

NOTES

- (UC) UNCONFINED COMPRESSION TEST
- (O) UNCONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- ▲ (R) CONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- (S) CONSOLIDATED - DRAINED DIRECT SHEAR TEST
- _{UP} ○_{UN} ○_{UL} ATTERBERG LIMITS

BORING WAS TAKEN WITH A 5 INCH DIAMETER STEEL TUBE PISTON TYPE SAMPLER.
 FOR SOIL BORING LEGEND SEE PLATE A.
 FOR LOCATION OF BORINGS SEE PLATE A.
 FOR DETAILED TEST DATA SEE

TABULAR TEST DATA

ENVELOPE NO.	EL.	TYPE	φ	c	τ _{sf}	CLASS
1	-13.6	0	0.0	0.015		CH
2	-22.5	0	0.0	0.122		CH
3	-29.6	0	0.0	0.201		CH
4	-50.5	0	0.0	0.441		CH
5	-58.5	0	0.0	0.324		CH
6	-66.5	0	0.0	0.092		CH
7	-77.6	0	0.0	0.445		CL
8	-85.6	0	0.0	0.742		CH

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA

DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]

DATE: [] [] [] [] [] []
 PLOT SCALE: [] [] [] [] [] []
 PLOT DATE: [] [] [] [] [] []
 FILE NO.: [] [] [] [] [] []

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080
Boring: B-1

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E (f)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests	
NS	0	WATER	NS															
1A	11.0	VSO GR CH4 W/ LNS ML	CH4		72													
1B	11.8	VSO GR CH3 W/ ARS & LNS ML, TR-WD	CH3	14	66	59	98	95	UC	--	144	289				0.100		
1C	12.7	VSO GR CH3 W/ LNS ML	CH3		63													
2A	15.0	VSO GR CH4 W/ TR-O	CH4		60													
2B	15.8	VSO GR CH3	CH3		43	75	107	93	UU	0	30		55	18	37	0.070		
NS	16.7	NO SAMPLE	NS															
3A	19.0	VSO GR CH2	CH2		44													
3B	19.8	VSO GR CL6	CL6		41													
3C	20.7	VSO GR CL4 W/ ARS CH	CL4	11	29	86	112	83	UC	--	185	371				0.230		
3D1	21.6	VSO GR CL4	CL4		37													
3D2	22.1	VSO GR CH4	CH4		75													
4A	23.0	VSO GR CH4 W/ LNS ML	CH4		95													
4B	23.8	VSO GR CH3 W/ LNS & LYS ML	CH3		96													
4C	24.7	VSO GR CH4 W/ LNS ML	CH4		75	55	96	97	UU	0	243		86	24	62	0.150		
4D	25.6	VSO GR CH4 W/ LNS ML	CH4		92													
5A	27.0	VSO GR CH4 W/ ARS ML	CH4		79													
5B	27.8	VSO GR CH4 W/ LNS ML	CH4	4	77	55	97	99	UC	--	204	408				0.130		
5C	28.7	VSO GR CH4 W/ ARS ML	CH4		82													
5D	29.6	VSO GR CH4 W/ ARS ML	CH4		83													
6A	31.0	SO GR CH4 W/ SL	CH4		68													
6B	31.8	SO GR CH4 W/ SL	CH4		66	57	95	91	UU	0	402		98	31	67	0.220		
6C	32.7	SO GR CH4 W/ SL	CH4		69													
7A	35.0	SO GR CH4 W/ SL	CH4		74													
7B	35.8	M GR CH4 W/ SL, LNS SP	CH4		70	59	101	100	UC	--	582	1165				0.270		
7C	36.7	SO GR CH2 W/ SIF	CH2		46													
7D	37.6	SO GR CL5 W/ SIF	CL5		29													
8A	39.0	VSO GR CL3 W/ SIF	CL3		27													
8B	39.8	VSO GR CL3 W/ SIF	CL3		27													
9	41.0	GR SP W/ TR-SIF	SP		34													
10	43.5	GR SM1	SM1		28													
11	46.0	GR SM1	SM1		28													
12	48.5	VSO GR CH2	CH2		59													
13A	51.0	M GR CH3 W/ LNS SM	CH3		66													
13B	51.8	M GR CH3 W/ LNS SM	CH3		55													
13C	52.7	M GR CH4 W/ ARS SM, SL	CH4		68													
13D	53.6	M GR CH4 W/ LNS SM	CH4		66	57	95	93	UU	0	882		91	25	66	0.300		

PD

Remarks: EUSTIS ENGINEERING COMPANY, INC.

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 Project Number: 19080
 Boring: B-1

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E (f)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests	
14A	55.0	ST GR CH4 W/ ARS SM, SL, SIF	CH4		55													
14B	55.8	ST GR CH4 W/ ARS SM, SL, SIF	CH4		59													
14C	56.7	M GR CH4 W/ ARS SM, SL, SIF	CH4	5	55	65	101	93	UC	--	1032	2065				0.360		
14D	57.6	ST GR CH4 W/ ARS SM, SL, SIF	CH4		56													
15A	59.0	ST GR CH4 W/ ARS SM, SIF, SL	CH4		61													
15B	59.8	ST GR CH4 W/ ARS SM, SIF, SL	CH4		61													
15C	60.7	M GR CH4 W/ LNS SM, SIF	CH4		60													
15D	61.6	ST GR CH4 W/ ARS SM, SIF, SL	CH4		60													
16A	63.0	ST GR CH4 W/ SL	CH4		48													
16B	63.8	ST GR CH4 W/ SL	CH4		49													
16C	64.7	M GR CH4 W/ LNS ML	CH4	4	52	71	107	99	UC	--	580	1159				0.350		
16D	65.6	ST GR CH4 W/ SL	CH4		50													
17A	67.0	SO GR CH4 W/ SL	CH4		72													
17B	67.8	M GR CH4 W/ SL	CH4		61													
17C	68.7	VSO GR CH4 W/ ARS ML, SIF, SL	CH4		49													
18A	71.0	ST GR CHOB W/ WD	CHOB		111													
18B	71.8	ST GR CHOB W/ WD	CHOB		113													
18C	72.7	ST BR & GR CHOB W/ WD	CHOB	7	118	38	83	93	UC	--	1139	2279				0.350		
19A	75.0	ST GR CH4 W/ SL	CH4		66													
19B	75.8	ST GR CH4 W/ SL	CH4		60													
19C	76.7	ST GR CH4 W/ TR-WD	CH4		56													
19D	77.6	ST GR CH4 W/ WD, LYS SM	CH4		50													
20A	79.0	ST LGR CL5	CL5		25													
20B	79.8	M LGR CL3	CL3		22													
20C	80.7	VST LGR CL3	CL3		18													
21A	83.0	VST LGR & T CH4 W/ LNS SM, SL	CH4		31													
21B	83.8	M GNGR & T CH4 W/ LYS SM, SL	CH4	2	31	90	118	95	UC	--	943	1887				1.125		
21C	84.7	VST LGR & T CH4 W/ LNS SM, SL	CH4		31													
NS	85.0	NO SAMPLE	NS															
22A	87.0	VST T & LGR CH4 W/ LNS SM, SL	CH4		39													
22B	87.8	ST T & LGR CH4 W/ LNS SM, SL	CH4		41													
22C	88.7	VST T & LGR CH4 W/ LNS SM, SL	CH4		41													
22D	89.6	VST T & LGR CH4 W/ LNS SM, SL	CH4		43													
23A	91.0	VST T & LGR CH4 W/ ARS SM, SL	CH4		41													
23B	91.8	ST T & GR CH4 W/ LNS ML, SL	CH4	4	41	78	110	94	UC	--	1929	3857				0.800		
23C	92.7	VST T & LGR CH4 W/ ARS SM, SL	CH4		42													
24	93.5	ST T CL6	CL6		30													

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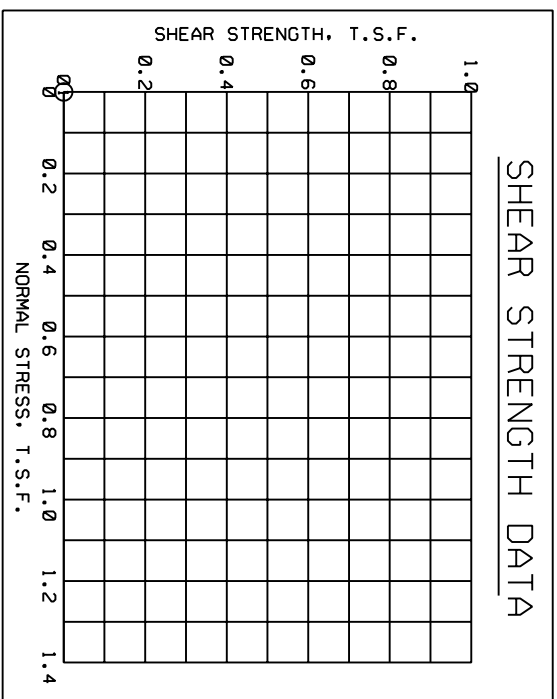
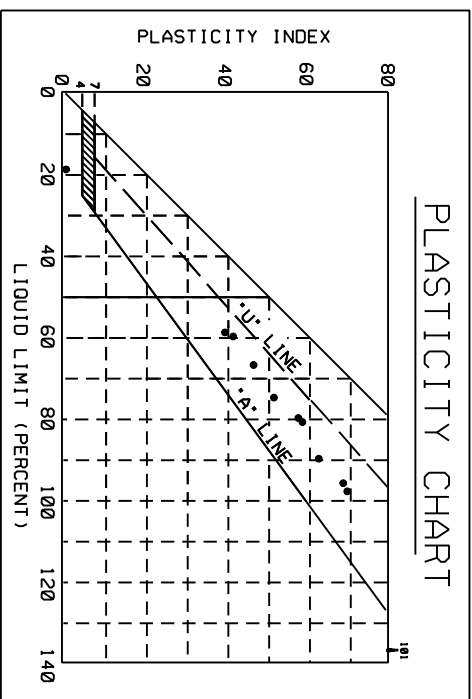
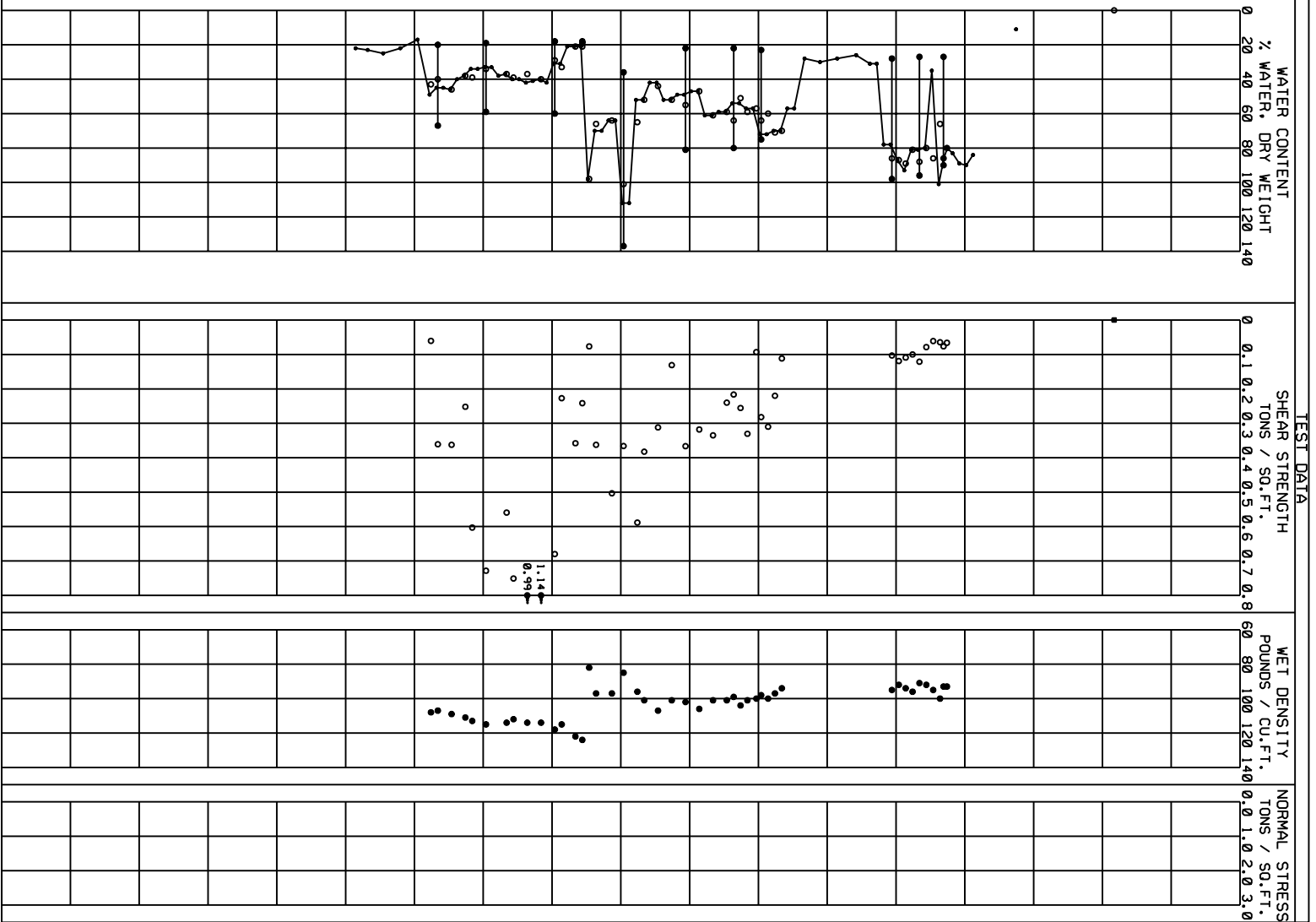
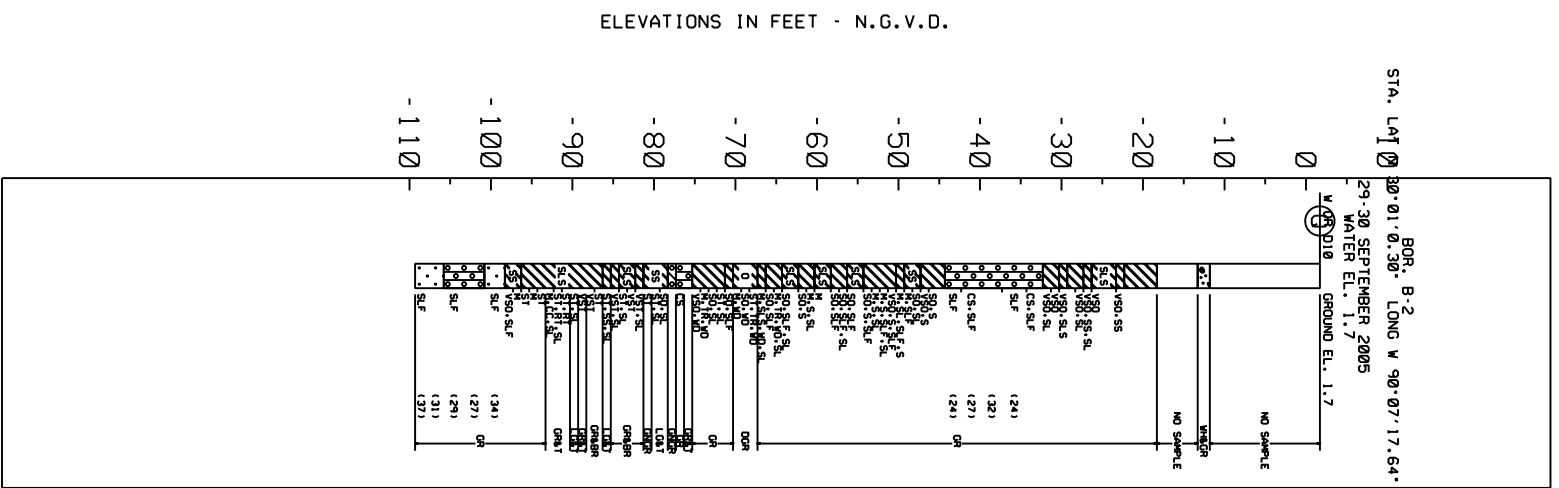
Project Number: 19080
Boring: B-1

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E (F)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	IL	PL	PI	TORVANE (tsf)	Other Tests
25	96.0	M GR CH2	CH2		43												
26C	97.7	ST GR & T CH3 W/ LNS SM, SL	CH3		35												
26A	98.0	ST GR & T CH3 W/ LNS SM, SL	CH3		36												
26D	98.6	ST GR & T CH3 W/ LNS SM, SL	CH3		35												
26B	98.8	ST GR & T CH3 W/ LNS SM, SL	CH3		35												
27	102.0	GR SP W/ SIF	SP		22												
28	104.5	GR SM1 W/ SIF	SM1		21												
29	107.0	GR SM1 W/ SIF	SM1		22												
30	109.5	GR SM1 W/ SIF	SM1		21												

Remarks: EUSTIS ENGINEERING COMPANY, INC.

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 - (O) UNCONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
 - ▲ (R) CONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
 - ▣ (S) CONSOLIDATED - DRAINED DIRECT SHEAR TEST
 - _{UP} ○_{UN} ○_{UL} ATTERBERG LIMITS
- BORING WAS TAKEN WITH A 5 INCH DIAMETER STEEL TUBE PISTON TYPE SAMPLER.
 FOR SOIL BORING LEGEND SEE PLATE A.
 FOR LOCATION OF BORINGS SEE PLATE FOR DETAILED TEST DATA SEE

TABULAR TEST DATA

ENVELOPE NO.	EL.	TYPE	STRENGTH	CLASS
1	1.7	0	0.0	0.000

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA

DESIGNED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 PLOT SCALE: _____
 PLOT DATE: _____
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 CAD FILE: _____
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SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E (F)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests	
NS	0	WATER	NS															
NS	11.0	NO SAMPLE	NS															
1	13.5	WH & GR G	GP		11													
NS	15.0	NO SAMPLE	NS															
2A	20.0	VSO GR CH4	CH4		84													
2B	21.0	VSO GR CH4	CH4		90													
3A	22.0	VSO GR CH4	CH4		89													
3B	23.0	VSO GR CH4	CH4		83													
4A	24.0	VSO GR CH4 W/ LNS SM	CH4	5	80	52	93	95	UC	--	132	264				0.070		
4A	24.5	VSO GR CH4 W/ LNS SM	CH4	2	86	50	93	98	OB	--	153	305	90	27	63			
4B	25.0	VSO GR CH4 W/ LNS ML	CH4	9	66	60	100	98	UC	--	129	258				0.100		
5A	26.0	VSO GR CH4 W/ LNS ML	CH4	4	86	51	95	100	OB	--	122	244				0.120		
5B	27.0	VSO GR CH4 W/ LNS ML	CH4	6	80	51	92	93	UC	--	157	314				0.090		
6A	28.0	VSO GR CH4 W/ SL, LNS SM	CH4	3	88	49	91	96	OB	--	242	484	96	27	69		0.160	
6B	29.0	VSO GR CH4 W/ SL	CH4	8	81	53	96	100	UC	--	200	400				0.150		
7A	30.0	VSO GR CH4	CH4	4	89	50	94	99	OB	--	218	436				0.150		
7B	31.0	VSO GR CH4 W/ ARS ML	CH4	9	87	49	92	96	UC	--	238	475				0.100		
8A	32.0	VSO GR CH4	CH4	2	86	51	95	100	OB	--	206	413	98	28	70		0.200	
8B	33.0	VSO GR CH4 W/ SL	CH4		78													
9A	34.0	GR SM1 W/ LYS CH, SIF	SM1		31													
9B	35.0	GR SM1 W/ LYS CH, SIF	SM1		31													
10	36.0	GR SM1 W/ SIF	SM1		26													
11	39.0	GR SM1 W/ ARS CH, SIF	SM1		28													
12	41.5	GR SM1 W/ ARS CH, SIF	SM1		30													
13	44.0	GR SM1 W/ SIF	SM1		28													
14A	46.0	SO GR CH3 W/ ARS SM	CH3		57													
14B	47.0	SO GR CH3 W/ ARS SM	CH3		57													
15A	48.0	VSO GR CH3 W/ ARS SM	CH3	10	70	56	94	92	UC	--	223	446				0.240		
15B	49.0	SO GR CH3 W/ ARS SM	CH3		71	57	97	97	OB	--	440	879				0.360		
16A	50.0	M GR CH4 W/ LNS SM, SIF	CH4	5	60	62	100	94	UC	--	620	1240				0.350		
16B	51.0	M GR CH4 W/ SL, SIF, ARS SM	CH4	4	64	60	98	95	OB	--	564	1128	75	23	52		0.330	
17A	52.0	VSO GR CH3 W/ ARS SM, SIF	CH3	11	57	64	100	94	UC	--	186	373				0.240		
17B	53.0	M GR CH3 W/ ARS SM, SIF, SL	CH3		59	63	101	95	OB	--	661	1322				0.350		
18A	54.0	M GR CH4 W/ ARS SM, SL	CH4	9	51	69	104	95	UC	--	511	1022				0.300		
18B	55.0	SO GR CH4 W/ ARS SM, SIF	CH4	8	64	61	99	96	OB	--	433	865	80	22	58		0.300	
19A	56.0	SO GR CH3 W/ LNS ML, SIF	CH3		59													
19B	57.0	SO GR CH3 W/ LNS ML, SIF	CH3	9	59	63	101	95	UC	--	480	961				0.200		

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PD

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Boring: B-2

Sample Number	Depth	Visual Classification	USCS	E(f)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
20A	58.0	M GR CH4 W/ SIF, SL	CH4	3	61	63	101	96	OB	--	670	1341				0.360	
20B	59.0	SO GR CH4 W/ SIF	CH4	3	61	63	101	96	OB	--	670	1341				0.360	
21A	60.0	M GR CH4 W/ LNS ML	CH4	13	47	72	106	94	UC	--	636	1272				0.270	
21B	61.0	M GR CH4 W/ LNS ML	CH4	13	47	72	106	94	UC	--	636	1272				0.270	
22A	62.0	M GR CH4 W/ ARS SM, SL	CH4	3	55	66	102	95	OB	--	733	1466	81	22	59	0.400	
22B	63.0	SO GR CH4 W/ ARS SM	CH4	3	49	66	102	95	OB	--	733	1466	81	22	59	0.400	
23A	64.0	SO GR CH3 W/ ARS ML, SIF, SL	CH3	7	52	66	101	91	UC	--	262	525				0.230	
23B	65.0	SO GR CH3 W/ ARS ML, SIF, SL	CH3	7	52	66	101	91	UC	--	262	525				0.230	
24A	66.0	M GR CH4 W/ TR-WD, SL	CH4	5	44	75	107	93	OB	--	624	1248				0.400	
24B	67.0	SO GR CH4 W/ SIF	CH4	5	42	67	107	93	OB	--	624	1248				0.400	
25A	68.0	M GR CH3 W/ ARS ML, WD, SL	CH3	10	52	67	101	91	UC	--	765	1530				0.300	
25B	69.0	ST DGR CHOA W/ TR-WD	CHOA	6	65	58	96	93	OB	--	1177	2353				0.520	
26A	70.0	SO DGR CHOA W/ WD	CHOA	6	65	58	96	93	OB	--	1177	2353				0.520	
26B	71.0	M DGR CHOA W/ WD	CHOA	4	101	42	85	91	OB	--	732	1464	137	36	101	0.550	
27A	72.0	SO GR CH4 W/ SIF	CH4	4	64	59	97	93	UC	--	1007	2013				0.300	
27B	73.0	ST GR CH4 W/ SL	CH4	12	64	59	97	93	UC	--	1007	2013				0.300	
28A	74.0	SO GR CH4 W/ SL	CH4	12	70	59	97	93	UC	--	1007	2013				0.300	
28B	75.0	M GR CH4 W/ TR-WD, SL	CH4	7	66	58	97	93	OB	--	725	1450				0.450	
29A	76.0	VSO GR CH4 W/ WD	CH4	14	98	42	82	86	UC	--	153	306				0.100	
29B	77.0	GR & T SM1	SM1	2	21	102	124	91	OB	--	483	965	19	18	1		
30A	78.0	GR SM1 W/ ARS CH	SM1	2	21	102	124	91	OB	--	483	965	19	18	1		
30B	79.0	GNGR SC3-S	SC3-S	5	21	101	122	88	OB	--	716	1433				0.625	
31A	80.0	SO LGR & T CH4 W/ LNS SM, SL	CH4	4	33	87	115	92	UC	--	454	909				0.625	
31B	81.0	ST LGR & T CH3 W/ LNS SM, SL	CH3	7	29	92	118	91	OB	--	1360	2721	60	18	42	1.425	
32A	82.0	ST GNGR CH4 W/ ARS & LNS SM	CH4	4	42	81	114	99	UC	--	2289	4577				1.525	
32B	83.0	VST GR & BR CH4 W/ SL	CH4	4	40	81	114	99	UC	--	2289	4577				1.525	
33A	84.0	VST GR & BR CH4 W/ LNS ML	CH4	4	41	81	114	99	UC	--	2289	4577				1.525	
33B	85.0	ST GR & BR CH4 W/ LNS ML, SL	CH4	5	37	84	114	96	UC	--	1988	3975				1.100	
34A	86.0	VST GR & BR CH4 W/ SL	CH4	5	40	81	114	96	UC	--	1988	3975				1.100	
34B	87.0	ST LGR & T CH4 W/ LNS SM, SL	CH4	5	39	81	112	94	OB	--	1502	3004				0.875	
35A	88.0	ST GR & BR CH4 W/ LNS ML	CH4	8	37	83	114	96	UC	--	1119	2237				1.025	
35B	89.0	VST GR & BR CH4 W/ LNS ML	CH4	8	37	83	114	96	UC	--	1119	2237				1.025	
36A	90.0	VST GR & T CH3 W/ LNS ML	CH3	3	33	86	115	94	OB	--	1457	2915				0.825	
36B	91.0	ST LGR & T CH3 W/ LNS ML, SL	CH3	6	34	86	115	94	OB	--	1457	2915				0.825	
37A	92.0	ST GR & T CH4 W/ LNS ML, RT	CH4	8	34	81	113	97	UC	--	1206	2412				0.650	
37B	93.0	ST GR & T CH4 W/ LNS ML, RT, SL	CH4	8	39	81	113	97	UC	--	1206	2412				0.650	
38A	94.0	M GR & T CH3 W/ LNS SM, CC, SL	CH3	5	38	81	111	92	OB	--	504	1008				0.500	

Remarks:

EUSTIS ENGINEERING COMPANY, INC.

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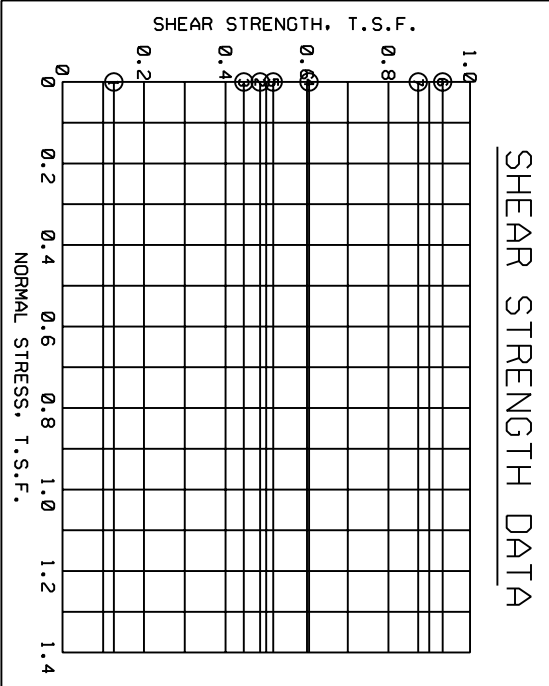
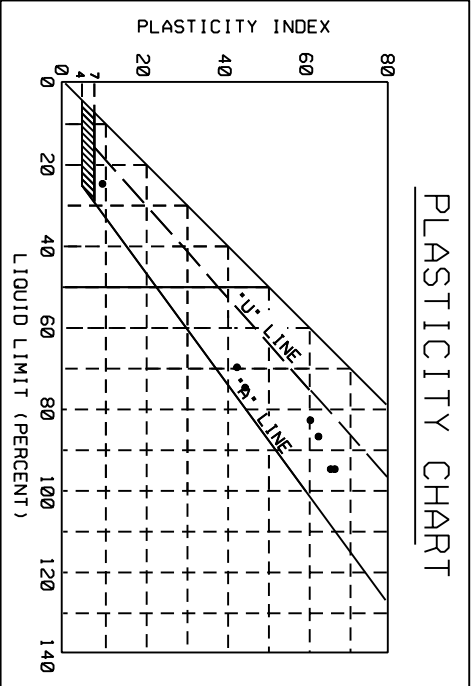
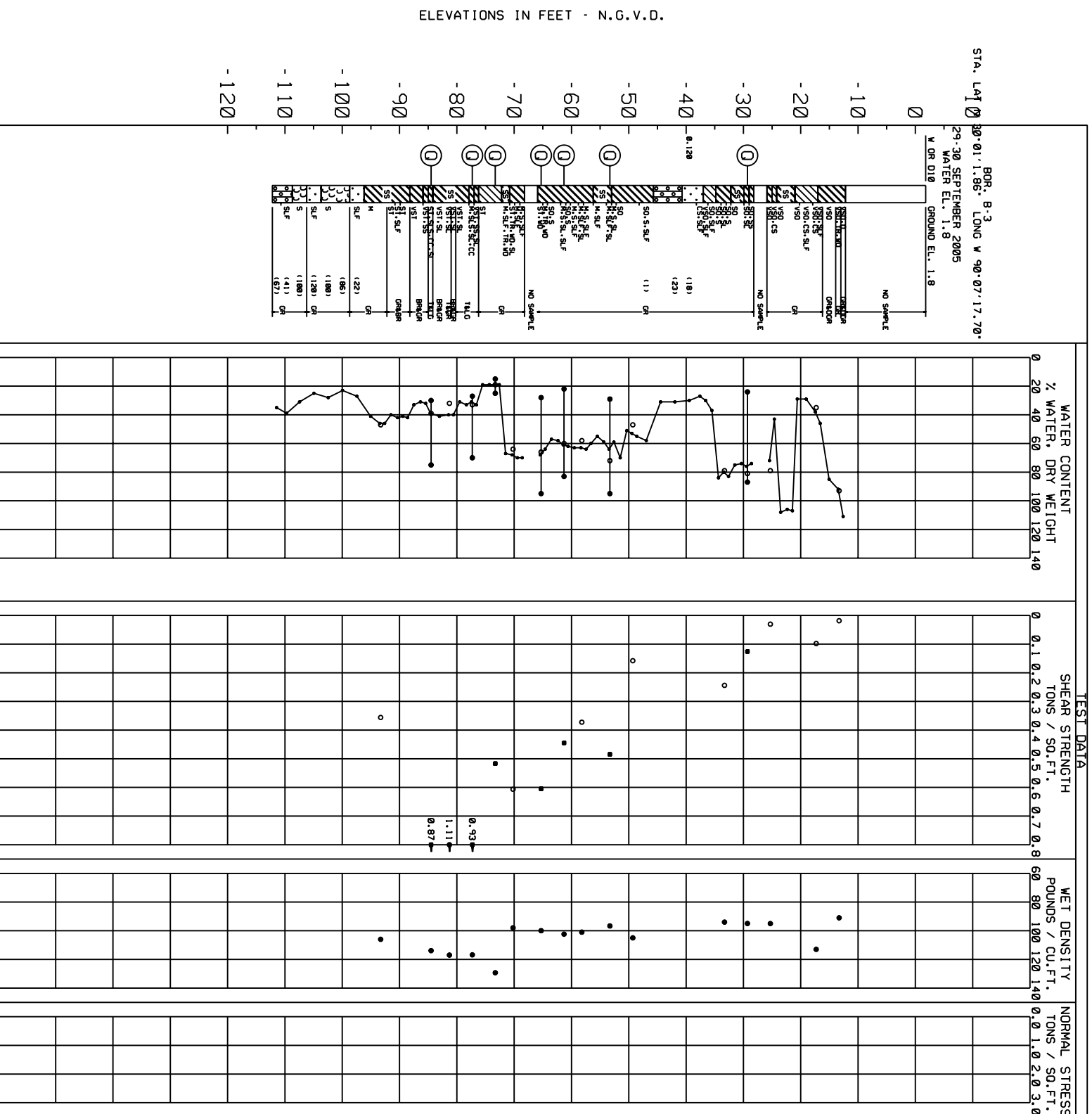
Project Number: 19080
Boring: B-2

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E(f)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests	
38B	95.0	ST GR CH3 W/ LNS ML	CH3		40													
39A	96.0	M GR CH4 W/ LNS ML	CH4	10	46	75	109	97	UC	--	725	1450				0.425		
39B	97.0	ST GR CH4 W/ LNS ML	CH4		46													
40A	98.0	M GR CH3 W/ ARS & LNS SP	CH3	9	40	76	107	88	OB	--	722	1443	67	20	47	0.370		
40B	99.0	VSO GR CH4 W/ LYS & LNS SM, SIF	CH4	1	43	76	108	92	OB	--	121	242				0.400		
41	100.0	GR SP W/ SIF	SP		17													
42	102.5	GR SM1 W/ SIF	SM1		22													
43	105.0	GR SM1 W/ SIF	SM1		25													
44	107.5	GR SP W/ SIF	SP		23													
45	109.5	GR SP W/ SIF	SP		22													

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080



NOTES

○ - (UC) UNCONFINED COMPRESSION TEST
 ■ - (O) UNCONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
 ▲ - (R) CONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
 ▣ - (S) CONSOLIDATED - DRAINED DIRECT SHEAR TEST
 ○_{UP} - U_N - U_L - ATTERBERG LIMITS
 BORING WAS TAKEN WITH A 5 INCH DIAMETER STEEL TUBE PISTON TYPE SAMPLER.
 FOR SOIL BORING LEGEND SEE PLATE A.
 FOR LOCATION OF BORINGS SEE PLATE FOR DETAILED TEST DATA SEE

TABULAR TEST DATA

NO.	ENVELOPE EL.	TYPE	STRENGTH	CLASS	
		Φ	c - tsf		
1	-29.3	0	0.0	0.126	CH
2	-53.3	0	0.0	0.485	CH
3	-61.3	0	0.0	0.445	CH
4	-65.3	0	0.0	0.605	CH
5	-73.3	0	0.0	0.517	CL
6	-77.3	0	0.0	0.933	CH
7	-84.5	0	0.0	0.873	CH

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA

DESIGNED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 DATE: _____

PLOT SCALE: _____ PLOT DATE: _____ CAD FILE: _____
 FILE NO.: _____

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E(F)	w%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
NS	0.0	WATER	NS														
1A	14.0	VSO GR & DGR CH4 W/ O	CH4	3	111	47	91	97	UC	--	37	74				0.070	
1B	14.8	VSO GR CH4 W/ TR-WD	CH4		93												
1C	15.7	VSO GR & DGR CH4	CH4		85												
2A	18.0	VSO GR CH2 W/ SIF	CH2		46												
2B	18.8	VSO GR CL4 W/ ARS CH	CL4	20	35	84	113	94	UC	--	196	391				0.110	
2C	19.7	VSO GR CL4 W/ LYS CH, SIF	CL4		29												
3A	22.0	VSO GR CL4	CL4		29												
3B	22.8	VSO GR CH4 W/ LNS SM	CH4		107												
3C	23.7	VSO GR CH4 W/ LNS SM	CH4		106												
3D	24.6	VSO GR CH4 W/ LNS SM	CH4		108												
4A	26.0	VSO GR CL4 W/ LYS CH	CL4		43												
4B	26.8	VSO GR CH4	CH4	4	79	53	95	98	UC	--	61	122				0.110	
NS	27.7	NO SAMPLE	NS														
5A	30.0	SO GR CH4 W/ LNS SM	CH4		74												
5B	30.8	SO GR CH4 W/ SL	CH4		81	51	92	94	UU	0	251		87	24	63	0.200	
5C	31.7	SO GR CH4 W/ LNS SM	CH4		74												
5D	32.6	SO GR CH4 W/ LNS SM	CH4		75												
6A	34.0	SO GR CH4 W/ ARS SM	CH4		83												
6B	34.8	SO GR CH4 W/ SL	CH4	4	79	53	94	96	UC	--	488	976				0.230	
6C	35.7	SO GR CH4 W/ ARS SM	CH4		84												
6D	36.6	SO GR CL5 W/ SIF	CL5		37												
7A	38.0	VSO GR CL3 W/ SIF	CL3		30												
7B	38.8	GR SP W/ ARS CH, SIF	SP		27												
8	40.0	GR SP	SP		30												
9	42.5	GR SM1	SM1		31												
10	45.0	GR SM1	SM1		31												
11	47.5	SO GR CH3 W/ ARS SM, SIF	CH3		58												
12A	50.0	SO GR CH2	CH2		55												
12B	50.8	SO GR CH2	CH2	8	47	72	105	93	UC	--	316	632				0.280	
12C	51.7	SO GR CH2	CH2		51												
12D	52.6	SO GR CH3	CH3		70												
13A	54.0	M GR CH4 W/ ARS SM, SL	CH4		59												
13B	54.8	M GR CH4 W/ LNS SM, SIF, SL	CH4		72	55	95	95	UU	0	970		95	29	66	0.300	
13C	55.7	M GR CH3 W/ ARS & LNS SM, SIF	CH3		59												
13D	56.6	M GR CH3 W/ ARS & LNS SM, SIF	CH3		55												
14A	58.0	M GR CH3 W/ ARS SM, SIF	CH3		60												

PD

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E (#)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	IL	PL	PI	TORVANE (tsf)	Other Tests	
14B	58.8	M GR CH3 W/ ARS SM, SIF	CH3		64													
14C	59.7	M GR CH4 W/ SIF, SL	CH4	3	58	64	101	95	UC	--	745	1490				0.350		
14D	60.6	M GR CH4 W/ ARS SM, SIF	CH4		63													
15A	62.0	SO GR CH4 W/ ARS SM	CH4		62													
15B	62.8	M GR CH4 W/ ARS SM, SL, SIF	CH4		60	63	100	96	UU	0	890		83	22	61	0.370		
15C	63.7	SO GR CH4 W/ ARS SM	CH4		58													
15D	64.6	SO GR CH4 W/ ARS SM	CH4		57													
16A	66.0	M GR CH4 W/ TR-WD	CH4		64													
16B	66.8	ST GR CH4 W/ WD	CH4		66	59	98	95	UU	0	1210			95	28	67	0.400	
NS	67.7	NO SAMPLE	NS															
17A	70.0	M GR CH4 W/ ARS SM, SIF	CH4		70													
17B	70.8	M GR CH4 W/ SIF	CH4		70													
17C	71.7	ST GR CH4 W/ TR-WD, SL	CH4	3	64	60	98	95	UC	--	1213	2425				0.400		
17D	72.6	M GR CH4 W/ SIF, TR-WD, LYS SM	CH4		67													
18A	74.0	ST GR CL3	CL3		19	19	124	82	UU	0	1033					0.650		
18B	74.8	ST GR CL3	CL3		19													
18C	75.7	ST GR CL3	CL3		19	105												
18D	76.6	ST GR CL3	CL3		19													
19A	78.0	VST T & LGR CH3 W/ LNS SM, SL	CH3		33													
19B	78.8	M T & LGR CH3 W/ LNS & LYS ML, SL, CC	CH3		33	86	115	92	UU	0	933			70	27	43	0.625	
19C	79.7	VST T & LGR CH3 W/ LNS SM, SL	CH3		33													
19D	80.6	VST T & LGR CH3 W/ LNS SM, SL	CH3		31													
20A	82.0	VST BR & GR CH4 W/ LNS SM, SL	CH4		40													
20B	82.8	VST T & GR CH4 W/ LNS SM, SL	CH4	3	32	88	117	94	UC	--	2212	4424				0.875		
20C	83.7	VST BR & GR CH4 W/ LNS SM, SL	CH4		41													
21A	86.0	ST T & LGR CH4 W/ LNS ML, CC, SL	CH4		39	81	113	96	UU	0	1746			75	30	45	0.800	
21B	86.8	VST BR & GR CH3 W/ LNS SM	CH3		32													
21C	87.7	VST BR & GR CH2	CH2		31													
21D	88.6	VST BR & GR CH2	CH2		33													
22A	90.0	ST GR & BR CH3 W/ ARS & LNS SM	CH3		42													
22B	90.8	ST GR & BR CH3 W/ ARS & LNS SM	CH3		41													
22C	91.7	ST GR & BR CH3 W/ ARS & LNS SM, SIF	CH3		42													
22D	92.6	ST GR & BR CH4 W/ ARS & LNS SM, SIF	CH4		40													
23A	94.0	M GR CH4 W/ LNS SM	CH4		46													
23B	94.8	M GR CH4 W/ LNS SP	CH4		47	72	106	93	UC	--	712	1424				0.380		
23C	95.7	M GR CH3 W/ LNS SM	CH3		41													
24	98.0	GR SP W/ SIF	SP		27													

Remarks: EVSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Boring: B-3

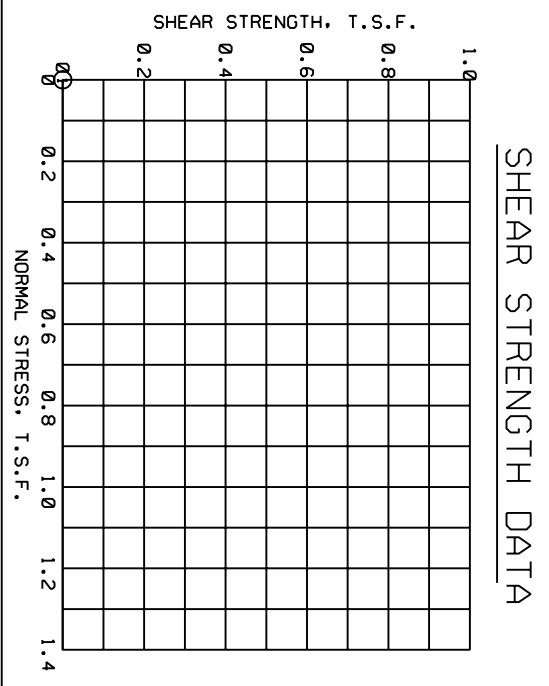
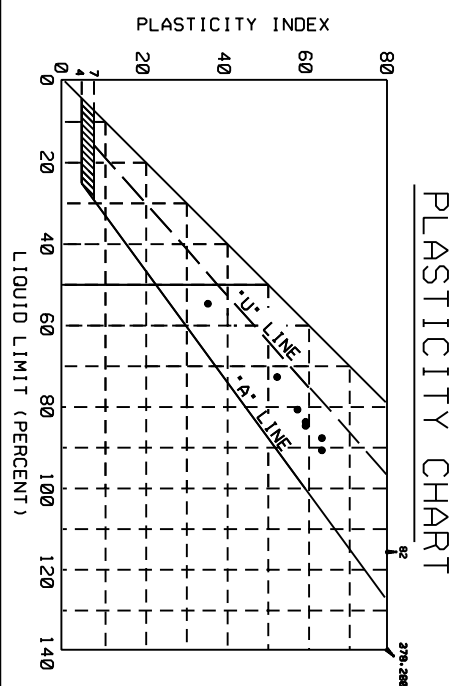
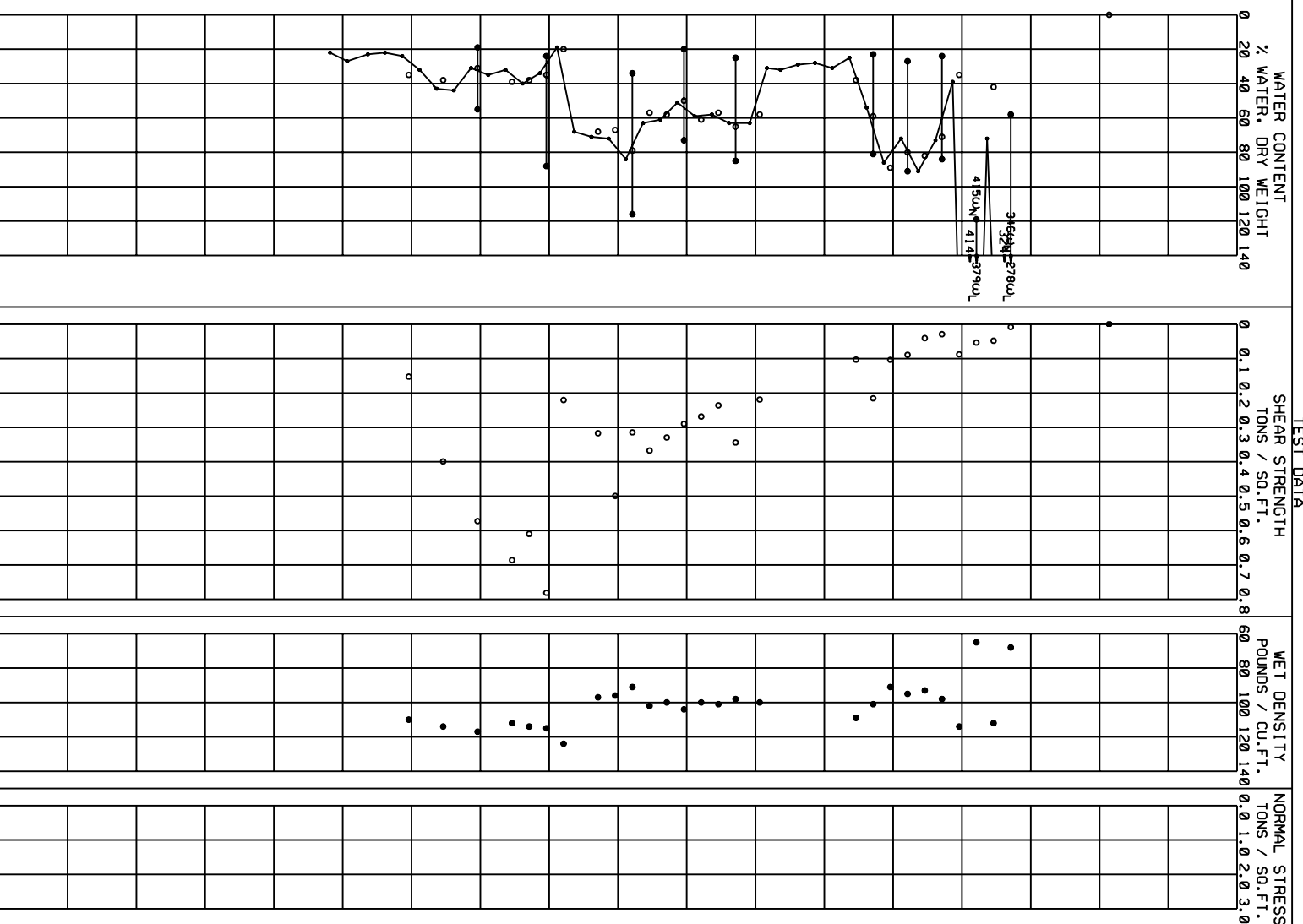
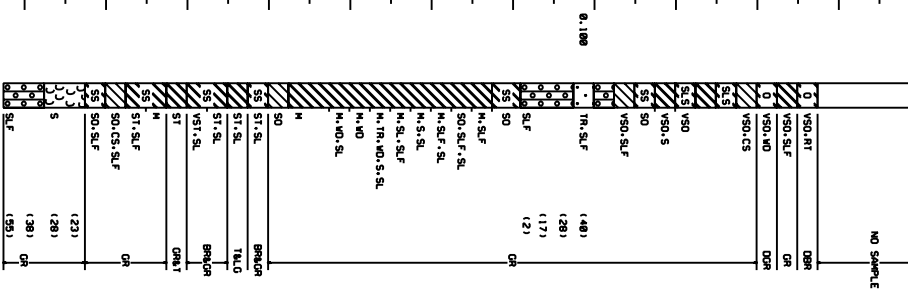
Sample Number	Depth	Visual Classification	USCS	E (F)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
25	100.5	SI W/ SP	SI		23												
26	103.0	SI W/ SP	SI		28												
27	105.5	GR SP W/ SIF	SP		25												
28	108.0	SI W/ SP	SI		31												
29	110.5	GR SM1	SM1		39												
30	112.5	GR SM1	SM1		35												

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

ELEVATIONS IN FEET - N.G.V.D.

BOR. B-4
 STA. LAT 29° 01' 3.24" LONG W 90° 07' 17.10"
 30 SEPTEMBER - 1 OCTOBER 2005
 WATER EL. 1.4
 GROUND EL. 1.4



NOTES

- - (UC) UNCONFINED COMPRESSION TEST
- - (O) UNCONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- ▲ - (R) CONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- ◻ - (S) CONSOLIDATED - DRAINED DIRECT SHEAR TEST
- UP ○ UN WL ATTERBERG LIMITS

BORING WAS TAKEN WITH A 5 INCH DIAMETER
 STEEL TUBE PISTON TYPE SAMPLER.
 FOR SOIL BORING LEGEND SEE PLATE A.
 FOR LOCATION OF BORINGS SEE PLATE
 FOR DETAILED TEST DATA SEE

TABULAR TEST DATA

ENVELOPE NO.	EL.	TYPE	STRENGTH Φ	C - TSF	CLASS
1	1.4	0	0.0	0.000	

DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]

DATE:

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA

PLATE

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Boring: B-4

Sample Number	Depth	Visual Classification	USCS	E(F)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
NS	0.0	WATER	NS														
1	14.0	VSO DBR CHOC W/ RT	CHOC	10	346	15	68	94	UC	--	16	33	276	58	218	0.130	
2	16.5	VSO GR CH2 W/ SIF	CH2	14	42	79	112	99	UC	--	96	192				0.100	
3	19.0	VSO DGR CHOC W/ WD	CHOC	2	415	13	65	91	OB	--	107	349	379	119	260	0.100	
4	21.5	VSO GR CL4 W/ LYS CH	CL4	12	35	85	114	95	UC	--	175					0.070	
5	24.0	VSO GR CH3 W/ LNS ML	CH3	1	71	58	98	98	OB	--	58	163	84	24	60	0.070	
6	26.5	VSO GR CH4	CH4	4	82	51	93	96	UC	--	81					0.070	
7	29.0	VSO GR CH4 W/ LNS ML	CH4	2	80	53	95	98	OB	--	178	413	91	27	64	0.150	
8	31.5	VSO GR CH4 W/ ARS SM	CH4	5	89	48	91	95	UC	--	206					0.150	
9	34.0	SO GR CH3 W/ ARS & LNS SM	CH3	5	59	63	101	95	OB	--	431	412	81	23	58	0.200	
10	36.5	VSO GR CL5 W/ SIF	CL5	7	38	79	109	90	UC	--	206					0.150	
11	39.0	GR SM1	SM1		31												
12	41.5	GR SP W/ TR-SIF	SP		28												PD
13	44.0	GR SM1	SM1		29												
14	46.5	GR SM1	SM1		32												
15	49.0	GR SM1 W/ SIF	SM1		31												
16	50.5	SO GR CH3 W/ LNS SM	CH3	4	58	63	100	94	UC	--	438	875	85	25	60	0.330	
17	54.0	M GR CH4 W/ SIF	CH4	5	65	59	98	94	OB	--	688					0.400	
18	56.5	SO GR CH4 W/ SIF, SL	CH4	5	57	64	101	94	UC	--	472	945				0.370	
19	59.0	M GR CH4 W/ SIF, SL	CH4	7	61	62	100	95	UC	--	537	1073				0.350	
20	61.5	M GR CH4 W/ ARS SM, SL	CH4	5	50	69	104	94	OB	--	579					0.370	
21	64.0	M GR CH4 W/ SL, SIF	CH4	11	58	63	100	93	UC	--	659	1318	73	20	53	0.400	
22	66.5	M GR CH4 W/ TR-WD, ARS SM, SL	CH4	6	57	65	102	95	UC	--	735	1470				0.390	
23	69.0	M GR CH4 W/ WD	CH4	3	79	51	91	91	OB	--	629					0.400	
24	71.5	M GR CH4 W/ WD, SL	CH4	8	67	58	96	93	UC	--	999	1999	116	34	82	0.450	
25	74.0	M GR CH4	CH4	5	68	58	97	94	UC	--	634	1267				0.370	
26	76.5	M GR CH4	CH4		68												
27	79.0	SO GR CL3	CL3	7	20	103	124	86	UC	--	441	883				0.230	
28	81.5	ST BR & GR CH4 W/ LNS SM, SL	CH4	2	35	85	115	95	UC	--	1562	3124	88	24	64	1.250	
29	84.0	ST T & LGR CH4 W/ SL	CH4	4	38	82	114	97	OB	--	1220					1.250	
30	86.5	ST BR & GR CH4 W/ LNS SM, SL	CH4	7	39	81	112	95	UC	--	1372	2744				1.000	
31	89.0	VST BR & GR CH4 W/ LNS SM, SL	CH4	3	35												
32	91.5	ST GR & T CH2	CH2	5	31	90	117	93	UC	--	1144	2289	55	19	36	0.625	
33	94.0	M GR CH3 W/ ARS & LNS SM	CH3		44												
34	96.5	ST GR CH4 W/ LNS SM, SIF	CH4	11	38	83	114	96	UC	--	798	1596				0.500	
35	99.0	SO GR CL3 W/ LYS CH, SIF	CL3		32												
36	101.5	SO GR CH3 W/ LNS & LYS SP, SIF	CH3	4	35	81	110	87	OB	--	305	610				0.300	

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Boring: B-4

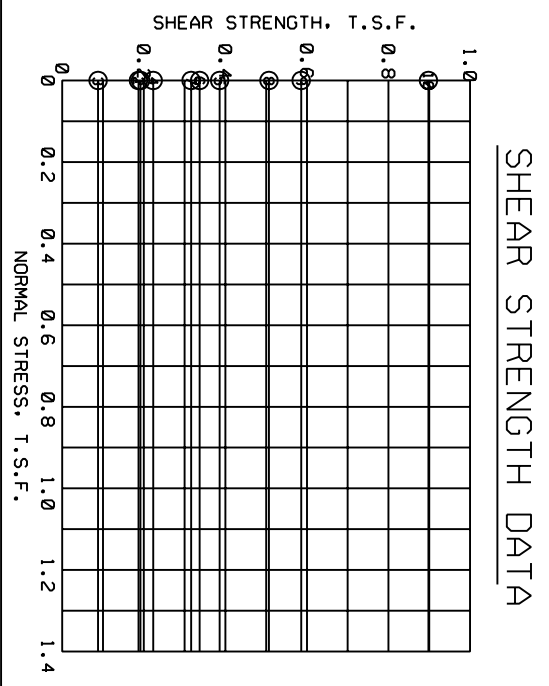
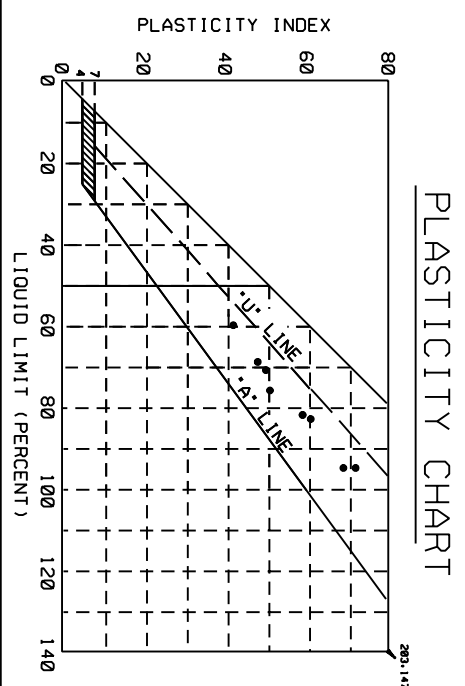
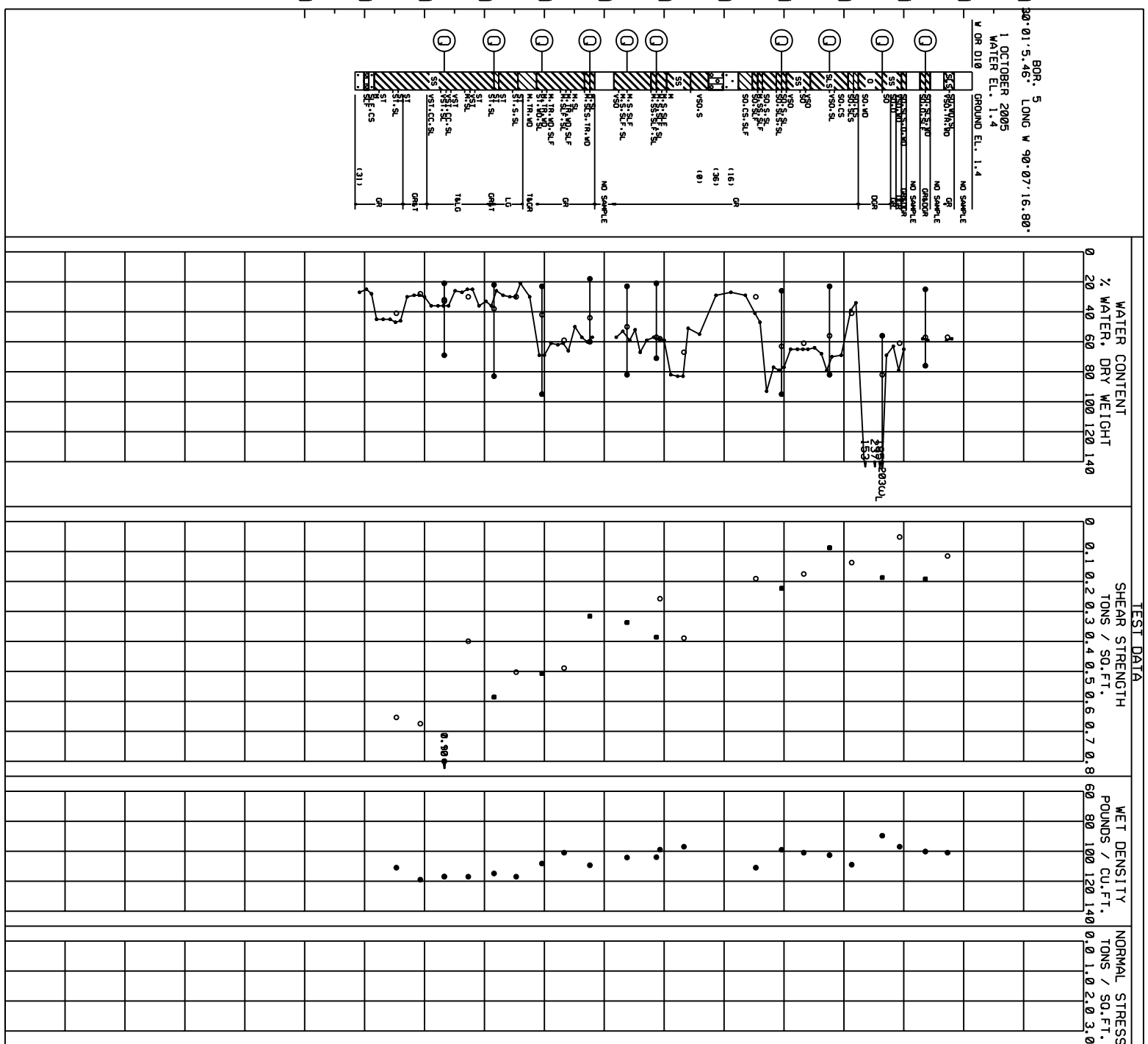
Sample Number	Depth	Visual Classification	USCS	E (F)	w%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
37	104.0	SI W/ ARS SM	SI		22												
38	106.5	SI W/ ARS SM	SI		23												
39	109.0	GR SM1 W/ SIF	SM1		27												
40	112.5	GR SM1 W/ SIF	SM1		22												

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

BOR. 5
 STA. LAT 30° 01' 5.46" LONG W 90° 07' 16.80"
 1 OCTOBER 2005
 WATER EL. 1.4
 GROUND EL. 1.4
 W OR 018

ELEVATIONS IN FEET - N.G.V.D.



NOTES

- - (UC) UNCONFINED COMPRESSION TEST
- - (O) UNCONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- ▲ - (R) CONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- ◻ - (S) CONSOLIDATED - DRAINED DIRECT SHEAR TEST
- _{UP} - ○_{UN} - ○_{UL} - ATTERBERG LIMITS

BORING WAS TAKEN WITH A 5 INCH DIAMETER STEEL TUBE PISTON TYPE SAMPLER. FOR SOIL BORING LEGEND SEE PLATE A. FOR LOCATION OF BORINGS SEE PLATE FOR DETAILED TEST DATA SEE

TABULAR TEST DATA

NO.	ENVELOPE EL.	TYPE	Φ	STRENGTH C - 1SF	CLASS
1	-6.4	0	0.0	0.152	CH
2	-13.6	0	0.0	0.187	CH
3	-22.4	0	0.0	0.088	CH
4	-30.4	0	0.0	0.222	CH
5	-51.3	0	0.0	0.386	CH
6	-56.2	0	0.0	0.337	CH
7	-62.4	0	0.0	0.316	CH
8	-70.4	0	0.0	0.507	CH
9	-78.4	0	0.0	0.586	CH
10	-86.7	0	0.0	0.898	CH

DESIGNED BY: U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA

DRAWN BY: _____ PLOT SCALE: _____ PLOT DATE: _____ CAD FILE: _____
 CHECKED BY: _____ DATE: _____ FILE NO.:

PLATE

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Current Date: 1/6/2006

Project Number: 19080
Boring: B-5

Sample Number	Depth	Visual Classification	USCS	E (F)	Wt %	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	IL	PL	PI	TORVANE (tsf)	Other Tests	
NS	0	WATER	NS															
1A	3.0	SO GR CH3 W/ ARS ML, WD, SL	CH3		58	64	101	94	UC	--	230	459				0.230		
1B	3.8	VSO GR CH4 W/ ARS ML, TR-WD	CH4	8	57													
NS	4.7	NO SAMPLE	NS		59													
2A	7.0	SO GR & DGR CH3 W/ ARS ML, WD	CH3		57	60	94	85	UU	0	383.9		76	25	51	0.290		
2B	7.8	SO GR & DGR CH3 W/ O, SIF	CH3															
NS	8.7	NO SAMPLE	NS															
3A	11.0	SO GR & DGR CH4 W/ O, WD, ARS ML	CH3		65													
3B	11.8	VSO DGR CH4 W/ LNS SM, WD	CH4	3	61	60	97	92	UC	--	103	206				0.210		
3C	12.7	SO GR CH4 W/ LNS SM, LYS O	CH4		63													
3D	13.6	SO DGR CH3 W/ LYS SM	CH3		69													
4A	15.0	SO DGR CHOA W/ WD	CHOA		82	44	80	79	UU	0	374.9		203	56	147	0.220		
4B	15.8	SO DGR CHOC W/ WD	CHOC		237													
4C	16.7	SO DGR CHOB W/ WD	CHOB		153													
5A	19.0	SO GR CL6 W/ LYS CH	CL6		34													
5B	19.8	SO GR CL6 W/ LYS ML	CL6	10	41	77	109	94	UC	--	274	549				0.150		
5C	20.7	SO GR CH4 W/ ARS ML, CH	CH4		69													
6A	23.0	VSO GR CH4 W/ ARS ML, SL	CH4		70													
6B	23.8	VSO GR CH4 W/ LNS ML	CH4		56	63	98	89	UU	0	175.5		82	23	59	0.100		
6C	24.7	VSO GR CH4 W/ LNS ML	CH4		68													
6D	25.6	VSO GR CH4 W/ LNS ML	CH4		64													
7A	27.0	VSO GR CH4 W/ LNS SM	CH4		65													
7B	27.8	SO GR CH4 W/ LNS SM	CH4	3	61	62	101	97	UC	--	350	700				0.200		
7C	28.7	VSO GR CH4 W/ LNS SM	CH4		65													
7D	29.6	VSO GR CH4 W/ LNS SM	CH4		65													
8A	31.0	SO GR CH4 W/ ARS SM, SL	CH4		77													
8B	31.8	SO GR CH4 W/ LNS ML, SL	CH4		63	58	95	89	UU	0	445.2		95	26	69	0.180		
8C	32.7	SO GR CH4 W/ ARS SM, SL	CH4		77													
8D	33.6	SO GR CH4 W/ ARS SM, SL	CH4		93													
9A	35.0	M GR CH3 W/ SIF, LNS SM	CH3		47													
9B	35.8	SO GR CH2 W/ SIF	CH2	5	30	86	111	82	UC	--	381	762				0.200		
9C	36.7	SO GR CL5 W/ ARS CH, SIF	CL5		29													
10	39.0	GR SP	SP		27													
11	41.5	GR SM1	SM1		29													
12	44.0	VSO GR CH4 W/ ARS SM	CH4		55													
13A	47.0	M GR CH4 W/ LNS & LYS SP	CH4		51													
13B	47.8	M GR CH4 W/ LNS SM	CH4	4	67	58	97	95	UC	--	778	1555	99	29	70	0.330	PD	

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Boring: B-5

Sample Number	Depth	Visual Classification	USCS	E (F)	Wt %	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
13C	48.7	M GR CH4 W/ LNS SP	CH4		83												
13D	49.6	M GR CH4 W/ ARS & LNS SP	CH4		82												
14A	51.0	M GR CH4 W/ ARS SM, SIF	CH4		59												
14B	51.8	M GR CH4 W/ ARS SM, SIF, SL	CH4	4	58	63	99	93	UC	--	515	1030	71	21	50	0.300	
14C	52.7	M GR CH4 W/ ARS & LNS SM, SIF, SL	CH4		57	65	102	95	UU	0	771.7					0.350	
14D	53.6	M GR CH4 W/ ARS SM, SIF	CH4		59												
15A	55.0	M GR CH4 W/ ARS SM, SIF	CH4		67												
15B	55.8	M GR CH4 W/ ARS SM, SIF	CH4		52												
15C	56.7	M GR CH4 W/ ARS SM, SIF	CH4		59												
15D	57.6	M GR CH4 W/ ARS SM, SIF, SL	CH4		50												
16A	59.0	VSO GR CH4	CH4		57						674.9					0.300	
NS	59.8	NO SAMPLE	NS														
17A	63.0	M GR CH4 W/ SL	CH4		57												
17B	63.8	M GR CH3 W/ TR-WD, ARS ML	CH3		44	74	106	92	UU	0	632.5		60	18	42	0.320	
17C	64.7	M GR CH4 W/ SL	CH4		57												
17D	65.6	M GR CH4 W/ SL	CH4		50												
18A	67.0	M GR CH4 W/ TR-WD, SIF	CH4		66												
18B	67.8	M GR CH4 W/ SIF, SL	CH4	6	59	63	101	95	UC	--	978	1956				0.350	
18C	68.7	M GR CH4 W/ TR-WD, SIF	CH4		62												
18D	69.6	M GR CH4 W/ TR-WD, SIF	CH4		61												
19A	71.0	M GR CH4 W/ TR-WD	CH4		69												
19B	71.8	ST GR CH4 W/ WD, SL	CH4		42	73	104	87	UU	0	1014.3		95	23	72	0.350	
19C	72.7	M T & GR CL6 W/ TR-WD	CL6		30												
20A	75.0	ST LGR CL6	CL6		21												
20B	75.8	ST LGR CH3 W/ ARS SM, SL	CH3	2	30	90	117	92	UC	--	1005	2010				0.925	
20C	76.7	ST LGR CH3	CH3		30												
20D	77.6	ST LGR CH3	CH3		29												
21A	79.0	ST LGR CL6	CL6		26												
21B	79.8	ST GR & T CH3 W/ LNS & LYS SM, SL	CH3		38	83	115	99	UU	0	1172.1		83	22	61	0.500	
21C	80.7	ST T & LGR CH4 W/ LNS SM	CH4		33												
21D	81.6	ST T & LGR CH4 W/ LNS SM	CH4		36												
22A	83.0	VST T & LGR CH4 W/ LNS SM	CH4		25												
22B	83.8	M T & LGR CH3 W/ LNS SM, SL	CH3	3	30	90	117	92	UC	--	799	1598				0.950	
22C	84.7	VST T & LGR CH4 W/ LNS SM	CH4		27												
22D	85.6	VST T & LGR CH4 W/ LNS SM	CH4		26												
23A	87.0	VST T & LGR CH4 W/ LNS SM, CC, SL	CH4		36												
23B	87.8	VST T & LGR CH4 W/ LNS SM, SL	CH4	4	33	88	117	95	UC	--	2201	4403				1.250	

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

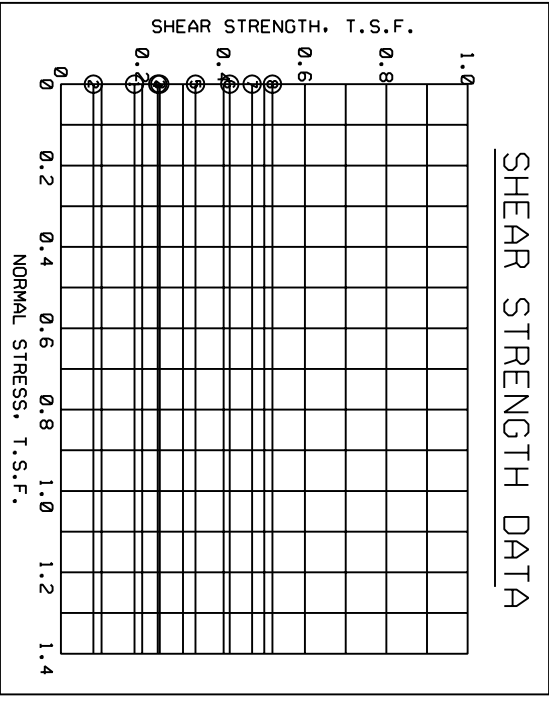
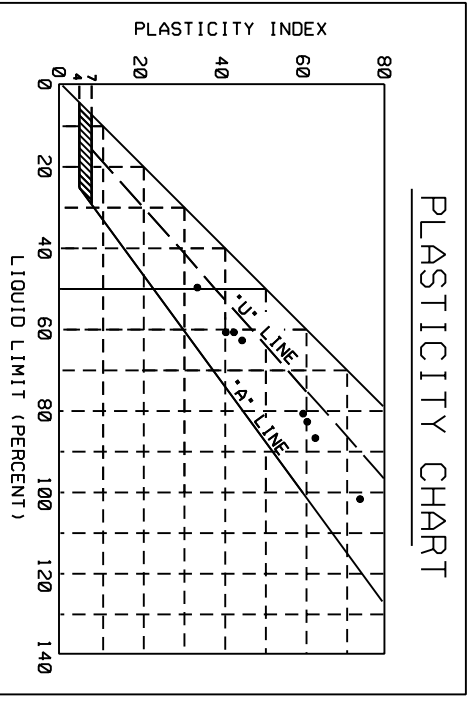
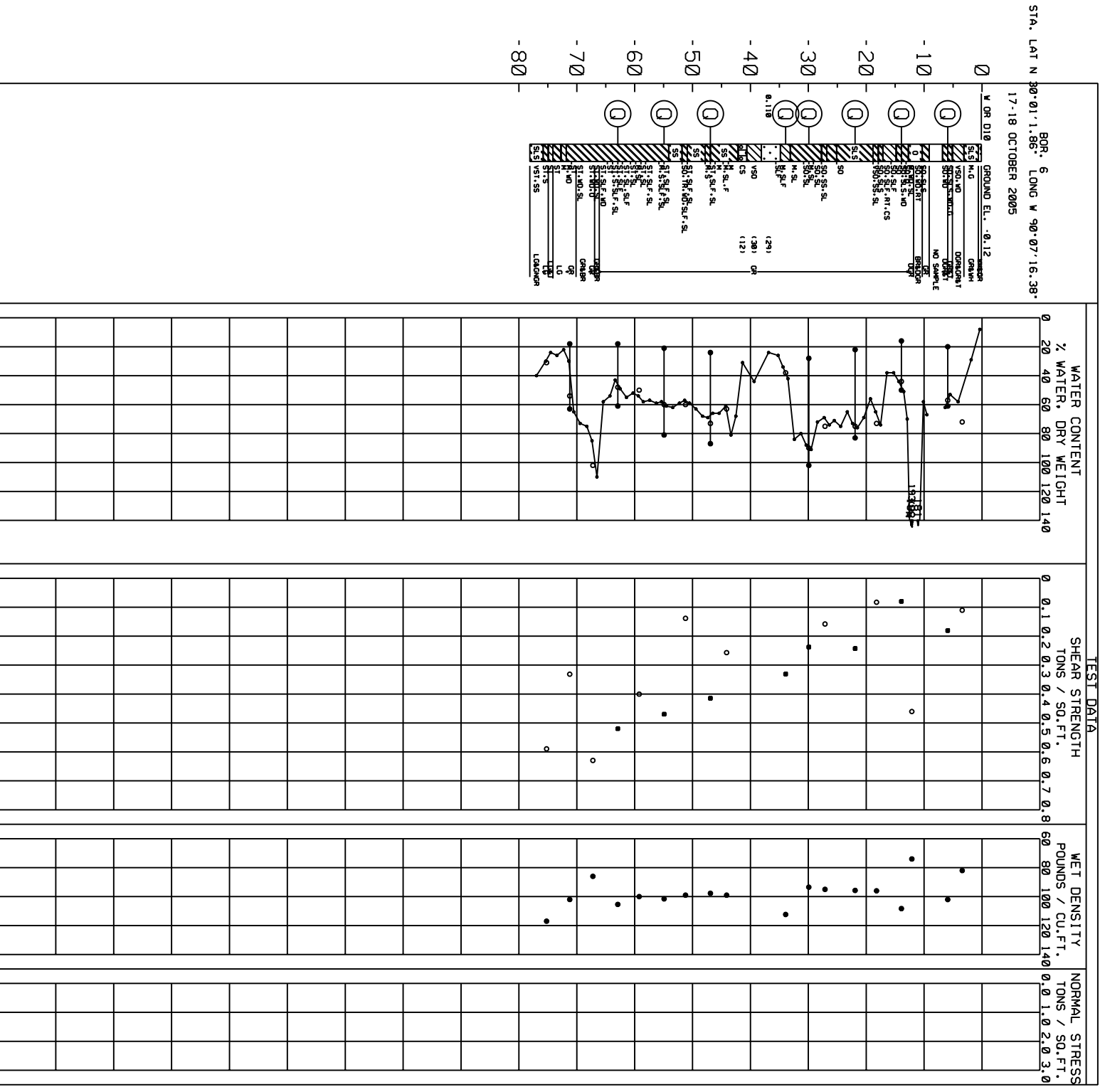
Boring: B-5

Sample Number	Depth	Visual Classification	USCS	E(f)	Wt	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
23B	88.1	ST T & GR CH4 W/ LNS ML, SL, CC	CH4		32	87	116	93	UU	0	1795.3		69	21	48	1.075	
23C	88.7	VST T & LGR CH4 W/ LNS SM, CC, SL	CH4		36												
23D	89.6	VST T & LGR CH4 W/ LNS SM, CC, SL	CH4		36												
24A	91.0	ST GR & T CH4 W/ LNS & LYS SM	CH4	4	30	92	119	91	UC	--	1349	2699					
24B	91.8	ST GR & T CH4 W/ LNS & LYS SM	CH4		28												
24C	92.7	ST GR & T CH4 W/ LNS SP	CH4		29												
24D	93.6	ST GR & T CH4 W/ LNS SP	CH4		30												
25A	95.0	ST GR CH4 W/ LNS SP	CH4		46												
25B	95.8	ST GR CH4 W/ LNS SM, SL	CH4	6	41	79	111	96	UC	--	1307	2615				0.500	
25C	96.7	ST GR CH4 W/ LNS SP	CH4		45												
25D	97.6	ST GR CH4 W/ LNS SP	CH4		45												
26A	99.0	M GR CH4 W/ LNS SM	CH4		45												
26B	99.8	GR SP W/ SIF, LYS CH	SP		28												
26C	100.7	GR SM1 W/ SIF	SM1		25												
27	101.5	GR SP	SP		27												PD

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

ELEVATIONS IN FEET - N.G.V.D.



NOTES

- o - (UC) UNCONFINED COMPRESSION TEST
- - (O) UNCONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- ▲ - (R) CONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- ▣ - (S) CONSOLIDATED - DRAINED DIRECT SHEAR TEST
- ω_p - ω_L - ATTERBERG LIMITS

BORING WAS TAKEN WITH A 5 INCH DIAMETER STEEL TUBE PISTON TYPE SAMPLER. FOR SOIL BORING LEGEND SEE PLATE A. FOR LOCATION OF BORINGS SEE PLATE FOR DETAILED TEST DATA SEE

TABULAR TEST DATA

ENVELOPE NO.	EL.	TYPE	Φ	STRENGTH c - tsf	CLASS
1	-5.9	0	0.0	0.181	CH
2	-13.9	0	0.0	0.080	CH
3	-21.9	0	0.0	0.243	CH
4	-29.9	0	0.0	0.238	CH
5	-33.9	0	0.0	0.331	CL
6	-46.9	0	0.0	0.415	CH
7	-54.9	0	0.0	0.470	CH
8	-62.9	0	0.0	0.520	CH

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

DESIGNED BY: [Signature]
DRAWN BY: [Signature]
CHECKED BY: [Signature]

PLAT SCALE: []
PLOT DATE: []
FILE NO.: []

PLATE

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080
Boring: B-6

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E (F)	Wt %	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests	
1	0.0	WH & GR GP	GP		8													
2	0.5	M GR & WH CH3 W/ ARS ML, G	CH3		29													
3A	3.0	VSO DGR, GR & T CL6 W/ WD	CL6	6	72	48	82	77	UC	--	221	443				0.230		
4A	5.0	SO GR & T CH3 W/ ARS ML, WD, G	CH3		53													
4B	5.8	SO DGR & T CH3 W/ WD	CH3		57				UU	0	361		61	20	41	0.120		
NS	6.7	NO SAMPLE	NS															
5A	9.0	SO GR CH4 W/ LNS & ARS ML	CH4		67													
5B1	9.8	SO GR CH4 W/ LNS & ARS ML	CH4		58													
5B2	10.2	SO BR & DGR CHOC W/ WD, RT	CHOC		181													
5C	11.7	M DGR CHOC W/ WD, SL	CHOC	10	193	25	74	92	UC	--	921	1841				0.350		
5D	12.6	SO GR CH4 W/ LNS ML, O	CH4		70													
6A	13.0	SO GR CH3 W/ LNS & ARS ML, WD	CH3		51													
6B	13.8	SO GR CH2	CH2		44	73	106	91	UU	0	159.3		50	16	34			
6C	14.7	SO GR CL6 W/ SIF	CL6		38													
6D	15.6	SO GR CL6 W/ SIF, RT, LYS CH	CL6		38													
7A	17.0	SO GR CH4 W/ LNS & ARS ML	CH4		74													
7B	17.8	VSO GR CH4 W/ LNS SM, SL	CH4	6	73	56	96	96	UC	--	166	333				0.130		
7C	18.7	SO GR CH3 W/ LNS & LYS ML	CH3		56													
7D	19.6	SO GR CH3 W/ LNS & LYS ML	CH3		69													
8A	21.0	SO GR CH4 W/ LNS ML	CH4		76													
8B	21.8	SO GR CH4 W/ ARS & LNS ML	CH4		75													
8C	22.7	SO GR CH4 W/ LNS ML	CH4		65													
8D	23.6	SO GR CH4 W/ LNS ML	CH4		75													
9A	25.0	SO GR CH4 W/ SL	CH4		71													
9B	25.8	SO GR CH4 W/ SL	CH4		74													
9C	26.7	SO GR CH4 W/ SL, LNS SM	CH4		75													
9D	27.6	SO GR CH4 W/ SL	CH4	5	72	54	95	95	UC	--	316	632				0.200		
10A	29.0	M GR CH4 W/ SL	CH4		91													
10B	29.8	SO GR CH4 W/ SL	CH4		90	48	90	95	UU	0	476.7		102	28	74	0.120		
10C	30.7	M GR CH4 W/ SL	CH4		80													
10D	31.6	M GR CH4 W/ SL	CH4		84													
11A	33.0	M GR CL5 W/ SIF	CL5		42													
11B	33.8	M GR CL5 W/ SIF	CL5		42													
11C	34.7	M GR CL5 W/ SIF	CL5		38	79	109	90	UU	0	662.0					0.150		
12	35.5	GR SP	SP		26													
13	38.0	GR SP	SP		24													
14	40.5	VSO GR CL3	CL3		44													
14		GR SM1 W/ ARS CH	SM1		31													PD

Remarks: _____
 Checked by: _____
 File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

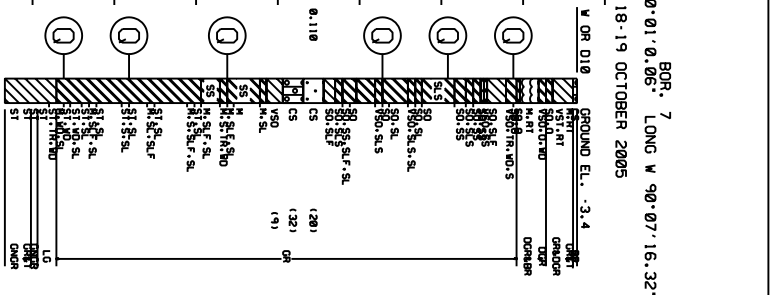
Current Date: 1/6/2006

Project Number: 19080
Boring: B-6

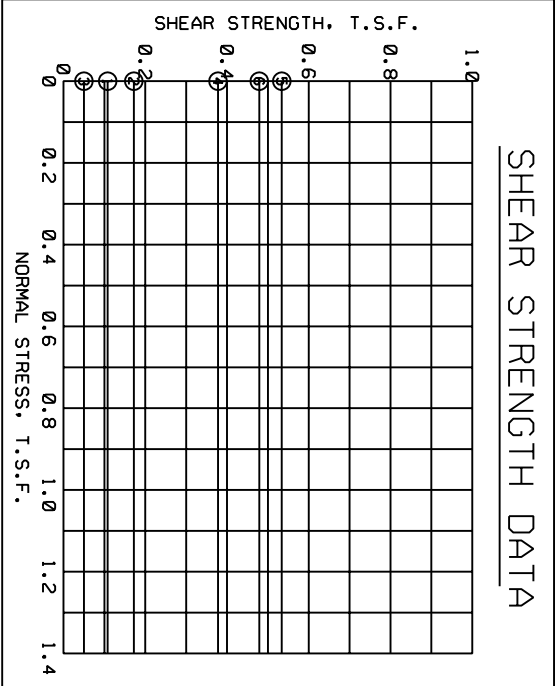
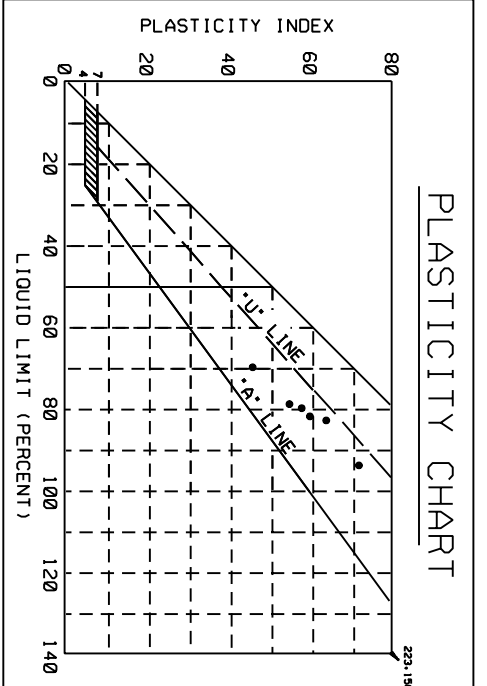
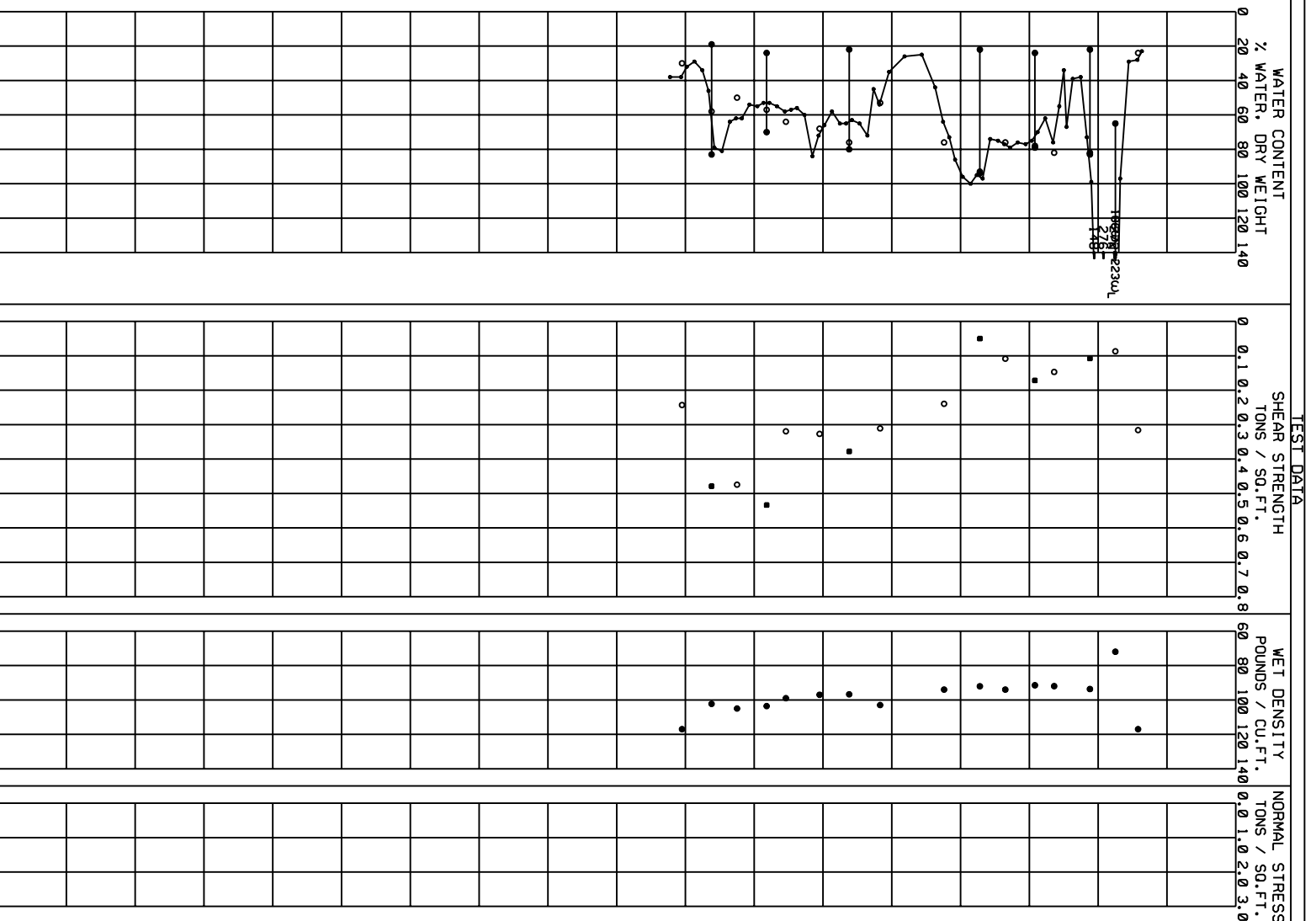
Sample Number	Depth	Visual Classification	USCS	E (F)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests	
15A	42.0	M GR CH3 W/ LVS & LNS SP	CH3		68													
15B	42.8	M GR CH3 W/ LVS & LNS SP	CH3		81													
15C	43.7	M GR CH3 W/ ARS & LNS SM, SIF	CH3	6	63	61	99	95	UC	--	514	1029				0.300		
15D	44.6	M GR CH3 W/ LVS & LNS SP	CH3		66													
16A	46.0	ST GR CH4 W/ LNS & ARS SM, SIF, SL	CH4		66													
16B	46.8	M GR CH4 W/ ARS SM	CH4		73	55	95	94	UU	0	830.8		87	24	63	0.300		
16C	47.7	ST GR CH4 W/ LNS & ARS SM, SIF, SL	CH4		68													
16D	48.6	ST GR CH4 W/ LNS & ARS SM, SIF, SL	CH4		63													
17A	50.0	ST GR CH4 W/ LNS SM, SIF, SL	CH4		59													
17B	50.8	SO GR CH4 W/ TR-WD, SIF, SL	CH4	6	60	62	99	93	UC	--	276.5	558.0				0.250		
17C	51.7	ST GR CH4 W/ LNS SM, SIF, SL	CH4		59													
17D	52.6	ST GR CH4 W/ LNS SM, SIF, SL	CH4		62													
18A	54.0	ST GR CH4 W/ SIF, SL	CH4		61													
18B	54.8	M GR CH4 W/ ARS SM, SIF, SL	CH4		60	62	100	94	UU	0	940.0		81	21	60	0.300		
18C	55.7	ST GR CH4 W/ SIF, SL	CH4		59													
18D	56.6	ST GR CH4 W/ SIF, SL	CH4		57													
19A	58.0	ST GR CH4 W/ SL	CH4		58													
19B	58.8	M GR CH4 W/ SL	CH4	5	50	67	100	87	UC	--	800.5	1601.0				0.320		
19C	59.7	ST GR CH4 W/ SL	CH4		52													
19D	60.6	ST GR CH4 W/ SL, SIF	CH4		55													
20A	62.0	ST GR CH4 W/ SIF	CH4		49													
20B	62.8	ST GR CH4 W/ ARS SM, SIF, SL	CH4		48	69	103	91	UU	0	1040.0		61	18	43	0.280		
20C	63.7	ST GR CH4	CH4		54													
20D	64.6	ST GR CH4 W/ SIF, WD	CH4		58													
21A	66.0	ST GR & BR CH4 W/ WD, SL	CH4		110													
21B	66.8	ST GR CH4 W/ WD, O	CH4	7	102	43	86	94	UC	--	1259	2518				0.320		
21C	67.7	ST GR & BR CH4 W/ WD, SL	CH4		75													
21D	68.6	ST GR & BR CH4 W/ WD, SL	CH4		73													
22A	70.0	ST GR CH4	CH4		65													
22B	70.8	M GR CH4 W/ WD	CH4	8	54	66	102	94	UC	--	663	1326	63	18	45	0.250		
22C	71.7	M LGR CL6	CL6		22													
22D	72.6	ST LGR CH2	CH2		26													
23A	74.0	ST LGR & T CL6	CL6		24													
23B	74.8	ST LGR CH4 W/ ARS SM	CH4		31	90	117	93	UC	--	1179	2357				0.625		
23C	75.7	VST LGR & GNGR CH4 W/ LNS & ARS ML & SM	CH4		40													

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080



ELEVATIONS IN FEET - N.G.V.D.



NOTES

- - (UC) UNCONFINED COMPRESSION TEST
- - (O) UNCONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- ▲ - (R) CONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- - (S) CONSOLIDATED - DRAINED DIRECT SHEAR TEST
- - ω_p - ω_L - ATTERBERG LIMITS

BORING WAS TAKEN WITH A 5 INCH DIAMETER STEEL TUBE PISTON TYPE SAMPLER. FOR SOIL BORING LEGENDS SEE PLATE A. FOR LOCATION OF BORINGS SEE PLATE. FOR DETAILED TEST DATA SEE

TABULAR TEST DATA

ENVELOPE NO.	EL.	TYPE	STRENGTH ϕ	C - TSF	CLASS
1	-11.2	0	0.0	0.108	CH
2	-19.2	0	0.0	0.172	CH
3	-27.2	0	0.0	0.050	CH
4	-46.2	0	0.0	0.378	CH
5	-58.2	0	0.0	0.534	CH
6	-66.2	0	0.0	0.479	CH

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

DESIGNED BY: DATE: _____
DRAWN BY: _____ FILE NO.: _____
CHECKED BY: _____

PLATE

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Boring: B-7

Sample Number	Depth	Visual Classification	USCS	E (f)	w _s	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests	
1	0.0	BR SM1 w/ ARS CH	SM1		23													
2A	0.5	M GR & T CL6 w/ RT	CL6	9	24	94	117	83	UC	--	632	1265				0.875		
2B	1.3	VST GR & DGR CL5 w/ RT	CL5		29													
3A	3.0	SO GR & DGR CH4 w/ O	CH4		97													
3B	3.8	VSO DGR CHOB w/ WD	CHOB	7	186	25	72	89	UC	--	174	349	223	65	158	0.270		
3C	4.7	M DGR & BR PT w/ RT	CHOB PT		276													
4A1	7.0	SO DGR & BR CHOB	CHOB		148													
4A2	7.4	SO GR CH4 w/ O	CH4		99													
4B	7.8	VSO GR CH4 w/ TR-WD, ARS SM	CH4		83	50	92	95	UU	0	214.9		82	22	60	0.060		
4C	8.7	SO GR CL6 w/ SIF	CL6		38													
4D	9.6	SO GR CL6 w/ SIF	CL6		39													
5A1	11.0	VSO GR CH4 w/ LNS SM	CH4		67													
5A2	11.4	SO GR CL4 w/ LNS SM	CL4		34													
5B	11.8	SO GR CH3 w/ LNS & LYS SM	CH3	4	55	51	92	95	OB	--	293.9	587.7				0.050		
5C	12.7	SO GR CH4 w/ LNS ML	CH4		82													
5D	13.6	SO GR CH3 w/ LNS & LYS SM	CH3		62													
6A	15.0	SO GR CH4 w/ LNS & LYS ML	CH4		70	50	92	94	UU	0	343.2		79	24	55	0.090		
6B	15.8	SO GR CH4 w/ LNS & ARS ML	CH4		78													
6C	16.7	SO GR CH4 w/ LNS ML	CH4		77													
6D	17.6	SO GR CH4 w/ LNS ML	CH4		76													
7A	19.0	SO GR CH4 w/ SL	CH4		79													
7B	19.8	VSO GR CH4 w/ LNS SM, SL	CH4	4	76	53	94	95	UC	--	217	435				0.100		
7C	20.7	SO GR CH4 w/ SL	CH4		75													
7D	21.6	SO GR CH4 w/ SL	CH4		74													
8A	23.0	SO GR CH4	CH4		97													
8B	23.8	VSO GR CH4 w/ ARS ML	CH4		93	47	91	97	UU	0	99.0		94	22	72	0.050		
8C	24.7	SO GR CH4	CH4		100													
8D	25.6	SO GR CH4	CH4		96													
9A	27.0	SO GR CH4 w/ LNS SM	CH4		86													
9B	27.8	SO GR CH4 w/ LNS SM, SIF, SL	CH4		73													
9C	28.7	SO GR CH4 w/ LNS ML	CH4	3	76	54	94	95	OB	--	478.6	957.2				0.090		
9D	29.6	SO GR CL5 w/ SIF	CL5		44													
10	31.0	GR SP w/ ARS CH	SP		25													
11	33.5	GR SM1 w/ ARS CH	SM1		26													
12	36.0	GR SM1 w/ ARS CH	SM1		35													
13A	38.0	M GR CH2 w/ SL	CH2	2	53	68	103	95	UC	--	622	1244				0.270		
13B	38.8	M GR CH3 w/ ARS & LNS SM	CH3		45													

PD

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080
Boring: B-7

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E(f)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
13C	39.7	M GR CH3 W/ ARS & LNS SM	CH3		72												
13D	40.6	M GR CH3 W/ ARS & LNS SM	CH3		65												
14A	42.0	M GR CH3 W/ LNS SM, SIF, SL	CH3		63												
14B	42.8	M GR CH4 W/ ARS SM, TR-WD	CH4		76	54	95	96	UU	0	756.9		80	22	58		
14C	43.7	M GR CH3 W/ LNS SM, SIF, SL	CH3		65												
14D	44.6	M GR CH3 W/ LNS SM, SIF, SL	CH3		58												
15A	46.0	ST GR CH4 W/ SL	CH4		66												
15B	46.8	M GR CH4 W/ ARS SM, SIF, SL	CH4	4	68	58	97	95	UC	--	654.0	1307.9				0.130	
15C	47.7	ST GR CH4 W/ SL	CH4		84												
15D	48.6	ST GR CH4 W/ SL	CH4		60												
16A	50.0	ST GR CH4 W/ SL	CH4		56												
16B	50.8	ST GR CH4 W/ SL	CH4		57												
16C	51.7	M GR CH4 W/ SL, SIF	CH4	2	64	60	99	96	UC	--	639	1277				0.350	
16D	52.6	ST GR CH4 W/ SL	CH4		55												
17A	54.0	ST GR CH4 W/ SL	CH4		53												
17B	54.8	ST GR CH4 W/ ARS SM, SL	CH4		57	65	102	96	UU	0	1067.1		70	24	46	0.350	
17C	55.7	ST GR CH4 W/ SL	CH4		55												
17D	56.6	ST GR CH4 W/ SL	CH4		54												
18A	58.0	ST GR CH4 W/ SL	CH4		62												
18B	58.8	M GR CH4 W/ SIF, SL	CH4	5	50	70	105	95	UC	--	948.8	1897.7				0.280	
18C	59.7	ST GR CH4 W/ SL	CH4		64												
18D	60.6	ST GR CH4 W/ WD, SL	CH4		81												
19A	62.0	ST GR CH4 W/ WD	CH4		79												
19B	62.8	M GR CH4 W/ WD, SL	CH4		58	63	100	93	UU	0	958.1		83	19	64	0.300	
19C	63.7	ST LGR CL6 W/ TR-WD	CL6		34												
19D	64.6	ST LGR CL6	CL6		29												
20A	66.0	ST GNGR CL6	CL6		32												
20B	66.8	SO GR & T CL4	CL4	4	30	90	117	94	UC	--	486.4	972.8					
20C	66.8	ST GNGR CL6	CL6		38												
20C	67.7	ST GNGR CL6	CL6														

Remarks: ENGUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080
Boring: B-8

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E(f)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
NS	0.0	WATER	NS														
1	21.0	VSO GR CH4 W/ TR-WD	CH4	20	77	53	94	95	UC	--	83.4	166.8	87	25	62	0.030	
2	23.5	VSO GR CH4 W/ LNS ML	CH4	6	93	47	90	95	OB	--	148.2	296.4	87	25	62	0.050	
3	26.0	VSO GR CH4	CH4	12	92	46	89	94	UC	--	120.3	241.5	99	28	71	0.060	
4	28.5	VSO GR CH4 W/ LNS ML	CH4	3	68	57	95	92	OB	--	32.4	64.9	99	28	71	0.060	
5	31.0	VSO GR CH4	CH4	5	95	46	89	95	UC	--	130.6	261.2	85	22	63	0.050	
6	33.5	SO GR CH3 W/ ARS & LNS SM, SIF	CH3	4	78	52	93	94	OB	--	330.6	661.1	85	22	63	0.160	
7	36.0	VSO GR CL5 W/ SIF	CL5	17	42	75	107	91	UC	--	95.5	191.0	25	22	3	0.100	
8	38.5	VSO GR CL3 W/ SIF	CL3	4	32	85	113	89	OB	--	240.9	481.7	25	22	3	0.070	
9	41.0	GR SM1-s	SM1-s		29												PD
10	43.5	M GR CH4 W/ LNS SM	CH4	4	79	52	93	94	UC	--	546.7	1093.3	86	23	63	0.230	
11	46.0	M GR CH4 W/ ARS SM	CH4	4	72	56	95	95	OB	--	594.9	1189.8	86	23	63	0.270	
12	48.5	M GR CH4 W/ ARS SM, SIF	CH4	4	62	60	97	92	UC	--	534.2	1058.4	82	23	59	0.250	
13	51.0	M GR CH4 W/ SIF	CH4	4	70	56	95	94	UC	--	493.1	986.2	77	17	60	0.250	
14	53.5	SO GR CH4 W/ SIF	CH4	4	60	63	100	94	UC	--	629.6	1259.1	77	17	60	0.300	
15	56.0	M GR CH4 W/ SL	CH4	6	56	66	103	96	OB	--	613.9	1227.9				0.300	
16	58.5	M GR CH4 W/ SL	CH4	4	43	74	106	90	UC	--	674.8	1349.6				0.500	
17	61.0	M GR & T CH2	CH2	10	31	87	114	90	OB	--	1778.9	3557.7				0.900	
18	63.5	ST LGR CH2	CH2	8	19	109	130	93	UC	--							
19	66.0	LGR SM1	SM1		23												
20	68.5	LGR SM1	SM1		24												
21	71.0	LGR SM1	SM1		21												
22	73.5	LGR SM1	SM1		16												
23	76.0	LGR SM1	SM1		24												
24	78.5	T SM1	SM1		31												
25	81.0	T & GR SM1	SM1		23												
26	83.5	T & GR SM1	SM1		24												
27	86.0	LGR SM1	SM1		26												
28	88.5	ST T & GR CH4 W/ LNS SM, SL	CH4	5	38	81	111	92	UC	--	1085.2	2170.4				0.625	
29	91.0	M GR & T CH4 W/ ARS & LNS SM	CH4		38												
30	93.5	ST GR CH4 W/ LNS SM	CH4		41												
31	96.0	ST GR CH4 W/ LNS SM	CH4		48												
32	98.5	ST GR CH4 W/ LNS SM	CH4	12	46	73	106	93	UC	--	1244.1	2488.1				0.425	
33	101.0	GR SP W/ SIF	SP		22												
34	103.5	GR SP W/ SIF	SP		26												
35	106.0	GR SP W/ SIF	SP		25												
36	108.5	GR SP W/ SIF	SP		29												

Remarks: EUUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Boring: B-8

Sample Number	Depth	Visual Classification	USCS	E(F)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
37	111.0	GR SP W/ SIF	SP		20												
38	113.5	GR SM1 W/ SIF	SM1		30												
39	116.0	GR SM1	SM1		26												
40	118.5	GR SM1	SM1		28												

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Boring: B-9

Sample Number	Depth	Visual Classification	USCS	E (F)	Wt %	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests	
NS	0.0	WATER	NS															
1	16.0	VSO DGR CH4 W/ WD	CH4	4	85	49	91	94	OB	--	50.2	100.3	80	22	58	0.050		
2	18.5	VSO GR CH4 W/ LNS ML	CH4	6	86	50	93	97	UC	--	102.9	205.8				0.050		
3	21.0	VSO GR CH4	CH4	5	91	48	92	98	OB	--	133.5	267.1	90	25	65	0.050		
4	23.5	VSO GR CH4	CH4	5	88	48	90	94	UC	--	223.0	446.0				0.100		
5	26.0	VSO GR CH4 W/ ARS SM	CH4	5	88	49	92	97	OB	--	262.3	524.6	98	27	71	0.100		
6	28.5	SO GR CH4 W/ SL	CH4	4	88	49	92	96	UC	--	162.0	324.1				0.100		
7	31.0	VSO GR CH4 W/ SL	CH4	3	87	49	92	96	UC	--	162.0	324.1				0.100		
8	33.5	SO GR CL5 W/ SIF	CL5	5	38	79	109	90	OB	--	276.1	552.1	30	13	17	0.100		
9	36.0	GR SM1 W/ SIF	SM1		30													
10	38.5	GR SP	SP		29													
11	41.0	GR SM1 W/ SIF	SM1		25													
12	43.5	SO GR CH4 W/ ARS SM	CH4		79													
13	46.0	SO GR CH4 W/ ARS SM, SIF	CH4		92													
14	48.5	M GR CH4 W/ LNS SM, SIF	CH4	8	69	59	99	98	OB	--	640.6	1281.1	87	26	61	0.320		
15	51.0	M GR CH4 W/ ARS SM, SL	CH4		67													
16	53.5	M GR CH4 W/ ARS SM, SIF, SL	CH4	13	63	69	103	92	UC	--	583.5	1166.9				0.250		
17	56.0	M GR CH4	CH4	6	50	66	102	93	OB	--	516.2	1032.4	73	19	54	0.250		
18	58.5	M GR CH4 W/ SL	CH4	9	55	66	102	93	OB	--	516.2	1032.4				1.000		
19	61.0	VSO LGR & T CL3	CL3		20													
20	63.5	VSO LGR & T CL3	CL3		22													
21	66.6	LGR SM1	SM1		20													
22	68.5	T & GR SM1	SM1		27													
23	71.0	LGR & T SM1	SM1		21													
24	73.5	T & GR SM1	SM1		26													
25	76.0	T & GR SM1	SM1		25													
26	78.5	T & GR SM1	SM1		29													
27	81.0	LGR SM1	SM1		22													
28	83.5	LGR SM1	SM1		22													
29	86.0	ST LGR & T CH3 W/ ARS SM	CH3	9	41	80	111	94	OB	--	1386.4	2772.7	70	24	46	0.550		
30	88.5	ST T & GR CH4 W/ LNS SM	CH4	10	39	79	112	98	UC	--	300.3	600.5				0.450		
31	91.0	SO GR & T CH3 W/ LNS & ARS SM	CH3		42													
32	93.5	M GR CH4 W/ LNS SM, TR-WD	CH4	11	44	74	109	99	OB	--	978.3	1956.5	72	22	50	0.375		
33	96.0	M GR CH4 W/ LNS ML	CH4		48													
34	98.5	M GR SM1 W/ ARS CH	SM1		23													
35	101.5	GR SP W/ SIF	SP		25													
36	103.5	GR SP W/ SIF	SP		24													

PD

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: 19080
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Boring: B-9

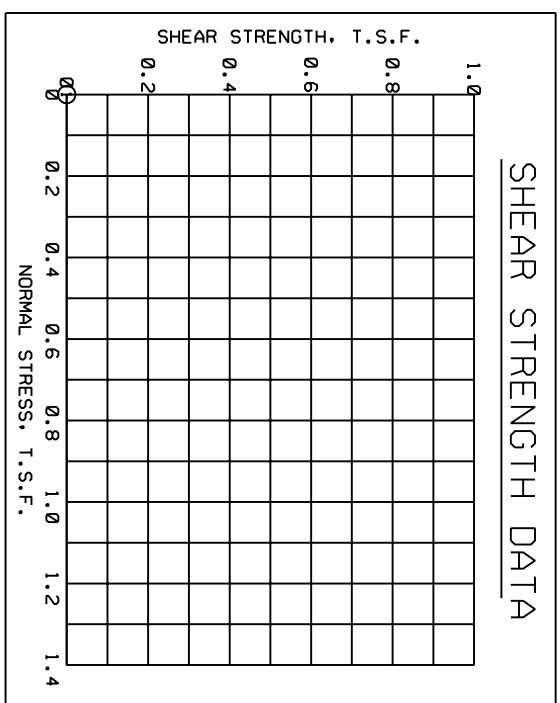
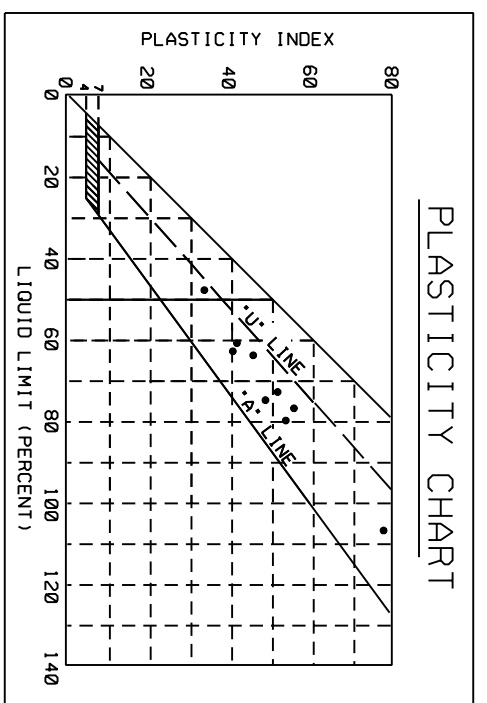
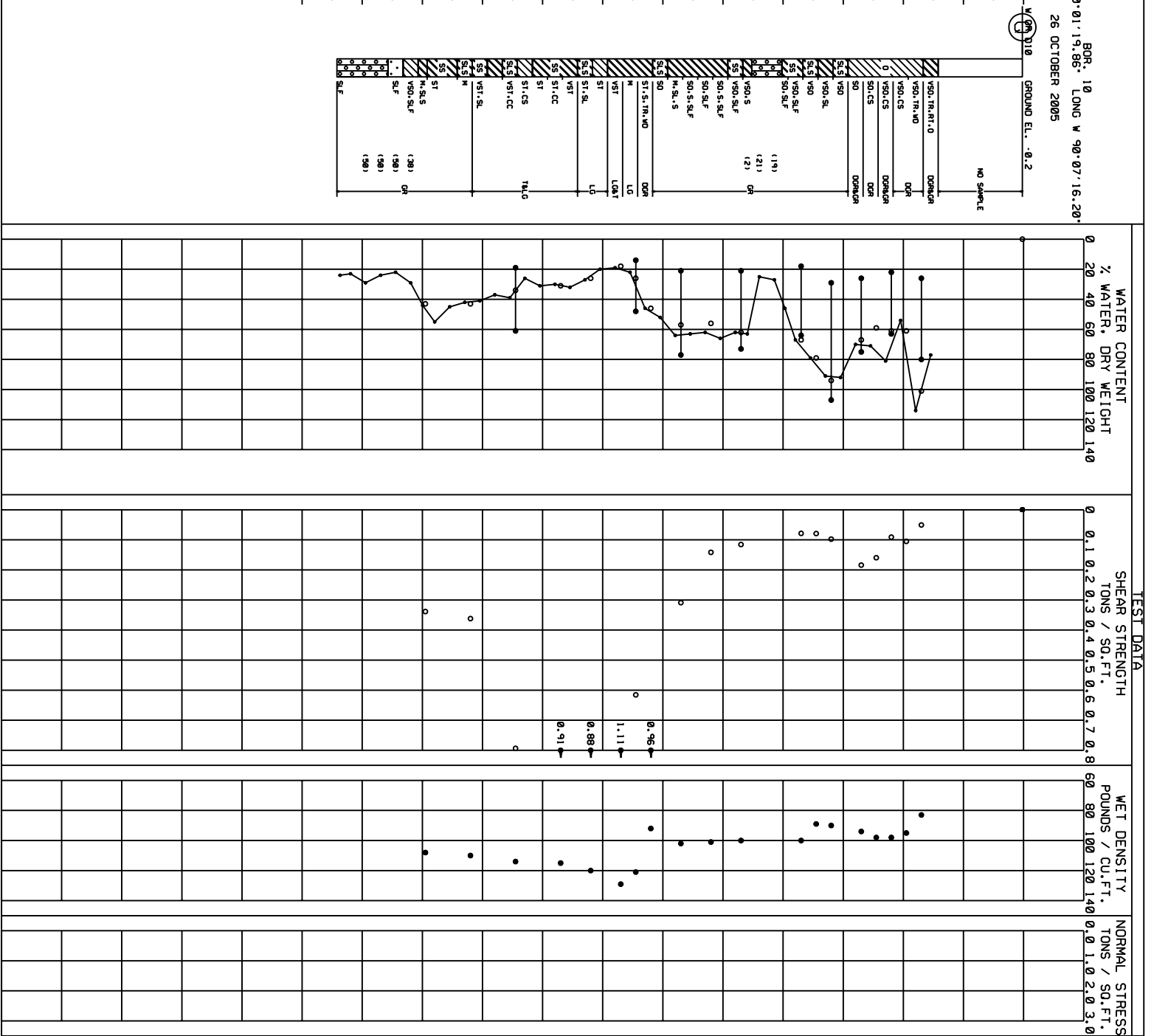
Sample Number	Depth	Visual Classification	USCS	E(F)	W _s	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
37	106.0	GR SP W/ SIF	SP		25												
38	108.5	GR SP W/ SIF	SP		25												
39	111.0	GR SP W/ SIF	SP		24												
40	113.5	GR SP W/ SIF	SP		32												

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

STA. LAT N 30°01'19.88" LONG W 90°07'16.20"
 BOR. 10
 26 OCTOBER 2005
 GROUND EL. -0.2

ELEVATIONS IN FEET - N.G.V.D.



- NOTES
- (UC) UNCONFINED COMPRESSION TEST
 - (O) UNCONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
 - ▲ (R) CONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
 - ▩ (S) CONSOLIDATED - DRAINED DIRECT SHEAR TEST
 - (W) ATTERBERG LIMITS
- BORING WAS TAKEN WITH A 5 INCH DIAMETER STEEL TUBE PISTON TYPE SAMPLER.
 FOR SOIL BORING LEGEND SEE PLATE A.
 FOR LOCATION OF BORINGS SEE PLATE
 FOR DETAILED TEST DATA SEE

TABULAR TEST DATA

ENVELOPE NO.	EL.	TYPE	STRENGTH ϕ	C - TSF	CLASS
1	-0.2	0	0.0	0.000	

DESIGNED BY: [Signature]

DRAWN BY: [Signature]

CHECKED BY: [Signature]

DATE: _____

DATE: _____

FILE NO. _____

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA

PLATE

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Boring: B-10

Sample Number	Depth	Visual Classification	USCS	E(f)	W% Dens (pcf)	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
NS	0.0	WATER	NS														
1	14.0	VSO DGR & GR CH4 W/ TR-RT, O	CH4	77	42	83	89	OB	--	101.3	202.6	80	26	54	0.080		
2	16.5	VSO DGR CLOA W/ TR-WD	CLOA	101	59	95	89	UC	--	209.5	419.1	63	22	41	0.070		
3	19.0	VSO DGR CLOA W/ LYS CH	CLOA	61	61	98	93	OB	--	181.6	363.2	63	22	41	0.130		
4	21.5	VSO DGR & GR CLOA W/ LNS CH	CLOA	61	63	98	91	UC	--	318.5	636.9	75	26	49	0.150		
5	24.0	SO DGR CLOA W/ ARS CH	CLOA	56	56	94	91	OB	--	368.0	736.1	75	26	49	0.150		
6	26.5	SO DGR & GR CLOA	CLOA	67	47	90	97	OB	--	195.2	390.4	107	29	78	0.100		
7	29.0	VSO GR CH4 W/ ARS ML	CH4	94	46	89	94	UC	--	157.7	315.5	64	18	46	0.100		
8	31.5	VSO GR CH4 W/ SL	CH4	79	63	100	96	OB	--	157.3	314.6	64	18	46	0.150		
9	34.0	VSO GR CH4 W/ LNS ML	CH4	67	62	100	96	OB	--	231.4	462.7	73	21	52	0.120		
10	36.5	VSO GR CH4 W/ ARS & LYS SM, SIF	CH3	67	64	101	93	UC	--	263.2	566.5	77	21	56	0.220		
11	39.0	SO GR CH3 W/ LNS & LYS SM, SIF	CH3	46	65	102	96	OB	--	617.8	1235.5	77	21	56	0.220		
12	40.0	GR SM1	SM1	27	47	92	99	UC	--	1916.7	3833.4	48	14	34	0.450		
13	42.5	GR SM1	SM1	25	66	101	91	OB	--	1230.9	2461.8	48	14	34	0.375		
14	45.0	VSO GR CH4 W/ ARS SM	CH4	63	64	101	93	UC	--	2215.3	4430.5	48	14	34	1.075		
15	46.5	VSO GR CH4 W/ LNS & ARS SM, SIF	CH4	62	62	100	96	OB	--	231.4	462.7	73	21	52	0.120		
16	49.0	SO GR CH4 W/ ARS SM, SIF	CH4	66	64	101	93	UC	--	263.2	566.5	77	21	56	0.220		
17	51.5	SO GR CH4 W/ SIF	CH4	56	64	101	93	UC	--	263.2	566.5	77	21	56	0.220		
18	54.0	SO GR CH4 W/ SM, SIF	CH4	63	65	102	96	OB	--	617.8	1235.5	77	21	56	0.220		
19	56.5	M GR CH4 W/ SL, ARS SM	CH4	57	65	102	96	OB	--	617.8	1235.5	77	21	56	0.220		
20	59.0	SO GR CH4 W/ ARS ML	CH4	52	65	102	96	OB	--	617.8	1235.5	77	21	56	0.220		
21	59.0	SO GR CH4 W/ ARS ML	CH4	52	65	102	96	OB	--	617.8	1235.5	77	21	56	0.220		
22	61.5	ST DGR CH4 W/ ARS SM, TR-WD	CH4	46	47	92	99	UC	--	1916.7	3833.4	48	14	34	0.450		
23	64.0	MLGR CH2	CH2	26	96	121	91	OB	--	1230.9	2461.8	48	14	34	0.375		
24	66.5	VST LGR & T CH2	CH2	18	109	129	89	UC	--	2215.3	4430.5	48	14	34	1.075		
25	69.0	ST GR CL5	CL5	20	20	109	89	UC	--	2215.3	4430.5	48	14	34	1.075		
26	71.5	ST LGR CH4 W/ LNS ML, SL	CH4	26	96	120	89	OB	--	1755.5	3510.9	61	19	42	0.800		
27	74.0	VST T & LGR CH4 W/ LNS SM	CH4	32	88	115	90	UC	--	1815.3	3630.6	61	19	42	0.800		
28	76.5	ST T & LGR CH3 W/ LNS SM, CC	CH3	31	88	115	90	UC	--	1815.3	3630.6	61	19	42	0.800		
29	79.0	ST T & LGR CH3 W/ LNS & LYS SM	CH3	31	88	115	90	UC	--	1815.3	3630.6	61	19	42	0.800		
30	81.5	ST T & LGR CL5 W/ LNS CH	CL5	26	85	114	94	OB	--	1587.0	3174	61	19	42	0.800		
31	84.0	VST T & GR CH3 W/ LNS ML, CC	CH3	34	85	114	94	OB	--	1587.0	3174	61	19	42	0.800		
32	86.5	VST T & LGR CH4 W/ SL	CH4	37	85	114	94	OB	--	1587.0	3174	61	19	42	0.800		
33	89.0	VST T & LGR CH4 W/ LNS SM, SL	CH4	41	85	114	94	OB	--	1587.0	3174	61	19	42	0.800		
34	91.5	M GR CH4 W/ LNS ML	CH4	43	77	110	96	UC	--	724.1	1448.2	61	19	42	0.420		
35	94.0	ST GR CH4 W/ LNS SM	CH4	45	77	110	96	UC	--	724.1	1448.2	61	19	42	0.420		
36	96.5	ST GR CH4 W/ LNS SM	CH4	55	75	108	93	OB	--	677.4	1354.9	61	19	42	0.420		
36	99.0	M GR CH4 W/ LNS & ARS ML	CH4	43	75	108	93	OB	--	677.4	1354.9	61	19	42	0.420		

Remarks: EUUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Boring: B-10

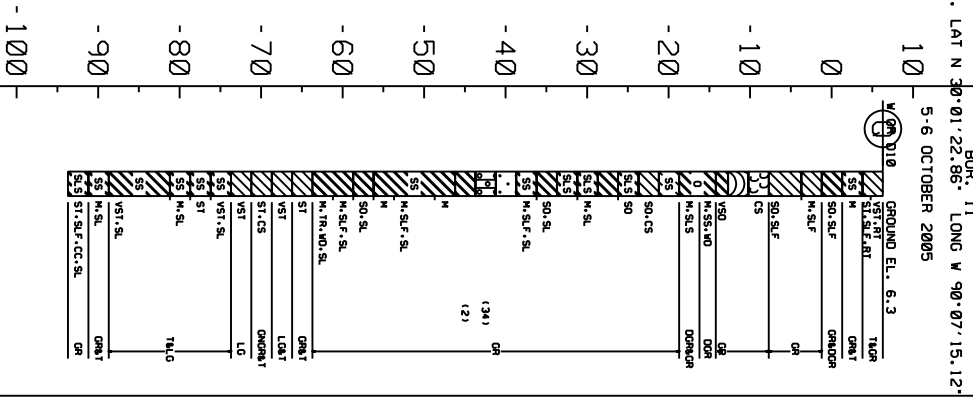
Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E(F)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	IL	PL	PI	TORVANE (tsf)	Other Tests
37	100.5	VSO GR CL3 W/ SIF	CL3		29												
38	103.0	GR SP W/ SIF	SP		22												
39	105.5	GR SM1	SM1		24												
40	108.0	GR SM1 W/ SIF	SM1		29												
41	110.5	GR SM1 W/ SIF	SM1		23												
42	113.0	GR SM1 W/ SIF	SM1		24												

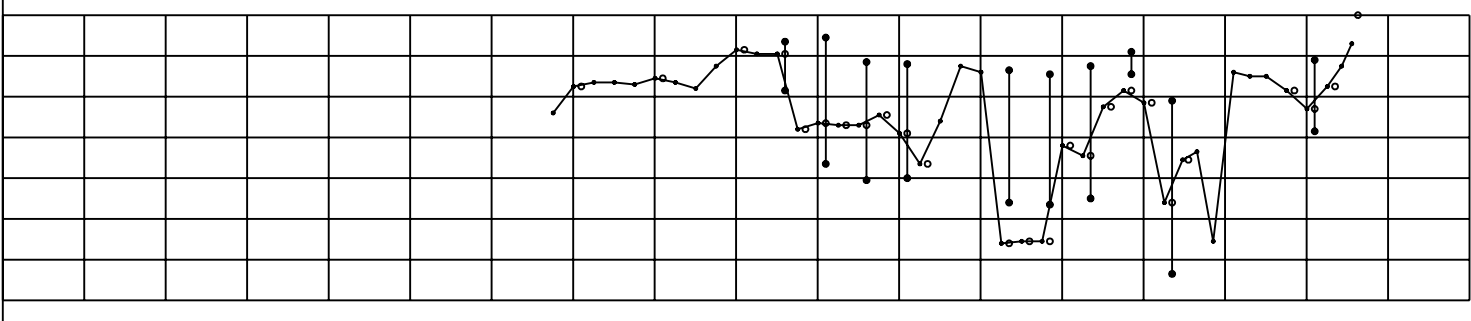
Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

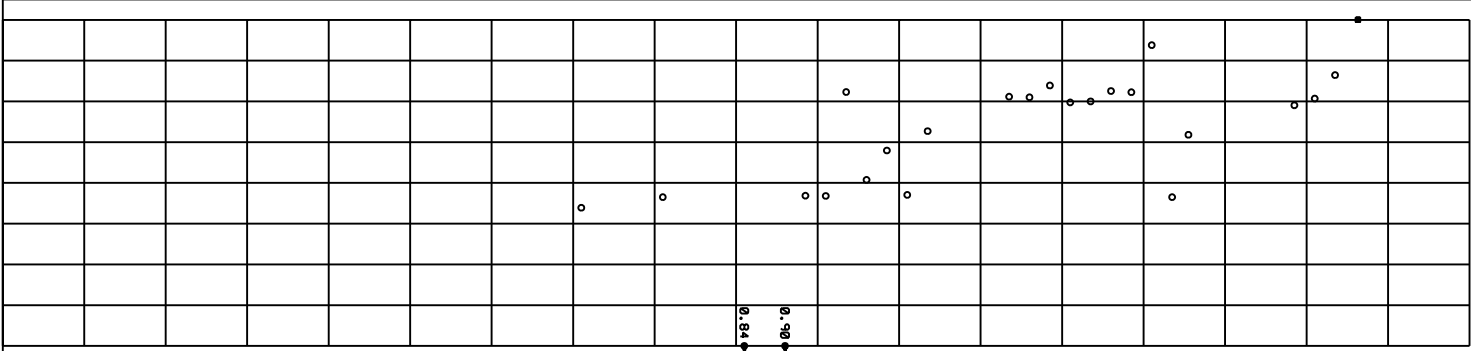
ELEVATIONS IN FEET - N.G.V.D.



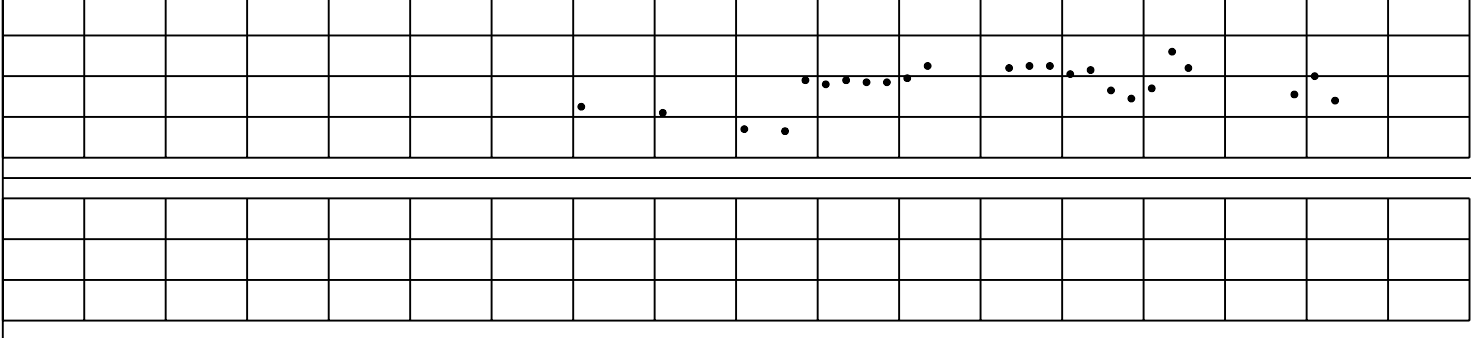
WATER CONTENT
% WATER, DRY WEIGHT



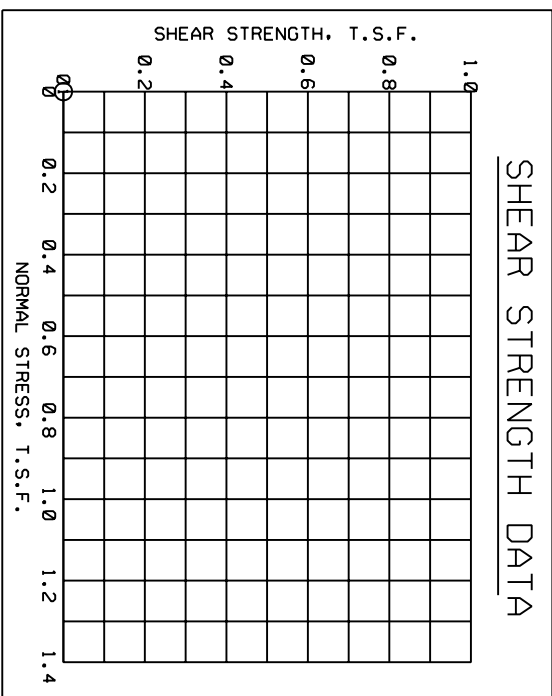
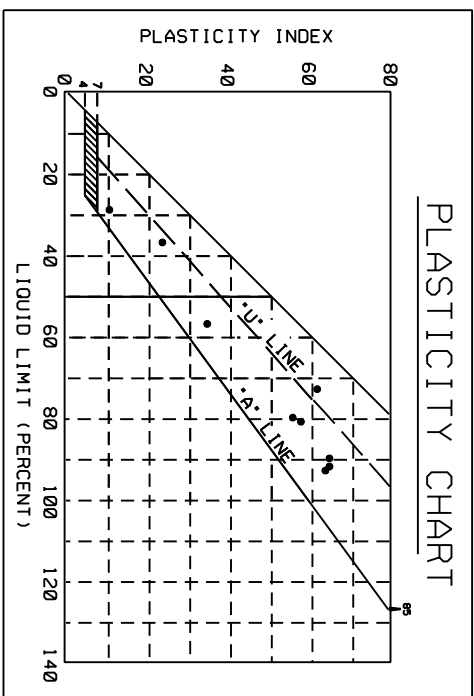
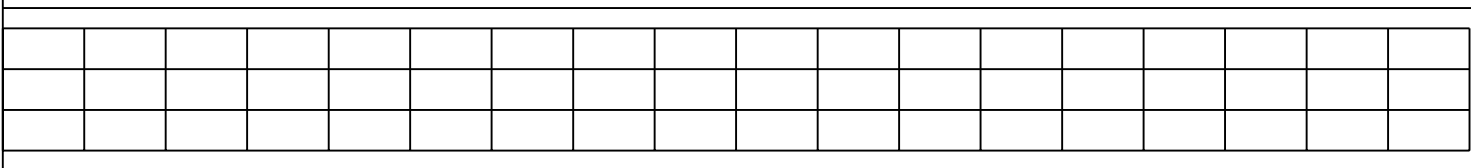
TEST DATA
SHEAR STRENGTH
TONS / SQ. FT.



WET DENSITY
POUNDS / CU. FT.



NORMAL STRESS
TONS / SQ. FT.



NOTES

- - (UC) UNCONFINED COMPRESSION TEST
- - (O) UNCONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- ▲ - (R) CONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- - (S) CONSOLIDATED - DRAINED DIRECT SHEAR TEST
- ω_p ○ ω_N ω_L - ATTERBERG LIMITS

BORING WAS TAKEN WITH A 5 INCH DIAMETER
STEEL TUBE PISTON TYPE SAMPLER.
FOR SOIL BORING LEGEND SEE PLATE A.
FOR LOCATION OF BORINGS SEE PLATE
FOR DETAILED TEST DATA SEE

TABULAR TEST DATA

NO.	ENVELOPE EL.	TYPE	STRENGTH φ	C - TSF	CLASS
1	6.3	0	0.0	0.000	

DESIGNED BY: U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

DRAWN BY: _____ PLOT SCALE: _____ PLOT DATE: _____ CADD FILE: _____
CHECKED BY: _____ DATE: _____ FILE NO. _____

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

Current Date: 1/6/2006

Boring: B-11

Sample Number	Depth	Visual Classification	USCS	E(f)	W% (pcf)	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
1	0.0	GR SM1 W/ LYS CL	SM1	14	14	56	96	95	UC	--	564	1127				0.300	
2	1.5	ST & GR CL6 W/ SIF, RT	CL6	25	83	46	88	93	OB	--	870	1740	127	42	85	0.370	PD
3	2.5	MGR & T CH3 W/ LNS & LYS SM	CH3	35	69	74	106	92	UC	--	124	248	80	24	56	0.400	
4	5.0	SO GR & DGR CH3 W/ SIF	CH3	46	69	81	111	93	OB	--	355	709	29	18	11	0.200	
5	7.5	MGR CL6 W/ SIF	CL6	37	80	74	107	94	UC	--	349	698	81	25	65	0.250	
6	10.0	SO GR CL4-S W/ SIF	CL4-S	30	30	57	97	96	OB	--	400	801	90	25	65	0.250	
7	12.5	SO GR CL3 W/ SIF	CL3	30	28	60	99	95	UC	--	405	810	93	29	64	0.230	
8	14.0	SI W/ ARS CH	SI	28	111	55	95	95	OB	--	380	760	92	27	65	0.270	
9	16.5	WD	WD	111	111	56	96	96	OB	--	377	753	92	27	65	0.250	PD
10	19.0	VSO GR CH2 W/ WD	CH2	67	56	56	96	95	UC	--	564	1127				0.300	
11	20.5	M DGR CHOA W/ LNS SM, WD	CHOA	71	46	46	88	93	OB	--	870	1740	127	42	85	0.370	
12	22.5	M DGR & GR CHOA W/ LYS ML	CHOA	92	43	74	106	92	UC	--	124	248	80	24	56	0.400	
13	25.0	VSO GR CL4 W/ LYS SM & CH	CL4	20	43	81	111	93	OB	--	355	709	29	18	11	0.200	
14	27.5	SO GR CL4 W/ LNS CH	CL4	37	81	74	107	94	UC	--	349	698	81	25	65	0.250	
15	30.0	SO GR CH3 W/ LYS & LNS ML	CH3	10	45	57	97	96	OB	--	400	801	90	25	65	0.250	
16	32.5	MGR CH4 W/ SL	CH4	5	69	60	99	95	UC	--	405	810	93	29	64	0.230	
17	35.0	MGR CH4 W/ LNS ML, SL	CH4	12	64	55	95	95	OB	--	322	645	92	27	65	0.270	
18	37.5	SO GR CH4 W/ LNS ML, SL	CH4	6	111	55	95	95	UC	--	380	760	92	27	65	0.270	
19	40.0	SO GR CH4 W/ SL	CH4	8	111	55	95	96	UC	--	380	760	92	27	65	0.270	
20	42.5	MGR CH4 W/ LNS SP, SIF, SL	CH4	4	112	56	96	96	OB	--	377	753	92	27	65	0.250	PD
21	45.0	GR SP	SP	28	111	56	96	96	OB	--	377	753	92	27	65	0.250	PD
22	47.5	GR SM1	SM1	25	25	56	96	96	OB	--	377	753	92	27	65	0.250	PD
23	50.0	MGR CH2	CH2	52	52	56	96	96	OB	--	377	753	92	27	65	0.250	PD
24	52.5	MGR CH4 W/ ARS & LNS SM	CH4	12	73	55	95	95	UC	--	546	1092				0.400	
25	55.0	MGR CH4 W/ ARS & LNS SM, SIF, SL	CH4	7	58	64	101	96	OB	--	859	1718	80	24	56	0.400	
26	57.5	MGR CH4 W/ ARS & LNS SM, SIF, SL	CH4	7	49	69	103	91	UC	--	641	1283	81	23	58	0.370	
27	60.0	MGR CH4 W/ LNS SM	CH4	8	54	67	103	95	OB	--	785	1569	81	23	58	0.360	
28	62.5	SO GR CH4 W/ SL	CH4	8	54	66	102	93	UC	--	354	708	73	11	62	0.460	
29	65.0	MGR CH4 W/ SIF, SL	CH4	9	53	68	104	96	OB	--	864	1728	73	11	62	0.460	
30	67.5	MGR CH4 W/ TR-WD, SL	CH4	10	56	66	102	95	UC	--	862.5	1725	37	13	24	1.050	
31	70.0	ST GR & T CL4	CL4	11	19	107	127	86	OB	--	1806	3611	37	13	24	1.050	
32	72.5	VST LGR & T CL4	CL4	19	19	107	127	86	OB	--	1806	3611	37	13	24	1.050	
33	75.0	ST GNGR & T CL5 W/ ARS CH	CL5	17	17	108	126	81	UC	--	1683	3366				1.225	
34	77.5	VST LGR CL6	CL6	25	25	108	126	81	UC	--	1683	3366				1.225	
35	80.0	VST T & LGR CH4 W/ LNS SM, SL	CH4	36	36	90	118	95	UC	--	870	1740				1.000	
36	82.5	ST & LGR CH3 W/ ARS & LNS SM	CH3	33	33	90	118	95	UC	--	870	1740				1.000	
37	85.0	M T & LGR CH4 W/ LNS SM, SL	CH4	31	31	90	118	95	UC	--	870	1740				1.000	

Remarks: _____
 EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
 File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080

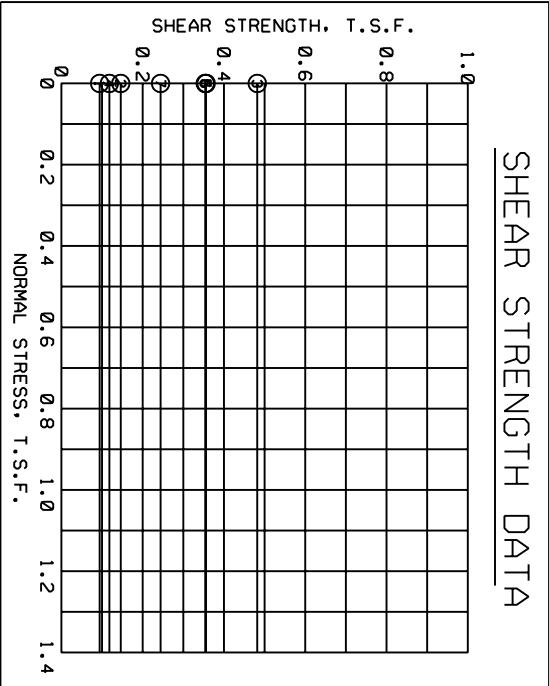
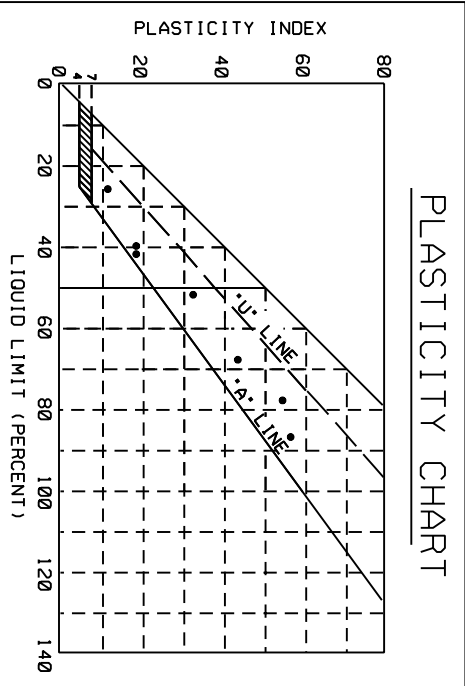
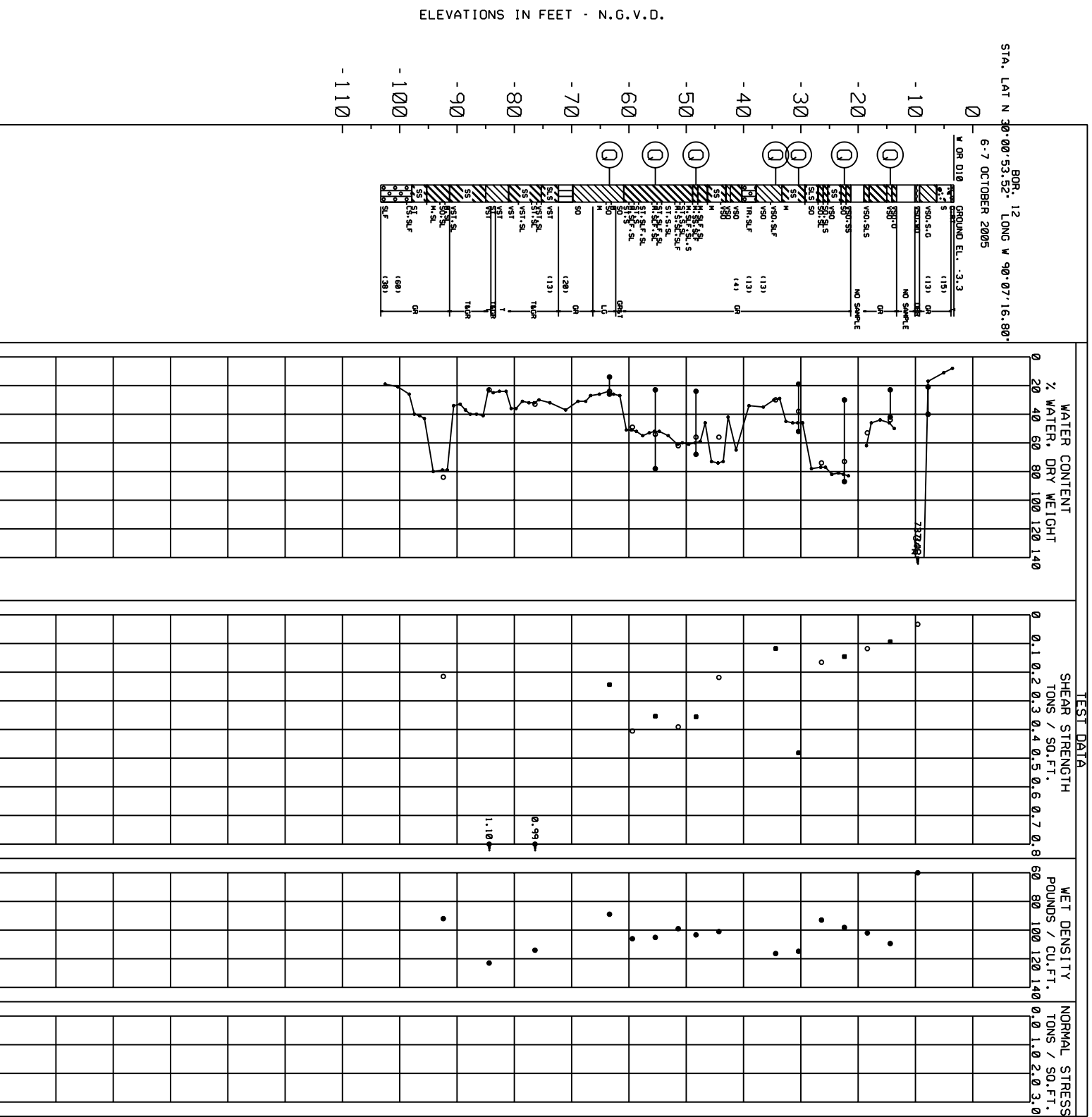
Boring: B-11

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E(F)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
38	87.5	VST T & LGR CH4 W/ LNS SM, SL	CH4		34												
39	90.0	VST T & LGR CH4 W/ LNS SM, SL	CH4		33												
40	92.5	VST T & LGR CH4 W/ LNS SM, SL	CH4		33												
41	95.0	MGR & T CH3 W/ ARS & LNS SM, SL	CH3	17	35	85	115	96	UC	--	922	1845				0.625	
42	97.5	ST GR CH4 W/ LNS ML, SIF, CC, SL	CH4		48												

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080



NOTES

- (UC) UNCONFINED COMPRESSION TEST
- (O) UNCONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- ▲ (R) CONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
- (S) CONSOLIDATED - DRAINED DIRECT SHEAR TEST
- _{UP} ○_{UN} ○_{UL} ATTERBERG LIMITS

BORING WAS TAKEN WITH A 5 INCH DIAMETER STEEL TUBE PISTON TYPE SAMPLER. FOR SOIL BORING LEGEND SEE PLATE A. FOR LOCATION OF BORINGS SEE PLATE. FOR DETAILED TEST DATA SEE

TABULAR TEST DATA

ENVELOPE NO.	EL.	TYPE	φ	STRENGTH c - 1SF	CLASS
1	-14.4	0	0.0	0.094	CL
2	-22.4	0	0.0	0.146	CH
3	-30.4	0	0.0	0.482	CH
4	-34.4	0	0.0	0.118	CL
5	-48.3	0	0.0	0.356	CH
6	-55.4	0	0.0	0.354	CH
7	-63.4	0	0.0	0.244	CL

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

DESIGNED BY:	PLLOT SCALE:	PLLOT DATE:	DATE:
DRAWN BY:	SCALE:	FILE NO.:	
CHECKED BY:			

PLATE

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080
 Boring: B-12

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E (F)	w%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests	
1	0.0	T SM1 W/ G, RT	SM1		8													PD
2	0.5	GP W/ ARS SM	GP		11													
3	3.0	VSO GR CL5 W/ ARS SM, G	CL5		17													
4A	6.0	VSO BR PT W/ WD	PT	7	737	7	60	89	UC	--	66.4	132.8	40	21	19			
NS	6.8	NO SAMPLE	NS															
5A	10.0	VSO GR CH2 W/ O	CH2		50													
5B	10.8	VSO GR CL4	CL4		44	75	108	96	UU	0	187		42	23	19	0.200		
5C	11.7	VSO GR CH2	CH2		44													
6A	14.0	VSO GR CH2	CH2		46													
6B	14.8	VSO GR CH3 W/ ARS ML	CH3	8	53	67	102	92	UC	--	236	472				0.200		
NS	15.7	NO SAMPLE	NS															
7A	18.0	VSO GR CH4 W/ LNS SM	CH4		83													
7B	18.8	SO GR CH4	CH4		73	56	97	97	UU	0	292		87	30	57	0.200		
7C	19.7	VSO GR CH4 W/ LNS SM	CH4		81													
7D	20.6	VSO GR CH4 W/ LNS SM	CH4		82													
8A	22.0	SO GR CH4 W/ LNS ML	CH4		77													
8B	22.8	SO GR CH4 W/ SL	CH4	5	74	54	93	93	UC	--	331	662				0.170		
8C	23.7	SO GR CH4 W/ LNS ML	CH4		78													
9A	26.0	M GR CH3 W/ LNS SM	CH3		46													
9B	26.8	M GR CH2 W/ LNS & LYS SM	CH2		38	82	113	95	UU	0	964		52	19	33	0.550		
9C	27.7	M GR CH3 W/ LNS SM	CH3		46													
9D	28.6	M GR CH3 W/ LNS SM	CH3		45													
10A	30.0	VSO GR CL3 W/ SIF	CL3		29													
10B	30.8	VSO GR CL3 W/ SIF	CL3		30													
11	32.0	VSO GR CL3	CL3		35													
12	34.5	GR SM1 W/ TR-SIF	SM1		34													PD
13	37.0	VSO GR CH2	CH2		65													
14A	39.0	VSO GR CL5	CL5		42													
14B	39.8	VSO GR CH4 W/ ARS & LNS SM	CH4		73													
14C	40.7	SO GR CH4 W/ LNS SM	CH4	8	56	65	101	94	UC	--	437	873				0.250		
14D	41.6	M GR CH4 W/ ARS & LNS SM	CH4		73													
15A	43.0	M GR CH4 W/ SIF, SL	CH4		46													
15B	43.8	M GR CH4 W/ SIF, SL	CH4		59													
15C	44.7	M GR CH3 W/ SIF, LNS SP	CH3		56	65	102	95	UU	0	712		68	24	44	0.270		
15D	45.6	M GR CH4 W/ SIF, SL, ARS SM	CH4		61													
16A	47.0	ST GR CH4 W/ ARS SM, SL	CH4		60													
16B	47.8	M GR CH4 W/ ARS SM, SL, SIF	CH4	5	62	61	99	95	UC	--	782	1565				0.300		

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
 File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080
Boring: B-12

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E(f)	Wt	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests	
16C	48.7	ST GR CH4 W/ ARS SM, SL	CH4		55													
17A	51.0	ST GR CH4 W/ SIF, SL	CH4		52													
17B	51.8	M GR CH4 W/ SIF, SL	CH4		54	67	103	95	UU	0	708		78	23	55	0.430		
17C	52.7	ST GR CH4 W/ SIF, SL	CH4		53													
17D	53.6	ST GR CH4 W/ SIF, SL	CH4		55													
18A	55.0	ST GR CH4 W/ ARS SM	CH4		52													
18B	55.8	M GR CH4 W/ SIF, SL	CH4	6	49	71	106	95	UC	--	811	1623				0.340		
18C	56.7	ST GR CH4 W/ ARS SM	CH4		51													
18D	57.6	SO GR & T CL3	CL3		27													
19A	59.0	ML GR CL3	CL3		26													
19B	59.8	SO LGR CL3	CL3		24	99	122	91	UU	0	488		26	14	12	0.180		
19C	60.7	ML GR CL3	CL3		26													
20A	63.0	SO GR CL3	CL3		27													
20B	63.8	SO GR CL3	CL3		31													
20C	64.7	SO GR CL3	CL3		31													
21	66.5	GR ML2	ML2		37													
22	69.0	VST T & GR CH4 W/ LNS ML	CH4		32													
23A	72.0	VST T & GR CH4 W/ LNS SM, SL	CH4	4	30	86	114	91	UC	--	1978	3956				1.050		
23B	72.8	ST T & GR CH4 W/ LNS SM, SL	CH4		33													
23C	73.7	VST T & GR CH4 W/ LNS SM, SL	CH4		32													
23D	74.6	VST T & GR CH4 W/ LNS SM, SL	CH4		31													
24A	76.0	VST T & GR CH4 W/ LNS SM	CH4		36													
24B	76.8	VST T & GR CH4 W/ LNS SM	CH4		36													
24C	77.7	VST T CL6	CL6		24													
24D	78.6	VST T CL6	CL6		24													
25A	80.0	ST T & GR CL6	CL6		25													
25B	80.8	VST T CL6	CL6	2	23	100	123	91	UC	--	2198	4396				1.000		
25C	81.7	VST T & GR CH4 W/ LNS SM, SL	CH4		41													
25D	82.6	VST T & GR CH4 W/ LNS SM, SL	CH4		40													
26A	84.0	VST T & GR CH4 W/ LNS SM, SL	CH4		40													
26B	84.8	VST T & GR CH4 W/ LNS SM, SL	CH4		37													
26C	85.7	VST T & GR CH4 W/ LNS SM, SL	CH4		33													
26D	86.6	VST T & GR CH4 W/ LNS SM, SL	CH4		34													
27A	88.0	M GR CH4 W/ SL	CH4		79													
27B	88.8	SO GR CH4 W/ SL	CH4	4	84	50	92	95	UC	--	430	860				0.250		
27C	89.7	M GR CH4 W/ SL	CH4		80													
28A	92.0	ST GR CH4 W/ LNS SM	CH4		43													

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080
 Boring: B-12

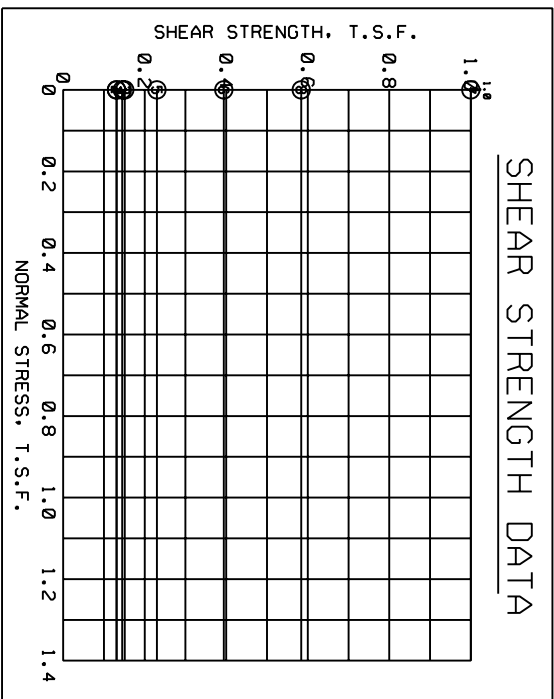
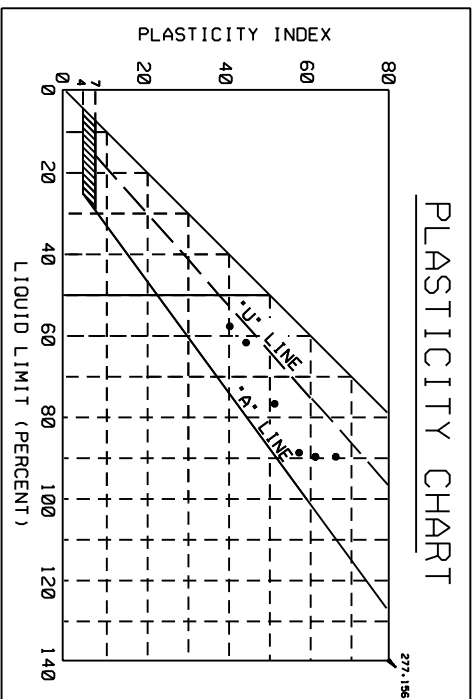
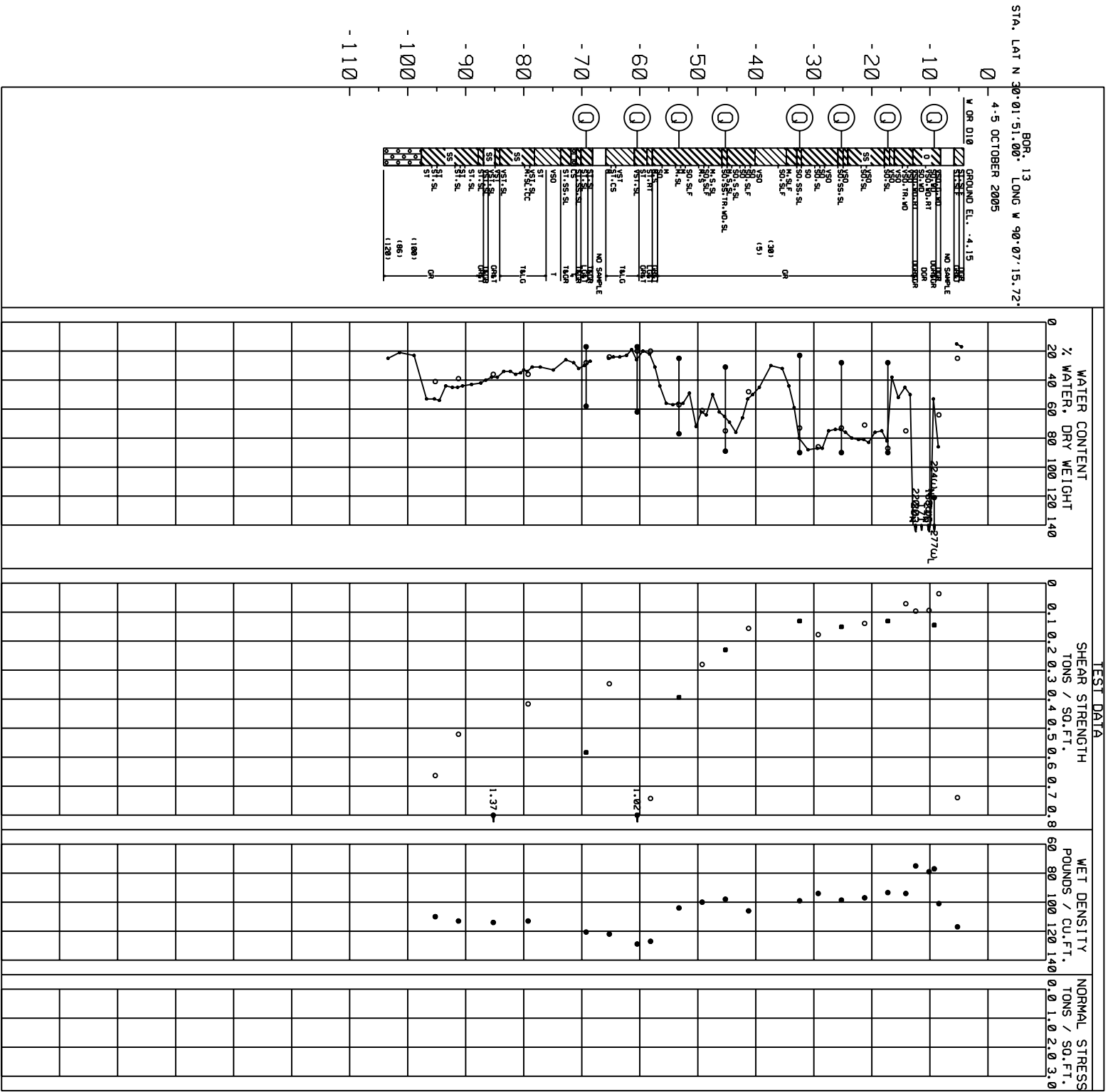
Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E(F)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
28B	92.8	ST GR CH4 W/ LNS SM	CH4		41												
28C	93.7	ST GR CH4 W/ LNS SM	CH4		40												
28D	94.6	GR SM1 W/ ARS CH, SIF	SM1		26												
29	95.5	GR SM1 W/ SIF	SM1		21												
30	98.5	GR SM1 W/ SIF	SM1		19												

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
 File Name: 19080

ELEVATIONS IN FEET - N.G.V.D.



NOTES

- - (UC) UNCONFINED COMPRESSION TEST
 - - (O) UNCONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
 - ▲ - (R) CONSOLIDATED - UNDRAINED TRIAXIAL SHEAR TEST
 - - (S) CONSOLIDATED - DRAINED DIRECT SHEAR TEST
 - _{WP} - ○_{UN} - ○_{UL} - ATTERBERG LIMITS
- BORING WAS TAKEN WITH A 5 INCH DIAMETER STEEL TUBE PISTON TYPE SAMPLER. FOR SOIL BORING LEGEND SEE PLATE A. FOR LOCATION OF BORINGS SEE PLATE FOR DETAILED TEST DATA SEE

TABULAR TEST DATA

ENVELOPE NO.	EL.	TYPE	Φ	STRENGTH C - TSF	CLASS
1	-9.3	0	0.0	0.145	CH
2	-17.3	0	0.0	0.131	CH
3	-25.3	0	0.0	0.151	CH
4	-32.5	0	0.0	0.131	CH
5	-45.3	0	0.0	0.230	CH
6	-53.3	0	0.0	0.394	CH
7	-60.4	0	0.0	1.021	CH
8	-69.3	0	0.0	0.584	CH



U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
PLOT SCALE: _____
PLOT DATE: _____
FILE NO.: _____

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080
Boring: B-13

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E (f)	w%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests	
1A	0.0	ST DGR CL6 W/ SIF	CL6		17													
1B	0.8	ST GR & T CL6 W/ SIF	CL6	7	25	94	117	85	UC	--	1479	2958						
NS	1.7	NO SAMPLE	NS															
2A	4.0	VSO DGR CHOB W/ G, WD	CHOB	5	64	62	101	100	UC	--	72.6	145.2						
2B	4.8	SO DGR & GR CHOC W/ WD	CHOC		224	21	67	84	UU	0	289		277	121	156	0.250		
2C	5.7	VSO DGR CHOA W/ WD, RT	CHOA	6	168	29	79	95	UC	--	187.9	375.9				0.090		
2D	6.6	SO DGR CHOB W/ WD	CHOB		171													
3A	8.0	VSO DGR & GR CHOB W/ WD, RT	CHOB	8	220	23	75	96	UC	--	193.3	386.5				0.110		
3B	8.8	VSO GR CH4	CH4		50													
3C	9.7	VSO GR CH4 W/ TR-WD	CH4		75	54	94	94	UC	--	142	284				0.100		
3D	10.6	VSO GR CH4	CH4		52													
4A	12.0	VSO GR CL6	CL6		38													
4B	12.8	SO GR CH4 W/ SL	CH4		87	49	92	96	UU	0	262		90	28	62	0.160		
4C	13.7	VSO GR CH4 W/ LNS & LYS SM	CH4		75													
4D	14.6	VSO GR CH4 W/ LNS & LYS SM	CH4		76													
5A	16.0	VSO GR CH4 W/ LNS SM	CH4		83													
5B	16.8	SO GR CH4 W/ LNS SM, SL	CH4	5	71	57	97	96	UC	--	278	556				0.170		
5C	17.7	VSO GR CH4 W/ LNS SM	CH4		81													
5D	18.6	VSO GR CH4 W/ LNS SM	CH4		80													
6A	20.0	VSO GR CH4	CH4		76													
6B	20.8	SO GR CH4 W/ LNS SM, SL	CH4		73	56	96	96	UU	0	301		90	28	62	0.170		
6C	21.7	VSO GR CH4	CH4		74													
6D	22.6	VSO GR CH4	CH4		75													
7A	24.0	SO GR CH4	CH4		87													
7B	24.8	SO GR CH4 W/ SL	CH4	5	86	50	94	98	UC	--	355	710				0.250		
7C	25.7	SO GR CH4	CH4		88													
8A	28.0	SO GR CH4 W/ LNS SM, SL	CH4		73	57	98	99	UU	0	261		90	23	67	0.150		
8B	28.8	M GR CH2 W/ SIF	CH2		59													
8C	29.7	M GR CH2 W/ SIF	CH2		44													
8D	30.6	SO GR CL5 W/ SIF	CL5		32													
9	32.0	GR SM1 W/ ARS CH	SM1		30													
10	34.5	VSO GR CL3	CL3		45													
11A	36.0	SO GR CH3	CH3		50													
11B	36.8	SO GR CH3 W/ SIF	CH3	6	48	72	106	96	UC	--	312	623				0.150		
11C	37.7	SO GR CH3	CH3		66													
11D	38.6	SO GR CH4 W/ ARS SM	CH4		76													
12A	40.0	M GR CH4 W/ ARS SM, SL	CH4		69													

Remarks: EUSTIS ENGINEERING COMPANY, INC.

Checked by: _____
File Name: 19080

SUMMARY OF LABORATORY TEST RESULTS

Project: USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL Assigned By: _____

Project Number: 19080
Boring: B-13

Current Date: 1/6/2006

Sample Number	Depth	Visual Classification	USCS	E(f)	w%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
12B	40.8	SO GR CH4 W/ LNS SM, TR-WD, SL	CH4		75	55	96	96	UU	0	460						
12C	41.7	M GR CH4 W/ ARS SM, SL	CH4		62												
12D	42.6	M GR CH4 W/ ARS SM, SL	CH4		50												
13A	44.0	SO GR CH4 W/ SIF	CH4		64												
13B	44.8	M GR CH4 W/ ARS SM	CH4	6	61	62	100	96	UC	--	561	1122				0.250	
13C	45.7	SO GR CH4 W/ SIF	CH4		72												
13D	46.6	SO GR CH4 W/ SIF	CH4		49												
14A	48.0	M GR CH4	CH4		56												
14B	48.8	M GR CH4 W/ SL	CH4		57	65	102	95	UU	0	787			77	25	52	0.320
14C	49.7	M GR CH4	CH4		57												
14D	50.6	M GR CH4	CH4		56												
15A	52.0	SO GR CH4	CH4		44												
15B	52.8	M GR & T CH3 W/ ARS SM	CH3		31												
15C	53.7	ST LGR & T CL6 W/ RT	CL6	6	20	107	127	91	UC	--	1485	2970				0.875	
15D	54.6	ST GR & T CH3	CH3		20												
16A	56.0	VST T & LGR CH3 W/ SL	CH3		20	105	126	88	UU	0	2042			62	17	45	1.750
16B	56.8	VST T & LGR CL5	CL5		19												
16C	57.7	VST T & LGR CL5	CL5		23												
16D	58.6	VST T & LGR CL5	CL5		24												
17A	60.0	ST T & LGR CL5 W/ LYS CH	CL5		24												
17B	60.8	MT & LGR CL5	CL5		24												
17C	61.7	NO SAMPLE	NS		27												
18A	64.0	ST T & GR CH2 W/ SL	CH2		27												
18B	64.8	ST LGR & T CH2 W/ SL	CH2		28	92	118	90	UU	0	1168			58	17	41	0.900
18C	65.7	NO SAMPLE	NS		28												
19A	66.0	ST T & GR CH3 W/ LNS & LYS SM, SL	CH3		32												
19B	66.8	T SM1 W/ LYS CH	SM1		28												
19C	67.7	ST T & GR CH3 W/ LNS & LYS SM, SL	CH3		26												
20	69.5	VSO T CL3	CL3		33												
21	72.0	ST T & LGR CL6	CL6		31												
22A	74.0	VST T & LGR CH3 W/ LNS SM, SL	CH3		31												
22B	74.8	MT & LGR CH4 W/ LNS SM, SL, CC	CH4	4	36	84	113	93	UC	--	883	1766				1.000	
22C	75.7	VST T & LGR CH3 W/ LNS SM, SL	CH3		33												
23A	76.0	VST T & LGR CH4 W/ LNS SM, SL	CH4		35												
23B	76.8	VST T & LGR CH4 W/ LNS SM, SL	CH4		36												
23C	77.7	VST T & LGR CH3 W/ LNS & LYS SM, SL	CH3		34												
23D	78.6	VST T & LGR CH3 W/ LNS SM, SL	CH3		34												

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SUMMARY OF LABORATORY TEST RESULTS

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Project Number: 19080
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Sample Number	Depth	Visual Classification	USCS	E(F)	W%	Dry Dens (pcf)	Wet Dens (pcf)	Sat %	Shear Test Type	Angle	Cohesion (psf)	Unconf. Comp. Str.	LL	PL	PI	TORVANE (tsf)	Other Tests
24A	80.0	VST GR & T CH4	CH4		38												
24B	80.8	VST GR & T CH4 W/ LNS SM, SL	CH4	6	36	83	114	95	UC	--	2743	5485				1.625	
25A	82.0	VST T & GR CH4 W/ LNS SM, SL	CH4		40												
25B	82.8	ST GR & T CH4 W/ SL	CH4		42												
25C	83.7	ST GR CH4 W/ LNS SM, SL	CH4		43												
26A	86.0	ST GR CH3 W/ LNS SM	CH3		44												
26B	86.8	ST GR CH4 W/ LNS SM, SL	CH4	6	39	81	113	97	UC	--	1042	2084				0.500	
26C	87.7	ST GR CH4 W/ LNS SM	CH4		45												
26D	88.6	ST GR CH4 W/ LNS SM	CH4		44												
27A	90.0	ST GR CH4 W/ LNS SM	CH4		54												
27B	90.8	ST GR CH4 W/ LNS SM, SL	CH4	9	41	78	110	94	UC	--	1327	2655				0.625	
27C	91.7	ST GR CH3 W/ LNS SM	CH3		53												
28	93.5	GR SM1	SM1		23												
29	96.0	GR SM1	SM1		21												
30	98.5	GR SM1	SM1		25												

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