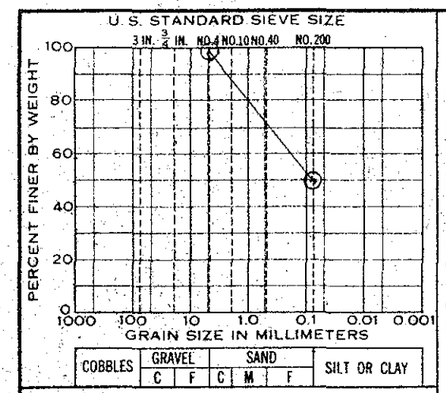

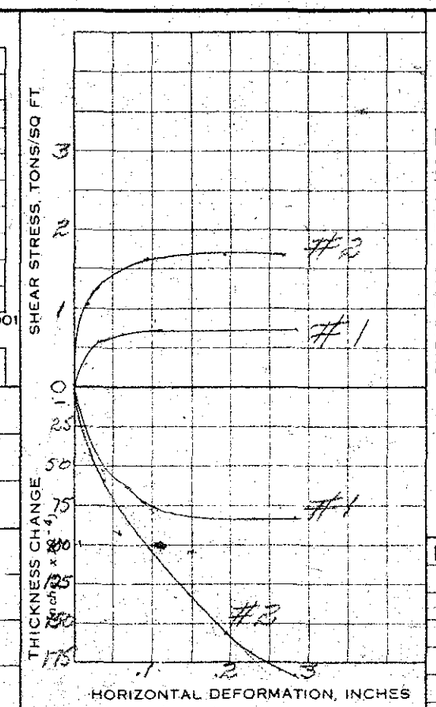

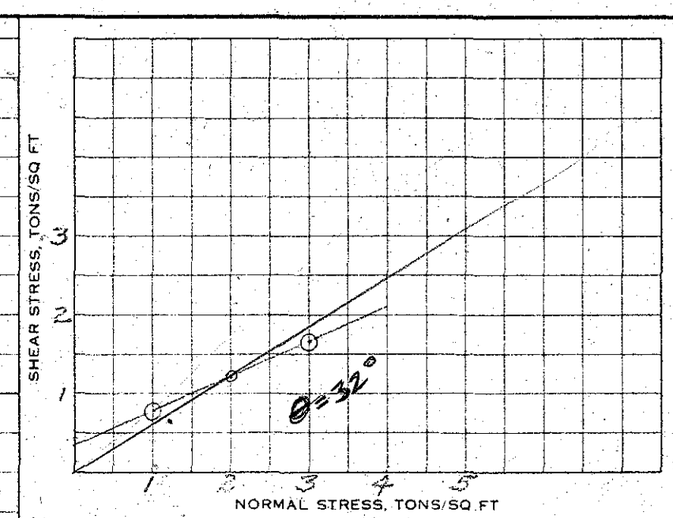

Classification				
LL	G			
PL	~~D_{10}~~ L.S.			
Test No.	1		2	
Initial Water Content, W_0 %	29.7		29.7	
Dry Density Lbs/CuFt	89.4		89.4	
Void Ratio, e_0				
Saturation, S_0 %				
Duration of Test t_0 to τ	135'		365'	
WC after Test, W_f %	35.8		38.5	
Normal Stress, σ T/SqFt	1		3	
Max. Shear Stress, τ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

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	PL	SPECIFIC GRAVITY G	NATURAL WATER CONTENT %	NATURAL DRY DENSITY LBS/CU FT	COMPACTION DATA OPTIMUM WATER %	MAXIMUM DRY DENSITY LBS/CU FT	SHEAR DATA INITIAL e	DRY DENSITY LBS/CU FT	W_i %	W_f %	S_i %	TYPE TEST	SPECIMEN SIZE INCHES	TEST	σ_{ID} T/SQ FT	σ_i T/SQ FT	C T/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}*	REMARKS
35T-53	61-	0.0 =	Water	Surface (Elev. -2.5' MLT)																													
			Water										Water																				
	4291	7.5	OH	0	7	93		79.9	26.0		136.9		Dark Gray, CLAY (OH), v/soft, organic, Ignition Loss = 7.5%																			0/7.5-12.0
	4292	12.0	(CL)	(Same as 61-4293)							62.2		Dark Gray, Sandy CLAY (CL), v/soft																			0/12.0-15.0
	4293	15.0	CL	0	32	68	0.25	43.0	11.5		62.3	60.8	Dark Gray, Sandy CLAY (CL), v/soft																			0/15.0-18.0
	4294	18.0	(CL)	(Same as 61-4293)			0.25				67.2	57.5	Dark Gray, Sandy CLAY (CL), v/soft.																			
	4295	20.0	CH	0	20	80	0.25	53.3	18.5		69.7	56.0	Dark Gray to Brown, CLAY (CH), v/soft																			
	4296	22.0	(CH)	(Same as 61-4295)							73.9		Dark Gray to Brown, CLAY (CH), v/soft																			0/22.0-23.5
	4297	23.5	(CH)	(Same as 61-4295)			0.25				77.8	55.6	Dark Gray to Brown, CLAY (CH), v/soft																			
	4298	26.0	CH	0	15	85	0.25	60.4	19.0		68.1	57.7	Brown, CLAY (CH), v/soft																			
	4299	28.0	SM	0	1-1-63 65	35	0.25		2.5		27.4	95.2	Gray, Silty SAND (SM), (Loose)																			
	4300	30.0	SM	0	1-0-61 62	38	0.25		3.0		28.3	93.1	Gray, Clayey Silty SAND (SM), (Loose)																			
	4301	32.0	(SM)	(Same as 61-4300)							29.7		Gray, Clayey Silty SAND (SM), (Loose)																			0/32.0-34.5
	4302	34.5	CH	0	13	87	2.50	72.6	25.0		32.0	88.5	Rust to Light Gray, CLAY (CH), v/stiff																			
	4303	36.0	(CH)	(Same as 61-4302)			3.50				28.4	93.4	Rust to Light Gray, CLAY (CH), v/stiff																			
	X	38.0	(CH)										(No Drillers Classification; assumed to be same as above)																			
	4304	41.0	CH	0	4	96	4.00	58.5	22.0		21.5	103.3	Light Gray to Rust, CLAY (CH), Hard																			
	4305	43.0	SC	4	49	47			9.0		19.4		Rust to Light Gray, Clayey SAND (SC), Dense, w/calcareous nodules																			27/43.5-44.5
	X	44.5	(SC)										"Same as above"																			
	4306	46.0	CH	0	15	85	1.75	72.2	25.0		29.1	91.7	Rust to Light Gray, CLAY (CH), Stiff, w/calcareous nodules																			
		48.0	Bottomed @ a depth of 48.0' below water surface in Rust to Light Gray, CLAY (CH), Stiff, w/calcareous nodules. Boring @ Sta. 89+000, 100' N.E. ℄																														

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

– Triaxial Compression
UC – Unconfined Compression
DS – Direct Shear
UU – Unconsolidated Undrained
– Consolidated Drained
CU – Consolidated Undrained

DLR 907