LEGEND AND NOTES FOR LOG OF BORING AND TEST RESULTS

PP — Pocket penetrometer: Resistance in tons per square foot

SPT — Standard Penetration Test: Number of blows of a 140-lb hammer dropped 30 inches required to drive 2-in. O.D., 1.4-in. I.D. sampler a distance of 1 foot into the soil after first seating it 6 inches

SPLR — Type of Sampling: Shelby, SPT, Auger, No sample

SYMBOL — Clay, Silt, Sand, Peat/Humus, Shells, Stone/Gravel

Predominant type shown heavy; Modifying type shown light

USC — Unified Soil Classification

DENSITY — Unit weight in pounds per cubic foot

SHEAR TESTS

TYPE

- UC — Unconfined compression shear
- OB — Unconsolidated undrained triaxial compression shear on one specimen confined at the approximate overburden pressure
- UU — Unconsolidated undrained triaxial compression shear
- CU — Consolidated undrained triaxial compression shear
- DS — Direct shear

- Ø — Angle of internal friction in degrees
- c — Cohesion in pounds per square foot

ATTERBERG LIMITS

- LL — Liquid Limit
- PL — Plastic Limit
- PI — Plasticity Index

OTHER TESTS

- CON — Consolidation
- PD — Particle size distribution (sieve and/or hydrometer)
- k — Coefficient of permeability in centimeters per second
- SP — Swelling pressure in pounds per square foot

Other laboratory test results reported on separate figures

GENERAL NOTES

(1) If a ground water depth is shown on the boring log, these observations were made at the time of drilling and were measured below the existing ground surface. These observations are shown on the boring logs. However, ground water levels may vary due to seasonal fluctuations and other factors. If important to construction, the depth to ground water should be determined by those persons responsible for construction immediately prior to beginning work.

(2) While the individual logs of borings are considered to be representative of subsurface conditions at their respective locations on the dates shown, it is not warranted that they are representative of subsurface conditions at other locations and times.

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS

STATE OF LOUISIANA
COASTAL RESTORATION AND MANAGEMENT
MISSISSIPPI RIVER SEDIMENT DELIVERY SYSTEM
BAYOU DUPONT, LOUISIANA

Ground Elev.: -18.3 **Datum:** NAVD 88 **Gr. Water Depth:** N/A **Job No.:** 19183 **Date Drilled:** 3/01/06 **Boring:** 1 Refer to "Legends & Notes"

Scale In Feet	PP	SPT	S P L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density Dry	Density Wet	Shear Tests Type	Shear Tests ø	Shear Tests C	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Misc tests	Other Tests
0		1	X		Loose gray clayey silt	ML	1	0'-1'6"											
		5	X				2	2'-3'6"	33										
					Loose gray sandy silt	ML	3	5'-6'											
							4	6'-7'											
							5	7'-8'	25	98	122	OB	--	656					
10					Very soft gray clay	CH	6	11'-12'	56	67	104	UC	--	114	65	23	42		
					Loose to medium dense gray silty sand w/clay layers	SM	7	13'-14'											
							8	15'-16'											
							9	16'-17'											PD
					Very soft gray clay w/silty sand lenses & layers	CH													
20	0.25						10	19'-20'	47	74	109	OB	0	75	72	24	48		
							11	20'-21'											
					Loose brown & gray sandy silt w/clay	ML													
							12	23'-24'											PD
	0.25				Very soft to soft brown & gray clay w/silt lenses & pockets	CH	13	25'-26'											
	0.25						14	27'-28'	43	77	111	UC	--	139	70	27	43		
30	0.25					CH	15	29'-30'											PD
	0.25						16	31'-32'											
					Medium compact gray sandy silt	ML	17	32'-34'											
	0.50				Soft brown & gray clay w/silt lenses & pockets	CH	18	35'-36'	55	66	102	UC	--	503	64	22	42		
	0.25						19	37'-38'											
40	0.25						20	39'-40'											
50																			

Comments: Estimated water surface at el 2.7.
N 29° 39.083'; W 89° 57.560'

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS

STATE OF LOUISIANA
COASTAL RESTORATION AND MANAGEMENT
MISSISSIPPI RIVER SEDIMENT DELIVERY SYSTEM
BAYOU DUPONT, LOUISIANA

Ground Elev.: -33.3 **Datum:** NAVD 88 **Gr. Water Depth:** N/A **Job No.:** 19183 **Date Drilled:** 3/01/06 **Boring:** 2 **Refer to "Legends & Notes"**

Scale In Feet	PP	SPT	S P L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density Dry	Density Wet	Shear Tests Type	Shear Tests ø	Shear Tests C	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI		Other Tests
0					Very soft gray silty clay	CL	1	0-2	30						50	16	34		
							2	3-4	37	85	116	UC	--	75	40	17	23		
					Very soft gray clay w/silt lenses & pockets	CH													
	0.25						3	5-6											
	0.25						4	7-8											
10	0.25						5	9-10	53	70	106	OB	0	69	58	22	36		
					Loose gray clayey silt	ML	6	11-12	56										
					Very soft gray silty clay	CL													
					Loose gray sandy silt	SM	7	13-14	70										
					Loose gray silty fine sand w/clay layers	SM													
							8	15-16											PD
							9	17-18											
20							10	19-20											
					Very soft gray clay w/silt pockets & lenses	CH	11	21-22	43	76	109	UC	--	81					
					Loose gray silty sand w/clay layers	SM	12	22-24											
							13	25-26											PD
							14	26-28											
							15	28-30											
30							16	30-32											
							17	32-34	22	101	122	OB	0	1107					
							18	34-36											
							19	36-38											
					Very soft gray silty clay w/sand layers	CL													
	0.50				Medium stiff gray silty clay w/silt lenses	CL	20	38-40											
40																			
50																			

Comments: Estimated water surface at el 2.7.
N 29° 39.584'; W 89° 57.628'

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS

STATE OF LOUISIANA
COASTAL RESTORATION AND MANAGEMENT
MISSISSIPPI RIVER SEDIMENT DELIVERY SYSTEM
BAYOU DUPONT, LOUISIANA

Ground Elev.: -27.3 **Datum:** NAVD 88 **Gr. Water Depth:** N/A **Job No.:** 19183 **Date Drilled:** 3/05/06 **Boring:** 3 Refer to "Legends & Notes"

Scale In Feet	PP	SPT	S P L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density Dry	Density Wet	Shear Tests Type	Shear Tests ø	Shear Tests C	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI		Other Tests
0	0.25				Extremely soft to very soft gray silty clay	CL	1	0-2											
	0.25						2	2-4	48	74	109	UC	--	28					
	0.25						3	4-6											
							4	6-8											
					Very loose to loose gray sandy silt	ML	5	8-10	30	90	117	OB	0	204					
10					Loose gray silty sand w/clay	SM	6	10-12											
							7	12-14											PD
							8	14-16											
							9	16-18											
							10	18-19											
20		8			Medium dense gray silty sand	SM	11	19-20.5											
		10					12	22-23											
		13					13	25-26											
		25					14	28-29											PD
30		24					15	31-32											
		16					16	34-35											
		18					17	37-38											
		20					18	39-40											
40																			
50																			

Comments: Estimated water surface at el 2.7.
N 29° 40.046'; W 89° 57.686'

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS

STATE OF LOUISIANA
COASTAL RESTORATION AND MANAGEMENT
MISSISSIPPI RIVER SEDIMENT DELIVERY SYSTEM
BAYOU DUPONT, LOUISIANA

Ground Elev.: -1.3 **Datum:** NAVD 88 **Gr. Water Depth:** N/A **Job No.:** 19183 **Date Drilled:** 4/03/06 **Boring:** 4 **Refer to "Legends & Notes"**

Scale In Feet	PP	SPT	SPLR	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density Dry	Density Wet	Shear Tests Type	Shear Tests ø	Shear Tests C	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI		Other Tests
0	0.00				Very soft gray clay	CH	1	1-2	87	50	93	OB	0	50	109	29	80		
	0.00						2	3-4											
	0.00				Very soft gray organic clay	OH	3	5-6	262	20	74	UC	--	125	267	88	179		
	0.50				Loose gray sandy silt	ML	4	7.0-8							32	25	7		CON
10	0.00				Very soft gray clay w/sandy silt lenses & pockets	CH	5	9-10	76	55	98	OB	0	58					
	0.00				w/sand pockets & shell fragments		6	11-12											
	0.50						7	13-14	63	63	102	UC	--	148					
	0.25						8	15-16											
	0.00						9	17-18											
20	0.25						10	19-20											
	0.50						11	24-25	79	53	95	UC	--	173					
30	0.75						12	29-30											
	0.50						13	34-35											
40	0.50						14	39-40											
50																			

Comments: Estimated water surface at el 0.2.
N 29° 39.078'; 90° 01.346'

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS

STATE OF LOUISIANA
COASTAL RESTORATION AND MANAGEMENT
MISSISSIPPI RIVER SEDIMENT DELIVERY SYSTEM
BAYOU DUPONT, LOUISIANA

Ground Elev.: -1.8 **Datum:** NAVD 88 **Gr. Water Depth:** N/A **Job No.:** 19183 **Date Drilled:** 3/30/06 **Boring:** 5 **Refer to "Legends & Notes"**

Scale In Feet	PP	SPT	S P L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density Dry	Density Wet	Shear Tests Type	Shear Tests ø	Shear Tests C	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI		Other Tests
0	0.00				Very soft black humus	Pt	1	1-2											
	0.00						2	3-4	664	9	66	OB	0	53.2	672	245	427		
	0.00				Very soft gray clay w/silt lenses & pockets	CH	3	5-6											
	0.25						4	7-8	71	56	96	UC	--	65	150	47	103		
10	0.00						5	9-10											
	0.25				Loose to medium compact gray clayey silt w/ clay layers	ML	6	11-12	34	88	117	OB	0	355	48	21	27		
	0.25						7	13-14											
	0.75						8	15-16											
	0.00				Medium compact gray sandy silt w/clay layers	ML	9	17-18	24	98	122	OB	0	1658	35	26	9		CON
20	0.25						10	19-20											
	0.25				Very soft gray clay	CH	11	24-25	82	52	94	UC	--	160					
30	0.25				w/sandy silt lenses & layers		12	29-30											
	0.25						13	34-35	63	61	99	UC	--	180					
40	0.50				Soft gray clay w/sand lenses	CH	14	39-40											
	0.75						15	44-45	60	63	101	OB	0	392					
50	0.75						16	49-50											

Comments: Estimated water surface at el 0.2.
N 29° 38.887'; W 90° 00.743'

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS

STATE OF LOUISIANA
COASTAL RESTORATION AND MANAGEMENT
MISSISSIPPI RIVER SEDIMENT DELIVERY SYSTEM
BAYOU DUPONT, LOUISIANA

Ground Elev.: -1.8 **Datum:** NAVD 88 **Gr. Water Depth:** N/A **Job No.:** 19183 **Date Drilled:** 3/30/06 **Boring:** 5 Refer to "Legends & Notes"

Scale In Feet	PP	SPT	S P L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density Dry	Density Wet	Shear Tests Type	Shear Tests ø	Shear Tests C	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI		Other Tests
50					Soft gray clay	CH													
	0.50						17	54-55	64	63	102	UC	--	395					
					Medium stiff gray clay	CH													
60	0.75						18	59-60											
70																			
80																			
90																			
100																			

Comments: Estimated water surface at el 0.2.
N 29° 38.887'; W 90° 00.743'

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS

STATE OF LOUISIANA
COASTAL RESTORATION AND MANAGEMENT
MISSISSIPPI RIVER SEDIMENT DELIVERY SYSTEM
BAYOU DUPONT, LOUISIANA

Ground Elev.: -0.3 **Datum:** NAVD 88 **Gr. Water Depth:** N/A **Job No.:** 19183 **Date Drilled:** 4/03/06 **Boring:** 6 **Refer to "Legends & Notes"**

Scale In Feet	PP	SPT	S P L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density Dry	Density Wet	Shear Tests Type	Shear Tests ø	Shear Tests C	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI		Other Tests
0	0.00				Very soft dark brown humus	Pt	1	1-2											
	0.75				Very soft gray clay w/silt pockets	CH	2	3-4	63	61	100	UC	--	145	88	27	61		CON
	1.00						3	5-6											
	0.75						4	7-8	63	62	100	UC	--	215	81	23	58		
10	0.50						5	9-10											
	1.25				Medium compact gray clayey silt w/clay lenses	ML	6	11-12	38	83	115	OB	0	552					
	1.25						7	13-14											
	0.50				Very soft gray clay w/silt lenses & layers	CH	8	15-16	57	65	102	OB	0	150	68	28	40		
	0.50						9	17-18											
20	0.75						10	19-20											
	0.50				w/sandy silt pockets		11	24-25											
30	1.00						12	29-30	64	61	100	UC	--	233					
	0.75						13	34-35											
40	0.75						14	39-40											
50																			

Comments: Estimated water surface at el 0.2.
N 29° 39.418'; W 90° 00.719'

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS

STATE OF LOUISIANA
COASTAL RESTORATION AND MANAGEMENT
MISSISSIPPI RIVER SEDIMENT DELIVERY SYSTEM
BAYOU DUPONT, LOUISIANA

Ground Elev.: -2.7 **Datum:** NAVD 88 **Gr. Water Depth:** N/A **Job No.:** 19183 **Date Drilled:** 4/03/06 **Boring:** 7 **Refer to "Legends & Notes"**

Scale In Feet	PP	SPT	S P L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density Dry	Density Wet	Shear Tests Type	Shear Tests ø	Shear Tests C	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI		Other Tests
0	0.00				Very soft black humus	Pt	1	1-2	700	8	64	OB	0	64					
	0.00						2	3-4											
	1.50				Medium compact gray clayey silt	ML	3	5-6											
	0.75						4	7-8	29	93	120	OB	0	616	36	31	5		
10	0.50						5	9-10											
	0.00						6	11-12											
	0.00				Very soft gray clay w/sand lenses & pockets	CH	7	13-14	79	54	97	OB	0	100	80	25	55		
	0.50						8	15-16											
	0.00				w/sand pockets		9	17-18											
20	0.50						10	19-20	74	57	99	UC	--	95					
	0.25						11	24-25											
30	0.50				w/sand lenses & pockets		12	29-30											
	0.75						13	34-35	69	55	96	UC	--	98	74	22	52		CON
					Medium stiff gray clay	CH													
40	1.00						14	39-40											
50																			

Comments: Estimated water surface at el 0.2.
N 29° 38.889'; W 90° 00.290'

EUSTIS ENGINEERING COMPANY, INC.

LOG OF BORING AND TEST RESULTS

STATE OF LOUISIANA
COASTAL RESTORATION AND MANAGEMENT
MISSISSIPPI RIVER SEDIMENT DELIVERY SYSTEM
BAYOU DUPONT, LOUISIANA

Ground Elev.: -1.8 **Datum:** NAVD 88 **Gr. Water Depth:** N/A **Job No.:** 19183 **Date Drilled:** 3/31/06 **Boring:** 8 **Refer to "Legends & Notes"**

Scale In Feet	PP	SPT	S P L R	Symbol	Visual Classification	USC	Sample Number	Depth In Feet	Water Content Percent	Density Dry	Density Wet	Shear Tests Type	Shear Tests ø	Shear Tests C	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI		Other Tests
0	0.00				Very soft black humus	Pt	1	1-2	528	10	65	UC	--	13					
	0.00						2	3-4											
	0.00						3	5-6											
	0.00				Very soft dark gray humus w/roots and clay layers	Pt	4	7-8	208	25	76	OB	0	57	224	67	157		CON
10	0.00						5	9-10											
	0.50				Very loose gray clayey silt	ML	6	11-12											
	0.00						7	13-14	38	83	115	OB	0	221					
	0.00				Very soft gray clay	CH	8	15-16											
	0.00				w/sand lenses & pockets		9	17-18											
20	0.00						10	19-20	81	52	93	UC	--	155					
	0.00						11	24-25											
30	0.25						12	29-30	57	64	100	UC	--	130					
	0.50						13	34-35											
40	0.50						14	39-40											
50																			

Comments: Estimated water surface at el 0.2.
N 29° 38.593'; W 90° 00.268'

LOG OF BORING LEGEND

LJC&A: 07-110

1.	SPT	=	Standard Penetration Test (4/6/9) where 4 is the blows to seat and 15 is blows (N) for 12 inch penetration.
2.	QU (TSF)	=	Unconsolidated undrained triaxial, one point test 0.05 @ 0.12 is the compressive strength in tsf which is twice the cohesion and @ means the confining pressure at tsf. Note: tests without @ values following are for unconfined Compression shear tests.
3.	WC (%)	=	In situ water content
4.	Dry Wt. (PCF)	=	The dry unit weight of soil
5.	LL	=	Liquid Limit (%)
6.	PI	=	Plasticity Index (%)
7.	MV(KSF)	=	Miniature vane strength test done in end of sample in the Shelby tube and value is the cohesion in KSF.

LOG OF BORING

Project: Bayou Dupont
Plaquemines Parish, Louisiana
Louisiana Department of Natural Resources (2503-05-44)
For: Sigma Consulting Group
Baton Rouge, Louisiana

Boring: B-1B
File: 07-110
Date: 24-May-07
Technician: CAL

■ Undisturbed Sample
⊠ Standard Penetration Test
◫ Classification Sample
(SLS) Slickensided

N 29° 42.099'
W 89° 58.799'
Boring Depth: 98 Feet

Depth Feet	SAMPLES		(SPT) Recovery %	UU(TSF)	WC(%)	Dry Wt. (PCF)	LL	PI	MV(KSF)
0		Zero = top of casing, set 62 feet of 8 inch casing 74 feet of 4 inch casing; top of casing to water is 7 feet							
		Water surface El. 5.0 feet NAVD 88 (Estimated)							
		Water depth = 51.5 feet							
		Mudline El. -46.5 feet, NAVD 88							
	⊠	Loose brown sand (SP) 6 blows per foot (2/3/3)	66						
60	⊠	Firm brown sand (SP) 20 blows per foot (10/11/9)	61						
	⊠	Firm brown sand (SP) 23 blows per foot (9/11/12)	100						
65	⊠	Firm brown sand (SP) 20 blows per foot (10/10/10)	70						
	⊠	Firm gray sand (SP) 18 blows per foot (7/9/9)	72						
	⊠	Firm gray sand (SP) 20 blows per foot (5/9/11)	72						
70	⊠	Firm gray sand with clay layer (SP) 20 blows per foot (6/8/12)	100						
	⊠	Very dense gray sand with clay layer, shells, wood, and organic (SP) 58 blows per foot (15/32/26)	70						
75	⊠	Very dense gray sand with organic (SP) 51 blows per foot (19/27/24)	80						
	⊠	Firm gray sand (SP) 14 blows per foot (5/6/8)	53						
	⊠	Firm gray sand (SP) 14 blows per foot (5/6/8)	60						
80	⊠	Firm gray sand (SP) 25 blows per foot (13/12/13)	100						
	⊠	Firm gray sand (SP) 27 blows per foot (13/13/14)	100						
85	⊠	Firm gray sand (SP) 34 blows per foot (15/14/20)	100						
	⊠	Firm gray sand (SP) 15 blows per foot (5/6/9)	90						
	⊠	Firm gray sand (SP) 22 blows per foot (10/12/10)	100						
90	⊠	Firm gray sand (SP) 25 blows per foot (9/11/14)	100						
	⊠	Dense gray sand with organic (SP) 27 blows per foot (10/13/14)	100						
95	⊠	Dense gray sand with organic (SP) 37 blows per foot (11/14/23)	90						
	⊠	Dense gray sand with organic (SP) 46 blows per foot (11/22/24)	100						
100									

LOUIS J. CAPOZZOLI & ASSOCIATES, INC.
Geotechnical Engineers

LOG OF BORING

Project: Bayou Dupont
Plaquemines Parish, Louisiana
Louisiana Department of Natural Resources (2503-05-44)
For: Sigma Consulting Group
Baton Rouge, Louisiana

Boring: B-2B
File: 07-110
Date: 16-May-07
Technician: CAL

■ Undisturbed Sample
⊠ Standard Penetration Test
◫ Classification Sample
(SLS) Slickensided

N 29° 42.490'
W 89° 58.992'
Boring Depth: 98 Feet

Depth Feet	SAMPLES		(SPT) Recovery %	UU(TSF)	WC(%)	Dry Wt. (PCF)	LL	PI	MV(KSF)
0		Zero = top of casing, set 62 feet of 8 inch casing; top of casing to water is 7 feet							
		Water surface El. 5.0 feet NAVD 88 (Estimated)							
		Water depth = 51.0 feet							
		Mudline El. -46.0 feet, NAVD 88							
	⊠	Firm brown sand (SP) 14 blows per foot (5/6/8)	44						
60	⊠	Firm brown sand with organic matter (SP) 17 blows per foot (8/9/8)	90						
	⊠	Firm brown sand (SP) 15 blows per foot (4/6/9)	20						
65	⊠	Firm gray sand with organic matter (SP) 23 blows per foot (8/8/15)	80						
	⊠	Firm gray sand (SP) 20 blows per foot (9/10/10)	55						
	⊠	Firm gray sand (SP) 23 blows per foot (9/11/12)	60						
70	⊠	Firm gray sand (SP) 27 blows per foot (13/13/14)	70						
	⊠	Firm gray sand (SP) 27 blows per foot (14/14/13)	80						
75	⊠	Dense gray sand 32 blows per foot (14/15/17)	80						
	⊠	Dense gray sand (SP) 37 blows per foot (17/18/19)	100						
	⊠	Dense gray sand (SP) 33 blows per foot (17/17/16)	100						
80	⊠	Firm gray sand (SP) 25 blows per foot (9/13/12)	70						
	⊠	Firm gray sand (SP) 27 blows per foot (14/14/13)	70						
85	⊠	Firm gray sand (SP) 29 blows per foot (12/14/15)	70						
	⊠	Firm gray sand (SP) 20 blows per foot (9/9/11)	55						
	⊠	Firm gray sand (SP) 13 blows per foot (7/8/5)	55						
90	⊠	Firm gray sand with organic matter (SP) 22 blows per foot (11/11/11)	80						
	⊠	Firm gray sand with organic matter (SP) 29 blows per foot (13/16/13)	100						
	⊠	Very dense gray sand (SP) 50 blows per foot (18/24/26)	90						
95	⊠	Very dense gray sand (SP) 56 blows per foot (19/27/29)	60						
100									

LOUIS J. CAPOZZOLI & ASSOCIATES, INC.
Geotechnical Engineers

LOG OF BORING

Project: Bayou Dupont
Plaquemines Parish, Louisiana
Louisiana Department of Natural Resources (2503-05-44)
For: Sigma Consulting Group
Baton Rouge, Louisiana

Boring: B-3B
File: 07-110
Date: 17-May-07
Technician: CAL

■ Undisturbed Sample
⊠ Standard Penetration Test
◫ Classification Sample
(SLS) Slickensided

N 29° 42.950'
W 89° 59.203'
Boring Depth: 104 Feet

Depth Feet	SAMPLES		(SPT) Recovery %	UU(TSF)	WC(%)	Dry Wt. (PCF)	LL	PI	MV(KSF)
0		Zero = top of casing, set 64 feet of 8 inch casing; top of casing to water is 7 feet							
		Water surface El. 5.0 feet NAVD 88 (Estimated)							
		Water depth = 57.0 feet							
		Mudline El. -52.0 feet, NAVD 88							
65	⊠	Loose brown sand with wood (SP) 7 blows per foot (3/3/4)	60						
	⊠	Very loose brown sand (SP) 3 blows per foot (2/2/1)	75						
	⊠	Firm gray sand with organic matter (SP) 10 blows per foot (5/5/5)	80						
70	⊠	Firm gray sand (SP) 10 blows per foot (3/4/6)	90						
	⊠	Firm gray sand (SP) 15 blows per foot (8/7/8)	90						
75	⊠	Firm gray sand (SP) 18 blows per foot (6/7/11)	90						
	⊠	Firm gray sand (SP) 26 blows per foot (12/12/14)	100						
	⊠	Firm gray sand (SP) 22 blows per foot (9/11/11)	60						
80	⊠	Firm gray sand (SP) 22 blows per foot (10/11/11)	90						
	⊠	Firm gray sand (SP) 25 blows per foot (13/12/13)	80						
85	⊠	Dense gray sand (SP) 32 blows per foot (16/15/17)	75						
	⊠	Dense gray sand (SP) 37 blows per foot (17/17/20)	60						
	⊠	Dense gray sand (SP) 32 blows per foot (16/15/17)	50						
90	⊠	Firm gray sand (SP) 29 blows per foot (9/13/16)	80						
	⊠	Firm gray sand (SP) 27 blows per foot (15/14/13)	80						
95	⊠	Dense gray sand (SP) 42 blows per foot (18/20/22)	60						
	⊠	Dense gray sand (SP) 49 blows per foot (22/23/26)	50						
	⊠	Very dense gray sand (SP) 56 blows per foot (20/27/29)	50						
100	⊠	Very dense gray sand (SP) 63 blows per foot (20/31/32)	55						
	⊠	Very dense gray sand (SP) 63 blows per foot (30/32/31)	80						
105									

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Geotechnical Engineers

LOG OF BORING

Project: Bayou Dupont
Plaquemines Parish, Louisiana
Louisiana Department of Natural Resources (2503-05-44)
For: Sigma Consulting Group
Baton Rouge, Louisiana

Boring: B-4B
File: 07-110
Date: 24-May-07
Technician: CAL

■ Undisturbed Sample
⊠ Standard Penetration Test
▯ Classification Sample
(SLS) Slickensided

N 29° 40.120'
W 89° 58.606'
Boring Depth: 40 Feet

Depth Feet	SAMPLES		(SPT)	Recovery %	UU(TSF)	WC(%)	Dry Wt. (PCF)	LL	PI	MV(KSF)
0		Very stiff tan and gray clay with grass roots and glass (CH)		95	2.22	33	87.5	72	45	--
		Stiff tan and gray clay with silt streaks and pockets (CH)		95	1.42	37	84.5	--	--	1.15
5		Stiff tan and gray clay with ferrous nodules (CH)		90	1.00	37	83.9	--	--	.63
		Medium gray silty clay with silt streaks (CL)		90	0.5	43	80.1	40	19	.49
		Free water encountered at 8 feet; rose to 5 feet in 10 minutes								
10		Soft gray clay (CH)		1.00	0.38 @.52	44	80.4	--	--	.46
		Soft gray clay (CH)		95	0.47@.65	37	81.4	--	--	.35
		Soft gray clay with silt streaks (CH)(SLS)		95	0.32@.75	38	82.0	--	--	.28
15		Medium gray clay with silt lenses (CH)		100	.60@.86	38	84.6	77	49	.22
		Soft gray silty clay (CH)		100	.34@.99	37	80.9	--	--	.06
		No sample recovered								
20	⊠	Loose gray very silty clay (CL) 5 blows per foot (1/2/3)		80	--	--	--	--	--	--
		Soft gray clay (CH)		100	.25@1.34	39	79.6	--	--	0.33
25		Soft gray silty clay (CL) with 3" silt layer		50	.27@1.45	46	82.1	35	16	.03
		Very loose gray fine sand (SP)		50	1.15@1.56	28	89.6	--	--	--
		Firm gray sandy silt (SM) with clay traces		40	1.24@1.68	28	93.3	--	--	0.05
30		Firm gray sandy silt (SM) with ½" clay layer		100	.55@1.80	27	94.4	--	--	--
		Firm gray fine sand (SP)		100	.64@1.92	31	85.8	--	--	--
35		Firm gray fine sand (SP) with ½" clay layer		65	.50@2.03	27	86.0	--	--	--
	⊠	Firm gray fine sand with silt traces (SP) 22 blows per foot (5/8/14)		75	--	--	--	--	--	--
	⊠	Firm gray fine sand with silt traces (SP) 10 blows per foot (6/7/3)		75	--	--	--	--	--	--
40		Clay encountered at 40 feet								

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LOG OF BORING

Project: Bayou Dupont
Plaquemines Parish, Louisiana
Louisiana Department of Natural Resources (2503-05-44)
For: Sigma Consulting Group
Baton Rouge, Louisiana

Boring: B-5B
File: 07-110
Date: 24-May-07
Technician: CAL

Undisturbed Sample
Standard Penetration Test
Classification Sample
(SLS) Slickensided

N 29° 42.019'
W 89° 59.218'

Free water encountered at 4 feet; rose to 3 feet in 10 minutes

Boring Depth: 40 Feet

Depth Feet	SAMPLES		(SPT)	Recovery %	UU(TSF)	WC(%)	Dry Wt. (PCF)	LL	PI	MV(KSF)
0		Stiff brown, tan, and gray slightly silty clay with roots, shells, and sand pockets(CL)		95	1.13	23	99.1	--	--	2.1
		Stiff brown, tan, and gray slightly silty clay (CL)		90	1.06	26	96.1	47	26	.82
5		Medium tan and gray clay (CH) with silt streaks and pockets		90	.54@.32	32	91.5	--	--	.44
		Soft gray slightly silty clay (CL)		50	.35@.40	37	86.9	48	26	--
	⊠	Soft tan and gray silty clay with shells(CL) 2 blows per foot (2/1/1)		100	--	31	--	41	22	--
10		Soft gray silty clay (CL)		90	.42@.65	35	92.3	--	--	.23
		Soft gray clay with sand streaks and pockets (CH)		90	.32@.75	46	77.8	--		.16
15		Soft gray clay with organic matter traces (CH)		90	.45@.86	41	77.4	52	29	.25
		Soft gray very silty clay (CL)		100	.28 @ .99	38	81.6	--	--	.15
		Soft gray very silty clay with 3" sandy silt layer (CL)		90	.48@1.09	35	83.7	--	--	.08
20		Soft gray very silty clay with 2½" clayey silt layer (CL)		90	.26@1.22	38	84.1	34	14	.29
		Loose gray silty sand with clay traces (ML)		90	.69@1.34	33	82.0	--	--	--
25		Loose gray clayey silt with 1" clay layer (CL-ML)		95	.49@1.45	36	79.3	--	--	.09
		Soft gray slightly organic clay with silt pockets (OH)		100	.37@1.56	73	57.8	--	--	1.75
		Medium gray slightly organic clay with shells (OH)		100	.60@1.68	71	56.1	--	--	.32
30		Soft gray clay (CH)		90	.30@1.80	50	66.9	--	--	.25
		Medium gray slightly organic clay (OH)		100	.58@1.92	72	57.9	--	--	.45
35		Soft gray clay (CH) (SLS)		100	.46@2.03	64	61.3	93	69	.17
		Medium gray clay (CH)		100	.50@2.15	58	63.6	--	--	.38
		Medium gray clay with silt lenses (CH)		100	.57@2.26	54	68.0	--	--	.49
40										

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