Primary Characterization Data ***

Pedon ID: 97LA005002 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM
Sampled As : Cancienne Fine-silty, mixed, nonacid, hyperthermic Fluvaquentic Epiaquept
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0457

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
				pct <0.4mm		(- - - - - - - g cm^{-3} - - - - - - -)			(- % of < 2mm -)							
				4F1	4F										4B1a	
97P02712	0-16	Ap	S	33	10										12.5	
97P02712[1]	0-16		S	33	10											
97P02713	16-34	A	S												13.8	
97P02714	34-68	Bw1	S												18.8	
97P02715	68-91	Bw2	S												16.8	
97P02716	91-107	Bw3	S	32	13										13.3	
97P02716[2]	91-107		S	32	13											
97P02717	107-134	Bw4	S												15.6	
97P02718	134-139	Bw5	S												17.6	
97P02719	139-156	Bw6	S												17.6	
97P02720	156-180	2Bssg1	S												29.8	
97P02721	180-207	2Bssg2	S												36.2	
97P02722	207-239	2Bssg3	S												32.7	

[1,2] Multiple values present due to instrumentation or analyzed size fraction. See laboratory for more information.

*** Primary Characterization Data ***

Pedon ID: 97LA005002 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM
Sampled As : Cancienne Fine-silty, mixed, nonacid, hyperthermic Fluvaquentic Epiaquept
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0457

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C	-2- N	-3- S	-4- Org C	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe	-7- Al	-8- Mn	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn	-15- (- - - Na Pyro-Phosphate - - -) C	-16- Fe	-17- Al	-18- Mn
				(- - - - - - % of <2 mm - - - - - -)					(- % of < 2mm - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - - - % of < 2mm - - - - -)			
					6B4a		6A1c														
97P02712	0-16	Ap	S		0.161		1.21	8													
97P02713	16-34	A	S		0.090		0.65	7													
97P02714	34-68	Bw1	S		0.065		0.47	7													

97P02715	68-91	Bw2	S	0.052	0.36	7
97P02716	91-107	Bw3	S	0.055	0.28	5
97P02717	107-134	Bw4	S		0.30	
97P02718	134-139	Bw5	S		0.34	
97P02719	139-156	Bw6	S		0.37	
97P02720	156-180	2Bssg1	S		0.59	
97P02721	180-207	2Bssg2	S		0.73	
97P02722	207-239	2Bssg3	S		0.73	

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- Sum Bases	-6- Acid-ity	-7- Extr Al	-8- KCl Mn	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Sum	-14- Base NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)												(- - - - Base - - - -)	
																(- Saturation -)	
				(- - - - - - - - - - - - - - - - - cmol(+) kg^{-1} -)							mg kg^{-1}	(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)		
				6N2e	6O2d	6P2b	6Q2b		6H5a	6G9c	6D3b	5A3a	5A8b			5C3	5C1
97P02712	0-16	Ap	S	12.7	3.4	0.5	0.4	17.0	5.1	--	3.8	22.1	18.0			77	94
97P02713	16-34	A	S	14.4*	4.2	1.1	0.4	20.1	5.4			25.5	20.0			79	100
97P02714	34-68	Bw1	S	17.6*	5.8	1.1	0.5	25.0	3.6			28.6	23.6			87	100
97P02715	68-91	Bw2	S	16.1*	6.8	1.7	0.5	25.1	3.3			28.4	21.5			88	100
97P02716	91-107	Bw3	S	17.3*	7.7	1.1	0.5		2.2				18.9			92	100
97P02717	107-134	Bw4	S	15.8*	9.8	1.2	0.5		2.3				21.6			92	100
97P02718	134-139	Bw5	S	17.1*	8.4	1.5	0.7	27.7	3.4			31.1	23.6			89	100
97P02719	139-156	Bw6	S	16.1*	7.3	1.2	0.8	25.4	2.7			28.1	23.0			90	100
97P02720	156-180	2Bssg1	S	22.1	9.2	1.4	1.1	33.8	4.8			38.6	36.7			88	92
97P02721	180-207	2Bssg2	S	32.9	12.7	1.6	1.4	48.6	5.5			54.1	50.4			90	96
97P02722	207-239	2Bssg3	S	29.8	11.3	2.0	1.3	44.4	4.7			49.1	45.5			90	98

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

*** Primary Characterization Data ***

Pedon ID: 97LA005002 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM
Sampled As : Cancienne Fine-silty, mixed, nonacid, hyperthermic Fluvaquentic Epiaquept
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0457

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na %	-20- SAR
				(- Water Extracted From Saturated Paste -)																			
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)								(- - - - % - - - -)		(- - dS m^{-1} - -)			
																						5D2	
97P02712	0-16	Ap	S																			3	
97P02713	16-34	A	S																			6	
97P02714	34-68	Bw1	S																			5	
97P02715	68-91	Bw2	S																			8	
97P02716	91-107	Bw3	S																			6	
97P02717	107-134	Bw4	S																			6	
97P02718	134-139	Bw5	S																			6	
97P02719	139-156	Bw6	S																			5	

97P02720	156-180	2Bssg1	S	4
97P02721	180-207	2Bssg2	S	3
97P02722	207-239	2Bssg3	S	4

pH & Carbonates

Layer	Depth (cm)	Horz	Prep	-1- KCl	-2- $CaCl_2$ 0.01M 1:2 4C1a2a	-3- H_2O 1:1 4C1a2a	-4- Sat Paste	-5- Sulf	-6- NaF	-7- Carbonate As $CaCO_3$ <2mm 6E1g	-8- Carbonate As $CaCO_3$ <20mm	-9- Gypsum As $CaSO_4$*$2H_2O$ <2mm	-10- Gypsum As $CaSO_4$*$2H_2O$ <20mm	-11- Resist ohms cm^{-1}
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
										(- - - - - - - - - - - - % - - - - - - - - - - -)				
97P02712	0-16	Ap	S		5.0	5.6								
97P02713	16-34	A	S		5.5	6.2								
97P02714	34-68	Bw1	S		6.6	7.3								
97P02715	68-91	Bw2	S		7.1	7.8				tr				
97P02716	91-107	Bw3	S		7.1	7.8				1				
97P02717	107-134	Bw4	S		7.1	7.8				1				
97P02718	134-139	Bw5	S		7.1	7.6				tr				
97P02719	139-156	Bw6	S		7.0	7.7				--				
97P02720	156-180	2Bssg1	S		6.6	7.4								
97P02721	180-207	2Bssg2	S		6.7	7.4								
97P02722	207-239	2Bssg3	S		6.7	7.0								

*** Primary Characterization Data ***

Pedon ID: 97LA005002 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM
Sampled As : Cancienne Fine-silty, mixed, nonacid, hyperthermic Fluvaquentic Epiaquept
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0457

Clay Mineralogy (<.002 mm)

Layer	Depth (cm)	Horz	Fraction	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
						X-Ray					Thermal					Elemental				EGME	Interpretation
													SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	K_2O	Na_2O	Retn	
				(- - - - - - - - -		7A2i peak size		- - - - - - - - - -)	(- - - - - - - - -		%	- - - - - - - - - -)	(- - - - - - - - - - - - - - - - - - -			%	- - - - - - - - - - - - - - - - - - -)			mg g^{-1}	
97P02714	34-68	Bw1	tcly	MT 4	KK 3	MI 1															
97P02715	68-91	Bw2	tcly	MT 3	KK 2	VR 2	MI 2														
97P02716	91-107	Bw3	tcly	MT 3	KK 2	VR 2	MI 2														

FRACTION INTERPRETATION:
tcly - Total Clay, <0.002 mm

MINERAL INTERPRETATION:
KK - Kaolinite MI - Mica MT - Montmorillonite VR - Vermiculite

RELATIVE PEAK SIZE: 5 Very Large 4 Large 3 Medium 2 Small 1 Very Small 6 No Peaks

*** Primary Characterization Data ***

Pedon ID: 97LA005002 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM
Sampled As : Cancienne Fine-silty, mixed, nonacid, hyperthermic Fluvaquentic Epiaquept
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0457

Sand - Silt Mineralogy (2.0-0.002 mm)

Layer	Depth (cm)	Horz	Fraction	-1-	-2-	-3- X-Ray	-4-	-5-	-6-	-7-	-8- Thermal	-9-	-10- Tot Re	-11-	-12-	-13- Optical Grain Count 7B1a	-14-	-15-	-16-	-17- EGME Retn	-18- Interpretation
				(- - - - - - - - peak size - - - - - - - - -)					(- - - - - - - - % - - - - - - - - - -)				(- % - - - - - - - - - - - - - - - - - -)							mg g^{-1}	
97P02713	16-34	A	csi										62	QZ 53	FK 20	FP 10	CD 6	CM 3	GS 2		
														OP 2	MS 1	BT 1	HN 1	AR 1	PO 1		
														ZE tr	PR tr	FE tr	TM tr	BY tr	GN tr		
														AP tr	SS tr	EP tr	RU tr	ZR tr			
97P02714	34-68	Bw1	csi										66	QZ 57	FK 17	CD 7	FP 6	CM 2	MS 2		
														AR 2	BT 2	GS 1	FE 1	HN 1	PR 1		
														ZE 1	PO 1	BY tr	AP tr	GN tr	OP tr		
														TM tr	KY tr	ZR tr	RU tr				
97P02715	68-91	Bw2	csi										55	QZ 50	FK 18	FP 8	MS 6	CD 4	CM 4		
														BT 3	OP 1	PR 1	GS 1	AR 1	CA 1		
														HN 1	FE tr	ZE tr	AP tr	GN tr	BY tr		
														PO tr	ZR tr	EP tr	SS tr	TM tr			
97P02716	91-107	Bw3	csi										55	QZ 50	FK 20	FP 7	CD 4	AR 4	MS 3		
														BT 3	CA 2	GS 1	CM 1	PR 1	HN 1		
														BY 1	EP 1	OP tr	ZE tr	GN tr	FE tr		
														PO tr	ZR tr	TM tr	AP tr	SS tr			

FRACTION INTERPRETATION:
csi - Coarse Silt, 0.02-0.05 mm

*** Primary Characterization Data ***

Pedon ID: 97LA005002 (Ascension Parish, Louisiana) Print Date: Aug 10 2011 1:38PM

Sampled As : Cancienne Fine-silty, mixed, nonacid, hyperthermic Fluvaquentic Epiaquept

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0457

MINERAL INTERPRETATION:

AP - Apatite	AR - Weatherable Aggregates	BT - Biotite	BY - Beryl	CA - Calcite
CD - Chert (Chalcedony	CM - Chlorite-Mica	EP - Epidote	FE - Iron Oxides (Goethite	FK - Potassium Feldspar
FP - Plagioclase Feldspar	GN - Garnet	GS - Glass	HN - Hornblende	KY - Kyanite
MS - Muscovite	OP - Opaques	PO - Plant Opal	PR - Pyroxene	QZ - Quartz
RU - Rutile	SS - Sponge Spicule	TM - Tourmaline	ZE - Zeolite	ZR - Zircon

*** Glossary of Codes ***

Print Date: Aug 10 2011 1:38PM

Reports: Primary Characterization Report;
Pedons: 95P1074; 97P0457;

*** Method Codes ***

Code	Description
3A1	PSDA, Routine, Pipet
3B1	Particles >2 mm, Weight Estimates
4A1d	Bulk Density, 1/3-Bar Desorption I
4A1h	Bulk Density, Oven-Dry
4B1c	Water Retention, clod, 0.06, 0.1, 0.33, or 1 bar, pressure-plate extraction
4B2a	Water Retention, 15 Bar, Pressure-Plate, <2mm
4B5	Water Retention, ADOD
4C1	derived WRD, 4C1
8D1	Ratio, to Total Clay - 8D1
4B1a	Water Retention, 2 Bar, Pressure-Plate, <2mm
4F	derived Plasticity Index
4F1	Plasticity Index, Liquid Limit
6A1c	Organic Carbon, acid dichromate digestion, FeSO4 titration, automatic titrator
6A2e	Total Carbon, dry combustion, CO2 evolution V
6B4a	Total Nitrogen, dry combustion, N2 Evolution
5A3a	derived CEC_SUM, 5A3a
5A8b	CEC, NH4OAc, pH 7.0, automatic extractor, steam distillation I
5A8c	CEC, NH4OAc, pH 7.0, automatic extractor, steam distillation II
5C1	derived BSESAT, 5C1
5C3	derived BSECAT, 5C3
6D3b	Manganese, 1 N KCl Extractable, Automatic Extractor, Inductively Coupled Plasma Spectrometry II
6G9c	Cations, Potassium Chloride Extractable, 1 N, automatic extractor, ICP II (6G9c)
6H5a	Extractable Acidity, BaCl2-Triethanolamine IV, automatic extractor
6N2e	Calcium, NH4OAc Extraction, Atomic Absorption I
6O2d	Magnesium, NH4OAc Extraction, Atomic Absorption I
6P2b	Sodium, NH4OAc Extraction, Atomic Absorption I
6Q2b	Potassium, NHOAc Extraction, Atomic Absorption I
5D2	derived NA_EXCH, 5D2
4C1a2a	pH, Routine, 1:1 Water and 1:2 0.01M CaCl2
6E1g	Calcium Carbonate Equivalent, HCl, <2mm, manometer, electronic (6E1g)
7A2i	X-ray Diffraction, Thin Film on Glass, Resin Pretreatment II
7B1a	Optical Analysis, Full Grain Count

*** Preparation Codes ***

Code	Description / List of Methods
Sjj	The air-dried soil passing a No. 10-mesh sieve 3A1, 4B2a, 4B5, 4B1a, 4F, 4F1, 6A1c, 6A2e, 6B4a, 5A8b, 5A8c, 6D3b, 6G9c, 6H5a, 6N2e, 6O2d, 6P2b, 6Q2b, 4C1a2a, 6E1g, 7A2i, 7B1a
Caj	The moist soil clod used for bulk density determinations 4A1d, 4A1h, 4B1c

*** Instrument Sets ***

Instrument Set Name	List of Methods
Instrument Not Specified	3A1, 3B1, 4A1d, 4A1h, 4B1c, 4B2a, 4B5, 4B1a, 4F, 4F1, 7A2i, 7B1a

titrator	6A1c, 6H5a
elemental analyzer	6A2e, 6B4a
distillation titirator	5A8b, 5A8c
inductively coupled plasma spectrophotometer	6D3b
atomic adsorption spectrophotometer	6G9c, 6N2e, 6O2d, 6P2b, 6Q2b
pH meter	4C1a2a
manometer	6E1g

*** Analyzed Size Fractions ***

Size Fraction	List of Methods
<2 mm	3A1, 4A1d, 4A1h, 4B1c, 4B2a, 4B5, 8D1, 4B1a, 4F, 4F1, 6A1c, 6A2e, 6B4a, 5A3a, 5A8b, 5A8c, 5C1, 5C3, 6D3b, 6G9c, 6H5a, 6N2e, 6O2d, 6P2b, 6Q2b, 5D2, 4C1a2a, 6E1g
<75 mm	3B1
whole soil	4C1
<0.002 mm	7A2i
0.02-0.05 mm	7B1a

East Baton Rouge Parish

Physical Soil Properties

East Baton Rouge Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
AT:														
Aquents	---	---	---	---	---	---	---	---	---	---	---	5	8	0
BoA:														
Bonn	0-5	---	---	---	1.30-1.50	1.41-4.23	0.15-0.23	0.0-2.9	0.5-6.0	.49	.49	3	5	56
	5-22	---	---	---	1.30-1.50	1.41-4.23	0.15-0.23	0.0-2.9	0.0-3.0	.49	.49			
	22-67	---	---	---	1.40-1.75	0.00-0.42	0.08-0.14	0.0-2.9	0.0-1.0	.49	.49			
	67-80	---	---	---	1.40-1.75	0.00-1.41	0.08-0.14	0.0-2.9	0.0-1.0	.49	.49			
BuB:														
Bude	0-5	---	---	10-27	1.40-1.60	4.23-14.11	0.21-0.24	0.0-2.9	0.5-2.0	.49	.49	3	6	48
	5-11	---	---	10-27	1.40-1.60	4.23-14.11	0.21-0.24	0.0-2.9	0.0-0.5	.49	.49			
	11-27	---	---	10-32	1.40-1.65	0.42-1.41	0.14-0.23	3.0-5.9	0.0-0.5	.43	.43			
	27-81	---	---	16-32	1.40-1.65	0.42-1.41	0.11-0.23	3.0-5.9	0.0-0.5	.37	.37			
CcA:														
Calhoun	0-3	---	---	10-27	1.30-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	3-13	---	---	10-27	1.30-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-0.8	.49	.49			
	13-60	---	---	22-35	1.30-1.70	0.42-1.41	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
	60-80	---	---	10-30	1.40-1.70	0.42-1.41	0.21-0.23	3.0-5.9	0.0-0.5	.43	.43			
CdA:														
Calhoun	0-3	---	---	10-27	1.30-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	3-22	---	---	10-27	1.30-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-0.8	.49	.49			
	22-68	---	---	22-35	1.30-1.65	0.42-1.41	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
	68-80	---	---	10-35	1.30-1.65	0.42-1.41	0.21-0.23	3.0-5.9	0.0-0.5	.43	.43			

USDA Natural Resources Conservation Service

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Tabular Data Version: 5
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Physical Soil Properties

East Baton Rouge Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
CEA:														
Calhoun	0-4	---	---	10-27	1.30-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	4-17	---	---	10-27	1.30-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-1.5	.49	.49			
	17-38	---	---	22-35	1.30-1.65	0.42-1.41	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
	38-80	---	---	10-30	1.30-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.0-0.5	.43	.43			
Cascilla	0-6	---	---	5-20	1.40-1.50	4.23-14.11	0.18-0.22	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	6-37	---	---	18-30	1.45-1.50	4.23-14.11	0.16-0.20	0.0-2.9	0.5-1.0	.43	.43			
	37-80	---	---	5-25	1.40-1.50	4.23-14.11	0.16-0.20	0.0-2.9	0.0-0.5	.43	.43			
CmA:														
Cancienne	0-5	---	---	14-27	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.43	.43	5	6	56
	5-28	---	---	14-39	1.35-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	28-60	---	---	14-40	1.35-1.65	1.41-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
CNA:														
Carville	0-14	---	---	0-18	1.30-1.65	4.23-14.11	0.18-0.23	0.0-2.9	0.5-3.0	.43	.43	5	5	56
	14-80	---	---	0-18	1.30-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
Cancienne	0-10	---	---	25-39	1.25-1.45	1.41-4.23	0.15-0.19	3.0-5.9	0.5-4.0	.37	.37	5	7	38
	10-21	---	---	14-39	1.35-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	21-80	---	---	14-42	1.35-1.65	1.41-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
CoB:														
Colyell	0-3	---	---	2-12	1.20-1.65	4.23-14.11	0.14-0.24	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	3-10	---	---	6-19	1.20-1.65	4.23-14.11	0.20-0.24	0.0-2.9	0.0-0.5	.49	.49			
	10-48	---	---	34-60	1.30-1.55	0.42-1.41	0.08-0.19	6.0-8.9	0.0-0.5	.32	.32			
	48-80	---	---	20-38	1.35-1.70	0.42-4.23	0.20-0.22	3.0-5.9	0.0-0.5	.32	.32			

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Physical Soil Properties

East Baton Rouge Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi-bility group	Wind erodi-bility index
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
CoD:														
Colyell	0-3	---	---	2-12	1.20-1.65	4.23-14.11	0.14-0.24	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	3-6	---	---	6-19	1.20-1.65	4.23-14.11	0.20-0.24	0.0-2.9	0.0-0.5	.49	.49			
	6-41	---	---	34-60	1.30-1.55	0.42-1.41	0.08-0.19	6.0-8.9	0.0-0.5	.32	.32			
	41-80	---	---	20-38	1.35-1.70	0.42-4.23	0.20-0.22	3.0-5.9	0.0-0.5	.32	.32			
CRC:														
Convent	0-4	---	---	0-18	1.30-1.65	4.23-14.11	0.18-0.23	0.0-2.9	0.5-3.0	.43	.43	5	5	56
	4-52	---	---	0-18	1.30-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
	52-80	---	---	0-18	1.30-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
Robinsonville	0-4	---	---	2-10	1.40-1.50	14.00-42.00	0.15-0.22	0.0-2.9	0.5-2.0	.32	.32	5	3	86
	4-80	---	---	5-15	1.50-1.60	4.00-42.00	0.14-0.18	0.0-2.9	0.5-1.0	.32	.32			
CvC:														
Crevasse	0-5	---	---	2-8	1.40-1.50	42.34-141.14	0.02-0.06	0.0-2.9	0.5-2.0	.10	.10	5	1	220
	5-80	---	---	2-8	1.40-1.50	42.34-141.14	0.02-0.06	0.0-2.9	0.0-0.5	.15	.15			
DaA:														
Deerford	0-4	---	---	5-27	1.30-1.70	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	3	5	56
	4-23	---	---	10-35	1.30-1.80	0.42-1.41	0.12-0.18	3.0-5.9	0.5-1.0	.49	.49			
	23-30	---	---	10-35	1.30-1.80	1.41-4.23	0.12-0.18	3.0-5.9	0.0-0.5	.49	.49			
	30-92	---	---	---	---	---	---	---	---	---	---			
Verdun	0-5	---	---	5-20	1.35-1.65	1.41-4.23	0.21-0.24	0.0-2.9	0.5-2.0	.49	.49	3	5	56
	5-40	---	---	18-35	1.35-1.65	0.00-0.42	0.11-0.20	3.0-5.9	0.0-0.8	.49	.49			
	40-80	---	---	15-35	1.35-1.65	0.42-1.41	0.10-0.20	0.0-2.9	0.0-0.5	.49	.49			

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										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
DrB:														
Dexter	0-10	---	---	10-27	1.30-1.70	4.23-14.11	0.15-0.24	0.0-2.9	0.5-4.0	.43	.43	5	5	56
	10-39	---	---	10-35	1.40-1.70	4.23-14.11	0.15-0.24	0.0-2.9	0.0-0.5	.32	.32			
	39-80	---	---	10-30	1.30-1.70	4.23-42.34	0.08-0.18	0.0-2.9	0.0-0.5	.24	.24			
EnA:														
Encrow	0-4	---	---	2-15	1.35-1.65	4.23-14.11	0.14-0.24	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	4-20	---	---	6-38	1.35-1.65	4.23-14.11	0.14-0.24	0.0-2.9	0.5-1.0	.49	.49			
	20-50	---	---	27-60	1.20-1.55	0.42-1.41	0.02-0.19	6.0-8.9	0.0-0.5	.32	.32			
	50-79	---	---	20-38	1.30-1.70	0.42-4.23	0.18-0.24	3.0-5.9	0.0-0.5	.32	.32			
FaA:														
Fausse	0-4	1-3	---	40-95	0.80-1.45	0.00-0.42	0.18-0.20	9.0-25.0	2.0-15	.20	.20	5	4	86
	4-26	1-3	---	60-95	0.80-1.45	0.00-0.42	0.18-0.20	9.0-25.0	1.0-3.0	.20	.20			
	26-45	1-3	---	60-95	1.10-1.35	0.00-0.42	0.18-0.20	9.0-25.0	0.5-1.0	.24	.24			
	45-80	---	---	35-95	1.10-1.45	0.00-1.41	0.18-0.22	9.0-25.0	0.0-0.5	.24	.24			
FeB:														
Feliciana	0-6	---	---	8-22	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	1.0-4.0	.49	.49	5	5	56
	6-12	---	---	8-22	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	1.0-2.0	.49	.49			
	12-43	---	---	20-35	1.30-1.50	4.23-14.11	0.20-0.22	0.0-2.9	0.5-1.0	.49	.49			
	43-99	---	---	12-25	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.0-0.5	.49	.49			
FeD:														
Feliciana	0-6	---	---	8-22	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	1.0-4.0	.49	.49	5	5	56
	6-30	---	---	20-35	1.30-1.50	4.23-14.11	0.20-0.22	0.0-2.9	0.5-1.0	.49	.49			
	30-80	---	---	12-25	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.0-0.5	.49	.49			

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										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
FeF:														
Feliciana	0-3	---	---	8-22	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	1.0-4.0	.49	.49	5	5	56
	3-51	---	---	20-35	1.30-1.50	4.23-14.11	0.20-0.22	0.0-2.9	0.5-1.0	.49	.49			
	51-80	---	---	12-25	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.0-0.5	.49	.49			
FkB:														
Fluker	0-6	---	---	2-12	1.35-1.65	4.23-14.11	0.14-0.24	0.0-2.9	0.5-4.0	.49	.49	3	5	56
	6-12	---	---	6-18	1.35-1.65	4.23-14.11	0.20-0.24	0.0-2.9	0.5-1.0	.49	.49			
	12-31	---	---	18-33	1.35-1.65	4.23-14.11	0.20-0.24	0.0-2.9	0.0-0.5	.43	.43			
	31-49	---	---	6-22	1.45-1.90	0.42-1.41	0.01-0.10	0.0-2.9	0.0-0.5	.32	.32			
	49-82	---	---	6-22	1.45-1.90	0.42-1.41	0.01-0.10	0.0-2.9	0.0-0.5	.32	.32			
FoA:														
Frost	0-4	---	---	8-22	1.35-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	4-20	---	---	8-22	1.35-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-1.0	.49	.49			
	20-62	---	---	18-35	1.35-1.75	0.42-1.41	0.20-0.25	3.0-5.9	0.5-1.0	.37	.37			
	62-88	---	---	18-50	1.35-1.70	0.42-1.41	0.20-0.22	3.0-5.9	0.5-1.0	.37	.37			
FrA:														
Frost	0-3	---	---	8-22	1.35-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	3-19	---	---	8-22	1.35-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-1.0	.49	.49			
	19-42	---	---	18-35	1.35-1.75	0.42-1.41	0.20-0.25	3.0-5.9	0.5-1.0	.37	.37			
	42-80	---	---	18-50	1.35-1.70	0.42-1.41	0.20-0.22	3.0-5.9	0.5-1.0	.37	.37			
GaB:														
Galvez	0-7	---	---	14-27	1.35-1.70	4.23-14.10	0.21-0.23	0.0-2.9	0.5-4.0	.43	.43	5	5	56
	7-47	---	---	14-39	1.35-1.70	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	47-80	---	---	20-50	1.20-1.70	1.41-4.23	0.20-0.23	3.0-5.9	0.0-0.5	.32	.32			

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Physical Soil Properties

East Baton Rouge Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
GeA:														
Gilbert	0-3	---	---	8-25	1.35-1.65	4.23-14.11	0.22-0.24	0.0-2.9	0.5-4.0	.49	.49	4	5	56
	3-22	---	---	8-25	1.35-1.65	4.23-14.11	0.22-0.24	0.0-2.9	0.5-1.5	.49	.49			
	22-45	---	---	18-35	1.40-1.60	0.00-0.42	0.14-0.23	3.0-5.9	0.5-1.0	.43	.43			
	45-68	---	---	18-35	1.40-1.65	0.00-0.42	0.14-0.23	3.0-5.9	0.0-0.5	.43	.43			
	68-84	---	---	18-35	1.40-1.65	0.00-0.42	0.14-0.23	3.0-5.9	0.0-0.5	.43	.43			
GtA:														
Gilbert	0-5	---	---	8-25	1.35-1.65	4.23-14.11	0.22-0.24	0.0-2.9	0.5-4.0	.49	.49	4	5	56
	5-15	---	---	8-25	1.35-1.65	4.23-14.11	0.22-0.24	0.0-2.9	0.5-1.5	.49	.49			
	15-40	---	---	18-35	1.40-1.60	0.00-0.42	0.14-0.23	3.0-5.9	0.5-1.0	.43	.43			
	40-56	---	---	18-35	1.40-1.65	0.00-0.42	0.14-0.23	3.0-5.9	0.0-0.5	.43	.43			
	56-80	---	---	18-35	1.40-1.65	0.00-0.42	0.14-0.23	3.0-5.9	0.0-0.5	.43	.43			
JeA:														
Jeanerette	0-11	---	---	10-26	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	7-24	---	---	18-35	1.35-1.70	1.41-4.23	0.14-0.23	3.0-5.9	0.5-2.0	.37	.37			
	24-32	---	---	18-35	1.35-1.70	1.41-4.23	0.09-0.21	3.0-5.9	0.5-1.0	.37	.37			
	32-78	---	---	14-35	1.35-1.70	1.41-4.23	0.14-0.23	3.0-5.9	0.5-1.0	.37	.37			
KwB:														
Cahaba	0-7	---	---	5-15	1.30-1.45	14.11-42.34	0.11-0.15	0.0-2.9	0.5-2.0	.24	.24	5	3	86
	7-56	---	---	20-34	1.35-1.55	4.23-14.11	0.12-0.18	3.0-5.9	0.5-1.0	.32	.32			
	56-69	---	---	10-24	1.50-1.65	4.23-14.11	0.12-0.17	0.0-2.9	0.5-1.0	.37	.37			
	69-81	---	---	2-15	1.50-1.69	14.11-42.34	0.06-0.14	0.0-2.9	0.5-1.0	.24	.24			
LE:														
Levees	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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Physical Soil Properties

East Baton Rouge Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
LoB:														
Loring	0-6	---	---	8-18	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.5-2.0	.49	.49	3	5	56
	6-23	---	---	18-32	1.40-1.50	4.23-14.11	0.20-0.22	0.0-2.9	0.0-0.5	.43	.43			
	23-51	---	---	15-30	1.50-1.70	0.42-1.41	0.06-0.13	0.0-2.9	0.0-0.5	.43	.43			
	51-70	---	---	10-25	1.30-1.60	1.41-14.11	0.06-0.13	0.0-2.9	0.0-0.5	.43	.43			
LoD:														
Loring	0-4	---	---	8-18	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.5-2.0	.49	.49	3	5	56
	4-20	---	---	18-32	1.40-1.50	4.23-14.11	0.20-0.22	0.0-2.9	0.0-0.5	.43	.43			
	20-54	---	---	15-30	1.50-1.70	0.42-1.41	0.06-0.13	0.0-2.9	0.0-0.5	.43	.43			
	54-93	---	---	10-27	1.30-1.60	1.41-14.11	0.06-0.13	0.0-2.9	0.0-0.5	.43	.43			
M-W:														
Water, waste	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OIA:														
Olivier	0-5	---	---	8-18	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	3	5	56
	5-13	---	---	8-18	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-1.5	.49	.49			
	13-28	---	---	18-35	1.35-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
	28-80	---	---	14-27	1.40-1.80	0.42-1.41	0.11-0.15	0.0-2.9	0.0-0.5	.43	.43			
OIB:														
Olivier	0-5	---	---	8-18	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	3	5	56
	5-13	---	---	18-35	1.35-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
	13-46	---	---	14-27	1.40-1.80	0.42-1.41	0.11-0.15	0.0-2.9	0.0-0.5	.43	.43			
	46-80	---	---	14-27	1.40-1.80	0.42-1.41	0.11-0.15	0.0-2.9	0.0-0.5	.43	.43			

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Physical Soil Properties

East Baton Rouge Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
OpA:														
Oprairie	0-4	---	---	8-18	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	4-9	---	---	8-18	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-1.5	.49	.49			
	9-49	---	---	18-35	1.35-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
	49-86	---	---	14-27	1.40-1.80	0.42-1.41	0.11-0.15	0.0-2.9	0.0-0.5	.43	.43			
OpB:														
Oprairie	0-2	---	---	8-18	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	2-10	---	---	8-18	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-1.5	.49	.49			
	13-28	---	---	18-35	1.35-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.0-0.5	.43	.43			
	28-80	---	---	14-27	1.40-1.80	0.42-1.41	0.11-0.15	0.0-2.9	0.0-0.5	.43	.43			
OUA:														
Ouachita	0-12	---	---	8-25	1.35-1.60	4.23-14.11	0.15-0.22	0.0-2.9	1.0-2.0	.37	.37	5	5	56
	12-65	---	---	18-35	1.35-1.60	1.41-4.23	0.15-0.22	0.0-2.9	0.5-1.0	.32	.32			
	65-82	---	---	18-35	1.35-1.60	1.41-4.23	0.15-0.22	0.0-2.9	0.5-1.0	.32	.32			
Guyton	0-3	---	---	7-25	1.35-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-4.0	.43	.43	5	5	56
	3-16	---	---	7-25	1.35-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-2.0	.43	.43			
	16-60	---	---	20-35	1.35-1.70	0.42-1.41	0.15-0.22	0.0-2.9	0.5-1.0	.37	.37			
	60-80	---	---	20-35	1.35-1.70	0.42-1.41	0.15-0.22	0.0-2.9	0.5-1.0	.37	.37			
Ochlockonee	0-5	---	---	3-12	1.30-1.70	14.11-42.34	0.06-0.12	0.0-2.9	0.5-2.0	.17	.17	5	2	134
	5-80	---	---	3-18	1.40-1.70	14.11-42.34	0.06-0.12	0.0-2.9	0.5-1.0	.17	.17			
Pt:														
Pits	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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Physical Soil Properties

East Baton Rouge Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
Qt:														
Udipsamments	0-10	---	---	2-8	1.40-1.50	42.34-141.14	0.02-0.06	0.0-2.9	0.5-2.0	.10	.10	5	2	134
	10-80	---	---	2-8	1.40-1.50	42.34-141.14	0.02-0.06	0.0-2.9	0.0-0.5	.15	.15			
SaB:														
Satsuma	0-5	---	---	2-12	1.35-1.65	4.23-14.11	0.14-0.24	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	5-13	---	---	6-18	1.35-1.65	4.23-14.11	0.20-0.24	0.0-2.9	0.5-1.0	.49	.49			
	13-40	---	---	27-45	1.35-1.65	0.42-1.41	0.15-0.18	3.0-5.9	0.5-1.0	.37	.37			
	40-69	---	---	18-30	1.35-1.65	4.23-14.11	0.20-0.24	0.0-2.9	0.5-1.0	.37	.37			
SeA:														
Schriever	0-11	---	---	40-60	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.5-4.0	.32	.32	5	4	86
	11-47	1-3	---	60-90	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.0-0.5	.28	.28			
	47-75	---	---	25-90	1.20-1.70	0.42-1.41	0.12-0.22	6.0-8.9	0.0-0.5	.28	.28			
SfA:														
Schriever	0-11	---	---	40-60	1.20-1.50	0.00-0.42	0.12-0.18	9.0-25.0	0.5-4.0	.32	.32	5	4	86
	11-41	1-3	---	60-90	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.0-0.5	.28	.28			
	41-96	---	---	25-90	1.20-1.65	0.42-1.41	0.12-0.18	6.0-8.9	0.0-0.5	.28	.28			
ShB:														
Schriever, gently undulating	0-4	---	---	40-60	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.5-4.0	.32	.32	5	4	86
	4-41	1-3	---	60-90	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.0-0.5	.28	.28			
	41-60	---	---	25-90	1.20-1.70	0.42-1.41	0.12-0.22	6.0-8.9	0.0-0.5	.28	.28			
Thibaut	0-5	---	---	35-75	1.45-1.55	0.00-0.42	0.15-0.20	6.0-8.9	1.0-3.0	.32	.32	5	4	86
	5-26	---	---	35-75	1.45-1.55	0.00-0.42	0.15-0.20	6.0-8.9	0.0-0.5	.32	.32			
	26-65	---	---	10-32	1.40-1.50	0.42-14.11	0.10-0.22	0.0-2.9	0.0-0.5	.32	.32			

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Physical Soil Properties

East Baton Rouge Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
SiB:														
Schriever	0-7	---	---	40-60	1.20-1.50	0.00-0.42	0.12-0.18	9.0-25.0	0.5-4.0	.32	.32	5	4	86
	7-55	1-3	---	60-90	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.0-0.5	.28	.28			
	55-80	---	---	25-90	1.20-1.65	0.42-1.41	0.12-0.18	6.0-8.9	0.0-0.5	.28	.28			
Thibaut	0-6	---	---	35-75	1.45-1.55	0.00-0.42	0.15-0.20	6.0-8.9	1.0-3.0	.32	.32	5	4	86
	6-26	---	---	35-75	1.45-1.55	0.00-0.42	0.15-0.20	6.0-8.9	0.0-0.5	.32	.32			
	26-60	---	---	10-32	1.40-1.50	0.42-14.11	0.10-0.22	0.0-2.9	0.0-0.5	.32	.32			
SnA:														
Scotlandville	0-7	---	---	8-18	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.5-2.0	.49	.49	5	5	56
	7-13	---	---	8-18	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.49	.49			
	13-39	---	---	18-32	1.40-1.50	4.23-14.11	0.20-0.22	0.0-2.9	0.0-0.5	.43	.43			
	39-80	---	---	10-25	1.30-1.60	1.41-14.11	0.06-0.13	0.0-2.9	0.0-0.5	.43	.43			
SnB:														
Scotlandville	0-8	---	---	8-18	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.5-2.0	.49	.49	5	5	56
	8-12	---	---	8-18	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.49	.49			
	12-33	---	---	18-32	1.40-1.50	4.23-14.11	0.20-0.22	0.0-2.9	0.0-0.5	.43	.43			
	33-72	---	---	15-30	1.40-1.60	1.41-14.11	0.06-0.13	0.0-2.9	0.0-0.5	.43	.43			
	72-83	---	---	10-25	1.30-1.60	1.41-14.11	0.06-0.13	0.0-2.9	0.0-0.5	.43	.43			
SnD:														
Scotlandville	0-5	---	---	8-18	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.5-2.0	.49	.49	5	5	56
	5-35	---	---	18-32	1.40-1.50	4.23-14.11	0.20-0.22	0.0-2.9	0.0-0.5	.43	.43			
	35-80	---	---	15-40	1.40-1.60	1.41-14.11	0.06-0.13	0.0-2.9	0.0-0.5	.43	.43			

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Physical Soil Properties

East Baton Rouge Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
SoB:														
Sharkey	0-7	---	---	40-60	1.20-1.50	0.00-0.42	0.12-0.18	9.0-25.0	0.5-4.0	.32	.32	5	4	86
	7-55	1-3	---	60-90	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.0-0.5	.28	.28			
	55-80	---	---	25-90	1.20-1.65	0.42-1.41	0.12-0.18	6.0-8.9	0.0-0.5	.28	.28			
Tunica	0-6	---	---	35-75	1.45-1.55	0.00-0.42	0.15-0.20	6.0-8.9	1.0-3.0	.32	.32	5	4	86
	6-26	---	---	35-75	1.45-1.55	0.00-0.42	0.15-0.20	6.0-8.9	0.0-0.5	.32	.32			
	26-60	---	---	10-32	1.40-1.50	0.42-14.11	0.10-0.22	0.0-2.9	0.0-0.5	.32	.32			
SpA:														
Springfield	0-4	---	---	5-20	1.35-1.65	4.23-14.11	0.21-0.24	0.0-2.9	0.5-2.0	.43	.43	5	5	56
	4-16	---	---	5-20	1.35-1.65	4.23-14.11	0.21-0.24	0.0-2.9	0.5-1.0	.43	.43			
	16-36	---	---	35-60	1.20-1.50	0.42-1.41	0.08-0.19	6.0-8.9	0.5-1.0	.32	.32			
	36-74	---	---	20-38	1.30-1.60	0.42-4.23	0.14-0.23	3.0-5.9	0.0-0.5	.32	.32			
TaD:														
Tangi	0-5	---	---	2-12	1.35-1.65	4.23-14.11	0.20-0.24	0.0-2.9	0.5-4.0	.49	.49	3	5	56
	5-22	---	---	18-30	1.35-1.65	4.23-14.11	0.20-0.24	0.0-2.9	0.0-0.5	.43	.43			
	22-40	---	---	20-35	1.45-1.85	0.42-1.41	0.08-0.14	0.0-2.9	0.0-0.5	.32	.32			
	40-80	---	---	35-55	1.40-1.80	0.00-0.42	0.08-0.14	3.0-5.9	0.0-0.5	.28	.28			
ThA:														
Thibaut	0-5	---	---	35-75	1.45-1.55	0.00-0.42	0.15-0.20	6.0-8.9	1.0-3.0	.32	.32	5	4	86
	5-25	---	---	35-75	1.45-1.55	0.00-0.42	0.15-0.20	6.0-8.9	0.0-0.5	.32	.32			
	25-80	---	---	10-32	1.40-1.50	0.42-14.11	0.10-0.22	0.0-2.9	0.0-0.5	.32	.32			

USDA Natural Resources Conservation Service

This report shows only the major soils in each map unit. Others may exist.

Tabular Data Version: 5
Tabular Data Version Date: 10/01/2007

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Physical Soil Properties

East Baton Rouge Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
TuB:														
Toula	0-4	---	---	2-12	1.35-1.65	4.23-14.11	0.22-0.25	0.0-2.9	0.5-4.0	.49	.49	3	5	56
	4-7	---	---	2-12	1.35-1.65	4.23-14.11	0.22-0.25	0.0-2.9	0.5-1.5	.49	.49			
	7-22	---	---	12-30	1.35-1.65	4.23-14.11	0.14-0.24	0.0-2.9	0.5-1.0	.43	.43			
	22-52	---	---	18-35	1.45-1.85	0.42-1.41	0.08-0.12	0.0-2.9	0.0-0.5	.37	.37			
	52-65	---	---	12-35	1.35-1.85	4.23-14.11	0.11-0.23	0.0-2.9	0.0-0.5	.37	.37			
UA:														
Made land	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UrA:														
Urban land	0-6	---	---	---	---	1.41-4.23	---	---	0.0-0.5	---	---	---	8	0
W:														
Water	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This report shows only the major soils in each map unit. Others may exist.

USDA Natural Resources Conservation Service

Tabular Data Version: 5
Tabular Data Version Date: 10/01/2007

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Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

"Depth" to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

"Sand" as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

"Silt" as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

"Clay" as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (Ksat), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

"Moist bulk density" is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

"Saturated hydraulic conductivity (Ksat)" refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields.

"Available water capacity" refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

"Linear extensibility" refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

"Organic matter" is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Physical Soil Properties

"Erosion factors" are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and Ksat. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

"Erosion factor Kf" indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

"Erosion factor T" is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

"Wind erodibility groups" are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

"Wind erodibility index" is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. (http://www.soils.usda.gov)

*** Primary Characterization Data ***

(East Baton Rouge Parish, Louisiana)

Pedon ID: 61LA033008

Print Date: Aug 10 2011 3:59PM

Sampled as : Calhoun
Revised to correlated on Aug 01, 1992 : Calhoun ; Fine-silty, mixed, active, thermic Typic Glossaqualf

SSL - Project NL40001 SSIR SAMPLES
- Site ID 61LA033008 Lat: 30° 22' 39.00" north Long: 91° 5' 30.00" west MLRA: 134
- Pedon No. 40A1323
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Soil Conservation Service
Lincoln Soil Survey Laboratory
Soil Laboratory
Lincoln, Nebraska

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
40A10070	Ap	AP	0-13	15084				SI
40A10071	Eg	A2 G	13-41	15085				SIL
40A10072	Btg1	B21T G	41-79	15086				SICL
40A10073	Btg2	B22T G	79-104	15087				SIL
40A10074	B1	B31	104-130	15088				SIL
40A10075	B2	B32	130-163	15089				SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
CEC Activity, CEC7/Clay, Weighted Average	0.55	(NA)
Clay, carbonate free, Weighted Average	27	% wt
Weighted Particles, 0.1-75mm, 75 mm Base	2	% wt
Volume, >2mm, Weighted Average	0	% vol
Clay, total, Weighted Average	27	% wt

Weighted averages based on control section: 41-91 cm

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002	-2- Silt .002 -.05	-3- Sand .05 -2	-4- Fine < .0002	-5- CO_3 < .002	-6- Fine .002 -.02	-7- Coarse .02 -.05	-8- VF .05 -.10	-9- F .10 -.25	-10- M .25 -.50	-11- C .5 -1	-12- VC 1 -2	-13- 2 -5	-14- 5 -20	-15- 20 -75	-16- .1-75	-17- >2 mm wt % whole soil
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - - -)					(Rock Fragments (mm))				
				(- % of <2mm Mineral Soil -)												(- - - - - - - - Weight - - - - - - - -)				
				3A1	3A1	3A1			3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
40A10070	0-13	Ap	S	8.9	87.4	3.7			34.1	53.3	1.3	0.3	0.1	0.5	1.5	--	--	--	2	--
40A10071	13-41	Eg	S	16.3	81.7	2.0			45.4	36.3	1.0	0.3	0.1	0.2	0.4	--	--	--	1	--
40A10072	41-79	Btg1	S	27.9	69.7	2.4			36.0	33.7	0.8	0.3	0.2	0.5	0.6	--	--	--	2	--
40A10073	79-104	Btg2	S	23.6	72.9	3.5			32.5	40.4	1.1	0.4	0.3	0.8	0.9	--	--	--	2	--
40A10074	104-130	B1	S	17.9	77.6	4.5			33.8	43.8	1.3	0.8	0.5	1.1	0.8	--	--	--	3	--
40A10075	130-163	B2	S	16.7	77.8	5.5			30.9	46.9	1.6	1.1	0.8	1.3	0.7	--	--	--	4	--

*** Primary Characterization Data ***

Pedon ID: 61LA033008 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 3:59PM

Sampled As : Calhoun

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1323

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa (- - - g cm^{-3} - - -)	-2- Oven Dry 4A1h	-3- Cole Whole Soil	-4- (- - - - - - - - - - - Water Content - - - - - - - - - - -) 6 kPa (- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)	-5- 10 kPa	-6- 33 kPa 4B1b	-7- 1500 kPa 4B2a	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil cm^3 cm^{-3}	-11- Aggst Stabl 2-0.5mm %	-12- (- - Ratio/Clay - -) CEC7	-13- 1500 kPa
40A10070	0-13	Ap	S		1.41				25.2	5.1			0.29		0.67	0.57
40A10071	13-41	Eg	S							7.2					0.48	0.44
40A10072	41-79	Btg1	S		1.54				26.8	12.9			0.20		0.53	0.46
40A10073	79-104	Btg2	S							11.9					0.63	0.50
40A10074	104-130	B1	S							9.5					0.69	0.53
40A10075	130-163	B2	S		1.57				21.8	9.9			0.17		0.77	0.59

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL pct <0.4mm	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field (- - - - - - - - g cm^{-3} - - - - - - -) 4A1a	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field (- % of < 2mm -) 4B4	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
40A10070	0-13	Ap	CLODDB			1.38			27.4							
40A10072	41-79	Btg1	CLODDB			1.48			24.5							
40A10075	130-163	B2	CLODDB			1.53			24.5							

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C (- - - - - - % of <2 mm - - - - - -)	-2- N 6B1a	-3- S	-4- Org C 6A1a	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe (- % of < 2mm - - - - - - - - - - - - - - - - - -) 6C1a	-7- Al	-8- Mn	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn mg kg^{-1}	-15- (- - - Na Pyro-Phosphate - - -) C (- - - - - - % of < 2mm - - - - -)	-16- Fe	-17- Al	-18- Mn
40A10070	0-13	Ap	S		0.085		0.91	11	1.3												
40A10071	13-41	Eg	S		0.036		0.29	8	0.6												
40A10072	41-79	Btg1	S		0.021		0.11	5	0.8												
40A10073	79-104	Btg2	S				0.06		0.8												
40A10074	104-130	B1	S				0.06		1.1												

40A10075	130-163	B2	S	0.06	1.1

*** Primary Characterization Data ***

Pedon ID: 61LA033008 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 3:59PM

Sampled As : Calhoun

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1323

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- Sum Bases	-6- Acid-ity	-7- Extr Al	-8- KCl Mn	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Sum	-14- Base NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)								CEC8	CEC7	ECEC		(- - - - Base - - - -)	
																(- Saturation -)	
				(- - - - - - - - - - - - - - - - - - cmol(+) kg^{-1} -)							mg kg^{-1}	(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)		
				6N2b	6O2b	6P2a	6Q2a		6H1a				5A1a				
40A10070	0-13	Ap	S	2.0	0.6	0.1	0.1	2.8	5.6			8.4	6.0			33	47
40A10071	13-41	Eg	S	2.2	1.0	0.3	0.1	3.6	6.5			10.1	7.8			36	46
40A10072	41-79	Btg1	S	5.6	3.3	0.8	0.2	9.9	8.5			18.4	14.8			54	67
40A10073	79-104	Btg2	S	7.4	4.1	1.0	0.2	12.7	4.9			17.6	14.8			72	86
40A10074	104-130	B1	S	7.1	3.6	1.0	0.2	11.9	3.3			15.2	12.4			78	96
40A10075	130-163	B2	S	8.0*	3.6	1.1	0.2	12.9	3.0			15.9	12.8			81	100

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na %	-20- SAR
				(- Water Extracted From Saturated Paste -)																			
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)								(- - - - % - - - -)		(- - dS m^{-1} - -)			
																						5D2	
40A10070	0-13	Ap	S																			2	
40A10071	13-41	Eg	S																			4	
40A10072	41-79	Btg1	S																			5	
40A10073	79-104	Btg2	S																			7	
40A10074	104-130	B1	S																			8	
40A10075	130-163	B2	S																			9	

*** Primary Characterization Data ***

Pedon ID: 61LA033008 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 3:59PM

Sampled As : Calhoun

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1323

pH & Carbonates

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
										As $CaCO_3$		As $CaSO_4$*$2H_2O$		Resist
	Depth				$CaCl_2$ 0.01M	H_2O	Sat			<2mm	<20mm	<2mm	<20mm	ohms
Layer	(cm)	Horz	Prep	KCl	1:2	1:1	Paste 8C1b	Sulf	NaF	(- - - - - - - - - - - - %		- - - - - - - - - - - -)		cm^{-1}
40A10070	0-13	Ap	S				5.1							
40A10071	13-41	Eg	S				5.0							
40A10072	41-79	Btg1	S				4.7							
40A10073	79-104	Btg2	S				5.2							
40A10074	104-130	B1	S				5.9							
40A10075	130-163	B2	S				6.4							

*** Primary Characterization Data ***

Pedon ID: 61LA033009 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 3:59PM

Sampled as : Verdun
Revised to correlated on Aug 01, 1992 : Verdun ; Fine-silty, mixed, superactive, thermic Glossic Natraqualf

SSL - Project NL40001 SSIR SAMPLES
- Site ID 61LA033009 Lat: 30° 27' 59.00" north Long: 91° 3' 17.00" west MLRA: 134
- Pedon No. 40A1329
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Soil Conservation Service
Lincoln Soil Survey Laboratory
Soil Laboratory
Lincoln, Nebraska

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
40A10113	Ap1	AP1	0-10	15090				SI
40A10114	Ap2	AP2	10-18	15091				SIL
40A10115	Bt1	B21 T	18-28	15092				SICL
40A10116	Bt2	B22 T	28-38	15093				SICL
40A10117	Bt3	B23 T	38-53	15094				SICL
40A10118	Bt4	B24 T	53-81	15095				SICL
40A10119	B	B31	81-112	15096				SIL
40A10120	C	C	112-152	15097				SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
CEC Activity, CEC7/Clay, Weighted Average	0.61	(NA)
Clay, carbonate free, Weighted Average	28	% wt
Weighted Particles, 0.1-75mm, 75 mm Base	1	% wt
Volume, >2mm, Weighted Average	1	% vol
Clay, total, Weighted Average	28	% wt

Weighted averages based on control section: 28-78 cm

*** Primary Characterization Data ***

Pedon ID: 61LA033009 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 3:59PM

Sampled As : Verdun

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1329

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002 (% of <2mm Mineral Soil) 3A1	-2- Silt .002 -.05 (Total) 3A1	-3- Sand .05 -2 (Total) 3A1	-4- Fine < .0002 (Clay)	-5- CO_3 < .002 (Clay)	-6- Fine .002 -.02 (Silt) 3A1	-7- Coarse .02 -.05 (Silt) 3A1	-8- VF .05 -.10 (Sand) 3A1	-9- F .10 -.25 (Sand) 3A1	-10- M .25 -.50 (Sand) 3A1	-11- C .5 -1 (Sand) 3A1	-12- VC 1 -2 (Sand) 3A1	-13- 2 -5 (Rock Fragments (mm) Weight, % of <75mm) 3B1	-14- 5 -20 (Rock Fragments (mm) Weight, % of <75mm) 3B1	-15- 20 -75 (Rock Fragments (mm) Weight, % of <75mm) 3B1	-16- .1- 75 (Rock Fragments (mm) Weight, % of <75mm)	-17- >2 mm wt % whole soil
40A10113	0-10	Ap1	S	10.3	83.5	6.2			38.8	44.7	2.0	0.4	0.3	1.5	2.0	--	--	--	4	--
40A10114	10-18	Ap2	S	15.0	79.5	5.5			40.7	38.8	1.4	0.4	0.3	1.6	1.8	--	--	--	4	--
40A10115	18-28	Bt1	S	28.7	68.6	2.7			35.8	32.8	1.1	0.4	0.2	0.4	0.6	--	--	--	2	--
40A10116	28-38	Bt2	S	28.4	69.7	1.9			33.8	35.9	1.3	0.3	0.1	0.1	0.1	--	--	--	1	--
40A10117	38-53	Bt3	S	27.5	70.6	1.9			34.4	36.2	1.4	0.3	0.1	0.1	tr	--	--	--	1	--
40A10118	53-81	Bt4	S	28.0	69.7	2.3			35.5	34.2	1.3	0.3	0.2	0.3	0.2	3	2	--	1	5
40A10119	81-112	B	S	24.2	73.8	2.0			35.8	38.0	1.1	0.3	0.1	0.3	0.2	--	--	--	1	--
40A10120	112-152	C	S	22.6	75.4	2.0			44.4	31.0	1.3	0.3	0.1	0.2	0.1	--	--	--	1	--

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa (g cm^{-3})	-2- Oven Dry (g cm^{-3}) 4A1h	-3- Cole Whole Soil	-4- 6 kPa (% of < 2mm Water Content)	-5- 10 kPa (% of < 2mm Water Content)	-6- 33 kPa (% of < 2mm Water Content) 4B1b	-7- 1500 kPa (% of < 2mm Water Content) 4B2a	-8- 1500 kPa Ratio Moist	-9- 1500 kPa Ratio AD/OD	-10- WRD Whole Soil cm^3 cm^{-3}	-11- Aggst Stabl 2-0.5mm %	-12- (Ratio/Clay) CEC7	-13- (Ratio/Clay) 1500 kPa
40A10113	0-10	Ap1	S		1.45				24.9	6.2			0.27		0.66	0.60
40A10114	10-18	Ap2	S							7.8					0.51	0.52
40A10115	18-28	Bt1	S							14.9					0.54	0.52
40A10116	28-38	Bt2	S							14.5					0.62	0.51
40A10117	38-53	Bt3	S							14.9					0.62	0.54
40A10118	53-81	Bt4	S		1.70				26.1	16.2			0.14		0.60	0.58
40A10119	81-112	B	S							14.4					0.64	0.60
40A10120	112-152	C	S		1.68				25.1	13.1			0.17		0.67	0.58

*** Primary Characterization Data ***

(East Baton Rouge Parish, Louisiana)

Pedon ID: 61LA033009 — Print Date: Aug 10 2011 3:59PM

Sampled As : Verdun

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1329

Water Content				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-
				(- - Atterberg - -)		(- - - - - Bulk Density - - - - -)			(- Water Content -)							
				(- - - Limits - - -)		Field	Recon	Recon	Field	Recon	(- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - -)					
				LL	PI		33	Oven		33	6	10	33	100	200	500
	Depth						kPa	Dry		kPa	kPa	kPa	kPa	kPa	kPa	kPa
Layer	(cm)	Horz	Prep	pct <0.4mm		(- - - - - - - - g cm^{-3} - - - - - - -)			(- % of < 2mm -)							
						4A1a			4B4							
40A10113	0-10	Ap1	CLODDB			1.43			23.8							
40A10118	53-81	Bt4	CLODDB			1.60			16.7							
40A10120	112-152	C	CLODDB			1.60			21.0							

Carbon & Extractions				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
				(- - - - - Total - - - - -)			Org	C/N	(- - - Dith-Cit Ext - - -)			(- - - - - - Ammonium Oxalate Extraction - - - - - -)						(- - - Na Pyro-Phosphate - - -)			
				C	N	S	C	Ratio	Fe	Al	Mn	Al+½Fe	ODOE	Fe	Al	Si	Mn	C	Fe	Al	Mn
Layer	Depth (cm)	Horz	Prep	(- - - - - - % of <2 mm - - - - - - -)					(- % of < 2mm - - - - - - - - - - - - - - - - - - -)								mg kg^{-1}	(- - - - - - % of < 2mm - - - - -)			
					6B1a		6A1a		6C1a												
40A10113	0-10	Ap1	S		0.115		1.42	12	1.8												
40A10114	10-18	Ap2	S		0.072		0.71	10	1.9												
40A10115	18-28	Bt1	S		0.068		0.52	8	1.3												
40A10116	28-38	Bt2	S		0.038		0.29	8	0.9												
40A10117	38-53	Bt3	S		0.031		0.24	8	0.9												
40A10118	53-81	Bt4	S		0.018		0.11	6	1.6												
40A10119	81-112	B	S				0.06		1.6												
40A10120	112-152	C	S				0.03		1.2												

*** Primary Characterization Data ***

Pedon ID: 61LA033009 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 3:59PM

Sampled As : Verdun

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1329

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca (6N2b)	-2- Mg (6O2b)	-3- Na (6P2a)	-4- K (6Q2a)	-5- Sum Bases	-6- Acid-ity (6H1a)	-7- Extr Al (6G1d)	-8- KCl Mn mg kg^{-1}	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC (5A1a)	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Saturation Sum	-14- Base Saturation NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)								(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)		
40A10113	0-10	Ap1	S	1.9	1.0	0.4	0.1	3.4	6.2	tr		9.6	6.8			35	50
40A10114	10-18	Ap2	S	1.7	1.0	1.2	0.1	4.0	6.5	tr		10.5	7.6			38	53
40A10115	18-28	Bt1	S	5.6	4.0	5.2	0.2		4.5	tr			15.5			77	97
40A10116	28-38	Bt2	S	6.4*	5.0	6.2	0.2		1.9				17.7			90	100
40A10117	38-53	Bt3	S	6.6*	5.3	6.7	0.2		1.6				17.0			92	100
40A10118	53-81	Bt4	S	8.9*	5.1	7.2	0.2		0.7				16.7			97	100
40A10119	81-112	B	S	9.0*	4.2	5.7	0.2		1.4				15.5			93	100
40A10120	112-152	C	S	8.3*	3.8	4.6	0.2		1.2				15.1			93	100

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na (6P1a)	-4- K (6Q1a)	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O (8A)	-16- Total Salts (8D5)	-17- Elec Cond (8A1a)	-18- Pred Elec Cond	-19- Exch Na % (5D2)	-20- SAR
				(- - - - - mmol(+) L^{-1} - - - - -)				(- - - - - - - -

*** Primary Characterization Data ***

Pedon ID: 61LA033009 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 3:59PM

Sampled As : Verdun

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1329

pH & Carbonates

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-
				(- - - - - - - - - - - - - - - - - - pH					- - - - - - - - - - - - - - - - -)	(- - Carbonate - - -)		(- - Gypsum - - -)		
										As $CaCO_3$		As $CaSO_4$*$2H_2O$		Resist
	Depth				$CaCl_2$ 0.01M	H_2O	Sat			<2mm	<20mm	<2mm	<20mm	ohms
Layer	(cm)	Horz	Prep	KCl	1:2	1:1	Paste	Sulf	NaF	(- - - - - - - - - - - -		%	- - - - - - - - - - - -)	cm^{-1}
							8C1b			6E1b				
40A10113	0-10	Ap1	S				5.5							
40A10114	10-18	Ap2	S				5.8							
40A10115	18-28	Bt1	S				6.7			--				
40A10116	28-38	Bt2	S				7.4			--				
40A10117	38-53	Bt3	S				7.9			--				
40A10118	53-81	Bt4	S				8.4			--				
40A10119	81-112	B	S				8.3			--				
40A10120	112-152	C	S				8.0			--				

*** Primary Characterization Data ***

Pedon ID: 61LA033010 — (East Baton Rouge Parish, Louisiana) — Print Date: Aug 10 2011 3:59PM

Sampled as : Verdun
Revised to correlated on Aug 01, 1992 : Verdun ; Fine-silty, mixed, active, thermic Glossic Natraqualf

SSL - Project NL40001 SSIR SAMPLES
- Site ID 61LA033010 Lat: 30° 27' 40.00" north Long: 91° 2' 20.00" west MLRA: 134
- Pedon No. 40A1330
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Soil Conservation Service
Lincoln Soil Survey Laboratory
Soil Laboratory
Lincoln, Nebraska

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
40A10121	Ap1	AP	0-10	15098				SI
40A10122	Ap2	AP2	10-15	15099				SI
40A10123	Bt1	B21 T	15-28	15100				SICL
40A10124	Bt2	B22 T	25-48	15101				SICL
40A10125	Bt3	B23 T	48-89	15102				SIL
40A10126	B	B3	89-122	15103				SIL
40A10127			122-152	15104				SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
CEC Activity, CEC7/Clay, Weighted Average	0.42	(NA)
Clay, carbonate free, Weighted Average	23	% wt
Weighted Particles, 0.1-75mm, 75 mm Base	1	% wt
Volume, >2mm, Weighted Average	0	% vol
Clay, total, Weighted Average	23	% wt

Weighted averages based on control section: 15-65 cm

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - - -)					(Rock Fragments (mm))				
				Clay < .002	Silt .002 -.05	Sand .05 -2	Fine < .0002	CO_3 < .002	Fine .002 -.02	Coarse .02 -.05	VF .05 -.10	F .10 -.25	M .25 -.50	C .5 -1	VC 1 -2	(- - - - - - - - Weight - - - - - - - -) 2 -5	5 -20	20 -75	.1- 75	>2 mm wt % whole soil
				(- % of <2mm Mineral Soil -)												(- - - - - - - % of <75mm - - - - - -)				
				3A1	3A1	3A1			3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
40A10121	0-10	Ap1	S	7.5	85.9	6.6			36.5	49.4	1.7	0.4	0.4	1.8	2.3	--	--	--	5	--
40A10122	10-15	Ap2	S	11.4	82.7	5.9			38.0	44.7	1.6	0.4	0.4	1.8	1.7	--	--	--	4	--
40A10123	15-28	Bt1	S	31.0	66.1	2.9			33.9	32.2	1.2	0.3	0.2	0.7	0.5	--	--	--	2	--
40A10124	25-48	Bt2	S	32.7	65.6	1.7			33.4	32.2	1.2	0.2	0.1	0.2	tr	--	--	--	1	--
40A10125	48-89	Bt3	S	26.7	71.6	1.7			35.8	35.8	1.2	0.1	0.1	0.2	0.1	--	--	--	1	--

40A10126	89-122	B	S	24.0	74.0	2.0		35.8	38.2	1.5	0.2	0.1	0.2	tr	--	--	--	1	--
40A10127	122-152		S	23.8	73.4	2.8		34.0	39.4	1.9	0.2	0.1	0.4	0.2	--	--	--	1	--

*** Primary Characterization Data ***

Pedon ID: 61LA033010 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 3:59PM

Sampled As : Verdun

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1330

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa (- - - g cm^{-3} - - -)	-2- Oven Dry 4A1h	-3- Cole Whole Soil	-4- (- - - - - - - - - - - Water Content - - - - - - - - - - -) 6 kPa (- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)	-5- 10 kPa	-6- 33 kPa 4B1b	-7- 1500 kPa 4B2a	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil cm^3 cm^{-3}	-11- Aggst Stabl 2-0.5mm %	-12- (- - Ratio/Clay - -) CEC7	-13- 1500 kPa
40A10121	0-10	Ap1	S		1.49				20.3	5.1			0.22		0.85	0.68
40A10122	10-15	Ap2	S							6.1					0.65	0.54
40A10123	15-28	Bt1	S							16.3					0.57	0.53
40A10124	25-48	Bt2	S							18.2					0.60	0.56
40A10125	48-89	Bt3	S		1.66				28.4	15.8			0.18		0.63	0.59
40A10126	89-122	B	S		1.72				24.6	15.3			0.13		0.68	0.64
40A10127	122-152		S							13.2					0.66	0.55

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL pct <0.4mm	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field (- - - - - - - - g cm^{-3} - - - - - - -) 4A1a	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field (- % of < 2mm -) 4B4	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
40A10121	0-10	Ap1	CLODDB			1.49			18.7							
40A10125	48-89	Bt3	CLODDB			1.64			13.0							
40A10126	89-122	B	CLODDB			1.69			14.6							

*** Primary Characterization Data ***

Pedon ID: 61LA033010 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 3:59PM
Sampled As : Verdun
USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1330

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- C (- - - - - - % of <2 mm - - - - - -) 6B1a	-2- N	-3- S	-4- Org C 6A1a	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe (- % of < 2mm - - - - - - - - - - - - - - - - - - -) 6C1a	-7- Al	-8- Mn	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn mg kg^{-1}	-15- (- - - Na Pyro-Phosphate - - -) C (- - - - - - % of < 2mm - - - - -)	-16- Fe	-17- Al	-18- Mn
40A10121	0-10	Ap1	S		0.126		1.50	12	2.0												
40A10122	10-15	Ap2	S		0.070		0.70	10	2.3												
40A10123	15-28	Bt1	S		0.081		0.71	9	1.5												
40A10124	25-48	Bt2	S		0.036		0.28	8	1.7												
40A10125	48-89	Bt3	S		0.017		0.10	6	1.6												
40A10126	89-122	B	S				0.05		1.4												
40A10127	122-152		S				0.04		1.2												

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - - NH_4OAC Extractable Bases - - - - -) Ca (- - - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -) 6N2b	-2- Mg 6O2b	-3- Na 6P2a	-4- K 6Q2a	-5- Sum Bases	-6- Acid-ity 6H1a	-7- Extr Al	-8- KCl Mn mg kg^{-1}	-9- CEC8 Sum Cats (- - - - cmol(+) kg^{-1} - - -)	-10- CEC7 NH_4 OAC 5A1a	-11- ECEC Bases +Al	-12- Al Sat (- - - - - - - - % - - - - - - - -)	-13- (- - - - Base - - - -) (- Saturation -) Sum	-14- NH_4OAC
40A10121	0-10	Ap1	S	2.8	1.2	0.4	0.1	4.5	4.0			8.5	6.4			53	70
40A10122	10-15	Ap2	S	3.5	1.4	1.3	0.1		3.0				7.4			68	85
40A10123	15-28	Bt1	S	7.7	4.4	5.2	0.2		3.3				17.6			84	99
40A10124	25-48	Bt2	S	8.7*	6.4	6.6	0.2		1.4				19.5			94	100
40A10125	48-89	Bt3	S	6.4*	5.4	6.2	0.2		1.2				16.8			94	100
40A10126	89-122	B	S	6.4*	5.2	5.5	0.2		1.2				16.2			94	100
40A10127	122-152		S	6.7*	5.0	4.8	0.2		0.9				15.7			95	100

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

*** Primary Characterization Data ***

Pedon ID: 61LA033010 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 3:59PM
Sampled As : Verdun
USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1330

Salt -1- -2- -3- -4- -5- -6- -7- -8- -9- -10- -11- -12- -13- -14- -15- -16- -17- -18- -19- -20-

Layer	Depth (cm)	Horz	Prep	Ca	Mg	Na	K	CO_3	HCO_3	F	Cl	PO_4	Br	OAC	SO_4	NO_2	NO_3	H_2O	Total Salts	Elec Cond	Pred Elec Cond	Exch Na	SAR
				(- Water Extracted From Saturated Paste -)																			
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)								(- - - - % - - - -)		(- - dS m^{-1} - -)			
						6P1a	6Q1a											8A	8D5	8A1a		5D2	
40A10121	0-10	Ap1	S			3.2	0.1											43.3	tr	0.60		4	
40A10122	10-15	Ap2	S			6.5	tr											34.3	tr	0.80		15	
40A10123	15-28	Bt1	S			5.7	tr											62.9	tr	0.70		28	
40A10124	25-48	Bt2	S			7.2	tr											82.8	tr	0.90		31	
40A10125	48-89	Bt3	S			5.2	tr											90.0	tr	0.60		34	
40A10126	89-122	B	S			3.7	tr											88.2	tr	0.50		32	
40A10127	122-152		S			3.3	tr											78.8	tr	0.40		29	

pH & Carbonates

Layer	Depth (cm)	Horz	Prep	-1- KCl	-2- $CaCl_2$ 0.01M 1:2	-3- H_2O 1:1	-4- Sat Paste	-5- Sulf	-6- NaF	-7- Carbonate As $CaCO_3$ <2mm	-8- Carbonate As $CaCO_3$ <20mm	-9- Gypsum As $CaSO_4$*$2H_2O$ <2mm	-10- Gypsum As $CaSO_4$*$2H_2O$ <20mm	-11- Resist ohms cm^{-1}
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
							8C1b			(- - - - - - - - - - - - % - - - - - - - - - - -)				
										6E1b				
40A10121	0-10	Ap1	S				5.7							
40A10122	10-15	Ap2	S				6.8			--				
40A10123	15-28	Bt1	S				7.5			--				
40A10124	25-48	Bt2	S				8.2			--				
40A10125	48-89	Bt3	S				8.1			--				
40A10126	89-122	B	S				8.0			--				
40A10127	122-152		S				7.9			--				

*** Primary Characterization Data ***

Pedon ID: 61LA033002 — (East Baton Rouge Parish, Louisiana) — Print Date: Aug 10 2011 4:00PM

Sampled as : Loring
Revised to correlated on Jun 01, 1965 : Loring ; Fine-silty, mixed, active, thermic Typic Fragiudalf

SSL - Project NL40001 SSIR SAMPLES
- Site ID 61LA033002 Lat: 30° 41' 5.00" north Long: 91° 13' 43.00" west MLRA: 134
- Pedon No. 40A1335
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Soil Conservation Service
Lincoln Soil Survey Laboratory
Soil Laboratory
Lincoln, Nebraska

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
40A10164	Ap	AP	0-25	15044				SI
40A10165	B	B1	25-33	15045				SIL
40A10166	Bt	B2 T	33-58	15046				SICL
40A10167	Bx1	B X1	58-97	15047				SIL
40A10168	Bx2	B X2	97-124	15048				SIL
40A10169	Bx3	B X3	124-152	15049				SIL
40A10170	Bx4	B X4	152-178	15050				SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
CEC Activity, CEC7/Clay, Weighted Average	0.41	(NA)
Clay, carbonate free, Weighted Average	31	% wt
Weighted Particles, 0.1-75mm, 75 mm Base	0	% wt
Volume, >2mm, Weighted Average	0	% vol
Clay, total, Weighted Average	31	% wt

Weighted averages based on control section: 33-58 cm

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - - -)					(Rock Fragments (mm))				
				Clay < .002	Silt .002 -.05	Sand .05 -2	Fine < .0002	CO_3 < .002	Fine .002 -.02	Coarse .02 -.05	VF .05 -.10	F .10 -.25	M .25 -.50	C .5 -1	VC 1 -2	(- - - - - - - - Weight - - - - - - - -) 2 -5	5 -20	20 -75	.1- 75	>2 mm wt % whole soil
				(- % of <2mm Mineral Soil -)												(- - - - - - - % of <75mm - - - - - -)				
				3A1	3A1	3A1			3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
40A10164	0-25	Ap	S	9.7	89.4	0.9			38.3	51.1	0.6	0.2	0.1	tr	tr	--	--	--	tr	--
40A10165	25-33	B	S	21.2	76.7	2.1			31.2	45.5	1.3	0.4	0.2	0.1	0.1	--	--	--	1	--
40A10166	33-58	Bt	S	31.2	67.9	0.9			32.5	35.4	0.8	0.1	tr	tr	tr	--	--	--	tr	--
40A10167	58-97	Bx1	S	23.7	75.4	0.9			37.0	38.4	0.7	0.1	tr	tr	0.1	--	--	--	tr	--
40A10168	97-124	Bx2	S	21.1	77.9	1.0			37.7	40.2	0.8	0.2	tr	tr	tr	--	--	--	tr	--

40A10169	124-152	Bx3	S	17.9	80.0	2.1	35.1	44.9	1.2	0.6	0.2	0.1	tr	--	--	--	1	--
40A10170	152-178	Bx4	S	16.2	78.3	5.5	33.5	44.8	1.9	1.9	0.8	0.5	0.4	--	--	--	4	--

*** Primary Characterization Data ***

Pedon ID: 61LA033002 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Loring

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1335

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa Oven Dry (- - - g cm^{-3} - - -) 4A1h	-2-	-3- Cole Whole Soil	-4- (- - - - - - - - - - - Water Content - - - - - - - - - - -) 6 kPa (- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)	-5- 10 kPa	-6- 33 kPa 4B1b	-7- 1500 kPa 4B2a	-8- 1500 kPa Ratio Moist	-9- AD/OD	-10- WRD Whole Soil cm^3 cm^{-3}	-11- Aggst Stabl 2-0.5mm %	-12- (- - Ratio/Clay - -) CEC7	-13- 1500 kPa
40A10164	0-25	Ap	S		1.44				18.0	4.6			0.19		0.56	0.47
40A10165	25-33	B	S							8.6					0.40	0.41
40A10166	33-58	Bt	S		1.60				27.4	12.8			0.21		0.41	0.41
40A10167	58-97	Bx1	S		1.58				25.8	10.6			0.22		0.46	0.45
40A10168	97-124	Bx2	S							9.5					0.46	0.45
40A10169	124-152	Bx3	S		1.61				29.0	8.3			0.30		0.50	0.46
40A10170	152-178	Bx4	S							7.4					0.46	0.46

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL pct <0.4mm	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field (- - - - - - - - g cm^{-3} - - - - - - -) 4A1a	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field (- % of < 2mm -) 4B4	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
40A10164	0-25	Ap	CLODDB			1.43			19.6						
40A10166	33-58	Bt	CLODDB			1.48			23.6						
40A10167	58-97	Bx1	CLODDB			1.51			23.9						
40A10169	124-152	Bx3	CLODDB			1.57			22.3						

*** Primary Characterization Data ***

(East Baton Rouge Parish, Louisiana)

Pedon ID: 61LA033002 — Print Date: Aug 10 2011 4:00PM

Sampled As : Loring

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1335

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- C (- - - - - - % of <2 mm - - - - - -)	-2- N (- - - - - Total - - - - -) 6B1a	-3- S (- - - - - Total - - - - -)	-4- Org C (- - - - - - % of <2 mm - - - - - -) 6A1a	-5- C/N Ratio	-6- Fe (- - - Dith-Cit Ext - - -) 6C1a	-7- Al (- - - Dith-Cit Ext - - -)	-8- Mn (- - - Dith-Cit Ext - - -)	-9- Al+½Fe (- - - - - - Ammonium Oxalate Extraction - - - - - -) % of < 2mm	-10- ODOE (- - - - - - Ammonium Oxalate Extraction - - - - - -) % of < 2mm	-11- Fe (- - - - - - Ammonium Oxalate Extraction - - - - - -) % of < 2mm	-12- Al (- - - - - - Ammonium Oxalate Extraction - - - - - -) % of < 2mm	-13- Si (- - - - - - Ammonium Oxalate Extraction - - - - - -) % of < 2mm	-14- Mn (- - - - - - Ammonium Oxalate Extraction - - - - - -) mg kg^{-1}	-15- C (- - - Na Pyro-Phosphate - - -) (- - - - - - % of < 2mm - - - - -)	-16- Fe (- - - Na Pyro-Phosphate - - -) (- - - - - - % of < 2mm - - - - -)	-17- Al (- - - Na Pyro-Phosphate - - -) (- - - - - - % of < 2mm - - - - -)	-18- Mn (- - - Na Pyro-Phosphate - - -) (- - - - - - % of < 2mm - - - - -)
40A10164	0-25	Ap	S		0.068		0.63	9	0.8												
40A10165	25-33	B	S		0.050		0.38	8	1.7												
40A10166	33-58	Bt	S		0.046		0.23	5	2.3												
40A10167	58-97	Bx1	S		0.029		0.13	4	2.3												
40A10168	97-124	Bx2	S				0.08		2.1												
40A10169	124-152	Bx3	S				0.06		1.6												
40A10170	152-178	Bx4	S				0.03		1.4												

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca (- - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -) 6N2b	-2- Mg (- - - - - - NH$_4$OAC Extractable Bases - - - - -) 6O2b	-3- Na (- - - - - - NH$_4$OAC Extractable Bases - - - - -) 6P2a	-4- K (- - - - - - NH$_4$OAC Extractable Bases - - - - -) 6Q2a	-5- Sum Bases	-6- Acid-ity (- - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -) 6H1a	-7- Extr Al (- - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -) 6G1d	-8- KCl Mn mg kg^{-1}	-9- CEC8 Sum Cats (- - - - cmol(+) kg^{-1} - - -)	-10- CEC7 NH$_4$ OAC (- - - - cmol(+) kg^{-1} - - -) 5A1a	-11- ECEC Bases +Al (- - - - cmol(+) kg^{-1} - - -)	-12- Al Sat (- - - - - - - - % - - - - - - - -)	-13- (- - - - Base - - - -) (- Saturation -) Sum (- - - - - - - - % - - - - - - - -)	-14- (- - - - Base - - - -) (- Saturation -) NH$_4$OAC (- - - - - - - - % - - - - - - - -)
40A10164	0-25	Ap	S	2.3	0.6	tr	0.1	3.0	5.5	tr		8.5	5.4			35	56
40A10165	25-33	B	S	3.1	1.9	0.1	0.1	5.2	6.9	1.0		12.1	8.4	6.2	16	43	62
40A10166	33-58	Bt	S	2.8	2.9	0.1	0.2	6.0	11.8	3.0		17.8	12.7	9.0	33	34	47
40A10167	58-97	Bx1	S	1.9	3.2	0.1	0.2	5.4	9.6	3.0		15.0	10.9	8.4	36	36	50
40A10168	97-124	Bx2	S	1.9	3.0	0.2	0.2	5.3	8.2	2.0		13.5	9.7	7.3	27	39	55
40A10169	124-152	Bx3	S	1.7	2.5	0.2	0.2	4.6	7.7	2.0		12.3	9.0	6.6	30	37	51
40A10170	152-178	Bx4	S	1.7	1.9	0.1	0.1	3.8	6.0	2.0		9.8	7.4	5.8	34	39	51

*** Primary Characterization Data ***

Pedon ID: 61LA033002 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Loring

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1335

Salt

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-	-19-	-20-
				(- Water Extracted From Saturated Paste -)																			
Layer	Depth (cm)	Horz	Prep	Ca	Mg	Na	K	CO_3	HCO_3	F	Cl	PO_4	Br	OAC	SO_4	NO_2	NO_3	H_2O	Total Salts	Elec Cond	Pred Elec Cond	Exch Na % 5D2	SAR
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)										(- - - - % - - - -)		(- - dS m^{-1} - -)			
40A10164	0-25	Ap	S																			--	
40A10165	25-33	B	S																			1	
40A10166	33-58	Bt	S																			1	
40A10167	58-97	Bx1	S																			1	
40A10168	97-124	Bx2	S																			2	
40A10169	124-152	Bx3	S																			2	
40A10170	152-178	Bx4	S																			1	

pH & Carbonates

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
										As $CaCO_3$		As $CaSO_4$*$2H_2O$		
Layer	Depth (cm)	Horz	Prep	KCl	$CaCl_2$ 0.01M 1:2	H_2O 1:1 8C1a	Sat Paste	Sulf	NaF	<2mm	<20mm	<2mm	<20mm	Resist ohms cm^{-1}
										(- - - - - - - - - - - - % - - - - - - - - - - -)				
40A10164	0-25	Ap	S			5.2								
40A10165	25-33	B	S			4.8								
40A10166	33-58	Bt	S			4.9								
40A10167	58-97	Bx1	S			5.0								
40A10168	97-124	Bx2	S			5.0								
40A10169	124-152	Bx3	S			5.0								
40A10170	152-178	Bx4	S			5.1								

*** Primary Characterization Data ***

Pedon ID: 61LA033007 — (East Baton Rouge Parish, Louisiana) — Print Date: Aug 10 2011 4:00PM

Sampled as : Olivier
Revised to correlated on Aug 01, 1992 : Olivier ; Fine-silty, mixed, active, thermic Aquic Fragiudalf

SSL - Project NL40001 SSIR SAMPLES
- Site ID 61LA033007 Lat: 30° 22' 32.00" north Long: 91° 2' 48.00" west MLRA: 134
- Pedon No. 40A1352
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Soil Conservation Service
Lincoln Soil Survey Laboratory
Soil Laboratory
Lincoln, Nebraska

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
40A10325	Ap	AP	0-13	15077				SI
40A10326	A	A3	13-23	15078				SIL
40A10327	B1	B1	23-28	15079				SIL
40A10328	B2	B2	28-56	15080				SIL
40A10329	Bx1	B X1	56-83	15081				SIL
40A10330	Bx2	B X2	83-105	15082				SIL
40A10331	Bx3	B X3	105-150	15083				SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
CEC Activity, CEC7/Clay, Weighted Average	0.47	(NA)
Clay, carbonate free, Weighted Average	25	% wt
Weighted Particles, 0.1-75mm, 75 mm Base	1	% wt
Volume, >2mm, Weighted Average	0	% vol
Clay, total, Weighted Average	25	% wt

Weighted averages based on control section: 25-56 cm

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - - -)					(Rock Fragments (mm))				
				Clay < .002	Silt .002 -.05	Sand .05 -2	Fine < .0002	CO_3 < .002	Fine .002 -.02	Coarse .02 -.05	VF .05 -.10	F .10 -.25	M .25 -.50	C .5 -1	VC 1 -2	(- - - - - - - - Weight - - - - - - - -) 2 -5	5 -20	20 -75	.1- 75	>2 mm wt % whole soil
				(- % of <2mm Mineral Soil -)												(- - - - - - - % of <75mm - - - - - -)				
				3A1	3A1	3A1			3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
40A10325	0-13	Ap	S	10.6	86.3	3.1			33.5	52.8	1.6	0.4	0.2	0.6	0.3	--	--	--	2	--
40A10326	13-23	A	S	12.7	84.3	3.0			35.1	49.2	1.8	0.3	0.2	0.4	0.3	--	--	--	1	--
40A10327	23-28	B1	S	18.3	79.5	2.2			34.3	45.2	1.4	0.3	0.2	0.2	0.1	--	--	--	1	--
40A10328	28-56	B2	S	25.9	72.5	1.6			34.8	37.7	1.1	0.3	0.1	0.1	tr	--	--	--	1	--
40A10329	56-83	Bx1	S	21.6	76.6	1.8			33.6	43.0	1.1	0.3	0.2	0.2	tr	--	--	--	1	--

40A10330	83-105	Bx2	S	19.8	77.8	2.4	34.9	42.9	1.3	0.4	0.2	0.3	0.2	--	--	--	1	--
40A10331	105-150	Bx3	S	21.4	76.0	2.6	33.0	43.0	1.3	0.4	0.2	0.4	0.3	--	--	--	1	--

*** Primary Characterization Data ***

Pedon ID: 61LA033007 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Olivier

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1352

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa (- - - g cm^{-3} - - -)	-2- Oven Dry 4A1h	-3- Cole Whole Soil	-4- (- - - - - - - - - - - Water Content - - - - - - - - - - -) 6 kPa (- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)	-5- 10 kPa	-6- 33 kPa 4B1b	-7- 1500 kPa 4B2a	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil cm^3 cm^{-3}	-11- Aggst Stabl 2-0.5mm %	-12- (- - Ratio/Clay - -) CEC7	-13- 1500 kPa
40A10325	0-13	Ap	S		1.47				22.4	6.2			0.23		0.87	0.58
40A10326	13-23	A	S							6.3					0.52	0.50
40A10327	23-28	B1	S							8.6					0.44	0.47
40A10328	28-56	B2	S		1.50				27.7	11.9			0.23		0.47	0.46
40A10329	56-83	Bx1	S							10.1					0.48	0.47
40A10330	83-105	Bx2	S		1.60				25.2	9.6			0.23		0.54	0.48
40A10331	105-150	Bx3	S							10.4					0.57	0.49

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL pct <0.4mm	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field (- - - - - - - - g cm^{-3} - - - - - - -) 4A1a	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field (- % of < 2mm -) 4B4	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
40A10325	0-13	Ap	CLODDB			1.45			21.2							
40A10328	28-56	B2	CLODDB			1.42			24.3							
40A10330	83-105	Bx2	CLODDB			1.55			24.1							

*** Primary Characterization Data ***

Pedon ID: 61LA033007 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Olivier
USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1352

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- C (- - - - - - % of <2 mm - - - - - -) 6B1a	-2- N	-3- S	-4- Org C 6A1a	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe (- % of < 2mm - - - - - - - - - - - - - - - - - - -) 6C1a	-7- Al	-8- Mn	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn mg kg^{-1}	-15- (- - - Na Pyro-Phosphate - - -) C (- - - - - - % of < 2mm - - - - -)	-16- Fe	-17- Al	-18- Mn
40A10325	0-13	Ap	S		0.116		1.23	11	0.8												
40A10326	13-23	A	S		0.045		0.36	8	0.9												
40A10327	23-28	B1	S		0.038		0.24	6	1.3												
40A10328	28-56	B2	S		0.039		0.21	5	1.8												
40A10329	56-83	Bx1	S		0.025		0.13	5	1.8												
40A10330	83-105	Bx2	S				0.10		1.6												
40A10331	105-150	Bx3	S				0.09		1.3												

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca (- - - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -) 6N2b	-2- Mg 6O2b	-3- Na 6P2a	-4- K 6Q2a	-5- Sum Bases	-6- Acid-ity 6H1a	-7- Extr Al	-8- KCl Mn mg kg^{-1}	-9- CEC8 Sum Cats (- - - - cmol(+) kg^{-1} - - -)	-10- CEC7 NH_4 OAC 5A1a	-11- ECEC Bases +Al	-12- Al Sat (- - - - - - - - % - - - - - - - -)	-13- (- - - - Base - - - -) (- Saturation -) Sum	-14- NH_4OAC
40A10325	0-13	Ap	S	7.0*	2.0	0.1	0.1	9.2	3.7			12.9	9.2			71	100
40A10326	13-23	A	S	4.3	1.1	0.1	0.1	5.6	3.5			9.1	6.6			62	85
40A10327	23-28	B1	S	4.4	1.5	0.1	0.1	6.1	4.9			11.0	8.0			55	76
40A10328	28-56	B2	S	3.9	2.6	0.2	0.2	6.9	9.6			16.5	12.3			42	56
40A10329	56-83	Bx1	S	2.7	2.6	0.3	0.2	5.8	8.6			14.4	10.4			40	56
40A10330	83-105	Bx2	S	2.5	2.6	0.4	0.2	5.7	8.6			14.3	10.7			40	53
40A10331	105-150	Bx3	S	3.0	3.0	0.4	0.2	6.6	9.1			15.7	12.1			42	55

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

*** Primary Characterization Data ***

Pedon ID: 61LA033007 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Olivier
USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1352

Salt -1- -2- -3- -4- -5- -6- -7- -8- -9- -10- -11- -12- -13- -14- -15- -16- -17- -18- -19- -20-

Layer	Depth (cm)	Horz	Prep	Ca	Mg	Na	K	CO_3	HCO_3	F	Cl	PO_4	Br	OAC	SO_4	NO_2	NO_3	H_2O	Total Salts	Elec Cond	Pred Elec Cond	Exch Na % 5D2	SAR
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)										(- - - - % - - - -)		(- - dS m^{-1} - -)			
40A10325	0-13	Ap	S																			1	
40A10326	13-23	A	S																			2	
40A10327	23-28	B1	S																			1	
40A10328	28-56	B2	S																			2	
40A10329	56-83	Bx1	S																			3	
40A10330	83-105	Bx2	S																			4	
40A10331	105-150	Bx3	S																			3	

pH & Carbonates

Layer	Depth (cm)	Horz	Prep	-1- KCl	-2- $CaCl_2$ 0.01M 1:2	-3- H_2O 1:1	-4- Sat Paste 8C1b	-5- Sulf	-6- NaF	-7- Carbonate As $CaCO_3$ <2mm	-8- Carbonate As $CaCO_3$ <20mm	-9- Gypsum As $CaSO_4*2H_2O$ <2mm	-10- Gypsum As $CaSO_4*2H_2O$ <20mm	-11- Resist ohms cm^{-1}
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
										(- - - - - - - - - - - - % - - - - - - - - - - -)				
40A10325	0-13	Ap	S				6.5							
40A10326	13-23	A	S				6.4							
40A10327	23-28	B1	S				5.3							
40A10328	28-56	B2	S				4.8							
40A10329	56-83	Bx1	S				5.0							
40A10330	83-105	Bx2	S				4.7							
40A10331	105-150	Bx3	S				5.0							

*** Primary Characterization Data ***

(East Baton Rouge Parish, Louisiana)

Pedon ID: 61LA033006

Print Date: Aug 10 2011 4:00PM

Sampled as : Olivier
Revised to correlated on Aug 01, 1992 : Olivier ; Fine-silty, mixed, active, thermic Aquic Fragiudalf

SSL - Project NL40001 SSIR SAMPLES
- Site ID 61LA033006 Lat: 30° 22' 43.00" north Long: 91° 5' 29.00" west MLRA: 134
- Pedon No. 40A1353
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Soil Conservation Service
Lincoln Soil Survey Laboratory
Soil Laboratory
Lincoln, Nebraska

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
40A10332	Ap	AP	0-15	15071				SI
40A10333	A	A3	15-33	15072				SIL
40A10334	Bt	B2 T	33-56	15073				SICL
40A10335	Bx / A	B X1& A1I	56-81	15074				SICL
40A10336	B / E	B X2& A12	81-112	15075				SIL
40A10337	B	B3	112-152	15076				SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
CEC Activity, CEC7/Clay, Weighted Average	0.46	(NA)
Clay, carbonate free, Weighted Average	32	% wt
Weighted Particles, 0.1-75mm, 75 mm Base	2	% wt
Volume, >2mm, Weighted Average	0	% vol
Clay, total, Weighted Average	32	% wt

Weighted averages based on control section: 33-56 cm

PSDA & Rock Fragments

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - - -)					(Rock Fragments (mm))				
				Clay	Silt	Sand	Fine	CO_3	Fine	Coarse	VF	F	M	C	VC	(- - - - - - - - Weight - - - - - - - -)				>2 mm
				<	.002	.05	<	<	.002	.02	.05	.10	.25	.5	1	2	5	20	.1-	wt %
	Depth			.002	-.05	-2	.0002	.002	-.02	-.05	-.10	-.25	-.50	-1	-2	-5	-20	-75	75	whole
Layer	(cm)	Horz	Prep	(- - - - - - - - - - - - -

*** Primary Characterization Data ***

Pedon ID: 61LA033006 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Olivier

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1353

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa Oven Dry (- - - g cm^{-3} - - -) 4A1h	-2-	-3- Cole Whole Soil	-4- (- - - - - - - - - - - Water Content - - - - - - - - - - -) 6 kPa (- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)	-5- 10 kPa	-6- 33 kPa 4B1b	-7- 1500 kPa 4B2a	-8- 1500 kPa Ratio Moist	-9- AD/OD	-10- WRD Whole Soil cm^3 cm^{-3}	-11- Aggst Stabl 2-0.5mm %	-12- (- - Ratio/Clay - -) CEC7	-13- 1500 kPa
40A10332	0-15	Ap	S		1.45				21.8	4.3			0.25		1.51	0.46
40A10333	15-33	A	S							7.3					0.71	0.43
40A10334	33-56	Bt	S		1.64				25.9	14.1			0.17		0.46	0.44
40A10335	56-81	Bx / A	S							12.8					0.47	0.45
40A10336	81-112	B / E	S		1.68				28.1	11.9			0.23		0.55	0.50
40A10337	112-152	B	S							9.4					0.66	0.54

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL pct <0.4mm	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field (- - - - - - - - g cm^{-3} - - - - - - -) 4A1a	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field (- % of < 2mm -) 4B4	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
40A10332	0-15	Ap	CLODDB			1.43			25.7							
40A10334	33-56	Bt	CLODDB			1.55			23.0							
40A10336	81-112	B / E	CLODDB			1.62			20.8							

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C (- - - - - - % of <2 mm - - - - - -)	-2- N 6B1a	-3- S	-4- Org C 6A1a	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe (- % of < 2mm - - - - - - - - - - - - - - - - - - -) 6C1a	-7- Al	-8- Mn	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn mg kg^{-1}	-15- (- - - Na Pyro-Phosphate - - -) C (- - - - - - % of < 2mm - - - - -)	-16- Fe	-17- Al	-18- Mn
40A10332	0-15	Ap	S		0.063		0.66	10	1.2												
40A10333	15-33	A	S		0.028		0.18	6	1.2												
40A10334	33-56	Bt	S		0.036		0.16	4	1.8												
40A10335	56-81	Bx / A	S		0.030		0.10	3	1.6												
40A10336	81-112	B / E	S				0.09		1.4												

40A10337	112-152	B	S	0.06	1.3

*** Primary Characterization Data ***

Pedon ID: 61LA033006 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Olivier

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1353

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca (6N2b)	-2- Mg (6O2b)	-3- Na (6P2a)	-4- K (6Q2a)	-5- Sum Bases	-6- Acid-ity (6H1a)	-7- Extr Al (6G1d)	-8- KCl Mn mg kg^{-1}	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC (5A1a)	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Sum	-14- Base NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)												(- - - - Base - - - -) (- Saturation -)	
				(- - - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)								(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)		
40A10332	0-15	Ap	S	3.3	3.4	0.5	0.2	7.4	5.8	tr		13.2	14.0			56	53
40A10333	15-33	A	S	3.7	3.4	0.8	0.2	8.1	7.0	2.0		15.1	12.0	10.1	20	54	68
40A10334	33-56	Bt	S	2.9	3.2	0.4	0.2	6.7	11.5	4.0		18.2	14.6	10.7	37	37	46
40A10335	56-81	Bx / A	S	4.2	4.6	0.6	0.3	9.7	8.9	2.0		18.6	13.4	11.7	17	52	72
40A10336	81-112	B / E	S	6.0	5.4	0.7	0.2	12.3	4.4	tr		16.7	13.0			74	95
40A10337	112-152	B	S	6.3*	4.4	0.6	0.2	11.5	4.0	tr		15.5	11.5			74	100

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na % 5D2	-20- SAR
				(- - - - - Water Extracted From Saturated Paste -)																			
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)								(- - - - % - - - -)		(- - dS m^{-1} - -)			
40A10332	0-15	Ap	S																			4	
40A10333	15-33	A	S																			7	
40A10334	33-56	Bt	S																			3	
40A10335	56-81	Bx / A	S																			4	
40A10336	81-112	B / E	S																			5	
40A10337	112-152	B	S																			5	

*** Primary Characterization Data ***

Pedon ID: 61LA033006 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Olivier

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1353

pH & Carbonates

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
										As $CaCO_3$		As $CaSO_4$*$2H_2O$		Resist
	Depth				$CaCl_2$ 0.01M	H_2O	Sat			<2mm	<20mm	<2mm	<20mm	ohms
Layer	(cm)	Horz	Prep	KCl	1:2	1:1	Paste 8C1b	Sulf	NaF	(- - - - - - - - - - - - %		- - - - - - - - - - - -)		cm^{-1}
40A10332	0-15	Ap	S				5.0							
40A10333	15-33	A	S				5.0							
40A10334	33-56	Bt	S				4.8							
40A10335	56-81	Bx / A	S				5.1							
40A10336	81-112	B / E	S				5.5							
40A10337	112-152	B	S				6.3							

*** Primary Characterization Data ***

Pedon ID: 61LA033004 — (East Baton Rouge Parish, Louisiana) — Print Date: Aug 10 2011 4:00PM

Sampled as : Olivier
Revised to correlated on Aug 01, 1992 : Olivier ; Fine-silty, mixed, active, thermic Typic Fragiudalf

SSL - Project NL40001 SSIR SAMPLES
- Site ID 61LA033004 Lat: 30° 38' 52.00" north Long: 91° 16' 36.00" west MLRA: 134
- Pedon No. 40A1354
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Soil Conservation Service
Lincoln Soil Survey Laboratory
Soil Laboratory
Lincoln, Nebraska

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
40A10338	Ap	AP	0-15	15058				SI
40A10339	Bw	B1	15-30	15059				SIL
40A10340	Bt	B21T	30-51	15060				SIL
40A10341	Bx1	B X1	51-71	15061				SIL
40A10342	Bx2	B X2	71-94	15062				SIL
40A10343	Bx3	B X3	94-124	15063				SIL
40A10344	Bx4	B X4	124-157	15064				SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
CEC Activity, CEC7/Clay, Weighted Average	0.47	(NA)
Clay, carbonate free, Weighted Average	25	% wt
Weighted Particles, 0.1-75mm, 75 mm Base	2	% wt
Volume, >2mm, Weighted Average	0	% vol
Clay, total, Weighted Average	25	% wt

Weighted averages based on control section: 30-51 cm

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - - -)					(Rock Fragments (mm))				
				Clay < .002	Silt .002 -.05	Sand .05 -2	Fine < .0002	CO_3 < .002	Fine .002 -.02	Coarse .02 -.05	VF .05 -.10	F .10 -.25	M .25 -.50	C .5 -1	VC 1 -2	(- - - - - - - - Weight - - - - - - - -) 2 -5	5 -20	20 -75	.1- 75	>2 mm wt % whole soil
				(- % of <2mm Mineral Soil -)												(- - - - - - - % of <75mm - - - - - -)				
				3A1	3A1	3A1			3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
40A10338	0-15	Ap	S	8.2	86.0	5.8			29.5	56.5	2.1	1.0	0.5	1.0	1.2	--	--	--	4	--
40A10339	15-30	Bw	S	21.8	75.2	3.0			35.2	40.0	1.4	0.6	0.4	0.5	0.1	--	--	--	2	--
40A10340	30-51	Bt	S	24.6	71.7	3.7			34.3	37.4	1.5	0.8	0.5	0.8	0.1	--	--	--	2	--
40A10341	51-71	Bx1	S	26.6	70.4	3.0			33.4	37.0	1.2	0.8	0.4	0.5	0.1	--	--	--	2	--
40A10342	71-94	Bx2	S	25.0	73.3	1.7			35.4	37.9	1.1	0.4	0.1	0.1	tr	--	--	--	1	--

40A10343	94-124	Bx3	S	19.4	79.0	1.6	37.3	41.7	1.1	0.4	0.1	tr	tr	--	--	--	1	--
40A10344	124-157	Bx4	S	18.6	78.2	3.2	30.8	47.4	1.4	1.3	0.4	0.1	tr	--	--	--	2	--

*** Primary Characterization Data ***

Pedon ID: 61LA033004 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Olivier

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1354

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa (- - - g cm^{-3} - - -)	-2- Oven Dry 4A1h	-3- Cole Whole Soil	-4- (- - - - - - - - - - - Water Content - - - - - - - - - - -) 6 kPa (- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)	-5- 10 kPa	-6- 33 kPa 4B1b	-7- 1500 kPa 4B2a	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil cm^3 cm^{-3}	-11- Aggst Stabl 2-0.5mm %	-12- (- - Ratio/Clay - -) CEC7	-13- 1500 kPa
40A10338	0-15	Ap	S		1.45				17.1	5.0			0.18		0.72	0.61
40A10339	15-30	Bw	S							9.1					0.39	0.42
40A10340	30-51	Bt	S		1.56				29.0	10.7			0.27		0.47	0.43
40A10341	51-71	Bx1	S							11.8					0.48	0.44
40A10342	71-94	Bx2	S		1.52				27.3	11.2			0.23		0.48	0.45
40A10343	94-124	Bx3	S							8.7					0.55	0.45
40A10344	124-157	Bx4	S		1.56				25.4	8.4			0.25		0.58	0.45

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL pct <0.4mm	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field (- - - - - - - - g cm^{-3} - - - - - - -) 4A1a	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field (- % of < 2mm -) 4B4	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
40A10338	0-15	Ap	CLODDB			1.44			19.9							
40A10340	30-51	Bt	CLODDB			1.48			23.6							
40A10342	71-94	Bx2	CLODDB			1.46			27.3							
40A10344	124-157	Bx4	CLODDB			1.52			24.7							

*** Primary Characterization Data ***

(East Baton Rouge Parish, Louisiana)

Pedon ID: 61LA033004 — Print Date: Aug 10 2011 4:00PM

Sampled As : Olivier

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1354

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C (- - - - - - % of <2 mm - - - - - -) 6B1a	-2- N	-3- S	-4- Org C 6A1a	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe (- % of < 2mm - - - - - - - - - - - - - - - - - -) 6C1a	-7- Al	-8- Mn	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn mg kg^{-1}	-15- (- - - Na Pyro-Phosphate - - -) C (- - - - - - % of < 2mm - - - - -)	-16- Fe	-17- Al	-18- Mn
40A10338	0-15	Ap	S		0.066		0.67	10	0.8												
40A10339	15-30	Bw	S		0.047		0.23	5	1.0												
40A10340	30-51	Bt	S		0.044		0.16	4	1.4												
40A10341	51-71	Bx1	S		0.037		0.15	4	1.6												
40A10342	71-94	Bx2	S				0.11		1.5												
40A10343	94-124	Bx3	S				0.06		1.3												
40A10344	124-157	Bx4	S				0.04		1.2												

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - - NH_4OAC Extractable Bases - - - - -) Ca (- - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -) 6N2b	-2- Mg 6O2b	-3- Na 6P2a	-4- K 6Q2a	-5- Sum Bases	-6- Acid-ity 6H1a	-7- Extr Al 6G1d	-8- KCl Mn mg kg^{-1}	-9- CEC8 Sum Cats (- - - - cmol(+) kg^{-1} - - -)	-10- CEC7 NH_4 OAC 5A1a	-11- ECEC Bases +Al	-12- Al Sat (- - - - - - - - % - - - - - - - -)	-13- (- - - - Base - - - -) (- Saturation -) Sum	-14- NH_4OAC
40A10338	0-15	Ap	S	3.4	1.4	0.1	0.2	5.1	3.5	tr		8.6	5.9			59	86
40A10339	15-30	Bw	S	4.7	1.7	0.3	0.2	6.9	4.9	tr		11.8	8.4			58	82
40A10340	30-51	Bt	S	5.5	2.4	0.2	0.2	8.3	7.2	1.0		15.5	11.5	9.3	11	54	72
40A10341	51-71	Bx1	S	4.8	3.0	0.3	0.2	8.3	9.4	2.0		17.7	12.8	10.3	19	47	65
40A10342	71-94	Bx2	S	4.5	3.3	0.2	0.2	8.2	8.9	1.0		17.1	12.0	9.2	11	48	68
40A10343	94-124	Bx3	S	3.7	2.9	0.2	0.2	7.0	7.0	1.0		14.0	10.7	8.0	13	50	65
40A10344	124-157	Bx4	S	4.1	3.2	0.3	0.2	7.8	6.8	1.0		14.6	10.8	8.8	11	53	72

*** Primary Characterization Data ***

Pedon ID: 61LA033004 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Olivier

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1354

Salt

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-	-19-	-20-
				(- Water Extracted From Saturated Paste -)																			
Layer	Depth (cm)	Horz	Prep	Ca	Mg	Na	K	CO_3	HCO_3	F	Cl	PO_4	Br	OAC	SO_4	NO_2	NO_3	H_2O	Total Salts	Elec Cond	Pred Elec Cond	Exch Na % 5D2	SAR
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)										(- - - - % - - - -)		(- - dS m^{-1} - -)			
40A10338	0-15	Ap	S																			2	
40A10339	15-30	Bw	S																			4	
40A10340	30-51	Bt	S																			2	
40A10341	51-71	Bx1	S																			2	
40A10342	71-94	Bx2	S																			2	
40A10343	94-124	Bx3	S																			2	
40A10344	124-157	Bx4	S																			3	

pH & Carbonates

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
					$CaCl_2$					As $CaCO_3$		As $CaSO_4$*$2H_2O$		
Layer	Depth (cm)	Horz	Prep	KCl	0.01M 1:2	H_2O 1:1	Sat Paste 8C1b	Sulf	NaF	<2mm	<20mm	<2mm	<20mm	Resist ohms cm^{-1}
										(- - - - - - - - - - - - % - - - - - - - - - - -)				
40A10338	0-15	Ap	S				6.2							
40A10339	15-30	Bw	S				5.3							
40A10340	30-51	Bt	S				4.7							
40A10341	51-71	Bx1	S				4.6							
40A10342	71-94	Bx2	S				4.8							
40A10343	94-124	Bx3	S				4.9							
40A10344	124-157	Bx4	S				5.1							

*** Primary Characterization Data ***

Pedon ID: 61LA033001 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled as : Olivier
Revised to correlated on Aug 01, 1992 : Olivier ; Fine-silty, mixed, active, thermic Aquic Fragiudalf

SSL - Project NL40001 SSIR SAMPLES
- Site ID 61LA033001 Lat: 30° 41' 13.00" north Long: 91° 13' 18.00" west MLRA: 134
- Pedon No. 40A1355
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Soil Conservation Service
Lincoln Soil Survey Laboratory
Soil Laboratory
Lincoln, Nebraska

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
40A10345	Ap	AP	3-15	15036				SI
40A10346	E	A2	15-23	15037				SIL
40A10347	Bt1	B21T	23-38	15038				SIL
40A10348	Bt2	B22T	38-56	15039				SIL
40A10349	Bt3	B23T	56-76	15040				SIL
40A10350	Bx / A	B X1& A	76-94	15041				SIL
40A10351	Bx	B X2	94-132	15042				SIL
40A10352	B	B3	132-163	15043				SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
CEC Activity, CEC7/Clay, Weighted Average	0.43	(NA)
Clay, carbonate free, Weighted Average	26	% wt
Weighted Particles, 0.1-75mm, 75 mm Base	1	% wt
Volume, >2mm, Weighted Average	0	% vol
Clay, total, Weighted Average	26	% wt

Weighted averages based on control section: 23-73 cm

*** Primary Characterization Data ***

Pedon ID: 61LA033001 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Olivier

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1355

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002 (% of <2mm Mineral Soil) 3A1	-2- Silt .002 -.05 (Total) 3A1	-3- Sand .05 -2 (Total) 3A1	-4- Fine < .0002 (Clay)	-5- CO_3 < .002 (Clay)	-6- Fine .002 -.02 (Silt) 3A1	-7- Coarse .02 -.05 (Silt) 3A1	-8- VF .05 -.10 (Sand) 3A1	-9- F .10 -.25 (Sand) 3A1	-10- M .25 -.50 (Sand) 3A1	-11- C .5 -1 (Sand) 3A1	-12- VC 1 -2 (Sand) 3A1	-13- 2 -5 (Rock Fragments (mm) Weight, % of <75mm) 3B1	-14- 5 -20 (Rock Fragments (mm) Weight, % of <75mm) 3B1	-15- 20 -75 (Rock Fragments (mm) Weight, % of <75mm) 3B1	-16- .1- 75 (Rock Fragments (mm) Weight, % of <75mm)	-17- >2 mm wt % whole soil
40A10345	3-15	Ap	S	8.3	89.0	2.7			42.0	47.0	1.2	0.4	0.4	0.5	0.2	--	--	--	2	--
40A10346	15-23	E	S	19.3	78.5	2.2			41.3	37.2	1.0	0.4	0.4	0.3	0.1	--	--	--	1	--
40A10347	23-38	Bt1	S	25.7	72.3	2.0			39.1	33.2	1.1	0.4	0.2	0.2	0.1	--	--	--	1	--
40A10348	38-56	Bt2	S	26.9	70.6	2.5			39.7	30.9	1.5	0.6	0.2	0.2	tr	--	--	--	1	--
40A10349	56-76	Bt3	S	25.5	72.1	2.4			41.1	31.0	1.2	0.5	0.2	0.3	0.2	--	--	--	1	--
40A10350	76-94	Bx / A	S	21.5	75.8	2.7			44.3	31.5	1.2	0.5	0.3	0.5	0.2	--	--	--	2	--
40A10351	94-132	Bx	S	19.7	77.6	2.7			42.1	35.5	1.3	0.7	0.4	0.2	0.1	--	--	--	1	--
40A10352	132-163	B	S	19.4	78.2	2.4			34.7	43.5	1.3	0.6	0.3	0.1	0.1	--	--	--	1	--

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa (g cm^{-3})	-2- Oven Dry (Bulk Density) 4A1h	-3- Cole Whole Soil	-4- 6 kPa (% of < 2mm Water Content)	-5- 10 kPa (% of < 2mm Water Content)	-6- 33 kPa (% of < 2mm Water Content) 4B1b	-7- 1500 kPa (% of < 2mm Water Content) 4B2a	-8- 1500 kPa Ratio Moist	-9- 1500 kPa Ratio AD/OD	-10- WRD Whole Soil (cm^3 cm^{-3})	-11- Aggst Stabl 2-0.5mm %	-12- (Ratio/Clay) CEC7	-13- (Ratio/Clay) 1500 kPa
40A10345	3-15	Ap	S		1.50				20.5	5.0			0.22		0.75	0.60
40A10346	15-23	E	S							9.0					0.44	0.47
40A10347	23-38	Bt1	S							11.3					0.42	0.44
40A10348	38-56	Bt2	S		1.52				27.0	12.3			0.21		0.43	0.46
40A10349	56-76	Bt3	S							11.6					0.44	0.45
40A10350	76-94	Bx / A	S		1.54				26.1	10.8			0.22		0.49	0.50
40A10351	94-132	Bx	S							10.2					0.55	0.52
40A10352	132-163	B	S		1.64				22.3	8.8			0.20		0.56	0.45

*** Primary Characterization Data ***

(East Baton Rouge Parish, Louisiana)

Pedon ID: 61LA033001 — Print Date: Aug 10 2011 4:00PM

Sampled As : Olivier

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1355

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field (- - - - - - - - g cm^{-3} - - - - - - -) 4A1a	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field (- % of < 2mm -) 4B4	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
				pct <0.4mm												
40A10345	3-15	Ap	CLODDB			1.49			23.0							
40A10348	38-56	Bt2	CLODDB			1.44			26.2							
40A10350	76-94	Bx / A	CLODDB			1.49			25.4							
40A10352	132-163	B	CLODDB			1.60			21.0							

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C	-2- N	-3- S	-4- Org C	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe	-7- Al	-8- Mn	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn	-15- (- - - Na Pyro-Phosphate - - -) C	-16- Fe	-17- Al	-18- Mn
				(- - - - - - % of <2 mm - - - - - -)					(- % of < 2mm - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - - - % of < 2mm - - - - -)			
					6B1a		6A1a		6C1a												
40A10345	3-15	Ap	S		0.077		0.78	10	1.0												
40A10346	15-23	E	S		0.040		0.24	6	1.1												
40A10347	23-38	Bt1	S		0.045		0.22	5	1.4												
40A10348	38-56	Bt2	S		0.042		0.15	4	1.7												
40A10349	56-76	Bt3	S		0.032		0.11	3	1.8												
40A10350	76-94	Bx / A	S				0.07		1.8												
40A10351	94-132	Bx	S				0.03		1.4												
40A10352	132-163	B	S				0.01		1.1												

*** Primary Characterization Data ***

Pedon ID: 61LA033001 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Olivier

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1355

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca (6N2b)	-2- Mg (6O2b)	-3- Na (6P2a)	-4- K (6Q2a)	-5- Sum Bases	-6- Acid-ity (6H1a)	-7- Extr Al	-8- KCl Mn mg kg^{-1}	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC (5A1a)	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Sat Sum	-14- Base Sat NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)								(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)		
40A10345	3-15	Ap	S	4.4	0.6	0.2	0.1	5.3	4.8			10.1	6.2			52	85
40A10346	15-23	E	S	5.4	1.1	0.2	0.1	6.8	4.3			11.1	8.5			61	80
40A10347	23-38	Bt1	S	5.4	2.1	0.3	0.2	8.0	6.7			14.7	10.7			54	75
40A10348	38-56	Bt2	S	3.7	2.4	0.3	0.2	6.6	9.4			16.0	11.6			41	57
40A10349	56-76	Bt3	S	2.5	3.0	0.3	0.2	6.0	9.4			15.4	11.2			39	54
40A10350	76-94	Bx / A	S	1.9	3.2	0.3	0.2	5.6	8.7			14.3	10.5			39	53
40A10351	94-132	Bx	S	2.1	3.4	0.3	0.2	6.0	8.2			14.2	10.8			42	56
40A10352	132-163	B	S	2.9	3.8	0.3	0.2	7.2	6.7			13.9	10.8			52	67

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na % (5D2)	-20- SAR
				(- - - - - mmol(+) L^{-1} - - - - -)				(- - - - - - - -

*** Primary Characterization Data ***

Pedon ID: 61LA033001 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Olivier

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1355

pH & Carbonates

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
										As $CaCO_3$		As $CaSO_4$*$2H_2O$		Resist
	Depth				$CaCl_2$ 0.01M	H_2O	Sat			<2mm	<20mm	<2mm	<20mm	ohms
Layer	(cm)	Horz	Prep	KCl	1:2	1:1	Paste 8C1b	Sulf	NaF	(- - - - - - - - - - - - %		- - - - - - - - - - - -)		cm^{-1}
40A10345	3-15	Ap	S				5.8							
40A10346	15-23	E	S				5.6							
40A10347	23-38	Bt1	S				5.2							
40A10348	38-56	Bt2	S				5.0							
40A10349	56-76	Bt3	S				4.9							
40A10350	76-94	Bx / A	S				5.0							
40A10351	94-132	Bx	S				5.2							
40A10352	132-163	B	S				5.4							

*** Primary Characterization Data ***

Pedon ID: 61LA033003 — (East Baton Rouge Parish, Louisiana) — Print Date: Aug 10 2011 4:00PM

Sampled as : Loring
Revised to :

SSL - Project NL40001 SSIR SAMPLES
- Site ID 61LA033003 Lat: 30° 38' 45.00" north Long: 91° 17' .00" west
- Pedon No. 40A1356
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Soil Conservation Service
Lincoln Soil Survey Laboratory
Soil Laboratory
Lincoln, Nebraska

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
40A10353	Ap	AP	0-18	15051				SI
40A10354	Bw1	B11	18-25	15052				SIL
40A10355	Bw2	B12	25-33	15053				SIL
40A10356	Bt	B2 T	33-58	15054				SICL
40A10357	Bx	B X1	58-89	15055				SICL
40A10358	Oap	BX2	89-107	15056				SIL
40A10359	Oa	BX3	107-155	15057				SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
CEC Activity, CEC7/Clay, Weighted Average	0.43	(NA)
Clay, carbonate free, Weighted Average	30	% wt
Weighted Particles, 0.1-75mm, 75 mm Base	0	% wt
Volume, >2mm, Weighted Average	0	% vol
Clay, total, Weighted Average	30	% wt

Weighted averages based on control section: 33-58 cm

PSDA & Rock Fragments

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - - -)					(Rock Fragments (mm))				
				Clay	Silt	Sand	Fine	CO_3	Fine	Coarse	VF	F	M	C	VC	(- - - - - - - - Weight - - - - - - - -)				>2 mm
	Depth			<	.002	.05	<	<	.002	.02	.05	.10	.25	.5	1	2	5	20	.1-	wt %
				.002	-.05	-2	.0002	.002	-.02	-.05	-.10	-.25	-.50	-1	-2	-5	-20	-75	75	whole
Layer	(cm)	Horz	Prep	(- - - - - - - - - - - - -

40A10358	89-107	Oap	S	24.4	74.4	1.2	37.8	36.6	0.9	0.2	0.1	tr	tr	--	--	--	tr	--
40A10359	107-155	Oa	S	19.4	79.4	1.2	36.2	43.2	1.1	0.1	tr	tr	tr	--	--	--	tr	--

*** Primary Characterization Data ***

Pedon ID: 61LA033003 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Loring

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1356

Bulk Density & Moisture

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-
				(Bulk Density)		Cole	(- - - - - - - - - - - Water Content - - - - - - - - - - -)						WRD	Aggst		
				33	Oven	Whole	6	10	33	1500	1500 kPa	Ratio	Whole	Stabl	(- - Ratio/Clay - -)	
	Depth			kPa	Dry	Soil	kPa	kPa	kPa	kPa	Moist	AD/OD	Soil	2-0.5mm	CEC7	1500 kPa
Layer	(cm)	Horz	Prep	(- - - g cm^{-3} - - -)			(- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)						cm^3 cm^{-3}	%		
					4A1h				4B1b	4B2a						
40A10353	0-18	Ap	S		1.42				18.2	4.4			0.20		0.75	0.58
40A10354	18-25	Bw1	S							6.2					0.43	0.42
40A10355	25-33	Bw2	S							9.5					0.40	0.43
40A10356	33-58	Bt	S		1.58				28.0	13.0			0.22		0.43	0.43
40A10357	58-89	Bx	S		1.57				26.9	12.1			0.21		0.46	0.43
40A10358	89-107	Oap	S							11.2					0.48	0.46
40A10359	107-155	Oa	S		1.55				22.9	9.4			0.20		0.54	0.48

Water Content

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-
				(- - Atterberg - -)		(- - - - - Bulk Density - - - - -)			(- Water Content -)							
				(- - - Limits - - -)		Field	Recon	Recon	Field	Recon	(- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - -)					
				LL	PI		33	Oven		33	6	10	33	100	200	500
	Depth						kPa	Dry		kPa	kPa	kPa	kPa	kPa	kPa	kPa
Layer	(cm)	Horz	Prep	pct <0.4mm		(- - - - - - - - g cm^{-3} - - - - - - -)			(- % of < 2mm -)							
						4A1a			4B4							
40A10353	0-18	Ap	CLODDB			1.41			22.9							
40A10356	33-58	Bt	CLODDB			1.48			22.8							
40A10357	58-89	Bx	CLODDB			1.48			25.6							
40A10359	107-155	Oa	CLODDB			1.50			25.2							

*** Primary Characterization Data ***

Pedon ID: 61LA033003 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Loring

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1356

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- C	-2- N	-3- S	-4- Org C	-5- C/N Ratio	-6- Fe	-7- Al	-8- Mn	-9- Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn	-15- C	-16- Fe	-17- Al	-18- Mn
				(- - - - - Total - - - - -)					(- - - Dith-Cit Ext - - -)			(- - - - - - Ammonium Oxalate Extraction - - - - - -)						(- - - Na Pyro-Phosphate - - -)			
				(- - - - - - % of <2 mm - - - - - -)					(- % of < 2mm - - - - - - - - - - - - - - - - - - -)								mg kg^{-1}	(- - - - - - % of < 2mm - - - - -)			
					6B1a		6A1a		6C1a												
40A10353	0-18	Ap	S		0.086		0.90	10	0.4												
40A10354	18-25	Bw1	S		0.046		0.34	7	0.8												
40A10355	25-33	Bw2	S		0.050		0.34	7	1.1												
40A10356	33-58	Bt	S		0.051		0.29	6	1.5												
40A10357	58-89	Bx	S		0.033		0.15	5	1.6												
40A10358	89-107	Oap	S				0.10		1.5												
40A10359	107-155	Oa	S				0.06		1.3												

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- Sum Bases	-6- Acid-ity	-7- Extr Al	-8- KCl Mn	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC	-11- ECEC Bases +Al	-12- Al Sat	-13- Sum	-14- NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)												(- - - - Base - - - -)	
																(- Saturation -)	
				(- - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)		
				6N2b	6O2b	6P2a	6Q2a		6H1a				5A1a				
40A10353	0-18	Ap	S	4.3	0.4	tr	0.1	4.8	3.0			7.8	5.7			62	84
40A10354	18-25	Bw1	S	4.3	1.0	0.1	0.1	5.5	3.2			8.7	6.3			63	87
40A10355	25-33	Bw2	S	5.4	1.8	0.1	0.2	7.5	4.2			11.7	8.8			64	85
40A10356	33-58	Bt	S	6.8	3.3	0.1	0.3	10.5	6.6			17.1	13.1			61	80
40A10357	58-89	Bx	S	5.3	3.6	0.2	0.2	9.3	7.3			16.6	12.7			56	73
40A10358	89-107	Oap	S	5.0	3.7	0.2	0.2	9.1	6.4			15.5	11.6			59	78
40A10359	107-155	Oa	S	4.4	3.2	0.2	0.2	8.0	5.9			13.9	10.4			58	77

*** Primary Characterization Data ***

Pedon ID: 61LA033003 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Loring

USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1356

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na % 5D2	-20- SAR
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)										(- - - - % - - - -)		(- - dS m^{-1} - -)		
				(- Water Extracted From Saturated Paste -)																			
40A10353	0-18	Ap	S																			--	
40A10354	18-25	Bw1	S																			2	
40A10355	25-33	Bw2	S																			1	
40A10356	33-58	Bt	S																			1	
40A10357	58-89	Bx	S																			2	
40A10358	89-107	Oap	S																			2	
40A10359	107-155	Oa	S																			2	

pH & Carbonates

Layer	Depth (cm)	Horz	Prep	-1- KCl	-2- $CaCl_2$ 0.01M 1:2	-3- H_2O 1:1	-4- Sat Paste 8C1b	-5- Sulf	-6- NaF	-7- Carbonate As $CaCO_3$ <2mm	-8- Carbonate As $CaCO_3$ <20mm	-9- Gypsum As $CaSO_4$*$2H_2O$ <2mm	-10- Gypsum As $CaSO_4$*$2H_2O$ <20mm	-11- Resist ohms cm^{-1}
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
										(- - - - - - - - - - - % - - - - - - - - - - -)				
40A10353	0-18	Ap	S				6.1							
40A10354	18-25	Bw1	S				6.1							
40A10355	25-33	Bw2	S				5.9							
40A10356	33-58	Bt	S				5.5							
40A10357	58-89	Bx	S				5.2							
40A10358	89-107	Oap	S				5.1							
40A10359	107-155	Oa	S				5.1							

*** Primary Characterization Data ***

Pedon ID: 61LA033005 — (East Baton Rouge Parish, Louisiana) — Print Date: Aug 10 2011 4:00PM

Sampled as :
Revised to correlated on Aug 01, 1992 : Calhoun ; Fine-silty, mixed, active, thermic Aeric Glossaqualf

SSL - Project NL40001 SSIR SAMPLES
- Site ID 61LA033005 Lat: 30° 22' 41.00" north Long: 91° 2' 41.00" west MLRA: 134
- Pedon No. 40A1357
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Soil Conservation Service
Lincoln Soil Survey Laboratory
Soil Laboratory
Lincoln, Nebraska

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
40A10360	Cc	AP	0-15	15065				SI
40A10361	Oag	A2G	15-30	15066				SI
40A10362	Ccb	A/B	30-53	15067				SIL
40A10363	Oa / A	B&A	53-86	15068				SICL
40A10364	2Bt	B21T	86-119	15069				SIL
40A10365	Bt	B22T	119-152	15070				SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
CEC Activity, CEC7/Clay, Weighted Average	0.43	(NA)
Clay, carbonate free, Weighted Average	24	% wt
Weighted Particles, 0.1-75mm, 75 mm Base	1	% wt
Volume, >2mm, Weighted Average	0	% vol
Clay, total, Weighted Average	24	% wt

Weighted averages based on control section: 86-136 cm

PSDA & Rock Fragments

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - - -)					(Rock Fragments (mm))				
				Clay	Silt	Sand	Fine	CO_3	Fine	Coarse	VF	F	M	C	VC	(- - - - - - - - Weight - - - - - - - -)				>2 mm
				<	.002	.05	<	<	.002	.02	.05	.10	.25	.5	1	2	5	20	.1-	wt %
	Depth			.002	-.05	-2	.0002	.002	-.02	-.05	-.10	-.25	-.50	-1	-2	-5	-20	-75	75	whole
Layer	(cm)	Horz	Prep	(- - - - - - - - - - - - -

*** Primary Characterization Data ***

Pedon ID: 61LA033005 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As :
USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1357

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa (- - - g cm^{-3} - - -)	-2- Oven Dry 4A1h	-3- Cole Whole Soil	-4- (- - - - - - - - - - - Water Content - - - - - - - - - - -) 6 kPa (- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)	-5- 10 kPa	-6- 33 kPa 4B1b	-7- 1500 kPa 4B2a	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil cm^3 cm^{-3}	-11- Aggst Stabl 2-0.5mm %	-12- (- - Ratio/Clay - -) CEC7	-13- 1500 kPa
40A10360	0-15	Cc	S		1.47				21.2	5.7			0.22		0.76	0.53
40A10361	15-30	Oag	S		1.52				19.8	4.4			0.22		0.49	0.45
40A10362	30-53	Ccb	S							6.9					0.44	0.40
40A10363	53-86	Oa / A	S		1.56				24.8	12.4			0.18		0.55	0.41
40A10364	86-119	2Bt	S							10.8					0.49	0.43
40A10365	119-152	Bt	S		1.56				24.4	10.7			0.20		0.31	0.49

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL pct <0.4mm	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field (- - - - - - - - g cm^{-3} - - - - - - -) 4A1a	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field (- % of < 2mm -) 4B4	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
40A10360	0-15	Cc	CLODDB			1.45			21.0							
40A10361	15-30	Oag	CLODDB			1.52			19.1							
40A10363	53-86	Oa / A	CLODDB			1.50			21.8							
40A10365	119-152	Bt	CLODDB			1.52			23.7							

*** Primary Characterization Data ***

Pedon ID: 61LA033005 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As :
USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1357

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- C	-2- N	-3- S	-4- Org C	-5- C/N Ratio	-6- Fe	-7- Al	-8- Mn	-9- Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn	-15- C	-16- Fe	-17- Al	-18- Mn
				(- - - - - Total - - - - -)					(- - - Dith-Cit Ext - - -)			(- - - - - - Ammonium Oxalate Extraction - - - - - -)						(- - - Na Pyro-Phosphate - - -)			
				(- - - - - - % of <2 mm - - - - - -)					(- % of < 2mm - - - - - - - - - - - - - - - - - - -)								mg kg^{-1}	(- - - - - - % of < 2mm - - - - -)			
					6B1a		6A1a		6C1a												
40A10360	0-15	Cc	S		0.094		0.96	10	0.6												
40A10361	15-30	Oag	S		0.031		0.22	7	0.8												
40A10362	30-53	Ccb	S		0.031		0.14	5	1.1												
40A10363	53-86	Oa / A	S		0.042		0.14	3	1.6												
40A10364	86-119	2Bt	S				0.11		1.3												
40A10365	119-152	Bt	S				0.06		1.3												

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- Sum Bases	-6- Acid-ity	-7- Extr Al	-8- KCl Mn	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Sum	-14- Base NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)												(- - - - Base - - - -)	
																(- Saturation -)	
				(- - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)		
				6N2b	6O2b	6P2b	6Q2a		6H1a	6G1d			5A1a				
40A10360	0-15	Cc	S	6.5	1.3	0.1	0.1	8.0	2.6	tr		10.6	8.2			75	98
40A10361	15-30	Oag	S	3.5	0.5	0.2	0.1	4.3	2.3	tr		6.6	4.8			65	90
40A10362	30-53	Ccb	S	2.9	1.6	0.3	0.1	4.9	6.0	1.0		10.9	7.6	5.9	17	45	64
40A10363	53-86	Oa / A	S	2.8	2.8	0.5	0.3	6.4	12.2	4.0		18.6	16.5	10.4	38	34	39
40A10364	86-119	2Bt	S	2.6	2.9	0.6	0.2	6.3	10.3	3.0		16.6	12.2	9.3	32	38	52
40A10365	119-152	Bt	S	1.8	0.9	0.2	0.1	3.0	8.4	2.0		11.4	6.7	5.0	40	26	45

*** Primary Characterization Data ***

Pedon ID: 61LA033005 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As :
USDA-SCS-Soil Survey Laboratory ; Pedon No. 40A1357

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na % 5D2	-20- SAR
				(- - - - - mmol(+) L^{-1} - - - - -)				(- - - - - mmol(-) L^{-1} -)										(- - - - % - - - -)		(- - dS m^{-1} - -)			
				Water Extracted From Saturated Paste																			
40A10360	0-15	Cc	S																			1	
40A10361	15-30	Oag	S																			4	
40A10362	30-53	Ccb	S																			4	
40A10363	53-86	Oa / A	S																			3	
40A10364	86-119	2Bt	S																			5	
40A10365	119-152	Bt	S																			3	

pH & Carbonates

Layer	Depth (cm)	Horz	Prep	-1- KCl	-2- $CaCl_2$ 0.01M 1:2	-3- H_2O 1:1	-4- Sat Paste 8C1b	-5- Sulf	-6- NaF	-7- Carbonate As $CaCO_3$ <2mm	-8- Carbonate As $CaCO_3$ <20mm	-9- Gypsum As $CaSO_4$*$2H_2O$ <2mm	-10- Gypsum As $CaSO_4$*$2H_2O$ <20mm	-11- Resist ohms cm^{-1}
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - -)						(- - - - - - - - - - - % - - - - - - - - - - -)				
40A10360	0-15	Cc	S				6.4							
40A10361	15-30	Oag	S				6.2							
40A10362	30-53	Ccb	S				4.6							
40A10363	53-86	Oa / A	S				4.4							
40A10364	86-119	2Bt	S				4.6							
40A10365	119-152	Bt	S				4.9							

*** Primary Characterization Data ***

Pedon ID: 95LA033010 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled as : Scotlandville ; Fine-silty, mixed, hyperthermic Glossaquic Hapludalf
Revised to :

SSL - Project CP96LA001 LOUISIANA-MLRA 131 NO. 2
- Site ID 95LA033010 Lat: 30° 32' 20.22" north Long: 91° 8' 19.73" west MLRA: 134
- Pedon No. 96P0004
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Natural Resources Conservation Service
National Soil Survey Center
Soil Survey Laboratory
Lincoln, Nebraska 68508-3866

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
96P00029	Ap	Ap	0-6				SIL	SI
96P00030	E1	E1	6-16				SIL	SI
96P00031	E2	E2	16-25				SIL	SIL
96P00032	Bt	Bt	25-37				SIL	SIL
96P00033	Bt / E1	Bt/E1	37-53				SIL	SICL
96P00034	Bt / E2	Bt/E2	53-71				SIL	SIL
96P00035	Bt / E3	Bt/E3	71-106				SIL	SIL
96P00036	B't1	B't1	106-140				SIL	SIL
96P00037	B't2	B't2	140-171				SIL	SIL
96P00038	B't3	B't3	171-199				SIL	SIL
96P00039	2Btb1	2Btb1	199-222				SIL	SIL
96P00040	2Btb2	2Btb2	222-245				SIL	SIL
96P00041	2Btb3	2Btb3	245-285				SIL	SICL

Pedon Calculations

Calculation Name	Result	Units of Measure
Clay, carbonate free, Weighted Average	27	% wt
Volume, >2mm, Weighted Average	0	% vol
Weighted Particles, 0.1-75mm, 75 mm Base	1	% wt
Clay, total, Weighted Average	27	% wt
CEC Activity, CEC7/Clay, Weighted Average	0.4	(NA)

Weighted averages based on control section: 25-75 cm

*** Primary Characterization Data ***

Pedon ID: 95LA033010 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Scotlandville Fine-silty, mixed, hyperthermic Glossaquic Hapludalf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0004

PSDA & Rock Fragments				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - - -)					(Rock Fragments (mm))				
				Clay	Silt	Sand	Fine	CO_3	Fine	Coarse	VF	F	M	C	VC	(- - - - - - - - Weight - - - - - - - -)				>2 mm
				<	.002	.05	<	<	.002	.02	.05	.10	.25	.5	1	2	5	20	.1-	wt %
	Depth			.002	-.05	-2	.0002	.002	-.02	-.05	-.10	-.25	-.50	-1	-2	-5	-20	-75	75	whole
Layer	(cm)	Horz	Prep	(- - - - - - - - - - - - -

*** Primary Characterization Data ***

Pedon ID: 95LA033010 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Scotlandville Fine-silty, mixed, hyperthermic Glossaquic Hapludalf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0004

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa (- - - g cm^{-3} - - -) 4A1d	-2- Oven Dry 4A1h	-3- Cole Whole Soil	-4- (- - - - - - - - - - - Water Content - - - - - - - - - - -) 6 kPa (- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)	-5- 10 kPa	-6- 33 kPa 4B1c	-7- 1500 kPa	-8- 1500 kPa Moist	-9- Ratio AD/OD 4B5	-10- WRD Whole Soil cm^3 cm^{-3} 4C1	-11- Aggst Stabl 2-0.5mm %	-12- (- - Ratio/Clay - -) CEC7 8D1	-13- 1500 kPa 8D1
96P00029	0-6	Ap	S	1.18	1.26	0.022			27.0	9.0		1.013	0.21		1.07	0.78
96P00030	6-16	E1	S	1.47	1.51	0.009			25.9	5.3		1.007	0.30		0.45	0.47
96P00031	16-25	E2	S	1.45	1.47	0.005			24.9	6.6		1.010	0.27		0.37	0.42
96P00032	25-37	Bt	S	1.40	1.49	0.021			27.1	10.6		1.016	0.23		0.37	0.41
96P00033	37-53	Bt / E1	S	1.43	1.56	0.029			26.6	12.7		1.022	0.20		0.40	0.43
96P00034	53-71	Bt / E2	S	1.44	1.54	0.023			27.6	12.2		1.022	0.22		0.41	0.45
96P00035	71-106	Bt / E3	S	1.49	1.56	0.015			26.1	10.1		1.018	0.24		0.48	0.47
96P00036	106-140	B't1	S	1.47	1.55	0.018			26.8	10.7		1.020	0.24		0.47	0.46
96P00037	140-171	B't2	S	1.48	1.55	0.016			26.2	9.6		1.016	0.25		0.54	0.49
96P00038	171-199	B't3	S	1.43	1.55	0.027			26.9	10.1		1.018	0.24		0.57	0.47
96P00039	199-222	2Btb1	S	1.42	1.55	0.030			26.2	9.8		1.018	0.23		0.63	0.52
96P00040	222-245	2Btb2	S	1.46	1.60	0.031			25.6	9.4		1.018	0.24		0.96	0.47
96P00041	245-285	2Btb3	S							15.4		1.029			0.25	0.47

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL pct <0.4mm 4F1	-2- PI 4F	-3- (- - - - - Bulk Density - - - - -) Field (- - - - - - - - g cm^{-3} - - - - - - -)	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field (- % of < 2mm -)	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
96P00029	0-6	Ap	S	NP												
96P00029[1]	0-6		S	NP												
96P00033	37-53	Bt / E1	S	39	17											
96P00033[2]	37-53		S	39	17											
96P00039	199-222	2Btb1	S	34	15											
96P00039[3]	199-222		S	34	15											

[1,2,3] Multiple values present due to instrumentation or analyzed size fraction. See laboratory for more information.

*** Primary Characterization Data ***

Pedon ID: 95LA033010 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Scotlandville Fine-silty, mixed, hyperthermic Glossaquic Hapludalf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0004

Carbon & Extractions

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
				(- - - - - Total - - - - -)			Org	C/N	(- - - Dith-Cit Ext - - -)			(- - - - - - Ammonium Oxalate Extraction - - - - - -)						(- - - Na Pyro-Phosphate - - -)			
	Depth			C	N	S	C	Ratio	Fe	Al	Mn	Al+½Fe	ODOE	Fe	Al	Si	Mn	C	Fe	Al	Mn
Layer	(cm)	Horz	Prep	(- - - - - - % of <2 mm - - - - - -)					(- % of < 2mm - - - - - - - - - - - - - - - - - - -)								mg kg^{-1}	(- - - - - - % of < 2mm - - - - -)			
				6A2e	6B4a		6A1c														
96P00029	0-6	Ap	S	2.91	0.346		3.25	9													
96P00030	6-16	E1	S	0.63	0.113		0.61	5													
96P00031	16-25	E2	S	0.31	0.063		0.33	5													
96P00032	25-37	Bt	S	0.30	0.072		0.29	4													
96P00033	37-53	Bt / E1	S	0.26	0.075		0.23	3													
96P00034	53-71	Bt / E2	S	0.20	0.060		0.18	3													
96P00035	71-106	Bt / E3	S	0.10	0.048		0.12	3													
96P00036	106-140	B't1	S	0.13			0.14														
96P00037	140-171	B't2	S	0.07			0.08														
96P00038	171-199	B't3	S	0.06			0.08														
96P00039	199-222	2Btb1	S	0.07			0.08														
96P00040	222-245	2Btb2	S	0.03			0.06														
96P00041	245-285	2Btb3	S	0.05			0.06														

*** Primary Characterization Data ***

Pedon ID: 95LA033010 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Scotlandville Fine-silty, mixed, hyperthermic Glossaquic Hapludalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0004

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- Sum Bases	-6- Acid-ity	-7- Extr Al	-8- KCl Mn	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Sum	-14- Base NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)								(- - - - cmol(+) kg^{-1} - - -)			(- - - - Base - - - -) (- Saturation -)		
				(- - - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)							mg kg^{-1}				(- - - - - - - - % - - - - - - - -)		
				6N2e	6O2d	6P2b	6Q2b		6H5a	6G9c	6D3b	5A3a	5A8b	5A3b	5G1	5C3	5C1
96P00029	0-6	Ap	S	6.4	2.4	0.3	1.4	10.5	11.8	0.2	25.2	22.3	12.4	10.7	2	47	85
96P00030	6-16	E1	S	1.4	1.0	0.2	1.4	4.0	5.7	0.3	18.9	9.7	5.1	4.3	7	41	78
96P00031	16-25	E2	S	1.8	1.4	0.3	0.9	4.4	5.4	0.5	11.7	9.8	5.8	4.9	10	45	76
96P00032	25-37	Bt	S	2.6	1.8	0.5	0.7	5.6	9.1	2.0	5.4	14.7	9.6	7.6	26	38	58
96P00033	37-53	Bt / E1	S	2.3	2.3	0.4	0.9	5.9	10.0	3.7	2.0	15.9	11.9	9.6	39	37	50
96P00034	53-71	Bt / E2	S	1.7	2.2	0.7	0.7	5.3	10.2	3.0	5.0	15.5	10.9	8.3	36	34	49
96P00035	71-106	Bt / E3	S	1.3	2.1	0.4	0.6	4.4	9.2	3.0	4.7	13.6	10.4	7.4	41	32	42
96P00036	106-140	B't1	S	1.4	2.2	0.4	0.6	4.6	9.3	2.5	3.8	13.9	11.0	7.1	35	33	42
96P00037	140-171	B't2	S	2.1	2.0	0.4	0.6	5.1	8.6	3.3	3.9	13.7	10.5	8.4	39	37	49
96P00038	171-199	B't3	S	3.7	2.9	0.5	0.4	7.5	7.2	1.6	3.0	14.7	12.2	9.1	18	51	61
96P00039	199-222	2Btb1	S	5.6	3.1	0.8	0.9	10.4	5.1	0.2	3.2	15.5	11.9	10.6	2	67	87
96P00040	222-245	2Btb2	S	6.5	2.9	0.5	0.9	10.8	3.5	--	2.4	14.3	19.1			76	57
96P00041	245-285	2Btb3	S	12.5*	4.3	0.7	0.7	18.2	3.8	--	1.0	22.0	8.2			83	100

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

*** Primary Characterization Data ***

Pedon ID: 95LA033010 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Scotlandville Fine-silty, mixed, hyperthermic Glossaquic Hapludalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0004

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na %	-20- SAR
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)										(- - - - % - - - -)		(- - dS m^{-1} - -)			
				(- Water Extracted From Saturated Paste -)																			
																						5D2	
96P00029	0-6	Ap	S																			2	
96P00030	6-16	E1	S																			4	
96P00031	16-25	E2	S																			5	
96P00032	25-37	Bt	S																			5	

96P00033	37-53	Bt / E1	S	3
96P00034	53-71	Bt / E2	S	6
96P00035	71-106	Bt / E3	S	4
96P00036	106-140	B't1	S	4
96P00037	140-171	B't2	S	4
96P00038	171-199	B't3	S	4
96P00039	199-222	2Btb1	S	7
96P00040	222-245	2Btb2	S	3
96P00041	245-285	2Btb3	S	9

*** Primary Characterization Data ***

Pedon ID: 95LA033010 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Scotlandville Fine-silty, mixed, hyperthermic Glossaquic Hapludalf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0004

pH & Carbonates

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
					$CaCl_2$					As $CaCO_3$		As $CaSO_4$*$2H_2O$		Resist
	Depth				0.01M	H_2O	Sat			<2mm	<20mm	<2mm	<20mm	ohms
Layer	(cm)	Horz	Prep	KCl	1:2	1:1	Paste	Sulf	NaF	(- - - - - - - - - - - - %		- - - - - - - - - - - -)		cm^{-1}
					4C1a2a	4C1a2a								
96P00029	0-6	Ap	S		4.2	4.3								
96P00030	6-16	E1	S		4.2	4.3								
96P00031	16-25	E2	S		4.3	4.5								
96P00032	25-37	Bt	S		4.1	4.5								
96P00033	37-53	Bt / E1	S		4.1	4.9								
96P00034	53-71	Bt / E2	S		4.2	5.1								
96P00035	71-106	Bt / E3	S		3.3	4.2								
96P00036	106-140	B't1	S		4.1	5.1								
96P00037	140-171	B't2	S		4.1	5.2								
96P00038	171-199	B't3	S		4.2	5.2								
96P00039	199-222	2Btb1	S		4.4	5.3								
96P00040	222-245	2Btb2	S		4.7	5.5								
96P00041	245-285	2Btb3	S		5.1	5.7								

*** Primary Characterization Data ***

Pedon ID: 95LA033010 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Scotlandville Fine-silty, mixed, hyperthermic Glossaquic Hapludalf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0004

Clay Mineralogy (<.002 mm)

Layer	Depth (cm)	Horz	Fraction	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
						X-Ray					Thermal					Elemental				EGME	Interpretation
													SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	K_2O	Na_2O	Retn	
				(- - - - - - - - -		7A2i peak size		- - - - - - - - - -)	(- - - - - - - - -		%	- - - - - - - - - -)	(- - - - - - - - - - - - - - - - - -			%	- - - - - - - - - - - - - - - - - -)			mg g^{-1}	
96P00029	0-6	Ap	tcly	KK 2	VR 2	MI 2	QZ 2														
96P00032	25-37	Bt	tcly	KK 3	MM 2	MI 2	QZ 2														
96P00040	222-245	2Btb2	tcly	MT 4	KK 3	MI 3	QZ 2	VR 1													

FRACTION INTERPRETATION:

tcly - Total Clay, <0.002 mm

MINERAL INTERPRETATION:

KK - Kaolinite MI - Mica MM - Montmorillonite-Mica MT - Montmorillonite QZ - Quartz

VR - Vermiculite

RELATIVE PEAK SIZE: 5 Very Large 4 Large 3 Medium 2 Small 1 Very Small 6 No Peaks

*** Primary Characterization Data ***

Pedon ID: 95LA033011 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled as : Comite ; Fine-silty, mixed, hyperthermic Typic Glossaqualf
Revised to :

SSL - Project CP96LA001 LOUISIANA-MLRA 131 NO. 2
- Site ID 95LA033011 Lat: 30° 38' 40.00" north Long: 91° 3' 41.00" west MLRA: 134
- Pedon No. 96P0005
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Natural Resources Conservation Service
National Soil Survey Center
Soil Survey Laboratory
Lincoln, Nebraska 68508-3866

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
96P00042	Ap	Ap	0-8				SIL	SIL
96P00043	E	E	8-19				SIL	SIL
96P00044	Bt1	Bt1	19-33				SIL	SIL
96P00045	Bt2	Bt2	33-49				SICL	SICL
96P00046	Bt3	Bt3	49-76				SICL	SICL
96P00047	Bt4	Bt4	76-104				SICL	SICL
96P00048	Bt5	Bt5	104-121				SIL	SIL
96P00049	2Btb1	2Btb1	121-150				SIL	SIL
96P00050	2Btb2	2Btb2	150-175				SICL	SIL
96P00051	2Btb3	2Btb3	175-200				SICL	SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
Weighted Particles, 0.1-75mm, 75 mm Base	8	% wt
LE, Whole Soil, Summed to 1m	3	cm/m
Clay, total, Weighted Average	27	% wt
CEC Activity, CEC7/Clay, Weighted Average	0.51	(NA)
Clay, carbonate free, Weighted Average	27	% wt
Volume, >2mm, Weighted Average	1	% vol

Weighted averages based on control section: 19-69 cm

*** Primary Characterization Data ***

Pedon ID: 95LA033011 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Comite Fine-silty, mixed, hyperthermic Typic Glossaqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0005

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002	-2- Silt .002 -.05	-3- Sand .05 -2	-4- Fine < .0002	-5- CO_3 < .002	-6- Fine .002 -.02	-7- Coarse .02 -.05	-8- VF .05 -.10	-9- F .10 -.25	-10- M .25 -.50	-11- C .5 -1	-12- VC 1 -2	-13- 2 -5	-14- 5 -20	-15- 20 -75	-16- .1- 75	-17- >2 mm wt % whole soil
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - -)					(Rock Fragments (mm))				
				(- % of <2mm Mineral Soil -)												(- - - - - - - Weight - - - - - - - -)				
																(- - - - - - - % of <75mm - - - - - -)				
				3A1	3A1	3A1			3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
96P00042	0-8	Ap	S	13.4	72.2	14.4			39.5	32.7	1.7	5.6	6.1	0.7	0.3	--	--	--	13	--
96P00043	8-19	E	S	14.6	73.0	12.4			40.8	32.2	1.6	4.5	4.9	0.5	0.9	tr	--	--	11	tr
96P00044	19-33	Bt1	S	20.6	69.2	10.2			38.4	30.8	1.5	4.1	4.0	0.4	0.2	1	--	--	10	1
96P00045	33-49	Bt2	S	28.0	64.0	8.0			37.7	26.3	1.2	3.1	3.1	0.5	0.1	1	--	--	8	1
96P00046	49-76	Bt3	S	30.5	62.2	7.3			35.6	26.6	1.2	2.8	2.7	0.5	0.1	1	tr	--	7	1
96P00047	76-104	Bt4	S	27.1	65.6	7.3			37.6	28.0	1.2	2.7	2.6	0.5	0.3	--	--	--	6	--
96P00048	104-121	Bt5	S	25.4	66.1	8.5			38.5	27.6	1.3	3.2	3.0	0.6	0.4	--	--	--	7	--
96P00049	121-150	2Btb1	S	24.4	66.9	8.7			36.8	30.1	1.4	3.1	3.0	0.5	0.7	tr	--	--	8	tr
96P00050	150-175	2Btb2	S	24.7	64.5	10.8			37.5	27.0	1.5	3.8	3.6	0.7	1.2	tr	--	--	10	tr
96P00051	175-200	2Btb3	S	23.9	63.5	12.6			36.4	27.1	1.8	4.7	4.5	0.6	1.0	2	1	--	13	3

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- 33 kPa	-2- Oven Dry	-3- Cole Whole Soil	-4- 6 kPa	-5- 10 kPa	-6- 33 kPa	-7- 1500 kPa	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil	-11- Aggst Stabl 2-0.5mm	-12- CEC7	-13- 1500 kPa
				(Bulk Density)			(- - - - - - - - - - - Water Content - - - - - - - - - - -)								(- - Ratio/Clay - -)	
				(- - - g cm^{-3} - - -)			(- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)						cm^3 cm^{-3}	%		
				4A1d	4A1h				4B1c	4B2a		4B5	4C1		8D1	8D1
96P00042	0-8	Ap	S	1.33	1.39	0.015			25.5	7.2		1.011	0.24		0.55	0.54
96P00043	8-19	E	S	1.48	1.54	0.013			23.7	7.1		1.009	0.25		0.65	0.49
96P00044	19-33	Bt1	S	1.47	1.53	0.013			23.2	9.0		1.015	0.21		0.59	0.44
96P00045	33-49	Bt2	S	1.46	1.57	0.024			23.4	11.4		1.020	0.17		0.45	0.41
96P00046	49-76	Bt3	S	1.53	1.71	0.037			21.7	11.9		1.022	0.15		0.51	0.39
96P00047	76-104	Bt4	S	1.51	1.72	0.044			22.5	12.7		1.022	0.15		0.58	0.47
96P00048	104-121	Bt5	S	1.56	1.74	0.037			22.8	11.9		1.020	0.17		0.59	0.47
96P00049	121-150	2Btb1	S	1.55	1.75	0.041			23.8	12.3		1.020	0.18		0.59	0.50
96P00050	150-175	2Btb2	S	1.70	1.83	0.025			19.0	11.9		1.018	0.12		0.52	0.48
96P00051	175-200	2Btb3	S	1.66	1.82	0.031			20.3	10.9		1.016	0.15		0.48	0.46

*** Primary Characterization Data ***

Pedon ID: 95LA033011 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Comite Fine-silty, mixed, hyperthermic Typic Glossaqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0005

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL (pct <0.4mm) 4F1	-2- PI (pct <0.4mm) 4F	-3- (- - - - - Bulk Density - - - - -) Field (- - - - - - - g cm^{-3} - - - - - - -)	-4- Recon 33 kPa (- - - - - - - g cm^{-3} - - - - - - -)	-5- Recon Oven Dry (- - - - - - - g cm^{-3} - - - - - - -)	-6- (- Water Content -) Field (- % of < 2mm -)	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
96P00042	0-8	Ap	S	29	6											
96P00042[1]	0-8		S	29	6											
96P00045	33-49	Bt2	S	34	16											
96P00045[2]	33-49		S	34	16											
96P00051	175-200	2Btb3	S	30	15											
96P00051[3]	175-200		S	30	15											

[1,2,3] Multiple values present due to instrumentation or analyzed size fraction. See laboratory for more information.

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C (- - - - - - % of <2 mm - - - - - -) 6A2e	-2- N (- - - - - Total - - - - -) (- - - - - - % of <2 mm - - - - - -) 6B4a	-3- S (- - - - - Total - - - - -) (- - - - - - % of <2 mm - - - - - -)	-4- Org C (- - - - - - % of <2 mm - - - - - -) 6A1c	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe (- % of < 2mm - - - - - - - - - - - - - - - - - -)	-7- Al (- - - Dith-Cit Ext - - -) (- % of < 2mm - - - - - - - - - - - - - - - - - -)	-8- Mn (- - - Dith-Cit Ext - - -) (- % of < 2mm - - - - - - - - - - - - - - - - - -)	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe (- % of < 2mm - - - - - - - - - - - - - - - - - -)	-10- ODOE (- - - - - - Ammonium Oxalate Extraction - - - - - -) (- % of < 2mm - - - - - - - - - - - - - - - - - -)	-11- Fe (- - - - - - Ammonium Oxalate Extraction - - - - - -) (- % of < 2mm - - - - - - - - - - - - - - - - - -)	-12- Al (- - - - - - Ammonium Oxalate Extraction - - - - - -) (- % of < 2mm - - - - - - - - - - - - - - - - - -)	-13- Si (- - - - - - Ammonium Oxalate Extraction - - - - - -) (- % of < 2mm - - - - - - - - - - - - - - - - - -)	-14- Mn (- - - - - - Ammonium Oxalate Extraction - - - - - -) (- % of < 2mm - - - - - - - - - - - - - - - - - -) mg kg^{-1}	-15- C (- - - Na Pyro-Phosphate - - -) (- - - - - - % of < 2mm - - - - -)	-16- Fe (- - - Na Pyro-Phosphate - - -) (- - - - - - % of < 2mm - - - - -)	-17- Al (- - - Na Pyro-Phosphate - - -) (- - - - - - % of < 2mm - - - - -)	-18- Mn (- - - Na Pyro-Phosphate - - -) (- - - - - - % of < 2mm - - - - -)
96P00042	0-8	Ap	S	1.53	0.176		1.57	9														
96P00043	8-19	E	S	0.90	0.113		0.96	8														
96P00044	19-33	Bt1	S	0.47	0.074		0.48	6														
96P00045	33-49	Bt2	S	0.41	0.065		0.32	5														
96P00046	49-76	Bt3	S	0.20	0.047		0.18	4														
96P00047	76-104	Bt4	S	0.08	0.034		0.09	3														
96P00048	104-121	Bt5	S	0.04			0.05															
96P00049	121-150	2Btb1	S	0.04			0.07															
96P00050	150-175	2Btb2	S	0.05			0.05															
96P00051	175-200	2Btb3	S				0.04															

*** Primary Characterization Data ***

Pedon ID: 95LA033011 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Comite Fine-silty, mixed, hyperthermic Typic Glossaqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0005

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca (6N2e)	-2- Mg (6O2d)	-3- Na (6P2b)	-4- K (6Q2b)	-5- Sum Bases	-6- Acid-ity (6H5a)	-7- Extr Al (6G9c)	-8- KCl Mn mg kg^{-1} (6D3b)	-9- CEC8 Sum Cats (5A3a)	-10- CEC7 NH_4 OAC (5A8b)	-11- ECEC Bases +Al (5A3b)	-12- Al Sat (5G1)	-13- Sum (5C3)	-14- NH_4OAC (5C1)
				(- - - - - - NH_4OAC Extractable Bases - - - - -)								(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)	(- - - - Base - - - -) (- Saturation -)	
				(- - - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)													
96P00042	0-8	Ap	S	2.8	0.7	1.2	1.4	6.1	0.6	1.3	6.5	6.7	7.4	7.4	18	91	82
96P00043	8-19	E	S	2.6	0.5	0.3	0.7	4.1	6.2	1.5	5.9	10.3	9.5	5.6	27	40	43
96P00044	19-33	Bt1	S	0.6	0.7	0.3	0.6	2.2	7.7	3.1	2.3	9.9	12.2	5.3	58	22	18
96P00045	33-49	Bt2	S	3.2	1.3	0.5	1.1	6.1	9.3	4.6	0.6	15.4	12.6	10.7	43	40	48
96P00046	49-76	Bt3	S	4.4	2.4	1.3	0.5	8.6	9.7	3.8	1.0	18.3	15.5	12.4	31	47	55
96P00047	76-104	Bt4	S	6.5	3.6	1.9	0.6	12.6	5.6	1.0	2.7	18.2	15.6	13.6	7	69	81
96P00048	104-121	Bt5	S	7.1	3.6	2.4	0.5	13.6	3.2			16.8	14.9			81	91
96P00049	121-150	2Btb1	S	7.5*	3.5	2.9	0.6	14.5	1.6			16.1	14.5			90	100
96P00050	150-175	2Btb2	S	6.6*	2.9	2.8	0.6	12.9	2.1			15.0	12.9			86	100
96P00051	175-200	2Btb3	S	6.4*	2.5	2.8	0.5	12.2	1.9			14.1	11.4			87	100

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na % (5D2)	-20- SAR
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)										(- - - - % - - - -)		(- - dS m^{-1} - -)			
				(- Water Extracted From Saturated Paste -)																			
96P00042	0-8	Ap	S																			16	
96P00043	8-19	E	S																			3	
96P00044	19-33	Bt1	S																			2	
96P00045	33-49	Bt2	S																			4	
96P00046	49-76	Bt3	S																			8	
96P00047	76-104	Bt4	S																			12	
96P00048	104-121	Bt5	S																			16	
96P00049	121-150	2Btb1	S																			20	
96P00050	150-175	2Btb2	S																			22	
96P00051	175-200	2Btb3	S																			25	

*** Primary Characterization Data ***

Pedon ID: 95LA033011 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Comite Fine-silty, mixed, hyperthermic Typic Glossaqualf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0005

pH & Carbonates

Layer	Depth (cm)	Horz	Prep	-1- KCl	-2- $CaCl_2$ 0.01M 1:2 4C1a2a	-3- H_2O 1:1 4C1a2a	-4- Sat Paste	-5- Sulf	-6- NaF	-7- Carbonate As $CaCO_3$ <2mm 6E1g	-8- Carbonate As $CaCO_3$ <20mm	-9- Gypsum As $CaSO_4$*$2H_2O$ <2mm	-10- Gypsum As $CaSO_4$*$2H_2O$ <20mm	-11- Resist ohms cm^{-1}
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
										(- - - - - - - - - - - - % - - - - - - - - - - -)				
96P00042	0-8	Ap	S		3.9	4.1								
96P00043	8-19	E	S		4.0	4.3								
96P00044	19-33	Bt1	S		4.0	5.0								
96P00045	33-49	Bt2	S		4.0	5.2								
96P00046	49-76	Bt3	S		4.1	5.4								
96P00047	76-104	Bt4	S		4.6	5.6								
96P00048	104-121	Bt5	S		5.5	6.3								
96P00049	121-150	2Btb1	S		6.4	7.1								
96P00050	150-175	2Btb2	S		6.7	7.5								
96P00051	175-200	2Btb3	S		7.0	7.7				--				

*** Primary Characterization Data ***

Pedon ID: 95LA033011 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Comite Fine-silty, mixed, hyperthermic Typic Glossaqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0005

Clay Mineralogy (<.002 mm)

Layer	Depth (cm)	Horz	Fraction	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
						X-Ray					Thermal					Elemental				EGME	Interpretation
													SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	K_2O	Na_2O	Retn	
						7A2i															
				(- - - - - - - - - peak size - - - - - - - - - -)					(- - - - - - - - - % - - - - - - - - - -)				(- - - - - - - - - - - - - - - - - - - % - - - - - - - - - - - - - - - - - - -)							mg g^{-1}	
96P00042	0-8	Ap	tcly	KK 3	VR 2	QZ 2	MI 1														
96P00045	33-49	Bt2	tcly	KK 4	MT 2	VR 2	QZ 2	GE 2													

FRACTION INTERPRETATION:
tcly - Total Clay, <0.002 mm

MINERAL INTERPRETATION:
GE - Goethite KK - Kaolinite MI - Mica MT - Montmorillonite QZ - Quartz
VR - Vermiculite

RELATIVE PEAK SIZE: 5 Very Large 4 Large 3 Medium 2 Small 1 Very Small 6 No Peaks

*** Primary Characterization Data ***

Pedon ID: 95LA033012 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled as : Jeanerette ; Fine-silty, mixed, hyperthermic Typic Argiaquoll
Revised to :

SSL - Project CP96LA001 LOUISIANA-MLRA 131 NO. 2
- Site ID 95LA033012 Lat: 30° 22' 43.00" north Long: 91° 0' 42.00" west MLRA: 134
- Pedon No. 96P0006
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Natural Resources Conservation Service
National Soil Survey Center
Soil Survey Laboratory
Lincoln, Nebraska 68508-3866

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
96P00052	Ap1	Ap1	0-14				SIL	SIL
96P00053	Ap2	Ap2	14-28				SIL	SIL
96P00054	A	A	28-46				SICL	SIL
96P00055	AB	AB	46-60				SICL	SICL
96P00056	Btk	Btk	60-81				SICL	SICL
96P00057	Bt1	Bt1	81-107				SICL	SICL
96P00058	Bt2	Bt2	107-131				SICL	SIL
96P00059	Bt3	Bt3	131-158				SICL	SIL
96P00060	Bt4	Bt4	158-198				SICL	SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
CEC Activity, CEC7/Clay, Weighted Average	0.76	(NA)
Clay, carbonate free, Weighted Average	29	% wt
Volume, >2mm, Weighted Average	3	% vol
Weighted Particles, 0.1-75mm, 75 mm Base	5	% wt
Clay, total, Weighted Average	29	% wt
LE, Whole Soil, Summed to 1m	4	cm/m

Weighted averages based on control section: 46-96 cm

*** Primary Characterization Data ***

Pedon ID: 95LA033012 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Jeanerette Fine-silty, mixed, hyperthermic Typic Argiaquoll
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0006

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002	-2- Silt .002 -.05	-3- Sand .05 -2	-4- Fine < .0002	-5- CO_3 < .002	-6- Fine .002 -.02	-7- Coarse .02 -.05	-8- VF .05 -.10	-9- F .10 -.25	-10- M .25 -.50	-11- C .5 -1	-12- VC 1 -2	-13- 2 -5	-14- 5 -20	-15- 20 -75	-16- .1-75	-17- >2 mm wt % whole soil
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - -)					(Rock Fragments (mm))				
				(- % of <2mm Mineral Soil -)												(- - - - - - - Weight - - - - - - - -)				
																(- - - - - - - % of <75mm - - - - - -)				
				3A1	3A1	3A1			3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
96P00052	0-14	Ap1	S	15.9	81.6	2.5			44.5	37.1	1.4	0.3	0.2	0.3	0.3	--	--	--	1	--
96P00053	14-28	Ap2	S	16.1	81.6	2.3			46.3	35.3	1.5	0.3	0.2	0.2	0.1	--	--	--	1	--
96P00054	28-46	A	S	24.3	70.7	5.0			37.2	33.5	1.5	0.5	0.7	1.4	0.9	tr	tr	--	4	tr
96P00055	46-60	AB	S	29.8	66.8	3.4			33.3	33.5	1.6	0.5	0.7	0.3	0.3	--	tr	--	2	tr
96P00056	60-81	Btk	S	29.5	68.1	2.4			33.0	35.1	1.5	0.3	0.2	0.1	0.3	1	9	--	11	10
96P00057	81-107	Bt1	S	27.8	69.8	2.4			35.9	33.9	1.5	0.3	0.2	0.3	0.1	--	--	--	1	--
96P00058	107-131	Bt2	S	25.0	72.2	2.8			37.3	34.9	1.4	0.3	0.3	0.3	0.5	--	--	--	1	--
96P00059	131-158	Bt3	S	23.9	73.0	3.1			36.8	36.2	1.6	0.3	0.4	0.5	0.3	1	--	--	2	1
96P00060	158-198	Bt4	S	26.0	70.9	3.1			35.1	35.8	2.1	0.4	0.3	0.2	0.1	--	--	--	1	--

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa	-2- Oven Dry	-3- Cole Whole Soil	-4- (- - - - - - - - - - - Water Content - - - - - - - - - - -) 6 kPa	-5- 10 kPa	-6- 33 kPa	-7- 1500 kPa	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil	-11- Aggst Stabl 2-0.5mm	-12- (- - Ratio/Clay - -) CEC7	-13- 1500 kPa
				(- - - g cm^{-3} - - -)			(- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)						cm^3 cm^{-3}	%		
				4A1d	4A1h				4B1c	4B2a		4B5	4C1		8D1	8D1
96P00052	0-14	Ap1	S	1.37	1.47	0.024			29.6	8.8		1.016	0.28		0.98	0.55
96P00053	14-28	Ap2	S	1.47	1.56	0.020			27.0	8.4		1.016	0.27		0.98	0.52
96P00054	28-46	A	S	1.50	1.75	0.053			25.5	12.1		1.029	0.20		0.98	0.50
96P00055	46-60	AB	S	1.50	1.75	0.053			24.3	13.7		1.032	0.16		0.80	0.46
96P00056	60-81	Btk	S	1.53	1.80	0.052			23.7	13.3		1.033	0.15		0.75	0.45
96P00057	81-107	Bt1	S	1.57	1.80	0.047			23.2	12.7		1.029	0.16		0.75	0.46
96P00058	107-131	Bt2	S	1.59	1.76	0.034			22.9	11.8		1.026	0.18		0.75	0.47
96P00059	131-158	Bt3	S	1.57	1.76	0.039			24.2	11.4		1.026	0.20		0.74	0.48
96P00060	158-198	Bt4	S	1.57	1.80	0.047			24.5	12.2		1.026	0.19		0.70	0.47

*** Primary Characterization Data ***

Pedon ID: 95LA033012 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Jeanerette Fine-silty, mixed, hyperthermic Typic Argiaquoll
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0006

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL (pct <0.4mm) 4F1	-2- PI (pct <0.4mm) 4F	-3- (- - - - - Bulk Density - - - - -) Field (g cm^{-3})	-4- Recon 33 kPa (g cm^{-3})	-5- Recon Oven Dry (g cm^{-3})	-6- (- Water Content -) Field (% of < 2mm)	-7- Recon 33 kPa (% of < 2mm)	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - -) 6 kPa (% of < 2mm)	-9- 10 kPa (% of < 2mm)	-10- 33 kPa (% of < 2mm)	-11- 100 kPa (% of < 2mm)	-12- 200 kPa (% of < 2mm)	-13- 500 kPa (% of < 2mm)
96P00052	0-14	Ap1	S	35	12											
96P00052[1]	0-14		S	35	12											
96P00056	60-81	Btk	S	43	24											
96P00056[2]	60-81		S	43	24											
96P00057	81-107	Bt1	S	40	22											
96P00057[3]	81-107		S	40	22											
96P00060	158-198	Bt4	S	39	22											
96P00060[4]	158-198		S	39	22											

[1,2,3,4] Multiple values present due to instrumentation or analyzed size fraction. See laboratory for more information.

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C (- - - - - - % of <2 mm - - - - - -) 6A2e	-2- N (% of <2 mm) 6B4a	-3- S (% of <2 mm)	-4- Org C (% of <2 mm) 6A1c	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe (- % of < 2mm - - - - - - - - - - - - - - - - - -)	-7- Al (% of < 2mm)	-8- Mn (% of < 2mm)	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe (% of < 2mm)	-10- ODOE (% of < 2mm)	-11- Fe (% of < 2mm)	-12- Al (% of < 2mm)	-13- Si (% of < 2mm)	-14- Mn (% of < 2mm) mg kg^{-1}	-15- (- - - Na Pyro-Phosphate - - -) C (- - - - - - % of < 2mm - - - - -)	-16- Fe (% of < 2mm)	-17- Al (% of < 2mm)	-18- Mn (% of < 2mm)
96P00052	0-14	Ap1	S	1.51	0.161		1.49	9													
96P00053	14-28	Ap2	S	0.97	0.094		0.91	10													
96P00054	28-46	A	S	1.04	0.091		0.89	10													
96P00055	46-60	AB	S	0.56	0.073		0.49	7													
96P00056	60-81	Btk	S	0.33	0.057		0.29	5													
96P00057	81-107	Bt1	S	0.21	0.043		0.21	5													
96P00058	107-131	Bt2	S	0.12			0.14														
96P00059	131-158	Bt3	S	0.06			0.09														
96P00060	158-198	Bt4	S	0.03			0.07														

*** Primary Characterization Data ***

Pedon ID: 95LA033012 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Jeanerette Fine-silty, mixed, hyperthermic Typic Argiaquoll
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0006

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- Sum Bases	-6- Acid-ity	-7- Extr Al	-8- KCl Mn	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Sum	-14- Base NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)								(- - - - cmol(+) kg^{-1} - - -)			(- - - - Base - - - -) (- Saturation -)		
				(- - - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)							mg kg^{-1}				(- - - - - - - - % - - - - - - - -)		
				6N2e	6O2d	6P2b	6Q2b		6H5a			5A3a	5A8b			5C3	5C1
96P00052	0-14	Ap1	S	13.0*	1.9	0.3	0.7	15.9	4.1			20.0	15.6			80	100
96P00053	14-28	Ap2	S	13.4*	1.7	0.2	1.0	16.3	2.9			19.2	15.7			85	100
96P00054	28-46	A	S	20.7*	2.3	0.3	1.0	24.3	3.4			27.7	23.9			88	100
96P00055	46-60	AB	S	21.6*	2.5	0.5	0.6	25.2	2.3			27.5	23.7			92	100
96P00056	60-81	Btk	S	28.2*	3.4	0.8	0.7	33.1	1.2			34.3	22.0			97	100
96P00057	81-107	Bt1	S	16.8	2.8	0.2	0.8	20.6	2.4			23.0	20.8			90	99
96P00058	107-131	Bt2	S	14.3	2.7	0.2	0.8	18.0	2.4			20.4	18.8			88	96
96P00059	131-158	Bt3	S	13.0	3.5	--	0.4	16.9	2.5			19.4	17.7			87	95
96P00060	158-198	Bt4	S	12.8	3.8	--	0.8	17.4	1.7			19.1	18.2			91	96

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na %	-20- SAR
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)										(- - - - % - - - -)		(- - dS m^{-1} - -)			
																						5D2	
96P00052	0-14	Ap1	S																			2	
96P00053	14-28	Ap2	S																			1	
96P00054	28-46	A	S																			1	
96P00055	46-60	AB	S																			2	
96P00056	60-81	Btk	S																			4	
96P00057	81-107	Bt1	S																			1	
96P00058	107-131	Bt2	S																			1	
96P00059	131-158	Bt3	S																			--	
96P00060	158-198	Bt4	S																			--	

*** Primary Characterization Data ***

Pedon ID: 95LA033012 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Jeanerette Fine-silty, mixed, hyperthermic Typic Argiaquoll

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0006

pH & Carbonates

Layer	Depth (cm)	Horz	Prep	-1- KCl	-2- $CaCl_2$ 0.01M 1:2 4C1a2a	-3- H_2O 1:1 4C1a2a	-4- Sat Paste	-5- Sulf	-6- NaF	-7- Carbonate As $CaCO_3$ <2mm 6E1g	-8- Carbonate As $CaCO_3$ <20mm	-9- Gypsum As $CaSO_4*2H_2O$ <2mm	-10- Gypsum As $CaSO_4*2H_2O$ <20mm	-11- Resist ohms cm^{-1}
				(- - - - - - - - - - - - - - - - - - pH					- - - - - - - - - - - - - - - - - -)	(- - Carbonate - -)		(- - Gypsum - - -)		
										(- - - - - - - - - - - - %		- - - - - - - - - - - -)		
96P00052	0-14	Ap1	S		5.7	6.0								
96P00053	14-28	Ap2	S		6.1	6.6								
96P00054	28-46	A	S		6.4	7.0								
96P00055	46-60	AB	S		6.9	7.5								
96P00056	60-81	Btk	S		7.6	8.0				tr				
96P00057	81-107	Bt1	S		6.7	7.3								
96P00058	107-131	Bt2	S		6.5	7.0								
96P00059	131-158	Bt3	S		6.2	6.8								
96P00060	158-198	Bt4	S		6.3	6.8								

*** Primary Characterization Data ***

Pedon ID: 95LA033012 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Jeanerette Fine-silty, mixed, hyperthermic Typic Argiaquoll
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 96P0006

Clay Mineralogy (<.002 mm)

Layer	Depth (cm)	Horz	Fraction	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
						X-Ray					Thermal					Elemental				EGME	Interpretation
													SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	K_2O	Na_2O	Retn	
						7A2i															
				(- - - - - - - - - peak size - - - - - - - - - -)					(- - - - - - - - - % - - - - - - - - - -)				(- - - - - - - - - - - - - - - - - - - % - - - - - - - - - - - - - - - - - - -)							mg g^{-1}	
96P00052	0-14	Ap1	tcly	MT 3	KK 3	QZ 2															
96P00056	60-81	Btk	tcly	MT 4	KK 3	MI 2	QZ 1														
96P00057	81-107	Bt1	tcly	MT 4	KK 2	MI 2	VR 2	QZ 2													

FRACTION INTERPRETATION:
tcly - Total Clay, <0.002 mm

MINERAL INTERPRETATION:
KK - Kaolinite MI - Mica MT - Montmorillonite QZ - Quartz VR - Vermiculite

RELATIVE PEAK SIZE: 5 Very Large 4 Large 3 Medium 2 Small 1 Very Small 6 No Peaks

*** Primary Characterization Data ***

Pedon ID: 97LA033002 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled as : Deerford ; Fine-silty, mixed, hyperthermic Albic Glossic Natraqualf
Revised to correlated on Mar 15, 2007 : Deerford ; Fine-silty, mixed, superactive, thermic Albic Glossic Natraqualf

SSL - Project CP97LA097 LOUISIANA HYPERTHERMIC 1
- Site ID 97LA033002 Lat: 30° 24' 56.50" north Long: 91° 7' 4.00" west NAD83 MLRA: 134
- Pedon No. 97P0453
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Natural Resources Conservation Service
National Soil Survey Center
Soil Survey Laboratory
Lincoln, Nebraska 68508-3866

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
97P02669	Ap	Ap	0-11				SI	SIL
97P02670	E1	E1	11-26				SI	SIL
97P02671	E2	E2	26-40				SI	SIL
97P02672	Bt / E	Bt/E	40-58				SIL	SIL
97P02673	Btn	Btn	58-77				SICL	SICL
97P02674	Btkn	Btkn	77-97				SIL	SIL
97P02675	Btn1	Btn1	97-118				SIL	SIL
97P02676	Btn2	Btn2	118-142				SIL	SIL
97P02677	Btn3	Btn3	142-173				SIL	SIL
97P02678	Btn4	Btn4	173-206				SIL	SIL
97P02679	Bth5	Bth5	206-233				SIL	SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
LE, Whole Soil, Summed to 1m	2	cm/m
Clay, carbonate free, Weighted Average	25	% wt
Volume, >2mm, Weighted Average	0	% vol
Weighted Particles, 0.1-75mm, 75 mm Base	2	% wt
Clay, total, Weighted Average	25	% wt
CEC Activity, CEC7/Clay, Weighted Average	0.71	(NA)

Weighted averages based on control section: 58-108 cm

*** Primary Characterization Data ***

Pedon ID: 97LA033002 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Deerford Fine-silty, mixed, hyperthermic Albic Glossic Natraqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0453

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002	-2- Silt .002 -.05	-3- Sand .05 -2	-4- Clay Fine < .0002	-5- CO_3 < .002	-6- Silt Fine .002 -.02	-7- Silt Coarse .02 -.05	-8- Sand VF .05 -.10	-9- Sand F .10 -.25	-10- Sand M .25 -.50	-11- Sand C .5 -1	-12- Sand VC 1 -2	-13- Rock Fragments (mm) Weight 2 -5	-14- 5 -20	-15- 20 -75	-16- .1-75	-17- >2 mm wt % whole soil
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - -)					(Rock Fragments (mm))				
				(- % of <2mm Mineral Soil -)												(- - - - - - - Weight - - - - - - - -)				
				3A1	3A1	3A1	3A1		3A1	3A1	3A1	3A1	3A1	3A1	3A1	(- - - - - - - % of <75mm - - - - - -) 3B1	3B1	3B1		
97P02669	0-11	Ap	S	12.0	85.3	2.7	8.9		38.5	46.8	1.7	0.4	0.2	0.2	0.2	tr	--	--	1	--
97P02670	11-26	E1	S	14.1	83.6	2.3	10.3		41.1	42.5	1.3	0.3	0.3	0.2	0.2	--	--	--	1	--
97P02671	26-40	E2	S	18.7	79.4	1.9	13.4		40.8	38.6	1.2	0.2	0.2	0.2	0.1	--	--	--	1	--
97P02672	40-58	Bt / E	S	24.3	73.4	2.3	17.5		37.8	35.6	1.1	0.3	0.4	0.3	0.2	--	--	--	1	--
97P02673	58-77	Btn	S	30.5	66.5	3.0	17.5		35.1	31.4	1.3	0.4	0.5	0.5	0.3	--	--	--	2	--
97P02674	77-97	Btkn	S	23.8	73.2	3.0	12.4		37.7	35.5	0.8	0.2	0.5	0.8	0.7	--	tr	--	2	tr
97P02675	97-118	Btn1	S	19.3	77.7	3.0	10.5		37.8	39.9	0.9	0.2	0.4	0.7	0.8	--	--	--	2	--
97P02676	118-142	Btn2	S	16.3	80.8	2.9	8.7		36.0	44.8	1.2	0.3	0.4	0.4	0.6	tr	1	--	3	1
97P02677	142-173	Btn3	S	14.3	81.8	3.9	7.3		35.5	46.3	1.3	0.4	0.5	1.0	0.7	tr	tr	--	3	tr
97P02678	173-206	Btn4	S	15.6	80.7	3.7	8.5		37.9	42.8	1.5	0.6	0.8	0.6	0.2	tr	tr	--	2	tr
97P02679	206-233	Bth5	S	17.7	79.2	3.1	10.5		37.5	41.7	1.6	0.4	0.4	0.4	0.3	tr	--	--	2	tr

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa (- - - g cm^{-3} - - -) 4A1d	-2- Oven Dry 4A1h	-3- Cole Whole Soil	-4- (- - - - - - - - - - - Water Content - - - - - - - - - - -) 6 kPa (- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)	-5- 10 kPa	-6- 33 kPa 4B1c	-7- 1500 kPa 4B2a	-8- 1500 kPa Moist	-9- Ratio AD/OD 4B5	-10- WRD Whole Soil cm^3 cm^{-3} 4C1	-11- Aggst Stabl 2-0.5mm %	-12- (- - Ratio/Clay - -) CEC7 8D1	-13- 1500 kPa 8D1
97P02669	0-11	Ap	S	1.20	1.25	0.014			36.4	8.2		1.015	0.34		0.87	0.68
97P02670	11-26	E1	S	1.39	1.43	0.010			24.3	7.1		1.014	0.24		0.62	0.50
97P02671	26-40	E2	S	1.37	1.43	0.014			25.2	9.0		1.018	0.22		0.62	0.48
97P02672	40-58	Bt / E	S	1.51	1.61	0.022			22.6	12.7		1.026	0.15		0.67	0.52
97P02673	58-77	Btn	S	1.52	1.72	0.042			23.8	16.7		1.036	0.11		0.71	0.55
97P02674	77-97	Btkn	S	1.53	1.68	0.032			24.3	13.6		1.028	0.16		0.70	0.57
97P02675	97-118	Btn1	S	1.49	1.61	0.026			24.8	11.4		1.022	0.20		0.73	0.59
97P02676	118-142	Btn2	S	1.44	1.54	0.023			26.2	10.1		1.020	0.23		0.80	0.62
97P02677	142-173	Btn3	S	1.49	1.54	0.011			24.5	9.0		1.018	0.23		0.85	0.63
97P02678	173-206	Btn4	S	1.46	1.53	0.016			25.9	9.4		1.019	0.24		0.78	0.60
97P02679	206-233	Bth5	S	1.58	1.65	0.015			23.0	10.0		1.019	0.21		0.72	0.56

*** Primary Characterization Data ***

Pedon ID: 97LA033002 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Deerford Fine-silty, mixed, hyperthermic Albic Glossic Natraqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0453

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL 4F1	-2- PI 4F	-3- (- - - - - Bulk Density - - - - -) Field (- - - - - - - g cm^{-3} - - - - - - -)	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field (- % of < 2mm -)	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa 4B1a	-13- 500 kPa
97P02669	0-11	Ap	S	35	8										12.0	
97P02669[1]	0-11		S	35	8											
97P02670	11-26	E1	S												10.8	
97P02671	26-40	E2	S												13.7	
97P02672	40-58	Bt / E	S												18.1	
97P02673	58-77	Btn	S												22.7	
97P02674	77-97	Btkn	S												19.4	
97P02675	97-118	Btn1	S	34	13										16.7	
97P02675[2]	97-118		S	34	13											
97P02676	118-142	Btn2	S												14.4	
97P02677	142-173	Btn3	S												12.9	
97P02678	173-206	Btn4	S												13.6	
97P02679	206-233	Bth5	S												14.9	

[1,2] Multiple values present due to instrumentation or analyzed size fraction. See laboratory for more information.

*** Primary Characterization Data ***

Pedon ID: 97LA033002 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Deerford Fine-silty, mixed, hyperthermic Albic Glossic Natraqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0453

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C (- - - - - - % of <2 mm - - - - - -)	-2- N 6B4a	-3- S	-4- Org C 6A1c	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe (- % of < 2mm -)	-7- Al	-8- Mn	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn mg kg^{-1}	-15- (- - - Na Pyro-Phosphate - - -) C (- - - - - - % of < 2mm - - - - -)	-16- Fe	-17- Al	-18- Mn
97P02669	0-11	Ap	S		0.190		1.88	10													
97P02670	11-26	E1	S		0.053		0.40	8													
97P02671	26-40	E2	S		0.053		0.27	5													

97P02672	40-58	Bt / E	S	0.036	0.20	6
97P02673	58-77	Btn	S	0.036	0.16	5
97P02674	77-97	Btkn	S	0.029	0.10	3
97P02675	97-118	Btn1	S	0.032	0.08	2
97P02676	118-142	Btn2	S		0.03	
97P02677	142-173	Btn3	S		0.05	
97P02678	173-206	Btn4	S		0.03	
97P02679	206-233	Bth5	S		0.03	

CEC & Bases

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-
				(- - - - - - NH_4OAC Extractable Bases - - - - -)								CEC8	CEC7	ECEC		(- - - - Base - - - -)	
								Sum	Acid-	Extr	KCl	Sum	NH_4	Bases	Al	(- Saturation -)	
	Depth			Ca	Mg	Na	K	Bases	ity	Al	Mn	Cats	OAC	+Al	Sat	Sum	NH_4OAC
Layer	(cm)	Horz	Prep	(- - - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - cmol(+) kg^{-1} - - -)				(- - - - - - - - % - - - - - - - -)	
				6N2e	6O2d	6P2b	6Q2b		6H5a	6G9c	6D3b	5A3a	5A8b	5A3b	5G1	5C3	5C1
97P02669	0-11	Ap	S	4.6	1.5	0.3	0.3	6.7	9.1	2.0	14.1	15.8	10.4	8.7	23	42	64
97P02670	11-26	E1	S	3.3	1.6	0.5	0.4	5.8	6.2	1.9	10.0	12.0	8.8	7.7	25	48	66
97P02671	26-40	E2	S	3.6	2.8	1.0	0.5	7.9	4.6	0.8	4.5	12.5	11.6	8.7	9	63	68
97P02672	40-58	Bt / E	S	7.9	4.8	1.2	0.4	14.3	4.2			18.5	16.2			77	88
97P02673	58-77	Btn	S	9.7	7.3	2.3	0.5	19.8	3.2			23.0	21.8			86	91
97P02674	77-97	Btkn	S	8.0	5.6	2.2	0.4	16.2	2.6			18.8	16.7			86	97
97P02675	97-118	Btn1	S	6.9*	5.0	2.2	0.5	14.6	1.8			16.4	14.1			89	100
97P02676	118-142	Btn2	S	6.0	4.7	1.7	0.5	12.9	1.4			14.3	13.1			90	98
97P02677	142-173	Btn3	S	6.6*	4.5	1.4	0.5	13.0	1.6			14.6	12.2			89	100
97P02678	173-206	Btn4	S	8.3*	4.4	1.1	0.4	14.2	1.6			15.8	12.2			90	100
97P02679	206-233	Bth5	S	7.9*	4.6	1.2	0.5	14.2	2.0			16.2	12.8			88	100

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

*** Primary Characterization Data ***

Pedon ID: 97LA033002 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Deerford Fine-silty, mixed, hyperthermic Albic Glossic Natraqualf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0453

Salt

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-	-19-	-20-
				(- Water Extracted From Saturated Paste -)																			
																			Total	Elec	Pred Elec	Exch	
	Depth			Ca	Mg	Na	K	CO_3	HCO_3	F	Cl	PO_4	Br	OAC	SO_4	NO_2	NO_3	H_2O	Salts	Cond	Cond	Na	SAR
Layer	(cm)	Horz	Prep	(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)										(- - - - % - - - -)		(- - dS m^{-1} - -)		%	
				6N1b	6O1b	6P1b	6Q1b	6I1b	6J1b	6U1b	6K1d				6L1d	6W1b	6M1d	8A	8D5	8A3a	8I	5D2	5E
97P02669	0-11	Ap	S																		0.05	3	
97P02670	11-26	E1	S																		0.03	6	
97P02671	26-40	E2	S																		0.03	9	
97P02672	40-58	Bt / E	S																		0.08	7	
97P02673	58-77	Btn	S	0.8	0.2	3.6	0.1	--	1.0	0.2	1.4				2.3	--	tr	75.6	tr	0.54	0.29	9	5
97P02674	77-97	Btkn	S	0.7	0.3	5.5	0.1	--	1.4	0.3	2.4				2.7	--	tr	62.5	tr	0.74	0.33	11	8
97P02675	97-118	Btn1	S	--	0.2	5.2	0.1	--	1.4	0.3	2.6				2.2	--	--	66.3	tr	0.70	0.33	13	16
97P02676	118-142	Btn2	S	0.7	0.2	5.1	0.1	--	1.3	0.4	2.5				2.1	--	--	54.1	tr	0.70	0.25	11	8

97P02677	142-173	Btn3	S	0.20	11
97P02678	173-206	Btn4	S	0.19	9
97P02679	206-233	Bth5	S	0.17	9

pH & Carbonates

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
										As $CaCO_3$		As $CaSO_4$*$2H_2O$		
					$CaCl_2$									
	Depth				0.01M	H_2O	Sat			<2mm	<20mm	<2mm	<20mm	Resist ohms
Layer	(cm)	Horz	Prep	KCl	1:2	1:1	Paste	Sulf	NaF	(- - - - - - - - - - - - - - - - - -

*** Primary Characterization Data ***

Pedon ID: 97LA033002 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Deerford Fine-silty, mixed, hyperthermic Albic Glossic Natraqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0453

Clay Mineralogy (<.002 mm)

Layer	Depth (cm)	Horz	Fraction	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
						X-Ray					Thermal					Elemental				EGME	Interpretation
													SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	K_2O	Na_2O	Retn	
				(- - - - - - - - - peak size - - - - - - - - - -)					(- - - - - - - - - % - - - - - - - - - -)				(- - - - - - - - - - - - - - - - - - - % - - - - - - - - - - - - - - - - - - -)							mg g^{-1}	
97P02672	40-58	Bt / E	tcly	MT 3	KK 2	MI 1															
97P02673	58-77	Btn	tcly	VR 2	MT 2	KK 2	MI 2														
97P02674	77-97	Btkn	tcly	VR 2	KK 2	MT 2	MI 2														

FRACTION INTERPRETATION:
tcly - Total Clay, <0.002 mm

MINERAL INTERPRETATION:
KK - Kaolinite MI - Mica MT - Montmorillonite VR - Vermiculite

RELATIVE PEAK SIZE: 5 Very Large 4 Large 3 Medium 2 Small 1 Very Small 6 No Peaks

*** Primary Characterization Data ***

Pedon ID: 97LA033003 — (East Baton Rouge Parish, Louisiana) — Print Date: Aug 10 2011 4:00PM

Sampled as : Klienpeter ; Fine-silty, mixed, hyperthermic Glossic Hapludalf
Revised to correlated on Mar 16, 2007 : Feliciana ; Fine-silty, mixed, active, thermic Ultic Hapludalf

SSL - Project CP97LA097 LOUISIANA HYPERTHERMIC 1
- Site ID 97LA033003 Lat: 30° 39' 50.61" north Long: 91° 14' 8.62" west NAD83 MLRA: 134
- Pedon No. 97P0454
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Natural Resources Conservation Service
National Soil Survey Center
Soil Survey Laboratory
Lincoln, Nebraska 68508-3866

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
97P02680	Ap	Ap	0-15				SIC	SI
97P02681	AB	AB	15-31				SIC	SIL
97P02682	Bt1	Bt1	31-57				SICL	SICL
97P02683	Bt2	Bt2	57-87				SICL	SICL
97P02684	Bt3	Bt3	87-109				SIC	SIL
97P02685	Bt / E1	Bt/E1	109-143				SIL	SIL
97P02686	Bt / E2	Bt/E2	143-174				SIL	SIL
97P02687	E / Bt	E/Bt	174-197				SIC	SIL
97P02688	2Bt / E1	2Bt/E1	197-223				SIL	SIL
97P02689	2Bt / E2	2Bt/E2	223-252				SIL	SIL
97P02690	2Bt	2Bt	252-275				L	CL

Pedon Calculations

Calculation Name	Result	Units of Measure
Clay, carbonate free, Weighted Average	28	% wt
Volume, >2mm, Weighted Average	0	% vol
Weighted Particles, 0.1-75mm, 75 mm Base	1	% wt
Clay, total, Weighted Average	28	% wt
LE, Whole Soil, Summed to 1m	2	cm/m
CEC Activity, CEC7/Clay, Weighted Average	0.46	(NA)

Weighted averages based on control section: 31-81 cm

*** Primary Characterization Data ***

Pedon ID: 97LA033003 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Klienpeter Fine-silty, mixed, hyperthermic Glossic Hapludalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0454

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002	-2- Silt .002 -.05	-3- Sand .05 -2	-4- Clay Fine < .0002	-5- CO_3 < .002	-6- Silt Fine .002 -.02	-7- Silt Coarse .02 -.05	-8- Sand VF .05 -.10	-9- Sand F .10 -.25	-10- Sand M .25 -.50	-11- Sand C .5 -1	-12- Sand VC 1 -2	-13- Rock Fragments (mm) Weight 2 -5	-14- 5 -20	-15- 20 -75	-16- .1- 75	-17- >2 mm wt % whole soil
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - -)					(Rock Fragments (mm))				
				% of <2mm Mineral Soil												% of <75mm				
				3A1	3A1	3A1	3A1		3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
97P02680	0-15	Ap	S	10.7	82.8	6.5	5.6		32.3	50.5	1.8	2.3	1.8	0.3	0.3	1	1	tr	8	2
97P02681	15-31	AB	S	12.1	83.5	4.4	5.3		35.2	48.3	1.4	1.5	1.1	0.3	0.1	tr	1	--	4	1
97P02682	31-57	Bt1	S	28.7	70.1	1.2	15.3		33.6	36.5	0.6	0.4	0.1	0.1	--	--	--	--	1	--
97P02683	57-87	Bt2	S	27.6	71.2	1.2	12.8		36.6	34.6	0.8	0.3	0.1	tr	--	--	--	--	tr	--
97P02684	87-109	Bt3	S	23.0	75.6	1.4	9.4		37.9	37.7	1.0	0.3	0.1	tr	tr	--	--	--	tr	--
97P02685	109-143	Bt / E1	S	20.6	77.5	1.9	8.9		38.2	39.3	1.1	0.5	0.3	tr	--	--	--	--	1	--
97P02686	143-174	Bt / E2	S	17.5	73.6	8.9	11.6		33.7	39.9	2.3	4.0	2.3	0.3	tr	--	--	--	7	--
97P02687	174-197	E / Bt	S	18.3	64.8	16.9	12.9		26.8	38.0	3.5	7.5	4.9	0.7	0.3	--	--	--	13	--
97P02688	197-223	2Bt / E1	S	20.0	59.5	20.5	15.3		24.3	35.2	4.3	9.3	6.0	0.5	0.4	8	--	--	23	8
97P02689	223-252	2Bt / E2	S	22.2	55.3	22.5	17.3		21.0	34.3	4.5	10.9	6.7	0.3	0.1	tr	--	--	18	tr
97P02690	252-275	2Bt	S	27.0	48.5	24.5	20.9		20.5	28.0	5.2	12.2	6.6	0.3	0.2	--	--	--	19	--

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa	-2- Oven Dry	-3- Cole Whole Soil	-4- (Water Content) 6 kPa	-5- 10 kPa	-6- 33 kPa	-7- 1500 kPa	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil	-11- Aggst Stabl 2-0.5mm	-12- (Ratio/Clay) CEC7	-13- 1500 kPa
				(- - - g cm^{-3} - - -)			(- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)						cm^3 cm^{-3}	%	(- - Ratio/Clay - -)	
				4A1d	4A1h				4B1c	4B2a		4B5	4C1		8D1	8D1
97P02680	0-15	Ap	S	1.40	1.42	0.005			25.3	8.0		1.014	0.24		1.22	0.75
97P02681	15-31	AB	S	1.45	1.47	0.005			23.3	6.7		1.011	0.24		0.77	0.55
97P02682	31-57	Bt1	S	1.39	1.58	0.044			29.8	13.8		1.025	0.22		0.46	0.48
97P02683	57-87	Bt2	S	1.46	1.55	0.020			27.5	13.8		1.025	0.20		0.47	0.50
97P02684	87-109	Bt3	S	1.43	1.56	0.029			27.7	11.3		1.023	0.23		0.52	0.49
97P02685	109-143	Bt / E1	S	1.46	1.59	0.029			26.9	9.9		1.020	0.25		0.53	0.48
97P02686	143-174	Bt / E2	S	1.51	1.62	0.024			23.4	8.5		1.015	0.22		0.48	0.49
97P02687	174-197	E / Bt	S	1.54	1.66	0.025			22.0	8.7		1.014	0.20		0.42	0.48
97P02688	197-223	2Bt / E1	S	1.58	1.69	0.021			20.5	9.4		1.015	0.17		0.41	0.47
97P02689	223-252	2Bt / E2	S	1.62	1.73	0.022			19.9	10.4		1.015	0.15		0.37	0.47
97P02690	252-275	2Bt	S	1.68	1.78	0.019			18.5	12.4		1.017	0.10		0.33	0.46

*** Primary Characterization Data ***

Pedon ID: 97LA033003 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Klienpeter Fine-silty, mixed, hyperthermic Glossic Hapludalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0454

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
				pct <0.4mm		(- - - - - - - g cm^{-3} - - - - - - -)			(- % of < 2mm -)							
				4F1	4F										4B1a	
97P02680	0-15	Ap	S	34	7										11.3	
97P02680[1]	0-15		S	34	7											
97P02681	15-31	AB	S												9.7	
97P02682	31-57	Bt1	S												18.7	
97P02683	57-87	Bt2	S												20.1	
97P02684	87-109	Bt3	S	36	15										16.9	
97P02684[2]	87-109		S	36	15											
97P02685	109-143	Bt / E1	S												15.2	
97P02686	143-174	Bt / E2	S												12.6	
97P02687	174-197	E / Bt	S												11.8	
97P02688	197-223	2Bt / E1	S												12.9	
97P02689	223-252	2Bt / E2	S												13.7	
97P02690	252-275	2Bt	S												15.1	

[1,2] Multiple values present due to instrumentation or analyzed size fraction. See laboratory for more information.

*** Primary Characterization Data ***

Pedon ID: 97LA033003 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Klienpeter Fine-silty, mixed, hyperthermic Glossic Hapludalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0454

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C	-2- N	-3- S	-4- Org C	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe	-7- Al	-8- Mn	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn	-15- (- - - Na Pyro-Phosphate - - -) C	-16- Fe	-17- Al	-18- Mn
				(- - - - - - % of <2 mm - - - - - - -)					(- % of < 2mm - - - - - - - - - - - - - - - - - - -)								mg kg^{-1}	(- - - - - - % of < 2mm - - - - -)			
					6B4a		6A1c														
97P02680	0-15	Ap	S		0.212		2.01	9													
97P02681	15-31	AB	S		0.099		0.80	8													
97P02682	31-57	Bt1	S		0.065		0.28	4													

97P02683	57-87	Bt2	S	0.046	0.14	3
97P02684	87-109	Bt3	S	0.048	0.09	2
97P02685	109-143	Bt / E1	S		0.08	
97P02686	143-174	Bt / E2	S		0.04	
97P02687	174-197	E / Bt	S		0.07	
97P02688	197-223	2Bt / E1	S		0.06	
97P02689	223-252	2Bt / E2	S		0.06	
97P02690	252-275	2Bt	S		0.07	

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- Sum Bases	-6- Acid-ity	-7- Extr Al	-8- KCl Mn	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Sum	-14- Base NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)												(- - - - Base - - - -)	
																(- Saturation -)	
				(- - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)		
				6N2e	6O2d	6P2b	6Q2b		6H5a			5A3a	5A8b			5C3	5C1
97P02680	0-15	Ap	S	19.3*	1.5	0.4	0.8	22.0	3.0			25.0	13.1			88	100
97P02681	15-31	AB	S	8.3*	0.8	0.1	0.6	9.8	3.3			13.1	9.3			75	100
97P02682	31-57	Bt1	S	11.0*	1.4	0.5	0.8	13.7	3.0			16.7	13.3			82	100
97P02683	57-87	Bt2	S	9.0	1.4	0.6	1.4	12.4	3.1			15.5	13.1			80	95
97P02684	87-109	Bt3	S	7.7	1.8	0.8	1.2	11.5	3.3			14.8	11.9			78	97
97P02685	109-143	Bt / E1	S	8.4*	2.0	0.5	0.8	11.7	3.6			15.3	11.0			76	100
97P02686	143-174	Bt / E2	S	6.2*	2.1	0.6	0.7	9.6	2.0			11.6	8.4			83	100
97P02687	174-197	E / Bt	S	5.3*	2.4	0.7	0.6	9.0	2.2			11.2	7.6			80	100
97P02688	197-223	2Bt / E1	S	3.7	3.0	0.5	0.5	7.7	2.8			10.5	8.1			73	95
97P02689	223-252	2Bt / E2	S	3.5	3.2	1.0	0.4	8.1	3.4			11.5	8.2			70	99
97P02690	252-275	2Bt	S	5.1*	2.5	0.5	0.8	8.9	3.0			11.9	8.8			75	100

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

*** Primary Characterization Data ***

Pedon ID: 97LA033003 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Klienpeter Fine-silty, mixed, hyperthermic Glossic Hapludalf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0454

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na %	-20- SAR
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)									(- - - - % - - - -)	(- - dS m^{-1} - -)			
										6U1b	6K1d				6L1d		6M1d		8D5			5D2	
97P02680	0-15	Ap	S																			3	
97P02681	15-31	AB	S																			1	
97P02682	31-57	Bt1	S																			4	
97P02683	57-87	Bt2	S																			5	
97P02684	87-109	Bt3	S																			7	
97P02685	109-143	Bt / E1	S							--	13.8				10.7		--		tr			5	
97P02686	143-174	Bt / E2	S							1.2	19.1				9.8		--		tr			7	
97P02687	174-197	E / Bt	S																			9	

97P02688	197-223	2Bt / E1	S													6
97P02689	223-252	2Bt / E2	S													12
97P02690	252-275	2Bt	S						8.5			5.2	--	tr		6

pH & Carbonates

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
										As $CaCO_3$		As $CaSO_4$*$2H_2O$		Resist
	Depth				$CaCl_2$ 0.01M	H_2O	Sat			<2mm	<20mm	<2mm	<20mm	ohms
Layer	(cm)	Horz	Prep	KCl	1:2	1:1	Paste	Sulf	NaF	(- - - - - - - - - - - - % - - - - - - - - - - - -)				cm^{-1}
					4C1a2a	4C1a2a				6E1g				
97P02680	0-15	Ap	S		7.0	7.7				tr				
97P02681	15-31	AB	S		6.7	7.4								
97P02682	31-57	Bt1	S		6.9	7.6				tr				
97P02683	57-87	Bt2	S		7.0	7.6				--				
97P02684	87-109	Bt3	S		7.0	7.7				tr				
97P02685	109-143	Bt / E1	S		7.0	7.7				--				
97P02686	143-174	Bt / E2	S		7.1	7.8				--				
97P02687	174-197	E / Bt	S		7.1	7.7				--				
97P02688	197-223	2Bt / E1	S		7.0	7.7				--				
97P02689	223-252	2Bt / E2	S		6.6	7.3								
97P02690	252-275	2Bt	S		5.6	6.3								

*** Primary Characterization Data ***

Pedon ID: 97LA033003 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Klienpeter Fine-silty, mixed, hyperthermic Glossic Hapludalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0454

Clay Mineralogy (<.002 mm)

Layer	Depth (cm)	Horz	Fraction	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
						X-Ray					Thermal					Elemental				EGME	Interpretation
													SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	K_2O	Na_2O	Retn	
						7A2i															
				(- - - - - - - - - peak size - - - - - - - - - -)					(- - - - - - - - - % - - - - - - - - - -)				(- - - - - - - - - - - - - - - - - - - % - - - - - - - - - - - - - - - - - - -)							mg g^{-1}	
97P02682	31-57	Bt1	tcly	VR 3	MI 2	KK 2															
97P02683	57-87	Bt2	tcly	KK 2	VR 2	MI 2															

FRACTION INTERPRETATION:
tcly - Total Clay, <0.002 mm

MINERAL INTERPRETATION:
KK - Kaolinite MI - Mica VR - Vermiculite

RELATIVE PEAK SIZE: 5 Very Large 4 Large 3 Medium 2 Small 1 Very Small 6 No Peaks

*** Primary Characterization Data ***

Pedon ID: 97LA033004 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled as : Satsuma ; Fine-silty, siliceous, hyperthermic Glossic Hapludalf
Revised to :

SSL - Project CP97LA097 LOUISIANA HYPERTHERMIC 1
- Site ID 97LA033004 Lat: 30° 39' 34.00" north Long: 90° 58' 11.00" west MLRA: 134
- Pedon No. 97P0455
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Natural Resources Conservation Service
National Soil Survey Center
Soil Survey Laboratory
Lincoln, Nebraska 68508-3866

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
97P02691	Ap	Ap	0-12				SIL	SI
97P02692	E	E	12-30				SIL	SI
97P02693	Btg	Btg	30-47				SIL	SIL
97P02694	Bt / Eg	Bt/Eg	47-81				SIL	SICL
97P02695	Bt1	Bt1	81-101				SIL	SIL
97P02696	Bt2	Bt2	101-132				SIL	SIL
97P02697	Bt3	Bt3	132-157				SIL	SIL
97P02698	2Bt	2Bt	157-197				L	SIL
97P02699	2C1	2C1	197-225				FSL	L
97P02700	2C2	2C2	225-245				FSL	L
97P02701	2Cr / Bt	2Cr/Bt	47-81				SIL	SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
LE, Whole Soil, Summed to 1m	2	cm/m

Weighted averages based on control section: 30-80 cm

*** Primary Characterization Data ***

Pedon ID: 97LA033004 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Satsuma Fine-silty, siliceous, hyperthermic Glossic Hapludalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0455

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002	-2- Silt .002 -.05	-3- Sand .05 -2	-4- Clay Fine < .0002	-5- CO_3 < .002	-6- Silt Fine .002 -.02	-7- Silt Coarse .02 -.05	-8- Sand VF .05 -.10	-9- Sand F .10 -.25	-10- Sand M .25 -.50	-11- Sand C .5 -1	-12- Sand VC 1 -2	-13- Rock Fragments (mm) Weight 2 -5	-14- 5 -20	-15- 20 -75	-16- .1-75	-17- >2 mm wt % whole soil
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - -)					(Rock Fragments (mm))				
				(- % of <2mm Mineral Soil -)												(- - - - - - - Weight - - - - - - - -)				
				3A1	3A1	3A1	3A1		3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
97P02691	0-12	Ap	S	9.8	82.1	8.1	5.5		47.2	34.9	2.3	2.9	1.3	0.9	0.7	2	1	--	9	3
97P02692	12-30	E	S	11.4	81.4	7.2	7.4		48.8	32.6	2.1	2.5	1.1	0.8	0.7	4	10	--	18	14
97P02693	30-47	Btg	S	24.2	70.6	5.2	17.2		43.1	27.5	1.6	1.9	0.9	0.6	0.2	tr	--	--	4	tr
97P02694	47-81	Bt / Eg	S	29.8	65.9	4.3	18.4		36.5	29.4	2.0	1.7	0.5	0.1	--	--	--	--	2	--
97P02695	81-101	Bt1	S	25.1	69.9	5.0	14.1		38.1	31.8	2.4	2.1	0.5	tr	--	--	--	--	3	--
97P02696	101-132	Bt2	S	20.8	69.6	9.6	12.5		36.5	33.1	4.8	4.0	0.7	0.1	--	--	--	--	5	--
97P02697	132-157	Bt3	S	17.1	64.6	18.3	10.5		31.7	32.9	9.2	7.5	1.1	0.3	0.2	--	--	--	9	--
97P02698	157-197	2Bt	S	9.8	59.1	31.1	7.1		17.7	41.4	11.7	17.4	2.0	tr	tr	--	--	--	19	--
97P02699	197-225	2C1	S	9.5	43.3	47.2	7.6		17.5	25.8	13.9	29.8	3.5	tr	tr	--	--	--	33	--
97P02700	225-245	2C2	S	11.3	49.4	39.3	7.8		21.4	28.0	14.3	20.3	4.7	--	--	--	--	--	25	--
97P02701	47-81	2Cr / Bt	S	23.5	71.8	4.7			45.8	26.0	1.5	1.8	0.7	0.3	0.4	tr	--	--	3	tr

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa	-2- Oven Dry	-3- Cole Whole Soil	-4- (Water Content) 6 kPa	-5- 10 kPa	-6- 33 kPa	-7- 1500 kPa	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil	-11- Aggst Stabl 2-0.5mm	-12- (Ratio/Clay) CEC7	-13- 1500 kPa
				(- - - g cm^{-3} - - -)			(- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)						cm^3 cm^{-3}	%	(- - Ratio/Clay - -)	
				4A1d	4A1h				4B1c	4B2a		4B5	4C1		8D1	8D1
97P02691	0-12	Ap	S	1.32	1.36	0.010			29.9	7.0		1.012	0.30		1.02	0.71
97P02692	12-30	E	S	1.50	1.58	0.016			23.3	6.1		1.010	0.24		0.59	0.54
97P02693	30-47	Btg	S	1.50	1.62	0.026			23.3	12.9		1.021	0.16		0.52	0.53
97P02694	47-81	Bt / Eg	S	1.50	1.60	0.022			24.9	16.3		1.029	0.13		0.55	0.55
97P02695	81-101	Bt1	S	1.49	1.56	0.015			24.7	13.8		1.023	0.16		0.57	0.55
97P02696	101-132	Bt2	S	1.54	1.63	0.019			22.8	11.8		1.017	0.17		0.55	0.57
97P02697	132-157	Bt3	S	1.65	1.74	0.018			19.7	9.3		1.011	0.17		0.46	0.54
97P02698	157-197	2Bt	S	1.80	1.86	0.011			13.5	8.4		1.010	0.09		0.63	0.86
97P02699	197-225	2C1	S	1.69	1.75	0.012			16.4	5.4		1.006	0.19		0.39	0.57
97P02700	225-245	2C2	S	1.73	1.79	0.011			15.9	6.5		1.007	0.16		0.39	0.58
97P02701	47-81	2Cr / Bt	S	1.43	1.50	0.016			25.0	12.3		1.022	0.18		0.53	0.52

*** Primary Characterization Data ***

Pedon ID: 97LA033004 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Satsuma Fine-silty, siliceous, hyperthermic Glossic Hapludalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0455

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
				pct <0.4mm		(- - - - - - - g cm^{-3} - - - - - - -)			(- % of < 2mm -)							
				4F1	4F										4B1a	
97P02691	0-12	Ap	S	31	6										10.5	
97P02691[1]	0-12		S	31	6											
97P02692	12-30	E	S												10.1	
97P02693	30-47	Btg	S												18.2	
97P02694	47-81	Bt / Eg	S												22.0	
97P02695	81-101	Bt1	S	37	16										19.7	
97P02695[2]	81-101		S	37	16											
97P02696	101-132	Bt2	S												17.5	
97P02697	132-157	Bt3	S												14.0	
97P02698	157-197	2Bt	S												11.6	
97P02699	197-225	2C1	S												7.9	
97P02700	225-245	2C2	S												9.3	
97P02701	47-81	2Cr / Bt	S												17.4	

[1,2] Multiple values present due to instrumentation or analyzed size fraction. See laboratory for more information.

*** Primary Characterization Data ***

Pedon ID: 97LA033004 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Satsuma Fine-silty, siliceous, hyperthermic Glossic Hapludalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0455

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C	-2- N	-3- S	-4- Org C	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe	-7- Al	-8- Mn	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE	-11- Fe	-12- Al	-13- Si	-14- Mn	-15- (- - - Na Pyro-Phosphate - - -) C	-16- Fe	-17- Al	-18- Mn
				(- - - - - - % of <2 mm - - - - - -)					(- % of < 2mm - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - - - % of < 2mm - - - - -)			
					6B4a		6A1c														
97P02691	0-12	Ap	S		0.149		1.79	12													
97P02692	12-30	E	S		0.035		0.21	6													
97P02693	30-47	Btg	S		0.031		0.15	5													

97P02694	47-81	Bt / Eg	S	0.051	0.14	3
97P02695	81-101	Bt1	S	0.043	0.07	2
97P02696	101-132	Bt2	S		0.08	
97P02697	132-157	Bt3	S		0.02	
97P02698	157-197	2Bt	S		0.02	
97P02699	197-225	2C1	S		0.02	
97P02700	225-245	2C2	S		0.02	
97P02701	47-81	2Cr / Bt	S		0.16	

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- Sum Bases	-6- Acid-ity	-7- Extr Al	-8- KCl Mn	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Sum	-14- Base NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)												(- - - - Base - - - -) (- Saturation -)	
				(- - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - cmol(+) kg^{-1} - - -)				(- - - - - - - - % - - - - - - - -)	
				6N2e	6O2d	6P2b	6Q2b		6H5a	6G9c	6D3b	5A3a	5A8b	5A3b	5G1	5C3	5C1
97P02691	0-12	Ap	S	5.8	1.1	0.5	0.2	7.6	6.1			13.7	10.0			55	76
97P02692	12-30	E	S	3.8	1.1	1.2	0.2	6.3	2.8			9.1	6.7			69	94
97P02693	30-47	Btg	S	2.8	1.7	2.0	0.3	6.8	8.4	5.1	3.1	15.2	12.5	11.9	43	45	54
97P02694	47-81	Bt / Eg	S	3.4	3.1	3.9	0.3	10.7	11.0	6.3	5.1	21.7	16.3	17.0	37	49	66
97P02695	81-101	Bt1	S	3.5	3.1	4.4	0.2	11.2	7.4	2.1	5.0	18.6	14.2	13.3	16	60	79
97P02696	101-132	Bt2	S	3.6	2.6	4.1	0.3	10.6	5.0	0.7	7.4	15.6	11.4	11.3	6	68	93
97P02697	132-157	Bt3	S	3.2*	1.9	3.0	0.2	8.3	2.8	0.2	2.5	11.1	7.9	8.5	2	75	100
97P02698	157-197	2Bt	S	3.1*	1.6	3.3	0.3	8.3	2.4	0.1	0.7	10.7	6.2	8.4	1	78	100
97P02699	197-225	2C1	S	2.7*	0.9	2.1	0.3	6.0	2.1	0.1	0.2	8.1	3.7	6.1	2	74	100
97P02700	225-245	2C2	S	2.8*	1.2	1.7	0.3	6.0	1.9	0.1	0.2	7.9	4.4	6.1	2	76	100
97P02701	47-81	2Cr / Bt	S	3.0	1.7	3.3	0.4	8.4	10.2	6.7	3.9	18.6	12.4	15.1	44	45	68

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

*** Primary Characterization Data ***

Pedon ID: 97LA033004 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Satsuma Fine-silty, siliceous, hyperthermic Glossic Hapludalf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0455

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na %	-20- SAR
				(- - - - - Water Extracted From Saturated Paste - - - - - -)																			
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)								(- - - - % - - - -)		(- - dS m^{-1} - -)			
																	6M1d					5D2	
97P02691	0-12	Ap	S																			5	
97P02692	12-30	E	S														--					18	
97P02693	30-47	Btg	S														--					16	
97P02694	47-81	Bt / Eg	S														--					24	
97P02695	81-101	Bt1	S														2.1					31	
97P02696	101-132	Bt2	S																			36	
97P02697	132-157	Bt3	S																			38	
97P02698	157-197	2Bt	S																			53	

97P02699	197-225	2C1	S	57
97P02700	225-245	2C2	S	39
97P02701	47-81	2Cr / Bt	S	27

pH & Carbonates

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
										As $CaCO_3$		As $CaSO_4$*$2H_2O$		Resist
	Depth				$CaCl_2$ 0.01M	H_2O	Sat			<2mm	<20mm	<2mm	<20mm	ohms
Layer	(cm)	Horz	Prep	KCl	1:2 4C1a2a	1:1 4C1a2a	Paste	Sulf	NaF	(- % -)				cm^{-1}
97P02691	0-12	Ap	S		5.4	6.0								
97P02692	12-30	E	S		6.2	7.1								
97P02693	30-47	Btg	S		4.1	5.6								
97P02694	47-81	Bt / Eg	S		4.0	5.2								
97P02695	81-101	Bt1	S		4.3	5.3								
97P02696	101-132	Bt2	S		4.6	5.8								
97P02697	132-157	Bt3	S		4.9	6.2								
97P02698	157-197	2Bt	S		5.1	6.5								
97P02699	197-225	2C1	S		4.9	6.2								
97P02700	225-245	2C2	S		4.9	6.2								
97P02701	47-81	2Cr / Bt	S		4.0	5.1								

*** Primary Characterization Data ***

Pedon ID: 97LA033004 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Satsuma Fine-silty, siliceous, hyperthermic Glossic Hapludalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0455

Clay Mineralogy (<.002 mm)

Layer	Depth (cm)	Horz	Fraction	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
						X-Ray					Thermal					Elemental				EGME	Interpretation
													SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	K_2O	Na_2O	Retn	
				(- - - - - - - - -		7A2i peak size		- - - - - - - - - -)	(- - - - - - - - -		%	- - - - - - - - - -)	(- - - - - - - - - - - - - - - - - - -			%	- - - - - - - - - - - - - - - - - - -)			mg g^{-1}	
97P02693	30-47	Btg	tcly	VR 3	KK 3	GI 1	MI 1														
97P02694	47-81	Bt / Eg	tcly	KK 3	MT 2	VR 2	MI 2														
97P02695	81-101	Bt1	tcly	KK 3	MT 2	VR 2	MI 2														

FRACTION INTERPRETATION:
tcly - Total Clay, <0.002 mm

MINERAL INTERPRETATION:
GI - Gibbsite KK - Kaolinite MI - Mica MT - Montmorillonite VR - Vermiculite

RELATIVE PEAK SIZE: 5 Very Large 4 Large 3 Medium 2 Small 1 Very Small 6 No Peaks

*** Primary Characterization Data ***

Pedon ID: 97LA033004 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Satsuma Fine-silty, siliceous, hyperthermic Glossic Hapludalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0455

Sand - Silt Mineralogy (2.0-0.002 mm)

Layer	Depth (cm)	Horz	Fraction	-1- -2- -3- -4- -5- X-Ray (- - - - - - - - peak size - - - - - - - - -)	-6- -7- -8- -9- Thermal (- - - - - - - - % - - - - - - - - - -)	-10- Tot Re (- - - - - - - - - - - - - - - - - - - -	-11- -12- -13- -14- -15- -16- Optical Grain Count 7B1a % - - - - - - - - - - - - - - - - - - -)	-17- EGME Retn mg g^{-1}	-18- Interpretation
97P02693	30-47	Btg	csi			82	QZ 72 FK 14 PO 5 CD 2 PR 2 OP 2 FP 2 ZR 1 BT 1 HN tr MS tr FE tr BY tr GS tr EP tr CT tr		
97P02694	47-81	Bt / Eg	csi			77	QZ 71 FK 15 CD 3 MS 2 FE 2 PR 2 FP 2 BT 1 CM 1 AR 1 OP 1 BY tr EP tr PO tr HN tr TM tr ZR tr GN tr GS tr		
97P02695	81-101	Bt1	csi			71	QZ 64 FK 21 CD 5 FP 3 MS 2 PR 1 OP 1 CM 1 BY 1 BT tr FE tr GN tr EP tr AR tr HN tr PO tr TM tr GY tr RU tr ZR tr AN tr GS tr		

FRACTION INTERPRETATION:
csi - Coarse Silt, 0.02-0.05 mm

MINERAL INTERPRETATION:

AN - Andalusite	AR - Weatherable Aggregates	BT - Biotite	BY - Beryl	CD - Chert (Chalcedony
CM - Chlorite-Mica	CT - Cassiterite	EP - Epidote	FE - Iron Oxides (Goethite	FK - Potassium Feldspar
FP - Plagioclase Feldspar	GN - Garnet	GS - Glass	GY - Gypsum	HN - Hornblende
MS - Muscovite	OP - Opaques	PO - Plant Opal	PR - Pyroxene	QZ - Quartz
RU - Rutile	TM - Tourmaline	ZR - Zircon		

*** Primary Characterization Data ***

Pedon ID: 97LA033005 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled as : Bonn ; Fine-silty, mixed, hyperthermic Vermic Natraqualf
Revised to correlated on Mar 15, 2007 : Bonn ; Fine-silty, mixed, superactive, thermic Vermic Natraqualf

SSL - Project CP97LA097 LOUISIANA HYPERTHERMIC 1
- Site ID 97LA033005 Lat: 30° 41' 49.45" north Long: 90° 56' 48.78" west NAD83 MLRA: 134
- Pedon No. 97P0456
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Natural Resources Conservation Service
National Soil Survey Center
Soil Survey Laboratory
Lincoln, Nebraska 68508-3866

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
97P02702	A	A	0-12				SIL	SI
97P02703	A1	A1	12-29				SIL	SIL
97P02704	A2	A2	29-57				SIL	SIL
97P02705	A3	A3	57-91				SIL	SIL
97P02706	A3	A3	91-110				SIL	SIL
97P02707	B / E	B/E	110-144				SIL	SIL
97P02708	E / B	E/B	144-169				SIL	SIL
97P02709	2Bt1	2Bt1	169-197				SIL	SIL
97P02710	3Bt2	3Bt2	197-228				SIL	SIL
97P02711	3Bt3	3Bt3	228-260				SIL	SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
Weighted Particles, 0.1-75mm, 75 mm Base	3	% wt
Clay, total, Weighted Average	25	% wt
Clay, carbonate free, Weighted Average	25	% wt
CEC Activity, CEC7/Clay, Weighted Average	0.98	(NA)
LE, Whole Soil, Summed to 1m	3	cm/m
Volume, >2mm, Weighted Average	0	% vol

Weighted averages based on control section: 57-97 cm

*** Primary Characterization Data ***

Pedon ID: 97LA033005 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Bonn Fine-silty, mixed, hyperthermic Vermic Natraqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0456

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002	-2- Silt .002 -.05	-3- Sand .05 -2	-4- Fine < .0002	-5- CO_3 < .002	-6- Fine .002 -.02	-7- Coarse .02 -.05	-8- VF .05 -.10	-9- F .10 -.25	-10- M .25 -.50	-11- C .5 -1	-12- VC 1 -2	-13- 2 -5	-14- 5 -20	-15- 20 -75	-16- .1-75	-17- >2 mm wt % whole soil
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - - -)					(Rock Fragments (mm))				
				(- % of <2mm Mineral Soil -)												(- - - - - - - Weight - - - - - - - -)				
				3A1	3A1	3A1	3A1		3A1	3A1	3A1	3A1	3A1	3A1	3A1	3B1	3B1	3B1		
97P02702	0-12	A	S	6.5	84.9	8.6	4.3		48.8	36.1	2.7	3.7	1.9	0.3	tr	--	--	--	6	--
97P02703	12-29	A1	S	14.7	77.5	7.8	9.5		26.0	51.5	2.6	3.4	1.6	0.2	tr	--	--	--	5	--
97P02704	29-57	A2	S	12.2	82.3	5.5	9.5		46.4	35.9	2.0	2.3	1.1	0.1	--	--	--	14	17	14
97P02705	57-91	A3	S	25.4	70.3	4.3	16.6		42.6	27.7	1.6	1.9	0.7	0.1	tr	--	--	--	3	--
97P02706	91-110	A3	S	22.2	72.3	5.5	11.4		43.8	28.5	1.8	2.2	1.0	0.3	0.2	--	--	--	4	--
97P02707	110-144	B / E	S	19.1	74.5	6.4	10.2		45.9	28.6	2.1	2.5	1.3	0.3	0.2	--	--	--	4	--
97P02708	144-169	E / B	S	17.9	75.3	6.8	10.8		46.3	29.0	2.3	2.8	1.3	0.3	0.1	--	--	--	5	--
97P02709	169-197	2Bt1	S	16.8	75.8	7.4	10.5		48.3	27.5	2.7	3.0	1.3	0.3	0.1	--	--	--	5	--
97P02710	197-228	3Bt2	S	18.5	73.4	8.1	13.4		47.9	25.5	3.0	3.5	1.5	tr	0.1	--	--	--	5	--
97P02711	228-260	3Bt3	S	23.9	66.7	9.4	14.9		42.7	24.0	3.3	4.2	1.7	0.1	0.1	--	--	--	6	--

Bulk Density & Moisture

Layer	Depth (cm)	Horz	Prep	-1- (Bulk Density) 33 kPa	-2- Oven Dry	-3- Cole Whole Soil	-4- (- - - - - - - - - - - Water Content - - - - - - - - - - -) 6 kPa	-5- 10 kPa	-6- 33 kPa	-7- 1500 kPa	-8- 1500 kPa Moist	-9- Ratio AD/OD	-10- WRD Whole Soil	-11- Aggst Stabl 2-0.5mm	-12- (- - Ratio/Clay - -) CEC7	-13- 1500 kPa
				(- - - g cm^{-3} - - -)			(- - - - - - - - - - - - % of < 2mm - - - - - - - - - - - -)						cm^3 cm^{-3}	%		
				4A1d	4A1h				4B1c	4B2a		4B5	4C1		8D1	8D1
97P02702	0-12	A	S	1.17	1.25	0.022			39.5	6.4		1.012	0.39		1.69	0.98
97P02703	12-29	A1	S	1.61	1.64	0.006			17.5	7.0		1.012	0.17		0.60	0.48
97P02704	29-57	A2	S	1.54	1.61	0.014			22.7	10.3		1.020	0.17		1.11	0.84
97P02705	57-91	A3	S	1.54	1.80	0.053			23.1	13.7		1.027	0.14		0.97	0.54
97P02706	91-110	A3	S	1.57	1.73	0.033			23.9	11.9		1.025	0.19		1.04	0.54
97P02707	110-144	B / E	S	1.62	1.79	0.034			22.5	10.1		1.022	0.20		1.04	0.53
97P02708	144-169	E / B	S	1.58	1.74	0.033			24.2	9.4		1.020	0.23		0.98	0.53
97P02709	169-197	2Bt1	S	1.66	1.74	0.016			20.6	8.7		1.017	0.20		0.89	0.52
97P02710	197-228	3Bt2	S	1.71	1.81	0.019			19.7	9.5		1.018	0.17		0.75	0.51
97P02711	228-260	3Bt3	S	1.74	1.82	0.015			18.8	12.3		1.023	0.11		0.70	0.51

*** Primary Characterization Data ***

Pedon ID: 97LA033005 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Bonn Fine-silty, mixed, hyperthermic Vermic Natraqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0456

Water Content				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-
				(- - Atterberg - -)		(- - - - - Bulk Density - - - - -)			(- Water Content -)							
				(- - - Limits - - -)		Field	Recon	Recon	Field	Recon	(- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - - -)					
				LL	PI		33	Oven		33	6	10	33	100	200	500
	Depth						kPa	Dry		kPa	kPa	kPa	kPa	kPa	kPa	kPa
Layer	(cm)	Horz	Prep	pct <0.4mm		(- - - - - - - - g cm^{-3} - - - - - - -)			(- % of < 2mm -)							
				4F1	4F										4B1a	
97P02702	0-12	A	S	32	5										9.8	
97P02702[1]	0-12		S	32	5											
97P02703	12-29	A1	S												10.5	
97P02704	29-57	A2	S												15.2	
97P02705	57-91	A3	S												21.1	
97P02706	91-110	A3	S	34	16										18.7	
97P02706[2]	91-110		S	34	16											
97P02707	110-144	B / E	S												17.3	
97P02708	144-169	E / B	S												15.1	
97P02709	169-197	2Bt1	S												15.8	
97P02710	197-228	3Bt2	S												15.4	
97P02711	228-260	3Bt3	S												19.9	

[1,2] Multiple values present due to instrumentation or analyzed size fraction. See laboratory for more information.

*** Primary Characterization Data ***

Pedon ID: 97LA033005 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Bonn Fine-silty, mixed, hyperthermic Vermic Natraqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0456

Carbon & Extractions				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
				(- - - - - Total - - - - -)			Org	C/N	(- - - Dith-Cit Ext - - -)			(- - - - - - Ammonium Oxalate Extraction - - - - - -)						(- - - Na Pyro-Phosphate - - -)			
	Depth			C	N	S	C	Ratio	Fe	Al	Mn	Al+½Fe	ODOE	Fe	Al	Si	Mn	C	Fe	Al	Mn
Layer	(cm)	Horz	Prep	(- - - - - - % of <2 mm - - - - - -)					(- % of < 2mm -)								mg kg^{-1}	(- - - - - - % of < 2mm - - - - -)			
					6B4a		6A1c														
97P02702	0-12	A	S		0.165		3.17	19													
97P02703	12-29	A1	S		0.057		0.92	16													
97P02704	29-57	A2	S		0.029		0.11	4													
97P02705	57-91	A3	S		0.010		0.07	7													

97P02706	91-110	A3	S	0.030	0.03	1
97P02707	110-144	B / E	S		0.03	
97P02708	144-169	E / B	S		0.04	
97P02709	169-197	2Bt1	S		0.03	
97P02710	197-228	3Bt2	S		0.03	
97P02711	228-260	3Bt3	S		0.01	

CEC & Bases

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-
				(- - - - - - NH_4OAC Extractable Bases - - - - -)								CEC8	CEC7	ECEC		(- - - - Base - - - -)	
								Sum	Acid-	Extr	KCl	Sum	NH_4	Bases	Al	(- Saturation -)	
	Depth			Ca	Mg	Na	K	Bases	ity	Al	Mn	Cats	OAC	+Al	Sat	Sum	NH_4OAC
Layer	(cm)	Horz	Prep	(- - - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)		
				6N2e	6O2d	6P2b	6Q2b		6H5a	6G9c	6D3b	5A3a	5A8b	5A3b	5G1	5C3	5C1
97P02702	0-12	A	S	4.9	0.8	1.0	0.3	7.0	10.5	1.7	6.4	17.5	11.0	8.7	20	40	64
97P02703	12-29	A1	S	2.8	1.3	1.7	0.2	6.0	5.9	3.1	0.1	11.9	8.8	9.1	34	50	68
97P02704	29-57	A2	S	5.0	3.4	4.6	0.3	13.3	3.0			16.3	13.6			82	98
97P02705	57-91	A3	S	10.5*	6.8	9.3	0.3	26.9	2.4			29.3	24.6			92	100
97P02706	91-110	A3	S	8.5*	6.4	8.9	0.4	24.2	1.9			26.1	23.1			93	100
97P02707	110-144	B / E	S	7.1*	5.5	7.6	0.2	20.4	1.6			22.0	19.8			93	100
97P02708	144-169	E / B	S	8.2*	4.9	6.3	0.2	19.6	0.7			20.3	17.6			97	100
97P02709	169-197	2Bt1	S	4.9*	4.2	6.0	0.2	15.3	1.2			16.5	15.0			93	100
97P02710	197-228	3Bt2	S	6.3*	4.0	4.7	0.2	15.2	1.9			17.1	13.9			89	100
97P02711	228-260	3Bt3	S	6.0	5.2	4.6	0.3	16.1	2.1			18.2	16.7			88	96

*Extractable Ca may contain Ca from calcium carbonate or gypsum., CEC7 base saturation set to 100.

*** Primary Characterization Data ***

Pedon ID: 97LA033005 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Bonn Fine-silty, mixed, hyperthermic Vermic Natraqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0456

Salt

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-	-19-	-20-
				(- Water Extracted From Saturated Paste -)																			
																			Total	Elec	Pred Elec	Exch	
	Depth			Ca	Mg	Na	K	CO_3	HCO_3	F	Cl	PO_4	Br	OAC	SO_4	NO_2	NO_3	H_2O	Salts	Cond	Cond	Na	SAR
Layer	(cm)	Horz	Prep	(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)										(- - - - % - - - -)		(- - dS m^{-1} - -)		%	
				6N1b	6O1b	6P1b	6Q1b	6I1b	6J1b	6U1b	6K1d				6L1d	6W1b	6M1d	8A	8D5	8A3a	8I	5D2	5E
97P02702	0-12	A	S																		0.17	9	
97P02703	12-29	A1	S																		0.14	19	
97P02704	29-57	A2	S	1.7	0.7	14.6	0.2	--	1.0	tr	14.8				3.4	tr	--	48.2	0.1	1.85	0.66	29	13
97P02705	57-91	A3	S	0.7	1.0	24.1	0.2	--	0.8	tr	22.9				6.2	--	--	60.6	0.1	2.96	1.12	32	26
97P02706	91-110	A3	S	1.0	0.7	14.0	0.2	--	0.5	tr	14.4				3.0	tr	--	59.7	0.1	1.76	0.94	35	15
97P02707	110-144	B / E	S	0.9	0.5	16.5	0.1	--	0.5	tr	17.2				3.3	tr	--	57.6	0.1	1.99	0.75	34	20
97P02708	144-169	E / B	S	1.0	0.4	14.7	0.2	--	0.8	--	15.6				2.5	tr	--	56.3	0.1	1.83	0.70	31	18
97P02709	169-197	2Bt1	S	0.9	0.6	9.5	0.3	--	0.8	--	13.5				1.9	tr	--	51.9	0.1	1.63	0.60	37	11
97P02710	197-228	3Bt2	S	--	0.2	8.3	0.2	--	0.5	0.5	9.2				1.3	tr	tr	50.7	tr	1.19	0.49	31	26
97P02711	228-260	3Bt3	S	0.3	0.2	8.9	--	--	0.5	tr	8.2				0.9	tr	--	50.3	tr	1.14	0.35	25	18

pH & Carbonates

Layer	Depth (cm)	Horz	Prep	-1- KCl	-2- $CaCl_2$ 0.01M 1:2 4C1a2a	-3- H_2O 1:1 4C1a2a	-4- Sat Paste 8C1b	-5- Sulf	-6- NaF	-7- Carbonate As $CaCO_3$ <2mm	-8- Carbonate As $CaCO_3$ <20mm	-9- Gypsum As $CaSO_4*2H_2O$ <2mm	-10- Gypsum As $CaSO_4*2H_2O$ <20mm	-11- Resist ohms cm^{-1}
				(- - - - - - - - - - - - - - - - - - pH					- - - - - - - - - - - - - - - - - -)	(- - Carbonate - -)		(- - Gypsum - - -)		
										(- - - - - - - - - - - -		%	- - - - - - - - - - - -)	
												6F1a		
97P02702	0-12	A	S		4.2	4.7								
97P02703	12-29	A1	S		4.3	5.3								
97P02704	29-57	A2	S		5.4	6.0	5.7					--		
97P02705	57-91	A3	S		6.4	6.7	6.3					--		
97P02706	91-110	A3	S		6.6	7.1	6.8					--		
97P02707	110-144	B / E	S		6.7	7.3	6.9					--		
97P02708	144-169	E / B	S		6.7	7.5	7.0					--		
97P02709	169-197	2Bt1	S		6.6	7.4	6.9					--		
97P02710	197-228	3Bt2	S		6.5	7.3	6.8							
97P02711	228-260	3Bt3	S		6.2	7.2	6.6							

*** Primary Characterization Data ***

Pedon ID: 97LA033005 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Bonn Fine-silty, mixed, hyperthermic Vermic Natraqualf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0456

Major Elements

Layer	Depth (cm)	Horz	Prep	-1- Al mg/kg 4H1b	-2- Ca mg/kg 4H1b	-3- Fe mg/kg 4H1b	-4- K mg/kg 4H1b	-5- Mg mg/kg 4H1b	-6- Mn mg/kg 4H1b	-7- Na mg/kg 4H1b	-8- P mg/kg 4H1b	-9- Si mg/kg 4H1b	-10- Sr mg/kg	-11- Ti mg/kg 4H1b	-12- Zr mg/kg 4H1b
97P02708	144-169	E / B	S	12982	3193	4518	4008	1203	242	6331	603	606636		619	15

*** Primary Characterization Data ***

Pedon ID: 97LA033005 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Bonn Fine-silty, mixed, hyperthermic Vermic Natraqualf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 97P0456

Clay Mineralogy (<.002 mm)

				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
						X-Ray					Thermal					Elemental				EGME	Inter
													SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	K_2O	Na_2O	Retn	preta
	Depth		Fract			7A2i															tion
Layer	(cm)	Horz	ion	(- - - - - - - - -		peak size	- - - - - - - - - -)		(- - - - - - - - -		%	- - - - - - - - - -)	(- - - - - - - - - - - - - - - - - - -			%	- - - - - - - - - - - - - - - - - - -)			mg g^{-1}	
97P02706	91-110	A3	tcly	MT 4	KK 2																
97P02707	110-144	B / E	tcly	MT 4	KK 3																

FRACTION INTERPRETATION:
tcly - Total Clay, <0.002 mm

MINERAL INTERPRETATION:
KK - Kaolinite MT - Montmorillonite

RELATIVE PEAK SIZE: 5 Very Large 4 Large 3 Medium 2 Small 1 Very Small 6 No Peaks

*** Primary Characterization Data ***

Pedon ID: S04LA-033-001 — (East Baton Rouge Parish, Louisiana) — Print Date: Aug 10 2011 4:00PM

Sampled as : Scotlandville ; Fine-silty, mixed, active, thermic Oxyaquic Glossudalf
Revised to :

SSL - Project C2004USLA166 East Baton Rouge & East Feliciana Parish
- Site ID S04LA-033-001 Lat: 30° 35' 29.31" north Long: 91° 12' 8.73" west MLRA: 134
- Pedon No. 04N0884
- General Methods 1B1A, 2A1, 2B

United States Department of Agriculture
Natural Resources Conservation Service
National Soil Survey Center
Soil Survey Laboratory
Lincoln, Nebraska 68508-3866

Layer	Horizon	Orig Hzn	Depth (cm)	Field Label 1	Field Label 2	Field Label 3	Field Texture	Lab Texture
04N05017	Ap		0-20	S04LA-033-001-1			SI	SI
04N05018	E		20-31	S04LA-033-001-2			SI	SIL
04N05019	Bt1		31-54	S04LA-033-001-3			SIL	SICL
04N05020	Bt2		54-84	S04LA-033-001-4			SIL	SIL
04N05021	Bt/E1		84-120	S04LA-033-001-5			SIL	SIL
04N05022	Bt/E2		120-139	S04LA-033-001-6			SIL	SIL
04N05023	Bt/E3		139-183	S04LA-033-001-7			SIL	SIL
04N05024	2BC		183-210	S04LA-033-001-8			SI	SIL

Pedon Calculations

Calculation Name	Result	Units of Measure
LE, Whole Soil, Summed to 1m	2	cm/m

Weighted averages based on control section: 31-81 cm

PSDA & Rock Fragments

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002	-2- Silt .002 -.05	-3- Sand .05 -2	-4- Fine < .0002	-5- CO_3 < .002	-6- Fine .002 -.02	-7- Coarse .02 -.05	-8- VF .05 -.10	-9- F .10 -.25	-10- M .25 -.50	-11- C .5 -1	-12- VC 1 -2	-13- 2 -5	-14- 5 -20	-15- 20 -75	-16- .1-75	-17- >2 mm wt % whole soil
				(- - - - - Total - - - - - -)			(- - Clay - - -)		(- - - - Silt - - - - -)		(- - - - - - - - - - - - Sand - - - - - - - - - - - - -)					(Rock Fragments (mm))				
				(- % of <2mm Mineral Soil -)												(- - - - - - - Weight - - - - - - - -)				
				3A1a1a			3A1a1a		3A1a1a		3A1a1a	3A1a1a	3A1a1a	3A1a1a	3A1a1a	(- - - - - - - % of <75mm - - - - - -)				
04N05017	0-20	Ap	S	9.7	88.5	1.8	5.8		34.5	54.0	1.0	0.3	0.2	0.1	0.2	--	--	--	1	--
04N05018	20-31	E	S	15.9	83.0	1.1	10.0		36.9	46.1	0.9	0.1	0.1	tr	--	--	--	--	tr	--
04N05019	31-54	Bt1	S	29.6	69.7	0.7	18.0		35.1	34.6	0.6	0.1	tr	tr	--	--	--	--	tr	--
04N05020	54-84	Bt2	S	26.0	73.5	0.5	17.8		38.8	34.7	0.4	0.1	tr	tr	tr	--	--	--	tr	--
04N05021	84-120	Bt/E1	S	22.0	77.4	0.6	11.5		41.1	36.3	0.5	0.1	tr	tr	tr	--	--	--	tr	--
04N05022	120-139	Bt/E2	S	19.4	79.8	0.8	11.0		39.2	40.6	0.7	0.1	tr	tr	--	--	--	--	tr	--
04N05023	139-183	Bt/E3	S	18.2	80.6	1.2	12.4		38.5	42.1	0.9	0.2	0.1	tr	--	--	--	--	tr	--
04N05024	183-210	2BC	S	17.5	78.5	4.0	14.9		35.8	42.7	1.8	0.7	0.5	0.8	0.2	1	--	--	3	1

*** Primary Characterization Data ***

Pedon ID: S04LA-033-001 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Scotlandville Fine-silty, mixed, active, thermic Oxyaquic Glossudalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 04N0884

Water Dispersible PSDA

Layer	Depth (cm)	Horz	Prep	-1- Clay < .002	-2- Silt .002 -.05	-3- Sand .05 -2	-4- F < .0002	-5- CO_3 < .002	-6- F .002 -.02	-7- C .02 -.05	-8- VF .05 -.10	-9- F .10 -.25	-10- M .25 -.50	-11- C .5 -1	-12- VC 1 -2
				(- - - -

*** Primary Characterization Data ***

Pedon ID: S04LA-033-001 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Scotlandville Fine-silty, mixed, active, thermic Oxyaquic Glossudalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 04N0884

Water Content

Layer	Depth (cm)	Horz	Prep	-1- (- - Atterberg - -) (- - - Limits - - -) LL	-2- PI	-3- (- - - - - Bulk Density - - - - -) Field	-4- Recon 33 kPa	-5- Recon Oven Dry	-6- (- Water Content -) Field	-7- Recon 33 kPa	-8- (- - - - - - - - - - - - - - Sieved Samples - - - - - - - - - - - - - -) 6 kPa	-9- 10 kPa	-10- 33 kPa	-11- 100 kPa	-12- 200 kPa	-13- 500 kPa
				pct <0.4mm		(- - - - - - - g cm^{-3} - - - - - - -)			(- % of < 2mm -)							
															3C1e1a	
04N05017	0-20	Ap	S												8.0	
04N05018	20-31	E	S												10.7	
04N05019	31-54	Bt1	S												17.8	
04N05020	54-84	Bt2	S												17.4	
04N05021	84-120	Bt/E1	S												15.1	
04N05022	120-139	Bt/E2	S												14.6	
04N05023	139-183	Bt/E3	S												12.9	
04N05024	183-210	2BC	S												11.7	

Carbon & Extractions

Layer	Depth (cm)	Horz	Prep	-1- (- - - - - Total - - - - -) C (- - - - - - % of <2 mm - - - - - -) 4H2a	-2- N 4H2a	-3- S 4H2a	-4- Org C	-5- C/N Ratio	-6- (- - - Dith-Cit Ext - - -) Fe (- % of < 2mm - - - - - - - - - - - - - - - - - - -) 4G1	-7- Al 4G1	-8- Mn 4G1	-9- (- - - - - - Ammonium Oxalate Extraction - - - - - -) Al+½Fe	-10- ODOE 4G2a	-11- Fe 4G2a	-12- Al 4G2a	-13- Si 4G2a	-14- Mn mg kg^{-1} 4G2a	-15- (- - - Na Pyro-Phosphate - - -) C (- - - - - - % of < 2mm - - - - -)	-16- Fe 4G3	-17- Al 4G3	-18- Mn 4G3
04N05017	0-20	Ap	S	1.01	0.10	0.01		10	0.7	0.1	0.1										
04N05018	20-31	E	S	0.38	0.04	0.01		10	1.0	0.1	0.1										
04N05019	31-54	Bt1	S	0.41	0.06	0.01		7	1.9	0.1	0.1	0.43	0.04	0.43	0.21	0.04	411.7		0.1	0.1	--
04N05020	54-84	Bt2	S	0.23	0.03	0.01		8	1.8	0.1	0.1										
04N05021	84-120	Bt/E1	S	0.16	0.03	tr		6	1.7	0.1	tr										
04N05022	120-139	Bt/E2	S	0.11	0.02	0.01		5	1.5	0.1	tr										
04N05023	139-183	Bt/E3	S	0.09	0.01	0.01		9	1.3	0.1	tr										
04N05024	183-210	2BC	S	0.07	tr	tr		37	1.2	0.1	tr										

*** Primary Characterization Data ***

Pedon ID: S04LA-033-001 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Scotlandville Fine-silty, mixed, active, thermic Oxyaquic Glossudalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 04N0884

CEC & Bases

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- Sum Bases	-6- Acid-ity	-7- Extr Al	-8- KCl Mn	-9- CEC8 Sum Cats	-10- CEC7 NH_4 OAC	-11- ECEC Bases +Al	-12- Al Sat	-13- Base Sat Sum	-14- Base Sat NH_4OAC
				(- - - - - - NH_4OAC Extractable Bases - - - - -)								CEC8	CEC7	ECEC		(- - - - Base - - - -)	
																(- Saturation -)	
				(- - - - - - - - - - - - - - - - - - cmol(+) kg^{-1} - - - - - - - - - - - - - - - - - - -)							mg kg^{-1}	(- - - - cmol(+) kg^{-1} - - -)			(- - - - - - - - % - - - - - - - -)		
				4B1a1a	4B1a1a	4B1a1a	4B1a1a		4B2b1a1	4B3a1a	4B3a1a		4B1a1a				
04N05017	0-20	Ap	S	0.9	0.2	--	0.1	1.2	14.3	1.5	9.5	15.5	5.4	2.7	56	8	22
04N05018	20-31	E	S	2.9	0.4	--	0.1	3.4	5.7	0.9	3.0	9.1	6.2	4.3	21	37	55
04N05019	31-54	Bt1	S	5.2	1.9	tr	0.3	7.4	10.7	1.5	1.2	18.1	11.8	8.9	17	41	63
04N05020	54-84	Bt2	S	3.6	2.9	0.1	0.3	6.9	8.7	1.1	0.9	15.6	11.2	8.0	14	44	62
04N05021	84-120	Bt/E1	S	2.8	2.8	0.1	0.2	5.9	7.5	1.0	0.5	13.4	9.8	6.9	14	44	60
04N05022	120-139	Bt/E2	S	2.2	2.4	0.2	0.2	5.0	6.9	1.6	0.8	11.9	9.2	6.6	24	42	54
04N05023	139-183	Bt/E3	S	2.4	2.4	0.6	0.2	5.6	7.1	1.4	0.7	12.7	9.2	7.0	20	44	61
04N05024	183-210	2BC	S	2.2	2.0	0.2	0.1	4.5	5.4	1.0	0.6	9.9	7.7	5.5	18	45	58

Salt

Layer	Depth (cm)	Horz	Prep	-1- Ca	-2- Mg	-3- Na	-4- K	-5- CO_3	-6- HCO_3	-7- F	-8- Cl	-9- PO_4	-10- Br	-11- OAC	-12- SO_4	-13- NO_2	-14- NO_3	-15- H_2O	-16- Total Salts	-17- Elec Cond	-18- Pred Elec Cond	-19- Exch Na	-20- SAR
				(- Water Extracted From Saturated Paste -)																			
				(- - - - - mmol(+) L^{-1} - - - - -)				(- mmol(-) L^{-1} -)								(- - - - % - - - -)		(- - dS m^{-1} - -)		%	
04N05017	0-20	Ap	S																			--	
04N05018	20-31	E	S																			--	
04N05019	31-54	Bt1	S																			tr	
04N05020	54-84	Bt2	S																			1	
04N05021	84-120	Bt/E1	S																			1	
04N05022	120-139	Bt/E2	S																			2	
04N05023	139-183	Bt/E3	S																			7	
04N05024	183-210	2BC	S																			3	

*** Primary Characterization Data ***

Pedon ID: S04LA-033-001 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Scotlandville Fine-silty, mixed, active, thermic Oxyaquic Glossudalf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 04N0884

pH & Carbonates

Layer	Depth (cm)	Horz	Prep	-1- KCl	-2- $CaCl_2$ 0.01M 1:2 4C1a2a	-3- H_2O 1:1 4C1a2a	-4- Sat Paste	-5- Sulf	-6- NaF	-7- Carbonate As $CaCO_3$ <2mm (%	-8- Carbonate As $CaCO_3$ <20mm	-9- Gypsum As $CaSO_4$*$2H_2O$ <2mm	-10- Gypsum As $CaSO_4$*$2H_2O$ <20mm	-11- Resist ohms cm^{-1}
				(- - - - - - - - - - - - - - - - - - pH - - - - - - - - - - - - - - - - - -)						(- - Carbonate - -)		(- - Gypsum - - -)		
04N05017	0-20	Ap	S		4.1	4.8								
04N05018	20-31	E	S		4.4	5.2								
04N05019	31-54	Bt1	S		4.5	5.4								
04N05020	54-84	Bt2	S		4.4	5.3								
04N05021	84-120	Bt/E1	S		4.4	5.8								
04N05022	120-139	Bt/E2	S		4.3	5.4								
04N05023	139-183	Bt/E3	S		4.3	5.5								
04N05024	183-210	2BC	S		4.3	5.6								

Phosphorous

Layer	Depth (cm)	Horz	Prep	-1- Melanic Index	-2- NZ %	-3- Acid Oxal 4G2a	-4- Bray 1 4D3	-5- Bray 2	-6- Olsen	-7- H_2O	-8- Citric Acid	-9- Mehlich III	-10- Extr NO_3 mg kg^{-1}
					(- Phosphorous - - - - - - - - - - - - - - - - - - -)								
						(- -mg kg^{-1} - - - - - - - - - - - - - - - - - -)							
04N05017	0-20	Ap	S				14.5						
04N05018	20-31	E	S				1.4						
04N05019	31-54	Bt1	S			--	0.9						
04N05020	54-84	Bt2	S				0.5						
04N05021	84-120	Bt/E1	S				1.1						
04N05022	120-139	Bt/E2	S				2.0						
04N05023	139-183	Bt/E3	S				8.9						
04N05024	183-210	2BC	S				9.0						

*** Primary Characterization Data ***

Pedon ID: S04LA-033-001 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Scotlandville Fine-silty, mixed, active, thermic Oxyaquic Glossudalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 04N0884

Clay Mineralogy (<.002 mm)

Layer	Depth (cm)	Horz	Fraction	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
				X-Ray					Thermal				Elemental							EGME	Interpretation
													SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	K_2O	Na_2O	Retn	
				7A1a1																	
				(- - - - - - - - - peak size - - - - - - - - - -)					(- - - - - - - - - % - - - - - - - - - -)				(- - - - - - - - - - - - - - - - - - - % - - - - - - - - - - - - - - - - - - -)							mg g^{-1}	
04N05017	0-20	Ap	tcly	KK 2	MI 2	VR 1	QZ 1														CMIX
04N05019	31-54	Bt1	tcly	KK 2	MI 2	VR 2	QZ 1														CMIX
04N05020	54-84	Bt2	tcly	KK 2	MI 2	VR 2	QZ 1														CMIX
04N05021	84-120	Bt/E1	tcly	KK 2	MI 2	VR 2	QZ 1														CMIX
04N05024	183-210	2BC	tcly	KK 3	VR 3	MI 1	GE 1	QZ 1													CMIX

FRACTION INTERPRETATION:
tcly - Total Clay, <0.002 mm

MINERAL INTERPRETATION:
GE - Goethite KK - Kaolinite MI - Mica QZ - Quartz VR - Vermiculite

RELATIVE PEAK SIZE: 5 Very Large 4 Large 3 Medium 2 Small 1 Very Small 6 No Peaks

*** Primary Characterization Data ***

Pedon ID: S04LA-033-001 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM
Sampled As : Scotlandville Fine-silty, mixed, active, thermic Oxyaquic Glossudalf
USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 04N0884

Sand - Silt Mineralogy (2.0-0.002 mm)				-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	-12-	-13-	-14-	-15-	-16-	-17-	-18-
						X-Ray					Thermal					Optical				EGME	Inter
													Tot Re			Grain Count				Retn	preta
	Depth		Fract													7B1a2					tion
Layer	(cm)	Horz	ion	(- - - - - - - - peak size - - - - - - - - -)					(- - - - - - - - % - - - - - - - - - -)				(- % - - - - - - - - - - - - - - - - - - -)							mg g^{-1}	
04N05019	31-54	Bt1	csi										73	QZ 64	FK 21	CD 8	BT 2	MS 2	PR 2		SMIX
														OP 1	HN 1	FE tr	PO tr	BY tr	GS tr		
														RU tr	TM tr	AR tr	ZR tr				
04N05020	54-84	Bt2	csi										76	QZ 66	FK 19	CD 7	PR 3	MS 2	OP 1		SMIX
														BT 1	FE 1	ZR 1	RU tr	SS tr	TM tr		
														AR tr	ZE tr	BY tr	PO tr	GN tr	GS tr		
														HN tr							
04N05022	120-139	Bt/E2	csi										70	QZ 65	FK 25	CD 3	MS 2	OP 2	PR 2		SMIX
														BT 1	CA tr	PO tr	GN tr	GS tr	HN tr		
														BY tr	RU tr	AR tr	ZR tr				
04N05024	183-210	2BC	csi										83	QZ 79	FK 14	PR 2	CD 2	OP 2	BT 1		SMIX
														CA tr	PO tr	GN tr	HN tr	FE tr	MS tr		
														BY tr	RU tr	AR tr	ZR tr				

FRACTION INTERPRETATION:
csi - Coarse Silt, 0.02-0.05 mm

MINERAL INTERPRETATION:

AR - Weatherable Aggregates	BT - Biotite	BY - Beryl	CA - Calcite	CD - Chert (Chalcedony
FE - Iron Oxides (Goethite	FK - Potassium Feldspar	GN - Garnet	GS - Glass	HN - Hornblende
MS - Muscovite	OP - Opaques	PO - Plant Opal	PR - Pyroxene	QZ - Quartz
RU - Rutile	SS - Sponge Spicule	TM - Tourmaline	ZE - Zeolite	ZR - Zircon

*** Primary Characterization Data ***

Pedon ID: S04LA-033-001 (East Baton Rouge Parish, Louisiana) Print Date: Aug 10 2011 4:00PM

Sampled As : Scotlandville Fine-silty, mixed, active, thermic Oxyaquic Glossudalf

USDA-NRCS-NSSC-Soil Survey Laboratory ; Pedon No. 04N0884

INTERPRETATION (BY HORIZON):

SMIX - Mixed Sand

*** Glossary of Codes ***

Print Date: Aug 10 2011 4:00PM

Reports: Primary Characterization Report;
Pedons: 04N0884; 40A1323; 40A1329; 40A1330; 40A1335; 40A1352; 40A1353; 40A1354; 40A1355; 40A1356; 40A1357; 96P0004; 96P0005; 96P0006; 97P0453; 97P0454; 97P0455; 97P0456;

*** Method Codes ***

Code	Description
3B1	Particles >2 mm, Weight Estimates
3A1	PSDA, Routine, Pipet
3A1a1a	PSDA, Routine, Pipet
3A1a6a	PSDA, Water Dispersible, Air-dry
3C2a1a	Water Retention, 15 Bar, Pressure-Plate, <2mm
3D1	Water Retention, ADOD
3F1a1a	Aggregate Stability, 2- to 0.5-mm Aggregates Retained
4A1d	Bulk Density, 1/3-Bar Desorption I
4A1h	Bulk Density, Oven-Dry
4B1b	Water Retention, 0.1 or 0.33 bar, Soil Pieces
4B1c	Water Retention, clod, 0.06, 0.1, 0.33, or 1 bar, pressure-plate extraction
4B2a	Water Retention, 15 Bar, Pressure-Plate, <2mm
4B5	Water Retention, ADOD
4C1	derived WRD, 4C1
8D1	Ratio, to Total Clay - 8D1
DbWR1	Bulk Density and Water Retention, Pressure-Plate, Clods
3C1e1a	Water Retention, 2 Bar, Pressure-Plate, <2mm
4A1a	Bulk Density, Field State
4B1a	Water Retention, 2 Bar, Pressure-Plate, <2mm
4B4	Water Retention, Field State, clod
4F	derived Plasticity Index
4F1	Plasticity Index, Liquid Limit
4G1	Cations, Dithionite-Citrate Extractable
4G2a	Cations, Acid Oxalate Extractable
4G3	Cations, Pyrophosphate Extractable
4H2a	Total N, C, S
6A1a	Organic Carbon, acid dichromate digestion, FeSO4 titration
6A1c	Organic Carbon, acid dichromate digestion, FeSO4 titration, automatic titrator
6A2e	Total Carbon, dry combustion, CO2 evolution V
6B1a	Total Nitrogen, Kjeldahl digestion, ammonia distillation
6B4a	Total Nitrogen, dry combustion, N2 Evolution
6C1a	Iron, Dithionite Extraction, Dichromate Titration
4B1a1a	CEC and Cations, NH4OAc, 2M KCl displacement
4B3a1a	Cations, Potassium Chloride Extractable
5C3	derived BSECAT, 5C3
6N2e	Calcium, NH4OAc Extraction, Atomic Absorption I
6Q2b	Potassium, NHOAc Extraction, Atomic Absorption I
5A3b	derived ECEC, 5A3b
5A8b	CEC, NH4OAc, pH 7.0, automatic extractor, steam distillation I
6H1a	Extractable Acidity, BaCl2-Triethanolamine I
6P2b	Sodium, NH4OAc Extraction, Atomic Absorption I

5C1	derived BSESAT, 5C1
5G1	derived AL_SAT, 5G1
6D3b	Manganese, 1 N KCl Extractable, Automatic Extractor, Inductively Coupled Plasma Spectrometry II
6G9c	Cations, Potassium Chloride Extractable, 1 N, automatic extractor, ICP II (6G9c)
6N2b	Calcium, NH4OAc Extraction, Oxalate-Permanganate I
6O2d	Magnesium, NH4OAc Extraction, Atomic Absorption I
6Q2a	Potassium, NHOAc Extraction, Flame Photometry
4B2b1a1	Extractable Acidity, BaCl2-Triethanolamine, Centrifuge
5A1a	CEC, NH4OAc, pH 7.0, Buchner funnel, direct distillation
5A3a	derived CEC_SUM, 5A3a
6G1d	Aluminum, KCl Extraction I, 30 min., Fluoride Titration
6H5a	Extractable Acidity, BaCl2-Triethanolamine IV, automatic extractor
6O2b	Magnesium, NH4OAc Extraction, Phosphate Titration

*** Glossary of Codes ***

Print Date: Aug 10 2011 4:00PM

Reports: Primary Characterization Report;
Pedons: 04N0884; 40A1323; 40A1329; 40A1330; 40A1335; 40A1352; 40A1353; 40A1354; 40A1355; 40A1356; 40A1357; 96P0004; 96P0005; 96P0006; 97P0453; 97P0454; 97P0455; 97P0456;

*** Method Codes ***

Code	Description
6P2a	Sodium, NHOAc Extraction, Flame Photometry
6L1d	Sulfate, Saturation Extraction, Anion Chromatograph, Ionic Suppressor
6M1d	Nitrate, Saturation Extraction, Anion Chromatograph, Ionic Suppressor
8A	Water Content, Saturated Paste
5E	derived SAR, 5E
6I1b	Carbonate, Saturated Paste and Soluble Salts, titration
6N1b	Calcium, Saturation Extraction, Atomic Absorption I
6P1a	Sodium, Saturation Extraction, Flame Photometry
6Q1a	Potassium, Saturation Extraction, Flame Photometry
6U1b	Fluoride, Saturation Extraction, Anion Chromatograph, Ionic Suppressor
8A3a	Saturated Paste, Mixed, Saturation Extract, Automatic Extractor Conductivity, Digital Bridge
8D5	derived est total salts, 8D5
5D2	derived NA_EXCH, 5D2
6J1b	Bicarbonate, Saturation Extraction, Acid Titration, Automatic Extractor
6K1d	Chloride, Saturation Extraction, Anion Chromatograph, Ionic Suppressor
6O1b	Magnesium, Saturation Extraction, Atomic Absorption I
6P1b	Sodium, Saturation Extraction, Atomic Absorption I
6Q1b	Potassium, Saturation Extraction, Atomic Absorption I
6W1b	Nitrite, Saturation Extraction, Anion Chromatograph, Ionic Suppressor
8A1a	Saturated Paste and Soluble Salts, EC cap rise
8I	Salt Prediction, 1:2 (w/v)
4D3	Phosphorus, Bray 1
4C1a2a	pH, Routine, 1:1 Water and 1:2 0.01M CaCl2
6E1b	Calcium Carbonate Equivalent, HCl, <2mm, manometer (6E1b)
6E1g	Calcium Carbonate Equivalent, HCl, <2mm, manometer, electronic (6E1g)
6F1a	Gypsum, H2O Extraction, Acetone Precipitation, <2mm
8C1a	pH, 1:1 Water
8C1b	Reaction (pH), Saturated Paste
4H1b	Major Elements (HF+HNO3+HCl)
7A1a1	X-ray Diffraction, Thin Film on Glass, Resin Pretreatment
7A2i	X-ray Diffraction, Thin Film on Glass, Resin Pretreatment II
7B1a	Optical Analysis, Full Grain Count
7B1a2	Optical Analysis, Full Grain Count

*** Preparation Codes ***

Code	Description / List of Methods
Sjj	The air-dried soil passing a No. 10-mesh sieve 3A1, 3A1a1a, 3A1a6a, 3C2a1a, 3D1, 4B2a, 4B5, 3C1e1a, 4B1a, 4F, 4F1, 4G1, 4G2a, 4G3, 6A1a, 6A1c, 6A2e, 6B1a, 6B4a, 6C1a, 4B1a1a, 4B3a1a, 6N2e, 6Q2b, 5A8b, 6H1a, 6P2b, 6D3b, 6G9c, 6N2b, 6O2d, 6Q2a, 4B2b1a1, 5A1a, 6G1d, 6H5a, 6O2b, 6P2a, 6L1d, 6M1d, 8A, 6I1b, 6N1b, 6P1a, 6Q1a, 6U1b, 8A3a, 6J1b, 6K1d, 6O1b, 6P1b, 6Q1b, 6W1b, 8A1a, 8I, 4D3, 4C1a2a, 6E1b, 6E1g, 6F1a, 8C1a, 8C1b, 7A1a1, 7A2i, 7B1a, 7B1a2
Sal	The air-dried whole soil passing a No. 10-mesh sieve and retained on a No. 18-mesh sieve 3F1a1a

Caj The moist soil clod used for bulk density determinations
4A1d, 4A1h, 4B1b, 4B1c, DbWR1, 4A1a, 4B4
Sjf The air-dried soil passing a No. 10-mesh sieve ground to pass a No. 80-mesh sieve
4H2a, 4H1b

*** Instrument Sets ***

Instrument Set Name	List of Methods
Instrument Not Specified	3A1, 3B1, 3A1a6a, 3C2a1a, 3D1, 3F1a1a, 4A1d, 4A1h, 4B1b, 4B1c, 4B2a, 4B5, DbWR1, 3C1e1a, 4A1a, 4B1a, 4B4, 4F, 4F1, 6A1a, 6B1a, 6C1a, 6H1a, 6P2b, 6N2b, 6Q2a, 5A1a, 6G1d, 6O2b, 6P2a, 8A, 6P1a, 6Q1a, 8A1a, 6E1b, 7A2i, 7B1a, 7B1a2
Omega PCL-200 Pressure Calibrator	3A1a1a
Perkin Elmer Aanalyst 400	4G1
ICP-PE4300 radial and Cary 50 Conc (absorbance)	4G2a
Perkin Elmer Aanalyst 300	4G3
elementar Vario EL	4H2a
titrator	6A1c, 6H5a, 6I1b, 6J1b
elemental analyzer	6A2e, 6B4a

*** Glossary of Codes ***

Print Date: Aug 10 2011 4:00PM

Reports: Primary Characterization Report;
Pedons: 04N0884; 40A1323; 40A1329; 40A1330; 40A1335; 40A1352; 40A1353; 40A1354; 40A1355; 40A1356; 40A1357; 96P0004; 96P0005; 96P0006; 97P0453; 97P0454; 97P0455; 97P0456;

*** Instrument Sets ***

Instrument Set Name	List of Methods
CEC and bases-Set 1 (AA-PE300 and Auto 1030 Analyzer)	4B1a1a
ICP - Perkin Elmer Optima 4300 DV (Radial)	4B3a1a
atomic adsorption spectrophotometer	6N2e, 6Q2b, 6P2b, 6G9c, 6O2d, 6N1b, 6O1b, 6P1b, 6Q1b
distillation titirator	5A8b
inductively coupled plasma spectrophotometer	6D3b
Titroprocessors	4B2b1a1, 4C1a2a
chromatograph	6L1d, 6M1d, 6U1b, 6K1d, 6W1b
EC meter	8A3a, 8I, 6F1a
Cary 50 Conc (absorbance)	4D3
pH meter	4C1a2a, 8C1a, 8C1b
manometer	6E1g
ICP - Perkin Elmer Optima 3300 DV (Axial)	4H1b
X-ray diffractometer	7A1a1

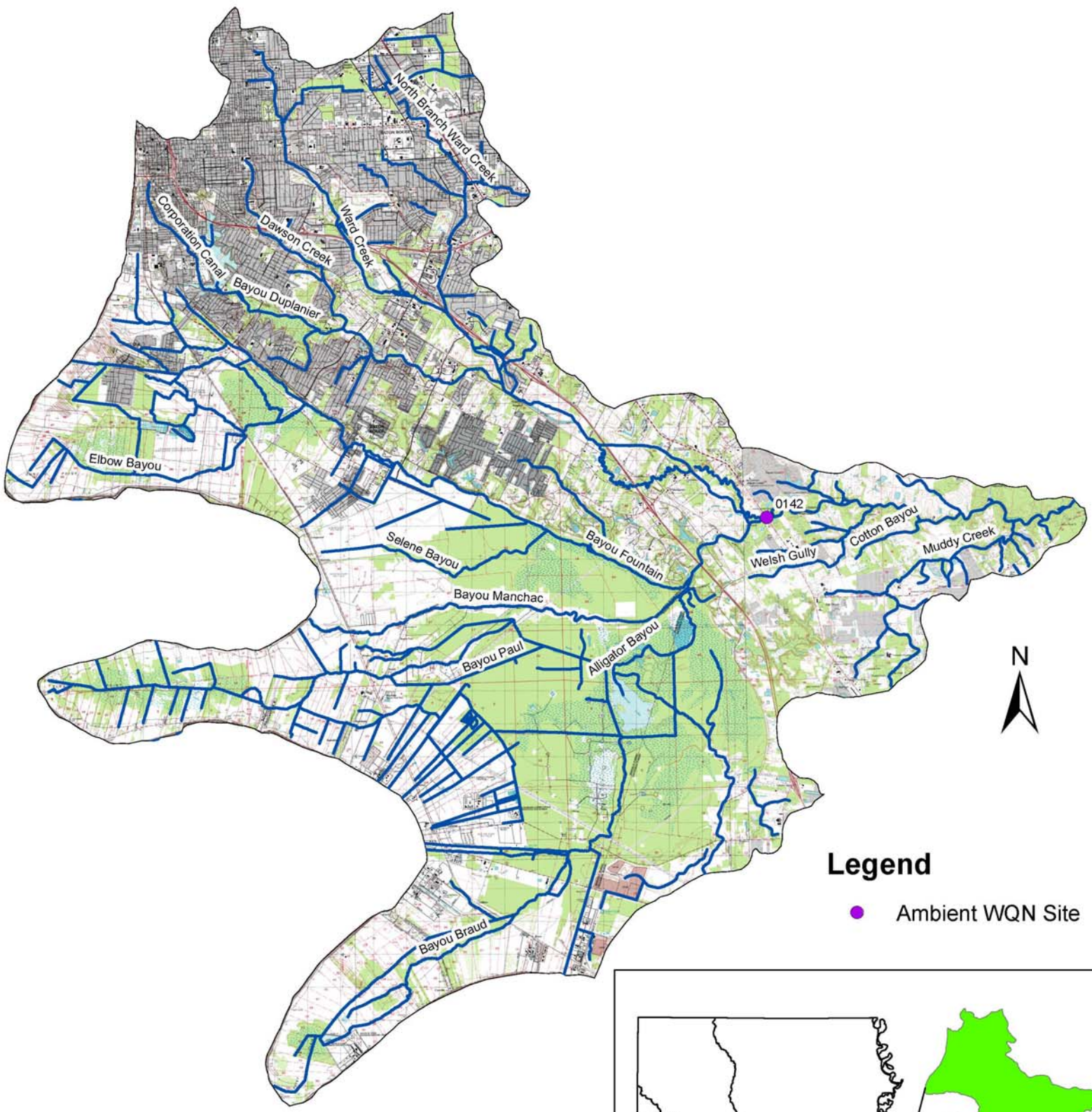
*** Analyzed Size Fractions ***

Size Fraction	List of Methods
<75 mm	3B1
<2 mm	3A1, 3A1a1a, 3A1a6a, 3C2a1a, 3D1, 4A1d, 4A1h, 4B1b, 4B1c, 4B2a, 4B5, 8D1, DbWR1, 3C1e1a, 4A1a, 4B1a, 4B4, 4F, 4F1, 4G1, 4G2a, 4G3, 6A1a, 6A1c, 6A2e, 6B1a, 6B4a, 6C1a, 4B1a1a, 4B3a1a, 5C3, 6N2e, 6Q2b, 5A3b, 5A8b, 6H1a, 6P2b, 5C1, 5G1, 6D3b, 6G9c, 6N2b, 6O2d, 6Q2a, 4B2b1a1, 5A1a, 5A3a, 6G1d, 6H5a, 6O2b, 6P2a, 6L1d, 6M1d, 8A, 5E, 6I1b, 6N1b, 6P1a, 6Q1a, 6U1b, 8A3a, 8D5, 5D2, 6J1b, 6K1d, 6O1b, 6P1b, 6Q1b, 6W1b, 8A1a, 8I, 4D3, 4C1a2a, 6E1b, 6E1g, 6F1a, 8C1a, 8C1b
1-2 mm	3F1a1a
whole soil	4C1
<80 Mesh	4H2a, 4H1b
<0.002 mm	7A1a1, 7A2i
0.02-0.05 mm	7B1a, 7B1a2

Appendix D – Maps and Diagrams

Appendix D1 – Map of Study Area

Bayou Manchac (040201) Study Area for Chlorides, Sulfates, and Total Dissolved Solids TMDLs

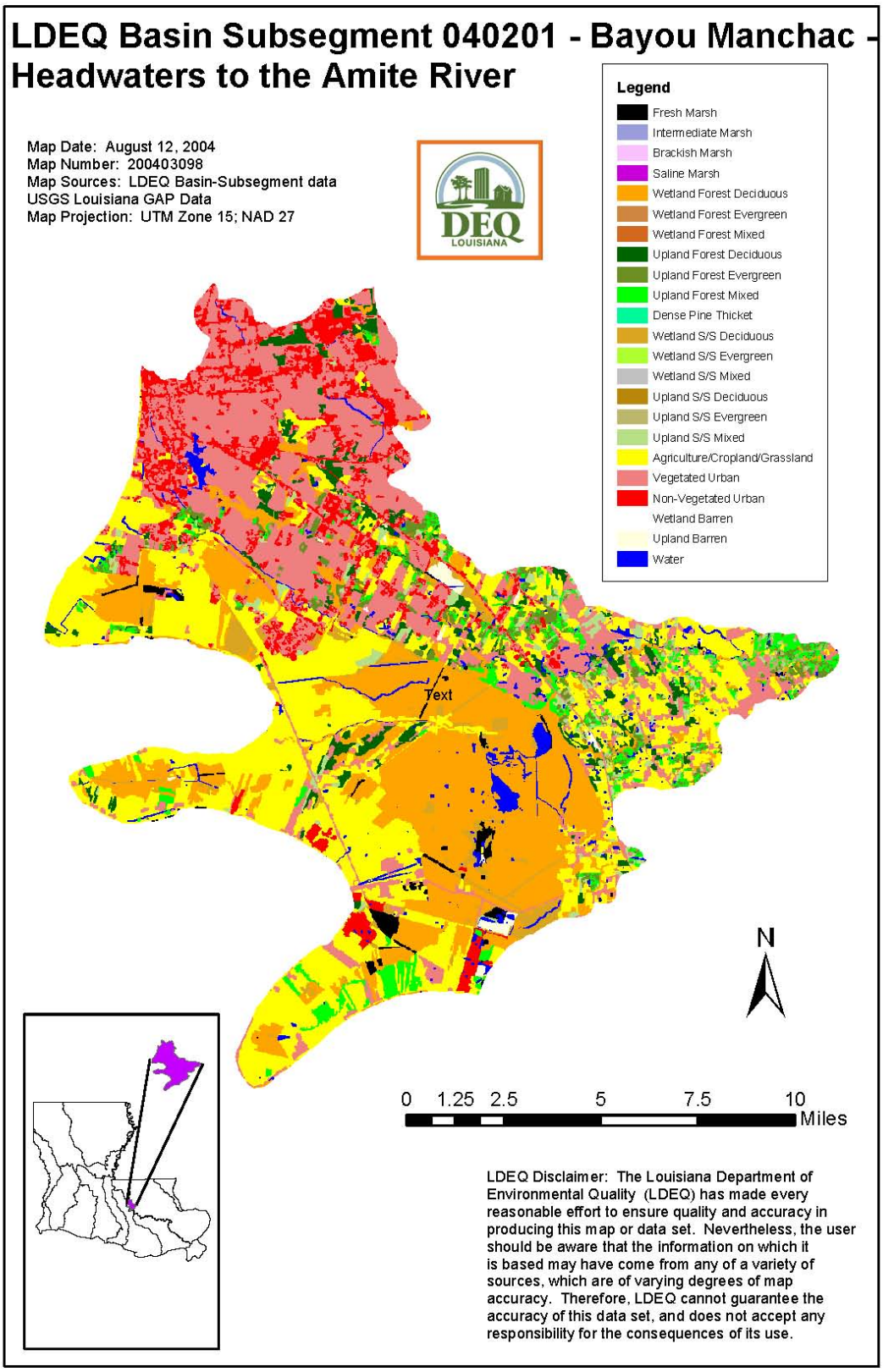


Map date: 09/12/2011
Map number: 201103078
Map sources: USGS, DEQ
Map projection: UTM Zone 15
Map datum: NAD83
DEQ/OEC/AD/WS

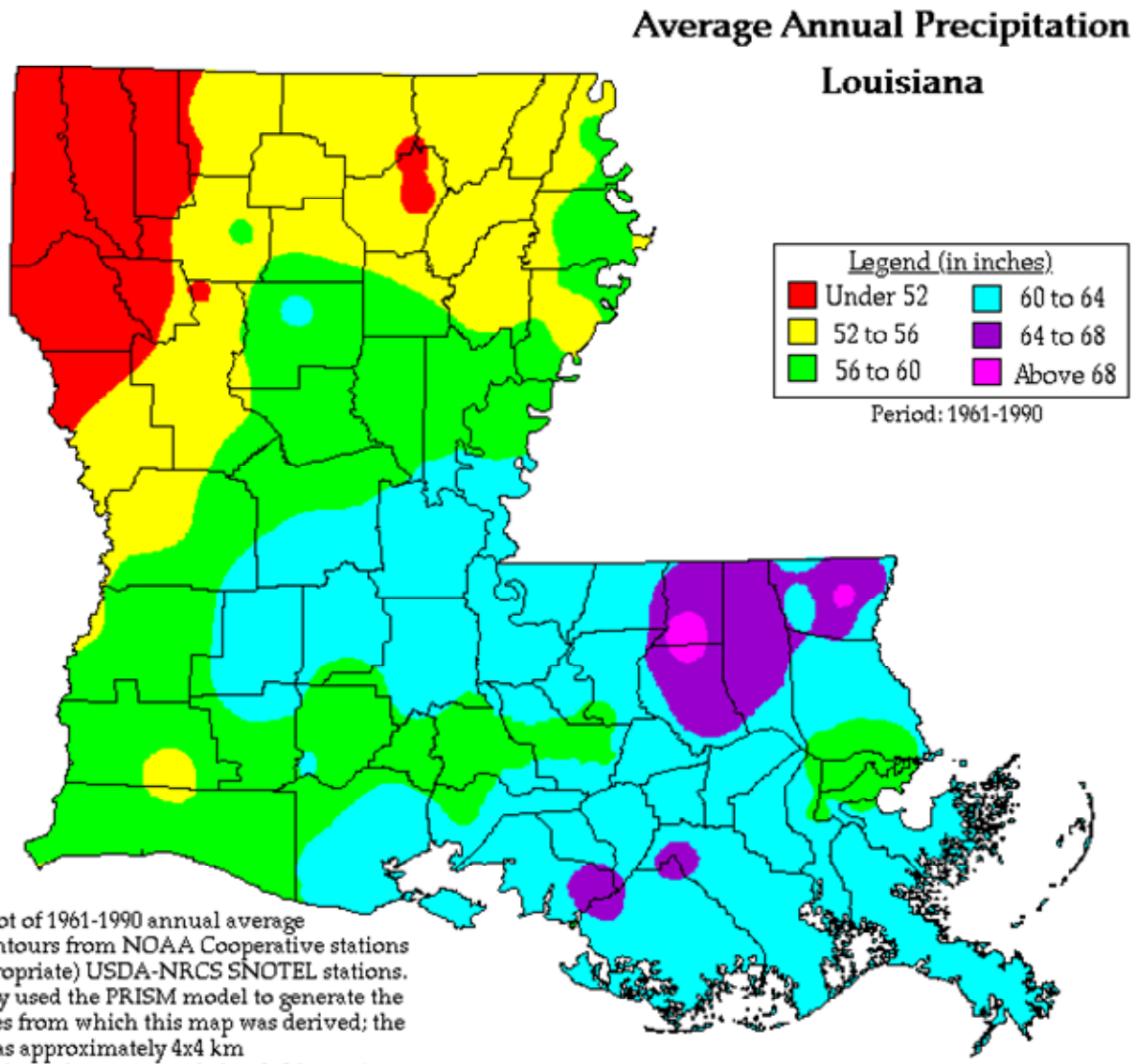
LDEQ Disclaimer: The Louisiana Department of Environmental Quality(LDEQ) has made every reasonable effort to ensure quality and accuracy in producing this map or data set. Nevertheless, the user should be aware that the information on which it is based may have come from any of a variety of sources, which are of varying degrees of map accuracy. Therefore LDEQ cannot guarantee the accuracy of this data set, and does not accept any responsibility for the consequences of its use.

0 1,550 3,100 6,200 9,300 12,400 Meters

Appendix D2 – Land Use Map

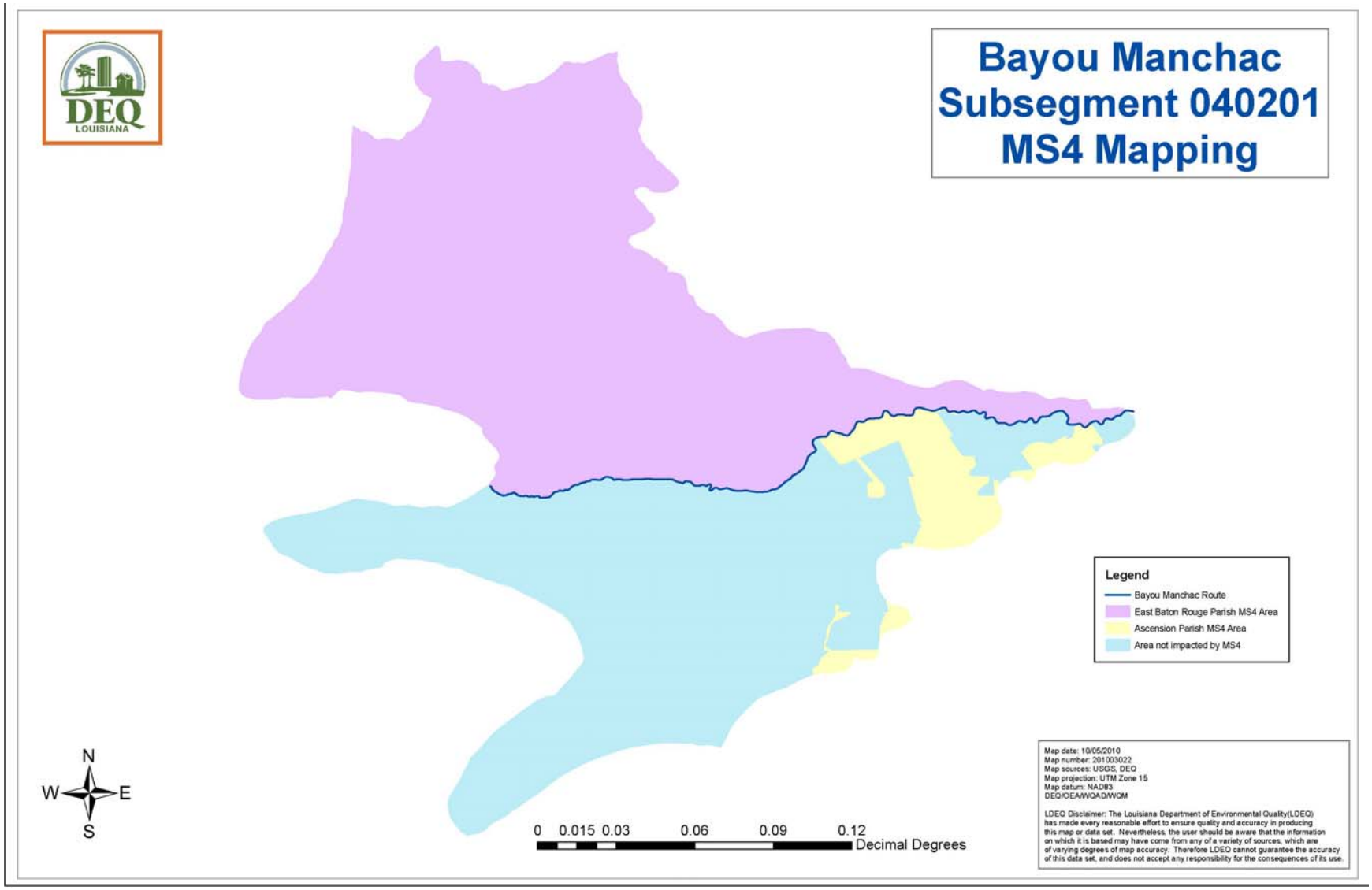

LDEQ Basin Subsegment 040201 - Bayou Manchac - Headwaters to the Amite River
Map Date: August 12, 2004
Map Number: 200403098
Map Sources: LDEQ Basin-Subsegment data
USGS Louisiana GAP Data
Map Projection: UTM Zone 15; NAD 27
DEQ
LOUISIANA
Legend
Fresh Marsh
Intermediate Marsh
Brackish Marsh
Saline Marsh
Wetland Forest Deciduous
Wetland Forest Evergreen
Wetland Forest Mixed
Upland Forest Deciduous
Upland Forest Evergreen
Upland Forest Mixed
Dense Pine Thicket
Wetland S/S Deciduous
Wetland S/S Evergreen
Wetland S/S Mixed
Upland S/S Deciduous
Upland S/S Evergreen
Upland S/S Mixed
Agriculture/Cropland/Grassland
Vegetated Urban
Non-Vegetated Urban
Wetland Barren
Upland Barren
Water
Text
N
0 1.25 2.5 5 7.5 10
Miles
LDEQ Disclaimer: The Louisiana Department of Environmental Quality (LDEQ) has made every reasonable effort to ensure quality and accuracy in producing this map or data set. Nevertheless, the user should be aware that the information on which it is based may have come from any of a variety of sources, which are of varying degrees of map accuracy. Therefore, LDEQ cannot guarantee the accuracy of this data set, and does not accept any responsibility for the consequences of its use.

Appendix D3 – LA Precipitation Map



This map is a plot of 1961-1990 annual average precipitation contours from NOAA Cooperative stations and (where appropriate) USDA-NRCS SNOTEL stations. Christopher Daly used the PRISM model to generate the gridded estimates from which this map was derived; the modeled grid was approximately 4x4 km latitude/longitude, and was resampled to 2x2 km using a Gaussian filter. Mapping was performed by Jenny Weisburg. Funding was provided by USDA-NRCS National Water and Climate Center.

Appendix D4 – MS4 Coverage Map


Bayou Manchac
Subsegment 040201
MS4 Mapping
DEQ
LOUISIANA
Legend
Bayou Manchac Route
East Baton Rouge Parish MS4 Area
Ascension Parish MS4 Area
Area not impacted by MS4
N
W
E
S
0 0.015 0.03 0.06 0.09 0.12
Decimal Degrees
Map date: 10/05/2010
Map number: 201003022
Map sources: USGS, DEQ
Map projection: UTM Zone 15
Map datum: NAD83
DEQ/OEA/WQA/WQM
LDEQ Disclaimer: The Louisiana Department of Environmental Quality(LDEQ) has made every reasonable effort to ensure quality and accuracy in producing this map or data set. Nevertheless, the user should be aware that the information on which it is based may have come from any of a variety of sources, which are of varying degrees of map accuracy. Therefore LDEQ cannot guarantee the accuracy of this data set, and does not accept any responsibility for the consequences of its use.

Appendix E – Justification for Variance to Minerals Criteria for Bayou Manchac (040201)

Factsheet for Use of Toxicity-based SO4 and Cl Criteria to Protect Aquatic Life Use in Bayou Manchac

Water Quality Standards Background. Water quality standards define a state's goals for waterbodies by designating CWA Section 101(a) uses (e.g., aquatic life protection, drinking water source, water recreation) and establishing criteria to protect those uses, as well as policies and provisions to protect water quality from pollutants. In accordance with Section 303(c) of the Clean Water Act (CWA), states and authorized tribes must adopt water quality standards into their regulations to protect water quality from pollutants.

Criteria to protect aquatic life and human health (e.g., through contact or ingestion) are developed by the United States Environmental Protection Agency (U.S. EPA) under Section 304(a) of the CWA and are used as guidance by states to develop state-specific water quality standards. Criteria are generally adopted as numeric pollutant concentrations (e.g., mg/L concentrations) protective of a water body's designated uses, but can also be narrative requirements. Water quality standards provide the basis for implementing the state's water quality programs including water quality assessments and total maximum daily loads (TMDLs) conducted and/or developed to meet the requirements of Sections 305(b) and 303(d) of the CWA and water discharge permitting to meet Section 402 of the CWA.

Water quality criteria are based on a sound scientific rationale and contain sufficient parameters or constituents to protect the designated uses. States (and authorized tribes) have four options when adopting water quality criteria for which U.S. EPA has published CWA Section 304(a) criteria. They can: (1) establish numerical values based on recommended Section 304(a) criteria; (2) adopt Section 304(a) criteria modified to reflect site-specific conditions; (3) adopt criteria derived using other scientifically defensible methods; or (4) establish narrative criteria where numeric criteria cannot be determined (40 CFR 131.11).

Louisiana has complied with the requirements in Section 304(a) and adopted criteria for state waters by one of the four methods described. For example, LDEQ has used option (2) to establish state-specific standards for many toxic pollutants. The national aquatic life criteria for toxic pollutants use data from a variety of aquatic organisms, including those not found in Louisiana waters (e.g., freshwater trout species). Therefore, in accordance with U.S. EPA guidance, Louisiana has developed a procedure to calculate aquatic life criteria for toxics by removing data for the non-Louisiana species, and/or adding data for Louisiana species and re-calculating state-specific criteria (LDEQ, 2011; U.S. EPA 1985).

History of Minerals Criteria in Louisiana. Using interim guidance from the Federal Water Pollution Control Administration (Water Quality Criteria Committee), Louisiana originally established its minerals criteria (levels for chlorides, sulfates and total dissolved solids or TDS) for state waters in 1967 to be in conformance with the Water Quality Act of 1965 (Public Law 89-234). At that time the guidance for protection of aquatic organisms was evolving and included general guidelines that acknowledged: 1) dissolved materials are different in concentrations from one locality to another; 2) many of these materials are essential for growth and reproduction; 3) chlorides, carbonates and silicates of sodium, potassium, calcium and magnesium are generally the most common salts present; and 4) the range of tolerance may be wide, but when concentrations reach too high or low a level, organisms degenerate and die.

As several measures of dissolved materials were available, no measure in itself was considered to be adequate as an index of optimal conditions, nor was one measure considered adequate to express a range of tolerance. However, minerals discharged through waste water effluents needed to be controlled to prevent concentrations that would exceed levels favorable to local aquatic life productivity. Therefore, Louisiana's Office of Water Pollution Control derived criteria for sulfates and chlorides to protect and maintain local ambient or background stream conditions in Louisiana's major watersheds.

In March of 1973, the newly created U.S. EPA advised Louisiana's Governor to revise the water quality standards regulations in consideration of U.S. EPA's *Water Quality Criteria 1972* (U.S. EPA, 1973), including recommendations that Louisiana's regulations incorporate or address stream classification policies, CWA uses, antidegradation policies, interstate standards, triennial reviews, and that minerals criteria include maximum values for total dissolved solids (TDS). Numeric criteria for sulfates, chlorides and TDS were calculated as the arithmetic mean of existing data plus one standard deviation and established for all fresh waters, replacing the previous minerals standards.

During 1984, the Louisiana Department of Environmental Quality (LDEQ) was established as the authority to implement the state's CWA responsibilities. Subsequent revisions to the water quality standards (1992) established the current water quality criteria for Louisiana waters; sulfates, chlorides and TDS criteria were again calculated as the arithmetic mean of existing ambient data from the "nearest sampling station" plus three standard deviations. These values have been maintained in the water quality standards regulations to date with a limited number of site specific exceptions that were adopted after Use Attainability Studies were completed (e.g., Bayou Anacoco; select Vermilion and/or Mermentau River watersheds).

Water Quality Standards Review. Federal and state regulations require routine review of water quality standards because the regulations recognize that standards are subject to revision. For example, Louisiana's water quality standards allow for changes to the criteria as new data becomes available or when advances in scientific knowledge concerning toxicity that affect the basis for existing criteria may necessitate a revision to the numerical criteria (LAC 33:IX.1109.H.1.c and d).

Chlorides Criteria - Chloride is an important component of life (e.g., maintains osmotic pressure); however, elevated chlorides in ambient water can pose a threat to freshwater species. Although chlorides of potassium, calcium and magnesium can be acutely toxic to aquatic animals, anthropogenic sources of chloride in ambient water are more often associated with sodium. Most of the toxicity data considered by U.S. EPA in the derivation of national recommendations for chloride criteria is based on sodium chloride. The 1988 update to U.S. EPA guidance also included the effects of water chemistry (e.g., hardness) on aquatic life toxicity.

The U.S. EPA published recommendations for chlorides criteria to protect aquatic life from the effects of toxicity are 860 mg/L to protect against acute effects and 230 mg/L to protect against chronic effects. These recommendations are based on calculations in accordance with U.S. EPA's published guidance and from studies published in peer reviewed literature (U.S. EPA, 1985 and 2008). However, as noted, Louisiana historically relied on ambient conditions rather than toxicity data to establish minerals criteria. Louisiana's ambient condition-based criteria can be as low as 10 mg/L for chlorides.

Sulfates Criteria Review - U.S. EPA has not published toxicity-based sulfates criteria for the protection of aquatic life. However, as noted, Louisiana historically relied on ambient conditions rather than toxicity data to establish minerals criteria. Louisiana's ambient condition-based criteria can be as low as 5 mg/L for sulfates

TDS Criteria Review - U.S. EPA has not published toxicity-based TDS criteria for the protection of aquatic life. However, as noted, Louisiana historically relied on ambient conditions rather than toxicity data to establish minerals criteria. Louisiana's ambient condition based criteria can be as low as 55 mg/L for TDS.

LDEQ recently began evaluating the need for changes to the existing minerals criteria based on:

- New scientific studies, designed in accordance with U.S. EPA guidance, that indicate the primary concern with minerals levels in water bodies is the potential for toxic effects on aquatic life of individual ions.
- New scientific studies also indicate that constituents in natural waters can influence the toxic effects of mineral ions on aquatic life.

Over the past decade, researchers in Illinois worked closely with U.S. EPA and followed U.S. EPA's guidance to conduct toxicity studies and develop formulas describing the relationships between the physical and chemical characteristics of water (e.g., hardness and sulfates) on the toxicity of chlorides to the appropriate sensitive species in Illinois waters. Chlorides toxicity studies (Soucek, 2005, 2007 and 2011) showed that chloride toxicity is dependent upon the hardness and concentration of sulfate in the ambient water. Together the effect is proportional:

- Chloride toxicity decreases as hardness increases (low hardness = higher toxicity)
- Chloride toxicity increases as sulfate increases (high sulfate = higher toxicity)

Iowa also conducted extensive literature reviews and evaluations of data from the Illinois studies. Iowa further developed a multiple regression equation that accounts for the effect of hardness and sulfate on chloride toxicity and the effect of hardness and chloride on sulfate toxicity. Both Illinois and Iowa have implemented, with U.S. EPA's approval, toxicity-based criteria for chlorides and sulfates and removed the requirement for TDS.

LDEQ evaluated the studies and literature used by Illinois and Iowa and used the approaches to develop toxicity-based criteria adapted for the protection of aquatic life in Bayou Manchac. This process has precedence in Louisiana as U.S. EPA's toxicity-based approach and equations that use ambient water quality conditions were used by LDEQ to calculate aquatic life criteria for 23 toxic substances (in consideration of Louisiana species) and hardness-dependent freshwater criteria have been developed for six metals. Additionally, much of the toxicity data used by Illinois and Iowa was based on routine toxicity tests using *Daphnia* and/or *Ceriodaphnia* species – data that can be used by any state.

LDEQ developed acute and chronic toxicity values for chlorides and sulfates to protect Louisiana's aquatic life in Bayou Manchac (e.g., used toxicity data for species found in Louisiana, see species list below). LDEQ used ambient hardness, chlorides and sulfates data from Bayou Manchac to develop

criteria based on local water quality conditions. The steps used to derive the updated minerals criteria and supporting information for Bayou Manchac are outlined below.

1. Use U.S. EPA Guidelines (1985) for developing acute and chronic values
    - Collect and review minerals toxicity data for species found in Louisiana
    - Evaluate literature review conducted by Iowa Department of Natural Resources (24 species, 19 genera)
2. Calculate the final acute value (FAV) for chlorides
    - Calculate genus mean acute value (GMAV) for each genus represented in Louisiana (from the Iowa dataset - 19 values) using the method outlined in the U.S. EPA Guidelines
    - Rank the GMAVs in accordance with U.S. EPA guidance
    - Use the four lowest GMAVs to calculate the final acute value (FAV)
        - Fingernail clam – Sphaerium sp. (1128 mg/L)
        - Cladoceran – Daphnia sp. (1650 mg/L)
        - Snail – Physa sp. (3350 mg/L)
        - Snail – Gyraulus sp. (3728 mg/L)
    - FAV = 226.89 mg/L
3. Calculate final chronic value (FCV) for chlorides
    - Calculate the predicted genus mean chronic value (pGMCV) for each genus represented in the dataset (19 values) using the alternative method outlined in Section XII.B of the 1985 U.S. EPA Guidelines to account for the sensitivities of both vertebrates and invertebrates
    - Rank the pGMCVs in accordance with U.S. EPA guidance
    - Use the four lowest pGMCVs to calculate the FCV
        - Fingernail clam – *Sphaerium sp*. (353.9 mg/L)
        - Chorus frog – *Pseudacris sp.* (641.2 mg/L)
        - Cladoceran – *Daphnia sp*. (729.8 mg/L)
        - Bullfrog – *Rana sp*. (806.9 mg/L)
    - FCV = 161.03 mg/L
4. Researchers in Illinois (in cooperation with U.S. EPA) determined that hardness and sulfates affect chloride toxicity – together they have a proportional effect on chloride toxicity
    - Chloride toxicity decreases as hardness increases (low hardness = higher toxicity)
    - Chloride toxicity increases as sulfate increases

    Therefore, final acute and chronic values calculated in Steps 2 and 3 above are dependent on the hardness and the concentration of sulfate in the ambient water.
5. Iowa's Department of Natural Resources (IDNR) performed multiple regression analysis based on chloride toxicity tests done at different concentrations of hardness and sulfates on *C. dubia*. The equation accounts for the effect of hardness and sulfates on chloride toxicity (equation is given in Step 6).

6. The resulting equation (using the FAV and FCV) for chloride was developed based on Iowa's chloride toxicity tests in accordance with U.S. EPA Guidelines:
    - Acute/Chronic Value*((hardness)$^{0.205797}$*(sulfate)$^{-0.07452}$)
7. Data from Bayou Manchac is used in the toxicity-based equation to develop chlorides criteria.
    - Site-specific ambient conditions best suited for the equation-based toxicity approach
    - Median values used for Bayou Manchac (based on ambient data)
      Hardness: 92 mg/L
      Sulfates: 12.75 mg/L
      Chlorides: 29 mg/L
8. Chlorides and Sulfates criteria:
    - Chlorides criteria
      Acute: 476 mg/L
        - Final Acute Value of 226.89 based on 19 Louisiana genera
        - Final Equation: 226.89*((92)$^{0.205797}$*(12.75)$^{-0.07452}$)

      Chronic: 338 mg/L
        - Final Chronic Value of 161.03 based on 19 Louisiana genera
        - Final Equation: 161.03*((92)$^{0.205797}$*(12.75)$^{-0.07452}$)
    - Sulfates Criteria:
        - Acute: 500 mg/L
        - Based on toxicity studies and equations conducted in Iowa (see matrix below)

Hardness (mg/L)	**Chloride < 5 mg/L**	**5 ≤ Chloride < 25**	**25 ≤ Chloride ≤ 500**
> 100	500	500	500
100 - 500	500	[-57.478 + 5.79 * (hardness) + 54.163 * (chloride)]* 0.65	[1276.7 + 5.508* (hardness) – 1.457 *(chloride)]* 0.65
> 500	500	2,000	2,000

        - Based on Bayou Manchac median hardness levels approximating 100 mg/L CaCO3 and chloride levels between 25 and 500 mg/L.
        - Studies concluded no chronic toxicity effects at the median hardness levels approximating 100 mg/L CaCO3

9. Removal of TDS criteria
    - Illinois studies demonstrated that ions other than chlorides, sulfates, and heavy metals did not cause toxicity
    - Louisiana has established criteria for other dissolved components (e.g., metals) and is in the process of developing criteria for other dissolved components (e.g., nutrients).

Species Used in the Calculation of Chloride Criteria for Bayou Manchac (19 genera, 24 species)

Sensitive Species Common Name	Latin Name (Genus species name)
Fish	
Red shiner	*Cyprinella lutrensis*
Fathead minnow	*Pimephales promelas*
Black bullhead	*Ameiurus melas*
Mosquitofish	*Gambusia affinis*
Green sunfish	*Lepomis cyanellus*
Bluegill	*Lepomis macrochirus*
American eel	*Anguilla Rostrata*
Frog	
Bullfrog (tadpole)	*Rana catesbeiana*
Chorus frog	*Pseudacris sp*
Planktonic crustacean	
Cladoceran	*Daphnia ambigua*
Benthic crustacean	
Amphipod	*Hyalella azteca*
Isopod	*Lirceus fontinalis*
Crayfish	*Cambarus sp.*
Insect	
Midge	*Chironomus attenuatus*
Midge	*Chironomus dilutus*
Dragonfly	*Libellulidae*
Not chordata or arthropoda	
Snail	*Physa gyrina*
Snail	*Physa heterostropha*
Snail	*Physa sp.*
Snail	*Gyraulus circumstriatus*
Snail	*Gyraulus parvus*
Tubificid worm	*Tubifex tubifex*

Aquatic worm	*Lumbriculus variegatus*
Fingernail clam	*Sphaerium simile*
Fingernail clam	*Sphaerium tenue*

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