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APPENDIX A

**SELECTED CONE PENETRATION
TEST RESULTS FROM FIELD STUDY**

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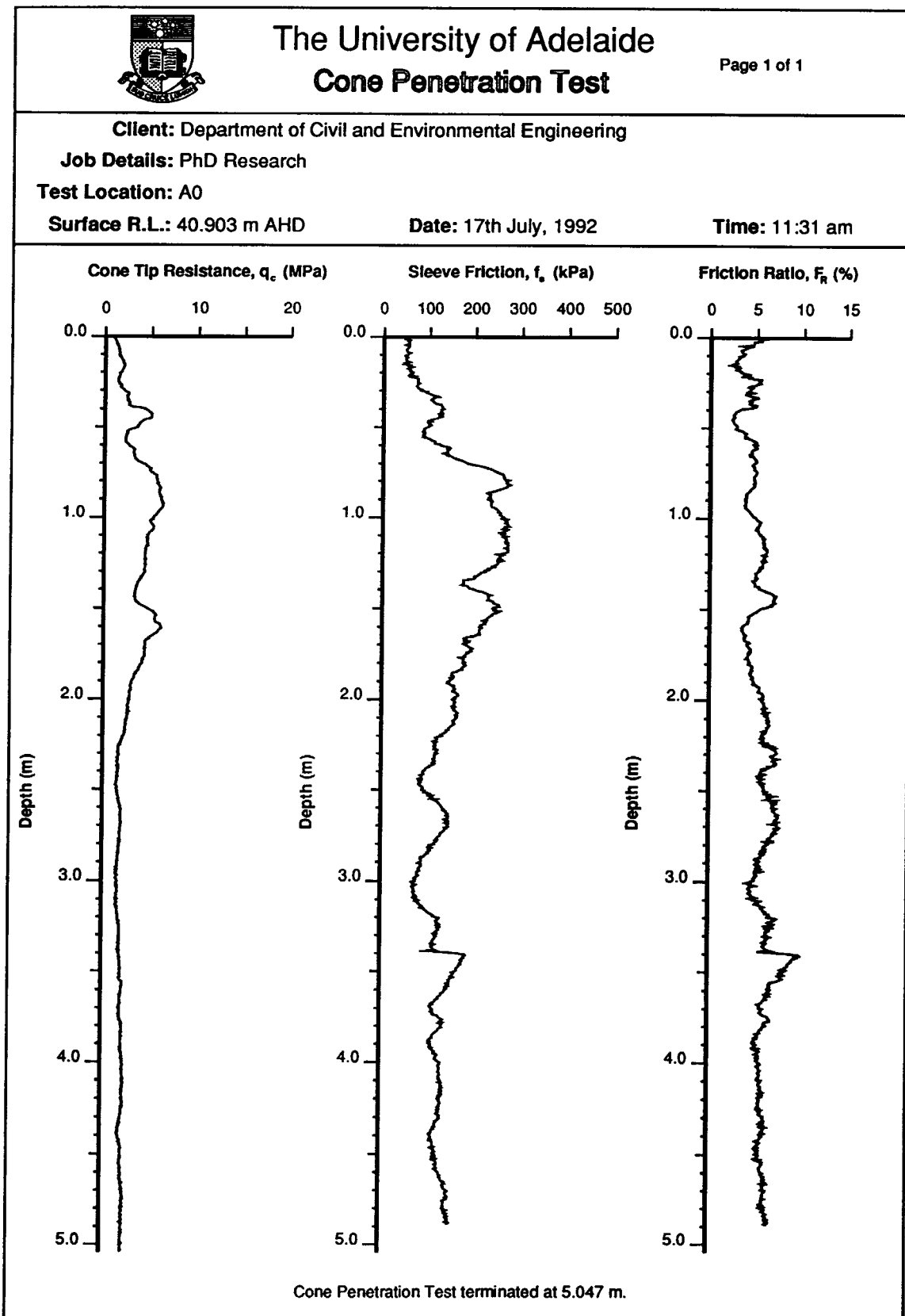


Figure A.1 Cone penetration test results from sounding A0.

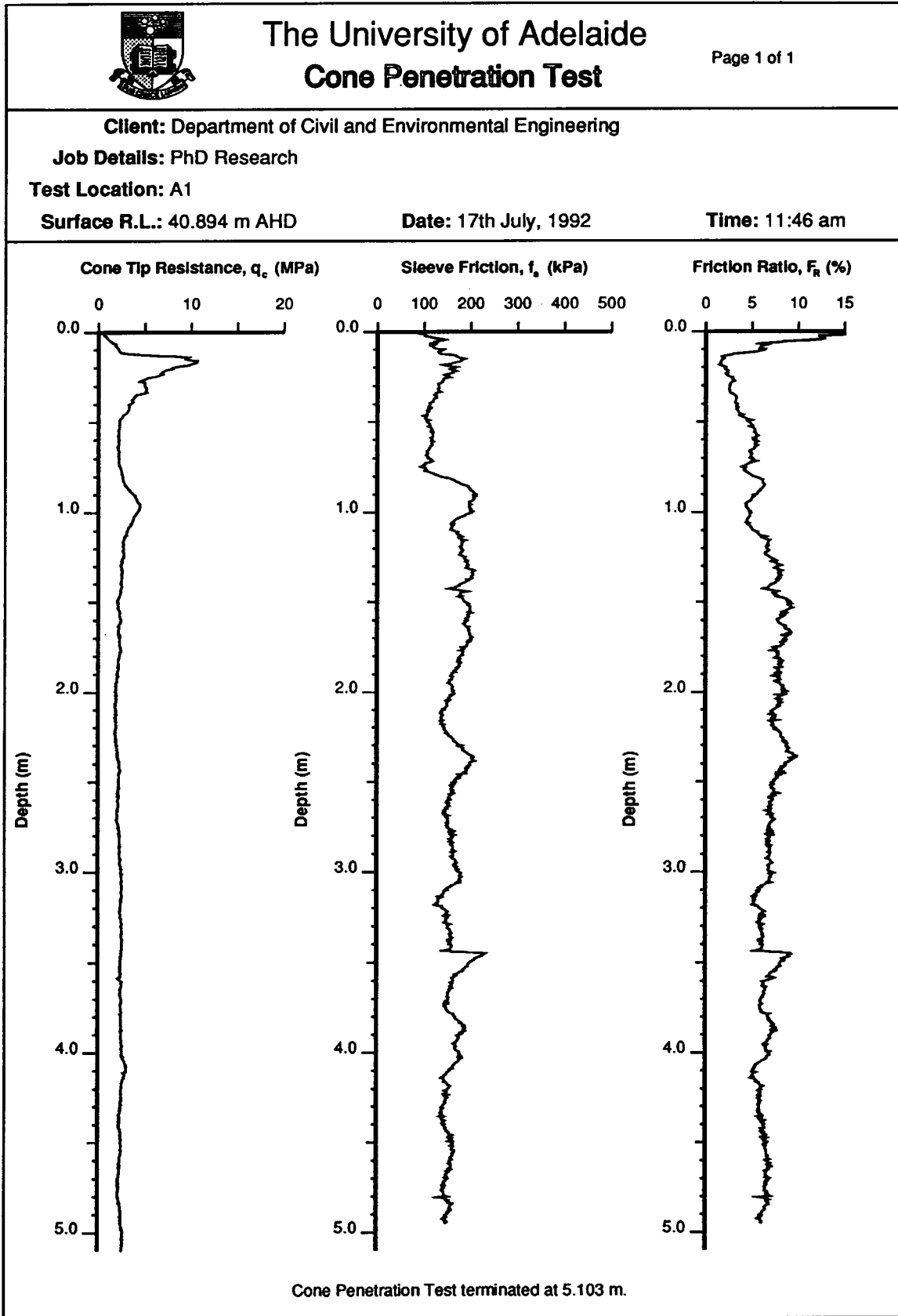


Figure A.2 Cone penetration test results from sounding A1.

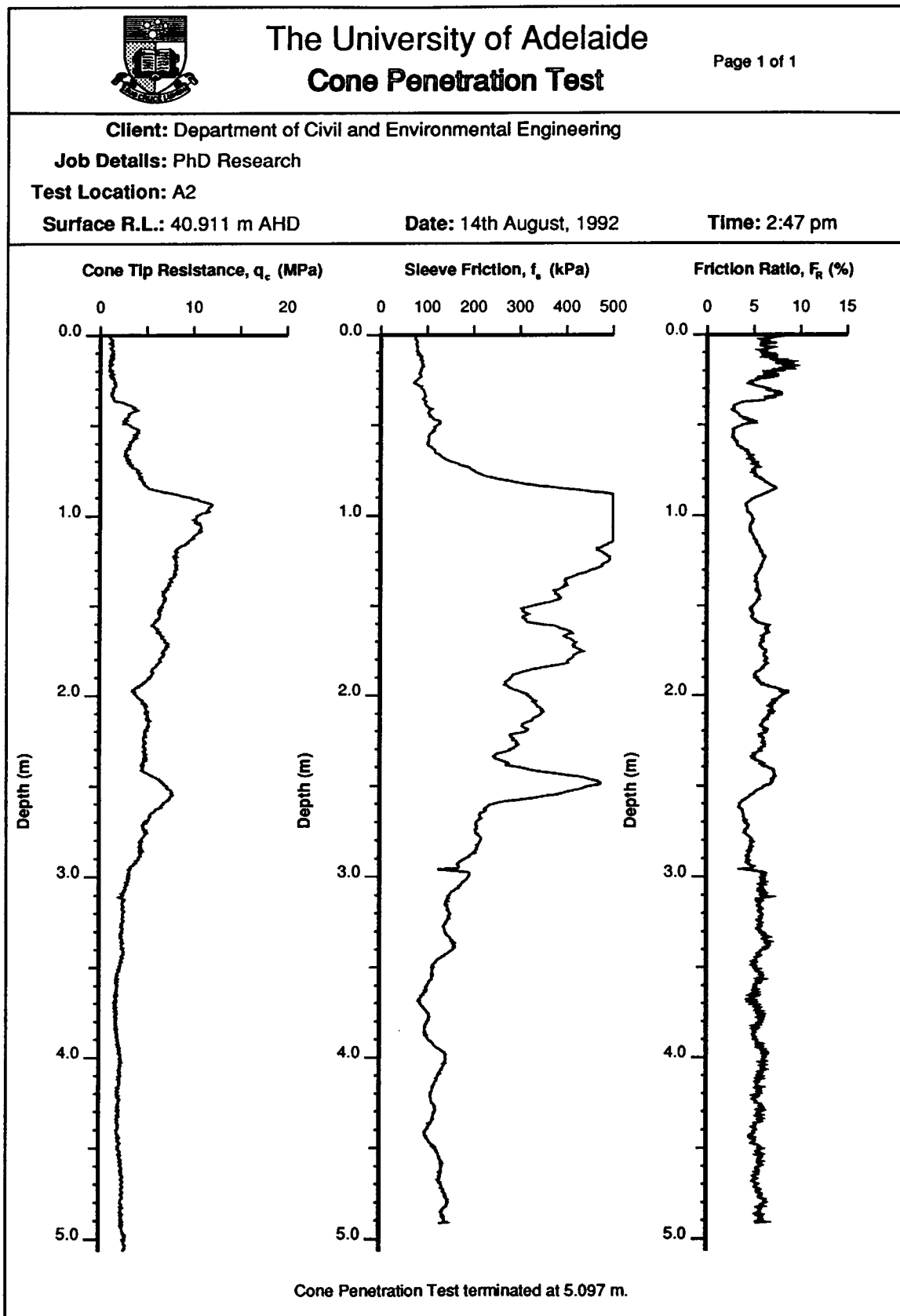


Figure A.3 Cone penetration test results from sounding A2.

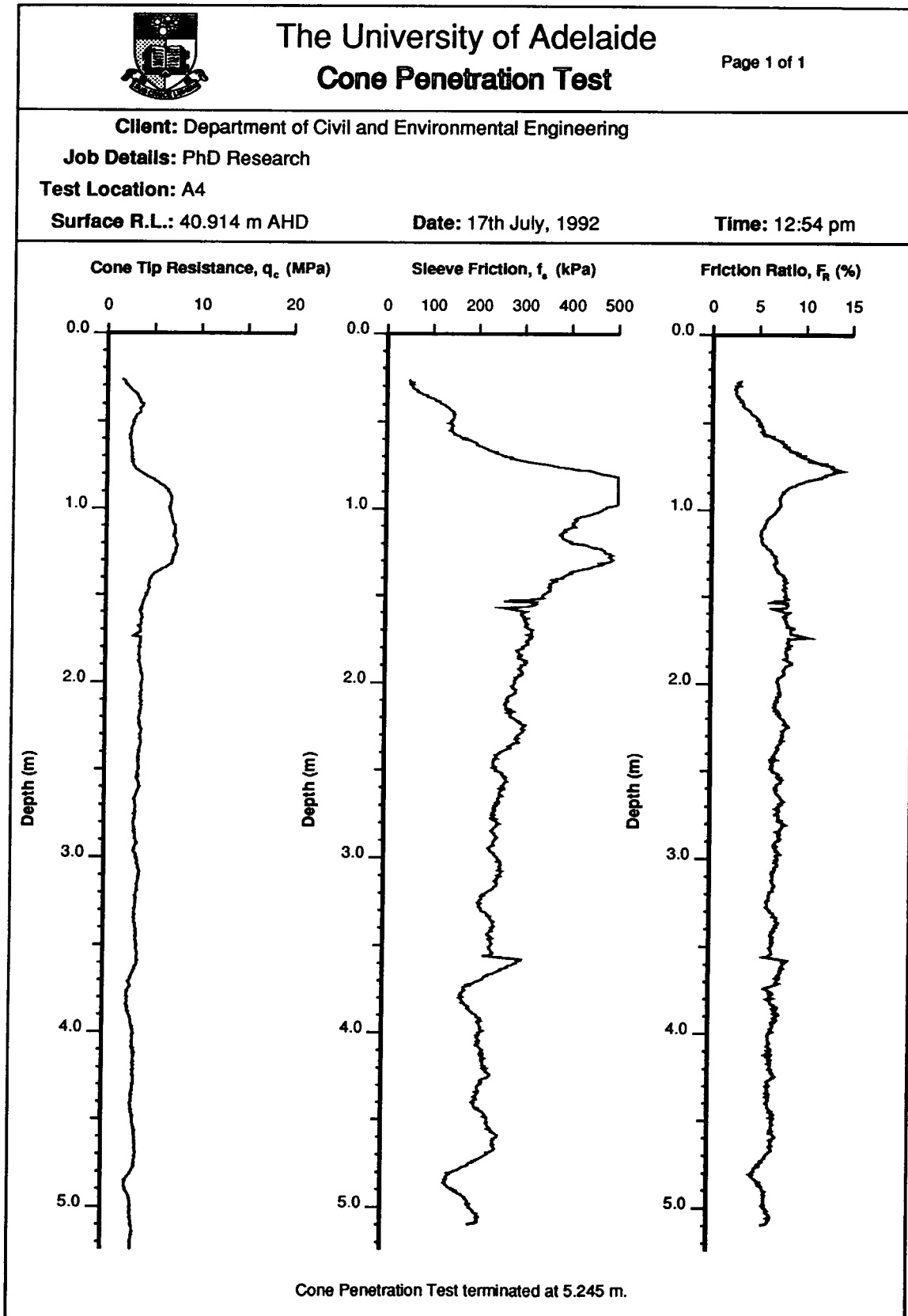


Figure A.4 Cone penetration test results from sounding A4.

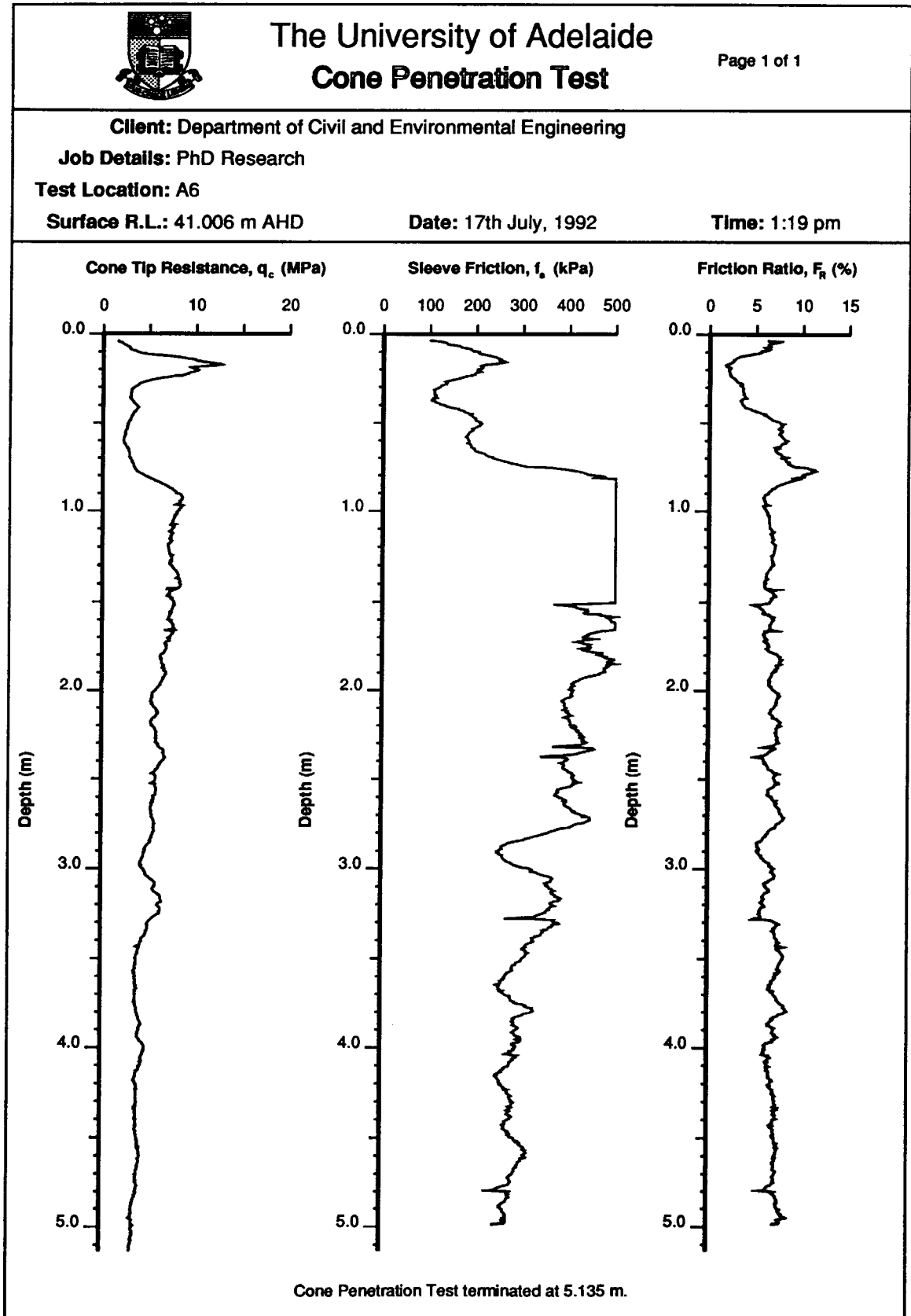


Figure A.5 Cone penetration test results from sounding A6.

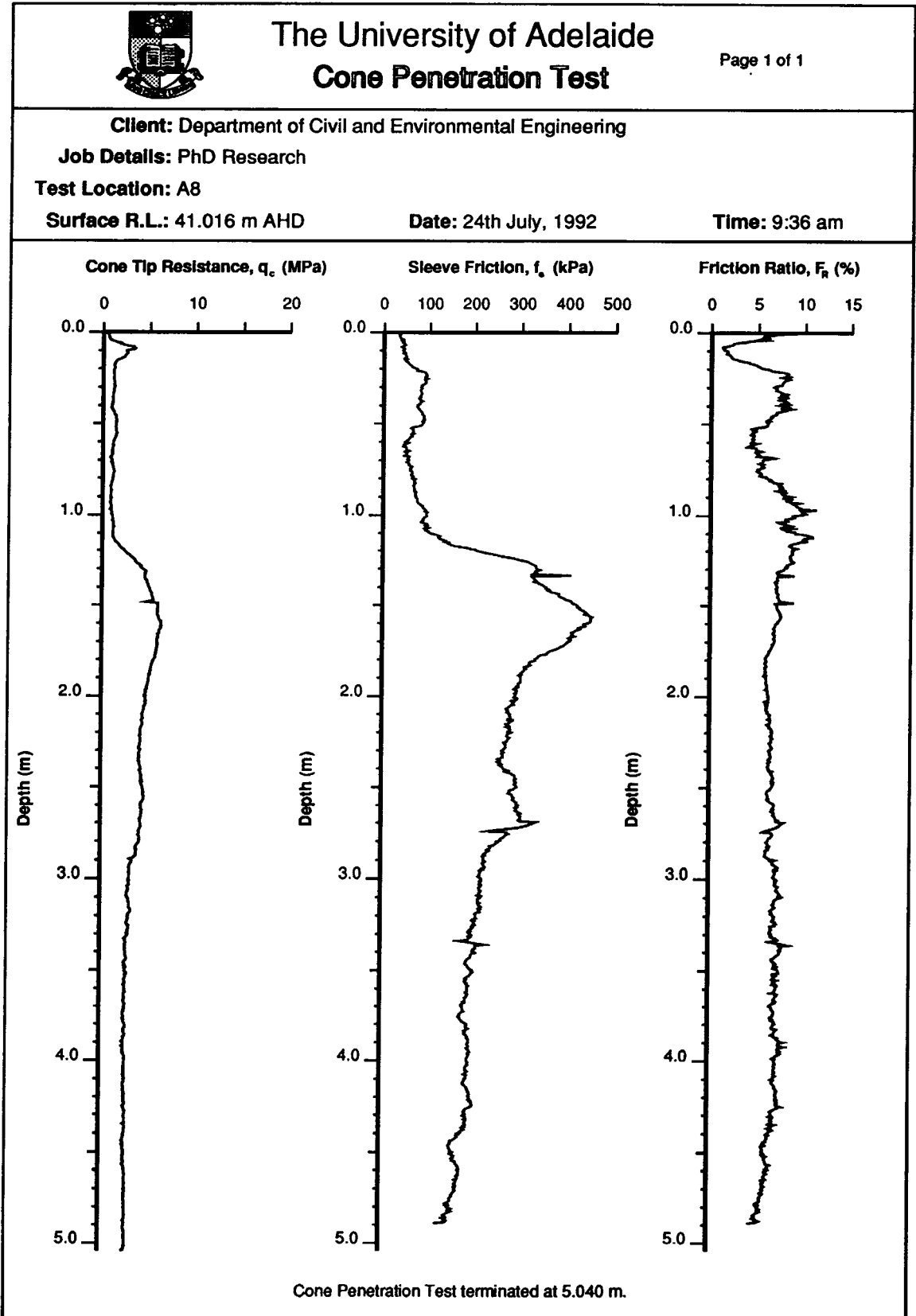


Figure A.6 Cone penetration test results from sounding A8.

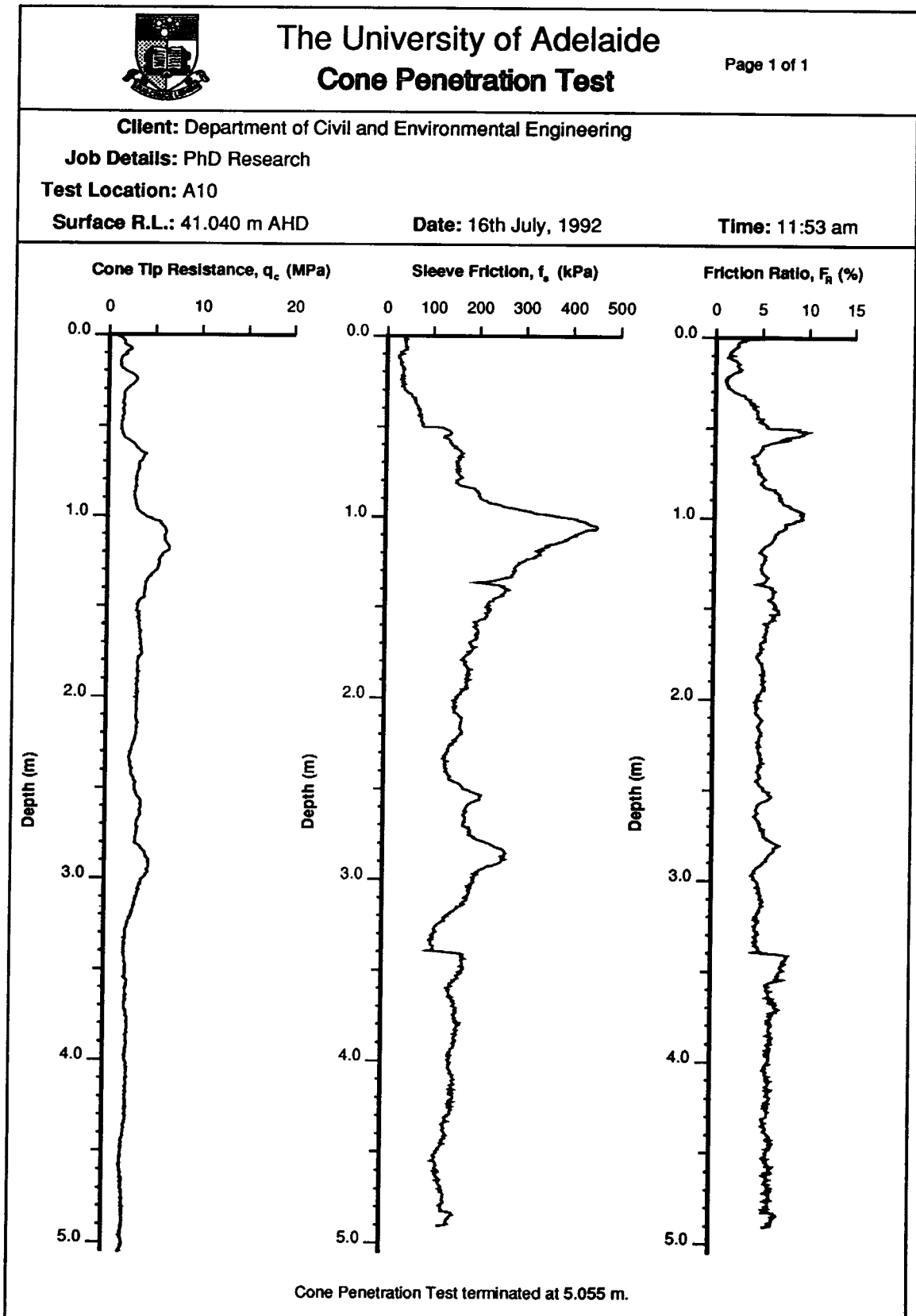


Figure A.7 Cone penetration test results from sounding A10.

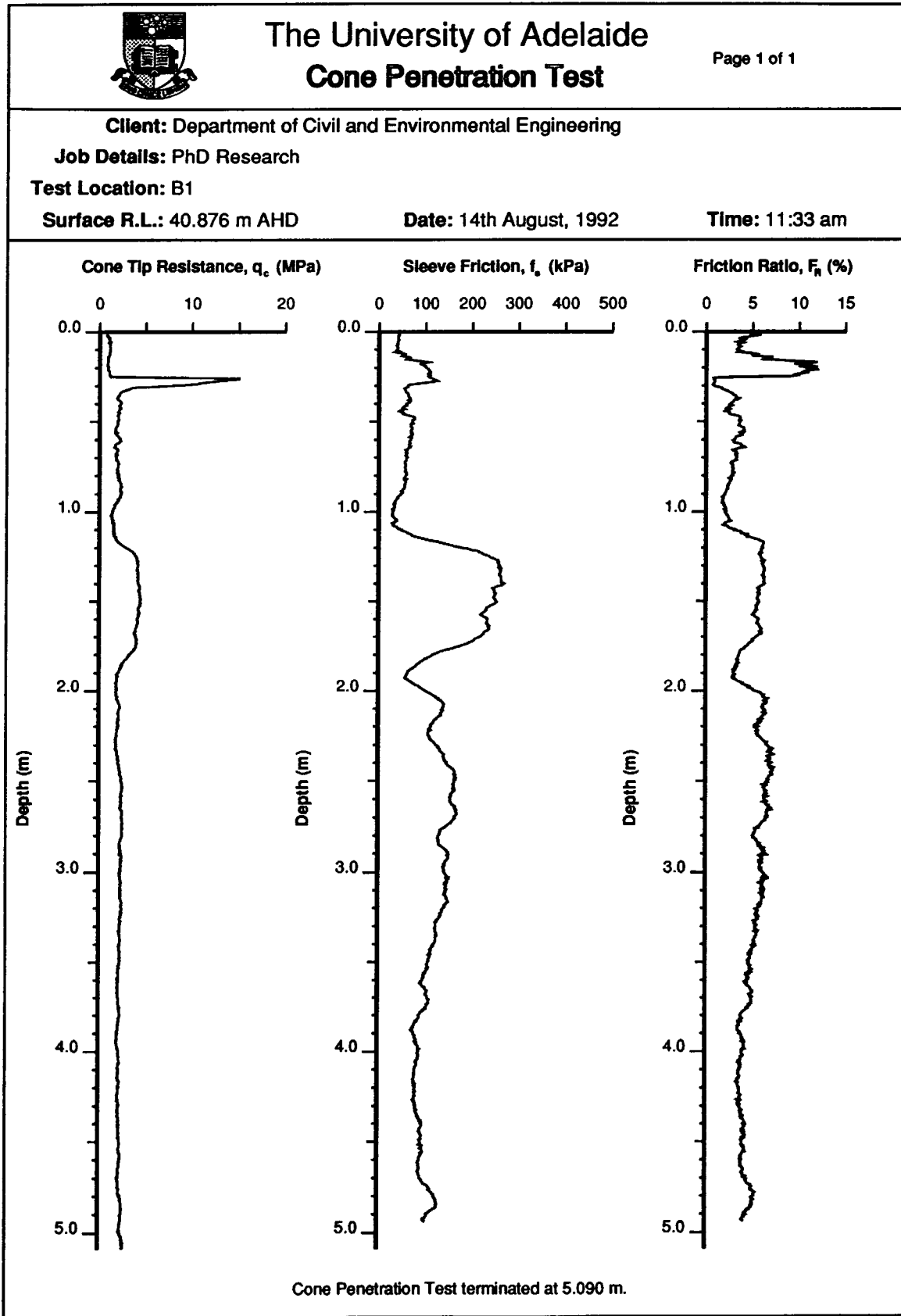


Figure A.8 Cone penetration test results from sounding B1.

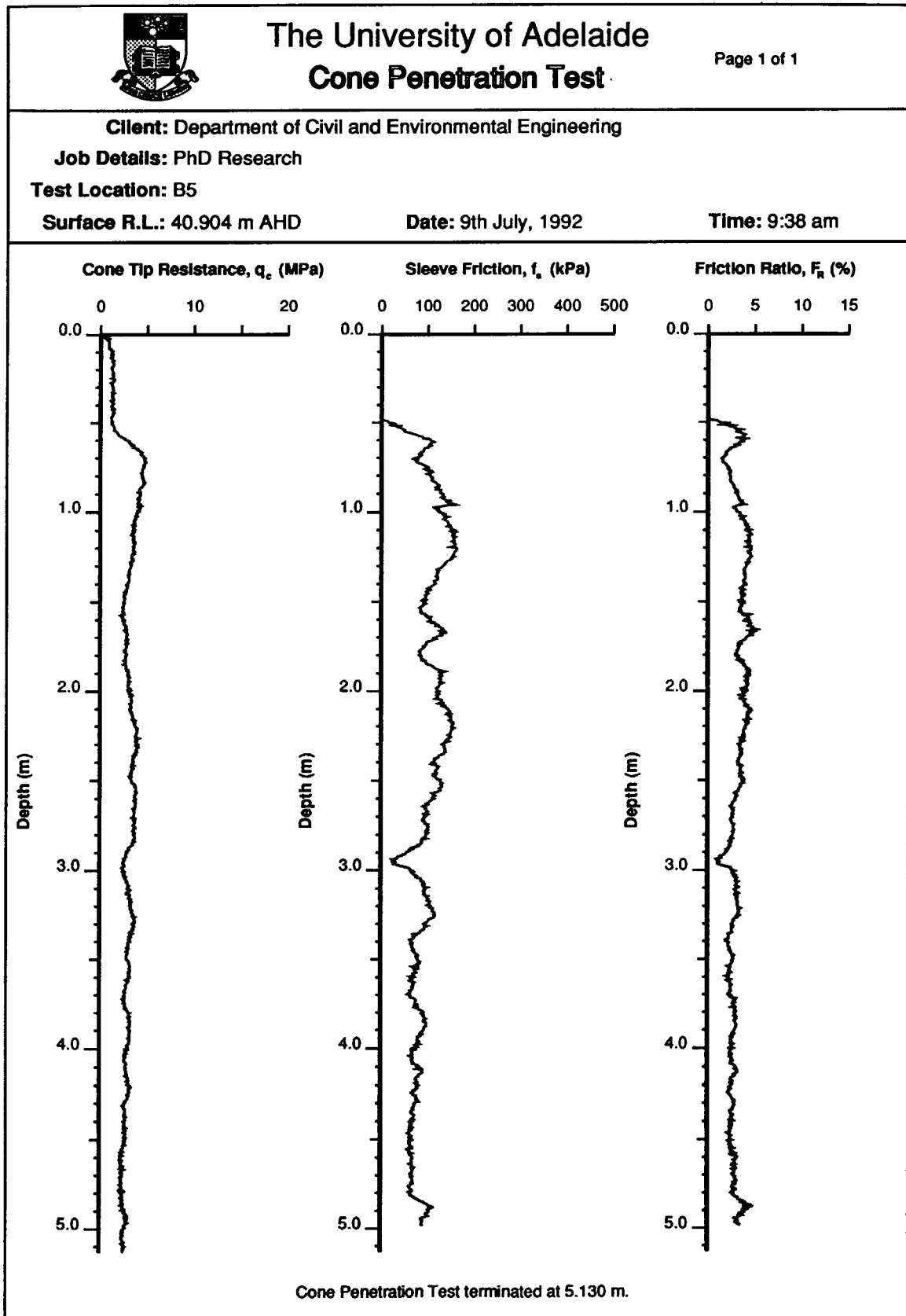


Figure A.9 Cone penetration test results from sounding B5.

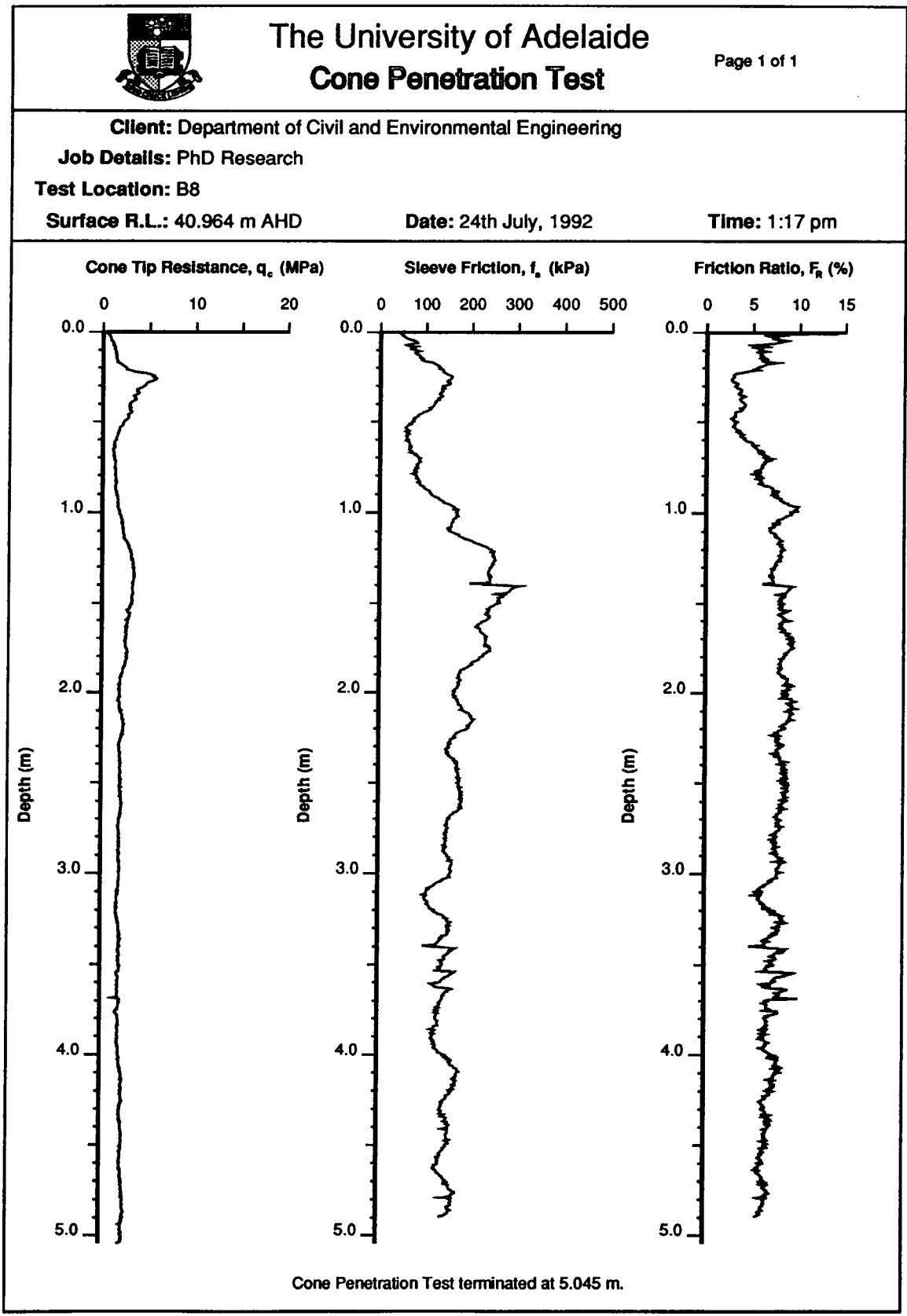


Figure A.10 Cone penetration test results from sounding B8.

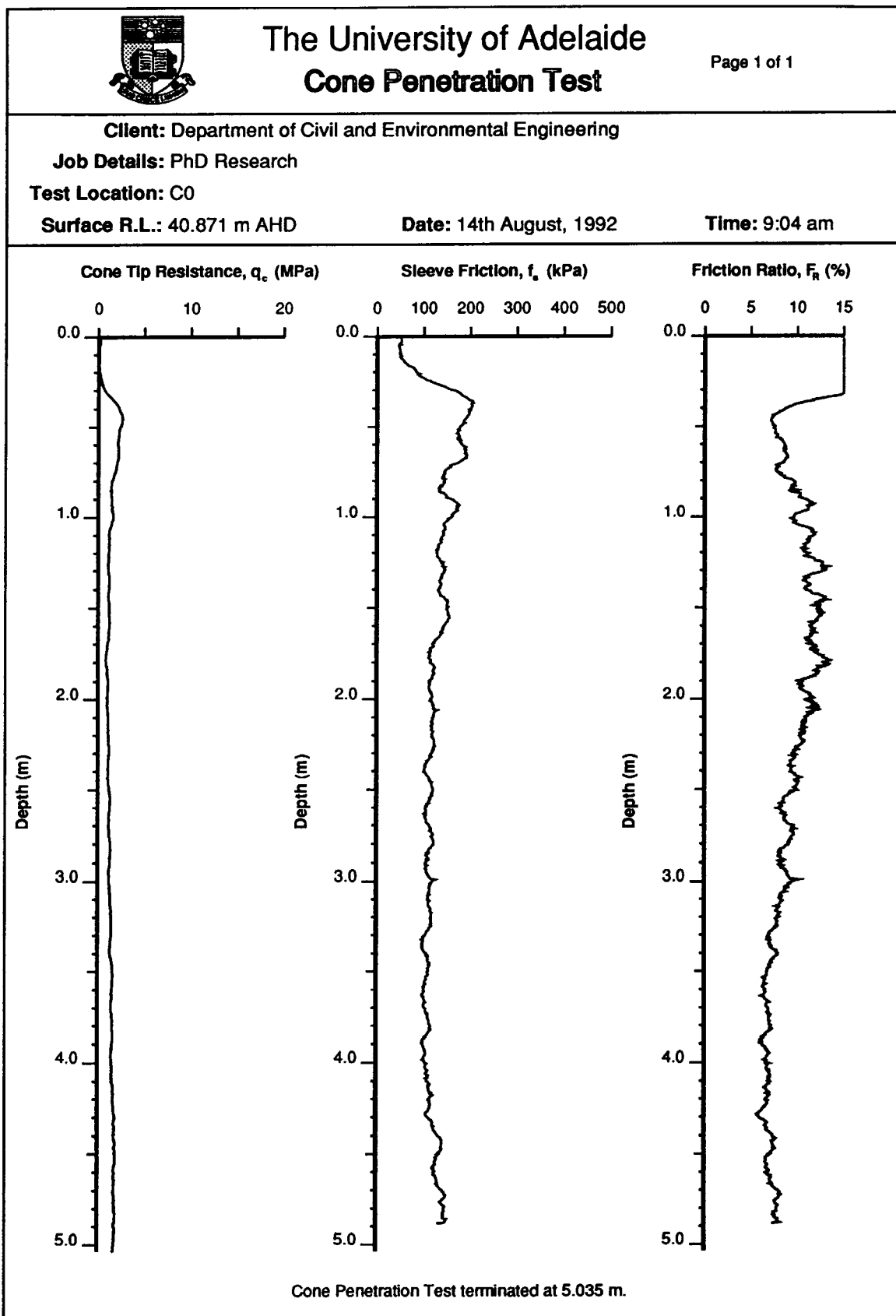


Figure A.11 Cone penetration test results from sounding C0.

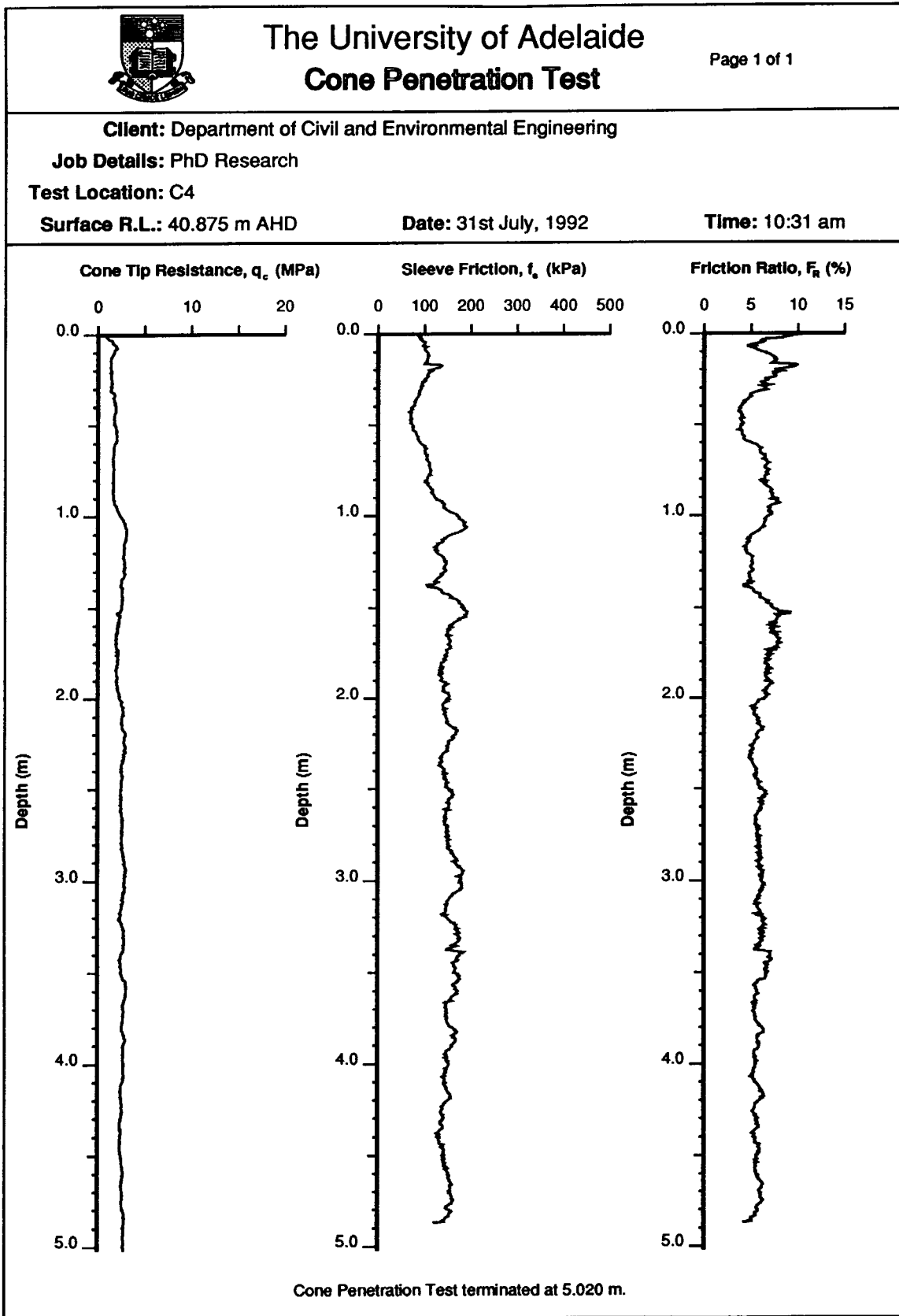


Figure A.12 Cone penetration test results from sounding C4.

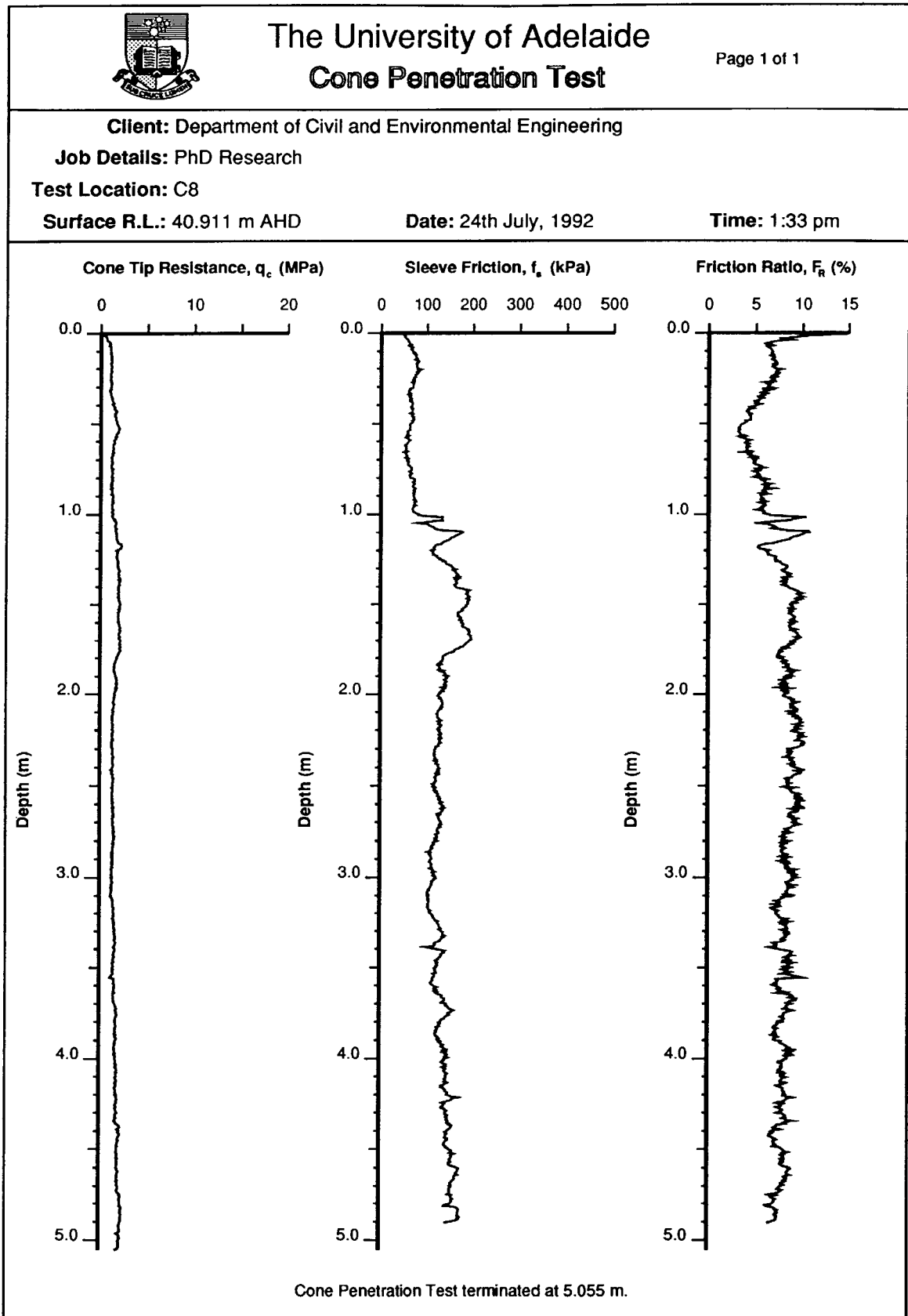


Figure A.13 Cone penetration test results from sounding C8.


		The University of Adelaide Cone Penetration Test		Page 1 of 13			
Client: Department of Civil and Environmental Engineering							
Job Details: PhD Research							
Test Location: C8							
Surface R.L.: 40.911 m AHD				Date: 24th July, 1992		Time: 1:33 pm	
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)
0.005	0.22	N/A	N/A	0.215	1.14	77.20	6.77
0.010	N/A	19.10	N/A	0.220	1.09	78.20	7.17
0.015	0.48	N/A	N/A	0.225	1.07	74.30	6.94
0.020	N/A	20.00	N/A	0.230	1.06	78.20	7.38
0.025	0.60	21.00	3.50	0.235	1.07	82.10	7.67
0.030	0.67	24.40	3.64	0.240	1.09	80.60	7.39
0.035	0.67	26.90	4.01	0.245	1.06	77.20	7.28
0.040	0.65	28.80	4.43	0.250	1.07	76.20	7.12
0.045	0.79	32.30	4.09	0.255	1.03	78.20	7.59
0.050	0.89	35.70	4.01	0.260	1.00	77.70	7.77
0.055	N/A	37.10	N/A	0.265	1.09	77.20	7.08
0.060	1.00	37.10	3.71	0.270	1.04	78.20	7.52
0.065	N/A	40.10	N/A	0.275	1.14	78.20	6.86
0.070	0.88	42.00	4.77	0.280	1.09	85.50	7.84
0.075	1.03	43.50	4.22	0.285	1.14	79.70	6.99
0.080	N/A	45.90	N/A	0.290	1.09	81.60	7.49
0.085	1.06	48.90	4.61	0.295	1.11	77.20	6.95
0.090	N/A	51.80	N/A	0.300	1.11	79.70	7.18
0.095	1.03	50.80	4.93	0.305	1.03	77.70	7.54
0.100	1.03	53.30	5.17	0.310	1.11	73.30	6.60
0.105	1.06	53.30	5.03	0.315	0.95	73.30	7.72
0.110	1.09	56.70	5.20	0.320	0.97	75.30	7.76
0.115	1.06	57.70	5.44	0.325	0.98	71.40	7.29
0.120	1.07	58.20	5.44	0.330	1.06	71.80	6.77
0.125	1.11	60.10	5.41	0.335	1.06	69.40	6.55
0.130	1.14	61.10	5.36	0.340	1.03	72.30	7.02
0.135	1.09	60.60	5.56	0.345	1.09	71.80	6.59
0.140	1.11	65.00	5.86	0.350	1.11	67.40	6.07
0.145	1.13	59.60	5.27	0.355	1.17	70.90	6.06
0.150	1.11	63.50	5.72	0.360	1.20	70.40	5.87
0.155	1.13	68.90	6.10	0.365	1.16	70.40	6.07
0.160	1.16	68.40	5.90	0.370	1.19	70.40	5.92
0.165	1.13	65.00	5.75	0.375	1.23	69.40	5.64
0.170	1.07	68.40	6.39	0.380	1.29	69.40	5.38
0.175	1.11	68.40	6.16	0.385	1.32	62.10	4.70
0.180	1.10	71.40	6.49	0.390	1.38	62.60	4.54
0.185	1.13	73.30	6.49	0.395	1.26	60.10	4.77
0.190	1.14	70.40	6.18	0.400	1.33	N/A	N/A
0.195	1.13	72.30	6.40	0.405	1.36	59.60	4.38
0.200	1.11	76.20	6.86	0.410	1.51	64.50	4.27
0.205	1.11	74.80	6.74	0.415	1.52	58.70	3.86
0.210	1.11	75.30	6.78	0.420	1.47	61.10	4.16

Figure A.14 Cone penetration test data from sounding C8 (1 of 13).


		The University of Adelaide Cone Penetration Test		Page 2 of 13			
Client: Department of Civil and Environmental Engineering Job Details: PhD Research Test Location: C8 Surface R.L.: 40.911 m AHD Date: 24th July, 1992 Time: 1:33 pm							
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)
0.425	1.60	64.50	4.03	0.635	1.35	55.70	4.13
0.430	1.61	61.10	3.80	0.640	1.33	61.10	4.59
0.435	1.69	63.50	3.76	0.645	1.35	56.20	4.16
0.440	1.66	66.00	3.98	0.650	1.32	58.20	4.41
0.445	1.51	63.50	4.21	0.655	1.30	54.30	4.18
0.450	1.54	66.00	4.29	0.660	1.38	59.10	4.28
0.455	1.54	63.50	4.12	0.665	1.23	60.10	4.89
0.460	1.50	67.40	4.49	0.670	1.23	63.50	5.16
0.465	1.60	68.40	4.28	0.675	1.30	59.60	4.58
0.470	1.58	68.40	4.33	0.680	1.25	59.10	4.73
0.475	N/A	67.40	N/A	0.685	1.14	56.70	4.97
0.480	1.60	67.40	4.21	0.690	1.17	56.20	4.80
0.485	1.72	64.00	3.72	0.695	1.19	51.80	4.35
0.490	1.73	65.00	3.76	0.700	1.20	51.80	4.32
0.495	1.77	69.40	3.92	0.705	1.14	54.70	4.80
0.500	1.73	66.50	3.84	0.710	1.25	53.80	4.30
0.505	1.80	67.90	3.77	0.715	1.22	54.70	4.48
0.510	1.85	67.90	3.67	0.720	1.23	53.80	4.37
0.515	1.88	68.40	3.64	0.725	1.19	52.80	4.44
0.520	1.92	63.50	3.31	0.730	1.14	57.20	5.02
0.525	1.98	69.40	3.51	0.735	1.14	50.30	4.41
0.530	1.91	66.00	3.46	0.740	1.17	55.20	4.72
0.535	1.91	66.00	3.46	0.745	1.13	54.30	4.81
0.540	1.88	70.90	3.77	0.750	1.28	54.30	4.24
0.545	1.85	69.40	3.75	0.755	1.20	57.20	4.77
0.550	1.83	72.30	3.95	0.760	1.19	57.20	4.81
0.555	1.72	70.90	4.12	0.765	1.26	52.80	4.19
0.560	1.64	67.00	4.09	0.770	1.25	60.10	4.81
0.565	1.64	69.40	4.23	0.775	1.30	57.20	4.40
0.570	1.70	68.40	4.02	0.780	1.22	56.20	4.61
0.575	1.54	64.50	4.19	0.785	1.22	60.10	4.93
0.580	1.60	62.10	3.88	0.790	1.17	59.60	5.09
0.585	1.60	61.60	3.85	0.795	1.30	58.20	4.48
0.590	1.51	62.60	4.15	0.800	1.22	57.70	4.73
0.595	1.42	63.50	4.47	0.805	1.20	59.10	4.93
0.600	1.44	62.10	4.31	0.810	1.20	63.50	5.29
0.605	1.50	62.10	4.14	0.815	1.29	64.50	5.00
0.610	1.48	63.00	4.26	0.820	1.23	66.50	5.41
0.615	1.33	58.20	4.38	0.825	1.17	66.00	5.64
0.620	1.30	57.20	4.40	0.830	1.19	66.50	5.59
0.625	1.29	59.10	4.58	0.835	1.11	65.50	5.90
0.630	1.28	56.70	4.43	0.840	1.20	60.60	5.05

Figure A.15 Cone penetration test data from sounding C8 (2 of 13).


		The University of Adelaide		Page 3 of 13			
Cone Penetration Test							
Client: Department of Civil and Environmental Engineering							
Job Details: PhD Research							
Test Location: C8							
Surface R.L.: 40.911 m AHD				Date: 24th July, 1992		Time: 1:33 pm	
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_r (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_r (%)
0.845	1.11	64.00	5.77	1.055	1.63	70.40	4.32
0.850	1.16	67.40	5.81	1.060	1.58	70.40	4.46
0.855	1.23	65.50	5.33	1.065	1.54	72.80	4.73
0.860	1.11	62.10	5.59	1.070	1.57	77.20	4.92
0.865	1.23	62.60	5.09	1.075	1.61	82.60	5.13
0.870	1.23	62.60	5.09	1.080	1.72	81.60	4.74
0.875	1.23	64.00	5.20	1.085	1.61	105.60	6.56
0.880	1.19	69.90	5.87	1.090	1.61	133.90	8.32
0.885	1.26	74.30	5.90	1.095	1.63	N/A	N/A
0.890	1.17	73.80	6.31	1.100	1.66	132.90	8.01
0.895	1.28	73.30	5.73	1.105	1.72	N/A	N/A
0.900	1.29	68.90	5.34	1.110	1.69	133.90	7.92
0.905	1.29	70.90	5.50	1.115	1.70	112.90	6.64
0.910	1.28	72.80	5.69	1.120	1.70	N/A	N/A
0.915	1.26	70.90	5.63	1.125	1.77	80.60	4.55
0.920	1.29	69.40	5.38	1.130	1.74	100.70	5.79
0.925	1.33	68.90	5.18	1.135	1.76	102.60	5.83
0.930	1.26	72.30	5.74	1.140	1.73	106.50	6.16
0.935	1.33	75.30	5.66	1.145	1.82	110.50	6.07
0.940	1.23	73.30	5.96	1.150	1.83	116.30	6.36
0.945	1.22	70.90	5.81	1.155	1.85	117.30	6.34
0.950	1.25	73.80	5.90	1.160	1.92	122.70	6.39
0.955	1.25	72.80	5.82	1.165	2.20	135.40	6.15
0.960	1.23	70.40	5.72	1.170	N/A	174.00	N/A
0.965	1.26	72.30	5.74	1.175	2.23	178.40	8.00
0.970	1.23	70.40	5.72	1.180	N/A	175.00	N/A
0.975	1.35	71.40	5.29	1.185	2.20	171.10	7.78
0.980	1.23	71.80	5.84	1.190	2.14	165.70	7.74
0.985	1.19	72.30	6.08	1.195	N/A	162.30	N/A
0.990	1.25	72.80	5.82	1.200	1.72	159.30	9.26
0.995	1.33	71.40	5.37	1.205	1.85	153.00	8.27
1.000	1.29	76.20	5.91	1.210	1.83	151.00	8.25
1.005	1.26	76.70	6.09	1.215	1.80	148.60	8.26
1.010	1.25	72.30	5.78	1.220	1.80	145.70	8.09
1.015	1.29	71.80	5.57	1.225	1.80	138.80	7.71
1.020	1.35	72.30	5.36	1.230	1.77	N/A	N/A
1.025	1.48	75.80	5.12	1.235	1.69	132.90	7.86
1.030	1.45	71.40	4.92	1.240	1.74	132.00	7.59
1.035	1.54	71.40	4.64	1.245	1.82	120.70	6.63
1.040	1.58	69.40	4.39	1.250	1.82	118.30	6.50
1.045	1.64	69.40	4.23	1.255	1.86	118.30	6.36
1.050	1.66	68.90	4.15	1.260	1.88	115.30	6.13

Figure A.16 Cone penetration test data from sounding C8 (3 of 13).


		The University of Adelaide Cone Penetration Test		Page 4 of 13			
Client: Department of Civil and Environmental Engineering							
Job Details: PhD Research							
Test Location: C8							
Surface R.L.: 40.911 m AHD				Date: 24th July, 1992		Time: 1:33 pm	
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)
1.265	1.86	115.80	6.23	1.475	2.02	163.20	8.08
1.270	1.88	116.80	6.21	1.480	2.02	165.20	8.18
1.275	1.83	110.00	6.01	1.485	2.08	N/A	N/A
1.280	1.83	113.90	6.22	1.490	2.04	N/A	N/A
1.285	1.83	114.40	6.25	1.495	2.11	192.60	9.13
1.290	1.83	112.90	6.17	1.500	2.16	188.70	8.74
1.295	1.89	114.90	6.08	1.505	2.11	187.20	8.87
1.300	1.91	113.90	5.96	1.510	2.07	188.70	9.12
1.305	N/A	121.70	N/A	1.515	2.04	185.70	9.10
1.310	2.02	121.20	6.00	1.520	2.08	188.70	9.07
1.315	2.05	122.70	5.99	1.525	1.96	188.70	9.63
1.320	2.02	129.00	6.39	1.530	2.07	192.60	9.30
1.325	1.92	128.10	6.67	1.535	2.05	189.60	9.25
1.330	1.91	135.90	7.12	1.540	1.94	187.20	9.65
1.335	2.01	134.90	6.71	1.545	1.91	191.60	10.03
1.340	1.96	141.30	7.21	1.550	1.95	191.60	9.83
1.345	1.96	N/A	N/A	1.555	1.91	188.70	9.88
1.350	2.07	142.20	6.87	1.560	N/A	187.70	N/A
1.355	2.08	147.10	7.07	1.565	N/A	189.60	N/A
1.360	1.96	153.00	7.81	1.570	1.88	189.60	10.09
1.365	2.08	154.00	7.40	1.575	1.91	188.20	9.85
1.370	2.10	156.40	7.45	1.580	1.94	185.20	9.55
1.375	1.99	157.40	7.91	1.585	1.95	185.70	9.52
1.380	2.01	163.20	8.12	1.590	1.94	183.30	9.45
1.385	1.99	156.90	7.88	1.595	1.89	180.40	9.54
1.390	2.04	161.30	7.91	1.600	2.01	177.40	8.83
1.395	1.96	163.20	8.33	1.605	1.99	179.40	9.02
1.400	1.92	163.20	8.50	1.610	2.02	175.50	8.69
1.405	1.94	166.20	8.57	1.615	2.07	173.00	8.36
1.410	1.96	168.10	8.58	1.620	2.07	167.60	8.10
1.415	1.92	165.20	8.60	1.625	2.08	167.20	8.04
1.420	N/A	170.10	N/A	1.630	2.14	167.60	7.83
1.425	1.98	163.20	8.24	1.635	2.08	168.60	8.11
1.430	1.94	168.60	8.69	1.640	2.04	168.10	8.24
1.435	1.89	162.30	8.59	1.645	2.14	173.00	8.08
1.440	1.96	165.20	8.43	1.650	2.11	174.50	8.27
1.445	1.96	163.20	8.33	1.655	2.08	174.00	8.37
1.450	1.94	165.20	8.52	1.660	2.02	171.10	8.47
1.455	1.91	165.70	8.68	1.665	2.01	177.40	8.83
1.460	2.02	163.20	8.08	1.670	2.02	175.50	8.69
1.465	2.02	160.30	7.94	1.675	2.04	175.00	8.58
1.470	1.95	160.80	8.25	1.680	2.11	180.40	8.55

Figure A.17 Cone penetration test data from sounding C8 (4 of 13).


		The University of Adelaide Cone Penetration Test		Page 5 of 13			
Client: Department of Civil and Environmental Engineering							
Job Details: PhD Research							
Test Location: C8							
Surface R.L.: 40.911 m AHD				Date: 24th July, 1992		Time: 1:33 pm	
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)
1.685	2.01	179.90	8.95	1.895	1.64	131.00	7.99
1.690	2.01	178.40	8.88	1.900	1.66	132.00	7.95
1.695	2.11	177.40	8.41	1.905	1.74	126.60	7.28
1.700	2.14	178.40	8.34	1.910	1.69	131.50	7.78
1.705	2.17	183.80	8.47	1.915	1.74	124.60	7.16
1.710	2.08	186.70	8.98	1.920	1.79	128.10	7.16
1.715	2.11	191.10	9.06	1.925	1.74	127.60	7.33
1.720	2.14	189.60	8.86	1.930	1.76	129.00	7.33
1.725	2.07	193.10	9.33	1.935	1.79	130.00	7.26
1.730	2.11	192.60	9.13	1.940	1.72	127.10	7.39
1.735	2.16	191.10	8.85	1.945	1.80	136.90	7.61
1.740	2.16	190.10	8.80	1.950	1.74	132.50	7.61
1.745	2.04	192.60	9.44	1.955	1.77	138.80	7.84
1.750	2.08	196.50	9.45	1.960	1.72	141.30	8.22
1.755	2.13	195.00	9.15	1.965	1.79	141.70	7.92
1.760	2.14	196.00	9.16	1.970	1.63	138.80	8.52
1.765	2.05	N/A	N/A	1.975	1.74	147.10	8.45
1.770	2.02	197.50	9.78	1.980	1.72	143.20	8.33
1.775	1.94	193.50	9.97	1.985	1.63	145.20	8.91
1.780	1.92	190.60	9.93	1.990	1.60	143.20	8.95
1.785	1.88	189.60	10.09	1.995	1.55	138.80	8.95
1.790	1.85	186.20	10.06	2.000	1.55	142.20	9.17
1.795	1.73	184.30	10.65	2.005	1.58	144.20	9.13
1.800	1.80	183.30	10.18	2.010	1.57	141.30	9.00
1.805	1.73	180.80	10.45	2.015	1.57	142.20	9.06
1.810	1.69	179.90	10.64	2.020	1.51	139.30	9.23
1.815	1.64	173.00	10.55	2.025	1.51	141.70	9.38
1.820	1.66	171.10	10.31	2.030	1.48	140.30	9.48
1.825	1.61	164.70	10.23	2.035	1.52	142.20	9.36
1.830	1.57	161.30	10.27	2.040	1.51	134.40	8.90
1.835	1.54	160.30	10.41	2.045	1.42	139.80	9.85
1.840	N/A	159.30	N/A	2.050	1.47	137.30	9.34
1.845	1.51	150.00	9.93	2.055	1.54	133.90	8.69
1.850	1.57	145.70	9.28	2.060	1.51	136.90	9.07
1.855	1.51	141.30	9.36	2.065	1.51	130.00	8.61
1.860	1.48	141.30	9.55	2.070	1.48	130.50	8.82
1.865	1.48	135.90	9.18	2.075	1.47	126.60	8.61
1.870	1.47	135.90	9.24	2.080	1.41	126.10	8.94
1.875	1.54	134.90	8.76	2.085	1.36	125.10	9.20
1.880	1.54	136.40	8.86	2.090	1.39	128.50	9.24
1.885	1.60	134.90	8.43	2.095	1.47	131.00	8.91
1.890	1.60	134.90	8.43	2.100	1.35	129.50	9.59

Figure A.18 Cone penetration test data from sounding C8 (5 of 13).


		The University of Adelaide Cone Penetration Test		Page 6 of 13			
Client: Department of Civil and Environmental Engineering Job Details: PhD Research Test Location: C8 Surface R.L.: 40.911 m AHD Date: 24th July, 1992 Time: 1:33 pm							
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_r (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_r (%)
2.105	1.39	132.90	9.56	2.315	1.35	129.00	9.56
2.110	1.41	133.90	9.50	2.320	1.38	132.90	9.63
2.115	1.35	133.40	9.88	2.325	1.32	127.60	9.67
2.120	1.32	134.90	10.22	2.330	1.35	130.00	9.63
2.125	1.36	134.90	9.92	2.335	1.38	130.00	9.42
2.130	1.29	135.90	10.53	2.340	1.38	128.50	9.31
2.135	1.35	135.40	10.03	2.345	1.45	132.50	9.14
2.140	1.30	132.90	10.22	2.350	1.33	128.10	9.63
2.145	1.36	134.90	9.92	2.355	1.35	126.10	9.34
2.150	1.30	131.00	10.08	2.360	1.42	127.10	8.95
2.155	1.30	132.90	10.22	2.365	1.33	120.70	9.08
2.160	1.32	129.00	9.77	2.370	1.35	121.20	8.98
2.165	1.38	127.10	9.21	2.375	1.33	120.70	9.08
2.170	1.38	126.10	9.14	2.380	1.39	117.80	8.47
2.175	1.35	125.10	9.27	2.385	1.39	117.80	8.47
2.180	1.39	125.10	9.00	2.390	1.42	119.30	8.40
2.185	1.41	122.70	8.70	2.395	1.39	117.80	8.47
2.190	1.35	125.10	9.27	2.400	1.35	116.80	8.65
2.195	1.29	124.60	9.66	2.405	1.32	118.80	9.00
2.200	1.42	124.60	8.77	2.410	1.29	117.30	9.09
2.205	1.42	124.60	8.77	2.415	1.22	118.30	9.70
2.210	1.39	127.60	9.18	2.420	1.36	118.80	8.74
2.215	1.32	128.10	9.70	2.425	1.26	119.70	9.50
2.220	1.36	132.00	9.71	2.430	1.28	118.80	9.28
2.225	1.28	126.10	9.85	2.435	1.25	123.20	9.86
2.230	1.35	130.00	9.63	2.440	1.38	118.80	8.61
2.235	1.29	128.50	9.96	2.445	1.35	123.70	9.16
2.240	1.32	127.10	9.63	2.450	1.35	121.70	9.01
2.245	1.39	132.90	9.56	2.455	1.35	120.70	8.94
2.250	1.32	133.40	10.11	2.460	1.48	126.60	8.55
2.255	1.38	130.00	9.42	2.465	1.45	125.60	8.66
2.260	1.29	130.00	10.08	2.470	1.42	125.60	8.85
2.265	1.26	125.60	9.97	2.475	1.45	126.60	8.73
2.270	1.29	124.60	9.66	2.480	1.42	128.50	9.05
2.275	1.29	128.50	9.96	2.485	1.36	124.60	9.16
2.280	1.25	126.60	10.13	2.490	1.35	125.60	9.30
2.285	1.30	129.50	9.96	2.495	1.39	127.60	9.18
2.290	1.26	132.00	10.48	2.500	1.38	123.70	8.96
2.295	1.32	132.90	10.07	2.505	1.42	126.60	8.92
2.300	1.41	128.10	9.09	2.510	1.32	122.20	9.26
2.305	1.35	131.00	9.70	2.515	1.38	127.10	9.21
2.310	1.38	131.50	9.53	2.520	1.36	121.70	8.95

Figure A.19 Cone penetration test data from sounding C8 (6 of 13).


		The University of Adelaide Cone Penetration Test		Page 7 of 13			
Client: Department of Civil and Environmental Engineering							
Job Details: PhD Research							
Test Location: C8							
Surface R.L.: 40.911 m AHD				Date: 24th July, 1992		Time: 1:33 pm	
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)
2.525	1.35	121.20	8.98	2.735	1.52	130.00	8.55
2.530	1.38	119.30	8.64	2.740	1.48	126.10	8.52
2.535	1.35	121.20	8.98	2.745	1.45	128.10	8.83
2.540	1.29	120.70	9.36	2.750	1.54	127.10	8.25
2.545	1.29	121.20	9.40	2.755	1.45	127.60	8.80
2.550	1.35	121.70	9.01	2.760	1.50	129.50	8.63
2.555	1.35	118.80	8.80	2.765	1.51	130.00	8.61
2.560	1.32	119.30	9.04	2.770	1.52	131.00	8.62
2.565	1.28	114.40	8.94	2.775	1.60	132.90	8.31
2.570	1.38	117.80	8.54	2.780	1.51	132.00	8.74
2.575	1.30	117.80	9.06	2.785	N/A	134.40	N/A
2.580	1.30	114.90	8.84	2.790	1.55	129.00	8.32
2.585	1.39	120.70	8.68	2.795	1.52	129.00	8.49
2.590	1.44	117.80	8.18	2.800	1.45	131.50	9.07
2.595	1.35	119.70	8.87	2.805	1.45	128.10	8.83
2.600	1.42	117.80	8.30	2.810	1.48	125.10	8.45
2.605	1.39	122.70	8.83	2.815	1.42	125.10	8.81
2.610	1.39	120.70	8.68	2.820	1.48	123.70	8.36
2.615	1.51	123.70	8.19	2.825	1.47	126.10	8.58
2.620	1.35	126.10	9.34	2.830	1.47	127.60	8.68
2.625	1.47	125.60	8.54	2.835	1.38	127.10	9.21
2.630	1.42	124.60	8.77	2.840	1.39	120.70	8.68
2.635	1.44	129.50	8.99	2.845	1.41	122.70	8.70
2.640	1.41	127.60	9.05	2.850	1.41	125.10	8.87
2.645	1.50	130.50	8.70	2.855	1.39	124.60	8.96
2.650	1.52	128.10	8.43	2.860	1.32	120.20	9.11
2.655	1.47	131.00	8.91	2.865	1.39	122.70	8.83
2.660	1.50	130.50	8.70	2.870	1.32	119.70	9.07
2.665	1.41	134.90	9.57	2.875	1.29	125.10	9.70
2.670	1.48	130.00	8.78	2.880	1.38	119.30	8.64
2.675	1.42	133.40	9.39	2.885	1.41	116.30	8.25
2.680	1.35	134.90	9.99	2.890	1.30	117.30	9.02
2.685	1.42	137.80	9.70	2.895	1.38	117.80	8.54
2.690	1.39	135.90	9.78	2.900	1.42	113.90	8.02
2.695	1.39	139.80	10.06	2.905	1.35	113.40	8.40
2.700	1.47	132.90	9.04	2.910	1.42	111.90	7.88
2.705	1.41	136.90	9.71	2.915	1.29	114.90	8.91
2.710	1.38	N/A	N/A	2.920	1.38	112.90	8.18
2.715	1.39	134.90	9.71	2.925	1.29	110.00	8.53
2.720	1.44	132.90	9.23	2.930	1.38	110.00	7.97
2.725	1.48	132.90	8.98	2.935	1.35	103.60	7.67
2.730	1.47	126.10	8.58	2.940	1.32	110.50	8.37

Figure A.20 Cone penetration test data from sounding C8 (7 of 13).


		The University of Adelaide		Cone Penetration Test		Page 8 of 13	
Client: Department of Civil and Environmental Engineering							
Job Details: PhD Research							
Test Location: C8							
Surface R.L.: 40.911 m AHD				Date: 24th July, 1992		Time: 1:33 pm	
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)
2.945	1.38	109.00	7.90	3.155	1.38	103.10	7.47
2.950	1.32	108.50	8.22	3.160	1.38	104.10	7.54
2.955	1.23	111.40	9.06	3.165	1.44	103.10	7.16
2.960	1.29	109.50	8.49	3.170	1.57	106.50	6.78
2.965	1.32	111.90	8.48	3.175	1.54	104.10	6.76
2.970	1.32	112.40	8.52	3.180	1.51	106.10	7.03
2.975	1.32	112.90	8.55	3.185	1.48	103.60	7.00
2.980	1.28	110.90	8.66	3.190	1.48	105.60	7.14
2.985	1.26	109.00	8.65	3.195	1.51	107.00	7.09
2.990	1.30	108.50	8.35	3.200	1.54	103.60	6.73
2.995	1.35	111.40	8.25	3.205	1.54	104.60	6.79
3.000	1.26	110.50	8.77	3.210	1.51	107.00	7.09
3.005	1.35	112.90	8.36	3.215	1.54	106.50	6.92
3.010	1.32	111.90	8.48	3.220	1.51	105.60	6.99
3.015	1.30	112.40	8.65	3.225	1.52	103.60	6.82
3.020	1.32	113.40	8.59	3.230	1.42	105.10	7.40
3.025	1.38	109.00	7.90	3.235	1.51	106.10	7.03
3.030	1.35	115.30	8.54	3.240	1.54	104.10	6.76
3.035	1.29	115.80	8.98	3.245	1.48	105.60	7.14
3.040	1.23	114.90	9.34	3.250	1.58	106.10	6.72
3.045	1.30	119.70	9.21	3.255	1.51	107.00	7.09
3.050	1.30	115.30	8.87	3.260	1.60	110.90	6.93
3.055	1.22	117.80	9.66	3.265	1.54	108.50	7.05
3.060	1.28	118.30	9.24	3.270	1.57	108.50	6.91
3.065	1.25	115.80	9.26	3.275	1.55	110.90	7.15
3.070	1.28	120.70	9.43	3.280	1.54	113.40	7.36
3.075	1.26	119.70	9.50	3.285	1.57	113.90	7.25
3.080	1.23	121.70	9.89	3.290	1.66	115.80	6.98
3.085	1.23	116.80	9.50	3.295	1.66	115.80	6.98
3.090	1.26	116.80	9.27	3.300	1.55	116.30	7.50
3.095	1.20	112.90	9.41	3.305	1.60	118.80	7.43
3.100	1.23	114.40	9.30	3.310	1.66	119.70	7.21
3.105	1.22	112.90	9.25	3.315	1.60	120.70	7.54
3.110	1.32	112.40	8.52	3.320	1.66	127.10	7.66
3.115	1.33	113.40	8.53	3.325	1.69	125.10	7.40
3.120	1.38	110.50	8.01	3.330	1.64	125.60	7.66
3.125	1.35	110.90	8.21	3.335	1.70	127.10	7.48
3.130	1.45	110.00	7.59	3.340	1.72	128.50	7.47
3.135	1.42	109.00	7.68	3.345	1.72	129.50	7.53
3.140	1.38	106.50	7.72	3.350	1.61	130.00	8.07
3.145	1.38	108.50	7.86	3.355	1.64	130.50	7.96
3.150	1.47	104.60	7.12	3.360	1.63	133.40	8.18

Figure A.21 Cone penetration test data from sounding C8 (8 of 13).


		The University of Adelaide			Page 9 of 13		
Cone Penetration Test							
Client: Department of Civil and Environmental Engineering							
Job Details: PhD Research							
Test Location: C8							
Surface R.L.: 40.911 m AHD				Date: 24th July, 1992		Time: 1:33 pm	
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)
3.365	1.74	129.50	7.44	3.575	1.55	122.70	7.92
3.370	1.69	133.40	7.89	3.580	1.54	118.80	7.71
3.375	1.64	132.90	8.10	3.585	1.55	120.70	7.79
3.380	1.64	138.30	8.43	3.590	1.54	120.20	7.81
3.385	1.61	136.90	8.50	3.595	1.66	121.70	7.33
3.390	1.51	136.90	9.07	3.600	1.63	121.20	7.44
3.395	1.60	136.90	8.56	3.605	1.61	123.20	7.65
3.400	1.63	142.20	8.72	3.610	1.64	116.80	7.12
3.405	1.63	136.90	8.40	3.615	1.55	119.70	7.72
3.410	1.63	138.80	8.52	3.620	1.60	119.70	7.48
3.415	1.54	135.90	8.82	3.625	1.61	118.80	7.38
3.420	1.57	134.40	8.56	3.630	1.57	115.80	7.38
3.425	1.54	132.00	8.57	3.635	1.52	115.30	7.59
3.430	1.54	131.00	8.51	3.640	1.63	114.90	7.05
3.435	1.48	126.60	8.55	3.645	1.51	115.80	7.67
3.440	1.60	119.70	7.48	3.650	1.48	115.30	7.79
3.445	1.60	119.30	7.46	3.655	1.51	112.90	7.48
3.450	1.50	120.70	8.05	3.660	1.48	110.90	7.49
3.455	1.48	120.20	8.12	3.665	1.54	112.40	7.30
3.460	1.45	116.80	8.06	3.670	1.50	114.40	7.63
3.465	1.51	98.70	6.54	3.675	1.54	116.80	7.58
3.470	1.54	N/A	N/A	3.680	1.51	118.80	7.87
3.475	1.39	N/A	N/A	3.685	1.60	124.60	7.79
3.480	1.45	131.00	9.03	3.690	1.57	120.20	7.66
3.485	1.45	141.70	9.77	3.695	1.60	118.80	7.43
3.490	1.47	138.80	9.44	3.700	1.63	123.70	7.59
3.495	1.48	139.80	9.45	3.705	1.69	119.70	7.08
3.500	1.39	135.90	9.78	3.710	1.72	125.60	7.30
3.505	1.39	132.90	9.56	3.715	1.80	121.70	6.76
3.510	1.51	133.90	8.87	3.720	1.77	125.10	7.07
3.515	1.42	133.40	9.39	3.725	1.86	131.50	7.07
3.520	1.47	130.50	8.88	3.730	1.77	135.90	7.68
3.525	1.38	129.00	9.35	3.735	1.77	134.90	7.62
3.530	1.48	125.60	8.49	3.740	1.82	134.90	7.41
3.535	1.48	127.10	8.59	3.745	1.86	142.20	7.65
3.540	1.36	120.70	8.88	3.750	1.83	N/A	N/A
3.545	N/A	122.70	N/A	3.755	1.86	142.20	7.65
3.550	N/A	126.10	N/A	3.760	1.88	139.30	7.41
3.555	1.14	123.70	10.85	3.765	1.86	136.90	7.36
3.560	1.54	126.10	8.19	3.770	1.86	134.90	7.25
3.565	1.57	126.10	8.03	3.775	1.77	145.20	8.20
3.570	1.55	121.70	7.85	3.780	1.74	144.70	8.32

Figure A.22 Cone penetration test data from sounding C8 (9 of 13).

Depth (m)		Cone Tip Resistance		Sleeve Friction		Friction Ratio	
		q_c (MPa)	f_s (kPa)	f_s (kPa)	F_R (%)	q_c (MPa)	f_s (kPa)
3.785	1.69	144.20	8.53	3.995	1.77	133.90	7.56
3.790	1.69	149.10	8.82	4.000	1.69	138.80	8.21
3.795	1.74	149.10	8.57	4.005	1.73	135.90	7.86
3.800	1.69	152.00	8.99	4.010	1.74	134.90	7.75
3.805	1.74	154.90	8.90	4.015	1.82	139.80	7.68
3.810	1.77	161.30	9.11	4.020	1.80	140.80	7.82
3.815	1.74	157.40	9.05	4.025	1.76	146.10	8.30
3.820	1.80	154.90	8.61	4.030	1.77	140.30	7.93
3.825	N/A	148.60	N/A	4.035	1.83	145.20	7.93
3.830	1.77	150.00	8.47	4.040	1.80	138.80	7.71
3.835	1.69	152.50	9.02	4.045	1.86	145.20	7.81
3.840	1.76	148.10	8.41	4.050	1.74	144.20	8.29
3.845	1.72	143.70	8.35	4.055	1.83	148.10	8.09
3.850	1.69	142.20	8.41	4.060	1.88	145.70	7.75
3.855	1.76	142.20	8.08	4.065	1.88	143.20	7.62
3.860	1.69	134.90	7.98	4.070	1.88	148.60	7.90
3.865	1.66	134.90	8.13	4.075	1.79	143.20	8.00
3.870	1.79	132.90	7.42	4.080	1.88	139.80	7.44
3.875	1.69	133.40	7.89	4.085	1.80	141.30	7.85
3.880	1.70	129.00	7.59	4.090	1.80	137.30	7.63
3.885	1.79	131.50	7.35	4.095	1.86	135.40	7.28
3.890	1.85	129.00	6.97	4.100	1.85	135.90	7.35
3.895	1.79	128.10	7.16	4.105	1.73	140.30	8.11
3.900	1.77	130.00	7.34	4.110	1.82	145.20	7.98
3.905	1.70	123.70	7.28	4.115	1.80	143.20	7.96
3.910	1.69	125.10	7.40	4.120	1.85	145.20	7.85
3.915	1.73	125.60	7.26	4.125	1.88	138.30	7.36
3.920	1.66	123.70	7.45	4.130	1.83	144.20	7.88
3.925	1.69	121.70	7.20	4.135	1.77	145.20	8.20
3.930	1.63	124.10	7.61	4.140	1.77	141.30	7.98
3.935	1.60	122.20	7.64	4.145	1.83	141.30	7.72
3.940	1.61	121.20	7.53	4.150	1.86	142.20	7.65
3.945	1.66	122.20	7.36	4.155	1.82	144.20	7.92
3.950	1.61	121.70	7.56	4.160	1.72	148.10	8.61
3.955	1.67	126.60	7.58	4.165	1.74	146.10	8.40
3.960	1.63	127.10	7.80	4.170	1.76	144.20	8.19
3.965	1.64	130.00	7.93	4.175	1.80	144.70	8.04
3.970	1.74	125.60	7.22	4.180	1.79	144.70	8.08
3.975	1.61	128.10	7.96	4.185	1.77	145.20	8.20
3.980	1.63	132.90	8.15	4.190	1.80	142.20	7.90
3.985	1.77	130.00	7.34	4.195	1.83	145.20	7.93
3.990	1.69	133.90	7.92	4.200	1.77	145.20	8.20

Figure A.23 Cone penetration test data from sounding C8 (10 of 13).


		The University of Adelaide Cone Penetration Test		Page 11 of 13			
Client: Department of Civil and Environmental Engineering Job Details: PhD Research Test Location: C8 Surface R.L.: 40.911 m AHD Date: 24th July, 1992 Time: 1:33 pm							
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)
4.205	1.88	142.20	7.56	4.415	2.24	145.70	6.50
4.210	1.86	148.10	7.96	4.420	2.20	150.00	6.82
4.215	1.88	143.70	7.64	4.425	2.20	149.60	6.80
4.220	1.89	141.70	7.50	4.430	2.11	148.10	7.02
4.225	1.94	136.40	7.03	4.435	2.05	154.00	7.51
4.230	1.91	137.80	7.21	4.440	2.07	152.00	7.34
4.235	1.83	134.90	7.37	4.445	2.02	157.90	7.82
4.240	1.91	140.30	7.35	4.450	2.08	157.40	7.57
4.245	1.88	141.70	7.54	4.455	2.05	155.90	7.60
4.250	1.79	144.20	8.06	4.460	2.02	154.90	7.67
4.255	1.80	143.20	7.96	4.465	2.01	153.50	7.64
4.260	1.77	146.10	8.25	4.470	1.94	149.10	7.69
4.265	1.80	148.60	8.26	4.475	1.98	147.60	7.45
4.270	1.83	148.10	8.09	4.480	1.96	144.20	7.36
4.275	1.77	147.10	8.31	4.485	2.01	146.60	7.29
4.280	1.82	152.00	8.35	4.490	1.88	147.60	7.85
4.285	1.79	157.40	8.79	4.495	1.91	143.70	7.52
4.290	1.86	170.10	9.15	4.500	1.88	143.70	7.64
4.295	1.88	160.30	8.53	4.505	1.92	143.70	7.48
4.300	1.94	N/A	N/A	4.510	1.94	143.20	7.38
4.305	1.82	157.40	8.65	4.515	1.83	148.60	8.12
4.310	1.77	150.00	8.47	4.520	1.91	148.60	7.78
4.315	1.80	144.20	8.01	4.525	1.98	146.60	7.40
4.320	1.80	136.90	7.61	4.530	2.02	143.70	7.11
4.325	1.74	142.20	8.17	4.535	1.94	143.20	7.38
4.330	1.85	139.80	7.56	4.540	1.96	141.70	7.23
4.335	1.77	139.80	7.90	4.545	1.92	140.80	7.33
4.340	1.73	140.30	8.11	4.550	1.99	141.30	7.10
4.345	1.64	134.90	8.23	4.555	1.88	145.20	7.72
4.350	1.79	134.90	7.54	4.560	1.92	144.20	7.51
4.355	1.83	142.70	7.80	4.565	1.96	144.20	7.36
4.360	1.86	143.20	7.70	4.570	1.94	150.00	7.73
4.365	2.05	146.60	7.15	4.575	1.95	150.00	7.69
4.370	2.13	144.70	6.79	4.580	1.96	155.90	7.95
4.375	N/A	143.20	N/A	4.585	1.94	157.90	8.14
4.380	2.23	145.20	6.51	4.590	1.96	156.90	8.01
4.385	2.17	144.20	6.65	4.595	1.94	154.00	7.94
4.390	1.99	149.10	7.49	4.600	1.92	162.80	8.48
4.395	2.13	148.10	6.95	4.605	1.95	158.40	8.12
4.400	2.17	145.20	6.69	4.610	1.98	155.90	7.87
4.405	2.05	148.10	7.22	4.615	1.99	158.40	7.96
4.410	2.11	147.60	7.00	4.620	2.08	156.40	7.52

Figure A.24 Cone penetration test data from sounding C8 (11 of 13).


		The University of Adelaide		Cone Penetration Test		Page 12 of 13	
Client: Department of Civil and Environmental Engineering							
Job Details: PhD Research							
Test Location: C8							
Surface R.L.: 40.911 m AHD				Date: 24th July, 1992		Time: 1:33 pm	
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)
4.625	2.01	156.40	7.78	4.835	2.32	155.90	6.72
4.630	1.99	153.50	7.71	4.840	2.36	156.40	6.63
4.635	1.99	155.40	7.81	4.845	2.33	157.90	6.78
4.640	1.94	154.00	7.94	4.850	2.29	159.80	6.98
4.645	1.95	156.40	8.02	4.855	2.35	156.90	6.68
4.650	2.01	151.00	7.51	4.860	2.39	157.40	6.59
4.655	1.96	150.50	7.68	4.865	2.36	158.40	6.71
4.660	1.94	152.00	7.84	4.870	2.33	156.40	6.71
4.665	1.96	156.90	8.01	4.875	2.38	155.40	6.53
4.670	1.99	164.20	8.25	4.880	2.32	151.50	6.53
4.675	1.91	169.10	8.85	4.885	2.36	142.20	6.03
4.680	1.96	172.50	8.80	4.890	2.35	141.30	6.01
4.685	1.98	171.10	8.64	4.895	2.35	165.20	7.03
4.690	1.99	171.10	8.60	4.900	2.29	169.60	7.41
4.695	1.94	N/A	N/A	4.905	2.24	171.60	7.66
4.700	1.99	169.10	8.50	4.910	2.23	173.00	7.76
4.705	2.04	167.20	8.20	4.915	2.20	172.00	7.82
4.710	2.04	169.10	8.29	4.920	2.14	171.60	8.02
4.715	2.04	171.10	8.39	4.925	2.18	171.10	7.85
4.720	2.05	164.20	8.01	4.930	2.20	170.60	7.75
4.725	1.94	164.20	8.46	4.935	2.20	170.60	7.75
4.730	1.95	163.20	8.37	4.940	2.27	170.10	7.49
4.735	1.99	164.20	8.25	4.945	2.20	172.50	7.84
4.740	2.04	163.20	8.00	4.950	2.23	175.00	7.85
4.745	2.14	160.80	7.51	4.955	2.23	171.10	7.67
4.750	2.26	158.40	7.01	4.960	2.08	172.50	8.29
4.755	2.20	157.90	7.18	4.965	1.92	170.10	8.86
4.760	2.32	154.90	6.68	4.970	2.04	164.20	8.05
4.765	2.32	156.40	6.74	4.975	2.17	153.50	7.07
4.770	N/A	157.40	N/A	4.980	2.20	143.20	6.51
4.775	2.20	154.00	7.00	4.985	2.14	N/A	N/A
4.780	2.21	155.90	7.05	4.990	2.26	N/A	N/A
4.785	2.24	154.00	6.88	4.995	2.14	N/A	N/A
4.790	2.23	154.00	6.91	5.000	2.14	N/A	N/A
4.795	2.23	153.00	6.86	5.005	2.08	N/A	N/A
4.800	2.26	154.00	6.81	5.010	2.11	N/A	N/A
4.805	2.26	152.00	6.73	5.015	2.14	N/A	N/A
4.810	2.29	153.00	6.68	5.020	2.14	N/A	N/A
4.815	2.23	154.40	6.92	5.025	2.11	N/A	N/A
4.820	2.39	154.00	6.44	5.030	2.16	N/A	N/A
4.825	2.38	150.00	6.30	5.035	2.14	N/A	N/A
4.830	2.40	158.40	6.60	5.040	2.08	N/A	N/A

Figure A.25 Cone penetration test data from sounding C8 (12 of 13).


		The University of Adelaide Cone Penetration Test		Page 13 of 13			
Client: Department of Civil and Environmental Engineering Job Details: PhD Research Test Location: C8 Surface R.L.: 40.911 m AHD Date: 24th July, 1992 Time: 1:33 pm							
Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)	Depth (m)	Cone Tip Resistance q_c (MPa)	Sleeve Friction f_s (kPa)	Friction Ratio F_R (%)
5.045	2.08	N/A	N/A				
5.050	2.02	N/A	N/A				
5.055	1.76	N/A	N/A				

Figure A.26 Cone penetration test data from sounding C8 (13 of 13).

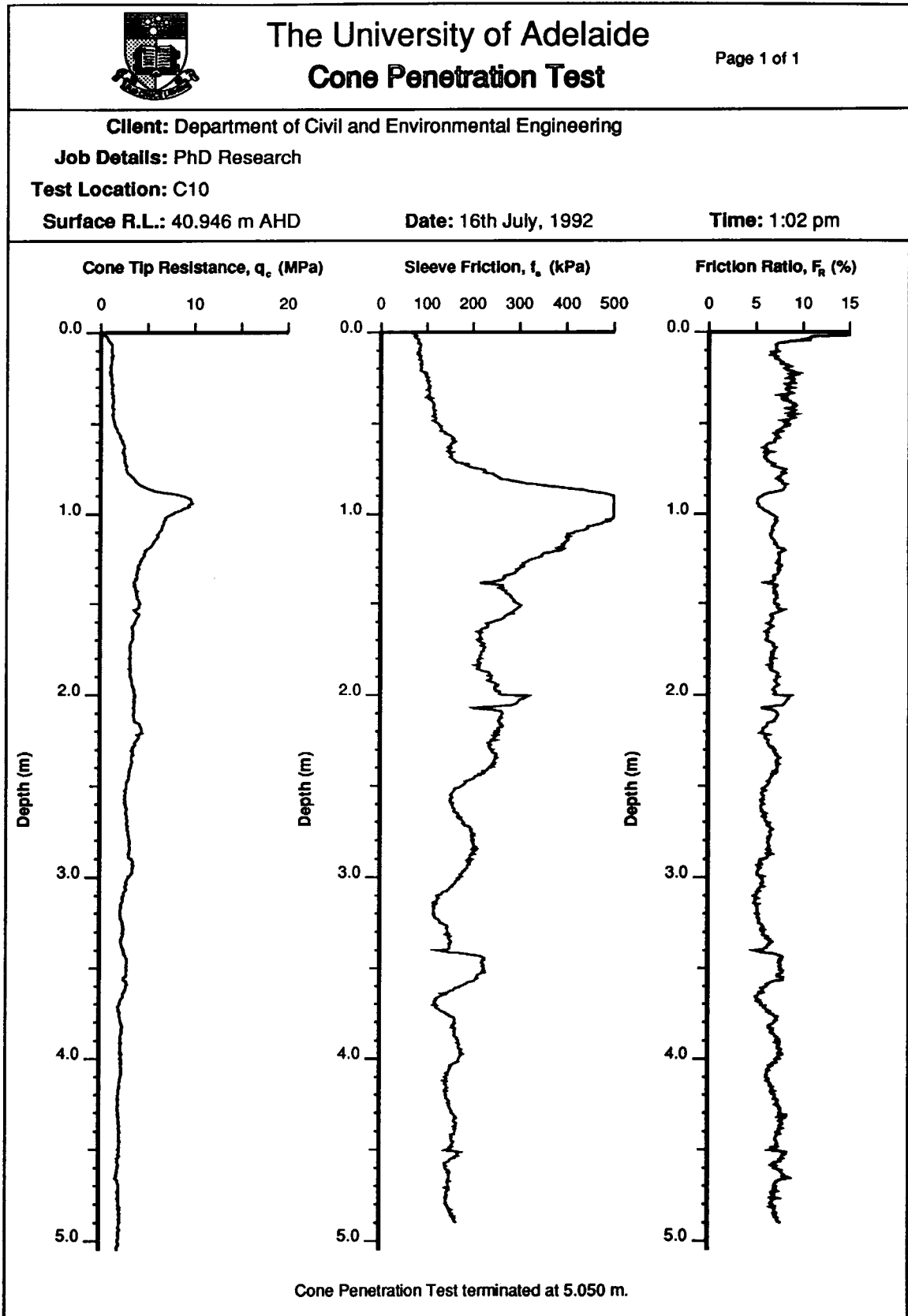


Figure A.27 Cone penetration test results from sounding C10.

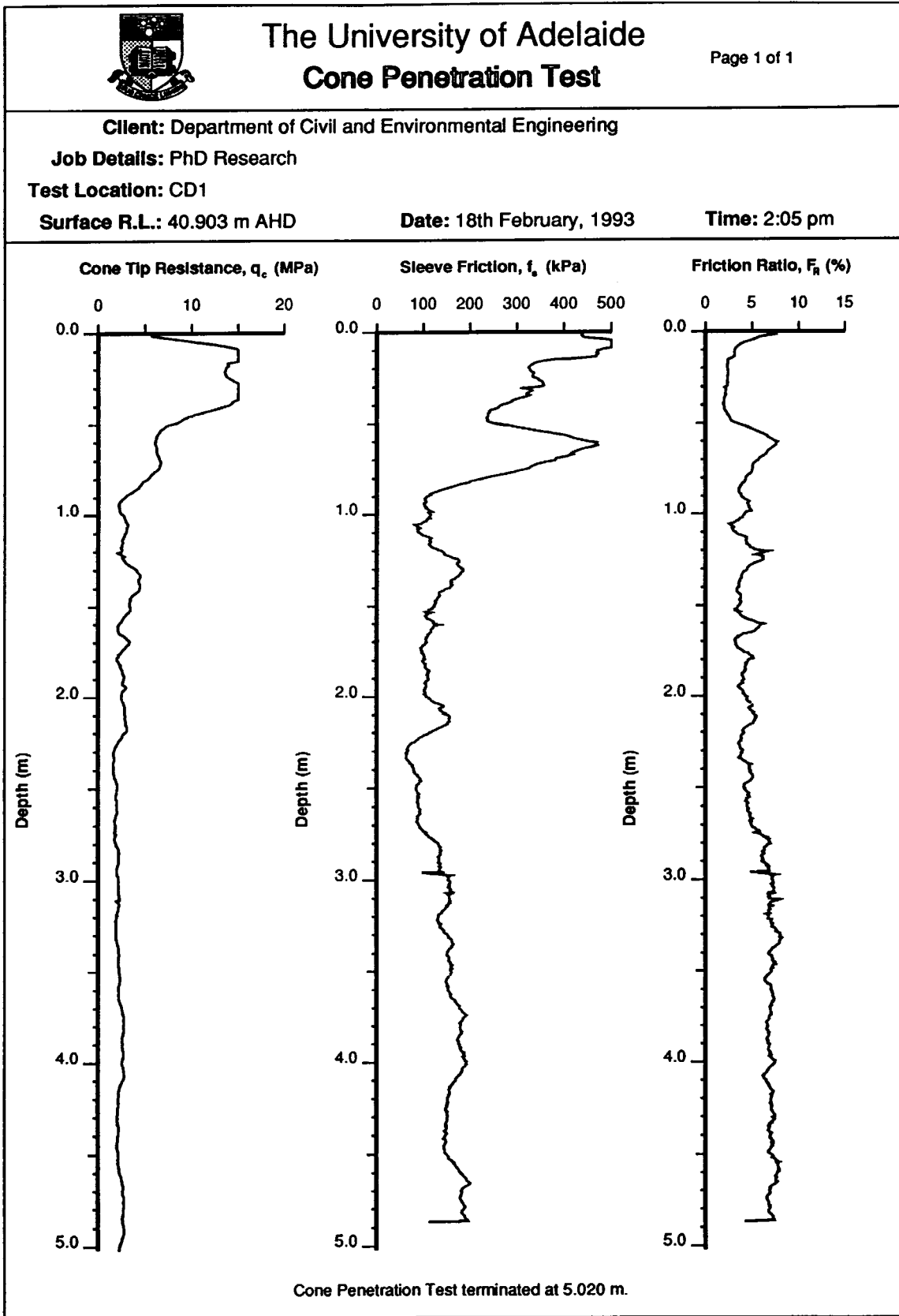


Figure A.28 Cone penetration test results from sounding CD1.

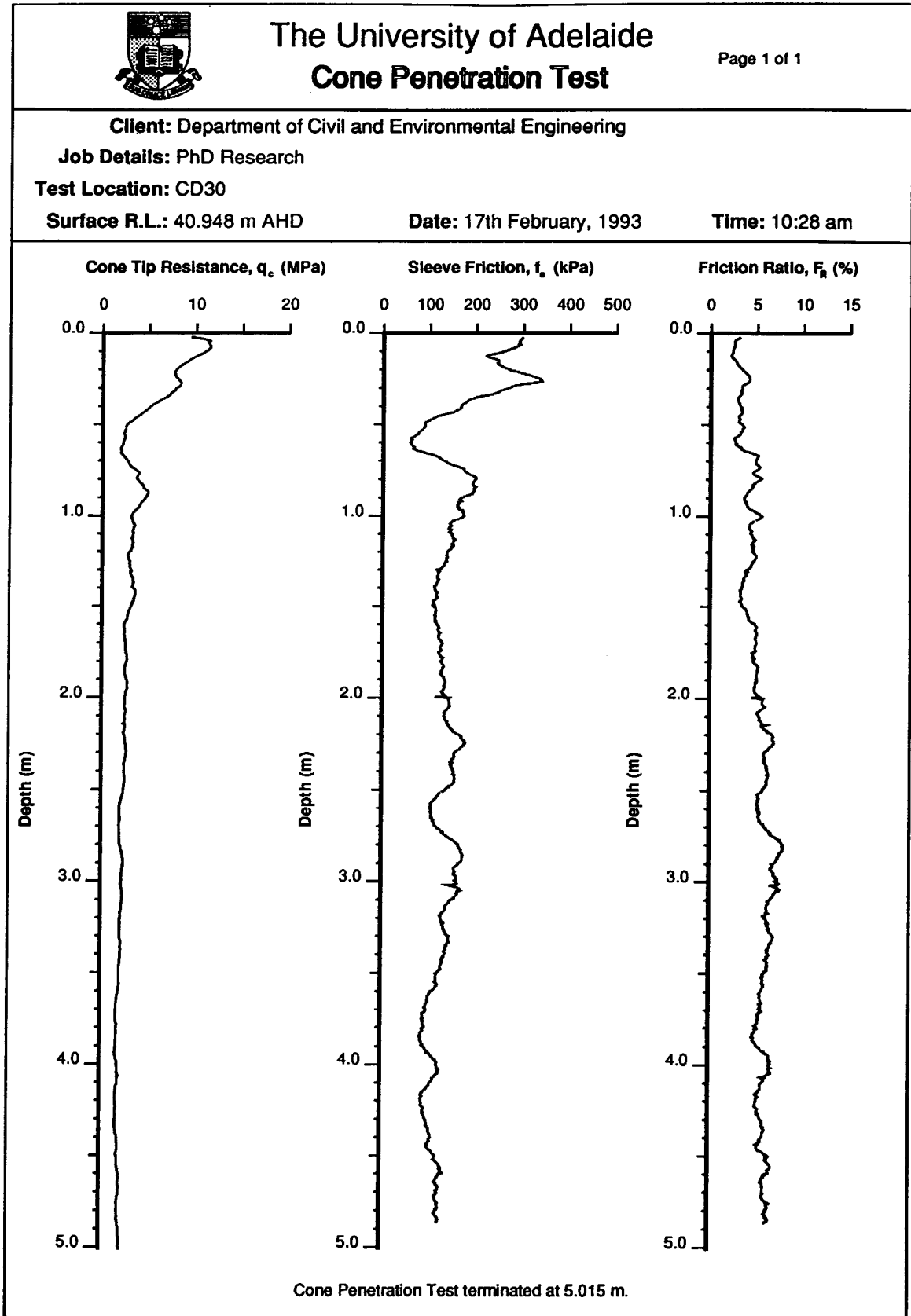


Figure A.29 Cone penetration test results from sounding CD30.

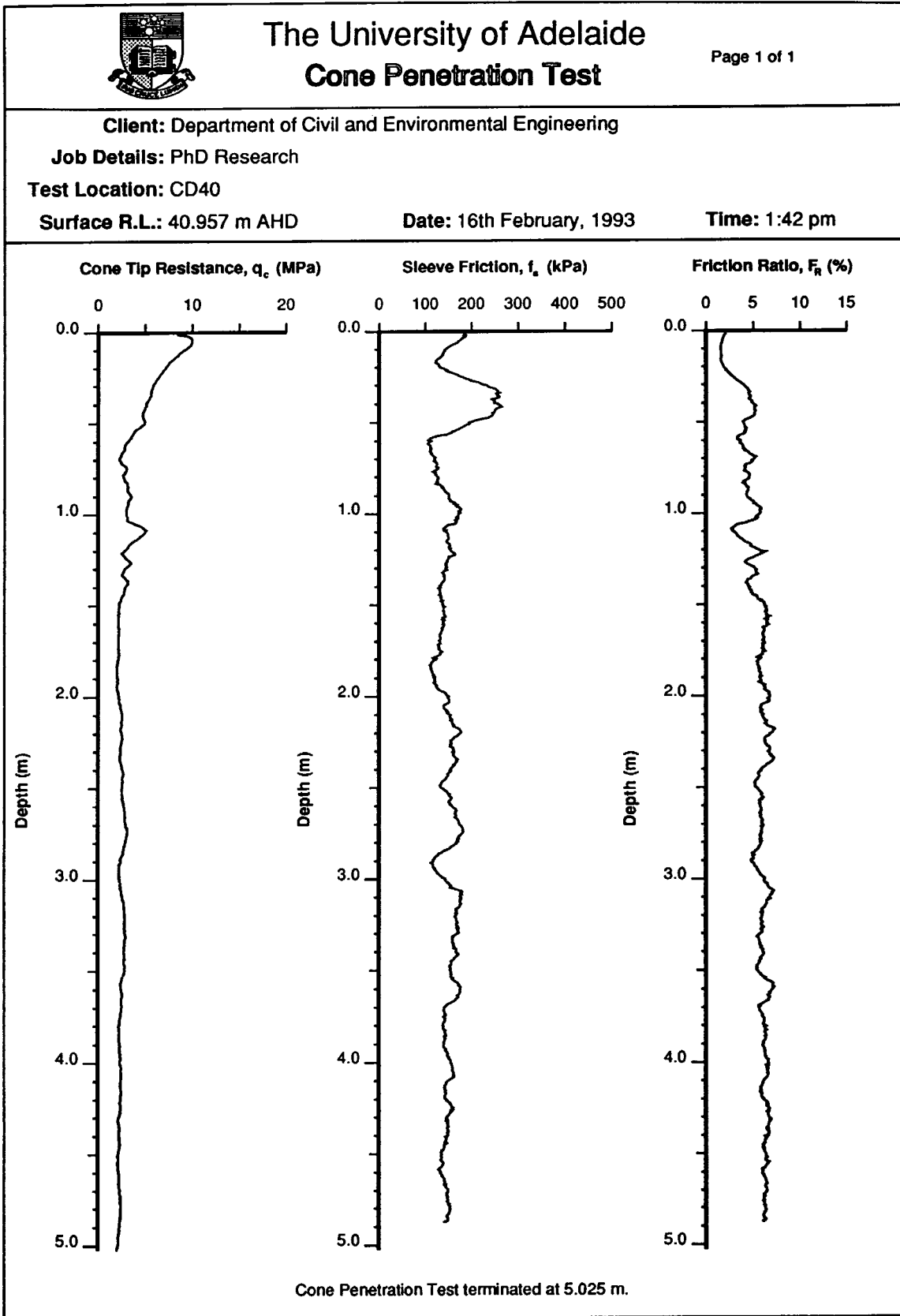


Figure A.30 Cone penetration test results from sounding CD40.

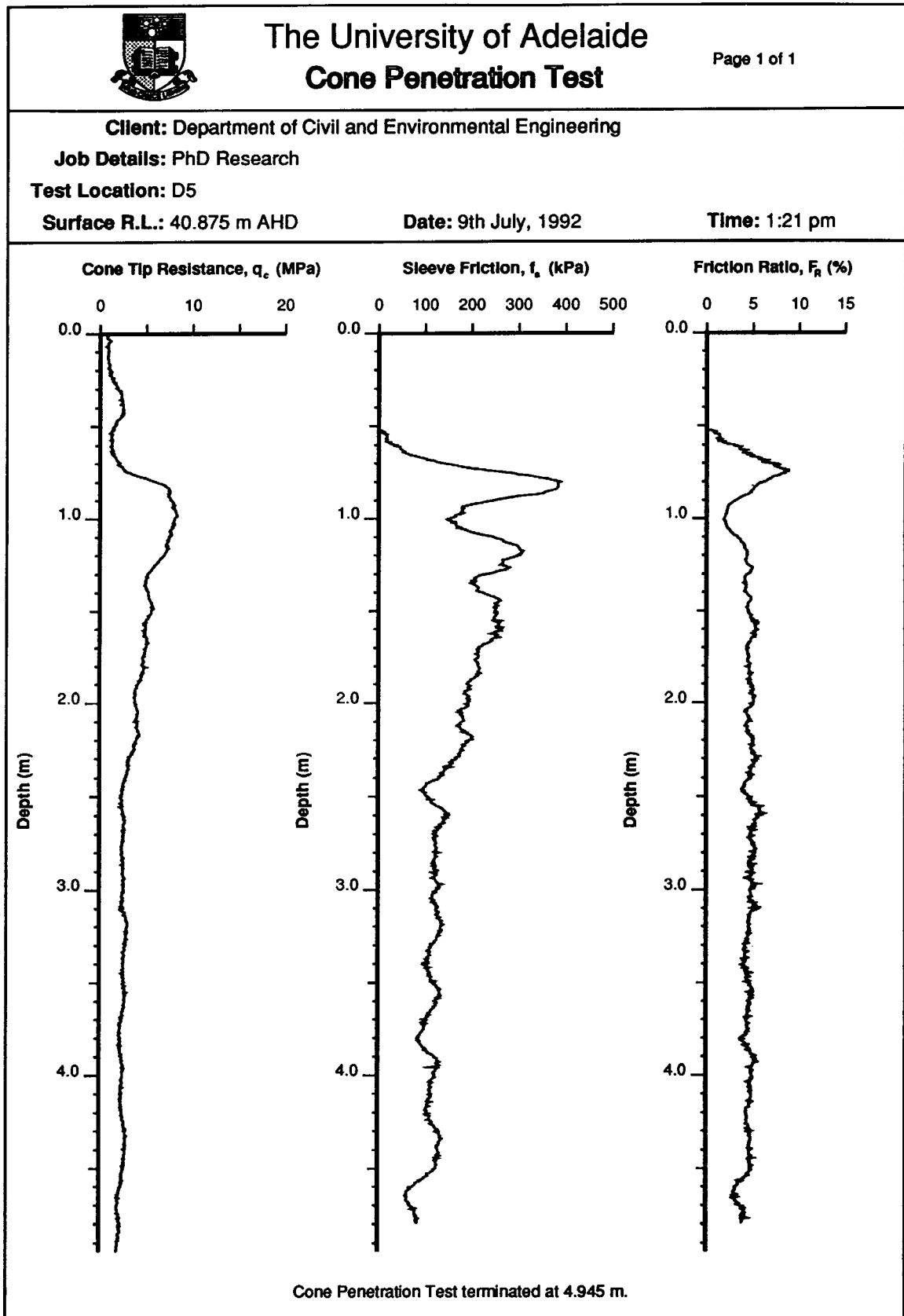


Figure A.31 Cone penetration test results from sounding D5.

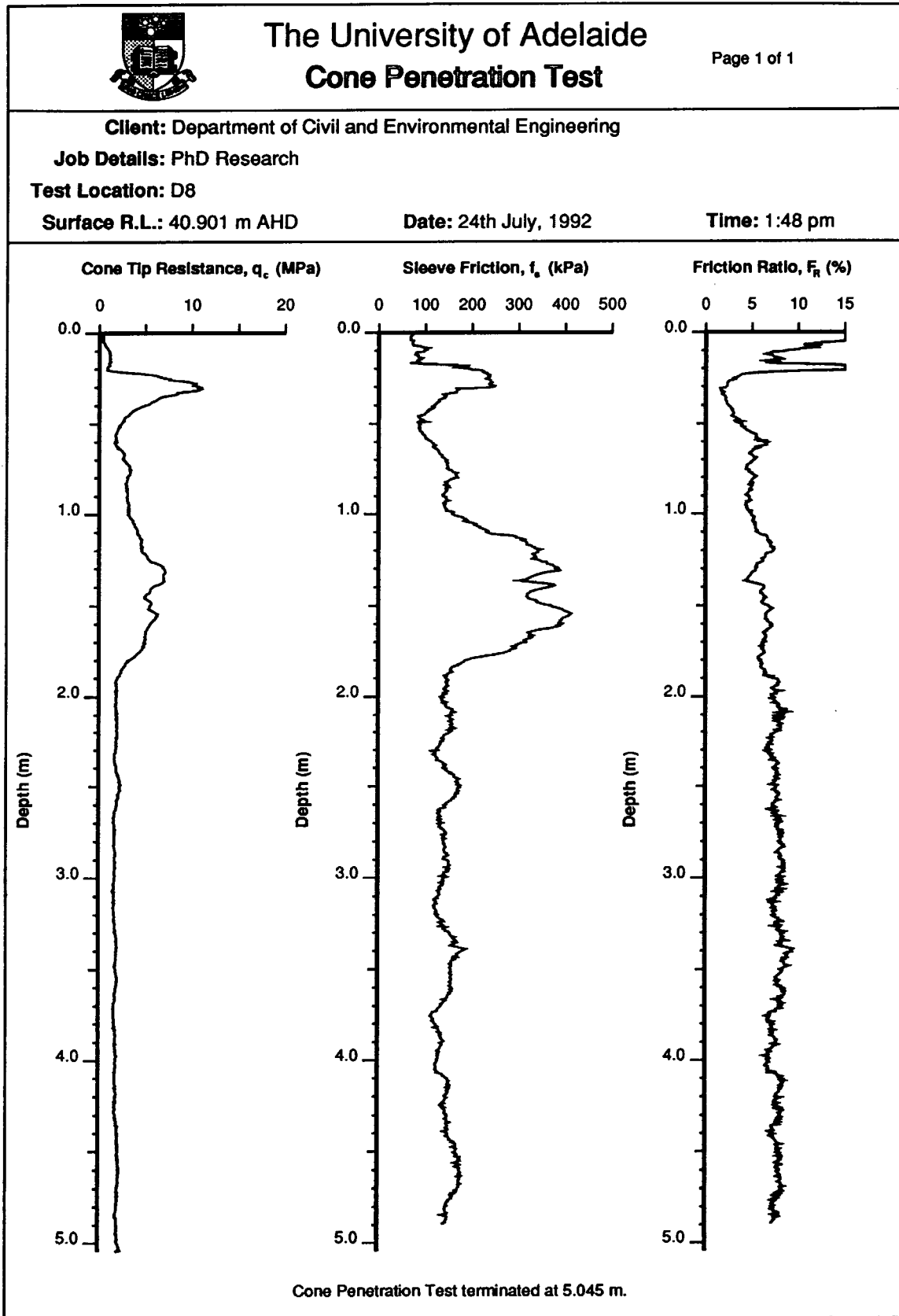


Figure A.32 Cone penetration test results from sounding D8.

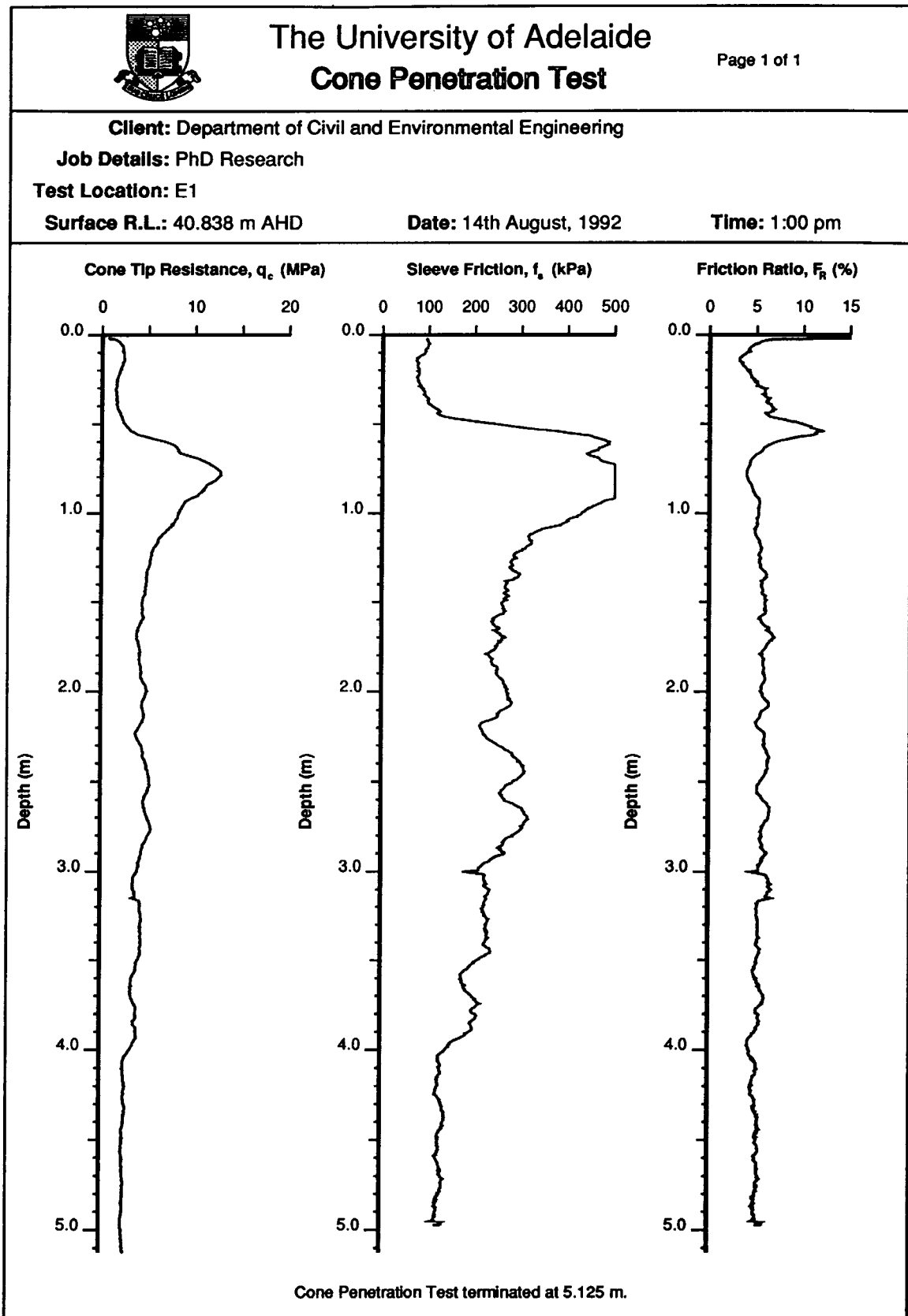


Figure A.33 Cone penetration test results from sounding E1.

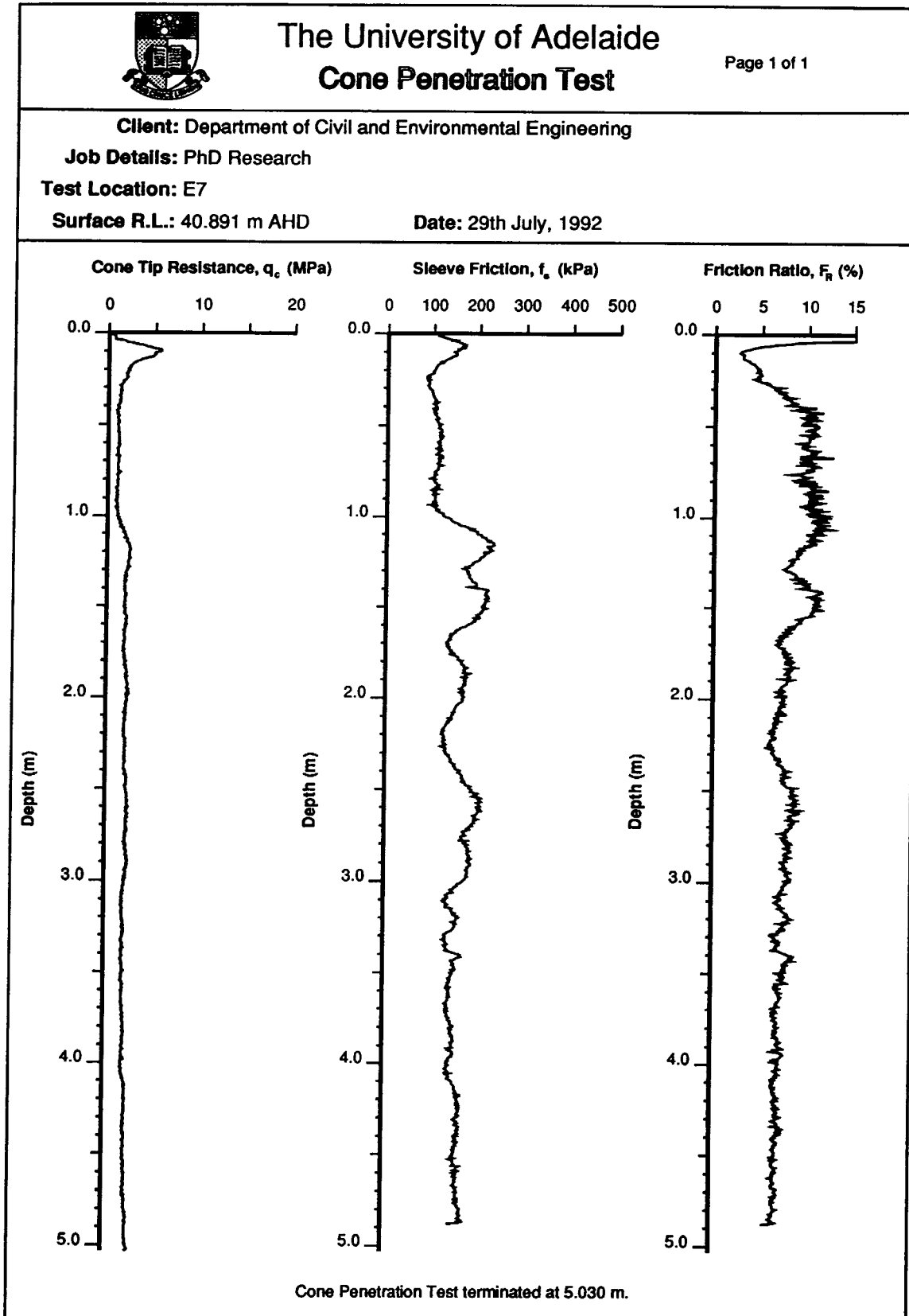


Figure A.34 Cone penetration test results from sounding E7.

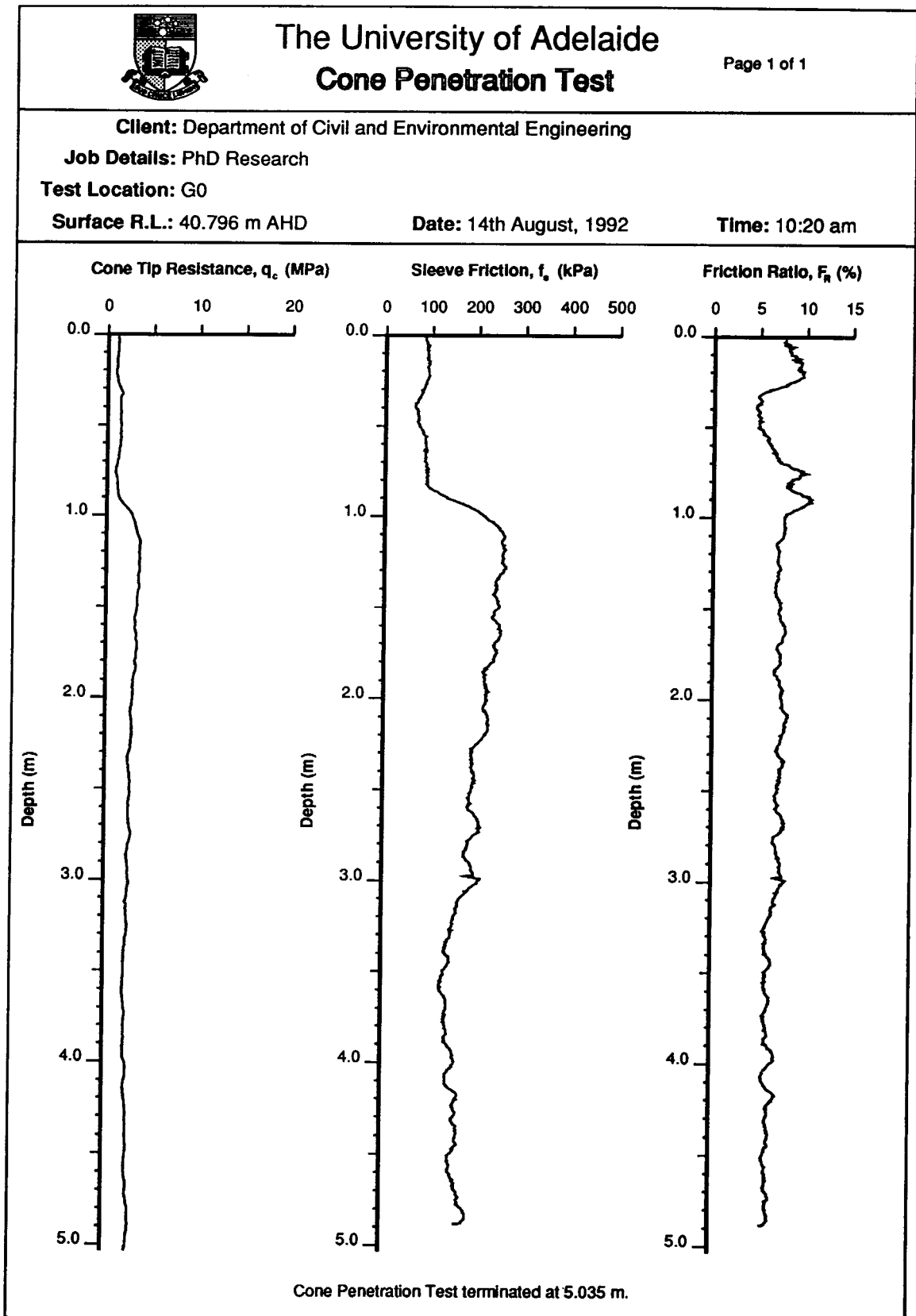


Figure A.35 Cone penetration test results from sounding G0.

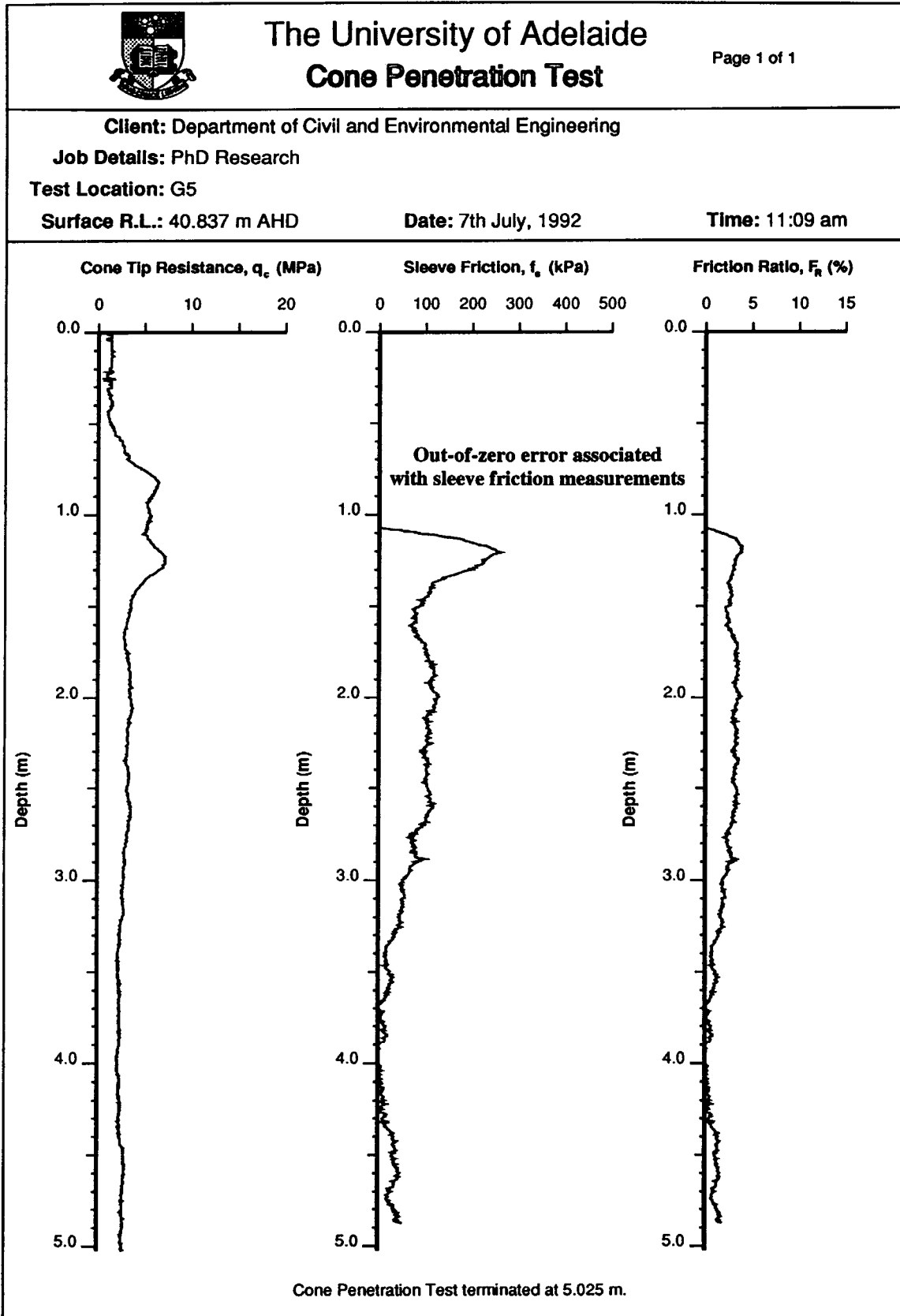


Figure A.36 Cone penetration test results from sounding G5.

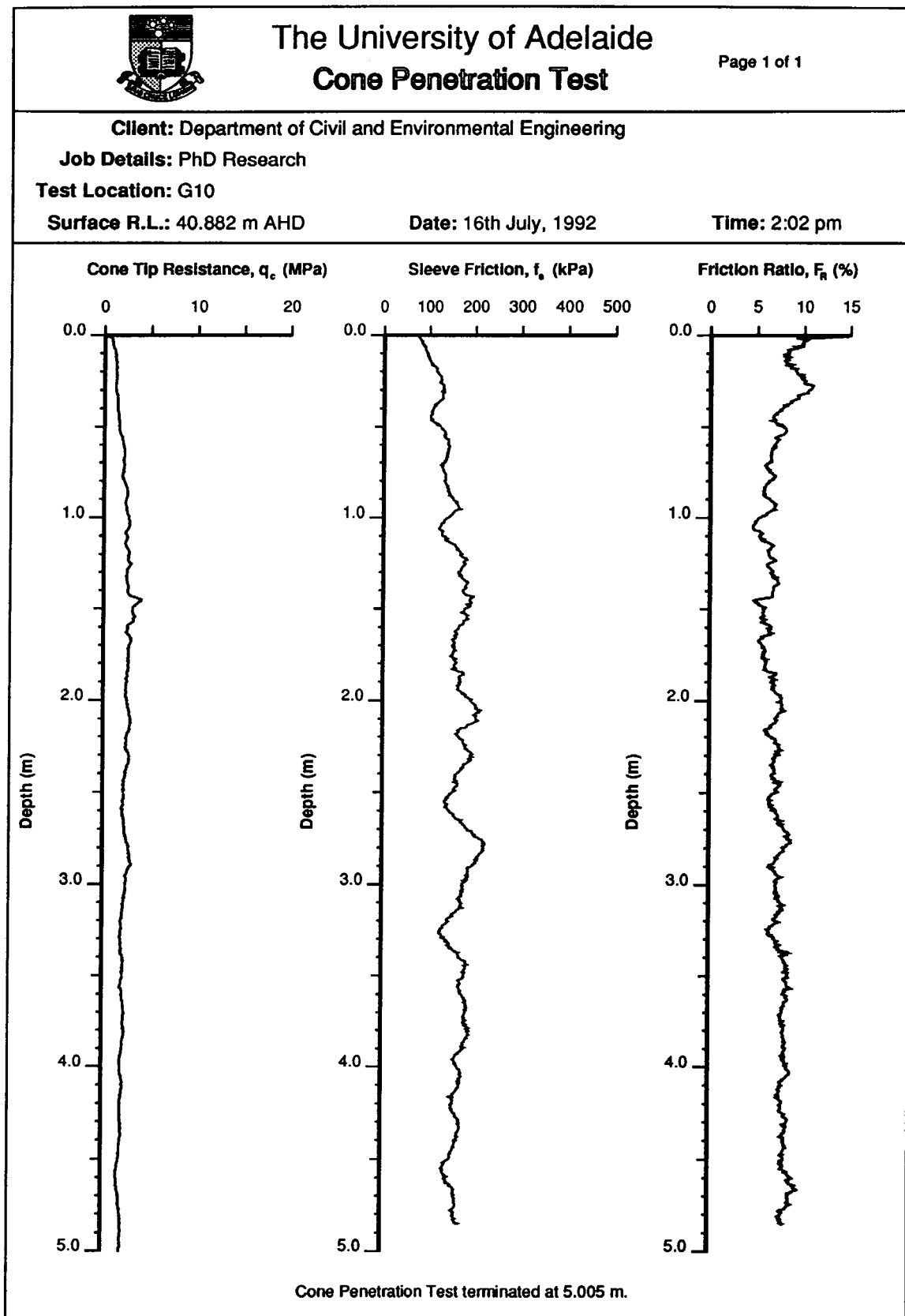


Figure A.37 Cone penetration test results from sounding G10.

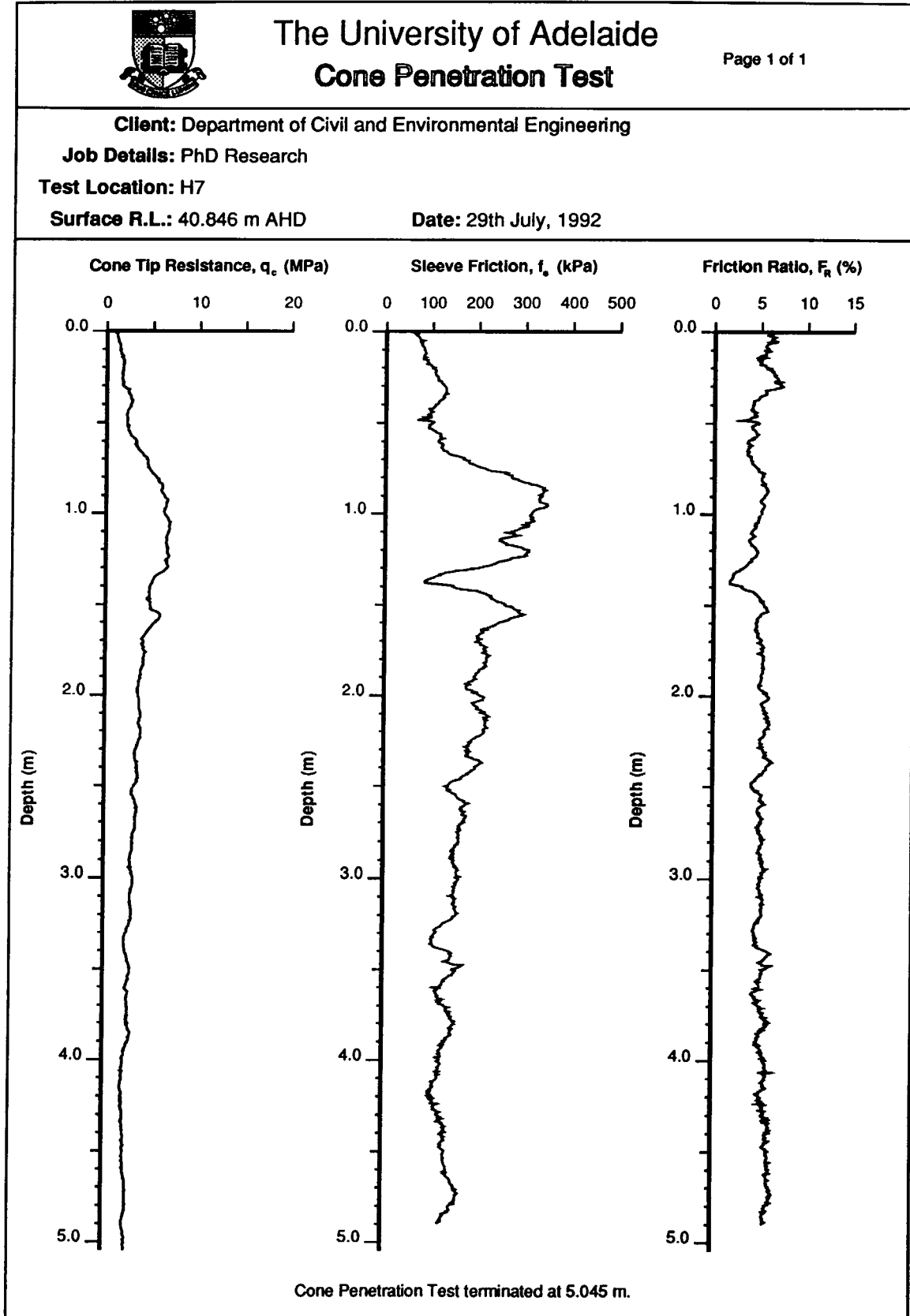


Figure A.38 Cone penetration test results from sounding H7.

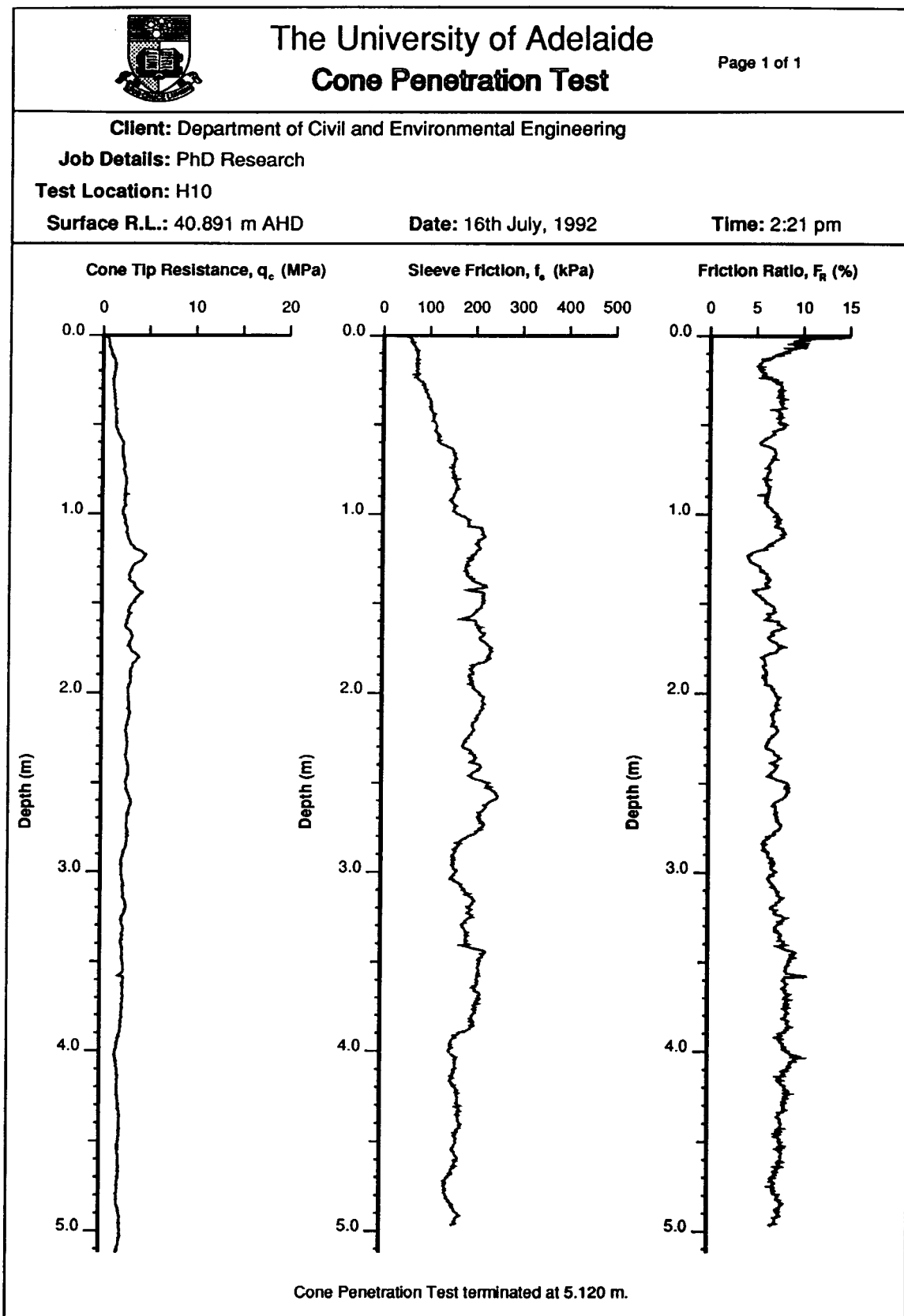


Figure A.39 Cone penetration test results from sounding H10.

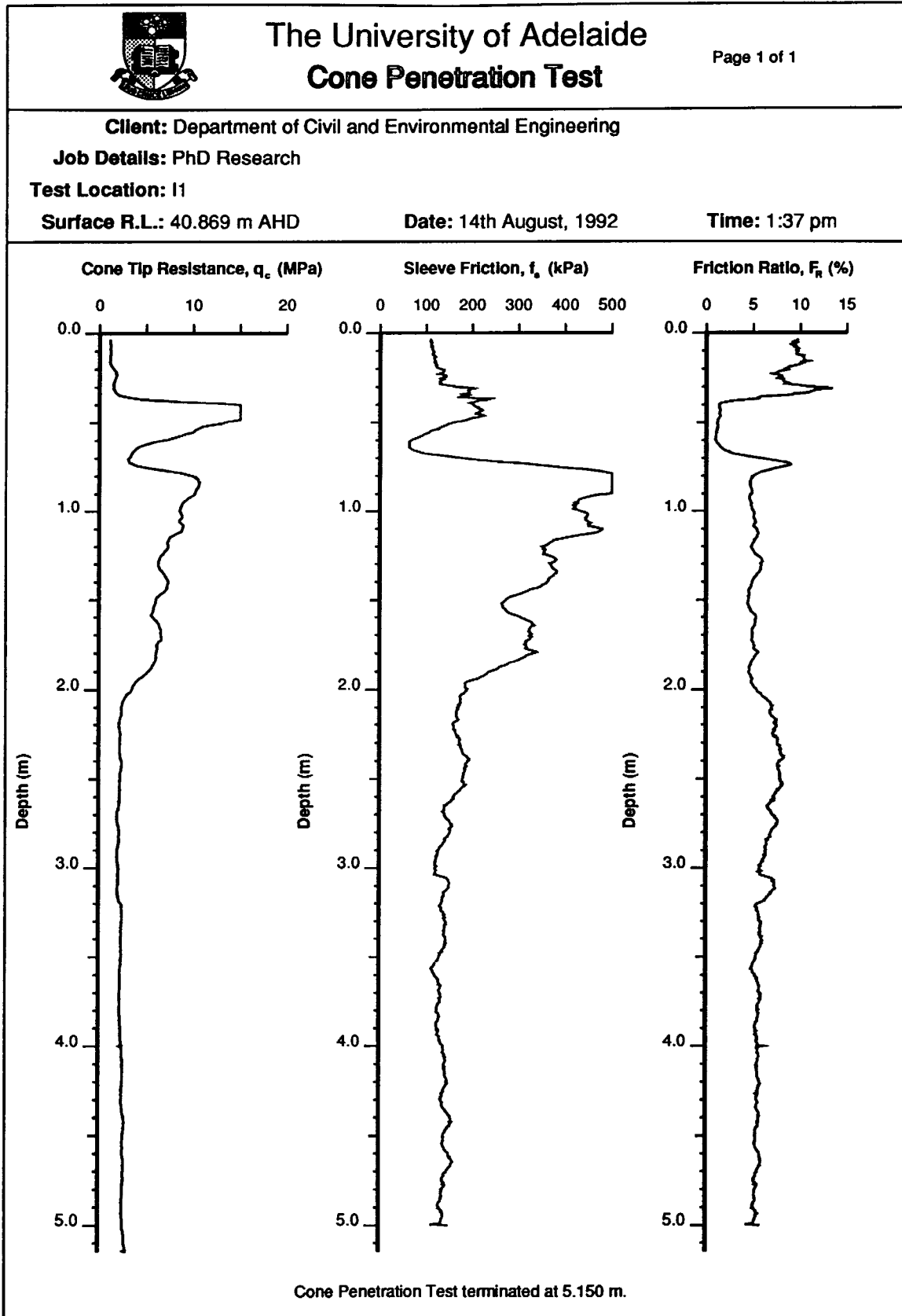


Figure A.40 Cone penetration test results from sounding I1.

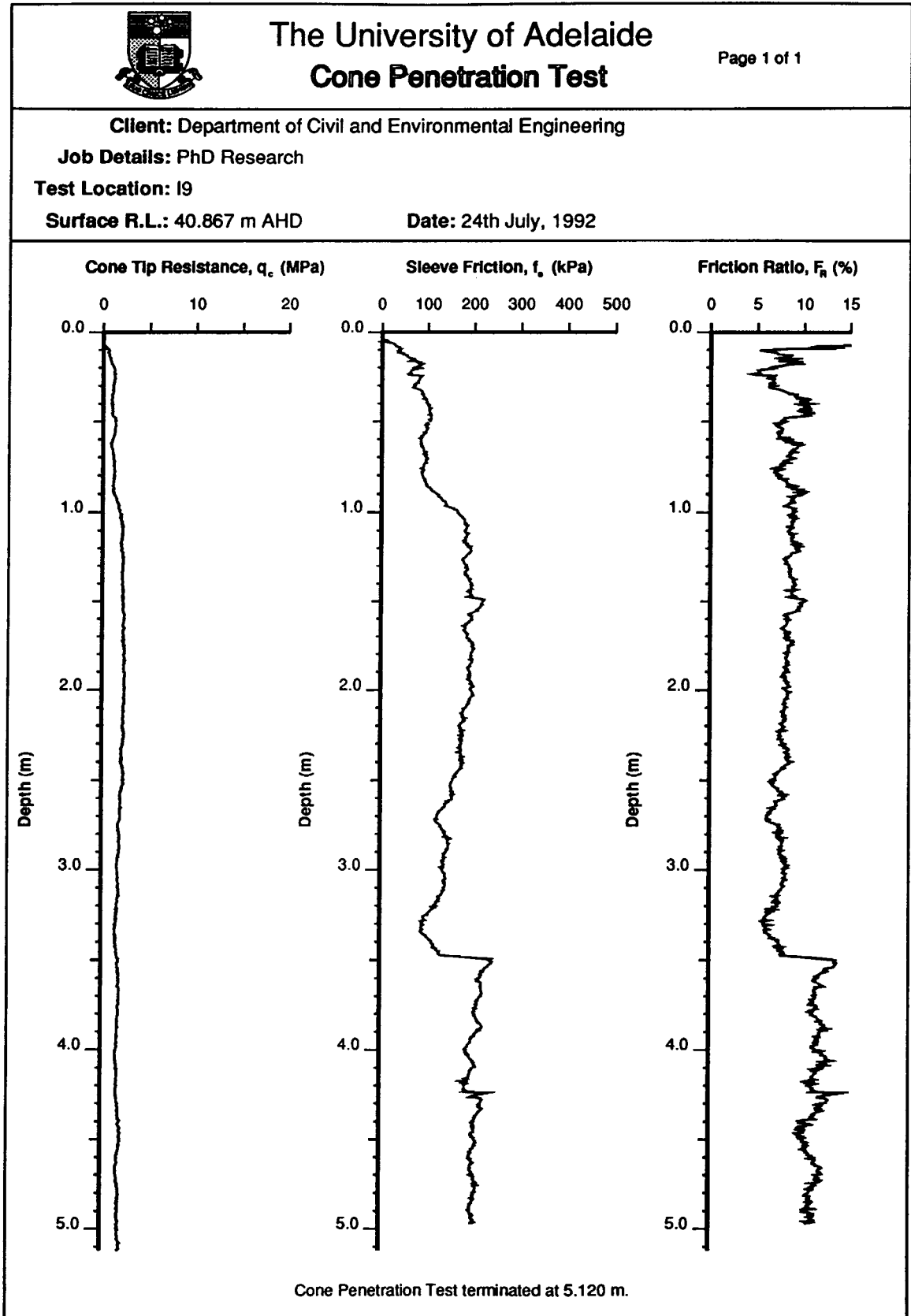


Figure A.41 Cone penetration test results from sounding I9.

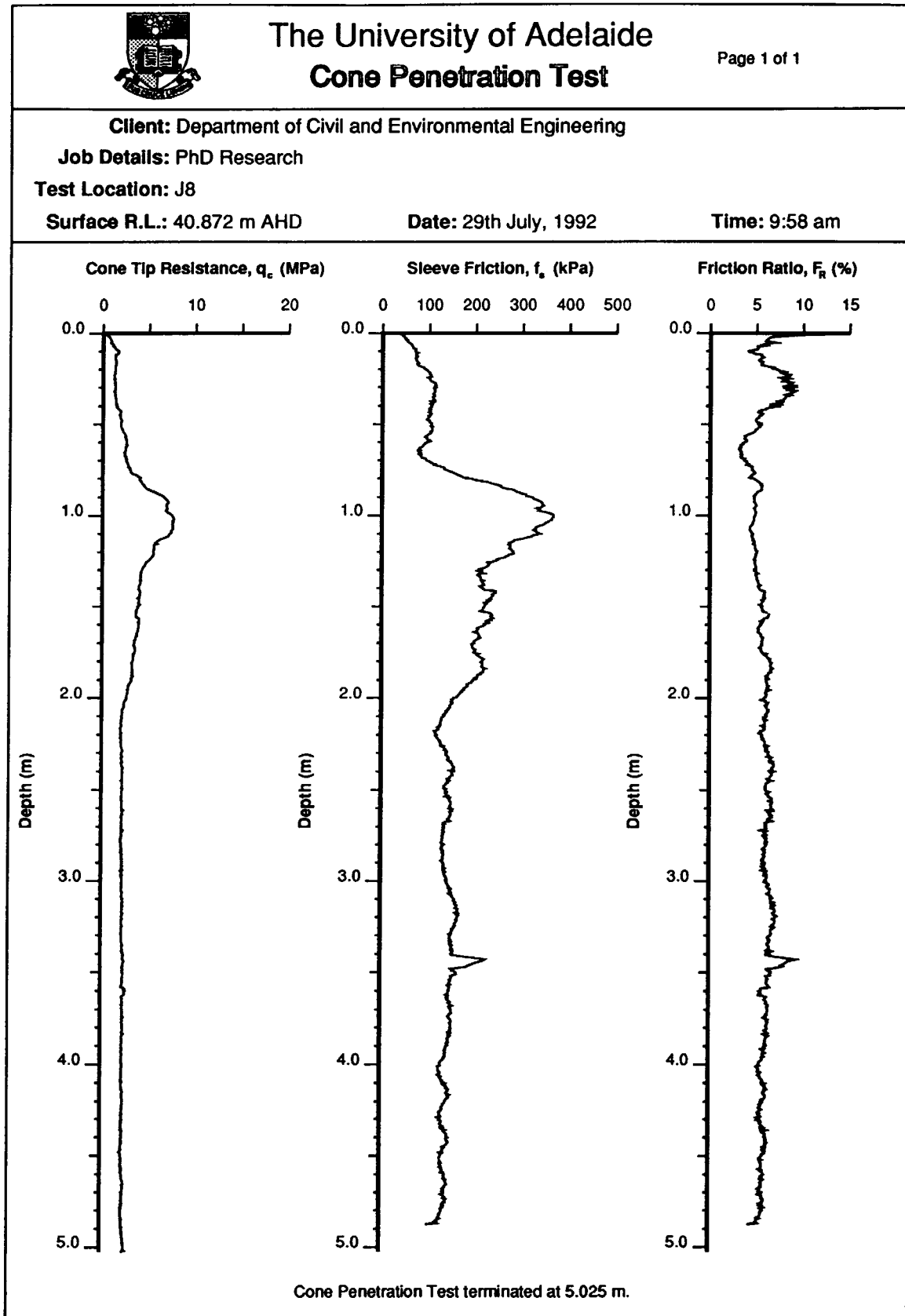


Figure A.42 Cone penetration test results from sounding J8.

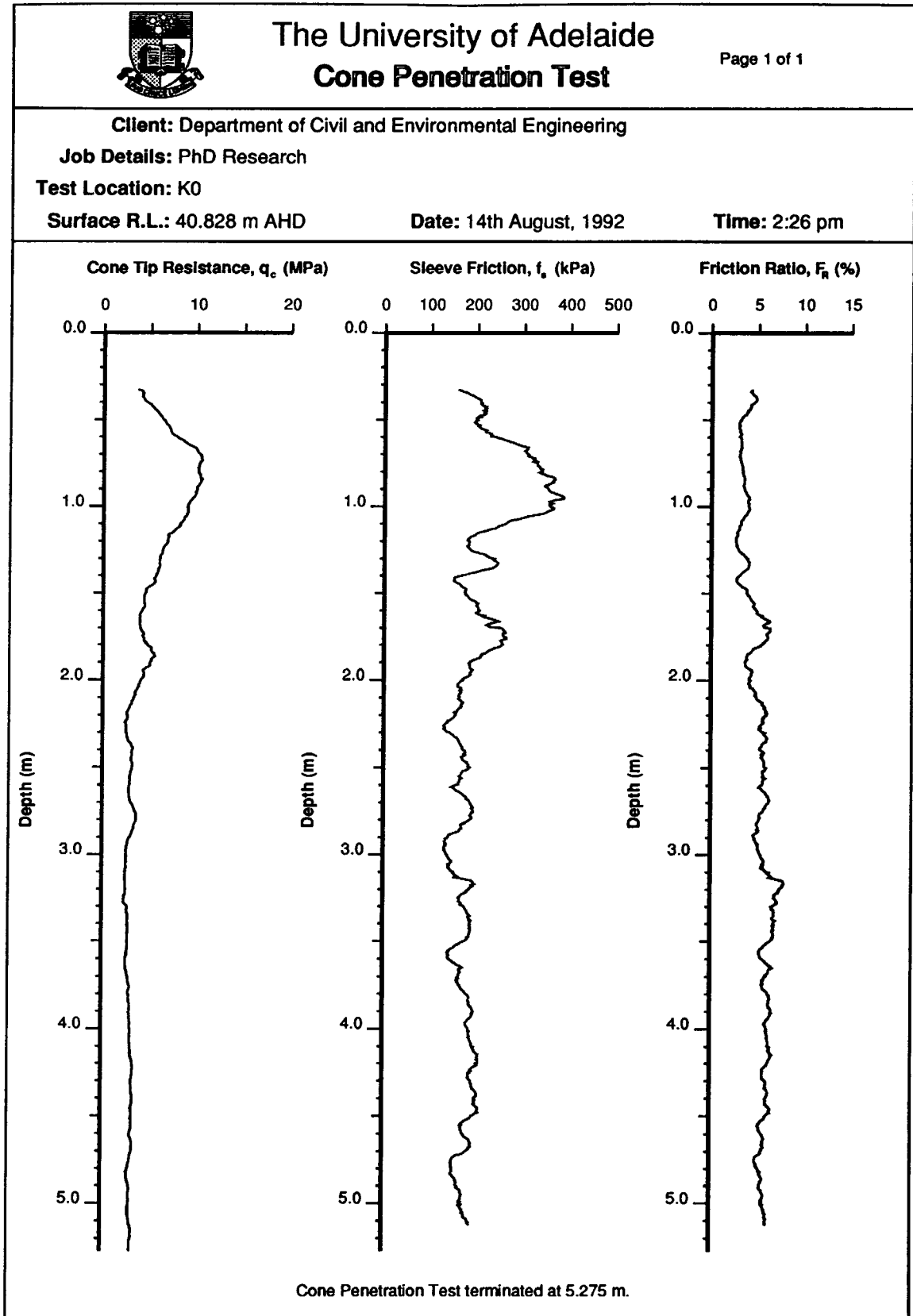


Figure A.43 Cone penetration test results from sounding K0.

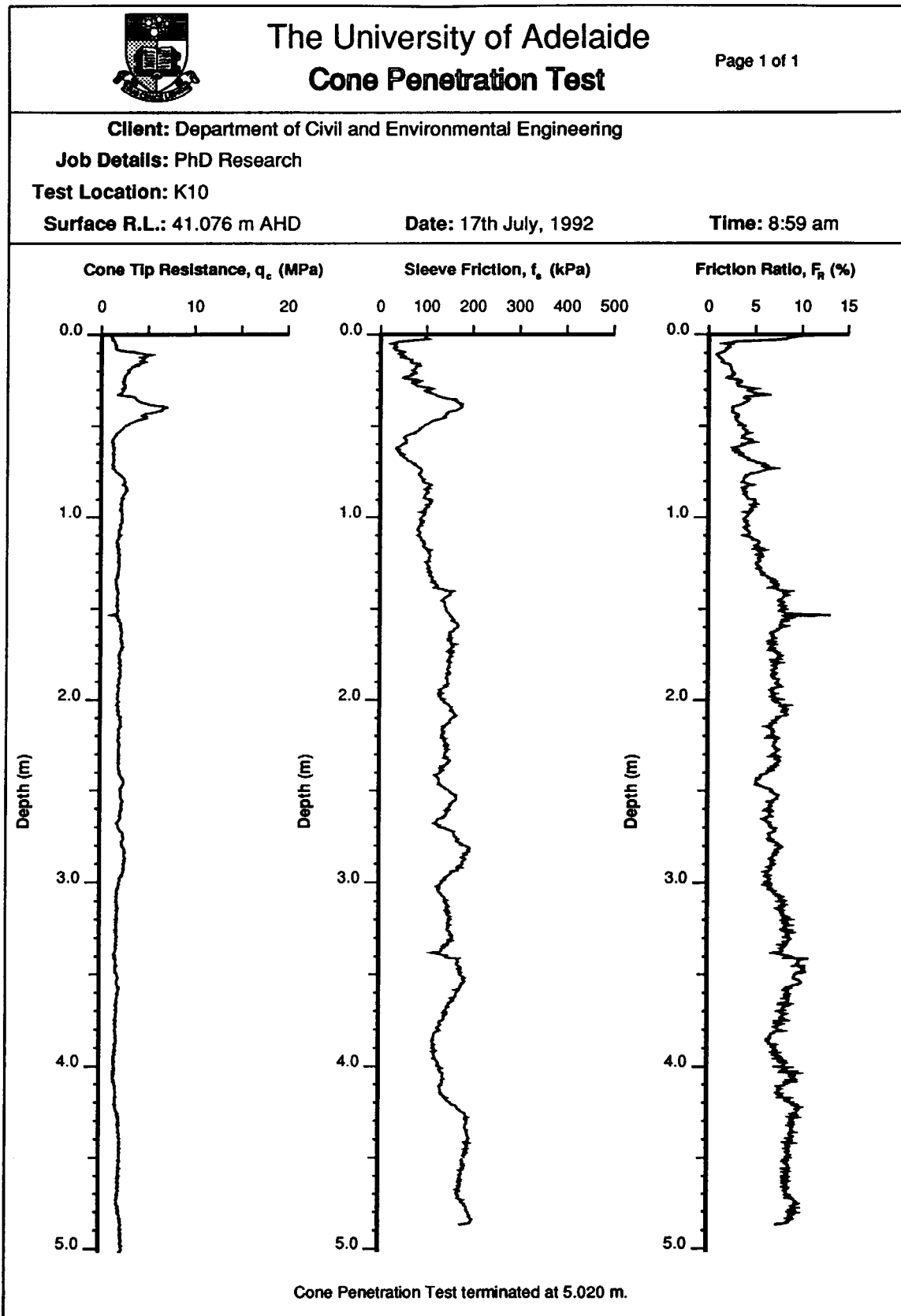


Figure A.44 Cone penetration test results from sounding K10.

APPENDIX B

ENGINEERING BOREHOLE LOGS

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B.1 INTRODUCTION

The following engineering borehole logs detail the soils encountered in the nine boreholes drilled at the South Parklands site. In describing the moisture condition and consistency of the soils encountered, a standard notation has been used, which is detailed below.

- **Moisture** condition of the soil is based on its appearance:

D	Dry	Looks and feels dry; cohesive soils are usually hard, powdery or friable, granular soils run freely through hands.
M	Moist	Soil feels cool, darkened in colour; cohesive soils usually weakened by moisture, granular soils tend to cohere, but one gets no free water on hands on remoulding.
W	Wet	Soil feels cool, darkened in colour; cohesive soils weakened, granular soils tend to cohere, free water collects on hands when remoulding.

- **Consistency** is based on the unconfined compressive strength (UCS) of the soil which is usually estimated, or measured by a hand penetrometer:

Symbol:	VS	S	F	St	VSt	H
Term:	Very Soft	Soft	Firm	Stiff	Very Stiff	Hard
UCS (kPa):	0 - 25	25 - 50	50 - 100	100 - 200	200 - 400	> 400

If the soil crumbles during the test, without a meaningful result, it is described as **friable (Fb)**.

BOREHOLE A0**Drilling Method:** Dynamic-push**Date Drilled:** 15th August 1992

Depth (m)	USCS	Description	Moisture	Consistency
0.0 - 0.4	CL/SC	Sandy CLAY/Clayey SAND, low plasticity, dark brown. Fine to medium sand. Trace of root fibre. <i>Callabonna Clay</i>	M	Fb
0.4 - 1.7	CL/CH	Silty Sandy CLAY, medium plasticity, pale brown. Fine to medium sand. Extremely calcareous. <i>Calcareous Mantle</i>	M	Fb
1.7 - 2.3	CH	Silty Sandy CLAY, high plasticity, white to grey. Fine to medium sand. Calcareous. <i>Limy surficial layer.</i>	M	Fb
2.3 - 5.0	CH	Silty CLAY, high plasticity, grey-green with red-brown and yellow mottling. Some fine sand. <i>Keswick Clay</i>	M	VSt/H

BOREHOLE A10**Drilling Method:** Solid-Flight Auger**Date Drilled:** 26th February 1993

Depth (m)	USCS	Description	Moisture	Consistency
0.0 - 1.1	CL/SC	Sandy CLAY/Clayey SAND, low plasticity, dark brown. Fine to medium sand. Trace of root fibre. <i>Callabonna Clay</i>	M	Fb
1.1 - 1.6	CL/CH	Silty Sandy CLAY, medium plasticity, pale brown. Fine to medium sand. Extremely calcareous. <i>Calcareous Mantle</i>	M	Fb
1.6 - 3.4	CH	Silty Sandy CLAY, high plasticity, white to grey. Fine to medium sand. Calcareous. <i>Limy surficial layer.</i>	M	Fb
3.4 - 5.0	CH	Silty CLAY, high plasticity, grey-green with red-brown and yellow mottling. Some fine sand. <i>Keswick Clay</i>	M	VSt/H

BOREHOLE C2**Drilling Method:** Dynamic-push**Date Drilled:** 15th August 1992

Depth (m)	USCS	Description	Moisture	Consistency
0.0 - 0.7	CL/SC	Sandy CLAY/Clayey SAND, low plasticity, dark brown. Fine to medium sand. Trace of root fibre. <i>Callabonna Clay</i>	M	Fb
0.7 - 1.1	CL/CH	Silty Sandy CLAY, medium plasticity, pale brown. Fine to medium sand. Extremely calcareous. <i>Calcareous Mantle</i>	M	Fb
1.1 - 2.3	CH	Silty Sandy CLAY, high plasticity, white to grey. Fine to medium sand. Calcareous. <i>Limy surficial layer.</i>	M	Fb
2.3 - 5.0	CH	Silty CLAY, high plasticity, grey-green with red-brown and yellow mottling. Some fine sand. <i>Keswick Clay</i>	M	VSt/H

BOREHOLE C8**Drilling Method:** Dynamic-push**Date Drilled:** 15th August 1992

Depth (m)	USCS	Description	Moisture	Consistency
0.0 - 0.2	CL/SC	Sandy CLAY/Clayey SAND, low plasticity, dark brown. Fine to medium sand. Trace of root fibre. <i>Callabonna Clay</i>	M	Fb
0.2 - 0.9	CL/CH	Silty Sandy CLAY, medium plasticity, pale brown. Fine to medium sand. Extremely calcareous. <i>Calcareous Mantle</i>	M	Fb
0.9 - 1.1	CH	Silty Sandy CLAY, high plasticity, white to grey. Fine to medium sand. Calcareous. <i>Limy surficial layer.</i>	M	Fb
1.1 - 5.0	CH	Silty CLAY, high plasticity, grey-green with red-brown and yellow mottling. Some fine sand. <i>Keswick Clay</i>	M	VSt/H

BOREHOLE F5**Drilling Method:** Dynamic-push**Date Drilled:** 15th August 1992

Depth (m)	USCS	Description	Moisture	Consistency
0.0 - 0.3	CL/SC	Sandy CLAY/Clayey SAND, low plasticity, dark brown. Fine to medium sand. Trace of root fibre. <i>Callabonna Clay</i>	M	Fb
0.3 - 0.9	CL/CH	Silty Sandy CLAY, medium plasticity, pale brown. Fine to medium sand. Extremely calcareous. <i>Calcareous Mantle</i>	M	Fb
0.9 - 1.6	CH	Silty Sandy CLAY, high plasticity, white to grey. Fine to medium sand. Calcareous. <i>Limy surficial layer.</i>	M	Fb
1.6 - 5.0	CH	Silty CLAY, high plasticity, grey-green with red-brown and yellow mottling. Some fine sand. <i>Keswick Clay</i>	M	VSt/H

BOREHOLE I2**Drilling Method:** Dynamic-push**Date Drilled:** 15th August 1992

Depth (m)	USCS	Description	Moisture	Consistency
0.0 - 0.5	CL/SC	Sandy CLAY/Clayey SAND, low plasticity, dark brown. Fine to medium sand. Trace of root fibre. <i>Callabonna Clay</i>	M	Fb
0.5 - 1.8	CL/CH	Silty Sandy CLAY, medium plasticity, pale brown. Fine to medium sand. Extremely calcareous. <i>Calcareous Mantle</i>	M	Fb
1.8 - 2.4	CH	Silty Sandy CLAY, high plasticity, white to grey. Fine to medium sand. Calcareous. <i>Limy surficial layer.</i>	M	Fb
2.4 - 5.0	CH	Silty CLAY, high plasticity, grey-green with red-brown and yellow mottling. Some fine sand. <i>Keswick Clay</i>	M	VSt/H

BOREHOLE I8**Drilling Method:** Dynamic-push**Date Drilled:** 15th August 1992

Depth (m)	USCS	Description	Moisture	Consistency
0.0 - 0.2	CL/SC	Sandy CLAY/Clayey SAND, low plasticity, dark brown. Fine to medium sand. Trace of root fibre. <i>Callabonna Clay</i>	M	Fb
0.2 - 1.0	CL/CH	Silty Sandy CLAY, high plasticity, brown with black and pale brown. Fine to medium sand. <i>Transitional Member</i>	M	Fb
1.0 - 2.2	CH	Silty Sandy CLAY, high plasticity, white to grey. Fine to medium sand. Calcareous. <i>Limy surficial layer.</i>	M	Fb
2.2 - 5.0	CH	Silty CLAY, high plasticity, grey-green with red-brown and yellow mottling. Some fine sand. <i>Keswick Clay</i>	M	VSt/H

BOREHOLE K0**Drilling Method:** Dynamic-push**Date Drilled:** 15th August 1992

Depth (m)	USCS	Description	Moisture	Consistency
0.0 - 0.5	CL/SC	Sandy CLAY/Clayey SAND, low plasticity, dark brown. Fine to medium sand. Trace of root fibre. <i>Callabonna Clay</i>	M	Fb
0.5 - 2.0	CL/CH	Silty Sandy CLAY, medium plasticity, pale brown. Fine to medium sand. Extremely calcareous. <i>Calcareous Mantle</i>	M	Fb
2.2 - 3.3	CH	Silty Sandy CLAY, high plasticity, white to grey. Fine to medium sand. Calcareous. <i>Limy surficial layer.</i>	M	Fb
3.3 - 5.0	CH	Silty CLAY, high plasticity, grey-green with red-brown and yellow mottling. Some fine sand. <i>Keswick Clay</i>	M	VSt/H

BOREHOLE K10**Drilling Method:** Dynamic-push**Date Drilled:** 15th August 1992

Depth (m)	USCS	Description	Moisture	Consistency
0.0 - 0.3	CL/SC	Sandy CLAY/Clayey SAND, low plasticity, dark brown. Fine to medium sand. Trace of root fibre. <i>Callabonna Clay</i>	M	Fb
0.3 - 1.6	CL/CH	Silty Sandy CLAY, medium plasticity, pale brown. Fine to medium sand. Extremely calcareous. <i>Calcareous Mantle</i>	M	Fb
1.6 - 2.0	CH	Silty Sandy CLAY, high plasticity, white to grey. Fine to medium sand. Calcareous. <i>Limy surficial layer.</i>	M	Fb
2.0 - 5.0	CH	Silty CLAY, high plasticity, grey-green with red-brown and yellow mottling. Some fine sand. <i>Keswick Clay</i>	M	VSt/H

APPENDIX C

**DATA BASE OF THE GEOTECHNICAL
PROPERTIES OF THE KESWICK
AND HINDMARSH CLAYS**

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C.1 INTRODUCTION

The following pages provide a brief overview of the *KESWICK* data base, which contains geotechnical properties of the Keswick and Hindmarsh Clays. Only part of the data base is shown, as an example of the information contained within it. Two columns, which contain information regarding internal job and borehole numbers relevant to each site investigation, have been hidden in order to provide some anonymity for the consulting practices and government instrumentalities who provided data for this research.

The following pages are organised in the order in which the data were obtained by the author, that is:

1. Coffey Partners International Pty. Ltd.;
2. Rust PPK Consultants Pty. Ltd. (*formerly PPK Consultants Pty. Ltd.*);
3. SACON (*South Australian Department of Housing and Construction*);
4. Golder Associates Pty. Ltd. (*formerly Woodburn Fitzhardinge Geotechnical*);
5. ACER Wargon Chapman (SA) Pty. Ltd. (*formerly Hosking Oborn Freeman and Fox*);
6. Koukourou and Partners;
7. Connell Wagner (SA) Pty. Ltd.;
8. Kinhill Engineers.

C.2 NOTES ON DATA

- The *Soil Layer Tested* column refers to the soil type (K: Keswick Clay; S: Hindmarsh Clay Sand Member; L: Hindmarsh Clay Layer; and K/L: Undifferentiated Keswick Clay/ Hindmarsh Clay Layer) to which the particular test refers.
- The data, whose title is given in *italics*, are *derived* from measured data by means of commonly applied phase relationship equations. These include:

$$\gamma_d = 9.81 \times \rho_d \quad (\text{C.1})$$

$$\gamma = \gamma_d(1 + w) \quad (\text{C.2})$$

$$e = \frac{G_s \gamma_w}{\gamma_d} - 1 \quad (\text{C.3})$$

$$S_r = \frac{w \gamma_d G_s}{G_s \gamma_w - \gamma_d} \quad (\text{C.4})$$

$$G_s = \frac{\gamma_d}{\gamma_w - w \gamma_d} \quad (\text{for } S_r = 100\%) \quad (\text{C.5})$$

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Table C.1 Data from Coffey Partners International Pty. Ltd.

Ref. No.	AMG Coords.		Surface RL (m) (ABPD)	Depth to Top of Layer (m)			Depth to Bottom of Layer (m)	Test Type	Test Depth (m)	Soil Layer	Undrained Shear Strength (kPa)	Confining Pressure (kPa)	Undrained Young's Modulus (MPa)	Undrained Shear Strength (kPa)	Internal Angle of Friction (degrees)	Dry Density (Vm3)	Dry Unit Weight (kN/m3)	Water Content (%)	Total Suction (pF)	Bulk Unit Weight (kN/m3)	Void Ratio	Degree of Saturation (%)	Back-Calculated Specific Gravity	Coeff. of Earth Pressure at Rest	Instab. Ily Index (%)	SPT Depth (m)	Data N	Season/ Year	Location	Comments	Assumed Constants and Legend																																																
	North	East		Kerwick	Sand	Lower																																																																									
Data Source: Coffey Partners International No. 1																																																																															
2	32473	80560	45.25	2.7	9.0	13.0	17.1	SPLT	5.43	K			65	120					33.3									A/1996	State Bank Building (Bombholes located near the end of Savings Bank Place, approx. 50m west of King William St.)	Layer depths interpolated between BH1 and BH2 A6 to BH1 A6 to BH1 Bh connect Transitional Member	Specific Gravity, G = 2.7 Test Types: SPLT = Screw Plate Lead Test SBPT = Self Boring Penetration Test CPT = Cone Penetration Test TUUW = Triaxial, Unconsolidated, Undrained test with 4 stages. TCD# = Triaxial, Consolidated, Drained test with 4 stages. TUC = Triaxial, Unconfined Compression Test DST = Direct Shear Test																																																
2	32473	80560	45.25	2.7	9.0	13.0	17.1	SPLT	4.10	K			105	125				28.2	4.00									A/1996																																																			
1	32480	80559	45.06	2.9	9.1	12.2	17.3	SPLT	5.47	K			109	120				33.8	4.20									A/1996																																																			
1	32480	80559	45.06	2.9	9.1	12.2	17.3	SPLT	7.01	K			180	215				31.7	4.30									A/1996																																																			
3	32463	80561	45.45	2.5	8.9	14.6	16.9	TUU1	4.50	K	100	150			1.44	14.13	32.7			18.75	0.88	100.00	2.72			11.0	17	A/1996																																																			
3	32463	80561	45.45	2.5	8.9	14.6	16.9	SBPT	5.50	K			375															A/1996																																																			
3	32463	80561	45.45	2.5	8.9	14.6	16.9	SBPT	7.50	K			90	180										4.4				A/1996																																																			
3	32463	80561	45.45	2.5	8.9	14.6	16.9	SBPT	10.50	S			140										4.8					A/1996																																																			
3	32463	80561	45.45	2.5	8.9	14.6	16.9	SBPT	16.10	L			220	300									5.5					A/1996																																																			
1	32480	80559	45.06	2.9	9.1	12.2	17.3	TUU1	3.15	K	200	120					1.55	15.31	26.9		19.30	0.74	97.89					A/1996																																																			
1	32480	80559	45.06	2.9	9.1	12.2	17.3	TUU1	4.65	K	120	180					1.42	13.83	33.4		18.58	0.90	100.04	2.70				A/1996																																																			
1	32480	80559	45.06	2.9	9.1	12.2	17.3	TUU3	5.70	K	130	200					1.47	14.42	30.8		18.86	0.84	99.39			10.8	37	A/1996																																																			
																										11.5	34	A/1996																																																			
																												A/1996																																																			
1	32480	80559	45.06	2.9	9.1	12.2	17.3	TUU1	7.15	K	200	280					1.52	14.91	30.6		19.47	0.78	106.43	2.84				A/1996																																																			
1	32480	80559	45.06	2.9	9.1	12.2	17.3	TUU1	13.45	L	280	300					1.48	14.52	31.5		19.09	0.82	103.18	2.77				A/1996																																																			
1	32480	80559	45.06	2.9	9.1	12.2	17.3	TUU3	15.20	L	272	300					1.59	15.60	26.2		19.68	0.70	101.33	2.73				A/1996																																																			
																												A/1996																																																			
																												A/1996																																																			
																												A/1996																																																			
4	32458	80523	39.93	0.0	4.8	9.0	12.3	TUU3	1.73	K	155	70	18	125	7.5	1.52	14.91	28.1		19.10	0.78	97.73				5.0	36	Sp/1986	State Bank Building Stage II																																																		
																										6.0	23	Sp/1986																																																			
																										7.5	>50	Sp/1986																																																			
4	32458	80523	39.93	0.0	4.8	9.0	12.3	TUU3	3.62	K	187	140	34	140	8.5	1.65	16.19	22.7		19.86	0.64	96.31				9.0	25	Sp/1986																																																			
																										10.2	>50	Sp/1986																																																			
																										12.0	>50	Sp/1986																																																			
																										3.0	35	Sp/1986																																																			
																										5.0	45	Sp/1986																																																			
																										6.5	>50	Sp/1986																																																			
																													Sp/1986																																																		
5	32488	80520	39.85	0.0	3.8	8.0	12.0	TUU3	1.92	K	71	75	53	50	7.5	1.60	15.70	24.8		19.59	0.69	97.40						Sp/1986	State Bank Building Stage II																																																		
																																Sp/1986																																															
5	32488	80520	39.85	0.0	3.8	8.0	12.0	TUU3	3.80	S	212	140	24	90	22	1.56	15.30	18.8		18.18	0.73	69.46						Sp/1986	State Bank Building Stage II																																																		
																																Sp/1986																																															
																													Sp/1986	State Bank Building Stage II																																																	
																													Sp/1986																																																		
5	32488	80520	39.85	0.0	3.8	8.0	12.0	TUU1	8.70	L	232	300	73	232			1.46	14.32	31.7		18.86	0.85	100.78	2.72				Sp/1986	State Bank Building Stage II																																																		
																																Sp/1986																																															
6	32851	81223	44.10	4.9																										City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																																																
7	32849	81194	44.10	4.9																													City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																																													
8	32848	81169	44.10	5.2																																City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																																										
9	32875	81220	43.90	4.9																																			City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																																							
10	32873	81200	44.00	4.9																																						City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																																				
11	32870	81169	44.00	4.9																																									City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																																	
12	32658	80555	43.50	2.0																																												City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																														
13	32770	80876	44.80	2.0																																															City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																											
14	32497	80797	45.10	4.0																																																		City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																								
15	32665	80103	35.70	2.1																																																					City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																					
16	31764	80719	45.30	3.2																																																								City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																		
17	31220	79675	40.10	1.3																																																											City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report															
18	32475	80920	46.00	3.1	9.0	12.5																																																												City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report												
19	32308	81225	47.30	2.0																																																																	City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report									
20	32391	80168	43.60	2.0																																																																				City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report						
21	32489	80354	43.04	1.5	6.9	9.6	15.4	SPLT	2.50	K			36	75															City Mutual Building Car. Pakeny St. & North Ton.																																														From a Dames & Moore report				
21	32489	80354	43.04	1.5	6.9	9.6	15.4	TUU1	1.63	K	125	65			1.51	14.81	29.0	3.10		19.11	0.79	99.36																																																							City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report	
21	32489	80354	43.04	1.5	6.9	9.6	15.4	TUU1	3.15	K	120	128			1.37	13.44	26.0	3.40		18.28	0.97	100.12	2.70			2.7		City Mutual Building Car. Pakeny St. & North Ton.																																																			
21	32489	80354	43.04	1.5	6.9	9.6	15.4	TUU1	5.15	K	170	210			1.47	14.42	30.7	4.20		18.85	0.84	99.06									City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																																															
22	32498	80423	43.08	1.0	5.8	10.5	15.5																										City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																																													
23	32465	80388	43.99	1.6			14.0	SPLT	2.50	K/L			84	128																						City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																																										
23	32465	80388	43.99	1.6			14.0	SBPT	2.75	K/L			10	75																									City Mutual Building Car. Pakeny St. & North Ton.	From a Dames & Moore report																																							
23	32465	80388	43.99	1.6			14.0	SBPT	5.00	K/L			55	100																																																																	

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Table C.5 Data from ACER Wargon Chapman Pty. Ltd. (formerly Hosking Oborn Freeman and Fox).

Ref. No.	AMG Coords.		Surface RL (m) (AHD)	Depth to Top of Layer (m)			Depth to Bottom of Layer (m)	Test Type	Test Depth (m)	Soil Layer Tested	Undrained Shear Strength s_u (kPa)	Confining Pressure (kPa)	Undrained Young's Modulus (MPa)	Undrained Shear Strength c_u (kPa)	Internal Angle of Friction (degrees)	Dry Density (γ_{m3})	Dry Unit Weight (kN/m ³)	Water Content (%)	Total Suction (kPa)	Bulk Unit Weight (kN/m ³)	Void Ratio	Degree of Saturation (%)	Back-Calculated Specific Gravity	Coeff. of Earth Pressure at Rest	Instability Index (%)	SPT Data		Season/Year	Location	Comments	Assumed Constants and Legend	
	North	East		Keswick	Sand	Lower																				N	N					
Data Source: Hosking Oborn Freeman and Fox																																
240	34474	80137	47.80	5.7		>6.39	TUU3	6.25	K/L	188	107	42.2	180	1.5	1.44	14.13	26.5			18.43	0.88	94.11						W/1977	Anchor St., Nth. Ad.		Specific Gravity, $G = 2.7$	
										187	214																					
										197	427																					
241	34453	80070	47.10	5.6		>6.44	TUU3	6.28	K/L	204	107	45.2	172	6	1.52	14.91	28.0			19.09	0.78	97.38						W/1977				
										215	214																					
										246	427																					
242	34435	80016	46.70	4.0		9.5	TUU3	6.25	K/L	122	107	29.4	110	3	1.46	14.32	28.5	3.46		18.55	0.85	93.78						W/1977				
										129	214																					
										141	427																					
242	34435	80016	46.70	4.0		9.5	TUU3	7.78	K/L	61	138	20.7	52	3	1.46	14.32	28.0			18.33	0.85	99.01										
										73	276																					
										83	552																					
243	34421	80210	47.70	4.0		10.0	TUU3	5.80	K/L	160	103	10.1	125	8.5	1.37	13.44	35.0	3.83		18.14	0.97	97.34						W/1977				
										190	207																					
										217	414																					
243	34421	80210	47.70	4.0		10.0	TUU3	7.72	K/L	177	138	39.7	175	0.5	1.5	14.72	28.5			18.91	0.80	96.19										
										177	276																					
										181	552																					
244	34394	80158	47.00	3.7		7.0	TUU3	6.15	K/L	208	107	43.3	180	5	1.47	14.42	30.0			18.75	0.84	96.80						W/1977				
										223	214																					
										240	427																					
245	34377	80107	46.70	3.1		6.5	TUU3	6.25	K/L	157	106	36.1	120	4	1.4	13.73	33.5			18.33	0.93	97.41										
										148	214																					
										162	427																					
246	32578	79713	39.70	2.0		6.0	SPLT	2.00	K/L			17.0	88															W/1982	State Aquatic Centre, Hindley St.			
246	32578	79713	39.70	2.0		6.0	SPLT	4.00	K/L			40.0	92																			
246	32578	79713	39.70	2.0		6.0	TUU	4.65	K/L				82	2			31.5	4.03														
246	32578	79713	39.70	2.0		6.0	SPLT	6.00	K/L			87.0																				
247	32588	79755	39.20	2.0		5.5	SPLT	2.00	K/L			28.0	81																			
247	32588	79755	39.20	2.0		5.5	TUU	3.15	K/L				65	0			32.3	3.91														
247	32588	79755	39.20	2.0		5.5	SPLT	4.00	K/L			37.0	102																			
248	32552	79751	39.60	0.8		5.0	SPLT	2.00	K/L			36.0	91																			
248	32552	79751	39.60	0.8		5.0	SPLT	4.00	K/L			37.0	141																			
249	32540	79736	39.60	1.4		5.6	SPLT	2.00	K/L			36.0	117																			
250	32697	81254	44.50	3.7		>10.7	TUU3	3.18	K/L	125	55	7.9	135	0	1.369	13.43	35.8	3.83		18.24	0.97	99.42						A/1979	Academy Classroom, Hindmarsh Sq.			
										130	110																					
										157	221																					
250	32697	81254	44.50	3.7		>10.7	TUU3	5.20	K/L	138	89	10.5	140	1.1	1.454	14.26	31.8	4.17		18.80	0.86	100.19	2.70									
										150	179																					
										166	359																					
250	32697	81254	44.50	3.7		>10.7	TUU3	7.20	K/L	123	128	14.7	117	1.7	1.421	13.84	33.2			18.57	0.90	99.59										
										141	255																					
										168	510																					
251	32669	81232	43.90	3.0		>6.3	TUU3	3.08	K/L	229	48		245	0.8	1.408	13.81	33.1	4.04		18.38	0.92	97.39										
										235	97																					
										247	193																					
251	32669	81232	43.90	3.0		>6.3	TUU2	4.65	K/L	140	79	18.0	146	1.2	1.409	13.82	33.2	4.15		18.41	0.92	97.83										
										148	159																					
251	32669	81232	43.90	3.0		>6.3	TUU3	6.07	K/L	177	107	18.0	184	0	1.469	14.41	30.3	4.25		18.78	0.84	97.63										
										186	214																					
										203	427																					
252	32635	81252	45.00	2.7		>10.7	TUU2	5.20	K/L	149	93	20.0	138	2.6	1.41	13.83	33.2	4.17		18.42	0.91	97.98										
										162	186																					
252	32635	81252	45.00	2.7		>10.7	TUU2	7.20	K/L	162	131	14.0	167	0.1	1.44	14.13	31.9			18.63	0.88	98.43										
										173	262																					

Test Types:
 SPLT = Screw Plate

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Table C.7 Data from Connell Wagner (SA) Pty. Ltd.

Ref. No.	AMG Coords.		Surface RL (m) (AHD)	Depth to Top of Layer (m)			Depth to Bottom of Layer (m)	Test Type	Test Depth (m)	Soil Layer	Undrained Shear Strength (kPa)	Applied Normal Stress (kPa)	Undrained Young's Modulus (MPa)	Undrained Shear Strength cu (kPa)	Internal Angle of Friction (degrees)	Dry Density (t/m ³)	Dry Unit Weight (kN/m ³)	Water Content (%)	Total Suction (kPa)	Bulk Unit Weight (kN/m ³)	Void Ratio	Degree of Saturation (%)	Back-Calculated Specific Gravity	Coeff. of Earth Pressure at Rest	Instability Index (%)	SPT Depth (m)	Data N	Season/Year	Location	Comments	Assumed Constants and Legend		
	North	East		Keswick	Sand	Lower																											
290	32438	80912	45.50	1.7		>6.0	SPLT	2.93	K/L			23	37															Sp/1980	82 - 90 Pirie St.		Specific Gravity, G = 2.7		
290	32438	80912	45.50	1.7		>6.0	SPLT	3.08	K/L			44	60																				
291	32219	81250	47.70	3.0		>11.6	DST	4.08	K/L	100	72				1.47	14.42	30.0				18.75	0.84	96.80					W/1972	TAB Building, Fould St.				
291	32219	81250	47.70	3.0		>11.6	DST	5.28	K/L	125	100				1.44	14.13	31.0				18.51	0.88	95.66										
292	32204	81279	47.90	2.2		>7.6	DST	3.48	K/L	89	63				1.41	13.83	32.5				18.33	0.91	95.91										
293	32796	80491	39.40	0.0		8.2	DST	4.68	K/L	102	95				1.73	16.97	17.3				19.91	0.56	83.31					W/1973	Annex Building, North Toe.				
293	32796	80491	39.40	0.0		8.2	DST	6.18	K/L	149	130				1.87	18.34	15.8				21.24	0.44	96.11										
293	32796	80491	39.40	0.0		8.2	DST	7.68	K/L	199	158				1.51	14.81	26.5				18.74	0.79	96.79										
294	32794	80517	39.70	0.0		8.6	DST	6.18	K/L	179	129				1.43	14.03	32.6				18.60	0.89	99.11										
295	32768	80510	40.00	0.0		8.2	DST	1.58	K/L	55	34				1.27	12.46	42.2				17.72	1.13	101.19	2.74									
295	32768	80510	40.00	0.0		8.2	DST	3.08	K/L	105	67				1.36	13.34	36.5				18.21	0.99	100.02	2.70									
295	32768	80510	40.00	0.0		8.2	DST	4.68	K/L	149	96				1.36	13.34	36.4				18.39	0.99	99.75										
295	32768	80510	40.00	0.0		8.2	DST	6.18	K/L	160	130				1.33	13.05	37.4				17.93	1.03	98.03										
295	32768	80510	40.00	0.0		8.2	DST	7.68	K/L	186	158				1.27	12.46	41.2				17.59	1.13	98.79										
296	32808	80528	37.90	0.0		5.9	DST	1.58	K/L	91	35				1.33	13.05	36.4				17.80	1.03	95.41										
296	32808	80528	37.90	0.0		5.9	DST	3.08	K/L	162	67				1.41	13.83	33.8				18.51	0.91	99.75										
296	32808	80528	37.90	0.0		5.9	DST	4.68	K/L	215	96				1.68	16.48	22.3				20.16	0.61	99.17										
297	32597	80594	45.40	2.1		14.0	DST	4.38	K/L	86	72				1.44	14.13	33.9				18.92	0.88	104.61	2.81									
297	32597	80594	45.40	2.1		14.0	DST	5.48	K/L	134	95				1.43	14.03	32.1				18.53	0.89	97.59										
297	32597	80594	45.40	2.1		14.0	DST	7.08	K/L	177	121				1.44	14.13	31.3				18.55	0.88	96.58										
297	32597	80594	45.40	2.1		14.0	DST	8.58	K/L	199	146				1.28	13.54	34.2				18.17	0.96	96.54										
297	32597	80594	45.40	2.1		14.0	DST	10.58	K/L	203	175				1.44	14.13	31.1				18.52	0.88	95.97										
298	32538	80786	44.60	2.4	7.6	9.5	15.8	DST	4.38	K	84	72				1.38	13.54	35.5				18.34	0.96	100.21	2.71								
298	32538	80786	44.60	2.4	7.6	9.5	15.8	DST	6.18	K	134	105				1.44	14.13	31.4				18.56	0.88	96.89									
298	32538	80786	44.60	2.4	7.6	9.5	15.8	DST	11.18	L	172	185				1.39	13.64	32.9				18.12	0.94	94.23									
298	32538	80786	44.60	2.4	7.6	9.5	15.8	DST	13.18	L	192	214				1.52	14.91	27.2				18.97	0.78	94.60									
298	32538	80786	44.60	2.4	7.6	9.5	15.8	DST	14.58	L	292	214				1.83	17.05	16.7				20.95	0.48	94.84									
299	32446	80799	45.50	3.0		>12.5	DST	3.28	K/L	96	57				1.52	14.91	27.6				19.03	0.78	95.99										
299	32446	80799	45.50	3.0		>12.5	DST	6.48	K/L	139	88				1.52	14.91	30.8				19.50	0.78	107.12	2.86									
299	32446	80799	45.50	3.0		>12.5	DST	12.58	K/L	220	150				1.43	14.03	32.0				18.52	0.89	97.29										
300	32142	80484	44.60	1.5	10.4	11.6	>15.5	DST	1.58	K	57	34				1.54	15.11	24.9				18.87	0.75	89.25									
300	32142	80484	44.60	1.5	10.4	11.6	>15.5	DST	3.78	K	72	63				1.51	14.81	28.2				18.99	0.79	96.61									
300	32142	80484	44.60	1.5	10.4	11.6	>15.5	DST	5.38	K	117	95				1.43	14.03	33.4				18.71	0.89	101.54	2.74								
300	32142	80484	44.60	1.5	10.4	11.6	>15.5	DST	7.38	K	139	121				1.41	13.83	32.5				18.33	0.91	95.91									
300	32142	80484	44.60	1.5	10.4	11.6	>15.5	DST	8.88	K	154	150				1.36	13.34	37.6				18.36	0.99	103.04	2.78								
300	32142	80484	44.60	1.5	10.4	11.6	>15.5	DST	13.48	L	215	215				1.62	15.89	24.1				19.72	0.67	97.61									
300	32142	80484	44.60	1.5	10.4	11.6	>15.5	DST	15.58	L	230	250				1.47	14.42	30.1				18.76	0.84	97.13									
300	32142	80484	44.60	1.5	10.4	11.6	>15.5	DST	15.58	L	230	250				1.21	12.85	37.5				17.67	1.06	95.42									
301	32199	80465	44.30	0.0		>7.9	DST	2.98	K/L	77	53				1.21	12.85	37.5				18.32	0.96	99.64										
301	32199	80465	44.30	0.0		>7.9	DST	4.08	K/L	93	63				1.28	13.54	35.3				18.32	0.96	99.64										
301	32199	80465	44.30	0.0		>7.9	DST	7.98	K/L	144	102				1.46	14.32	30.5				18.69	0.85	96.96										
302	34297	80652	46.60	3.4		10.7	DST	5.38	K/L	134	91				1.43	14.03	32.3				18.56	0.89	98.20										
302	34297	80652	46.60	3.4		10.7	DST	7.58	K/L	153	121				1.65	16.19	20.8				19.55	0.64	88.25										
303	34312	80621	47.10	3.0		8.2	DST	3.08	K/L	110	59				1.46	14.32	31.5				18.83	0.85	100.14	2.70									
303	34312	80621	47.10	3.0		8.2	DST	6.98	K/L	182	114				1.57	15.40	26.5				19.48	0.72	99.41										
304	32574	80564	44.70	2.7		13.6	DST	4.98	K/L																								

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Table C.8 Data from Kinhill Engineers Pty. Ltd.

Ref. No.	AMG Coords.		Surface RL (m) (ABD)	Depth to Top of Layer (m)			Depth to Bottom of Layer (m)	Test Type	Test Depth (m)	Soil Layer	Undrained Shear Strength c_u (kPa)	Confining Pressure (kPa)	Undrained Young's Modulus (MPa)	Undrained Shear Strength c_u (kPa)	Internal Angle of Friction (degrees)	Dry Density (γ_m)	Dry Unit Weight (kN/m ³)	Water Content (%)	Total Section (pF)	BuR Unit Weight (kN/m ³)	Void Ratio	Degree of Saturation (%)	Back-Calculated Specific Gravity	Coeff. of Earth Pressure at Rest	Instability Index (%)	SPT Depth (m)	Data N	Season/Year	Location	Comments	Assumed Constants and Legend						
	North	East		Keewick	Sand	Lower																															
Data Sources: Kinhill Engineers																																					
312	33001	81076	40.05	N/E																																	
313	33009	81032	39.21	N/E																																	
314	33004	80330	25.70	N/E																																	
315	32436	80856	45.21	2.3			13.7	TUU3	3.20	K/L	78	69	2	76	1	1.36	13.24	35.6										S/1973	Bear Smith Library Stage 3 Adelaide Festival Centre-Drone Th. National Bank Centre, Pile St.		Specific Gravity, G = 2.7						
											86	207																									
											90	414																									
315	32436	80856	45.21	2.3			13.7	TUU3	4.72	K/L	133	103	4	124	2	1.51	14.81	29.2																			
											150	276																									
											160	552																									
315	32436	80856	45.21	2.3			13.7	TUU3	6.25	K/L	219	138	4	207	2	1.58	15.50	26.0																			
											240	276																									
											241	552																									
315	32436	80856	45.21	2.3			13.7	TUU3	7.77	K/L	217	138	5	207	1	1.44	14.13	32.4																			
											221	276																									
											231	552																									
315	32436	80856	45.21	2.3			13.7	TUU3	9.30	K/L	255	172	4	248	0.6	1.47	14.42	31.4																			
											262	345																									
											265	690																									
315	32436	80856	45.21	2.3			13.7	TUU3	12.34	K/L	234	241	4	234	0	1.41	13.83	33.5																			
											228	483																									
											228	758																									
316	32415	80846	45.21	2.7			14.9	TUU3	3.20	K/L	103	69	3	103	1.8	1.56	15.30	26.2																			
											115	207																									
											121	414																									
316	32415	80846	45.21	2.7			14.9	TUU3	4.72	K/L	93	103	4	90	1.5	1.48	14.52	29.9																			
											105	276																									
											112	552																									
316	32415	80846	45.21	2.7			14.9	TUU3	6.25	K/L	160	138	3	148	1.8	1.45	14.22	31.9																			
											164	276																									
											190	552																									
316	32415	80846	45.21	2.7			14.9	TUU3	7.77	K/L	209	138	4	200	1	1.41	13.83	33.9																			
											214	276																									
											219	552																									
316	32415	80846	45.21	2.7			14.9	TUU3	9.30	K/L	78	172	7	76	0.5	1.43	14.03	33.0																			
											81	345																									
											112	690																									
316	32415	80846	45.21	2.7			14.9	TUU3	12.34	K/L	178	241	6	178	0	1.39	13.64	34.8																			
											178	483																									
											183	758																									
317	31227	79744	40.40	1.5			6.7																														
318	31210	79712	40.20	3.0			8.2																														
319	34220	80322	46.20	4.1			7.9																														
320	32399	80707	49.29	3.4	9.6	10.6	17.1																														
321	32456	80702	45.60	3.0	10.5	11.9	15.8																														
322	33050	80450	26.31	N/E																																	
323	32725	80871	45.00	2.4			12.4																														
324	32779	80866	44.70	2.7			12.5																														
325	31566	80727	44.30	4.0	10.7	11.7	>15.2																														
326	31570	80748	44.20	4.0	11.0	12.6	>15.2																														
327	32551	80586	44.62	5.0			>10.5																														
328	32563	80576	44.50	2.7			>9.9																														
329	32588	80402	42.10	2.1	5.8	9.4	11.7																														
330	32463	80800	45.10	3.4			>14.5	TUU3	4.15	K/L	151	69	23	15																							