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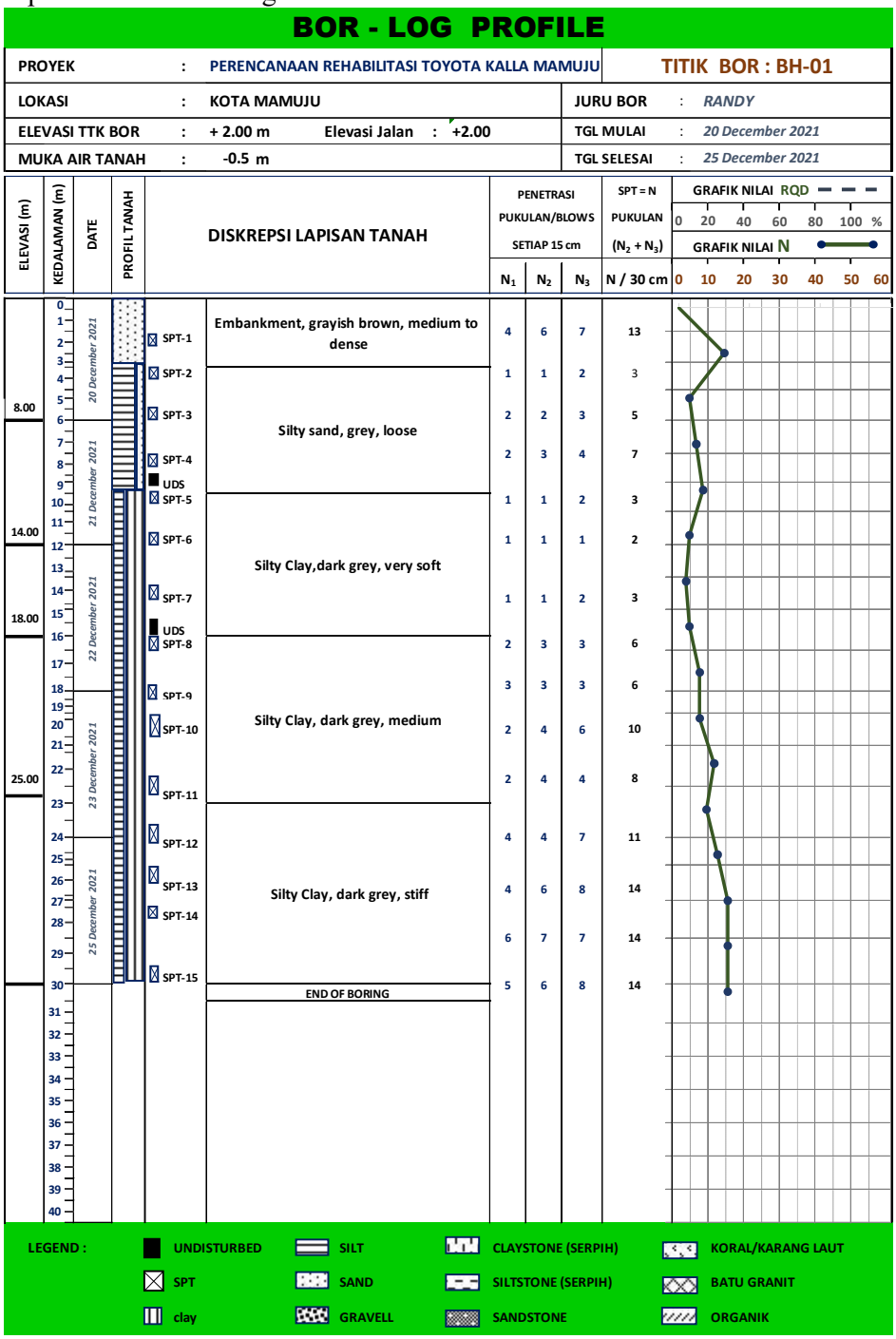
LAMPIRAN

Lampiran 1 Profil Bor-log SPT



Lampiran 2 Data Pengujian Berat Jenis

SPECIFIC GRAVITY TEST RESULTS

PROJECT : Shop Toyota Kalla

LOCATION : Mamuju

BORING NUMBER : BH 1

BORING DEPTH : Meter

TESTED BY : Firmansyah Yusuf

TESTING METHOD : ASTM D 854-58(72)

DATE : Januari 2022

Bore Hole No. / Type	-	BH1		BH1		BH1			
Sample	-	1		2		3			
Sample Depth & Inclination	m	9,5 -10		15,5 - 16		19,5 -20			
Number of Volumetric Flask	-	1	2	1	2	1	2		
Weight of Vol. Flask + Soil (W2)	Gram	44.01	45.36	30.04	32.79	44.18	45.39		
Weight of Vol. Flask (W1)	Gram	34.01	35.36	20.04	22.79	34.18	35.39		
Weight of Dry Soil (Ws=W2-W1)	Gram	10.00	10.00	10.00	10.00	10.00	10.00		
Temperature, T (oC)	Degree	29.00	29.00	30.00	30.00	30.00	30.00		
Weight of Vol. Flask+Water at T (W4)	Gram	82.29	83.61	69.84	74.90	82.36	83.50		
Weight of Vol. Flask+Water+Soil (W3)	Gram	88.83	89.65	76.25	81.17	88.67	89.89		
Unit Weight of Water at T, γ_T	Gram/Cm^3	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963		
Temp. Corr. Coefficient, $\alpha=\gamma_T/\gamma_{20}{}^0C$	-	1.00	1.00	1.00	1.00	1.00	1.00		
Weight of Soil (Wu=(Ws+W4-W3))	Gram	3.46	3.96	3.59	3.73	3.69	3.61		
Specific Gravity of Soil (Gs=α*Ws/Wu)	-	2.885	2.520	2.780	2.676	2.705	2.765		
Average of Gs	-	2.702		2.728		2.735			
Remarks:	Unit Weight of Water, γ_w 20^{0}C = 0.99823								

Lampiran 3 Data Pengujian Berat Isi

TEST RESULTS OF GENERAL PROPERTIES
(Wet Density, Water Content, Dry Density, Porosity, & Degree of Saturation)

PROJECT : Shop Toyota Kalla
LOCATION : Mamuju
BORING NUMBER : BH 1
BORING DEPTH : Meter
TESTING METHOD : ASTM D 2216-(98), D 2937-(71), AASHTO T100-71

TESTED BY : Firmansyah Yusuf
DATE : Januari 2022

Bore Hole No.	-	BH 1			BH 1			BH 1			KETERANGAN
Sample	-	1			2			3			
Sample Depth & Inclination	m	9-9,5			15,5-16			19,5-20			
Ring / Container Number	-	1	2	2	1	2	3	1	2	3	
Weight of Ring, (1)	Gram	65.95	65.95	65.95	65.95	65.95	65.95	65.95	65.95	65.95	D ring = 63 mm
Weight of Container, (2)	Gram	8.77	8.55	10.99	8.62	10.94	11.21	11.21	8.60	8.76	h ring = 20 mm
Weight of Ring+Container+Wet Soil, (3)	Gram	164.60	156.47	169.20	156.41	153.30	154.34	147.48	148.65	150.86	d= diameter
Weight of Wet Soil, (4)={(3)-(2)-(1)}	Gram	89.88	81.97	92.26	81.84	76.41	77.18	70.32	74.10	76.15	h = tinggi
Volume of Soil or Ring, (5)	cm^3	35.33	35.33	35.33	35.33	35.33	35.33	35.33	35.33	35.33	
Weight of Container+Dry Soil, (6)	Gram	58.85	56.91	64.69	52.03	52.27	53.42	51.65	49.60	46.74	
Weight of Dry Soil, (7)={(6)-(2)}	Gram	50.08	48.36	53.70	43.41	41.33	42.21	40.44	41.00	37.98	
Weight of Water, (8)=(4)-(7)	Gram	48.16	44.13	48.87	46.17	45.18	45.29	40.72	40.47	45.43	
Specific Gravity, Gs	-	2.702	2.702	2.702	2.728	2.728	2.728	2.735	2.735	2.735	
Volume of Dry Soil, (9)=(7)/Gs	cm^3	18.53	17.90	19.87	15.91	15.15	15.47	14.79	14.99	13.89	
Volume of Pore, (10)=(5)-(9)	cm^3	16.79	17.43	15.45	19.41	20.17	19.85	20.54	20.34	21.44	
Wet Density, γ_{wet} = (4)/(5)	Gr/cm^3	2.54	2.32	2.61	2.32	2.16	2.18	1.99	2.10	2.16	
Water Content, w=(8)/(7)*100%	%	96.17	91.25	91.01	106.36	109.32	107.30	100.69	98.71	119.62	
Dry Density, $\gamma_d = \gamma_{wet}/(1+w)$	Gr/cm^3	1.30	1.21	1.37	1.12	1.03	1.05	0.99	1.06	0.98	
Porosity, n=(10)/(5)*100%	%	47.53	49.33	43.74	54.95	57.11	56.20	58.15	57.57	60.69	
Degree of Saturation, Sr=(8)/(10)*100%	%	286.83	253.23	316.29	237.84	223.94	228.14	198.21	198.98	211.86	

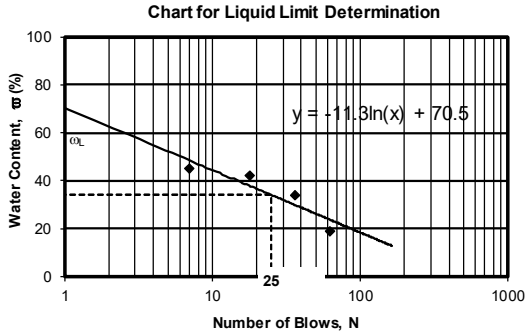
Lampiran 4 Data Pengujian Batas-Batas Atterberg

ATTERBERG LIMITS TEST RESULTS

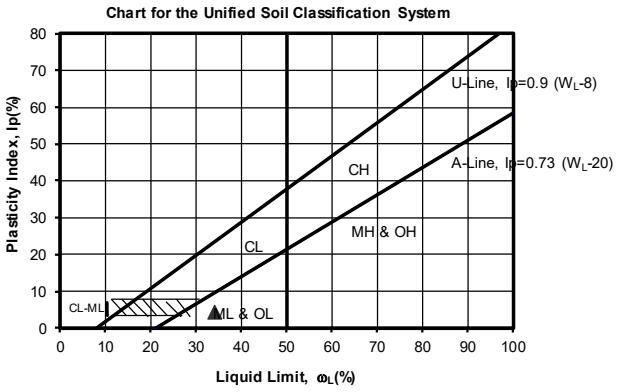
(Unified Soil Classification System Chart)

PROJECT	: Toyota Kalla Shop		
LOCATION	: Mamuju		
BORING NUMBER	: BH1		
BORING DEPTH	9,5 - 10 m	TESTED BY	: Firmansyah Yusuf
TESTING METHOD	: ASTM D 424-59, D 4318-(00), AASHTO T89/T90	DATE	: Januari 2022

Sample No. :	1														
Depth of Sample :	9,5 - 10 m														
	Unit	Plastic Limit		Liquid Limit											
Test Number	-	1	2	1		2		3		4					
Number of Blows	N	-	-	7.0		18.0		36.0		62.0					
Container No. or Can No.	-	A	B	1		2		3		4					
Weigth of Wet Soil+Can, W1	gram	15.05	17.17	16.30		17.36		19.10		14.76					
Weigth of Dry Soil+Can, W2	gram	14.10	12.21	13.95		14.86		17.08		13.77					
Weigth of Water, Ww=W1-W2	gram	0.95	4.96	2.35		2.50		2.02		0.99					
Weigth of Can, W3	gram	2.58	2.54	8.74		8.92		11.13		8.57					
Weigth of Dry Soil, Ws=W2-W3	gram	11.52	9.67	5.21		5.94		5.95		5.20					
Water Content, ω=Ww/Ws*100%	%	8.25	51.29	45.11		42.09		33.95		19.04					
Average of Water Content, w	%	29.77		45.11		42.09		33.95		19.04					



Atterberg Limits	Value
Plastic Limit, ωp(%)	29.77
Liquid Limit, ω_L(%)	34.13
Plastic Index, Ip=ω_L-ωp	4.36
Liquidity Index, I_L=(ω-ωp)/Ip	-



USCS Classification : ML & OL

▲ : Sample Position in the Chart

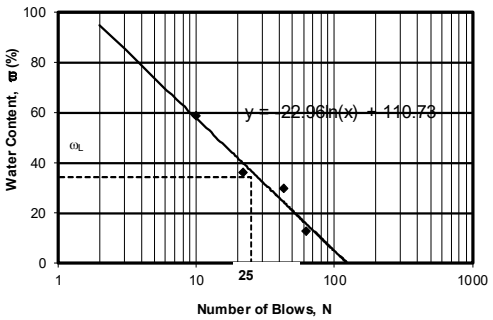
ATTERBERG LIMITS TEST RESULTS

(Unified Soil Classification System Chart)

LOCATION : Mamuju
BORING NUMBER : BH1
BORING DEPTH 15,5 - 16 m
TESTING METHOD : ASTM D 424-59, D 4318-(00), AASHTO T89/T90
TESTED BY : Firmansyah Yusuf
DATE : Januari 2022

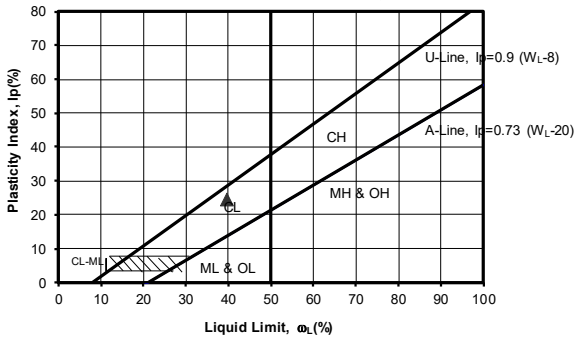
Sample No.	:	2							
Depth of Sample	:	15,5-16 m							
	Unit	Plastic Limit		Liquid Limit					
Test Number	-	1	2	1		2		3	4
Number of Blows	N	-	-	10.0		22.0		43.0	63.0
Container No. or Can No.	-	A	B	1		2		3	4
Weigth of Wet Soil+Can, W1	gram	14.52	14.70	24.08		18.25		20.41	20.12
Weigth of Dry Soil+Can, W2	gram	12.94	13.11	19.22		15.70		17.76	18.83
Weigth of Water, Ww=W1-W2	gram	1.58	1.59	4.86		2.55		2.65	1.29
Weigth of Can, W3	gram	2.58	2.54	10.94		8.68		8.84	8.76
Weigth of Dry Soil, Ws=W2-W3	gram	10.36	10.57	8.28		7.02		8.92	10.07
Water Content, ω=Ww/Ws*100%	%	15.25	15.04	58.70		36.32		29.71	12.81
Average of Water Content, w	%	15.15		58.70		36.32		29.71	12.81

Chart for Liquid Limit Determination



Atterberg Limits	Value
Plastic Limit, ωp(%)	15.15
Liquid Limit, ωL(%)	39.72
Plastic Index, Ip=ωL-ωp	24.57
Liquidity Index, IL=(ω-ωp)/Ip	-

Chart for the Unified Soil Classification System



USCS Classification : ML & OL
▲ : Sample Position in the Chart

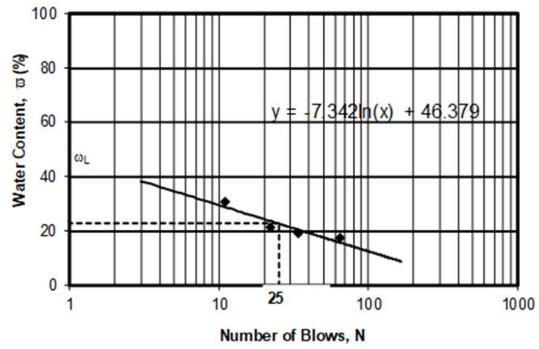
ATTERBERG LIMITS TEST RESULTS

(Unified Soil Classification System Chart)

LOCATION	: Mamuju		
BORING NUMBER	: BH1		
BORING DEPTH	19,5 - 20 m	TESTED BY	: Firmansyah Yusuf
TESTING METHOD	: ASTM D 424-59, D 4318-(00), AASHTO T89/T90	DATE	: Januari 2022

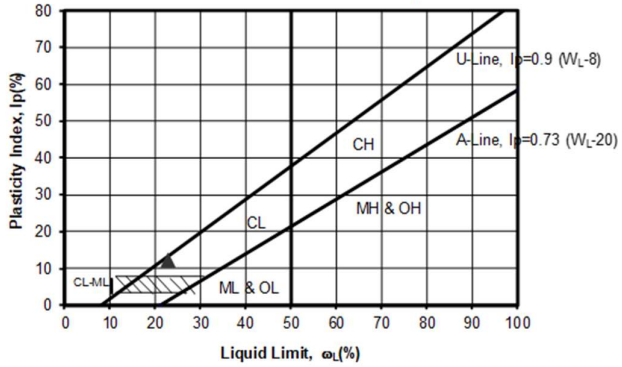
Sample No.	:	3							
Depth of Sample	:	19,5-20							
	Unit	Plastic Limit		Liquid Limit					
Test Number	-	1	2	1	2	3	4		
Number of Blows	N	-	-	11.0	22.0	34.0	65.0		
Container No. or Can No.	-	A	B	1	2	3	4		
Weigth of Wet Soil+Can, W1	gram	14.45	14.75	21.99	17.37	20.78	22.36		
Weigth of Dry Soil+Can, W2	gram	13.33	13.59	18.90	15.84	18.85	20.66		
Weigth of Water, Ww=W1-W2	gram	1.12	1.16	3.09	1.53	1.93	1.70		
Weigth of Can, W3	gram	2.58	2.54	8.82	8.69	8.77	10.93		
Weigth of Dry Soil, Ws=W2-W3	gram	10.75	11.05	10.08	7.15	10.08	9.73		
Water Content, ω=Ww/Ws*100%	%	10.42	10.50	30.65	21.40	19.15	17.47		
Average of Water Content, w	%	10.46		30.65	21.40	19.15	17.47		

Chart for Liquid Limit Determination



Atterberg Limits	Value
Plastic Limit, ωp(%)	10.46
Liquid Limit, ω_L(%)	22.75
Plastic Index, Ip=ω_L-ωp	12.29
Liquidity Index, I_L=(ω-ωp)/Ip	-

Chart for the Unified Soil Classification System



USCS Classification : ML & OL

▲ : Sample Position in the Chart

Lampiran 5 Data Pengujian Triaksial

PT.TAWANG REKATAMA

PROYEK	: SHOP TOYOTA KALLA	OPERATOR	: FIRMANSYAH
LOKASI	: MAMUJU	PENGUJIAN	: TRAKSIAL UU
BH	: 01		
DEPTH	: 9,5 - 10 m		
TANGGAL	: FEBRUARY 2022		

c	pembacaan ring Ʊ1= 50 kg/cm²	pembacaan ring Ʊ2= 100kg/cm²	pembacaan ring Ʊ3= 200 kg/cm²
0	0	0	0
0.2	25	30	37
0.4	30	35	50
0.6	35	40	56
0.8	40	45	60
1	44	50	65
1.2	48	55	68
1.4	50	60	75
1.6	55	65	80
1.8	58	70	85
2	60	74	90
2.2	61	76	95
2.4	62	78	100
2.6	62	80	104
2.8	62	84	106
3	62	86	107
3.2		88	110
3.4		90	110
3.6		90	110
3.8		90	
4		90	
		86	

PT.TAWANG REKATAMA

PROYEK : SHOP TOYOTA KALLA
LOKASI : MAMUJU
BH : 01
DEPTH : 15,5-16 m
TANGGAL : FEBRUARY 2022

OPERATOR : FIRMANSYAH
PENGUJIAN : TRAKSIAL UU

C	pembacaan ring Ʊ1= 50 kg/cm²	pembacaan ring Ʊ2= 100kg/cm²	pembacaan ring Ʊ3= 200 kg/cm²
0	0	0	0
0.2	25	55	37
0.4	30	64	50
0.6	38	70	56
0.8	40	75	60
1	42	78	65
1.2	45	82	68
1.4	48	85	75
1.6	50	88	80
1.8	55	92	85
2	60	95	90
2.2	62	98	95
2.4	63	100	100
2.6	63	110	104
2.8	62	120	106
3	59	130	107
3.2		130	110
3.4		130	110
3.6			110
3.8			
4			