

*LAMPPIRAN*



**KARTU PESERTA TUGAS AKHIR**

NO	N A M A	NO.MHS.	BID.STUDI
1.	Rahma Angelia	01 511 252	Teknik Sipil
<b>JUDUL TUGAS AKHIR</b>			
Analisis Dimensi Pondasi Dangkal Pada Tanah Dasar Tanpa Dan Dicampur Kapur Berdasarkan Kuat Dukung Dengan Metode Meyerhof			

<b>PERIODE KE</b>	: II ( Des.06- Mei.07 )
<b>TAHUN</b>	: 2006 - 2007
Sampai Akhir Mei 2007	

No.	Kegiatan	Bulan Ke :					
		Des.	Jan.	Peb.	Mar.	Apr.	Mei.
1	Pendaftaran						
2	Penentuan Dosen Pembimbing						
3	Pembuatan Proposal						
4	Seminar Proposal						
5	Konsultasi Penyusunan TA.						
6	Sidang - Sidang						
7	Pendadaran						

Dosen Pembimbing I : Ibnu Sudarmadji,Ir,H,MS

Dosen Pembimbing II : Ibnu Sudarmadji,Ir,H,MS



Jogjakarta ,18-Dec-06  
 a.n. Dekan,

Ir.H.Faisol AM, MS

<b>Catatan</b>	:	
Seminar	:	7/10 '06.
Sidang	:	22 Maret '07
Pendadaran	:	3 Mei '07

(Dekan)

Lampiran 1



**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN UII**  
Jln. Kaliurang KM 14,4 Telp. (0274) 895042 Yogyakarta 55584

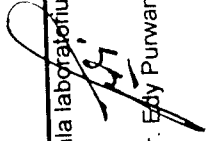
**PENGUJIAN KADAR AIR**

Proyek : Tugas Akhir  
Asal Sampel : Kasongan, Bantul, Yogyakarta

Dikerjakan : Angel  
Tanggal : November 2006

1	No Pengujian	1		2		3	
		a	b	a	b	a	b
2	Berat Container (W1)	22.16	21.54	21.98	21.74	21.81	21.97
3	Berat Container + Tanah Basah (W2)	28.22	28.53	32.68	31.39	30.96	31.54
4	Berat Container + Tanah Kering (W3)	26.23	26.25	29.21	28.28	28.06	28.48
5	Berat Air (Wa)	1.99	2.28	3.47	3.11	2.9	3.06
6	Berat Tanah Kering (Wt)	4.07	4.71	7.23	6.54	6.25	6.51
7	Kadar Air (Wa/Wt) x 100%	48.89	48.41	47.99	47.55	46.40	47.00
8	Kadar Air rata-rata (%)	47.71					

Kepala laboratorium,

  
Dr. Ir. Eby Purwanto, CES. DEA.



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 Jln. Kaliurang KM 14,4 Telp. (0274) 895042 Yogyakarta 55584

PENGUJIAN BERAT VOLUME

Proyek : Tugas Akhir  
 Asal Sampel : Kasongan, Bantul, Yogyakarta  
 Dikerjakan : Angel  
 Tanggal : 13 November 2006

1	No Pengujian	0.5			1.5		
		1	2	3	4		
2	Diameter ring (d)	6.33	6.43	6.33	6.43		
3	Tinggi cincin (t)	2.35	2.35	2.35	2.35		
4	Volume ring (V)	73.92	76.271	73.917	76.271		
5	Berat ring (W1)	67.61	69.2	69.76	67.65		
6	Berat ring + tanah basah (W2)	198.42	195.28	196.24	188.24		
7	Berat tanah basah (W2-W1)	130.81	126.08	126.48	120.59		
8	Berat volume tanah (Y)	1.77	1.82	1.81	1.78		
9	Berat volume rata-rata (gr/cm <sup>3</sup> )				1.80		

Kepala laboratorium, im,

Dr. Ir. Eddy Purwanto, CES. DEA.



**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN UJI**  
 Jln. Kaliurang KM 14,4 Telp. (0274) 895042 Yogyakarta 55584

**PENGUJIAN BERAT JENIS**

Proyek : Tugas Akhir  
 Asal Sampel : Kasongan, Bantul, Yogyakarta

Dikerjakan : Angel  
 Tanggal : November 2006

No. Pengujian	1	2	3
Berat piknometer	20.44	20.28	21.96
Berat piknometer + Tanah Kering (W2)	32.94	35.94	37.95
Berat Piknometer + Tanah + Air (W3)	79.08	80.8	89.2
Berat Piknometer + Air (W4)	71.12	71.58	79.71
Temperatur (t°)	26.5	26	26
Bj air pada temperatur	0.99668	0.99682	0.99682
Bj air pada 27.5 °C	0.99641	0.99641	0.99641
Berat tanah kering (Wt)	12.5	15.66	15.99
A = Wt + W4	83.62	87.24	95.7
I = A - W3	4.54	6.44	6.5
Berat jenis, Gs (t°) = Wt/I	2.75	2.43	2.46
Gs pada 27.5°C = Gs(t°) . [Bj air t / Bj air t 27.5]	2.754	2.433	2.461
Berat jenis rata-rata Gs	2.55		

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**PEMADATAN TANAH**  
**Proctor test**

PROYEK : Tugas Akhir  
 Asal Sampel : Kasongan, Bantul  
 NO Sampel : 1  
 Komposisi : Tanah asli

DIKERJAKAN : Angel  
 TANGGAL : Nov-06

DATA SILINDER	
1	Diameter ( $\phi$ ) cm : 10.16
2	Tinggi ( H ) cm : 11.6
3	Volume ( V ) cm <sup>3</sup> : 940.45
4	Berat gram : 1875

DATA PENUMBUK	
Berat (kg)	2.530
Jumlah lapis	3
Jumlah tumbukan /lapis	25
Tinggi jatuh	30.48

Berat jenis Gs	2.55
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		PENAMBAHAN AIR				
		2000	2000	2000	2000	2000
1	Berat tanah basah gram	2000	2000	2000	2000	2000
2	Kadar air mula-mula %	19.930	19.93	19.93	19.93	19.93
3	Penambahan air %	5	10	15	20	25
4	Penambahan air ml	100	200	300	400	500

PENGUJIAN PEMADATAN SILINDER		1	2	3	4	5
1	Nomor pengujian					
2	Berat silinder + tanah padat gram	3117	3340	3479	3456	3420
3	Berat tanah padat gram	1242	1465	1604	1581	1545
4	Berat volume tanah gr/cm <sup>3</sup>	1.321	1.558	1.706	1.681	1.643

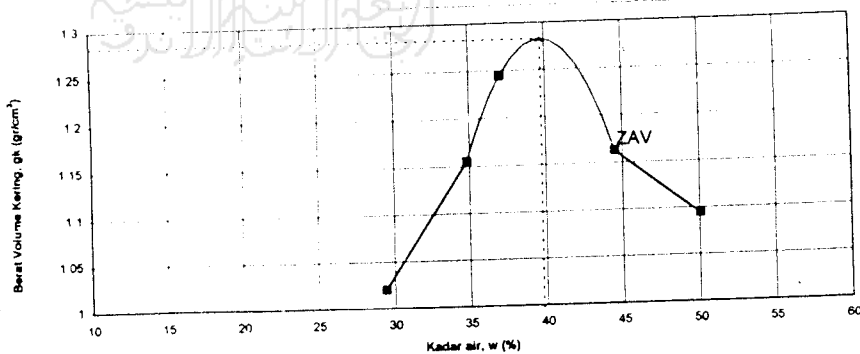
PENGUJIAN KADAR AIR		1		2		3		4		5	
1	NOMOR PERCOBAAN	a	b	a	b	a	b	a	b	a	b
2	Nomor cawan										
3	Berat cawan kosong gram	21.62	21.76	22.13	22.04	22.33	21.82	22.08	21.85	21.92	21.92
4	Berat cawan + tanah basah gram	39.29	36.23	37.44	36.32	34.08	39.19	35.01	37.39	38.77	39.12
5	Berat cawan + tanah kering gram	35.22	32.98	33.54	32.58	30.92	34.47	31.02	32.61	33.17	33.38
8	Kadar air = w %	29.93	28.97	34.18	35.48	36.79	37.31	44.63	44.42	49.78	50.06
9	Kadar air rata-rata		29.45		34.83		37.05		44.53		50.06
10	Berat volume tanah kering gr/cm <sup>3</sup>		1.020		1.155		1.244		1.163		1.095

BERAT VOLUME KERING  
 MAKSIMUM (gr/cm<sup>3</sup>)

1.28309

KADAR AIR OPTIMUM (%)

39.76



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**LABORATORIUM MEKANIKA TANAH**  
**JURUSAN TEKNIK SIPIL FTSP**  
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**PENGUJIAN BATAS CAIR**

**PROYEK** Tugas Akhir  
**LOKASI** Kasongan, Bantul, Yogyakarta

Tanggal November 2006  
 Dikerjakan Angel

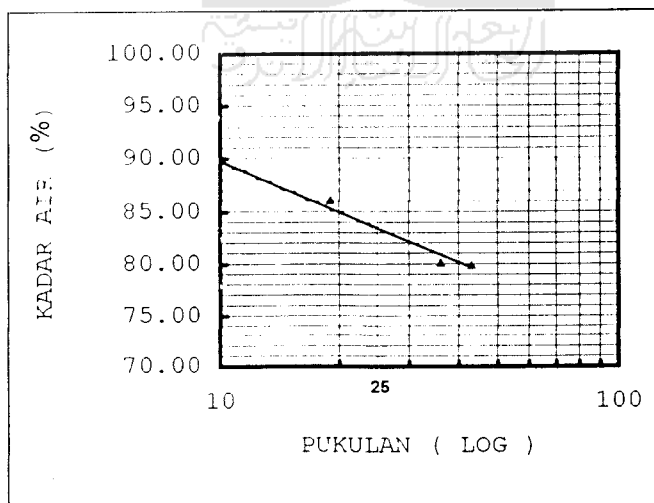
NO	NO. PENGUJIAN	I		II		III		IV	
		1	2	3	4	5	6	7	8
1	NO CAWAN								
2	Berat cawan kosong g	21.79	21.30	21.65	21.65	21.83	21.63	22.12	21.76
3	Berat cawan + tanah basah (gr)	33.56	33.02	33.40	34.36	32.97	32.04	33.08	32.32
4	Berat cawan + tanah kering (gr)	28.01	27.43	27.98	28.46	28.01	27.41	28.23	27.61
5	Berat air (3) - (4)	5.55	5.59	5.42	5.90	4.96	4.63	4.85	4.71
6	Berat tanah kering (4) - (2)	6.22	6.13	6.33	6.81	6.18	5.78	6.11	5.85
7	KADAR AIR = $\frac{(5)}{(6)} \times 100\%$	89.23	91.19	85.52	86.64	80.26	80.10	79.38	80.51
8	KADAR AIR RATA RATA =		90.21		86.13		80.18		79.95
9	PUKULAN		9		19		36		43

**PENGUJIAN BATAS PLASTIS**

NO		1	2
1	NO CAWAN		
2	BERAT CAWAN KOSONG	21.84	21.96
3	BERAT CAWAN + TANAH BASAH	24.37	26.04
4	BERAT CAWAN + TANAH KERING	23.72	24.90
5	BERAT AIR (3)-(4)	0.65	1.14
6	BERAT TANAH KERING (4)-(2)	1.88	2.94
7	KADAR AIR = $\frac{(5)}{(6)} \times 100\%$	34.57	38.78
8	KADAR AIR RATA-RATA =		36.67

**KESIMPULAN**

FLOW INDEX **6.671**  
 BATAS CAIR **83.44**  
 BATAS PLASTIS **36.67**  
 INDEX PLASTISITAS **46.77**



Kepala laboratorium,

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**PENGUJIAN BATAS CAIR**

PROYEK : Tugas Akhir  
 LOKASI : Kasongan, Bantul, Yogyakarta

Tanggal : November 2006  
 Dikerjakan : Angel

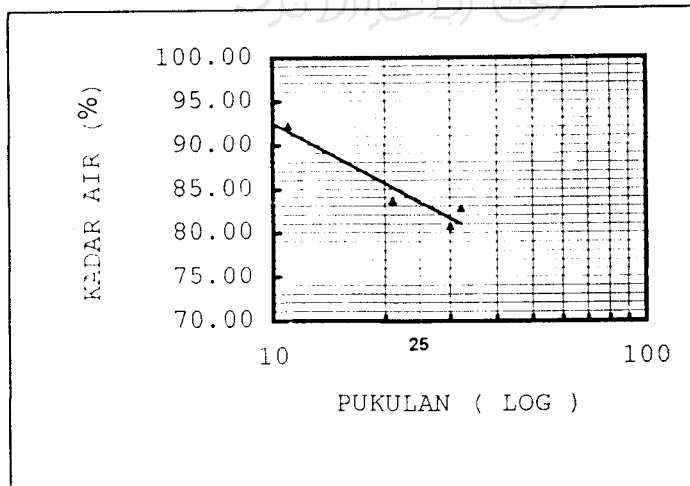
NO	NO. PENGUJIAN	I		II		III		IV	
		1	2	3	4	5	6	7	8
1	NO CAWAN								
2	Berat cawan kosong	21.80	22.19	21.62	21.96	21.80	21.99	21.97	21.81
3	Berat cawan + tanah basah (gr)	33.09	35.78	35.79	33.40	33.63	37.29	31.00	32.19
4	Berat cawan + tanah kering (gr)	27.69	29.24	29.33	28.19	28.35	30.45	26.91	27.49
5	Berat air (3) - (4)	5.40	6.54	6.46	5.21	5.28	6.84	4.09	4.70
6	Berat tanah kering (4) - (2)	5.89	7.05	7.71	6.23	6.55	8.46	4.94	5.68
7	KADAR AIR = $\frac{(5)}{(6)} \times 100\%$	91.68	92.77	83.79	83.63	80.61	80.85	82.79	82.75
8	KADAR AIR RATA-RATA =		92.22		83.71		80.73		82.77
9	PUKULAN		11		21		30		32

**PENGUJIAN BATAS PLASTIS**

NO		1	2
1	NO CAWAN		
2	BERAT CAWAN KOSONG	21.77	22.05
3	BERAT CAWAN + TANAH BASAH	25.44	25.51
4	BERAT CAWAN + TANAH KERING	24.49	24.57
5	BERAT AIR (3)-(4)	0.95	0.94
6	BERAT TANAH KERING (4)-(2)	2.72	2.52
7	KADAR AIR = $\frac{(5)}{(6)} \times 100\%$	34.93	37.30
8	KADAR AIR RATA-RATA =		36.11

**KESIMPULAN**

FLOW INDEX	:	8.580
BATAS CAIR	:	83.46
BATAS PLASTIS	:	36.11
INDEX FLASTISITAS	:	47.34



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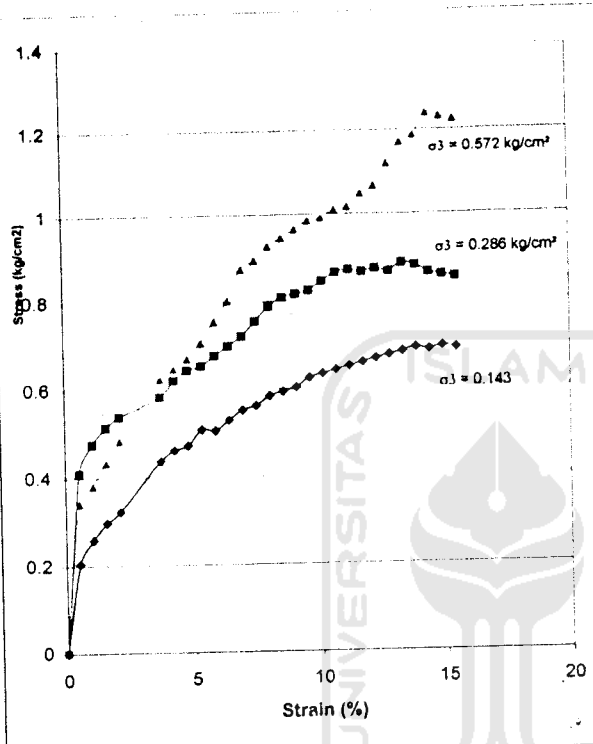
**LABORATORIUM MEKANIK TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14.4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay

Sample No. : Undisturbed  
 Date : November 2006  
 Tested by : Angel

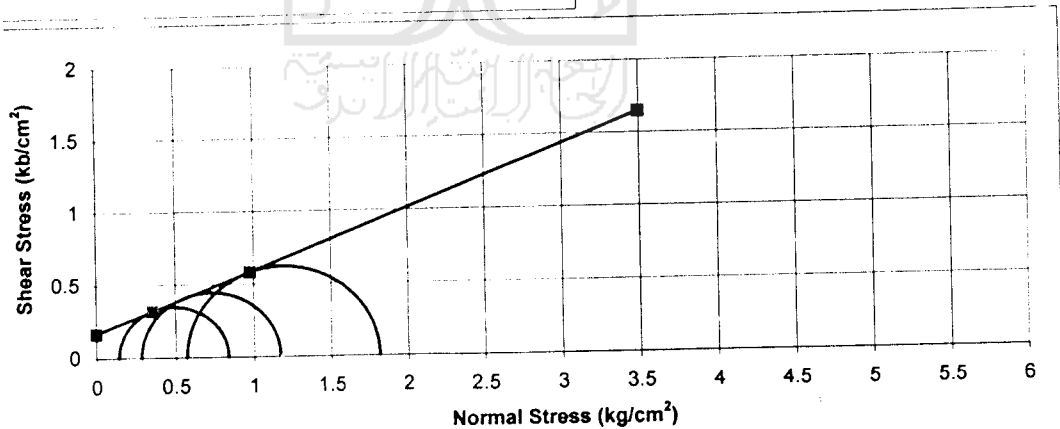


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	139.12	134.88	132.32

Water Content		
Wt Container (cup), gr	21.79	21.84
Wt of Cup + Wet soil, gr	33.52	34.00
Wt of Cup + Dry soil, gr	29.87	30.80
Water Content %	45.17	44.64
Average water content %	44.91	

$\gamma_d$ gram/cm³	1.552777	1.505453	1.47688
$\gamma$ gram/cm³	1.07156	1.038902	1.019184

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	0.693228	0.885826	1.241446
$\sigma_1 = \Delta\sigma + \sigma_3$	0.836228	1.171826	1.813446
$(\sigma_1 + \sigma_3)/2$	0.489614	0.728913	1.192723
$(\sigma_1 - \sigma_3)/2$	0.346614	0.442913	0.620723
Angle of shearing resistance ( $\phi$ )	22.87961		
Apperen cohesion (kg/cm²)	0.169553		



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LAMPIRAN TRIAKSIAL UU  
PEMERAMAN 3 HARI SAMPEL 1





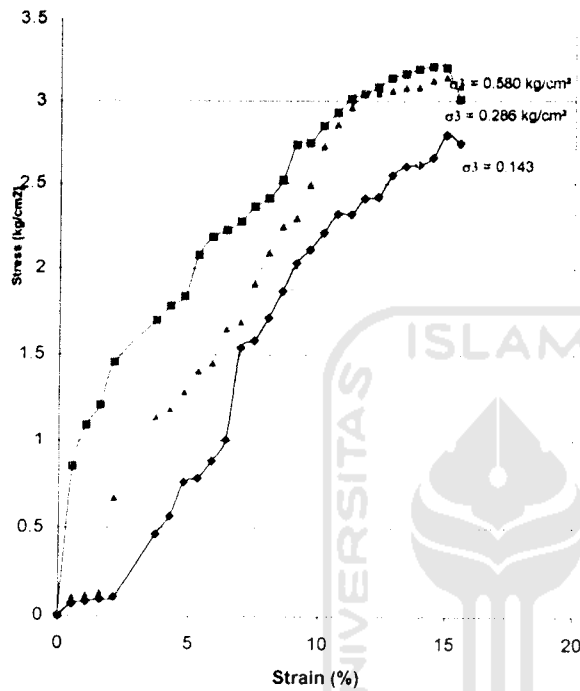
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 3 Hari.

Sample No. : Tanah + 3% Kapur  
 Date : 11 Desember 2006  
 Tested by : Angel  
 No Sampel : 1

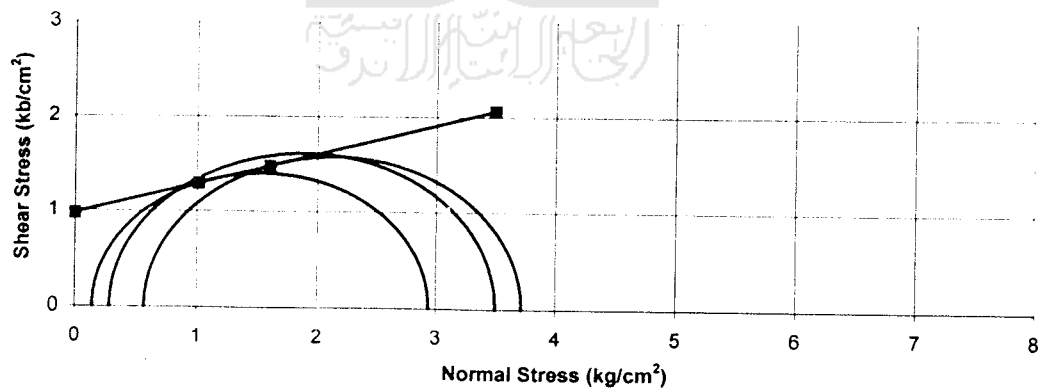


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	158.18	156.55	158.20

Water Content		
Wt Container (cup), gr	21.85	21.93
Wt of Cup + Wet soil, gr	31.75	33.45
Wt of Cup + Dry soil, gr	28.80	29.92
Water Content %	42.45	44.18
Average water content %	43.31	

γ <sub>d</sub> gram/cm³	1.765514	1.747321	1.765737
γ <sub>d</sub> gram/cm³	1.231928	1.219233	1.232083

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	2.796412	3.215937	3.148901
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	2.939412	3.501937	3.720901
(σ <sub>1</sub> + σ <sub>3</sub> )/2	1.541206	1.893968	2.146451
(σ <sub>1</sub> - σ <sub>3</sub> )/2	1.398206	1.607968	1.574451
Angle of shearing resistance (φ)	17.22714		
Apperen cohesion (kg/cm²)	0.980919		



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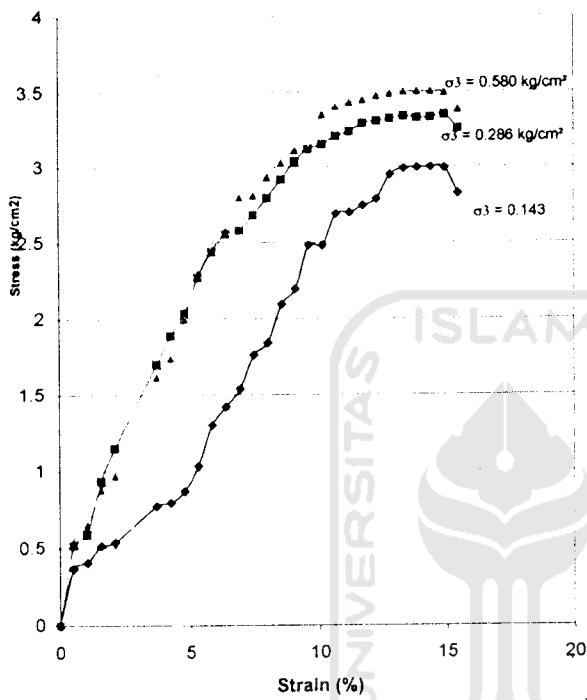
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**TRIAxIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 3 Hari

Sample : Tanah + 4% Kapur  
 Date : November 2006  
 Tested by : Angel  
 No Sampel : 1

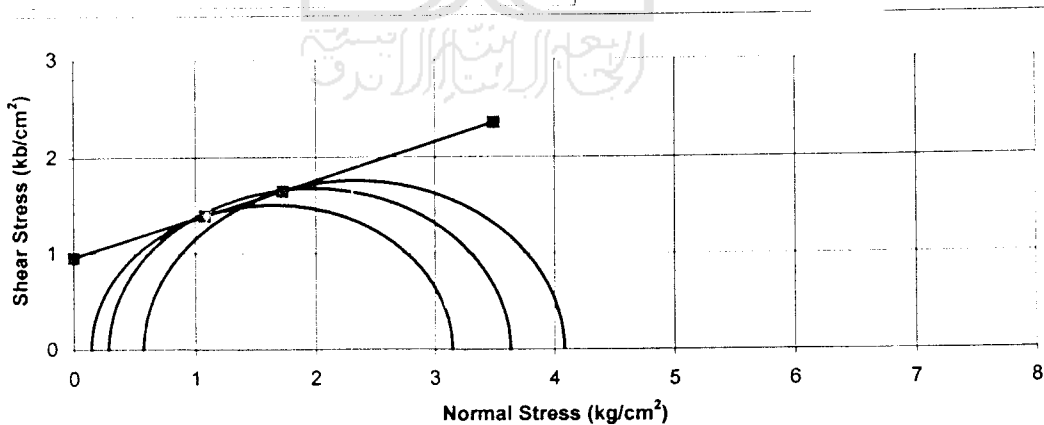


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	157.41	156.99	156.38

Water Content		
Wt Container (cup), gr	21.93	21.90
Wt of Cup + Wet soil, gr	34.76	32.41
Wt of Cup + Dry soil, gr	30.73	29.19
Water Content %	45.80	44.17
Average water content %	44.98	

γ <sub>d</sub> gram/cm³	1.75692	1.752232	1.745424
γ <sub>d</sub> gram/cm³	1.211813	1.208579	1.203883

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	3.003118	3.348645	3.511519
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	3.146118	3.634645	4.083519
(σ <sub>1</sub> + σ <sub>3</sub> )/2	1.644559	1.960323	2.32776
(σ <sub>1</sub> - σ <sub>3</sub> )/2	1.501559	1.674323	1.75576
Angle of shearing resistance (φ)	21.76906		
Apperen cohesion (kg/cm²)	0.960104		



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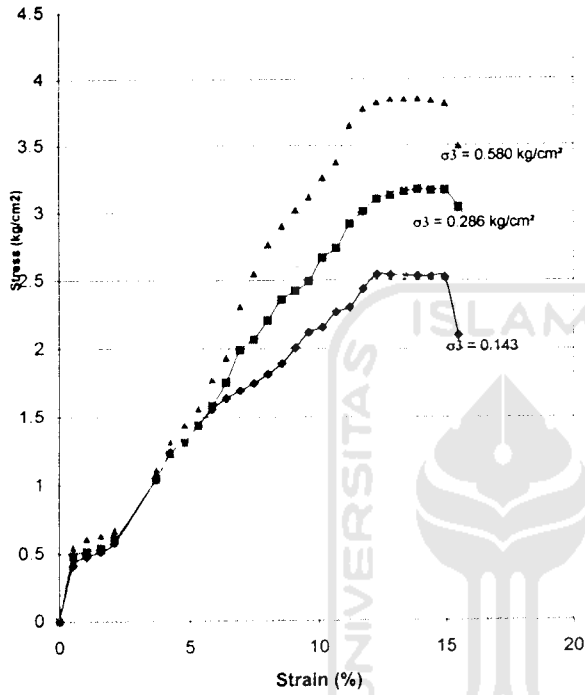
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Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 3 Hari

Sample : Tanah + 5% Kapur  
 Date : 14 Desember 2006  
 Tested by : Angel  
 No sample : 1

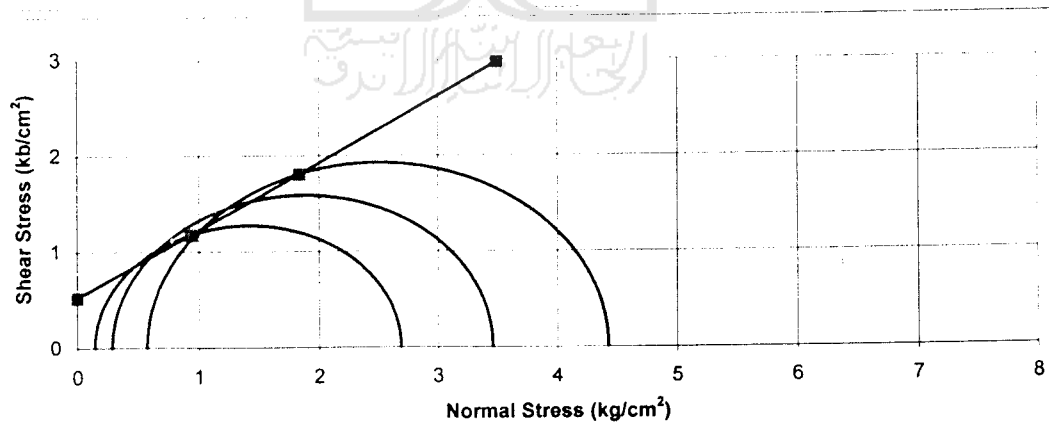


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	158.01	158.07	158.10

Water Content		
Wt Container (cup), gr	21.92	21.76
Wt of Cup + Wet soil, gr	33.30	34.44
Wt of Cup + Dry soil, gr	29.91	30.60
Water Content %	42.43	43.44
Average water content %	42.93	

$\gamma_d$ gram/cm³	1.763617	1.764286	1.764621
$\gamma$ gram/cm³	1.233872	1.234341	1.234575

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	2.544771	3.176489	3.854616
$\sigma_1 = \Delta\sigma + \sigma_3$	2.687771	3.462489	4.426616
$(\sigma_1 + \sigma_3)/2$	1.415386	1.874245	2.499308
$(\sigma_1 - \sigma_3)/2$	1.272386	1.588245	1.927308
Angle of shearing resistance (o)	35.0078		
Apperen cohesion (kg/cm²)	0.522231		



Kepala laboratorium,

Dr. Ir. Edy Purwanto, CES. DEA.



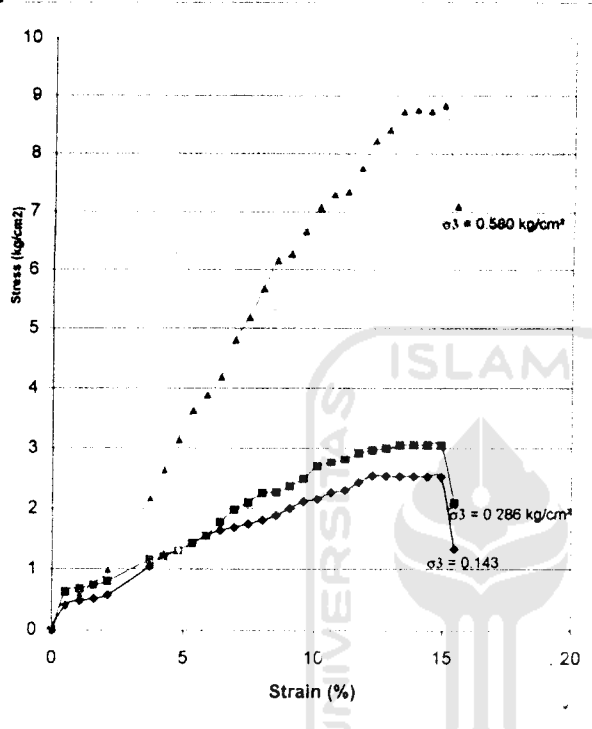
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax: 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraan : 3 Hari

Sample : Tanah + 6% Kapur  
 Date : 15 Desember 2006  
 Tested by : Angel  
 No Sample : 1

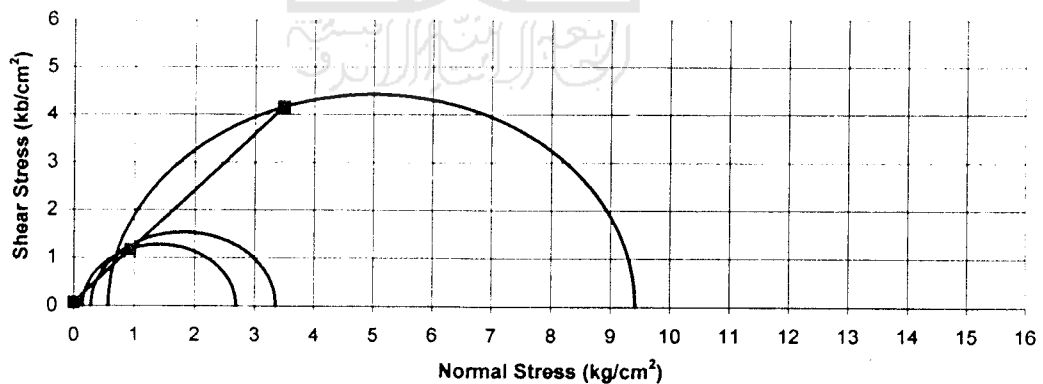


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	155.87	156.20	156.56

Water Content		
Wt Container (cup), gr	21.84	21.78
Wt of Cup + Wet soil, gr	31.58	31.45
Wt of Cup + Dry soil, gr	28.82	28.52
Water Content %	44.31	43.28
Average water content %	43.80	

γ <sub>d</sub> gram/cm³	1.739731	1.743415	1.747433
γ <sub>d</sub> gram/cm³	1.209867	1.212428	1.215223

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	2.544771	3.069416	8.847473
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	2.687771	3.355416	9.419473
(σ <sub>1</sub> + σ <sub>3</sub> )/2	1.415386	1.820708	4.995736
(σ <sub>1</sub> - σ <sub>3</sub> )/2	1.272386	1.534708	4.423736
Angle of shearing resistance (φ)	49.4866		
Apperen cohesion (kg/cm²)	0.081131		



Kepala laboratorium,

*[Signature]*  
 Dr. Ir/Edy Purwanto, CES. DEA.



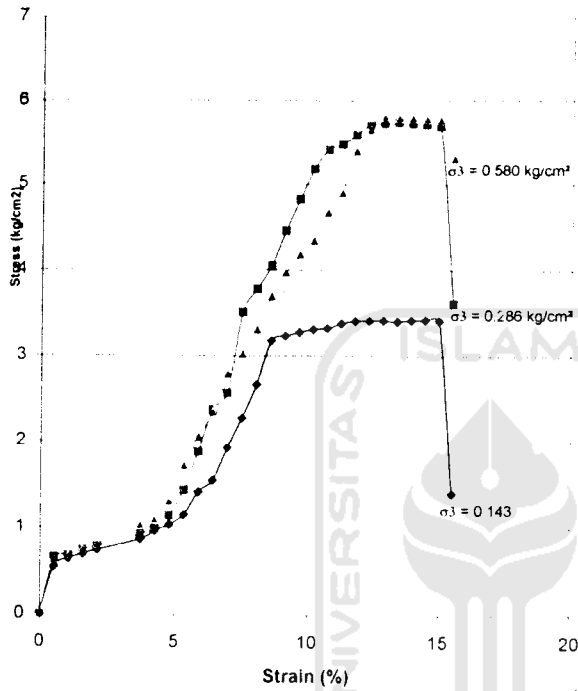
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 3 Hari

Sample : Tanah + 7% Kapur  
 Date : 16 Desember 2006  
 Tested by : Angel  
 No Sampel : 1

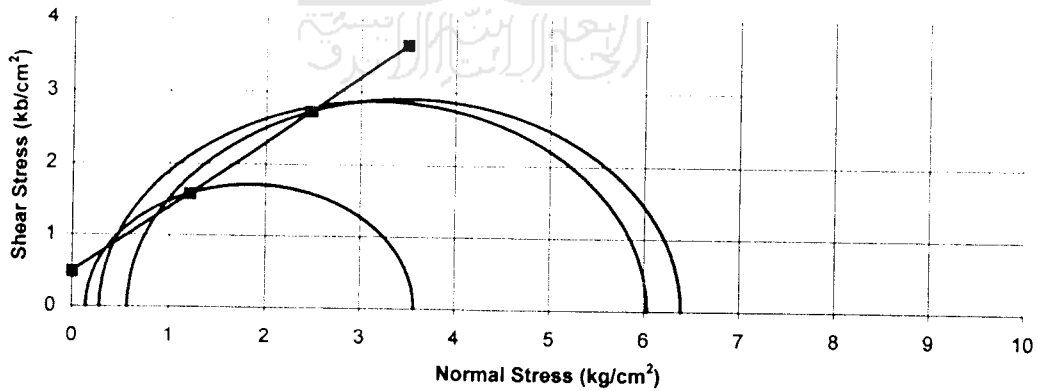


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm <sup>2</sup>	11.95	11.95	11.95
V cm <sup>3</sup>	89.59	89.59	89.59
Wt gram	150.83	151.47	153.03

Water Content		
Wt Container (cup), gr	22.10	21.78
Wt of Cup + Wet soil, gr	37.10	33.56
Wt of Cup + Dry soil, gr	32.41	29.92
Water Content %	45.49	44.72
Average water content %	45.10	

$\gamma_d$ gram/cm <sup>3</sup>	1.683478	1.690621	1.708033
$\gamma$ gram/cm <sup>3</sup>	1.16019	1.165113	1.177112

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	3.428756	5.745902	5.817394
$\sigma_1 = \Delta\sigma + \sigma_3$	3.571756	6.031902	6.389394
$(\sigma_1 + \sigma_3)/2$	1.857378	3.158951	3.480697
$(\sigma_1 - \sigma_3)/2$	1.714378	2.872951	2.908697
Angle of shearing resistance ( $\phi$ )	41.98981		
Apperen cohesion (kg/cm <sup>2</sup> )	0.495799		



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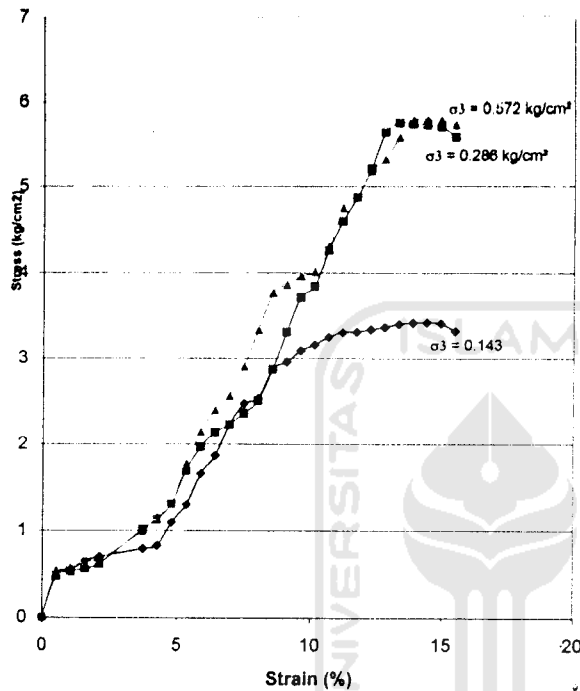
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 3 Hari

Sample No. : Tanah + 8% Kapur  
 Date : 16 Desember 2006  
 Tested by : Angel  
 No Sampel : 1

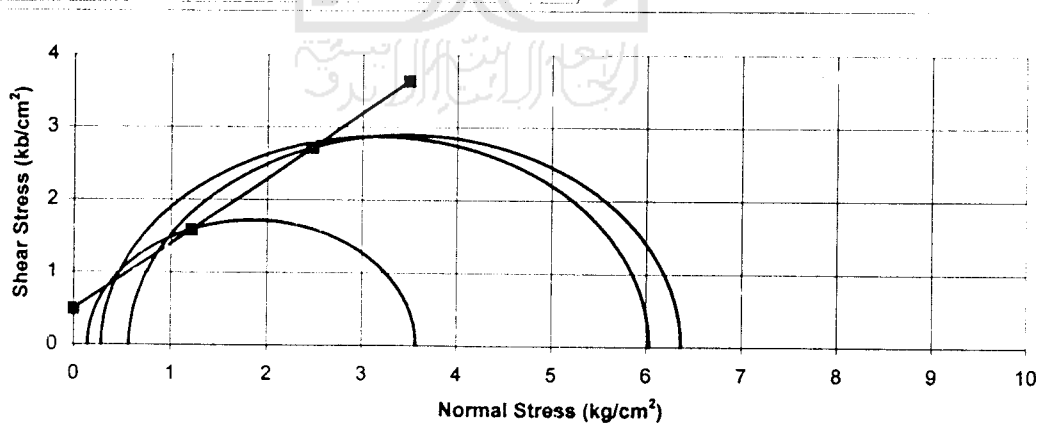


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.53	89.59
Wt gram	150.83	151.47	152.03

Water Content		
Wt Container (cup), gr	22.10	21.75
Wt of Cup + Wet soil, gr	35.79	33.61
Wt of Cup + Dry soil, gr	32.06	30.39
Water Content %	37.45	37.27
Average water content %	37.36	

$\gamma_d$ gram/cm³	1.683478	1.690621	1.708033
$\gamma$ gram/cm³	1.225603	1.230803	1.243479

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	3.428756	5.745902	5.793416
$\sigma_1 = \Delta\sigma + \sigma_3$	3.571756	6.031902	6.365416
$(\sigma_1 + \sigma_3)/2$	1.857378	3.158951	3.468708
$(\sigma_1 - \sigma_3)/2$	1.714378	2.872951	2.896708
Angle of shearing resistance ( $\phi$ )	41.88523		
Apperen cohesion ( $c$ ) (kg/cm²)	0.499808		



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LAMPIRAN TRIAKSIAL UU  
PEMERAMAN 3 HARI SAMPEL 2





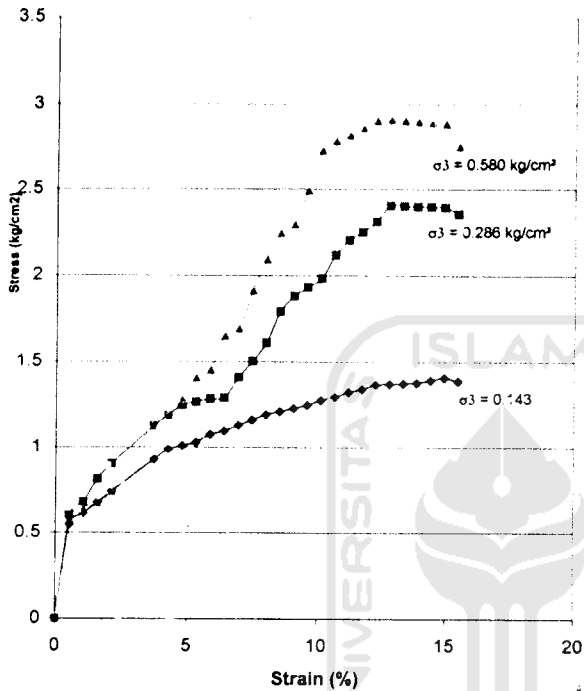
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 896042, 896707 fax 896330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemerami : 3 Hari

Sample No. : Tanah + 3 % Kapur  
 Date : November 2006  
 Tested by : Angel  
 Sample No. : 2

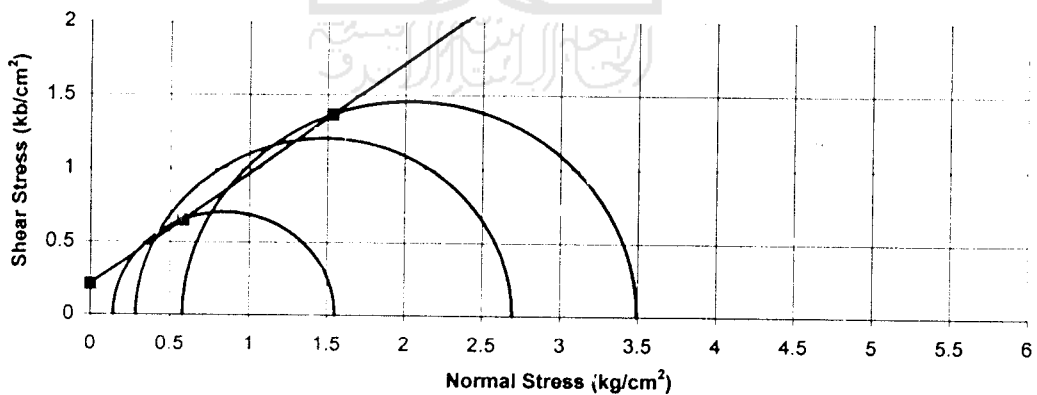


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	160.26	158.72	158.72

Water Content		
Wt Container (cup), gr	21.85	21.93
Wt of Cup + Wet soil, gr	31.75	33.45
Wt of Cup + Dry soil, gr	28.80	29.92
Water Content %	42.45	44.18
Average water content %	43.31	

$\gamma_d$ gram/cm³	1.78873	1.771541	1.771541
$\gamma_d$ gram/cm³	1.248127	1.236133	1.236133

$\sigma_3$	0.143	0.286	0.58
$\Delta\sigma = P/A$	1.409956	2.408859	2.914719
$\sigma_1 = \Delta\sigma + \sigma_3$	1.552956	2.694859	3.494719
$(\sigma_1 + \sigma_3)/2$	0.847978	1.490429	2.03736
$(\sigma_1 - \sigma_3)/2$	0.704978	1.204429	1.45736
Angle of shearing resistance (o)	36.8529		
Apperen cohesion (kg/cm²)	0.215998		



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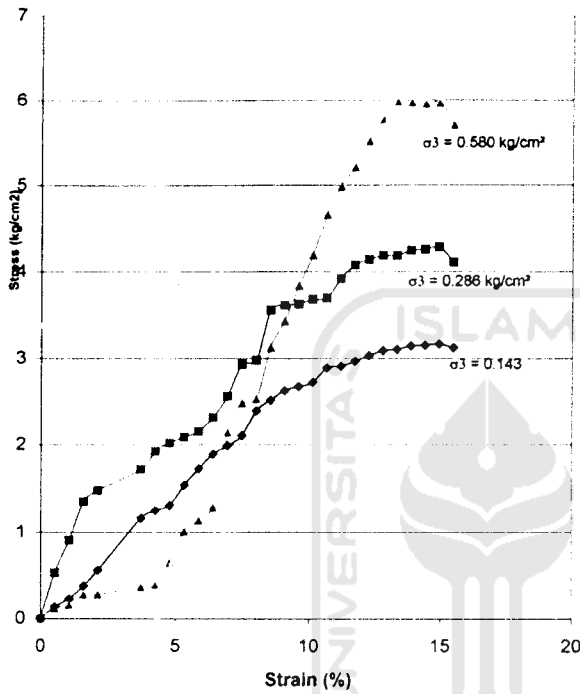
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 3 Hari

Sample No. : Tanah + 4% Kapur  
 Date : 12 Desember 2006  
 Tested by : Angel

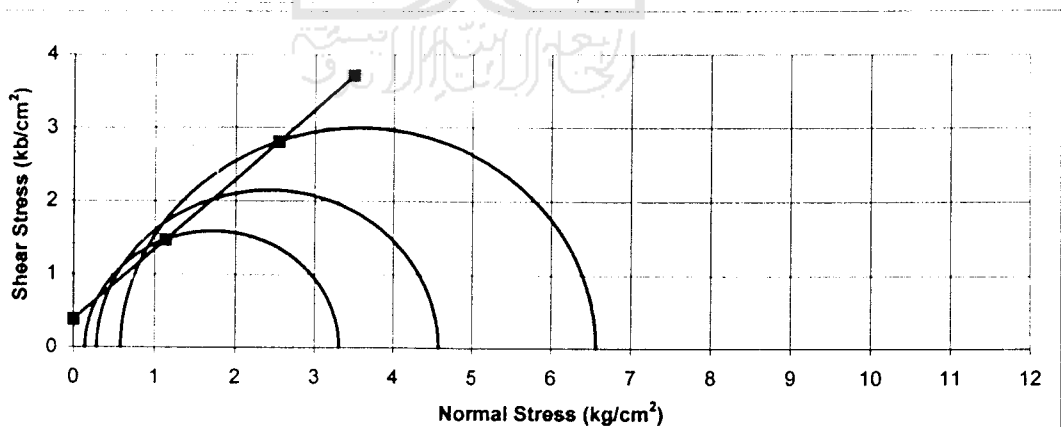


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	159.09	158.74	159.88

Water Content		
Wt Container (cup), gr	21.93	21.90
Wt of Cup + Wet soil, gr	34.76	32.41
Wt of Cup + Dry soil, gr	30.73	29.19
Water Content %	45.80	44.17
Average water content %	44.98	

γ <sub>d</sub> gram/cm³	1.775671	1.771765	1.784489
γ <sub>d</sub> gram/cm³	1.224746	1.222052	1.230828

σ <sub>3</sub>	0.143	0.286	0.58
Δσ = P/A	3.172401	4.288616	5.985314
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	3.315401	4.574616	6.565314
(σ <sub>1</sub> + σ <sub>3</sub> )/2	1.7292	2.430308	3.572657
(σ <sub>1</sub> - σ <sub>3</sub> )/2	1.5862	2.144308	2.992657
Angle of shearing resistance (φ)	43.49018		
Apperen cohesion (kg/cm²)	0.393995		



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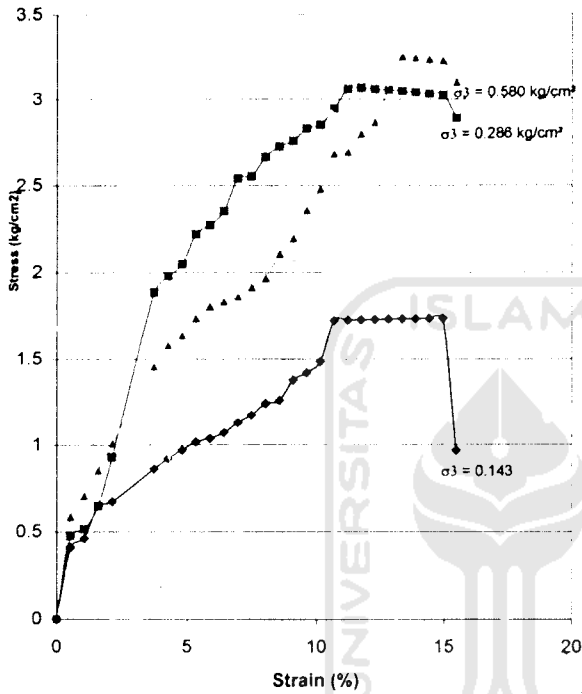
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 3 Hari

Sample No. : Tanah + 5% Kapur  
 Date : 14 Desember 2006  
 Tested by : Angel

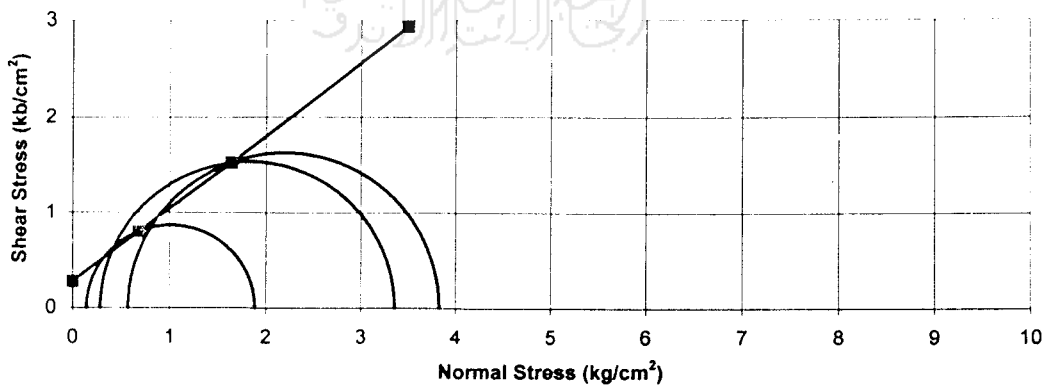


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm <sup>2</sup>	11.95	11.95	11.95
V cm <sup>3</sup>	89.59	89.59	89.59
Wt gram	158.53	158.37	158.48

Water Content		
Wt Container (cup), gr	21.92	21.76
Wt of Cup + Wet soil, gr	33.30	34.44
Wt of Cup + Dry soil, gr	29.91	30.60
Water Content %	42.43	43.44
Average water content %	42.93	

$\gamma_d$ gram/cm <sup>3</sup>	1.769421	1.767635	1.768863
$\gamma$ gram/cm <sup>3</sup>	1.237933	1.236684	1.237543

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	1.738946	3.072289	3.256011
$\sigma_1 = \Delta\sigma + \sigma_3$	1.881946	3.358289	3.828011
$(\sigma_1 + \sigma_3)/2$	1.012473	1.822145	2.200005
$(\sigma_1 - \sigma_3)/2$	0.869473	1.536145	1.628005
Angle of shearing resistance (o)	37.11218		
Apperen cohesion (kg/cm <sup>2</sup> )	0.286537		



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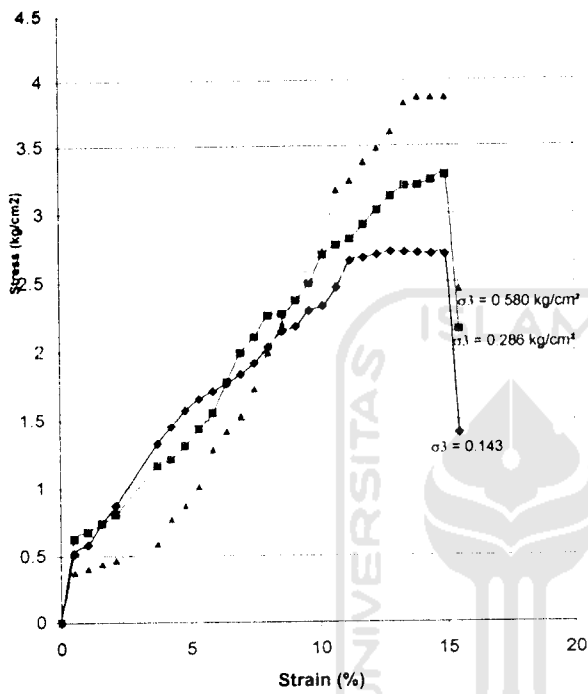
**LABORATORIUM MEKANIK TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 3 Hari

Sample No. : Tanah + 6% Kapur  
 Date : 15 Desember 2006  
 Tested by : Angel

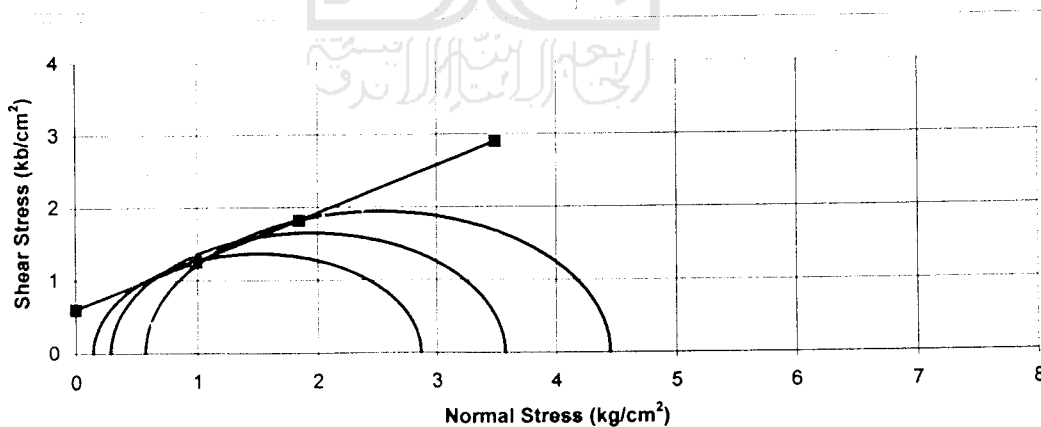


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	155.05	149.29	154.25

Water Content		
Wt Container (cup), gr	21.94	21.75
Wt of Cup + Wet soil, gr	31.58	31.45
Wt of Cup + Dry soil, gr	28.62	28.52
Water Content %	44.31	43.28
Average water content %	43.80	

$\gamma_d$ gram/cm³	1.730579	1.666289	1.72165
$\gamma_d$ gram/cm³	1.203502	1.158793	1.197292

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	2.72201	3.289897	3.87841
$\sigma_1 = \Delta\sigma + \sigma_3$	2.86501	3.575897	4.45041
$(\sigma_1 + \sigma_3)/2$	1.504005	1.930948	2.511205
$(\sigma_1 - \sigma_3)/2$	1.361005	1.644948	1.939205
Angle of shearing resistance (o)	33.27733		
Apperen cohesion (kg/cm²)	0.609421		



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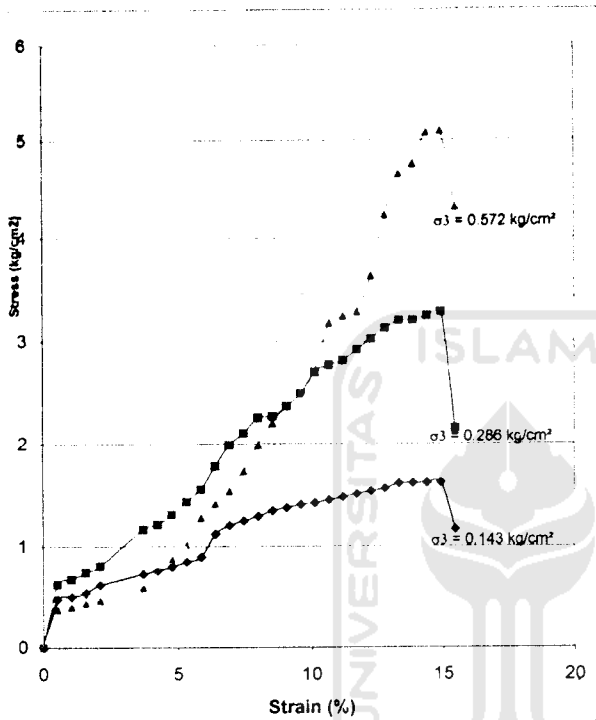
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 3 Hari

Sample No. : Tanah + 7% Kapur  
 Date : 15 Desember 2006  
 Tested by : Angel  
 No Sampel : 2

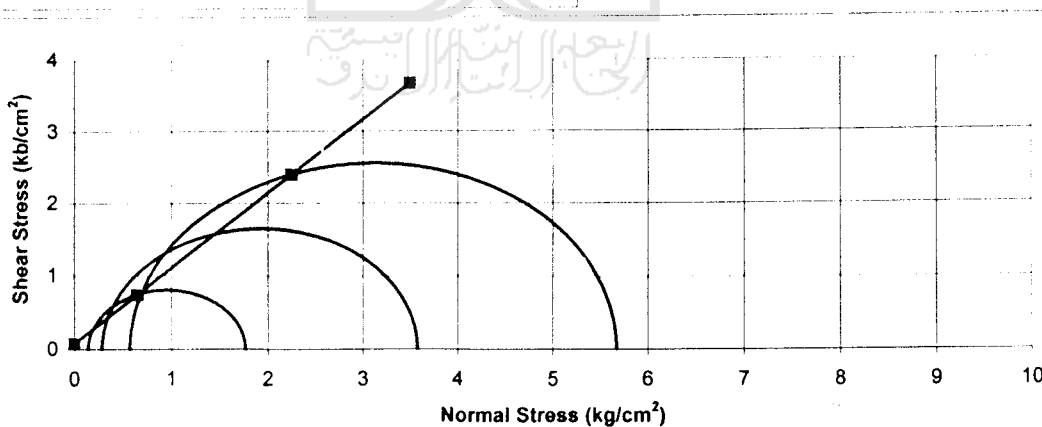


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	149.80	149.95	150.24

Water Content		
Wt Container (cup), gr	22.10	21.78
Wt of Cup + Wet soil, gr	37.10	33.58
Wt of Cup + Dry soil, gr	32.41	29.92
Water Content %	45.49	44.72
Average water content %	45.10	

$\gamma_d$ gram/cm³	1.671981	1.673656	1.676892
$\gamma$ gram/cm³	1.152267	1.153421	1.155652

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	1.621449	3.289897	5.09934
$\sigma_1 = \Delta\sigma + \sigma_3$	1.764449	3.575897	5.67134
$(\sigma_1 + \sigma_3)/2$	0.953725	1.930948	3.12167
$(\sigma_1 - \sigma_3)/2$	0.810725	1.644948	2.54967
Angle of shearing resistance (o)	45.78782		
Apperen cohesion (kg/cm²)	0.083543		



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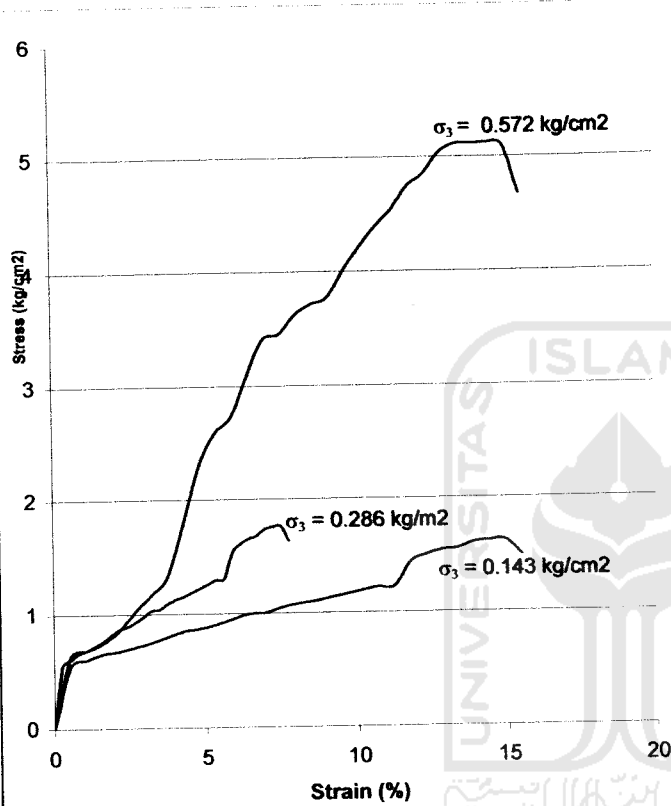
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul  
 Description of soil : Silty Clay  
 Pemeraman : 3 Hari

Sample No. : Undisturbed I  
 Date : 16 Desember 2006  
 Tested by : Rahma Angelia  
 No. Sampel : 2

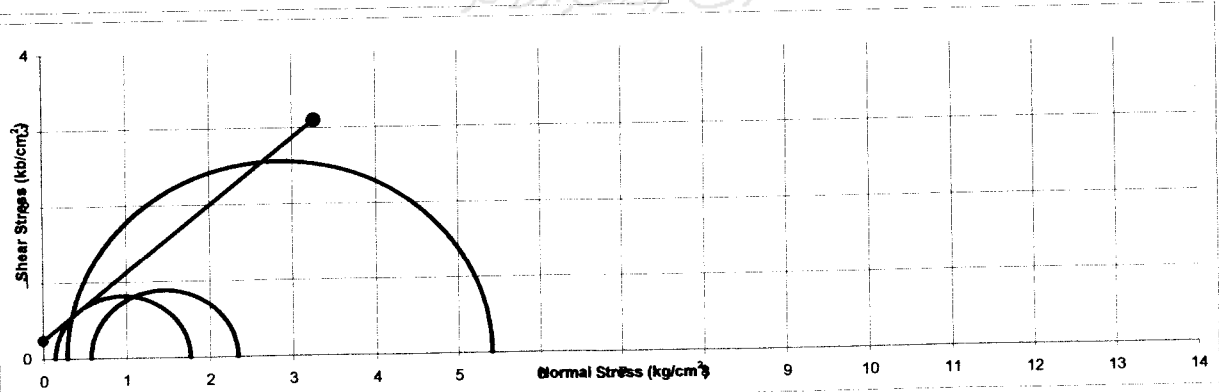


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	149.80	150.24	150.24

Water Content	
Wt Container (cup), gr	8.75 9.08
Wt of Cup + Wet soil, gr	29.83 34.45
Wt of Cup + Dry soil, gr	22.71 25.90
Water Content %	51.00 50.83
Average water content %	50.92

γ <sub>d</sub> gram/cm³	1.6719814	1.6768925	1.6768925
γ <sub>d</sub> gram/cm³	1.107877	1.1111311	1.1111311

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	1.621	5.119	1.764
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	1.764	5.405	2.336
(σ <sub>1</sub> + σ <sub>3</sub> )/2	0.954	2.846	1.454
(σ <sub>1</sub> - σ <sub>3</sub> )/2	0.811	2.560	0.882
Angle of shearing resistance (φ)			41.200
Apperent cohesion (kg/cm²)			0.240



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LAMPIRAN TRIAKSIAL UU  
PEMERAMAN 7 HARI SAMPEL 1





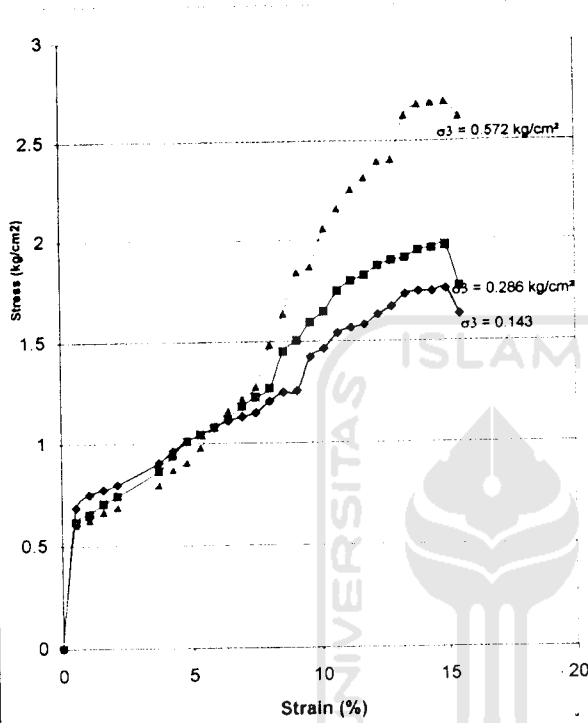
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

Sample No. : Tanah + 3% Kapur  
 Date : November 2006  
 Tested by : Angel

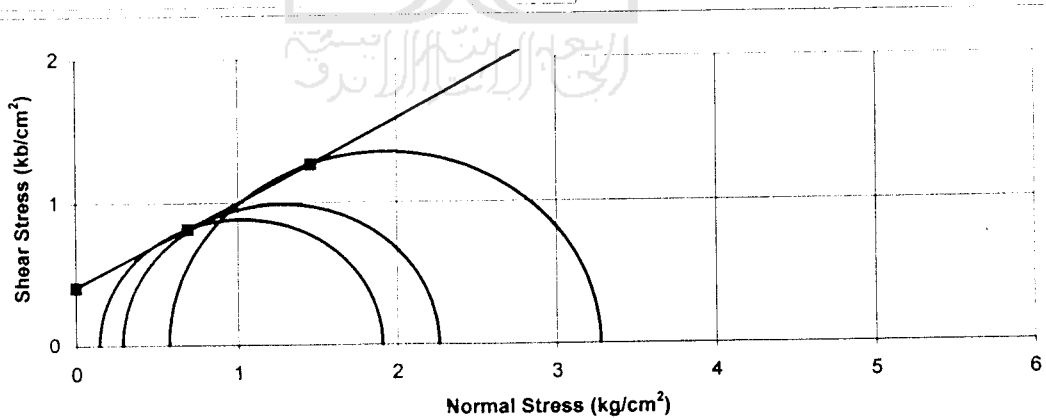


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	157.88	157.09	157.86

Water Content		
Wt Container (cup), gr	21.85	21.93
Wt of Cup + Wet soil, gr	31.75	33.45
Wt of Cup + Dry soil, gr	28.80	29.92
Water Content %	42.45	44.18
Average water content %	43.31	

γ <sub>d</sub> gram/cm³	1.762166	1.753348	1.761943
γ <sub>d</sub> gram/cm³	1.229591	1.223439	1.229435

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	1.762445	1.973938	2.702415
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	1.905445	2.259938	3.274415
(σ <sub>1</sub> + σ <sub>3</sub> )/2	1.024222	1.272969	1.923208
(σ <sub>1</sub> - σ <sub>3</sub> )/2	0.881222	0.986969	1.351208
Angle of shearing resistance (φ)	30.54948		
Apperent cohesion (kg/cm²)	0.407385		



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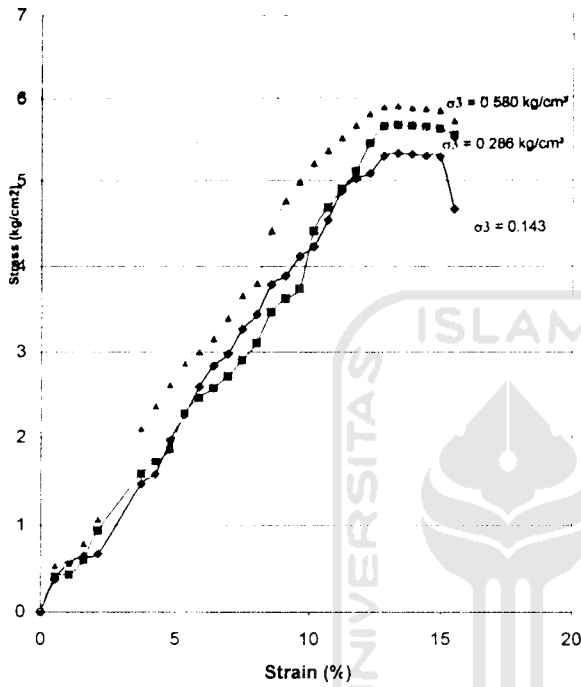
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

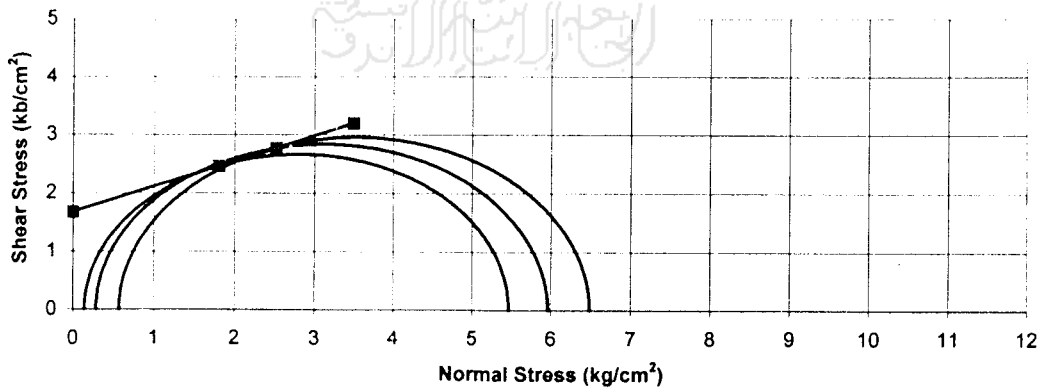
Sample No. : Tanah + 4% Kapur  
 Date : November 2006  
 Tested by : Angel



Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	153.93	154.21	154.41
Water Content			
Wt Container (cup), gr	21.93	21.90	
Wt of Cup + Wet soil, gr	34.76	32.41	
Wt of Cup + Dry soil, gr	30.73	29.19	
Water Content %	45.80	44.17	
Average water content %	44.98		

γ <sub>d</sub> gram/cm³	1.718078	1.721203	1.723436
γ <sub>d</sub> gram/cm³	1.185022	1.187178	1.188717

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	5.32693	5.674078	5.91349
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	5.46993	5.960078	6.48549
(σ <sub>1</sub> + σ <sub>3</sub> )/2	2.806465	3.123039	3.528745
(σ <sub>1</sub> - σ <sub>3</sub> )/2	2.663465	2.837039	2.956745
Angle of shearing resistance (φ)	23.54962		
Apperen cohesion (kg/cm²)	1.681207		



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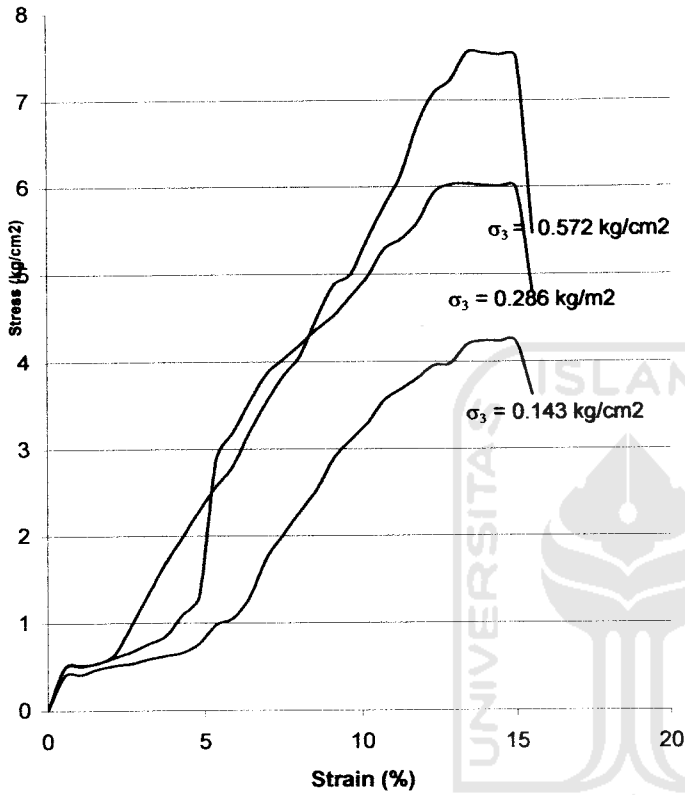
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**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

Sample No. : Tanah + 5% Kapur  
 Date : 11 Desember 2006  
 Tested by : Rahma Angelia  
 No. Sampel : 1

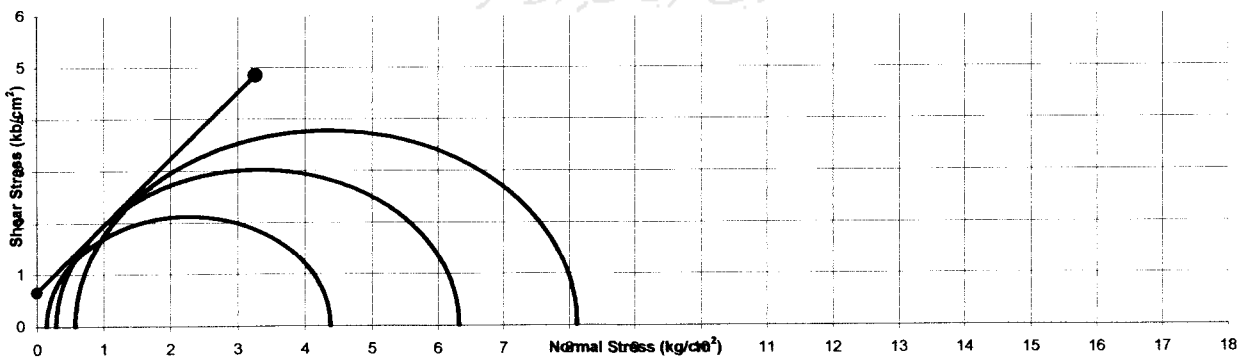


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm <sup>2</sup>	11.95	11.95	11.95
V cm <sup>3</sup>	89.59	89.59	89.59
Wt gram	154.67	153.42	154.21

Water Content		
Wt Container (cup), gr	8.75	9.08
Wt of Cup + Wet soil, gr	29.83	34.45
Wt of Cup + Dry soil, gr	22.71	25.90
Water Content %	51.00	50.83
Average water content %	50.92	

γ <sub>d</sub> gram/cm <sup>3</sup>	1.726338	1.712386	1.721203
γ <sub>d</sub> gram/cm <sup>3</sup>	1.143894	1.134649	1.140492

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	4.235	6.033	7.543
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	4.378	6.319	8.115
(σ <sub>1</sub> + σ <sub>3</sub> )/2	2.261	3.303	4.343
(σ <sub>1</sub> - σ <sub>3</sub> )/2	2.118	3.017	3.771
Angle of shearing resistance (o)	52.056		
Apperen cohesion (kg/cm <sup>2</sup> )	0.660		



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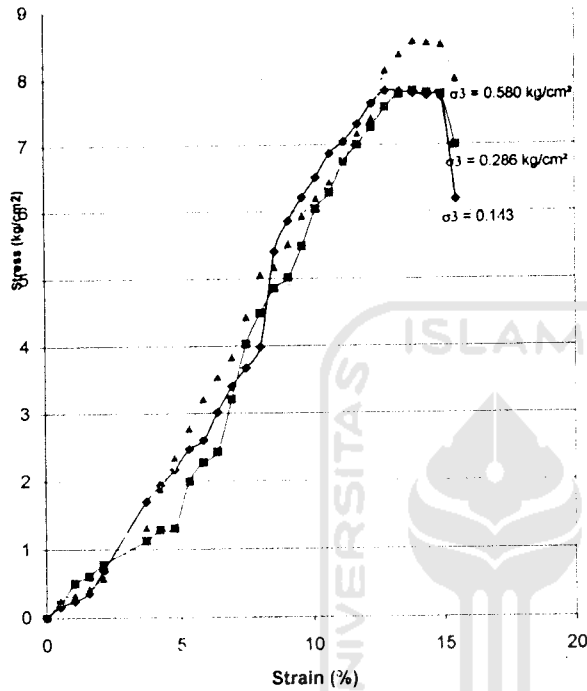
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Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

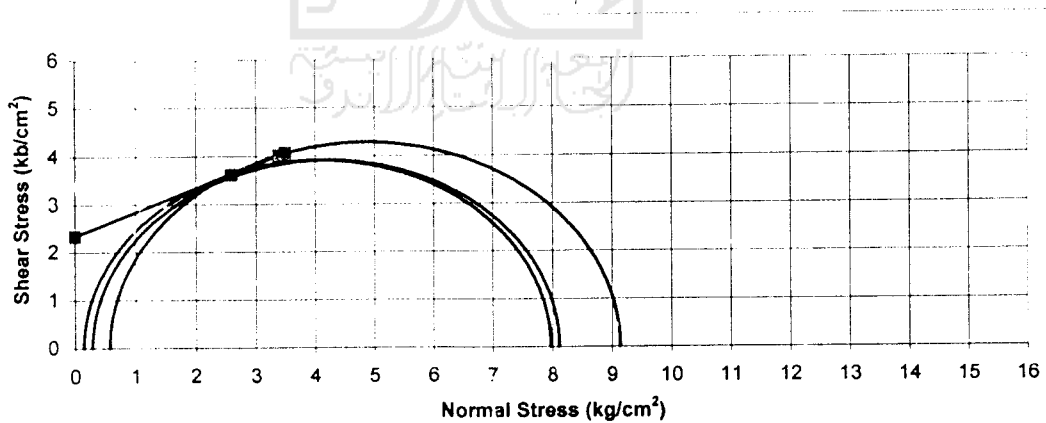
Sample : Tanah + 6% Kapur  
 Date : 12 Desember 2006  
 Tested by : Angel  
 No Sample : 1



Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	151.80	152.73	151.87
Water Content			
Wt Container (cup), gr	21.94	21.75	
Wt of Cup + Wet soil, gr	31.58	31.45	
Wt of Cup + Dry soil, gr	28.62	28.52	
Water Content %	44.31	43.28	
Average water content %	43.80		

$\gamma_d$ gram/cm³	1.694304	1.704684	1.695086
$\gamma_d$ gram/cm³	1.178275	1.185494	1.178819

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	7.828791	7.828202	8.565813
$\sigma_1 = \Delta\sigma + \sigma_3$	7.971791	8.114202	9.137813
$(\sigma_1 + \sigma_3)/2$	4.057395	4.200101	4.854907
$(\sigma_1 - \sigma_3)/2$	3.914395	3.914101	4.282907
Angle of shearing resistance ( $\phi$ )	26.31998		
Apperen cohesion ( $c$ kg/cm²)	2.34767		



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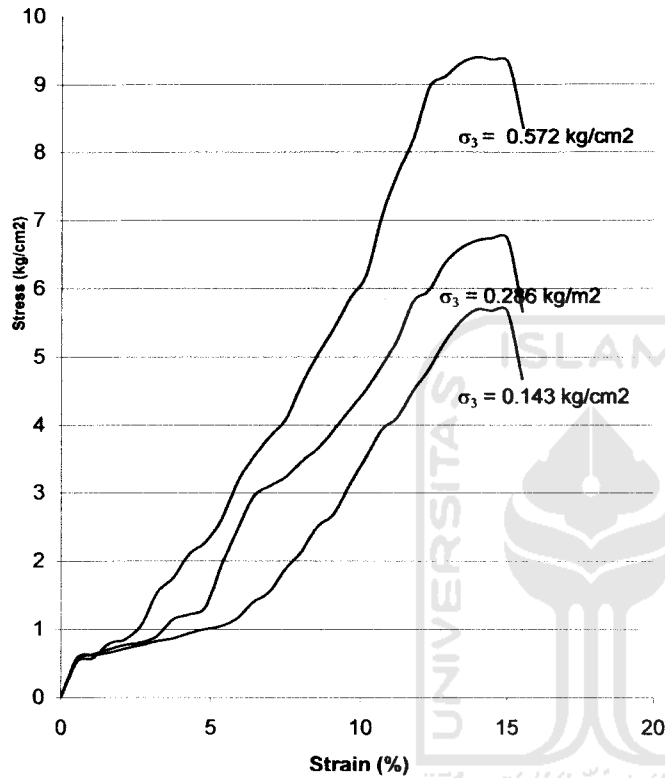
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**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

Sample No. : Tanah + 7% Kapur  
 Date : 12 Desember 2006  
 Tested by : Rahma Angelia  
 No. Sampel : 1

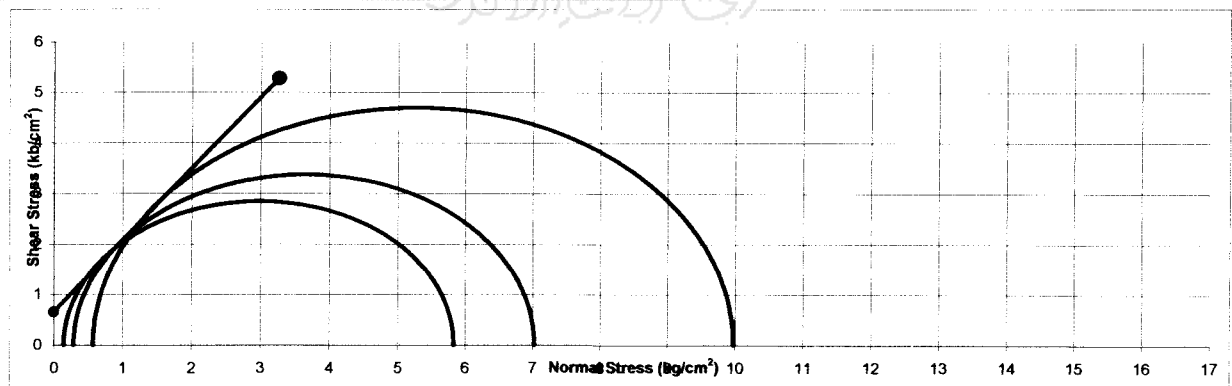


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm <sup>2</sup>	11.95	11.95	11.95
V cm <sup>3</sup>	89.59	89.59	89.59
Wt gram	157.67	158.19	157.75

Water Content		
Wt Container (cup), gr	8.75	9.08
Wt of Cup + Wet soil, gr	29.83	34.45
Wt of Cup + Dry soil, gr	22.71	25.90
Water Content %	51.00	50.83
Average water content %	50.92	

γ <sub>d</sub> gram/cm <sup>3</sup>	1.7598219	1.7656258	1.7607148
γ <sub>d</sub> gram/cm <sup>3</sup>	1.1660812	1.169927	1.1666729

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	5.687	6.739	9.399
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	5.830	7.025	9.971
(σ <sub>1</sub> + σ <sub>3</sub> )/2	2.986	3.656	5.271
(σ <sub>1</sub> - σ <sub>3</sub> )/2	2.843	3.370	4.699
Angle of shearing resistance (φ)	54.734		
Apperen cohesion (kg/cm <sup>2</sup> )	0.660		



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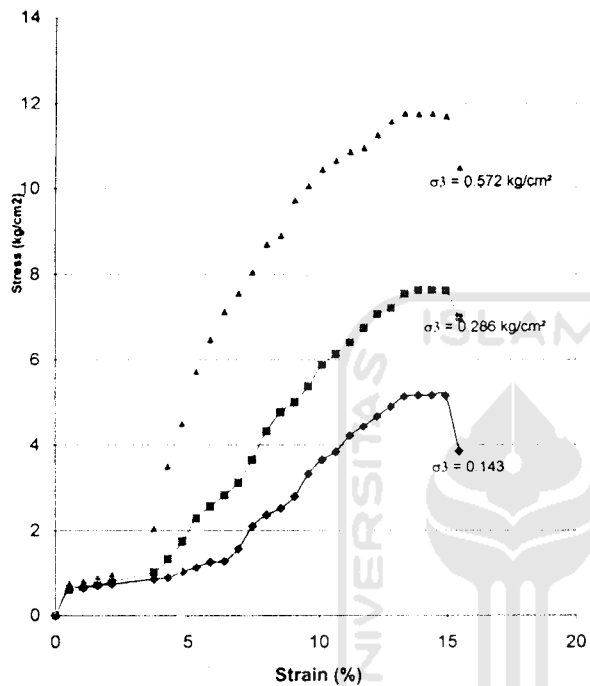
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**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 896330 Yogyakarta 55584.

**TRIAxIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

Sample No. : Tanah + 8% Kapur  
 Date : 15 Desember 2006  
 Tested by : Angel  
 No Sampel : 1

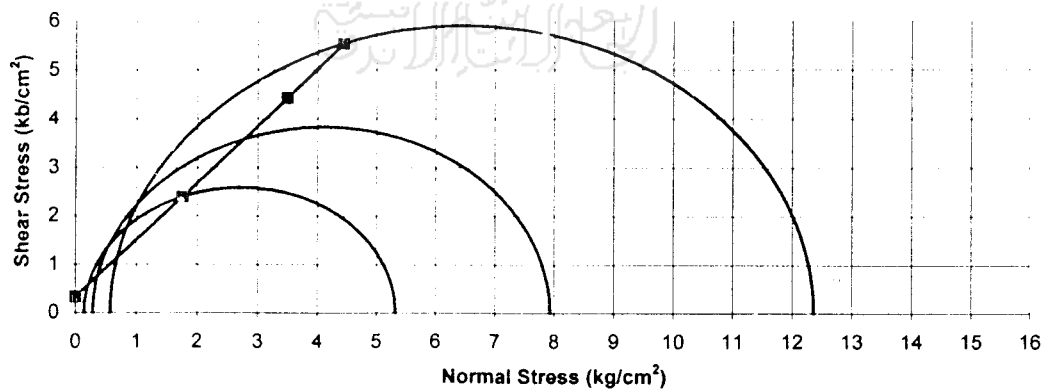


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	155.26	155.18	155.56

Water Content		
Wt Container (cup), gr	22.10	21.75
Wt of Cup + Wet soil, gr	35.79	33.61
Wt of Cup + Dry soil, gr	32.06	30.39
Water Content %	37.45	37.27
Average water content %	37.36	

γ <sub>d</sub> gram/cm³	1.732923	1.73203	1.736271
γ <sub>d</sub> gram/cm³	1.2616	1.26095	1.264037

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	5.178604	7.649747	11.79107
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	5.321604	7.935747	12.36307
(σ <sub>1</sub> + σ <sub>3</sub> )/2	2.732302	4.110874	6.467534
(σ <sub>1</sub> - σ <sub>3</sub> )/2	2.589302	3.824874	5.895534
Angle of shearing resistance (φ)	49.41932		
Apperen cohesion (kg/cm²)	0.343207		



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LAMPIRAN TRIAKSIAL UU  
PEMERAMAN 7 HARI SAMPEL 2







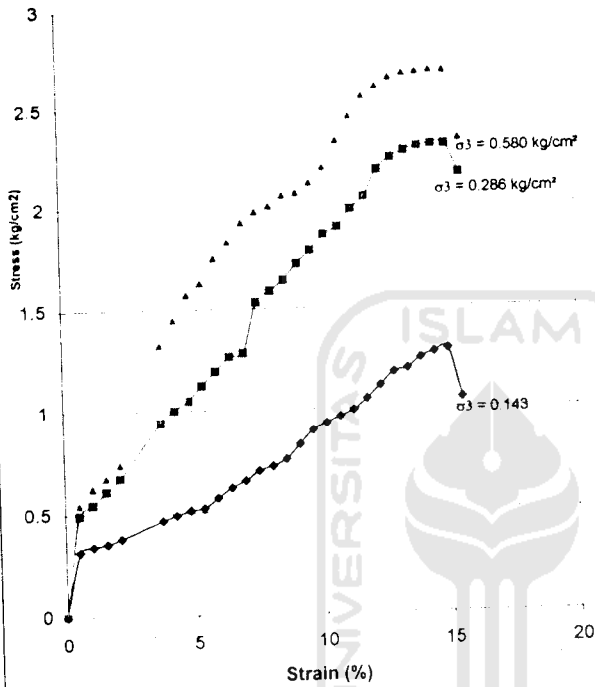
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**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

Sample No. : Tanah + 3% Kapur  
 Date : 9 Desember 2006  
 Tested by : Angel  
 No Sampel : 2

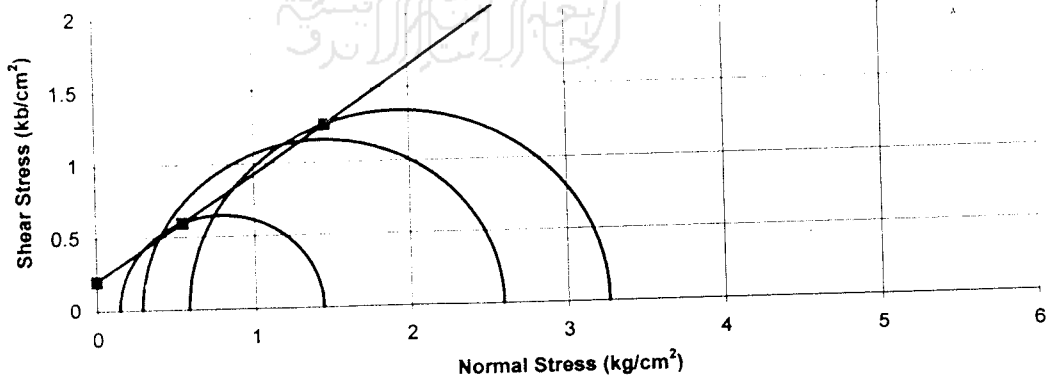


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	158.36	156.29	158.83

Water Content		
Wt Container (cup), gr	21.85	21.93
Wt of Cup + Wet soil, gr	31.75	33.45
Wt of Cup + Dry soil, gr	28.80	29.92
Water Content %	42.45	44.18
Average water content %	43.31	

γ <sub>d</sub> gram/cm³	1.767523	1.744419	1.772769
γ <sub>d</sub> gram/cm³	1.23333	1.217208	1.23699

σ <sub>3</sub>	0.143	0.286	0.58
Δσ = P/A	1.29246	2.305543	2.683889
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	1.43546	2.591543	3.263889
(σ <sub>1</sub> + σ <sub>3</sub> )/2	0.78923	1.438771	1.921944
(σ <sub>1</sub> - σ <sub>3</sub> )/2	0.64623	1.152771	1.341944
Angle of shearing resistance (φ)	35.85461		
Apperen cohesion (kg/cm²)	0.203765		



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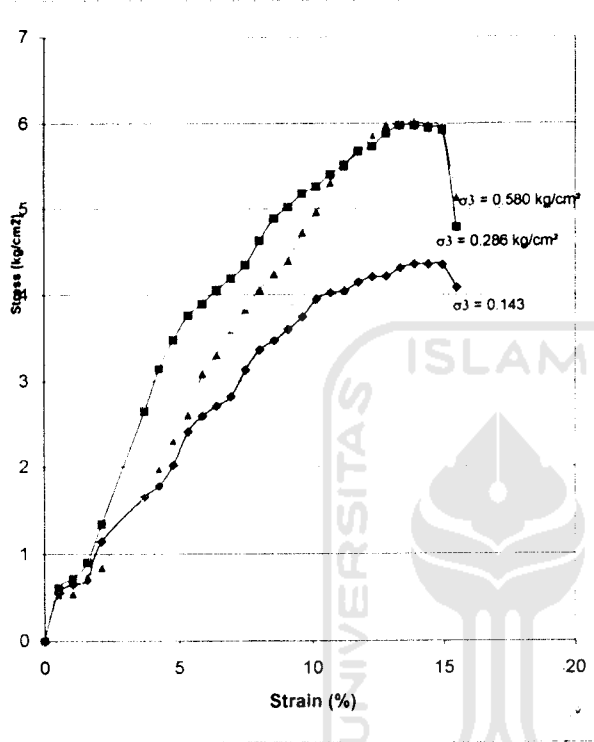
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**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

Sample : Tanah + 4% Kapur  
 Date : 11 Desember 2006  
 Tested by : Angel  
 No Sampel : 2

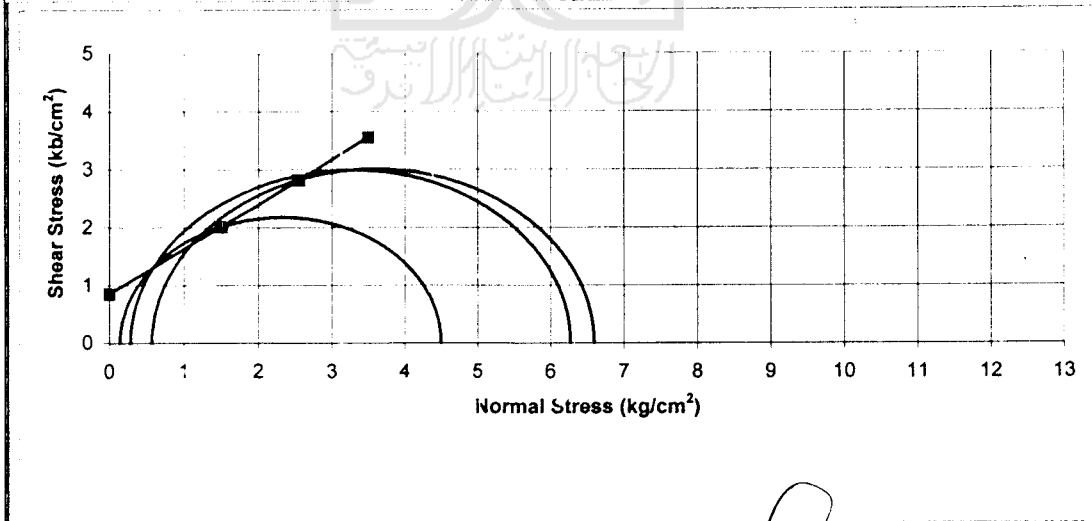


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm <sup>2</sup>	11.95	11.95	11.95
V cm <sup>3</sup>	89.59	89.59	89.59
Wt gram	155.21	155.76	155.65

Water Content		
Wt Container (cup), gr	21.93	21.90
Wt of Cup + Wet soil, gr	34.76	32.41
Wt of Cup + Dry soil, gr	30.73	29.19
Water Content %	45.80	44.17
Average water content %	44.98	

γ <sub>d</sub> gram/cm <sup>3</sup>	1.732365	1.738504	1.737276
γ <sub>d</sub> gram/cm <sup>3</sup>	1.194876	1.19911	1.198264

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	4.354288	5.985314	6.019863
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	4.497288	6.271314	6.591863
(σ <sub>1</sub> + σ <sub>3</sub> )/2	2.320144	3.278657	3.581932
(σ <sub>1</sub> - σ <sub>3</sub> )/2	2.177144	2.992657	3.009932
Angle of shearing resistance (φ)	37.69611		
Apperen cohesion (kg/cm <sup>2</sup> )	0.855911		



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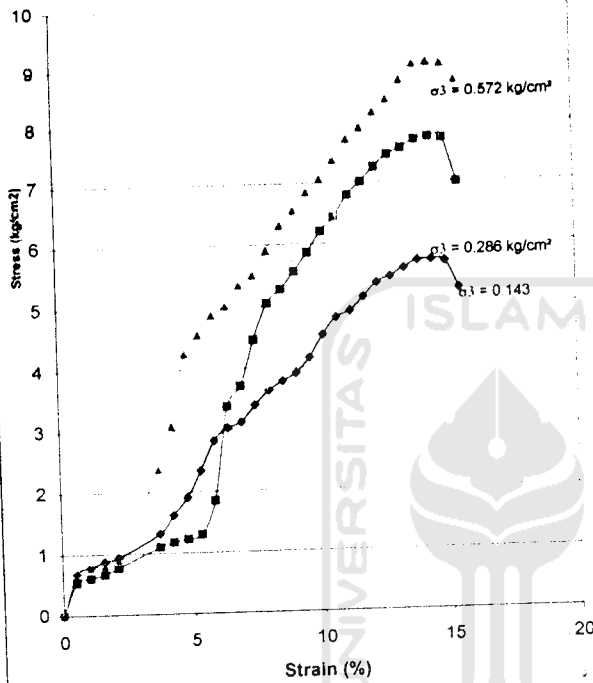
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**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

Sample : Tanah + 5% Kapur  
 Date : 11 Desember 2006  
 Tested by : Angel  
 No sample : 2

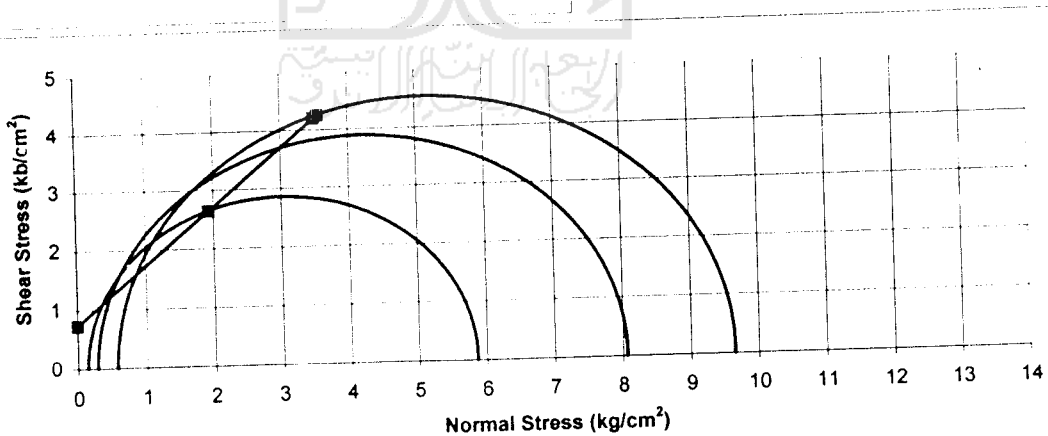


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	155.95	154.15	153.85

Water Content		
Wt Container (cup), gr	21.92	21.76
Wt of Cup + Wet soil, gr	33.30	34.44
Wt of Cup + Dry soil, gr	29.91	30.60
Water Content %	42.43	43.44
Average water content %	42.93	

$\gamma_d$ gram/cm³	1.740624	1.720534	1.717185
$\gamma$ gram/cm³	1.217786	1.20373	1.201388

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	5.722476	7.77973	9.080292
$\sigma_1 = \Delta\sigma + \sigma_3$	5.865476	8.06573	9.652292
$(\sigma_1 + \sigma_3)/2$	3.004238	4.175865	5.112146
$(\sigma_1 - \sigma_3)/2$	2.861238	3.889865	4.540146
Angle of shearing resistance ( $\phi$ )	44.7617		
Apperen cohesion ( $c$ ) (kg/cm²)	0.736502		



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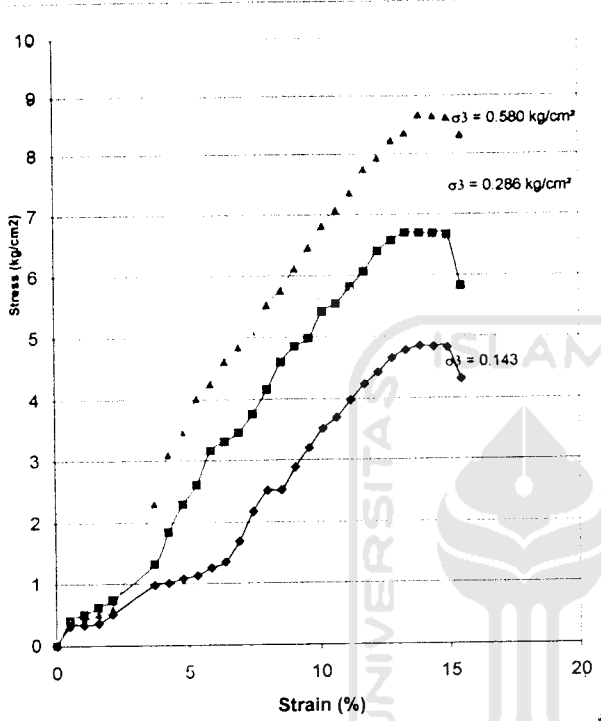
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**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

Sample : Tanah + 6% Kapur  
 Date : 12 Desember 2006  
 Tested by : Angel  
 No Sample : 2

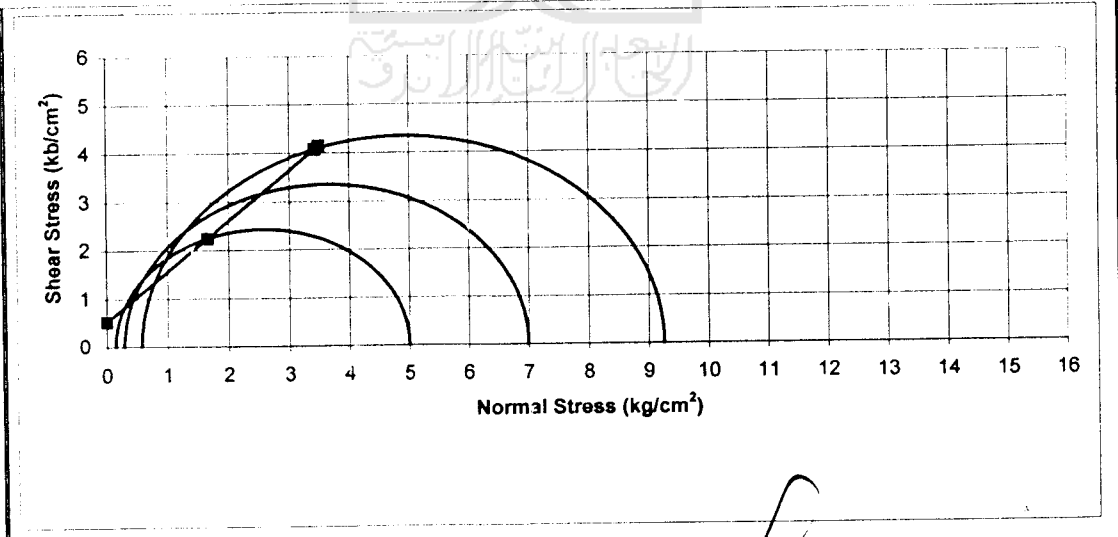


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm <sup>2</sup>	11.95	11.95	11.95
V cm <sup>3</sup>	89.59	89.59	89.59
Wt gram	153.42	154.04	154.50

Water Content		
Wt Container (cup), gr	21.94	21.75
Wt of Cup + Wet soil, gr	31.58	31.45
Wt of Cup + Dry soil, gr	28.62	28.52
Water Content %	44.31	43.28
Average water content %	43.80	

$\gamma_d$ gram/cm <sup>3</sup>	1.712386	1.719306	1.72444
$\gamma_d$ gram/cm <sup>3</sup>	1.19085	1.195662	1.199233

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	4.853961	6.703552	8.684783
$\sigma_1 = \Delta\sigma + \sigma_3$	4.996961	6.989552	9.256783
$(\sigma_1 + \sigma_3)/2$	2.56998	3.637776	4.914391
$(\sigma_1 - \sigma_3)/2$	2.42698	3.351776	4.342391
Angle of shearing resistance ( $\phi$ )	45.98493		
Apperen cohesion (kg/cm <sup>2</sup> )	0.531335		



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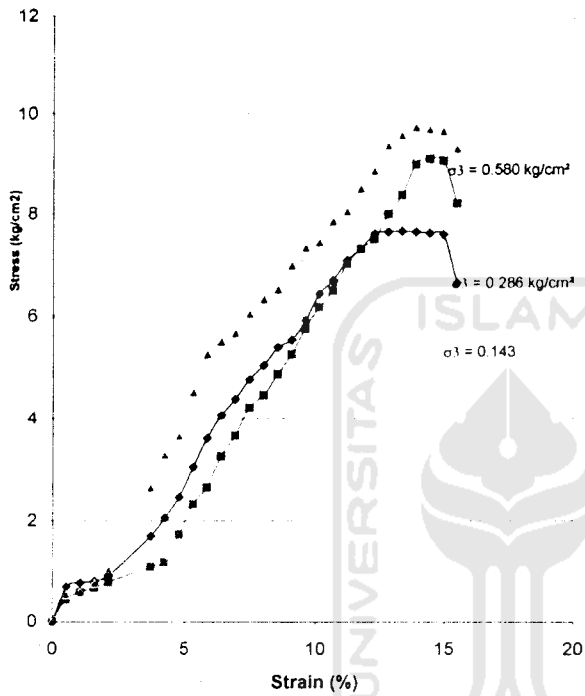
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**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14.4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

Sample : Tanah + 7% Kapur  
 Date : 12 Desember 2006  
 Tested by : Angel  
 No Sampel : 2



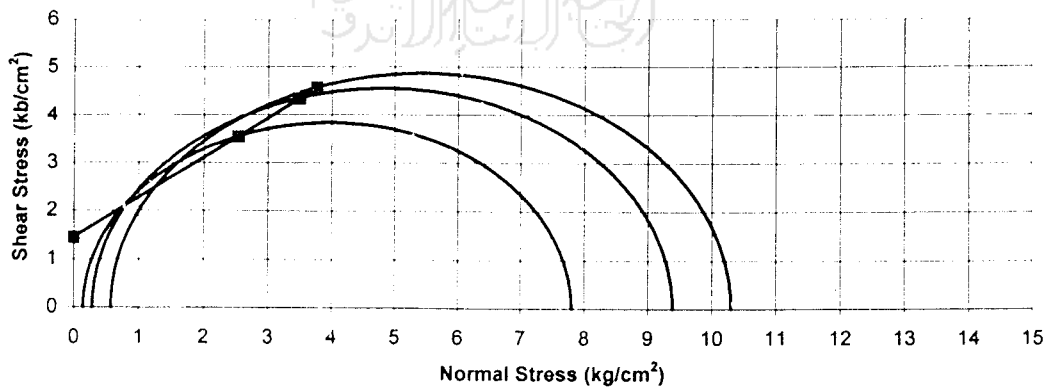
Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm <sup>2</sup>	11.95	11.95	11.95
V cm <sup>3</sup>	89.59	89.59	89.59
Wt gram	159.08	158.82	158.73

**Water Content**

Wt Container (cup), gr	22.10	21.78
Wt of Cup + Wet soil, gr	37.10	33.56
Wt of Cup + Dry soil, gr	32.41	29.92
Water Content %	45.49	44.72
Average water content %	45.10	

$\gamma_d$ gram/cm <sup>3</sup>	1.775559	1.772658	1.771653
$\gamma$ gram/cm <sup>3</sup>	1.223649	1.221649	1.220957

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	7.661202	9.103939	9.731716
$\sigma_1 = \Delta\sigma + \sigma_3$	7.804202	9.339939	10.30372
$(\sigma_1 + \sigma_3)/2$	3.973601	4.837969	5.437858
$(\sigma_1 - \sigma_3)/2$	3.830601	4.551969	4.865858
Angle of shearing resistance ( $\phi$ )	39.57397		
Apperen cohesion (kg/cm <sup>2</sup> )	1.453474		



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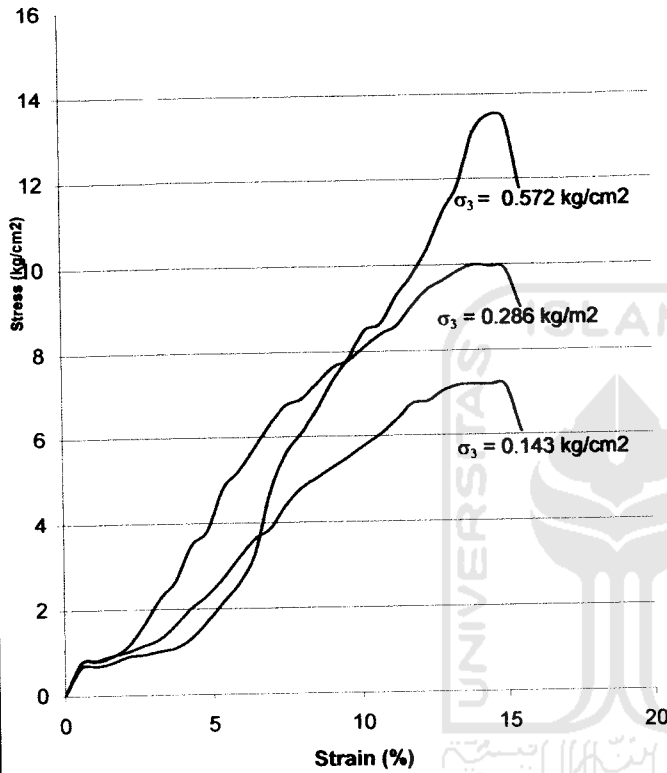
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul  
 Description of soil : Silty Clay  
 Pemeraman : 7 Hari

Sample No. : Tanah + 8% Kapur  
 Date : 15 Desember 2006  
 Tested by : Rahma Angelia  
 No. Sampel : 2

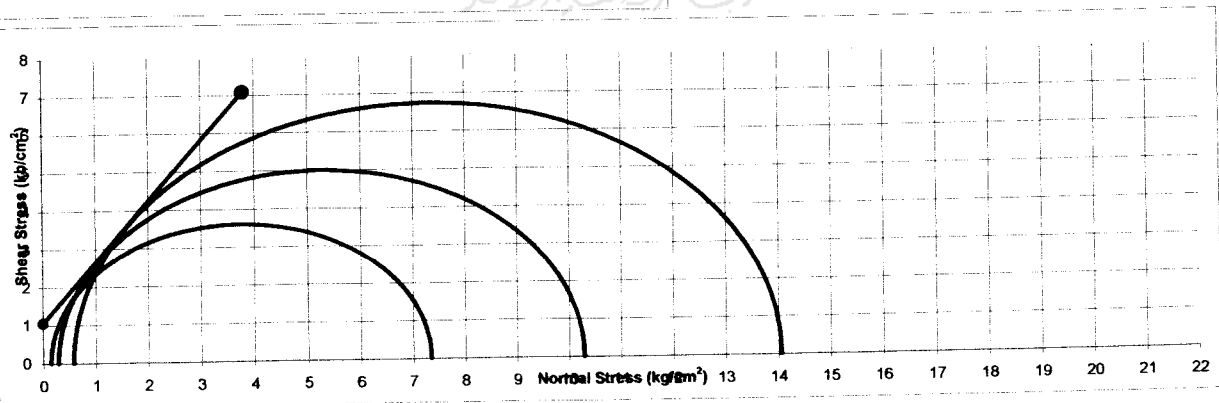


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm <sup>2</sup>	11.95	11.95	11.95
V cm <sup>3</sup>	89.59	89.59	89.59
Wt gram	156.89	157.61	157.04

Water Content	
Wt Container (cup), gr	8.75    9.08
Wt of Cup + Wet soil, gr	29.83    34.45
Wt of Cup + Dry soil, gr	22.71    25.90
Water Content %	51.00    50.83
Average water content %	50.92

$\gamma_d \text{ gram/cm}^3$	1.751116	1.7591522	1.7527902
$\gamma \text{ gram/cm}^3$	1.1603126	1.1656375	1.1614219

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	7.198	9.993	13.479
$\sigma_1 = \Delta\sigma + \sigma_3$	7.341	10.279	14.051
$(\sigma_1 + \sigma_3)/2$	3.742	5.283	7.311
$(\sigma_1 - \sigma_3)/2$	3.599	4.997	6.739
Angle of shearing resistance ( $\phi$ )	57.782		
Apperen cohesion (kg/cm <sup>2</sup> )	1.050		



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LAMPIRAN TRIAKSIAL UU  
PEMERAMAN 14 HARI SAMPEL 1





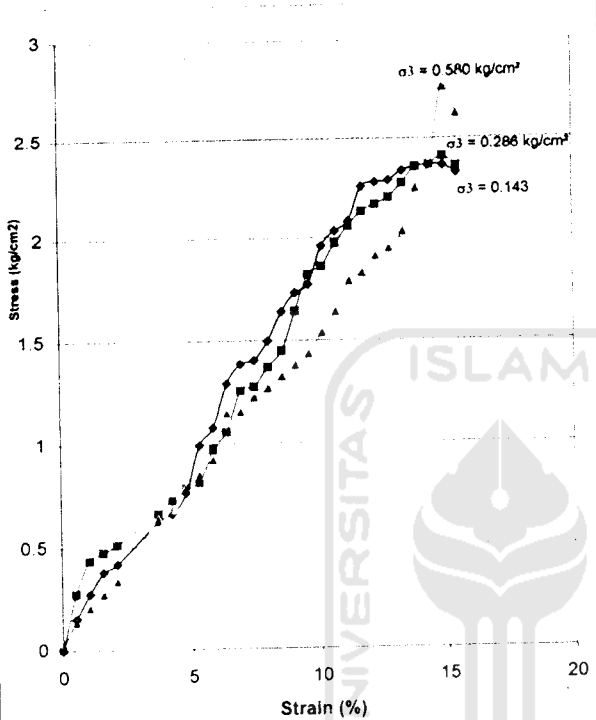
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAxIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

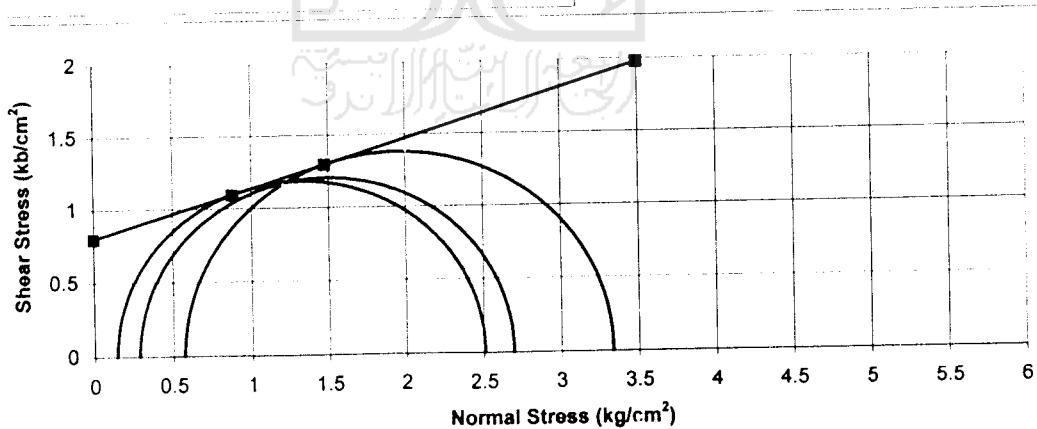
Sample No. : Tanah + 3% Kapur  
 Date : November 2006  
 Tested by : Angel



Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	153.29	151.14	148.94
Water Content			
Wt Container (cup), gr	21.85	21.93	
Wt of Cup + Wet soil, gr	31.75	33.45	
Wt of Cup + Dry soil, gr	28.80	29.92	
Water Content %	42.45	44.18	
Average water content %	43.31		

γ <sub>d</sub> gram/cm³	1.710935	1.686938	1.662383
γ <sub>d</sub> gram/cm³	1.193844	1.177099	1.159965

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	2.364659	2.408675	2.761164
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	2.507659	2.694675	3.333164
(σ <sub>1</sub> + σ <sub>3</sub> )/2	1.32533	1.490337	1.952582
(σ <sub>1</sub> - σ <sub>3</sub> )/2	1.18233	1.204337	1.380582
Angle of shearing resistance (φ)	18.58666		
Apperen cohesion (kg/cm²)	0.799498		



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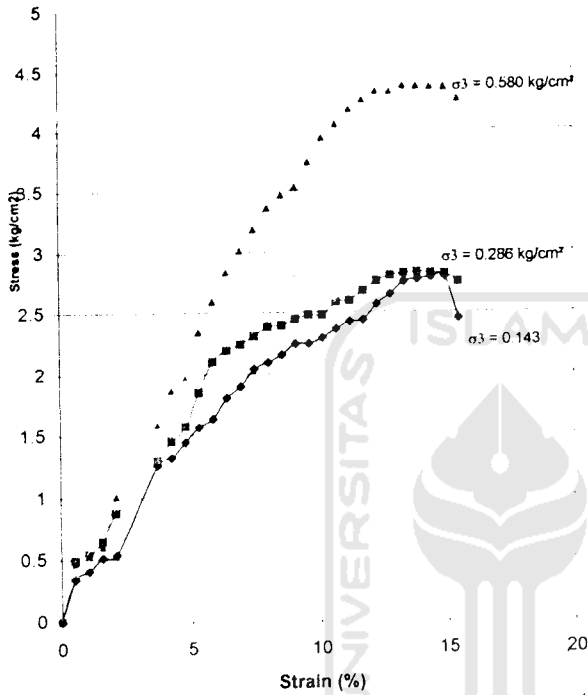
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAxIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

Sample No. : Tanah + 4% Kapur  
 Date : November 2006  
 Tested by : Angel  
 Sample No. : 1

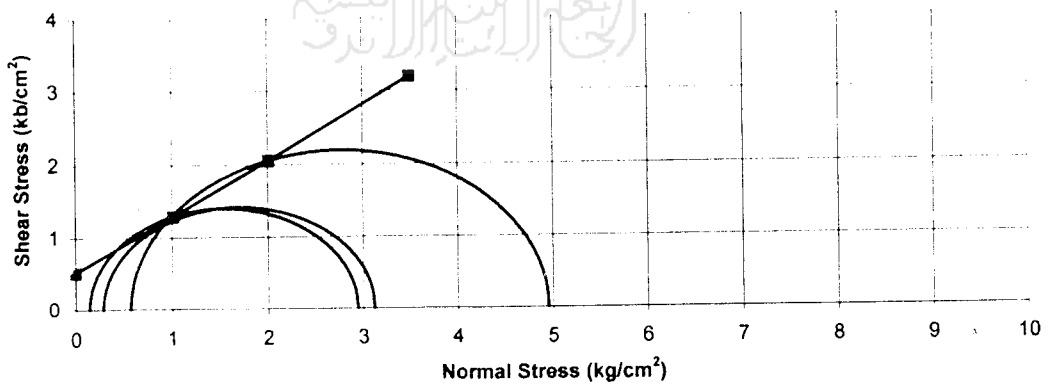


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	152.98	152.72	153.29

Water Content		
Wt Container (cup), gr	21.93	21.90
Wt of Cup + Wet soil, gr	34.76	32.41
Wt of Cup + Dry soil, gr	30.73	29.19
Water Content %	45.80	44.17
Average water content %	44.98	

$\gamma_d$ gram/cm³	1.707475	1.704573	1.710935
$\gamma$ gram/cm³	1.177709	1.175707	1.180095

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	2.796412	2.831477	4.38125
$\sigma_1 = \Delta\sigma + \sigma_3$	2.939412	3.117477	4.95325
$(\sigma_1 + \sigma_3)/2$	1.541206	1.701739	2.762625
$(\sigma_1 - \sigma_3)/2$	1.398206	1.415739	2.190625
Angle of shearing resistance ( $\phi$ )			37.42368
Apperen cohesion ( $c$ ) (kg/cm²)			0.517845



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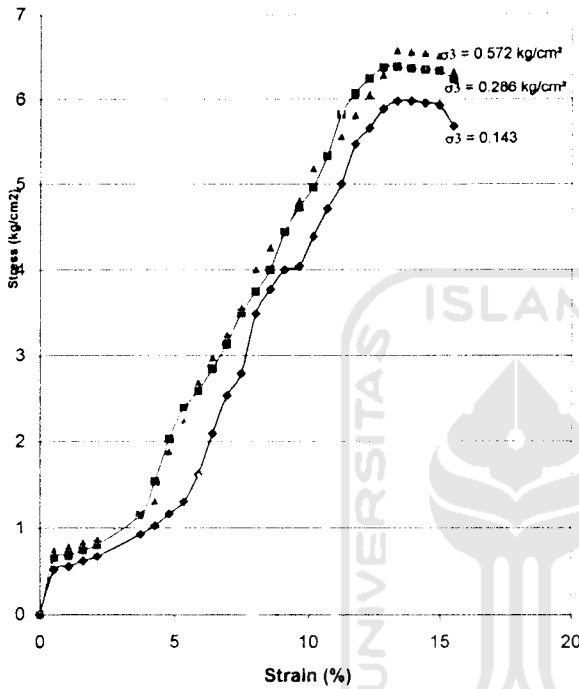
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

Sample : Tanah + 5% Kapur  
 Date : 14 Desember 2006  
 Tested by : Angel  
 No sample : 1

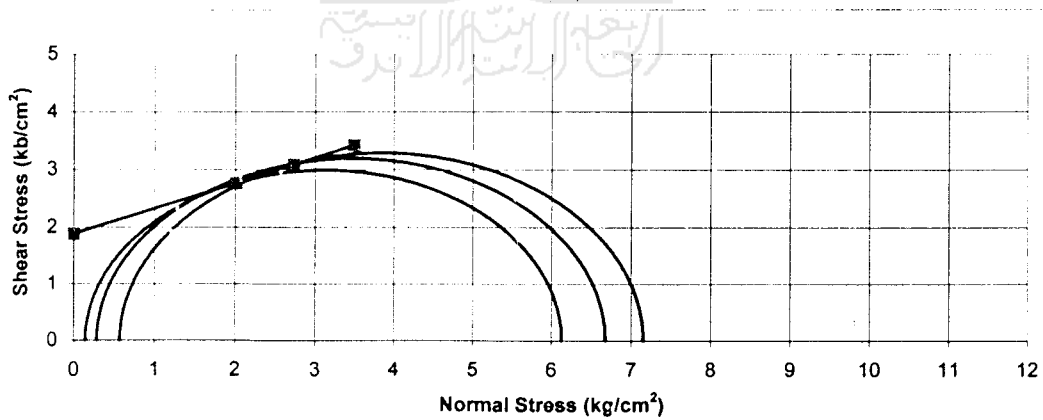


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	152.53	148.79	147.16

Water Content		
Wt Container (cup), gr	21.92	21.76
Wt of Cup + Wet soil, gr	33.30	34.44
Wt of Cup + Dry soil, gr	29.91	30.60
Water Content %	42.43	43.44
Average water content %	42.93	

γ <sub>d</sub> gram/cm³	1.702452	1.660708	1.642515
γ <sub>d</sub> gram/cm³	1.19108	1.161875	1.149147

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	5.985314	6.392315	6.583846
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	6.128314	6.678315	7.155846
(σ <sub>1</sub> + σ <sub>3</sub> )/2	3.135657	3.482158	3.863923
(σ <sub>1</sub> - σ <sub>3</sub> )/2	2.992657	3.196158	3.291923
Angle of shearing resistance (φ)	23.77223		
Apperen cohesion (kg/cm²)	1.88737		



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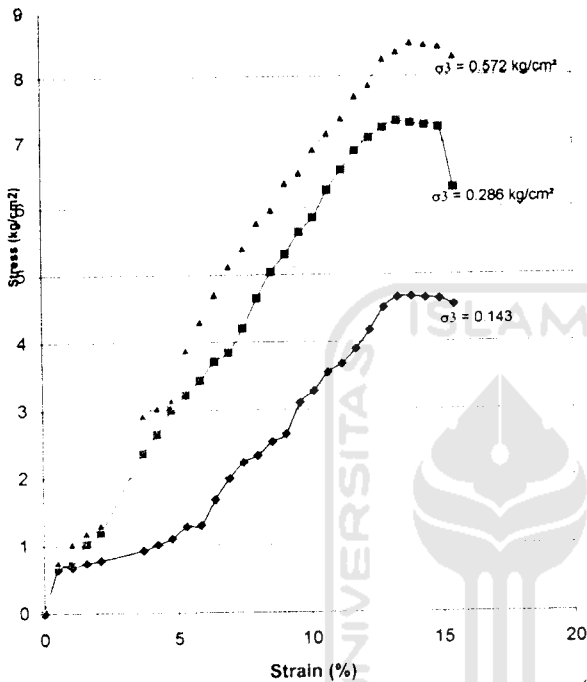
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAxIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

Sample : Tanah + 6% Kapur  
 Date : 15 Desember 2006  
 Tested by : Angel  
 No Sample : 1

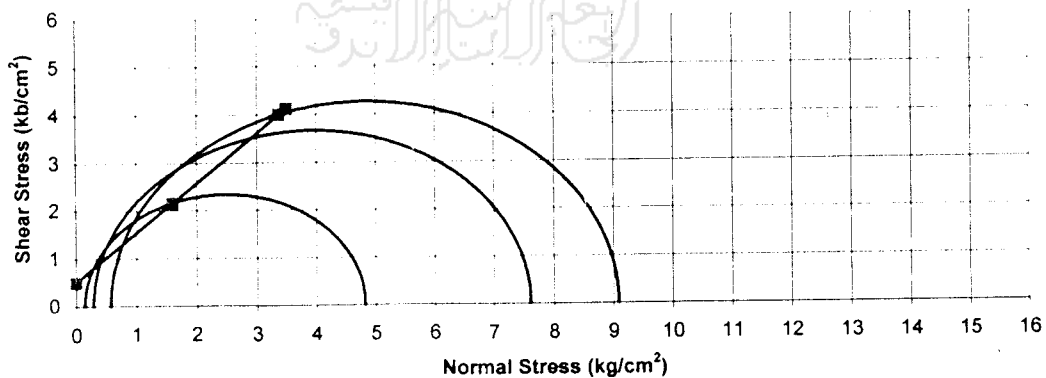


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	153.83	154.89	153.84

Water Content		
Wt Container (cup), gr	21.94	21.75
Wt of Cup + Wet soil, gr	31.58	31.45
Wt of Cup + Dry soil, gr	28.62	28.52
Water Content %	44.31	43.28
Average water content %	43.80	

$\gamma_d$ gram/cm³	1.716962	1.728793	1.717074
$\gamma$ gram/cm³	1.194032	1.20226	1.19411

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	4.675506	7.326024	8.518225
$\sigma_1 = \Delta\sigma + \sigma_3$	4.818506	7.612024	9.090225
$(\sigma_1 + \sigma_3)/2$	2.480753	3.949012	4.831113
$(\sigma_1 - \sigma_3)/2$	2.337753	3.663012	4.259113
Angle of shearing resistance ( $\phi$ )	46.03853		
Apperen cohesion ( $c$ ) (kg/cm²)	0.503246		



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*Edy Purwanto*  
 Dr. Ir. Edy Purwanto, CES. DEA.



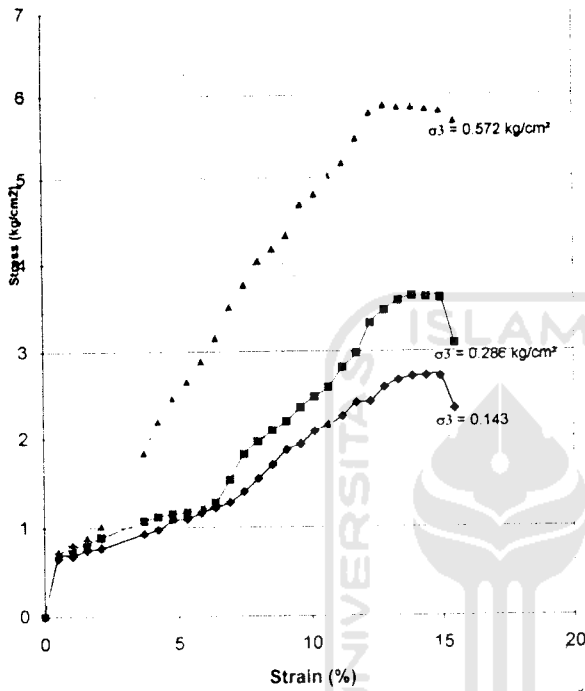
**LABORATORIUM MEKANIK TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAxIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

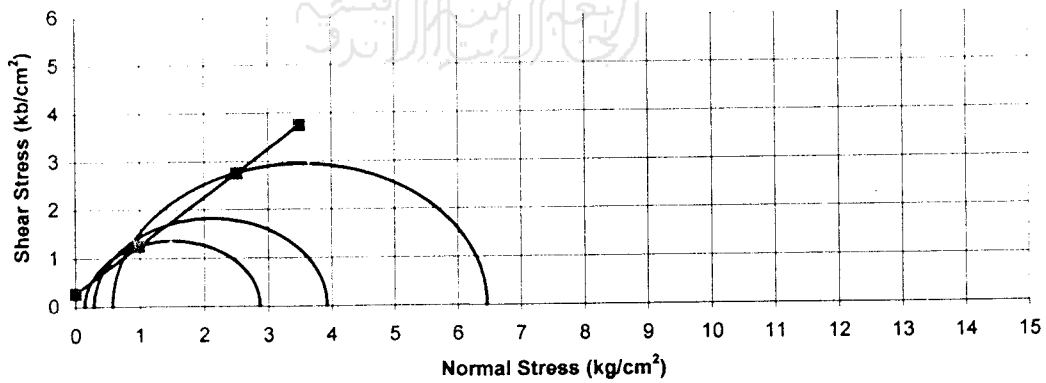
Sample : Tanah + 7% Kapur  
 Date : 16 Desember 2006  
 Tested by : Angel  
 No Sampel : 1



Piece No :	1	2	3
H cm	7.6	7.6	7.6
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	153.53	153.15	154.49
Water Content			
Wt Container (cup), gr	22.10	21.78	
Wt of Cup + Wet soil, gr	37.10	33.56	
Wt of Cup + Dry soil, gr	32.41	29.92	
Water Content %	45.49	44.72	
Average water content %	45.10		

$\gamma_d$ gram/cm³	1.713614	1.709372	1.724329
$\gamma$ gram/cm³	1.180958	1.178035	1.188343

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	2.719358	3.640471	5.88966
$\sigma_1 = \Delta\sigma + \sigma_3$	2.862358	3.926471	6.46166
$(\sigma_1 + \sigma_3)/2$	1.502679	2.106235	3.51683
$(\sigma_1 - \sigma_3)/2$	1.359679	1.820235	2.94483
Angle of shearing resistance ( $\phi$ )	44.81535		
Apperen cohesion (kg/cm²)	0.27372		



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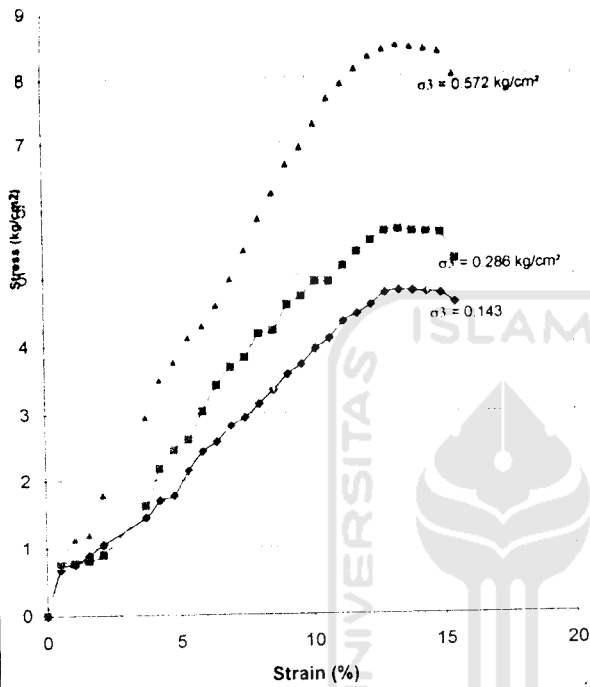
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAxIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

Sample No. : Tanah + 8% Kapur  
 Date : 16 Desember 2006  
 Tested by : Angel  
 No Sampel : 1

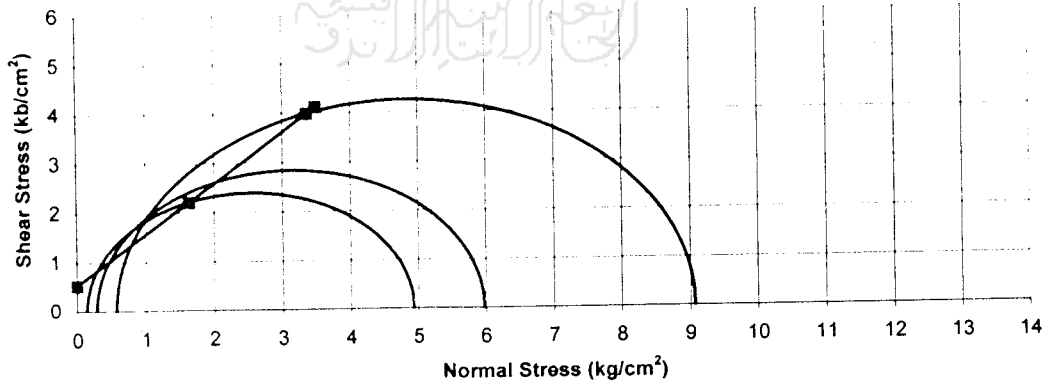


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	155.60	155.34	157.85

Water Content		
Wt Container (cup), gr	22.10	21.75
Wt of Cup + Wet soil, gr	35.79	33.61
Wt of Cup + Dry soil, gr	32.06	30.39
Water Content %	37.45	37.27
Average water content %	37.36	

γ <sub>d</sub> gram/cm. <sup>3</sup>	1.736718	1.733816	1.761831
γ <sub>d</sub> gram/cm. <sup>3</sup>	1.264363	1.26225	1.282645

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	4.788251	5.686048	8.499146
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	4.931251	5.972048	9.071146
(σ <sub>1</sub> + σ <sub>3</sub> )/2	2.537126	3.129024	4.821573
(σ <sub>1</sub> - σ <sub>3</sub> )/2	2.394126	2.843024	4.249573
Angle of shearing resistance (φ)	45.74672		
Apperen cohesion (kg/cm <sup>2</sup> )	0.536203		



Kepala laboratorium,

*Edy Purwanto*  
 Dr. Ir. Edy Purwanto, CES. DEA.

LAMPIRAN TRIAKSIAL UU  
PEMERAMAN 14 HARI SAMPEL2





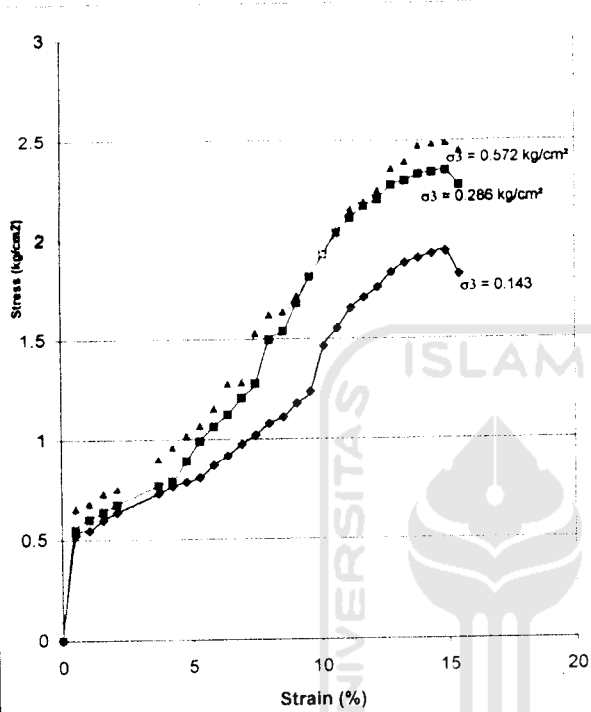
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

Sample No. : Tanah + 3% Kapur  
 Date : 11 Desember 2006  
 Tested by : Angel  
 No Sampel : 2

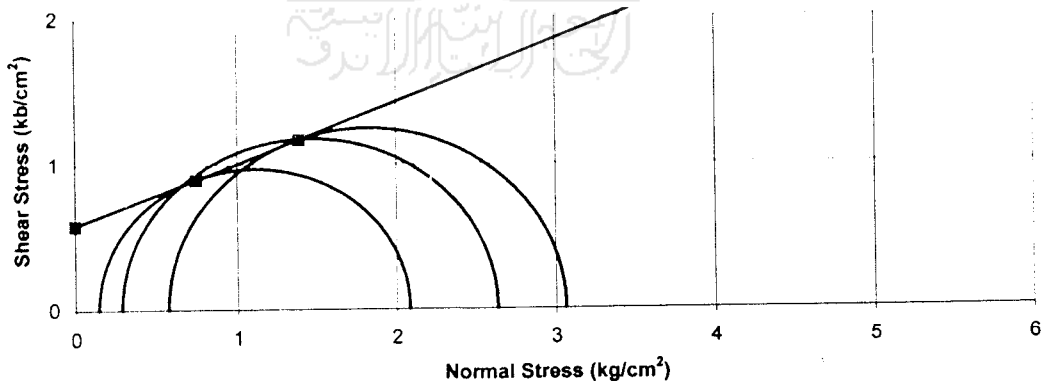


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	156.52	154.51	154.07

Water Content		
Wt Container (cup), gr	21.85	21.93
Wt of Cup + Wet soil, gr	31.75	33.45
Wt of Cup + Dry soil, gr	28.80	29.92
Water Content %	42.45	44.18
Average water content %	43.31	

γ <sub>d</sub> gram/cm³	1.746986	1.724552	1.719641
γ <sub>d</sub> gram/cm³	1.218999	1.203345	1.199918

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	1.938689	2.349926	2.490922
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	2.081689	2.635926	3.062922
(σ <sub>1</sub> + σ <sub>3</sub> )/2	1.112345	1.460963	1.817461
(σ <sub>1</sub> - σ <sub>3</sub> )/2	0.969345	1.174963	1.245461
Angle of shearing resistance (φ)	22.92163		
Apperen cohesion (kg/cm²)	0.581944		



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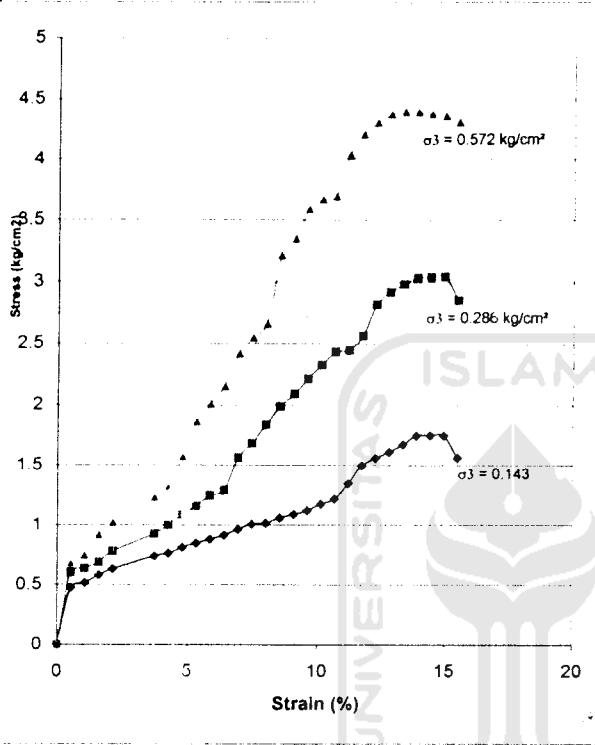
**LABORATORIUM MEKANIK TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 896042, 896707 fax 896330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

Sample : Tanah + 4% Kapur  
 Date : November 2006  
 Tested by : Angel  
 No Sampel : 2

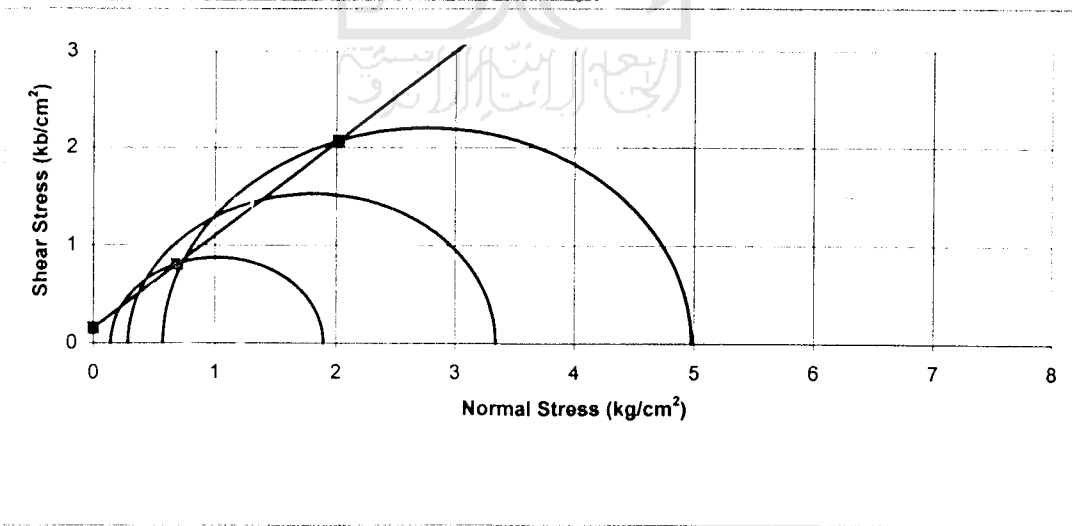


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm <sup>2</sup>	11.95	11.95	11.95
V cm <sup>3</sup>	89.59	89.59	89.59
Wt gram	154.12	154.70	152.22

Water Content		
Wt Container (cup), gr	21.93	21.90
Wt of Cup + Wet soil, gr	34.76	32.41
Wt of Cup + Dry soil, gr	30.73	29.19
Water Content %	45.80	44.17
Average water content %	44.98	

yd gram/cm <sup>3</sup>	1.720199	1.726672	1.698992
yd gram/cm <sup>3</sup>	1.186485	1.19095	1.171858

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	1.750695	3.054904	4.405191
$\sigma_1 = \Delta\sigma + \sigma_3$	1.893695	3.340904	4.977191
$(\sigma_1 + \sigma_3)/2$	1.018348	1.813452	2.774596
$(\sigma_1 - \sigma_3)/2$	0.875348	1.527452	2.202596
Angle of shearing resistance (o)	43.39214		
Apperen cohesion (kg/cm <sup>2</sup> )	0.158874		



Kepala laboratorium,

*Edy Purwanto*  
 Dr. Ir. Edy Purwanto, CES. DEA.





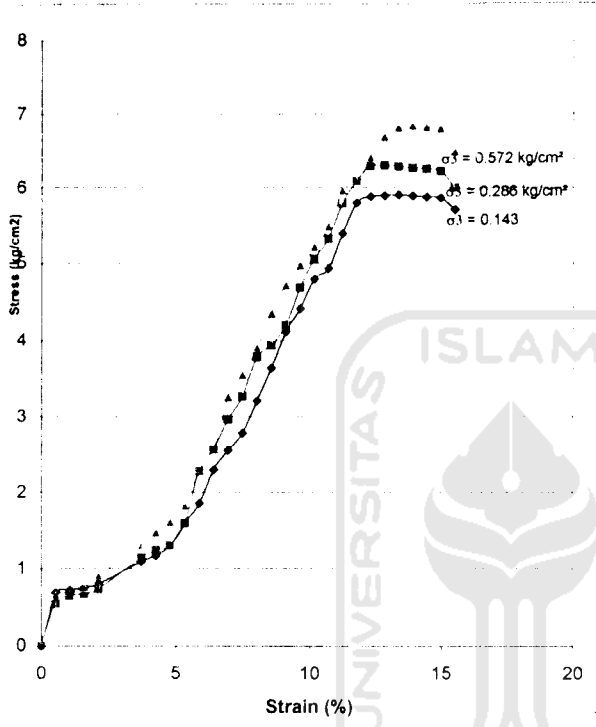
**LABORATORIUM MEKANIK TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAxIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

Sample : Tanah + 5% Kapur  
 Date : 14 Desember 2006  
 Tested by : Angel  
 No sample : 2

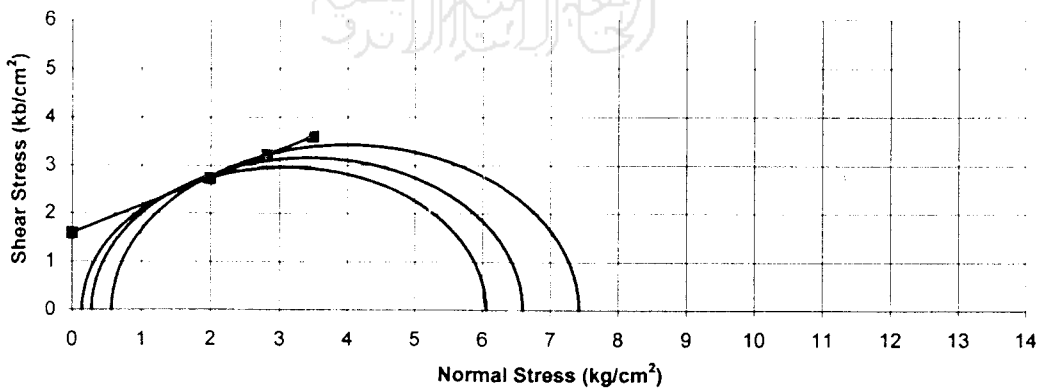


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm <sup>2</sup>	11.95	11.95	11.95
V cm <sup>3</sup>	89.59	89.59	89.59
Wt gram	152.80	155.50	153.11

Water Content		
Wt Container (cup), gr	21.92	21.76
Wt of Cup + Wet soil, gr	33.30	34.44
Wt of Cup + Dry soil, gr	29.91	30.60
Water Content %	42.43	43.44
Average water content %	42.93	

γ <sub>d</sub> gram/cm <sup>3</sup>	1.705466	1.735602	1.708926
γ <sub>d</sub> gram/cm <sup>3</sup>	1.193188	1.214272	1.195609

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	5.91349	6.31121	6.852651
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	6.05649	6.59721	7.424651
(σ <sub>1</sub> + σ <sub>3</sub> )/2	3.099745	3.441605	3.998325
(σ <sub>1</sub> - σ <sub>3</sub> )/2	2.956745	3.155605	3.426325
Angle of shearing resistance (φ)	29.82194		
Apperen cohesion (kg/cm <sup>2</sup> )	1.59953		



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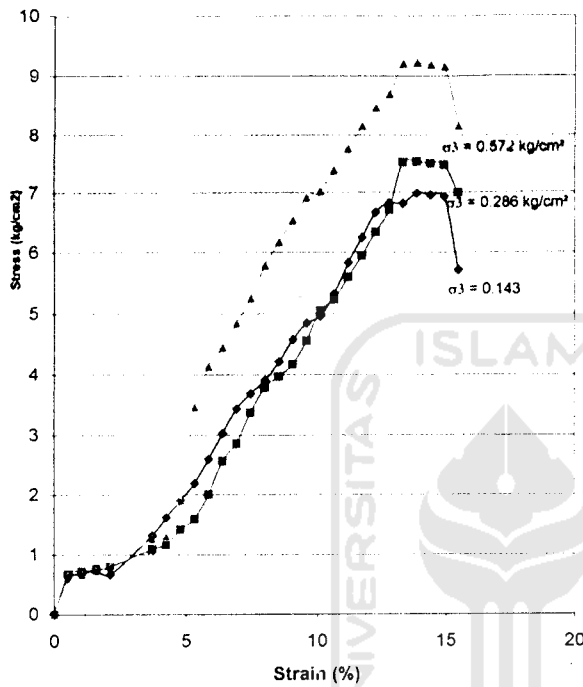
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14.4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

Sample : Tanah + 6% Kapur  
 Date : 15 Desember 2006  
 Tested by : Angel  
 No Sample : 2

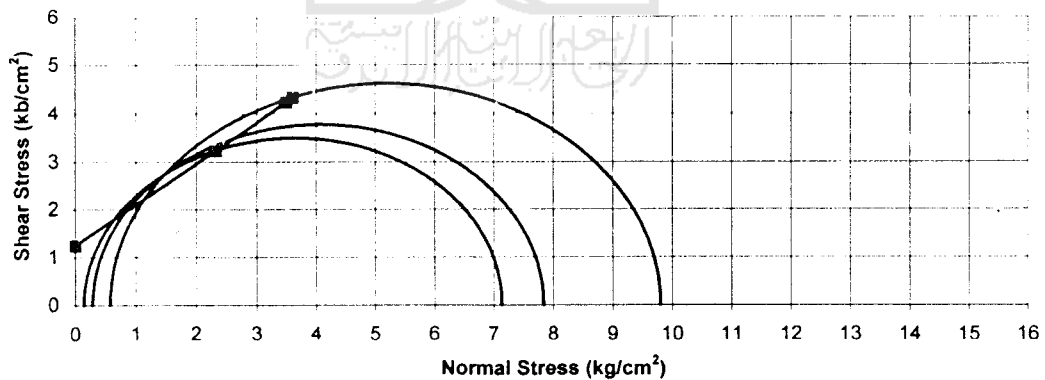


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm <sup>2</sup>	11.95	11.95	11.95
V cm <sup>3</sup>	89.59	89.59	89.59
Wt gram	153.52	153.54	153.59

Water Content		
Wt Container (cup), gr	21.94	21.75
Wt of Cup + Wet soil, gr	31.58	31.45
Wt of Cup + Dry soil, gr	28.62	28.52
Water Content %	44.31	43.28
Average water content %	43.80	

γ <sub>d</sub> gram/cm <sup>3</sup>	1.713502	1.713725	1.714283
γ <sub>d</sub> gram/cm <sup>3</sup>	1.191626	1.191781	1.192169

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	6.995414	7.554571	9.232043
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	7.138414	7.840571	9.804043
(σ <sub>1</sub> + σ <sub>3</sub> )/2	3.640707	4.063286	5.188022
(σ <sub>1</sub> - σ <sub>3</sub> )/2	3.497707	3.777286	4.616022
Angle of shearing resistance (φ)	40.56264		
Apperen cohesion (kg/cm <sup>2</sup> )	1.248221		



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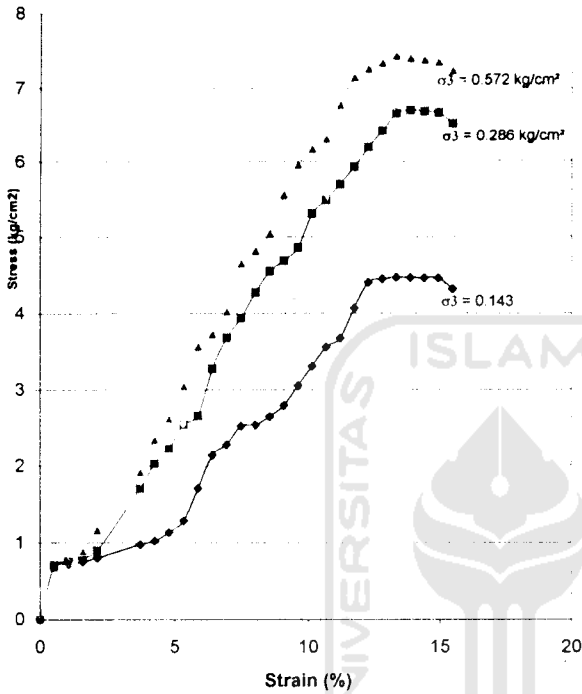
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**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kaliurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

Sample : Tanah + 7% Kapur  
 Date : 16 Desember 2006  
 Tested by : Angel  
 No Sampel : 2

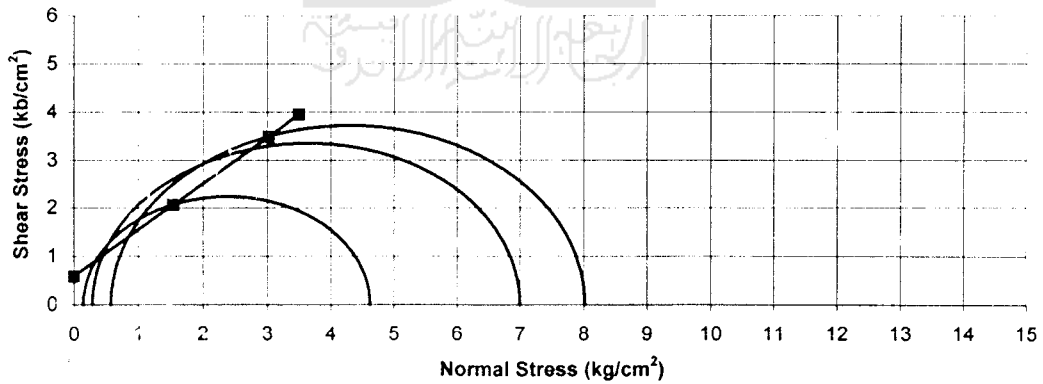


Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	155.75	155.29	154.86

Water Content		
Wt Container (cup), gr	22.10	21.78
Wt of Cup + Wet soil, gr	37.10	33.56
Wt of Cup + Dry soil, gr	32.41	29.92
Water Content %	45.49	44.72
Average water content %	45.10	

γ <sub>d</sub> gram/cm³	1.738392	1.733258	1.728458
γ <sub>d</sub> gram/cm³	1.198035	1.194496	1.191189

σ <sub>3</sub>	0.143	0.286	0.572
Δσ = P/A	4.477015	6.709887	7.445731
σ <sub>1</sub> = Δσ + σ <sub>3</sub>	4.620015	6.995887	8.017731
(σ <sub>1</sub> + σ <sub>3</sub> )/2	2.381507	3.640944	4.294865
(σ <sub>1</sub> - σ <sub>3</sub> )/2	2.238507	3.354944	3.722865
Angle of shearing resistance (φ)	43.89861		
Apperen cohesion (kg/cm²)	0.590768		



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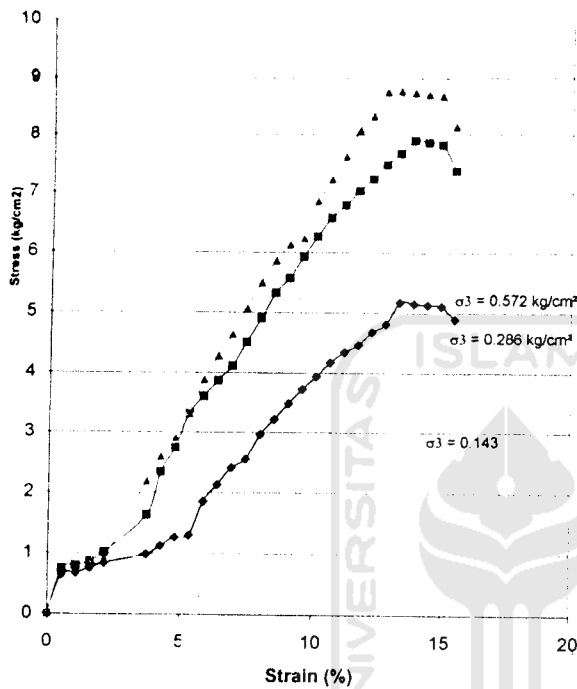
**LABORATORIUM MEKANIKA TANAH**  
**FAKULTAS TEKNIK SIPIL DAN PERENCANAAN**  
**UNIVERSITAS ISLAM INDONESIA**

Jl. Kallurang KM. 14,4 Telp. (0274) 895042, 895707 fax 895330 Yogyakarta 55584.

**TRIAXIAL COMPRESSION TEST RESULT**  
**UNCONSOLIDATED UNDRAINED (TXUU)**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Description of soil : Silty Clay  
 Pemeraman : 14 Hari

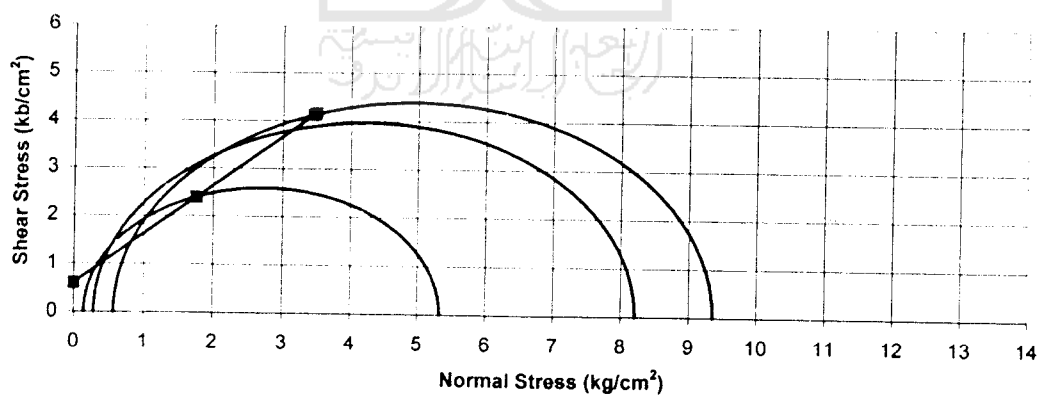
Sample No. : Tanah + 8% Kapur  
 Date : 16 Desember 2006  
 Tested by : Angel  
 No Sampel : 2



Piece No :	1	2	3
H cm	7.5	7.5	7.5
D cm	3.9	3.9	3.9
A cm²	11.95	11.95	11.95
V cm³	89.59	89.59	89.59
Wt gram	154.60	154.97	152.48
Water Content			
Wt Container (cup), gr	22.10	21.75	
Wt of Cup + Wet soil, gr	35.79	33.61	
Wt of Cup + Dry soil, gr	32.06	30.39	
Water Content %	37.45	37.27	
Average water content %	37.36		

$\gamma_d$ gram/cm³	1.725556	1.729686	1.701894
$\gamma_d$ gram/cm³	1.256237	1.259243	1.23901

$\sigma_3$	0.143	0.286	0.572
$\Delta\sigma = P/A$	5.183282	7.923377	8.786441
$\sigma_1 = \Delta\sigma + \sigma_3$	5.326282	8.209377	9.358441
$(\sigma_1 + \sigma_3)/2$	2.734641	4.247689	4.965221
$(\sigma_1 - \sigma_3)/2$	2.591641	3.961689	4.393221
Angle of shearing resistance ( $\phi$ )			45.4433
Apperen cohesion (kg/cm²)			0.611626



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LAMPIRAN TEKAN BEBAS (UCT)  
PEMERAMAN 3 HARI SAMPEL 1





**LABORATORIUM MEKANIKA TANAH**  
**JURUSAN TEKNIK SIPIL-FTSP**  
**UNIVERSITAS ISLAM INDONESIA**

**UNCONFINED COMPRESSION TEST**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Depth : 1,50 m - 2,00 m

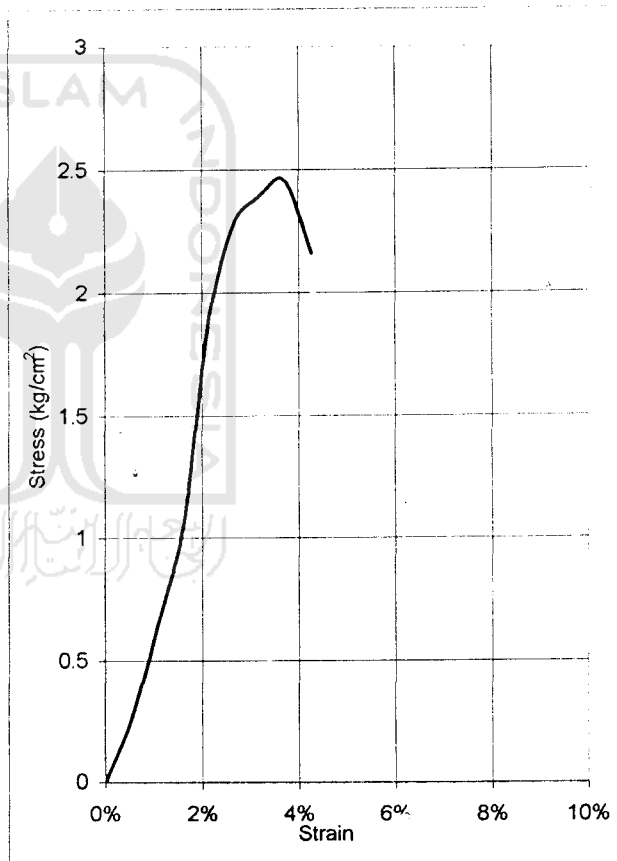
Date : 11 Desember 2006  
 Tested by : Angel  
 Sampel : 1

Sample data	
diam (cm)	3.9
Area (cm <sup>2</sup> )	11.9459
Ht, Lo (cm)	7.5
Vol (cm <sup>3</sup> )	89.5489
Wt (gr)	155.99
Wet Unit wt (gr/cm <sup>3</sup> )	1.74
Dry Unit wt (gr/cm <sup>3</sup> )	1.21549

Water Content		
Wt Container (cup), gr	21.85	21.93
Wt of Cup + Wet soil, gr	31.750	33.45
Wt of Cup + Dry soil, gr	28.80	29.92
Water Content %	42.45	44.18
Average water content %	43.31	

LRC = 0.5083 kg/div

Deformation dial rading (x 10 <sup>2</sup> )	Load dial (unit)	Unit Strain (ΔL/Lo)	Total load on sample (kg)	Sample stress (kg/cm <sup>2</sup> )
0	0	0.00%	0	0
40	6	0.53%	3.0498	0.253939
80	15	1.07%	7.6245	0.631444
120	25	1.60%	12.7075	1.046733
160	45	2.13%	22.8735	1.873908
200	55	2.67%	27.9565	2.277851
240	58	3.20%	29.4814	2.388935
280	60	3.73%	30.498	2.457696
320	53	4.27%	26.9399	2.158937
360		4.80%	0	0
400		5.33%	0	0
440		5.87%	0	0
480		6.40%	0	0
520		6.93%	0	0
560		7.47%	0	0
600		8.00%	0	0
640		8.53%	0	0
680		9.07%	0	0
720		9.60%	0	0
760		10.13%	0	0
800		10.67%	0	0
840		11.20%	0	0
880		11.73%	0	0
920		12.27%	0	0
960		12.80%	0	0
1000		13.33%	0	0
1040		13.87%	0	0
1080		14.40%	0	0
1120		14.93%	0	0



qu = 2.45770 kg/cm<sup>2</sup>  
 $\alpha = 67^\circ$   
 Angle Of Internal friction,  $\phi = 44^\circ$   
 Cohesion = 0.522 kg/cm<sup>2</sup>

Kepala laboratorium,

Dr. Ir. Edy Purwanto, CES. DEA.



**LABORATORIUM MEKANIKA TANAH**  
**JURUSAN TEKNIK SIPIL-FTSP**  
**UNIVERSITAS ISLAM INDONESIA**

**UNCONFINED COMPRESSION TEST**

Project : Tugas Akhir  
 Location : Kasongan, Bantul, Yogyakarta  
 Depth : 1,50 m - 2,00 m

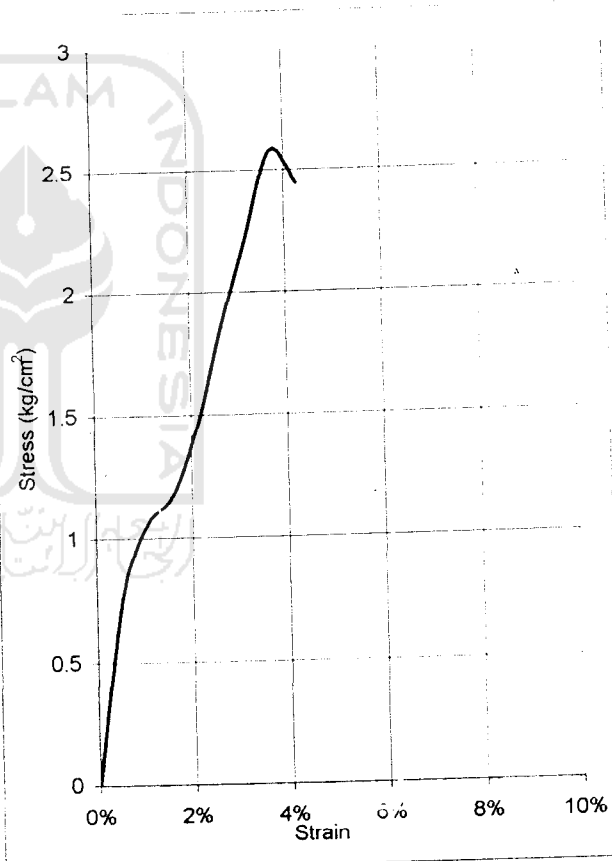
Date : 12 Desember 2006  
 Tested by : Angel  
 Sampel : 1

Sample data	
diam (cm)	3.9
Area (cm <sup>2</sup> )	11 9459
Ht, Lo (cm)	7.5
Vol (cm <sup>3</sup> )	89.5489
Wt (gr)	155.38
Wet Unit wt (gr/cm <sup>3</sup> )	1.74
Dry Unit wt (gr/cm <sup>3</sup> )	1.19679

Water Content		
Wt Container (cup), gr	21.93	21.90
Wt of Cup + Wet soil, gr	34.760	32.41
Wt of Cup + Dry soil, gr	30.73	29.19
Water Content %	45.80	44.17
Average water content %	44.98	

LRC = 0.5083 kg/div

Deformation dial rading (x 10 <sup>-2</sup> )	Load dial (unit)	Unit Strain (ΔL/Lo)	Total load on sample (kg)	Sample stress (kg/cm <sup>2</sup> )
0	0	0.00%	0	0
40	18	0.53%	9.1494	0.761818
80	25	1.07%	12.7075	1.052407
120	28	1.60%	14.2324	1.172342
160	35	2.13%	17.7905	1.457484
200	45	2.67%	22.8735	1.863696
240	54	3.20%	27.4482	2.224181
280	63	3.73%	32.0229	2.580581
320	60	4.27%	30.498	2.44408
360		4.80%	0	0
400		5.33%	0	0
440		5.87%	0	0
480		6.40%	0	0
520		6.93%	0	0
560		7.47%	0	0
600		8.00%	0	0
640		8.53%	0	0
680		9.07%	0	0
720		9.60%	0	0
760		10.13%	0	0
800		10.67%	0	0
840		11.20%	0	0
880		11.73%	0	0
920		12.27%	0	0
960		12.80%	0	0
1000		13.33%	0	0
1040		13.87%	0	0
1080		14.40%	0	0
1120		14.93%	0	0



qu = 2.58058 kg/cm<sup>2</sup>  
 α = 57°  
 Angle Of Internal friction, φ = 24°  
 Cohesion = 0.838 kg/cm<sup>2</sup>

Kepala laboratorium,  
*[Signature]*  
 Dr. Ir. Eddy Purwanto, CES. DEA.











LAMPIRAN TEKAN BEBAS (UCT)  
PEMERAMAN 3 HARI SAMPEL 2















LAMPIRAN TEKAN BEBAS (UCT)  
PEMERAMAN 7 HARI SAMPEL 1









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LABORATORIUM MEKANIKA TANAH  
JURUSAN TEKNIK SIPIL-FTSP  
UNIVERSITAS ISLAM INDONESIA

UNCONFINED COMPRESSION TEST

Project : Tugas Akhir  
Location : Kasongan, Bantul, Yogyakarta  
Depth : 1,50 m - 2,00 m

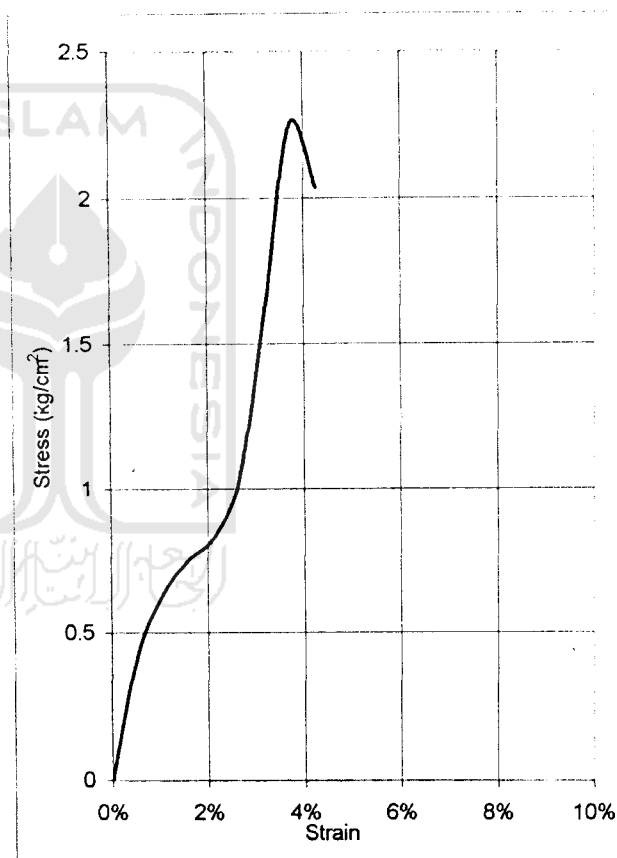
Date : 11 Desember 2006  
Tested by : Angel  
Sampel : 1  
Kadar Kapur : 6 %

Sample data	
diamtr (cm)	3.9
Area (cm <sup>2</sup> )	11.9459
Ht, Lo (cm)	7.5
Vol (cm <sup>3</sup> )	89.5489
Wt (gr)	151.63
Wet Unit wt (gr/cm <sup>3</sup> )	1.69
Dry Unit wt (gr/cm <sup>3</sup> )	1.17755

Water Content		
Wt Container (cup), gr	21.94	21.75
Wt of Cup + Wet soil, gr	31.58	31.45
Wt of Cup + Dry soil, gr	28.62	28.52
Water Content %	44.31	43.28
Average water content %	43.80	

LRC = 0.5083 kg/div

Deformation dial rading (x 10 <sup>-2</sup> )	Load dial (unit)	Unit Strain (ΔL/Lo)	Total load on sample (kg)	Sample stress (kg/cm <sup>2</sup> )
0	0	0.00%	0	0
40	10	0.53%	5.083	0.423232
80	15	1.07%	7.6245	0.631444
120	18	1.60%	9.1494	0.753648
160	20	2.13%	10.166	0.832848
200	25	2.67%	12.7075	1.035387
240	39	3.20%	19.8237	1.606353
280	55	3.73%	27.9565	2.252888
320	50	4.27%	25.415	2.036733



qu = 2.25289 kg/cm<sup>2</sup>  
 $\alpha$  = 50°  
 Angle Of Internal friction,  $\phi$  = 10°  
 Cohesion = 0.945 kg/cm<sup>2</sup>

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Dr. Ir. Edy Purwanto, CES. DEA.







LAMPIRAN TEKAN BEBAS (UCT)  
PEMERAMAN 7 HARI SAMPEL 2















LAMPIRAN TEKAN BEBAS (UCT)  
PEMERAMAN 14 HARI SAMPEL 1

















LAMPIRAN TEKAN BEBAS (UCT)  
PEMERAMAN 14 HARI SAMPEL2















