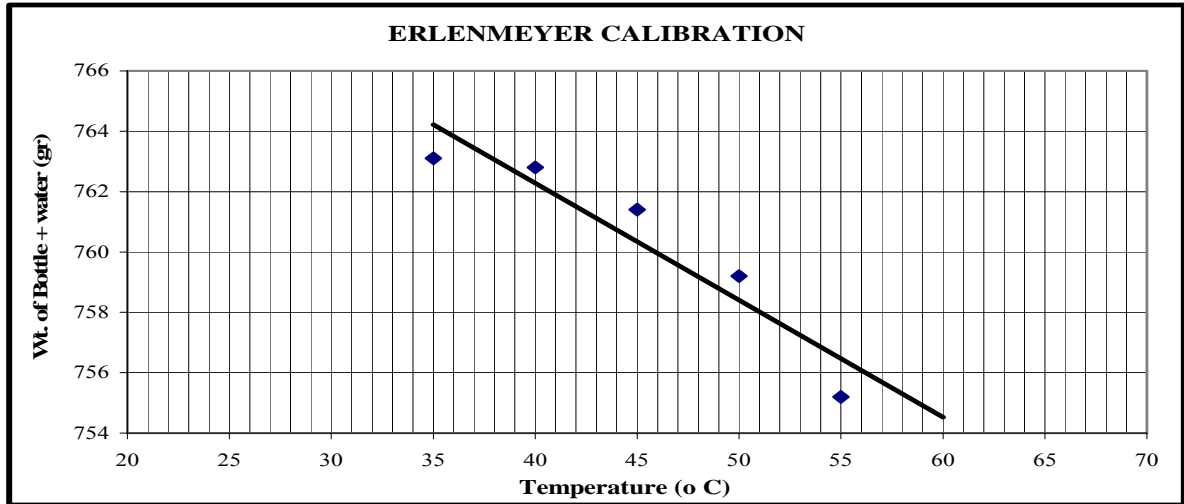


## ERLENMEYER CALIBRATION

Erlenmeyer Data :	Test No.
Erlenmeyer No. : 1	Tested by : Fendy (9821017)
Wt. of bottle; Wb :	Erlenmeyer No.
	Date : 20 April 2006

Determination No.	1	2	3	4	5
Wt. Bottle + water ; W1 (gr)	755.2	759.2	761.4	762.8	763.1
Temperature ; T (°C)	55	50	45	40	35



## WATER CONTENT

Soil sample : .....	Form No. : .....
Location : .....	Tested No : 1
Boring No. : .....	Date : 19 April 2006
Depth : .....	Tested by: Fendy (9821017)

Lokasi	I		II		III	
	1	2	1	2	1	2
Test No.						
Container no.	A	B	C	D	E	F
Wt. Container, W <sub>1</sub> (gr)	12.47	13.28	13.05	12.49	13.10	12.51
Wt. of wet soil + Container, W <sub>2</sub> (gr)	26.60	26.70	27.31	26.90	27.41	26.71
Wt. of dry soil + Container, W <sub>3</sub> (gr)	22.36	22.25	22.65	22.13	22.72	22.08
Wt. of wet soil, W <sub>4</sub> = W <sub>2</sub> - W <sub>1</sub> (gr)	14.13	13.42	14.26	14.41	14.31	14.20
Wt. of dry soil, W <sub>5</sub> = W <sub>3</sub> - W <sub>1</sub> (gr)	9.89	8.97	9.60	9.64	9.62	9.57
Wt. of water, W <sub>6</sub> = W <sub>4</sub> - W <sub>5</sub> (gr)	4.24	4.45	4.66	4.77	4.69	4.63
Water content, $w = \frac{W_6}{W_5} \times 100 \%$	42.88	49.61	48.51	49.48	48.75	48.38
Average	46.25		49.00		48.57	

## SPECIFIC GRAVITY TEST

Location	: Universitas Kristen Maranatha	Test No. :
Boring No.	:	Date : 22 April 2006
		Tested by : Fendy ( 9821017 )

Sample no : 1	1	2	3	4	5
Determination					
Wt. Bottle + water + soil ; $W_1$	801.30	802.10	803.50	804.00	804.70
Temperature ; $T (^{\circ}C)$	55	50	45	40	35
Wt. Bottle + water ; $W_2$	755.20	759.20	761.40	762.80	763.10
Wt.of pan + dry soil	165.50				
Wt.of pan	97.80				
Wt.of dry soil ; $W_s$	67.70				
Spec. Garvity of water at T ; GT	0.9857	0.9881	0.9902	0.9922	0.9941
Spec. Garvity of soil ; $G_s$	3.09	2.70	2.62	2.53	2.58
AVERAGE $G_s$	<b>2.7038</b>				

Sample no : 2	1	2	3	4	5
Determination					
Wt. Bottle + water + soil ; $W_1$	801.40	802.50	803.90	804.90	805.70
Temperature ; $T (^{\circ}C)$	55°	50°	45°	40°	35°
Wt. Bottle + water ; $W_2$	755.20	759.20	761.40	762.80	763.10
Wt.of pan + dry soil	166.00				
Wt.of pan	97.10				
Wt.of dry soil ; $W_s$	68.90				
Spec. Garvity of water at T ; GT	0.9857	0.9881	0.9902	0.9922	0.9941
Spec. Garvity of soil ; $G_s$	2.9918	2.6594	2.58	2.55	2.60
AVERAGE $G_s$	<b>2.6781</b>				

Sample no : 3	1	2	3	4	5
Determination					
Wt. Bottle + water + soil ; $W_1$	801.70	803.00	804.20	805.20	806.10
Temperature ; $T ( C )$	55	50	45	40	35
Wt. Bottle + water ; $W_2$	755.20	759.20	761.40	762.80	763.10
Wt.of pan + dry soil	250.40				
Wt.of pan	179.20				
Wt.of dry soil ; $W_s$	71.20				
Spec. Garvity of water at T ; GT	0.9857	0.9881	0.9902	0.9922	0.9941
Spec. Garvity of soil ; $G_s$	2.8414	2.5676	2.4825	2.4529	2.5099
AVERAGE $G_s$	<b>2.5709</b>				

## Sieve Analysis Test

Soil sample Lanau warna coklat

Location Grha Widya Maranatha

Depth \_\_\_\_\_

Sample No. \_\_\_\_\_ m

Wt. of sample 100 gr

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

Test No. 1

Date .23 April 2006

Tested by Fendy (9821017)

### SIEVE ANALYSIS

No	Size Of Sieve	Weight Of Sieve (gr)	Weight Of Sieve + Soil (gr)	Weight Of Retained (gr)	Percent Retained (%)	Comulative Percent (%)	Percent Finer (%)	Diameter Of Particles (mm)	Weight of Samples (gr)	
1	2 "	485.00	485.00	0.00	0.00	0.00	100.00	50.799	Sieve Analysis	
2	1 "	452.00	452.00	0.00	0.00	0.00	100.00	25.400		
3	3/4 "	435.00	435.00	0.00	0.00	0.00	100.00	19.050		
4	3/8 "	425.00	425.00	0.00	0.00	0.00	100.00	9.525	Hydrometer Analysis	
5	# 4	512.00	512.00	0.00	0.00	0.00	100.00	4.750		
6	# 10	438.00	439.80	1.80	1.80	1.80	98.20	2.000	50.00	
7	# 20	388.00	390.04	2.04	2.04	3.84	96.16	0.850	Specific Gravity (Gs)	
8	# 40	285.00	287.60	2.60	2.60	6.44	93.56	0.425		
9	# 100	280.00	283.00	3.00	3.00	9.44	90.56	0.150		
10	# 200	268.00	271.60	3.60	3.60	13.04	86.96	0.075		
11	PAN	250.00	336.96	86.96	86.96	100.00				
TOTAL										100.00

## Sieve Analysis Test

Soil sample	Lanau warna coklat	Form No.	
		Test No.	2
Location	Lapangan Parkir SGS	Date	23 April 2006
Depth		Tested by	Fendy (9821017)
Sample No.	m		
Wt. of sample	100 gr		

### SIEVE ANALYSIS

No	Size Of Sieve	Weight Of Sieve (gr)	Weight Of Sieve + Soil (gr)	Weight Of Retained (gr)	Percent Retained (%)	Comulative Percent (%)	Percent Finer (%)	Diameter Of Particles (mm)	Weight of Samples (gr)
1	2 "	485.00	485.00	0.00	0.000	0.00	100.00	50.799	Sieve
2	1 "	452.00	452.00	0.00	0.000	0.00	100.00	25.400	Analysis
3	3/4 "	435.00	435.00	0.00	0.000	0.00	100.00	19.050	100.00
4	3/8 "	425.00	425.00	0.00	0.000	0.00	100.00	9.525	Hydrometer
5	# 4	512.00	512.00	0.00	0.000	0.00	100.00	4.750	Analysis
6	# 10	438.00	438.00	0.00	0.000	0.00	100.00	2.000	50.00
7	# 20	388.00	388.97	0.97	0.970	0.97	99.03	0.850	Specific Gravity (Gs)
8	# 40	285.00	285.69	0.69	0.690	1.66	98.34	0.425	
9	# 100	280.00	282.93	2.93	2.930	4.59	95.41	0.150	
10	# 200	268.00	270.94	2.94	2.940	7.53	92.47	0.075	
11	PAN	250.00	342.47	92.47	92.470	100.00			
<b>TOTAL</b>					100.000				

## Sieve Analysis Test

Soil sample	Lanau warna coklat kehitaman	Form No.	
		Test No.	3
Location	Belakang Gedung C	Date	.23 April 2006
Depth	_____ m	Tested by	Fendy (9821017)
Sample No.	_____		_____
Wt. of sample	100 _____ gr		_____

### SIEVE ANALYSIS

No	Size Of Sieve	Weight Of Sieve (gr)	Weight Of Sieve + Soil (gr)	Weight Of Retained (gr)	Percent Retained (%)	Comulative Percent (%)	Percent Finer (%)	Diameter Of Particles (mm)	Weight of Samples (gr)
1	2 "	485.00	485.00	0.00	0.00	0.00	100.00	50.799	Sieve
2	1 "	452.00	452.00	0.00	0.00	0.00	100.00	25.400	Analysis
3	3/4 "	435.00	435.00	0.00	0.00	0.00	100.00	19.050	100.00
4	3/8 "	425.00	425.00	0.00	0.00	0.00	100.00	9.525	Hydrometer
5	# 4	512.00	512.00	0.00	0.00	0.00	100.00	4.750	Analysis
6	# 10	438.00	438.00	0.00	0.00	0.00	100.00	2.000	50.00
7	# 20	388.00	390.21	2.21	2.21	2.21	97.79	0.850	Specific Gravity (Gs)
8	# 40	285.00	287.11	2.11	2.11	4.32	95.68	0.425	
9	# 100	280.00	284.47	4.47	4.47	8.79	91.21	0.150	
10	# 200	268.00	269.14	1.14	1.14	9.93	90.07	0.075	
11	PAN	250.00	340.07	90.07	90.07	100.00			
TOTAL					100.00				

# ATTERBERG LIMITS

Soil sample : **Lanau warna coklat**  
 Location : **Grha Widya Maranatha**  
 Boring No. :  
 Depth :

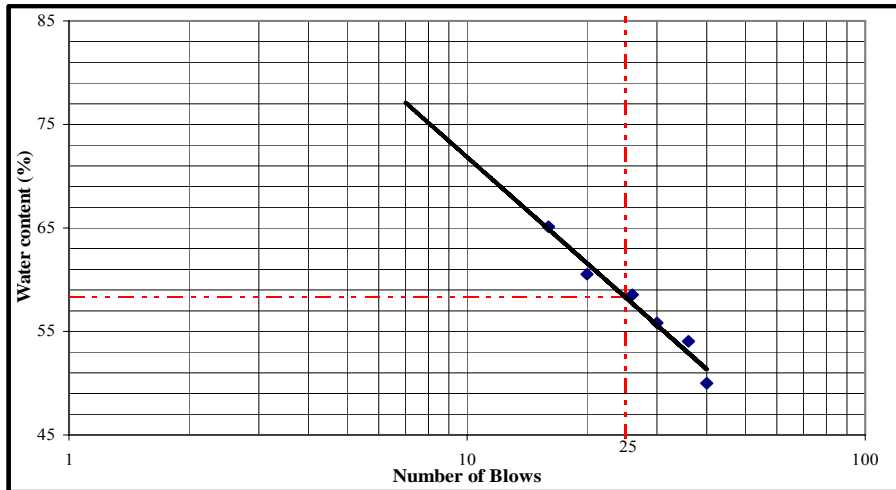
Form No. :  
 Test No. :  
 Date : **25-Apr-06**  
 Tested by : **Fendy (9821017)**

## SOIL PARAMETERS

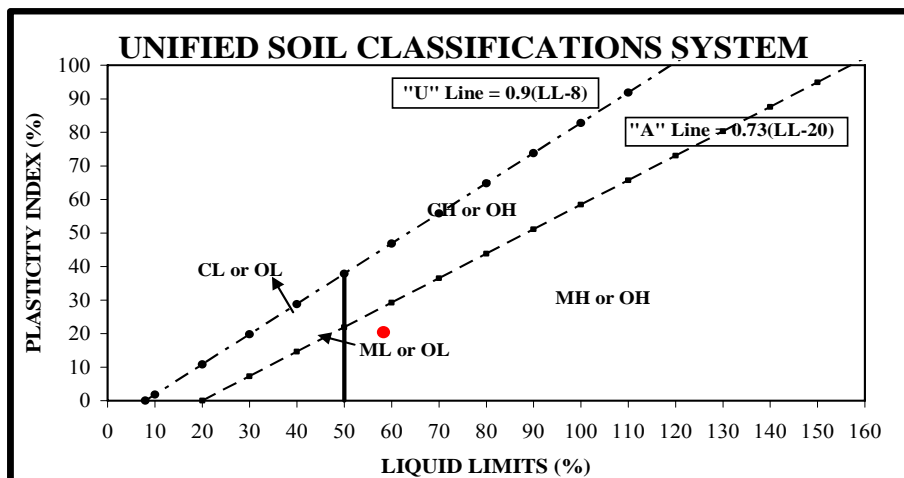
Water Content (w) : **46.25** %  
 Specific Gravity (Gs) : **2.704**

Test Number	Liquid Limit						Plastic Limit	
	1	2	3	4	5	6	1	2
Container Number	6	5	4	3	2	1	0	0
Number of blows	16	20	26	30	36	40	-	-
Weight of container + wet soil (gr)	16.00	15.70	20.40	16.10	15.30	15.80	23.80	23.50
Weight of container + dry soil (gr)	13.20	13.40	18.00	13.70	13.30	13.80	21.00	20.80
Weight of water (gr)	2.80	2.30	2.40	2.40	2.00	2.00	2.80	2.70
Weight of container (gr)	8.90	9.60	13.90	9.40	9.60	9.80	13.80	13.50
Weight of dry soil (gr)	4.30	3.80	4.10	4.30	3.70	4.00	7.20	7.30
Moisture content (%)	65.12	60.53	58.54	55.81	54.05	50.00	38.89	36.99
Average :							37.938	

## FLOW CURVE



Liquid Limit (LL)	58.29
Plastic Limit (PL)	37.94
Plasticity Index (PI = LL - PL)	20.36



# ATTERBERG LIMITS

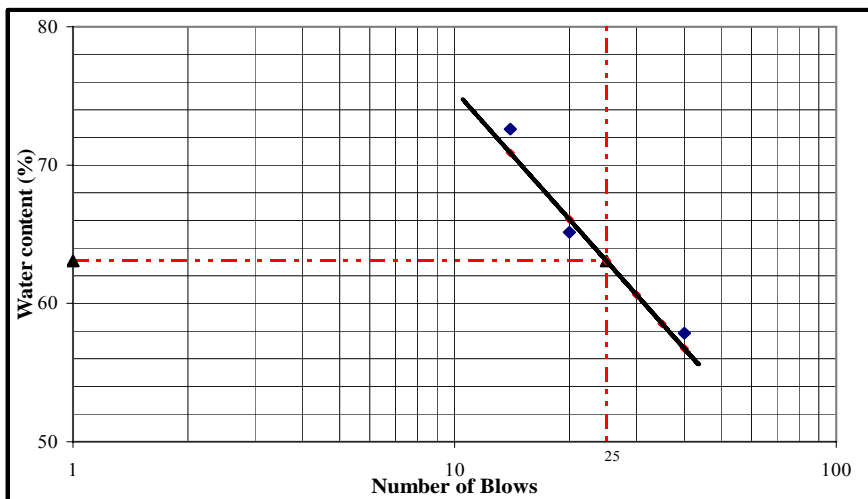
Soil sample : **Lanau warna coklat**  
 Location : **Lapangan Parkir SGS**  
 Boring No. :  
 Depth :

Form No. :  
 Test No. :  
 Date : **23-Apr-06**  
 Tested by : **Fendy (9821017)**

## SOIL PARAMETERS

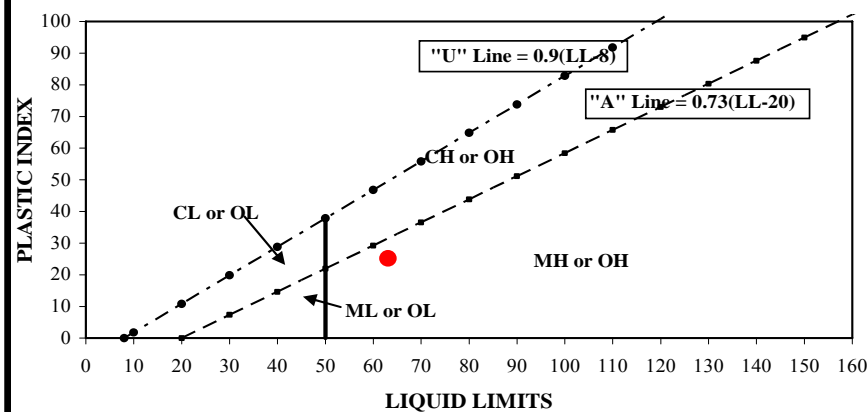
Water Content (w) : **49.00 %**  
 Specific Gravity (Gs) : **2.678**

Test Number		Liquid Limit						Plastic Limit	
		1	2	3	4	5	6	1	2
Container Number		A	B	C	D	E	F	0	0
Number of blows		14	20	25	30	35	40	-	-
Weight of container + wet soil	(gr)	34.10	27.70	28.40	24.30	29.30	25.40	23.60	23.50
Weight of container + dry soil	(gr)	23.50	20.60	21.50	18.40	22.00	19.50	20.90	20.70
Weight of water	(gr)	10.60	7.10	6.90	5.90	7.30	5.90	2.70	2.80
Weight of container	(gr)	8.90	9.70	10.00	8.80	9.60	9.30	13.60	13.50
Weight of dry soil	(gr)	14.60	10.90	11.50	9.60	12.40	10.20	7.30	7.20
Moisture content	(%)	72.60	65.14	60.00	61.46	58.87	57.84	36.99	38.89
								Average :	37.94



Liquid limit (wl)	63.07
Plastic limit (wp)	37.94
Plastic index (Ip=wl - wp)	25.13

## U.S.C. SOIL CLASSIFICATIONS



# ATTERBERG LIMITS

Soil sample : **Lanau warna coklat kehitaman**  
 Location : **Belakang Gedung C**  
 Boring No. :  
 Depth :

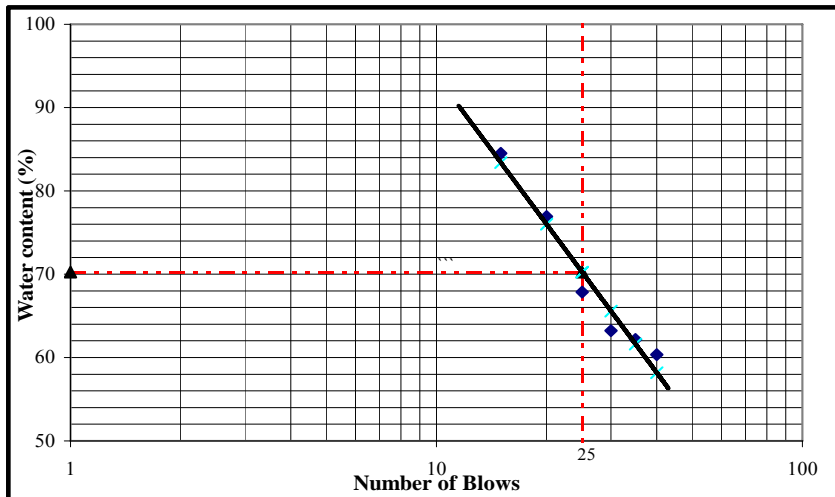
Form No. :  
 Test No. :  
 Date : 24-Apr-06  
 Tested by : Fendy (9821017)

## SOIL PARAMETERS

Water Content (w) : 48.57 %  
 Specific Gravity (Gs) : 2.571

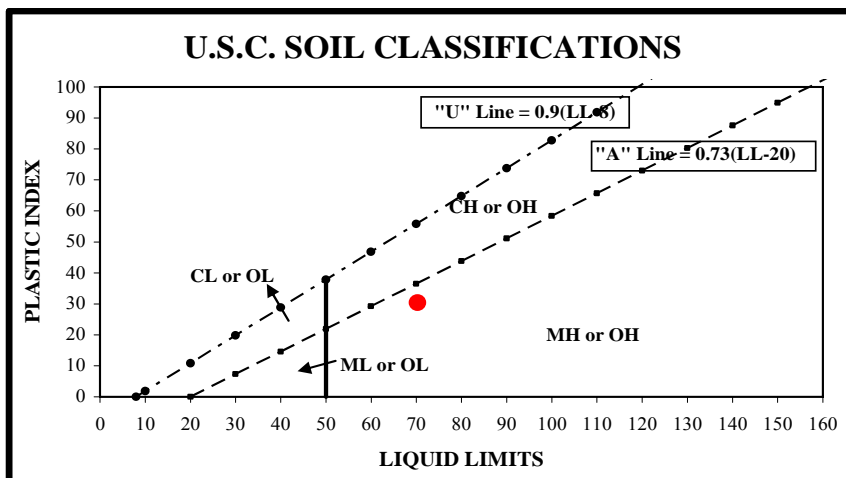
Test Number	Liquid Limit						Plastic Limit	
	1	2	3	4	5	6	1	2
Container Number	6	5	4	3	2	1	0	0
Number of blows	15	20	25	30	35	40	-	-
Weight of container + wet soil (gr)	22.90	22.60	23.50	23.90	20.90	18.60	23.50	23.60
Weight of container + dry soil (gr)	16.90	16.60	17.80	18.40	16.30	15.10	20.70	20.70
Weight of water (gr)	6.00	6.00	5.70	5.50	4.60	3.50	2.80	2.90
Weight of container (gr)	9.80	8.80	9.40	9.70	8.90	9.30	13.50	13.60
Weight of dry soil (gr)	7.10	7.80	8.40	8.70	7.40	5.80	7.20	7.10
Moisture content (%)	84.51	76.92	67.86	63.22	62.16	60.34	38.89	40.85
							Average :	39.87

## FLOW CURVE



Liquid limit (wl)	70.26
Plastic limit (wp)	39.87
Plastic index (Ip=wl - wp)	30.39

## U.S.C. SOIL CLASSIFICATIONS





# COMPACTION TEST

Soil sample	Lanau warna coklat	Type Of Test	Modified Proctor
Location	Graha Widya Maranatha	Date	15 Juni 2006
Plasticity Index	20.357	Tested by	Fendy ( 9821017 )
Specific Gravity	2.704	Berat Hammer	: 10 lbs
Diameter Mold	: 4 inch	Tinggi Jatuh Hammer	: 1.5 ft
Tinggi Mold	: 4.6 inch	Energi Kompaksi	: 56110.2223 lbs ft/ft <sup>3</sup>

<b>SAMPLE NO</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
------------------	----------	----------	----------	----------	----------

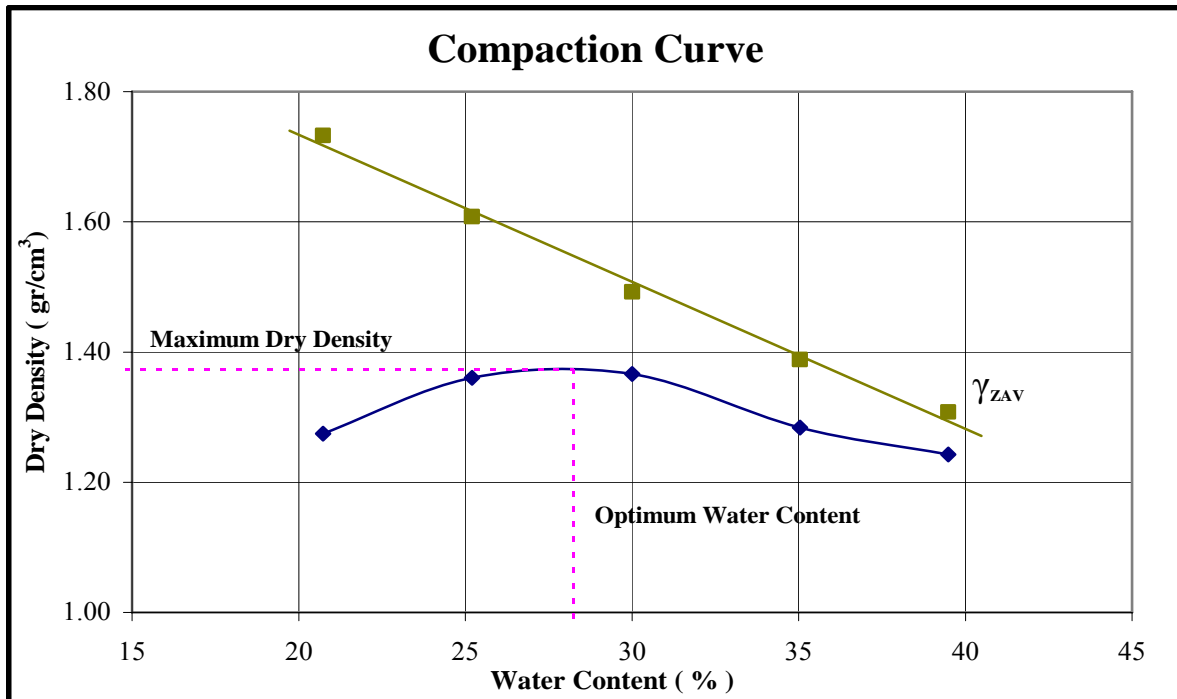
## DENSITY DETERMINATION

Assumed Water Content (gr)	20	25	30	35	40
Weight Of Sample + Mold (gr)	11091	11471	11641	11542	11541
Weight Of Mold (gr)	7531	7531	7531	7531	7531
Volume Mold (cm <sup>3</sup> )	2313.34	2313.34	2313.34	2313.34	2313.34
Weight Of Wet Soil (gr)	3560	3940	4110	4011	4010
Wet Density (gr/cm <sup>3</sup> )	1.539	1.703	1.777	1.734	1.733
Dry Density (gr/cm <sup>3</sup> )	<b>1.275</b>	<b>1.360</b>	<b>1.367</b>	<b>1.284</b>	<b>1.243</b>

## WATER CONTENT

Weight Of Wet Soil + Tare (gr)	194.2	142.1	208.7	251	238.2
Weight Of Dry Soil + Tare (gr)	172	126.2	174.7	201.8	189
Weight Of Tare (gr)	64.9	63.1	61.4	61.4	64.4
Weight Of Water (gr)	22.2	15.9	34	49.2	49.2
Weight Of Dry Soil (gr)	107.1	63.1	113.3	140.4	124.6
Water Content (%)	<b>20.728</b>	<b>25.198</b>	<b>30.009</b>	<b>35.043</b>	<b>39.486</b>

Zero Air Void (gr/cm <sup>3</sup> )	<b>1.733</b>	<b>1.608</b>	<b>1.493</b>	<b>1.388</b>	<b>1.308</b>
-------------------------------------	--------------	--------------	--------------	--------------	--------------



<b>Optimum Water Content (%)</b>	<b>28.250</b>	<b>Maximum Dry Density (gr/cm<sup>3</sup>)</b>	<b>1.374</b>
----------------------------------	---------------	--	--------------

# COMPACTION TEST

Soil sample	Lanau warna coklat	Type Of Test	Modified Proctor
Location	Graha Widya Maranatha	Date	15 Juni 2006
Plasticity Index	20.357	Tested by	Fendy ( 9821017 )
Specific Gravity	2.704	Berat Hammer	: 10 lbs
Diameter Mold	: 4 inch	Tinggi Jatuh Hammer	: 1.5 ft
Tinggi Mold	: 4.6 inch	Energi Kompaksi	: 56110.2223 lbs ft/ft <sup>3</sup>

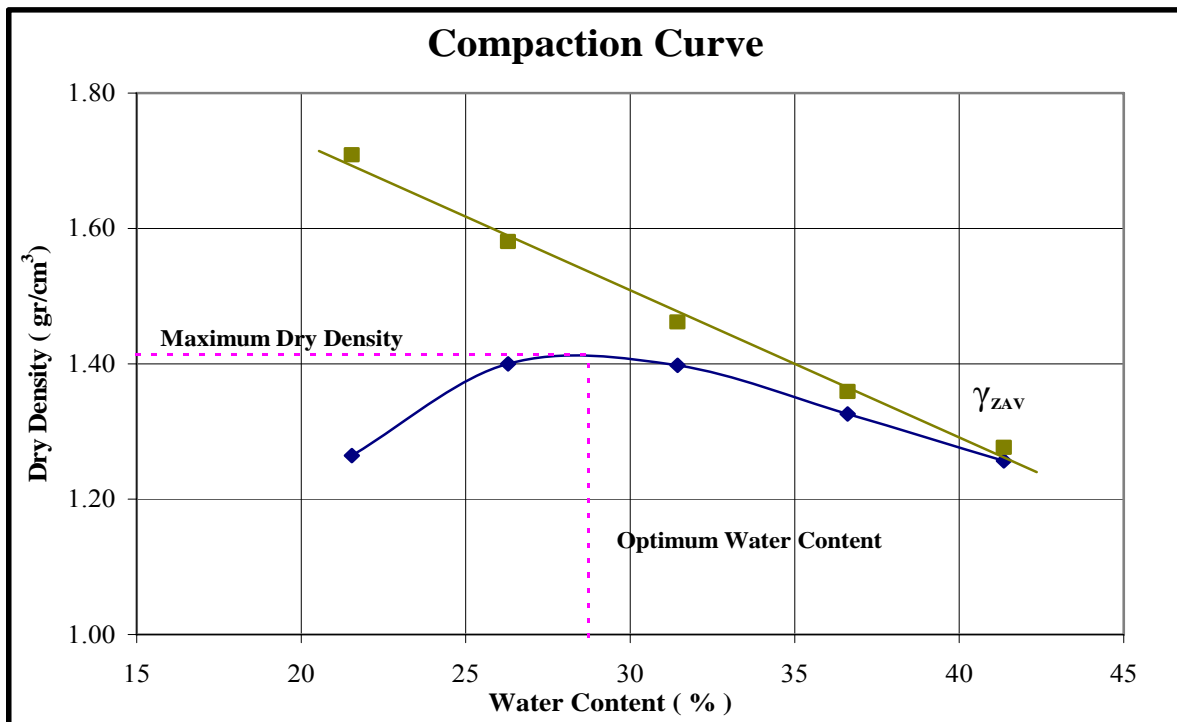
<b>SAMPLE NO</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
------------------	----------	----------	----------	----------	----------

## DENSITY DETERMINATION

Assumed Water Content	(gr)	20	25	30	35	40
Weight Of Sample + Mold	(gr)	11086	11621	11781	11721	11641
Weight Of Mold	(gr)	7531	7531	7531	7531	7531
Volume Mold	(cm <sup>3</sup> )	2313.34	2313.34	2313.34	2313.34	2313.34
Weight Of Wet Soil	(gr)	3555	4090	4250	4190	4110
Wet Density	(gr/cm <sup>3</sup> )	1.537	1.768	1.837	1.811	1.777
Dry Density	(gr/cm <sup>3</sup> )	<b>1.264</b>	<b>1.400</b>	<b>1.398</b>	<b>1.326</b>	<b>1.257</b>

## WATER CONTENT

Weight Of Wet Soil + Tare	(gr)	170.2	145	181.6	262.3	299.9
Weight Of Dry Soil + Tare	(gr)	150.6	128.1	152.9	209	231
Weight Of Tare	(gr)	59.6	63.8	61.6	63.4	64.4
Weight Of Water	(gr)	19.6	16.9	28.7	53.3	68.9
Weight Of Dry Soil	(gr)	91	64.3	91.3	145.6	166.6
Water Content	(%)	<b>21.538</b>	<b>26.283</b>	<b>31.435</b>	<b>36.607</b>	<b>41.357</b>
Zero Air Void	(gr/cm <sup>3</sup> )	<b>1.709</b>	<b>1.581</b>	<b>1.462</b>	<b>1.359</b>	<b>1.276</b>



Optimum Water Content (%)	<b>28.747</b>	Maximum Dry Density (gr/cm <sup>3</sup> )	<b>1.414</b>
---------------------------	---------------	---	--------------

# COMPACTION TEST

Soil sample	Lanau warna coklat	Type Of Test	Modified Proctor
Location	SGS Maranatha	Date	18 Juni 2006
Plasticity Index	25.132	Tested by	Fendy ( 9821017 )
Specific Gravity	2.678	Berat Hammer	: 10 lbs
Diameter Mold	: 4 inch	Tinggi Jatuh Hammer	: 1.5 ft
Tinggi Mold	: 4.6 inch	Energi Kompaksi	: 56110.2223 lbs ft/ft <sup>3</sup>

<b>SAMPLE NO</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
------------------	----------	----------	----------	----------	----------

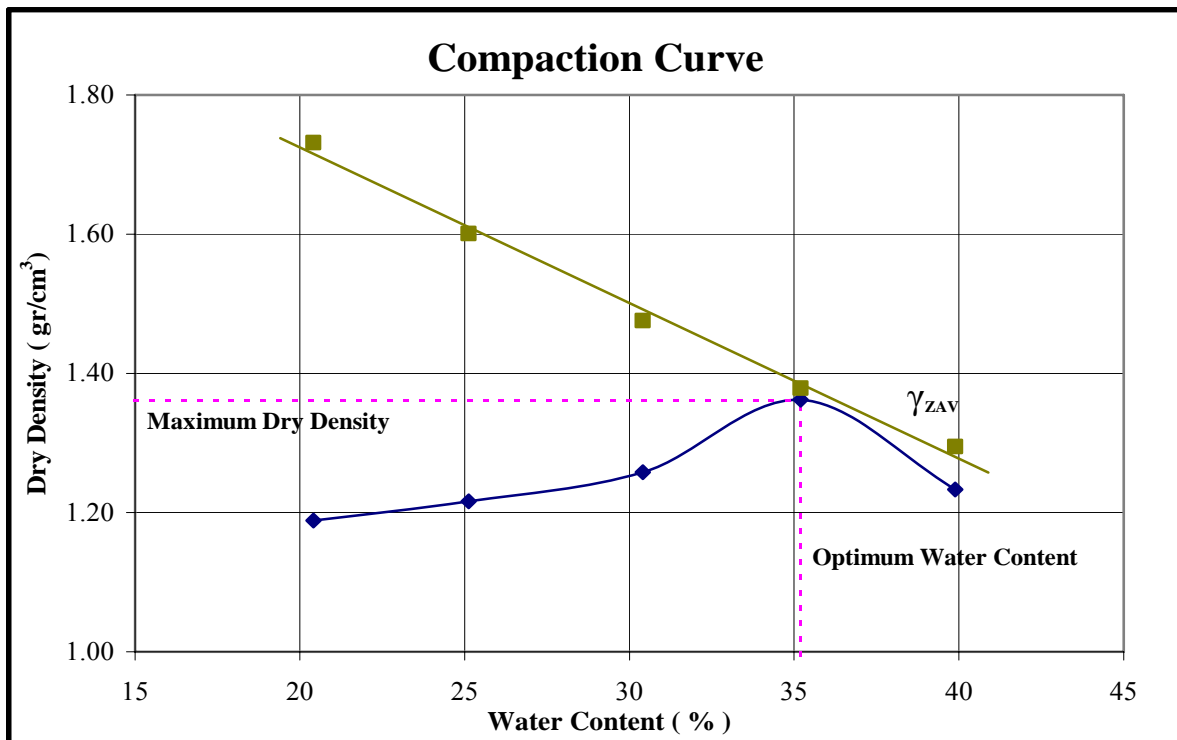
## DENSITY DETERMINATION

Assumed Water Content (gr)	20	25	30	35	40
Weight Of Sample + Mold (gr)	10841	11051	11326	11791	11521
Weight Of Mold (gr)	7531	7531	7531	7531	7531
Volume Mold (cm <sup>3</sup> )	2313.34	2313.34	2313.34	2313.34	2313.34
Weight Of Wet Soil (gr)	3310	3520	3795	4260	3990
Wet Density (gr/cm <sup>3</sup> )	1.431	1.522	1.640	1.841	1.725
Dry Density (gr/cm <sup>3</sup> )	<b>1.188</b>	<b>1.216</b>	<b>1.258</b>	<b>1.362</b>	<b>1.233</b>

## WATER CONTENT

Weight Of Wet Soil + Tare (gr)	198.3	164.8	206.3	198.2	287.5
Weight Of Dry Soil + Tare (gr)	175.5	143.7	175.1	163.5	223.6
Weight Of Tare (gr)	63.8	59.7	72.5	64.9	63.4
Weight Of Water (gr)	22.8	21.1	31.2	34.7	63.9
Weight Of Dry Soil (gr)	111.7	84	102.6	98.6	160.2
Water Content (%)	<b>20.412</b>	<b>25.119</b>	<b>30.409</b>	<b>35.193</b>	<b>39.888</b>

Zero Air Void (gr/cm <sup>3</sup> )	<b>1.732</b>	<b>1.601</b>	<b>1.476</b>	<b>1.379</b>	<b>1.295</b>
-------------------------------------	--------------	--------------	--------------	--------------	--------------



Optimum Water Content (%)	<b>35.193</b>	Maximum Dry Density (gr/cm <sup>3</sup> )	<b>1.362</b>
---------------------------	---------------	---	--------------

# COMPACTION TEST

Soil sample	Lanau warna coklat	Type Of Test	Modified Proctor
Location	SGS Maranatha	Date	18 Juni 2006
Plasticity Index	25.132	Tested by	Fendy ( 9821017 )
Specific Gravity	2.678	Berat Hammer	: 10 lbs
Diameter Mold	: 4 inch	Tinggi Jatuh Hammer	: 1.5 ft
Tinggi Mold	: 4.6 inch	Energi Kompaksi	: 56110.2223 lbs ft/ft <sup>3</sup>

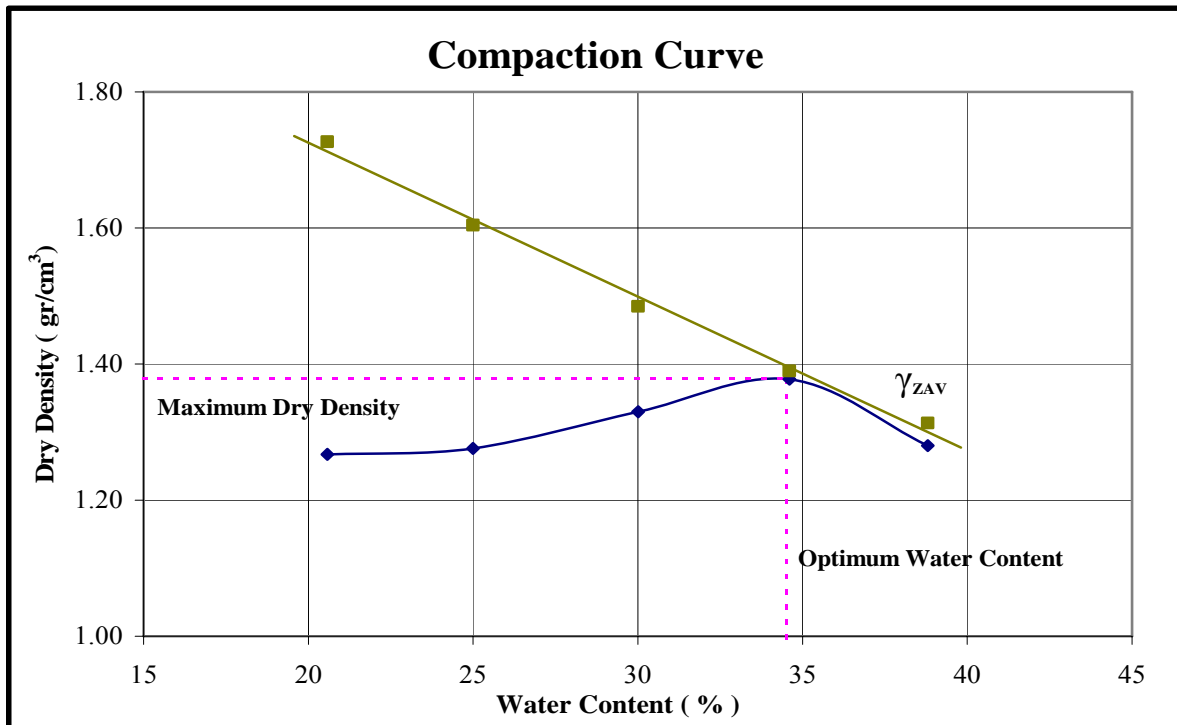
<b>SAMPLE NO</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
------------------	----------	----------	----------	----------	----------

## DENSITY DETERMINATION

Assumed Water Content (gr)	20	25	30	35	40
Weight Of Sample + Mold (gr)	11066	11221	11531	11821	11641
Weight Of Mold (gr)	7531	7531	7531	7531	7531
Volume Mold (cm <sup>3</sup> )	2313.34	2313.34	2313.34	2313.34	2313.34
Weight Of Wet Soil (gr)	3535	3690	4000	4290	4110
Wet Density (gr/cm <sup>3</sup> )	1.528	1.595	1.729	1.854	1.777
Dry Density (gr/cm <sup>3</sup> )	<b>1.267</b>	<b>1.276</b>	<b>1.330</b>	<b>1.378</b>	<b>1.280</b>

## WATER CONTENT

Weight Of Wet Soil + Tare (gr)	245.9	255.9	158.9	224	277.3
Weight Of Dry Soil + Tare (gr)	215	217	136	183	217
Weight Of Tare (gr)	64.8	61.4	59.7	64.5	61.6
Weight Of Water (gr)	30.9	38.9	22.9	41	60.3
Weight Of Dry Soil (gr)	150.2	155.6	76.3	118.5	155.4
Water Content (%)	<b>20.573</b>	<b>25.000</b>	<b>30.013</b>	<b>34.599</b>	<b>38.803</b>
Zero Air Void (gr/cm <sup>3</sup> )	<b>1.727</b>	<b>1.604</b>	<b>1.485</b>	<b>1.390</b>	<b>1.313</b>



Optimum Water Content (%)	<b>34.500</b>	Maximum Dry Density (gr/cm <sup>3</sup> )	<b>1.379</b>
---------------------------	---------------	---	--------------

# COMPACTION TEST

Soil sample	Lanau warna coklat kehitaman	Type Of Test	Modified Proctor
Location	Belakang Gedung C	Date	21 Juni 2006
Plasticity Index	30.394	Tested by	Fendy ( 9821017 )
Specific Gravity	2.571	Berat Hammer	: 10 lbs
Diameter Mold	: 4 inch	Tinggi Jatuh Hammer	: 1.5 ft
Tinggi Mold	: 4.6 inch	Energi Kompaksi	: 56110.2223 lbs ft/ft <sup>3</sup>

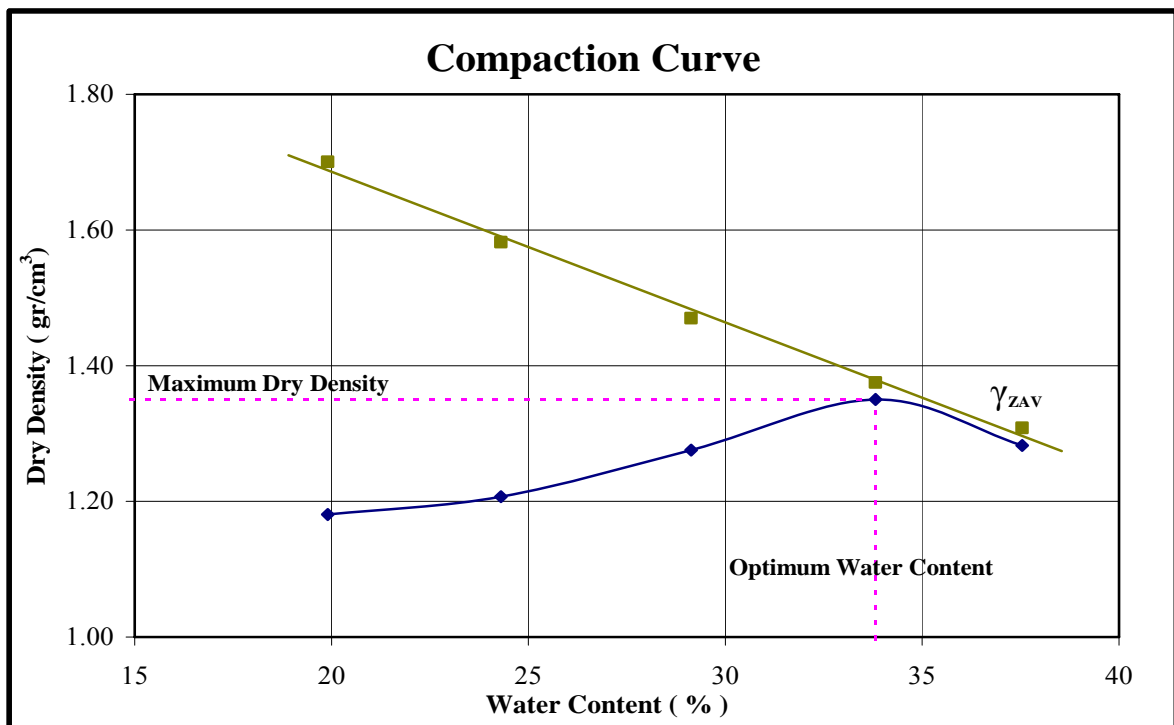
<b>SAMPLE NO</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
------------------	----------	----------	----------	----------	----------

## DENSITY DETERMINATION

Assumed Water Content	(gr)	20	25	30	35	40
Weight Of Sample + Mold	(gr)	10806	11001	11341	11711	11611
Weight Of Mold	(gr)	7531	7531	7531	7531	7531
Volume Mold	(cm <sup>3</sup> )	2313.34	2313.34	2313.34	2313.34	2313.34
Weight Of Wet Soil	(gr)	3275	3470	3810	4180	4080
Wet Density	(gr/cm <sup>3</sup> )	1.416	1.500	1.647	1.807	1.764
Dry Density	(gr/cm <sup>3</sup> )	<b>1.181</b>	<b>1.207</b>	<b>1.275</b>	<b>1.350</b>	<b>1.282</b>

## WATER CONTENT

Weight Of Wet Soil + Tare	(gr)	162	133	145.4	169.2	233.8
Weight Of Dry Soil + Tare	(gr)	145.5	119.9	126.9	143.6	187.7
Weight Of Tare	(gr)	62.6	66	63.4	67.9	64.9
Weight Of Water	(gr)	16.5	13.1	18.5	25.6	46.1
Weight Of Dry Soil	(gr)	82.9	53.9	63.5	75.7	122.8
Water Content	(%)	<b>19.903</b>	<b>24.304</b>	<b>29.134</b>	<b>33.818</b>	<b>37.541</b>
Zero Air Void	(gr/cm <sup>3</sup> )	<b>1.701</b>	<b>1.582</b>	<b>1.470</b>	<b>1.375</b>	<b>1.308</b>



Optimum Water Content (%)	<b>33.818</b>	Maximum Dry Density (gr/cm <sup>3</sup> )	<b>1.350</b>
---------------------------	---------------	---	--------------

# COMPACTION TEST

Soil sample	Lanau warna coklat kehitaman	Type Of Test	Modified Proctor
Location	Belakang Gedung C	Date	21 Juni 2006
Plasticity Index	30.394	Tested by	Fendy ( 9821017 )
Specific Gravity	2.571	Berat Hammer	: 10 lbs
Diameter Mold	: 4 inch	Tinggi Jatuh Hammer	: 1.5 ft
Tinggi Mold	: 4.6 inch	Energi Kompaksi	: 56110.2223 lbs ft/ft <sup>3</sup>

<b>SAMPLE NO</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
------------------	----------	----------	----------	----------	----------

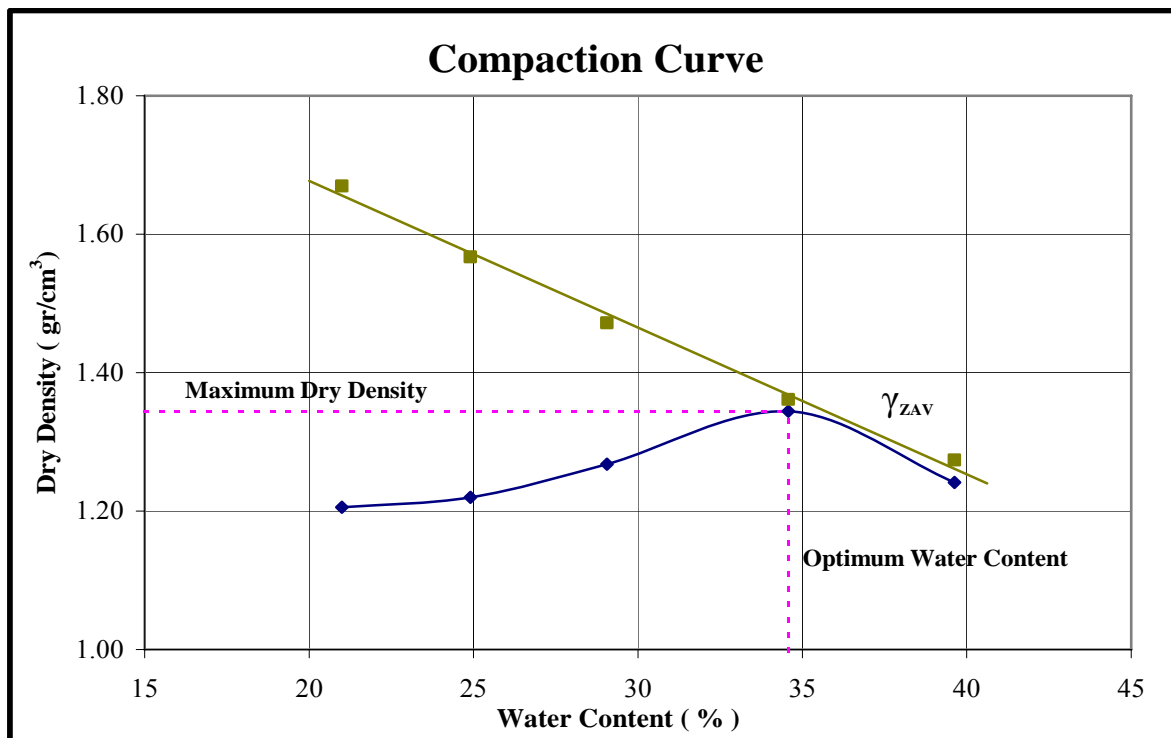
## DENSITY DETERMINATION

Assumed Water Content (gr)	20	25	30	35	40
Weight Of Sample + Mold (gr)	10906	11056	11316	11716	11541
Weight Of Mold (gr)	7531	7531	7531	7531	7531
Volume Mold (cm <sup>3</sup> )	2313.34	2313.34	2313.34	2313.34	2313.34
Weight Of Wet Soil (gr)	3375	3525	3785	4185	4010
Wet Density (gr/cm <sup>3</sup> )	1.459	1.524	1.636	1.809	1.733
Dry Density (gr/cm <sup>3</sup> )	<b>1.206</b>	<b>1.220</b>	<b>1.268</b>	<b>1.344</b>	<b>1.242</b>

## WATER CONTENT

Weight Of Wet Soil + Tare (gr)	230.8	224.1	202.3	177.2	249.9
Weight Of Dry Soil + Tare (gr)	201.4	191.9	171.3	147.5	197.4
Weight Of Tare (gr)	61.4	62.6	64.6	61.6	64.9
Weight Of Water (gr)	29.4	32.2	31	29.7	52.5
Weight Of Dry Soil (gr)	140	129.3	106.7	85.9	132.5
Water Content (%)	<b>21.000</b>	<b>24.903</b>	<b>29.053</b>	<b>34.575</b>	<b>39.623</b>

Zero Air Void (gr/cm <sup>3</sup> )	<b>1.670</b>	<b>1.567</b>	<b>1.472</b>	<b>1.361</b>	<b>1.274</b>
-------------------------------------	--------------	--------------	--------------	--------------	--------------



Optimum Water Content (%)	<b>34.570</b>	Maximum Dry Density (gr/cm <sup>3</sup> )	<b>1.344</b>
---------------------------	---------------	---	--------------

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua	Type of Test : Modified Proctor
Location : Grha Widya Maranatha	Date : 15 Juni 2006
Sample No. : 1 (IP = 20.357%, w = 20.728%, $\gamma_{dry} = 1.275 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm			
0	0.00	0	0	0.00	-
1	1.20	12	12	12.00	-
2	2.00	20	8	10.00	-
3	3.20	32	12	10.67	10.67
4	3.70	37	5	9.25	9.25
5	4.50	45	8	9.00	9.00
6	5.20	52	7	8.67	8.67
7	5.50	55	3	7.86	7.86
8	6.00	60	5	7.50	7.50
9	6.90	69	9	7.67	7.67
10	7.50	75	6	7.50	7.50
11	8.30	83	8	7.55	7.55
12	8.80	88	5	7.33	7.33
13	10.00	100	12	7.69	-
14	11.60	116	16	8.29	-
				121.04	82.99
			DCP rata-rata	8.645	8.299

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua

Location : Grha Widya Maranatha

Sample No. : 1 (IP = 20.357 %, w = 25.198%,  $\gamma_{dry} = 1.360 \text{ gr/cm}^3$ )

Type of Test : Modified Proctor

Date : 15 Juni 2006

Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI mm	DCP VALUE mm/blow	DCP VALUE pada ½H
	cm	mm			
0	0.00	0	0	0.00	-
1	1.50	15	15	15.00	-
2	2.20	22	7	11.00	-
3	2.90	29	7	9.67	9.67
4	3.60	36	7	9.00	9.00
5	3.90	39	3	7.80	7.80
6	4.50	45	6	7.50	7.50
7	4.90	49	4	7.00	7.00
8	5.40	54	5	6.75	6.75
9	5.70	57	3	6.33	6.33
10	6.40	64	7	6.40	6.40
11	6.90	69	5	6.27	6.27
12	7.20	72	3	6.00	6.00
13	7.70	77	5	5.92	5.92
14	8.20	82	5	5.86	5.86
15	8.70	87	5	5.80	5.80
16	8.90	89	2	5.56	-
17	9.30	93	4	5.47	-
18	9.60	96	3	5.33	-
19	10.20	102	6	5.37	-
				138.04	90.30
DCP rata-rata				7.265	6.946



## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua	Type of Test : Modified Proctor
Location : Grha Widya Maranatha	Date : 15 Juni 2006
Sample No. : 1 (IP = 20.357 %, w = 30.009%, $\gamma_{dry}$ = 1.367 gr/cm <sup>3</sup> )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm			
0	0.00	0	0	0.00	-
1	2.00	20	20	20.00	-
2	3.30	33	13	16.50	16.50
3	4.40	44	11	14.67	14.67
4	5.50	55	11	13.75	13.75
5	6.80	68	13	13.60	13.60
6	7.80	78	10	13.00	13.00
7	9.00	90	12	12.86	-
8	10.50	105	15	13.13	-
DCP rata-rata				117.50	71.52
DCP rata-rata				14.687	14.303

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua	Type of Test : Modified Proctor
Location : Grha Widya Maranatha	Date : 15 Juni 2006
Sample No. : 1 (IP = 20.357 %, w = 35.043%, $\gamma_{dry}$ = 1.284 gr/cm <sup>3</sup> )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm			
0	0.00	0	0	0.00	-
1	6.90	69	69	69.00	69.00
DCP rata-rata				69.00	69.00
DCP rata-rata				69.00	69.00

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua	Type of Test : Modified Proctor
Location : Grha Widya Maranatha	Date : 15 Juni 2006
Sample No. : 1 (IP = 20.357 %, w = 39.486 %, $\gamma_{dry}$ = 1.243 gr/cm <sup>3</sup> )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm			
0	~	~	~	~	~
DCP rata-rata				~	~

DCP Value pada kadar air kondisi diatas tidak dapat dihitung (besar sekali), karena pada saat alat DCP diletakan diatas tanah kompak, ujung dari konus sudah mencapai dasar dari mold kompak (base plate)

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua	Type of Test : Modified Proctor
Location : Graha Widya Maranatha	Date : 15 Juni 2006
Sample No. : 1 (IP = 20.357%, w = 21.538%, $\gamma_{dry} = 1.264 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI mm	DCP VALUE mm/blow	DCP VALUE pada ½H
	cm	mm			
0	0.00	0	0	0.00	-
1	1.50	15	15	15.00	-
2	2.10	21	6	10.50	-
3	2.50	25	4	8.33	-
4	3.50	35	10	8.75	8.75
5	3.70	37	2	7.40	7.40
6	3.90	39	2	6.50	6.50
7	4.10	41	2	5.86	5.86
8	4.30	43	2	5.38	5.38
9	4.90	49	6	5.44	5.44
10	5.10	51	2	5.10	5.10
11	5.50	55	4	5.00	5.00
12	5.80	58	3	4.83	4.83
13	6.00	60	2	4.62	4.62
14	6.30	63	3	4.50	4.50
15	6.70	67	4	4.47	4.47
16	7.10	71	4	4.44	4.44
17	7.30	73	2	4.29	4.29
18	7.70	77	4	4.28	4.28
19	8.10	81	4	4.26	4.26
20	8.30	83	2	4.15	4.15
21	8.70	87	4	4.14	4.14
22	9.10	91	4	4.14	-
23	9.50	95	4	4.13	-
24	9.70	97	2	4.04	-
25	10.10	101	4	4.04	-
26	10.80	108	7	4.15	-
				147.743	93.407
DCP rata-rata				5.682	5.189

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua	Type of Test : Modified Proctor
Location : Grha Widya Maranatha	Date : 15 Juni 2006
Sample No. : 1 (IP = 20.357%, w = 26.283 %, $\gamma_{dry} = 1.400 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm	mm	mm/blow	pada 1/2H
0	0.00	0	0	0.00	-
1	0.60	6	6	6.00	-
2	1.10	11	5	5.50	-
3	1.50	15	4	5.00	-
4	1.90	19	4	4.75	-
5	2.20	22	3	4.40	-
6	2.70	27	5	4.50	-
7	3.10	31	4	4.43	4.43
8	3.60	36	5	4.50	4.50
9	4.10	41	5	4.56	4.56
10	4.50	45	4	4.50	4.50
11	4.90	49	4	4.45	4.45
12	5.20	52	3	4.33	4.33
13	5.50	55	3	4.23	4.23
14	5.70	57	2	4.07	4.07
15	6.00	60	3	4.00	4.00
16	6.20	62	2	3.88	3.88
17	6.60	66	4	3.88	3.88
18	7.10	71	5	3.94	3.94
19	7.40	74	3	3.89	3.89
20	7.60	76	2	3.80	3.80
21	8.10	81	5	3.86	3.86
22	8.40	84	3	3.82	3.82
23	8.80	88	4	3.83	-
24	9.10	91	3	3.79	-
25	9.30	93	2	3.72	-
26	9.60	96	3	3.69	-
27	10.00	100	4	3.70	-
28	10.20	102	2	3.64	-
29	10.70	107	5	3.69	-
DCP rata-rata				122.362	66.146
				4.219	4.134

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua

Location : Grha Widya Maranatha

Sample No. : 1 (IP = 20.357%, w = 31.435%,  $\gamma_{dry} = 1.398 \text{ gr/cm}^3$ )

Type of Test : Modified Proctor

Date : 15 Juni 2006

Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm			
0	0.00	0	0	0.00	-
1	2.00	20	20	20.00	-
2	3.20	32	12	16.00	16.00
3	4.10	41	9	13.67	13.67
4	4.80	48	7	12.00	12.00
5	6.00	60	12	12.00	12.00
6	6.80	68	8	11.33	11.33
7	7.50	75	7	10.71	10.71
8	8.40	84	9	10.50	10.50
9	9.00	90	6	10.00	-
10	9.40	94	4	9.40	-
11	10.00	100	6	9.09	-
12	10.80	108	8	9.00	-
DCP rata-rata				143.705	86.214
DCP rata-rata				11.975	12.316

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua	Type of Test : Modified Proctor
Location : Grha Widya Maranatha	Date : 15 Juni 2006
Sample No. : 1 (IP = 20.357%, w = 36.607%, $\gamma_{dry} = 1.326 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm	mm	mm/blow	pada 1/2H
0	0.00	0	0	0.00	-
1	3.10	31	31	31.00	31.00
2	6.30	63	32	31.50	31.50
3	9.10	91	28	30.33	-
DCP rata-rata				92.833	62.500
DCP rata-rata				30.944	31.250

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua	Type of Test : Modified Proctor
Location : Grha Widya Maranatha	Date : 15 Juni 2006
Sample No. : 1 (IP = 20.357 %, w = 41.357 %, $\gamma_{dry} = 1.257 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm	mm	mm/blow	pada 1/2H
0	~	~	~	~	~
DCP rata-rata				~	~

DCP Value pada kadar air kondisi diatas tidak dapat dihitung (besar sekali), karena pada saat alat DCP diletakan diatas tanah kompaksi, ujung dari konus sudah mencapai dasar dari mold kompaksi (base plate)

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna kecoklatan	Type of Test : Modified Proctor
Location : SGS Maranatha	Date : 18 Juni 2006
Sample No. : 2 (IP = 25.132 %, w = 20.573 %, $\gamma_{dry} = 1.267 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm			
0	0.00	0	0	0.00	-
1	2.00	20	20	20.00	-
2	3.00	30	10	15.00	15.00
3	4.00	40	10	13.33	13.33
4	4.90	49	9	12.25	12.25
5	5.60	56	7	11.20	11.20
6	6.70	67	11	11.17	11.17
7	8.00	80	13	11.43	11.43
8	8.80	88	8	11.00	-
9	9.50	95	7	10.56	-
10	10.30	103	8	10.30	-
DCP rata-rata				126.23	74.38
DCP rata-rata				12.62	12.40

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna kecoklatan	Type of Test : Modified Proctor
Location : SGS Maranatha	Date : 18 Juni 2006
Sample No. : 2 (IP = 25.132 %, w = 25.000 %, $\gamma_{dry} = 1.276 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm	mm	mm/blow	pada 1/2H
0	0.00	0	0	0.00	-
1	1.60	16	16	16.00	-
2	2.10	21	5	10.50	-
3	2.60	26	5	8.67	-
4	3.30	33	7	8.25	8.25
5	3.60	36	3	7.20	7.20
6	4.00	40	4	6.67	6.67
7	4.40	44	4	6.29	6.29
8	4.70	47	3	5.87	5.87
9	5.10	51	4	5.67	5.67
10	5.40	54	3	5.40	5.40
11	5.80	58	4	5.27	5.27
12	6.40	64	6	5.33	5.33
13	6.80	68	4	5.23	5.23
14	7.40	74	6	5.29	5.29
15	7.60	76	2	5.07	5.07
16	8.10	81	5	5.06	5.06
17	8.50	85	4	5.00	5.00
18	8.70	87	2	4.83	4.83
19	9.10	91	4	4.79	-
20	9.60	96	5	4.80	-
21	10.10	101	5	4.81	-
				135.99	86.43
DCP rata-rata				6.48	5.76

### DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna kecoklatan	Type of Test : Modified Proctor
Location : SGS Maranatha	Date : 18 Juni 2006
Sample No. : 2 (IP = 25.132 %, w = 30.013 %, $\gamma_{dry} = 1.330 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE mm/blow	DCP VALUE pada 1/2H
	cm	mm			
0	0.00	0	0	0.00	-
1	2.00	20	20	20.00	-
2	3.50	35	15	17.50	17.50
3	4.50	45	10	15.00	15.00
4	5.20	52	7	13.00	13.00
5	6.30	63	11	12.60	12.60
6	7.20	72	9	12.00	12.00
7	7.70	77	5	11.00	11.00
8	8.80	88	11	11.00	-
9	9.50	95	7	10.56	-
10	10.30	103	8	10.30	-
DCP rata-rata				132.96	81.10
				13.30	13.52

### DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna kecoklatan	Type of Test : Modified Proctor
Location : SGS Maranatha	Date : 18 Juni 2006
Sample No. : 2 (IP = 25.132 %, w = 34.599 %, $\gamma_{dry} = 1.378 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE mm/blow	DCP VALUE pada 1/2H
	cm	mm			
0	0.00	0	0	0.00	-
1	3.20	32	32	32.00	32.00
2	6.20	62	30	31.00	31.00
3	10.20	102	40	34.00	-
DCP rata-rata				97.00	63.00
				32.33	31.50



## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua	Type of Test : Modified Proctor
Location : Grha Widya Maranatha	Date : 18 Juni 2006
Sample No. : 2 (IP = 25.132 %, w = 38.803 %, $\gamma_{dry} = 1.280 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm	mm	mm/blow	pada $\frac{1}{2}H$
0	~	~	~	~	~
DCP rata-rata				~	~

DCP Value pada kadar air kondisi diatas tidak dapat dihitung (besar sekali), karena pada saat alat DCP diletakan diatas tanah kompaksi, ujung dari konus sudah mencapai dasar dari mold kompaksi (base plate)

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna kecoklatan

Location : SGS Maranatha

Sample No. : 2(IP = 25.132 %, w = 20.412 %,  $\gamma_{dry} = 1.188 \text{ gr/cm}^3$ )

Type of Test : Modified Proctor

Date : 18 Juni 2006

Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI mm	DCP VALUE mm/blow	DCP VALUE pada ½H
	cm	mm			
0	0.00	0	0	0.00	-
1	1.40	14	14	14.00	-
2	2.50	25	11	12.50	-
3	3.40	34	9	11.33	11.33
4	4.40	44	10	11.00	11.00
5	4.90	49	5	9.80	9.80
6	5.30	53	4	8.83	8.83
7	5.90	59	6	8.43	8.43
8	6.40	64	5	8.00	8.00
9	6.90	69	5	7.67	7.67
10	7.60	76	7	7.60	7.60
11	7.90	79	3	7.18	7.18
12	8.50	85	6	7.08	7.08
13	9.00	90	5	6.92	-
14	9.90	99	9	7.07	-
15	10.90	109	10	7.27	-
				134.69	86.93
DCP rata-rata				8.98	8.693

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna kecoklatan	Type of Test : Modified Proctor
Location : SGS Maranatha	Date : 18 Juni 2006
Sample No. : 2 (IP = 25.132 %, w = 25.119 %, $\gamma_{dry} = 1.216 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm			
0	0.00	0	0	0.00	-
1	1.60	16	16	16.00	-
2	2.20	22	6	11.00	-
3	3.10	31	9	10.33	10.33
4	4.10	41	10	10.25	10.25
5	4.40	44	3	8.80	8.80
6	4.70	47	3	7.83	7.83
7	5.00	50	3	7.14	7.14
8	5.20	52	2	6.50	6.50
9	5.60	56	4	6.22	6.22
10	6.00	60	4	6.00	6.00
11	6.20	62	2	5.64	5.64
12	6.40	64	2	5.33	5.33
13	6.80	68	4	5.23	5.23
14	7.30	73	5	5.21	5.21
15	7.80	78	5	5.20	5.20
16	8.10	81	3	5.06	5.06
17	8.30	83	2	4.88	4.88
18	8.60	86	3	4.78	4.78
19	9.00	90	4	4.74	-
20	9.20	92	2	4.60	-
21	9.60	96	4	4.57	-
22	10.10	101	5	4.59	-
23	10.40	104	3	4.52	-
				154.44	104.42
			DCP rata-rata	6.71	6.53

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna kecoklatan	Type of Test : Modified Proctor
Location : SGS Maranatha	Date : 18 Juni 2006
Sample No. : 2 (IP = 25.132%, w = 30.409 %, $\gamma_{dry} = 1.258 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI mm	DCP VALUE mm/blow	DCP VALUE pada ½H
	cm	mm			
0	0.00	0	0	0.00	-
1	0.50	5	5	5.00	-
2	1.50	15	10	7.50	-
3	2.60	26	11	8.67	-
4	3.00	30	4	7.50	7.50
5	3.80	38	8	7.60	7.60
6	4.60	46	8	7.67	7.67
7	5.40	54	8	7.71	7.71
8	6.40	64	10	8.00	8.00
9	7.00	70	6	7.78	7.78
10	7.60	76	6	7.60	7.60
11	8.50	85	9	7.73	7.73
12	9.40	94	9	7.83	-
13	10.00	100	6	7.69	-
14	10.80	108	8	7.71	-
DCP rata-rata				105.99	61.59
				7.57	7.698

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna kecoklatan	Type of Test : Modified Proctor
Location : SGS Maranatha	Date : 18 Juni 2006
Sample No. : 2 (IP = 25.132 %, w = 35.193 %, $\gamma_{dry} = 1.362 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI mm	DCP VALUE mm/blow	DCP VALUE pada ½H
	cm	mm			
0	0.00	0	0	0.00	-
1	3.20	32	32	32.00	32.00
2	6.20	62	30	31.00	31.00
3	10.20	102	40	34.00	-
DCP rata-rata				97.000	63.000
				32.333	31.500

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna kecoklatan	Type of Test : Modified Proctor
Location : SGS Maranatha	Date : 18 Juni 2006
Sample No. : 2 (IP = 25.132 %, w = 39.888 %, $\gamma_{dry} = 1.233 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm	mm	mm/blow	pada 1/2H
0	~	~	~	~	~
DCP rata-rata				~	~

DCP Value pada kadar air kondisi diatas tidak dapat dihitung (besar sekali), karena pada saat alat DCP diletakan diatas tanah kompaksi, ujung dari konus sudah mencapai dasar dari mold kompaksi (base plate)

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna coklat kehitaman Location : Belakang Gedung C Sample No. : 3 (IP = 30.394 %, w = 21.000 %, $\gamma_{dry} = 1.206 \text{ gr/cm}^3$ )	Type of Test : Modified Proctor Date : 21 Juni 2006 Tested by : Fendy (9821017)
---	---

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm	mm	mm/blow	pada 1/2H
0	0.00	0	0	0.00	-
1	2.00	20	20	20.00	-
2	3.10	31	11	15.50	15.50
3	4.40	44	13	14.67	14.67
4	4.70	47	3	11.75	11.75
5	5.40	54	7	10.80	10.80
6	6.00	60	6	10.00	10.00
7	6.60	66	6	9.43	9.43
8	7.50	75	9	9.38	9.38
9	8.60	86	11	9.56	9.56
10	8.90	89	3	8.90	-
11	9.80	98	9	8.91	-
12	10.80	108	10	9.00	-
				137.88	91.08
			DCP rata-rata	11.49	11.38

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna coklat kehitaman	Type of Test : Modified Proctor
Location : Belakang Gedung C	Date : 21 Juni 2006
Sample No. : 3 (IP = 30.394 %, w = 24.903 %, $\gamma_{dry} = 1.220 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI mm	DCP VALUE mm/blow	DCP VALUE pada 1/2H
	cm	mm			
0	0.00	0	0	0.00	-
1	0.50	5	5	5.00	-
2	1.40	14	9	7.00	-
3	2.00	20	6	6.67	-
4	2.50	25	5	6.25	-
5	2.90	29	4	5.80	5.80
6	3.50	35	6	5.83	5.83
7	3.90	39	4	5.57	5.57
8	4.40	44	5	5.50	5.50
9	4.80	48	4	5.33	5.33
10	5.10	51	3	5.10	5.10
11	5.70	57	6	5.18	5.18
12	6.30	63	6	5.25	5.25
13	6.40	64	1	4.92	4.92
14	7.00	70	6	5.00	5.00
15	7.30	73	3	4.87	4.87
16	7.50	75	2	4.69	4.69
17	7.80	78	3	4.59	4.59
18	8.40	84	6	4.67	4.67
19	8.70	87	3	4.58	4.58
20	8.90	89	2	4.45	-
21	9.30	93	4	4.43	-
22	9.80	98	5	4.45	-
23	10.40	104	6	4.52	-
24	10.70	107	3	4.46	-
DCP rata-rata				124.11	76.88
DCP rata-rata				5.17	5.13

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna coklat kehitaman	Type of Test : Modified Proctor
Location : Belakang Gedung C	Date : 21 Juni 2006
Sample No. : 3 (IP = 30.394 %, w = 29.053 %, $\gamma_{dry} = 1.268 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI mm	DCP VALUE mm/blow	DCP VALUE pada 1/2H
	cm	mm			
0	0.00	0	0	0.00	-
1	1.60	16	16	16.00	-
2	2.30	23	7	11.50	-
3	3.10	31	8	10.33	10.33
4	3.60	36	5	9.00	9.00
5	4.30	43	7	8.60	8.60
6	5.00	50	7	8.33	8.33
7	5.60	56	6	8.00	8.00
8	6.40	64	8	8.00	8.00
9	6.90	69	5	7.67	7.67
10	7.60	76	7	7.60	7.60
11	8.20	82	6	7.45	7.45
12	8.80	88	6	7.33	-
13	9.60	96	8	7.38	-
14	10.30	103	7	7.36	-
DCP rata-rata				124.56	74.99
DCP rata-rata				8.90	8.33

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna coklat kehitaman	Type of Test : Modified Proctor
Location : Belakang Gedung C	Date : 21 Juni 2006
Sample No. : 3 (IP = 30.394 %, w = 34.575 %, $\gamma_{dry} = 1.344 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI mm	DCP VALUE mm/blow	DCP VALUE pada 1/2H
	cm	mm			
0	0.00	0	0	0.00	-
1	2.00	20	20	20.00	-
2	3.70	37	17	18.50	18.50
3	5.70	57	20	19.00	19.00
4	7.50	75	18	18.75	18.75
5	9.40	94	19	18.80	-
6	10.90	109	15	18.17	-
DCP rata-rata				113.22	56.25
DCP rata-rata				18.87	18.75



## DYNAMIC CONE PENETRATION TEST

Soil sample : Lanau warna coklat kehitaman	Type of Test : Modified Proctor
Location : Belakang Gedung C	Date : 21 Juni 2006
Sample No. : 3 (IP = 30.394 %, w = 39.623 %, $\gamma_{dry} = 1.242 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm	mm	mm/blow	pada 1/2H
0	~	~	~	~	~
DCP rata-rata				~	~

DCP Value pada kadar air kondisi diatas tidak dapat dihitung (besar sekali), karena pada saat alat DCP diletakan diatas tanah kompaksi, ujung dari konus sudah mencapai dasar dari mold kompaksi (base plate)

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat kehitaman

Location : Belakang Gedung C

Sample No. : 3 (IP = 30.394 %, w = 19.903 %,  $\gamma_{dry} = 1.181 \text{ gr/cm}^3$ )

Type of Test : Modified Proctor

Date : 21 Juni 2006

Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm	mm	mm/blow	pada 1/2H
0	0.00	0	0	0.00	-
1	1.50	15	15	15.00	-
2	3.00	30	15	15.00	15.00
3	4.00	40	10	13.33	13.33
4	4.50	45	5	11.25	11.25
5	5.00	50	5	10.00	10.00
6	5.50	55	5	9.17	9.17
7	6.00	60	5	8.57	8.57
8	6.80	68	8	8.50	8.50
9	7.60	76	8	8.44	8.44
10	8.20	82	6	8.20	8.20
11	9.80	98	16	8.91	-
12	10.80	108	10	9.00	-
				125.37	92.47
			DCP rata-rata	10.45	10.27

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat kehitaman	Type of Test : Modified Proctor
Location : Belakang Gedung C	Date : 21 Juni 2006
Sample No. : 3 (IP = 30.394 %, w = 24.304 %, $\gamma_{dry} = 1.207 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm	mm	mm/blow	pada 1/2H
0	0.00	0	0	0.00	-
1	1.90	19	19	19.00	-
2	2.50	25	6	12.50	-
3	3.00	30	5	10.00	10.00
4	3.70	37	7	9.25	9.25
5	4.00	40	3	8.00	8.00
6	4.70	47	7	7.83	7.83
7	5.00	50	3	7.14	7.14
8	5.20	52	2	6.50	6.50
9	5.80	58	6	6.44	6.44
10	6.20	62	4	6.20	6.20
11	6.50	65	3	5.91	5.91
12	6.80	68	3	5.67	5.67
13	7.00	70	2	5.38	5.38
14	7.50	75	5	5.36	5.36
15	7.90	79	4	5.27	5.27
16	8.10	81	2	5.06	5.06
17	8.50	85	4	5.00	5.00
18	9.00	90	5	5.00	-
19	9.30	93	3	4.89	-
20	9.70	97	4	4.85	-
21	10.00	100	3	4.76	-
22	10.50	105	5	4.77	-
				154.80	99.02
			DCP rata-rata	7.04	6.60

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat kehitaman	Type of Test : Modified Proctor
Location : Belakang Gedung C	Date : 21 Juni 2006
Sample No. : 3 (IP = 30.394 %, w = 29.134 %, $\gamma_{dry} = 1.275 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm			
0	0.00	0	0	0.00	-
1	2.00	20	20	20.00	-
2	2.30	23	3	11.50	-
3	2.60	26	3	8.67	-
4	3.50	35	9	8.75	8.75
5	4.30	43	8	8.60	8.60
6	4.70	47	4	7.83	7.83
7	5.10	51	4	7.29	7.29
8	5.60	56	5	7.00	7.00
9	6.30	63	7	7.00	7.00
10	6.60	66	3	6.60	6.60
11	7.10	71	5	6.45	6.45
12	7.50	75	4	6.25	6.25
13	8.00	80	5	6.15	6.15
14	8.70	87	7	6.21	6.21
15	9.30	93	6	6.20	-
16	9.80	98	5	6.13	-
17	10.30	103	5	6.06	-
18	10.60	106	3	5.89	-
				142.58	78.14
			DCP rata-rata	7.92	7.10

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat kehitaman	Type of Test : Modified Proctor
Location : Belakang Gedung C	Date : 21 Juni 2006
Sample No. : 3 (IP = 30.394 %, w = 33.818 %, $\gamma_{dry} = 1.350 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm			
0	0.00	0	0	0.00	-
1	2.50	25	25	25.00	-
2	3.50	35	10	17.50	17.50
3	5.00	50	15	16.67	16.67
4	6.00	60	10	15.00	15.00
5	7.00	70	10	14.00	14.00
6	8.10	81	11	13.50	13.50
7	9.30	93	12	13.29	-
8	10.50	105	12	13.13	-
DCP rata-rata				128.08	76.67
DCP rata-rata				16.01	15.33

## DYNAMIC CONE PENETRATION TEST

Soil sample : Lempung warna coklat tua	Type of Test : Modified Proctor
Location : Belakang Gedung C	Date : 21 Juni 2006
Sample No. : 3 (IP = 30.394 %, w = 37.541 %, $\gamma_{dry} = 1.282 \text{ gr/cm}^3$ )	Tested by : Fendy (9821017)

Number of Blows	PENETRASI		$\Delta$ PENETRASI	DCP VALUE	DCP VALUE
	cm	mm			
0	~	~	~	~	~
DCP rata-rata				~	~

DCP Value pada kadar air kondisi diatas tidak dapat dihitung (besar sekali), karena pada saat alat DCP diletakan diatas tanah kompaksi, ujung dari konus sudah mencapai dasar dari mold kompaksi (base plate)