Opened

HOLE NO. 6ST-150

DEPARTMENT OF THE ARMY

DIVISION Southwestern

INSTALLATION Galv Dist, Eng Div

DRILLING LOG

1. PROJECT Victoria Channel	SHEET OF
2. LOCATION (Coordinates or Station) Sta. 1745+40 - 230 off centerline	
3. DRILLING AGENCY U. S. Army Corps of Engineers	
4. HOLE NO. (As shown on drawing title and file No.) 6ST-150	5. NAME OF DRILLER Eck
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED; DEGREES WITH VERTICAL	7. THICKNESS OF OVER-BURDEN; 8. DEPTH DRILLED INTO ROCK; 9. TOTAL DEPTH OF HOLE 80.0
10. SIZE AND TYPE OF BIT Shelby Tube - 6"	11. DATUM FOR ELEVATION SHOWN (TBM or MSL); 12. MANUFACTURER'S DESIGNATION OF DRILL
13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN: DISTURBED 10 Jars; UNDISTURBED 25 Cont	14. TOTAL NO. CORE BOXES; 15. ELEV. GROUND WATER; 16. DATE HOLE: STARTED 11 June; COMPLETED 14 June 1963
17. ELEV. TOP OF HOLE +56' ?	18. TOTAL CORE RECOVERY FOR BORING (%); 19. SIGNATURE OF INSPECTOR

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)	
0.0	2.0		Dark gray and brown clay hard, dry			Cont. 1	4.50+
2.0	4.0		Gray brown clay, hard, dry			Cont. 2	4.50+
4.0	6.0		Same as above, hard, dry			Cont. 3	4.50+
6.0	8.0		Same as below			No sample	
8.0	10.0		Gray clayey sand, soft, dry			Jar 1	0.25
10.0	12.0		Brown clayey sand, w/layers brown clay w/cal nod, soft dry			Jar 2	0.25
12.0	14.0		Brown sand w/thin seams gray clay, v/soft			Jar 3	0.0
14.0	17.0		Washed, same as above			No sample	
17.0	18.0		Brown sand 17.0-17.5 No count 17.5-18.0 100 blows - refusal			Jar 4 v/Dense	
18.0	20.0		Same as above, washed			No sample	
20.0	23.0		Sand, washed, same as above			No sample	
23.0	24.0		Brown and gray clay w/cal nod v/stiff			Jar 6	2.75

Opened +56 12 68 feet

HOLE NO. 6ST-150

DEPARTMENT OF THE ARMY DIVISION Southwestern INSTALLATION Galv Dist, Eng Div **DRILLING LOG**	1. PROJECT Victoria Channel — SHEET OF 2. LOCATION (Coordinates or Station) Sta. 1745+40 - 230 off centerline Hrn Bay 3. DRILLING AGENCY U. S. Army Corps of Engineers
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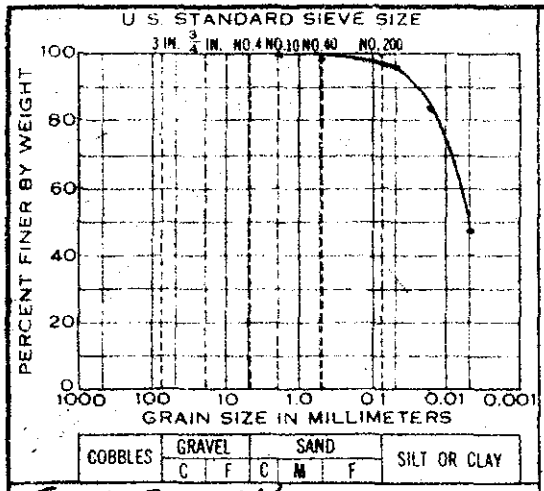
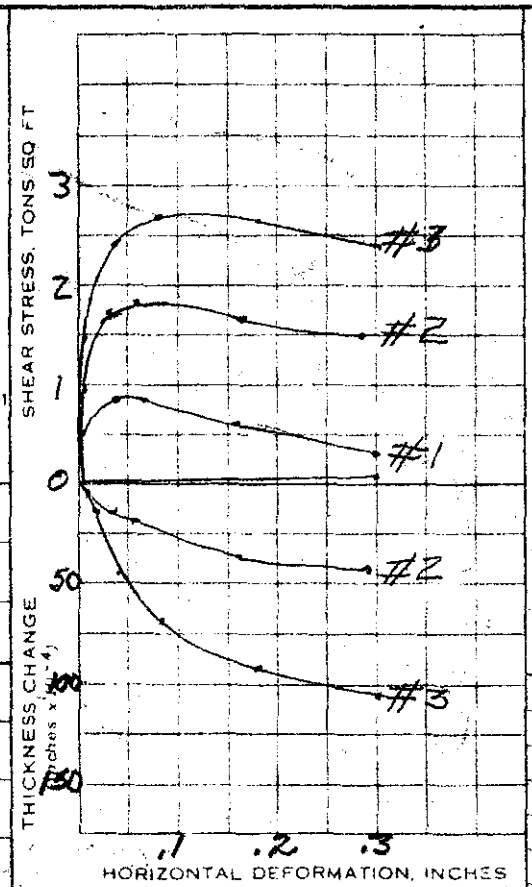
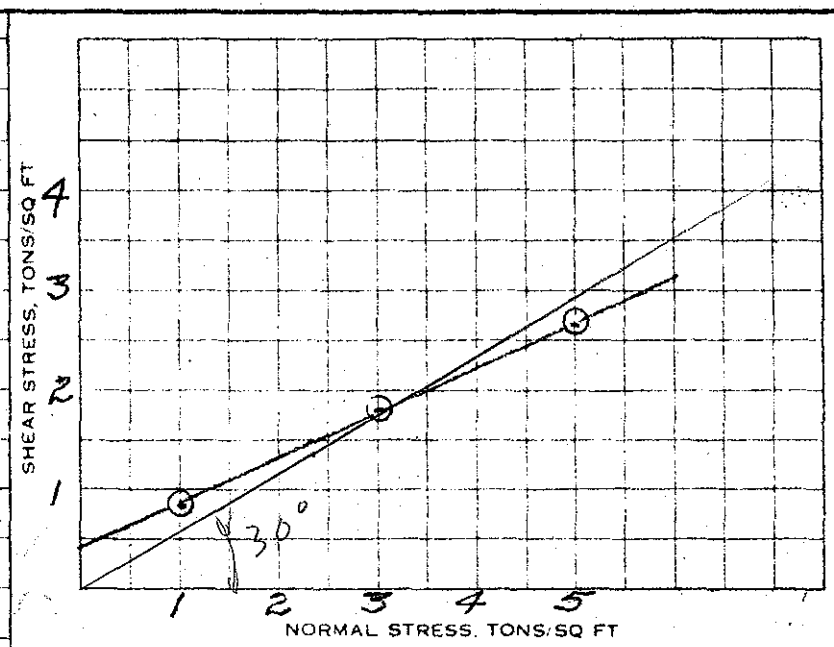
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)	
0.0	2.0		Dark gray and brown clay hard, dry			Cont. 1	4.50+
2.0	4.0		Gray brown clay, hard, dry			Cont. 2	4.50+
4.0	6.0		Same as above, hard, dry			Cont. 3	4.50+
6.0	8.0		Same as below			No sample	
8.0	10.0		Gray clayey sand, soft, dry			Jar 1	0.25
10.0	12.0		Brown clayey sand, w/layers brown clay w/cal nod, soft dry			Jar 2	0.25
12.0	14.0		Brown sand w/thin seams gray clay, v/soft			Jar 3	0.0
14.0	17.0		Washed, same as above			No sample	
17.0	18.0		Brown sand 17.0-17.5 No connt 17.5-18.0 100 blows - refusal			Jar 4 v/Dense	
18.0	20.0		Same as above, washed			No sample	
20.0	23.0		Sand, washed, same as above			No sample	
23.0	24.0		Brown and gray clay w/cal nod v/stiff			Jar 6	2.75
24.0	26.0		Same as above, hard			Cont. 4	4.00
26.0	28.0		Brown and gray silty fine sand w/clay lumps embedded stiff	"S" Test		Cont. 5 Dense $\phi = 34°$ $c = 0.16$ T/□'	1.00
28.0	30.0		Brown and gray silt, soft			Jar 7 56-58 Foot DEPTH	0.25
30.0	32.0		Brown and gray clay 30.0-30.5 No count 30.5-31.0 9 blows 31.0-31.5 8 blows v/stiff			Jar 8 v/stiff to Hard	3.75
32.0	34.0		Brown and gray clay, v/stiff			Cont. 6	2.75
34.0	36.0		Same as above, hard			Cont. 7	4.50
36.0	38.0		Brown and gray silty clay, stiff			Cont. 8 stiff	1.75
38.0	40.0		Same as above, stiff			Cont. 9	1.75
40.0	42.0		Brown and gray clay, hard			Cont. 10	4.25
42.0	44.0		Gray and brown clay, v/stiff			Cont. 11	3.25
44.0	46.0		Brown and gray clay, hard			Cont. 12 v/stiff to Hard	4.00
46.0	48.0		Gray and brown clay, hard			Cont. 13	4.00

ENG FORM 1836 1 MAR 61 (EM 1110-1-1801) TRANSLUCENT PREVIOUS EDITION MAY BE USED UNTIL EXHAUSTED. PROJECT Victoria Channel HOLE NO. 6ST-150

56 43 +13







Classification Gray-Brown Clay (CL)

LL 46.0	G
PL 19.1	D_{10}

Test No.	1	2	3
Initial Water Content, W_0 %	21.2	21.2	21.2
Dry Density Lbs/Cu Ft	105.1	103.2	99.5
Void Ratio, e_0			
Saturation, S_0 %			
Duration of Test (t o T)	65'	100'	180'
WC after Test, W_f %	24.8	23.7	26.2
Normal Stress, σ T/Sq Ft	1	3	5
Max. Shear Stress, τ T/Sq Ft	.84	1.83	2.66

Type of Test: Strain Control; ✓ Consolidated; Drained

Type of Specimen: undisturbed; 3 in. square; .75 in. thickness

SHEAR VALUES	Ø	TAN Ø	C, T/SQ FT
Maximum	24.47	.4550	.39
Ultimate			

Remarks:

Project Guadalupe River Channel to Victoria

Area

Boring No. 6ST-150 Sample No. 63-6357

Elev or Depth 42-44 Date Aug 1963

DIRECT SHEAR TEST REPORT

Plate No 2 ACE 973

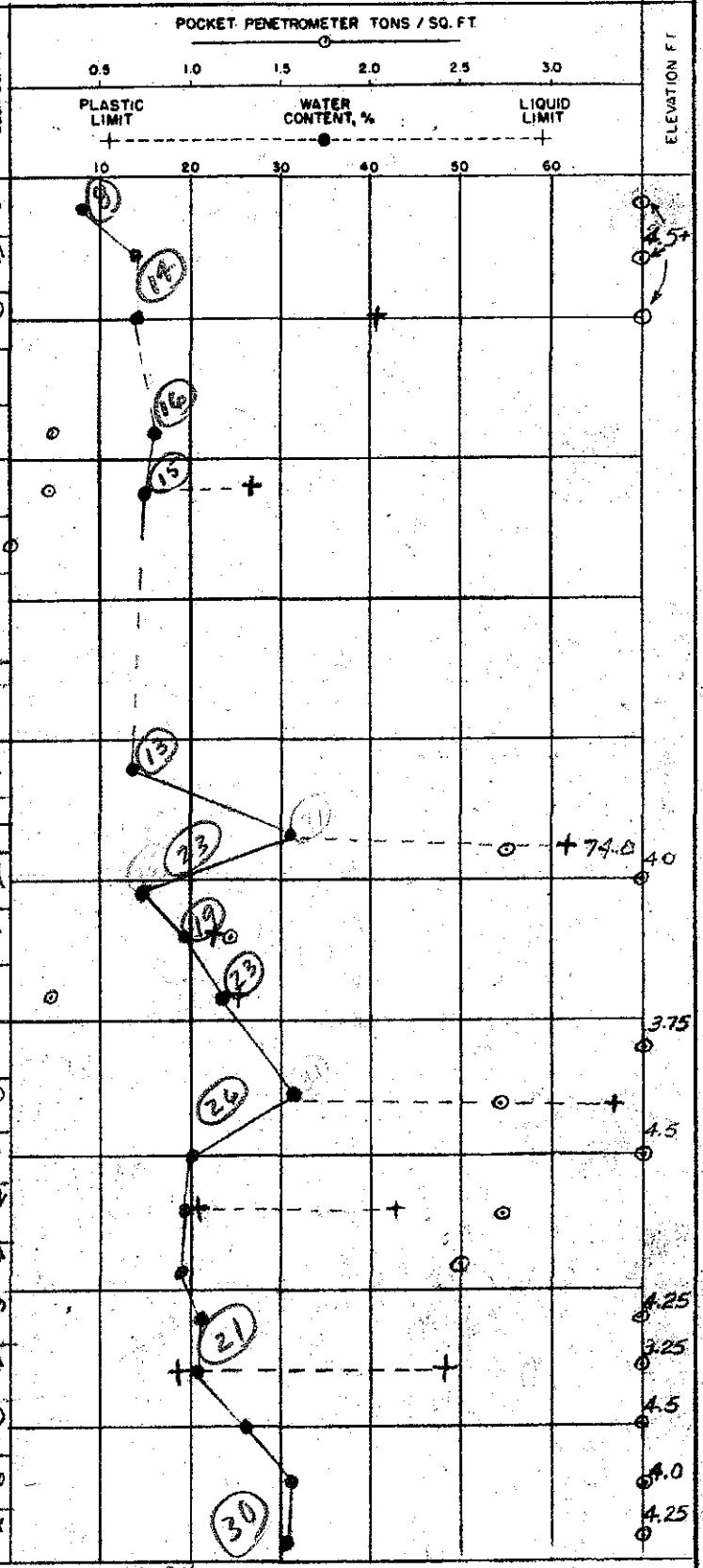
ENG FORM 1 FEB 58 2092 (TRANSLUCENT) (EM 1110-2-1906)

LOG OF BORING NO. 6 ST-150

Victoria Channel

TYPE: 6" shelby tube LOCATION:

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL (SURF. EL.)	BLOWS PER FT.	UNIT DRY WT. LBS/CU.FT.
	SC		Dark Gray, Clayey sand L.S.=9.5 hard 0-52-48		110.1
	CL		Gray-Brown, sandy clay L.S.=15.5 hard 0-27-73		112.1
5					112.5
	SM		Tan, silty sand L.S.=1.5 0-74-26		
10	CL		Brown, sandy clay soft L.S.=9.0 0-35-65		
	SM		Brown, silty sand v/soft 0-80-20		
15					
	SP Sm		Silty Sand 0-92-8		
20	SM		Silty Sand v/dense Refusal 2-85-13		
25	CH		Brown-Gray clay v/stiff 0-2-98 L.S.=24.5		137
	CL ML		Brown, sandy clayey silt L.S.=4.0 stiff 0-46-54		100.7
	CL		Brown, sandy clay, soft L.S.=5.0 w/shell 2-33-65		
30	CH		Brown, clay v/stiff-hard L.S.=23.0 0-7-93 17		89.0
35					108.1
	CL		Brown-Gray, L.S.=13.0 0-8-92		106.2
40			v/stiff-hard 0-2-98		106.1
					105.3
					110.1
45					99.0
	CH		Brown-Gray clay		90.6
50					93.4



COMPLETION DEPTH 80.0'
DATE: 11 June '63

DEPTH TO WATER IN BORING 42'8"

DATE

SWN 266(C)
22 AUG 62

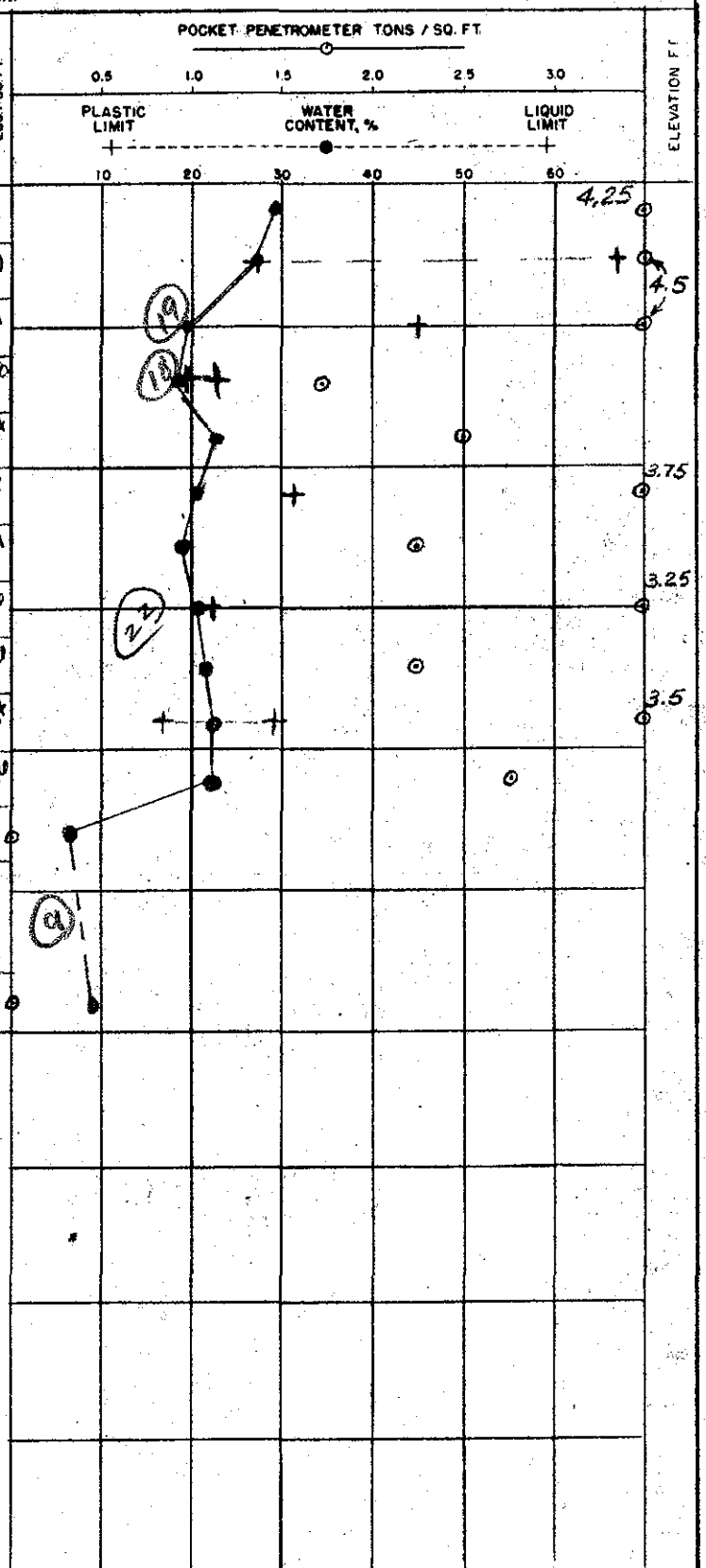
Victoria Channel

LOG OF BORING NO. 6 ST-150

TYPE: 6" Shelby Tube

LOCATION:

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL (SURF. EL.)	BLOWS PER FT.	UNIT DRY WT. LBS./CU.FT.
50					
	CH		Clay, Hard L.S-21.0 0-8-92		91.7
					93.9
55	CL		Brown, sandy clay hard L.S.-16.5 0-28-72		105.1
	CL ML		Buff, sandy clayey silt L.S:3.0 0-48-52		108.8
			Gray, sandy clay v/stiff L.S=10.0 0-16-84		102.4
60					101.4
			0-56-44		107.1
65	CL		L.S.=6.5 0-45-55		106.6
			0-54-46		104.6
			0-25-75		103.4
70			L.S=6.5 0-44-56		103.6
			Brown, silty		
75	SM		Gravelly sand 17-54-29		
			30-51-29		
80					
85					
90					
95					
100					



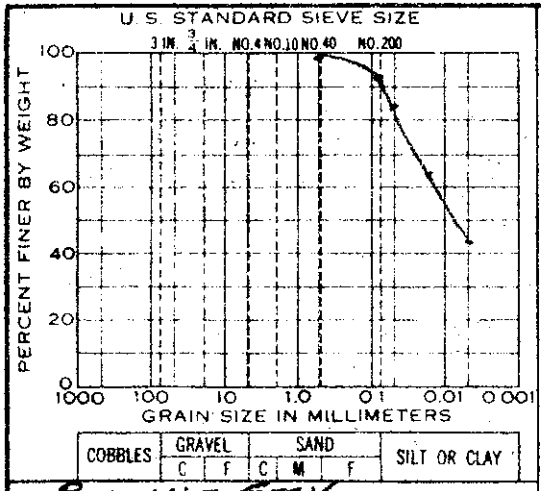
COMPLETION DEPTH 80.0'

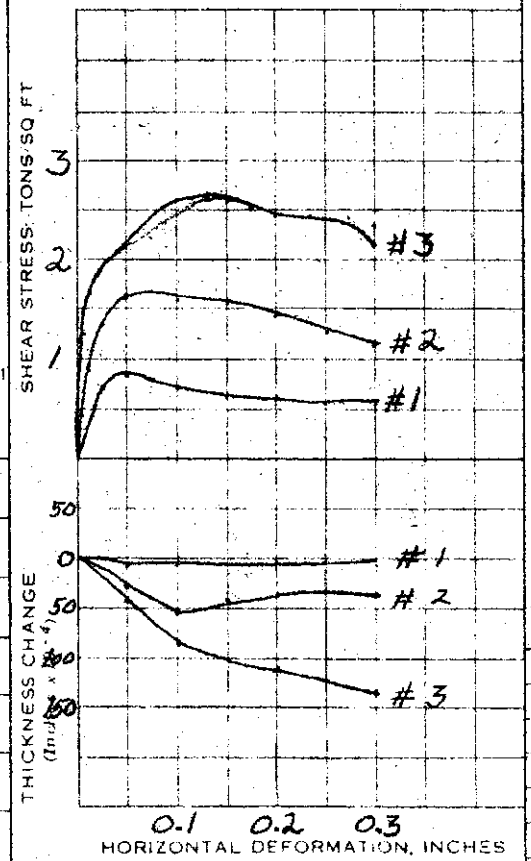
DATE 11 June '63

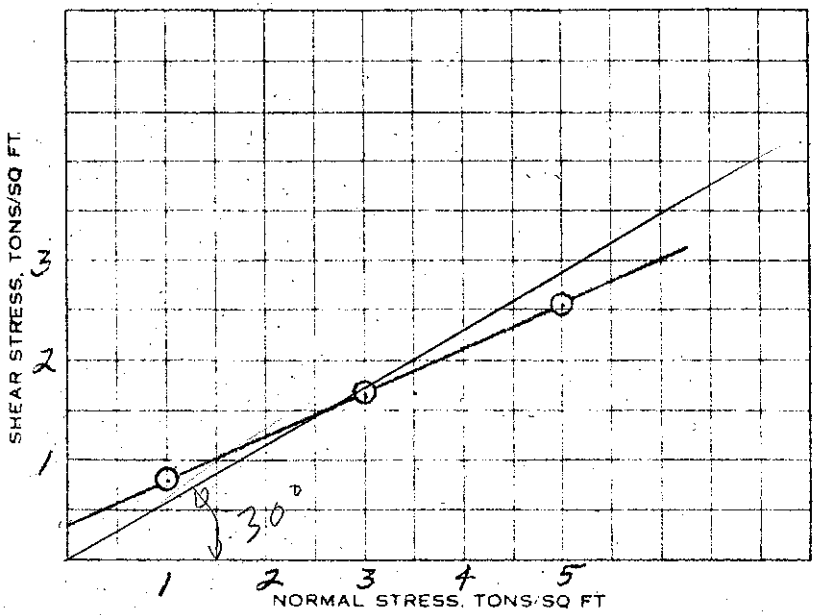
DEPTH TO WATER IN BORING 42'8"

DATE

SWN 266(C)
22 AUG 62







Classification Brown - Gray Clay (CL)

LL 43.2	G
PL 17.8	D_{10}

Test No.	1	2	3
Initial Water Content, W_0 %	19.4	19.4	19.4
Dry Density Lbs/Cu Ft	104.7	105.4	103.6
Void Ratio, e_0			
Saturation, S_0 %			
Duration of Test (t_0 τ)	110'	135'	210'
WC after Test, W_f %	23.7	23.6	21.8
Normal Stress, σ T/Sq Ft	1	3	5
Max. Shear Stress, τ T/Sq Ft	80	1.67	2.53

Type of Test: Strain - Control

Rate .001 in/min. Consolidated Drained

Type of Specimen: undisturbed

3 in. square

.75 in. thickness

SHEAR VALUES	Ø	TAN Ø	C, T/SQ FT
Maximum	23.38	.4325	.38
Ultimate			

Remarks:

Project Guadalupe River Channel to Victoria

Area

Boring No. 65T-150 Sample No. 63-6354

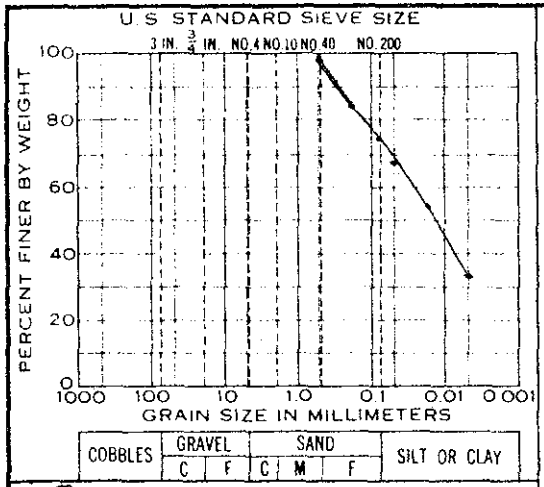
~~Elev. or~~ Depth 36'-38' Date July 1963

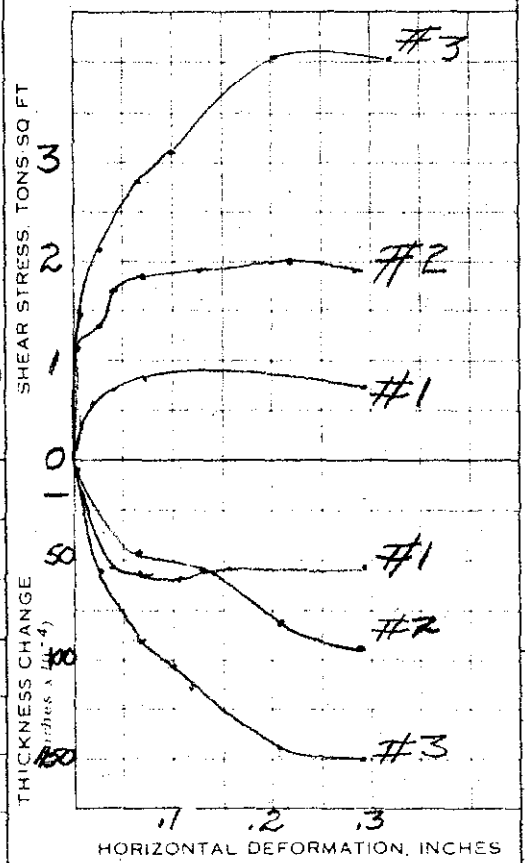
DIRECT SHEAR TEST REPORT

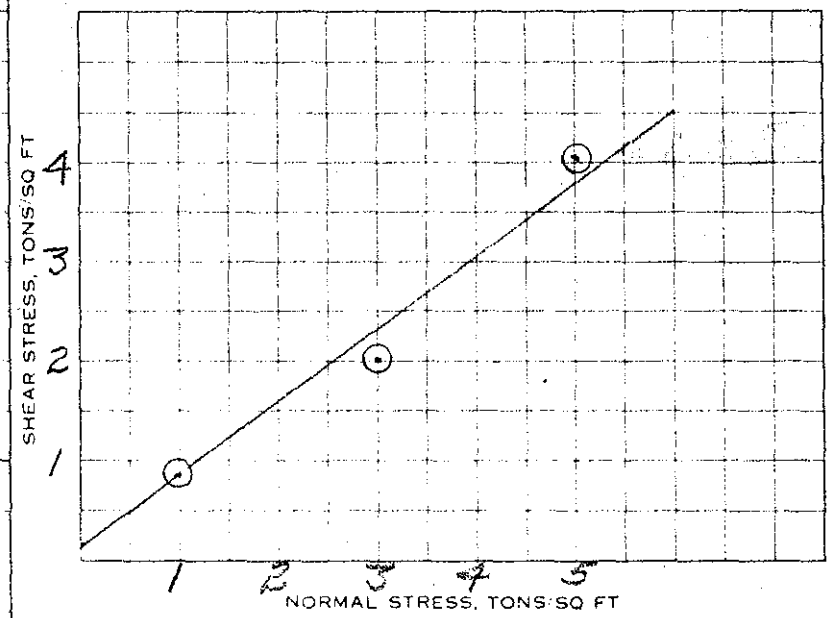
Plate No. 1

DLP 9-73

ENG FORM 1 FEB 58 2092 (TRANSLUCENT) (EM 1110-2-1906)







Classification Gray Sandy Clay (CL)

LL 29.4 G

PL 17.6 D_{10}

Test No.	1	2	3
Initial Water Content, W_0 %	22.6	22.6	22.6
Dry Density Lbs/Cu Ft	102.9	103.4	100.6
Void Ratio, e_0			
Saturation, S_0 %			
Duration of Test ($t_{0.2}$)	155'	305'	330'
WC after Test, W_f %			
Normal Stress, σ T/Sq Ft	1	3	5
Max. Shear Stress, τ T/Sq Ft	.79	2.00	4.09

Type of Test: Strain Control; ✓ Consolidated; Drained

Type of Specimen: undisturbed; 3 in. square; .75 in. thickness

SHEAR VALUES	Ø	TAN Ø	C, T/SQ FT
Maximum	38.60	.798	.10
Ultimate			

Remarks:

Project Guadalupe River Channel to Victoria

Area

Boring No. 65T-150 Sample No. 63-6370

Elev or Depth 68-70 Date July 1963

DIRECT SHEAR TEST REPORT

Plate No. 3

DLR 973

ENG FORM 1 FEB 58 2092 (TRANSLUCENT) (EM 1110-2-1906)