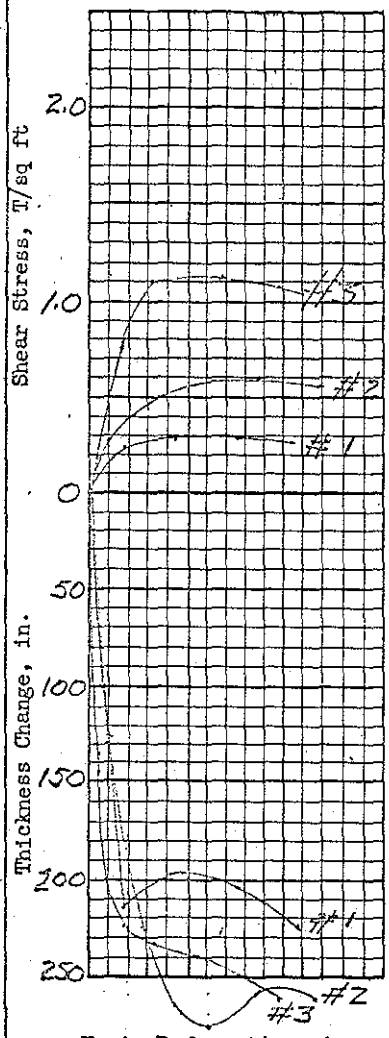
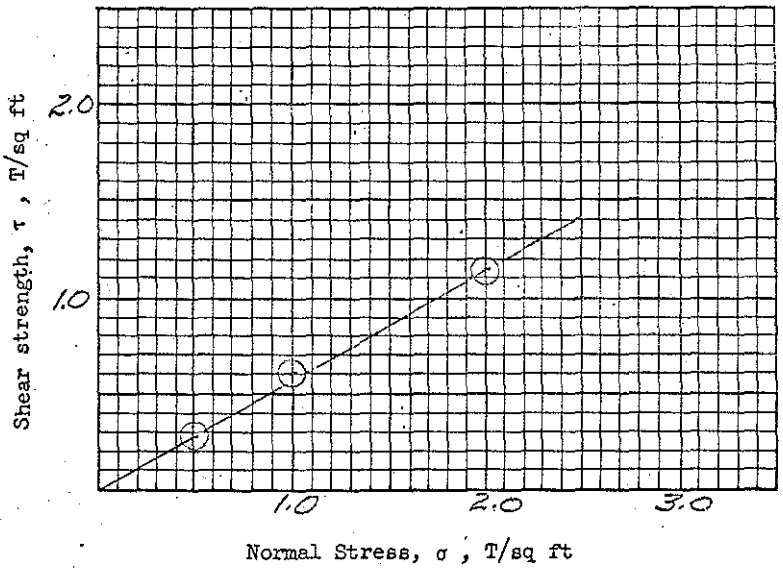
Hole No. 3ST-20

DRILLING LOG	DIVISION Southwestern	INSTALLATION Galv Dist, Eng Div	SHEET OF SHEETS

1. PROJECT Neches River - Channel to Evadale	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-20	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED 6 Jars — UNDISTURBED
5. NAME OF DRILLER Curtis	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED 6 Jars — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE 30.0	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
0.0	11.0		Water			
11.0	12.0		Gray sandy clay org. soft			Jar 1
12.0	14.0		Gray sand fine organic			Jar 2
14.0	16.0		Gray sand, no recovery 14.0-14.5 No count 14.5-15.0 2 blows 15.0-15.5 6 blows			Jar 3
16.0	18.0		Same as below, washed			
18.0	20.0		Gray sand, tr org. no recovery 18.0-18.5 No count 18.5-19.0 7 blows 19.0-19.5 12 blows			Jar 4
20.0	23.0		Same as above, washed			
23.0	25.0		Gray sand fine org decayed wood, washed 23.0-23.5 No count 23.5-24.0 16 blows 24.0-24.5 15 blows 24.5-25.0 No count			Jar 5
25.0	30.0		Same as above, unable to drive, could not set casing washed			Jar 6
			BOTTOMED			





Test No.			1	2	3	
Initial	Water content	w_o	%	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density lb/cu ft	γ_d	110	109	108	
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	200	420	400	
Normal stress T/sq ft		σ	0.5	1.0	2.0	
Maximum shear strength, T/sq ft		τ	0.28	0.60	1.13	

Shear Values

ϕ' = 29.50

tan ϕ' = 0.565

c' = 0.0

Test Type (Check One) ☐ Controlled, stress ☑ Controlled, strain

Type of Specimen Remolded	3 in. Square	0.75 in. Thickness
Classification Gray sand (SP)		
LL NP	PL	PI	D_{10}

Remarks composite sample from holes 35T-18-20 & 23	Project Neches River channel to Evadale
	Area
	Boring No. / Sample No.
sample puddled in shear ring	Depth ET 15-35 / Date May 1966

DIRECT SHEAR TEST REPORT

ENG FORM 1 MAY 63 2092 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) C 3437

SWG Form 267(C)
28 Jan 1965

PROJECT: Neches River

LOCATION: Channel to Evadale

TEST DATA SUMMARY

BORING NO. 3st-20

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 GRVL	SAND	FINES	INIT. WT.	ACC. WT. RTND. SIEVE NO. (3) NO. 4	NO. 10	NO. 40	NO. 200
	0-11	Water																	
J-1	11-12	Gray sandy silt 11-12	ML				35.6				0.0	0	48	52	50	0	1	2	24
J-2	12-14	Gray silty sand 12-14	SM				27.2				0.0	0	68	32	50	0	0	0	34
J-3	14-16	Gray sand 14-30	SP	M		8	25.6												
	16-18																		
J-4	18-20			VD		19	22.4				0.0	0	100	0	50	0	0	18	50
	20-23																		
J-5	23-25			VD		31	22.7												
J-6	25-30						24.6												

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

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

BORING NO. 3st-20