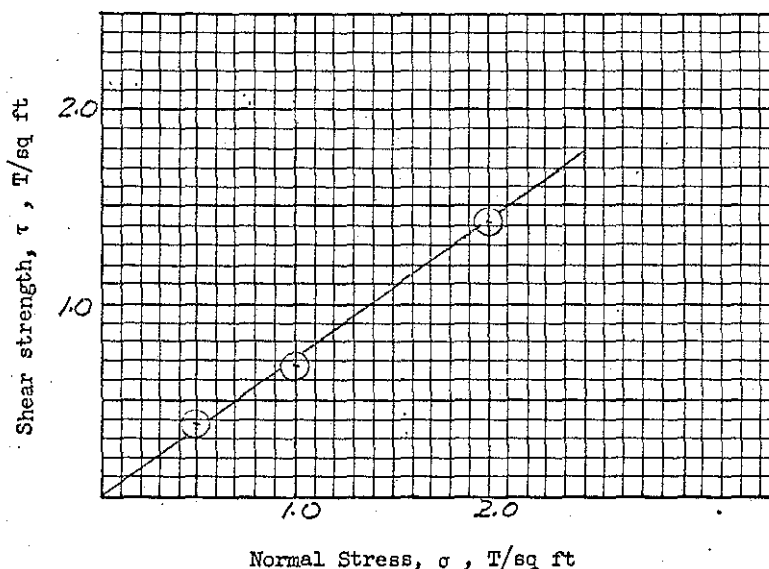
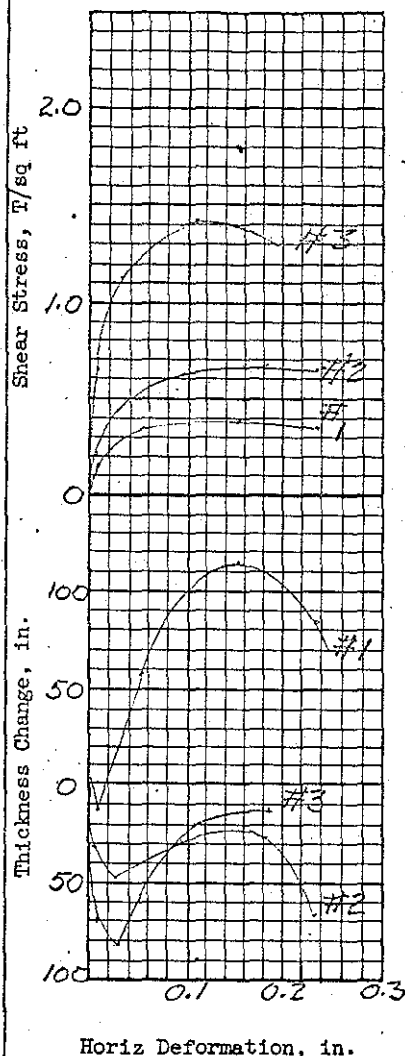


DRILLING LOG		DIVISION Southwestern		INSTALLATION Galv Dist, Eng Div		SHEET OF SHEETS	
1. PROJECT Channel to Evadale, Neches River				10. SIZE AND TYPE OF BIT			
2. LOCATION (Coordinates or Station)				11. DATUM FOR ELEVATION SHOWN (TBM or MSL)			
3. DRILLING AGENCY U. S. Army Corps of Engineers				12. MANUFACTURER'S DESIGNATION OF DRILL			
4. HOLE NO. (As shown on drawing title and file number)		3ST-5W & HA-5B		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		DISTURBED 9 Jars UNDISTURBED	
5. NAME OF DRILLER				14. TOTAL NUMBER CORE BOXES			
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.				15. ELEVATION GROUND WATER		16. DATE HOLE 11 Feb	
7. THICKNESS OF OVERBURDEN				17. ELEVATION TOP OF HOLE		COMPLETED 11 Feb 1966	
8. DEPTH DRILLED INTO ROCK				18. TOTAL CORE RECOVERY FOR BORING %			
9. TOTAL DEPTH OF HOLE 36.0				19. SIGNATURE OF INSPECTOR			
ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g	
			HA-5B 0.0-10.0 - 4 Jars				
0.0	1.0		Tan silty sand, fine grained loose, wet, w/roots			Jar 1	
1.0	5.0		Gray and tan sandy clay, med wet			Jar 2	
5.0	6.5		Tan silty sand fine grained loose, wet			Jar 3	
6.5	10.0		Same as above, slightly clayey			Jar 4	
			3ST-5W - 10.0-36.0 5 Jars				
10.0	12.0		Tan silty sand fine grained slightly clayey, saturated, loose			Jar 5	
12.0	14.0		Tan sand, medium grained, loose, saturated 12.0-12.5 2 blows 12.5-13.0 4 blows 13.0-13.5 7 blows			Jar 6	
14.0	20.0		Washed, same as above				
20.0	22.0		Tan sand, medium grained medium dense, changed to Lt. Gray sand, medium grained, clean @ 21.3'			Jar 7	
22.0	25.0		Washed, same as below				
25.0	26.5		No recovery of sample same as below 25.0-25.5 4 blows 25.5-26.0 12 blows 26.0-26.5 25 blows				
26.5	28.5		Washed, no sample				
28.5	30.0		White sand, medium dense, medium grained, clean, saturateed			Jar 8	
30.0	36.0		White sand, medium grained, clean saturated, washed, from 30.0-36.0 unable to keep hole open due to lack of casing. Sample taken was wash sample but appeared to be the same as from 28.5-30.0			Jar 9	
			BOTTOMED				
			Depth of water 5.5' Height of bank 4.5'				



Test No.		1	2	3	
Initial	Water content	w_o	%	%	%
	Void ratio	e_o			
	Saturation	S_o	%	%	%
	Dry density lb/cu ft	γ_d	108	111	103
Void ratio after consolidation		e_c			
Time for 50% consolidation, min		t_{50}			
Final	Water content	w_f	%	%	%
	Void ratio	e_f			
	Saturation	S_f	%	%	%
Actual time to failure, min.		t_f	260	425	380
Normal stress T/sq ft		σ	0.5	1.0	2.0
Maximum shear strength, T/sq ft		τ	0.38	0.68	1.42

Shear Values

$$\phi' = 35.38$$

$$\tan \phi' = 0.710$$

$$c' = 0.0$$

Test Type (Check One)

☐ Controlled, stress

☒ Controlled, strain

Type of Specimen	Remolded	3	in. Square	0.75	in. Thickness
Classification	Gray silty sand (sm-sp)				
LL	N-P	PL	PI	D ₁₀	
Remarks	Composite sample from holes 3ST-1 & 3ST-5		Project Neches River channel to Evadale		
	sample Puddled in shear box		Area		
			Boring No.	Sample No.	
			Depth 5-30	Date May 1966	
DIRECT SHEAR TEST REPORT					

Plate 1

SWG Form 267(C)
28 Jan 1965

PROJECT: Neches River

LOCATION: Channel to Evadale

TEST DATA SUMMARY

BORING NO. 3st-5

DATE DRILLED _____

FIELD NO.	DEPTH	CLASSIFICATION ELEVATION TOP BORING _____	SYMBOL	CONSISTENCY	POCKET (1) PENETROMETER	STAN. PENET. BLOWS/FT (2)	MOISTURE CONTENT %	DRY DENSITY p. c. f.	L.L.	P.L.	BAR L.S.	SIEVE ANALYSIS							
												PERCENT			INIT. WT.	ACC. WT. RTND. SIEVE NO. (3)			
												GRVL	SAND	FINES		NO. 4	NO. 10	NO. 40	NO. 200
J-1	0-1	Brown silty sand 0-1	SM				17.2				0.0	0	72	28	50	0	0	0	36
J-2	1-5	Brown sandy clayey silt 1-5	SM				27.7				4.0	0	30	70	50	0	0	0	15
J-3	5-6 ²	Brown silty sand 5-12	SM				26.5				0.0	0	82	18	50	0	0	0	41
J-4	6 ³ -10					(25)	24.3												
J-5	10-12						25.6				2.0	0	60	40	50	0	0	0	30
J-6	12-14	Brown, Gray sand 12-36	SP	D		11	24.1												
X	14-20																		
J-7	20-22					(2)	17.3												
X	22-25																		
X	25-26 ³			VD			37												
X	26 ³ -28 ³																		
J-8	28 ³ -30						23.5				0.0	0	98	2	50	0	0	17	49
J-9	30-36						24.1												
		Height of Bank 4.5																	
		Water depth 5.5																	

KEY: CONSISTENCY - COHESIVE SOILS
VS S H ST VST H VL L H D VD
Very Soft Soft Medium Stiff Very Stiff Hard Very Loose Loose Medium Dense Very Dense

(1) Tons/Sq. Ft. Unconfined Compressive Strength
(2) Split Barrel Sampler
(3) Acc. Wt. Rtd ÷ Init. Wt. x 100 = % Rtd.

BORING NO. 3st-5