17TH St. Canal Boring Locations

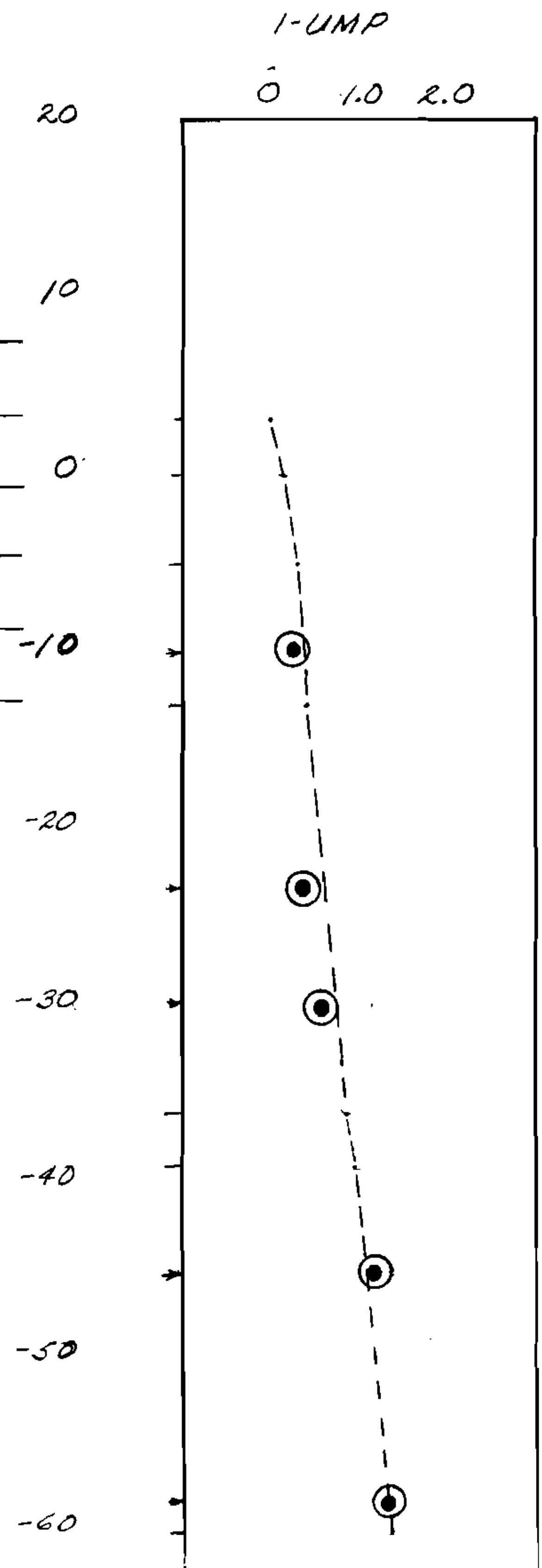
Boring	Station	Elev.	Lt	Rt.	Log Location
2-MP	548+19	1.1	190		East side of Canal, landside toe
1-UMP	549+95	3.1	60		Canal side toe of Jeff. Ret. Levee
1-MP	550+69	0.9	190		East side of Canal, landside toe of levee
6-MUE	553+51	1.1	245		40' P.S. toe East levee
1-MUG	555+15	-7.2	140		20' east of C/L of Canal
5-MUW	573+51	10.1		20	C/L west levee
2-MUG	600+25	7.1		15	C/L east levee
3-MUG	624+25	10.9		20	C/L west levee
3-MUW	[illegible]	-2.0		65	P.S. toe west levee
4-MUE	642+71	2.5	300		92' P.S. of C/L east levee
4-MUG	660+15	12.8	℄		C/L west levee
2-MUE	671+74	11.1	310		C/L east levee
1-MUW	672+80	5.9	50		P.S. toe west levee

COMPUTATION SHEET

PROJECT 17th ST. Outfall Canal	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE

(3.1 - 0.0)(110) ÷ 2000 = 0.171
(0.0 - 5.0)(100 - 62.5) ÷ 2000 = 0.094
0.265
(-5.0 - 13.0)(95 - 62.5) ÷ 2000 = 0.130
0.395
(-13.0 - 36.0)(100 - 62.5) ÷ 2000 = 0.431
0.826
(-36.0 - 39.0)(122 - 62.5) ÷ 2000 = 0.089
0.915
(-39.0 - 60.0)(104 - 62.5) ÷ 2000 = 0.436
1.351
(-60.0 - 97.1)(127 - 62.5) ÷ 2000 = 1.196
2.547

El. -10.1 P_c = 0.22
El. -23.2 P_c = 0.39
El. -29.8 P_c = 0.55
El. -45.2 P_c = 1.12
El. -58.2 P_c = 1.32

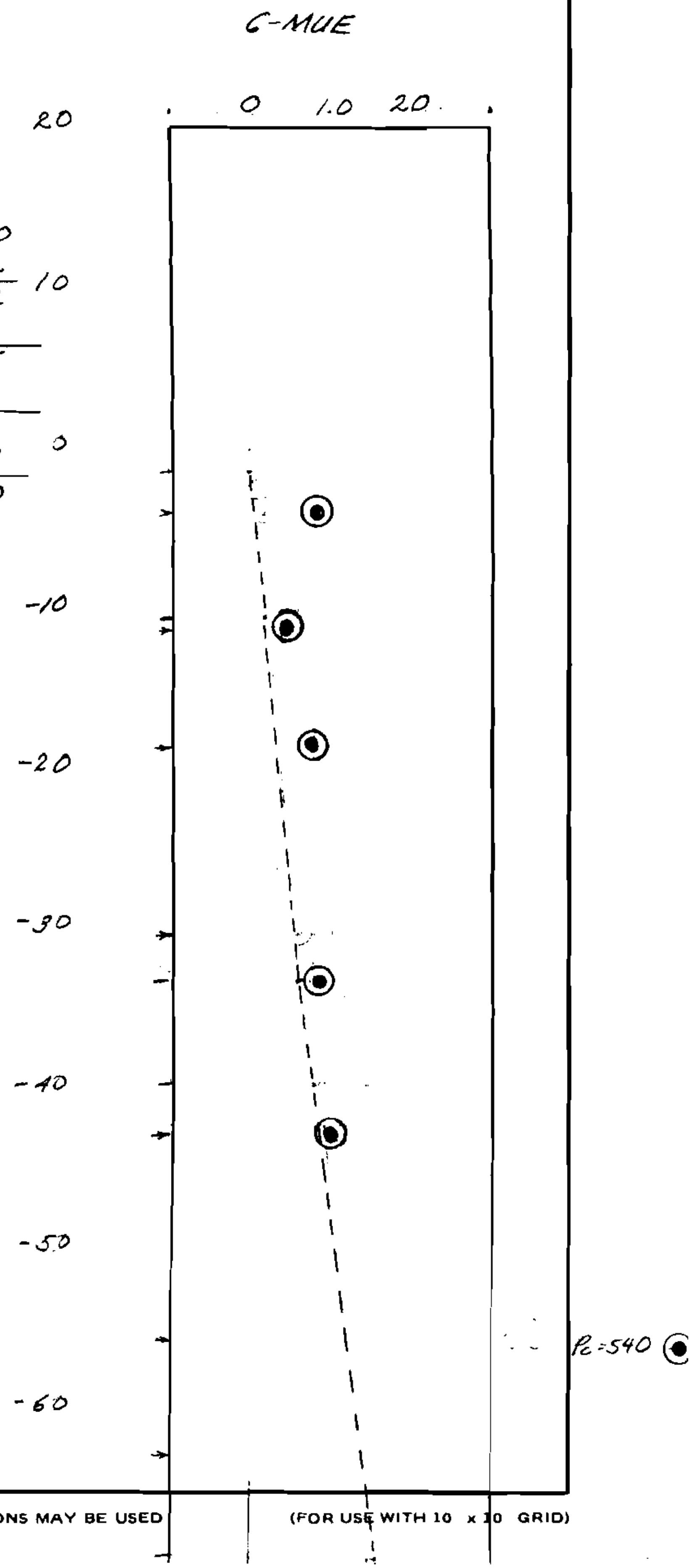


COMPUTATION SHEET

PROJECT 17 TH St. Outfall Canal	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE

(-1.1 - 10.5)(103 - 62.5) ÷ 2000 = 0.190
(-10.5 - 33.0)(100 - 62.5) ÷ 2000 = 0.422
0.612
(-33.0 - 39.5)(122 62.5) ÷ 2000 = 0.193
0.805
(-39.5 - 69.0)(107 - 62.5) ÷ 2000 = 0.656
1.461
(-69.0 - 72.0)(1~~7~~2 62.5) ÷ 2000 = 0.089
1.550

El. -3.9 Pc = 0.81
El. -11.2 Pc = 0.42
El. -18.5 Pc = 0.78
El. -30.1 Pc = 0.94
El. -42.7 Pc = 1.04
El. -55.5 Pc = 5.40
El. -62.9 Pc = 7.00



COMPUTATION SHEET

PROJECT 17TH St. Outfall Canal	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE

(-7.2-35.0)(100-62.5)÷2000 = 0.521

(-35.0-37.0)(122-62.5)÷2000 = 0.060

0.581

(-37.0-65.0)(102-62.5)÷2000 = 0.553

1.134

(-65.0-77.0)(122-62.5)÷2000 = 0.357

1.491

(-77.0-100.0)(120-62.5)÷2000 = 0.661

2.152

El. -44.9 R = 1.05

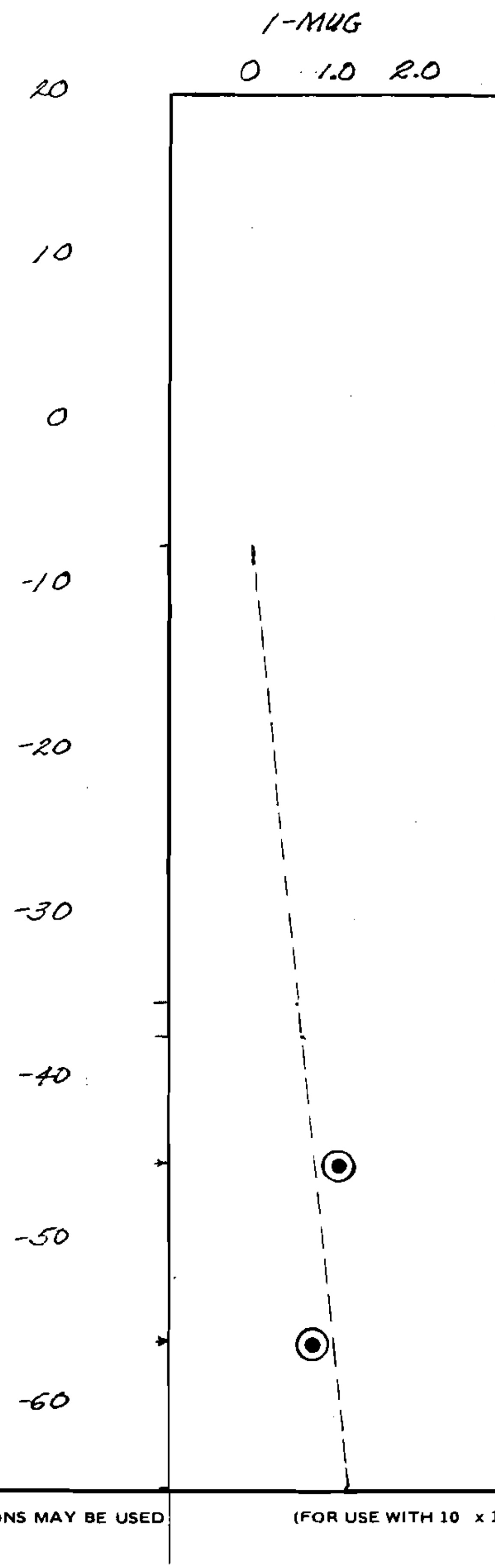
El. -56.9 R = 0.75

(-100-104.9)(92-62.5)÷2000 = 0.072

2.224

(-104.9-108.7)(120-62.5)÷2000 = 0.109

2.333



COMPUTATION SHEET

PROJECT 17TH St Outfall Canall	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE

$(10.1 - 3.5)(120) \div 2000 = 0.396$

$(3.5\ \ 0.0)(103) \div 2000 = \underline{0.180}$

0.576

$(0.00 - 10.5)(103 - 62.5) \div 2000 = \underline{0.213}$

0.789

$(-10.5 - 33.5)(100 - 62.5) \div 2000 = \underline{0.431}$

1.220

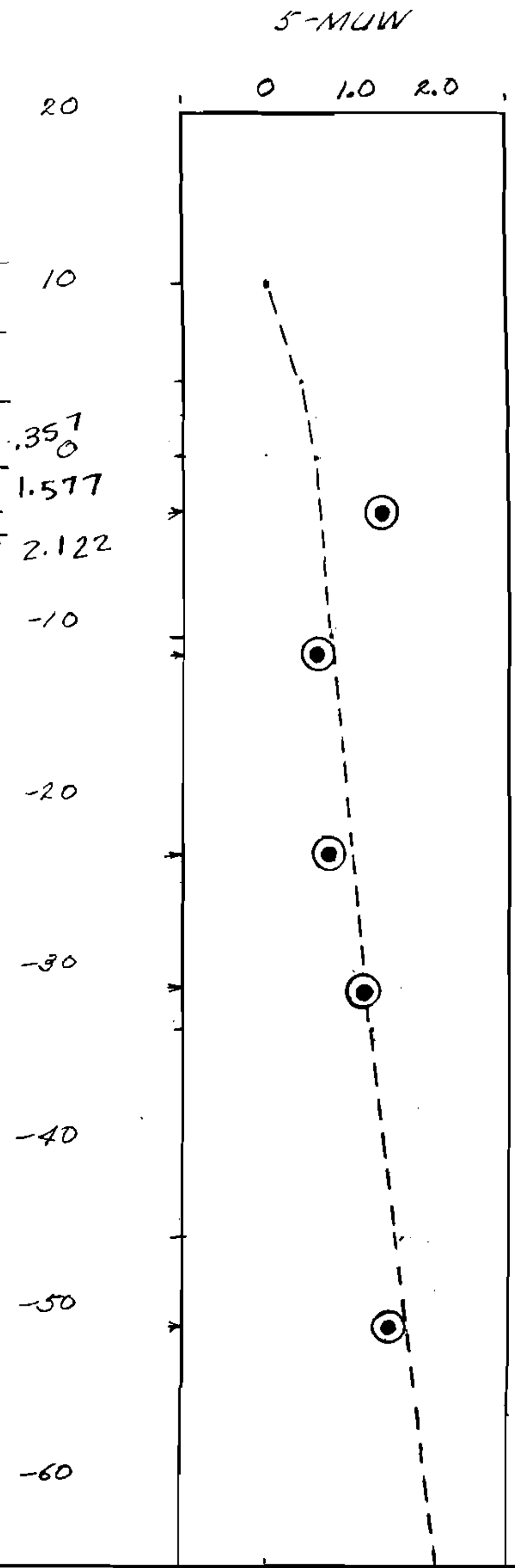
$(-33.5 - 45.5)(122 - 62.5) \div 2000 = \cancel{0.684}$ .357 .350

$\cancel{1.904}$ 1.577

$(-45.5 - 70.0)(107 - 62.5) \div 2000 = \underline{0.545}$

$\cancel{2.449}$ 2.122

El. -3.1 P_c = 1.38
El. -11.6 P_c = 0.60
El. -23.1 P_c = 0.72
El. -30.9 P_c = 1.13
El. -50.9 P_c = 1.41

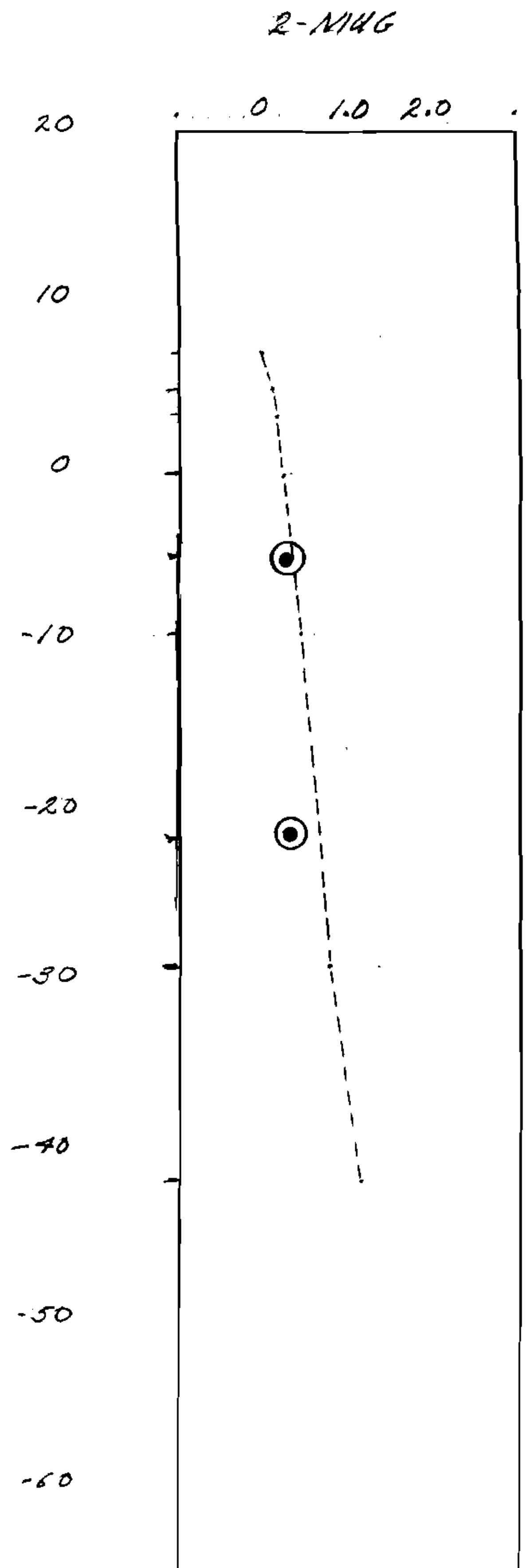


COMPUTATION SHEET

PROJECT 17TH St. Outfall Canal	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE

(7.1 − 5.0)(120) ÷ 2000 = 0.114
(5.0 − 3.5)(103) ÷ 2000 = 0.077
0.191
(3.5 − 0.0)(103 − 62.5) ÷ 2000 = 0.071
0.262
(0.0 − 10.5)(103 − 62.5) ÷ 2000 = 0.213
0.475
(−10.5 − 29.0)(100 − 62.5) ÷ 2000 = 0.347
0.822
(−29.0 − 41.5)(122 − 62.5) ÷ 2000 = 0.372
1.194

El. − 4.4 Pc = 0.31
El. − 21.4 Pc = 0.32



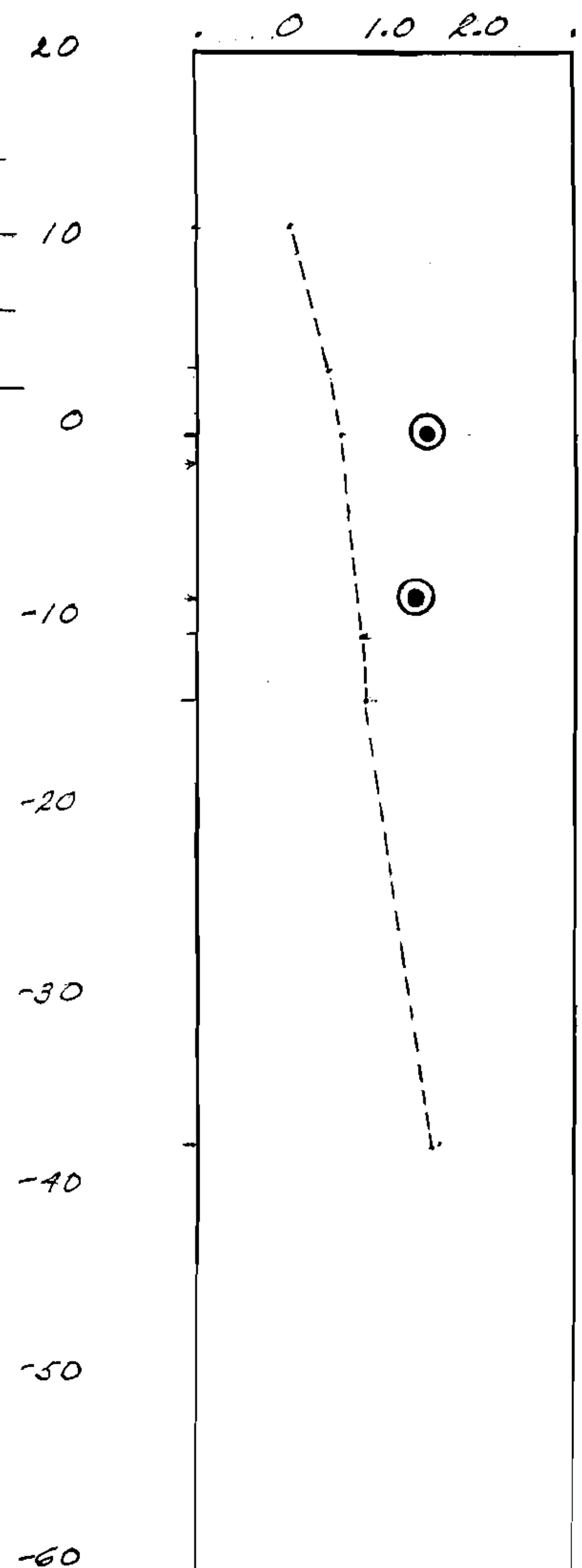
COMPUTATION SHEET

PROJECT 17 TH St. Out Fall Canal	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE

3-MUG

$(10.9-3.5)(117) \div 2000 = 0.433$
$(3.5-0.0)(103) \div 2000 = 0.180$
0.513
$(0.0-10.5)(103-62.5) \div 2000 = 0.213$
0.726
$(-10.5-14.0)(100-62.5) \div 2000 = 0.066$
0.792
$(-14.0-37.5)(122-62.5) \div 2000 = 0.699$
1.491

El. -1.6 R = 1.44
El. -8.8 R = 1.34



COMPUTATION SHEET

PROJECT 17TH St. Outfall Canal	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE

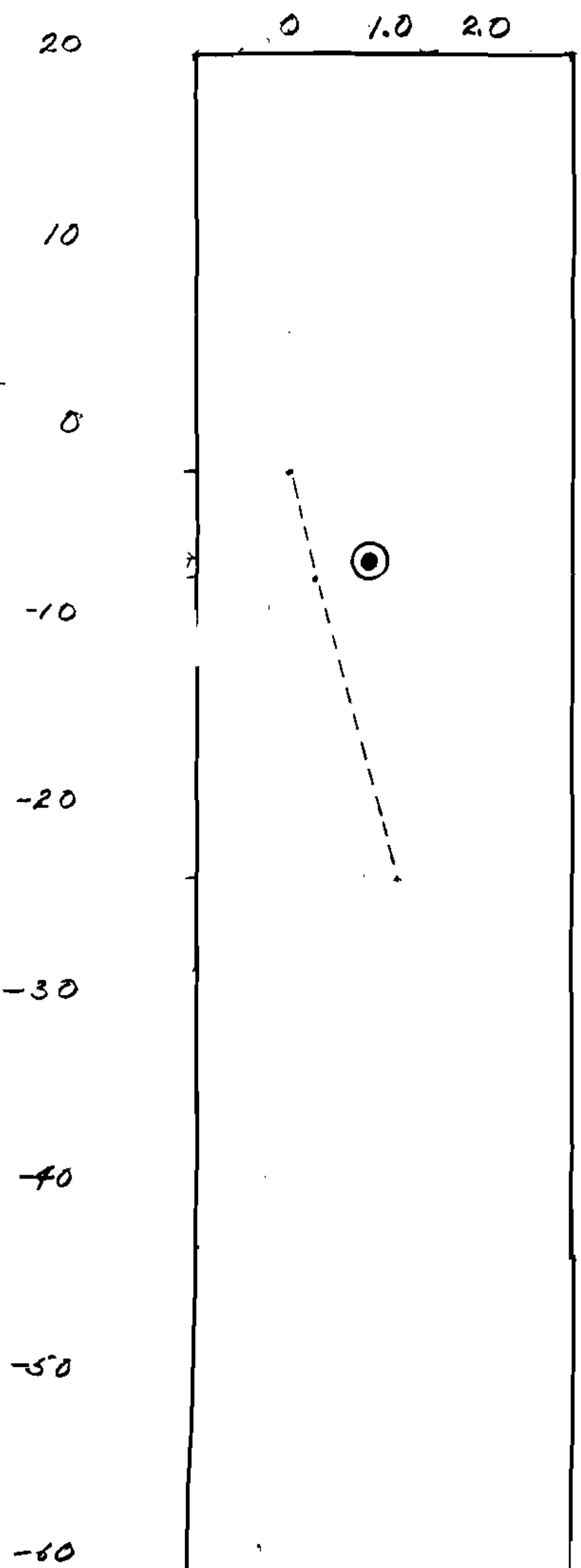
3-MUW

$(-2.0-7.8)(107-62.5) \div 2000 = 0.129$

$(-7.8-23.5)(122-62.5) \div 2000 = 0.467$

$\overline{\quad 0.596}$

El. −6.7 Pc = 0.83



COMPUTATION SHEET

PROJECT 17 TH St. Outfall Canal	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE

$(-2.5-8.5)(107-62.5)\div 2000 = 0.134$

$(-8.5-46.5)(122-62.5)\div 2000 = \underline{1.131}$

1.265

$(-46.5-70.0)(107-62.5)\div 2000 = \underline{0.523}$

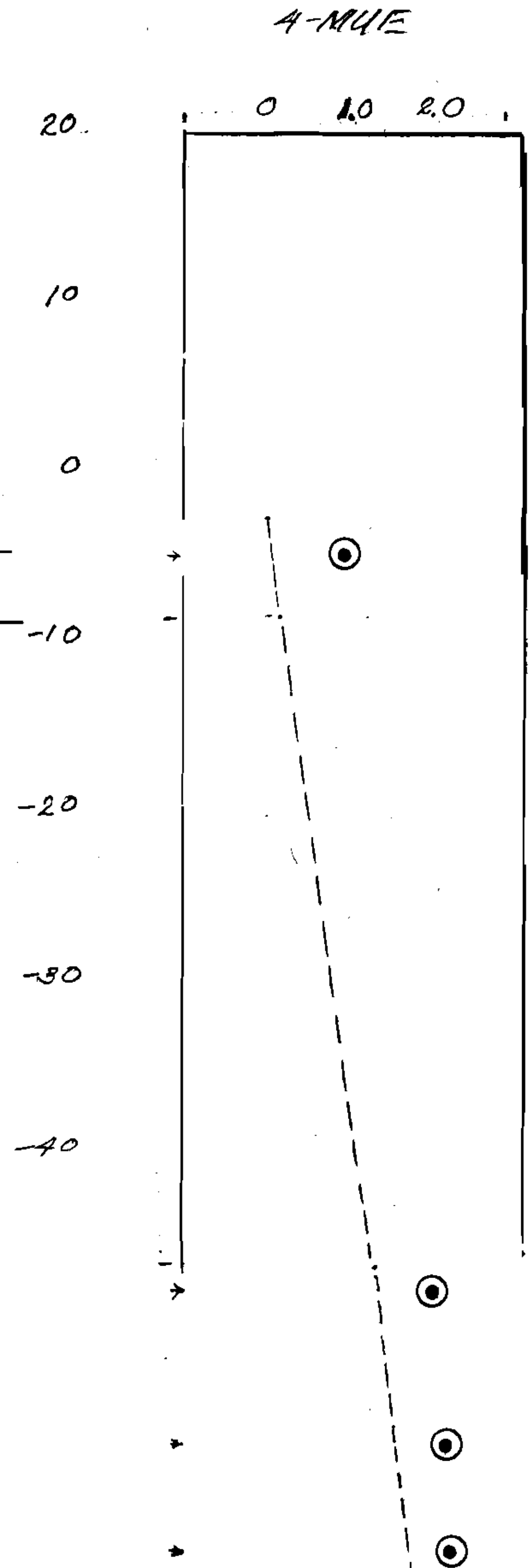
1.788

El. − 4.8 Pc = 0.84

El. − 48.0 Pc = 1.96

El. − 57.4 Pc = 2.10

El. − 63.5 Pc = 2.15



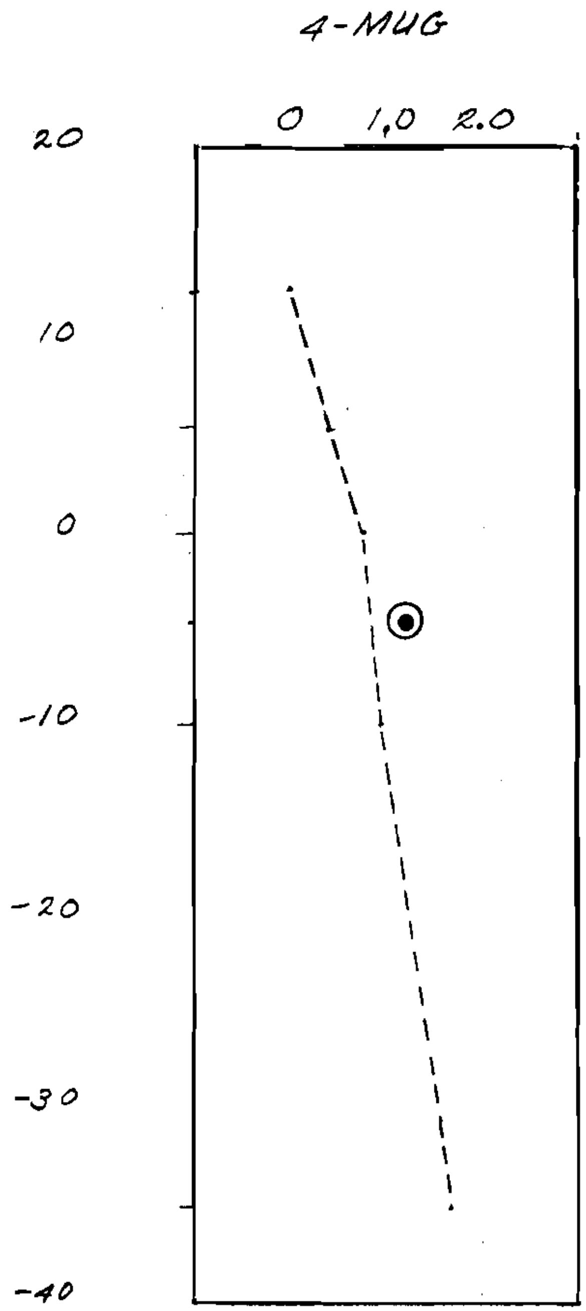
70.0

COMPUTATION SHEET

PROJECT 17TH St. Outfall Canal	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE

(12.8-5.5)(117)÷2000 = 0.427
(5.5-0.0)(107)÷2000 = 0.294
0.731
(0.0--10.0)(107-62.5)÷2000 = 0.223
0.954
(-10.0-35.0)(122-62.5)÷2000 = 0.744
1.698

El. -4.7 Pc = 1.20

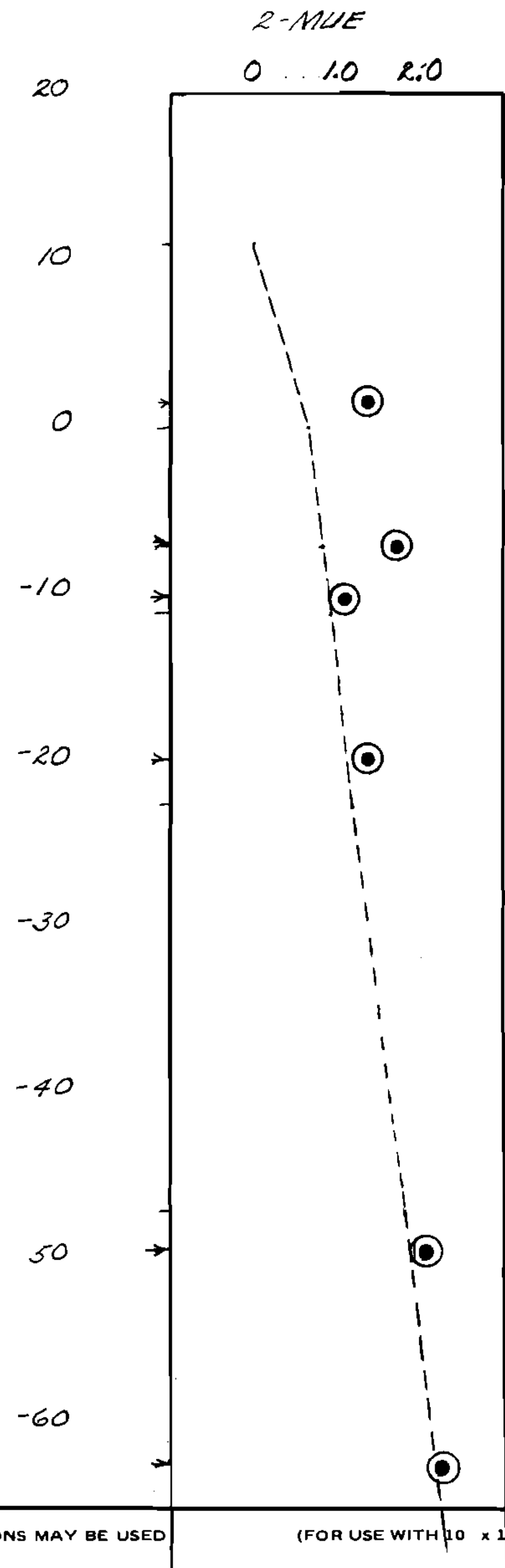


COMPUTATION SHEET

PROJECT 17TH st. Outfall Canal	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE

(11.1 − 0.0) (112) ÷ 2000 = 0.622
(0.0 − 7.0)(112 − 62.5) ÷ 2000 = 0.173
0.795
(−7.0 − 11.0)(115 − 62.5) ÷ 2000 = 0.105
0.900
(−11.0 − 22.5)(107 − 62.5) ÷ 2000 = 0.256
1.156
(−22.5 − 47.0)(122 − 62.5) ÷ 2000 = 0.729
1.885
(−47.0 − 80.0)(110 − 62.5) ÷ 2000 = 0.784
2.669

El. 1.6 R = 1.38
El. −6.9 R = 1.72
El. −10.0 R = 1.10
El. −19.8 R = 1.38
El. −49.3 R = 2.05
El. −62.2 R = 2.29

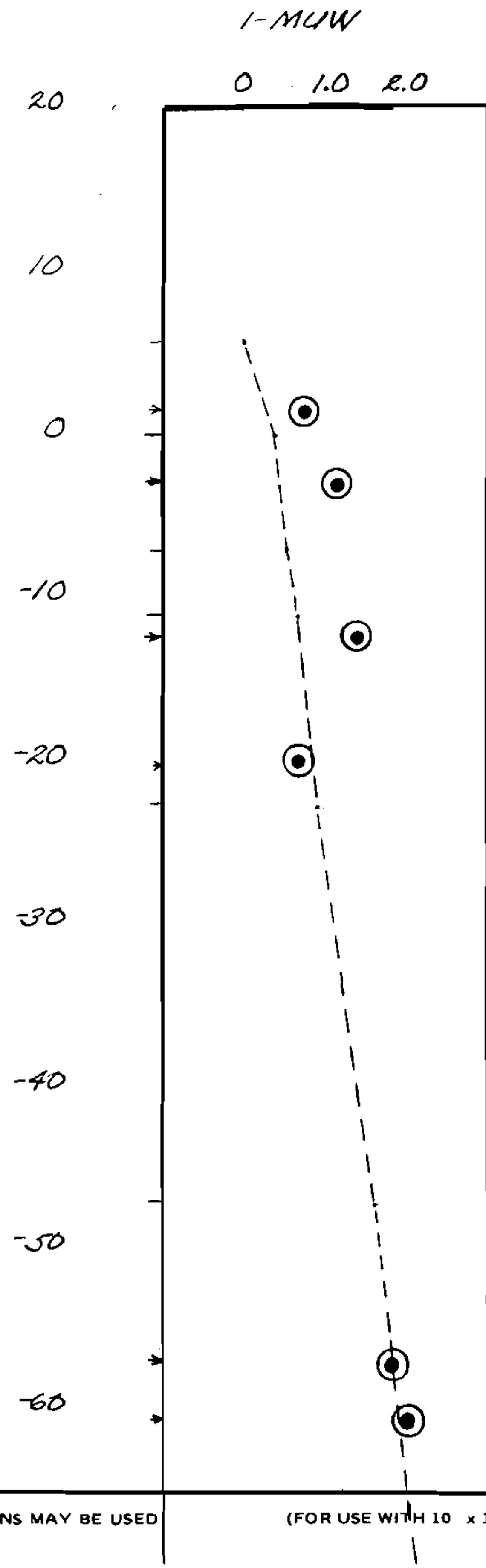


COMPUTATION SHEET

PROJECT 17TH St Outfall Canal	PAGE OF	COMPUTED BY	DATE
SUBJECT		CHECKED BY	DATE

(5.9 - 0.0) (112) ÷ 2000 = 0.330
(0.0 - 7.0) (112 - 62.5) ÷ 2000 = 0.173
0.503
(-7.0 - 11.0) (115 - 62.5) ÷ 2000 = 0.105
0.608
(-11.0 - 22.5) (107 - 62.5) ÷ 2000 = 0.256
0.864
(-22.5 - 47.0) (122 - 62.5) ÷ 2000 = 0.729
1.593
(-47.0 - 70) (110 - 62.5) ÷ 2000 = 0.546
2.139

El. 1.5 R = 0.741
El. -2.9 R = 1.130
El. -12.3 R = 1.140
El. -20.2 R = 0.650
El. -56.9 R = 1.780
El. -60.5 R = 2.000



11/20/85

17th St Outfall Canal
COE BORINGS
STA 673+51 @ Pumping Sta Building North Wall

Boring	OLD STATION		NEW STATION
2-MP	450' Lakeside of Bridge	552+69 - 4+50	= 548+19
1-UMP	300' " " "	552+69 - 3+00	= 549+95
1-MP	200' " " "	552+69 - 2+00	= 550+69
6-MUE	STA 120+00 :	673+51 - 120+00	= 553+51
* 1-MUG	200' South of Hammond Highway	553+15 + 2+00	= 555+15
5-MUW	STA 100+00 :	673+51 - 100+00	= 573+51
* 2-MUG	2500' North of Veterans Blvd	625+25 - 25+00	= 600+25
* 3-MUG	100' North of Veterans Blvd	625+25 - 1+00	= 624+25
4-MUE	STA 30+80 :	673+51 - 30+80	= 642+71
3-MUW	See Map	Spotted by eye	= 642+71
* 4-MUG	100' North of Canal St. :	661+15 - 1+00	= 660+15
2-MUE	See Map	Spotted by eye	= 671+74
1-MUW	See Map	Spotted by eye	= 672+80

* To be completed by March 15 1985

VOID

Orleans Parish Outfall Canal

Consolidation Test Time Curves

Hu IN.	Boring	Sample	Elev.	Load Inc.	Cv	Minutes	Remark
1.119	1-MUG	10-B	-44.9	0.063	—		
				0.25	97.61	2.3	
			P_c = 1.05	0.5	85.90	2.6	
			e_o = 2.40	1.0	42.48	5.2	
				2.0	5.08	40	
				4.0	5.57	37	
				8.0	9.61	22	
				2.0			(Rebound)
				0.5			
				0.02			
1.124		13-B	-56.8	0.063	28.67	7.9	
				0.125	5.51	41	
			P_c = 0.75	0.25	4.49	45	
			e_o = 1.33	0.5	3.74	59	
				1.0	4.21	52	
				2.0	3.15	68	
				4.0	3.55	60	
				8.0	4.13	52	
				2.0			(Rebound)
				0.5			
				0.02			
1.120	2-MUG	4-B	-4.4	0.063	12.36	18	
				0.125	3.59	62	
			P_c = 0.31	0.25	3.50	63	
			e_o = 1.43	0.5	5.59	39	
				1.0	6.29	34	
				2.0	7.04	30	
				4.0	6.28	34	
				8.0	5.63	38	

Orleans Parish Outfall Canal

Consolidation Test Time Curves

Ht. IN.	Boring	Sample	Elev.	Load Inc.	Cv	Minutes	Remark
1.123	2-MUG	8-B	-21.4	0.063	37.68	5.9	
				0.125	3.55	62	
			$P_c = 0.32$	0.25	4.00	55	
			$e_o = 1.92$	0.5	4.13	52	
				1.0	4.33	49	
				2.0	4.06	52	
				4.0	4.41	48	
1.127	3-MUG	4-C	-1.6	0.063	76.00	3	
				0.25	11.39	20	
			$P_c = 1.9$	0.5	226.83	10	
			$e_o = 0.88$	1.0	27.16	8.3	
				2.0	17.21	13	
				4.0	5.53	40	
				8.0	6.88	32	
				16.0	4.04	54	
1.110		6-B	-8.8	0.063	78.90	2.8	
				0.25	30.61	7.2	
			$P_c = 1.34$	0.5	21.91	10	
			$e_o = 2.12$	1.0	11.97	18	
				2.0	4.28	48	
				4.0	4.11	79	
				8.0	1.35	150	
1.122	4-MUG	7-D	-4.7	0.063	-		
				0.5	8.65	26	
			$P_c = 1.20$	1.0	9.27	24	
			$e_o = 1.42$	2.0	5.41	40	
				4.0	3.28	65	
				8.0	2.39	89	
				16.0	1.63	130	

1-UMP

WESSE 18 September 1973

SUBJECT: Transmittal of Soils Test Results, Lake Pontchartrain, La., and Vic. - Orleans Parish Outfall Canals - 17th Street Canal

District Engineer
U. S. Army Engineer District,
New Orleans
ATTN: LMNED-FT
P. O. Box 60267
New Orleans, LA 70160

1. Reference is made to your Intra-Army Order for Reimbursable Services No. LMNED-FT-13B dated 31 May 1973. Inclosed are a plasticity chart on which Atterberg limits data are presented (Incl 1), test report sheets for six Q triaxial and two S direct shear tests (Incl 2, 8 sheets), and test data summary sheets (Incl 3, 2 sheets).

2. Two $\bar{R}$ check tests are in progress, and results of these tests will be furnished by 30 September 1973. Test data for the original $\bar{R}$ test specimens is included on the test data summary. Q test specimens below -45 ft elevation indicate degrees of saturation less than 100 percent even though specimens above that elevation are essentially saturated. Strength envelopes for these tests would best be represented by sloping lines.

FOR THE DIRECTOR:

3 Incl (trip)
as

CF w/incl:
LMVD (LMVED-G)

G. P. HALE
Engineer
Soil Mechanics Division
Soils and Pavements Laboratory

WESSE 27 September 1973

SUBJECT: Transmittal of Soils Test Results, Lake Pontchartrain, La., and Vic. - Orleans Parish Outfall Canals - 17th Street Canal

District Engineer
U. S. Army Engineer District, New Orleans
ATTN: LMNED-FT
P. O. Box 60267
New Orleans, LA 70160

1. Reference is made to our letter dated 18 September 1973, subject as above, in which we state that the results of two $\bar{R}$ triaxial tests would be forthcoming. Inclosed are report sheets for these tests, including plots of induced pore pressure versus axial strain and Mohr effective stress diagrams (Incl 1, 4 sheets).

2. Relatively high negative pore pressures were induced during axial loading of specimens in both tests. Since the total strength envelopes for the tests are dependent on the development of these high pore pressures, and since the pore pressures may not be attainable in the field, the use of the total strength envelopes should be used with daution for design purposes.

FOR THE DIRECTOR:

1 Incl (trip)
as

G. P. HALE
Engineer
Soil Mechanics Division
Soils and Pavements Laboratory

CF w/incl:
LMVD (LMVED-G)

Orleans Parish Outfall Canals

Bor. No.	Elev.	Test	Deg.	W.C. Avg	C-T/SF	γ	P_c	PL	PI	LL
1-MUG	-12.2	Q	0	79.0	0.042 / 84	96		20	49	69
	-16.8	Q	0	77.0	0.055 / 110	97		22	48	70
	-17.3	S	24	71.9	0.0	97		—	—	—
	-20.2	Q	0	87.2	0.045 / 90	94		23	66	89
	-23.9	Q	0	52.5	0.110 / 220	105		16	32	48
	-42.2	Q	0	75.9	0.250 / 500	96		21	47	68
	-49.2	Q	0	64.9	0.200 / 400	100		18	48	66
	-57.7	Q	0	54.7	0.170 / 340	104		19	53	72
2-MUG	-1.8	Q	0	45.9	0.240 / 480	109		—	—	—
	-5.3	Q	0	53.8	0.115 / 230	105		22	55	77
	-6.3	Q	0	167.9	0.156 / 312	81		61	187	248
	-17.6	Q	0	57.6	0.090 / 180	104		18	41	59
3-MUG	-1.1	Q	0	78.5	0.280 / 560	92		46	74	120
	-9.9	Q	0	87.5	0.225 / 450	93		31	96	127
	-13.3	Q	0	43.4	0.227 / 454	111		13	38	51
4-MUG	-4.3	Q	0	66.6	0.203 / 406	100		25	91	116
	-8.1	Q	0	45.2	0.350 / 700	110		21	53	74
	-16.2	S	31°30'	21.2	0.0	119		—	—	—

*FRN R0GE31/Q.DRABT,R
DATA FILE
=QD44
AUTOMATIC LOG-OFF (YES OR NO?)
=YES

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING: 1-MUG SAMPLE: 2-B DEPTH: 5.0/-12.2
DATE: 14 AUG 86 TECH: KOC

SPECIMEN NO.	1	2	3	Avg
	95.7	97.4	95.5	96
WATER CONTENT, % =	80.1	76.4	80.4	
DRY DENSITY, PCF =	52.9	55.2	52.7	
SATURATION, % =	98.9	100.5	98.9	
VOID RATIO =	2.186	2.052	2.196	
CONFINING PRESSSURE, TSF =	0.50	1.50	3.00	
MAX DEV. STRESS, TSF =	0.08	0.08	0.09	.08
TIME TO FAILURE, MIN =	30	30	30	.04
INITIAL DIAMETER =	1.39	1.39	1.39	
INITIAL HEIGHT =	3.00	3.00	3.00	

STRAIN	- - DEVIATOR	STRESS - -	
0.5	0.01	0.01	0.01
1.0	0.02	0.02	0.02
3.0	0.04	0.04	0.04
5.0	0.06	0.06	0.06

10.0	0.07	0.07	0.08	20.0	0.07
15.0	0.08	0.08	0.09		
20.0	0.08	0.08	0.09		

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING: 1-MUG SAMPLE: 3-C DEPTH: 9.6/-16.8
DATE: 14 AUG 86 TECH: KOC

SPECIMEN NO.	1	2	3	Avg
	96.6	96.5	97.4	96.8
WATER CONTENT, % =	77.3	77.4	76.4	77
DRY DENSITY, PCF =	54.3	54.1	55.2	
SATURATION, % =	99.3	98.8	100.5	
VOID RATIO =	2.102	2.116	2.053	
CONFINING PRESSSURE, TSF =	0.50	1.50	3.00	
MAX. DEV. STRESS, TSF =	0.09	0.11	0.11	.055
TIME TO FAILURE, MIN =	6	12	12	
INITIAL DIAMETER =	1.39	1.39	1.39	
INITIAL HEIGHT =	3.00	3.00	3.00	

STRAIN	- - DEVIATOR	STRESS - -	
0.5	0.02	0.03	0.03
1.0	0.06	0.09	0.09
2.0	0.08	0.11	0.11
3.0	0.09	0.11	0.11
4.0	0.08	0.11	0.11
5.0	0.08	0.11 *	0.11 *
10.0	0.08	0.11	0.11
15.0	0.08	0.11	0.11

* LAST POINT BEFORE STRAIN RATE WAS INCREASED

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING: 1-MUG   SAMPLE: 4-B   DEPTH: 13.0/-20.2
DATE: 15 AUG 86   TECH: KOC

SPECIMEN NO.		1	2	3	Avg
		94.5	94.2	94.7	94.5 = γ
WATER CONTENT, %	=	87.8	88.4	85.4	87.2
DRY DENSITY, PCF	=	50.3	50.0	51.1	
SATURATION, %	=	100.9	100.6	100.4	
VOID RATIO	=	2.350	2.372	2.297	
CONFINING PRESSSURE, TSF	=	0.50	1.50	3.00	
MAX. DEV. STRESS, TSF	=	0.15	0.09	0.09	.09
TIME TO FAILURE, MIN	=	8	12	12	.045
INITIAL DIAMETER	=	1.39	1.39	1.39	
INITIAL HEIGHT	=	3.00	3.00	3.00	

STRAIN	- - DEVIATOR STRESS - -		
0.5	0.05	0.05	0.05
1.0	0.10	0.08	0.08
2.0	0.11	0.09	0.09
3.0	0.13	0.09	0.09
4.0	0.15	0.09	0.09
5.0	0.15	0.09 *	0.09 *
10.0	0.11	0.13	0.11
15.0	0.11	0.14	0.11
20.0			

0 11   0.12   0 11

* LAST POINT BEFORE STRAIN RATE WAS INCREASED

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING 1-MUG   SAMPLE· 5-B   DEPTH· 16.7/-23.9
DATE 15 AUG 86   TECH· KOC

	106	107.3	102.7	105
SPECIMEN NO.	1	2	3	52.5
WATER CONTENT, % =	49 8	48 3	59 3	
DRY DENSITY, PCF =	69.3	71 3	63 9	
SATURATION, % =	93.9	95.6	97.7	
VOID RATIO =	1 432	1.365	1.639	
CONFINING PRESSSURE, TSF =	0.50	1.50	3.00	
MAX DEV STRESS, TSF =	0.22	0 22	0 22	.22
TIME TO FAILURE, MIN =	8	24	12	
INITIAL DIAMETER =	1.39	1.39	1 39	.11
INITIAL HEIGHT =	3.00	3.00	3 00	

STRAIN	- - DEVIATOR	STRESS - -	
0 5	0 10	0 10	0.13
1 0	0 12	0.12	0.19
2 0	0 20	0.20	0.22
3 0	0 21	0.21	0.22
4.0	0.22	0.22	0.22
5 0	0 21	0 22 *	0 22 *
10 0	0 20	0.28	0 28
15 0	0 21	0 28	0 24
20 0	0 21	0 28	0 24

* LAST POINT BEFORE STRAIN RATE WAS INCREASED

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING 1-MUG   SAMPLE 9-C   DEPTH· 35 0/-42.2
DATE 19 AUG 86   TECH KOC

	96.8	95.7	96.2	
SPECIMEN NO	1	2	3	
WATER CONTENT, % =	75 8	75 5	76 4	75.9
DRY DENSITY, PCF =	54 5	52 7	53 7	
SATURATION, % =	97 7	92 6	96 5	
VOID RATIO =	2 095	2 202	2 138	Avg
CONFINING PRESSSURE, TSF =	0 50	1 50	3 00	.48
MAX DEV STRESS, TSF =	0 41	0 54	0 50	
TIME TO FAILURE, MIN =	5	14	14	
INITIAL DIAMETER =	1 39	1 39	1 39	.25
INITIAL HEIGHT =	3 00	3 00	3 00	

STRAIN	- - DEVIATOR	STRESS - -	
0 5	0 13	0 20	0 20
1 0	0 28	0.40	0 32
2 0	0 41	0.54	0 50
3 0	0 41	0 53	0 49
4.0	0 40	0.52	0 43
5 0	0 40	0.51 *	0 42 *
10.0	0 40	0 51	0.43
15.0	0 38	0.50	0.40
20.0	0 33	0 47	0 37

* LAST POINT BEFORE STRAIN RATE WAS INCREASED

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING· 1-MUG   SAMPLE· 11-B   DEPTH· 42 0/-49 2
DATE· 20 AUG 86   TECH· KOC

	99.1	101.8	101.8	98.4	100.3
SPECIMEN NO.	1	2	3	4	
WATER CONTENT, % =	66 8	60.8	61.8	70 3	64.9
DRY DENSITY, PCF =	58.3	62 6	62 6	57 1	
SATURATION, % =	95.5	97 0	98 6	97 3	
VOID RATIO =	1.889	1 693	1 693	1 951	
CONFINING PRESSSURE, TSF =	0.50	1 50	3 00	0 50	.395 → Avg 4
MAX. DEV. STRESS, TSF =	0.31	0 47	0 39	0 41	.407 → Avg 3
TIME TO FAILURE, MIN =	6	18	18	12	
INITIAL DIAMETER =	1 39	1.39	1 39	1 39	Say ~~.40~~
INITIAL HEIGHT =	3.00	3 00	3 00	3 00	.20

STRAIN	- - DEVIATOR	STRESS - -		
0 5	0.11	0 20	0 30	0 22
1 0	0 21	0 31	0 34	
2 0				0 41
3 0	0.31	0 47	0 39	0 39
4 0	0 31	0 46	0 39	0 36
5 0	0 31	0 42 *	0 39 *	0 34 *
10 0	0 29	0 46	0 46	0 35
15 0	0 29	0 46	0 44	0 34
20 0	0 29	0 45	0.43	0 33

* LAST POINT BEFORE STRAIN RATE WAS INCREASED

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING 1-MUG   SAMPLE 13-C   DEPTH 50 5/-57 7
DATE 20 AUG 86   TECH KOC

SPECIMEN NO   1   2   3

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FRN R0GE31/0DBRAFT.R
DATA FILE
*0D44A
AUTOMATIC LOG-OFF (YES OR NO?)
*NO
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LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING 2-MUG SAMPLE 4-C DEPTH 12 4/-5.3
DATE 22 AUG 86 TECH KOC

SPECIMEN NO.	1	2	3	
	103.5	107.3	104.6	53.8
WATER CONTENT, % =	56.5	49.6	55 4	105.1
DRY DENSITY, PCF =	65 2	71.3	67.0	
SATURATION, % =	96 2	98.2	98.7	
VOID RATIO =	1.586	1.364	1.516	
CONFINING PRESSSURE, TSF =	0.50	1.50	3 00	
MAX DEV STRESS, TSF =	0.21	0.22	0 27	.23
TIME TO FAILURE, MIN =	20	10	10	
INITIAL DIAMETER =	1.39	1.39	1.39	.117
INITIAL HEIGHT =	3.00	3.00	3 00	.110

STRAIN	- - DEVIATOR	STRESS - -	
0 5	0.05	0 09	0.09
1 0	0.09	0 11	0 12
3 0	0.18	0 20	0 22
5 0	0 20	0.22	0 27
10 0	0.21	0.22	0 27
20 0	0.23	0.23	0 27

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING 2-MUG SAMPLE 4-D DEPTH 13 4/-6.3
DATE 25 AUG 86 TECH KOC

SPECIMEN NO.	1	2	3	
	77.5	80.9	83.9	γ = 80.8
WATER CONTENT, % =	206 7	157.3	139 7	167.9
DRY DENSITY, PCF =	24 0	29 5	33 9	
SATURATION, % =	92 7	90 3	94 8	
VOID RATIO =	6.021	4.704	3 978	
CONFINING PRESSSURE, TSF =	0 50	1 50	3 00	
MAX DEV STRESS, TSF =	0 31	0 35	0 28	.313
TIME TO FAILURE, MIN =	14	30	30	
INITIAL DIAMETER =	1 39	1 39	1 39	.156
INITIAL HEIGHT =	3 00	3 00	3 00	

STRAIN	- - DEVIATOR	STRESS - -	
0 5	0 06	0 06	0 06
1 0	0 11	0 11	0 [illegible]
4 0	0 29	0 22	0 22
5 0	0 30	0 24	0 24
7 0	0 31	0 29	0 26

10.0	0 29	0 31	0 27
15 0	0 29	0 35	0.28
20 0	0.30	0 35	0.28

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING 2-MUG SAMPLE 7-C DEPTH 24 7/-17.6
DATE 25 AUG 86 TECH KOC

SPECIMEN NO.	1	2	3	4	
	104.3	102.7	103.4	103.6	57.6
WATER CONTENT, % =	55 7	59.3	57 8	57 4	103.5
DRY DENSITY, PCF =	66 5	64.0	65.0	65 4	
SATURATION, % =	97 9	98.0	97 9	98 2	
VOID RATIO =	1 536	1.634	1 594	1.578	
CONFINING PRESSSURE, TSF =	0 50	1.50	3 00	1 50	.165 Avg
MAX DEV. STRESS, TSF =	0 22	0 12	0 19	0 13	.178 3 Avg
TIME TO FAILURE, MIN =	8	18	18	24	say .18
INITIAL DIAMETER =	1 39	1 39	1 39	1.39	
INITIAL HEIGHT =	3 00	3 00	3.00	3 00	.09

STRAIN	- - DEVIATOR	STRESS - -		
0 5	0 09	0 05	0.09	0 08
1 0	0 13	0 09	0 11	0 09
3 0	0 21	0 12	0 19	0 12
4 0	0 22	0 12	0 19	0 13
5 0	0 22	0 11 *	0.19 *	0 13 *
10 0	0 22	0 15	0 20	0 16
15.0	0 22	0 17	0 20	0 16
20.0	0 22	0 18	0.20	0 16

* LAST POINT BEFORE STRAIN RATE WAS INCREASED

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING 3-MUG SAMPLE 4-B DEPTH 12 0/-1 1
DATE 26 AUG 86 TECH KOC

SPECIMEN NO	1	2	3	
	91.2	92.4	92.6	92.1
WATER CONTENT, % =	79 9	80 0	75 7	78.5
DRY DENSITY, PCF =	45 7	47 6	47 8	
SATURATION, % =	80 2	85 0	80 8	
VOID RATIO =	2 690	2 542	2 530	Avg
CONFINING PRESSSURE, TSF =	0 50	1 50	3 00	
MAX DEV STRESS, TSF =	0 36	0 50	0 73	.560
TIME TO FAILURE, MIN =	30	10	8	
INITIAL DIAMETER =	1 39	1 39	1 39	.28
INITIAL HEIGHT =	3 00	3 00	3 00	

STRAIN - - DEVIATOR STRESS - -

ALS

BORING: 4-MUG SAMPLE: 8-C DEPTH: 20.9/-8.1
DATE: 28 AUG 86 TECH: KOC

SPECIMEN NO	1	2	3	4	
	111.7	111.8	108	106.5	109.5 45.2
WATER CONTENT, % =	42.3	40.0	48.3	50.0	
DRY DENSITY, PCF =	78.3	78.4	72.5	69.9	
SATURATION, % =	99.0	93.8	98.5	95.6	
VOID RATIO =	1.154	1.151	1.324	1.411	
CONFINING PRESSSURE, TSF =	0.50	1.50	3.00	3.00	
MAX DEV STRESS, TSF =	0.70	0.70	0.51	0.79	
TIME TO FAILURE, MIN =	8	24	18	15	
INITIAL DIAMETER =	1.39	1.39	1.39	1.39	
INITIAL HEIGHT =	3.00	3.00	3.00	3.00	

.675 = Avg
.68 = Avg 3
Say .7 (ok)
.35

STRAIN	- - DEVIATOR	STRESS - -		
0.5	0.30	0.20	0.20	0.35
1.0	0.45	0.45	0.38	0.61
2.5				0.79
3.0	0.69	0.69	0.51	0.79
4.0	0.70	0.70	0.51	0.75
5.0	0.70	0.70 *	0.51 *	0.73 *
10.0	0.61	0.73	0.56	0.73
15.0	0.55	0.72	0.55	0.71
20.0	0.52	0.71	0.52	0.69

* LAST POINT BEFORE STRAIN RATE WAS INCREASED

*

STRAIN				
0 6	0.12	0 28	0.30	
1 0	0 19	0 33	0.47	
3 0	0.30	0.54	0 72	
4.0	0 31	0.57	0.73	
5.0	0 32	0 58	0.73	
10 0	0 35	0 58	0.72	
15 0	0 36	0 56	0.71	
20.0	0.36	0.53	0.70	

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING· 3-MUG SAMPLE· 6-C DEPTH· 20 8/-9.9
DATE· 27 AUG 86 TECH· KOC

SPECIMEN NO	1	2	3	4	
	91.9	92.7	93.2	94.1	93.5
WATER CONTENT, % =	90.5	89.4	87.9	82.1	87.5
DRY DENSITY, PCF =	46 8	48.1	48.9	50.3	
SATURATION, % =	94 0	96.5	97.0	94.3	
VOID RATIO =	2.599	2.503	2.448	2.351	
CONFINING PRESSSURE, TSF =	0.50	1.50	3.00	0.50	
MAX DEV STRESS, TSF =	0.32	0 48	0 40	0 60	.45 Avg
TIME TO FAILURE, MIN =	8	24	18	24	.45 Avg 3
INITIAL DIAMETER =	1.39	1.39	1.39	1.39	.45
INITIAL HEIGHT =	3.00	3.00	3.00	3.00	

STRAIN	- - DEVIATOR STRESS - -			
0 5	0.11	0.18	0.18	0.21
1 0	0 20	0.30	0.28	0 31
3 0	0.31	0.47	0.40	0 59
4 0	0.32	0.48	0.40	0.60
5 0	0 31	0 47 *	0.39 *	0.59 *
10 0	0 29	0.48	0 37	0.53
15 0	0 22	0.43	0.32	0.42
20.0	0.21	0.42	0.31	0.41

* LAST POINT BEFORE STRAIN RATE WAS INCREASED

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING· 3-MUG SAMPLE· 7-B DEPTH· 24 2/-13 3
DATE· 27 AUG 86 TECH· JMS

SPECIMEN NO	1	2	3	
	109.8	110.7	112.5	111
WATER CONTENT, % =	45 8	43 9	40 4	43.4
DRY DENSITY, PCF =	75 1	76 8	79 6	
SATURATION, % =	99 2	99 3	97 7	
VOID RATIO =	1 246	1 194	1 117	
CONFINING PRESSSURE, TSF =	0 50	1 60	3 00	
MAX DEV STRESS, TSF =	0 46	0 44	0 46	.45
TIME TO FAILURE, MIN =	14	14	15	
INITIAL DIAMETER =	1.37	1.37	1 38	
INITIAL HEIGHT =	3 00	3 00	3 00	

STRAIN	- - DEVIATOR STRESS - -		
0.5	0.22	0.22	0 22
1 0	0 30	0 29	0 30
4 5	0.46	0.44	0 46
6 0	0 45	0.44	0 45
7.0	0 46 *	0.44 *	0.45 *
10.0	0 44	0 44	0 48
15.0	0 42	0.44	0 46
20.0	0 41	0.43	0 43

* LAST POINT BEFORE STRAIN RATE WAS INCREASED

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING· 4-MUG SAMPLE· 7-C DEPTH· 17 1/-4 3
DATE· 28 AUG 86 TECH· KOC

SPECIMEN NO.	1	2	3	
	102.8	95.7	101.9	
WATER CONTENT, % =	59 8	78 4	61 5	66.6
DRY DENSITY, PCF =	64.1	52.8	62 7	100.1
SATURATION, % =	99.1	96.6	98 4	
VOID RATIO =	1.630	2 192	1 687	
CONFINING PRESSSURE, TSF =	0 50	1 50	3 00	.400 Avg
MAX DEV STRESS, TSF =	0 45	0 38	0 39	Say .39
TIME TO FAILURE, MIN =	10	24	24	.195
INITIAL DIAMETER =	1 39	1 39	1 39	
INITIAL HEIGHT =	3 00	3 00	3 00	

STRAIN	- - DEVIATOR STRESS - -		
0.5	0.23	0 12	0 19
1.0	0 30	0 21	0 22
3 0	0 41	0 34	0 38
4 0	0 42	0.38	0 39
5.0	0 45	0 38 *	0 39 *
10.0	0 40	0 41	0 47
15 0	0 39	0 40	0 47
20.0	0 38	0 39	0 46

* LAST POINT BEFORE STRAIN RATE WAS INCREASED

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CAN

	105.1	103.1	104.9	
WATER CONTENT, % =	53 5	56.8	53 8	
DRY DENSITY, PCF =	67 8	64 7	67.6	54.7
SATURATION, % =	97 1	96 6	97.0	
VOID RATIO =	1 487	1 603	1.498	
CONFINING PRESSSURE, TSF =	0 50	1 50	3.00	
MAX DEV STRESS, TSF =	0 40	0 32	0 30	.32
TIME TO FAILURE, MIN =	20	8	20	
INITIAL DIAMETER =	1 39	1 39	1.39	.16
INITIAL HEIGHT =	3 00	3 00	3.00	

STRAIN	- -	DEVIATOR STRESS	- -
0.5	0 12	0.12	0.12
1.0	0.20	0 20	0.19
2.0	0 29	0 29	0.21
3 0	0 30	0 30	0.22
4.0	0.32	0.32	0.25
5 0	0 33	0 32	0.28
10 0	0 40	0 31	0.30
15.0	0 40	0.31	0.30
20.0	0 40	0 31	0.29

88 02 TSS IS DISCONNECTED REASON: X00

LK PONT LA & VIC HURR PROT
ORLEANS PARISH OUTFALL CANALS

BORING: 2-MUG SAMPLE: 3-C DEPTH: 8.9/-1 8
DATE 22 AUG 86 TECH: KOC

SPECIMEN NO	1	2	3	4	
	110.4	108.3	107.2	108.5	
WATER CONTENT, % =	44 6	47.1	47.7	44 1	45.9
DRY DENSITY, PCF =	76 2	72 8	71 2	73.2	109
SATURATION, % =	99 4	96 7	94.3	91 5	
VOID RATIO =	1.212	1 315	1.366	1 302	
CONFINING PRESSSURE, TSF =	0 50	1 50	3 00	3.00	.48 Avg 4
MAX DEV STRESS, TSF =	0.53	0 38	0.40	0 61	
TIME TO FAILURE, MIN =	30	30	10	30	.47 Avg 3
INITIAL DIAMETER =	1 39	1 39	1 39	1 39	
INITIAL HEIGHT =	3.00	3 00	3.00	3.00	.235

STRAIN	- -	DEVIATOR STRESS	- -	
0 5	0.19	0.19	0 23	0.22
1 0	0.22	0.21	0 30	0 35
2 0	0.30	0.23	0 34	0.49
3 0	0.33	0.29	0 38	0 52
4 0	0.38	0.30	0 39	0 53
5 0	0.40	0 31	0 40	0 54
10 0	0.48	0.36	0.40	0 69
15 0	0.53	0.38	0 38	0 61
20 0	0 61	0 39	0 37	0 61

$$cost: $ 1 25 to date: $ 1 25: 0%
$$on at 15 388 - off at 15.530 on 09/18/86

TEST DATA SUMMARY

LK. PONT., LA.&VIC.-HURR. PROT.-ORLEANS P...
LKFRNT. LEV., WEST OF IHNC-GDM#2, SUPP.#5, ALL
CANALS(ALONG 17th ST. CANAL) 1971

FEATURE 24

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 on UNDISTURBED: Initial e	Dry Density Lbs/Cu Ft	w_i %	w_f %	S_i %	Type Test	Specimen Size Inches	Test	σ_3 T/Sq Ft	σ_1 T/Sq Ft	c T/Sq Ft	ϕ Degrees	Permeability: e	K Ft/Min	P T/Sq
4-MUE	2-B	-7.5	PLASTIC CLAY(CH),gray, contains a					67	18	2.69					107.5	71.6	49.8		99.2	TC-Q	1.40 x 3.00	1	0.5	0.83					
			few 1/2" dia. roots and a few												104.9	67.5	54.4		98.2		"	2	1.5	1.83					
			sand pockets												107	71.7	49.2		100+		"	3	3.0	3.36					
															106.5		51.1												
	4-B	-15.4	PLASTIC CLAY(CH),gray,contains a					55	17	2.67						80.3	40.4		99.9	TC-Q	1.39 x 3.00	1	0.5	0.70					
			strata of coarse sand													82.7	36.0		94.2		"	2	1.5	1.80					
																89.3	30.7		94.5		1.38 x 3.00	3	3.0	3.45					
	11-D	-49.5	PLASTIC CLAY(CH),gray, contains					67	20	2.67						69.0	52.5		98.7	TC-Q	1.39 x 3.00	1	0.5	1.17					
			scattered silt pockets													66.8	55.3		98.4		"	2	1.5	2.32					
																66.2	56.8		99.8		"	3	3.0	3.91					
																69.5	50.6		96.5		1.41 x 3.00	4	0.5	1.33					
	13-C	-56.6	PLASTIC CLAY(CH),gray, contains					68	24	2.71						69.3	50.8		95.6	TC-Q	1.40 x 3.00	1	0.5	1.49					
			numerous 1/4" dia. shells, shell													69.9	51.1		97.5		"	2	1.5	2.56					
			fragments													69.3	52.4		98.6		"	3	3.0	3.96					
	15-C	-64.4	SILTY CLAY(CL),gray, crumbly					23	13	2.69						108.5	20.1		98.8	TC-Q	1.38 x 3.00	1	0.5	1.68					
																106.8	20.6		96.9		1.39 x 3.00	2	1.5	2.94					
																107.1	20.8		98.5		1.38 x 3.00	3	3.0	4.15					
1-MUW	2-B	0.4	PLASTIC CLAY(CH),gray, contains					70	22	2.59						83.4	36.4		100+	TC-Q	1.41 x 3.00	1	0.5	1.22					
			3/4" brick fragments in unused													81.1	39.0		100+		1.40 x 3.00	2	1.5	2.27					
			portion of sample													82.5	37.4		100+		"	3	3.0	3.78					
	3-C	-4.0	PLASTIC CLAY(CH),gray, contains					86	21	2.70						71.7	48.9		97.8	TC-Q	1.40 x 3.00	1	0.5	0.88					
			rootlets and organic matter, slick-													74.7	45.2		96.9		"	2	1.5	2.04					
			ensided													73.1	46.6		96.0		"	3	3.0	3.50					
																67.6	52.4		95.0		1.41 x 3.00	4	0.5	0.92					
	3-D	-4.8	PLASTIC CLAY(CH),gray, contains					82	28	2.67						71.1	48.4	45.5	96.4	DS-S	3.00^2x0.540	1	1.0	0.49					
			rootlets, badly slickensided													73.3	48.7	39.0	100+		"	2	2.0	0.87					
																74.6	48.5	33.4	100+		"	3	3.0	1.30					
	5-D	-13.0	PLASTIC CLAY(CH),gray, contains					119	30	2.70						52.6	80.4		98.7	TC-Q	1.40 x 3.00	1	0.5	0.93					
			organic matter													50.9	84.7		99.0		"	2	1.5	1.96					
																53.5	78.9		99.1		"	3	3.0	3.48					

TC – Triaxial Compression DS – Direct Shear CD – Consolidated Drai...
UC – Unconfined Compression Q UU – Unconsolidate Undrained R-CU – Consolidated Undr...

4MUE → 2E

TEST DATA SUMMARY

LK.PONT.LA.&VIC.-HURR. PROT.-ORLEANS F... OUTFALL
LKFRNT. LEV. WEST OF IHNC-GDM#2, SUPP.#.
CANALS (ALONG 17th ST. CANAL) 1971

FEATURE 24

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
1-MUW	7-D	-21.0	Alternating layers of PLASTIC CLAY (CH) and SILTY SAND(SM)											
	10-D	-33.0	SILTY SAND(SM), gray, contains a few pebbles					-	-	2.68				
	16-C	-56.2	PLASTIC CLAY(CH), gray, contains shell fragments					73	18	2.68				
	17-B	-59.3	PLASTIC CLAY(CH), dark gray, fissured					81	19	2.70				
	17-D	-61.2	PLASTIC CLAY(CH), gray, contains silt lenses					86	22	2.71				

Boring No.	Sam. No.	Shear Data on UNDISTURBED: Initial e	Dry Density Lbs/Cu Ft	w_i %	w_f %	S_i %	Type Test	Specimen Size Inches	Test	σ_3 T/Sq Ft	σ_1 T/Sq Ft	c T/Sq Ft	ϕ Degrees	Permeability: e	K Ft/Min.	P_0 T/Sq Ft
1-MUW	7-D		Unable to trim uniform "Q" test specimens													
	10-D		94.5	27.5	27.9	95.7	TC-R	1.40 x 3.00	1	1.0	23.31			*(ϕ' =	, c' =)	
			94.5	28.3	27.3	98.5		"	2	2.0	26.04					
			95.6	27.4	26.9	97.9		1.41 x 3.00	3	3.0	26.20					
	16-C		69.8	52.1		99.7	TC-Q	1.41 x 3.00	1	0.5	1.59					
			69.1	52.1		98.3		"	2	1.5	2.36					
			70.1	51.5		99.3		"	3	3.0	4.07					
	17-B		69.3	49.8	53.7	94.0	DS-S	3.00^2x0.550	1	1.0	0.47					
			69.4	50.9	45.7	96.1		"	2	2.0	0.86					
			69.0	50.9	40.5	95.4		"	3	3.0	1.26					
	17-D		68.6	54.2		99.9	TC-Q	1.40 x 3.00	1	0.5	1.54					
			68.2	54.4		99.6		"	2	1.5	2.53					
			68.2	54.2		99.2		"	3	3.0	3.94					

* Based on Ma...

ENG FORM 2086 1 MAR 58 (PREVIOUS EDITIONS MAY BE USED) (EM 1110-2-1803) (TRANSLUCENT)

TC – Triaxial Compression UC – Unconfined Compression DS – Direct Shear Q UU – Unconsolidated Undrained CD – Consolidated Drai... R CU – Consolidated Undr...

TEST DATA SUMMARY

FEATURE 15

LK. PONT., LA.& VIC.-HURR. PROT.-1971
ORLEANS PAR. LAKEFRONT LEVEE, WEST OF I.
GDM#2, SUPP.#5, OUTFALL CANALS (ALONG 17th .CANAL)
W.E.S. JOB NO. 441-S472.21SE39

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 on UNDISTURBED: Initial e	Dry Density Lbs/Cu Ft	w_1 %	w_F %	S_1 %	Type Test	Specimen Size Inches	Test	σ_3 T/Sq Ft	σ_1 T/Sq Ft	c T/Sq Ft	ϕ Degrees	Permeability: e	K Ft/Min.	P_o T/Sq Ft
3-MUW	1-B	-3.2	PLASTIC CLAY(CH), brown, contains					-	-							Unable to trim satisfactory "Q" test specimens													
			broken glass, gravel, and small shells																										
	1-B	-3.2	PLASTIC CLAY(CH), brown, contains					51	23	2.59	From Undist.					81.8	25.0		63.5		4.25x1.146				CONSOLIDATION TEST t_o				6.4
			organic matter and zones of clayey																										
			silt																										
	2-B	-6.7	PLASTIC CLAY(CH), gray, contains					105	33	2.69	From Undist.					65.1	59.5		100+	TC-Q	1.41 x 3.00	1	0.5	0.93					
			numerous rootlets													63.1	61.3		99.3		1.40 x 3.00	2	1.5	1.92					
																63.0	61.1		99.0		1.41 x 3.00	3	3.0	3.48					
	2-B	-6.7	PLASTIC CLAY(CH), gray, contains					-	-	2.69	From Undist.					57.9	68.1		96.4		4.25x1.153				CONSOLIDATION TEST t_o				3.2
			wood fragments and roots																										
	3-A	-10.4																		DS-S									

ENG FORM 2086, 1 MAR 66 (PREVIOUS EDITIONS MAY BE USED) (EM 1110-2-1803) (TRANSLUCENT)

TC – Triaxial Compression
UC – Unconfined Compression
DS – Direct Shear
Q ~~UU~~ – Unconsolidated Undrained
CD – Consolidated Drained
R ~~CU~~ – Consolidated Undrained

TEST DATA SUMMARY

FEATURE 14

LK.PONT.,LA.&VIC.-HURR. PROT.-'71 ORLE[illegible]ALS)
PARISH L.F. LEVEE WEST OF IHNC(OUTFALL
ALONG 17th ST. CANAL(GDM#2,SUPP.#5,)
W.E.S. JOB NO. 441-S472.21SE39$_2$

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 on UNDISTURBED INITIAL e	DRY DENSITY LBS/CU FT	w_i %	w_f %	S_i %	TYPE TEST	SPECIMEN SIZE INCHES	TEST	σ_3 T/SQ FT	σ_1 T/SQ FT	c T/SQ FT	ϕ DEGREES	PERMEABILITY e	K FT/MIN	P T/SQ
5-MUW	4-B	-3.1	PLASTIC CLAY(CH),gray, contains					57	19	2.66						84.5	37.2		100+	TC-Q	1.41 x 3.00	1	0.5	1.17					
			silt lenses													77.8	44.3		100+		"	2	1.5	2.16					
																80.6	41.4		100+		1.40 x 3.00	3	3.0	3.54					
	4-B	-3.1	PLASTIC CLAY(CH),gray, contains small roots					-	-	2.66 From Q						75.3	45.3		100		4.25x1.164				CONSOLIDATION TEST to 12[illegible]				
	6-C	-8.0	SILTY CLAY(CL),gray, contains					41	19	2.69						81.5	40.4	28.5	100+	DS-S	3.00^{2}x0.550	1	1.0	0.63					
			organic matter and rootlets													75.5	49.5	27.6	100+		"	2	2.0	1.19					
																75.4	45.7	33.2	99.9		"	3	3.0	1.83					
	6-C	-11.6	PLASTIC CLAY(CH),brown, contains 1/2" dia. roots and decayed wood, highly organic													Unable to trim "Q" specimens													
	6-C	-11.6	PLASTIC CLAY(CH),brown, contains 1/2" dia. roots, highly organic					-	-	1.83						102.8	363.1		95.2		4.25x1.165				CONSOLIDATION TEST to 16.0				
	7-D	-16.4	PLASTIC CLAY(CH),gray, contains a few small roots													Unable to trim "Q" specimens-specimens slumped during trimming													
	9-B	-23.1	PLASTIC CLAY(CH),gray, contains					78	21	2.71						63.0	62.0		100+	TC-Q	1.41 x 3.00	1	0.5	0.90					
			silt lenses													62.3	63.7		100+		"	2	1.5	1.89					
																62.8	62.3		99.9		"	3	3.0	3.41					
	9-B	-23.1	PLASTIC CLAY(CH),gray, contains a 1/8" silt stratum					-	-	2.71 From Q						65.5	57.0		97.5		4.25x1.163				CONSOLIDATION TEST to 19.2				
	11-B	-30.9	PLASTIC CLAY(CH),gray					95	24	2.73						55.8	74.9		99.4		4.25x1.165				CONSOLIDATION TEST to 2[illegible]				
	11-C	-31.8	PLASTIC CLAY(CH),gray					-	-	2.73 From 11-B Cons.						57.3	72.2		100	TC-Q	1.41 x 3.00	1	0.5	1.00					
																57.7	71.4		100		1.40 x 3.00	2	1.5	2.07					
																56.9	72.8		99.4		1.41 x 3.00	3	3.0	3.51					
	13-B	-39.1	SAND(SP),light gray, contains 1/4"					-	-	2.67						92.7	26.8	28.1	89.7	DS-S	3.00^{2}x0.550	1	1.0	0.64					
			dia. shells and shell fragments													91.1	26.9	27.3	86.5		"	2	2.0	1.48					
																93.4	26.0	28.5	88.4		"	3	3.0	2.27					

ENG FORM 2086, 1 MAR 60 (PREVIOUS EDITIONS MAY BE USED) (EM 1110-2-1803) (TRANSLUCENT)

TC – Triaxial Compression; UC – Unconfined Compression; DS – Direct Shear; Q UU – Unconsolidated Undrained; CD – Consolidated Dra[illegible]; R CU – Consolidated Und[illegible]

TES DATA SUMMARY	FEATURE 14	LK.PONT.,LA.&VIC.-HURR. PROT.-'71 ORLEANS PARISH L.F. LEVEE WEST OF IHNC(OUTFALL ALONG 17th ST. CANAL(GDM#2,SUPP.#5) W.E.S. JOB NO. 441-S472.21SE39

Boring No.	Sam. No.	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	Initial e	Shear Data on UNDISTURBED: Dry Density Lbs/Cu Ft	w_i %	w_F %	s_i %	Type Test	Specimen Size Inches	Test	σ_3 T/SQ FT	σ_1 T/SQ FT	c T/SQ FT	ϕ Degrees	Permeability: e	k FT/MIN.	P_c T/SQ FT
5-MUW	16-E	-50.9	PLASTIC CLAY(CH),gray, contains sand					64	22	2.69						62.9	60.3		97.1	TC-Q	1.41 x 3.00	1	0.5	1.02					
			and shell fragments													62.9	61.6		99.2		"	2	1.5	2.07					
																65.4	56.5		96.8		"	3	3.0	3.62					
	16-E	-50.9	PLASTIC CLAY(CH)grayish-green, con-					-	-	2.69	From Q					55.0	76.3		100		4.25x1.163				CONSOLIDATION TEST			to	32.0
			tains small sand pockets																										
	17-C	-56.0	PLASTIC CLAY(CH),gray, contains shell					82	24	2.70						65.3	57.0		97.4	DS-S	3.00^2x0.540	1	1.0	0.51					
			fragments													65.3	55.9		95.5		"	2	2.0	0.97					
																65.6	55.5		95.4		"	3	3.0	1.39					
	18-C	-60.2	PLASTIC CLAY(CH),gray					81	19	2.73						66.0	57.8		99.8		4.25x1.163				CONSOLIDATION TEST			to	32.0
	18-D	-60.6	PLASTIC CLAY(CH),gray					77	18	2.71						68.9	53.6		99.5	TC-Q	1.40 x 3.00	1	0.5	1.28					
																68.8	53.3		98.9		"	2	1.5	2.28					
																66.8	56.3		99.7		"	3	3.0	3.64					
6-MUE	1-D	-3.9	PLASTIC CLAY(CH),gray, contains													68.7	46.4		90.3	TC-Q	1.39 x 3.00	1	0.5	1.10					
			numerous rootlets and large decayed													70.8	44.8		92.1		1.40 x 3.00	2	1.5	2.22					
			roots													70.7	46.3		95.2		1.39 x 3.00	3	3.0	3.74					
	1-D	-3.9	PLASTIC CLAY(CH),dark brown					-	-	2.53	From Q					66.9	51.3		95.5		4.25x1.166				CONSOLIDATION TEST			to	3.[illegible]
	3-C	-11.2	PLASTIC CLAY(CH),gray, contains					102	30	2.56						48.4	89.0		99.1	TC-Q	1.39 x 3.00	1	0.5	0.84					
			rootlets and decayed large roots													48.5	91.0		100+		"	2	1.5	1.78					
																48.1	89.7		99.0		1.40 x 3.00	3	3.0	3.35					
	3-C	-11.2	PLASTIC CLAY(CH),brown, contains					-	-	2.56	From Q					48.0	87.9		96.6		4.25x1.162				CONSOLIDATION TEST			to	6.4
			1/16" to 3/8" dia. roots																										
	5-B	-18.5	PLASTIC CLAY(CH),gray					69	19	2.68						51.0	85.0		99.8		4.25x1.152				CONSOLIDATION TEST			to	6.4
	5-C	-18.9	PLASTIC CLAY(CH),gray, contains					81	20	2.73						55.1	76.8		100+	TC-Q	1.41 x 3.00	1	0.5	0.78					
			silt seams													56.3	76.1		100+		1.40 x 3.00	2	1.5	1.79					
																55.3	76.5		100+		"	3	3.0	3.26					
	7-B	-26.3	PLASTIC CLAY(CH),dark gray, contains					92	29	2.73						56.5	70.6	57.4	95.4	DS-S	3.00^2x0.550	1	1.0	0.44					
			a trace of organic matter, slicken-													55.4	74.7	49.4	98.0		3.00^2x0.625	2	2.0	0.72					
			sided													55.4	73.7	44.6	96.7		"	3	3.0	1.13					

TC – Triaxial Compression DS – Direct Shear CD – Consolidated Drained
UC – Unconfined Compression Q UU – Unconsolidated Undrained R CU – Consolidated Undrained

TEST DATA SUMMARY

FEATURE 14

LK. PONT., LA.&VIC.-HURR. PROT.'71 ORLEANS PARISH L.F. LEVEE, WEST OF IHNC(OUTFALL C ALONG 17th ST. CANAL(GDM#2, SUPP.#5,)
W.E.S. JOB NO. 441-S472.21SE39

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 on UNDISTURBED: Initial e	Dry Density lbs/cu ft	w_i %	w_f %	S_i %	Type Test	Specimen Size Inches	Test	σ_3 T/sq ft	σ_1 T/sq ft	c T/sq ft	ϕ Degrees	Permeability: e	k ft/min.	Con: P_o T/sq ft
6-MUE	8-B	-30.1	PLASTIC CLAY(CH), gray					100	27	2.74						52.2	83.2		100		4.25 x1.160				CONSOLIDATION TEST to				12.8
	8-C	-31.0	PLASTIC CLAY(CH), gray					-	-	2.74	From 8-B Cons.					53.4	79.3		98.8	TC-Q	1.41 x 3.00	1	0.5	0.95					
																53.3	80.5		99.8		1.40 x 3.00	2	1.5	1.81					
																54.2	77.9		98.8		"	3	3.0	3.35					
	9-B	-34.3	SILTY SAND(SM), gray, contains Clay (CH) lenses and shell fragments					-	-	2.68						92.1	29.0	29.4	95.1	DS-S	3.00^2 x0.550	1	1.0	0.58					
																92.0	30.1	27.4	98.5		"	2	2.0	1.36					
																91.9	31.4	26.6	100+		"	3	3.0	1.92					
	11-C	-42.7	PLASTIC CLAY(CH), gray, contains 1/4" silty sand seam					65	21	2.67						60.4	65.0		98.6	TC-Q	1.40 x 3.00	1	0.5	1.02					
																61.9	61.9		97.8		"	2	1.5	2.10					
																64.2	59.3		99.0		1.41 x 3.00	3	3.0	3.59					
	11-C	-42.7	PLASTIC CLAY(CH), gray, contains 1" dia. sand pockets					-	-	2.67	From					58.2	68.9		98.6		4.25x1.162				CONSOLIDATION TEST to				16.6 tsf
	14-C	-55.5	LEAN CLAY(CL), gray					49	21	2.76						68.0	54.5		98.2		4.25x1.165				CONSOLIDATION TEST to				19.2
	14-D	-55.9	PLASTIC CLAY(CH), gray					65	16	2.71						72.2	48.6		98.3	TC-Q	1.41 x 3.00	1	0.5	1.17					
																74.8	45.9		98.7		"	2	1.5	2.15					
																74.3	46.3		98.0		"	3	3.0	3.73					
	16-B	-62.0	SANDY CLAY(CL), gray, fissured					44	15	2.71						110.1	19.0	21.0	95.9	DS-S	3.00^2 x0.540	1	1.0	0.65					
																110.9	18.9	19.6	97.6		"	2	2.0	1.19					
																110.1	18.8	19.3	94.9		"	3	3.0	1.50					
	16-C	-62.9	PLASTIC CLAY(CH), gray, contains iron oxide concretions					51	18	2.70						104.0	22.3		97.0	TC-Q	1.40 x 3.00	1	0.5	2.58					
																107.6	19.8		94.3		"	2	1.5	4.69					
																105.9	20.8		94.9		"	3	3.0	6.53					
	16-C	-62.9	PLASTIC CLAY(CH), greenish gray					-	-	2.70	From					105.9	21.0		95.7		4.25x1.159				CONSOLIDATION TEST to				25.6

ENG FORM 2086 1 MAR 50 (PREVIOUS EDITIONS MAY BE USED) (EM 1110-2-1803) (TRANSLUCENT)

TC – Triaxial Compression; UC – Unconfined Compression; DS – Direct Shear; Q UU – Unconsolidated Undrained; CD – Consolidated Drained; R CU – Consolidated Undrained

LK. PONT.LA.&VIC. (71) ORLEANS PARISH
LAKEFRONT LEVEE, WEST OF IHNC, GDM #2,
SUPP.#5, OUTFALL CANALS
W.E.S. JOB NO. 441-S472.21SE394

TEST DATA SUMMARY

FEATURE 16

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 on UNDISTURBED: 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_1 T/Sq Ft	c T/Sq Ft	ϕ Degrees	Permeability: e	K Ft/Min.	P_c T/Sq Ft
2-MUE	1-C	+9.5	SILTY CLAY(CL),tan, contains con-													Unable to trim satisfactory "R" test specimens													
			cretions up to 2" in size and num-																										
			erous rootlets, crumbly																										
	3-A	+2.5	PLASTIC CLAY(CH),gray, slickensided,					90	25	2.71						73.1	45.8		94.7	TC-Q	1.40 x 3.00	1	0.5	1.10					
			contains small concretions													67.9	51.5		93.7		"	2	1.5	2.28					
																70.6	49.4		95.6		"	3	3.0	4.03					
																71.3	46.6		92.2		"	4	0.5	1.34					
	3-B	+1.6																							CONSOLIDATION TEST				
	5-C	-6.9																							CONSOLIDATION TEST				
	5-D	-7.4	PLASTIC CLAY(CH),gray, slightly					79	19	2.73						78.2	43.0		99.5	TC-Q	1.39 x 3.00	1	0.5	1.32					
			fissured													81.9	39.5		99.8		"	2	1.5	2.39					
																79.7	41.8		100+		"	3	3.0	3.99					
	6-B	-10.0	SILTY CLAY(CL),gray					41	22	2.72						86.5	33.4		94.3	TC-Q	1.41 x 3.00	1	0.5	1.11					
																88.1	33.1		97.1		"	2	1.5	2.20					
																89.0	32.9		98.6		1.40 x 3.00	3	3.0	3.73					
	6-B	-10.0																							CONSOLIDATION TEST				
	6-D	-11.8	PLASTIC CLAY(CH),gray, slickensided,					89	25	2.74						67.1	56.1		99.2	TC-Q	1.41 x 3.00	1	0.5	0.97					
			contains rootlets													63.7	61.4		100+		1.40 x 3.00	2	1.5	1.87					
																68.5	54.3		99.2		"	3	3.0	3.50					
	8-C	-18.9	SILTY SAND(SM),gray													[redacted]			"Q" test not performed										
	8-D	-19.8																							CONSOLIDATION TEST				
	9-D	-23.8	SILTY SAND(SM),gray, contains seams					-	-	2,68						88.4	31.3	27.9	93.9	DS-S	3.00^2x0.540	1	1.0	0.60					
			of plastic clay													87.5	32.4	28.4	95.2		"	2	2.0	1.12					
																85.8	33.5	29.3	94.5		"	3	3.0	1.76					

ENG FORM 2086 1 MAR 58 (PREVIOUS EDITIONS MAY BE USED) (EM 1110-2-1803) (TRANSLUCENT)

TC – Triaxial Compression; UC – Unconfined Compression; DS – Direct Shear; Q UU – Unconsolidated Undrained; CD – Consolidated Drained; R CU – Consolidated Undrained

TEST DATA SUMMARY

FEATURE 16

LK.PONT.LA.&VIC. (71) ORLEANS PARISH
LAKEFRONT LEVEE, WEST OF IHNC, GDM#2,
SUPP.#5, OUTFALL CANALS
W.E.S. JOB NO. 441-S472.21SE394

Boring No.	Sam. No.	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 on UNDISTURBED: 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_1 T/Sq Ft	c T/Sq Ft	ϕ Degrees	Permeability: e	K Ft/Min
2-MUE	13-D	-40.0	SILTY SAND(SM),gray					-	-	2.68						101.6	23.4	21.3	96.9	DS-S	3.00^2x0.540	1	1.0	0.63				
																100.9	22.8	21.1	92.9		"	2	2.0	1.32				
																102.6	22.7	20.1	96.4		"	3	3.0	1.99				
	16-A	-49.3	PLASTIC CLAY(CH),gray, scattered pockets of sand					56	17	2.71						74.8	43.6		93.8	TC-Q	1.41 x 3.00	1	0.5	1.43				
																76.6	42.7		95.6		"	2	1.5	2.58				
																75.2	44.1		95.6		"	3	3.0	4.12				
	16-A	-49.3																							CONSOLIDATION TEST			
	19-B	-62.2	PLASTIC CLAY(CH),gray, numerous pockets of sand and shell fragments					75	17	2.75						74.3	46.6		97.8	TC-Q	1.40 x 3.00	1	0.5	1.74				
																75.5	44.8		97.0		"	2	1.5	2.85				
																74.0	47.2		98.3		1.41 x 3.00	3	3.0	4.34				
	19-B	-62.2																							CONSOLIDATION TEST			

ENG FORM 2086 1 MAR 00 (PREVIOUS EDITIONS MAY BE USED) (EM 1110-2-1903) (TRANSLUCENT)

TC – Triaxial Compression   UC – Unconfined Compression   DS – Direct Shear   Q UU – Unconsolidate Undrained   CD – Consolidated Dr   R CU – Consolidated Un

TEST DATA SUMMARY

FEATURE 42

LK. PONT. LA. & VIC-HURR. PROT. (73) ORLEANS PARISH OUTFALL CANALS GDM #2, SUPP. #5-C-
17th ST. CANAL
W.E.S. JOB NO. 441-S472.14SE3C2

SHEAR DATA on UNDISTURBED

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	Initial e	Dry Density Lbs/Cu Ft	w_i %	w_f %	S_i %	Type Test	Specimen Size Inches	Test	σ_n T/Sq Ft	σ_1 T/Sq Ft	c T/Sq Ft	ϕ Degrees	Permeability: e	k Ft/Min.	P T/Sq
1-UMP	4-D	13.7/-10.6	ORGANIC CLAY(OH),dark brown					270	110	2.29						22.6	229.9		99.0	TC-Q	1.40 x 3.00	1	0.5	0.76					
																20.9	250.4		98.2		"	2	1.5	1.79					
																21.7	241.0		98.7		1.41 x 3.00	3	3.0	3.30					
	7-C	24.9/-21.8	PLASTIC CLAY(CH),gray;silt lenses					67	21	2.72						64.6	60.0		100+	TC-Q	1.40 x 3.00	1	0.5	0.81					
																63.3	61.9		100+		1.39 x 3.00	2	1.5	1.70					
																65.0	59.9		100+		1.40 x 3.00	3	3.0	3.18					
																65.0	59.6		100+		1.39 x 3.00	4	3.0	3.24					
	9-D	33.4/-30.3	PLASTIC CLAY(CH),gray;3/8" layer of silt in unused portion of sample					96	28	2.72						50.7	86.2		99.8	TC-Q	1.39 x 3.00	1	0.5	0.83					
																49.7	89.0		100		1.40 x 3.00	2	1.5	1.77					
																52.2	83.7		100+		"	3	3.0	3.28					
	11-C	40.9/-37.8	SILTY SAND(SM),gray;shells					-	-	2.68						97.3	25.1	24.3	93.4	DS-S	3.00^2x0.620	1	1.0	0.85					
																98.4	25.3	23.7	96.9		"	2	2.0	1.32					
																97.0	26.0	24.9	97.0		"	3	3.0	2.07					
	13-C	48.8/-45.7	PLASTIC CLAY(CH),gray;shell fragments					70	23	2.69						62.0	62.7		98.6	TC-Q	1.40 x 3.00	1	0.5	0.82					
																66.8	56.8		100+		1.41 x 3.00	2	1.5	1.99					
																65.8	55.7		96.7		1.42 x 3.00	3	3.0	3.42					
																62.9	59.2		95.4		1.40 x 3.00	4	0.5	0.96					
	16-D	61.8--58.7	LEAN CLAY(CL),light greenish gray;numerous silt pockets					45	15	2.68						109.8	18.7		95.6	TC-Q	1.39 x 3.00	1	0.5	2.72					
																109.6	18.8		95.8		1.40 x 3.00	2	1.5	3.96					
																110.7	18.5		97.0		1.39 x 3.00	3	3.0	6.02					
	17-D	65.8/-62.7	SANDY SILTY CLAY(CL),gray					28	20	2.70						103.1	22.8	23.1	97.0	TC-R	1.39 x 3.00	1	1.0	9.25			*(ϕ'=	, c'=	
																106.5	21.2	20.9	98.2		1.38 x 3.00	2	2.0	12.97					
																106.1	21.3	20.9	97.8		"	3	3.0	11.50					
	19-D	73.4/-70.3	SILT(ML),gray					-	-	2.67						104.7	23.6	22.9	100+	TC-R	1.37 x 3.00	1	1.0	14.03			*(ϕ'=	, c'=	
																104.2	23.3	22.3	100+		"	2	2.0	9.68					
																104.2	23.8	22.6	100+		"	3	3.0	14.02					
	20-C	76.9/-73.8	SAND(SP),tan and gray;vertical clay seams					-	-	2.68						101.9	24.2	23.4	100+	DS-S	3.01^2x0.556	1	2.0	1.31					
																100.8	22.8	22.9	92.6		"	2	4.0	2.43					
																100.0	23.6	24.5	94.0		"	3	6.0	3.83			*Based on	Rm	

TC – Triaxial Compression　　DS – Direct Shear　　S ~~CD~~ – Consolidated Dr[ained]
UC – Unconfined Compression　　Q ~~UU~~ – Unconsolidated Undrained　　R ~~CU~~ – Consolidated Un[drained]

TEST DATA SUMMARY

LK. PONT. LA&VIC-HURR. PROT. (73) ORLEANS PARISH
OUTFALL CANALS GDM #2, SUPP. # 5-C, -17th ST.
CANAL
W.E.S. JOB NO. 441-S472.14SE3C2

FEATURE 42

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 on UNDISTURBED: INITIAL e	DRY DENSITY LBS/CU FT	w_i %	w_f %	S_i %	TYPE TEST	SPECIMEN SIZE INCHES	TEST	σ_3 T/SQ FT	σ_1 T/SQ FT	c T/SQ FT	ϕ DEGREES	PERMEABILITY: e	K FT/MIN	P_o T/SQ F
1-UMP	24-D	93.3/-90.2	PLASTIC CLAY(CH), gray; seams of silty sand approx. 1/8" thick					57	20	2.73						85.0	35.4		96.6	TC-Q	1.39 x 3.00	1	0.5	1.74					
																85.1	34.3		93.6		1.39 x 3.00	2	1.5	1.89					
																84.1	35.9		95.2		"	3	3.0	4.62					

ENG FORM 2086 1 MAR 50 (PREVIOUS EDITIONS MAY BE USED) (EM 1110-2-1803) (TRANSLUCENT)

TC – Triaxial Compression
UC – Unconfined Compression
DS – Direct Shear
Q ~~UU~~ – Unconsolidated Undrained
S ~~CD~~ – Consolidated Drained
R ~~CU~~ – Consolidated Undrained

DEPARTMENT OF THE ARMY
WATERWAYS EXPERIMENT STATION, CORPS OF ENGINEERS
P. O. BOX 631
VICKSBURG, MISSISSIPPI 39180

IN REPLY REFER TO: WESSE

5 April 1971

SUBJECT: Transmittal of Results of Soil Tests, Lake Pontchartrain, La., and Vicinity, Boring 2-MUE

RECEIVED
APR 8 1971
TESTING SEC.

District Engineer
U. S. Army Engineer District, New Orleans
ATTN: LMNED-FT
P. O. Box 60267
New Orleans, La. 70160

1. Reference is made to your Intra-Army Order for Reimbursable Services (LMNED-FT-2C) dated 9 February 1971. Inclosed are a plasticity chart on which Atterberg limits data are presented (Incl 1), test report sheets for two S direct shear and six Q triaxial compression tests (Incl 2, 8 sheets), and test data summary sheets (Incl 3, 2 sheets)

2. A check test was performed on sample 3-A to better define its Q strength envelope. Sample 1-C (a silty clay) contained concretions and rootlets in amounts sufficient to prevent trimming satisfactory R test specimens. Sample 8-C was a silty sand, and the assigned Q test was therefore not performed.

3. Six consolidation tests are in progress, and results will be furnished your office by 14 April 1971; spaces for these test data have been provided on the test data summary sheets.

FOR THE DIRECTOR:

Joseph R Compton

3 Incl
as (trip)

JOSEPH R. COMPTON
Engineer
Chief, Embankment and Foundation Branch

CF w/incl:
LMVD (LMVED-G)

DEPARTMENT OF THE ARMY
WATERWAYS EXPERIMENT STATION, CORPS OF ENGINEERS
P. O. BOX 631
VICKSBURG, MISSISSIPPI 39180

IN REPLY REFER TO: WESSE

21 April 1971

SUBJECT: Transmittal of Results of Soils Tests, Lake Pontchartrain, La., and Vicinity, Boring 2-MUE

RECEIVED
APR 23 1971
TESTING SEC.

District Engineer
U. S. Army Engineer District, New Orleans
ATTN: LMNED-FT
P. O. Box 60267
New Orleans, La. 70160

1. Reference is made to our letter dated 5 April 1971, subject as above, in which we indicated that the results of the six consolidation tests assigned would be forthcoming; test report sheets for these tests are inclosed (Incl 1, 24 sheets).

2. In three of the consolidation tests, e-log p plots were concave upward at the higher pressures, and values of C_c are not reported.

FOR THE DIRECTOR:

Joseph R. Compton
JOSEPH R. COMPTON
Engineer
Chief, Embankment & Foundation Branch

1 Incl
as (trip)

CF w/incl:
LMVD (LMVED-G)

DEPARTMENT OF THE ARMY
WATERWAYS EXPERIMENT STATION, CORPS OF ENGINEERS
P. O. BOX 631
VICKSBURG, MISSISSIPPI 39180

IN REPLY REFER TO: WESSE

7 May 1971

SUBJECT: Transmittal of Results of Soil Tests, Lake Pontchartrain, La., and Vicinity, Boring 3-MUW

District Engineer
U. S. Army Engineer District, New Orleans
ATTN: LMNED-FT
P. O. Box 60267
New Orleans, La. 70160

Reference is made to our letter dated 30 April 1971, subject as above, in which we indicated that an S direct shear test was being rerun on sample 3-A. A test report sheet for this test is inclosed (Incl 1).

FOR THE DIRECTOR:

Joseph R. Compton

JOSEPH R. COMPTON
Engineer
Chief, Embankment & Foundation Branch

1 Incl
as (trip)

CF w/incl:
LMVD (LMVED-G)

DEPARTMENT OF THE ARMY
WATERWAYS EXPERIMENT STATION. CORPS OF ENGINEERS
P. O. BOX 631
VICKSBURG. MISSISSIPPI 39180

IN REPLY REFER TO: WESSE

30 April 1971

SUBJECT: Transmittal of Results of Soil Tests, Lake Pontchartrain, La., and Vicinity, Boring 3-MUW

District Engineer
U. S. Army Engineer District, New Orleans
ATTN: LMNED-FT
P. O. Box 60267
New Orleans, La. 70160

RECEIVED
MAY 4 1971
TESTING SEC.

1. Reference is made to your Intra-Army Order for Reimbursable Services (LMNED-FT-2-B) dated 2 February 1971. Inclosed are test report sheets for one Q triaxial compression and two consolidation tests (Incl 1, 9 sheets) and a test data summary sheet (Incl 2).

2. That portion of sample 1-B designated by your office for Q testing contained broken glass, gravel, and shell fragments in amounts sufficient to prevent trimming of satisfactory test specimens. The results of an S direct shear test performed on sample 3-A appeared questionable; a check test is in progress and results will be forwarded by 7 May 1971.

FOR THE DIRECTOR:

Joseph R. Compton

2 Incl
as (trip)

JOSEPH R. COMPTON
Engineer
Chief, Embankment & Foundation Branch

CF w/incl:
LMVD (LMVED-G)

DEPARTMENT OF THE ARMY
WATERWAYS EXPERIMENT STATION, CORPS OF ENGINEERS
P. O. BOX 631
VICKSBURG, MISSISSIPPI 39180

IN REPLY REFER TO: WESSE

21 April 1971

SUBJECT: Transmittal of Results of Soil Tests, Lake Pontchartrain, La., and Vicinity, Borings 5-MUW and 6-MUE

District Engineer
U. S. Army Engineer District, New Orleans
ATTN: LMNED-FT
P. O. Box 60267
New Orleans, La. 70160

RECEIVED
APR 23 1971
TESTING
SEC.

1. Reference is made to your Intra-Army Order for Reimbursable Services (LMNED-FT-2A) dated 2 February 1971. Inclosed are a plasticity chart on which Atterberg limits data are presented (Incl 1); test report sheets for 12 Q triaxial compression, 6 S direct shear, and 13 consolidation tests (Incl 2, 84 sheets); and test data summary sheets (Incl 3, 3 sheets).

2. Twenty of the samples tested were plastic clays (CH), three were clays (CL), and two were sands; they were brown to gray in color. Some of the clays contained organic matter, rootlets, and others contained seams or pockets of silt or fine sand. Generally, for the clays with little or no organic content, specific gravities ranged from 2.67 to 2.74, initial water contents varied from 46 to 76 percent, and initial degrees of saturation ranged from 95 to 100 percent.

3. Large amounts of organic matter in samples 6-C and 7-D, boring 5-MUW, prevented the trimming of satisfactory Q test specimens. Maximum deviator stresses indicated by the Q test on sample 16-C, boring 6-MUE, seemed unusually high; however, the e-log p curve derived from the consolidation test on this sample indicated that the material was overconsolidated, which perhaps accounts for the high deviator stresses and an apparently curved Q envelope.

FOR THE DIRECTOR:

Joseph R Compton

3 Incl
as (trip)

JOSEPH R. COMPTON
Engineer
Chief, Embankment and Foundation Branch

CF w/incl:
LMVD (LMVED-G)

DEPARTMENT OF THE ARMY
WATERWAYS EXPERIMENT STATION, CORPS OF ENGINEERS
P. O. BOX 631
VICKSBURG, MISSISSIPPI 39180

IN REPLY REFER TO: WESSE

27 September 1973

SUBJECT: Transmittal of Soils Test Results, Lake Pontchartrain, La., and Vic. - Orleans Parish Outfall Canals - 17th Street Canal

RECEIVED
OCT 1 1973
TESTING SEC.

District Engineer
U. S. Army Engineer District, New Orleans
ATTN: LMNED-FT
P. O. Box 60267
New Orleans, LA 70160

1. Reference is made to our letter dated 18 September 1973, subject as above, in which we state that the results of two $\overline{R}$ triaxial tests would be forthcoming. Inclosed are report sheets for these tests, including plots of induced pore pressure versus axial strain and Mohr effective stress diagrams (Incl 1, 4 sheets).

2. Relatively high negative pore pressures were induced during axial loading of specimens in both tests. Since the total strength envelopes for the tests are dependent on the development of these high pore pressures, and since the pore pressures may not be attainable in the field, the use of the total strength envelopes should be used with caution for design purposes.

FOR THE DIRECTOR:

R. C. Hor
for

G. P. HALE
Engineer
Soil Mechanics Division
Soils and Pavements Laboratory

1 Incl (trip)
as

CF w/incl:
LMVD (LMVED-G)

DEPARTMENT OF THE ARMY
WATERWAYS EXPERIMENT STATION, CORPS OF ENGINEERS
P. O. BOX 631
VICKSBURG, MISSISSIPPI 39180

IN REPLY REFER TO: WESSE

18 September 1973

SUBJECT: Transmittal of Soils Test Results, Lake Pontchartrain, La., and Vic. - Orleans Parish Outfall Canals - 17th Street Canal

District Engineer
U. S. Army Engineer District,
New Orleans
ATTN: LMNED-FT
P. O. Box 60267
New Orleans, LA 70160

1. Reference is made to your Intra-Army Order for Reimbursable Services No. LMNED-FT-13B dated 31 May 1973. Inclosed are a plasticity chart on which Atterberg limits data are presented (Incl 1), test report sheets for six Q triaxial and two S direct shear tests (Incl 2, 8 sheets), and test data summary sheets (Incl 3, 2 sheets).

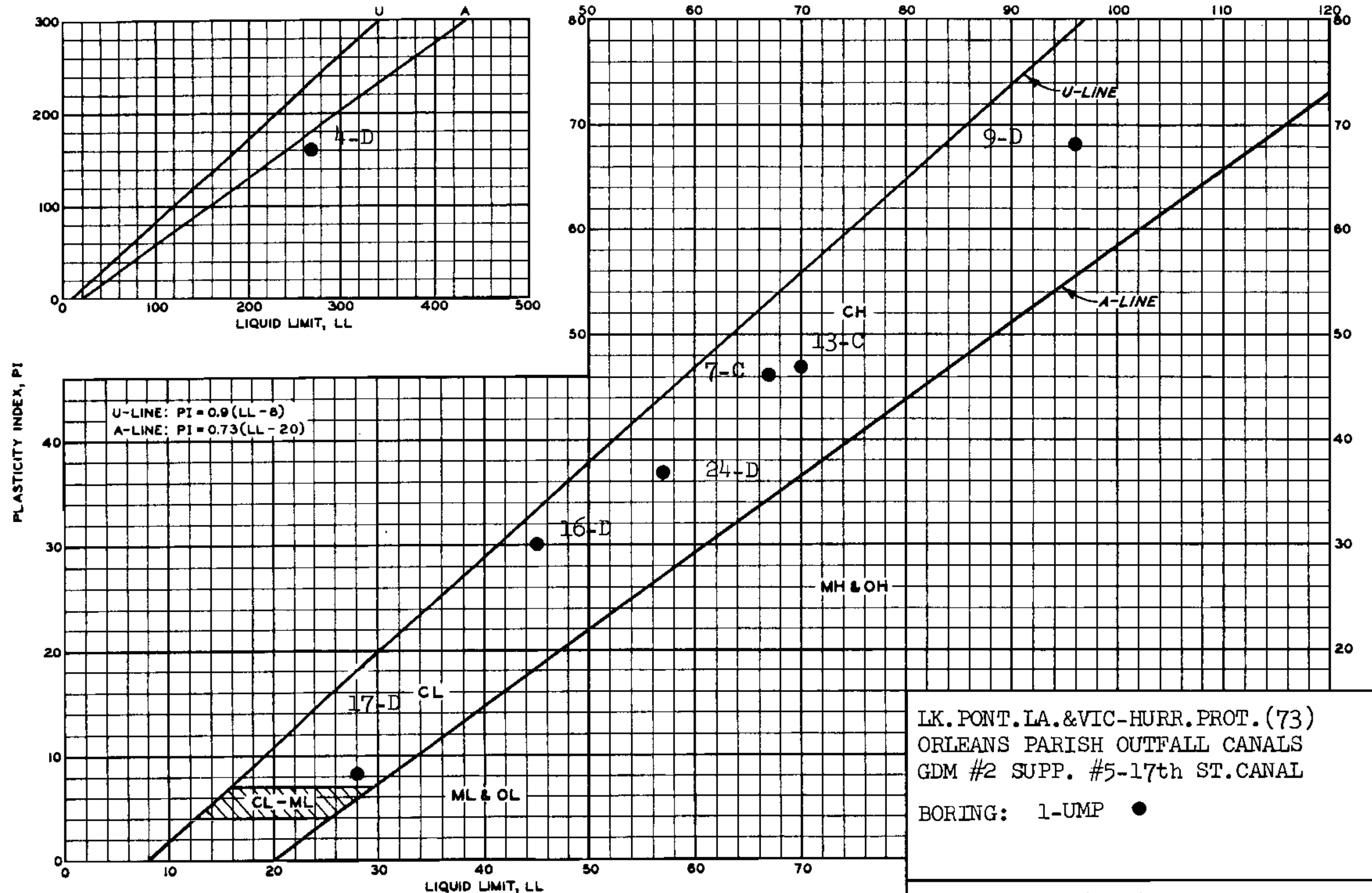
2. Two $\overline{R}$ check tests are in progress, and results of these tests will be furnished by 30 September 1973. Test data for the original $\overline{R}$ test specimens is included on the test data summary. Q test specimens below -45 ft elevation indicate degrees of saturation less than 100 percent even though specimens above that elevation are essentially saturated. Strength envelopes for these tests would best be represented by sloping lines.

FOR THE DIRECTOR:

G. P. HALE
Engineer
Soil Mechanics Division
Soils and Pavements Laboratory

3 Incl (trip)
as

CF w/incl:
LMVD (LMVED-G)

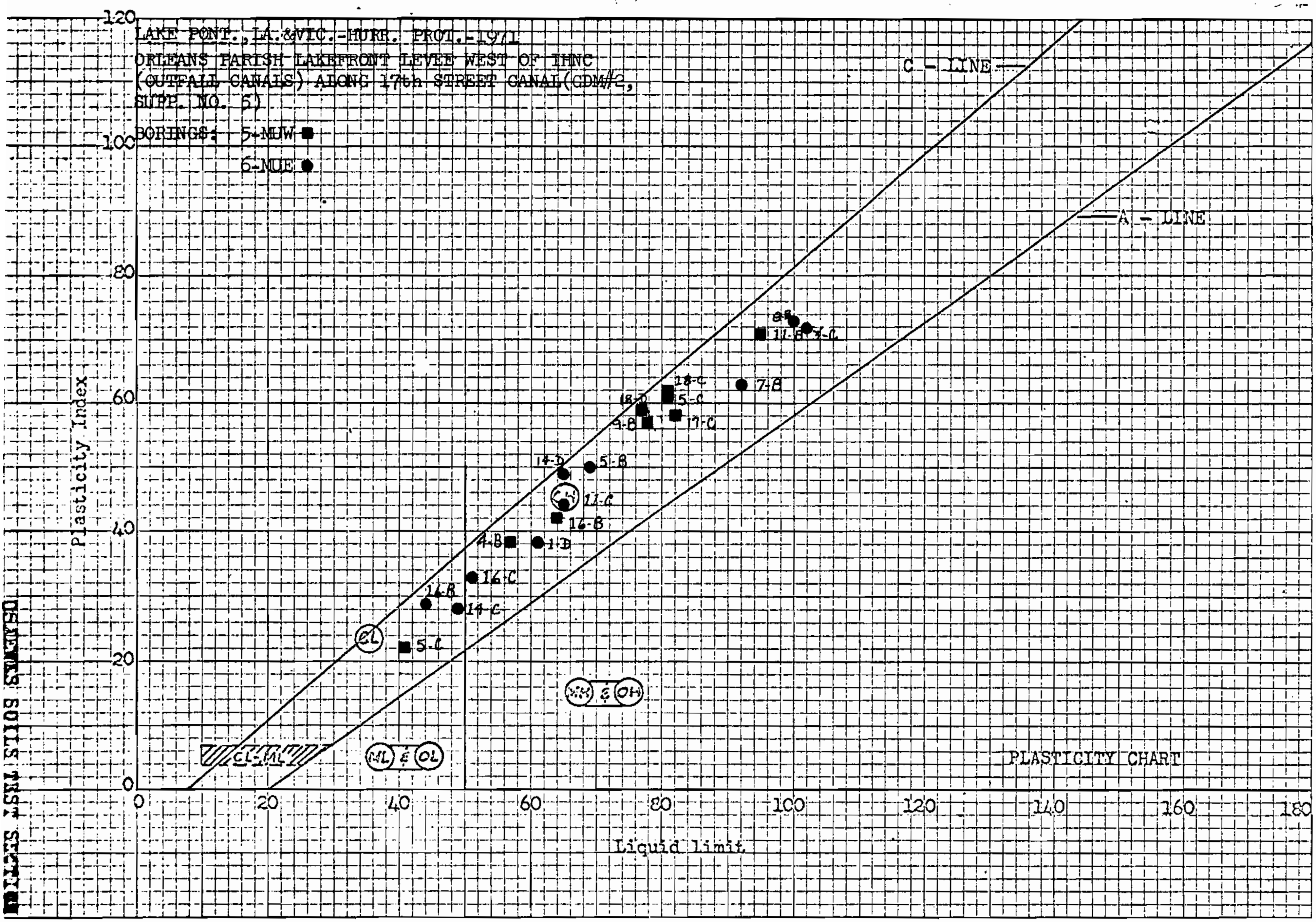


LK. PONT. LA. & VIC-HURR. PROT. (73)
ORLEANS PARISH OUTFALL CANALS
GDM #2 SUPP. #5-17th ST. CANAL

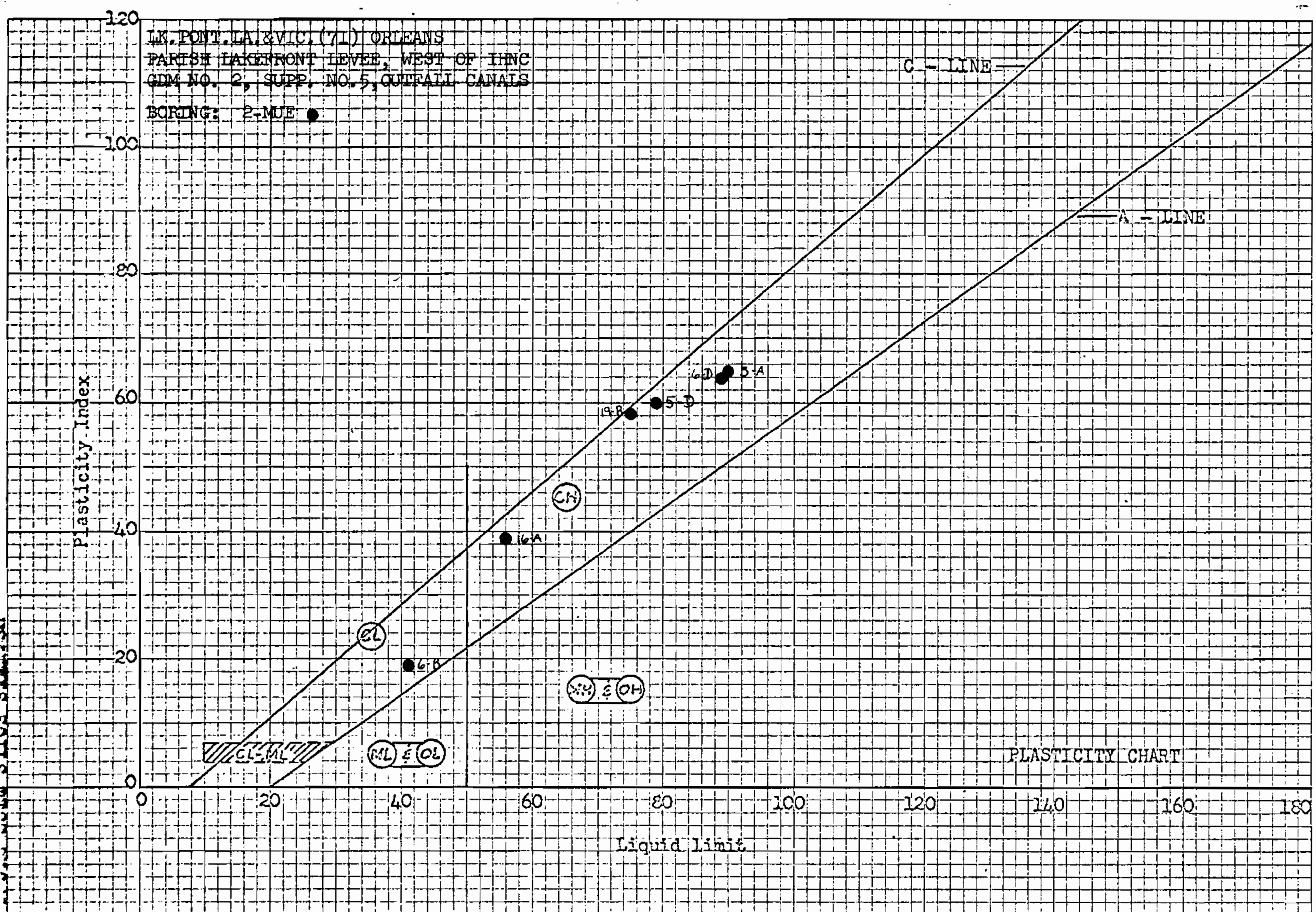
BORING: 1-UMP ●

PLASTICITY CHART

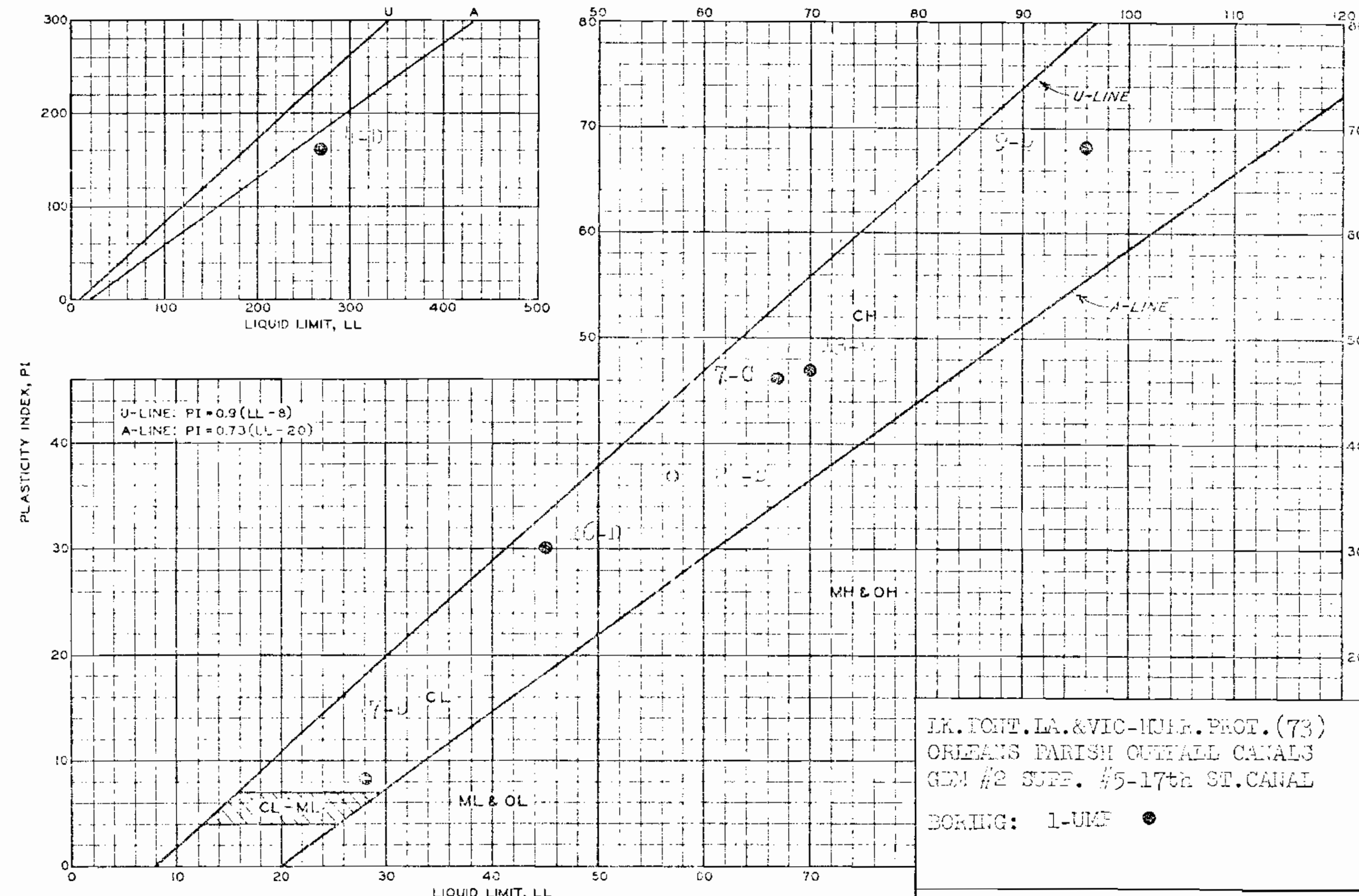
ENG FORM 4334 JUNE 1970 TRANSLUCENT



USACE SOILS TEST DATA



LK. PONT. LA. & VIC. (71) ORLEANS
PARISH LAKEFRONT LEVEE, WEST OF IHNC
GDM NO. 2, SUPP. NO. 5, OUTFALL CANALS
BORING: 2-MUE
C - LINE
A - LINE
Plasticity Index
Liquid Limit
PLASTICITY CHART
CH
CL
CL-ML
ML & OL
MH & OH
6-D
5-A
5-D
19-B
16-A
6-B
0
20
40
60
80
100
120
140
160
180



LK. PONT. LA. & VIC-HURR. PROT. (73)
ORLEANS PARISH OUTFALL CANALS
GDM #2 SUPP. #5-17th ST. CANAL

BORING: 1-UMF ●

PLASTICITY CHART

ENG FORM 4334
JUNE 1970

TRANSLUCENT

PROJECT LAKE PONTCHARTRAIN & VICINITY METAIRIE (17th ST.) OUTFLOW CANAL	Page 1 of __	COMPUTED BY RM	DATE 12/29/83
SUBJECT TEST RESULTS ON BORING 6-MUE		CHECKED BY	DATE

BORING 6-MUE

SAMPLE	ELEV.	TEST	γ (PCF)	c (TSF)
1-D	-3.9	Q	102	.34
3-C	-11.2	Q	92	.16
5-C	-18.9	Q	98	.14
8-C	-31.0	Q	96	.19
11-C	-42.7	Q	101	.29
14-D	-55.9	Q	108	.34
16-C	-62.9	Q	128	1.68

$$\gamma_s = \frac{\gamma_T}{(1+w)}$$

PROJECT Lake Pont., La. + Vic. Hurr.	Page 1 of —	COMPUTED BY WJD	DATE 3 Aug 77
SUBJECT Calculation of C_c		CHECKED BY	DATE

Boring 6-MUE

$$C_c = \frac{\Delta e}{\Delta \text{Log } P}$$

P_c	Sample	e_1	e_2	P_1	P_2	Δe	Δ Log P	C_c
.81	1-D	1.210	1.003	1	3	.207	1.0986	.1884
.42	3-C	1.790	1.530	1	2	.260	.6931	.3751 .87
.78	5-B	1.910	1.140	1	3	.77	1.0986	.7008
.94	8-B	2.080	1.100	1	5	.980	1.6094	.6089
1.04	11-C	1.730	1.000	1	5	.730	1.6094	.4535
5.40	14-C	1.016	.7320	5	18	.2840	1.2809	.2217
7.0	16-C	.530	.430	5	20	.100	1.3862	.0721

PROJECT: 17th St Outfall Canal PAGE ___ OF ___

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	W_n	LL	PL	PI
2-MUE	2-C	+5.2	UCT	110	0	.694	41	89	25	64
SL	3-A	+2.5	Q	107	0	.40	48	90	25	65
	3-B	+2.1	UCT	102	0	.324	41	77	26	51
	4-D	-3.7	UCT	114	0	.510	46	92	35	57
	5-C	-6.4	UCT	109	0	.238	50	82	28	54
	5-D	-7.4	Q	113	0	.42	41	79	19	60
	6-B	-10.0	Q	118	0	.36	33	41	22	19
	6-D	-11.4	UCT	112	0	.255	46	88	27	61
SL	6-D	-11.8	Q	105	0	.24	57	89	25	64
	7-B	-13.6	UCT	104	0	.331	71	99	31	68
	16-A	-49.3	Q	110	0	.52	43.5	56	17	39
	16-B	-50.4	UCT	111	0	.466	44	58	21	37
	17-C	-55.1	UCT	109	0	.515	51	74	23	51
	18-B	-58.4	UCT	111	0	.594	52	81	23	58
	19-A	-61.5	UCT	114	0	.817	49	79	25	54
	19-B	-62.2	Q	110	0	.67	46	75	58	17
	9-D	-23.8	S	117	30	0	32.4	-	-	-
	13-D	-40.0	S	126	33	0	23.0	-	-	-
Eustis Bor Pump Stg 5										
	2	+6.6	UCT	114	0	.449	33.5	-	-	-
	3	+3.6	"	111	0	.405	36.5	-	-	-
	5	-2.4	"	116	0	.26	29.0	-	-	-
	6	-6.9	"	112	0	.425	37	-	-	-
	7	-11.9	"	113	0	.275	38	71	24	47

PROJECT: PAGE __ OF __

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	W_n	LL	PL	PI
Bor 5 Pump Sta 6	8	-16.9	UCT	113	0	.23	40	45	19	26
	19	-56.9	"	103	0	.315	56	–	–	–
	21	-66.9	"	129	0	1.10	18	–	–	–
	23	-76.9	"	115	0	.92	35	–	–	–
	25	-86.9	"	120	0	.55	24	–	–	–
1MUW	2B	+0.4	Q	113	0	.38✓	38	70	22	48
	3B	-3.3	UCT	103	0	.124	54	96	28	68
SL	3C	-4.0	Q	108	0	.240✓	48	86	21	65
SL	3D	-4.8	(CH) S	109	24	0	49	82	28	54
	4-C	-8.0	UCT	117	0	.342	35	61	25	36
	5-C	-11.8	UCT	109	0	.228	49	85	35	50
	5-D	-13.0	Q	95	0	.230	81	119	30	89
	7-C	-19.7	UCT	103	0	.323	53	69	23	46
	10-D	-33.0	SM R	122			28	–	–	–
	14-B	-47.6	UCT	113	0	.485	44	55	18	37
	16-C	-56.2	Q	106	0	.50	52	73	18	55
	16-D	-57.4	UCT	109	0	.396	58	80	26	54
	17-B	-59.3	(CH) S	106	23°	0	51	81	19	62
	17-C	-60.0	UCT	111	0	.750	50	75	16	59
	17-D	-61.2	Q	106	0	.50	54	86	22	64

PROJECT: PAGE 1 OF ___

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	W_n	LL	PL	PI
1	1	+10.6	1PT Q	119	0	.776	26	–	–	–
	2	+7.6	1PT Q	120	0	.646	21	–	–	–
	3	+4.6	UCT	120	0	.491	27	–	–	–
	4	+1.6	UCT	103	0	.281	53	–	–	–
	5	-1.4	UCT	103	0	.201	59	–	–	–
	6	-6.4	"	113	0	.393	38	–	–	–
	7	-11.4	1PT Q	115	0	.402	37	–	–	–
2	2	+7.1	UCT	105	0	.204	51	–	–	–
	3	+4.1	1PT Q	100	0	.213	41	–	–	–
	4	+1.1	UCT	108	0	.156	40	–	–	–
	5	-1.9	"	120	0	.530	30	–	–	–
	6	-6.9	"	108	0	.300	46	–	–	–
	7	-11.9	"	111.	0	.280	43	–	–	–
	8	-16.9	"	119	0	.243	35	–	–	–
3	1	+10.6	"	121	0	.456	28	–	–	–
	4	+1.6	1PTQ	114	0	.449	29	–	–	–
	5	-1.4	UCT	115	0	.314	34	–	–	–
	6	-6.4	"	109	0	.283	44	–	–	–
	7	-11.4	1PTQ	106	0	.248	52	–	–	–
4 5"	1	+8.1	"	115	0	.310	28	–	–	–
	1	+8.1	3PTQ	117	10°	.253	34	–	–	–
	2	+5.1	1PTQ	97	0	.229	48	–	–	–
	3	+2.1	"	107	0	.156	37	–	–	–
	4	-.9	"	95	0	.221	57	104	30	74
	4	-.9	3PTQ	104	0	.32	52	104	30	74
	5	-3.9	1PTQ	97	0	.198	53	–	–	–

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	W_n	LL	PL	PI
5' 4	6	-8.9	UCT	114	0	.195	42	—	—	—
	7	-12.9	1PTQ	99	0	.221	66	117	37	80
	7	-12.9	3PTQ	100	0	.220	64	117	37	80
5	3	+4.6	UCT	115	0	.456	33	—	—	—
	4	+1.6	1PTQ	125	0	.569	20	—	—	—
	5	-1.4	"	107	0	.351	41	—	—	—
	6	-6.4	UCT	106	0	.319	49	—	—	—
6	1	+8.6	1PTQ	114	0	.643	28	—	—	—
	2	+5.6	"	107	0	.181	36	—	—	—
	3	+2.6	"	108	0	.239	49	—	—	—
	4	-0.4	UCT	104	0	.144	51	—	—	—
	5	-3.4	"	102	0	.109	66	—	—	—
	6	-8.4	"	115	0	.318	40	—	—	—
	7	-13.4	"	99	0	.296	70	—	—	—
5" 7	2	+7.9	1PTQ	128	0	.919	18	—	—	—
	3	+4.9	"	116	0	.330	33	—	—	—
	3	+4.9	3PTQ	115	0	.330	38	—	—	—
	4	+1.9	1PTQ	112	0	.439	41	89	24	65
	4	+1.9	3PTQ	114	0	.460	39	89	24	65
	5	-1.1	UCT	110	0	.123	42	—	—	—
	8	-7.1	"	112	0	.281	37	76	19	57
	8	-7.1	3PTQ	114	0	.385	38	76	19	57
8	2	+5.6	1PTQ	107	0	.094	29	—	—	—
	3	+2.6	"	104	0	.151	34	—	—	—
	5	-3.4	UCT	85	0	.125	88	—	—	—
	6	-8.4	"	110	0	.150	41	—	—	—
9	2	+7.6	"	116	0	.453	32	—	—	—
10	1	+8.6	1PTQ	110	0	.394	31	—	—	—

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ϕ	C (TSF)	W_n	LL	PL	PI
	~~3~~	~~+2.6~~	~~1PTQ~~	~~111~~	~~0~~	~~.065~~	~~23~~			
	5	-3.4	UCT	114	0	.253	34	—	—	—
11	1	+10.6	1PTQ	124	0	.938	22	—	—	—
	6	-6.4	UCT	113	0	.380	40	—	—	—
12 5"	2	+5.1	1PTQ	108	0	.196	26	—	—	—
	2	+5.1	3PTQ	101	0	.150	62	—	—	—
	3	+2.1	1PTQ	95	0	.152	63	—	—	—
	3	+2.1	3PTQ	104	0	.260	51	—	—	—
	4	-3.9	1PTQ	104	0	.10	45	—	—	—
	4	-3.9	3PTQ	105	0	.175	54	—	—	—
13	2	+10.6	1PTQ	122	0	.746	23	—	—	—
	8	+4.6	"	122	0	.736	23	—	—	—
14	5	-3.4	UCT	105	0	.123	52	—	—	—
15 5"	1	+11.1	1PTQ	114	0	.361	28	48	22	26
	2	+8.1	"	118	0	.408	23	—	—	—
	2	+8.1	3PTQ	122	0	.575	22	—	—	—
	3	+5.1	1PTQ	120	0	.508	24	—	—	—
16	2	+4.6	"	105	0	.188	41	—	—	—
	3	+1.6	"	105	0	.333	35	—	—	—
	6	-7.4	UCT	110	0	.155	44	—	—	—
17	1	+8.6	"	116	0	.413	28	—	—	—
	6	-6.9	"	102	0	.278	59	—	—	—
18	1	+7.6	1PTQ	109	0	.164	17	—	—	—
	2	+4.6	UCT	110	0	.164	32	—	—	—
	3	+1.6	1PTQ	94	0	.158	68	—	—	—
	4	-1.4	UCT	102	0	.176	59	—	—	—
19	2	-5.6	1PTQ	101	0	.465	35	—	—	—
20	1	+7.6	1PTQ	113	0	.728	19	—	—	—

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ϕ	C (TSF)	W_n	LL	PL	PI
20	2	+4.6	1PTQ	109	0	.204	36	63	21	42
	2	+4.6	3PTQ	114	0	.201	32	63	21	42
	3	+1.6	1PTQ	108	0	.133	.35	—	—	—
	4	-1.4	"	111	0	.210	.33	—	—	—
	5	-4.4	UCT	104	0	.096	50	60	22	38
	5	-4.4	3PTQ	107	0	.10	48	60	22	38
21	1	-1.4	1PTQ	114	0	3.42	12	—	—	—
22	1	+3.6	"	113	0	.254	31	—	—	—
	2	+.6	UCT	100	0	.263	55	—	—	—
	3	-2.4	"	96	0	.148	64	—	—	—
	5	-8.4	"	89	0	.119	86	—	—	—
23	3	-4.9	"	89	0	.118	87	—	—	—
	3	-4.9	3PTQ	93	0	.135	89	—	—	—
	4	-7.9	UCT	96	0	.105	72	88	26	62
24	1	+4.6	1PTQ	118	0	.624	20	—	—	—
	2	+1.6	"	104	0	.498	26	—	—	—
	3	-1.4	UCT	108	0	.225	42	—	—	—
	4	-4.4	"	98	0	.166	59	—	—	—
	6	-7.4	"	98	0	.148	72	—	—	—
26	1	+4.6	1PTQ	113	0	.385	26	—	—	—
	2	+1.6	"	107	0	.485	28	—	—	—
	3	-1.4	UCT	104	0	.134	52	—	—	—
	4	-4.4	"	74	0	.193	178	—	—	—
	6	-12.4	"	83	0	.180	131	—	—	—
	7	-15.4	"	128	0	.101	23	—	—	—
27	3	-4.4	1PTQ	119	0	.213	19	—	—	—
28	1	+4.6	"	123	0	1.03	22	—	—	—

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	W_n	LL	PL	PI
28 5"	2	+1.6	1PTQ	104	0	.518	34	—	—	—
	3	-1.4	UCT	111	0	.238	31	58	18	40
	3	-1.4	3PTQ	114	0	.240	33	58	18	40
	5	-11.4	UCT	100	0	.204	65	83	24	59
	5	-11.4	3PTQ	100	0	.190	65	83	24	59
29	2	-4.4	UCT	109	0	1.15	36	—	—	—
	4	-10.4	"	87	0	.088	112	—	—	—
	5	-13.4	"	96	0	.093	78	—	—	—
30	1	+4.6	"	117	0	.282	22	—	—	—
	2	+1.6	1PTQ	105	0	0.085	34	—	—	—
	3	-1.4	"	99	0	0.16	52	—	—	—
	4	-4.4	UCT	96	0	0.118	68	—	—	—
	5	-7.4	"	90	0	0.046	98	—	—	—
	6	-12.4	"	101	0	0.151	60	—	—	—
	7	-16.4	"	113	0	0.109	37	—	—	—
31 5"	1	-.4	1PTQ	112	0	1.37	32	—	—	—
	2	-3.4	"	67	0	.336	181	229	132	97
	2	-3.4	3PTQ	78	0	.335	168	229	132	97
	3	-6.4	UCT	92	0	0.093	80	—	—	—
	3	-6.4	3PTQ	97	0	.150	80	—	—	—
	4	-12.4	1PTQ	71	0	0.119	292	340	136	204
	4	-12.4	3PTQ	97	0	0.085	75	89	26	63
32	2	+2.1	UCT	97	0	.283	41	—	—	—
	3	-1.4	1PTQ	96	0	.146	62	—	—	—
	4	-4.4	UCT	78	0	.251	141	—	—	—
	5	-12.4	"	78	0	.161	163	—	—	—
33	3	+1.6	"	104	0	.454	44	—	—	—
	4	-1.4	1PTQ	103	0	.206	51	—	—	—
	5	-4.4	"	67	0	.430	250	—	—	—

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	W_n	LL	PL	PI
33	6	-14.4	UCT	105	0	.124	49	—	—	—
	7	-19.4	"	98	0	.154	69	—	—	—
	8	-22.4	"	99	0	.230	69	—	—	—
34	2	+1.1	"	109	0	.248	44	—	—	—
	3	-1.9	"	98	0	.184	64	—	—	—
	4	-4.9	"	109	0	.168	41	—	—	—
	5	-7.9	"	91	0	.199	77	—	—	—
	6	-12.9	"	76	0	.166	167	—	—	—
	7	-17.9	"	101	0	.125	65	—	—	—
	8	-22.9	"	99	0	.169	70	—	—	—
35	1	+8.6	UU M.S.	118	24	.148	18	—	—	—
	2	+2.6	UCT	98	0	.210	58	—	—	—
	4	-0.4	"	98	0	.176	55	—	—	—
	5	-3.4	"	109	0	.185	41	—	—	—
	6	-8.4	"	105	0	.146	54	—	—	—
	7	-13.4	"	108	0	.138	47	—	—	—
	8	-18.4	"	101	0	.144	65	—	—	—
	9	-23.4	"	101	0	.146	66	—	—	—
36 5"	1	+4.6	1PT Q	115	0	2.53	13	—	—	—
	2	+1.6	"	100	0	.176	44	—	—	—
	2	+1.6	3PTQ	105	0	.265	47	—	—	—
	3	-1.4	1PTQ	107	0	.141	41	—	—	—
	4	-4.4	UCT	98	0	.186	69	102	27	75
	4	-4.4	3PTQ	98	0	.165	71	102	27	75
	5	-7.4	UCT	105	0	.129	49	—	—	—
	7	-17.4	"	103	0	.129	55	—	—	—
	7	-17.4	3PTQ	106	0	.170	53	—	—	—

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	W_n	LL	PL	PI
36 5"	8	-22.4	UCT	99	0	.126	66	—	—	—
37	1	+7.6	M. S. Q	124	11	.253	18	—	—	—
	3	+1.6	1 PT Q	96	0	.231	45	—	—	—
	4	-1.4	UCT	105	0	.236	41	—	—	—
	5	-4.4	"	101	0	.136	60	—	—	—
	8	-24.4	"	98	0	.123	67	—	—	—
38	3	-1.9	UCT	106	0	.226	52	—	—	—
	4	-4.9	"	98	0	.089	64	—	—	—
	5	-7.9	"	71	0	.168	168	—	—	—
	6	-12.9	"	85	0	.106	118	—	—	—
	7	-17.9	"	105	0	.144	52	—	—	—
	9	-27.9	"	100	0	.234	70	—	—	—
	13	-41.9	"	104	0	.186	52	—	—	—
39 5"	1	-0.4	1 PT Q	106	0	.838	44	—	—	—
	3	-6.4	UCT	117	0	.133	33	—	—	—
	3	-6.4	3PTQ	117	0	.135	34	—	—	—
	6	-16.4	UCT	108	0	.176	45	—	—	—
	7	-21.4	"	104	0	.193	51	63	20	43
	7	-21.4	3PTQ	106	0	.200	52	63	20	43
	8	-26.4	UCT	99	0	.261	64	—	—	—
40	3	+1.1	"	98	0	.296	47	—	—	—
	4	-1.9	1 PT Q	92	0	.195	74	—	—	—
	5	-4.9	UCT	88	0	.115	90	—	—	—
	6	-7.9	"	72	0	.325	182	—	—	—
	8	-17.9	"	98	0	.108	69	—	—	—
	10	-27.9	"	97	0	.160	73	—	—	—

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	W_n	LL	PL	PI
40	14	-42.9	UCT	101	0	.378	59	—	—	—
41	1	+8.1	M.S. Q	122	22	.164	23	—	—	—
	3	-0.9	1PT Q	112	0	.501	30	—	—	—
	5	-8.9	UCT	103	0	.161	53	—	—	—
	6	-13.9	1PTQ	75	0	.219	182	—	—	—
	7	-18.9	UCT	103	0	.144	54	—	—	—
	8	-23.9	"	100	0	.125	66	—	—	—
42	1	+4.6	1PTQ	117	0	.191	22	—	—	—
	2	+1.6	UCT	101	0	.125	45	—	—	—
	3	-1.4	1PT Q	106	0	.206	44	—	—	—
	4	-4.4	UCT	106	0	.208	48	—	—	—
	5	-7.4	"	97	0	.132	66	—	—	—
	6	-12.4	"	91	0	.049	100	—	—	—
	7	-17.4	"	101	0	.165	50	—	—	—
	8	-22.4	"	97	0	.166	72	—	—	—
	9	-27.4	"	97	0	.165	69	—	—	—
43	1	+8.1	M.S. Q	127	17	.40	18	—	—	—
	3	+2.1	1PT Q	106	0	.504	35	—	—	—
	4	-0.9	UCT	113	0	.361	37	—	—	—
	5	-3.9	"	102	0	.144	59	—	—	—
	7	-18.9	"	106	0	.086	55	—	—	—
	8	-23.9	"	99	0	.103	68	—	—	—
44S	1	+5.1	1PT Q	118	0	.644	24	—	—	—
	2	+2.1	"	99	0	.291	40	—	—	—

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	Wn	LL	PL	PI
44 5"	2	+2,1	3PT Q	108	7	0,23	36	—	—	—
	3	-0,9	1PT Q	99	0	0,19	54	—	—	—
	4	-3,9	"	106	0	0,453	47	—	—	—
	5	-6,9	UCT	97	0	,138	66	—	—	—
	6	-11,9	"	100	0	,138	58	—	—	—
	6	-11,9	3PT Q	103	0	0,12	57	—	—	—
	7	-16,9	UCT	98	0	0,14	58	—	—	—
	8	-21,9	1PT Q	97	0	0,153	66	84	22	62
	9	-26,9	"	99	0	,23	67	—	—	—
	9	-26,9	3PT Q	99	0	,22	69	—	—	—
45	3	+2,1	UCT	104	0	,506	39	—	—	—
	4	-0,9	"	115	0	,351	36	—	—	—
	5	-3,9	"	98	0	,226	65	—	—	—
	7	-13,9	"	72	0	,224	207	—	—	—
	8	-18,9	"	70	0	,133	50	—	—	—
	9	-23,9	"	102	0	,189	65	—	—	—
	10	-28,9	"	99	0	,160	68	—	—	—
46	1	+4,6	1PTQ	118	0	,354	27	—	—	—
	2	+1,6	"	104	0	,244	41	—	—	—
	3	-1,4	"	103	0	,413	45	—	—	—
	4	-4,4	UCT	84	0	,475	107	—	—	—
	5	-7,4	"	85	0	,118	115	—	—	—
	7	17,4	"	96	0	,089	65	—	—	—
	8	-22,4	"	100	0	,176	63	—	—	—

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	W_n	LL	PL	PI
47 5"	1	-1.4	1PT Q	111	0	.635	32	—	—	—
	2	-7.4	UCT	69	0	.094	283	—	—	—
	2	-7.4	3PT Q	71	0	.09	273	—	—	—
	3	-10.4	UCT	100	0	.075	60	58	21	37
	3	-10.4	3PT Q	103	0	.085	58	58	21	37
	4	-13.4	UCT	103	0	.088	55	—	—	—
	5	-17.4	"	97	0	.115	71	—	—	—
	6	-22.4	"	96	0	.064	68	—	—	—
	6	-22.4	3PT Q	99	0	.09	71	82	27	55
48	2	+1.6	1PTQ	107	0	.128	36	—	—	—
	4	-4.4	UCT	114	0	.370	33	—	—	—
	5	-7.4	"	97	0	.106	67	—	—	—
	6	-12.4	"	108	0	.221	38	—	—	—
	7	-17.4	"	102	0	.098	58	—	—	—
	8	-22.4	"	99	0	.138	65	—	—	—
	9	-27.4	"	97	0	.135	67	—	—	—
49	3	-11.9	"	82	0	.095	134	—	—	—
	4	-14.9	"	73	0	.079	249	—	—	—
	5	-19.9	"	99	0	.113	66	—	—	—
	6	-24.9	"	98	0	.159	70	—	—	—
	7	-29.9	"	97	0	.225	71	—	—	—
50	2	+1.6	1PTQ	102	0	.459	47	—	—	—
	4	-3.4	UCT	106	0	.151	52	—	—	—
	5	-6.4	"	99	0	.130	67	—	—	—

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	W_n	LL	PL	PI
50	7	-16.4	1PT Q	73	0	.178	195	—	—	—
	8	-21.4	UCT	103	0	.094	54	—	—	—
	9	-26.4	"	103	0	.104	75	—	—	—
51	4	-13.9	UCT	112	0	.080	42	—	—	—
	5	-18.9	"	102	0	.114	52	—	—	—
	6	-23.9	"	101	0	.098	66	—	—	—
	7	-28.9	"	99	0	.166	70	—	—	—
52 5"	1	+4.6	1PT Q	118	0	.790	21	—	—	—
	2	+1.6	"	93	0	.205	36	—	—	—
	3	-1.4	"	110	0	.125	29	47	16	31
	3	-1.4	3PT Q	119	0	.20	29	47	16	31
	4	-4.4	UCT	110	0	.280	43	—	—	—
	5	-7.4	"	93	0	.146	71	—	—	
	6	-12.4	"	76	0	.231	147	—	—	—
	6	-12.4	3PT Q	79.1	0	.230	180	—	—	—
	7	-17.4	1PTQ	108	0	.115	44	48	22	26
	7	-17.4	3PT Q	110	0	.250	43	48	22	26
	8	-22.4	UCT	100	0	.119	63	—	—	—
	9	-27.4	"	99	0	.146	70	—	—	—
	9	-27.4	3PT Q	99	0	.150	68	—	—	—
53	1	-3.4	1PTQ	106	0	.578	30	—	—	—
	4	-12.4	UCT	68	0	.118	334	—	—	—
	5	-15.4	"	110	0	.065	43	—	—	—

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	W_n	LL	PL	PI
53	6	-20.4	UCT	101	0	.099	65	—	—	—
	7	-25.4	"	99	0	.119	69	—	—	—
	8	-30.4	"	102	0	.164	56	—	—	—
54	2	+1.6	1PT Q	114	0	.611	30	—	—	—
	4	-4.4	UCT	114	0	.256	35	—	—	—
	5	-7.4	"	108	0	.201	46	—	—	—
	6	-12.4	"	77	0	.123	175	—	—	—
	8	-22.4	"	101	0	.136	61	—	—	—
	10	-32.4	"	99	0	.179	65	—	—	—
55	1	-3.4	1PT Q	121	0	.346	29	—	—	—
5"	3	-12.4	"	71	0	.119	277	—	—	—
	3	-12.4	3PT Q	75	0	.120	237	—	—	—
	4	-15.4	UCT	87	0	.176	98	—	—	—
	5	-19.4	"	99	0	.119	69	—	—	—
	6	-24.4	UCT	101	0	.189	64	75	24	51
	6	-24.4	3PTQ	101	0	.195	64	75	24	51
	7	-33.4	"	114	0	.185	34	—	—	—
	7	-33.4	3PT Q	116	0	.185	34	—	—	—
56	2	+1.6	1PT Q	103	0	.196	32	—	—	—
	4	-4.4	UCT	106	0	.153	49	—	—	—
	5	-7.4	"	114	0	.166	34	—	—	—
	7	-17.4	"	70	0	.280	243	—	—	—
	8	-22.4	"	103	0	.148	56	—	—	—
	10	-32.4	"	100	0	.158	65	—	—	—
57	1	-3.4	"	119	0	.885	27	—	—	—

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	W_n	LL	PL	PI
57	3	-16.4	UCT	102	0	.085	57	—	—	—
	4	-20.4	"	100	0	.099	63	71	27	44
	5	-25.4	"	100	0	.144	64	—	—	—
	6	-30.4	"	98	0	.189	64	81	28	53
	7	-35.4	"	96	0	.239	69	—	—	—
58	2	+1.6	1PT Q	106	0	1.78	19	—	—	—
	4	-4.4	UCT	107	0	.200	46	—	—	—
	5	-7.4	"	88	0	.141	98	—	—	—
	6	-12.4	"	67	0	.155	338	—	—	—
	7	-17.4	"	108	0	.091	41	—	—	—
	8	-22.4	"	98	0	.156	68	—	—	—
	10	-32.4	"	97	0	.238	70	—	—	—
	12	-42.4	UCT	105	0	.208	52	—	—	—
59	1	-3.4	1PTQ	119	0	.286	27	—	—	—
	2	-6.4	UCT	108	0	.241	42	—	—	—
	4	-15.4	"	70	0	.176	206	—	—	—
	5	-20.4	"	97	0	.140	78	—	—	—
	6	-25.4	1PT Q	97	0	.155	69	—	—	—
	7	-30.4	UCT	96	0	.176	72	—	—	—
	8	-35.4	"	108	0	.194	43	—	—	—
60 S"	3	-0.9	1PTQ	92	0	.319	56	—	—	—
	4	-3.9	1PT Q	113	0	.208	39	43	20	23
	4	-3.9	3PT Q	112	0	.210	40	43	20	23

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	W_n	LL	PL	PI
60 5"	7	-16.9	UCT	101	0	.100	58	—	—	—
	8	-21.9	"	101	0	.183	63	66	20	46
	8	-21.9	3PTQ	102	0	.19	61	—	—	—
	9	-26.9	UCT	100	0	.193	65	—	—	—
	10	-31.9	"	100	0	.161	68	—	—	—
	10	-31.9	3PTQ	100	0	.15	66	—	—	—
61	1	-2.4	1PT Q	121	0	.421	23	—	—	—
	2	-5.4	"	93	0	.096	66	—	—	—
	3	-14.4	UCT	68	0	.100	295	—	—	—
	4	-19.4	"	105	0	.113	50	—	—	—
	5	-24.4	"	101	0	.119	59	—	—	—
	6	-29.4	1PT Q	94	0	.175	74	—	—	—
62	1	+4.6	"	120	0	.943	23	—	—	—
	3	-1.4	"	90	0	.191	51	—	—	—
	5	-7.4	UCT	100	0	.265	52	—	—	—
	6	-12.4	"	69	0	.141	239	—	—	—
	7	-17.4	"	114	0	.153	35	—	—	—
	9	-27.4	"	100	0	.130	64	—	—	—
63 5"	2	-10.4	UCT	77	0	.136	175	—	—	—
	3	-14.4	"	79	0	.174	147	210	77	133
	3	-14.4	3PT Q	82	0	.175	139	210	77	133
	4	-18.4	UCT	97	0	.099	73	—	—	—
	5	-23.4	"	100	0	.173	64	78	23	55
	5	-23.4	3PT Q	101	0	.175	65	78	23	55

PROJECT:

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	Wn	LL	PL	PI
64	2	+1.6	1PTQ	119	0	.738	20	—	—	—
	4	-4.4	UCT	110	0	.176	40	—	—	—
	7	-15.4	"	102	0	.051	61	—	—	—
	9	-26.9	"	103	0	.191	66	—	—	—
	11	-34.9	"	98	0	.084	71	—	—	—
65	1	-3.4	"	118	0	.635	32	—	—	—
	2	-5.4	"	112	0	.179	43	—	—	—
	3	-8.4	"	71	0	.044	294	—	—	—
	4	-11.4	"	86	0	.119	117	—	—	—
	5	-14.4	"	98	0	.081	75	—	—	—
	6	-19.4	"	98	0	.100	69	—	—	—
	7	-24.4	"	101	0	.131	64	—	—	—
	8	-29.4	"	96	0	.185	75	—	—	—
	9	-34.4	"	99	0	.213	65	—	—	—
66	2	+1.6	"	114	0	.791	32	—	—	—
	4	-4.4	"	109	0	.256	44	—	—	—
	6	-11.9	"	85	0	.238	96	—	—	—
	7	-16.9	"	95	0	.084	74	—	—	—
	8	-21.9	"	104	0	.118	60	—	—	—
	10	-31.9	"	96	0	.199	76	—	—	—
67	3	-1.4	"	113	0	.211	43	—	—	—
	4	-4.4	"	110	0	.270	40	—	—	—
	5	-9.4	"	100	0	.174	60	—	—	—
	6	-14.4	"	103	0	.089	59	—	—	—

PROJECT: PAGE 16 OF

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	Wn	LL	PL	PI
67	7	-19.4	UCT	102	0	.145	61	–	–	–
	8	-24.4	"	101	0	.178	63	–	–	–
	9	-29.4	"	98	0	.136	71	–	–	–
	10	-34.4	"	111	0	.184	35	–	–	–
68 5"	1	+5.1	1PT Q	127	0	1.29	21	–	–	–
	2	+2.1	"	92	0	.350	58	96	28	68
	2	+2.1	3PT Q	119	0	.495	29	96	28	68
	3	-0.9	1PTQ	104	0	.215	46	–	–	–
	3	-0.9	3PT Q	107	0	.215	46	–	–	–
	4	-3.9	1PT Q	88	0	.249	79	–	–	–
	5	-6.9	"	102	0	.399	45	38	18	20
	5	-6.9	3PT Q	104	0	.40	50	38	18	20
	7	-16.9	1PT Q	84	0	.121	92	–	–	–
	7	-16.9	3PT Q	88	0	.130	99	–	–	–
	9	-25.9	UCT	103	0	.170	56	69	17	52
	9	-25.9	3PT Q	105	0	.175	53	69	17	52
	10	-31.9	3PT Q	98	0	.175	71	–	–	–
	11	-35.4	1PT Q	110	0	.125	38	–	–	–
	11	-35.4	3PT Q	114	0	.115	36	–	–	–

PROJECT: PAGE ___ OF ___

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	W_n	LL	PL	PI
3-MUW	2B	-6.7	Q	103	0	.22	61	105	72	33
	3A	-10.4	(SM) S	124	35	0	23	–	–	–
4-MUE	2B	-7.5	Q	107	0	.17	51	67	18	49
	1C	-4.6	UCT	102	0	.355	62	113	40	73
	2A	-7.1	UCT	113	0	.257	44	88	27	61
	4B	-15.4	Q	115	0	.16	36	55	17	38
	11C	-48.4	UCT	106	0	.631	53	81	23	58
	11D	-49.5	Q	105	0	.43√	54	67	20	47
	13C	-56.6	Q	106	0	.50	51	68	24	44
	13D	-57.8	UCT	106	0	.358	58	78	25	53
	14C	-60.2	UCT	110	0	.861	50	73	25	48
	15C	-64.4	Q	130	0	.63	21	23	13	10
5-MUW	4B	-3.1	Q	114	0	.310	41	57	19	38
	5C	-8.0	(CL) S	112	31°	0	45	41	19	22
	9B	-23.1	Q	102	0	0.20	63	78	21	57
	9C	-24.3	UCT	105	0	.251	60	81	24	57
	10C	-27.6	UCT	104	0	.275	65	81	25	56
	11B	-31.4	UCT	101	0	.408	71	87	35	52
	11C	-31.8	Q	99	0	.27	72	–	–	–
	13-B	-39.1	(SP) S	120	36°	0	26	–	–	–
	16-B	-50.9	Q	103	0	.28	60	64	22	42
	17-C	-56.0	S	104	26°	0	56	82	24	58
	18-C	-59.7	UCT	106	0	.547	58	82	23	59
	18-D	-60.6	Q	94	0	.37	38	77	18	59

PROJECT: PAGE __ OF __

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	W_n	LL	PL	PI
5-MUW	19A	-61.5	UCT	106	0	.430	59	85	25	60
	20C	-67.8	"	108	0	.530	51	81	19	62
1-MUG										
	2B	-12.2	Q	96	0	.04	79	69	20	49
	3C	-16.8	Q	97	0	.055	77	70	22	48
	3C	-17.3	S	97	24	0	72	-	-	-
	4B	-20.2	Q	95	0	.045	87	89	23	66
	5B	-23.9	Q	105	0	.11	53	48	16	32
	9C	-42.2	Q	96	0	.25	76	68	21	47
	10B	-45.4	UCT	100	0	.255	69	72	21	51
	11B	-49.2	Q	100	0	.20	65	66	18	48
	11C	-50.1	UCT	102	0	.108	65	-	-	-
	13C	-57.7	Q	104	0	.16	55	72	19	53
2 MUG										
	3C	-1.8	Q	109	0	.235	46	-	-	-
	4C	-5.3	"	105	0	.110	54	77	22	55
	4D	-6.3	"	81	0	.155	168	248	61	187
	7C	-17.6	Q	104	0	.09	58	59	18	41
3 MUG										
	4B	-1.1	Q	92	0	.28	79	120	46	74
	6C	-9.9	Q	93	0	.225	88	127	31	96

PROJECT:

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BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	W_n	LL	PL	PI
3MUG	7B	-13.3	Q	111	0	.225	43	51	13	38
4MUG	7C	-4.3	Q	100	0	.195	67	116	25	91
	8C	-8.1	"	110	0	.35	45	74	21	53
	10C	-16.2	S	119	31°30	0	21	—	—	—

PROJECT: PAGE ___ OF ___

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	Wn	LL	PL	PI
69	2	+0.6	UCT	114	0	.276	37	-	-	-
	3	-1.4	"	95	0	.11	71	-	-	-
	4	-3.9	"	100	0	.105	61	-	-	-
	5	-6.9	"	91	0	.058	84	-	-	-
	6	-9.9	"	73	0	.21	172	-	-	-
	7	-14.9	"	83	0	.133	129	-	-	-
	8	-19.9	"	98	0	.089	74	-	-	-
	9	-24.9	"	99	0	.139	70	-	-	-
	10	-29.9	"	96	0	.17	74	-	-	-
	14	-44.4	"	109	0	.089	41	-	-	-
	15	-49.9	1PTQ	96	0	.196	73	-	-	-
	17	-59.9	UCT	105	0	.279	50	-	-	-
	19	-64.9	"	128	0	.806	20	-	-	-
70										
	1	.1	UCT	102	0	.278	47	-	-	-
	3	-5.9	"	100	0	.065	64	-	-	-
	4	-8.9	"	91	0	.109	74	-	-	-
	6	-16.4	"	94	0	.116	72	-	-	-
	7	-21.4	"	100	0	.146	71	-	-	-
	8	-26.4	"	99	0	.148	62	-	-	-
	9	-31.4	"	95	0	.206	77	-	-	-
	12	-39.4	1PTQ	108	0	.115	42	-	-	-
	13	-46.4	UCT	96	0	.245	68	-	-	-
	15	-56.4	"	101	0	.315	57	-	-	-

PROJECT: PAGE ___ OF ___

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	W_n	LL	PL	PI
70	16	-61.4	UCT	125	0	.815	22	—	—	—
71	3	-2.9	UCT	69	0	.279	241	—	—	—
	5	-13.4	"	84	0	.166	106	—	—	—
	6	-18.4	3PTQ	107	0	.14	50	75	21	54
	6	-18.4	UCT	100	0	.16	69	75	21	54
	7	-23.4	3PTQ	102	0	.165	66	—	—	—
	7	-23.4	UCT	98	0	.155	66	—	—	—
	8	-28.4	3PTQ	100	0	.20	71	—	—	—
	8	-28.4	UCT	95	0	.14	75	—	—	—
	9	-33.4	3PTQ	99	0	.265	70	83	19	64
	9	-33.4	UCT	101	0	.308	63	83	19	64
	12	-43.4	1PTQ	101	0	.249	63	—	—	—
	13	-48.4	UCT	100	0	.25	63	—	—	—
	14	-53.4	3PTQ	106	0	.32	53	75	18	57
	14	-53.4	UCT	106	0	.286	56	75	18	57
	15	-63.4	1PTQ	124	0	.50	20	—	—	—
72										
	3	-5.9	1PTQ	95	0	.131	67	—	—	—
	5	-16.9	UCT	94	0	.105	79	—	—	—
	6	-21.9	"	97	0	.128	70	—	—	—
	7	-26.9	"	102	0	.15	62	—	—	—
	8	-31.9	"	96	0	.19	75	—	—	—
	11	-46.9	"	100	0	.241	61	—	—	—
	12	-51.9	"	101	0	.176	60	—	—	—
	13	-56.9	"	118	0	.488	31	—	—	—
	14	-61.9	"	128	0	.389	20	—	—	—

PROJECT: PAGE ___ OF ___

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	W_n	LL	PL	PI
73	3	-4.4	1PTQ	93	0	.124	65	—	—	—
	4	-7.4	UCT	80	0	.140	127	—	—	—
	5	-10.4	"	96	0	.124	73	—	—	—
	6	-14.9	"	82	0	.136	124	—	—	—
	7	-19.9	1PTQ	104	0	.156	53	—	—	—
	8	-24.9	UCT	101	0	.138	60	—	—	—
	9	-29.9	"	96	0	.153	75	—	—	—
	10	-34.9	1PTQ	108	0	.144	45	—	—	—
	13	-44.9	1PTQ	99	0	.306	62	—	—	—
	15	-54.9	UCT	105	0	.296	52	—	—	—
	17	-64.9	"	127	0	1.17	20	—	—	—
74										
	2	+0.9	1PTQ	89	0	.259	66	—	—	—
	4	-9.9	"	87	0	.109	83	102	29	73
	4	-9.9	3PTQ	94	0	.160	83	102	29	73
	5	-14.4	UCT	118	0	.166	41	55	18	37
	5	-14.4	3PTQ	113	0	.145	42	55	18	37
	6	-19.4	1PTQ	104	0	.125	51	—	—	—
	7	-24.4	UCT	103	0	.208	58	—	—	—
	8	-29.4	"	95	0	.214	72	80	24	56
	9	-34.4	"	106	0	.285	47	—	—	—
	13	-49.4	"	97	0	.344	58	81	21	60
	13	-49.4	3PTQ	103	0	.385	62	81	21	60

PROJECT:

PAGE __ OF __

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	ø	C (TSF)	W_n	LL	PL	PI
74	14	-54.4	1PTQ	105	0	.456	53	—	—	—
	15	-64.4	"	126	0	.690	17	—	—	—
	16	-69.4	"	128	0	.613	21	—	—	—
75	7	-14.9	UCT	85	0	.114	98	—	—	—
	8	-19.9	"	101	0	.148	61	—	—	—
	9	-24.9	"	101	0	.165	57	—	—	—
	10	-29.9	"	95	0	.213	74	—	—	—
	11	-34.9	"	100	0	.214	60	—	—	—
	13	-43.4	1PTQ	102	0	.318	56	—	—	—
	15	-54.9	UCT	104	0	.32	53	—	—	—
	17	-63.4	1PTQ	119	0	.593	27	—	—	—
76	2	+.6	UCT	96	0	.136	69	—	—	—
	3	-2.4	1PTQ	99	0	.235	59	—	—	—
	4	-5.4	UCT	86	0	.131	100	—	—	—
	8	-23.4	"	103	0	.173	57	—	—	—
	9	-28.4	"	97	0	.163	69	—	—	—
	10	-33.4	"	99	0	.29	68	—	—	—
	12	-43.4	"	98	0	.29	67	—	—	—
	13	-48.4	"	102	0	.358	60	—	—	—
	14	-52.9	"	105	0	.356	53	—	—	—
	15	-58.4	"	120	0	.566	31	—	—	—

PROJECT: LAKE PONTCHARTRAIN, LA. & VICINITY
METAIRIE (17TH ST.) OUTFALL CANAL

PAGE 1 OF

BORING NO.	SAMPLE	ELEVATION	TEST	γ (PCF)	Ø	C (TSF)	W_n	LL	PL	PI
6-MUE	1-D	-3.9	Q	102	0	.34	46	61	23	38
	3-C	-11.2	Q	92	0	.16	90	102	30	72
	4-B	-14.6	UCT	98	0	.104	74	97	24	73
	5-B	-18.0	"	102	0	.122	68	82	29	53
	5-C	-18.9	Q	98	0	.14	74	81	20	61
	6-C	-23.0	UCT	100	0	.186	74	85	25	60
	7-C	-27.5	"	100	0	.22	72	92	26	66
	8-B	-30.6	"	94	0	.172	85	109	30	79
	8-C	-31.0	Q	96	0	.19	79	-	-	-
	11-C	-42.7	Q	101	0	.29	62	65	21	44
	11-D	-43.4	UCT	97	0	.343	79	105	27	78
	12-B	-46.1	UCT	98	0	.365	72	93	63	30
	13-D	-51.7	"	104	0	.347	62	86	18	68
	14-C	-55.0	"	111	0	.553	55	72	26	46
	14-D	-55.9	Q	108	0	.34	47	65	16	49
	15-C	-59.1	UCT	131	0	.573	26	55	15	40
	16-C	-62.9	Q	128	0	1.68	21	51	18	33
	7-B	-26.3	S	98	21°	0	73	92	29	63
	9-B	-34.3	S	120	32°	0	30	-	-	-
	16-B	-62.0	S	120	30°	0	19	44	15	29

TEST DATA SUMMARY

FEATURE 42

LK. PONT. LA.&VIC-HURR. PROT. (73) ORLEANS PARISH OUTFALL CANALS GDM #2, SUPP. #5-C-17th ST. CANAL
W.E.S. JOB NO. 441-S472.14SESC

Sheet 1 of 2

12 Sept. 1973

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 on UNDISTURBED INITIAL e	DRY DENSITY LBS/CU FT	w_1 %	w_F %	S_1 %	TYPE TEST	SPECIMEN SIZE INCHES	TEST	σ_m T/SQ FT	σ_1 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
1-UMP	4-D	13.7/-10.6	ORGANIC CLAY(OH),dark brown					270	110	2.29						22.6	229.9		99.0	TC-Q	1.40 x 3.00	1	0.5	0.76									
																20.9	250.4		98.2		"	2	1.5	1.79									
																21.7	241.0		98.7		1.41 x 3.00	3	3.0	3.30									
	7-C	24.9/-21.8	PLASTIC CLAY(CH),gray;silt lenses					67	21	2.72						64.6	60.0		100+	TC-Q	1.40 x 3.00	1	0.5	0.81									
																63.3	61.9		100+		1.39 x 3.00	2	1.5	1.70									
																65.0	59.9		100+		1.40 x 3.00	3	3.0	3.18									
																65.0	59.6		100+		1.39 x 3.00	4	3.0	3.24									
	9-D	33.4/-30.3	PLASTIC CLAY(CH),gray;3/8" layer of					96	28	2.72						50.7	86.2		99.8	TC-Q	1.39 x 3.00	1	0.5	0.83									
			silt in unused portion of sample													49.7	89.0		100		1.40 x 3.00	2	1.5	1.77									
																52.2	83.7		100+		"	3	3.0	3.28									
	11-C	40.9/-37.8	SILTY SAND(SM),gray;shells					-	-	2.68						97.3	25.1	24.3	93.4	DS-S	3.00^2x0.620	1	1.0	0.85									
																98.4	25.3	23.7	96.9		"	2	2.0	1.32									
																97.0	26.0	24.9	97.0		"	3	3.0	2.07									
	13-C	48.8/-45.7	PLASTIC CLAY(CH),gray;shell fragments					70	23	2.69						62.0	62.7		98.6	TC-Q	1.40 x 3.00	1	0.5	0.82									
																66.8	56.8		100+		1.41 x 3.00	2	1.5	1.99									
																65.8	55.7		96.7		1.42 x 3.00	3	3.0	3.42									
																62.9	52.2		95.4		1.40 x 3.00	4	0.5	0.96									
	16-D	61.8--58.7	LEAN CLAY(CL),light greenish					45	15	2.68						109.8	18.7		95.6	TC-Q	1.39 x 3.00	1	0.5	2.72									
			gray;numerous silt pockets													104.6	18.8		95.8		1.40 x 3.00	2	1.5	3.96									
																110.7	18.5		97.0		1.39 x 3.00	3	3.0	6.02									
	17-D	65.8/-62.7	SANDY SILTY CLAY(CL),gray					28	20	2.70						103.1	22.8	23.1	97.0	TC-R	1.39 x 3.00	1	1.0	9.25			*(ϕ'= , c'=)						
																106.5	21.2	20.9	98.2		1.38 x 3.00	2	2.0	12.97									
																106.1	21.3	20.9	97.8		"	3	3.0	11.50									
	19-D	73.4/-70.3	SILT(ML),gray					-	-	2.67						104.7	23.6	22.9	100+	TC-R	1.37 x 3.00	1	1.0	14.03			*(ϕ'= , c'=)						
																104.2	23.3	22.3	100+		"	2	2.0	9.68									
																104.2	23.8	22.6	100+		"	3	3.0	14.02									
	20-C	76.9/-73.8	SAND(SP),tan and gray;vertical					-	-	2.68						101.9	24.2	23.4	100+	DS-S	3.01^2x0.556	1	2.0	1.31									
			clay seams													100.8	22.8	22.9	92.6		"	2	4.0	2.43									
																100.0	23.6	24.5	94.0		"	3	6.0	3.83			*Based on Max. σ_1/σ_3						

ENG FORM 2086 1 MAR 58 (PREVIOUS EDITIONS MAY BE USED) (EM 1110-2-1803) (TRANSLUCENT)

TC – Triaxial Compression
UC – Unconfined Compression
DS – Direct Shear
Q ~~UU~~ – Unconsolidate Undrained
S ~~CD~~ – Consolidated Drained
R ~~CU~~ – Consolidated Undrained
* Values at Pressure T/SQ FT

TEST DATA SUMMARY

FEATURE 42

LK. PONT. LA&VIC-HURR. PROT. (73) ORLEANS PARISH
OUTFALL CANALS GDM #2, SUPP. # 5-C, -17th ST.
CANAL
W.E.S. JOB NO. 441-S472.14SE3C2

12 Sept. 1973

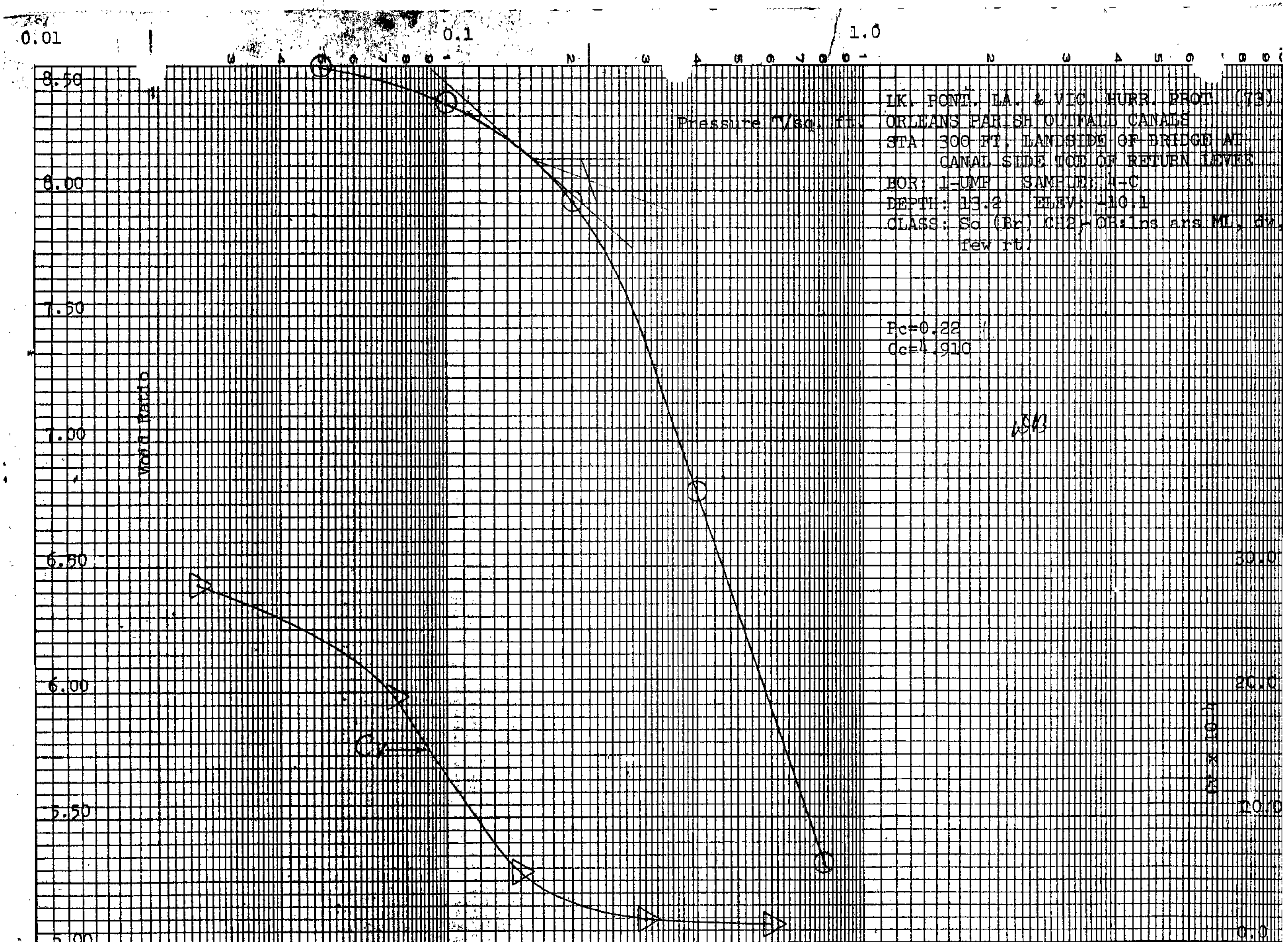
BORING NO.	SAM. NO.	DEPTH OR ELEV. OF SAMPLE	LABORATORY CLASSIFICATION	MECHANICAL ANALYSIS: GRAVEL %	SAND %	FINES %	D_{10}	ATTERBERG LIMITS: LL	PL	SPECIFIC GRAVITY G	NAT. WATER CONT. %	NATURAL DRY DENSITY LBS/CU FT	COMPACTION DATA: OPT. WATER %	MAXIMUM DRY DENSITY LBS/CU FT
1-UMP	24-D	93.3/-90.2	PLASTIC CLAY(CH), gray; seams of					57	20	2.73				
			silty sand approx. 1/8" thick											

SHEAR DATA on UNDISTURBED

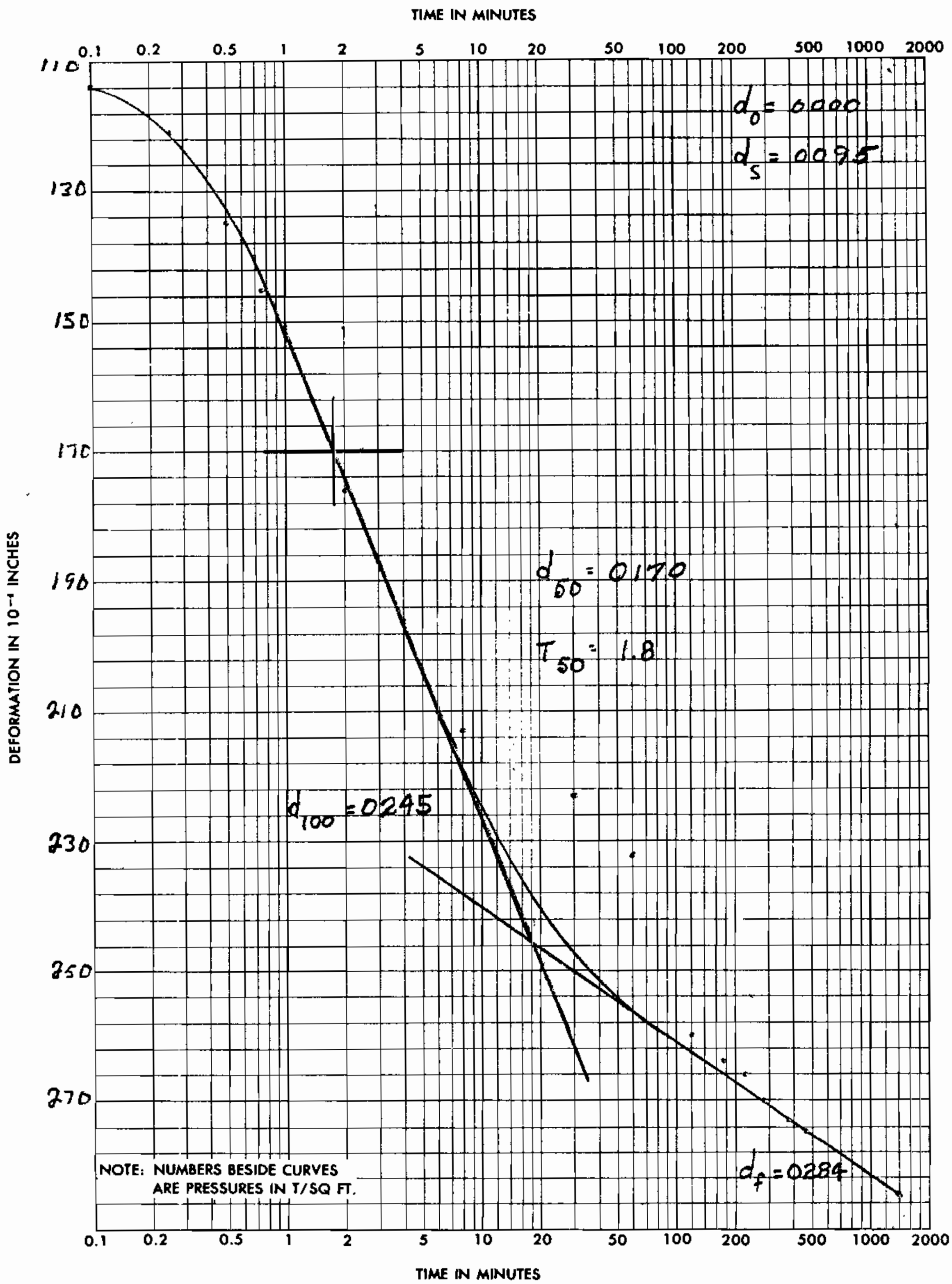
BORING NO.	INITIAL e	DRY DENSITY LBS/CU FT	w_i %	w_F %	S_i %	TYPE TEST	SPECIMEN SIZE INCHES	TEST	σ_m T/SQ FT	σ_1 T/SQ FT	c T/SQ FT	ϕ DEGREES	PERMEABILITY: e	K FT/MIN	CONSOLIDATION DATA: P_o T/SQ FT	P_c T/SQ FT	C_c	t_{50} *	REMARKS
1-UMP		85.0	35.4		96.6	TC-Q	1.39 x 3.00	1	0.5	1.74									
		85.1	34.3		93.6		1.39 x 3.00	2	1.5	1.89									
		84.1	35.9		95.2		"	3	3.0	4.62									

ENG FORM 2086 1 MAR 58 (PREVIOUS EDITIONS MAY BE USED) (EM 1110-2-1803) (TRANSLUCENT)

TC – Triaxial Compression
UC – Unconfined Compression
DS – Direct Shear
Q ~~UU~~ – Unconsolidate Undrained
S ~~CD~~ – Consolidated Drained
R ~~CU~~ – Consolidated Undrained
* Values at Pressure T/SQ FT



0.01
0.1
1.0
Pressure T/sq. ft.
LK. PONT. LA. & VIC. HURR. PROT. (73)
ORLEANS PARISH OUTFALL CANALS
STA: 300 FT, LANDSIDE OF BRIDGE AT
CANAL SIDE TOE OF RETURN LEVEE
BOR: 1-UMF SAMPLE: 4-C
DEPTH: 13.2 ELEV: -10.1
CLASS: So (Br) CH2)-OB:lns ars ML, dw,
few rt.
Pc=0.22
Cc=4.910
Void Ratio
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
30.0
20.0
10.0
0.0
Cv x 10-4



PROJECT

AREA

BORING NO. 1-UMP	SAMPLE NO. 4-C	DEPTH EL	DATE

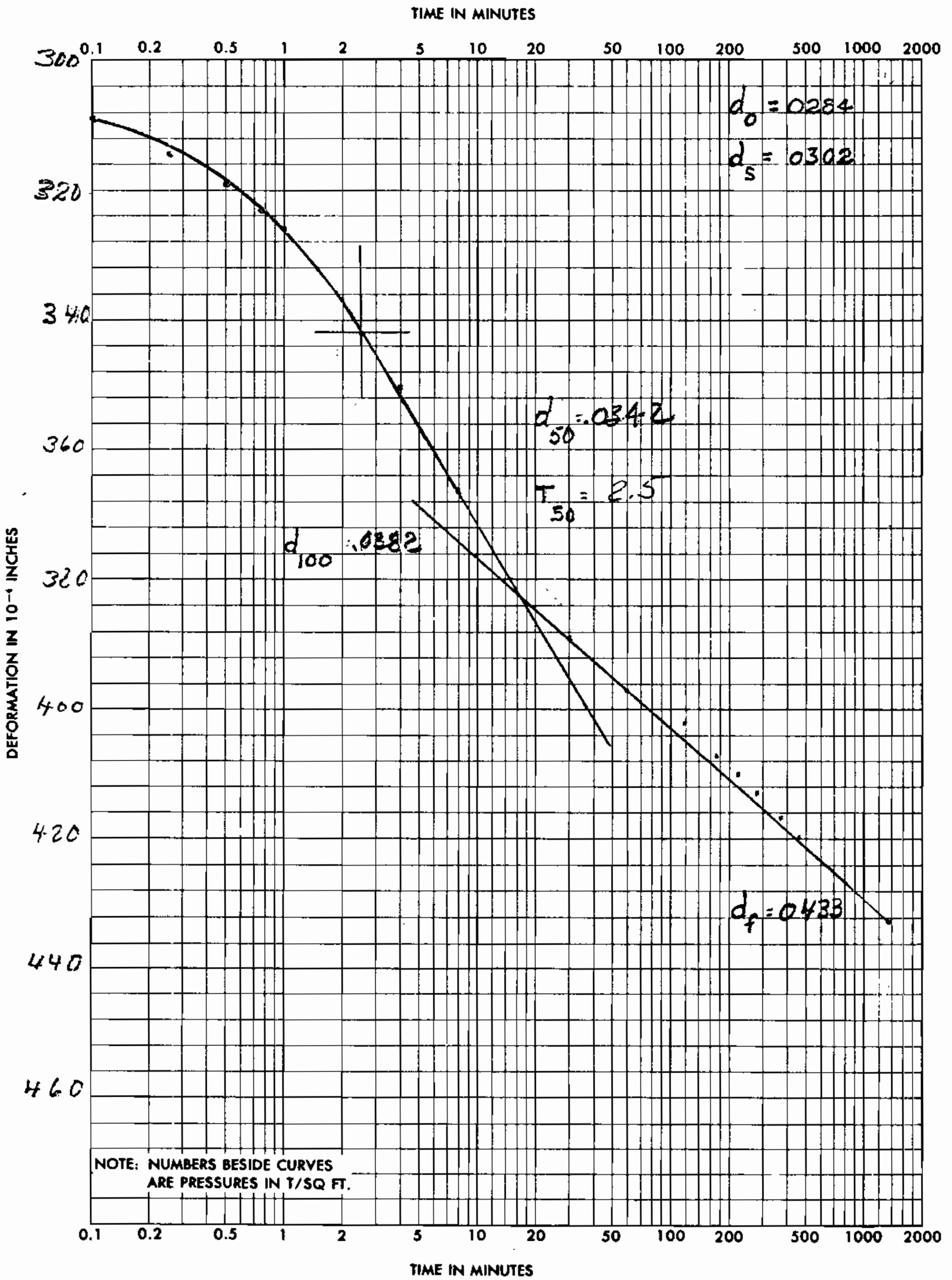
ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

☆ GPO : 1964 OF—715-985

PG

#1



PROJECT

AREA

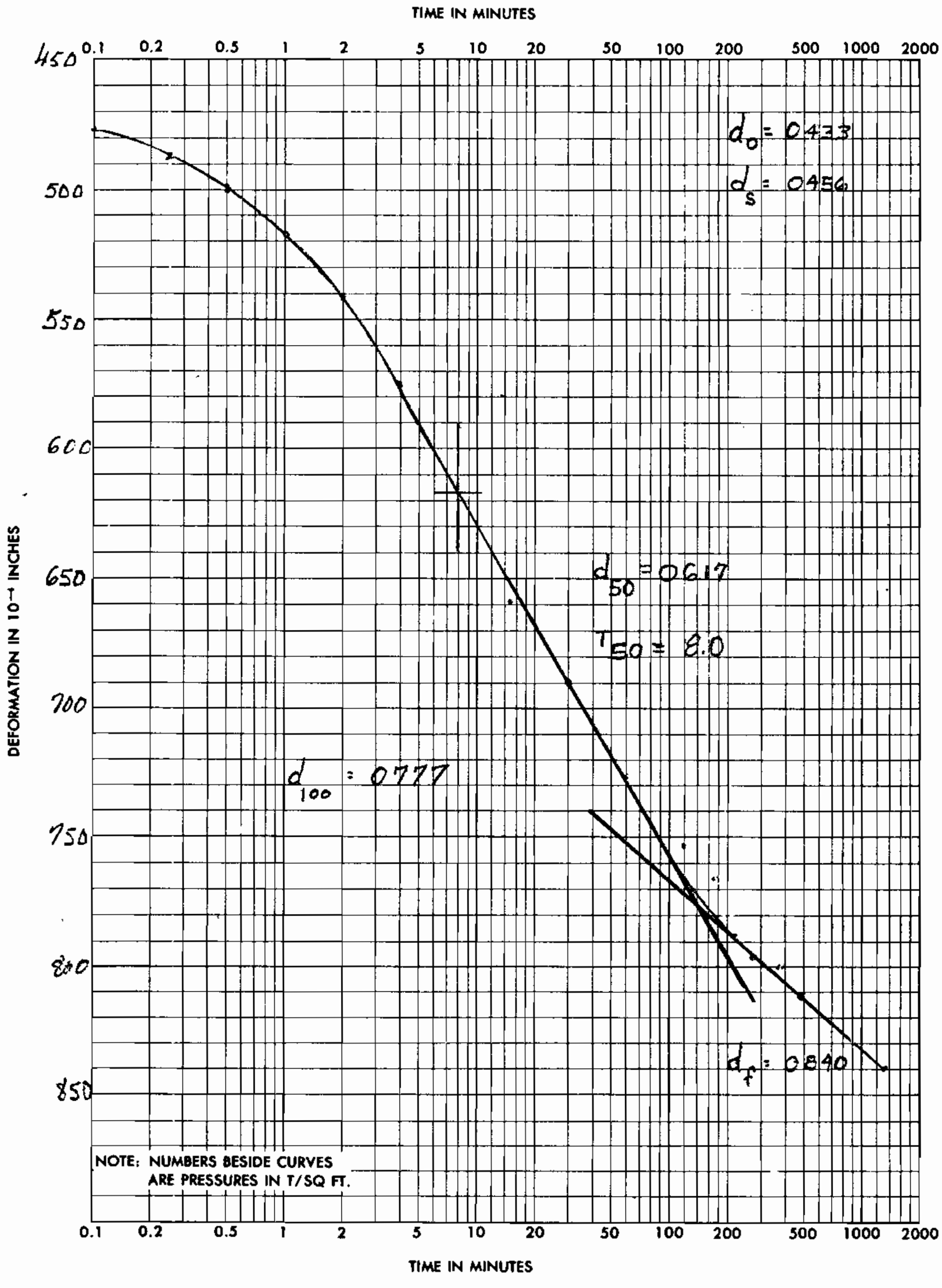
BORING NO. 1-UMP | SAMPLE NO. 4-C | DEPTH EL | DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965

IF F

PG



PROJECT

AREA

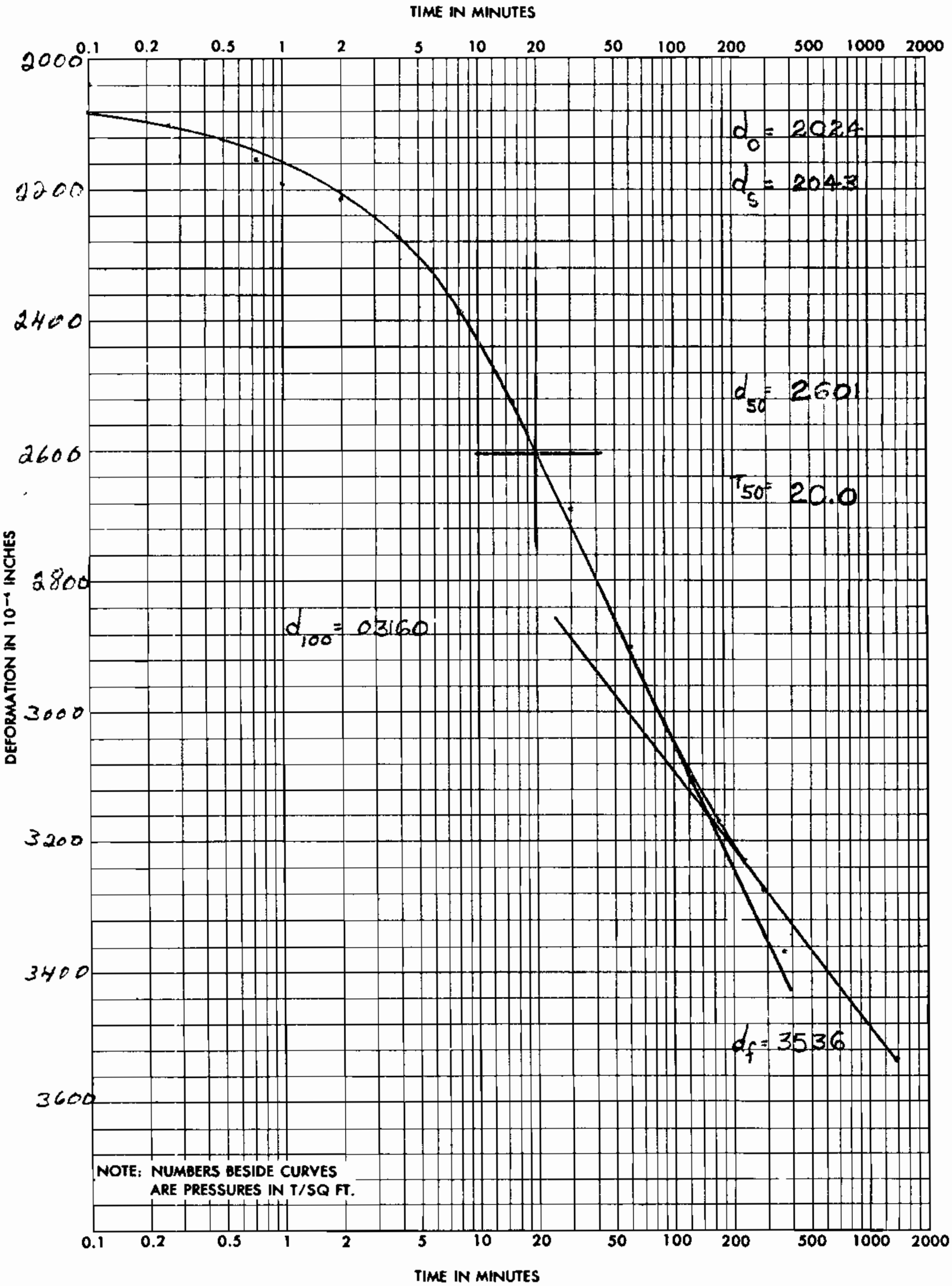
BORING NO. 1-UMP	SAMPLE NO. 4-C	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

* GPO : 1964 OF—715-965

PG

#3



PROJECT

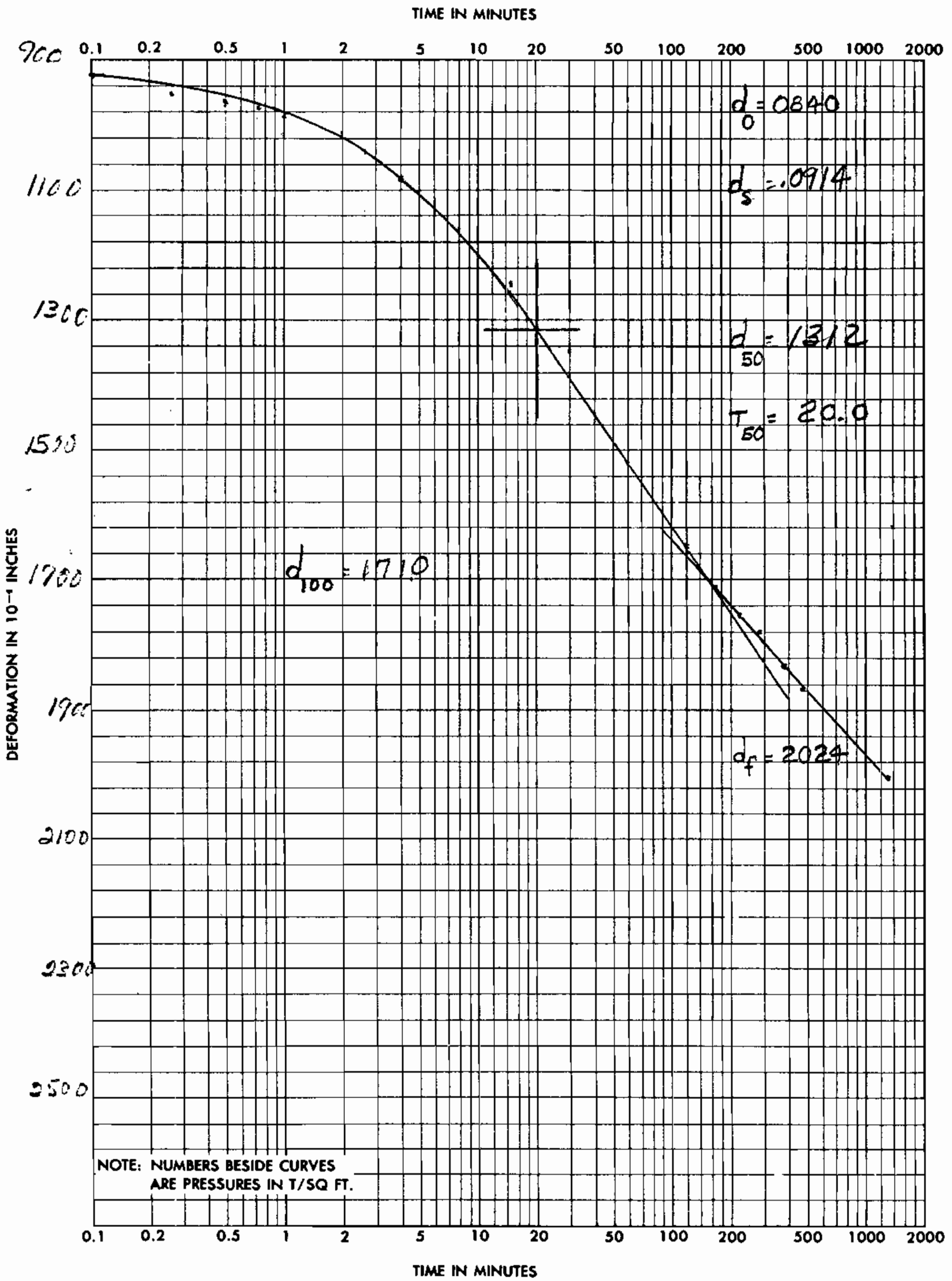
AREA

BORING NO. 1-UMD	SAMPLE NO. 4-C	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

* GPO : 1964 OF—715-965

5



PROJECT

AREA

BORING NO. 1-UMP | SAMPLE NO. 4-C | DEPTH EL | DATE

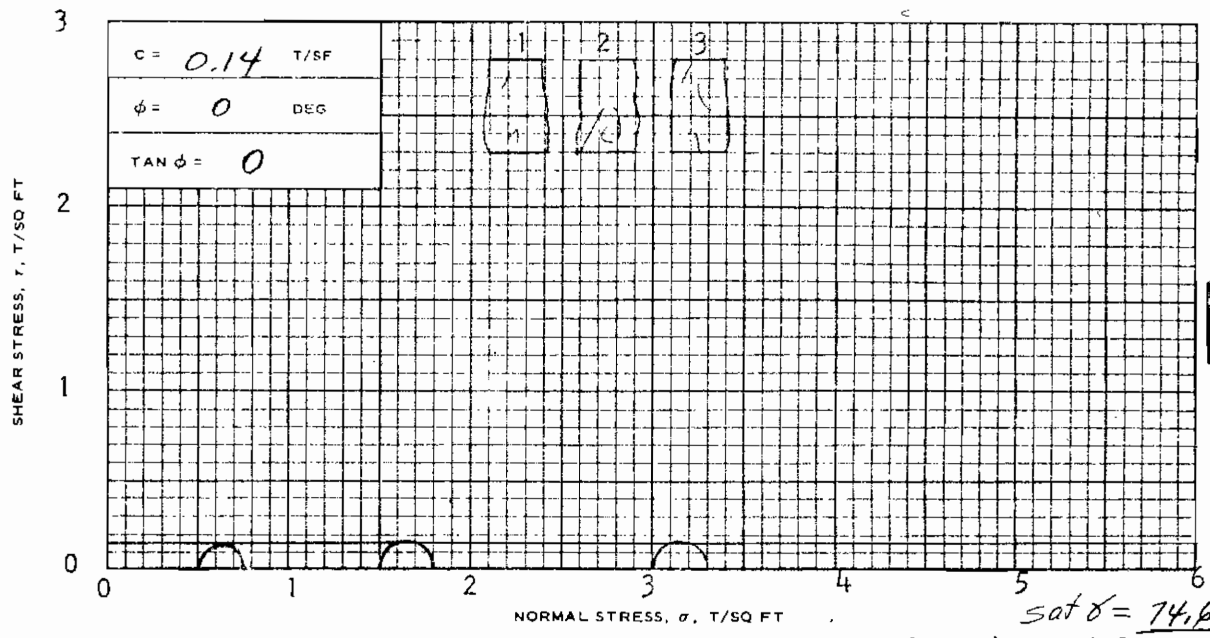
ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

* GPO : 1964 OF—715-965

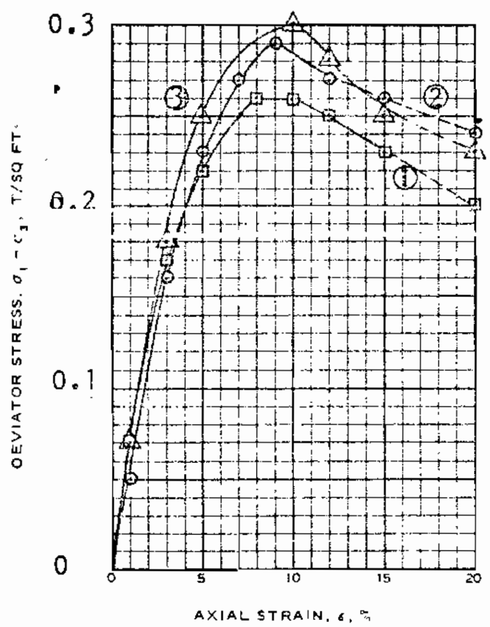
F.A.

PG



sat γ = 14.6

~~75.1~~ ~~74.2~~ ~~74.7~~



SPECIMEN NO.			1	2	3	Avg.
INITIAL	WATER CONTENT, %	w_o	229.9	250.4	241.0	240.4
INITIAL	DRY DENSITY LB/CU FT	γd_o	22.6	20.9	21.7	
INITIAL	SATURATION, %	S_o	99.0	98.2	98.7	
INITIAL	VOID RATIO	e_o	5.32	5.84	5.59	
BEFORE SHEAR	WATER CONTENT, %	w_c				
BEFORE SHEAR	DRY DENSITY LB/CU FT	γd_c				
BEFORE SHEAR	SATURATION, %	S_c				
BEFORE SHEAR	VOID RATIO	e_c				
BEFORE SHEAR	FINAL BACK PRESSURE, T/SQ FT	u_o				
MINOR PRINCIPAL STRESS, T/SQ FT		σ_3	0.5	1.5	3.0	
MAXIMUM DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{MAX}$	0.26	0.29	0.30	
TIME TO $(\sigma_1 - \sigma_3)_{MAX}$, MIN		t_f	10	12	13	
ULTIMATE DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{ULT}$				
INITIAL DIAMETER, IN.		D_o	1.40	1.40	1.41	
INITIAL HEIGHT, IN.		H_o	3.00	3.00	3.00	

CONTROLLED- Strain TEST

DESCRIPTION OF SPECIMENS ORGANIC CLAY(OH), dark brown

LL 270	PL 110	PI 160	Gs. 2.29	TYPE OF SPECIMEN UNDISTURBED	TYPE OF TEST Q

REMARKS: ---Rate of strain increased

PROJECT LK. PONT., LA.& VIC.-HURR. PROT.
ORLEANS PARISH OUTFALL CANALS-17th.ST.CANAL

BORING NO. 1-UMP	SAMPLE NO. 4-D
DEPTH/ELEV 13.7/-10.6	
LABORATORY USAEWES	DATE 26 July 1973

RAA TRIAXIAL COMPRESSION TEST REPORT

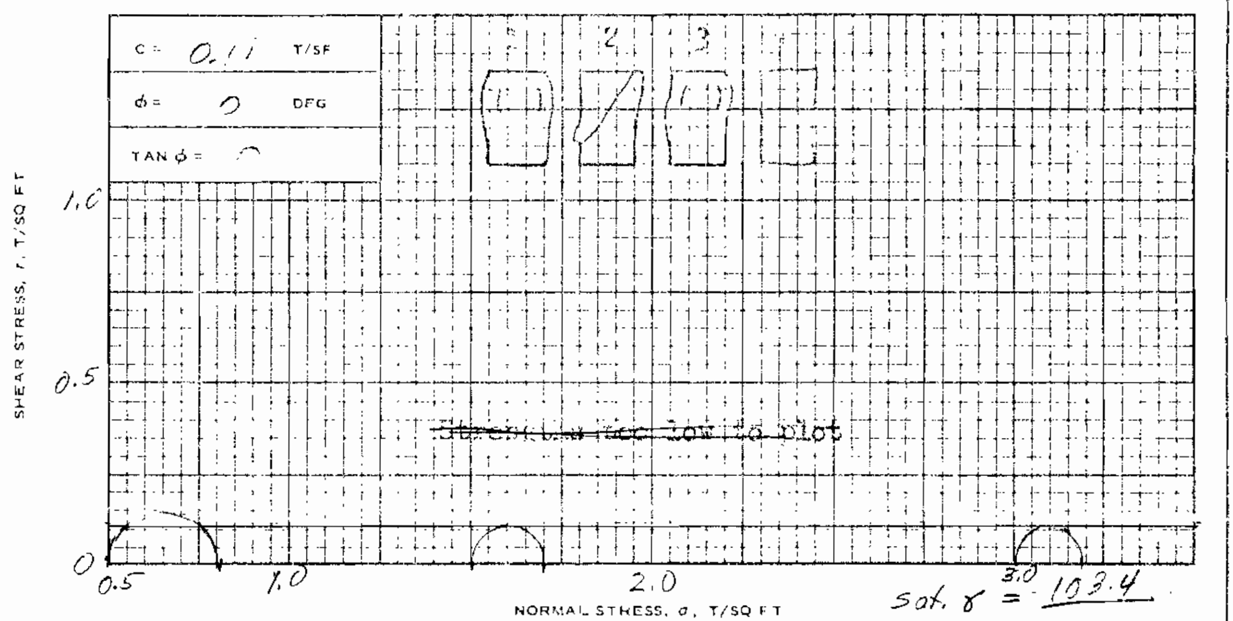
ENG FORM NO. 2089 PREVIOUS EDITION IS OBSOLETE TRANSLUCENT (EM 1110-2-1906)
REV JUNE 1970

B-2/23

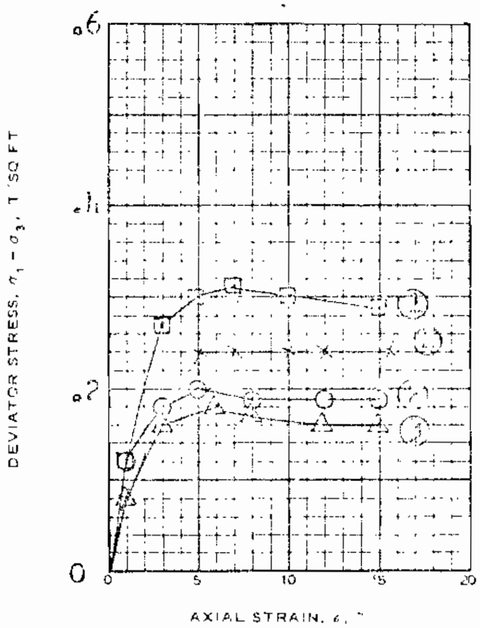
c = 0.11 T/SF

φ = 0 DEG

TAN φ = 0



sat. γ = 103.4



			~~103.4~~	102.5	103.9	103.7	
SPECIMEN NO.			1	2	3	4	
INITIAL	WATER CONTENT, %	w_o	60.0	61.9	59.9	59.6	Avg. 60.2
	DRY DENSITY LB/CU FT	γ_{d_o}	64.6	63.2	65.0	65.0	
	SATURATION, %	S_o	100+	100+	100+	100+	
	VOID RATIO	e_o	1.65	1.68	1.61	1.62	
BEFORE SHEAR	WATER CONTENT, %	w_c					
	DRY DENSITY LB/CU FT	γ_{d_c}					
	SATURATION, %	S_c					
	VOID RATIO	e_c					
	FINAL BACK PRESSURE, T/SQ FT	u_o					
MINOR PRINCIPAL STRESS, T/SQ FT		σ_3	0.5	1.5	3.0	3.0	
MAXIMUM DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{max}$	0.31	0.20	0.18	0.24	
TIME TO $(\sigma_1 - \sigma_3)_{max}$, MIN		t_f	17	12	16	12	
ULTIMATE DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{ult}$					
INITIAL DIAMETER, IN.		D_o	1.40	1.39	1.40	1.39	
INITIAL HEIGHT, IN.		H_o	3.00	3.00	3.00	3.00	

CONTROLLED- Strain TEST

DESCRIPTION OF SPECIMENS PLASTIC CLAY(CH),gray;silt lenses

LL 67	PL 21	PI 46	Gs 2.72	TYPE OF SPECIMEN UNDISTURBED	TYPE OF TEST Q

REMARKS:

PROJECT LK. PONT.,LA.& VIC.-HURR. PROT.(73)
ORLEANS PARISH OUTFALL CANALS- 17th.ST.CAN.

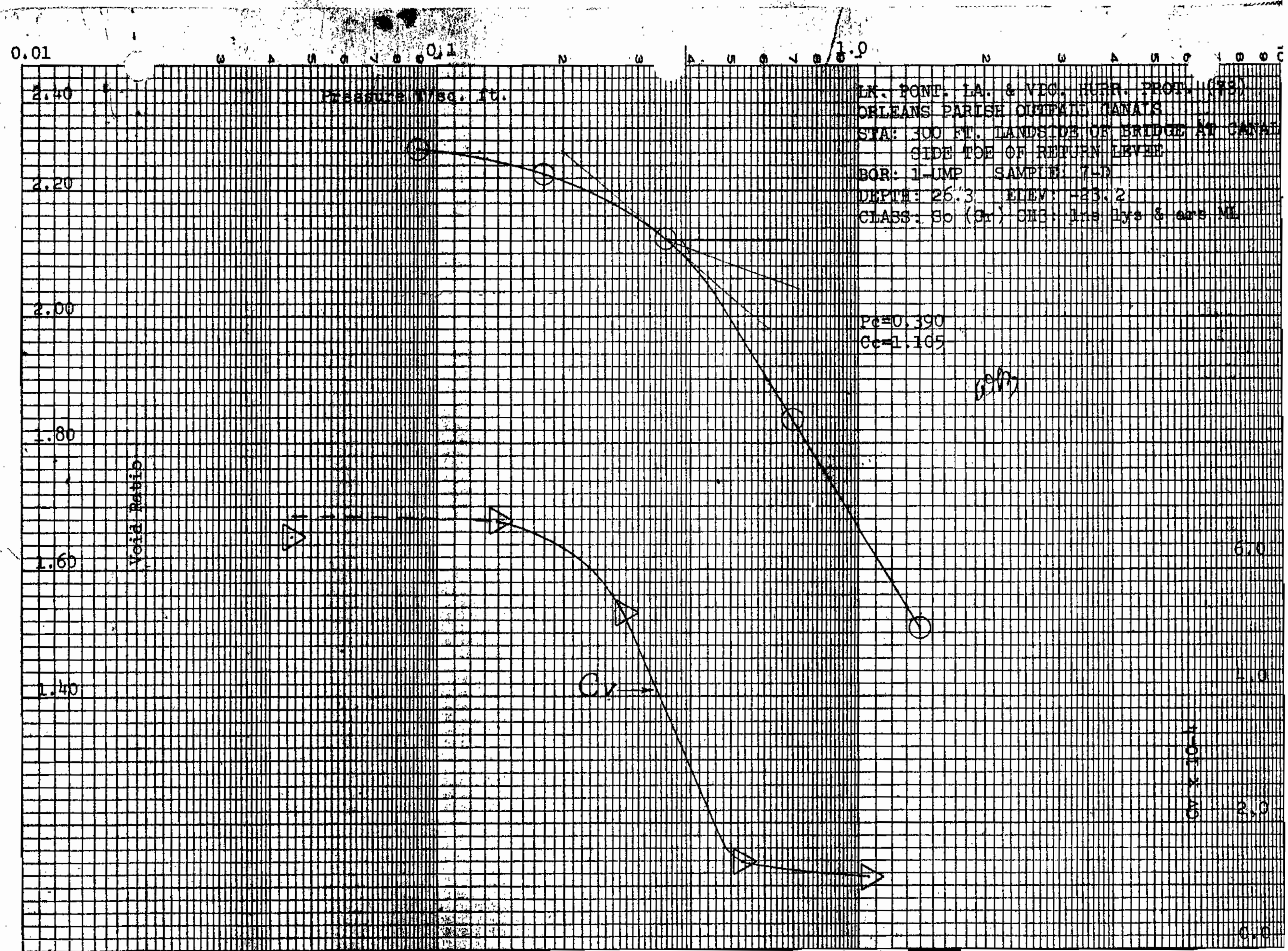
BORING NO. 1-UBP | SAMPLE NO. 7-C

DEPTH ELEV 24.9/-21.8

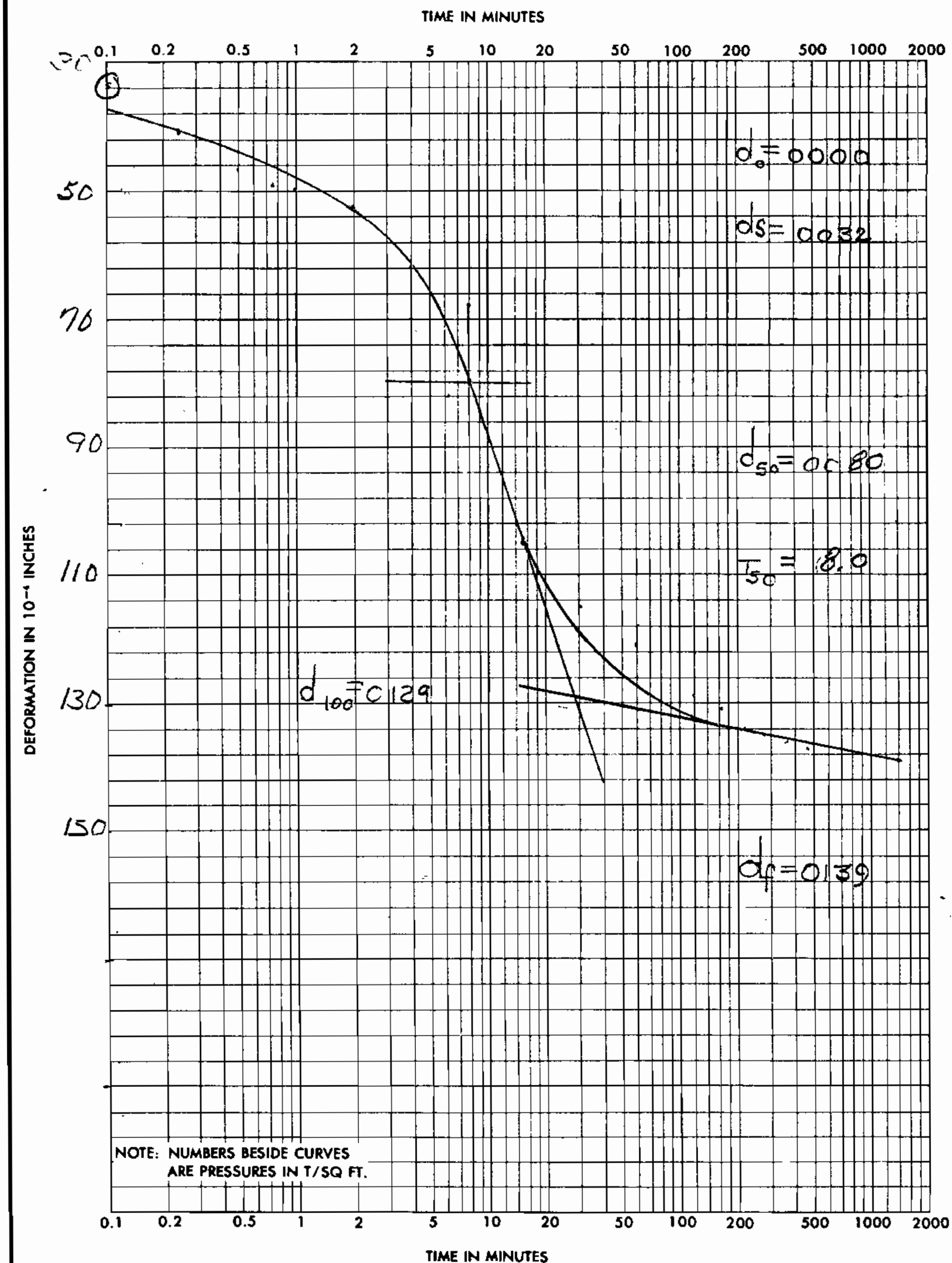
LABORATORY USAENDS | DATE 27 July,1973

TRIAXIAL COMPRESSION TEST REPORT

ENG FORM NO. 2089 REV JUNE 1970 PREVIOUS EDITION IS OBSOLETE TRANSLUCENT (EM 1110-2-1906)



Pressure T/sq. ft.
Void Ratio
LK. PONT. LA. & VIC. HURR. PROT.
ORLEANS PARISH OUTFALL CANALS
STA: 300 FT. LANDSIDE OF BRIDGE AT CANAL
SIDE TOE OF RETURN LEVEE
BOR: 1-UMP SAMPLE: 7-D
DEPTH: 26.3 ELEV: -23.2
Pc=0.390
Cc=1.105
Cv



PROJECT

AREA

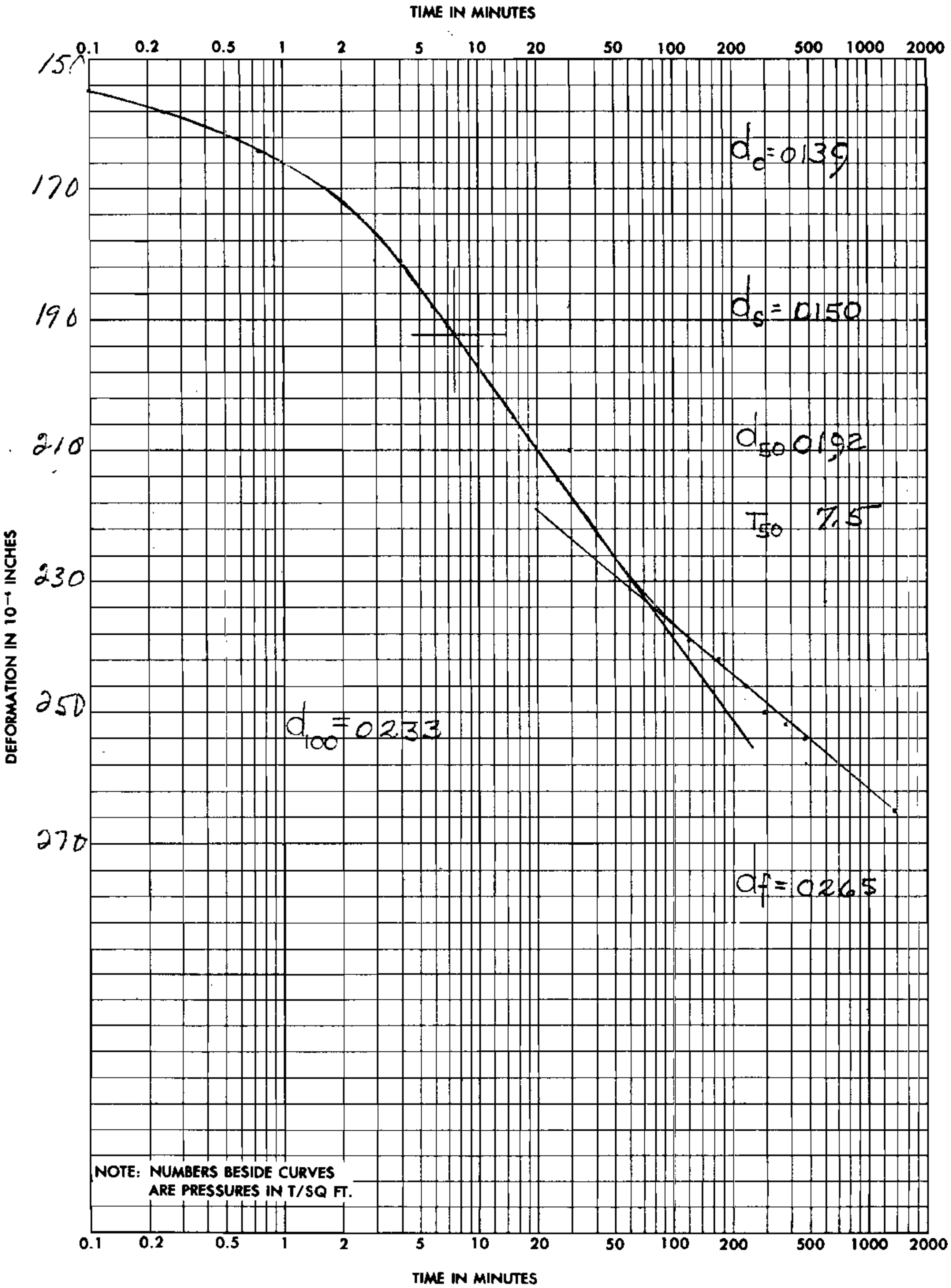
BORING NO. 1-UMP	SAMPLE NO. 7-D	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

☆ GPO : 1964 OF—715-965

#1

46

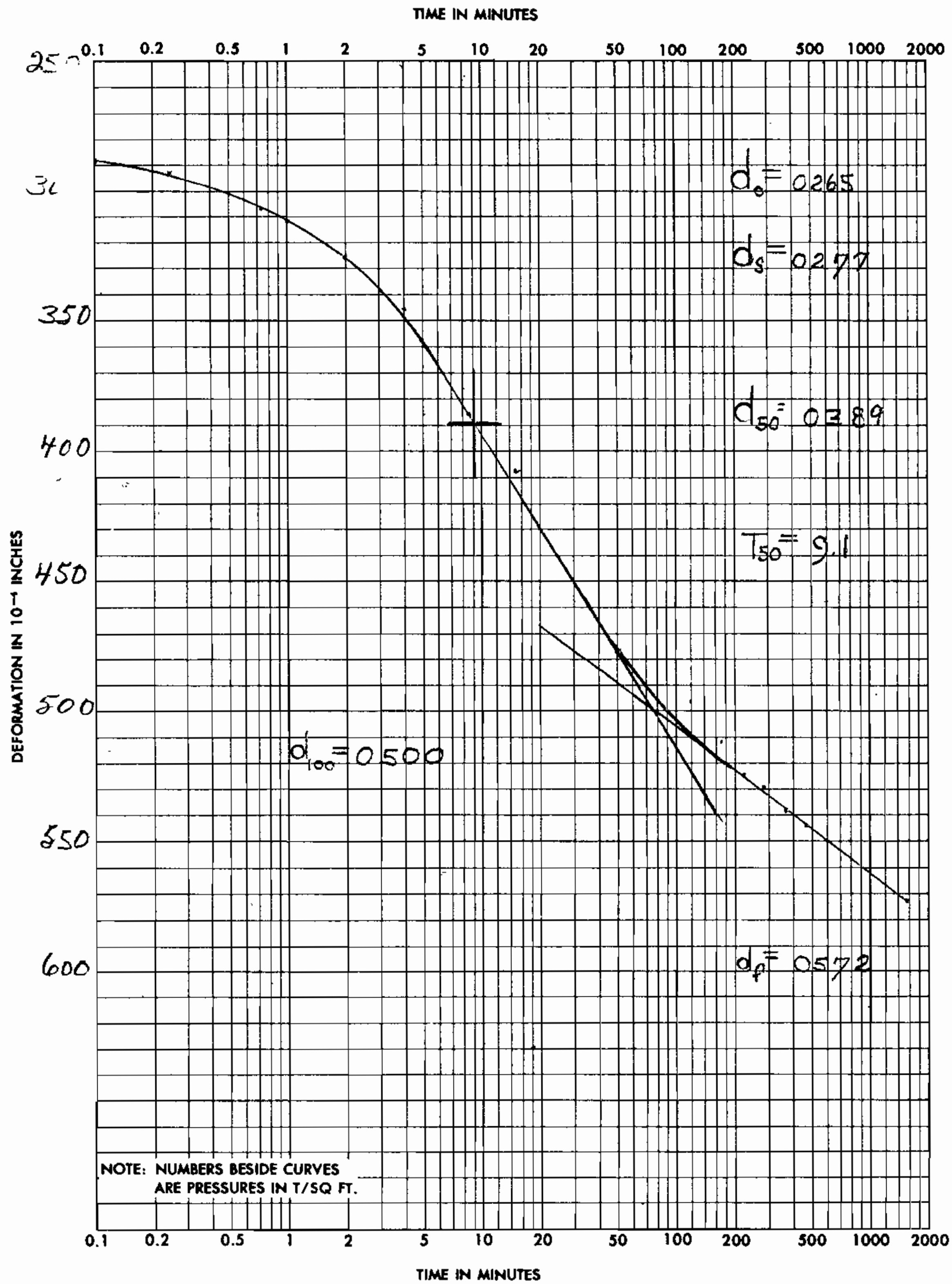


PROJECT			
AREA			
BORING NO. 1-UMP	SAMPLE NO. 7-D	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

* GPO : 1964 OF—715-965

PG



PROJECT			
AREA			
BORING NO. 1-UMP	SAMPLE NO. 7-D	DEPTH EL	DATE

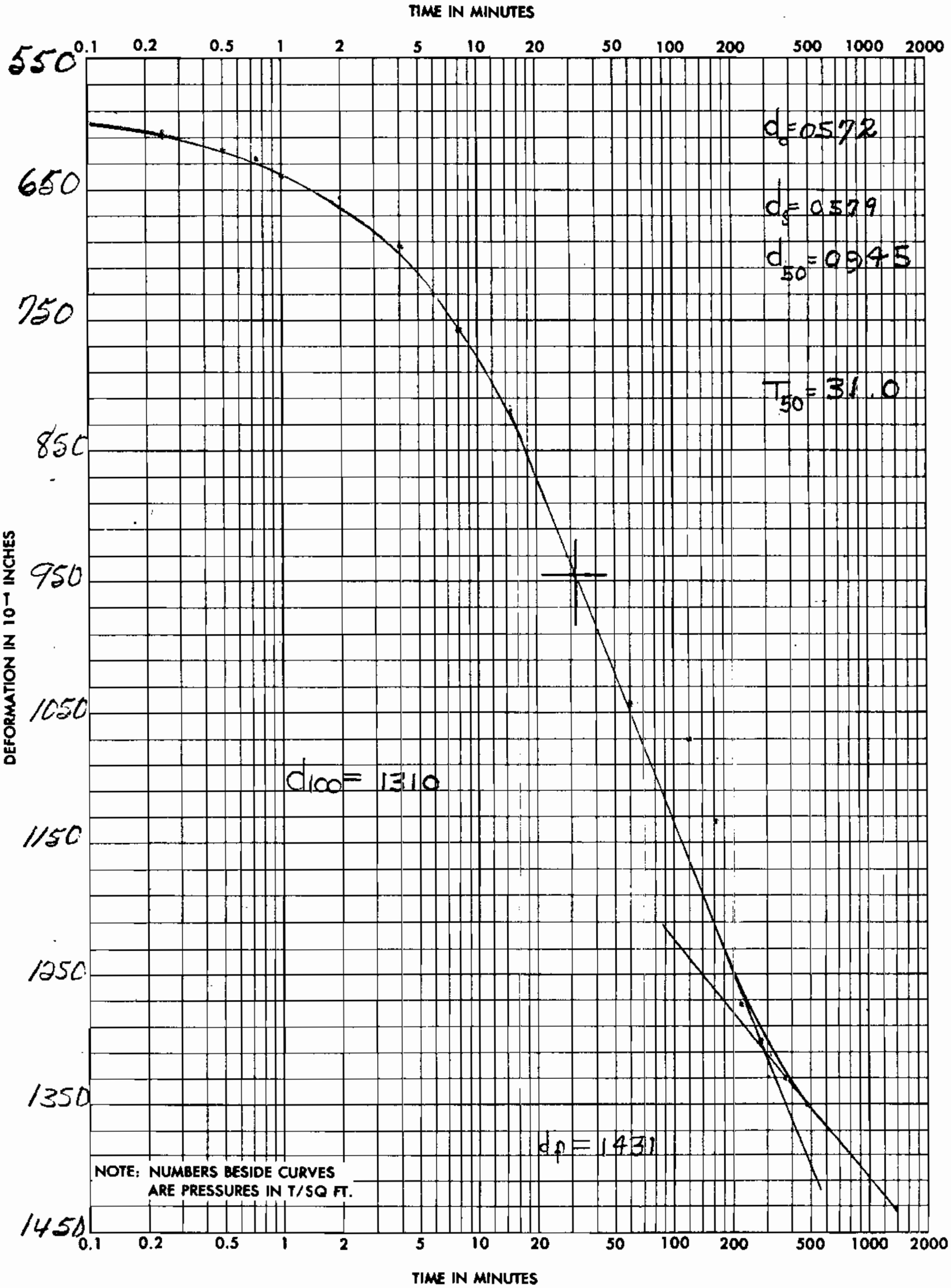
ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

★ GPO : 1964 OF—715-985

PG

2



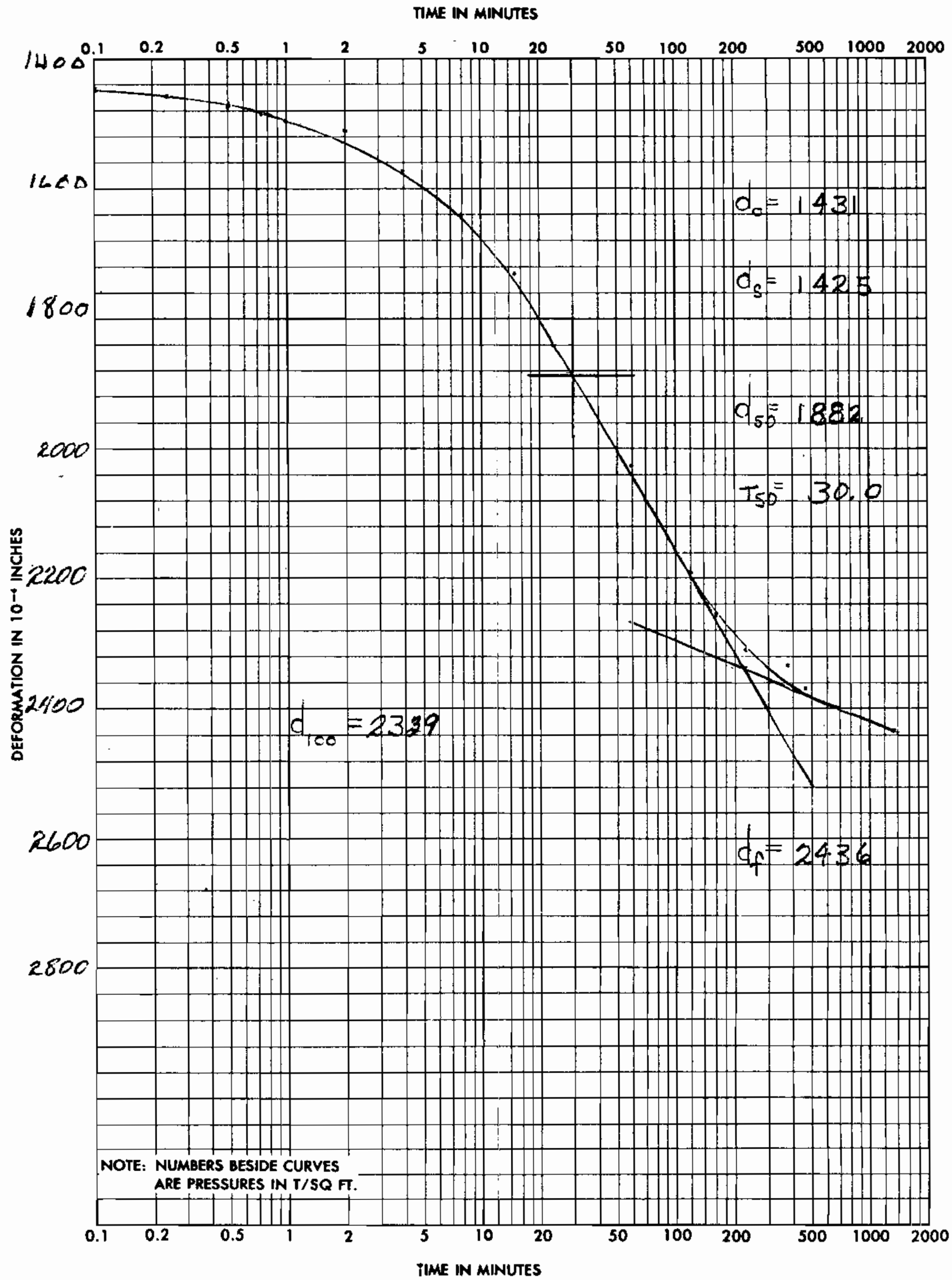
PROJECT			
AREA			
BORING NO. 1-UMF	SAMPLE NO. 7-D	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 — PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

★ GPO : 1964 OF—715-985

PG

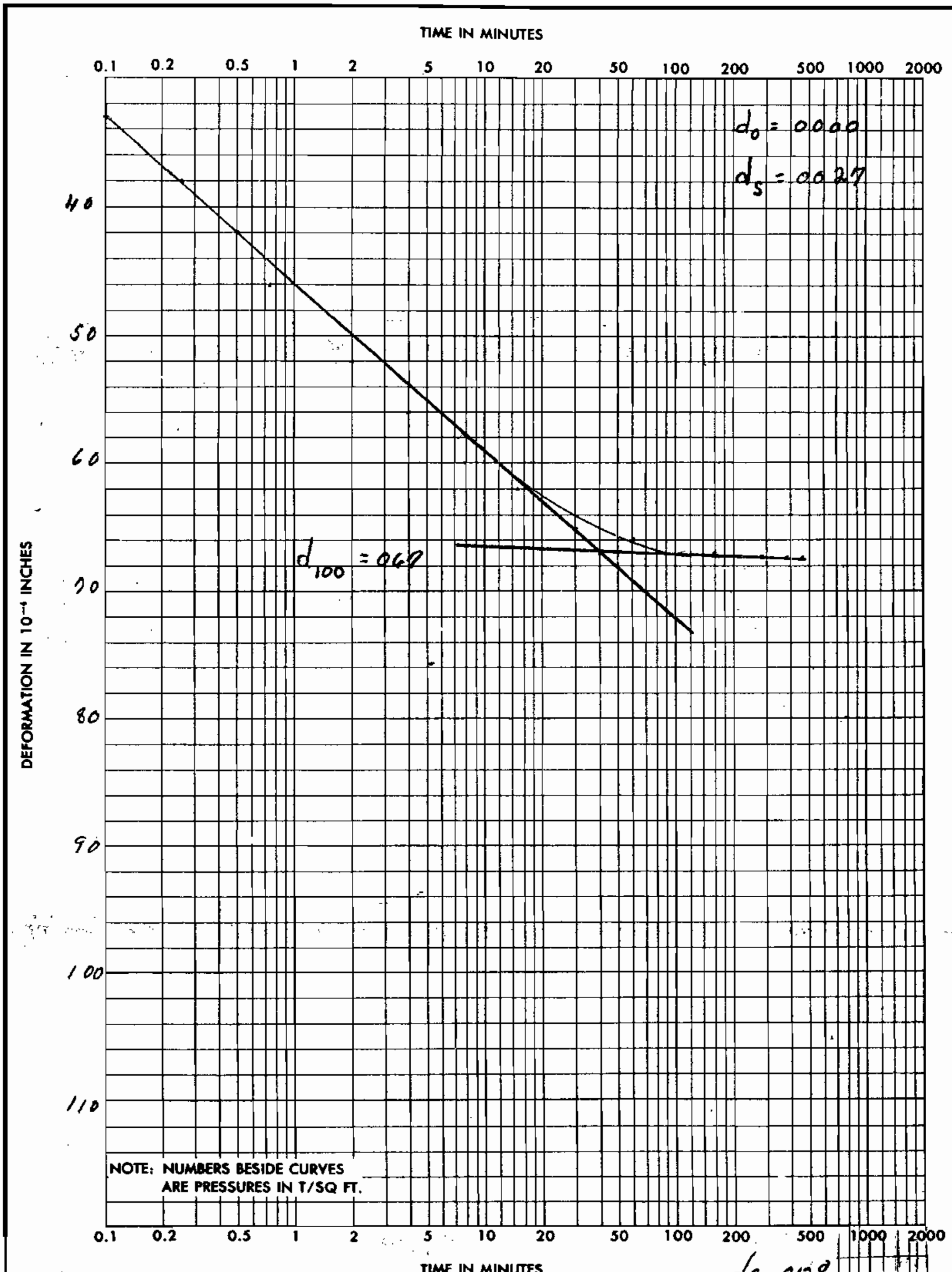


PROJECT			
AREA			
BORING NO. 1-UMP	SAMPLE NO. 7-D	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-865

4G



d_f = 0128

PROJECT VOID

AREA

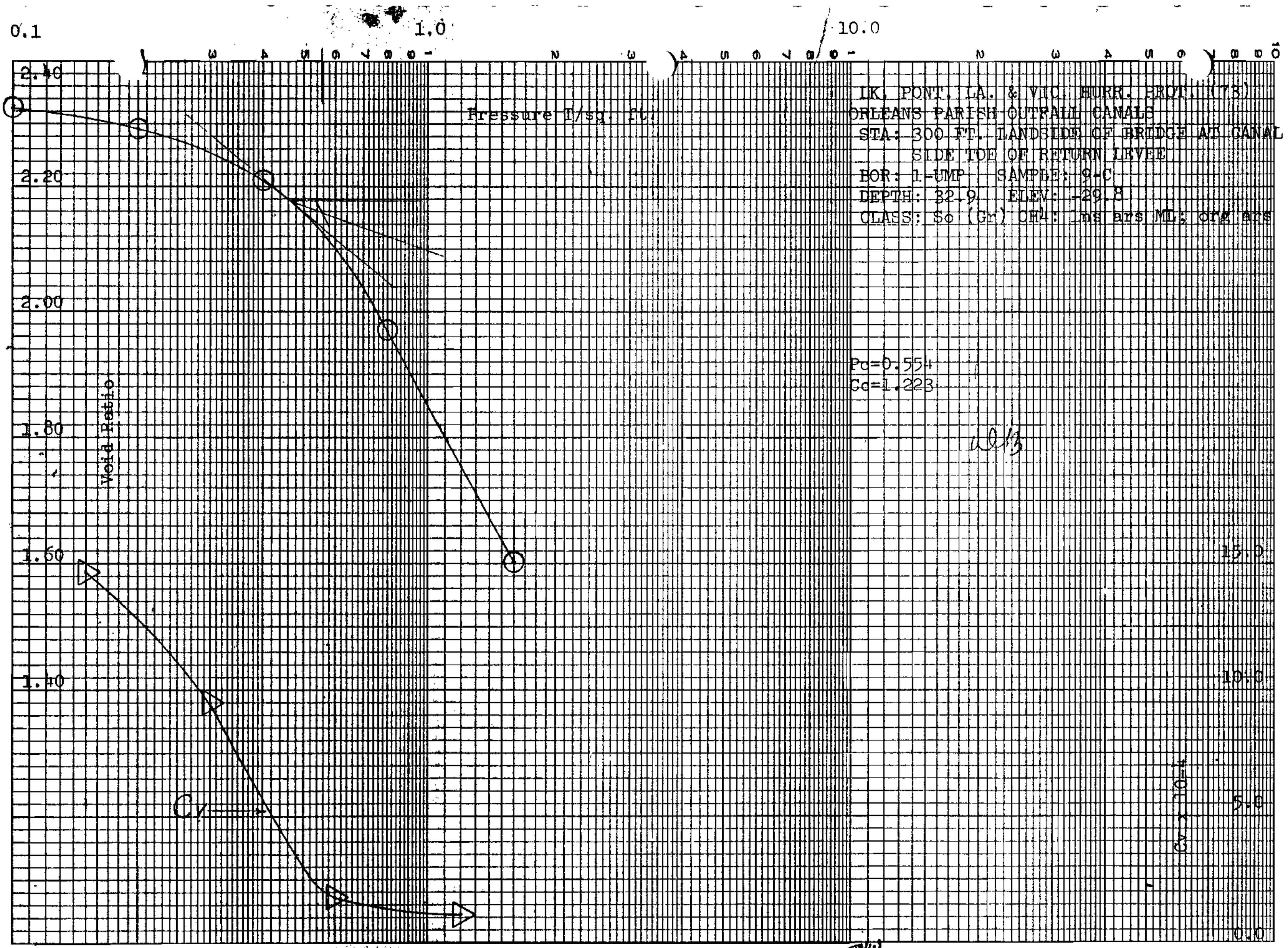
BORING NO. 1-UMP SAMPLE NO. 9-C DEPTH EL DATE

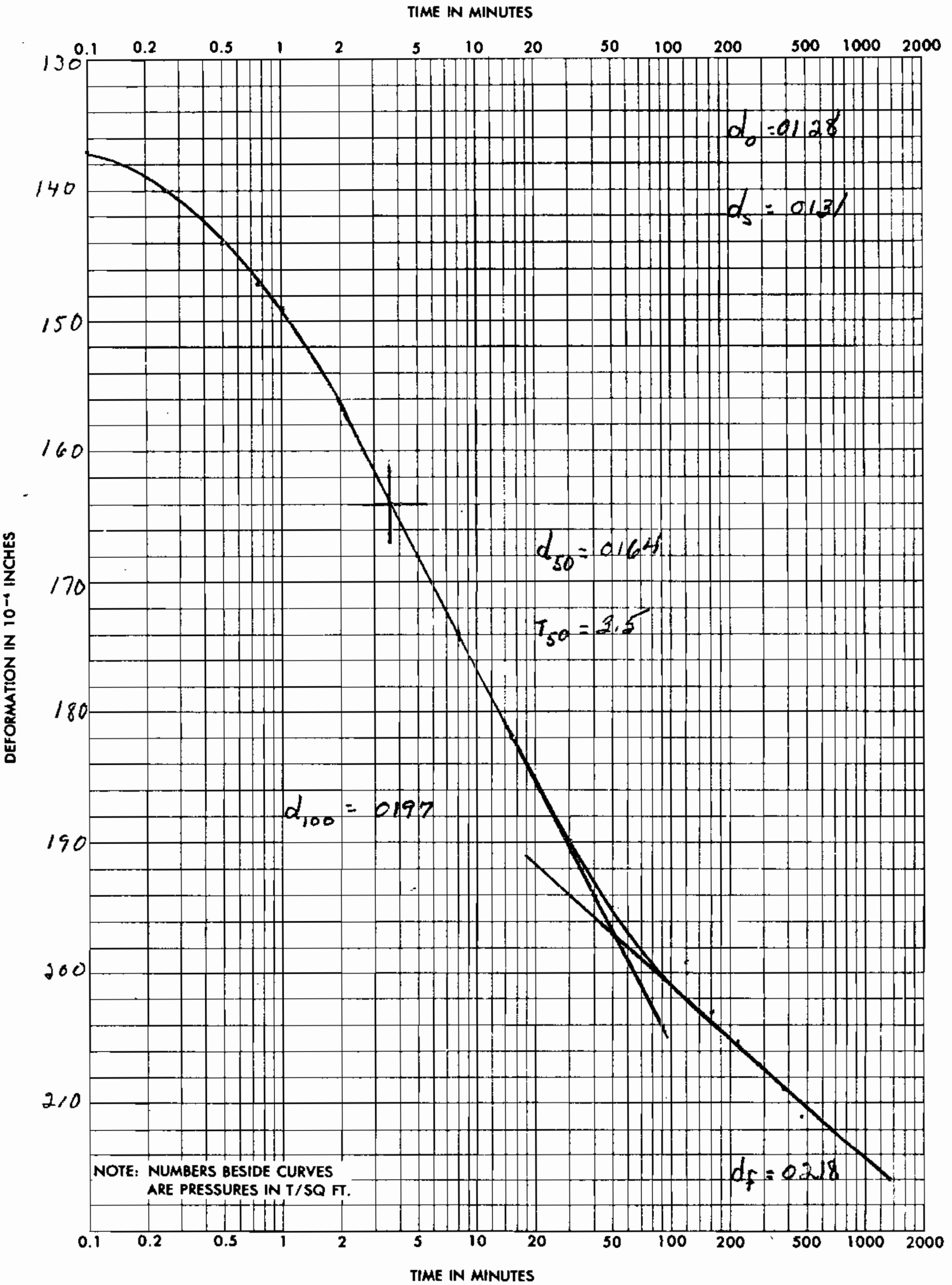
ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-985

#1

P.G.


0.1
1.0
10.0
Pressure T/sq. ft.
LK. PONT. LA. & VIC. HURR. PROT. (73)
ORLEANS PARISH OUTFALL CANALS
STA: 300 FT. LANDSIDE OF BRIDGE AT CANAL
SIDE TOE OF RETURN LEVEE
BOR: 1-UMP SAMPLE: 9-C
DEPTH: 32.9 ELEV: -29.8
CLASS: So (Gr) CH4: lns ars ML; org ars
2.40
2.20
2.00
1.80
1.60
1.40
Void Ratio
Pc=0.554
Cc=1.223
Cv
15.0
10.0
5.0
0.0
Cv x 10-4



PROJECT			
AREA			
BORING NO. 1-UMP	SAMPLE NO. 9-C	DEPTH EL	DATE

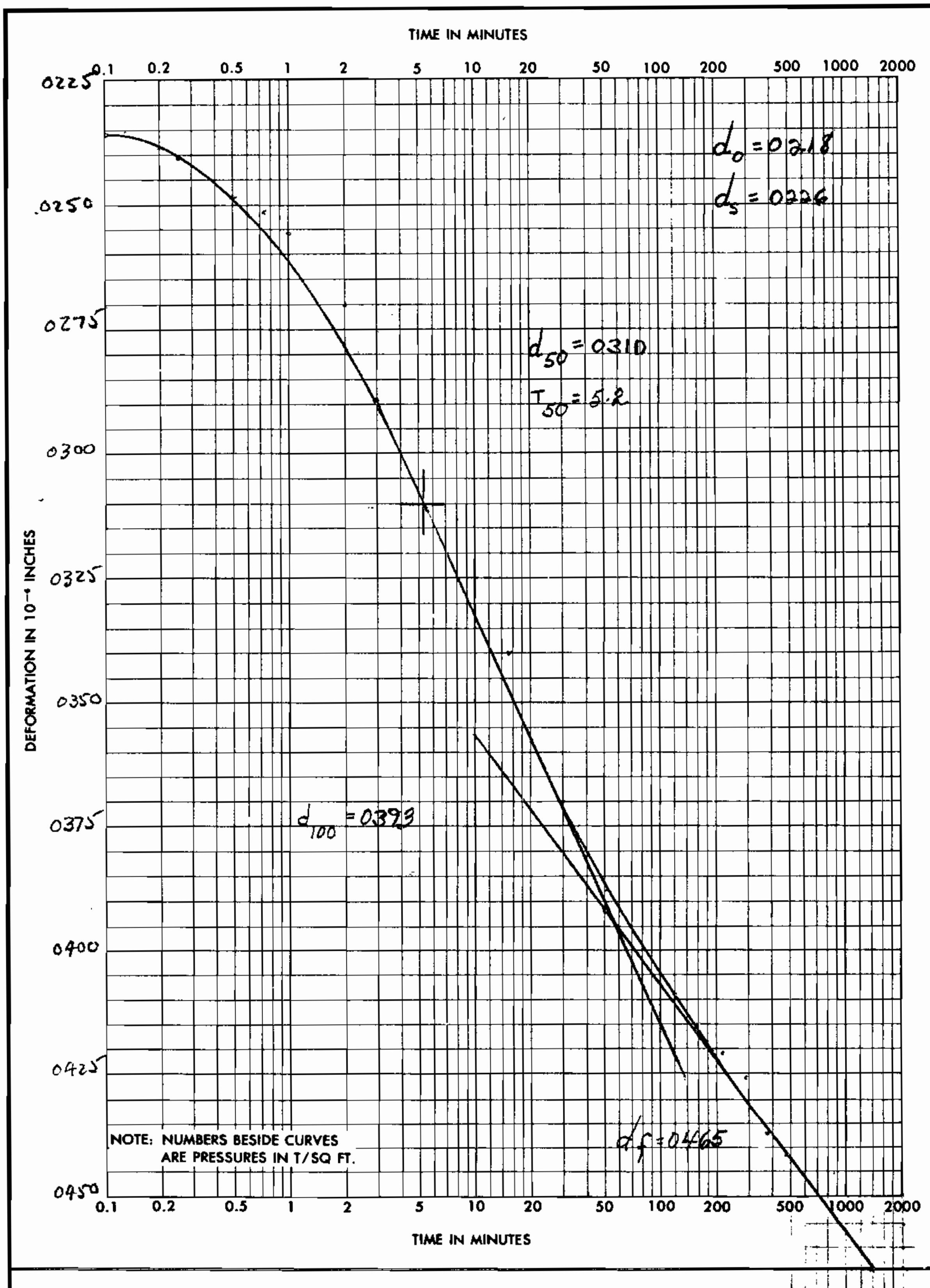
ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

* GPO : 1964 OF—715-965

7

FG



PROJECT

AREA

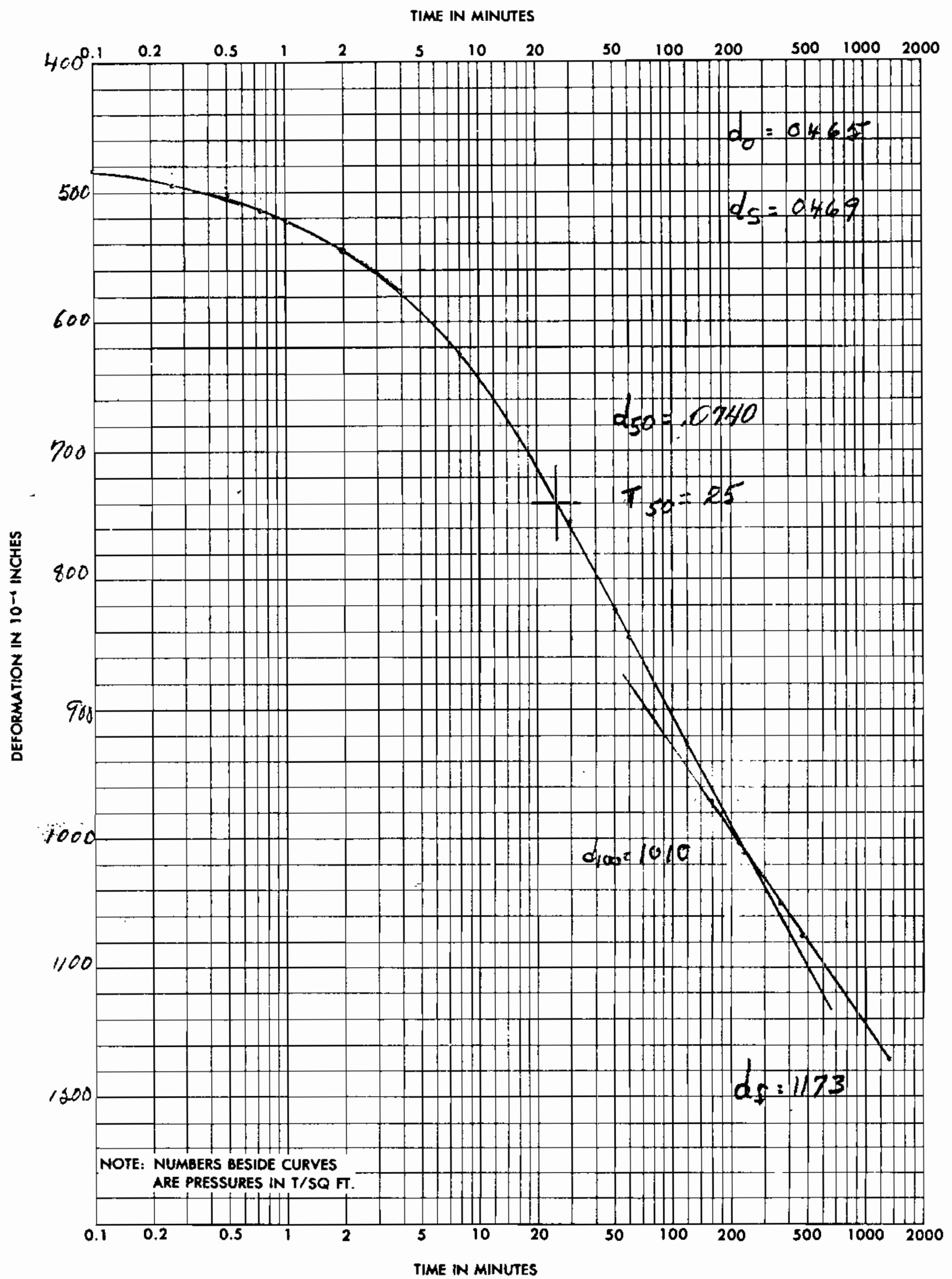
BORING NO.	SAMPLE NO.	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965

1-UMP
9-C
#3

PG



PROJECT

AREA

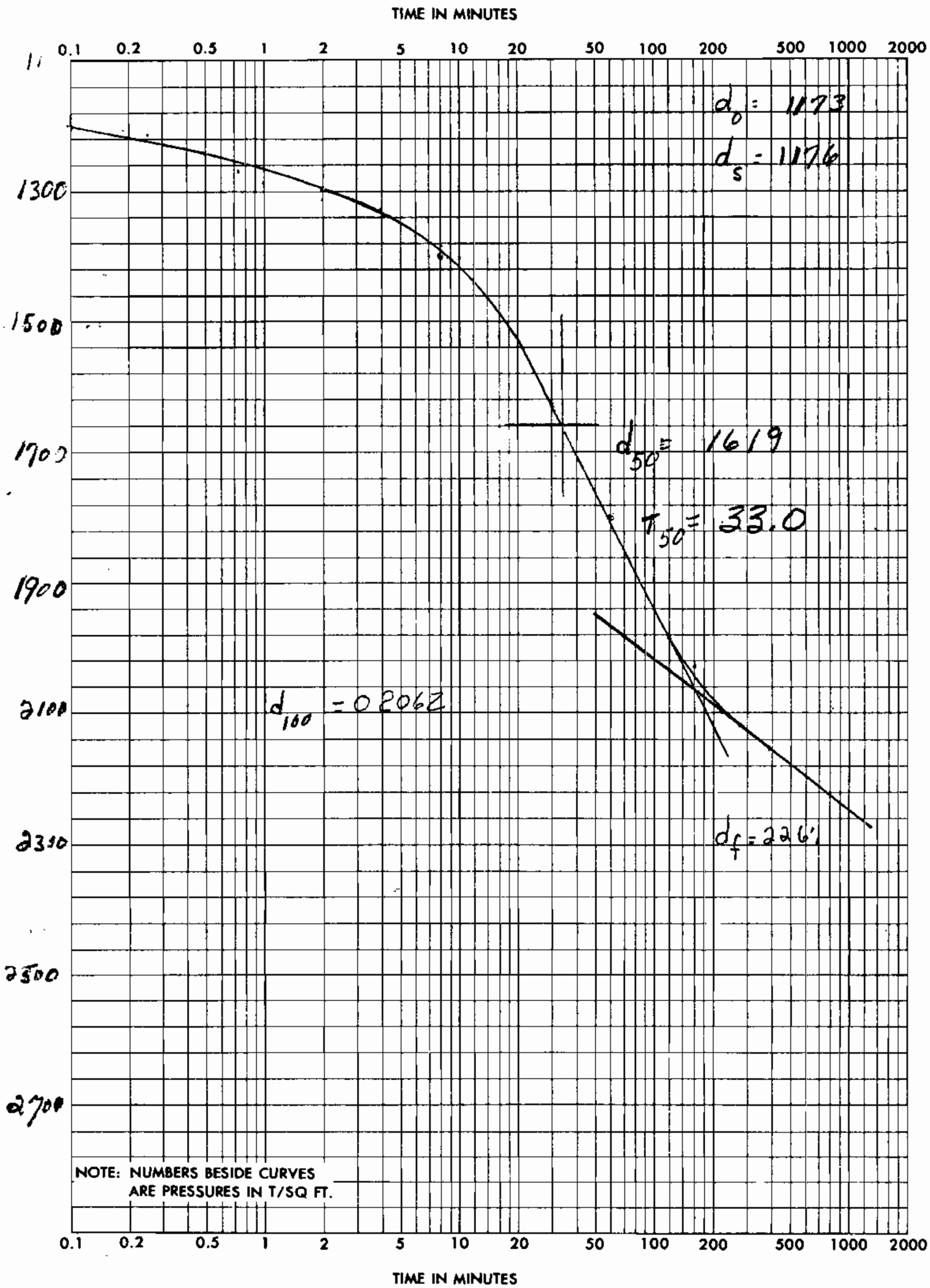
BORING NO. 1-UMP | SAMPLE NO. 9-C | DEPTH EL | DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1984 OF—715-985

PG

II 4



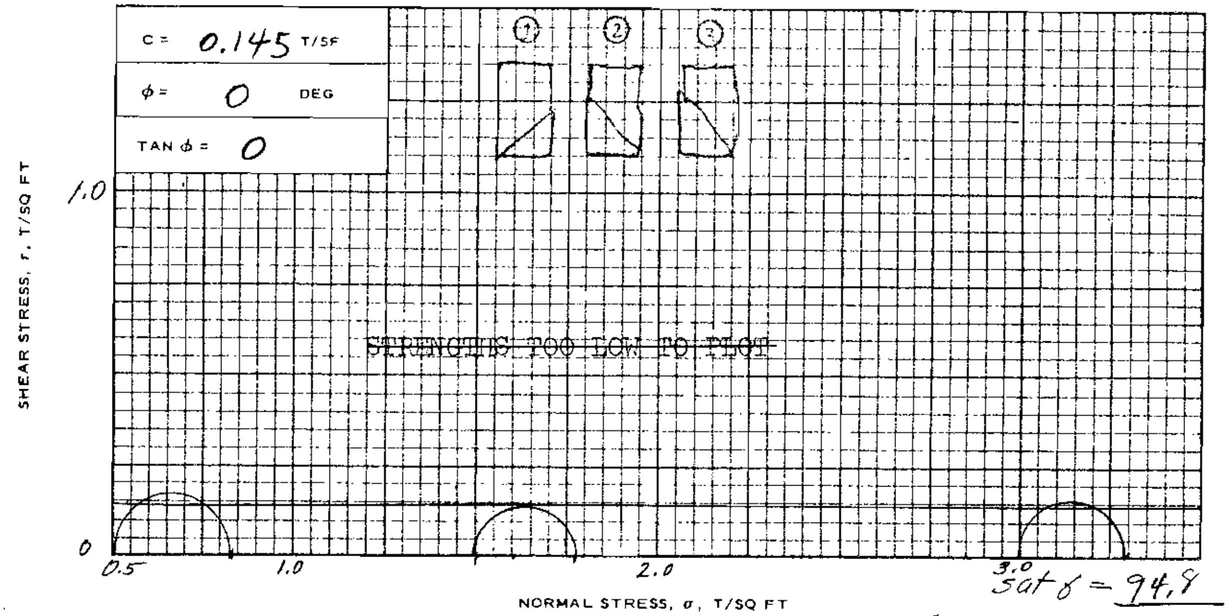
PROJECT			
AREA			
BORING NO. 1-UM2	SAMPLE NO. 9-C	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 — PREVIOUS EDITIONS ARE OBSOLETE.

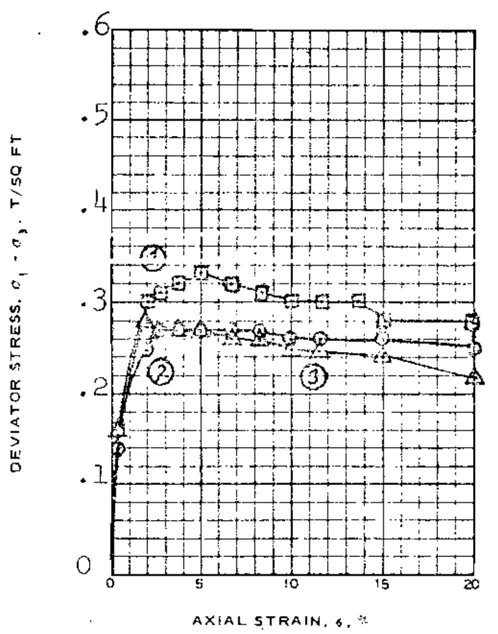
CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

★ GPO : 1964 OF—715-965

PG



sat γ = 94.9



94.5 97.7 95.9

SPECIMEN NO.			1	2	3	Avg.
INITIAL	WATER CONTENT, %	w_o	86.2	89.0	83.7	86.3
	DRY DENSITY LB/CU FT	γd_o	50.7	49.7	52.2	
	SATURATION, %	S_o	99.8	100	100+	
	VOID RATIO	e_o	2.35	2.42	2.25	
BEFORE SHEAR	WATER CONTENT, %	w_c				
	DRY DENSITY LB/CU FT	γd_c				
	SATURATION %	S_c				
	VOID RATIO	e_c				
	FINAL BACK PRESSURE, T/SQ FT	u_o				
MINOR PRINCIPAL STRESS, T/SQ FT		σ_3	0.5	1.5	3.0	
MAXIMUM DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{MAX}$	0.33	0.27	0.28	
TIME TO $(\sigma_1 - \sigma_3)_{MAX}$, MIN		t_f	56	29	22	
ULTIMATE DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{ULT}$				
INITIAL DIAMETER, IN.		D_o	1.39	1.40	1.40	
INITIAL HEIGHT, IN.		H_o	3.00	3.00	3.00	

CONTROLLED- strain TEST

DESCRIPTION OF SPECIMENS PLASTIC CLAY(CH),gray;3/8" layer of silt in unused portion of sample

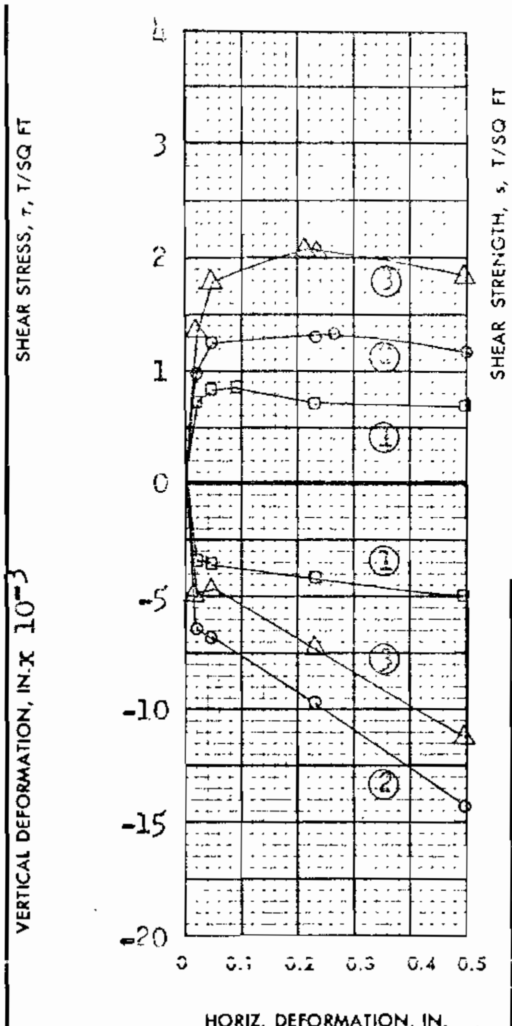
LL 96	PL 28	PI 68	Gs 2.72	TYPE OF SPECIMEN UNDISTURBED	TYPE OF TEST Q

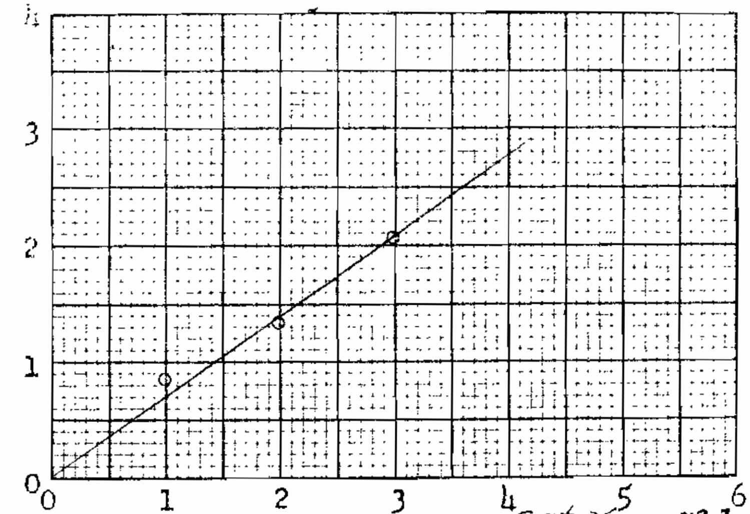
REMARKS:

PROJECT LK.PONT.LA.&VIC-HURR. PROT.(73)
ORLEANS PARISH OUTFALL CANALS-17th ST.CANAL

BORING NO. 1-UMP	SAMPLE NO. 9-D
DEPTH/ELEV 33.4/-30.3	
LABORATORY USAEWES	DATE 26 July 1973

GDA TRIAXIAL COMPRESSION TEST REPORT





sat γ = 123.1

~~123.4~~ ~~124.1~~ ~~123.5~~

			1	2	3	Avg.
TEST NO.			1	2	3	Avg.
INITIAL	WATER CONTENT	w_o	25.1 %	25.3%	26.0%	25.5 %
INITIAL	VOID RATIO	e_o	0.720	0.700	0.718	
INITIAL	SATURATION	S_o	93.4 %	96.9 %	97.0%	%
INITIAL	DRY DENSITY, LB/CU FT	γ_d	97.3	98.4	97.4	
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}				
FINAL	WATER CONTENT	w_f	24.3 %	23.7%	24.9%	%
FINAL	VOID RATIO	e_f				
FINAL	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.85	1.32	2.07	
ACTUAL TIME TO FAILURE, MIN		t_f	600	1500	1260	
RATE OF STRAIN, IN./MIN			.00018	.00018	.00018	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

SHEAR STRENGTH PARAMETERS

ϕ' = 34°

TAN ϕ' = 0.69

c' = 0 T/SQ FT

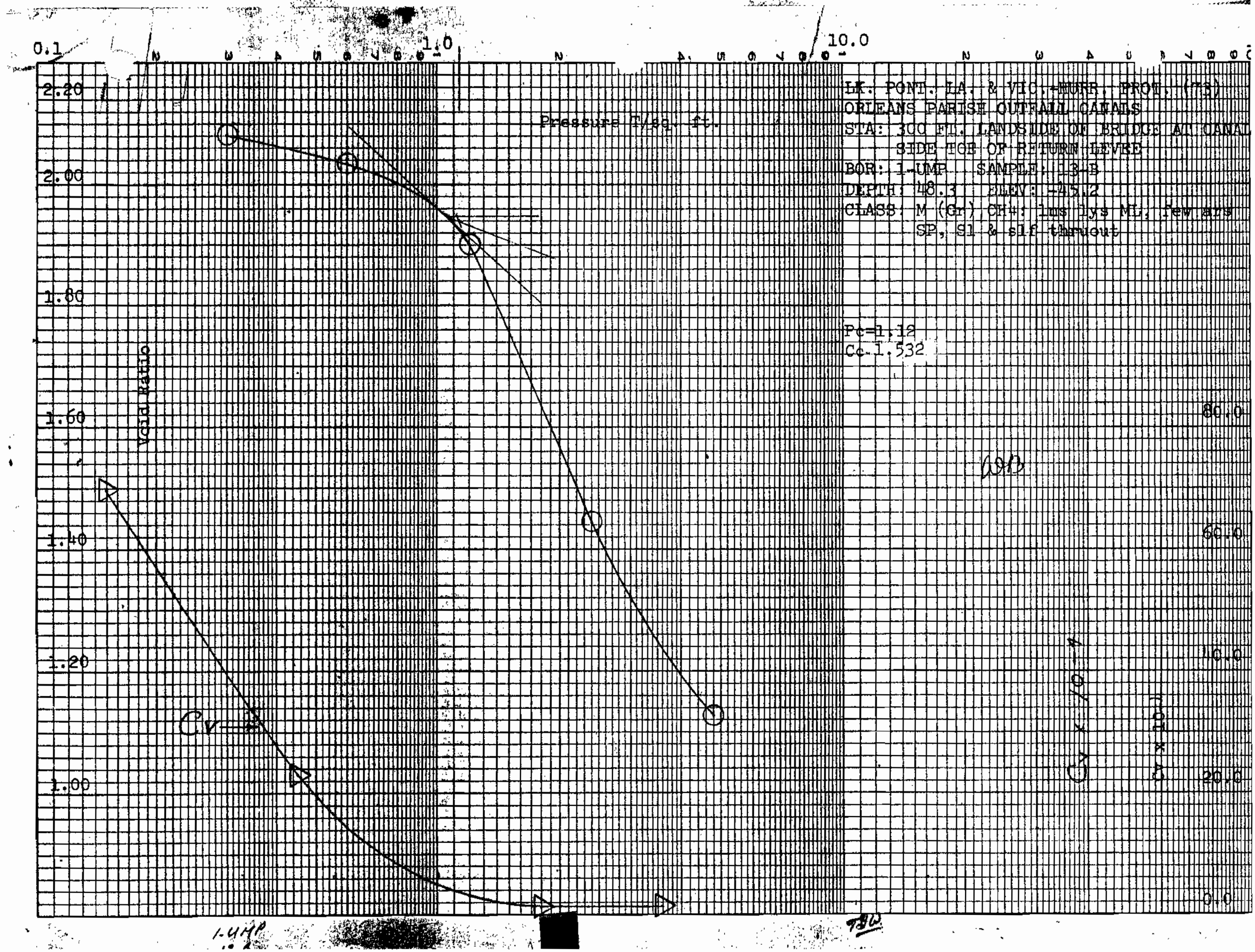
☐ CONTROLLED STRESS

☒ CONTROLLED STRAIN

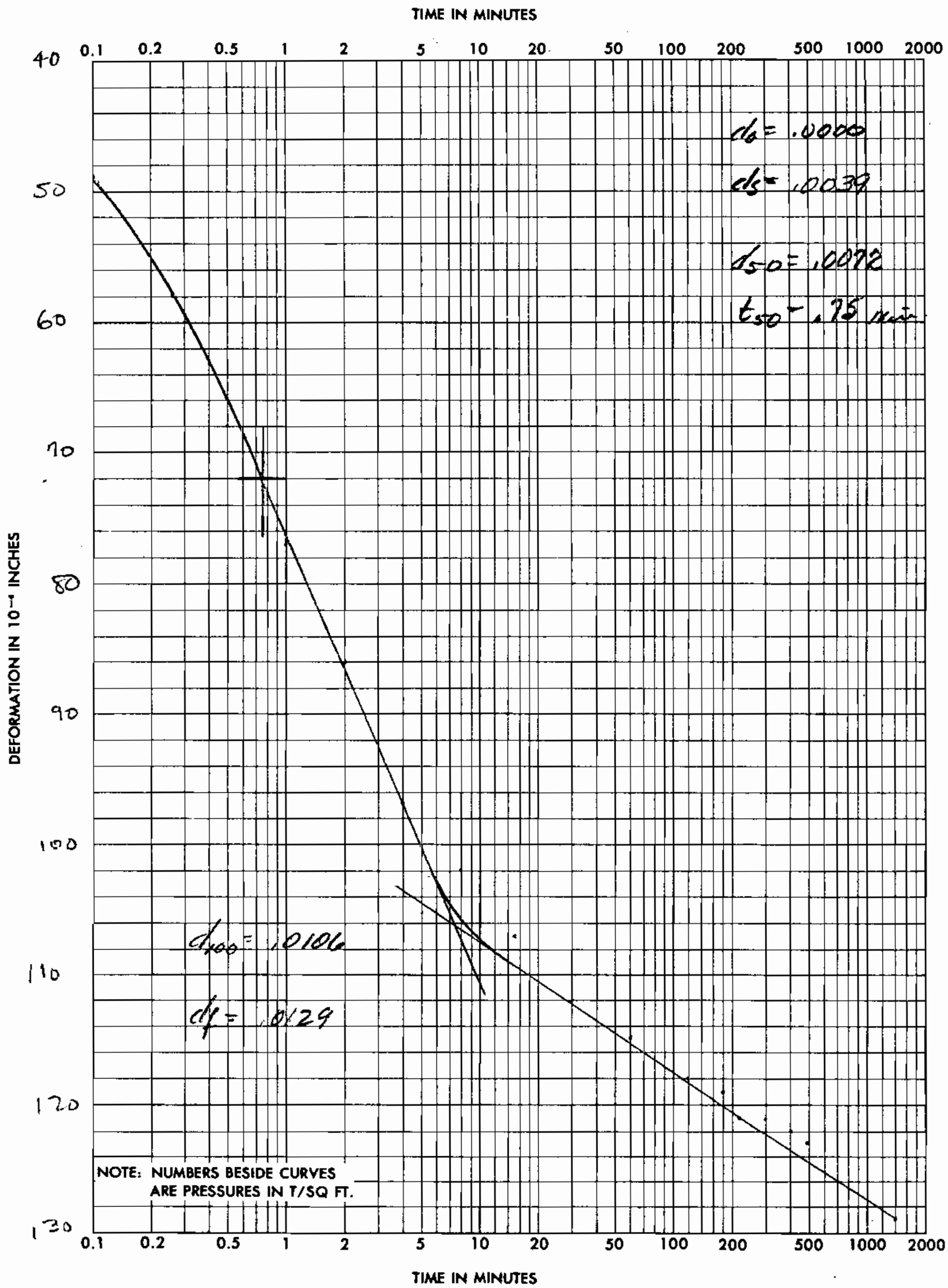
TYPE OF SPECIMEN UNDISTURBED		3.01 IN. SQUARE	0.620 IN. THICK
CLASSIFICATION SILTY SAND(SM),gray;shells			
LL -	PL -	PI -	G_s 2.68

REMARKS

PROJECT LK.PONT.,LA.& VIC.-HURR. PROT.(73)	
ORLEANS PARISH OUTFALL CANALS-17th.ST CANAL	
AREA	
BORING NO. 1-UMP	SAMPLE NO. 11-C
DEPTH / EL 40.9/-37.8	DATE 25 August,1973
RCH	DIRECT SHEAR TEST REPORT



0.1
1.0
10.0
Pressure T/sq. ft.
Void Ratio
2.20
2.00
1.80
1.60
1.40
1.20
1.00
80.0
60.0
40.0
20.0
0.0
LK. PONT. LA. & VIC.-HURR. PROT. (73)
ORLEANS PARISH OUTFALL CANALS
STA: 300 FT. LANDSIDE OF BRIDGE AT CANAL
SIDE TOE OF RETURN LEVEE
BOR: 1-UMP SAMPLE: 13-B
DEPTH: 48.3 ELEV: -45.2
CLASS: M (Gr) CH+: lms lys ML, few ars
SP, Sl & slf thruout
Pc=1.12
Cc 1.532
Cv
1-UMP



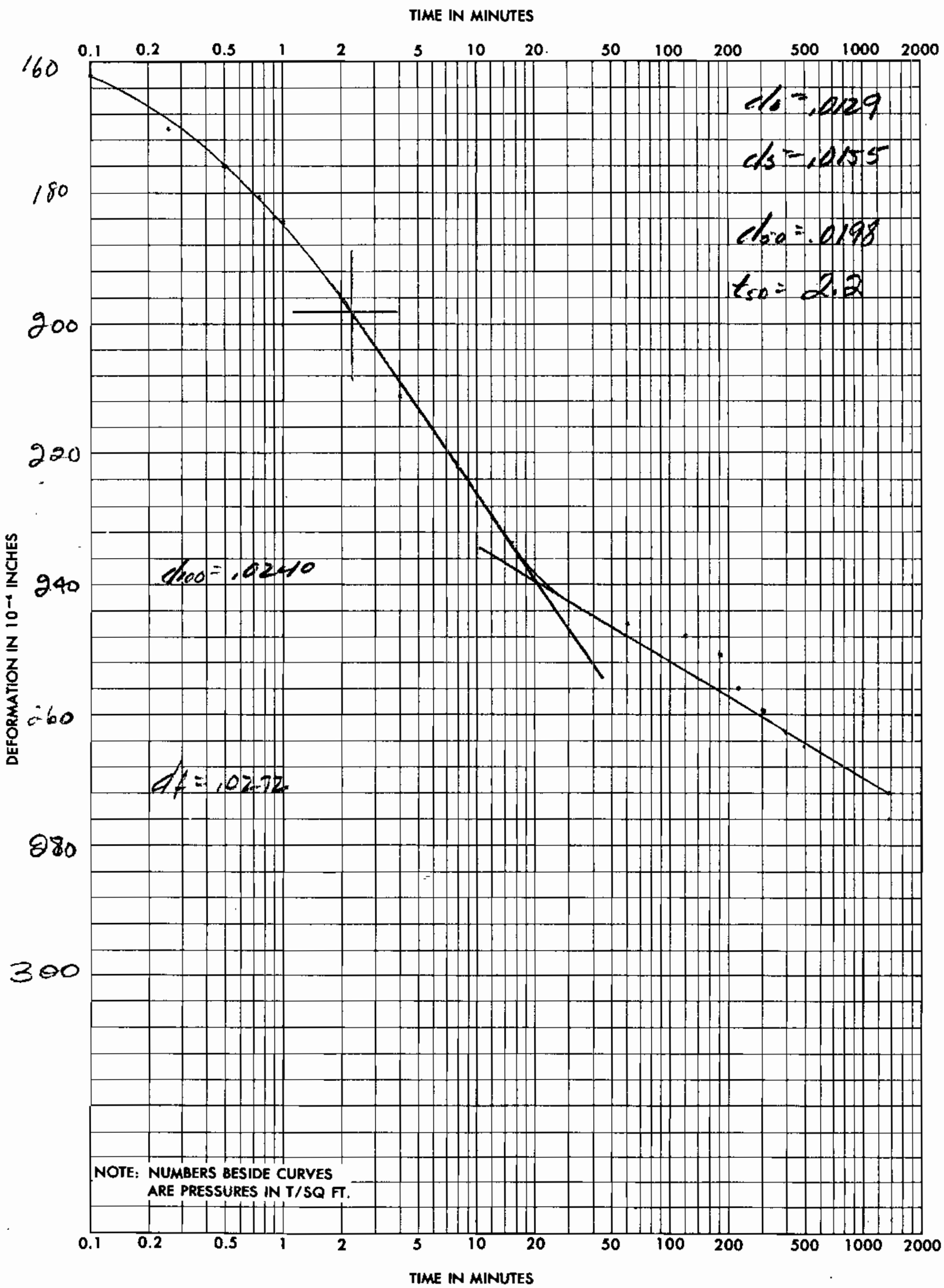
PROJECT			
AREA			
BORING NO. 1-UMP	SAMPLE NO. 13-B	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 — PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

-#1

☆ GPO : 1964 OF—715-965



PROJECT

AREA

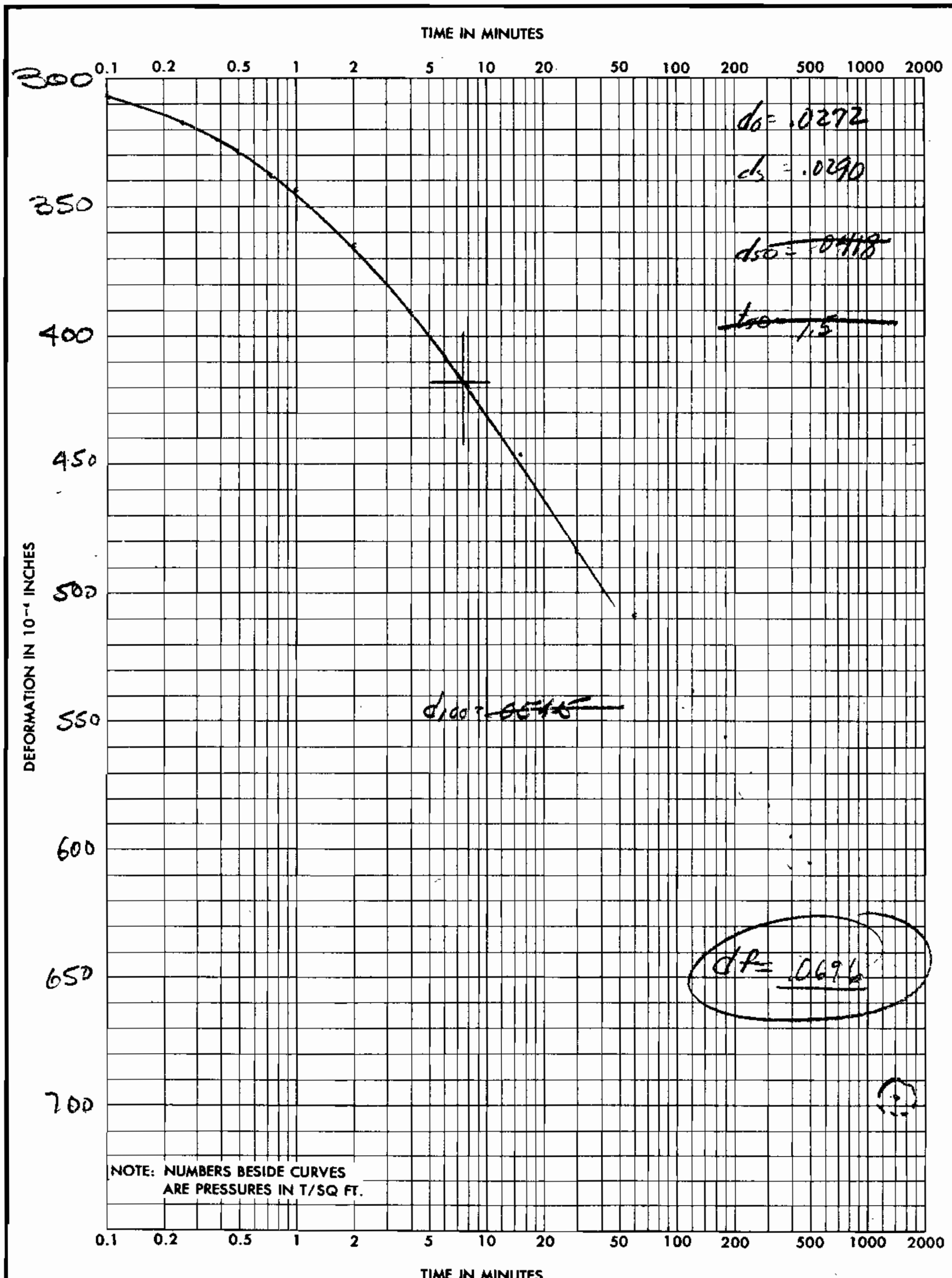
BORING NO. 1-UMP	SAMPLE NO. 13-B	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

#2

★ GPO : 1964 OF—715-965



PROJECT

AREA

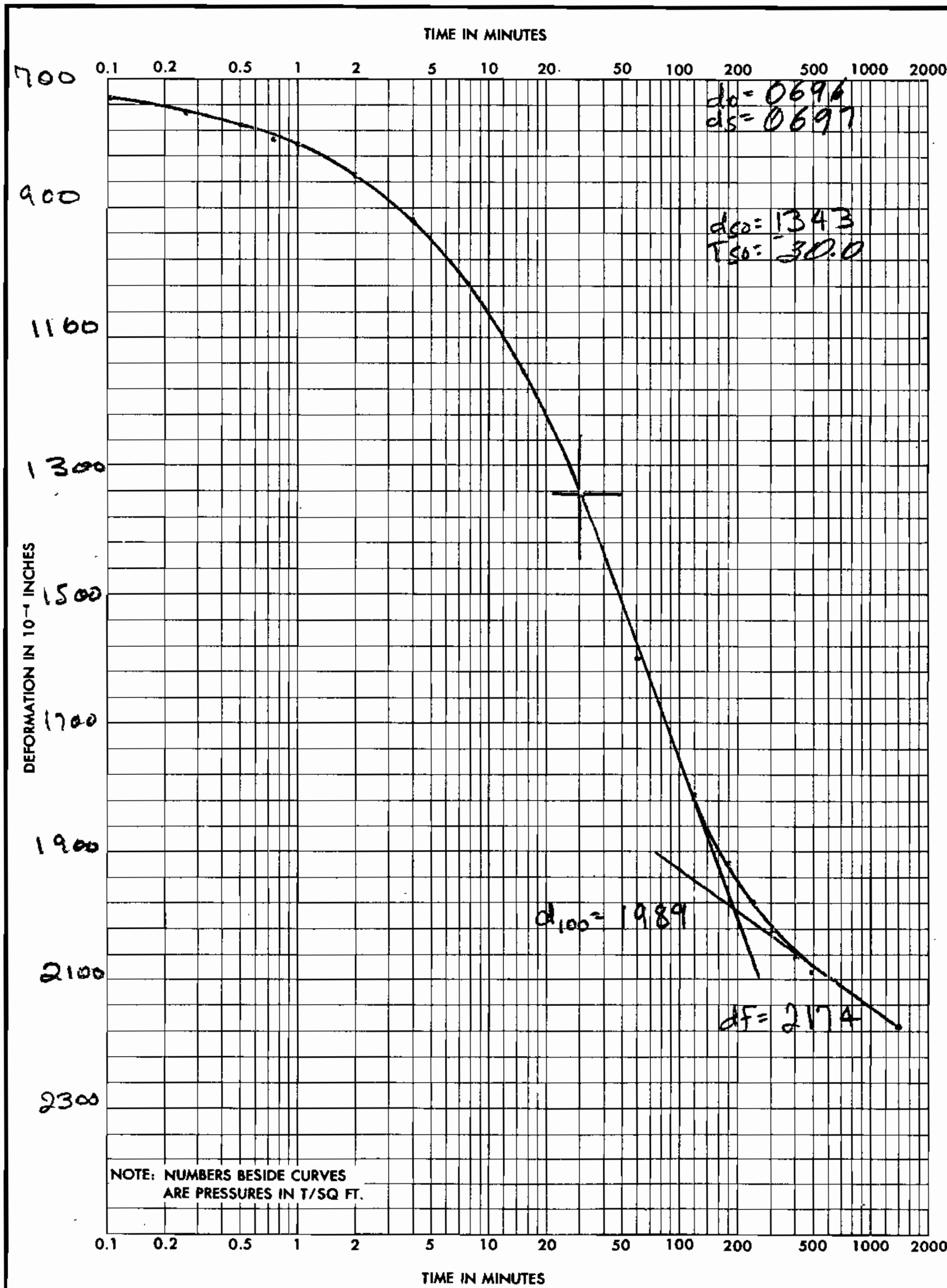
BORING NO. 1-UMP | SAMPLE NO. 13-B | DEPTH EL | DATE

ENG FORM 2088 1 MAY 63 | PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

-#3

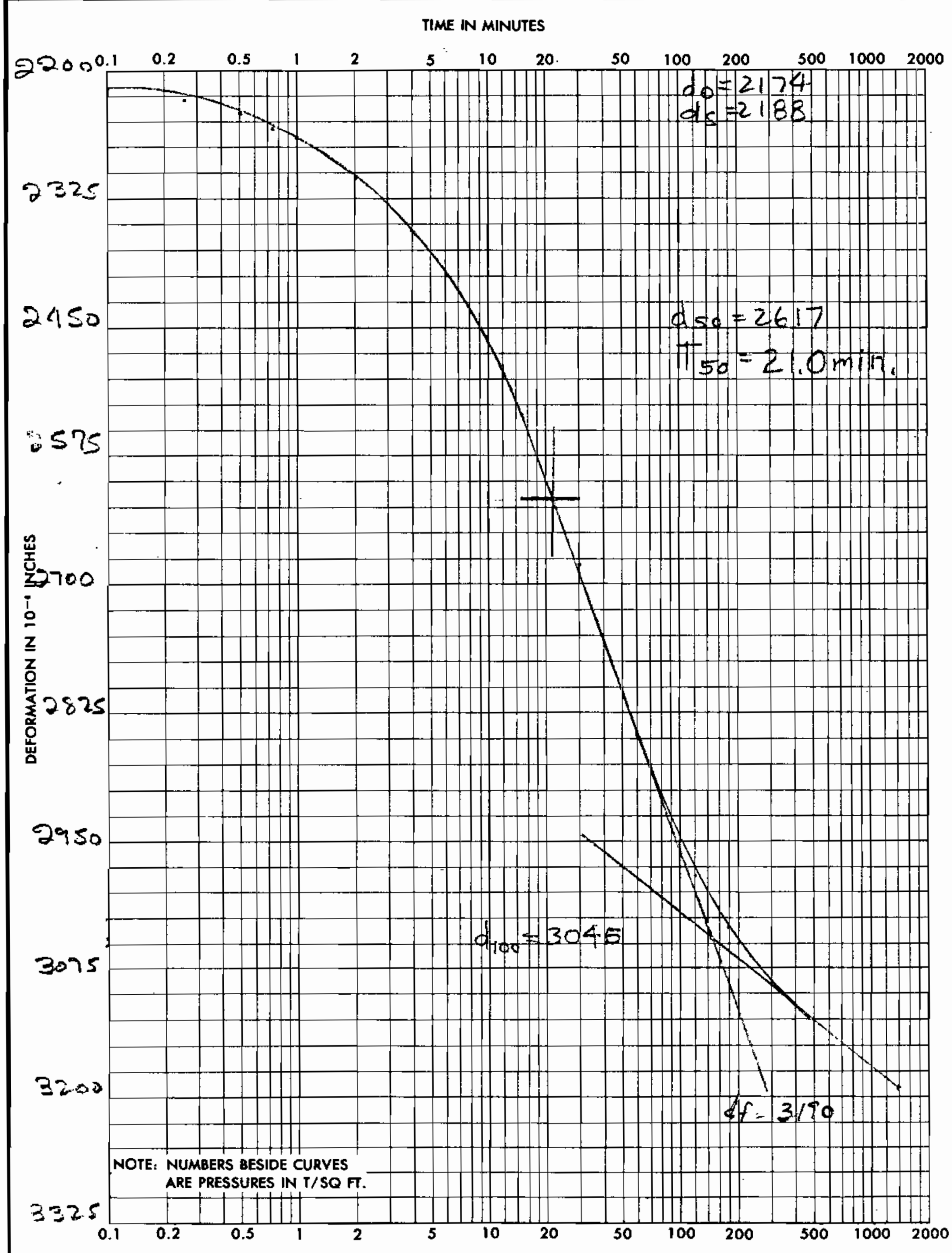
★ GPO : 1964 OF—715-985



PROJECT			
AREA			
BORING NO. 1-UMP	SAMPLE NO. 13-B	DEPTH EL	DATE
ENG FORM 2088 1 MAY 63 — PREVIOUS EDITIONS ARE OBSOLETE.	**CONSOLIDATION TEST—TIME CURVES**		(TRANSLUCENT)

- #4

★ GPO : 1964 OF—713-985



PROJECT

AREA

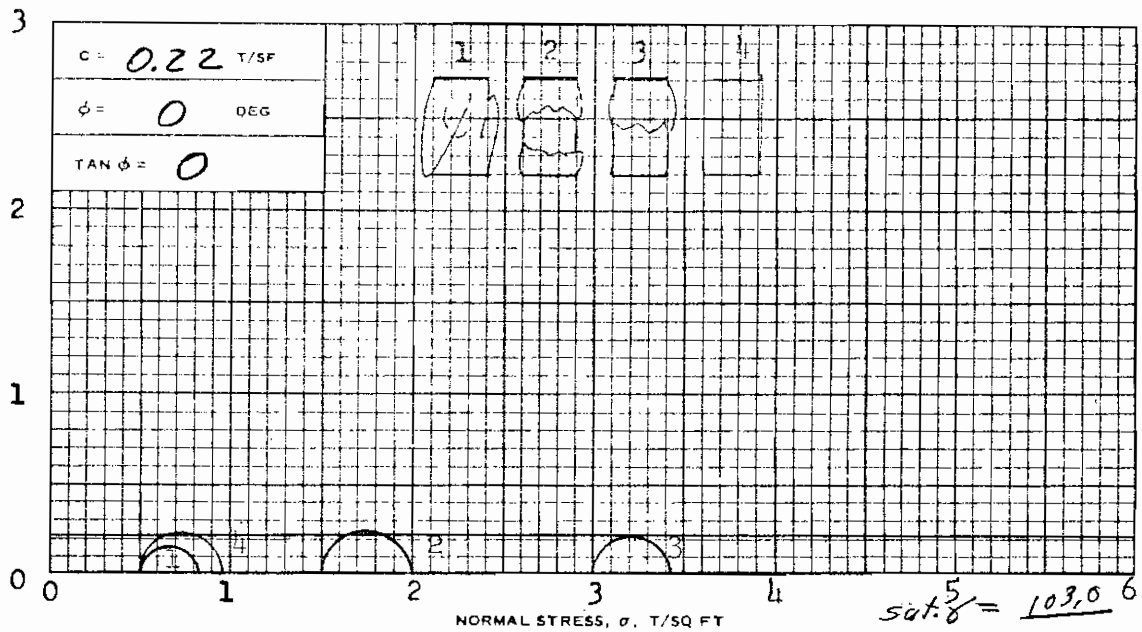
BORING NO. 1-UMP	SAMPLE NO. 13-B	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-985

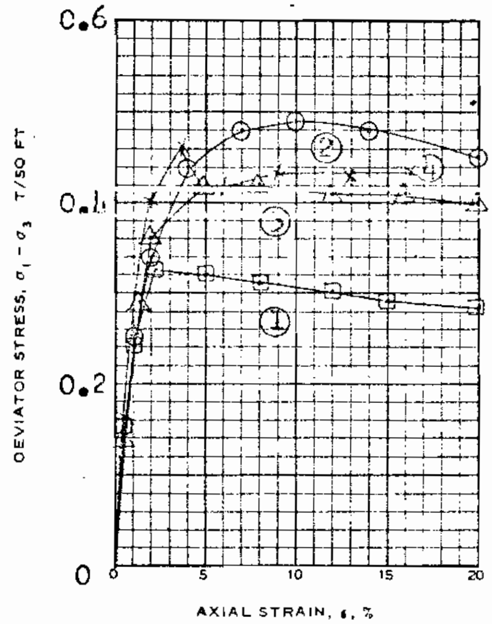
5 1-UMP 13-B

c =	0.22 T/SF
φ =	0 DEG
TAN φ =	0



sat. γ = 103.0

~~101.4~~ ~~104.7~~ ~~103.7~~ ~~101.9~~



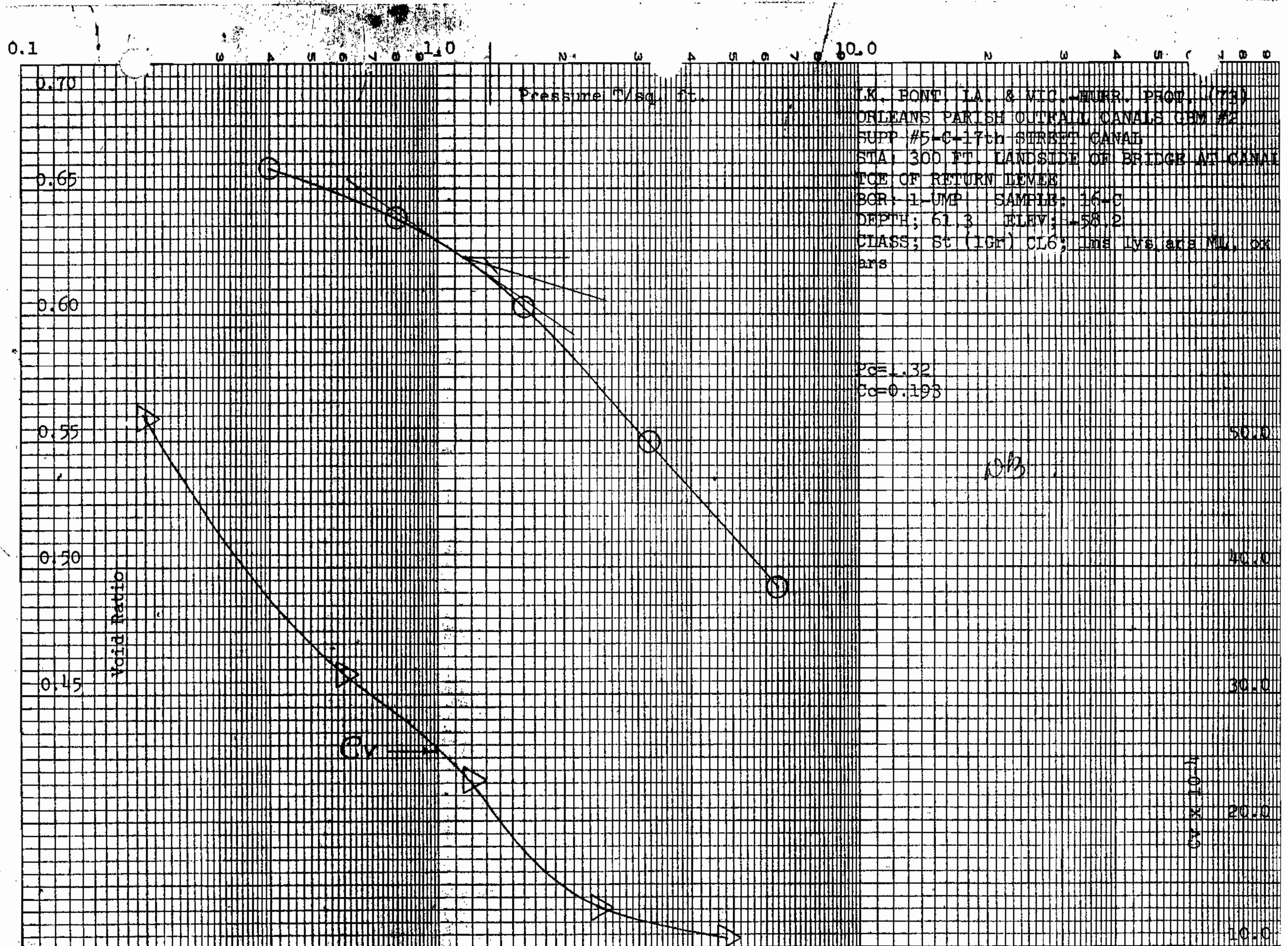
			1	2	3	4
SPECIMEN NO.			1	2	3	4
INITIAL	WATER CONTENT, %	w_o	62.7	56.8	55.7	59.2
	DRY DENSITY LB/CU FT	γ_{d_o}	62.0	66.8	65.8	62.9
	SATURATION, %	S_o	98.6	100+	96.7	95.4
	VOID RATIO	e_o	1.71	1.51	1.55	1.67
BEFORE SHEAR	WATER CONTENT, %	w_c				
	DRY DENSITY LB/CU FT	γ_{d_c}				
	SATURATION, %	S_c				
	VOID RATIO	e_c				
	FINAL BACK PRESSURE, T/SQ FT	u_o				
MINOR PRINCIPAL STRESS, T/SQ FT		σ_3	0.5	1.5	3.0	0.5
MAXIMUM DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{MAX}$	0.32	0.49	0.42	0.4[redacted]
TIME TO $(\sigma_1 - \sigma_3)_{MAX}$, MIN		t_f	4	17	8	9
ULTIMATE DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{ULT}$				
INITIAL DIAMETER, IN.		D_o	1.40	1.41	1.42	1.40
INITIAL HEIGHT, IN.		H_o	3.00	3.00	3.00	3.00

CONTROLLED- Strain TEST

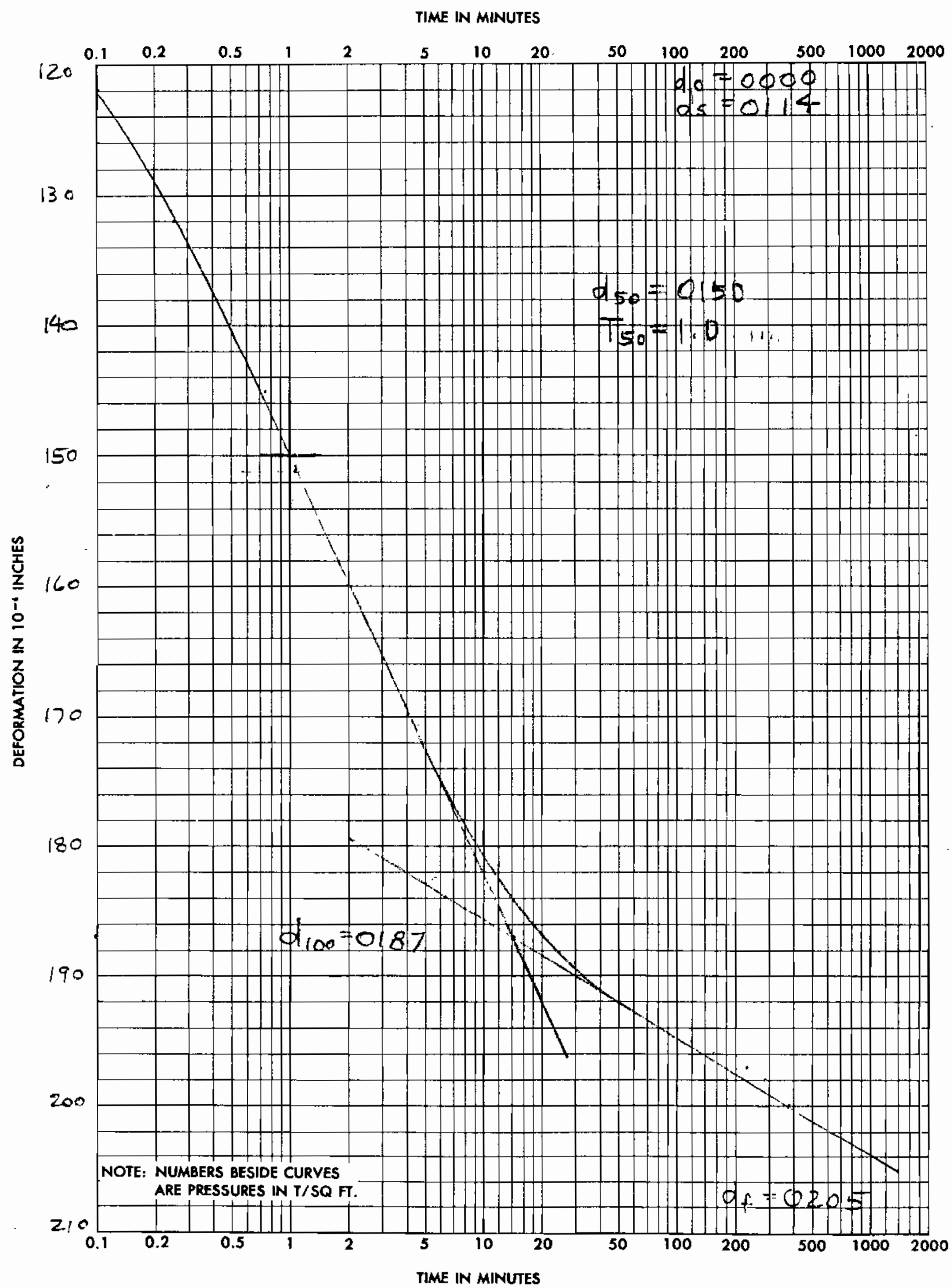
DESCRIPTION OF SPECIMENS PLASTIC CLAY(CH),gray;shell fragments

LL 70	PL 23	PI 47	Gs 2.69	TYPE OF SPECIMEN UNDISTURBED	TYPE OF TEST Q

REMARKS:	PROJECT LK. PONT.LA. & VIC-HURR. PROT. (73)
	ORLEANS PARISH OUTFALL CANALS-17th.ST.CANAL
	BORING NO. 1-UMP — SAMPLE NO. 13-C
	DEPTH/ELEV 48.8/-45.7
	LABORATORY USAEWES — DATE 27 July,1973
	RAA TRIAXIAL COMPRESSION TEST REPORT



0.1
1.0
10.0
Pressure T/sq. ft.
LK. PONT. LA. & VIC.-HURR. PROT. (73)
ORLEANS PARISH OUTFALL CANALS GDM #2
SUPP #5-C-17th STREET CANAL
STA: 300 FT. LANDSIDE OF BRIDGE AT CANAL
TOE OF RETURN LEVEE
BOR: 1-UMP SAMPLE: 16-C
DEPTH; 61.3 ELEV; -58.2
CLASS; St (lGr) CL6; lns lys ars ML, ox ars
Pc=1.32
Cc=0.193
0.70
0.65
0.60
0.55
0.50
0.45
Void Ratio
Cv
50.0
40.0
30.0
20.0
10.0
Cv x 10



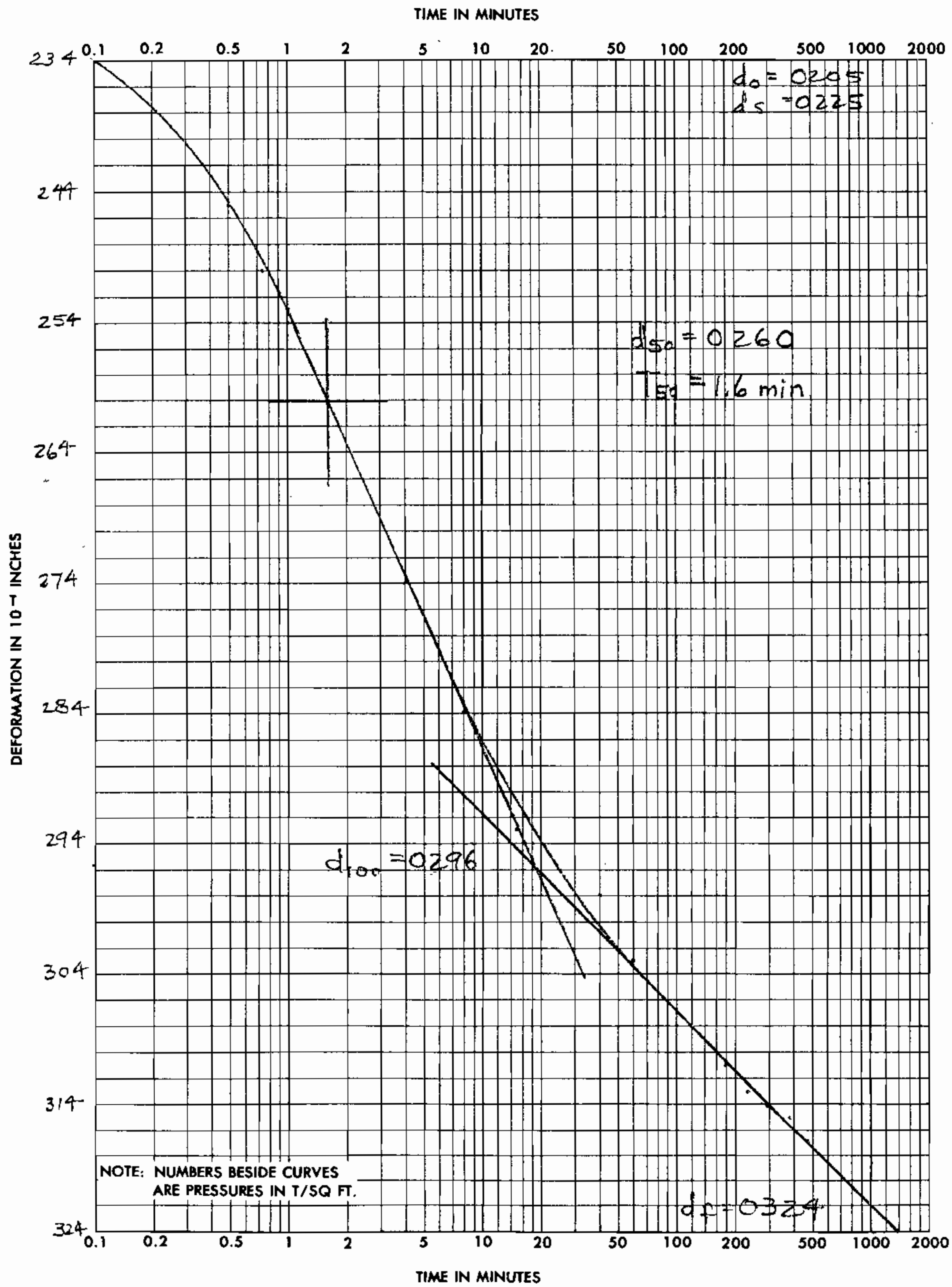
PROJECT

AREA

BORING NO. 1-UMP	SAMPLE NO. 16-C	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—713-965



PROJECT

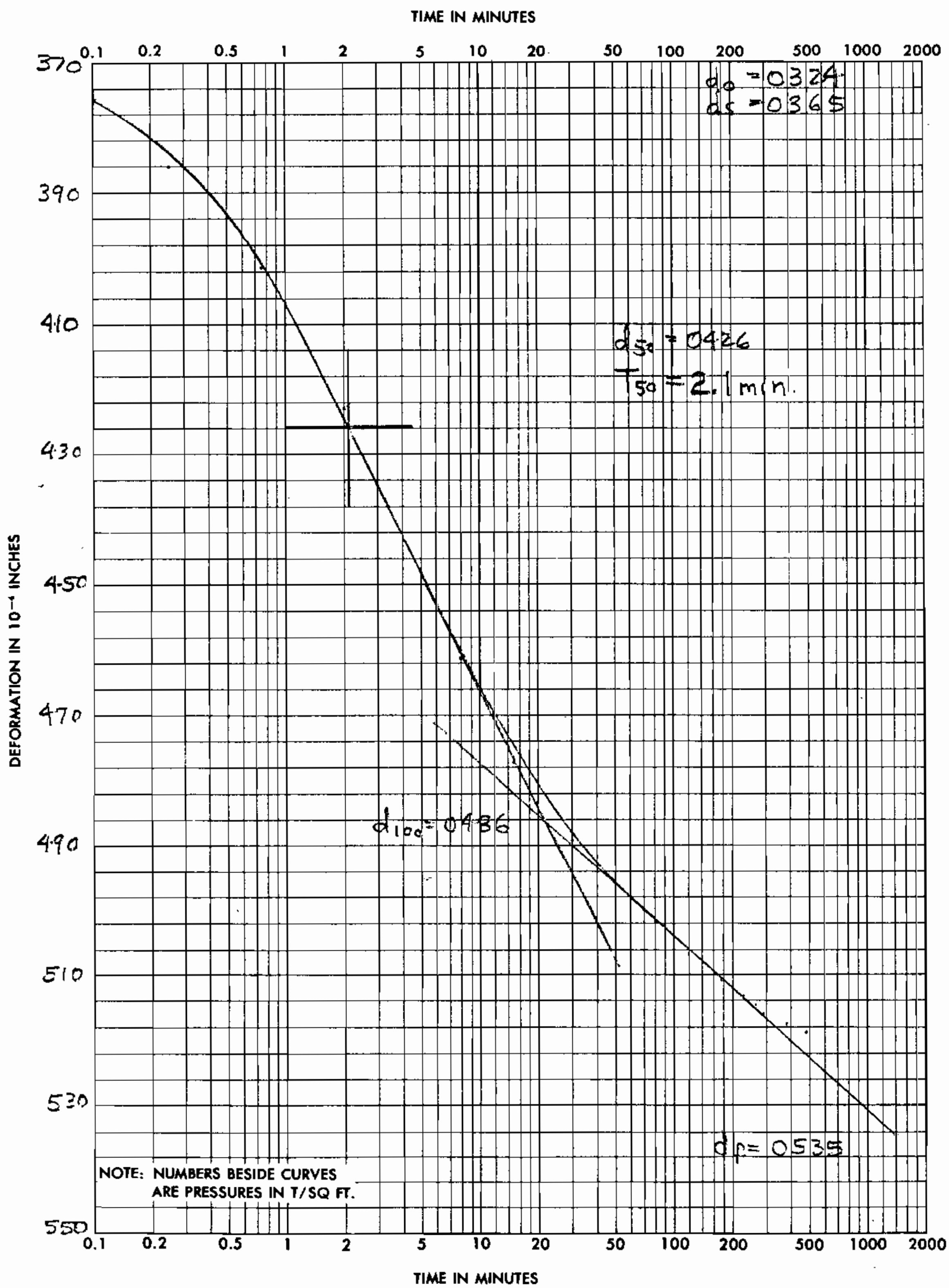
AREA

BORING NO. 1-UMP | SAMPLE NO. 16-C | DEPTH EL | DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

☆ GPO : 1964 OF—715-965



PROJECT

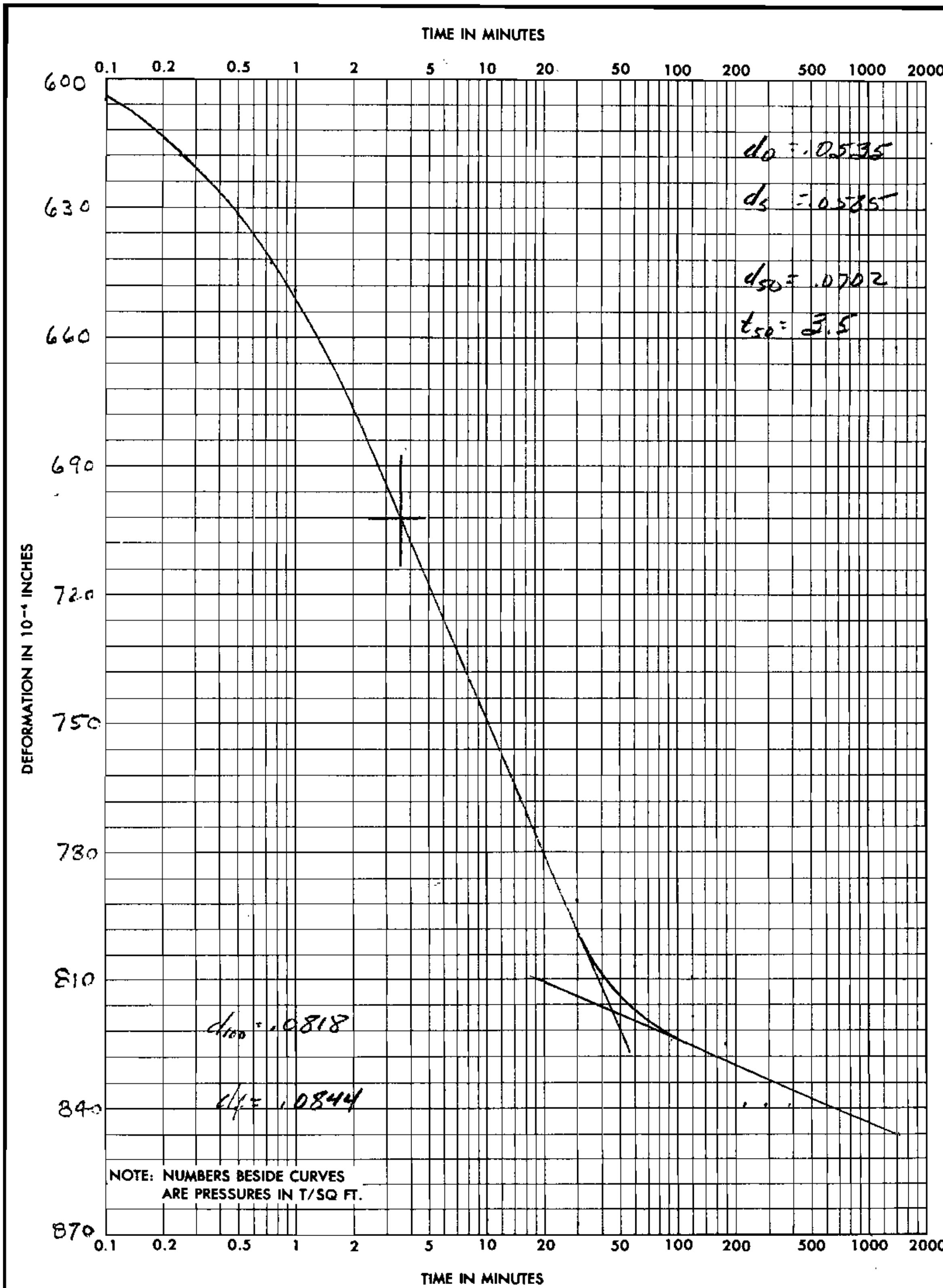
AREA

BORING NO. 1-UMD SAMPLE NO. 16-C DEPTH EL DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

GPO : 1964 OF—715-965



PROJECT

AREA

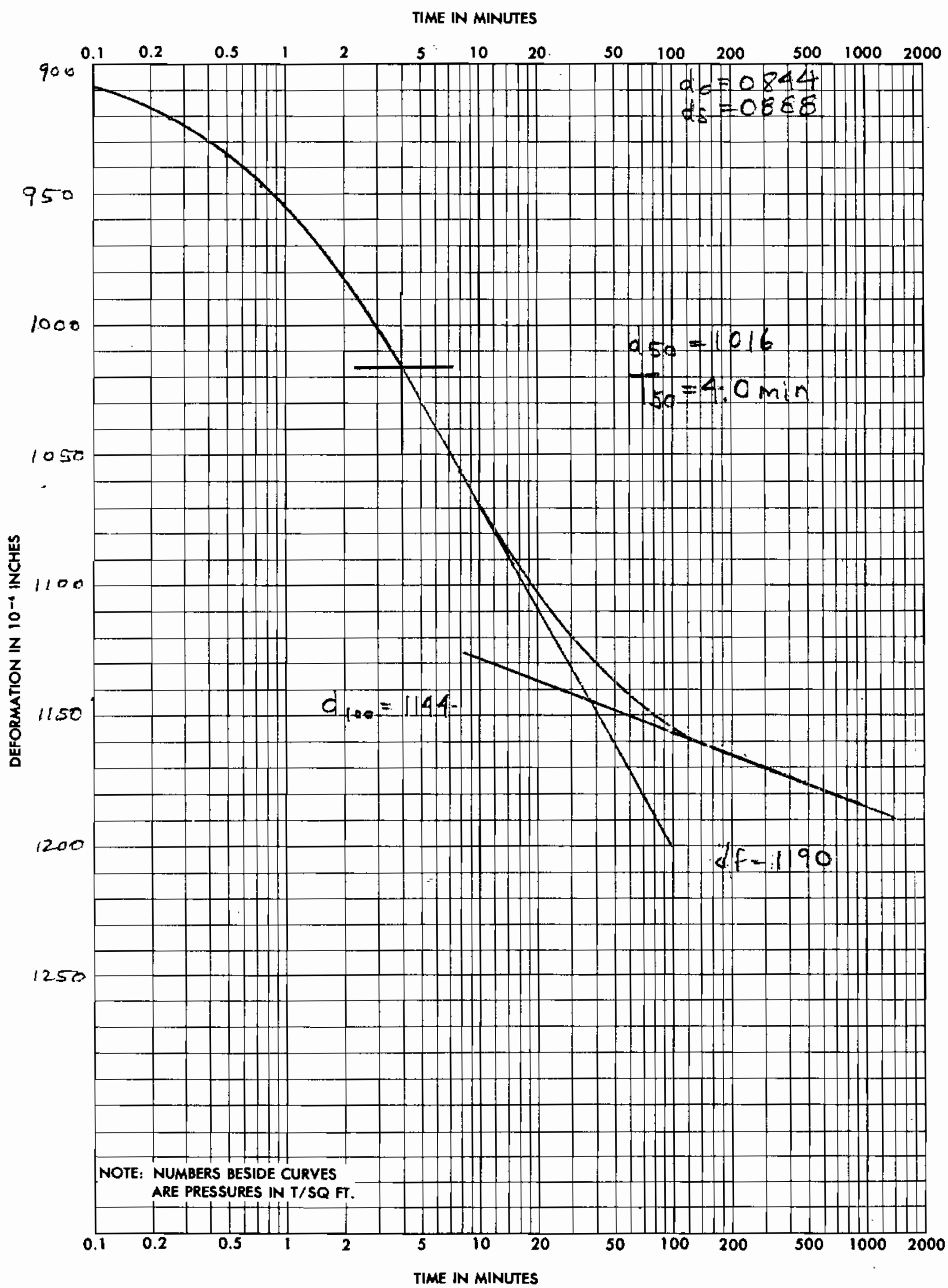
BORING NO. 1-UMP	SAMPLE NO. 16-C	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES

(TRANSLUCENT)

*GPO : 1964 OF—715-965

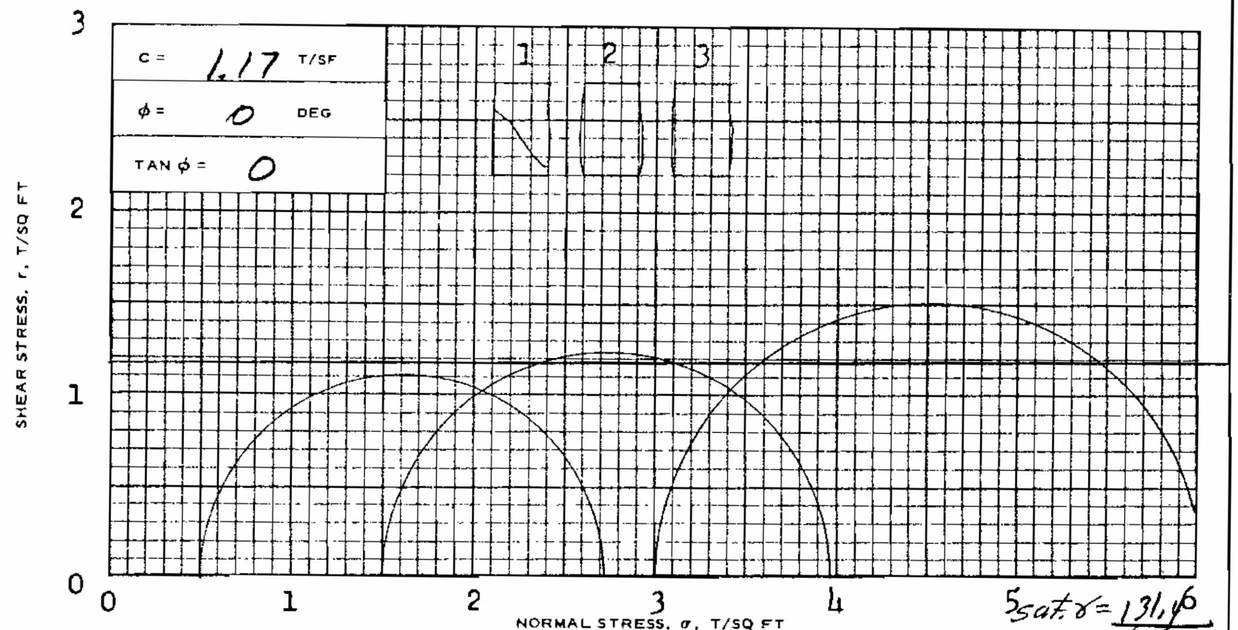


PROJECT			
AREA			
BORING NO. 1-MMP	SAMPLE NO. 16-C	DEPTH EL	DATE

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

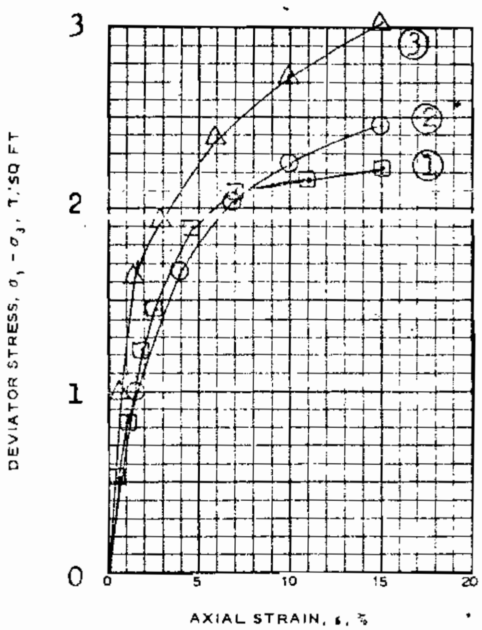
★ GPO : 1964 OF—715-965

C =	1.17	T/SF
ϕ =	0	DEG
TAN ϕ =	0	



5sat γ= 131.6

~~131.2~~ ~~131.1~~ ~~131.6~~



			1	2	3	Avg.
SPECIMEN NO.			1	2	3	Avg.
INITIAL	WATER CONTENT, %	w_o	18.7	18.8	18.5	18.7
	DRY DENSITY LB/CU FT	γd_o	109.8	109.6	110.7	
	SATURATION, %	S_o	95.6	95.8	97.0	
	VOID RATIO	e_o	0.524	0.526	0.511	
BEFORE SHEAR	WATER CONTENT, %	w_c				
	DRY DENSITY LB/CU FT	γd_c				
	SATURATION, %	S_c				
	VOID RATIO	e_c				
	FINAL BACK PRESSURE, T/SQ FT	u_o				
MINOR PRINCIPAL STRESS, T/SQ FT		σ_3	0.5	1.5	3.0	
MAXIMUM DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{MAX}$	2.22	2.46	3.02	
TIME TO $(\sigma_1 - \sigma_3)_{MAX}$, MIN		t_f	60	22	24	
ULTIMATE DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{ULT}$				
INITIAL DIAMETER, IN.		D_o	1.39	1.40	1.39	
INITIAL HEIGHT, IN.		H_o	3.00	3.00	3.00	

CONTROLLED- Strain TEST

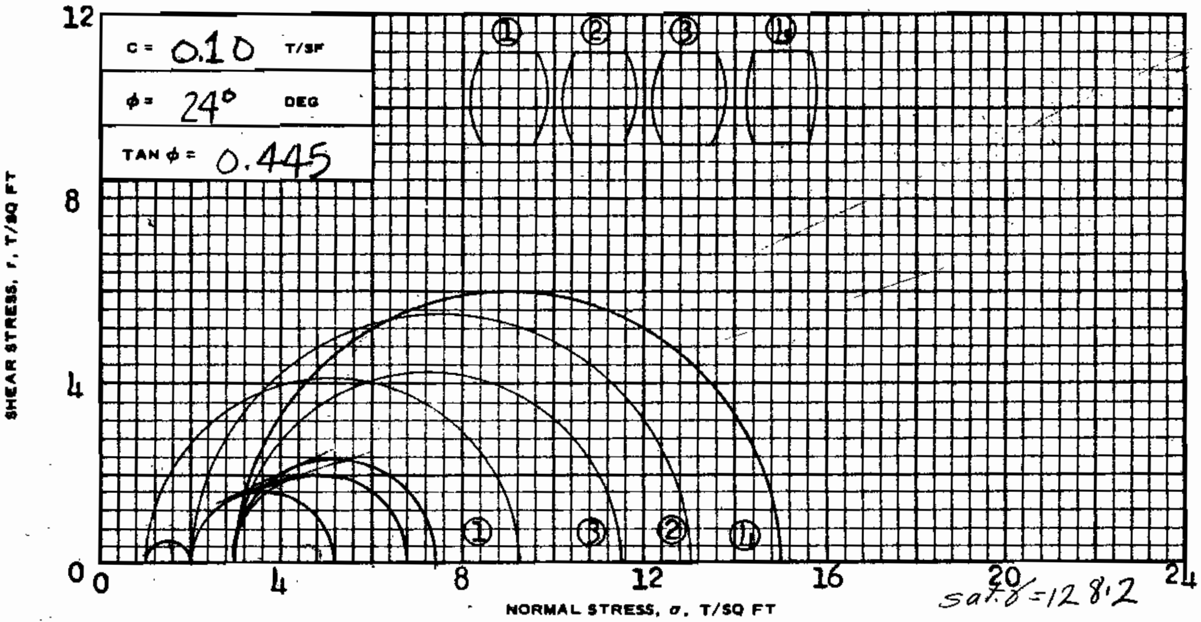
DESCRIPTION OF SPECIMENS LEAN CLAY(CL), light greenish gray; numerous silt pockets [redacted]

LL 45	PL 15	PI 30	GS 2.68	TYPE OF SPECIMEN UNDISTURBED	TYPE OF TEST Q

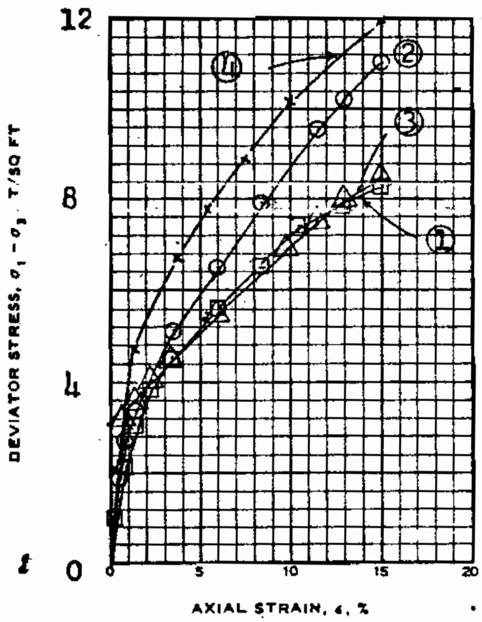
REMARKS:	PROJECT LK.PONT.,LA.& VIC.-HURR.PROT(73)	
	ORLEANS PARISH OUTFALL CANALS-17th.ST.CANAL	
	BORING NO. 1-UMP	SAMPLE NO. 16-D
	DEPTH/ELEV 61.8/-58.7	
	LABORATORY USAEWES	DATE 27 July,1973
	JMS TRIAXIAL COMPRESSION TEST REPORT	

ENG FORM NO. 2089 PREVIOUS EDITION IS OBSOLETE TRANSLUCENT *(EM 1110-2-1906)*
REV JUNE 1970

c =	0.10 T/SF
φ =	24° DEG
TAN φ =	0.445



sat γ = 128.2



			127.3	129.5	129.2	127.0
SPECIMEN NO.			1	2	3	4
INITIAL	WATER CONTENT, %	w_o	22.8	21.2	21.3	22.6
	DRY DENSITY LB/CU FT	γ_{d_o}	103.1	106.5	106.1	103.0
	SATURATION, %	S_o	97.0	98.2	97.8	97.1
	VOID RATIO	e_o	0.635	0.583	0.588	0.624
BEFORE SHEAR	WATER CONTENT, %	w_c	23.1	20.9	20.9	21.4
	DRY DENSITY LB/CU FT	γ_{d_c}	104.7	109.4	109.6	104.7
	SATURATION, %	S_c	100+	100+	100+	95.9
	VOID RATIO	e_c	0.610	0.541	0.538	0.598
	FINAL BACK PRESSURE, T/SQ FT	u_o	5.54	5.54	5.54	5.04
MINOR PRINCIPAL STRESS, T/SQ FT		σ_3	1.0	2.0	3.0	3.0
MAXIMUM DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{MAX}$	8.25	10.97	8.50	11.95
TIME TO $(\sigma_1 - \sigma_3)_{MAX}$, MIN		t_f	114	113	113	115
ULTIMATE DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{ULT}$	1.0	3.2	3.8	4.4
INITIAL DIAMETER, IN.		D_o	1.39	1.38	1.38	1.40
INITIAL HEIGHT, IN.		H_o	3.00	3.00	3.00	3.00

CONTROLLED- Strain TEST

DESCRIPTION OF SPECIMENS SANDY SILTY CLAY(CL),gray

LL 28	PL 20	PI 8	Gs 2.70	TYPE OF SPECIMEN UNDISTURBED	TYPE OF TEST R

REMARKS: See attached Plot for effective values

PROJECT LK. PONT.,LA.&VIC.-HURR. PROT. ORLEANS PARISH OUTFALL CANALS-17th.ST. CANA

BORING NO. 1-UMP SAMPLE NO. 17-D

DEPTH/ELEV 65.8/-62.7

LABORATORY USAEWES DATE 7 July,1973

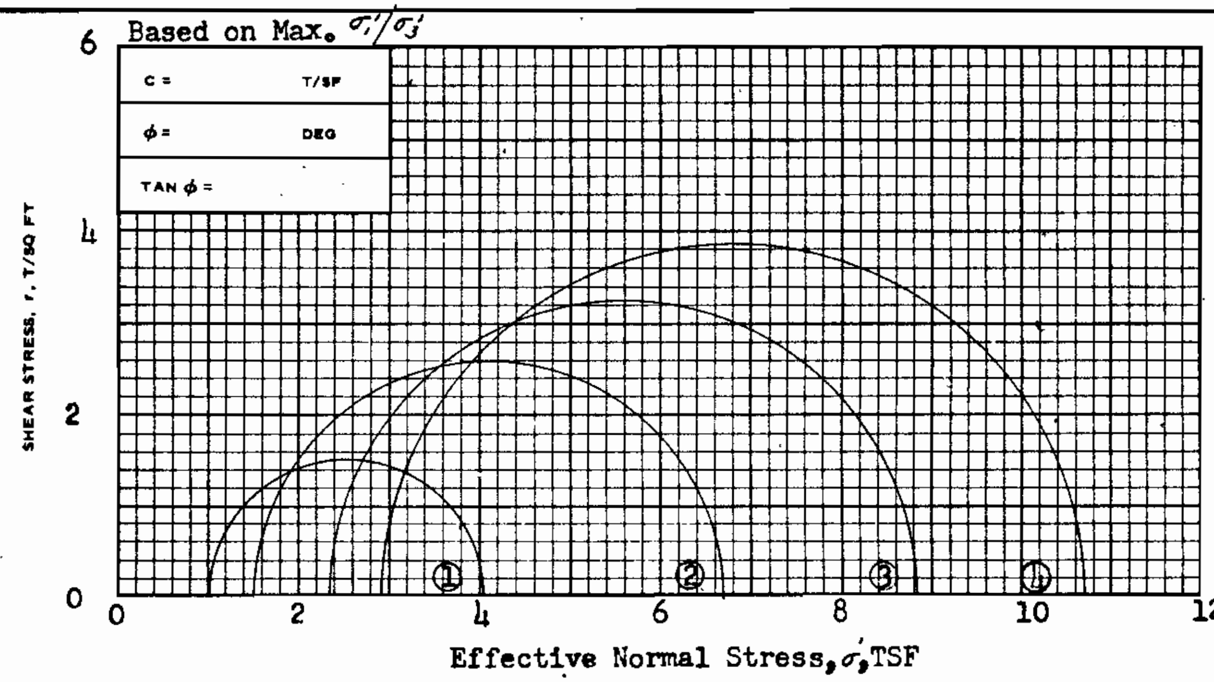
Sheet 1 of 2

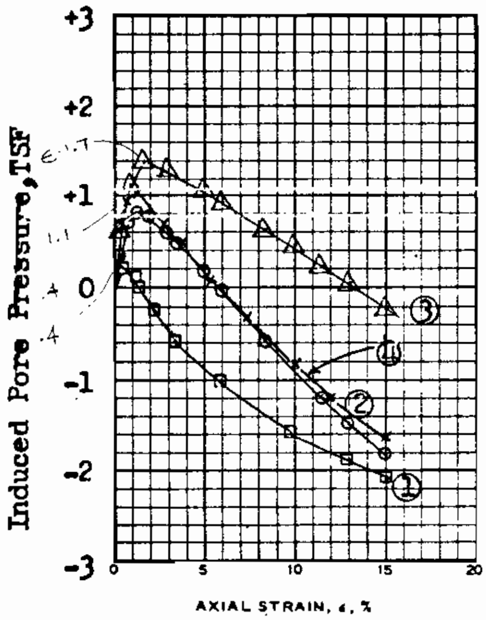
TES TRIAXIAL COMPRESSION TEST REPORT

ENG FORM NO. 2089 REV JUNE 1970 PREVIOUS EDITION IS OBSOLETE TRANSLUCENT (EM 1110-2-1906)

Based on Max. σ_1'/σ_3'

c =	T/SF
ϕ =	DEG
TAN ϕ =	





SPECIMEN NO.					
INITIAL — WATER CONTENT, %	w_o				
INITIAL — DRY DENSITY LB/CU FT	γ_{d_o}				
INITIAL — SATURATION, %	S_o				
INITIAL — VOID RATIO	e_o				
BEFORE SHEAR — WATER CONTENT, %	w_c				
BEFORE SHEAR — DRY DENSITY LB/CU FT	γ_{d_c}				
BEFORE SHEAR — SATURATION, %	S_c				
BEFORE SHEAR — VOID RATIO	e_c				
BEFORE SHEAR — FINAL BACK PRESSURE, T/SQ FT	u_o				
MINOR PRINCIPAL STRESS, T/SQ FT	σ_3				
MAXIMUM DEVIATOR STRESS, T/SQ FT	$(\sigma_1-\sigma_3)_{MAX}$				
TIME TO $(\sigma_1-\sigma_3)_{MAX}$, MIN	t_f				
ULTIMATE DEVIATOR STRESS, T/SQ FT	$(\sigma_1-\sigma_3)_{ULT}$				
INITIAL DIAMETER, IN.	D_o				
INITIAL HEIGHT, IN.	H_o				

CONTROLLED- TEST

DESCRIPTION OF SPECIMENS

LL	PL	PI	Gs	TYPE OF SPECIMEN	TYPE OF TEST

REMARKS:

PROJECT LK. PONT., LA.& VIC-HURR. PROT. ORLEANS PARISH, OUTFALL CANALS, 17th. ST. CANAL

BORING NO. 1-UMP SAMPLE NO. 17-D

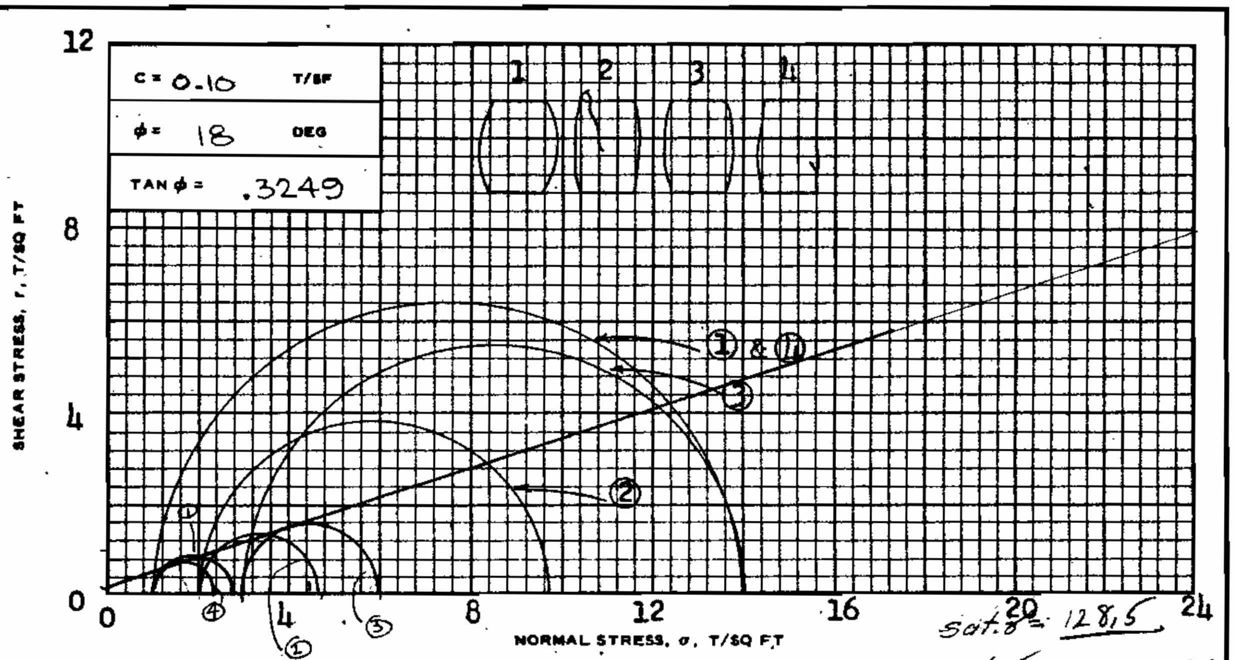
DEPTH/ELEV 65.8/-62.7

LABORATORY USAEWES DATE 7 July, 1973

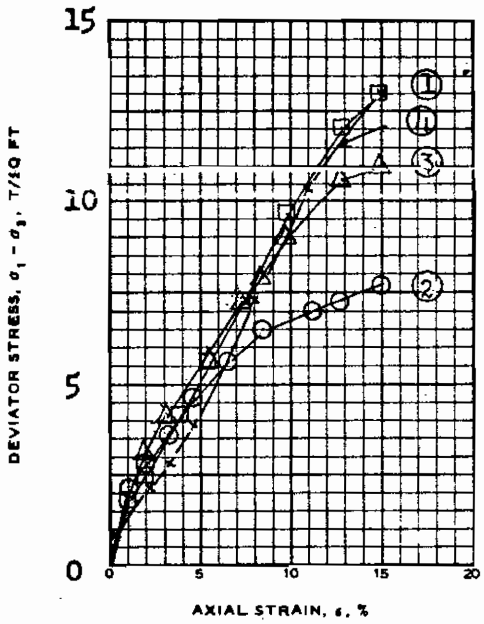
Sheet 2 of 2

TES TRIAXIAL COMPRESSION TEST REPORT

ENG FORM NO. 2089 REV JUNE 1970 PREVIOUS EDITION IS OBSOLETE TRANSLUCENT (EM 1110-2-1906)



~~129.4~~ ~~128.5~~ ~~129.0~~ ~~127.2~~



			1	2	3	4
SPECIMEN NO.			1	2	3	4
INITIAL	WATER CONTENT, % 23.5	w_o	23.6	23.3	23.8	23.4
INITIAL	DRY DENSITY LB/CU FT	γ_{d_o}	104.7	104.2	104.2	103.1
INITIAL	SATURATION, %	S_o	100+	100+	100+	100+
INITIAL	VOID RATIO	e_o	0.592	0.600	0.599	0.617
BEFORE SHEAR	WATER CONTENT, %	w_c	22.9	22.3	22.6	22.5
BEFORE SHEAR	DRY DENSITY LB/CU FT	γ_{d_c}	105.9	107.6	107.7	104.2
BEFORE SHEAR	SATURATION, %	S_c	100+	100+	100+	100+
BEFORE SHEAR	VOID RATIO	e_c	0.573	0.549	0.548	0.600
BEFORE SHEAR	FINAL BACK PRESSURE, T/SQ FT	u_o	4.10	4.10	4.10	5.04
MINOR PRINCIPAL STRESS, T/SQ FT		σ_3	1.0	2.0	3.0	1.0
MAXIMUM DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{MAX}$	13.03	7.68	11.02	13.03
TIME TO $(\sigma_1 - \sigma_3)_{MAX}$, MIN		t_f	64	64	64	125
ULTIMATE DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{ULT}$	1.75	2.75	3.0	1.3
INITIAL DIAMETER, IN.		D_o	1.37	1.37	1.37	1.40
INITIAL HEIGHT, IN.		H_o	3.00	3.00	3.00	3.00

CONTROLLED- Strain TEST

DESCRIPTION OF SPECIMENS SILT(ML), gray

LL	PL	PI	Gs	TYPE OF SPECIMEN	TYPE OF TEST
-	-	-	2.67	UNDISTURBED	R

REMARKS: See attached plot for effective values
Portion of sample allowed to drain before trimming
Sheet 1 of 2

PROJECT LK. PONT., LA&VIC.-HURR.PROT.(73)
ORLEANS PARISH, OUTFALL CANALS, 17th.St.CAN[redacted]

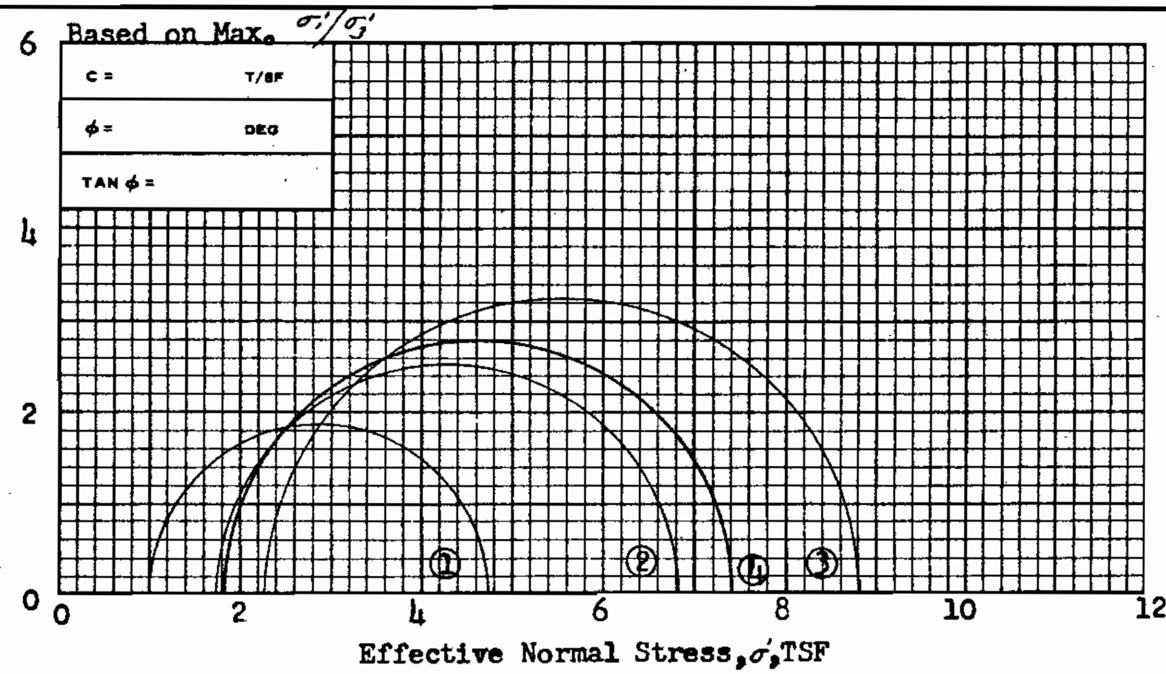
BORING NO. 1-UMP SAMPLE NO. 19-D

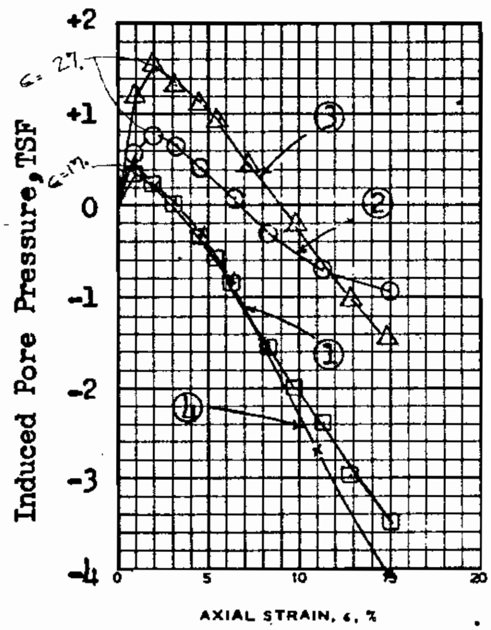
DEPTH/ELEV 73.4/-70.3

LABORATORY USAEWES DATE 23 July, 1973

TES TRIAXIAL COMPRESSION TEST REPORT

ENG FORM NO. 2089 REV JUNE 1970 PREVIOUS EDITION IS OBSOLETE TRANSLUCENT (EM 1110-2-1906)





SPECIMEN NO.					
INITIAL: WATER CONTENT, %	w_o				
INITIAL: DRY DENSITY LB/CU FT	γd_o				
INITIAL: SATURATION, %	S_o				
INITIAL: VOID RATIO	e_o				
BEFORE SHEAR: WATER CONTENT, %	w_c				
BEFORE SHEAR: DRY DENSITY LB/CU FT	γd_c				
BEFORE SHEAR: SATURATION, %	S_c				
BEFORE SHEAR: VOID RATIO	e_c				
BEFORE SHEAR: FINAL BACK PRESSURE, T/SQ FT	u_o				
MINOR PRINCIPAL STRESS, T/SQ FT	σ_3				
MAXIMUM DEVIATOR STRESS, T/SQ FT	$(\sigma_1 - \sigma_3)_{MAX}$				
TIME TO $(\sigma_1 - \sigma_3)_{MAX}$, MIN	t_f				
ULTIMATE DEVIATOR STRESS, T/SQ FT	$(\sigma_1 - \sigma_3)_{ULT}$				
INITIAL DIAMETER, IN.	D_o				
INITIAL HEIGHT, IN.	H_o				

CONTROLLED- TEST

DESCRIPTION OF SPECIMENS

LL	PL	PI	Gs	TYPE OF SPECIMEN	TYPE OF TEST

REMARKS:

PROJECT LK. PONT., LA.&VIC.-HURR.PROT.(73), ORLEANS PARISH, OUTFALL CANALS, 17th.St CANAL

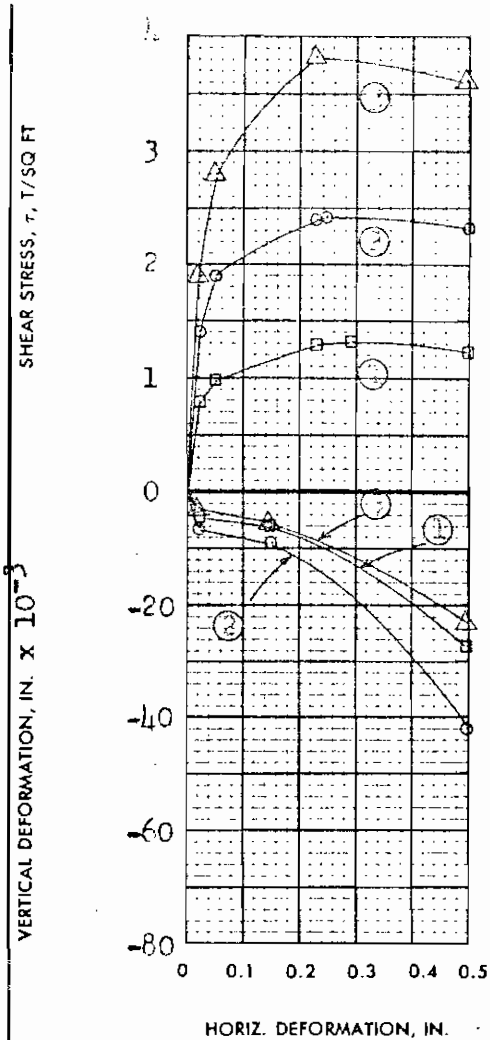
BORING NO. 1-UMP SAMPLE NO. 19-D

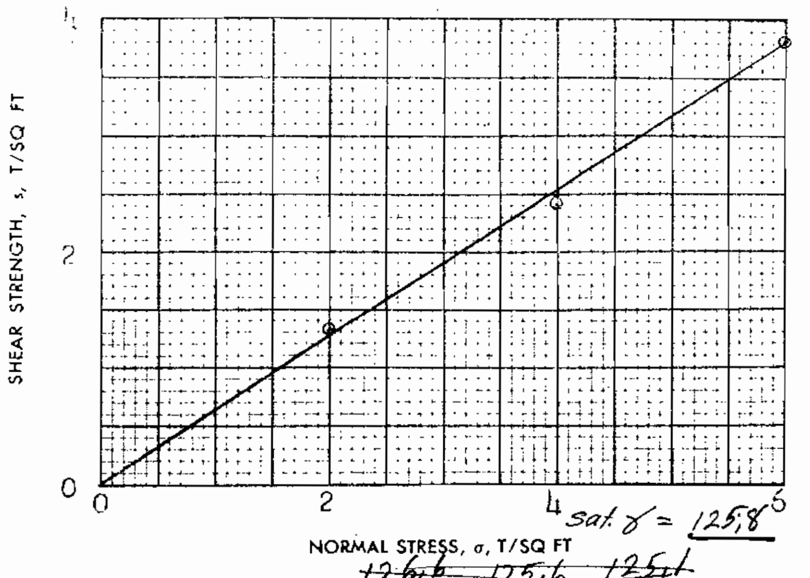
DEPTH/ELEV 73.4/-70.3

LABORATORY USAEWES DATE 23 July, 1973

Sheet 2 of 2

TES TRIAXIAL COMPRESSION TEST REPORT





SHEAR STRENGTH PARAMETERS

φ' = 32°

TAN φ' = 0.63

c' = 0 T/SQ FT

☐ CONTROLLED STRESS

☒ CONTROLLED STRAIN

			1	2	3	Avg.
INITIAL	WATER CONTENT	w_o	24.2 %	22.8 %	23.6 %	23.5 %
	VOID RATIO	e_o	0.642	0.660	0.673	
	SATURATION	S_o	100+ %	92.6 %	94.0 %	%
	DRY DENSITY, LB/CU FT	γ_d	101.9	100.8	100.0	
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}				
FINAL	WATER CONTENT	w_f	23.4 %	22.9 %	24.5 %	%
	VOID RATIO	e_f				
	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	2.0	4.0	6.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	1.31	2.43	3.83	
ACTUAL TIME TO FAILURE, MIN		t_f	1650	1410	1320	
RATE OF STRAIN, IN./MIN			.00018	.00018	.00018	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

TYPE OF SPECIMEN	UNDISTURBED	3.01 IN. SQUARE	0.556 IN. THICK
CLASSIFICATION	SAND (SP), tan and gray; vertical clay seams		
LL -	PL -	PI -	G_s 2.68

REMARKS

PROJECT LK. PONT., LA. & VIC.- HURR. PROT.(73)

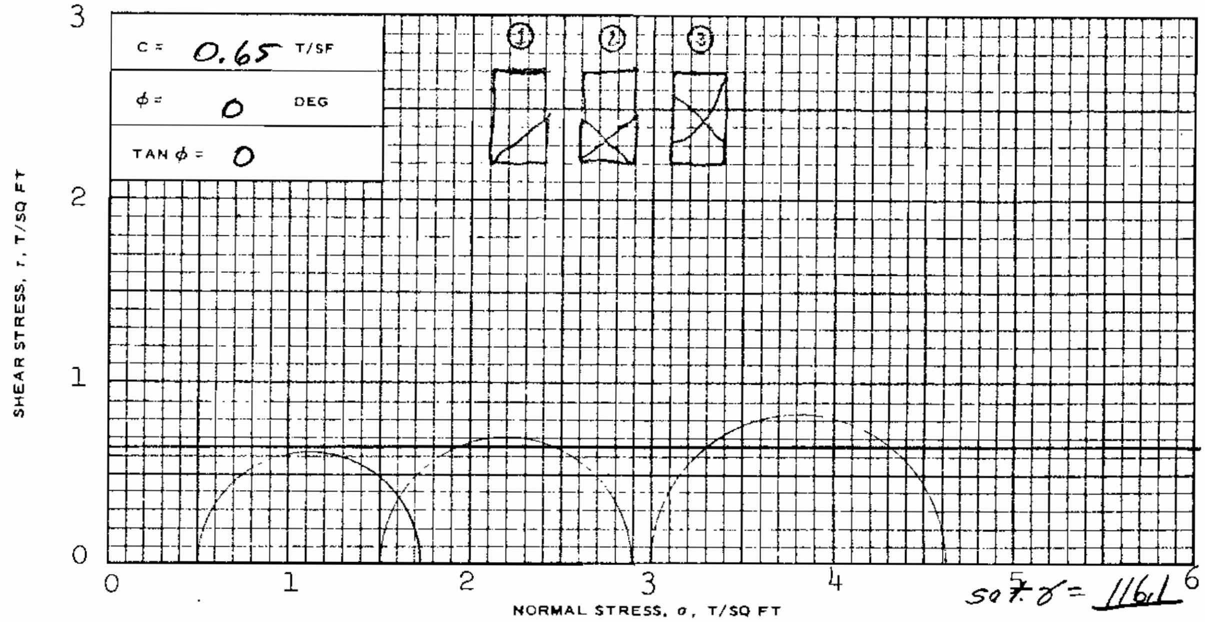
ORLEANS PARISH OUTFALL CANALS - 17th. ST. CANAL

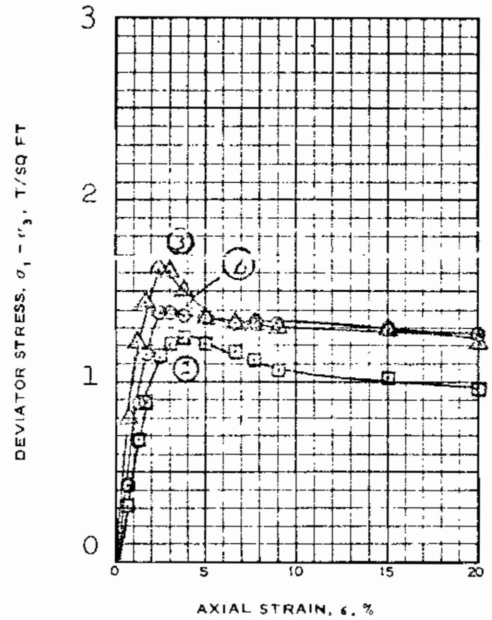
AREA

BORING NO. 1-UMP SAMPLE NO. 20-C

DEPTH EL 76.9/-73.8 DATE 25 August,1973

BWG **DIRECT SHEAR TEST REPORT**





SPECIMEN NO.			~~116.1~~ 1	~~116.3~~ 2	~~115.8~~ 3	Avg.
INITIAL	WATER CONTENT, %	w_o	35.4	34.3	35.9	35.2
	DRY DENSITY LB/CU FT	γd_o	85.0	85.1	84.1	
	SATURATION, %	S_o	96.6	93.6	95.2	
	VOID RATIO	e_o	1.00	1.00	1.03	
BEFORE SHEAR	WATER CONTENT, %	w_c				
	DRY DENSITY LB/CU FT	γd_c				
	SATURATION, %	S_c				
	VOID RATIO	e_c				
	FINAL BACK PRESSURE, T/SQ FT	u_c				
MINOR PRINCIPAL STRESS, T/SQ FT		σ_3	0.5	1.5	3.0	
MAXIMUM DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{MAX}$	1.24	1.39	1.62	
TIME TO $(\sigma_1 - \sigma_3)_{MAX}$, MIN		t_f	25	17	17	
ULTIMATE DEVIATOR STRESS, T/SQ FT		$(\sigma_1 - \sigma_3)_{ULT}$				
INITIAL DIAMETER, IN.		D_o	1.39	1.39	1.39	
INITIAL HEIGHT, IN.		H_o	3.00	3.00	3.00	

CONTROLLED- strain TEST

DESCRIPTION OF SPECIMENS PLASTIC CLAY(CH), gray; seams of silty sand approx. 1/8" thick

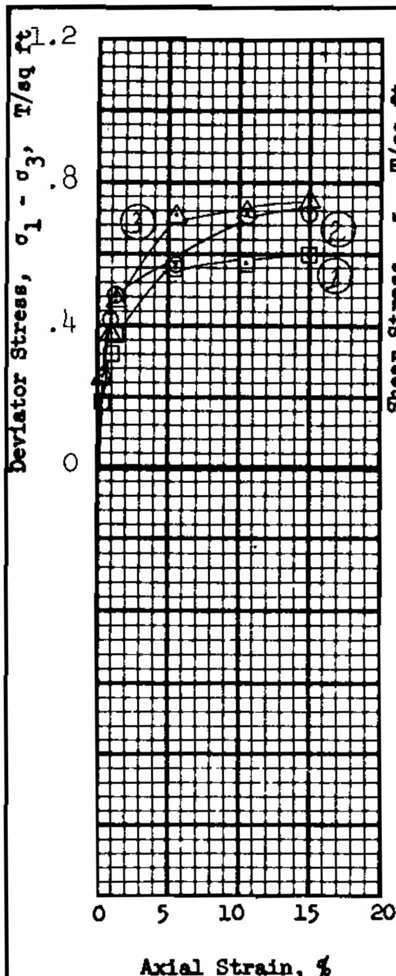
LL 57	PL 20	PI 37	Gs 2.73	TYPE OF SPECIMEN UNDISTURBED	TYPE OF TEST Q

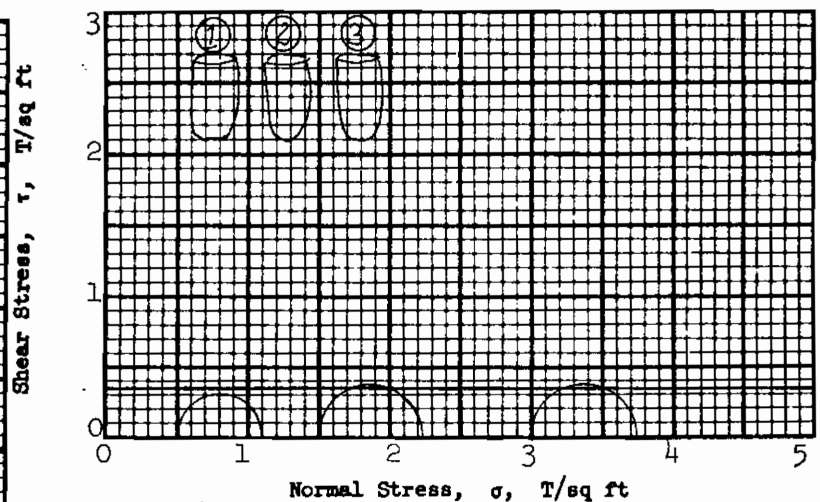
REMARKS:

PROJECT LK. PONT. LA.&VIC-HURR. PROT. (73)
ORLEANS PARISH OUTFALL CANALS-17th ST. CANAL

BORING NO. 1-UMP	SAMPLE NO. 24D
DEPTH/ELEV 93.3/-90.2	
LABORATORY USAEWES	DATE 27 July 1973

GDA TRIAXIAL COMPRESSION TEST REPORT





Test No.			1	2	3	
Initial	Water content	w_o	46.4 %	44.8 %	46.3 %	45.83 %
	Void ratio	e_o	1.30	1.23	1.23	
	Saturation	S_o	90.3 %	92.1 %	95.2 %	%
	Dry density, lb/cu ft	γ_d	68.7	70.8	70.7	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.60	0.72	0.74	
Time to failure, min		t_f	76	76	76	
Rate of strain, percent/min			0.197	0.197	0.197	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.39	1.40	1.39	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = .34 T/sq ft

Method of saturation ________

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY(CH),gray, contains numerous rootlets and large*

LL 61	PL 23	PI 38		G_s 2.53

Remarks *decayed roots

Project LK.PONT.LA.&VIC.-HURR. PROT.'71

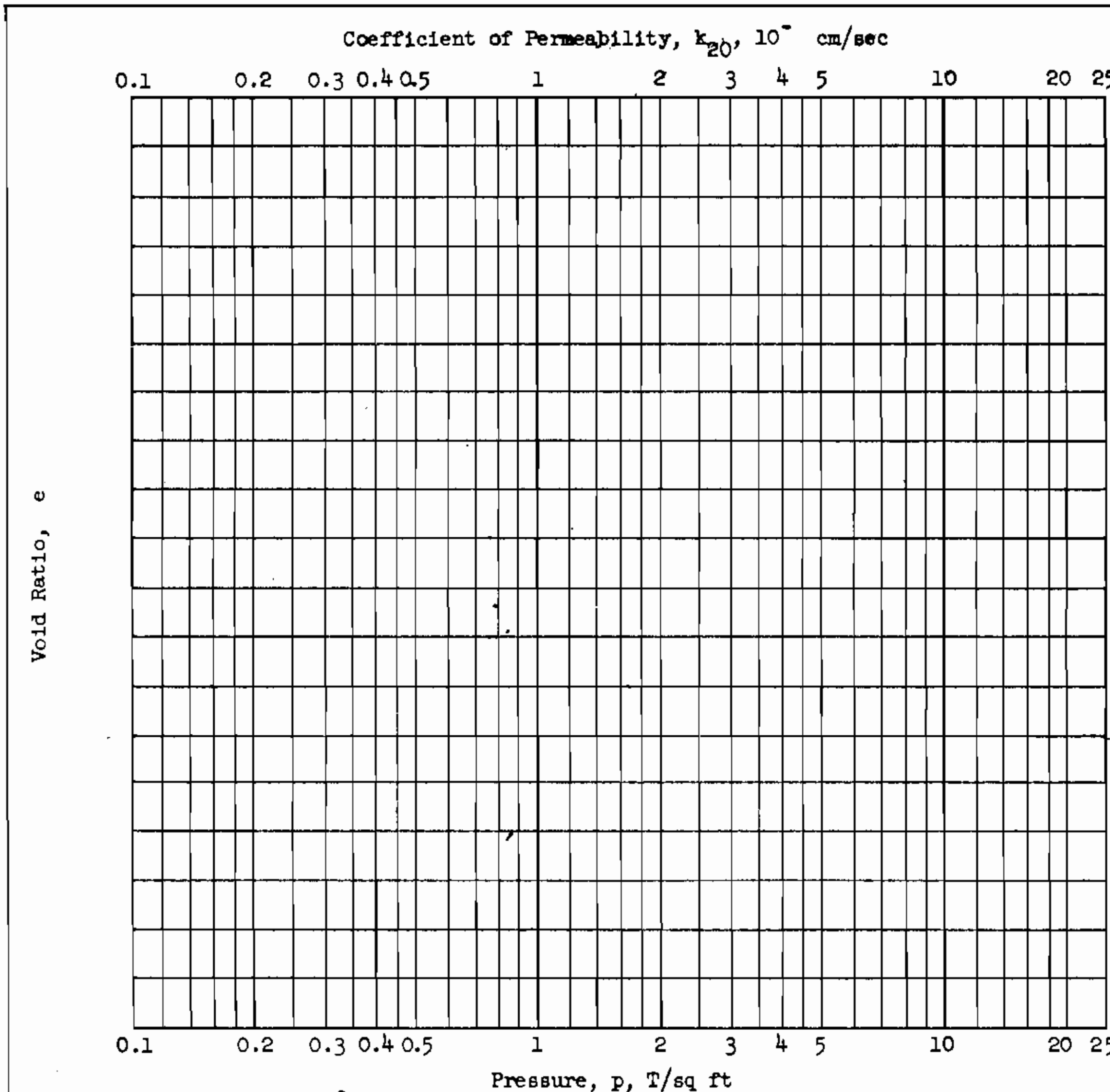
Area ORLEANS PARISH L.F. LEVEE WEST OF IHNC(OUTFALL CANALS)ALONG 17th ST.CANAL(GDM#2SUPP.#5

Boring No. 6-MUE	Sample No. 1-D
Depth El -3.9	Date 8 March 1971

TES TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 *(EM 1110-2-1902)* PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT

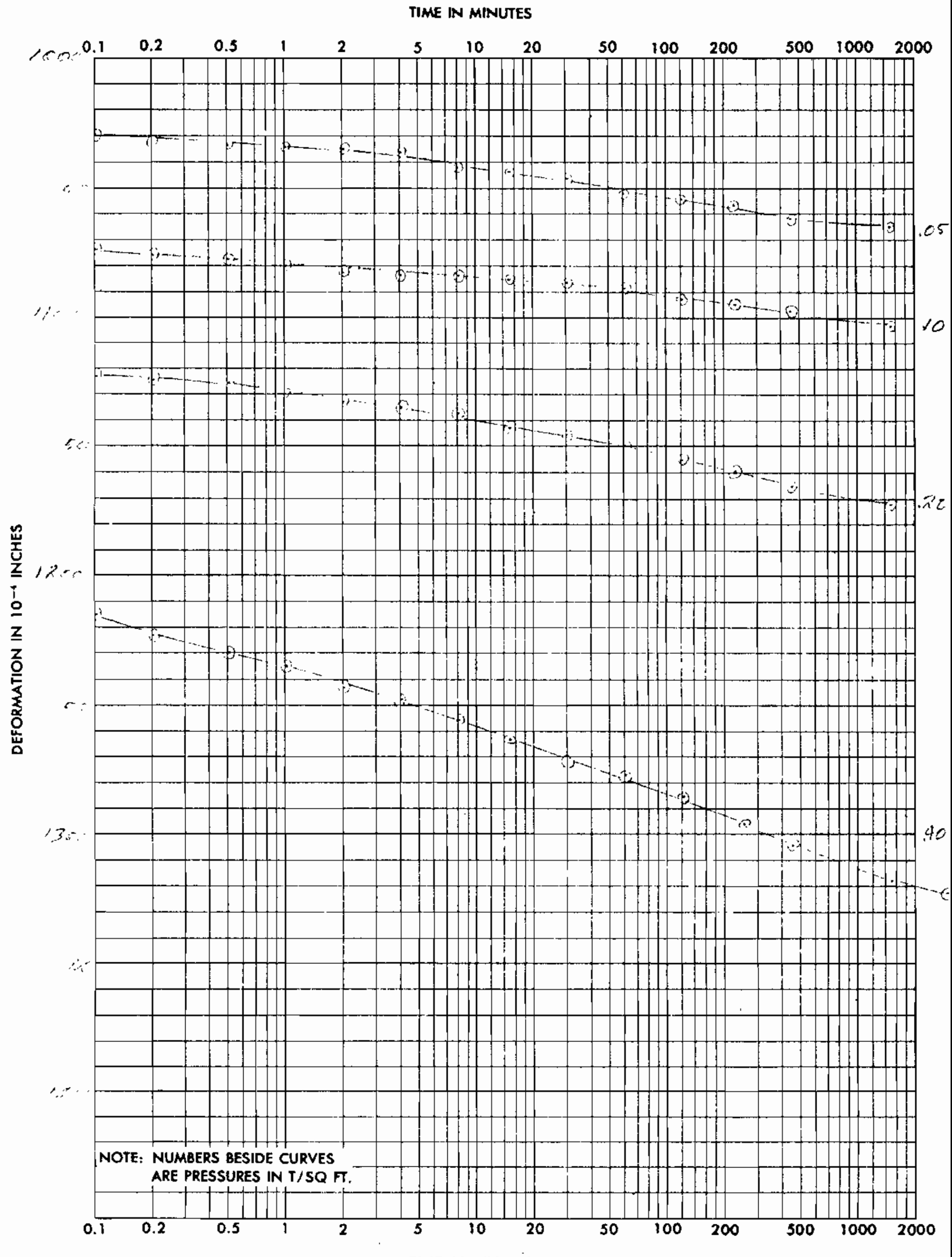


Type of Specimen UNDISTURBED		Before Test			After Test	
Diam 4.25 in.	Ht 1.166 in.	Water Content, w_o	51.3 %		w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	1.36		e_f	
Preconsol. Pressure, p_c T/sq ft		Saturation, S_o	95.5 %		S_f	%
Compression Index, C_c		Dry Density, γ_d	66.9 lb/ft^3			
Classification PLASTIC CLAY(CH),dark*		k_{20} at e_o =	× 10⁻ cm/sec			
LL -	G_s 2.53 From c	Project LK.PONT.,LA.&VIC.-HURR. PORT.'71				
PL -	D_{10}	ORLEANS PAR.L.F.LEV.WEST OF IHNC(OUTFALL				
Remarks See attached pressure		Area CANALS)ALONG 17th ST.CANAL(GDM#2,SUPP.#5)				
versus void ratio curve		Boring No. 6-MUE		Sample No. 1-D		
*brown		Depth El -3.9		Date 16 March 1971		
		CONSOLIDATION TEST REPORT				

ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

0 3424

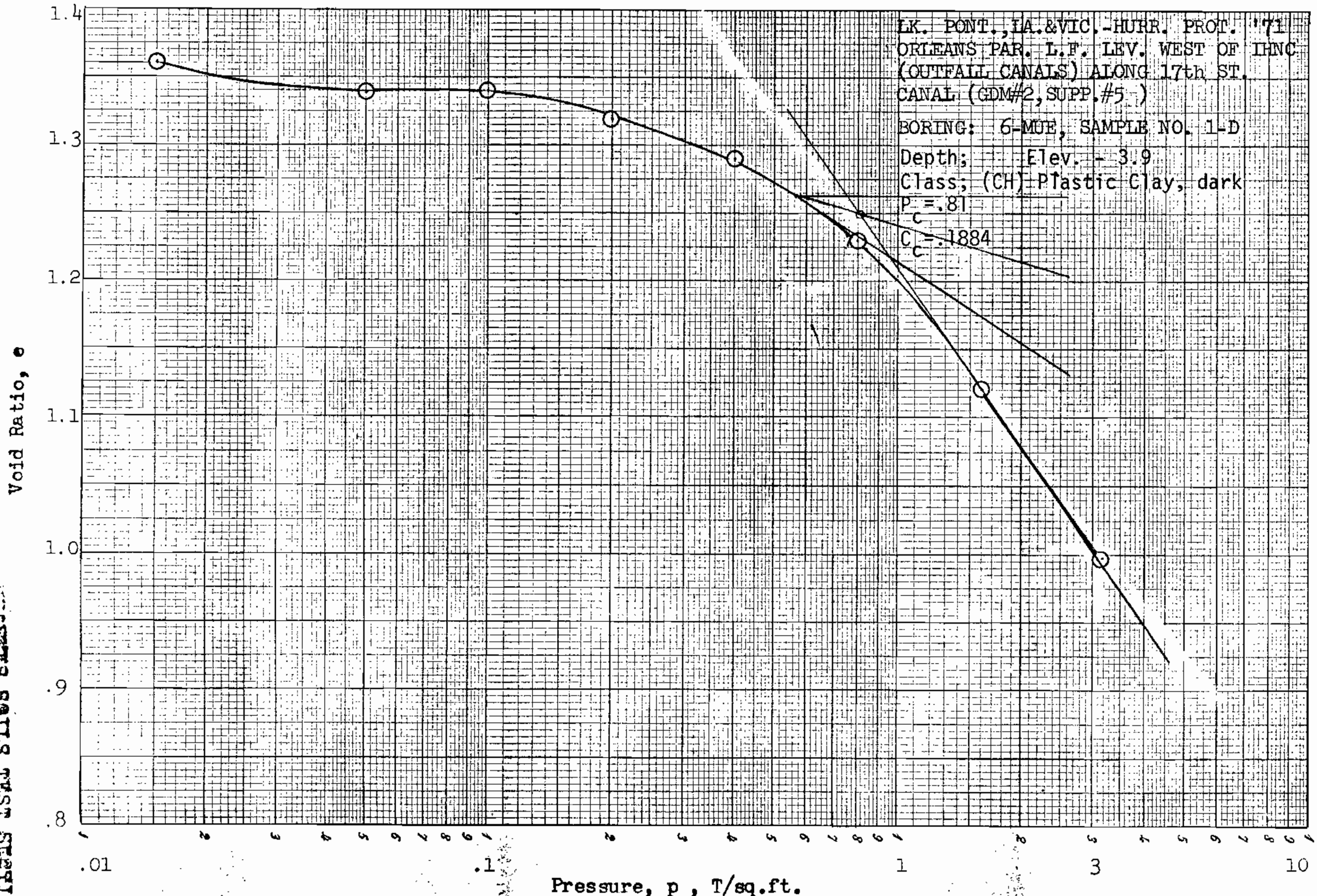
WES SOILS TEST SECTION

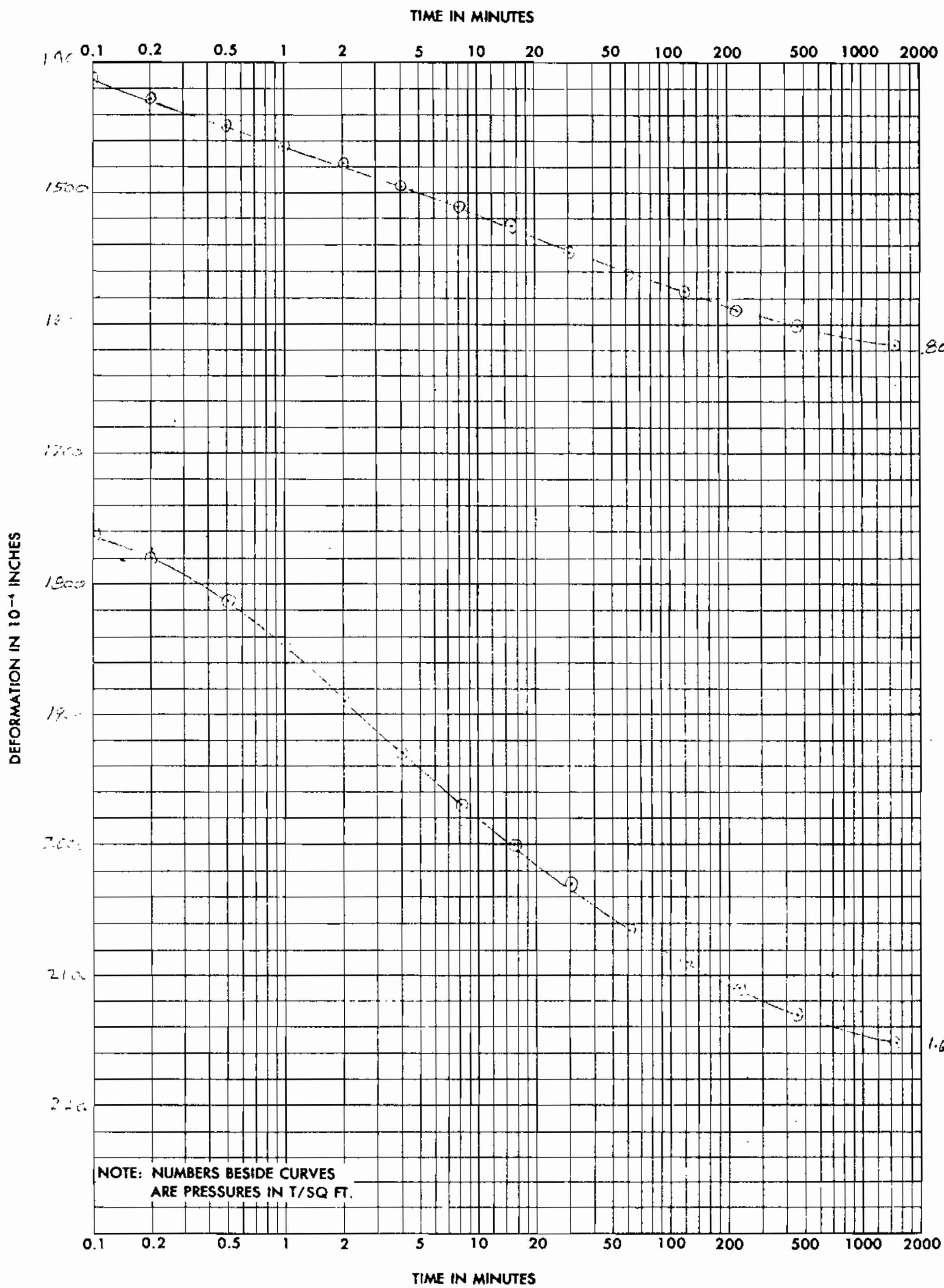


PROJECT	LK. PONT.,LA. & VIC. -HURR. PROT.'71 ORLEANS PAR. L.F.LEV. WEST OF						
AREA	IHNC(OUTFALL CANALS)ALONG 17th ST. CANAL(GDM#2,SUPP.#5)						
BORING NO.	6-MUE	SAMPLE NO.	1-D	DEPTH EL	-3.9	DATE	16 March 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

GPO : 1964 OF—715-965


LK. PONT., LA.&VIC.-HURR. PROT. '71
ORLEANS PAR. L.F. LEV. WEST OF IHNC
(OUTFALL CANALS) ALONG 17th ST.
CANAL (GDM#2, SUPP.#5)
BORING: 6-MUE, SAMPLE NO. 1-D
Depth; Elev. - 3.9
Class; (CH) Plastic Clay, dark
P_c = .81
C_c = .1884
Void Ratio, e
1.4
1.3
1.2
1.1
1.0
.9
.8
.01
.1
1
3
10
Pressure, p , T/sq.ft.



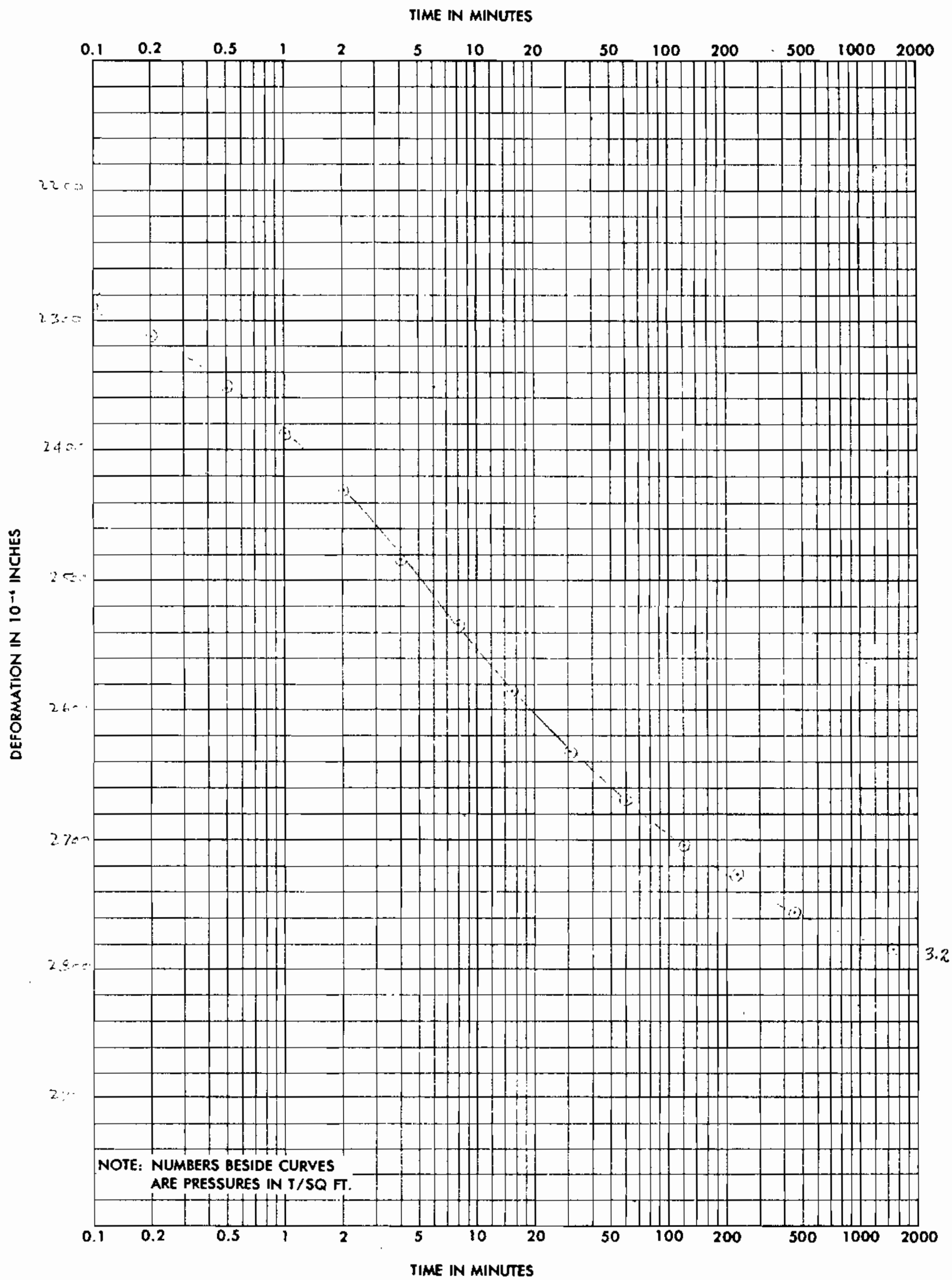
PROJECT LK. PONT., LA. & VIC. - HURR. PROT.'71 ORLEANS PAR. L.F. LEV WEST

AREA OF IHNC(OUTFALL CANALS)ALONG 17th ST. CANAL(GDM#2,SUPP.#5)

BORING NO. 6-MUE	SAMPLE NO. 1-D	DEPTH EL -3.9	DATE 16 March 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

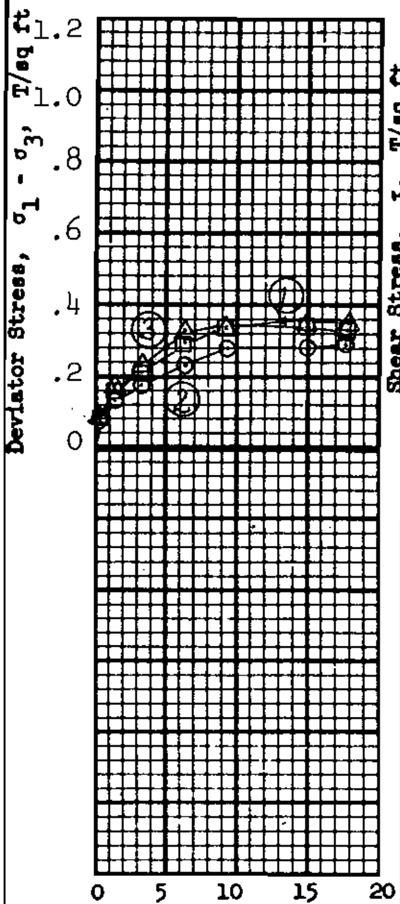
★ GPO : 1964 OF—715-965

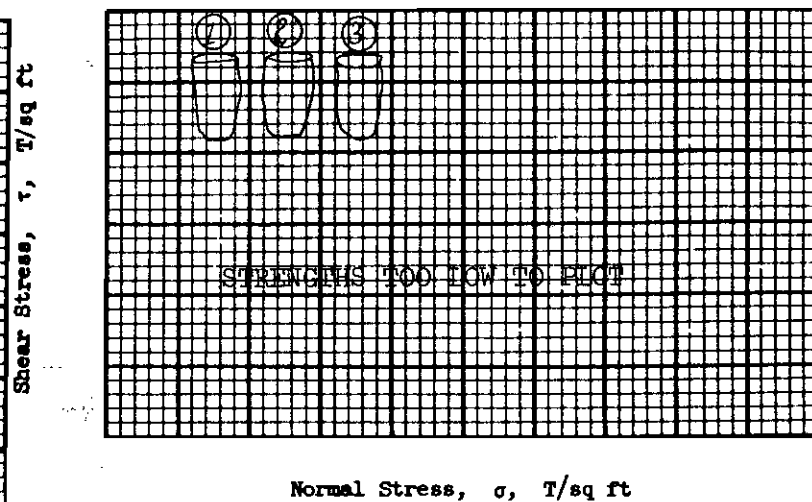


PROJECT	LK. PONT.,LA. & VIC. - HURR. PROT.'71 ORLEANS PAR. L.F. LEV. WEST
AREA	IHNC(OUTFALL CANALS) ALONG 17th ST. CANAL(GDM#2,SUPP.#5)

BORING NO. 6-MUE	SAMPLE NO. 1-D	DEPTH / EL -3.9	DATE 16 March 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)





Test No.			1	2	3	
Initial	Water content	w_o	89.0 %	91.0 %	89.7 %	89.9 %
	Void ratio	e_o	2.30	2.30	2.32	
	Saturation	S_o	99.1 %	100+ %	99.0 %	%
	Dry density, lb/cu ft	γ_d	48.4	48.5	48.1	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.34	0.28	0.35	
Time to failure, min		t_f	55	55	88	
Rate of strain, percent/min			0.170	0.170	0.170	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.39	1.39	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = .16 T/sq ft

Method of saturation ________

☐ Controlled stress

☒ Controlled strain

Type of test Q	Type of specimen UNDISTURBED			
Classification PLASTIC CLAY(CH),gray,contains rootlets and decayed large roots				
LL 102	PL 30	PI 72		G_s 2.56

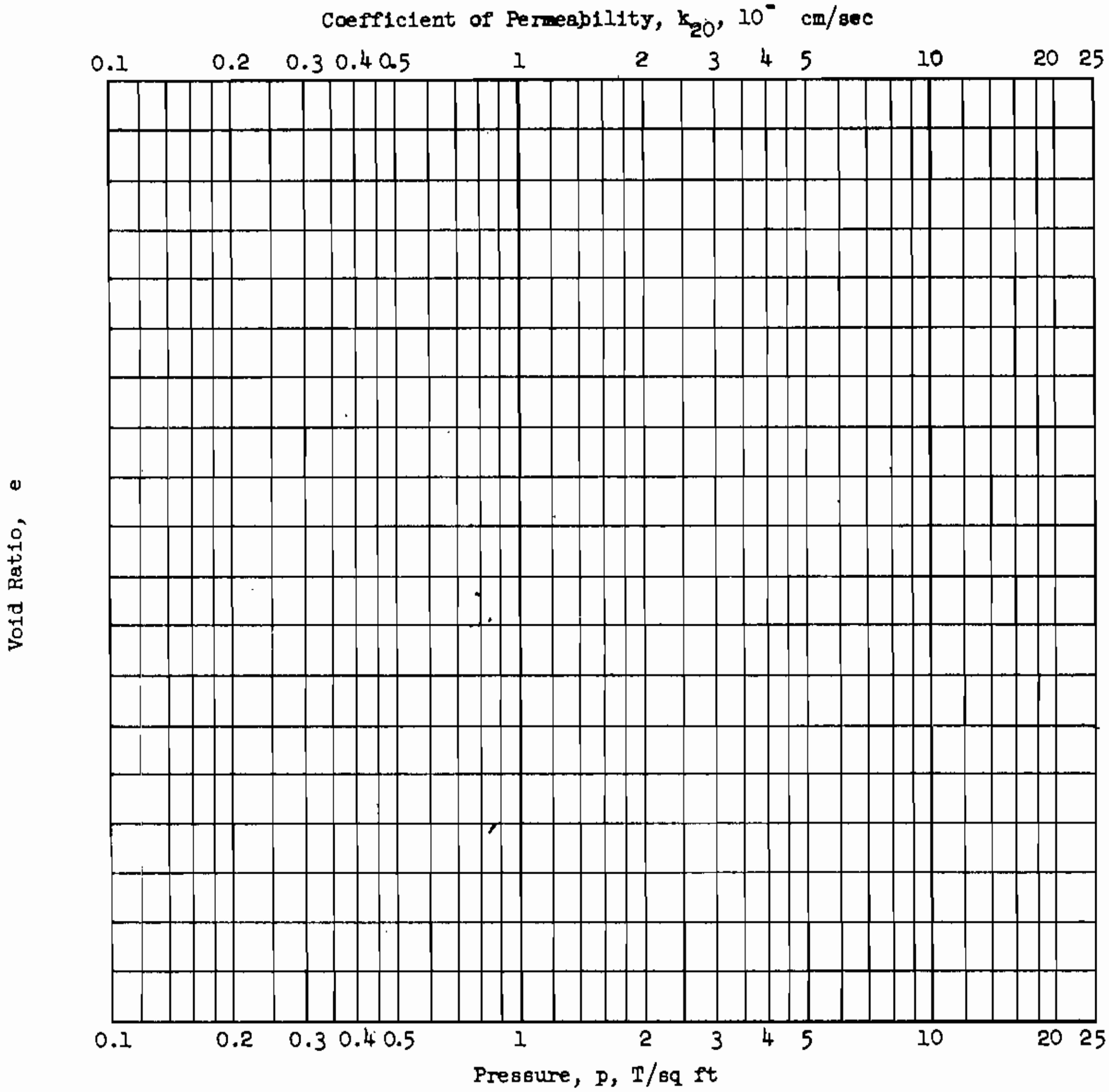
Remarks ________

Project LK.PONT.LA.&VIC.-HURR. PROT.'71

ORLEANS PARISH L.F. LEVEE WEST OF IHNC,(OUT-

Area FALL CANALS)ALONG 17th ST.CANAL(GDM#2,SUPP.#5)

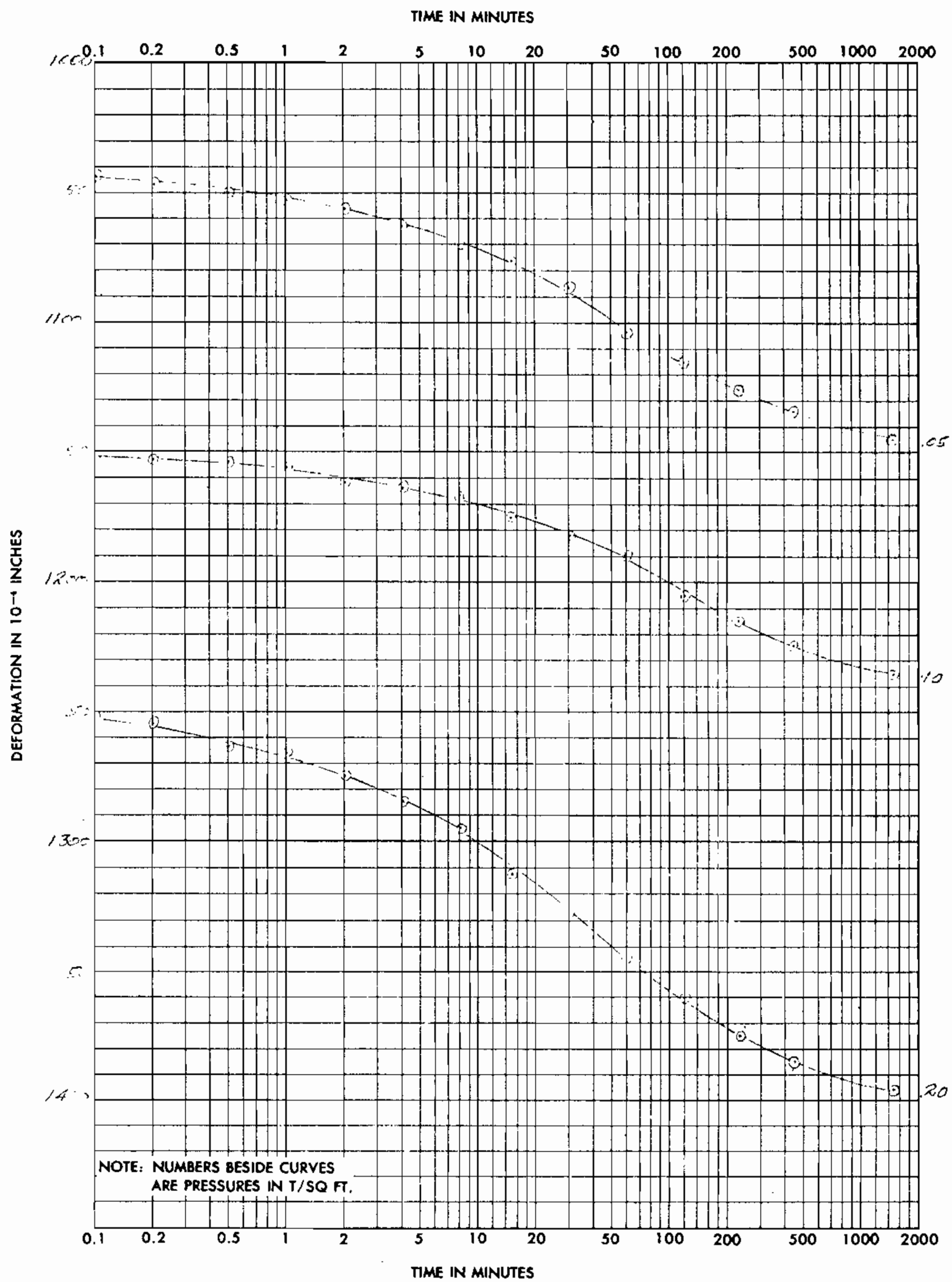
Boring No. 6-MUE	Sample No. 3-C
Depth El -11.2	Date 8 March 1971
TES	TRIAXIAL COMPRESSION TEST REPORT



Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.162 in.	Water Content, w_o	87.9 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	2.33	e_f	
Preconsol. Pressure, p_c T/sq ft		Saturation, S_o	96.6 %	S_f	%
Compression Index, C_c = 0.87		Dry Density, γ_d	48.0 lb/ft^3		
Classification PLASTIC CLAY(CH),*		k_{20} at e_o = × 10^{-} cm/sec			
LL –	G_s 2.56 From Q	Project LK.PONT.,LA.& VIC.-HURR. PROT. '71			
PL –	D_{10}	ORLEANS PARISH LAKEFRONT LEVEE,WEST OF IHNC			
Remarks See attached plot for		(OUTFALL CANALS)ALONG 17th.ST.(GDM#2;SUPP.#5)			
pressure vs void ratio curve		Boring No. 6-MUE		Sample No. 3-C	
*brown, contains 1/16" to 3/8"		Depth El -11.2		Date 16 March,1971	
dia. roots		JDB CONSOLIDATION TEST REPORT			

ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

G 3424



PROJECT LK. PONT.,LA. & VIC.-HURR. PROT.-1971; ORLEANS PARISH LAKEFRONT

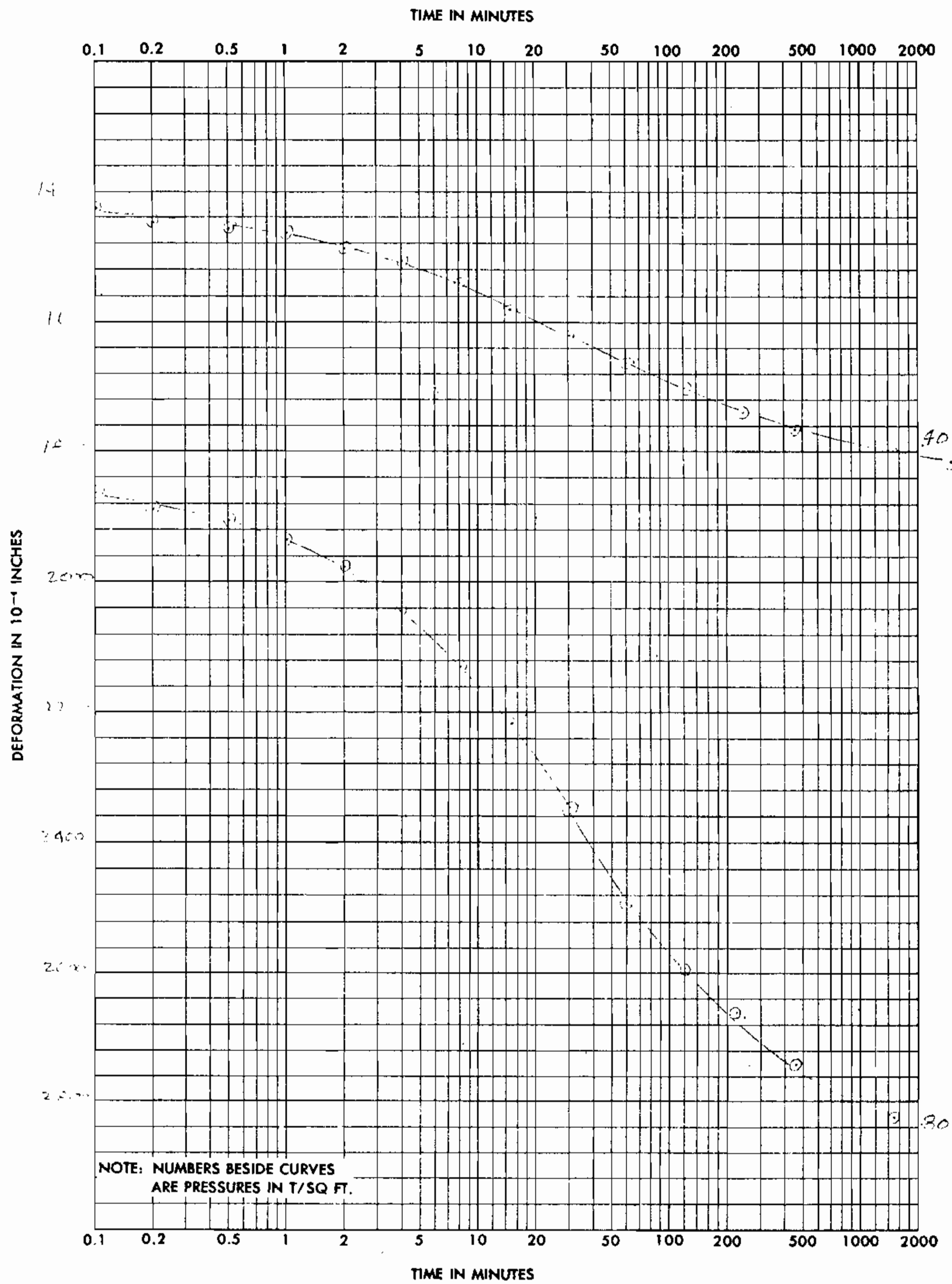
AREA LEVEE WEST OF IHNC;(OUTFALL CANALS)ALONG 17th.ST.(GDM #2; SUPP. #5)

BORING NO. 6-MUE	SAMPLE NO. 3-C	~~DEPTH~~ EL -11.2	DATE 16 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

* GPO : 1964 OF—715-985

...NEERS SOILS TEST SECT...

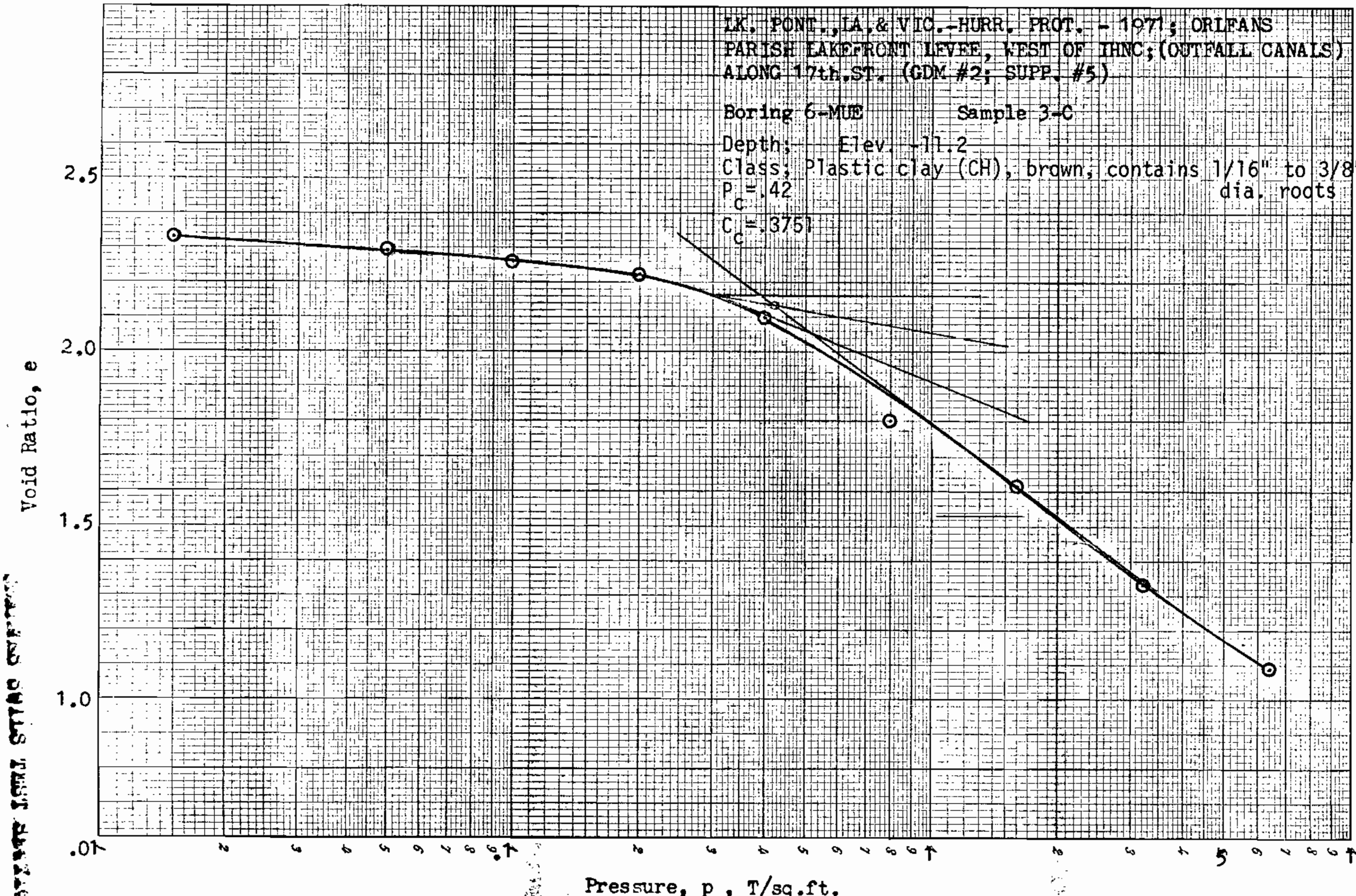


PROJECT LK. PONT.,LA.& VIC.-HURR. PROT.-'71; ORLEANS PARISH LAKEFRONT LEVEE

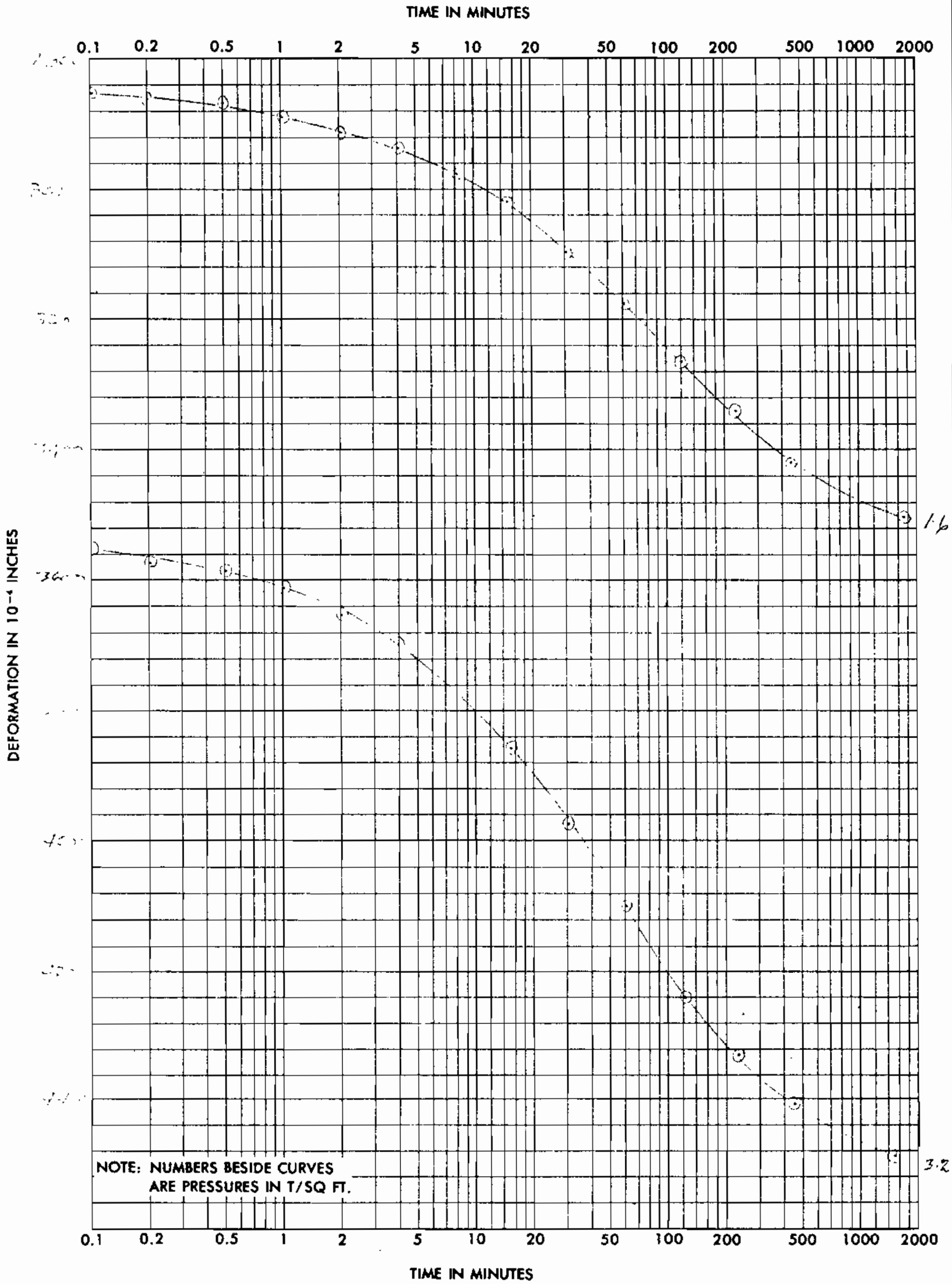
AREA WEST OF IHNC;(OUTFALL CANALS) ALONG 17th.ST.(GDM #2; SUPP. #5)

BORING NO. 6-MUE	SAMPLE NO. 3-C	~~DEPTH~~ EL -11.2	DATE 16 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)



LK. PONT.,LA.& VIC.-HURR. PROT. - 1971; ORLEANS
PARISH LAKEFRONT LEVEE, WEST OF IHNC;(OUTFALL CANALS)
ALONG 17th.ST. (GDM #2; SUPP. #5)
Boring 6-MUE
Sample 3-C
Depth; Elev. -11.2
Class; Plastic clay (CH), brown, contains 1/16" to 3/8" dia. roots
P_c = .42
C_c = .3751
2.5
2.0
1.5
1.0
Void Ratio, e
.01
.1
1
5
10
Pressure, p , T/sq.ft.



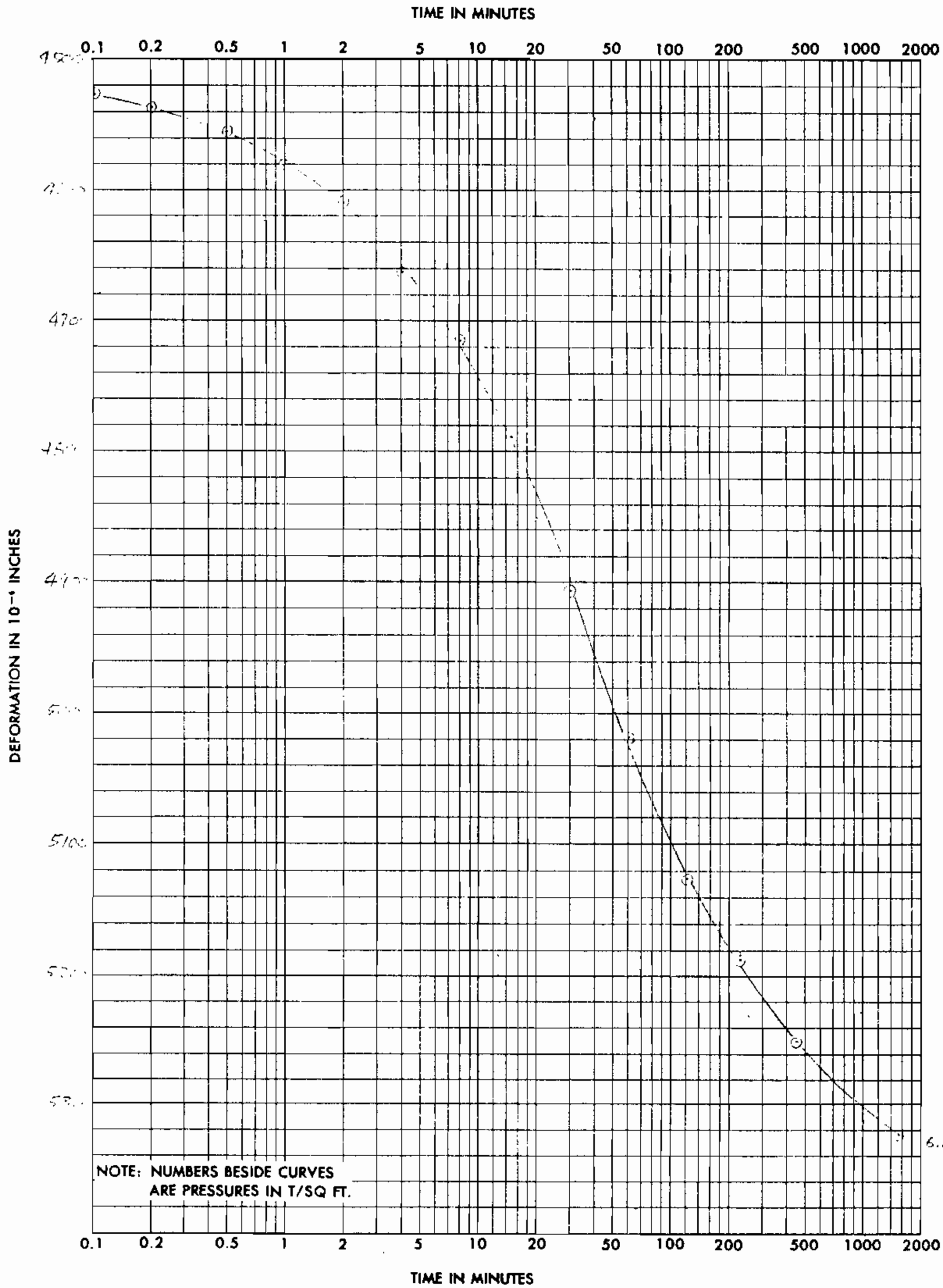
PROJECT LK. PONT., LA. & VIC.-HURR. PROT. '71; ORLEANS PARISH LAKEFRONT LEVEE;

AREA WEST OF IHNC (OUTFALL CANALS) ALONG 17th. ST. (GDM #2; SUPP. #5)

BORING NO. 6-MUE	SAMPLE NO. 3-C	~~DEPTH~~ EL -11.2	DATE 16 March, 1971

ENG FORM 1 MAY 63 2088 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

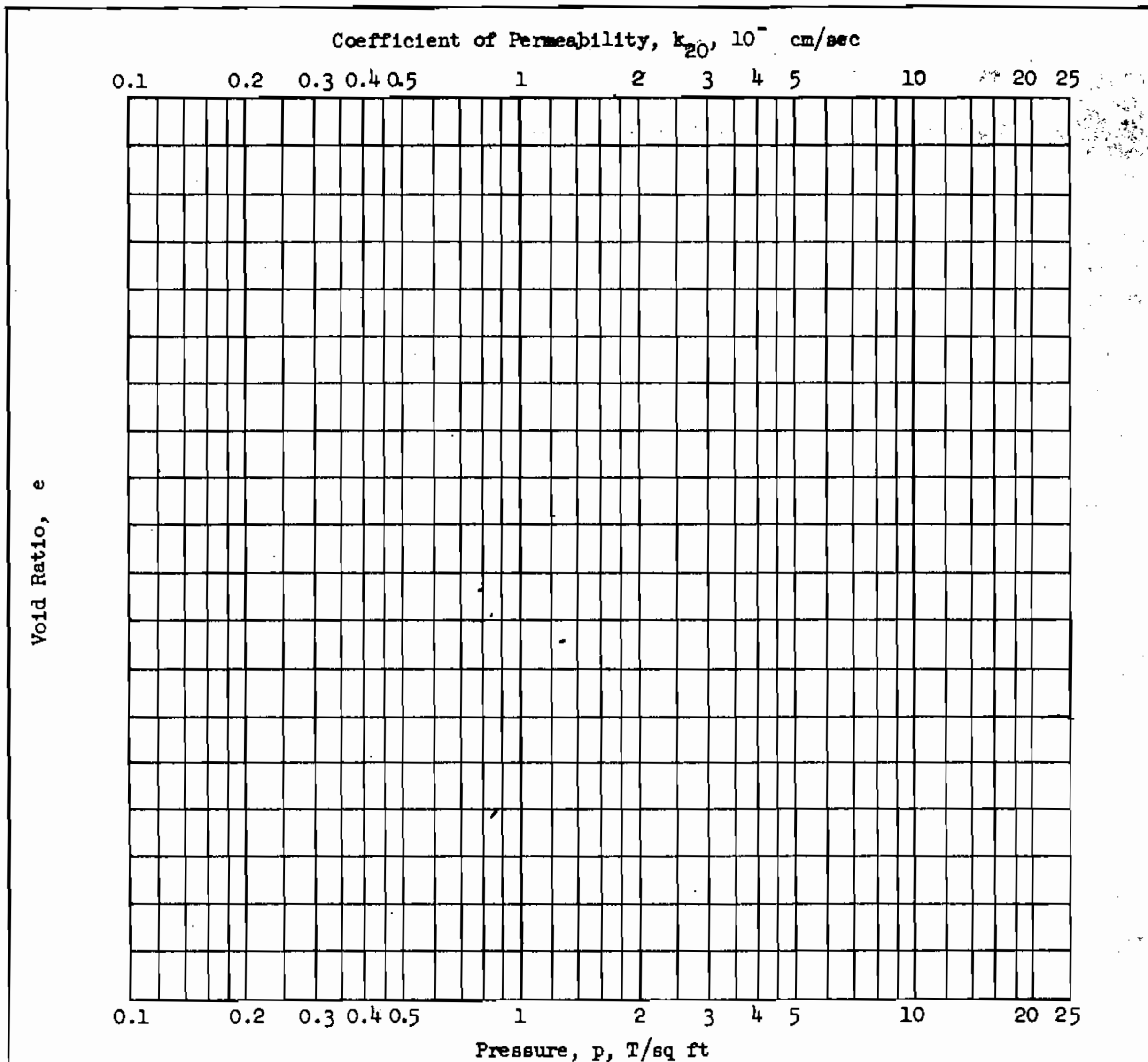
* GPO : 1964 OF—715-865



PROJECT LK.PONT.,LA.& VIC.-HURR. PROT.'71;ORLEANS PARISH LAKEFRONT LEVEE							
AREA WEST OF IHNC;(OUTFALL CANALS) ALONG 17th.ST.(GDM #2; SUPP. #5)							
BORING NO.	6-MUE	SAMPLE NO.	3-C	~~DEPTH~~ EL	-11.2	DATE	16 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965



Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.152 in.	Water Content, w_o	85.0 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	2.28	e_f	
Preconsol. Pressure, p_c T/sq ft		Saturation, S_o	99.8 %	S_f	%
Compression Index, C_c		Dry Density, γ_d	51.0 lb/ft^3		
Classification PLASTIC CLAY(CH),*		k_{20} at e_o = × 10^{-} cm/sec			

LL 69	G_s 2.68
PL 19	D_{10}

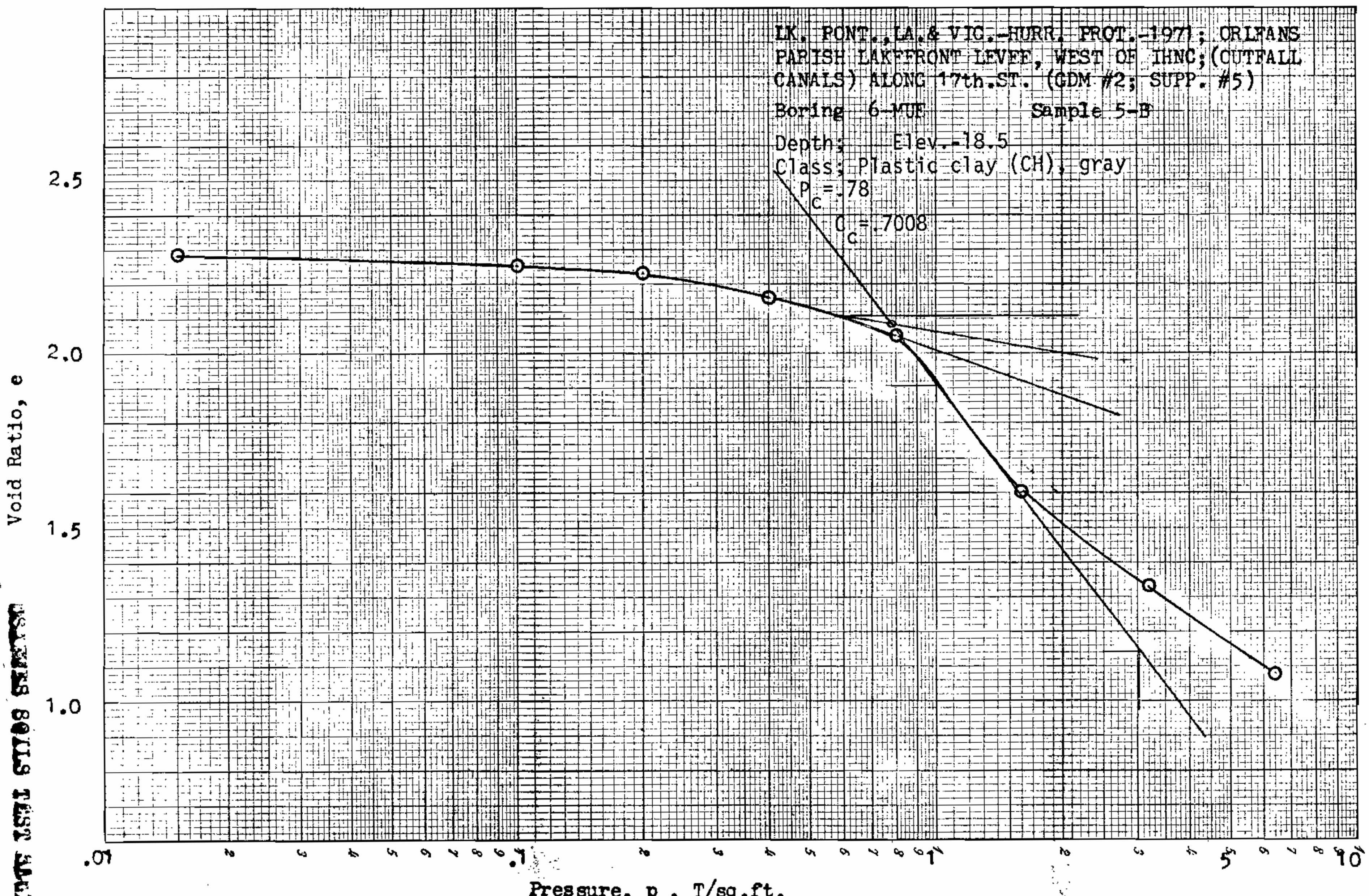
Project LK.PONT., LA.& VIC.-HURR. PROT.-1971
ORLEANS PARISH LAKEFRONT LEVEE WEST OF IHNC
(OUTFALL CANALS) ALONG 17th.ST.(GDM#2;SUPP.#5)

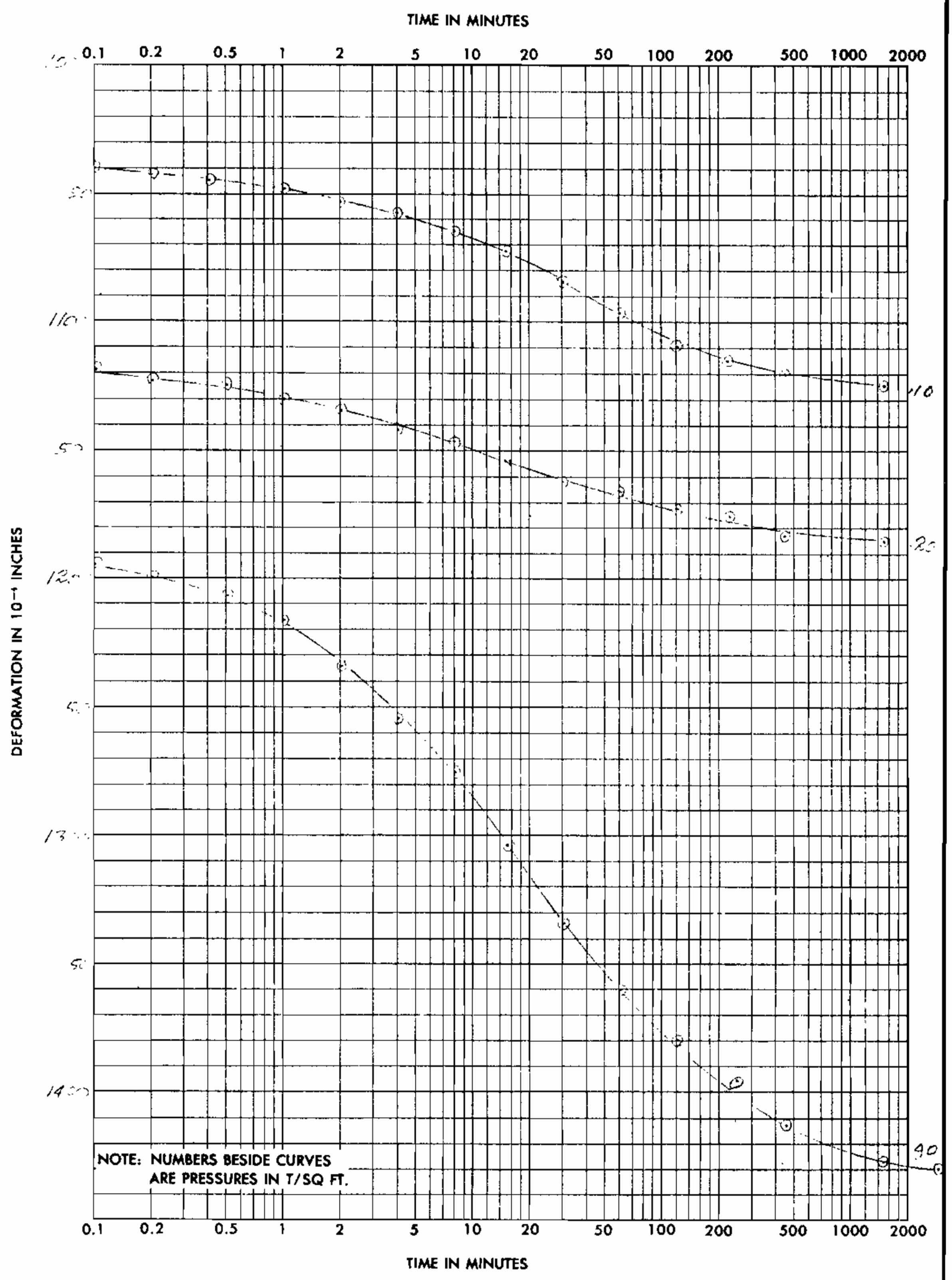
Remarks * gray

See attached plot for pressure vs void ratio curve

Boring No. 6-MUE	Sample No. 5-B
~~Depth~~ El -18.5	Date 17 March,1971

JDB **CONSOLIDATION TEST REPORT**


LK. PONT.,LA.& VIC.-HURR. PROT.-1971; ORLEANS PARISH LAKEFRONT LEVEE, WEST OF IHNC;(CUTFALL CANALS) ALONG 17th.ST. (GDM #2; SUPP. #5)
Boring 6-MUE
Sample 5-B
Depth; Elev.-18.5
Class; Plastic clay (CH), gray
P_c = .78
C_c = .7008
2.5
2.0
1.5
1.0
Void Ratio, e
.01
.1
1
5
10
Pressure, p , T/sq.ft.



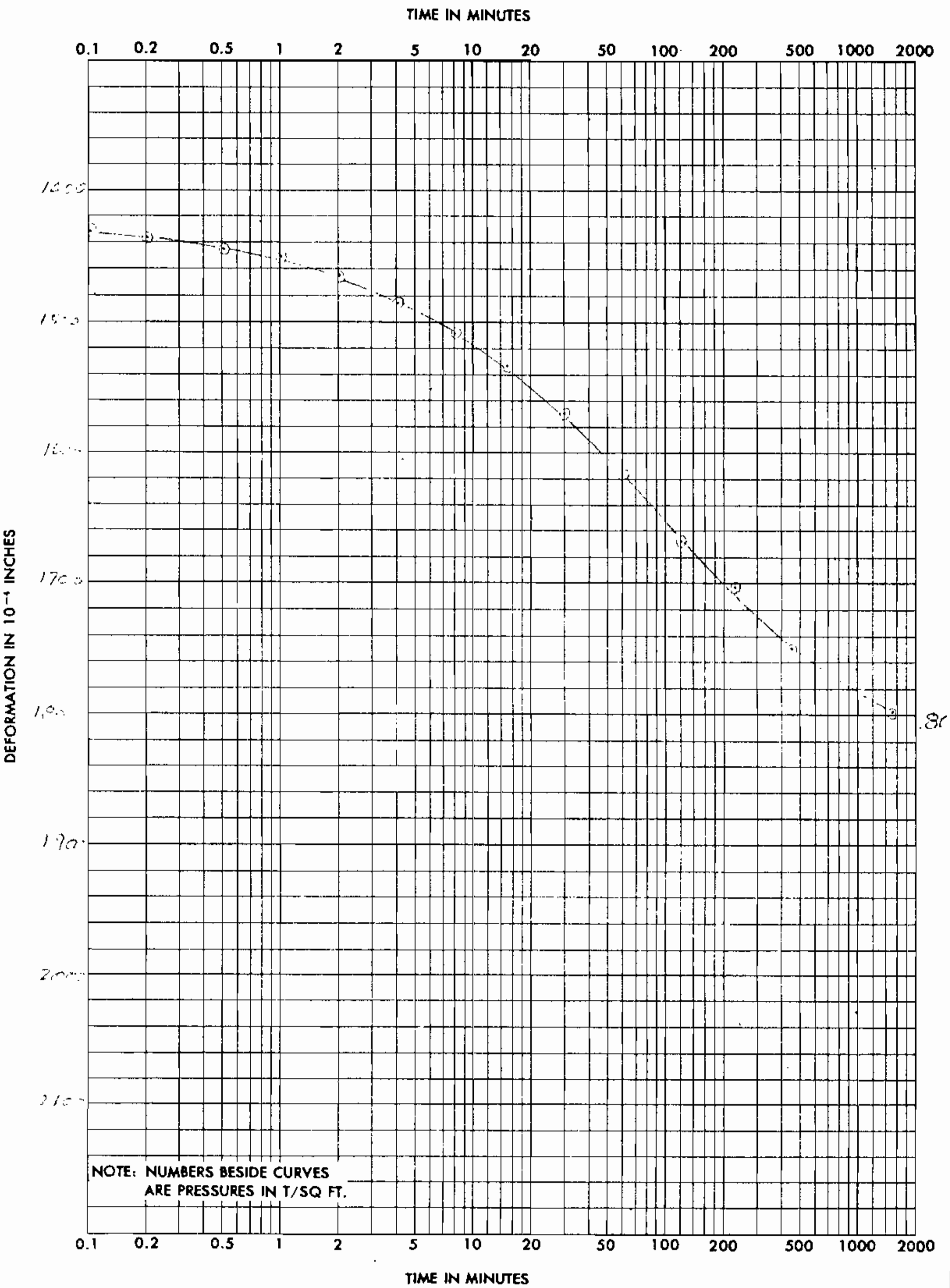
PROJECT LK. PONT., LA.& VIC.-HURR. PROT.- 1971; ORLEANS PARISH LAKEFRONT LEVEE

AREA WEST OF IHNC; (OUTFALL CANALS) ALONG 17th.ST. (GDM #2; SUPP. #5)

BORING NO. 6-MUE	SAMPLE NO. 5-B	DEPTH EL -18.5	DATE 17 March, 1971

ENG FORM 1 MAY 63 2088 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—719-985



PROJECT LK. PCNT., LA.& VIC.-HURR. PROT.-1971; ORLEANS PARISH LAKEFRONT LEVEE

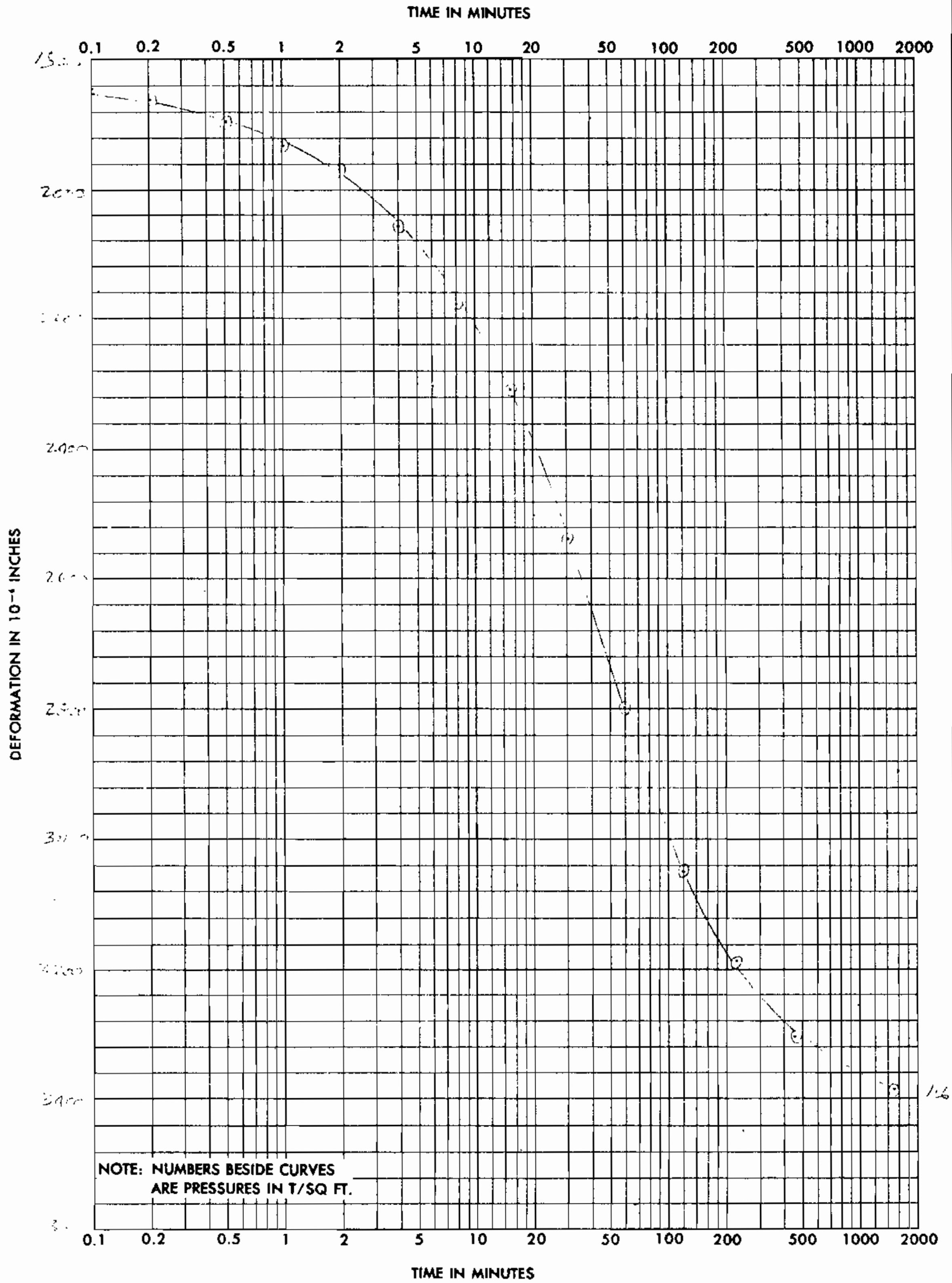
AREA WEST OF IHNC; (OUTFALL CANALS) ALONG 17th.ST. (GDM #2; SUPP. #5)

BORING NO. 6-MUE SAMPLE NO. 5-B ~~DEPTH~~ EL -18.5 DATE 17 March, 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

* GPO : 1964 OF—715-965

...S SOILS TEST ...



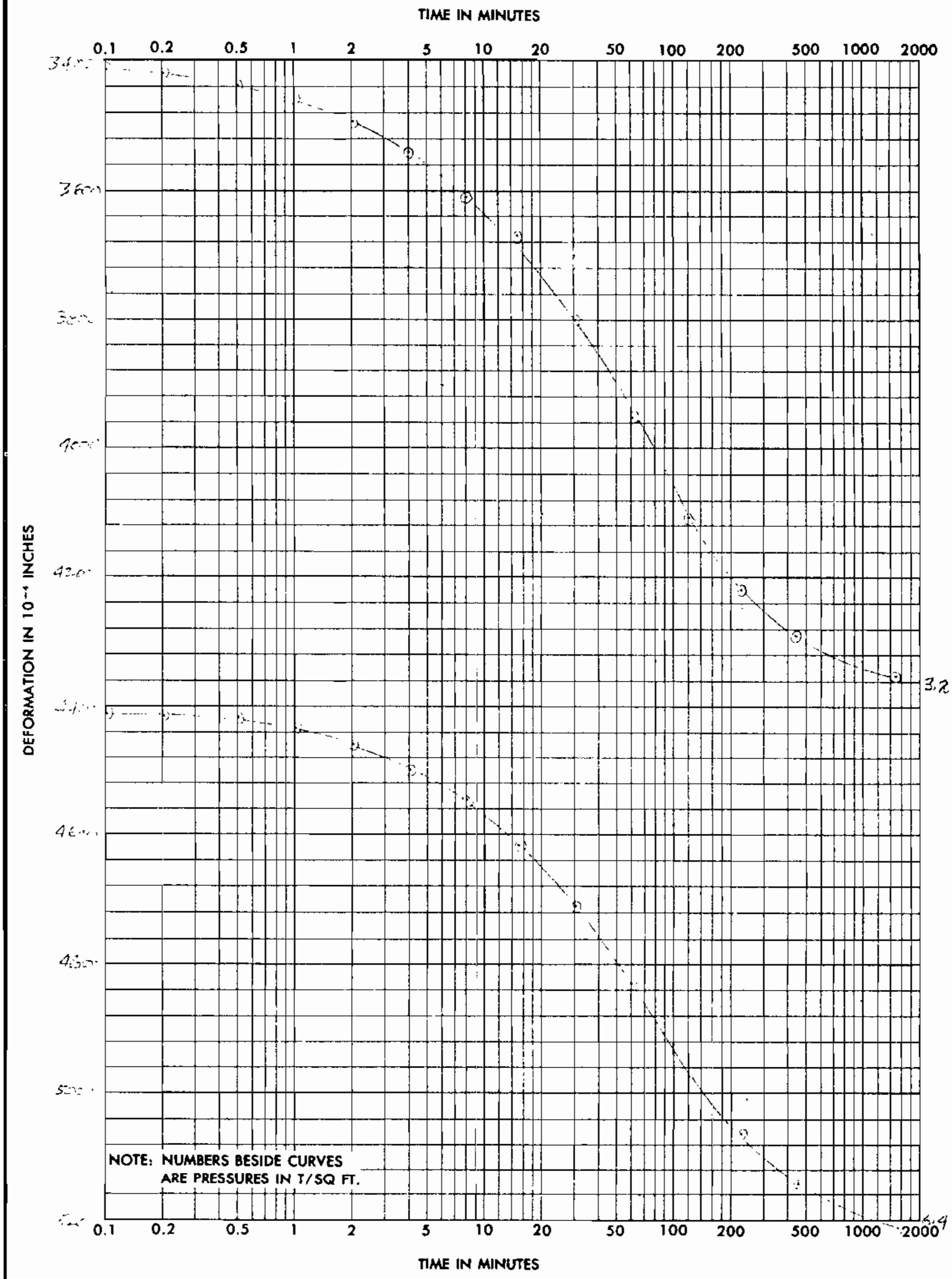
PROJECT LK. PONT.,LA.& VIC.-HURR. PROT.-1971; ORLEANS PARISH LAKEFRONT LEVEE

AREA WEST OF IHNC;(OUTFALL CANALS) ALONG 17th.ST. (GDM #2; SUPP. #5)

BORING NO. 6-MUE	SAMPLE NO. 5-B	~~DEPTH~~ EL -18.5	DATE 17 March,1971

ENG FORM 1 MAY 63 2088 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

☆ GPO : 1964 OF—715-045



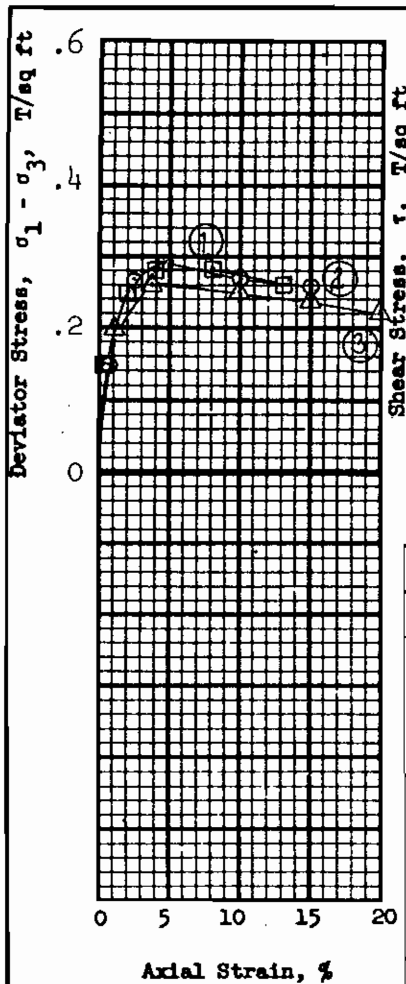
PROJECT LK. PONT.,LA.& VIC.-HURR. PROT.-1971; ORLFANS PARISH LAKEFRONT LEVEE

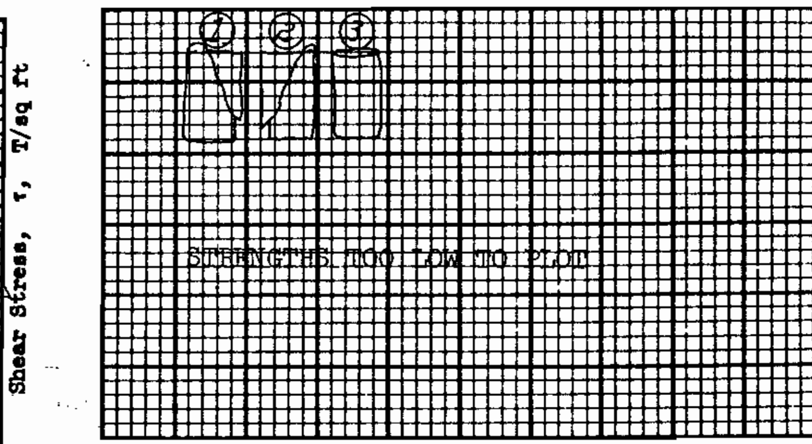
AREA WEST OF IHNC;(OUTFALL CANALS) ALONG 17th.ST. (GDM #2; SUPP. #5)

BORING NO. 6-MUE	SAMPLE NO. 5-B	DEPTH EL -18.5	DATE 17 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

* GPO : 1964 OF—715-985





Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = .14 T/sq ft

Method of saturation ________

☐ Controlled stress

☒ Controlled strain

	Test No.		1	2	3	
Initial	Water content	w_o	76.8 %	76.1 %	76.5 %	76.46 %
Initial	Void ratio	e_o	2.09	2.03	2.08	
Initial	Saturation	S_o	100+ %	100+ %	100+ %	%
Initial	Dry density, lb/cu ft	γ_d	55.1	56.3	55.3	
Before Shear	Water content	w_c	%	%	%	%
Before Shear	Void ratio	e_c				
Before Shear	Saturation	S_c	%	%	%	%
Before Shear	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
Final	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.28	0.29	0.26	
Time to failure, min		t_f	7	25	18	
Rate of strain, percent/min			0.542	0.192	0.196	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.40	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Type of test Q	Type of specimen UNDISTURBED		
Classification PLASTIC CLAY(CH),gray, contains silt seams			
LL 81	PL 20	PI 61	G_s 2.73

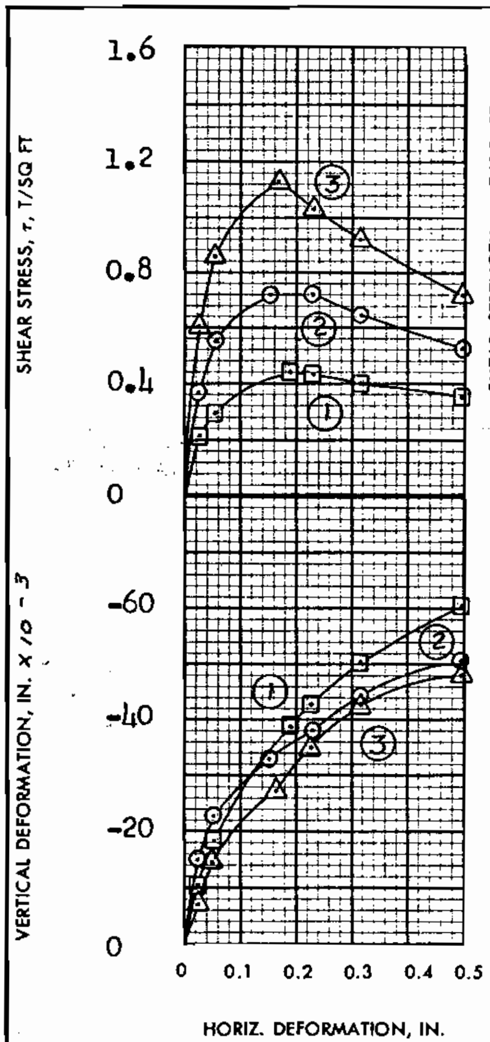
Remarks ________

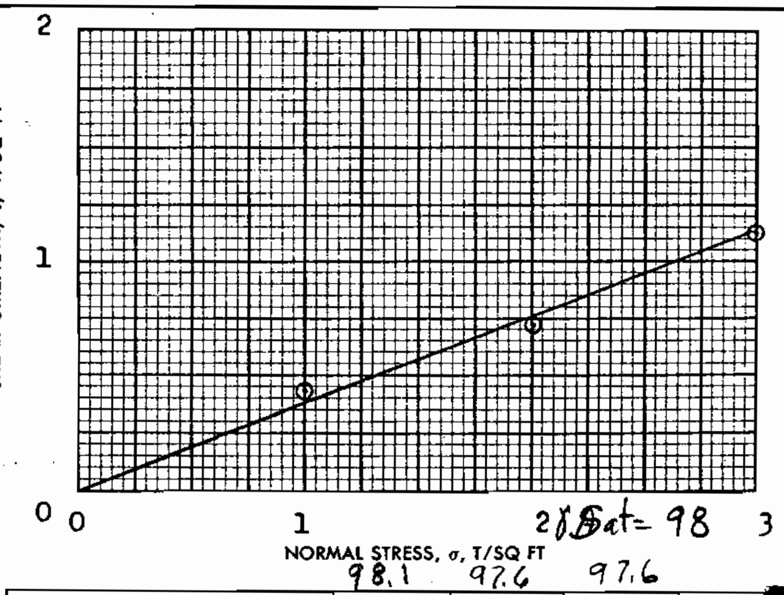
Project LK.PONT.LA.&VIC.-HURR. PROT.'71(OUTFALL CANALS)ALONG 17th ST. CANAL(GDM#2,SUPP.#5)

Area ORLEANS PARISH L.F. LEVEE WEST OF IHNC

Boring No. 6-MUE	Sample No. 5-C
Depth El -18.9	Date 9 March 1971

OHR TRIAXIAL COMPRESSION TEST REPORT





SHEAR STRENGTH PARAMETERS

φ' = 21°

TAN φ' = .392

c' = 0 T/SQ FT

☐ CONTROLLED STRESS

☒ CONTROLLED STRAIN

TEST NO.			1	2	3	
INITIAL	WATER CONTENT	w_o	70.6 %	74.7 %	73.7 %	73.0 %
	VOID RATIO	e_o	2.02	2.08	2.08	
	SATURATION	S_o	95.4 %	98.0 %	96.7 %	%
	DRY DENSITY, LB/CU FT	γ_d	56.5	55.4	55.4	-
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}	4	11	9	
FINAL	WATER CONTENT	w_f	57.4 %	49.4 %	44.6 %	%
	VOID RATIO	e_f				
	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.44	0.72	1.13	
ACTUAL TIME TO FAILURE, MIN		t_f	1110	900	960	
RATE OF STRAIN, IN./MIN			.00018	.00018	.00018	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

TYPE OF SPECIMEN UNDISTURBED — 3.00 IN. SQUARE — 1= 0.550, 2&3= 0.625 IN. THICK

CLASSIFICATION PLASTIC CLAY(CH),dark gray, contains a trace of organic matter,*

LL 92	PL 29	PI 63		G_s 2.73

REMARKS *slickensided

PROJECT LK.PONT.LA.,&VIC.-HURR.PROT.- 1971

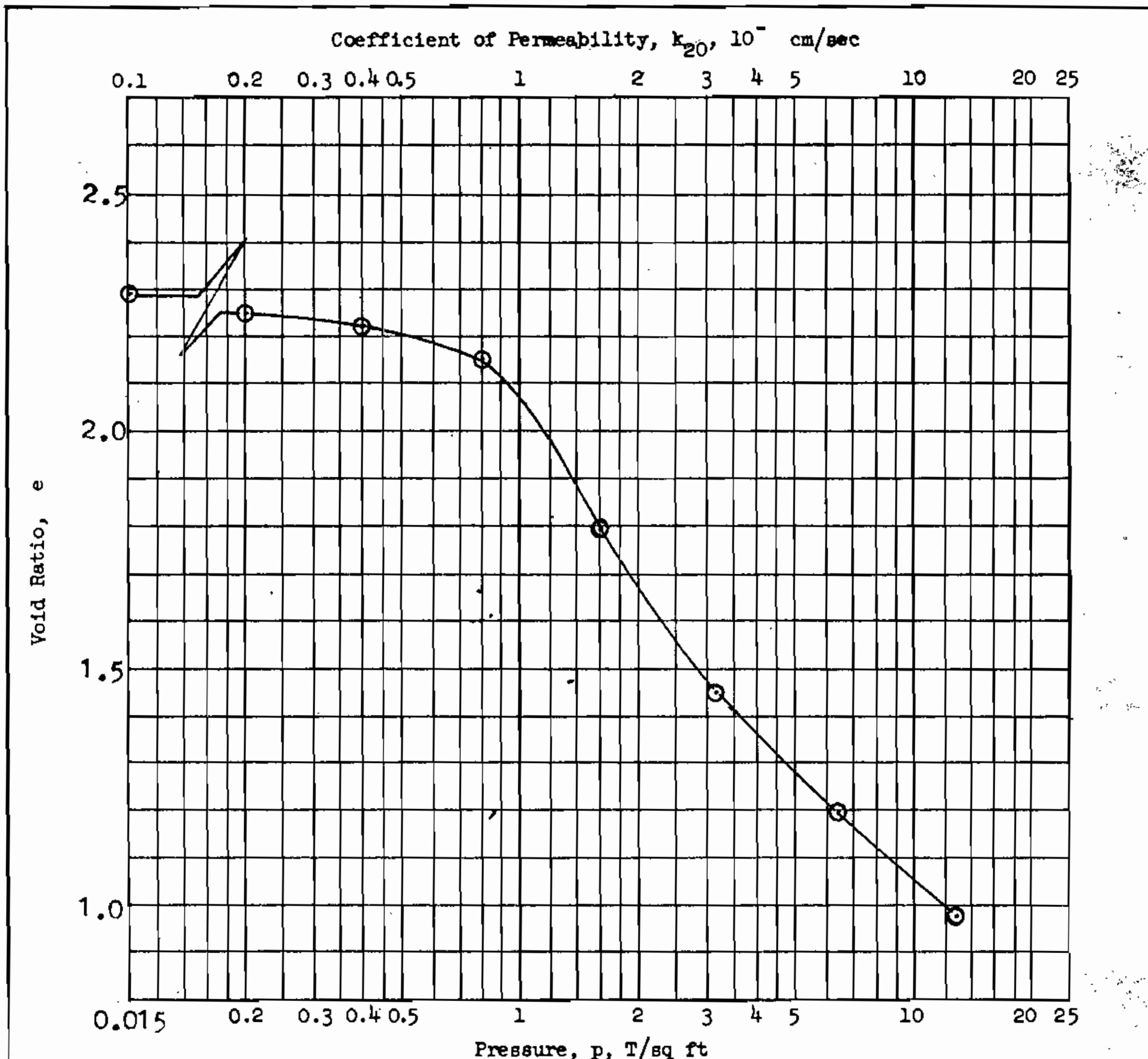
ORLEANS PARISH LK.FT.LEVEE,WEST OF IHNC(OUT-

AREA FALL CANALS)ALONG 17TH ST CANAL(GDM#2SUPP#5)

BORING NO. 6-MUE — SAMPLE NO. 7-B

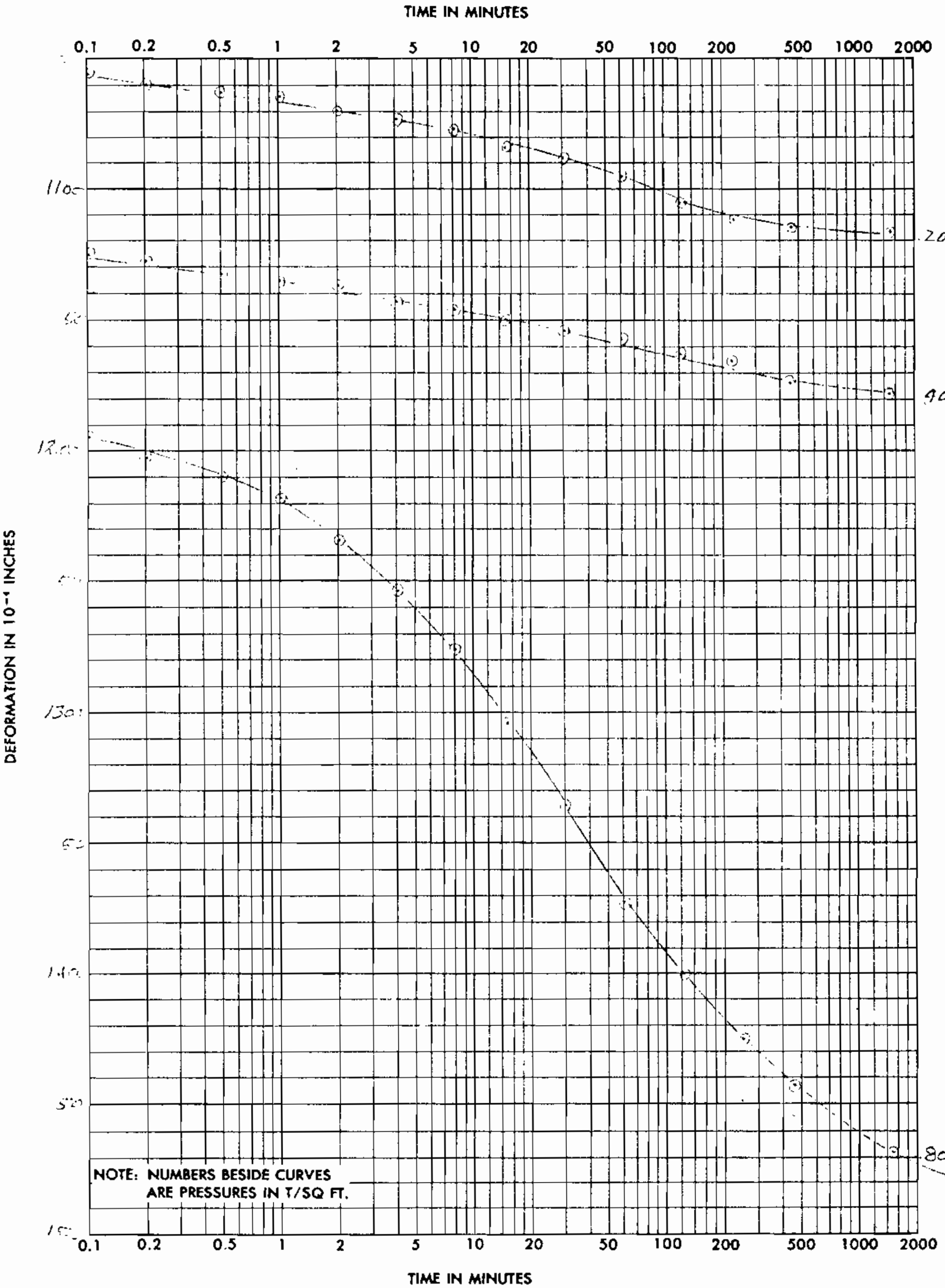
~~DEPTH~~ EL - 26.3 — DATE 10 March 1971

BWG/GDA — **DIRECT SHEAR TEST REPORT**



Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.160 in.	Water Content, w_o	83.2 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	2.28	e_f	
Preconsol. Pressure, p_c T/sq ft		Saturation, S_o	100 %	S_f	%
Compression Index, C_c		Dry Density, γ_d	52.2 lb/ft^3		
Classification PLASTIC CLAY(CH)*		k_{20} at e_o = × 10⁻ cm/sec			
LL 100	G_s 2.74	Project LK.PONT.,LA.& VIC.-HURR. PROT. '71			
PL 27	D_{10}	ORLEANS PARISH LAKEFRONT LEVEE WEST OF IHNC			
Remarks * gray		(OUTFALL CANALS) ALONG 17th.ST.(GDM #2;SUPP.#5)			
		Boring No. 6-MUE		Sample No. 8-B	
		~~Depth~~ El -30.1		Date 17 March,1971	
		JDB CONSOLIDATION TEST REPORT			

ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) 0 3424

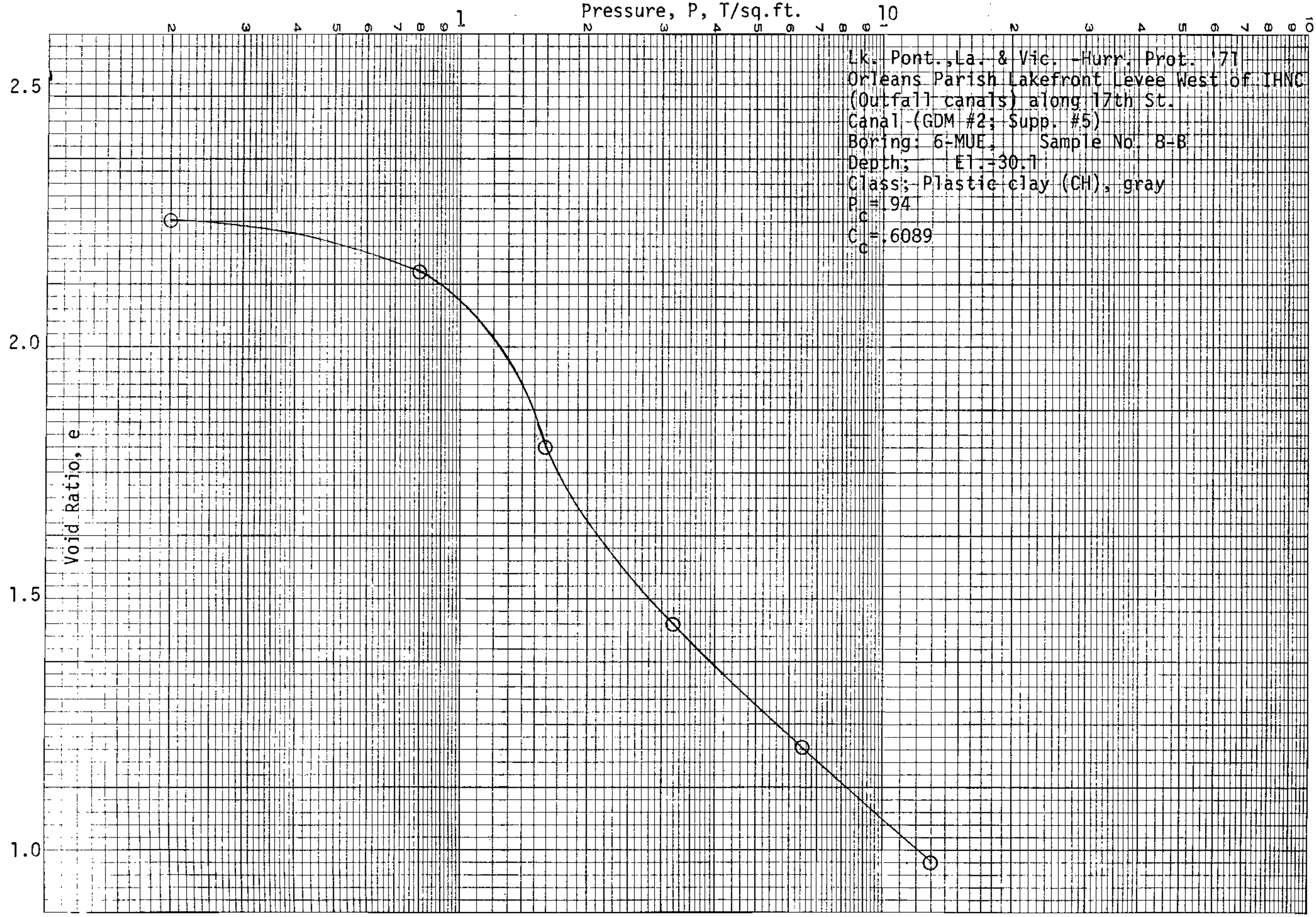


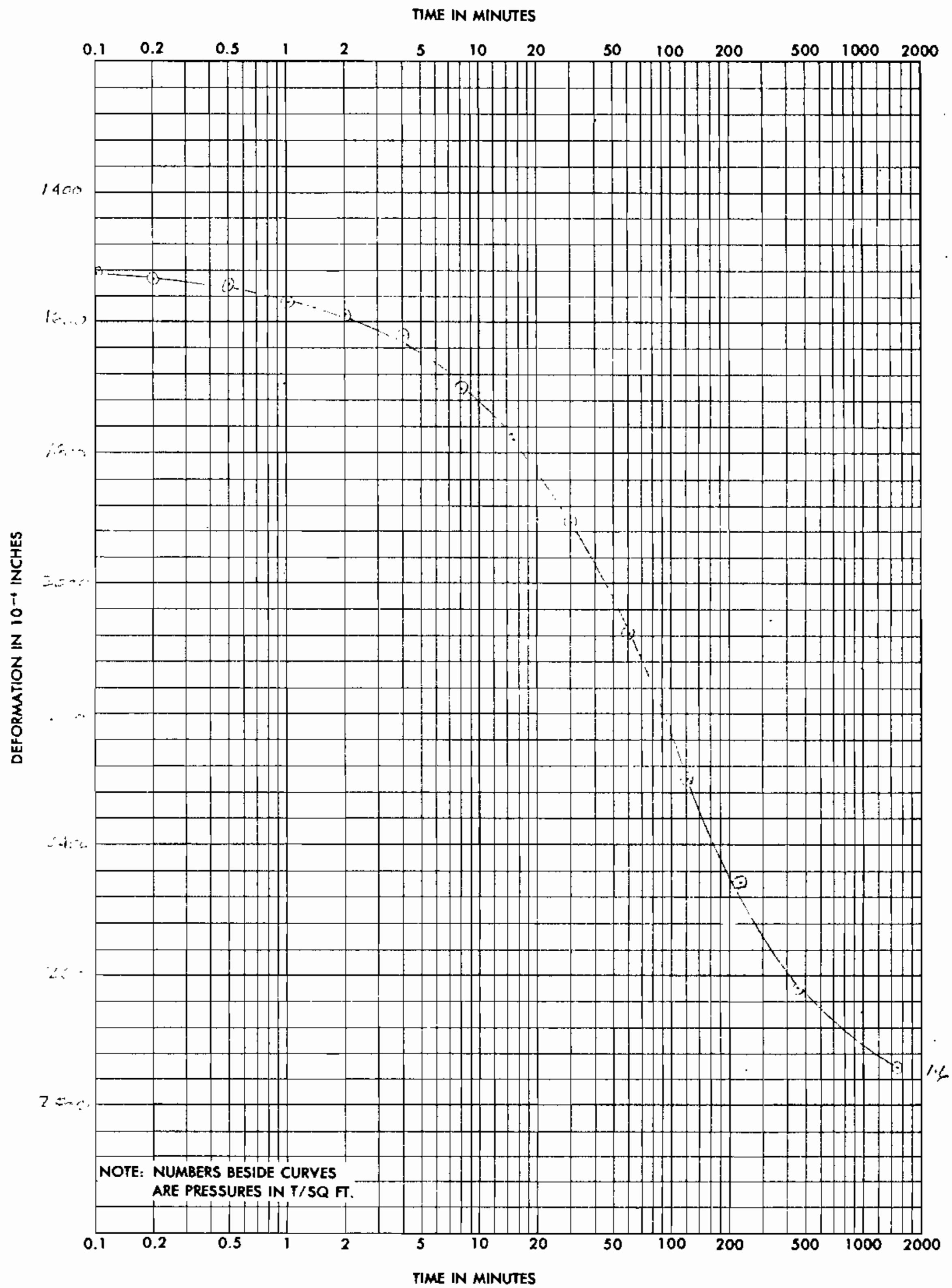
PROJECT LK. PONT.,LA.& VIC.-HURR. PROT. '71; ORLEANS PARISH LAKEFRONT LEVEE			
AREA WEST OF IHNC:(OUTFALL CANALS) ALONG 17th.ST. (GDM #2; SUPP. #5)			
BORING NO. 6-MUE	SAMPLE NO. 8-B	~~DEPTH~~ EL -30.1	DATE 17 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

* GPO : 1964 OF—718-965

...ERS SOILS TEST SERIES


Pressure, P, T/sq.ft.
Void Ratio, e
2.5
2.0
1.5
1.0
1
10
Lk. Pont.,La. & Vic. -Hurr. Prot. '71
Orleans Parish Lakefront Levee West of IHNC
(Outfall canals) along 17th St.
Canal (GDM #2; Supp. #5)
Boring: 6-MUE. Sample No. 8-B
Depth; El.-30.1
Class; Plastic clay (CH), gray
P_c = .94
C_c = .6089



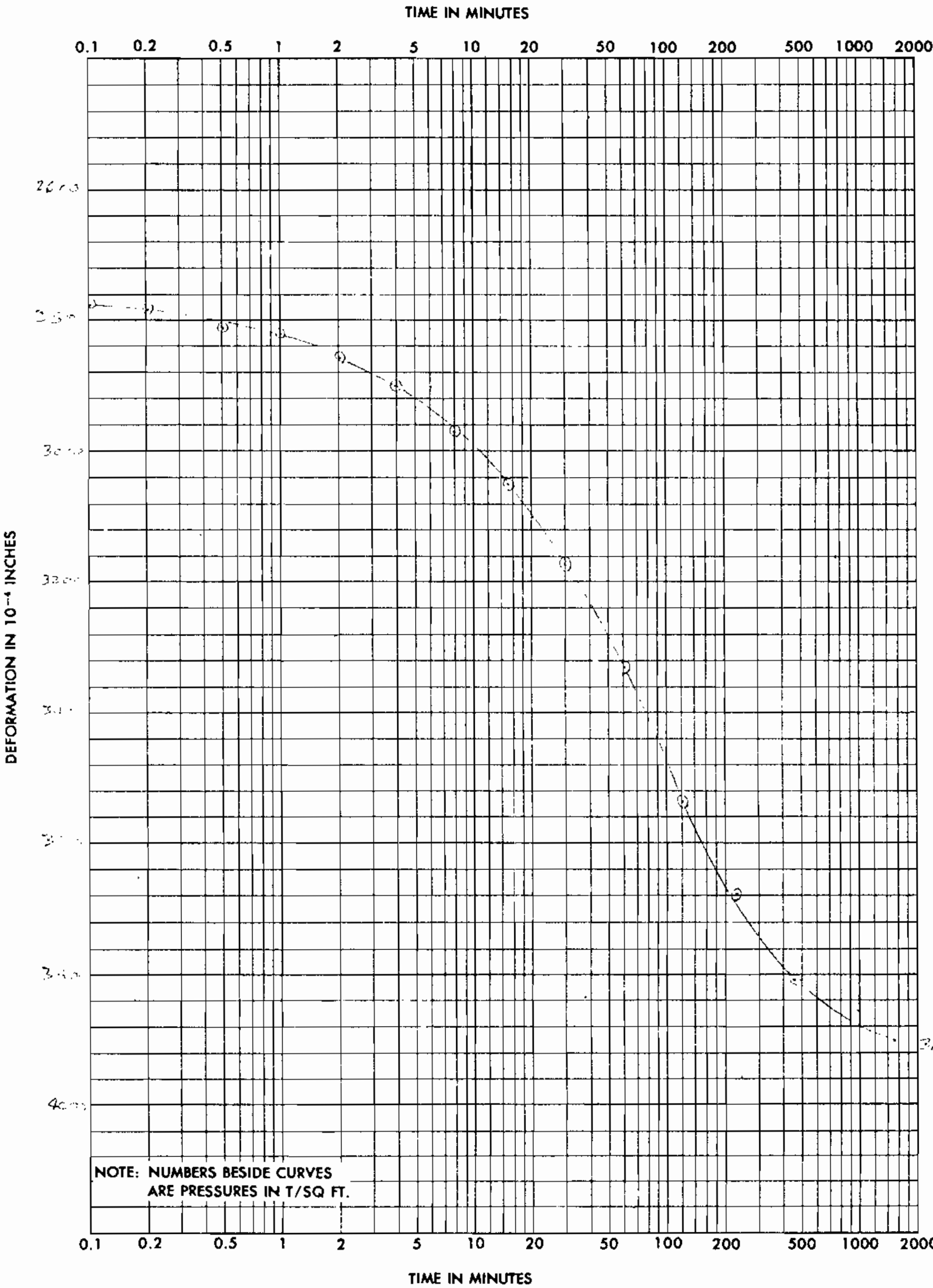
PROJECT LK. PONT., LA. & VIC.-HURR. PROT. '71; ORLEANS PARISH LAKEFRONT LEVEE

AREA WEST OF IHNC; (OUTFALL CANALS) ALONG 17th.ST. (GDM #2; SUPP. #5)

BORING NO. 6-MUE	SAMPLE NO. 8-8	~~DEPTH~~ EL -30.1	DATE 17 March, 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965

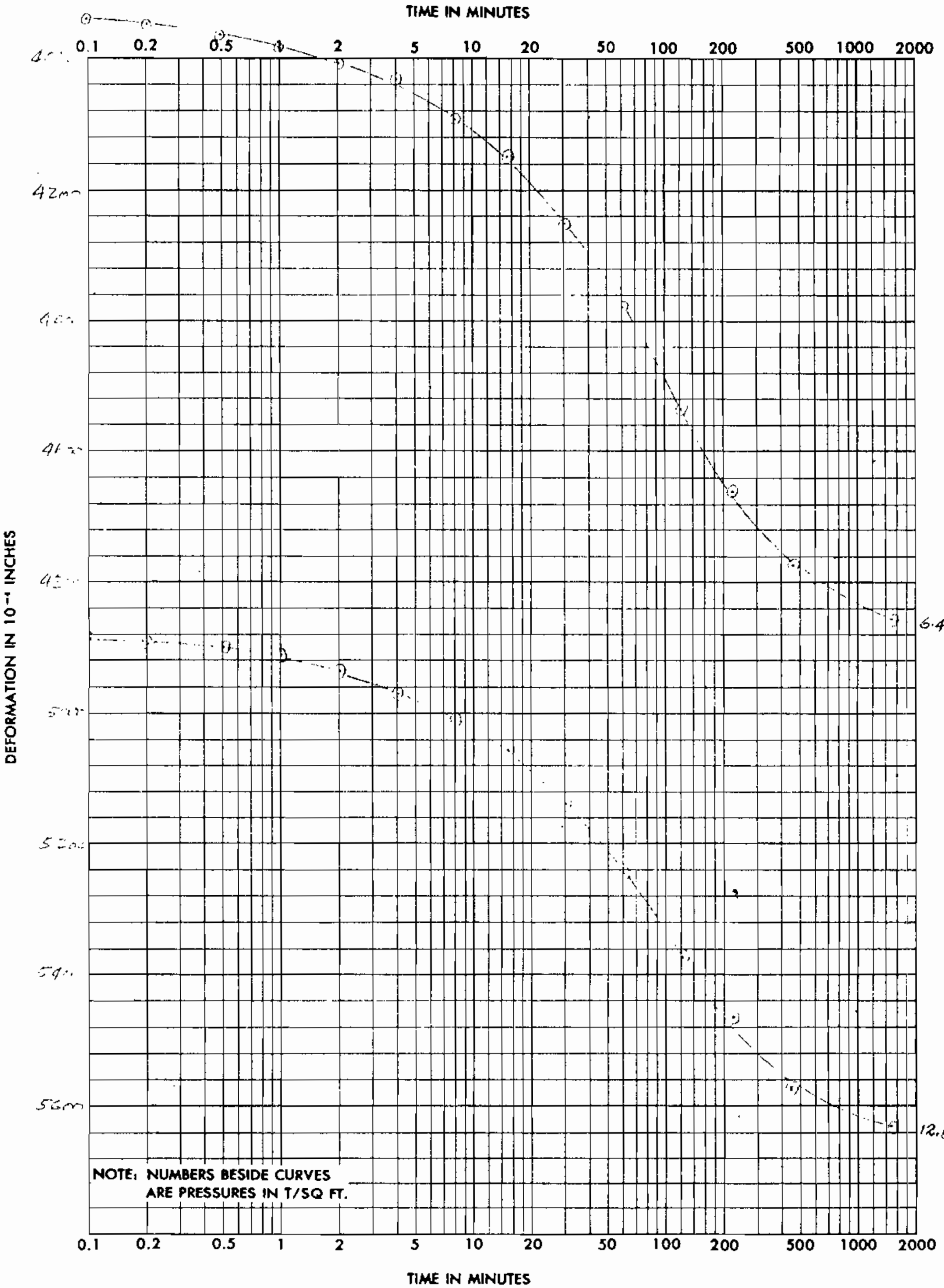


PROJECT LK. PONT.,LA.& VIC.-HURR. PROT.'71; ORLEANS PARISH LAKEFRONT LEVEE	
AREA WEST OF IHNC;(OUTFALL CANALS) ALONG 17th.ST.(GDM #2; SUPP. #5)	

BORING NO.	SAMPLE NO.	~~DEPTH~~ EL	DATE
6-MUE	8-B	-30.1	17 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

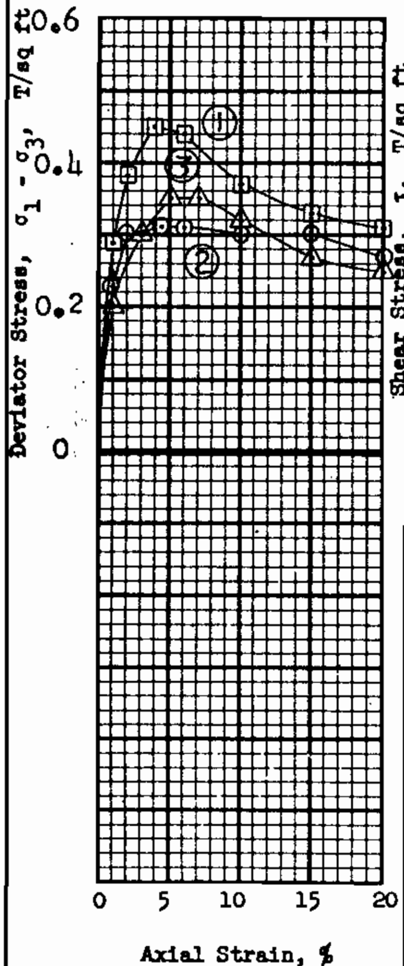


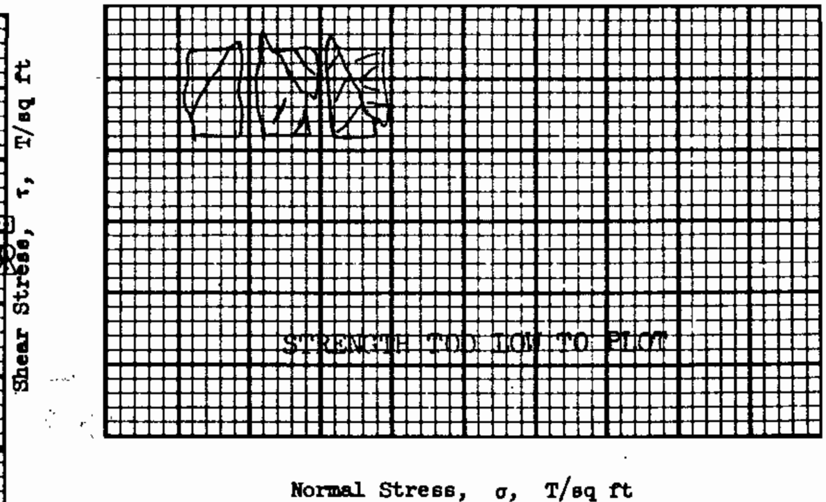
PROJECT LK. PONT.,LA.& VIC.-HURR. PROT. '71; ORLEANS PARISH LAKEFRONT LEVEE			
AREA WEST OF IHNC;(OUTFALL CANALS) ALONG 17th.ST. (GDM #2; SUPP. #5)			
BORING NO. 6-MUF	SAMPLE NO. 8-B	DEPTH EL -30.1	DATE 17 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

★ GPO : 1964 OF—715-965





Test No.			1	2	3	
Initial	Water content	w_o	79.3 %	80.5 %	77.9 %	79.23 %
	Void ratio	e_o	2.20	2.21	2.16	
	Saturation	S_o	98.8 %	99.8 %	98.8 %	%
	Dry density, lb/cu ft	γ_d	53.4	53.3	54.2	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.45	0.31	0.35	
Time to failure, min		t_f	24	28	27	
Rate of strain, percent/min			0.155	0.160	0.185	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.40	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = .19 T/sq ft

Method of saturation ________

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY(CH),gray

LL - | PL - | PI - | | G_s2.74 From 8-B Cc

Remarks

Project LK.PONT.LA.,&VIC.-HURR.PROT.-1971

ORLEANS PARISH LK.FT.LEVEE,WEST OF IHNC,(OUT-

Area FALL CANALS)ALONG 17thST.CANAL(GDM#2,SUPP.#

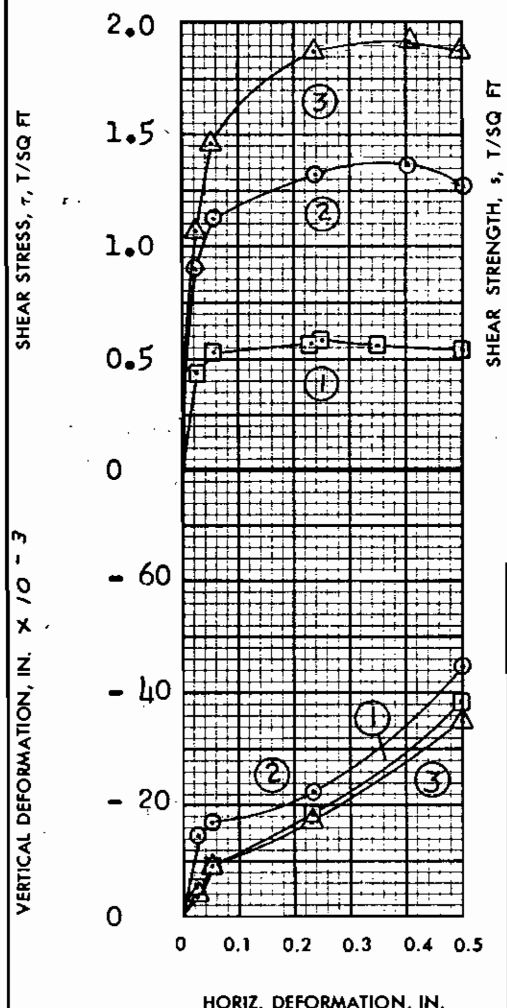
Boring No. 6-MUE | Sample No. 8-C

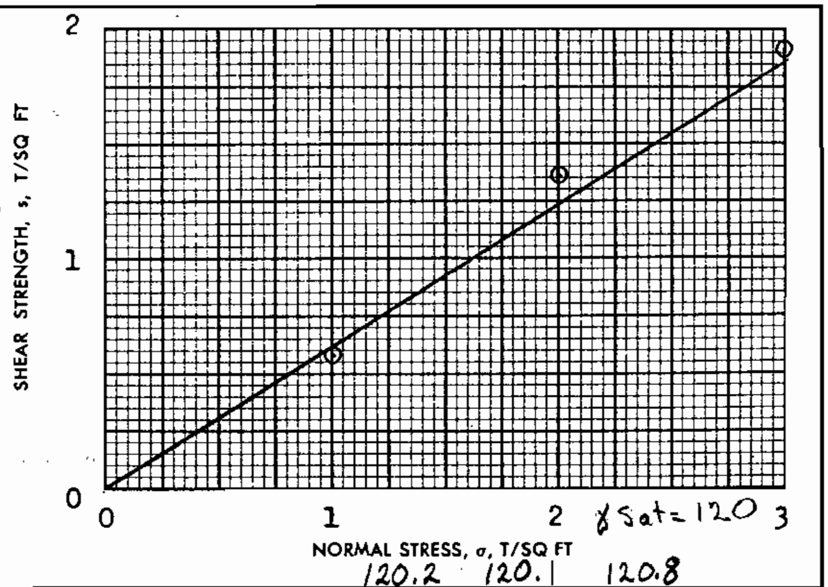
~~Depth~~ El - 31.0 | Date 9 March,1971

FAM TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 *(EM 1110-2-1902)* PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT





TEST NO.			1	2	3	
INITIAL	WATER CONTENT	w_o	29.0 %	30.1 %	31.4 %	30.2 %
	VOID RATIO	e_o	0.817	0.819	0.820	
	SATURATION	S_o	95.1 %	98.5 %	100+ %	%
	DRY DENSITY, LB/CU FT	γ_d	92.1	92.0	91.9	-
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}				
FINAL	WATER CONTENT	w_f	29.4 %	27.4 %	26.6 %	%
	VOID RATIO	e_f				
	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.58	1.36	1.92	
ACTUAL TIME TO FAILURE, MIN		t_f	1380	2190	2190	
RATE OF STRAIN, IN./MIN			.00018	.00018	.00018	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

SHEAR STRENGTH PARAMETERS

ϕ' = 32°

TAN ϕ' = .633

c' = 0 T/SQ FT

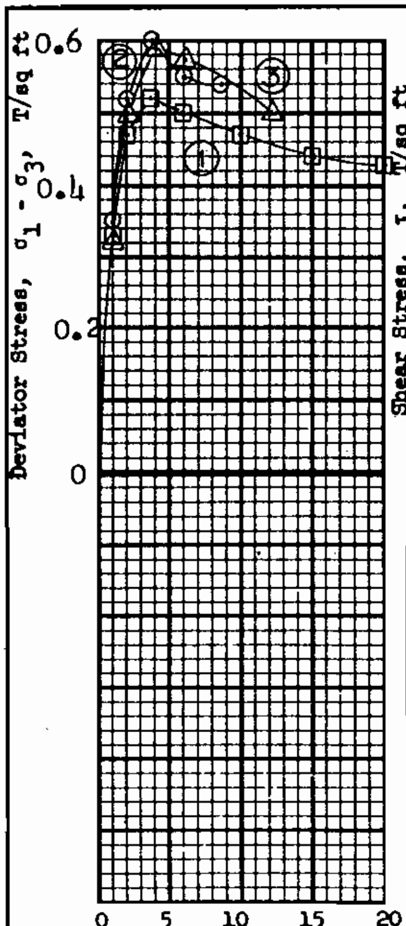
☐ CONTROLLED STRESS

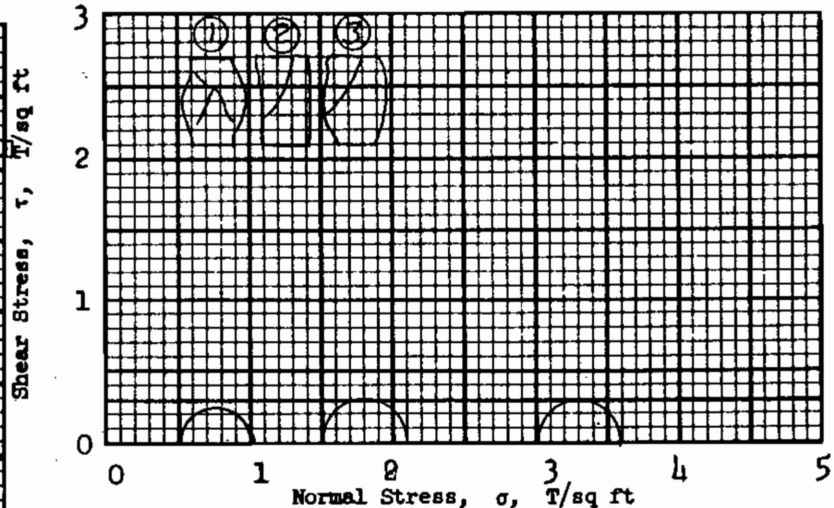
☒ CONTROLLED STRAIN

TYPE OF SPECIMEN	UNDISTURBED	3.00 IN. SQUARE		0.550 IN. THICK	
CLASSIFICATION SILTY SAND(SM),gray, contains CLAY(CH) lenses and shell fragments					
LL -	PL -	PI -		G_s 2.68	

REMARKS

PROJECT	LK.PONT.LA.,&VIC.-HURR.PROT.-1971	
	ORLEANS PARISH LK.FRNT. LEVEE,WEST OF IHNC	
AREA	(OUTFALL CANALS)ALONG 17th ST CANAL	
BORING NO. 6-MUE		SAMPLE NO. 9-B
~~DEPTH~~ EL -34.3		DATE 22 March 1971
BWG	DIRECT SHEAR TEST REPORT	





Test No.			1	2	3	
Initial	Water content	w_o	65.0 %	61.9 %	59.3 %	62.06 %
	Void ratio	e_o	1.76	1.69	1.60	
	Saturation	S_o	98.6 %	97.8 %	99.0 %	%
	Dry density, lb/cu ft	γ_d	60.4	61.9	64.2	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.52	0.60	0.59	
Time to failure, min		t_f	15	23	33	
Rate of strain, percent/min			0.253	0.164	0.120	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.40	1.40	1.41	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = .29 T/sq ft

Method of saturation ______

☐ Controlled stress

☒ Controlled strain

Type of test Q	Type of specimen UNDISTURBED			
Classification PLASTIC CLAY(CH),gray, contains 1/4" silty sand seam				
LL 65	PL 21	PI 44		G_s 2.67

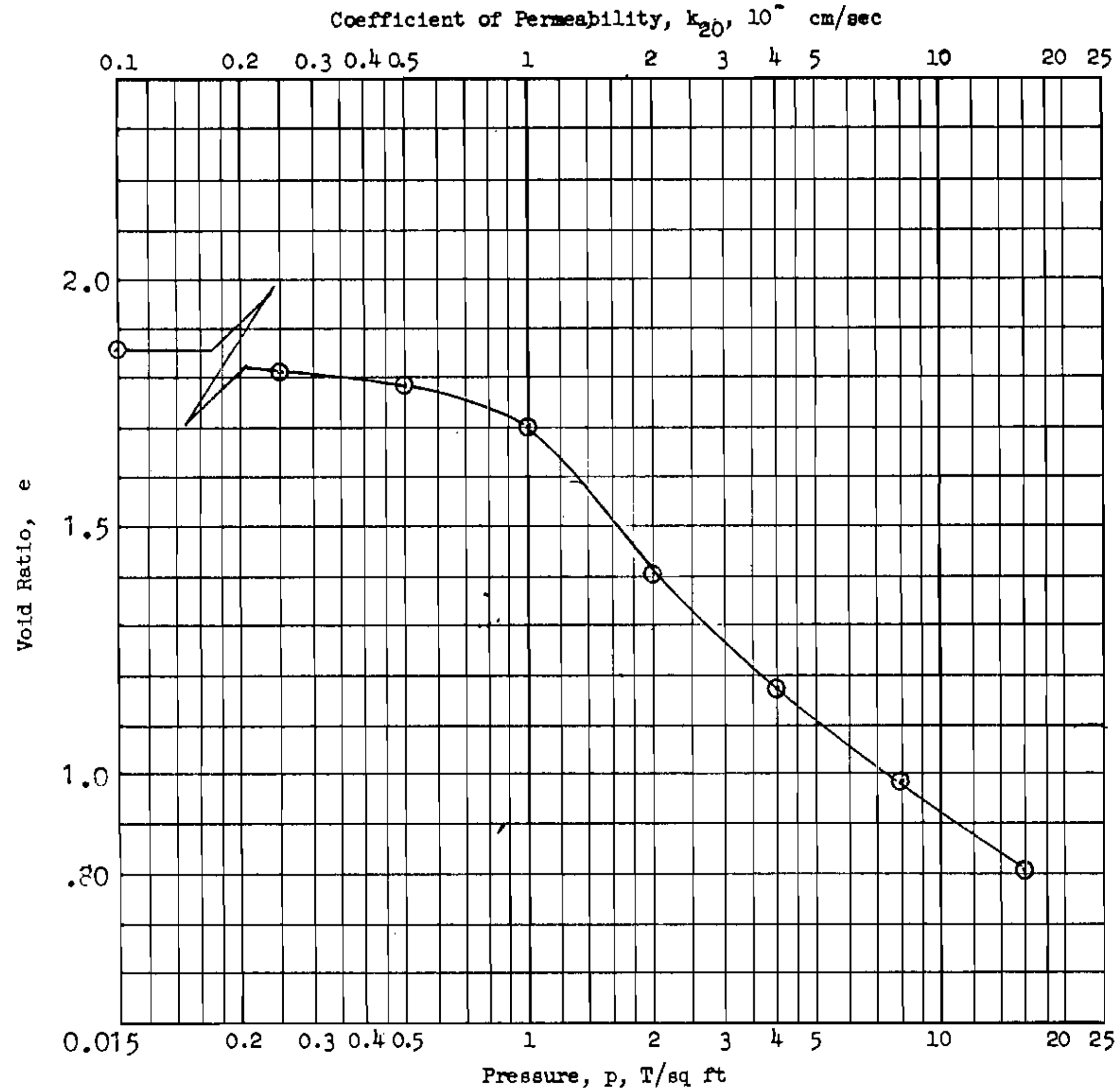
Remarks Specimens trimmed from 2nd level-top portion of sample contained 1/2" seam of sand(SP)

Project LK.PONT.LA.,&VIC.-HURR.PROT.-1971 ORLEANS PARISH LK.FT.LEVEE,WEST OF IHNC,(OUT-	
Area FALL CANALS)ALONG 17TH.ST. CANAL(GDM#2SUPP	
Boring No. 6-MUE	Sample No. 11-C
~~Depth~~ El - 42.7	Date 10 March 1971
JMS	TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 *(EM 1110-2-1902)* PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT

[illegible] SOILS TEST SECTION

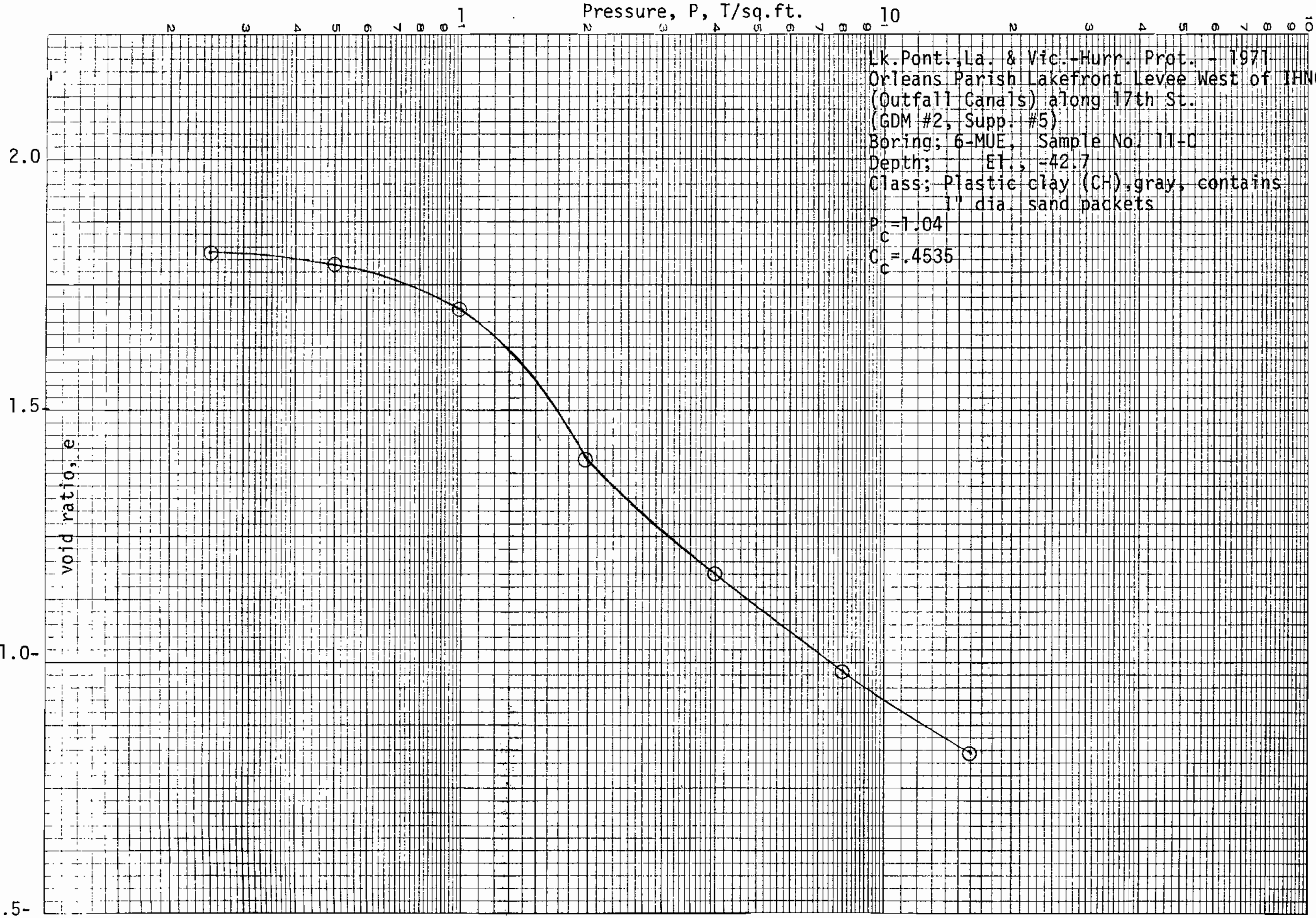


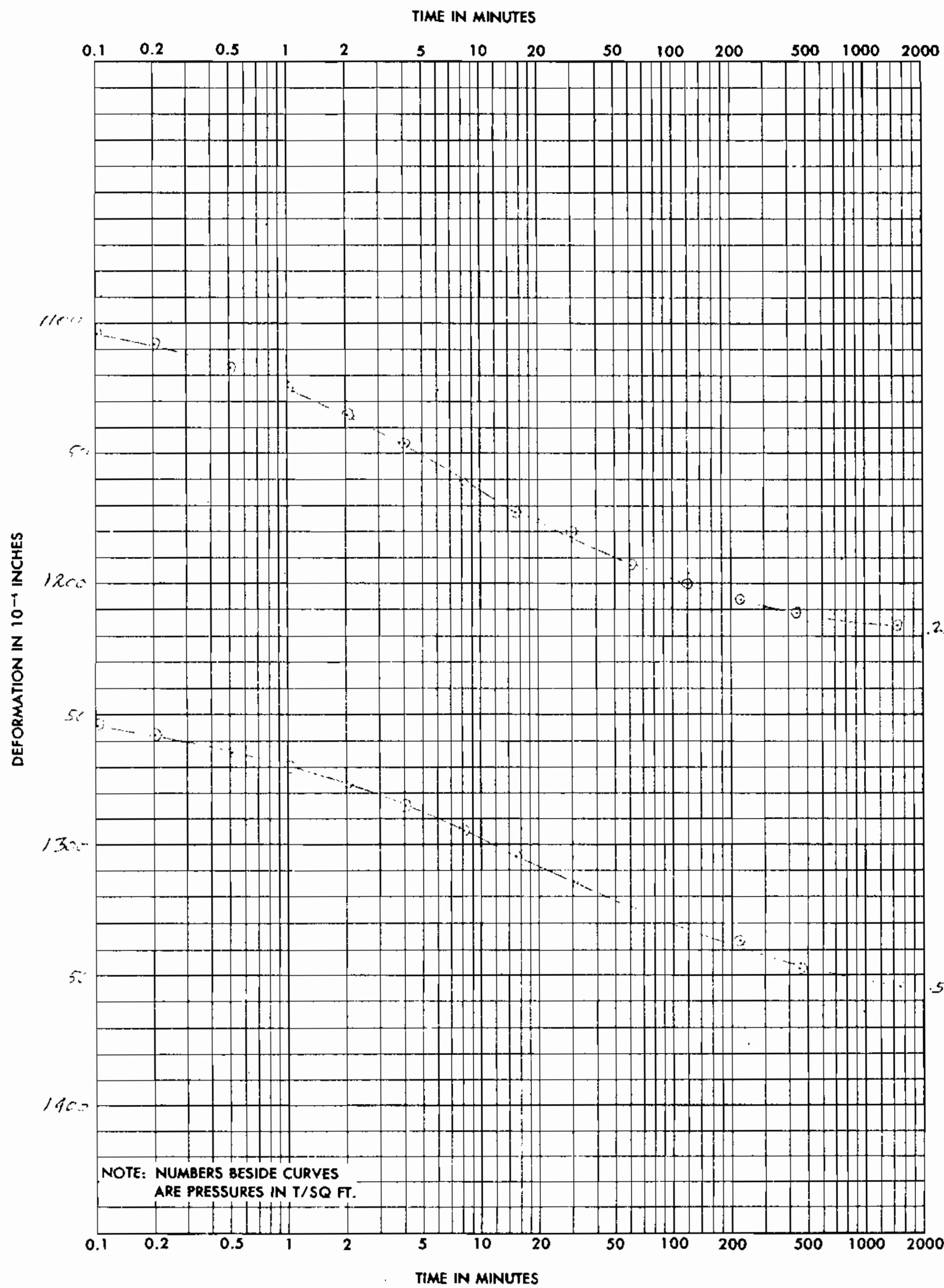
Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.162 in.	Water Content, w_o	68.9 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	1.86	e_f	
Preconsol. Pressure, p_c T/sq ft		Saturation, S_o	98.6 %	S_f	%
Compression Index, C_c		Dry Density, γ_d	58.2 lb/ft^3		
Classification PLASTIC CLAY(CH),*		k_{20} at e_o = × 10^{-} cm/sec			
LL -	G_s 2.67 From Q	Project LK.FONT.,LA.& VIC.-HURR. PROT.-1971			
PL -	D_{10}	ORLEANS PARISH LAKFFRONT LEVEE WEST OF IHNC			
Remarks * gray, contains 1" dia.		(OUTFALL CANALS)ALONG 17th.ST.(GDM#2,SUPP.#5)			
sand pockets		Boring No. 6-MUE		Sample No. 11-C	
		~~Depth~~ El -42.7		Date 17 March,1971	
		JDB CONSOLIDATION TEST REPORT			

ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

0 3424

SOILS TEST SECTION


Pressure, P, T/sq.ft.
1
10
void ratio, e
2.0
1.5
1.0
.5
Lk.Pont.,La. & Vic.-Hurr. Prot. - 1971
Orleans Parish Lakefront Levee West of IHNC
(Outfall Canals) along 17th St.
(GDM #2, Supp. #5)
Boring; 6-MUE, Sample No. 11-C
Depth; El., -42.7
Class; Plastic clay (CH),gray, contains
1" dia. sand packets
P_c=1.04
C_c=.4535

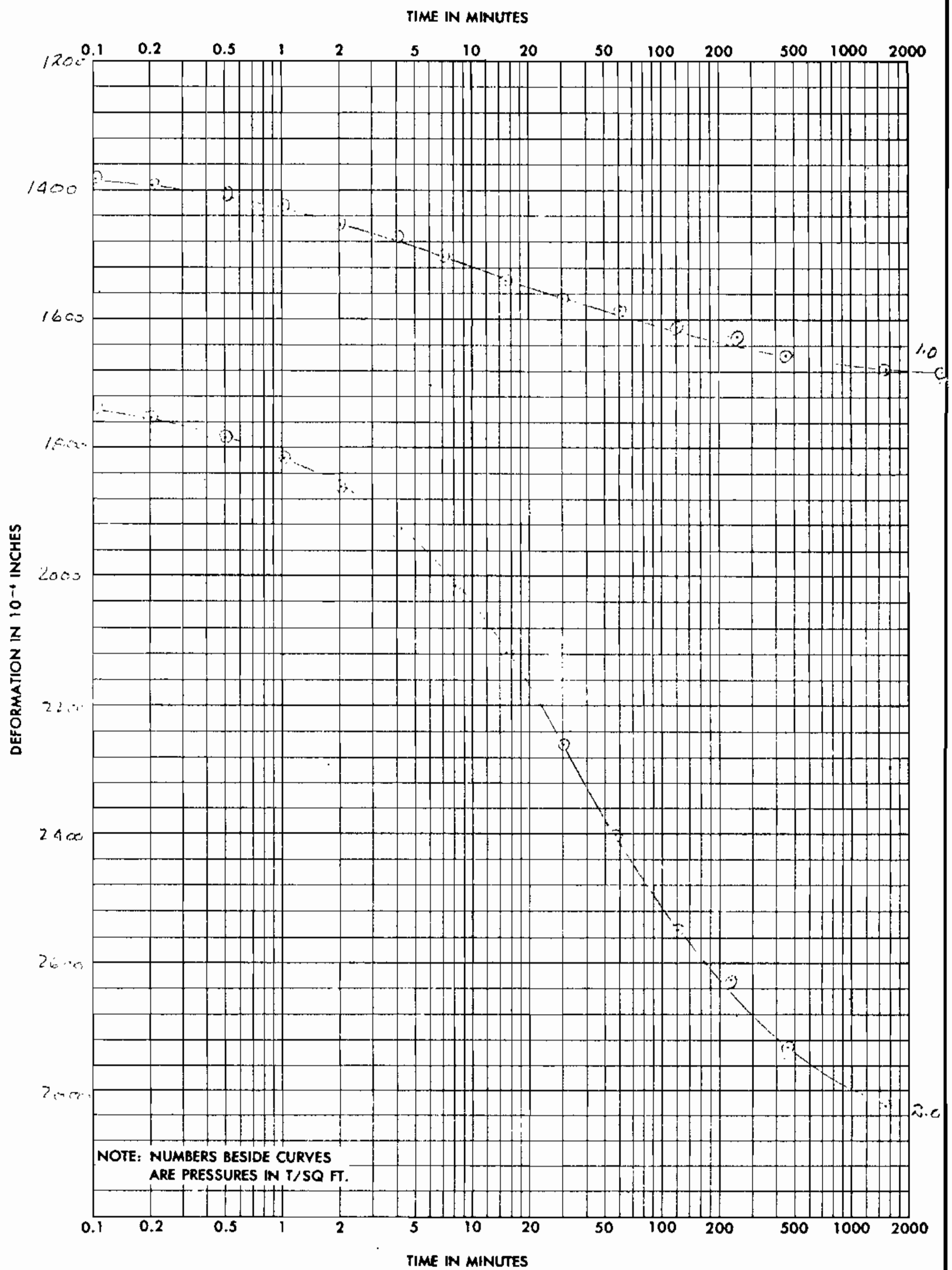


PROJECT LK. PONT.,LA.& VIC.-HURR. PROT. '71; ORLEANS PARISH LAKEFRONT LEVEE

AREA WEST OF IHNC:(OUTFALL CANALS) ALONG 17th.ST. (GDM #2; SUPP. #5)

BORING NO. 6-MUE	SAMPLE NO. 11-C	~~DEPTH~~ EL -42.7	DATE 17 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)



PROJECT LK. PONT.,LA.& VIC.-HURR. PROT. '71; ORLEANS PARISH LAKEFRONT LEVEE

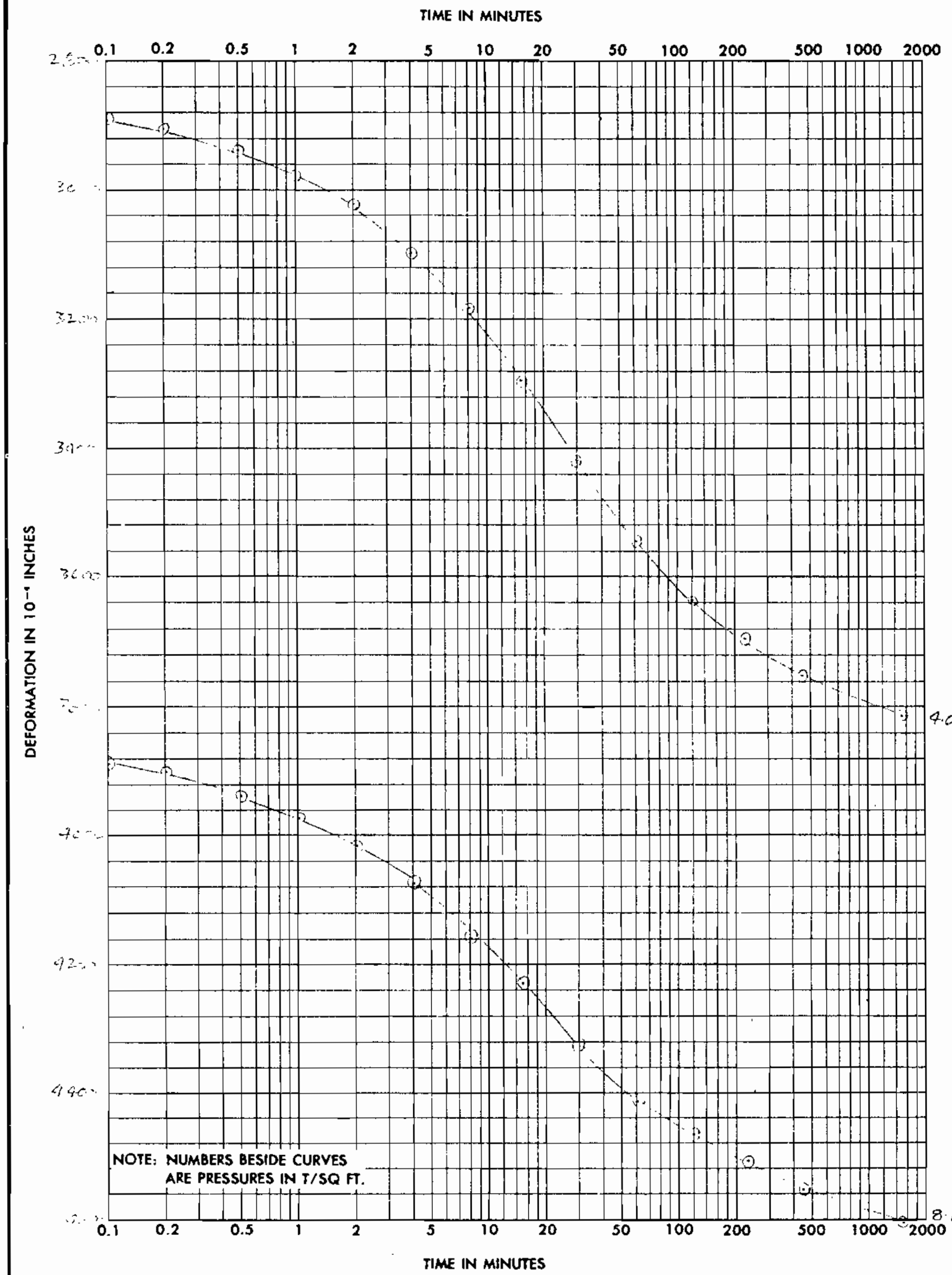
AREA WEST OF IHNC:(OUTFALL CANALS) ALONG 17th.ST.(GDM #2; SUPP. #5)

BORING NO. 6-MUE	SAMPLE NO. 11-C	DEPTH EL -42.7	DATE 17 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

GPO : 1964 OF—715-065



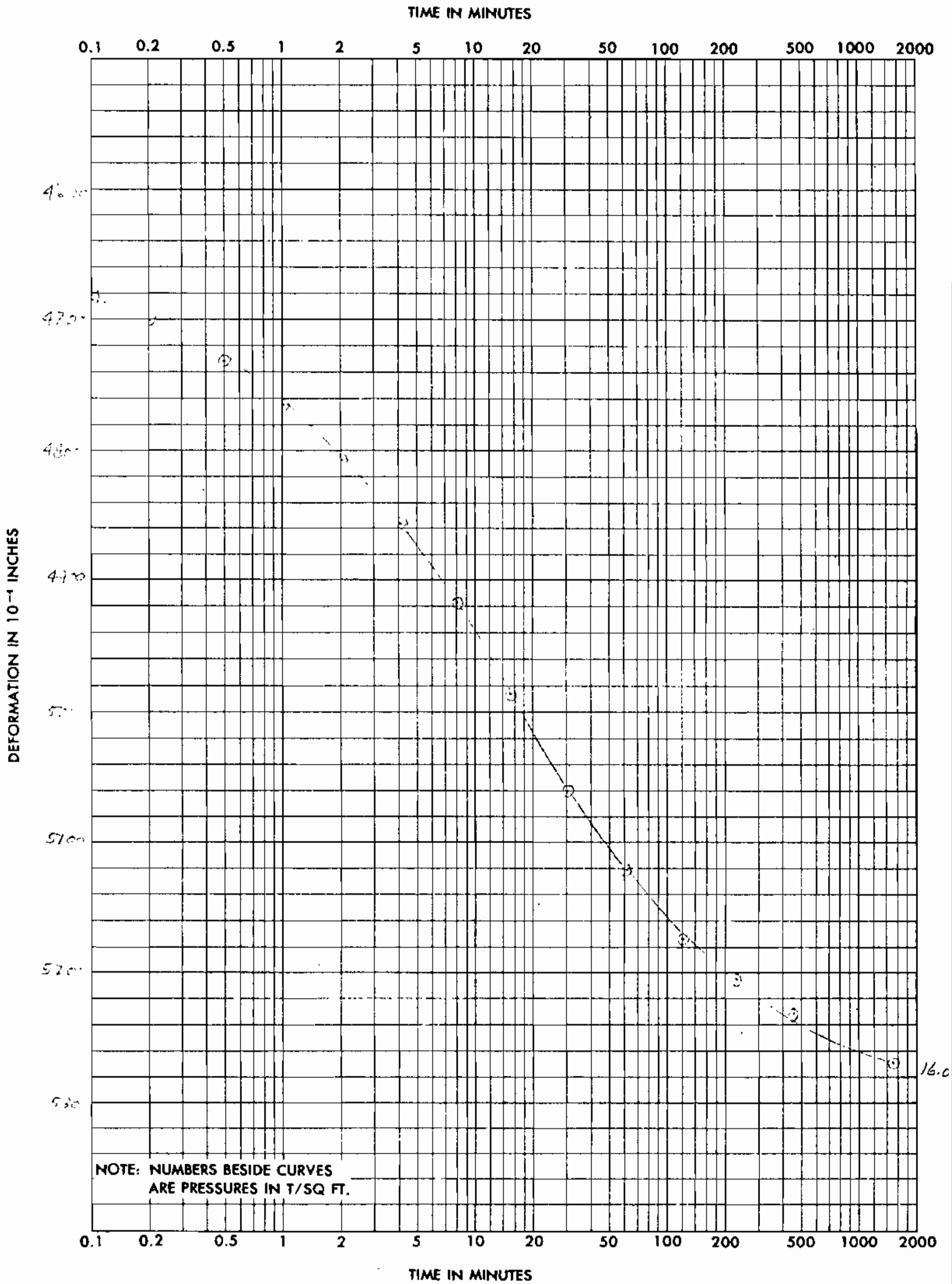
PROJECT LK. PONT., LA.& VIC.-HURR. PROT. '71; ORLEANS PARISH LAKEFRONT LEVEE

AREA WEST OF IHNC; (OUTFALL CANALS) ALONG 17th.ST. (GDM #2; SUPP. #5)

BORING NO. 6-MUE	SAMPLE NO. 11-C	~~DEPTH~~ EL -42.7	DATE 17 March, 1971

ENG FORM 1 MAY 63 2088 PREVIOUS EDITIONS ARE OBSOLETE. CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

* GPO : 1964 OF—715-965



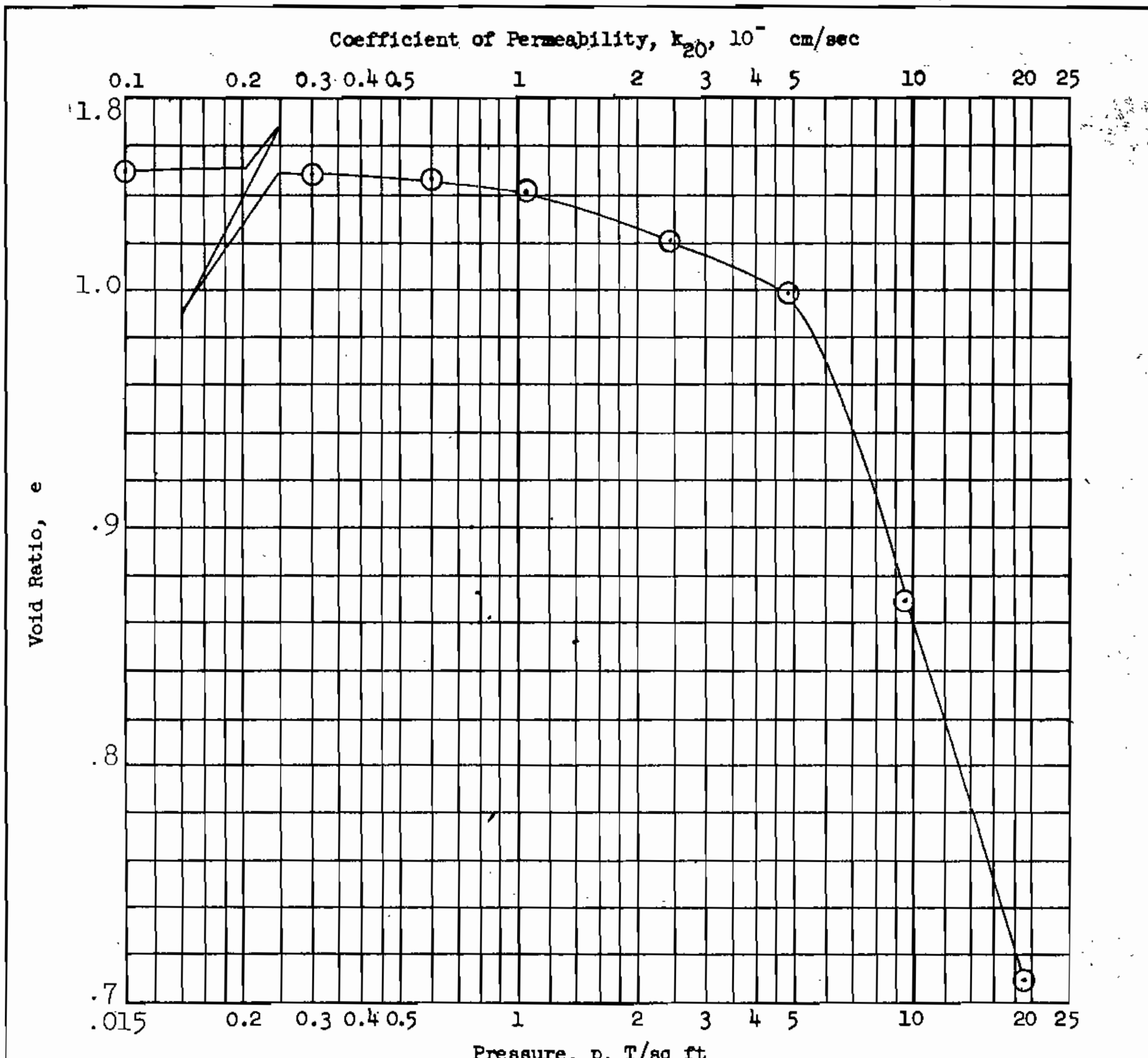
PROJECT LK. PONT., LA.& VIC.-HURR. PROT. '71; ORLEANS PARISH LAKEFRONT LEVEE

AREA WEST OF IHNC;(OUTFALL CANALS) ALONG 17th.ST. (GDM #2; SUPP. #5)

BORING NO. 6-MUE	SAMPLE NO. 11-C	DEPTH / EL -42.7	DATE 17 March, 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

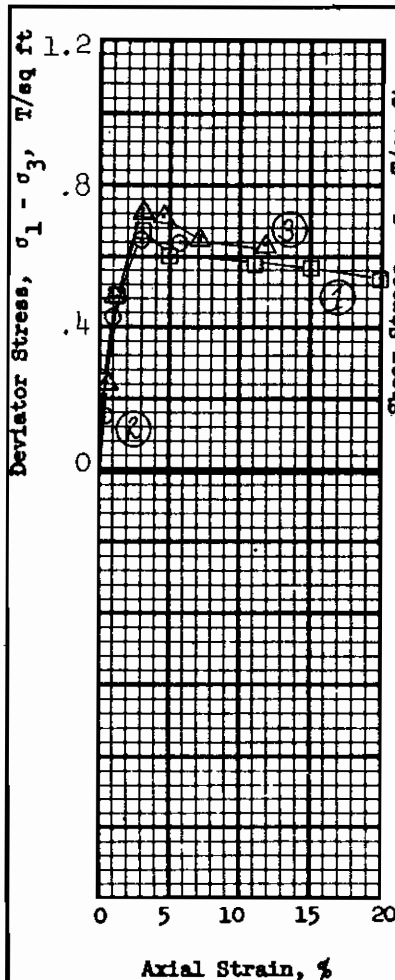
* GPO : 1964 OF—713-983

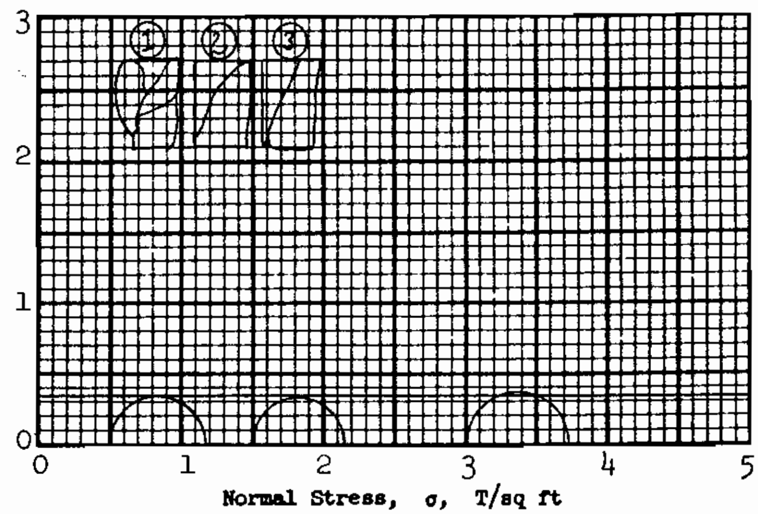


Type of Specimen Undisturbed		Before Test		After Test	
Diam 4.25 in.	Ht 1.165 in.	Water Content, w_o	54.5 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	1.53	e_f	
Preconsol. Pressure, p_c T/sq ft		Saturation, S_o	98.2 %	S_f	%
Compression Index, C_c		Dry Density, γ_d	68.0 lb/ft^3		
Classification LEAN CLAY(CL),gray		k_{20} at e_o = × 10^{-} cm/sec			
LL 49	G_s 2.76	Project LK.PONT.,LA.&VIC.-HURR. PROT.'71			
PL 21	D_{10}	ORLEANS PAR. L.F. LEV.WEST OF IHNC(OUTFALL			
Remarks		Area CANALS)ALONG 17th ST.CANAL(GDM#2,SUPP.#5)			
		Boring No. 6-MUE		Sample No. 14-C	
		~~Depth~~ El -55.5		Date 15 March 1971	
		CONSOLIDATION TEST REPORT			

ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

G 3424





Test No.			1	2	3	
Initial	Water content	w_o	48.6 %	45.9 %	46.3 %	46.93 %
	Void ratio	e_o	1.34	1.26	1.28	
	Saturation	S_o	98.3 %	98.7 %	98.0 %	%
	Dry density, lb/cu ft	γ_d	72.2	74.8	74.3	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.67	0.65	0.73	
Time to failure, min		t_f	16	30	27	
Rate of strain, percent/min			0.180	0.100	0.111	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.41	1.41	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = .34 T/sq ft

Method of saturation ______

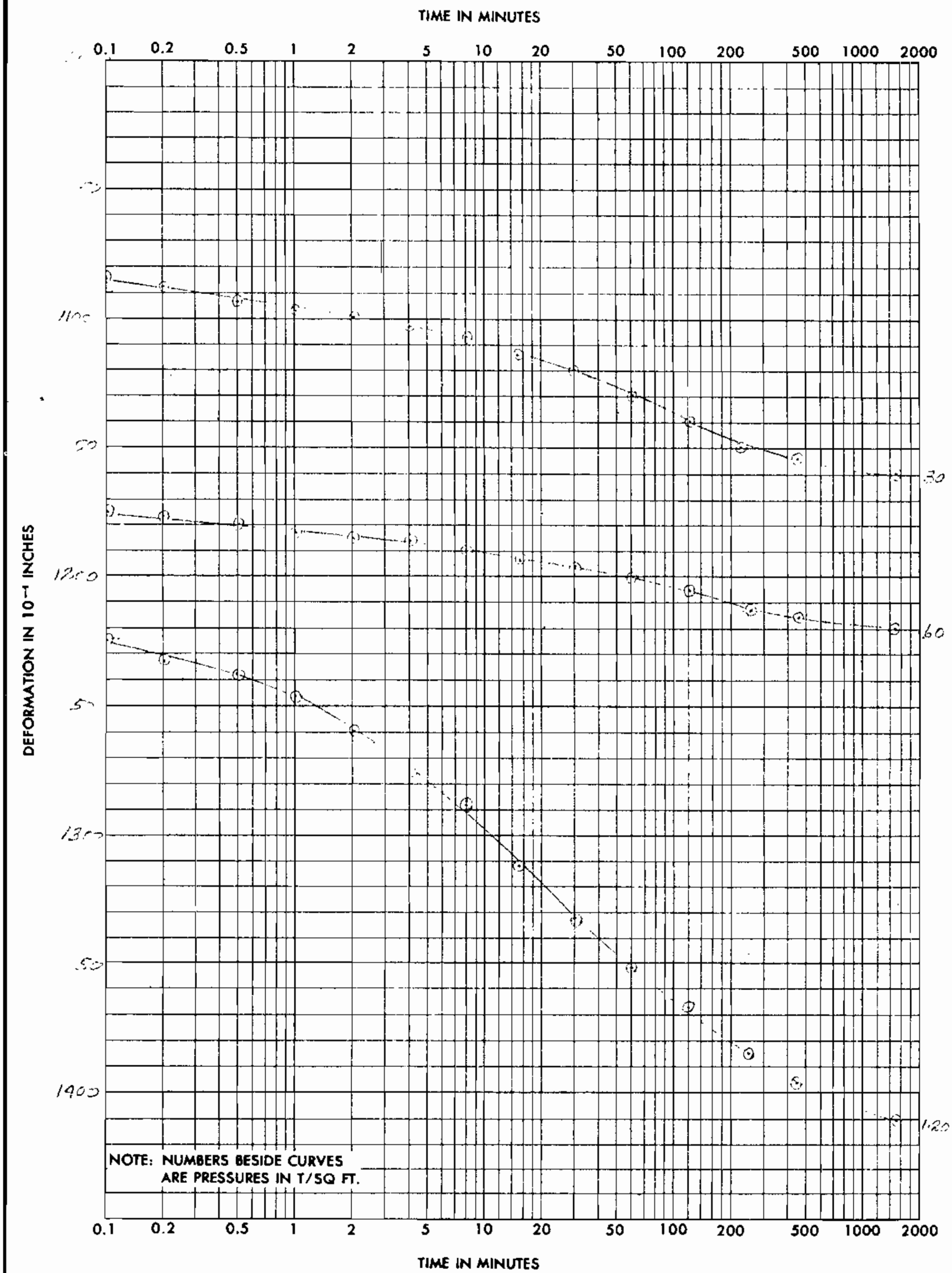
☐ Controlled stress

☒ Controlled strain

Type of test Q	Type of specimen UNDISTURBED			
Classification PLASTIC CLAY(CH),gray				
LL 65	PL 16	PI 49		G_s 2.71

Remarks ______

Project LK. PONT.LA.&VIC.-HURR. PROT-'71	
Area ORLEANS PARISH L.F. LEVEE WEST OF IHNC(OUTFALL CANALS)ALONG 17th ST.(GDM#2,SUPP.#5)	
Boring No. 6-MUE	Sample No. 14-D
Depth. El -55.9	Date 9 March 1971
JMS	TRIAXIAL COMPRESSION TEST REPORT



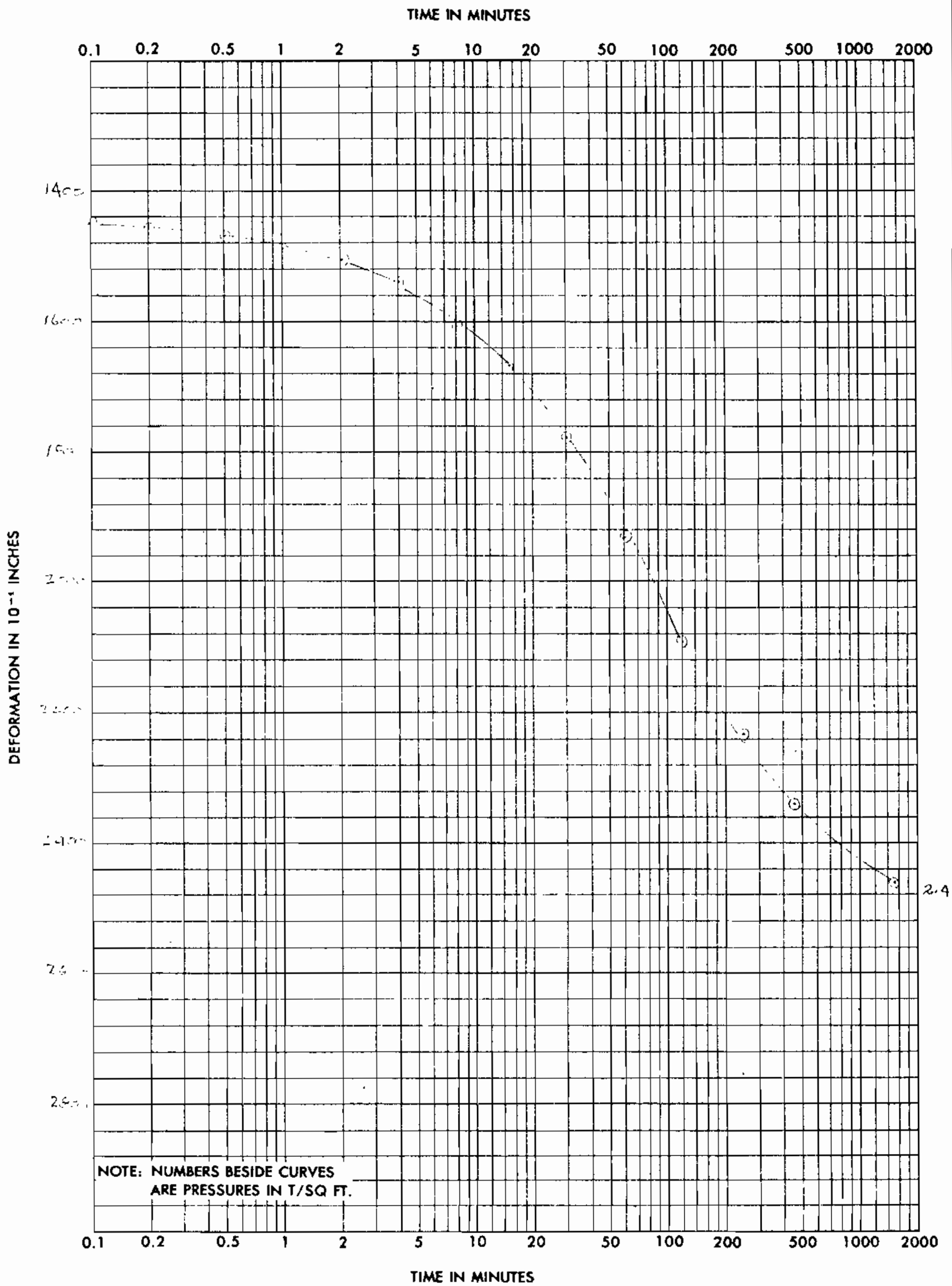
PROJECT LK. PONT., LA. & VIC.- HURR. PROT.'71 ORLEANS PAR. L.F. LEV. WEST

AREA OF IHNC(OUTFALL CANALS) ALONG 17th ST. CANAL(GDM#2,SUPP.#5)

BORING NO. 6-MUE	SAMPLE NO. 14-C	DEPTH EL -55.5	DATE 15 March 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965

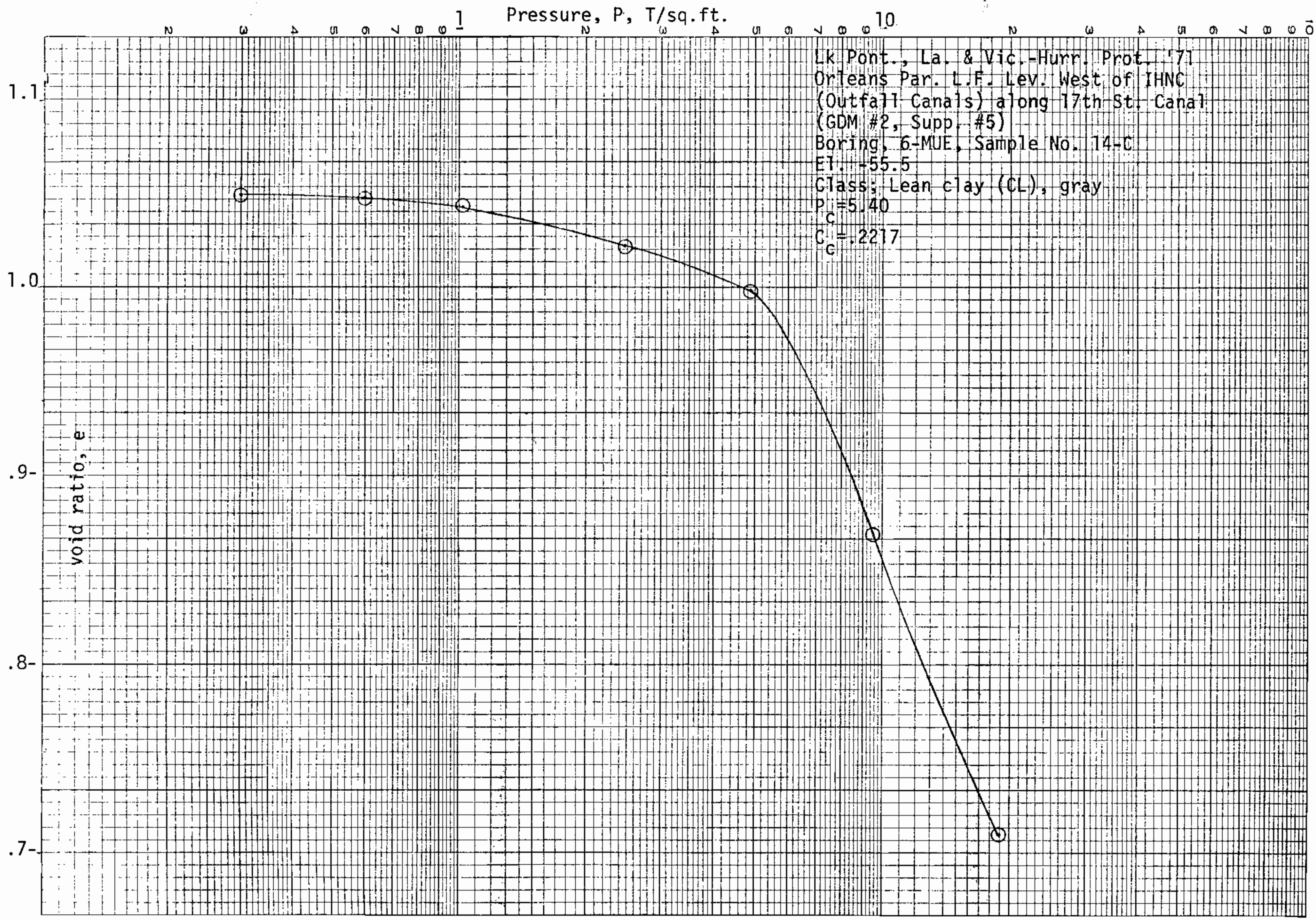


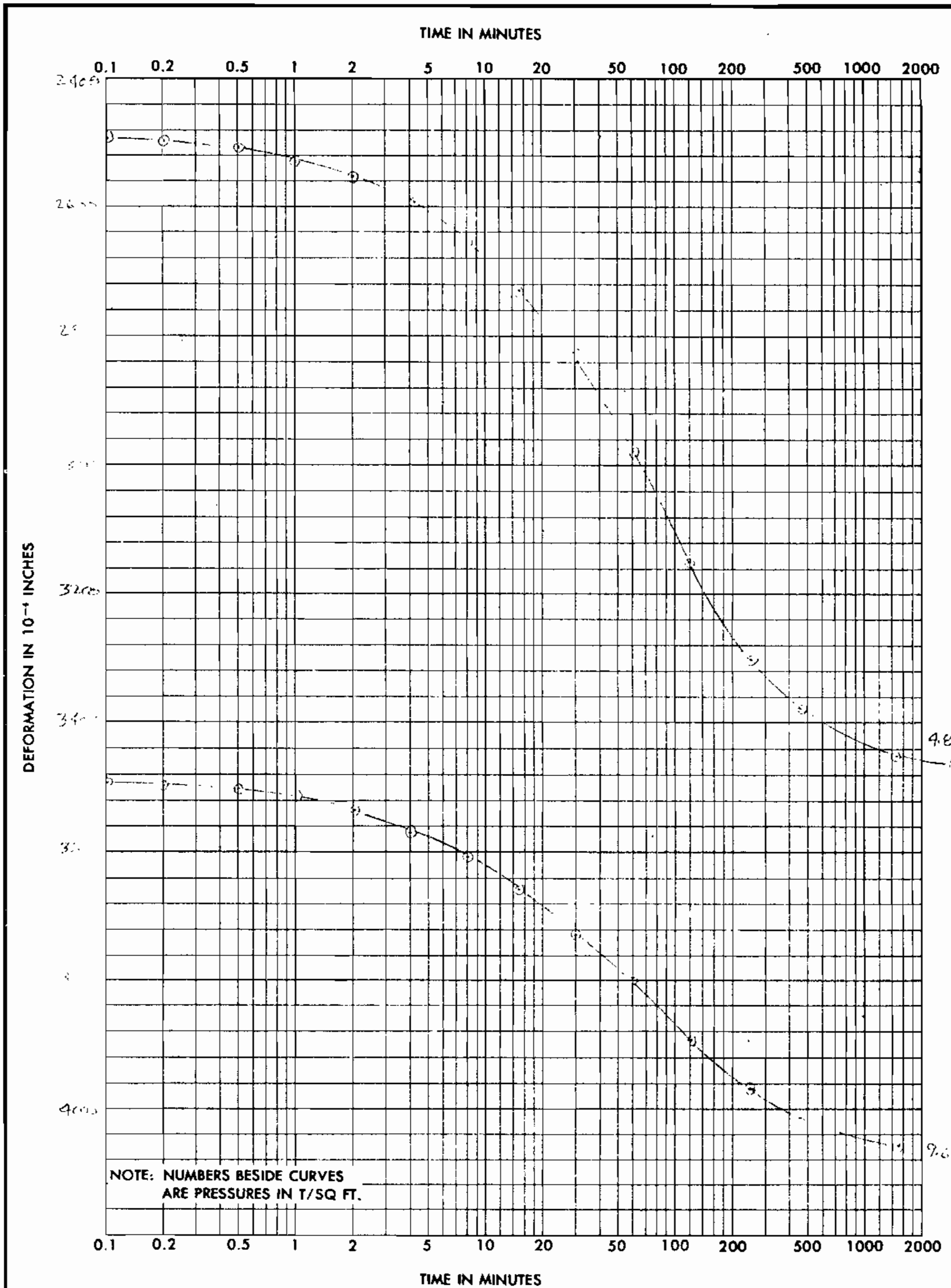
PROJECT LK. PONT., LA. & VIC.-HURR. PROT.'71 OLREANS PAR. L.F. LEV. WEST	
AREA OF IHNC(OUTFALL CANALS) ALONG 17th ST. CANAL(GDM#2,SUPP.#5)	

BORING NO.	SAMPLE NO.	DEPTH EL	DATE
6-MUE	14-C	-55.5	15 March 1971

ENG FORM 2088 1 MAY 63 — PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965


Pressure, P, T/sq.ft.
1
10
void ratio, e
1.1
1.0
.9
.8
.7
Lk Pont., La. & Vic.-Hurr. Prot. '71
Orleans Par. L.F. Lev. West of IHNC
(Outfall Canals) along 17th St. Canal
(GDM #2, Supp. #5)
Boring, 6-MUE, Sample No. 14-C
El. -55.5
Class; Lean clay (CL), gray
P_c=5.40
C_c=.2217



PROJECT LK. PONT., LA. & VIC. HURR. PROT.'71 ORLEANS PAR. L.F. LEV. WEST OF

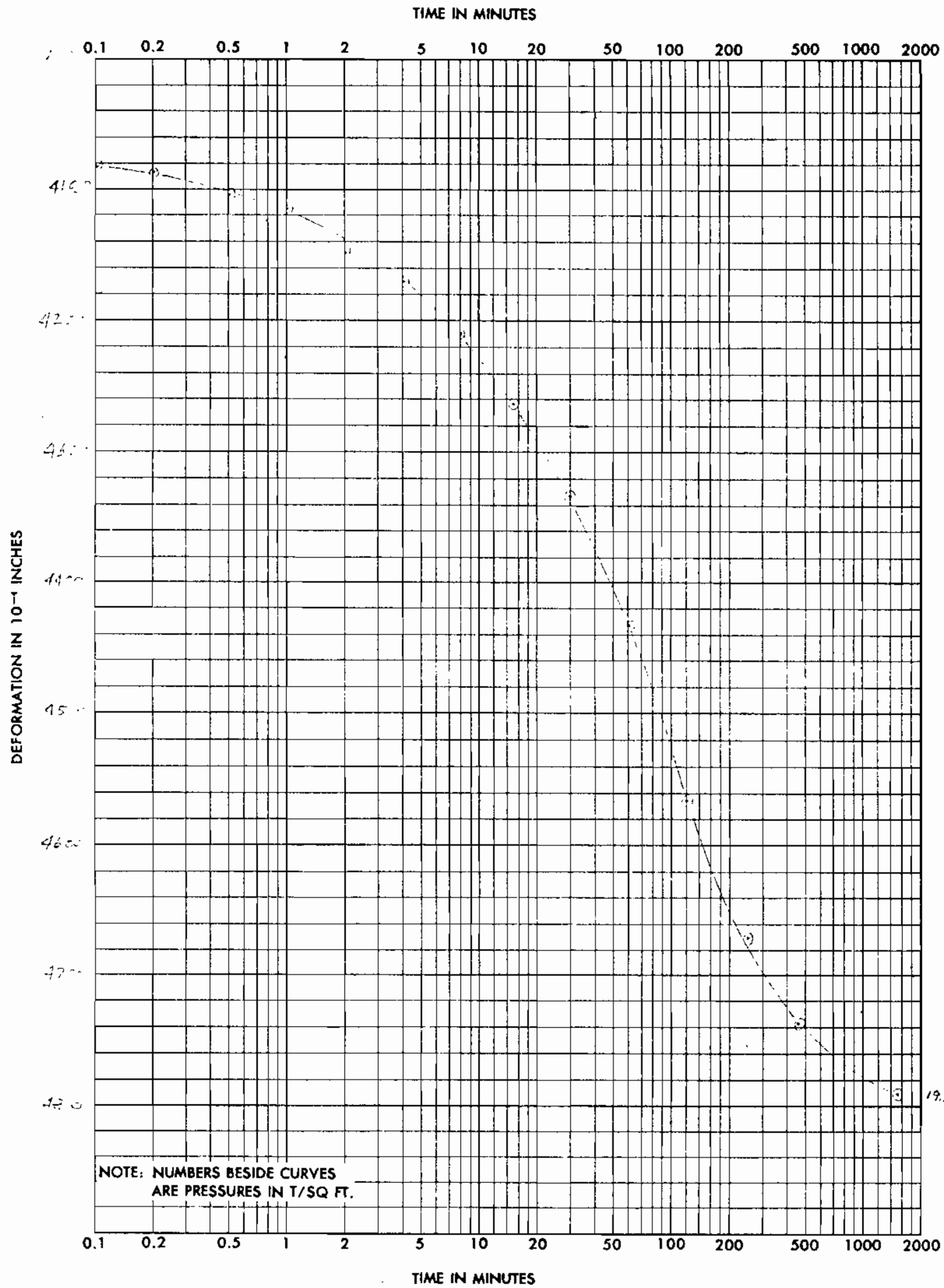
AREA IHNC(OUTFALL CANALS) ALONG 17th ST. CANAL (GDM#2, SUPP.#5)

BORING NO. 6-MUE	SAMPLE NO. 14-C	DEPTH EL -55.5	DATE 15 March 1971

ENG FORM 1 MAY 63 2088 PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

* GPO : 1964 OF—718-965



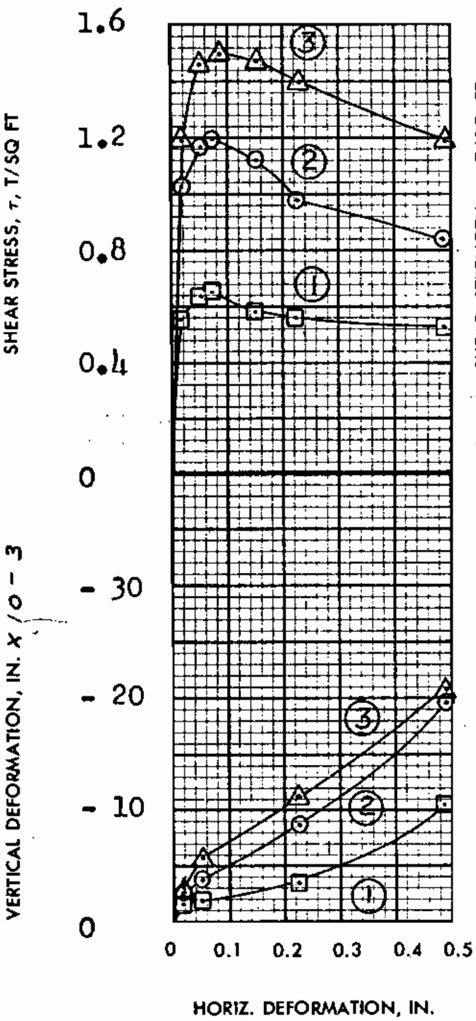
PROJECT LK. PONT., LA. & VIC. - HURR. PROT. '71 ORLEANS PAR. L.F. LEV.

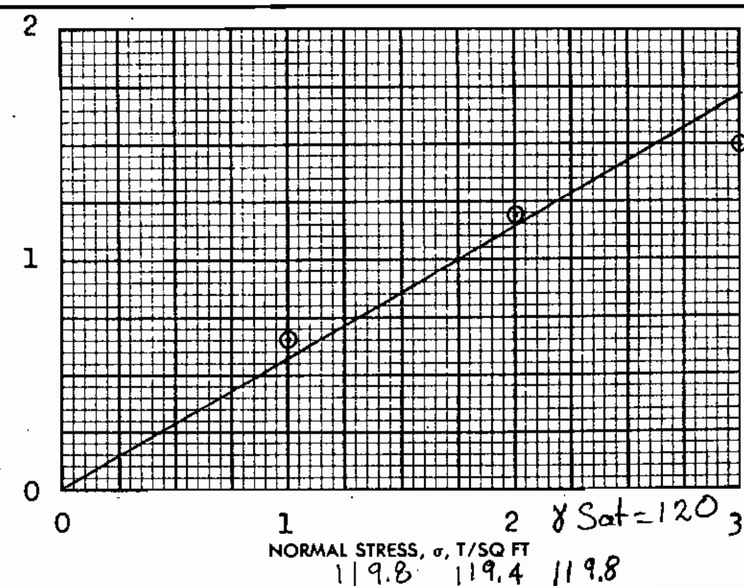
AREA WEST OF IHNC(OUTFALL CANALS) ALONG 17th ST. CANAL(GDM#2,SUPP.#5)

BORING NO. 6-MUE SAMPLE NO. 14-C DEPTH EL -55.5 DATE 15 March 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

☆ GPO : 1964 OF—715-985





SHEAR STRENGTH PARAMETERS

ϕ' = 30°

TAN ϕ' = .581

c' = 0 T/SQ FT

☐ CONTROLLED STRESS

☒ CONTROLLED STRAIN

TEST NO.			1	2	3	
INITIAL	WATER CONTENT	w_o	19.0 %	18.9 %	18.8 %	18.9 %
	VOID RATIO	e_o	0.537	0.525	0.537	
	SATURATION	S_o	95.9 %	97.6 %	94.9 %	%
	DRY DENSITY, LB/CU FT	γ_d	110.1	110.9	110.1	
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}	1	1	2	
FINAL	WATER CONTENT	w_f	21.0 %	19.6 %	19.3 %	%
	VOID RATIO	e_f				
	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.65	1.19	1.50	
ACTUAL TIME TO FAILURE, MIN		t_f	480	480	540	
RATE OF STRAIN, IN./MIN			.00018	.00018	.00018	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

TYPE OF SPECIMEN UNDISTURBED		3.00 IN. SQUARE		0.540 IN. THICK
CLASSIFICATION SANDY CLAY(CL),gray, fissured				
LL 44	PL 15	PI 29		G_s 2.71

REMARKS

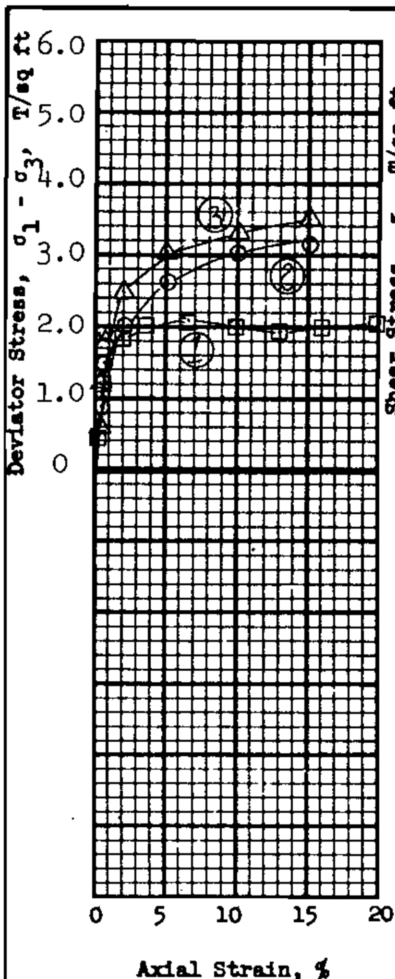
PROJECT LK.PONT.LA.,&VIC.-HURR.PROT.-1971

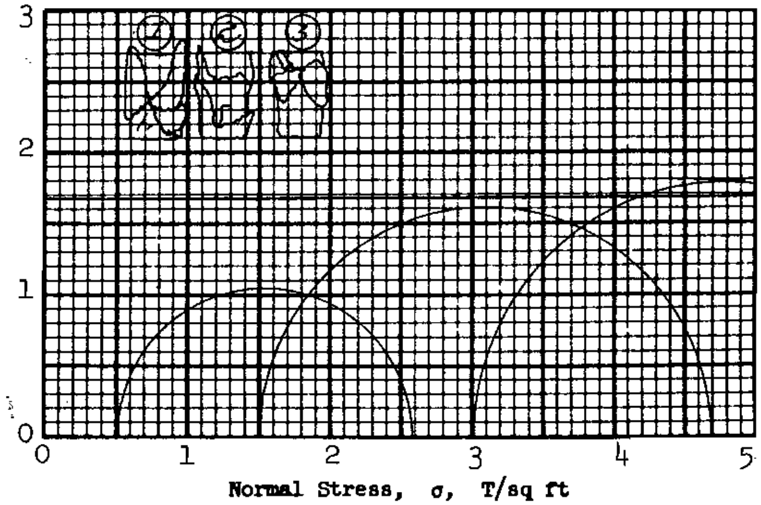
AREA ORLEANS PARISH LK.FT.LEVEE WEST OF IHNC(OUT-FALL CANALS) ALONG 17THSTCANAL(GDM#2,SUPP#5

BORING NO. 6-MUE | SAMPLE NO. 16-B

~~DEPTH~~ EL - 62.0 | DATE 17 March 1971

GDA **DIRECT SHEAR TEST REPORT**





Test No.			1	2	3	
Initial	Water content	w_o	22.3 %	19.8 %	20.8 %	21.96 %
	Void ratio	e_o	0.621	0.567	0.592	
	Saturation	S_o	97.0 %	94.3 %	94.9 %	%
	Dry density, lb/cu ft	γ_d	104.0	107.6	105.9	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	2.08	3.19	3.53	
Time to failure, min		t_f	42	68	30	
Rate of strain, percent/min			0.154	0.221	0.500	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.40	1.40	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 1.68 T/sq ft

Method of saturation ______

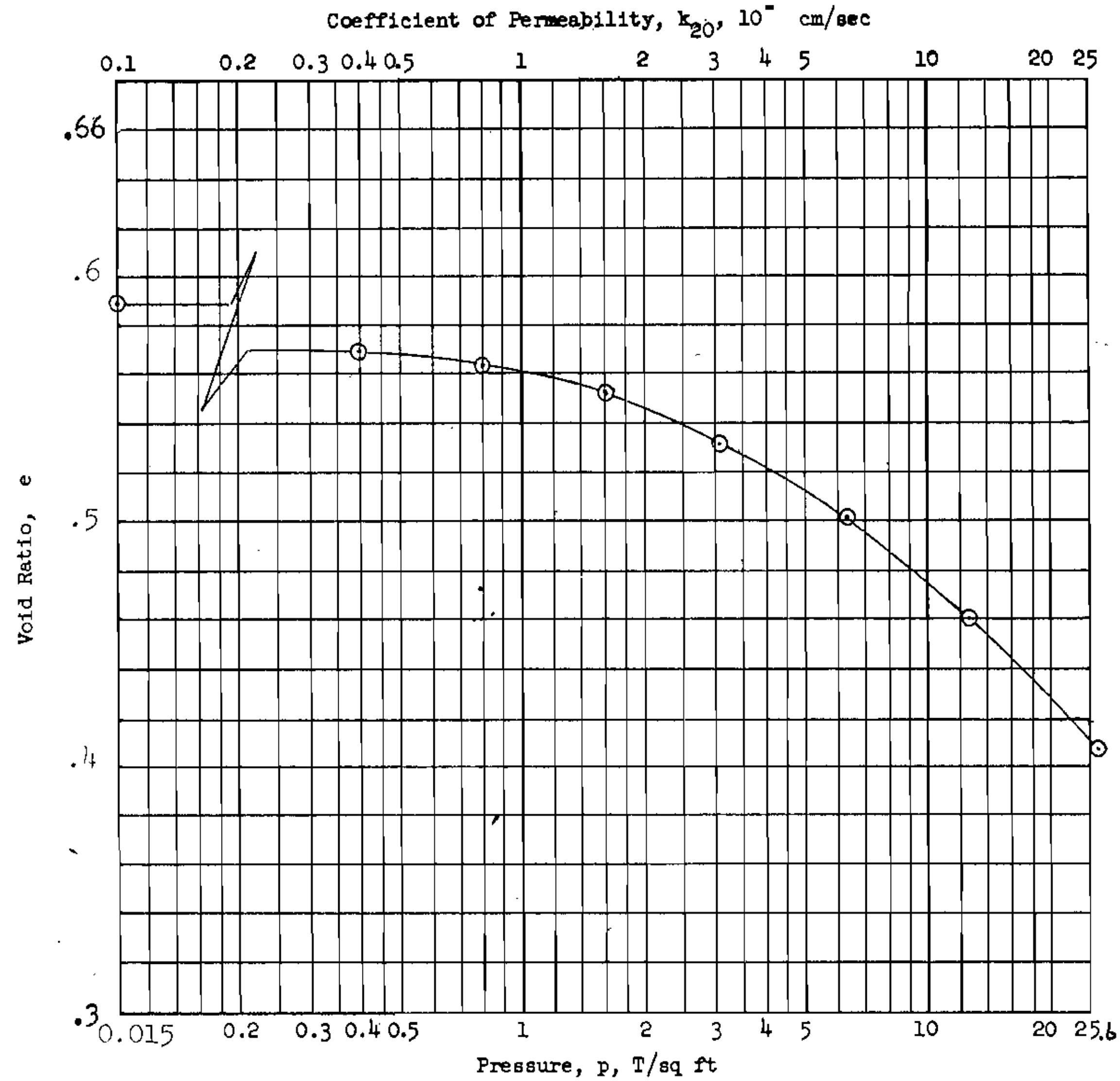
☐ Controlled stress

☒ Controlled strain

Type of test Q	Type of specimen UNDISTURBED		
Classification PLASTIC CLAY(CH), gray, contains iron oxide concretions			
LL 51	PL 18	PI 33	G_s 2.70

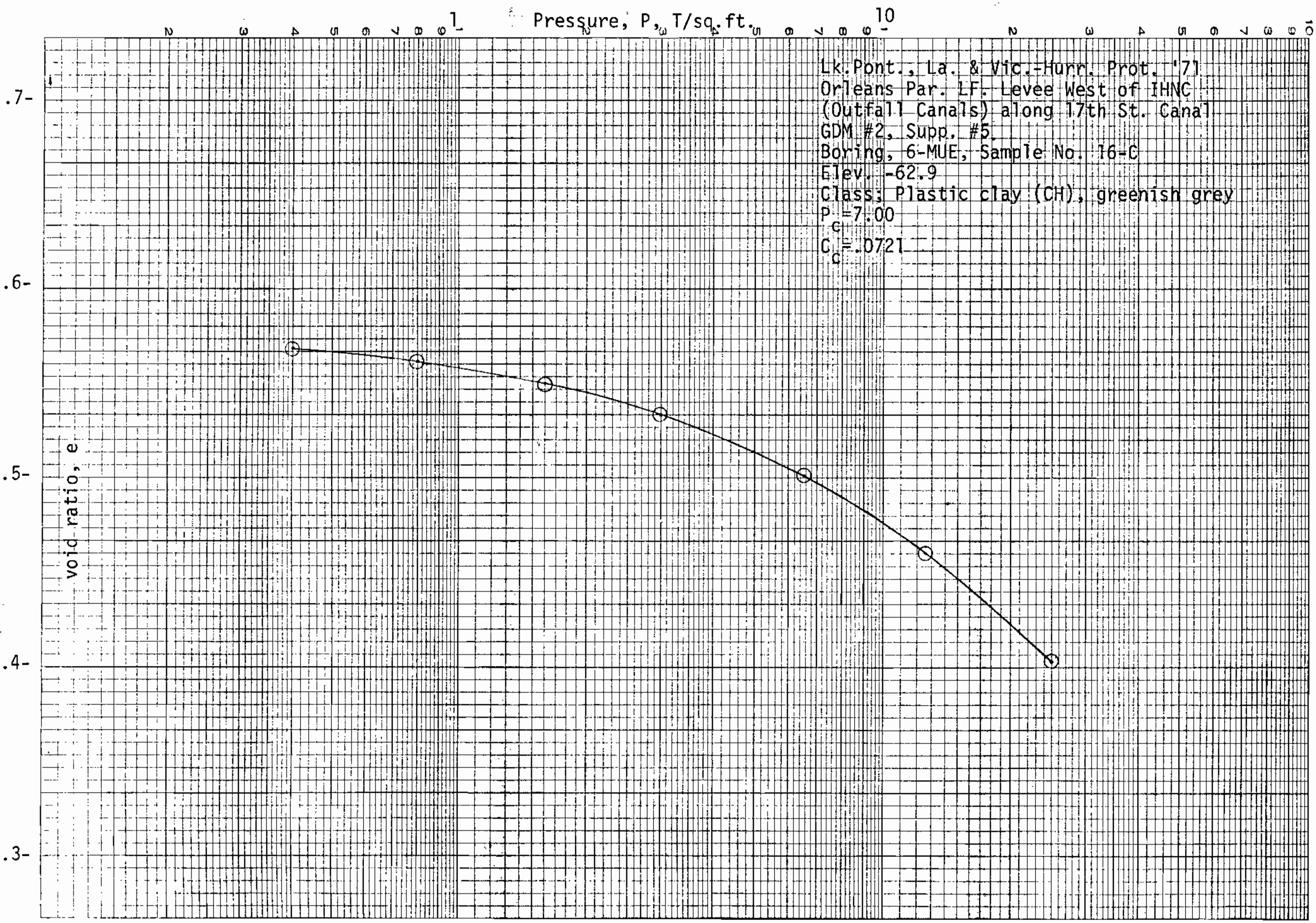
Remarks Insufficient material to perform check test

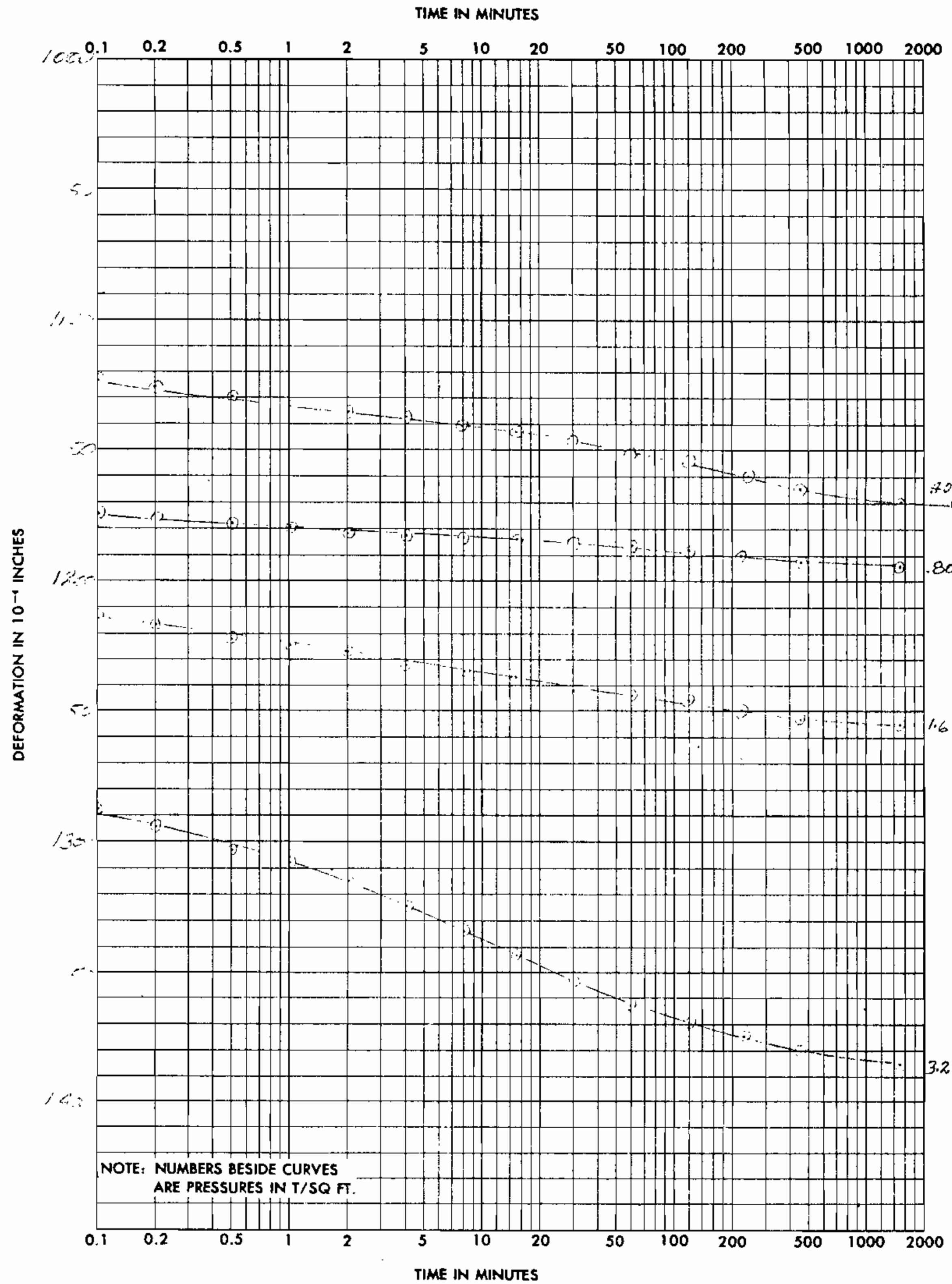
Project LK. PONT. LA. & VIC.-HURR. PROT.-'71	
Area ORLEANS PARISH L.F. LEVEE WEST OF IHNC(OUT-FALL CANALS)ALONG 17thST. CANAL(GDM#2, SUPP. 5)	
Boring No. 6-MUE	Sample No. 16-C
~~Depth~~ El -62.9	Date 10 March 1971
OHR	TRIAXIAL COMPRESSION TEST REPORT



Type of Specimen UNDISTURBED		Before Test		After Test
Diam 4.25 in.	Ht 1.159 in.	Water Content, w_o	21.0 %	w_f %
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	0.590	e_f
Preconsol. Pressure, p_c T/sq ft		Saturation, S_o	95.7 %	S_f %
Compression Index, C_c		Dry Density, γ_d	105.9 lb/ft^3	
Classification PLASTIC CLAY(CH),*		k_{20} at e_o = × 10^{-} cm/sec		
LL -	G_s 2.70 From Q	Project LK.PONT.,LA.&VIC.-HURR. PROT.-'71		
PL -	D_{10}	ORLEANS PAR. LF. LEVEE WEST OF IHNC(OUTFALL		
Remarks *greenish gray		Area CANALS)ALONG 17th ST.CANAL(GDM#2,SUPP.#5)		
		Boring No. 6-MUE	Sample No. 16-C	
		Depth El -62.9	Date 19 March 1971	

CONSOLIDATION TEST REPORT


Pressure, P, T/sq. ft.
1
10
void ratio, e
.7-
.6-
.5-
.4-
.3-
Lk.Pont., La. & Vic.-Hurr. Prot. '71
Orleans Par. LF. Levee West of IHNC
(Outfall Canals) along 17th St. Canal
GDM #2, Supp. #5
Boring, 6-MUE, Sample No. 16-C
Elev. -62.9
Class: Plastic clay (CH), greenish grey
P_c=7.00
C_c=.0721

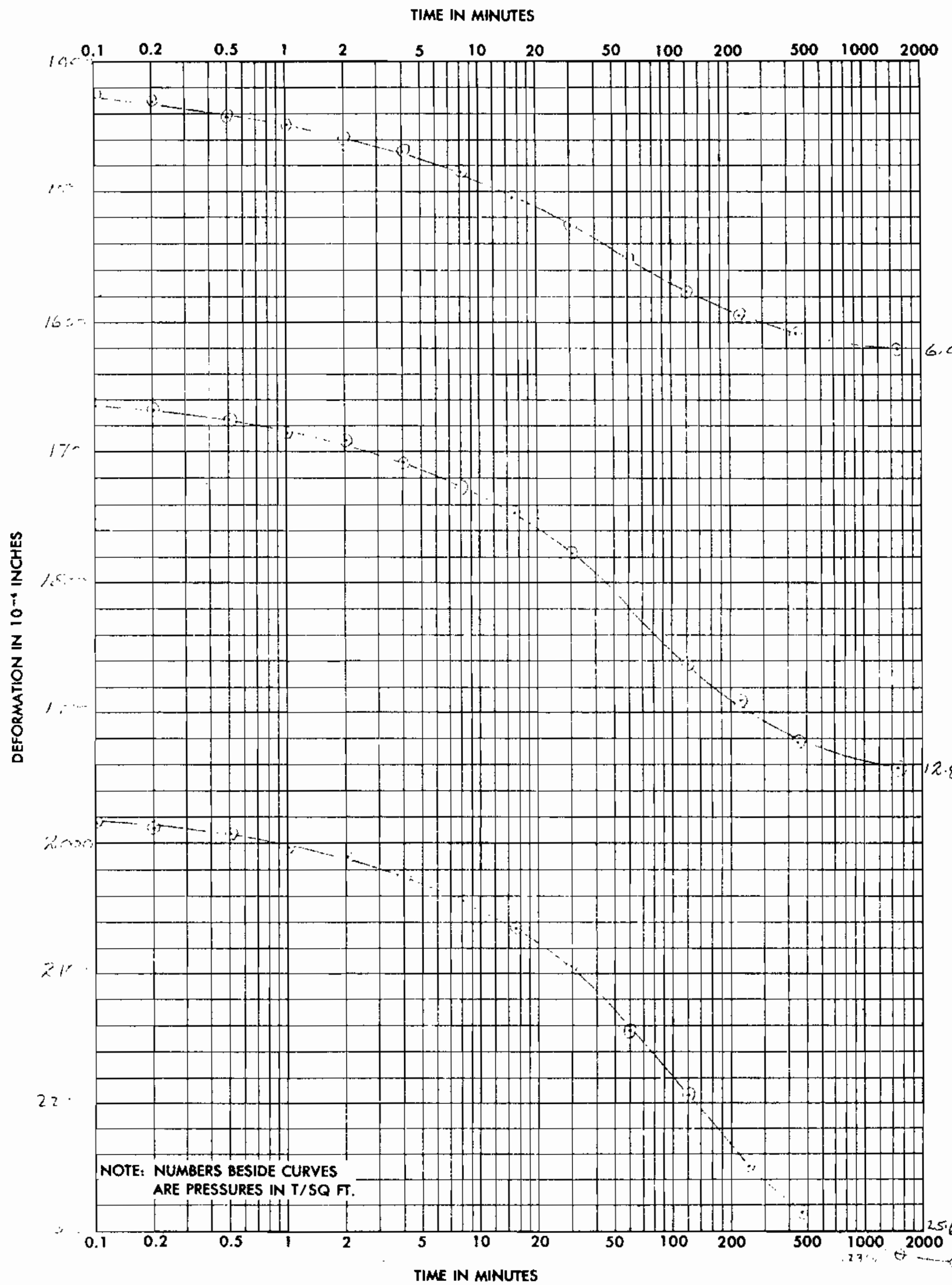


PROJECT LK.PONT.LA.,&VIC.-HURR. PROT.-'71 ORLEANS PARISH LAKEFRONT LEVEE

AREA WEST OF IHNC(OUTFALL CANALS)ALONG 17th ST. CANAL(GDM#2,SUPP.#5)

BORING NO. 6-MUE | SAMPLE NO. 16-C | DEPTH EL -62.9 | DATE 19 March 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)



PROJECT LK. PONT. LA., &VIC.-HURR. PROT.-'71 ORLEANS PARISH LAKEFRONT LEVEE

AREA WEST OF IHNC(OUTFALL CANALS)ALONG 17th ST. CANAL(GDM#2, SUPP.#5)

BORING NO. 6-MUE	SAMPLE NO. 16-C	~~DEPTH~~ EL -62.9	DATE 19 March 1971

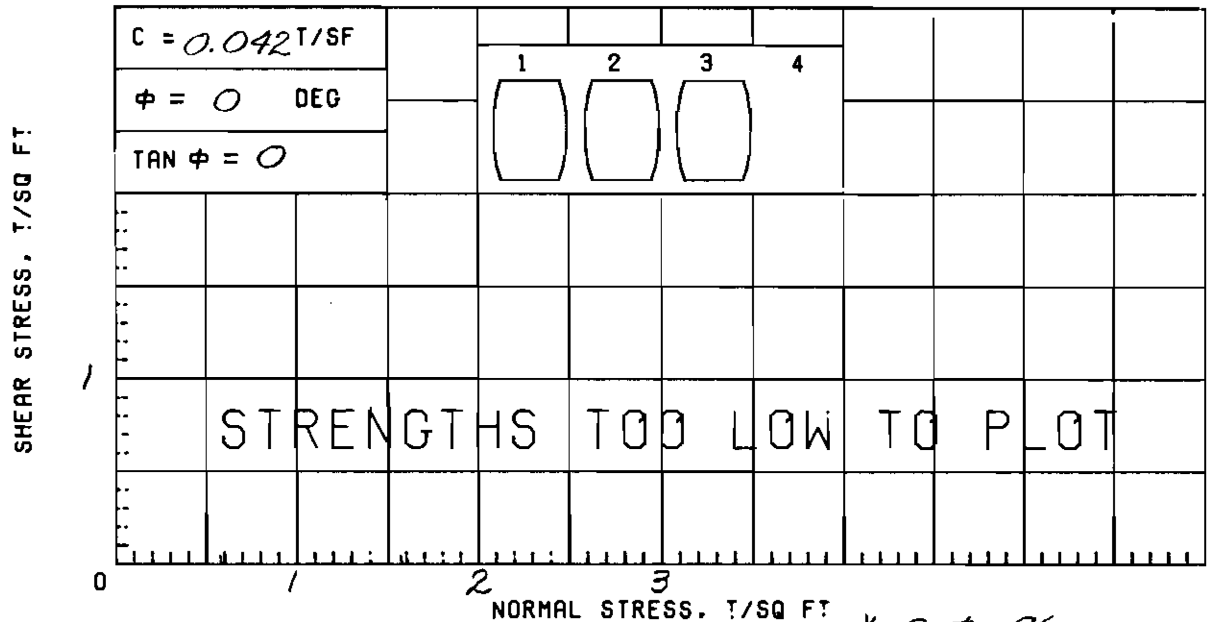
ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

* GPO : 1964 OF—718-965

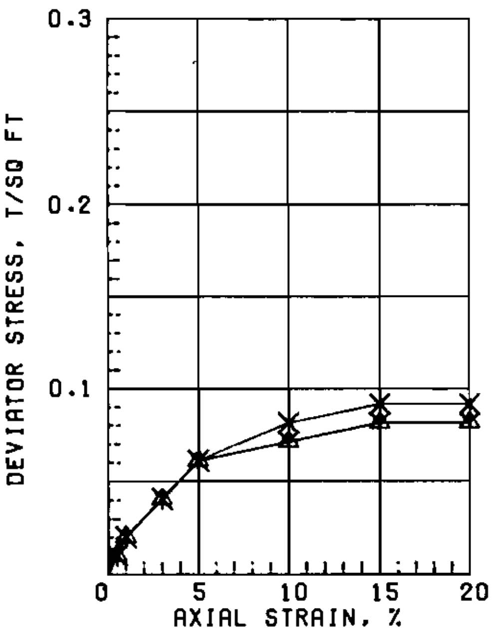
C = 0.042 T/SF

Φ = 0 DEG

TAN Φ = 0



γ Sat = 96



	SPECIMEN NO.	△1	Y2	X3	4
INITIAL	WATER CONTENT, %	80.1	76.4	80.4	Avg. 79.0
	DRY DENSITY, PCF	52.9	55.2	52.7	
	SATURATION, %	98.9	100+	98.9	
	VOID RATIO	2.186	2.052	2.196	
BEFORE SHEAR	WATER CONTENT, %				
	DRY DENSITY, PCF				
	SATURATION, %				
	VOID RATIO				
	BACK PRESS., TSF				
	MIN PRIN. STRESS, TSF	0.5	1.5	3.0	
	MAX. DEV. STRESS, TSF	0.08	0.08	0.09	
	TIME TO FAILURE, MIN.	30	30	30	
	RATE OF STRAIN INCR.%				
	INITIAL DIAMETER, IN.	1.39	1.39	1.39	
	INITIAL HEIGHT, IN.	3.00	3.00	3.00	

CONTROLLED-STRAIN TEST

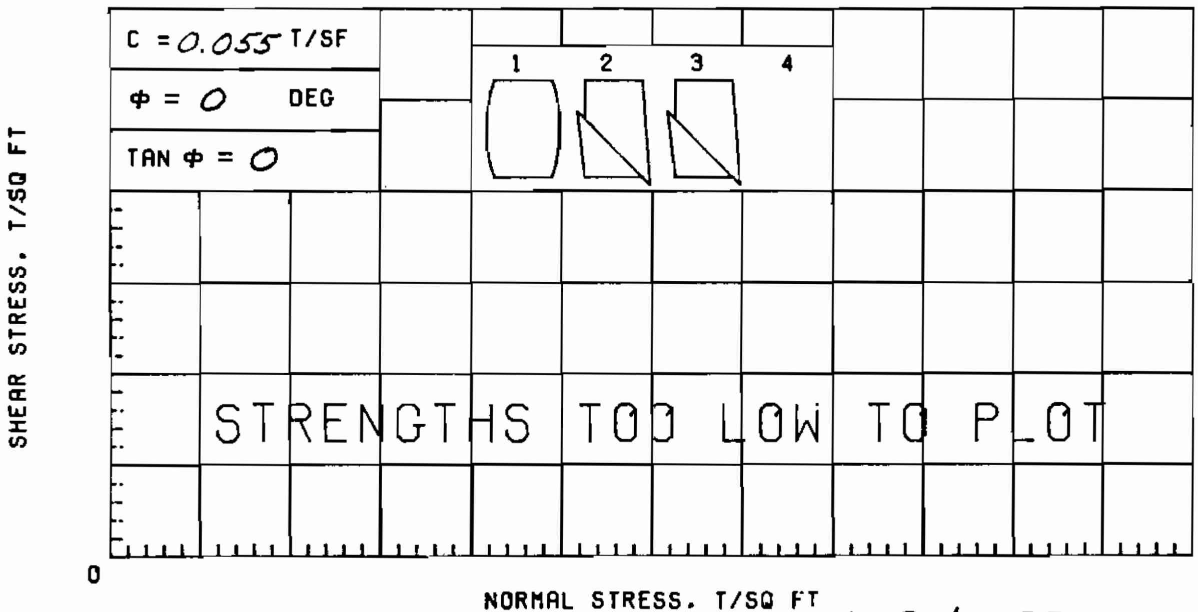
DESCRIPTION OF SPECIMENS; PLASTIC CLAY (CH), GRAY

LL 69	PL 20	PI 49	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

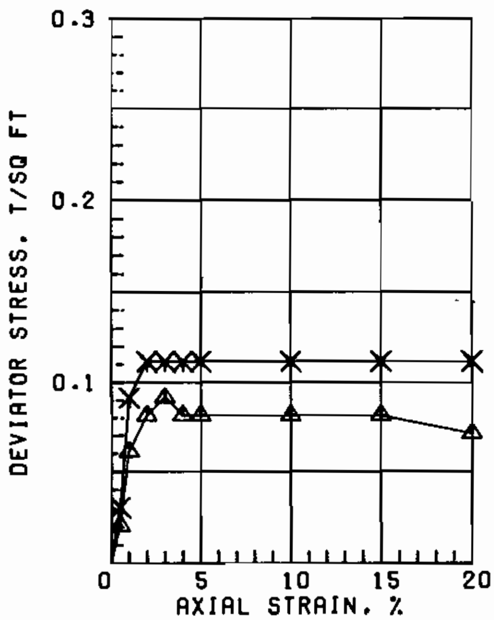
REMARKS;

PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING NO. 1-MUG	SAMPLE NO. 2-B
DEPTH/ELEV 5.0/-12.2	TECH. KOC
LABORATORY USAE WES	DATE 14 AUG 86

TRIAXIAL COMPRESSION TEST REPORT



γ Sat. = 97



SPECIMEN NO.		Δ1	Y2	X3	4
INITIAL	WATER CONTENT, %	77.3	77.4	76.4	
	DRY DENSITY, PCF	54.3	54.1	55.2	
	SATURATION, %	99.3	98.8	100+	
	VOID RATIO	2.102	2.116	2.053	
BEFORE SHEAR	WATER CONTENT, %				
	DRY DENSITY, PCF				
	SATURATION, %				
	VOID RATIO				
	BACK PRESS., TSF				
MIN PRIN. STRESS, TSF		0.5	1.5	3.0	
MAX. DEV. STRESS, TSF		0.09	0.11	0.11	
TIME TO FAILURE, MIN.		6	12	12	
RATE OF STRAIN INCR.%			6	6	
INITIAL DIAMETER, IN.		1.39	1.39	1.39	
INITIAL HEIGHT, IN.		3.00	3.00	3.00	

Avg. 77.0

CONTROLLED-STRAIN TEST

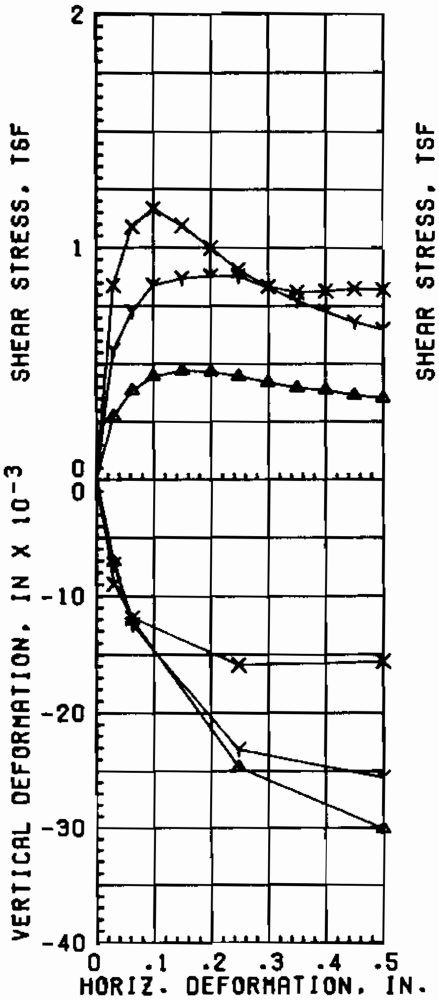
DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), GRAY; SILT LENSES

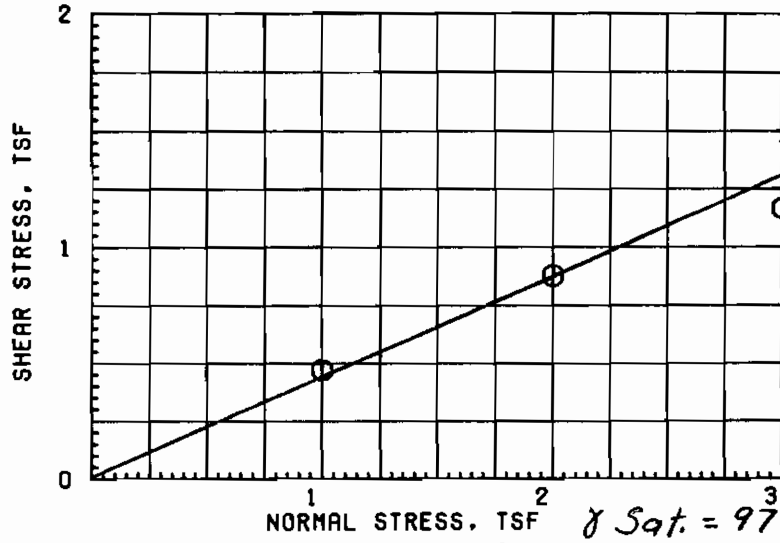
LL 70	PL 22	PI 48	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS:

PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING NO. 1-MUG	SAMPLE NO. 3-C
DEPTH/ELEV 9.6/-16.8	TECH. KOC
LABORATORY USAE WES	DATE 14 AUG 86

TRIAXIAL COMPRESSION TEST REPORT





γ Sat. = 97
97.8 97.0 96.7

		TEST NO.	1 ▲	2 Y	3 X	Avg.
INITIAL		WATER CONTENT, %	73.2	72.3	70.3	71.9
		VOID RATIO	1.993	2.071	2.105	
		SATURATION, %	99.2	94.3	90.1	
		DRY DENSITY, PCF	56.3	54.9	54.3	
VOID RATIO AFTER CONSOL						
FIFTY PERCENT CONSOL, MIN			< 1	< 1	< 1	
FINAL		WATER CONTENT, %	47.7	42.8	45.0	
		VOID RATIO				
		SATURATION, %				
NORMAL STRESS, TSF			1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, TSF			0.47	0.88	1.16	
TIME TO FAILURE, MIN			805	1073	537	
RATE OF STRAIN, IN/MIN			.00019	.00019	.00019	
ULTIMATE SHEAR STRESS, TSF						

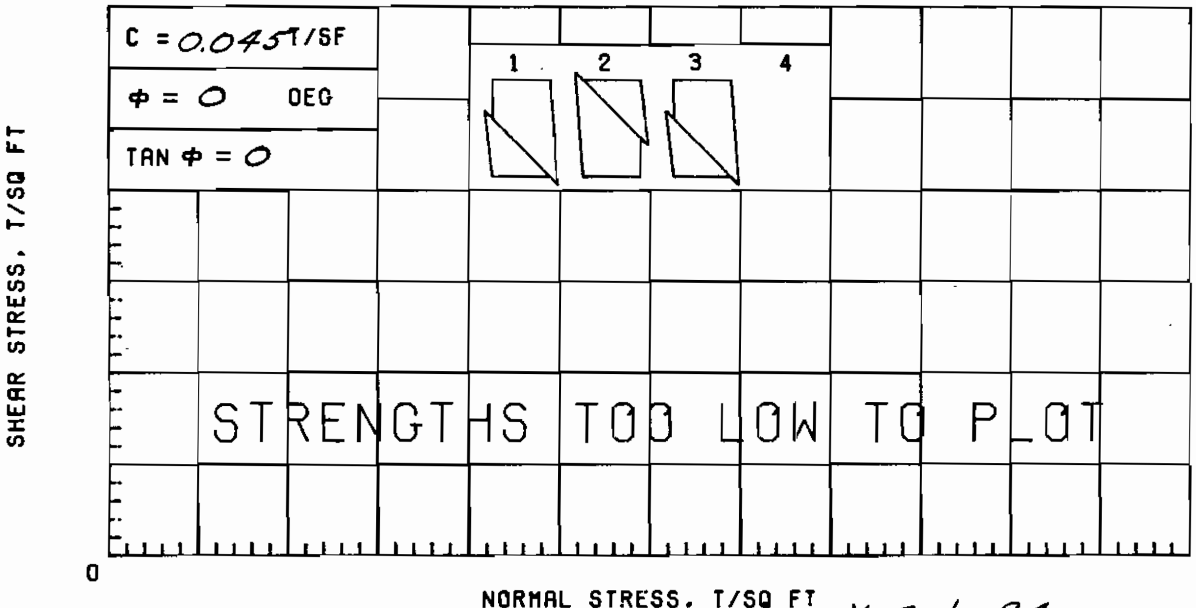
Φ = 24°

TAN Φ = 0.445

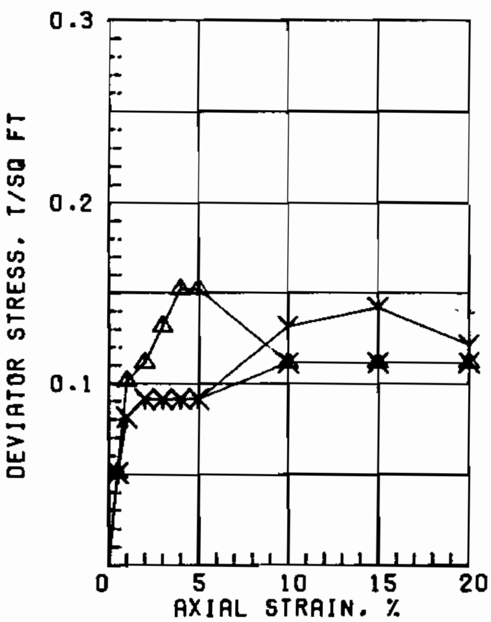
C = 0

TYPE SPECIMEN UNDISTURBED		3.00 IN. SQUARE		0.744 IN. THICK
CLASSIFICATION PLASTIC CLAY (CH), GRAY				
LL	PL	PI		GS 2.70 (EST)
REMARKS:		PROJECT LK PONT LA & VIC HURR PROT		
		ORLEANS PARISH OUTFALL CANALS		
		BORING NO. 1MUG		SAMPLE 3-C
		DEPTH/ELEV 10.1/-17.3		DATE 28 JUL 86

DIRECT SHEAR TEST REPORT



γ Sat. = 94



SPECIMEN NO.		Δ1	Y2	X3	4
INITIAL	WATER CONTENT, %	87.8	88.4	85.4	
	DRY DENSITY, PCF	50.3	50.0	51.1	
	SATURATION, %	100+	100+	100+	
	VOID RATIO	2.350	2.372	2.297	
BEFORE SHEAR	WATER CONTENT, %				
	DRY DENSITY, PCF				
	SATURATION, %				
	VOID RATIO				
	BACK PRESS., TSF				
MIN PRIN. STRESS, TSF		0.5	1.5	3.0	
MAX. DEV. STRESS, TSF		0.15	0.09	0.09	
TIME TO FAILURE, MIN.		8	12	12	
RATE OF STRAIN INCR.%		[illegible]	6	6	
INITIAL DIAMETER, IN.		1.39	1.39	1.39	
INITIAL HEIGHT, IN.		3.00	3.00	3.00	

Avg. 87.2

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), GRAY

LL 89	PL 23	PI 66	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS:

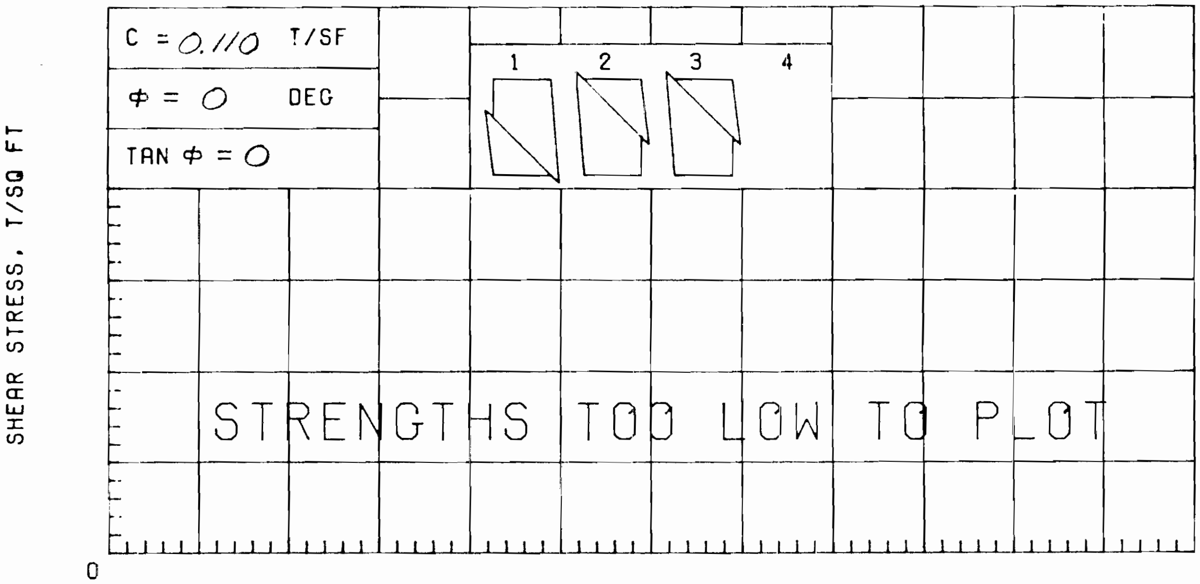
PROJECT	LK PONT LA & VIC HURR PROT
	ORLEANS PARISH OUTFALL CANALS
BORING NO. 1-MUG	SAMPLE NO. 4-8
DEPTH/ELEV 13.0/-20.2	TECH. KOC
LABORATORY USAE WES	DATE 15 AUG 86

TRIAXIAL COMPRESSION TEST REPORT

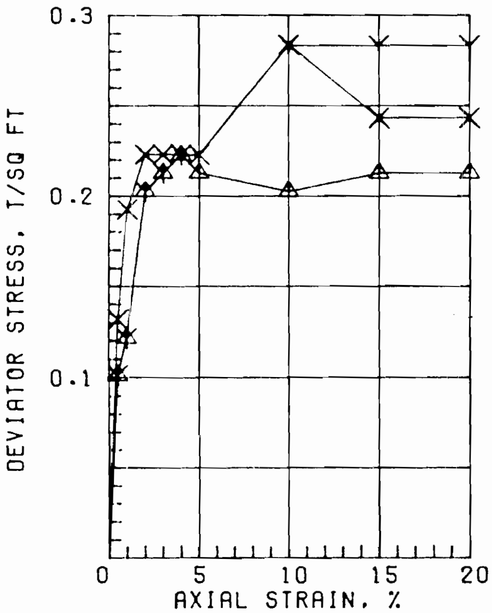
C = 0.110 T/SF

Φ = 0 DEG

TAN Φ = 0



γ Sat. = 105



	SPECIMEN NO.	△1	Y2	X3	4
INITIAL	WATER CONTENT, %	49.8	48.3	59.3	
	DRY DENSITY, PCF	69.3	71.3	63.9	
	SATURATION, %	93.9	95.6	97.7	
	VOID RATIO	1.432	1.365	1.639	
BEFORE SHEAR	WATER CONTENT, %				
	DRY DENSITY, PCF				
	SATURATION, %				
	VOID RATIO				
	BACK PRESS., TSF				
MIN PRIN. STRESS, TSF		0.5	1.5	3.0	
MAX. DEV. STRESS, TSF		0.22	0.22	0.22	
TIME TO FAILURE, MIN.		8	24	12	
RATE OF STRAIN INCR,%			6	6	
INITIAL DIAMETER, IN.		1.39	1.39	1.39	
INITIAL HEIGHT, IN.		3.00	3.00	3.00	

Avg. 52.5

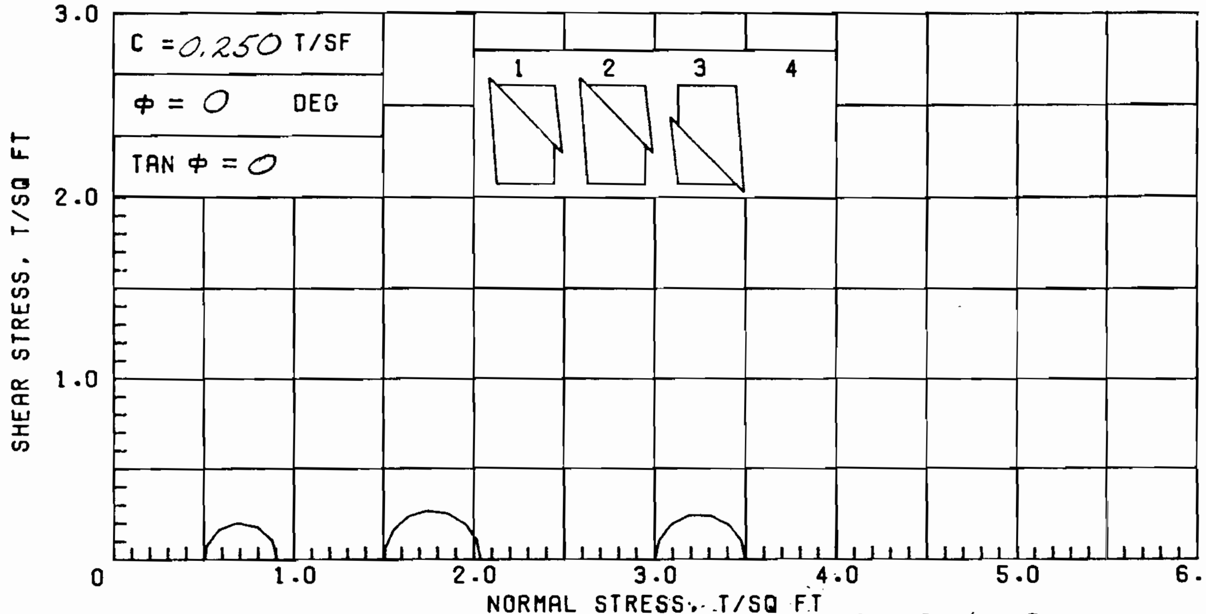
220

CONTROLLED-STRAIN TEST

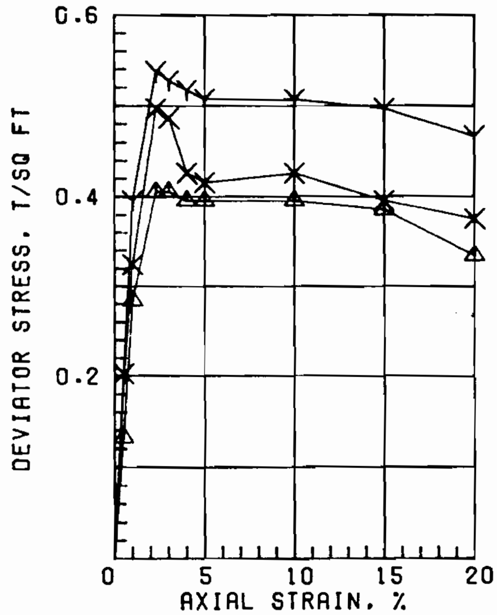
DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), GRAY; SILT POCKETS; SHELL PARTICLES

LL 48	PL 16	PI 32	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS;	PROJECT LK PONT LA & VIC HURR PROT	
LIMITS ON MIXTURE OF MATERIAL.	ORLEANS PARISH OUTFALL CANALS	
	BORING NO. 1-MUG	SAMPLE NO. 5-B
	DEPTH/ELEV 16.7/-23.9	TECH. KOC
	LABORATORY USAE WES	DATE 15 AUG 86
	TRIAXIAL COMPRESSION TEST REPORT	



γ Sat. = 96



	SPECIMEN NO.	△1	Y2	X3	4
INITIAL	WATER CONTENT, %	75.8	75.5	76.4	
	DRY DENSITY, PCF	54.5	52.7	53.7	
	SATURATION, %	97.7	92.6	96.5	
	VOID RATIO	2.095	2.202	2.138	
BEFORE SHEAR	WATER CONTENT, %				
	DRY DENSITY, PCF				
	SATURATION, %				
	VOID RATIO				
	BACK PRESS., TSF				
MIN PRIN. STRESS, TSF		0.5	1.5	3.0	
MAX. DEV. STRESS, TSF		0.41	0.54	0.50	
TIME TO FAILURE, MIN.		5	14	14	
RATE OF STRAIN INCR.,%			6	6	
INITIAL DIAMETER, IN.		1.39	1.39	1.39	
INITIAL HEIGHT, IN.		3.00	3.00	3.00	

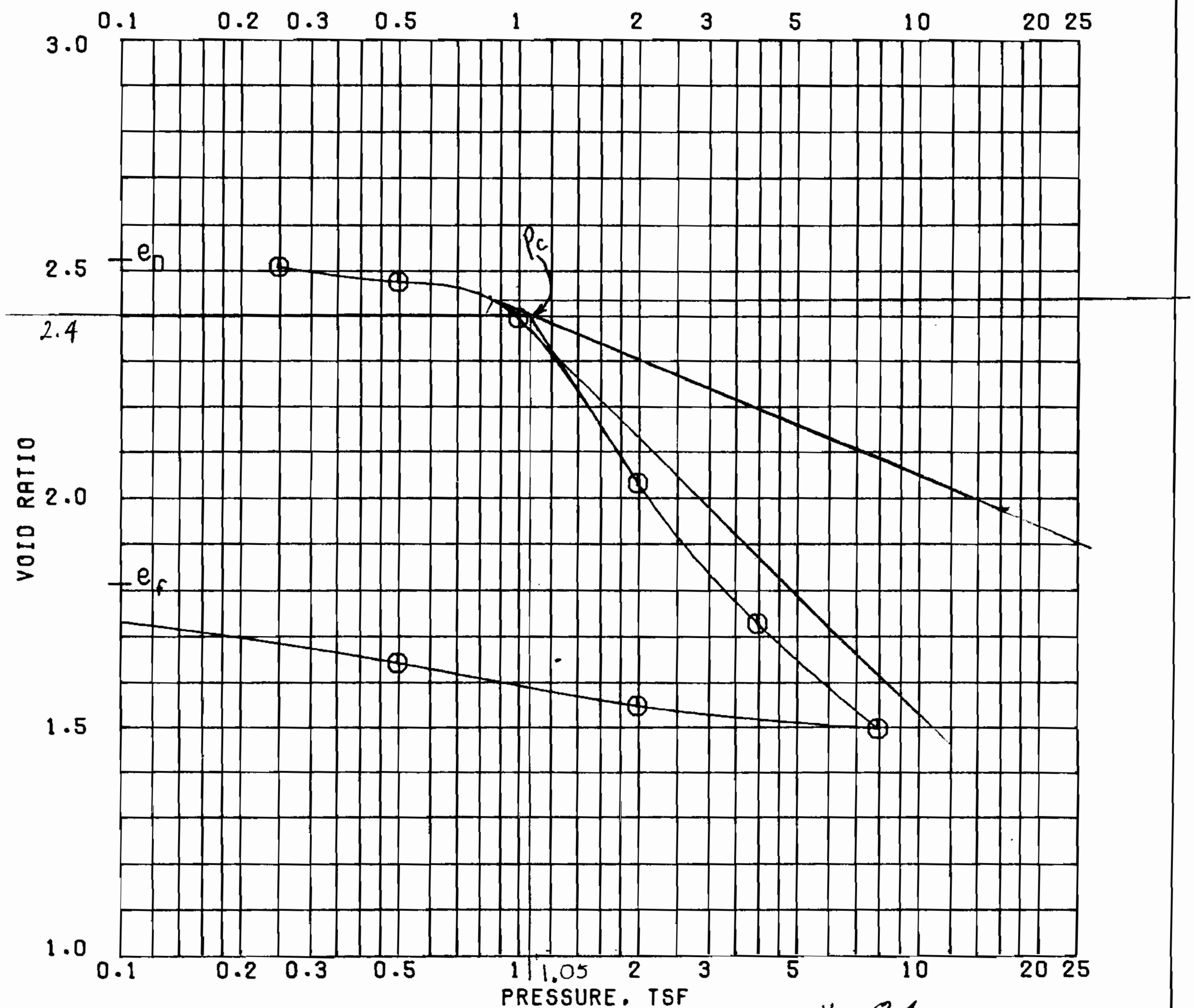
Avg. 75.9

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), GRAY; SILT LAYERS TO 3/4"

LL 68	PL 21	PI 47	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS:	PROJECT LK PONT LA & VIC HURR PROT	
	ORLEANS PARISH OUTFALL CANALS	
	BORING NO. 1-MUG	SAMPLE NO. 9-C
	DEPTH/ELEV 35.0/-42.2	TECH. KOC
	LABORATORY USAE WES	DATE 19 AUG 86
	TRIAXIAL COMPRESSION TEST REPORT	



$\gamma = 84$

			BEFORE TEST	AFTER TEST
OVERBURDEN PRESSURE, TSF		WATER CONTENT, %	63.5	45.7
PRECONSOL. PRESSURE, TSF		DRY DENSITY, PCF	47.9	60.0
COMPRESSION INDEX		SATURATION, %	85.0	85.1
TYPE SPECIMEN	UNDISTURBED	VOID RATIO	2.519	1.810
DIA. IN 4.44	HT. IN 1.119	BACK PRESSURE, TSF		

CLASSIFICATION PLASTIC CLAY (CH), GRAY; SHELL PARTICLES

LL	PL	PI	PROJECT LK PONT LA & VIC HURR PROT
GS 2.70 (EST)	D_{10}		ORLEANS PARISH OUTFALL CANALS
REMARKS		BORING NO. 1-MUG	SAMPLE NO. 10-B
		DEPTH/ELEV 37.7/-44.9	DATE 21 JUL 86

CONSOLIDATION TEST REPORT

Date ______

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 10-B Elev. -44.9 Load Increment 0.063 T.S.F.

$t = .8$

$t/4 = .2$

Dial Reading $DR_1 =$ 1006

Dial Reading $DR_2 =$ 1004

$a = DR_1 - DR_2 =$ 2

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a =$ 1004 − 2 = 1002

$U = 100\%$ from construction $DR_{100} =$ 1008

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1002 + 1008}{2} =$ 1005

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times$ ______ = ______ sec

T_v for $U = 50$ that $= 0.197$

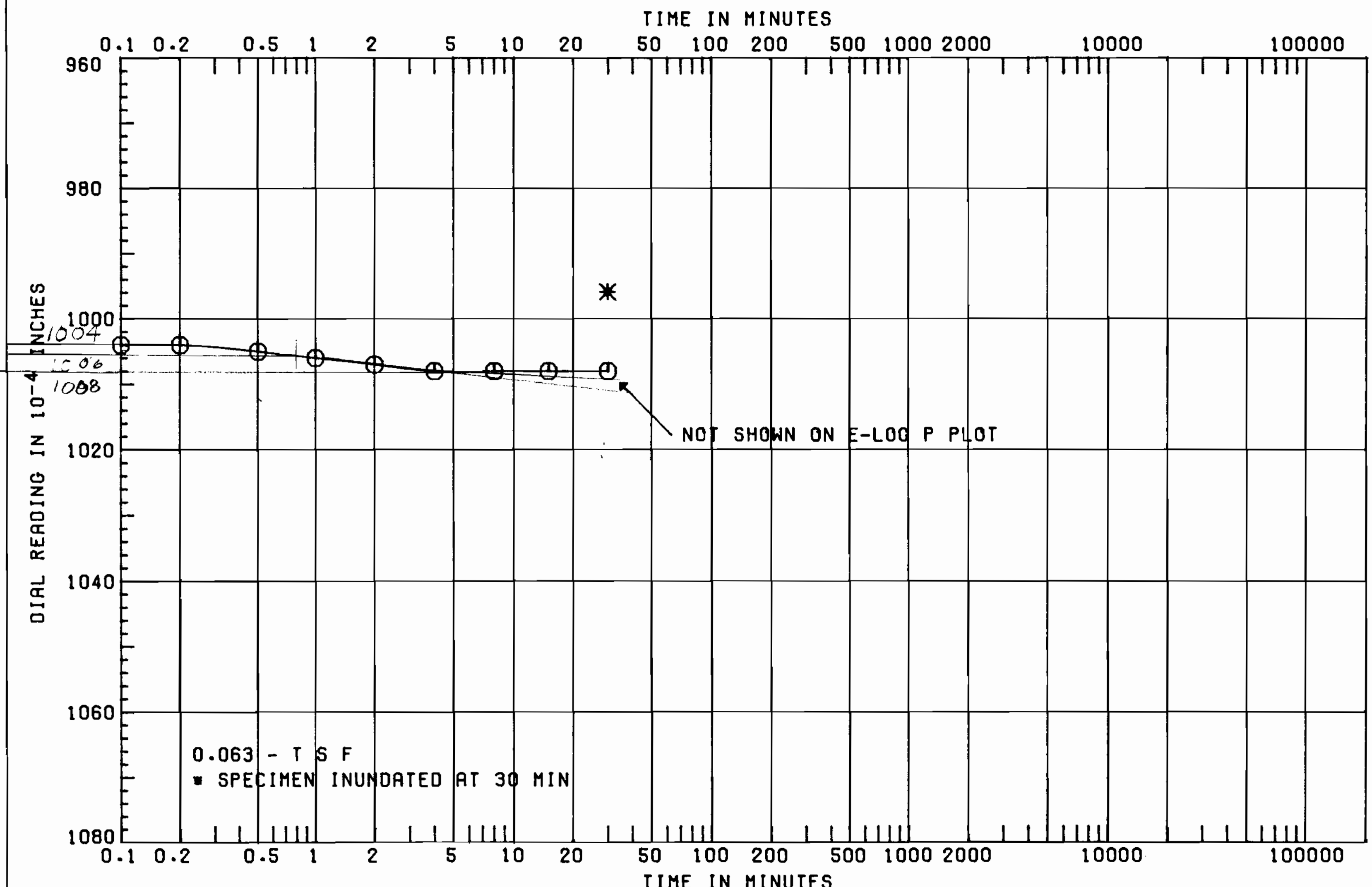
$2H =$ Sample height = 1.119 $-(DR_{50} - DR_0)$

$H =$ $\frac{1.119 - (\quad - \quad)}{2} =$ ______

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

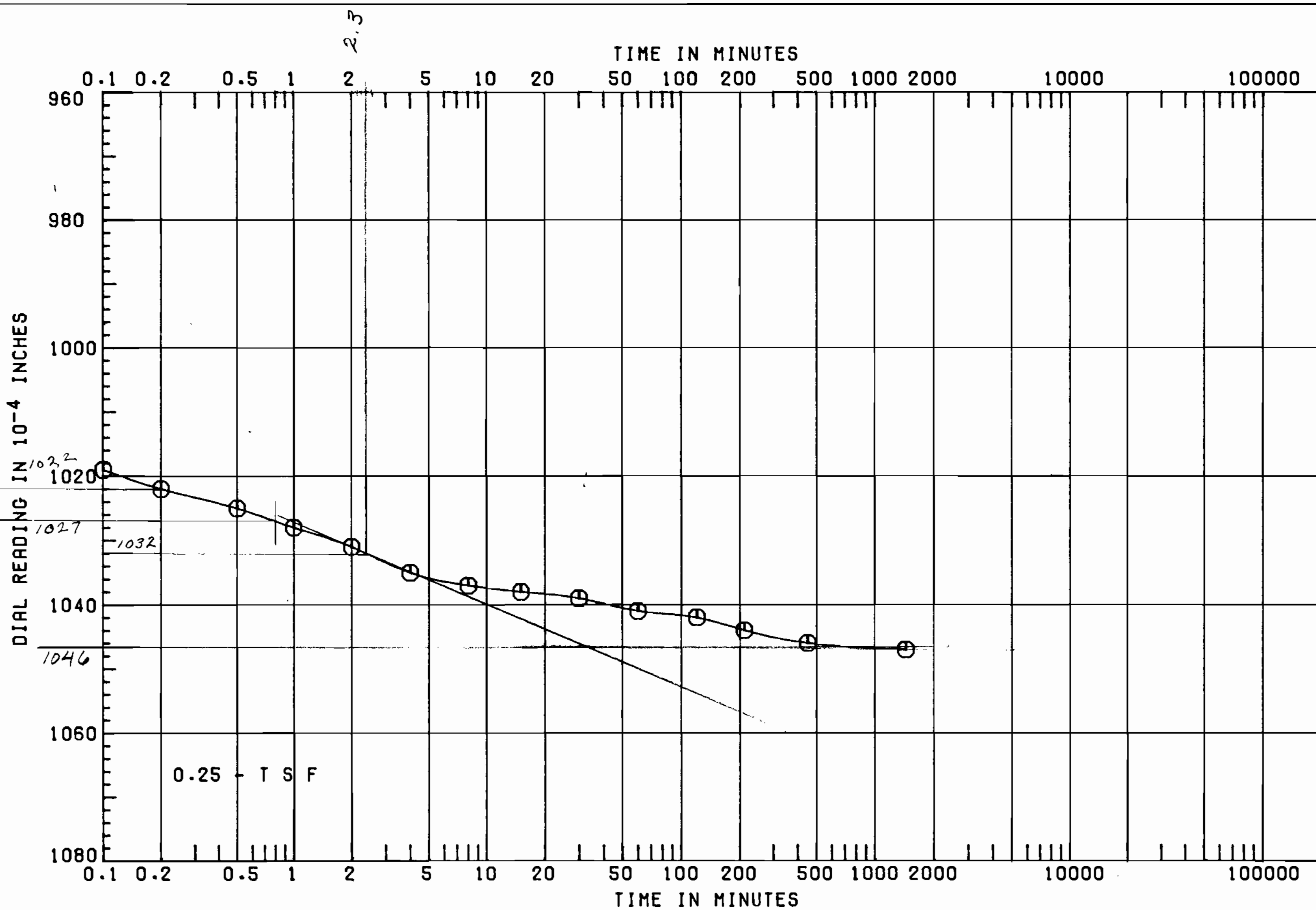
$C_v = 1.271 (\quad)^2 =$ ______ $\frac{cm^2}{yr}$

$C_v \left(\frac{cm^2}{sec}\right) \times 33,945 = C_v \left(\frac{ft^2}{yr}\right) = 33,945 \times$ ______ = ______ $\frac{ft^2}{yr}$



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST TIME CURVES
ORLEANS PARISH OUTFALL CANALS		
BORING 1-MUG	SAMPLE NO. 10-B	
DEPTH/ELEV 37.7/-44.9	DATE 21 JUL 86	

SHEET 2 OF 11



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 10-B
DEPTH/ELEV 37.7/-44.9	DATE 21 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 3 OF 11

Date ______

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 10-B   Elev. -44.9   Load Increment 0.25 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1027$

$t/4 = .2$ Dial Reading $DR_2 = 1022$

$a = DR_1 - DR_2 = 5$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1022 - 5 = 1017$

$U = 100\%$ from construction $DR_{100} = 1046$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1017 + 1046}{2} = 1032$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 2.3 = 138$ sec

T_v for $U = 50$ that $= 0.197$

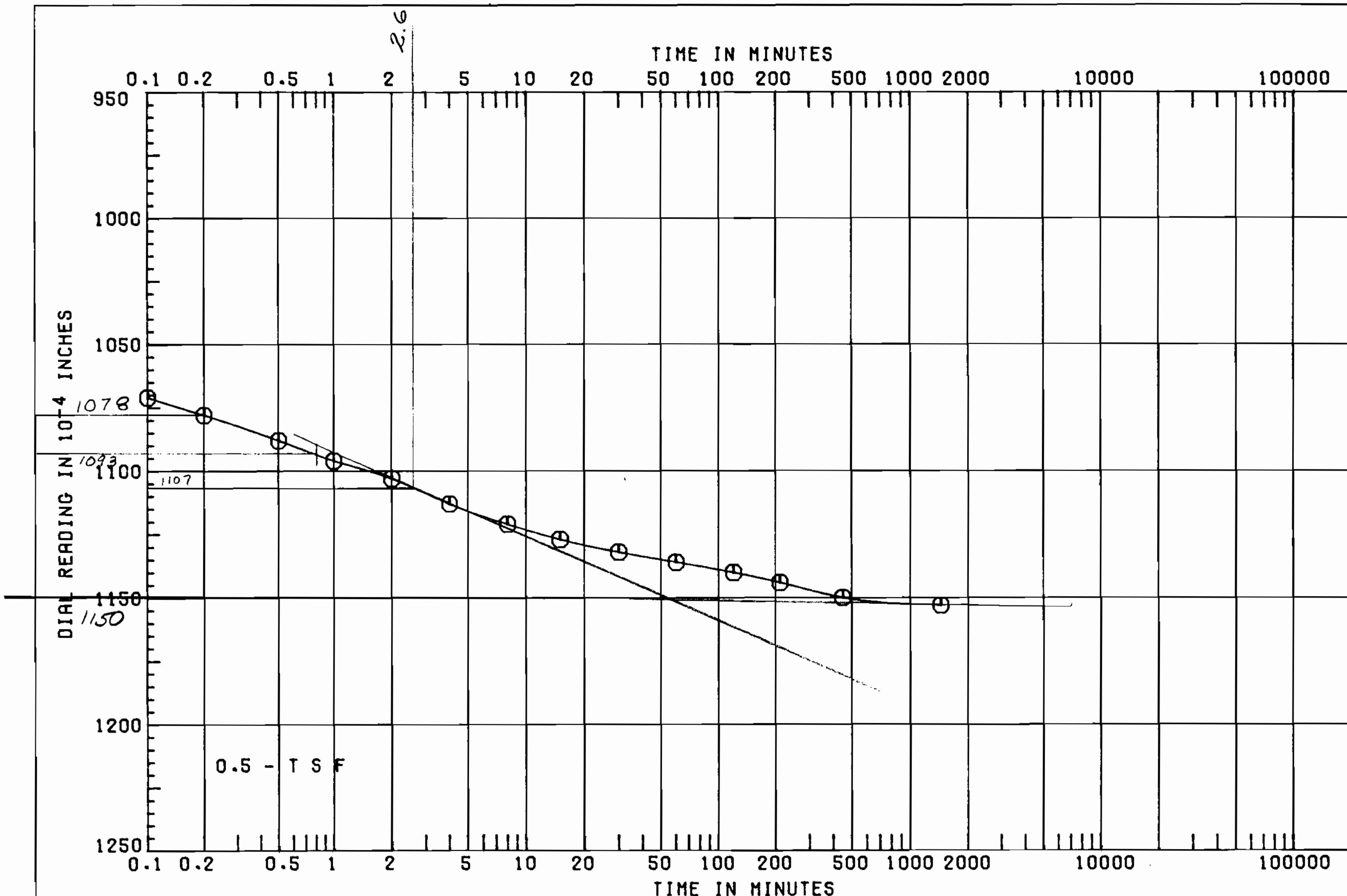
$2H$ = Sample height $= 1.119 - (DR_{50} - DR_0)$

$H = \frac{1.119 - (.1032 - .1017)}{2} = 0.55875$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55875)^2}{138} = 0.00288 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00288 = 97.61 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 10-B
DEPTH/ELEV 37.7/-44.9	DATE 21 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 4 OF 11

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 10-B Elev. -44.9 Load Increment 0.5 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 1093

$t/4 = .2$ Dial Reading $DR_2 =$ 1078

$a = DR_1 - DR_2 =$ 15

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1078 - 15 = 1063$

$U = 100\%$ from construction $DR_{100} =$ 1150

$U = 50\%$ @ $\dfrac{DR_0 + DR_{100}}{2} = DR_{50} = \dfrac{1063 + 1150}{2} = 1107$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 2.6 = 156$ sec

T_v for $U = 50$ that $= 0.197$

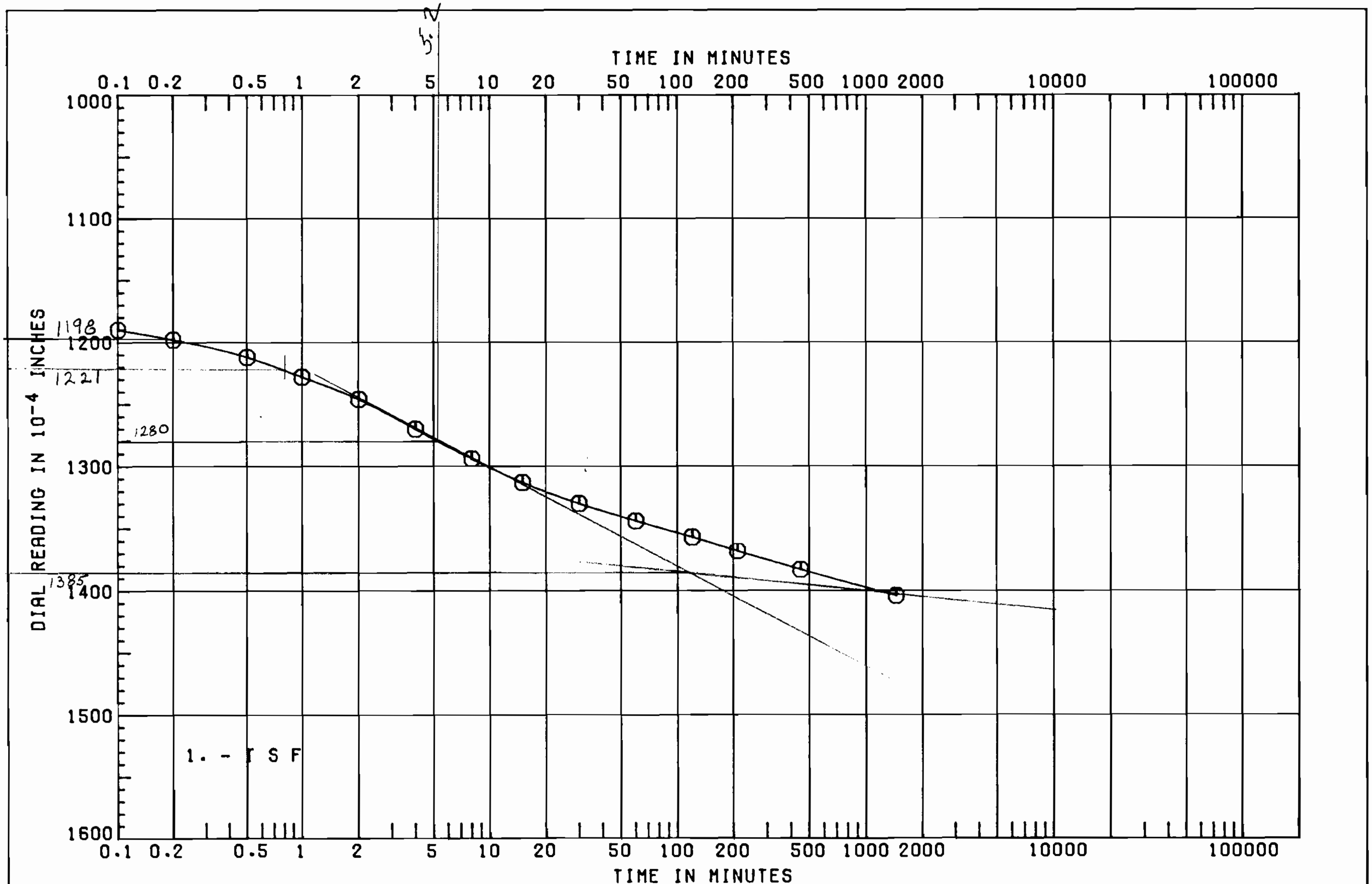
$2H =$ Sample height $= 1.119 - (DR_{50} - DR_0)$

$$H = \frac{1.119 - (.1107 - .1063)}{2} = 0.5573$$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(0.5573)^2}{156} = 0.00253 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00253 = 85.90 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 10-B
DEPTH/ELEV 37.7/-44.9	DATE 21 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 5 OF 11

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 10-B Elev. -44.9 Load Increment 1.0 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1221$

$t/4 = .2$ Dial Reading $DR_2 = 1198$

$a = DR_1 - DR_2 = 23$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1198 - 23 = 1175$

$U = 100\%$ from construction $DR_{100} = 1385$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1175 + 1385}{2} = 1280$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 5.2 = 312$ se

T_v for $U = 50$ that $= 0.197$

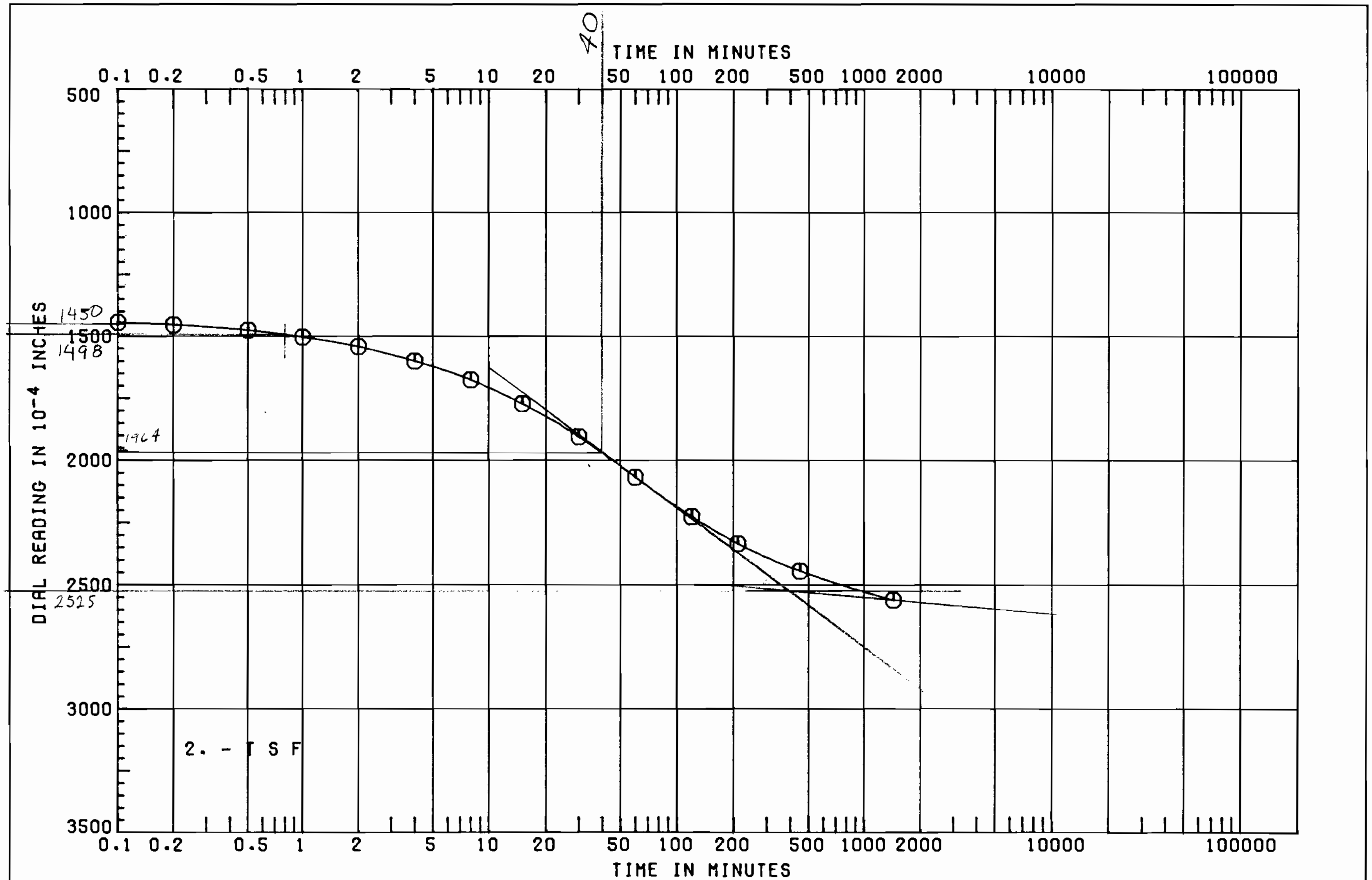
$2H$ = Sample height $= 1.119 - (DR_{50} - DR_0)$

$H = \frac{1.119 - (.1280 - .1175)}{2} = 0.55425$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \mathrm{cm^2/sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55425)^2}{312} = 0.00125 \frac{\mathrm{cm^2}}{\mathrm{s}}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00125 = 42.48 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 10-B
DEPTH/ELEV 37.7/-44.9	DATE 21 JUL 86

CONSOLIDATION TEST

TIME CURVES

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 10-B Elev. -44.9 Load Increment 2.0 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1498$

$t/4 = .2$ Dial Reading $DR_2 = 1450$

$a = DR_1 - DR_2 = 48$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1450 - 48 = 1402$

$U = 100\%$ from construction $DR_{100} = 2525$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1402 + 2525}{2} = 1964$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 40 = 2400$ s

T_v for $U = 50$ that $= 0.197$

$2H =$ Sample height $= 1.119 - (DR_{50} - DR_0)$

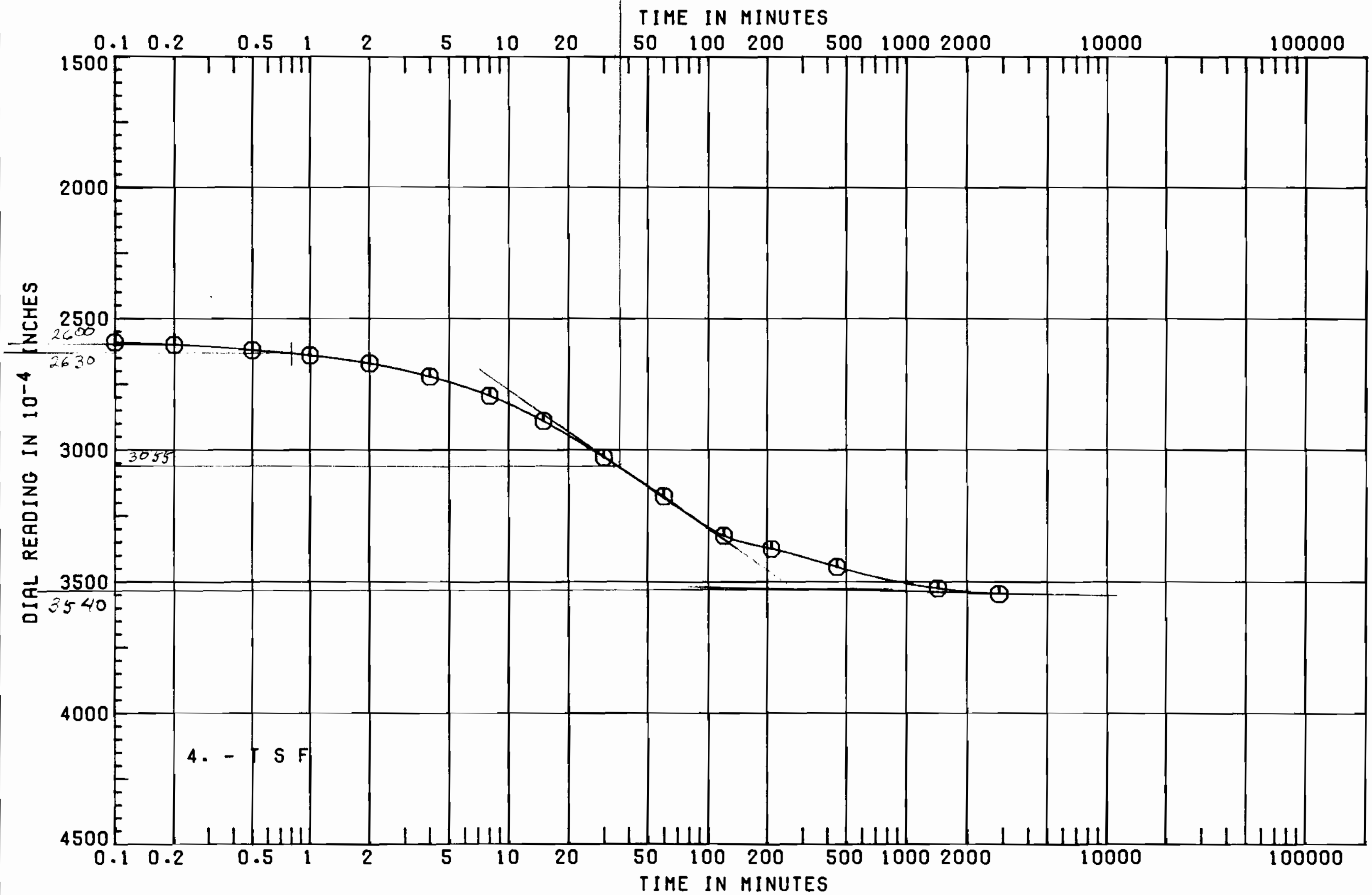
$H = \frac{1.119 - (.1964 - .1402)}{2} = 0.5314$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) cm^2/sec = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5314)^2}{2400} = 0.00015 \frac{cm^2}{s}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00015 = 5.08 \frac{ft^2}{y}$$

37



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 10-B
DEPTH/ELEV 37.7/-44.9	DATE 21 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 7 OF 11

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 10-B Elev. -44.9 Load Increment 4.0 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 2630

$t/4 = .2$ Dial Reading $DR_2 =$ 2600

$a = DR_1 - DR_2 =$ 30

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a =$ 2600 - 30 = 2570

$U = 100\%$ from construction $DR_{100} =$ 3540

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{2570 + 3540}{2} = 3055$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 37 = 2220$ Se

T_v for $U = 50$ that $= 0.197$

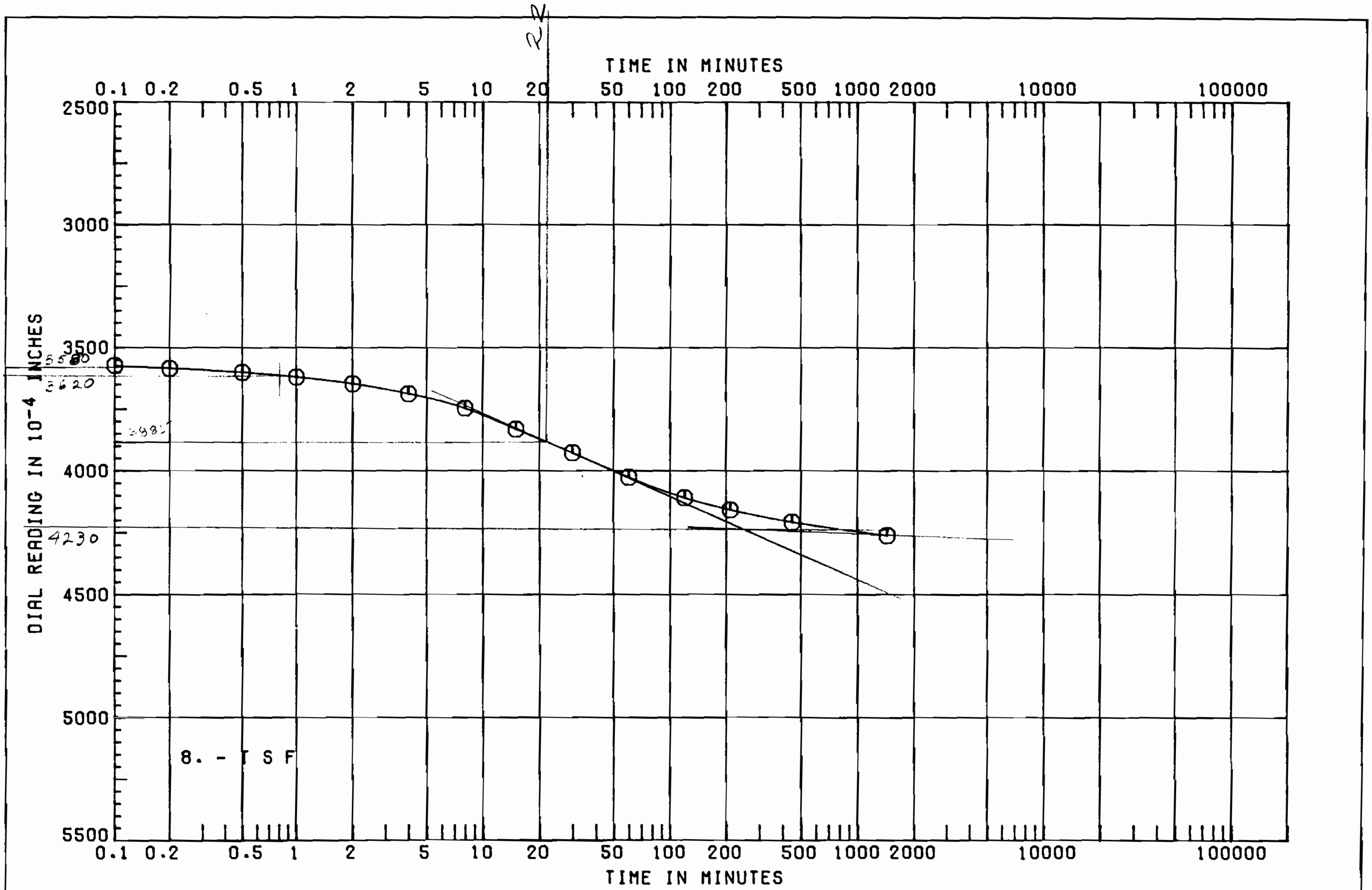
$2H =$ Sample height $= 1.119 - (DR_{50} - DR_0)$

$H = \frac{1.119 - (.3055 - .2570)}{2} = 0.53525$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) cm^2/sec = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.53525)^2}{2220} = 0.00016 \ cm^2/yr$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00016 = 5.57 \ ft^2/yr$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 10-B
DEPTH/ELEV 37.7/-44.9	DATE 21 JUL 86

CONSOLIDATION TEST
TIME CURVES

SHEET 8 OF 11

Date ______

Project Orleans Parish Outfall Canals

Boring No. L-MUG

Sample No. 10-B Elev. -44.9 Load Increment 8.0 T.S.F.

$t = .8$ Dial Reading $DR_1 = 3620$

$t/4 = .2$ Dial Reading $DR_2 = 3580$

$a = DR_1 - DR_2 = 40$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 3580 - 40 = 3540$

$U = 100\%$ from construction $DR_{100} = 4230$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{3540 + 4230}{2} = 3885$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 22 = 1320$ Se[c]

T_v for $U = 50$ that $= 0.197$

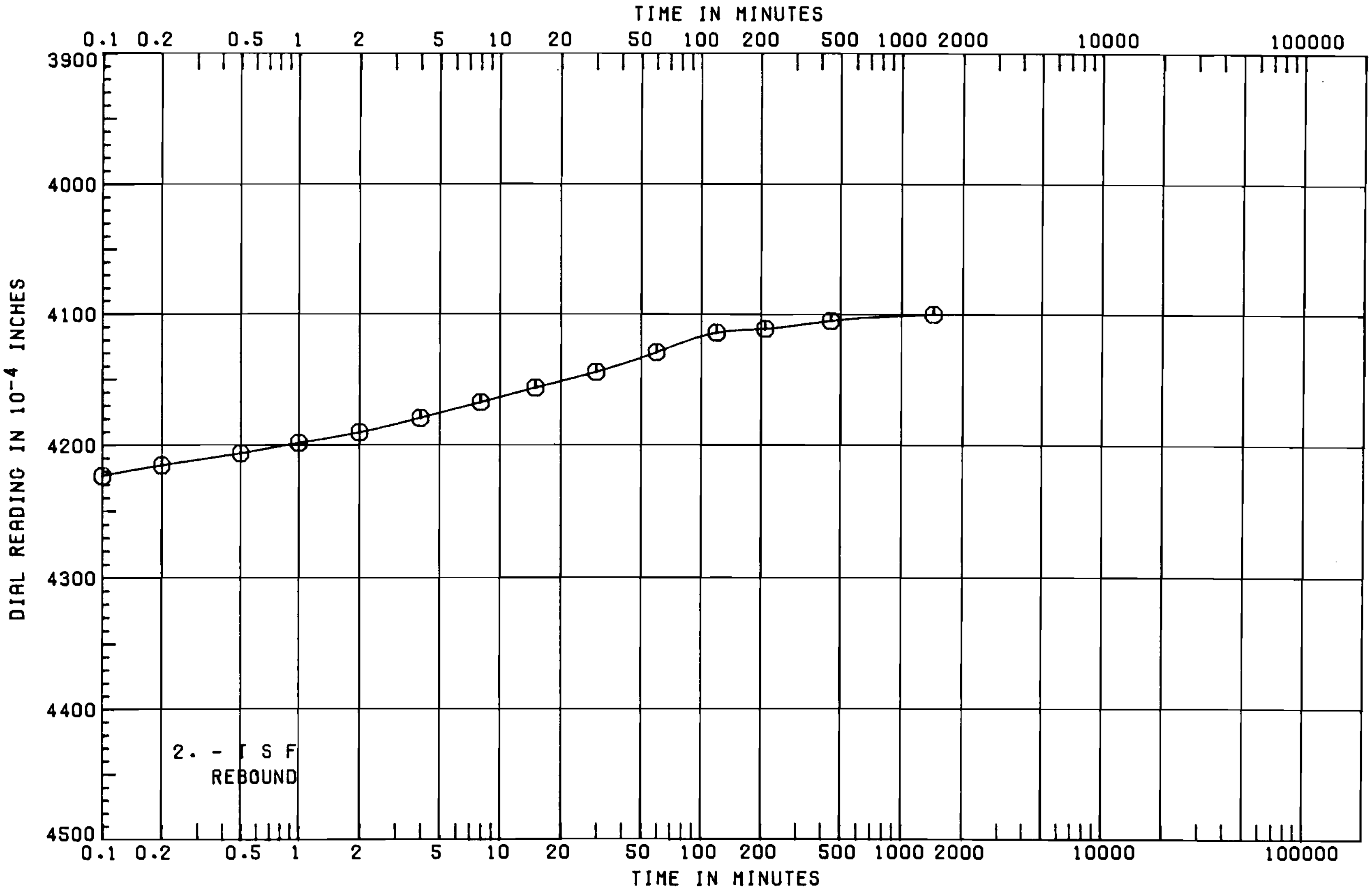
$2H$ = Sample height $= 1.119 - (DR_{50} - DR_0)$

$H = \frac{1.119 - (.3885 - .3540)}{2} = 0.54225$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.54225)^2}{1320} = 0.00028 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00028 = 9.61 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST TIME CURVES
ORLEANS PARISH OUTFALL CANALS		
BORING 1-MUG	SAMPLE NO. 10-B	
DEPTH/ELEV 37.7/-44.9	DATE 21 JUL 86	

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Rebound

Sample No. 10-B Elev. -44.9 Load Increment 2.0 T.S.F.

$t = .8$ Dial Reading DR_1 = ______

$t/4 = .2$ Dial Reading DR_2 = ______

$a = DR_1 - DR_2$: ______

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = ______ - ______ = ______

$U = 100\%$ from construction DR_{100} = ______

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{\_\_\_ + \_\_\_}{2}$ = ______

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times$ ______ = ______ sec

T_v for $U = 50$ that $= 0.197$

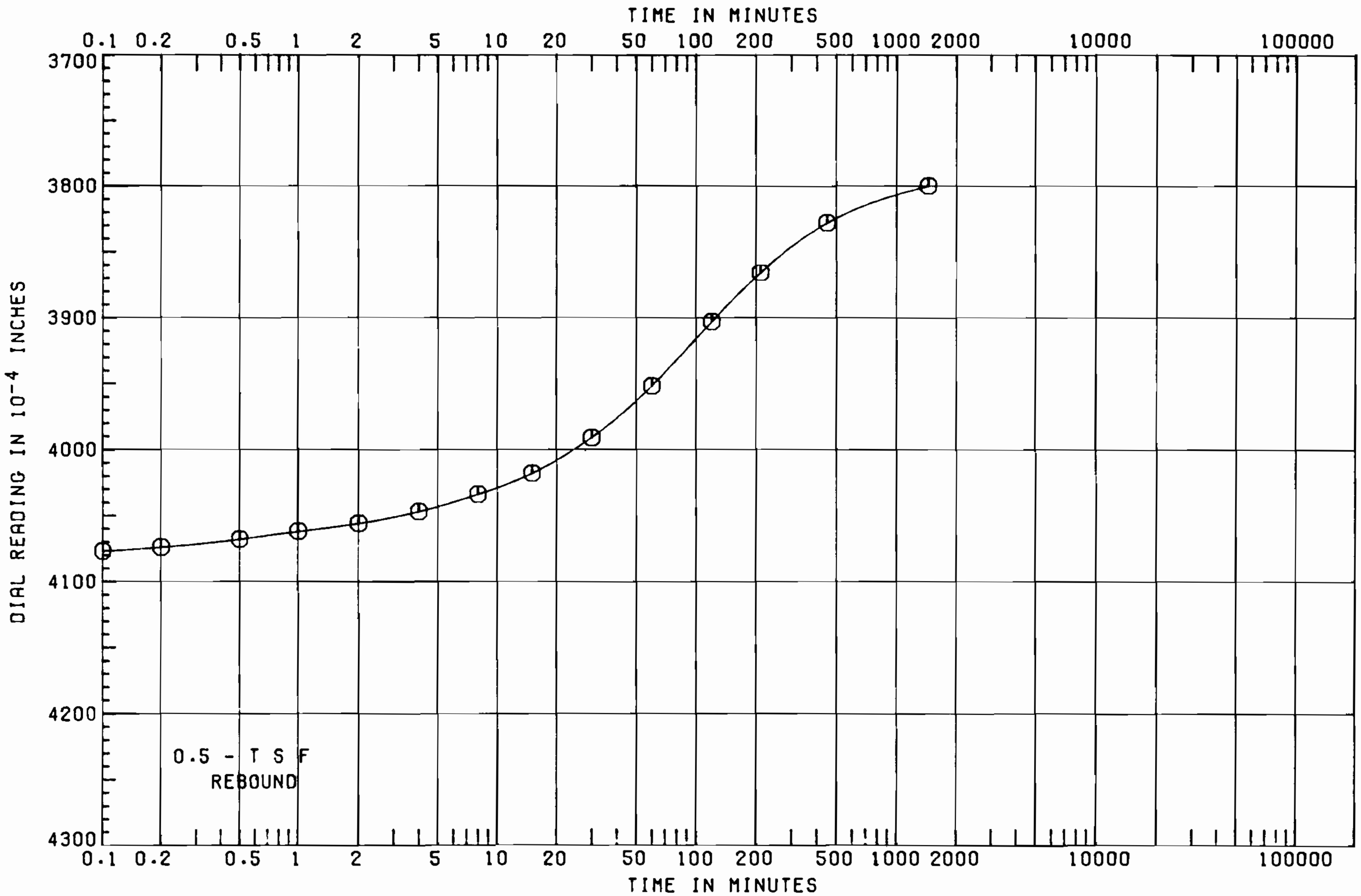
$2H$ = Sample height = 1.119 $- (DR_{50} - DR_0)$

$H = \frac{1.119 - (\_\_\_ - \_\_\_)}{2}$ = ______

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$C_v = 1.271 \left(\_\_\_\right)^2 =$ ______ $\frac{cm^2}{yr}$

$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times$ ______ = ______ $\frac{ft}{y}$



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST
ORLEANS PARISH OUTFALL CANALS		TIME CURVES
BORING 1-MUG	SAMPLE NO. 10-B	
DEPTH/ELEV 37.7/-44.9	DATE 21 JUL 86	

SHEET 10 OF 11

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Rebound

Sample No. 10-B Elev. -44.9 Load Increment 0.5 T.S.F.

$t = .8$ Dial Reading DR_1 = ______

$t/4 = .2$ Dial Reading DR_2 = ______

$a = DR_1 - DR_2$ = ______

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = ______ − ______ = ______

$U = 100\%$ from construction DR_{100} = ______

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{\_\_\_\_ + \_\_\_\_}{2}$ = ______

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times$ ______ = ______ sec

T_v for $U = 50$ that = 0.197

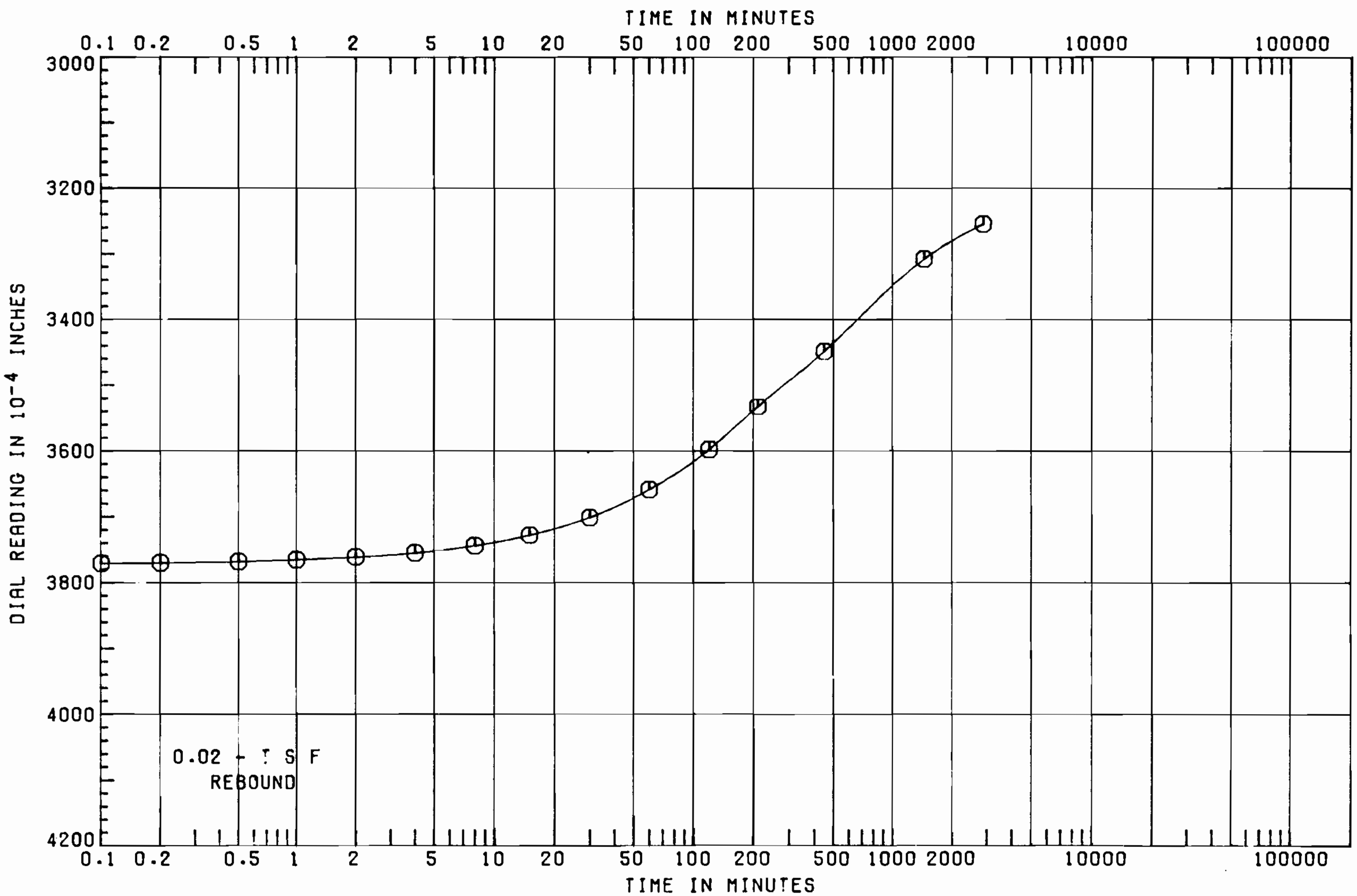
$2H$ = Sample height = 1.119 $- (DR_{50} - DR_0)$

$H = \frac{1.119 - (\_\_\_\_ - \_\_\_\_)}{2}$ = ______

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$C_v = 1.271 (\_\_\_\_)^2 =$ ______ $\frac{cm^2}{yr}$

$$C_v \left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v \left(\frac{ft^2}{yr}\right) = 33{,}945 \times \_\_\_\_ = \_\_\_\_ \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 10-B
DEPTH/ELEV 37.7/-44.9	DATE 21 JUL 86

CONSOLIDATION TEST

TIME CURVES

Project Orleans Parish Outfall Canals

Boring No. 1-M4G

Rebound

Sample No. 10-B Elev. -44.9 Load Increment 0.02 T.S.F.

$t = .8$ Dial Reading DR_1 = ______

$t/4 = .2$ Dial Reading DR_2 = ______

$a = DR_1 - DR_2$: ______

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = ______ - ______ = ______

$U = 100\%$ from construction DR_{100} = ______

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{\_\_\_ + \_\_\_}{2}$ = ______

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times$ ______ = ______ sec

T_v for $U = 50$ that = 0.197

$2H$ = Sample height = 1.119 $- (DR_{50} - DR_0)$

$H = \frac{1.119 - (\_\_\_ - \_\_\_)}{2}$ = ______

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

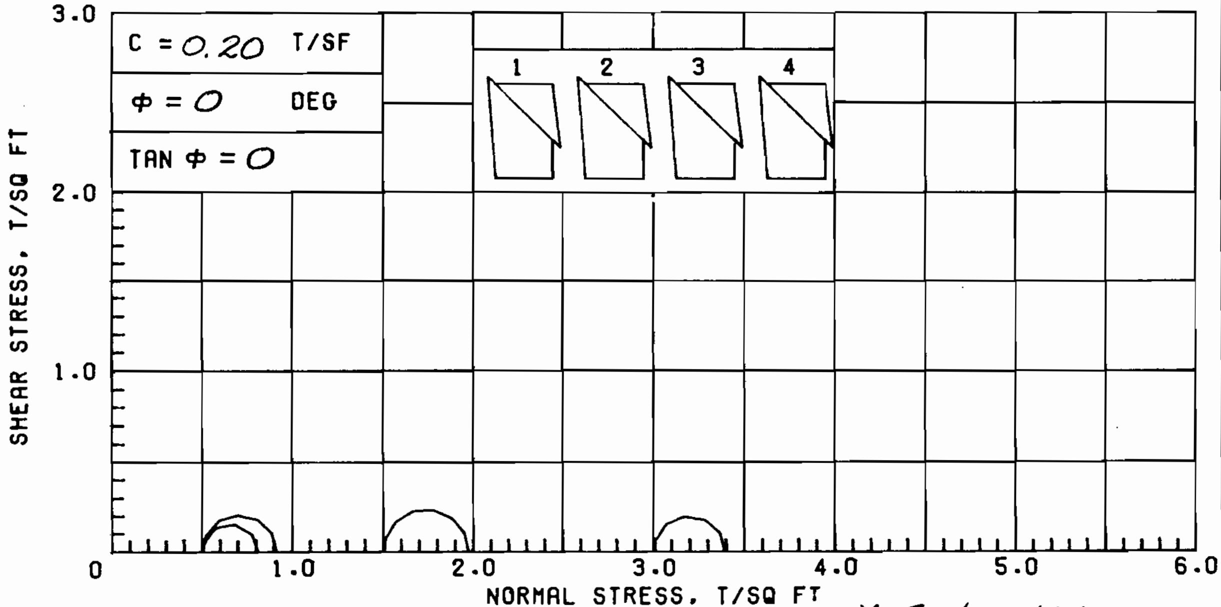
$C_v = 1.271 (\_\_\_)^2$ = ______ $\frac{cm^2}{yr}$

$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times$ ______ = ______ $\frac{ft^2}{yr}$

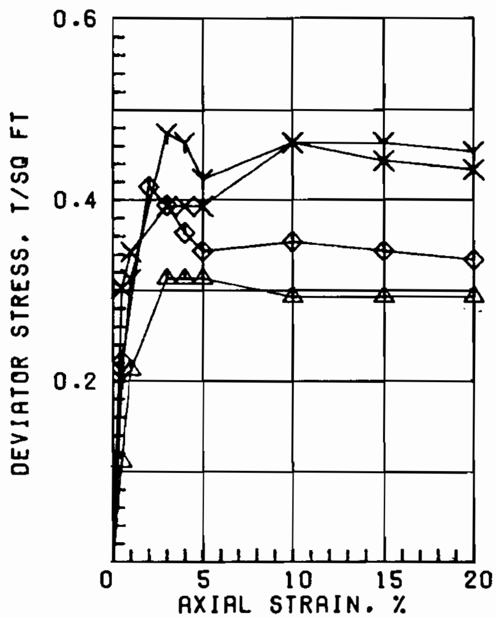
C = 0.20 T/SF

Φ = 0 DEG

TAN Φ = 0



γ Sat. = 100



	SPECIMEN NO.	△1	Y2	X3	◇4
INITIAL	WATER CONTENT, %	66.8	60.8	61.8	70.3
	DRY DENSITY, PCF	58.3	62.6	62.6	57.1
	SATURATION, %	95.5	97.0	98.6	97.3
	VOID RATIO	1.889	1.693	1.693	1.951
BEFORE SHEAR	WATER CONTENT, %				
	DRY DENSITY, PCF				
	SATURATION, %				
	VOID RATIO				
	BACK PRESS., TSF				
	MIN PRIN. STRESS, TSF	0.5	1.5	3.0	0.5
	MAX. DEV. STRESS, TSF	0.31	0.47	0.39	0.41
	TIME TO FAILURE, MIN.	6	18	18	12
	RATE OF STRAIN INCR.%		6	6	6
	INITIAL DIAMETER, IN.	1.39	1.39	1.39	1.39
	INITIAL HEIGHT, IN.	3.00	3.00	3.00	3.00

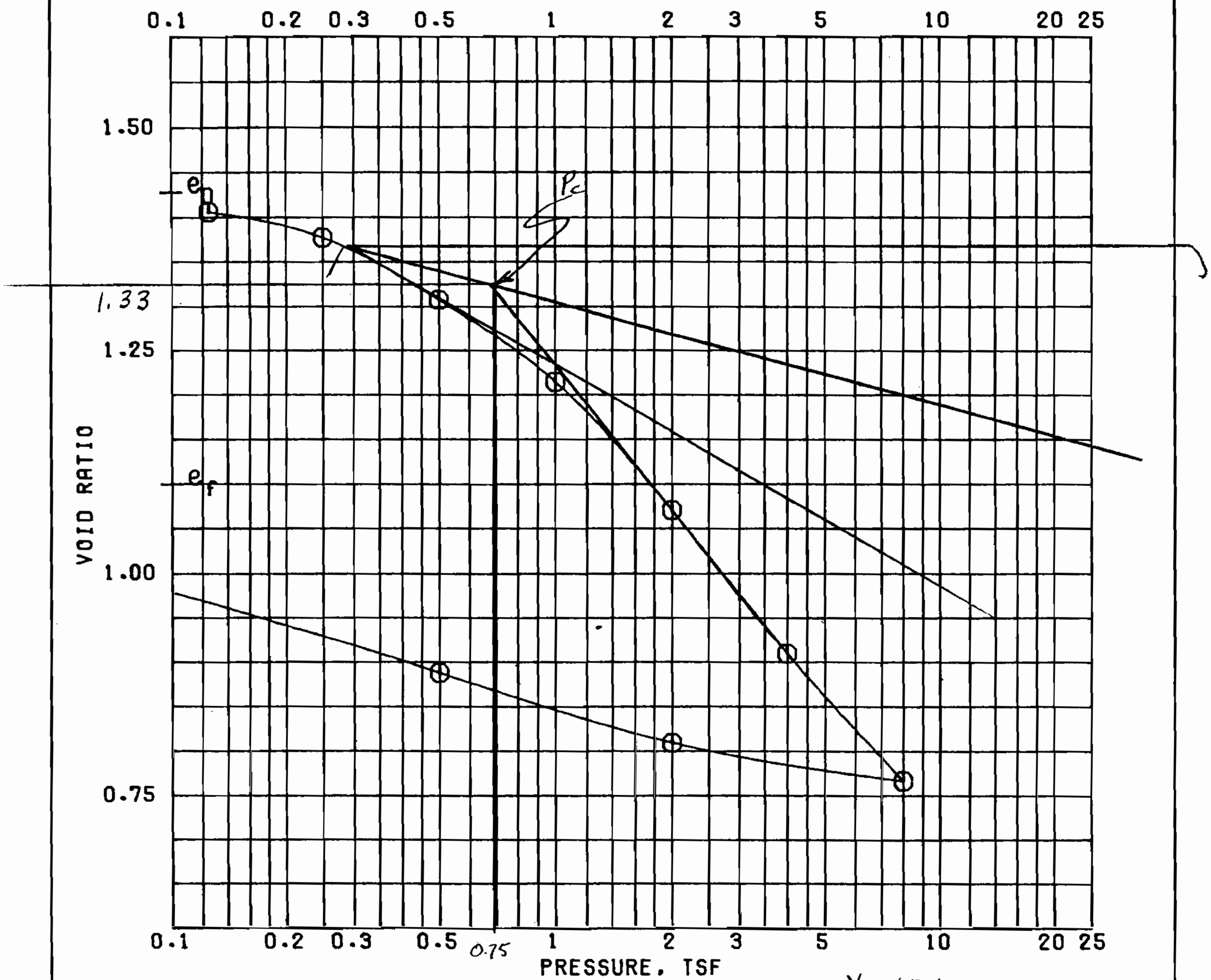
Avg. 64.9

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS; PLASTIC CLAY (CH), GRAY; SHELL PARTICLES

LL 66	PL 18	PI 48	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS;	PROJECT LK PONT LA & VIC HURR PROT	
	ORLEANS PARISH OUTFALL CANALS	
	BORING NO. 1-MUG	SAMPLE NO. 11-B
	DEPTH/ELEV 42.0/-49.2	TECH. KOC
	LABORATORY USAE WES	DATE 20 AUG 86
	TRIAXIAL COMPRESSION TEST REPORT	

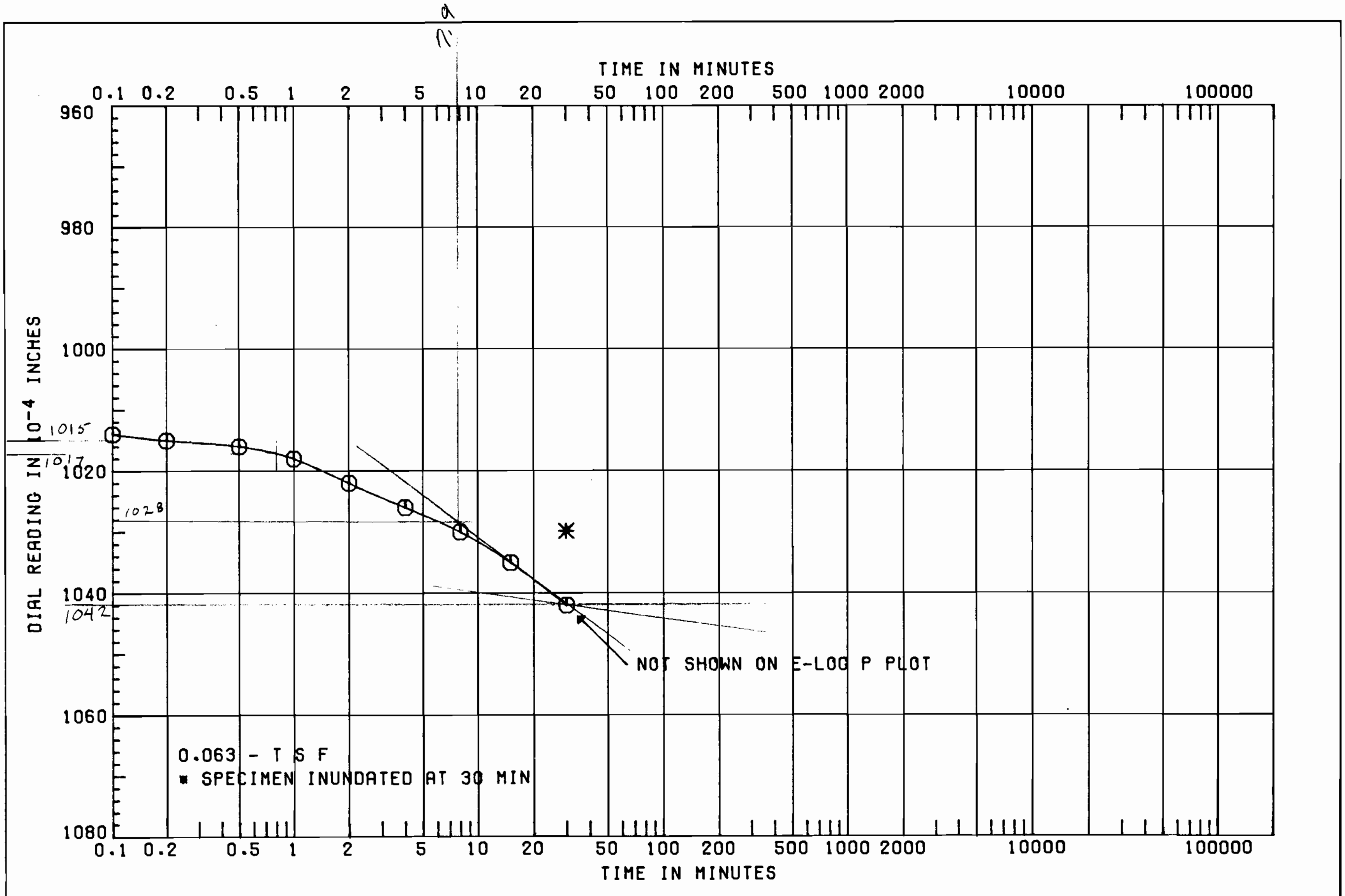


$\gamma = 106$

			BEFORE TEST	AFTER TEST
OVERBURDEN PRESSURE, TSF		WATER CONTENT, %	50.3	40.2
PRECONSOL. PRESSURE, TSF	0.75	DRY DENSITY, PCF	69.5	80.4
COMPRESSION INDEX		SATURATION, %	95.2	98.7
TYPE SPECIMEN	UNDISTURBED	VOID RATIO	1.427	1.098
DIA. IN 4.44	HT. IN 1.124	BACK PRESSURE, TSF		
CLASSIFICATION	PLASTIC CLAY (CH), GRAY			
LL	PL	PI	PROJECT LK PONT LA & VIC HURR PROT	
GS 2.70 (EST)	D_{10}	ORLEANS PARISH OUTFALL CANALS		
REMARKS		BORING NO. 1-MUG	SAMPLE NO. 13-B	
		DEPTH/ELEV 49.6/-56.8	DATE 23 JUL 86	

CONSOLIDATION TEST REPORT

SHEET 1 OF 12



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 13-B
DEPTH/ELEV 49.6/-56.8	DATE 23 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 2 OF 12

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 13-B Elev. -56.8 Load Increment 0.063 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1017$

$t/4 = .2$ Dial Reading $DR_2 = 1015$

$a = DR_1 - DR_2 = 2$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1015 - 2 = 1013$

$U = 100\%$ from construction $DR_{100} = 1042$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1013 + 1042}{2} = 1028$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 7.9 = 474$ sec

T_v for $U = 50$ that $= 0.197$

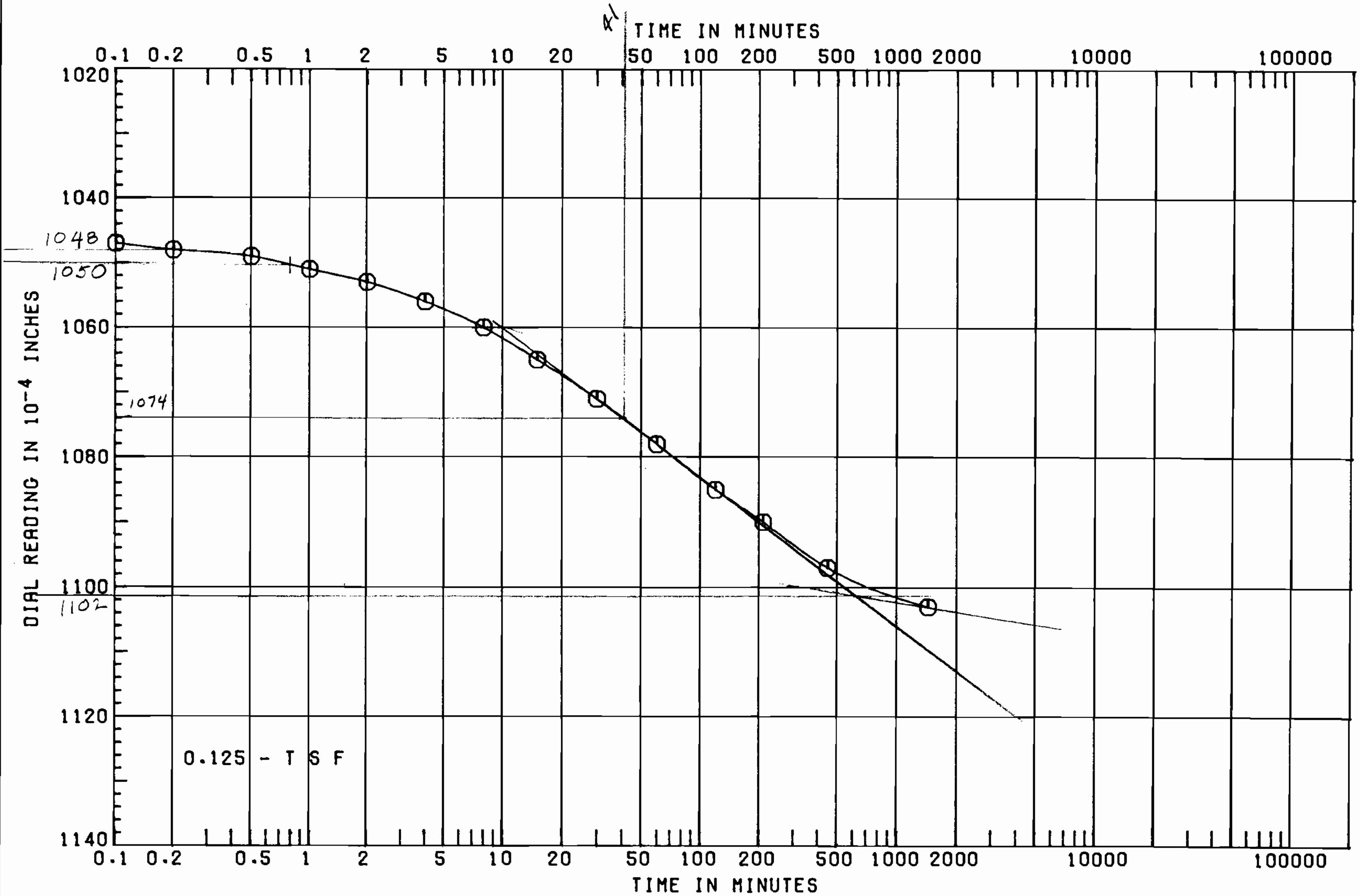
$2H$ = Sample height $= 1.1124 - (DR_{50} - DR_0)$

$$H = \frac{1.1124 - (.1028 - .1013)}{2} = 0.56125$$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.56125)^2}{474} = 0.00084 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00084 = 28.67 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 13-B
DEPTH/ELEV 49.6/-56.8	DATE 23 JUL 86

CONSOLIDATION TEST

TIME CURVES

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 13-B Elev. -56.8 Load Increment 0.125 T.S.F.

$t = .8$ Dial Reading DR_1 = 1050

$t/4 = .2$ Dial Reading DR_2 = 1048

$a = DR_1 - DR_2$: 2

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 1048 − 2 = 1046

$U = 100\%$ from construction DR_{100} = 1102

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1046 + 1102}{2} = 1074$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 41 = 2460$ se[c]

T_v for $U = 50$ that = 0.197

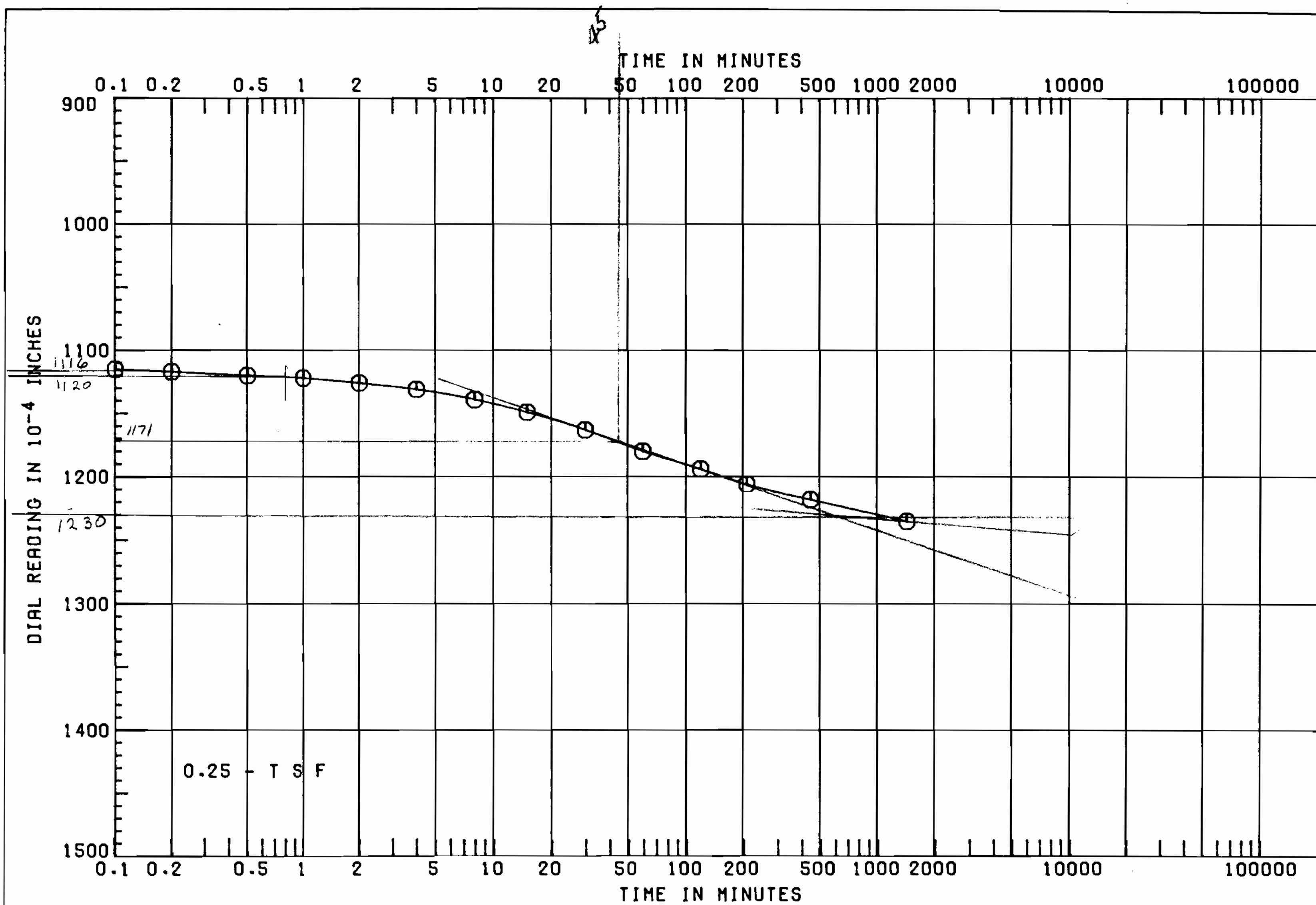
$2H$ = Sample height = 1.124 − $(DR_{50} - DR_0)$

$H = \frac{1.124 - (.1074 - .1046)}{2} = 0.5606$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5606)^2}{2460} = 0.00016 \frac{cm^2}{s}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00016 = 5.51 \frac{ft}{y}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 13-B
DEPTH/ELEV 49.6/-56.8	DATE 23 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 4 OF 12

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 13-B Elev. -56.8 Load Increment 0.25 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1120$

$t/4 = .2$ Dial Reading $DR_2 = 1116$

$a = DR_1 - DR_2 = 4$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1116 - 4 = 1112$

$U = 100\%$ from construction $DR_{100} = 1230$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1112 + 1230}{2} = 1171$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 45 = 2700$ se

T_v for $U = 50$ that $= 0.197$

$2H$ = Sample height $= 1.124 - (DR_{50} - DR_0)$

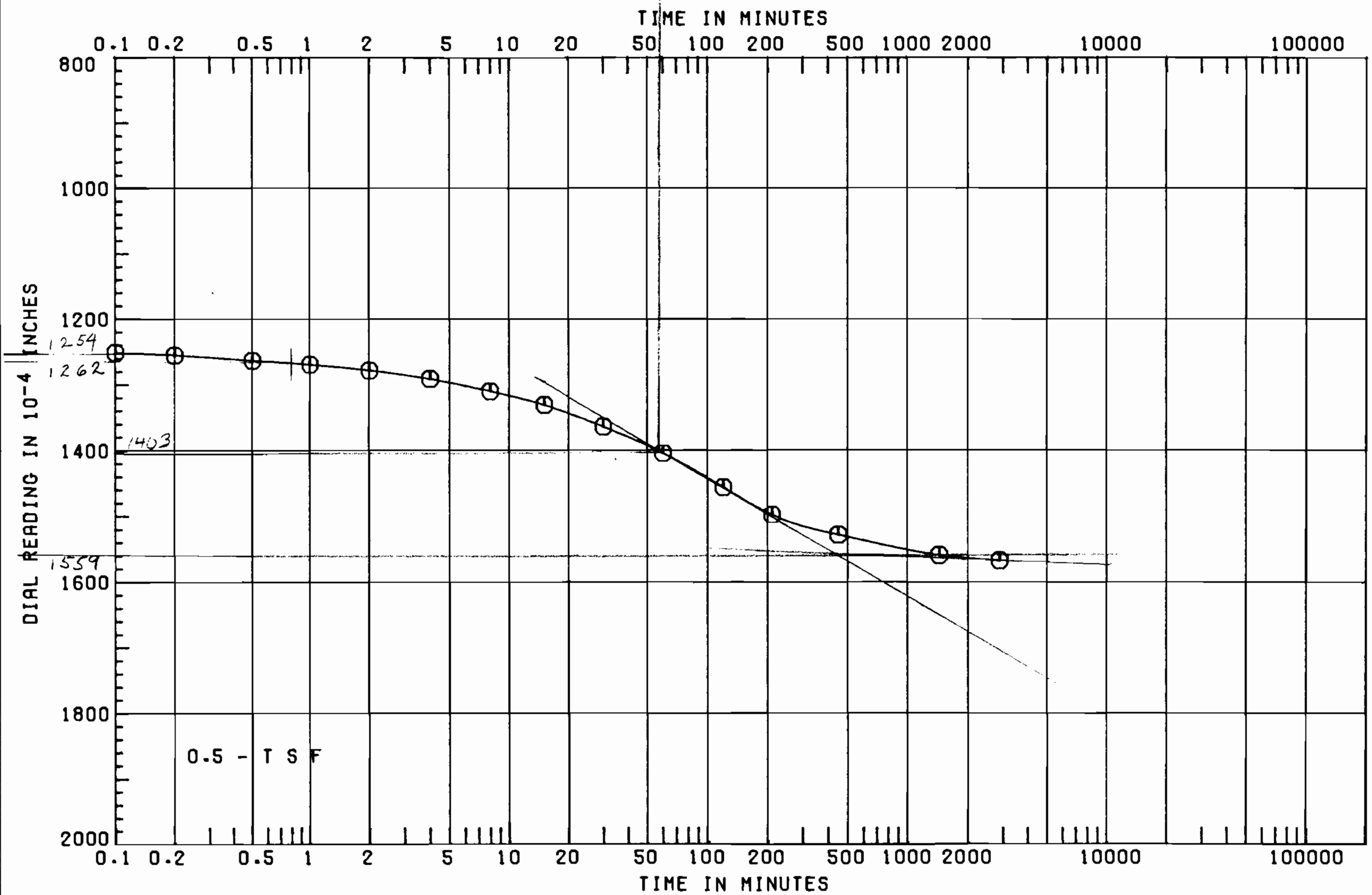
$$H = \frac{1.124 - (.1171 - .1112)}{2} = 0.55905$$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55905)^2}{2700} = 0.00015 \frac{cm^2}{se}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00015 = 4.99 \frac{ft^2}{yr}$$

59



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 13-B
DEPTH/ELEV 49.6/-56.8	DATE 23 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 5 OF 12

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 13-B Elev. -56.8 Load Increment 0.5 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 1262

$t/4 = .2$ Dial Reading $DR_2 =$ 1254

$a = DR_1 - DR_2 =$ 8

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1254 - 8 = 1246$

$U = 100\%$ from construction $DR_{100} = 1559$

$U = 50\%$ @ $\dfrac{DR_0 + DR_{100}}{2} = DR_{50} = \dfrac{1246 + 1559}{2} = 1403$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 59 = 3540$ sec

T_v for $U = 50$ that $= 0.197$

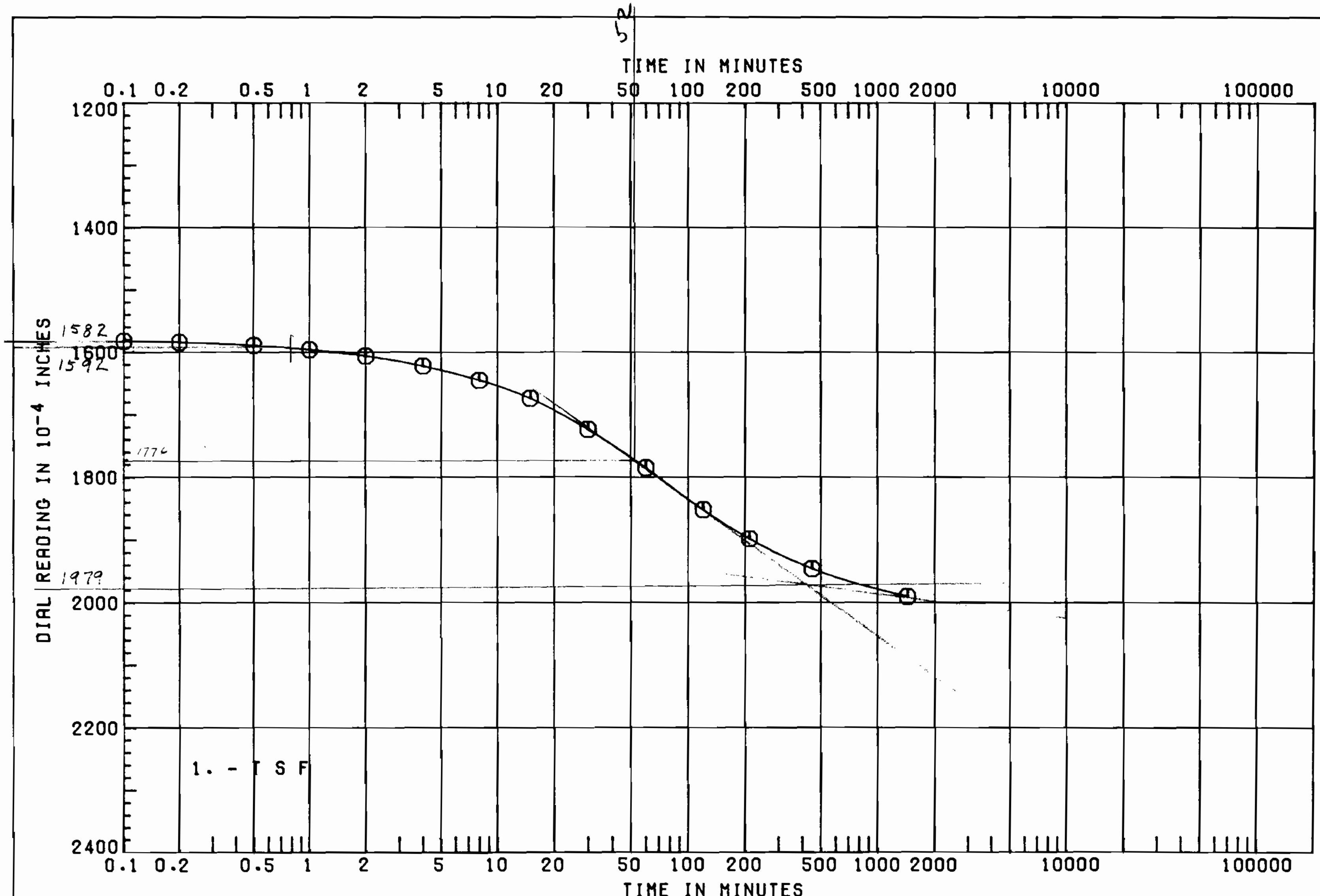
$2H =$ Sample height $= 1.124 - (DR_{50} - DR_0)$

$$H = \frac{1.124 - (.1403 - .1246)}{2} = 0.55415$$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55415)^2}{3540} = 0.00011 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00011 = 3.74 \frac{ft}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 13-B
DEPTH/ELEV 49.6/-56.8	DATE 23 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 6 OF 12

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 13-B Elev. -56.8 Load Increment 1.0 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1592$

$t/4 = .2$ Dial Reading $DR_2 = 1582$

$a = DR_1 - DR_2 = 10$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1582 - 10 = 1572$

$U = 100\%$ from construction $DR_{100} = 1979$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1572 + 1979}{2} = 1776$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 52 = 3120$ sec

T_v for $U = 50$ that $= 0.197$

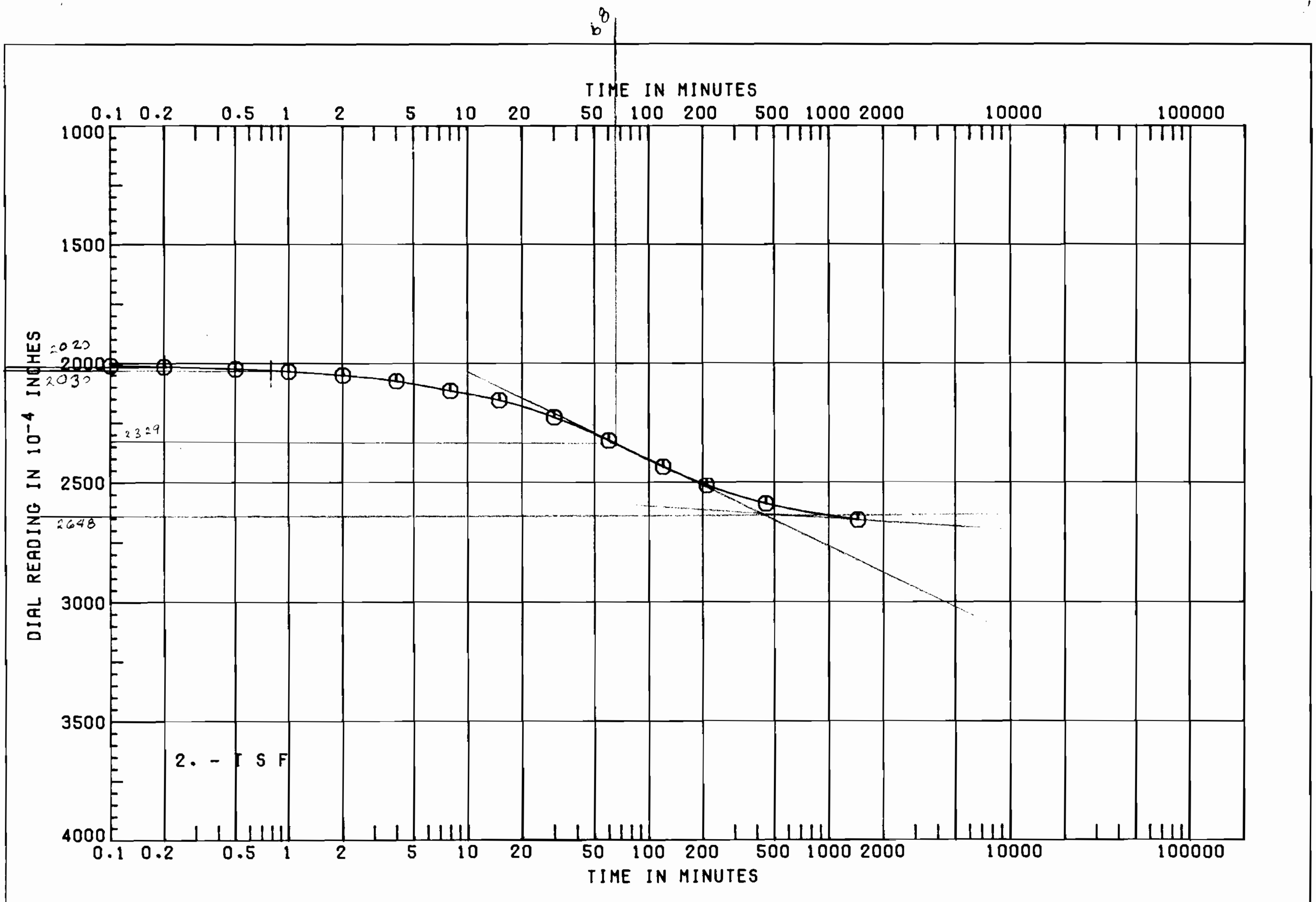
$2H = \text{Sample height} = 1.124 - (DR_{50} - DR_0)$

$H = \frac{1.124 - (.1776 - .1572)}{2} = 0.5518$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5518)^2}{3120} = 0.00012 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00012 = 4.21 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 13-B
DEPTH/ELEV 49.6/-56.8	DATE 23 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 7 OF 12

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 13-B Elev. -56.8 Load Increment 2.0 T.S.F.

$t = .8$ Dial Reading $DR_1 = 2030$

$t/4 = .2$ Dial Reading $DR_2 = 2020$

$a = DR_1 - DR_2 = 10$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 2020 - 10 = 2010$

$U = 100\%$ from construction $DR_{100} = 2648$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{2010 + 2648}{2} = 2329$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 68 = 4080$ sec

T_v for $U=50$ that $= 0.197$

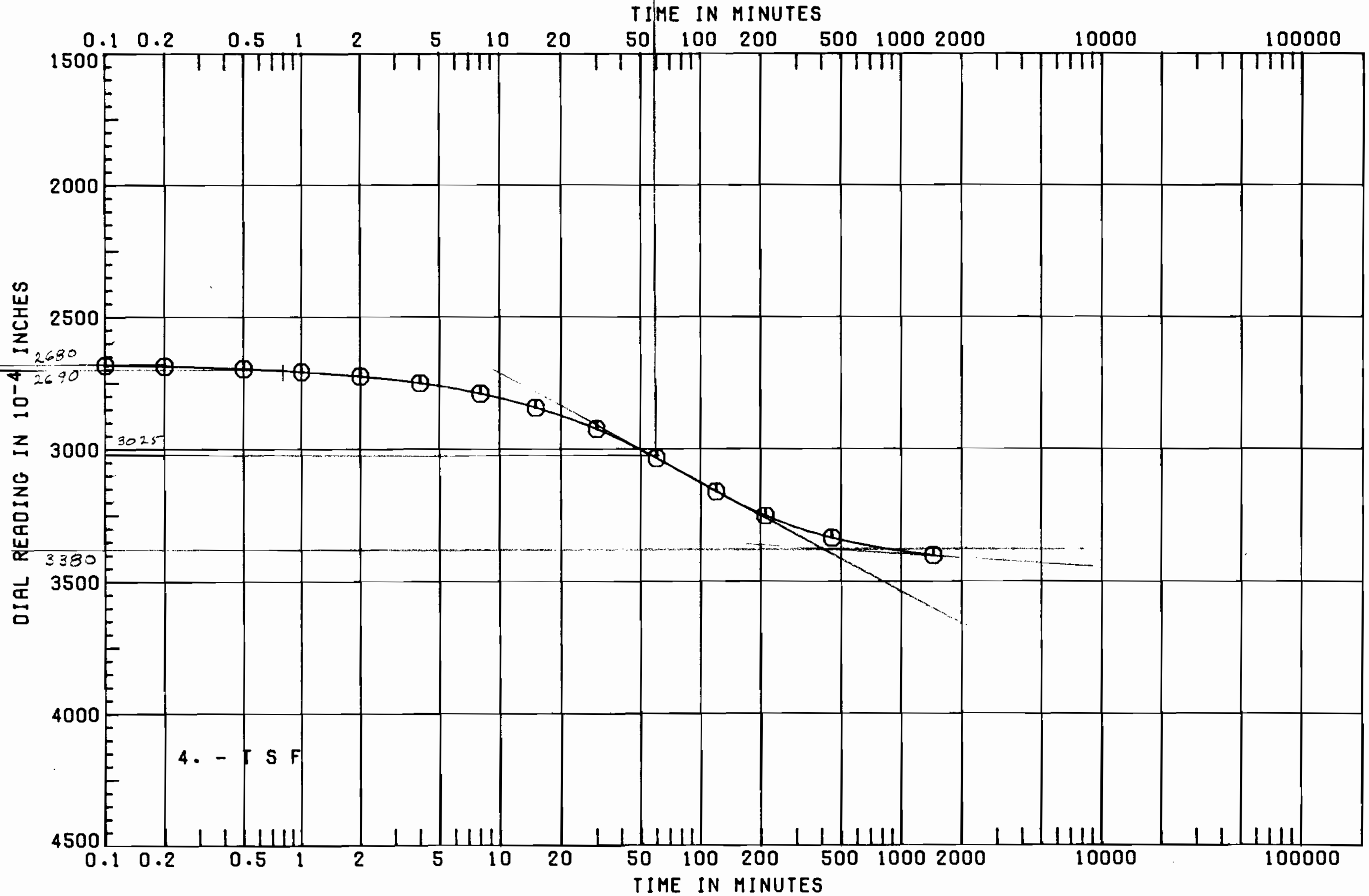
$2H$ = Sample height $= 1.124 - (DR_{50} - DR_0)$

$H = \frac{1.124 - (.2329 - .2010)}{2} = 0.54605$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.54605)^2}{4080} = 0.00009 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00009 = 3.15 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 13-B
DEPTH/ELEV 49.6/-56.8	DATE 23 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 8 OF 12

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Sample No. 13-B Elev. -56.8 Load Increment 4.0 T.S.F.

$t = .8$ Dial Reading DR_1 = 2690

$t/4 = .2$ Dial Reading DR_2 = 2680

$a = DR_1 - DR_2$ = 10

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 2680 − 10 = 2670

$U = 100\%$ from construction DR_{100} = 3380

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{2670 + 3380}{2}$ = 3025

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 60$ = 3600 se[c]

T_v for $U = 50$ that = 0.197

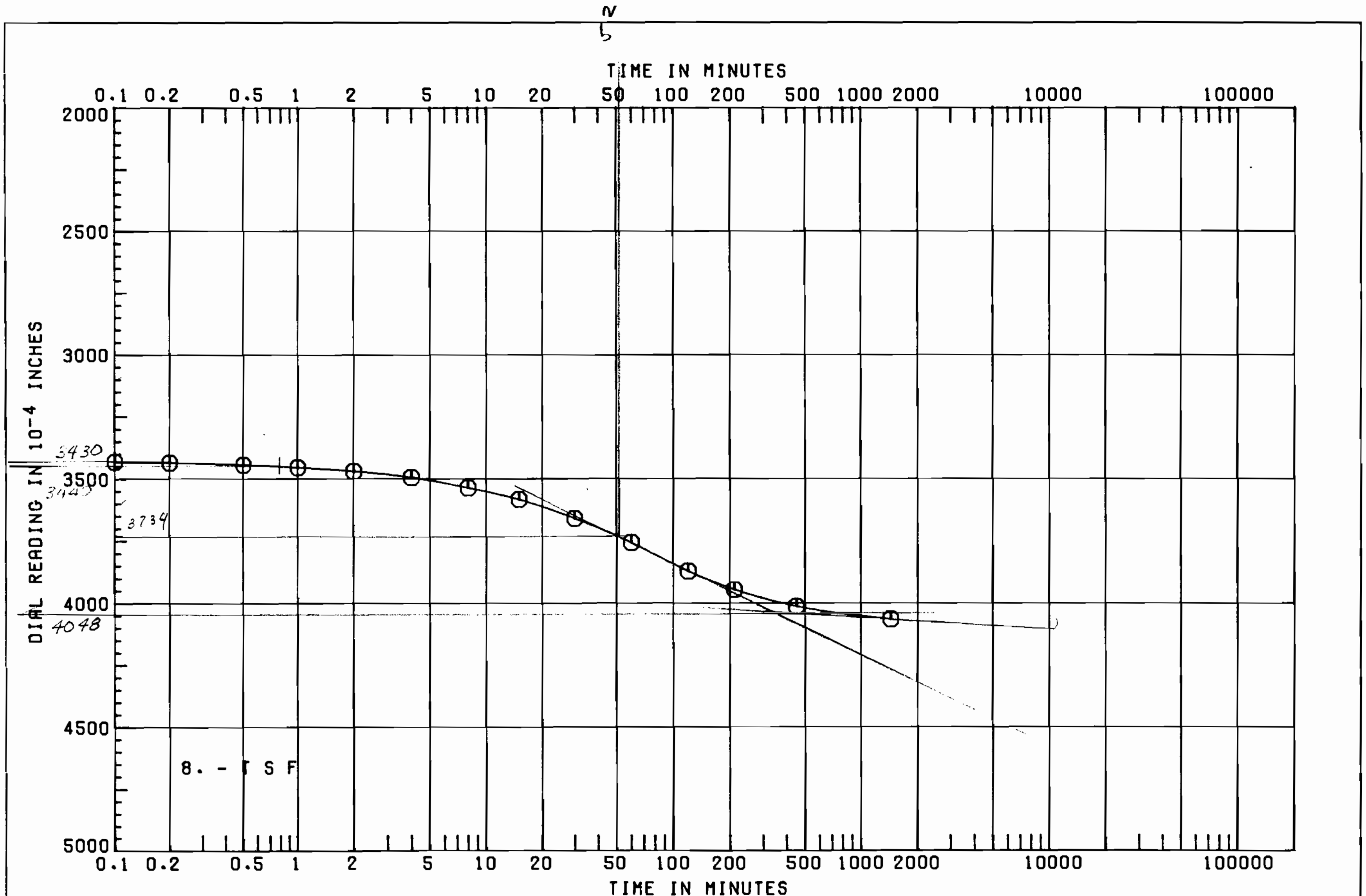
$2H$ = Sample height = 1.124 $- (DR_{50} - DR_0)$

$H = \frac{1.124 - (.3025 - .2670)}{2}$ = 0.54425

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.54425)^2}{3600} = 0.00010 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00010 = 3.55 \frac{ft}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST
ORLEANS PARISH OUTFALL CANALS		TIME CURVES
BORING 1-MUG	SAMPLE NO. 13-B	
DEPTH/ELEV 49.6/-56.8	DATE 23 JUL 86	

SHEET 9 OF 12

Project Orleans Parish Outfall Canals

Boring No. [illegible]

Sample No. 13-B Elev. -56.8 Load Increment 8.0 T.S.F.

$t = .8$ Dial Reading DR_1 = 3440

$t/4 = .2$ Dial Reading DR_2 = 3430

$a = DR_1 - DR_2$ = 10

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 3430 − 10 = 3420

$U = 100\%$ from construction DR_{100} = 4048

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{3420 + 4048}{2} = 3734$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 52 = 3120$ sec

T_v for $U = 50$ that = 0.197

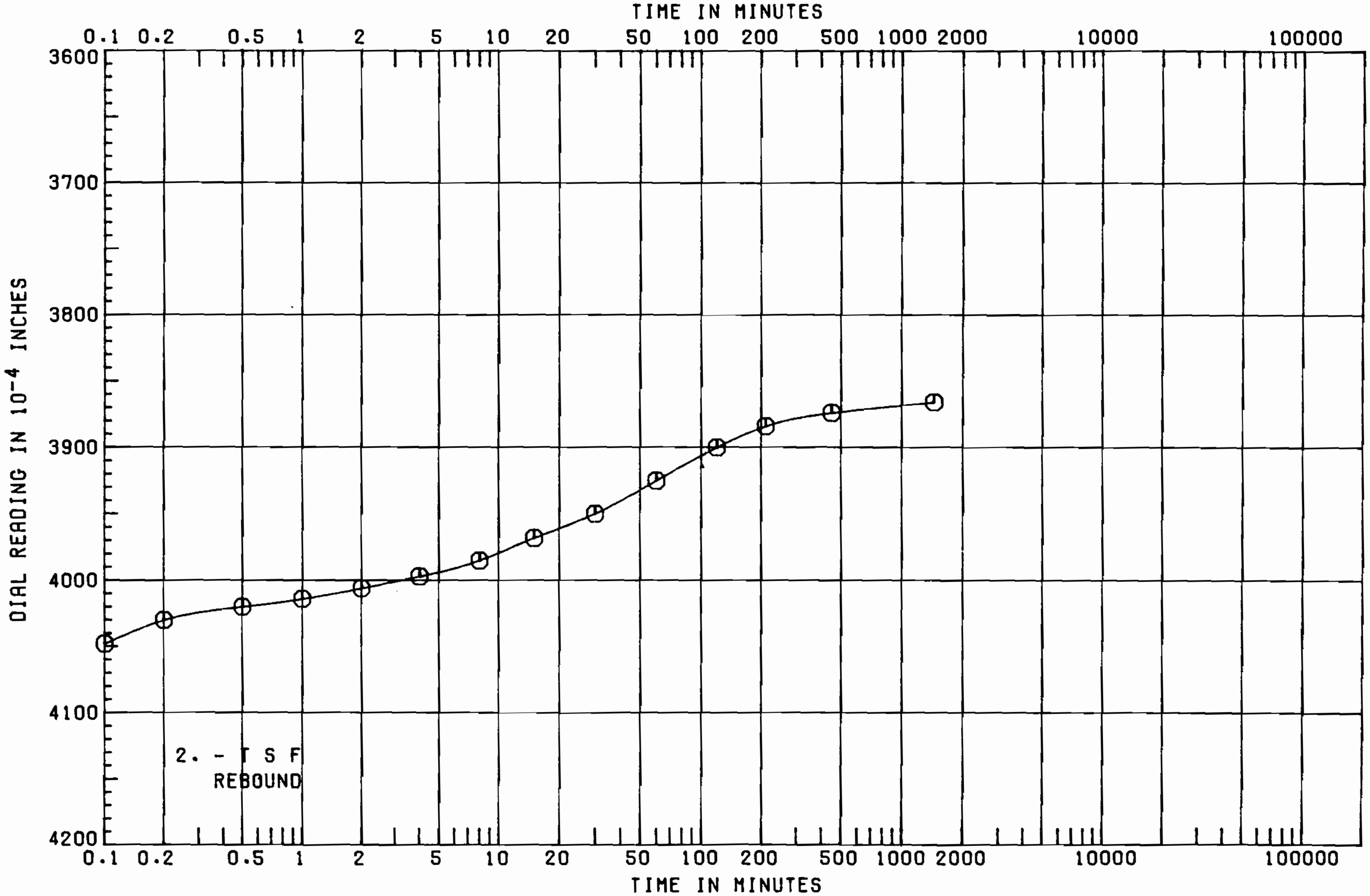
$2H$ = Sample height = 1.124 − $(DR_{50} - DR_0)$

$H = \frac{1.124 - (.3734 - .3420)}{2} = 0.5463$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5463)^2}{3120} = 0.00012 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00012 = 4.13 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 1-MUG	SAMPLE NO. 13-B
ᶜPTH/ELEV 49.6/-56.8	DATE 23 JUL 86

CONSOLIDATION TEST
TIME CURVES

ᵀ 10 OF 12

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Rebound

Sample No. 13-B Elev. -56.8 Load Increment 2.0 T.S.F.

$t = .8$ Dial Reading DR_1 = ______

$t/4 = .2$ Dial Reading DR_2 = ______

$q = DR_1 - DR_2$ = ______

$U = 0\%$ Dial Reading $DR_0 = DR_2 - q$ = ______ - ______ = ______

$U = 100\%$ from construction DR_{100} = ______

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{\text{\_\_\_\_} + \text{\_\_\_\_}}{2}$ = ______

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times$ ______ = ______ sec

T_v for $U=50$ that = 0.197

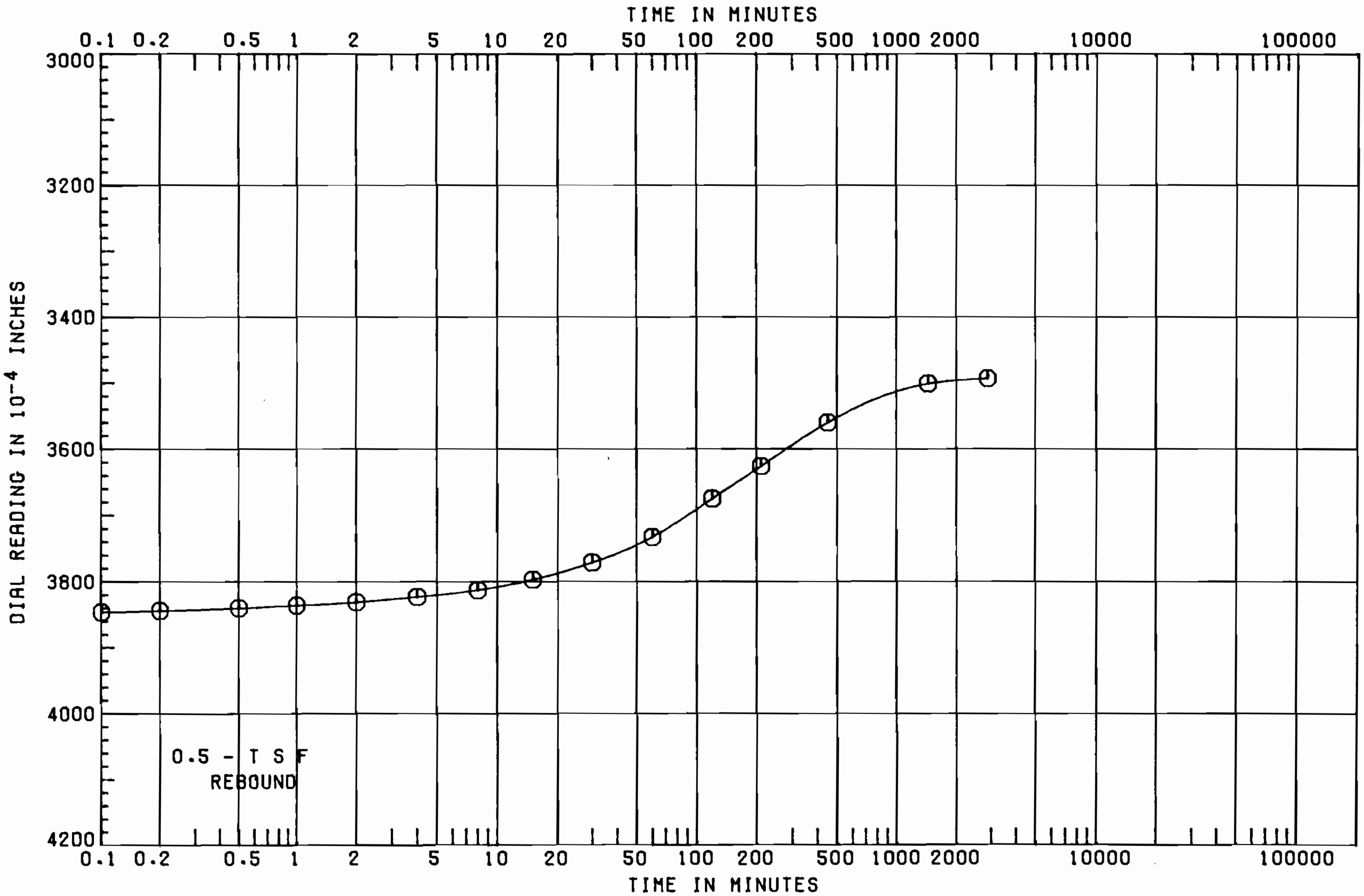
$2H$ = Sample height = 1.124 $-(DR_{50} - DR_0)$

$H = \frac{1.124 - (\text{\_\_\_\_} - \text{\_\_\_\_})}{2}$ = ______

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right)\frac{cm^2}{sec} = 1.271\frac{H^2}{t_{50}}$$

$C_v = 1.271(\text{\_\_\_\_})^2$ = ______ $\frac{cm^2}{yr}$

$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times$ ______ = ______ $\frac{ft}{yr}$



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST
ORLEANS PARISH OUTFALL CANALS		TIME CURVES
BORING 1-MUG	SAMPLE NO. 13-B	
DEPTH/ELEV 49.6/-56.8	DATE 23 JUL 86	

SHEET 11 OF 12

Project Orleans Parish Outfall Canals

Boring No. 1-MU3

Rebound

Sample No. 13-B Elev. -56.8 Load Increment 0.5 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ ______

$t/4 = .2$ Dial Reading $DR_2 =$ ______

$a = DR_1 - DR_2 =$ ______

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a =$ ____ - ____ = ______

$U = 100\%$ from construction $DR_{100} =$ ______

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{\quad + \quad}{2} =$ ______

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times$ ______ = ______ sec

T_v for $U = 50$ that $= 0.197$

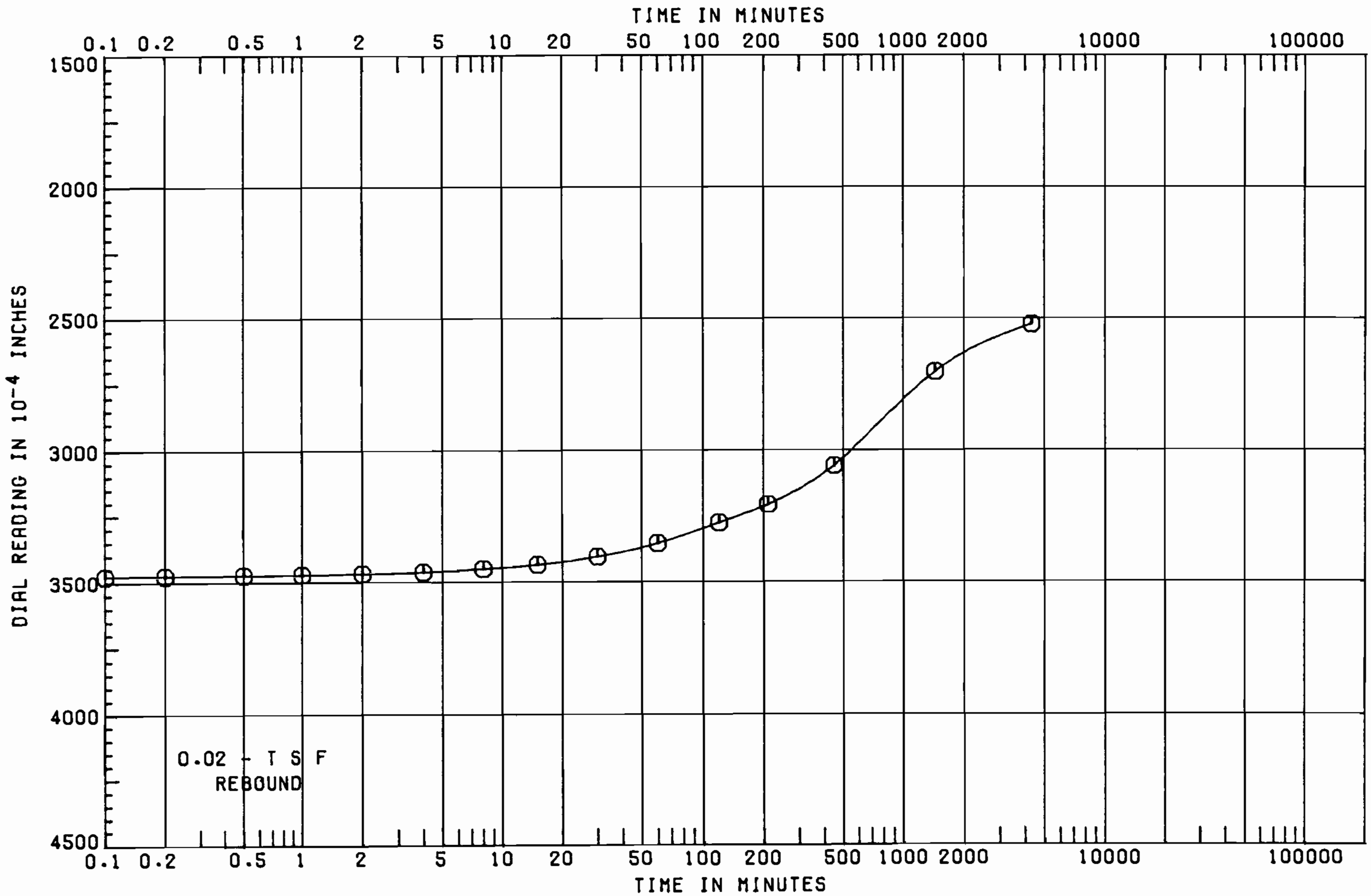
$2H =$ Sample height $= 1.124 - (DR_{50} - DR_0)$

$H = \frac{1.124 - (\quad - \quad)}{2} =$ ______

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$C_v = 1.271 (\quad)^2 =$ ______ $\frac{cm^2}{sec}$

$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times$ ______ = ______ $\frac{ft^2}{yr}$



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST TIME CURVES
ORLEANS PARISH OUTFALL CANALS		
BORING 1-MUG	SAMPLE NO. 13-B	
DEPTH/ELEV 49.6/-56.8	DATE 23 JUL 86	

Project Orleans Parish Outfall Canals

Boring No. 1-MUG

Rebound

Sample No. 13-B **Elev.** -56.8 **Load Increment** 0.02 **T.S.F.**

$t = .8$

$t/4 = .2$

Dial Reading DR_1 = ______

Dial Reading DR_2 = ______

$a = DR_1 - DR_2$: ______

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = ______ - ______ = ______

$U = 100\%$ from construction DR_{100} = ______

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{\_\_\_ + \_\_\_}{2}$ = ______

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times$ ______ = ______ sec

T_v for $U=50$ that = 0.197

$2H$ = Sample height = 1.124 $- (DR_{50} - DR_0)$

$H = \frac{1.124 - (\_\_\_ - \_\_\_)}{2}$ = ______

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

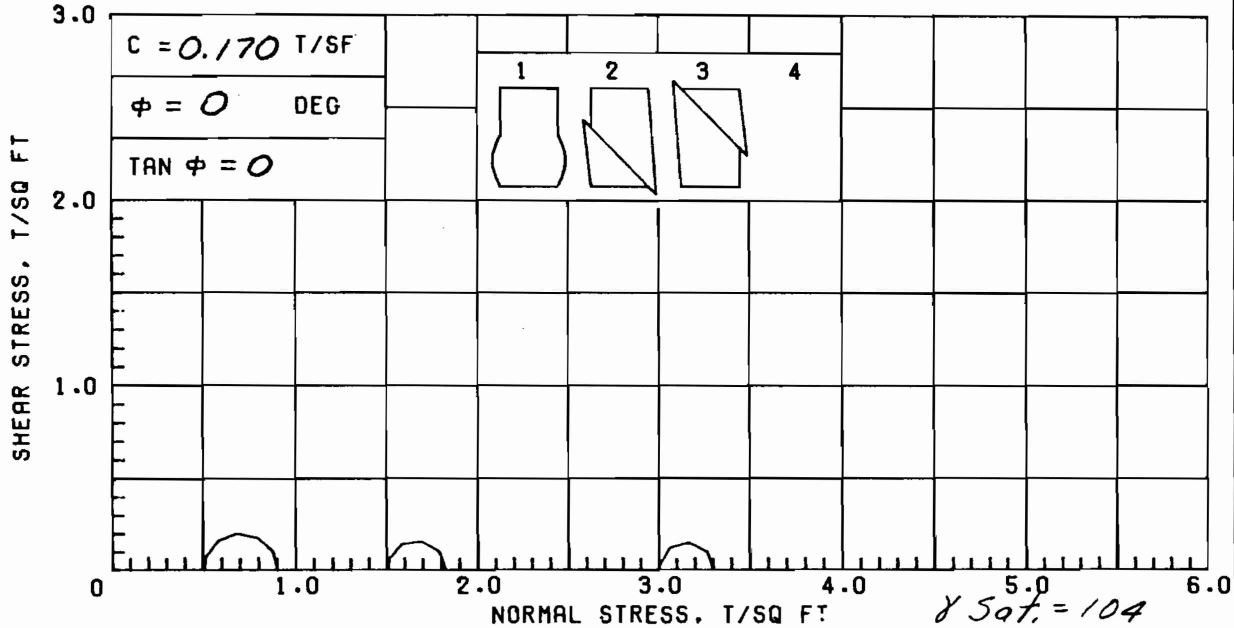
$C_v = 1.271 \left(\_\_\_\right)^2 =$ ______ $\frac{cm^2}{yr}$

$C_v \left(\frac{cm^2}{sec}\right) \times 33,945 = C_v \left(\frac{ft^2}{yr}\right) = 33,945 \times$ ______ = ______ $\frac{ft^2}{yr}$

C = 0.170 T/SF

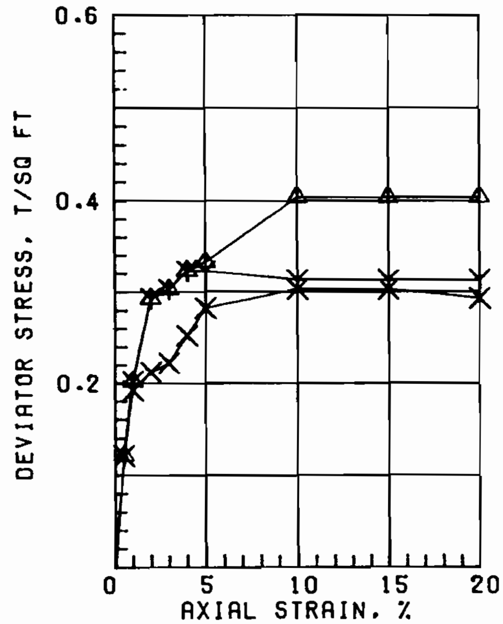
φ = 0 DEG

TAN φ = 0



γ Sat. = 104

105.2 103.1 104.9



CONTROLLED-STRAIN TEST

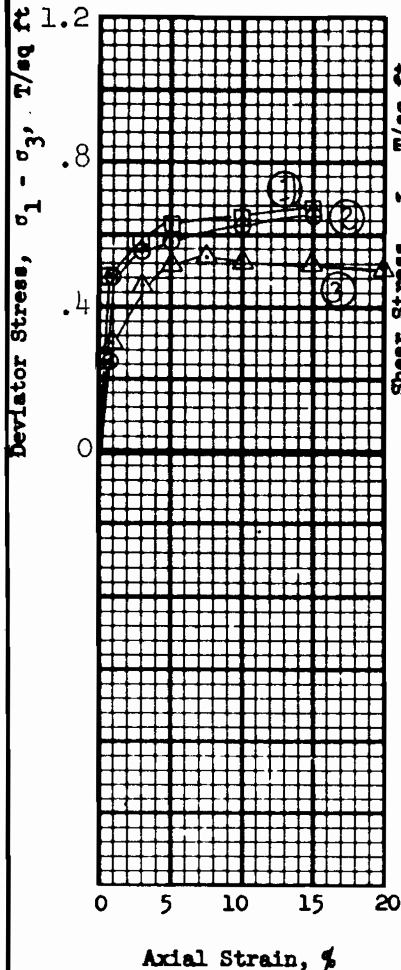
	SPECIMEN NO.	△1	Y2	X3	4
INITIAL	WATER CONTENT, %	53.5	56.8	53.8	
	DRY DENSITY, PCF	67.8	64.7	67.5	
	SATURATION, %	97.1	95.6	97.0	
	VOID RATIO	1.487	1.603	1.498	
BEFORE SHEAR	WATER CONTENT, %				
	DRY DENSITY, PCF				
	SATURATION, %				
	VOID RATIO				
	BACK PRESS., TSF				
MIN PRIN. STRESS, TSF		0.5	1.5	3.0	
MAX. DEV. STRESS, TSF		0.40	0.32	0.30	
TIME TO FAILURE, MIN.		20	8	20	
RATE OF STRAIN INCR.,%					
INITIAL DIAMETER, IN.		1.39	1.39	1.39	
INITIAL HEIGHT, IN.		3.00	3.00	3.00	

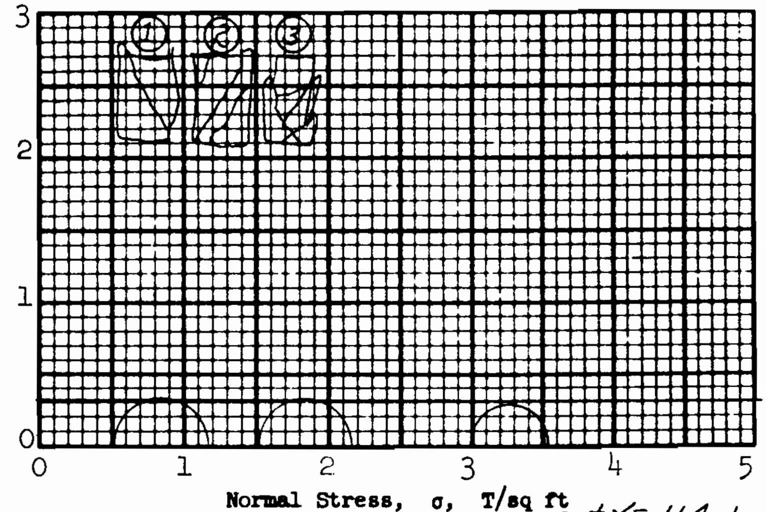
Avg. 54.7

DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), GRAY; ORGANIC MATERIAL

LL 72	PL 19	PI 53	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS:	PROJECT LK PONT LA & VIC HURR PROT	
	ORLEANS PARISH OUTFALL CANALS	
	BORING NO. 1-MUG	SAMPLE NO. 13-C
	DEPTH/ELEV 50.5/-57.7	TECH. KOC
	LABORATORY USAE WES	DATE 20 AUG 86
	TRIAXIAL COMPRESSION TEST REPORT	





sat. γ = 114.1

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.31 T/sq ft

Method of saturation ________

☐ Controlled stress

☒ Controlled strain

Test No.			1	2	3	Avg.
Initial	Water content	w_o	37.2 %	44.3 %	41.4 %	41.0 %
	Void ratio	e_o	0.965	1.13	1.06	
	Saturation	S_o	100+ %	100+ %	100+ %	%
	Dry density, lb/cu ft	γ_d	84.5	77.8	80.6	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.67	0.66	0.54	
Time to failure, min		t_f	82	36	14	
Rate of strain, percent/min			0.182	0.421	0.523	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.41	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Type of test Q	Type of specimen UNDISTURBED			
Classification PLASTIC CLAY(CH), gray, contains silt lenses				
LL 57	PL 19	PI 38		G_s 2.66

Remarks ________

Project LK. PONT., LA.&VIC.-HURR. PROT.-'71

Area ORLEANS PARISH L.F. LEVEE WEST OF IHNC (OUTFALL CANALS) ALONG 17th ST. CANAL (GDM#2, SUPP. #5)

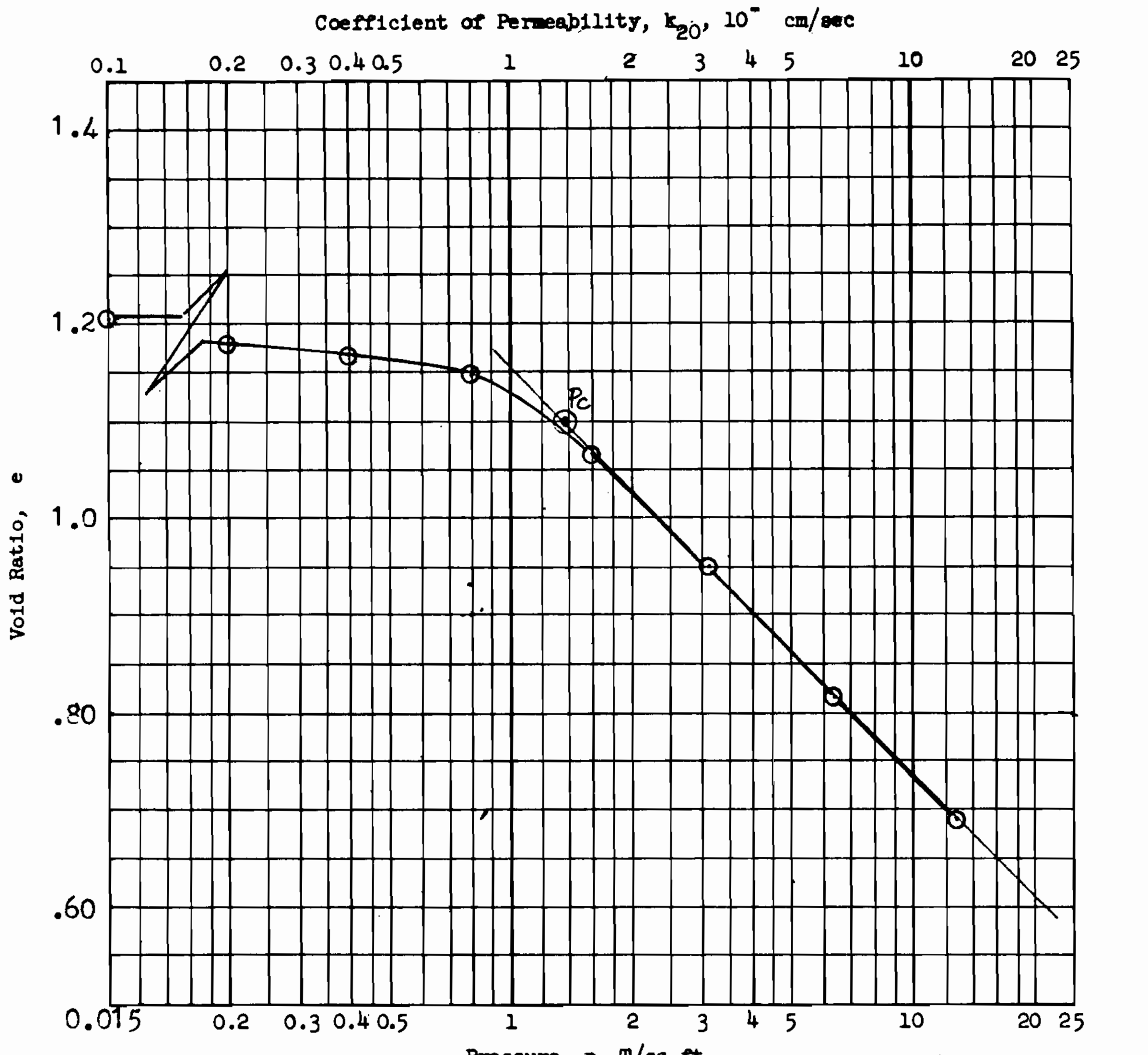
Boring No. 5-MUW	Sample No. 4-B
Depth El -3.1	Date 5 March 1971

FAM **TRIAXIAL COMPRESSION TEST REPORT**

ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT

USAEWES SOILS TEST SECTION



sat. γ = 109.4

Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.164 in.	Water Content, w_o	45.3 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	1.20	e_f	
Preconsol. Pressure, p_c 1.38 T/sq ft		Saturation, S_o	100 %	S_f	%
Compression Index, C_c 0.43		Dry Density, γ_d	75.3 lb/ft^3		
Classification PLASTIC CLAY(CH)*		k_{20} at e_o =	$\times 10^{-}$ cm/sec		

LL –	G_s 2.66 From Q
PL –	D_{10}

Remarks * gray, contains small roots

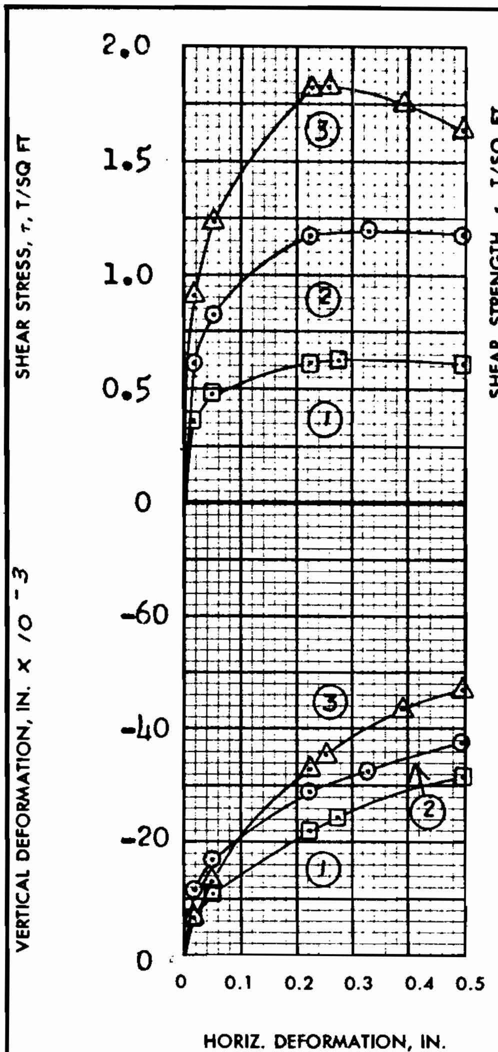
Project LK. PONT., LA., & VIC.-HURR. PROT.-'71
ORLEANS PARISH LAKEFRONT LEVEE, WEST OF IHNC
(OUTFALL CANALS)ALONG 17th.ST.CANAL(GDM#2;SUPP.#5)

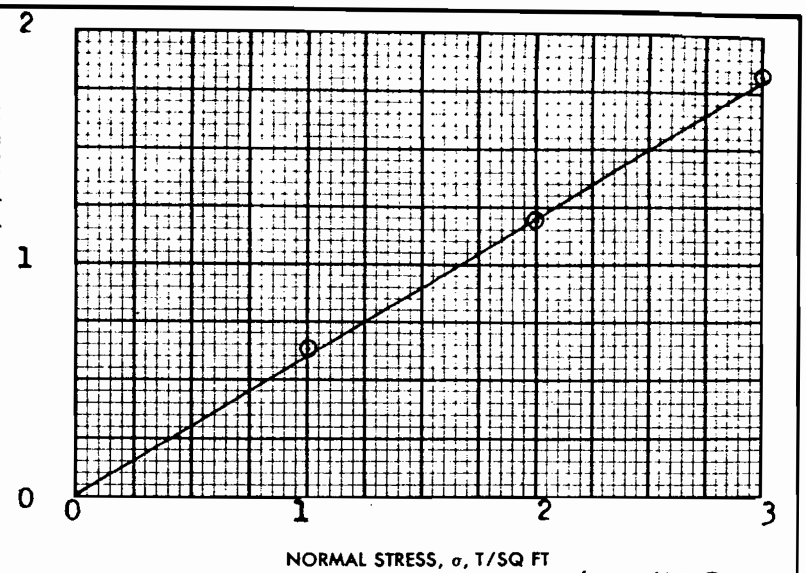
Boring No. 5-MUW	Sample No. 4-B
~~Depth~~ El -3.1	Date 8 March, 1971

JDB **CONSOLIDATION TEST REPORT**

ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

0 3424





Sat. γ = 112.2

SHEAR STRENGTH PARAMETERS

ϕ' = 31°

TAN ϕ' = 0.595

c' = 0 T/SQ FT

☐ CONTROLLED STRESS

☒ CONTROLLED STRAIN

			1	2	3	Avg.
TEST NO.			1	2	3	Avg.
INITIAL	WATER CONTENT	w_o	40.4 %	49.5 %	45.7 %	45.2 %
INITIAL	VOID RATIO	e_o	1.06	1.22	1.23	
INITIAL	SATURATION	S_o	100+%	100+ %	99.9%	%
INITIAL	DRY DENSITY, LB/CU FT	γ_d	81.5	75.5	75.4	
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}	< 1	< 1	< 1	
FINAL	WATER CONTENT	w_f	28.5 %	27.6 %	33.2%	%
FINAL	VOID RATIO	e_f				
FINAL	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.63	1.19	1.83	
ACTUAL TIME TO FAILURE, MIN		t_f	1620	1860	1500	
RATE OF STRAIN, IN./MIN			.00018	.00018	.00018	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

TYPE OF SPECIMEN UNDISTURBED — 3.00 IN. SQUARE — 0.550 IN. THICK

CLASSIFICATION SILTY CLAY(CL),gray,contains organic matter and rootlets

LL 41 | PL 19 | PI 22 | G_s 2.69

REMARKS

PROJECT LK. PONT.LA.,& VIC.-HURR.PROT.-1971

ORLEANS PARISH LAKEFRONT LEVEE WEST OF IHNC

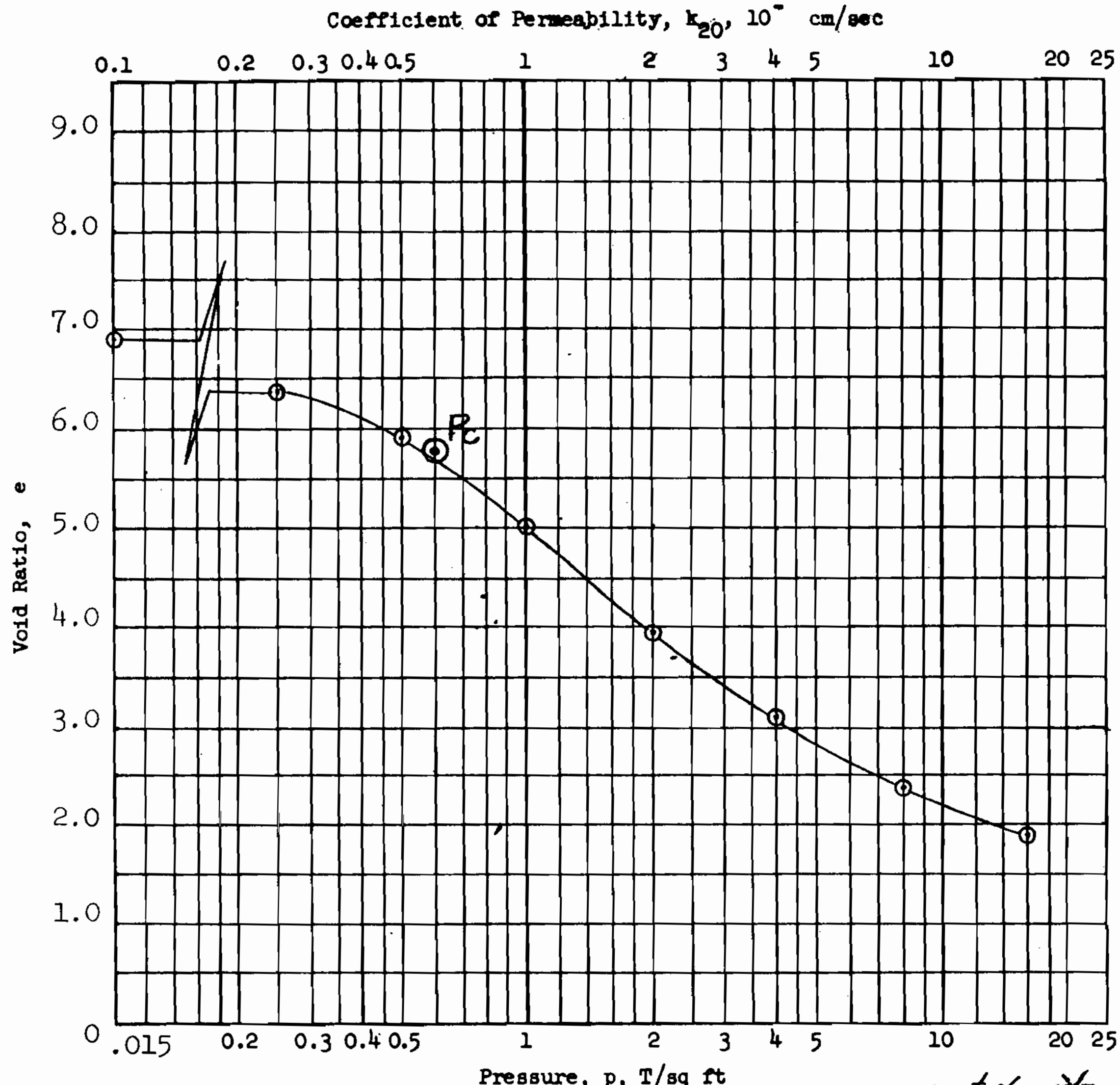
AREA (OUTFALL CANALS) ALONG 17th ST.CANAL

BORING NO. 5-MUW — SAMPLE NO. 5-C

~~DEPTH~~ EL - 8.0 — DATE 8 March 1971

BWG

DIRECT SHEAR TEST REPORT



sat γ = *

Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.165 in.	Water Content, w_o	363.1 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	6.98	e_f	
Preconsol. Pressure, p_c 0.60 T/sq ft		Saturation, S_o	95.2 %	S_f	%
Compression Index, C_c 3.65		Dry Density, γ_d	102.8 lb/ft^3		
Classification PLASTIC CLAY(CH),*		k_{20} at e_o = × 10^{-} cm/sec			
LL -	G_s 1.83				
PL -	D_{10}				

Project LK. PONT., LA.&VIC.-HURR. PROT.'71

Area ORLEANS PARISH L.F. LEV. WEST OF IHNC(OUT-FALL CANALS)ALONG 17th ST.CANAL(GDM#2,SUPP.#5)

Remarks *brown, contains 1/2" dia. roots, highly organic

*calculated sat γ is unreasonable

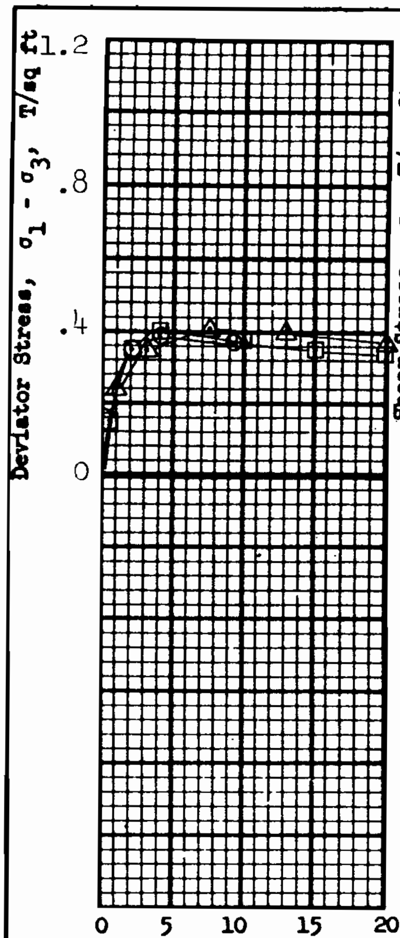
Boring No. 5-MUW	Sample No. 6-C
Depth-El -11.6	Date 10 March 1971

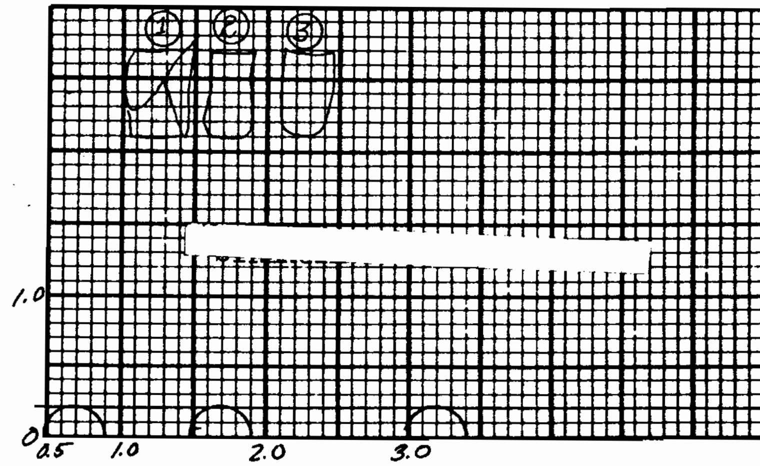
CONSOLIDATION TEST REPORT

ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

G 3424

SOILS TEST SECTI[illegible]





sat γ = 102

Test No.			1	2	3	Avg.
Initial	Water content	w_o	62.0 %	63.7 %	62.3 %	62.7 %
	Void ratio	e_o	1.69	1.72	1.69	
	Saturation	S_o	100+ %	100+ %	99.9 %	%
	Dry density, lb/cu ft	γ_d	63.0	62.3	62.8	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.40	0.39	0.41	
Time to failure, min		t_f	17	24	77	
Rate of strain, percent/min			0.234	0.167	0.098	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.41	1.41	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.20 T/sq ft

Method of saturation ________

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY(CH), gray, contains silt lenses

LL 78 | PL 21 | PI 57 | G_s 2.71

Remarks

Project LK. PONT., LA.&VIC.-HURR. PROT-71
ORLEANS PARISH LK.F. LEVEE WEST OF IHNC(OUT-
Area FALL CANALS)ALONG 17th St.CANAL(GDM #2 SUPP. # 5)

Boring No. 5-MUW | Sample No. 9-B

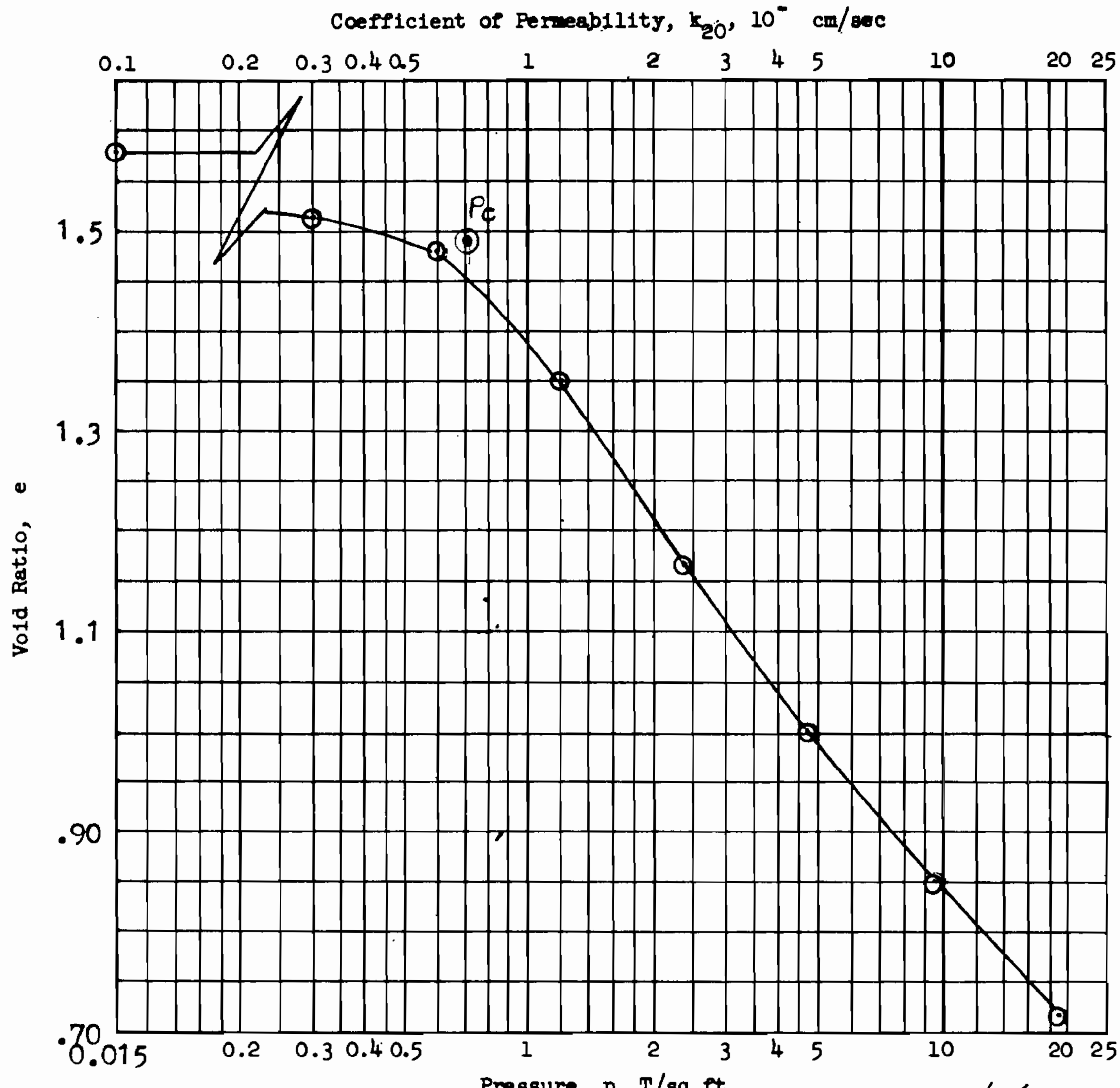
Depth El -23.1 | Date 8 March 1971

JMS TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

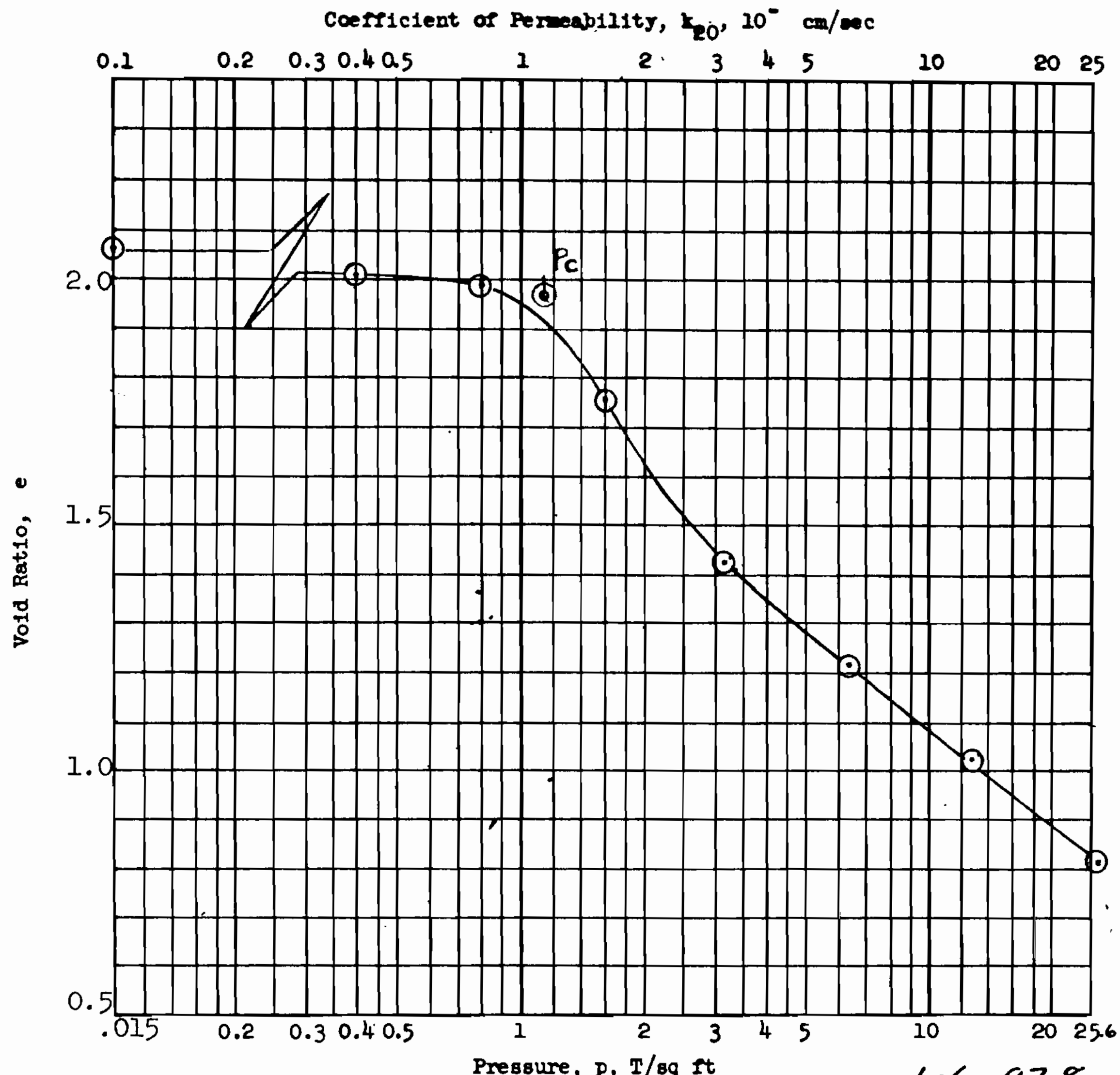
TRANSLUCENT

SOILS TEST SECTION



sat. γ = 103.8

Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.163 in.	Water Content, w_o	57.0 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	1.58	e_f	
Preconsol. Pressure, p_c 0.72 T/sq ft		Saturation, S_o	97.5 %	S_f	%
Compression Index, C_c 0.43		Dry Density, γ_d	65.5 lb/ft^3		
Classification PLASTIC CLAY(CH)*		k_{20} at e_o = × 10^{-} cm/sec			
LL -	G_s 2.71 From Q	Project LK.PONT.,LA.& VIC.-HURR. PROT.-'71			
PL -	D_{10}	ORLEANS PARISH LAKEFRONT LEVEE,WEST OF IHNC			
Remarks * gray, contains a 1/8"		(OUTFALL CANALS)ALONG17thST.CANAL(GDM#2;SUPP.#5)			
silt stratum		Boring No. 5-MUW		Sample No. 9-B	
		~~Depth~~ El -23.1		Date 10 March,1971	
		JDB **CONSOLIDATION TEST REPORT**			

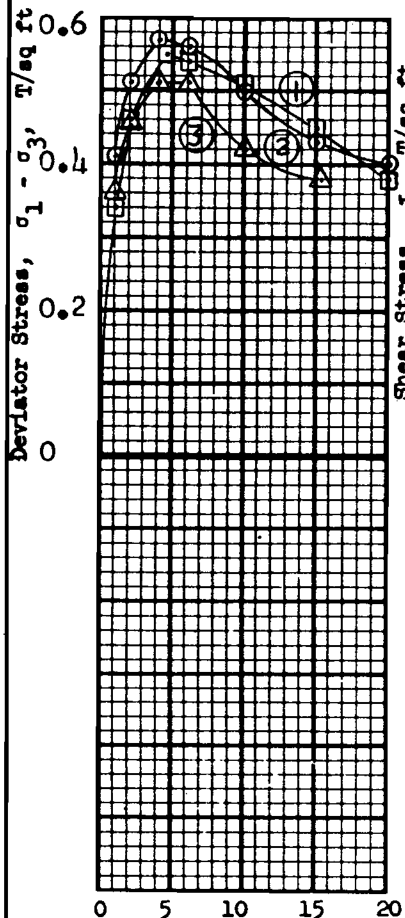


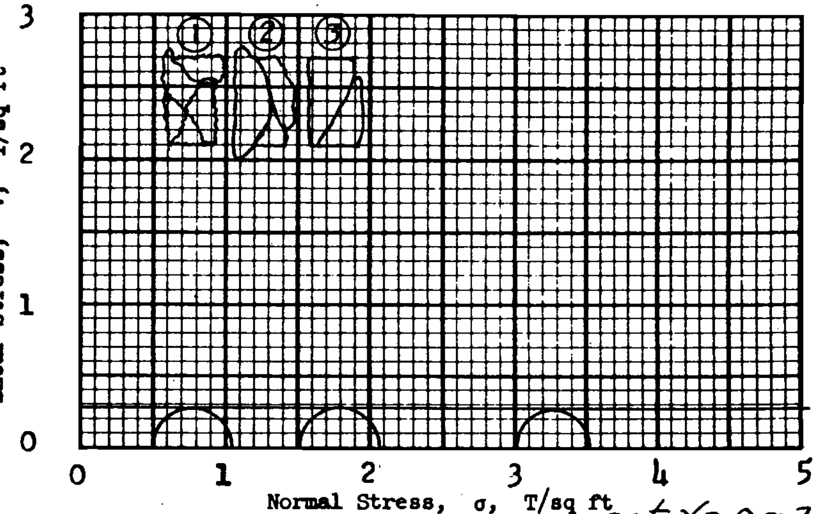
sat. γ = 97.8

Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.165 in.	Water Content, w_o	74.9 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	2.06	e_f	
Preconsol. Pressure, p_c 1.13 T/sq ft		Saturation, S_o	99.4 %	S_f	%
Compression Index, C_c 1.17		Dry Density, γ_d	55.8 lb/ft^3		
Classification PLASTIC CLAY(CH),*		k_{20} at e_o = × 10^{-} cm/sec			
LL 95	G_s 2.73	Project LK.PONT.,LA.&VIC.-HURR. PROT.'71			
PL 24	D_{10}	ORLEANS PAR. L.F. LEV. WEST OF IHNC(OUTFALL			
Remarks *gray		Area CANALS)ALONG17th ST. CANAL(GDM#2,SUPP.#5)			
		Boring No. 5-MUW		Sample No. 11-B	
		Depth El -30.9		Date 12 March 1971	
		CONSOLIDATION TEST REPORT			

ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) G 3424

SOILS TEST SECTION





sat. γ = 98.7

Test No.			1	2	3	Avg.
Initial	Water content	w_o	72.2 %	71.4 %	72.8 %	72.1 %
	Void ratio	e_o	1.97	1.95	2.00	
	Saturation	S_o	100 %	100 %	99.4 %	%
	Dry density, lb/cu ft	γ_d	57.3	57.7	56.9	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.55	0.57	0.51	
Time to failure, min		t_f	28	19	34	
Rate of strain, percent/min			0.163	0.213	0.119	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.40	1.41	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.27 T/sq ft

Method of saturation ________

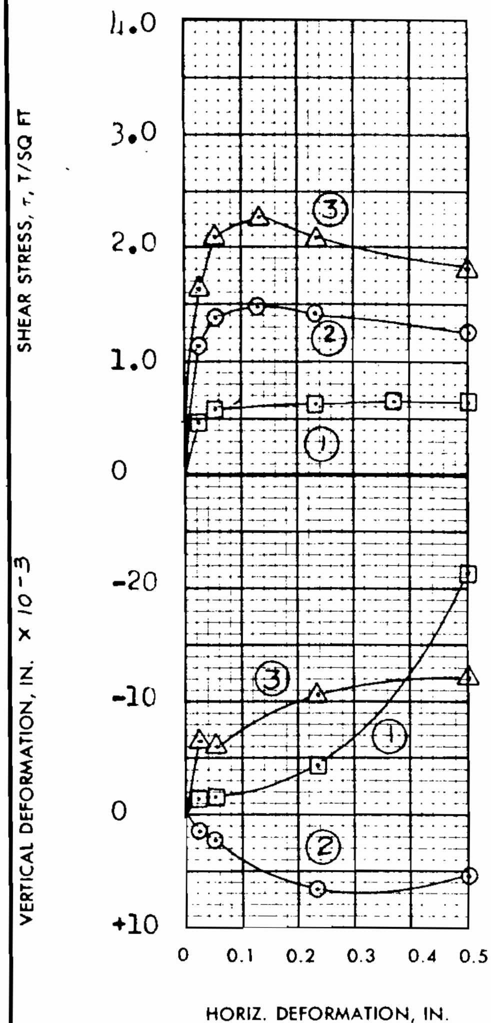
☐ Controlled stress

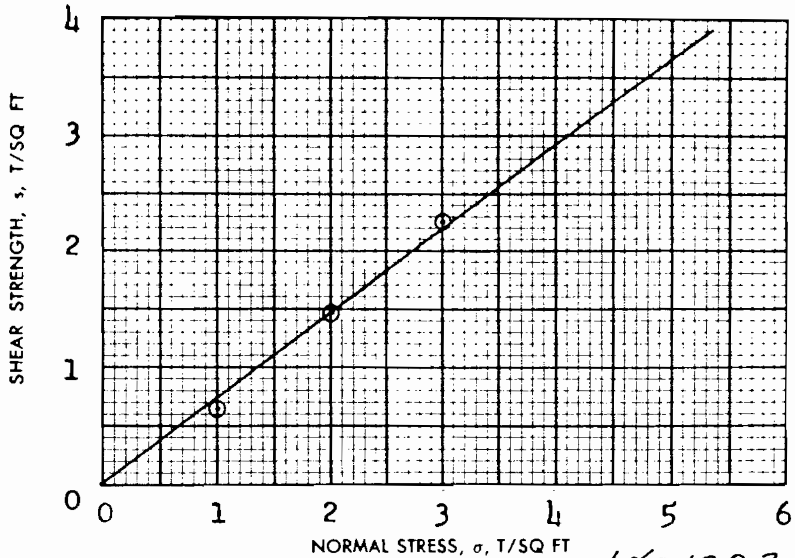
☒ Controlled strain

Type of test Q	Type of specimen UNDISTURBED			
Classification PLASTIC CLAY(CH),gray				
LL -	PL -	PI -		G_s 2.73 From 11-B Cons

Remarks ________

Project LK.PONT.LA.,&VIC.-HURR.PROT-1971	
ORLEANS PARISH LK.FT.LEVEE,WEST OF IHNC(OUT-	
Area FALL CANALS) ALONG 17thST.CANAL(GDM#2,SUPP#5)	
Boring No. 5-MUW	Sample No. 11-C
~~Depth~~ El - 31.8	Date 8 March,1971
FAM TRIAXIAL COMPRESSION TEST REPORT	





sat γ = 120.2

TEST NO.			1	2	3	Avg.
INITIAL	WATER CONTENT	w_o	26.8 %	26.9 %	26.0 %	25.6 %
	VOID RATIO	e_o	0.798	0.830	0.785	
	SATURATION	S_o	89.7 %	86.5 %	88.4 %	%
	DRY DENSITY, LB/CU FT	γ_d	92.7	91.1	93.4	
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}				
FINAL	WATER CONTENT	w_f	28.1 %	27.3 %	28.5 %	%
	VOID RATIO	e_f				
	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.64	1.48	2.27	
ACTUAL TIME TO FAILURE, MIN		t_f	2040	750	750	
RATE OF STRAIN, IN./MIN			.00018	.00018	.00018	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

SHEAR STRENGTH PARAMETERS

ϕ' = 36°

TAN ϕ' = 0.740

c' = 0 T/SQ FT

☐ CONTROLLED STRESS

☒ CONTROLLED STRAIN

TYPE OF SPECIMEN UNDISTURBED		3.00 IN. SQUARE	0.550 IN. THICK
CLASSIFICATION SAND(SP), light gray, contains 1/4" dia. shells and shell fragments			
LL -	PL -	PI -	G_s 2.67

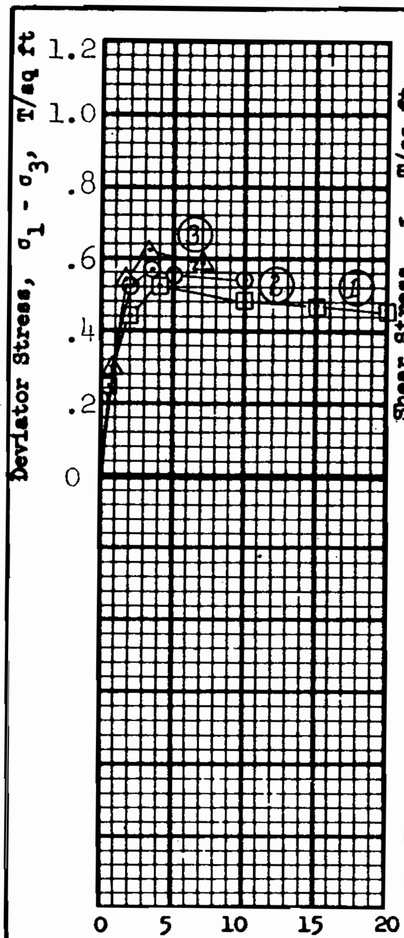
REMARKS

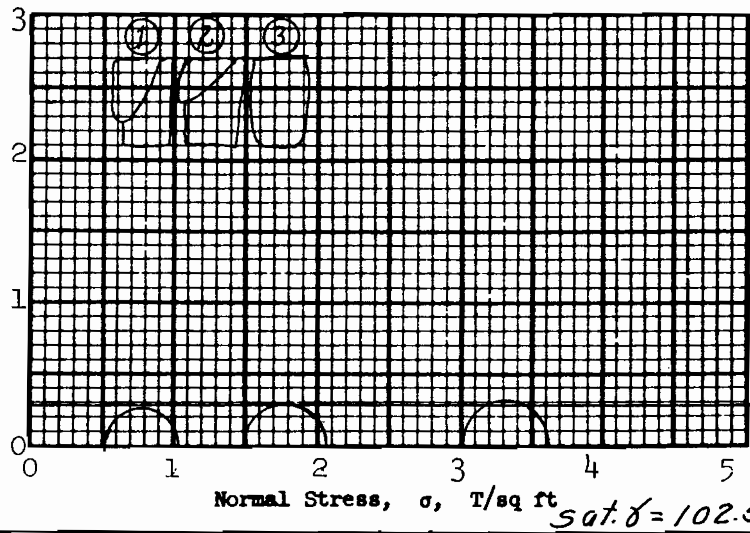
PROJECT LK. PONT. LA., & VIC.-HURR. PROT- 1971

AREA ORLEANS PARISH L.F. LEVEE WEST OF IHNC (OUT-FALL CANALS) ALONG 17th ST. CANAL (GDM#2

BORING NO.	5-MUW	SAMPLE NO.	13-B SUPP.#5)
~~DEPTH~~ EL	- 39.1	DATE	9 March 1971

BWG **DIRECT SHEAR TEST REPORT**





sat. γ = 102.5

Test No.			1	2	3	Avg.
Initial	Water content	w_o	60.3 %	61.6 %	56.5 %	59.5 %
	Void ratio	e_o	1.67	1.67	1.57	
	Saturation	S_o	97.1 %	99.2 %	96.8 %	%
	Dry density, lb/cu ft	γ_d	62.9	62.9	65.4	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.52	0.57	0.62	
Time to failure, min		t_f	14	18	32	
Rate of strain, percent/min			0.276	0.198	0.103	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.41	1.41	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.28 T/sq ft

Method of saturation ________

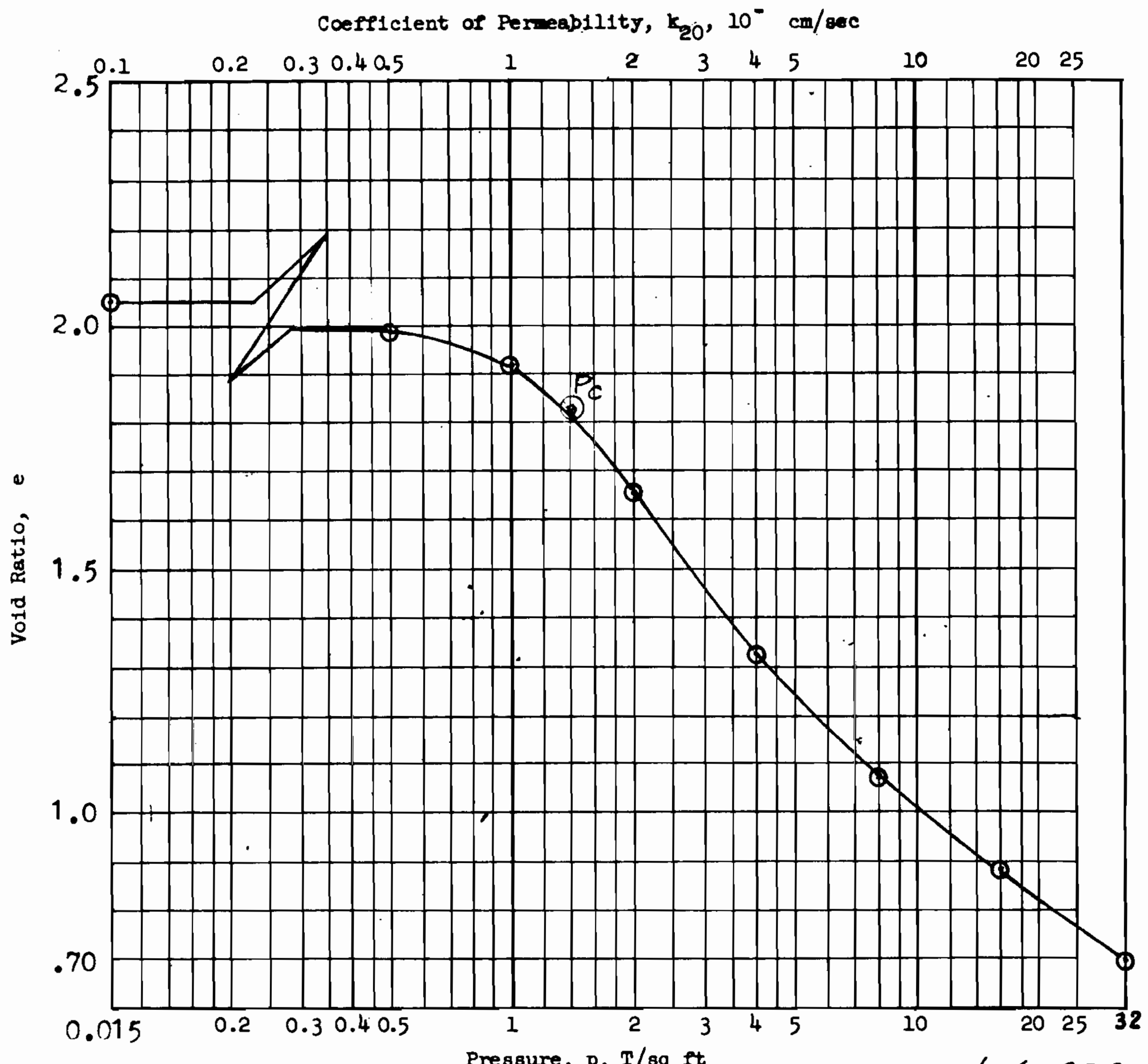
☐ Controlled stress

☒ Controlled strain

Type of test Q	Type of specimen UNDISTURBED			
Classification PLASTIC CLAY(CH), gray, contains sand and shell fragments				
LL 64	PL 22	PI 42		G_s 2.69

Remarks ________

Project LK. PONT.LA.&VIC.-HURR. PROT.'71 ORLEANS PARISH L.F. LEVEE WEST OF IHNC(OUTFALL	
Area CANALS)ALONG 17th ST. CANAL(GDM#2,SUPP.#5)	
Boring No. 5-MUW	Sample No. 16-B
Depth El -50.9	Date 8 March 1971
JMS TRIAXIAL COMPRESSION TEST REPORT	

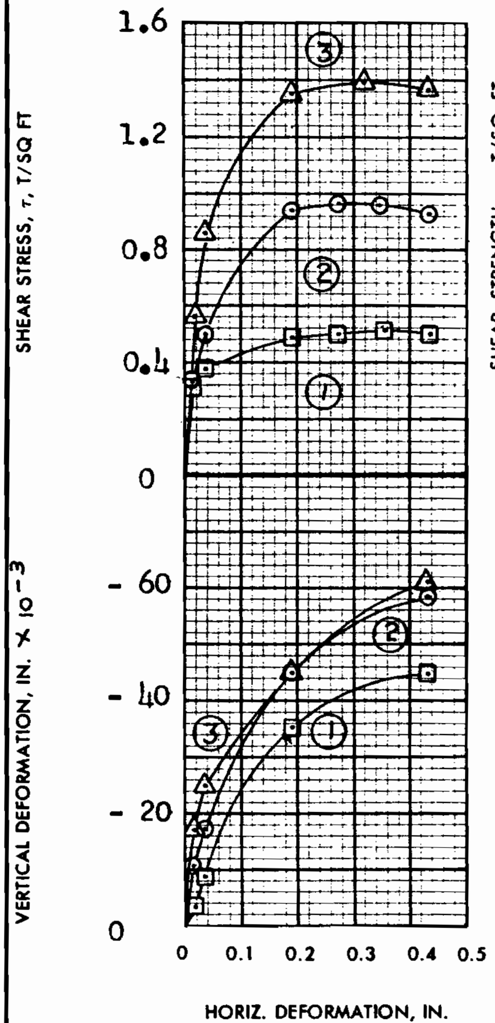


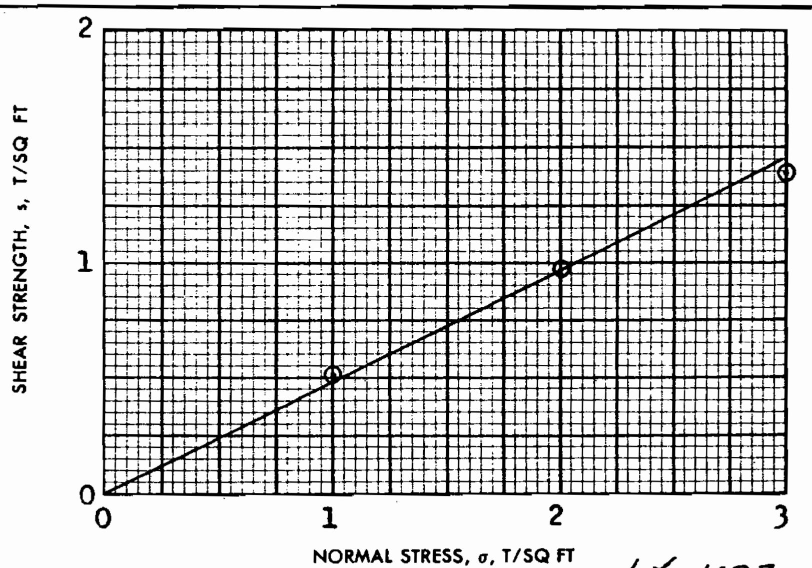
sat. γ = 97.0

Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.163 in.	Water Content, w_o	76.3 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	2.05	e_f	
Preconsol. Pressure, p_c 1.41 T/sq ft		Saturation, S_o	100 %	S_f	%
Compression Index, C_c 1.10		Dry Density, γ_d	55.0 lb/ft^3		
Classification PLASTIC CLAY(CH),*		k_{20} at e_o = × 10^{-} cm/sec			
LL -	G_s 2.69 From Q	Project LK. PONT., LA. &VIC.-HURR. PROT. '71;			
PL -	D_{10}	ORLEANS PARISH LAKEFRONT LEVEE WEST OF IHNC			
Remarks * grayish-green, contains		(OUTFALL CANALS) ALONG 17thST. CANAL (GDM#2; SUPP. #5)			
small sand pockets		Boring No. 5-MUW		Sample No. 16-B	
		~~Depth~~ El -50.9		Date 15 March, 1971	
		JDB **CONSOLIDATION TEST REPORT**			

ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

G 3424





sat. γ = 103.7

TEST NO.			1	2	3	Avg.
INITIAL	WATER CONTENT	w_o	57.0 %	55.9 %	55.5 %	56.1 %
	VOID RATIO	e_o	1.58	1.58	1.57	
	SATURATION	S_o	97.4 %	95.5 %	95.4 %	%
	DRY DENSITY, LB/CU FT	γ_d	65.3	65.3	65.6	
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}	1	4	4	
FINAL	WATER CONTENT	w_f	47.8 %	42.6 %	38.2 %	%
	VOID RATIO	e_f				
	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.51	0.97	1.39	
ACTUAL TIME TO FAILURE, MIN		t_f	2280	1830	2040	
RATE OF STRAIN, IN./MIN			.00016	.00016	.00016	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

SHEAR STRENGTH PARAMETERS

ϕ' = 26°

TAN ϕ' = 0.485

c' = 0 T/SQ FT

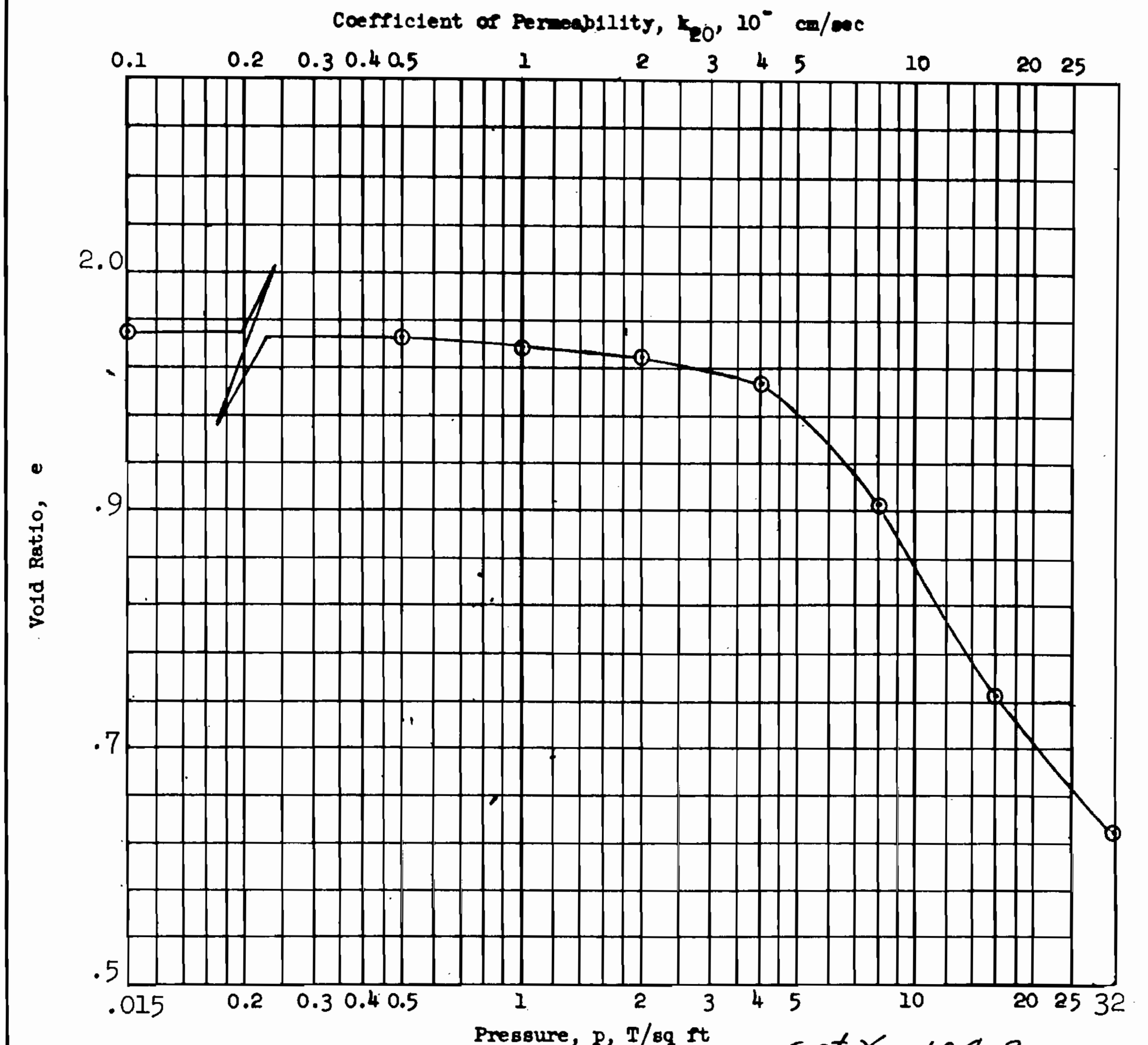
☐ CONTROLLED STRESS

☒ CONTROLLED STRAIN

TYPE OF SPECIMEN UNDISTURBED		3.00 IN. SQUARE	0.540 IN. THICK
CLASSIFICATION PLASTIC CLAY(CH),gray, contains shell fragments			
LL 82	PL 24	PI 58		G. 2.70

REMARKS

PROJECT LK.PONT.LA.,&VIC.-HURR.PROT.-1971	
AREA ORLEANS PARISH LK.PT.LEVEE,WEST OF IHNC(OUT-FALL CANALS) ALONG 17thST.CANAL(GDM#2,SUPP#5)	
BORING NO. 5-MUW	SAMPLE NO. 17-C
~~DEPTH~~ EL - 56.0	DATE 10 March, 1971
GDA	DIRECT SHEAR TEST REPORT



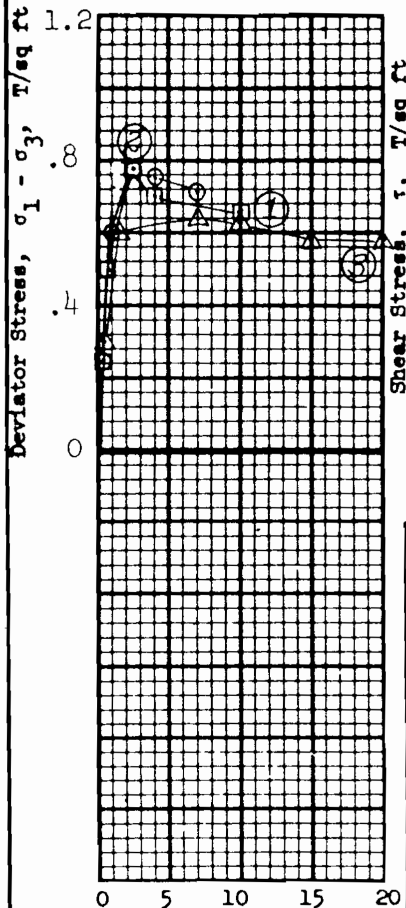
sat. γ = 104.2

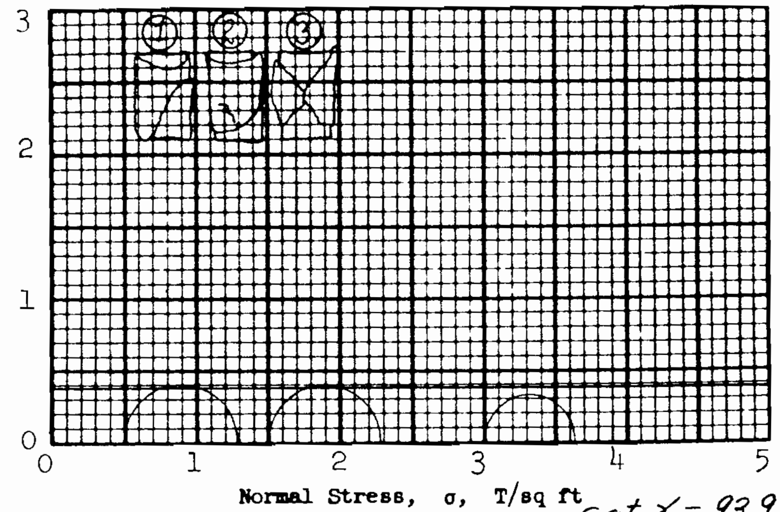
Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.163 in.	Water Content, w_o	57.8 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	1.58	e_f	
Preconsol. Pressure, p_c* T/sq ft		Saturation, S_o	99.8 %	S_f	%
Compression Index, C_c*		Dry Density, γ_d	66.0 lb/ft^3		
Classification PLASTIC CLAY(CH)*		k_{20} at e_o = × 10^{-} cm/sec			
LL 81	G_s 2.73	Project LK. PONT., LA.&VIC.-HURR. PROT.'71			
PL 19	D_{10}	ORLEANS PAR. L.F.LEV.WEST OF IHNC(OUTFALL			
Remarks * gray		Area CANALS)ALONG 17th ST.CANAL(GDM#2,SUPP.#5)			
*Pc & Cc NOT FIGURED		Boring No. 5-MUW		Sample No. 18-C	
BECAUSE SCALE ON ABOVE		Depth El -60.2		Date 15 March 1971	
PLOT IN ERROR		CONSOLIDATION TEST REPORT			

ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

G 3424

USAEWES SOILS TEST SHEET





Sat. γ = 93.9

Test No.			1	2	3	Avg.
Initial	Water content	w_o	53.6 %	53.3 %	56.3 %	37.7 %
	Void ratio	e_o	1.46	1.46	1.53	
	Saturation	S_o	99.5 %	98.9 %	99.7 %	%
	Dry density, lb/cu ft	γ_d	68.9	68.8	66.8	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.78	0.78	0.64	
Time to failure, min		t_f	14	21	68	
Rate of strain, percent/min			0.182	0.117	0.103	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.40	1.40	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.37 T/sq ft

Method of saturation ______

☐ Controlled stress

☒ Controlled strain

Type of test Q	Type of specimen UNDISTURBED			
Classification PLASTIC CLAY(CH),gray				
LL 77	PL 18	PI 59		G_s 2.71

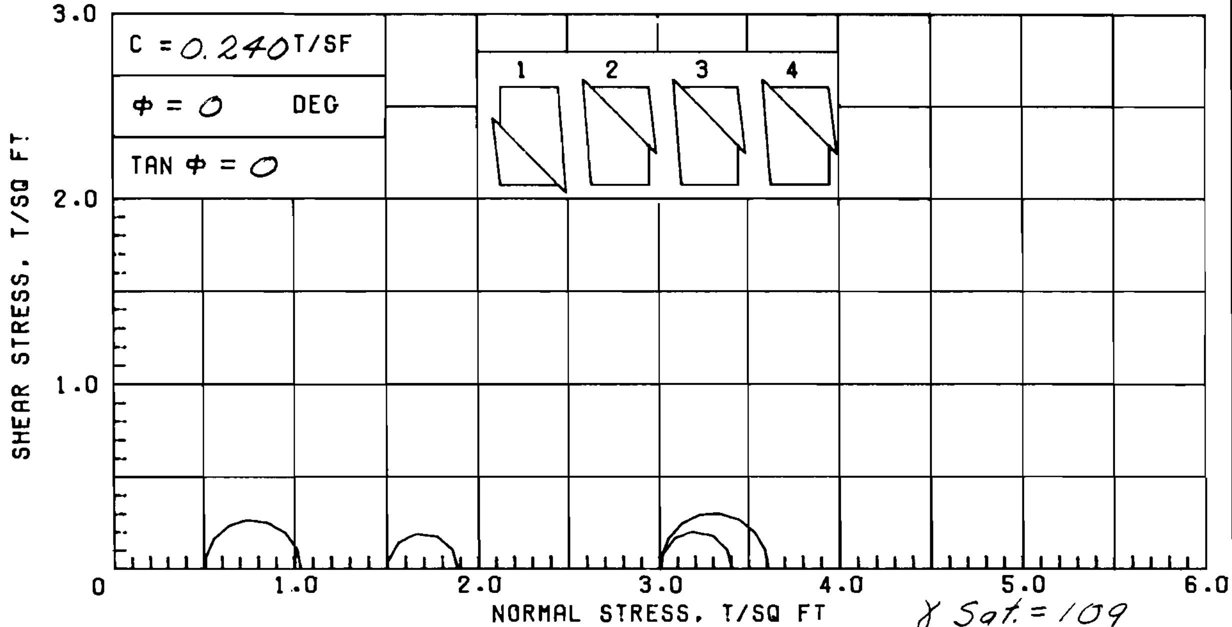
Remarks

Project LK. PONT.,LA.&VIC.-HURR. PROT.-'71	
Area ORLEANS PARISH L.F. LEVEE WEST OF IHNC(OUTFALL CANALS)ALONG 17th ST.CANAL(GDM#2,SUPP.#5)	
Boring No. 5-MUW	Sample No. 18-D
~~Depth~~ El -60.6	Date 8 March 1971
OHR	TRIAXIAL COMPRESSION TEST REPORT

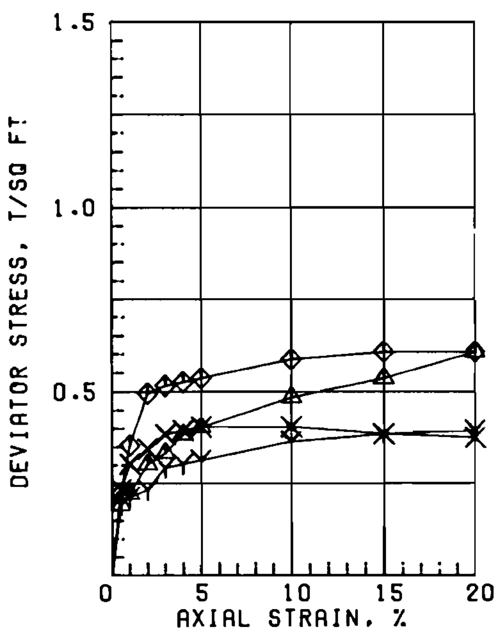
ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT

SOILS TEST SECTION



γ Sat. = 109



		110.4	108.3	107.2	108.5	
SPECIMEN NO.		△1	Y2	X3	◇4	Avg. 45.9
INITIAL	WATER CONTENT, %	44.6	47.1	47.7	44.1	
	DRY DENSITY, PCF	76.2	72.8	71.2	73.2	
	SATURATION, %	99.4	96.7	94.3	91.5	
	VOID RATIO	1.212	1.315	1.366	1.302	
BEFORE SHEAR	WATER CONTENT, %					
	DRY DENSITY, PCF					
	SATURATION, %					
	VOID RATIO					
	BACK PRESS., TSF					
MIN PRIN. STRESS, TSF		0.5	1.5	3.0	3.0	
MAX. DEV. STRESS, TSF		0.53	0.38	0.40	0.61	
TIME TO FAILURE, MIN.		30	30	10	30	
RATE OF STRAIN INCR.,%						
INITIAL DIAMETER, IN.		1.39	1.39	1.39	1.39	
INITIAL HEIGHT, IN.		3.00	3.00	3.00	3.00	

CONTROLLED-STRAIN TEST

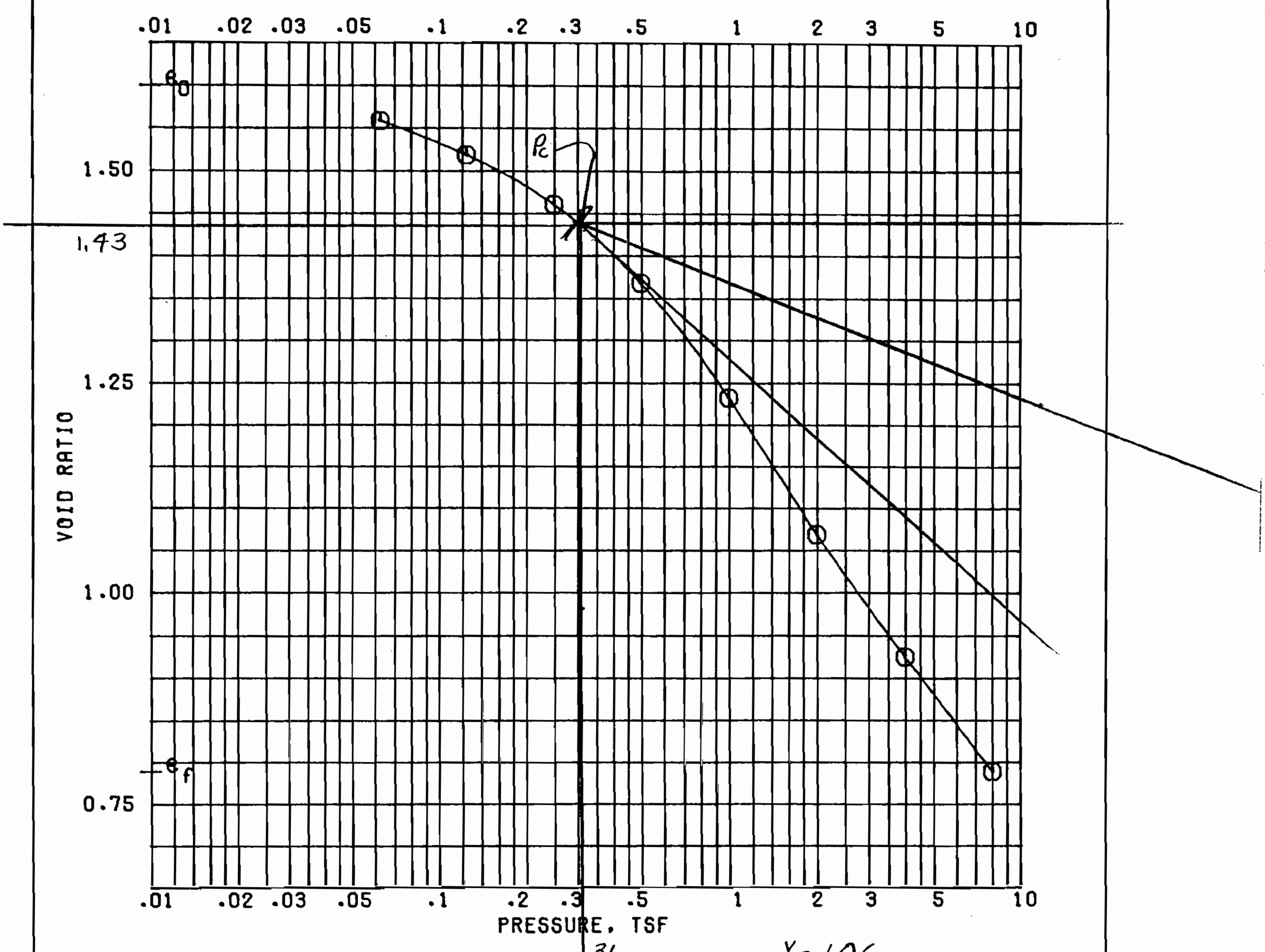
DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), BROWN; SILT LENSES & POCKETS

LL	PL	PI	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS:

PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING NO. 2-MUG	SAMPLE NO. 3-C
DEPTH/ELEV 8.9/-1.8	TECH. KOC
LABORATORY USAE WES	DATE 22 AUG 86

TRIAXIAL COMPRESSION TEST REPORT



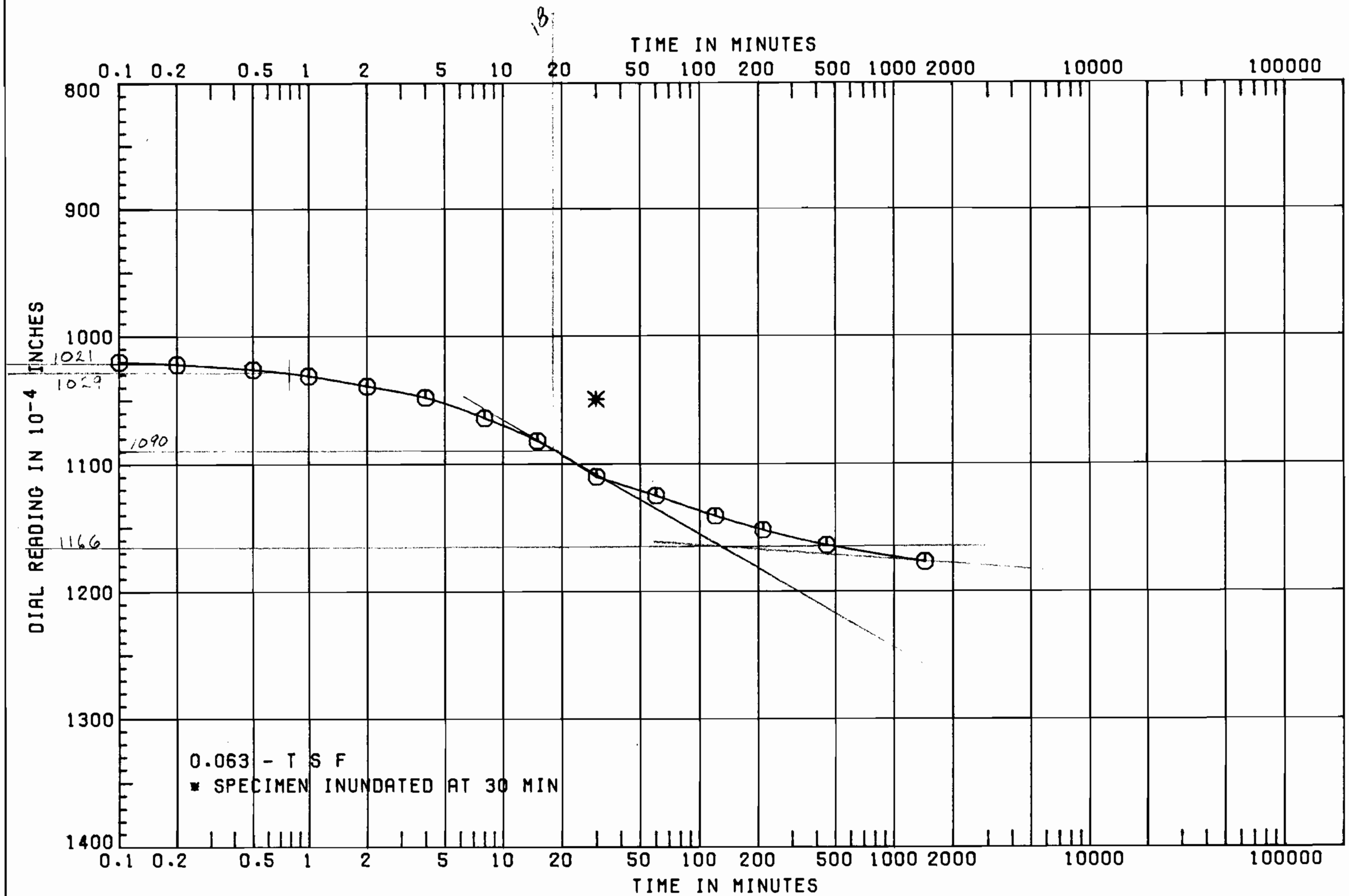
γ=106

			BEFORE TEST	AFTER TEST
OVERBURDEN PRESSURE, TSF		WATER CONTENT, %	62.8	29.8
PRECONSOL. PRESSURE, TSF	.31	DRY DENSITY, PCF	64.9	94.3
COMPRESSION INDEX		SATURATION, %	100 +	100 +
TYPE SPECIMEN	UNDISTURBED	VOID RATIO	1.598	0.788
DIA. IN 4.44	HT. IN 1.120	BACK PRESSURE, TSF		

CLASSIFICATION	PLASTIC CLAY (CH), GRAY		
LL	PL	PI	PROJECT LK PONT LA & VIC HURR PROT
GS 2.70 (EST)	D_{10}		ORLEANS PARISH OUTFALL CANALS
REMARKS		BORING NO. 2-MUG	SAMPLE NO. 4-B
		DEPTH/ELEV 11.5/-4.4	DATE 24 JUL 86

CONSOLIDATION TEST REPORT

SHEET 1 OF 9



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST TIME CURVES
ORLEANS PARISH OUTFALL CANALS		
BORING 2-MUG	SAMPLE NO. 4-B	
DEPTH/ELEV 11.5/-4.4	DATE 24 JUL 86	

SHEET 2 OF 9

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 4-B Elev. -4.4 Load Increment 0.063 T.S.F.

$t = .8$ Dial Reading DR_1 = 1029

$t/4 = .2$ Dial Reading DR_2 = 1021

$a = DR_1 - DR_2$ = 8

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 1021 − 8 = 1013

$U = 100\%$ from construction DR_{100} = 1166

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1013 + 1166}{2} = 1090$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 18 = 1080$ sec

T_v for $U = 50$ that $= 0.197$

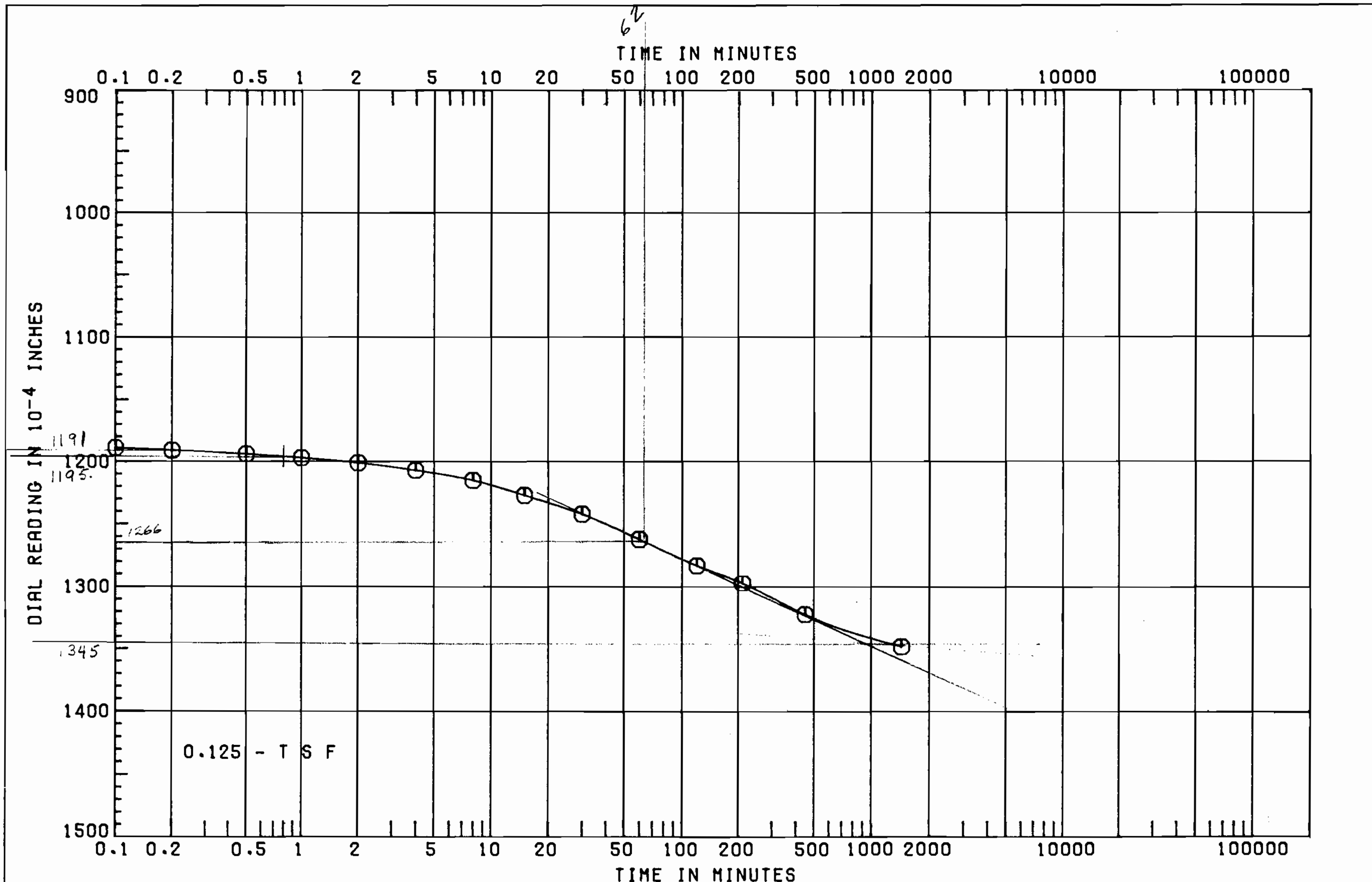
$2H$ = Sample height = 1.120 $-(DR_{50} - DR_0)$

$H = \frac{1.120 - (.1090 - .1013)}{2} = 0.55615$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right)\frac{cm^2}{sec} = 1.271\frac{H^2}{t_{50}}$$

$$C_v = 1.271\frac{(.55615)^2}{1080} = 0.00036 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00036 = 12.36 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 2-MUG	SAMPLE NO. 4-B
DEPTH/ELEV 11.5/-4.4	DATE 24 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 3 OF 9

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 4-B Elev. -4.4 Load Increment 0.125 T.S.F.

$t = .8$ Dial Reading DR_1 = 1195

$t/4 = .2$ Dial Reading DR_2 = 1191

$a = DR_1 - DR_2$ = 4

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 1191 − 4 = 1187

$U = 100\%$ from construction DR_{100} = 1345

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1187 + 1345}{2}$ = 1266

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 62 = 3720$ Se[c]

T_v for $U=50$ that $=$ 0.197

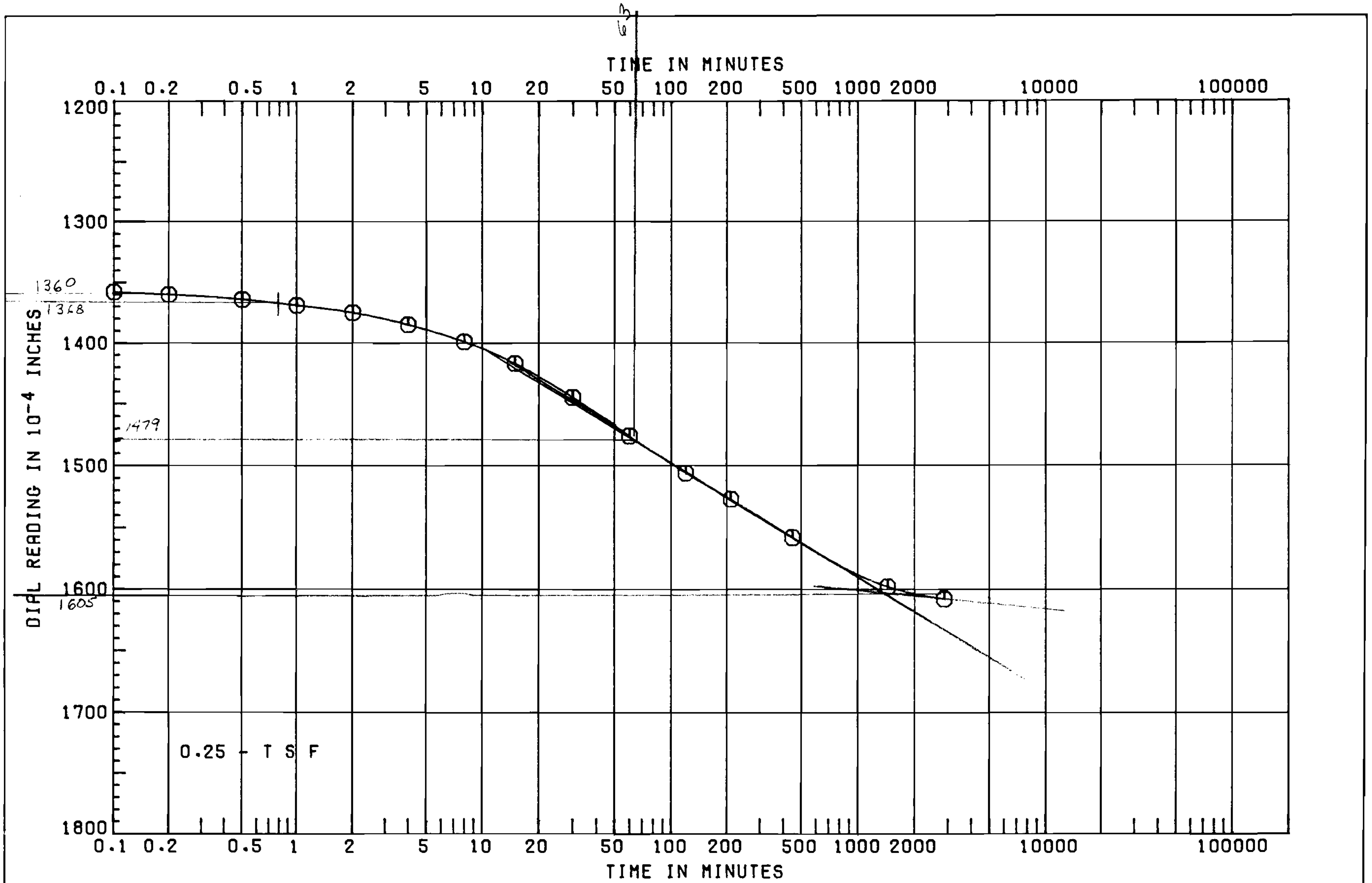
$2H$ = Sample height = 1.120 $-(DR_{50} - DR_0)$

$H = \frac{1.120 - (.1266 - .1187)}{2} = 0.55605$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) cm^2/sec = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55605)^2}{3720} = 0.00011 \ cm^2/s[ec]$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00011 = 3.59 \ \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 2-MUG	SAMPLE NO. 4-B
DEPTH/ELEV 11.5/-4.4	DATE 24 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 4 OF 9

Project Orleans Parish Outfall Canals

Boring No. 2-MU3

Sample No. 4-B Elev. -4.4 Load Increment 0.25 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1368$

$t/4 = .2$ Dial Reading $DR_2 = 1360$

$a = DR_1 - DR_2 = 8$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1360 - 8 = 1352$

$U = 100\%$ from construction $DR_{100} = 1605$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1352 + 1605}{2} = 1479$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 63 = 3780$ Se

T_v for $U = 50$ that $= 0.197$

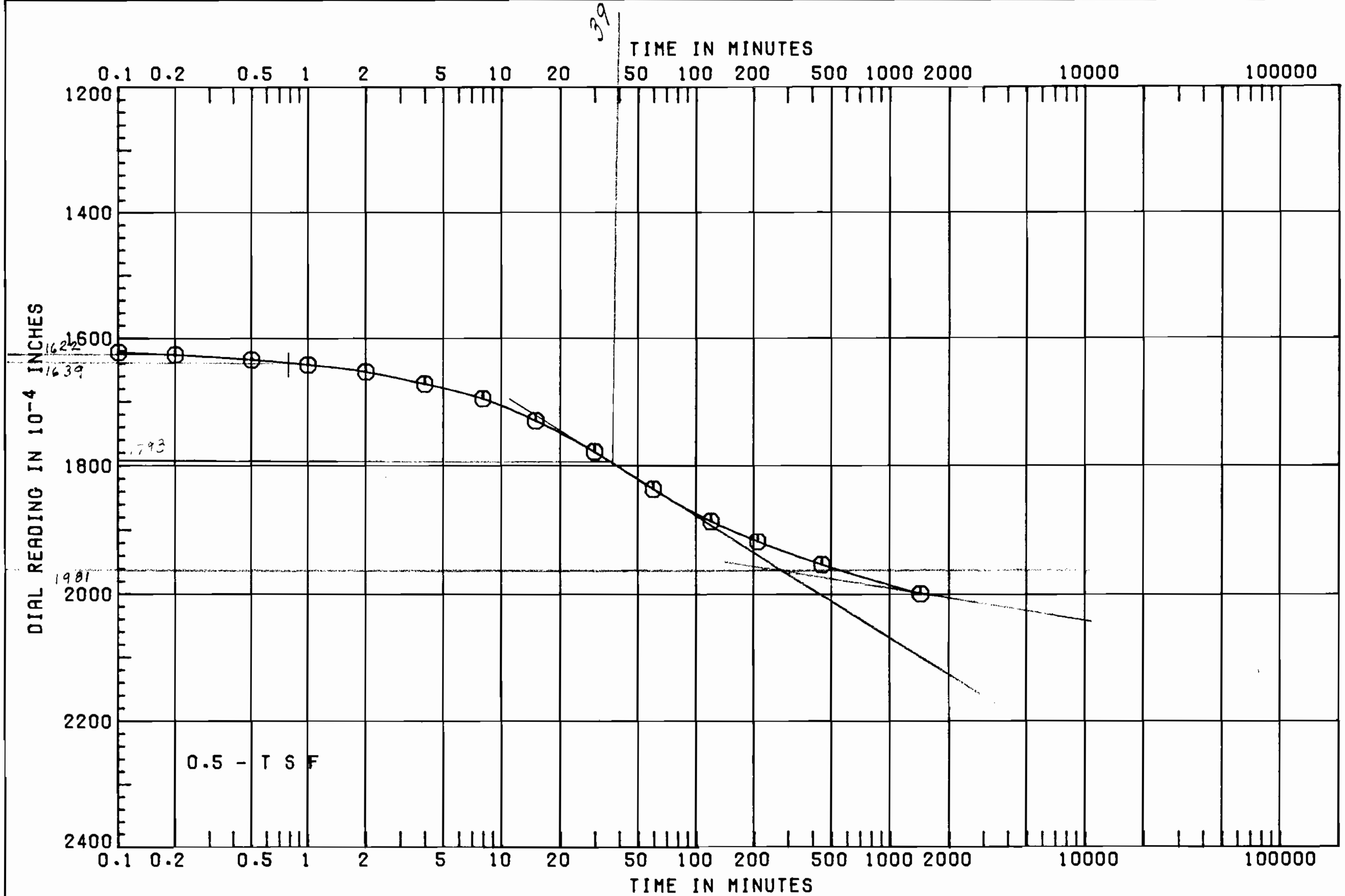
$2H =$ Sample height $= 1.120 - (DR_{50} - DR_0)$

$$H = \frac{1.120 - (.1479 - .1352)}{2} = 0.55365$$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55365)^2}{3780} = 0.00010 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00010 = 3.50 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 2-MUG	SAMPLE NO. 4-B
DEPTH/ELEV 11.5/-4.4	DATE 24 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 5 OF 9

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 4-B Elev. -4.4 Load Increment 0.5 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1639$

$t/4 = .2$ Dial Reading $DR_2 = 1622$

$a = DR_1 - DR_2 = 17$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1622 - 17 = 1605$

$U = 100\%$ from construction $DR_{100} = 1981$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1605 + 1981}{2} = 1793$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 39 = 2340$ Sec

T_v for $U = 50$ that $= \underline{0.197}$

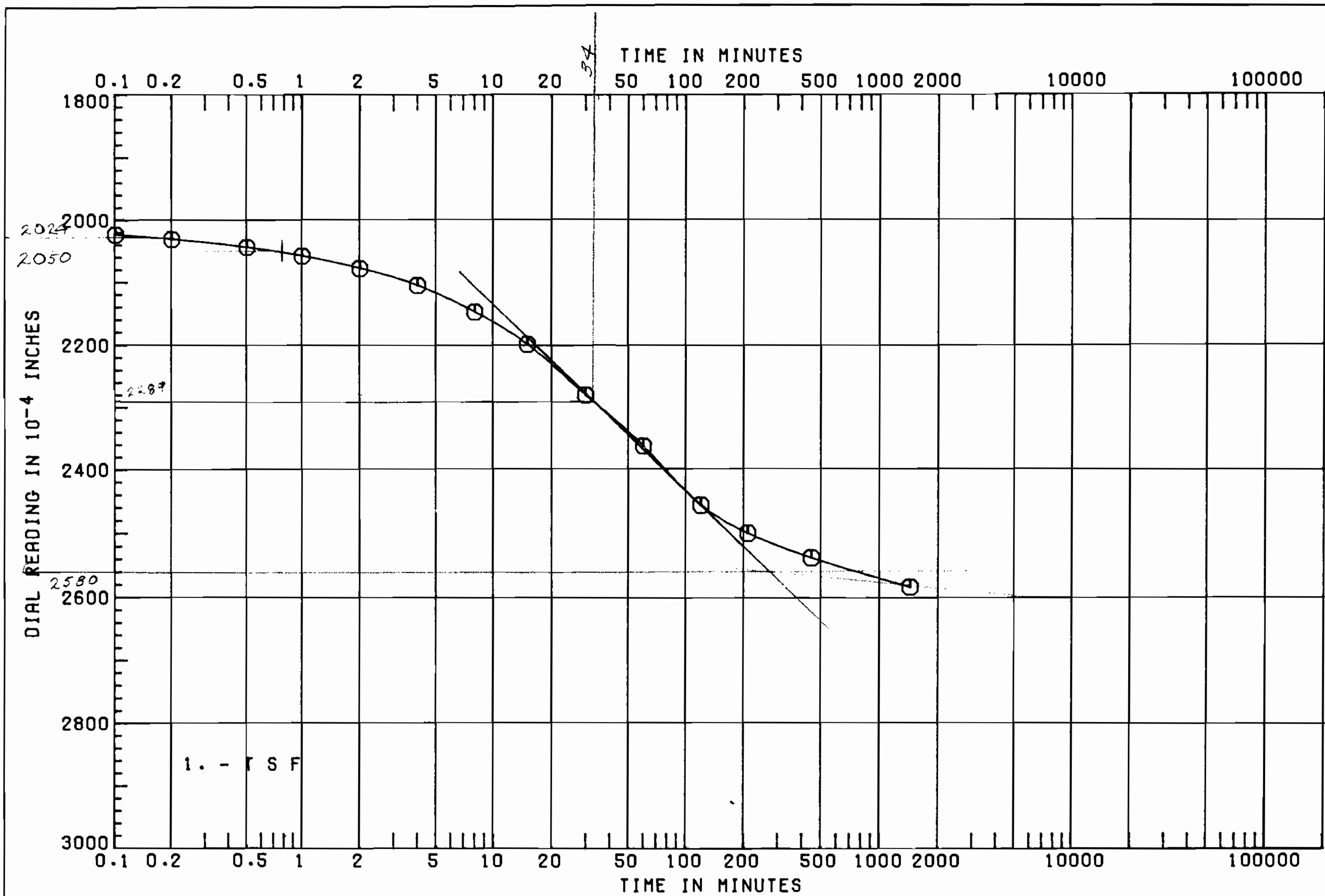
$2H$ = Sample height $= 1.120 - (DR_{50} - DR_0)$

$H = \frac{1.120 - (.1793 - .1605)}{2} = 0.5506$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) cm^2/sec = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5506)^2}{2340} = 0.00016 \ \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00016 = 5.59 \ \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST TIME CURVES
ORLEANS PARISH OUTFALL CANALS		
BORING 2-MUG	SAMPLE NO. 4-B	
DEPTH/ELEV 11.5/-4.4	DATE 24 JUL 86	

SHEET 6 OF 9

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 4-B Elev. -44 Load Increment 1.0 T.S.F.

$t = .8$ Dial Reading DR_1 = 2050

$t/4 = .2$ Dial Reading DR_2 = 2024

$a = DR_1 - DR_2$ = 26

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 2024 − 26 = 1998

$U = 100\%$ from construction DR_{100} = 2580

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1998 + 2580}{2}$ = 2289

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 34 = 2040$ sec

T_v for $U=50$ that = 0.197

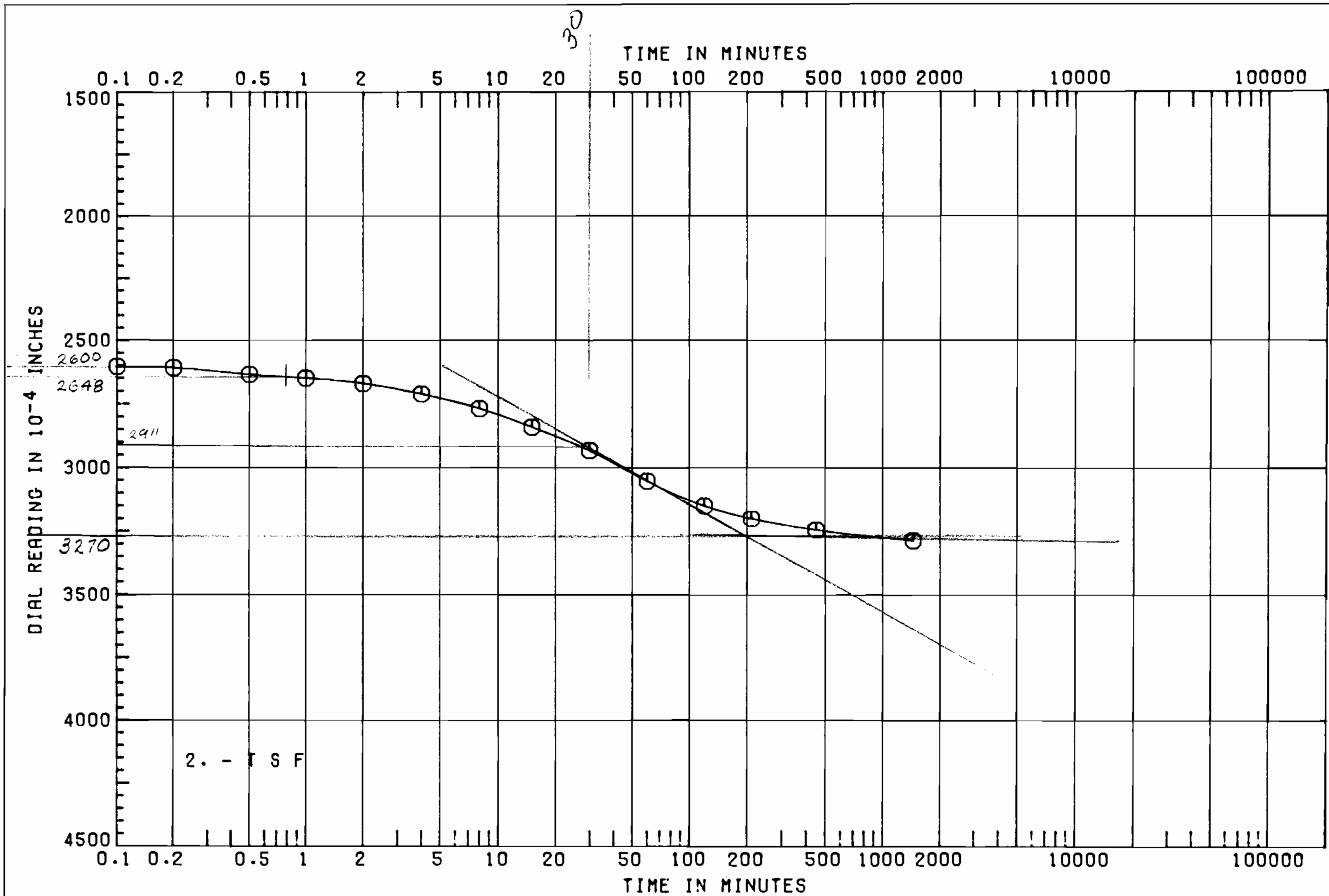
$2H$ = Sample height = 1.120 − $(DR_{50} - DR_0)$

$H = \frac{1.120 - (.2289 - .1998)}{2}$ = 0.54545

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right)\frac{cm^2}{sec} = 1.271\frac{H^2}{t_{50}}$$

$$C_v = 1.271\left(\frac{.54545}{2040}\right)^2 = 0.00019\ \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00019 = 6.29\ \frac{ft}{y}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 2-MUG	SAMPLE NO. 4-B
DEPTH/ELEV 11.5/-4.4	DATE 24 JUL 86

SHEET 7 OF 9

CONSOLIDATION TEST

TIME CURVES

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 4-B Elev. -4.4 Load Increment 2.0 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 2648

$t/4 = .2$ Dial Reading $DR_2 =$ 2600

$a = DR_1 - DR_2 =$ 48

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a =$ 2600 − 48 = 2552

$U = 100\%$ from construction $DR_{100} =$ 3270

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{2552 + 3270}{2} = 2911$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 30 = 1800$ sec

T_v for $U = 50$ that $= 0.197$

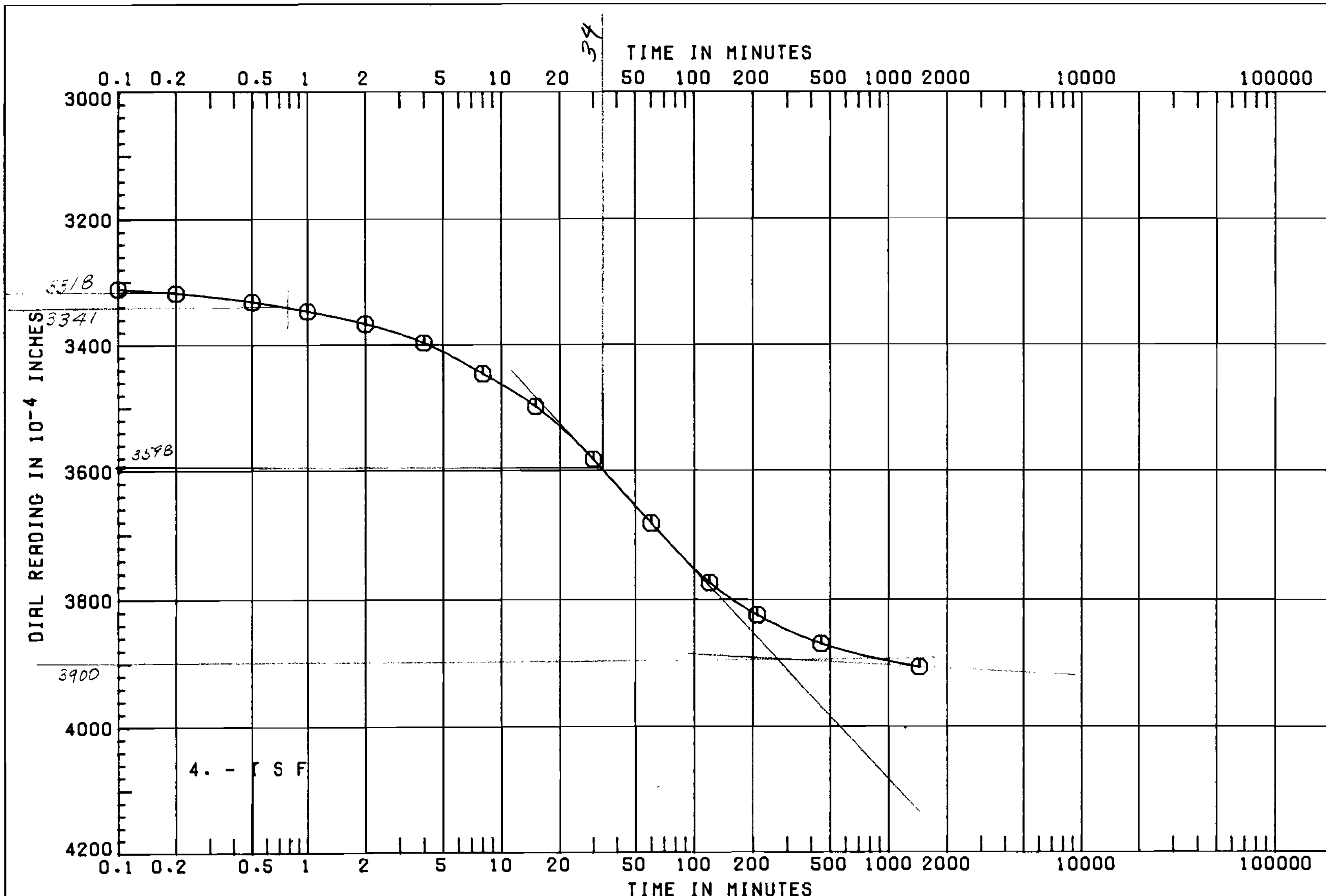
$2H$ = Sample height $= 1.1120 - (DR_{50} - DR_0)$

$H = \frac{1.1120 - (.2911 - .2552)}{2} = 0.54205$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.54205)^2}{1800} = 0.00021 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00021 = 7.04 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 2-MUG	SAMPLE NO. 4-B
DEPTH/ELEV 11.5/-4.4	DATE 24 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 8 OF 9

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 4-B Elev. -44 Load Increment 4.0 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 3341

$t/4 = .2$ Dial Reading $DR_2 =$ 3318

$a = DR_1 - DR_2 =$ 23

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a =$ 3318 − 23 = 3295

$U = 100\%$ from construction $DR_{100} =$ 3900

$$U = 50\% \ @ \ \frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{3295 + 3900}{2} = 3598$$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 34 = 2040$ s

T_v for $U = 50$ that $= 0.197$

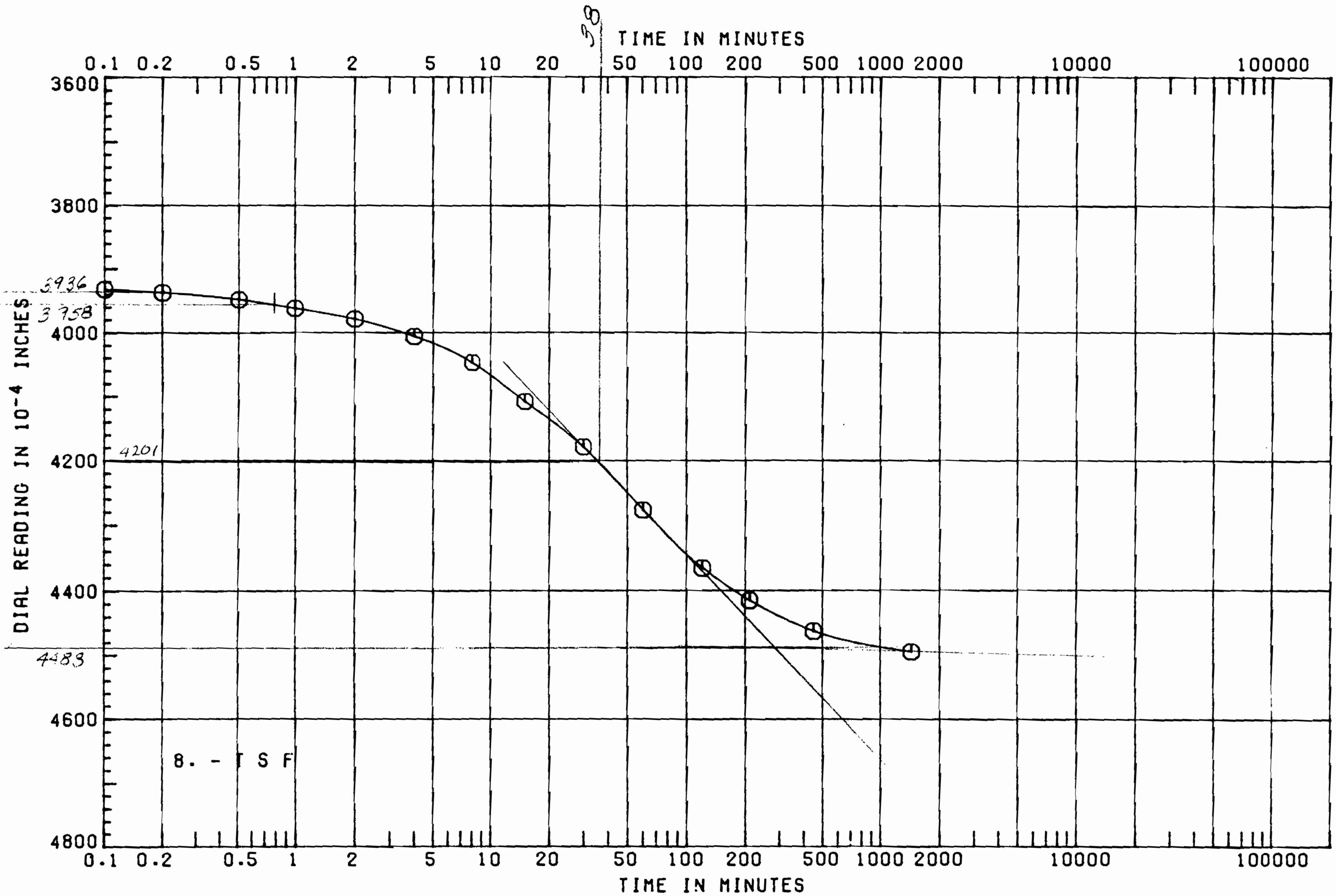
2H = Sample height = 1.120 − $(DR_{50} - DR_0)$

$$H = \frac{1.120 - (.3598 - .3295)}{2} = 0.54485$$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.54485)^2}{2040} = 0.00018 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00018 = 6.28 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 2-MUG	SAMPLE NO. 4-B
DEPTH/ELEV 11.5/-4.4	DATE 24 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 9 OF 9

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 4-B Elev. -4.4 Load Increment 8.0 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 3958

$t/4 = .2$ Dial Reading $DR_2 =$ 3936

$a = DR_1 - DR_2 :$ 22

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a =$ 3936 − 22 = 3914

$U = 100\%$ from construction $DR_{100} =$ 4488

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{3914 + 4488}{2} = 4201$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 38 = 2280$ Se

T_v for $U = 50$ that $= 0.197$

$2H$ = Sample height = 1.120 $-(DR_{50} - DR_0)$

$H = \frac{1.120 - (.4201 - .3914)}{2} = 0.54565$

$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$

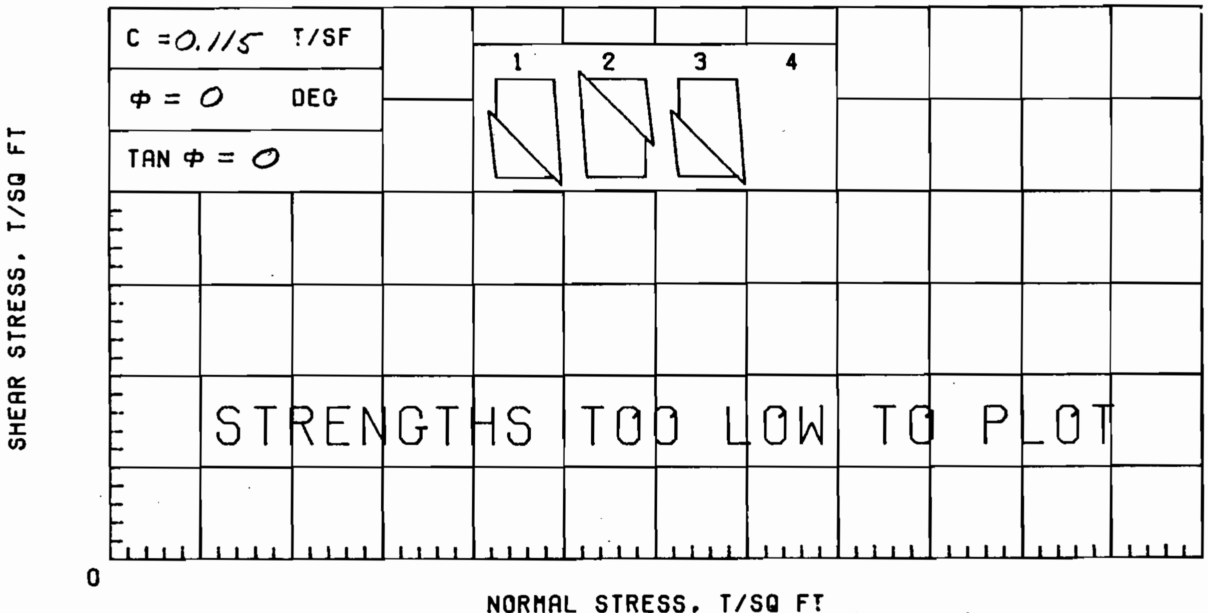
$C_v = 1.271 \frac{(.54565)^2}{2280} = 0.00017 \frac{cm^2}{sec}$

$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00017 = 5.63 \frac{ft^2}{yr}$

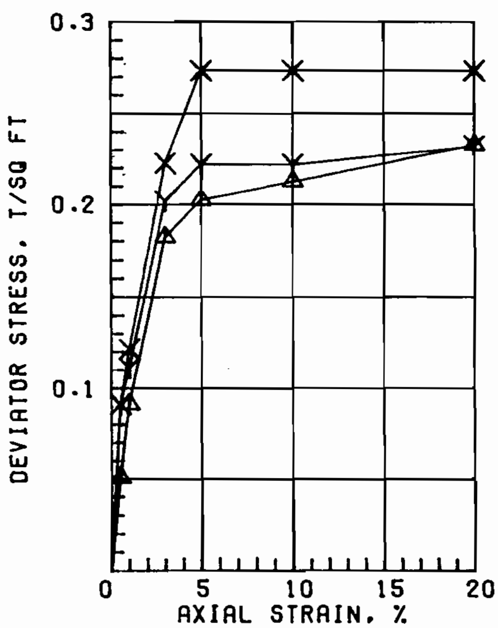
C = 0.115 T/SF

Φ = 0 DEG

TAN Φ = 0



γ Sat. = 105



	SPECIMEN NO.	Δ1	Y2	X3	4
INITIAL	WATER CONTENT, %	56.5	49.6	55.4	
	DRY DENSITY, PCF	65.2	71.3	67.0	
	SATURATION, %	96.2	98.2	98.7	
	VOID RATIO	1.586	1.364	1.516	
BEFORE SHEAR	WATER CONTENT, %				
	DRY DENSITY, PCF				
	SATURATION, %				
	VOID RATIO				
	BACK PRESS., TSF				
	MIN PRIN. STRESS, TSF	0.5	1.5	3.0	
	MAX. DEV. STRESS, TSF	0.21	0.22	0.27	
	TIME TO FAILURE, MIN.	20	10	10	
	RATE OF STRAIN INCR,%				
	INITIAL DIAMETER, IN.	1.39	1.39	1.39	
	INITIAL HEIGHT, IN.	3.00	3.00	3.00	

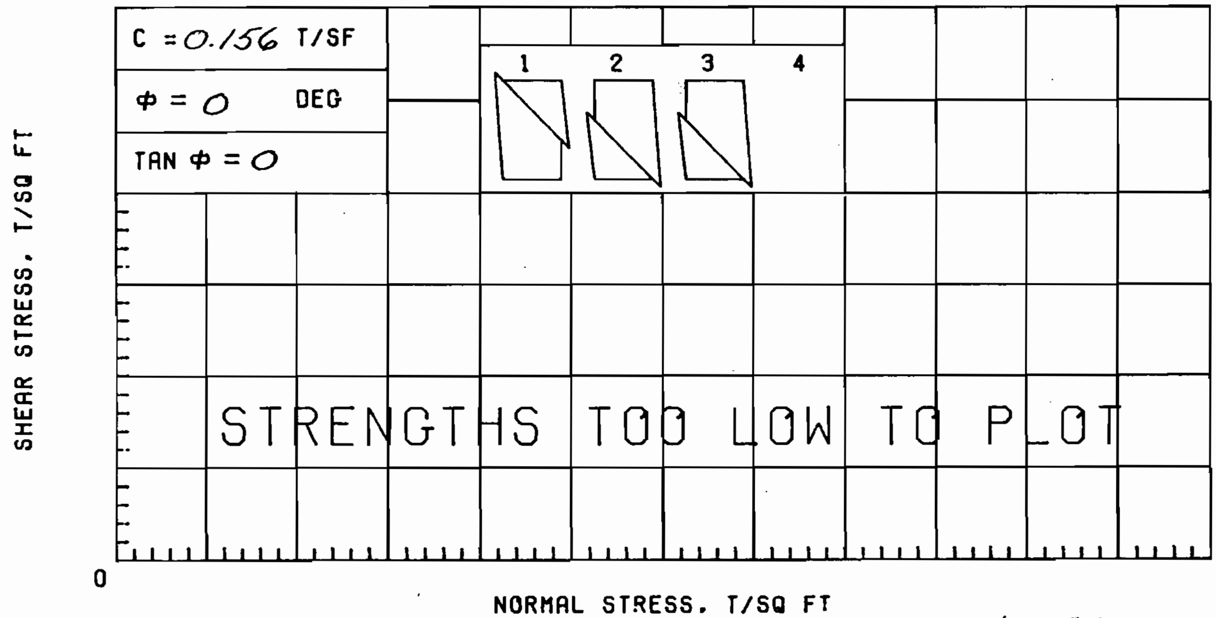
Avg. 53.8

CONTROLLED-STRAIN TEST

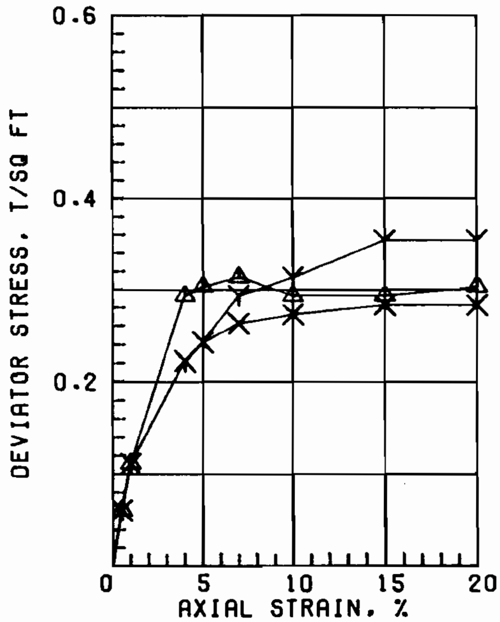
DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), GRAY; 3/4" ROOT

LL 77	PL 22	PI 55	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS:	PROJECT LK PONT LA & VIC HURR PROT	
	ORLEANS PARISH OUTFALL CANALS	
	BORING NO. 2-MUG	SAMPLE NO. 4-C
	DEPTH/ELEV 12.4/-5.3	TECH. KOC
	LABORATORY USAE WES	DATE 22 AUG 86
	TRIAXIAL COMPRESSION TEST REPORT	



γ Sat. = 81



SPECIMEN NO.		Δ1	Y2	X3	4	Avg.
INITIAL	WATER CONTENT, %	206.7	157.3	139.7		167.9
	DRY DENSITY, PCF	24.0	29.5	33.9		
	SATURATION, %	92.7	90.3	94.8		
	VOID RATIO	6.021	4.704	3.978		
BEFORE SHEAR	WATER CONTENT, %					
	DRY DENSITY, PCF					
	SATURATION, %					
	VOID RATIO					
	BACK PRESS., TSF					
MIN PRIN. STRESS, TSF		0.5	1.5	3.0		
MAX. DEV. STRESS, TSF		0.31	0.35	0.28		
TIME TO FAILURE, MIN.		14	30	30		
RATE OF STRAIN INCR.%						
INITIAL DIAMETER, IN.		1.39	1.39	1.39		
INITIAL HEIGHT, IN.		3.00	3.00	3.00		

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), DARK BROWN; ORGANIC MATERIAL

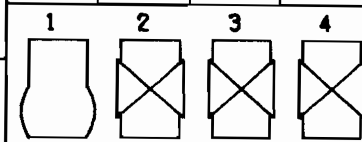
LL 248	PL 61	PI 187	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

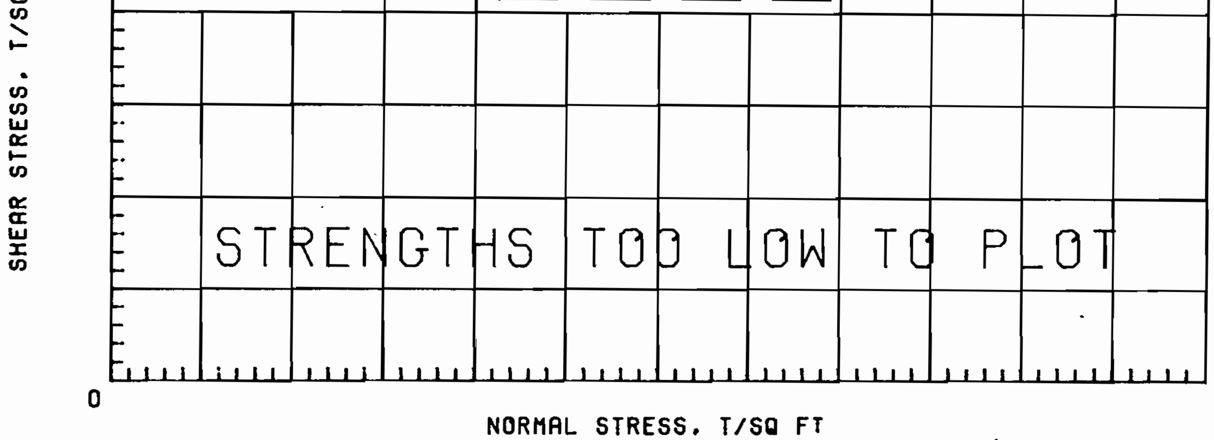
REMARKS:	PROJECT LK PONT LA & VIC HURR PROT ORLEANS PARISH OUTFALL CANALS	
	BORING NO. 2-MUG	SAMPLE NO. 4-D
	DEPTH/ELEV 13.4/-6.3	TECH. KOC
	LABORATORY USAE WES	DATE 25 AUG 86
	TRIAXIAL COMPRESSION TEST REPORT	

C = 0.090 T/SF

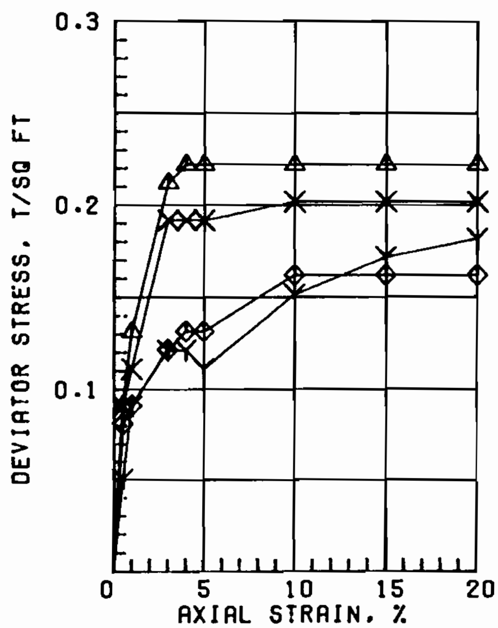
Φ = 0 DEG

TAN Φ = 0





γ Sat. = 104



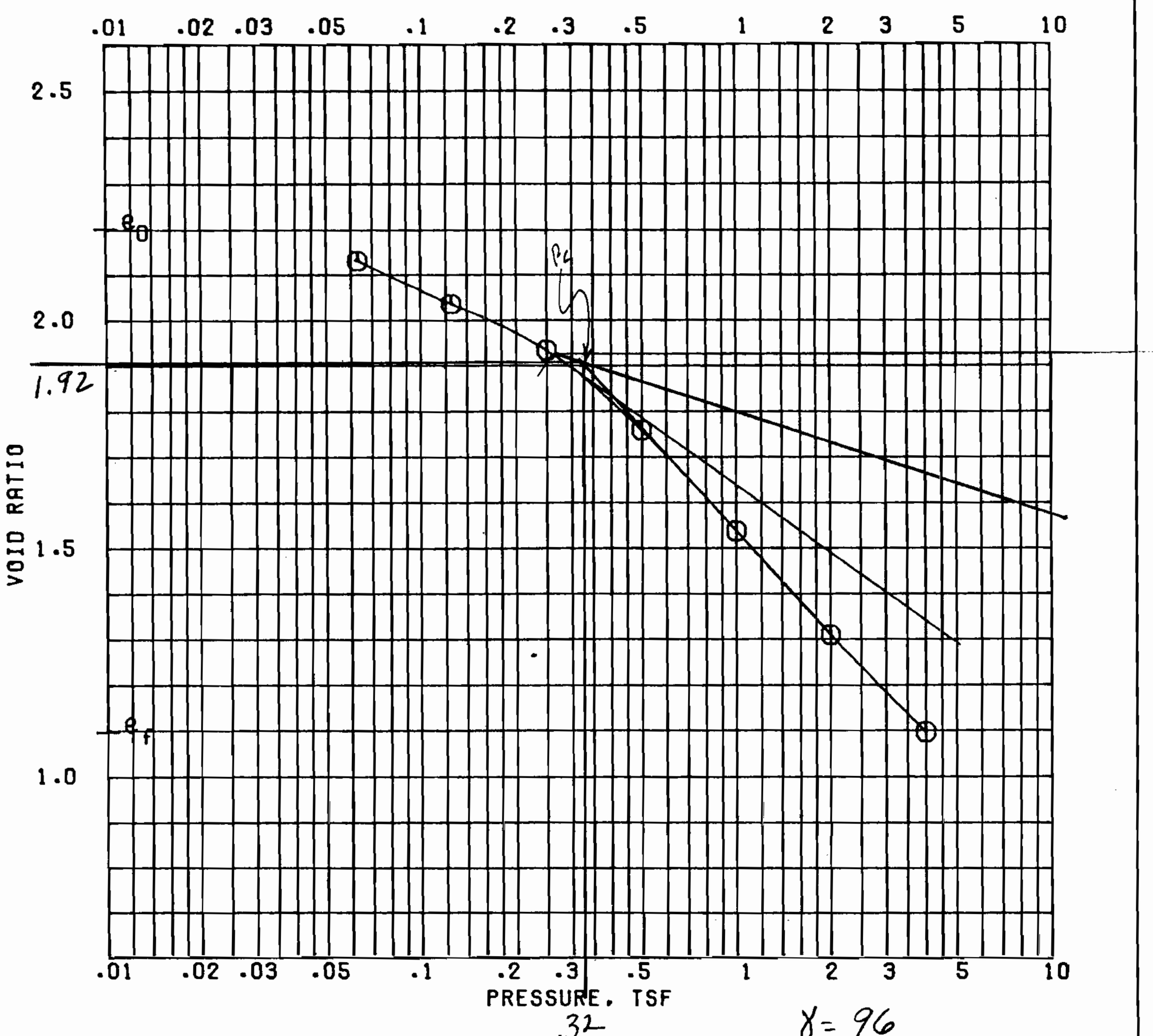
		SPECIMEN NO.	△1	Y2	X3	◇4	Avg.
INITIAL		WATER CONTENT, %	55.7	59.3	57.8	57.4	57.6
INITIAL		DRY DENSITY, PCF	66.5	64.0	65.0	65.4	
INITIAL		SATURATION, %	97.9	98.0	97.9	98.2	
INITIAL		VOID RATIO	1.536	1.634	1.594	1.578	
BEFORE SHEAR		WATER CONTENT, %					
BEFORE SHEAR		DRY DENSITY, PCF					
BEFORE SHEAR		SATURATION, %					
BEFORE SHEAR		VOID RATIO					
BEFORE SHEAR		BACK PRESS., TSF					
MIN PRIN. STRESS, TSF			0.5	1.5	3.0	1.5	
MAX. DEV. STRESS, TSF			0.22	0.12	0.19	0.13	
TIME TO FAILURE, MIN.			8	18	18	24	
RATE OF STRAIN INCR.%				6	6	6	
INITIAL DIAMETER, IN.			1.39	1.39	1.39	1.39	
INITIAL HEIGHT, IN.			3.00	3.00	3.00	3.00	

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), GRAY; SILT POCKETS; SHELL PARTICLES

LL 59	PL 18	PI 41	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS:	PROJECT LK PONT LA & VIC HURR PROT	
	ORLEANS PARISH OUTFALL CANALS	
	BORING NO. 2-MUG	SAMPLE NO. 7-C
	DEPTH/ELEV 24.7/-17.6	TECH. KOC
	LABORATORY USAE WES	DATE 25 AUG 86
	TRIAXIAL COMPRESSION TEST REPORT	



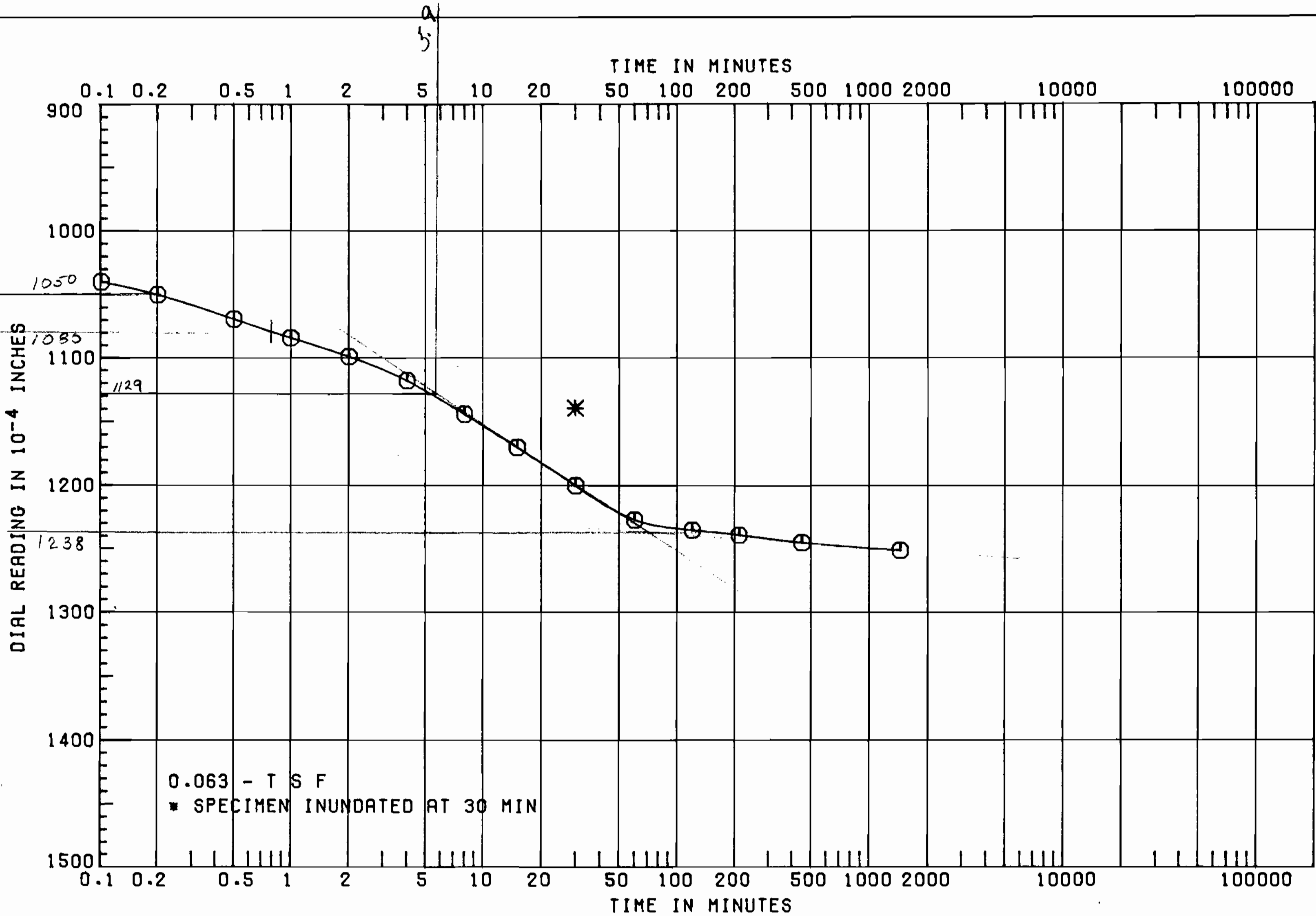
$\gamma = 96$

			BEFORE TEST	AFTER TEST
OVERBURDEN PRESSURE, TSF		WATER CONTENT, %	79.6	41.1
PRECONSOL. PRESSURE, TSF	0.32	DRY DENSITY, PCF	52.7	80.5
COMPRESSION INDEX		SATURATION, %	97.8	100 +
TYPE SPECIMEN	UNDISTURBED	VOID RATIO	2.199	1.093
DIA. IN 4.44	HT. IN 1.123	BACK PRESSURE, TSF		

CLASSIFICATION	PLASTIC CLAY (CH), GRAY	
LL	PL	PI
GS 2.70 (EST)	D_{10}	
REMARKS		

PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING NO. 2-MUG	SAMPLE NO. 8-B
DEPTH/ELEV 28.5/-21.4	DATE 28 JUL 86

CONSOLIDATION TEST REPORT



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 2-MUG	SAMPLE NO. 8-B
DEPTH/ELEV 28.5/-21.4	DATE 28 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 2 OF 8

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 8-B   Elev. -21.4   Load Increment 0.063 T.S.F.

$t = .8$ Dial Reading DR_1 = 1080

$t/4 = .2$ Dial Reading DR_2 = 1050

$a = DR_1 - DR_2$ = 30

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 1050 − 30 = 1020

$U = 100\%$ from construction DR_{100} = 1238

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1020 + 1238}{2}$ = 1129

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 5.9$ = 354 Se[c]

T_v for $U = 50$ that = 0.197

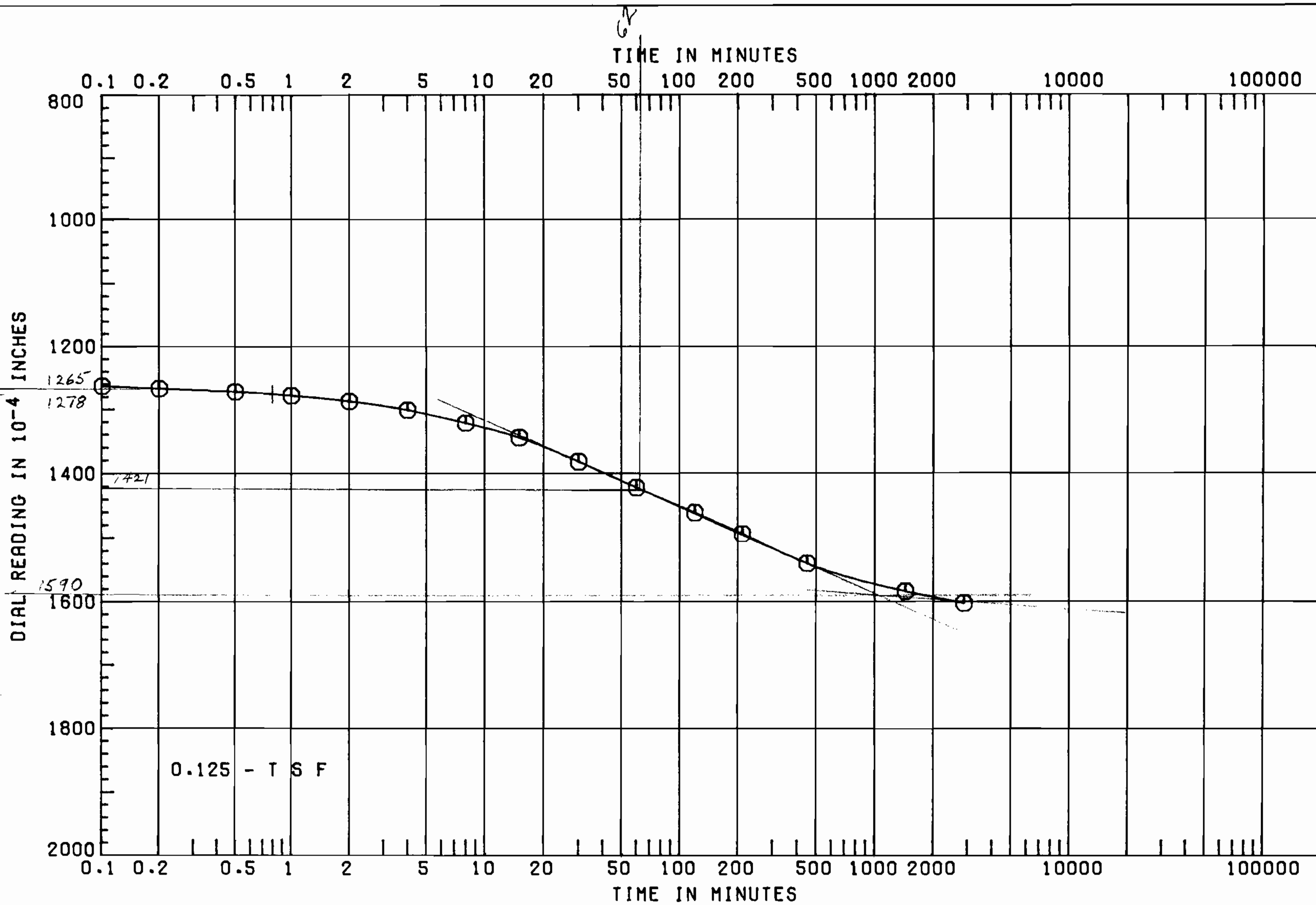
$2H$ = Sample height = 1.1123 $-(DR_{50} - DR_0)$

$H = \frac{1.1123 - (.1129 - .1020)}{2}$ = 0.55605

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right)\frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55605)^2}{354} = 0.00111 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00111 = 37.68 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 2-MUG	SAMPLE NO. 8-B
DEPTH/ELEV 28.5/-21.4	DATE 28 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 3 OF 8

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 8-B Elev. -21.4 Load Increment 0.125 T.S.F.

$t = .8$ Dial Reading DR_1 = 1278

$t/4 = .2$ Dial Reading DR_2 = 1265

$a = DR_1 - DR_2$ = 13

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 1265 − 13 = 1252

$U = 100\%$ from construction DR_{100} = 1590

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1252 + 1590}{2}$ = 1421

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 62$ = 3720 sec

T_v for $U = 50$ that = 0.197

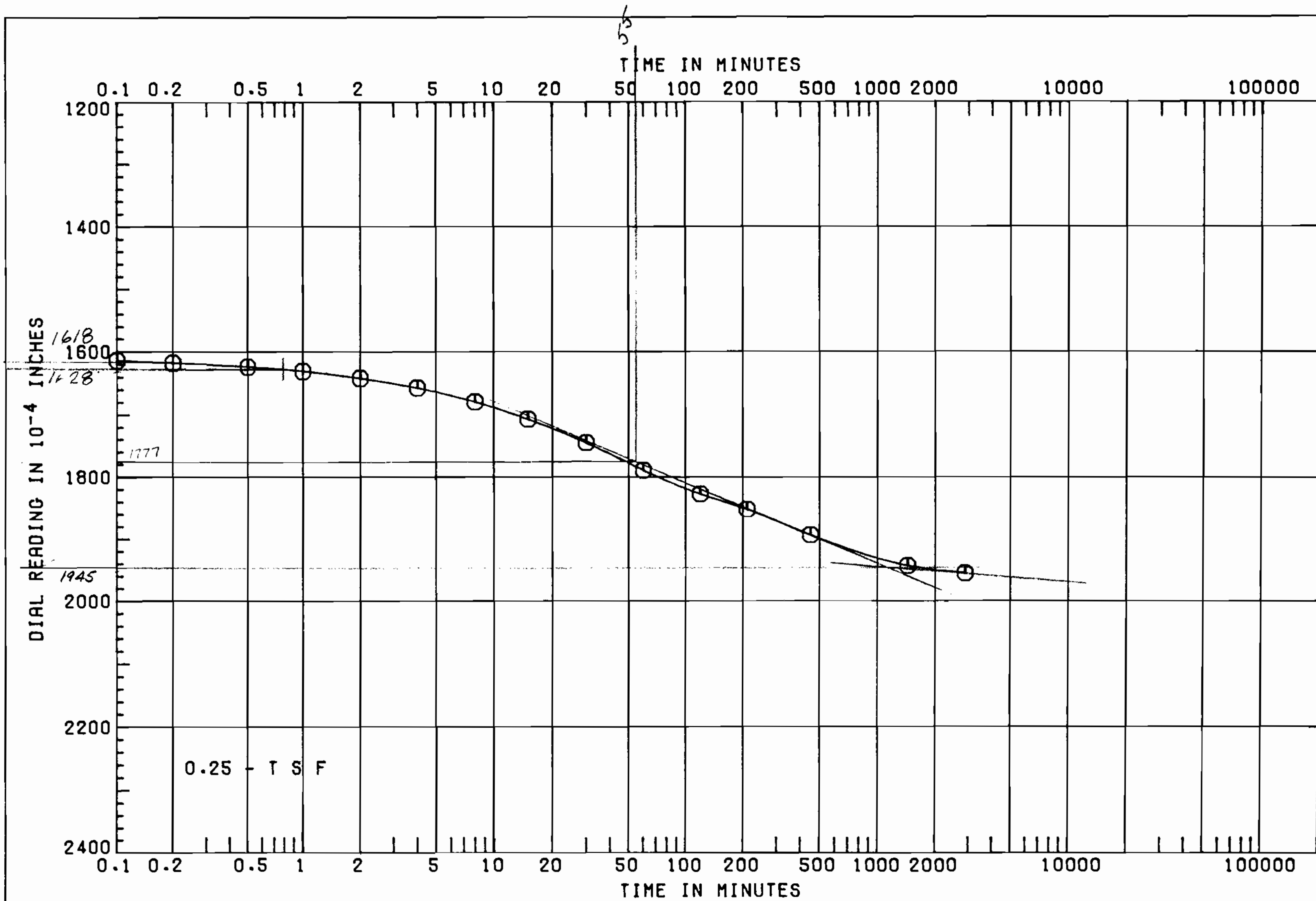
$2H$ = Sample height = 1.123 − $(DR_{50} - DR_0)$

$H = \frac{1.123 - (.1590 - .1421)}{2}$ = 0.55305

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \mathrm{cm^2/sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55305)^2}{3720} = 0.00010 \ \mathrm{cm^2/sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00010 = 3.55 \ \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 2-MUG	SAMPLE NO. 8-B
DEPTH/ELEV 28.5/-21.4	DATE 28 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 4 OF 8

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 8-B Elev. -21.4 Load Increment 0.25 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1628$

$t/4 = .2$ Dial Reading $DR_2 = 1618$

$a = DR_1 - DR_2 = 10$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1618 - 10 = 1608$

$U = 100\%$ from construction $DR_{100} = 1945$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1608 + 1945}{2} = 1777$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 55 = 3300$ Se

T_v for $U = 50$ that $= 0.197$

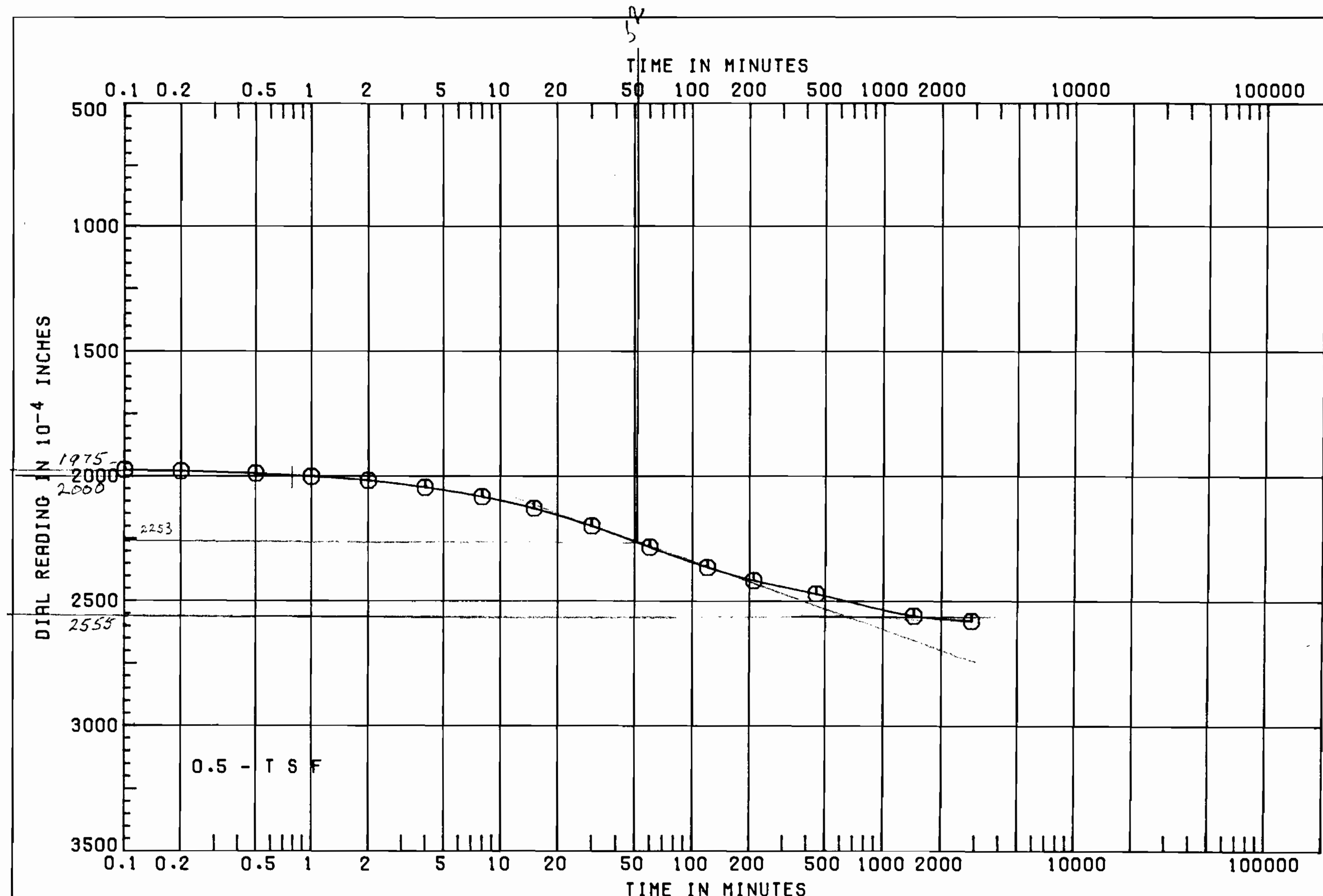
$2H =$ Sample height $= 1.123 - (DR_{50} - DR_0)$

$$H = \frac{1.123 - (.1777 - .1608)}{2} = 0.55305$$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55305)^2}{3300} = 0.00012 \frac{cm^2}{y}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00012 = 4.00 \frac{ft}{y}$$



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST TIME CURVES
ORLEANS PARISH OUTFALL CANALS		
BORING 2-MUG	SAMPLE NO. 8-B	
DEPTH/ELEV 28.5/-21.4	DATE 28 JUL 86	

SHEET 5 OF 8

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 8-B Elev. -21.4 Load Increment 0.5 T.S.F.

$t = .8$ Dial Reading DR_1 = 2000

$t/4 = .2$ Dial Reading DR_2 = 1975

$a = DR_1 - DR_2$ = 25

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1975 - 25 = 1950$

$U = 100\%$ from construction $DR_{100} = 2555$

$U = 50\%$ @ $\dfrac{DR_0 + DR_{100}}{2} = DR_{50} = \dfrac{1950 + 2555}{2} = 2253$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 52 = 3120$ se[c]

T_v for $U = 50$ that $= 0.197$

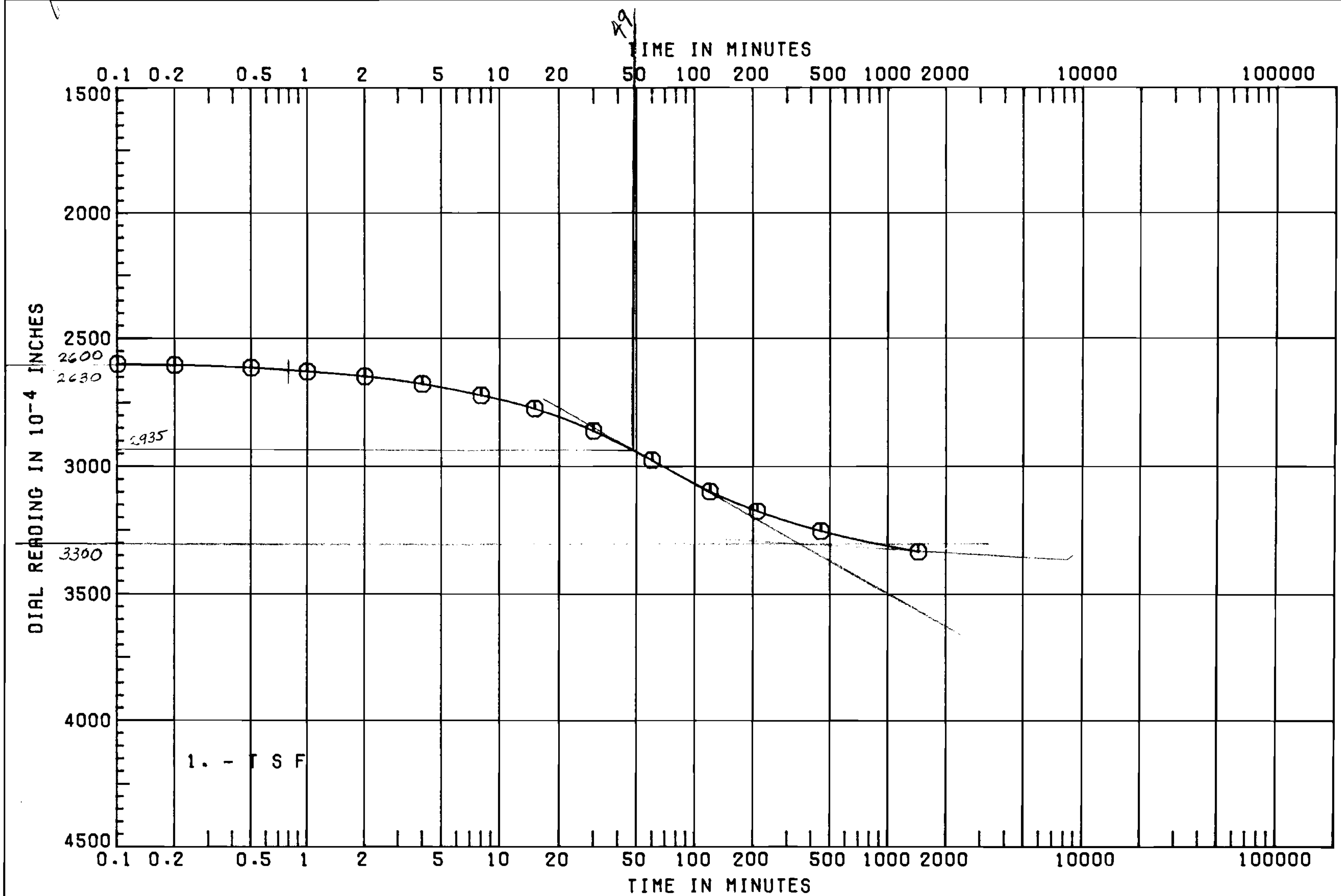
$2H$ = Sample height $= 1.123 - (DR_{50} - DR_0)$

$H = \dfrac{1.123 - (.2253 - .1950)}{2} = 0.54635$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \mathrm{cm^2/sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.54635)^2}{3120} = 0.00012 \ \mathrm{cm^2/s[ec]}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00012 = 4.13 \ \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST TIME CURVES
ORLEANS PARISH OUTFALL CANALS		
BORING 2-MUG	SAMPLE NO. 8-B	
DEPTH/ELEV 28.5/-21.4	DATE 28 JUL 86	

SHEET 6 OF 8

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 8-B Elev. -21.4 Load Increment 1.0 T.S.F.

$t = .8$ Dial Reading DR_1 = 2630

$t/4 = .2$ Dial Reading DR_2 = 2600

$a = DR_1 - DR_2$ = 30

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 2600 − 30 = 2570

$U = 100\%$ from construction DR_{100} = 3300

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{2570 + 3300}{2} = 2935$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 49 = 2940$ Se[c]

T_v for $U = 50$ that $= 0.197$

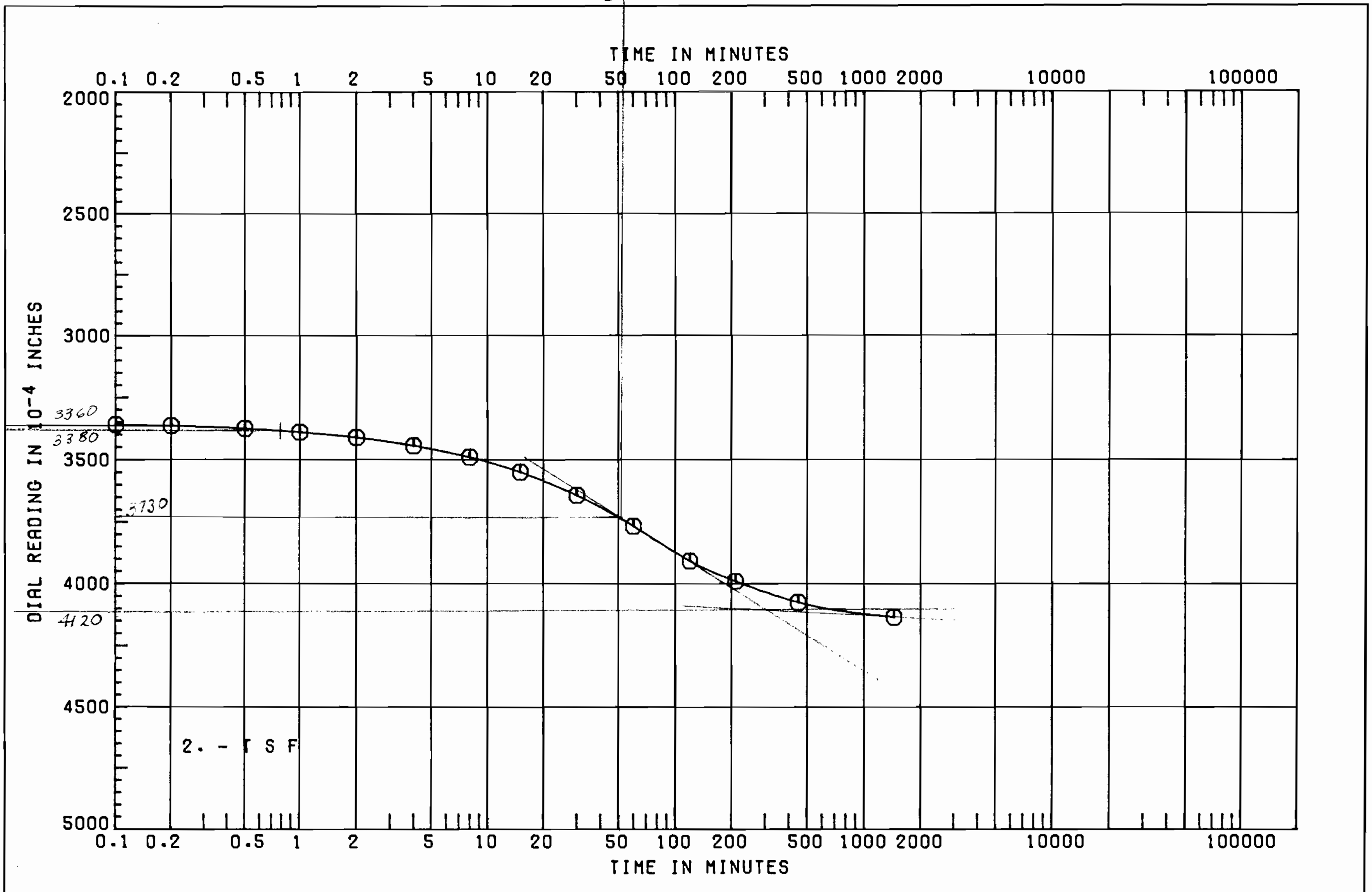
$2H$ = Sample height $= 1.123 - (DR_{50} - DR_0)$

$H = \frac{1.123 - (.2935 - .2570)}{2} = 0.54325$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.54325)^2}{2940} = 0.00013 \frac{cm^2}{s}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00013 = 433 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 2-MUG	SAMPLE NO. 8-B
DEPTH/ELEV 28.5/-21.4	DATE 28 JUL 86

CONSOLIDATION TEST
TIME CURVES

SHEET 7 OF 8

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 8-B Elev. -21.4 Load Increment 2.0 T.S.F.

$t = .8$

$t/4 = .2$

Dial Reading $DR_1 = 3380$

Dial Reading $DR_2 = 3360$

$a = DR_1 - DR_2 = 20$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 3360 - 20 = 3340$

$U = 100\%$ from construction $DR_{100} = 4120$

$U = 50\% \ @ \ \frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{3340 + 4120}{2} = 3730$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 52 = 3120$ sec

T_v for $U = 50$ that $= 0.197$

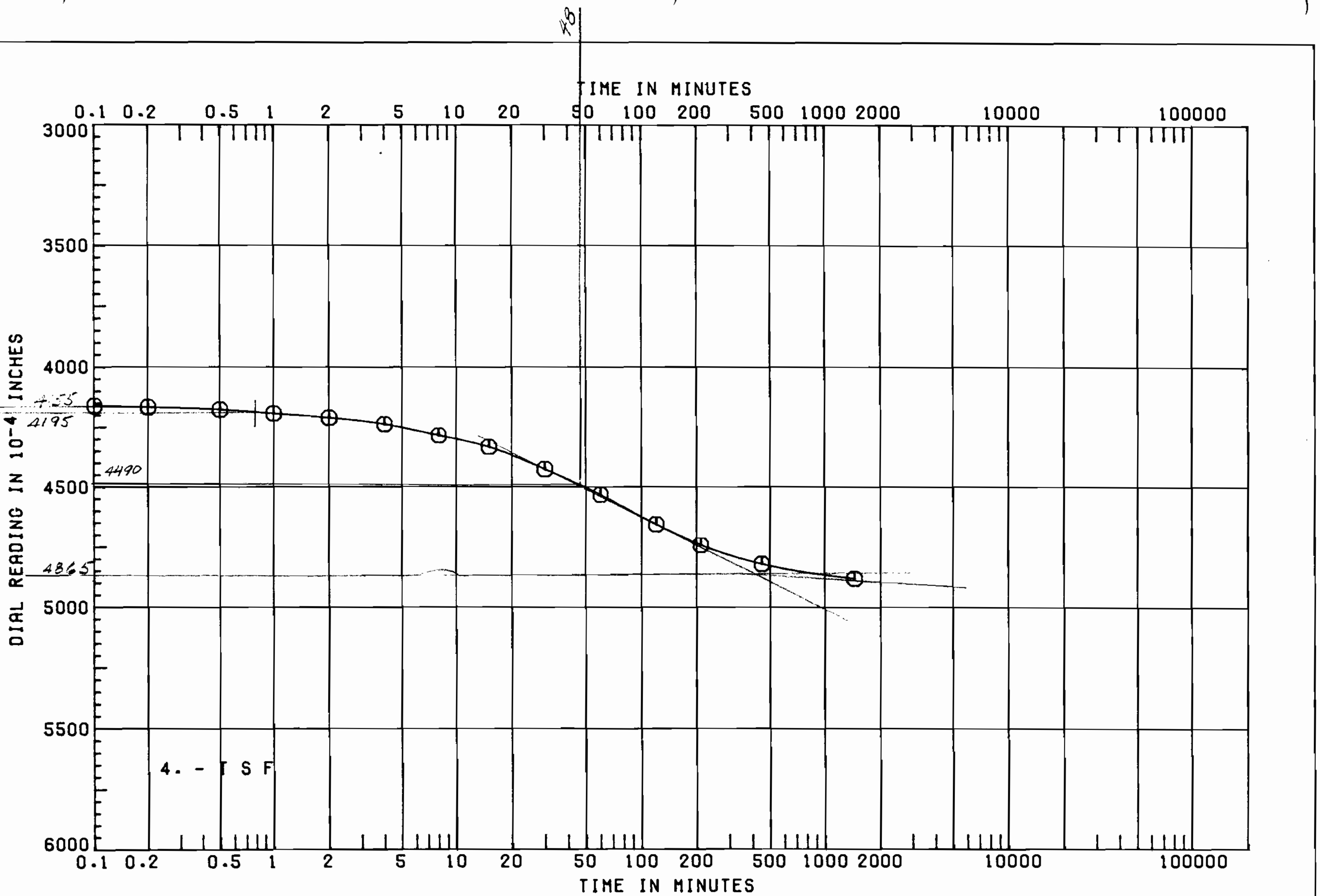
$2H =$ Sample height $= 1.123 - (DR_{50} - DR_0)$

$H = \frac{1.123 - (.3730 - .3340)}{2} = 0.5420$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5420)^2}{3120} = 0.00012 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00012 = 4.06 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 2-MUG	SAMPLE NO. 8-B
DEPTH/ELEV 28.5/-21.4	DATE 28 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 8 OF 8

Project Orleans Parish Outfall Canals

Boring No. 2-MUG

Sample No. 8-B Elev. -21.4 Load Increment 4.0 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 4195

$t/4 = .2$ Dial Reading $DR_2 =$ 4155

$a = DR_1 - DR_2 :$ 40

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a =$ 4155 − 40 = 4115

$U = 100\%$ from construction $DR_{100} =$ 4865

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{4115 + 4865}{2} = 4490$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 48 = 2880$ Se

T_v for $U = 50$ that $= 0.197$

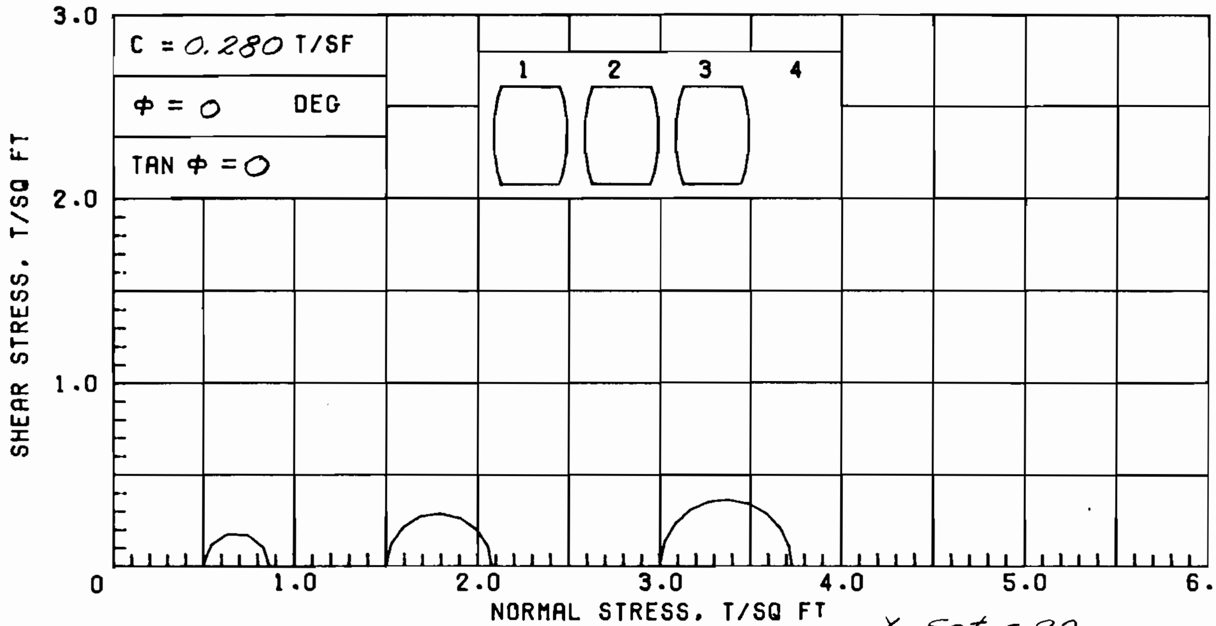
$2H =$ Sample height $= 1.1123 - (DR_{50} - DR_0)$

$H = \frac{1.1123 - (.4490 - .4115)}{2} = 0.54275$

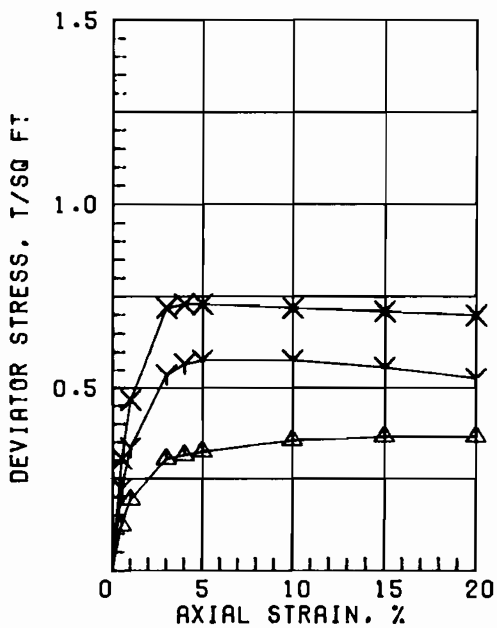
$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.54275)^2}{2880} = 0.00013 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00013 = 4.4 \frac{ft}{yr}$$



γ Sat. = 92



SPECIMEN NO.		△1	Y2	X3	4
INITIAL	WATER CONTENT, %	79.9	80.0	75.7	
	DRY DENSITY, PCF	45.7	47.6	47.8	
	SATURATION, %	80.2	85.0	80.8	
	VOID RATIO	2.690	2.542	2.530	
BEFORE SHEAR	WATER CONTENT, %				
	DRY DENSITY, PCF				
	SATURATION, %				
	VOID RATIO				
	BACK PRESS., TSF				
MIN PRIN. STRESS, TSF		0.5	1.5	3.0	
MAX. DEV. STRESS, TSF		0.36	0.58	0.73	
TIME TO FAILURE, MIN.		30	10	8	
RATE OF STRAIN INCR.,%					
INITIAL DIAMETER, IN.		1.39	1.39	1.39	
INITIAL HEIGHT, IN.		3.00	3.00	3.00	

Avg. 78.5

CONTROLLED-STRAIN TEST

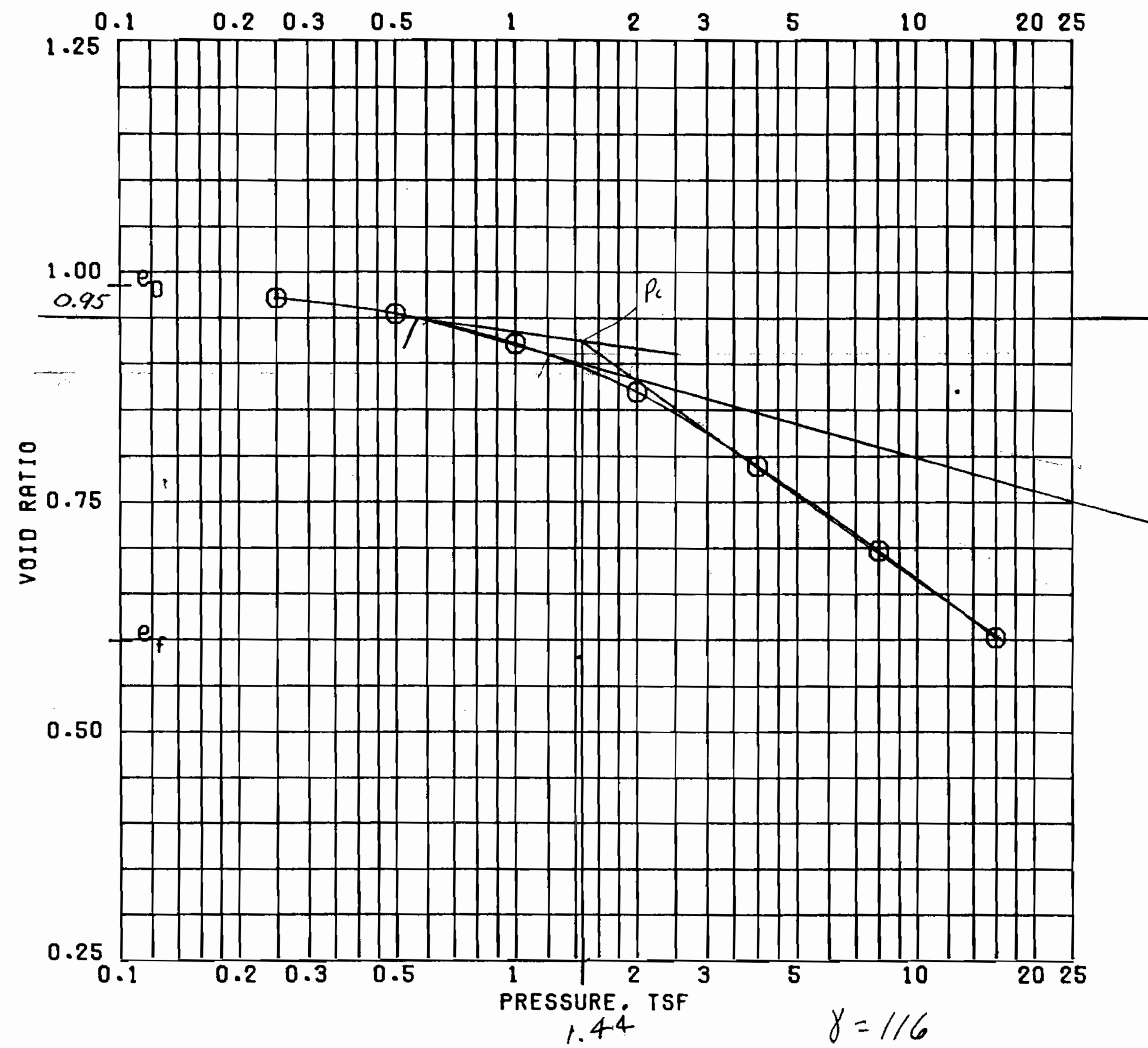
DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), DARK BROWN; ORGANIC MATERIAL

LL 120	PL 46	PI 74	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS:

PROJECT LK PONT LA & VIC HURR PROT ORLEANS PARISH OUTFALL CANALS	
BORING NO. 3-MUG	SAMPLE NO. 4-B
DEPTH/ELEV 12.0/-1.1	TECH. KOC
LABORATORY USAE WES	DATE 26 AUG 86

TRIAXIAL COMPRESSION TEST REPORT

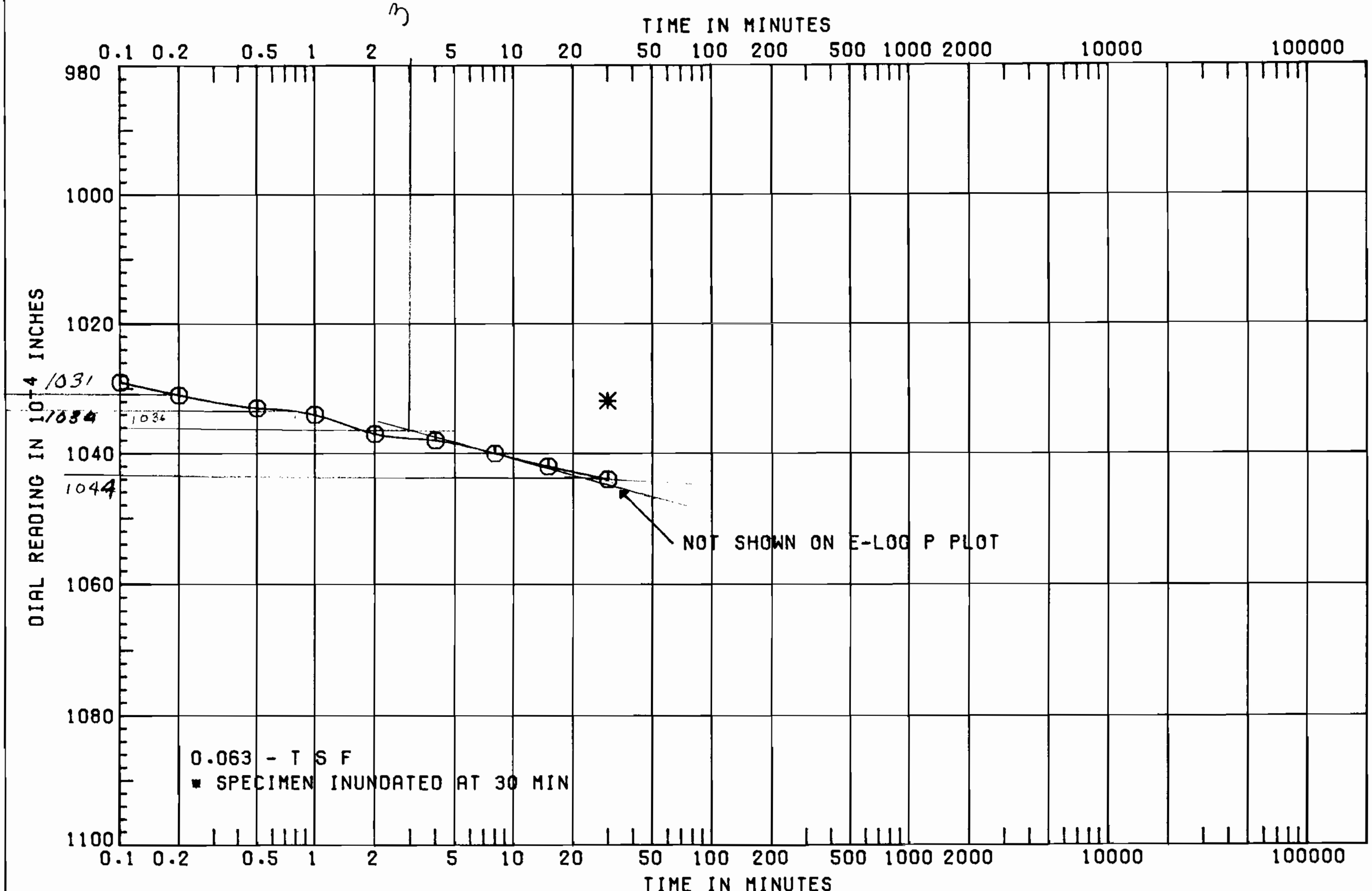


$\gamma = 116$

			BEFORE TEST	AFTER TEST
OVERBURDEN PRESSURE, TSF		WATER CONTENT, %	32.3	22.5
PRECONSOL. PRESSURE, TSF	1.44	DRY DENSITY, PCF	85.0	105.6
COMPRESSION INDEX		SATURATION, %	88.7	100 +
TYPE SPECIMEN	UNDISTURBED	VOID RATIO	0.983	0.597
DIA. IN 4.44	HT. IN 1.127	BACK PRESSURE, TSF		

CLASSIFICATION PLASTIC CLAY (CH), GRAY; FINE SAND LENSES			
LL / PL / PI		PROJECT LK PONT LA & VIC HURR PROT	
GS 2.70 (EST)	D_{10}	ORLEANS PARISH OUTFALL CANALS	
REMARKS		BORING NO. 3-MUG	SAMPLE NO. 4-C
		DEPTH/ELEV 12.5/-1.6	DATE 28 JUL 86

CONSOLIDATION TEST REPORT



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 4-C
DEPTH/ELEV 12.5/-1.6	DATE 28 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 2 OF 9

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 4-C   Elev. -1.6   Load Increment 0.063 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1034$

$t/4 = .2$ Dial Reading $DR_2 = 1031$

$a = DR_1 - DR_2 = 3$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1031 - 3 = 1028$

$U = 100\%$ from construction $DR_{100} = 1044$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1028 + 1044}{2} = 1036$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 3 = 180$ sec

T_v for $U = 50$ that $= 0.197$

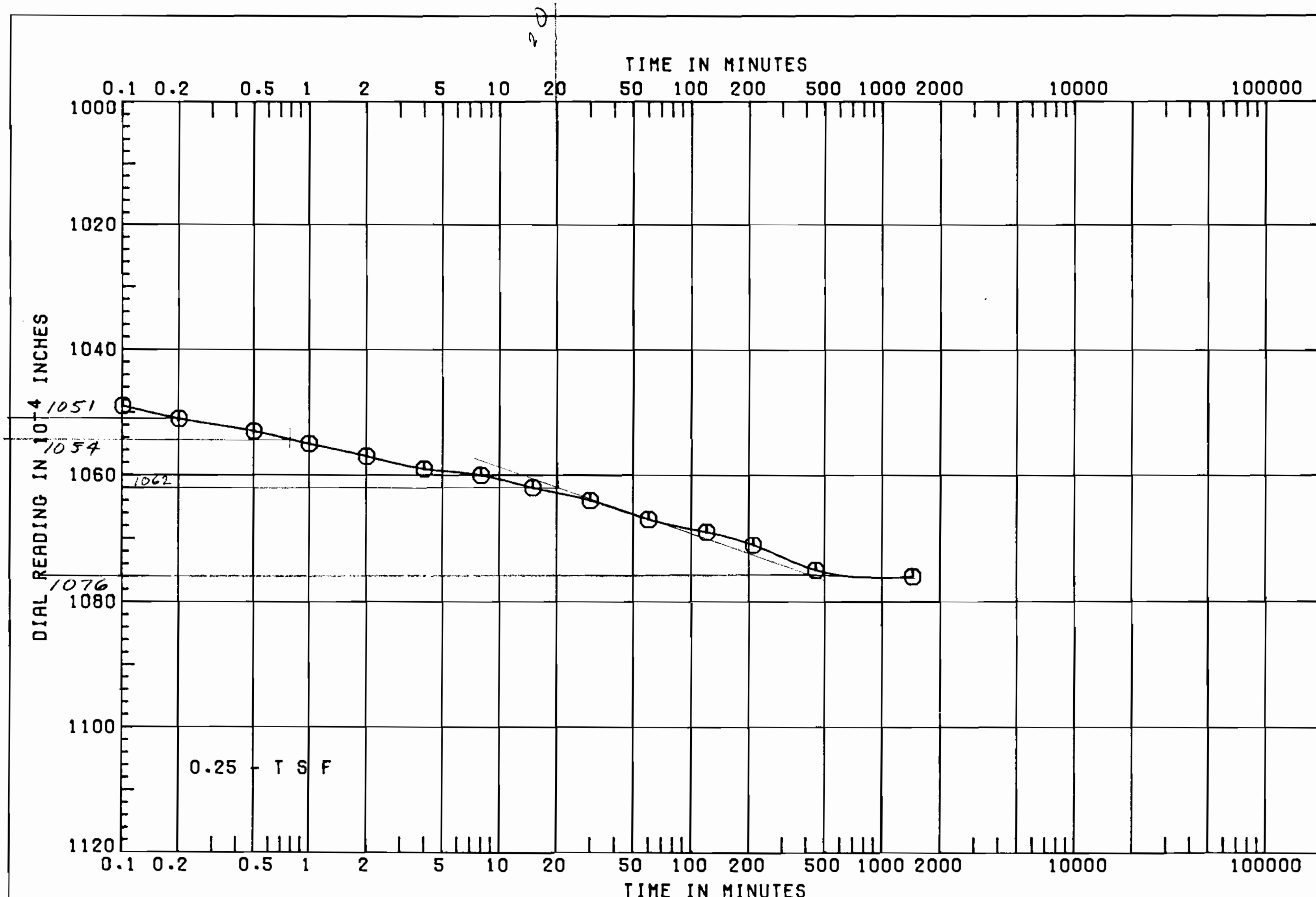
$2H$ = Sample height $= 1.127 - (DR_{50} - DR_0)$

$H = \frac{1.127 - (.1036 - .1028)}{2} = 0.5631$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right)\frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5631)^2}{180} = 0.00224 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00224 = 76.00 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 4-C
DEPTH/ELEV 12.5/-1.6	DATE 28 JUL 86

CONSOLIDATION TEST
TIME CURVES

SHEET 3 OF 9

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 4-C Elev. -1.6 Load Increment 0.25 T.S.F.

$t = .8$

$t/4 = .2$

Dial Reading DR_1 = 1054

Dial Reading DR_2 = 1051

$a = DR_1 - DR_2$ = 3

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 1051 − 3 = 1048

$U = 100\%$ from construction DR_{100} = 1076

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1048 + 1076}{2}$ = 1062

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 20 = 1200$ Se

T_v for $U = 50$ that = 0.197

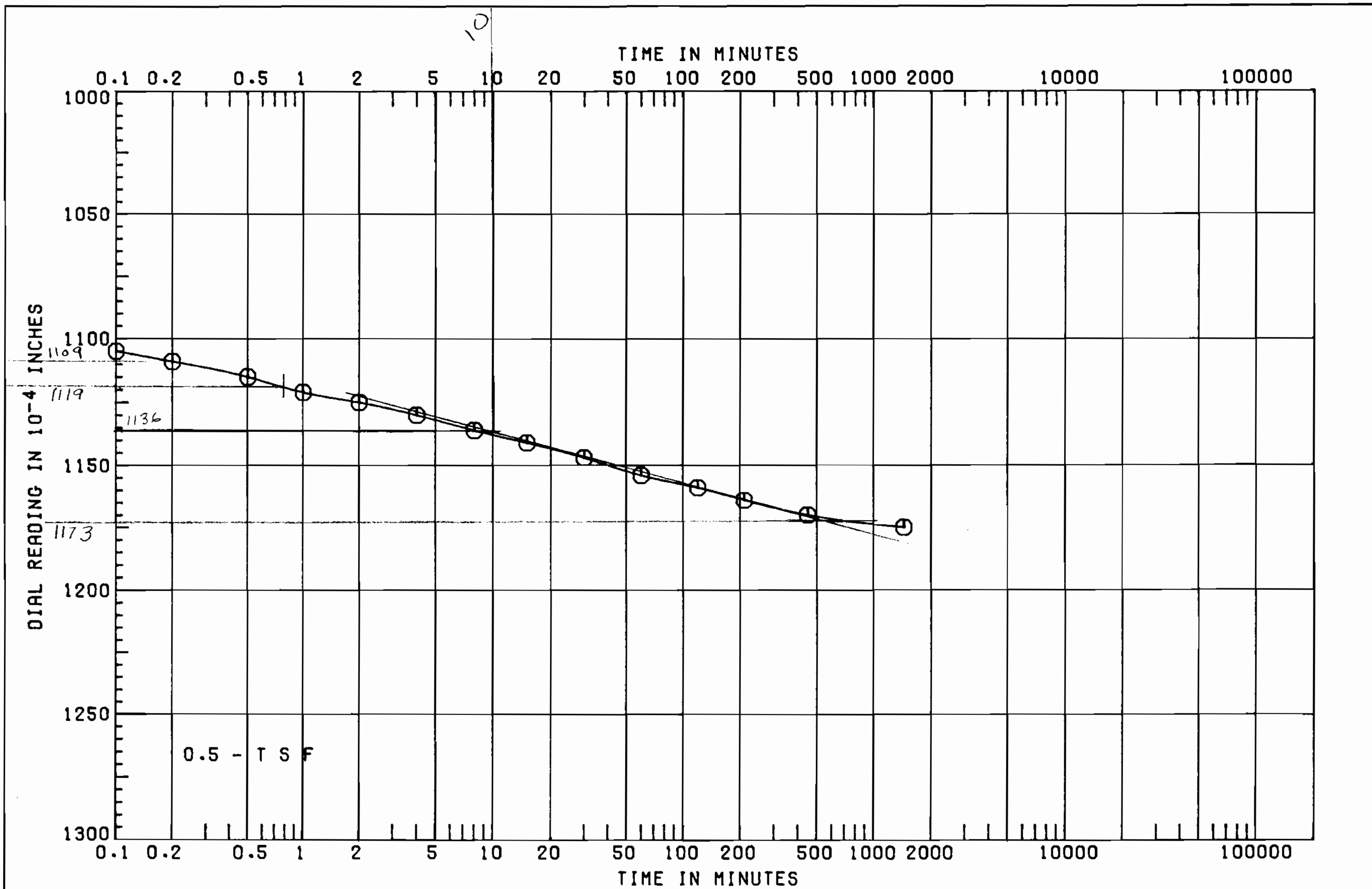
$2H$ = Sample height = .1127 − $(DR_{50} - DR_0)$

$H = \frac{.1127 - (.1062 - .1048)}{2}$ = 0.5628

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \text{cm}^2/\text{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5628)^2}{1200} = 0.00034 \ \frac{\text{cm}^2}{\text{yr}}$$

$$C_v\left(\frac{\text{cm}^2}{\text{sec}}\right) \times 33{,}945 = C_v\left(\frac{\text{ft}^2}{\text{yr}}\right) = 33{,}945 \times 0.00034 = 11.39 \ \frac{\text{ft}^2}{\text{yr}}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 4-C
DEPTH/ELEV 12.5/-1.6	DATE 28 JUL 86

CONSOLIDATION TEST
TIME CURVES

SHEET 4 OF 9

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 4-C Elev. -1.6 Load Increment 0.5 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1119$

$t/4 = .2$ Dial Reading $DR_2 = 1109$

$a = DR_1 - DR_2 = 10$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1109 - 10 = 1099$

$U = 100\%$ from construction $DR_{100} = 1173$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1099 + 1173}{2} = 1136$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 10 = 60$ s

T_v for $U = 50$ that $= 0.197$

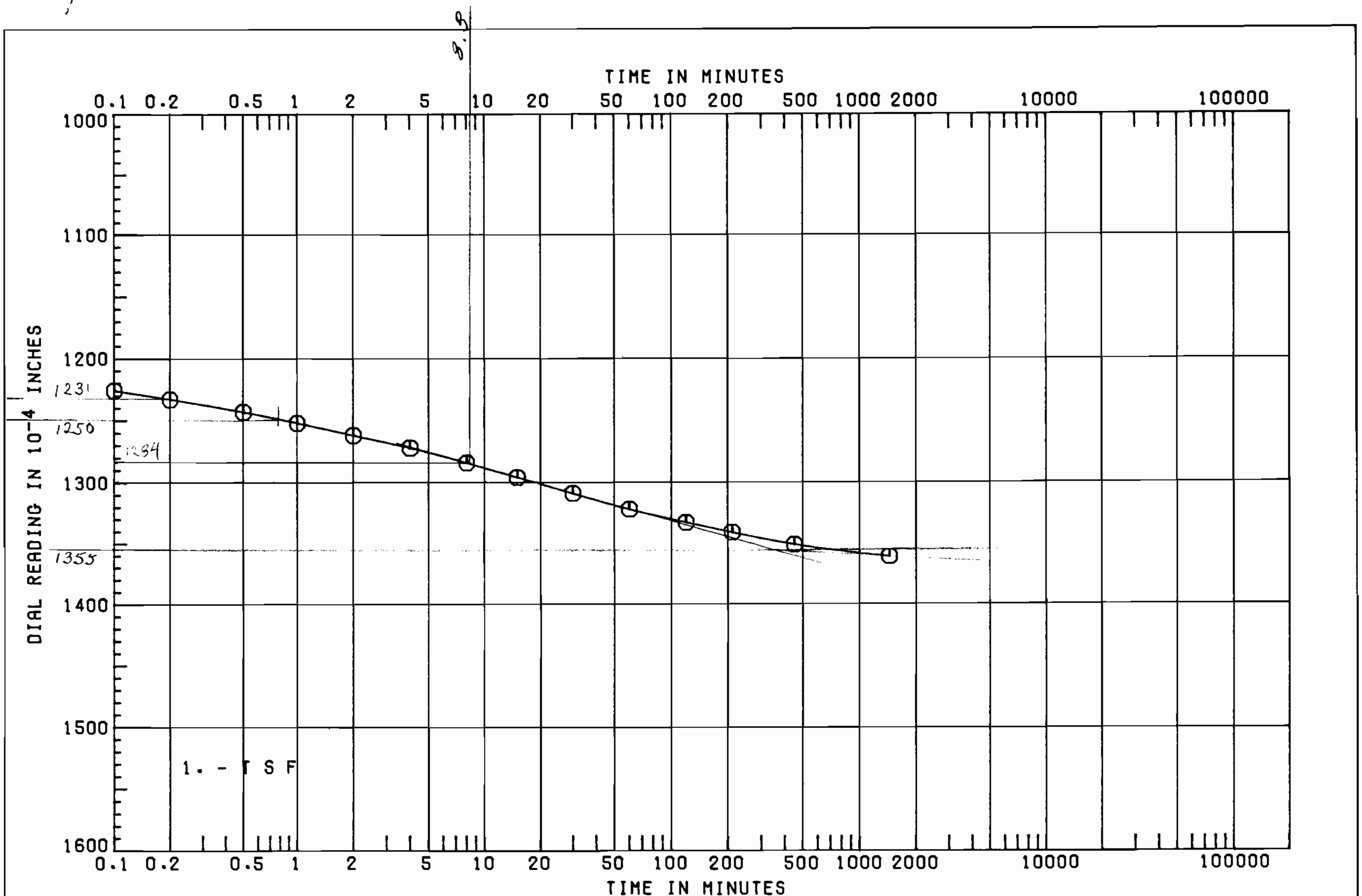
$2H =$ Sample height $= 1.127 - (DR_{50} - DR_0)$

$H = \frac{1.127 - (.1136 - .1099)}{2} = 0.56165$

$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) cm^2/sec = 1.271 \frac{H^2}{t_{50}}$

$C_v = 1.271 \frac{(.56165)^2}{60} = 0.00668 \frac{cm^2}{sec}$

$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00668 = 226.83 \frac{ft}{y}$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 4-C
DEPTH/ELEV 12.5/-1.6	DATE 28 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 5 OF 9

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 4-C Elev. -1.6 Load Increment 1.0 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1250$

$t/4 = .2$ Dial Reading $DR_2 = 1231$

$a = DR_1 - DR_2 = 19$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1231 - 19 = 1212$

$U = 100\%$ from construction $DR_{100} = 1355$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1212 + 1355}{2} = 1284$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 8.3 = 498$ sec

T_v for $U = 50$ that $= 0.197$

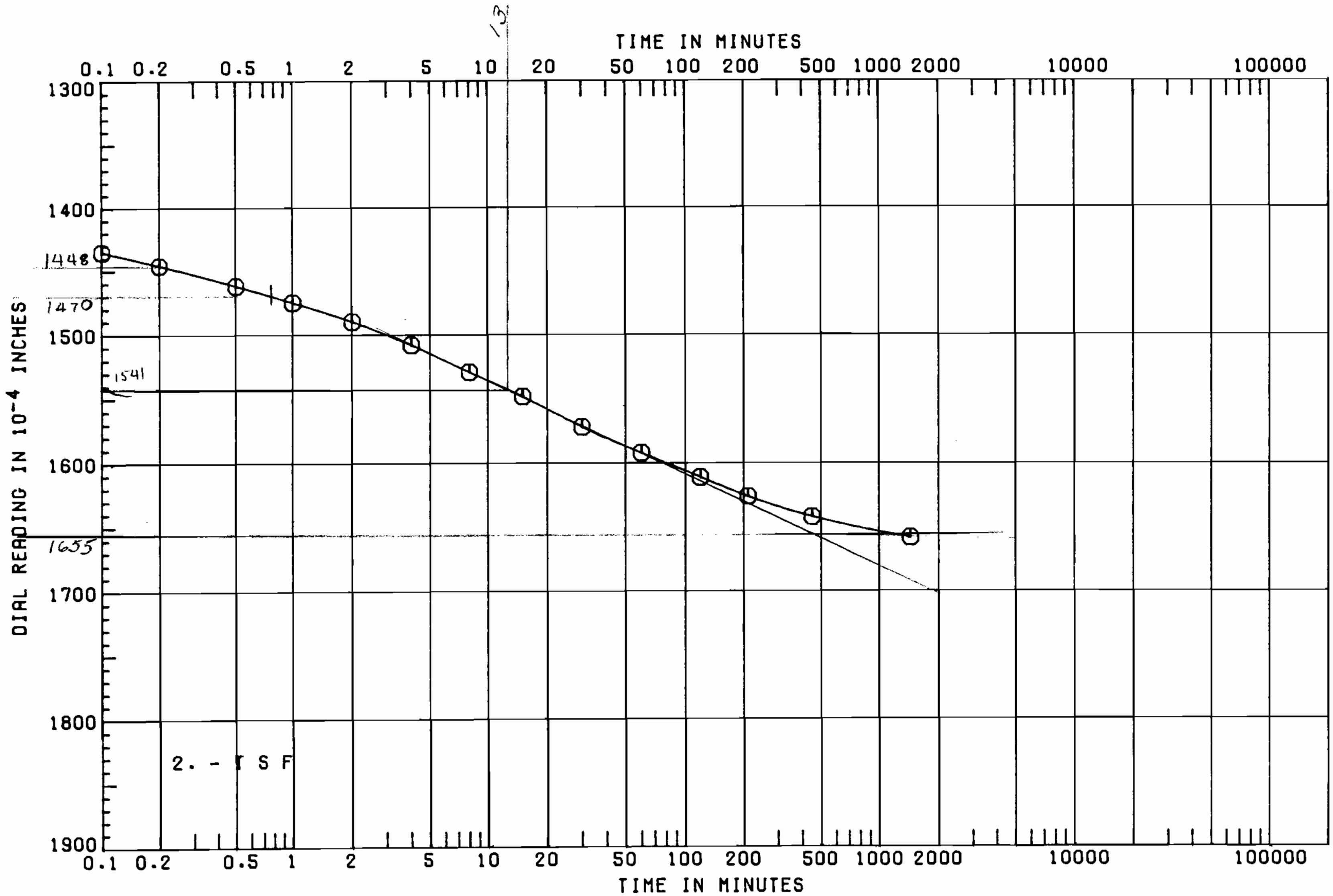
$2H =$ Sample height $= 1.127 - (DR_{50} - DR_0)$

$H = \frac{1.127 - (.1284 - .1212)}{2} = 0.5599$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \text{cm}^2/\text{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5599)^2}{498} = 0.0008 \ \text{cm}^2/\text{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.0008 = 27.16 \ \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUD	SAMPLE NO. 4-C
DEPTH/ELEV 12.5/-1.6	DATE 28 JUL 86

CONSOLIDATION TEST
TIME CURVES

SHEET 6 OF 9

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 4-C Elev. -1.6 Load Increment 2.0 T.S.F.

$t = .8$ Dial Reading $DR_1 = $ 1470

$t/4 = .2$ Dial Reading $DR_2 = $ 1448

$a = DR_1 - DR_2 = $ 22

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = $ 1448 − 22 = 1426

$U = 100\%$ from construction $DR_{100} = $ 1655

$$U = 50\% \ @ \ \frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1426 + 1655}{2} = 1541$$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 13 = 780$ sec

T_v for $U = 50$ that $= 0.197$

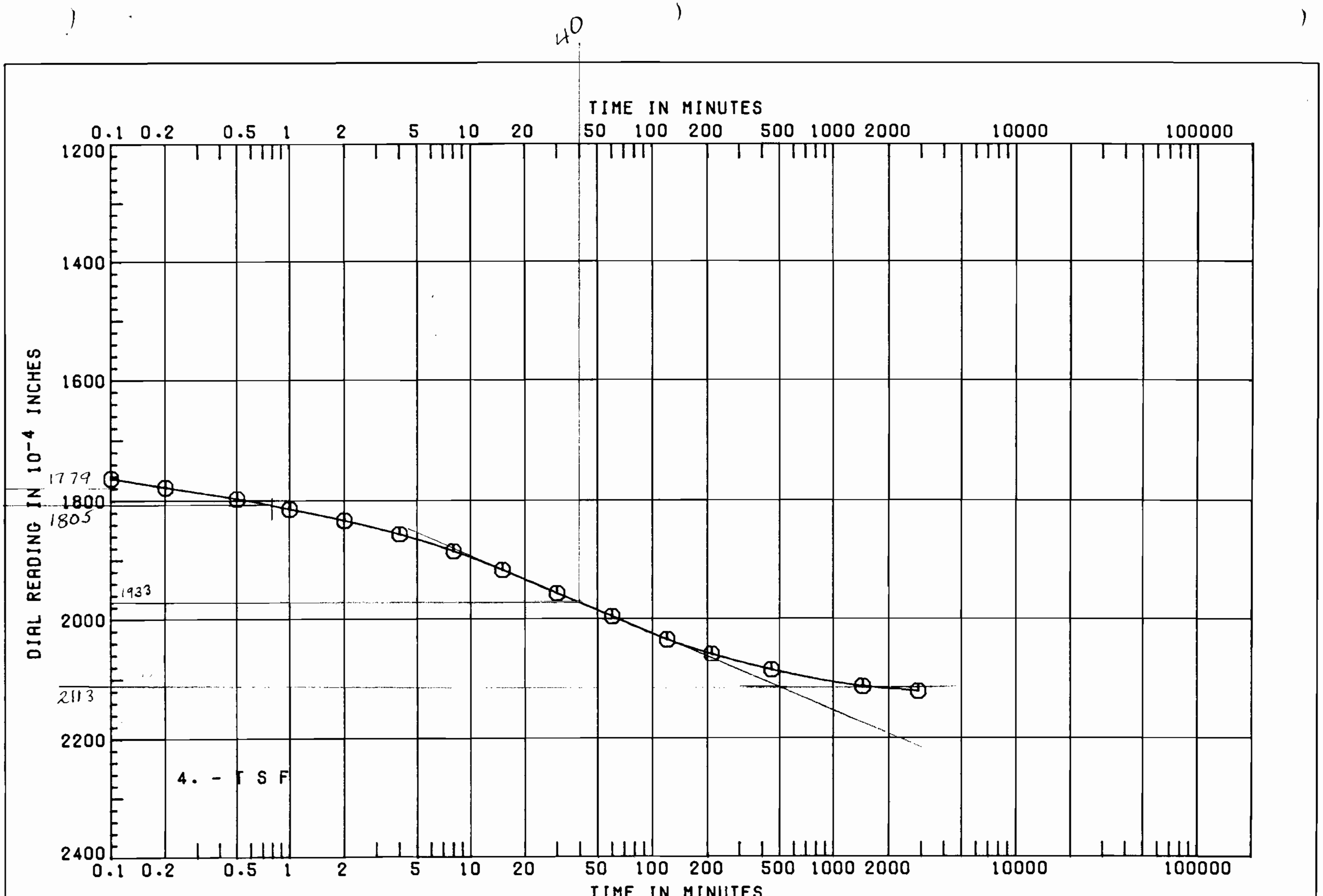
$2H = $ Sample height $= 1.127 - (DR_{50} - DR_0)$

$$H = \frac{1.127 - (.1541 - .1426)}{2} = 0.55775$$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \text{cm}^2/\text{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55775)^2}{780} = 0.00051 \ \text{cm}^2/\text{sec}$$

$$C_v\left(\frac{\text{cm}^2}{\text{sec}}\right) \times 33{,}945 = C_v\left(\frac{\text{ft}^2}{\text{yr}}\right) = 33{,}945 \times 0.00051 = 17.21 \ \frac{\text{ft}^2}{\text{yr}}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 4-C
DEPTH/ELEV 12.5/-1.6	DATE 28 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 7 OF 9

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 4-C Elev. -1.6 Load Increment 4.0 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 1805

$t/4 = .2$ Dial Reading $DR_2 =$ 1779

$a = DR_1 - DR_2 =$ 26

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a =$ 1779 − 26 = 1753

$U = 100\%$ from construction $DR_{100} =$ 2113

$U = 50\% \text{ @ } \frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1753 + 2113}{2} = 1933$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 40 = 2400$ sec

T_v for $U = 50$ that $= 0.197$

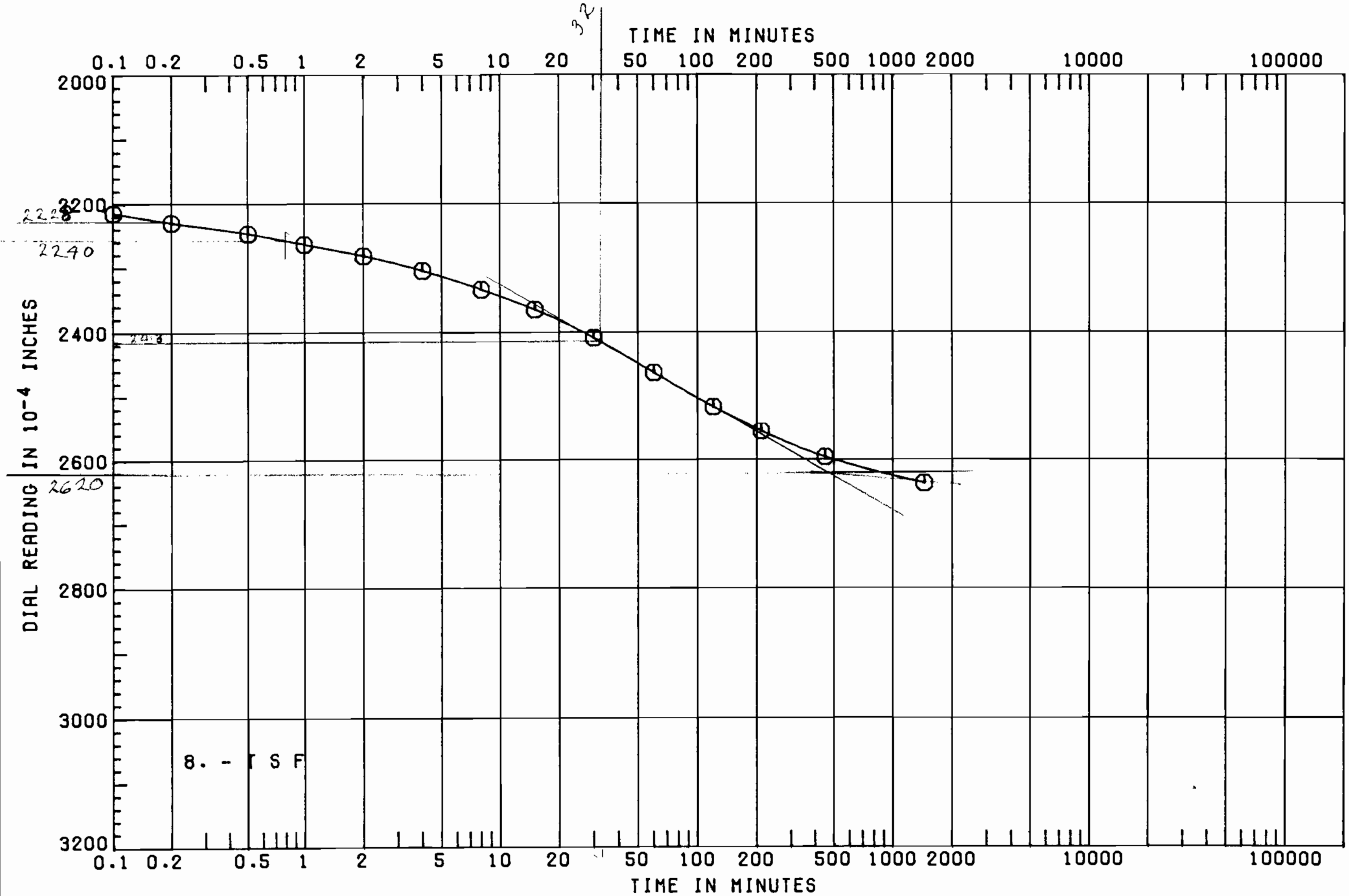
$2H =$ Sample height $= 1.1127 - (DR_{50} - DR_0)$

$H = \frac{1.1127 - (.1933 - .1753)}{2} = 0.5545$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(0.5545)^2}{2400} = 0.00016 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00016 = 5.53 \frac{ft}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 4-C
DEPTH/ELEV 12.5/-1.6	DATE 28 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 8 OF 9

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 4-C   Elev. -1.6   Load Increment 8.0 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 2240

$t/4 = .2$ Dial Reading $DR_2 =$ 2228

$a = DR_1 - DR_2 =$ 12

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 2228 - 12 = 2216$

$U = 100\%$ from construction $DR_{100} = 2620$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{2216 + 2620}{2} = 2418$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 32 = 1920$ sec

T_v for $U = 50$ that $= 0.197$

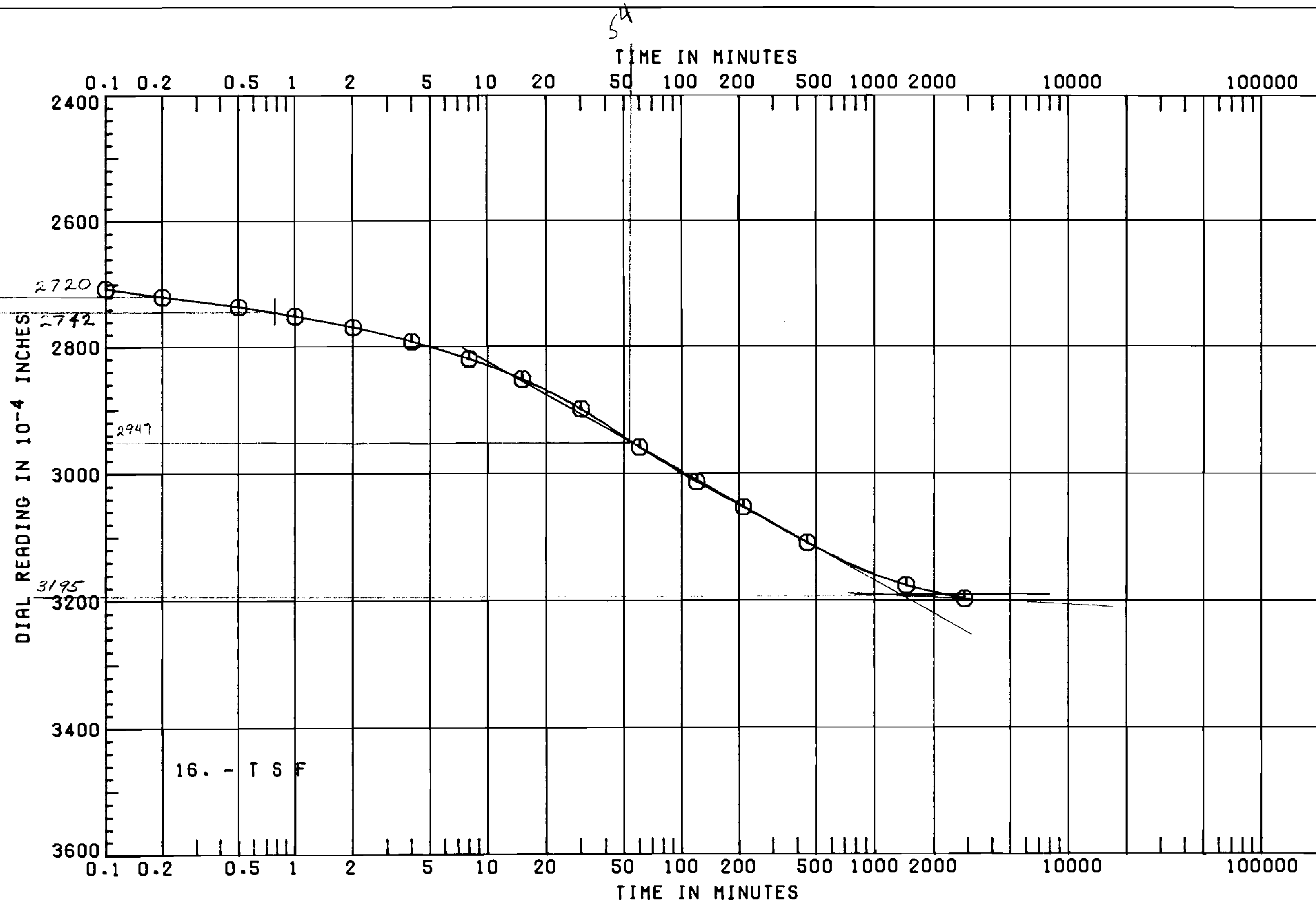
$2H =$ Sample height $= 1.1127 - (DR_{50} - DR_0)$

$H = \frac{1.1127 - (.2418 - .2216)}{2} = 0.5534$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5534)^2}{1920} = 0.00020 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00020 = 6.88 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 4-C
DEPTH/ELEV 12.5/-1.6	DATE 28 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 9 OF 9

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 4-C Elev. -1.6 Load Increment 16.0 T.S.F.

$t = .8$ Dial Reading $DR_1 = 2742$

$t/4 = .2$ Dial Reading $DR_2 = 2720$

$a = DR_1 - DR_2 = 22$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 2720 - 22 = 2698$

$U = 100\%$ from construction $DR_{100} = 3195$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{2698 + 3195}{2} = 2947$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 54 = 3240$ Se

T_v for $U = 50$ that $= 0.197$

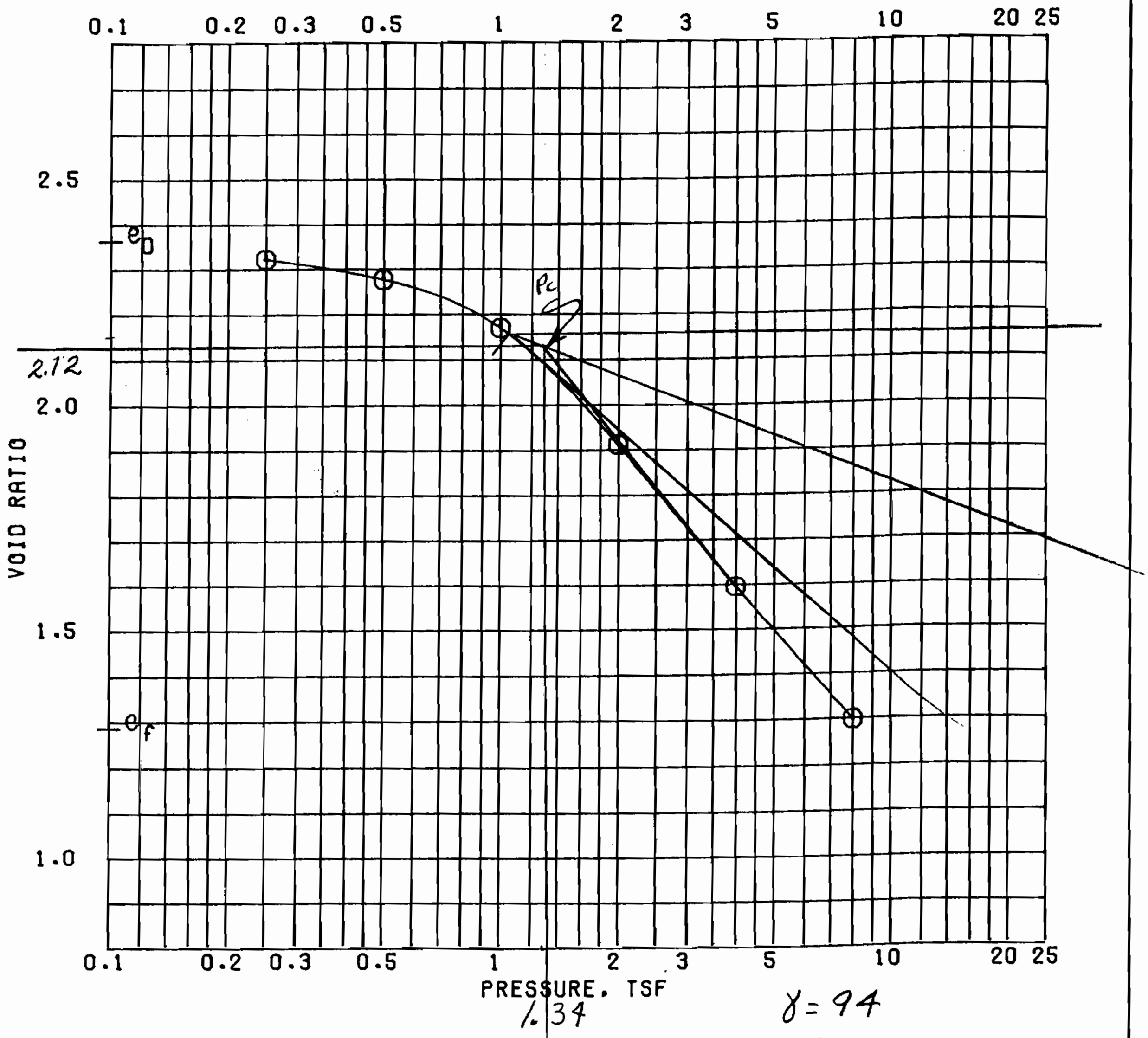
$2H$ = Sample height $= 1.127 - (DR_{50} - DR_0)$

$$H = \frac{1.127 - (.2947 - .2698)}{2} = 0.55105$$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \text{cm}^2/\text{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55105)^2}{3240} = 0.00012 \ \frac{\text{cm}^2}{\text{yr}}$$

$$C_v\left(\frac{\text{cm}^2}{\text{sec}}\right) \times 33{,}945 = C_v\left(\frac{\text{ft}^2}{\text{yr}}\right) = 33{,}945 \times 0.00012 = 4.04 \ \frac{\text{ft}^2}{\text{yr}}$$

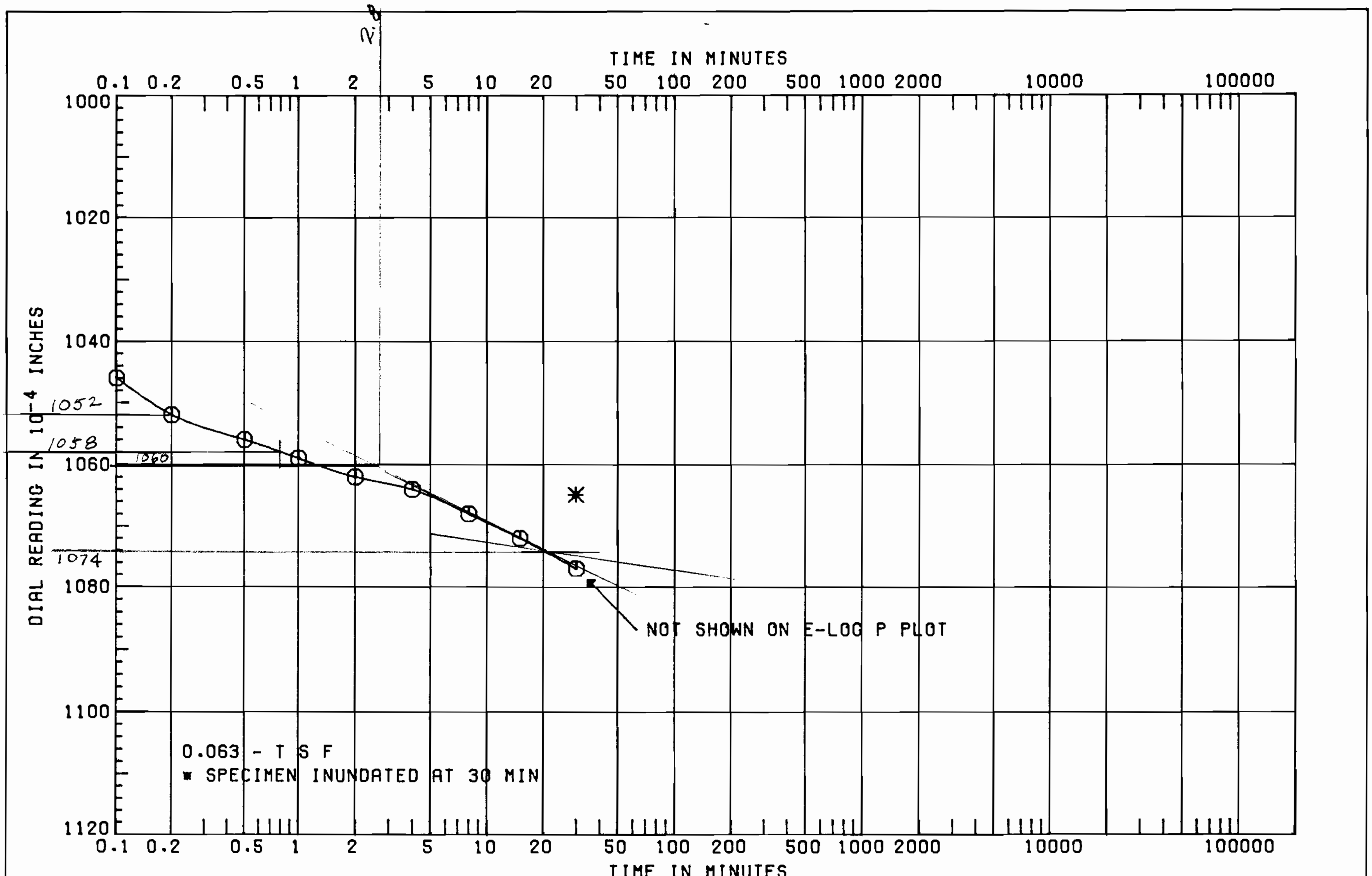


γ = 94

			BEFORE TEST	AFTER TEST
OVERBURDEN PRESSURE, TSF		WATER CONTENT, %	82.6	50.2
PRECONSOL. PRESSURE, TSF	1.34	DRY DENSITY, PCF	50.2	73.8
COMPRESSION INDEX		SATURATION, %	94.4	100 +
TYPE SPECIMEN	UNDISTURBED	VOID RATIO	2.360	1.283
DIA. IN 4.44	HT. IN 1.110	BACK PRESSURE, TSF		

CLASSIFICATION	PLASTIC CLAY (CH), GRAY; ROOTLETS			
LL	PL	PI	PROJECT LK PONT LA & VIC HURR PROT	
GS 2.70 (EST)	D_{10}		ORLEANS PARISH OUTFALL CANALS	
REMARKS			BORING NO. 3-MUG	SAMPLE NO. 6-B
			DEPTH/ELEV 19.7/-8.8	DATE 29 JUL 86

CONSOLIDATION TEST REPORT



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 6-B
DEPTH/ELEV 19.7/-8.8	DATE 29 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 2 OF 8

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 6-B Elev. -8.8 Load Increment 0.063 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 1058

$t/4 = .2$ Dial Reading $DR_2 =$ 1052

$a = DR_1 - DR_2 =$ 6

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1052 - 6 = 1046$

$U = 100\%$ from construction $DR_{100} = 1074$

$$U = 50\% \text{ @ } \frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1046 + 1074}{2} = 1060$$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 2.8 = 168$ sec

T_v for $U = 50$ that $= 0.197$

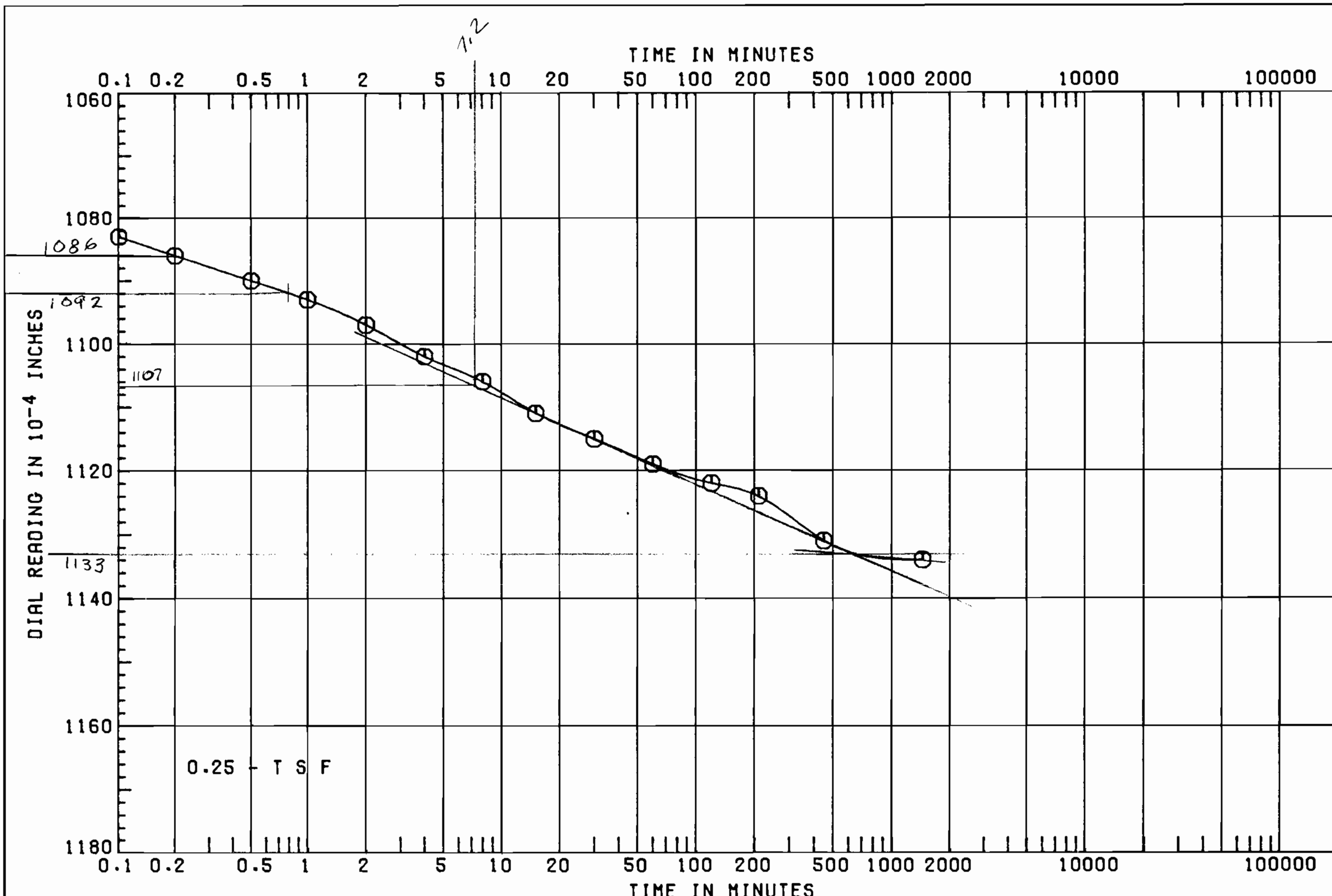
$$2H = \text{Sample height} = .1110 - (DR_{50} - DR_0)$$

$$H = \frac{.1110 - (.1060 - .1046)}{2} = 0.5543$$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5543)^2}{168} = 0.00232 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00232 = 78.90 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 6-B
DEPTH/ELEV 19.7/-8.8	DATE 29 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 3 OF 8

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 6-B   Elev. -8.8   Load Increment 0.25 T.S.F.

$t = .8$ Dial Reading DR_1 = 1092

$t/4 = .2$ Dial Reading DR_2 = 1086

$a = DR_1 - DR_2$ = 6

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 1086 − 6 = 1080

$U = 100\%$ from construction DR_{100} = 1133

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1080 + 1133}{2} = 1107$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 7.2 = 432$ se

T_v for $U = 50$ that $=$ 0.197

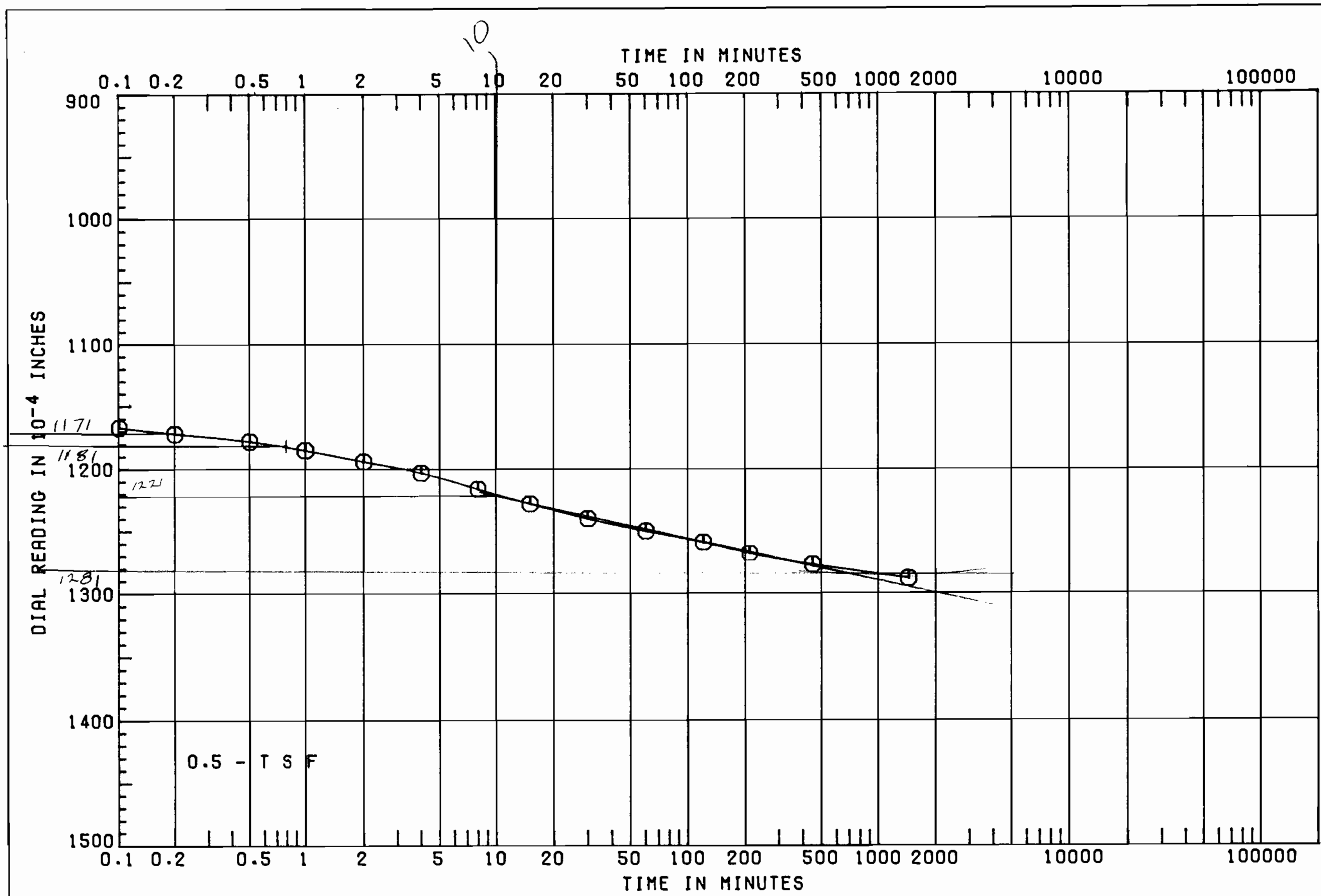
$2H$ = Sample height $=$ 1.110 $-(DR_{50} - DR_0)$

$H = \frac{1.110 - (.1107 - .1080)}{2} = 0.55365$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.55365)^2}{432} = 0.0009 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.0009 = 30.61 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 6-B
DEPTH/ELEV 19.7/-8.8	DATE 29 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 4 OF 8

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 6-8 Elev. -8.8 Load Increment 0.5 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 1181

$t/4 = .2$ Dial Reading $DR_2 =$ 1171

$a = DR_1 - DR_2 :$ 10

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a =$ 1171 − 10 = 1161

$U = 100\%$ from construction $DR_{100} =$ 1281

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1161 + 1281}{2} =$ 1221

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 10 = 600$ se

T_v for $U = 50$ that $= 0.197$

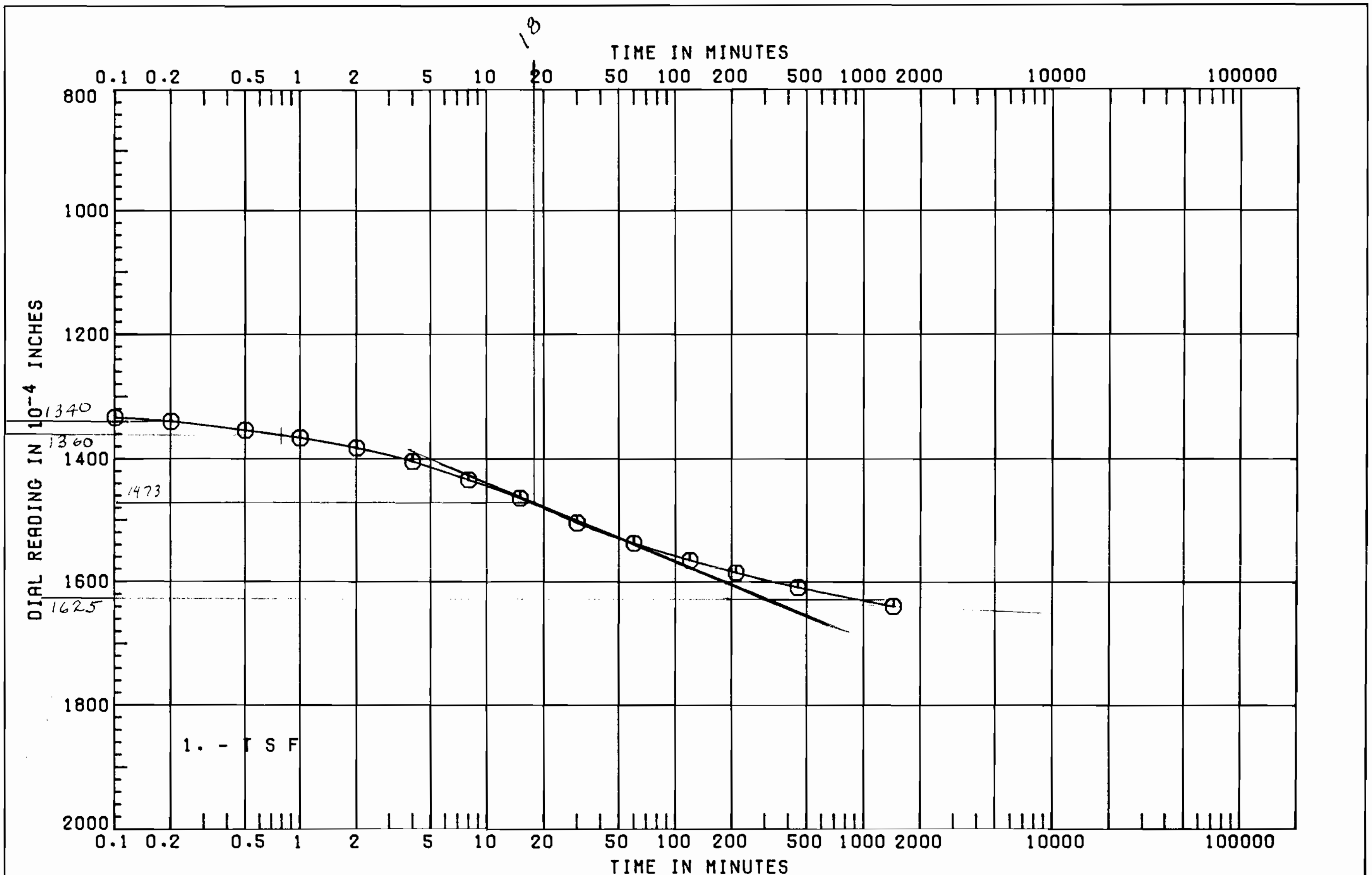
2H = Sample height = 1.110 − $(DR_{50} - DR_0)$

$H = \frac{1.110 - (.1221 - .1161)}{2} = 0.5520$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \text{cm}^2/\text{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5520)^2}{600} = 0.00065 \ \text{cm}^2/\text{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00065 = 21.91 \ \frac{ft}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 6-B
DEPTH/ELEV 19.7/-8.8	DATE 29 JUL 86

CONSOLIDATION TEST
TIME CURVES

SHEET 5 OF 8

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 6-8 Elev. -8.8 Load Increment 1.0 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 1360

$t/4 = .2$ Dial Reading $DR_2 =$ 1340

$a = DR_1 - DR_2 =$ 20

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1340 - 20 = 1320$

$U = 100\%$ from construction $DR_{100} =$ 1625

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1320 + 1625}{2} = 1473$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 18 = 1080$ sec

T_v for $U = 50$ that $= 0.197$

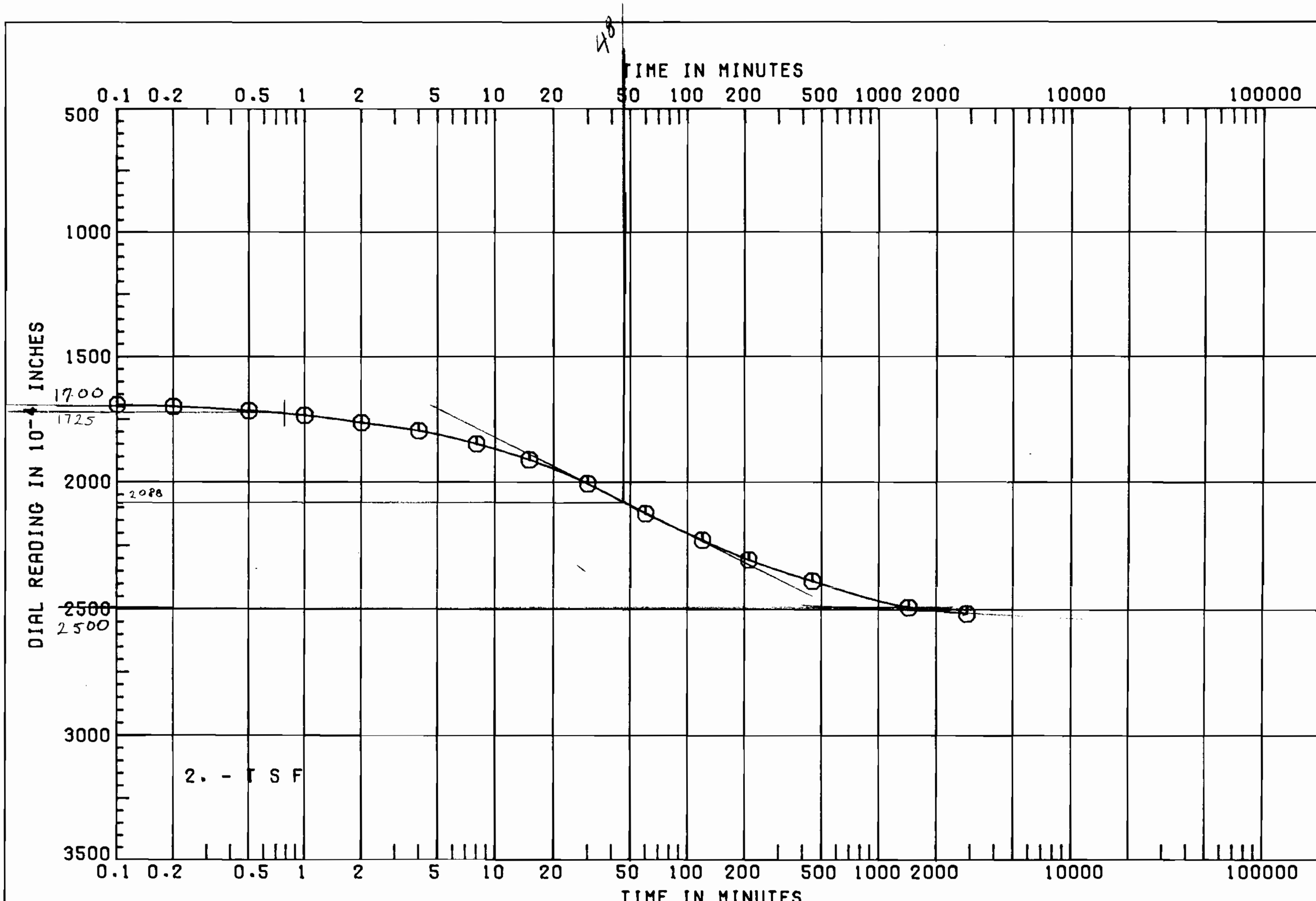
$2H =$ Sample height $= .1110 - (DR_{50} - DR_0)$

$H = \frac{.1110 - (.1473 - .1320)}{2} = 0.54735$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.54735)^2}{1080} = 0.00035 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00035 = 11.97 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST TIME CURVES
ORLEANS PARISH OUTFALL CANALS		
BORING 3-MUG	SAMPLE NO. 6-B	
DEPTH/ELEV 19.7/-8.8	DATE 29 JUL 86	

SHEET 6 OF 8

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 6-B Elev. -8.8 Load Increment 2.0 T.S.F.

$t = .8$ Dial Reading DR_1 = 1725
$t/4 = .2$ Dial Reading DR_2 = 1700
$a = DR_1 - DR_2$ = 25

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 1700 − 25 = 1675

$U = 100\%$ from construction DR_{100} = 2500

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1675 + 2500}{2} = 2088$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 48 = 2880$ sec

T_v for $U = 50$ that $= 0.197$

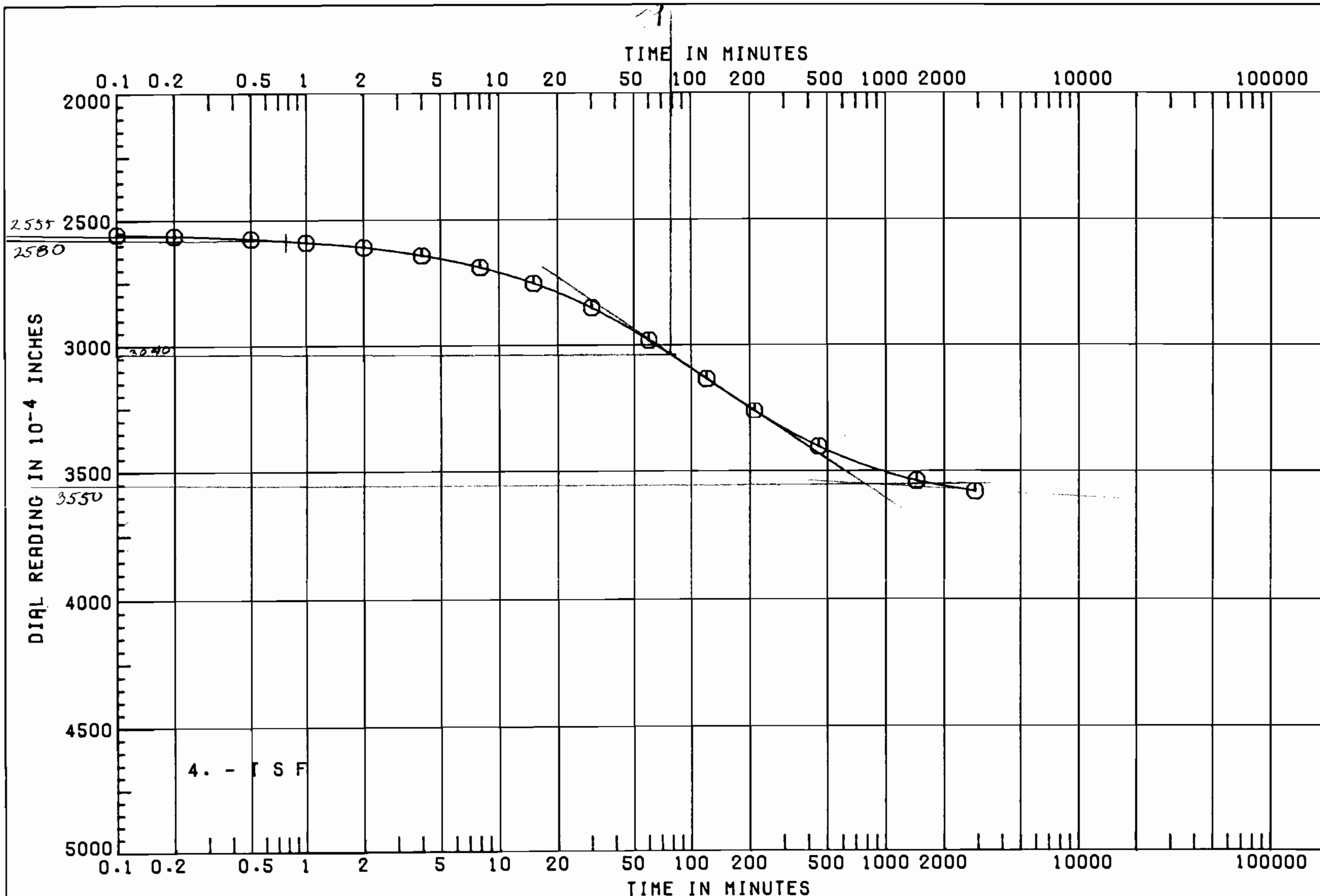
$2H$ = Sample height = 1.110 $-(DR_{50} - DR_0)$

$H = \frac{1.110 - (.2088 - .1675)}{2} = 0.53435$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.53435)^2}{2880} = 0.00013 \ \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00013 = 4.28 \ \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 6-B
DEPTH/ELEV 19.7/-8.8	DATE 29 JUL 86

CONSOLIDATION TEST

TIME CURVES

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 6-B Elev. -8.8 Load Increment 4.0 T.S.F.

$t = .8$ Dial Reading DR_1 = 2580

$t/4 = .2$ Dial Reading DR_2 = 2555

$a = DR_1 - DR_2$ = 25

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 2555 − 25 = 2530

$U = 100\%$ from construction DR_{100} = 3550

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{2530 + 3550}{2} = 3040$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 79 = 2940$ se[c]

T_v for $U = 50$ that $= 0.197$

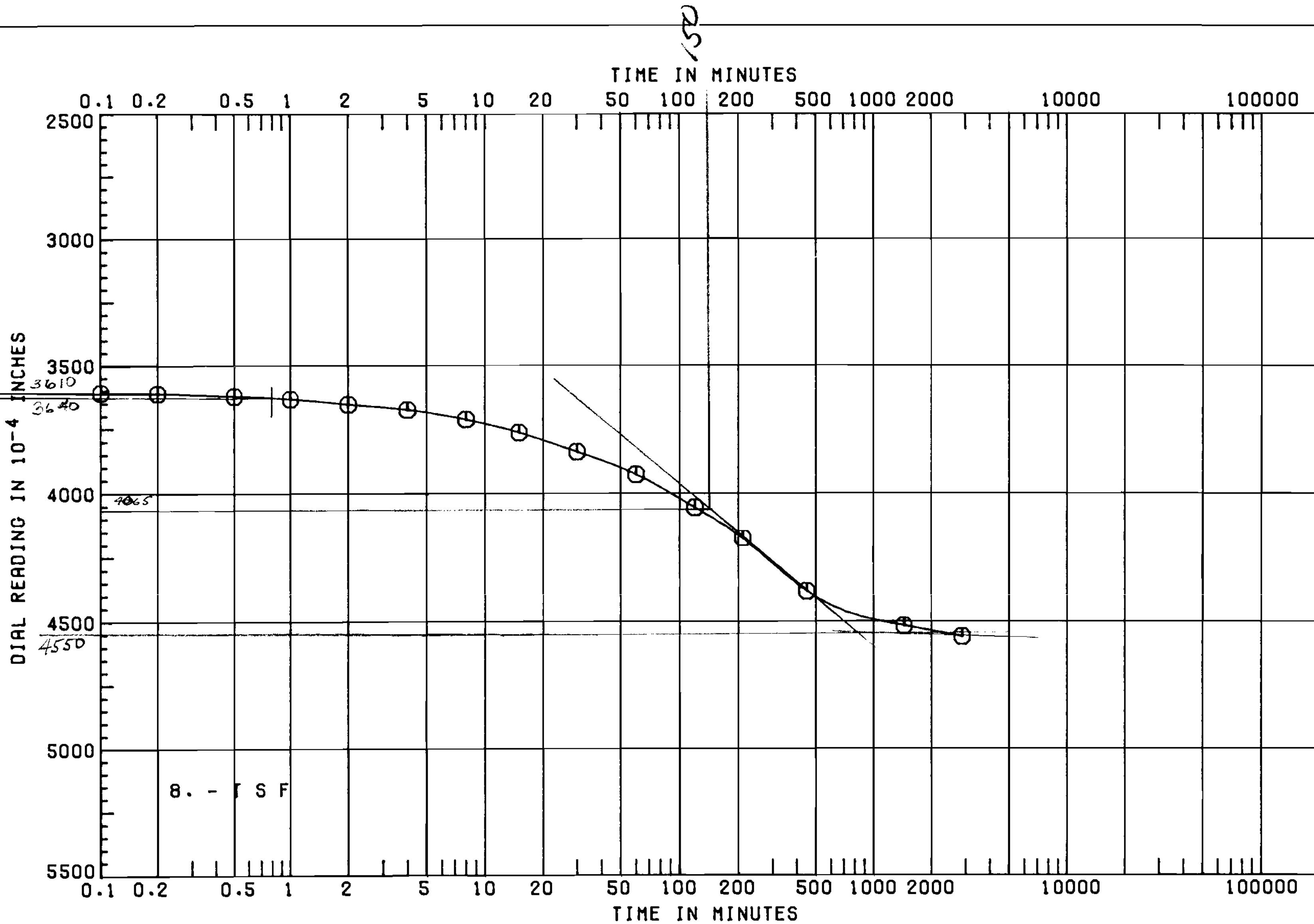
$2H$ = Sample height = 1.110 $-(DR_{50} - DR_0)$

$H = \frac{1.110 - (.3040 - .2530)}{2} = 0.5295$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5295)^2}{2940} = 0.00012 \frac{cm^2}{y[r]}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00012 = 4.11 \frac{ft}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 3-MUG	SAMPLE NO. 6-B
DEPTH/ELEV 19.7/-8.8	DATE 29 JUL 86

CONSOLIDATION TEST

TIME CURVES

SHEET 8 OF 8

Project Orleans Parish Outfall Canals

Boring No. 3-MUG

Sample No. 6-B Elev. -8.8 Load Increment 8.0 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 3640

$t/4 = .2$ Dial Reading $DR_2 =$ 3610

$a = DR_1 - DR_2 =$ 30

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 3610 - 30 = 3580$

$U = 100\%$ from construction $DR_{100} = 4550$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{3580 + 4550}{2} = 4065$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 150 = 9000$ s

T_v for $U = 50$ that $= 0.197$

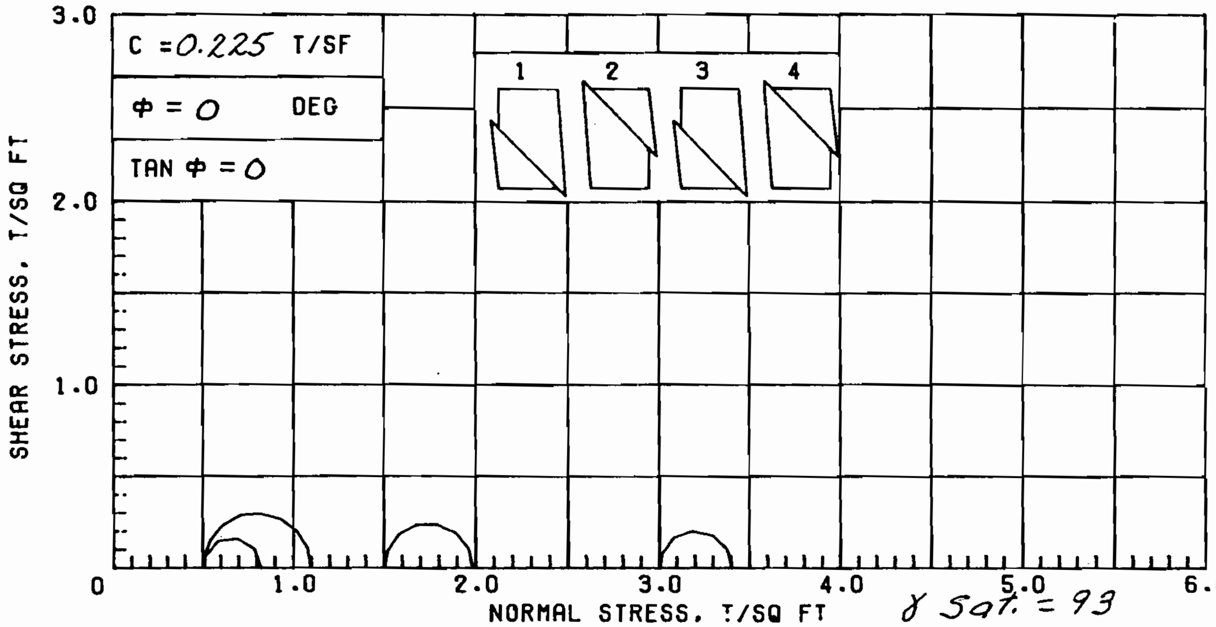
$2H =$ Sample height $= 1.110 - (DR_{50} - DR_0)$

$H = \frac{1.110 - (.4065 - .3580)}{2} = 0.53075$

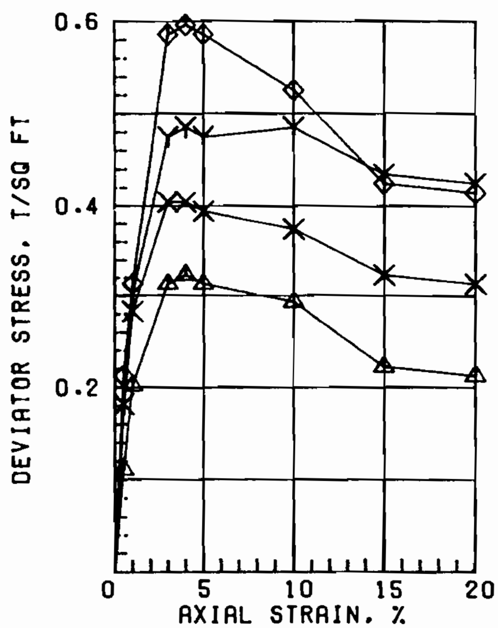
$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.53075)^2}{9000} = 0.00004 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.0004 = 1.35 \frac{ft}{yr}$$



γ Sat. = 93



			91.9	92.7	93.2	94.1	
SPECIMEN NO.			△1	Y2	X3	◇4	Avg.
INITIAL	WATER CONTENT, %		90.5	89.4	87.9	82.1	87.5
	DRY DENSITY, PCF		46.8	48.1	48.9	50.3	
	SATURATION, %		94.0	96.5	97.0	94.3	
	VOID RATIO		2.599	2.503	2.448	2.351	
BEFORE SHEAR	WATER CONTENT, %						
	DRY DENSITY, PCF						
	SATURATION, %						
	VOID RATIO						
	BACK PRESS., TSF						
MIN PRIN. STRESS, TSF			0.5	1.5	3.0	0.5	
MAX. DEV. STRESS, TSF			0.32	0.48	0.40	0.60	
TIME TO FAILURE, MIN.			8	24	18	24	
RATE OF STRAIN INCR.,%				6	6	6	
INITIAL DIAMETER, IN.			1.39	1.39	1.39	1.39	
INITIAL HEIGHT, IN.			3.00	3.00	3.00	3.00	

CONTROLLED-STRAIN TEST

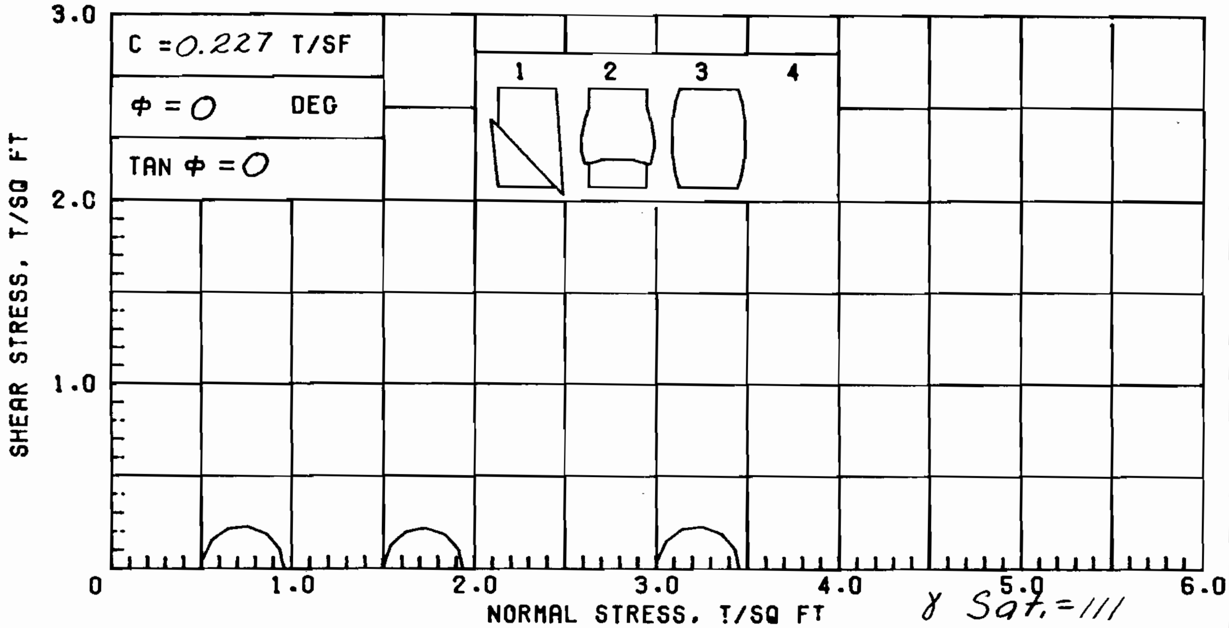
DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), GRAY; DECAYED WOOD

LL 127	PL 31	PI 96	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

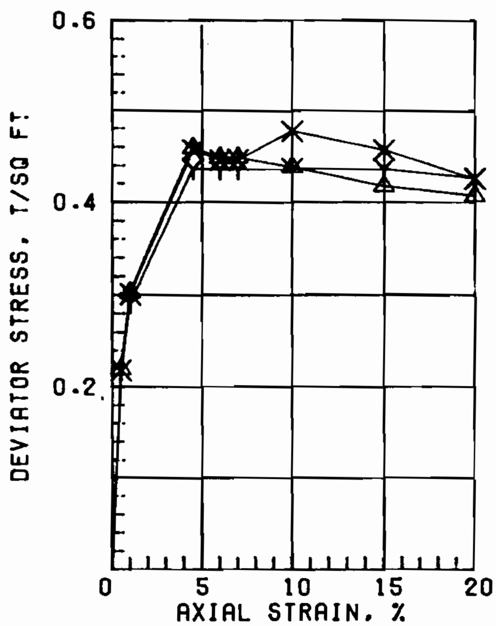
REMARKS:

PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING NO. 3-MUG	SAMPLE NO. 6-C
DEPTH/ELEV 20.8/-9.9	TECH. KOC
LABORATORY USAE WES	DATE 27 AUG 86

TRIAXIAL COMPRESSION TEST REPORT



γ Sat. = 111
109.8 110.8 112.5



SPECIMEN NO.		△1	Y2	X3	4
INITIAL	WATER CONTENT, %	45.8	43.9	40.4	
	DRY DENSITY, PCF	75.1	76.8	79.6	
	SATURATION, %	99.2	99.3	97.7	
	VOID RATIO	1.246	1.194	1.117	
BEFORE SHEAR	WATER CONTENT, %				
	DRY DENSITY, PCF				
	SATURATION, %				
	VOID RATIO				
	BACK PRESS., TSF				
MIN PRIN. STRESS, TSF		0.5	1.5	3.0	
MAX. DEV. STRESS, TSF		0.46	0.44	0.46	
TIME TO FAILURE, MIN.		14	14	15	
RATE OF STRAIN INCR,%		7	7	7	
INITIAL DIAMETER, IN.		1.37	1.37	1.37	
INITIAL HEIGHT, IN.		3.00	3.00	3.00	

Avg. 43.4

CONTROLLED-STRAIN TEST

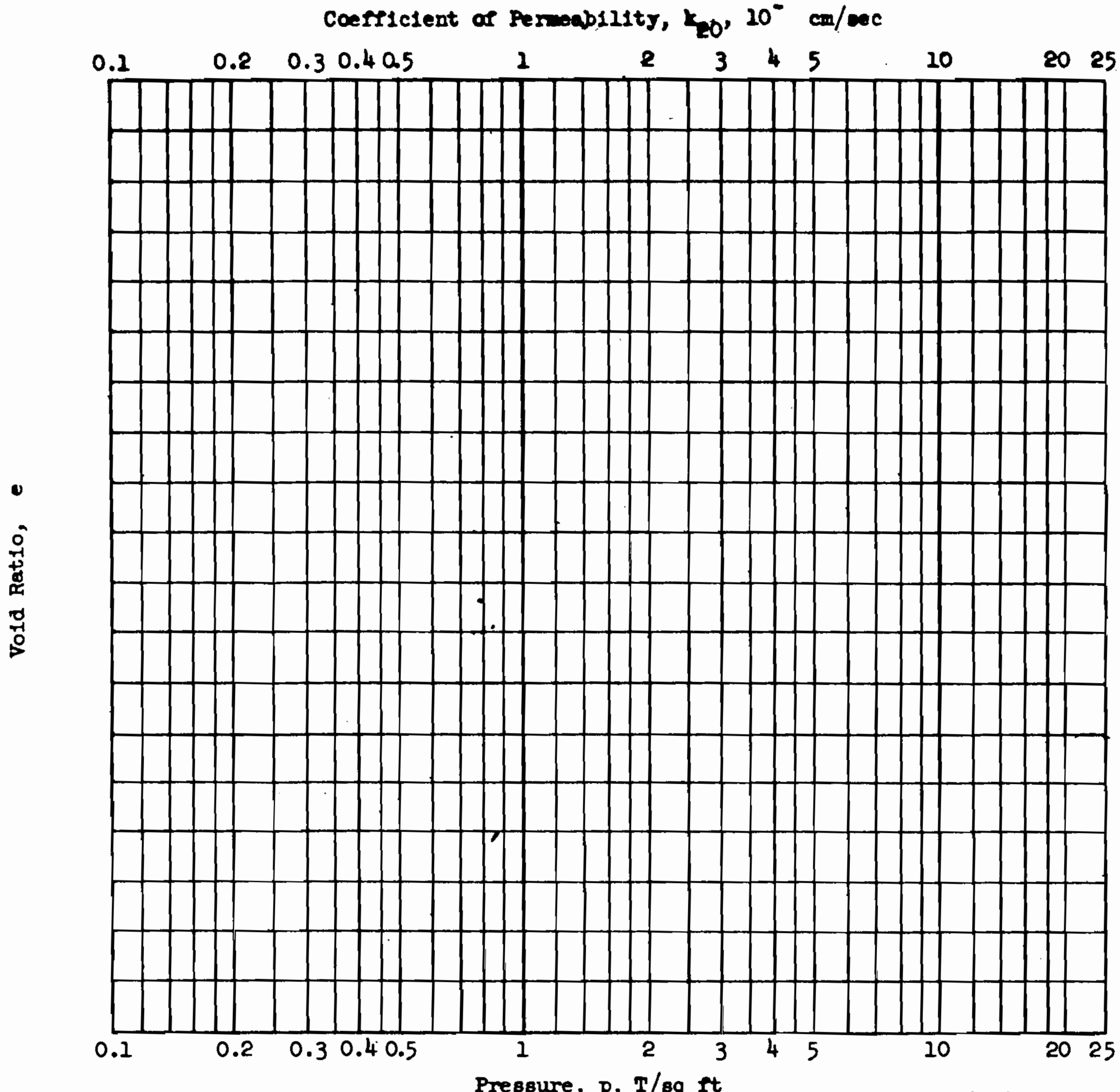
DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), GRAY; SHELL PARTICLES

LL 51	PL 13	PI 38	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS:

PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING NO. 3-MUG	SAMPLE NO. 7-B
DEPTH/ELEV 24.2/-13.3	TECH. JMS
LABORATORY USAE WES	DATE 27 AUG 86

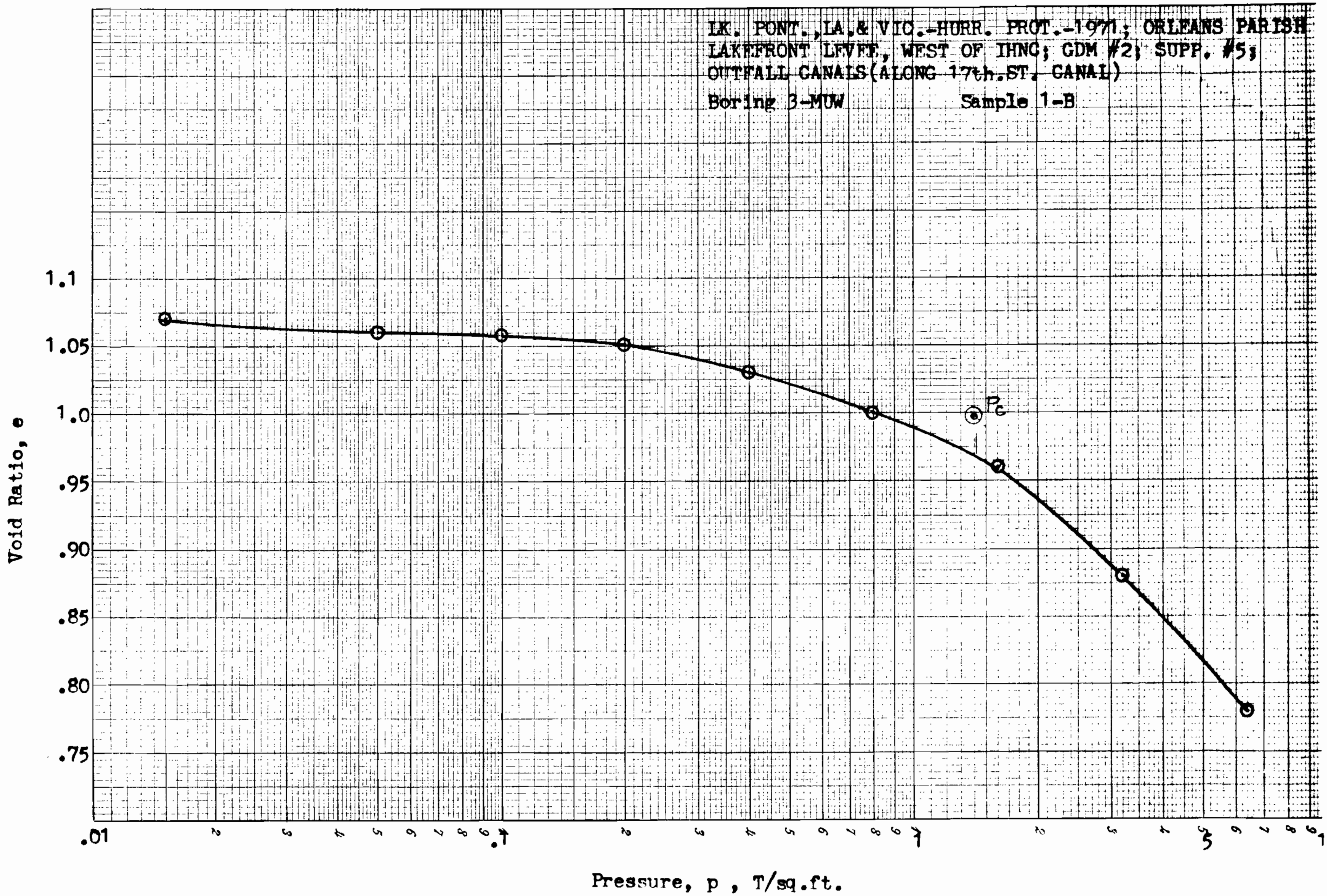
TRIAXIAL COMPRESSION TEST REPORT



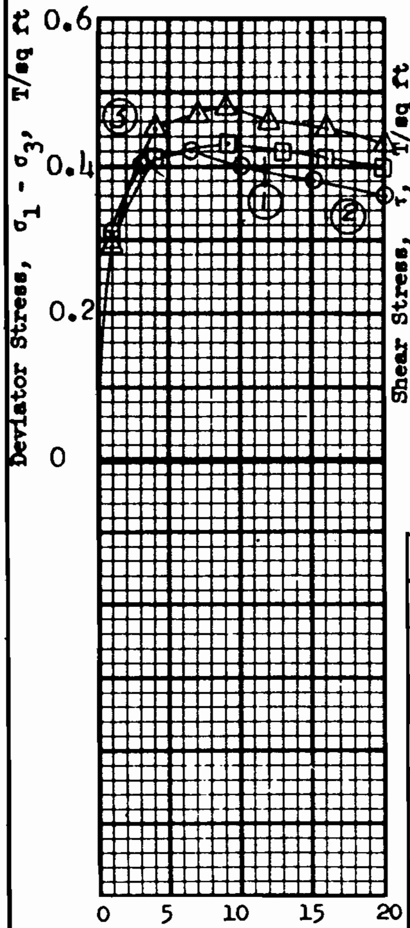
Sat. γ = 114

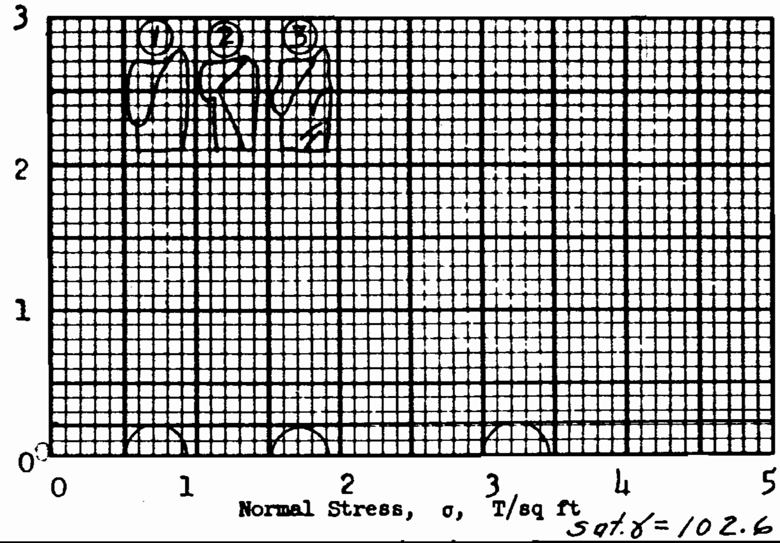
Type of Specimen UNDISTURBED		Before Test		After Test
Diam 4.25 in.	Ht 1.146 in.	Water Content, w_o	25.0 %	w_f %
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	1.07	e_f
Preconsol. Pressure, p_c 1.41 T/sq ft		Saturation, S_o	63.5 %	S_f %
Compression Index, C_c 0.33		Dry Density, γ_d	81.8 lb/ft^3	
Classification PLASTIC CLAY(CH),*		k_{20} at e_o = × 10^{-} cm/sec		
LL 51	G_s 2.59 From Undist.	Project LK. PONT.,LA.& VIC.-HURR. PROT.-1971		
PL 23	D_{10}	ORLEANS PARISH LK.FT.LEVEE,WEST OF IHNC;		
Remarks *brown, contains organic		GDM#2;SUPP.#5(ALONG 17th.ST. CANAL)		
matter and zones of clayey silt		Boring No. 3-MUW	Sample No. 1-B	
See attached plot for pressure		~~Depth~~ El -3.2	Date 29 March,1971	
vs void ratio curve		JDB CONSOLIDATION TEST REPORT		

USAEWES SOILS TEST SECTION



USAEWES SOILS TEST SECTION





sat γ = 102.6

Shear Strength Parameters

φ = 0 °

tan φ = 0

c = 0.22 T/sq ft

Method of saturation ________

☐ Controlled stress

☒ Controlled strain

			Test No. 1	2	3	Avg.
Initial	Water content	w_o	59.5 %	61.3 %	61.1 %	60.6 %
	Void ratio	e_o	1.58	1.66	1.66	
	Saturation	S_o	100+ %	99.3 %	99.0 %	%
	Dry density, lb/cu ft	γ_d	65.1	63.1	63.0	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.43	0.42	0.48	
Time to failure, min		t_f	58	23	21	
Rate of strain, percent/min			0.158	0.272	0.435	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.40	1.41	
Initial height, in.		H_o	3.00	3.00	3.00	

Type of test Q	Type of specimen UNDISTURBED
Classification	PLASTIC CLAY(CH), gray, contains numerous rootlets

LL 105	PL 33	PI 72		G_s 2.69 From Undist.

Remarks ________

Project LK. PONT. LA., & VIC.-HURR. PROT.-1971

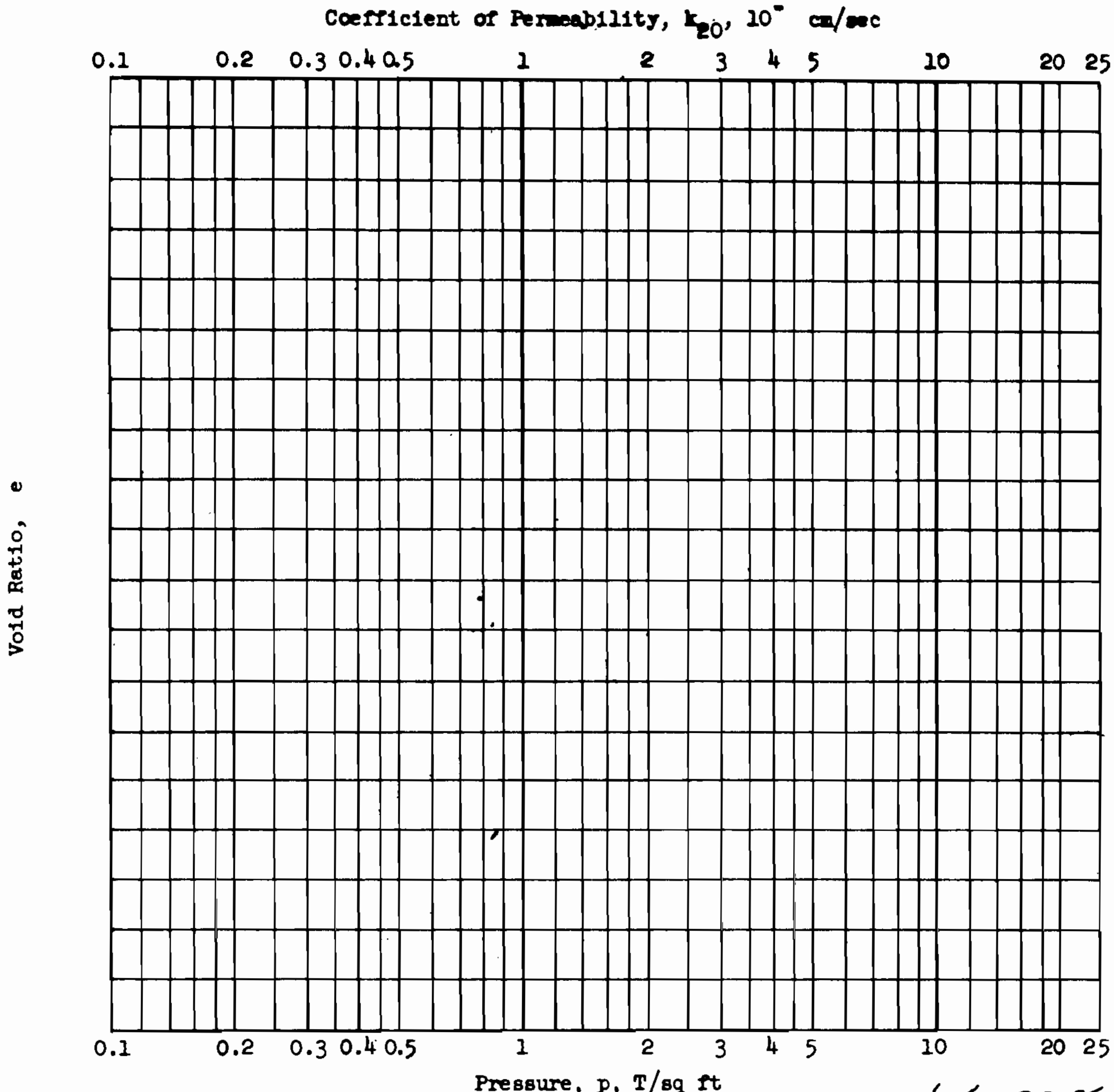
ORLEANS PARISH LF. LEVEE, WEST OF IHNC, GDM#2,

Area SUPP.# 5 OUTFALL CANALS (ALONG 17th ST. CANAL)

Boring No. 3-MUW	Sample No. 2-B
Depth El - 6.7	Date 11 March, 1971

FAM TRIAXIAL COMPRESSION TEST REPORT

Box 19

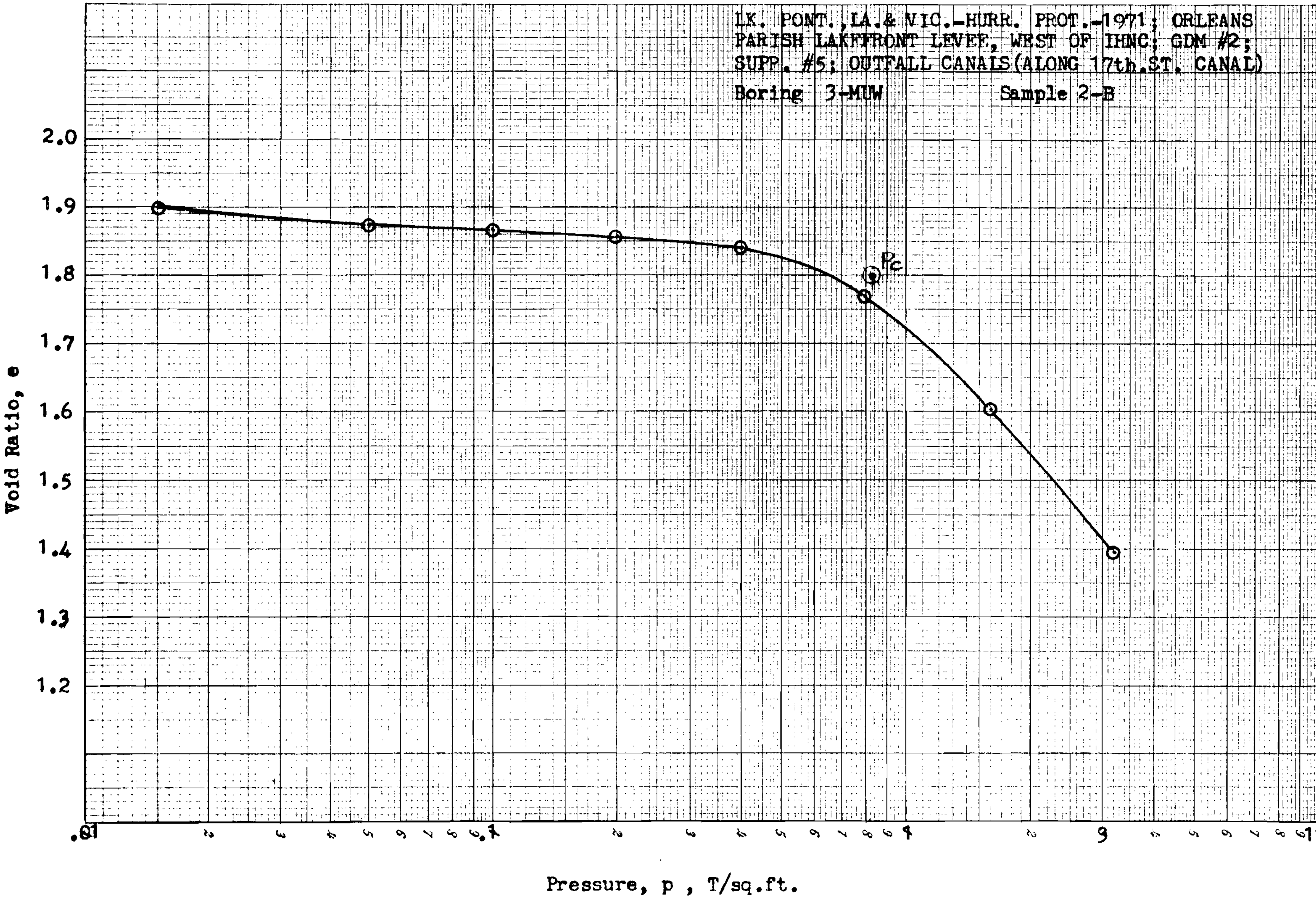


sat. γ = 98.8

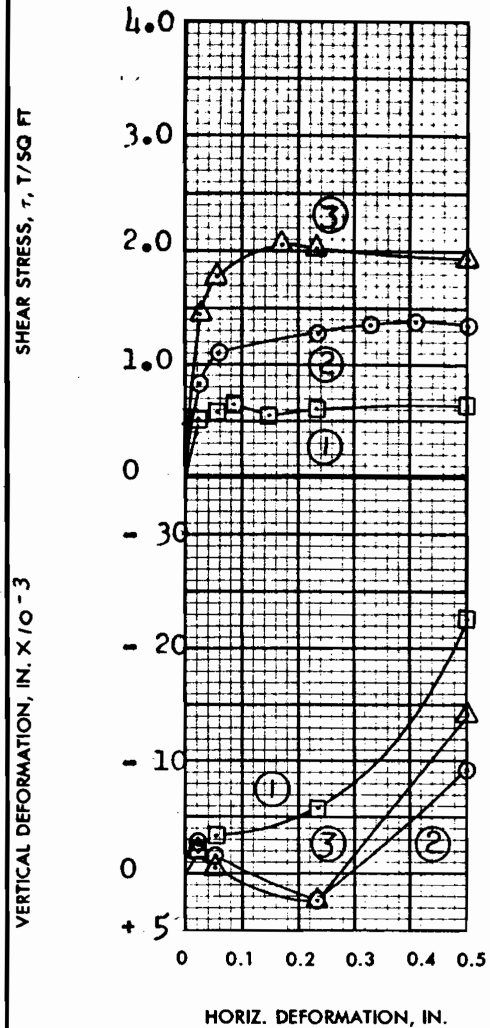
Type of Specimen UNDISTURBED		Before Test		After Test
Diam 4.25 in.	Ht 1.153 in.	Water Content, w_o	68.1 %	w_f %
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	1.90	e_f
Preconsol. Pressure, p_c 0.83 T/sq ft		Saturation, S_o	96.4 %	S_f %
Compression Index, C_c 0.69		Dry Density, γ_d	57.9 lb/ft^3	
Classification PLASTIC CLAY(CH)*		k_{20} at e_o = × 10^{-} cm/sec		
LL 105	G_s 2.69 From Undist.	Project LK. PONT., LA.& VIC.-HURR. PROT.-1971		
PL 33	D_{10}	ORLEANS PARISH LAKEFRONT LEVEE, WEST OF IHNC		
Remarks See attached plot for		GDM#2; SUPP.#5; OUTFALL CANALS(ALONG 17th.St.CANAL)		
Pressure vs Void Ratio Curve		Boring No. 3-MUW	Sample No. 2-B	
* gray, contains wood fragments		~~Depth~~ El -6.7	Date 6 April, 1971	
and roots		JDB **CONSOLIDATION TEST REPORT**		

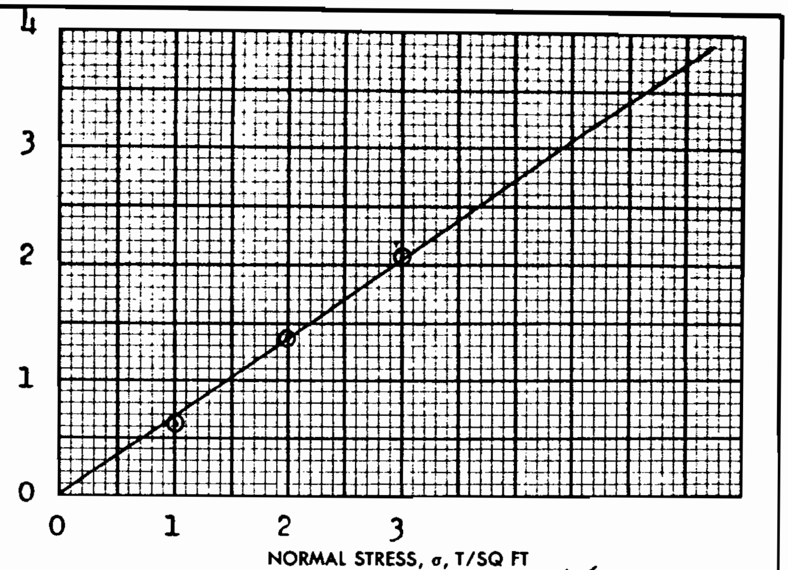
ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) 0 3424

USAEWES SOILS TEST SECTION



USAEWES SOILS TEST SECTION





sat.γ = 124.3

TEST NO.			1	2	3	Avg.
INITIAL	WATER CONTENT	w_o	22.8 %	23.1 %	23.4 %	23.1 %
	VOID RATIO	e_o	0.670	0.685	0.699	
	SATURATION	S_o	90.9 %	90.0 %	89.4 %	%
	DRY DENSITY, LB/CU FT	γ_d	99.8	98.9	98.1	
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}				
FINAL	WATER CONTENT	w_f	25.3 %	25.1 %	24.2 %	%
	VOID RATIO	e_f				
	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.64	1.38	2.07	
ACTUAL TIME TO FAILURE, MIN		t_f	480	2220	960	
RATE OF STRAIN, IN./MIN			.00018	.00018	.00018	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

SHEAR STRENGTH PARAMETERS

ϕ' = 35°

TAN ϕ' = 0.690

c' = 0 T/SQ FT

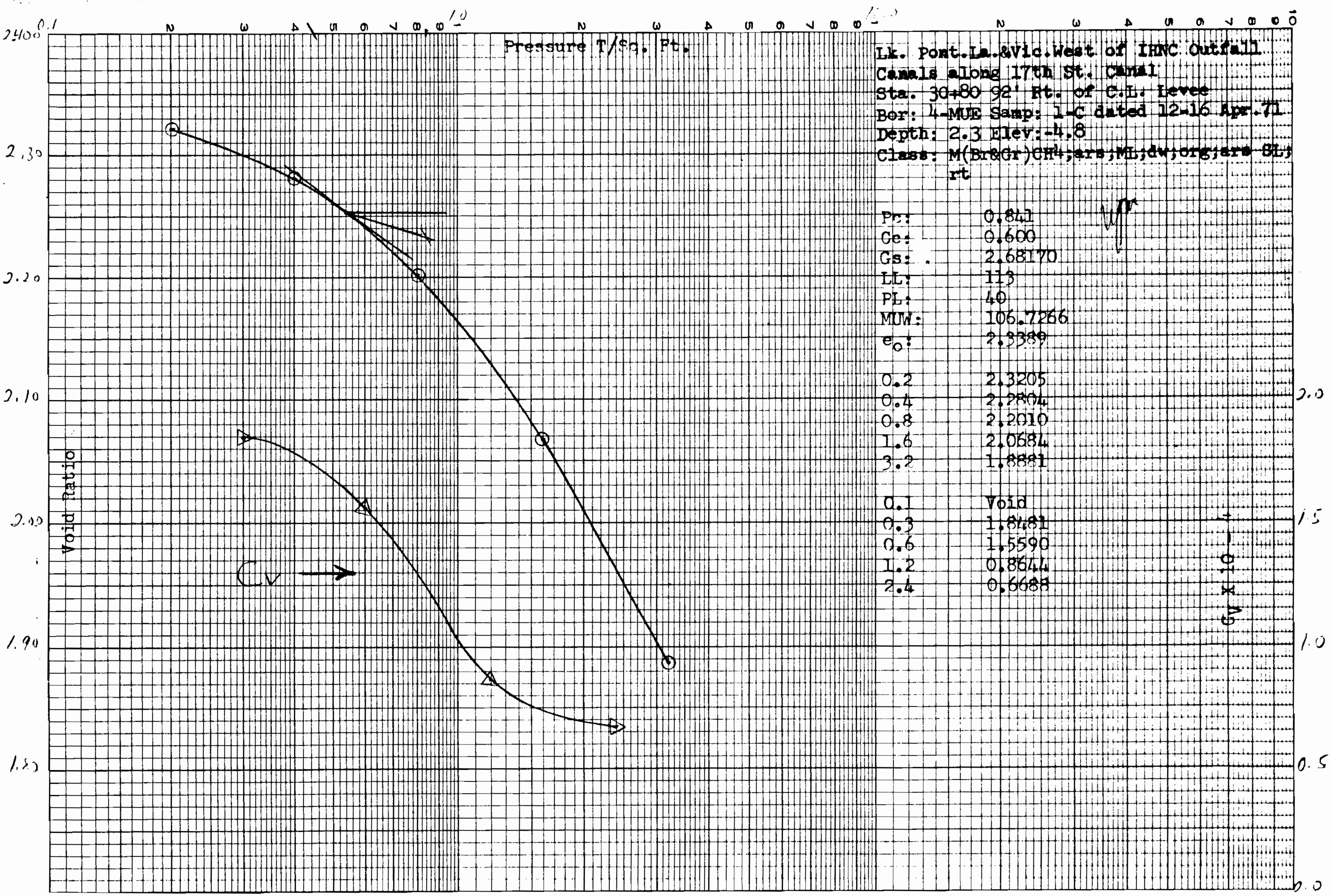
☐ CONTROLLED STRESS

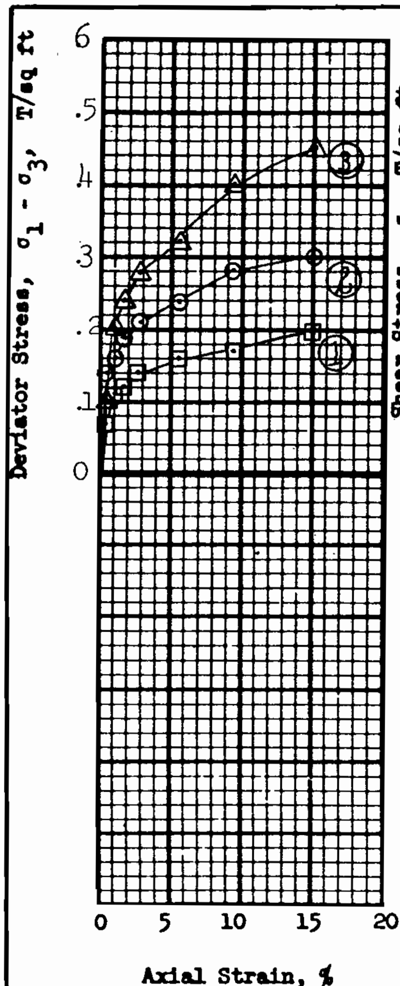
☒ CONTROLLED STRAIN

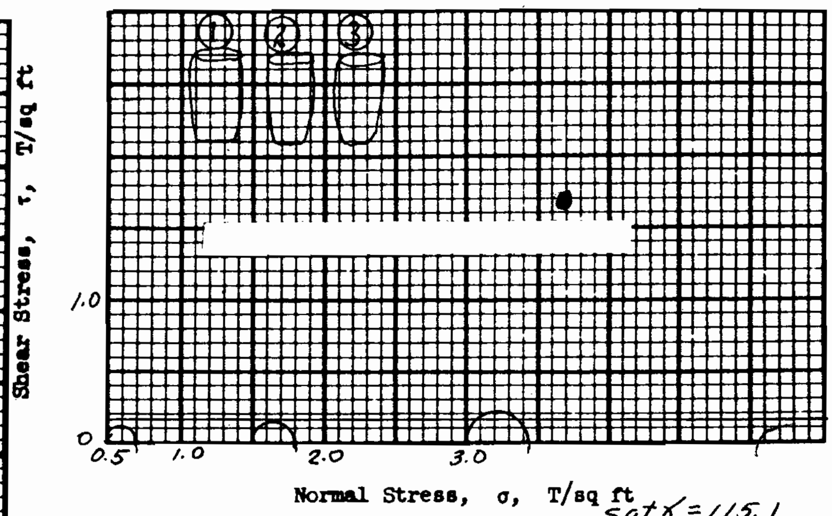
TYPE OF SPECIMEN	UNDISTURBED	3.00 IN. SQUARE	0.550 IN. THICK
CLASSIFICATION	SILTY SAND(SM), gray		
LL -	PL -	PI -	G_s 2.67

REMARKS

PROJECT	LK.PONT.LA.,&VIC.-HURR.PROT.-1971
AREA	ORLEANS PARISH LK.FRNT.LEVEE,WEST OF IHNC, GDM # 2,SUPP.#5OUTFALL CANALS
BORING NO. 3-MUW	SAMPLE NO. 3-A
~~DEPTH~~ EL - 10.4	DATE 29 April 1971
BWG	DIRECT SHEAR TEST REPORT


Pressure T/Sq. Ft.
Void Ratio
Cv x 10⁻⁴
Cv →
Lk. Pont.La.&Vic.West of IHNC Outfall
Canals along 17th St. Canal
Sta. 30+80 92' Rt. of C.L. Levee
Bor: 4-MUE Samp: 1-C dated 12-16 Apr.71
Depth: 2.3 Elev: -4.8
Class: M(Br&Gr)CH4;ars;ML;dw;org;ars SL;
rt
Pc: 0.841
Ce: 0.600
Gs: 2.68170
LL: 113
PL: 40
MUW: 106.7266
eo: 2.3389
0.2 2.3205
0.4 2.2804
0.8 2.2010
1.6 2.0684
3.2 1.8881
0.1 Void
0.3 1.8481
0.6 1.5590
1.2 0.8644
2.4 0.6688
2.40
2.30
2.20
2.10
2.00
1.90
1.80
2.0
1.5
1.0
0.5
0.0





Test No.			1	2	3	Avg.
Initial	Water content	w_o	40.4 %	36.0 %	30.7 %	35.7 %
	Void ratio	e_o	1.08	1.02	0.867	
	Saturation	S_o	99.9 %	94.2 %	94.5 %	%
	Dry density, lb/cu ft	γ_d	80.3	82.7	89.3	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.20	0.30	0.45	
Time to failure, min		t_f	75	75	75	
Rate of strain, percent/min			0.201	0.201	0.201	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.39	1.39	1.38	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.16 T/sq ft

Method of saturation ________

☐ Controlled stress

☒ Controlled strain

Type of test Q	Type of specimen UNDISTURBED
Classification	PLASTIC CLAY(CH), gray, contains a strata of coarse sand

LL 55	PL 17	PI 38		G_s 2.67

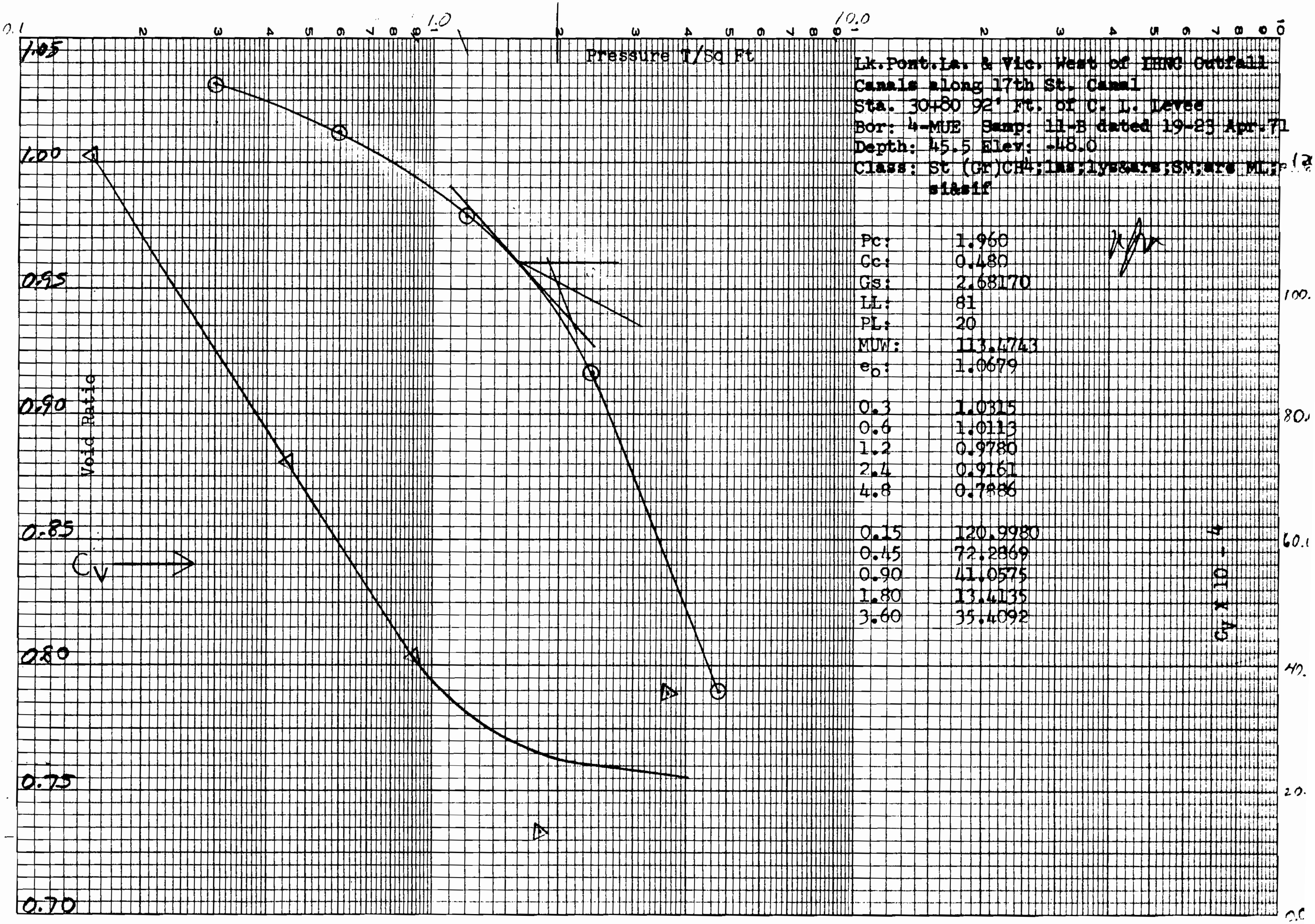
Remarks Insufficient material for check test

Project LK. PONT., LA.&VIC.-HURR. PROT.-ORLEANS	
PAR. LKFRNT.LEV;WEST OF IHNC-GDM#2,SUPP.#5,	
Area OUTFALL CANALS(ALONG 17th ST.CANAL)1971	
Boring No. 4-MUE	Sample No. 4-B
~~Depth~~ El -15.4	Date 22 March 1971
TES	TRIAXIAL COMPRESSION TEST REPORT

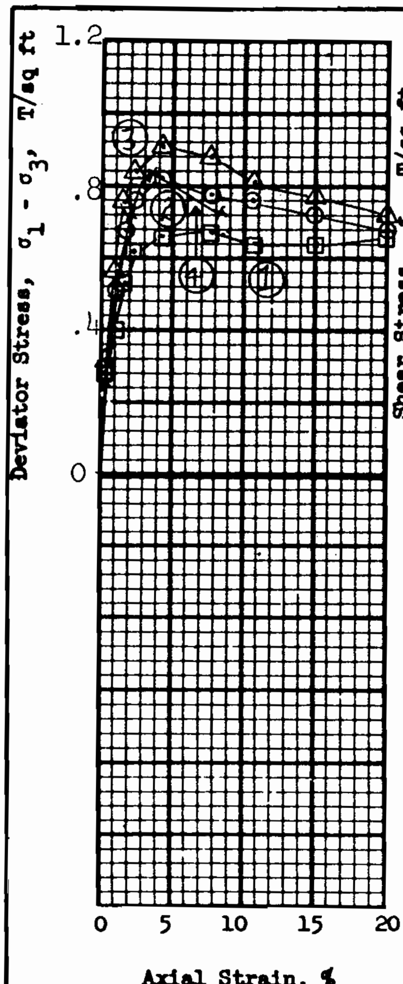
ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

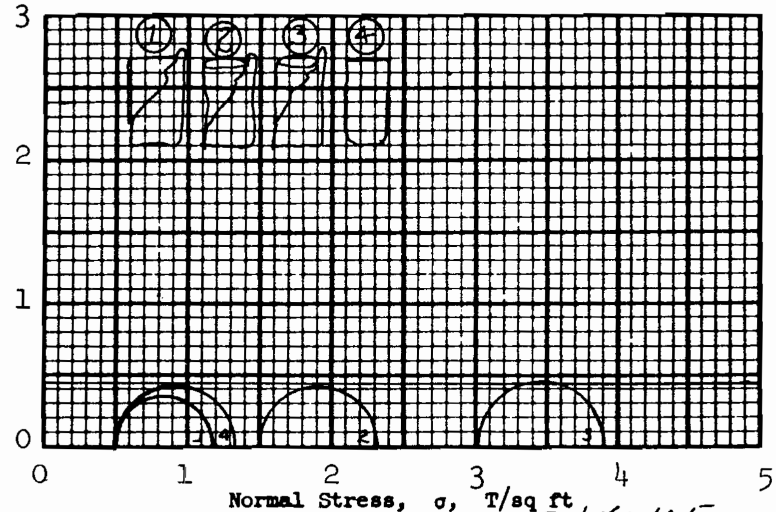
TRANSLUCENT

USAEWES SOILS TEST SECTION



0.1
1.0
10.0
Pressure T/Sq Ft
Void Ratio
1.05
1.00
0.95
0.90
0.85
0.80
0.75
0.70
Cv
Cv X 10⁻⁴
100.
80.
60.
40.
20.
0.0
Lk.Pont.La. & Vic. West of IHNC Outfall
Canals along 17th St. Canal
Sta. 30+80 92' Ft. of C. L. Levee
Bor: 4-MUE Samp: 11-B dated 19-23 Apr.71
Depth: 45.5 Elev: -48.0
Class: St (Gr)CH4;las;lys&ars;SM;ars ML;
sl&slf
Pc: 1.960
Cc: 0.480
Gs: 2.68170
LL: 81
PL: 20
MUW: 113.4743
e0: 1.0679
0.3 1.0315
0.6 1.0113
1.2 0.9780
2.4 0.9161
4.8 0.7886
0.15 120.9980
0.45 72.2869
0.90 41.0575
1.80 13.4135
3.60 35.4092





Sat. γ = 105

Test No.		1	2	3	4	Avg.
Initial: Water content	w_o	52.5 %	55.3 %	56.8 %	50.6 %	53.8
Void ratio	e_o	1.42	1.50	1.52	1.40	
Saturation	S_o	98.7 %	98.4 %	99.8 %	96.5 %	
Dry density, lb/cu ft	γ_d	69.0	66.8	66.2	69.5	
Before Shear: Water content	w_c	%	%	%	%	
Void ratio	e_c					
Saturation	S_c	%	%	%	%	
Final back pressure, T/sq ft	u_o					
Final: Water content	w_f	%	%	%	%	
Void ratio	e_f					
Minor principal stress, T/sq ft	σ_3	0.5	1.5	3.0	0.5	
Max deviator stress, T/sq ft	$(\sigma_1-\sigma_3)_{max}$	0.67	0.82	0.91	0.83	
Time to failure, min	t_f	47	26	26	16	
Rate of strain, percent/min		0,163	0.163	0.163	0.237	
Ult deviator stress, T/sq ft	$(\sigma_1-\sigma_3)_{ult}$					
Initial diameter, in.	D_o	1.39	1.39	1.39	1.41	
Initial height, in.	H_o	3.00	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.43 T/sq ft

Method of saturation ______

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY(CH),gray, contains scattered silt pockets

LL 67 | PL 20 | PI 47 | G_s 2.67

Remarks ______

Project LK.PONT.LA.&VIC.-HURR. PROT.-ORLEANS PAR.LKFRNT.LEV.,WEST OF IHNC-GDM#2,SUPP.#5.

Area OUTFALL CANALS(ALONG 17th ST. CANAL)1971

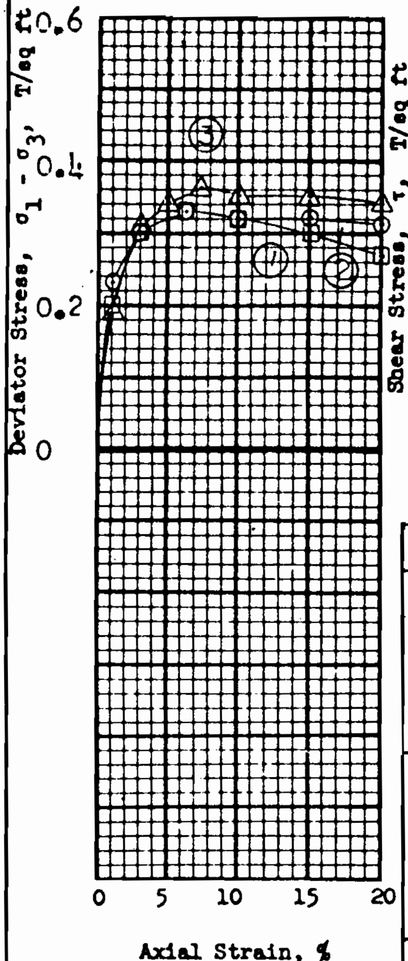
Boring No. 4-MUE | Sample No. 11-D

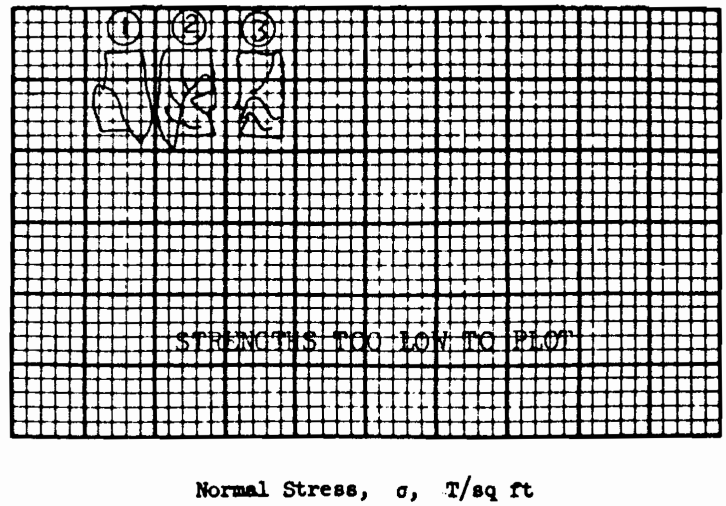
Depth El -49.5 | Date 23 March 1971

TES TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT





Test No.			1	2	3	
Initial	Water content	w_o	49.8 %	54.4 %	49.2%	%
	Void ratio	e_o	1.35	1.49	1.34	
	Saturation	S_o	99.2 %	98.2 %	100+ %	%
	Dry density, lb/cu ft	γ_d	71.6	67.5	71.7	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.33	0.33	0.36	
Time to failure, min		t_f	25	18	32	
Rate of strain, percent/min			0.253	0.326	0.228	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.40	1.40	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = ______ °

tan ϕ = ______

c = ______ T/sq ft

Method of saturation ______

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY(CH),gray, contains a few 1/2" dia. roots and a*

LL 67 | PL 18 | PI 49 | | G_s 2.69

Remarks *few sand pockets

Project LK.PONT.LA.,&VIC.-HURR.PROT.-LKFRNT. LEV.,WEST OF IHNC-GDM #2,SUPP.#5,OUTFALL

Area CANALS(ALONG 17thST. CANAL) 1971

Boring No. 4-MUE | Sample No. 2-B

~~Depth~~ El - 7.5 | Date 22 March 1971

FAM TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

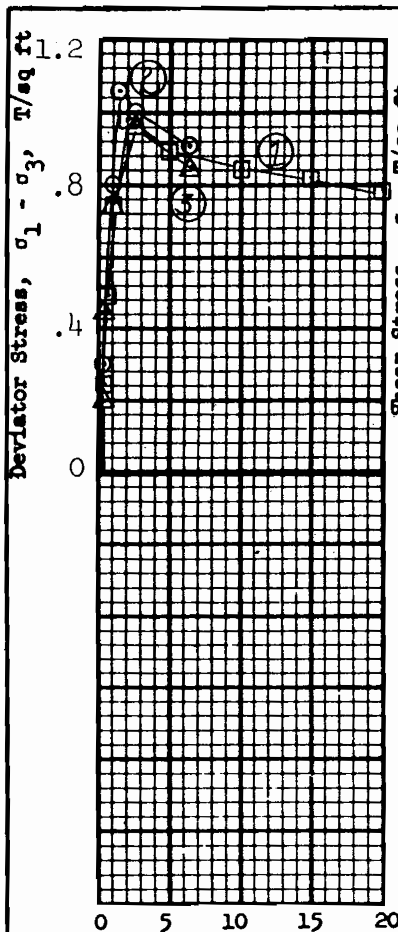
TRANSLUCENT

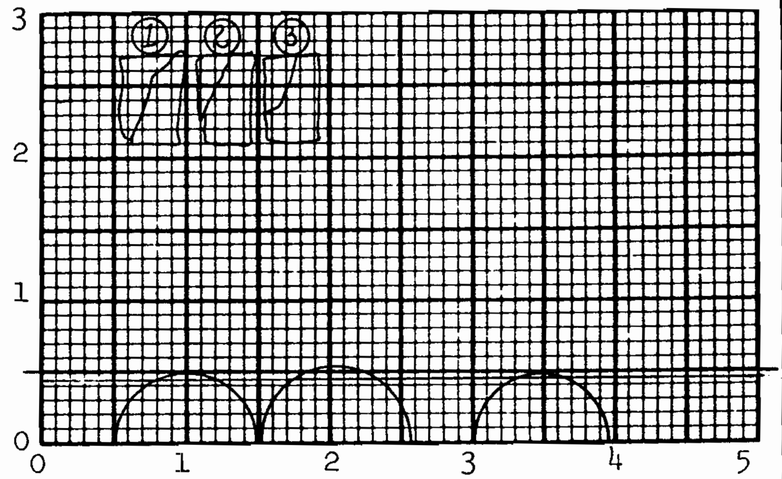
USAEWES SOILS TEST SECTION

9 Test @ El.
-7.5 missing

4-MUE

P-9





sat. γ = 106.3

Test No.			1	2	3	Avg.
Initial	Water content	w_o	50.8 %	51.1 %	52.4 %	51.4 %
	Void ratio	e_o	1.44	1.42	1.44	
	Saturation	S_o	95.6 %	97.5 %	98.6 %	%
	Dry density, lb/cu ft	γ_d	69.3	69.9	69.3	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.99	1.06	0.96	
Time to failure, min		t_f	12	31	31	
Rate of strain, percent/min			0.172	0.481	0.810	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.40	1.40	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.50 T/sq ft

Method of saturation ______

☐ Controlled stress

☒ Controlled strain

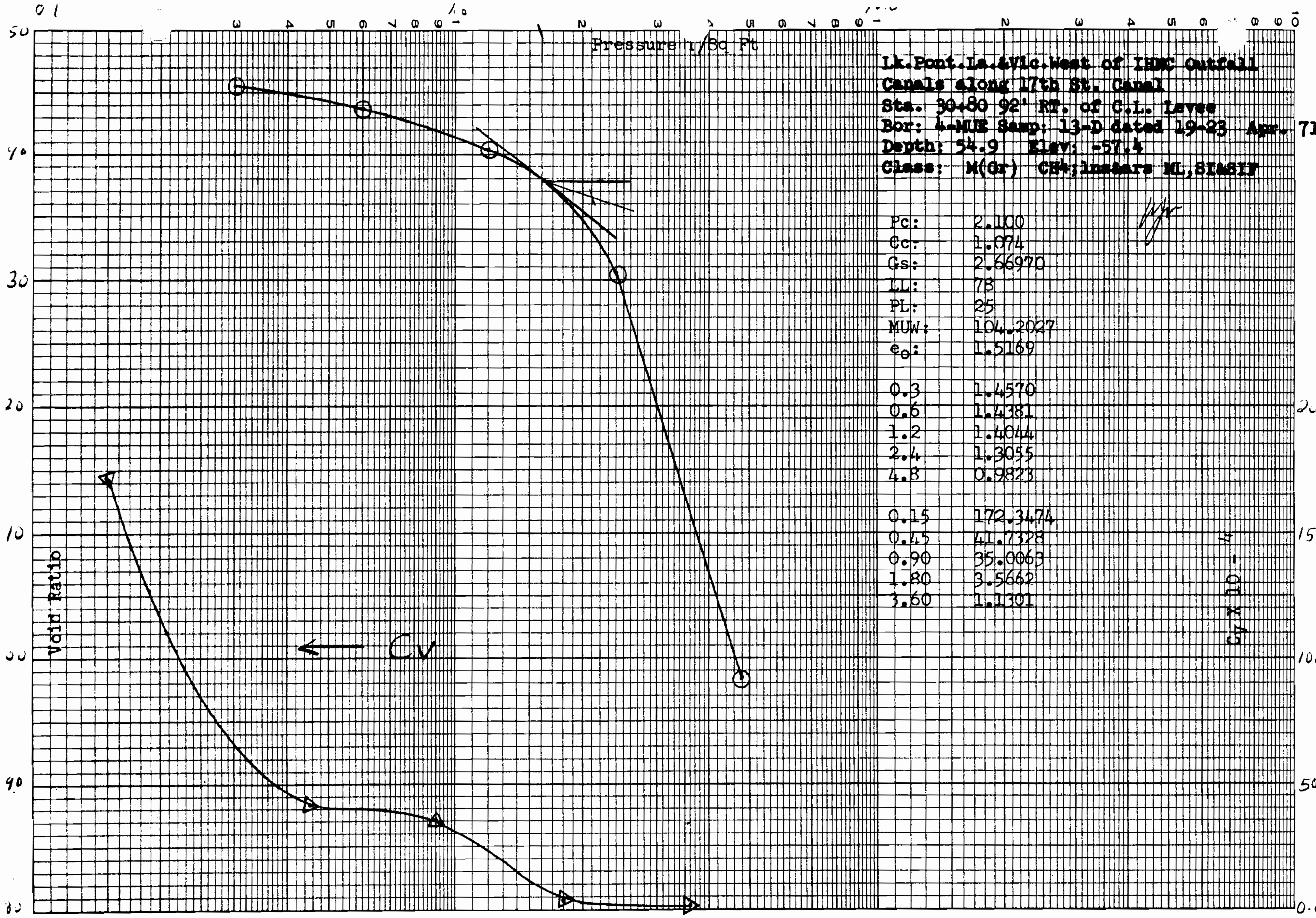
Type of test Q	Type of specimen UNDISTURBED		
Classification PLASTIC CLAY(CH), gray, contains numerous 1/4" dia. shells*			
LL 68	PL 24	PI 44	G_s 2.71

Remarks *shell fragments

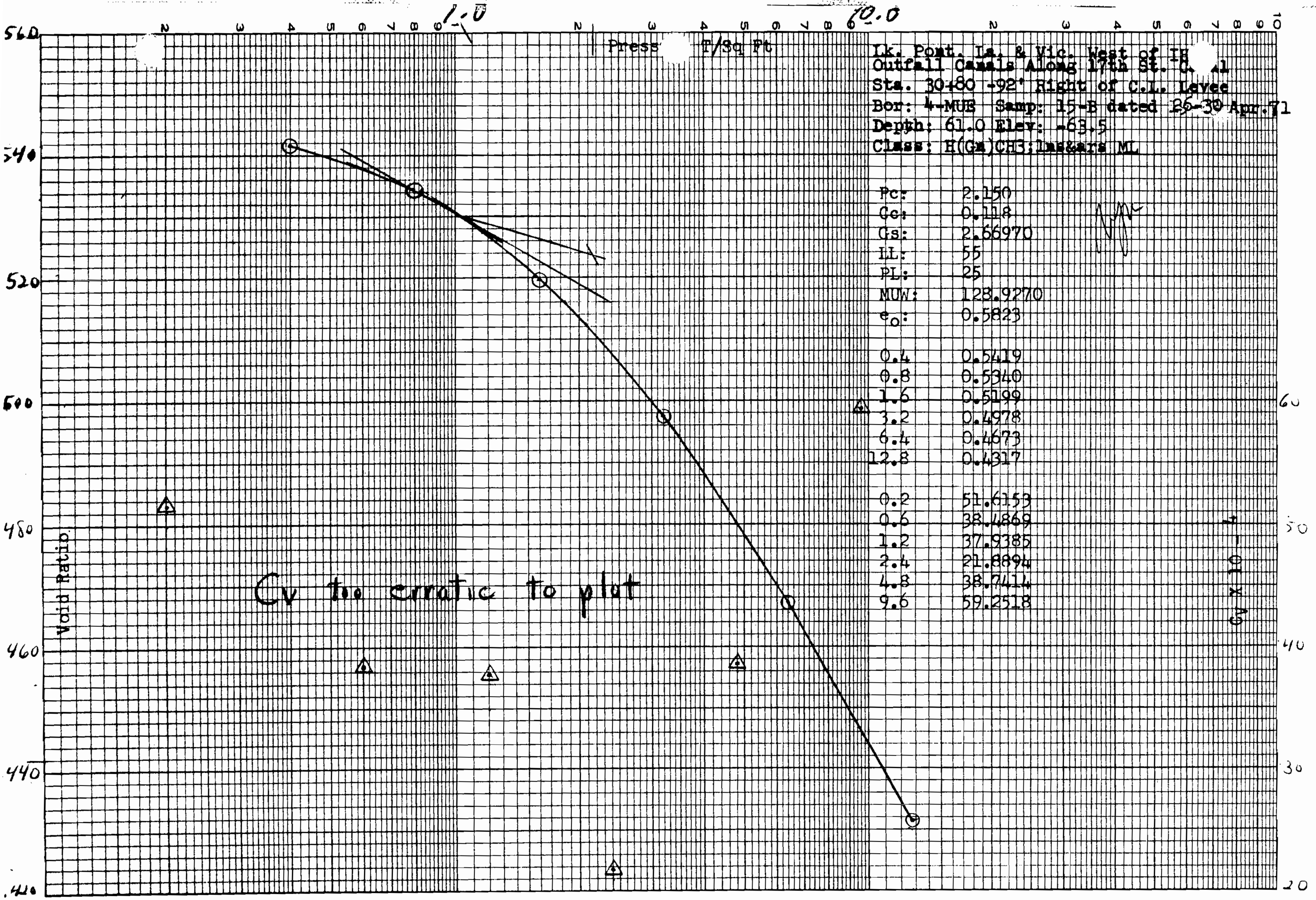
Project LK.PONT., LA.&VIC.-HURR. PROT.-ORLEANS PAR.LKFRNT.LEV., WEST OF IHNC-GDM#2, SUPP.#5;	
Area OUTFALL CANALS(ALONG 17thST. CANAL)1971	
Boring No. 4-MUE	Sample No. 13-C
~~Depth~~ El -56.6	Date 22 March 1971
TES TRIAXIAL COMPRESSION TEST REPORT	

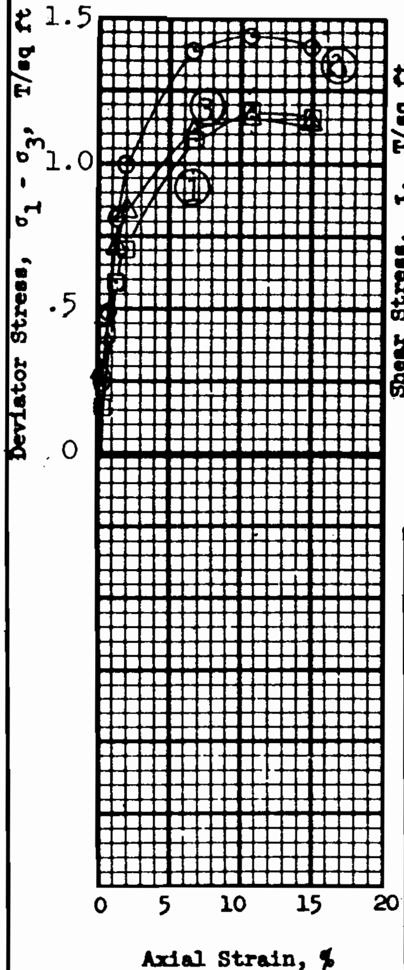
ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

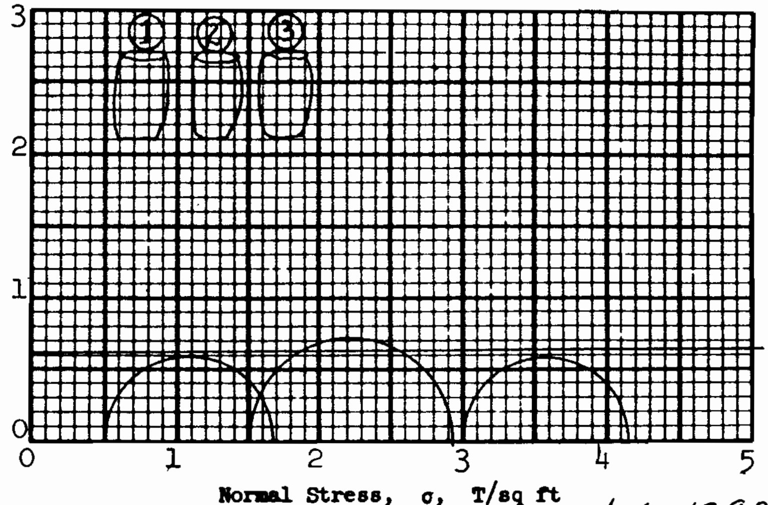
TRANSLUCENT



Pressure T/Sq Ft
Void Ratio
Cv X 10 - 4
Cv
Lk.Pont.La.&Vic.West of IHNC Outfall
Canals along 17th St. Canal
Sta. 30+80 92' RT. of C.L. Levee
Bor: 4-MUE Samp: 13-D dated 19-23 Apr. 71
Depth: 54.9 Elev: -57.4
Class: M(Gr) CH4;lns&ars ML,SI&SIF
Pc: 2.100
Cc: 1.074
Gs: 2.66970
LL: 78
PL: 25
MUW: 104.2027
e_o: 1.5169
0.3 1.4570
0.6 1.4381
1.2 1.4044
2.4 1.3055
4.8 0.9823
0.15 172.3474
0.45 41.7328
0.90 35.0063
1.80 3.5662
3.60 1.1301
200.0
150.0
100.0
50.0
0.0


1.0
10.0
Press T/Sq Ft
Lk. Pont. La. & Vic. West of IH
Outfall Canals Along 17th St. C. l
Sta. 30+80 -92' Right of C.L. Levee
Bor: 4-MUE Samp: 15-B dated 25-30 Apr.71
Depth: 61.0 Elev: -63.5
Class: H(Gm)CH3;lns&ars ML
Pc: 2.150
Cc: 0.118
Gs: 2.66970
LL: 55
PL: 25
MUW: 128.9270
eo: 0.5823
0.4 0.5419
0.8 0.5340
1.6 0.5199
3.2 0.4978
6.4 0.4673
12.8 0.4317
0.2 51.6153
0.6 38.4869
1.2 37.9385
2.4 21.8894
4.8 38.7414
9.6 59.2518
Void Ratio
Cv x 10^-4
Cv too erratic to plot
.560
.540
.520
.500
.480
.460
.440
.420
60
50
40
30
20





			1	2	3	Avg.
Test No.			1	2	3	Avg.
Initial	Water content	w_o	20.1 %	20.6 %	20.8 %	20.5 %
	Void ratio	e_o	0.548	0.572	0.568	
	Saturation	S_o	98.8 %	96.9 %	98.5 %	%
	Dry density, lb/cu ft	γ_d	108.5	106.8	107.1	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	1.18	1.44	1.15	
Time to failure, min		t_f	43	43	43	
Rate of strain, percent/min			0.247	0.247	0.247	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.38	1.39	1.38	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.63 T/sq ft

Method of saturation ______

☐ Controlled stress

☒ Controlled strain

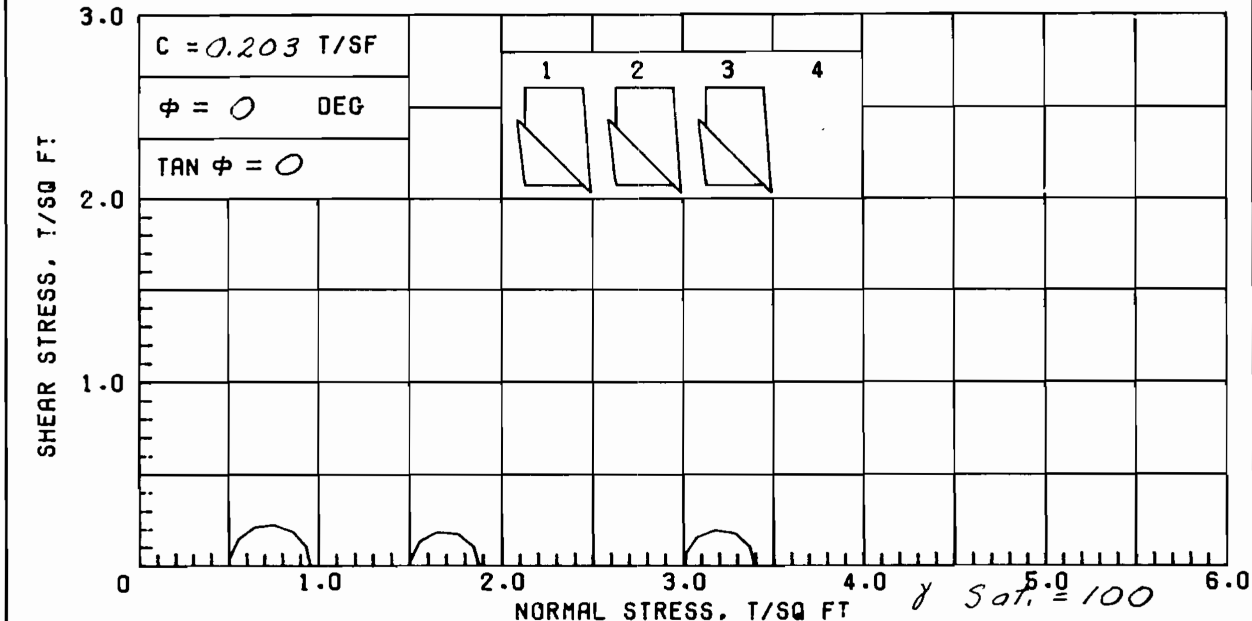
Type of test Q	Type of specimen UNDISTURBED			
Classification SILTY CLAY(CL),gray, crumbly				
LL 23	PL 13	PI 10		G_s 2.69

Remarks ______

Project LK.PONT.,LA.&VIC.-HURR. PROT.-ORLEANS PAR.LKFRNT.LEVL,WEST OF IHNC-GDM#2,SUPP.#5;	
Area OUTFALL CANALS(ALONG 17th ST. CANAL)1971	
Boring No. 4-MUE	Sample No. 15-C
Depth El -64.4	Date 22 March 1971
TES	TRIAXIAL COMPRESSION TEST REPORT

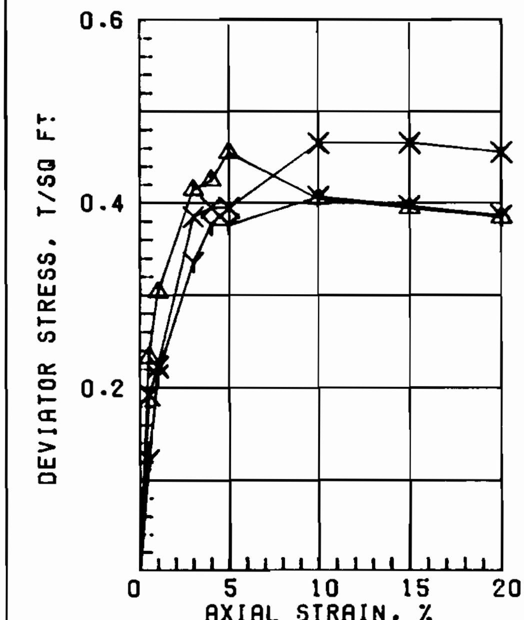
ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT



γ Sat. = 100

102.8 95.7 101.9



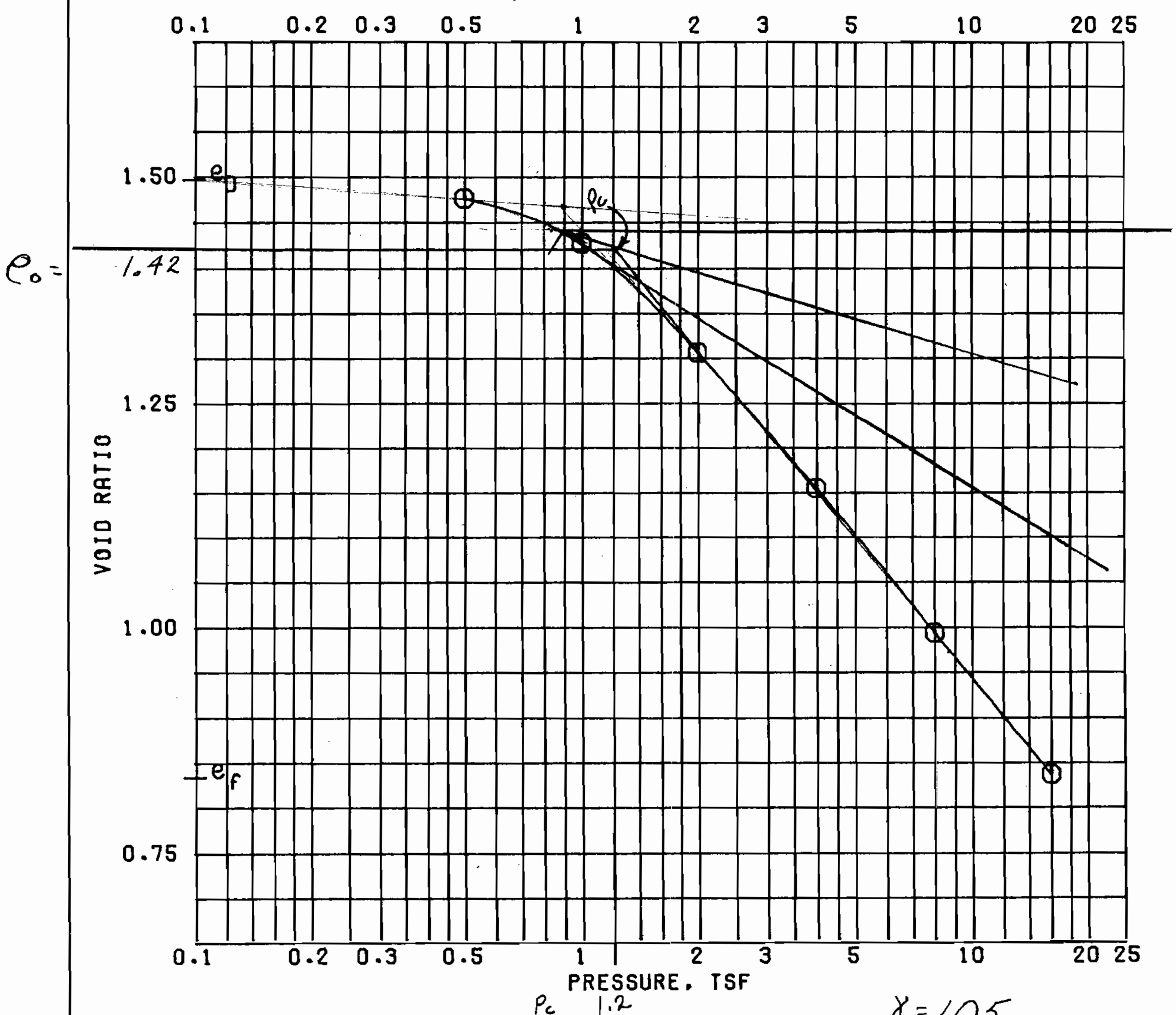
			SPECIMEN NO.	Δ1	Y2	X3	4	
INITIAL	WATER CONTENT, %	59.8	78.4	61.5		Avg. 66.6
INITIAL	DRY DENSITY, PCF	64.1	52.8	62.7		
INITIAL	SATURATION, %	99.1	96.6	98.4		
INITIAL	VOID RATIO	1.630	2.192	1.687		
BEFORE SHEAR	WATER CONTENT, %					
BEFORE SHEAR	DRY DENSITY, PCF					
BEFORE SHEAR	SATURATION, %					
BEFORE SHEAR	VOID RATIO					
BEFORE SHEAR	BACK PRESS., TSF					
	MIN PRIN. STRESS, TSF	0.5	1.5	3.0		
	MAX. DEV. STRESS, TSF	0.45	0.38	0.39		
	TIME TO FAILURE, MIN.	10	24	24		
	RATE OF STRAIN INCR.%		6	6		
	INITIAL DIAMETER, IN.	1.39	1.39	1.39		
	INITIAL HEIGHT, IN.	3.00	3.00	3.00		

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), GRAY; DECAYED ROOTS

LL 116	PL 25	PI 91	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS:	PROJECT LK PONT LA & VIC HURR PROT	
	ORLEANS PARISH OUTFALL CANALS	
	BORING NO. 4-MUG	SAMPLE NO. 7-C
	DEPTH/ELEV 17.1/-4.3	TECH. KOC
	LABORATORY USAE WES	DATE 28 AUG 86
	TRIAXIAL COMPRESSION TEST REPORT	



γ = 105

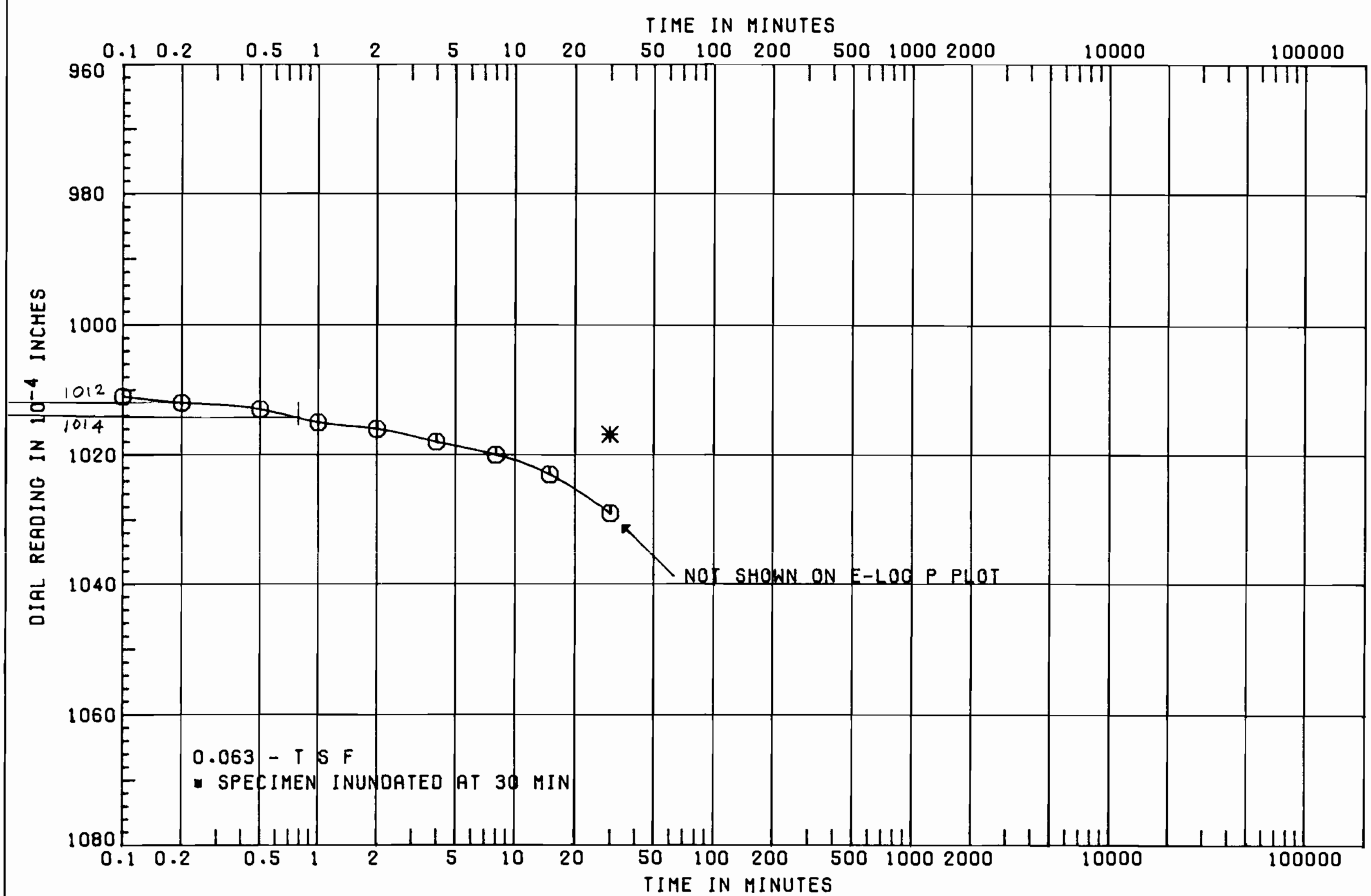
			BEFORE TEST	AFTER TEST
OVERBURDEN PRESSURE, TSF		WATER CONTENT, %	54.5	32.9
PRECONSOL. PRESSURE, TSF	1.20	DRY DENSITY, PCF	67.6	92.0
COMPRESSION INDEX		SATURATION, %	98.4	100 +
TYPE SPECIMEN	UNDISTURBED	VOID RATIO	1.495	0.832
DIA. IN 4.44	HT. IN 1.122	BACK PRESSURE, TSF		

CLASSIFICATION	PLASTIC CLAY (CH), GRAY	
LL	PL	PI

GS 2.70 (EST)	D_{10}	PROJECT LK PONT LA & VIC HURR PROT ORLEANS PARISH OUTFALL CANALS	
REMARKS		BORING NO. 4-MUG	SAMPLE NO. 7-D
		DEPTH/ELEV 17.5/-4.7	DATE 02 AUG 86

CONSOLIDATION TEST REPORT

SHEET 1 OF 8



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST TIME CURVES
ORLEANS PARISH OUTFALL CANALS		
BORING 4-MUG	SAMPLE NO. 7-D	
DEPTH/ELEV 17.5/-4.7	DATE 02 AUG 86	

Project Orleans Parish Outfall Canals

Boring No. 4-MUG

Sample No. 7-D Elev. -4.7 Load Increment 0.063 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 1014

$t/4 = .2$ Dial Reading $DR_2 =$ 1012

$a = DR_1 - DR_2 =$ 2

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a =$ 1012 − 2 $=$ 1010

$U = 100\%$ from construction $DR_{100} =$ ______

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1010 \quad + \quad}{2} =$ ______

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times$ ______ $=$ ______ sec

T_v for $U = 50$ that $=$ 0.197

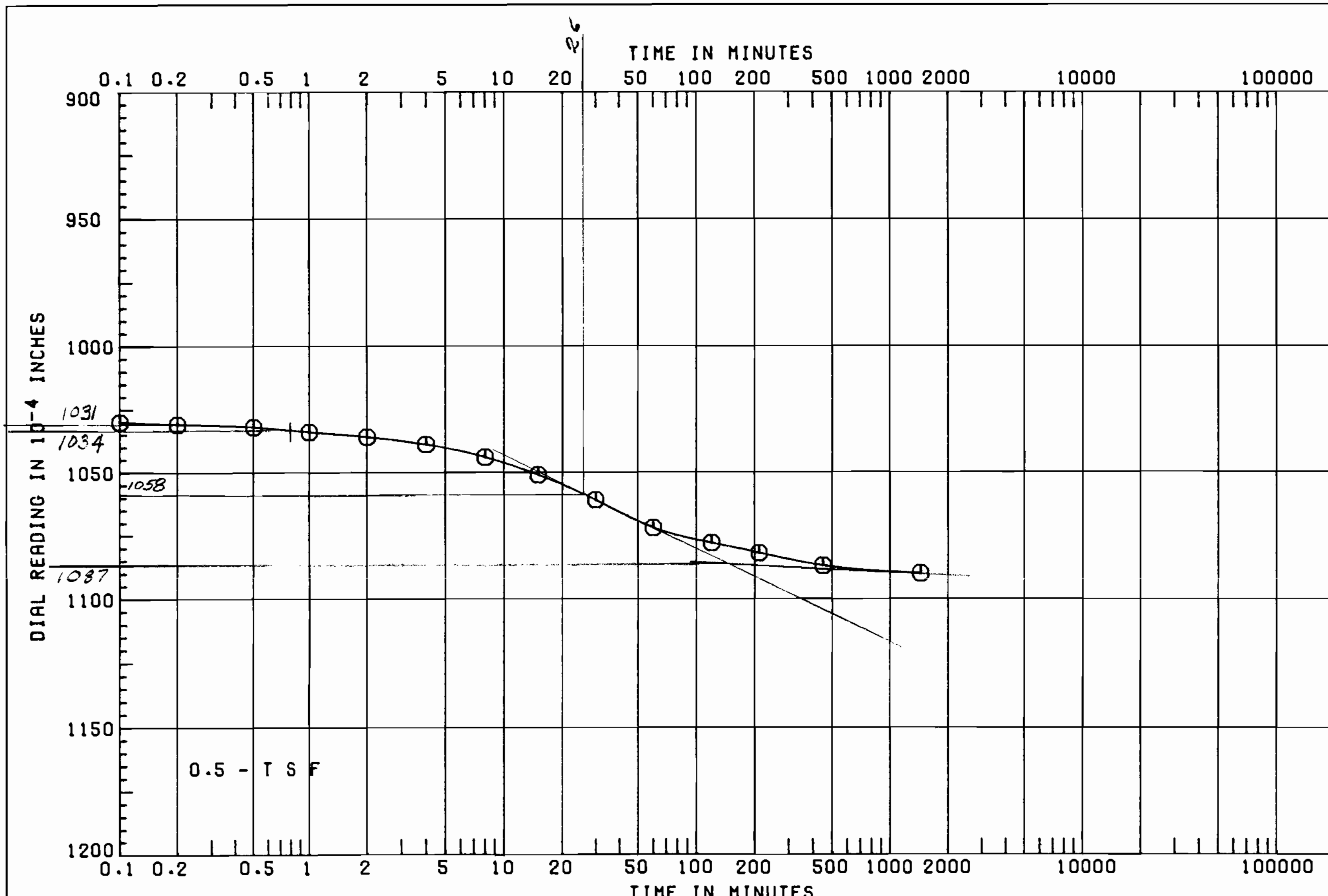
$2H =$ Sample height $=$ 1.122 $- (DR_{50} - DR_0)$

$H = \frac{1.122 \; - (\quad - \quad)}{2} =$ ______

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}} \right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$C_v = 1.271 \left(\quad \right)^2 =$ ______ $\frac{cm^2}{yr}$

$C_v \left(\frac{cm^2}{sec} \right) \times 33{,}945 = C_v \left(\frac{ft^2}{yr} \right) = 33{,}945 \times$ ______ $=$ ______ $\frac{ft^2}{yr}$



PROJECT LK PONT LA & VIC HURR PROT		CONSOLIDATION TEST TIME CURVES
ORLEANS PARISH OUTFALL CANALS		
BORING 4-MUG	SAMPLE NO. 7-D	
DEPTH/ELEV 17.5/-4.7	DATE 02 AUG 86	

SHEET 3 OF 8

Project Orleans Parish Outfall Canals

Boring No. 4-MUG

Sample No. 7-D Elev. -4.7 Load Increment 0.5 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1034$

$t/4 = .2$ Dial Reading $DR_2 = 1031$

$a = DR_1 - DR_2 = 3$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1031 - 3 = 1028$

$U = 100\%$ from construction $DR_{100} = 1087$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1028 + 1087}{2} = 1058$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 26 = 1,560$ sec

T_v for $U = 50$ that $= 0.197$

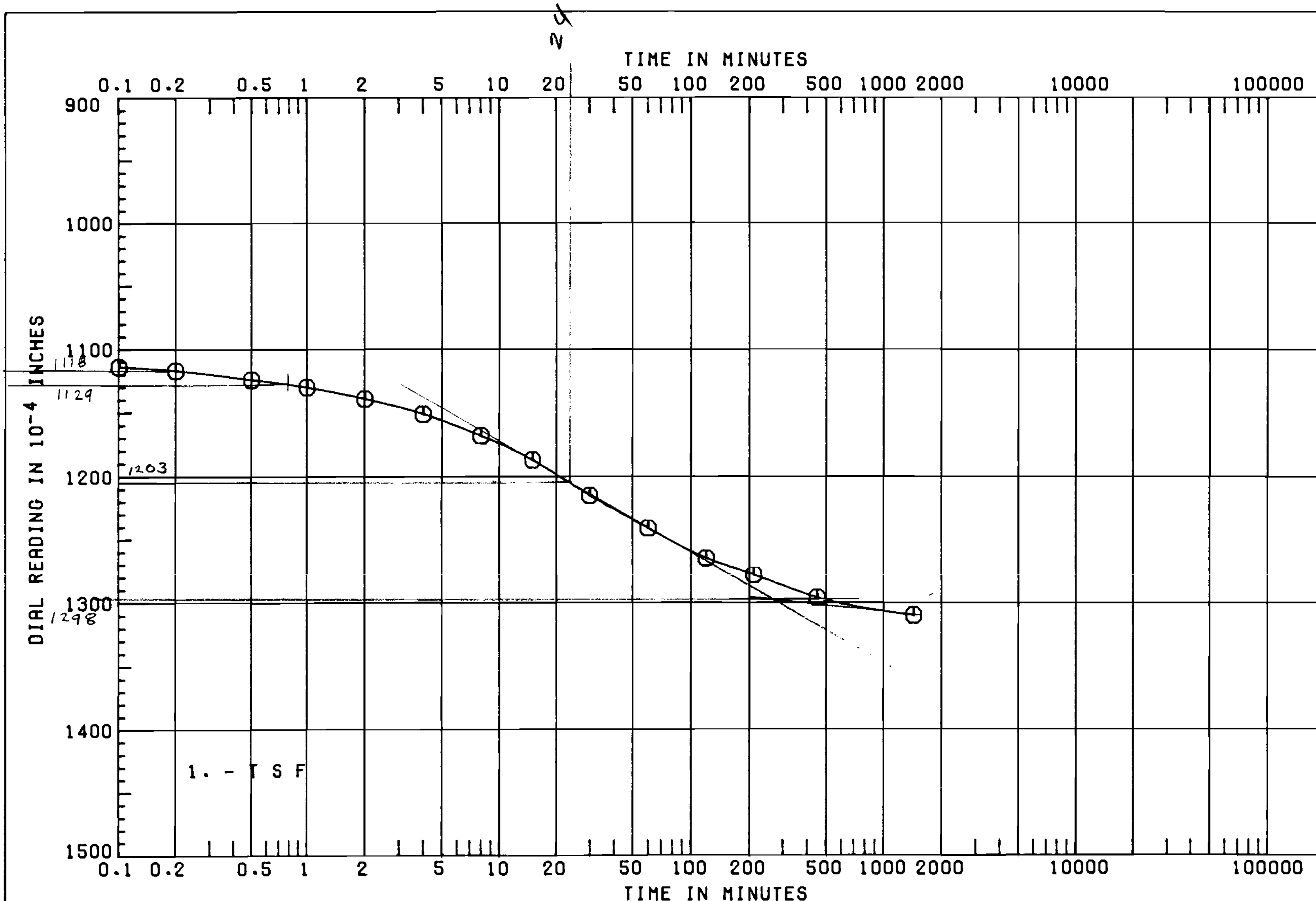
$2H$ = Sample height $= 1.122 - (DR_{50} - DR_0)$

$H = \frac{1.122 - (.1058 - .1028)}{2} = 0.5595$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5595)^2}{1560} = 0.00025 \frac{cm^2}{yr}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00025 = 8.65 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	CONSOLIDATION TEST TIME CURVES
ORLEANS PARISH OUTFALL CANALS	
BORING 4-MUG / SAMPLE NO. 7-D	
DEPTH/ELEV 17.5/-4.7 / DATE 02 AUG 86	

SHEET 4 OF 8

Project Orleans Parish Outfall Canals

Boring No. 4-MUG

Sample No. 7-U Elev. -47 Load Increment 1.0 T.S.F.

$t = .8$ Dial Reading $DR_1 = 1129$

$t/4 = .2$ Dial Reading $DR_2 = 1118$

$a = DR_1 - DR_2 = 11$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1118 - 11 = 1107$

$U = 100\%$ from construction $DR_{100} = 1298$

$U = 50\%$ @ $\dfrac{DR_0 + DR_{100}}{2} = DR_{50} = \dfrac{1107 + 1298}{2} = 1203$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 24 = 1440$ se

T_v for $U = 50$ that $= 0.197$

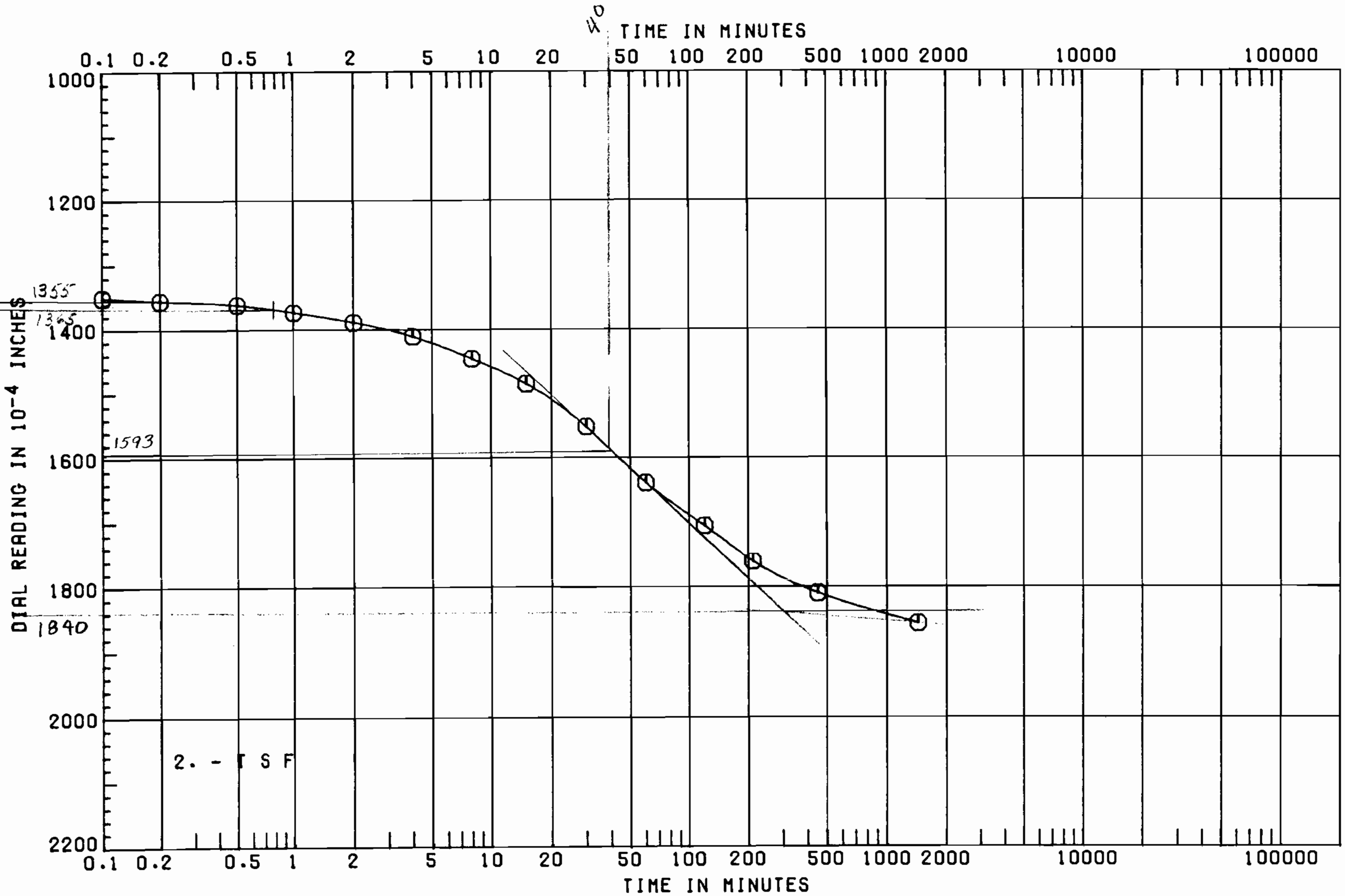
$2H = \text{Sample height} = .1122 - (DR_{50} - DR_0)$

$H = \dfrac{.1122 - (.1203 - .1107)}{2} = 0.5562$

$C_v = \dfrac{T_v H^2}{t} = \left(\dfrac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) cm^2/sec = 1.271 \dfrac{H^2}{t_{50}}$

$C_v = 1.271 \dfrac{(.5562)^2}{1440} = .00027 \; cm^2/yr$

$C_v\left(\dfrac{cm^2}{sec}\right) \times 33,945 = C_v\left(\dfrac{ft^2}{yr}\right) = 33,945 \times 0.00027 = 9.27 \; ft/yr$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 4-MUG	SAMPLE NO. 7-D
DEPTH/ELEV 17.5/-4.7	DATE 02 AUG 86

CONSOLIDATION TEST

TIME CURVES

SHEET 5 OF 8

Project Orleans Parish Outfall Canals

Boring No. 4-MUG

Sample No. 7-0 Elev. -47 Load Increment 2.0 T.S.F.

$t = .8$

$t/4 = .2$

Dial Reading $DR_1 = 1365$

Dial Reading $DR_2 = 1355$

$a = DR_1 - DR_2 = 10$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1355 - 10 = 1345$

$U = 100\%$ from construction $DR_{100} = 1840$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1345 + 1840}{2} = 1593$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 40 = 2400$ sec

T_v for $U = 50$ that $= 0.197$

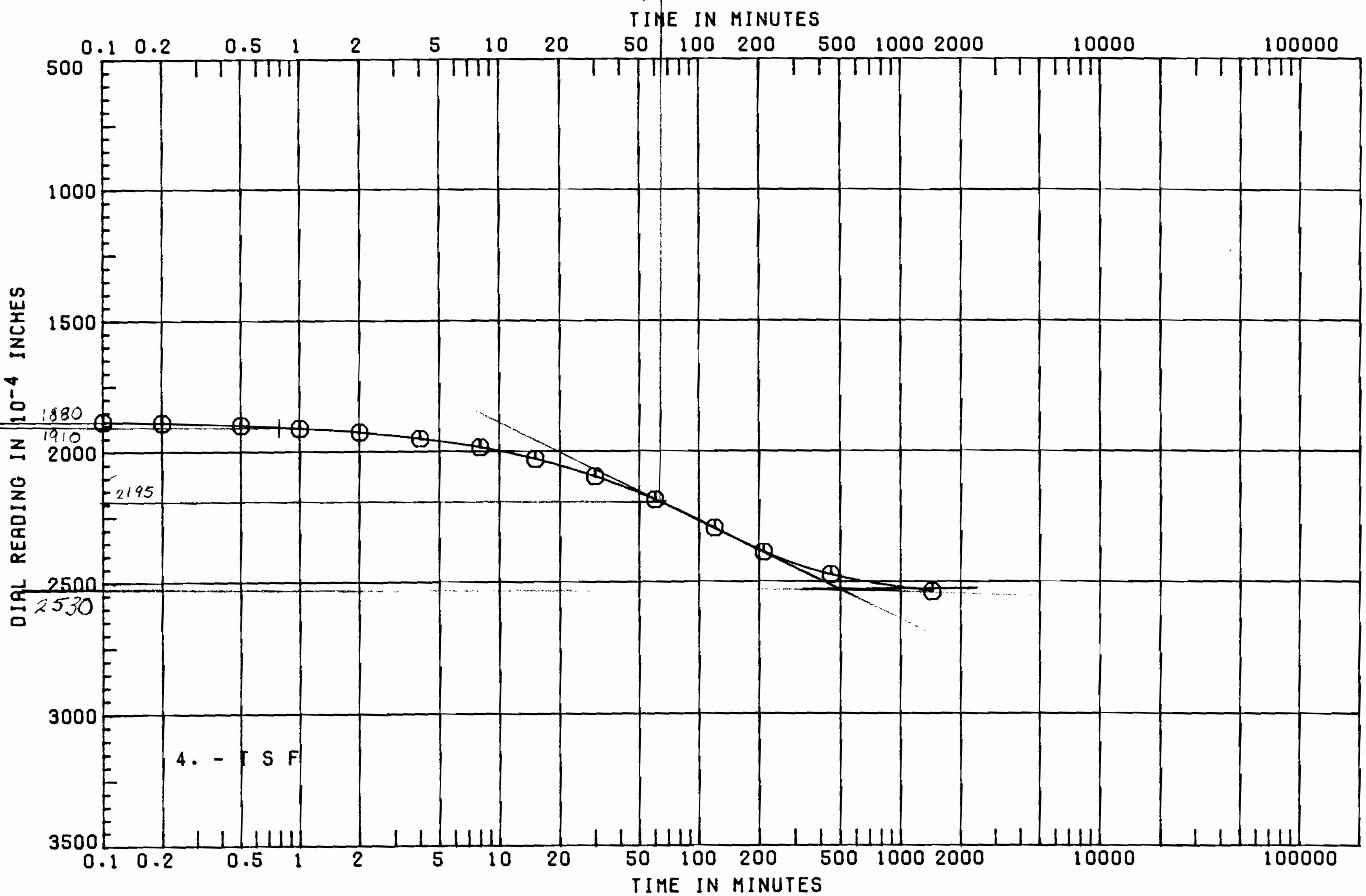
$2H$ = Sample height $= 1.122 - (DR_{50} - DR_0)$

$$H = \frac{1.122 - (.1593 - .1345)}{2} = 0.5486$$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5486)^2}{2400} = 0.00016 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33,945 = C_v\left(\frac{ft^2}{yr}\right) = 33,945 \times 0.00016 = 5.41 \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 4-MUG	SAMPLE NO. 7-D
DEPTH/ELEV 17.5/-4.7	DATE 02 AUG 86

CONSOLIDATION TEST

TIME CURVES

Project Orleans Parish Outfall Canals

Boring No. 4-MUG

Sample No. 7-D   Elev. -4.7   Load Increment 4.0 T.S.F.

$t = .8$ Dial Reading $DR_1 =$ 1910

$t/4 = .2$ Dial Reading $DR_2 =$ 1880

$a = DR_1 - DR_2 =$ 20

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 1880 - 20 = 1860$

$U = 100\%$ from construction $DR_{100} =$ 2530

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{1860 + 2530}{2} = 2195$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 65 = 3900$ sec

t_v for $U = 50$ that $= 0.197$

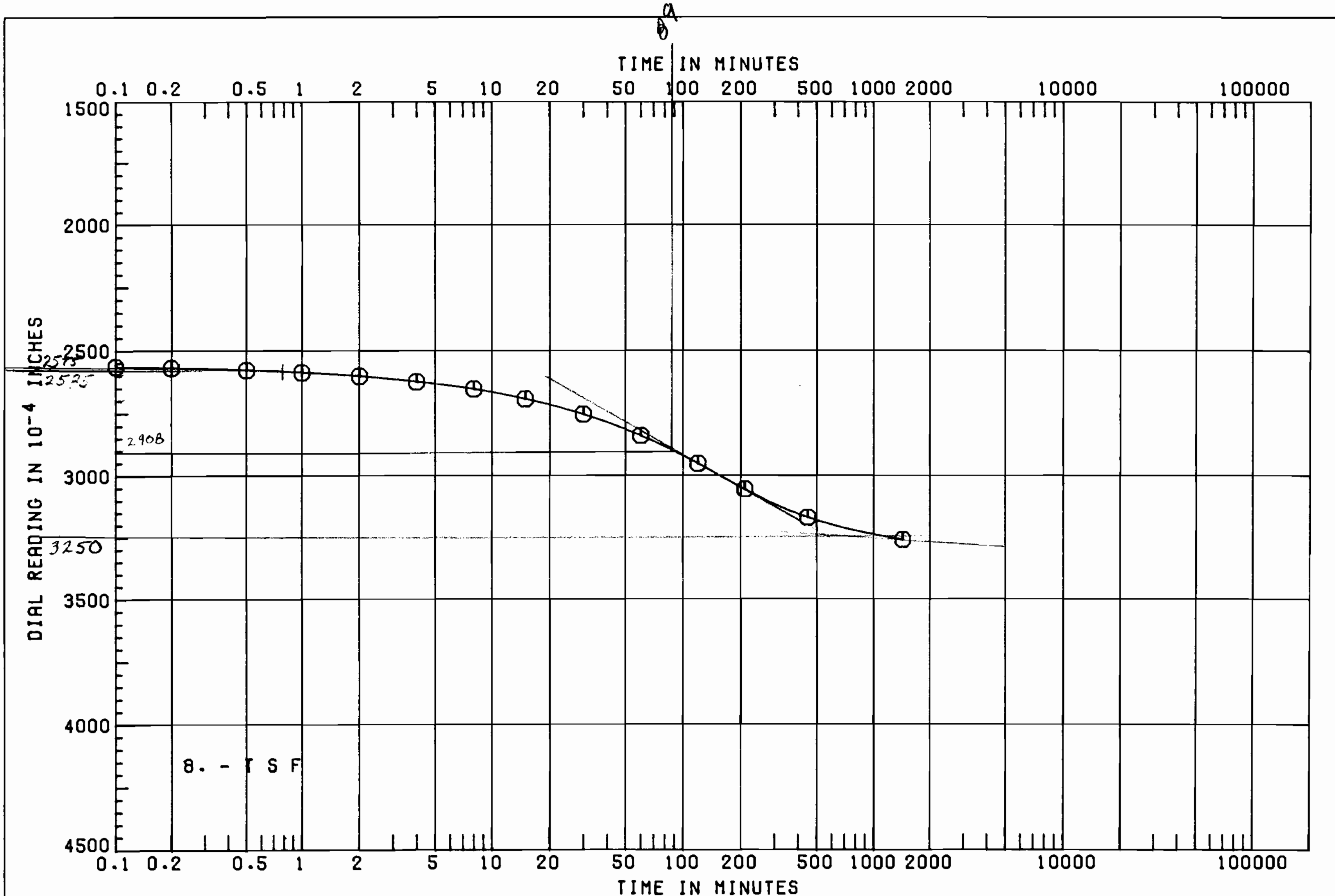
$2H =$ Sample height $= 1.122 - (DR_{50} - DR_0)$

$H = \frac{1.122 - (.2195 - .1860)}{2} = 0.54425$

$$C_v = \frac{t_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \mathrm{cm^2/sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.54425)^2}{3900} = 0.00010 \ \mathrm{cm^2/sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00010 = 3.28 \ \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 4-MUG	SAMPLE NO. 7-D
DEPTH/ELEV 17.5/-4.7	DATE 02 AUG 86

CONSOLIDATION TEST

TIME CURVES

SHEET 7 OF 8

Project Orleans Parish Outfall Canals

Boring No. 4-MUG

Sample No. 7-D Elev. -47 Load Increment 8.0 T.S.F.

$t = .8$ Dial Reading $DR_1 = 2585$

$t/4 = .2$ Dial Reading $DR_2 = 2575$

$a = DR_1 - DR_2 = 10$

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a = 2575 - 10 = 2565$

$U = 100\%$ from construction $DR_{100} = 3250$

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{2565 + 3250}{2} = 2908$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 89 = 5340$ sec

T_v for $U = 50$ that $= 0.197$

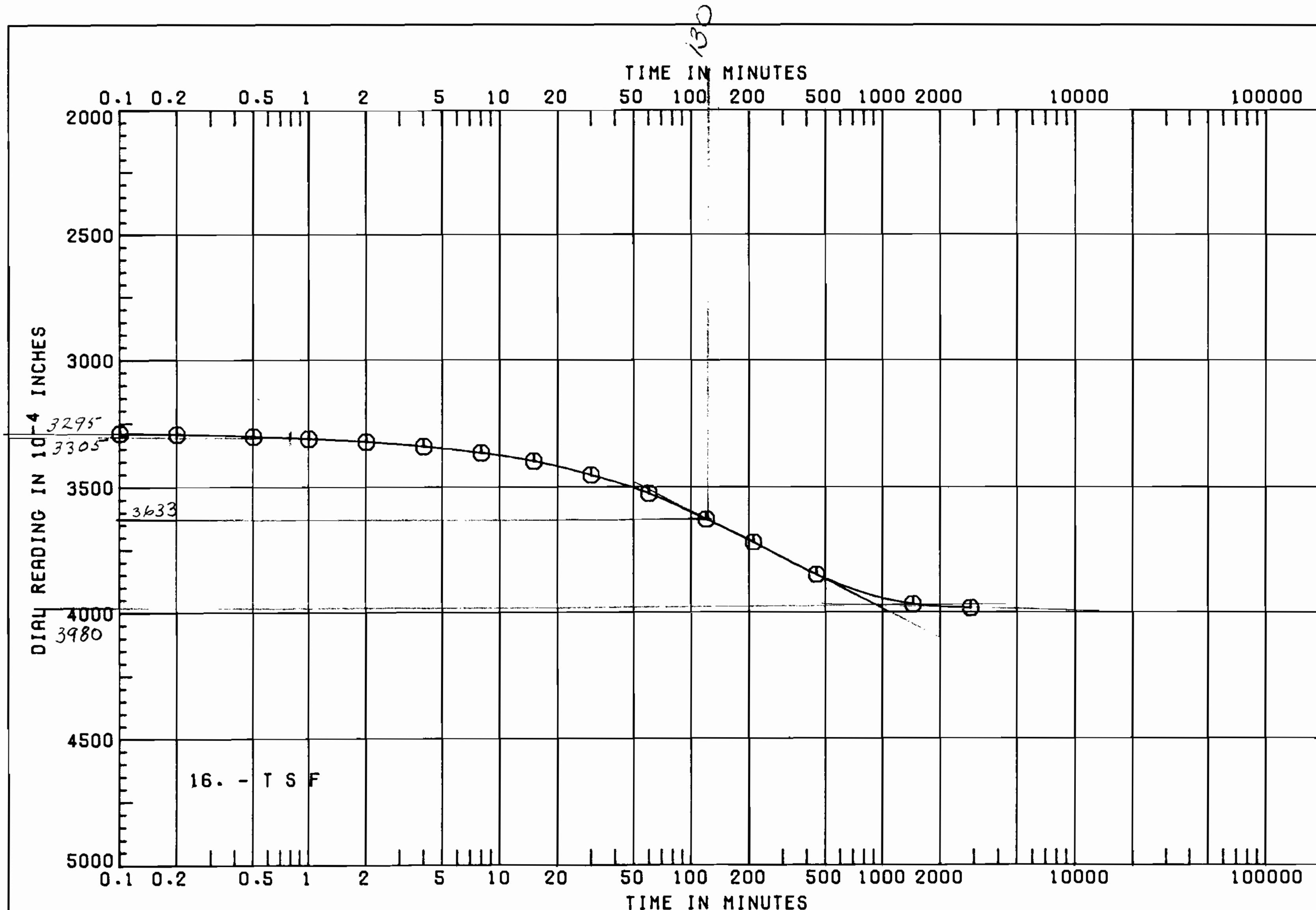
$2H =$ Sample height $= 1.122 - (DR_{50} - DR_0)$

$H = \frac{1.122 - (.2908 - .2565)}{2} = 0.54385$

$$C_v = \frac{T_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \text{cm}^2/\text{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.54385)^2}{5340} = 0.00007 \ \text{cm}^2/\text{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00007 = 2.39 \ \frac{ft^2}{yr}$$



PROJECT LK PONT LA & VIC HURR PROT	
ORLEANS PARISH OUTFALL CANALS	
BORING 4-MUG	SAMPLE NO. 7-D
DEPTH/ELEV 17.5/-4.7	DATE 02 AUG 86

CONSOLIDATION TEST

TIME CURVES

SHEET 8 OF 8

Project Orleans Parish Outfall Canals

Boring No. 4-MUG

Sample No. 7-D Elev. -4.7 Load Increment 16.0 T.S.F.

$t = .8$ Dial Reading DR_1 = 3305

$t/4 = .2$ Dial Reading DR_2 = 3295

$a = DR_1 - DR_2$ = 10

$U = 0\%$ Dial Reading $DR_0 = DR_2 - a$ = 3295 − 10 = 3285

$U = 100\%$ from construction DR_{100} = 3980

$U = 50\%$ @ $\frac{DR_0 + DR_{100}}{2} = DR_{50} = \frac{3285 + 3980}{2} = 3633$

t_{50} read from curve @ DR_{50} $t_{50} = 60 \times 130 = 7800$ sec

t_v for $U = 50$ that $= 0.197$

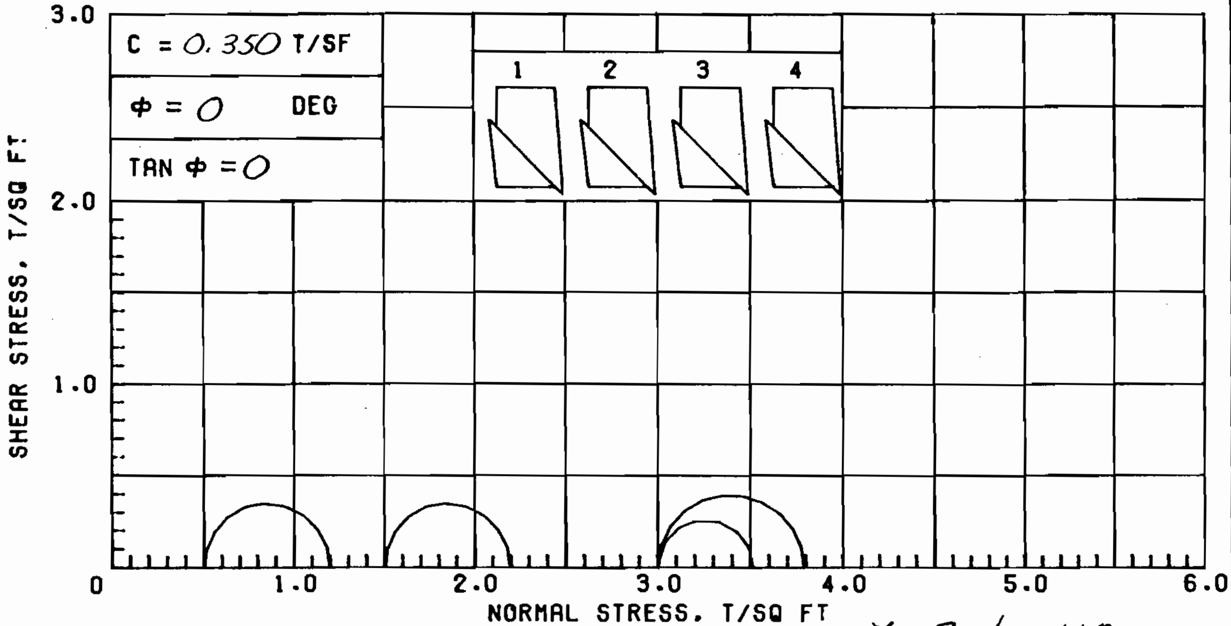
$2H$ = Sample height = 1.122 − $(DR_{50} - DR_0)$

$H = \frac{1.122 - (.3633 - .3285)}{2} = 0.5436$

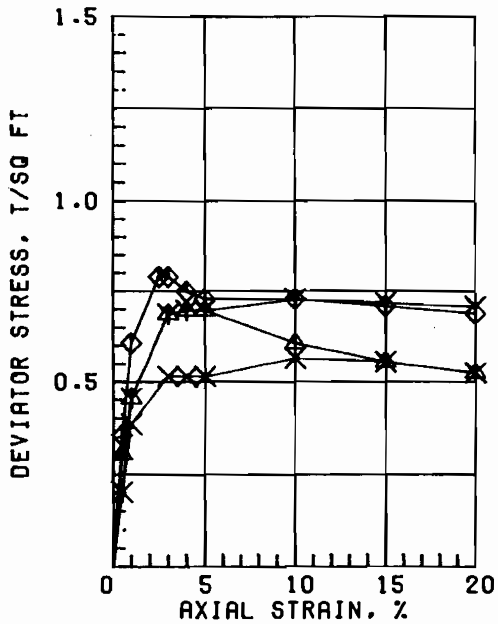
$$C_v = \frac{t_v H^2}{t} = \left(\frac{0.197 \times H^2 \times 2.54^2}{t_{50}}\right) \frac{cm^2}{sec} = 1.271 \frac{H^2}{t_{50}}$$

$$C_v = 1.271 \frac{(.5436)^2}{7800} = 0.00005 \frac{cm^2}{sec}$$

$$C_v\left(\frac{cm^2}{sec}\right) \times 33{,}945 = C_v\left(\frac{ft^2}{yr}\right) = 33{,}945 \times 0.00005 = 1.63 \frac{ft^2}{yr}$$



γ Sat = 110



	SPECIMEN NO.	△1	Y2	X3	◇4
INITIAL	WATER CONTENT, %	42.3	40.0	48.3	50.0
INITIAL	DRY DENSITY, PCF	78.3	78.4	72.5	69.9
INITIAL	SATURATION, %	99.0	93.8	98.5	95.6
INITIAL	VOID RATIO	1.154	1.151	1.324	1.411
BEFORE SHEAR	WATER CONTENT, %				
BEFORE SHEAR	DRY DENSITY, PCF				
BEFORE SHEAR	SATURATION, %				
BEFORE SHEAR	VOID RATIO				
BEFORE SHEAR	BACK PRESS., TSF				
	MIN PRIN. STRESS, TSF	0.5	1.5	3.0	3.0
	MAX. DEV. STRESS, TSF	0.70	0.70	0.51	0.79
	TIME TO FAILURE, MIN.	8	24	18	15
	RATE OF STRAIN INCR.%		6	6	6
	INITIAL DIAMETER, IN.	1.39	1.39	1.39	1.39
	INITIAL HEIGHT, IN.	3.00	3.00	3.00	3.00

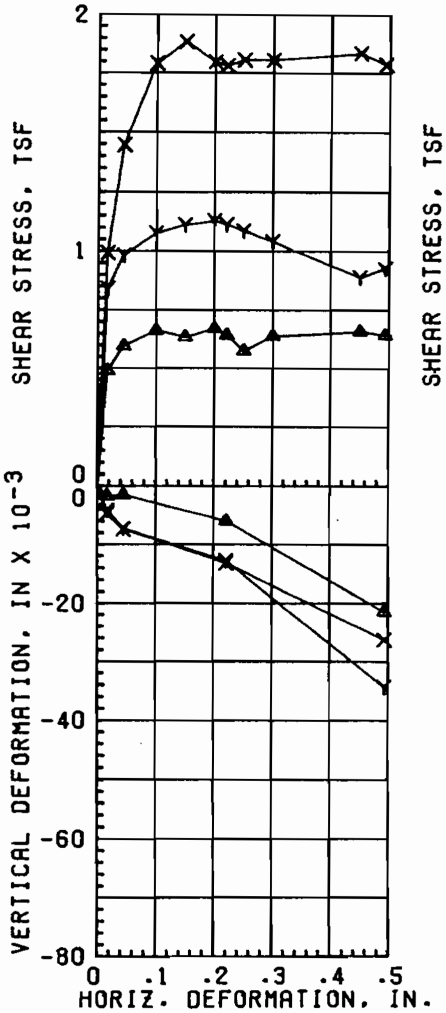
Avg. 45.2

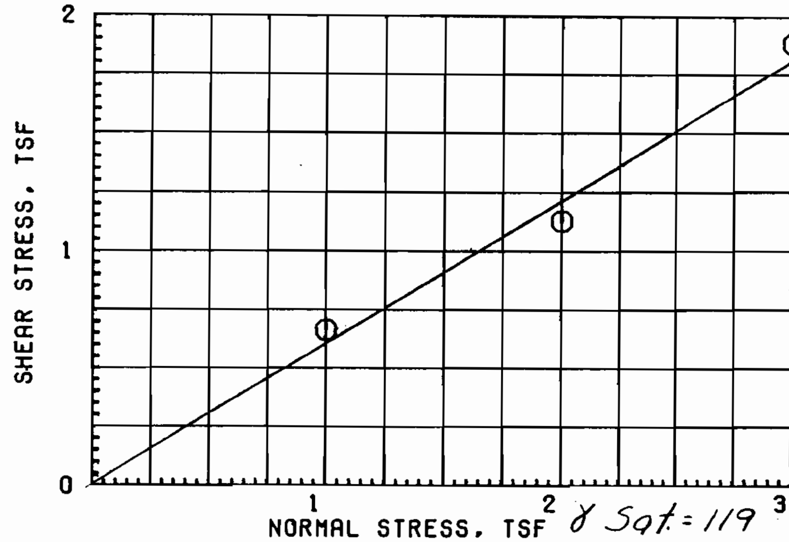
CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: PLASTIC CLAY (CH), GRAY; SILT POCKETS

LL 74	PL 21	PI 53	GS 2.70 (ESTIMATED)	UNDISTURBED SPECIMEN	Q TEST

REMARKS:	PROJECT LK PONT LA & VIC HURR PROT	
	ORLEANS PARISH OUTFALL CANALS	
	BORING NO. 4-MUG	SAMPLE NO. 8-C
	DEPTH/ELEV 20.9/-8.1	TECH. KOC
	LABORATORY USAE WES	DATE 28 AUG 86
	TRIAXIAL COMPRESSION TEST REPORT	





γ Sat = 119
116.6 120.5 119.2

φ = 31°

TAN φ = 0.601

C = 0

		TEST NO.	1 ▲	2 Y	3 X	Avg.
INITAL		WATER CONTENT, %	21.4	20.6	21.6	21.2
		VOID RATIO	0.896	0.773	0.813	
		SATURATION, %	63.4	70.6	70.4	
		DRY DENSITY, PCF	87.2	93.3	91.2	
VOID RATIO AFTER CONSOL						
FIFTY PERCENT CONSOL, MIN			< 1	< 1	< 1	
FINAL		WATER CONTENT, %	24.6	25.8	26.0	
		VOID RATIO				
		SATURATION, %				
NORMAL STRESS, TSF			1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, TSF			0.66	1.13	1.88	
TIME TO FAILURE, MIN			559	1119	839	
RATE OF STRAIN, IN/MIN			.00018	.00018	.00018	
ULTIMATE SHEAR STRESS, TSF						

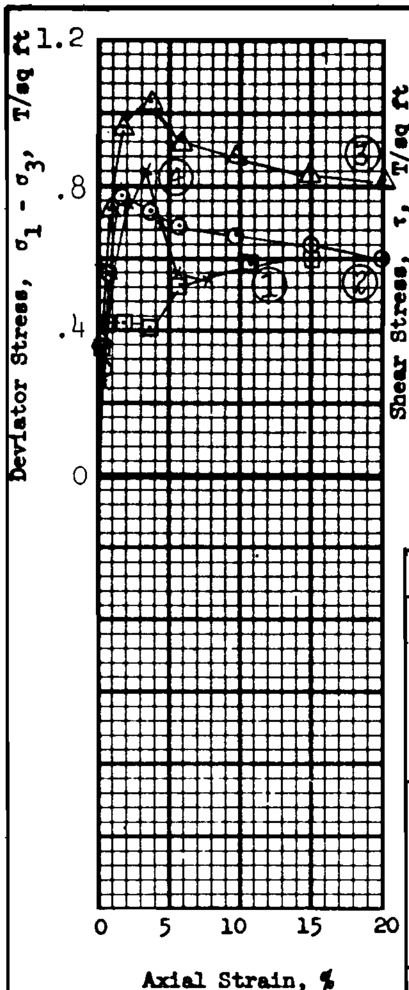
TYPE SPECIMEN UNDISTURBED	3.00 IN. SQUARE	0.553 IN. THICK

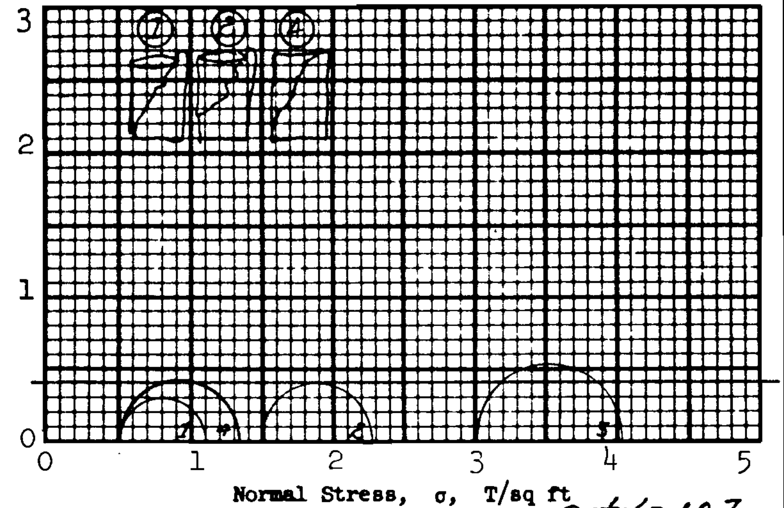
CLASSIFICATION SAND (SP), GRAY; SHELL PARTICLES

LL	PL	PI		GS 2.65 (EST)

REMARKS;	PROJECT LK PONT LA & VIC HURR PROT	
	ORLEANS PARISH OUTFALL CANALS	
	BORING NO. 4MUG	SAMPLE 10-C
	DEPTH/ELEV 29.0/-16.2	DATE 04 AUG 86

DIRECT SHEAR TEST REPORT





sat γ = 107

Test No.			1	2	3	4
Initial	Water content	w_o	45.8 %	51.5 %	49.4 %	46.6 % Avg 48.3
	Void ratio	e_o	1.31	1.49	1.40	1.37
	Saturation	S_o	94.7 %	93.7 %	95.6 %	92.2 %
	Dry density, lb/cu ft	γ_d	73.1	67.9	70.6	71.3
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	0.5
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.60	0.78	1.03	0.84
Time to failure, min		t_f	82	9	20	24
Rate of strain, percent/min			0.184	0.184	0.184	0.141
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.40	1.40	1.40	1.40
Initial height, in.		H_o	3.00	3.00	3.00	3.00

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.40 T/sq ft

Method of saturation ________

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY(CH), gray, slickensided, contains small concretions

LL 90 | PL 25 | PI 65 | G_s 2.71

Remarks ________

Project LK. PONT. LA.&VIC.(71) ORLEANS PARISH

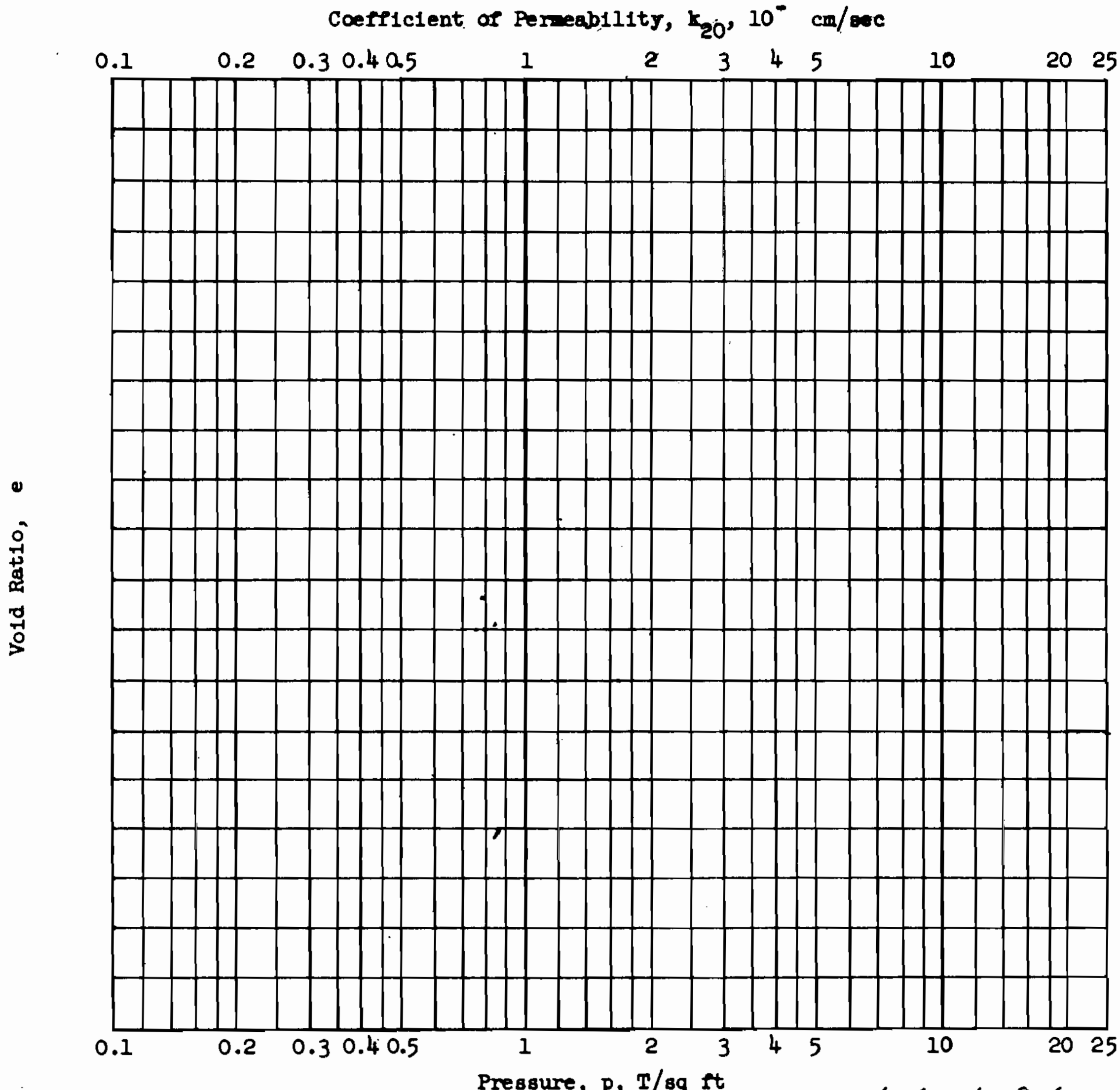
LK.FR. LEVEE, WEST OF IHNC, GDM#2, SUPP.#5,

Area OUTFALL CANALS

Boring No. 2-MUE | Sample No. 3-A

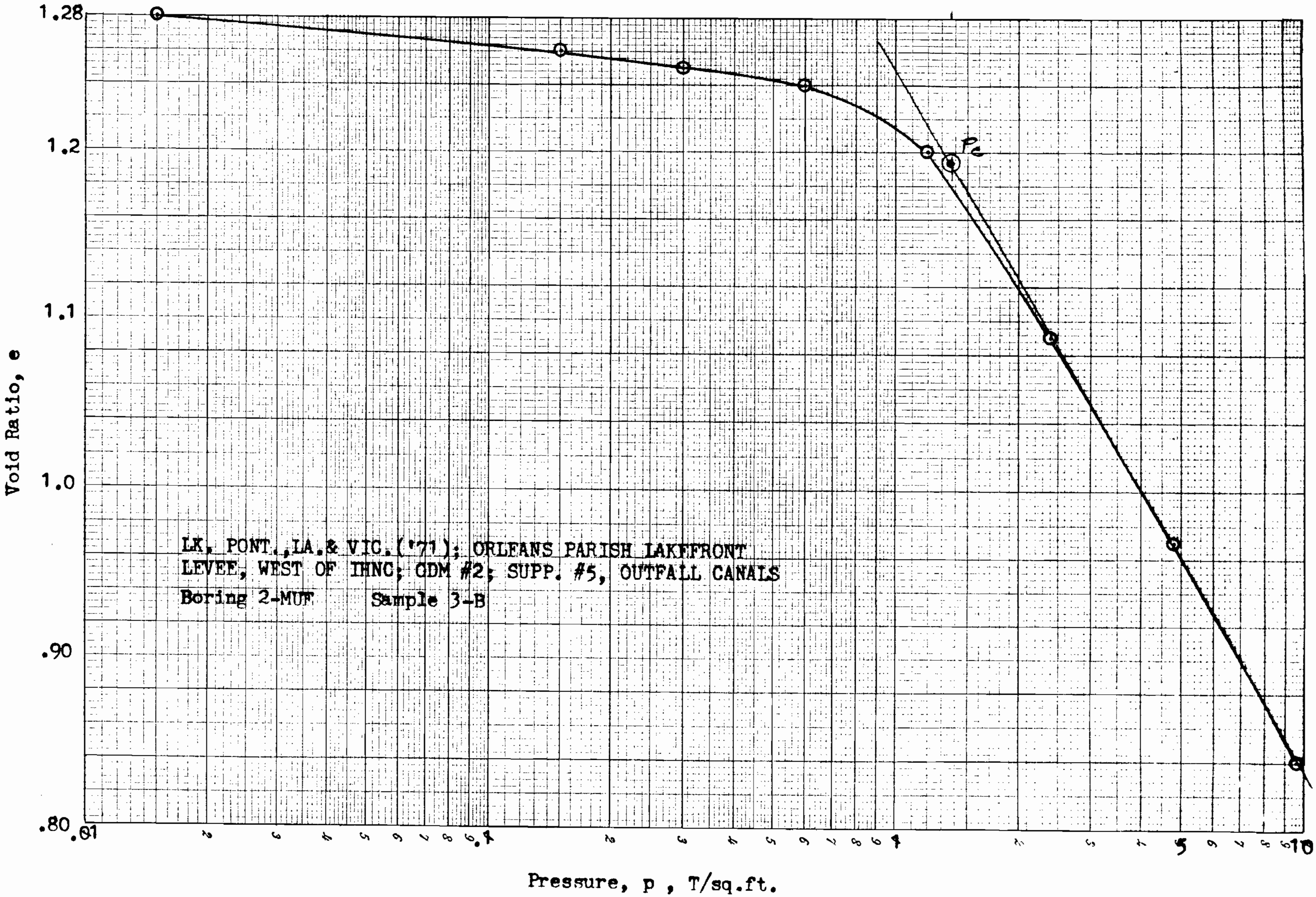
Depth El 2.5 | Date 9 March 1971

TES **TRIAXIAL COMPRESSION TEST REPORT**

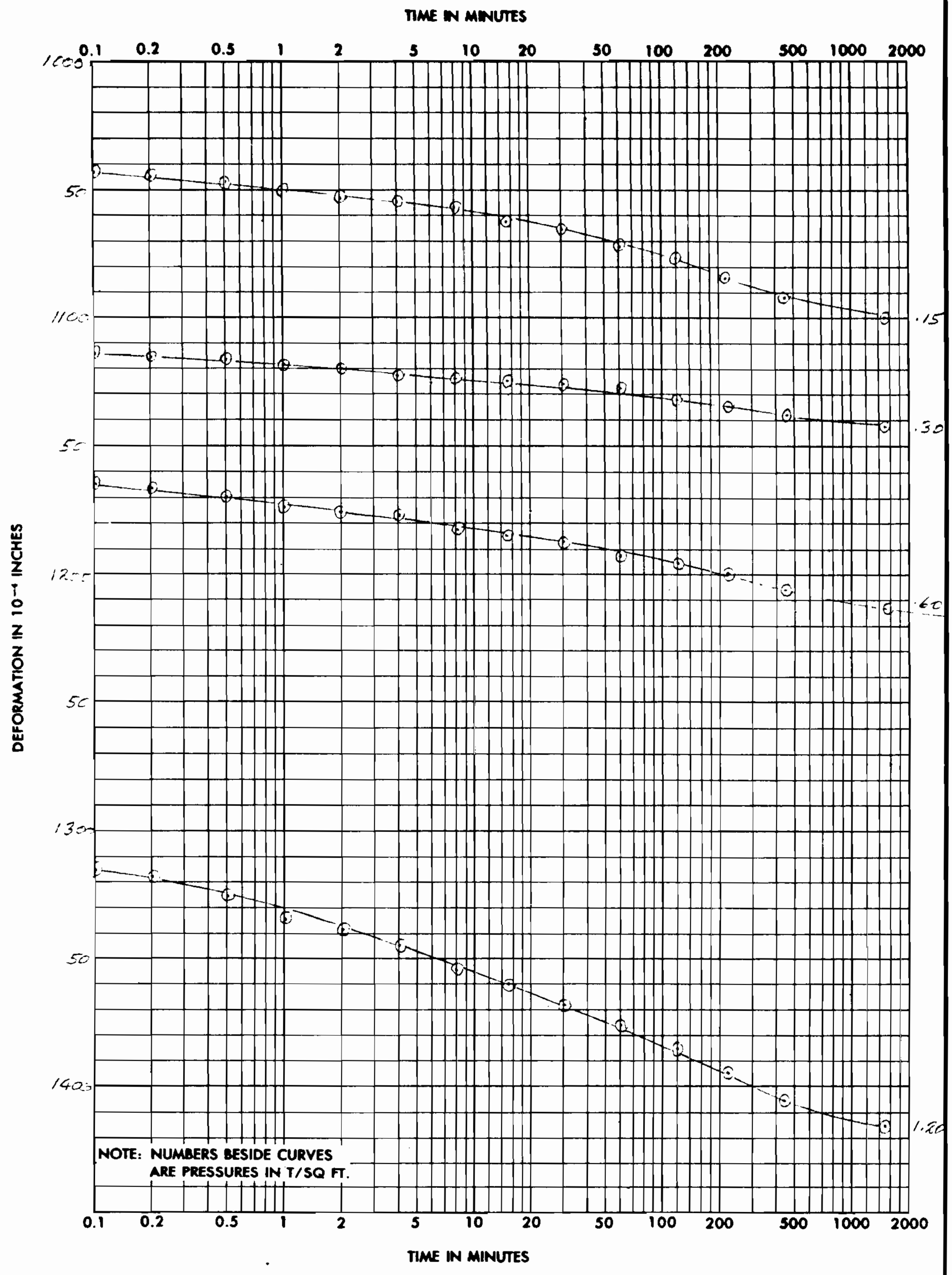


sat. γ = 109.6

Type of Specimen UNDISTURBED		Before Test		After Test
Diam 4.25 in.	Ht 1.153 in.	Water Content, w_o	46.8 %	w_f %
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	1.28	e_f
Preconsol. Pressure, p_c 1.38 T/sq ft		Saturation, S_o	99.3 %	S_f %
Compression Index, C_c 0.43		Dry Density, γ_d	74.5 lb/ft^3	
Classification PLASTIC CLAY(CH)*		k_{20} at e_o = × 10^{-} cm/sec		
LL 64	G_s 2.72	Project LK. PONT., LA. & VIC. ('71); ORLEANS		
PL 18	D_{10}	PARISH LAKEFRONT LEVEE, WEST OF IHNC;		
Remarks * tan and gray, fissured		GDM #2; SUPP. #5; OUTFALL CANALS		
See attached plot for pressure		Boring No. 2-MUE	Sample No. 3-B	
vs void ratio curve		Depth El +1.6	Date 30 March, 1971	
		JDB CONSOLIDATION TEST REPORT		



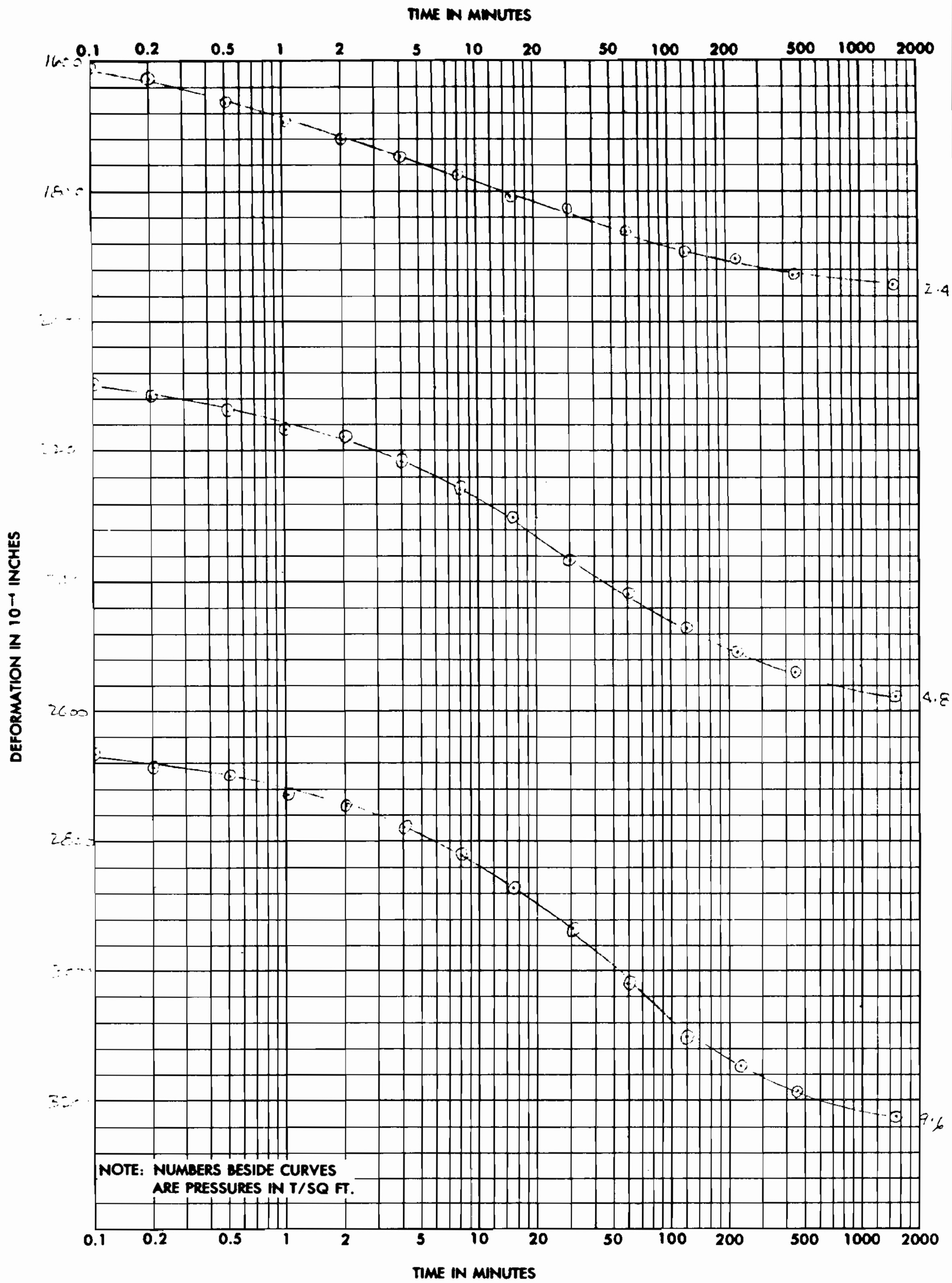
1.28
1.2
1.1
1.0
.90
.80
Void Ratio, e
.01
.1
1
5
10
Pressure, p , T/sq.ft.
Pc
LK. PONT.,LA.& VIC.('71); ORLEANS PARISH LAKEFRONT
LEVEE, WEST OF IHNC; GDM #2; SUPP. #5, OUTFALL CANALS
Boring 2-MUF
Sample 3-B



PROJECT	LK. PONT.,LA.& VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF				
AREA	IHNC; GDM #2; SUPP. #5, OUTFALL CANALS				
BORING NO. 2-MUE	SAMPLE NO. 3-B	~~DEPTH~~ EL +1.6		DATE 30 March, 1971	

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965

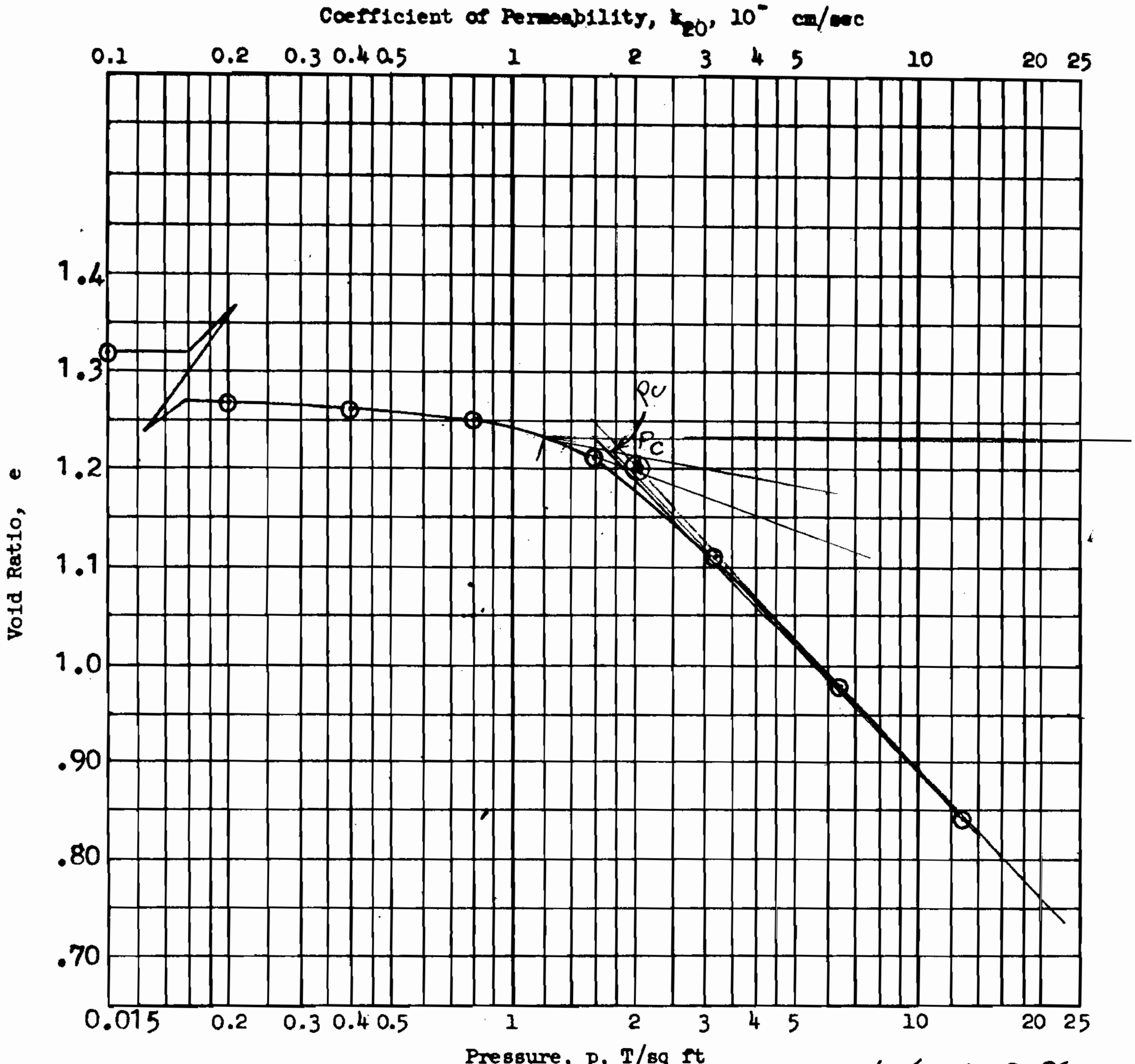


PROJECT	LK. PONT., LA.& VIC ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF
AREA	IHNC; GDM #2; SUPP. #5; OUTFALL CANALS

BORING NO. 2-MUE	SAMPLE NO. 3-B	~~DEPTH~~ EL +1.6	DATE 30 March, 1971

ENG FORM 1 MAY 63 2088 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

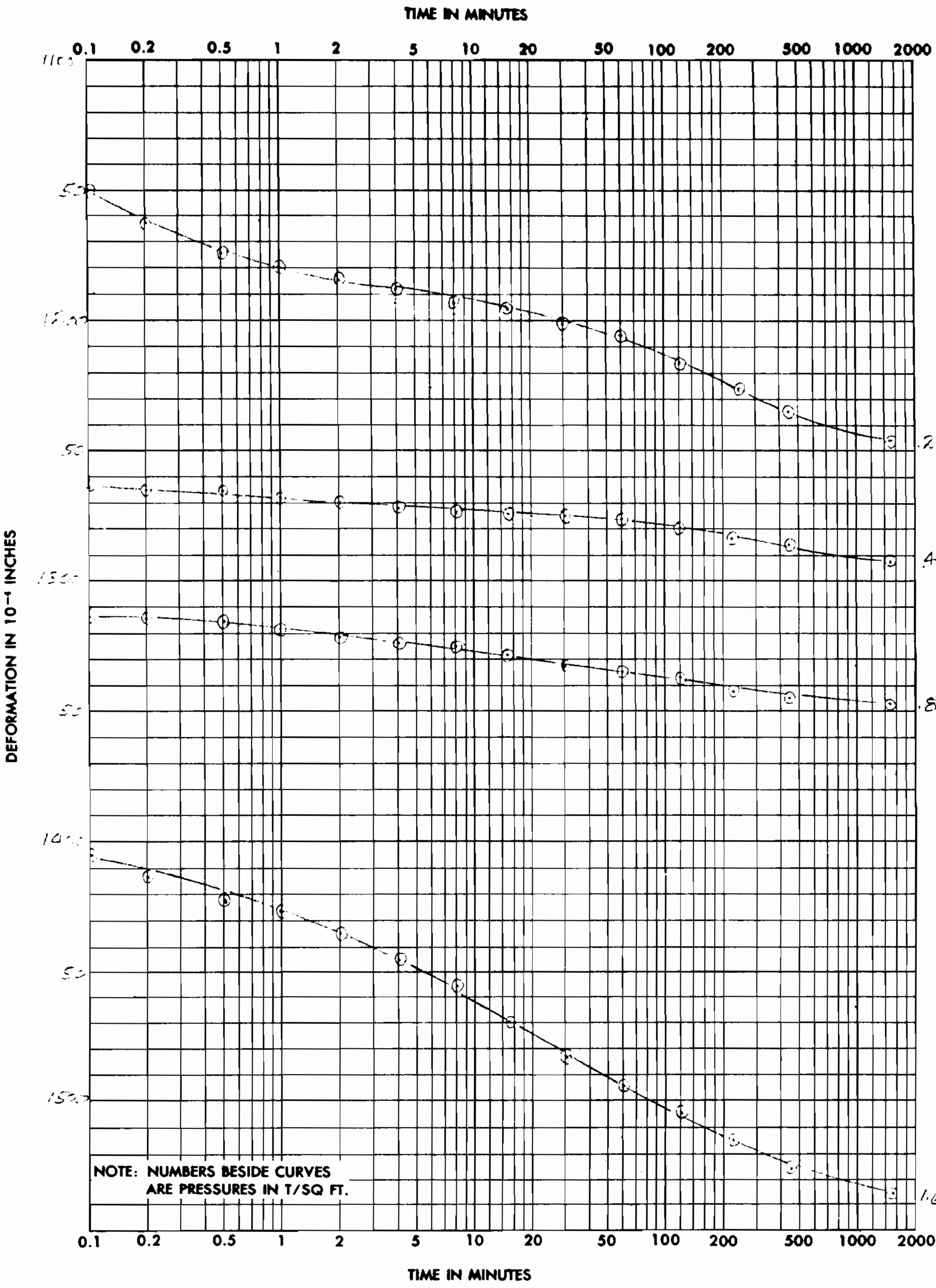
★ GPO : 1964 OF—718-965



sat. γ = 108.8

Type of Specimen UNDISTURBED		Before Test	After Test
Diam 4.25 in.	Ht 1.150 in.	Water Content, w_o 48.0 %	w_f %
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o 1.32	e_f
Preconsol. Pressure, p_c ~~2.05~~ 1.72 T/sq ft		Saturation, S_o 99.1 %	S_f %
Compression Index, C_c 0.46		Dry Density, γ_d 73.3 lb/ft^3	
Classification PLASTIC CLAY (CH),*		k_{20} at e_o = × 10^{-} cm/sec	
LL 88	G_s 2.72	Project LK. PONT., LA.& VIC.('71);ORLEANS	
PL 32	D_{10}	PARISH LAKEFRONT LEVEE, WEST OF IHNC;	
*Remarks mottled tan and gray,		GDM #2; SUPP. #5; OUTFALL CANALS	
contains ½" dia. roots		Boring No. 2-MUE	Sample No. 5-C
		~~Depth~~ El -6.9	Date 24 March, 1971
		JDB **CONSOLIDATION TEST REPORT**	

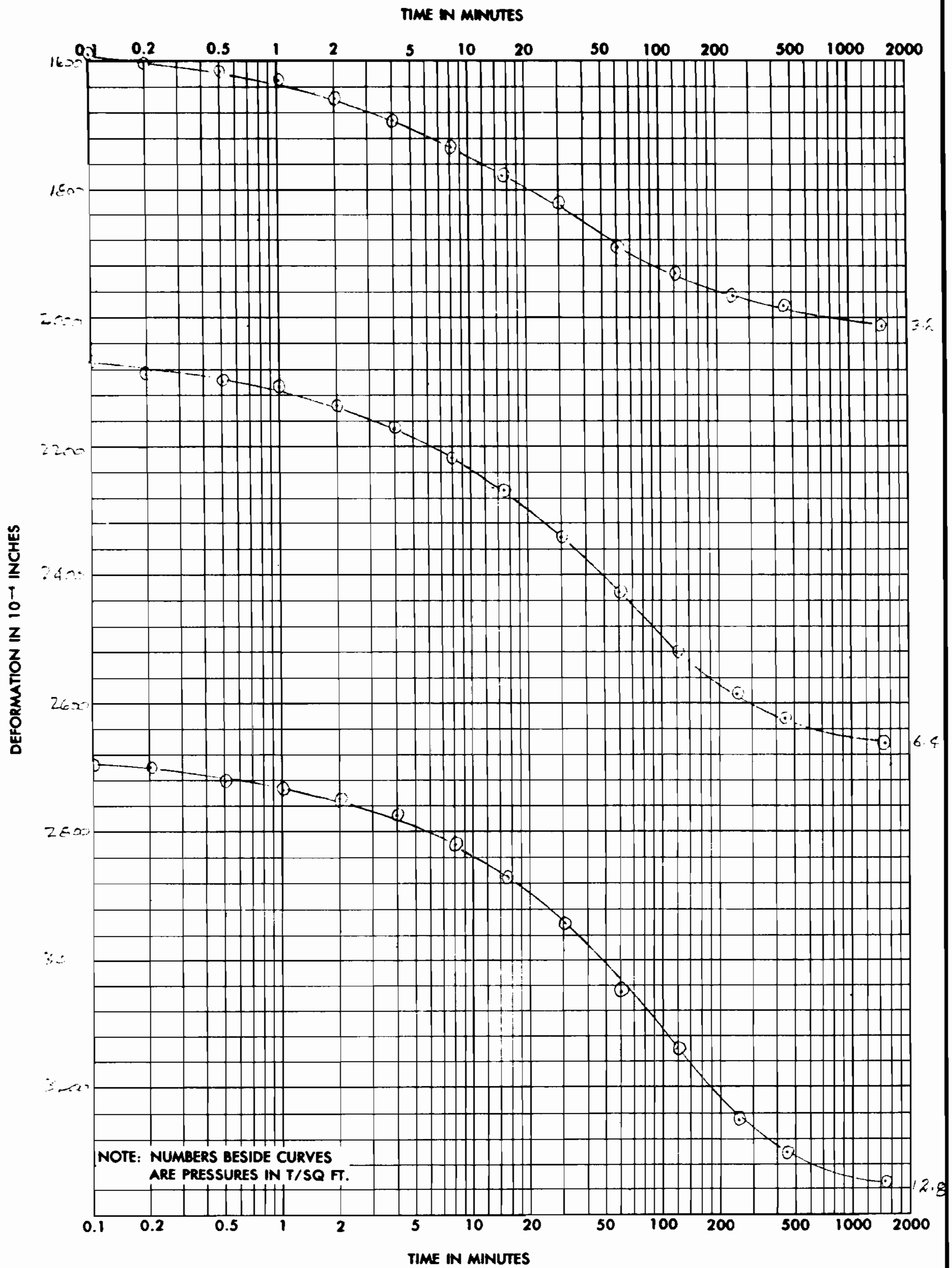
ENG FORM 2090 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) 0 3424



PROJECT LK. PONT., LA. & VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF			
AREA IHNC; GDM #2; SUPP. #5; OUTFALL CANALS			
BORING NO. 2-MUE	SAMPLE NO. 5-C	DEPTH EL -6.9	DATE 24 March, 1971

ENG FORM 1 MAY 63 2088 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965

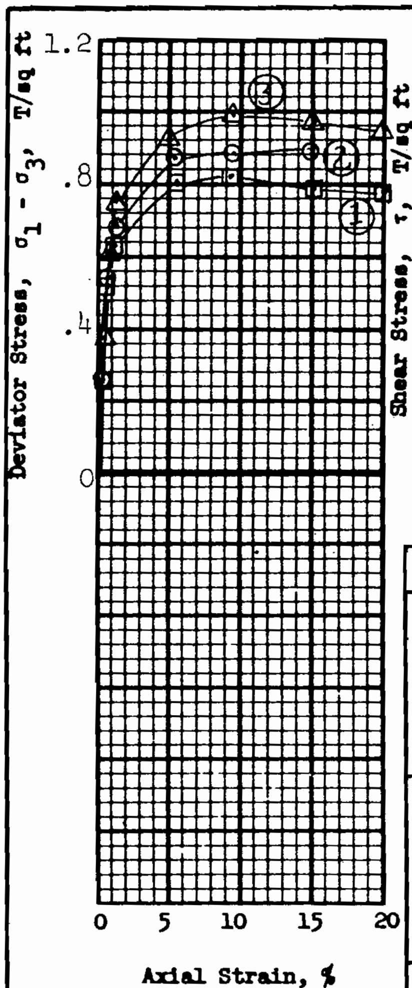


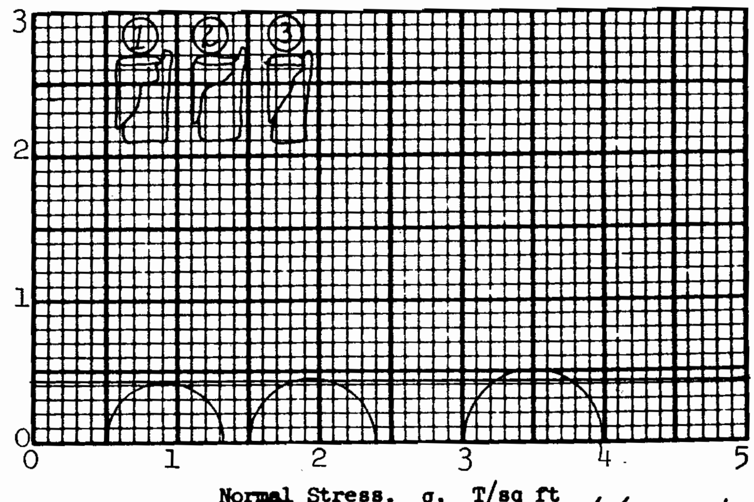
PROJECT LK. PONT.,LA.& VIC.('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF			
AREA IHNC; GDM #2; SUPP. #5; OUTFALL CANALS			
BORING NO. 2-MUE	SAMPLE NO. 5-C	~~DEPTH~~ EL -6.9	DATE 24 March,1971

ENG FORM 2088, 1 MAY 63 — PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

★ GPO : 1964 OF—715-965





sat. γ = 113.1

Test No.			1	2	3	Avg.
Initial	Water content	w_o	43.0 %	39.5 %	41.8 %	41.4 %
	Void ratio	e_o	1.18	1.08	1.14	
	Saturation	S_o	99.5 %	99.8 %	100+ %	%
	Dry density, lb/cu ft	γ_d	78.2	81.9	79.7	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.82	0.89	0.99	
Time to failure, min		t_f	48	77	48	
Rate of strain, percent/min			0.196	0.196	0.196	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.39	1.39	1.39	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.42 T/sq ft

Method of saturation ______

☐ Controlled stress

☒ Controlled strain

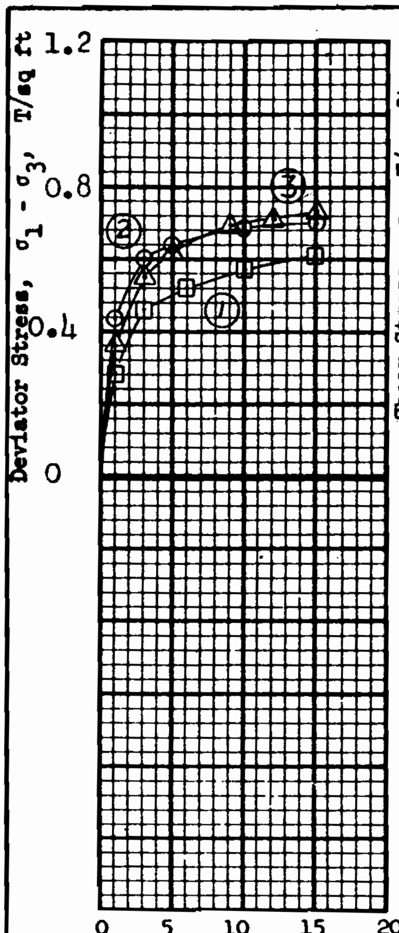
Type of test Q	Type of specimen UNDISTURBED			
Classification PLASTIC CLAY(CH), gray, slightly fissured				
LL 79	PL 19	PI 60		G_s 2.73

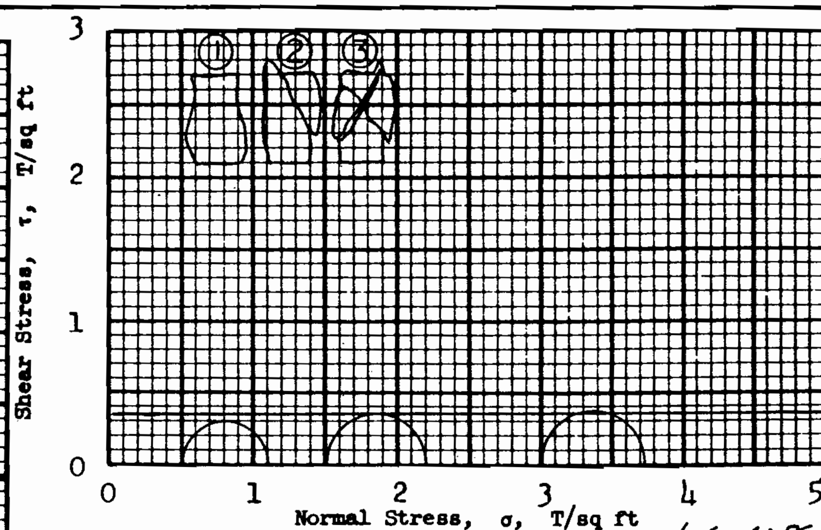
Remarks ______

Project LK. PONT. LA. &VIC. (71) ORLEANS PARISH	
LAKEFRONT LEVEE, WEST OF IHNC, GDM#2, SUPP.	
Area # 5, OUTFALL CANALS	
Boring No. 2-MUE	Sample No. 5-D
Depth El -7.4	Date 9 March 1971
TES	TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT USAEWES SOILS TEST SECTION





sat.γ = 118

Test No.			1	2	3	Avg.
Initial	Water content	w_o	33.4 %	33.1 %	32.9 %	33.1 %
	Void ratio	e_o	0.963	0.927	0.908	
	Saturation	S_o	94.3 %	97.1 %	98.6%	%
	Dry density, lb/cu ft	γ_d	86.5	88.1	89.0	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.61	0.70	0.73	
Time to failure, min		t_f	106	36	42	
Rate of strain, percent/min			0.141	0.416	0.359	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.41	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.36 T/sq ft

Method of saturation ________

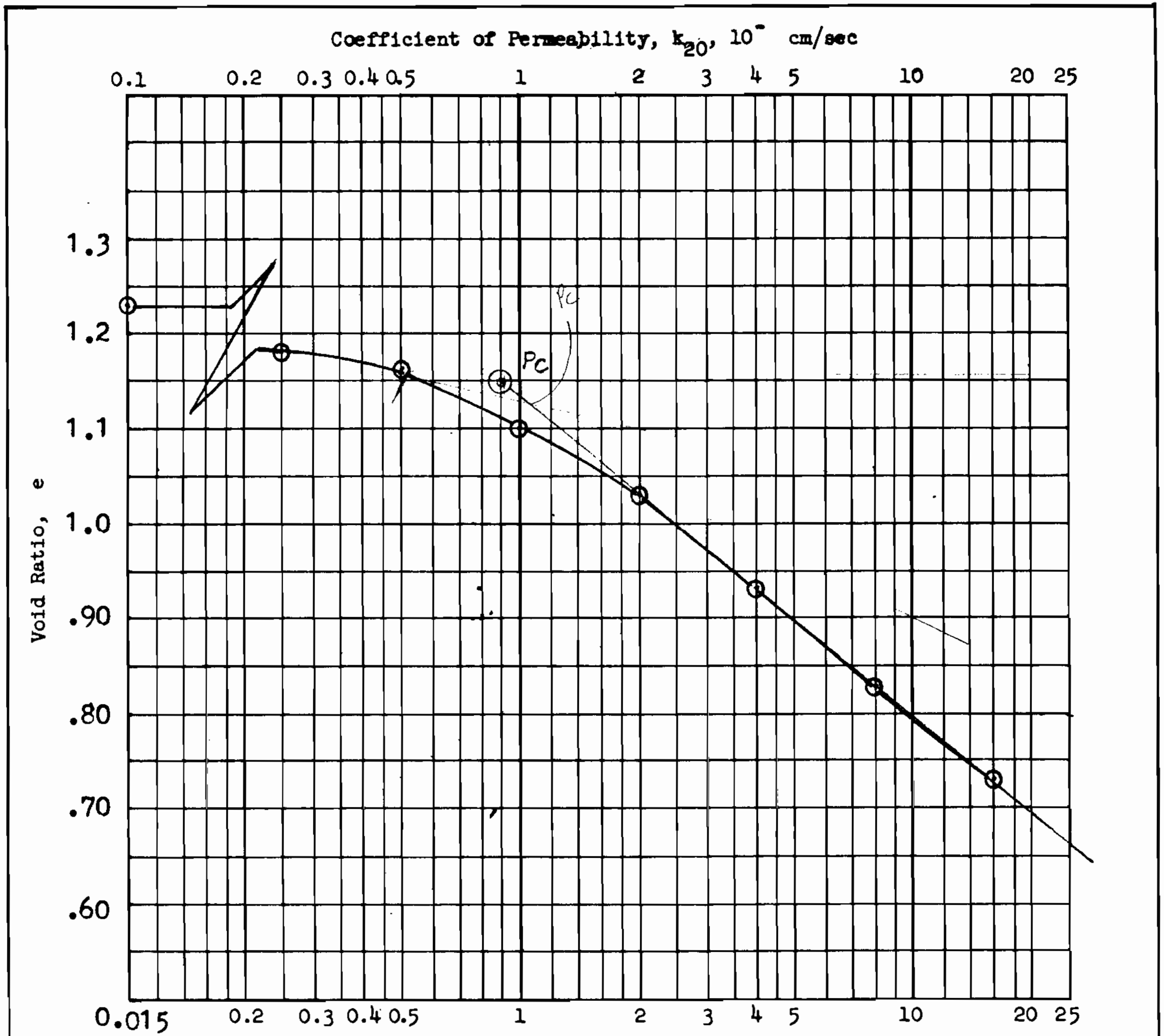
☐ Controlled stress

☒ Controlled strain

Type of test Q	Type of specimen UNDISTURBED				
Classification SILTY CLAY(CL),gray					
LL 41	PL 22	PI 19		G_s 2.72	

Remarks ________

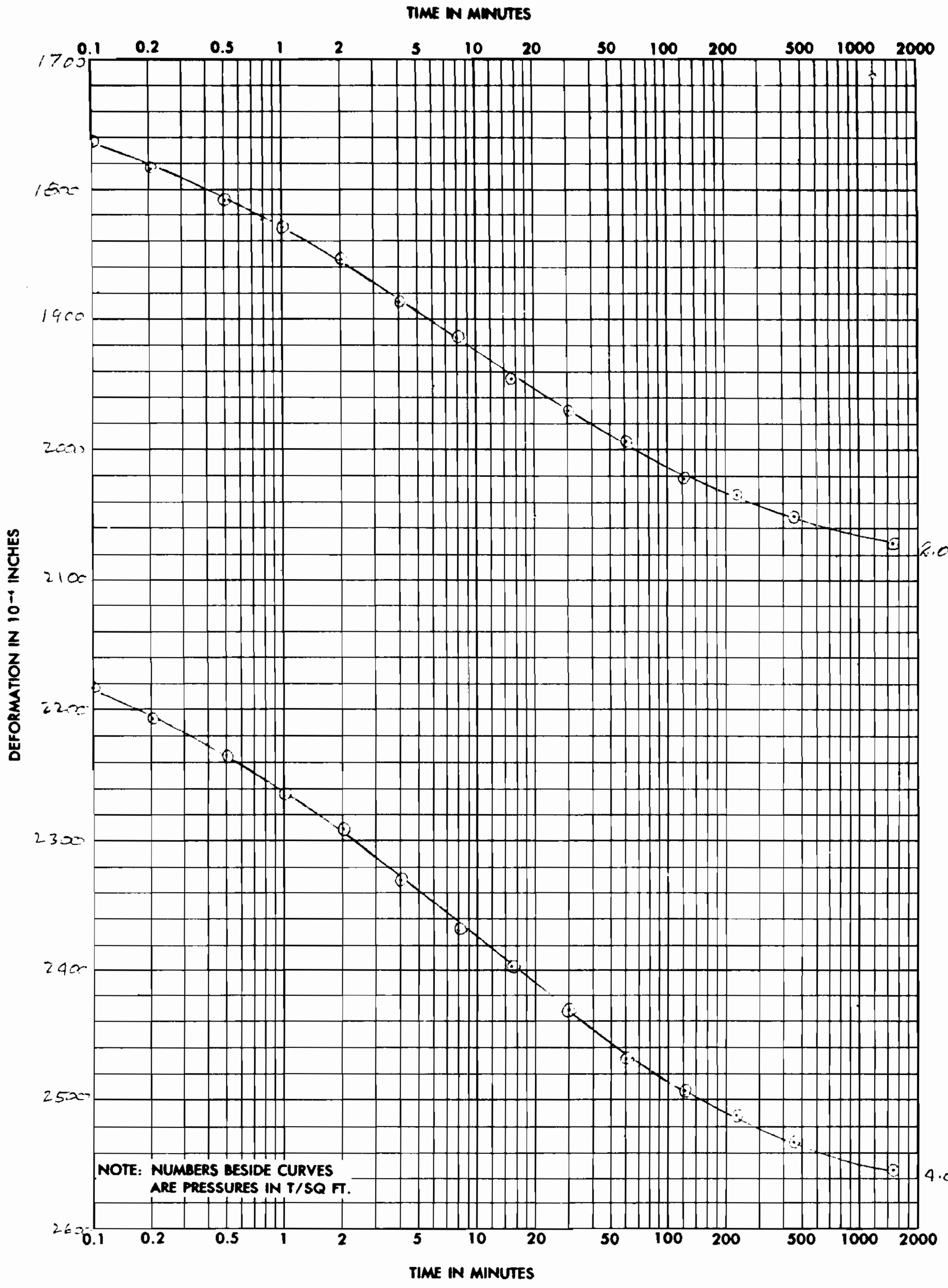
Project LK.PONT.LA.,&VIC.(71)ORLEANS PARISH	
LAKEFRONT LEVEE,WEST OF IHNC, GDM#2,SUPP.#5,	
Area OUTFALL CANALS.	
Boring No. 2-MUE	Sample No. 6-B
Depth El - 10.0	Date 10 March,1971
FAM TRIAXIAL COMPRESSION TEST REPORT	



sat. γ = 110.5

Type of Specimen UNDISTURBED		Before Test		After Test
Diam 4.25 in.	Ht 1.154 in.	Water Content, w_o	43.3 %	w_f %
Overburden Pressure, p_o 1.10 T/sq ft		Void Ratio, e_o	1.23	e_f
Preconsol. Pressure, p_c 0.91 T/sq ft		Saturation, S_o	95.4 %	S_f %
Compression Index, C_c 0.33		Dry Density, γ_d	76.0 lb/ft^3	
Classification SILTY CLAY(CL), *		k_{20} at e_o = × 10^{-} cm/sec		
LL -	G_s 2.72 From Q	Project LK. PONT., LA. & VIC.('71);ORLEANS PARISH LAKEFRONT LEVEE,WEST OF IHNC;GDM #2; SUPP. #5, OUTFALL CANALS		
PL -	D_{10}			
Remarks * gray, contains pockets of clay (CH)		Boring No. 2-MUE		Sample No. 6-B
		~~Depth~~ El -10.0		Date 26 March,1971
		JDB CONSOLIDATION TEST REPORT		

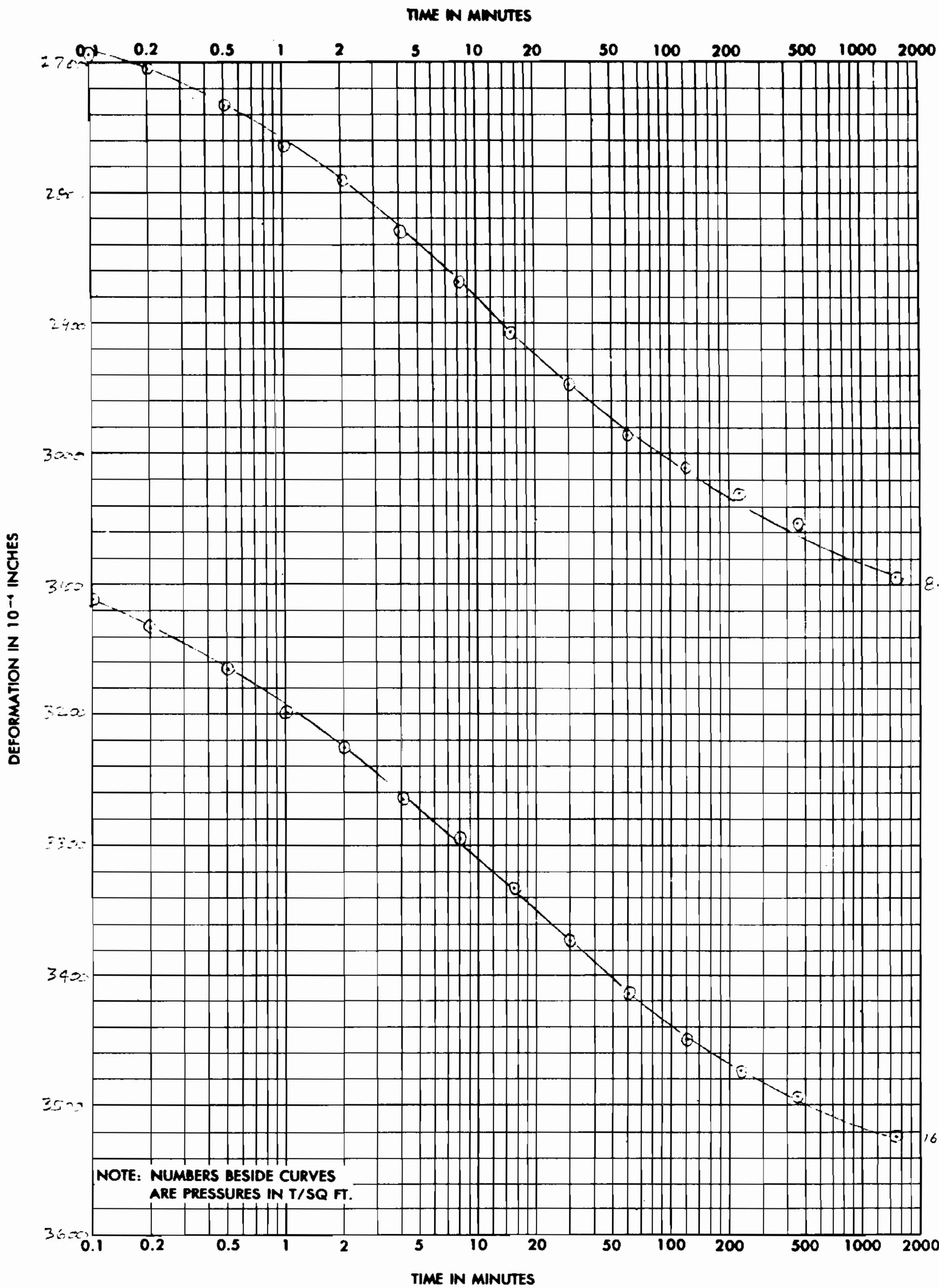
ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) 0 3424



PROJECT LK. PONT.,LA. & VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF			
AREA IHNC; GDM #2; SUPP. #5, OUTFALL CANALS			
BORING NO. 2-MUE	SAMPLE NO. 6-B	~~DEPTH~~ EL -10.0	DATE 26 March, 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

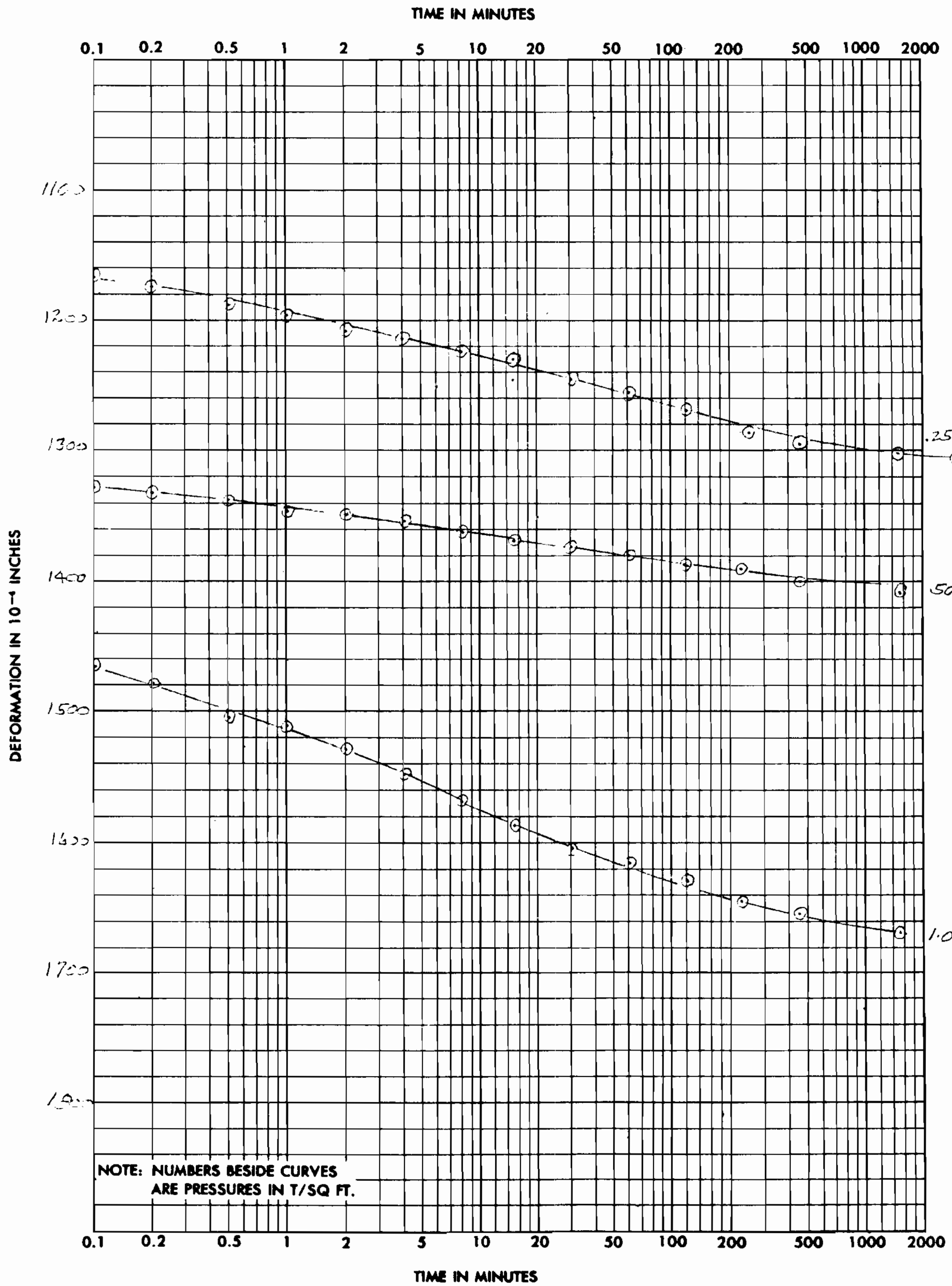
★ GPO : 1964 OF—715-965



PROJECT LK. PONT., LA.& VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF			
AREA IHNC; GDM #2; SUPP. #5, OUTFALL CANALS			
BORING NO. 2-MUE	SAMPLE NO. 6-B	~~DEPTH~~ EL -10.0	DATE 26 March, 1971

ENG FORM 2088 1 MAY 63 — PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965



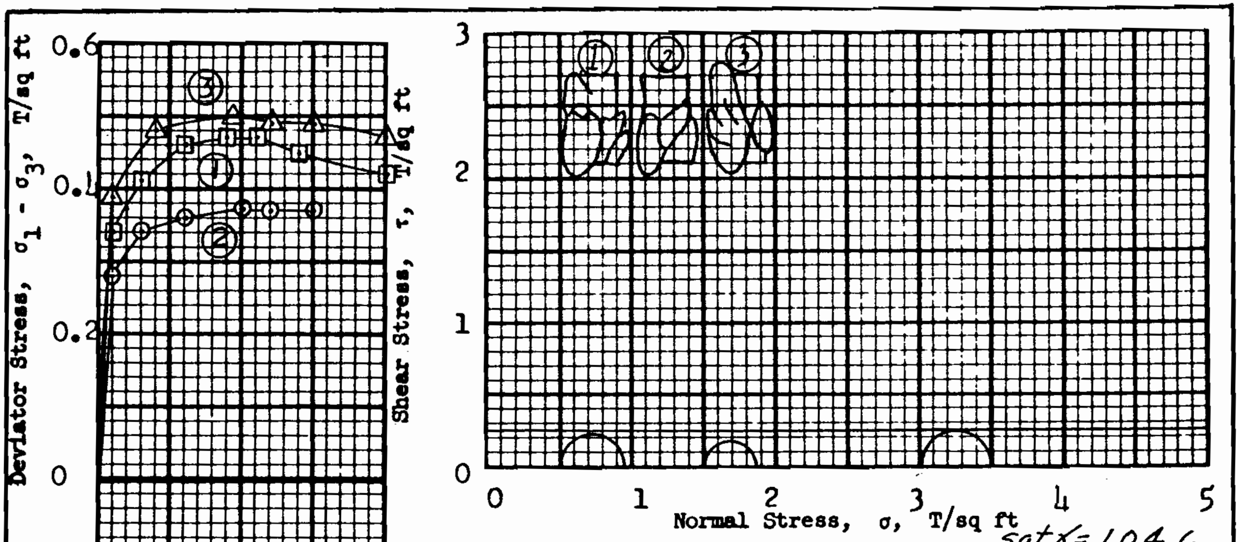
PROJECT LK. PONT.,LA.& VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF IHNC; GDM #2; SUPP. #5, OUTFALL CANALS

AREA

BORING NO. 2-MUE | SAMPLE NO. 6-B | DEPTH EL -10.0 | DATE 26 March, 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

☆ GPO : 1964 OF—715-065



sat. γ = 104.6

Test No.			1	2	3	Avg.
Initial	Water content	w_o	56.1 %	61.4 %	54.3 %	57.3 %
	Void ratio	e_o	1.55	1.68	1.50	
	Saturation	S_o	99.2 %	100+ %	99.2 %	%
	Dry density, lb/cu ft	γ_d	67.1	63.7	68.5	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.47	0.37	0.50	
Time to failure, min		t_f	74	31	16	
Rate of strain, percent/min			0.161	0.326	0.571	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.40	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.24 T/sq ft

Method of saturation ______

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY(CH), gray, slickensided, contains rootlets

LL 89 | PL 25 | PI 64 | | G_s 2.74

Remarks ______

Project LK. PONT. LA., &VIC. (71) ORLEANS PARISH
LK. FT. LEVEE, WEST OF IHNC, GDM#2, SUPP. # 5.

Area OUTFALL CANALS

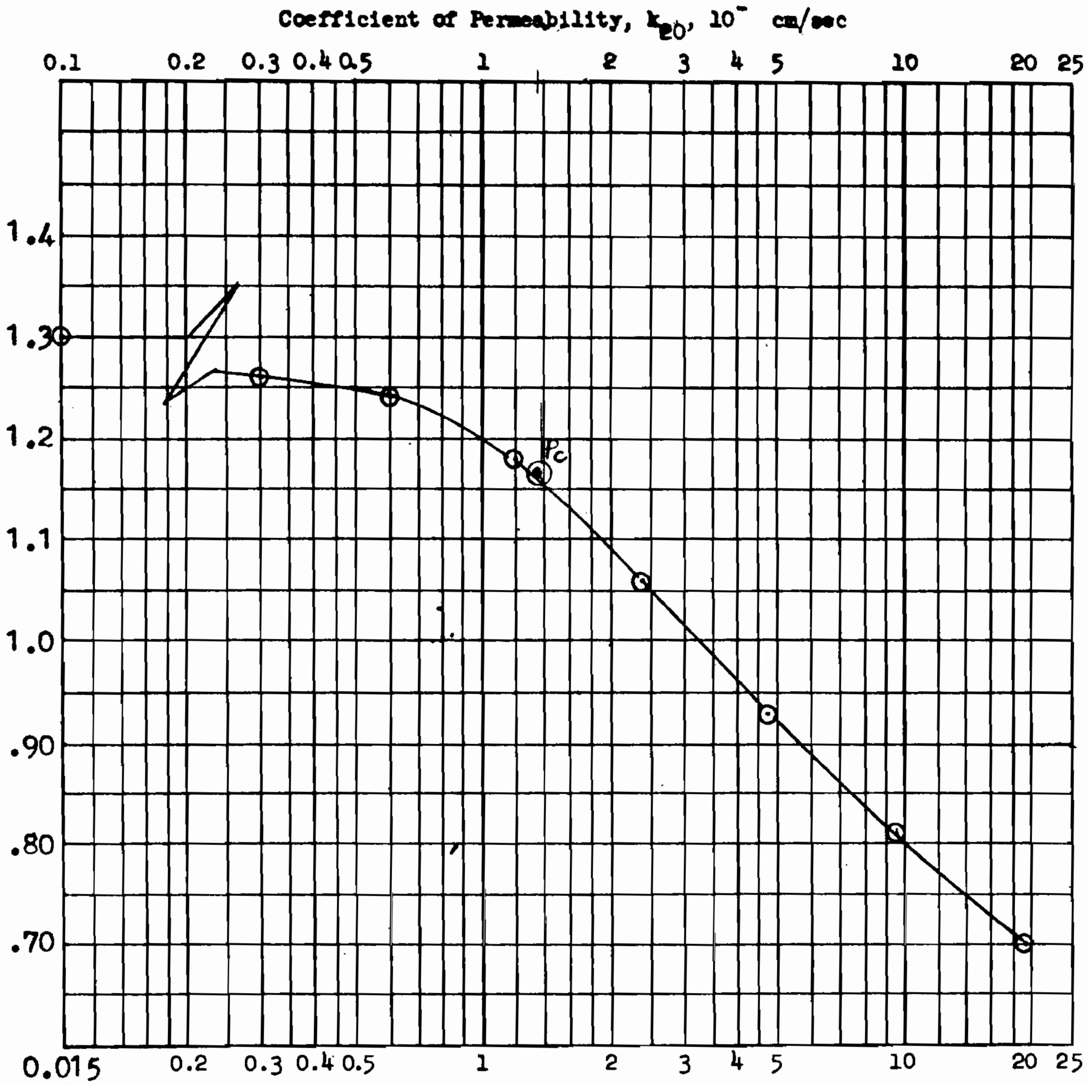
Boring No. 2-MUE | Sample No. 6-D

Depth El - 11.8 | Date 11 March, 1971

OHR TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT USAEWES SOILS TEST SHEET



sat. γ = 108.7

Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.155 in.	Water Content, w_o	48.1 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	1.30	e_f	
Preconsol. Pressure, p_c 1.38 T/sq ft		Saturation, S_o	100 %	S_f	%
Compression Index, C_c 0.43		Dry Density, γ_d	73.4 lb/ft^3		
Classification Alternating 1/16" *		k_{20} at e_o = × 10^{-} cm/sec			

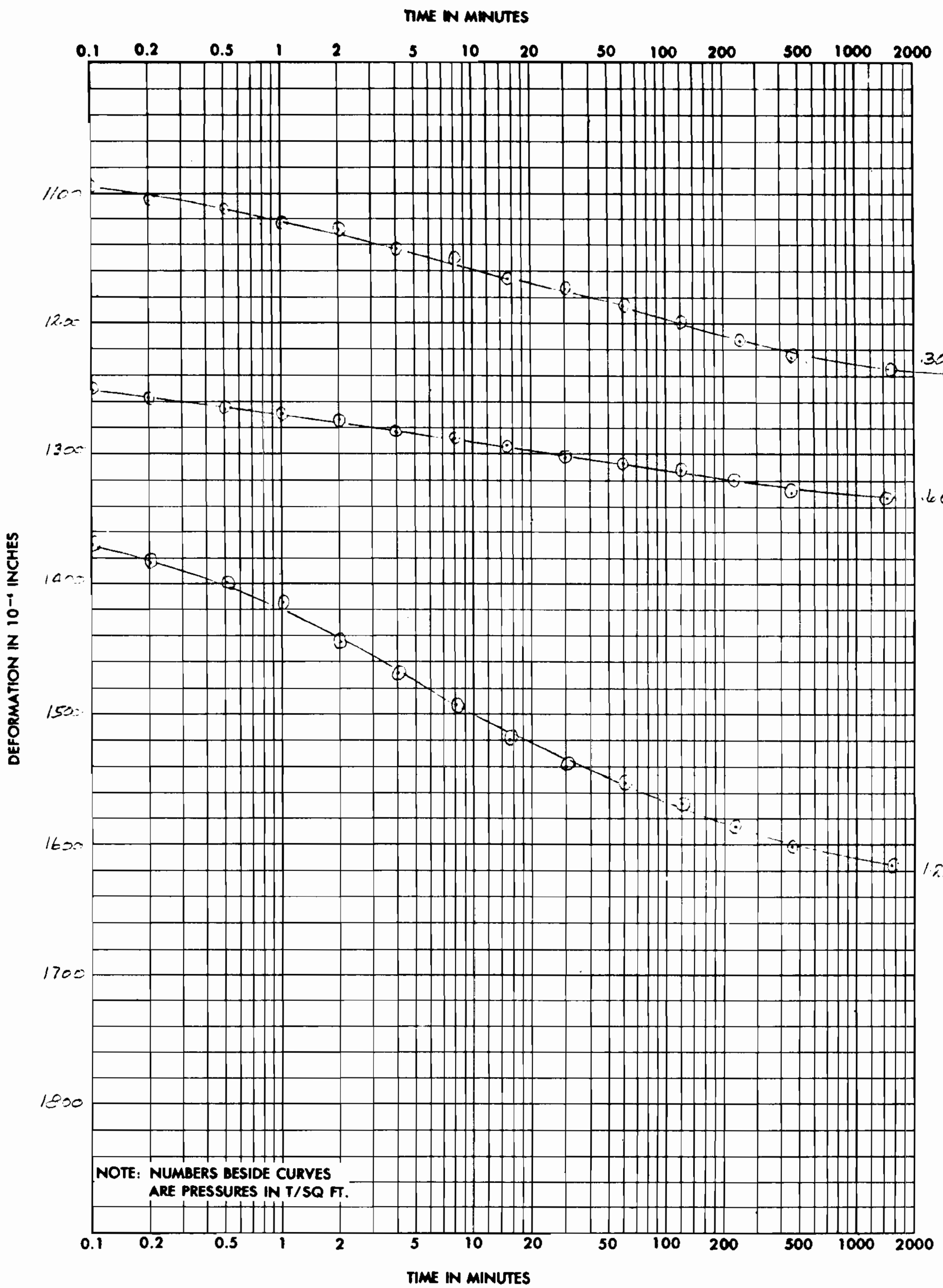
LL 50	G_s 2.71
PL 18	D_{10}

Remarks * strata of PLASTIC CLAY (CH) and SILT (ML), gray

Project LK. PONT., LA. & VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF IHNC; GDM #2; SUPP. #5; OUTFALL CANALS

Boring No. 2-MUE	Sample No. 8-D
~~Depth~~ El -19.8	Date 26 March, 1971

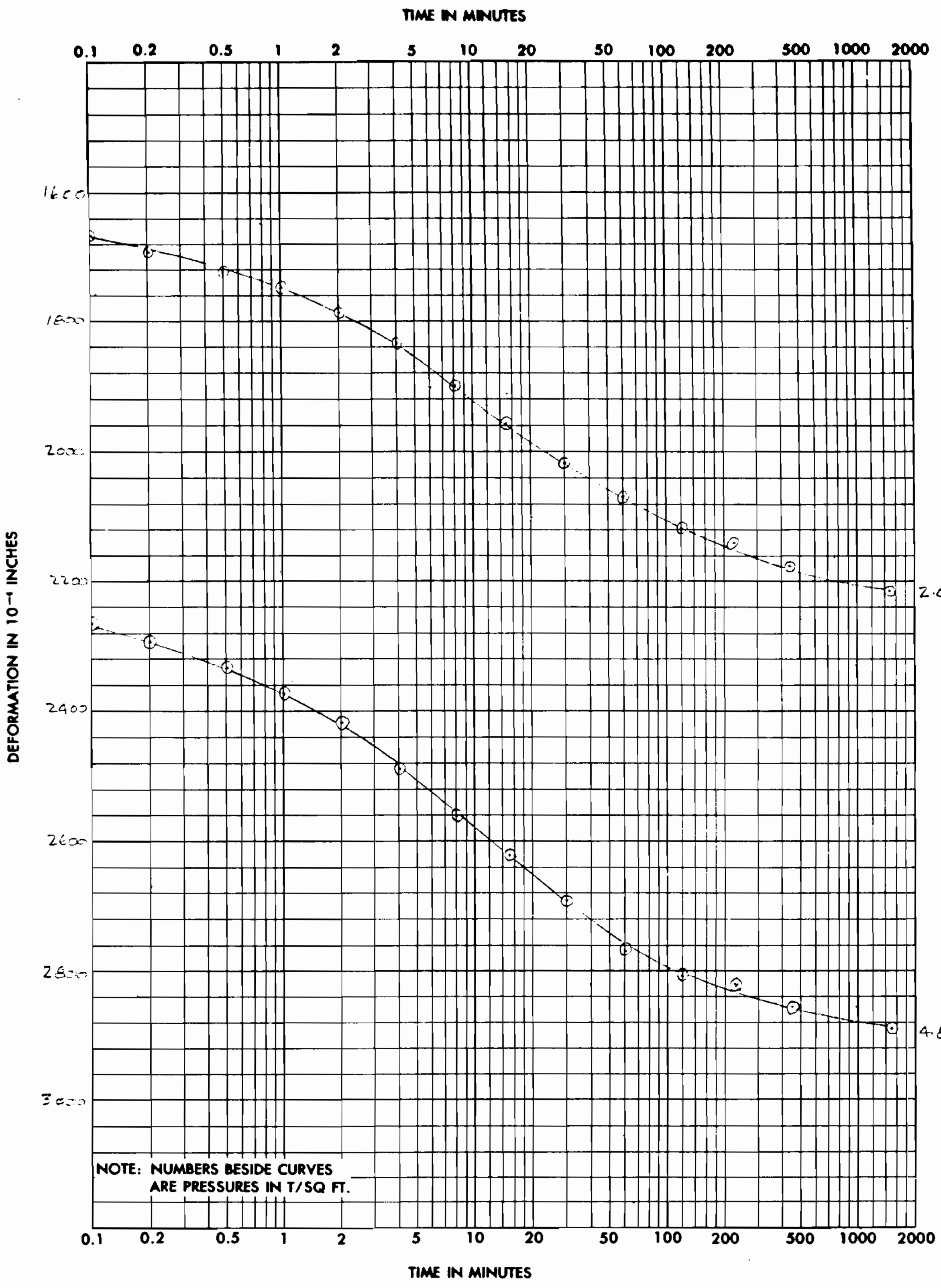
JDB **CONSOLIDATION TEST REPORT**



PROJECT LK. PONT.,LA. & VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF			
AREA IHNC; GDM #2; SUPP. #5; OUTFALL CANALS			
BORING NO. 2-MUE	SAMPLE NO. 8-D	~~DEPTH~~ EL -19.8	DATE 26 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965

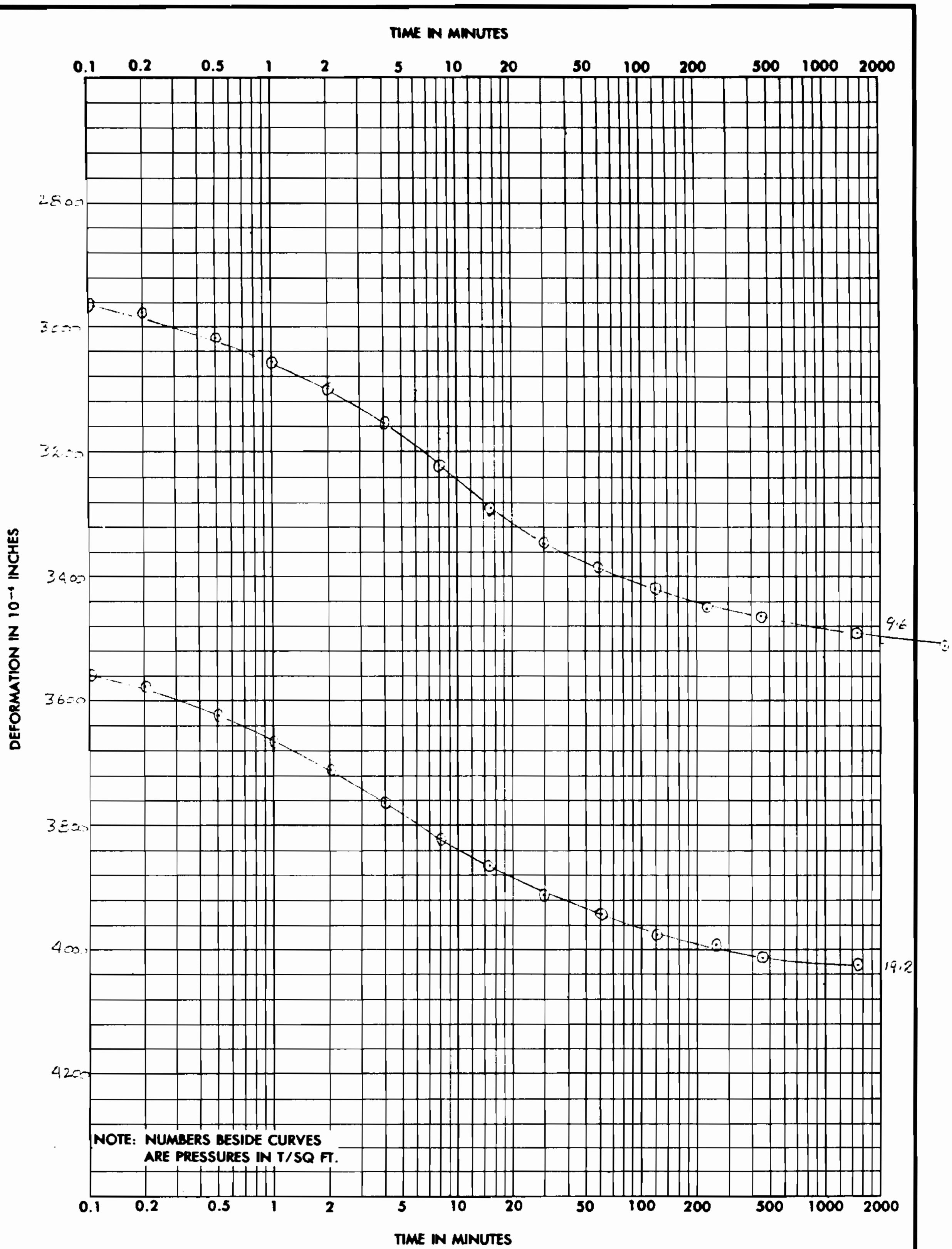


PROJECT	LK. PONT.,LA.& VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF
AREA	IHNC; GDM #2; SUPP. #5; OUTFALL CANALS

BORING NO.	2-MUE	SAMPLE NO.	8-D	~~DEPTH~~ EL	-19.8	DATE	26 March, 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965

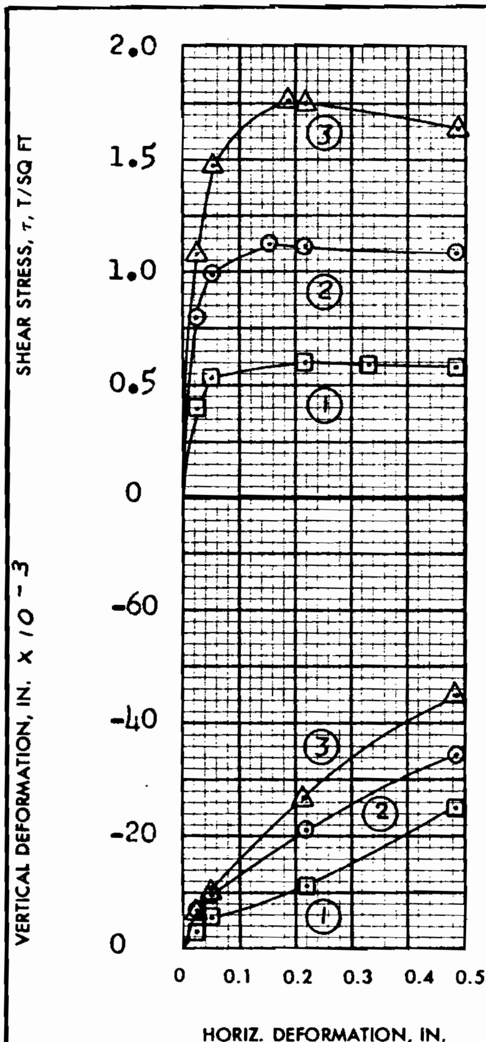


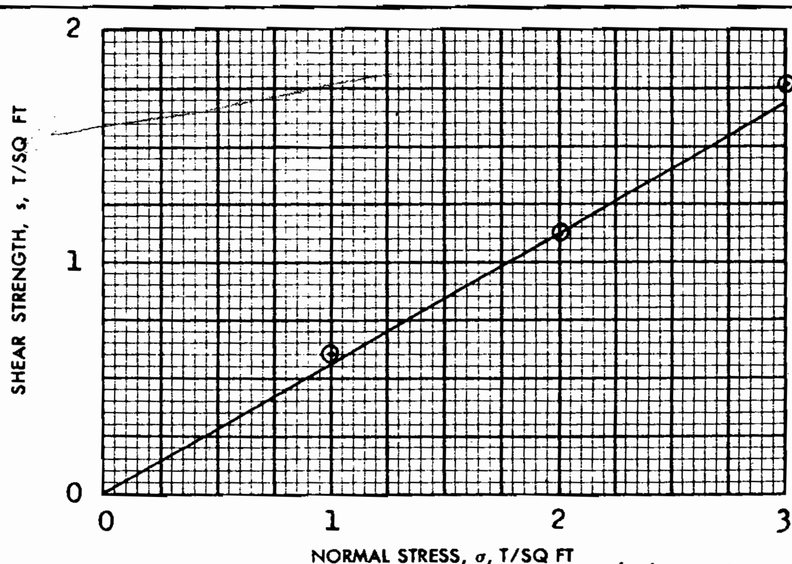
PROJECT	LK. PONT.,LA.& VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF
AREA	IHNC; GDM #2; SUPP. #5; OUTFALL CANALS

BORING NO.	2-MUE	SAMPLE NO.	8-D	~~DEPTH~~ EL	-19.8	DATE	26 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965





sat γ = 117.1

TEST NO.			1	2	3	Avg.
INITIAL	WATER CONTENT	w_o	31.3%	32.4%	33.5%	32.4%
	VOID RATIO	e_o	0.893	0.912	0.950	
	SATURATION	S_o	93.9%	95.2%	94.5%	%
	DRY DENSITY, LB/CU FT	γ_d	88.4	87.5	85.8	
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}				
FINAL	WATER CONTENT	w_f	27.9%	28.4%	29.3%	%
	VOID RATIO	e_f				
	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.60	1.12	1.76	
ACTUAL TIME TO FAILURE, MIN		t_f	1320	960	1140	
RATE OF STRAIN, IN./MIN			.00017	.00017	.00017	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

SHEAR STRENGTH PARAMETERS

ϕ' = 30°

TAN ϕ' = 0.560

c' = 0 T/SQ FT

☐ CONTROLLED STRESS

☒ CONTROLLED STRAIN

TYPE OF SPECIMEN UNDISTURBED | 3.00 IN. SQUARE | 0.540 IN. THICK

CLASSIFICATION SILTY SAND(SM),gray, contains seams of plastic clay

LL - | PL - | PI - | G_s 2.68

REMARKS

PROJECT LK.PONT.LA.&VIC.(71)ORLEANS PARISH LAKE-FRONT LEVEE,WEST OF IHNC,GDM # 2,SUPP. # 5,

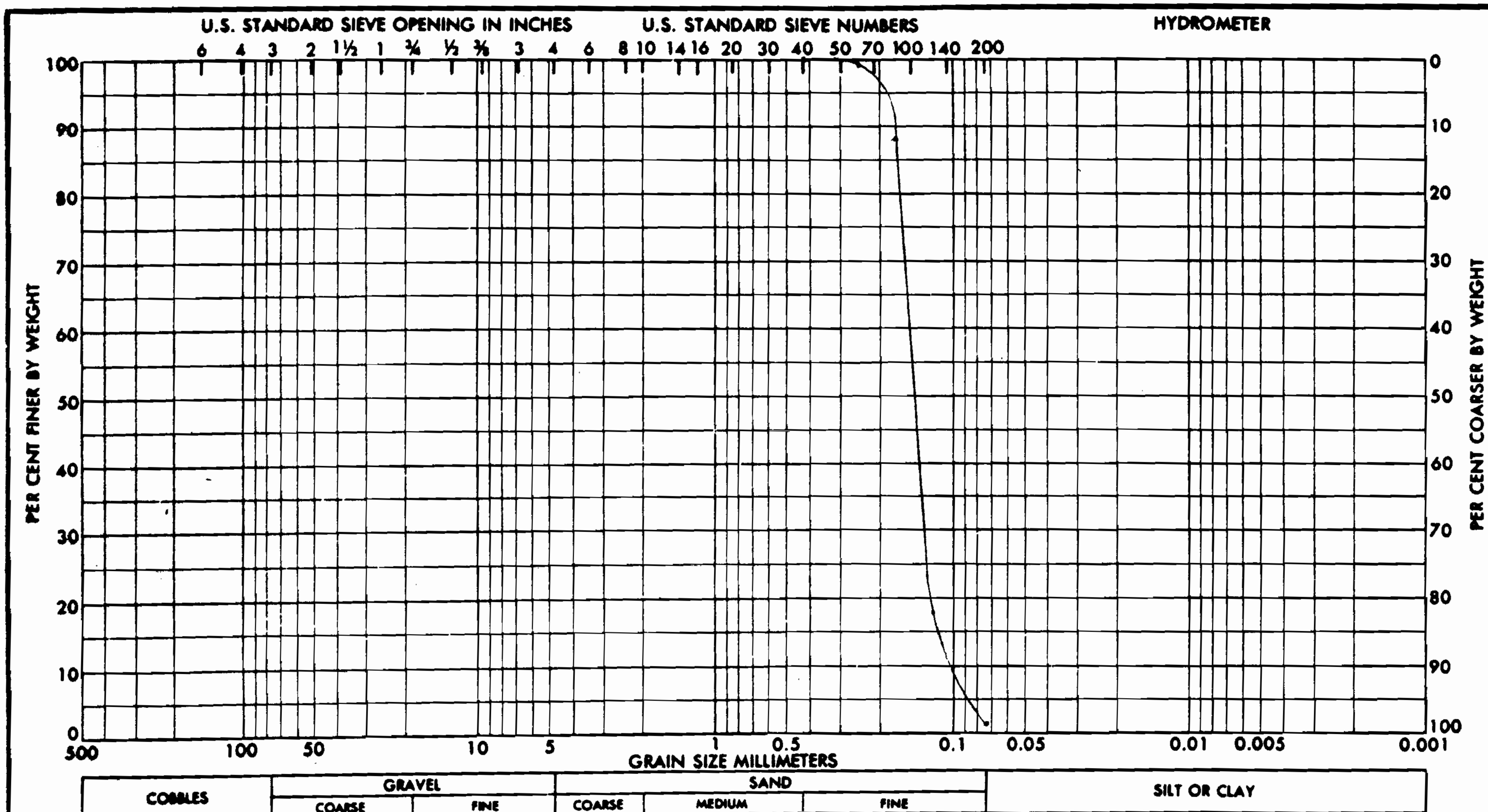
AREA OUTFALL CANALS

BORING NO. 2-MUE | SAMPLE NO. 9-D

DEPTH EL - 23.8 | DATE 22 March 1971

GDA

DIRECT SHEAR TEST REPORT



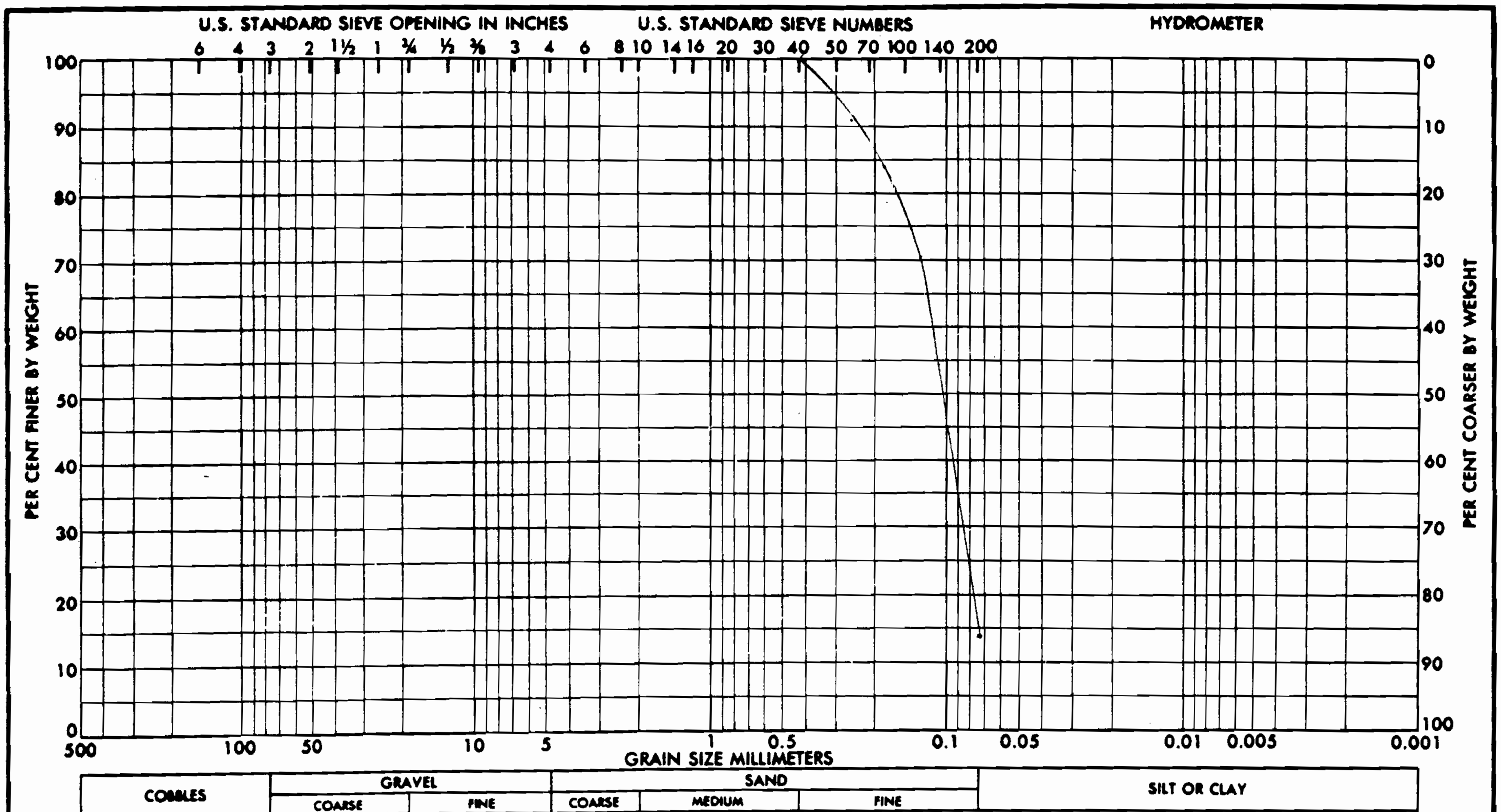
SAMPLE NO.	ELEV OR DEPTH	CLASSIFICATION	NAT W%	LL	PL	PI
10-B		Fine Sand (SP)		D10	Size in	MM
		98.6% Sand.			0.105	

PROJECT	Lk. Pont. La & Vic, Orleans Parish
	Lk Front Lev.
AREA	
BORING NO.	2-MUE
DATE	FEB 12, 1971

GRADATION CURVES

JLH

[redacted]



SAMPLE NO.	ELEV OR DEPTH	CLASSIFICATION	NAT W%	LL	PL	PI
12-D		SM-S 86.0% SAND				

PROJECT LK PONT. LA & VIC ORLEANS PARISH

LK FRONT LEV.

AREA

BORING NO. 2-MUE

DATE FEB 12, 1971

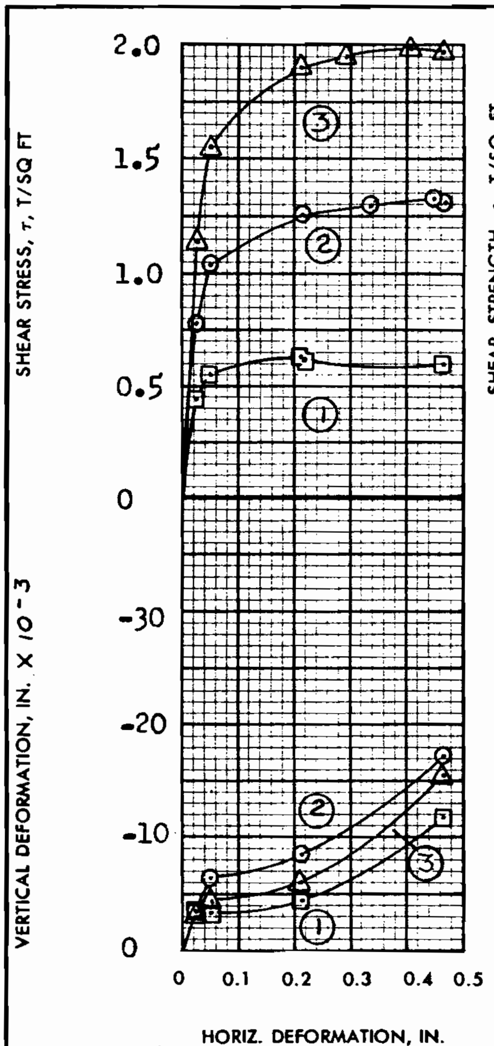
JLH

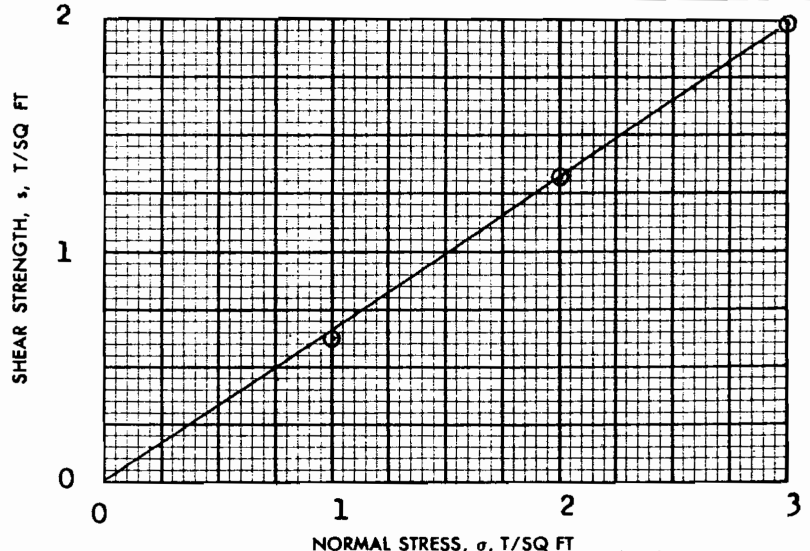
GRADATION CURVES

ENG FORM 1 MAY 63 2087 REPLACES WES FORM NO. 1241, SEP 1962, WHICH IS OBSOLETE.

U.S. GOVERNMENT PRINTING OFFICE : 1963 OF—700-124

[redacted]





sat. γ = 126.2

SHEAR STRENGTH PARAMETERS

φ' = 33°

TAN φ' = 0.660

c' = 0 T/SQ FT

☐ CONTROLLED STRESS

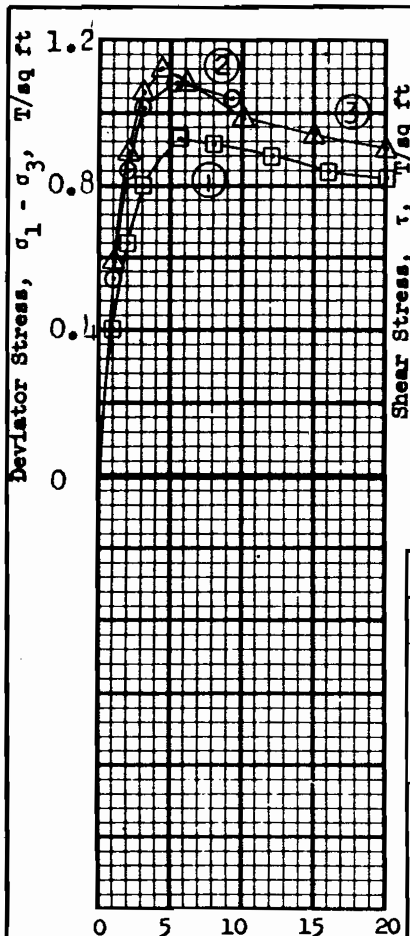
☒ CONTROLLED STRAIN

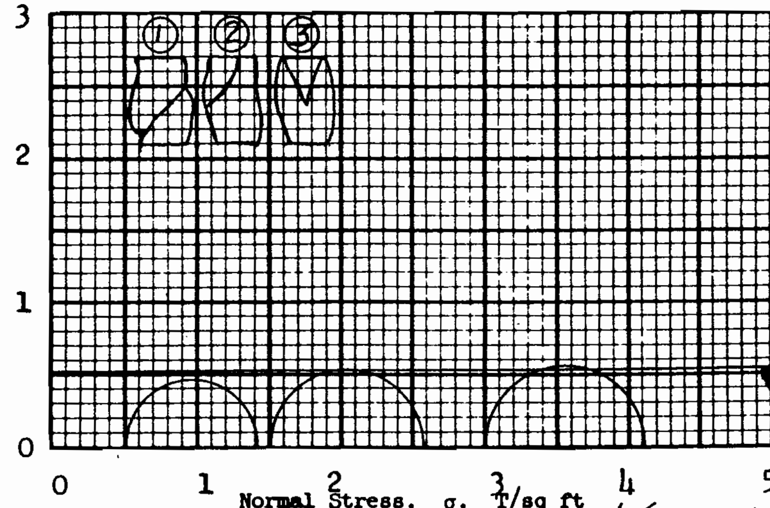
TEST NO.			1	2	3	Avg.
INITIAL	WATER CONTENT	w_o	23.4 %	22.8 %	22.7 %	23.0%
	VOID RATIO	e_o	0.647	0.658	0.631	
	SATURATION	S_o	96.9%	92.9 %	96.4 %	%
	DRY DENSITY, LB/CU FT	γ_d	101.6	100.9	102.6	
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}				
FINAL	WATER CONTENT	w_f	21.3%	21.1%	20.1 %	%
	VOID RATIO	e_f				
	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.63	1.32	1.99	
ACTUAL TIME TO FAILURE, MIN		t_f	1290	2640	2400	
RATE OF STRAIN, IN./MIN			.00017	.00017	.00017	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

TYPE OF SPECIMEN UNDISTURBED		3.00 IN. SQUARE	0.540 IN. THICK
CLASSIFICATION SILTY SAND(SM), gray			
LL -	PL -	PI -	G. 2.68

REMARKS

PROJECT	LK.PONT.LA.,&VIC.(71)ORLEANS PARISH		
	LKFRNT.LEVEE,WEST OF IHNC,GDM # 2,SUPP. # 5,		
AREA	OUT FALL CANALS		
BORING NO.	2-MUE	SAMPLE NO.	13-D
DEPTH EL	- 40.0	DATE	23 March 1971
GDA	DIRECT SHEAR TEST REPORT		





Sat. γ = 110.1

Test No.			1	2	3	Avg.
Initial	Water content	w_o	43.6 %	42.7 %	44.1 %	43.5 %
	Void ratio	e_o	1.26	1.21	1.25	
	Saturation	S_o	93.8 %	95.6 %	95.6 %	%
	Dry density, lb/cu ft	γ_d	74.8	76.6	75.2	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.93	1.08	1.12	
Time to failure, min		t_f	26	24	25	
Rate of strain, percent/min			0.216	0.219	0.169	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.41	1.41	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = *0* °

tan ϕ = *0*

c = *0.52* T/sq ft

Method of saturation ________

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY(CH),gray, scattered pockets of sand

LL 56 | PL 17 | PI 39 | G_s 2.71

Remarks ________

Project LK.PONT.LA.,& VIC.(71) ORLEANS PARISH
LAKEFRONT LEVEE,WEST OF IHNC, GDM # 2,SUPP.
Area # 5,OUTFALL CANALS

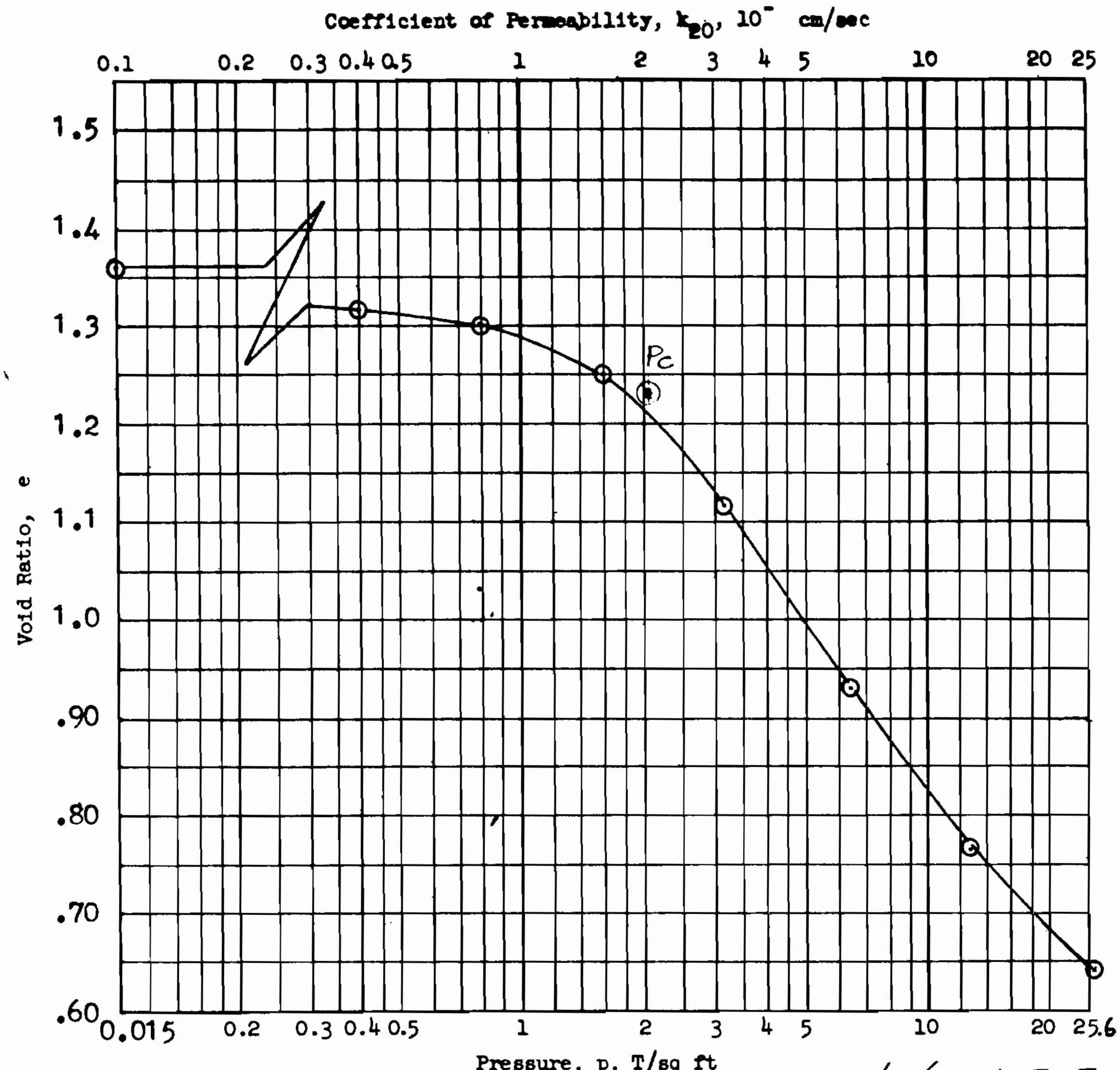
Boring No. 2-MUE | Sample No. 16-A

Depth El - 49.3 | Date 11 March,1971

JMS TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

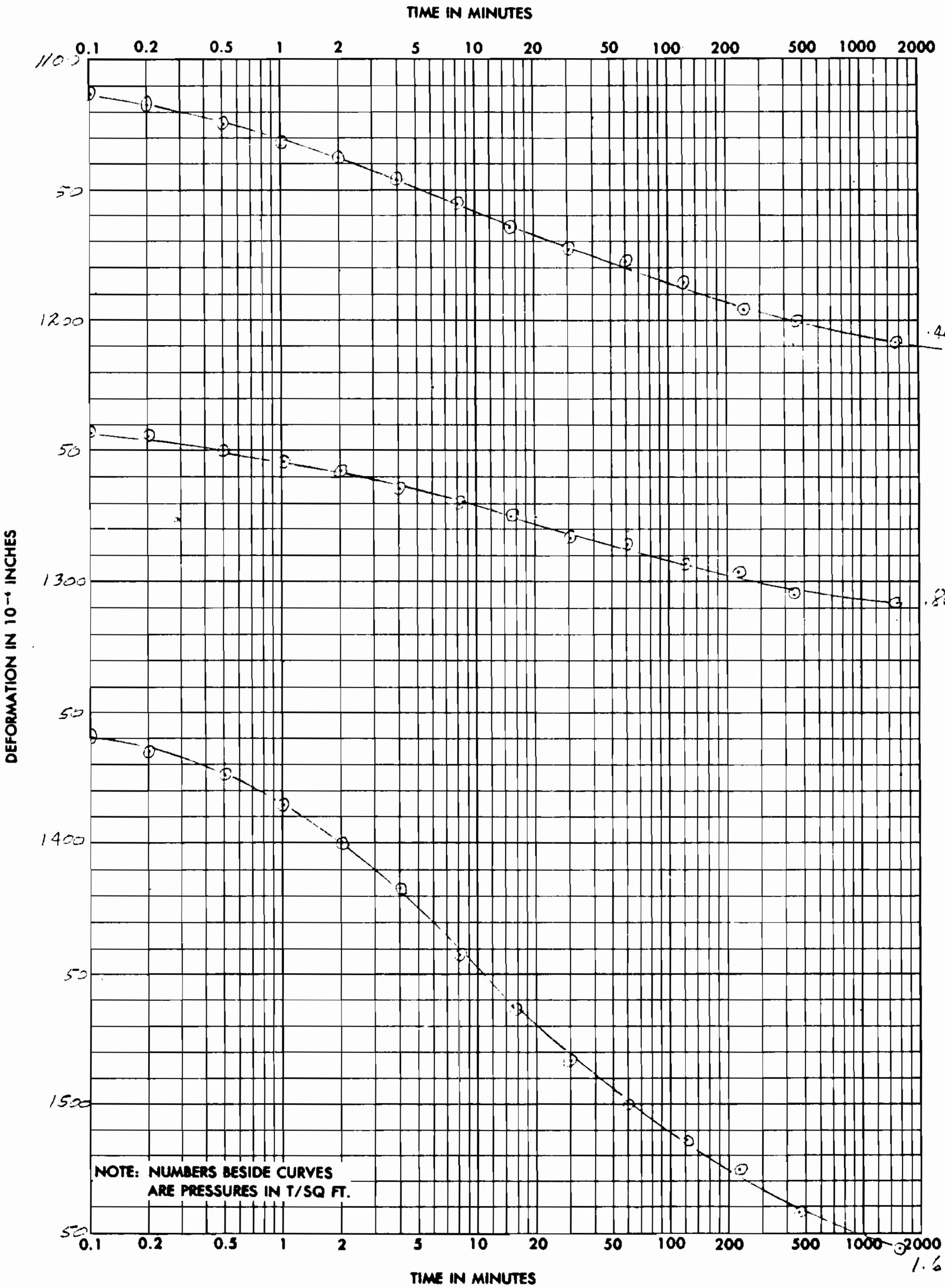
TRANSLUCENT USAEWES SOILS TEST SE.



sat. γ = 107.5

Type of Specimen UNDISTURBED		Before Test	After Test
Diam 4.25 in.	Ht 1.155 in.	Water Content, w_o 48.9 %	w_f %
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o 1.36	e_f
Preconsol. Pressure, p_c 2.05 T/sq ft		Saturation, S_o 97.0 %	S_f %
Compression Index, C_c 0.60		Dry Density, γ_d 71.5 lb/ft^3	
Classification PLASTIC CLAY (CH)*		k_{20} at e_o = × 10^{-} cm/sec	
LL -	G_s 2.71 From Q	Project LK. PONT.,LA.& VIC.-('71) ORLEANS	
PL -	D_{10}	PARISH LAKEFRONT LEVEE,WEST OF IHNC, GDM #2,	
* Remarks grayish-green, contains		SUPP. #5, OUTFALL CANALS	
small shell fragments		Boring No. 2-MUE	Sample No. 16-A
		~~Depth~~ El -49.3	Date 26 March,1971
		JDB CONSOLIDATION TEST REPORT	

ENG FORM 1 MAY 63 2090 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) G 3424



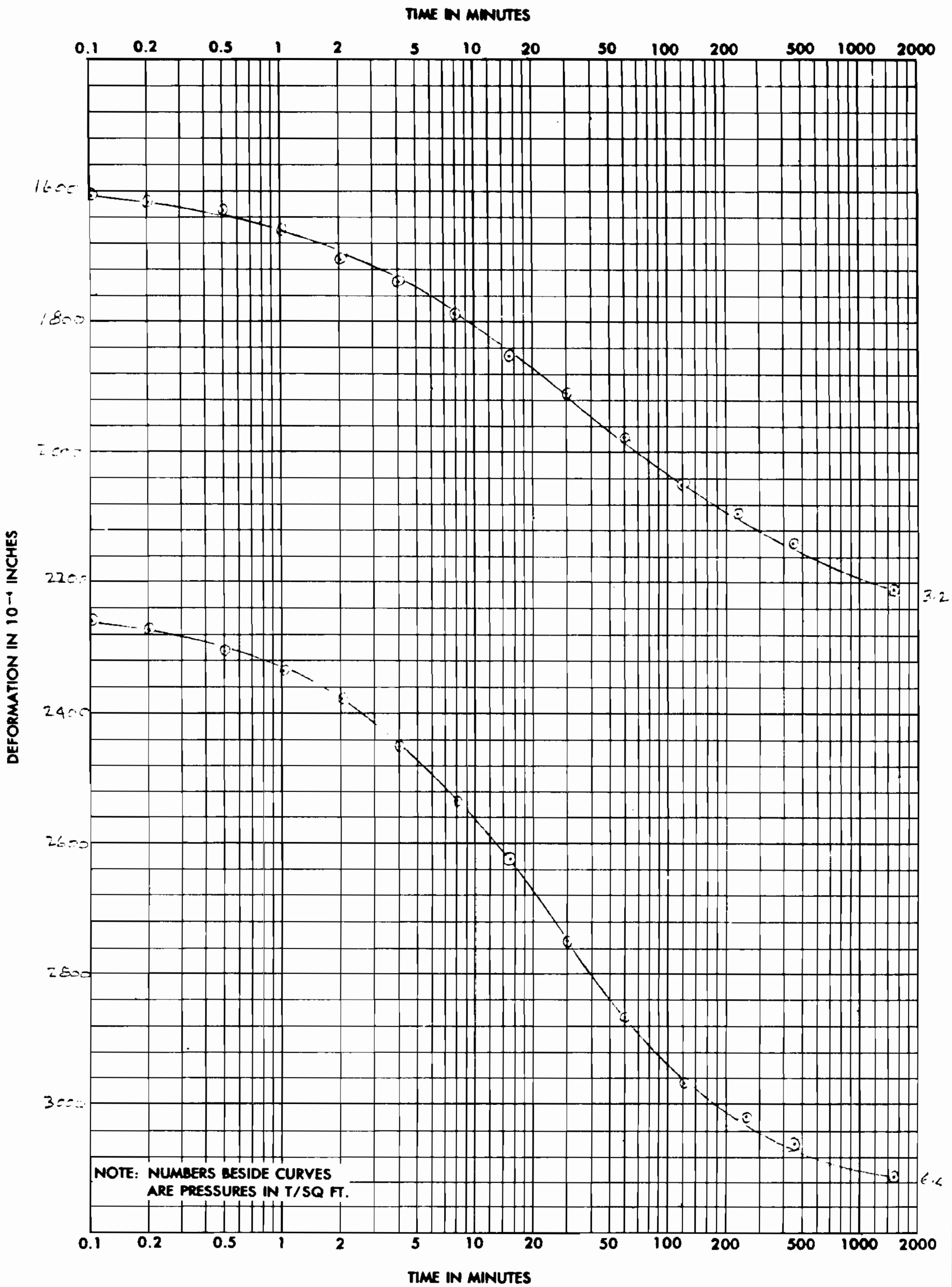
PROJECT LK. PONT., LA.& VIC.('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF

AREA IHNC, GDM #2; SUPP. #5, OUTFALL CANALS

BORING NO. 2-MUE	SAMPLE NO. 16-A	~~DEPTH~~ EL -49.3	DATE 26 March, 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

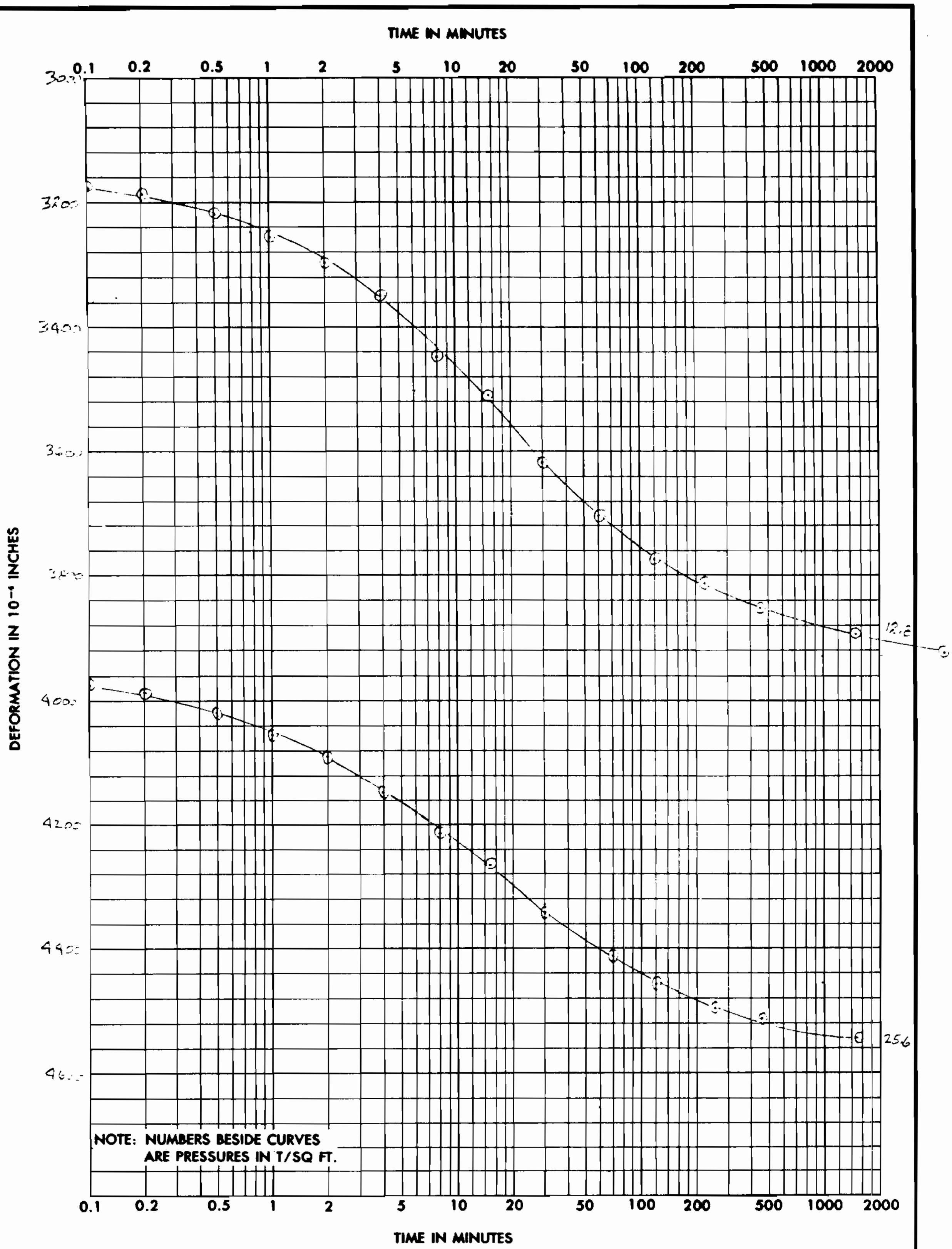
★ GPO : 1964 OF—715-068



PROJECT LK. PONT., LA. & VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF			
AREA IHNC, GDM #2; SUPP. #5, OUTFALL CANALS			
BORING NO. 2-MUE	SAMPLE NO. 16-A	~~DEPTH~~ EL -49.3	DATE 26 March, 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965



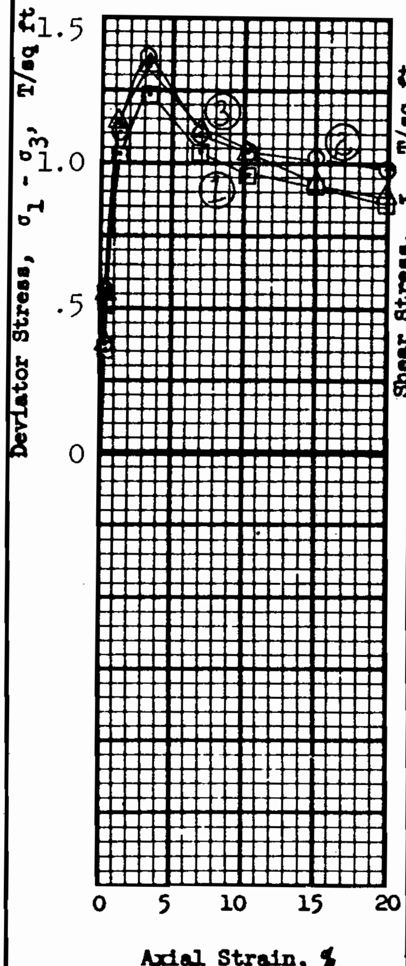
PROJECT LK. PONT.,LA. & VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF

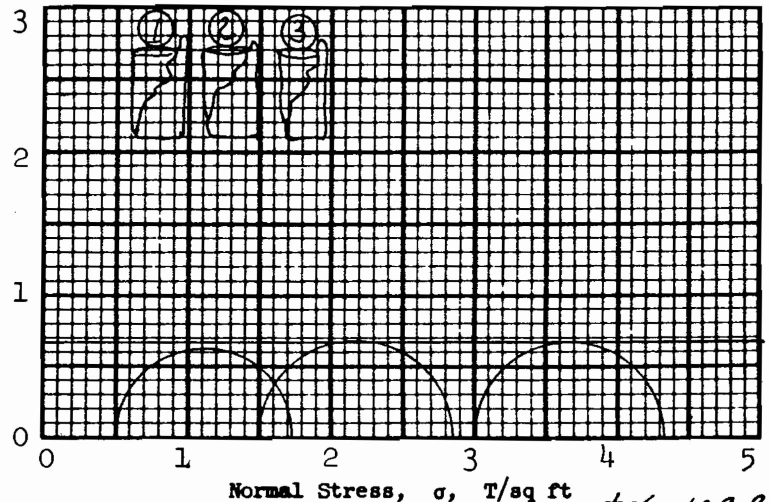
AREA IHNC, GDM #2, SUPP. #5, OUTFALL CANALS

BORING NO. 2-MUE SAMPLE NO. 16-A DEPTH EL -49.3 DATE 26 March, 1971

ENG FORM 1 MAY 63 2088 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—715-965





sat. γ = 109.9

Test No.			1	2	3	Avg.
Initial	Water content	w_o	46.6 %	44.8 %	47.2 %	46.2 %
	Void ratio	e_o	1.31	1.27	1.32	
	Saturation	S_o	97.8 %	97.0 %	98.3 %	%
	Dry density, lb/cu ft	γ_d	74.3	75.5	74.0	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	1.24	1.35	1.34	
Time to failure, min		t_f	18	18	18	
Rate of strain, percent/min			0.179	0.179	0.179	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.40	1.40	1.41	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.67 T/sq ft

Method of saturation ________

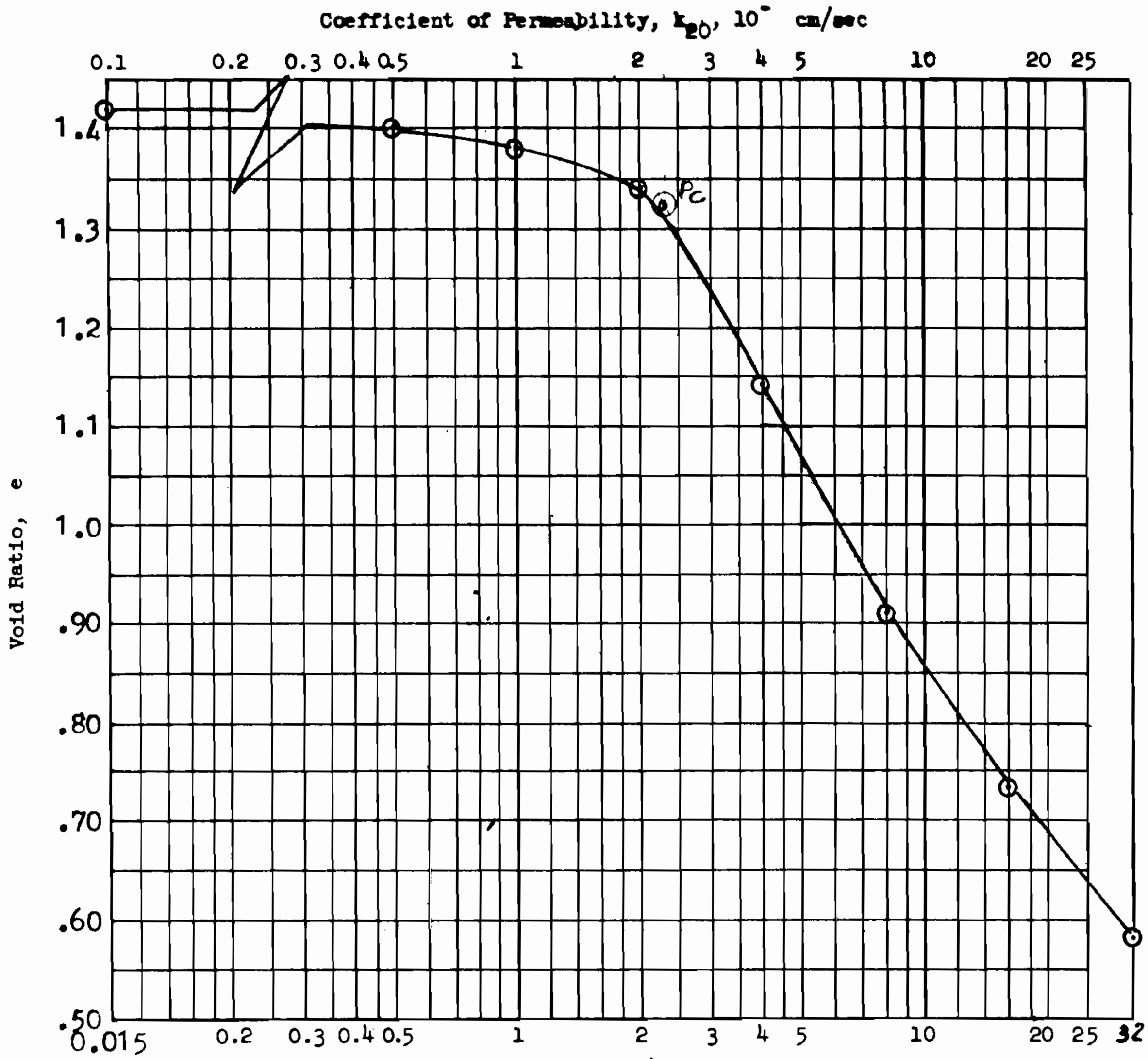
☐ Controlled stress

☒ Controlled strain

Type of test Q	Type of specimen UNDISTURBED			
Classification PLASTIC CLAY(CH),gray, numerous pockets of sand and shell *				
LL 75	PL 17	PI 58		G_s 2.75

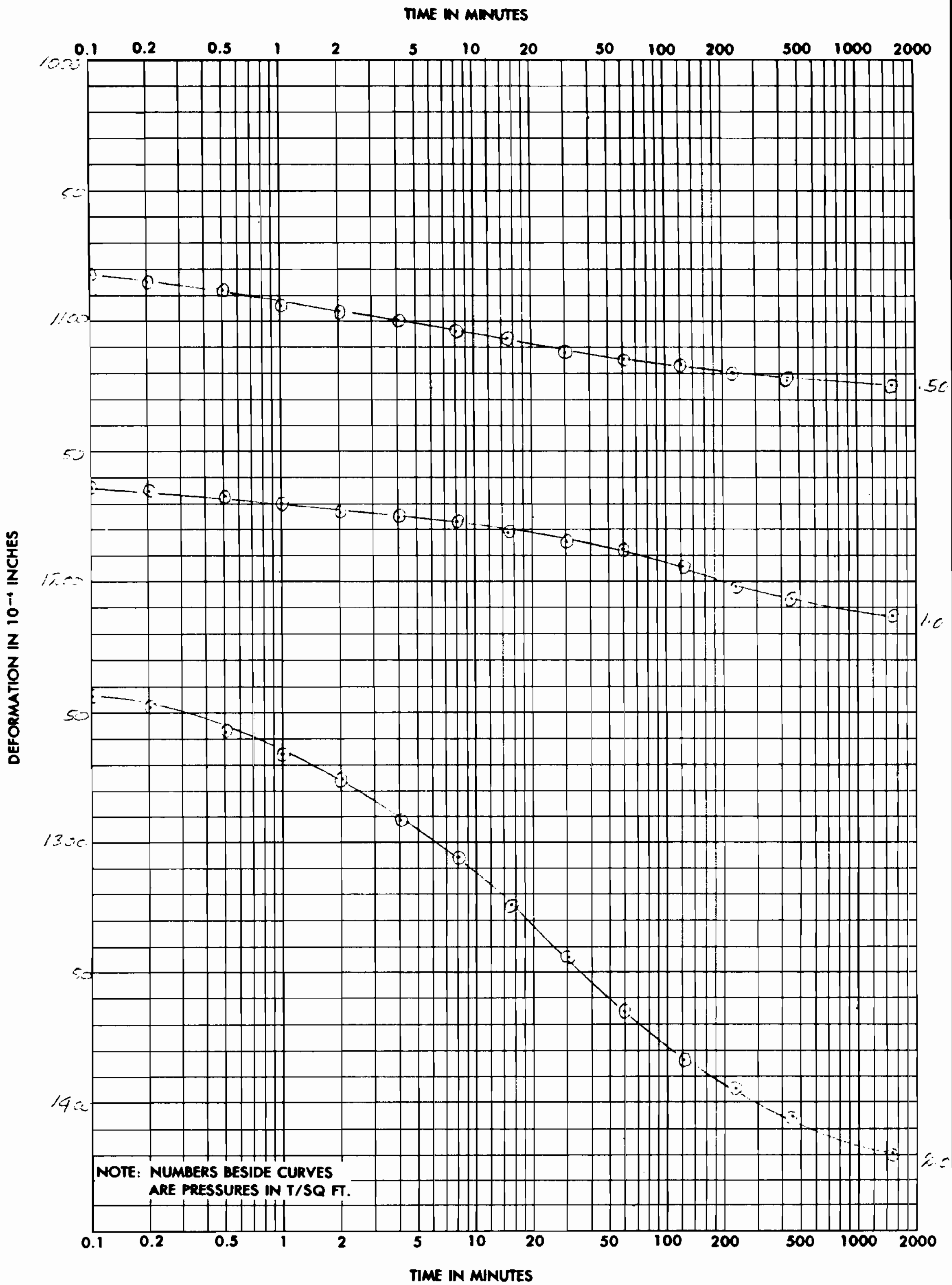
Remarks *fragments

Project LK. PONT.LA.&VIC.(VIC)ORLEANS PARISH	
LAKEFRONT LEVEE, WEST OF IHNC, GDM # 2,SUPP.	
Area #5,OUTFALL CANALS	
Boring No. 2-MUE	Sample No. 19-B
Depth El -62.2	Date 11 March 1971
TES	TRIAXIAL COMPRESSION TEST REPORT



sat. γ = 107.5

Type of Specimen UNDISTURBED		Before Test		After Test	
Diam 4.25 in.	Ht 1.151 in.	Water Content, w_o	51.1 %	w_f	%
Overburden Pressure, p_o T/sq ft		Void Ratio, e_o	1.42	e_f	
Preconsol. Pressure, p_c 2.29 T/sq ft		Saturation, S_o	98.7 %	S_f	%
Compression Index, C_c 0.76		Dry Density, γ_d	70.8 lb/ft^3		
Classification PLASTIC CLAY (CH) *		k_{20} at e_o = × 10^{-} cm/sec			
LL -	G_s 2.75 From Q	Project LK. PONT.,LA.& VIC.('71);ORLEANS PARISH LAKEFRONT LEVEE, WEST OF IHNC; GDM #2; SUPP. #5; OUTFALL CANALS			
PL -	D_{10}				
Remarks * gray		Boring No. 2-MUE		Sample No. 19-B	
		~~Depth~~ El -62.2		Date 29 March,1971	
		JDB **CONSOLIDATION TEST REPORT**			



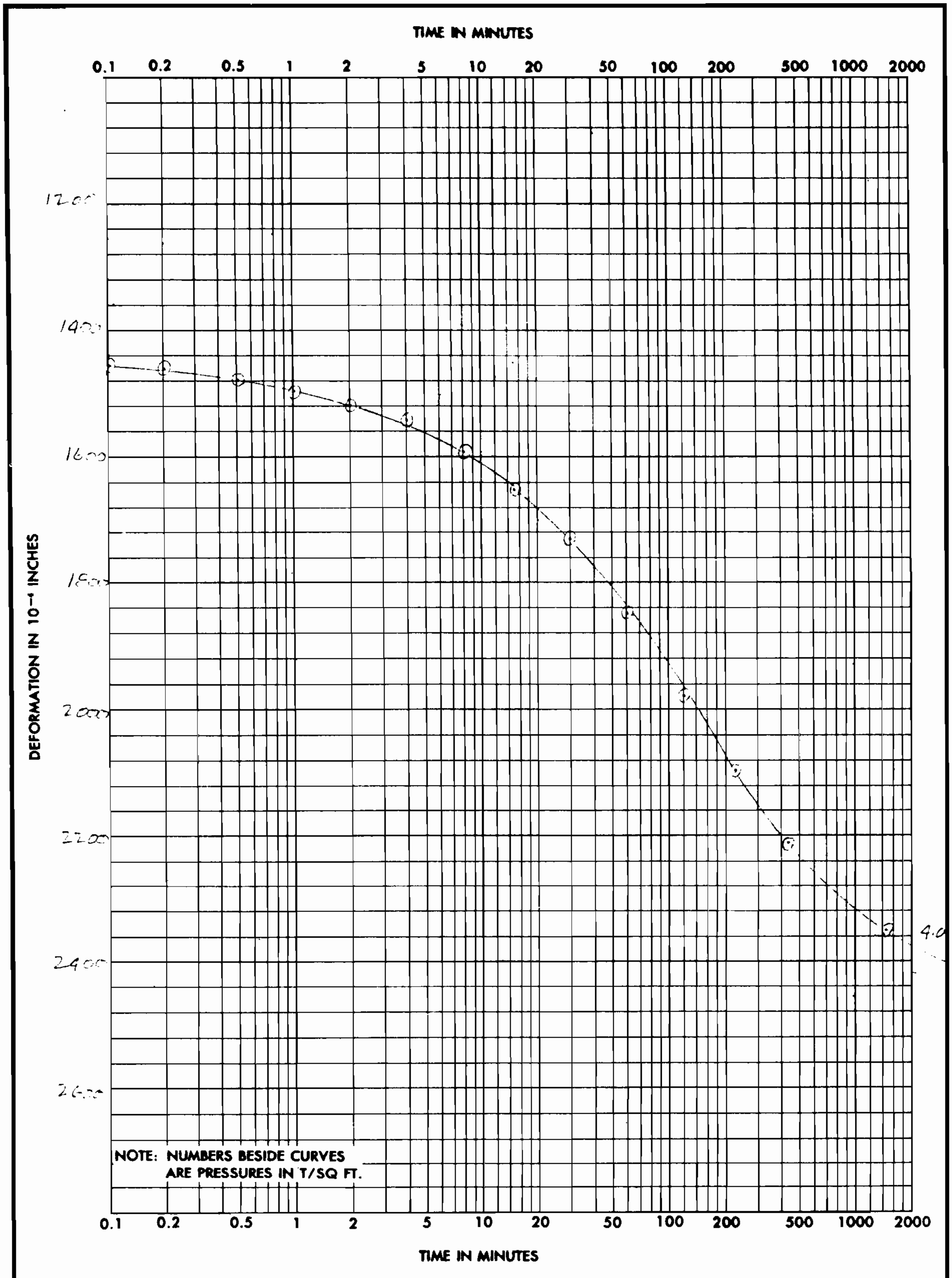
PROJECT	LK. PONT.,LA.& VIC.('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF
AREA	IHNC; GDM #2; SUPP. #5; OUTFALL CANALS

BORING NO. 2-MUE	SAMPLE NO. 19-B	~~DEPTH~~ EL -62.2	DATE 29 March,1971

ENG FORM 2088 1 MAY 63 — PREVIOUS EDITIONS ARE OBSOLETE.

CONSOLIDATION TEST—TIME CURVES (TRANSLUCENT)

★ GPO : 1964 OF—715-965

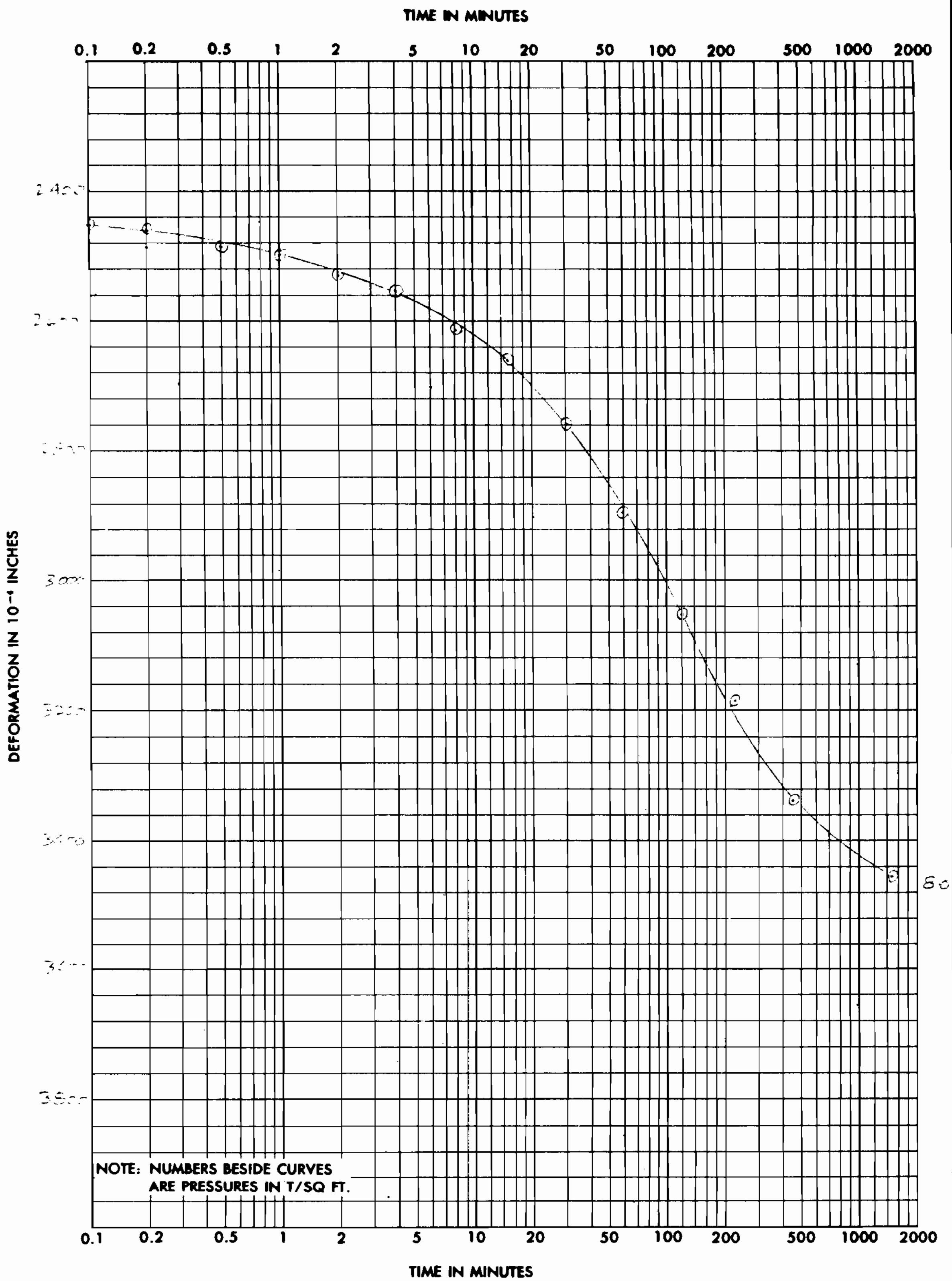


PROJECT	LK. PONT.,LA.& VIC.('71) ; ORLEANS PARISH LAKEFRONT LEVEE, WEST OF
AREA	IHNC; GDM #2; SUPP. #5; OUTFALL CANALS

BORING NO. 2-MUE	SAMPLE NO. 19-B	~~DEPTH~~ EL -62.2	DATE 29 March,1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

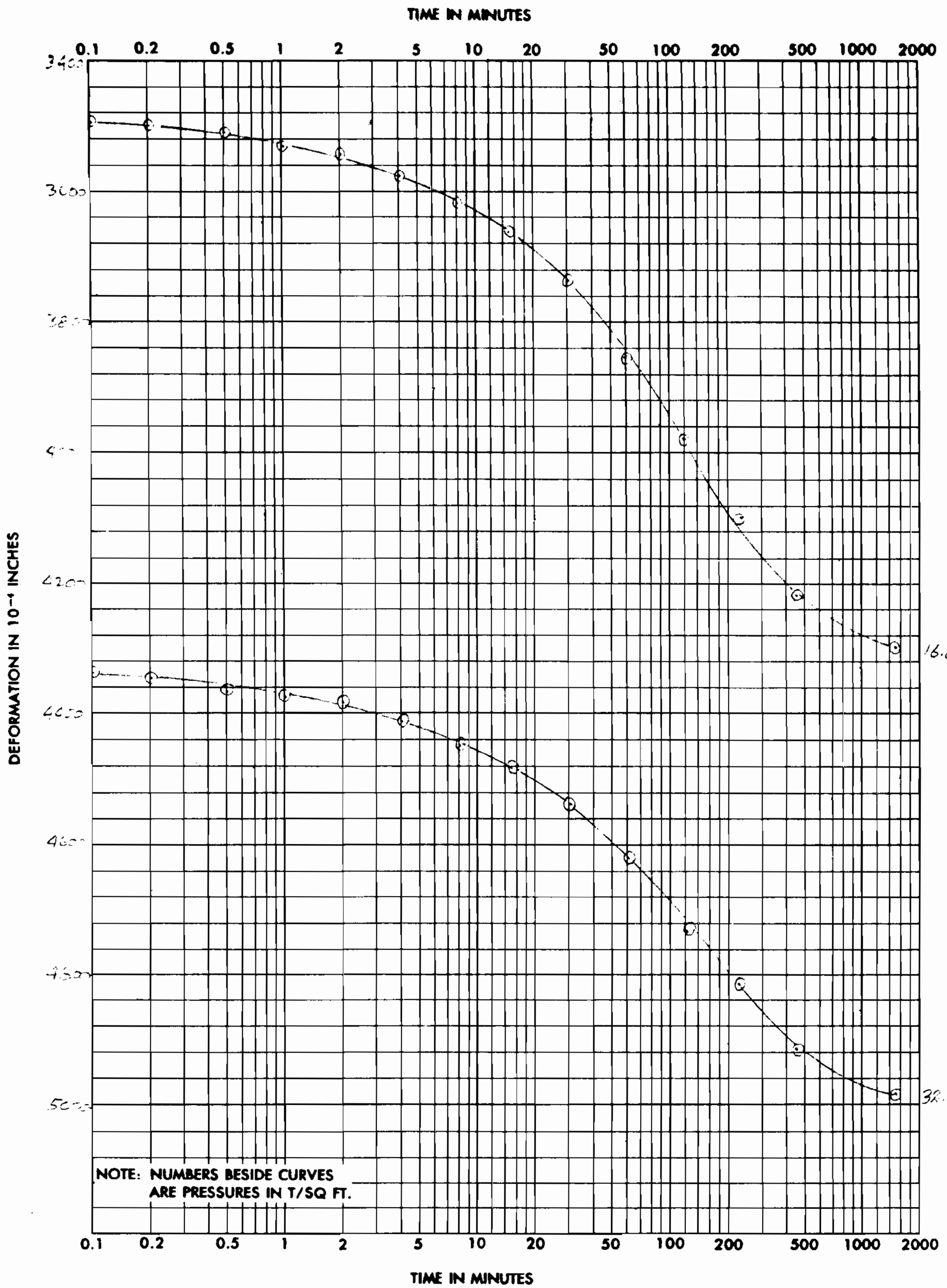
★ GPO : 1964 OF—718-985



PROJECT LK. PONT., LA.& VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF			
AREA IHNC; GDM #2; SUPP. #5; OUTFALL CANALS			
BORING NO. 2-MUE	SAMPLE NO. 19-B	~~DEPTH~~ EL -62.2	DATE 29 March, 1971

ENG FORM 2088 1 MAY 63 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

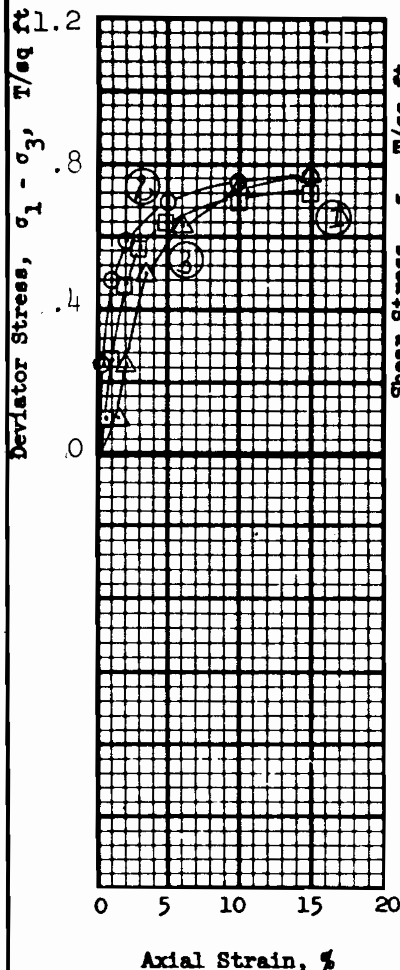
★ GPO : 1964 OF—715-965

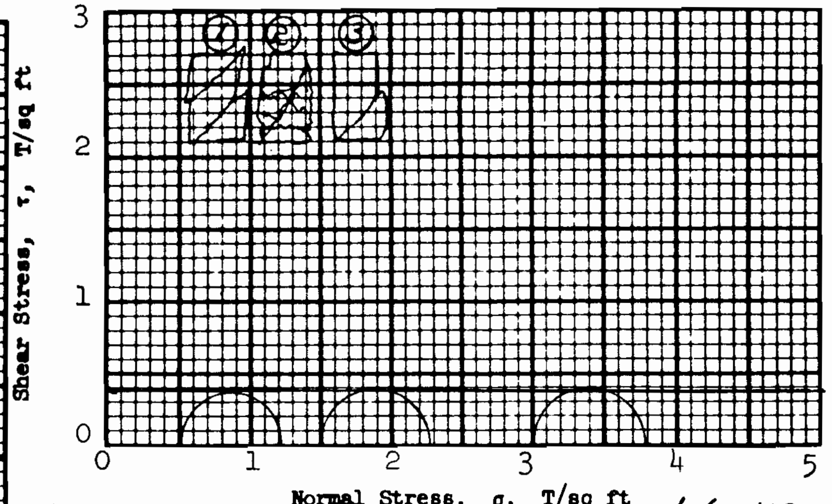


PROJECT LK. PONT.,LA.& VIC. ('71); ORLEANS PARISH LAKEFRONT LEVEE, WEST OF			
AREA IHNC; GDM #2; SUPP. #5; OUTFALL CANALS			
BORING NO. 2-MUE	SAMPLE NO. 19-B	~~DEPTH~~ EL -62.2	DATE 29 March,1971

ENG FORM 1 MAY 63 2088 PREVIOUS EDITIONS ARE OBSOLETE. **CONSOLIDATION TEST—TIME CURVES** (TRANSLUCENT)

★ GPO : 1964 OF—713-965





sat. γ = 113.3

Test No.			1	2	3	Avg.
Initial	Water content	w_o	36.4 %	39.0 %	37.4 %	37.6 %
	Void ratio	e_o	0.939	0.994	0.960	
	Saturation	S_o	100+ %	100+ %	100+ %	%
	Dry density, lb/cu ft	γ_d	83.4	81.1	82.5	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.72	0.77	0.78	
Time to failure, min		t_f	24	61	35	
Rate of strain, percent/min			0.612	0.247	0.428	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.40	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.38 T/sq ft

Method of saturation ________

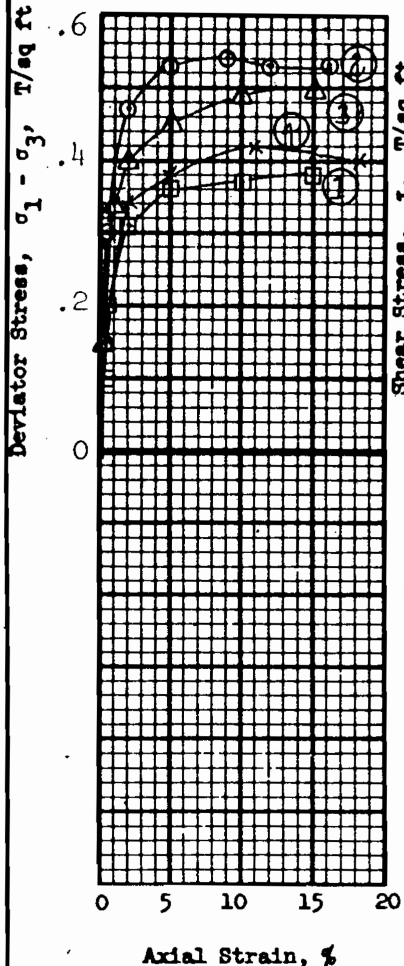
☐ Controlled stress

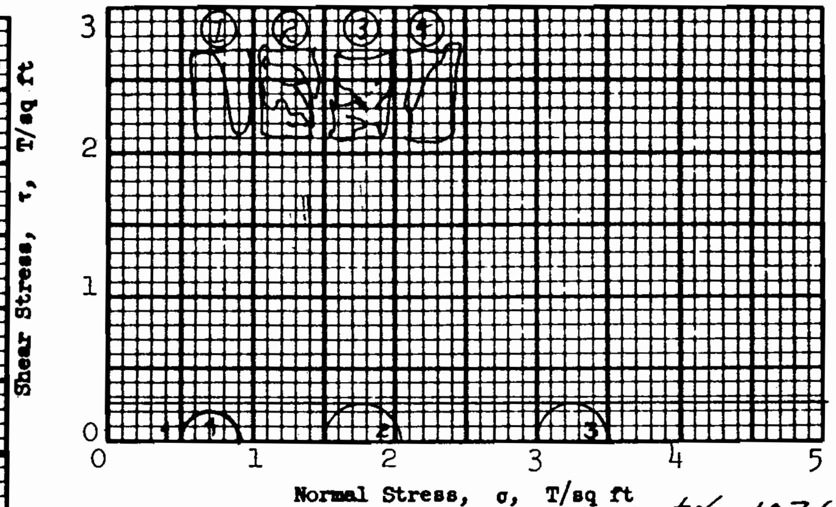
☒ Controlled strain

Type of test Q	Type of specimen UNDISTURBED			
Classification PLASTIC CLAY(CH), gray, contains 3/4" brick fragments *				
LL 70	PL 22	PI 48		G_s 2.59

Remarks *in unused portion of sample

Project LK. PONT., LA. & VIC. -HURR. PROT.-ORLEANS PAR. LKFRNT. LEV., WEST OF IHNC-GDM#2, SUPP. #5,	
Area OUTFALL CANALS (ALONG 17th ST. CANAL) 1971	
Boring No. 1-MUW	Sample No. 2-B
Depth El 0.4	Date 22 March 1971
FAm TRIAXIAL COMPRESSION TEST REPORT	





sat. γ = 107.6

Test No.			1	2	3	4
Initial	Water content	w_o	48.9 %	45.2 %	46.6 %	52.4 %
	Void ratio	e_o	1.35	1.26	1.31	1.49
	Saturation	S_o	97.8 %	96.9 %	96.0 %	95.0 %
	Dry density, lb/cu ft	γ_d	71.7	74.7	73.1	67.6
Before Shear	Water content	w_c	%	%	%	
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	0.5
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.38	0.54	0.50	0.42
Time to failure, min		t_f	90	15	27	47
Rate of strain, percent/min			0.167	0.593	0.552	0.235
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.40	1.40	1.40	1.41
Initial height, in.		H_o	3.00	3.00	3.00	3.00

A
48

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.24 T/sq ft

Method of saturation ______

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY(CH),gray, contains rootlets and organic matter*

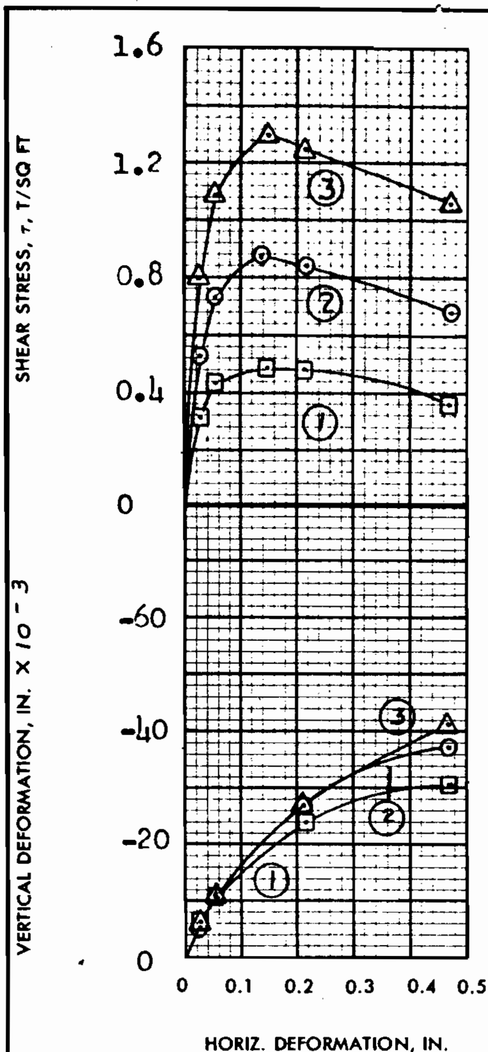
LL 86 | PL 21 | PI 65 | | G_s 2.70

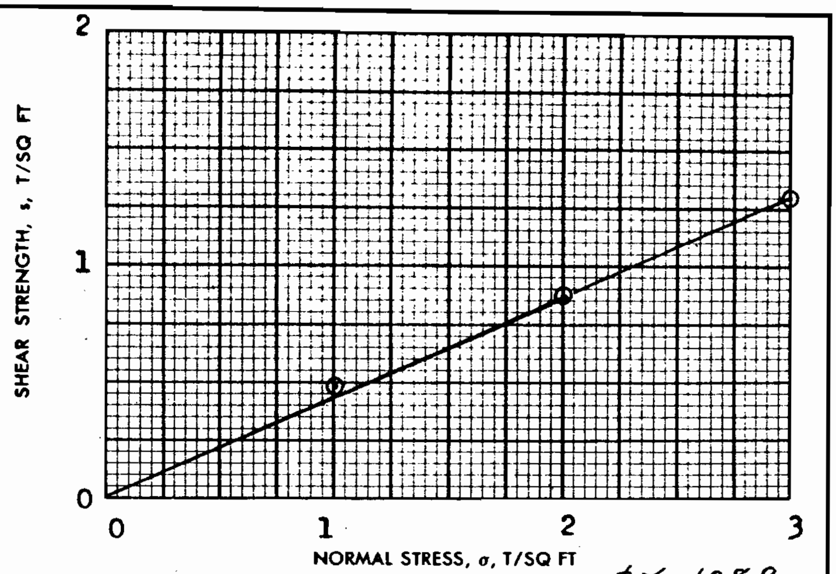
Remarks *slickensided
Strength of test specimen
#1 too low to plot

Project LK. PONT.,LA.&VIC.-HURR. PROT.-ORLEANS
PAR.LKFRNT.LEV.,WEST OF IHNC-GDM#2,SUPP.#5;
Area OUTFALL CANALS(ALONG 17th ST.CANAL)1971

Boring No. 1-MUW | Sample No. 3-C
Depth El -4.0 | Date 23 March 1971

OHR TRIAXIAL COMPRESSION TEST REPORT





sat. γ = 108.9

TEST NO.			1	2	3	Avg.
INITIAL	WATER CONTENT	w_o	48.4 %	48.7%	48.5%	48.5%
	VOID RATIO	e_o	1.34	1.27	1.23	
	SATURATION	S_o	96.4 %	100+ %	100+ %	%
	DRY DENSITY, LB/CU FT	γ_d	71.1	73.3	74.6	
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}	1	2	1	
FINAL	WATER CONTENT	w_f	45.4 %	39.0%	33.4%	%
	VOID RATIO	e_f				
	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.49	0.87	1.30	
ACTUAL TIME TO FAILURE, MIN		t_f	900	840	900	
RATE OF STRAIN, IN./MIN			.00017	.00017	.00017	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				

SHEAR STRENGTH PARAMETERS

ϕ' = 24°

TAN ϕ' = 0.435

c' = 0 T/SQ FT

☐ CONTROLLED STRESS

☒ CONTROLLED STRAIN

TYPE OF SPECIMEN UNDISTURBED		3.00 IN. SQUARE	0.540 IN. THICK
CLASSIFICATION PLASTIC CLAY(CH),gray, contains rootlets, badly slickensided			
LL 82	PL 28	PI 54	G_s 2.67

REMARKS

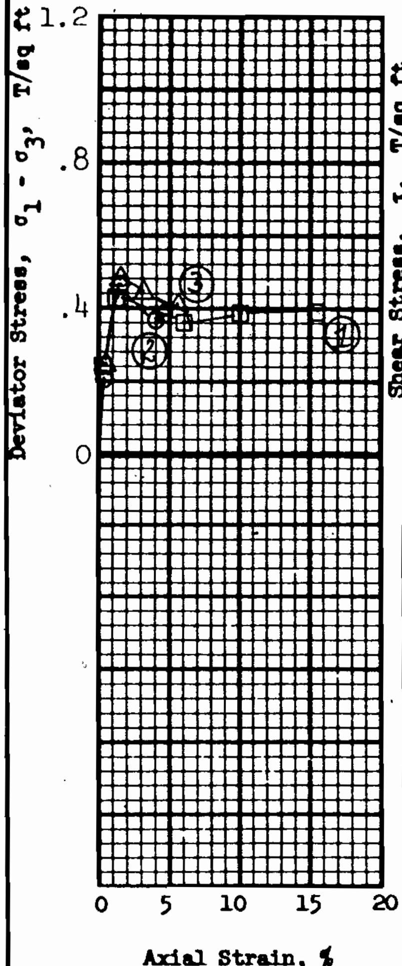
PROJECT LK.PONT.LA.,&VIC.-HURR.PROT.-ORLEANS PARISH LKFRNT.LEV.,WEST OF IHNC-GDM # 2,SUPP.

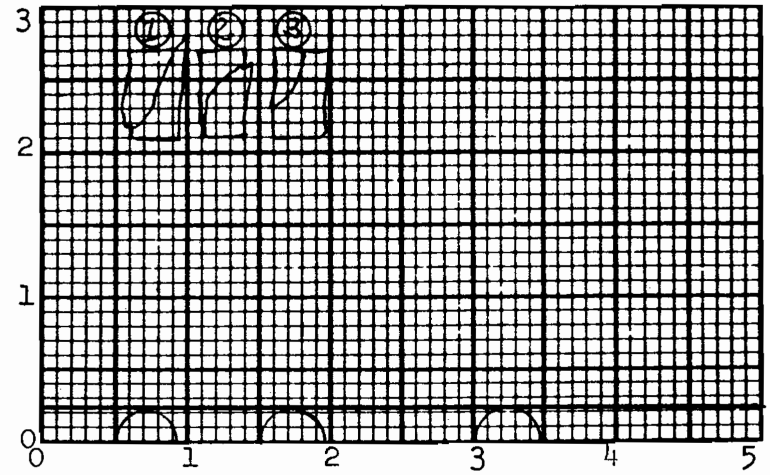
AREA # 5,OUTFALL CANALS(ALONG 17thST.CANAL)1971

BORING NO. 1-MUW — SAMPLE NO. 3-D

~~DEPTH~~ EL - 4.8 — DATE 25 March 1971

GDA — DIRECT SHEAR TEST REPORT





sat.γ = 95.3

Test No.			1	2	3	Avg.
Initial	Water content	w_o	80.4 %	84.7 %	78.9 %	81.3 %
	Void ratio	e_o	2.20	2.31	2.15	
	Saturation	S_o	98.7 %	99.0 %	99.1 %	%
	Dry density, lb/cu ft	γ_d	52.6	50.9	53.5	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	0.43	0.46	0.48	
Time to failure, min		t_f	7	37	32	
Rate of strain, percent/min			0.173	0.379	0.047	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.40	1.40	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.23 T/sq ft

Method of saturation ________

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY(CH),gray, contains organic matter

LL 119 | PL 30 | PI 89 | | G_s 2.70

Remarks ________

Project LK.PONT.LA.&VIC.-HURR. PROT.-ORLEANS PAR.LKFRNT. LEV.,WEST OF IHNC-GDM #2,SUPP.#5,

Area OUTFALL CANALS(ALONG 17th ST.CANAL) 1971

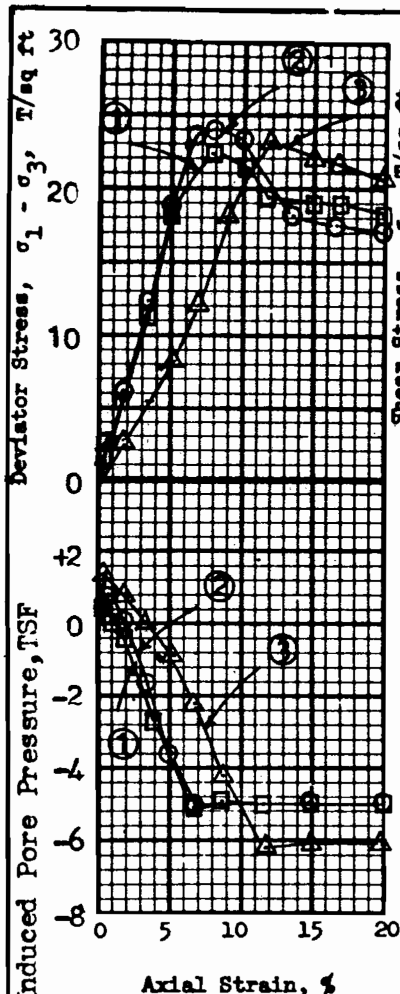
Boring No. 1-MUW | Sample No. 5-D

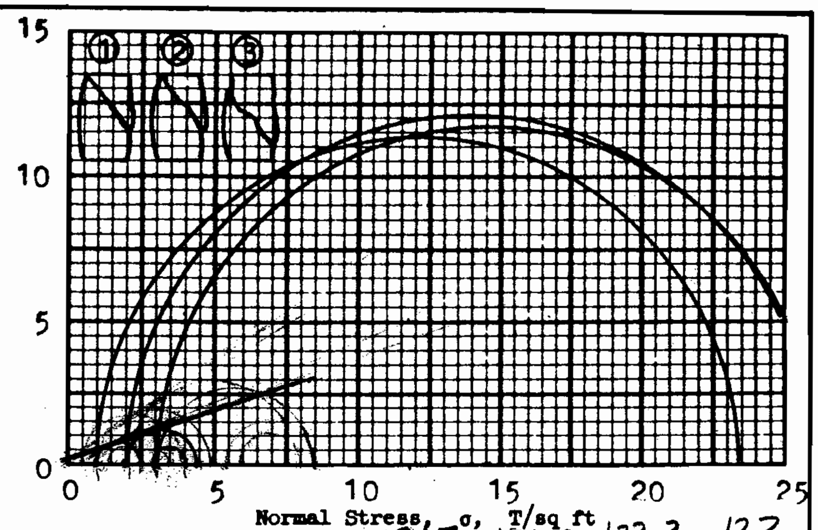
Depth El -13.0 | Date 23 March 1971

JMS TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 *(EM 1110-2-1902)* PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT





121.7 121.7 122.3 122

Test No.			1	2	3	
Initial	Water content	w_o	27.5 %	28.3 %	27.4 %	27.7 %
	Void ratio	e_o	0.770	0.770	0.750	
	Saturation	S_o	95.7 %	98.5 %	97.9 %	%
	Dry density, lb/cu ft	γ_d	94.5	94.5	95.6	
Before Shear	Water content	w_c	27.9 %	27.3 %	26.9 %	%
	Void ratio	e_c	0.737	0.746	0.692	
	Saturation	S_c	100+ %	98.1 %	100+ %	%
	Final back pressure, PSI	u_o	60	60	60	
	Dry Density Lbs/cu.ft.	γ_d	96.3	95.8	98.9	
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	1.0	2.0	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	22.31	24.04	23.20	
Time to failure, min		t_f	84	84	126	
Rate of strain, percent/min			0.093	0.093	0.094	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.40	1.40	1.41	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

φ = 21 °

tan φ = .384

c = .1 T/sq ft

Method of saturation BP

☐ Controlled stress

☒ Controlled strain

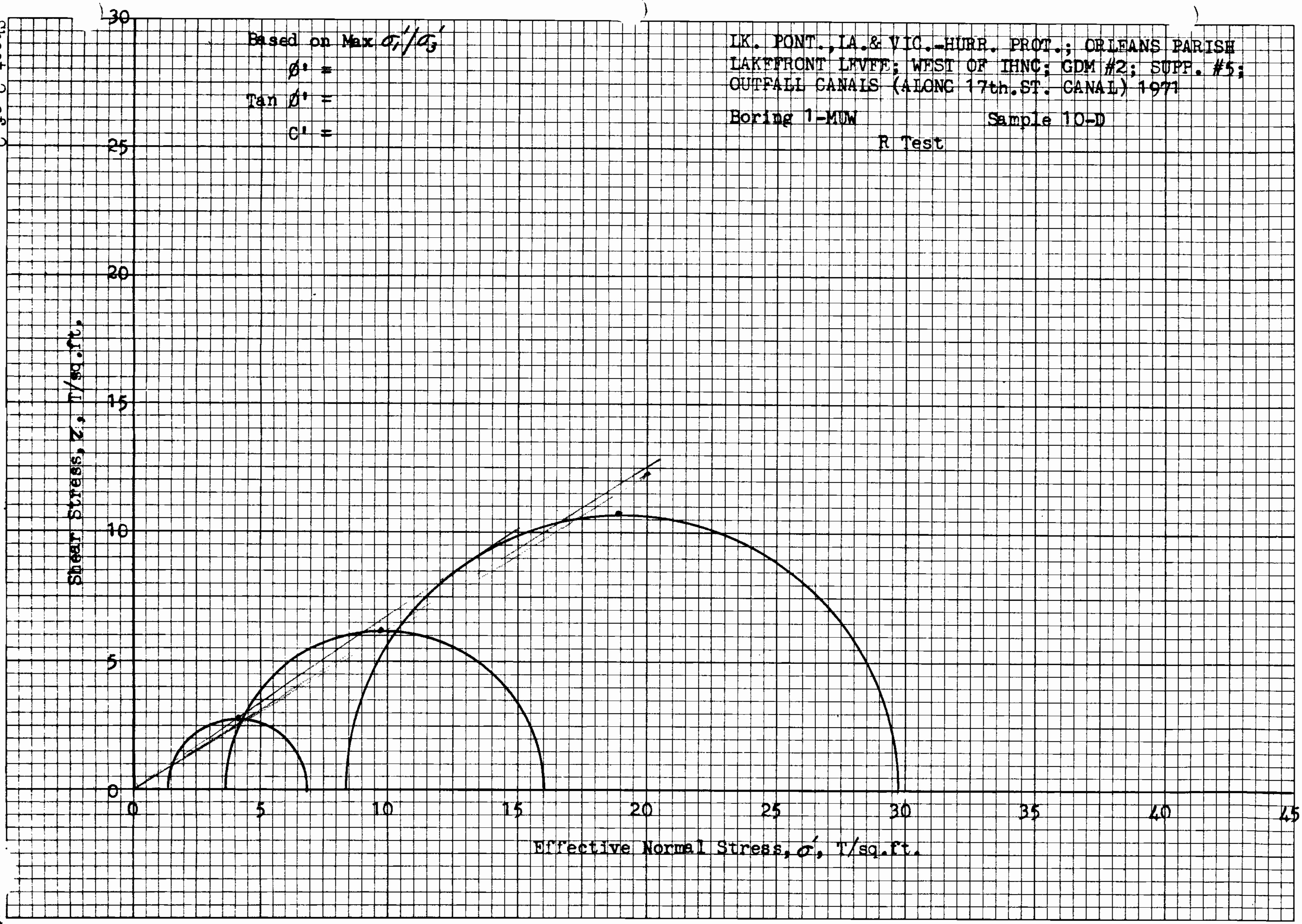
Type of test R	Type of specimen UNDISTURBED		
Classification SILTY SAND (SM), gray, contains a few pebbles			
LL –	PL –	PI –	G_s 2.68

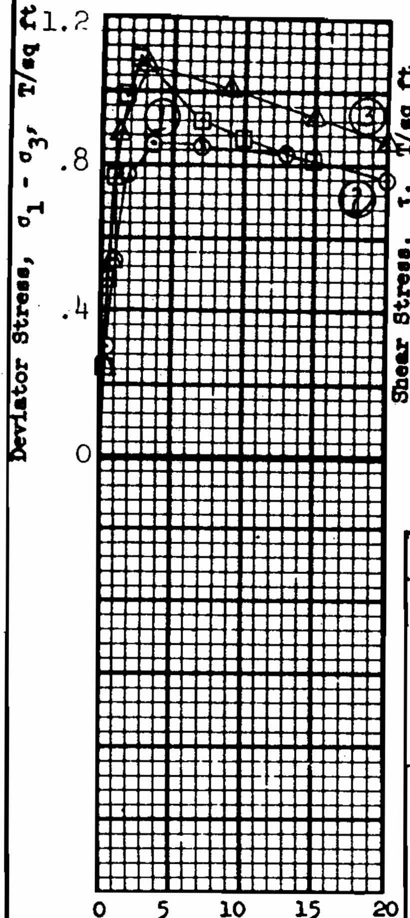
Remarks See attached plot for effective values

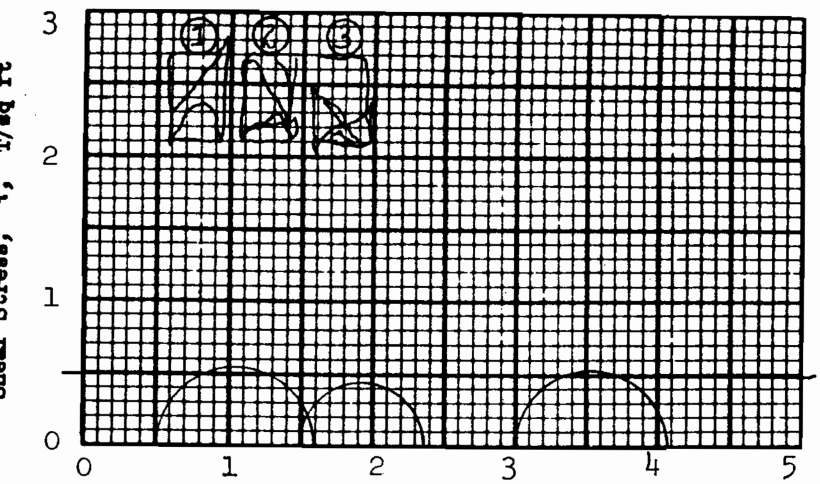
Project LK.PONT.,LA.& VIC.-HURR. PROT.ORLEANS PARISH LAKEFRONT LEVEE;WEST OF IHNC;GDM#2; SUPP.#5;OUTFALL CANALS(ALONG 17th.ST CANAL)'71

Boring No. 1-MUW	Sample No. 10-D
~~Depth~~ El -33.0	Date 31 March,1971
JAL	TRIAXIAL COMPRESSION TEST REPORT

Sheet 1 of 2


Based on Max σ_1'/σ_3'
ϕ' =
Tan ϕ' =
C' =
LK. PONT., LA.& VIC.-HURR. PROT.; ORLEANS PARISH
LAKEFRONT LEVEE; WEST OF IHNC; GDM #2; SUPP. #5;
OUTFALL CANALS (ALONG 17th. ST. CANAL) 1971
Boring 1-MUW
Sample 10-D
R Test
Shear Stress, τ, T/sq.ft.
Effective Normal Stress, σ', T/sq.ft.
0
5
10
15
20
25
30
35
40
45





Sat. γ = 106.2

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.50 T/sq ft

Method of saturation ________

[ ] Controlled stress

[x] Controlled strain

			1	2	3	Avg.
Test No.			1	2	3	Avg.
Initial	Water content	w_o	52.1 %	52.1 %	51.5 %	51.9 %
	Void ratio	e_o	1.40	1.42	1.39	
	Saturation	S_o	99.7 %	98.3 %	99.3 %	%
	Dry density, lb/cu ft	γ_d	69.8	69.1	70.1	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	1.09	0.86	1.07	
Time to failure, min		t_f	43	28	13	
Rate of strain, percent/min			0.652	0.132	0.235	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.41	1.41	1.41	
Initial height, in.		H_o	3.00	3.00	3.00	

Type of test Q | **Type of specimen** UNDISTURBED

Classification PLASTIC CLAY(CH), gray, contains shell fragments

LL 73 | **PL** 18 | **PI** 55 | | **G_s** 2.68

Remarks ________

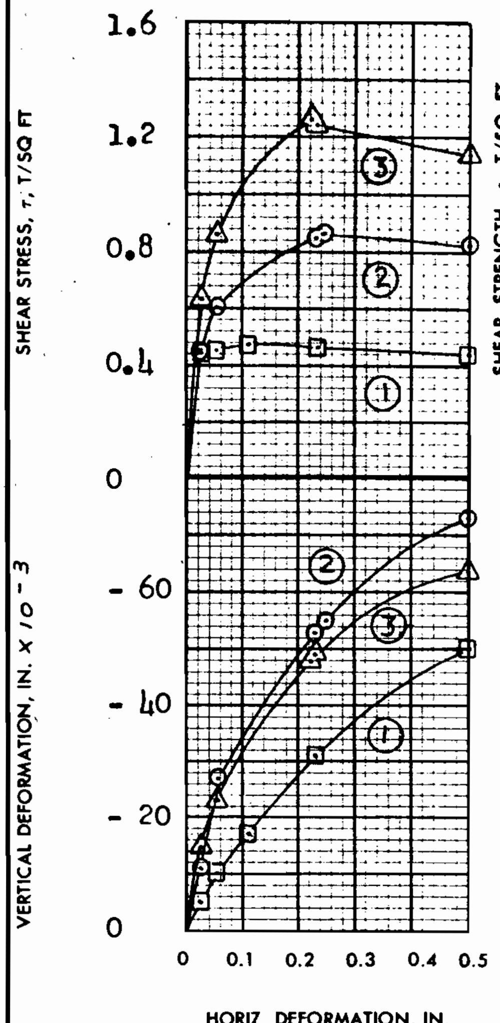
Project LK. PONT., LA.&VIC.-HURR. PROT.-ORLEANS PARISH LKFRNT. LEV., WEST OF IHNC-GDM#2, SUPP.#5

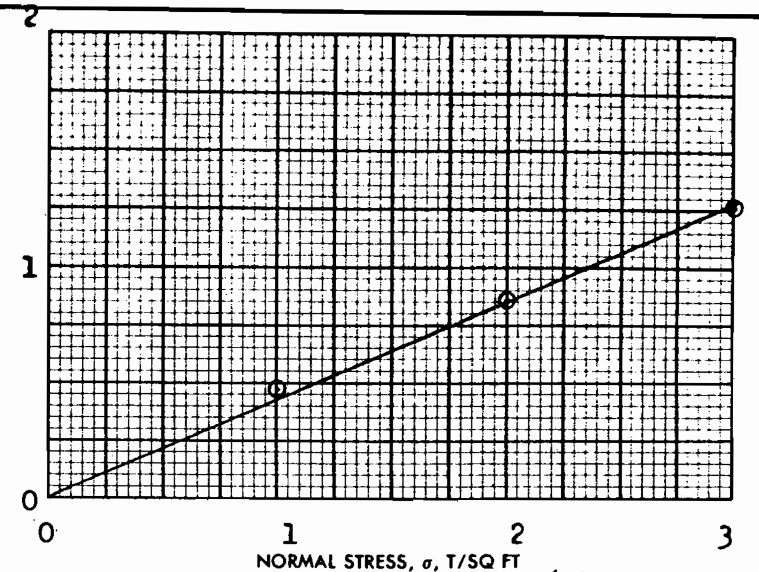
Area OUTFALL CANALS(SLONG 17th ST.CANAL)1971

Boring No. 1-MUW | **Sample No.** 16-C

~~Depth~~ El -56.2 | **Date** 23 March 1971

FAM **TRIAXIAL COMPRESSION TEST REPORT**





Sat.γ = 106

TEST NO.			1	2	3	Avg.
INITIAL	WATER CONTENT	w_o	49.8 %	50.9 %	50.9 %	50.5 %
	VOID RATIO	e_o	1.43	1.43	1.44	
	SATURATION	S_o	94.0 %	96.1 %	95.4 %	%
	DRY DENSITY, LB/CU FT	γ_d	69.3	69.4	69.0	
VOID RATIO AFTER CONSOLIDATION		e_c				
TIME FOR 50 PERCENT CONSOLIDATION, MIN		t_{50}	< 1	2	10	
FINAL	WATER CONTENT	w_f	53.7 %	45.7 %	40.5 %	%
	VOID RATIO	e_f				
	SATURATION	S_f	%	%	%	%
NORMAL STRESS, T/SQ FT		σ	1.0	2.0	3.0	
MAXIMUM SHEAR STRESS, T/SQ FT		τ_{max}	0.47	0.86	1.26	
ACTUAL TIME TO FAILURE, MIN		t_f	660	1410	1260	
RATE OF STRAIN, IN./MIN			.00018	.00018	.00018	
ULTIMATE SHEAR STRESS, T/SQ FT		τ_{ult}				[redacted]

SHEAR STRENGTH PARAMETERS

ϕ' = 23°

TAN ϕ' = 0.430

c' = 0 T/SQ FT

☐ CONTROLLED STRESS

☒ CONTROLLED STRAIN

TYPE OF SPECIMEN UNDISTURBED | 3.00 IN. SQUARE | 0.550 IN. THI[redacted]

CLASSIFICATION PLASTIC CLAY(CH),dark gray, fissured

LL 81	PL 19	PI 62		G_s 2.70

REMARKS

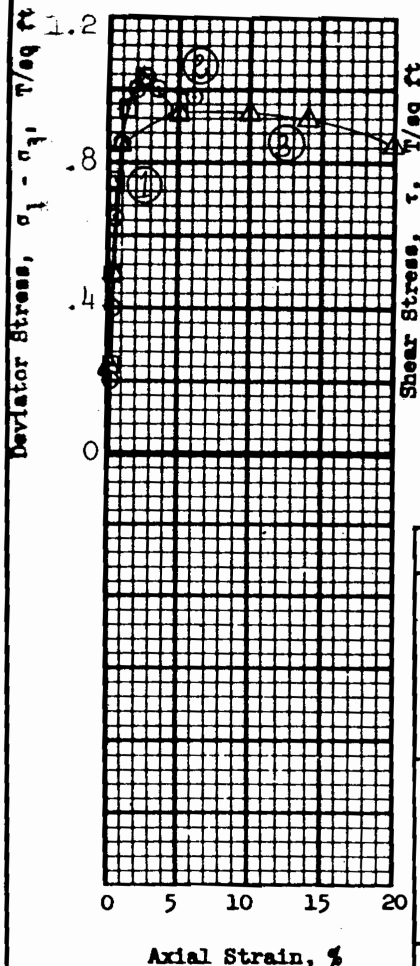
PROJECT LK.PONT.LA.,& VIC-HURR.PROT.-ORLEANS PARISH LKFRNT.LEV.,WEST OF IHNC-GDM#2,SUPP.#5,

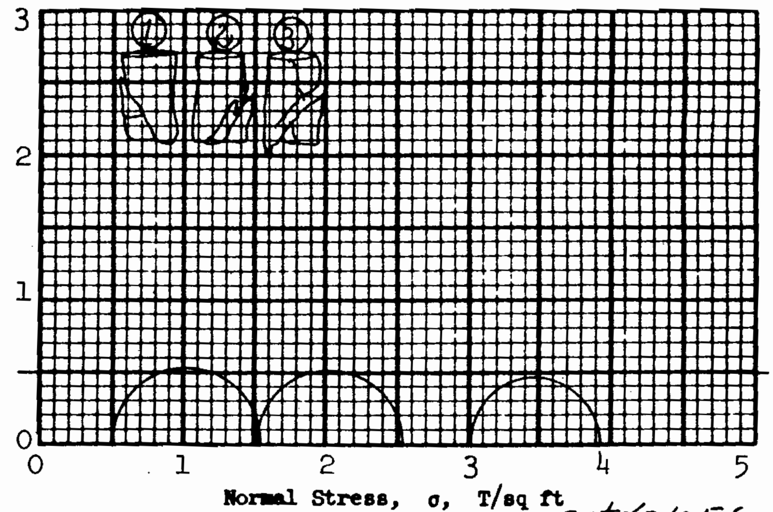
AREA OUTFALL CANALS(ALONG 17thST.CANAL) 1971

BORING NO. 1-MUW | SAMPLE NO. 17-B

~~DEPTH~~ EL -59.3 | DATE 25 March 1971

BWG **DIRECT SHEAR TEST REPORT**





sat γ = 105.6

Test No.			1	2	3	Avg.
Initial	Water content	w_o	54.2 %	54.4 %	54.2 %	54.3 %
	Void ratio	e_o	1.47	1.48	1.48	
	Saturation	S_o	99.9 %	99.6 %	99.2 %	%
	Dry density, lb/cu ft	γ_d	68.6	68.2	68.2	
Before Shear	Water content	w_c	%	%	%	%
	Void ratio	e_c				
	Saturation	S_c	%	%	%	%
	Final back pressure, T/sq ft	u_o				
Final	Water content	w_f	%	%	%	%
	Void ratio	e_f				
Minor principal stress, T/sq ft		σ_3	0.5	1.5	3.0	
Max deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{max}$	1.04	1.03	0.94	
Time to failure, min		t_f	10	27	44	
Rate of strain, percent/min			0.250	0.102	0.114	
Ult deviator stress, T/sq ft		$(\sigma_1-\sigma_3)_{ult}$				
Initial diameter, in.		D_o	1.40	1.40	1.40	
Initial height, in.		H_o	3.00	3.00	3.00	

Shear Strength Parameters

ϕ = 0 °

tan ϕ = 0

c = 0.50 T/sq ft

Method of saturation ______

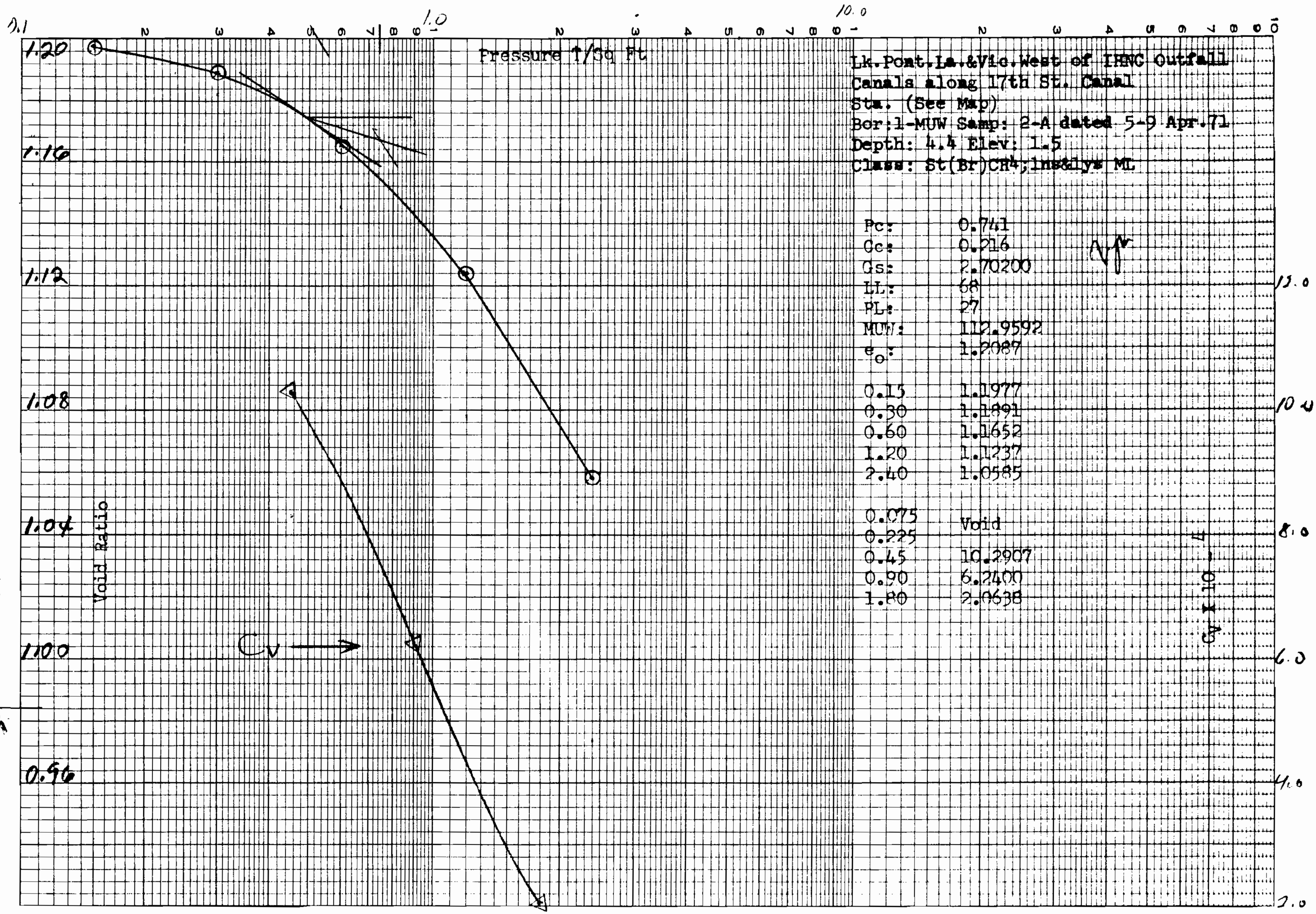
☐ Controlled stress

☒ Controlled strain

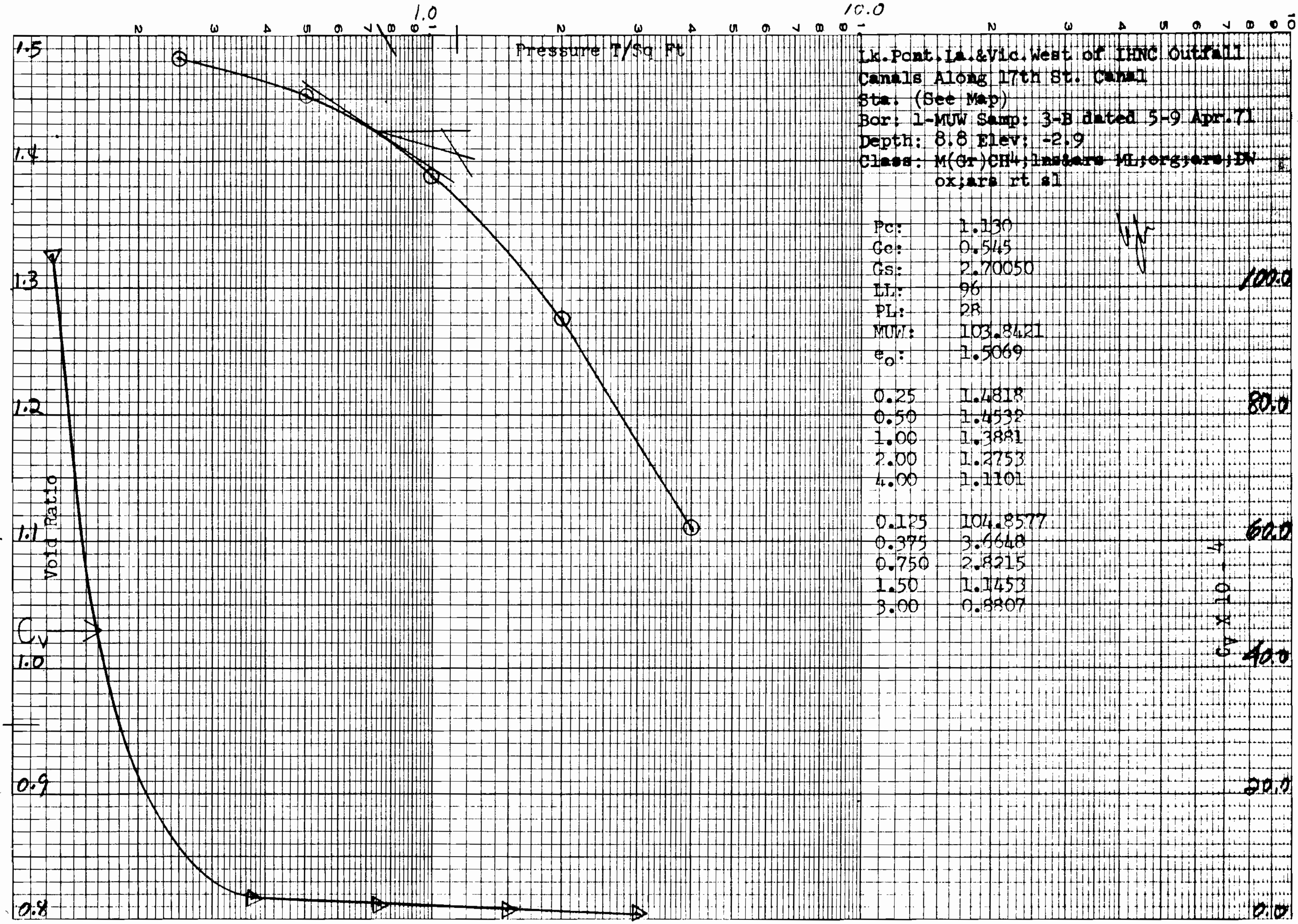
Type of test Q	Type of specimen UNDISTURBED				
Classification PLASTIC CLAY(CH), gray, contains silt lenses					
LL 86	PL 22	PI 64		G_s 2.71	

Remarks ______

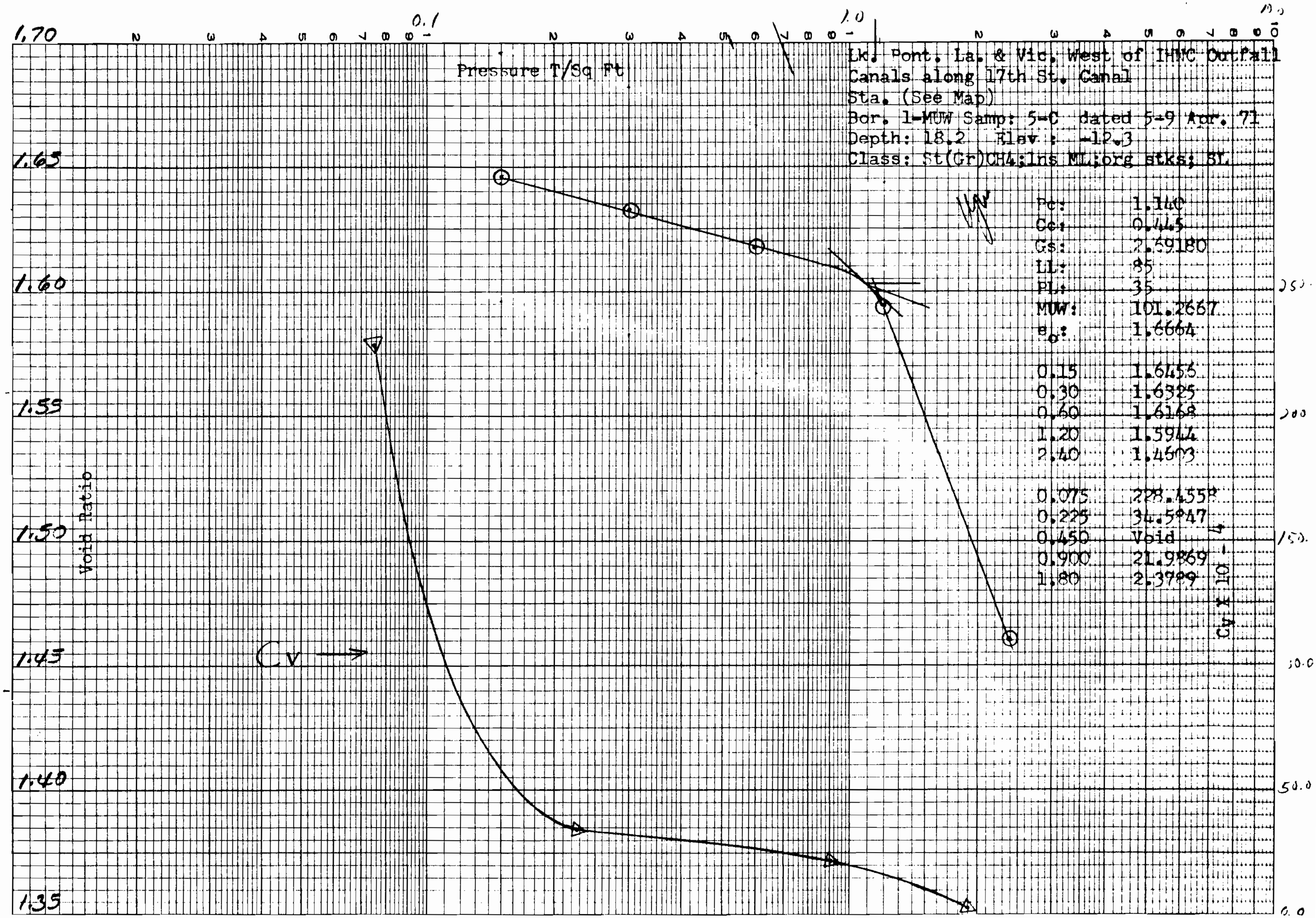
Project LK. PONT. LA. & VIC.-HURR. PROT.-ORLEANS PAR. LKFRNT. LEV., WEST OF IHNC-GDM#2, SUPP. #5;	
Area OUTFALL CANALS(ALONG 17th ST. CANAL) 1971	
Boring No. 1-MUW	Sample No. 17-D
Depth El -61.2	Date 24 March 1971
OHR TRIAXIAL COMPRESSION TEST REPORT	

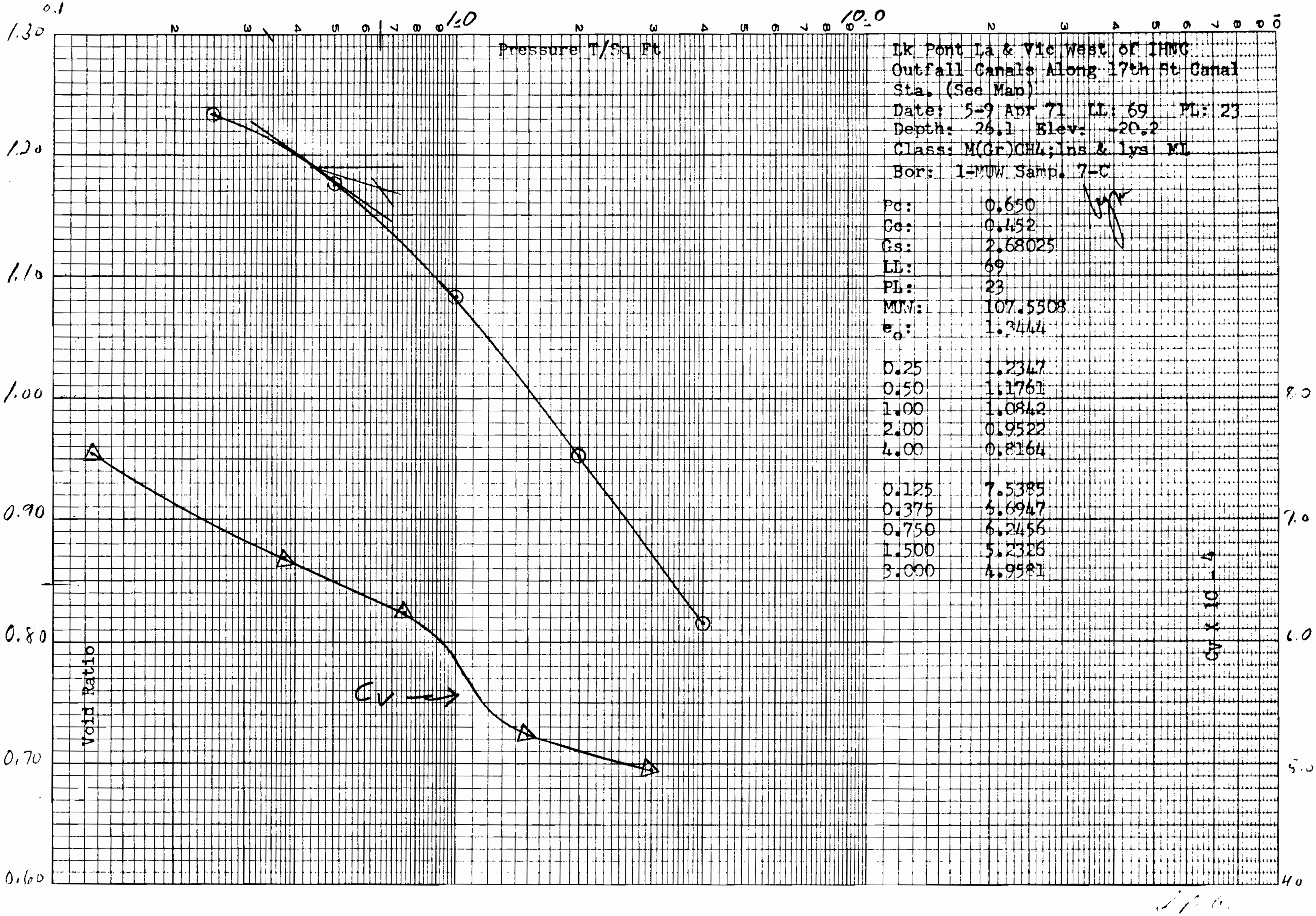

Pressure T/Sq Ft
Void Ratio
Cv x 10^-4
Cv
0.1
1.0
10.0
1.20
1.16
1.12
1.08
1.04
1.00
0.96
12.0
10.0
8.0
6.0
4.0
2.0
Lk. Pont. La. & Vic. West of IHNC Outfall
Canals along 17th St. Canal
Sta. (See Map)
Bor: 1-MUW Samp: 2-A dated 5-9 Apr. 71
Depth: 4.4 Elev: 1.5
Class: St(Br)CH4; ins&lys ML
Pc: 0.741
Cc: 0.216
Gs: 2.70200
LL: 68
PL: 27
MUW: 112.9592
eo: 1.2087
0.15 1.1977
0.30 1.1891
0.60 1.1652
1.20 1.1237
2.40 1.0585
0.075 Void
0.225
0.45 10.2907
0.90 6.2400
1.80 2.0638

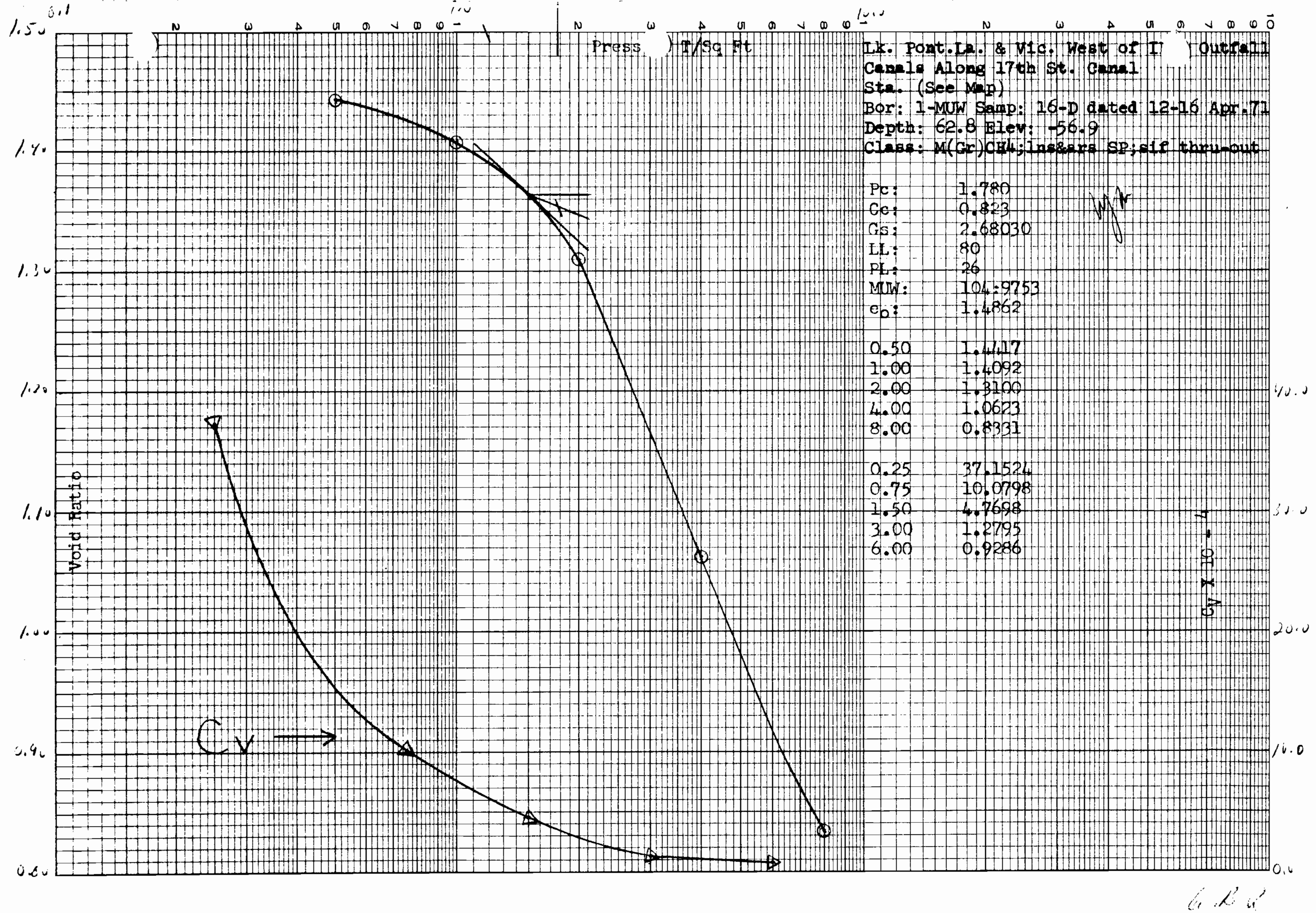
ARG

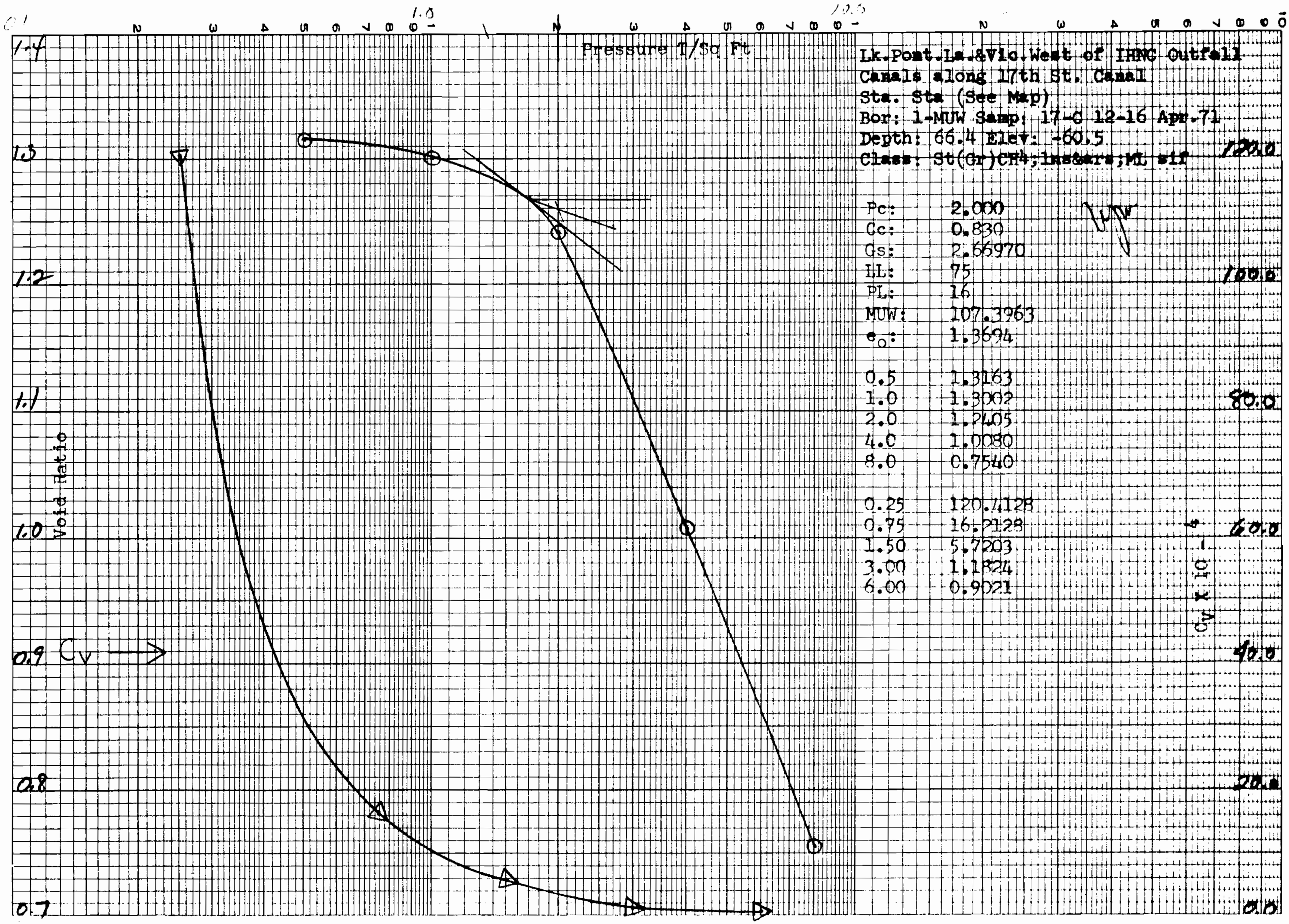


Pressure T/Sq Ft
1.0
10.0
Void Ratio
Cv
Cv x 10-4
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
100.0
80.0
60.0
40.0
20.0
0.0
Lk.Pont.La.&Vic.West of IHNC Outfall
Canals Along 17th St. Canal
Sta. (See Map)
Bor: 1-MUW Samp: 3-B dated 5-9 Apr.71
Depth: 8.8 Elev: -2.9
Class: M(Gr)CH4;lnstars ML;org;ars;DW
ox;ars rt sl
Pc: 1.130
Gc: 0.545
Gs: 2.70050
LL: 96
PL: 28
MUW: 103.8421
eo: 1.5069
0.25 1.4818
0.50 1.4532
1.00 1.3881
2.00 1.2753
4.00 1.1101
0.125 104.8577
0.375 3.6648
0.750 2.8215
1.50 1.1453
3.00 0.8807


Pressure T/Sq Ft
0.1
1.0
10.0
1.70
1.65
1.60
1.55
1.50
1.45
1.40
1.35
Void Ratio
Cv →
Cv x 10⁻⁴
250
200
150
100
50.0
0.0
Lk. Pont. La. & Vic. West of IHNC Outfall
Canals along 17th St. Canal
Sta. (See Map)
Bor. 1-MUW Samp: 5-C dated 5-9 Apr. 71
Depth: 18.2 Elev : -12.3
Class: St(Gr)CH4;Ins ML;org stks; SL
Pc: 1.140
Cc: 0.445
Gs: 2.69180
LL: 85
PL: 35
MUW: 101.2667
eo: 1.6664
0.15 1.6455
0.30 1.6325
0.60 1.6168
1.20 1.5944
2.40 1.4603
0.075 228.4558
0.225 34.5847
0.450 Void
0.900 21.9869
1.80 2.3789


Pressure T/Sq Ft
Void Ratio
Cv x 10⁻⁴
Cv
0.1
1.0
10.0
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
8.0
7.0
6.0
5.0
4.0
Lk Pont La & Vic West of IHNC
Outfall Canals Along 17th St Canal
Sta. (See Map)
Date: 5-9 Apr 71 LL: 69 PL: 23
Depth: 26.1 Elev: -20.2
Class: M(Gr)CH4;Ins & lys ML
Bor: 1-MUW Samp. 7-C
Pc: 0.650
Cc: 0.452
Gs: 2.68025
LL: 69
PL: 23
MUW: 107.5508
e0: 1.3444
0.25 1.2347
0.50 1.1761
1.00 1.0842
2.00 0.9522
4.00 0.8164
0.125 7.5385
0.375 6.6947
0.750 6.2456
1.500 5.2326
3.000 4.9581


Press T/Sq Ft
Void Ratio
Cv X 10 - 4
Cv
Lk. Pont.La. & Vic. West of I Outfall
Canals Along 17th St. Canal
Sta. (See Map)
Bor: 1-MUW Samp: 16-D dated 12-16 Apr.71
Depth: 62.8 Elev: -56.9
Class: M(Gr)CH4;lns&srs SP;sif thru-out
Pc: 1.780
Cc: 0.823
Gs: 2.68030
LL: 80
PL: 26
MUW: 104.9753
e_0: 1.4862
0.50 1.4417
1.00 1.4092
2.00 1.3100
4.00 1.0623
8.00 0.8331
0.25 37.1524
0.75 10.0798
1.50 4.7698
3.00 1.2795
6.00 0.9286


Pressure T/Sq Ft
Lk.Pont.La.&Vic.West of IHNC Outfall
Canals along 17th St. Canal
Sta. Sta (See Map)
Bor: 1-MUW Samp: 17-C 12-16 Apr.71
Depth: 66.4 Elev: -60.5
Class: St(Gr)CH4;ins&ars;ML slf
Pc: 2.000
Cc: 0.830
Gs: 2.66970
LL: 75
PL: 16
MUW: 107.3963
e0: 1.3694
0.5 1.3163
1.0 1.3002
2.0 1.2405
4.0 1.0080
8.0 0.7540
0.25 120.4128
0.75 16.2128
1.50 5.7203
3.00 1.1824
6.00 0.9021
Void Ratio
Cv x 10^-4
Cv
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
120.0
100.0
80.0
60.0
40.0
20.0
0.0
0.1
1.0
10.0
MUW