TEST DATA SUMMARY

SWDGL REPORT NO. 7281

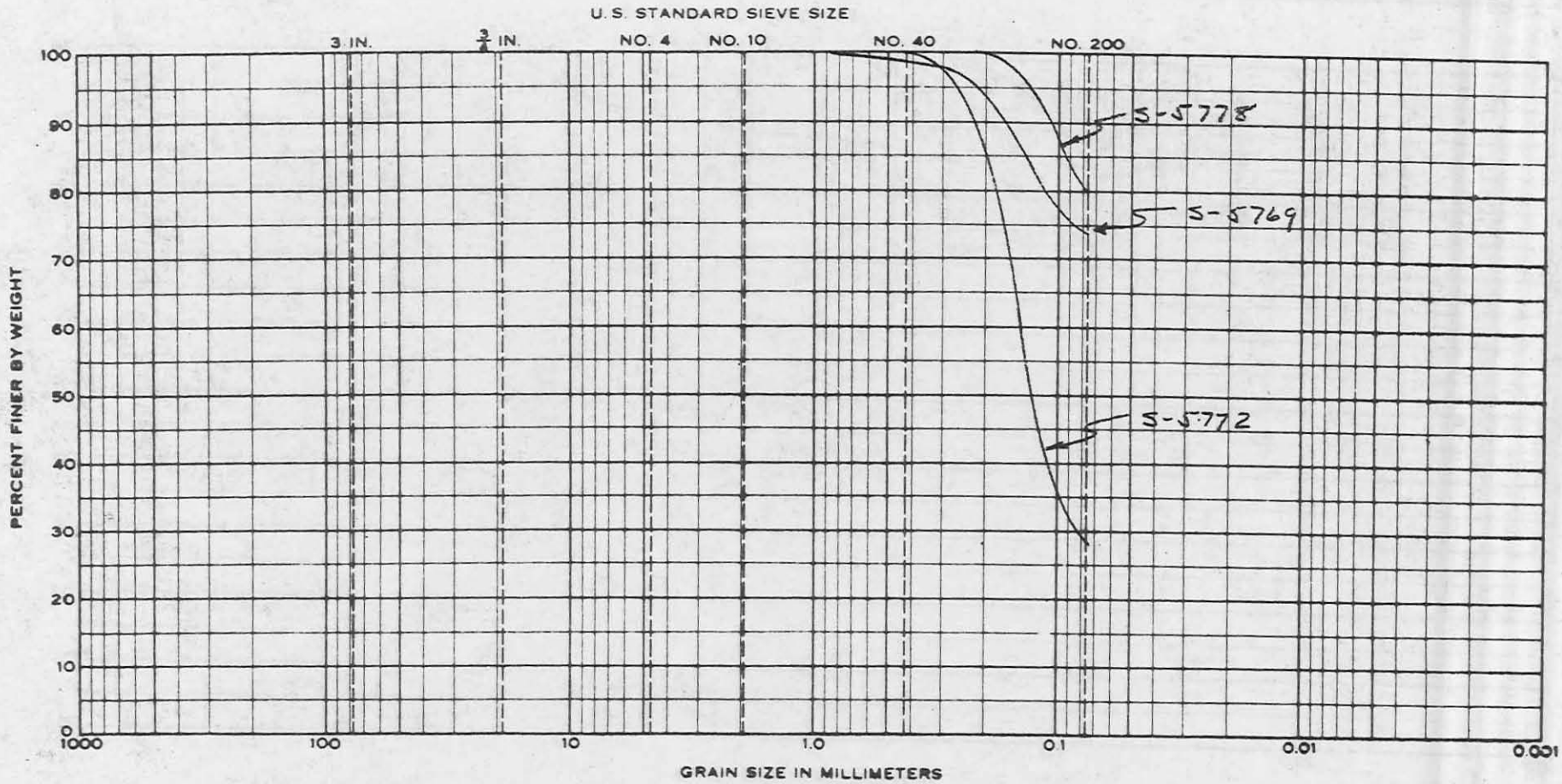
FEATURE FOUNDATION MATERIAL

Trinity River
Lock and Dam Site No. 6

BORING NO.	SAM. NO.	DEPTH OR ELEV. OF SAMPLE	LABORATORY CLASSIFICATION	MECHANICAL ANALYSIS: GRAVEL %	SAND %	FINES %	D_{10}	ATTERBERG LIMITS: LL	PL	SPECIFIC GRAVITY G	NAT. WATER CONT. %	NATURAL DRY DENSITY LBS/CU FT	COMPACTION DATA: OPT. 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_m T/SQ FT	σ_I T/SQ FT	C T/SQ FT	ϕ DEGREES	PERMEABILITY: e	K FT/MIN.	CONSOLIDATION DATA: P_o T/SQ FT	P_c T/SQ FT	C_c	t_{50}*	REMARKS
6ST-6-6																																	
S-5	778	10.0-11.0	CL	0	20	80		48	13		15.4	113				113	15.4			UC	4.9 x 7.5		0.0	4.5									LS = 16
				Lt. gray and yellow mottled CLAY, hard.																													
S-5	779	30.0-32.0	CL-ML								32.2	88				90	29.8			UC	5.2 x 7.9		0.0	5.6									
				Bluish-gray silty CLAY, hard.																													
S-5	780	38.0-40.0	CL-ML								37.0	83				83	36.2			UC	5.3 x 7.8		0.0	8.7									
				Bluish-gray silty CLAY, hard.																													
6ST-6-7																																	
S-5	781	2.0-4.0	CL	9	19	72		68	14	2.65	22.5	101																					
				Yellowish-brown to very dk. gray sandy CLAY, stiff.											.718	96	24.5	25.6	90	DS-S	3 x 3 x 0.5	1			0.2	14.6							LS = 21
															.704	97	24.5	24.8	92	"	"	2											
															.713	97	24.3	22.2	90	"	"	3											
S-5	782	4.0-6.0	CH	0	25	75		52	13	2.67	16.8	113																			0.14		LS = 18
				Lt. gray and reddish-yellow sandy CLAY, hard.																													
S-5	783	46.0-48.0	SHALY CLAY								26.7	97				98	25.9			UC	2.0 x 3.3		0.0	11.0									
				Lt. olive-brown and bluish-gray SHALY CLAY, montmorillonitic, slickensided.																													
6ST-6-8																																	
S-5	784	22.0-24.0	CL-ML								25.9	95				95	25.9			UC	5.3 x 7.6		0.0	1.4									
				Olive and blue silty CLAY, montmorillonitic.																													
S-5	785	26.0-28.0	ML-CL								27.8	94				95	27.1			UC	5.4 x 8.5		0.0	2.6									
				Blue clayey SILT, montmorillonitic.																													
S-5	786	33.5-35.5	ML-CL								26.9	95				95	26.9			UC	5.7 x 7.9		0.0	3.4									
				Olive clayey SILT, montmorillonitic.																													
S-5	787	35.5-37.5	CL-ML								26.5	95				96	26.0			UC	5.7 x 9.2		0.0	4.1									
				Olive silty CLAY, montmorillonitic.																													
6ST-6-10																																	
S-5	788	24.0-26.0	CL	0	16	84		44	21		28.9	96				97	27.9			UC	5.4 x 8.8		0.0	2.2									LS = 8
				Bluish-gray CLAY, montmorillonitic.																													
6ST-6-12																																	
S-5	789	8.0-10.0	CH	0	15	85		68	14	2.64	27.6	94																					LS = 21
				Dk. gray CLAY, stiff; few platy calcareous nodules to ¼" size.											.981	83	31.6	32.8	85	DS-S	3 x 3 x 0.5	1			0.1	15.1							
															1.015	82	34.1	30.1	89	"	"	2											
															.932	85	27.2	28.6	77	"	"	3											

NOTE: Materials described above as "silty" or "silt" are typically low-P.I. materials having some structural strength and characterized by friableness in varying degrees.

Triaxial Compression
UC – Unconfined Compression
DS – Direct Shear
UU – Unconsolidate Undrained
Consolidated Drained
CU – Consolidated Undrained
* Values at Pressure
T/SQ FT



COBBLES	GRAVEL		SAND			SILT OR CLAY
	Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Elev or Depth	Classification	Nat WC	LL	PL	PI	LS	Hole No.
S-5769	6.0-8.0	Sandy CLAY (CL)		50	12	38	16	6ST-6-4
S-5772	2.0-4.0	Clayey SAND (SC)		30	10	20	8	6ST-6-5
S-5778	10.0-11.0	CLAY (CL)		48	13	35	16	6ST-6-6

Project Trinity River Lock and Dam Site No. 6

FOUNDATION MATERIAL

Area GALVESTON DISTRICT

Boring No. 6ST-6-4, -5 & -6

Date NOV 1961

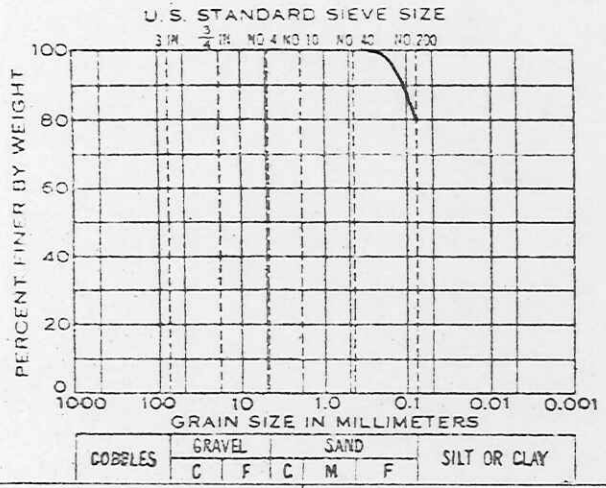
GRADATION CURVES

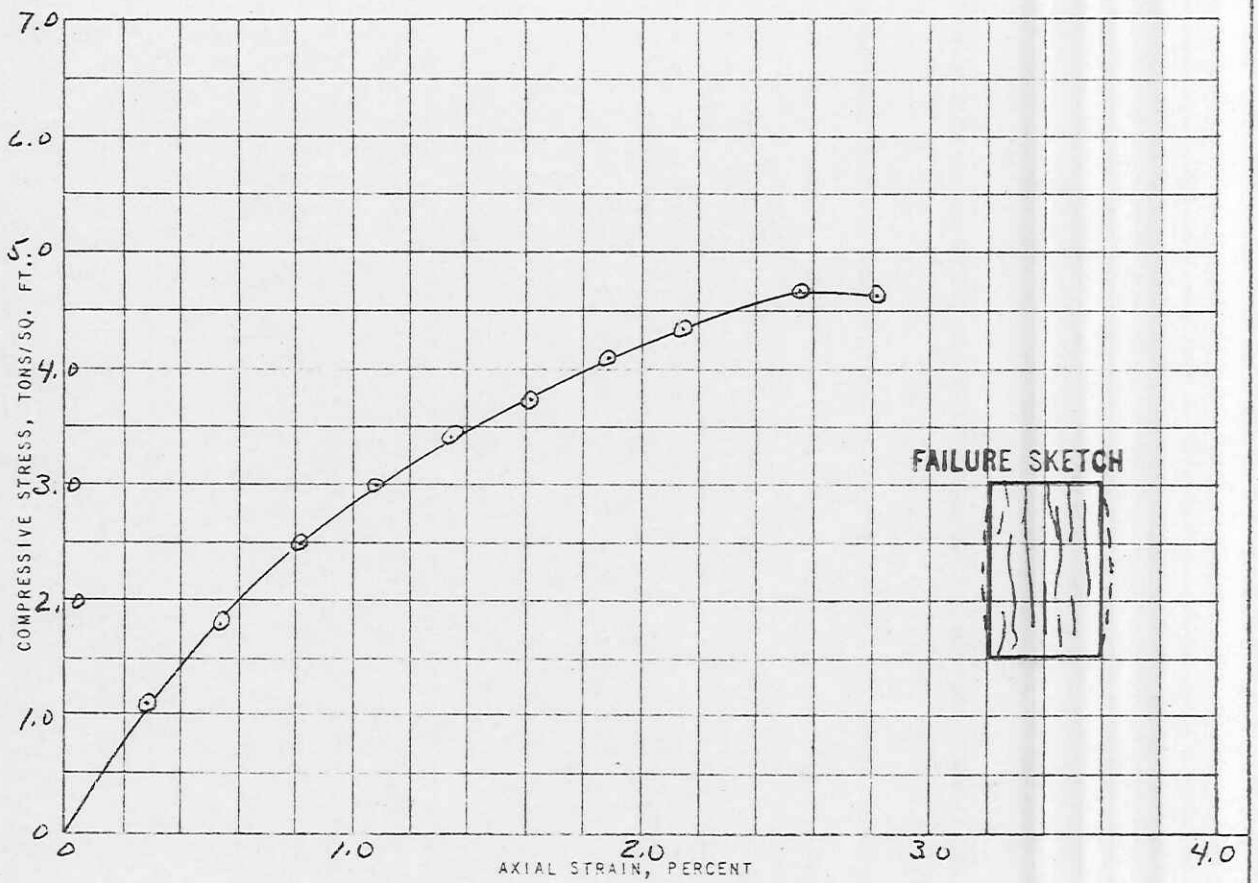
PLATE NO. 1

SWDGL REPORT NO. 7281

FORM 2 DEC 54 2087

SWD FORM 558-C
REV 10 MAR 52





LL	48	G	
PL	13	D_{10}	
X	UNDISTURBED		REMOLDED
WATER CONTENT, W_o		%	15.4
DRY DENSITY		LBS./CU.FT.	113
VOID RATIO e_o			
SATURATION, S_o		%	
UNCONFINED COMP. STRENGTH q_u		TONS/SQ.FT.	4.7
X	q_u ADJUSTED, A.S.T.M. C42-44	TONS/SQ.FT.	4.5
SPECIMEN DIAMETER		INCHES	4.9
SPECIMEN HEIGHT		INCHES	7.5
Stress - CONTROL, 60 lbs./min.			

REMARKS:

PROJECT Trinity River - Lock and Dam Site No. 6 FOUNDATION MATERIAL

AREA GALVESTON DISTRICT

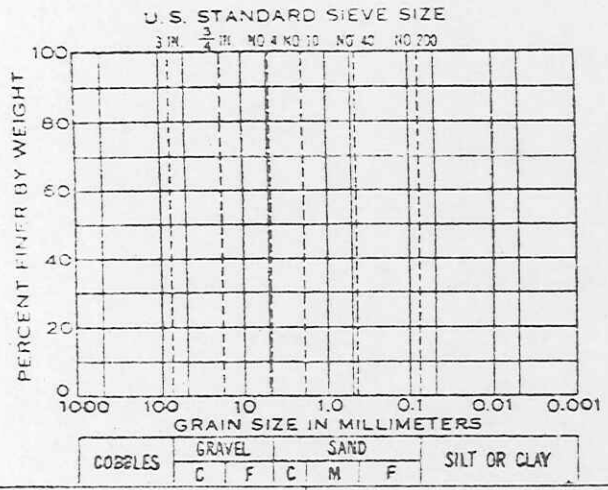
BORING NO. 65T-6-6 | SAMPLE NO. S-5778 | ELEV. OR DEPTH 10.0-11.0 | DATE NOV 1961

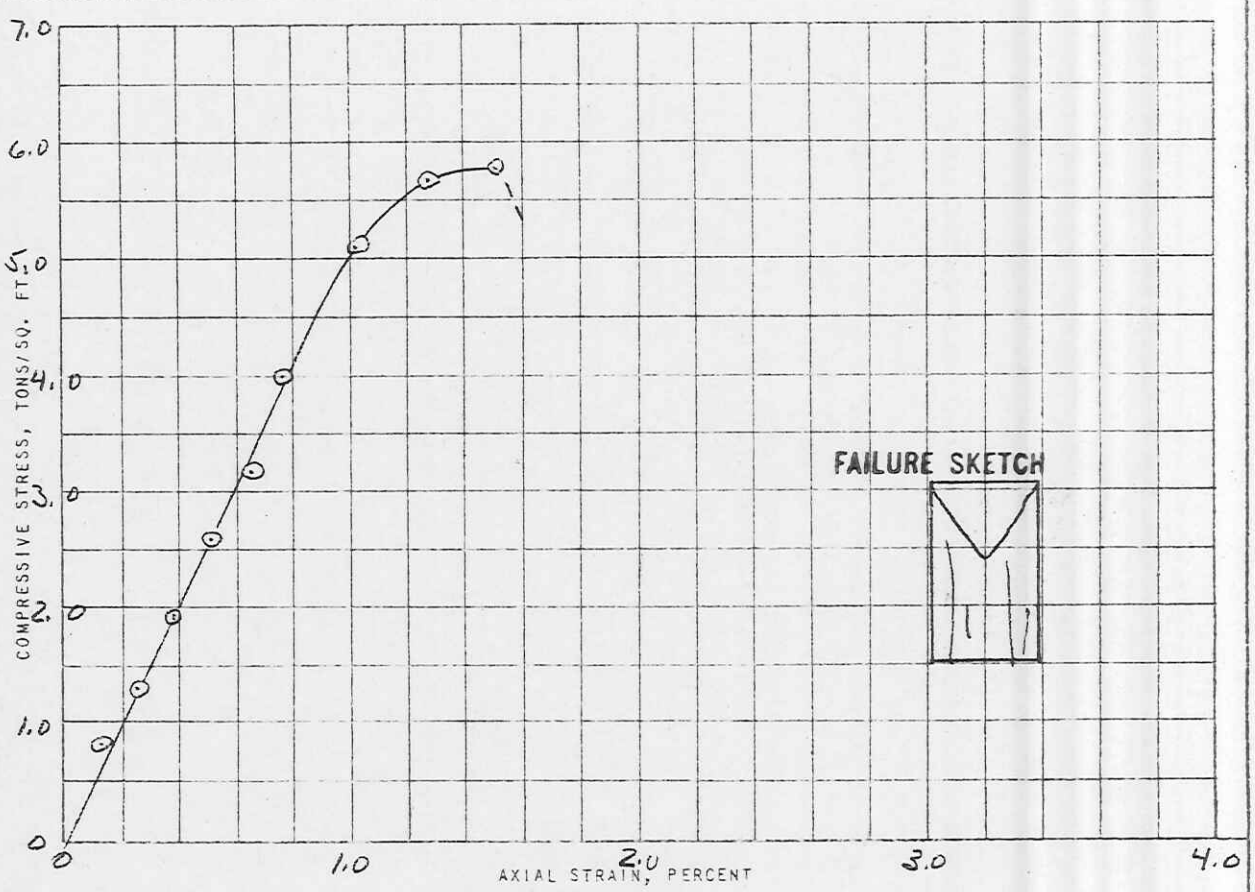
UNCONFINED COMPRESSION TEST

PLATE NO. 13

SWDGL REPORT NO. 7281

SWD FORM 558-C
REV 10 MAR 52





LL		G	
PL		D_{10}	
X	UNDISTURBED		REMOLDED
WATER CONTENT, W_o		%	29.8
DRY DENSITY		LBS./CU.FT.	90
VOID RATIO e_o			
SATURATION, S_o		%	
UNCONFINED COMP. STRENGTH q_u		TONS/SQ.FT.	5.8
X	q_u ADJUSTED, A.S.T.M. D42-44	TONS/SQ.FT.	5.6
SPECIMEN DIAMETER		INCHES	5.2
SPECIMEN HEIGHT		INCHES	7.9
Stress - CONTROL, 1200 lbs./min.			

REMARKS:

PROJECT Trinity River - Lock and Dam Site No. 6 FOUNDATION MATERIAL

AREA GALVESTON DISTRICT

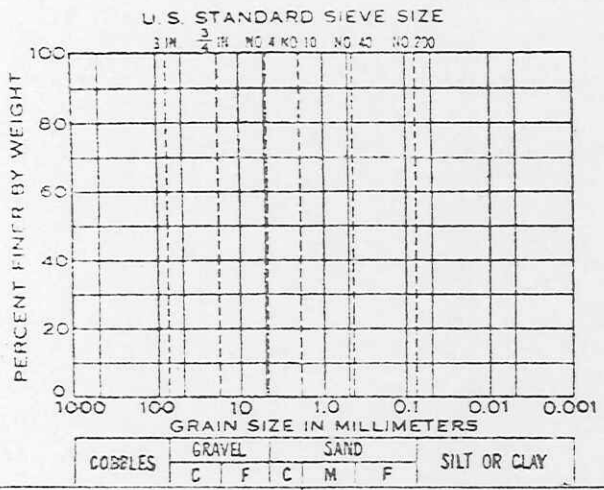
BORING NO. 6ST-6-6 | SAMPLE NO. 5-5779 | ELEV. OR DEPTH 30.0-32.0 | DATE NOV 1961

UNCONFINED COMPRESSION TEST

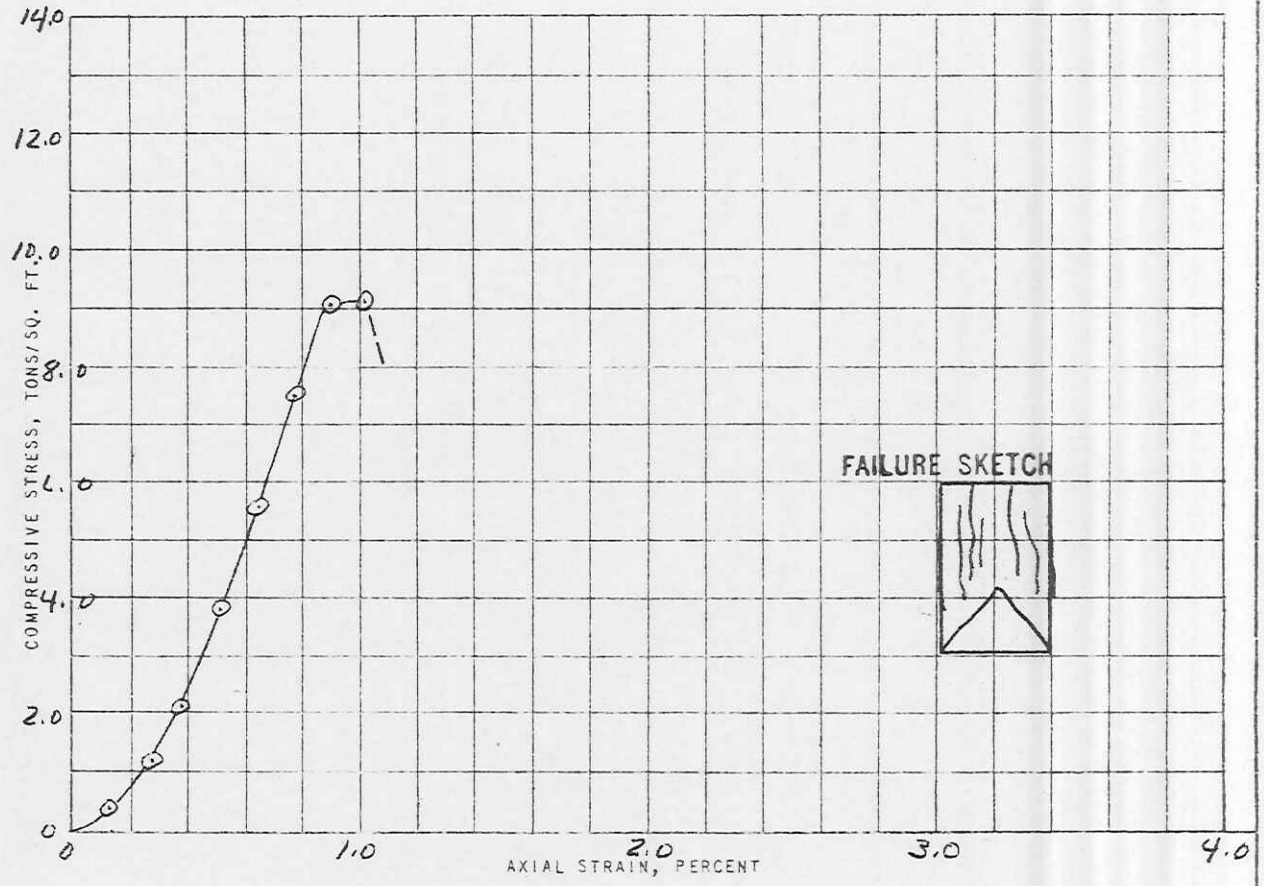
PLATE NO. 14

SWD/GL REPORT NO. 7281

SWD FORM 558-C
REV 10 MAR 52



LL		G	
PL		D_{10}	
X	UNDISTURBED		REMOLDED
WATER CONTENT, W_o		%	36.2
DRY DENSITY		LBS./CU.FT.	83
VOID RATIO e_o			
SATURATION, S_o		%	
UNCONFINED COMP. STRENGTH q_u		TONS/SQ.FT.	9.1
X	q_u ADJUSTED, A.S.T.M. C42-44	TONS/SQ.FT.	8.7
SPECIMEN DIAMETER		INCHES	5.3
SPECIMEN HEIGHT		INCHES	7.8
Stress - CONTROL, 600 lbs./min.			



REMARKS:

PROJECT Trinity River - Lock and Dam Site No. 6 FOUNDATION MATERIAL

AREA GALVESTON DISTRICT

BORING NO. 65T-6-6	SAMPLE NO. S-5780	ELEV. OR DEPTH 38.0-40.0	DATE NOV 1961

UNCONFINED COMPRESSION TEST

SWD GL REPORT NO. 7281

PLATE NO. 15