t-1

YAYASAN PERGURUAN "CIKINI"
INSTITUT
SAINS DAN TEKNOLOGI
NASIONAL
I S T N

FAKULTAS TEKNIK SIPIL
DAN PERENCANAAN
JURUSAN TEKNIK SIPIL

PENUGASAN

No : 05-04/PM/LM/IV/93

Ketua Program Studi Teknik Sipil, Fakultas Teknik Sipil dan Perencanaan Institut Sains dan Teknologi Nasional Jakarta menugaskan kepada :

Ir. Idrus, MSc Staff Jurusan Teknik Sipil

Untuk melakukan pekerjaan Penyelidikan Tanah sebagai bentuk kegiatan **Pengabdian Pada Masyarakat pada :**

Nama Pekerjaan	:	Penyelidikan Tanah PT Multi Rasa Agung
Lokasi	:	jatake, Tangerang
Pemberi Tugas	:	PT.Multi Rasa Agung

Dengan jadwal pelaksanaan pekerjaan selama 12 hari kerja (80 Jam), 2 hari di lapangan dan 10 hari di Laboratorium

Kepada Ir. Idrus MSc diberikan kepercayaan penuh untuk melakukan pekerjaan Pengabdian Pada Masyarakat tersebut dan bertanggung jawab atas segala sesuatu mengenai pekerjaan tersebut

Kepada pelaksana tugas ini akan diberikan honorarium sesuai dengan ketentuan yang berlaku di Laboratorium Mekanika Tanah Institut Sains dan Teknologi Nasional.

Penugasan ini berlaku sejak dikeluarkan sampai dengan berakhirnya jangka waktu penyusunan Laporan Akhir (Final Report) diterima oleh pemberi kerja dengan baik.

Jakarta, 5 April 1993
Kaprodi Teknik Sipil

Ir. Ari Mulyo Diah Utami MT
NIP : 01.83332

Tembusan :
1. Dekan FTSP-ISTN (sbg laporan)
2. Ka. Lab. Mekanika Tanah ISTN
3. Arsip

LEMBAR PENGESAHAN
PENGABDIAN PADA MASYARAKAT

ISTN

PENYELIDIKAN TANAH PT. MULTI RASA AGUNG
Lokasi : Jatake, Tangerang

Oleh :
Idrus Ir, M.Sc

Mengetahui :
Ketua Jurusan Teknik Sipil

Ir. Arimulyo Diah Utami, M.T

Program Studi Teknik Sipil
Institut Sain dan Teknologi Nasonal
Jakarta 1993

MULTIRASA

PT. MULTI RASA AGUNG

SURAT PERJANJIAN KERJASAMA
No: 05-04.1/MRA/IV/93

Pada hari ini, Senin tanggal Lima bulan April tahun Seribu Sembilan Ratus Sembilan Puluh Tiga (05-04-1993) yang bertanda tangan dibawah ini :

I. Nama : **PT. Multi Rasa Agung**
Alamat : Jl. Raya Serang Km 12, Kompl. Cimone Mas, JAKARTA

Selanjutnya disebut **PIHAK PERTAMA.**

II. Nama : **Ir. Idrus MSc**
Jabatan : Kepala Laboratorium Mekanika Tanah ISTN
Alamat : Jl. Asmin rt 08/rw 03 no.45
Susukan Ciracas Jakarta timur

Selanjutnya disebut **PIHAK KEDUA.**

Pihak Pertama telah sepakat untuk menunjuk Pihak Kedua dalam melakukan pekerjaan Penyelidikan Tanah (Soil Investigation) pada :

Proyek : Gedung PT. Multi Rasa Agung

Lokasi : Jatake, Tangerang, Jawa Barat

Demikian surat perjanjian kerja sama ini kami buat dengan sebenar-benarnya.

Jakarta, 05 April 1993

PIHAK KEDUA	PIHAK PERTAMA
Laboratorium Mekanika Tanah ISTN	PT. Multi Rasa Agung

FINAL REPORT
OF
SOIL INVESTIGATION

PROJECT : P.T MULTI RASA AGUNG

LOCATION : JATAKE , TANGERANG , WEST JAVA.

LABORATORIUM MEKANIKA TANAH
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Kampus ISTN Bhumi Srengseng Telp. 7270092, Fax. 7270090

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OUTLINE OF INVESTIGATION

1.1. OBJECTIVE

The soil investigation consist of :

-. Shallow Boring : - Core Boring
- Undisturbed Sampling
- Disturbed Sampling

-. Dutch Cone Penetration Test (CPT Test / Sondir).

-. Laboratory Test.

The investigation are aimed at collecting subsoil data to establish the most suitable, technically and economically, the types of foundation for the upper structure and probability to improve or stabilising the soil.

1.2. PERIOD AND LOCATION.

Periode :

Site Investigation , April 6 th until 7 th 1983.

Lab. Investigation , April 8th until 22th

Location :

The Shallow Boring and Dutch Cone Penetration Test were performed as indicated at Fig.1

1.3. ITEMS AND QUANTITY OF INVESTIGATION

Field Exploratory Work.

- 5 (five) Shallow Boring of 4 to 5 meters depth. (data in Final Report after laboratory test was complette)
- 7 (seven) Ducth Cone Penetration Test Of 2,5 ton capacity , or maximum depth of 20 meters.

In Table 1, indicated the quantity of field exploration works.

The Laboratory Test :

The item and quantity of the Laboratory Tests related to the boreholes were tabulated in Tab 2.

1.4. FIELD EXPLORATORY WORK.

Equipment :

- 1 (one) unit Hand Boring , with bor iwan auger.
- Thin walled tube samplers of 75 mm inner diameter , 1,5 mm thickness and 60 cm length.
- 1 (one) unit DCPT Machine of 2,5 tonf capacity or 20 meters maximum depth.

Metode of exploration :

-. Hand Boring.

For drilling of bore holes, the rotary core drilling method had been employed by means of iwan auger.

-. Undisturbed Sampling.

A shelby type thinwalled tube samplers had been used for undisturbed samplings and had been conducted in accordance with the requirements of ASTM D1587.

The sampling tube containing undisturbed samples had been sealed at both ends with paraffin containing 2 to 3 % resin, placed in plastic bag and put into the wooden boxes and had been clearly identified, keep out from shock, exposure to the sun and other external forces and transported carefully to the laboratory.

-. Dutch Cone Penetration Test.

Dutch Cone Penetration Test had been carried out in accordance with the requirements of ASTM D3441 , of 2,5 tonf capacity, equipped with rod and friction cone. The CPT had been performed continously from the ground surface to the top of hard layer soil with cone peretration resistance value exceeding 200 kgf/cm2 or 20 meters maximum depth. The recording had been taken every 20 cm penetration rate.

The data obtained from the test had been of cone penetration resistance and total friction as well.

1.5. LABORATORY TEST AND ANALYSIS.

All laboratory Test had been performed in Soil Mechanics Laboratory of National Institute of Sience and Technology at Jakarta (ISTN). The all test had been conducted in accordance with ASTM requirements.

For disturbed samples for Iwan auger, following index properties tests had been carried out :

- Determination of Natural Water Content , ASTM D2216
- Determination of Specific Gravity , ASTM D854
- Determination Of Attreber limits : Liquid limits, Plastic limits and Plasticity Index. ASTM D423.
- Determination of Grained sized distribution by Sive analysis and Hydrometre Analysis, ASTM D422

For Undisturbed samples from the thin walled tube samplers, following idex and engineering properties test had been carried out in addition to the test listed above :

- Determination of Wet Density and Dry Density
- Determination of Degree of Saturation, Void ratio
- Determination UU Triaxial Compression Test, ASTM D2166
- Determination Compression index with Consolidation Test ASTM D2435

The result of all Laboratory Test was summarized at the Summmary of Laboratory Test" enclosed.

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DISCUSSION & FOUNDATION RECOMENDATION

2.1. SUB SOIL CONDITION.

From the field exploratory test data with CPT test and shallow boring test, the sub soil condition could be explained as follows :

-. From the existing ground surface (elevation +0.40 meter to - 0.80 meter) down to 1.50 meters , -G.L was found a layer of Reddish Brown Clay and silt or Silt and clay with soft consistency.

-. From 1.50 meter down to 2.50 / 3.00 meters, -G.L was found a layer of Reddish Brown Clay and silt or Silt and clay with medium consistency.

-. From 2.50 / 3.00 meter down to more than 10.00 meter , -G.L was found a layer with medium to stiff consistency.

- A layer with verry stiff to hard consistency was found at more than 12.00 meters depth.

- For this subsoil condition, only 1 (one) point of CPT test was found the qonus resistance >200 kg/cm2.(at S7), and the 6 th points of CPT others couldn't found the end bearing (qonus resistance) bigger than 200 kg/cm2.

-. The zero level (0.00) for this report was assumed at floor of building factory beside the area of investigation.

2.2. FOUNDATION RECOMENDATION.

With the sub soil condition as described above, it is recomended to use foundation alternative as follows :

A. Shallow Fondation.(Mat Foundation)

-. Elevation Depth -2.50 to -3.00 meter.

-. The allowable of soil bearing capasity is 0.5 kgf/cm2.

-. The original allowable bearing capasity of soil above elevation -3.00 meters is smallest than 0.5 kg/cm2, because it is a thickness of soil (clay) with soft consistency.

-. The allowable of soil bearing capasity could be increased (more than 0.5 kgf/cm2) with filled other material (macadam) above elevation -3.00 meter.

The filled material must be compacted still 90 to 95% dry density maximum from modified proctor laboratory for the same material.

We suggested that the settlement of consolidation must be calculated with using the parameter from oedometre test.

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B. Deep Fondation.

With the sub soil condition as describe above, we can't recommendation to used deep foundation (i.e pile foundation), because all of the CPT test not found the bearing layer > 200 kg/cm2 to 20.00 meter depth.
Using Pile foundation for this casus isn't economically, it's expansive investation for foundation structure.

Jakarta, April 25th 1993.
SOIL MECHANICS LABORATORY OF I.S.T.N
Chief Executive

(Ir. Idrus MSc)

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FIGURE : 1

o BOR / HAND BORED.
Δ CPT / SONDIR

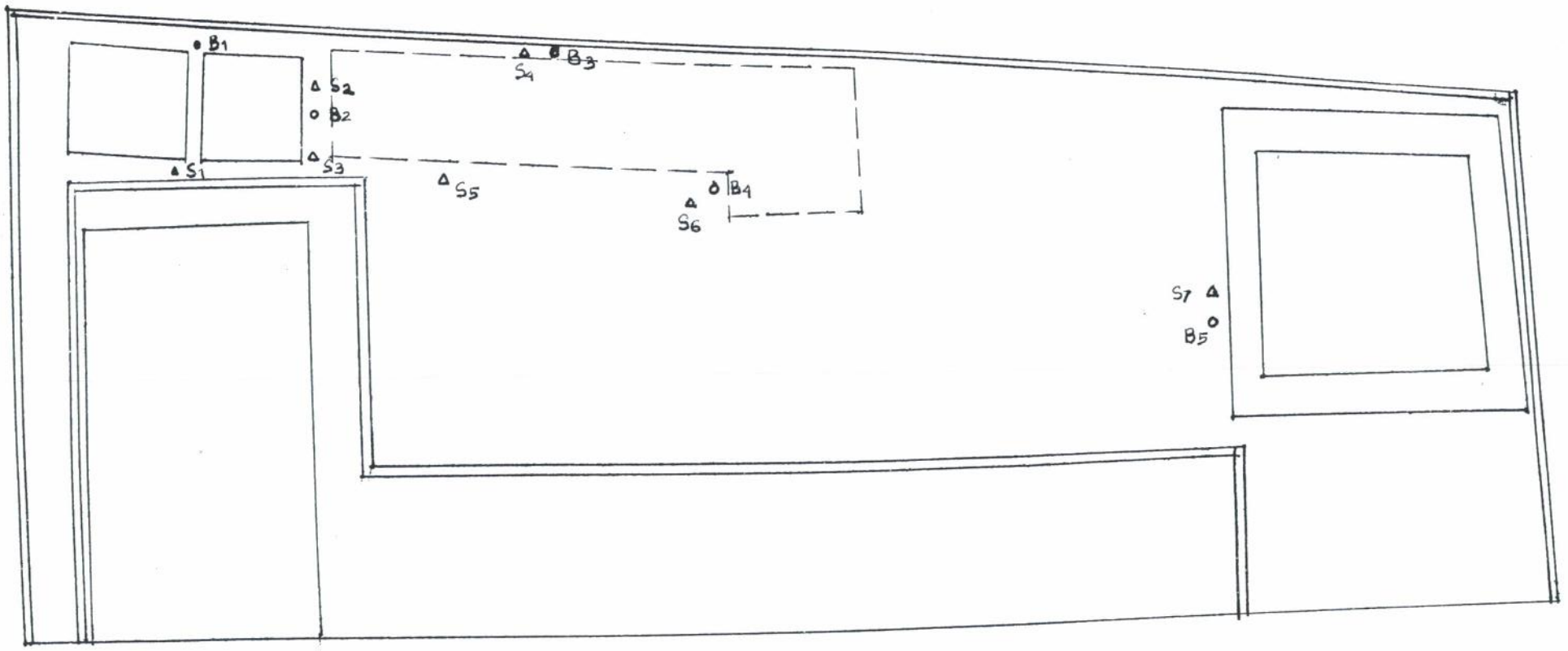

TABLE I

Quantity of The Exploratory Works

No CPT	Depth (m)	Qonus resistant (kg/cm2)	Total friction (kg/cm')
S1	19.80	60	> 1700
S2	19.80	75	> 1700
S3	19.80	95	1700
S4	11.80	95 *)	1430
S5	14.80	115 *)	> 1700
S6	14.80	150 *)	> 1700
S7	19.80	170	> 1700

Note *) : The Operation CPT Test was finished at elevation above, because the subgrade of the top soil is a clay with soft consistency and the anchor of the CPT equipment was failure before the maximum capacity equipment had been used.

Bor No	Elevation -GL (m)	Depth from GL (m)	No of UD Sample (Spl)
B1	-0.20	3.45	2
B2	-0.60	3.45	2
B3	-0.80	3.45	2
B4	+0.20	3.45	2
B5	+0.40	3.20	2

Note : The elevation standard (0.00) is the elevation of the building factory floor besides the area investigation.

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TABEL II

Quantity of Laboratory Test

Item of Test	No. of Test (Samples)	Remarks Samples
Index Properties	10	Undisturbed
Grained Sizes Analysis & Hydro.	10	Disturbed
Atterberg limits	10	Undisturbed
Triaxial UU Test	10	Undisturbed
Consolidation Test	10	Undisturbed

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BORE LOG

OJECT	: PT. MULTI RASA AGUNG	hole No: B.1	elevation (m) -0,20	GWL	date : 6-4-1993
CATION	: JATAKE TANGERANG				

log	unified classification.	DESCRIPTION	Sample Depth (m)	Pocket penetr. mtr (kg/cm²)
		Lempung, coklat muda sedikit abu-abu, tanah - sangat bau, lunak.		
		Lempung collat muda sedikit abu-abu, tanah - sedikit berbau, sedang .	2,00 / 2,45	0,75
		Lempung, coklat muda sedikit abu-abu, tanah - tidak berbau , sedang.	3,00 / 3,45	1,25

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BORE LOG

OJECT	: PT.MULTI RASA AGUNG	hole No: B.2	elevation (m) -0,60	GWL	date : 6-4-1993
CATION	: JATAKE TANGERANG				

log	unified classification	DESCRIPTION	Sample Depth (m)	Pocket penetr. mtr (kg/cm²)
		Lempung, coklat muda keabu-abuan, lunak, tnh tanah sangat bau.		
			2,00 / 2,45	1,00
		Lempung, coklat tua sedikit abu-abu, sedang , tanah tidak berbau.		
			3,00 / 3,45	1,25

LABORATORIUM MEKANIKA TANAH
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BORE LOG

OJECT	: PT MULTI RASA AGUNG	hole No: B.3	elevation (m) -0,80	GWL	date : 7-4-1993
CATION	: JATAKE TANGERANG				

log	unified classification.	DESCRIPTION	Sample Depth (m)	Pocket penetr. mtr (kg/cm²)
		Lempung, coklat tua sedikit abu-abu, lunak, cukup bau.	2,00 / 2,45	1,00
		Lempung, coklat tua sedikit abu-abu, sedang. tanah tidak berbau.	3,00 / 3,45	1,50

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BORE LOG

OJECT	: PT. MULTI RASA AGUNG	hole No: B.4	elevation (m) +0,20	GWL	date : 7-4-1993
CATION	: JATAKE TANGERANG				

log	unified classification.	DESCRIPTION	Sample Depth (m)	Pocket penetr. mtr (kg/cm²)
		Lempung , hitam kecoklatan, lunak.		
		Lempung, coklat tua kehitaman, lunak.		
		Lempung, coklat keabu-abuan, sedang.		
		Lempung, coklat tua sedikit kehitaman, sedang - agak kaku.		
			2,00 / 2,45	2,50
		Lempung, coklat tua kehitaman, kaku.		
			3,00 / 3,45	3,75

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BORE LOG

OJECT	: PT. MULTI RASA AGUNG	hole No: B.5	elevation (m) +0,40	GWL	date : 7-4-1993
CATION	: JATAKE TANGERANG				

log	unified classification	DESCRIPTION	Sample Depth (m)	Pocket penetr. (kg/cm²)
		Lepung, coklat kehitaman, sedikit berpasir,sedang		
		Bempung, coklat kemerahan, sedikit berpasir,kaku.		
			2,00 / 2,45	3,00
		Lempung, coklat kemerahan, sedikit berpasir - kaku.		
			2,75 / 3,20	3,75

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DIAGRAM SONDIR

No. PROYEK :
PROYEK : PT MULTI RASA AGUNG
SONDIR : S. 1
KEDALAMAN :

DIKERJAKAN : Ir. Nasir Jalili
TANGGAL : 8 April 1993 .
AIR TANAH :
Elevasi = -0,20 m .

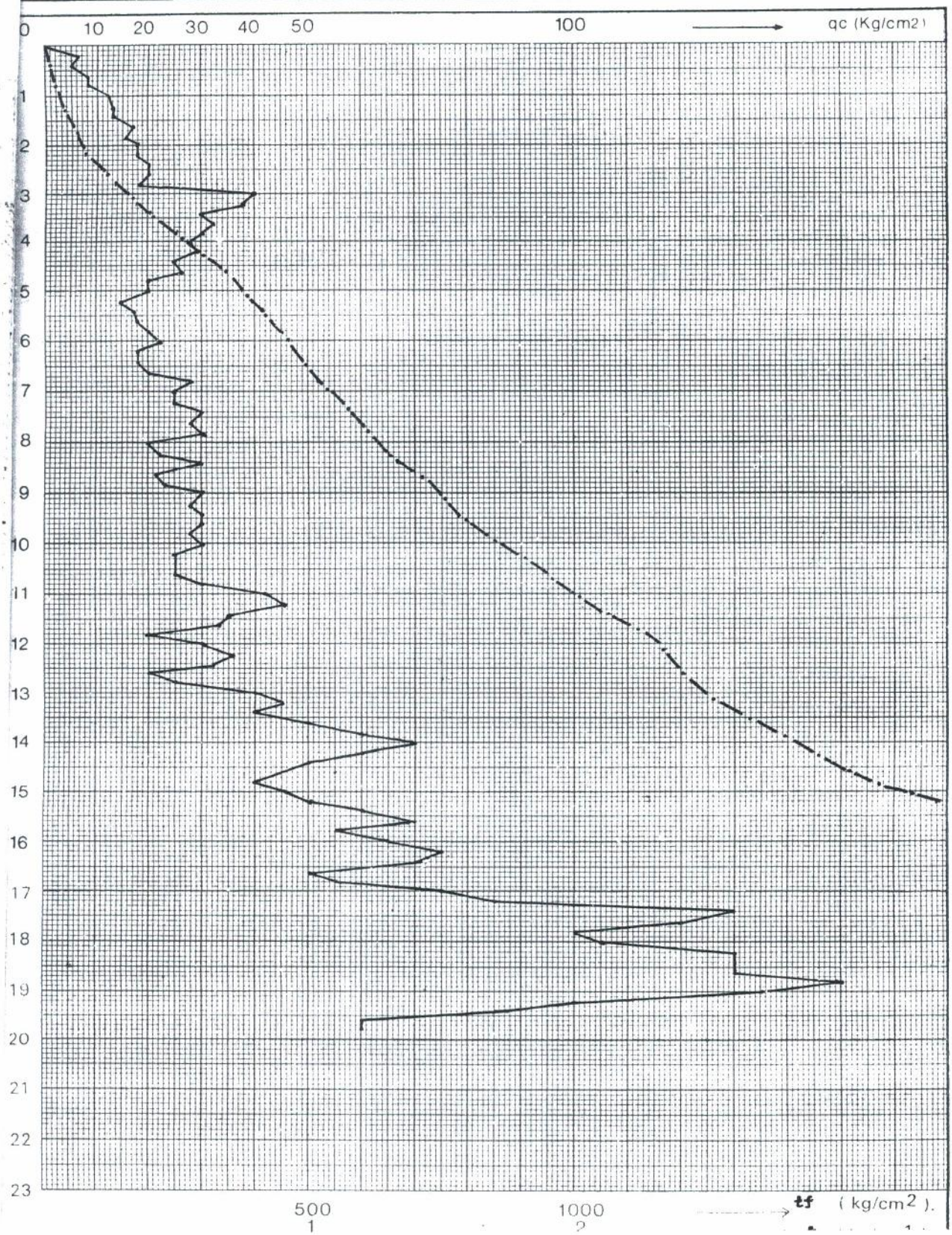

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DIAGRAM SONDIR

No. PROYEK :
PROYEK : PT MULTI RASA AGUNG
SONDIR : S.2
KEDALAMAN :

DIKERJAKAN : Ir. Nasir Jalili
TANGGAL : 8 April 1993
AIR TANAH :
Elevasi = -0,60 m .

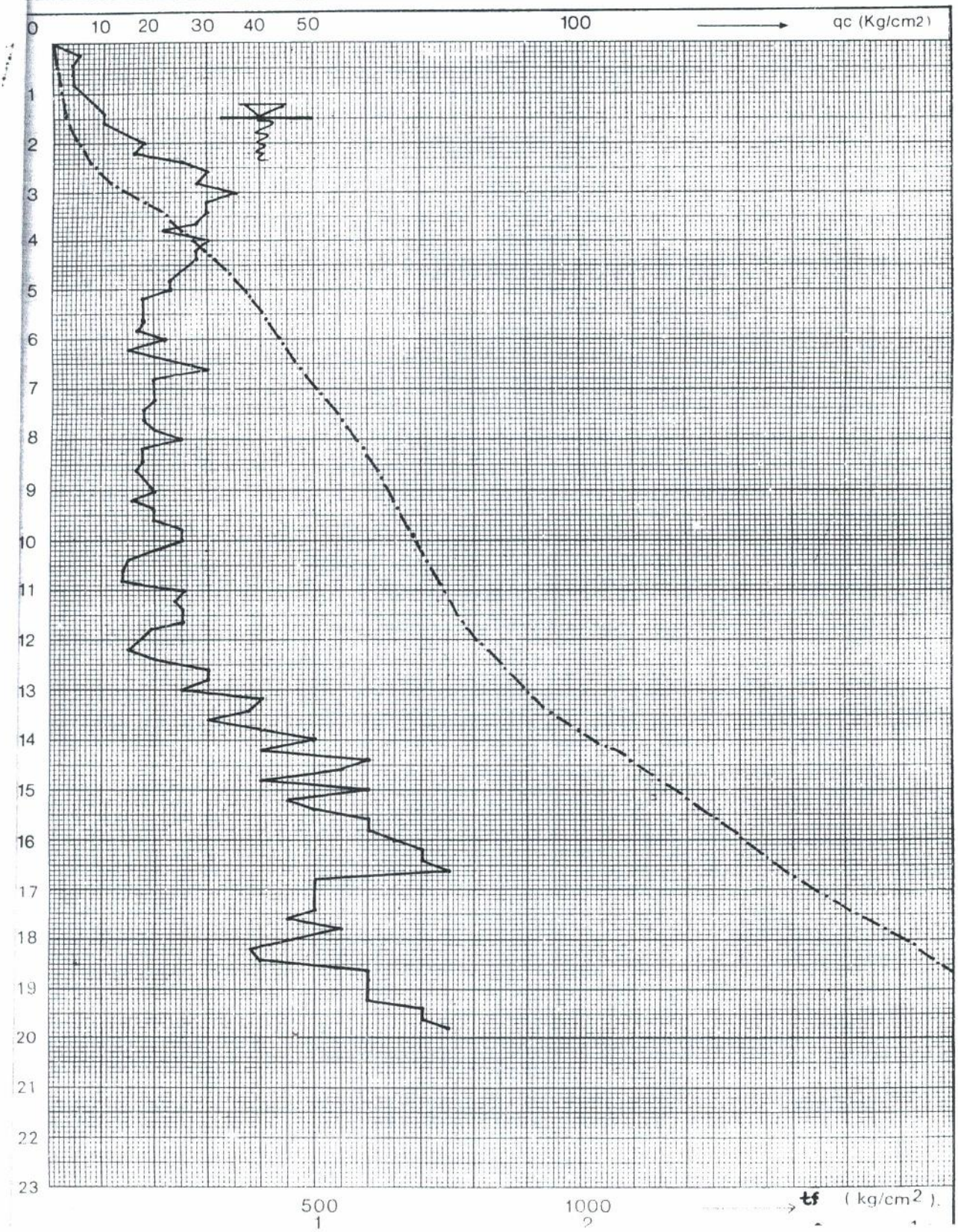

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DIAGRAM SONDIR

No. PROYEK :
PROYEK : PT. MULTI RASA AGUNG
SONDIR : S. 3
KEDALAMAN :

DIKERJAKAN : Ir. Nasir Jalili
TANGGAL : 8 April 1993
AIR TANAH :
Elevasi = -0,50 m .

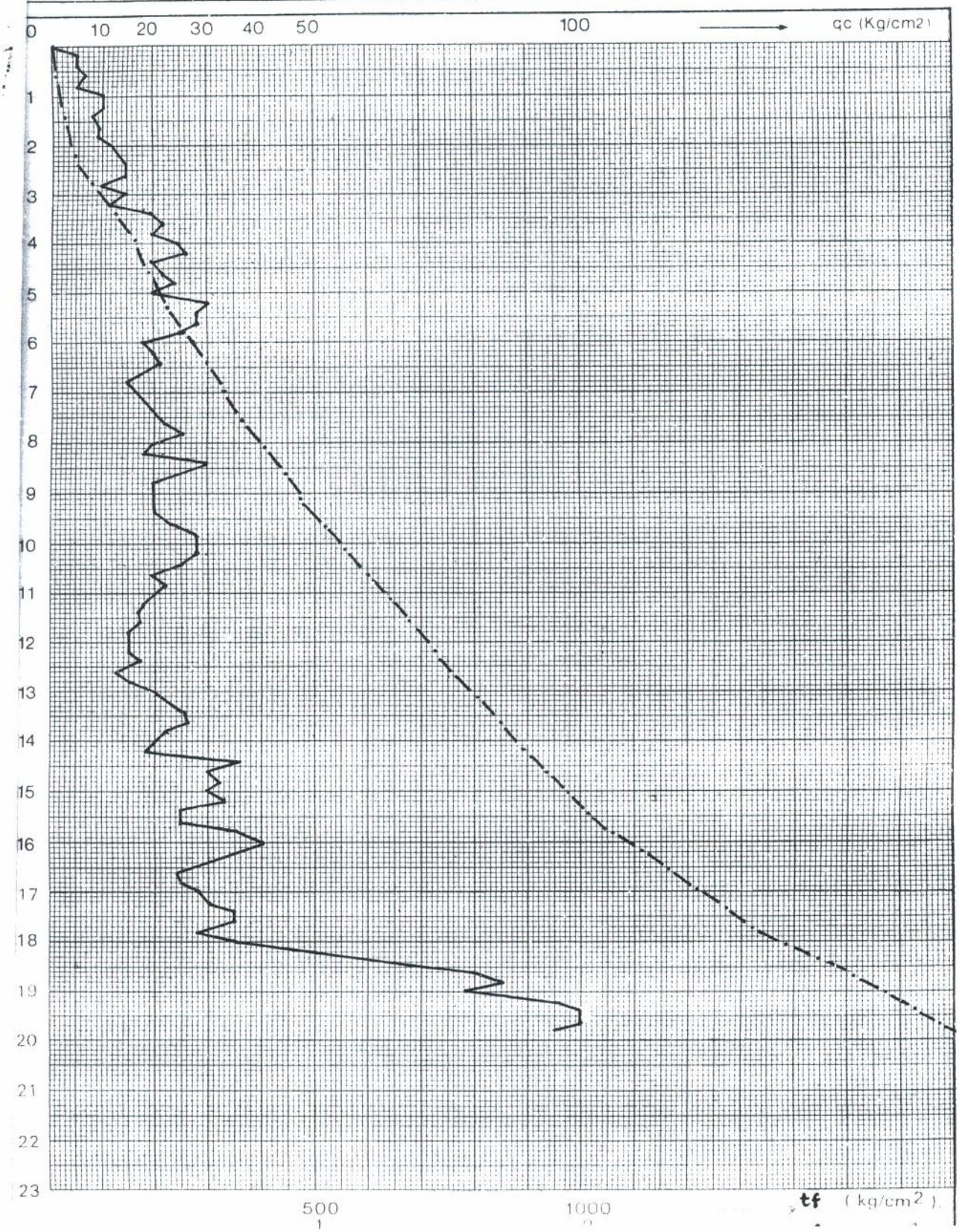

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DIAGRAM SONDIR

No. PROYEK	:	DIKERJAKAN	: Ir. Nasir Jalili
PROYEK	: PT MULTI RASA AGUNG	TANGGAL	: 8 April 1993.
SONDIR	: S.4.	AIR TANAH	:
KEDALAMAN	:	Elevasi =	-0,80 m.

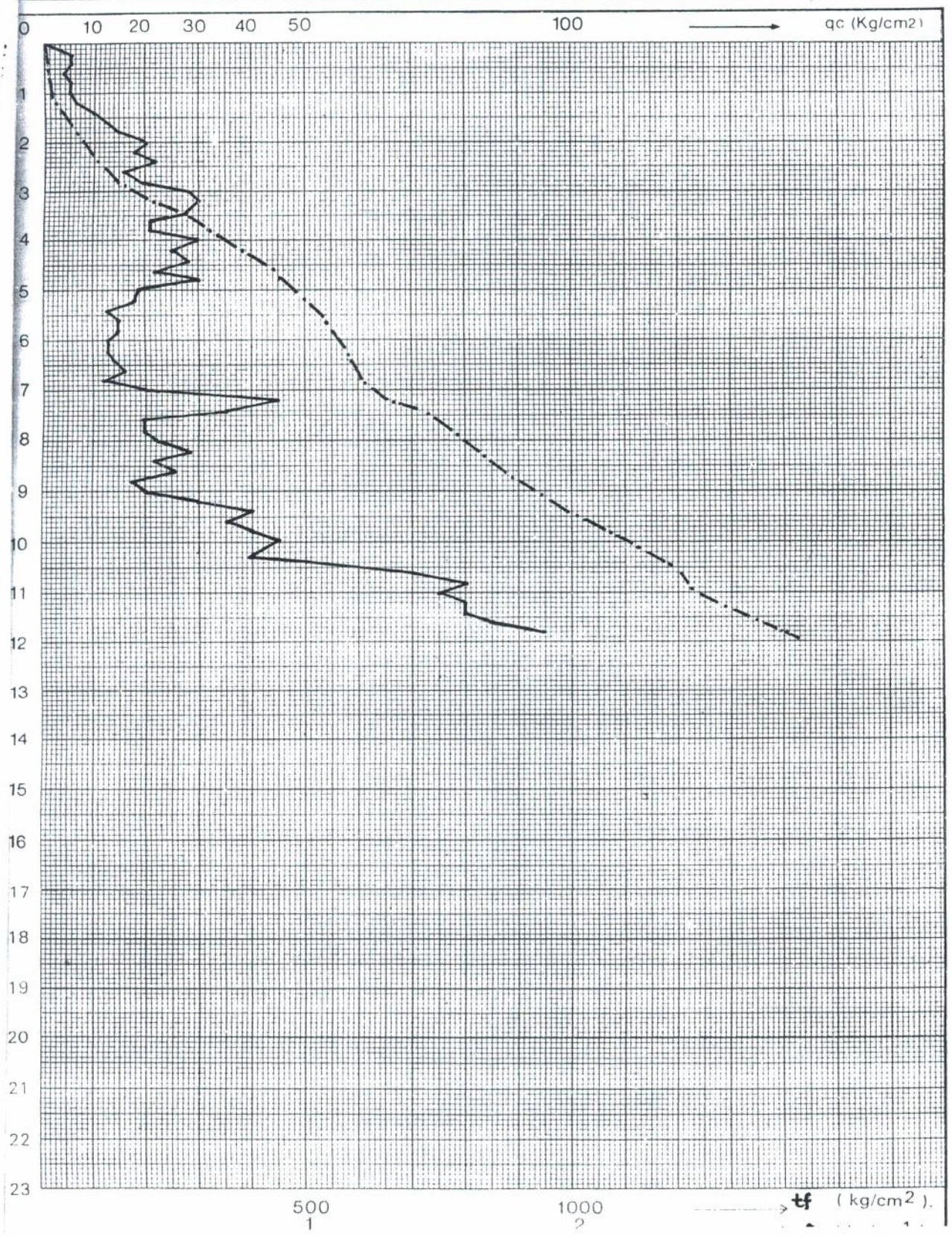

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DIAGRAM SONDIR

No. PROYEK :
PROYEK : PT. MULTI RASA AGUNG.
SONDIR : S.5.
KEDALAMAN :

DIKERJAKAN : Ir. Nasir Jalili
TANGGAL : 8 April 1993.
AIR TANAH :
Elevasi = -0,10 m.

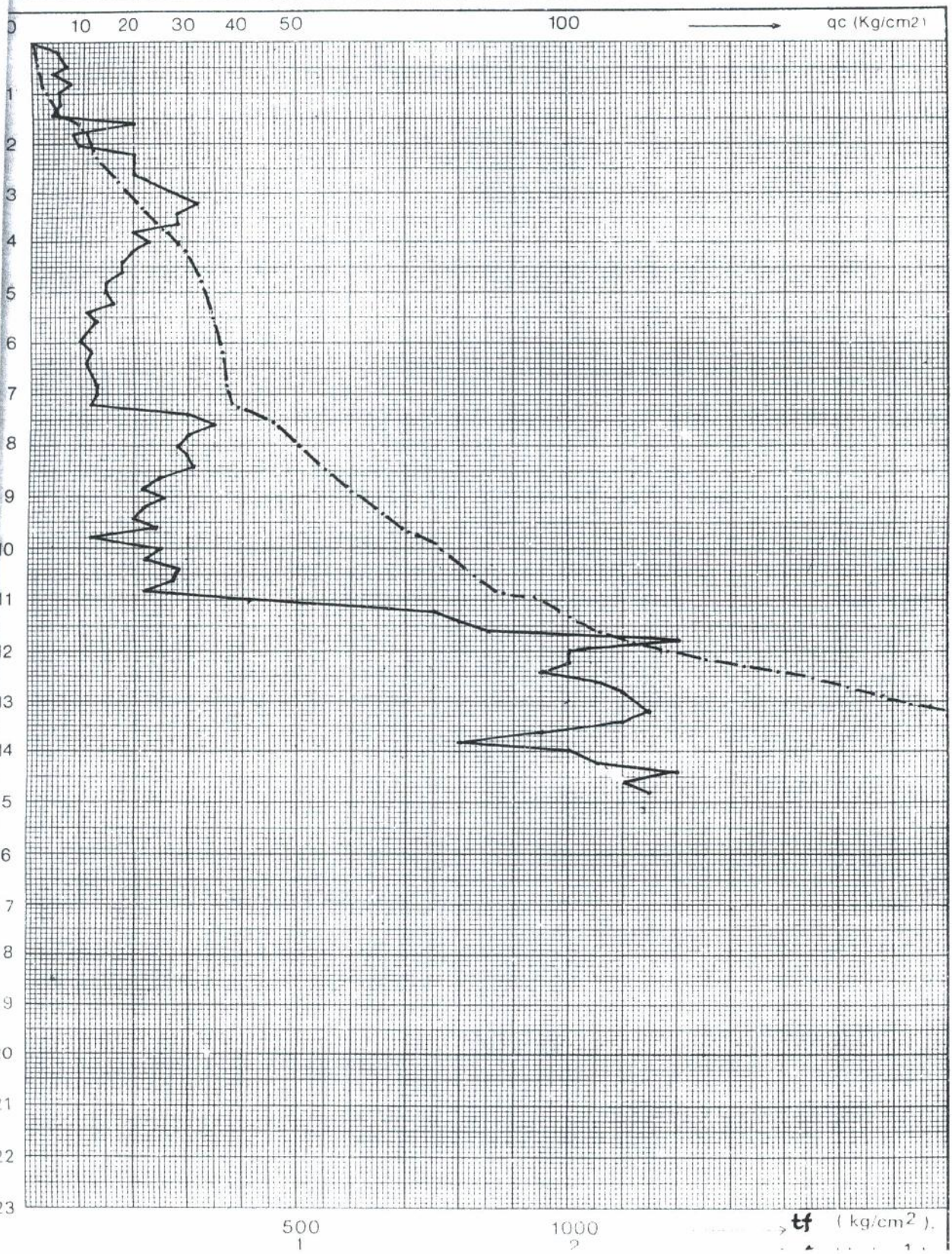

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DIAGRAM SONDIR

No. PROYEK	:	DIKERJAKAN	: Ir. Nasir Jalili .
PROYEK	: PT MULTI RASA AGUNG	TANGGAL	: 8 April 1993.
SONDIR	: S.6.	AIR TANAH	:
KEDALAMAN	:	Elevasi = + 0,20 m .	

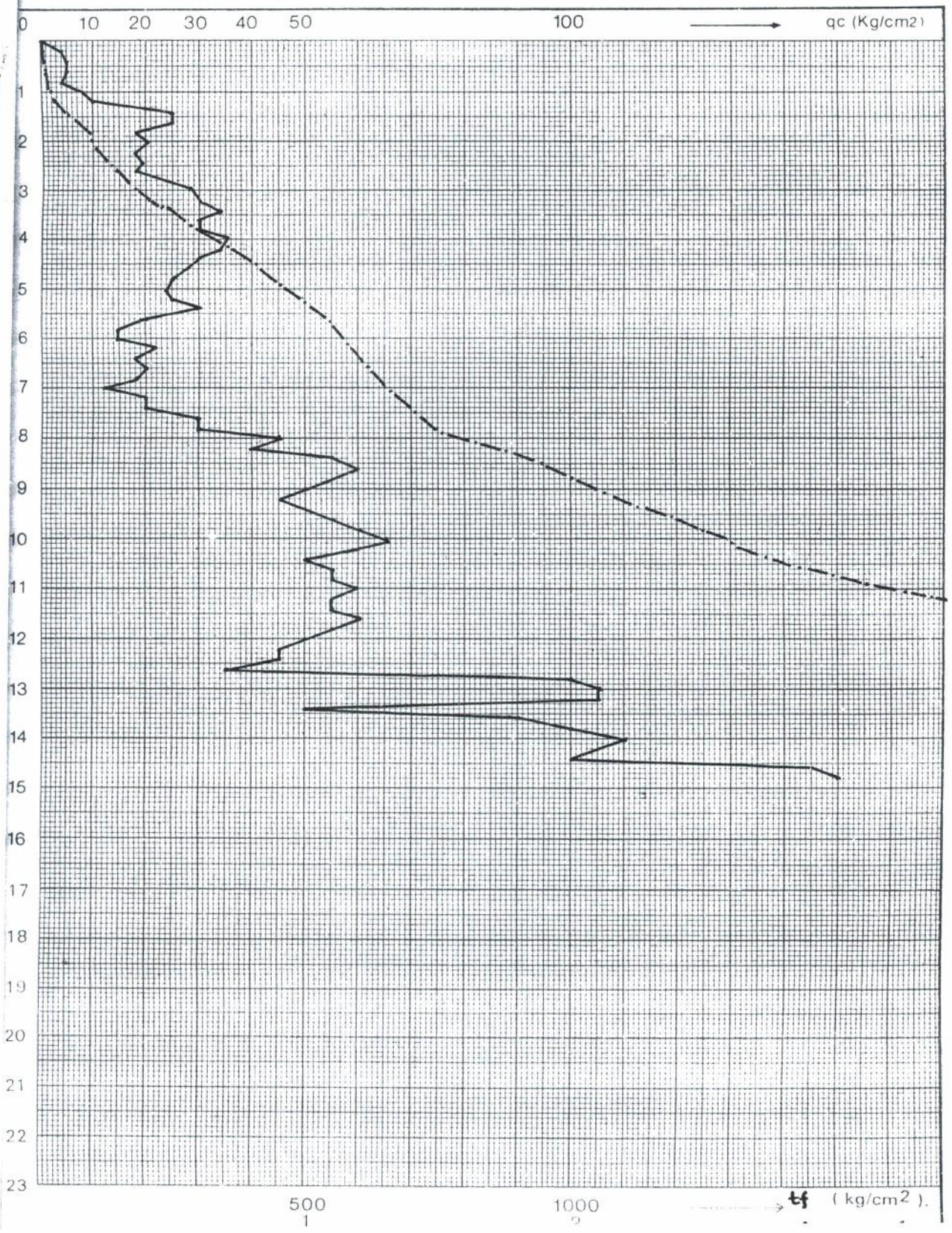

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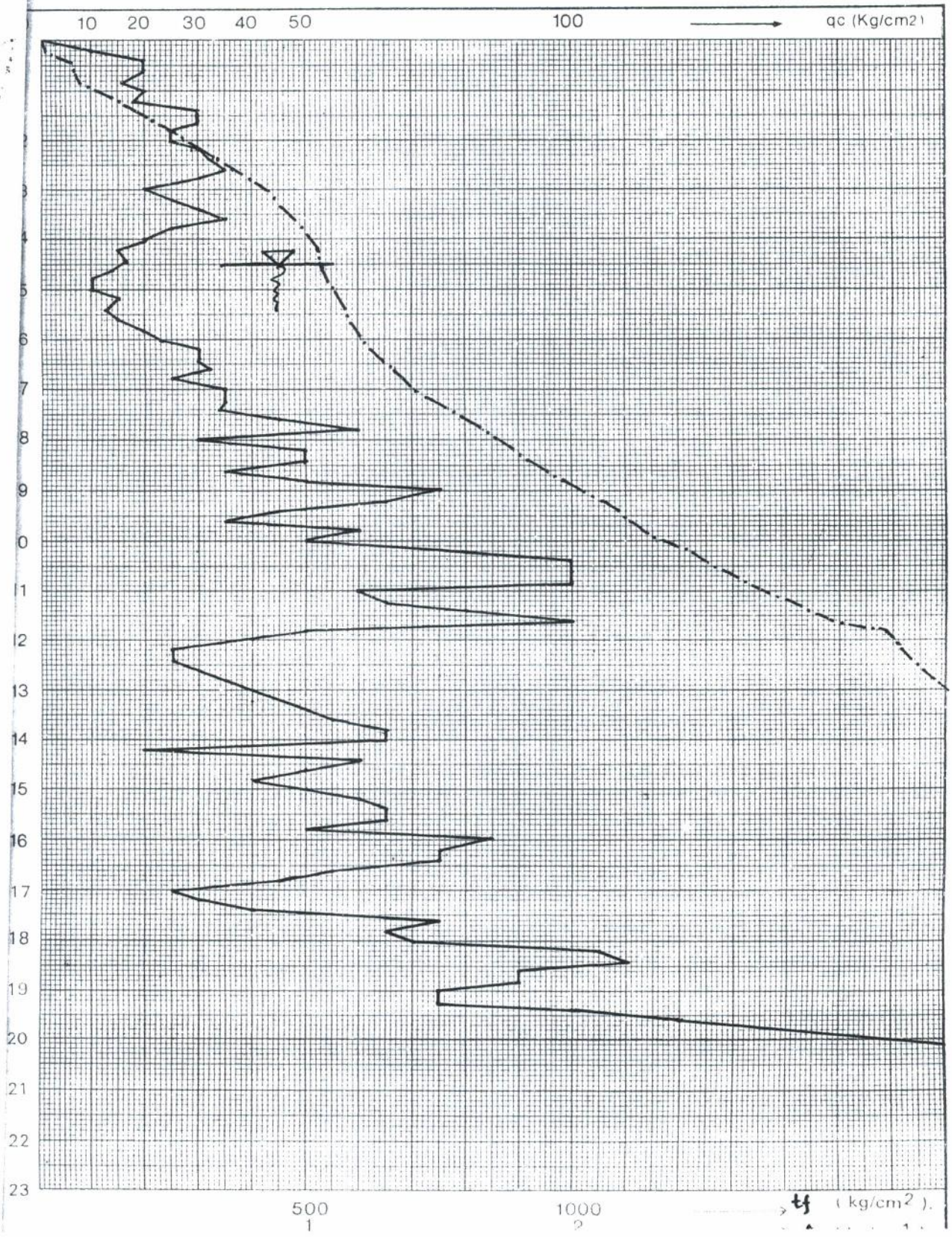
DIAGRAM SONDIR

No. PROYEK	:	DIKERJAKAN	: Ir. Nasir Jalili
PROYEK	: PT MULTI INDAH AGUNG	TANGGAL	: 8 April 1993.
SONDIR	: S.7.	AIR TANAH	:
KEDALAMAN	:	Elevasi =	+ 0,40 m.



LABORATORY TESTING RESULTS

OJECT : PT MULTI RASA AGUNG

CATION : JATAKE TANGERANG

RING : B.1,1 , B1,2 B2,1 , B2,2 .

sample type U	sample type D	classification symbol	INDEX PROPERTIES								GRAIN SIZE	
			W_n %	$\gamma_m \frac{wet}{dry}$ t/m^3	G_s	e	S_r %	W_P %	W_L %	P_I %	SIEVE %	HYDRO %
U			55,388	1,649 / 1,069	2,521	1,3661	102,2	32,20	66,52	34,32	4,5	95,5
U			46,524	1,723 / 1,189	2,531	1,1367	102,99	29,89	55,69	25,80	5,2	94,8
U			44,844	1,724 / 1,191	2,53	1,1310	100,3	38,77	98,55	59,78	4,5	95,5
U			44,882	1,373 / 1,211	2,538	1,1041	103,17	44,12	70,72	26,60	5,8	94,2

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LABORATORY TESTING RESULTS

OJECT : PT MULTI RASA AGUNG

CATION : JATAKE TANGERANG

RING : B3,1 B3,2 . B4,1 B4.2 .

sample type U	sample type D	classification symbol	INDEX PROPERTIES									
			W_n %	$\gamma_m \frac{wet}{dry}$ t/m3	G_s	e	S_r %	W_P %	W_L %	P_I %	GRAIN SIZE SIEVE %	GRAIN SIZE HYDRO %
U			38,408	1,775 / 1,269	2,551	1,0175	96,29	32,30	62,74	30,44	5,5	94,5
U			43,85	1,737 / 1,223	2,571	1,1107	101,50	32,45	58,12	25,67	4,7	95,3
U			43,6	1,745 / 1,218	2,554	1,105	100,7	31,88	70,11	38,23	5,5	94,5
U			40,465	1,761 / 1,242	2,56	1,0691	96,89	32,31	63,94	31,63	4,5	95,5

LABORATORIUM MEKANIKA TANAH
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INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp 7270092

LABORATORY TESTING RESULTS

OJECT : PT MULTI RASA AGUNG

CATION : JATAKE TANGERANG

RING : B5,1 B5,2.

sample type U	sample type D	classification symbol	INDEX PROPERTIES									
			W_n %	$\gamma_m \frac{wet}{dry}$ t/m³	G_s	e	S_r %	W_P %	W_L %	P_I %	GRAIN SIZE SIEVE %	GRAIN SIZE HYDRO %
U			47,27	1,639 / 1,044	2,555	1,4570	82,89	28,43	87,50	59,05	8	92
U			40,117	1,761 / 1,255	2,52	1,0157	99,54	27,92	78,74	50,82	5,5	94,5

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INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

LABORATORY TESTING RESULTS

CT : PT MULTI RASA AGUNG

ION : JATAKE TANGERANG

G : B1,1. B1,2 . B2,1. B2,2.

e	sample type U	sample type D	classification symbol	ENGINEERING PROPERTIES: Shear strengh C , C' (kg/cm²)	Shear strengh Ø , Ø' (°)	Shear strengh q_{uu} (kg/cm²)	Shear strengh S_t	Compressibility C_c	Compressibility C_v (cm²/sec)
	U		CH	0,15	13^{o}	-	-	0,323	7×10^{-3}
	U		CH	0,80	9^{o}	-	-	0,245	8×10^{-3}
	U		CH	0,48	15^{o}	-	-	0,615	11×10^{-3}
	U		OH & MH	0,10	17^{o}	-	-	0,266	13×10^{-3}

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INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

LABORATORY TESTING RESULTS

CT : PT MULTI RASA AGUNG

ION : JATAKE TANGERANG

G : B3,1. B3,2. B4,1. B4,2.

e	sample type U	sample type D	classification symbol	ENGINEERING PROPERTIES: Shear strengh C, C' (kg/cm²)	Shear strengh Ø, Ø' (°)	Shear strengh q_{uu} (kg/cm²)	Shear strengh S_t	Compressibility C_c	Compressibility C_v (cm²/sec)
	U		CH	0,25	17^o	-	-	0,299	7×10^{-3}
	Um		OH & MH	0,18	17^o	-	-	0,332	7×10^{-3}
	U		OH & MH	0,1	20^o	--	--	0,266	26×10^{-3}
	U		CH	0,2	20^o	-	-	0,265	58×10^{-3}

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LABORATORY TESTING RESULTS

CT : PT MULTI RASA AGUNG

ION : JATAKE TANGERANG

G : B5,1 B5,2.

e	sample type U	sample type D	classification symbol	ENGINEERING PROPERTIES: Shear strengh C, C' (kg/cm²)	Shear strengh Ø, Ø' (°)	Shear strengh q_{uu} (kg/cm²)	Shear strengh S_t	Compressibility C_c	Compressibility C_v (cm²/sec)
	U		CH	0,05	25^{o}	-	-	0,282	24×10^{-3}
	U		CH	0,6	19^{o}	-	-	0,42	19×10^{-3}

LABORATORIUM MEKANIKA TANAH
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INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

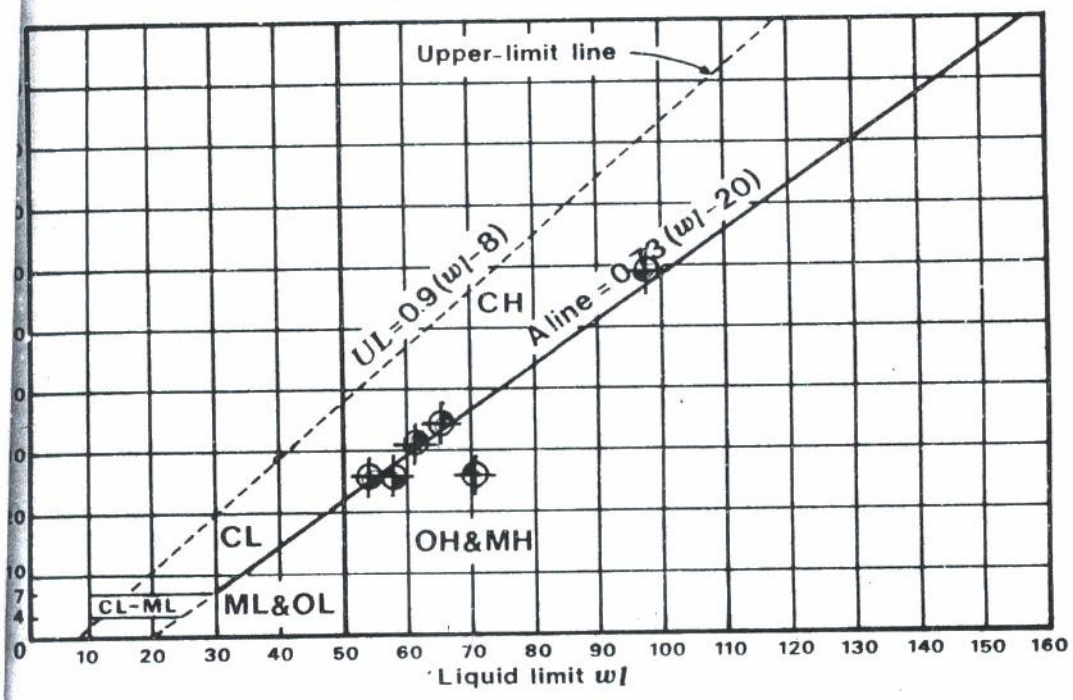
roject : PT MULTI RASA AGUNG

ocation : JATAKE TANGERANG

Test By : IR. RAHARDJO SAMIONO

Date of Test : APRIL 1993.

PLASTICITY CHART



Boring No.	Depth (M)	Symbol	WL (%)	WP (%)	IP (%)	Unified Classification
B.1	2,00 - 2,45	⊕	66,52	32,20	34,32	CH
	3,00 - 3,45	⊕	55,69	29,89	25,80	CH
B.2	2,00 - 2,45	⊕	98,55	38,77	59,78	CH
	3,00 - 3,45	⊕	70,72	44,12	26,60	OH & MH
B.3	2,00 - 2,45	⊕	62,74	32,30	30,44	CH
	3,00 - 3,45	⊕	58,12	32,45	25,67	OH & MH

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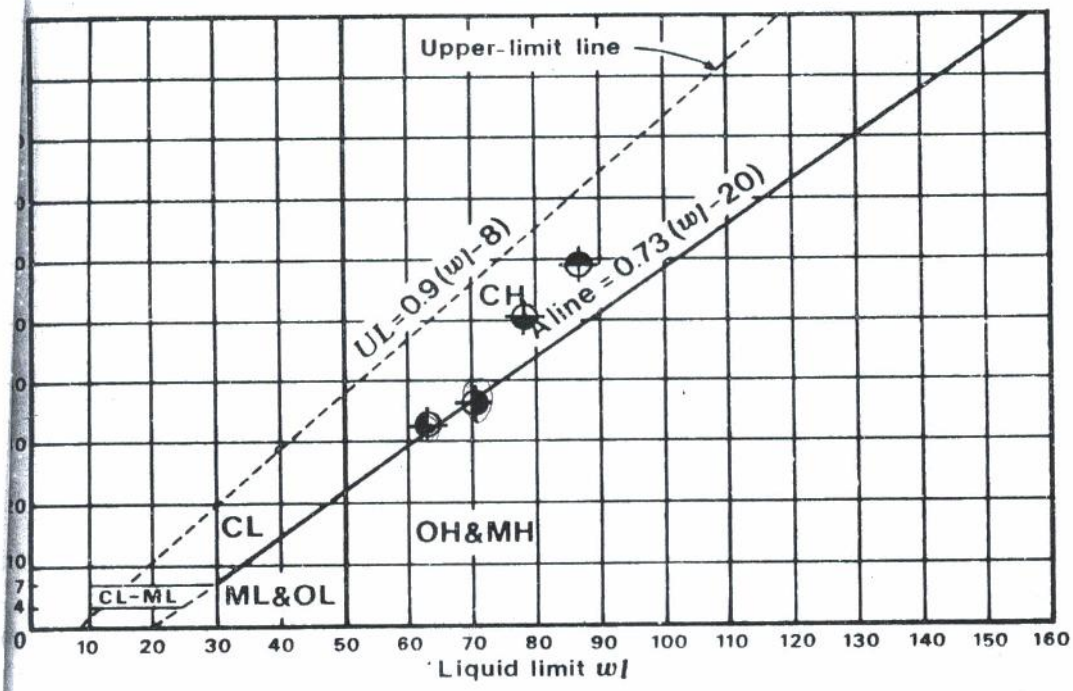
roject : PT MULTI RASA AGAUNG

ocation : JATAKE TANGERANG

est By : IR. RAHARDJO SAMIONO

ate of Test : APRIL 1993.

PLASTICITY CHART



Boring No.	Depth (M)	Symbol	WL (%)	WP (%)	IP (%)	Unified Classification
B.4	2,00 - 2,45	⊕	70,11	31,88	38,23	OH & MH
	3,00 - 3,45	⊕	63,94	32,31	31,63	CH
B.5	2,00 - 2,45	⊕	87,50	28,43	59,05	CH
	2,75 - 3,20	⊕	78,74	27,92	50,82	CH

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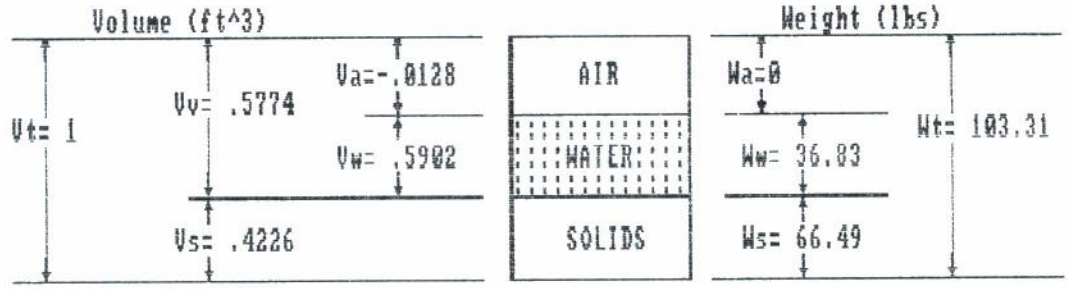
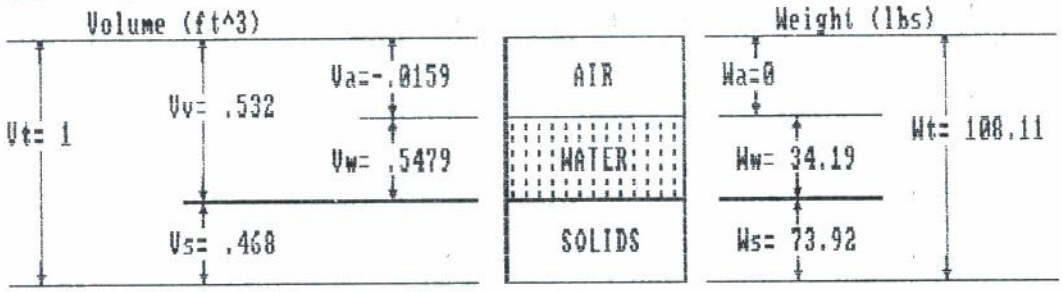
Boring No. = B 1.1	Depth = 2.00-2.45	Number = PT. MULTI RASA AG
Mass Unit Weight (pcf)	Water Content (%)	Specific Gravity of Solids
103.312	55.388	2.521



Void Ratio	1.3661	% Saturation	102.22
Porosity (%)	57.74	Dry Unit Wt (pcf)	66.49
Sat. Unit Wt (pcf)	102.51	Boug. Unit Wt (pcf)	40.11

Boring No. = B 1.2	Depth = 3.00-3.45	Number = PT.MULTI RASA AG
Mass Unit Weight (pcf)	Water Content (%)	Specific Gravity of Solids
108.106	46.254	2.531



Void Ratio	1.1367	% Saturation	102.99
Porosity (%)	53.20	Dry Unit Wt (pcf)	73.92
Sat. Unit Wt (pcf)	107.11	Boug. Unit Wt (pcf)	44.71

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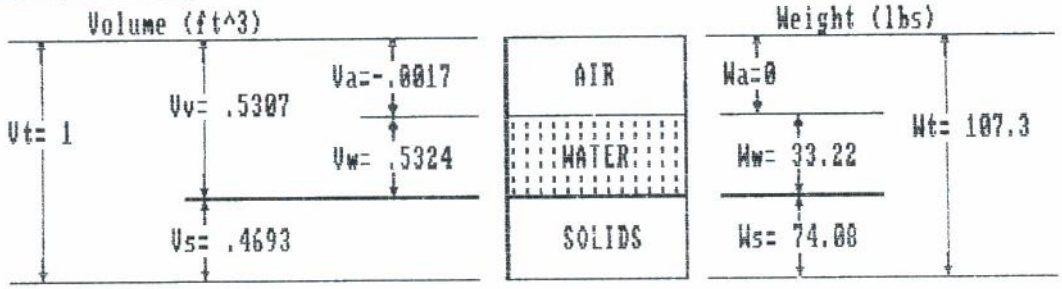
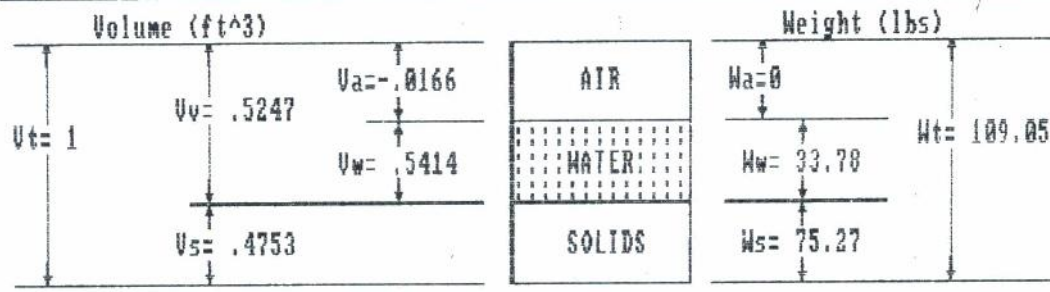
Boring No. = B 2.1	Depth = 2.00-2.45	Number = PT.MULTI RASA AG
Mass Unit Weight (pcf)	Water Content (%)	Specific Gravity of Solids
107.304	44.844	2.53



Void Ratio	1.1310	% Saturation	100.31
Porosity (%)	53.07	Dry Unit Wt (pcf)	74.08
Sat. Unit Wt (pcf)	107.20	Boug. Unit Wt (pcf)	44.80

Boring No. = B 2.2	Depth = 3.00-3.45	Number = PT.MULTI RASA AG
Mass Unit Weight (pcf)	Water Content (%)	Specific Gravity of Solids
109.049	44.882	2.538



Void Ratio	1.1041	% Saturation	103.17
Porosity (%)	52.47	Dry Unit Wt (pcf)	75.27
Sat. Unit Wt (pcf)	108.01	Boug. Unit Wt (pcf)	45.61

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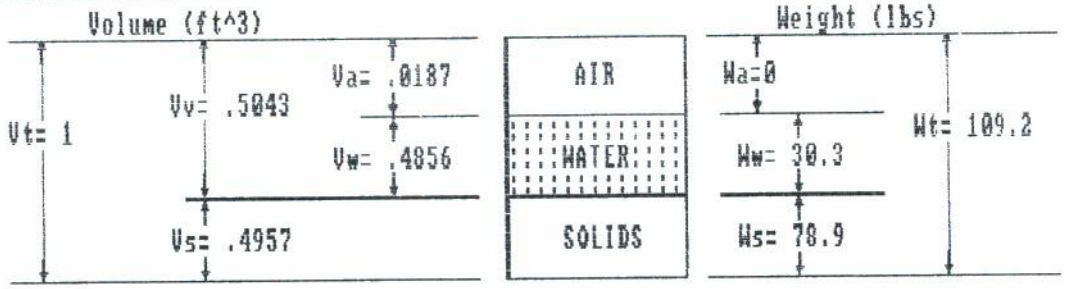
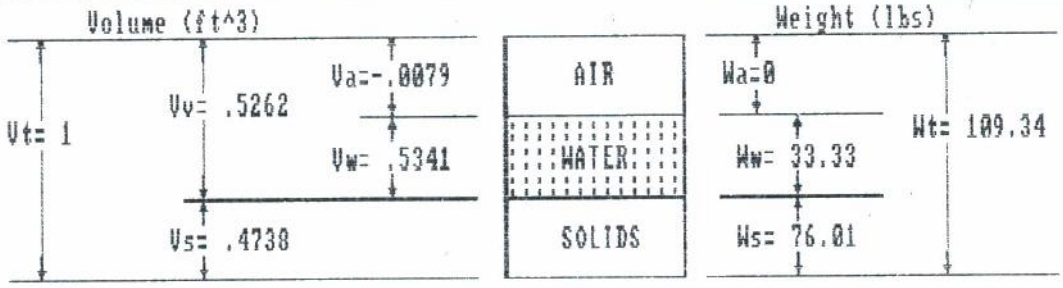
Boring No. = B 3.1	Depth = 2.00-2.45	Number = PT.MULTI RASA AG
Mass Unit Weight (pcf)	Water Content (%)	Specific Gravity of Solids
109.203	38.408	2.551



Void Ratio	1.0175	% Saturation	96.29
Porosity (%)	50.43	Dry Unit Wt (pcf)	78.90
Sat. Unit Wt (pcf)	110.37	Boug. Unit Wt (pcf)	47.97

Boring No. = B 3.2	Depth = 3.00-3.45	Number = PT.MULTI RASA AG
Mass Unit Weight (pcf)	Water Content (%)	Specific Gravity of Solids
109.337	43.85	2.571



Void Ratio	1.1107	% Saturation	101.50
Porosity (%)	52.62	Dry Unit Wt (pcf)	76.01
Sat. Unit Wt (pcf)	108.84	Boug. Unit Wt (pcf)	46.44

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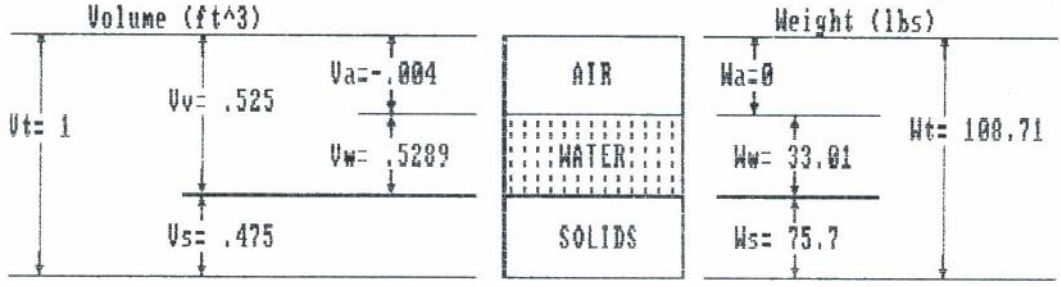
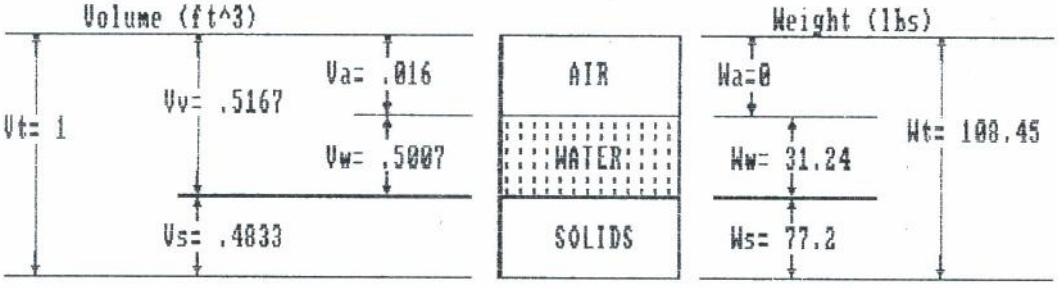
Boring No. = B 4.1	Depth = 2.00-2.45	Number = PT.MULTI RASA AG
Mass Unit Weight (pcf)	Water Content (%)	Specific Gravity of Solids
108.708	43.6	2.554



Void Ratio	1.1052	% Saturation	100.75
Porosity (%)	52.50	Dry Unit Wt (pcf)	75.70
Sat. Unit Wt (pcf)	108.46	Bouy. Unit Wt (pcf)	46.06

Boring No. = B 4.2	Depth = 3.00-3.45	Number = PT.MULTI RASA AG
Mass Unit Weight (pcf)	Water Content (%)	Specific Gravity of Solids
108.445	40.465	2.56



Void Ratio	1.0691	% Saturation	96.89
Porosity (%)	51.67	Dry Unit Wt (pcf)	77.20
Sat. Unit Wt (pcf)	109.45	Bouy. Unit Wt (pcf)	47.05

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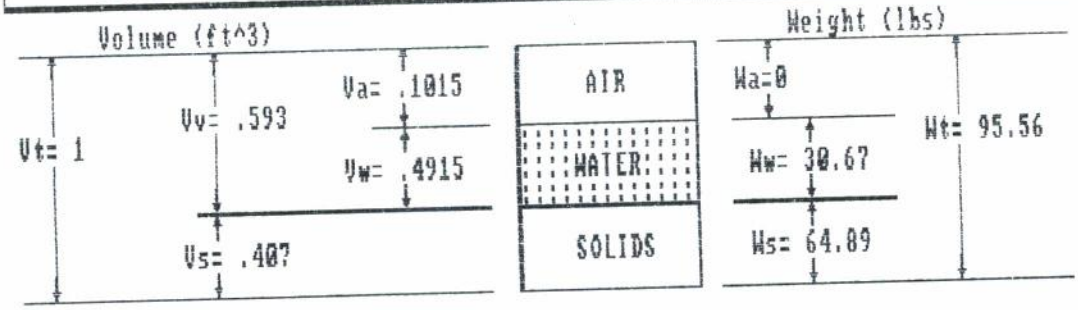
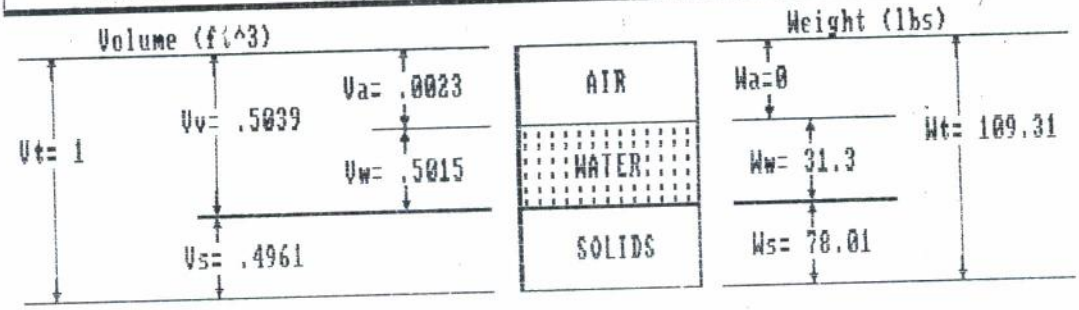
Boring No. = B 5.1	Depth = 2.00-2.45	Number = PT.MULTI RASA AG
Mass Unit Weight (pcf)	Water Content (%)	Specific Gravity of Solids
95.56	47.27	2.555



Void Ratio	1.4570	% Saturation	82.89
Porosity (%)	59.30	Dry Unit Wt (pcf)	64.89
Sat. Unit Wt (pcf)	101.89	Bouy. Unit Wt (pcf)	39.49

Boring No. = B 5.2	Depth = 2.75-3.20	Number = PT.MULTI RASA AG
Mass Unit Weight (pcf)	Water Content (%)	Specific Gravity of Solids
109.31	40.117	2.52



Void Ratio	1.0157	% Saturation	99.54
Porosity (%)	50.39	Dry Unit Wt (pcf)	78.01
Sat. Unit Wt (pcf)	109.46	Bouy. Unit Wt (pcf)	47.06

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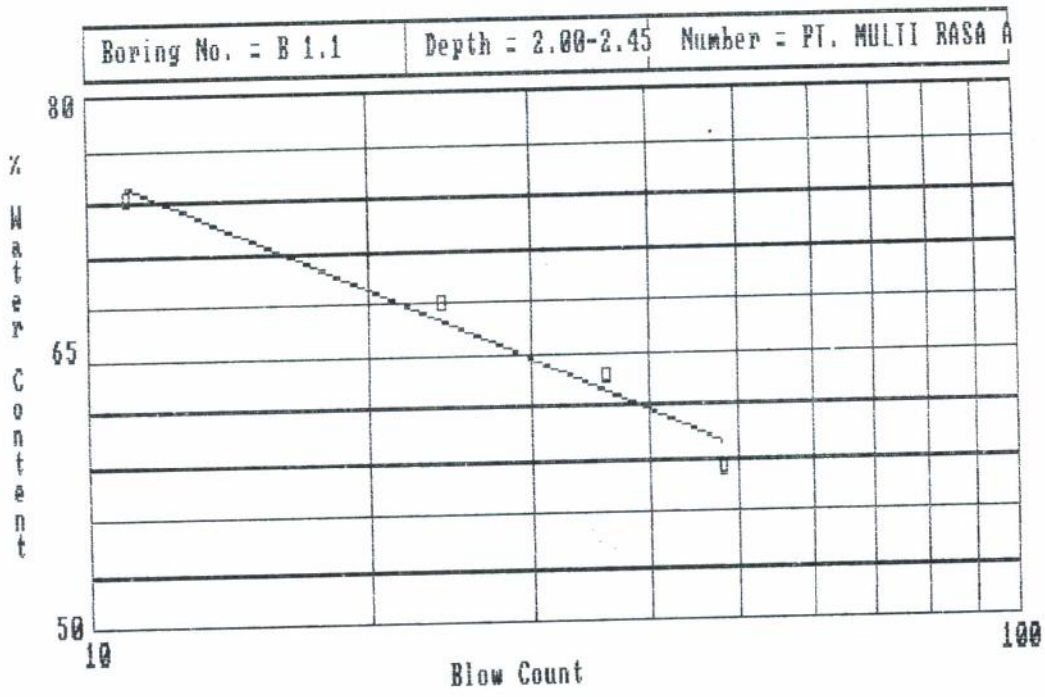

Sample no.	1	2	3	4					
% Water content	58.60	63.72	68.02	74.14					
Blow count	48	36	24	11					

Regression equation	Coefficient of determination
W =-23.3254 * logN + 99.1236	R^2 = .9678 ** Excellent Test
Liquid limit = 66.52	Flow index =-23.33
Input plastic limit = 32.2	Toughness index = -1.47
Plasticity index = 34.32	Shrinkage limit = 19.8
Input natural water content = 55.388	Liquidity index = .68
Boring No. = B 1.1	Depth = 2.00-2.45 Number = PT. MULTI RASA A

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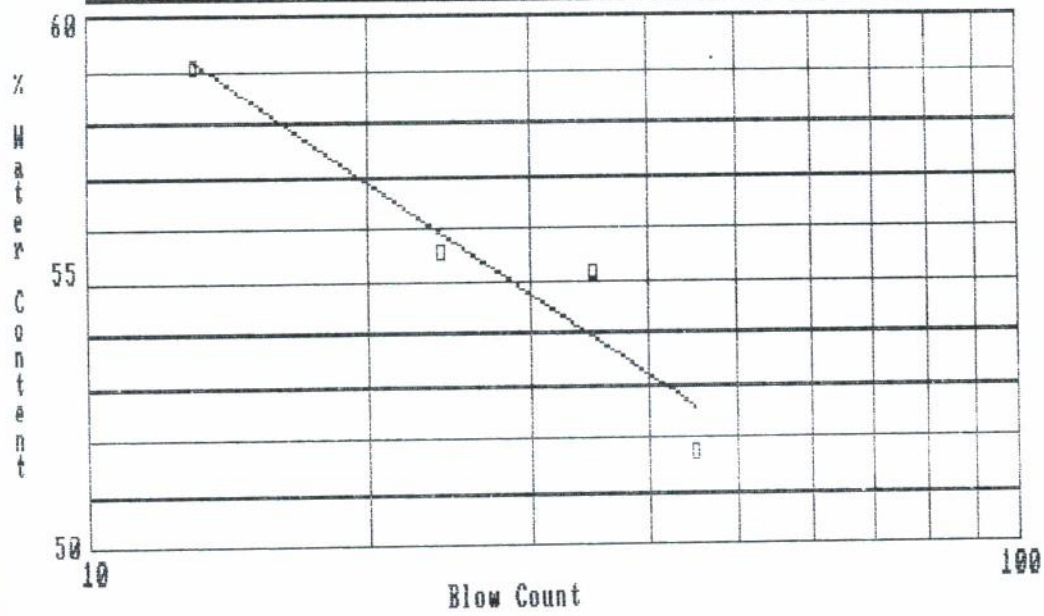
Boring No. = B 1.2	Depth = 3.00-3.45	Number = PT. MULTI RASA A



Sample no.	1	2	3	4					
% Water content	51.75	55.14	55.57	59.06					
Blow count	45	35	24	13					

Regression equation	Coefficient of determination
W =-12.1834 * logN + 72.7168	R^2 = .9138 ** Excellent Test
Liquid limit = 55.69	Flow index =-12.18
Input plastic limit = 29.89	Toughness index = -2.12
Plasticity index = 25.8	Shrinkage limit = 20.29
Input natural water content = 46.254	Liquidity index = .63
Boring No. = B 1.2	Depth = 3.00-3.45 Number = PT. MULTI RASA A

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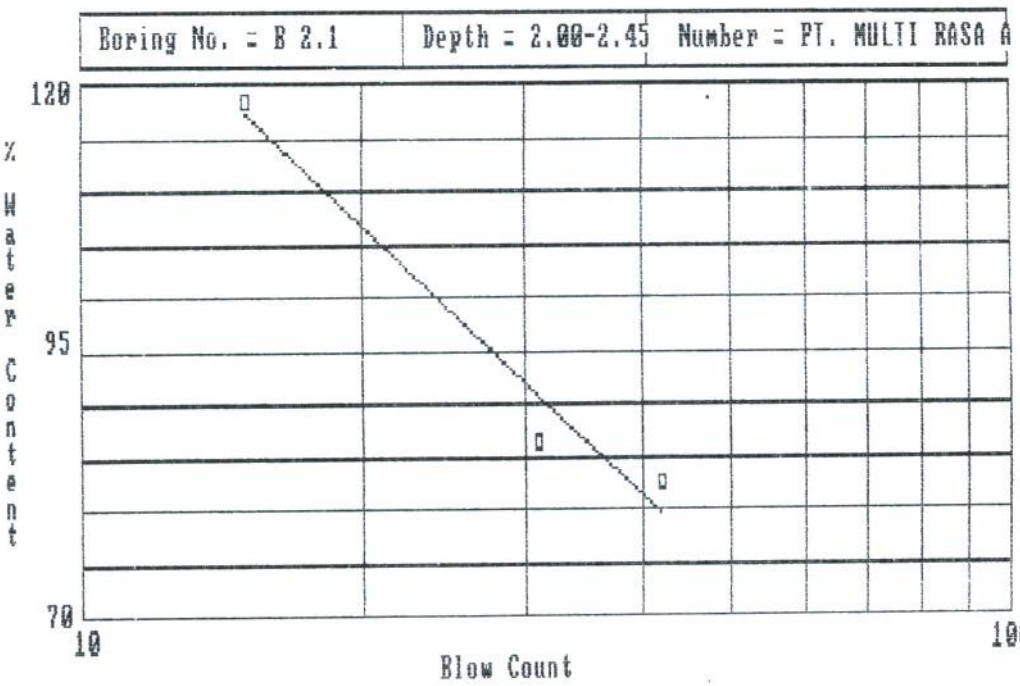

Sample no.	1	2	3						
% Water content	82.69	86.30	118.51						
Blow count	42	31	15						

Regression equation	Coefficient of determination
W =-84.1282 * logN + 216.1576	R^2 = .9607 ** Excellent Test
Liquid limit = 98.55	Flow index =-84.13
Input plastic limit = 38.77	Toughness index = -.71
Plasticity index = 59.78	Shrinkage limit = 18.65
Input natural water content = 44.844	Liquidity index = .1
Boring No. = B 2.1	Depth = 2.00-2.45 Number = PT. MULTI RASA A

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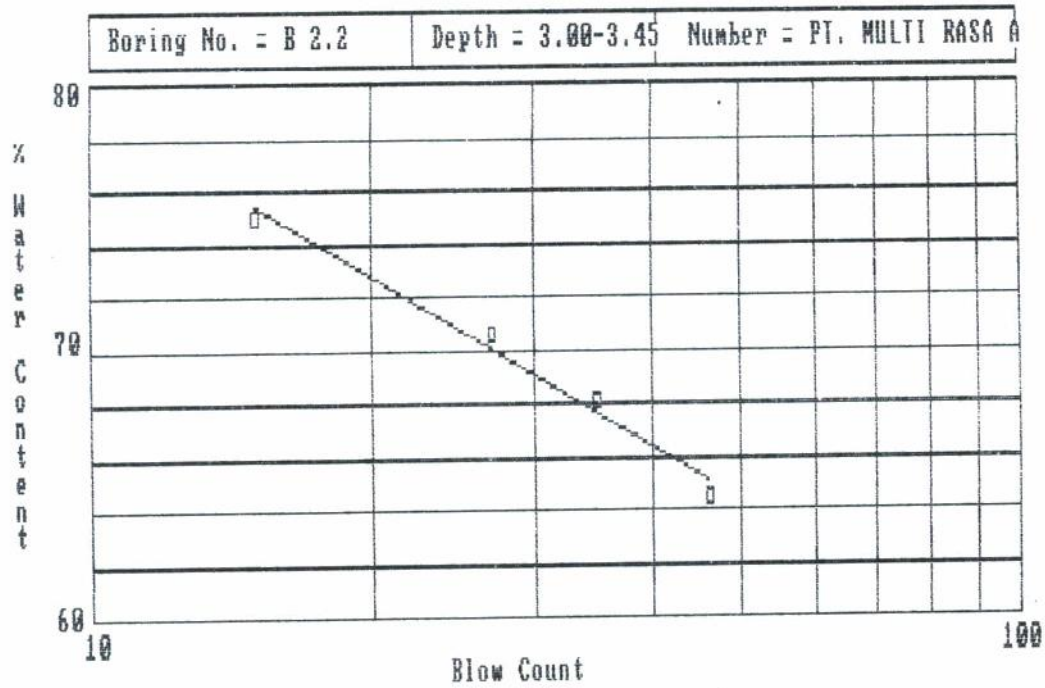

Sample no.	1	2	3	4					
% Water content	64.51	68.12	70.53	75.02					
Blow count	46	35	27	15					

Regression equation	Coefficient of determination
W =-21.026 * logN + 100.1084	R^2 = .9823 ** Excellent Test
Liquid limit = 70.72	Flow index =-21.03
Input plastic limit = 44.12	Toughness index = -1.27
Plasticity index = 26.6	Shrinkage limit = 29.15
Input natural water content = 44.882	Liquidity index = .03
Boring No. = B 2.2	Depth = 3.00-3.45 Number = PT. MULTI RASA A

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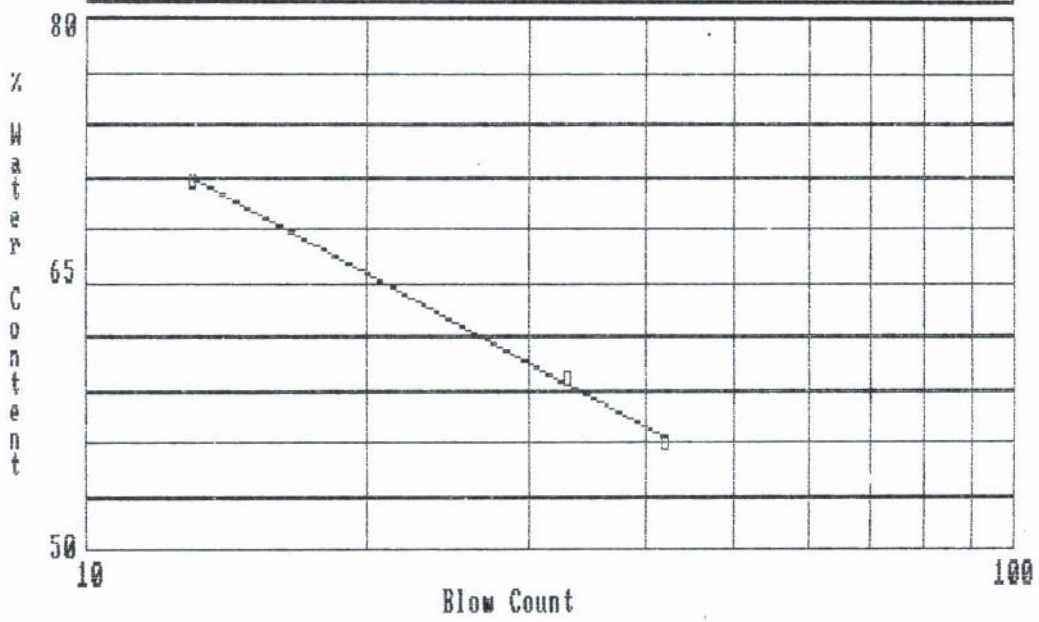
Boring No. = B 3.1	Depth = 2.00-2.45	Number = PT. MULTI RASA A



Sample no.	1	2	3						
% Water content	56.06	59.60	70.79						
Blow count	42	33	13						

Regression equation	Coefficient of determination
W =-28.5741 * logN + 102.6843	R^2 = .9987 ** Excellent Test
Liquid limit = 62.74	Flow index =-28.57
Input plastic limit = 32.3	Toughness index = -1.07
Plasticity index = 30.44	Shrinkage limit = 20.71
Input natural water content = 38.404	Liquidity index = .2

Boring No. = B 3.1	Depth = 2.00-2.45	Number = PT. MULTI RASA A

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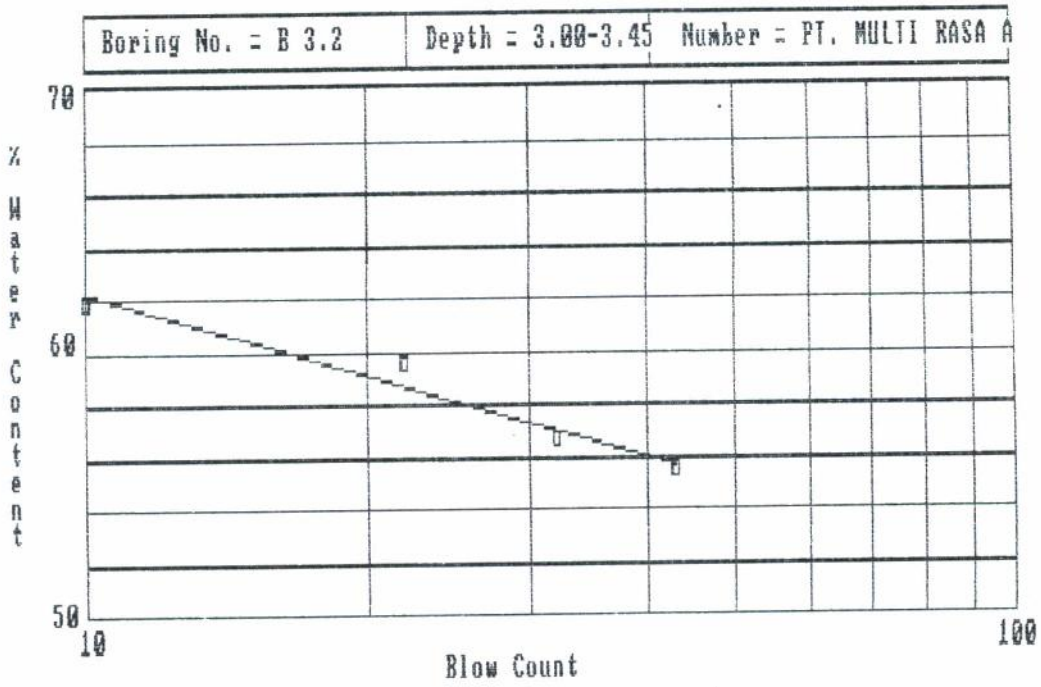

Sample no.	1	2	3	4					
% Water content	55.54	56.65	59.55	61.88					
Blow count	43	32	22	10					

Regression equation	Coefficient of determination
W =-10.2506 * logN + 72.4512	R^2 = .9594 ** Excellent Test
Liquid limit = 50.12	Flow index =-10.25
Input plastic limit = 32.45	Toughness index = -2.5
Plasticity index = 25.67	Shrinkage limit = 21.98
Input natural water content = 43.85	Liquidity index = .44
Boring No. = B 3.2	Depth = 3.00-3.45 Number = PT. MULTI RASA A

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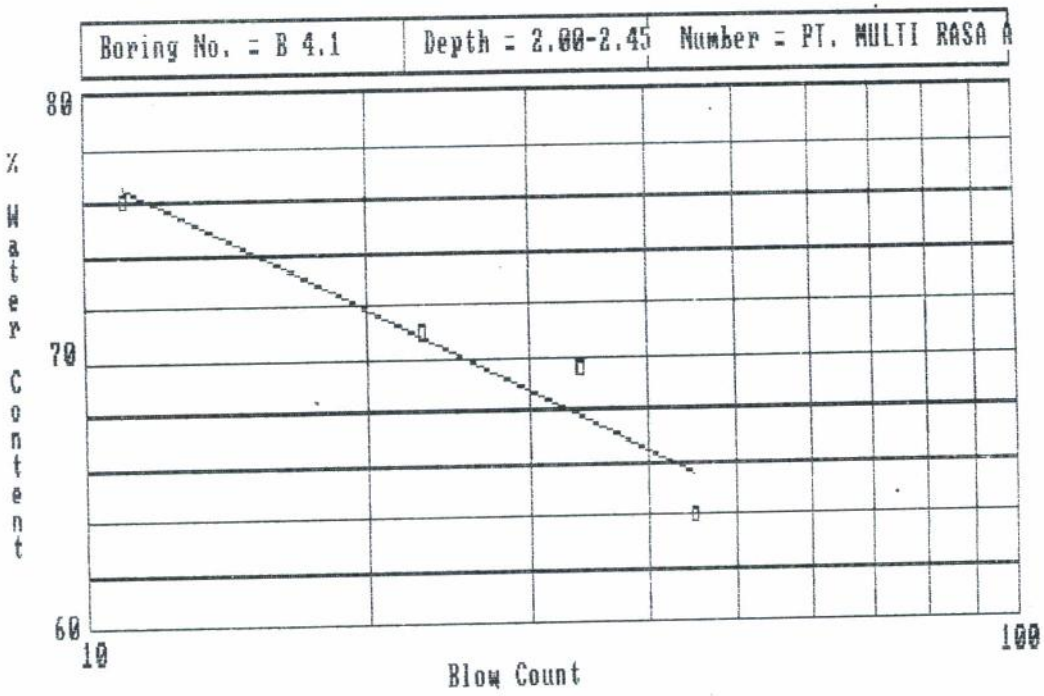

Sample no.	1	2	3	4					
% Water content	63.98	69.59	70.94	76.02					
Blow count	45	34	23	11					

Regression equation	Coefficient of determination
W =-17.8543 * logN + 95.0729	R^2 = .916 ** Excellent Test
Liquid limit = 70.11	Flow index =-17.85
Input plastic limit = 31.88	Toughness index = -2.14
Plasticity index = 38.23	Shrinkage limit = 18.85
Input natural water content = 43.6	Liquidity index = .31

Boring No. = B 4.1	Depth = 2.00-2.45	Number = PT. MULTI RASA A

LABORATORIUM MEKANIKA TANAH
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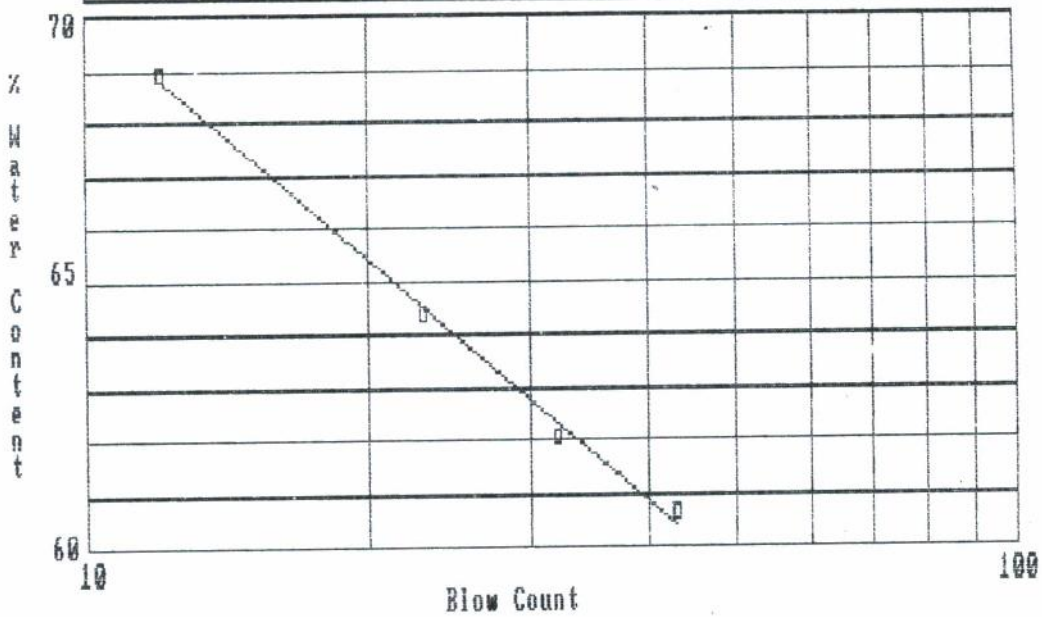
Boring No. = B 4.2	Depth = 3.00-3.45	Number = PT. MULTI RASA A



Sample no.	1	2	3	4					
% Water content	60.62	62.05	64.39	68.90					
Blow count	43	32	23	12					

Regression equation	Coefficient of determination
W =-15.1871 * logN + 85.1726	R^2 = .9959 ** Excellent Test
Liquid limit = 63.94	Flow index =-15.19
Input plastic limit = 32.31	Toughness index = -2.00
Plasticity index = 31.63	Shrinkage limit = 20.45
Input natural water content = 40.465	Liquidity index = .26

Boring No. = B 4.2	Depth = 3.00-3.45	Number = PT. MULTI RASA A

LABORATORIUM MEKANIKA TANAH
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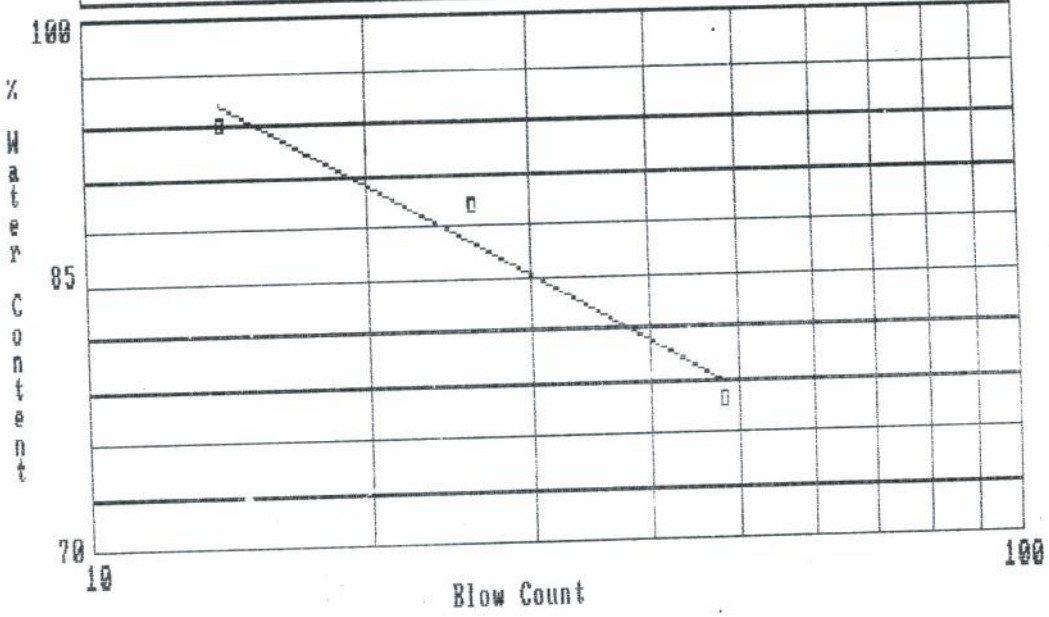
Boring No. = B 5.1	Depth = 2.00-2.45	Number = PT. MULTI RASA A



Sample no.	1	2	3						
% Water content	77.84	89.16	94.01						
Blow count	48	26	14						

Regression equation	Coefficient of determination
W =-30.1994 * logN + 129.7121	R^2 = .9481 ** Excellent Test
Liquid limit = 87.5	Flow index =-30.2
Input plastic limit = 28.45	Toughness index = -1.96
Plasticity index = 59.05	Shrinkage limit = 14.21
Input natural water content = 47.27	Liquidity index = .32

Boring No. = B 5.1	Depth = 2.00-2.45	Number = PT. MULTI RASA A

LABORATORIUM MEKANIKA TANAH
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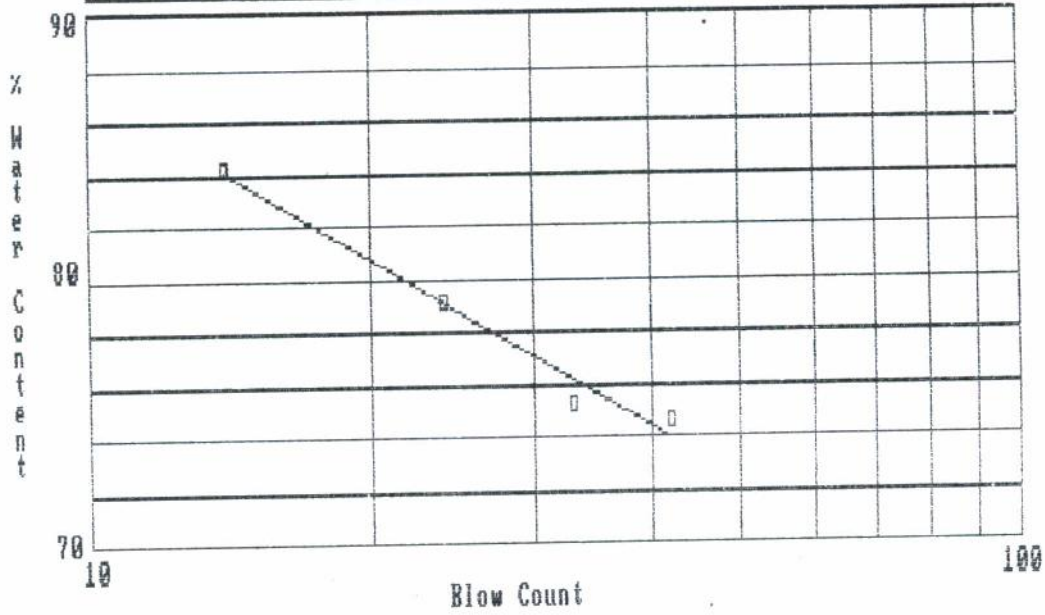
Boring No. = B 5.2	Depth = 2.75-3.20	Number = PT. MULTI RASA A



Sample no.	1	2	3	4					
% Water content	74.65	75.33	79.19	84.17					
Blow count	42	33	24	14					

Regression equation	Coefficient of determination
W =-20.9776 * logN + 108.061	R^2 = .9788 ** Excellent Test
Liquid limit = 78.74	Flow index =-20.98
Input plastic limit = 27.92	Toughness index = -2.42
Plasticity index = 50.82	Shrinkage limit = 14.9
Input natural water content = 40.117	Liquidity index = .24

Boring No. = B 5.2	Depth = 2.75-3.20	Number = PT. MULTI RASA A

LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
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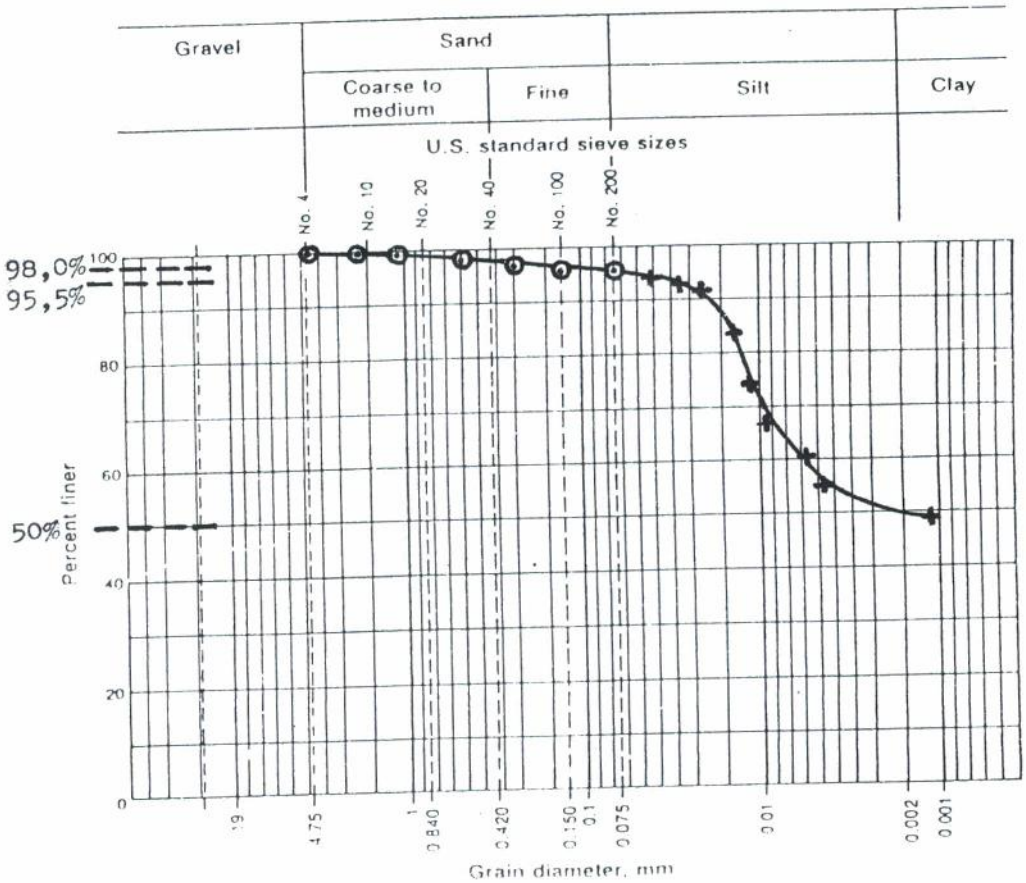
GRAIN SIZE DISTRIBUTION

Project PT MULTI RASA AGUNG Job No. _____

Location of Project JATAKE TANGERANG Boring No. B.1. Sample No. _____

Description of Soil _____ Depth of Sample 200 - 245

Tested By. IR. NASIR JALILI Date of Testing 14 April 1993



Visual soil description _____

Soil classification

Clay - Silt System Sieve analisys & Hydrometer

Gravel = 2,0 %

Sand = 2,5 %

Silt =45,5 %

Clay =50,0 %

LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

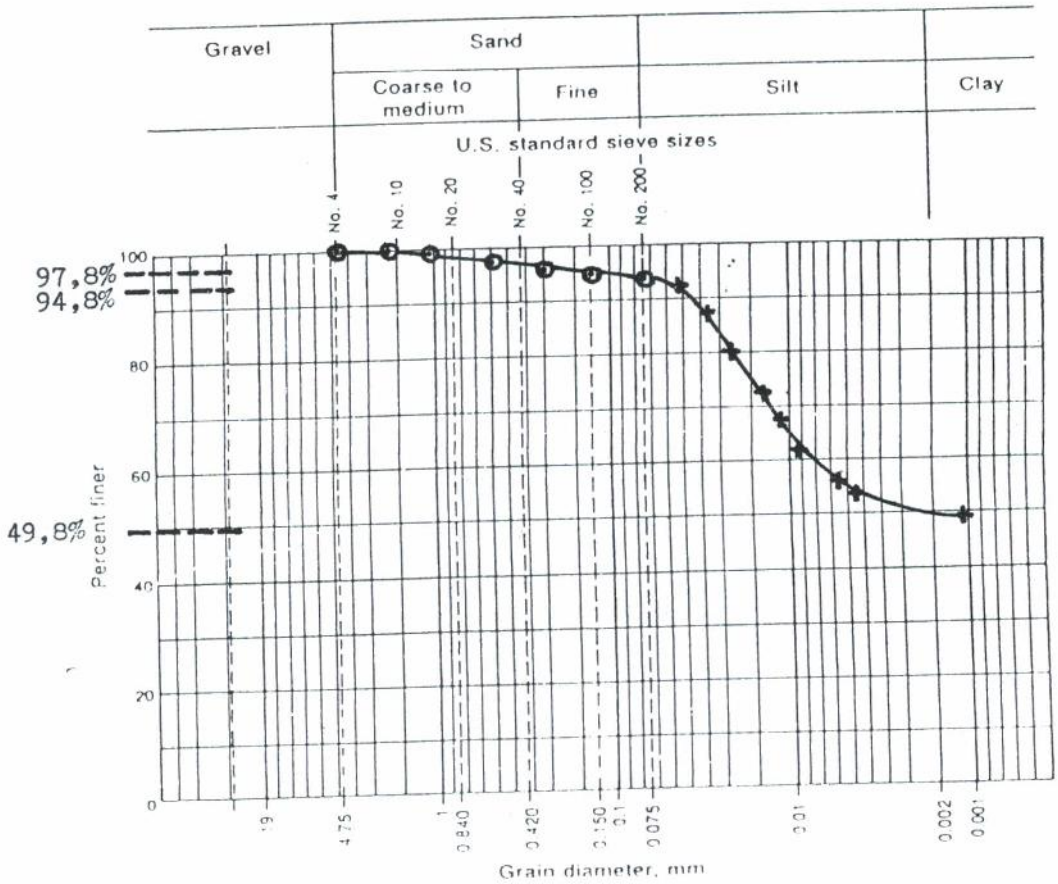
GRAIN SIZE DISTRIBUTION

Project PT.MULTI RASA AGUNG Job. No. _____

Location of Project JATAKE TANGERANG Boring No. B.1 Sample No. _____

Description of Soil _____ Depth of Sample 300 - 345

Tested By. IR. NASIR JALILI Date of Testing 14 April 1993.



Visual soil description _____

Soil classification

Clay-Silt System Sieve Analisys & Hydrometer

Gravel = 2,2 %
Sand = 3,0 %
Silt = 45,0 %
Clay = 49,8 %.

LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
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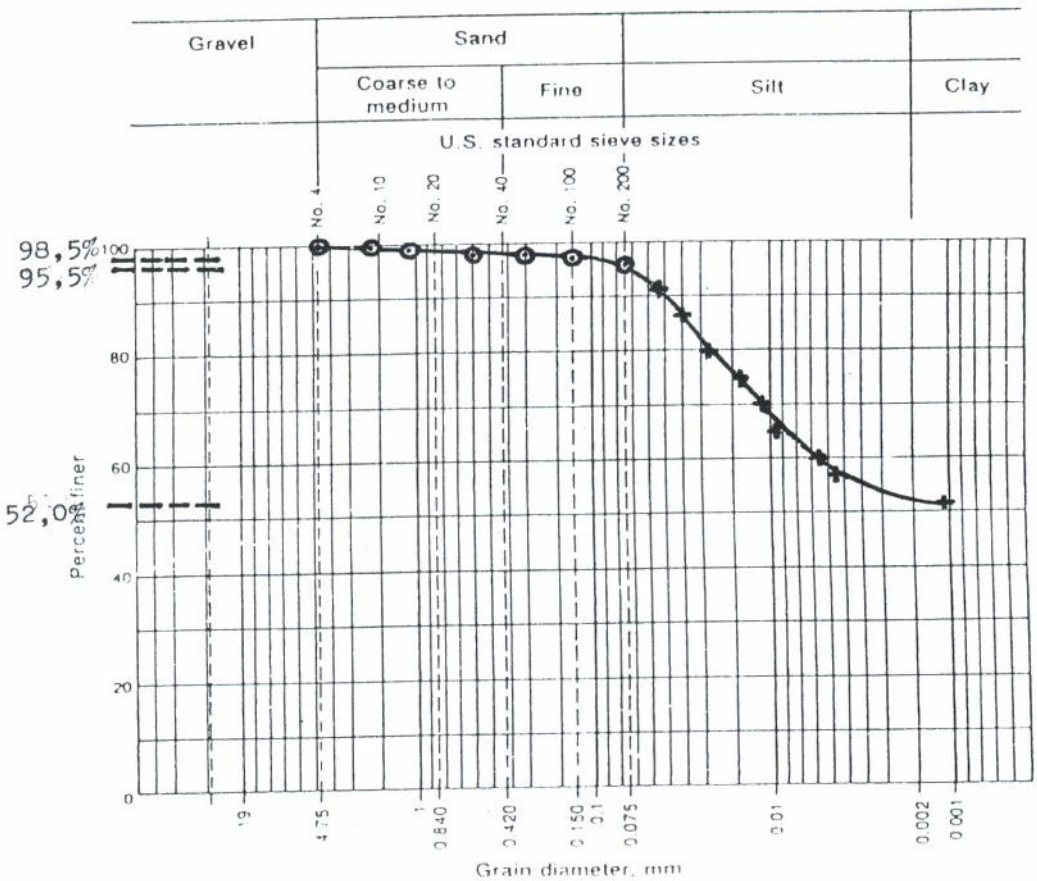
GRAIN SIZE DISTRIBUTION

Project PT.MULTI RASA AGUNG Job. No. _____

Location of Project JATAKE TANGERANG Boring No. B.2 Sample No. _____

Description of Soil _____ Depth of Sample 200 - 245

Tested By IR.NASIR JALILI Date of Testing 14 April 1993.



Visual soil description _____

Soil classification

Clay - Silt System Sieve Analisys & Hydrometer

Gravel = 1,5%

Sand = 3,0%

Silt = 43,5%

Clay = 52,0%

LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
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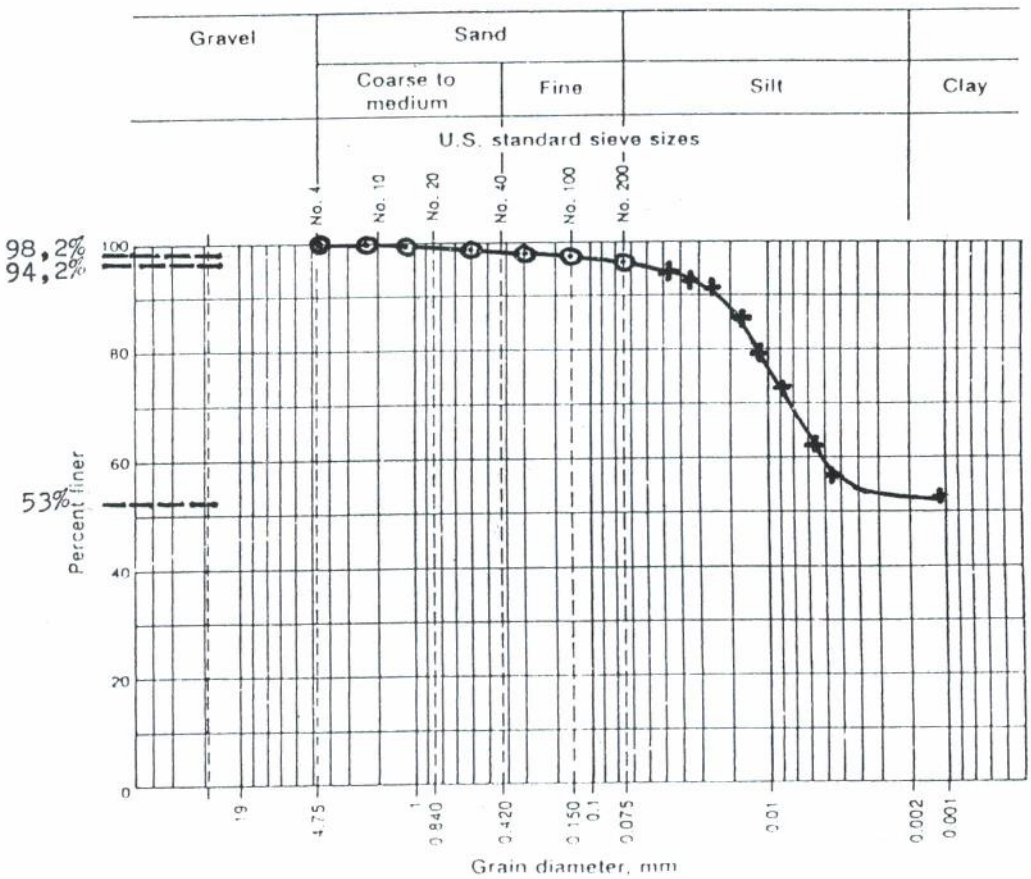
GRAIN SIZE DISTRIBUTION

Project PT.MULTI RASA AGUNG Job. No. _____

Location of Project JATAKE TANGERANG Boring No. B.2 Sample No. _____

Description of Soil _____ Depth of Sample 300-345

Tested By. IR.NASIR JALILI Date of Testing 14 April 1993.



Visual soil description _____

Soil classification

Clay - Silt System Sieve Analisys & Hydrometer

Gravel= 1,8%

Sand = 4,0%

Silt = 41,2%

Clay = 53,0%

LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp 7270092

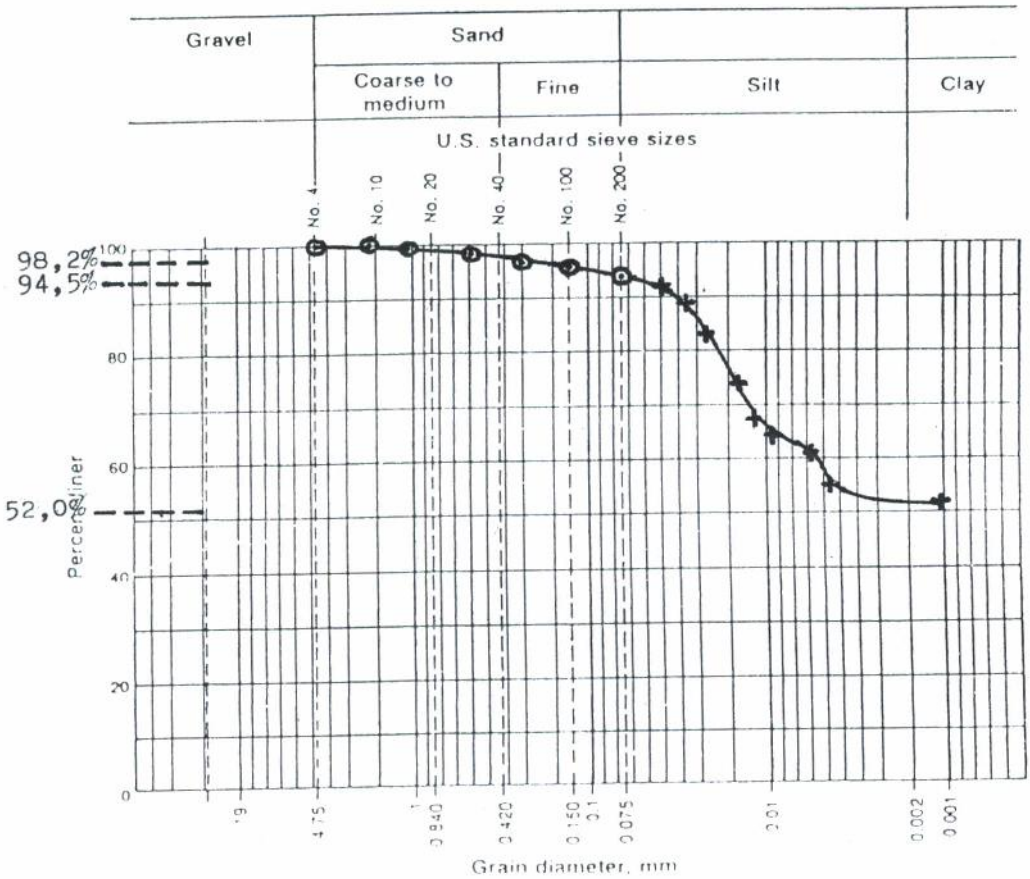
GRAIN SIZE DISTRIBUTION

Project PT.MULTI RASA AGUNG Job No. —

Location of Project JATAKE TANGERANG Boring No. B.3 Sample No. —

Description of Soil — Depth of Sample 200 - 245

Tested By IR? NASIR JALILI Date of Testing 14 April 1993



Visual soil description —

Soil classification

Clay - Silt System Sieve Analisys & Hydrometer

Gravel ; 2,0%

Sand = 3,5%

Silt = 42,5%

Clay = 52,0%

LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
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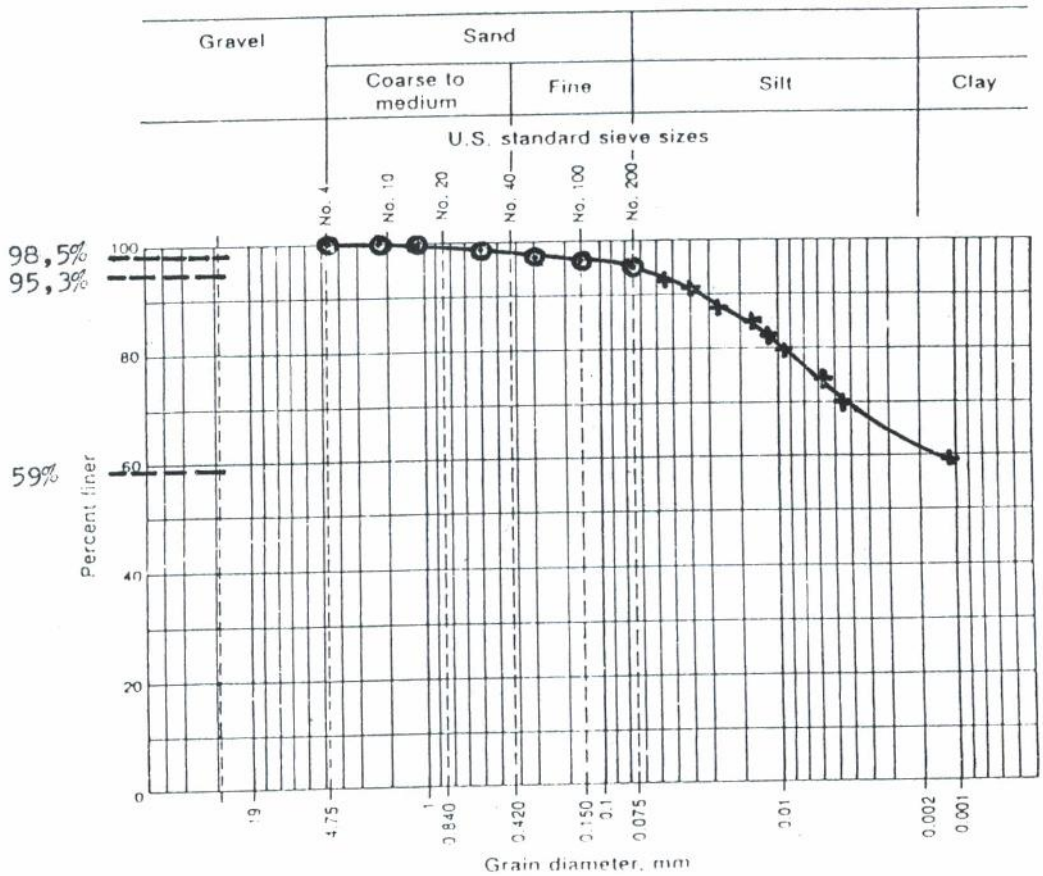
GRAIN SIZE DISTRIBUTION

Project PT.MULTI RASA AGUNG Job. No. _____

Location of Project JATAKE TANGERANG Boring No B.3 Sample No. _____

Description of Soil _____ Depth of Sample 300 - 345

Tested By IR. NASIR JALILI Date of Testing 14 April 1993.



Visual soil description _____

Soil classification
Clay - Silt System Sieve Analisys & Hydrometer

Gravel = 1,5%
Sand = 3,2%
Silt = 36,3%
Clay = 59,0%

LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
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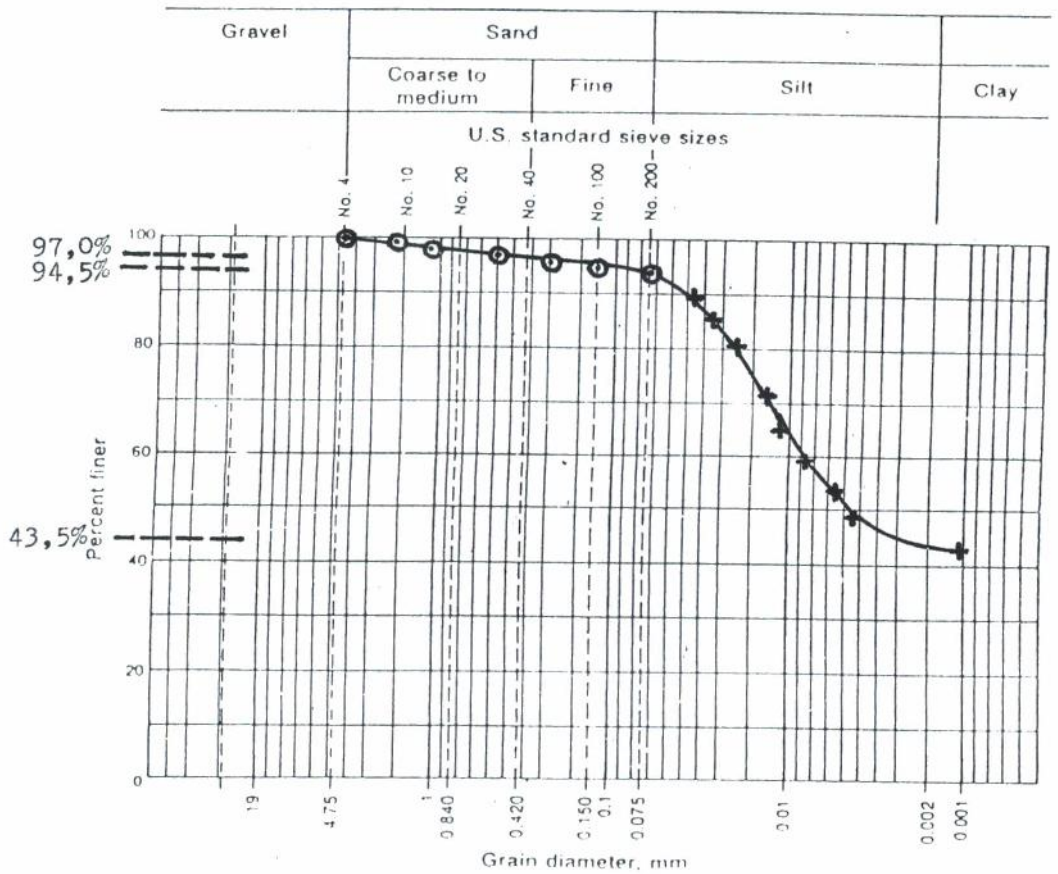
GRAIN SIZE DISTRIBUTION

Project PT. MULTI RASA AGUNG Job No. _____

Location of Project JATAKE TANGERANG Boring No. B.4 Sample No. _____

Description of Soil _____ Depth of Sample 200 - 245

Tested By IR. NASIR JALILI Date of Testing 14 April 1993.



Visual soil description _____

Soil classification
Silt - Clay System Sieve Analisys & Hydrometr

Gravel = 3,0%
Sand = 2,5%
Silt = 51,0%
Clay = 43,5%

LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

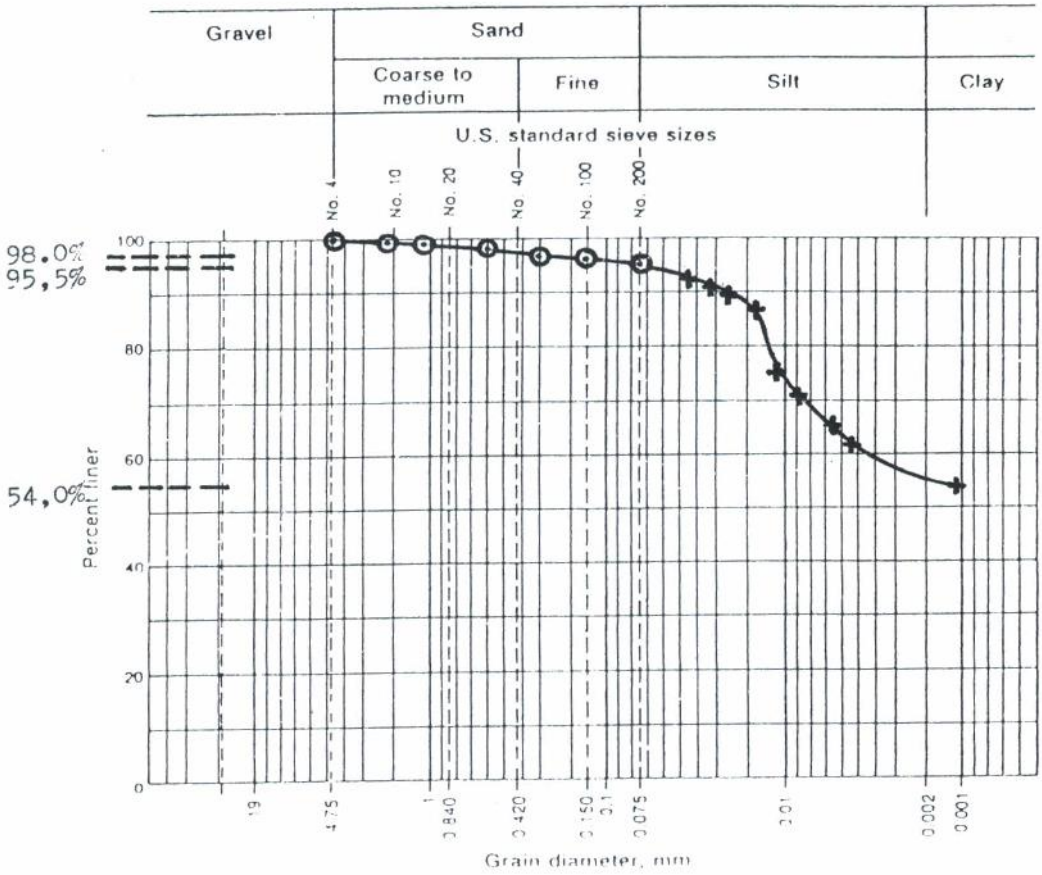
GRAIN SIZE DISTRIBUTION

Project PT. MULTI RASA AGUNG Job. No. _____

Location of Project JATAKE TANGERANG Boring No. B.4 Sample No. _____

Description of Soil _____ Depth of Sample 300 - 345

Tested By. IR. NASIR JALILI Date of Testing 14 April 1993.



Visual soil description _____

Soil classification:

Clay - Silt System Sieve Analisys & Hydrometer

Gravel = 2,0%
Sand = 2,5%
Silt = 41,5%
Clay = 54,0%

LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

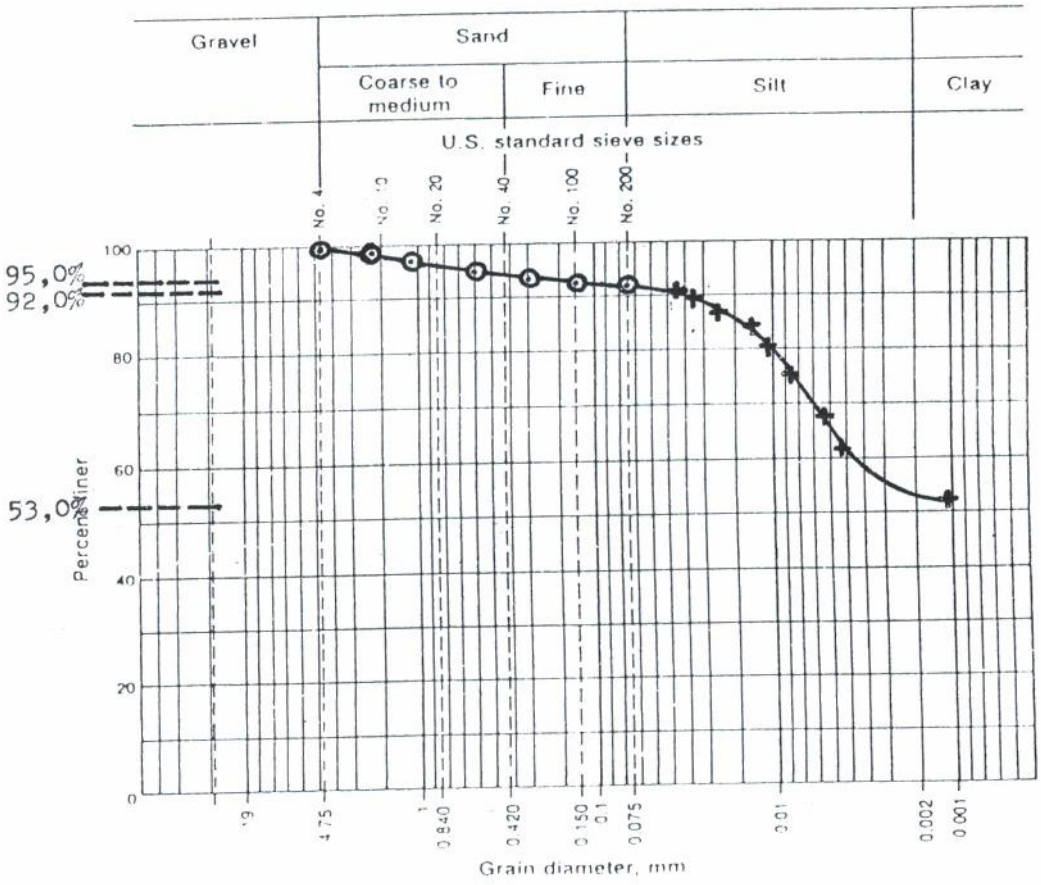
GRAIN SIZE DISTRIBUTION

Project PT.MULTI RASA AGUNG Job. No. _____

Location of Project JATAKE TANGERANG Boring No. B.5 Sample No. _____

Description of Soil _____ Depth of Sample 200 - 245

Tested By IR. NASIR JALILI Date of Testing 14 Avril 1993.



Visual soil description _____

Soil classification

Clay - Silt System Sieve Analisys & Hydrometer

Gravel = 5,0%
Sand = 3,0%
Silt = 39,0%
Clay = 53,0%

LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
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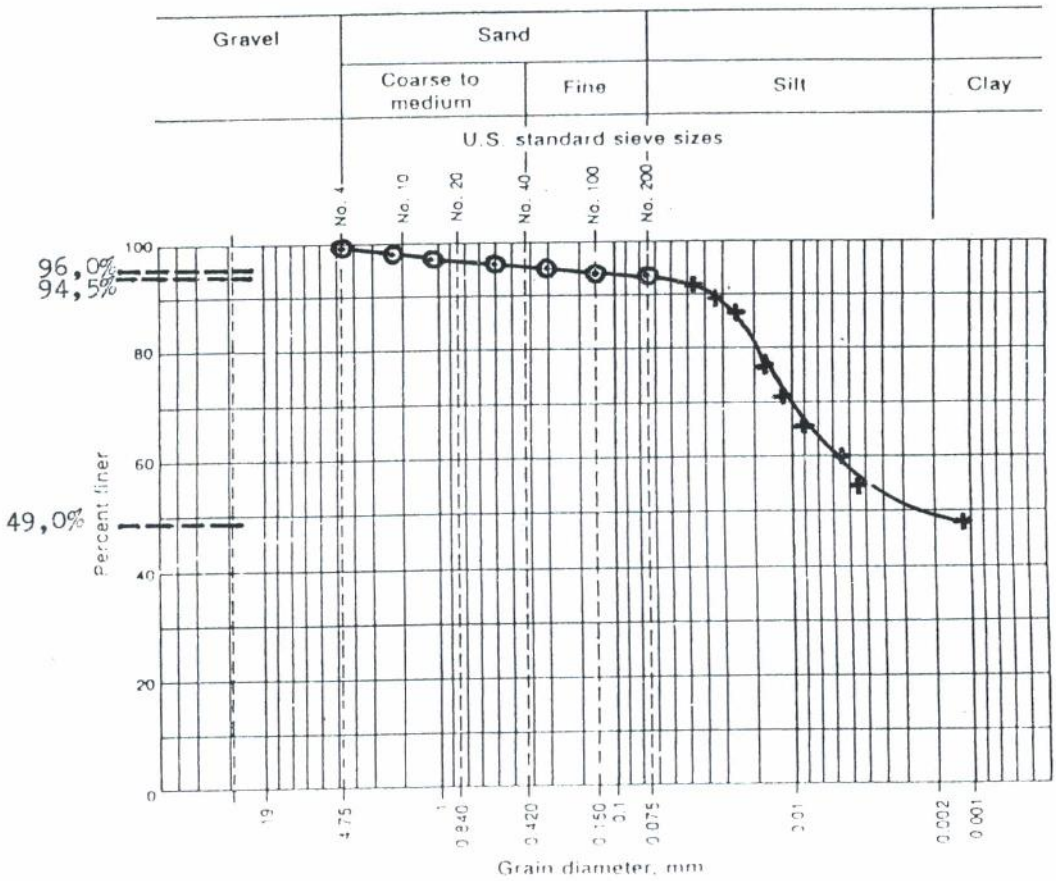
GRAIN SIZE DISTRIBUTION

Project PT. MULTI RASA AGUNG Job. No. _____

Location of Project JATAKE TANGERANG Boring No. B.5 Sample No. _____

Description of Soil _____ Depth of Sample 275 - 320

Tested By. IR.NASIR JALILI Date of Testing 14 APRIL 1993.



Visual soil description _____

Soil classification

Clay - Silt System Sieve Analisys & Hydrometer

Gravel = 4,0%
Sand = 1,5%
Silt = 45,5%
Clay = 49,0%

LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

TRIAXIAL TEST.

Project : PT MULTI RASA AGUNG

Location : JATAKE TANGERANG

Boring no : B.1 (200 - 245).

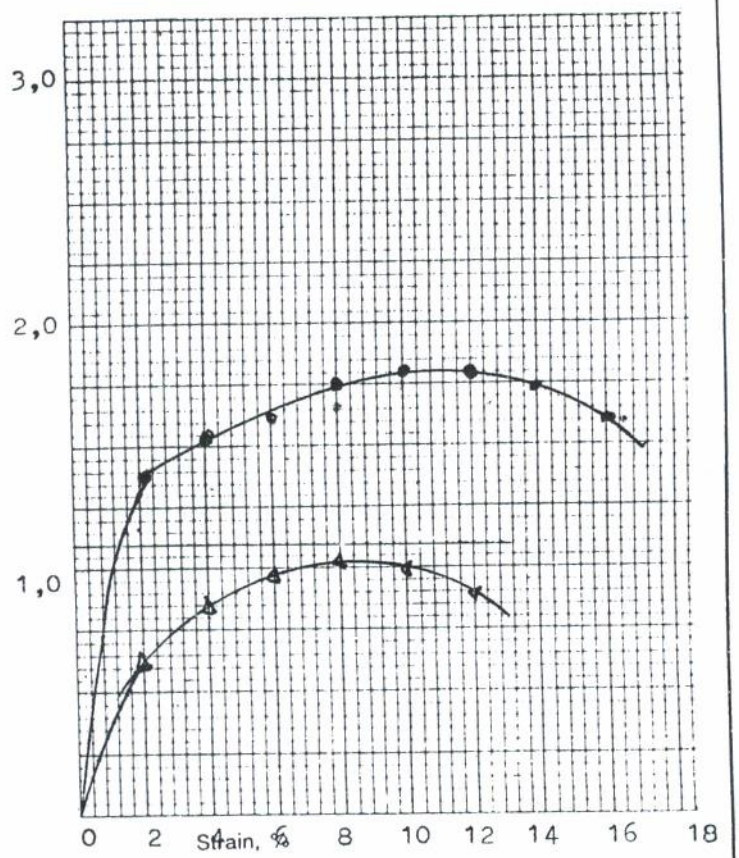
Test By : IR. N A N A . S

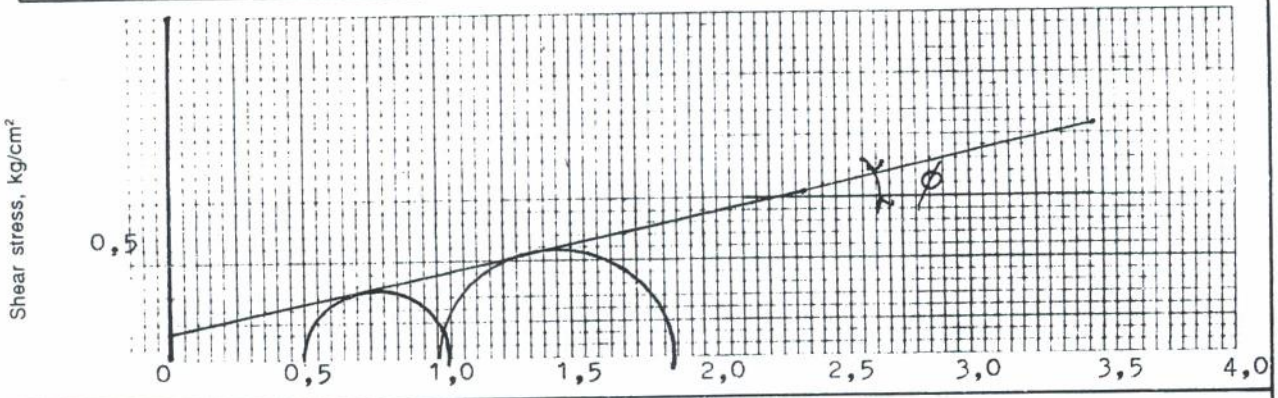
Data :

1. Machine LRC :
2. Sample dia : 38,8
   Sample ht : 66,5

	1	2	3	4
σ_3	0,5	1,0		
σ	0,55	0,87		
σ_1	1,05	1,87		
u				

γ wet	:		ton/m³
γ dry	:		ton/m³
w	:		%
c	:	0,15	kg/cm²
ϕ	:	13°	
Sr	:		%





LABORATORIUM MEKANIKA TANAH
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TRIAXIAL TEST.

Project : PT MULTI RASA AGUNG

Location : JATAKE TANGERANG

Boring no : B.1 (300 - 345).

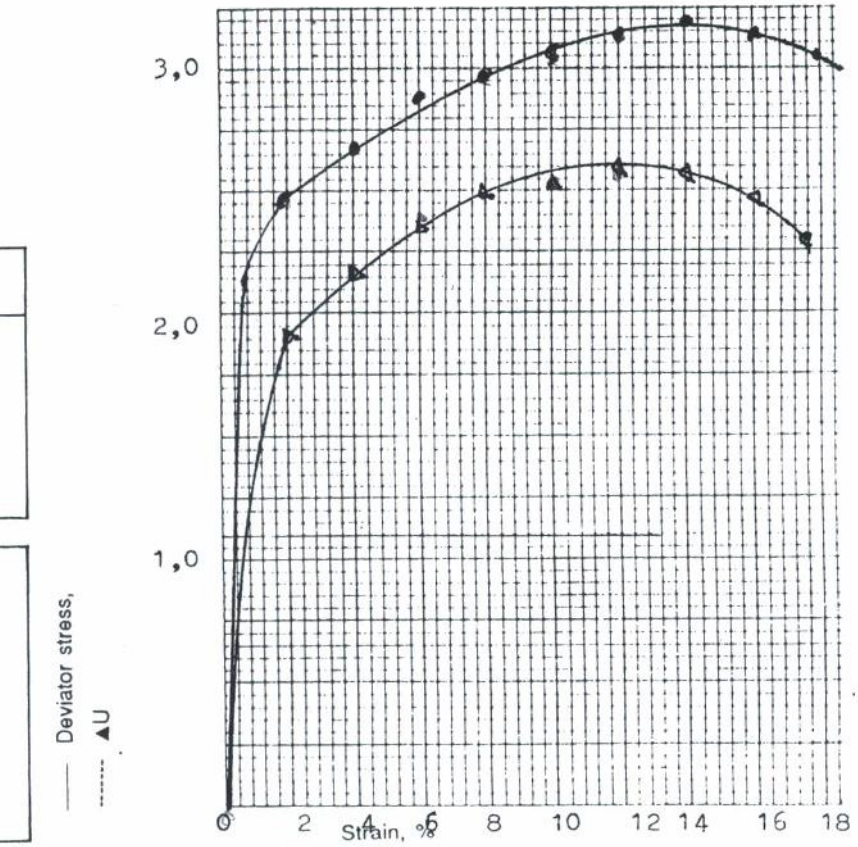
Test By : IR. N A N A . S

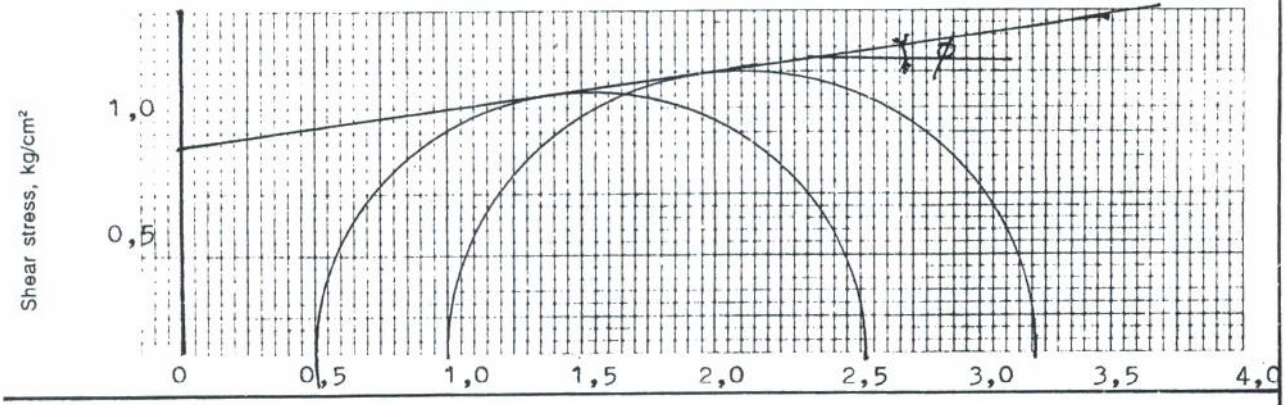
Data :

1. Machine LRC :
2. Sample dia : 38,8
   Sample ht : 68,5

	1	2	3	4
σ_3	1,0	1,5		
σ	1,56	1,73		
σ_1	2,56	3,21		
u				

γ wet	:		ton/m³
γ dry	:		ton/m³
w	:		%
c	:	0,80	kg/cm²
ϕ	:	9°	
Sr	:		%





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TRIAXIAL TEST.

Project : PT MULTI RASA AGUNG

Location : JATAKE TANGERANG.

Boring no : P.2 (200 - 245).

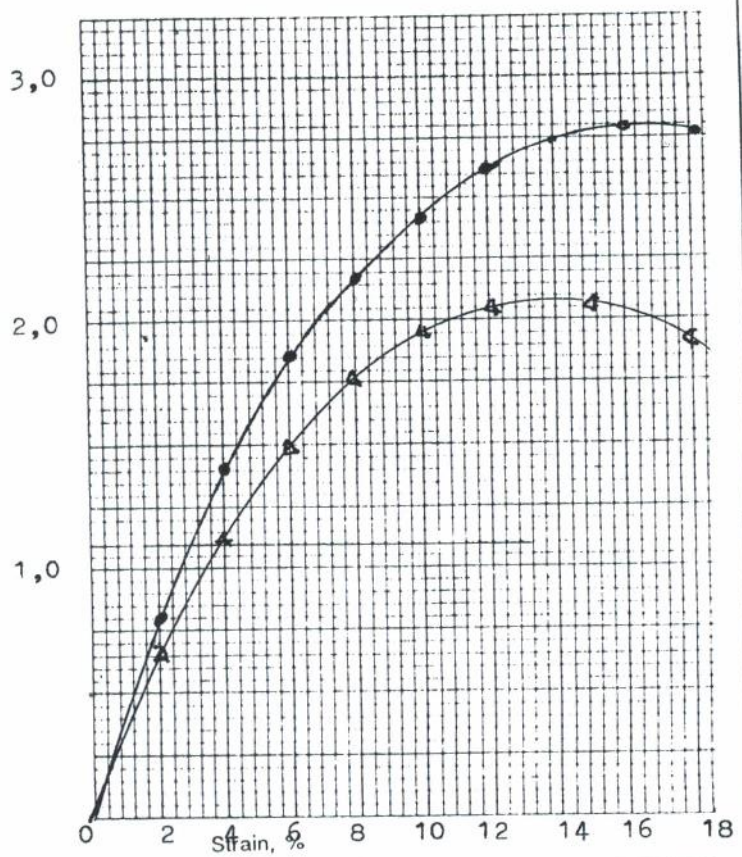
Test By : IR. N A N A . S

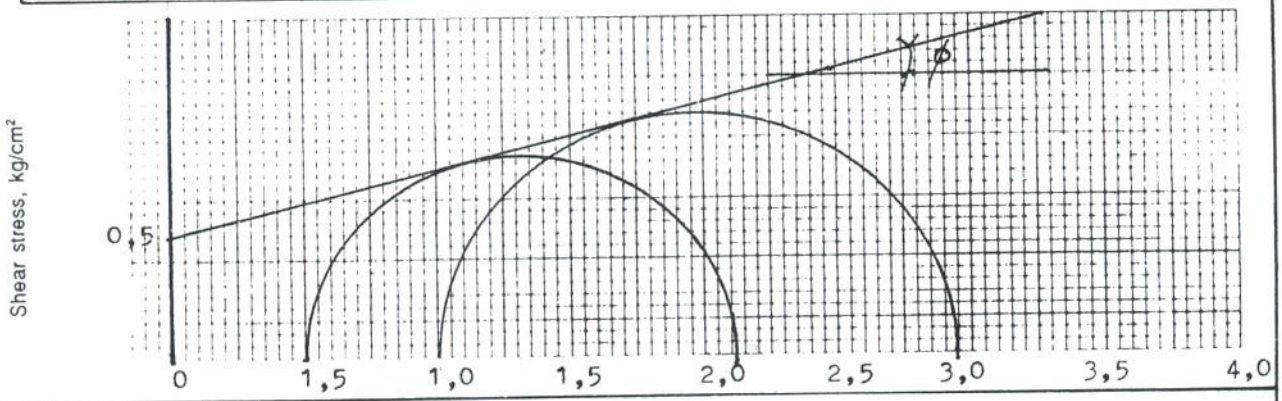
Data :

1. Machine LRC :
2. Sample dia : 35,1
   Sample ht : 68,3

	1	2	3	4
σ_3	0,5	1		
σ	1,62	1,95		
σ_1	2,12	2,95		
u				

γ wet	:		ton/m³
γ dry	:		ton/m³
w	:		%
c	:	0,48	kg/cm²
ϕ	:	15°	
Sr	:		%





LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
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TRIAXIAL TEST.

Project : PT. MULTI RASA AGUNG

Location : JATAKE TANGERANG

Boring no : B.2 (300 - 345).

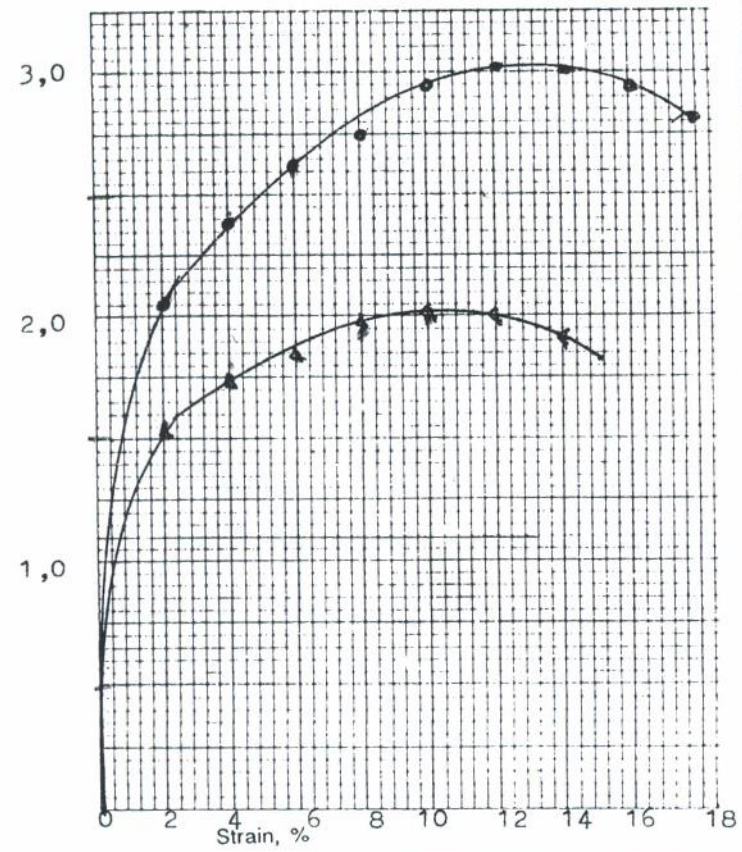
Test By : IR. N A N A . S

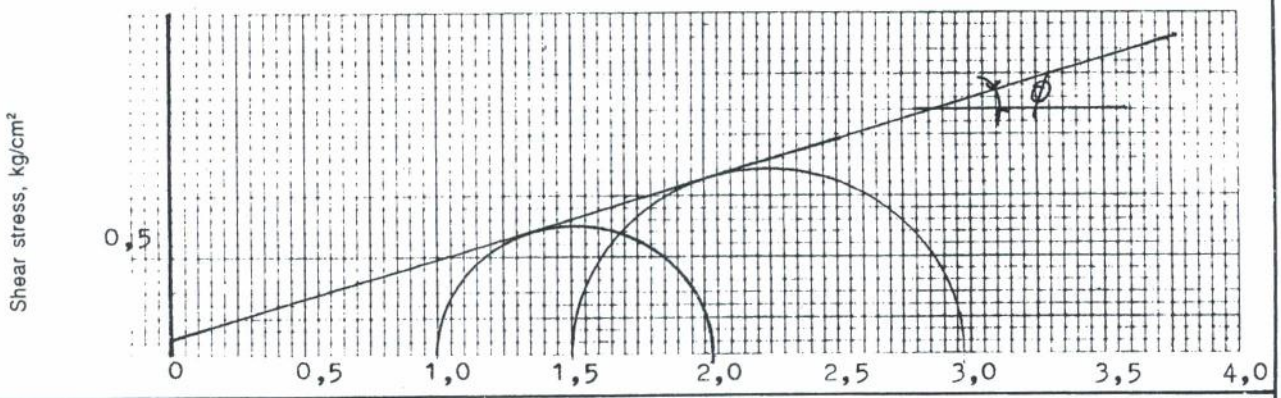
Data :

1. Machine LRC :
2. Sample dia : 38,5
   Sample ht : 65,8

	1	2	3	4
σ_3	1,0	1,5		
σ	1,018	1,436		
σ_1	1,018			
u				

γ wet	:		ton/m³
γ dry	:		ton/m³
w	:		%
c	:	0,10	kg/cm²
ϕ	:	17°	
Sr	:		%





LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

TRIAXIAL TEST.

Project : PT MULTI RASA AGUNG

Location : JATAKE TANGERANG

Boring no : B.3 (200 - 245).

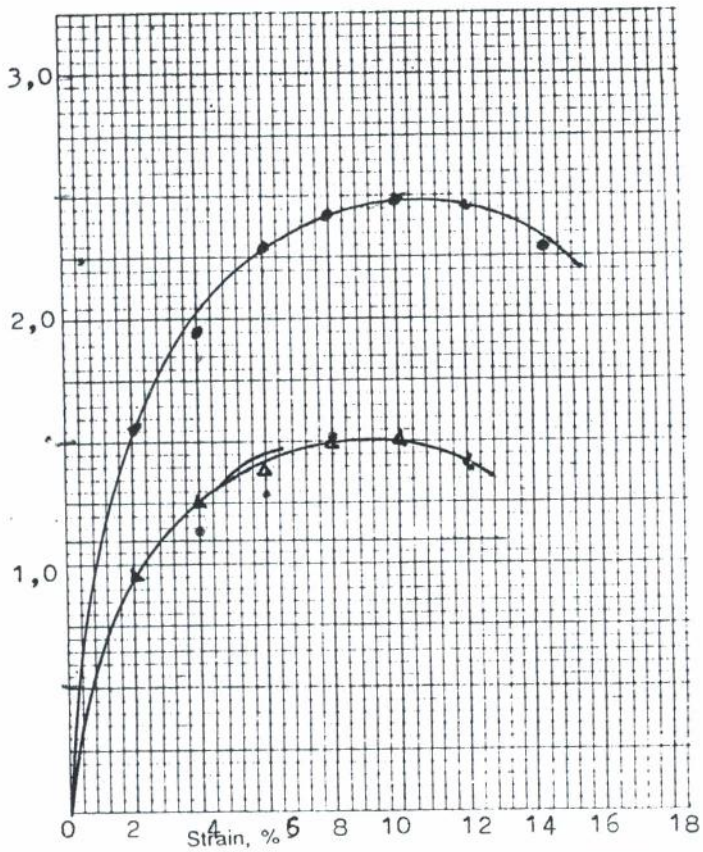
Test By : IR. NANA. S

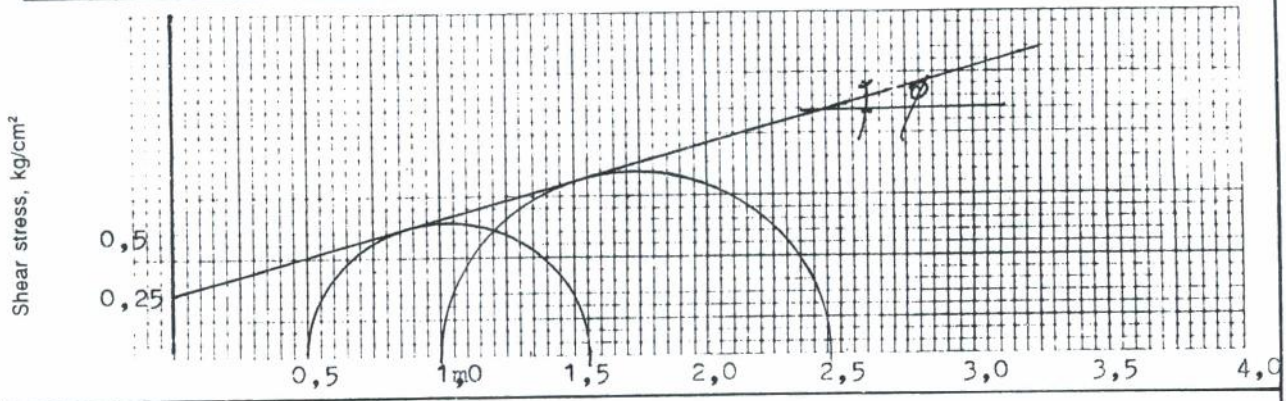
Data :

1. Machine LRC :
2. Sample dia : 38,5
   Sample ht : 60,4

	1	2	3	4
σ_3	0,5	1,0		
σ	1,05	1,41		
σ_1	1,55	2,41		
u				

γ wet	:		ton/m³
γ dry	:		ton/m³
w	:		%
c	:	0,25	kg/cm²
$\varnothing$	:	17°	
Sr	:		%





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INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

TRIAXIAL TEST.

Project : PT MULTI RASA AGUNG

Location : JATAKE TANGERANG

Boring no : B.3 (300 - 345).

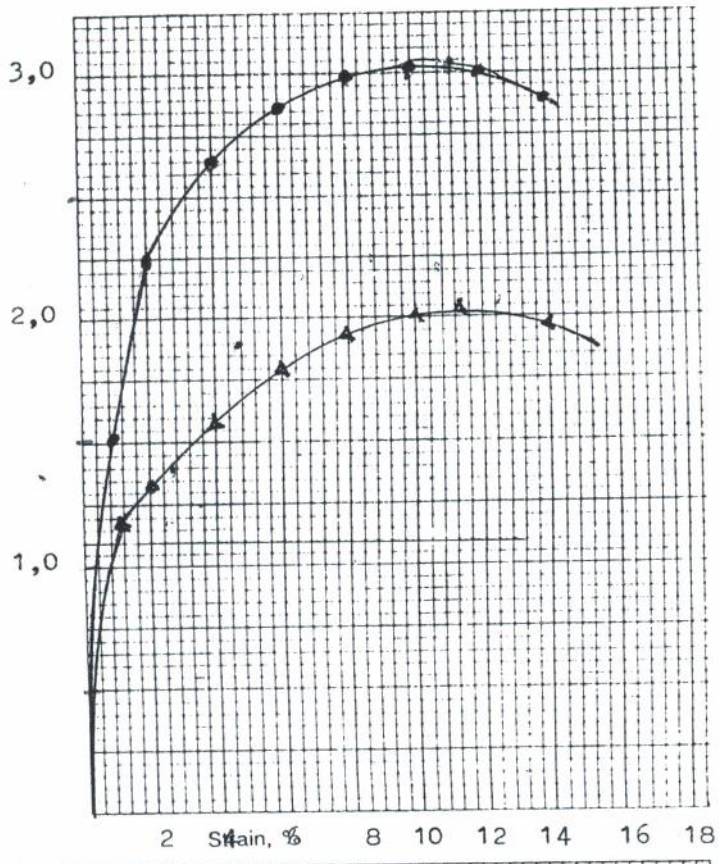
Test By : IR. N A N A . S

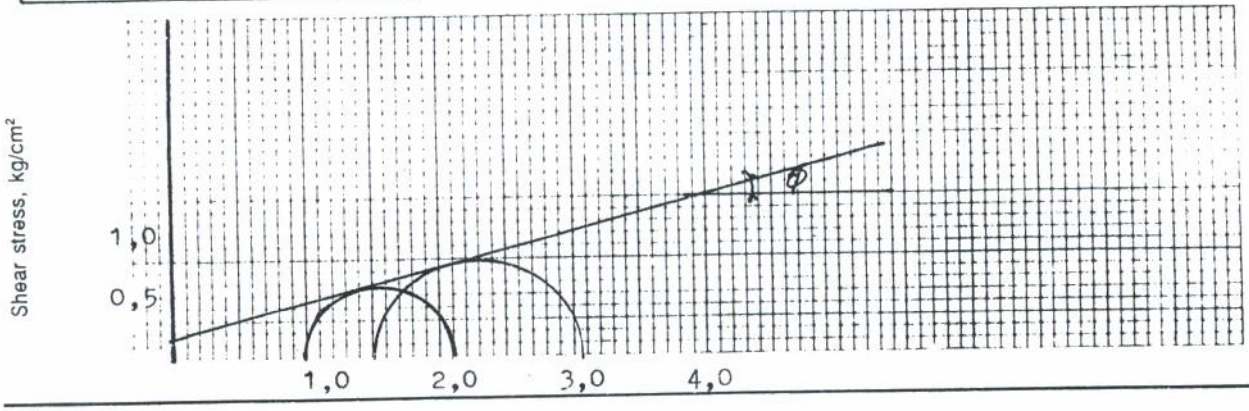
Data :

1. Machine LRC :
2. Sample dia : 38,5
   Sample ht : 67,4

	1	2	3	4
σ_3	1,0	1,5		
σ	1,1	1,522		
σ_1	2,1	3,022		
U				

γ wet	:		ton/m³
γ dry	:		ton/m³
w	:		%
c	:	0,18	kg/cm²
ϕ	:	17°	
Sr	:		%





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INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

TRIAXIAL TEST.

Project : PT MULTI RASA AGUNG

Location : JATAKE TANGERANG

Boring no : B.4 (200 - 245).

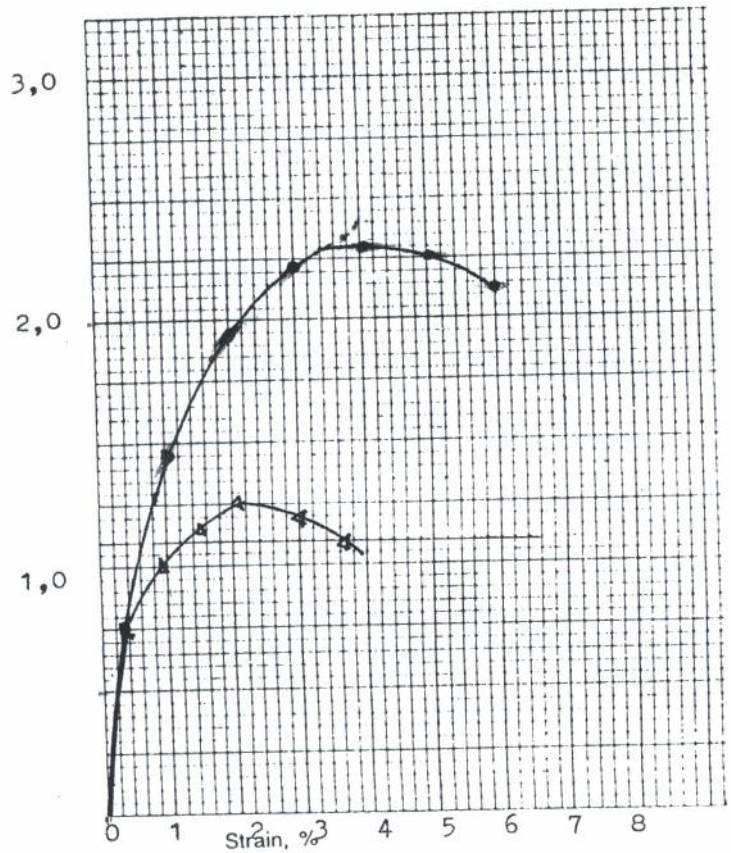
Test By : IR. N A N A . S

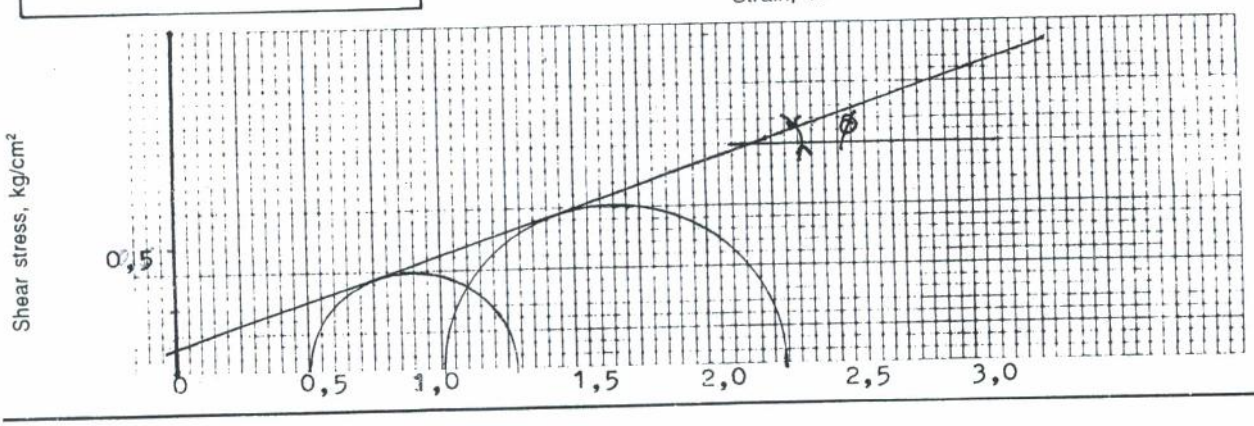
Data :

1. Machine LRC :
2. Sample dia : 38,5
   Sample ht : 68,4

	1	2	3	4
σ_3	0,5	1		
σ	0,752	1,30		
σ_1	1,252	2,30		
u				

γ wet	:		ton/m³
γ dry	:		ton/m³
w	:		%
c	:	0,1	kg/cm²
ϕ	:	20°	
Sr	:		%





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TRIAXIAL TEST.

Project : PT. MULTI RASA AGUNG

Location : JATAKE TANGERANG

Boring no : B4 (300 - 345)

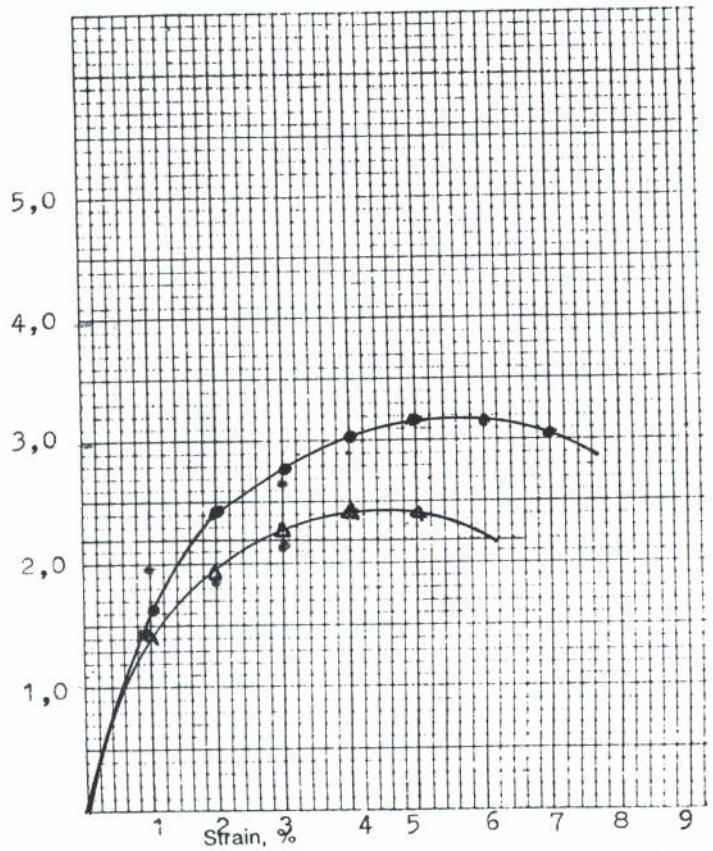
Test By : IR. NANA . S

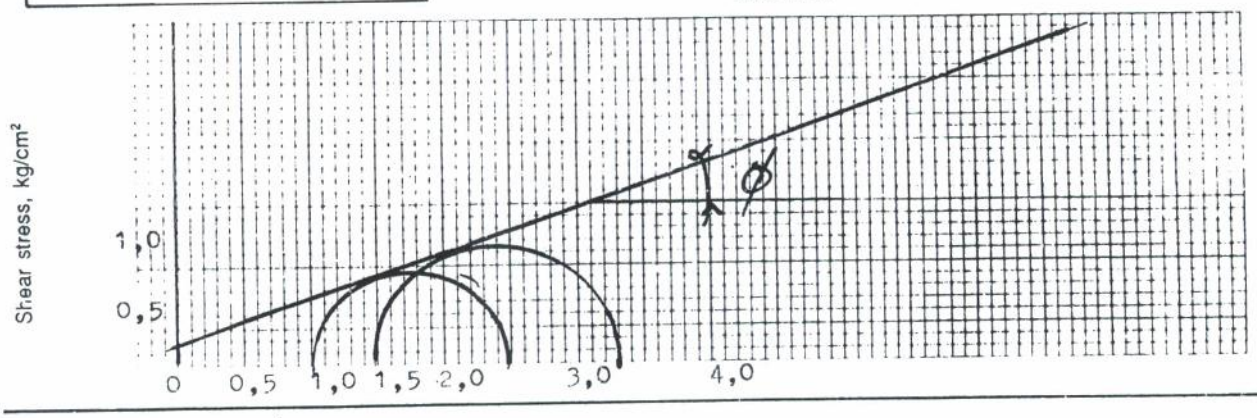
Data :

1. Machine LRC :
2. Sample dia : 38,5
   Sample ht : 67,3

	1	2	3	4
σ_3	1,0	1,5		
σ	1,41	1,80		
σ_1	2,41	3,3		
u				

γ wet	:		ton/m³
γ dry	:		ton/m³
w	:		%
c	:	0,20	kg/cm²
ϕ	:	20°	
Sr	:		%





LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

TRIAXIAL TEST.

Project : PT MULTI RASA AGUNG

Location : JATAKE TANGERANG

Boring no : B.5 (200 - 245).

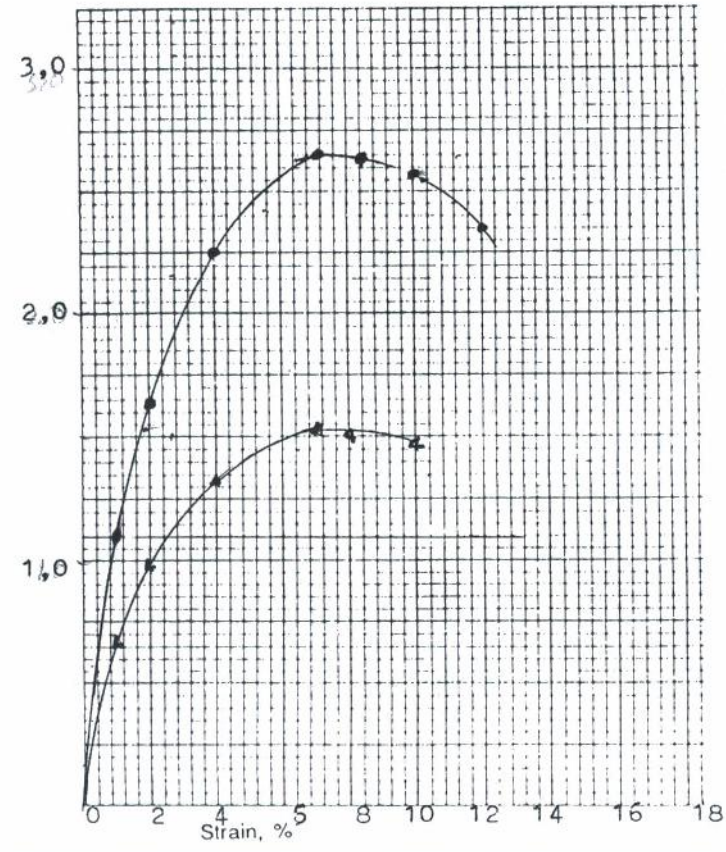
Test By : IR. N A N A . S

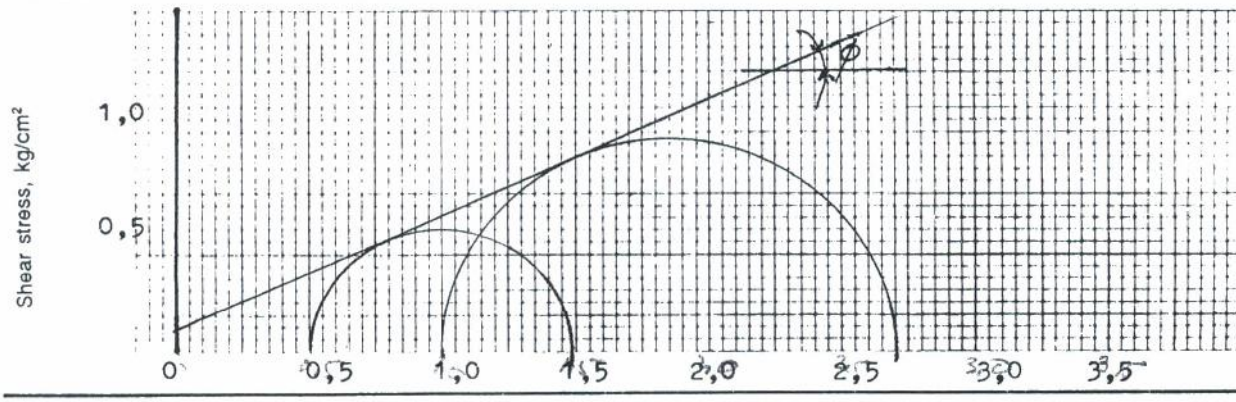
Data :

1. Machine LRC :
2. Sample dia : 38,5
   Sample ht : 67,6

	1	2	3	4
σ_3	0,5	1,0		
σ	1	1,7		
σ_1	1,5	2,7		
u				

γ wet	:		ton/m³
γ dry	:		ton/m³
w	:		%
c	:	0,05	kg/cm²
ϕ	:	25°	
Sr	:		%





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TRIAXIAL TEST.

Project : PT MULTI RASA AGUNG

Location : JATAKE TANGERANG

Boring no : B.5 (275 - 320).

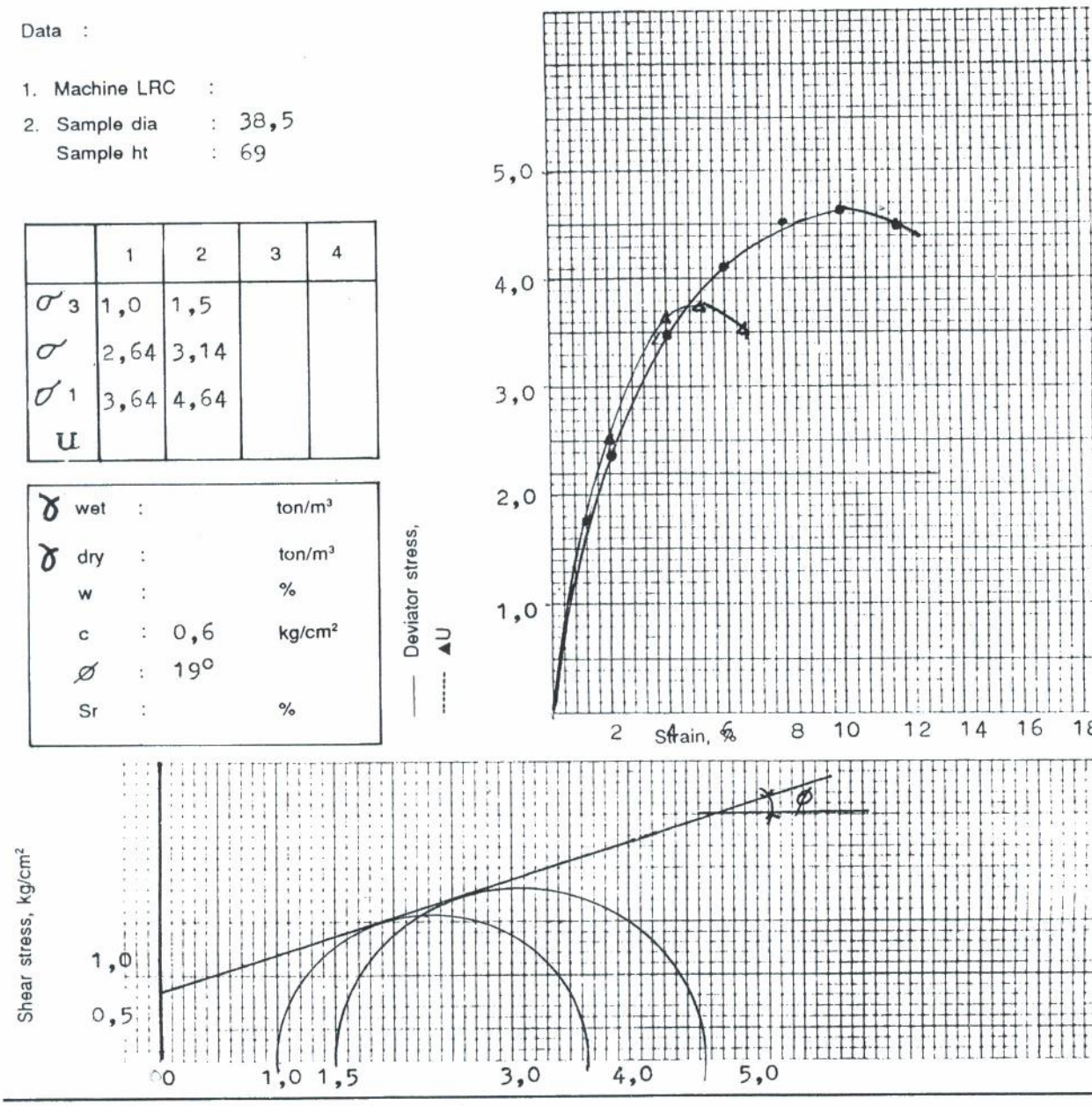
Test By : IR. NANA. S

Data :

1. Machine LRC :
2. Sample dia : 38,5
   Sample ht : 69

	1	2	3	4
σ_3	1,0	1,5		
σ	2,64	3,14		
σ_1	3,64	4,64		
u				

γ wet	:		ton/m³
γ dry	:		ton/m³
w	:		%
c	:	0,6	kg/cm²
ϕ	:	19°	
Sr	:		%



LABORATORIUM MEKANIKA TANAH
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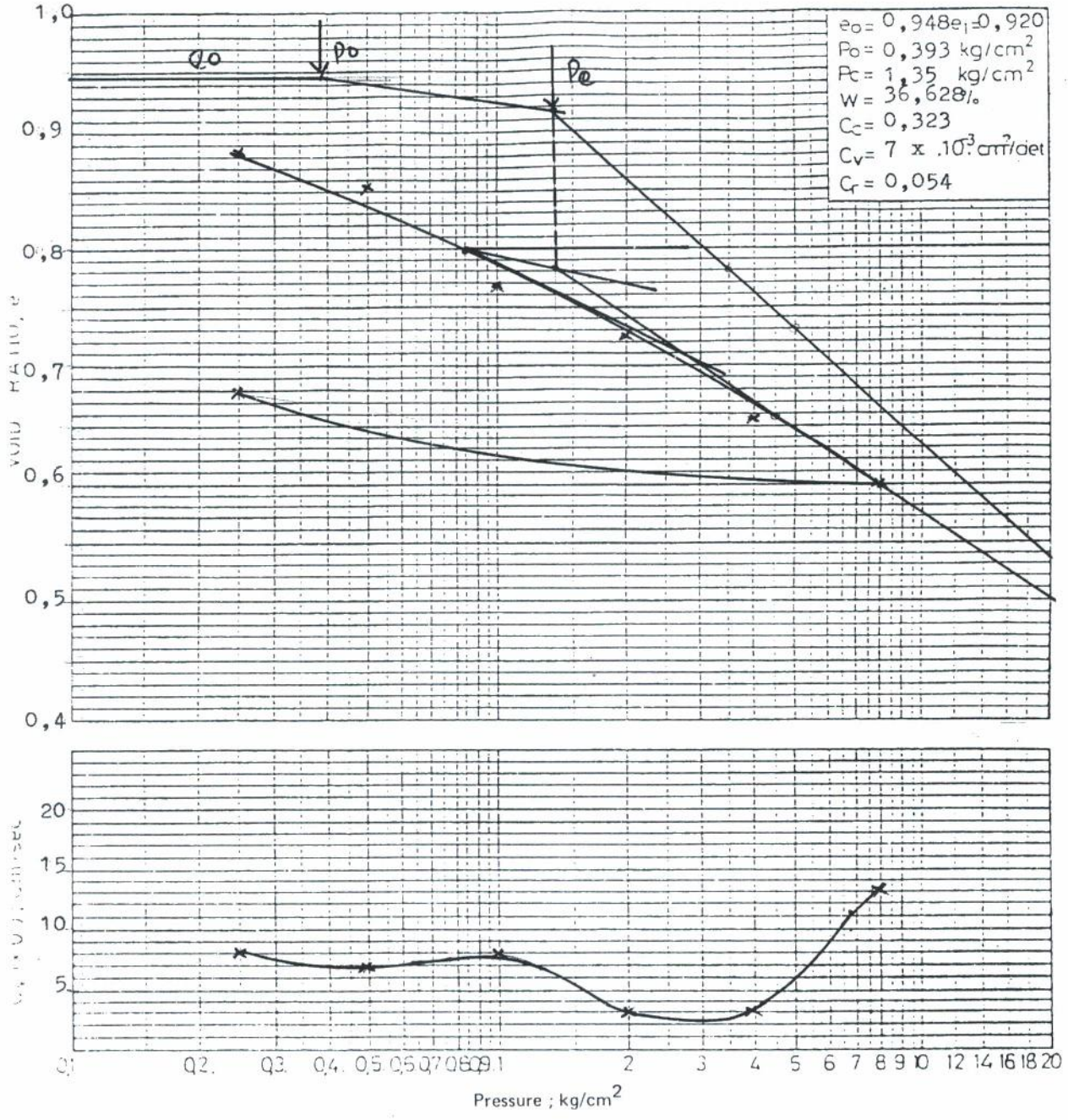
Kampus ISTN Bhumi Srengseng Telp. 7270092

CONSOLIDATION TEST

Project : PT. MULTI RASA AGUNG
Location : JATAKE TANGERANG
Boring no : B.1

Depth of sample : 200 - 245
Date of test : APRIL 1993
Test by : IR. A ACHMAD KARMANA

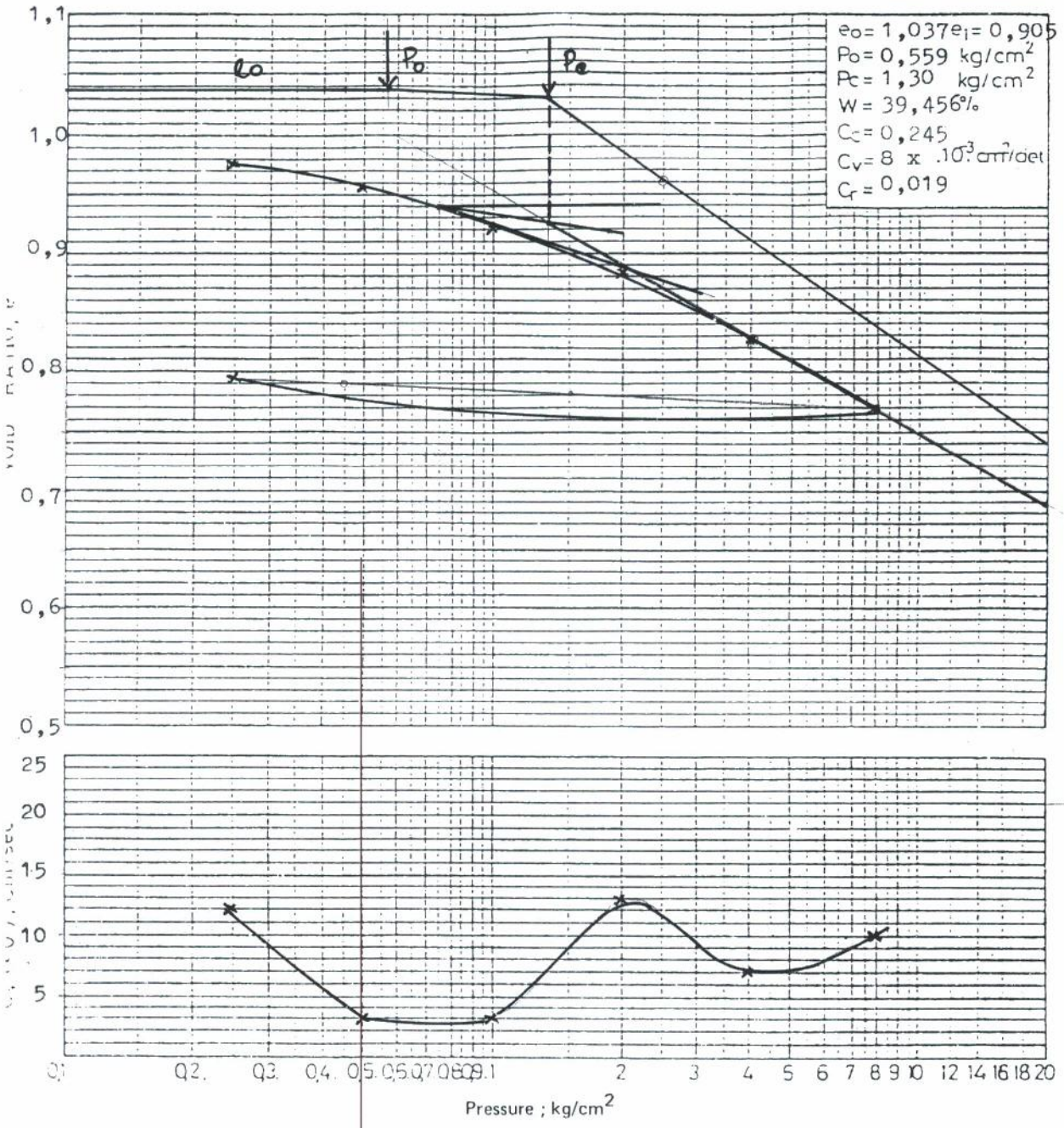


LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

CONSOLIDATION TEST

Project : PT MULTI RASA AGUNG
Location : JATAKE TANGERANG
Boring no : B.1

Depth of sample : 300 - 345
Date of test : APRIL 1993
Test by : Ir. A Achmad Karmana

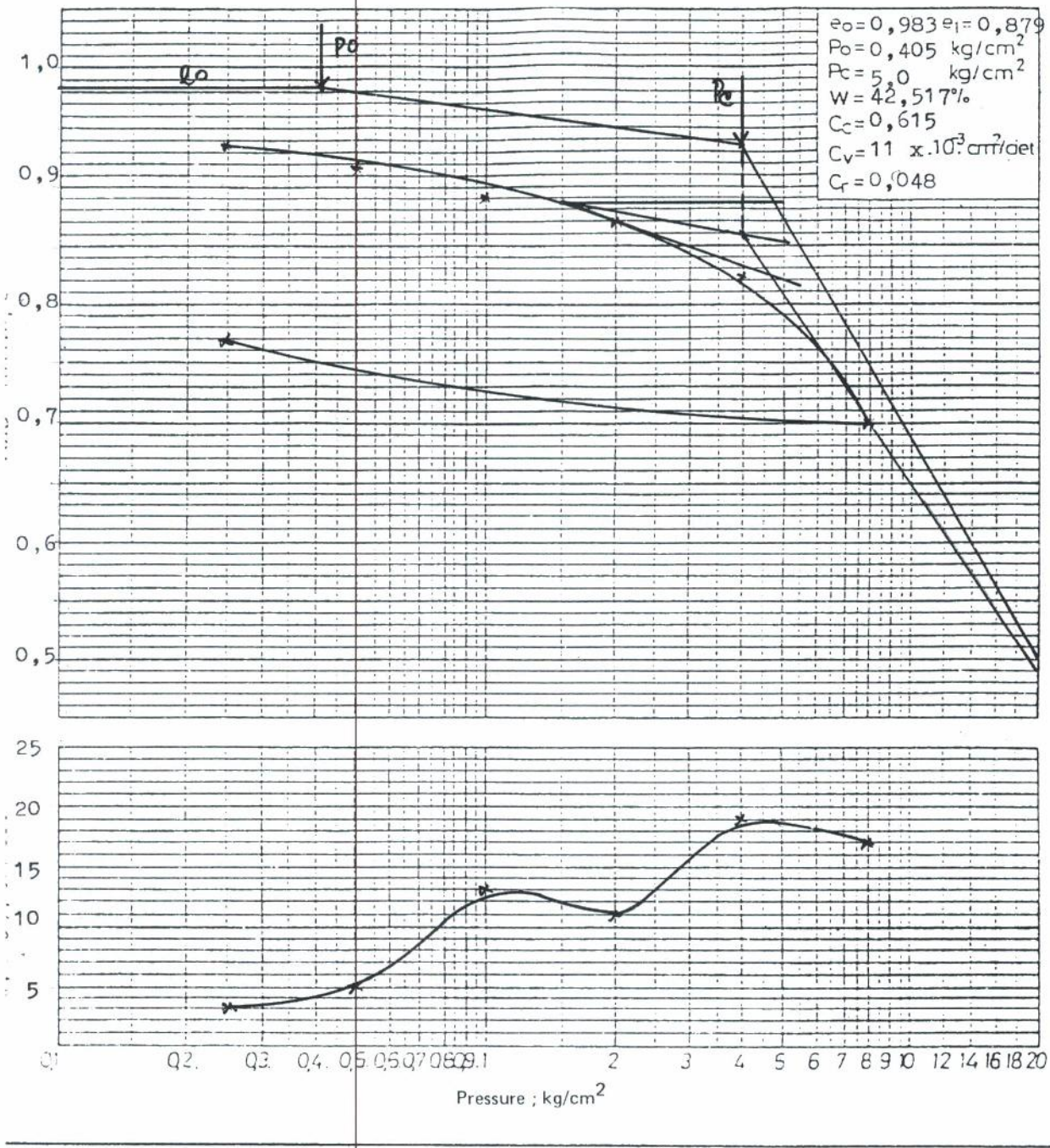


LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

CONSOLIDATION TEST

Project : PT MULTI RASA AGUNG
Location : JATAKE TANGERANG
Boring no : B.2

Depth of sample : 200 - 245
Date of test : APRIL 1993
Test by : IR. A ACHMAD KARMANA

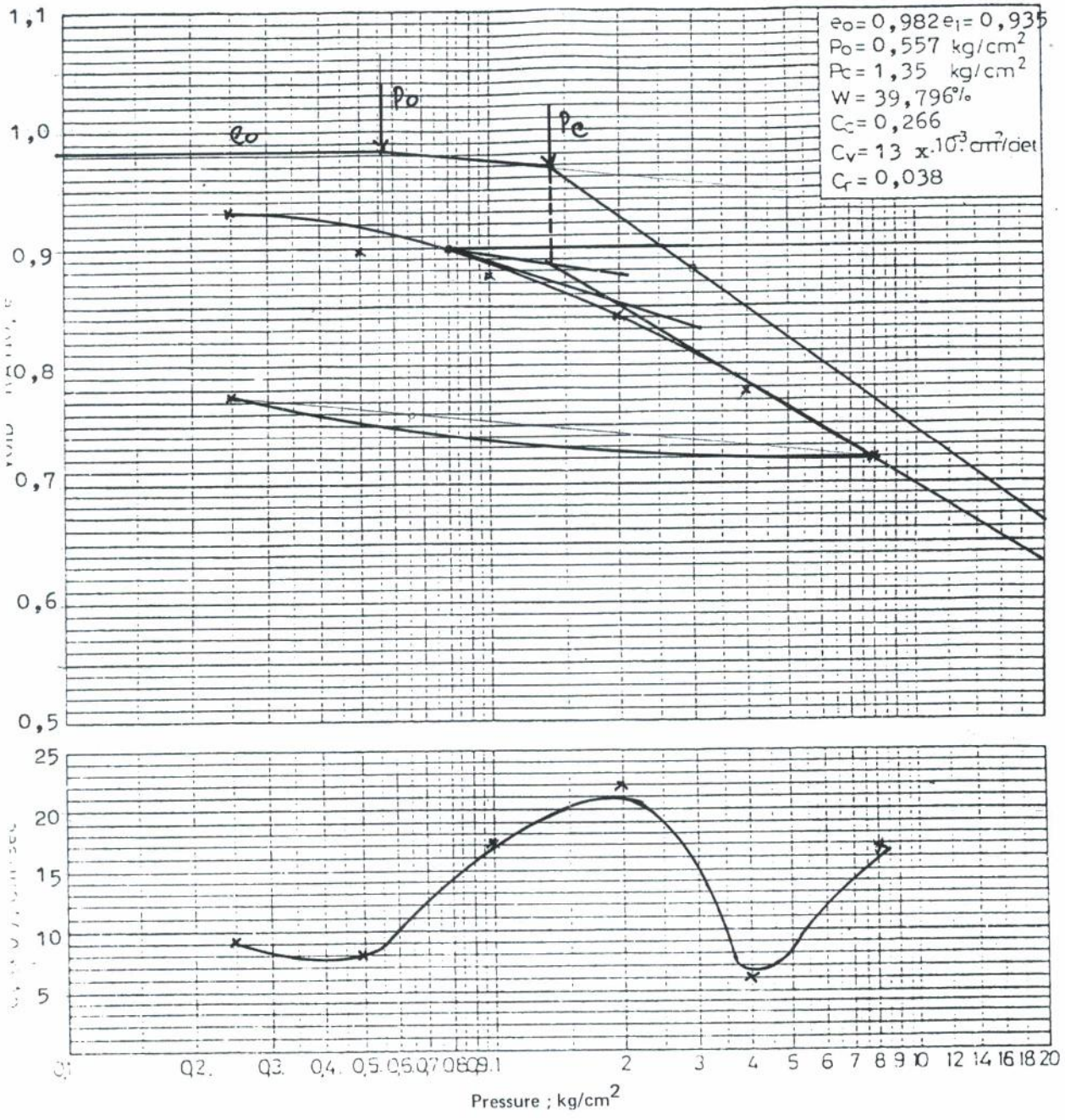


LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

CONSOLIDATION TEST

Project : PT MULTI RASA AGUNG
Location : JATAKE TANGERANG
Boring no : B.2

Depth of sample : 300 - 345
Date of test : APRIL 1993
Test by : IR. A ACHMAD KARMANA



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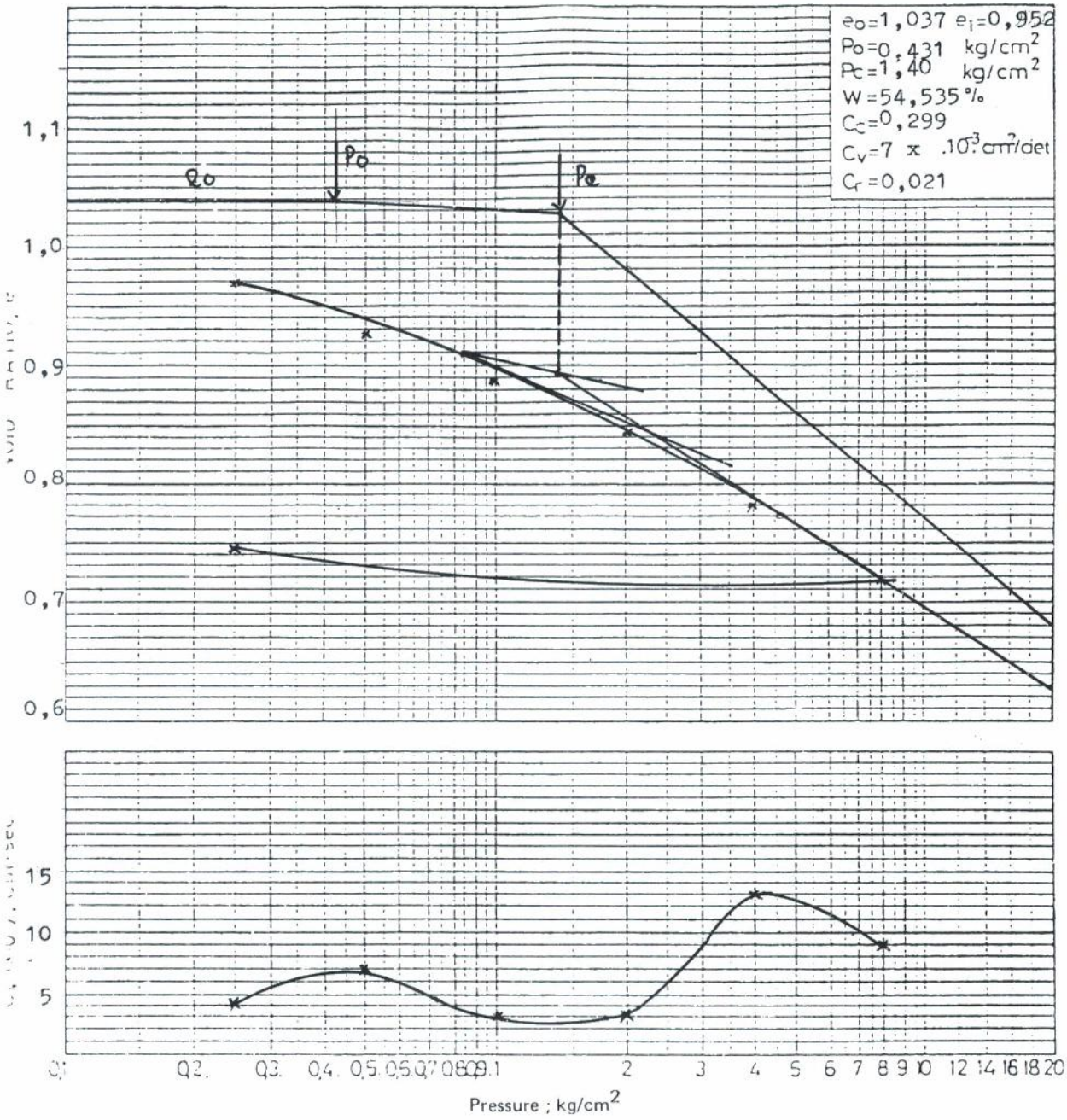
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

CONSOLIDATION TEST

Project : PT MULTI RASA AGUNG
Location : JATAKE TANGERANG
Boring no : B.3

Depth of sample : 200 - 245
Date of test : APRIL 1993
Test by : IR. A ACHMAD KARMANA

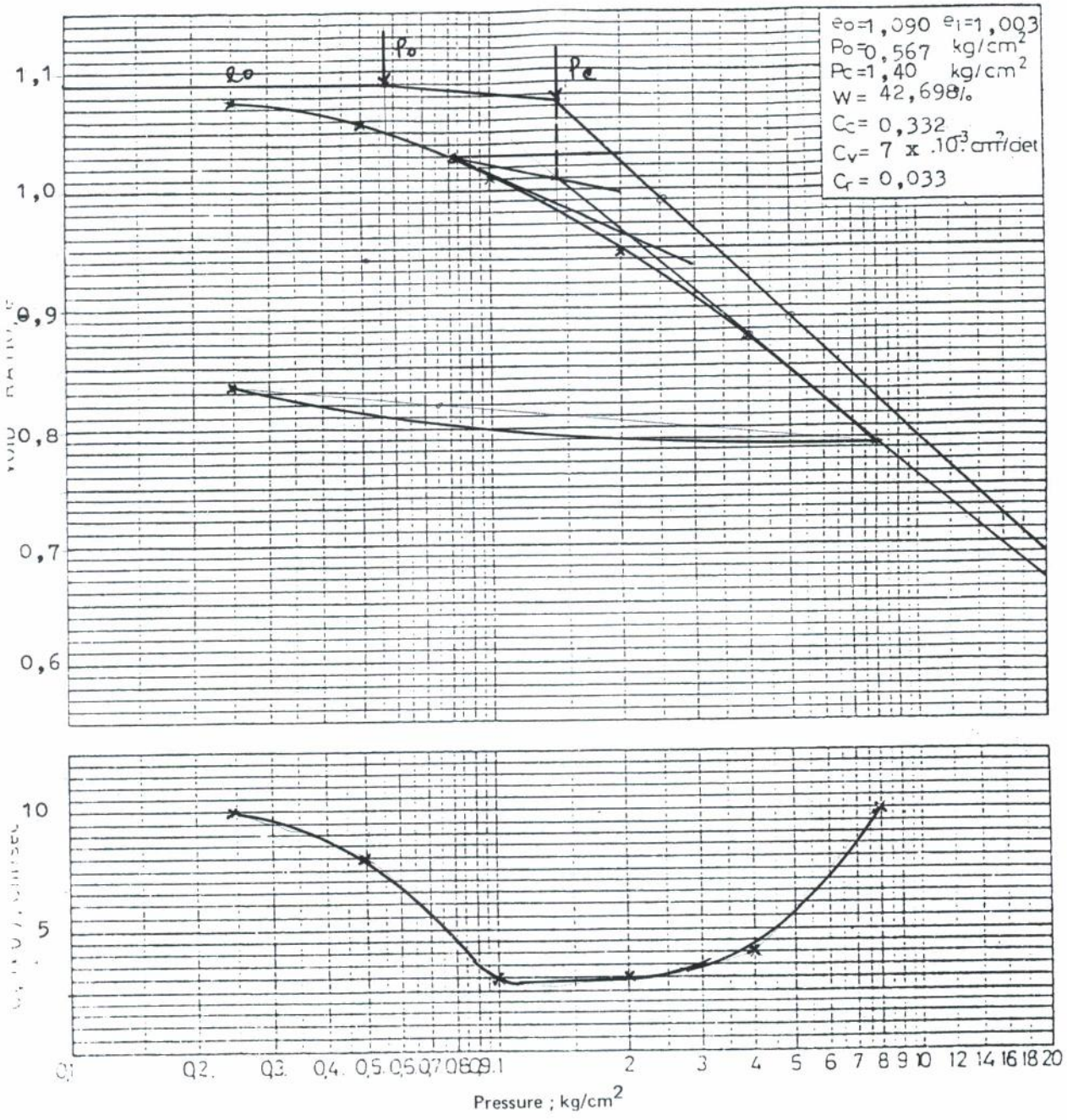


LABORATORIUM MEKANIKA TANAH
JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

CONSOLIDATION TEST

Project : PT MULTI RASA AGUNG
Location : JATAKE TANGERANG
Boring no : B.3

Depth of sample : 300 - 345
Date of test : APRIL 1993
Test by : IR. A ACHMAD KARMANA



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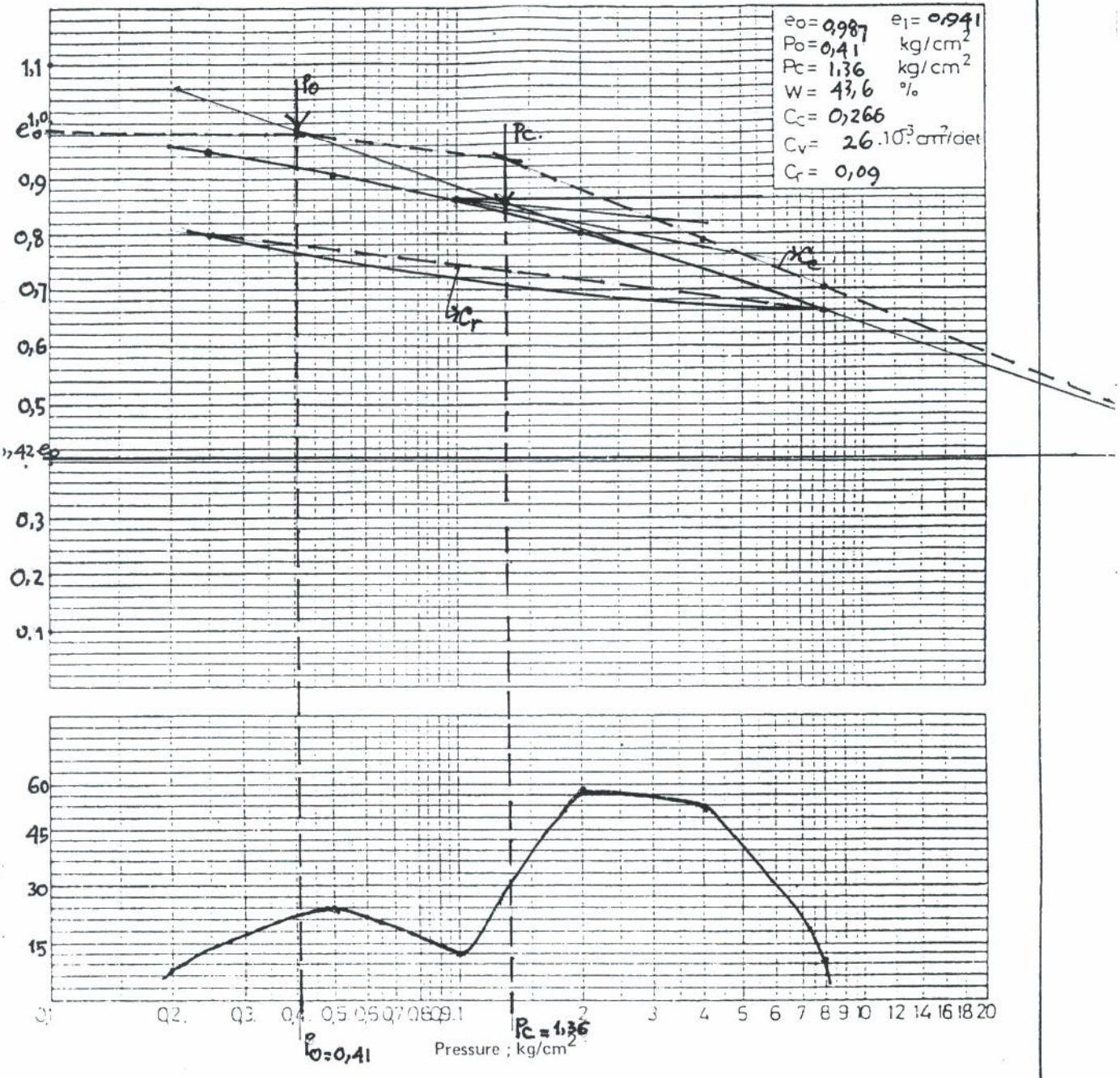
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

CONSOLIDATION TEST

Project : PT. MULTI RASA AGUNG
Location : JATAKE TANGERANG
Boring no : B.4

Depth of sample : 200 - 245
Date of test : APRIL 1993
Test by : FAUZI BULDAN.IR



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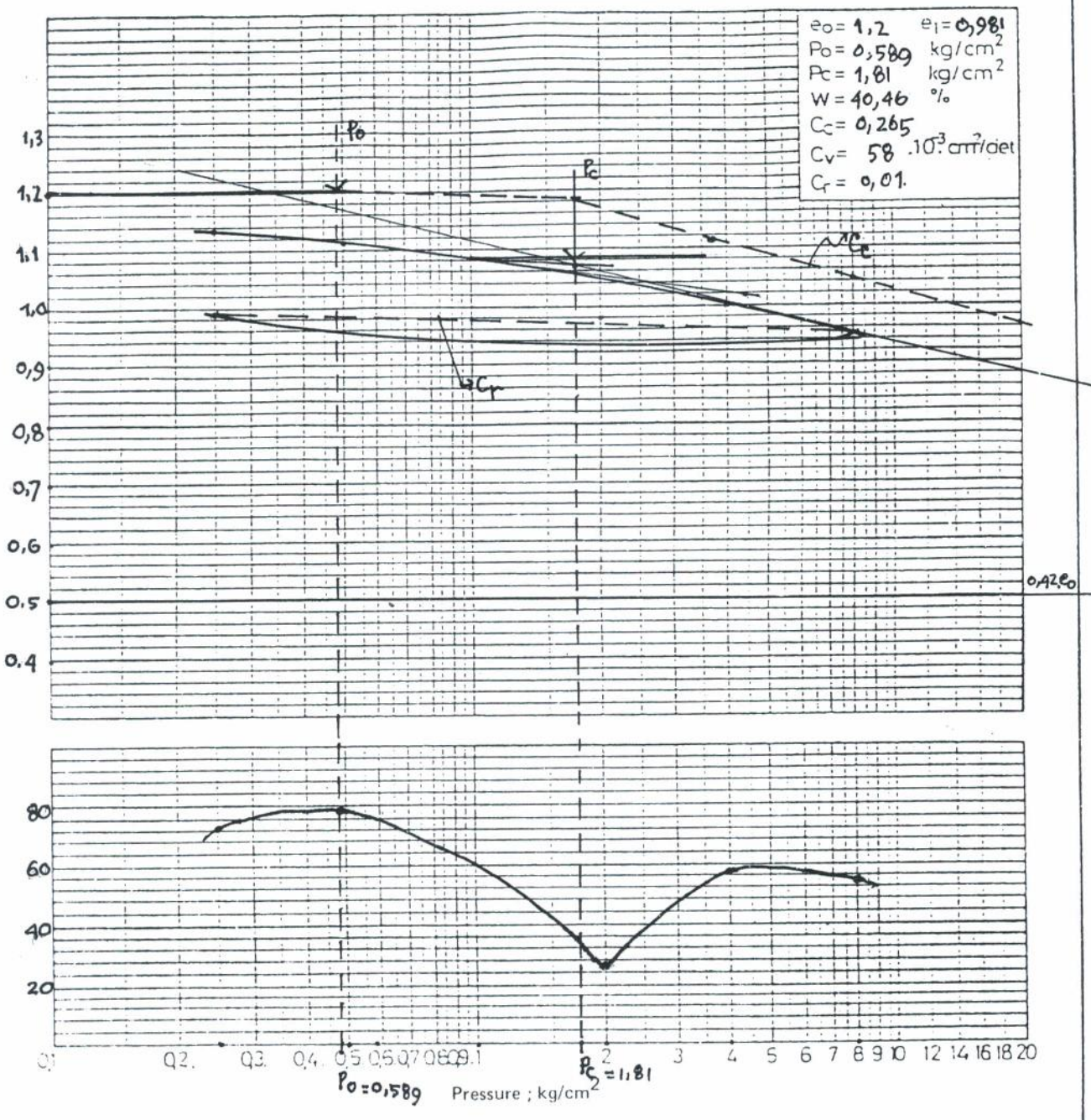
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

CONSOLIDATION TEST

Project : PT MULTI RASA AGUNG
Location : JATAKE TANGERANG
Boring no : B.4

Depth of sample : 300 - 345
Date of test : APRIL 1993
Test by : FAUZI BULDAN.IR



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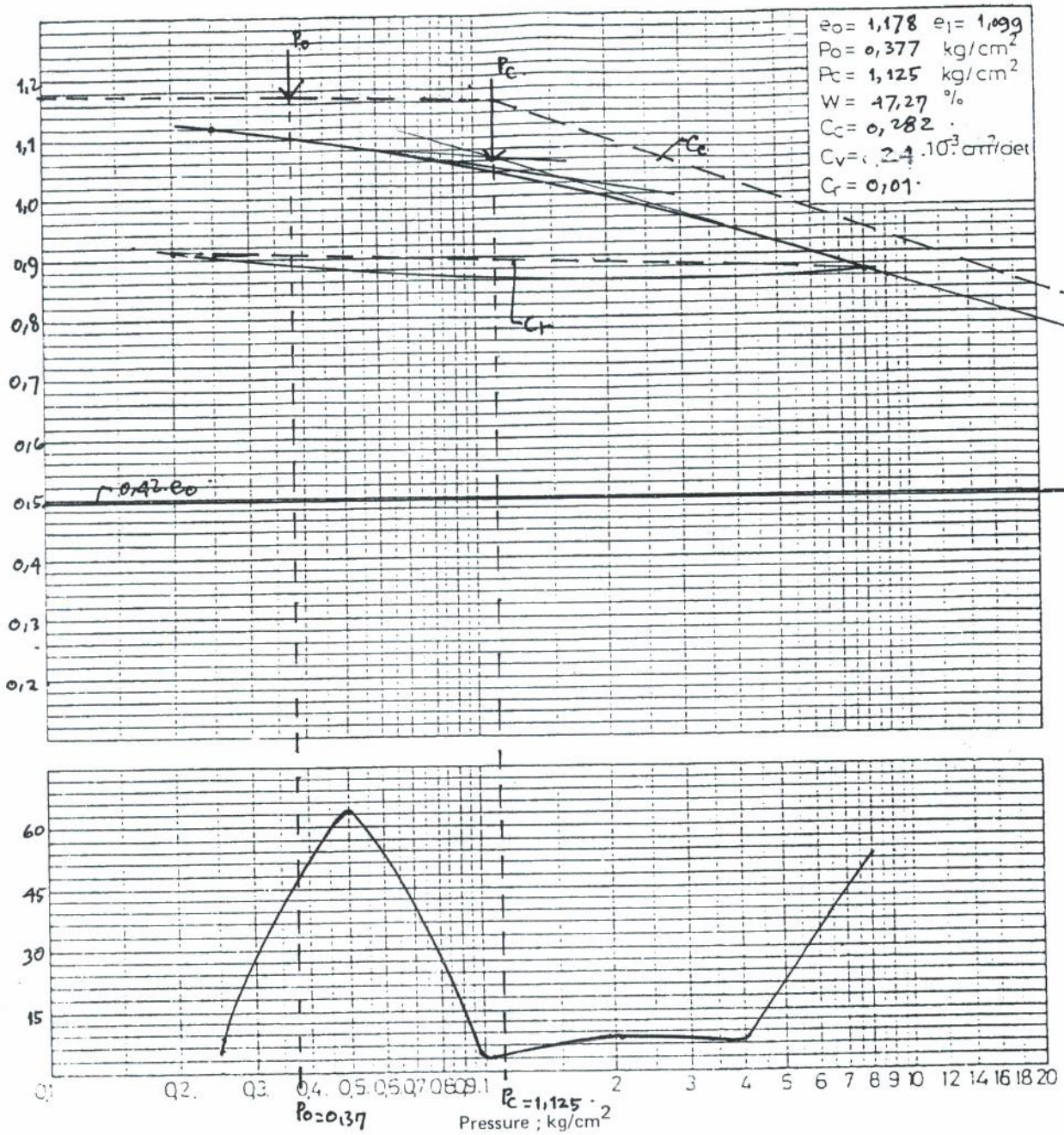
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

CONSOLIDATION TEST

Project : PT. MULTI RASA AGUNG
Location : JATAKE TANGERANG
Boring no : B.5

Depth of sample : 200 - 245
Date of test : APRIL 1993
Test by : FAUZI BULDA.IR



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JURUSAN TEKNIK SIPIL - FTSP.
INSTITUT SAINS DAN TEKNOLOGI NASIONAL - JAKARTA
Kampus ISTN Bhumi Srengseng Telp. 7270092

CONSOLIDATION TEST

Project : PT. MULTI RASA AGUNG
Location : JATAKE TANGERANG
Boring no : B.5

Depth of sample : 275 - 320
Date of test : APRIL 1993
Test by : PAUZI BULDAN.IR