MATAGORDA SHIP CHANNEL
LIGHT # 51 TO Beacon #19

TEST DATA SUMMARY

FEATURE LOG OF SOIL BORINGS

BORING NO.	SAMPLE NO.	DEPTH OR ELEV OF SAMPLE	LABORATORY CLASSIFICATION	MECHANICAL ANALYSIS: GRAVEL %	SAND %	FINES %	~~%~~	ATTERBERG LIMITS: LL	~~PI~~	SPECIFIC GRAVITY G	NATURAL WATER CONTENT %	NATURAL DRY DENSITY LBS CU FT	COMPACTION DATA: OPTIMUM WATER %	MAXIMUM DRY DENSITY LBS CU FT	REMARKS
3ST-52	61-	0.0=	Water Surface (Elev. +2.0' M.L.T.)												
	–		Water										WATER		
		11.0													
	4280		OH	0	2	98		84.6	23.0		194.7		Black to Dark Gray, CLAY (OH), v/soft, highly organic		0/11.0-14.0
		14.0													
	4281		OH	0	12	88	0.25	66.0	20.0		117.4	42.5	Dark Gray, CLAY (OH), v/soft		0/14.0-17.0
		17.0													
	4282		(OH)	(Same as 61-4281)							73.4		Dark Gray, CLAY (OH), v/soft		0/17.0-19.0
		19.0													
	4283		(CH)	(Same as 61-4284)							66.8		Gray to Brown, Sandy CLAY (CH), v/soft		0/19.0-22.0
		22.0													
	X		(CH)										(No Drillers Classification; assumed to be same as above)		
		25.0													
	4284		CH	0	21	79	0.25	51.5	17.0		67.0	57.5	Gray to Brown, Sandy CLAY (CH), v/soft		0/25.0-27.0
		27.0													
	X		(SC)										"Same as below"		
		30.0			0-1-62										
	4285		SM	0	63	37	0.25		2.0		28.5	95.3	Gray, Silty, SAND (SM) (Loose)		
		32.0													
	4286		(SM)	Same as 62-4285							27.5		Gray, Silty SAND (SM) (Loose)		0/32.0-33.5
		33.5			2.0-48										
	4287		SC	1	50	49	0.50		5.0		29.9	89.4	Gray, Clayey SAND (SC), Medium Dense		
		36.0													
	4288		CH	0	9	91	2.75	62.0	26.0		28.1	93.2	Rust to Light Gray, Clay (CH), v/stiff		
		38.0													
	X		(CH)										"Same as below"		
		40.0													
	4289		CH	0	5	95	2.50	71.3	26.0		29.2	94.1	Light Gray to Tan, CLAY (CH), v/stiff		
		42.0													
	X		(CH)										"No Drillers Classification; assumed to be same as above)		
		46.0													
	4290		(CH)	(Same as 61-4289)			3.75				22.7	100.7	Light Gray to Tan, CLAY (CH), v/stiff		
		48.0													

BORING NO.	SAMPLE NO.	SHEAR DATA: INITIAL e	DRY DENSITY LBS/CU FT	W_i %	W_f %	S_i %	TYPE TEST	SPECIMEN SIZE INCHES	TEST	σ_m T/SQ FT	σ'_1 T/SQ FT	C SQ FT	Ø DEGREES	PERMEABILITY: e	K FT/MIN	CONSOLIDATION DATA: P_o T/SQ FT	P_c T/SQ FT	C_c	t_{50}*

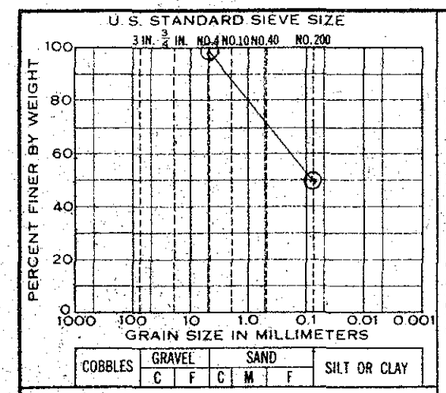
Bottomed @ a depth of 48.0' below water surface in Light Gray to Tan, CLAY (CH), v/stiff
Boring @ Sta. 90+000, 100' S.W.L.

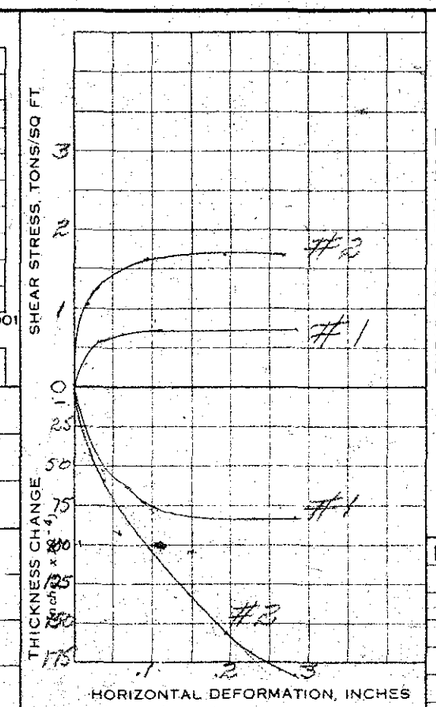
NOTE: Samples recovered from 33.5' to 48.0' were 6" containers.

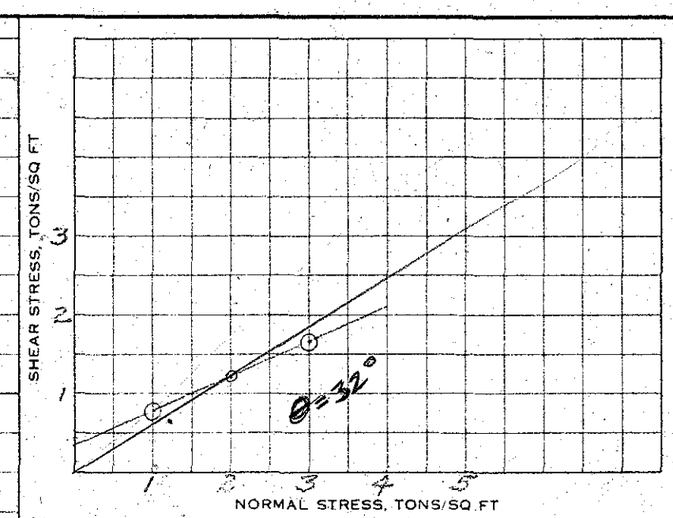
~~* Values at Pressure~~ ~~T/SQ FT~~

T - Triaxial Compression
UC - Unconfined Compression
DS - Direct Shear
UU - Unconsolidated Undrained
CD - Consolidated Drained
CU - Consolidated Undrained

DLR 907







Classification				
LL	G			
PL	~~D_{10}~~ L.S.			
Test No.	1		2	
Initial Water Content, W_0 %	29.7		29.7	
Dry Density Lbs/CuFt	89.4		89.4	
Void Ratio, e_0				
Saturation, S_0 %				
Duration of Test t_0 to τ	135'		365'	
WC after Test, W_f %	35.8		38.5	
Normal Stress, σ T/SqFt	1		3	
Max. Shear Stress, τ T/SqFt	.76		1.65	

Type of Test	Type of Specimen
Strain - Control Rate 0.01 in/min	Undisturbed
Consolidated	3 in. square
Drained	.75 in. thickness

SHEAR VALUES	Ø	TAN Ø	C, T/SQ FT
Maximum	23.63	.4375	.35
Ultimate			

Remarks:

Project MATAGORDA SHIP CHANNEL

Area

Boring No. 3 ST-52 Sample No. 61-4287

~~Elev~~ or Depth 33.5-36.0 Date Oct. 1961

DIRECT SHEAR TEST REPORT

ENG FORM 1 FEB 58 2092 (TRANSLUCENT) (EM 1110-2-1803)