



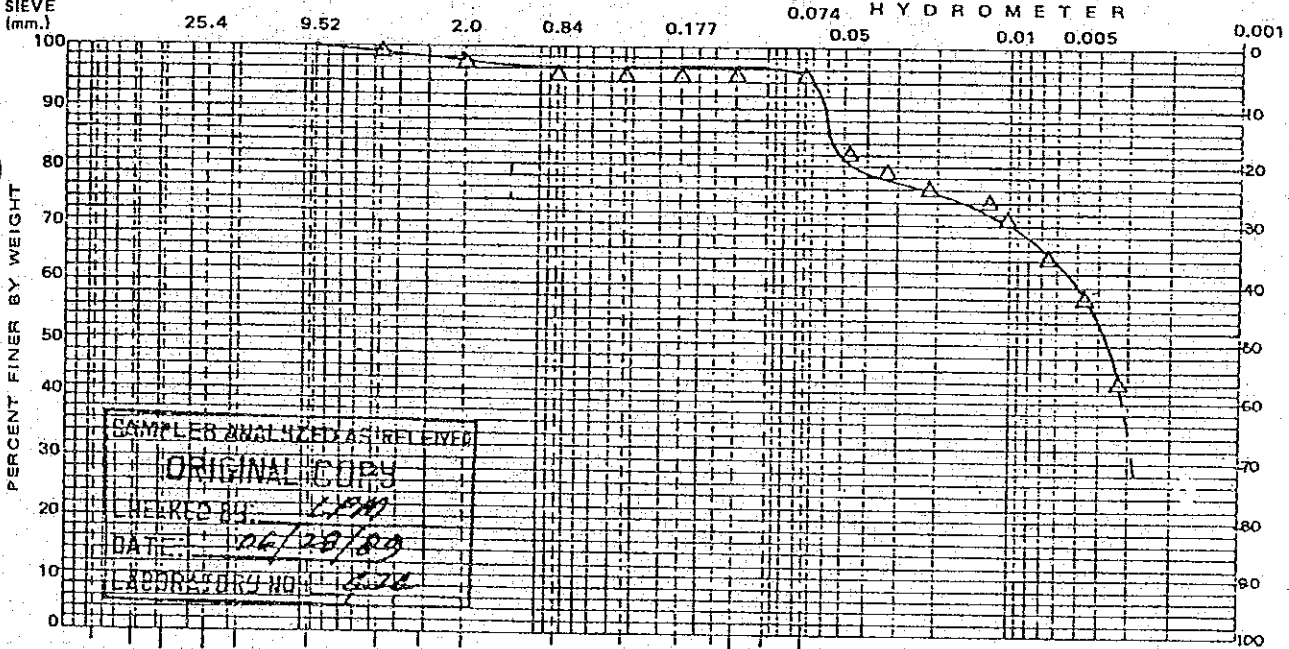
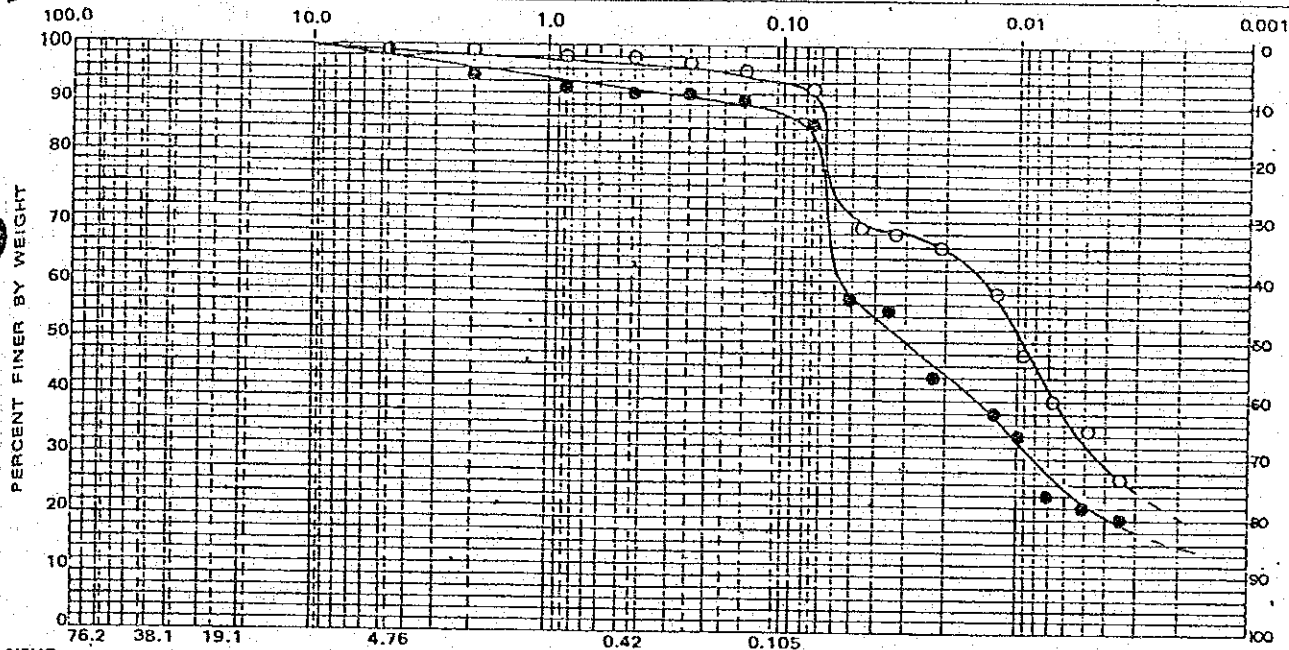
**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 EDSA, QUEZON CITY, PHILIPPINES

D-1

**PARTICLE-SIZE DISTRIBUTION CURVE**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT LOCATION: \_\_\_\_\_

SAMPLE No.:	JB-1 UDS-1	JB-1 UDS-2	JB-2 UDS-1		
DEPTH	7.55 - 8.00m	14.55 - 15.00m	17.55 - 18.00m		
MOIST. CONT. %	92.93	80.48	82.62		
SP. GR., G <sub>s</sub>	2.60	2.61	2.61		



SAMPLE ANALYZED AS RECEIVED  
 ORIGINAL COPY  
 CHECKED BY: *[Signature]*  
 DATE: *06/28/89*  
 LABORATORY NO: *2026*

U S C S	GRAVEL		SAND			FINE (SILT OR CLAY)	
	COARSE	FINE	COARSE	MEDIUM	FINE		
AASHTO	GRAVEL		SAND			SILT	CLAY
ASTM	COARSE	MED.	FINE	COARSE	FINE		
	GRAVEL		SAND			SILT	CLAY

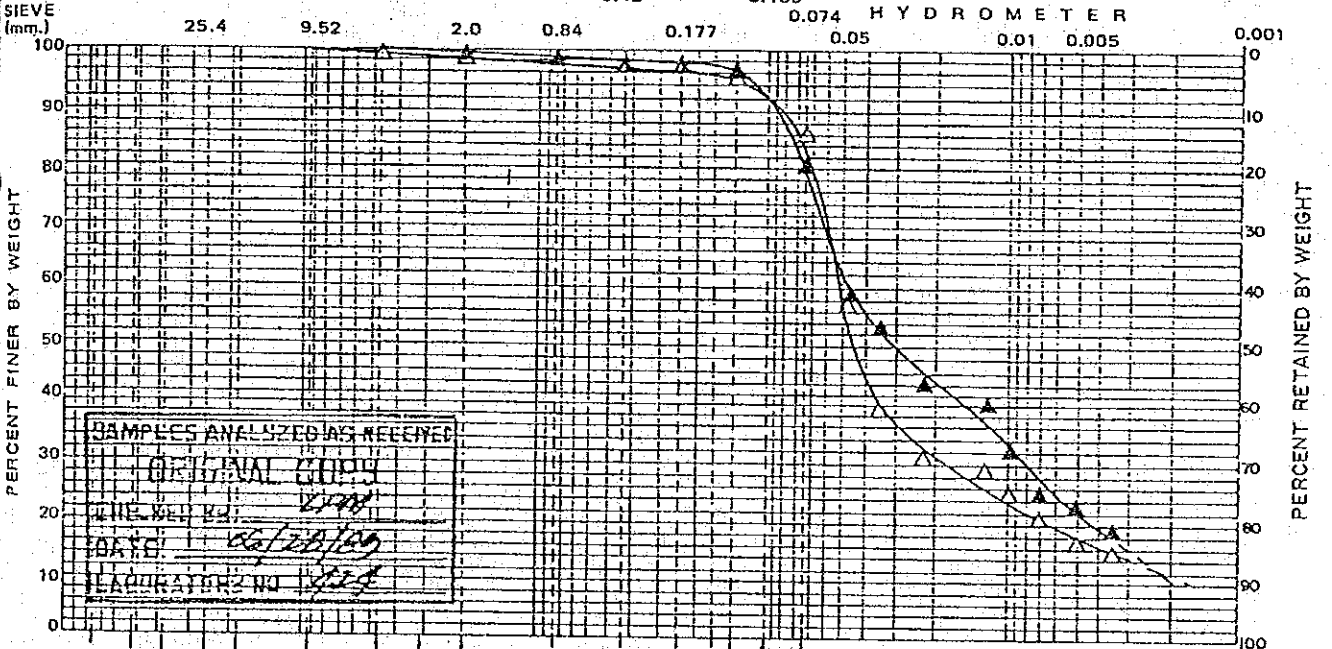
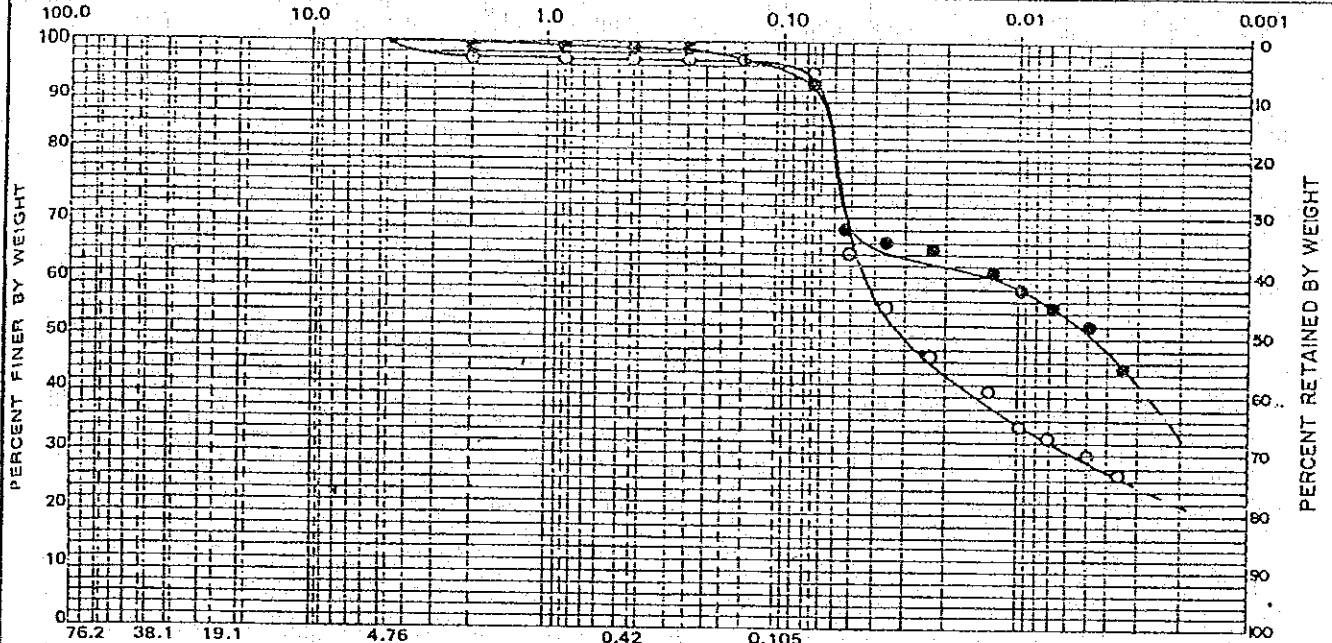


**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 EDSA, QUEZON CITY, PHILIPPINES

**PARTICLE-SIZE DISTRIBUTION CURVE**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT LOCATION: \_\_\_\_\_

SAMPLE No.:	JB-3 UDS-1	JB-3 S-16	JB-4 UDS-1	JB-4 UDS-2
DEPTH	5.55 - 6.00m	17.00 - 18.00m	8.55 - 9.00m	14.55 - 15.00m
MOIST. CONT. %	74.18	103.19	42.30	49.17
SP. GR., G <sub>s</sub>	2.60	2.57	2.63	2.60



SAMPLES ANALYZED AS RECEIVED  
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 FILE NO. 22  
 DATE: 06/28/09  
 LABORATORY NO. 122

SIEVE (SIZE) 3" 1 1/2" 3/4" 3/8" #4 #6 #10 #20 #40 #60 #80 #100 #200 #140 HYDROMETER

U. S. STANDARD SIEVES

USCS	GRAVEL		SAND			FINE (SILT OR CLAY)	
	COARSE	FINE	COARSE	MEDIUM	FINE		
AASHTO	GRAVEL		SAND			SILT	CLAY
	COARSE	MED.	FINE	COARSE	FINE		
ASTM	GRAVEL						

*W. Francisco*

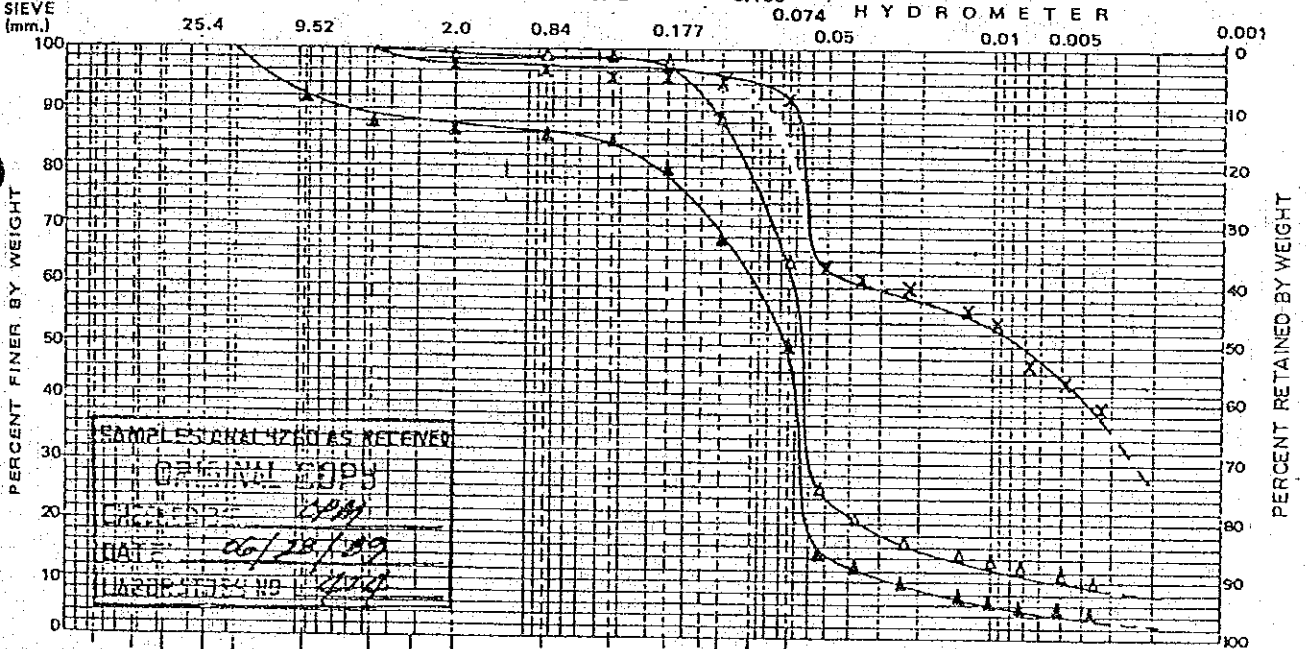
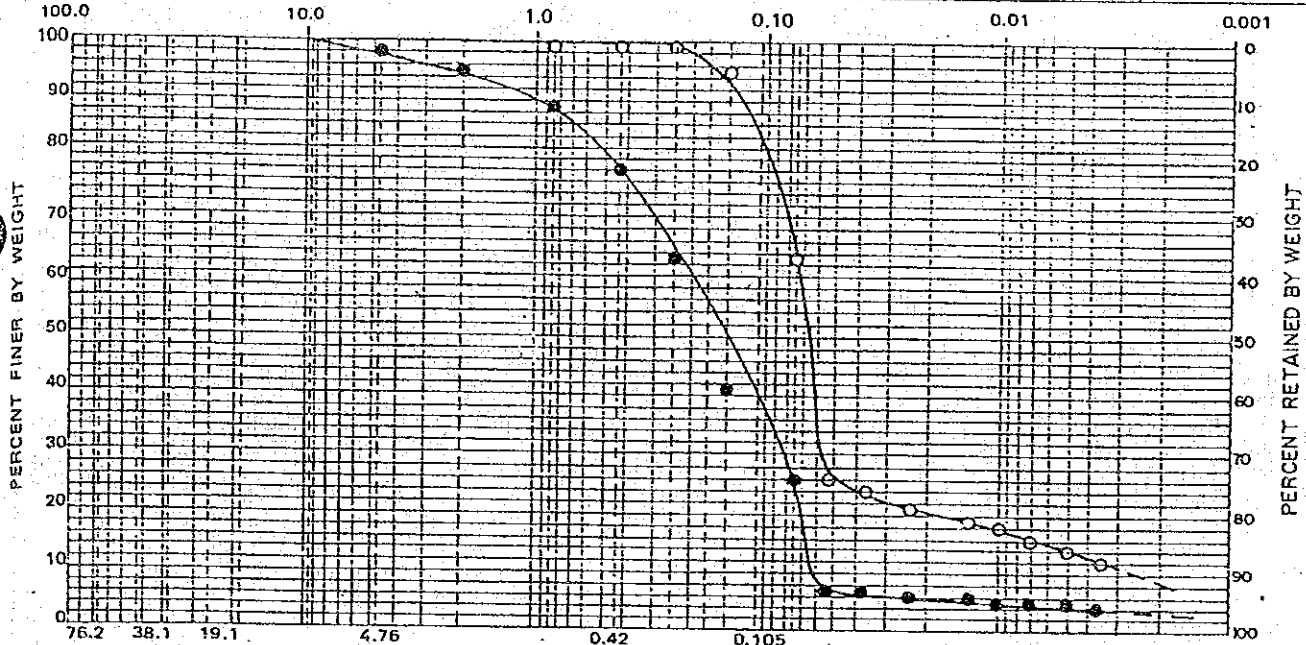


TECHNOTEST, INC.  
SOIL TESTING LABORATORY  
893 EDSA, QUEZON CITY, PHILIPPINES

PARTICLE-SIZE DISTRIBUTION CURVE

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT LOCATION: \_\_\_\_\_

SAMPLE No.:	JB-5 UDS-1	JB-5 S-12	JB-6 S-5	JB-6 UDS-1	JB-6 S-23
DEPTH	4.55-5.00m	13.55-14.00m	4.55-5.00m	6.55-7.00m	24.55-25.00m
MOIST. CONT. %	47.44	44.13	37.00	38.75	52.11
SP. GR., G <sub>s</sub>	2.60	2.60	2.63	2.59	2.60



SAMPLES ANALYZED AS RECEIVED  
ORIGINAL COPY  
DATE: 06/28/89  
LABORATORY NO. 12000

USCS	GRAVEL		SAND			FINE (SILT OR CLAY)	
	COARSE	FINE	COARSE	MEDIUM	FINE		
AASHTO	GRAVEL		SAND			SILT	CLAY
ASTM	GRAVEL		COARSE	FINE			

U.S. STANDARD SIEVES, *Al Francisco*

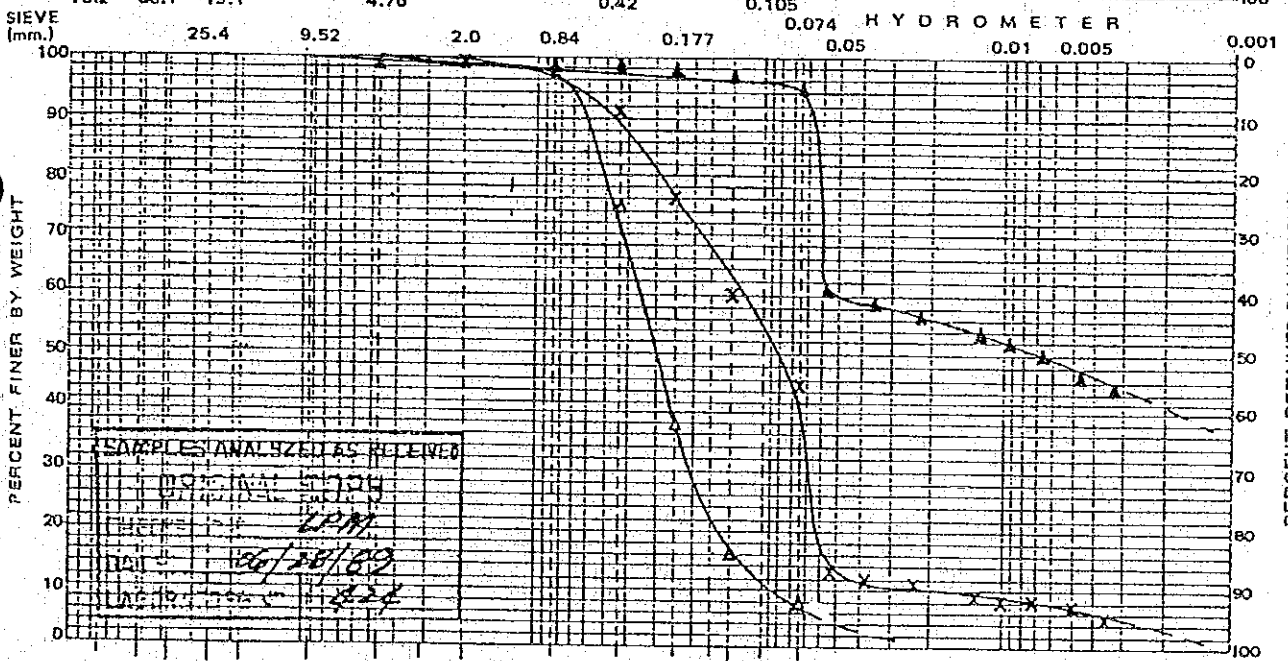
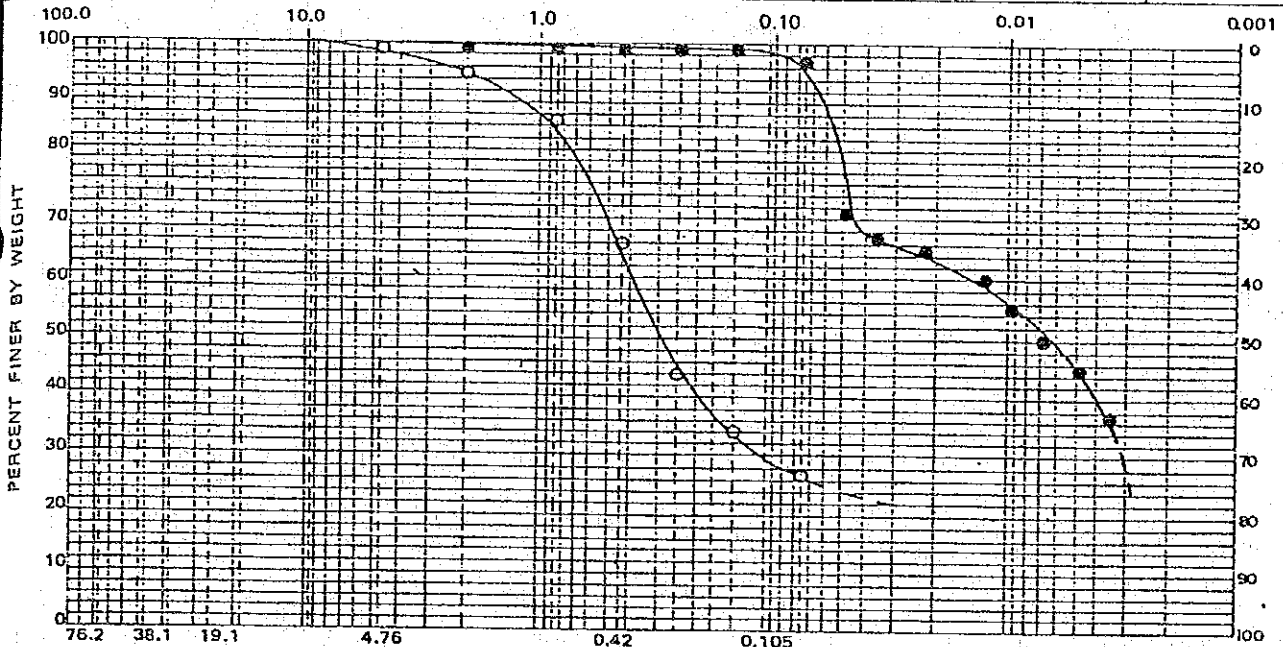


TECHNOTEST, INC.  
 SOIL TESTING LABORATORY  
 893 EDSA, QUEZON CITY, PHILIPPINES

PARTICLE-SIZE DISTRIBUTION CURVE

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT LOCATION: \_\_\_\_\_

SAMPLE No.:	JB-7 UDS-1	JB-7 S-15	JB-B UDS-1	JB-8 S-14	JB-8 S-17
DEPTH	5.55-6.00m	16.55-17.00m	5.55-6.00m	14.55-15.00m	17.55-18.00m
MOIST. CONT. %	30.70	46.65	31.55	38.62	26.38
SP. GR., G <sub>s</sub>	2.62	2.57	2.59	2.61	2.64



SAMPLES ANALYZED AS RECEIVED  
 ORIGINAL TEST  
 DATE: 12/28/89  
 LAB: 1224

*W. Ramos*

USCS	GRAVEL		SAND			FINE (SILT OR CLAY)	
	COARSE	FINE	COARSE	MEDIUM	FINE		
AASHTO	GRAVEL			SAND		SILT	CLAY
	COARSE	MED.	FINE	COARSE	FINE		
ASTM	GRAVEL			COARSE	FINE	SILT	CLAY



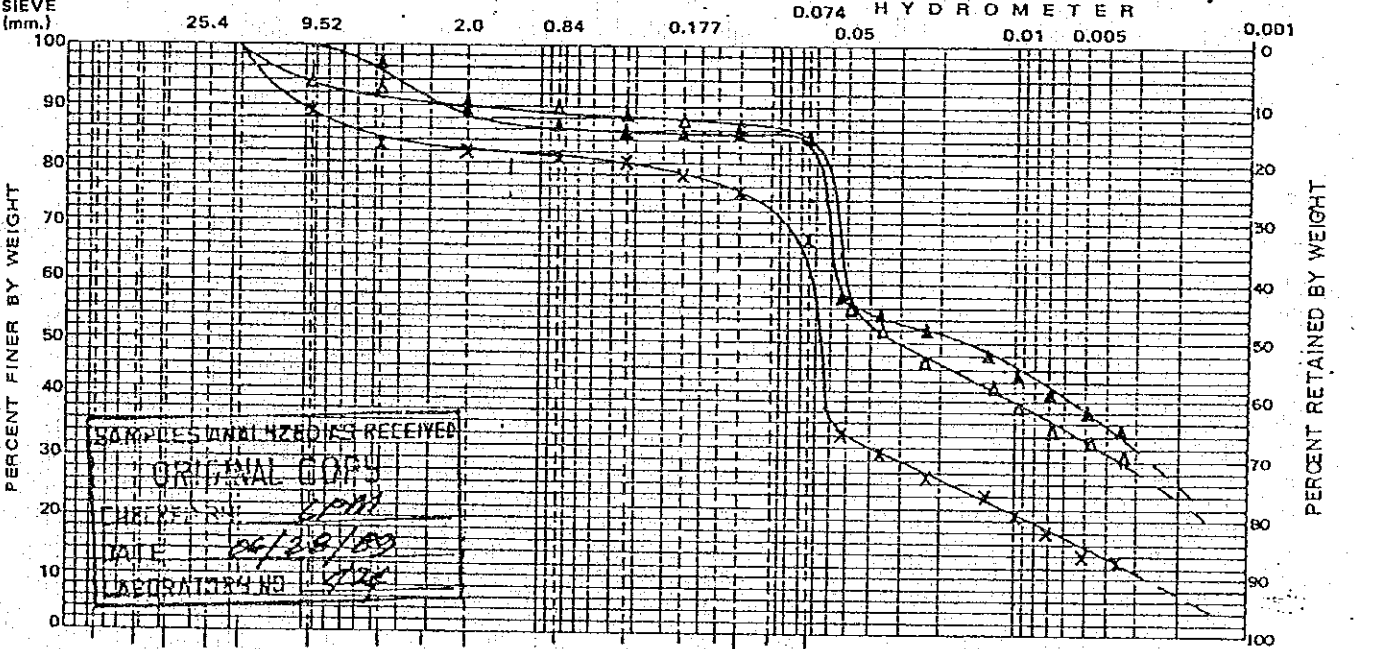
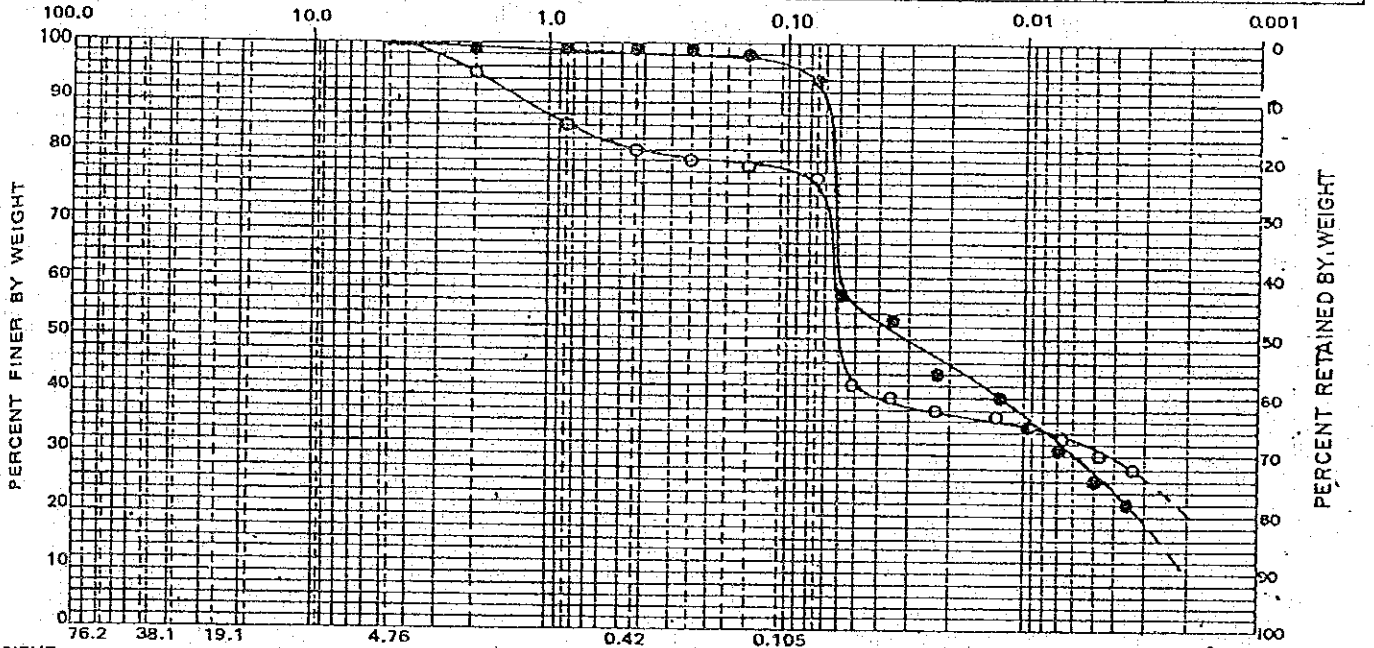
**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 EDSA, QUEZON CITY, PHILIPPINES

D-5

**PARTICLE-SIZE DISTRIBUTION CURVE**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT LOCATION: \_\_\_\_\_

SAMPLE No.:	JB-9 UDS-1	JB-9 S-16	JB-10 S-11	JB-10 S-14	JB-10 UDS-2
DEPTH	7.55 - 8.00m	16.55 - 17.00m	0.55 - 1.00m	15.55 - 16.00m	11.55 - 12.00m
MOIST. CONT. %	42.86	30.13	38.00	71.42	60.92
SP. GR., G <sub>s</sub>	2.62	2.62	2.62	2.65	2.60



USCS	GRAVEL		SAND			FINE (SILT OR CLAY)	
	COARSE	FINE	COARSE	MEDIUM	FINE		
AASHTO	GRAVEL		SAND			SILT	CLAY
ASTM	COARSE	MED. FINE	COARSE	FINE			



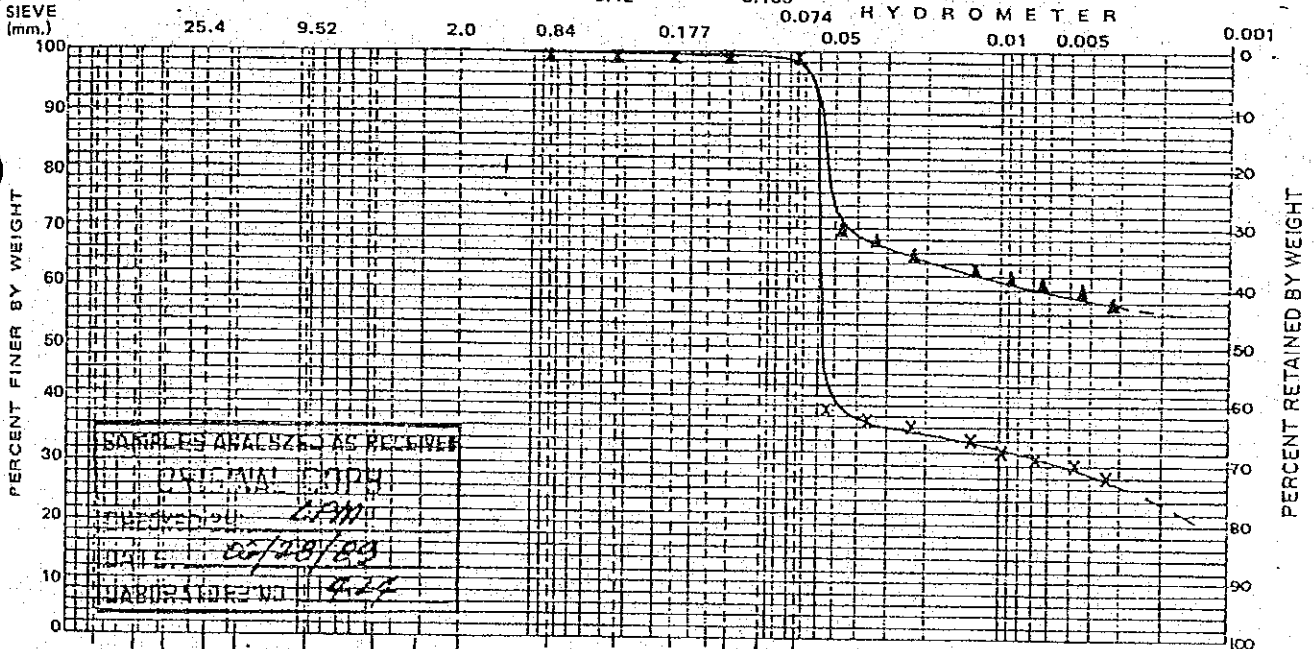
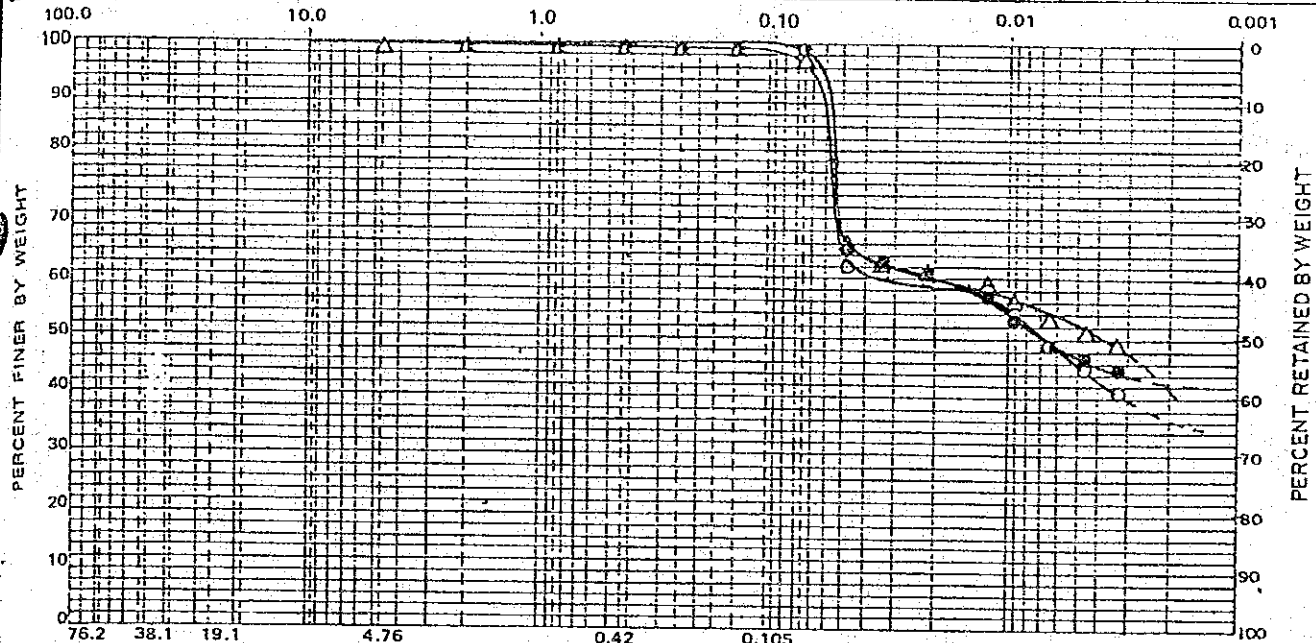
TECHNOTEST, INC.  
SOIL TESTING LABORATORY  
893 EDSA, QUEZON CITY, PHILIPPINES

D-6

PARTICLE-SIZE DISTRIBUTION CURVE

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT LOCATION: \_\_\_\_\_

SAMPLE No.:	O	●	▲	▲	X
TP/JB-3	TP/JB-4	TP/JB-7	TP/JB-8	TP/JB-9	
UDS-1	UDS-1	UDS-1	UDS-1	UDS-1	
MOIST. CONT. %	61.10	67.33	61.64	48.97	42.20
SP. GR., G <sub>s</sub>	2.63	2.62	2.61	2.61	2.62



SAMPLES ANALYZED AS RECEIVED  
ORIGINAL FROM  
CHECKED BY *[Signature]*  
DATE *05/28/03*  
LABORATORY NO. *424*

*W. Francisco*

USCS	GRAVEL		SAND			FINE (SILT OR CLAY)	
	COARSE	FINE	COARSE	MEDIUM	FINE		
AASHTO	GRAVEL		SAND			SILT	CLAY
ASTM	GRAVEL		COARSE	FINE			





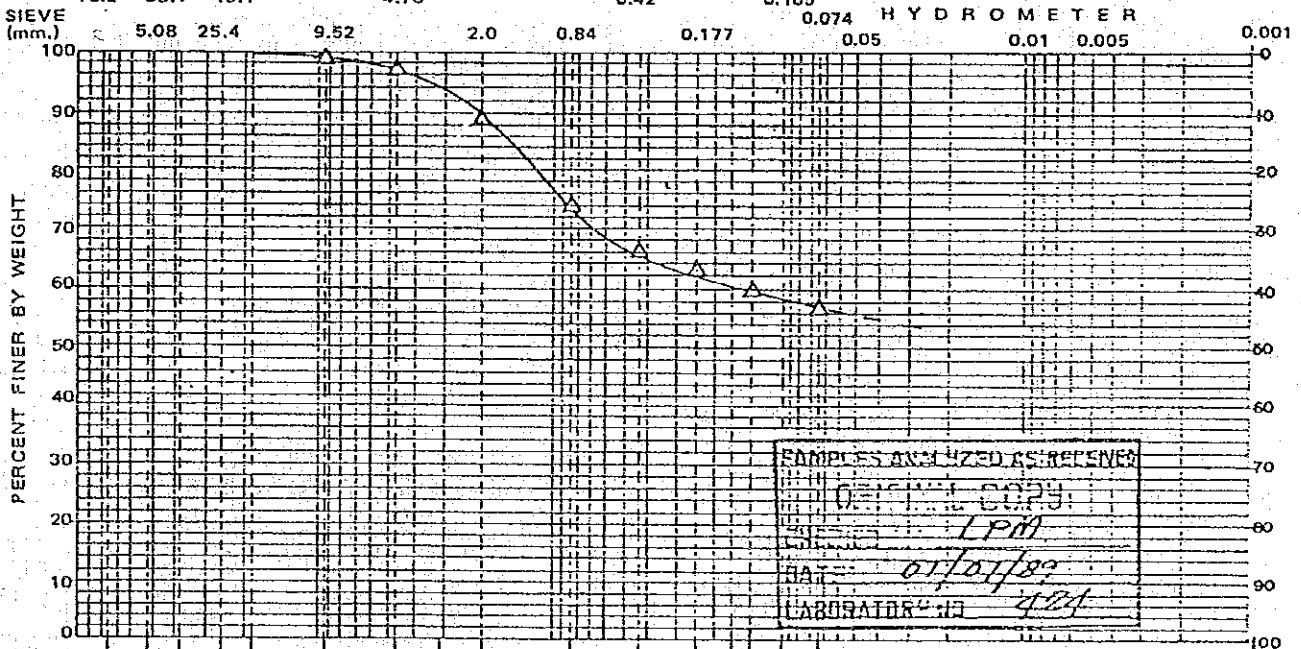
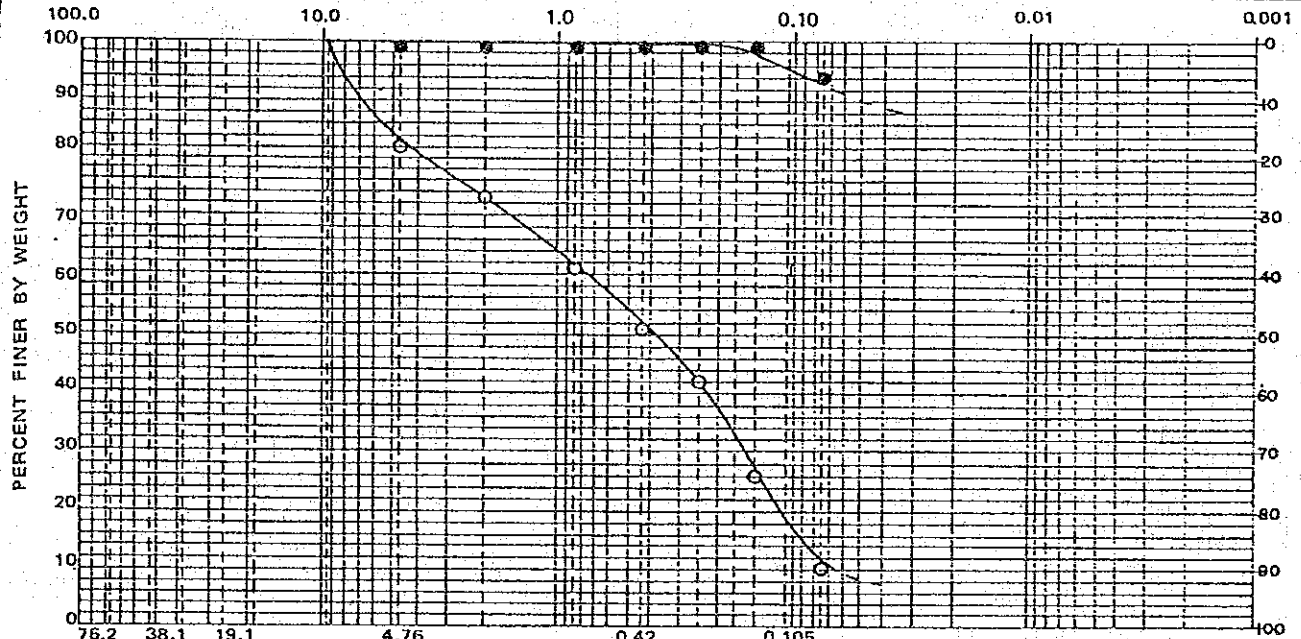
**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 EDSA, QUEZON CITY, PHILIPPINES

D-7

**PARTICLE-SIZE DISTRIBUTION CURVE**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT LOCATION: MALABON, M. M.L.A.

SAMPLE No.:	NM-1 S-1	NM-1 S-5	NM-1 S-9		
DEPTH (m)	1.55 - 2.00	5.55 - 6.00	9.55 - 10.00		
MOIST. CONT. %	31.36	48.81	50.19		
SP. GR., Gs	2.64	2.60	2.59		



SAMPLES ANALYZED AS REPRESENTATIVE  
 ORIGINAL COPY  
 DATE: 01/01/80  
 LABORATORY: 401

USCS	GRAVEL			SAND			FINE (SILT OR CLAY)
	COARSE	FINE	COARSE	MEDIUM	FINE		
AASHTO	GRAVEL			SAND			SILT
ASTM	COARSE	MED.	FINE	COARSE	FINE	CLAY	
	GRAVEL			COARSE	FINE		COLLOID



TECHNOTEST, INC.  
SOIL TESTING LABORATORY  
893 E. de los SANTOS AVENUE  
QUEZON CITY, PHILIPPINES

E-1

LIQUID AND PLASTIC LIMIT TEST REPORT

SAMPLE No. JB-1 UDS-1 DEPTH: 7.55 - 8.00m

PROJECT:

FLOOD CONTROL AND DRAINAGE PROJECT

LIQUID LIMIT			PLASTIC LIMIT	
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT
1	30	39.57 %	1	20.55 %
2	20	41.14 %	2	21.22 %
3	11	46.53 %	3	%
			AVE.	20.89 %

BOREHOLE No. \_\_\_\_\_

TESTED BY: R. DELOS REYES DATE: JUNE 14, 1989

CHECKED BY: L. P. MALAPAYA DATE: JUNE 16, 1989

LABORATORY No. 424

SAMPLES ANALYZED AS RECEIVED  
ORIGINAL COPY

L LIQUID LIMIT $w_L$ %	PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %
40.20 %	20.89 %	19.31 %

REMARKS: ○

SAMPLE No. JB-1 UDS-2 DEPTH: 14.55 - 15.00m

LIQUID LIMIT			PLASTIC LIMIT	
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT
1	32	76.92 %	1	39.26 %
2	25	78.28 %	2	40.11 %
3	15	80.70 %	3	%
			AVE.	39.69 %

L LIQUID LIMIT $w_L$ %	PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %
78.28 %	39.69 %	38.59 %

REMARKS: ●

SAMPLE No. JB-2 UDS-1 DEPTH: 17.55 - 18.00m

LIQUID LIMIT			PLASTIC LIMIT	
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT
1	31	88.74 %	1	46.24 %
2	24	91.54 %	2	47.04 %
3	14	94.47 %	3	%
			AVE.	46.64 %

L LIQUID LIMIT $w_L$ %	PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %
90.78 %	46.64 %	44.14 %

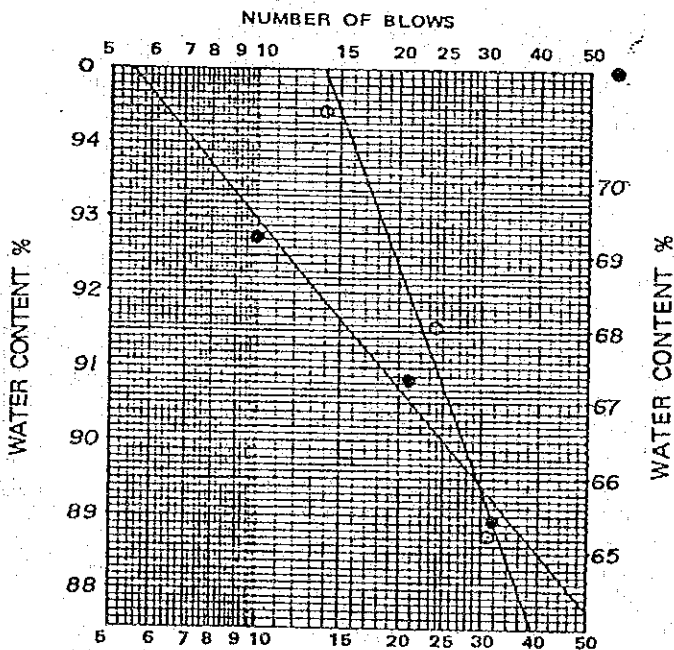
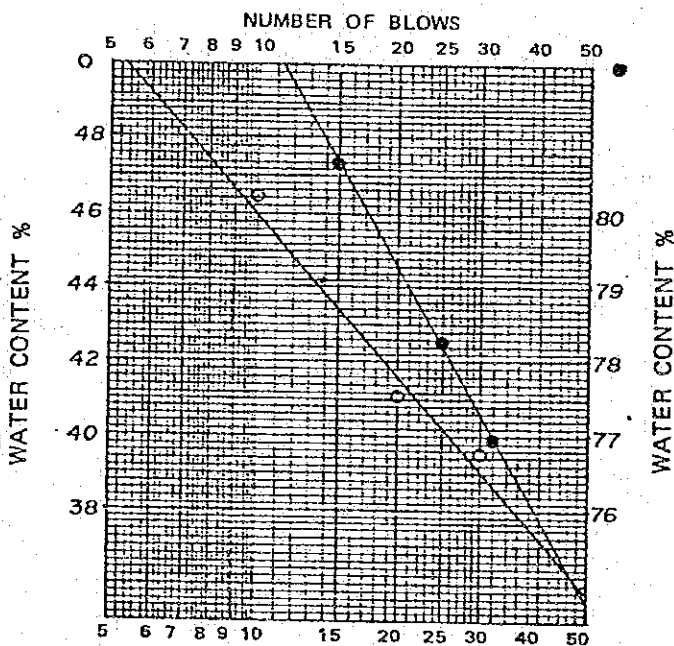
REMARKS: ○

SAMPLE No. JB-3 UDS-1 DEPTH: 5.55 - 6.00m

LIQUID LIMIT			PLASTIC LIMIT	
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT
1	32	65.47 %	1	34.05 %
2	21	67.36 %	2	34.84 %
3	10	69.28 %	3	%
			AVE.	34.45 %

L LIQUID LIMIT $w_L$ %	PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %
66.52 %	34.45 %	32.07 %

REMARKS: ●







**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 E. delos SANTOS AVENUE  
 QUEZON CITY, PHILIPPINES

**LIQUID AND PLASTIC LIMIT TEST REPORT**

SAMPLE No. JB-3 UDS-2 DEPTH: 14.55 - 15.00m

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1	33	101.04 %	1	53.59 %	
2	24	103.68 %	2	54.89 %	
3	14	106.99 %	3	%	
			AVE.	54.24 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
103.20 %		54.24 %	48.96 %		

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT

BOREHOLE No. \_\_\_\_\_

TESTED BY: R. DE LOS REYES DATE: JUNE 15, 1989

CHECKED BY: L. P. MALAPAYA DATE: JUNE 16, 1989

LABORATORY No. \_\_\_\_\_

REMARKS: ○

SAMPLE No. JB-4 UDS-1 DEPTH: 8.55 - 9.00m

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1	31	31.65 %	1	16.49 %	
2	22	34.55 %	2	17.51 %	
3	13	37.48 %	3	%	
			AVE.	17.00 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
33.50 %		17.00 %	16.50 %		

REMARKS: ●

SAMPLE No. JB-4 UDS-2 DEPTH: 14.55 - 15.00m

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1	32	43.22 %	1	24.08 %	
2	23	45.00 %	2	22.66 %	
3	12	47.15 %	3	%	
			AVE.	22.37 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
44.45 %		22.37 %	22.08 %		

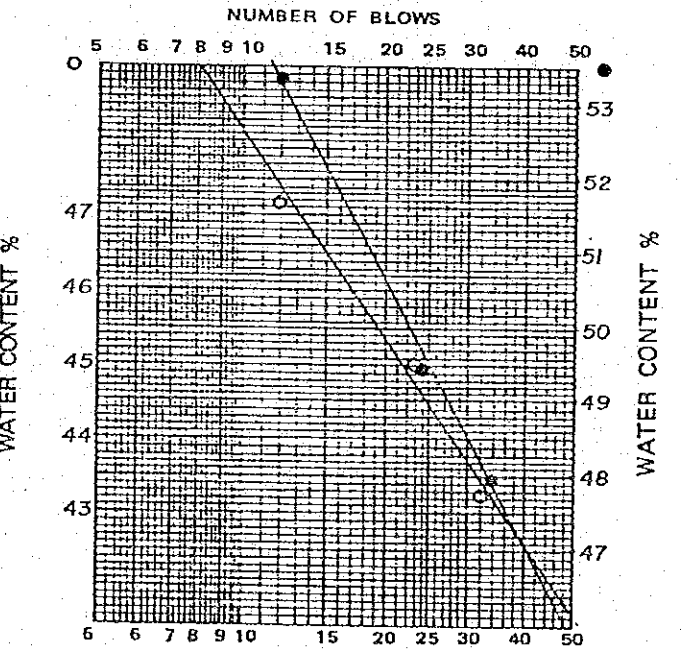
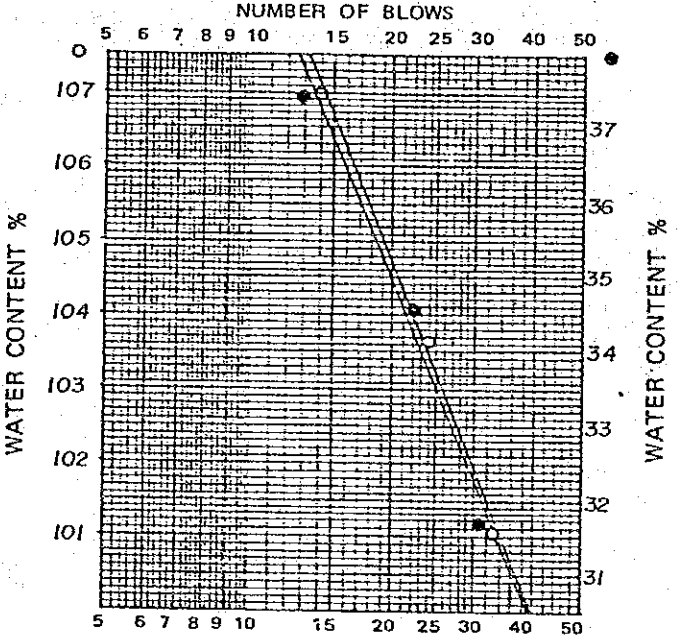
REMARKS: ○

SAMPLE No. JB-5 UDS-1 DEPTH: 4.55 - 5.00m

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1	34	47.96 %	1	26.23 %	
2	24	49.49 %	2	27.05 %	
3	12	53.33 %	3	%	
			AVE.	26.64 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
49.55 %		26.64 %	22.91 %		

REMARKS: ●

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TECHNOTEST, INC.  
SOIL TESTING LABORATORY  
893 E. delos SANTOS AVENUE  
QUEZON CITY, PHILIPPINES

LIQUID AND PLASTIC LIMIT TEST REPORT

SAMPLE No. JB-6UDS-1 DEPTH: 6.55 - 7.00m

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	RUN No.	WATER CONTENT	
1	30	32.41 %	1	17.79 %	
2	20	34.77 %	2	18.36 %	
3	10	36.51 %	3		
			AVE.	18.08 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
33.58 %		18.08 %	15.50 %		

PROJECT:

FLOOD CONTROL AND DRAINAGE PROJECT

BOREHOLE No. \_\_\_\_\_

TESTED BY: R. DE LOS REYES DATE: JUNE 15, 1989

CHECKED BY: L. P. MALAPAYA DATE: JUNE 17, 1989

LABORATORY No. 424

SAMPLES ANALYZED AS RECEIVED  
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REMARKS: ○

SAMPLE No. JB-6UDS-2 DEPTH: 14.55 - 15.00m

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	RUN No.	WATER CONTENT	
1	33	61.29 %	1	31.54 %	
2	22	63.43 %	2	32.94 %	
3	14	65.42 %	3		
			AVE.	32.24 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
62.70 %		32.24 %	30.46 %		

REMARKS: ●

SAMPLE NO. JB-7UDS-2 DEPTH: 11.55 - 12.00m

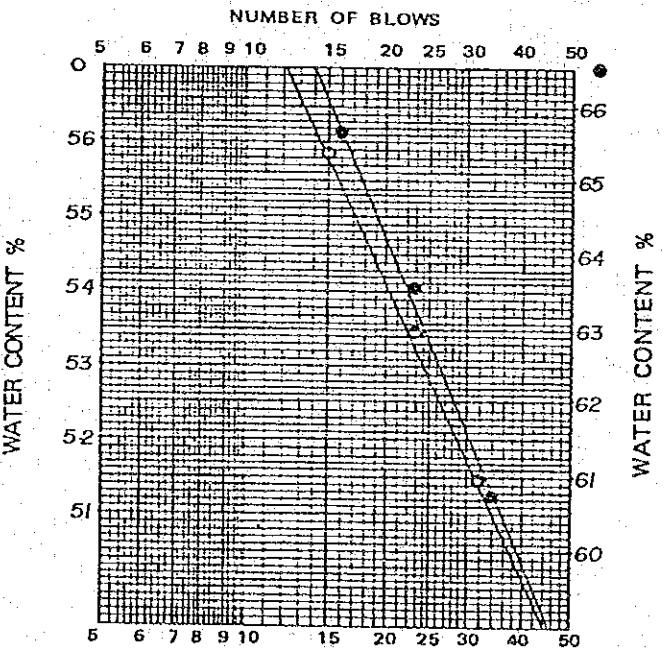
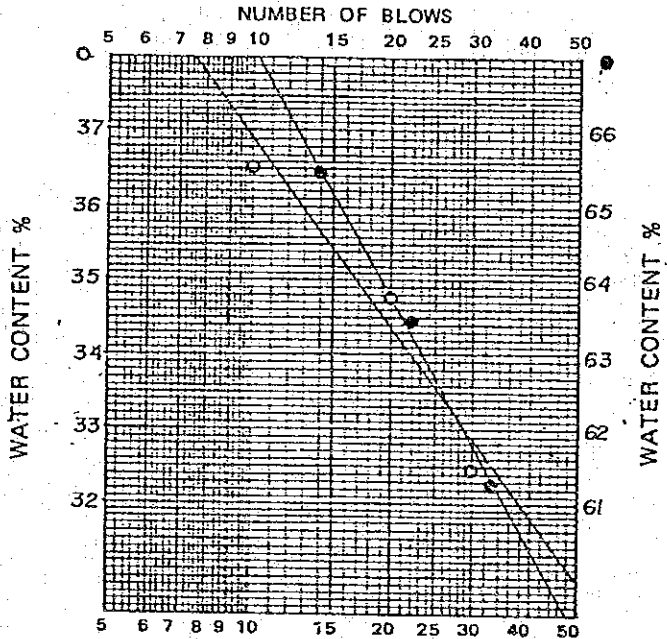
LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	RUN No.	WATER CONTENT	
1	32	51.48 %	1	29.28 %	
2	23	53.43 %	2	30.33 %	
3	15	55.83 %	3		
			AVE.	29.81 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
52.85 %		29.81 %	23.04 %		

REMARKS: ○

SAMPLE NO. JB-9UDS-1 DEPTH: 7.55 - 8.00m

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	RUN No.	WATER CONTENT	
1	34	60.78 %	1	33.00 %	
2	23	63.57 %	2	34.44 %	
3	16	65.66 %	3		
			AVE.	33.72 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
62.82 %		33.72 %	29.10 %		

REMARKS: ●





TECHNOTEST, INC.  
SOIL TESTING LABORATORY  
893 E. delos SANTOS AVENUE  
QUEZON CITY, PHILIPPINES

E-4

LIQUID AND PLASTIC LIMIT TEST REPORT

SAMPLE No. TP/JB-3 UDS DEPTH: \_\_\_\_\_

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1	35	59.63 %	1	32.33 %	
2	24	62.47 %	2	33.33 %	
3	14	65.94 %	3	%	
			AVE.	32.83 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
61.90 %		32.83 %	29.07 %		

PROJECT: \_\_\_\_\_  
FLOOD CONTROL AND DRAINAGE PROJECT

BOREHOLE No. \_\_\_\_\_

TESTED BY: R. DELOS REYES DATE: JUNE 9, 1989

CHECKED BY: L. P. MALAPAYA DATE: JUNE 15, 1989

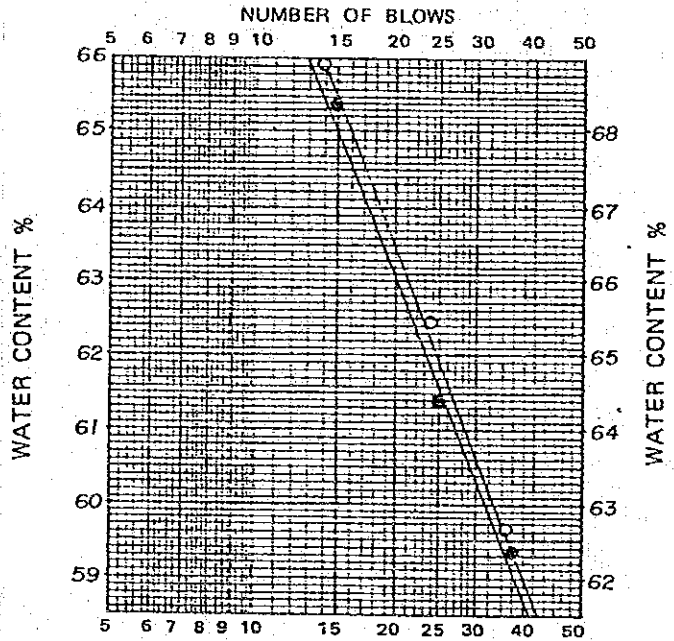
LABORATORY No. 424

REMARKS: 0

SAMPLES ANALYZED AS RECEIVED.  
ORIGINAL COPY

SAMPLE No. TP/JB-4 UDS DEPTH: \_\_\_\_\_

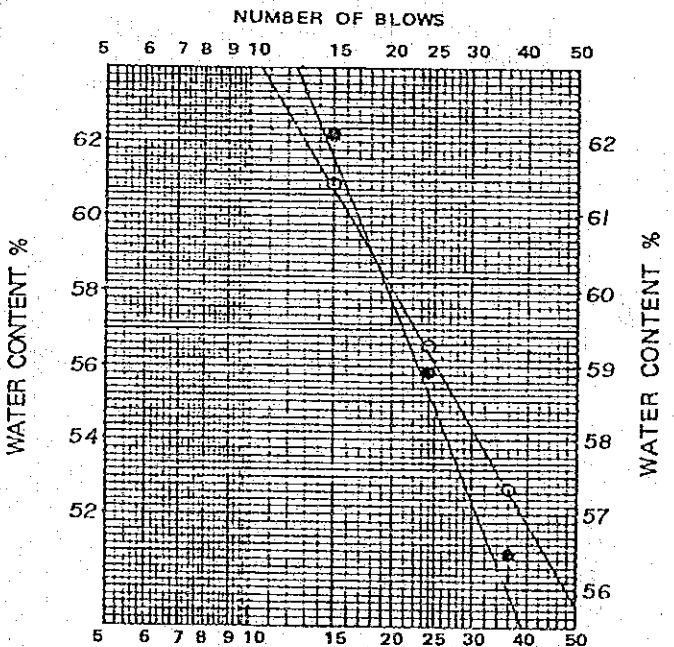
LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1	36	62.84 %	1	34.38 %	
2	25	64.72 %	2	34.72 %	
3	15	68.72 %	3	%	
			AVE.	34.55 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
64.72 %		34.55 %	30.17 %		



REMARKS: 0

SAMPLE NO. TP/JB-7 UDS DEPTH: \_\_\_\_\_

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1	36	52.67 %	1	29.25 %	
2	24	56.56 %	2	30.04 %	
3	15	60.95 %	3	%	
			AVE.	29.65 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
56.10 %		29.65 %	26.45 %		



REMARKS: 0

SAMPLE NO. TP/JB-8 UDS DEPTH: \_\_\_\_\_

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1	36	56.46 %	1	26.01 %	
2	24	58.84 %	2	27.93 %	
3	15	62.13 %	3	%	
			AVE.	26.97 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
58.81 %		26.97 %	31.84 %		

REMARKS: 0



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QUEZON CITY, PHILIPPINES

E-5

LIQUID AND PLASTIC LIMIT TEST REPORT

SAMPLE No. TP/JB-9UDS DEPTH: \_\_\_\_\_

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1	35	55.23 %	1	27.72 %	
2	23	56.62 %	2	28.54 %	
3	14	60.66 %	3		
			AVE.	28.13 %	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
56.75 %		28.13 %	28.62 %		

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT

BOREHOLE No. \_\_\_\_\_

TESTED BY: R. DELOS REYES DATE: JUNE 3, 1989

CHECKED BY: L. P. MALAPAYA DATE: JUNE 7, 1989

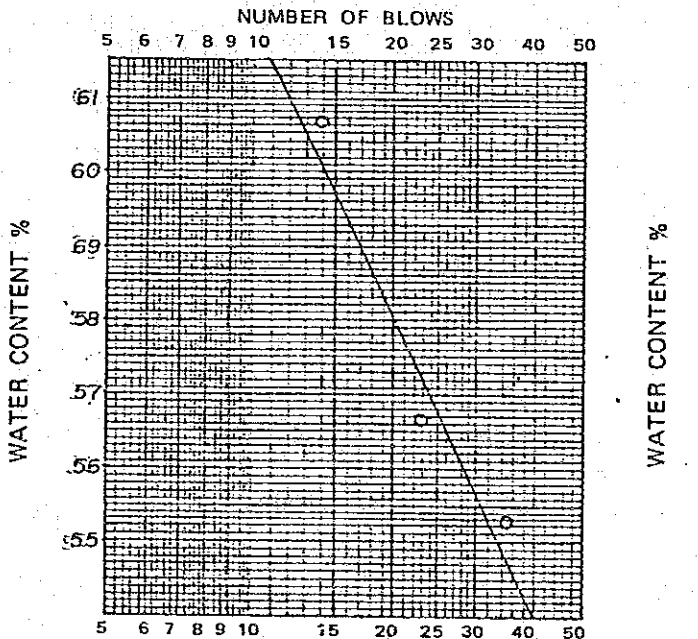
LABORATORY No. 424

REMARKS:

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ORIGINAL COPY

SAMPLE No. \_\_\_\_\_ DEPTH: \_\_\_\_\_

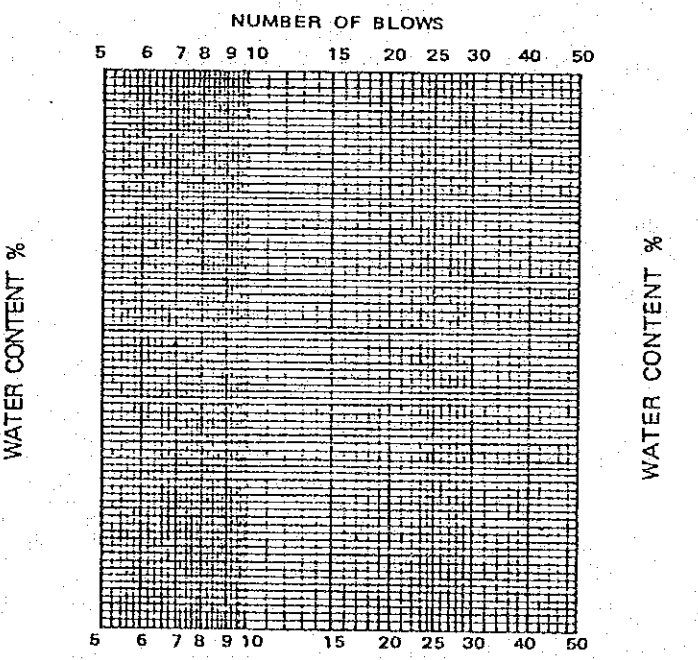
LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1		%	1	%	
2		%	2	%	
3		%	3	%	
			AVE.	%	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
%		%	%		



REMARKS:

SAMPLE NO. \_\_\_\_\_ DEPTH: \_\_\_\_\_

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1		%	1	%	
2		%	2	%	
3		%	3	%	
			AVE.	%	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
%		%	%		



REMARKS:

SAMPLE NO. \_\_\_\_\_ DEPTH: \_\_\_\_\_

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT	
1		%	1	%	
2		%	2	%	
3		%	3	%	
			AVE.	%	
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
%		%	%		

REMARKS:



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LIQUID AND PLASTIC LIMIT TEST REPORT

SAMPLE No. JB-10 UDS-2 DEPTH: 11.55 - 12.00m

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	RUN No.	WATER CONTENT	
1	33	54.03 %	1	27.50 %	
2	22	56.32 %	2	28.45 %	
3	14	59.94 %	3		
			AVE.	27.98 %	
L	LIQUID LIMIT $w_L$ %	PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
	55.70 %	27.98 %	27.72 %		

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT

BOREHOLE No. \_\_\_\_\_

TESTED BY: R. DE LOS REYES DATE: JUNE 15, 1989

CHECKED BY: L. P. MALAPAYA DATE: JUNE 17, 1989

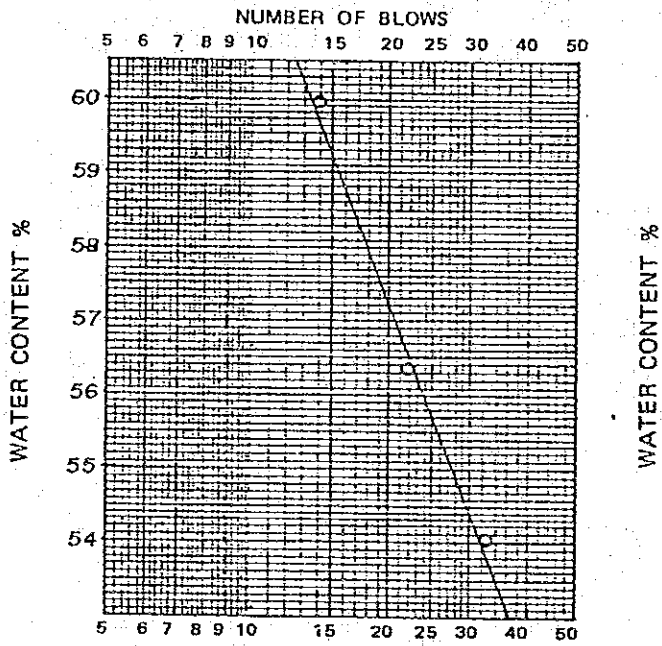
LABORATORY No. \_\_\_\_\_

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SAMPLE No. \_\_\_\_\_ DEPTH: \_\_\_\_\_

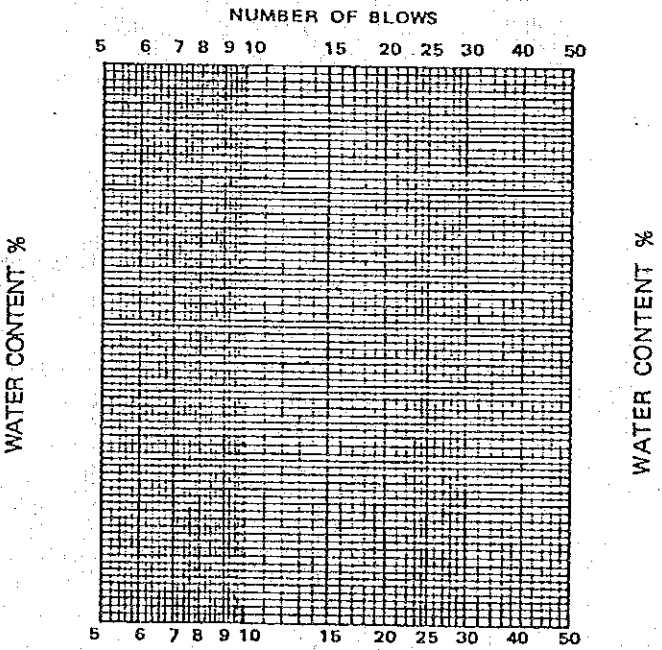
LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	RUN No.	WATER CONTENT	
1		%	1	%	
2		%	2	%	
3		%	3	%	
			AVE.	%	
	LIQUID LIMIT $w_L$ %	PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
	%	%	%		



REMARKS: \_\_\_\_\_

SAMPLE NO. \_\_\_\_\_ DEPTH: \_\_\_\_\_

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	RUN No.	WATER CONTENT	
1		%	1	%	
2		%	2	%	
3		%	3	%	
			AVE.	%	
	LIQUID LIMIT $w_L$ %	PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
	%	%	%		



REMARKS: \_\_\_\_\_

SAMPLE NO. \_\_\_\_\_ DEPTH: \_\_\_\_\_

LIQUID LIMIT			PLASTIC LIMIT		
RUN No.	BLOWS	WATER CONTENT	RUN No.	WATER CONTENT	
1		%	1	%	
2		%	2	%	
3		%	3	%	
			AVE.	%	
	LIQUID LIMIT $w_L$ %	PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %		
	%	%	%		

REMARKS: \_\_\_\_\_



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**LIQUID AND PLASTIC LIMIT TEST REPORT**

SAMPLE No. #-5 DEPTH: 5.55-6.00 m

LIQUID LIMIT			PLASTIC LIMIT	
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT
1	31	40.00 %	1	22.13 %
2	22	41.82 %	2	22.27 %
3	11	43.61 %	3	
			AVE.	22.20 %
L LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %	
41.08 %		22.20 %	18.88 %	

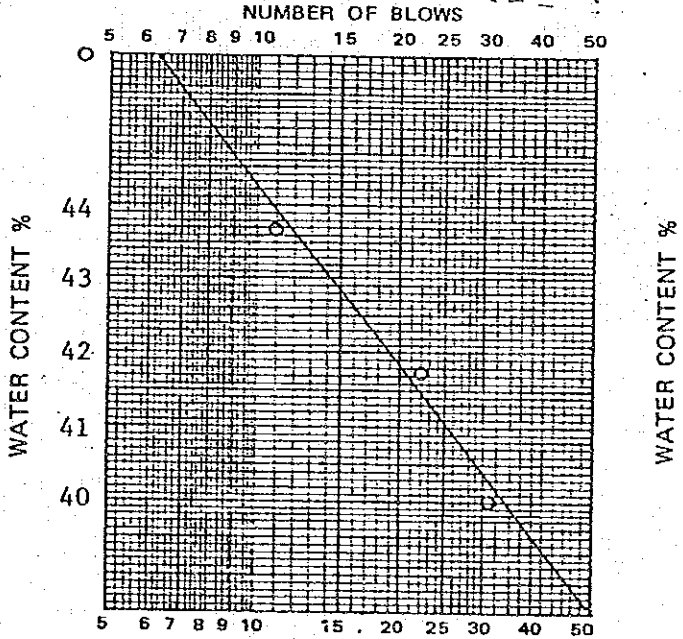
PROJECT: Flood Control and Drainage Project  
Malabon  
 BOREHOLE No. NM-1  
 TESTED BY: R. de los Reyes DATE: 7-4-89  
 CHECKED BY: L. MALAPAYA DATE: 7-6-89  
 LABORATORY No. \_\_\_\_\_

REMARKS: o

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SAMPLE No. #-8 DEPTH: 8.55-9.00 m

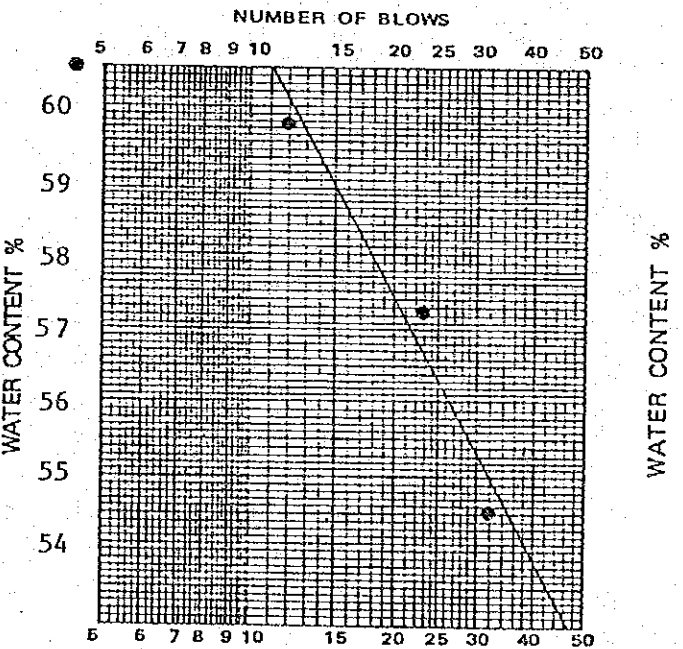
LIQUID LIMIT			PLASTIC LIMIT	
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT
1	32	54.51 %	1	27.43 %
2	23	57.28 %	2	28.94 %
3	12	59.74 %	3	
			AVE.	28.19 %
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %	
56.34 %		28.19 %	28.15 %	



REMARKS: \_\_\_\_\_

SAMPLE NO. \_\_\_\_\_ DEPTH: \_\_\_\_\_

LIQUID LIMIT			PLASTIC LIMIT	
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT
1		%	1	%
2		%	2	%
3		%	3	%
			AVE.	%
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %	
%		%	%	



REMARKS: \_\_\_\_\_

SAMPLE NO. \_\_\_\_\_ DEPTH: \_\_\_\_\_

LIQUID LIMIT			PLASTIC LIMIT	
RUN No.	BLOWS	WATER CONTENT	Run No.	WATER CONTENT
1		%	1	%
2		%	2	%
3		%	3	%
			AVE.	%
LIQUID LIMIT $w_L$ %		PLASTIC LIMIT $w_p$ %	PLASTICITY INDEX $I_p$ %	
%		%	%	

REMARKS: \_\_\_\_\_





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 DATE: 06/30/89  
 LABORATORY NO. 424

**SHRINKAGE LIMIT TEST**

PROJECT: Flood Control and Drainage Project

LOCATION: Passing No. 40

DESCRIPTION OF SOIL: SAMPLE No. JB-3

DEPTH TESTED:

TESTED BY: *Luz Santiago* LUZ SANTIAGO DATE TESTED: 6-29-89

ITEM No.	DESCRIPTION	UNIT	COMPUTATION	VALUES
1	WT. OF COATED DISH + WET SOIL	g		70.20
2	WT. OF COATED DISH + DRY SOIL	g		57.72
3	WT. OF COATED DISH	g		44.80
4	WT. OF DRY SOIL (W <sub>s</sub> )	g	(2) - (3)	12.92
5	WT. OF WATER (W <sub>w</sub> )	g	(1) - (2)	12.48
6	WATER CONTENT (W <sub>o</sub> )	%	$\frac{(5)}{(4)} \times 100$	96.59
7	VOL. OF WET SOIL (V <sub>o</sub> )	cc	(18)	17.51
8	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(14)	9.47
9	SHRINKAGE RATIO (SR)		(4) / (8)	1.36
10	WT. OF SHRINKAGE DISH	g		49.98
11	WT. OF SHRINKAGE DISH + Hg	g		536.08
12	WT. OF SHRINKAGE DISH + Hg AFTER SUBMERGING SOIL CAKE	g		407.95
13	WT. OF Hg REMOVED	g	(11) - (12)	128.13
14	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(13) / 13.53	9.47
15	WT. OF SOIL CAKE DISH + Hg	g		281.44
16	WT. OF SOIL CAKE DISH	g		44.58
17	WT. OF Hg	g	(15) - (16)	236.86
18	VOL. OF SHRINKAGE DISH (V <sub>o</sub> )	cc	(17) / 13.53	17.51
19	SHRINKAGE LIMIT (W <sub>s</sub> )	%	$(6) - \left[ \frac{(7) - (8)}{4} \right] \times 100$	34.36

BY: E. L. ANTONIC



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 LABORATORY NO: 424

**SHRINKAGE LIMIT TEST**

PROJECT: Flood Control and Drainage Project

LOCATION:

SAMPLE No. JB-3 UDS-2

Passing No. 40

DESCRIPTION OF SOIL:

DEPTH TESTED: 14.55-15.00m

TESTED BY: LUZ SANTIAGO *Luz Santiago*

DATE TESTED: 6-29-89

ITEM No.	DESCRIPTION	UNIT	COMPUTATION	VALUES
1	WT. OF COATED DISH + WET SOIL	g		70.22
2	WT. OF COATED DISH + DRY SOIL	g		58.09
3	WT. OF COATED DISH	g		43.27
4	WT. OF DRY SOIL (W <sub>s</sub> )	g	(2) - (3)	14.82
5	WT. OF WATER (W <sub>w</sub> )	g	(1) - (2)	12.13
6	WATER CONTENT (W <sub>e</sub> )	%	$\frac{(5)}{(4)} \times 100$	81.85
7	VOL. OF WET SOIL (V <sub>o</sub> )	cc	(18)	17.51
8	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(14)	11.77
9	SHRINKAGE RATIO (SR)		(4) / (8)	1.26
10	WT. OF SHRINKAGE DISH	g		49.98
11	WT. OF SHRINKAGE DISH + Hg	g		536.08
12	WT. OF SHRINKAGE DISH + Hg AFTER SUBMERGING SOIL CAKE	g		376.85
13	WT. OF Hg REMOVED	g	(11) - (12)	159.23
14	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(13) / 13.55	11.77
15	WT. OF SOIL CAKE DISH + Hg	g		279.75
16	WT. OF SOIL CAKE DISH	g		42.89
17	WT. OF Hg	g	(15) - (16)	236.86
18	VOL. OF SHRINKAGE DISH (V <sub>o</sub> )	cc	(17) / 13.55	17.51
19	SHRINKAGE LIMIT (W <sub>s</sub> )	%	$(6) - \left[ \frac{(7) - (8)}{4} \right] \times 100$	43.12

STY L.L. ANTONIO



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 DATE: *10/30/89*  
 LABORATORY NO: *424*

**SHRINKAGE LIMIT TEST**

PROJECT: Flood Control and Drainage Project

LOCATION:

SAMPLE No. JB-4

DESCRIPTION OF SOIL: Passing No. 40

DEPTH TESTED:

TESTED BY: *Luz Santiago*  
 LUZ SANTIAGO

DATE TESTED: 6-29-89

ITEM No.	DESCRIPTION	UNIT	COMPUTATION	VALUES
1	WT. OF COATED DISH + WET SOIL	g		73.20
2	WT. OF COATED DISH + DRY SOIL	g		60.75
3	WT. OF COATED DISH	g		48.93
4	WT. OF DRY SOIL (W <sub>s</sub> )	g	(2) - (3)	11.82
5	WT. OF WATER (W <sub>w</sub> )	g	(1) - (2)	12.45
6	WATER CONTENT (W <sub>o</sub> )	%	<sup>(5)</sup> / <sup>(4)</sup> X 100	105.33
7	VOL. OF WET SOIL (V <sub>o</sub> )	cc	(18)	17.51
8	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(14)	7.85
9	SHRINKAGE RATIO (SR)		(4) / (8)	1.51
10	WT. OF SHRINKAGE DISH	g		49.98
11	WT. OF SHRINKAGE DISH + Hg	g		536.08
12	WT. OF SHRINKAGE DISH + Hg AFTER SUBMERGING SOIL CAKE	g		429.90
13	WT. OF Hg REMOVED	g	(11) - (12)	106.18
14	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(13) / 15.55	7.85
15	WT. OF SOIL CAKE DISH + Hg	g		285.37
16	WT. OF SOIL CAKE DISH	g		48.51
17	WT. OF Hg	g	(15) - (16)	236.86
18	VOL. OF SHRINKAGE DISH (V <sub>o</sub> )	cc	(17) / 15.55	17.51
19	SHRINKAGE LIMIT (W <sub>s</sub> )	%	(6) - $\frac{[(7) - (8)]}{4} \times 100$	23.60

EST. L.L. ANTONIO



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DATE: *06/30/89*

LABORATORY NO: *424*

**SHRINKAGE LIMIT TEST**

PROJECT: Flood Control and Drainage Project

LOCATION:

SAMPLE No. JB-6 UDS-1

DESCRIPTION OF SOIL: Passing No. 40

DEPTH TESTED: 6.55-7.00 m

TESTED BY: *Luiz Santiago*  
LUZ SANTIAGO

DATE TESTED: 6-29-89

ITEM No.	DESCRIPTION	UNIT	COMPUTATION	VALUES
1	WT. OF COATED DISH ÷ WET SOIL	g		75.80
2	WT. OF COATED DISH ÷ DRY SOIL	g		66.06
3	WT. OF COATED DISH	g		44.47
4	WT. OF DRY SOIL (W <sub>s</sub> )	g	(2) - (3)	21.59
5	WT. OF WATER (W <sub>w</sub> )	g	(1) - (2)	9.74
6	WATER CONTENT (W <sub>o</sub> )	%	$\frac{(5)}{(4)} \times 100$	45.11
7	VOL. OF WET SOIL (V <sub>o</sub> )	cc	(18)	17.51
8	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(14)	15.33
9	SHRINKAGE RATIO (SR)		(4) / (8)	1.41
10	WT. OF SHRINKAGE DISH	g		49.98
11	WT. OF SHRINKAGE DISH ÷ Hg	g		536.08
12	WT. OF SHRINKAGE DISH ÷ Hg AFTER SUBMERGING SOIL CAKE	g		328.70
13	WT. OF Hg REMOVED	g	(11) - (12)	207.38
14	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(13) / 13.33	15.33
15	WT. OF SOIL CAKE DISH ÷ Hg	g		282.93
16	WT. OF SOIL CAKE DISH	g		46.07
17	WT. OF Hg	g	(15) - (16)	236.86
18	VOL. OF SHRINKAGE DISH (V <sub>o</sub> )	cc	(17) / 13.33	17.51
19	SHRINKAGE LIMIT (W <sub>s</sub> )	%	$(6) - \left[ \frac{(7) - (8)}{2} \right] \times 100$	35.01

EST. E. L. SANTOS



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**SHRINKAGE LIMIT TEST**

PROJECT: Flood Control and Drainage Project

LOCATION: SAMPLE No. JB-7

DESCRIPTION OF SOIL: Passing No. 40 DEPTH TESTED:

TESTED BY: *Luz Santiago* **LUZ SANTIAGO** DATE TESTED: 6-29-89

ITEM No.	DESCRIPTION	UNIT	COMPUTATION	VALUES
1	WT. OF COATED DISH + WET SOIL	g		68.45
2	WT. OF COATED DISH + DRY SOIL	g		56.64
3	WT. OF COATED DISH	g		42.44
4	WT. OF DRY SOIL (W <sub>s</sub> )	g	(2) - (3)	14.20
5	WT. OF WATER (W <sub>w</sub> )	g	(1) - (2)	11.81
6	WATER CONTENT (W <sub>o</sub> )	%	<sup>(5)</sup> / (4) X 100	83.17
7	VOL. OF WET SOIL (V <sub>o</sub> )	cc	(18)	17.51
8	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(14)	8.96
9	SHRINKAGE RATIO (SR)		(4) / (8)	1.58
10	WT. OF SHRINKAGE DISH	g		49.98
11	WT. OF SHRINKAGE DISH + Hg	g		536.08
12	WT. OF SHRINKAGE DISH + Hg AFTER SUBMERGING SOIL CAKE	g		414.90
13	WT. OF Hg REMOVED	g	(11) - (12)	121.18
14	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(13) / 13.55	8.96
15	WT. OF SOIL CAKE DISH + Hg	g		278.95
16	WT. OF SOIL CAKE DISH	g		42.09
17	WT. OF Hg	g	(15) - (16)	236.86
18	VOL. OF SHRINKAGE DISH (V <sub>o</sub> )	cc	(17) / 13.55	17.51
19	SHRINKAGE LIMIT (W <sub>s</sub> )	%	(6) - $\frac{[(7) - (8)]}{4} \times 100$	22.96

BY: E. L. ANTONIO



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LABORATORY NO: 424

**SHRINKAGE LIMIT TEST**

PROJECT: Flood Control and Drainage Project

LOCATION:

SAMPLE No. JB-7 UDS-2

DESCRIPTION OF SOIL: Passing No. 40

DEPTH TESTED: 11.55-12.00m

TESTED BY: *Luiz Santiago*  
LUZ SANTIAGO

DATE TESTED: 6-29-89

ITEM No.	DESCRIPTION	UNIT	COMPUTATION	VALUES
1	WT. OF COATED DISH + WET SOIL	g		74.67
2	WT. OF COATED DISH + DRY SOIL	g		62.87
3	WT. OF COATED DISH	g		46.43
4	WT. OF DRY SOIL (W <sub>s</sub> )	g	(2) - (3)	16.44
5	WT. OF WATER (W <sub>w</sub> )	g	(1) - (2)	11.80
6	WATER CONTENT (W <sub>e</sub> )	%	$\frac{(5)}{(4)} \times 100$	71.78
7	VOL. OF WET SOIL (V <sub>o</sub> )	cc	(18)	17.51
8	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(14)	12.81
9	SHRINKAGE RATIO (SR)		(4) / (8)	1.28
10	WT. OF SHRINKAGE DISH	g		49.98
11	WT. OF SHRINKAGE DISH + Hg	g		536.08
12	WT. OF SHRINKAGE DISH + Hg AFTER SUBMERGING SOIL CAKE	g		362.72
13	WT. OF Hg REMOVED	g	(11) - (12)	173.36
14	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(13) / 13.55	12.81
15	WT. OF SOIL CAKE DISH + Hg	g		282.93
16	WT. OF SOIL CAKE DISH	g		46.07
17	WT. OF Hg	g	(15) - (16)	236.86
18	VOL. OF SHRINKAGE DISH (V <sub>o</sub> )	cc	(17) / 13.55	17.51
19	SHRINKAGE LIMIT (w <sub>s</sub> )	%	$(8) - \left[ \frac{(7) - (8)}{4} \right] \times 100$	43.19

201 E.L. ANTONIO





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 LABORATORY NO: *424*

**SHRINKAGE LIMIT TEST**

PROJECT: Flood Control and Drainage Project

LOCATION: SAMPLE No. JB-8

DESCRIPTION OF SOIL: Passing No. 40 DEPTH TESTED: 0.5-1.00 m

TESTED BY: *Luiz Santiago* **LUZ SANTIAGO** DATE TESTED: 6-29-89

ITEM No.	DESCRIPTION	UNIT	COMPUTATION	VALUES
1	WT. OF COATED DISH + WET SOIL	g		72.90
2	WT. OF COATED DISH + DRY SOIL	g		58.40
3	WT. OF COATED DISH	g		45.74
4	WT. OF DRY SOIL (W <sub>s</sub> )	g	(2) - (3)	12.66
5	WT. OF WATER (W <sub>w</sub> )	g	(1) - (2)	14.50
6	WATER CONTENT (W <sub>o</sub> )	%	<sup>(5)</sup> (4) X 100	114.53
7	VOL. OF WET SOIL (V <sub>o</sub> )	cc	(18)	17.51
8	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(14)	7.77
9	SHRINKAGE RATIO (SR)		(4) / (8)	1.63
10	WT. OF SHRINKAGE DISH	g		49.98
11	WT. OF SHRINKAGE DISH + Hg	g		536.08
12	WT. OF SHRINKAGE DISH + Hg AFTER SUBMERGING SOIL CAKE	g		431.00
13	WT. OF Hg REMOVED	g	(11) - (12)	105.08
14	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(13) / 13.55	7.77
15	WT. OF SOIL CAKE DISH + Hg	g		282.29
16	WT. OF SOIL CAKE DISH	g		45.43
17	WT. OF Hg	g	(15) - (16)	236.86
18	VOL. OF SHRINKAGE DISH (V <sub>o</sub> )	cc	(17) / 13.55	17.51
19	SHRINKAGE LIMIT (W <sub>s</sub> )	%	$(6) - \frac{[(7) - (8)]}{4} \times 100$	37.59

STP E.L. ANTONIO



**TECHNOTEST, INC.**

SOIL TESTING LABORATORY  
283 E. DE LOS SANTOS AVE.  
QUEZON CITY, PHILIPPINES

SAMPLES ANALYZED AS RECEIVED  
**ORIGINAL COPY**  
 CHECKED BY: LPM  
 DATE: 06/30/89  
 LABORATORY NO: 424

**SHRINKAGE LIMIT TEST**

PROJECT: Flood Control and Drainage Project

LOCATION:

SAMPLE No. JB-9

DESCRIPTION OF SOIL: Passing No. 40

DEPTH TESTED: 0.5-1.00 m

TESTED BY: *Luz Santiago*  
LUZ SANTIAGO

DATE TESTED: 6-29-89

ITEM No.	DESCRIPTION	UNIT	COMPUTATION	VALUES
1	WT. OF COATED DISH + WET SOIL	g		71.00
2	WT. OF COATED DISH + DRY SOIL	g		58.42
3	WT. OF COATED DISH	g		44.34
4	WT. OF DRY SOIL (W <sub>s</sub> )	g	(2) - (3)	14.08
5	WT. OF WATER (W <sub>w</sub> )	g	(1) - (2)	12.58
6	WATER CONTENT (W <sub>a</sub> )	%	$\frac{(5)}{(4)} \times 100$	89.35
7	VOL. OF WET SOIL (V <sub>w</sub> )	cc	(18)	17.51
8	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(14)	7.66
9	SHRINKAGE RATIO (SR)		(4) / (8)	1.84
10	WT. OF SHRINKAGE DISH	g		49.98
11	WT. OF SHRINKAGE DISH + Hg	g		536.08
12	WT. OF SHRINKAGE DISH + Hg AFTER SUBMERGING SOIL CAKE	g		432.50
13	WT. OF Hg REMOVED	g	(11) - (12)	103.58
14	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(13) / 13.55	7.66
15	WT. OF SOIL CAKE DISH + Hg	g		280.82
16	WT. OF SOIL CAKE DISH	g		43.96
17	WT. OF Hg	g	(15) - (16)	236.86
18	VOL. OF SHRINKAGE DISH (V <sub>w</sub> )	cc	(17) / 13.55	17.51
19	SHRINKAGE LIMIT (W <sub>s</sub> )	%	$(6) - \left[ \frac{(7) - (8)}{4} \right] \times 100$	19.39

BY: E.L. ANTONIO



**TECHNOTEST, INC.**

SOIL TESTING LABORATORY  
893 E. DE LOS SANTOS AVE.  
QUEZON CITY, PHILIPPINES

SAMPLES ANALYZED AS RECEIVED	
ORIGINAL COPY	
CHECKED BY:	LPM
DATE:	06/30/89
LABORATORY NO.	424

**SHRINKAGE LIMIT TEST**

PROJECT: Flood Control and Drainage Project

LOCATION:

SAMPLE No. JB-9 UDS-1

DESCRIPTION OF SOIL: Passing No. 40

DEPTH TESTED: 7.55-8.00 m

TESTED BY: LUZ SANTIAGO

DATE TESTED: 6-29-89

ITEM No.	DESCRIPTION	UNIT	COMPUTATION	VALUES
1	WT. OF COATED DISH + WET SOIL	g		73.48
2	WT. OF COATED DISH + DRY SOIL	g		61.07
3	WT. OF COATED DISH	g		48.58
4	WT. OF DRY SOIL (W <sub>s</sub> )	g	(2) - (3)	12.49
5	WT. OF WATER (W <sub>w</sub> )	g	(1) - (2)	12.41
6	WATER CONTENT (W <sub>e</sub> )	%	<sup>(5)</sup> / (4) X 100	99.36
7	VOL. OF WET SOIL (V <sub>o</sub> )	cc	(18)	17.51
8	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(14)	7.43
9	SHRINKAGE RATIO (SR)		(4) / (8)	1.68
10	WT. OF SHRINKAGE DISH	g		49.98
11	WT. OF SHRINKAGE DISH + Hg	g		536.08
12	WT. OF SHRINKAGE DISH + Hg AFTER SUBMERGING SOIL CAKE	g		435.61
13	WT. OF Hg REMOVED	g	(11) - (12)	100.47
14	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(13) / 13.53	7.43
15	WT. OF SOIL CAKE DISH + Hg	g		284.04
16	WT. OF SOIL CAKE DISH	g		47.18
17	WT. OF Hg	g	(15) - (16)	236.86
18	VOL. OF SHRINKAGE DISH (V <sub>o</sub> )	cc	(17) / 13.53	17.51
19	SHRINKAGE LIMIT (W <sub>s</sub> )	%	(6) - $\frac{[(7) - (9)]}{4} \times 100$	18.66

DR. E.L. ANTONIO



**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 853 E. DE LOS SANTOS AVE.  
 QUEZON CITY, PHILIPPINES

SAMPLES ANALYZED AS RECEIVED  
 ORIGINAL COPY  
 CHECKED BY: LPM  
 DATE: 06/30/89  
 LABORATORY NO: 424

**SHRINKAGE LIMIT TEST**

PROJECT: Flood Control and Drainage Project

LOCATION:

SAMPLE No. JB-10 UDS-2

DESCRIPTION OF SOIL: Passing NO. 40

DEPTH TESTED: 11.55-12.00m

TESTED BY: *Luz Santiago*  
 LUZ SANTIAGO

DATE TESTED: 6-29-89

ITEM No.	DESCRIPTION	UNIT	COMPUTATION	VALUES
1	WT. OF COATED DISH + WET SOIL	g		75.63
2	WT. OF COATED DISH + DRY SOIL	g		64.77
3	WT. OF COATED DISH	g		49.30
4	WT. OF DRY SOIL (W <sub>s</sub> )	g	(2) - (3)	15.47
5	WT. OF WATER (W <sub>w</sub> )	g	(1) - (2)	10.86
6	WATER CONTENT (W <sub>o</sub> )	%	$\frac{(5)}{(4)} \times 100$	70.20
7	VOL. OF WET SOIL (V <sub>o</sub> )	cc	(18)	17.51
8	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(14)	11.74
9	SHRINKAGE RATIO (SR)		(4) / (8)	1.32
10	WT. OF SHRINKAGE DISH	g		49.98
11	WT. OF SHRINKAGE DISH + Hg	g		536.08
12	WT. OF SHRINKAGE DISH + Hg AFTER SUBMERGING SOIL CAKE	g		377.20
13	WT. OF Hg REMOVED	g	(11) - (12)	158.88
14	VOL. OF DRY SOIL (V <sub>f</sub> )	cc	(13) / 13.55	11.74
15	WT. OF SOIL CAKE DISH + Hg	g		282.81
16	WT. OF SOIL CAKE DISH	g		45.95
17	WT. OF Hg	g	(15) - (16)	236.86
18	VOL. OF SHRINKAGE DISH (V <sub>o</sub> )	cc	(17) / 13.55	17.51
19	SHRINKAGE LIMIT (W <sub>s</sub> )	%	$(6) - \left[ \frac{(7) - (8)}{4} \right] \times 100$	32.90

BY: E.L. ANTONIC



**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 E. delos SANTOS AVENUE  
 QUEZON CITY, PHILIPPINES

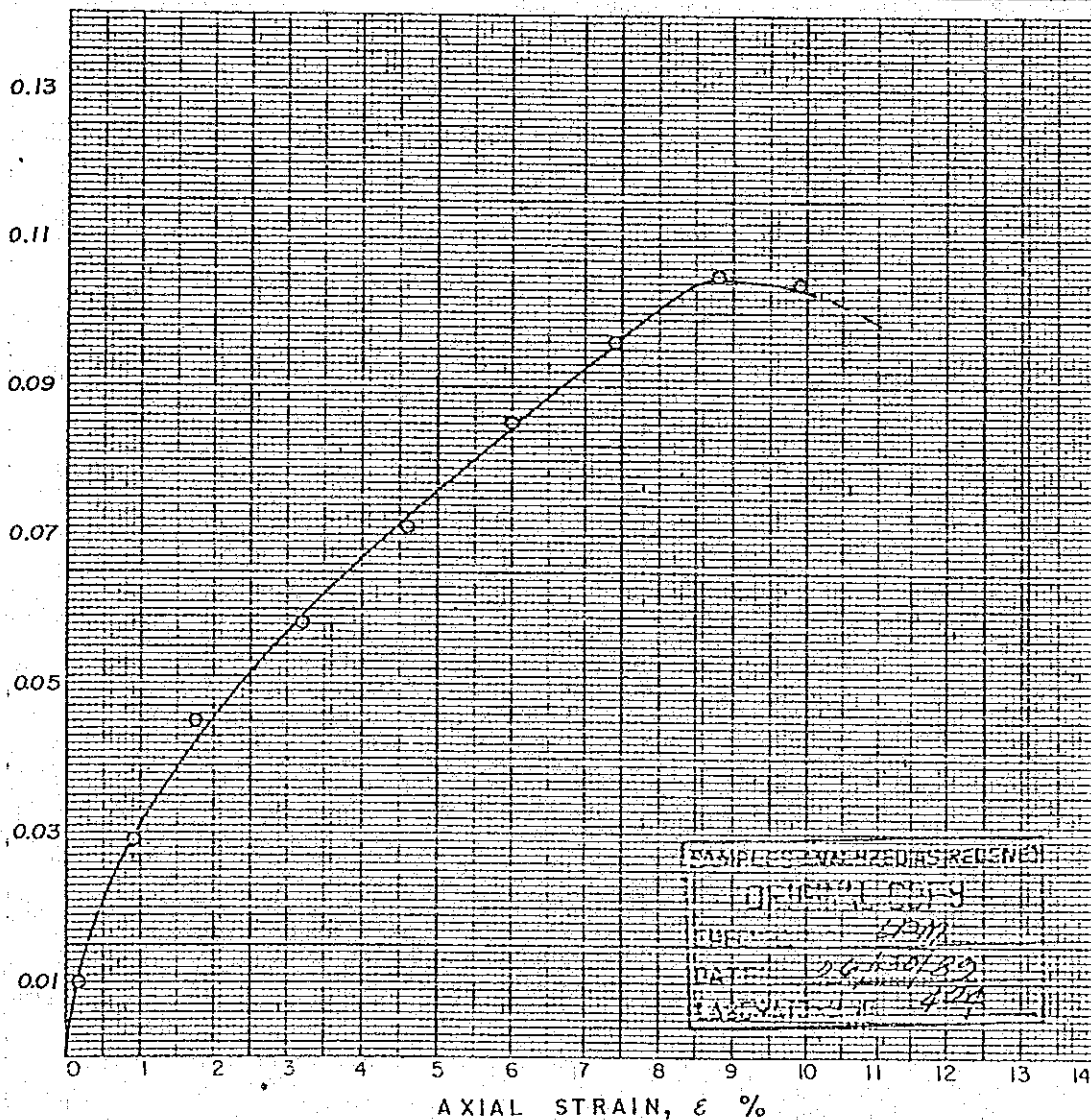
G-

**UNCONFINED COMPRESSION TEST REPORT**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 27, 1989  
 BOREHOLE No: JB-1 UDS-2 DEPTH: 14.55 - 15.00m TESTED BY: R. MAILARE

SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT W (%)	WET DENSITY $\gamma_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$
		HEIGHT H (cm)	DIAMETER $\phi$ (cm)					
1	UDS	14.18	5.88	91.53	1.34	0.105	8.81	

REMARKS:

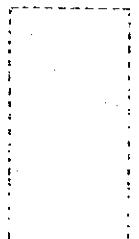


SPECIMEN AT ULTIMATE FAILURE

No. 1



No.



SAMPLES MANAGED AS REGEMEN  
 DATE: 26 JUN 1989  
 LABORATORY: 422



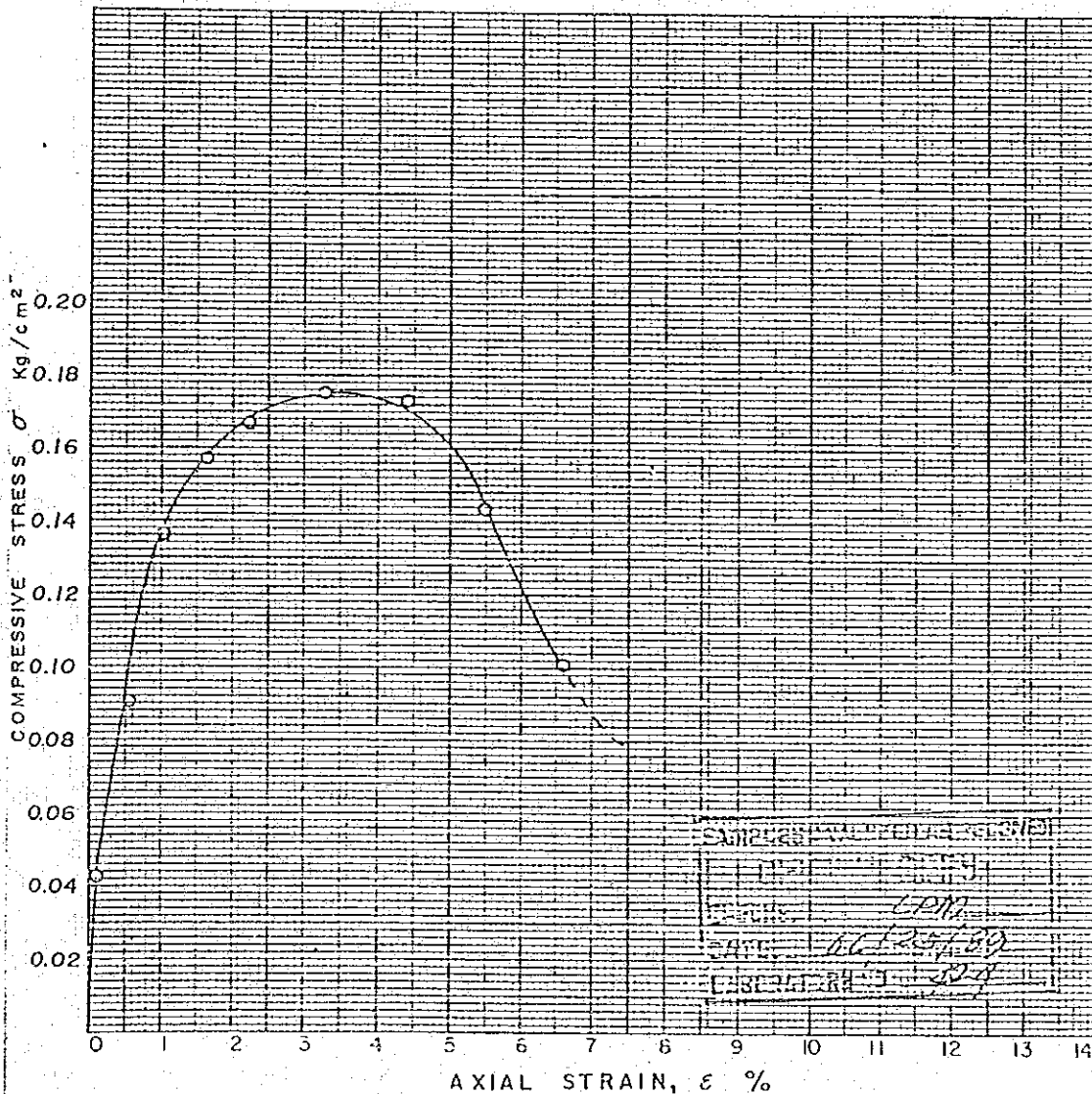
**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 E. de los SANTOS AVENUE  
 QUEZON CITY, PHILIPPINES

**UNCONFINED COMPRESSION TEST REPORT**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 21, 1989  
 BOREHOLE No: JB-2 UDS-1 DEPTH: 17.55 - 18.00m TESTED BY: R. MALLARE

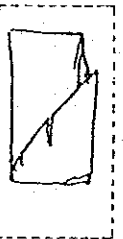
SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT $w$ (%)	WET DENSITY $\delta_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$	
		HEIGHT H (cm)	DIAMETER $\phi$ (cm)						
1	UDS	9.10	3.70	126.12	1.34	0.175	3.297		

REMARKS:

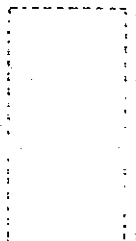


SPECIMEN AT ULTIMATE FAILURE

No. 1

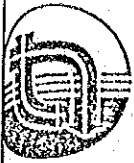


No.



SAMPLE NO. UDS-1  
 DATE: JUN 21 1989  
 TESTER: R. MALLARE  
 CHECKED: R. MALLARE





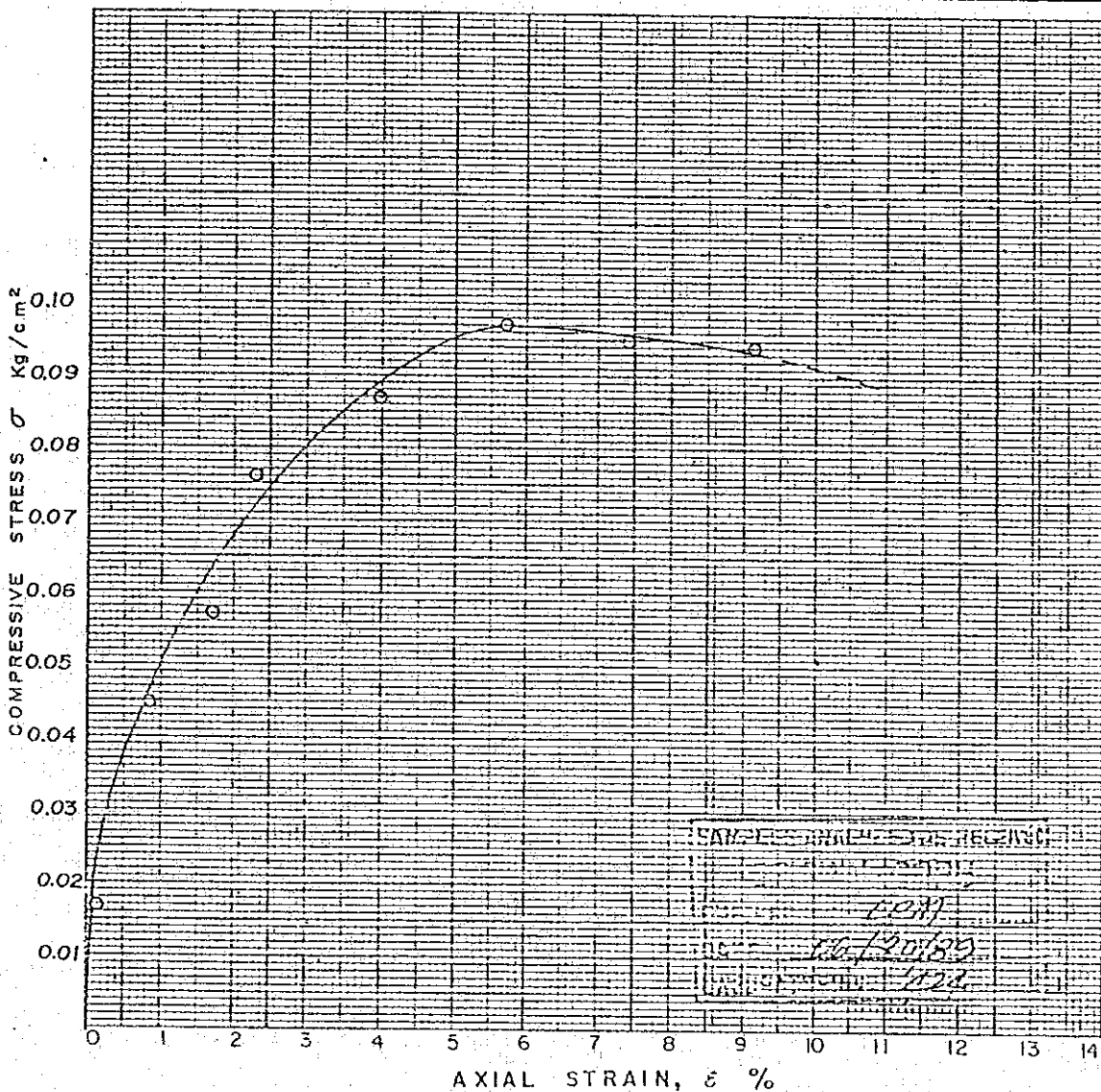
**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 E. delos SANTOS AVENUE  
 QUEZON CITY, PHILIPPINES

**UNCONFINED COMPRESSION TEST REPORT**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 16, 1989  
 BOREHOLE No: JB-3 UDS-1 DEPTH: 5.55 - 6.00m TESTED BY: R. MALLARE

SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT W (%)	WET DENSITY $\gamma_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$	
		HEIGHT H (cm)	DIAMETER $\phi$ (cm)						
1	UDS	8.75	3.82	79.38	1.51	0.097	5.714		

REMARKS:



SPECIMEN AT ULTIMATE FAILURE

No. 1



No.



SAMPLES RECEIVED FROM  
 PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT  
 DATE: JUN 16 1989  
 BY: R. MALLARE



**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 E. de los SANTOS AVENUE  
 QUEZON CITY, PHILIPPINES

G-4

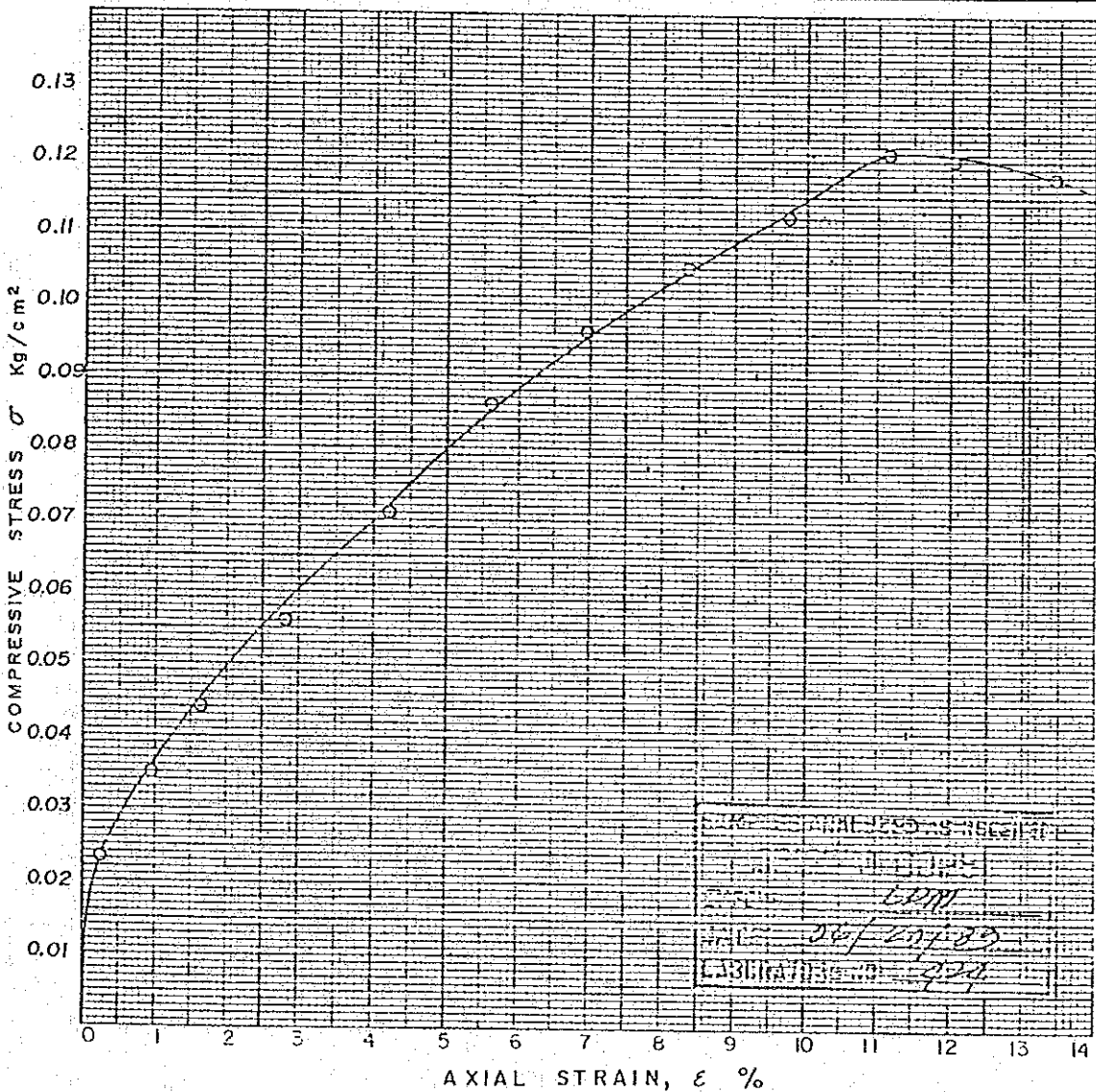
**UNCONFINED COMPRESSION TEST REPORT**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 16, 1989  
 BOREHOLE No: JB-3 UDS-2 DEPTH: 14.55-15.00m TESTED BY: R. MALLARE

SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT W (%)	WET DENSITY $\gamma_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$	
		HEIGHT H (cm)	DIAMETER $\phi$ (cm)						
1	UDS	10.76	5.25	112.08	1.36	0.121	11.152		

REMARKS:

1

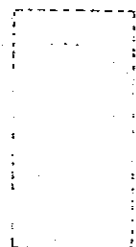


SPECIMEN AT ULTIMATE FAILURE

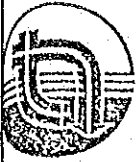
No. 1



No.



LABORATORY NO. 229  
 DATE 20/07/89  
 BY LM



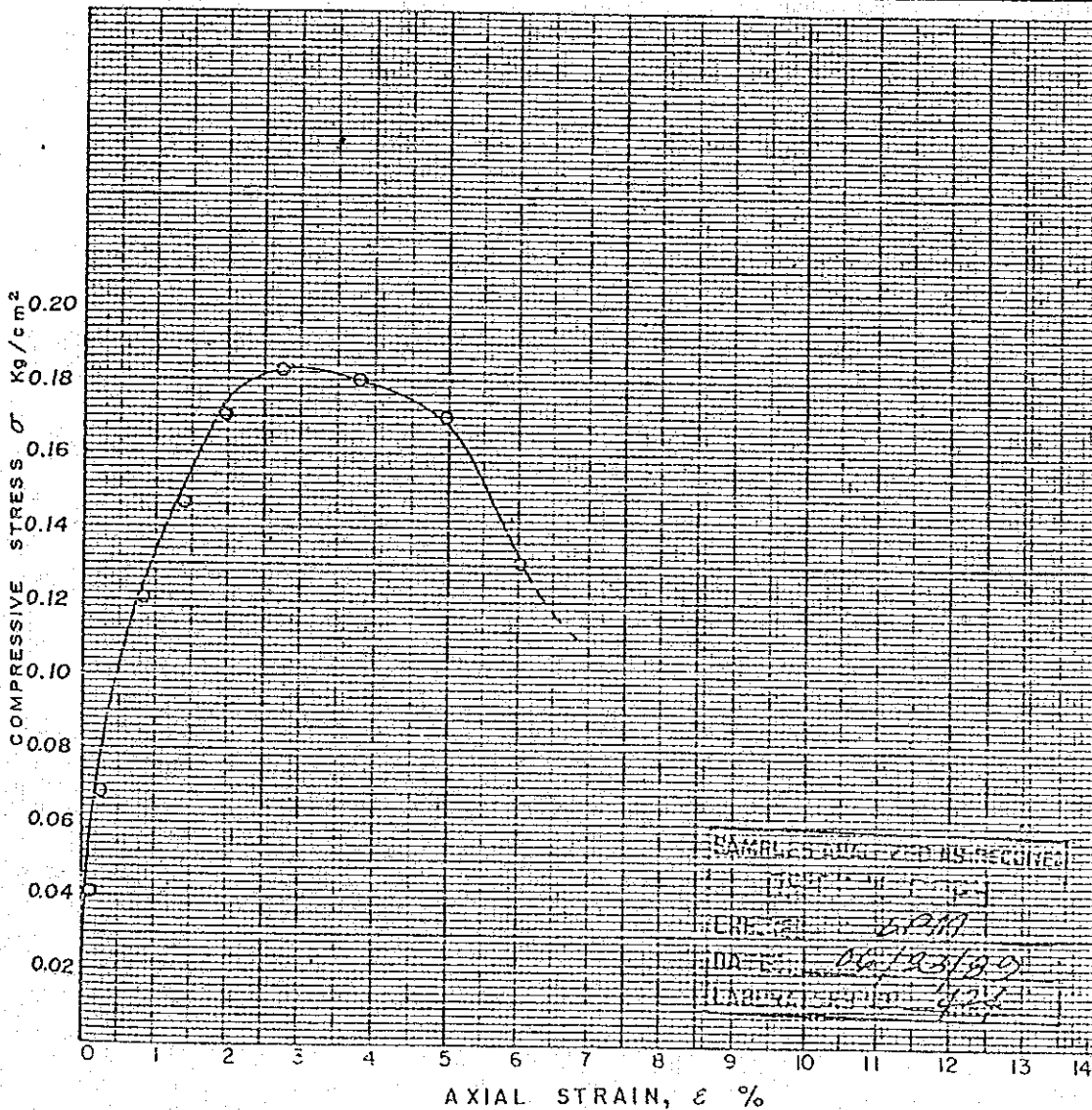
**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 E. delos SANTOS AVENUE  
 QUEZON CITY, PHILIPPINES

**UNCONFINED COMPRESSION TEST REPORT**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 21, 1989  
 BOREHOLE No: JB-4 UDS-1 DEPTH: 8.55 - 9.00m TESTED BY: R. MALLARE

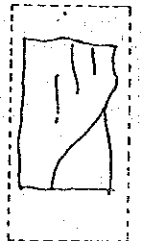
SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT W (%)	WET DENSITY $\delta_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$	
		HEIGHT H (cm)	DIAMETER $\phi$ (cm)						
1	UDS	9.10	3.70	54.77	1.64	0.1825	2.747		

REMARKS:

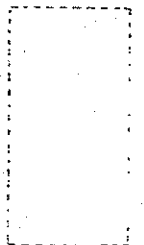


SPECIMEN AT ULTIMATE FAILURE

No. 1



No.



LABORATORY: TECHNOTEST, INC.  
 DATE: 06/23/89  
 TESTER: R. MALLARE



**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 E. de los SANTOS AVENUE  
 QUEZON CITY, PHILIPPINES

G-6

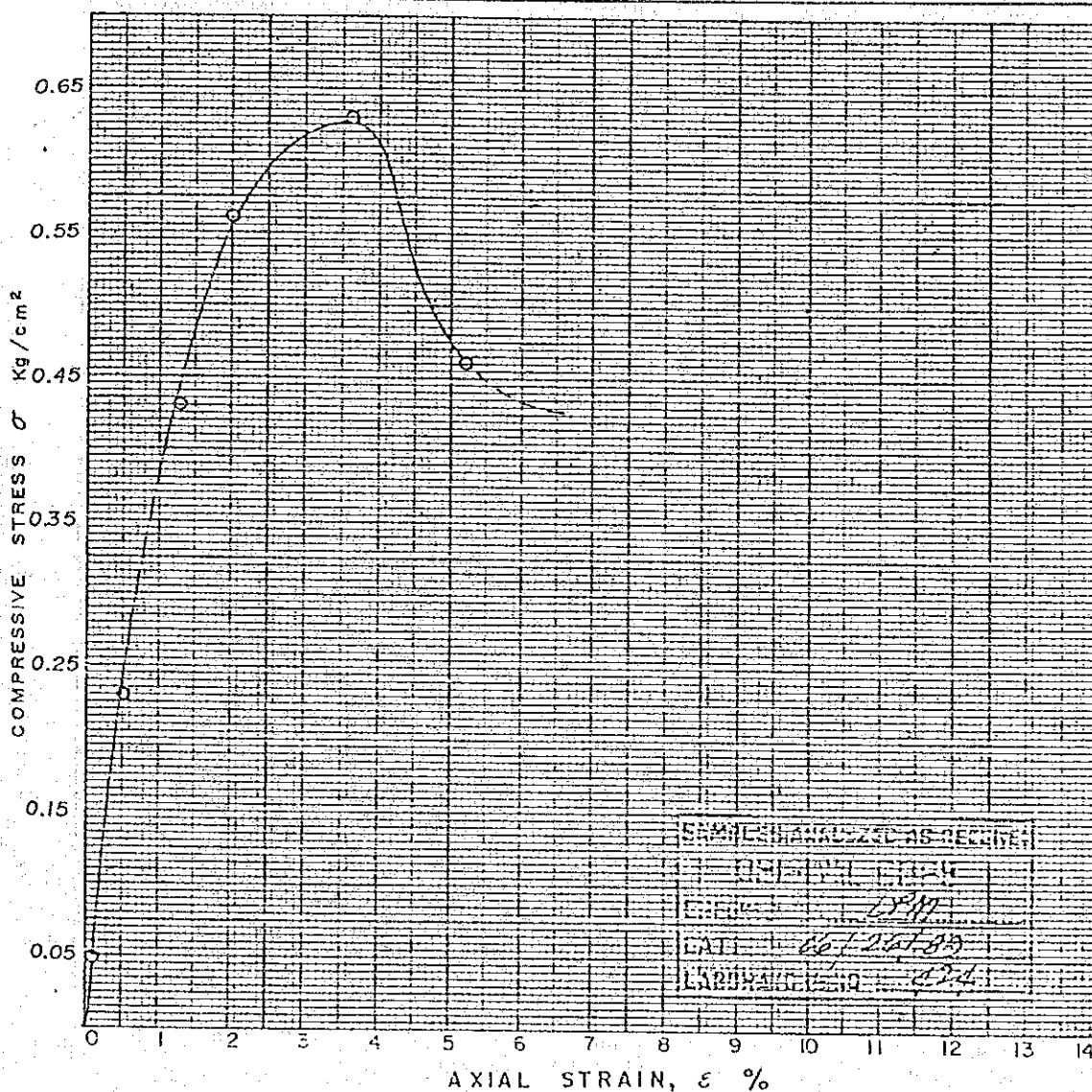
**UNCONFINED COMPRESSION TEST REPORT**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 20, 1989

BOREHOLE No: JB-5 UDS-1 DEPTH: 4.55-5.00m TESTED BY: R. MALLAPET

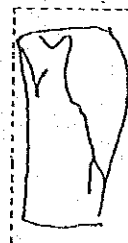
SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT W (%)	WET DENSITY $\delta_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$	
		HEIGHT H (cm)	DIAMETER $\phi$ (cm)						
1	UDS	9.70	3.60	51.36	1.66	0.629	3.608		

REMARKS:

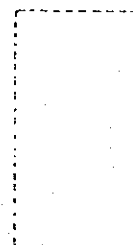


SPECIMEN AT ULTIMATE FAILURE

No. 1



No.



SAMPLES ANALYZED AS RECEIVED  
 DATE: 6-21-89  
 BY: LYN  
 CAT: 60-1-267-89  
 LABORATORY: 234



**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 E. delos SANTOS AVENUE  
 QUEZON CITY, PHILIPPINES

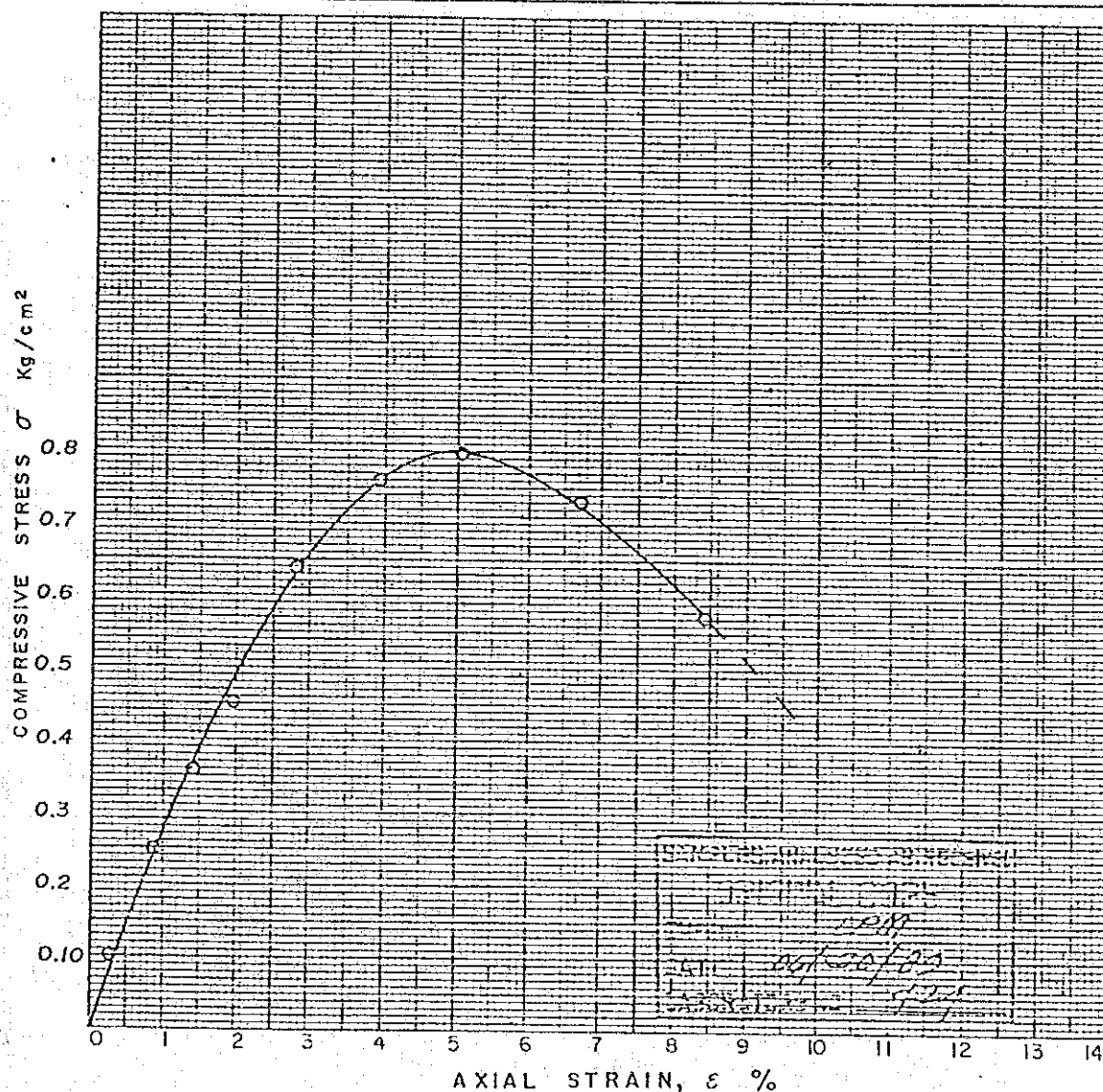
G-1

## UNCONFINED COMPRESSION TEST REPORT

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 27, 1989  
 BOREHOLE No: JB-6 UDS-2 DEPTH: 14.55-15.00m TESTED BY: R. MALLABE

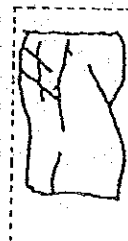
SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT W (%)	WET DENSITY $\delta_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$	
		HEIGHT H (cm)	DIAMETER $\phi$ (cm)						
1	UDS	8.91	4.0	67.93	1.57	0.799	5.051		

REMARKS:

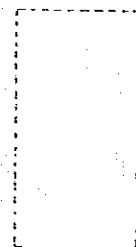


SPECIMEN AT ULTIMATE FAILURE

No. 1



No.





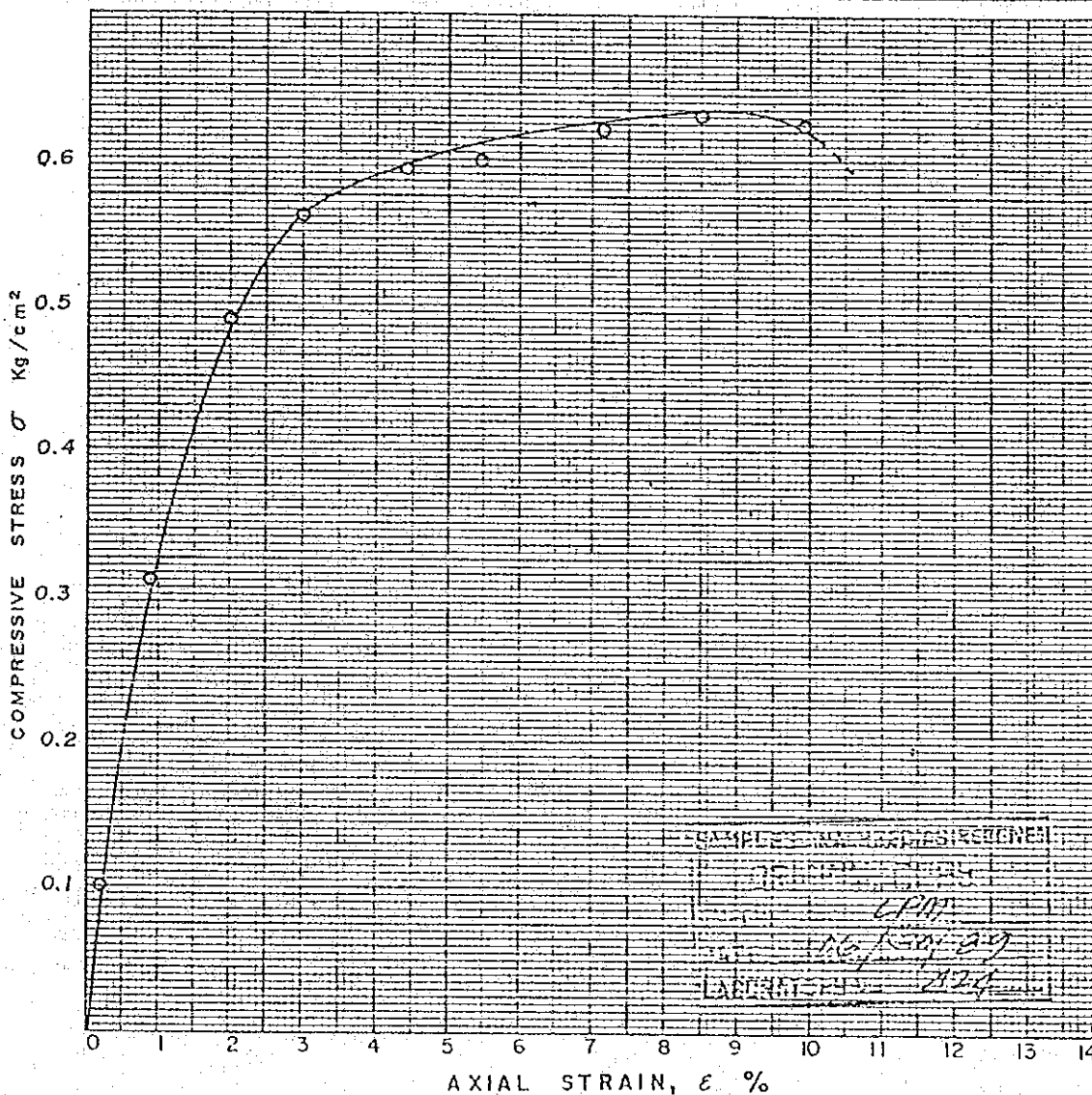
**TECHNOTEST, INC.**  
 SOIL TESTING LABORATORY  
 893 E. delos SANTOS AVENUE  
 QUEZON CITY, PHILIPPINES

**UNCONFINED COMPRESSION TEST REPORT**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 27, 1989  
 BOREHOLE No: JB-9 UDS-1 DEPTH: 7.55-8 TESTED BY: R. MALLARE

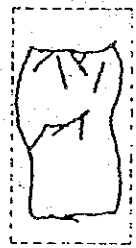
SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT W (%)	WET DENSITY $\delta_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$	
		HEIGHT H (cm)	DIAMETER $\phi$ (cm)						
1	UDS	14.68	5.80	46.84	1.75	0.632	8.515		

REMARKS:

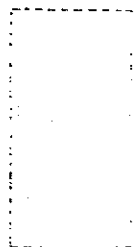


SPECIMEN AT ULTIMATE FAILURE

No. 1



No.



SAMPLES TAKEN AT THE FOLLOWING DEPTHS:  
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 0.15 - 0.30  
 0.30 - 0.45  
 0.45 - 0.60  
 0.60 - 0.75  
 0.75 - 0.90  
 0.90 - 1.05  
 1.05 - 1.20  
 1.20 - 1.35  
 1.35 - 1.50  
 1.50 - 1.65  
 1.65 - 1.80  
 1.80 - 1.95  
 1.95 - 2.10  
 2.10 - 2.25  
 2.25 - 2.40  
 2.40 - 2.55  
 2.55 - 2.70  
 2.70 - 2.85  
 2.85 - 3.00  
 3.00 - 3.15  
 3.15 - 3.30  
 3.30 - 3.45  
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 3.90 - 4.05  
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 11.70 - 11.85  
 11.85 - 12.00  
 12.00 - 12.15  
 12.15 - 12.30  
 12.30 - 12.45  
 12.45 - 12.60  
 12.60 - 12.75  
 12.75 - 12.90  
 12.90 - 13.05  
 13.05 - 13.20  
 13.20 - 13.35  
 13.35 - 13.50  
 13.50 - 13.65  
 13.65 - 13.80  
 13.80 - 13.95  
 13.95 - 14.10  
 14.10 - 14.25  
 14.25 - 14.40  
 14.40 - 14.55  
 14.55 - 14.70  
 14.70 - 14.85  
 14.85 - 15.00





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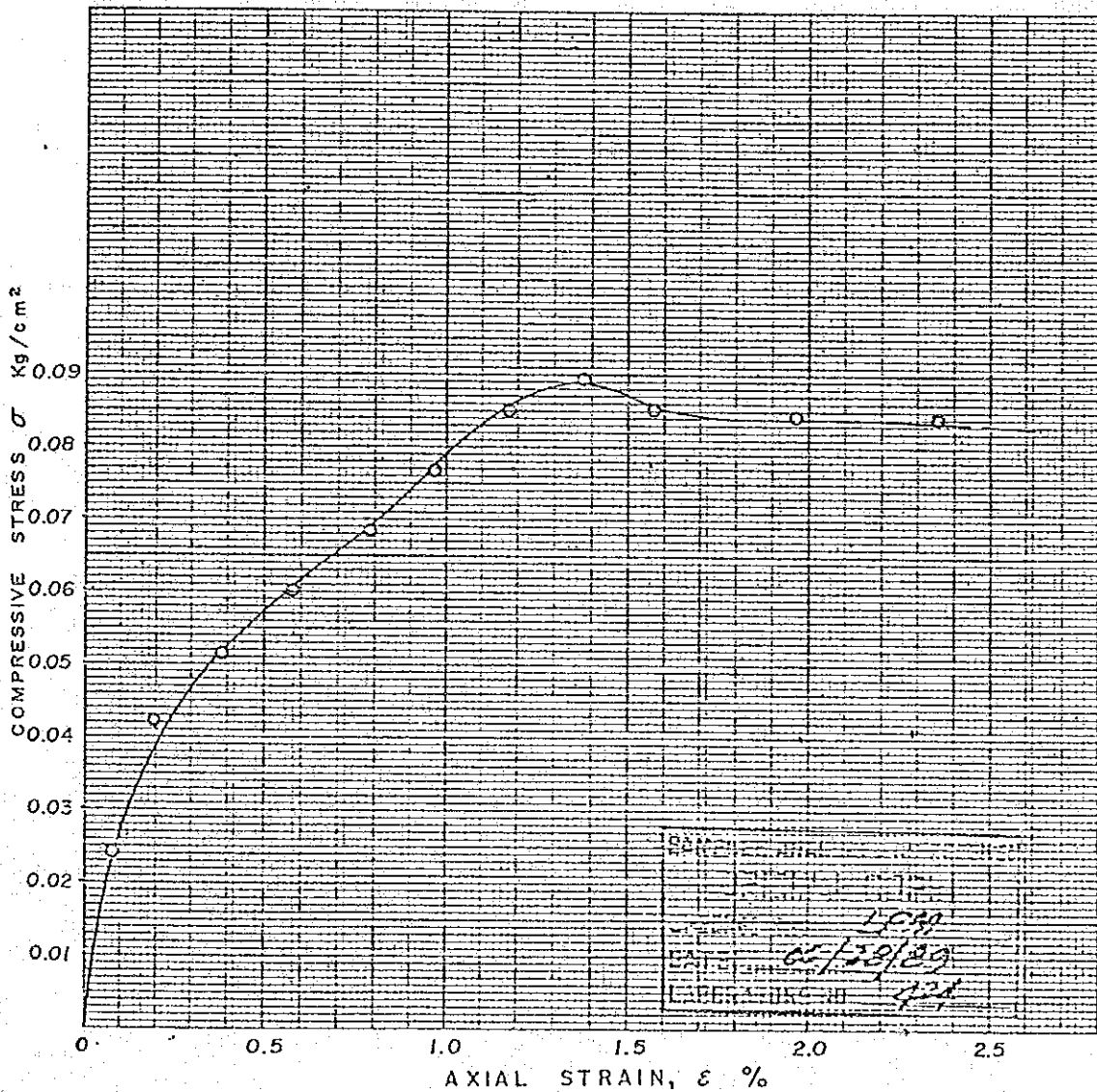
G-5

**UNCONFINED COMPRESSION TEST REPORT**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 9, 1989  
 BOREHOLE No: JB-10 UDS-1 DEPTH: \_\_\_\_\_ TESTED BY: R. MALLARE

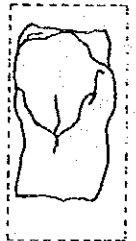
SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT $W$ (%)	WET DENSITY $\delta_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$
		HEIGHT $H$ (cm)	DIAMETER $\phi$ (cm)					
1	UDS	12.70	6.03	39.79	1.74	0.0892	1.378	

REMARKS:

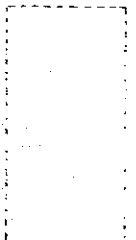


SPECIMEN AT ULTIMATE FAILURE

No. \_\_\_\_\_



No. \_\_\_\_\_



LABORATORY: \_\_\_\_\_  
 DATE: 6/29/89  
 OPERATOR: LCM  
 CHECKED: \_\_\_\_\_



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 QUEZON CITY, PHILIPPINES

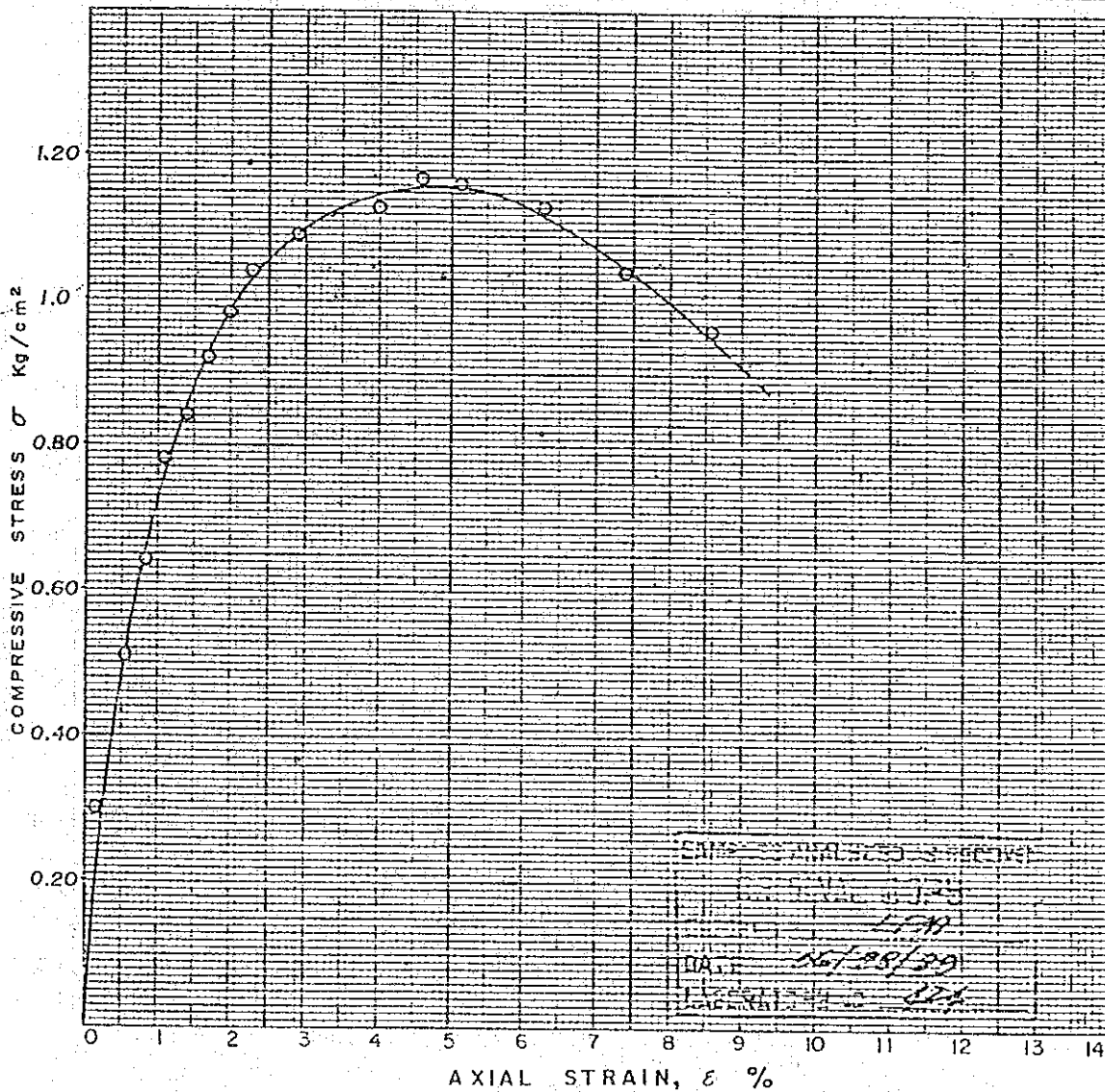
G-10

**UNCONFINED COMPRESSION TEST REPORT**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 9, 1989  
 BOREHOLE No: TP/JB-7 UDS DEPTH: \_\_\_\_\_ TESTED BY: R. MALLARE

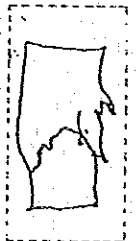
SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT W (%)	WET DENSITY $\delta_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$
		HEIGHT H (cm)	DIAMETER $\phi$ (cm)					
1	UDS	8.75	3.50	44.63	1.77	1.663	4.571	

REMARKS:

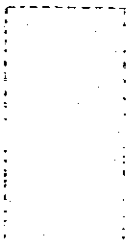


SPECIMEN AT ULTIMATE FAILURE

No. \_\_\_\_\_



No. \_\_\_\_\_



TESTED BY: \_\_\_\_\_  
 DATE: 16/08/89  
 PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT



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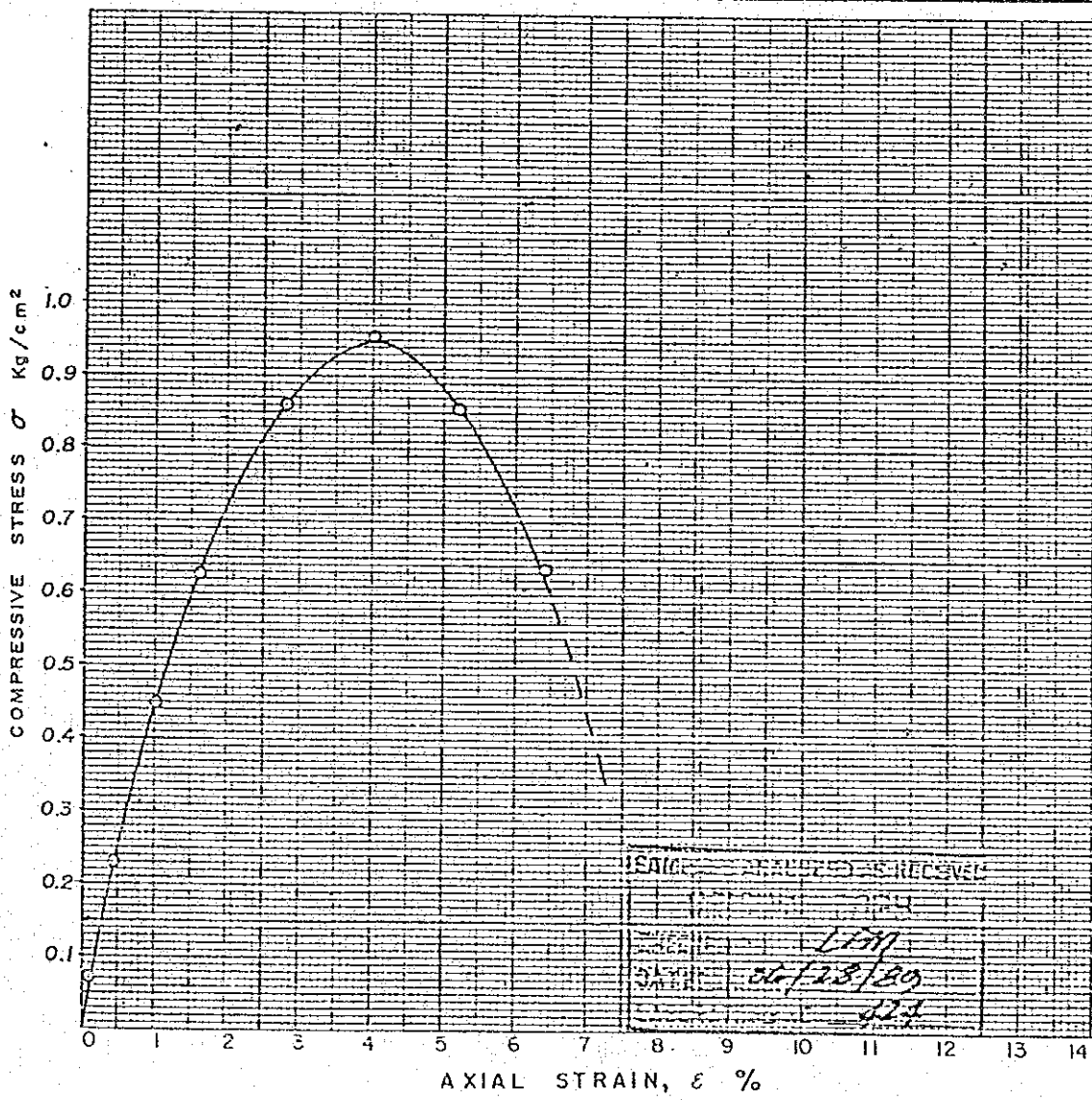
**UNCONFINED COMPRESSION TEST REPORT**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 8, 1989

BOREHOLE No: TP/JB-8 UDS DEPTH: 0.50m TESTED BY: R. MALLARE

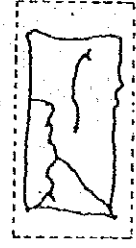
SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT W (%)	WET DENSITY $\delta_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$	
		HEIGHT H (cm)	DIAMETER $\phi$ (cm)						
1	UDS	12.50	5.08	41.70	1.69	0.955	4.00		

REMARKS:

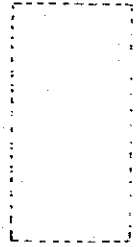


SPECIMEN AT ULTIMATE FAILURE

No. \_\_\_\_\_



No. \_\_\_\_\_



TESTED BY: R. MALLARE  
 DATE: 06/28/89  
 222



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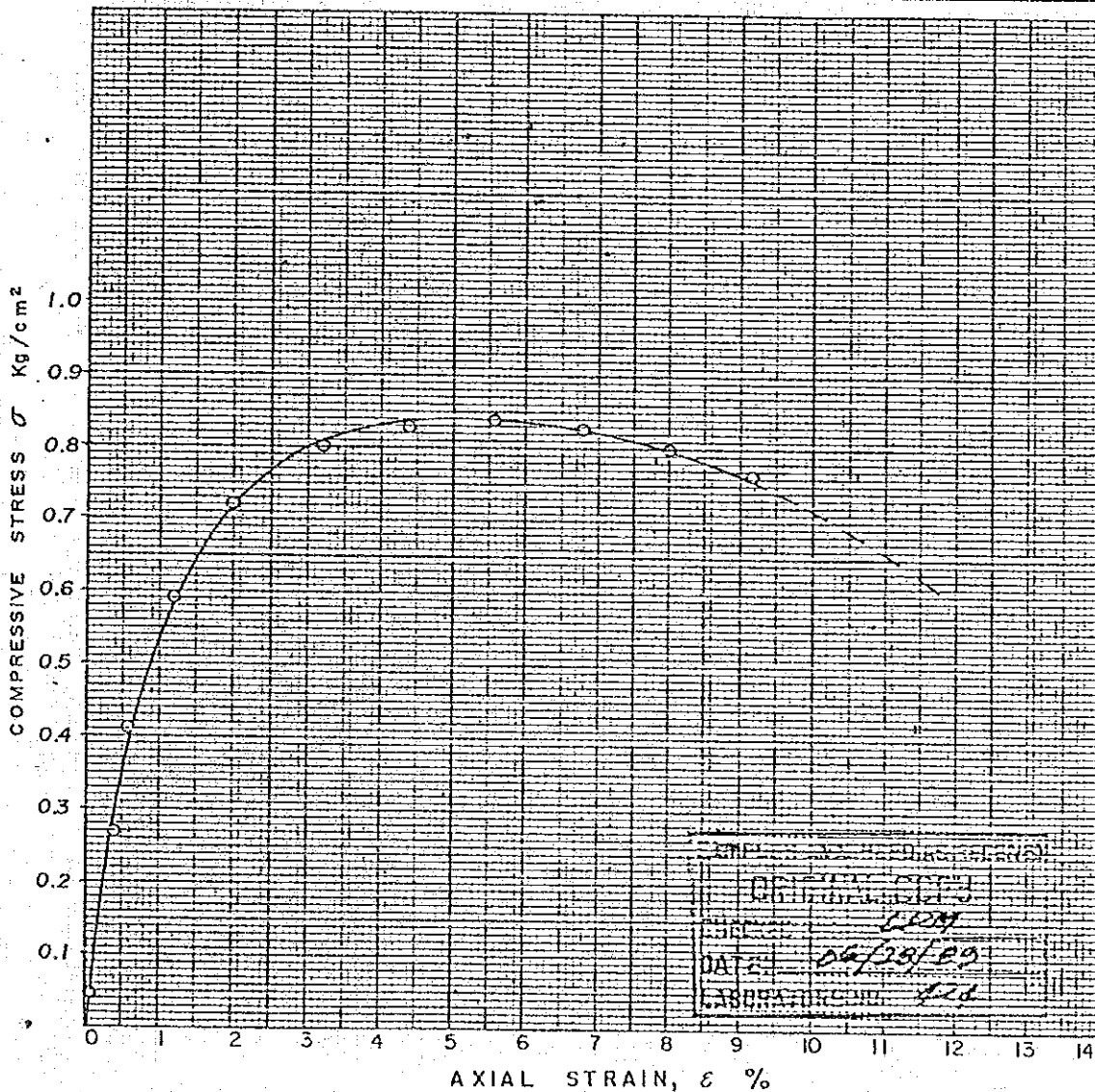
**UNCONFINED COMPRESSION TEST REPORT**

PROJECT: FLOOD CONTROL AND DRAINAGE PROJECT DATE: JUNE 8, 1989

BOREHOLE No: TP/JB-9 UDS DEPTH: 0.50m TESTED BY: R. MALLARE

SPECIMEN No.	SPECIMEN CONDITION	DIMENSION OF SPECIMEN		MOISTURE CONTENT W (%)	WET DENSITY $\gamma_t$ (g/cm <sup>3</sup> )	UNCONFINED COMPRESSIVE STRENGTH $q_u$ (Kg/cm <sup>2</sup> )	FAILURE STRAIN $\epsilon$ (%)	SENSITIVITY RATIO $S_t$
		HEIGHT H (cm)	DIAMETER $\phi$ (cm)					
1	UDS	12.54	5.07	37.22	1.80	0.838	5.58	

REMARKS:



SPECIMEN AT ULTIMATE FAILURE

No.



No.



LABORATORY NO. 428  
 DATE 06/28/89  
 OPERATOR RM  
 CHECKED BY RM