

DAFTAR PUSTAKA

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LAMPIRAN



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SPECIFIC GRAVITY TEST RESULTS

PROJECT	: PENGUJIAN KARAKTERISTIK BERAT JENIS TUGAS AKHIR S1		
LOCATION	: LABORATORIUM MEKANIKA TANAH UNIVERSITAS HASANUDDIN GOWA		
STASIUN	:		
BORING DEPTH	:		
TESTING METHOD	: ASTM D 854-58(72)	TESTED BY	: MAHASISWA STRATA 1
LABORATORY	: HASANUDDIN UNIVERSITY	DATE	: SEPTEMBER 2018

Bore Hole No. / Type	-								
Sample	-								
Sample Depth & Inclination	m								
Number of Volumetric Flask	-	1	2	1					
Weight of Vol. Flask + Soil (W2)	Gram	42.1	42.1						
Weight of Vol. Flask (W1)	Gram	28.08	20.71						
Weight of Dry Soil (Ws=W2-W1)	Gram	25.00	25.00						
Temperature, T (oC)	Degree	28.0	28.0						
Weight of Vol. Flask+Water at T (W4)	Gram	77.21	68.67						
Weight of Vol. Flask+Water+Soil (W3)	Gram	92.99	84.44						
Unit Weight of Water at T, γ_T	Gram/Cm ³	0.9963	0.9963						
Temp. Corr. Coefficient, $\alpha = \gamma_T / \gamma_{20}^{oC}$	-	0.9981	0.9981						
Weight of Soil (Wu=(Ws+W4-W3))	Gram	9.2	9.2						
Specific Gravity of Soil (Gs= $\alpha \cdot Ws / Wu$)	-	2.706	2.703						
Average of Gs	-	2.705							
Remarks:	Unit Weight of Water, $\gamma_{w,20}^{oC} = 0.99823$								

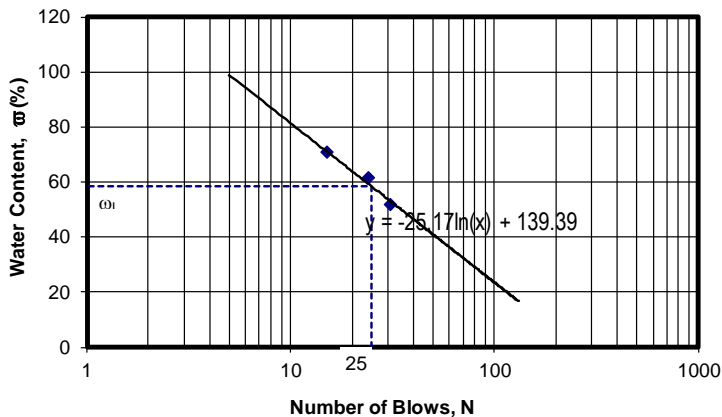


ATTERBERG LIMITS TEST

PROJECT	: PENGUJIAN BATAS-BATAS ATTERBERG TUGAS AKHIR S1	TESTED BY	: MAHASISWA STRATA 1
LOCATION	:	DATE	: SEPTEMBER 2018
STASIUN	:		
SAMPLING DEPTH	:		
TESTING METHOD	: ASTM D 424-59, D 4318-(00), AASHTO T89/T90		
LABORATORY	: HASANUDDIN UNIVERSITY		

Sample No.	:										
Depth of Sample	:										
	Unit	Plastic Limit		Liquid Limit							
Test Number	-	1	2	1		2		3		4	
Number of Blows	N	-	-	15		24		31			
Container No. or Can No.	-	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2
Weigh of Wet Soil+Can, W1	gram	10.99		14.28	20.78	34.32	30.32	16.54	21.45		
Weigh of Dry Soil+Can, W2	gram	10.54		10.50	15.55	24.99	22.44	12.70	14.21		
Weigh of Water, Ww=W1-W2	gram	0.45		3.78	5.23	9.33	7.88	3.84	7.24		
Weigh of Can, W3	gram	9.01		5.10	8.20	9.76	9.58	5.25	5.09		
Weigh of Dry Soil, Ws=W2-W3	gram	1.53		5.40	7.35	15.23	12.86	7.45	13.93		
Water Content, $\omega = Ww/Ws \cdot 100\%$	%	29.08		70.00	71.16	61.26	61.28	51.54	51.97		
Average of Water Content, w	%	29.08		70.58		61.27		51.76			

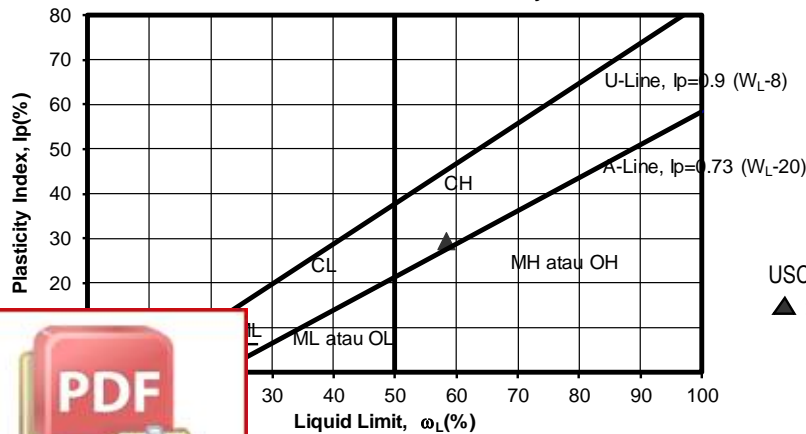
Chart for Liquid Limit Determination



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Atterberg Limits	Value
Plastic Limit, ω_p (%)	29.08
Liquid Limit, ω_L (%)	58.37
Plastic Index, $I_p = \omega_L - \omega_p$	29.29
Shrinkage Limit, ω_L (%)	20.16

Chart for the Unified Soil Classification System



USCS Classification : CH

▲ : Sample Position in the Chart



ATTERBERG LIMITS TEST

PROJECT	: PENGUJIAN BATAS-BATAS ATTERBERG TUGAS AKHIR S1				
LOCATION	:				
STASIUN	:				
SAMPLING DEPTH	:				
TESTING METHOD	: ASTM D 424-59, D 4318-(00), AASHTO T89/T90			TESTED BY	: MAHASISWA STRATA 1
LABORATORY	: HASANUDDIN UNIVERSITY			DATE	: SEPTEMBER 2018

Sample No.	:										
Depth of Sample	:										
	Unit	Plastic Limit		Liquid Limit						Shrinkage Limit	
Test Number	-	1	2	1		2		3		4	
Number of Blows	N	-	-	15		24		31		-	
Container No. or Can No.	-	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2
Weigth of Wet Soil+Can, W1	gram	10.99	0.00	14.28	20.78	34.32	30.32	16.54	21.45	46.87	43.83
Weigth of Dry Soil+Can, W2	gram	10.54	0.00	10.50	15.55	24.99	22.44	12.70	14.21	28.21	25.98
Weigth of Water, Ww=W1-W2	gram	0.45	0.00	3.78	5.23	9.33	7.88	3.84	7.24	18.66	17.85
Weigth of Can, W3	gram	9.01	0.00	5.10	8.20	9.76	9.58	5.25	5.09	7.52	6.14
Weigth of Dry Soil, Ws=W2-W3	gram	1.53	0.00	5.40	7.35	15.23	12.86	7.45	13.93	20.69	19.84
Water Content, $\omega = Ww/Ws \cdot 100\%$	%	29.08	0.00	70.00	71.16	61.26	61.28	51.54	51.97	90.19	89.97
Average of Water Content, w	%	29.08		70.00		61.27		51.76		90.08	
Weigth of Can+Hg, W1	gram									359.00	328.00
Weigth of Shrink dish	gram									35.13	35.13
Weight of displaced Hg + Shrink dish	gram									190.01	168.21
Hg content	gr/cm ³									13.60	13.60
Volume of Wet Soil	cm ³									25.84	23.67
Volume of Dry Soil	cm ³									11.39	9.79
Shrinkage Limit	%									20.21	20.12
Average of Shrinkage Limit	%									20.16	



COMPACTION TEST RESULTS

PROJECT	: PENGUJIAN KARAKTERISTIK PEMADATAN TANAH					
LOCATION	: LABORATORIUM MEKANIKA TANAH UNHAS GOWA					
BORING NUMBER	:					
SAMPLING DEPTH	:					
TESTING METHOD	: ASTM D 698/ D 1567			TESTED BY : NURUL M.AS		
LABORATORY	: HASANUDDIN UNIVERSITY			DATE : AGUSTUS 2018		

Berat tanah	gram	2000	2000	2000	2000	2000
Kadar air mula-mula	%	12.17	12.17	12.17	12.17	12.17
Penambahan air	ml	150	200	250	300	350
Kadar air akhir	%	20.58	23.39	26.19	29.00	31.80

Berat Isi Basah (Wet density)

No. Mould	-	1	2	3	4	5
Berat Mould	gram	1939	1939	1939	1939	1939
Berat tanah basah + Mould	gram	3423	3600	3715	3678	3545
Berat tanah basah, W_{wet}	gram	1484	1661	1776	1739	1606
Volume Mould	cm ³	1004	1004	1004	1004	1004
Berat Volume Basah	gr/cm ³	1.4782	1.6545	1.7690	1.7322	1.5997

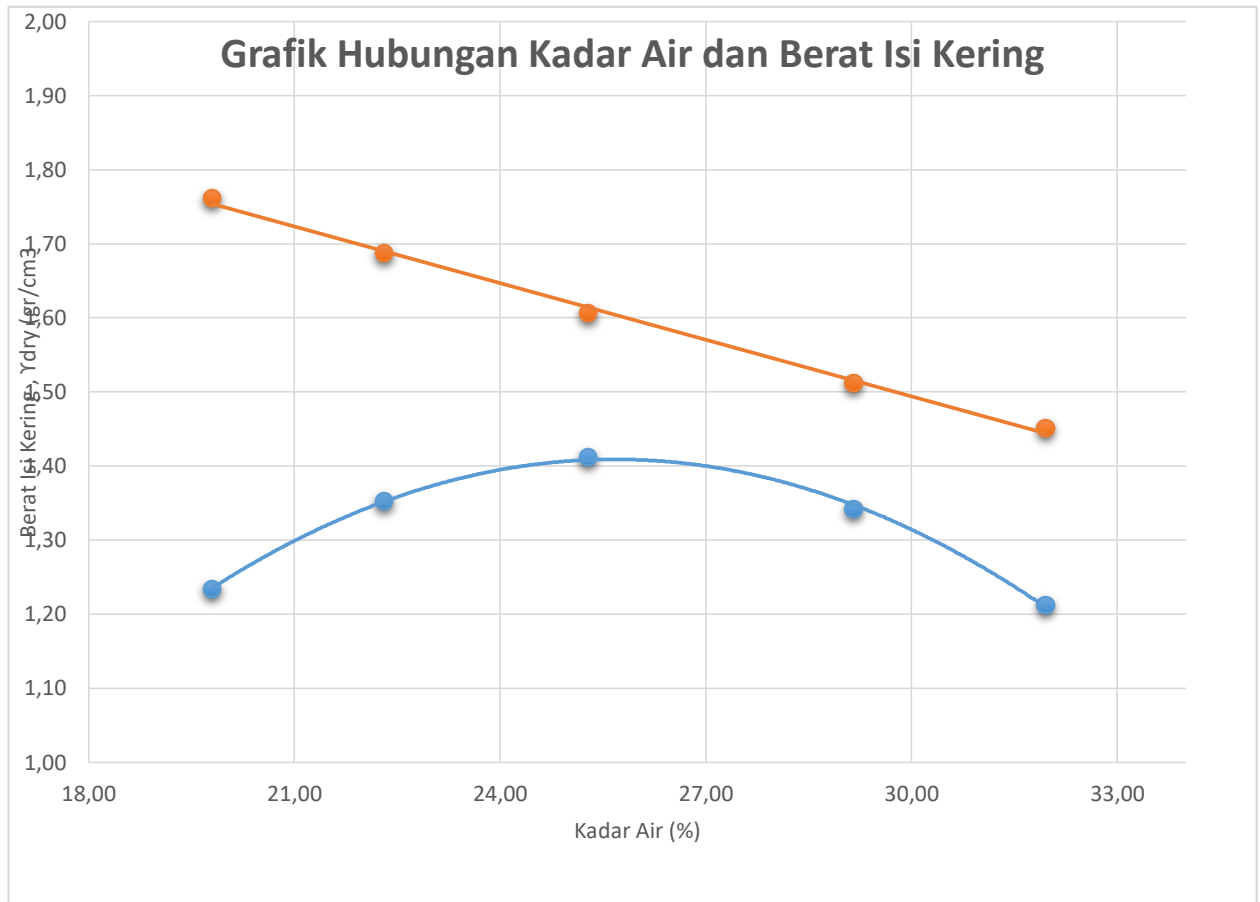
Kadar Air (Water Content)

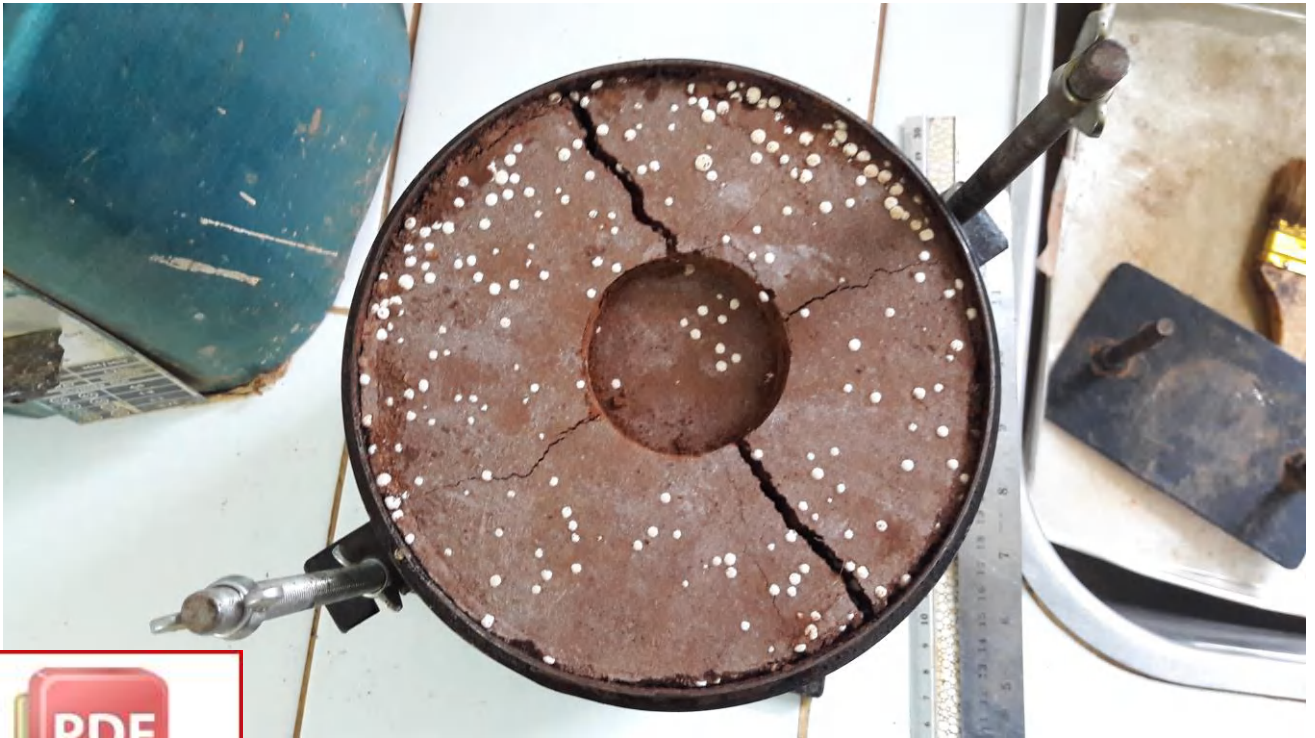
No. Container	-	1A	1B	2A	2B	3A	3B	4A	4B	5A	5B
Berat tanah basah + Container	gram	37.45	42.00	36.23	31.17	32.19	28.93	24.45	38.48	52.49	61.21
Berat tanah kering + Container	gram	32.77	37.44	30.53	26.41	26.73	24.11	20.07	30.93	41.73	48.25
Berat air	gram	4.68	4.56	5.70	4.76	5.46	4.82	4.38	7.55	10.76	12.96
Berat container	gram	9.07	14.48	5.08	4.98	5.13	5.05	5.02	5.08	7.94	7.83
Berat tanah kering	gram	23.70	22.96	25.45	21.43	21.60	19.06	15.05	25.85	33.79	40.42
Kadar air	%	19.75	19.86	22.40	22.21	25.28	25.29	29.10	29.21	31.84	32.06
Kadar air rata-rata	%	19.80		22.30		25.28		29.15		31.95	

Berat Isi Kering (Dry Density)

Berat tanah basah, $\frac{W_{wet}}{100}$	gram	1484	1661	1776	1739	1606
Kadar air rata-rata	%	19.80	22.30	25.28	29.15	31.95
Berat kering	gram	1238.69	1358.09	1417.59	1346.44	1217.10
	cm ³	1003.94	1003.94	1003.94	1003.94	1003.94
	gr/cm ³	1.23	1.35	1.41	1.34	1.21
	gr/cm ³	1.76	1.69	1.61	1.51	1.45







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