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APPENDIX A
SPT DATA

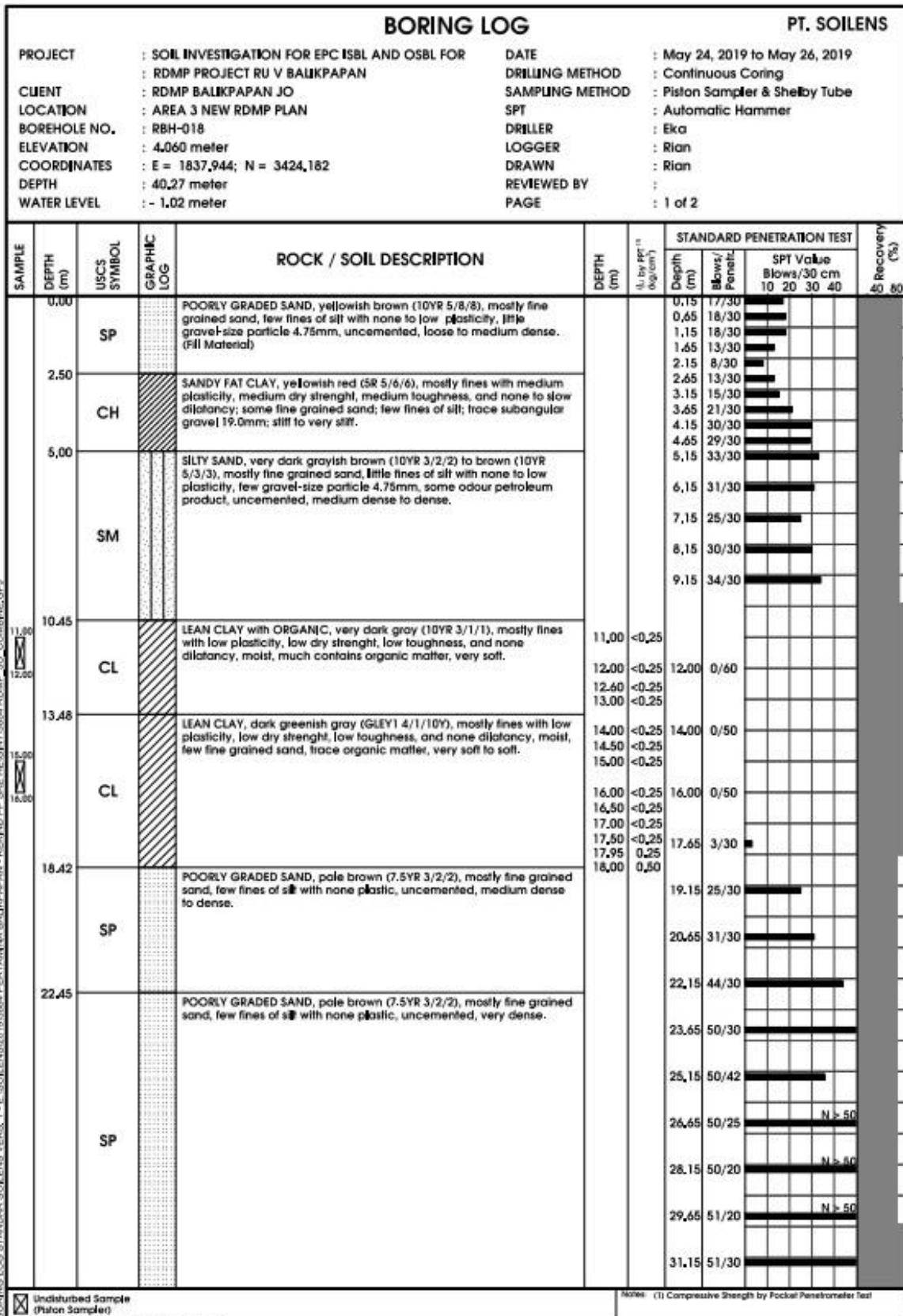


Figure A.1: SPT Data

BORING LOG						PT. SOILENS					
PROJECT : SOIL INVESTIGATION FOR EPC ISBL AND OSBL FOR			DATE : May 24, 2019 to May 26, 2019								
CLIENT : RDMP BALIKPAPAN JO			DRILLING METHOD : Continuous Coring								
LOCATION : AREA 3 NEW RDMP PLAN			SAMPLING METHOD : Piston Sampler & Shelby Tube								
BOREHOLE NO. : RBH-018			SPT : Automatic Hammer								
ELEVATION : 4.060 meter			DRILLER : Eka								
COORDINATES : E = 1837,944; N = 3424,182			LOGGER : Rian								
DEPTH : 40,27 meter			DRAWN : Rian								
WATER LEVEL : - 1.02 meter			REVIEWED BY :								
			PAGE : 2 of 2								
SAMPLE	DEPTH (m)	USCS SYMBOL	GRAPHIC LOG	ROCK / SOIL DESCRIPTION	DEPTH (m)	S. by PPT ¹⁸ (kg/cm)	STANDARD PENETRATION TEST				40 Recovery (%)
							Depth (m)	Blows/Penetr.	SPT Value Blows/30 cm 10 20 30 40		
	40.27	SP	[Dotted Pattern]	POORLY GRADED SAND, pale brown (7.5YR 3/2/2), mostly fine grained sand, few fines of s _{cl} with none plastic, uncemented, very dense. (Layer continued from previous page)							
					32.65	50/5					N > 50
					34.15	51/10					N > 50
					35.65	50/10					N > 50
					37.15	51/20					N > 50
					38.65	50/18					N > 50
					40.15	51/12					N > 50
				END OF THIS BORING CASING DOWN TO 37.00 METERS DEPTH.							

BORING LOG STANDAR SOILENS VERS. 1 - E:SOILENS20190384 PERTAMINA BALIKPAPAN - REV:ND PP SKE HEIGHT:084 RDMP_JD_COMBINE.GPJ

Undisturbed Sample (Piston Sampler)

NOTE: (1) Compressive Strength by Pocket Penetrometer Test

Figure A.2: SPT Data (Continuation)

APPENDIX B
BEARING CAPACITY CALCULATION

Depth (m)	L (m)	Soil Type (C/S)	Nspt corr	Qp (ton)	Qs (ton)	Qs cumm (ton)	Qu (ton)	Qall: Qu/2.5
0.15	0.15	sand	23	19.941	1.367	1.367	21.308	8.52
0.65	0.5	sand	24	18.811	4.300	5.667	24.478	9.79
1.15	0.5	sand	24	17.954	4.104	9.771	27.725	11.09
1.65	0.5	sand	17	16.473	3.765	13.536	30.009	12.00
2.15	0.5	clay	10	7.630	2.331	15.868	23.498	9.40
2.65	0.5	clay	16	12.016	3.672	19.539	31.556	12.62
3.15	0.5	clay	18	13.450	4.110	23.649	37.098	14.84
3.65	0.5	clay	24	18.282	5.586	29.235	47.516	19.01
4.15	0.5	clay	34	25.378	7.754	36.989	62.367	24.95
4.65	0.5	clay	32	23.858	7.290	44.279	68.137	27.25
5.15	0.5	sand	35	24.876	5.686	49.965	74.841	29.94
6.15	1	sand	31	23.173	10.593	60.558	83.731	33.49
7.15	1	sand	24	23.784	10.872	71.431	95.214	38.09
8.15	1	sand	28	26.064	11.915	83.346	109.410	43.76
9.15	1	sand	30	26.141	11.950	95.296	121.437	48.57
12	2.85	clay	0	0.000	0.000	95.296	95.296	38.12
14	2	clay	0	0.000	0.000	95.296	95.296	38.12
16	2	clay	0	0.000	0.000	95.296	95.296	38.12
17.65	1.65	clay	2	1.593	1.606	96.902	98.495	39.40
19.15	1.5	sand	17	10.899	7.474	104.376	115.275	46.11
20.65	1.5	sand	20	14.742	10.109	114.485	129.227	51.69
22.15	1.5	sand	27	19.959	13.686	128.17	148.130	59.25
23.65	1.5	sand	30	23.358	16.017	144.19	167.547	67.02
25.15	1.5	sand	29	23.545	16.145	160.33	183.878	73.55
26.65	1.5	sand	25	22.969	15.750	176.08	199.053	79.62
28.15	1.5	sand	24	22.306	15.295	191.38	213.685	85.47
29.65	1.5	sand	24	21.341	14.634	206.01	227.354	90.94
31.15	1.5	sand	23	20.232	13.873	219.89	240.118	96.05
32.65	1.5	sand	22	19.564	13.415	233.30	252.865	101.15
34.15	1.5	sand	21	18.990	13.022	246.32	265.313	106.13
35.65	1.5	sand	20	18.352	12.584	258.91	277.259	110.90
37.15	1.5	sand	20	17.800	12.206	271.11	288.913	115.57
38.65	1.5	sand	19	17.281	11.850	282.96	300.244	120.10
40.15	1.5	sand	19	16.988	11.649	294.61	311.599	124.64

Figure B.1: Bearing Capacity Calculation With Pile Diameter 40 cm

Depth (m)	L (m)	Soil Type (C/S)	Nspt corr	Qp (ton)	Qs (ton)	Qs cumm (ton)	Qu (ton)	Qall: Qu/2.5
0.15	0.15	sand	23	11.217	1.026	1.026	12.242	4.90
0.65	0.5	sand	24	10.581	3.225	4.250	14.832	5.93
1.15	0.5	sand	24	10.099	3.078	7.328	17.427	6.97
1.65	0.5	sand	17	9.266	2.824	10.152	19.418	7.77
2.15	0.5	clay	10	4.292	1.749	11.901	16.193	6.48
2.65	0.5	clay	16	6.759	2.754	14.654	21.414	8.57
3.15	0.5	clay	18	7.565	3.082	17.737	25.302	10.12
3.65	0.5	clay	24	10.283	4.190	21.926	32.210	12.88
4.15	0.5	clay	34	14.275	5.816	27.742	42.017	16.81
4.65	0.5	clay	32	13.420	5.467	33.209	46.629	18.65
5.15	0.5	sand	35	13.993	4.264	37.474	51.467	20.59
6.15	1	sand	31	13.035	7.945	45.419	58.454	23.38
7.15	1	sand	24	13.378	8.154	53.573	66.951	26.78
8.15	1	sand	28	14.661	8.936	62.509	77.171	30.87
9.15	1	sand	30	14.704	8.963	71.472	86.176	34.47
12	2.85	clay	0	0.000	0.000	71.472	71.472	28.59
14	2	clay	0	0.000	0.000	71.472	71.472	28.59
16	2	clay	0	0.000	0.000	71.472	71.472	28.59
17.65	1.65	clay	2	0.896	1.204	72.677	73.572	29.43
19.15	1.5	sand	17	6.131	5.605	78.282	84.413	33.77
20.65	1.5	sand	20	8.293	7.582	85.864	94.156	37.66
22.15	1.5	sand	27	11.227	10.265	96.13	107.355	42.94
23.65	1.5	sand	30	13.139	12.013	108.14	121.280	48.51
25.15	1.5	sand	29	13.244	12.109	120.25	133.494	53.40
26.65	1.5	sand	25	12.920	11.813	132.06	144.983	57.99
28.15	1.5	sand	24	12.547	11.472	143.53	156.081	62.43
29.65	1.5	sand	24	12.004	10.975	154.51	166.514	66.61
31.15	1.5	sand	23	11.380	10.405	164.91	176.295	70.52
32.65	1.5	sand	22	11.004	10.061	174.98	185.980	74.39
34.15	1.5	sand	21	10.682	9.766	184.74	195.424	78.17
35.65	1.5	sand	20	10.323	9.438	194.18	204.504	81.80
37.15	1.5	sand	20	10.013	9.154	203.33	213.347	85.34
38.65	1.5	sand	19	9.721	8.887	212.22	221.943	88.78
40.15	1.5	sand	19	9.556	8.736	220.96	230.514	92.21

Figure B.2: Bearing Capacity Calculation With Pile Diameter 30 cm