



LAMPIRAN

Lampiran 1. Hasil Pengujian *Index Properties* Tanah


1. Kadar Air

 LABORATORIUM GEOTEKNIK JURUSAN TEKNIK SIPIL - FAKULTAS TEKNIK UNIVERSITAS MUHAMMADIYAH YOGYAKARTA JL. BRAWIJAYA, TAMAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55183 TELP. 0274-387656 (HUNTING)					
KADAR AIR					
Project	: Tugas Akhir	Depth	:-		
Location	: -	Date	:-		
No.	: -	Made by	: Adi Septian Arifin		
No.	Uraian	Satuan	Benda Uji		
			A1	A2	A3
1	Berat Cawan Kosong	g	9,41	9,19	9,45
2	Berat Cawan + Tanah Basah	g	29,41	29,19	29,45
3	Berat Cawan + Tanah Kering	g	26,7	26,53	26,84
4	Berat Air	g	2,71	2,66	2,61
5	Derat Tanah Kering	g	17,29	17,34	17,39
6	Kadar Air	%	15,7	15,3	15,0
7	Kadar Air rata-rata	%	15,3		
GEOTECHNICAL LABORATORY - CIVIL ENGINEERING DEPT. - UNIVERSITAS MUHAMMADIYAH YOGYAKARTA					

2. Berat Jenis

 LABORATORIUM GEOTEKNIK JURUSAN TEKNIK SIPIL - FAKULTAS TEKNIK UNIVERSITAS MUHAMMADIYAH YOGYAKARTA JL. BRAWIJAYA, TAMAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55183 TELP. 0274-387656 (HUNTING)					
BERAT JENIS					
Project	: Tugas Akhir	Depth	:-		
Location	: -	Date	:-		
No.	: -	Made by	: Adi Septian Arifin		
No.	Uraian	Satuan	A1	A2	A3
			A1	A2	A3
1	Berat Piknometer kosong	g	25,79	22,86	27,36
2	Berat Piknometer + tanah kering	g	35,79	32,86	37,36
3	Berat Piknometer + tanah + air	g	82,28	79,43	83,38
4	Temperatur	C	27,6	27,5	27,7
5	Berat Volume Air	g/ml	0,99625	0,99638	0,99632
6	Berat Piknometer + air	g	76,0008	73,1664	77,0945
7	Berat Jenis, Gs.t		2,69	2,68	2,69
8	Rata-rata berat jenis		2,69		
9	Berat Jenis pada T=20°C. Gs		2,69		
10	Berat Jenis Rata-rata, GS		2,69		
GEOTECHNICAL LABORATORY - CIVIL ENGINEERING DEPT. - UNIVERSITAS MUHAMMADIYAH YOGYAKARTA					

3. Batas Cair

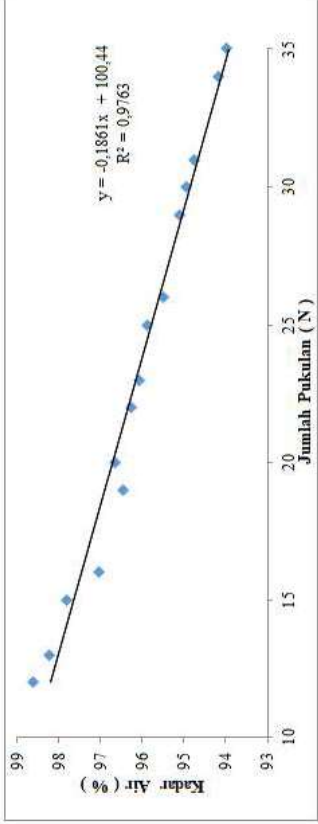


LABORATORIUM GEOTEKNIK
JURUSAN TEKNIK SIPIL FAKULTAS TEKNIK
UNIVERSITAS MUHAMMADIYAH YOGYAKARTA
Jl. BRIKULAJA, TAWAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55183
TELP. 0274-387656 (PUNTING)

BATAS CAIR

Project : Tugas Akhir
Location :
No. :
Depth :
Date :
Made by : Adi Septian Arifin

No	Jenis Pengujian	Satuan	1			2			3			4			5		
			A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
1	Jumlah Pukulan		35	34	31	30	29	26	25	22	23	20	19	16	12	15	13
2	Berat Cawan Kosong	g	13,22	9,23	10,11	9,19	9,42	9,17	9,28	9,20	9,19	8,76	12,00	9,77	9,28	9,38	9,24
3	Berat Cawan + Tanah Basah	g	33,22	29,23	30,11	29,19	29,42	29,17	29,28	29,20	29,19	28,76	32,00	29,77	29,28	29,38	29,24
4	Berat Cawan + Tanah Kering	g	23,53	19,53	20,38	19,45	19,67	19,40	19,49	19,39	19,39	18,93	22,18	19,92	19,35	19,49	19,33
5	Berat Air	g	9,69	9,70	9,73	9,74	9,75	9,77	9,79	9,81	9,80	9,83	9,82	9,85	9,93	9,89	9,91
6	Berat Tanah Kering	g	10,31	10,30	10,27	10,26	10,25	10,23	10,21	10,19	10,20	10,17	10,18	10,15	10,07	10,11	10,09
7	Kadar Air	%	93,99	94,17	94,74	94,93	95,12	95,50	95,89	96,27	96,08	96,66	96,46	97,04	98,61	97,82	98,22
8	Rata - rata Kadar Air	%	94,30			95,19			96,08			96,72			98,22		
9	Batas Cair (2,5)	%	94,30			95,19			96,08			96,72			98,22		



$y = -0,1861x + 100,44$
 $R^2 = 0,9763$

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4. Batas Plastis



LABORATORIUM GEOTEKNIK
JURUSAN TEKNIK SIPIL, FAKULTAS TEKNIK
UNIVERSITAS MUHAMMADIYAH YOGYAKARTA
JL. BRAWIJAYA, TAMAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55183
TELP. 0274-387656 (HUNTING)

BATAS PLASTIS

Project : Tugas Akhir
Location :-
No. :-

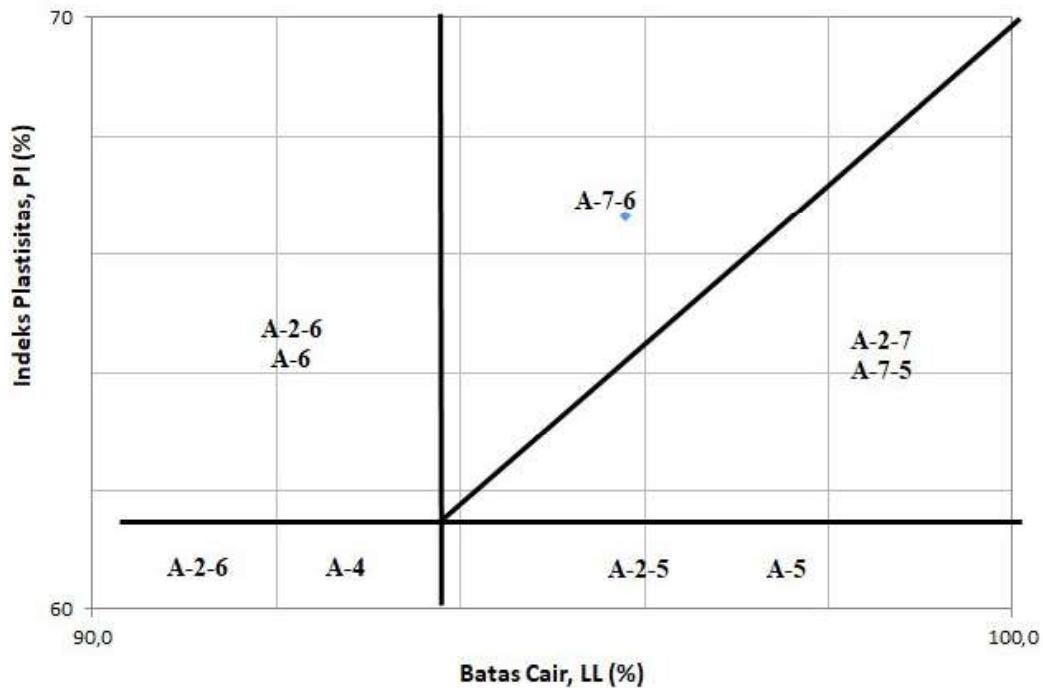
Depth :-
Date :-
Made by : Adi Septian Arifin

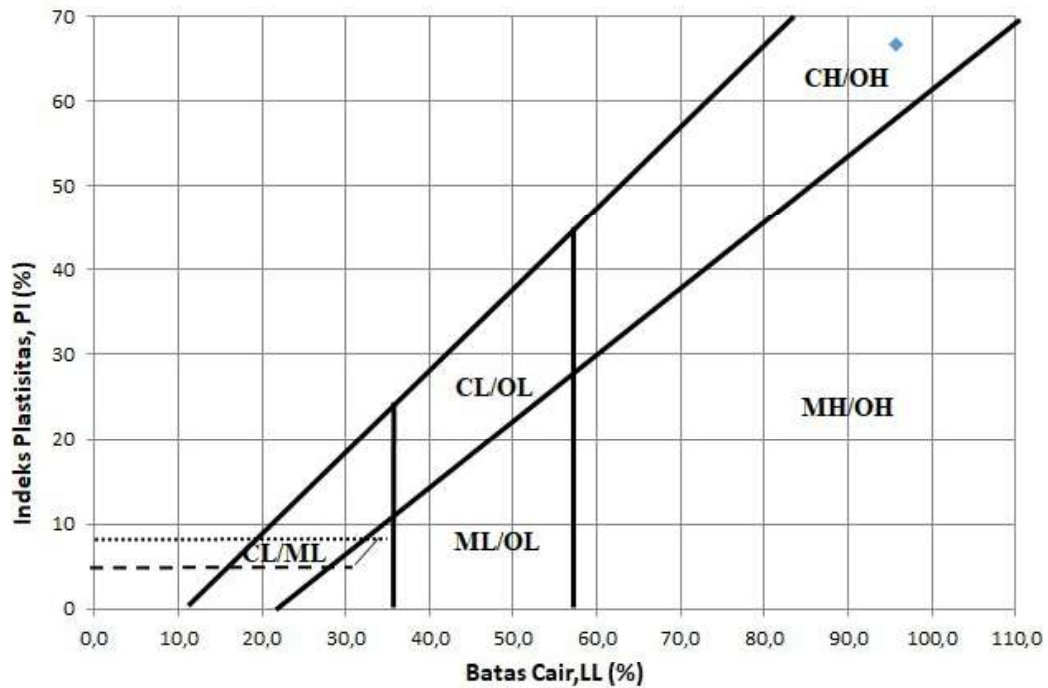
No	Uraian	Satuan	Nomor Cawan	
			1	2
1	Berat Cawan Kosong	g	9,4	9,18
2	Berat Cawan + Tanah Basah	g	29,4	29,18
3	Berat Cawan + Tanah Kering	g	24,27	25,34
4	Berat Air	g	5,13	3,84
5	Berat Tanah Kering	g	14,87	16,16
6	Kadar Air	%	34,499	23,7624
7	Kadar Air Rata-rata	%	29,13	

catatan : batas plastis = kadar air rata-rata

Batas Cair, (%) 95,8
Batas Plastis, PL (%) 29,1
Indeks Plastisitas, PI(%) 66,7

GEOTECHNICAL LABORATORY - CIVIL ENGINEERING DEPT. - UNIVERSITAS MUHAMMADIYAH YOGYAKARTA





5. Batas Susut



LABORATORIUM GEOTEKNIK
JURUSAN TEKNIK SIPIL, FAKULTAS TEKNIK
UNIVERSITAS MUHAMMADIYAH YOGYAKARTA
JL. BRAWIJAYA, TANAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55183
TELP. 0274-387656 (HUNTING)


BATAS SUSUT

Project : Tugas Akhir
Location :-
No. :-

Depth :-
Date :-
Made by : Adi Septian Arifin

No.	Uraian	Satuan	Nomor Cawan	
			A1	A2
1	Berat Cawan Susut	g	11,11	10,14
2	Berat Cawan Susut + Pasta Tanah	g	41,49	42,45
3	Berat Cawan Susut + Tanah Kering	g	33,21	33,03
4	Berat Tanah Kering	g	22,1	22,89
5	Kadar Air Tanah Awal	%	37,47	41,15
6	Berat Tanah Kering + Lilin	g	22,67	22,48
7	Berat Tanah Kering + Lilin Dalam Air	g	7,47	7,17
8	Berat Air Yang Didesak Oleh Tanah Kering + Lilin	g	15,2	15,31
9	Volume Tanah Kering + Lilin	cm ³	15,2	15,31
10	Berat Lapisan Lilin Pada Tanah Kering	g	0,57	-0,41
11	Volume Lapisan Lilin Pada Tanah Kering	cm ³	0,402107	-0,28923
12	Volume Tanah Kering	cm ³	14,80	15,59923
13	Batas Susut Tanah	%	6,8	15
14	Batas Susut Tanah Rata-rata	%		10,9

6. Ukuran Butir Tanah

	LABORATORIUM GEOTEKNIK JURUSAN TEKNIK SIPIL, FAKULTAS TEKNIK UNIVERSITAS MUHAMMADIYAH YOGYAKARTA JL. LINGKAR LUAR SELATAN, TAMAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55163 TELP. 0274-387656 (HUNTING)																																																																																
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	<hr/>																																																																																
Mass of soil, W = 65 gr Specific Gravity, G _s = 2,69 $K_2 = a/W \times 100 = 1,526$ Dispersing agent _____	Hydrometer no. = 151 H Hydr. correction, a = 0,99 Meniscus correction, m = 1,0 Amount _____																																																																																
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Sieve No.</th> <th>Opening (mm)</th> <th>Mass retained (gr)</th> <th>Mass passing (gr)</th> <th>% finer by mass $e/W \times 100\%$</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>4,750</td> <td>$d_1 = 0,00$</td> <td>$e_1 = 65,00$</td> <td>100,00</td> </tr> <tr> <td>10</td> <td>2,000</td> <td>$d_2 = 0,00$</td> <td>$e_2 = 65,00$</td> <td>100,00</td> </tr> <tr> <td>20</td> <td>0,850</td> <td>$d_3 = 0,89$</td> <td>$e_3 = 64,11$</td> <td>98,63</td> </tr> <tr> <td>40</td> <td>0,425</td> <td>$d_4 = 1,81$</td> <td>$e_4 = 62,30$</td> <td>95,85</td> </tr> <tr> <td>60</td> <td>0,250</td> <td>$d_5 = 1,08$</td> <td>$e_5 = 61,22$</td> <td>94,18</td> </tr> <tr> <td>140</td> <td>0,106</td> <td>$d_6 = 2,23$</td> <td>$e_6 = 58,99$</td> <td>90,75</td> </tr> <tr> <td>200</td> <td>0,074</td> <td>$d_7 = 0,72$</td> <td>$e_7 = 58,27$</td> <td>89,65</td> </tr> <tr> <td></td> <td></td> <td>$\Sigma d = 6,7$</td> <td></td> <td></td> </tr> </tbody> </table>					Sieve No.	Opening (mm)	Mass retained (gr)	Mass passing (gr)	% finer by mass $e/W \times 100\%$	4	4,750	$d_1 = 0,00$	$e_1 = 65,00$	100,00	10	2,000	$d_2 = 0,00$	$e_2 = 65,00$	100,00	20	0,850	$d_3 = 0,89$	$e_3 = 64,11$	98,63	40	0,425	$d_4 = 1,81$	$e_4 = 62,30$	95,85	60	0,250	$d_5 = 1,08$	$e_5 = 61,22$	94,18	140	0,106	$d_6 = 2,23$	$e_6 = 58,99$	90,75	200	0,074	$d_7 = 0,72$	$e_7 = 58,27$	89,65			$\Sigma d = 6,7$																																		
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<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Time</th> <th>Elapsed time min.</th> <th>R₁</th> <th>R₂</th> <th>t</th> <th>R = R₁+m</th> <th>L</th> <th>K</th> <th>D = K*L/T</th> <th>R = R₁-R₂+Ct</th> <th>P = K₂*R%</th> </tr> </thead> <tbody> <tr> <td></td> <td>2</td> <td>17</td> <td>-1</td> <td>30,1</td> <td>18,0</td> <td>18,37</td> <td>0,0120</td> <td>0,036</td> <td>22,9</td> <td>34,93</td> </tr> <tr> <td></td> <td>5</td> <td>15</td> <td>-1</td> <td>30</td> <td>16,0</td> <td>17,73</td> <td>0,0120</td> <td>0,023</td> <td>20,8</td> <td>31,74</td> </tr> <tr> <td></td> <td>30</td> <td>13</td> <td>-1</td> <td>29,9</td> <td>14,0</td> <td>17,31</td> <td>0,0120</td> <td>0,009</td> <td>18,8</td> <td>28,65</td> </tr> <tr> <td></td> <td>60</td> <td>12</td> <td>-1</td> <td>30,3</td> <td>13,0</td> <td>17,09</td> <td>0,0120</td> <td>0,006</td> <td>18,1</td> <td>27,55</td> </tr> <tr> <td></td> <td>250</td> <td>9</td> <td>-1</td> <td>29,9</td> <td>10,0</td> <td>16,46</td> <td>0,0120</td> <td>0,003</td> <td>14,8</td> <td>22,54</td> </tr> <tr> <td></td> <td>1440</td> <td>4</td> <td>-1</td> <td>30,1</td> <td>5,0</td> <td>15,39</td> <td>0,0120</td> <td>0,001</td> <td>9,9</td> <td>15,09</td> </tr> </tbody> </table>					Time	Elapsed time min.	R ₁	R ₂	t	R = R ₁ +m	L	K	D = K*L/T	R = R ₁ -R ₂ +Ct	P = K ₂ *R%		2	17	-1	30,1	18,0	18,37	0,0120	0,036	22,9	34,93		5	15	-1	30	16,0	17,73	0,0120	0,023	20,8	31,74		30	13	-1	29,9	14,0	17,31	0,0120	0,009	18,8	28,65		60	12	-1	30,3	13,0	17,09	0,0120	0,006	18,1	27,55		250	9	-1	29,9	10,0	16,46	0,0120	0,003	14,8	22,54		1440	4	-1	30,1	5,0	15,39	0,0120	0,001	9,9	15,09
Time	Elapsed time min.	R ₁	R ₂	t	R = R ₁ +m	L	K	D = K*L/T	R = R ₁ -R ₂ +Ct	P = K ₂ *R%																																																																							
	2	17	-1	30,1	18,0	18,37	0,0120	0,036	22,9	34,93																																																																							
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	60	12	-1	30,3	13,0	17,09	0,0120	0,006	18,1	27,55																																																																							
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	1440	4	-1	30,1	5,0	15,39	0,0120	0,001	9,9	15,09																																																																							
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GEOTECHNICAL LABORATORY - CIVIL ENGINEERING DEPT. -UNIVERSITAS MUHAMMADIYAH YOGYAKARTA																																																																																	



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 Telp. 0274-387656 (HUNTING)

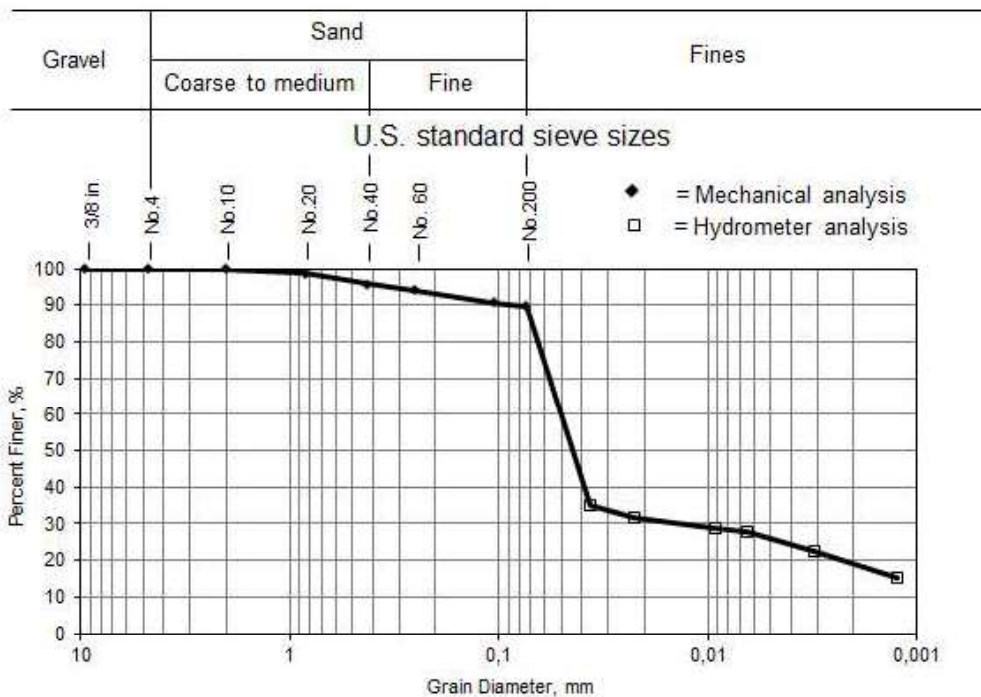
GRAIN SIZE ANALYSIS

Project : Tugas Akhir
 Location :-
 No. :-

Depth :-
 Date :-
 Made by : Adi Septian Arifin

Specific Gravity 2,69

Description of soil _____



Finer # 200 = 89,65 %

Gravel = 0,00 %

Sand = 10,35 %

Silt/Clay = 89,65 %

D ₁₀	D ₃₀	D ₆₀	C _u = D ₆₀ /D ₁₀	C _c = (D ₃₀) ² / (D ₁₀ x D ₆₀)
-	-	-	-	-

7. Pemadatan Tanah

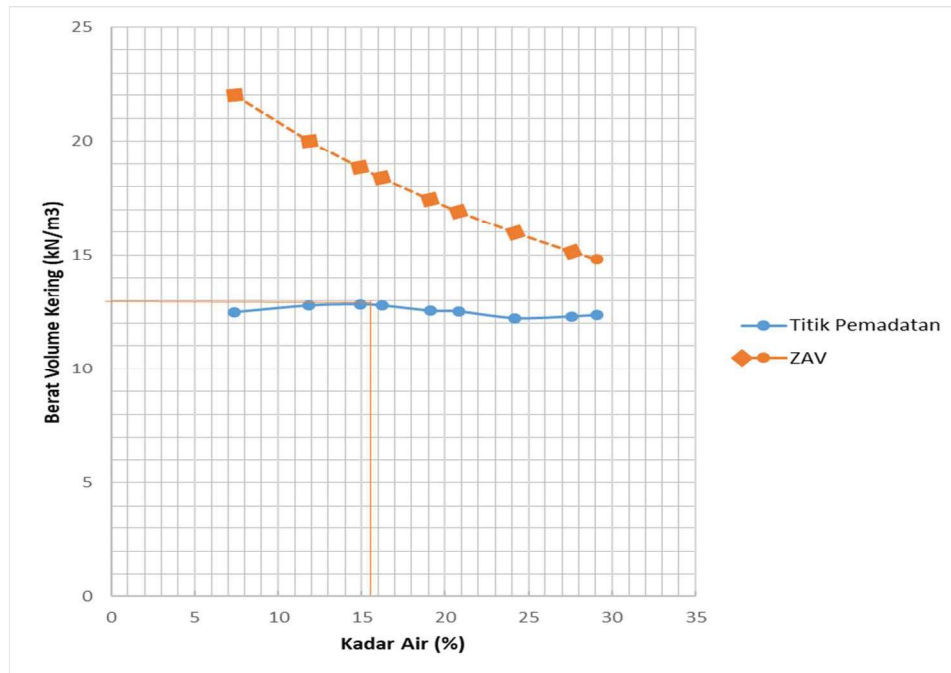


LABORATORIUM GEOTEKNIK
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UNIVERSITAS MUHAMMADIYAH YOGYAKARTA
JL. BRAWIJAYA, TAMAN TIRTO KASIHAN BANTUL, YOGYAKARTA 55183
TELEP. 0274-857355 (PANGUNG)

PEMADATAN TANAH

Project : Tugas Akhir
Location :
No. :
Depth :
Date :
Made by : Adi Septian Arifin

No.	Uraian	Satuan	0 ml	100 ml	150 ml	200 ml	250 ml	300 ml	350 ml	400 ml	450 ml																		
1	Berat Silinder Kosong (W1)	g	1783	1784	1785	1786	1787	1788	1789	1790	1791																		
2	Berat Silinder + tanah padat (W2)	g	3122	3211	3257	3269	3280	3298	3306	3358	3386																		
3	Berat Tanah Padat (Wm)	g	1339	1427	1472	1483	1493	1510	1517	1568	1595																		
4	Diameter Silinder (D)	cm	10,25	10,25	10,25	10,25	10,25	10,25	10,25	10,25	10,25																		
5	Tinggi Silinder (h)	cm	11,88	11,88	11,88	11,88	11,88	11,88	11,88	11,88	11,88																		
6	Volume Silinder (V)	cm ³	980,29	980,29	980,29	980,29	980,29	980,29	980,29	980,29	980,29																		
7	Berat Volume Basah	kN/m ³	13,4	14,28	14,73	14,84	14,94	15,11	15,18	15,69	15,96																		
8	Pemeriksaan Kadar Air																												
a	No.Cawan		1	3	10	6 A3	A1	15 A	11	8	13	9 A2	14	4 PR4	Pro 14 Pro 2	2 Z2	Pro 4	12 M1	M3	A4	Rp13 O3								
b	Berat Cawan kosong (W0)	g	9,40	9,19	9,29	10,14	9,47	9,40	9,45	9,21	9,32	12,01	13,25	9,21	9,28	9,32	9,20	8,87	8,79	9,82	9,52	8,77	13,33	11,94	9,10	9,84	9,37	12,35	
c	Berat Cawan + tanah basah (Wb)	g	29,40	29,19	29,29	30,14	29,47	29,40	29,45	29,21	29,27	29,32	32,01	33,25	29,21	29,28	29,32	29,20	28,87	28,79	29,82	29,52	28,77	33,33	31,94	29,10	29,84	29,37	32,35
d	Berat Cawan + tanah kering (Wd)	g	28,04	27,80	27,89	28,03	27,31	27,30	26,78	26,59	26,77	26,37	29,31	30,53	25,99	26,22	25,97	25,73	25,43	25,36	25,93	25,63	24,85	29,06	27,69	24,63	25,51	24,84	27,67
e	Berat Air	g	1,36	1,39	1,40	2,11	2,16	2,10	2,67	2,62	2,50	2,70	2,72	3,22	3,06	3,35	3,47	3,44	3,43	3,89	3,89	3,92	4,27	4,25	4,47	4,33	4,53	4,68	
f	Berat Tanah Kering	g	18,64	18,61	18,60	17,89	17,84	17,90	17,33	17,38	17,50	17,30	17,28	16,78	16,94	16,65	16,53	16,56	16,57	16,11	16,11	16,08	15,73	15,53	15,67	15,47	15,32		
g	Kadar Air	%	7,30	7,50	7,50	11,80	12,10	11,70	15,40	15,10	14,30	17,30	15,70	19,19	18,10	20,10	21,00	20,80	20,70	24,10	24,10	24,40	27,10	27,00	28,80	27,60	29,30	30,50	
h	Kadar Air Rata-rata	%	7,4	7,4	11,9	14,9	16,2	19,1	20,8	24,2	27,6	29,1																	
9	Berat Volume Kering	kN/m ³	12,48	12,77	12,82	12,77	12,54	12,51	12,22	12,3	12,36																		
10	Berat Jenis		2,69	2,69	2,69	2,69	2,69	2,69	2,69	2,69	2,69																		
11	ZAV	kN/m ³	22,01	20	18,84	18,38	17,43	16,92	15,98	15,14	14,8																		



Lampiran 2. Kebutuhan Tanah Dalam Wadah Benda Uji

	LABORATORIUM GEOTEKNIK JURUSAN TEKNIK SIPIL, FAKULTAS TEKNIK UNIVERSITAS MUHAMMADIYAH YOGYAKARTA JL. BRAWIJAYA, TAMAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55163 TELP. 0274-367656 (HUNTING)		
	KEBUTUHAN TANAH BENDA UJI		
Project	: Tugas Akhir	Depth	: -
Location	: -	Date	: -
No.	: -	Made by	: Adi Septian Arifin
Wadah Benda Uji			
Diameter	=	58 cm	Drum
Tinggi	=	50 cm	
Volume	=	132104 cm ³	
Berat Basah Tanah			
γ_k	=	13,64 g/cm ³	
w	=	15,3 %	
γ_b	=	15,727 g/cm ³	
Berat Tanah			
	=	207,7589 kg	
		208 kg	Total
Perlayer			
	=	5 layer	
	=	41,6 kg/layer	
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Lampiran 3. Hasil Pengujian Utama

1. Benda Uji I

a. Pembebanan Kondisi Keras

Data Pelat		Data Tiang		Keterangan	
Diameter (D)	= 0,2 m	Jumlah Tiang	= 1 buah	Pelat Lingkaran Dengan Tiang	
Jari-Jari (r)	= 0,1 m	Tinggi (h)	= 0,2 m		
Luas (L)	= 0,03142 m ²	Diameter (D)	= 0,04 m		

Loading Beban			Pembacaan <i>Dialgauge</i>			Analisis		
Beban kg	kN	Bacaan <i>Dial</i>			Tekanan kN/m ²	Lendutan		
		Kiri	Pusat	Kanan		Kiri (m)	Pusat (m)	Kanan (m)
0	0	0	0	0	0	0	0	0
10	9,810×10 ⁻²		4,0		3,123		4,000×10 ⁻⁵	
20	1,962×10 ⁻¹		8,5		6,245		8,500×10 ⁻⁵	
30	9,810×10 ⁻¹		13,5		9,368		1,350×10 ⁻⁴	
40	3,924×10 ⁻¹		16,5		12,490		1,650×10 ⁻⁴	
50	4,905×10 ⁻¹		25,0		15,613		2,500×10 ⁻⁴	
60	5,886×10 ⁻¹		31,0		18,736		3,100×10 ⁻⁴	
70	6,867×10 ⁻¹		40,0		21,858		4,000×10 ⁻⁴	
80	7,848×10 ⁻¹		47,5		24,981		4,750×10 ⁻⁴	
90	8,829×10 ⁻¹		55,0		28,104		5,500×10 ⁻⁴	
100	9,810×10 ⁻¹		64,0		31,226		6,400×10 ⁻⁴	
110	0,981		71,0		34,349		7,100×10 ⁻⁴	
120	1,079		77,0		37,471		7,700×10 ⁻⁴	
130	1,177		84,0		40,594		8,400×10 ⁻⁴	
140	1,275		93,0		43,717		9,300×10 ⁻⁴	
150	1,373		101,0		46,839		1,010×10 ⁻³	
160	1,472		113,0		49,962		1,130×10 ⁻³	
170	1,570		129,0		53,085		1,290×10 ⁻³	
180	1,766		142,0		56,207		1,420×10 ⁻³	
190	1,864		158,0		59,330		1,580×10 ⁻³	

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UNIVERSITAS MUHAMMADIYAH YOGYAKARTA
JL. LINGKAR LUAR SELATAN, TAMAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55183
TELP. 0274-387656 (HUNTING)

BENDA UJI I (KERAS)

Project : Tugas Akhir
Location :-
No. :-

Depth :-
Date :-
Made by : Adi Septian Arifin

Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,2 m	Jumlah Tiang	=	1 buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r)	=	0,1 m	Tinggi (h)	=	0,2 m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	0,04 m	

Unloading Beban

Beban		Bacaan Dial			Tekanan	Lendutan		
kg	kN	Kiri	Pusat	Kanan	kN/m ²	Kiri (m)	Pusat (m)	Kanan (m)
190	1,864	0	158,0	0	59,330	0	1,580×10 ⁻³	0
180	1,766		157,0		56,207		1,570×10 ⁻³	
170	1,570		152,0		53,085		1,520×10 ⁻³	
160	1,472		150,5		49,962		1,505×10 ⁻³	
150	1,373		143,0		46,839		1,430×10 ⁻³	
140	1,275		136,0		43,717		1,360×10 ⁻³	
130	1,177		126,0		40,594		1,260×10 ⁻³	
120	1,079		120,0		37,471		1,200×10 ⁻³	
110	0,981		108,0		34,349		1,080×10 ⁻³	
100	9,810×10 ⁻¹		97,0		31,226		9,700×10 ⁻⁴	
90	8,829×10 ⁻¹		88,0		28,104		8,800×10 ⁻⁴	
80	7,848×10 ⁻¹		76,0		24,981		7,600×10 ⁻⁴	
70	6,867×10 ⁻¹		71,0		21,858		7,100×10 ⁻⁴	
60	5,886×10 ⁻¹		59,0		18,736		5,900×10 ⁻⁴	
50	4,905×10 ⁻¹		53,0		15,613		5,300×10 ⁻⁴	
40	3,924×10 ⁻¹		47,0		12,490		4,700×10 ⁻⁴	
30	9,810×10 ⁻¹		32,0		9,368		3,200×10 ⁻⁴	
20	1,962×10 ⁻¹		29,0		6,245		2,900×10 ⁻⁴	
10	9,810×10 ⁻²		22,0		3,123		2,200×10 ⁻⁴	
0	0		19,0		0		1,900×10 ⁻⁴	



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TELP: 0274-387656 (HUNTING)

BENDA UJI I (KERAS)

Project : Tugas Akhir

Location :-

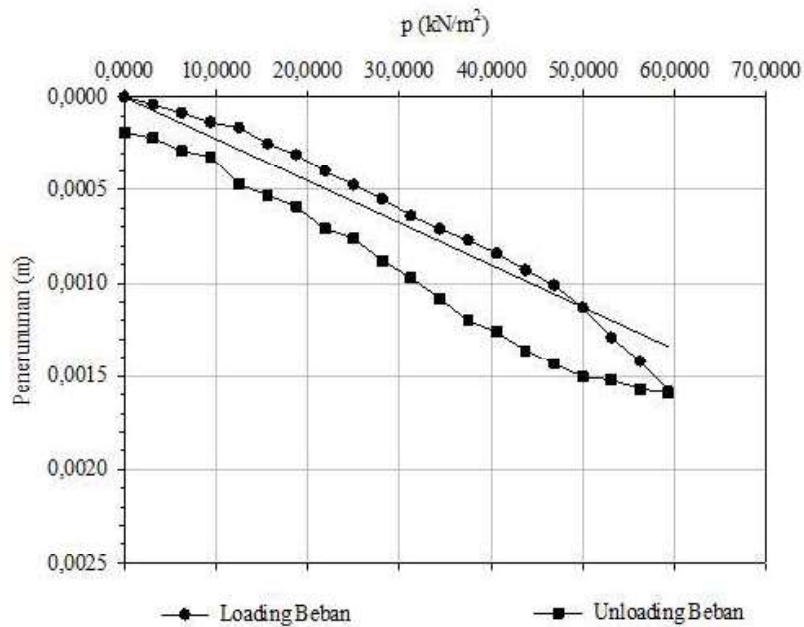
No. :-

Depth :-

Date :-

Made by : Adi Septian Arifin

Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,2 m	Jumlah Tiang	=	1 buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r)	=	0,1 m	Tinggi (h)	=	0,2 m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	0,04 m	



b. Pembebanan Kondisi Lunak

Data Pelat		Data Tiang		Keterangan
Diameter (D)	= 0,2 m	Jumlah Tiang	= 1 buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r)	= 0,1 m	Tinggi (h)	= 0,2 m	
Luas (L)	= 0,03142 m ²	Diameter (D)	= 0,04 m	

Loading Beban		Pembacaan Dialgauge							Analisis		
Beban		Bacaan Dial			Tekanan	Lendutan					
kg	kN	Kiri	Pusat	Kanan	kN/m ²	Kiri (m)	Pusat (m)	Kanan (m)			
0	0	0	0	0	0	0	0	0			
10	9,810×10 ⁻²		8,0		3,123		8,000×10 ⁻⁵				
20	1,962×10 ⁻¹		28,0		6,245		2,800×10 ⁻⁴				
30	9,810×10 ⁻¹		83,0		9,368		8,300×10 ⁻⁴				
40	3,924×10 ⁻¹		172,0		12,490		1,720×10 ⁻³				
50	4,905×10 ⁻¹		208,0		15,613		2,080×10 ⁻³				
60	5,886×10 ⁻¹		352,0		18,736		3,520×10 ⁻³				
70	6,867×10 ⁻¹		492,0		21,858		4,920×10 ⁻³				
80	7,848×10 ⁻¹		566,0		24,981		5,660×10 ⁻³				
90	8,829×10 ⁻¹		758,0		28,104		7,580×10 ⁻³				
100	9,810×10 ⁻¹		934,0		31,226		9,340×10 ⁻³				
110	0,981		1140,0		34,349		1,140×10 ⁻²				
120	1,079		1293,0		37,471		1,293×10 ⁻²				
130	1,177		1450,0		40,594		1,450×10 ⁻²				
140	1,275		1450,0		43,717		1,450×10 ⁻²				
150	1,373		1519,0		46,839		1,519×10 ⁻²				
160	1,472		1645,0		49,962		1,645×10 ⁻²				
170	1,570		1779,0		53,085		1,779×10 ⁻²				
180	1,766		2044,0		56,207		2,044×10 ⁻²				
190	1,864		2098,0		59,330		2,098×10 ⁻²				

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TELP. 0274-387656 (HUNTING)

BENDA UJI I (LUNAK)

Project : Tugas Akhir

Location :-

No. :-

Depth :-

Date :-

Made by : Adi Septian Arifin



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TELP. 0274-357656 (HUNTING)

BENDA UJI I (LUNAK)

Project : Tugas Akhir

Location :-

No. :-

Depth :-

Date :-

Made by : Adi Septian Arifin

Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,2 m	Jumlah Tiang	=	1 buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r)	=	0,1 m	Tinggi (h)	=	0,2 m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	0,04 m	

Unloading Beban

Pembacaan Dialgauge					Analisis			
Beban		Bacaan Dial			Tekanan	Lendutan		
kg	kN	Kiri	Pusat	Kanan	kN/m ²	Kiri (m)	Pusat (m)	Kanan (m)
190	1,864	0	2098,0	0	59,330	0	$2,098 \times 10^{-2}$	0
180	1,766		2086,0		56,207		$2,086 \times 10^{-2}$	
170	1,570		2090,0		53,085		$2,090 \times 10^{-2}$	
160	1,472		2090,0		49,962		$2,090 \times 10^{-2}$	
150	1,373		2093,0		46,839		$2,093 \times 10^{-2}$	
140	1,275		2097,0		43,717		$2,097 \times 10^{-2}$	
130	1,177		2100,0		40,594		$2,100 \times 10^{-2}$	
120	1,079		2104,0		37,471		$2,104 \times 10^{-2}$	
110	0,981		2118,0		34,349		$2,118 \times 10^{-2}$	
100	$9,810 \times 10^{-1}$		2123,0		31,226		$2,123 \times 10^{-2}$	
90	$8,829 \times 10^{-1}$		2125,0		28,104		$2,125 \times 10^{-2}$	
80	$7,848 \times 10^{-1}$		2138,0		24,981		$2,138 \times 10^{-2}$	
70	$6,867 \times 10^{-1}$		2165,0		21,858		$2,165 \times 10^{-2}$	
60	$5,886 \times 10^{-1}$		2185,0		18,736		$2,185 \times 10^{-2}$	
50	$4,905 \times 10^{-1}$		2200,0		15,613		$2,200 \times 10^{-2}$	
40	$3,924 \times 10^{-1}$		2223,0		12,490		$2,223 \times 10^{-2}$	
30	$9,810 \times 10^{-1}$		2245,0		9,368		$2,245 \times 10^{-2}$	
20	$1,962 \times 10^{-1}$		2274,0		6,245		$2,274 \times 10^{-2}$	
10	$9,810 \times 10^{-2}$		2313,0		3,123		$2,313 \times 10^{-2}$	
0	0		2306,0		0		$2,306 \times 10^{-2}$	



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TELP. 0274-387856 (HUNTING)

BENDA UJI I (LUNAK)

Project : Tugas Akhir

Location :-

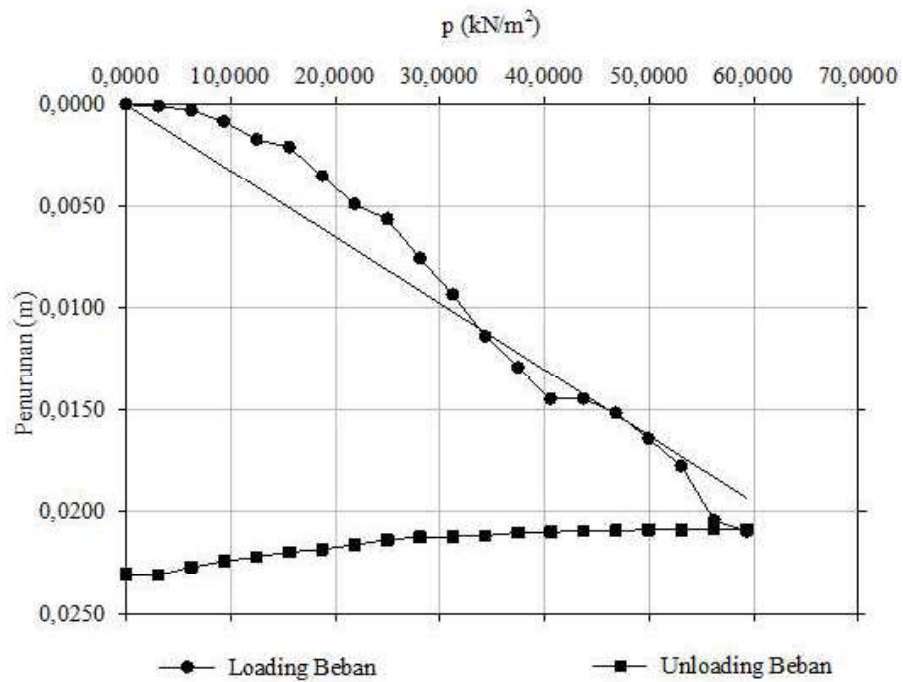
No. :-

Depth :-

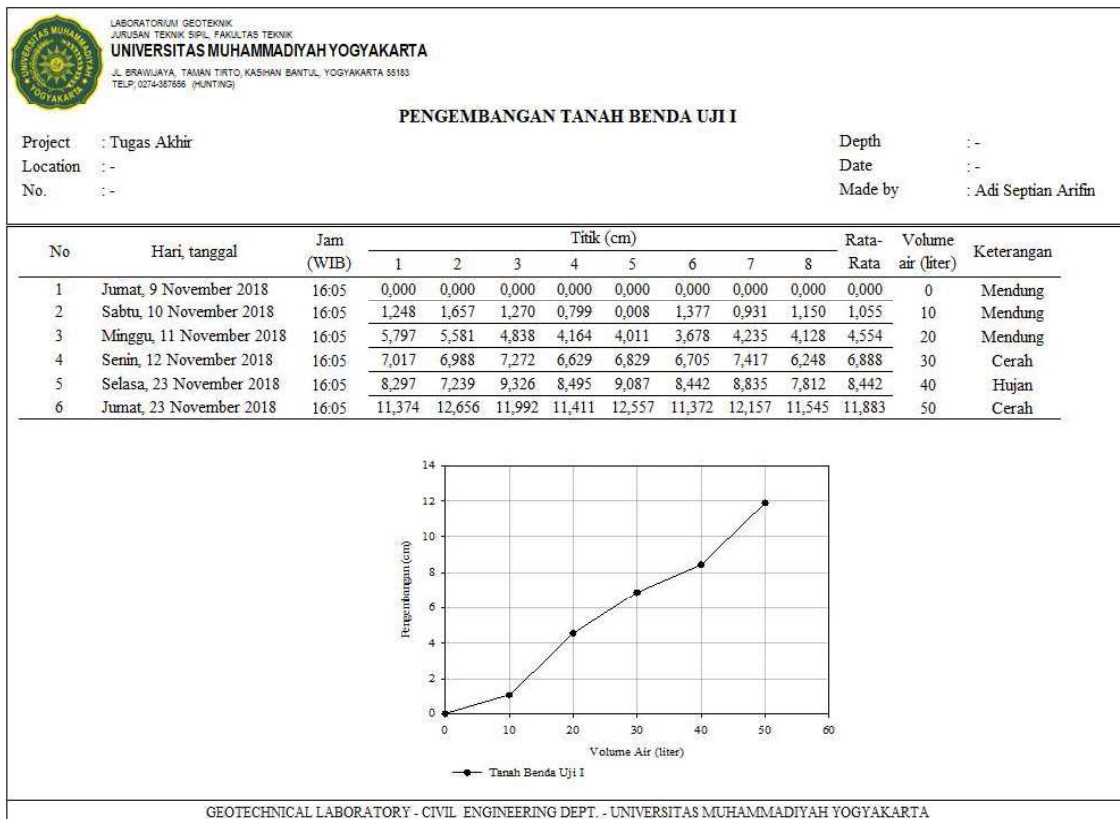
Date :-

Made by : Adi Septian Arifin

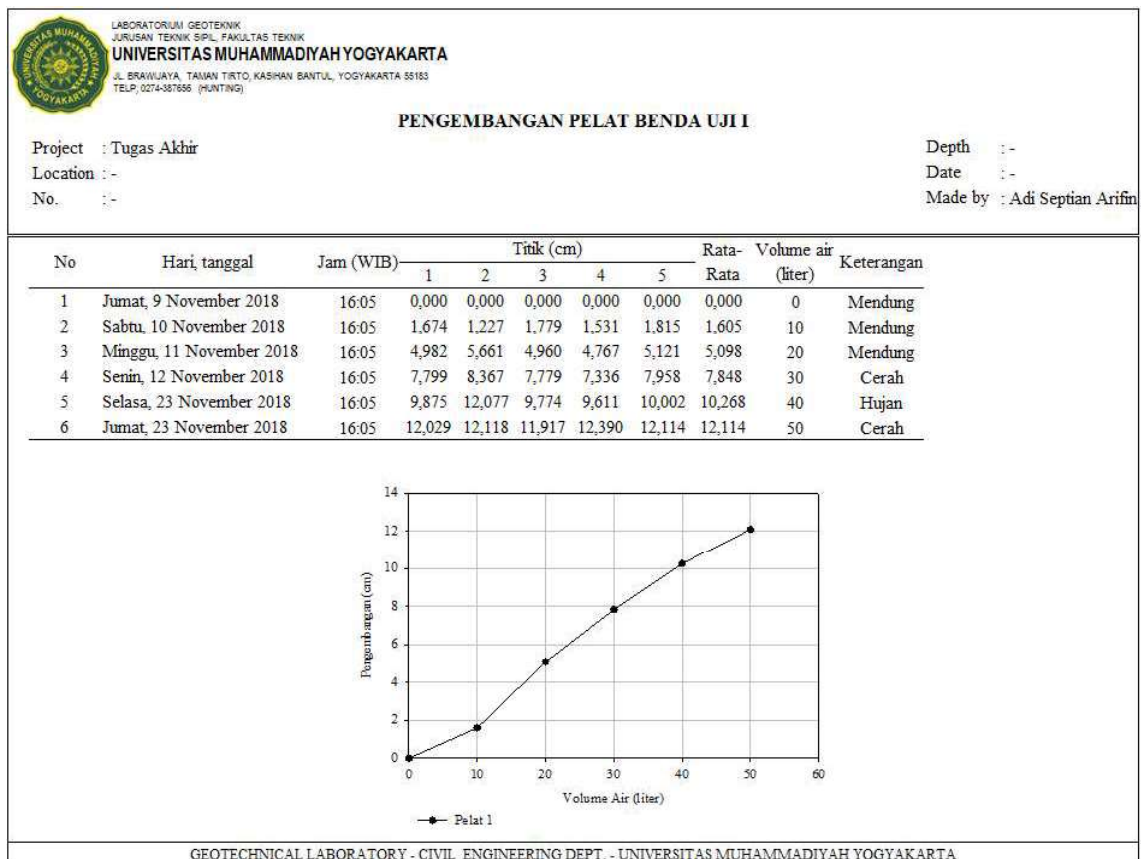
Data Pelat			Data Tiang			Keterangan
Diameter (D) =	0,2	m	Jumlah Tiang =	1	buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r) =	0,1	m	Tinggi (h) =	0,2	m	
Luas (L) =	0,03142	m ²	Diameter (D) =	0,04	m	



c. Pengembangan Tanah



d. Pengembangan Pelat



2. Benda Uji II

a. Pembebanan Kondisi Keras

Data Pelat		Data Tiang		Keterangan	
Diameter (D)	= 0,20000 m	Jumlah Tiang	= 1 buah	Pelat Lingkaran Dengan Tiang	
Jari-Jari (r)	= 0,10000 m	Tinggi (h)	= 0,1 m		
Luas (L)	= 0,03142 m ²	Diameter (D)	= 0,04 m		

Project : Tugas Akhir		Depth	:-	
Location :-		Date	:-	
No. :-		Made by	: Adi Septian Arifin	

Loading Beban			Pembacaan Dialgauge			Analisis		
Beban		Bacaan Dial			Tekanan	Lendutan		
kg	kN	Kiri	Pusat	Kanan	kN/m ²	Kiri	Pusat	Kanan
0	0	0	0	0	0	0	0	0
10	9,810×10 ⁻²		7,0		3,123		7,000×10 ⁻⁵	
20	1,962×10 ⁻¹		14,0		6,245		1,400×10 ⁻⁴	
30	9,810×10 ⁻¹		21,0		9,368		2,100×10 ⁻⁴	
40	3,924×10 ⁻¹		28,0		12,490		2,800×10 ⁻⁴	
50	4,905×10 ⁻¹		38,0		15,613		3,800×10 ⁻⁴	
60	5,886×10 ⁻¹		48,0		18,736		4,800×10 ⁻⁴	
70	6,867×10 ⁻¹		57,0		21,858		5,700×10 ⁻⁴	
80	7,848×10 ⁻¹		66,0		24,981		6,600×10 ⁻⁴	
90	8,829×10 ⁻¹		74,0		28,104		7,400×10 ⁻⁴	
100	9,810×10 ⁻¹		82,0		31,226		8,200×10 ⁻⁴	
110	0,981		92,0		34,349		9,200×10 ⁻⁴	
120	1,079		100,0		37,471		1,000×10 ⁻³	
130	1,177		108,0		40,594		1,080×10 ⁻³	
140	1,275		115,0		43,717		1,150×10 ⁻³	
150	1,373		125,0		46,839		1,250×10 ⁻³	
160	1,472		130,0		49,962		1,300×10 ⁻³	
170	1,570		136,0		53,085		1,360×10 ⁻³	
180	1,766		145,0		56,207		1,450×10 ⁻³	
190	1,864		155,0		59,330		1,550×10 ⁻³	

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JL. LINGKAR LUAR, SELATAN, TAMAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55183
TELP. 0274-387656 (HUNTING)

BENDA UJI II (KERAS)

Project : Tugas Akhir

Location :-

No. :-

Depth :-

Date :-

Made by : Adi Septian Arifin

Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,2 m	Jumlah Tiang	=	1 buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r)	=	0,1 m	Tinggi (h)	=	0,1 m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	0,04 m	

Unloading Beban

Pembacaan <i>Dial</i> gauge					Analisis			
Beban		Bacaan <i>Dial</i>			Tekanan	Lendutan		
kg	kN	Kiri	Pusat	Kanan	kN/m ²	Kiri	Pusat	Kanan
190	1,864	0	155,0	0	59,330	0	1,550×10 ⁻³	0
180	1,766		152,0		56,207		1,520×10 ⁻³	
170	1,570		148,0		53,085		1,480×10 ⁻³	
160	1,472		147,0		49,962		1,470×10 ⁻³	
150	1,373		145,0		46,839		1,450×10 ⁻³	
140	1,275		142,0		43,717		1,420×10 ⁻³	
130	1,177		138,0		40,594		1,380×10 ⁻³	
120	1,079		134,0		37,471		1,340×10 ⁻³	
110	0,981		131,0		34,349		1,310×10 ⁻³	
100	9,810×10 ⁻¹		125,0		31,226		1,250×10 ⁻³	
90	8,829×10 ⁻¹		121,0		28,104		1,210×10 ⁻³	
80	7,848×10 ⁻¹		119,0		24,981		1,190×10 ⁻³	
70	6,867×10 ⁻¹		117,0		21,858		1,170×10 ⁻³	
60	5,886×10 ⁻¹		116,0		18,736		1,160×10 ⁻³	
50	4,905×10 ⁻¹		113,0		15,613		1,130×10 ⁻³	
40	3,924×10 ⁻¹		109,0		12,490		1,090×10 ⁻³	
30	9,810×10 ⁻¹		105,0		9,368		1,050×10 ⁻³	
20	1,962×10 ⁻¹		102,0		6,245		1,020×10 ⁻³	
10	9,810×10 ⁻²		97,0		3,123		9,700×10 ⁻⁴	
0	0		94,0		0		9,400×10 ⁻⁴	



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JL. LINGKAR LUAR SELATAN, TAMAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55163
TELP. 0274-387666 (HUNTING)

BENDA UJI II (KERAS)

Project : Tugas Akhir

Location :-

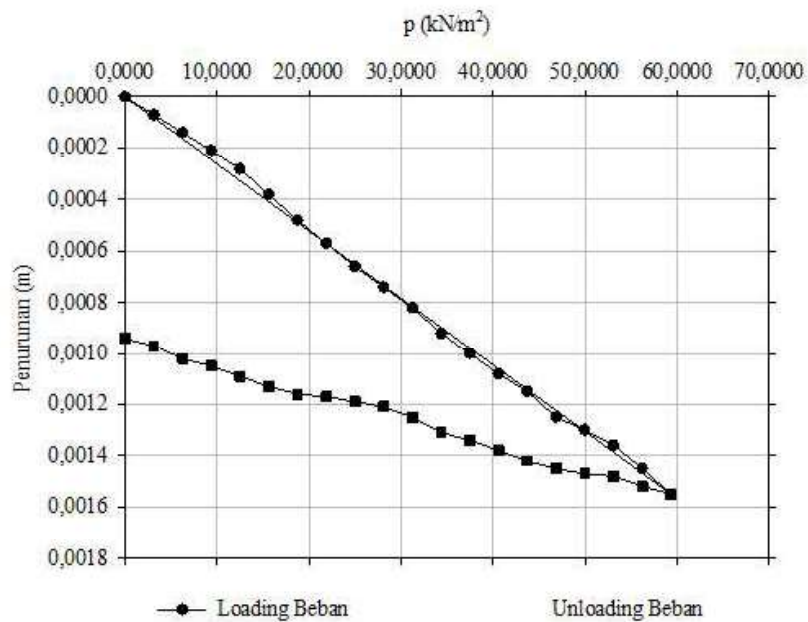
No. :-

Depth :-


Date :-

Made by : Adi Septian Arifin

Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,2 m	Jumlah Tiang	=	1 buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r)	=	0,1 m	Tinggi (h)	=	0,1 m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	0,04 m	



b. Pembebanan Kondisi Lunak

	LABORATORIUM GEOTEKNIK JURUSAN TEKNIK SIPIL, FAKULTAS TEKNIK	UNIVERSITAS MUHAMMADIYAH YOGYAKARTA <small>JL. LINGKAR LUAR SELATAN, TAMAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55183 TELP. 0274-387656 (HUNTING)</small>	
	BENDA UJI II (LUNAK)		
Project : Tugas Akhir		Depth : -	
Location : -		Date : -	
No. : -		Made by : Adi Septian Arifin	

Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,20000 m	Jumlah Tiang	=	1 buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r)	=	0,10000 m	Tinggi (h)	=	0,1 m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	0,04 m	

Loading Beban								
Pembacaan <i>Dialgauge</i>					Analisis			
Beban		Bacaan <i>Dial</i>			Tekanan	Lendutan		
kg	kN	Kiri	Pusat	Kanan	kN/m ²	Kiri	Pusat	Kanan
0	0	0	0	0	0	0	0	0
10	$9,810 \times 10^{-2}$		10,0		3,123		$1,000 \times 10^{-4}$	
20	$1,962 \times 10^{-1}$		77,0		6,245		$7,700 \times 10^{-4}$	
30	$9,810 \times 10^{-1}$		154,0		9,368		$1,540 \times 10^{-3}$	
40	$3,924 \times 10^{-1}$		254,0		12,490		$2,540 \times 10^{-3}$	
50	$4,905 \times 10^{-1}$		393,0		15,613		$3,930 \times 10^{-3}$	
60	$5,886 \times 10^{-1}$		541,0		18,736		$5,410 \times 10^{-3}$	
70	$6,867 \times 10^{-1}$		701,0		21,858		$7,010 \times 10^{-3}$	
80	$7,848 \times 10^{-1}$		859,0		24,981		$8,590 \times 10^{-3}$	
90	$8,829 \times 10^{-1}$		1001,0		28,104		$1,001 \times 10^{-2}$	
100	$9,810 \times 10^{-1}$		1154,0		31,226		$1,154 \times 10^{-2}$	
110	0,981		1323,0		34,349		$1,323 \times 10^{-2}$	
120	1,079		1492,0		37,471		$1,492 \times 10^{-2}$	
130	1,177		1595,0		40,594		$1,595 \times 10^{-2}$	
140	1,275		1725,0		43,717		$1,725 \times 10^{-2}$	
150	1,373		1855,0		46,839		$1,855 \times 10^{-2}$	
160	1,472		2143,0		49,962		$2,143 \times 10^{-2}$	
170	1,570		2241,0		53,085		$2,241 \times 10^{-2}$	
180	1,766		2324,0		56,207		$2,324 \times 10^{-2}$	
190	1,864		2379,0		59,330		$2,379 \times 10^{-2}$	

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JL. LINGKAR LUAR SELATAN, TAMAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55183
TELP. 0274-387856 (HUNTING)

BENDA UJI II (LUNAK)

Project : Tugas Akhir

Location :-

No. :-

Depth :-

Date :-

Made by : Adi Septian Arifin

Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,2 m	Jumlah Tiang	=	1 buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r)	=	0,1 m	Tinggi (h)	=	0,1 m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	0,04 m	

Unloading Beban

Pembacaan Dialgauge					Analisis			
Beban		Bacaan Dial			Tekanan	Lendutan		
kg	kN	Kiri	Pusat	Kanan	kN/m ²	Kiri	Pusat	Kanan
190	1,864	0	2379,0	0	59,330	0	2,379×10 ⁻²	0
180	1,766		2399,0		56,207		2,399×10 ⁻²	
170	1,570		2395,0		53,085		2,395×10 ⁻²	
160	1,472		2389,0		49,962		2,389×10 ⁻²	
150	1,373		2379,0		46,839		2,379×10 ⁻²	
140	1,275		2365,0		43,717		2,365×10 ⁻²	
130	1,177		2352,0		40,594		2,352×10 ⁻²	
120	1,079		2341,0		37,471		2,341×10 ⁻²	
110	0,981		2330,0		34,349		2,330×10 ⁻²	
100	9,810×10 ⁻¹		2319,0		31,226		2,319×10 ⁻²	
90	8,829×10 ⁻¹		2315,0		28,104		2,315×10 ⁻²	
80	7,848×10 ⁻¹		2305,0		24,981		2,305×10 ⁻²	
70	6,867×10 ⁻¹		2285,0		21,858		2,285×10 ⁻²	
60	5,886×10 ⁻¹		2277,0		18,736		2,277×10 ⁻²	
50	4,905×10 ⁻¹		2261,0		15,613		2,261×10 ⁻²	
40	3,924×10 ⁻¹		2241,0		12,490		2,241×10 ⁻²	
30	9,810×10 ⁻¹		2221,0		9,368		2,221×10 ⁻²	
20	1,962×10 ⁻¹		2204,0		6,245		2,204×10 ⁻²	
10	9,810×10 ⁻²		2213,0		3,123		2,213×10 ⁻²	
0	0		2204,0		0		2,204×10 ⁻²	



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TELP. 0274-387666 (HUNTING)

BENDA UJI II (LUNAK)

Project : Tugas Akhir

Location : -

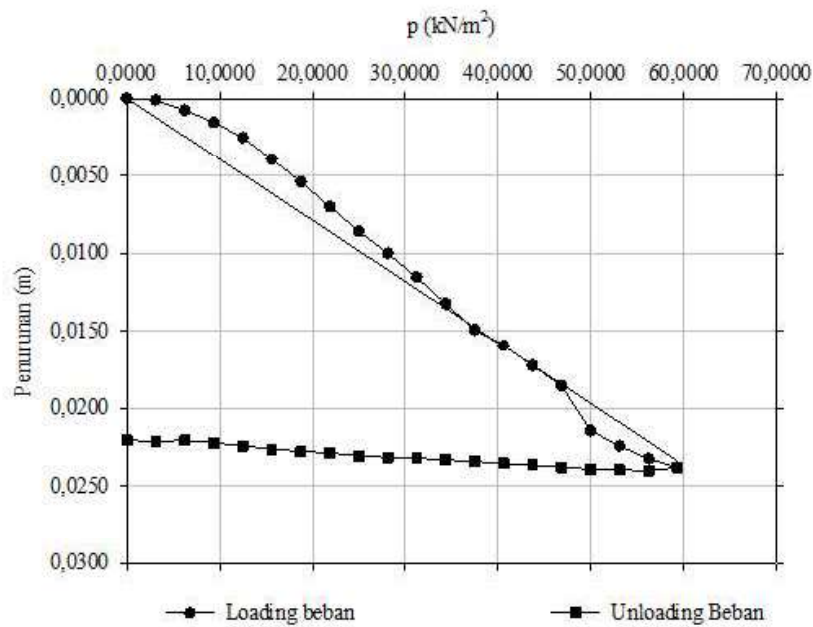
No. : -

Depth : -

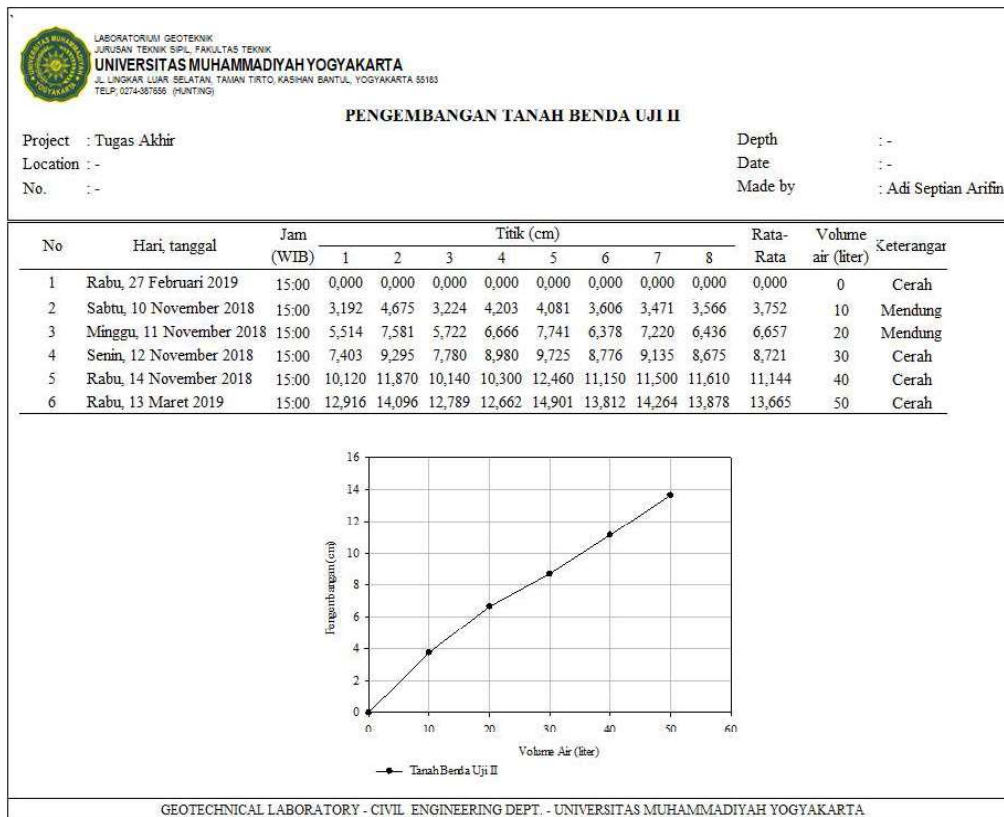
Date : -

Made by : Adi Septian Arifin

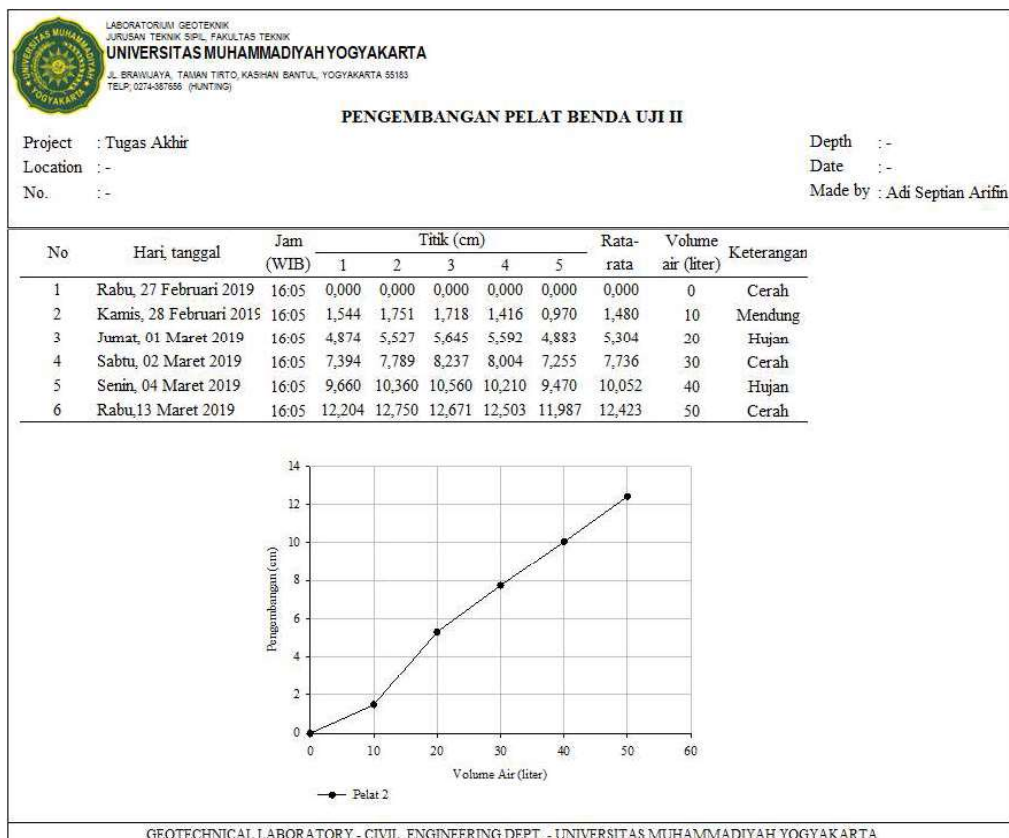
Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,2 m	Jumlah Tiang	=	1 buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r)	=	0,1 m	Tinggi (h)	=	0,1 m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	0,04 m	



c. Pengembangan Tanah



d. Pengembangan Pelat



3. Benda Uji III

a. Pembebanan Kondisi Keras

Data Pelat		Data Tiang		Keterangan
Diameter (D)	= 0,20000 m	Jumlah Tiang	= - buah	Pelat Lingkaran Tanpa Tiang
Jari-Jari (r)	= 0,10000 m	Tinggi (h)	= - m	
Luas (L)	= 0,03142 m ²	Diameter (D)	= - m	

Loading Beban		Pembacaan <i>Dial</i> gauge			Analisis			
kg	kN	Bacaan <i>Dial</i>			Tekanan kN/m ²	Lendutan		
		Kiri	Pusat	Kanan		Kiri	Pusat	Kanan
0	0	0	0	0	0	0	0	0
10	9,810×10 ⁻²		7,0		3,123		7,000×10 ⁻⁵	
20	1,962×10 ⁻¹		17,0		6,245		1,700×10 ⁻⁴	
30	9,810×10 ⁻¹		25,0		9,368		2,500×10 ⁻⁴	
40	3,924×10 ⁻¹		31,0		12,490		3,100×10 ⁻⁴	
50	4,905×10 ⁻¹		42,0		15,613		4,200×10 ⁻⁴	
60	5,886×10 ⁻¹		55,0		18,736		5,500×10 ⁻⁴	
70	6,867×10 ⁻¹		68,0		21,858		6,800×10 ⁻⁴	
80	7,848×10 ⁻¹		78,0		24,981		7,800×10 ⁻⁴	
90	8,829×10 ⁻¹		87,0		28,104		8,700×10 ⁻⁴	
100	9,810×10 ⁻¹		96,0		31,226		9,600×10 ⁻⁴	
110	0,981		105,0		34,349		1,050×10 ⁻³	
120	1,079		111,0		37,471		1,110×10 ⁻³	
130	1,177		120,0		40,594		1,200×10 ⁻³	
140	1,275		126,0		43,717		1,260×10 ⁻³	
150	1,373		134,0		46,839		1,340×10 ⁻³	
160	1,472		140,0		49,962		1,400×10 ⁻³	
170	1,570		147,0		53,085		1,470×10 ⁻³	
180	1,766		153,0		56,207		1,530×10 ⁻³	
190	1,864		160,0		59,330		1,600×10 ⁻³	

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TELP. 0274-367666 (HUNTING)

BENDA UJI III (KERAS)

Project : Tugas Akhir

Location :-

No. :-

Depth :-

Date :-

Made by : Adi Septian Arifin



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TELP. 0274-367805 (HUNTING)

BENDA UJI III (KERAS)

Project : Tugas Akhir

Location :-

No. :-

Depth :-

Date :-

Made by : Adi Septian Arifin

Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,2 m	Jumlah Tiang	=	- buah	Pelat Lingkaran Tanpa Tiang
Jari-Jari (r)	=	0,1 m	Tinggi (h)	=	- m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	- m	

Unloading Beban

Pembacaan <i>Dialgauge</i>					Analisis			
Beban		Bacaan <i>Dial</i>			Tekanan	Lendutan		
kg	kN	Kiri	Pusat	Kanan	kN/m ²	Kiri	Pusat	Kanan
190	1,864	0	160,0	0	59,330	0	1,600×10 ⁻³	0
180	1,766		160,0		56,207		1,600×10 ⁻³	
170	1,570		160,0		53,085		1,600×10 ⁻³	
160	1,472		160,0		49,962		1,600×10 ⁻³	
150	1,373		160,0		46,839		1,600×10 ⁻³	
140	1,275		160,0		43,717		1,600×10 ⁻³	
130	1,177		157,0		40,594		1,570×10 ⁻³	
120	1,079		157,0		37,471		1,570×10 ⁻³	
110	0,981		154,0		34,349		1,540×10 ⁻³	
100	9,810×10 ⁻¹		154,0		31,226		1,540×10 ⁻³	
90	8,829×10 ⁻¹		153,0		28,104		1,530×10 ⁻³	
80	7,848×10 ⁻¹		153,0		24,981		1,530×10 ⁻³	
70	6,867×10 ⁻¹		152,0		21,858		1,520×10 ⁻³	
60	5,886×10 ⁻¹		149,0		18,736		1,490×10 ⁻³	
50	4,905×10 ⁻¹		147,0		15,613		1,470×10 ⁻³	
40	3,924×10 ⁻¹		144,0		12,490		1,440×10 ⁻³	
30	9,810×10 ⁻¹		141,0		9,368		1,410×10 ⁻³	
20	1,962×10 ⁻¹		136,0		6,245		1,360×10 ⁻³	
10	9,810×10 ⁻²		130,0		3,123		1,300×10 ⁻³	
0	0		130,0		0		1,300×10 ⁻³	



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TELP. 0274-367666 (HUNTING)

BENDA UJI III (KERAS)

Project : Tugas Akhir

Location :-

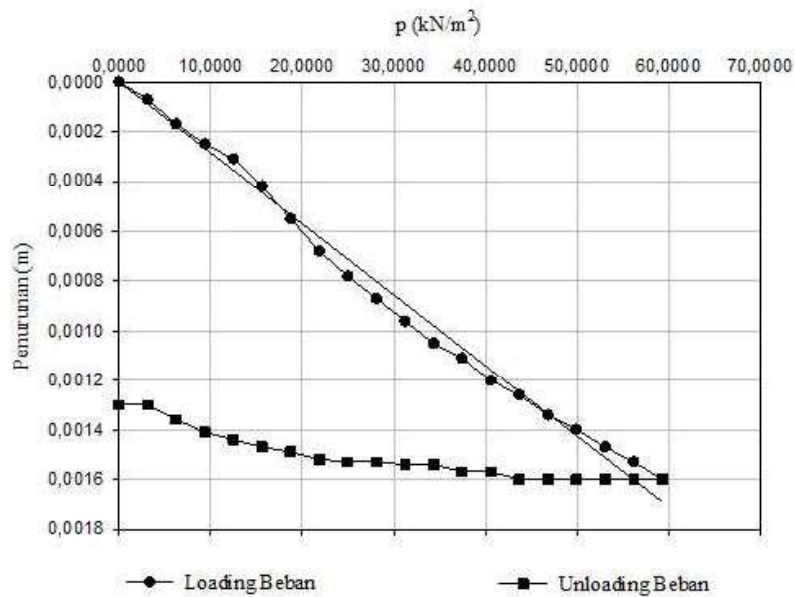
No. :-

Depth :-

Date :-

Made by : Adi Septian Arifin

Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,2 m	Jumlah Tiang	=	- buah	Pelat Lingkaran Tanpa Tiang
Jari-Jari (r)	=	0,1 m	Tinggi (h)	=	- m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	- m	



b. Pembebanan Kondisi Lunak

Data Pelat		Data Tiang		Keterangan	
Diameter (D)	= 0,20000 m	Jumlah Tiang	= - buah	Pelat Lingkaran Dengan Tiang	
Jari-Jari (r)	= 0,10000 m	Tinggi (h)	= - m		
Luas (L)	= 0,03142 m ²	Diameter (D)	= - m		

Loading Beban		Pembacaan Dialgauge			Analisis			
Beban		Bacaan Dial			Tekanan	Lendutan		
kg	kN	Kiri	Pusat	Kanan	kN/m ²	Kiri	Pusat	Kanan
0	0	0	0,0	0	0	0	0	0
10	9,810×10 ⁻²		20,0		3,123		2,000×10 ⁻⁴	
20	1,962×10 ⁻¹		59,0		6,245		5,900×10 ⁻⁴	
30	9,810×10 ⁻¹		134,0		9,368		1,340×10 ⁻³	
40	3,924×10 ⁻¹		367,0		12,490		3,670×10 ⁻³	
50	4,905×10 ⁻¹		444,0		15,613		4,440×10 ⁻³	
60	5,886×10 ⁻¹		598,0		18,736		5,980×10 ⁻³	
70	6,867×10 ⁻¹		808,0		21,858		8,080×10 ⁻³	
80	7,848×10 ⁻¹		998,0		24,981		9,980×10 ⁻³	
90	8,829×10 ⁻¹		1078,0		28,104		1,078×10 ⁻²	
100	9,810×10 ⁻¹		1123,0		31,226		1,123×10 ⁻²	
110	0,981		1229,0		34,349		1,229×10 ⁻²	
120	1,079		1379,0		37,471		1,379×10 ⁻²	
130	1,177		1529,0		40,594		1,529×10 ⁻²	
140	1,275		1702,0		43,717		1,702×10 ⁻²	
150	1,373		1962,0		46,839		1,962×10 ⁻²	
160	1,472		2101,0		49,962		2,101×10 ⁻²	
170	1,570		2361,0		53,085		2,361×10 ⁻²	
180	1,766		2469,0		56,207		2,496×10 ⁻²	
190	1,864		2656,0		59,330		2,656×10 ⁻²	

GEOTECHNICAL LABORATORY - CIVIL ENGINEERING DEPT. - UNIVERSITAS MUHAMMADIYAH YOGYAKARTA



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JL. LINGKAR LUAR SELATAN, TANAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55183
TELP. 0274-387656 (HUNTING)

BENDA UJI III (LUNAK)

Project : Tugas Akhir
Location :-
No. :-

Depth :-
Date :-
Made by : Adi Septian Arifin



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TELP. 0274-387656 (HUNTING)

BENDA UJI III (LUNAK)

Project : Tugas Akhir

Location :-

No. :-

Depth :-

Date :-

Made by : Adi Septian Arifin

Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,2 m	Jumlah Tiang	=	- buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r)	=	0,1 m	Tinggi (h)	=	- m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	- m	

Unloading Behan

Pembacaan <i>Dial gauge</i>					Analisis			
Beban		Bacaan <i>Dial</i>			Tekanan	Lendutan		
kg	kN	Kiri	Pusat	Kanan	kN/m ²	Kiri	Pusat	Kanan
190	1,864	0	2656,0	0	59,330	0	$2,656 \times 10^{-2}$	0
180	1,766		2507,0		56,207		$2,507 \times 10^{-2}$	
170	1,570		2494,0		53,085		$2,494 \times 10^{-2}$	
160	1,472		2472,0		49,962		$2,472 \times 10^{-2}$	
150	1,373		2455,0		46,839		$2,455 \times 10^{-2}$	
140	1,275		2319,0		43,717		$2,319 \times 10^{-2}$	
130	1,177		2290,0		40,594		$2,290 \times 10^{-2}$	
120	1,079		2282,0		37,471		$2,282 \times 10^{-2}$	
110	0,981		2265,0		34,349		$2,265 \times 10^{-2}$	
100	$9,810 \times 10^{-1}$		2280,0		31,226		$2,280 \times 10^{-2}$	
90	$8,829 \times 10^{-1}$		2239,0		28,104		$2,239 \times 10^{-2}$	
80	$7,848 \times 10^{-1}$		2205,0		24,981		$2,205 \times 10^{-2}$	
70	$6,867 \times 10^{-1}$		2171,0		21,858		$2,171 \times 10^{-2}$	
60	$5,886 \times 10^{-1}$		2140,0		18,736		$2,140 \times 10^{-2}$	
50	$4,905 \times 10^{-1}$		2109,0		15,613		$2,109 \times 10^{-2}$	
40	$3,924 \times 10^{-1}$		2071,0		12,490		$2,071 \times 10^{-2}$	
30	$9,810 \times 10^{-1}$		2030,0		9,368		$2,030 \times 10^{-2}$	
20	$1,962 \times 10^{-1}$		1906,0		6,245		$1,906 \times 10^{-2}$	
10	$9,810 \times 10^{-2}$		1821,0		3,123		$1,821 \times 10^{-2}$	
0	0		1820,0		0		$1,820 \times 10^{-2}$	



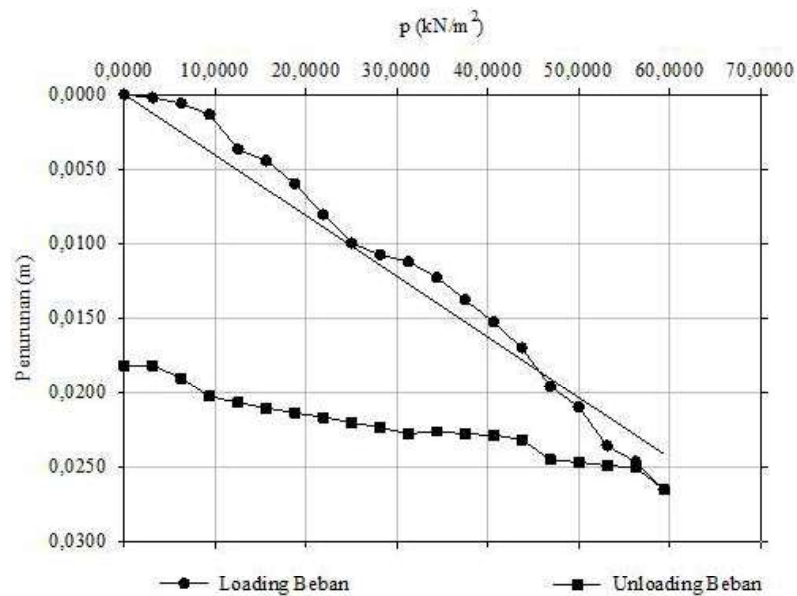
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UNIVERSITAS MUHAMMADIYAH YOGYAKARTA
JL. LINGKAR LUAR SELATAN, TAMAN TIRTO, KASIHAN BANTUL, YOGYAKARTA 55183
TELP. 0274-387656 (HUNTING)

BENDA UJI III (LUNAK)

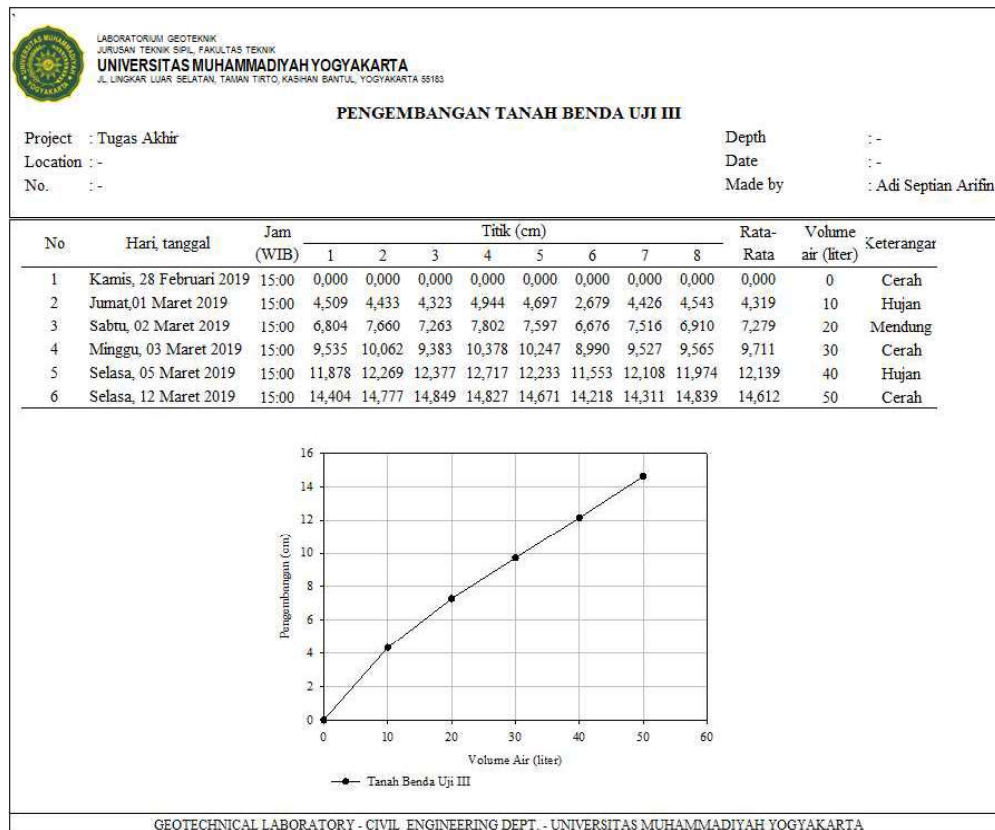
Project : Tugas Akhir
Location : -
No. : -

Depth : -
Date : -
Made by : Adi Septian Arifin

Data Pelat			Data Tiang			Keterangan
Diameter (D)	=	0,2 m	Jumlah Tiang	=	- buah	Pelat Lingkaran Dengan Tiang
Jari-Jari (r)	=	0,1 m	Tinggi (h)	=	- m	
Luas (L)	=	0,03142 m ²	Diameter (D)	=	- m	



c. Pengembangan Tanah



d. Pengembangan Pelat

