

BAB VI

KESIMPULAN DAN SARAN

6.1. Kesimpulan

Berdasarkan hasil penelitian dan pembahasan yang telah dilakukan, dapat disimpulkan bahwa :

1. Dari hasil perhitungan angka korelasi disetiap lokasi memiliki perbedaan, bahkan ada yang cukup signifikan yaitu angka korelasi di Proyek Hotel Gandekan yakni $q_c = 6,502$ N. Angka korelasi di proyek – proyek lainnya memiliki angka yang tidak jauh berbeda yaitu :
 - Proyek Hotel di Jalan Sosrowijayan yaitu $q_c = 4,660$ N
 - Proyek Hotel di Jalan Suryonegaran yaitu $q_c = 4,394$ N
 - Proyek Hotel di Jalan Jogonegaran yaitu $q_c = 4,586$ N
 - Proyek Hotel di Jalan Dagen yaitu $q_c = 4,587$ N
 - Proyek The Malioboro Heritage $q_c = 4,641$ N
2. Dari hasil perhitungan yang dilakukan Angka korelasi data secara keseluruhan memiliki sedikit perbedaan terhadap angka korelasi Terzaghi yaitu $q_c = 4,55$ N. Angka korelasi menurut Terzaghi adalah $q_c = 4$ N.
3. Dari hasil perhitungan analisis daya dukung tanah didapat hasil yang berbeda dari setiap metode yang digunakan. Hasil daya dukung

menggunakan SPT dan CPT lebih besar dan lebih dapat dipercaya daripada hasil perhitungan Terzaghi.

6.2 Saran

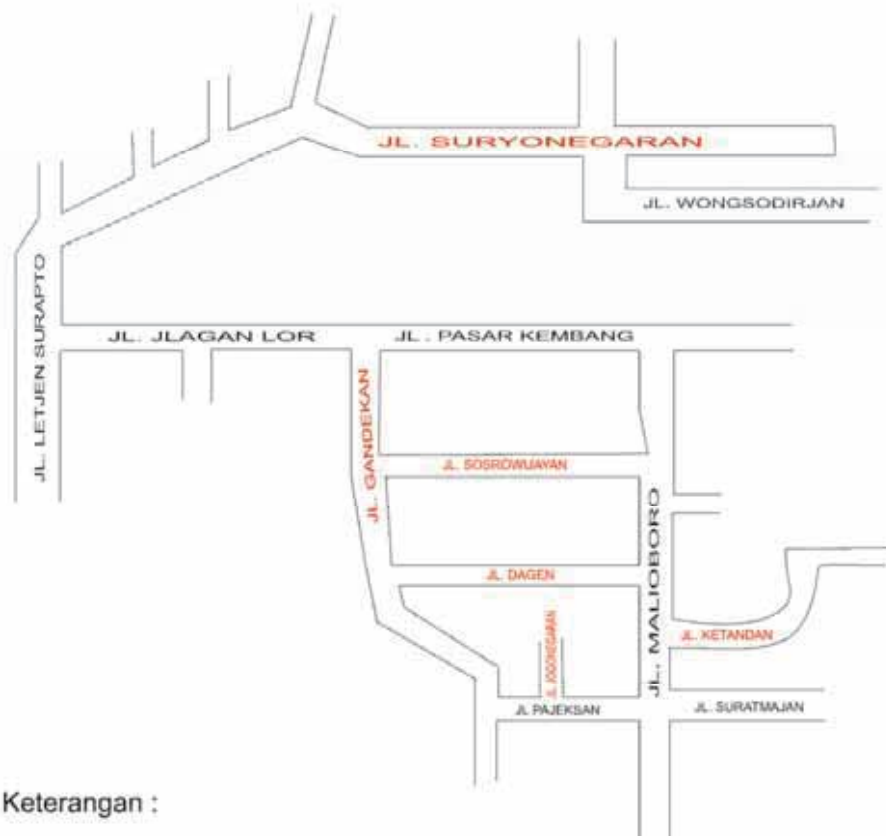
1. Untuk pusat kota Yogyakarta, khususnya Kecamatan Gedongtengen dan sekitarnya sesuai dengan hasil penelitian nilai $q_c = 4,55$ N cukup akurat untuk dipergunakan.
2. Dalam menggunakan persamaan korelasi tetap harus berhati – hati dan dipakai secara cermat karena perhitungan menggunakan bantuan nilai korelasi tidak mewakili keadaan sebenarnya, misalnya pada tanah di Hotel Gandekan. Pengujian tanah secara langsung tetap lebih akurat hasilnya.
3. Dalam menghitung daya dukung tanah terutama untuk pondasi dalam baiknya menggunakan SPT atau CPT (pilih yang nilainya lebih rendah) karena hasilnya lebih baik dalam perancangan pondasi. Umumnya hasil SPT lebih disarankan karena perhitungan daya dukungnya tidak terlalu tinggi dan tidak terlalu rendah sehingga cocok dalam menggambarkan kekuatan tanah. Sedangkan metode terzaghi lebih digunakan pada saat menghitung pondasi dangkal.
4. Disarankan untuk mengadakan penelitian lebih lanjut dengan metoda lain ataupun dengan metoda yang sama, tetapi dengan mempergunakan sample yang lebih banyak, serta pada lokasi yang berbeda.

DAFTAR PUSTAKA

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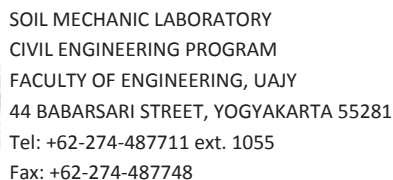
PETA LOKASI PROYEK PENELITIAN



Keterangan :

— : Nama Jalan Letak Proyek yang Diteliti

— : Nama Jalan



BH-1

BOR LOG

PROJECT TITLE : Gandekan Hotel

PROJECT LOCATION : Jl. Gandekan Yogyakarta

GROUND ELEVATION : + 0,20 m from road level

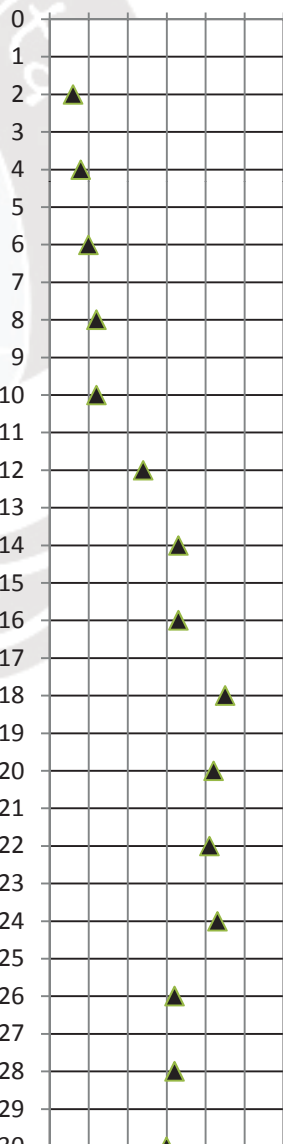
HOLE SIZE : 7.295cm

GROUND WATER LEVEL : - 12,00 m from ground level

WEATHER CONDITION : FINE

ESTIMATED SEASONAL HIGH :-

CHECKED BY: SOIL MECH. LAB. UAJY

Depth (m)	Graph Log	Material Description	Contact Depth (m)	Sample Number	Blow Counts (N Value)				Water Level Elevation (m)	SPT Value	
					N ₁	N ₂	N ₃	N _v		0 10 20 30 40 50 60	
1		Urug	1						-12.00	0	
2		Pasir kasar (coklat)	2		2	3	3	6		1	
3		Pasir kasar (coklat, hitam) terdapat andesit Ø 2-3 cm	3							2	
4					3	3	5	8		3	
5										4	
6					4	4	6	10		5	
7		Pasir halus (coklat, hitam)	2					6			
8				4	6	6	12	7			
9								8			
10		Pasir kasar (coklat, hitam)	3	3	6	6	12	9			
11								10			
12				Pasir halus berlempung (coklat, hitam)	3	I	8	12	12	24	11
13									12		
14					Pasir kasar (coklat, hitam)	3	8	12	21	33	13
15									14		
16					Pasir kasar (coklat, hitam)	3	7	20	13	33	15
17									16		
18					Batu pasir (coklat, abu- abu)	4	9	20	25	45	17
19									18		
20					Pasir kasar (coklat, hitam) terdapat andesit Ø 3-5 cm	2	9	19	23	42	19
21									20		
22					Pasir kasar (coklat, hitam) terdapat andesit Ø 3-5 cm	2	10	19	22	41	21
23									22		
24					Pasir halus (coklat, hitam)	4	10	20	23	43	23
25					II				24		
26					Pasir halus (coklat, hitam)	4		9	15	17	32
27									26		
28					Pasir kasar (coklat, hitam)	3	9	16	16	32	27
29									28		
30					Pasir kasar (coklat, hitam)	3	8	15	15	30	29
									30		



SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Jalan Gandekan Yogyakarta	Date	: 12 Juli 2013
No. of CPT	: SB. 1	Weather	: Cerah
Elevation	: +0,20 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel Gandekan

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	L F Kg/cm ²	T F Kg/cm ¹	Jumlah T F Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	L F Kg/cm ²	T F Kg/cm ¹	Jumlah T F Kg/cm ¹
0,00	0	0	0,00	0	0						
0,20	2	5	0,45	9	9	9,20	102	106	0,60	12	537
0,40	3	6	0,45	9	18	9,40	126	131	0,75	15	552
0,60	4	7	0,45	9	27	9,60	94	99	0,75	15	567
0,80	3	6	0,45	9	36	9,80	187	196	1,35	27	594
1,00	5	8	0,45	9	45	10,00	220	225	0,75	15	609
1,20	5	8	0,45	9	54	10,20	216	221	0,75	15	624
1,40	7	10	0,45	9	63	10,40	196	200	0,60	12	636
1,60	6	9	0,45	9	72	10,60	177	181	0,60	12	648
1,80	9	12	0,45	9	81	10,80	180	185	0,75	15	663
2,00	11	14	0,45	9	90	11,00	152	156	0,60	12	675
2,20	33	36	0,45	9	99	11,20	96	99	0,45	9	684
2,40	53	56	0,45	9	108	11,40	87	90	0,45	9	693
2,60	61	64	0,45	9	117	11,60	83	86	0,45	9	702
2,80	69	73	0,60	12	129	11,80	52	55	0,45	9	711
3,00	78	81	0,45	9	138	12,00	54	57	0,45	9	720
3,20	50	53	0,45	9	147	12,20	60	64	0,60	12	732
3,40	48	51	0,45	9	156	12,40	79	83	0,60	12	744
3,60	64	68	0,60	12	168	12,60	91	95	0,60	12	756
3,80	88	92	0,60	12	180	12,80	289	293	0,60	12	768
4,00	112	116	0,60	12	192	13,00	334	339	0,75	15	783
4,20	195	199	0,60	12	204	13,20	445	450	0,75	15	798
4,40	74	78	0,60	12	216	13,40					
4,60	40	43	0,45	9	225	13,60					
4,80	32	35	0,45	9	234	13,80					
5,00	79	83	0,60	12	246	14,00					
5,20	95	99	0,60	12	258	14,20					
5,40	101	105	0,60	12	270	14,40					
5,60	112	116	0,60	12	282	14,60					
5,80	154	159	0,75	15	297	14,80					
6,00	175	181	0,90	18	315	15,00					
6,20	156	161	0,75	15	330	15,20					
6,40	66	70	0,60	12	342	15,40					
6,60	47	50	0,45	9	351	15,60					
6,80	51	54	0,45	9	360	15,80					
7,00	56	60	0,60	12	372	16,00					
7,20	68	72	0,60	12	384	16,20					
7,40	91	95	0,60	12	396	16,40					
7,60	102	107	0,75	15	411	16,60					
7,80	133	139	0,90	18	429	16,80					
8,00	150	156	0,90	18	447	17,00					
8,20	161	167	0,90	18	465	17,20					
8,40	178	183	0,75	15	480	17,40					
8,60	205	209	0,60	12	492	17,60					
8,80	208	214	0,90	18	510	17,80					
9,00	129	134	0,75	15	525	18,00					

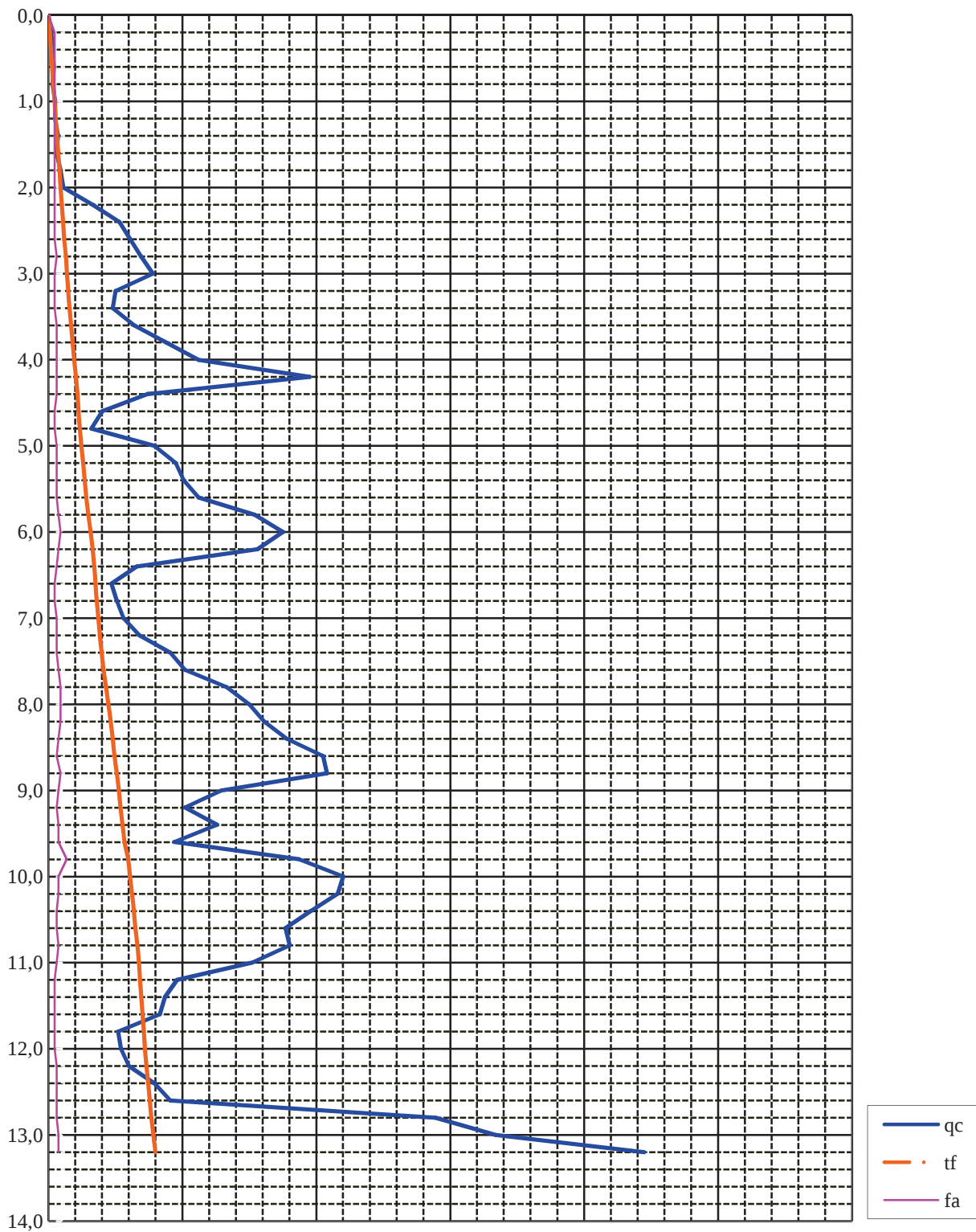


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel Gandekan, Jalan Gandekan Yogyakarta
No. of CPT : SB. 1 Elevation : +0,20 meter dari muka jalan
Date : 12 Juli 2013 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm^2
qc	100	200	300	400	500	600	kg / cm^2
tf	1000	2000	3000	4000	5000	6000	kg / cm^1





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10 TON DUTCH CONE PENETRATION TEST

Location	: Jalan Gandekan Yogyakarta	Date	: 12 Juli 2013
No. of CPT	: SB. 2	Weather	: Cerah
Elevation	: ± 0,00 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel Gandekan

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	L F Kg/cm ²	T F Kg/cm ¹	Jumlah T F Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	L F Kg/cm ²	T F Kg/cm ¹	Jumlah T F Kg/cm ¹
0,00	0	0	0,00	0	0						
0,20	12	15	0,45	9	9	9,20	106	110	0,60	12	549
0,40	15	18	0,45	9	18	9,40	125	129	0,60	12	561
0,60	14	17	0,45	9	27	9,60	91	95	0,60	12	573
0,80	12	15	0,45	9	36	9,80	189	194	0,75	15	588
1,00	11	14	0,45	9	45	10,00	216	221	0,75	15	603
1,20	14	17	0,45	9	54	10,20	213	218	0,75	15	618
1,40	16	19	0,45	9	63	10,40	199	205	0,90	18	636
1,60	12	15	0,45	9	72	10,60	176	180	0,60	12	648
1,80	13	16	0,45	9	81	10,80	183	188	0,75	15	663
2,00	11	14	0,45	9	90	11,00	161	165	0,60	12	675
2,20	32	36	0,60	12	102	11,20	101	105	0,60	12	687
2,40	47	51	0,60	12	114	11,40	89	92	0,45	9	696
2,60	44	47	0,45	9	123	11,60	81	84	0,45	9	705
2,80	41	44	0,45	9	132	11,80	50	53	0,45	9	714
3,00	46	50	0,60	12	144	12,00	49	52	0,45	9	723
3,20	119	125	0,90	18	162	12,20	60	63	0,45	9	732
3,40	99	105	0,90	18	180	12,40	81	85	0,60	12	744
3,60	87	91	0,60	12	192	12,60	98	102	0,60	12	756
3,80	101	106	0,75	15	207	12,80	183	188	0,75	15	771
4,00	103	108	0,75	15	222	13,00	291	297	0,90	18	789
4,20	63	67	0,60	12	234	13,20	339	345	0,90	18	807
4,40	71	75	0,60	12	246	13,40	445	450	0,75	15	822
4,60	56	59	0,45	9	255	13,60					
4,80	38	41	0,45	9	264	13,80					
5,00	55	58	0,45	9	273	14,00					
5,20	59	63	0,60	12	285	14,20					
5,40	68	71	0,45	9	294	14,40					
5,60	91	95	0,60	12	306	14,60					
5,80	115	119	0,60	12	318	14,80					
6,00	107	112	0,75	15	333	15,00					
6,20	154	159	0,75	15	348	15,20					
6,40	63	67	0,60	12	360	15,40					
6,60	48	51	0,45	9	369	15,60					
6,80	50	53	0,45	9	378	15,80					
7,00	57	60	0,45	9	387	16,00					
7,20	65	69	0,60	12	399	16,20					
7,40	93	97	0,60	12	411	16,40					
7,60	108	112	0,60	12	423	16,60					
7,80	139	145	0,90	18	441	16,80					
8,00	160	166	0,90	18	459	17,00					
8,20	163	169	0,90	18	477	17,20					
8,40	170	176	0,90	18	495	17,40					
8,60	210	215	0,75	15	510	17,60					
8,80	209	213	0,60	12	522	17,80					
9,00	127	132	0,75	15	537	18,00					

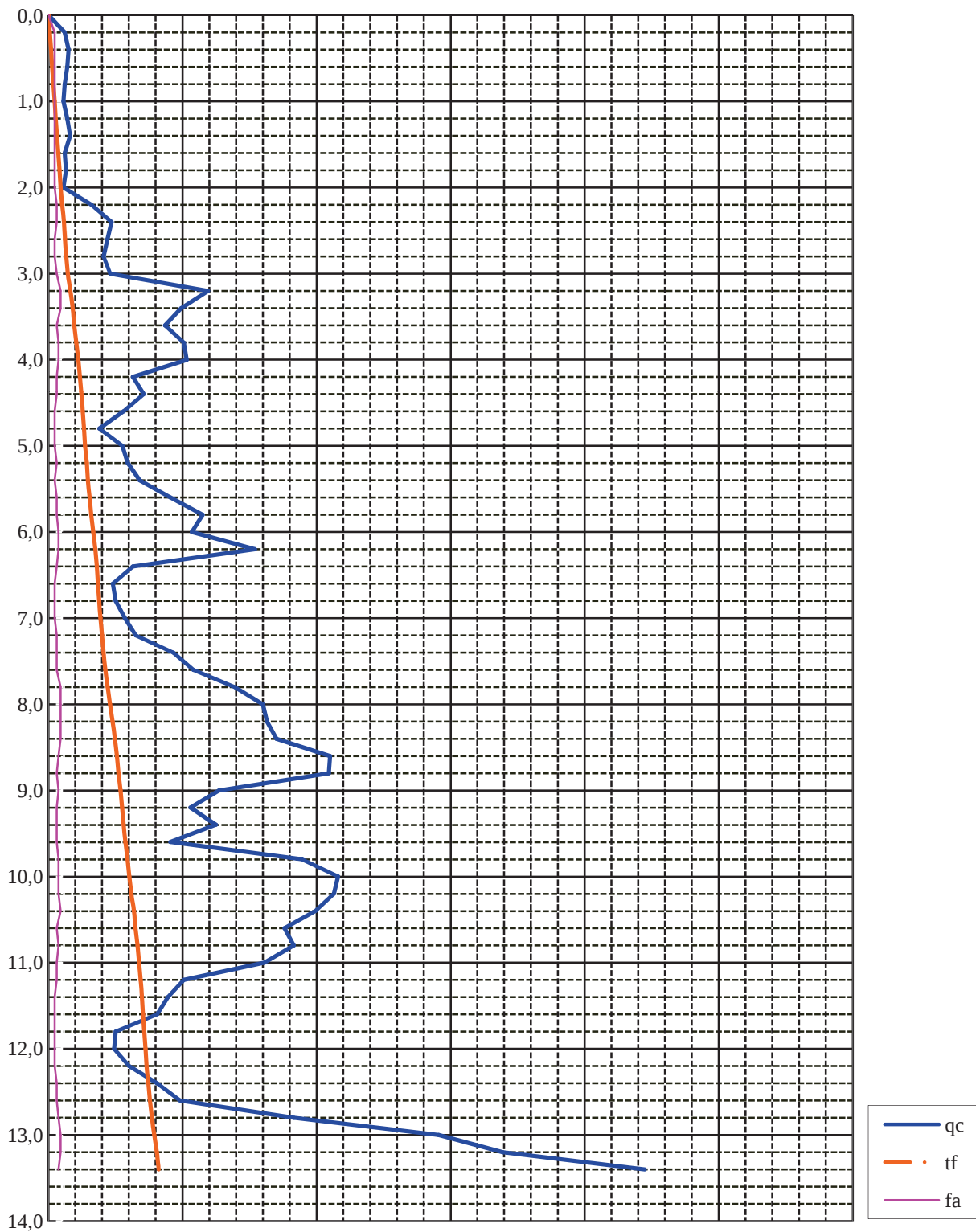


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DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel Gandekan, Jalan Gandekan, Yogyakarta
No. of CPT : SB. 2 Elevation : ± 0,00 meter dari muka jalan
Date : 12 Juli 2013 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm^2
qc	100	200	300	400	500	600	kg / cm^2
tf	1000	2000	3000	4000	5000	6000	kg / cm^1





SOIL MECHANIC LABORATORY
CIVIL ENGINEERING PROGRAM
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44 BABARSARI STREET, YOGYAKARTA 55281
Tel: +62-274-487711 ext. 1055
Fax: +62-274-487748.

Boring Number:

BH-1

BOR LOG

CLIENT:

PROJECT TITLE : Hotel Summer 2 (Summer Quest)

PROJECT CONTRACT NUMBER:

PROJECT LOCATION : Jl. Sosrowijayan Yogyakarta

DATE STARTED: 03 Mei 2014

GROUND ELEVATION : + 0,20 m from road level

DATE COMPLETED : 03 Mei 2014

HOLE SIZE : 7.295cm

DRILLING CONTRACTOR: SOIL MECH. LAB. UAJY

GROUND WATER LEVEL : - 14,00 m from ground level

DRILLING METHOD: ROTARY SPINDLE, SKID MOUNTED TYPE

WEATHER CONDITION : FINE

LOGGED BY: Mukarob, CS.

ESTIMATED SEASONAL HIGH :-

CHECKED BY: SOIL MECH. LAB. UAJY

Depth (m)	Graph Log	Material Description (field observations)	Contact Depth (m)	Sample Number	Blow Counts (N Value)				Water Level Elevation (m)	SPT Value
					N ₁	N ₂	N ₃	N _v		
1		Pasir sedang (coklat, kuning)	2							0
2					6	7	9	16		1
3										2
4		Pasir kasar (coklat, abu- abu)	4		7	9	13	22		3
5										4
6					7	15	21	36		5
7										6
8		Pasir sedang (coklat, abu- abu)	4		6	7	7	14		7
9										8
10					6	6	7	13		9
11										10
12		Pasir kasar (coklat, hitam)	3		6	8	11	19		11
13										12
14		Pasir kasar sedikit lanau (coklat, hitam)	3	I	9	14	23	37	-14.00	13
15										14
16					12	18	23	41		15
17		Pasir kasar (coklat, hitam)	2							16
18					12	21	29	50		17
19										18
20										19
21		Pasir sedang (coklat, hitam)	5		13	20	30	50		20
22										21
23					14	21	32	53		22
24										23
25		Pasir kasar sedikit lanau (coklat, hitam)	4	II	15	23	37	60		24
26										25
27					17	25	35	60		26
28										27
29		Pasir sedang (coklat, hitam)	3		17	24	34	58		28
30										29
					17	25	35	60		30

Catatan: Pada pengamatan di lapangan, lanau bisa tampak seperti pasir halus atau pasir sangat halus



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FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Sosrokusuman DN I/190 RT.18/06	Date	: 28 Mei 2012
No. of CPT	: SB. 1	Weather	: Cerah
Elevation	: +0.20 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -13.25 meter	Project	: Hotel 3 lantai

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	16	21	0.75	15	15	9.20	240	250	1.50	30	972
0.40	27	33	0.90	18	33	9.40	275	284	1.35	27	999
0.60	29	34	0.75	15	48	9.60	345	356	1.65	33	1032
0.80	30	35	0.75	15	63	9.80	395	410	2.25	45	1077
1.00	31	36	0.75	15	78	10.00	413	421	1.20	24	1101
1.20	5	11	0.90	18	96	10.20	423	430	1.05	21	1122
1.40	7	14	1.05	21	117	10.40	435	442	1.05	21	1143
1.60	10	16	0.90	18	135	10.60	438	445	1.05	21	1164
1.80	13	18	0.75	15	150	10.80	446	452	0.90	18	1182
2.00	15	26	1.65	33	183	11.00	600	600	0.00	0	1182
2.20	15	25	1.50	30	213	11.20					
2.40	24	31	1.05	21	234	11.40					
2.60	35	43	1.20	24	258	11.60					
2.80	80	87	1.05	21	279	11.80					
3.00	75	89	2.10	42	321	12.00					
3.20	50	65	2.25	45	366	12.20					
3.40	63	74	1.65	33	399	12.40					
3.60	75	85	1.50	30	429	12.60					
3.80	63	70	1.05	21	450	12.80					
4.00	40	46	0.90	18	468	13.00					
4.20	5	10	0.75	15	483	13.20					
4.40	85	95	1.50	30	513	13.40					
4.60	110	118	1.20	24	537	13.60					
4.80	113	117	0.60	12	549	13.80					
5.00	112	118	0.90	18	567	14.00					
5.20	140	146	0.90	18	585	14.20					
5.40	110	116	0.90	18	603	14.40					
5.60	114	121	1.05	21	624	14.60					
5.80	117	123	0.90	18	642	14.80					
6.00	34	41	1.05	21	663	15.00					
6.20	37	43	0.90	18	681	15.20					
6.40	39	44	0.75	15	696	15.40					
6.60	40	45	0.75	15	711	15.60					
6.80	108	113	0.75	15	726	15.80					
7.00	112	118	0.90	18	744	16.00					
7.20	135	142	1.05	21	765	16.20					
7.40	136	141	0.75	15	780	16.40					
7.60	145	152	1.05	21	801	16.60					
7.80	75	81	0.90	18	819	16.80					
8.00	60	67	1.05	21	840	17.00					
8.20	115	121	0.90	18	858	17.20					
8.40	101	110	1.35	27	885	17.40					
8.60	90	97	1.05	21	906	17.60					
8.80	94	100	0.90	18	924	17.80					
9.00	110	116	0.90	18	942	18.00					

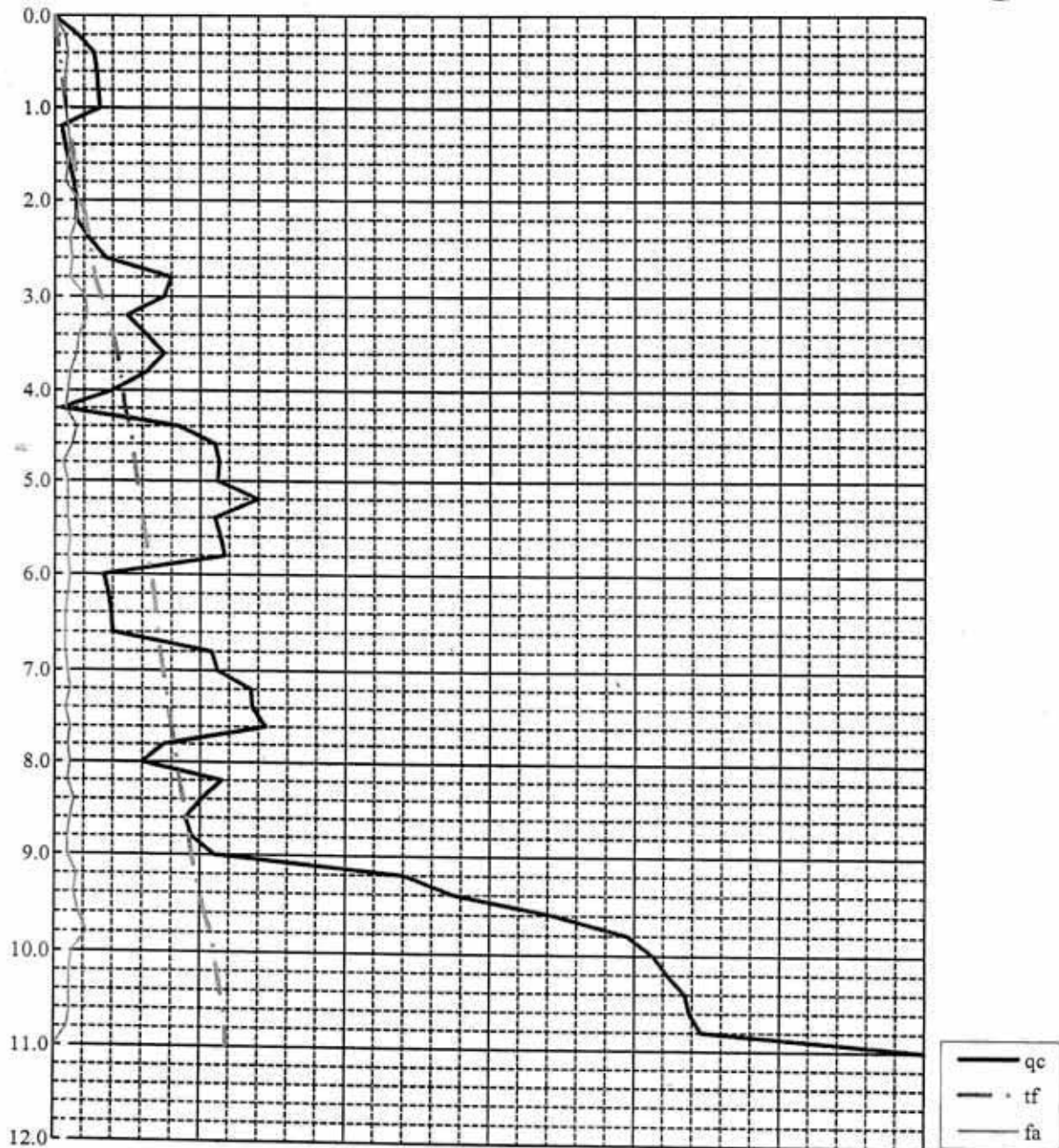


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel 3 lantai - Sosrokusuman DN I/190 RT.18/06 Suryatmajan, Danurejan, Yogyakarta
No. of CPT : SB. 1 Elevation : +0.20 meter dari muka jalan
Date : 28 Mei 2012 Ground Water Depth : -13.25 meter

fa	10	20	30	40	50	60	kg / cm^2
qc	100	200	300	400	500	600	kg / cm^2
tf	1000	2000	3000	4000	5000	6000	kg / cm^1





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Sosrokusuman DN I/190 RT.18/06	Date	: 28 Mei 2012
No. of CPT	: SB. 2	Weather	: Cerah
Elevation	: +0.20 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -13.25 meter	Project	: Hotel 3 lantai

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	12	18	0.90	18	18	9.20	242	258	2.40	48	906
0.40	25	31	0.90	18	36	9.40	279	285	0.90	18	924
0.60	29	33	0.60	12	48	9.60	295	310	2.25	45	969
0.80	32	36	0.60	12	60	9.80	337	346	1.35	27	996
1.00	34	40	0.90	18	78	10.00	405	415	1.50	30	1026
1.20	10	16	0.90	18	96	10.20	415	424	1.35	27	1053
1.40	15	21	0.90	18	114	10.40	427	435	1.20	24	1077
1.60	16	21	0.75	15	129	10.60	434	440	0.90	18	1095
1.80	18	23	0.75	15	144	10.80	437	442	0.75	15	1110
2.00	21	26	0.75	15	159	11.00	442	447	0.75	15	1125
2.20	24	30	0.90	18	177	11.20	445	451	0.90	18	1143
2.40	27	34	1.05	21	198	11.40	600	600	0.00	0	1143
2.60	32	39	1.05	21	219	11.60					
2.80	58	64	0.90	18	237	11.80					
3.00	70	75	0.75	15	252	12.00					
3.20	49	55	0.90	18	270	12.20					
3.40	59	65	0.90	18	288	12.40					
3.60	74	80	0.90	18	306	12.60					
3.80	65	71	0.90	18	324	12.80					
4.00	50	57	1.05	21	345	13.00					
4.20	15	21	0.90	18	363	13.20					
4.40	90	98	1.20	24	387	13.40					
4.60	115	121	0.90	18	405	13.60					
4.80	110	116	0.90	18	423	13.80					
5.00	112	118	0.90	18	441	14.00					
5.20	137	143	0.90	18	459	14.20					
5.40	115	122	1.05	21	480	14.40					
5.60	116	121	0.75	15	495	14.60					
5.80	120	126	0.90	18	513	14.80					
6.00	35	41	0.90	18	531	15.00					
6.20	40	46	0.90	18	549	15.20					
6.40	42	48	0.90	18	567	15.40					
6.60	46	54	1.20	24	591	15.60					
6.80	110	116	0.90	18	609	15.80					
7.00	115	121	0.90	18	627	16.00					
7.20	135	141	0.90	18	645	16.20					
7.40	139	145	0.90	18	663	16.40					
7.60	147	156	1.35	27	690	16.60					
7.80	94	102	1.20	24	714	16.80					
8.00	58	64	0.90	18	732	17.00					
8.20	118	125	1.05	21	753	17.20					
8.40	109	115	0.90	18	771	17.40					
8.60	100	116	2.40	48	819	17.60					
8.80	112	118	0.90	18	837	17.80					
9.00	234	241	1.05	21	858	18.00					

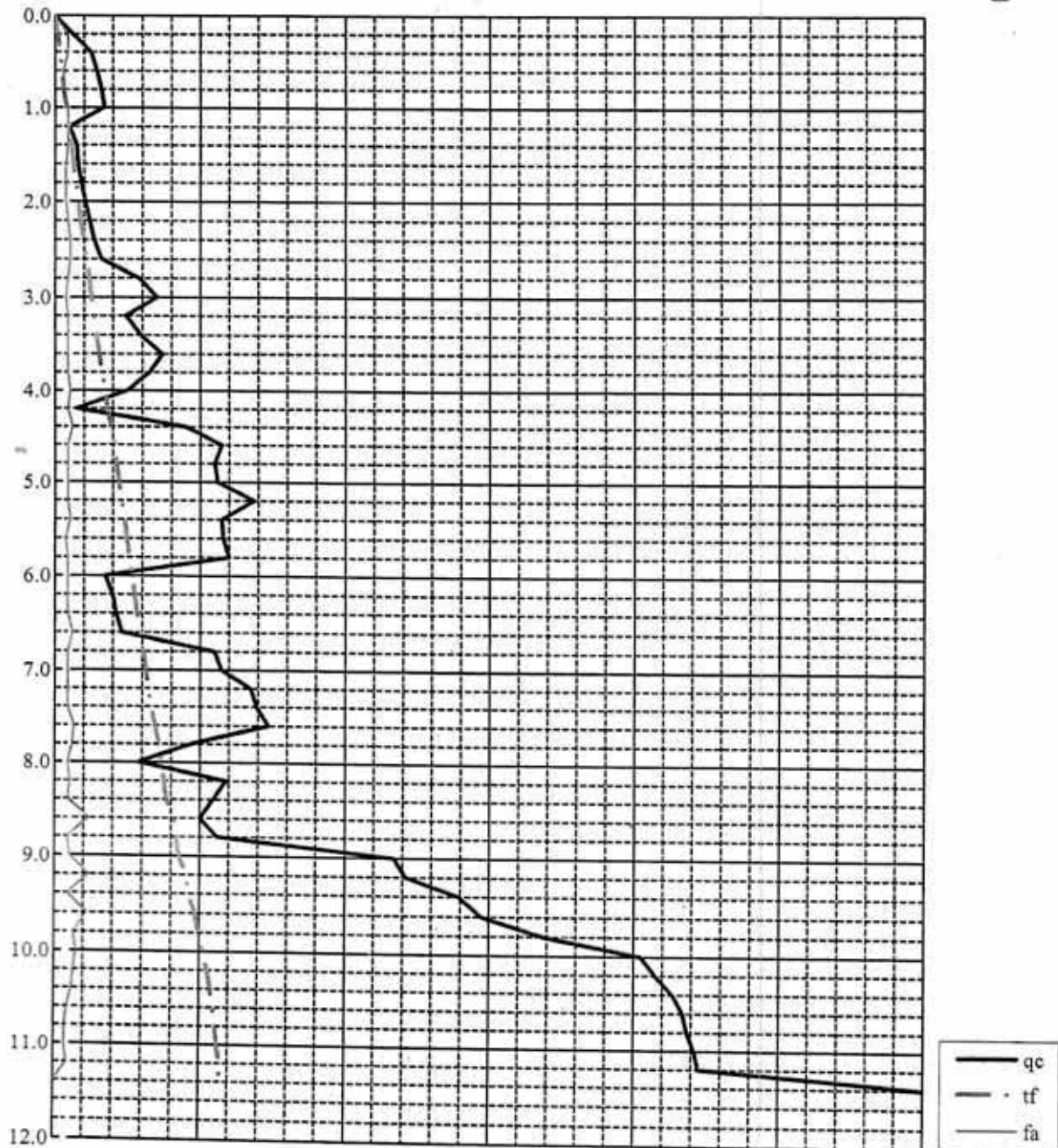


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel 3 lantai - Sosrokusuman DN I/190 RT.18/06 Suryatmajan, Danurejan, Yogyakarta
No. of CPT : SB. 2 Elevation : +0,20 meter dari muka jalan
Date : 28 Mei 2012 Ground Water Depth : -13.25 meter

fa	10	20	30	40	50	60	kg / cm^2
qc	100	200	300	400	500	600	kg / cm^2
tf	1000	2000	3000	4000	5000	6000	kg / cm^1





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

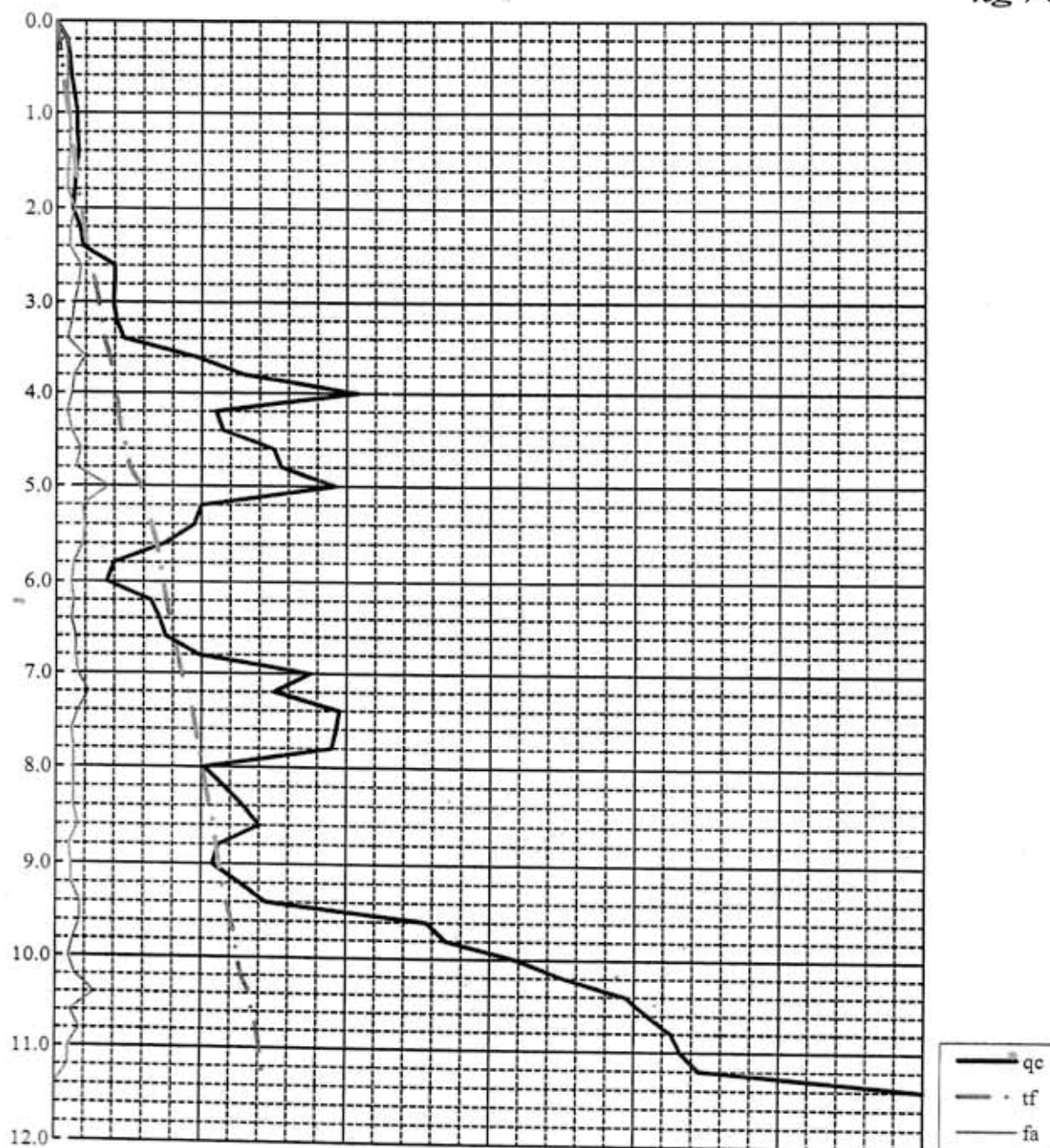
10 TON DUTCH CONE PENETRATION TEST

Location	: Sosrokusuman DN I/190 RT.18/06	Date	: 28 Mei 2012
No. of CPT	: SB. 3	Weather	: Cerah
Elevation	: +0,20 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -13.25 meter	Project	: Hotel 3 lantai

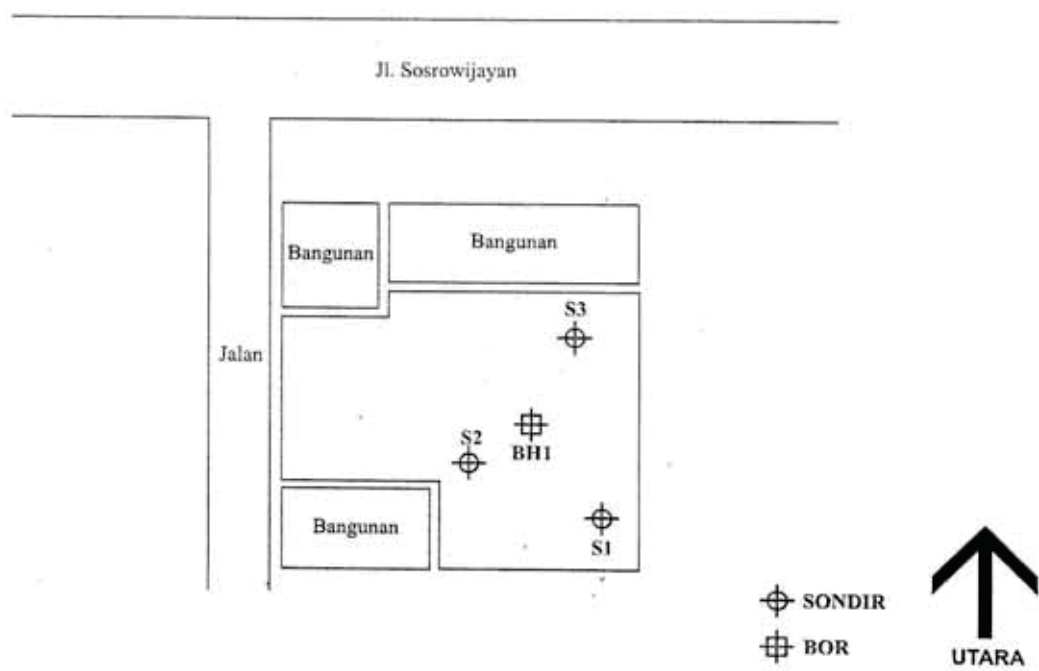
Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	7	12	0.75	15	15	9.20	127	134	1.05	21	1146
0.40	9	14	0.75	15	30	9.40	145	156	1.65	33	1179
0.60	10	15	0.75	15	45	9.60	256	267	1.65	33	1212
0.80	12	17	0.75	15	60	9.80	269	277	1.20	24	1236
1.00	14	20	0.90	18	78	10.00	318	324	0.90	18	1254
1.20	14	20	0.90	18	96	10.20	351	360	1.35	27	1281
1.40	15	21	0.90	18	114	10.40	394	412	2.70	54	1335
1.60	13	18	0.75	15	129	10.60	409	416	1.05	21	1356
1.80	12	17	0.75	15	144	10.80	426	437	1.65	33	1389
2.00	11	19	1.20	24	168	11.00	432	438	0.90	18	1407
2.20	16	22	0.90	18	186	11.20	445	451	0.90	18	1425
2.40	18	24	0.90	18	204	11.40	600	600	0.00	0	1425
2.60	40	51	1.65	33	237	11.60					
2.80	40	50	1.50	30	267	11.80					
3.00	39	47	1.20	24	291	12.00					
3.20	41	48	1.05	21	312	12.20					
3.40	46	51	0.75	15	327	12.40					
3.60	95	108	1.95	39	366	12.60					
3.80	130	138	1.20	24	390	12.80					
4.00	208	215	1.05	21	411	13.00					
4.20	110	115	0.75	15	426	13.20					
4.40	115	122	1.05	21	447	13.40					
4.60	150	161	1.65	33	480	13.60					
4.80	155	164	1.35	27	507	13.80					
5.00	192	216	3.60	72	579	14.00					
5.20	100	112	1.80	36	615	14.20					
5.40	95	108	1.95	39	654	14.40					
5.60	74	86	1.80	36	690	14.60					
5.80	40	48	1.20	24	714	14.80					
6.00	35	42	1.05	21	735	15.00					
6.20	65	73	1.20	24	759	15.20					
6.40	71	78	1.05	21	780	15.40					
6.60	75	84	1.35	27	807	15.60					
6.80	98	107	1.35	27	834	15.80					
7.00	175	185	1.50	30	864	16.00					
7.20	150	165	2.25	45	909	16.20					
7.40	195	205	1.50	30	939	16.40					
7.60	193	200	1.05	21	960	16.60					
7.80	190	198	1.20	24	984	16.80					
8.00	102	110	1.20	24	1008	17.00					
8.20	116	124	1.20	24	1032	17.20					
8.40	129	137	1.20	24	1056	17.40					
8.60	140	150	1.50	30	1086	17.60					
8.80	112	118	0.90	18	1104	17.80					
9.00	108	115	1.05	21	1125	18.00					

Project : Hotel 3 lantai - Sosrokusuman DN I/190 RT.18/06 Suryatmajan, Danurejan, Yogyakarta
 No. of CPT : SB. 3 Elevation : +0,20 meter dari muka jalan
 Date : 28 Mei 2012 Ground Water Depth : -13.25 meter

fa	10	20	30	40	50	60	kg / cm^2
qc	100	200	300	400	500	600	kg / cm^2
tf	1000	2000	3000	4000	5000	6000	kg / cm^1



LETAK TITIK TES TANAH





BH-1

CLIENT:

PROJECT TITLE : Hotel

PROJECT CONTRACT NUMBER:

PROJECT LOCATION : Jl. Suryonegaran 12 Yogyakarta

DATE STARTED: 5 Desember 2012

GROUND ELEVATION : - 0,25 m from road level

DATE COMPLETED : 5 Desember 2012

HOLE SIZE : 7.295cm

DRILLING CONTRACTOR: SOIL MECH. LAB. UAIY

GROUND WATER LEVEL : - 12,00 m

DRILLING METHOD: ROTARY SPINDLE, SKID MOUNTED TYPE

WEATHER CONDITION : FINE

LOGGED BY: Mukarob, CS.

ESTIMATED SEASONAL HIGH : -

CHECKED BY: SOIL MECH. LAB, UAJY

Depth (m)	Graph Log	Material Description (field observations)	Contact Depth (m)	Sample Number	Blow Counts (N Value)				Water Level Elevation (m)	SPT Value	
					N ₁	N ₂	N ₃	N _v			
1		Pasir kasar (coklat)	2						-12.00	0	
2					3	3	4	7		1	
3	Pasir halus (coklat, abu-abu)	2						2			
4			3		4	4	8	3			
5								4			
6	Pasir sangat halus (coklat, abu-abu)	2.5						5			
7			3		3	10	13	6			
8	Pasir sedang (coklat kekuningan)	2.5						7			
9			9		15	20	35	8			
10	Pasir halus berlanau (coklat kekuningan)	3						9			
11			9		16	22	38	10			
12			8		12	17	29	11			
13	Pasir sedang (abu-abu kehitaman)	2	I					12			
14				12	15	25	40	13			
15	Pasir kasar (hitam)	2						14			
16					12	15	20	35		15	
17								16			
18	Pasir halus (hitam)	2			12	8	8	16		17	
19	Pasir sedang (hitam)	2	II					18			
20				19	21	30	51	19			



SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Location	: Jl. Suryonegaran 12 Yogyakarta	Date	: 5 Desember 2012
No. of CPT	: SB. 1	Weather	: Cerah
Elevation	: +0,75 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	7	12	0.75	15	15	11.20	150	156	0.90	18	1137
0.40	10	15	0.75	15	30	11.40	120	127	1.05	21	1158
0.60	12	18	0.90	18	48	11.60	130	142	1.80	36	1194
0.80	30	35	0.75	15	63	11.80	120	135	2.25	45	1239
1.00	25	30	0.75	15	78	12.00	125	133	1.20	24	1263
1.20	26	30	0.60	12	90	12.20	110	120	1.50	30	1293
1.40	15	20	0.75	15	105	12.40	80	85	0.75	15	1308
1.60	10	20	1.50	30	135	12.60	115	120	0.75	15	1323
1.80	9	14	0.75	15	150	12.80	100	105	0.75	15	1338
2.00	10	15	0.75	15	165	13.00	70	78	1.20	24	1362
2.20	15	20	0.75	15	180	13.20	145	152	1.05	21	1383
2.40	25	32	1.05	21	201	13.40	186	194	1.20	24	1407
2.60	23	30	1.05	21	222	13.60	170	175	0.75	15	1422
2.80	18	24	0.90	18	240	13.80	100	105	0.75	15	1437
3.00	15	21	0.90	18	258	14.00	90	96	0.90	18	1455
3.20	15	20	0.75	15	273	14.20	85	94	1.35	27	1482
3.40	13	18	0.75	15	288	14.40	220	230	1.50	30	1512
3.60	10	15	0.75	15	303	14.60	215	223	1.20	24	1536
3.80	5	9	0.60	12	315	14.80	230	241	1.65	33	1569
4.00	9	16	1.05	21	336	15.00	205	211	0.90	18	1587
4.20	7	12	0.75	15	351	15.20	180	194	2.10	42	1629
4.40	15	20	0.75	15	366	15.40	195	210	2.25	45	1674
4.60	16	20	0.60	12	378	15.60	218	224	0.90	18	1692
4.80	16	21	0.75	15	393	15.80	275	284	1.35	27	1719
5.00	17	23	0.90	18	411	16.00	250	261	1.65	33	1752
5.20	15	19	0.60	12	423	16.20	274	285	1.65	33	1785
5.40	14	18	0.60	12	435	16.40	295	310	2.25	45	1830
5.60	17	23	0.90	18	453	16.60	318	325	1.05	21	1851
5.80	18	23	0.75	15	468	16.80	345	357	1.80	36	1887
6.00	10	16	0.90	18	486	17.00	364	375	1.65	33	1920
6.20	25	30	0.75	15	501	17.20	350	364	2.10	42	1962
6.40	35	40	0.75	15	516	17.40	341	352	1.65	33	1995
6.60	40	50	1.50	30	546	17.60	395	412	2.55	51	2046
6.80	10	24	2.10	42	588	17.80	410	415	0.75	15	2061
7.00	50	60	1.50	30	618	18.00	418	425	1.05	21	2082
7.20	52	57	0.75	15	633	18.20	430	440	1.50	30	2112
7.40	60	65	0.75	15	648	18.40	437	442	0.75	15	2127
7.60	50	56	0.90	18	666	18.60	443	453	1.50	30	2157
7.80	100	110	1.50	30	696	18.80	446	450	0.60	12	2169
8.00	80	87	1.05	21	717	19.00	600	600	0.00	0	2169
8.20	60	70	1.50	30	747	19.20					
8.40	45	50	0.75	15	762	19.40					
8.60	85	95	1.50	30	792	19.60					
8.80	140	150	1.50	30	822	19.80					
9.00	130	142	1.80	36	858	20.00					
9.20	110	120	1.50	30	888	20.20					
9.40	80	95	2.25	45	933	20.40					
9.60	140	146	0.90	18	951	20.60					
9.80	55	67	1.80	36	987	20.80					
10.00	40	48	1.20	24	1011	21.00					
10.20	48	55	1.05	21	1032	21.20					
10.40	90	95	0.75	15	1047	21.40					
10.60	60	68	1.20	24	1071	21.60					
10.80	64	73	1.35	27	1098	21.80					

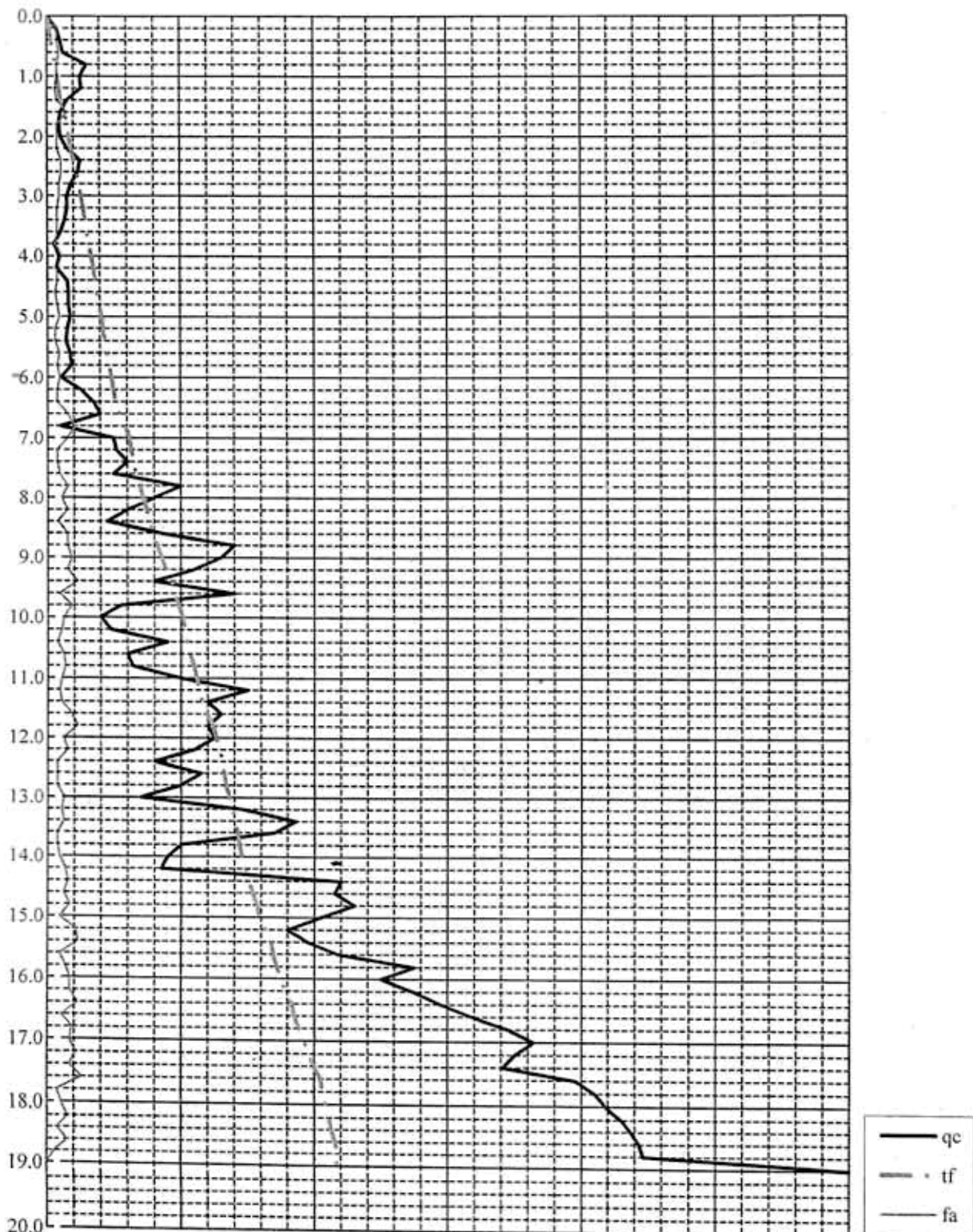


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jl. Suryonegaran 12 Yogyakarta
No. of CPT : SB. 1 Elevation : +0,75 meter dari muka jalan
Date : 5 Desember 2012 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Location	: Jl. Suryonegaran 12 Yogyakarta	Date	: 5 Desember 2012
No. of CPT	: SB. 2	Weather	: Cerah
Elevation	: -0,25 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	7	12	0.75	15	15	11.20	185	194	1.35	27	1335
0.40	10	15	0.75	15	30	11.40	160	171	1.65	33	1368
0.60	12	18	0.90	18	48	11.60	158	169	1.65	33	1401
0.80	17	21	0.60	12	60	11.80	115	122	1.05	21	1422
1.00	25	31	0.90	18	78	12.00	90	101	1.65	33	1455
1.20	13	17	0.60	12	90	12.20	87	95	1.20	24	1479
1.40	5	10	0.75	15	105	12.40	75	83	1.20	24	1503
1.60	9	15	0.90	18	123	12.60	84	92	1.20	24	1527
1.80	18	24	0.90	18	141	12.80	140	155	2.25	45	1572
2.00	30	37	1.05	21	162	13.00	165	176	1.65	33	1605
2.20	35	42	1.05	21	183	13.20	175	186	1.65	33	1638
2.40	61	69	1.20	24	207	13.40	65	72	1.05	21	1659
2.60	53	59	0.90	18	225	13.60	34	41	1.05	21	1680
2.80	35	43	1.20	24	249	13.80	37	45	1.20	24	1704
3.00	48	55	1.05	21	270	14.00	82	90	1.20	24	1728
3.20	57	66	1.35	27	297	14.20	100	108	1.20	24	1752
3.40	75	80	0.75	15	312	14.40	155	165	1.50	30	1782
3.60	37	44	1.05	21	333	14.60	265	276	1.65	33	1815
3.80	20	35	2.25	45	378	14.80	355	366	1.65	33	1848
4.00	35	45	1.50	30	408	15.00	315	322	1.05	21	1869
4.20	41	48	1.05	21	429	15.20	300	310	1.50	30	1899
4.40	50	59	1.35	27	456	15.40	425	434	1.35	27	1926
4.60	51	61	1.50	30	486	15.60	445	450	0.75	15	1941
4.80	48	55	1.05	21	507	15.80	600	600	0.00	0	1941
5.00	50	60	1.50	30	537	16.00					
5.20	58	66	1.20	24	561	16.20					
5.40	95	104	1.35	27	588	16.40					
5.60	20	25	0.75	15	603	16.60					
5.80	21	27	0.90	18	621	16.80					
6.00	22	31	1.35	27	648	17.00					
6.20	25	34	1.35	27	675	17.20					
6.40	32	37	0.75	15	690	17.40					
6.60	40	46	0.90	18	708	17.60					
6.80	43	49	0.90	18	726	17.80					
7.00	60	65	0.75	15	741	18.00					
7.20	63	74	1.65	33	774	18.20					
7.40	68	75	1.05	21	795	18.40					
7.60	70	78	1.20	24	819	18.60					
7.80	73	79	0.90	18	837	18.80					
8.00	76	84	1.20	24	861	19.00					
8.20	43	50	1.05	21	882	19.20					
8.40	50	57	1.05	21	903	19.40					
8.60	65	72	1.05	21	924	19.60					
8.80	145	155	1.50	30	954	19.80					
9.00	185	210	3.75	75	1029	20.00					
9.20	195	212	2.55	51	1080	20.20					
9.40	200	205	0.75	15	1095	20.40					
9.60	45	51	0.90	18	1113	20.60					
9.80	75	82	1.05	21	1134	20.80					
10.00	85	97	1.80	36	1170	21.00					
10.20	182	191	1.35	27	1197	21.20					
10.40	210	216	0.90	18	1215	21.40					
10.60	160	168	1.20	24	1239	21.60					
10.80	145	156	1.65	33	1272	21.80					

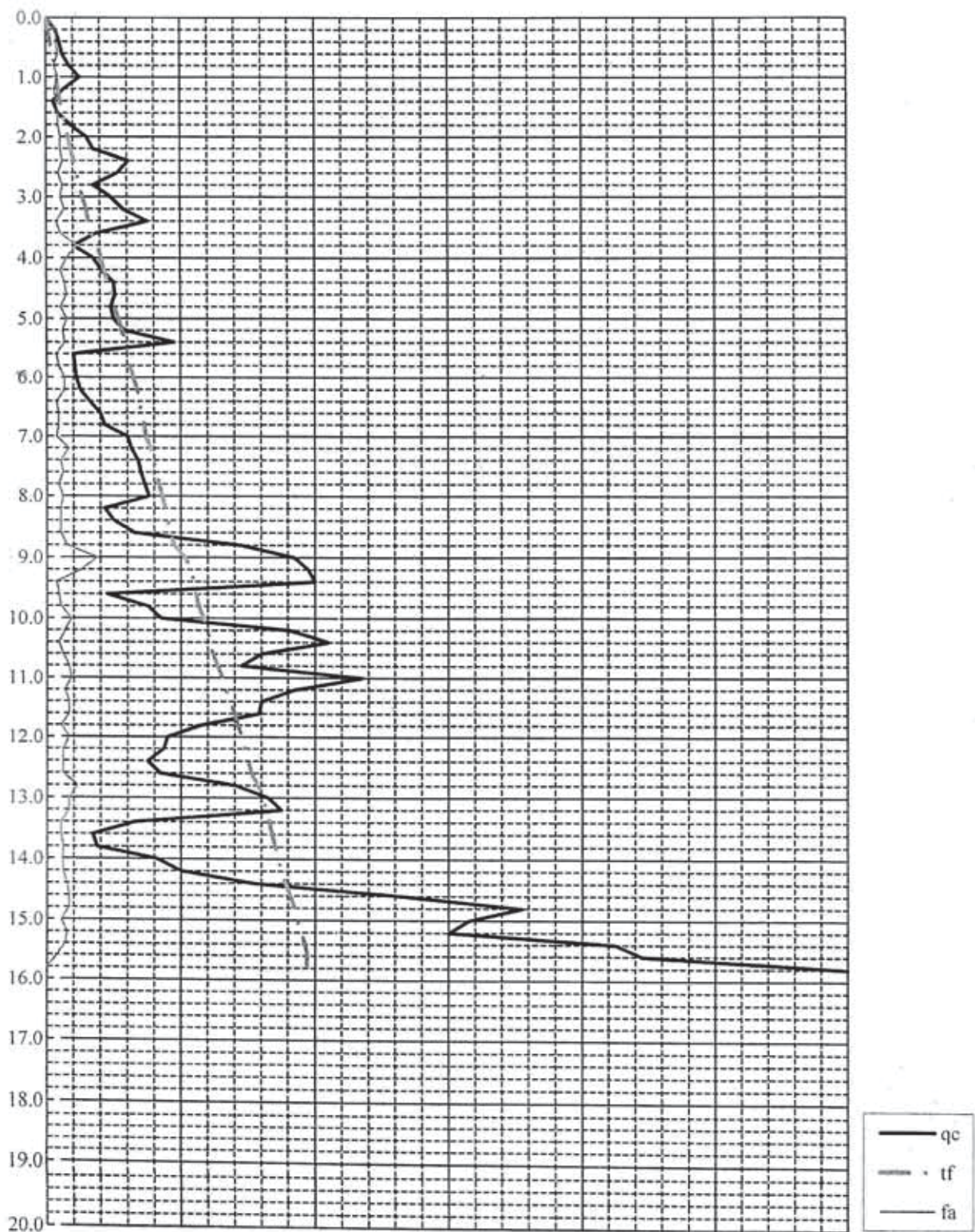


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jl. Suryonegaran 12 Yogyakarta
No. of CPT : SB. 2 Elevation : -0,25 meter dari muka jalan
Date : 5 Desember 2012 Ground Water Depth : -12,00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Location	: Jl. Suryonegaran 12 Yogyakarta	Date	: 6 Desember 2012
No. of CPT	: SB. 3	Weather	: Cerah
Elevation	: -0,15 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	5	9	0.60	12	12	11.20	195	210	2.25	45	1293
0.40	5	9	0.60	12	24	11.40	165	174	1.35	27	1320
0.60	7	12	0.75	15	39	11.60	157	166	1.35	27	1347
0.80	8	12	0.60	12	51	11.80	112	120	1.20	24	1371
1.00	10	15	0.75	15	66	12.00	98	104	0.90	18	1389
1.20	13	20	1.05	21	87	12.20	87	94	1.05	21	1410
1.40	18	23	0.75	15	102	12.40	80	89	1.35	27	1437
1.60	25	38	1.95	39	141	12.60	76	86	1.50	30	1467
1.80	31	37	0.90	18	159	12.80	150	164	2.10	42	1509
2.00	40	45	0.75	15	174	13.00	167	172	0.75	15	1524
2.20	34	40	0.90	18	192	13.20	178	190	1.80	36	1560
2.40	27	34	1.05	21	213	13.40	69	78	1.35	27	1587
2.60	20	28	1.20	24	237	13.60	40	46	0.90	18	1605
2.80	54	61	1.05	21	258	13.80	39	45	0.90	18	1623
3.00	85	93	1.20	24	282	14.00	75	86	1.65	33	1656
3.20	78	84	0.90	18	300	14.20	94	106	1.80	36	1692
3.40	60	67	1.05	21	321	14.40	108	118	1.50	30	1722
3.60	65	73	1.20	24	345	14.60	168	175	1.05	21	1743
3.80	62	68	0.90	18	363	14.80	194	210	2.40	48	1791
4.00	60	78	2.70	54	417	15.00	322	334	1.80	36	1827
4.20	67	73	0.90	18	435	15.20	315	325	1.50	30	1857
4.40	72	81	1.35	27	462	15.40	354	367	1.95	39	1896
4.60	80	90	1.50	30	492	15.60	425	432	1.05	21	1917
4.80	83	91	1.20	24	516	15.80	437	445	1.20	24	1941
5.00	98	115	2.55	51	567	16.00	443	449	0.90	18	1959
5.20	95	104	1.35	27	594	16.20	446	451	0.75	15	1974
5.40	52	59	1.05	21	615	16.40	600	600	0.00	0	1974
5.60	40	45	0.75	15	630	16.60					
5.80	10	16	0.90	18	648	16.80					
6.00	7	12	0.75	15	663	17.00					
6.20	16	23	1.05	21	684	17.20					
6.40	35	45	1.50	30	714	17.40					
6.60	27	34	1.05	21	735	17.60					
6.80	48	55	1.05	21	756	17.80					
7.00	70	81	1.65	33	789	18.00					
7.20	66	72	0.90	18	807	18.20					
7.40	60	68	1.20	24	831	18.40					
7.60	62	71	1.35	27	858	18.60					
7.80	70	78	1.20	24	882	18.80					
8.00	50	56	0.90	18	900	19.00					
8.20	75	84	1.35	27	927	19.20					
8.40	120	130	1.50	30	957	19.40					
8.60	200	210	1.50	30	987	19.60					
8.80	205	212	1.05	21	1008	19.80					
9.00	165	173	1.20	24	1032	20.00					
9.20	140	148	1.20	24	1056	20.20					
9.40	94	103	1.35	27	1083	20.40					
9.60	40	45	0.75	15	1098	20.60					
9.80	75	84	1.35	27	1125	20.80					
10.00	89	95	0.90	18	1143	21.00					
10.20	120	130	1.50	30	1173	21.20					
10.40	100	105	0.75	15	1188	21.40					
10.60	85	91	0.90	18	1206	21.60					
10.80	135	142	1.05	21	1227	21.80					

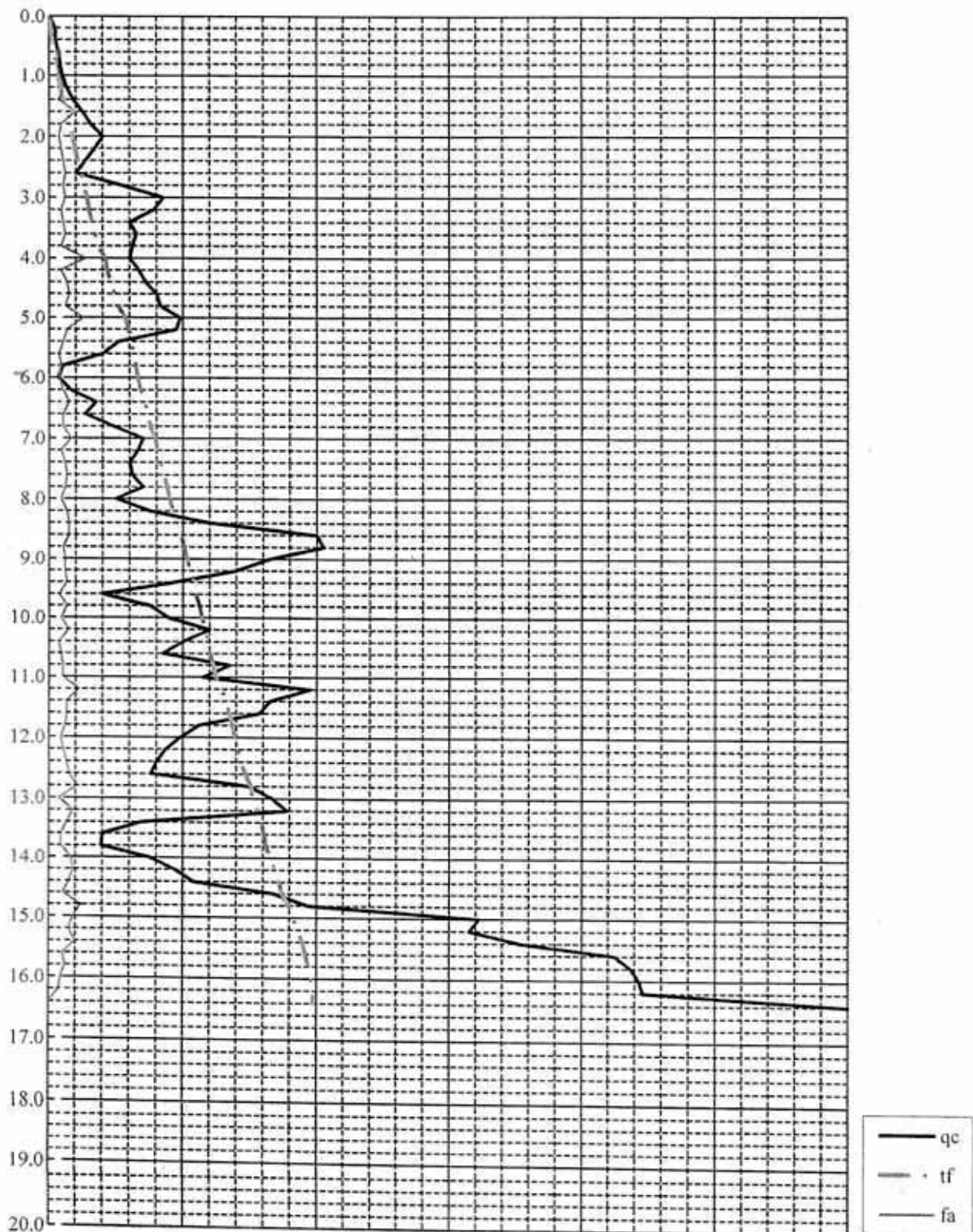


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jl. Suryonegaran 12 Yogyakarta
No. of CPT : SB. 3 Elevation : -0,15 meter dari muka jalan
Date : 6 Desember 2012 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





SOIL MECHANIC LABORATORY
CIVIL ENGINEERING PROGRAM
FACULTY OF ENGINEERING, UAJY
44 BABARSARI STREET, YOGYAKARTA 55281
Tel: +62-274-487711 ext. 1055
Fax: +62-274-487748

Boring Number:

BH-1

BOR LOG

CLIENT:	PROJECT TITLE : Hotel
PROJECT CONTRACT NUMBER:	PROJECT LOCATION : Jl. Jogonegaran 4 Yogyakarta
DATE STARTED: 09 September 2013	GROUND ELEVATION : + 0,40 m from road level
DATE COMPLETED : 09 September 2013	HOLE SIZE : 7.295cm
DRILLING CONTRACTOR: SOIL MECH. LAB. UAJY	GROUND WATER LEVEL : - 12,00 m from ground level
DRILLING METHOD: ROTARY SPINDLE, SKID MOUNTED TYPE	WEATHER CONDITION : FINE
LOGGED BY: Mukarob, CS.	ESTIMATED SEASONAL HIGH :-
CHECKED BY: SOIL MECH. LAB. UAJY	

Depth (m)	Graph Log	Material Description	Contact Depth (m)	Sample Number	Blow Counts (N Value)				Water Level Elevation (m)	SPT Value
					N ₁	N ₂	N ₃	N _v		
1		Pasir kasar (coklat, hitam)	3						-12.00	0
2					3	4	7	11		1
3										2
4		Pasir halus (coklat)	3	I	4	6	6	12		3
5										4
6					4	7	8	15		5
7		Pasir kasar (coklat, hitam) terdapat andesit Ø 2-3 cm	2							6
8					4	8	9	17		7
9										8
10		Pasir berlanau (coklat, hitam)	4	II	4	8	8	16		9
11										10
12					11	19	31	50		11
13		Pasir sedang (coklat, hitam)	4							12
14					12	20	30	50		13
15										14
16		Batu pasir (coklat, hitam)	7		17	21	30	51		15
17										16
18					19	25	32	57		17
19										18
20					19	25	35	60		19
21										20
22					19	25	35	60		21
23		Pasir kasar (coklat, hitam) terdapat andesit Ø 2-3 cm	4							22
24					17	21	25	46		23
25										24
26		Pasir sedang (coklat, hitam)	3		16	19	27	46		25
27										26
28					16	18	21	39		27
29										28
30					17	20	22	42		29
										30



SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Jogonegaran 4 Yogyakarta	Date	: 10 September 2013
No. of CPT	: SB. 1	Weather	: Cerah
Elevation	: +0,40 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	13	16	0.45	9	9	9.20	77	80	0.45	9	438
0.40	11	14	0.45	9	18	9.40	19	22	0.45	9	447
0.60	5	8	0.45	9	27	9.60	43	46	0.45	9	456
0.80	7	10	0.45	9	36	9.80	68	71	0.45	9	465
1.00	6	9	0.45	9	45	10.00	96	99	0.45	9	474
1.20	7	10	0.45	9	54	10.20	129	133	0.60	12	486
1.40	8	11	0.45	9	63	10.40	96	100	0.60	12	498
1.60	10	13	0.45	9	72	10.60	66	69	0.45	9	507
1.80	10	13	0.45	9	81	10.80	34	37	0.45	9	516
2.00	11	14	0.45	9	90	11.00	62	66	0.60	12	528
2.20	33	37	0.60	12	102	11.20	96	99	0.45	9	537
2.40	7	10	0.45	9	111	11.40	108	111	0.45	9	546
2.60	7	10	0.45	9	120	11.60	84	87	0.45	9	555
2.80	14	17	0.45	9	129	11.80	228	232	0.60	12	567
3.00	9	12	0.45	9	138	12.00	184	188	0.60	12	579
3.20	12	15	0.45	9	147	12.20	113	117	0.60	12	591
3.40	17	20	0.45	9	156	12.40	84	87	0.45	9	600
3.60	19	23	0.60	12	168	12.60	54	57	0.45	9	609
3.80	15	18	0.45	9	177	12.80	51	54	0.45	9	618
4.00	8	11	0.45	9	186	13.00	40	43	0.45	9	627
4.20	15	18	0.45	9	195	13.20	53	56	0.45	9	636
4.40	13	16	0.45	9	204	13.40	66	69	0.45	9	645
4.60	13	16	0.45	9	213	13.60	105	109	0.60	12	657
4.80	15	18	0.45	9	222	13.80	110	114	0.60	12	669
5.00	14	17	0.45	9	231	14.00	112	116	0.60	12	681
5.20	38	41	0.45	9	240	14.20	127	131	0.60	12	693
5.40	27	30	0.45	9	249	14.40	106	109	0.45	9	702
5.60	28	31	0.45	9	258	14.60	119	123	0.60	12	714
5.80	19	22	0.45	9	267	14.80	128	132	0.60	12	726
6.00	12	15	0.45	9	276	15.00	191	195	0.60	12	738
6.20	61	65	0.60	12	288	15.20	211	215	0.60	12	750
6.40	35	38	0.45	9	297	15.40	214	218	0.60	12	762
6.60	19	22	0.45	9	306	15.60	224	228	0.60	12	774
6.80	23	26	0.45	9	315	15.80	378	383	0.75	15	789
7.00	26	29	0.45	9	324	16.00	446	450	0.60	12	801
7.20	33	36	0.45	9	333	16.20					
7.40	54	57	0.45	9	342	16.40					
7.60	58	62	0.60	12	354	16.60					
7.80	61	65	0.60	12	366	16.80					
8.00	105	109	0.60	12	378	17.00					
8.20	151	155	0.60	12	390	17.20					
8.40	112	116	0.60	12	402	17.40					
8.60	108	111	0.45	9	411	17.60					
8.80	31	34	0.45	9	420	17.80					
9.00	36	39	0.45	9	429	18.00					

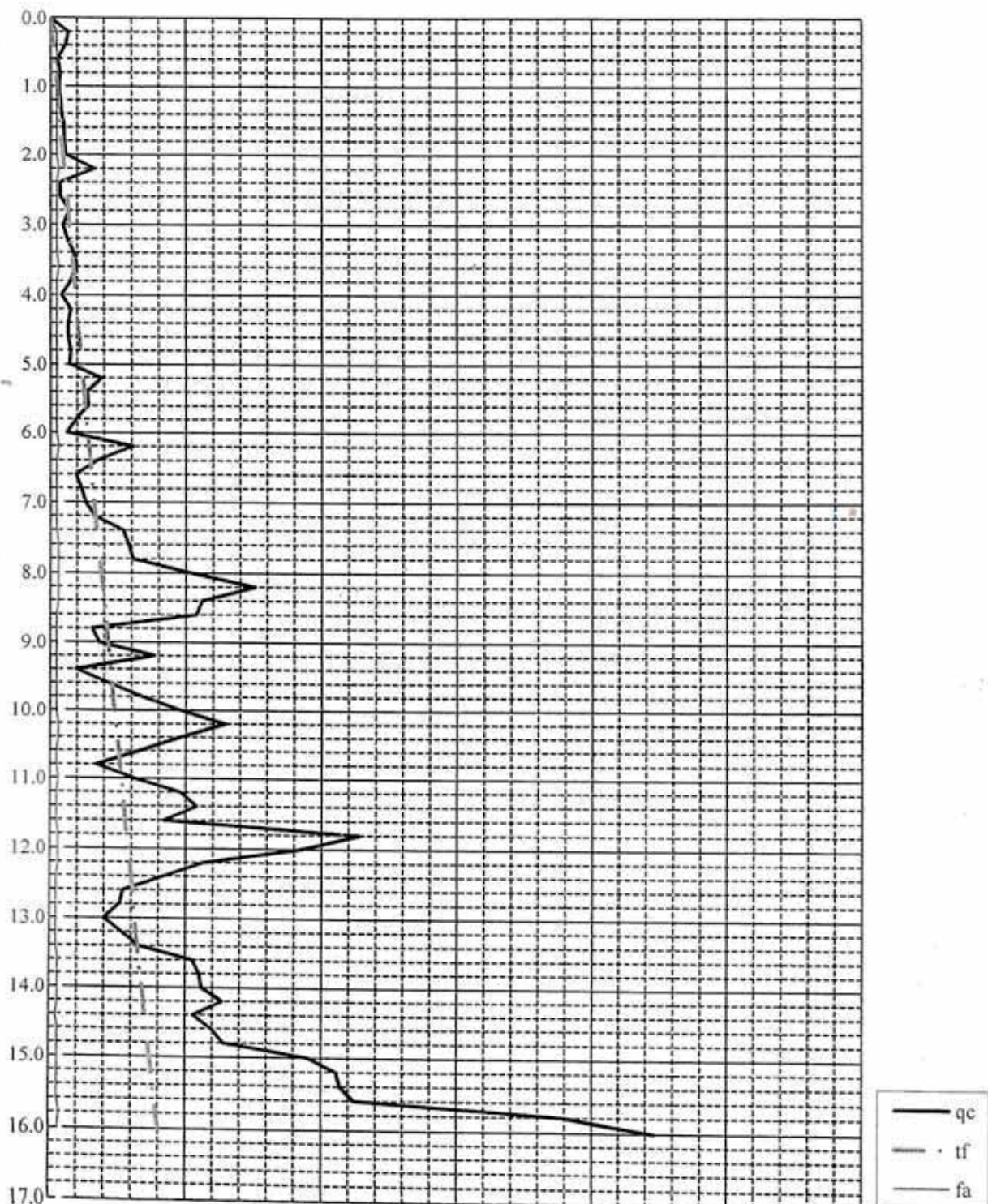


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jogonegaran 4 Yogyakarta
No. of CPT : SB. 1 Elevation : +0,40 meter dari muka jalan
Date : 10 September 2013 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ³





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Jogonegaran 4 Yogyakarta	Date	: 10 September 2013
No. of CPT	: SB. 2	Weather	: Panas
Elevation	: +0,40 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	8	10	0.30	6	6	9.20	80	84	0.60	12	435
0.40	12	15	0.45	9	15	9.40	24	27	0.45	9	444
0.60	7	9	0.30	6	21	9.60	45	48	0.45	9	453
0.80	11	14	0.45	9	30	9.80	71	74	0.45	9	462
1.00	5	8	0.45	9	39	10.00	98	101	0.45	9	471
1.20	6	9	0.45	9	48	10.20	140	144	0.60	12	483
1.40	7	10	0.45	9	57	10.40	103	107	0.60	12	495
1.60	9	12	0.45	9	66	10.60	67	70	0.45	9	504
1.80	10	13	0.45	9	75	10.80	37	40	0.45	9	513
2.00	12	15	0.45	9	84	11.00	64	67	0.45	9	522
2.20	16	19	0.45	9	93	11.20	97	101	0.60	12	534
2.40	8	11	0.45	9	102	11.40	110	113	0.45	9	543
2.60	7	10	0.45	9	111	11.60	86	90	0.60	12	555
2.80	14	17	0.45	9	120	11.80	230	233	0.45	9	564
3.00	10	13	0.45	9	129	12.00	186	189	0.45	9	573
3.20	11	14	0.45	9	138	12.20	114	117	0.45	9	582
3.40	19	22	0.45	9	147	12.40	309	312	0.45	9	591
3.60	21	24	0.45	9	156	12.60	200	204	0.60	12	603
3.80	14	17	0.45	9	165	12.80	363	367	0.60	12	615
4.00	11	14	0.45	9	174	13.00	446	450	0.60	12	627
4.20	13	16	0.45	9	183	13.20					
4.40	15	18	0.45	9	192	13.40					
4.60	15	18	0.45	9	201	13.60					
4.80	17	20	0.45	9	210	13.80					
5.00	12	15	0.45	9	219	14.00					
5.20	41	44	0.45	9	228	14.20					
5.40	29	33	0.60	12	240	14.40					
5.60	31	35	0.60	12	252	14.60					
5.80	20	23	0.45	9	261	14.80					
6.00	10	13	0.45	9	270	15.00					
6.20	64	67	0.45	9	279	15.20					
6.40	38	42	0.60	12	291	15.40					
6.60	17	20	0.45	9	300	15.60					
6.80	21	24	0.45	9	309	15.80					
7.00	25	28	0.45	9	318	16.00					
7.20	35	39	0.60	12	330	16.20					
7.40	56	60	0.60	12	342	16.40					
7.60	60	63	0.45	9	351	16.60					
7.80	60	63	0.45	9	360	16.80					
8.00	99	103	0.60	12	372	17.00					
8.20	154	158	0.60	12	384	17.20					
8.40	115	118	0.45	9	393	17.40					
8.60	110	114	0.60	12	405	17.60					
8.80	28	31	0.45	9	414	17.80					
9.00	34	37	0.45	9	423	18.00					

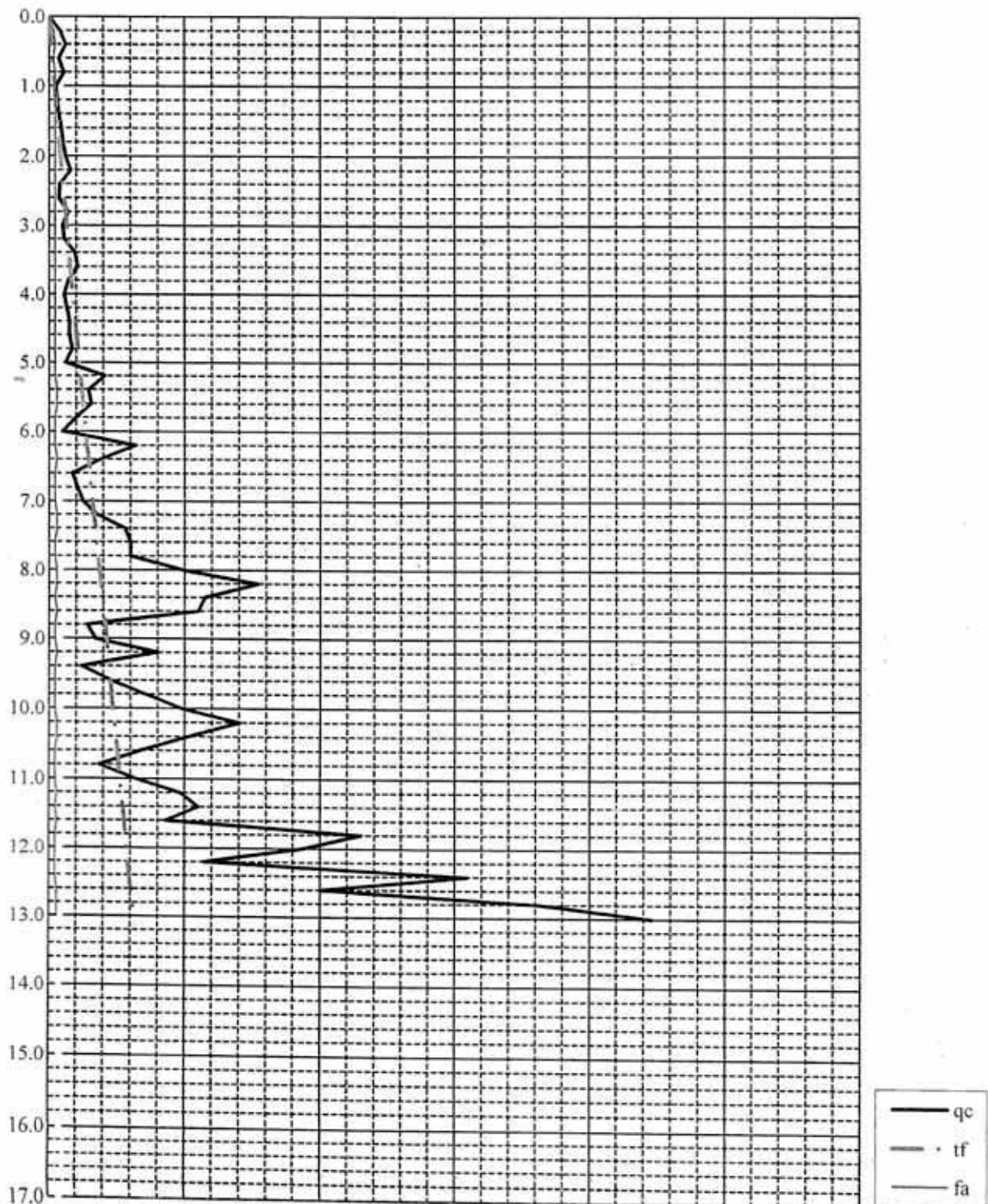


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jogonegaran 4 Yogyakarta
No. of CPT : SB. 2 Elevation : +0,40 meter dari muka jalan
Date : 10 September 2013 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Jogonegaran 4 Yogyakarta	Date	: 09 September 2013
No. of CPT	: SB. 3	Weather	: Panas
Elevation	: +0,40 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	11	14	0.45	9	9	9.20	32	35	0.45	9	447
0.40	13	16	0.45	9	18	9.40	46	50	0.60	12	459
0.60	17	20	0.45	9	27	9.60	70	73	0.45	9	468
0.80	19	22	0.45	9	36	9.80	91	95	0.60	12	480
1.00	5	8	0.45	9	45	10.00	186	190	0.60	12	492
1.20	4	7	0.45	9	54	10.20	113	116	0.45	9	501
1.40	5	8	0.45	9	63	10.40	62	66	0.60	12	513
1.60	6	8	0.30	6	69	10.60	40	43	0.45	9	522
1.80	4	6	0.30	6	75	10.80	37	40	0.45	9	531
2.00	7	10	0.45	9	84	11.00	51	54	0.45	9	540
2.20	29	32	0.45	9	93	11.20	183	187	0.60	12	552
2.40	11	14	0.45	9	102	11.40	106	110	0.60	12	564
2.60	15	18	0.45	9	111	11.60	141	145	0.60	12	576
2.80	11	14	0.45	9	120	11.80	243	248	0.75	15	591
3.00	9	12	0.45	9	129	12.00	303	307	0.60	12	603
3.20	11	14	0.45	9	138	12.20	445	450	0.75	15	618
3.40	31	34	0.45	9	147	12.40					
3.60	59	62	0.45	9	156	12.60					
3.80	58	62	0.60	12	168	12.80					
4.00	89	93	0.60	12	180	13.00					
4.20	95	99	0.60	12	192	13.20					
4.40	81	85	0.60	12	204	13.40					
4.60	59	62	0.45	9	213	13.60					
4.80	79	82	0.45	9	222	13.80					
5.00	74	77	0.45	9	231	14.00					
5.20	39	42	0.45	9	240	14.20					
5.40	20	23	0.45	9	249	14.40					
5.60	35	38	0.45	9	258	14.60					
5.80	41	44	0.45	9	267	14.80					
6.00	39	42	0.45	9	276	15.00					
6.20	49	52	0.45	9	285	15.20					
6.40	52	56	0.60	12	297	15.40					
6.60	57	61	0.60	12	309	15.60					
6.80	62	65	0.45	9	318	15.80					
7.00	111	115	0.60	12	330	16.00					
7.20	140	145	0.75	15	345	16.20					
7.40	127	131	0.60	12	357	16.40					
7.60	123	127	0.60	12	369	16.60					
7.80	117	121	0.60	12	381	16.80					
8.00	86	89	0.45	9	390	17.00					
8.20	91	95	0.60	12	402	17.20					
8.40	83	86	0.45	9	411	17.40					
8.60	36	39	0.45	9	420	17.60					
8.80	27	30	0.45	9	429	17.80					
9.00	18	21	0.45	9	438	18.00					

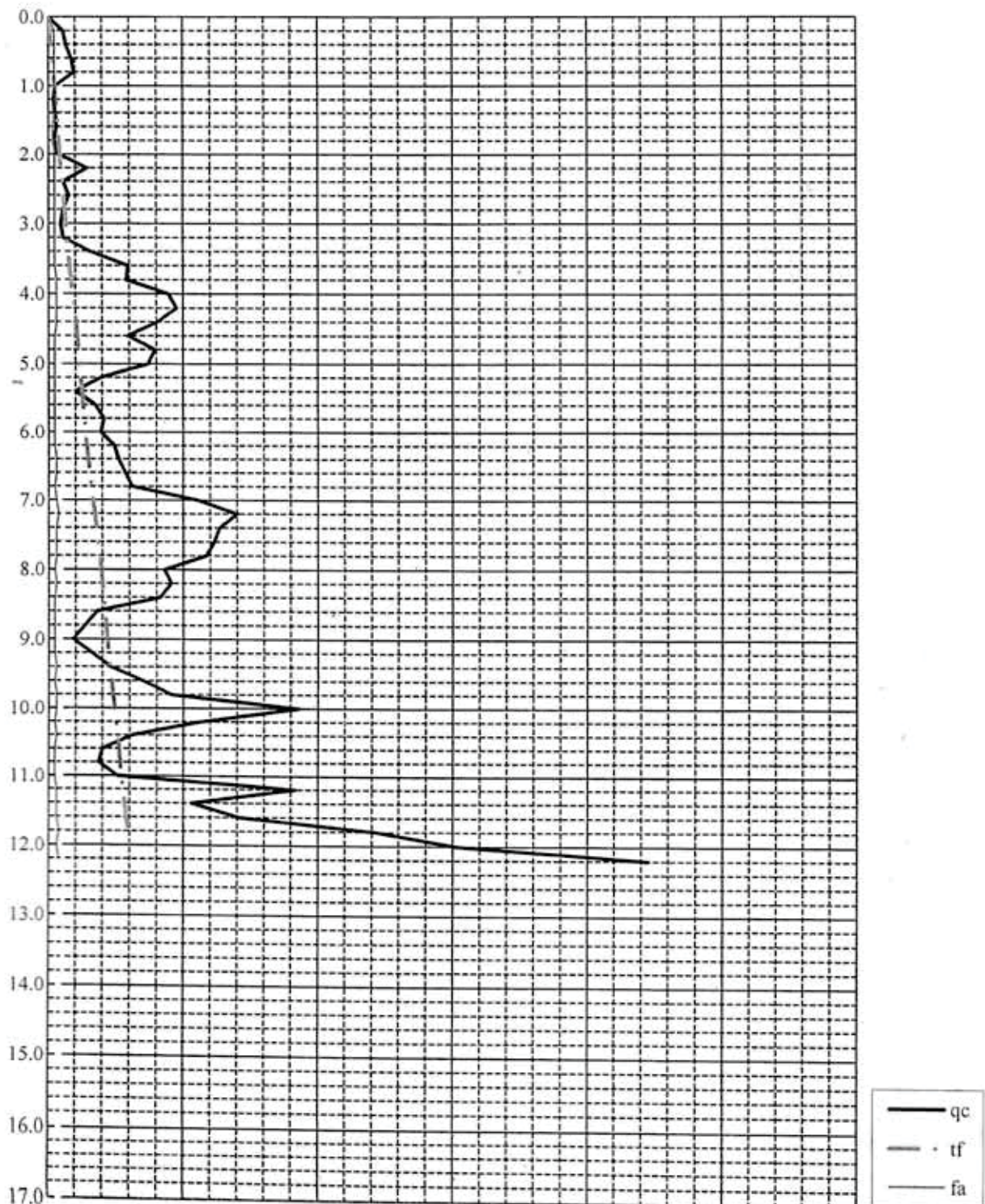


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jogonegaran 4 Yogyakarta
No. of CPT : SB. 3 Elevation : +0.40 meter dari muka jalan
Date : 09 September 2013 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Jogonegaran 4 Yogyakarta	Date	: 09 September 2013
No. of CPT	: SB. 4	Weather	: Panas
Elevation	: +0,40 meter dari muka jalan	Project	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	17	20	0.45	9	9	9.20	42	45	0.45	9	462
0.40	16	19	0.45	9	18	9.40	53	57	0.60	12	474
0.60	25	28	0.45	9	27	9.60	70	74	0.60	12	486
0.80	15	18	0.45	9	36	9.80	96	99	0.45	9	495
1.00	7	10	0.45	9	45	10.00	221	225	0.60	12	507
1.20	24	27	0.45	9	54	10.20	124	127	0.45	9	516
1.40	16	19	0.45	9	63	10.40	55	58	0.45	9	525
1.60	11	14	0.45	9	72	10.60	36	39	0.45	9	534
1.80	17	21	0.60	12	84	10.80	34	37	0.45	9	543
2.00	7	10	0.45	9	93	11.00	50	53	0.45	9	552
2.20	9	12	0.45	9	102	11.20	142	146	0.60	12	564
2.40	10	13	0.45	9	111	11.40	109	112	0.45	9	573
2.60	10	14	0.60	12	123	11.60	124	128	0.60	12	585
2.80	14	18	0.60	12	135	11.80	210	214	0.60	12	597
3.00	11	14	0.45	9	144	12.00	284	288	0.60	12	609
3.20	26	29	0.45	9	153	12.20	306	310	0.60	12	621
3.40	31	35	0.60	12	165	12.40	294	298	0.60	12	633
3.60	41	45	0.60	12	177	12.60	445	450	0.75	15	648
3.80	57	60	0.45	9	186	12.80					
4.00	66	69	0.45	9	195	13.00					
4.20	57	61	0.60	12	207	13.20					
4.40	78	82	0.60	12	219	13.40					
4.60	71	75	0.60	12	231	13.60					
4.80	47	51	0.60	12	243	13.80					
5.00	73	77	0.60	12	255	14.00					
5.20	34	37	0.45	9	264	14.20					
5.40	34	37	0.45	9	273	14.40					
5.60	51	55	0.60	12	285	14.60					
5.80	58	61	0.45	9	294	14.80					
6.00	40	43	0.45	9	303	15.00					
6.20	56	59	0.45	9	312	15.20					
6.40	61	64	0.45	9	321	15.40					
6.60	62	65	0.45	9	330	15.60					
6.80	46	49	0.45	9	339	15.80					
7.00	68	71	0.45	9	348	16.00					
7.20	91	95	0.60	12	360	16.20					
7.40	116	120	0.60	12	372	16.40					
7.60	125	128	0.45	9	381	16.60					
7.80	108	111	0.45	9	390	16.80					
8.00	171	175	0.60	12	402	17.00					
8.20	174	178	0.60	12	414	17.20					
8.40	133	137	0.60	12	426	17.40					
8.60	96	99	0.45	9	435	17.60					
8.80	33	36	0.45	9	444	17.80					
9.00	14	17	0.45	9	453	18.00					

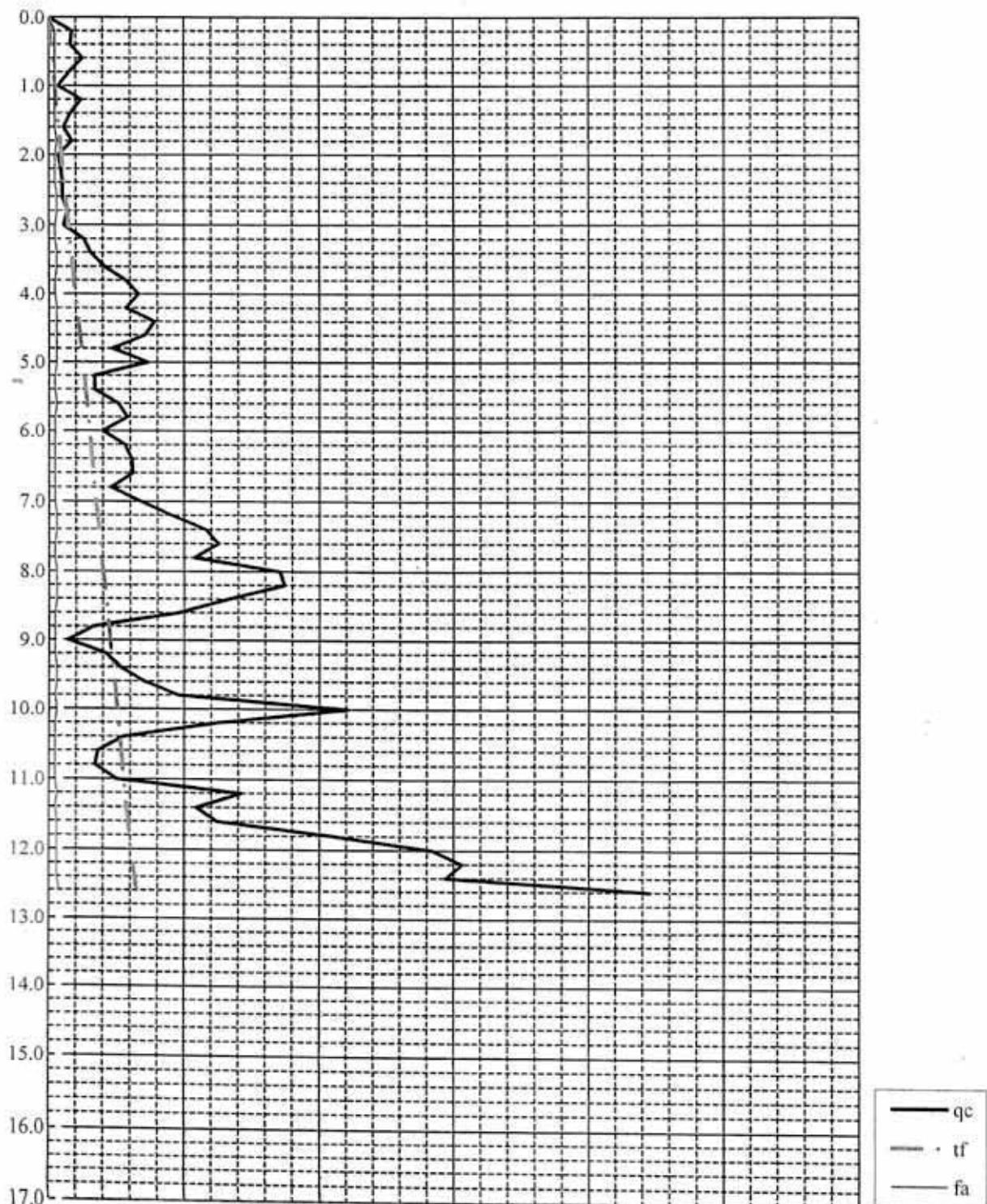


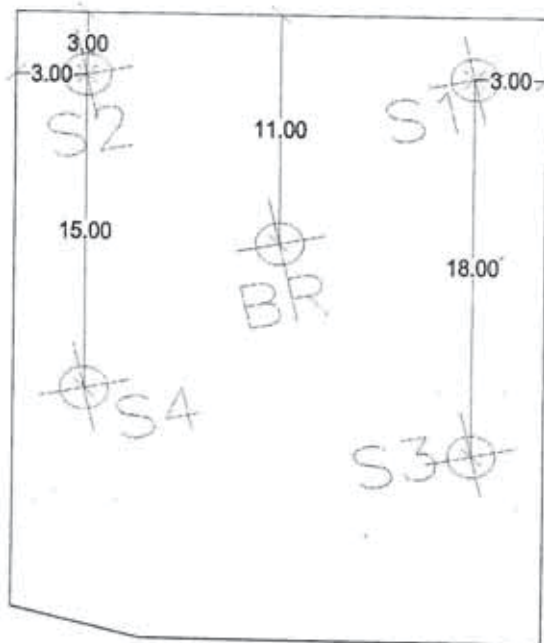
SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jogonegaran 4 Yogyakarta
No. of CPT : SB. 4 Elevation : +0,40 meter dari muka jalan
Date : 09 September 2013 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





karena ada bangunan
existing (toko),
supaya jarak titik2 sondir
dan boring menyesuaikan,
minimal mendekati
sket rencana

TITIK SONDIR



SOIL MECHANIC LABORATORY
CIVIL ENGINEERING PROGRAM
FACULTY OF ENGINEERING, UJAJ
44 BABARSARI STREET, YOGYAKARTA 55281
Tel: +62-274-487711 ext. 1055
Fax: +62-274-487748

Boring Number:

BH-1

BOR LOG

CLIENT: PROJECT TITLE : Hotel Summer 2 (Summer Quest)
PROJECT CONTRACT NUMBER: PROJECT LOCATION : Jl. Sosrowijayan Yogyakarta
DATE STARTED: 03 Mei 2014 GROUND ELEVATION : + 0,20 m from road level
DATE COMPLETED : 03 Mei 2014 HOLE SIZE : 7.295cm
DRILLING CONTRACTOR: SOIL MECH. LAB. UAJJ GROUND WATER LEVEL : - 14,00 m from ground level
DRILLING METHOD: ROTARY SPINDLE, SKID MOUNTED TYPE WEATHER CONDITION : FINE
LOGGED BY: Mukarob, CS. ESTIMATED SEASONAL HIGH : -
CHECKED BY: SOIL MECH. LAB. UAJJ

Depth (m)	Graph Log	Material Description (field observations)	Contact Depth (m)	Sample Number	Blow Counts (N Value)				Water Level Elevation (m)	SPT Value
					N ₁	N ₂	N ₃	N _V		
1		Pasir sedang (coklat, kuning)	2							0
2					6	7	9	16		1
3										2
4		Pasir kasar (coklat, abu- abu)	4		7	9	13	22		3
5										4
6					7	15	21	36		5
7										6
8		Pasir sedang (coklat, abu- abu)	4		6	7	7	14		7
9										8
10					6	6	7	13		9
11		Pasir kasar (coklat, hitam)	3		6	8	11	19		10
12										11
13										12
14		Pasir kasar sedikit lanau (coklat, hitam)	3		9	14	23	37	-14.00	13
15				I						14
16					12	18	23	41		15
17		Pasir kasar (coklat, hitam)	2							16
18					12	21	29	50		17
19										18
20		Pasir sedang (coklat, hitam)	5		13	20	30	50		19
21										20
22					14	21	32	53		21
23										22
24					15	23	37	60		23
25		Pasir kasar sedikit lanau (coklat, hitam)	4	II						24
26					17	25	35	60		25
27										26
28		Pasir sedang (coklat, hitam)	3		17	24	34	58		27
29										28
30					17	25	35	60		29
										30

Catatan: Pada pengamatan di lapangan, lanau bisa tampak seperti pasir halus atau pasir sangat halus



SOIL MECHANICS LABORATORY
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FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Sosrokusuman DN I/190 RT.18/06	Date	: 28 Mei 2012
No. of CPT	: SB. 1	Weather	: Cerah
Elevation	: +0.20 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -13.25 meter	Project	: Hotel 3 lantai

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	16	21	0.75	15	15	9.20	240	250	1.50	30	972
0.40	27	33	0.90	18	33	9.40	275	284	1.35	27	999
0.60	29	34	0.75	15	48	9.60	345	356	1.65	33	1032
0.80	30	35	0.75	15	63	9.80	395	410	2.25	45	1077
1.00	31	36	0.75	15	78	10.00	413	421	1.20	24	1101
1.20	5	11	0.90	18	96	10.20	423	430	1.05	21	1122
1.40	7	14	1.05	21	117	10.40	435	442	1.05	21	1143
1.60	10	16	0.90	18	135	10.60	438	445	1.05	21	1164
1.80	13	18	0.75	15	150	10.80	446	452	0.90	18	1182
2.00	15	26	1.65	33	183	11.00	600	600	0.00	0	1182
2.20	15	25	1.50	30	213	11.20					
2.40	24	31	1.05	21	234	11.40					
2.60	35	43	1.20	24	258	11.60					
2.80	80	87	1.05	21	279	11.80					
3.00	75	89	2.10	42	321	12.00					
3.20	50	65	2.25	45	366	12.20					
3.40	63	74	1.65	33	399	12.40					
3.60	75	85	1.50	30	429	12.60					
3.80	63	70	1.05	21	450	12.80					
4.00	40	46	0.90	18	468	13.00					
4.20	5	10	0.75	15	483	13.20					
4.40	85	95	1.50	30	513	13.40					
4.60	110	118	1.20	24	537	13.60					
4.80	113	117	0.60	12	549	13.80					
5.00	112	118	0.90	18	567	14.00					
5.20	140	146	0.90	18	585	14.20					
5.40	110	116	0.90	18	603	14.40					
5.60	114	121	1.05	21	624	14.60					
5.80	117	123	0.90	18	642	14.80					
6.00	34	41	1.05	21	663	15.00					
6.20	37	43	0.90	18	681	15.20					
6.40	39	44	0.75	15	696	15.40					
6.60	40	45	0.75	15	711	15.60					
6.80	108	113	0.75	15	726	15.80					
7.00	112	118	0.90	18	744	16.00					
7.20	135	142	1.05	21	765	16.20					
7.40	136	141	0.75	15	780	16.40					
7.60	145	152	1.05	21	801	16.60					
7.80	75	81	0.90	18	819	16.80					
8.00	60	67	1.05	21	840	17.00					
8.20	115	121	0.90	18	858	17.20					
8.40	101	110	1.35	27	885	17.40					
8.60	90	97	1.05	21	906	17.60					
8.80	94	100	0.90	18	924	17.80					
9.00	110	116	0.90	18	942	18.00					

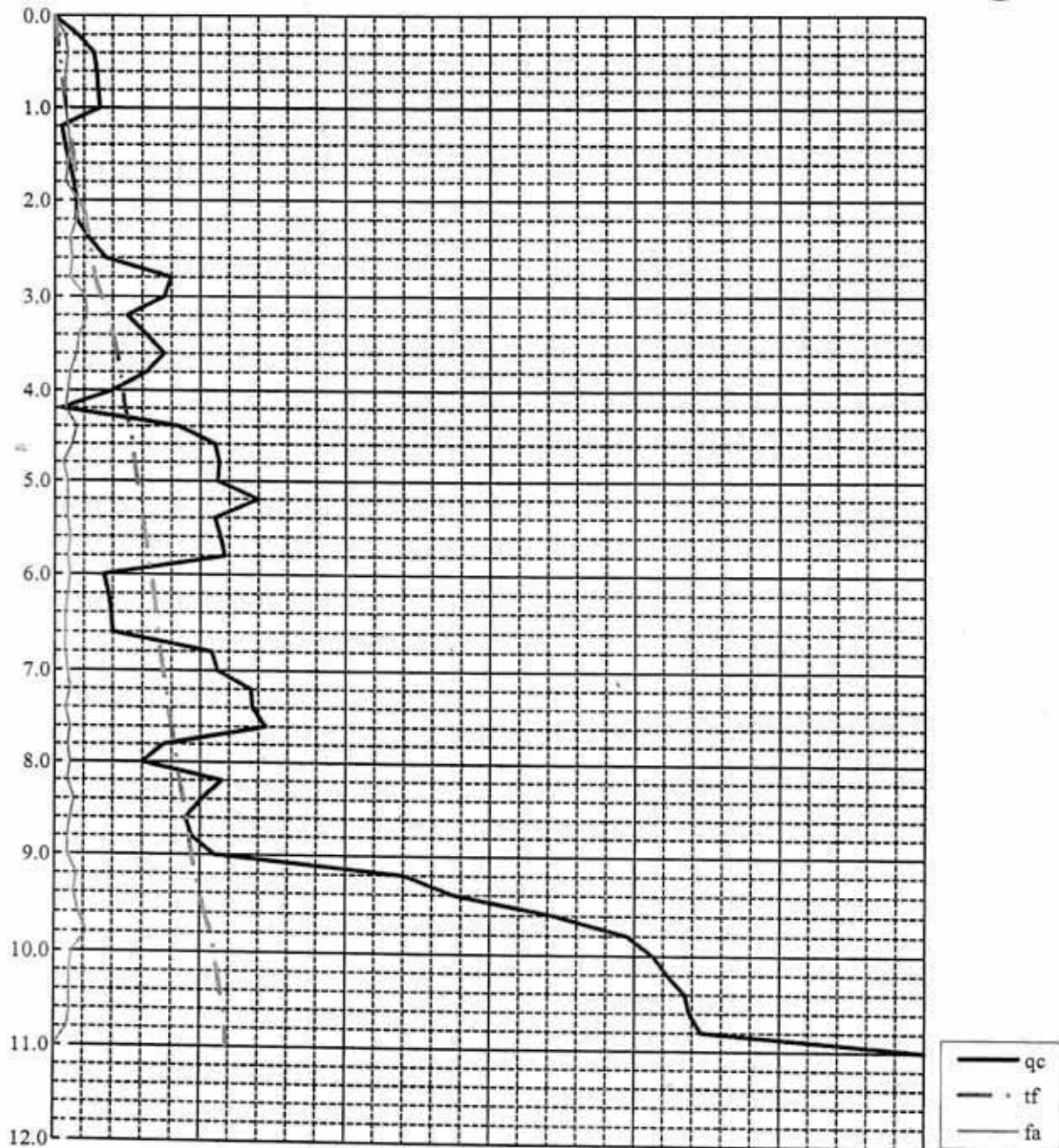


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel 3 lantai - Sosrokusuman DN I/190 RT.18/06 Suryatmajan, Danurejan, Yogyakarta
No. of CPT : SB. 1 Elevation : +0.20 meter dari muka jalan
Date : 28 Mei 2012 Ground Water Depth : -13.25 meter

fa	10	20	30	40	50	60	kg / cm^2
qc	100	200	300	400	500	600	kg / cm^2
tf	1000	2000	3000	4000	5000	6000	kg / cm^1





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Sosrokusuman DN I/190 RT.18/06	Date	: 28 Mei 2012
No. of CPT	: SB. 2	Weather	: Cerah
Elevation	: +0.20 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -13.25 meter	Project	: Hotel 3 lantai

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	12	18	0.90	18	18	9.20	242	258	2.40	48	906
0.40	25	31	0.90	18	36	9.40	279	285	0.90	18	924
0.60	29	33	0.60	12	48	9.60	295	310	2.25	45	969
0.80	32	36	0.60	12	60	9.80	337	346	1.35	27	996
1.00	34	40	0.90	18	78	10.00	405	415	1.50	30	1026
1.20	10	16	0.90	18	96	10.20	415	424	1.35	27	1053
1.40	15	21	0.90	18	114	10.40	427	435	1.20	24	1077
1.60	16	21	0.75	15	129	10.60	434	440	0.90	18	1095
1.80	18	23	0.75	15	144	10.80	437	442	0.75	15	1110
2.00	21	26	0.75	15	159	11.00	442	447	0.75	15	1125
2.20	24	30	0.90	18	177	11.20	445	451	0.90	18	1143
2.40	27	34	1.05	21	198	11.40	600	600	0.00	0	1143
2.60	32	39	1.05	21	219	11.60					
2.80	58	64	0.90	18	237	11.80					
3.00	70	75	0.75	15	252	12.00					
3.20	49	55	0.90	18	270	12.20					
3.40	59	65	0.90	18	288	12.40					
3.60	74	80	0.90	18	306	12.60					
3.80	65	71	0.90	18	324	12.80					
4.00	50	57	1.05	21	345	13.00					
4.20	15	21	0.90	18	363	13.20					
4.40	90	98	1.20	24	387	13.40					
4.60	115	121	0.90	18	405	13.60					
4.80	110	116	0.90	18	423	13.80					
5.00	112	118	0.90	18	441	14.00					
5.20	137	143	0.90	18	459	14.20					
5.40	115	122	1.05	21	480	14.40					
5.60	116	121	0.75	15	495	14.60					
5.80	120	126	0.90	18	513	14.80					
6.00	35	41	0.90	18	531	15.00					
6.20	40	46	0.90	18	549	15.20					
6.40	42	48	0.90	18	567	15.40					
6.60	46	54	1.20	24	591	15.60					
6.80	110	116	0.90	18	609	15.80					
7.00	115	121	0.90	18	627	16.00					
7.20	135	141	0.90	18	645	16.20					
7.40	139	145	0.90	18	663	16.40					
7.60	147	156	1.35	27	690	16.60					
7.80	94	102	1.20	24	714	16.80					
8.00	58	64	0.90	18	732	17.00					
8.20	118	125	1.05	21	753	17.20					
8.40	109	115	0.90	18	771	17.40					
8.60	100	116	2.40	48	819	17.60					
8.80	112	118	0.90	18	837	17.80					
9.00	234	241	1.05	21	858	18.00					

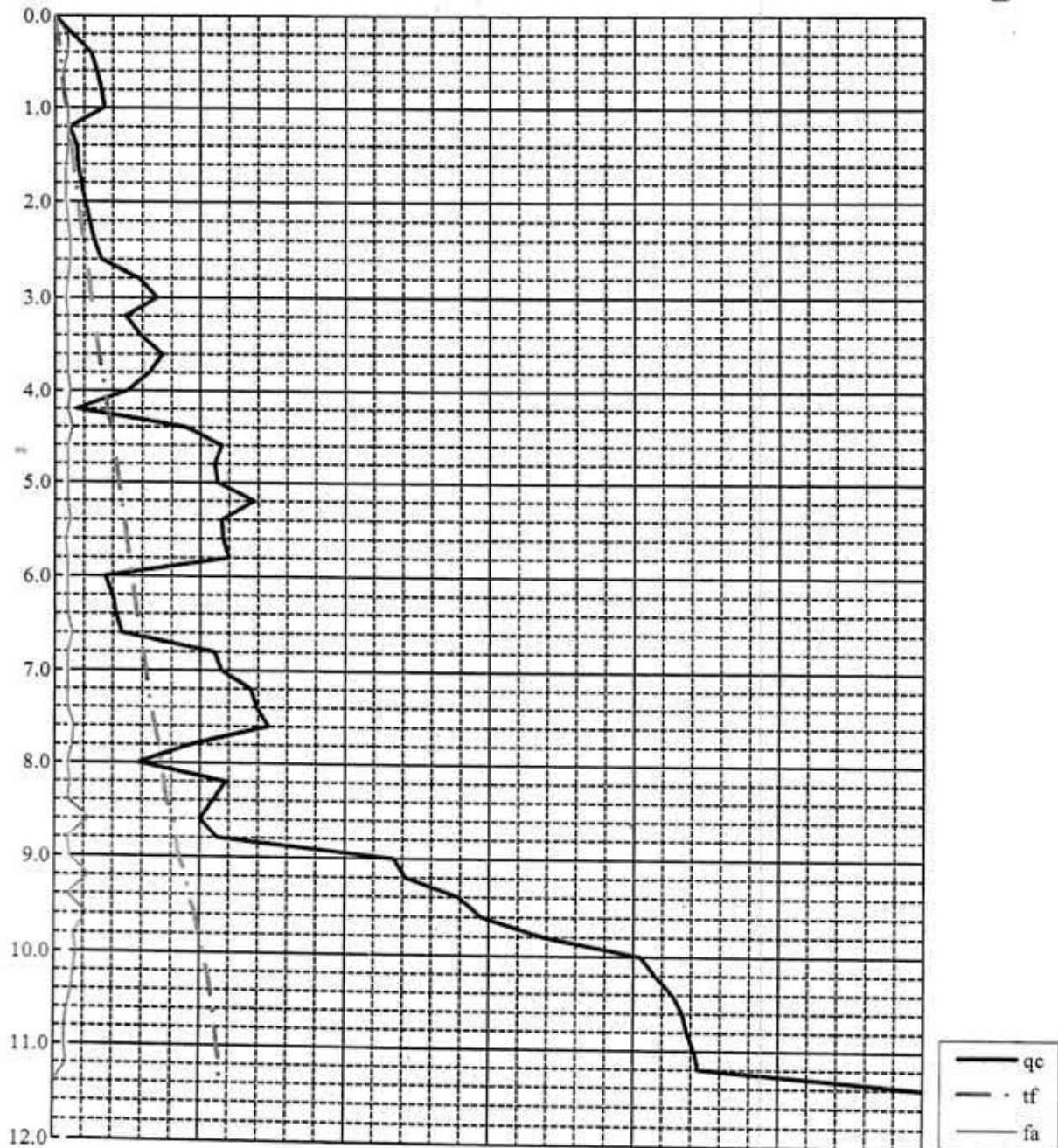


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel 3 lantai - Sosrokusuman DN I/190 RT.18/06 Suryatmajan, Danurejan, Yogyakarta
No. of CPT : SB. 2 Elevation : +0.20 meter dari muka jalan
Date : 28 Mei 2012 Ground Water Depth : -13.25 meter

fa	10	20	30	40	50	60	kg / cm^2
qc	100	200	300	400	500	600	kg / cm^2
tf	1000	2000	3000	4000	5000	6000	kg / cm^1





SOIL MECHANICS LABORATORY
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FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

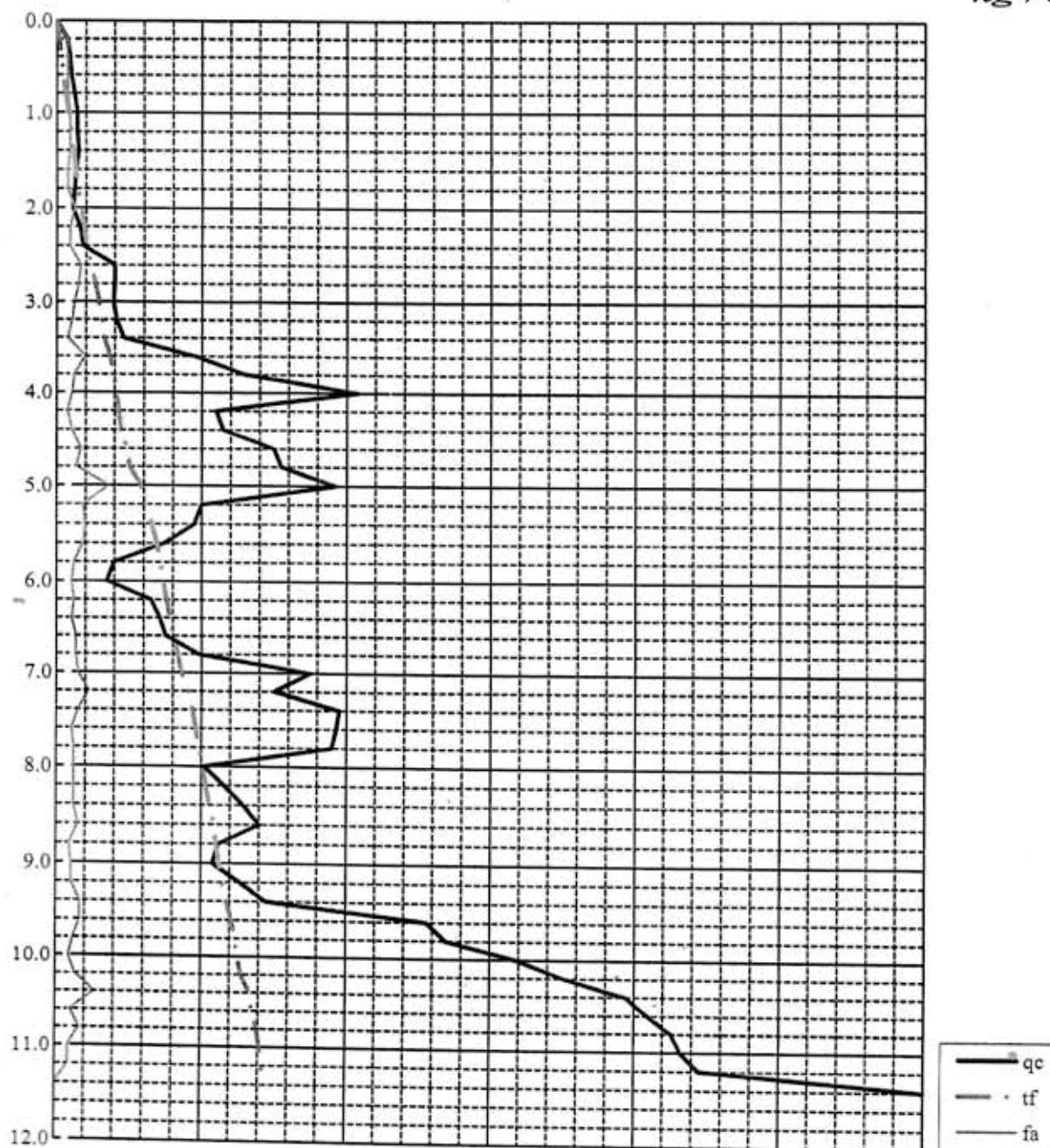
10 TON DUTCH CONE PENETRATION TEST

Location	: Sosrokusuman DN I/190 RT.18/06	Date	: 28 Mei 2012
No. of CPT	: SB. 3	Weather	: Cerah
Elevation	: +0,20 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -13.25 meter	Project	: Hotel 3 lantai

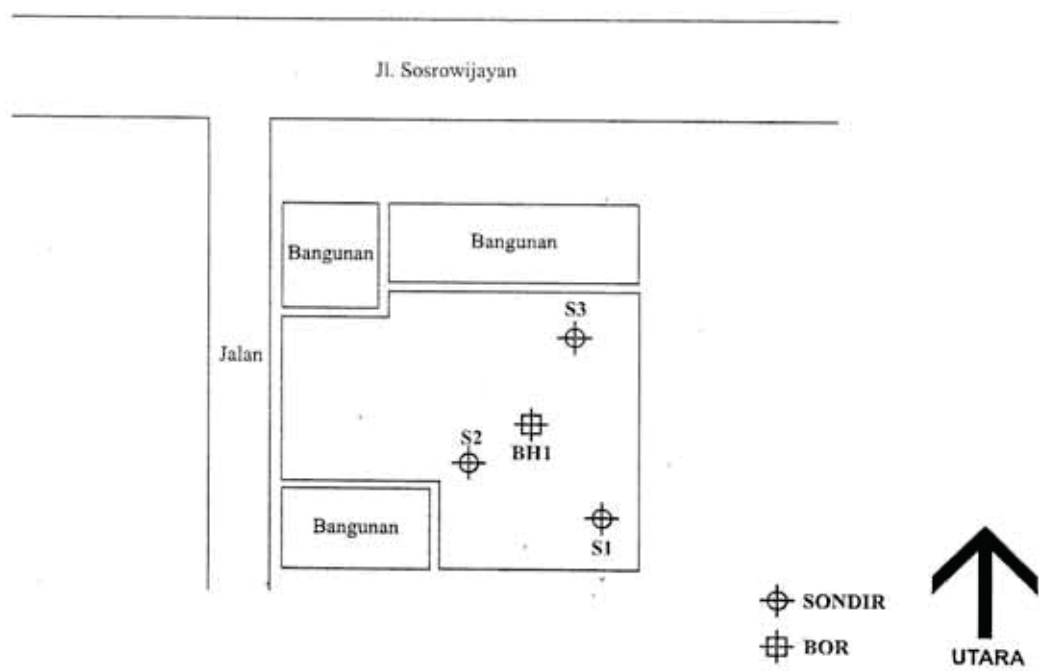
Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	7	12	0.75	15	15	9.20	127	134	1.05	21	1146
0.40	9	14	0.75	15	30	9.40	145	156	1.65	33	1179
0.60	10	15	0.75	15	45	9.60	256	267	1.65	33	1212
0.80	12	17	0.75	15	60	9.80	269	277	1.20	24	1236
1.00	14	20	0.90	18	78	10.00	318	324	0.90	18	1254
1.20	14	20	0.90	18	96	10.20	351	360	1.35	27	1281
1.40	15	21	0.90	18	114	10.40	394	412	2.70	54	1335
1.60	13	18	0.75	15	129	10.60	409	416	1.05	21	1356
1.80	12	17	0.75	15	144	10.80	426	437	1.65	33	1389
2.00	11	19	1.20	24	168	11.00	432	438	0.90	18	1407
2.20	16	22	0.90	18	186	11.20	445	451	0.90	18	1425
2.40	18	24	0.90	18	204	11.40	600	600	0.00	0	1425
2.60	40	51	1.65	33	237	11.60					
2.80	40	50	1.50	30	267	11.80					
3.00	39	47	1.20	24	291	12.00					
3.20	41	48	1.05	21	312	12.20					
3.40	46	51	0.75	15	327	12.40					
3.60	95	108	1.95	39	366	12.60					
3.80	130	138	1.20	24	390	12.80					
4.00	208	215	1.05	21	411	13.00					
4.20	110	115	0.75	15	426	13.20					
4.40	115	122	1.05	21	447	13.40					
4.60	150	161	1.65	33	480	13.60					
4.80	155	164	1.35	27	507	13.80					
5.00	192	216	3.60	72	579	14.00					
5.20	100	112	1.80	36	615	14.20					
5.40	95	108	1.95	39	654	14.40					
5.60	74	86	1.80	36	690	14.60					
5.80	40	48	1.20	24	714	14.80					
6.00	35	42	1.05	21	735	15.00					
6.20	65	73	1.20	24	759	15.20					
6.40	71	78	1.05	21	780	15.40					
6.60	75	84	1.35	27	807	15.60					
6.80	98	107	1.35	27	834	15.80					
7.00	175	185	1.50	30	864	16.00					
7.20	150	165	2.25	45	909	16.20					
7.40	195	205	1.50	30	939	16.40					
7.60	193	200	1.05	21	960	16.60					
7.80	190	198	1.20	24	984	16.80					
8.00	102	110	1.20	24	1008	17.00					
8.20	116	124	1.20	24	1032	17.20					
8.40	129	137	1.20	24	1056	17.40					
8.60	140	150	1.50	30	1086	17.60					
8.80	112	118	0.90	18	1104	17.80					
9.00	108	115	1.05	21	1125	18.00					

Project : Hotel 3 lantai - Sosrokusuman DN I/190 RT.18/06 Suryatmajan, Danurejan, Yogyakarta
 No. of CPT : SB. 3 Elevation : +0,20 meter dari muka jalan
 Date : 28 Mei 2012 Ground Water Depth : -13.25 meter

fa	10	20	30	40	50	60	kg / cm^2
qc	100	200	300	400	500	600	kg / cm^2
tf	1000	2000	3000	4000	5000	6000	kg / cm^1



LETAK TITIK TES TANAH





BH-1

CLIENT:

PROJECT TITLE : Hotel

PROJECT CONTRACT NUMBER:

PROJECT LOCATION : Jl. Suryonegaran 12 Yogyakarta

DATE STARTED: 5 Desember 2012

GROUND ELEVATION : - 0,25 m from road level

DATE COMPLETED : 5 Desember 2012

HOLE SIZE : 7.295cm

DRILLING CONTRACTOR: SOIL MECH. LAB. UAIY

GROUND WATER LEVEL : - 12,00 m

DRILLING METHOD: ROTARY SPINDLE, SKID MOUNTED TYPE

WEATHER CONDITION : FINE

LOGGED BY: Mukarob, CS.

ESTIMATED SEASONAL HIGH : -

CHECKED BY: SOIL MECH. LAB, UAJY

Depth (m)	Graph Log	Material Description (field observations)	Contact Depth (m)	Sample Number	Blow Counts (N Value)				Water Level Elevation (m)	SPT Value	
					N ₁	N ₂	N ₃	N _v			
1		Pasir kasar (coklat)	2						-12.00	0	
2					3	3	4	7		1	
3		Pasir halus (coklat, abu-abu)	2								2
4					3	4	4	8		3	
5		Pasir sangat halus (coklat, abu-abu)	2.5								4
6					3	3	10	13		5	
7		Pasir sedang (coklat kekuningan)	2.5								6
8					9	15	20	35		7	
9		Pasir halus berlanau (coklat kekuningan)	3								8
10					9	16	22	38		9	
11		Pasir sedang (abu-abu kehitaman)	2		I						10
12						8	12	17		29	11
13		Pasir kasar (hitam)	2								12
14						12	15	25		40	13
15		Pasir halus (hitam)	2								14
16						12	15	20		35	15
17		Pasir sedang (hitam)	2		II						16
18						12	8	8		16	17
19		Pasir sedang (hitam)	2								18
20						19	21	30		51	19



SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Location	: Jl. Suryonegaran 12 Yogyakarta	Date	: 5 Desember 2012
No. of CPT	: SB. 1	Weather	: Cerah
Elevation	: +0,75 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	7	12	0.75	15	15	11.20	150	156	0.90	18	1137
0.40	10	15	0.75	15	30	11.40	120	127	1.05	21	1158
0.60	12	18	0.90	18	48	11.60	130	142	1.80	36	1194
0.80	30	35	0.75	15	63	11.80	120	135	2.25	45	1239
1.00	25	30	0.75	15	78	12.00	125	133	1.20	24	1263
1.20	26	30	0.60	12	90	12.20	110	120	1.50	30	1293
1.40	15	20	0.75	15	105	12.40	80	85	0.75	15	1308
1.60	10	20	1.50	30	135	12.60	115	120	0.75	15	1323
1.80	9	14	0.75	15	150	12.80	100	105	0.75	15	1338
2.00	10	15	0.75	15	165	13.00	70	78	1.20	24	1362
2.20	15	20	0.75	15	180	13.20	145	152	1.05	21	1383
2.40	25	32	1.05	21	201	13.40	186	194	1.20	24	1407
2.60	23	30	1.05	21	222	13.60	170	175	0.75	15	1422
2.80	18	24	0.90	18	240	13.80	100	105	0.75	15	1437
3.00	15	21	0.90	18	258	14.00	90	96	0.90	18	1455
3.20	15	20	0.75	15	273	14.20	85	94	1.35	27	1482
3.40	13	18	0.75	15	288	14.40	220	230	1.50	30	1512
3.60	10	15	0.75	15	303	14.60	215	223	1.20	24	1536
3.80	5	9	0.60	12	315	14.80	230	241	1.65	33	1569
4.00	9	16	1.05	21	336	15.00	205	211	0.90	18	1587
4.20	7	12	0.75	15	351	15.20	180	194	2.10	42	1629
4.40	15	20	0.75	15	366	15.40	195	210	2.25	45	1674
4.60	16	20	0.60	12	378	15.60	218	224	0.90	18	1692
4.80	16	21	0.75	15	393	15.80	275	284	1.35	27	1719
5.00	17	23	0.90	18	411	16.00	250	261	1.65	33	1752
5.20	15	19	0.60	12	423	16.20	274	285	1.65	33	1785
5.40	14	18	0.60	12	435	16.40	295	310	2.25	45	1830
5.60	17	23	0.90	18	453	16.60	318	325	1.05	21	1851
5.80	18	23	0.75	15	468	16.80	345	357	1.80	36	1887
6.00	10	16	0.90	18	486	17.00	364	375	1.65	33	1920
6.20	25	30	0.75	15	501	17.20	350	364	2.10	42	1962
6.40	35	40	0.75	15	516	17.40	341	352	1.65	33	1995
6.60	40	50	1.50	30	546	17.60	395	412	2.55	51	2046
6.80	10	24	2.10	42	588	17.80	410	415	0.75	15	2061
7.00	50	60	1.50	30	618	18.00	418	425	1.05	21	2082
7.20	52	57	0.75	15	633	18.20	430	440	1.50	30	2112
7.40	60	65	0.75	15	648	18.40	437	442	0.75	15	2127
7.60	50	56	0.90	18	666	18.60	443	453	1.50	30	2157
7.80	100	110	1.50	30	696	18.80	446	450	0.60	12	2169
8.00	80	87	1.05	21	717	19.00	600	600	0.00	0	2169
8.20	60	70	1.50	30	747	19.20					
8.40	45	50	0.75	15	762	19.40					
8.60	85	95	1.50	30	792	19.60					
8.80	140	150	1.50	30	822	19.80					
9.00	130	142	1.80	36	858	20.00					
9.20	110	120	1.50	30	888	20.20					
9.40	80	95	2.25	45	933	20.40					
9.60	140	146	0.90	18	951	20.60					
9.80	55	67	1.80	36	987	20.80					
10.00	40	48	1.20	24	1011	21.00					
10.20	48	55	1.05	21	1032	21.20					
10.40	90	95	0.75	15	1047	21.40					
10.60	60	68	1.20	24	1071	21.60					
10.80	64	73	1.35	27	1098	21.80					

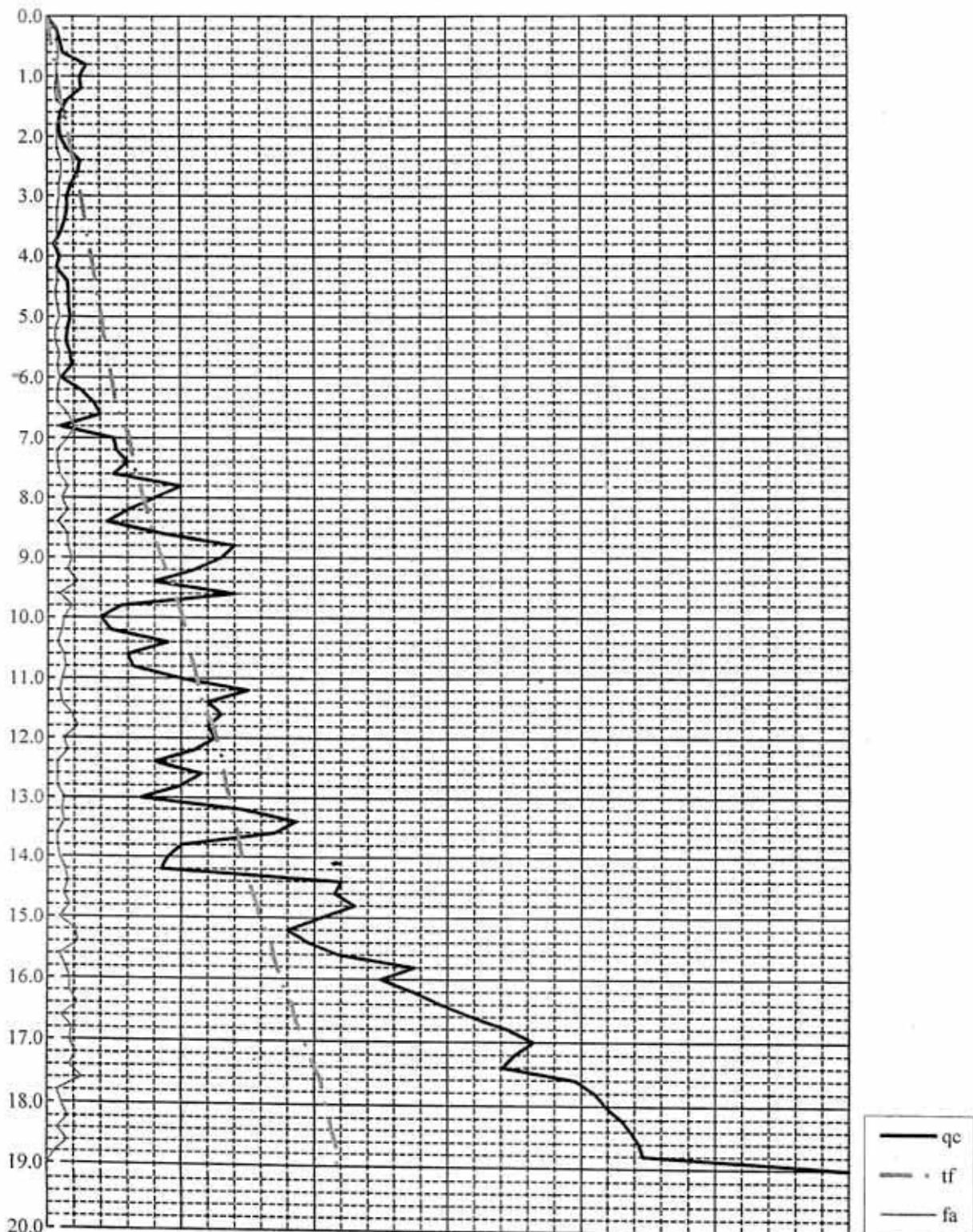


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jl. Suryonegaran 12 Yogyakarta
No. of CPT : SB. 1 Elevation : +0,75 meter dari muka jalan
Date : 5 Desember 2012 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Location	: Jl. Suryonegaran 12 Yogyakarta	Date	: 5 Desember 2012
No. of CPT	: SB. 2	Weather	: Cerah
Elevation	: -0,25 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	7	12	0.75	15	15	11.20	185	194	1.35	27	1335
0.40	10	15	0.75	15	30	11.40	160	171	1.65	33	1368
0.60	12	18	0.90	18	48	11.60	158	169	1.65	33	1401
0.80	17	21	0.60	12	60	11.80	115	122	1.05	21	1422
1.00	25	31	0.90	18	78	12.00	90	101	1.65	33	1455
1.20	13	17	0.60	12	90	12.20	87	95	1.20	24	1479
1.40	5	10	0.75	15	105	12.40	75	83	1.20	24	1503
1.60	9	15	0.90	18	123	12.60	84	92	1.20	24	1527
1.80	18	24	0.90	18	141	12.80	140	155	2.25	45	1572
2.00	30	37	1.05	21	162	13.00	165	176	1.65	33	1605
2.20	35	42	1.05	21	183	13.20	175	186	1.65	33	1638
2.40	61	69	1.20	24	207	13.40	65	72	1.05	21	1659
2.60	53	59	0.90	18	225	13.60	34	41	1.05	21	1680
2.80	35	43	1.20	24	249	13.80	37	45	1.20	24	1704
3.00	48	55	1.05	21	270	14.00	82	90	1.20	24	1728
3.20	57	66	1.35	27	297	14.20	100	108	1.20	24	1752
3.40	75	80	0.75	15	312	14.40	155	165	1.50	30	1782
3.60	37	44	1.05	21	333	14.60	265	276	1.65	33	1815
3.80	20	35	2.25	45	378	14.80	355	366	1.65	33	1848
4.00	35	45	1.50	30	408	15.00	315	322	1.05	21	1869
4.20	41	48	1.05	21	429	15.20	300	310	1.50	30	1899
4.40	50	59	1.35	27	456	15.40	425	434	1.35	27	1926
4.60	51	61	1.50	30	486	15.60	445	450	0.75	15	1941
4.80	48	55	1.05	21	507	15.80	600	600	0.00	0	1941
5.00	50	60	1.50	30	537	16.00					
5.20	58	66	1.20	24	561	16.20					
5.40	95	104	1.35	27	588	16.40					
5.60	20	25	0.75	15	603	16.60					
5.80	21	27	0.90	18	621	16.80					
6.00	22	31	1.35	27	648	17.00					
6.20	25	34	1.35	27	675	17.20					
6.40	32	37	0.75	15	690	17.40					
6.60	40	46	0.90	18	708	17.60					
6.80	43	49	0.90	18	726	17.80					
7.00	60	65	0.75	15	741	18.00					
7.20	63	74	1.65	33	774	18.20					
7.40	68	75	1.05	21	795	18.40					
7.60	70	78	1.20	24	819	18.60					
7.80	73	79	0.90	18	837	18.80					
8.00	76	84	1.20	24	861	19.00					
8.20	43	50	1.05	21	882	19.20					
8.40	50	57	1.05	21	903	19.40					
8.60	65	72	1.05	21	924	19.60					
8.80	145	155	1.50	30	954	19.80					
9.00	185	210	3.75	75	1029	20.00					
9.20	195	212	2.55	51	1080	20.20					
9.40	200	205	0.75	15	1095	20.40					
9.60	45	51	0.90	18	1113	20.60					
9.80	75	82	1.05	21	1134	20.80					
10.00	85	97	1.80	36	1170	21.00					
10.20	182	191	1.35	27	1197	21.20					
10.40	210	216	0.90	18	1215	21.40					
10.60	160	168	1.20	24	1239	21.60					
10.80	145	156	1.65	33	1272	21.80					

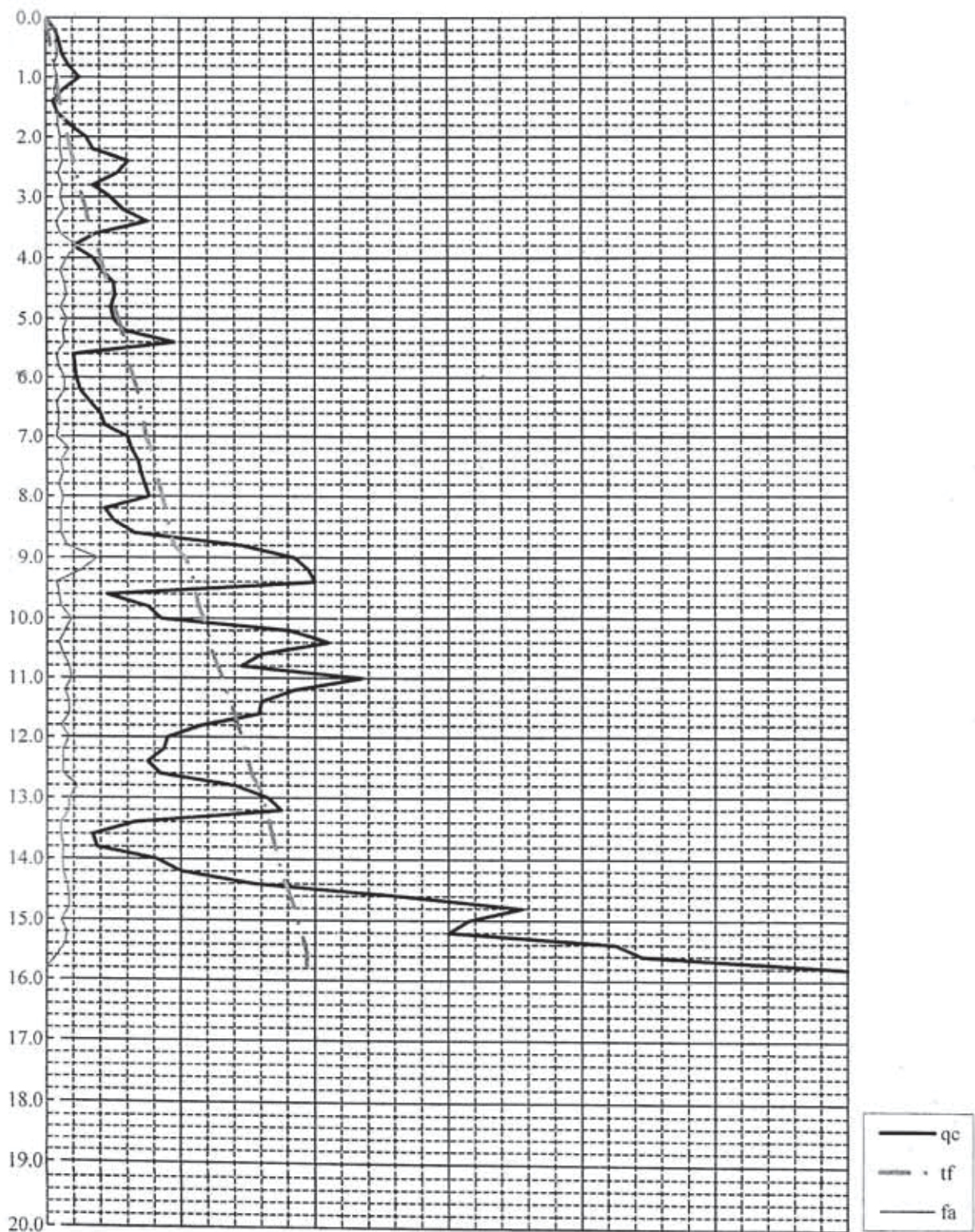


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jl. Suryonegaran 12 Yogyakarta
No. of CPT : SB. 2 Elevation : -0,25 meter dari muka jalan
Date : 5 Desember 2012 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Location	: Jl. Suryonegaran 12 Yogyakarta	Date	: 6 Desember 2012
No. of CPT	: SB. 3	Weather	: Cerah
Elevation	: -0,15 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	5	9	0.60	12	12	11.20	195	210	2.25	45	1293
0.40	5	9	0.60	12	24	11.40	165	174	1.35	27	1320
0.60	7	12	0.75	15	39	11.60	157	166	1.35	27	1347
0.80	8	12	0.60	12	51	11.80	112	120	1.20	24	1371
1.00	10	15	0.75	15	66	12.00	98	104	0.90	18	1389
1.20	13	20	1.05	21	87	12.20	87	94	1.05	21	1410
1.40	18	23	0.75	15	102	12.40	80	89	1.35	27	1437
1.60	25	38	1.95	39	141	12.60	76	86	1.50	30	1467
1.80	31	37	0.90	18	159	12.80	150	164	2.10	42	1509
2.00	40	45	0.75	15	174	13.00	167	172	0.75	15	1524
2.20	34	40	0.90	18	192	13.20	178	190	1.80	36	1560
2.40	27	34	1.05	21	213	13.40	69	78	1.35	27	1587
2.60	20	28	1.20	24	237	13.60	40	46	0.90	18	1605
2.80	54	61	1.05	21	258	13.80	39	45	0.90	18	1623
3.00	85	93	1.20	24	282	14.00	75	86	1.65	33	1656
3.20	78	84	0.90	18	300	14.20	94	106	1.80	36	1692
3.40	60	67	1.05	21	321	14.40	108	118	1.50	30	1722
3.60	65	73	1.20	24	345	14.60	168	175	1.05	21	1743
3.80	62	68	0.90	18	363	14.80	194	210	2.40	48	1791
4.00	60	78	2.70	54	417	15.00	322	334	1.80	36	1827
4.20	67	73	0.90	18	435	15.20	315	325	1.50	30	1857
4.40	72	81	1.35	27	462	15.40	354	367	1.95	39	1896
4.60	80	90	1.50	30	492	15.60	425	432	1.05	21	1917
4.80	83	91	1.20	24	516	15.80	437	445	1.20	24	1941
5.00	98	115	2.55	51	567	16.00	443	449	0.90	18	1959
5.20	95	104	1.35	27	594	16.20	446	451	0.75	15	1974
5.40	52	59	1.05	21	615	16.40	600	600	0.00	0	1974
5.60	40	45	0.75	15	630	16.60					
5.80	10	16	0.90	18	648	16.80					
6.00	7	12	0.75	15	663	17.00					
6.20	16	23	1.05	21	684	17.20					
6.40	35	45	1.50	30	714	17.40					
6.60	27	34	1.05	21	735	17.60					
6.80	48	55	1.05	21	756	17.80					
7.00	70	81	1.65	33	789	18.00					
7.20	66	72	0.90	18	807	18.20					
7.40	60	68	1.20	24	831	18.40					
7.60	62	71	1.35	27	858	18.60					
7.80	70	78	1.20	24	882	18.80					
8.00	50	56	0.90	18	900	19.00					
8.20	75	84	1.35	27	927	19.20					
8.40	120	130	1.50	30	957	19.40					
8.60	200	210	1.50	30	987	19.60					
8.80	205	212	1.05	21	1008	19.80					
9.00	165	173	1.20	24	1032	20.00					
9.20	140	148	1.20	24	1056	20.20					
9.40	94	103	1.35	27	1083	20.40					
9.60	40	45	0.75	15	1098	20.60					
9.80	75	84	1.35	27	1125	20.80					
10.00	89	95	0.90	18	1143	21.00					
10.20	120	130	1.50	30	1173	21.20					
10.40	100	105	0.75	15	1188	21.40					
10.60	85	91	0.90	18	1206	21.60					
10.80	135	142	1.05	21	1227	21.80					

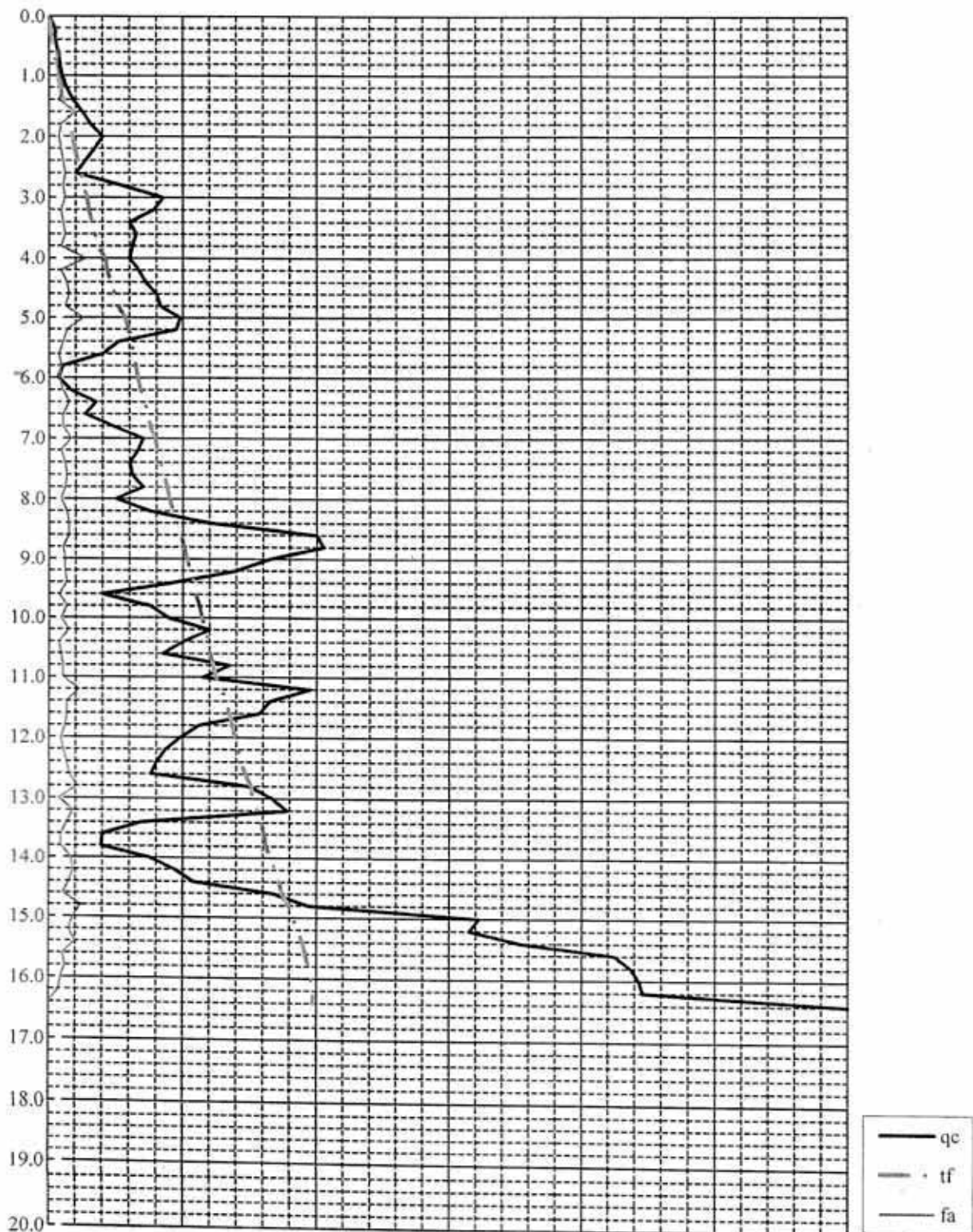


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

6 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jl. Suryonegaran 12 Yogyakarta
No. of CPT : SB. 3 Elevation : -0,15 meter dari muka jalan
Date : 6 Desember 2012 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





SOIL MECHANIC LABORATORY
CIVIL ENGINEERING PROGRAM
FACULTY OF ENGINEERING, UAJY
44 BABARSARI STREET, YOGYAKARTA 55281
Tel: +62-274-487711 ext. 1055
Fax: +62-274-487748

Boring Number:

BH-1

BOR LOG

CLIENT:	PROJECT TITLE : Hotel
PROJECT CONTRACT NUMBER:	PROJECT LOCATION : Jl. Jogonegaran 4 Yogyakarta
DATE STARTED: 09 September 2013	GROUND ELEVATION : + 0,40 m from road level
DATE COMPLETED : 09 September 2013	HOLE SIZE : 7.295cm
DRILLING CONTRACTOR: SOIL MECH. LAB. UAJY	GROUND WATER LEVEL : - 12,00 m from ground level
DRILLING METHOD: ROTARY SPINDLE, SKID MOUNTED TYPE	WEATHER CONDITION : FINE
LOGGED BY: Mukarob, CS.	ESTIMATED SEASONAL HIGH :-
CHECKED BY: SOIL MECH. LAB. UAJY	

Depth (m)	Graph Log	Material Description	Contact Depth (m)	Sample Number	Blow Counts (N Value)				Water Level Elevation (m)	SPT Value
					N ₁	N ₂	N ₃	N _v		
1		Pasir kasar (coklat, hitam)	3						-12.00	0
2					3	4	7	11		1
3										2
4		Pasir halus (coklat)	3	I	4	6	6	12		3
5										4
6					4	7	8	15		5
7		Pasir kasar (coklat, hitam) terdapat andesit Ø 2-3 cm	2							6
8					4	8	9	17		7
9										8
10		Pasir berlanau (coklat, hitam)	4	II	4	8	8	16		9
11										10
12					11	19	31	50		11
13		Pasir sedang (coklat, hitam)	4							12
14					12	20	30	50		13
15										14
16		Batu pasir (coklat, hitam)	7		17	21	30	51		15
17										16
18					19	25	32	57		17
19										18
20					19	25	35	60		19
21										20
22					19	25	35	60		21
23		Pasir kasar (coklat, hitam) terdapat andesit Ø 2-3 cm	4							22
24					17	21	25	46		23
25										24
26		Pasir sedang (coklat, hitam)	3		16	19	27	46		25
27										26
28					16	18	21	39		27
29										28
30					17	20	22	42		29



SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Jogonegaran 4 Yogyakarta	Date	: 10 September 2013
No. of CPT	: SB. 1	Weather	: Cerah
Elevation	: +0,40 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	13	16	0.45	9	9	9.20	77	80	0.45	9	438
0.40	11	14	0.45	9	18	9.40	19	22	0.45	9	447
0.60	5	8	0.45	9	27	9.60	43	46	0.45	9	456
0.80	7	10	0.45	9	36	9.80	68	71	0.45	9	465
1.00	6	9	0.45	9	45	10.00	96	99	0.45	9	474
1.20	7	10	0.45	9	54	10.20	129	133	0.60	12	486
1.40	8	11	0.45	9	63	10.40	96	100	0.60	12	498
1.60	10	13	0.45	9	72	10.60	66	69	0.45	9	507
1.80	10	13	0.45	9	81	10.80	34	37	0.45	9	516
2.00	11	14	0.45	9	90	11.00	62	66	0.60	12	528
2.20	33	37	0.60	12	102	11.20	96	99	0.45	9	537
2.40	7	10	0.45	9	111	11.40	108	111	0.45	9	546
2.60	7	10	0.45	9	120	11.60	84	87	0.45	9	555
2.80	14	17	0.45	9	129	11.80	228	232	0.60	12	567
3.00	9	12	0.45	9	138	12.00	184	188	0.60	12	579
3.20	12	15	0.45	9	147	12.20	113	117	0.60	12	591
3.40	17	20	0.45	9	156	12.40	84	87	0.45	9	600
3.60	19	23	0.60	12	168	12.60	54	57	0.45	9	609
3.80	15	18	0.45	9	177	12.80	51	54	0.45	9	618
4.00	8	11	0.45	9	186	13.00	40	43	0.45	9	627
4.20	15	18	0.45	9	195	13.20	53	56	0.45	9	636
4.40	13	16	0.45	9	204	13.40	66	69	0.45	9	645
4.60	13	16	0.45	9	213	13.60	105	109	0.60	12	657
4.80	15	18	0.45	9	222	13.80	110	114	0.60	12	669
5.00	14	17	0.45	9	231	14.00	112	116	0.60	12	681
5.20	38	41	0.45	9	240	14.20	127	131	0.60	12	693
5.40	27	30	0.45	9	249	14.40	106	109	0.45	9	702
5.60	28	31	0.45	9	258	14.60	119	123	0.60	12	714
5.80	19	22	0.45	9	267	14.80	128	132	0.60	12	726
6.00	12	15	0.45	9	276	15.00	191	195	0.60	12	738
6.20	61	65	0.60	12	288	15.20	211	215	0.60	12	750
6.40	35	38	0.45	9	297	15.40	214	218	0.60	12	762
6.60	19	22	0.45	9	306	15.60	224	228	0.60	12	774
6.80	23	26	0.45	9	315	15.80	378	383	0.75	15	789
7.00	26	29	0.45	9	324	16.00	446	450	0.60	12	801
7.20	33	36	0.45	9	333	16.20					
7.40	54	57	0.45	9	342	16.40					
7.60	58	62	0.60	12	354	16.60					
7.80	61	65	0.60	12	366	16.80					
8.00	105	109	0.60	12	378	17.00					
8.20	151	155	0.60	12	390	17.20					
8.40	112	116	0.60	12	402	17.40					
8.60	108	111	0.45	9	411	17.60					
8.80	31	34	0.45	9	420	17.80					
9.00	36	39	0.45	9	429	18.00					

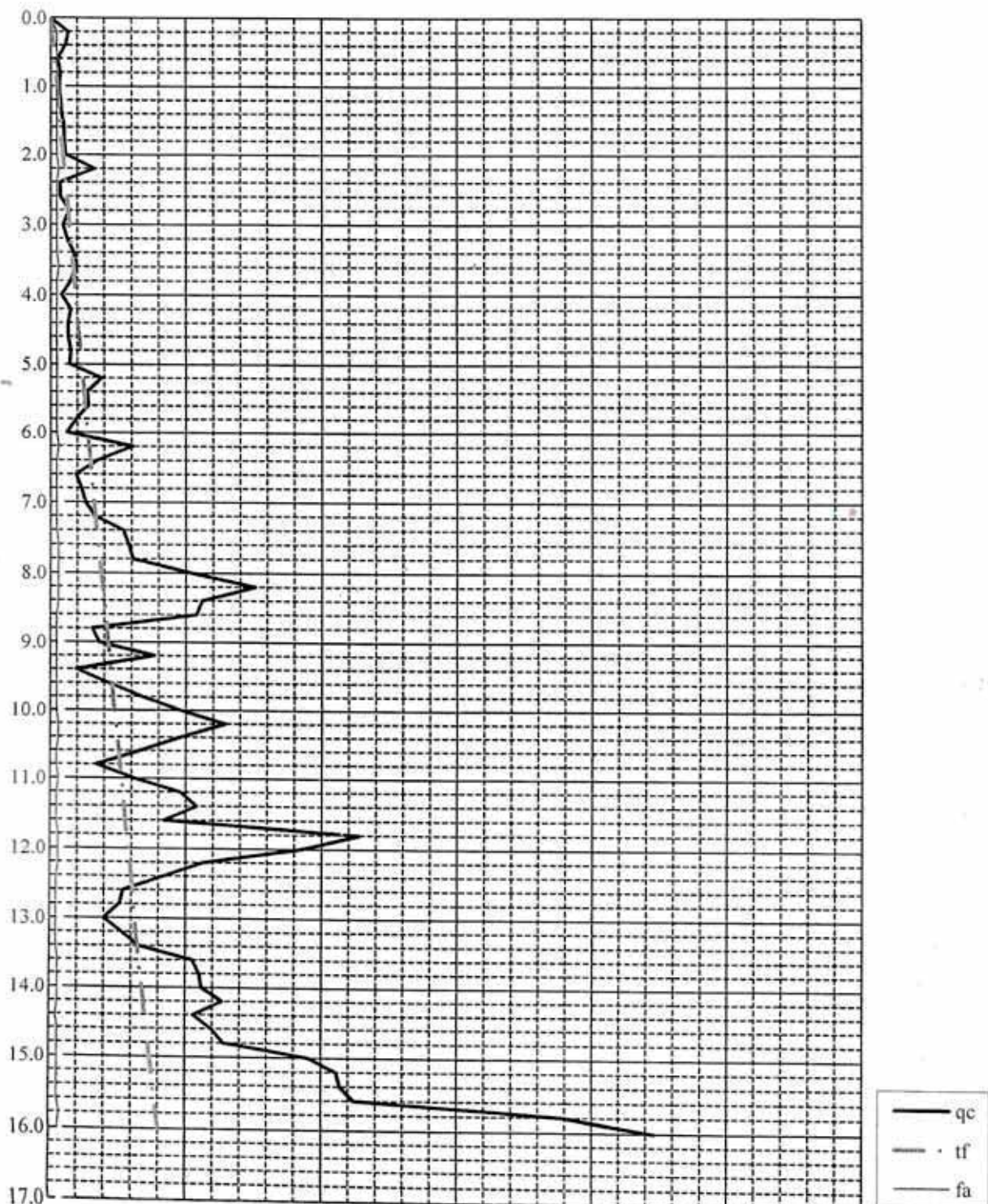


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jogonegaran 4 Yogyakarta
No. of CPT : SB. 1 Elevation : +0,40 meter dari muka jalan
Date : 10 September 2013 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ³





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Jogonegaran 4 Yogyakarta	Date	: 10 September 2013
No. of CPT	: SB. 2	Weather	: Panas
Elevation	: +0,40 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	8	10	0.30	6	6	9.20	80	84	0.60	12	435
0.40	12	15	0.45	9	15	9.40	24	27	0.45	9	444
0.60	7	9	0.30	6	21	9.60	45	48	0.45	9	453
0.80	11	14	0.45	9	30	9.80	71	74	0.45	9	462
1.00	5	8	0.45	9	39	10.00	98	101	0.45	9	471
1.20	6	9	0.45	9	48	10.20	140	144	0.60	12	483
1.40	7	10	0.45	9	57	10.40	103	107	0.60	12	495
1.60	9	12	0.45	9	66	10.60	67	70	0.45	9	504
1.80	10	13	0.45	9	75	10.80	37	40	0.45	9	513
2.00	12	15	0.45	9	84	11.00	64	67	0.45	9	522
2.20	16	19	0.45	9	93	11.20	97	101	0.60	12	534
2.40	8	11	0.45	9	102	11.40	110	113	0.45	9	543
2.60	7	10	0.45	9	111	11.60	86	90	0.60	12	555
2.80	14	17	0.45	9	120	11.80	230	233	0.45	9	564
3.00	10	13	0.45	9	129	12.00	186	189	0.45	9	573
3.20	11	14	0.45	9	138	12.20	114	117	0.45	9	582
3.40	19	22	0.45	9	147	12.40	309	312	0.45	9	591
3.60	21	24	0.45	9	156	12.60	200	204	0.60	12	603
3.80	14	17	0.45	9	165	12.80	363	367	0.60	12	615
4.00	11	14	0.45	9	174	13.00	446	450	0.60	12	627
4.20	13	16	0.45	9	183	13.20					
4.40	15	18	0.45	9	192	13.40					
4.60	15	18	0.45	9	201	13.60					
4.80	17	20	0.45	9	210	13.80					
5.00	12	15	0.45	9	219	14.00					
5.20	41	44	0.45	9	228	14.20					
5.40	29	33	0.60	12	240	14.40					
5.60	31	35	0.60	12	252	14.60					
5.80	20	23	0.45	9	261	14.80					
6.00	10	13	0.45	9	270	15.00					
6.20	64	67	0.45	9	279	15.20					
6.40	38	42	0.60	12	291	15.40					
6.60	17	20	0.45	9	300	15.60					
6.80	21	24	0.45	9	309	15.80					
7.00	25	28	0.45	9	318	16.00					
7.20	35	39	0.60	12	330	16.20					
7.40	56	60	0.60	12	342	16.40					
7.60	60	63	0.45	9	351	16.60					
7.80	60	63	0.45	9	360	16.80					
8.00	99	103	0.60	12	372	17.00					
8.20	154	158	0.60	12	384	17.20					
8.40	115	118	0.45	9	393	17.40					
8.60	110	114	0.60	12	405	17.60					
8.80	28	31	0.45	9	414	17.80					
9.00	34	37	0.45	9	423	18.00					

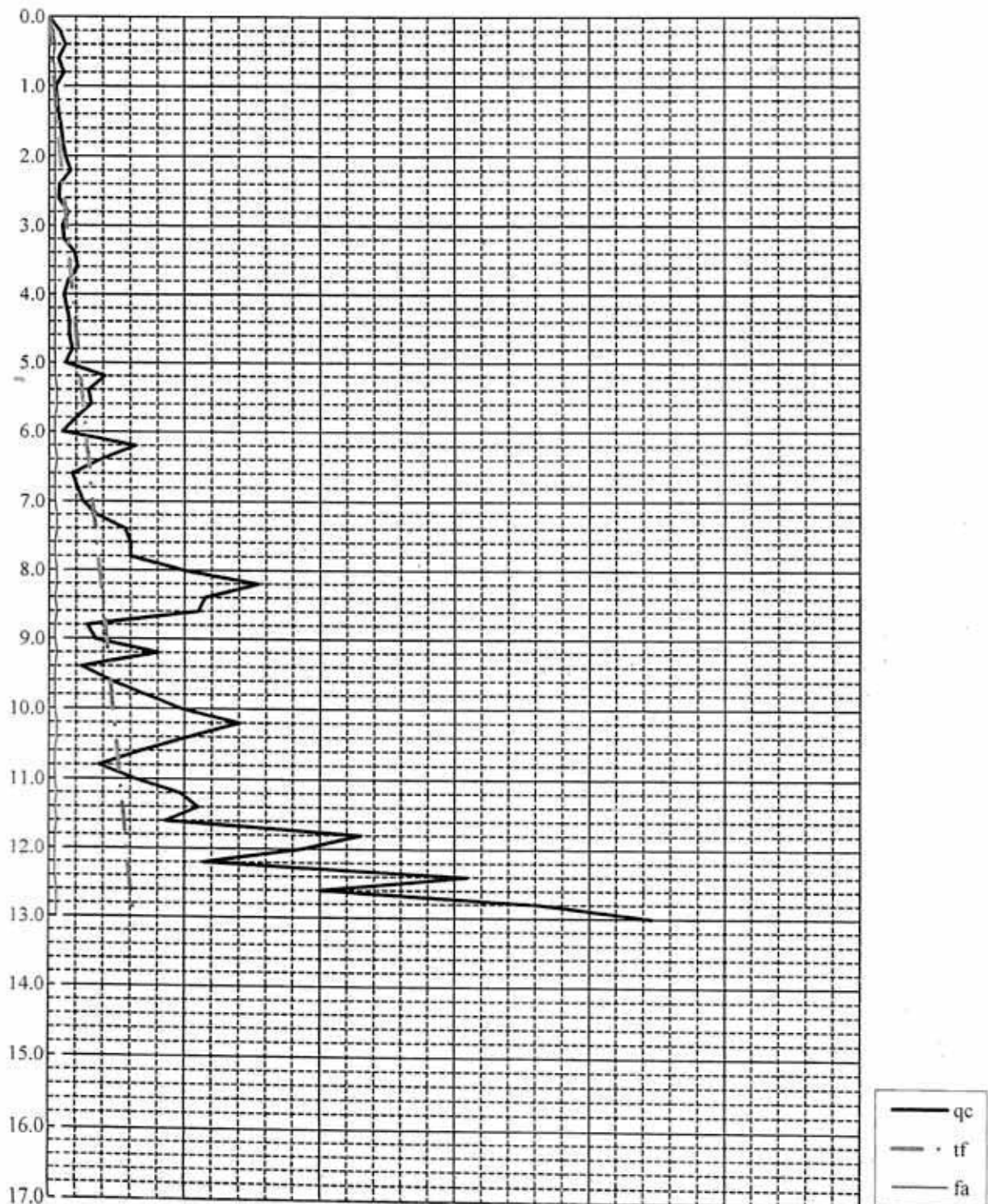


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jogonegaran 4 Yogyakarta
No. of CPT : SB. 2 Elevation : +0,40 meter dari muka jalan
Date : 10 September 2013 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





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DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Jogonegaran 4 Yogyakarta	Date	: 09 September 2013
No. of CPT	: SB. 3	Weather	: Panas
Elevation	: +0,40 meter dari muka jalan	Surveyor	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	11	14	0.45	9	9	9.20	32	35	0.45	9	447
0.40	13	16	0.45	9	18	9.40	46	50	0.60	12	459
0.60	17	20	0.45	9	27	9.60	70	73	0.45	9	468
0.80	19	22	0.45	9	36	9.80	91	95	0.60	12	480
1.00	5	8	0.45	9	45	10.00	186	190	0.60	12	492
1.20	4	7	0.45	9	54	10.20	113	116	0.45	9	501
1.40	5	8	0.45	9	63	10.40	62	66	0.60	12	513
1.60	6	8	0.30	6	69	10.60	40	43	0.45	9	522
1.80	4	6	0.30	6	75	10.80	37	40	0.45	9	531
2.00	7	10	0.45	9	84	11.00	51	54	0.45	9	540
2.20	29	32	0.45	9	93	11.20	183	187	0.60	12	552
2.40	11	14	0.45	9	102	11.40	106	110	0.60	12	564
2.60	15	18	0.45	9	111	11.60	141	145	0.60	12	576
2.80	11	14	0.45	9	120	11.80	243	248	0.75	15	591
3.00	9	12	0.45	9	129	12.00	303	307	0.60	12	603
3.20	11	14	0.45	9	138	12.20	445	450	0.75	15	618
3.40	31	34	0.45	9	147	12.40					
3.60	59	62	0.45	9	156	12.60					
3.80	58	62	0.60	12	168	12.80					
4.00	89	93	0.60	12	180	13.00					
4.20	95	99	0.60	12	192	13.20					
4.40	81	85	0.60	12	204	13.40					
4.60	59	62	0.45	9	213	13.60					
4.80	79	82	0.45	9	222	13.80					
5.00	74	77	0.45	9	231	14.00					
5.20	39	42	0.45	9	240	14.20					
5.40	20	23	0.45	9	249	14.40					
5.60	35	38	0.45	9	258	14.60					
5.80	41	44	0.45	9	267	14.80					
6.00	39	42	0.45	9	276	15.00					
6.20	49	52	0.45	9	285	15.20					
6.40	52	56	0.60	12	297	15.40					
6.60	57	61	0.60	12	309	15.60					
6.80	62	65	0.45	9	318	15.80					
7.00	111	115	0.60	12	330	16.00					
7.20	140	145	0.75	15	345	16.20					
7.40	127	131	0.60	12	357	16.40					
7.60	123	127	0.60	12	369	16.60					
7.80	117	121	0.60	12	381	16.80					
8.00	86	89	0.45	9	390	17.00					
8.20	91	95	0.60	12	402	17.20					
8.40	83	86	0.45	9	411	17.40					
8.60	36	39	0.45	9	420	17.60					
8.80	27	30	0.45	9	429	17.80					
9.00	18	21	0.45	9	438	18.00					

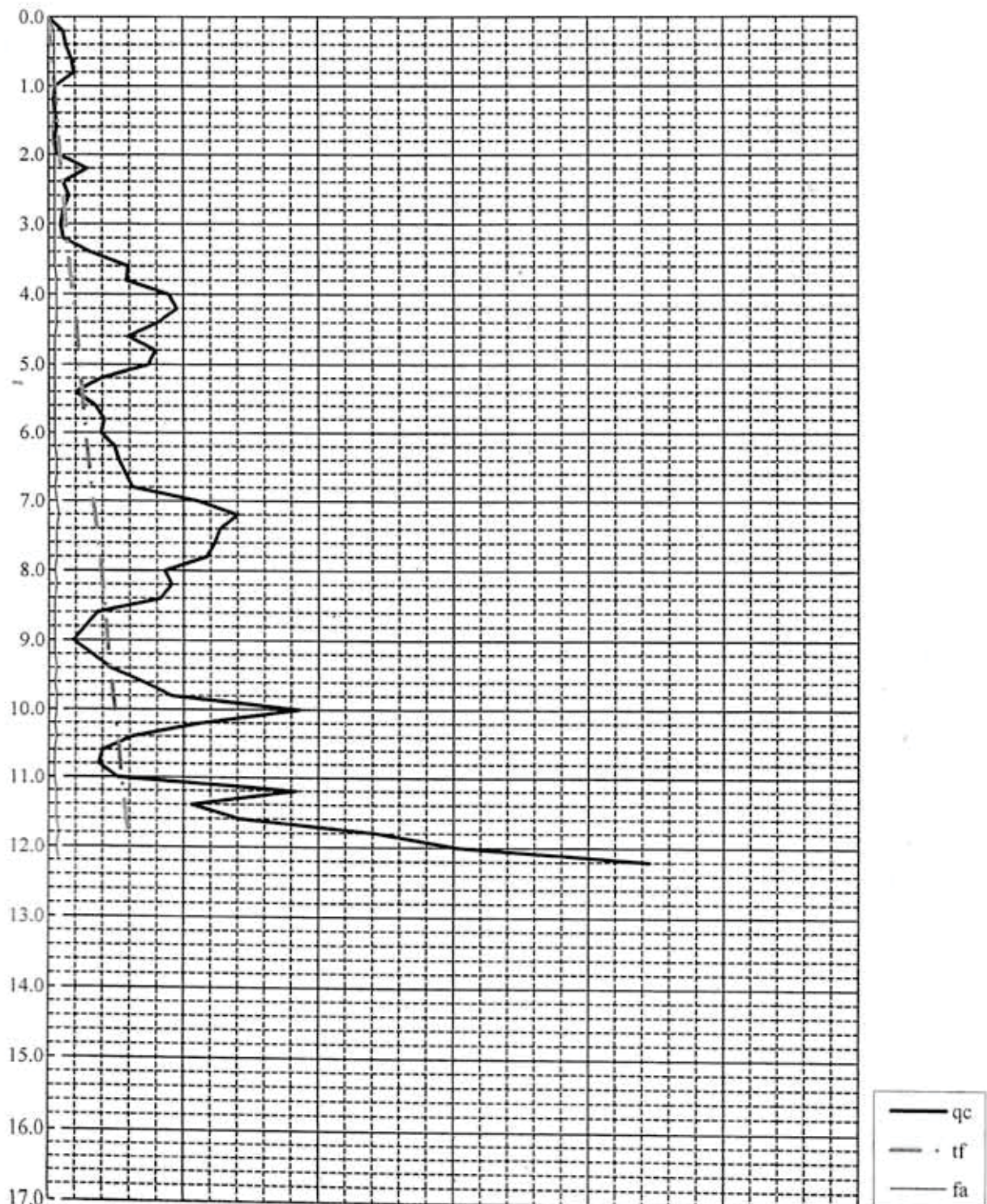


SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jogonegaran 4 Yogyakarta
No. of CPT : SB. 3 Elevation : +0.40 meter dari muka jalan
Date : 09 September 2013 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Location	: Jogonegaran 4 Yogyakarta	Date	: 09 September 2013
No. of CPT	: SB. 4	Weather	: Panas
Elevation	: +0,40 meter dari muka jalan	Project	: Lab.Mektan FT.UAJY
Ground Water Depth	: -12.00 meter	Project	: Hotel

Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹	Keda-laman meter	C kg/cm ²	C + F Kg/cm ²	LF Kg/cm ²	TF Kg/cm ¹	Jumlah TF Kg/cm ¹
0.00	0	0	0.00	0	0						
0.20	17	20	0.45	9	9	9.20	42	45	0.45	9	462
0.40	16	19	0.45	9	18	9.40	53	57	0.60	12	474
0.60	25	28	0.45	9	27	9.60	70	74	0.60	12	486
0.80	15	18	0.45	9	36	9.80	96	99	0.45	9	495
1.00	7	10	0.45	9	45	10.00	221	225	0.60	12	507
1.20	24	27	0.45	9	54	10.20	124	127	0.45	9	516
1.40	16	19	0.45	9	63	10.40	55	58	0.45	9	525
1.60	11	14	0.45	9	72	10.60	36	39	0.45	9	534
1.80	17	21	0.60	12	84	10.80	34	37	0.45	9	543
2.00	7	10	0.45	9	93	11.00	50	53	0.45	9	552
2.20	9	12	0.45	9	102	11.20	142	146	0.60	12	564
2.40	10	13	0.45	9	111	11.40	109	112	0.45	9	573
2.60	10	14	0.60	12	123	11.60	124	128	0.60	12	585
2.80	14	18	0.60	12	135	11.80	210	214	0.60	12	597
3.00	11	14	0.45	9	144	12.00	284	288	0.60	12	609
3.20	26	29	0.45	9	153	12.20	306	310	0.60	12	621
3.40	31	35	0.60	12	165	12.40	294	298	0.60	12	633
3.60	41	45	0.60	12	177	12.60	445	450	0.75	15	648
3.80	57	60	0.45	9	186	12.80					
4.00	66	69	0.45	9	195	13.00					
4.20	57	61	0.60	12	207	13.20					
4.40	78	82	0.60	12	219	13.40					
4.60	71	75	0.60	12	231	13.60					
4.80	47	51	0.60	12	243	13.80					
5.00	73	77	0.60	12	255	14.00					
5.20	34	37	0.45	9	264	14.20					
5.40	34	37	0.45	9	273	14.40					
5.60	51	55	0.60	12	285	14.60					
5.80	58	61	0.45	9	294	14.80					
6.00	40	43	0.45	9	303	15.00					
6.20	56	59	0.45	9	312	15.20					
6.40	61	64	0.45	9	321	15.40					
6.60	62	65	0.45	9	330	15.60					
6.80	46	49	0.45	9	339	15.80					
7.00	68	71	0.45	9	348	16.00					
7.20	91	95	0.60	12	360	16.20					
7.40	116	120	0.60	12	372	16.40					
7.60	125	128	0.45	9	381	16.60					
7.80	108	111	0.45	9	390	16.80					
8.00	171	175	0.60	12	402	17.00					
8.20	174	178	0.60	12	414	17.20					
8.40	133	137	0.60	12	426	17.40					
8.60	96	99	0.45	9	435	17.60					
8.80	33	36	0.45	9	444	17.80					
9.00	14	17	0.45	9	453	18.00					

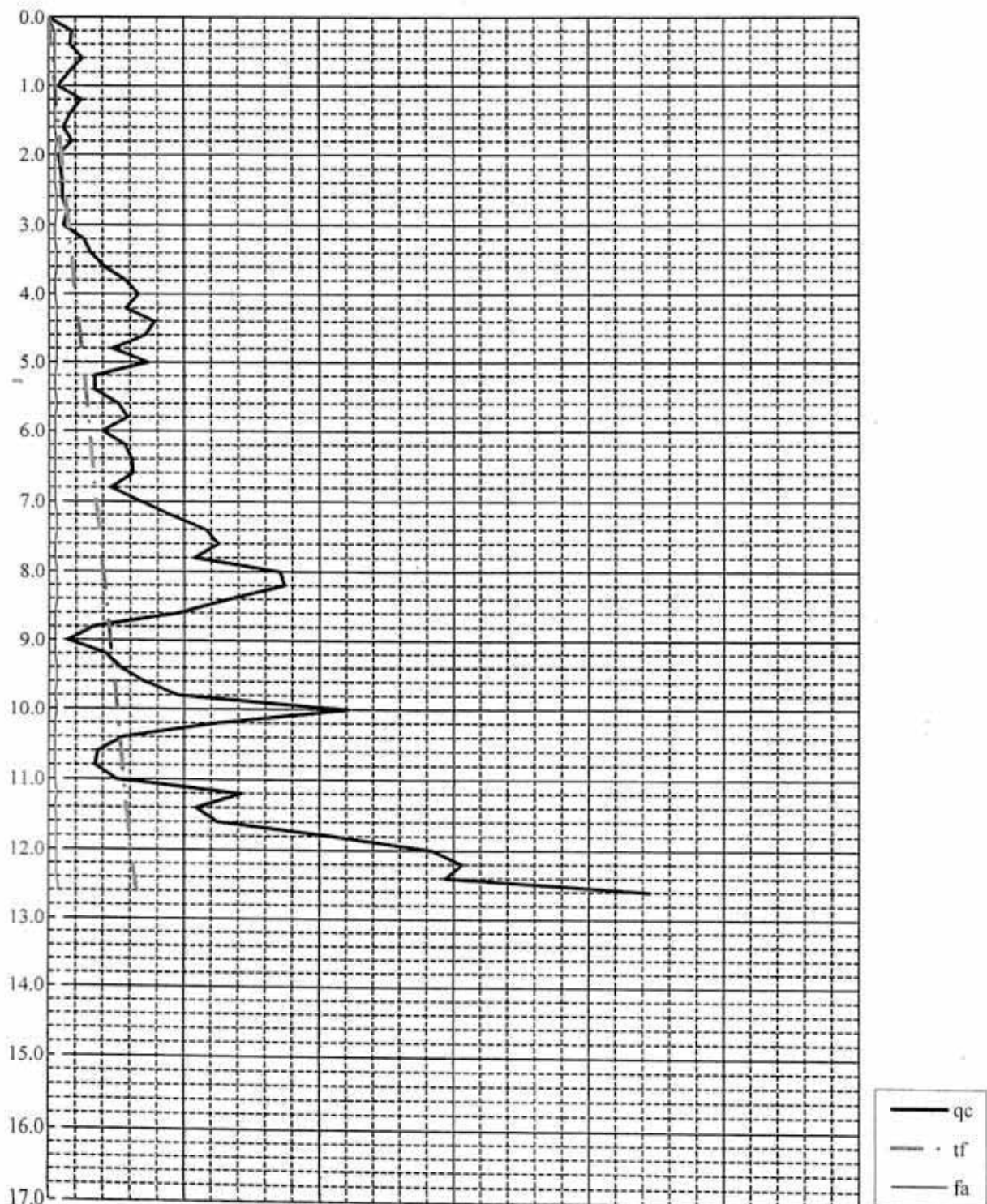


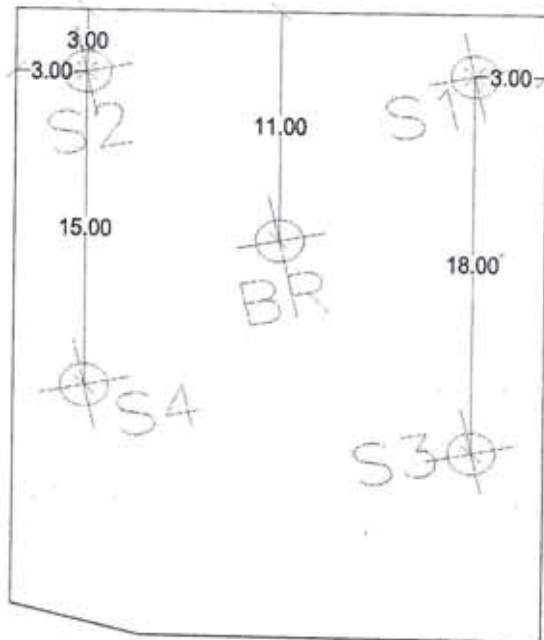
SOIL MECHANICS LABORATORY
DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING - ATMA JAYA YOGYAKARTA UNIVERSITY

10 TON DUTCH CONE PENETRATION TEST

Project : Hotel - Jogonegaran 4 Yogyakarta
No. of CPT : SB. 4 Elevation : +0,40 meter dari muka jalan
Date : 09 September 2013 Ground Water Depth : -12.00 meter

fa	10	20	30	40	50	60	kg / cm ²
qc	100	200	300	400	500	600	kg / cm ²
tf	1000	2000	3000	4000	5000	6000	kg / cm ¹





karena ada bangunan existing (toko), supaya jarak titik2 sondir dan boring menyesuaikan, minimal mendekati sket rencana

TITIK SONDIR