



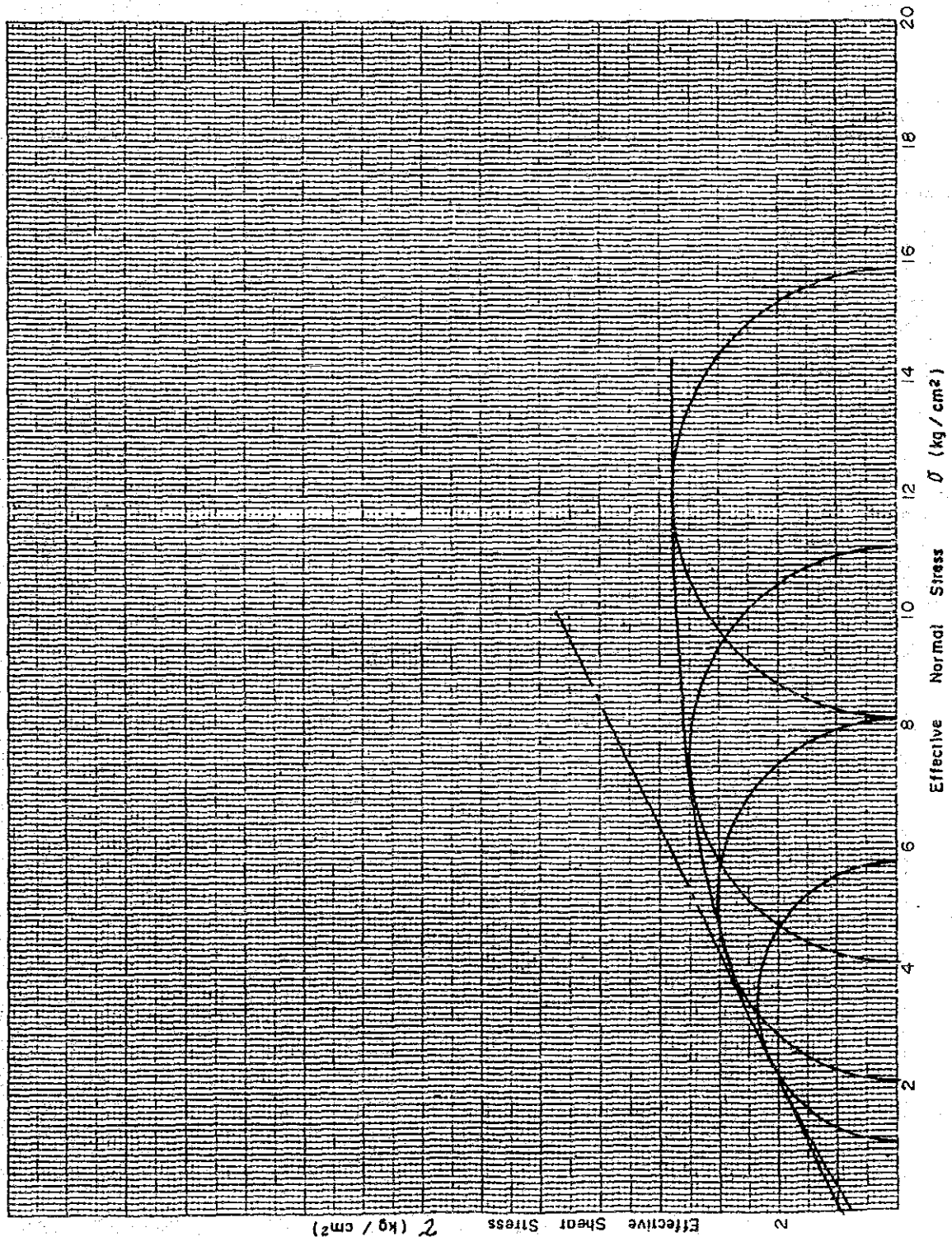
# TRIAXIAL COMPRESSION TEST (MOHR'S STRESS DIAGRAM)

CU  
CU  
CU

FOR REPORTING

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	9 - 10 - 85
SAMPLE NO. & DEPTH	SP-7 Wopt' ( m ~ m )	TESTED BY	SUHAIBUN

SCOPE	Normally Consolidated	$C_u = 0.95$ kg/cm <sup>2</sup> , $\sigma_u = 25.40$	$C' =$ kg/cm <sup>2</sup> , $\phi' =$
	Over-Consolidated	$C =$ kg/cm <sup>2</sup> , $(\phi' = 2 \sim 4 \text{ kg/cm}^2)$	$C' =$ kg/cm <sup>2</sup> , $\phi' =$



TRIAXIAL COMPRESSION TEST (INITIAL CONDITION: UU · CU  
 CONSOLIDATION: DATE) CU · CD

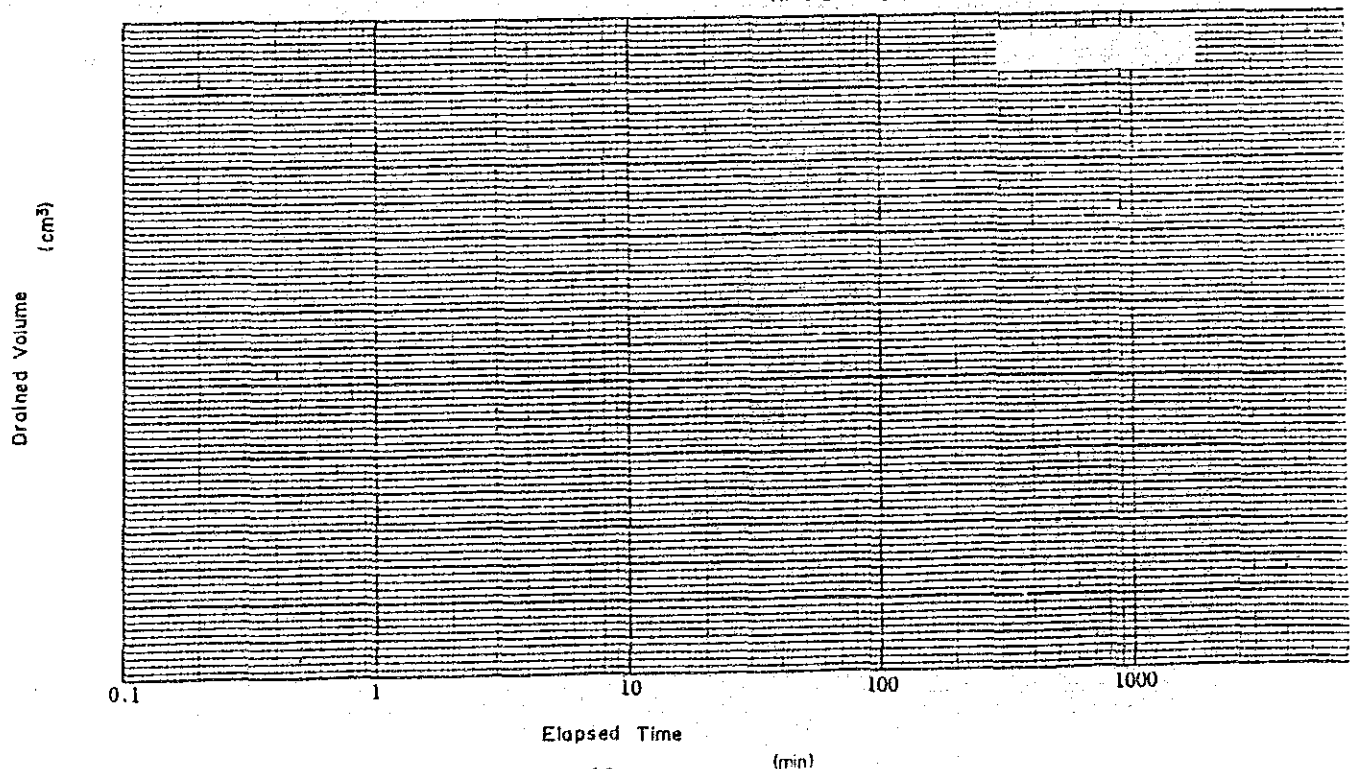
FOR REPORTING

NAME OF PROJECT	TENOM PANGI PROJECT PHASE III	DATE	9 - 10 - 85
SAMPLE NO. & DEPTH	SP-7 Wopt (2.0 m ~ 5.0 m)	TESTED BY	SUHAIBUN

Sample	Undisturbed ( <del>Disturbed</del> )	Type of Apparatus	British Type ELE Product
Shaped With	Trimmer · Other ( ) Compaction	Condition of Drainage During Consolidation	Single Drainage, Double Drainage, Paper Drain
Properties	Classification	CL _____ Gs 2.85 w <sub>L</sub> 48.9 % w <sub>p</sub> 21.8 %	

Specimen Number		No. 1	No. 2	No. 3	No. 4	No. Mean
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26	
Initial Conditions of Specimen	Height H <sub>s</sub> (cm)	8.0	8.0	8.0	8.0	
	Diameter D (cm)	3.8	3.8	3.8	3.8	
	Volume V <sub>s</sub> (cm <sup>3</sup> )	91	91	91	91	
	Weight W <sub>s</sub> (g)	181.43	180.29	179.95	180.05	
	Wet Density γ (g/cm <sup>3</sup> )	1.994	1.981	1.977	1.979	
	Water Content w <sub>o</sub> (%)	25.4	24.4	26.4	25.2	25.4
	Void Ratio e <sub>s</sub>	0.792	0.790	0.877	0.803	
	Degree of Saturation S <sub>r</sub> (%)	91.4	88.0	91.5	89.4	90.1
Consol. Data	Consolidation Time					
	Dry Density d (g/cm <sup>3</sup> )	1.590	1.592	1.564	1.581	1.582
	Drained Volume ΔV (cm <sup>3</sup> )					
	Void Ratio After Consolidation e					
Room Temperature (°C)						

Time Drained Volume Curve for Consolidation



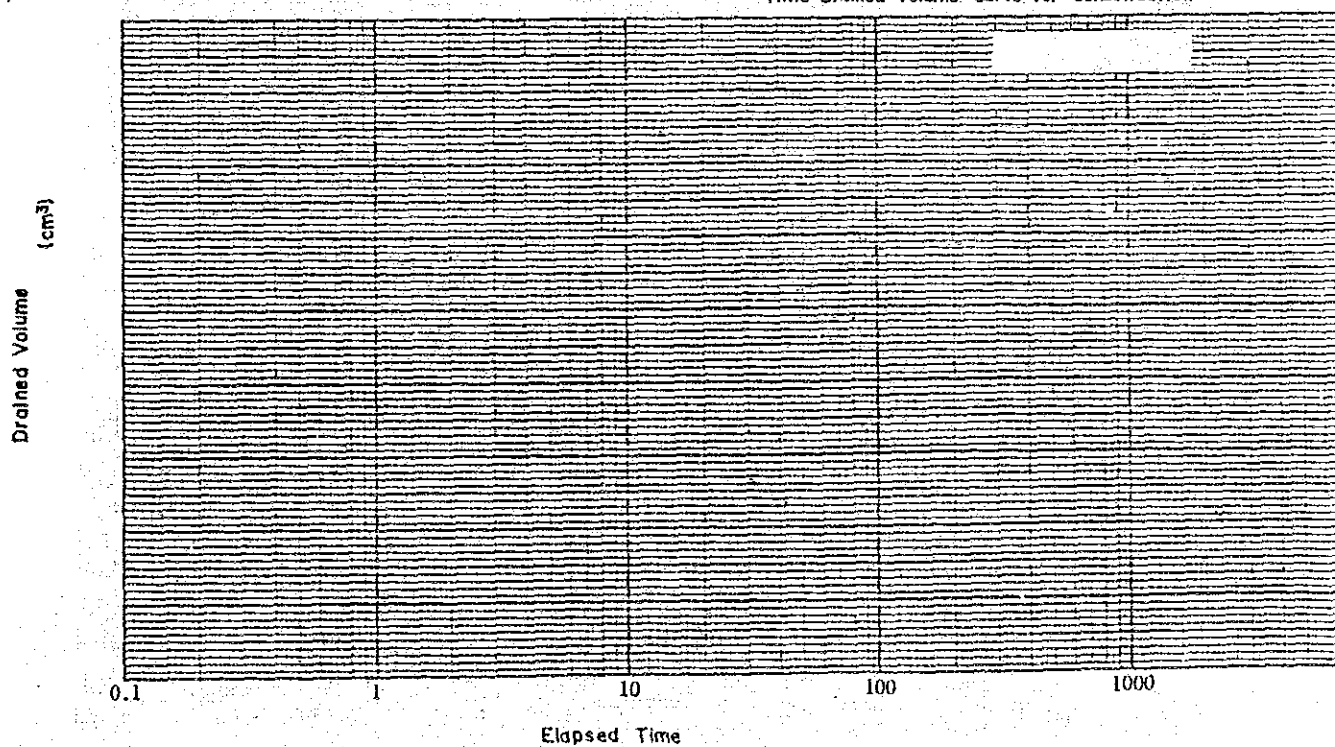
TRIAXIAL COMPRESSION TEST (INITIAL CONDITION:  
 CONSOLIDATION: DATE)
 
 UU · CU  
 CU · CD
 
FOR REPORTING

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE	DATE	7 - 10 - 85
SAMPLE NO. & DEPTH	SP - 7 $w_{opt} + 2\%$ (2.0 m ~ 5.0 m)	TESTED BY	SUHAIBUN

Sample	Undisturbed ( <u>Disturbed</u> ) $w_{opt} + 2\%$	Type of Apparatus	British Type ELE    Product
Shaped With	Trimmer · Other (    ) Compaction	Condition of Drainage During Consolidation	Single Drainage · Double Drainage · Paper Drain
Properties	Classification	$CL$ $G_s$ 2.85 $w_L$ 48.9 % $w_p$ 21.8 %	

Specimen Number			No. 1	No. 2	No. 3	No. 4	No. Mean
Consolidation Pressure (kg/cm <sup>2</sup> )			1.12	2.14	4.18	8.26	
Initial Conditions of Specimen	Height	$H_o$ (cm)	8.0	8.0	8.0	8.0	
	Diameter	$D$ (cm)	3.8	3.8	3.8	3.8	
	Volume	$V_o$ (cm <sup>3</sup> )	91	91	91	91	
	Weight	$W_o$ (g)	179.4	183.0	182.3	183.8	
	Wet Density	$\gamma$ (g/cm <sup>3</sup> )	1.971	2.010	2.003	2.019	
	Water Content	$w_o$ (%)	27.3	27.9	26.7	27.2	27.3
	Void Ratio	$e_o$	0.840	0.812	0.803	0.795	
	Degree of Saturation	$S_r$ (%)	92.6	97.9	94.8	97.5	95.7
Consol. Data	Consolidation Time	Dry Density $\gamma_d$ (g/cm <sup>3</sup> )	1.549	1.572	1.581	1.588	1.572
	Drained Volume	$\Delta V$ (cm <sup>3</sup> )					
	Void Ratio After Consolidation	$e$					
	Room Temperature	(°C)					

Time Drained Volume Curve for Consolidation



# TRIAXIAL COMPRESSION TEST (LOADING DATA)

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CU

FOR REPORTING

CD

NAME OF PROJECT

TENOM PANGI PROJECT, PHASE III

DATE

7 - 10 - 85

SAMPLE NO. &amp; DEPTH

SP - 7 Wopt + 2% (2.0 m ~ 5.0 m)

TESTED BY

SUHAIBUN

Loading Method

(Strain Control) Stress Control

Rate Compression

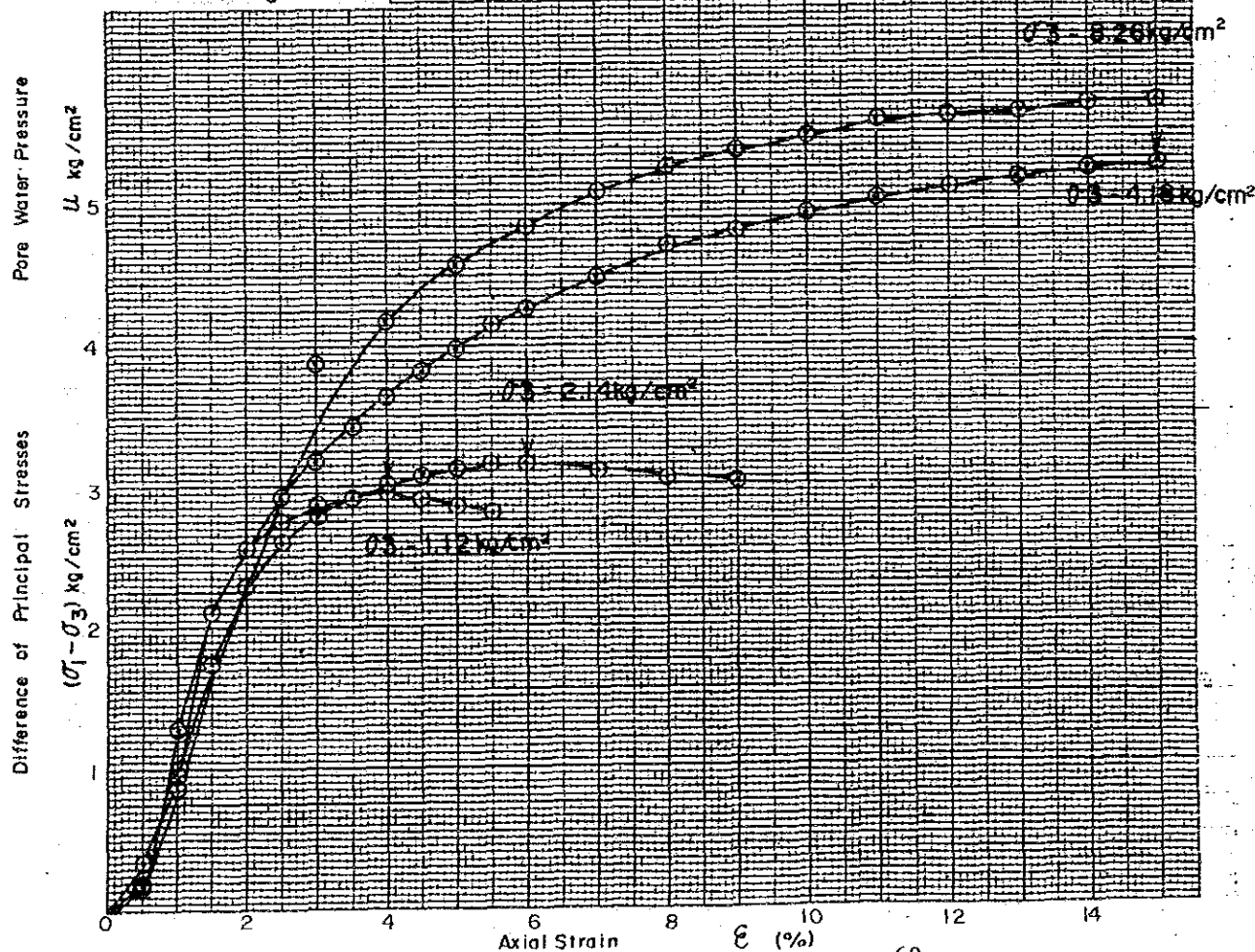
1.0 % /min

Proving Ring Capacity

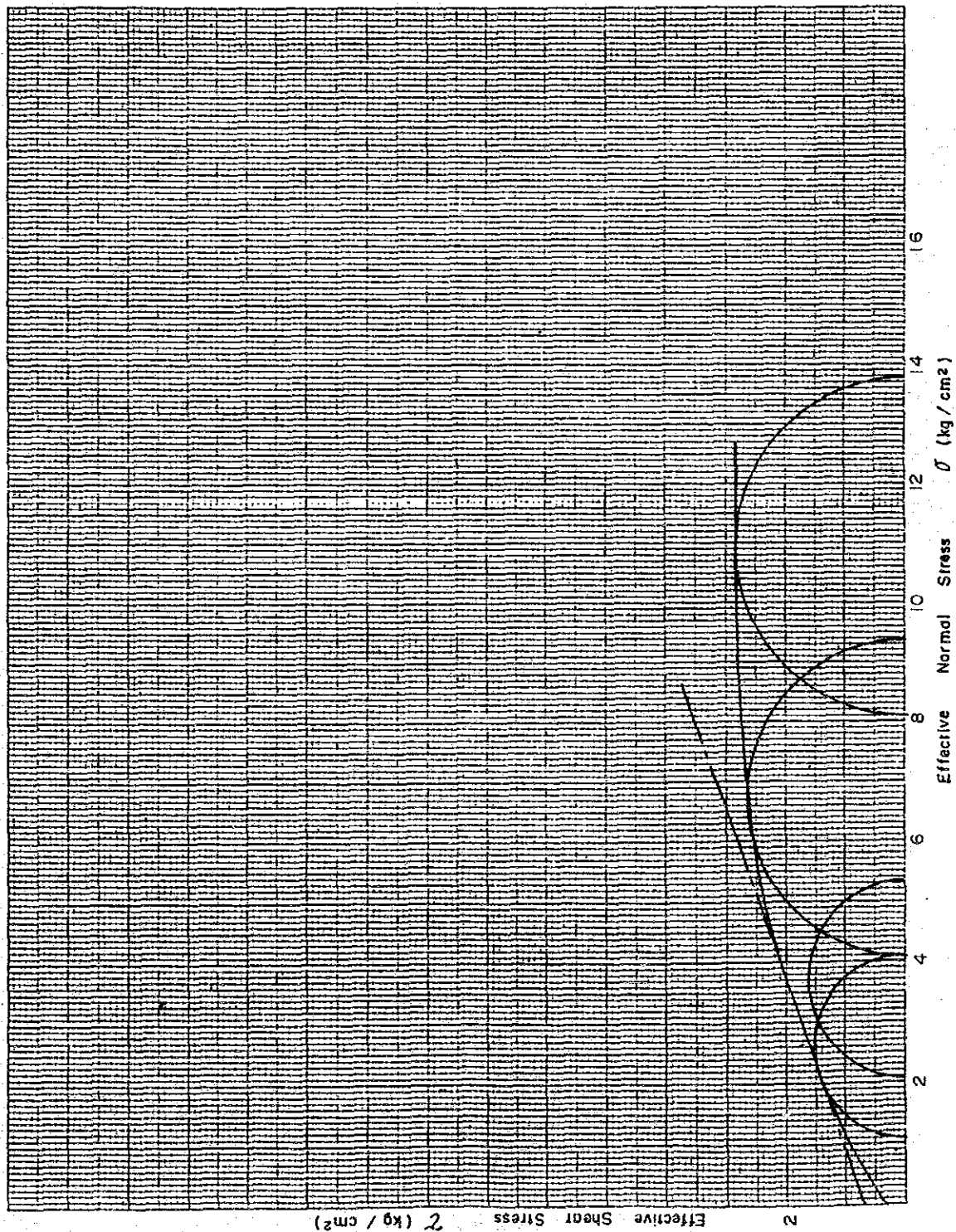
306 kg

Specimen Number		No. 1	No. 2	No. 3	No. 4	No.
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26	
At Peak	$(\sigma_1 - \sigma_3)_f$ (kg/cm <sup>2</sup> )	2.95	3.16	5.26	5.62	
	$\epsilon_f$ (%)	4.0	6.0	15.0	14.0	
	$U_f$ (kg/cm <sup>2</sup> )					
	$A_f$					
	$\sigma_f$					
	$\epsilon_{vf}$ (%)					
Elapsed Time to Failure (min)		4.0	6.0	15.0	14.0	
Modulus of Elasticity E50(kg/cm <sup>2</sup> )		134	112	131	117	
Room Temperature (°C)		28	28	28	28	

$(\sigma_1 - \sigma_3) - \epsilon$  CURVE  
 $(\Delta V/V) - \epsilon$   
 $U - \epsilon$



TRIAXIAL COMPRESSION TEST (MOHR'S STRESS DIAGRAM)		(U) CU CŪ CD	FOR REPORTING
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	7 - 10 - 85
SAMPLE NO. & DEPTH	SP - 7      Wopt + 2%    ( 2.0 m ~ 5.0 m )	TESTED BY	SUHAIBUN
SCOPE	Normally Consolidated	$C_u = 0.7 \text{ kg/cm}^2$ , $\mu_u = 19.29$	$C' =$ $\text{kg/cm}^2$ , $\phi' =$
	Over-Consolidated	$C =$ $\text{kg/cm}^2$ , $(\sigma' = 2 \sim 4 \text{ kg/cm}^2)$	$C' =$ $\text{kg/cm}^2$ , $\phi' =$



TRIAXIAL COMPRESSION TEST (INITIAL CONDITION:  
CONSOLIDATION : DATE)

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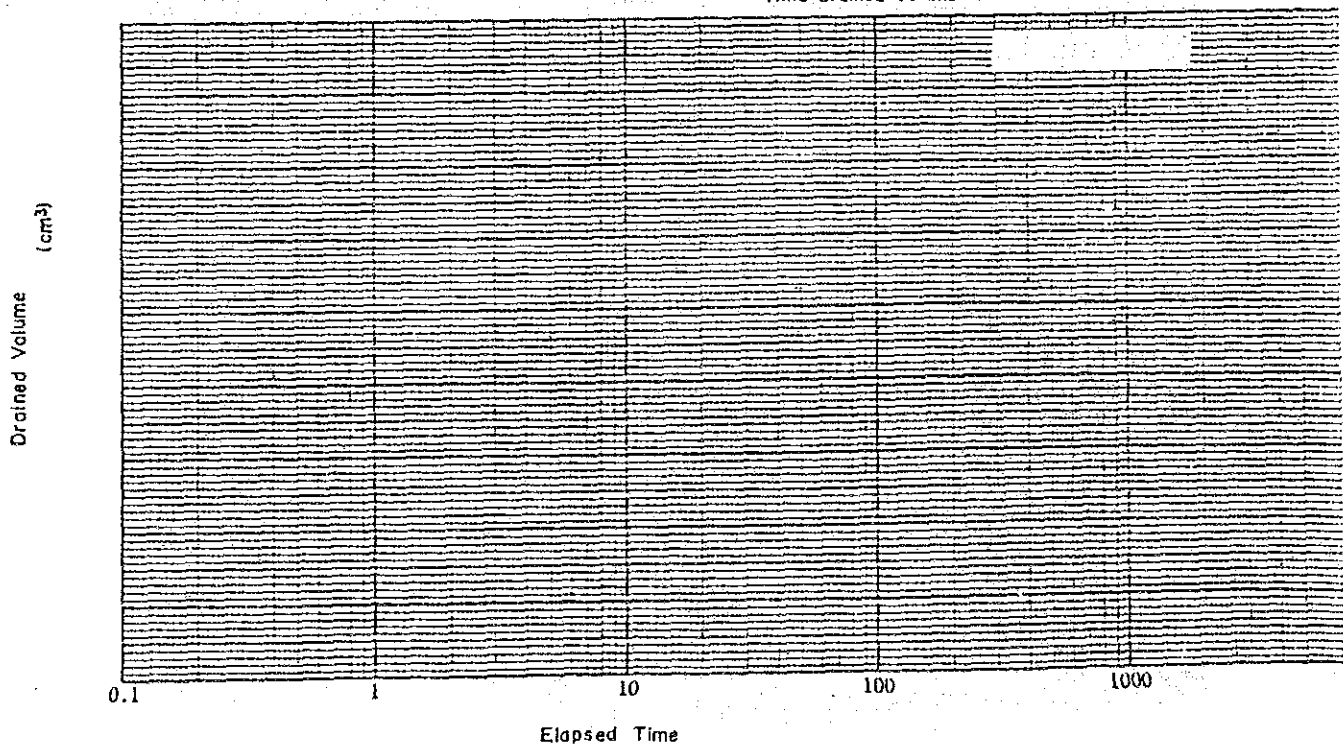
FOR REPORTING

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	14 - 10 - 85
SAMPLE NO. & DEPTH	SP - 8 Wopt ( 2.0 m ~ 5.0 m )	TESTED BY	SUHAIBUN

Sample	Undisturbed · Disturbed	Type of Apparatus	British Type ELE Product
Shaped With	Trimmer · Other ( ) Remoulded	Condition of Drainage During Consolidation	Single Drainage · Double Drainage. Paper Drain
Properties	Classification	CL ----- Gs 2.84 wL 56.4 % wp 22.0 %	

Specimen Number		No. 1	No. 2	No. 3	No. 4	No.
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26	
Initial Conditions of Specimen	Height H <sub>s</sub> (cm)	8.0	8.0	8.0	8.0	
	Diameter D (cm)	3.8	3.8	3.8	3.8	
	Volume V <sub>s</sub> (cm <sup>3</sup> )	91	91	91	91	
	Weight W <sub>s</sub> (g)	187.75	185.03	185.57	187.81	
	Wet Density γ (g/cm <sup>3</sup> )	2.063	2.033	2.039	2.064	
	Water Content w <sub>s</sub> (%)	20.2	19.0	21.0	20.3	20.1
	Void Ratio e <sub>s</sub>	0.655	0.664	0.681	0.655	
Degree of Saturation S <sub>r</sub> (%)		88	81	88	88	
Consol. Data	Consolidation Time Dry Density ρ <sub>d</sub> (g/cm <sup>3</sup> )	1.716	1.712	1.689	1.716	
	Drained Volume ΔV (cm <sup>3</sup> )					
	Void Ratio After Consolidation e					
	Room Temperature (°C)					

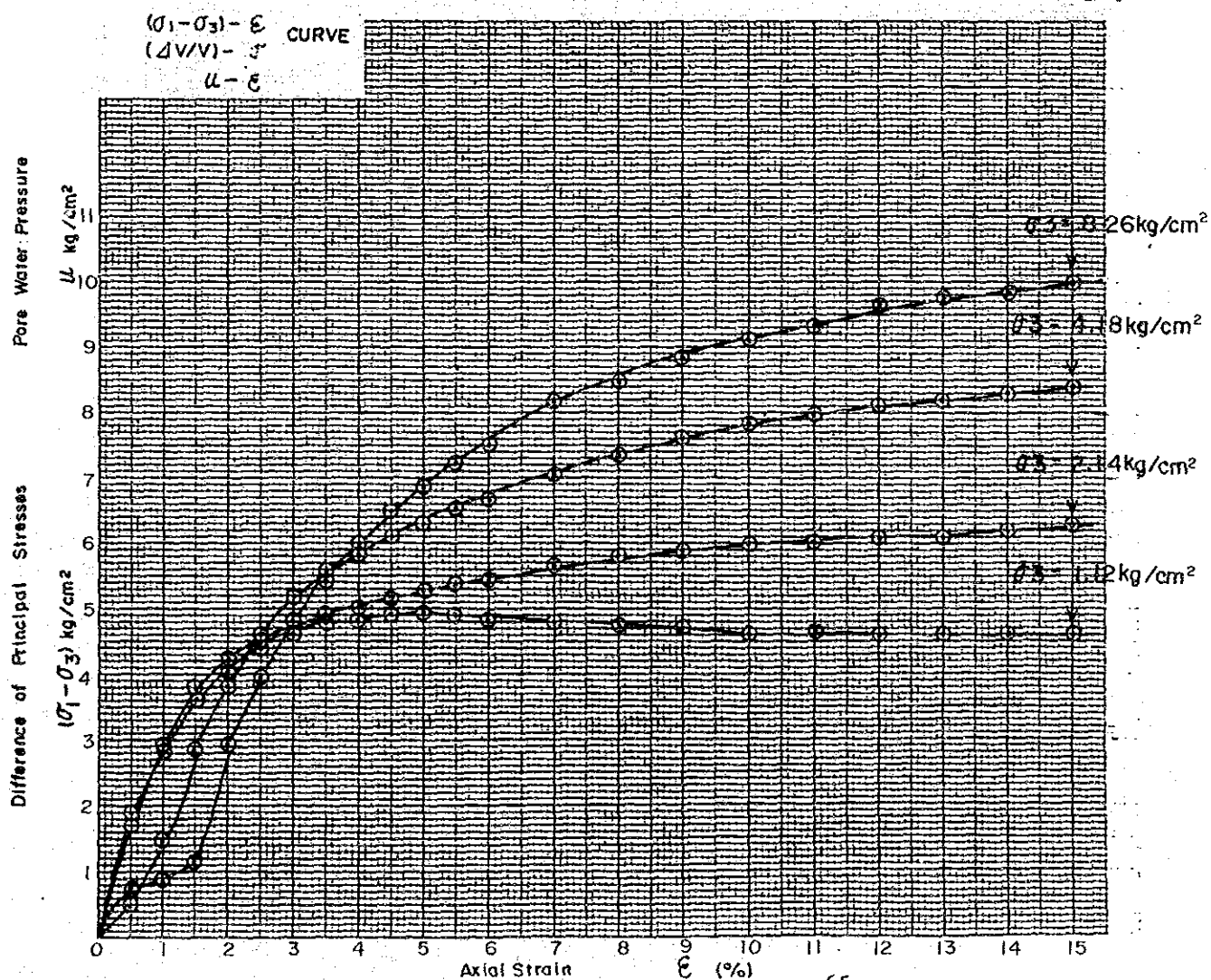
Time Drained Volume Curve for Consolidation





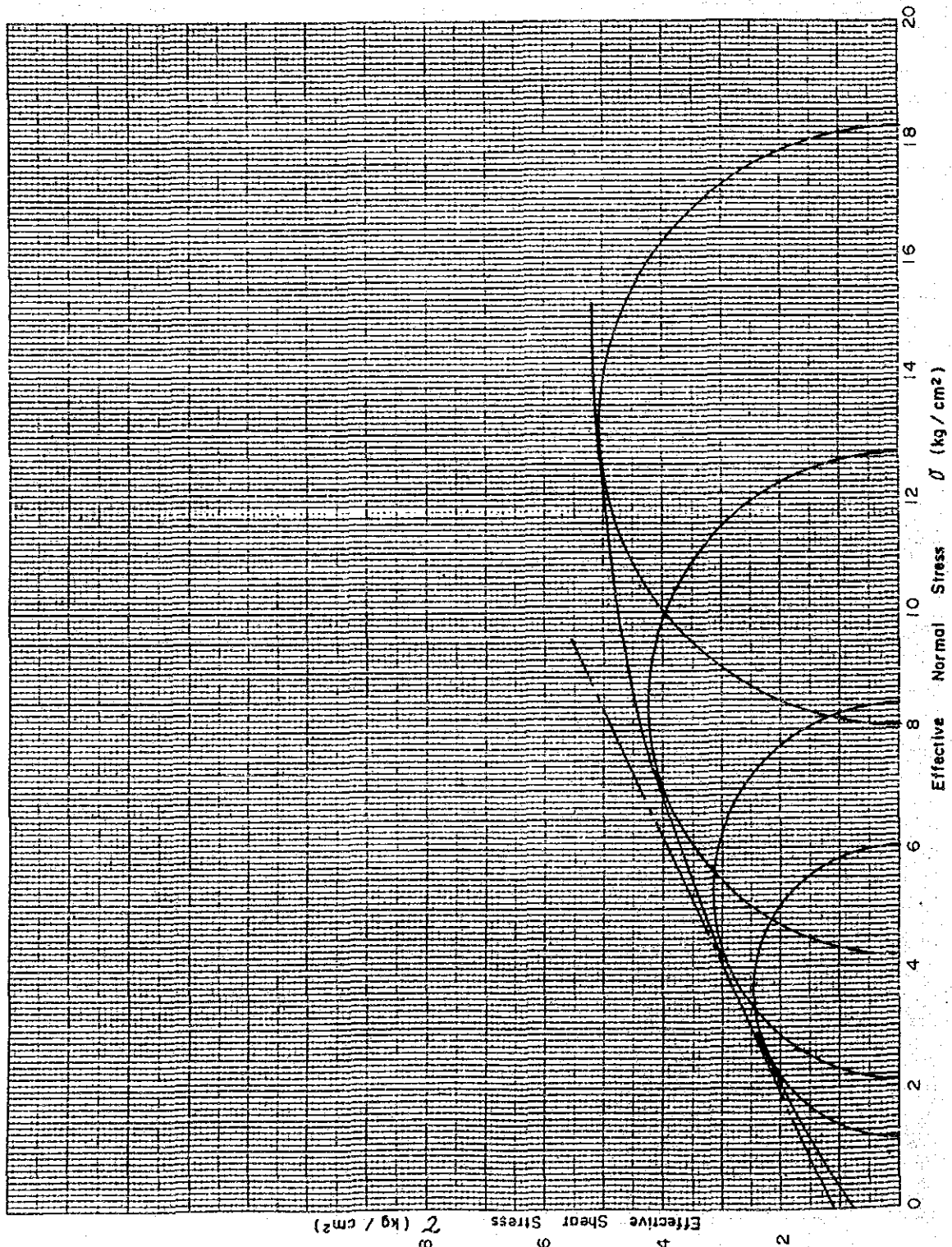
TRIAXIAL COMPRESSION TEST (LOADING DATA) <div style="float: right;">           UU CU            CU CD         </div>		FOR REPORTING	
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE II	DATE	14 - 10 - 85
SAMPLE NO. & DEPTH	SP - 8 Wopt (2.0 m ~ 5.0 m)	TESTED BY	SUHAIBUN

Loading Method		Strain Control Stress Control		Proving Ring Capacity	
		Rate Compression		/min	
Specimen Number		No. 1	No. 2	No. 3	No. 4
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26
At Peak	( $\sigma_1 - \sigma_3$ ) <sub>f</sub> (kg/cm <sup>2</sup> )	4.923	6.233	8.396	10.053
	$\epsilon_f$ (%)	5.0	15.0	15.0	15.0
	U <sub>f</sub> (kg/cm <sup>2</sup> )				
	A <sub>f</sub>				
	e <sub>f</sub>				
	$\epsilon_{uf}$ (%)				
Elapsed Time to Failure (min)		5	15	15	15
Modulus of Elasticity E <sub>50</sub> (kg/cm <sup>2</sup> )		280	356	160.7	158.8
Room Temperature (°C)		28	28	28	28





TRIAXIAL COMPRESSION TEST (MOHR'S STRESS DIAGRAM)			(UU) CU CU CD	FOR REPORTING
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III		DATE	14 - 10 - 85
SAMPLE NO. & DEPTH	SP - 8      Wopt      (2.0 m ~ 5.0m)		TESTED BY	SUHAIBUN
SCOPE	Normally Consolidated	$C_u = 1.05 \text{ kg/cm}^2$ $\sigma_u = 25.40$	$C' =$ $\sigma' =$	$\text{kg/cm}^2$ $\sigma' =$
	Over-Consolidated	$C =$ $\sigma =$	$C' =$ $\sigma' =$	$\text{kg/cm}^2$ $\sigma' =$



TRIAXIAL COMPRESSION TEST (INITIAL CONDITION:  
CONSOLIDATION: DATE)

(UU) · CU  
CU · CD

FOR REPORTING

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	18-10-85
SAMPLE NO. & DEPTH	SP-8 $W_{opt} + 2\% (2.0\text{ m} \sim 5.0\text{ m})$	TESTED BY	SUHAIBUN

Sample	Undisturbed · Disturbed	Type of Apparatus	British Type ELE Product
Shaped With	Trimmer · Other ( ) Rermoulded	Condition of Drainage During Consolidation	Single Drainage · Double Drainage. Paper Drain

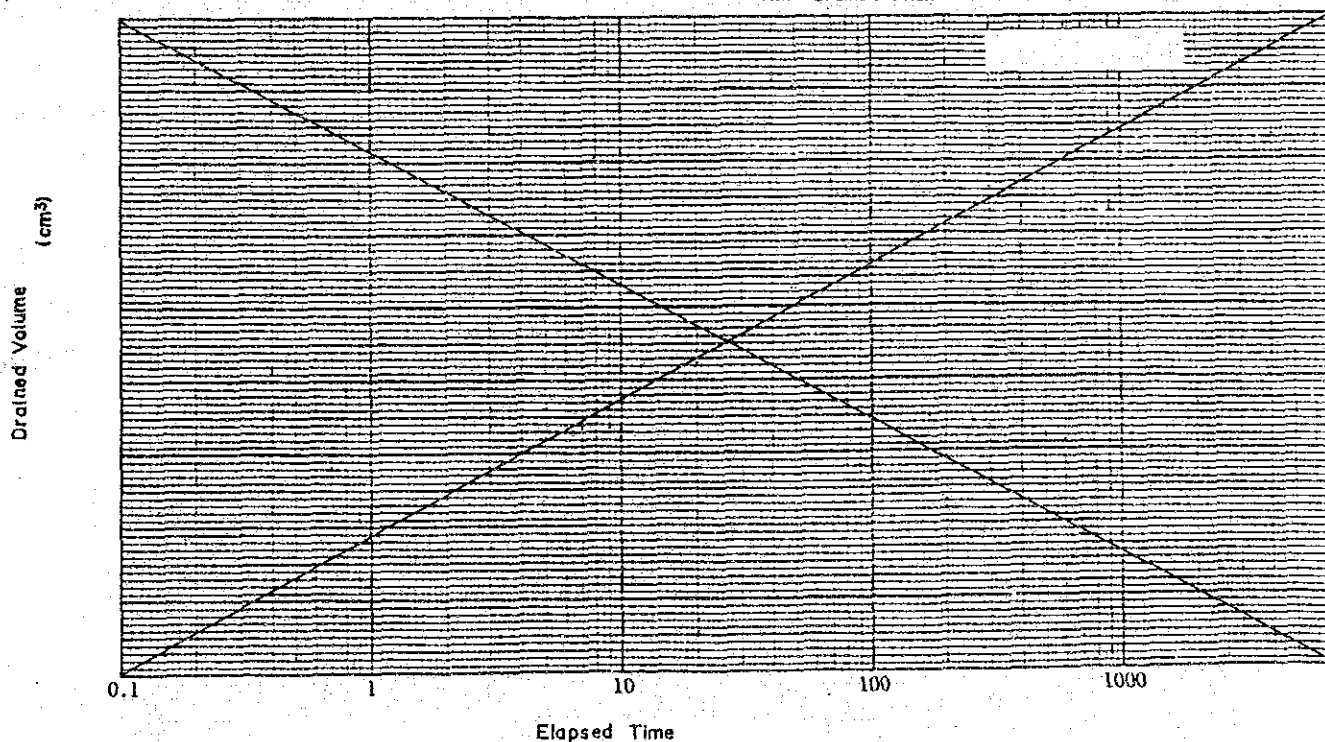
Properties

Classification

CL       $G_s$  2.84       $w_L$  56.4 %       $w_p$  22.0 %

Specimen Number			No. 1	No. 2	No. 3	No. 4	No.
Consolidation Pressure (kg/cm <sup>2</sup> )			1.12	2.14	4.18	8.26	
Initial Conditions of Specimen	Height	$H_o$ (cm)	8.0	8.0	8.0	8.0	
	Diameter	$D$ (cm)	3.8	3.8	3.8	3.8	
	Volume	$V_o$ (cm <sup>3</sup> )	91	91	91	91	
	Weight	$W_o$ (g)	184.91	184.20	185.30	183.11	
	Wet Density	$\gamma$ (g/cm <sup>3</sup> )	2.032	2.024	2.036	2.012	
	Water Content	$w_o$ (%)	22.86	22.11	23.36	21.02	22.34
	Void Ratio	$e_o$	0.717	0.713	0.720	0.708	
	Degree of Saturation	$S_r$ (%)	91	88	92	84	
Consol. Data	Consolidation Time	Dry Density $\rho_d$ (g/cm <sup>3</sup> )	1.654	1.658	1.651	1.663	
	Drained Volume	$\Delta V$ (cm <sup>3</sup> )					
	Void Ratio After Consolidation	$e$					
	Room Temperature	(°C)					

Time Drained Volume Curve for Consolidation



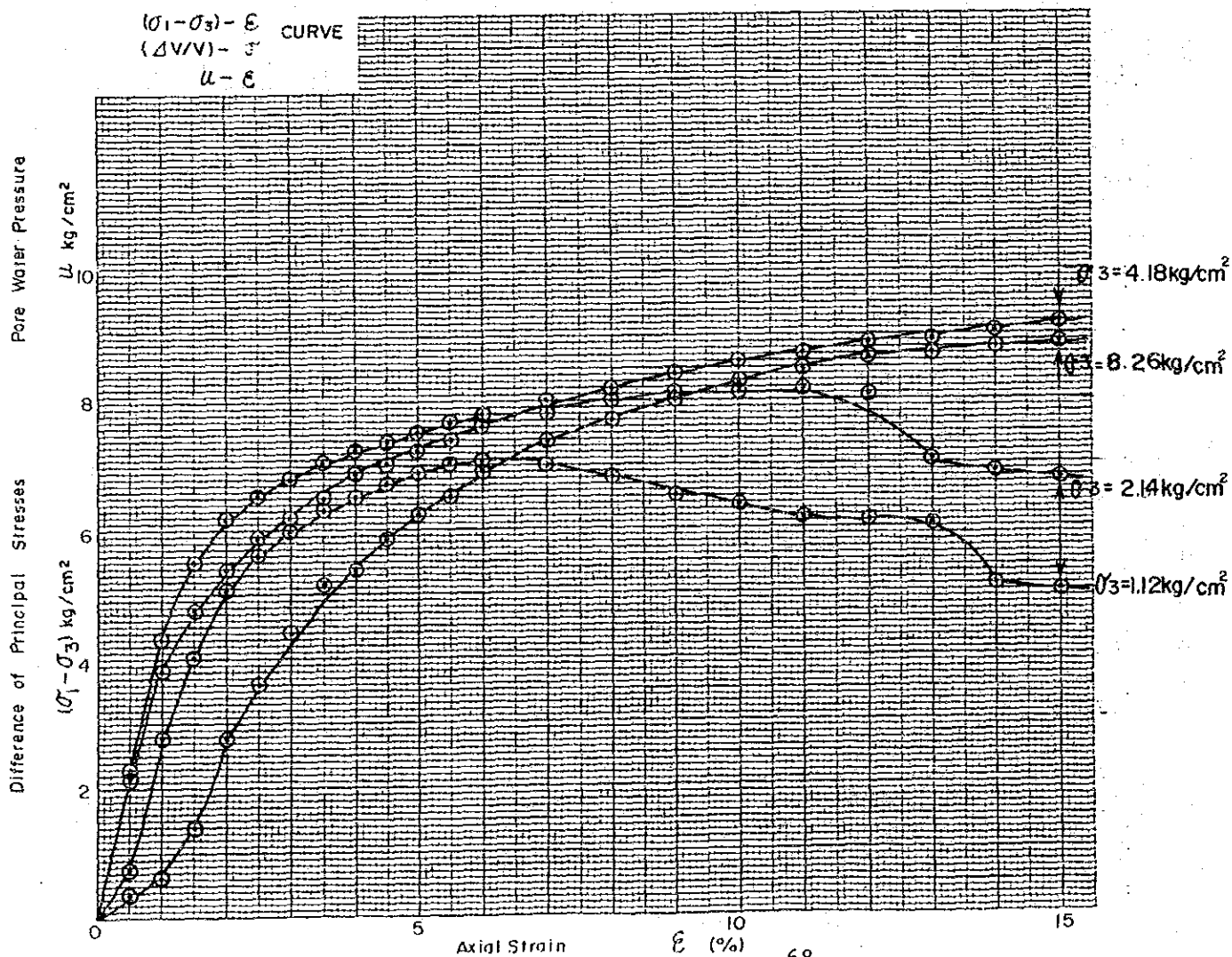
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FOR REPORTING

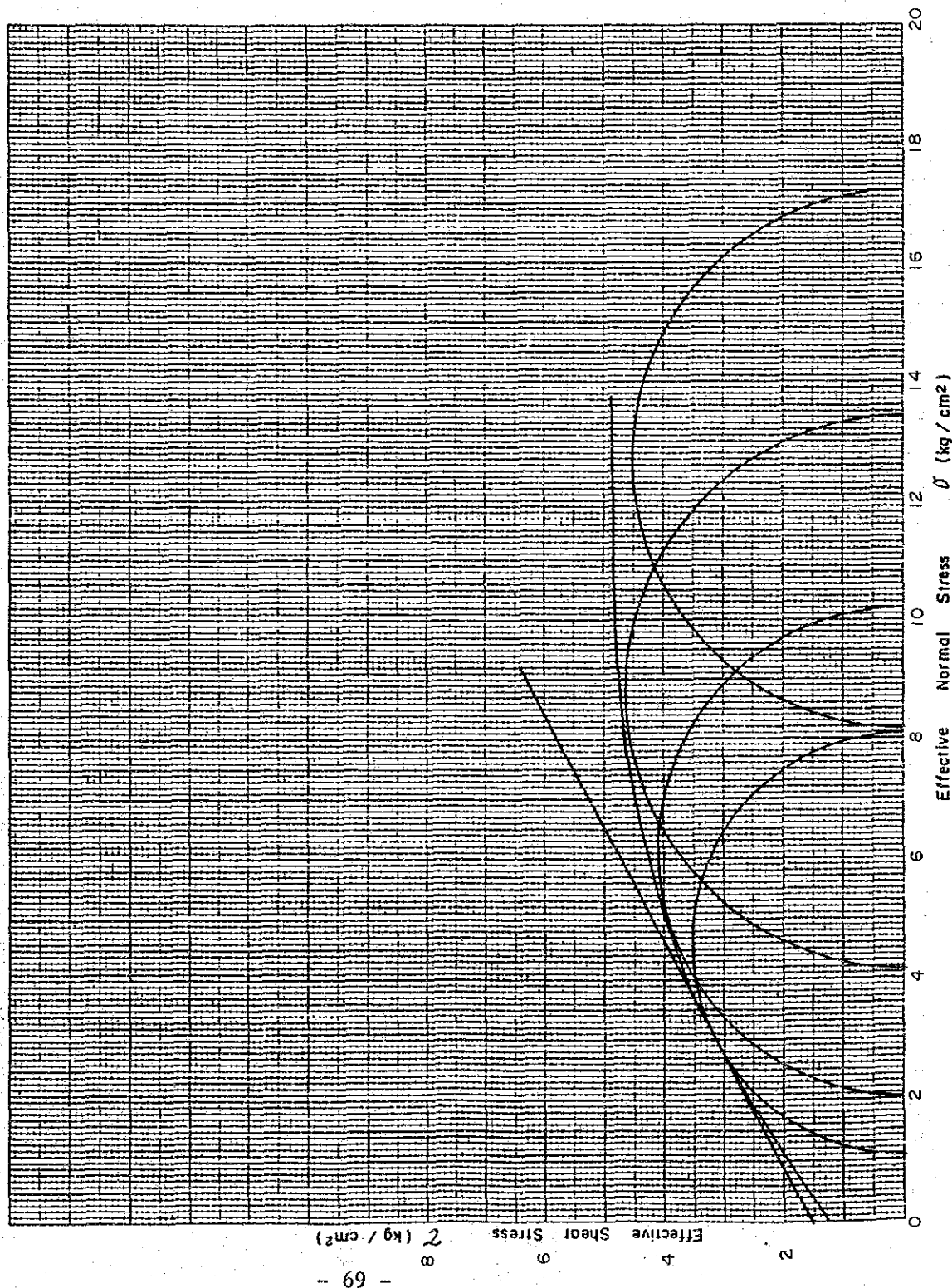
# TRIAXIAL COMPRESSION TEST (LOADING DATA)

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	18 - 10 - 85
SAMPLE NO. & DEPTH	SP - 8 Wopt + 2 % ( 2.0m ~ 5.0m )	TESTED BY	SUHAIBUN

Loading Method		Strain Control Stress Control		Proving Ring Capacity	
		Rate Compression		/min	
Specimen Number		No. 1	No. 2	No. 3	No. 4
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26
At Peak	( $\sigma_1 - \sigma_3$ ) <sub>f</sub> (kg/cm <sup>2</sup> )	6.972	8.148	9.153	8.896
	$\epsilon_f$ (%)	6.0	11.0	15.0	15.0
	U <sub>f</sub> (kg/cm <sup>2</sup> )				
	A <sub>f</sub>				
	e <sub>f</sub>				
	$\epsilon_{vf}$ (%)				
Elapsed Time to Failure (min)		6.0	11.0	15.0	15.0
Modulus of Elasticity E <sub>50</sub> (kg/cm <sup>2</sup> )		14.0	356	418	153
Room Temperature (°C)		28	28	28	28



TRIAXIAL COMPRESSION TEST (MOHR'S STRESS DIAGRAM)		(UU) CU CU CD	FOR REPORTING CU CD
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	18 - 10 - 85
SAMPLE NO. & DEPTH	SP - 8 Wopt + 2% ( 2.0 m ~ 5.0 m )	TESTED BY	SUHAIBUN
SCOPE	Normally Consolidated	$C_u = 1.55$ kg/cm <sup>2</sup> , $\sigma_u = 26.57$	$C' =$ kg/cm <sup>2</sup> , $\phi' =$
	Over-Consolidated	$C =$ kg/cm <sup>2</sup> , $\phi =$	$C' =$ kg/cm <sup>2</sup> , $\phi' =$



TRIAXIAL COMPRESSION TEST (INITIAL CONDITION:  
CONSOLIDATION: DATE)

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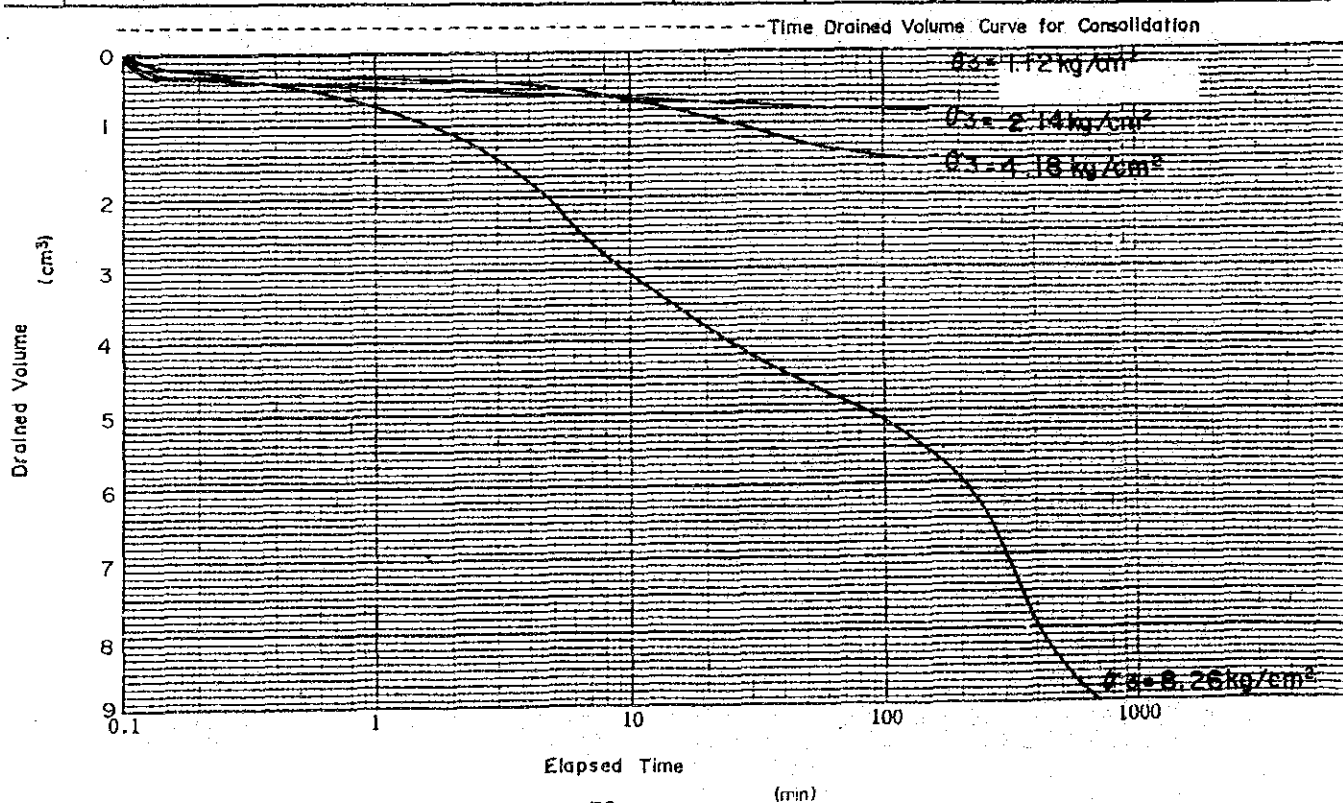
CU · CD

FOR REPORTING

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	24 - 10 - 85
SAMPLE NO. & DEPTH	SP-7 Wopt (2.0 m ~ 5.0 m)	TESTED BY	SUHAIBUN

Sample	Undisturbed · Disturbed	Type of Apparatus	British Type ELE Product
Shaped With	Trimmer · Other ( ) Remoulded	Condition of Drainage During Consolidation	Single Drainage, Double Drainage, Paper Drain
Properties	Classification	Gs 2.85 wL % wp %	

Specimen Number		No. 1	No. 2	No. 3	No. 4	No.
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26	
Initial Conditions of Specimen	Height H <sub>o</sub> (cm)	8	8	8	8	
	Diameter D (cm)	3.8	3.8	3.8	3.8	
	Volume V <sub>o</sub> (cm <sup>3</sup> )	91	91	91	91	
	Weight W <sub>o</sub> (g)	184.20	179.13	175.59	180.75	
	Wet Density γ (g/cm <sup>3</sup> )	2.024	1.968	1.929	1.986	1.976
	Water Content w <sub>o</sub> (%)	25.90	26.10	28.30	29.90	27.55
	Void Ratio e <sub>o</sub>	0.772	0.824	0.894	0.865	
	Degree of Saturation S <sub>r</sub> (%)	95.6	90.1	90.1	99	
Consol. Data	Consolidation Time Dry Density γ <sub>d</sub> (g/cm <sup>3</sup> )	1.608	1.562	1.504	1.528	1.550
	Drained Volume ΔV (cm <sup>3</sup> )					
	Void Ratio After Consolidation e					
	Room Temperature (°C)					



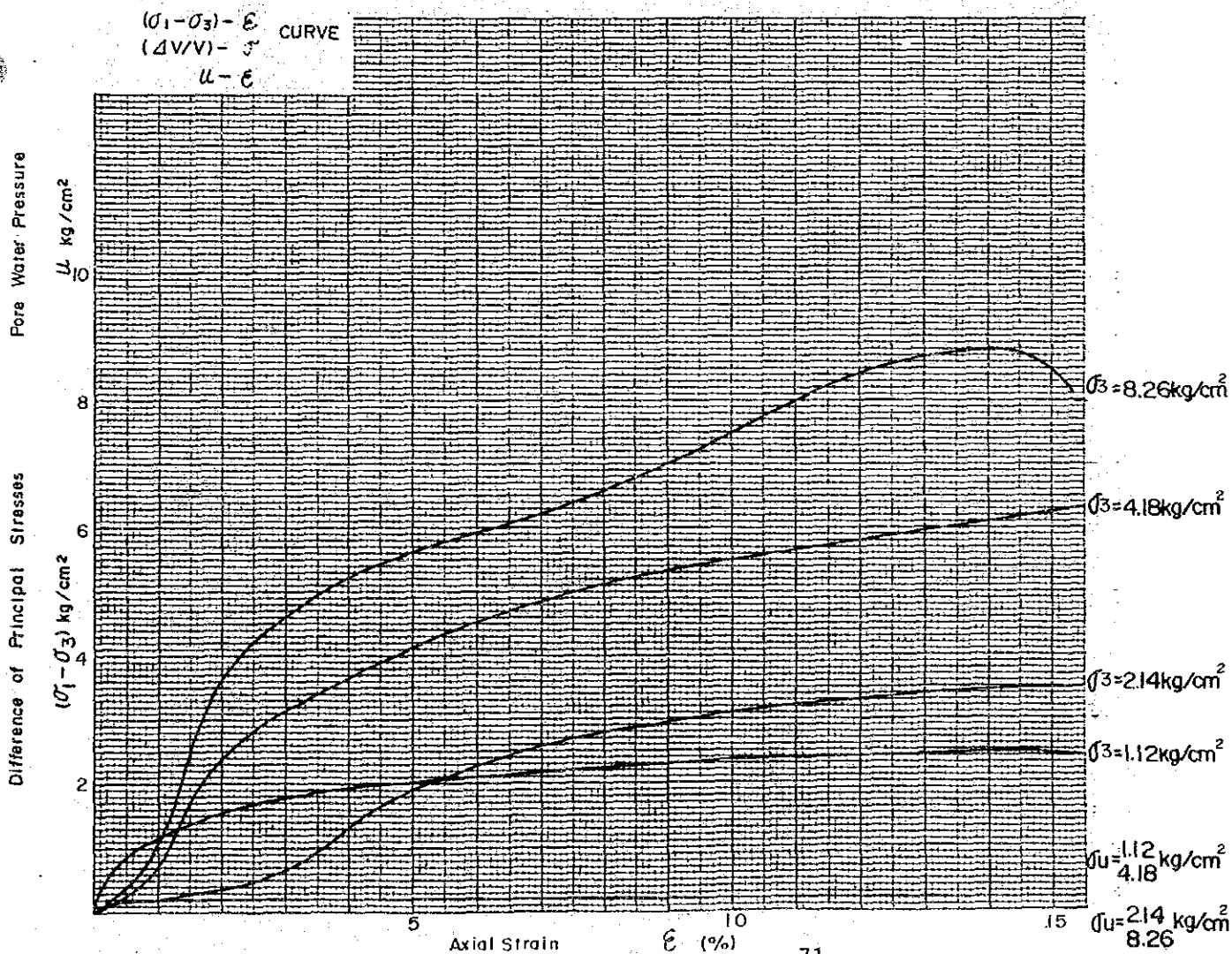
UU CU  
CU CD

TRIAXIAL COMPRESSION TEST (LOADING DATA) CU FOR REPORTING

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	23-10-85
SAMPLE NO. & DEPTH	SP-7 Wopt (2.0m ~ 5.0 m)	TESTED BY	SUHAIBUN

Loading Method	Strain Control Stress Control	Proving Ring Capacity
	Rate Compression /min	

Specimen Number		No. 1	No. 2	No. 3	No. 4	No.
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26	
At Peak	$(\sigma_1 - \sigma_3)_f$ (kg/cm <sup>2</sup> )	2.427	3.552	6.140	8.763	
	$\epsilon_f$ (%)	15.0	15.0	15.0	13.0	
	$U_f$ (kg/cm <sup>2</sup> )	0.002	0	0.02	0	
	$A_f$					
	$e_f$					
	$\epsilon_{vf}$ (%)					
Elapsed Time to Failure (min)		15	15	15	13	
Modulus of Elasticity E50 (kg/cm <sup>2</sup> )		186	31	161	165.2	
Room Temperature (°C)						



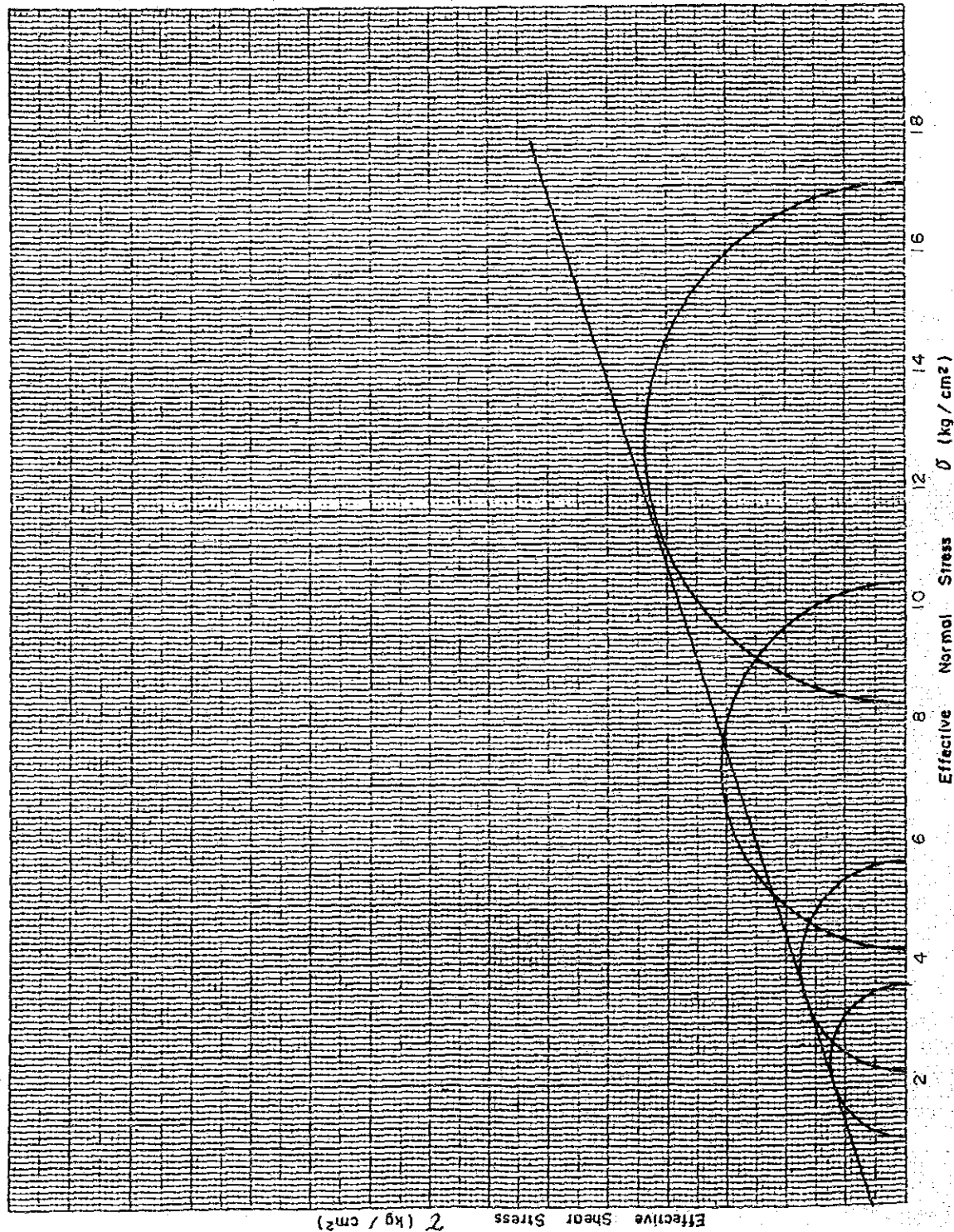
# TRIAXIAL COMPRESSION TEST (MOHR'S STRESS DIAGRAM)

UU CU  
(CU) CD

FOR REPORTING

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	24 - 10 - 85
SAMPLE NO. & DEPTH	SP - 7 Wopt ( 2.0m ~ 5.0m )	TESTED BY	SUHAIBUN

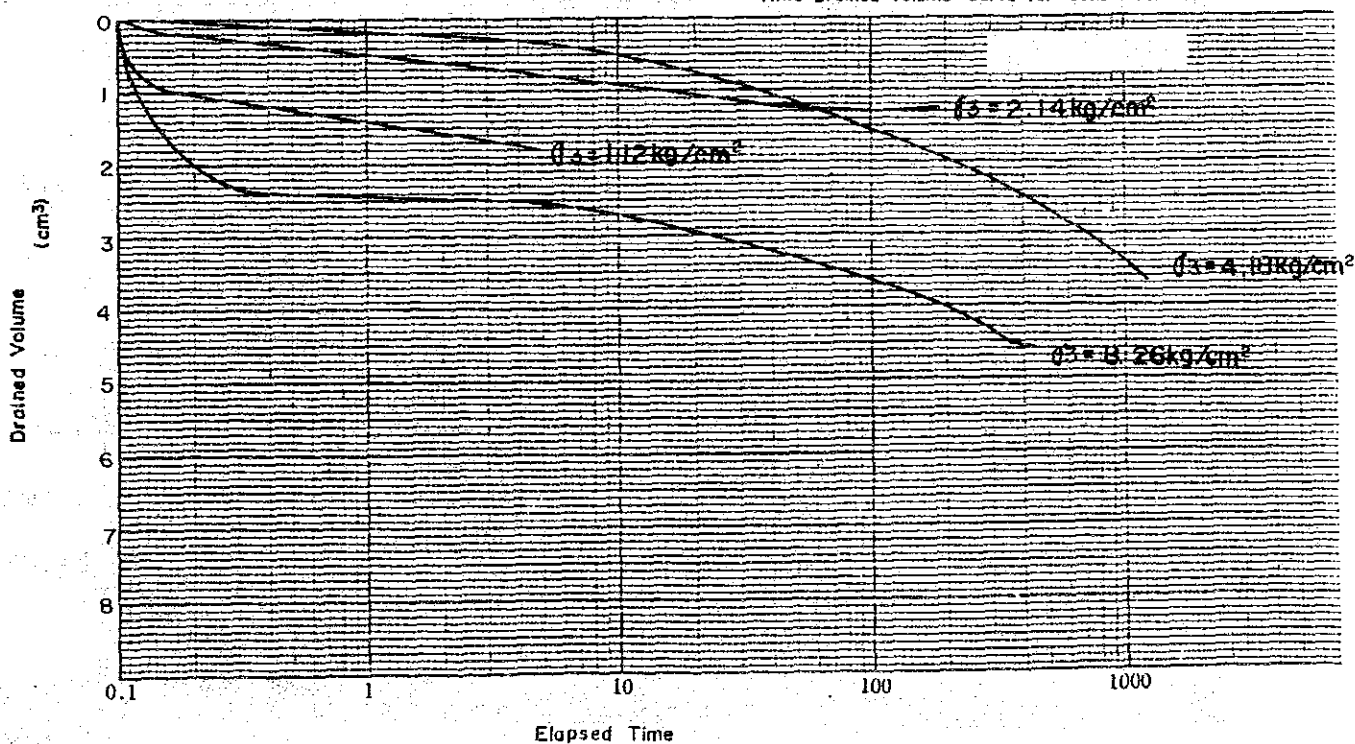
SCOPE	Normally Consolidated	$C_u =$ kg/cm <sup>2</sup> , $\phi_u =$	$C' = 0.567$ kg/cm <sup>2</sup> , $\phi' = 17.69$
	Over-Consolidated	$C =$ kg/cm <sup>2</sup> , $\phi =$	$C' =$ kg/cm <sup>2</sup> , $\phi' =$





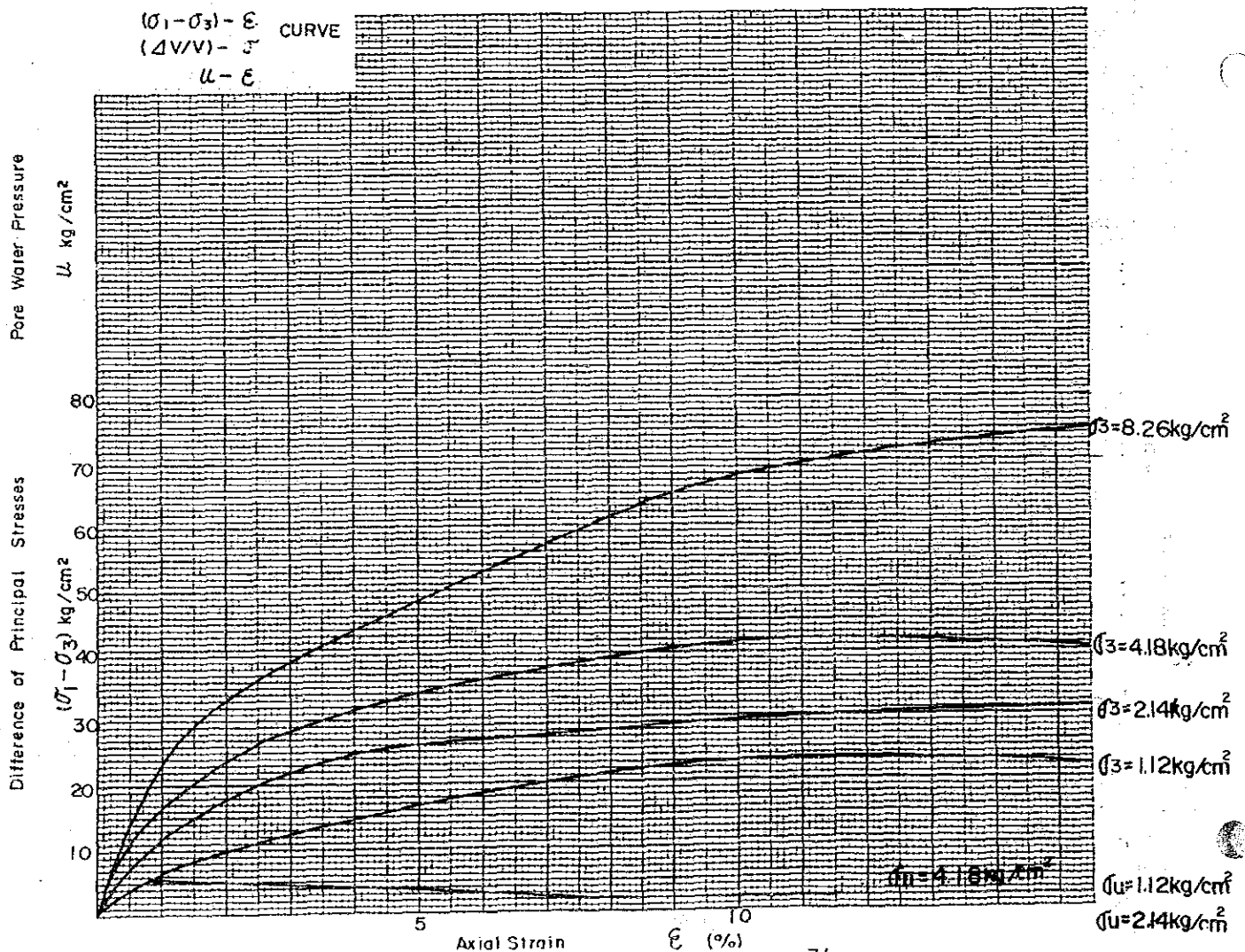
FOR REPORTING

Specimen Number			No. 1	No. 2	No. 3	No. 4	No.
Consolidation Pressure (kg/cm <sup>2</sup> )			1.12	2.14	4.18	8.26	
Initial Conditions at Specimen	Height	H <sub>a</sub> (cm)	8	8	8	8	
	Diameter	D (cm)	3.8	3.8	3.8	3.8	
	Volume	V <sub>a</sub> (cm <sup>3</sup> )	91	91	91	91	
	Weight	W <sub>a</sub> (g)	186.30	185.00	186.20	186.10	
	Wet Density	γ (g/cm <sup>3</sup> )	2.019	2.033	2.046	2.045	
	Water Content	w <sub>a</sub> (%)	27.5	27.9	28.3	27.8	27.9
	Void Ratio	e <sub>a</sub>	0.774	0.792	0.788	0.781	
	Degree of Saturation	S <sub>r</sub> (%)	100	100	100	100	
Consol. Data	Consolidation Time	Dry Density d(g/cm <sup>3</sup> )	1.606	1.590	1.594	1.600	1.598
	Drained Volume	ΔV (cm <sup>3</sup> )					
	Void Ratio After Consolidation	e					
	Room Temperature	(°C)					



UU      CU TRIAXIAL COMPRESSION TEST (LOADING DATA) (CU)      CD		FOR REPORTING	
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	18 - 10 - 85
SAMPLE NO. & DEPTH	SP - 7      Wopt + 2%      ( 2.0 m ~ 5.0 m )	TESTED BY	SUHAIBUN

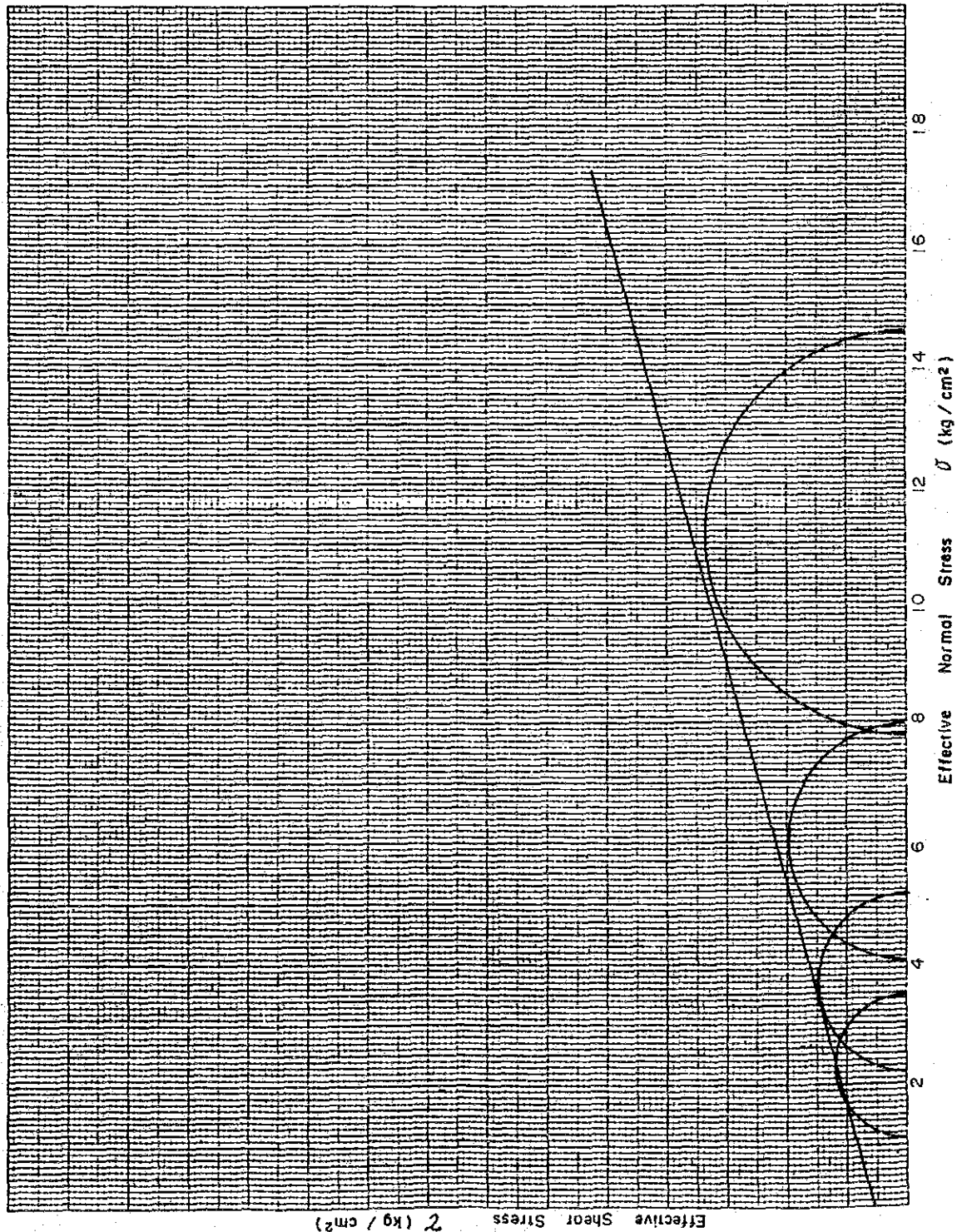
Loading Method	Strain Control Stress Control	Proving Ring Capacity				
	Rate Compression      0.1 /min					
Specimen Number		No. 1	No. 2	No. 3	No. 4	No.
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26	
At Peak	$(\sigma_1 - \sigma_3)_f$ (kg/cm <sup>2</sup> )	2.363	3.039	4.173	7.418	
	$\epsilon_f$ (%)	12.1	14.1	12.2	15.25	
	$U_f$ (kg/cm <sup>2</sup> )	0	0	0.20	0.53	
	$A_f$					
	$e_f$					
	$\epsilon_{vf}$ (%)					
Elapsed Time to Failure (min)		12.1	14.1	12.2	15.25	
Modulus of Elasticity E50 (kg/cm <sup>2</sup> )		70	119	139.3	118	
Room Temperature (°C)		28	28	28	28	



TRIAXIAL COMPRESSION TEST (MOHR'S STRESS DIAGRAM)			UU (CU)	CU CD	FOR REPORTING
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE II		DATE	18 - 10 - 85	
SAMPLE NO. & DEPTH	SP - 7 Wopt + 2% (2.0 m ~ 5.0 m)		TESTED BY	SUHAIBUN	

SCOPE	Normally Consolidated	$C_u =$ $\text{kg/cm}^2$ , $\phi_u =$	$C' = 0.581$ $\text{kg/cm}^2$ , $\phi' = 14.84$
	Over-Consolidated	$C =$ $\text{kg/cm}^2$ , $\phi =$	$C' =$ $\text{kg/cm}^2$ , $\phi' =$



# TRIAXIAL COMPRESSION TEST (INITIAL CONDITION: CONSOLIDATION: DATE)

UU · CU

CU · CD

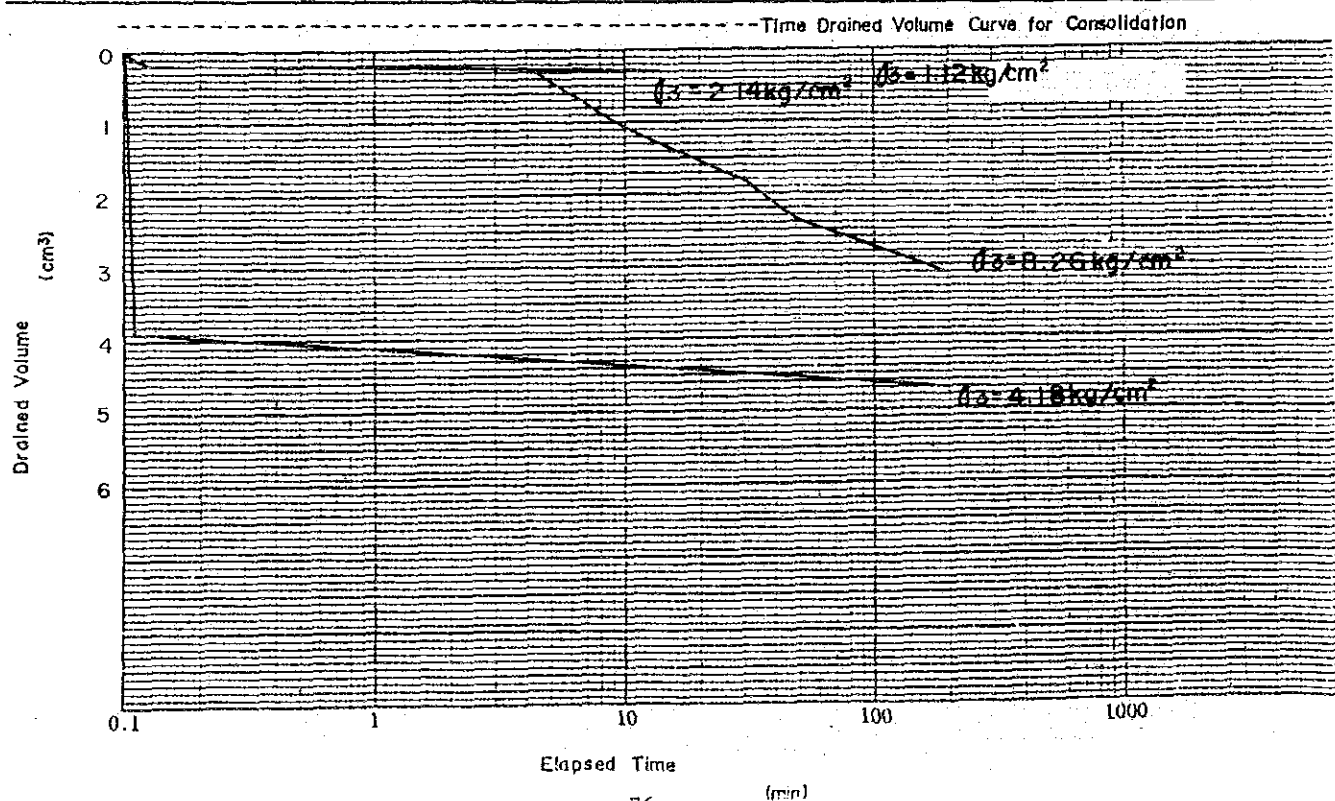
FOR REPORTING

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE II	DATE	26-10-85
SAMPLE NO. & DEPTH	SP-8 Wopt (2.0 m ~ 5.0 m)	TESTED BY	SUHAIBUN

Sample	Undisturbed · Disturbed	Type of Apparatus	British Type ELE Product
Shaped With	Trimmer · Other ( ) ( Remoulded )	Condition of Drainage During Consolidation	Single Drainage · Double Drainage · Paper Drain
Properties	Classification		

CL \_\_\_\_\_ Gs 2.84 wL \_\_\_\_\_ % wp \_\_\_\_\_ %

Specimen Number		No. 1	No. 2	No. 3	No. 4	No.
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26	
Initial Conditions of Specimen	Height H <sub>o</sub> (cm)	8	8	8	8	
	Diameter D (cm)	3.8	3.8	3.8	3.8	
	Volume V <sub>o</sub> (cm <sup>3</sup> )	91	91	91	91	
	Weight W <sub>o</sub> (g)	184.84	183.49	185.20	187.90	
	Wet Density γ (g/cm <sup>3</sup> )	2.031	2.016	2.035	2.064	2.037
	Water Content w <sub>o</sub> (%)	20.7	21.4	21.44	21.0	21.14
	Void Ratio e <sub>o</sub>	0.687	0.408	0.695	0.663	0.613
	Degree of Saturation S <sub>r</sub> (%)	86	100	88	90	91
Consol. Data	Consolidation Time Dry Density d (g/cm <sup>3</sup> )	1.683	2.016	1.676	1.708	1.771
	Drained Volume ΔV (cm <sup>3</sup> )					
	Void Ratio After Consolidation e					
	Room Temperature (°C)					



UU CU  
CU CD

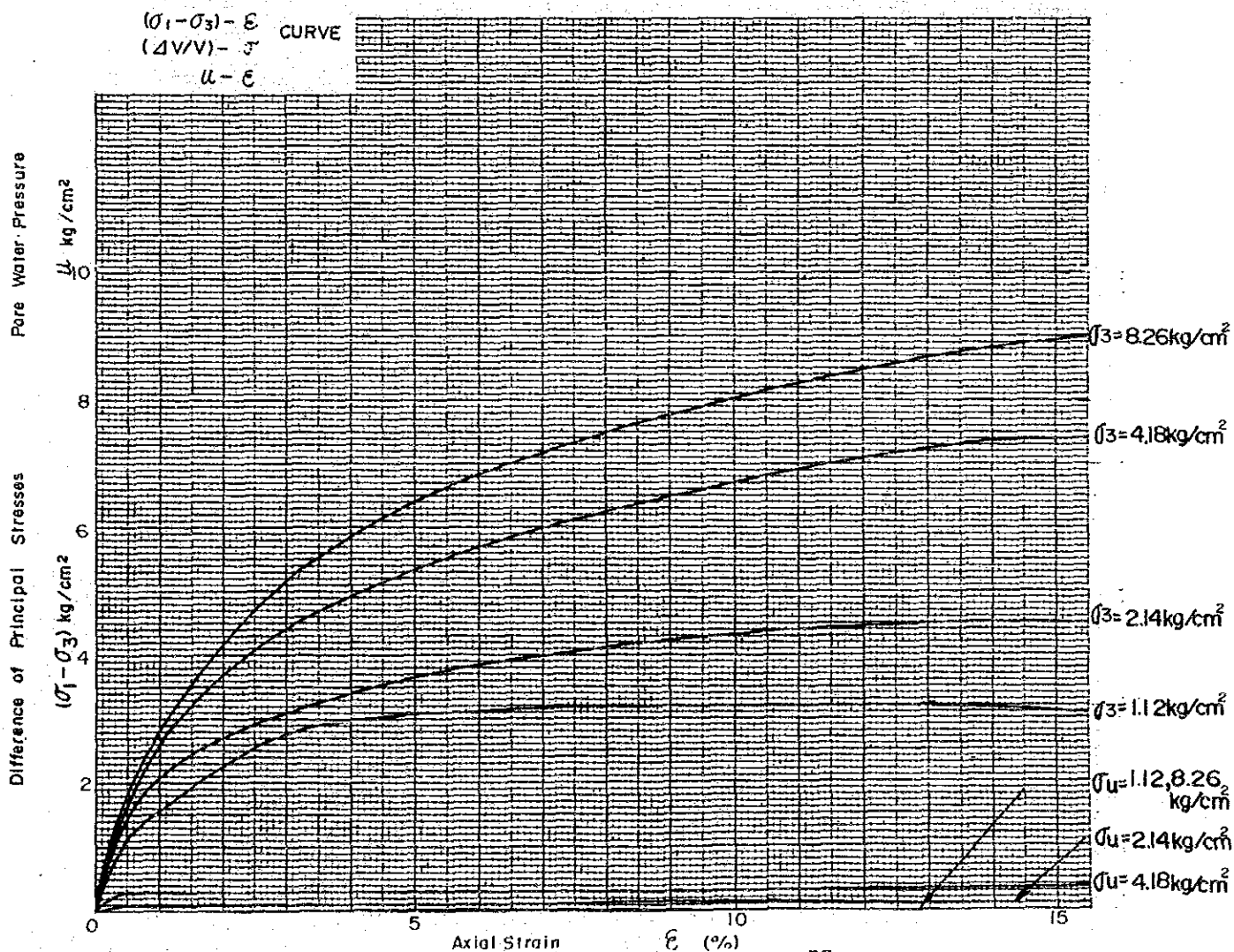
TRIAXIAL COMPRESSION TEST (LOADING DATA) CU

FOR REPORTING

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	26 - 10 - 85
SAMPLE NO. & DEPTH	SP - 8 Wopt ( 2.0m ~ 5.0m )	TESTED BY	SUHAIBUN

Loading Method	Strain Control	Proving Ring Capacity
	Stress Control	
	Rate Compression /min	

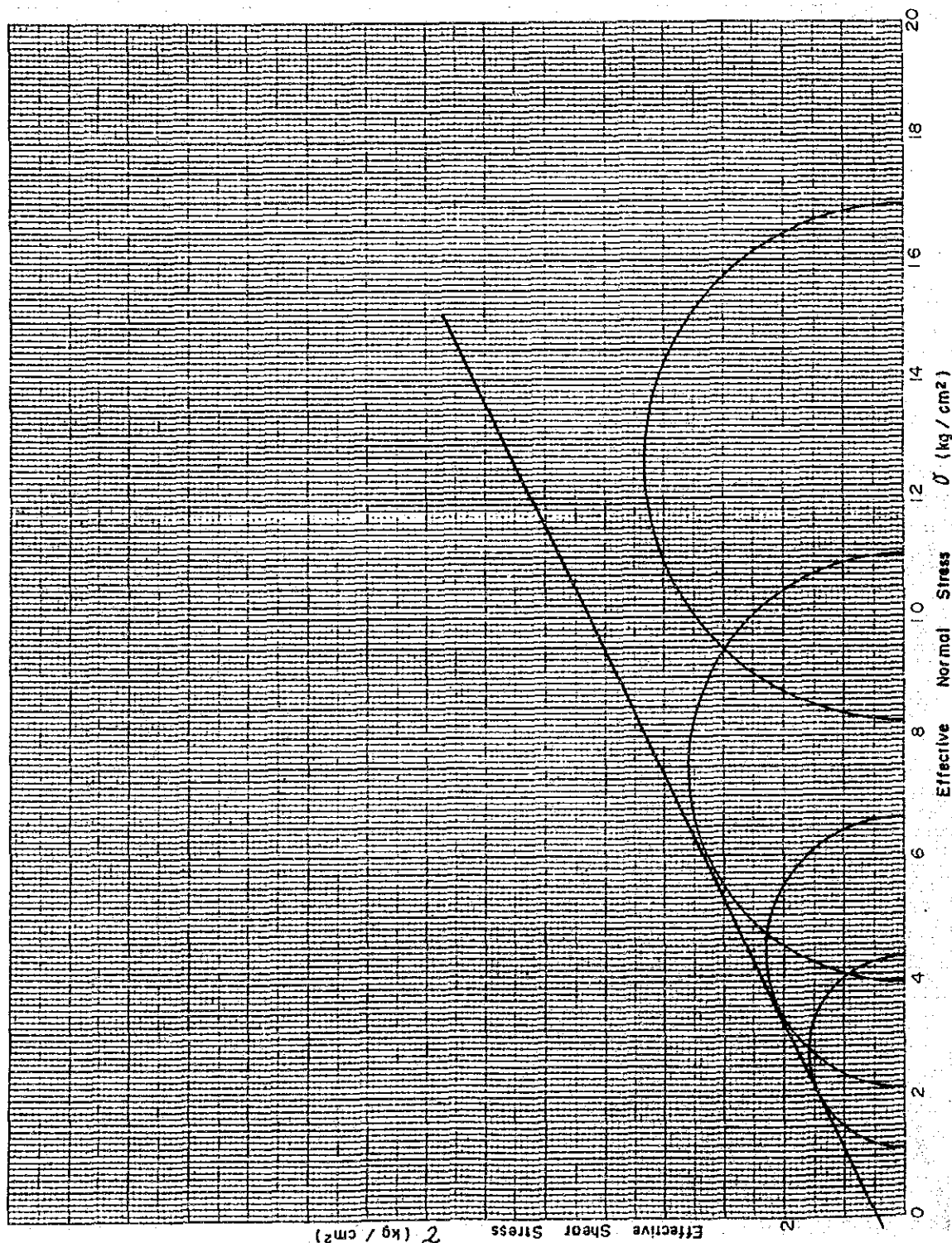
Specimen Number		No. 1	No. 2	No. 3	No. 4	No.
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26	
At Peak	( $\sigma_1 - \sigma_3$ ) <sub>f</sub> (kg/cm <sup>2</sup> )	3.179	4.504	7.446	8.694	
	$\epsilon_f$ (%)	12	15	15	15	
	U <sub>f</sub> (kg/cm <sup>2</sup> )	0	0.001	0.30	0	
	A <sub>f</sub>					
	e <sub>f</sub>					
	$\epsilon_{vf}$ (%)					
Elapsed Time to Failure (min)		12	15	15	15	
Modulus of Elasticity E <sub>50</sub> (kg/cm <sup>2</sup> )		280	356	298	206.5	
Room Temperature (°C)		27	27	27	27	



TRIAXIAL COMPRESSION TEST (MOHR'S STRESS DIAGRAM)			UU CU (CU)	CD CD	FOR REPORTING
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III		DATE	26 - 10 - 85	
SAMPLE NO. & DEPTH	SP - 8 Wopt (2.0 m ~ 5.0 m)		TESTED BY	SUHAIBUN	

SCOPE	Normally Consolidated	$C_u =$ $\text{kg/cm}^2$ , $\mu_u =$	$C' = 0.413$ $\text{kg/cm}^2$ , $\mu' = 26.01$
	Over-Consolidated	$C =$ $\text{kg/cm}^2$ , $\mu =$	$C' =$ $\text{kg/cm}^2$ , $\mu' =$



TRIAXIAL COMPRESSION TEST (INITIAL CONDITION:  
CONSOLIDATION: DATE)

UU · CU  
(CU) · CD

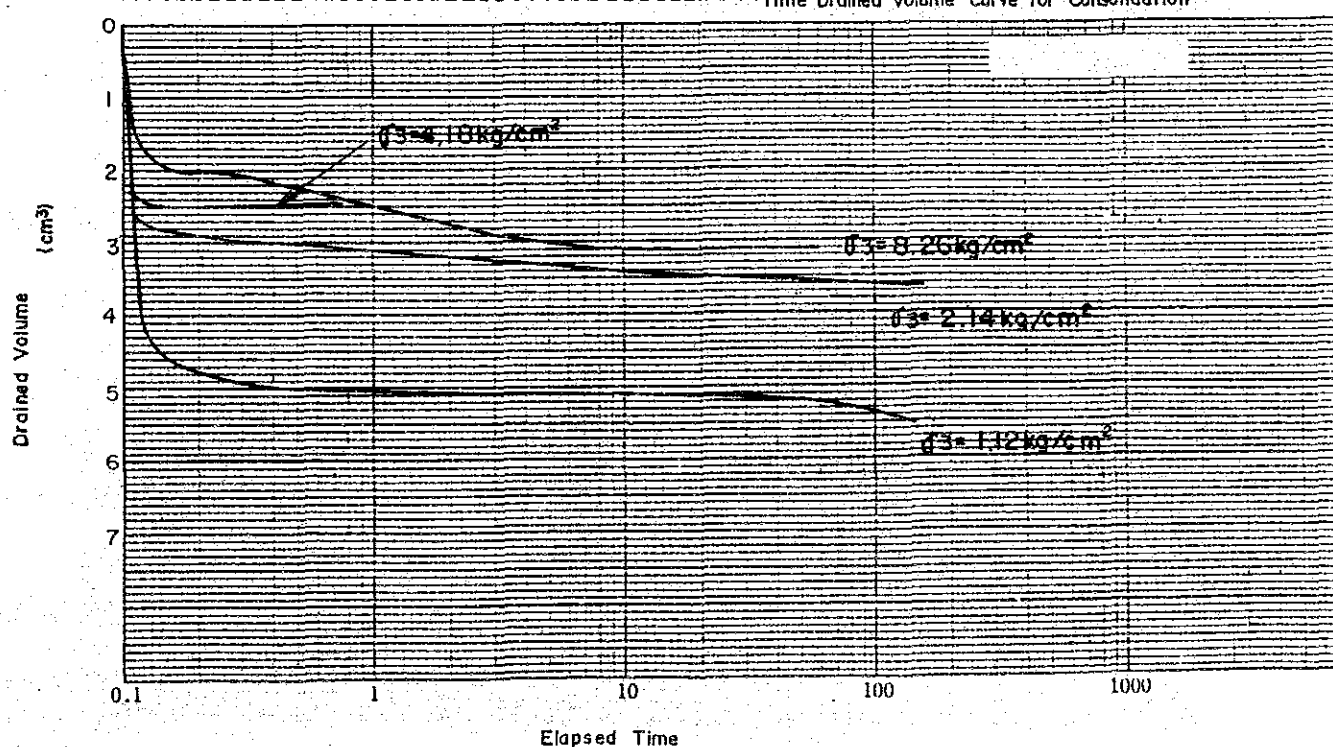
FOR REPORTING

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	22 - 10 - 85
SAMPLE NO. & DEPTH	SP - 8 Wopt + 2 % (2.0 m ~ 5.0 m)	TESTED BY	SUHAIBUN

Sample	Undisturbed · Disturbed	Type of Apparatus	British Type ELE Product
Shaped With	Trimmer · Other ( ) Remoulded	Condition of Drainage During Consolidation	Single Drainage Double Drainage, Paper Drain
Properties	Classification		
		Gs 2.84	wL % wp %

Specimen Number		No. 1	No. 2	No. 3	No. 4	No.
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26	
Initial Conditions of Specimen	Height H <sub>c</sub> (cm)	8	8	8	8	
	Diameter D (cm)	3.8	3.8	3.8	3.8	
	Volume V <sub>c</sub> (cm <sup>3</sup> )	91	91	91	91	
	Weight W <sub>c</sub> (g)	183.92	183.40	184.29	184.64	
	Wet Density γ (g/cm <sup>3</sup> )	2.019	2.015	2.025	2.029	
	Water Content w <sub>c</sub> (%)	23.30	22.83	22.41	22.89	22.86
	Void Ratio e <sub>c</sub>	0.734	0.731	0.717	0.720	
	Degree of Saturation S <sub>r</sub> (%)	90	89	89	90	
Consol. Data	Consolidation Time Dry Density ρ <sub>d</sub> (g/cm <sup>3</sup> )	1.637	1.641	1.654	1.651	1.646
	Drained Volume ΔV (cm <sup>3</sup> )					
	Void Ratio After Consolidation e					
	Room Temperature (°C)					

Time Drained Volume Curve for Consolidation





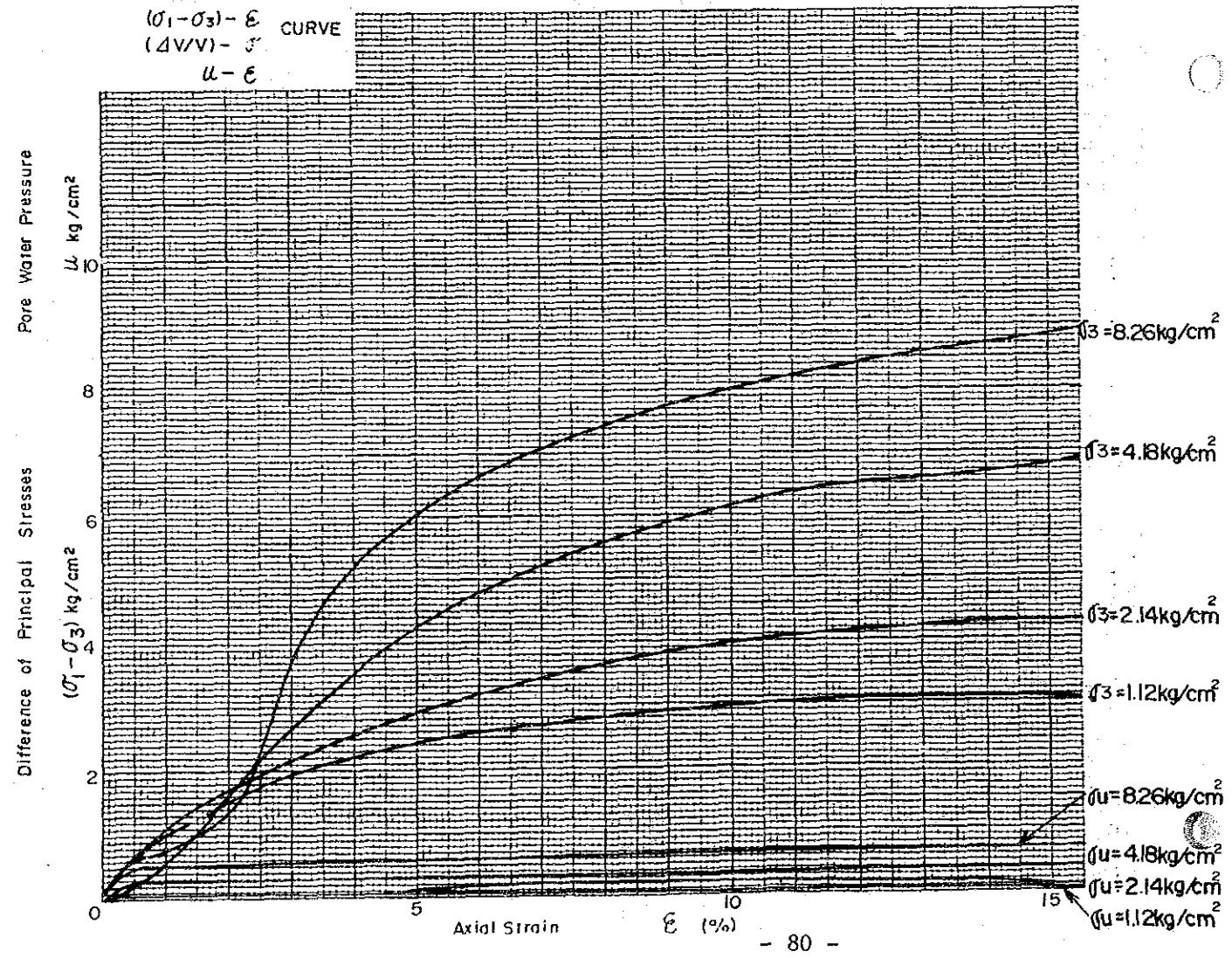
UU    CU  
CD    CD

FOR REPORTING

# TRIAxIAL COMPRESSION TEST (LOADING DATA) (CU)

NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	22-10-85
SAMPLE NO. & DEPTH	SP-8    Wopt + 2 % (2.0 m ~ 5.0 m)	TESTED BY	SUHAIBUN

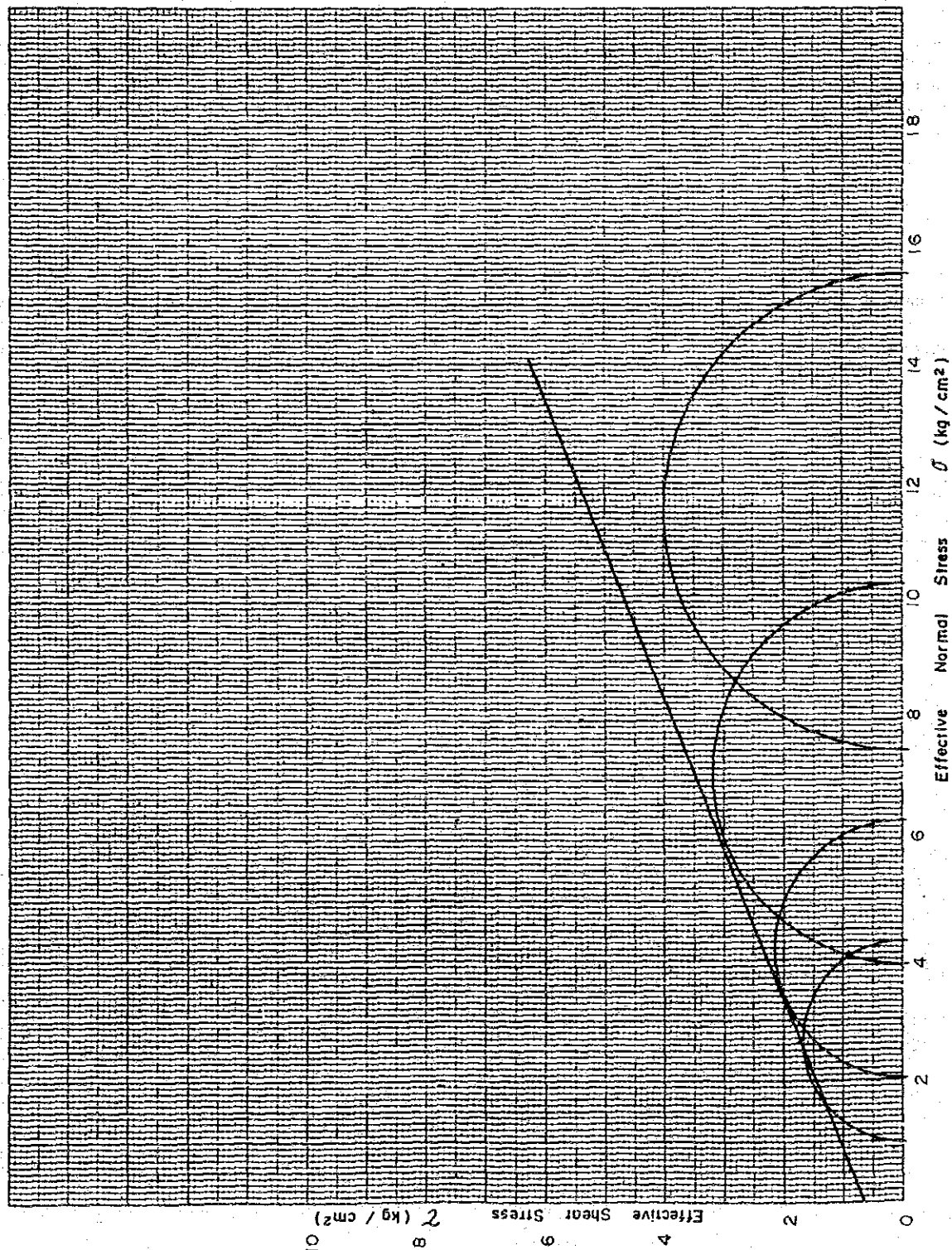
Loading Method	Strain Control Stress Control	Proving Ring Capacity -----				
	Rate Compression ----- /min					
Specimen Number		No. 1	No. 2	No. 3	No. 4	No.
Consolidation Pressure (kg/cm <sup>2</sup> )		1.12	2.14	4.18	8.26	
At Peak	( $\sigma_1 - \sigma_3$ ) <sub>f</sub> (kg/cm <sup>2</sup> )	4.219	6.294	10.224	15.613	
	$\epsilon_f$ (%)	13.26	15.20	15.14	15.21	
	U <sub>f</sub> (kg/cm <sup>2</sup> )	0.009	0.11	0.38	0.69	
	A <sub>f</sub>					
	e <sub>f</sub>					
	$\epsilon_{vf}$ (%)					
Elapsed Time to Failure (min)		13.3	15	15	15	
Modulus of Elasticity E <sub>50</sub> (kg/cm <sup>2</sup> )		186	107	72.1	129.1	
Room Temperature (°C)		28	28	28	28	



TRIAXIAL COMPRESSION TEST (MOHR'S STRESS DIAGRAM)		UU (CU)	CU CD	FOR REPORTING
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	22 - 10 - 85	
SAMPLE NO. & DEPTH	SP - 8    Wopt + 2 % ( 2.0m ~ 5.0 m )	TESTED BY	SUHAIBUN	

SCOPE	Normally Consolidated	$C_u =$ $\text{kg/cm}^2$ , $\phi_u =$	$C' = 0.619$ $\text{kg/cm}^2$ , $\phi' = 21.75$
	Over-Consolidated	$C =$ $\text{kg/cm}^2$ , $\phi =$	$C' =$ $\text{kg/cm}^2$ , $\phi' =$



ASTM C136 - 84	GRADATION ANALYSIS			FOR REPORTING
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	5 - 9 - 85	
SAMPLE NO. & DEPTH	GP - 1 Mixed ( 1.0 m 2.0 m )	TESTED BY	DORA	

### COARSE AGGREGATE

Sieve	Grain Size (mm)			90	75	63	50	37.5	25	19	12.5	9.5	4.75
	Total Passing (%)					98.9	94.5	74.9	58.6	46.3	24.0	16.0	0.3

### FINE AGGREGATE

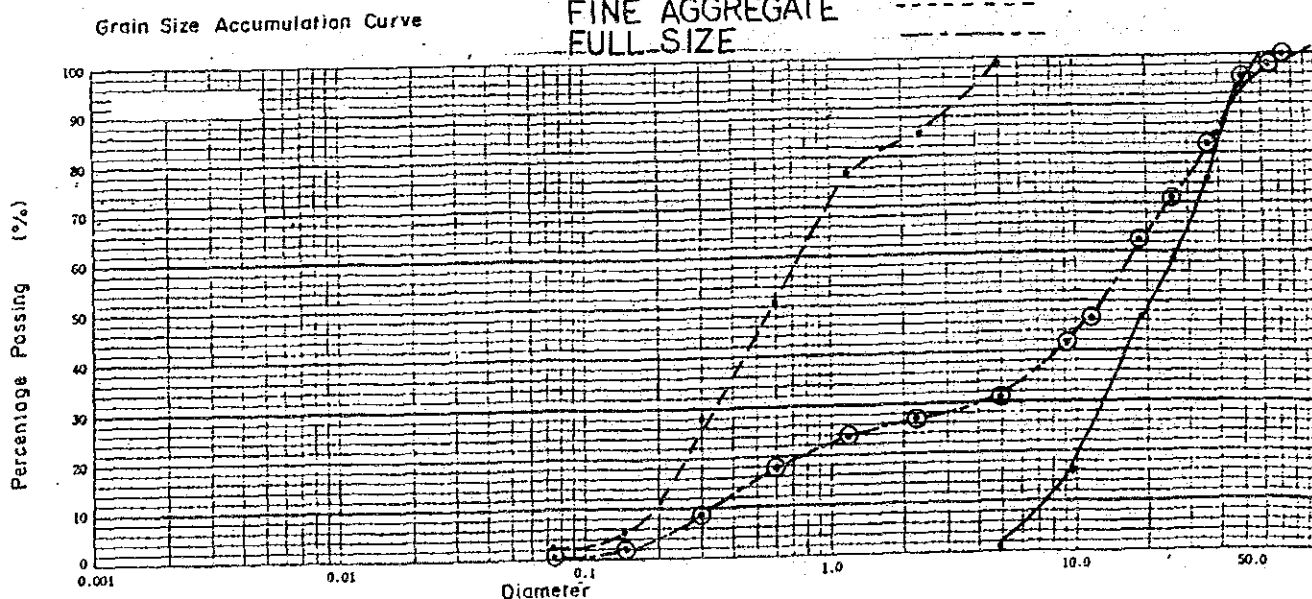
Sieve	Grain Size (mm)						4.75	2.40	1.18	0.6	0.3	0.15
	Total Passing (%)						100.0	87.3	78.3	51.3	28.2	4.7
												0.075
												1.11

### FULL SIZE

Sieve	Grain Size (mm)	90	75	63	50	37.5	25	19	12.5	9.5	4.75	2.36	1.18	0.6	0.3	0.15
	Total Passing (%)	100.0	98.6	97.8	94.9	81.5	70.5	62.1	46.8	41.4	30.7	26.7	24.0	15.7	8.6	1.4
																0.075
																0.3

ex.

COARSE AGGREGATE  
FINE AGGREGATE  
FULL SIZE



ASTM C136 - 84	GRADATION ANALYSIS			FOR REPORTING
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	26 - 9 - 85	
SAMPLE NO. & DEPTH	GP - 2 Mixed ( 1.0 m 2.0 m )	TESTED BY	DORA	

### COARSE AGGREGATE

Sieve	Grain Size (mm)			90	75	63	50	37.5	25	19	12.5	9.5	4.75
	Total Passing (%)				100.0	89.2	79.5	66.6	49.2	35.8	—	13.4	1.7

(21.0)

### FINE AGGREGATE

Sieve	Grain Size (mm)						4.75	2.36	1.18	0.6	0.3	0.15
	Total Passing (%)						99.7	80.3	64.4	49.7	25.1	9.2

0.075  
5.0

### FULL SIZE

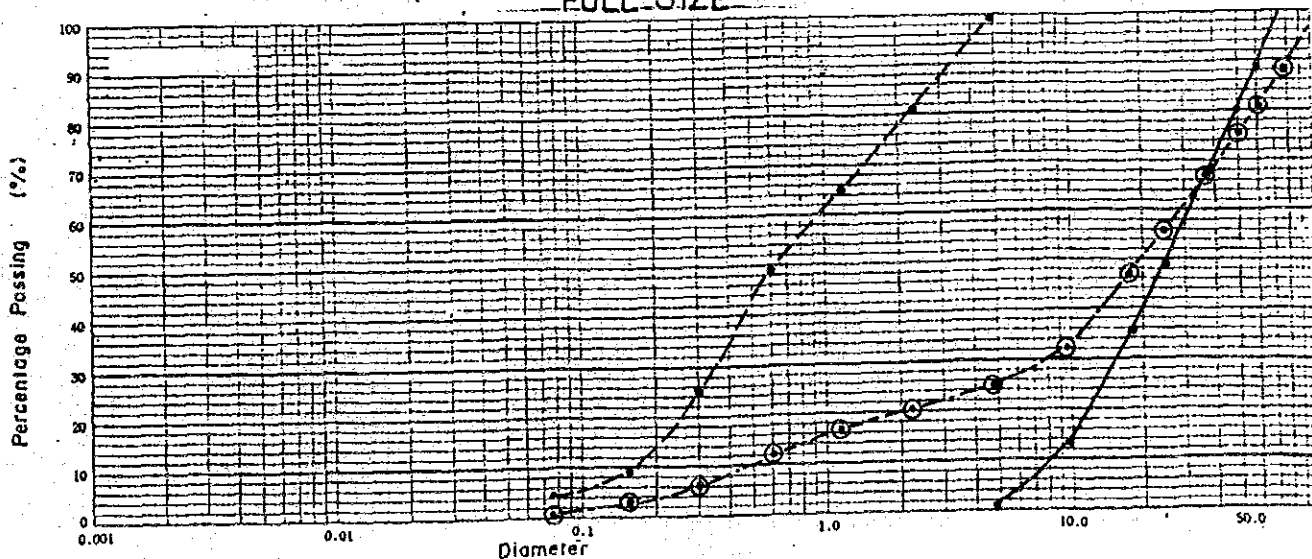
Sieve	Grain Size (mm)	90	75	63	50	37.5	25	19	12.5	9.5	4.75	2.36	1.18	0.6	0.3	0.15
	Total Passing (%)	93.0	88.0	81.1	74.9	66.6	55.5	46.9	—	32.6	25.1	20.2	16.2	12.5	6.3	2.3

0.075  
1.3

ex.

COARSE AGGREGATE  
FINE AGGREGATE  
FULL SIZE

Grain Size Accumulation Curve



ASTM C136 - 84	GRADATION ANALYSIS			FOR REPORTING
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	25 - 9 - 85	
SAMPLE NO. & DEPTH	G P - 3 Mixed ( 1.0 m 2.0 m )	TESTED BY	DORA	

### COARSE AGGREGATE

Sieve	Grain Size (mm)			90	75	63	50	37.5	25	19	12.5	9.5	4.75
	Total Passing (%)				100.0	95.9	83.5	69.8	47.5	28.8	—	12.9	2.2

(20.0)

### FINE AGGREGATE

Sieve	Grain Size (mm)							4.75	2.36	1.18	0.6	0.3	0.15
	Total Passing (%)							95.8	80.5	70.1	62.7	48.3	19.1

0.075  
8.2

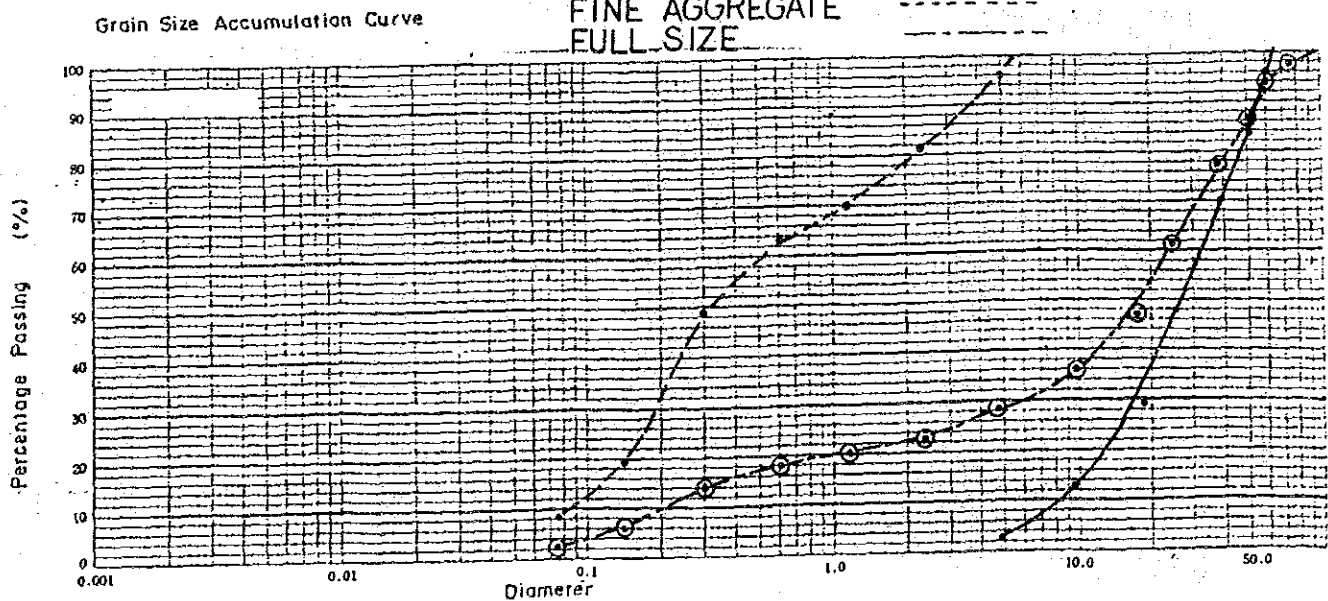
### FULL SIZE

Sieve	Grain Size (mm)	90	75	63	50	37.5	25	19	12.5	9.5	4.75	2.36	1.18	0.6	0.3	0.15
	Total Passing (%)	100.0	97.6	94.7	85.9	76.3	60.6	47.4	—	36.2	28.7	23.1	20.1	18.0	13.9	5.5

0.075  
2.4

ex.

COARSE AGGREGATE  
FINE AGGREGATE  
FULL SIZE



ASTM C136 - 84	GRADATION ANALYSIS				FOR REPORTING
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE II			DATE	19 - 9 - 85
SAMPLE NO. & DEPTH	G P - 4 <sup>Mixed</sup> ( 1.0 m 2.0 m )			TESTED BY	DORA

### COARSE AGGREGATE

Sieve	Grain Size (mm)			90	75	63	50	37.5	25	19	12.5	9.5	4.75
	Total Passing (%)			100.0	93.3	86.9	76.4	68.4	48.9	36.0	—	14.6	1.2

(220)

### FINE AGGREGATE

Sieve	Grain Size (mm)							4.76	2.36	1.18	0.6	0.3	0.15
	Total Passing (%)							99.8	87.1	76.9	69.3	50.0	19.8
												0.075	8.4

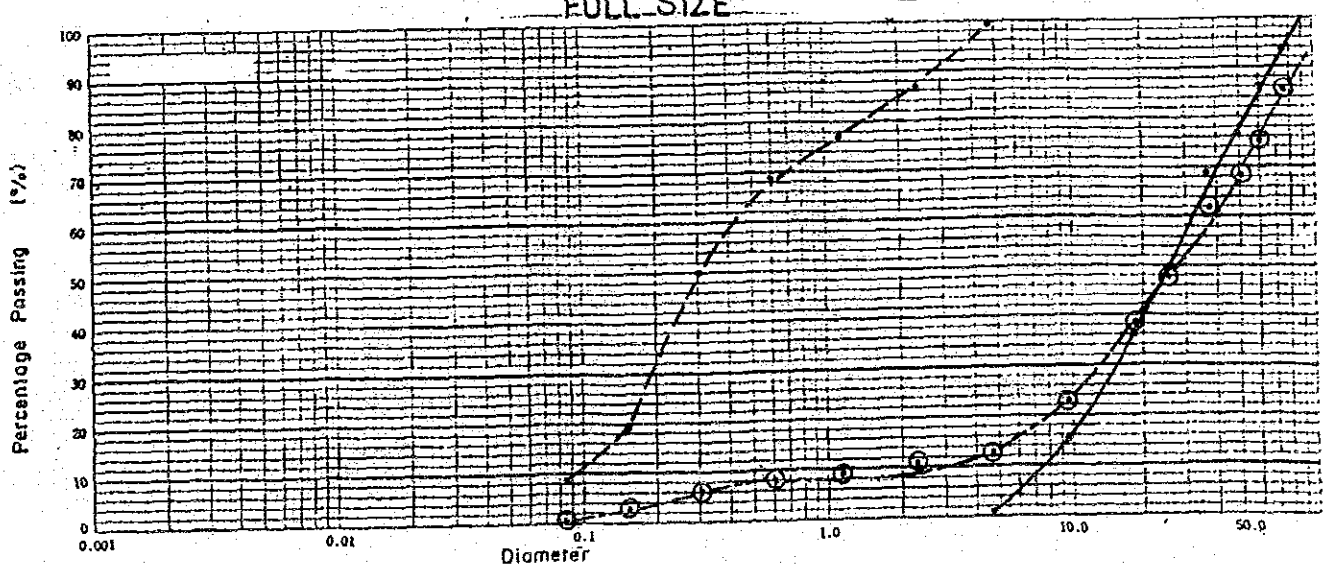
### FULL SIZE

Sieve	Grain Size (mm)	90	75	63	50	37.5	25	19	12.5	9.5	4.75	236	118	0.6	0.3	0.15
	Total Passing (%)	90.0	85.1	75.4	67.9	61.9	47.7	38.2	—	22.6	12.6	10.4	9.1	8.2	6.0	2.4
																0.075
																1.0

ex.

COARSE AGGREGATE ———  
FINE AGGREGATE - - - - -  
FULL SIZE . . . . .

Grain Size Accumulation Curve



ASTM C136 - 84	GRADATION ANALYSIS			FOR REPORTING
NAME OF PROJECT	TENOM PANGI PROJECT, PHASE III	DATE	7 - 9 - 85	
SAMPLE NO. & DEPTH	GP - 5 Mixed ( 1.0 m 2.0 m )	TESTED BY	DORA	

### COARSE AGGREGATE

Sieve	Grain Size (mm)	90	75	63	50	37.5	25	19	12.5	9.5	4.75
	Total Passing (%)	100.0	96.0	78.5	71.3	59.3	47.2	36.7	—	15.5	1.3

(23.0)

### FINE AGGREGATE

Sieve	Grain Size (mm)	4.75	2.36	1.18	0.6	0.3	0.15
	Total Passing (%)	99.9	83.9	66.1	53.8	41.5	25.8
							0.075
							10.7

### FULL SIZE

Sieve	Grain Size (mm)	90	75	63	50	37.5	25	19	12.5	9.5	4.75	2.36	1.18	0.6	0.3	0.15
	Total Passing (%)	93.0	86.6	71.8	66.8	58.5	50.1	42.8	—	28.1	18.4	15.4	12.2	9.9	7.6	4.7
																0.075
																2.0

ex.

COARSE AGGREGATE  
FINE AGGREGATE  
FULL SIZE

