Hole No. 3ST-18

DRILLING LOG

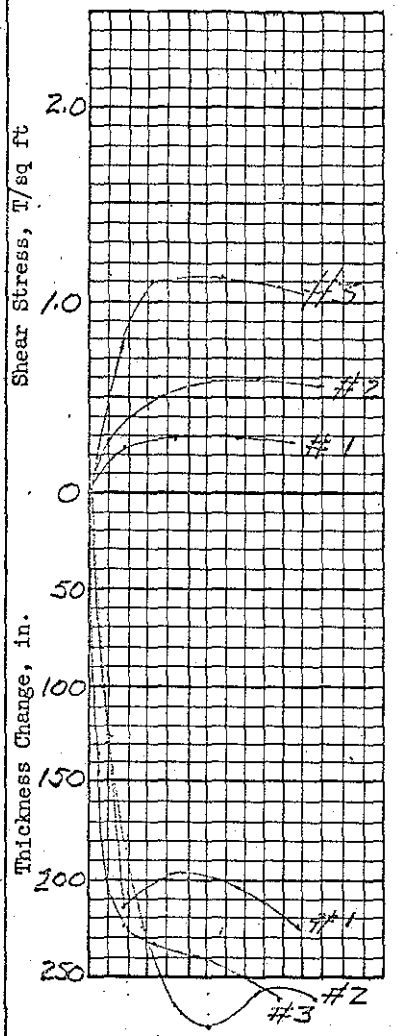
DIVISION: Southwestern

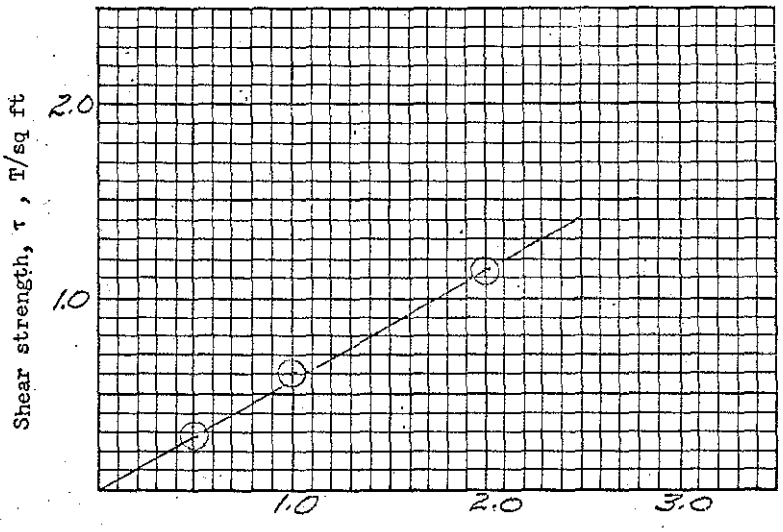
INSTALLATION: Galv Dist, Eng Div

SHEET OF SHEETS

1. PROJECT: Neches River - Channel to Evadale
2. LOCATION (Coordinates or Station)
3. DRILLING AGENCY: U. S. Army Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): 3ST-18
5. NAME OF DRILLER: Curtis
6. DIRECTION OF HOLE: ☐ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE: 35.0
10. SIZE AND TYPE OF BIT
11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
12. MANUFACTURER'S DESIGNATION OF DRILL
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED 5 Jars; UNDISTURBED
14. TOTAL NUMBER CORE BOXES
15. ELEVATION GROUND WATER
16. DATE HOLE: STARTED 4 Mar; COMPLETED 4 Mar 1966
17. ELEVATION TOP OF HOLE
18. TOTAL CORE RECOVERY FOR BORING %
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	6.7		River Bank			
6.7	11.9		Water			
11.9	15.0		Sandy clay, org. 11.9 -13.0 weight of 1 rod and tube 13.0-13.5 weight of hammer and rod 13.5-14.0 1 blow 14.0-14.5 2 blows			Jar 1
15.0	18.0		Same as below, washed			
18.0	20.0		Gray sand, thin layer of clay at 19.0 18.0-18.5 no count 18.5-19.0 4 blows 19.0-19.5 6 blows			Jar 2
20.0	23.0		Same as below, washed			
23.0	25.0		Gray sand, decayed wood, gravel no recovery, washed sample 23.0-23.5 no count 23.5-24.0 8 blows 24.0-24.5 10 blows 24.5-25.0 no count			Jar 3
25.0	28.0		Same as above, washed			
28.0	30.0		Gray sand and gravel, washed sample 28.0-28.5 no count 28.5-29.0 7 blows 29.0-29.5 8 blows			Jar 4
30.0	35.0		Gray sand, no drive, unable to set casing, washed sample BOTTOMED Water depth 5.2 Note - Unable to get casing below 30.0			Jar 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	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

sample puddled in shear ring

Project Neches River channel to Evadale

Area

Boring No. | Sample No.

Depth ET 15-35 | Date May 1966

DIRECT SHEAR TEST REPORT

ENG FORM 2092 1 MAY 63 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-18

DATE DRILLED April 1964

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
	0-6'																		
	6'-11'																		
J-1	11'-15'	Brown sandy silt 11.5-15	ML	M		3	36.7		39		5.0	0	46	54	97	0	0	5	23
X	15-18	Gray silty sand 15'-20'	SM																
J-2	18-20			D		10	25.5				0.0	0	90	10	97	0	0	10	45
X	20-23	Gray sand 20-35	SP																
J-3	23-25			D		18	17.4	(2)											
X	25-28																		
J-4	28-30			D		15	19.3												
J-5	30-35						25.2				0.0	0	98	2	50	0	0	20	49
		Height of Bank 6.7'																	
		Water depth in River 5.2'																	

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-18