



PT. SRI AGUNG JAYA

Engineering Consultant
 Kantor : Komplek Bumi Asri Pekar Bahaya Blok II / No. B.3 Bopo Km. 09
 Telp (022) 5414200 - Fax (022) 5414200 - Bandung 40215

DCPT DATA

ASTM . D - 3441

PROYEK :	Review Desain Sistem Sungai Jragung	OPERATOR	: Sigit Dwi
LOKASI :	P.177 (S. Jragung Lama) Ds. Tegowani Wetan	DIPERIKSA	: K. Azhar Darmawan M
HOLE NO. :	SD - 12	TYPE OF APPARATUS	: 2.50 TON
COORDINATE :	N = E =	MANOMETER 1:	0 - 60 kg/cm ² /MANOMETER 2: 0 - 250 kg/cm ²
ELEVATION :	-	TYPE OF CONE UNIT	: BICONUS
TANGGAL :		LEMBAR	: 1 DARI 2

DUCTH CONE PENETRATION TEST

KEDALAMAN (m)	TIP RESISTANCE Rd1 = qc (kg/cm ²)	TOTAL RESISTANCE Rd2 (kg/cm ²)	FRICITION RESISTANCE R2 - R1 (kg/cm ²)	FRICITION SLEEVE fc (kg/cm ²)	LOCAL RESISTANCE 20 fc (kg/cm)	TOTAL FRICITION TF = Σ 20 fc (kg/cm)
0.20	7.00	13.00	6.00	0.540	10.80	10.80
0.40	7.00	13.00	6.00	0.540	10.80	21.60
0.60	8.00	14.00	6.00	0.540	10.80	32.40
0.80	8.00	14.00	6.00	0.540	10.80	43.20
1.00	9.00	15.00	6.00	0.540	10.80	54.00
1.20	9.00	15.00	6.00	0.540	10.80	64.80
1.40	10.00	16.00	6.00	0.540	10.80	75.60
1.60	10.00	16.00	6.00	0.540	10.80	86.40
1.80	11.00	18.00	7.00	0.630	12.60	99.00
2.00	10.00	17.00	7.00	0.630	12.60	111.60
2.20	12.00	19.00	7.00	0.630	12.60	124.20
2.40	11.00	19.00	8.00	0.720	14.40	138.60
2.60	13.00	21.00	8.00	0.720	14.40	153.00
2.80	13.00	21.00	8.00	0.720	14.40	167.40
3.00	15.00	22.00	7.00	0.630	12.60	180.00
3.20	15.00	22.00	7.00	0.630	12.60	192.60
3.40	14.00	21.00	7.00	0.630	12.60	205.20
3.60	13.00	20.00	7.00	0.630	12.60	217.80
3.80	13.00	20.00	7.00	0.630	12.60	230.40
4.00	16.00	24.00	8.00	0.720	14.40	244.80
4.20	15.00	23.00	8.00	0.720	14.40	259.20
4.40	15.00	23.00	8.00	0.720	14.40	273.60
4.60	17.00	25.00	8.00	0.720	14.40	288.00
4.80	16.00	25.00	9.00	0.810	16.20	304.20
5.00	17.00	27.00	10.00	0.900	18.00	322.20
5.20	19.00	29.00	10.00	0.900	18.00	340.20
5.40	19.00	30.00	11.00	0.990	19.80	360.00
5.60	21.00	31.00	10.00	0.900	18.00	378.00
5.80	21.00	29.00	8.00	0.720	14.40	392.40
6.00	23.00	30.00	7.00	0.630	12.60	405.00
6.20	24.00	31.00	7.00	0.630	12.60	417.60
6.40	25.00	33.00	8.00	0.720	14.40	432.00
6.60	25.00	34.00	9.00	0.810	16.20	448.20
6.80	24.00	35.00	11.00	0.990	19.80	468.00
7.00	24.00	35.00	11.00	0.990	19.80	487.80
7.20	26.00	36.00	10.00	0.900	18.00	505.80
7.40	26.00	36.00	10.00	0.900	18.00	523.80
7.60	28.00	38.00	10.00	0.900	18.00	541.80
7.80	28.00	37.00	9.00	0.810	16.20	558.00
8.00	30.00	38.00	8.00	0.720	14.40	572.40
8.20	31.00	38.00	7.00	0.630	12.60	585.00
8.40	31.00	39.00	8.00	0.720	14.40	599.40
8.60	29.00	38.00	9.00	0.810	16.20	615.60
8.80	28.00	38.00	10.00	0.900	18.00	633.60
9.00	28.00	38.00	10.00	0.900	18.00	651.60
9.20	27.00	36.00	9.00	0.810	16.20	667.80
9.40	27.00	36.00	9.00	0.810	16.20	684.00
9.60	29.00	39.00	10.00	0.900	18.00	702.00
9.80	30.00	40.00	10.00	0.900	18.00	720.00
10.00	33.00	41.00	8.00	0.720	14.40	734.40

Total Depth : 12.20 m

Diameter piston (d1)	=	3.60	cm	REMARKS : $f_f = R2 - R1$ $f_c = \frac{A_p \times f_f}{A_c}$ $TF = \Sigma 20 f_c$	
Luas piston (Ap)	=	$25 \times 3.14 \times 3.60^2$	10		cm ²
Diameter cylinder conus (d2)	=	3.60	cm		
Panjang cylinder (l)	=	10.00	cm		
Luas cylinder (Ac)	=	$L14 \times 3.6 \times 10$	113.10		cm ²

PROJECT	: Review Desain Sistem Sungai Jragung	OPERATOR	: Sigit Dwi
LOCATION	: P.177 (S. Jragung Lama) Ds. Tegowan i Wetan	DIPERIKSA	: K. Azhar Dermawan M
HOLE NO.	: SD - 12	TYPE OF APPARATUS	: 2,50 TON
COORDINATE	: N = 07° 04' 54,7" E = 110° 33' 52,9"	MANOMETER 1:	0 - 60 kg/cm ² /MANOMETER 2: 0 - 250 kg/cm ²
ELEVATION	: -	TYPE OF CONE UNIT	: BICONUS
DATE	: 0-Jan-00	LEMBAR	: 2 of 2

CONE PENETRATION TEST

DEPTH (m)	TIP RESISTANCE Rd1 = qc (kg/cm ²)	TOTAL RESISTANCE Rd2 (kg/cm ²)	FRICTION RESISTANCE R2 - R1 (kg/cm ²)	FRICTION SLEEVE fc (kg/cm ²)	LOCAL RESISTANCE 20 fc (kg/cm)	TOTAL FRICTION TF = Σ 20 fc (kg/cm)
10,20	35,00	44,00	9,00	0,810	16,20	750,60
10,40	38,00	48,00	10,00	0,900	18,00	768,60
10,60	47,00	57,00	10,00	0,900	18,00	786,60
10,80	55,00	66,00	11,00	0,990	19,80	806,40
11,00	78,00	89,00	11,00	0,990	19,80	826,20
11,20	95,00	105,00	10,00	0,900	18,00	844,20
11,40	108,00	119,00	11,00	0,990	19,80	864,00
11,60	126,00	137,00	11,00	0,990	19,80	883,80
11,80	140,00	152,00	12,00	1,080	21,60	905,40
12,00	166,00	178,00	12,00	1,080	21,60	927,00
12,20	200,00					
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19,80						
20,00						

Total Depth : 12,20 m

Diameter of piston (d1)	=	3,60	cm	REMARKS :	
Area of piston (Ap)	=	25 x 3,14 x 3,60 ²	= 10		cm ²
Diameter cylinder of conus (d2)	=	3,60	cm		
Length of cylinder (l)	=	10,00	cm		
Area of cylinder (Ac)	=	14 x 3,6 x 10	= 113,10		cm ²
				tf = R2 - R1	
				fc = $\frac{Ap \times tf}{Ac}$	
				TF = Σ 20 fc	



PT. SRI AGUNG JAYA

Engineering Consultant

Alamat : Komplek Bumi Asri Pekar Rahayu Blok B / No. B.3 Kopo Km. 09
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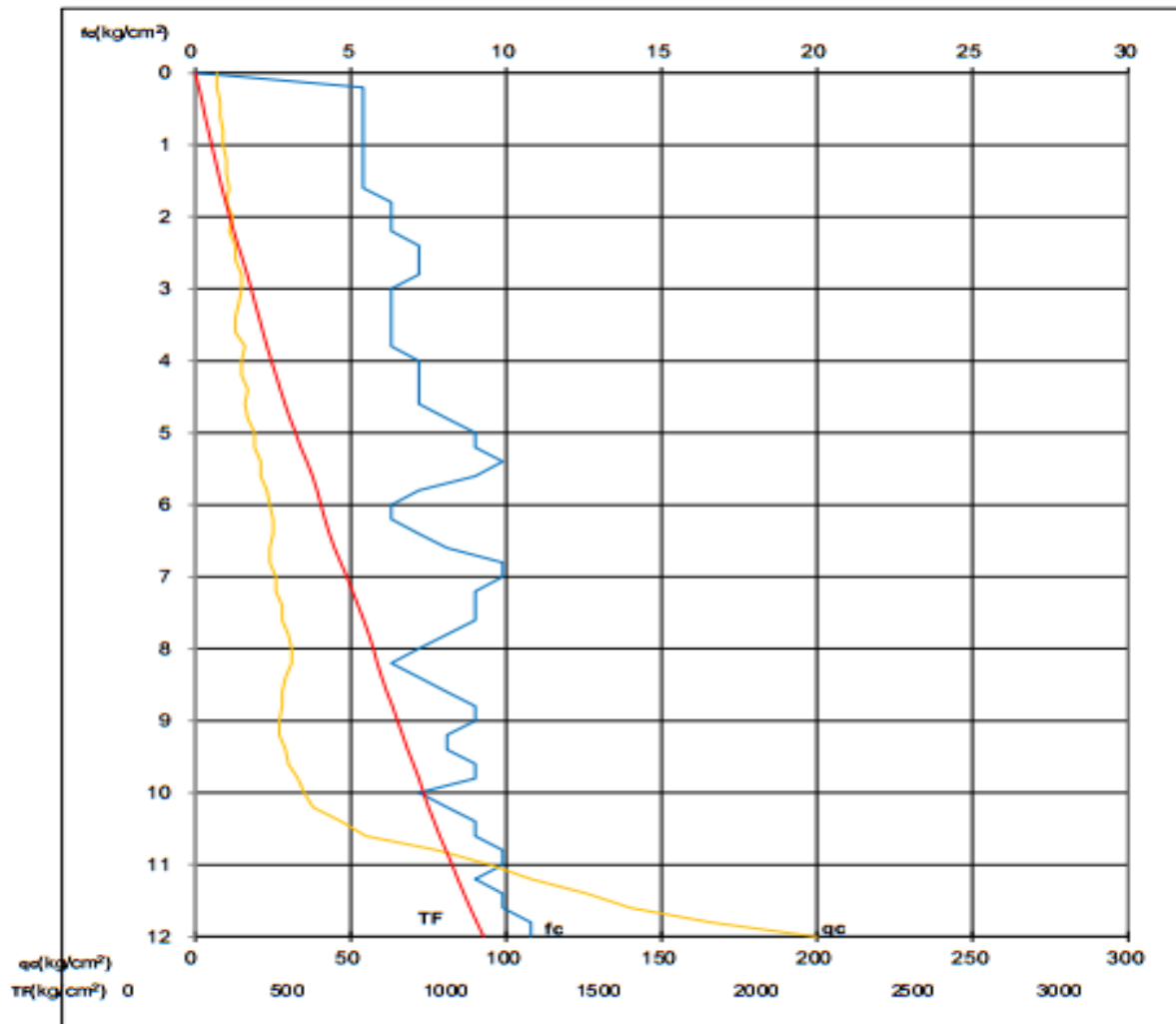
SOUNDING GRAPH

ASTM . D - 3441

PROYEK : Review Desain Sistem Sungai Jragung
0
LOKASI : P.177 (S..Jragung Lama) Ds. Tegowati Witan
HOLE NO. : SD - 12
COORDINATE : N = 07° 04' 54.7" E = 110° 33' 52.9"
ELEVATION : -
TANGGAL : 0-Jan-00

OPERATOR : Sigit Dwi
DIPERIKSA : Ir. Azhar Dermawan M
TYPE OF APPARATUS : 2.50 TON
MANOMETER 1: 0 - 60 KG/cm² MANOMETER 2 : 0 - 250 kg/cm²
TYPE OF CONE UNIT : BICONUS
LEMBAR : 1 DARI 2

DUCTH CONE PENETRATION TEST



LOG BORE HOLE

Project : Review Desain Sistem Sungai Jragung Location : Karang Paching (P.75) Bore Hole No. : BBH-01 Depth : 10,00 meter Elevation : + meter G.W.L : - 3,40 meter Start of date : 2015 Finish of date :	Coordinate : S = : E = Machine Bore Type : HOKIEN Master Bore : Herman Driller/Man by : Gagy Checked by : Sheet : 1 of 1
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Data	G.W.L (m)	Depth (m)	Lithology Unit	Symbol	Description	Elevation (m)	Sample	Core No. (N)	R.O.D (N)	Core Barrel	Casing	Permeability Test			SPT			Graphic	Remark	
												Method	Permeability Coeff (cm/sec)	Logans Value(Lu)	N1	N2	N3			N Value
					0,00 - 0,20 m Lempung lempayan, kering agak sedikit dengan tapan, banyak akar rumputnya, warna coklat						89 mm									
					0,20 - 5,00 m Lempung kekuningan konsistensi lunak sampai sedang, mudah diurai dengan menggunakan tangan, berwarna coklat					SINGLE										
					5,00 - 10,00 m Lempung kekuningan, mengandung pasir berbutir halus, konsistensi lunak sampai agak padat, mudah diurai dengan menggunakan tangan, abu-abu kekuningan															

☒ Contoh SPT

■ Contoh Tak Terganggu

CONSOLIDATION TEST (ASTM - D.2435 - 80)

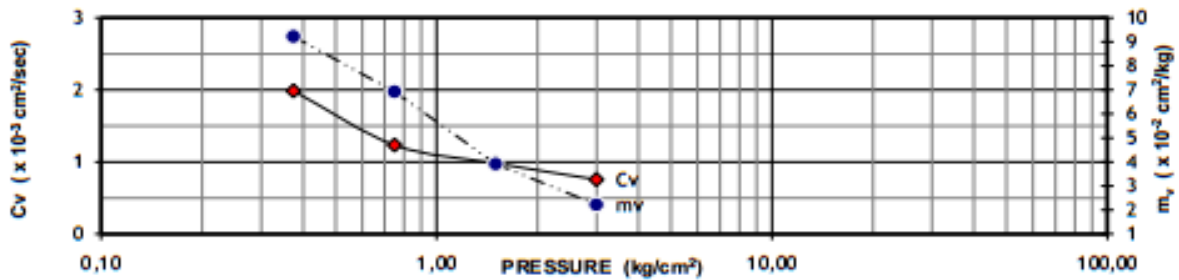
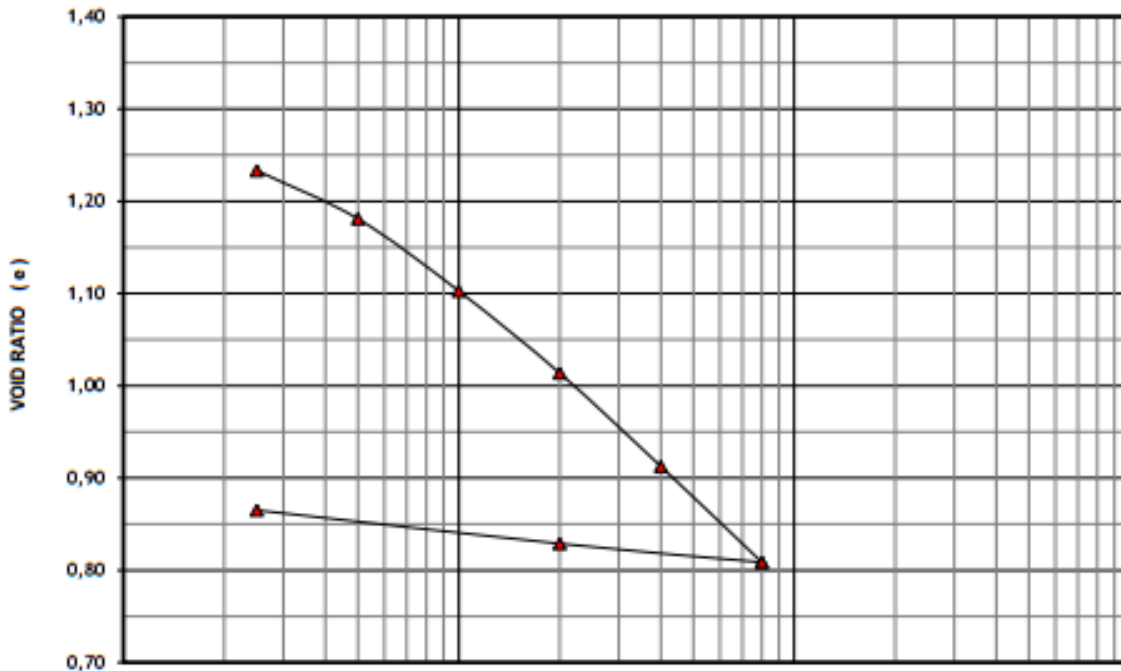
SAMPLE DESCRIPTION

Bor/Test Pit No. : BH - 01
 Depth : 4,50 - 5,00 meter
 Soil Type : Lempung pasir halus lempungan
 Colour : Coklat tua

SOIL PARAMETER

Specific Gravity, GS : 2,5431 gr/cm^3
 Moisture Content, w : 45,92 %
 Degree Saturation, Sr : 92,34 %
 Unit Weight, γ_u : 1,64 gr/cm^3

$$C_c = \frac{\Delta e}{\log P_2 - \log P_1} = \frac{0,104}{0,301} = 0,345$$



CONSOLIDATION TEST (ASTM - D.2435 - 80)

SAMPLE DESCRIPTION

Boer/Test Pit No. : BH - 09
 Depth : 3,00 - 3,40 meter
 Soil Type : Lempung lanau pasir halus
 Colour : Coklat

SOIL PARAMETER

Specific Gravity, G_s : 2,5984 gf/cm^3
 Moisture Content, w : 32,96 %
 Degree Saturation, S_r : 70,41 %
 Unit Weight, γ_u : 1,56 gf/cm^3

$$C_c = \frac{\Delta e}{\log P_2 - \log P_1} = \frac{0,127}{0,301} = 0,423$$

