TEST DATA SUMMARY

SWDGL Report No. 9211

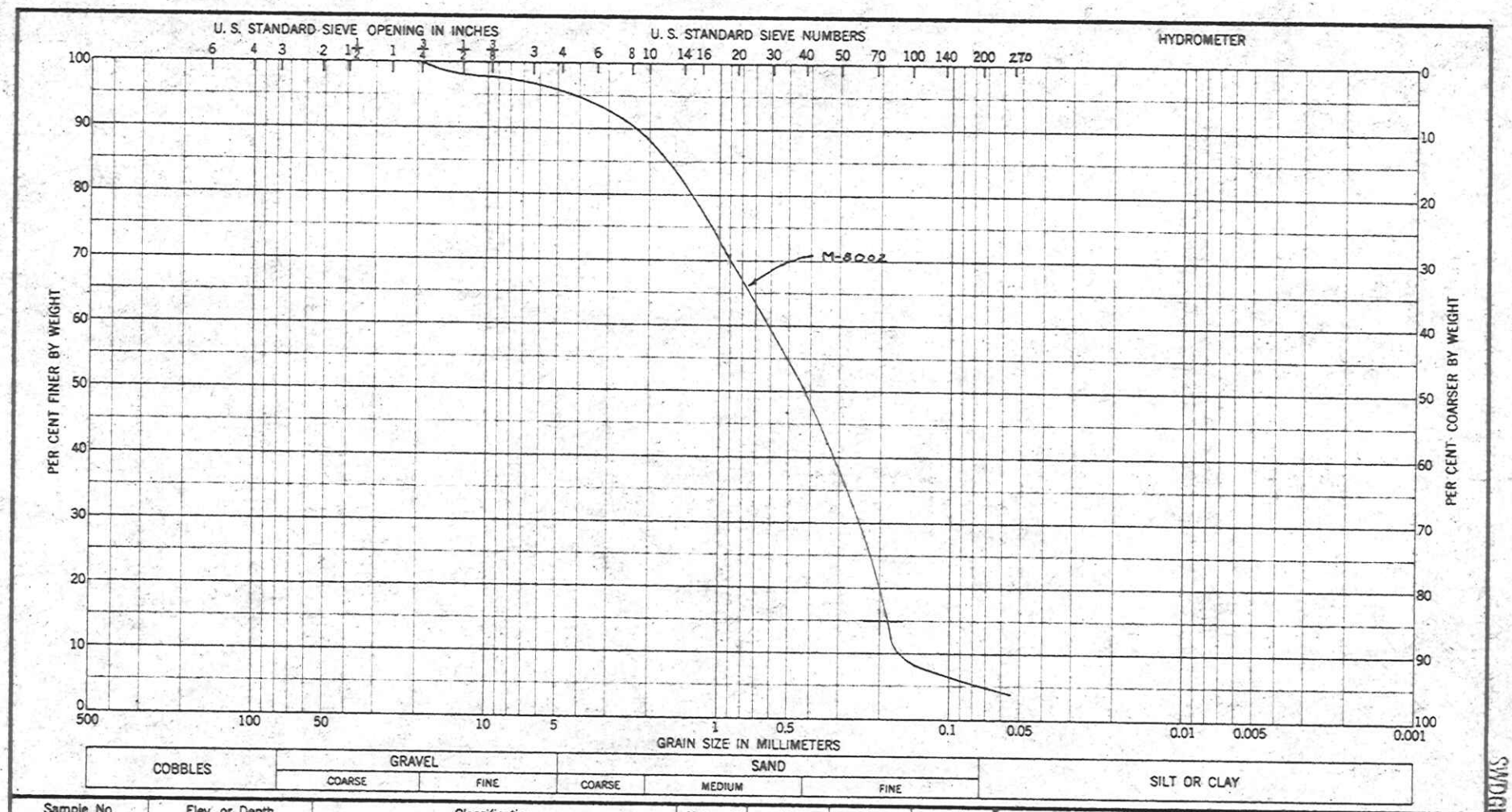
FEATURE FOUNDATION MATERIAL

WALLISVILLE RESERVOIR

BORING NO.	SAM. NO.	DEPTH OR ELEV. OF SAMPLE	LABORATORY CLASSIFICATION	MECHANICAL ANALYSIS: GRAVEL %	SAND %	FINES %	D_{10}	ATTERBERG LIMITS: LL	PL	SPECIFIC GRAVITY G	NAT. WATER CONT. %	NATURAL DRY DENSITY LBS/CU FT	COMPACTION DATA: OPT. WATER %	MAXIMUM DRY DENSITY LBS/CU FT	SHEAR DATA: INITIAL e	DRY DENSITY LBS/CU FT	W_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: γ_d Lbs/Ft³	K x 10⁴ FT/MIN.	CONSOLIDATION DATA: P_o T/SQ FT	P_c T/SQ FT	C_c	t_{50} *	REMARKS
3ST-111 (Cont'd)																																	
M-7995	48.0-50.0		SC	0	67	33					28.8																101	0.15					D10 not determined
				Gray clayey SAND; free water.																													
M-7996	53.0-55.0		SP-SM	18	77	5					13.8																						
				Grayish-brown gravelly SAND.																													
M-7997	63.0-64.0		CH					64	18		23.2	103				103	24.0			UC	2.8x5.9		0.0	3.3									
				Olive and gray CLAY, very stiff.																													
3ST-112																																	
M-7998	20.0-22.0		CL					34	11		36.0																						
				Gray sandy CLAY.																													
M-7999	26.0-27.0		CH					67	19		31.3	90				89	33.4			UC	2.7x5.1		0.0	0.8									
				Dk. gray CLAY, stiff.																													
M-8000	30.0-31.0		CH					51	14		23.0	105				105	23.2			UC	2.8x5.2		0.0	1.6									
				Gray and yellow CLAY, very stiff; becoming more sandy with depth.																													
M-8001	45.0-46.0		CH					42	20		31.2	91				90	32.5			UC	2.8x4.8		0.0	1.0									
				Gray and yellow CLAY, stiff.																													
M-8002	51.5-53.5		SP-SM	4	91	5					14.6																						
				Brown SAND.																													
M-8003	61.0-62.0		CH					62	17		23.4	105				105	22.8			UC	2.4x5.0		0.0	2.4									
				Yellowish-brown and gray CLAY, hard.																													

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
UU – Unconsolidate Undrained
CD – Consolidated Drained
CU – Consolidated Undrained
* Values at Pressure
T/SQ FT



Sample No.	Elev or Depth	Classification	Nat w %	LL	PL	PI
M-8002	51.5-53.5	SAND (SP-SM)	14.6			

Project Wallisville Reservoir

Area FOUNDATION MATERIAL

Boring No. 3ST-112

Date DEC 64

GRADATION CURVES

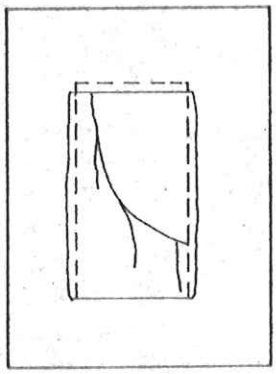
PLATE NO. 7

SWDGL Report No. 9211

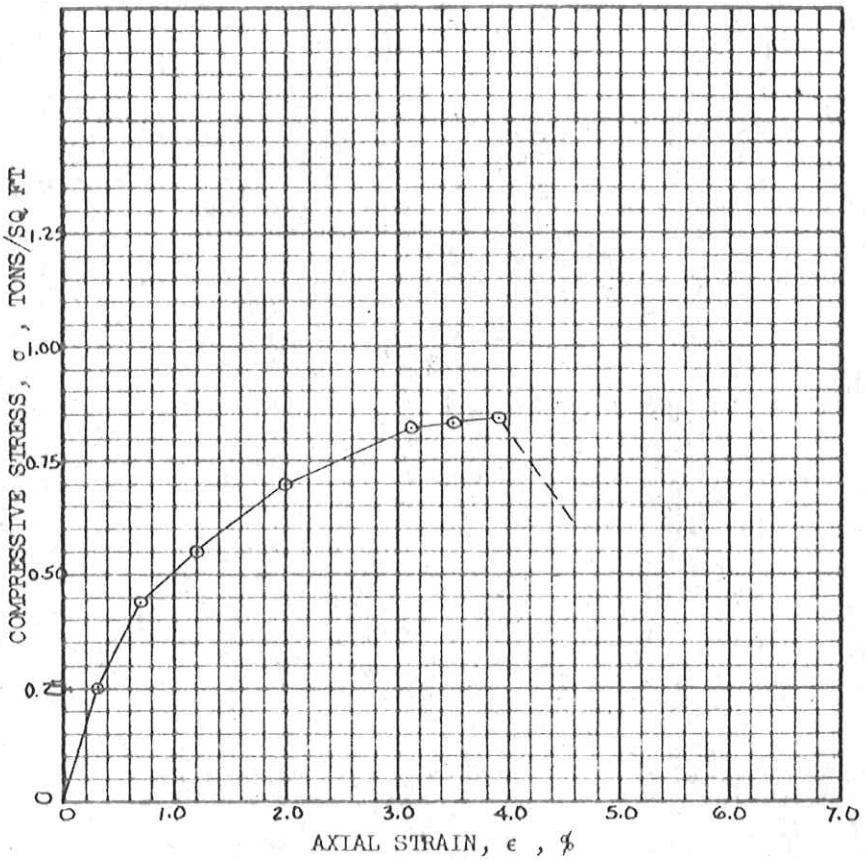
ENG FORM 2087 1 MAY 63 REPLACES WES FORM NO. 1241, SEP 1962, WHICH IS OBSOLETE. (TRANSLUCENT)

C 3436

WDGL Report No. 9211



Sketch of specimen after failure



TEST TYPE
(Check one)

☐ Controlled-stress

☑ Controlled-strain
0.02 in/min

Type of specimen ☑ Undisturbed ☐ Remolded			Test No.	Test No.	Test No.	Test No.
Initial	Water content	w_o	33.4 %	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density, lb/cu ft	γ_d	89			
Time to failure, min		t_f	10			
Unconfined compressive strength, tons/sq ft		q_u	0.8			
Undrained shear strength, tons/sq ft		s_u	0.4			
Sensitivity ratio		S_t				

Classification CLAY (CH)

LL	PL	PI	G_s
67	19	48	

Specimen Diam	Specimen Height
2.7 in.	5.1 in.

Remarks

Project Wallisville Reservoir

Area FOUNDATION MATERIAL

Boring No. 35T-112 Sample No. M-7999

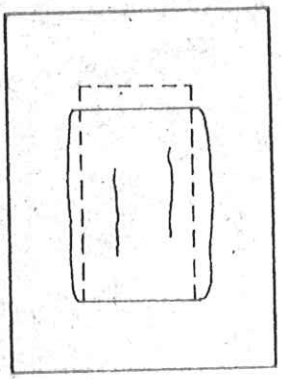
Depth, ft 26.0-27.0 Date DEC 64

UNCONFINED COMPRESSION TEST REPORT

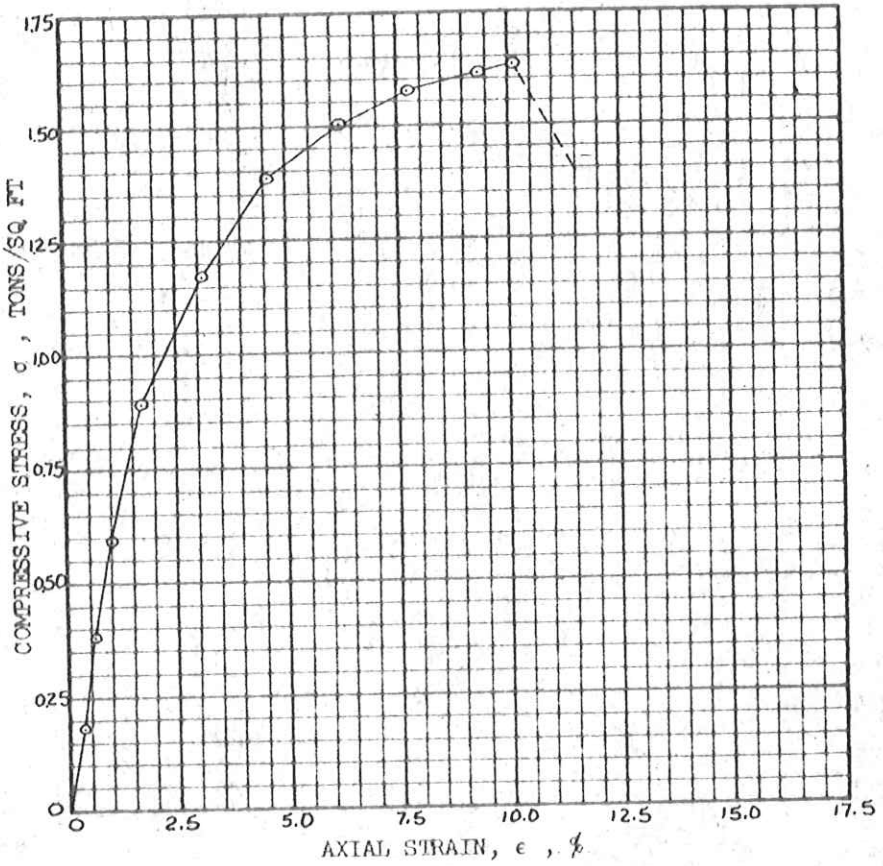
ENG FORM 3659 1 MAY 63 (TRANSLUCENT)

PLATE XI-2

C 8927 PLATE NO. 17



Sketch of specimen after failure



TEST TYPE
(Check one)

☐ Controlled-stress

☑ Controlled-strain
0.02 in/min

Type of specimen ☑ Undisturbed ☐ Remolded			Test No.	Test No.	Test No.	Test No.
Initial	Water content	w_o	23.2 %	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density, lb/cu ft	γ_d	105			
Time to failure, min		t_f	26			
Unconfined compressive strength, tons/sq ft		q_u	1.6			
Undrained shear strength, tons/sq ft		s_u	0.8			
Sensitivity ratio		S_t				

Classification CLAY (CH)

LL 51	PL 14	PI 37	G_s

Specimen Diam 2.8 ~~cm~~ in. | Specimen Height 5.2 ~~cm~~ in.

Remarks

Project Wallisville Reservoir

Area FOUNDATION MATERIAL

Boring No. 35T-112 Sample No. M-8000

Depth, ~~ft~~ 30.0-31.0 Date DEC 84

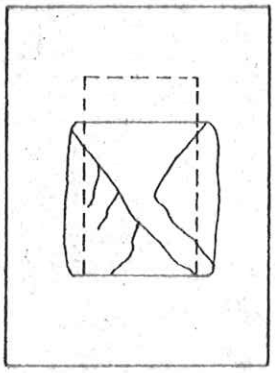
UNCONFINED COMPRESSION TEST REPORT

ENG FORM 3659 1 MAY 63 (TRANSLUCENT)

C 8927 PLATE NO. 18

PLATE XI-2

SWDCL Report No 9211

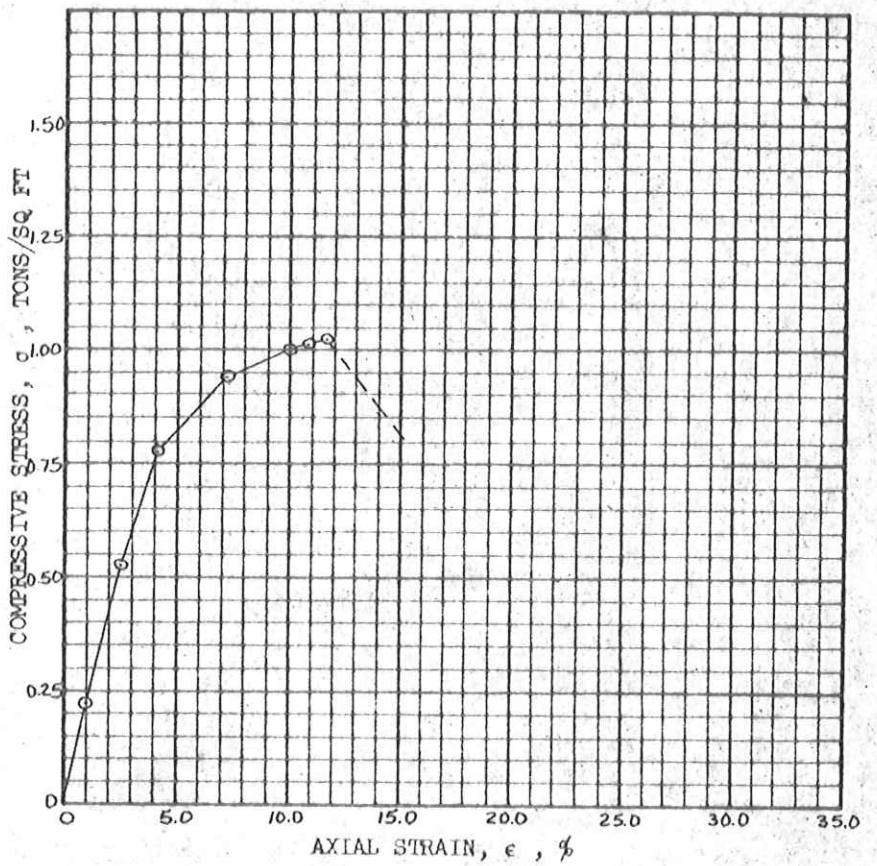


Sketch of specimen after failure

TEST TYPE
(Check one)

☐ Controlled-stress

☑ Controlled-strain
0.01 in/min.



Type of specimen ☑ Undisturbed ☐ Remolded			Test No.	Test No.	Test No.	Test No.
Initial	Water content	w_o	32.5 %	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density, lb/cu ft	γ_d	90			
Time to failure, min		t_f	56			
Unconfined compressive strength, tons/sq ft		q_u	1.0			
Undrained shear strength, tons/sq ft		s_u	0.5			
Sensitivity ratio		S_t				

Classification CLAY (CH)

LL 62 | PL 20 | PI 42 | G_s

Specimen Diam 2.8 ~~cm~~ in. | Specimen Height 4.8 ~~cm~~ in.

Remarks

Project Wallisville Reservoir

Area FOUNDATION MATERIAL

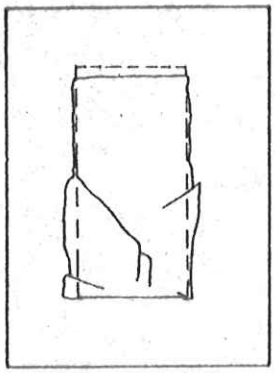
Boring No. 35T-112 Sample No. M-8001

Depth, ~~Ft~~ 45.0-46.0 Date DEC 8 4

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 3659 1 MAY 63 (TRANSLUCENT)

C 8927 PLATE XI-2
PLATE NO. 19

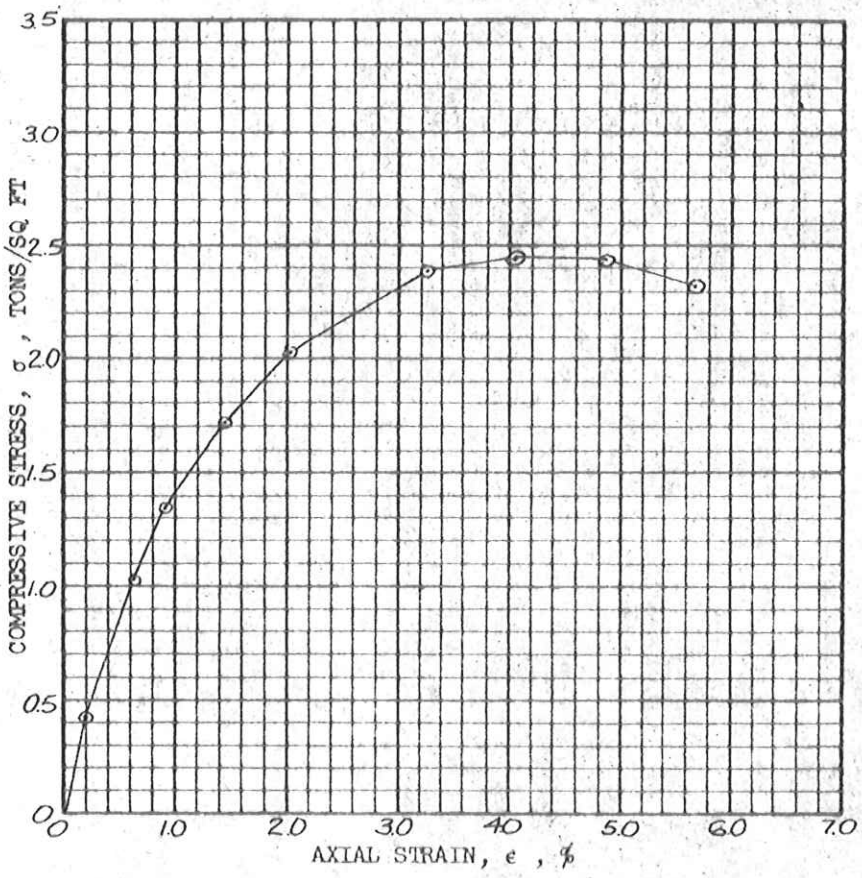


Sketch of specimen after failure

TEST TYPE
(Check one)

☐ Controlled-stress

☑ Controlled-strain
0.02 in/min



Type of specimen ☑ Undisturbed ☐ Remolded			Test No.	Test No.	Test No.	Test No.
Initial	Water content	w_o	22.8 %	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density, lb/cu ft	γ_d	105			
Time to failure, min		t_f	10			
Unconfined compressive strength, tons/sq ft		q_u	2.4			
Undrained shear strength, tons/sq ft		s_u	1.2			
Sensitivity ratio		S_t				

Classification CLAY (CH)

LL	PL	PI	G_s
62	17	45	

Specimen Diam 2.4 ~~cm~~ in.

Specimen Height 5.0 ~~cm~~ in.

Remarks

Project Wallisville Reservoir

Area FOUNDATION MATERIAL

Boring No. 357-112 Sample No. M-8003

Depth, ~~ft~~ 61.0-62.0 Date DEC 64

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 3659 1 MAY 63 (TRANSLUCENT)

C 8927 PLATE XI-2
PLATE NO. 20