COPY NO. 6

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

REPORT ON CYCLONED SAND CONSTRUCTION OF STAGE 3 AND ON-GOING STAGES OF THE TAILINGS STORAGE FACILITY (REF. NO. 11162/12-2)

VOLUME II OF II

Knight Piésold
CONSULTING ENGINEERS

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MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

REPORT ON CYCLONED SAND CONSTRUCTION OF STAGE 3 AND ON-GOING STAGES OF THE TAILINGS STORAGE FACILITY (REF. NO. 11162/12-2)

VOLUME II OF II

MP00015

Rev. No.	Revision	Date	Approved
A	Issued in Draft	November 16, 1999	
0	Issued in Final	December 13, 1999	KJB

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MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

REPORT ON CYCLONED SAND CONSTRUCTION OF STAGE 3 AND ON-GOING STAGES OF THE TAILINGS STORAGE FACILITY
(REF. NO. 11162/12-2)

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DOWNSTREAM TRIAL BERM

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APPENDIX B1

PHOTOS

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Photo No. 2: Downstream Trial vibrating wire piezometers. Leads wrapped in geotextile fabric for protection.

Photo No. 3: Downstream Trial vibrating wire piezometer post.

Photo No. 4: Downstream Trial – Phase I cycloned sand deposition. Note upstream face of rock berm covered with geotextile fabric.

Photo No. 5: Downstream Trial – Phase I cycloned sand deposition.

Photo No. 6: Downstream Trial – Timed discharge barrel test.

Photo No 7: Downstream Trial – Construction of Phase II downstream berm.

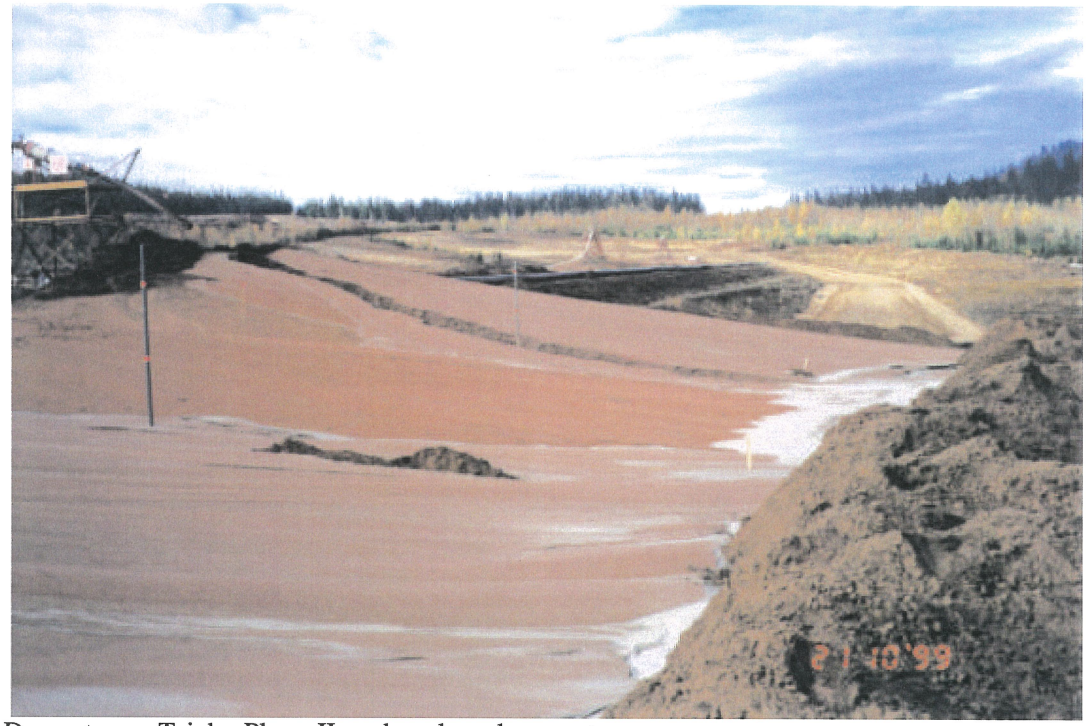

Photo No. 8: Downstream Trial – Phase II cycloned sand geometry.

Photo No. 9: Downstream Cycloned Sand Trial – Final configuration.

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APPENDIX B2

PORE PRESSURE
AND OUTLET DRAIN FLOW MONITORING

KNIGHT PIESOLD LTD.
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MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
PIEZOMETER D2-PE1-02
DOWNSTREAM TRIAL BERM (Zone CS Piezometer El. 935.02m)

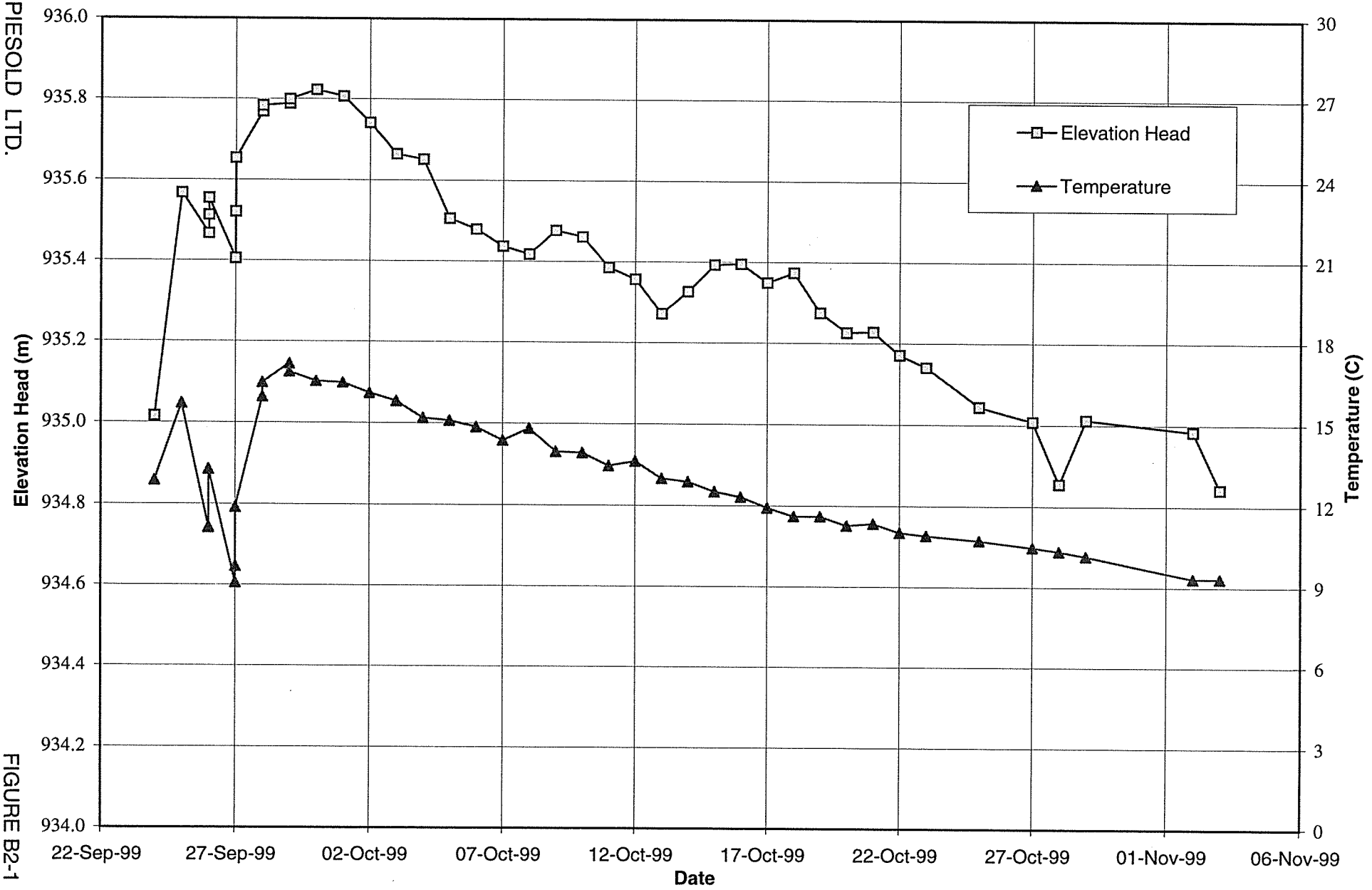

FIGURE B2-1

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
PIEZOMETER D2-PE1-03
DOWNSTREAM TRIAL BERM (Zone CS Piezometer El. 934.17m)

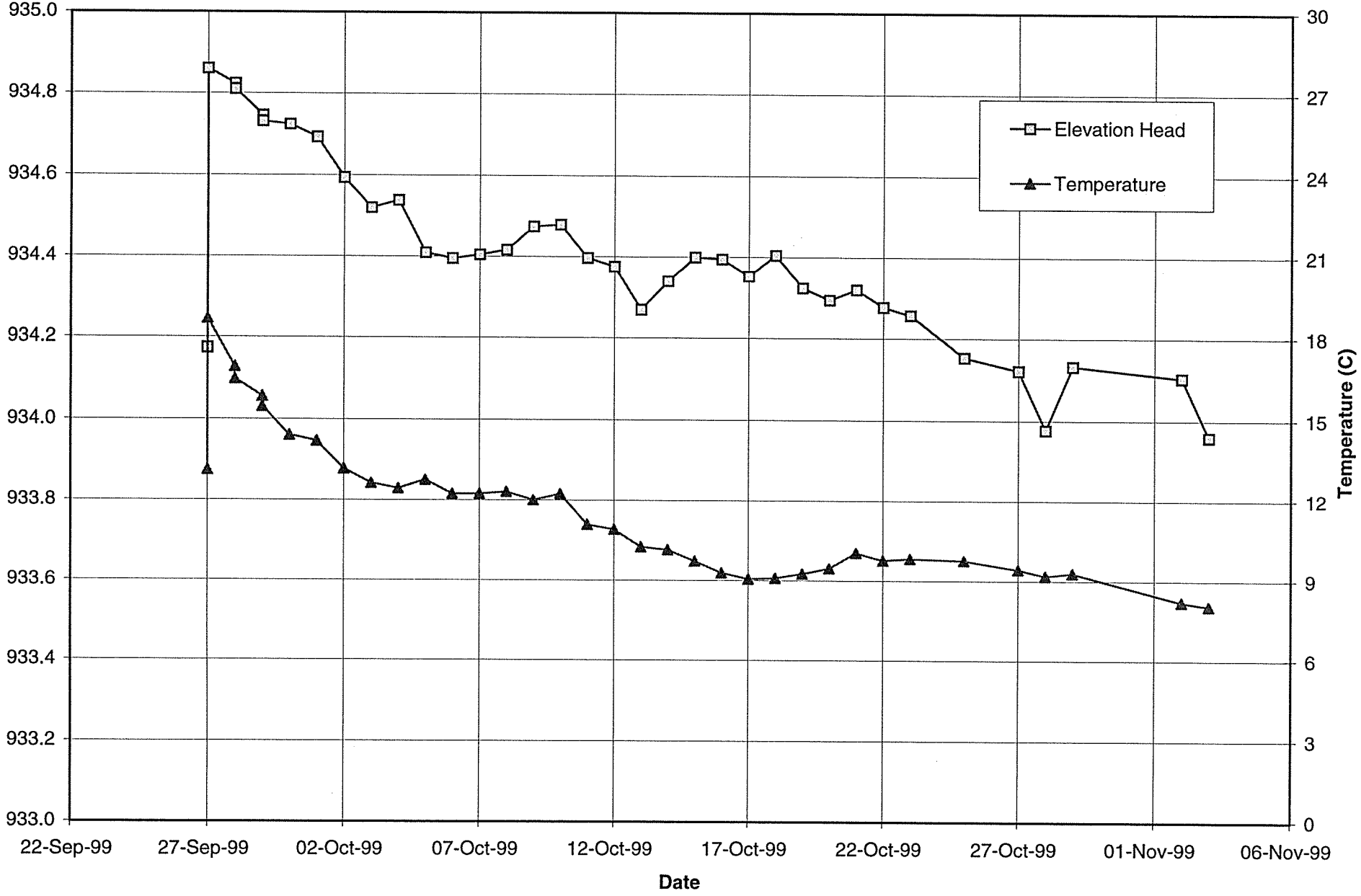

FIGURE B2-2

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
PIEZOMETER D2-PE1-04
DOWNSTREAM TRIAL BERM (Zone CS Piezometer El. 933.27m)

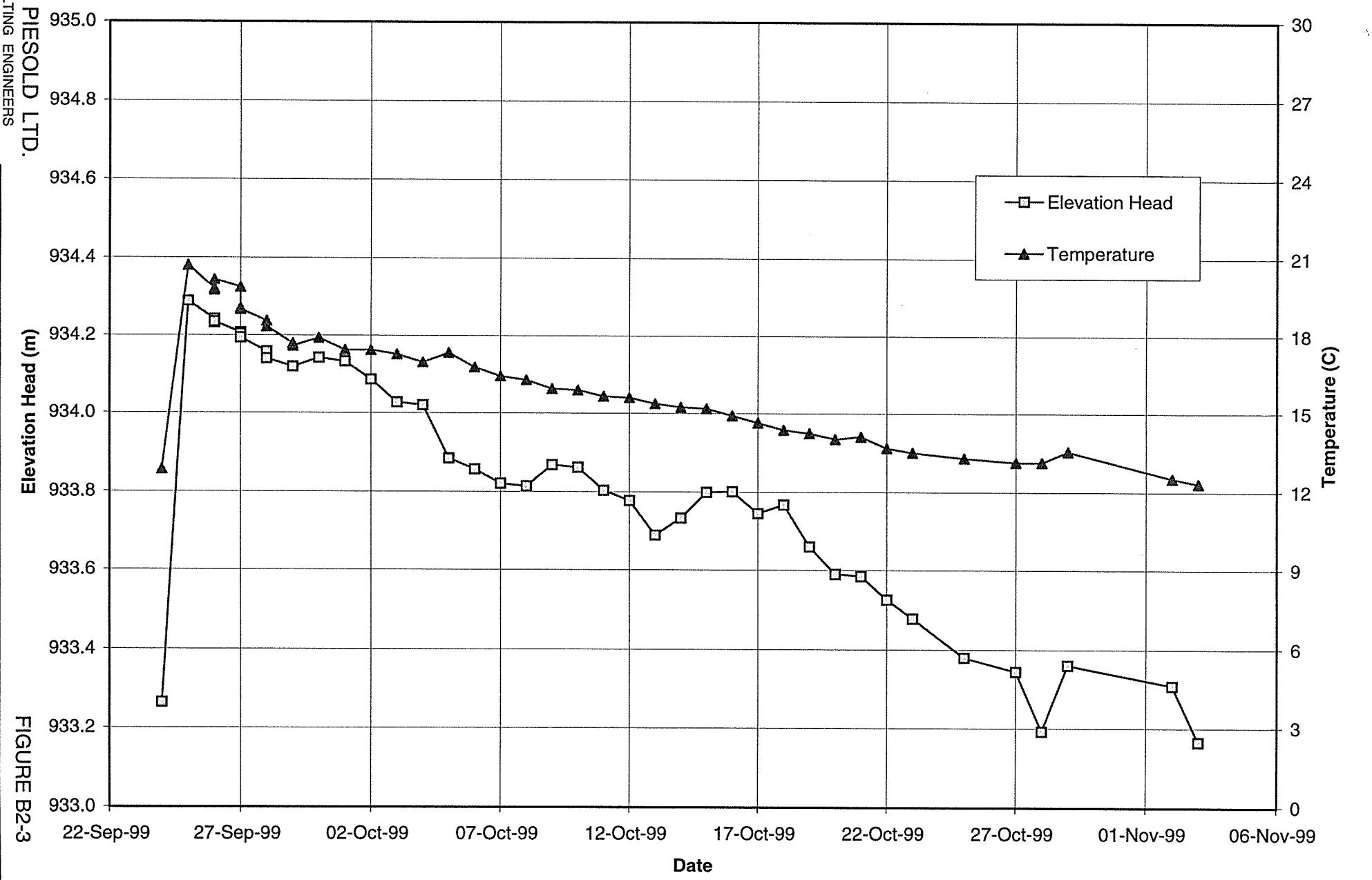

FIGURE B2-3

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
PIEZOMETER D2-PE1-05
DOWNSTREAM TRIAL BERM (Zone CS Piezometer El. 932.36m)

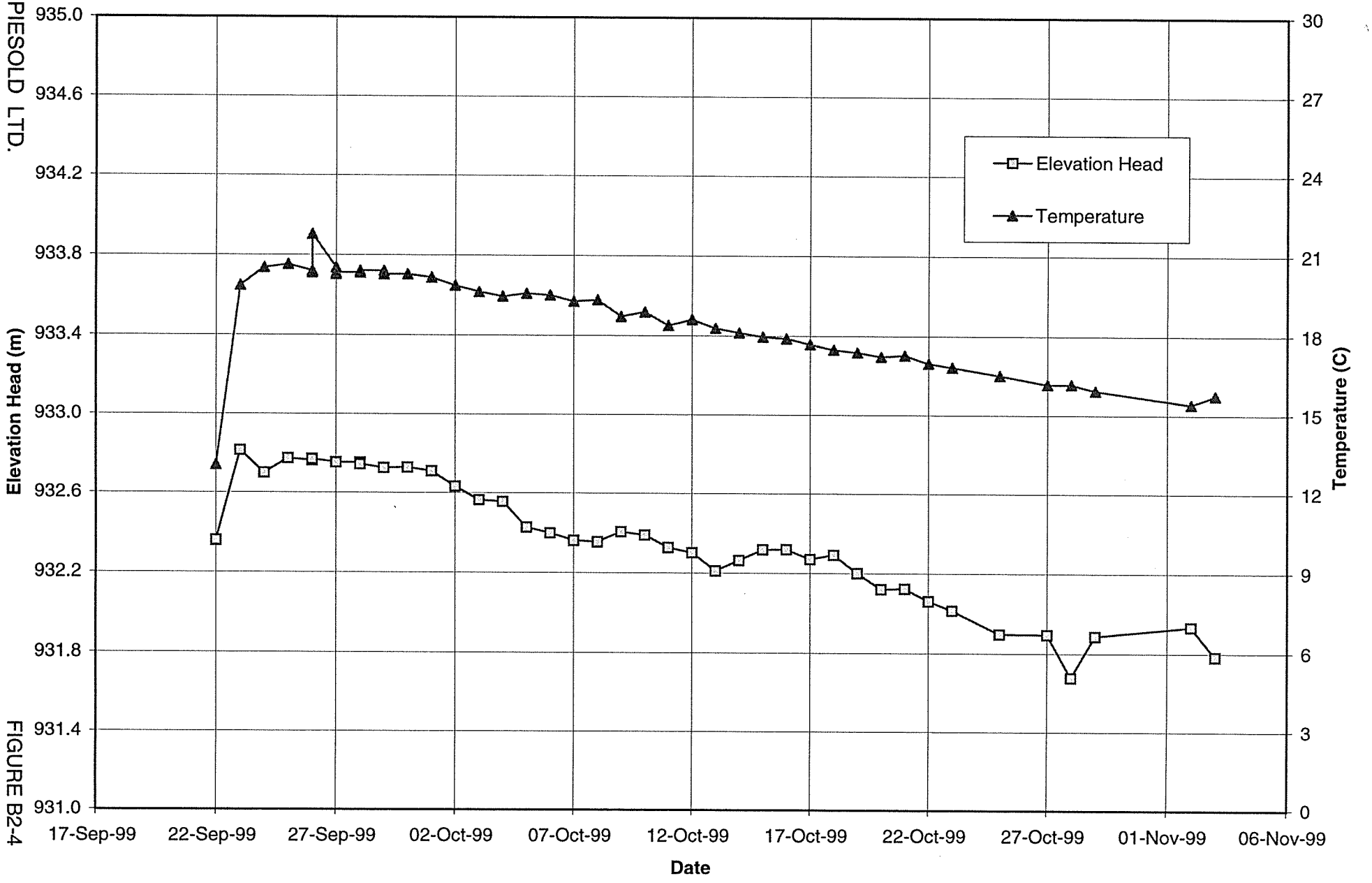

FIGURE B2-4

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
PIEZOMETER D2-PE1-06
DOWNSTREAM TRIAL BERM (Zone CS Piezometer El. 932.09m)

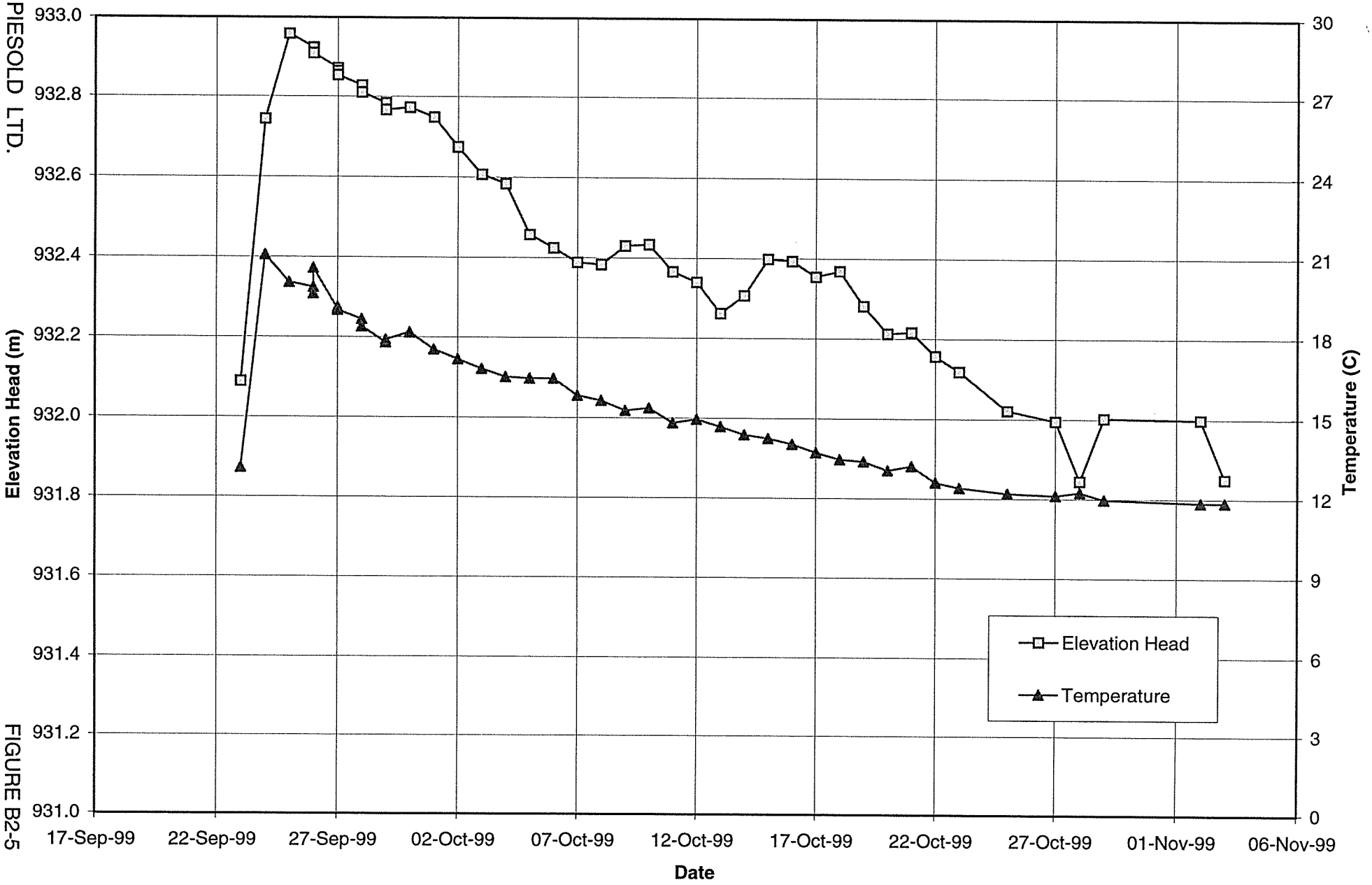

FIGURE B2-5

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
PIEZOMETER F2-PE1-01
DOWNSTREAM TRIAL BERM (Zone CS Piezometer El. 935.00m)

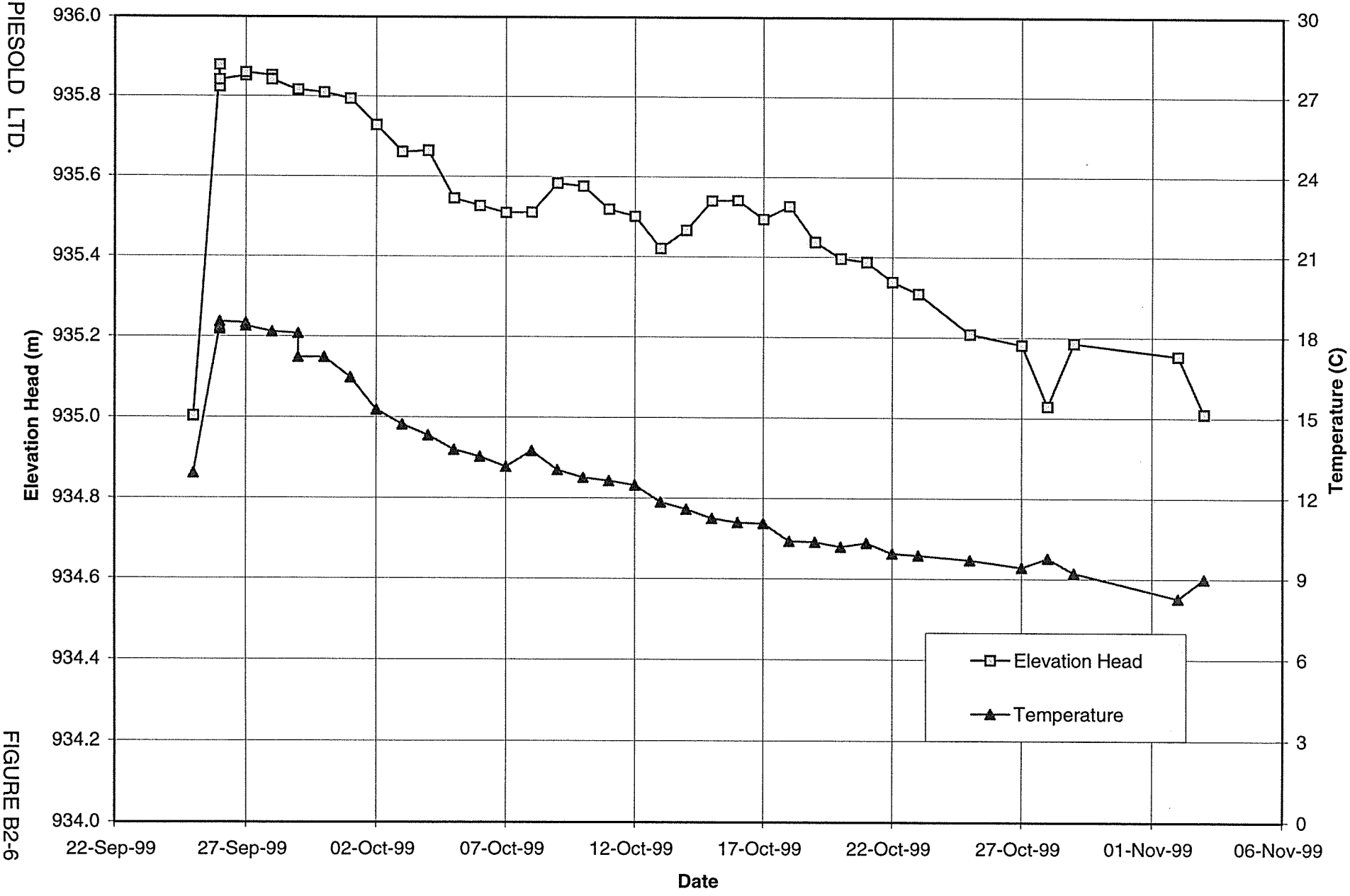

FIGURE B2-6

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
PIEZOMETER F2-PE1-02
DOWNSTREAM TRIAL BERM (Zone CS Piezometer El. 934.16m)

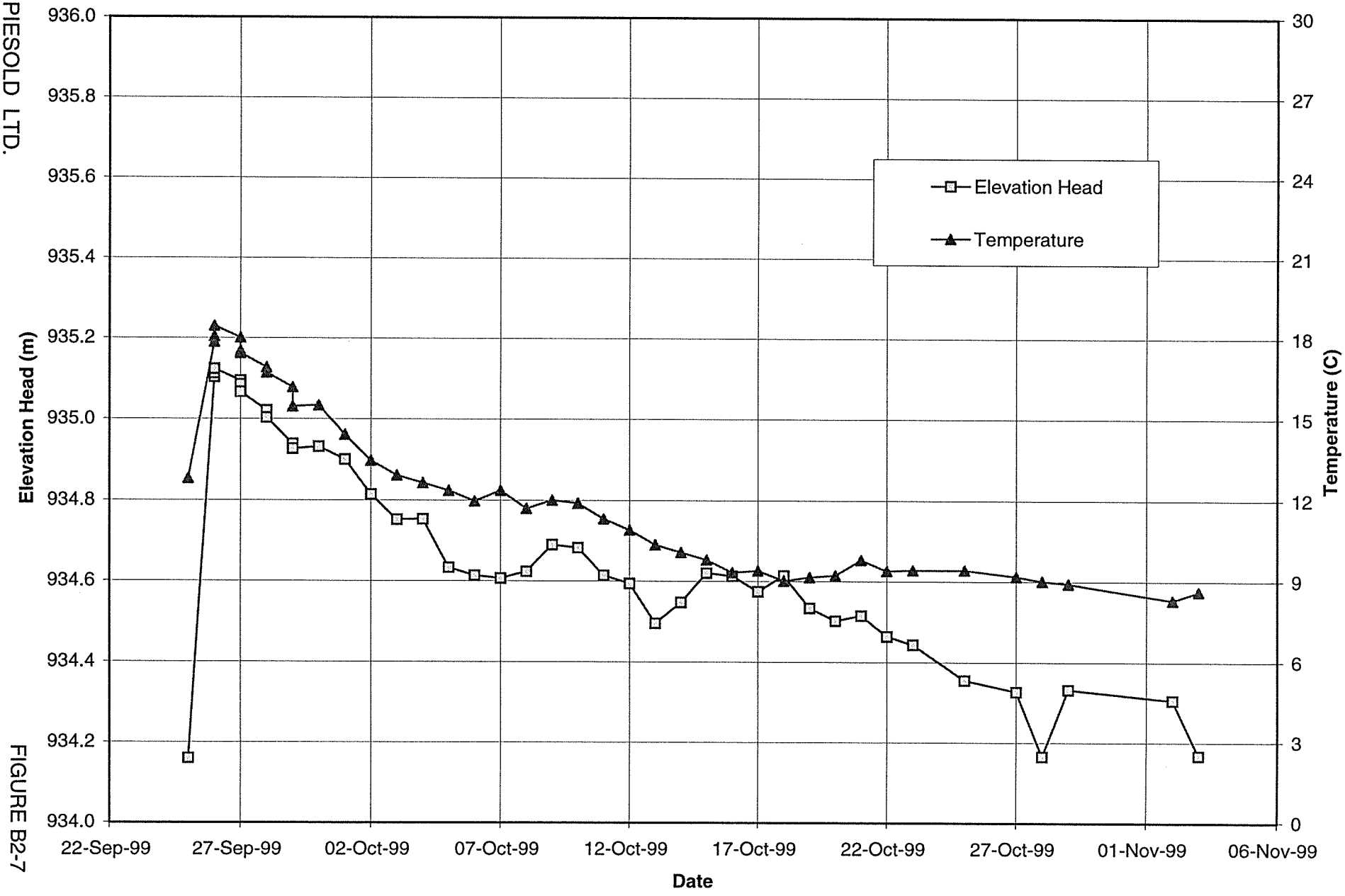

FIGURE B2-7

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
PIEZOMETER F2-PE1-03
DOWNSTREAM TRIAL BERM (Zone CS Piezometer El. 933.28m)

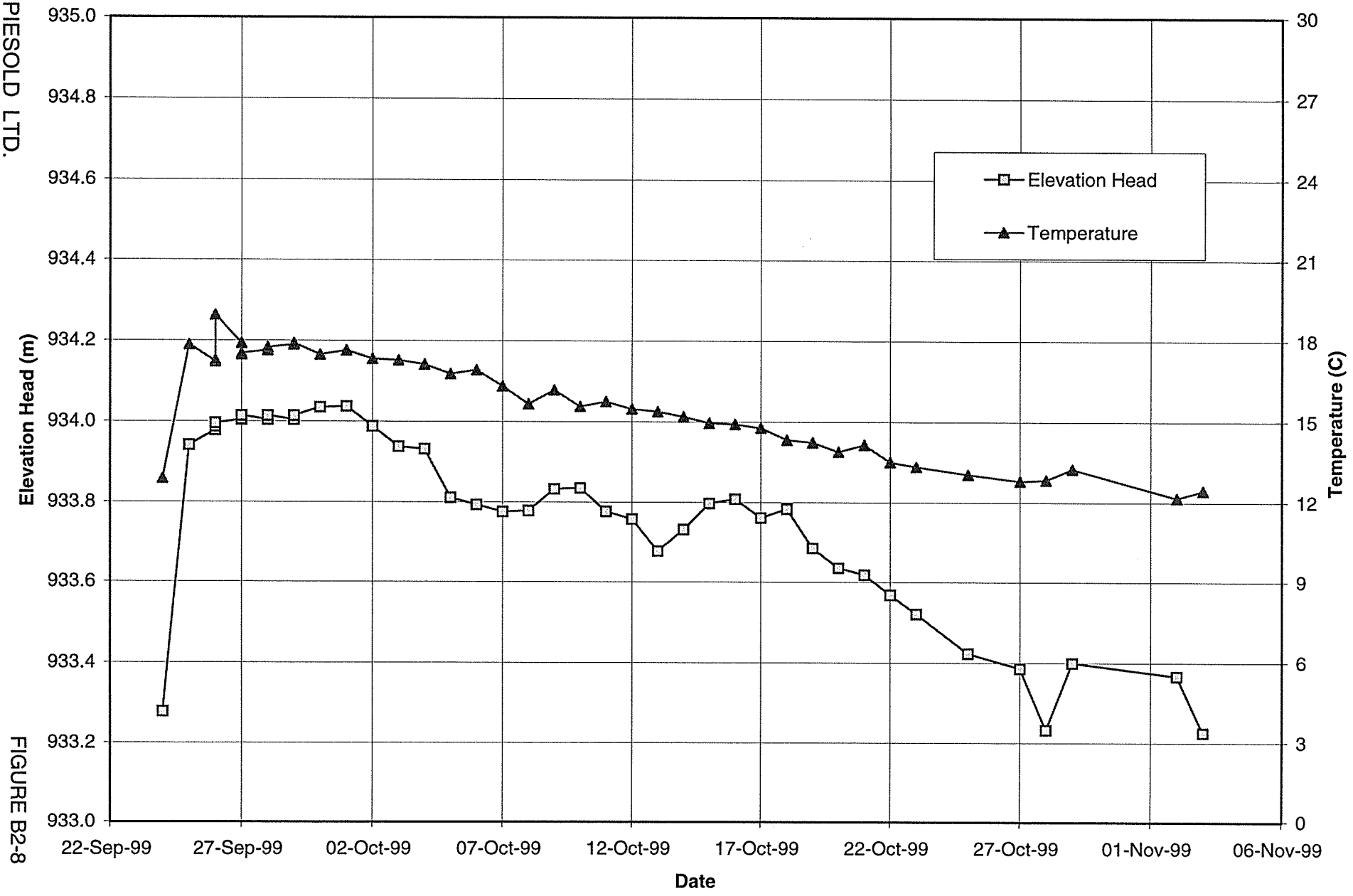

FIGURE B2-8

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
PIEZOMETER F2-PE1-04
DOWNSTREAM TRIAL BERM (Zone CS Piezometer El. 932.38m)

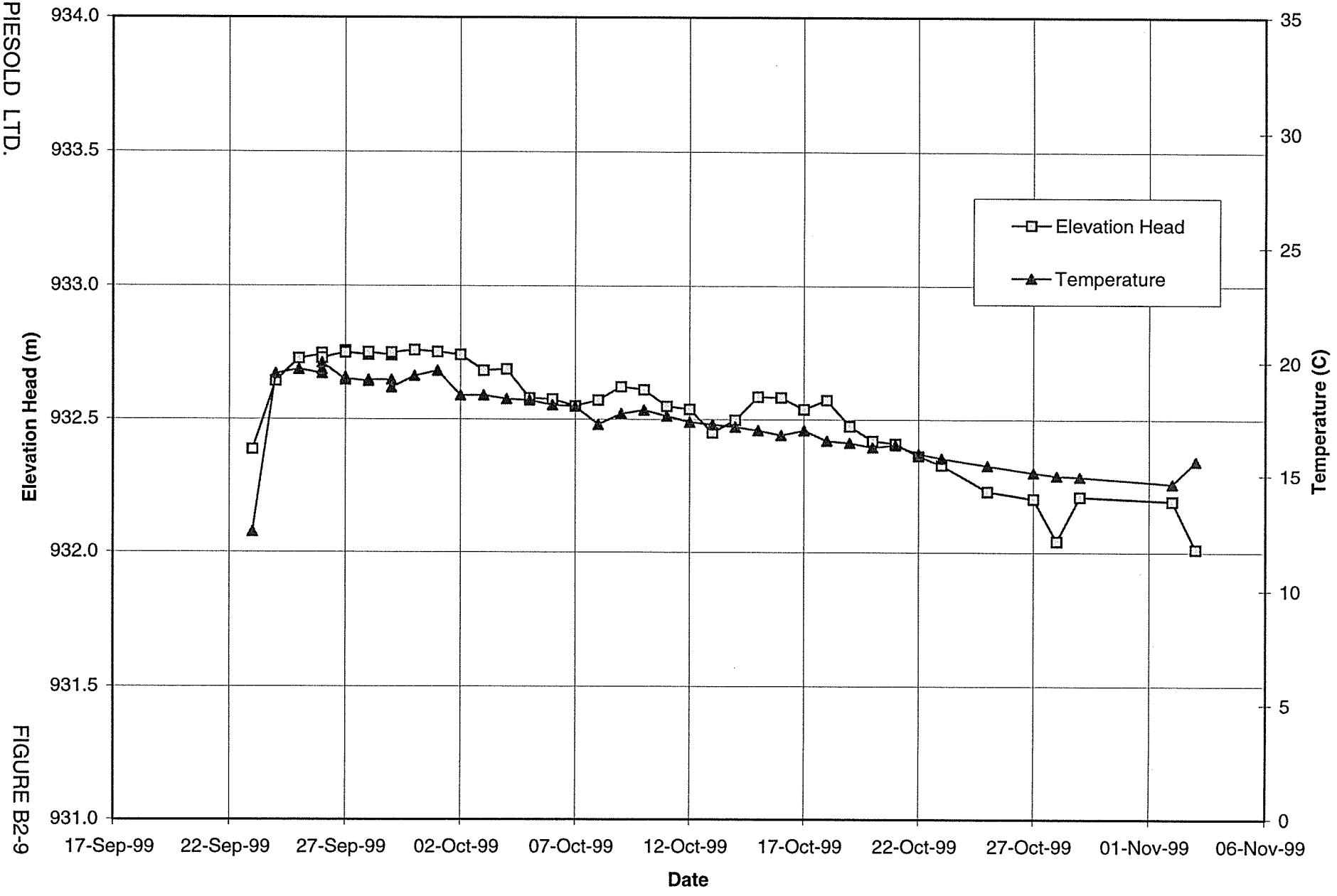

FIGURE B2-9

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
PIEZOMETER F2-PE1-05
DOWNSTREAM TRIAL BERM (Zone CS Piezometer El. 932.10m)

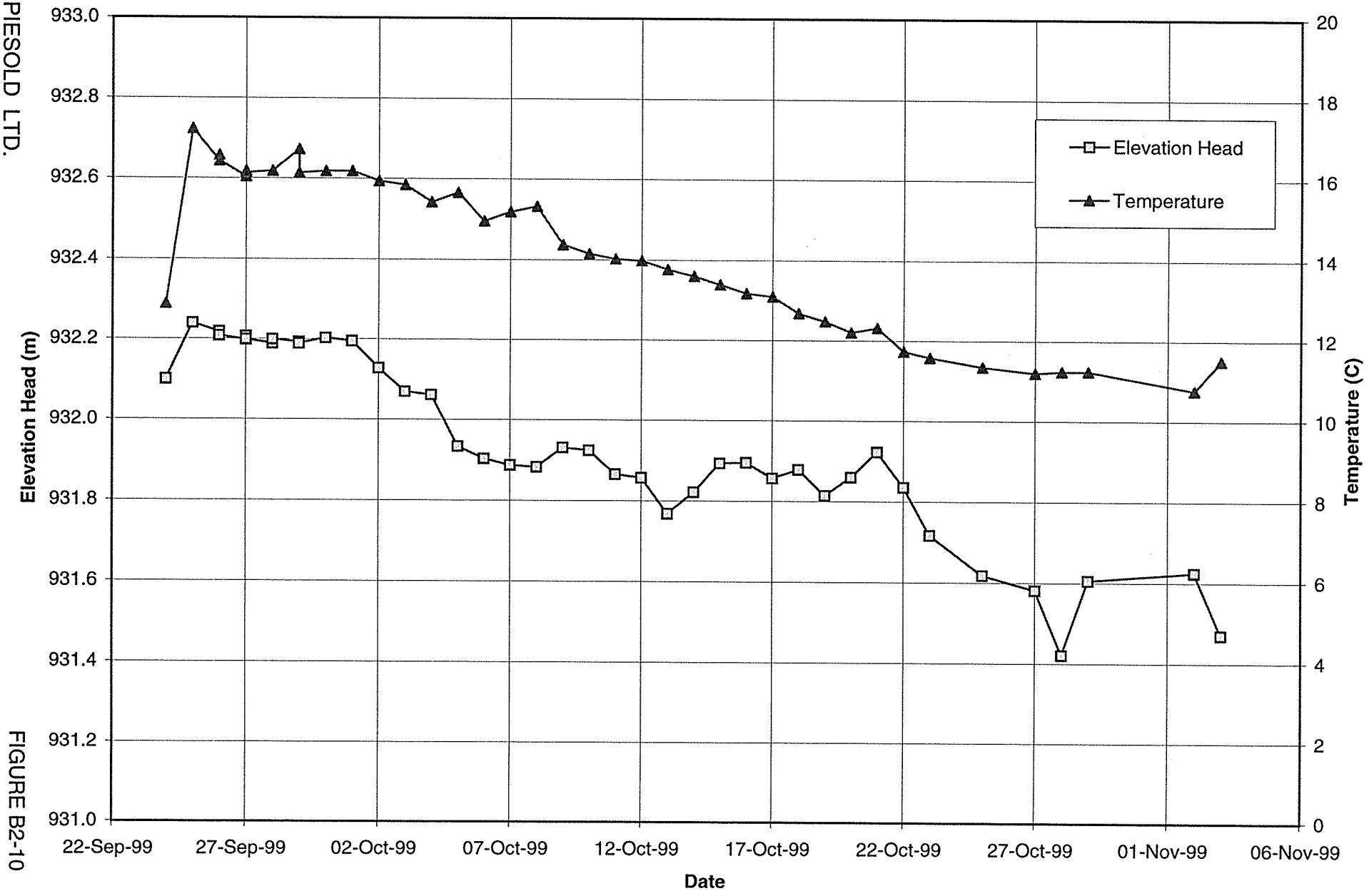

FIGURE B2-10

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
TAILINGS STORAGE FACILITY
PERIMETER EMBANKMENT OUTLET DRAIN FLOWS

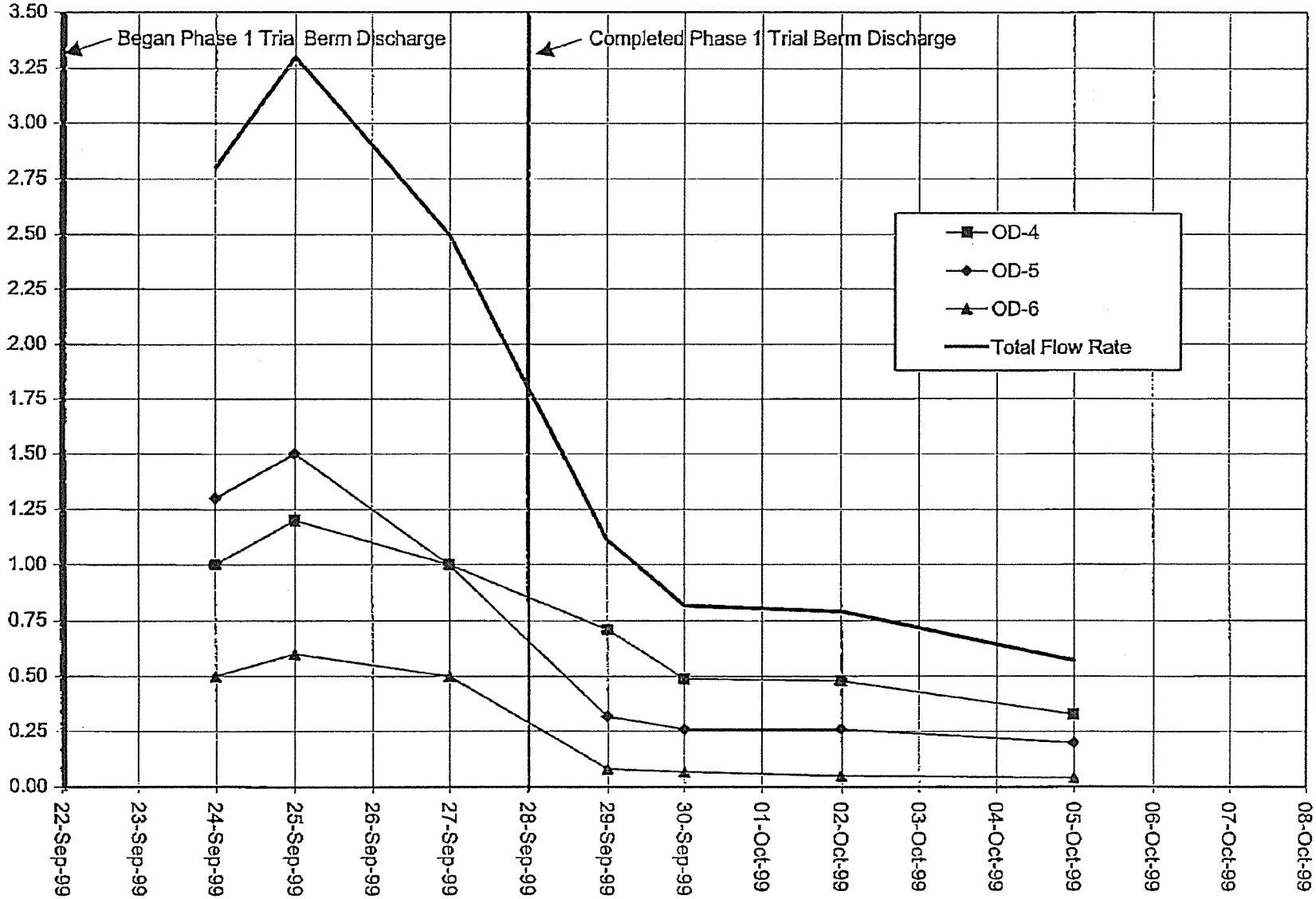

FIGURE 21

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APPENDIX B3

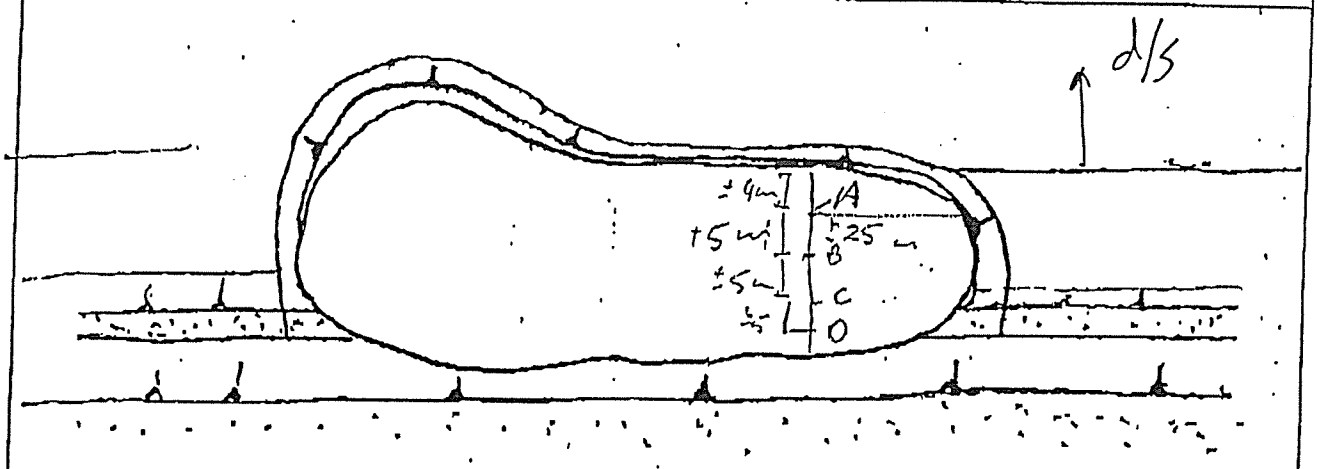
PHASE I TEST TRENCHES

Knight Piésold Ltd.

CONSULTING ENGINEERS

Project: Mt. Polley
Calculations for: Trial Berm
Calculations by: Trench 1
Checked by: Date:

Project No.: 11162/12
Date: Oct
Sheet ____ of ____



TRENCH NUMBER 1 TIME 11:00

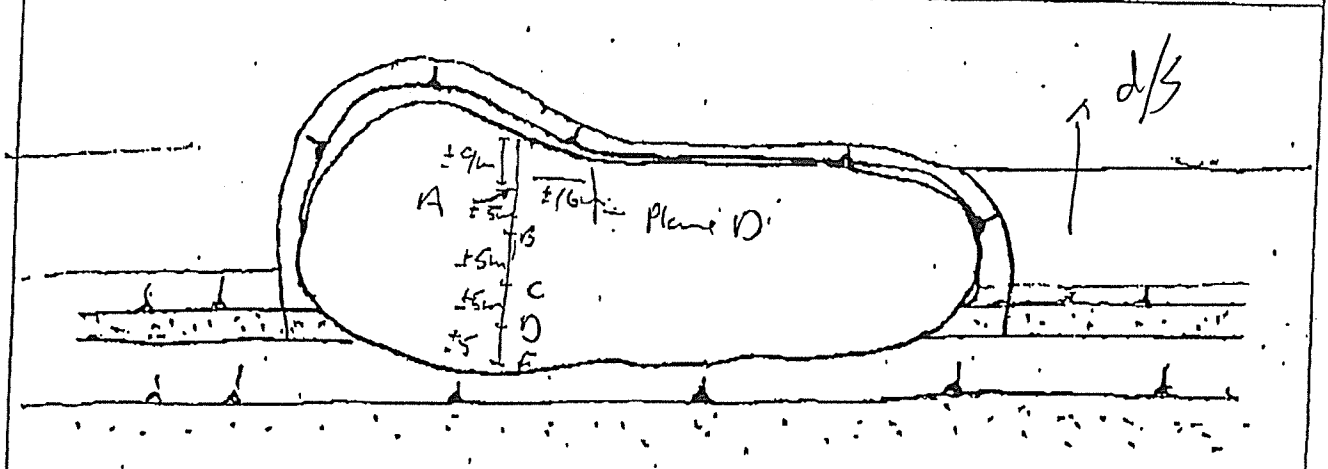
Location	Depth (m)	Yd	M.C. (%)	Sample No.	Comments
A	0.3	1717	8.23		This section constructed with Cyclone 3 [± 1.5 m upslope of stacker].
	0.8	1594	19.41		
	1.5	1622	21.84	A1	
B	0.3	1661	7.55		
	0.8	1637	17.63		
	1.55	1669	15.42	B1	Water surface @ ± 1.65
C	0.3	1641	7.72		
	1.0	1645	14.73		
	1.4	1636	17.53	C1	
	1.95	1609	23.31		
O	0.3	1657	7.00		
	0.8	1607	24.16		Water surface affected by Crib

Knight Piésold Ltd.

CONSULTING ENGINEERS

Project: Mt. Polley
Calculations for: Trial Berm
Calculations by:
Checked by: Date:

Project No.: 11162/12
Date: Oct
Sheet ____ of ____



TRENCH NUMBER 2c TIME 11:50

Location	Depth (m)	γd	M.C. (%)	Sample No.	Comments
A	0.3	1552	8.61		This section constructed with cyclone. [1.5 m upslope of stake]
	0.8	1649	20.07		
	1.0				
B	0.3	1567	8.45		
	1.05	1530	23.16	B2	
C	0.3	1568	7.86		
	1.05	1664	14.56		
	2.55	1619	16.59	C2	± 9.5 m Water level
D	0.3	1602	7.09		± 2 m upslope of stake & ice reaching
	0.8	1572	17.75		
	2.55	1536	18.98	D2	⇒ Water at ± 2.55/3.5 ??
E	0.3	1595	7.33		Stake on Edge of Embankment Bench
	1.05	1661	17.05		
	1.5	1622	27.29	E2	

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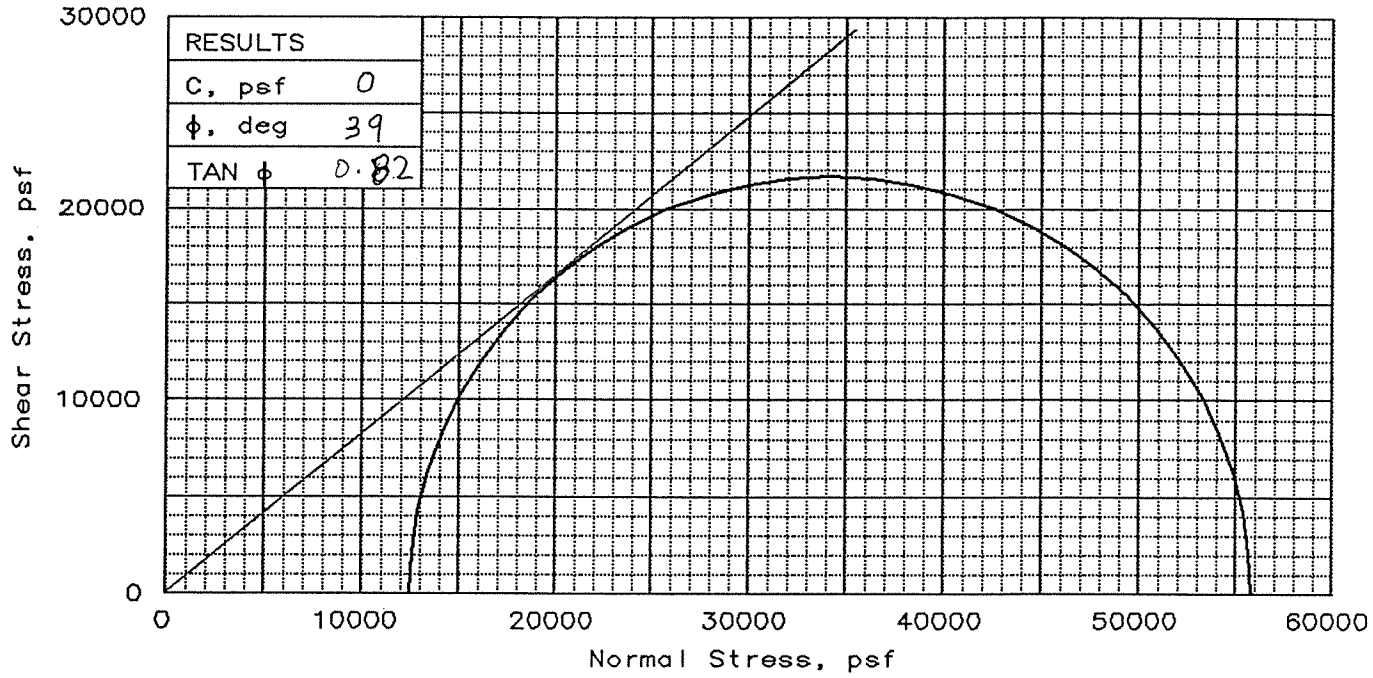
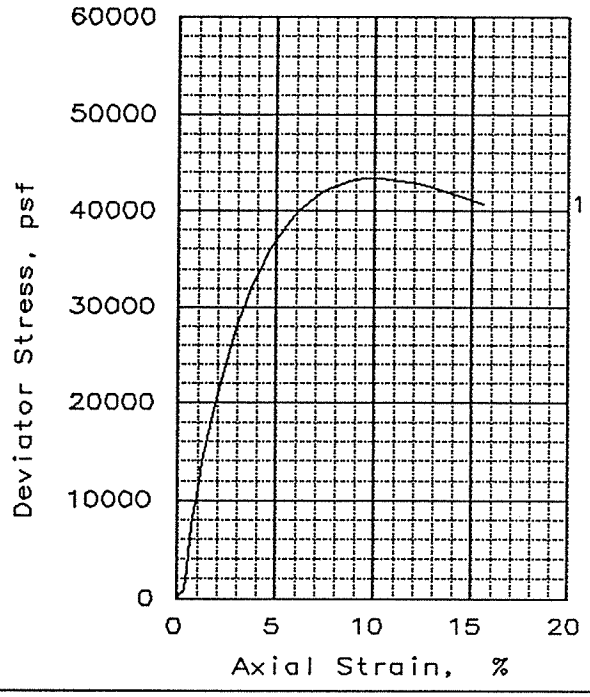
APPENDIX B4

LABORATORY DATA





SAMPLE NO.:		1
INITIAL	WATER CONTENT, %	22.9
	DRY DENSITY, pcf	99.7
	SATURATION, %	82.3
	VOID RATIO	0.797
	DIAMETER, in	2.42
	HEIGHT, in	5.47
AT TEST	WATER CONTENT, %	26.2
	DRY DENSITY, pcf	102.2
	SATURATION, %	100.0
	VOID RATIO	0.753
	DIAMETER, in	2.40
	HEIGHT, in	5.44
Strain rate, in/min		0.0010
BACK PRESSURE, psf		7200
CELL PRESSURE, psf		19728
FAIL. STRESS, psf		43326
ULT. STRESS, psf		
σ_1 FAILURE, psf		55854
σ_3 FAILURE, psf		12528

TYPE OF TEST:
Consolidated Drained

CLIENT: Knight Piesold Ltd.

PROJECT: Mt. Polley Mine - TSF

SAMPLE LOCATION: Trench 1 Blend

PROJ. NO.: 1377P-L100 DATE: 11/10/99

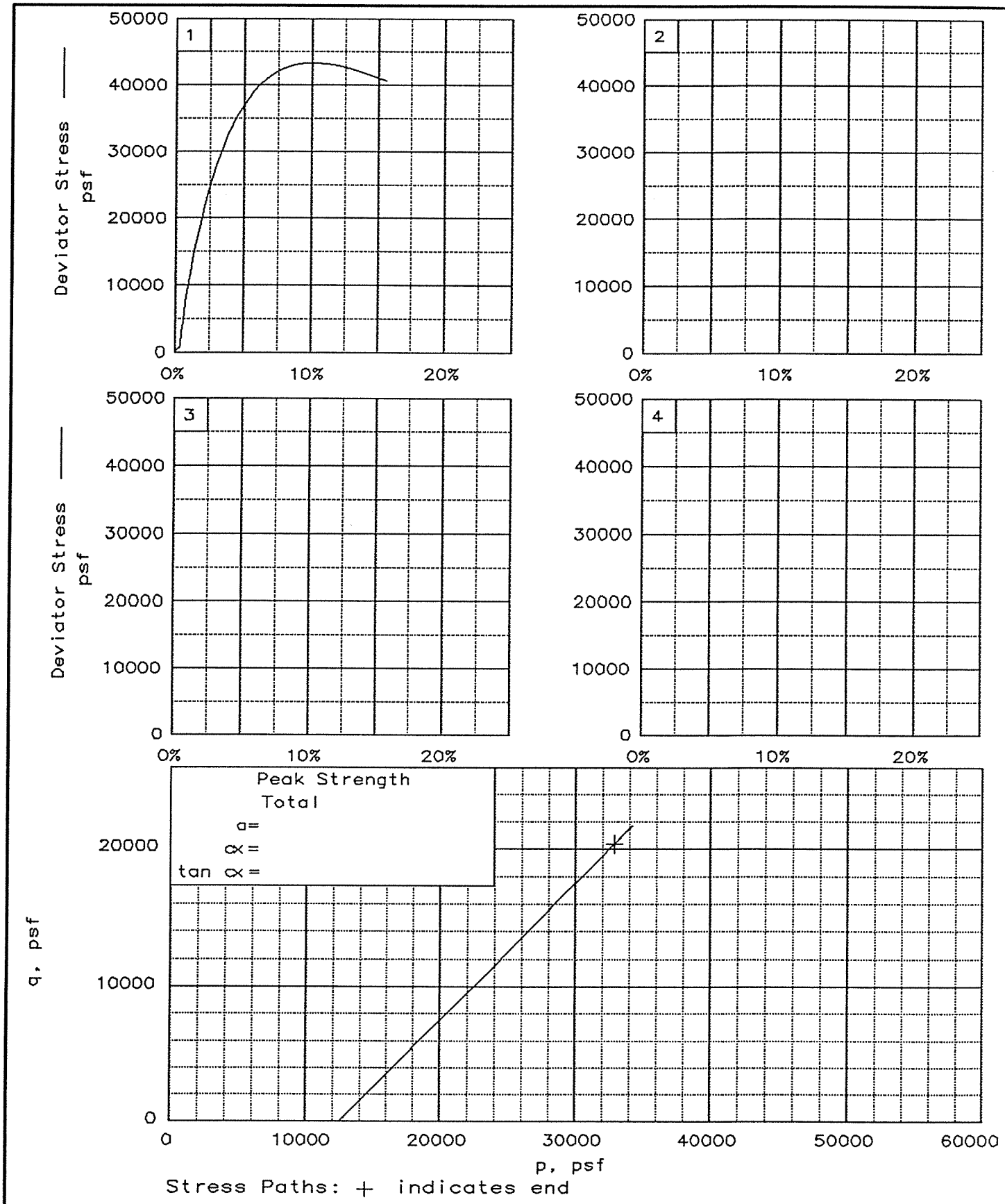
TRIAXIAL SHEAR TEST REPORT

Knight Piésold and Co.

SAMPLE TYPE: remolded
DESCRIPTION: silty SAND

SPECIFIC GRAVITY= 2.87
REMARKS: Target remolding criteria was 1600 kg/cu.m
Failure circle plotted for peak deviator stress.

Fig. _____



Client: Knight Piesold Ltd.

Project: Mt. Polley Mine - TSF

Location: Trench 1 Blend

File: 1377PT1 Project No.: 1377P-L100 Fig. peak

Project and Sample Data

Date: 11/10/99
Client: Knight Piesold Ltd.
Project: Mt. Polley Mine - TSF
Sample location: Trench 1 Blend
Sample description: silty SAND
Remarks: Target remolding cri- teria was 1600 kg/cu.m
Failure circle plotted for peak deviator stress.
Fig no.: 2nd page Fig no. (if applicable): peak
Type of sample: remolded
Specific gravity= 2.87 LL= PL= PI=
Test method: ASTM - Method B

Specimen Parameters for Specimen No. 1

Specimen Parameter	Initial	Saturated	Consolidated	Final
Wt. moist soil and tare:	808.100			976.400
Wt. dry soil and tare:	657.700			803.800
Wt. of tare:	0.000			146.100
Weight, gms:	808.1			
Diameter, in:	2.418	2.418	2.395	
Area, in²:	4.592	4.592	4.506	
Height, in:	5.473	5.473	5.441	
Net decrease in height, in:		0.000	0.032	
decrease in water volume, cc:			10.100	
% Moisture:	22.9	27.8	26.2	26.2
Wet density, pcf:	122.5	127.4	129.0	
Dry density, pcf:	99.7	99.7	102.2	
Void ratio:	0.7971	0.7972	0.7532	
% Saturation:	82.3	100.0	100.0	

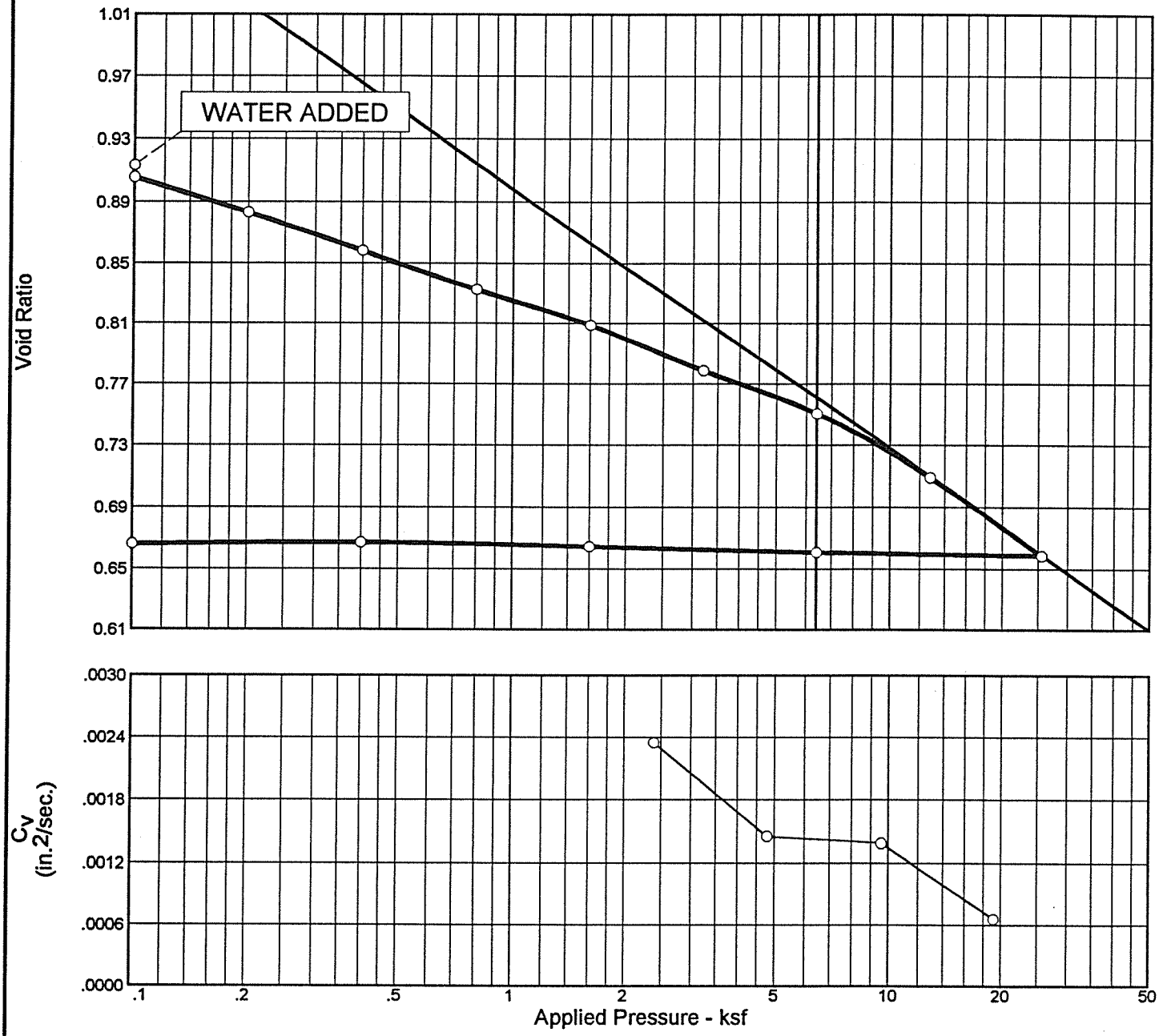
Test Readings Data for Specimen No. 1

Deformation dial constant= 1 in per input unit
Primary load ring constant= 1 lbs per input unit
Secondary load ring constant= 1 lbs per input unit
Crossover reading for secondary load ring= 1 input units
Consolidation cell pressure = 137.00 psi = 19728 psf
Consolidation back pressure = 50.00 psi = 7200 psf
Consolidation effective confining stress = 12528 psf
Strain rate, in/min = 0.0010
FAIL. STRESS = 43326 psf at reading no. 30
ULT. STRESS = not selected

Test Readings Data for Specimen No. 1

No.	Def. Dial Units	Def. in	Load Dial Units	Load lbs	Strain %	Deviator Stress psf	Principal Stresses Minor psf	Principal Stresses Major psf	Principal Stresses 1:3 Ratio	P psf	Q psf
0	0.0000	0.000	29.00	0.0	0.0	0	12528	12528	1.00	12528	0
1	0.0060	0.006	41.00	12.0	0.1	383	12528	12911	1.03	12720	192
2	0.0120	0.012	46.00	17.0	0.2	542	12528	13070	1.04	12799	271
3	0.0180	0.018	48.00	19.0	0.3	605	12528	13133	1.05	12831	303
4	0.0230	0.023	62.00	33.0	0.4	1050	12528	13578	1.08	13053	525
5	0.0270	0.027	119.00	90.0	0.5	2862	12528	15390	1.23	13959	1431
6	0.0310	0.031	172.00	143.0	0.6	4544	12528	17072	1.36	14800	2272
7	0.0400	0.040	260.00	231.0	0.7	7328	12528	19856	1.58	16192	3664
8	0.0500	0.050	336.00	307.0	0.9	9721	12528	22249	1.78	17388	4860
9	0.0600	0.060	405.00	376.0	1.1	11884	12528	24412	1.95	18470	5942
10	0.0700	0.070	469.00	440.0	1.3	13880	12528	26408	2.11	19468	6940
11	0.0800	0.080	530.00	501.0	1.5	15775	12528	28303	2.26	20416	7888
12	0.0900	0.090	588.00	559.0	1.7	17569	12528	30097	2.40	21312	8784
13	0.1000	0.100	642.00	613.0	1.8	19230	12528	31758	2.53	22143	9615
14	0.1210	0.121	745.00	716.0	2.2	22373	12528	34901	2.79	23714	11186
15	0.1470	0.147	859.00	830.0	2.7	25808	12528	38336	3.06	25432	12904
16	0.1670	0.167	941.00	912.0	3.1	28251	12528	40779	3.26	26653	14125
17	0.1880	0.188	1014.00	985.0	3.5	30391	12528	42919	3.43	27723	15195
18	0.2080	0.208	1081.00	1052.0	3.8	32334	12528	44862	3.58	28695	16167
19	0.2300	0.230	1142.00	1113.0	4.2	34065	12528	46593	3.72	29561	17033
20	0.2510	0.251	1197.00	1168.0	4.6	35604	12528	48132	3.84	30330	17802
21	0.2720	0.272	1245.00	1216.0	5.0	36918	12528	49446	3.95	30987	18459
22	0.2930	0.293	1289.00	1260.0	5.4	38098	12528	50626	4.04	31577	19049
[illegible]	0.3140	0.314	1329.00	1300.0	5.8	39147	12528	51675	4.12	32102	19574
[illegible]	0.3350	0.335	1364.00	1335.0	6.2	40037	12528	52565	4.20	32546	20018
25	0.3570	0.357	1394.00	1365.0	6.6	40760	12528	53288	4.25	32908	20380
26	0.3790	0.379	1422.00	1393.0	7.0	41416	12528	53944	4.31	33236	20708
27	0.4110	0.411	1457.00	1428.0	7.6	42188	12528	54716	4.37	33622	21094
28	0.4550	0.455	1492.00	1463.0	8.4	42844	12528	55372	4.42	33950	21422
29	0.4760	0.476	1508.00	1479.0	8.7	43130	12528	55658	4.44	34093	21565
30	0.5200	0.520	1528.00	1499.0	9.6	43326	12528	55854	4.46	34191	21663
31	0.5640	0.564	1541.00	1512.0	10.4	43311	12528	55839	4.46	34184	21656
32	0.6080	0.608	1549.00	1520.0	11.2	43147	12528	55675	4.44	34102	21574
33	0.6520	0.652	1554.00	1525.0	12.0	42895	12528	55423	4.42	33976	21448
34	0.6960	0.696	1555.00	1526.0	12.8	42529	12528	55057	4.39	33792	21264
35	0.7390	0.739	1551.00	1522.0	13.6	42033	12528	54561	4.36	33545	21017
36	0.7610	0.761	1549.00	1520.0	14.0	41781	12528	54309	4.34	33419	20891
37	0.8050	0.805	1545.00	1516.0	14.8	41280	12528	53808	4.29	33168	20640
38	0.8490	0.849	1540.00	1511.0	15.6	40753	12528	53281	4.25	32905	20377

CONSOLIDATION TEST REPORT



Natural		Dry Dens.	LL	PI	Sp.	Overburden	P_c	C_c	C_r	Swell Press.	Clpse.	e_o
Sat.	Moist.	(pcf)			Gr.	(ksf)	(ksf)			(ksf)	%	
62.1 %	19.8 %	93.6	NP	NP	2.87		7.89	0.17			0.4	0.914

MATERIAL DESCRIPTION	USCS	AASHTO
Silty sand	SM	

Project No. 1377P **Client:** Knight Piesold Ltd.

Project: Mt. Polley Mine - Tailings Storage Facility

Source: Cyclone Tailings **Sample No.:** Trench 2 Blend

Remarks:

Specimen inundated at 0.1ksf. Target dry density was 93.6pcf @ natural moisture content.

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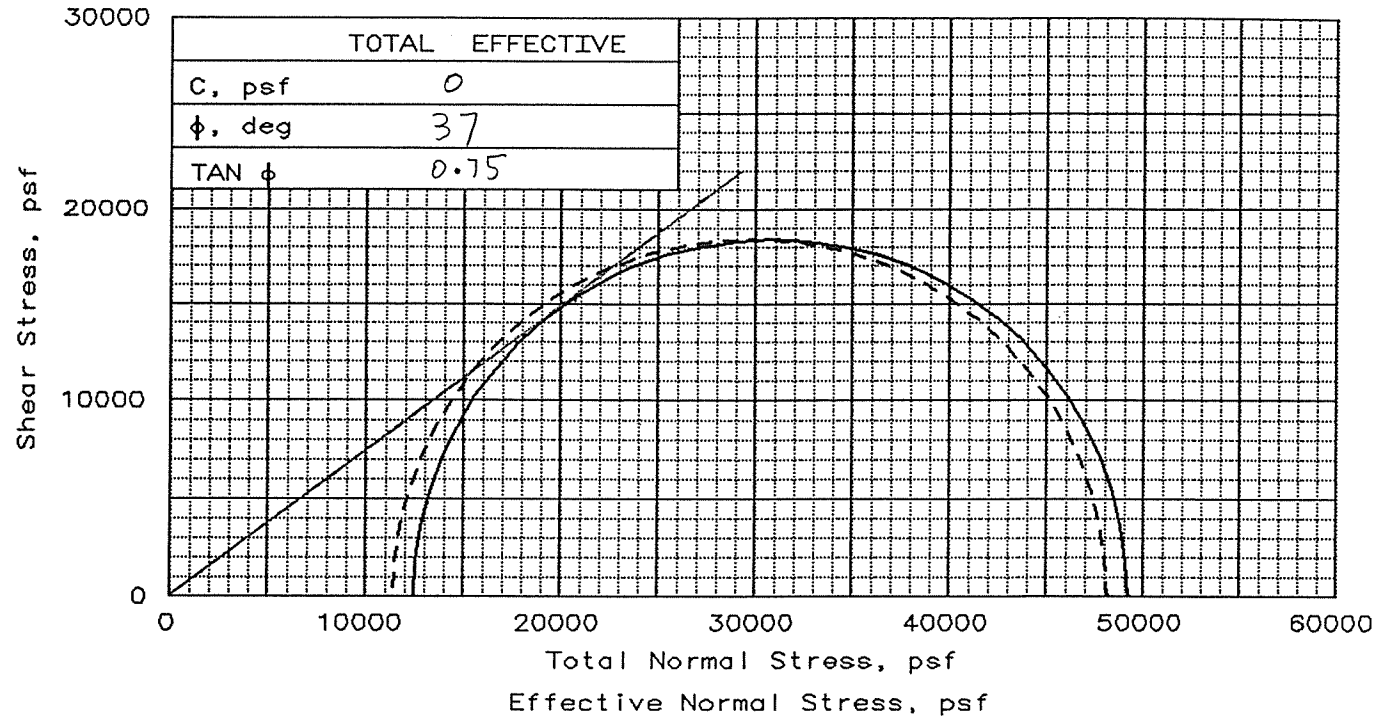
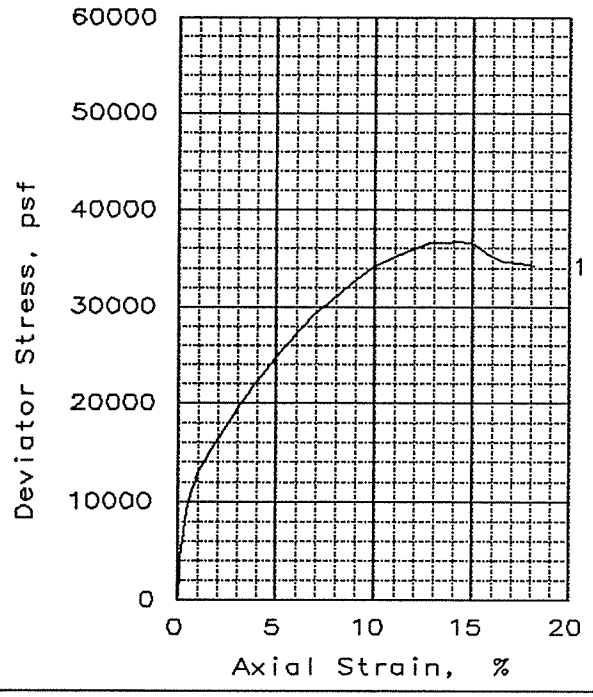
Consulting

Plate





TYPE OF TEST:
CU with Pore Pressures

SAMPLE NO.:		1
INITIAL	WATER CONTENT, %	19.7
	DRY DENSITY, pcf	100.1
	SATURATION, %	71.7
	VOID RATIO	0.790
	DIAMETER, in	2.42
	HEIGHT, in	5.50
AT TEST	WATER CONTENT, %	24.8
	DRY DENSITY, pcf	104.6
	SATURATION, %	100.0
	VOID RATIO	0.712
	DIAMETER, in	2.38
	HEIGHT, in	5.45
Strain rate, in/min		0.0040
BACK PRESSURE, psf		7200
CELL PRESSURE, psf		19728
FAIL. STRESS, psf		36714
EXCESS PORE PR., psf		1080
ULT. STRESS, psf		
EXCESS PORE PR., psf		
$\bar{\sigma}_1$ FAILURE, psf		48162
$\bar{\sigma}_3$ FAILURE, psf		11448

CLIENT: Knight Piesold Ltd.

PROJECT: Mt. Polley Mine - TSF

SAMPLE LOCATION: Trench 2 Blend

PROJ. NO.: 1377P-L100 DATE: 11/8/99

TRIAXIAL SHEAR TEST REPORT

Knight Piésold and Co.

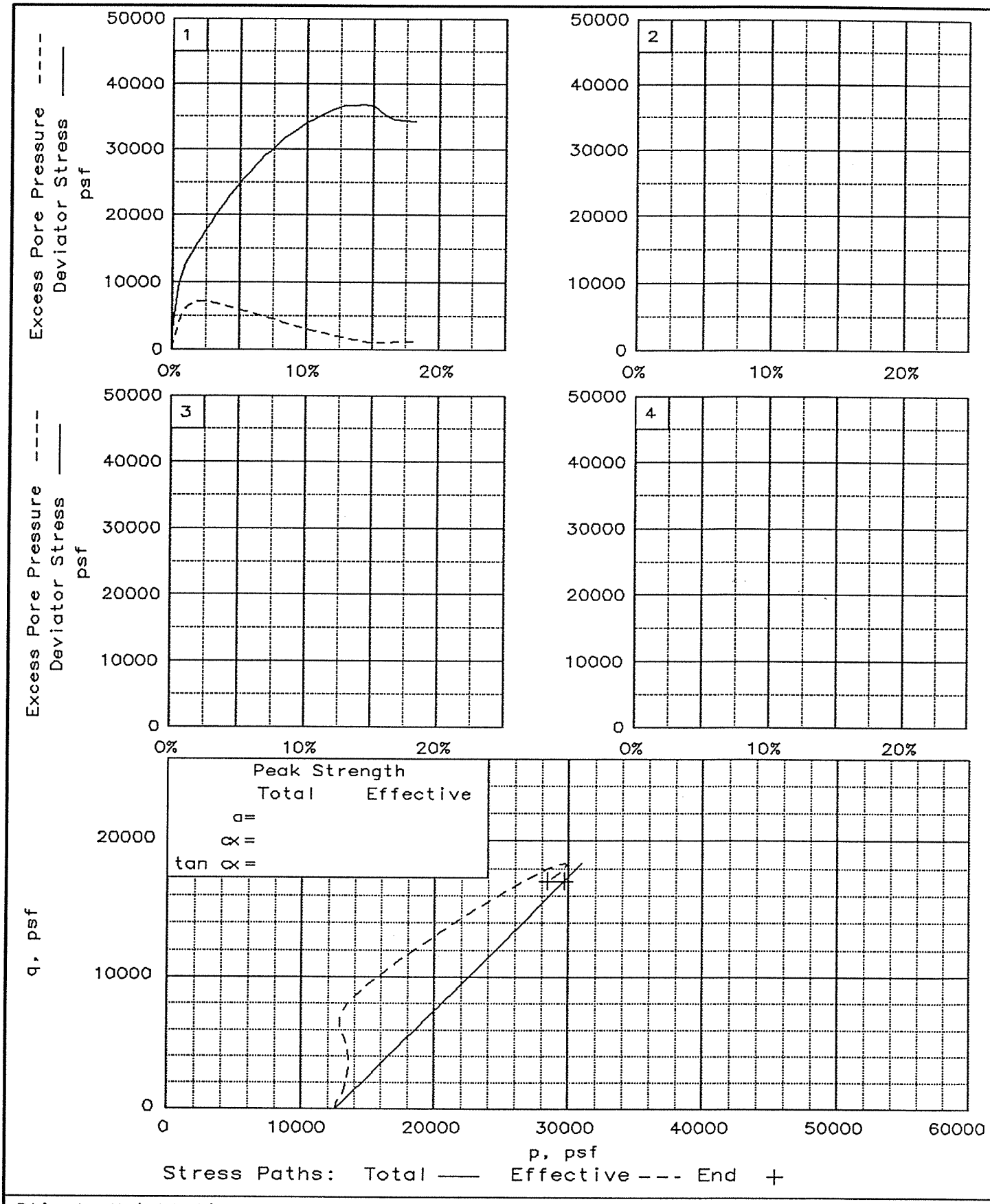
SAMPLE TYPE: remolded

DESCRIPTION: silty SAND

SPECIFIC GRAVITY= 2.87

REMARKS: Target remolding criteria was 1600 kg/cu.m
Failure circle plotted for peak deviator stress.

Fig. _____



Client: Knight Piesold Ltd.

Project: Mt. Polley Mine - TSF

Location: Trench 2 Blend

File: 1377PT2 Project No.: 1377P-L100 Fig. peak

Project and Sample Data

Date: 11/8/99
Client: Knight Piesold Ltd.
Project: Mt. Polley Mine - TSF
Sample location: Trench 2 Blend
Sample description: silty SAND
Remarks: Target remolding cri- teria was 1600 kg/cu.m
Failure circle plotted for peak deviator stress.
Fig no.: 2nd page Fig no. (if applicable): peak
Type of sample: remolded
Specific gravity= 2.87 LL= PL= PI=
Test method: ASTM - Method A

Specimen Parameters for Specimen No. 1

Specimen Parameter	Initial	Saturated	Consolidated	Final
Wt. moist soil and tare:	794.500			941.700
Wt. dry soil and tare:	663.600			777.000
Wt. of tare:	0.000			113.400
Weight, gms:	794.5			
Diameter, in:	2.418	2.418	2.376	
Area, in²:	4.592	4.592	4.433	
Height, in:	5.500	5.500	5.449	
Net decrease in height, in:		0.000	0.051	
decrease in water volume, cc:			18.000	
% Moisture:	19.7	27.5	24.8	24.8
Wet density, pcf:	119.8	127.7	130.6	
Dry density, pcf:	100.1	100.1	104.6	
Void ratio:	0.7900	0.7900	0.7121	
% Saturation:	71.7	100.0	100.0	

Test Readings Data for Specimen No. 1

Deformation dial constant= 1 in per input unit
Primary load ring constant= 1 lbs per input unit
Secondary load ring constant= 1 lbs per input unit
Crossover reading for secondary load ring= 1 input units
Consolidation cell pressure = 137.00 psi = 19728 psf
Consolidation back pressure = 50.00 psi = 7200 psf
Consolidation effective confining stress = 12528 psf
Strain rate, in/min = 0.0040
FAIL. STRESS = 36714 psf at reading no. 38
ULT. STRESS = not selected

Test Readings Data for Specimen No. 1

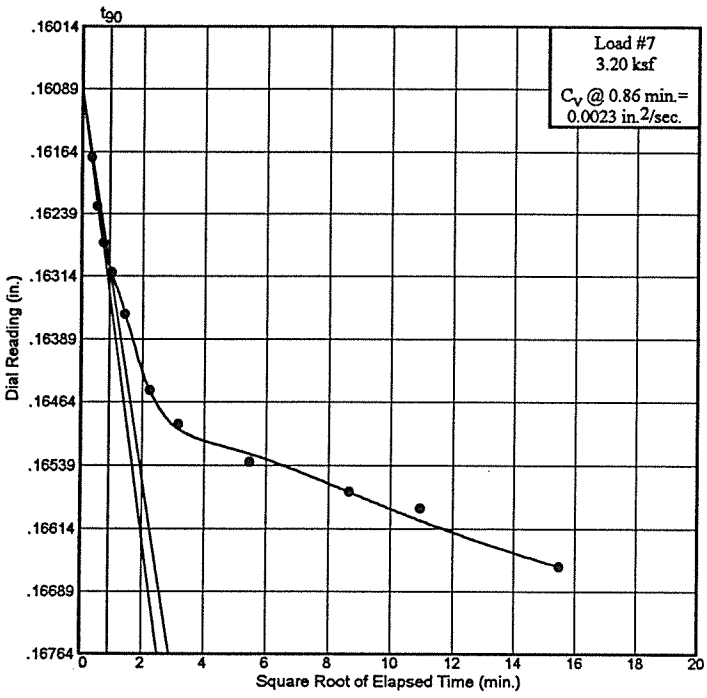
No.	Def. Dial Units	Def. in	Load Dial Units	Load lbs	Strain %	Deviator Stress psf	Effective Stresses Minor psf	Effective Stresses Major psf	Effective Stresses 1:3 Ratio	Pore Pres. psi	P psf	Q psf
0	0.0010	0.000	25.00	0.0	0.0	0	12614	12614	1.00	49.40	12614	0
1	0.0030	0.002	50.00	25.0	0.0	812	12269	13081	1.07	51.80	12675	406
2	0.0060	0.005	104.00	79.0	0.1	2564	11923	14487	1.22	54.20	13205	1282
3	0.0090	0.008	154.00	129.0	0.1	4184	11333	15517	1.37	58.30	13425	2092
4	0.0180	0.017	239.00	214.0	0.3	6929	10166	17096	1.68	66.40	13631	3465
5	0.0270	0.026	306.00	281.0	0.5	9084	8986	18069	2.01	74.60	13527	4542
6	0.0370	0.036	356.00	331.0	0.7	10680	7906	18586	2.35	82.10	13246	5340
7	0.0470	0.046	392.00	367.0	0.8	11820	7114	18933	2.66	87.60	13024	5910
8	0.0560	0.055	421.00	396.0	1.0	12733	6552	19285	2.94	91.50	12918	6366
9	0.0660	0.065	445.00	420.0	1.2	13479	6163	19642	3.19	94.20	12903	6740
10	0.0760	0.075	467.00	442.0	1.4	14159	5904	20063	3.40	96.00	12983	7079
11	0.0870	0.086	488.00	463.0	1.6	14801	5731	20532	3.58	97.20	13132	7401
12	0.0960	0.095	508.00	483.0	1.7	15415	5616	21031	3.74	98.00	13323	7707
13	0.1060	0.105	527.00	502.0	1.9	15991	5558	21550	3.88	98.40	13554	7996
14	0.1160	0.115	545.00	520.0	2.1	16534	5530	22063	3.99	98.60	13796	8267
15	0.1360	0.135	583.00	558.0	2.5	17675	5544	23219	4.19	98.50	14382	8838
16	0.1560	0.155	620.00	595.0	2.8	18776	5630	24407	4.33	97.90	15019	9388
17	0.1760	0.175	657.00	632.0	3.2	19869	5774	25643	4.44	96.90	15709	9934
18	0.1960	0.195	694.00	669.0	3.6	20952	5918	26870	4.54	95.90	16394	10476
19	0.2150	0.214	729.00	704.0	3.9	21968	6106	28074	4.60	94.60	17090	10984
20	0.2350	0.234	762.00	737.0	4.3	22910	6293	29203	4.64	93.30	17748	11455
21	0.2550	0.254	797.00	772.0	4.7	23906	6494	30401	4.68	91.90	18448	11953
22	0.2750	0.274	828.00	803.0	5.0	24771	6710	31481	4.69	90.40	19096	12385
[illegible]	0.2950	0.294	862.00	837.0	5.4	25720	6912	32632	4.72	89.00	19772	12860
[illegible]	0.3160	0.315	892.00	867.0	5.8	26533	7128	33661	4.72	87.50	20394	13266
25	0.3360	0.335	924.00	899.0	6.1	27405	7344	34749	4.73	86.00	21047	13703
26	0.3560	0.355	955.00	930.0	6.5	28239	7560	35799	4.74	84.50	21680	14120
27	0.3760	0.375	984.00	959.0	6.9	29005	7776	36781	4.73	83.00	22279	14503
28	0.3970	0.396	1009.00	984.0	7.3	29638	7992	37630	4.71	81.50	22811	14819
29	0.4170	0.416	1035.00	1010.0	7.6	30301	8208	38509	4.69	80.00	23359	15151
30	0.4570	0.456	1088.00	1063.0	8.4	31638	8640	40278	4.66	77.00	24459	15819
31	0.4980	0.497	1137.00	1112.0	9.1	32824	9058	41882	4.62	74.10	25470	16412
32	0.5380	0.537	1182.00	1157.0	9.9	33877	9446	43323	4.59	71.40	26385	16938
33	0.5790	0.578	1219.00	1194.0	10.6	34668	9835	44503	4.52	68.70	27169	17334
34	0.6190	0.618	1255.00	1230.0	11.3	35420	10210	45630	4.47	66.10	27920	17710
35	0.6600	0.659	1288.00	1263.0	12.1	36062	10555	46617	4.42	63.70	28586	18031
36	0.7020	0.701	1316.00	1291.0	12.9	36538	10886	47425	4.36	61.40	29155	18269
37	0.7430	0.742	1331.00	1306.0	13.6	36644	11189	47832	4.28	59.30	29511	18322
38	0.7840	0.783	1345.00	1320.0	14.4	36714	11448	48162	4.21	57.50	29805	18357
39	0.8260	0.825	1348.00	1323.0	15.1	36466	11664	48130	4.13	56.00	29897	18233
40	0.8680	0.867	1318.00	1293.0	15.9	35315	11664	46979	4.03	56.00	29322	17658
41	0.9090	0.908	1301.00	1276.0	16.7	34539	11520	46059	4.00	57.00	28790	17270
42	0.9510	0.950	1308.00	1283.0	17.4	34407	11462	45870	4.00	57.40	28666	17204
43	0.9920	0.991	1311.00	1286.0	18.2	34174	11405	45578	4.00	57.80	28492	17087

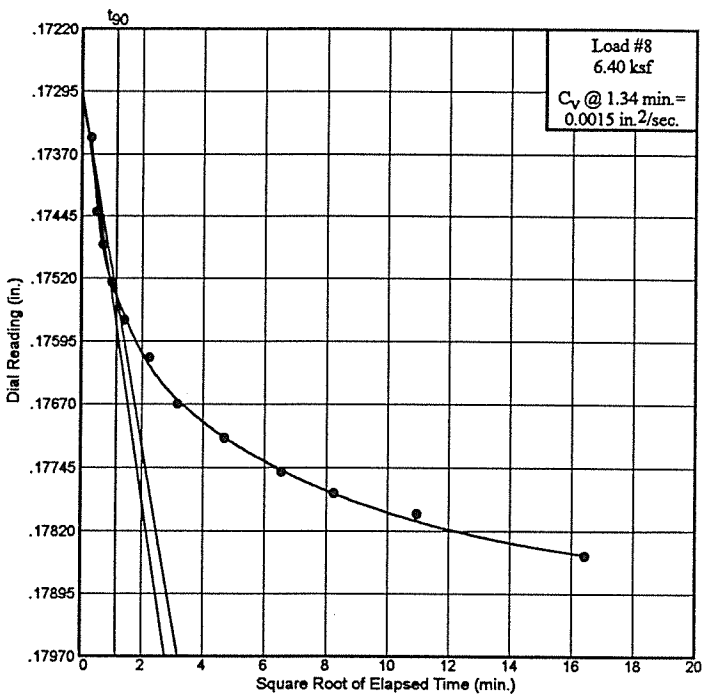
Dial Reading vs. Time

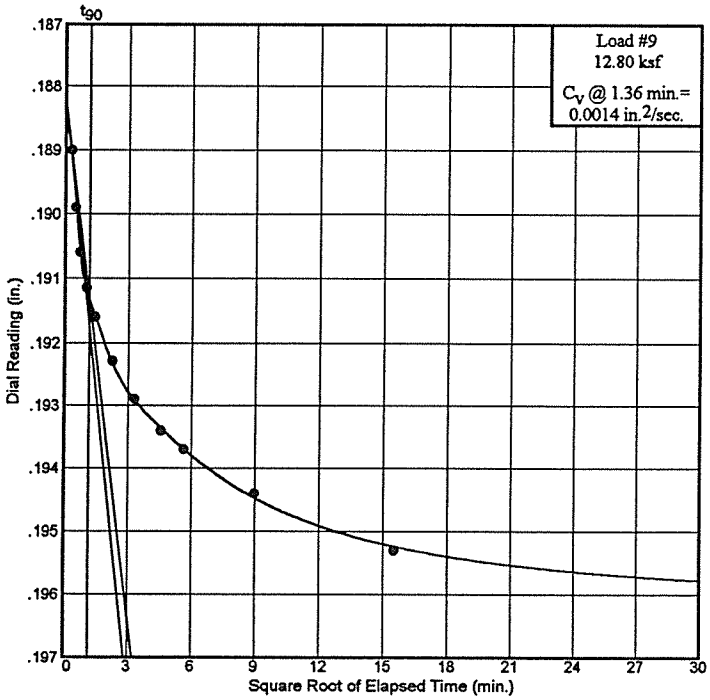
Project No.: 1377P
Project: Mt. Polley Mine - Tailings Storage Facility

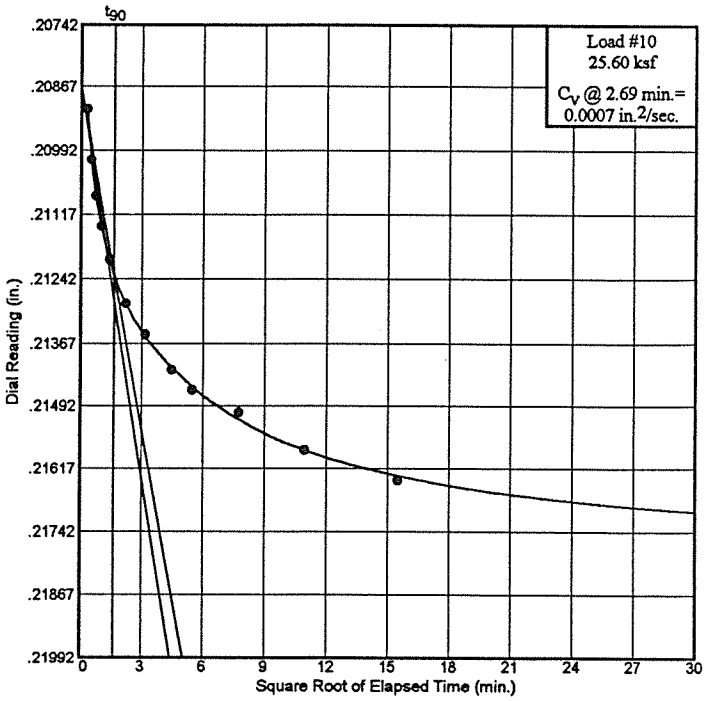
Source: Cyclone Tailings

Sample No.: Trench 2 Blend









Knight Piésold
Consulting

Plate

CONSOLIDATION TEST DATA

Client: Knight Piesold Ltd.
Project: Mt. Polley Mine - Tailings Storage Facility
Project Number: 1377P

Sample Data

Source: Cyclone Tailings
Sample No.: Trench 2 Blend
Elev. or Depth: **Sample Length (in./cm.):** 0.805
Location:
Description: Silty sand
Liquid Limit: NP **Plasticity Index:** NP
USCS: SM **AASHTO:** **Figure No.:**
Testing Remarks: Specimen inundated at 0.1ksf. Target dry density was 93.6pcf @ natural moisture content.

Test Specimen Data

TOTAL SAMPLE		BEFORE TEST	AFTER TEST
Wet w+t =	600.90 g.	Consolidometer # = 1	Wet w+t = 117.73 g.
Dry w+t =	567.10 g.		Dry w+t = 90.60 g.
Tare Wt. =	396.10 g.	Spec. Gravity = 2.87	Tare Wt. = .00 g.
Height =	.81 in.	Height = .81 in.	
Diameter =	2.41 in.	Diameter = 2.41 in.	
Weight =	108.54 g.	Defl. Table = Reference Set (inches/ksf)	
Moisture =	19.8 %	Ht. Solids = 0.4207 in.	Moisture = 29.9 %
Wet Den. =	112.1 pcf	Dry Wt. = 90.63 g.*	Dry Wt. = 90.60 g.
Dry Den. =	93.6 pcf	Void Ratio = 0.914	Void Ratio = 0.666
		Saturation = 62.1 %	

* Initial dry weight used in calculations

End-of-Load Summary

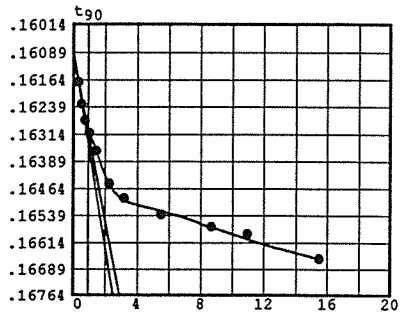
Pressure (ksf)	Final Dial (in.)	Machine Defl. (in.)	C_v (in.^{2}/sec.)	C_α	Void Ratio	% Compression /Swell
start	0.11000				0.914	
0.10	0.11060	0.00050			0.913	0.0 Comprs.
water	0.11380	0.00050			0.906	0.4 Comprs.
0.20	0.12300	0.00020			0.883	1.6 Comprs.
0.40	0.13410	0.00080			0.858	2.9 Comprs.
0.80	0.14610	0.00200			0.833	4.2 Comprs.
1.60	0.15900	0.00500			0.809	5.5 Comprs.
3.20	0.17410	0.00750	0.0023		0.779	7.0 Comprs.
6.40	0.18850	0.01000	0.0015		0.751	8.5 Comprs.
12.80	0.20840	0.01250	0.0014		0.709	10.7 Comprs.
25.60	0.23220	0.01500	0.0007		0.659	13.3 Comprs.
6.40	0.22730	0.01100			0.661	13.2 Comprs.
1.60	0.22320	0.00850			0.665	13.0 Comprs.

Pressure (ksf)	Final Dial (in.)	Machine Defl. (in.)	C_v (in.^{2}/sec.)	C_α	Void Ratio	% Compression /Swell
0.40	0.21960	0.00600			0.667	12.9 Comprs.
0.10	0.21410	0.00000			0.666	12.9 Comprs.

C_c = 0.17 P_c = 7.89 ksf
Collapse percentage = 0.4

Pressure: 3.20 ksf — TEST READINGS — Load No. 7

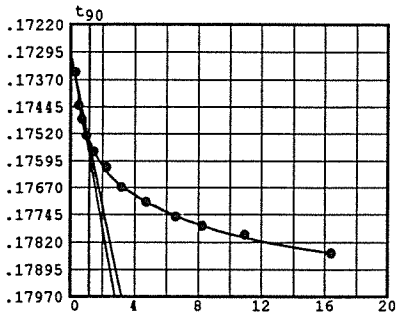
No.	Elapsed Time	Dial Reading	No.	Elapsed Time	Dial Reading
1	0.00	0.15900	11	120.00	0.17340
2	0.10	0.16920	12	240.00	0.17410
3	0.25	0.16980			
4	0.50	0.17025			
5	1.00	0.17060			
6	2.00	0.17110			
7	5.00	0.17200			
8	10.00	0.17240			
9	30.00	0.17285			
10	75.00	0.17320			



Void Ratio = 0.779 Compression = 7.0 %
D_0 = 0.16089 D_{90} = 0.16305 D_{100} = 0.16329
C_v at 0.9 min. = 0.0023 in.^{2}/sec.

Pressure: 6.40 ksf — TEST READINGS — Load No. 8

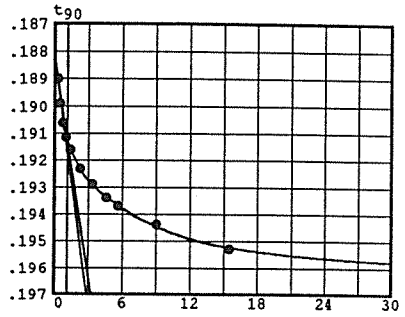
No.	Elapsed Time	Dial Reading	No.	Elapsed Time	Dial Reading
1	0.00	0.17410	11	68.00	0.18775
2	0.10	0.18350	12	120.00	0.18800
3	0.25	0.18440	13	270.00	0.18850
4	0.50	0.18480			
5	1.00	0.18525			
6	2.00	0.18570			
7	5.00	0.18615			
8	10.00	0.18670			
9	22.00	0.18710			
10	43.00	0.18750			



Void Ratio = 0.751 Compression = 8.5 %
D_0 = 0.17295 D_{90} = 0.17540 D_{100} = 0.17567
C_v at 1.3 min. = 0.0015 in.^{2}/sec.

Pressure: 12.80 ksf — TEST READINGS — Load No. 9

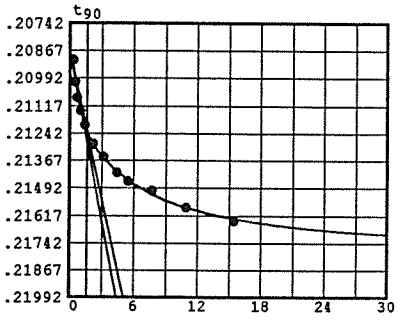
No.	Elapsed Time	Dial Reading	No.	Elapsed Time	Dial Reading
1	0.00	0.18550	11	81.00	0.20690
2	0.10	0.20150	12	240.00	0.20780
3	0.25	0.20240	13	1440.00	0.20840
4	0.50	0.20310			
5	1.00	0.20365			
6	2.00	0.20410			
7	5.00	0.20480			
8	11.00	0.20540			
9	21.00	0.20590			
10	32.00	0.20620			



Void Ratio = 0.709 Compression = 10.7 %
D_0 = 0.18821 D_{90} = 0.19134 D_{100} = 0.19169
C_v at 1.4 min. = 0.0014 in.^{2}/sec.

Pressure: 25.60 ksf — TEST READINGS — Load No. 10

No.	Elapsed Time	Dial Reading	No.	Elapsed Time	Dial Reading
1	0.00	0.20840	11	60.00	0.23005
2	0.10	0.22410	12	120.00	0.23080
3	0.25	0.22510	13	240.00	0.23140
4	0.50	0.22580	14	1440.00	0.23220
5	1.00	0.22640			
6	2.00	0.22705			
7	5.00	0.22790			
8	10.00	0.22850			
9	20.00	0.22920			
10	30.00	0.22960			



Void Ratio = 0.659 Compression = 13.3 %
D_0 = 0.20868 D_{90} = 0.21232 D_{100} = 0.21273
C_v at 2.7 min. = 0.0007 in.^{2}/sec.

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.		
PROJECT:	Mt. Polley Mine TSF	PROJECT NO. :	1377P-L100
BORING NO.	Trench 1 Blend	LAB NO. :	L99182
DEPTH		SAMPLE ID:	300.99.1859
SAMPLE NO.		TEST STARTED :	11/02/99
SAMPLE TYPE	Remolded	TEST FINISHED :	11/10/99
CONF. PRESSURE. (psi)	29	SATURATED TEST:	YES

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	808.10	830.30
Wt. Wet Soil & Pan (g)	808.10	976.40
Wt. Dry Soil & Pan (g)	657.70	803.80
Wt. Moisture Lost (g)	150.40	172.60
Wt. of Pan Only (g)	0.00	146.10
Wt. of Dry Soil (g)	657.70	657.70
Moisture Content %	22.9	26.2
Wet Density (pcf)	122.5	129.0
Dry Density (pcf)	99.7	102.2

Init. Diameter (in)	2.418	(cm)	6.142
Init. Area (sq in)	4.592	(sq cm)	29.626
Init. Height (in)	5.473	(cm)	13.901
Height Change (in)	0.032	(cm)	0.081
Consol. Height (in)	5.441	(cm)	13.820
Area After Consol. (sq in)	4.505	(sq cm)	29.069
Vol. Before Consol. (cu ft)	0.01454	Specific Gravity	2.87
Vol. Before Consol. (cc)	411.840	Assumed?	yes
Change in Vol. (cc)	10.100		
Cell Exp. (cc)	0.000	Init. Saturation	82.3
Vol. After Consol. (cc)	401.740	Init. Void Ratio	0.797
Vol. After Consol. (cu ft)	0.01419	Final Saturation	100.0
Effective Porosity %	44.36	Final Void Ratio	0.753
Pressure Difference (psi):	0.00		
C =	0.54448	Buret Constant, a	0.995
		Buret Stand	2

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.		
PROJECT:	Mt. Polley Mine TSF	PROJECT NO. :	1377P-L100
BORING NO.	Trench 1 Blend	LAB NO. :	L99182
DEPTH		SAMPLE ID:	300.99.1859
SAMPLE NO.		TEST STARTED :	11/02/99
SAMPLE TYPE	Remolded	TEST FINISHED :	11/10/99
CONF. PRESSURE. (psi)	29	SATURATED TEST:	YES

Permeability Test Trials

Time min.	Cap Elevation cm	Pedestal Elevation cm	Elevation Head cm	Total Head cm	Permeability k cm/sec
0.0	50.0	0.0	50.0	50.3	
45.5	47.0	3.0	44.0	44.2	6.6E-04
0.0	50.0	0.0	50.0	50.3	
51.1	47.0	3.0	44.0	44.2	5.9E-04
0.0	50.0	0.0	50.0	50.3	
48.9	47.0	3.0	44.0	44.2	6.2E-04
0.0	50.0	0.0	50.0	50.3	
45.8	47.0	3.0	44.0	44.2	6.6E-04
0.0	50.0	0.0	50.0	50.3	
48.7	47.0	3.0	44.0	44.2	6.2E-04
			Average of Last 4 Readings		6.2E-04

General Test Notes:

1) Tap water was used as the permeant.
2) Back pressure saturation continued until 'B' parameter a minimum of 0.95.
3) Target remolding criteria: 1600 kg/m^3 @ natural moisture content.

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.		
PROJECT:	Mt. Polley Mine TSF	PROJECT NO. :	1377P-L100
BORING NO.	Trench 1 Blend	LAB NO. :	L99182
DEPTH		SAMPLE ID:	300.99.1859
SAMPLE NO.		TEST STARTED :	11/02/99
SAMPLE TYPE	Remolded	TEST FINISHED :	11/10/99
CONF. PRESSURE. (psi)	58	SATURATED TEST:	YES

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	808.10	826.50
Wt. Wet Soil & Pan (g)	808.10	972.60
Wt. Dry Soil & Pan (g)	657.70	803.80
Wt. Moisture Lost (g)	150.40	168.80
Wt. of Pan Only (g)	0.00	146.10
Wt. of Dry Soil (g)	657.70	657.70
Moisture Content %	22.9	25.7
Wet Density (pcf)	122.5	129.7
Dry Density (pcf)	99.7	103.2

Init. Diameter	(in)	2.418	(cm)	6.142
Init. Area	(sq in)	4.592	(sq cm)	29.626
Init. Height	(in)	5.473	(cm)	13.901
Height Change	(in)	0.050	(cm)	0.127
Consol. Height	(in)	5.423	(cm)	13.774
Area After Consol.	(sq in)	4.478	(sq cm)	28.890
Vol. Before Consol.	(cu ft)	0.01454	Specific Gravity	2.87
Vol. Before Consol.	(cc)	411.840	Assumed?	yes
Change in Vol.	(cc)	13.900		
Cell Exp.	(cc)	0.000	Init. Saturation	82.3
Vol. After Consol.	(cc)	397.940	Init. Void Ratio	0.797
Vol. After Consol.	(cu ft)	0.01405	Final Saturation	100.0
Effective Porosity %		44.36	Final Void Ratio	0.736
Pressure Difference (psi):		0.00		
C =		0.54604	Buret Constant, a	0.995
			Buret Stand	2

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.		
PROJECT:	Mt. Polley Mine TSF	PROJECT NO. :	1377P-L100
BORING NO.	Trench 1 Blend	LAB NO. :	L99182
DEPTH		SAMPLE ID:	300.99.1859
SAMPLE NO.		TEST STARTED :	11/02/99
SAMPLE TYPE	Remolded	TEST FINISHED :	11/10/99
CONF. PRESSURE. (psi)	58	SATURATED TEST:	YES

Permeability Test Trials

Time min.	Cap Elevation cm	Pedestal Elevation cm	Elevation Head cm	Total Head cm	Permeability k cm/sec
0.0	50.0	0.0	50.0	50.3	
60.5	47.0	3.0	44.0	44.2	5.0E-04
0.0	50.0	0.0	50.0	50.3	
61.1	47.0	3.0	44.0	44.2	5.0E-04
0.0	50.0	0.0	50.0	50.3	
58.4	47.0	3.0	44.0	44.2	5.2E-04
0.0	50.0	0.0	50.0	50.3	
55.5	47.0	3.0	44.0	44.2	5.5E-04
0.0	50.0	0.0	50.0	50.3	
58.3	47.0	3.0	44.0	44.2	5.2E-04
			Average of Last 4 Readings		5.2E-04

General Test Notes:

1) Tap water was used as the permeant.
2) Back pressure saturation continued until 'B' parameter a minimum of 0.95.
3) Target remolding criteria: 1600 kg/m^3 @ natural moisture content.

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.		
PROJECT:	Mt. Polley Mine TSF	PROJECT NO. :	1377P-L100
BORING NO.	Trench 1 Blend	LAB NO. :	L99182
DEPTH		SAMPLE ID:	300.99.1859
SAMPLE NO.		TEST STARTED :	11/02/99
SAMPLE TYPE	Remolded	TEST FINISHED :	11/10/99
CONF. PRESSURE. (psi)	87	SATURATED TEST:	YES

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	808.10	824.30
Wt. Wet Soil & Pan (g)	808.10	970.40
Wt. Dry Soil & Pan (g)	657.70	803.80
Wt. Moisture Lost (g)	150.40	166.60
Wt. of Pan Only (g)	0.00	146.10
Wt. of Dry Soil (g)	657.70	657.70
Moisture Content %	22.9	25.3
Wet Density (pcf)	122.5	130.0
Dry Density (pcf)	99.7	103.8

Init. Diameter	(in)	2.418	(cm)	6.142
Init. Area	(sq in)	4.592	(sq cm)	29.626
Init. Height	(in)	5.473	(cm)	13.901
Height Change	(in)	0.058	(cm)	0.147
Consol. Height	(in)	5.415	(cm)	13.754
Area After Consol.	(sq in)	4.459	(sq cm)	28.773
Vol. Before Consol.	(cu ft)	0.01454	Specific Gravity	2.87
Vol. Before Consol.	(cc)	411.840	Assumed?	yes
Change in Vol.	(cc)	16.100		
Cell Exp.	(cc)	0.000	Init. Saturation	82.3
Vol. After Consol.	(cc)	395.740	Init. Void Ratio	0.797
Vol. After Consol.	(cu ft)	0.01398	Final Saturation	100.0
Effective Porosity %		44.36	Final Void Ratio	0.727
Pressure Difference (psi):		0.00		
C =		0.54746	Buret Constant, a	0.995
			Buret Stand	2

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.		
PROJECT:	Mt. Polley Mine TSF	PROJECT NO. :	1377P-L100
BORING NO.	Trench 1 Blend	LAB NO. :	L99182
DEPTH		SAMPLE ID:	300.99.1859
SAMPLE NO.		TEST STARTED :	11/02/99
SAMPLE TYPE	Remolded	TEST FINISHED :	11/10/99
CONF. PRESSURE. (psi)	87	SATURATED TEST:	YES

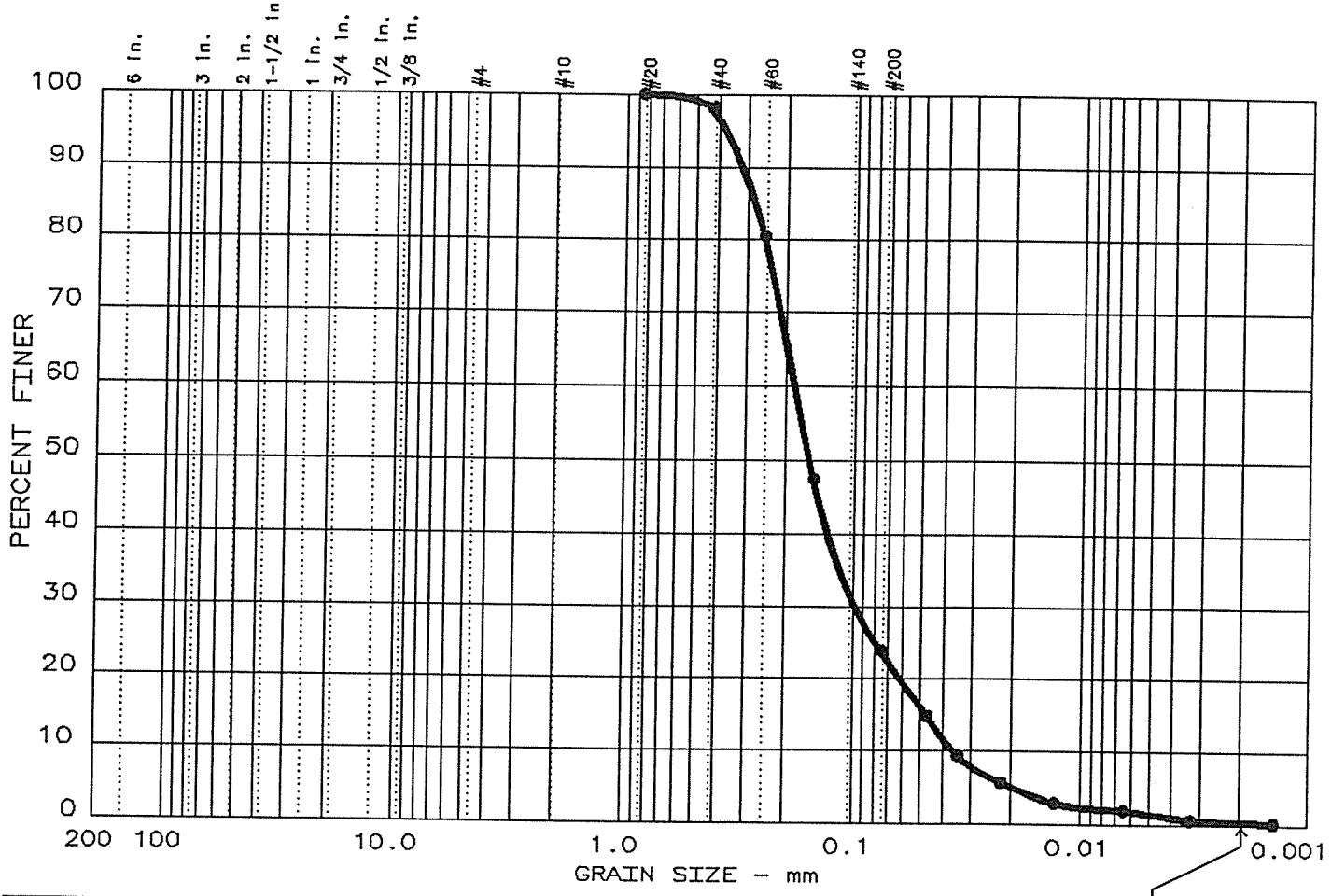
Permeability Test Trials

Time min.	Cap Elevation cm	Pedestal Elevation cm	Elevation Head cm	Total Head cm	Permeability k cm/sec
0.0	50.0	0.0	50.0	50.3	
22.1	49.0	1.0	48.0	48.2	4.4E-04
0.0	48.9	1.1	47.8	48.0	
23.7	47.9	2.1	45.8	46.0	4.3E-04
0.0	47.5	2.5	45.0	45.2	
25.4	46.5	3.5	43.0	43.2	4.3E-04
0.0	46.0	4.0	42.0	42.2	
28.1	45.0	5.0	40.0	40.2	4.1E-04
0.0	50.0	0.0	50.0	50.3	
85.3	46.5	3.5	43.0	43.2	4.2E-04
			Average of Last 4 Readings		4.2E-04

General Test Notes:

1) Tap water was used as the permeant.
2) Back pressure saturation continued until 'B' parameter a minimum of 0.95.
3) Target remolding criteria: 1600 kg/m^3 @ natural moisture content.
4) Specimen was sheared after this stress.

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	13	0.0	0.0	76.1	23.5	0.4

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.275	0.183	0.157	0.0974	0.0472	0.0358	1.45	5.1

MATERIAL DESCRIPTION	USCS	AASHTO
● silty SAND	SM	

Project No.: 1377P
Project: Mt. Polley Mine - TSF
● Location: Trench 2 Blend

Date: 11/1/99

GRAIN SIZE DISTRIBUTION TEST REPORT

Knight Piesold LLC

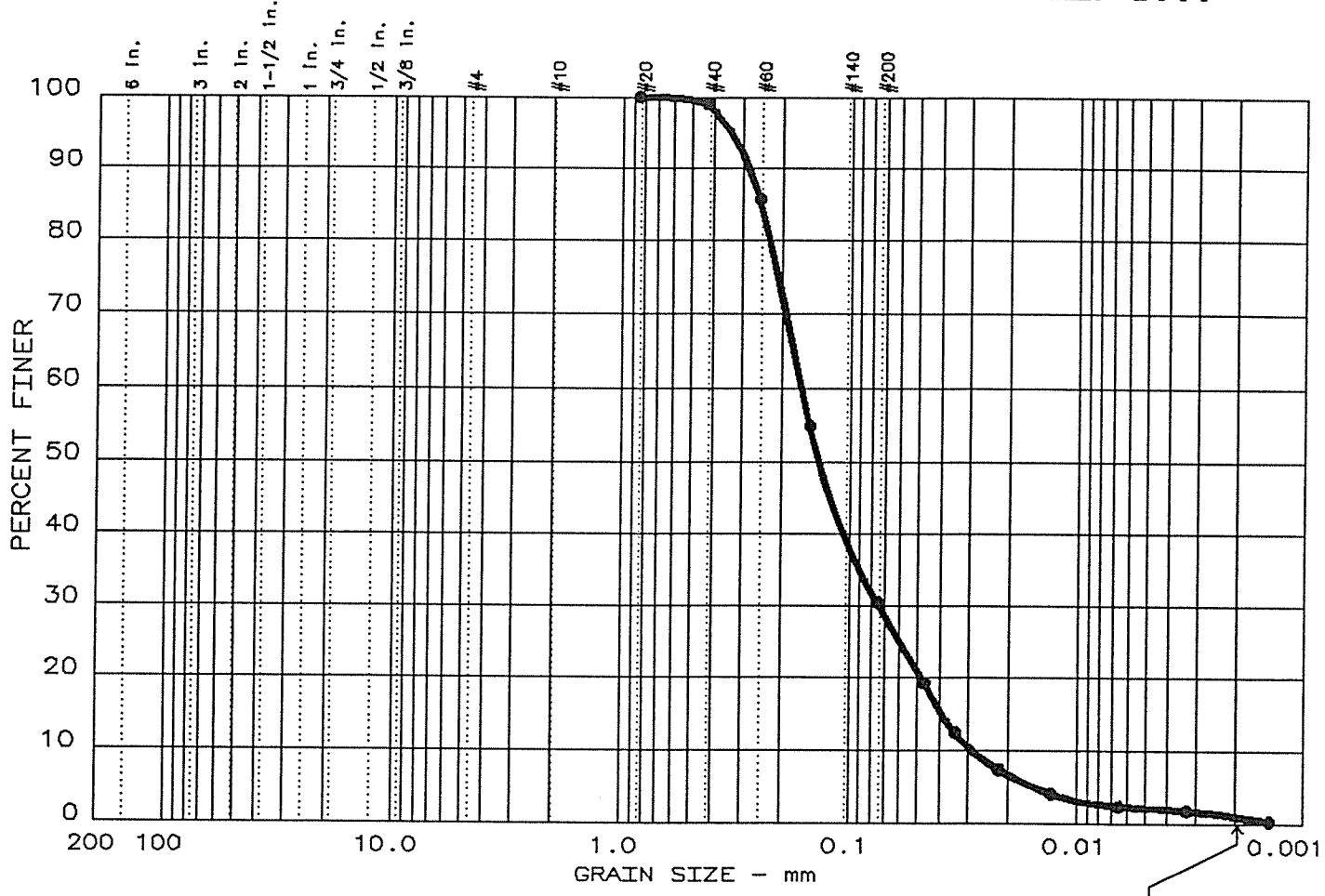
Remarks:

Atterberg Limits not run

Specific gravity: 2.87

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	14	0.0	0.0	69.6	29.4	1.0

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.247	0.164	0.136	0.0731	0.0388	0.0287	1.14	5.7

MATERIAL DESCRIPTION	USCS	AASHTO
● silty SAND	SM	

Project No.: 1377P
Project: Mt. Polley Mine - TSF
● Location: Top of Cone

Date: 11/1/99

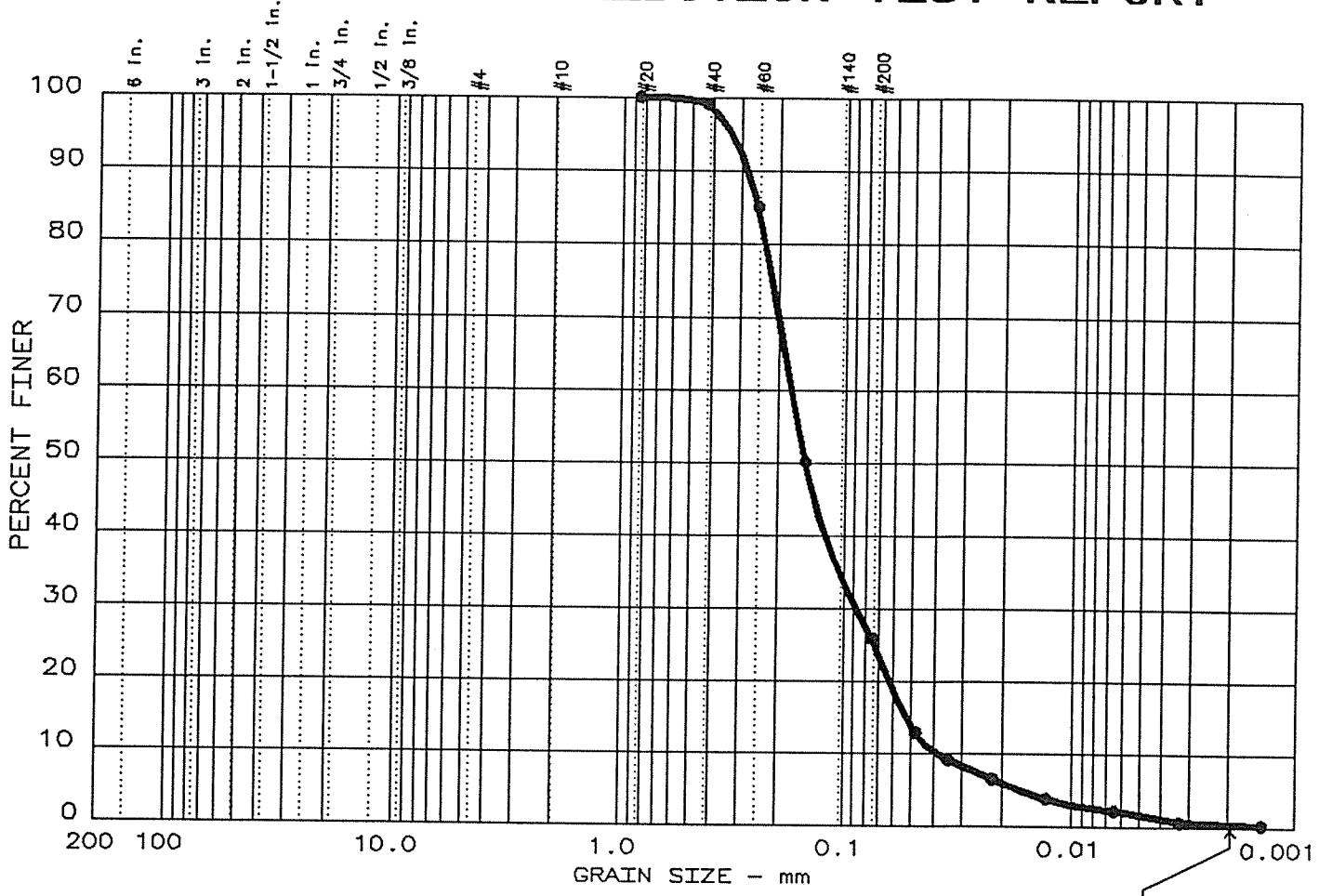
GRAIN SIZE DISTRIBUTION TEST REPORT

Knight Piesold LLC

Remarks:
Atterberg Limits not run
Specific gravity was
estimated.

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	15	0.0	0.0	74.0	25.5	0.5

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.250	0.174	0.150	0.0869	0.0523	0.0379	1.15	4.6

MATERIAL DESCRIPTION	USCS	AASHTO
● silty SAND	SM	

Project No.: 1377P
Project: Mt. Polley Mine - TSF
● Location: Middle of Cone

Date: 11/1/99

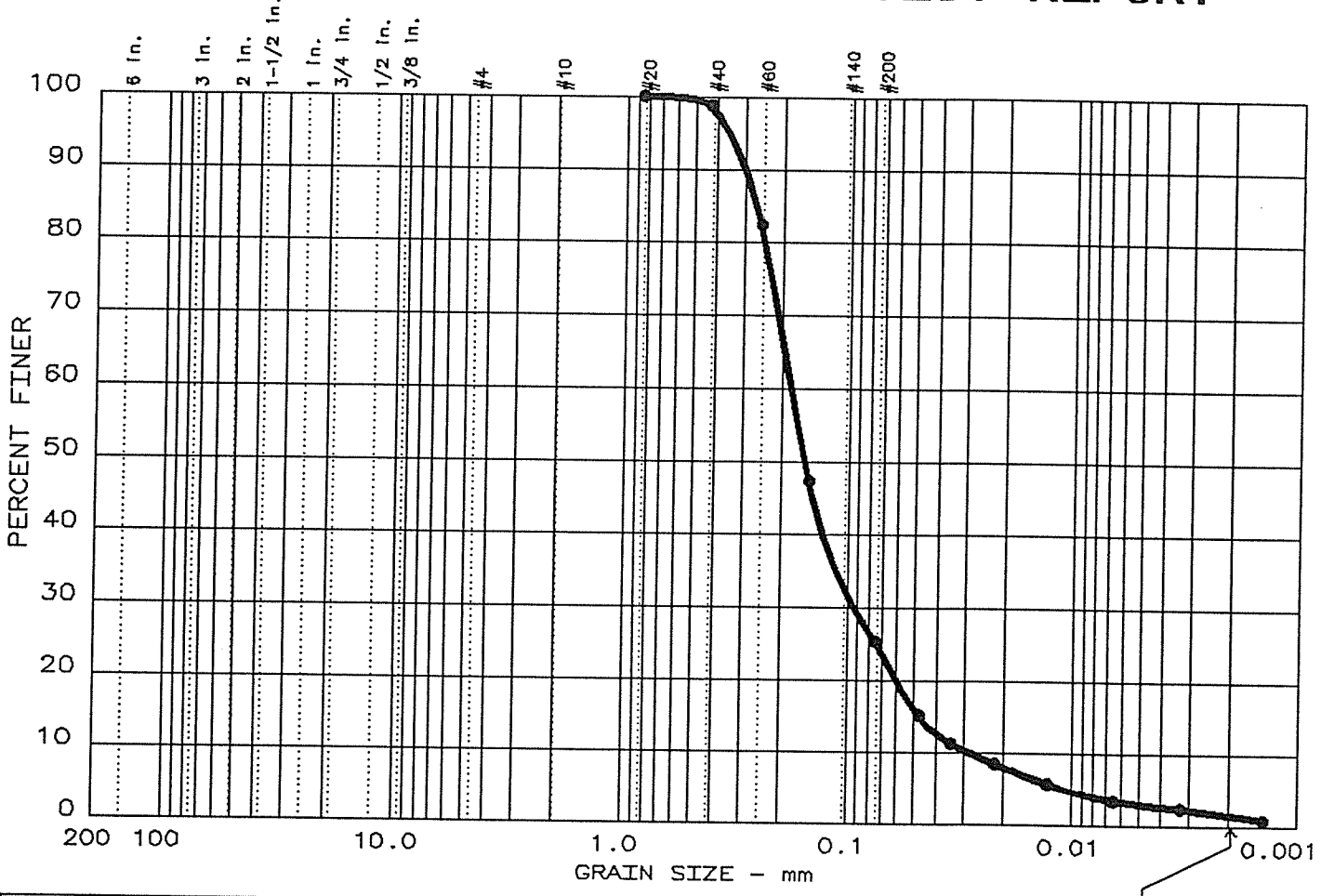
GRAIN SIZE DISTRIBUTION TEST REPORT

Knight Piesold LLC

Remarks:
Atterberg Limits not run
Specific gravity was
estimated.

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	16	0.0	0.0	74.6	23.8	1.6

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.263	0.181	0.157	0.0923	0.0468	0.0285	1.65	6.4

MATERIAL DESCRIPTION	USCS	AASHTO
● silty SAND	SM	

Project No.: 1377P
Project: Mt. Polley Mine - TSF
● Location: Toe of Cone

Date: 11/1/99

GRAIN SIZE DISTRIBUTION TEST REPORT

Knight Piesold LLC

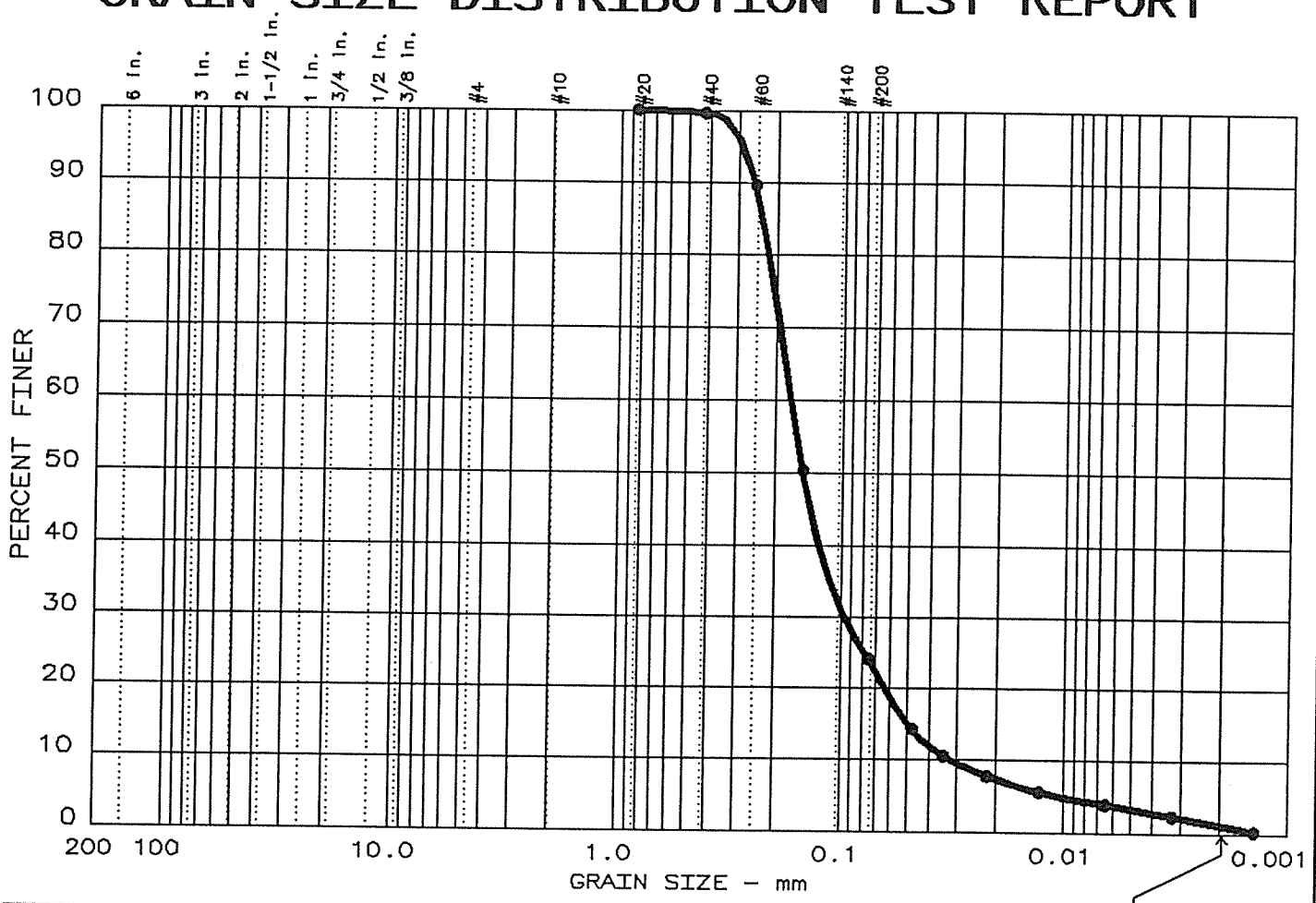
Remarks:

Atterberg Limits not run

Specific gravity was estimated.

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	17	0.0	0.0	75.9	22.9	1.2

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.232	0.170	0.149	0.0953	0.0494	0.0323	1.66	5.3

MATERIAL DESCRIPTION	USCS	AASHTO
● silty SAND	SM	

Project No.: 1377P
Project: Mt. Polley Mine - TSF
● Location: B2

Date: 11/1/99

GRAIN SIZE DISTRIBUTION TEST REPORT

Knight Piesold LLC

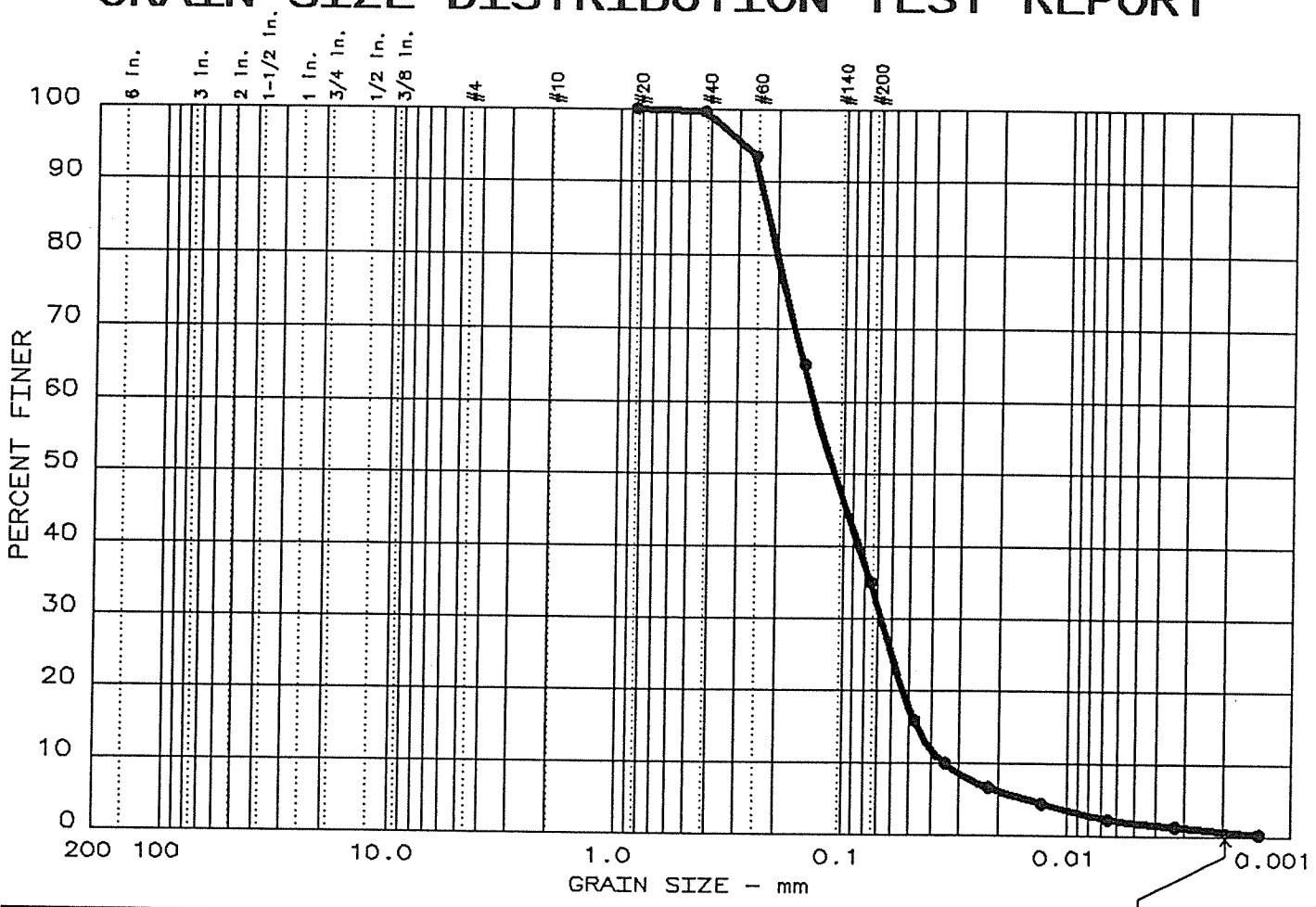
Remarks:

Atterberg Limits not run

Specific gravity was estimated.

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	19	0.0	0.0	65.0	34.3	0.7

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.218	0.136	0.109	0.0670	0.0458	0.0348	0.95	3.9

MATERIAL DESCRIPTION	USCS	AASHTO
● silty SAND	SM	

Project No.: 1377P
Project: Mt. Polley Mine - TSF
● Location: E2

Date: 11/1/99

Remarks:

Atterberg Limits not run

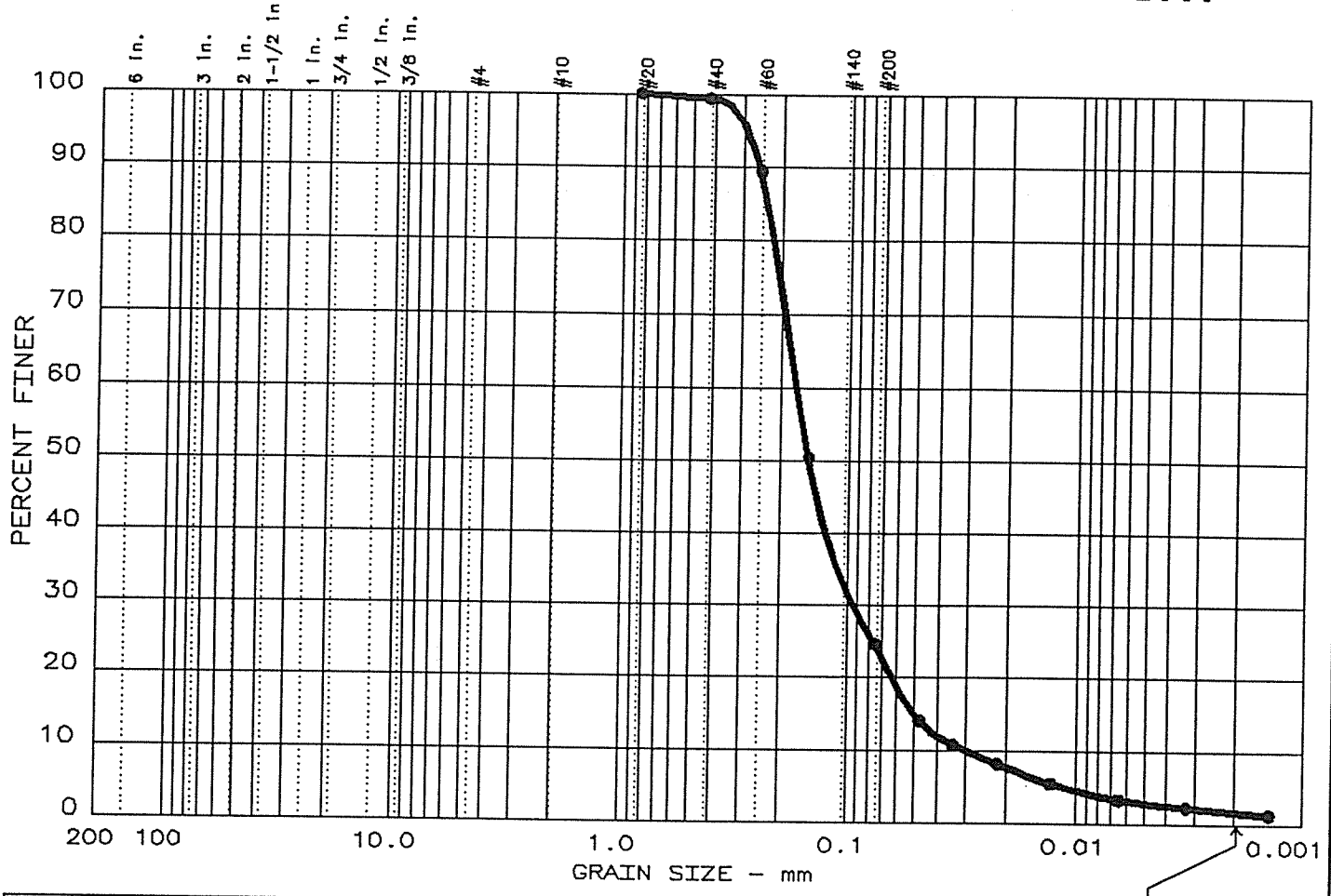
Specific gravity was estimated.

GRAIN SIZE DISTRIBUTION TEST REPORT

Knight Piesold LLC

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	18	0.0	0.0	75.5	22.8	1.7

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.233	0.170	0.149	0.0930	0.0499	0.0298	1.71	5.7

MATERIAL DESCRIPTION	USCS	AASHTO
● silty SAND	SM	

Project No.: 1377P
Project: Mt. Polley Mine - TSF
● Location: C1

Date: 11/1/99

GRAIN SIZE DISTRIBUTION TEST REPORT

Knight Piesold LLC

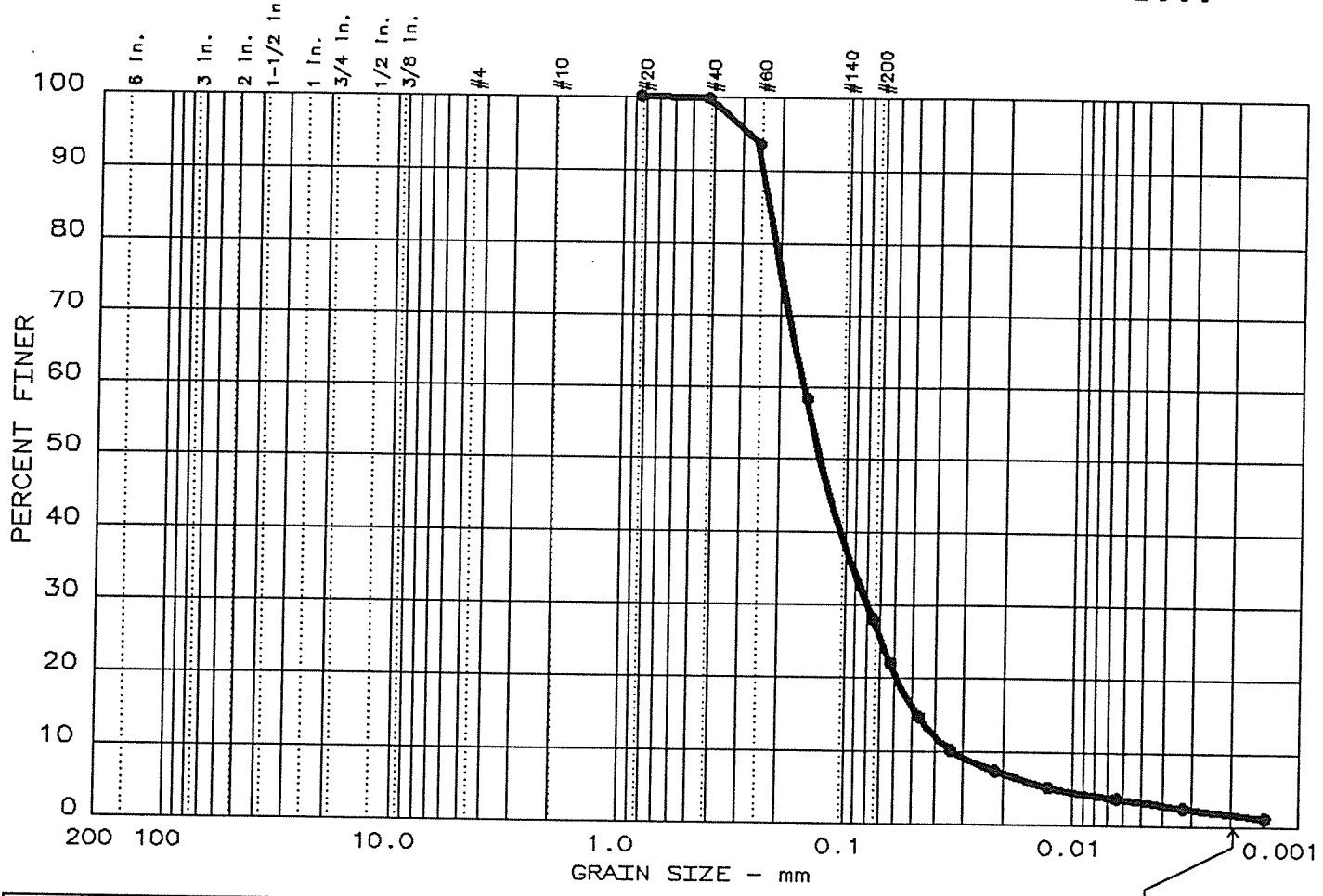
Remarks:

Atterberg Limits not run

Specific gravity was estimated.

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	12	0.0	0.0	71.9	26.4	1.7

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.224	0.155	0.130	0.0793	0.0473	0.0335	1.21	4.6

MATERIAL DESCRIPTION	USCS	AASHTO
● silty SAND	SM	

Project No.: 1377P
Project: Mt. Polley Mine - TSF
● Location: Trench 1 Blend

Date: 11/1/99

Remarks:
Atterberg Limits not run
Specific gravity was estimated.

GRAIN SIZE DISTRIBUTION TEST REPORT

Knight Piesold LLC

Figure No. _____

PROCTOR TEST REPORT

Curve No.:

Project No.: 1377P-L100

Project: Mt. Polley Mine - TSF

Date: 11/2/99

Location: B2

Elev/Depth:

Remarks:

Pt.4 represents sample run at natural moisture content.

MATERIAL DESCRIPTION

Description: silty SAND

Classifications: USCS: SM

AASHTO:

Nat. Moist. = %

Sp.G. = 2.70

Liquid Limit =

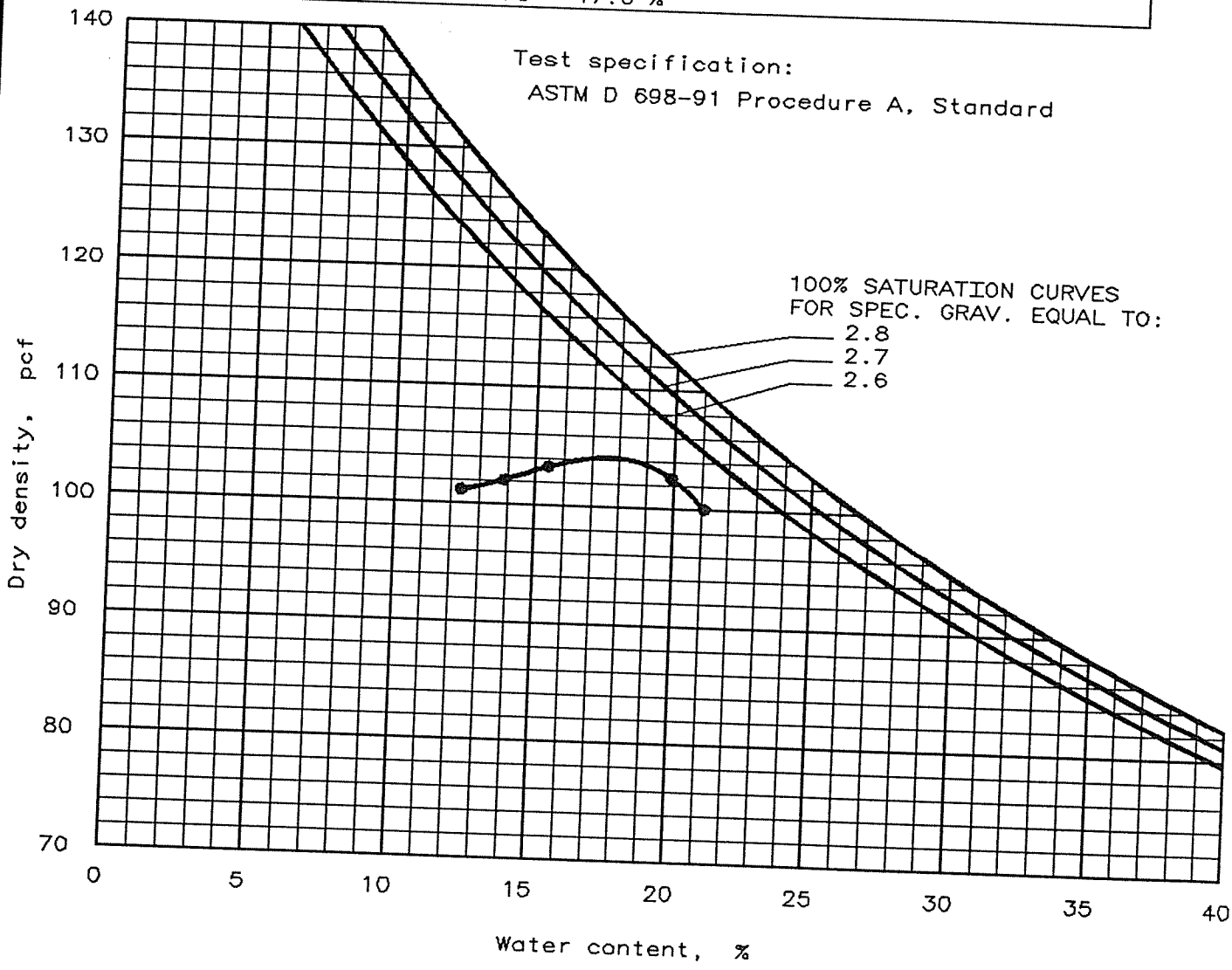
Plasticity Index =

%> No.4 = 0%

%< No.200 = 24.1%

TEST RESULTS
Maximum dry density = 104.2 pcf
Optimum moisture = 17.6 %

Test specification:
ASTM D 698-91 Procedure A, Standard



Knight Piesold LLC

Fig.

MOISTURE-DENSITY TEST DATA

DATA FILE: 213

PROJECT DATA

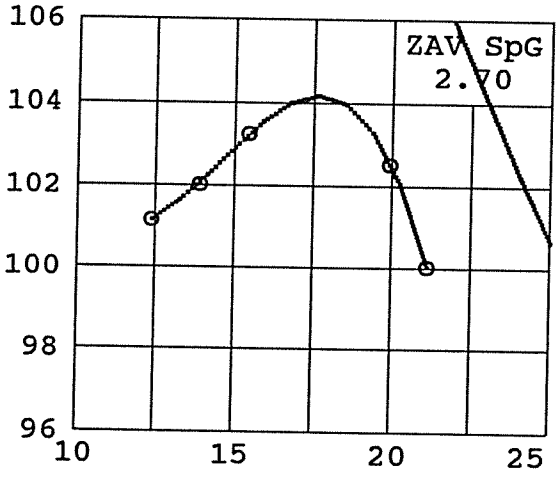
Date:	11/2/99
Project no.:	1377P-L100
Project:	Mt. Polley Mine - TSF
Location 1:	B2
2:	
Remarks 1:	Pt.4 represents sample
2:	run at natural moisture
3:	content.
Material 1:	silty SAND
description 2:	
Elevation or depth:	
Fig no:	

SPECIMEN DATA

USCS classification: SM
AASHTO classification:
Natural moisture:
Specific gravity: 2.70
Percent retained on No.4 sieve: 0
Percent passing No. 200 sieve: 24.1
Liquid limit: Plastic limit: Plasticity index:

TEST DATA AND RESULTS

Type of test: Standard, ASTM D 698-91 Procedure A



POINT NO.	1	2	3	4	5
WM + WS	13.29	13.37	13.47	13.54	13.60
WM	9.50	9.50	9.50	9.50	9.50
WW+T #1	670.20	755.80	334.80	447.10	567.90
WD+T #1	609.10	687.30	305.90	389.00	492.30
TARE #1	114.60	193.70	118.60	113.70	112.50
MOIST #1	12.4	13.9	15.4	21.1	19.9
MOISTURE	12.4	13.9	15.4	21.1	19.9
DRY DEN	101.2	102.1	103.3	100.1	102.6

Max dry den= 104.2 pcf, Opt moisture= 17.6 %

Oversize Correction Not Applied

PROCTOR TEST REPORT

Curve No.:

Project No.: 1377P-L100

Project: Mt. Polley Mine - TSF

Date: 11/2/99

Location: E2

Elev/Depth:

Remarks:

Pt.4 represents sample run at natural moisture content.

MATERIAL DESCRIPTION

Description: silty SAND

Classifications: USCS: SM AASHTO:

Nat. Moist. = %

Sp.G. = 2.70

Liquid Limit =

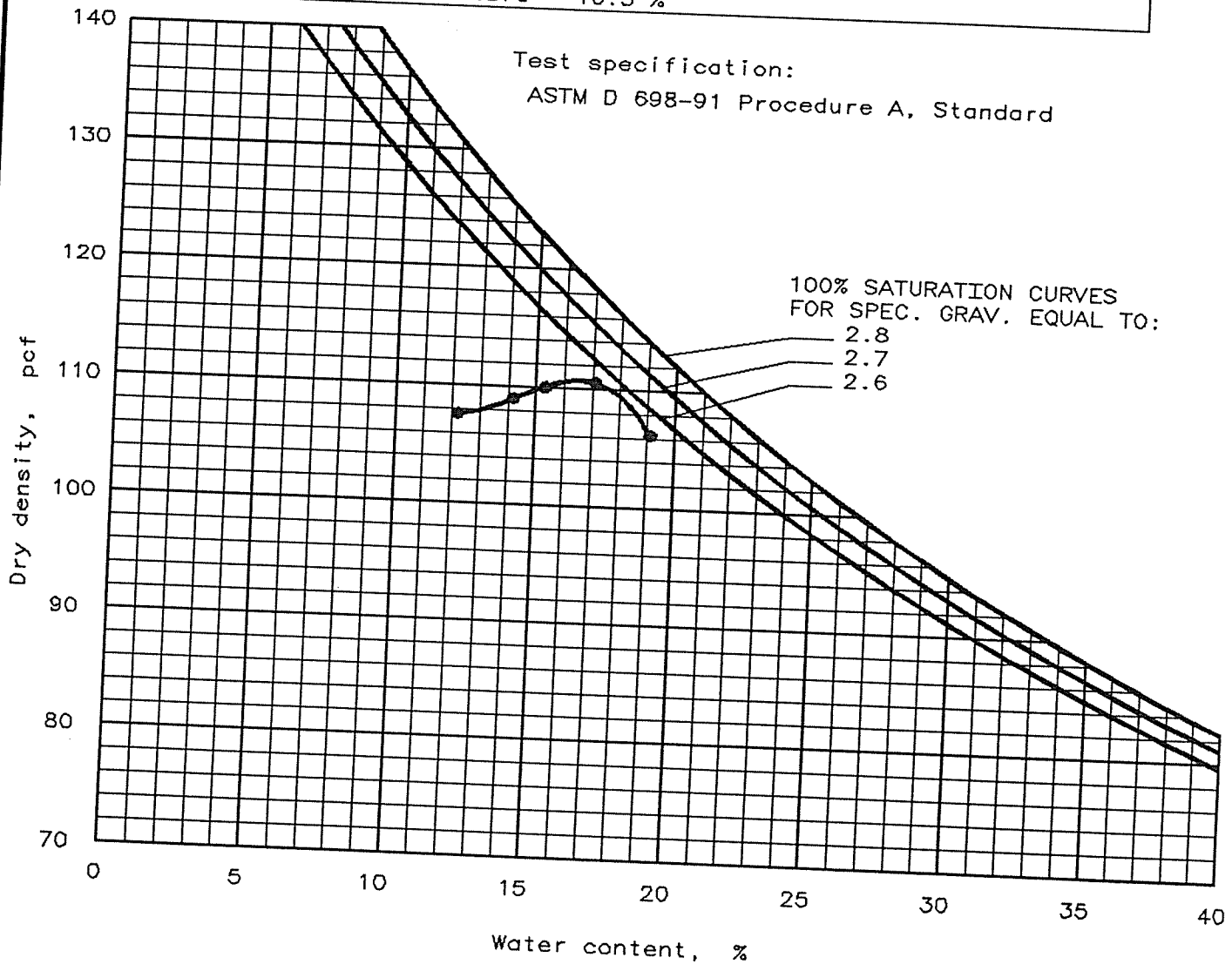
Plasticity Index =

%> No.4 = 0%

%< No.200 = 35.0%

TEST RESULTS
Maximum dry density = 110.7 pcf
Optimum moisture = 16.5 %

Test specification:
ASTM D 698-91 Procedure A, Standard



MOISTURE-DENSITY TEST DATA

DATA FILE: 214

PROJECT DATA

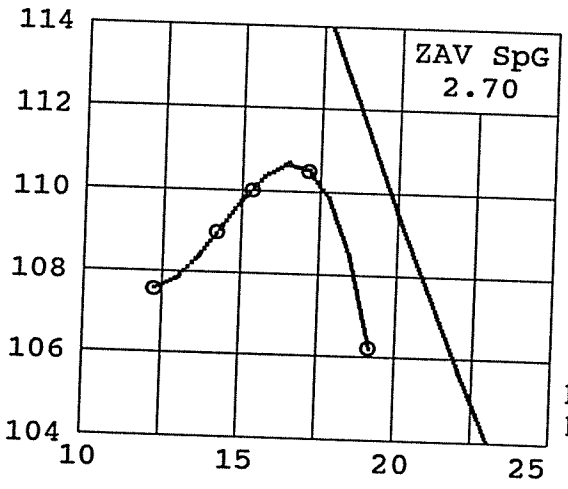
Date:	11/2/99
Project no.:	1377P-L100
Project:	Mt. Polley Mine - TSF
Location 1:	E2
2:	
Remarks 1:	Pt.4 represents sample
2:	run at natural moisture
3:	content.
Material 1:	silty SAND
description 2:	
Elevation or depth:	
Fig no:	

SPECIMEN DATA

USCS classification: SM
AASHTO classification:
Natural moisture:
Specific gravity: 2.70
Percent retained on No.4 sieve: 0
Percent passing No. 200 sieve: 35.0
Liquid limit:
Plastic limit:
Plasticity index:

TEST DATA AND RESULTS

Type of test: Standard, ASTM D 698-91 Procedure A



POINT NO.	1	2	3	4	5
WM + WS	13.52	13.65	13.73	13.81	13.72
WM	9.50	9.50	9.50	9.50	9.50
WW+T #1	505.30	623.80	326.70	527.60	346.50
WD+T #1	462.60	561.00	298.40	467.60	309.80
TARE #1	112.90	118.40	113.50	116.60	117.90
MOIST #1	12.2	14.2	15.3	17.1	19.1
MOISTURE	12.2	14.2	15.3	17.1	19.1
DRY DEN	107.6	109.0	110.1	110.6	106.3

Max dry den= 110.7 pcf, Opt moisture= 16.5 %

Oversize Correction Not Applied

PROCTOR TEST REPORT

Curve No.:

Project No.: 1377P-L100

Project: Mt. Polley Mine - TSF

Date: 11/2/99

Location: C1

Elev/Depth:

Remarks:

Pt.2 represents sample run at natural moisture content.

MATERIAL DESCRIPTION

Description: silty SAND

Classifications: USCS: SM AASHTO:

Nat. Moist. = %

Sp.G. = 2.70

Liquid Limit =

Plasticity Index =

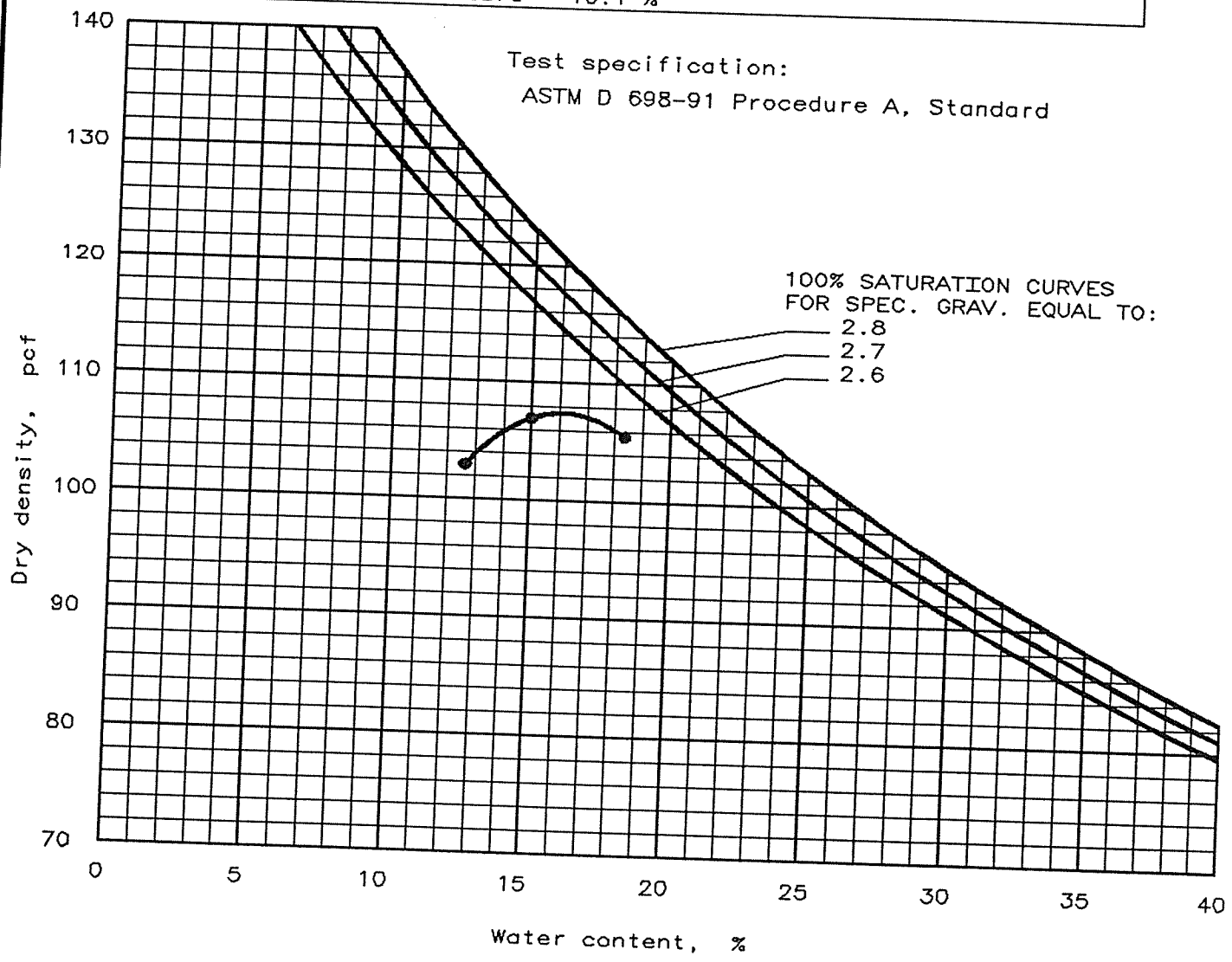
%> No.4 = 0%

%< No.200 = 24.5%

TEST RESULTS
Maximum dry density = 107.5 pcf
Optimum moisture = 16.1 %

Test specification:

ASTM D 698-91 Procedure A, Standard



MOISTURE-DENSITY TEST DATA

DATA FILE: 215

PROJECT DATA

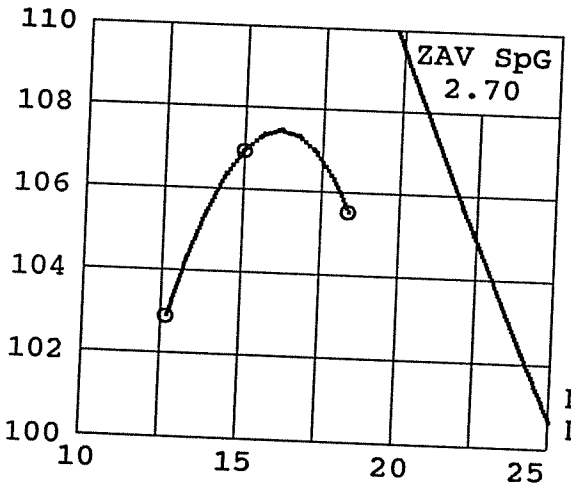
Date:	11/2/99
Project no.:	1377P-L100
Project:	Mt. Polley Mine - TSF
Location 1:	C1
2:	
Remarks 1:	Pt.2 represents sample
2:	run at natural moisture
3:	content.
Material 1:	silty SAND
description 2:	
Elevation or depth:	
Fig no:	

SPECIMEN DATA

USCS classification: SM
AASHTO classification:
Natural moisture:
Specific gravity: 2.70
Percent retained on No.4 sieve: 0
Percent passing No. 200 sieve: 24.5
Liquid limit:
Plastic limit:
Plasticity index:

TEST DATA AND RESULTS

Type of test: Standard, ASTM D 698-91 Procedure A



POINT NO.	1	2	3
WM + WS	13.36	13.66	13.60
WM	9.50	9.50	9.50
WW+T #1	586.30	819.80	352.80
WD+T #1	533.10	754.10	322.10
TARE #1	112.20	396.00	117.00
MOIST #1	12.6	18.3	15.0
MOISTURE	12.6	18.3	15.0
DRY DEN	102.9	105.6	107.0

Max dry den= 107.5 pcf, Opt moisture= 16.1 %

Oversize Correction Not Applied

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.		
PROJECT:	Mt. Polley Mine TSF	PROJECT NO. :	1377P-L100
BORING NO.	Trench 2 Blend	LAB NO. :	L99182
DEPTH		SAMPLE ID:	300.99.1860
SAMPLE NO.		TEST STARTED :	11/01/99
SAMPLE TYPE	Remolded	TEST FINISHED :	11/06/99
CONF. PRESSURE. (psi)	29	SATURATED TEST:	YES

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	794.50	834.40
Wt. Wet Soil & Pan (g)	794.50	947.80
Wt. Dry Soil & Pan (g)	663.60	777.00
Wt. Moisture Lost (g)	130.90	170.80
Wt. of Pan Only (g)	0.00	113.40
Wt. of Dry Soil (g)	663.60	663.60
Moisture Content %	19.7	25.7
Wet Density (pcf)	119.8	129.6
Dry Density (pcf)	100.1	103.1

Init. Diameter	(in)	2.418	(cm)	6.142
Init. Area	(sq in)	4.592	(sq cm)	29.626
Init. Height	(in)	5.500	(cm)	13.970
Height Change	(in)	0.027	(cm)	0.069
Consol. Height	(in)	5.473	(cm)	13.901
Area After Consol.	(sq in)	4.482	(sq cm)	28.916
Vol. Before Consol.	(cu ft)	0.01462	Specific Gravity	2.87
Vol. Before Consol.	(cc)	413.872	Assumed?	No
Change in Vol.	(cc)	11.900		
Cell Exp.	(cc)	0.000	Init. Saturation	71.7
Vol. After Consol.	(cc)	401.972	Init. Void Ratio	0.790
Vol. After Consol.	(cu ft)	0.01420	Final Saturation	100.0
Effective Porosity %		44.13	Final Void Ratio	0.738
Pressure Difference (psi):		0.00		
C =		0.55058	Buret Constant, a	0.994
			Buret Stand	3

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.		
PROJECT:	Mt. Polley Mine TSF	PROJECT NO. :	1377P-L100
BORING NO.	Trench 2 Blend	LAB NO. :	L99182
DEPTH		SAMPLE ID:	300.99.1860
SAMPLE NO.		TEST STARTED :	11/01/99
SAMPLE TYPE	Remolded	TEST FINISHED :	11/06/99
CONF. PRESSURE. (psi)	29	SATURATED TEST:	YES

Permeability Test Trials

Time min.	Cap Elevation cm	Pedestal Elevation cm	Elevation Head cm	Total Head cm	Permeability k cm/sec
0.0	50.0	0.0	50.0	50.3	
39.9	47.0	3.0	44.0	44.3	7.7E-04
0.0	50.0	0.0	50.0	50.3	
38.1	47.0	3.0	44.0	44.3	8.0E-04
0.0	50.0	0.0	50.0	50.3	
39.8	47.0	3.0	44.0	44.3	7.7E-04
0.0	50.0	0.0	50.0	50.3	
38.2	47.0	3.0	44.0	44.3	8.0E-04
0.0	50.0	0.0	50.0	50.3	
39.1	47.0	3.0	44.0	44.3	7.8E-04
			Average of Last 4 Readings		7.9E-04

General Test Notes:

1) Tap water was used as the permeant.
2) Back pressure saturation continued until 'B' parameter a minimum of 0.95.
3) Target remolding criteria: 1600 kg/m^3 @ natural moisture content.

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.		
PROJECT:	Mt. Polley Mine TSF	PROJECT NO. :	1377P-L100
BORING NO.	Trench 2 Blend	LAB NO. :	L99182
DEPTH		SAMPLE ID:	300.99.1860
SAMPLE NO.		TEST STARTED :	11/01/99
SAMPLE TYPE	Remolded	TEST FINISHED :	11/06/99
CONF. PRESSURE. (psi)	58	SATURATED TEST:	YES

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	794.50	830.70
Wt. Wet Soil & Pan (g)	794.50	944.10
Wt. Dry Soil & Pan (g)	663.60	777.00
Wt. Moisture Lost (g)	130.90	167.10
Wt. of Pan Only (g)	0.00	113.40
Wt. of Dry Soil (g)	663.60	663.60
Moisture Content %	19.7	25.2
Wet Density (pcf)	119.8	130.2
Dry Density (pcf)	100.1	104.0

Init. Diameter	(in)	2.418	(cm) 6.142
Init. Area	(sq in)	4.592	(sq cm) 29.626
Init. Height	(in)	5.500	(cm) 13.970
Height Change	(in)	0.040	(cm) 0.102
Consol. Height	(in)	5.460	(cm) 13.868
Area After Consol.	(sq in)	4.451	(sq cm) 28.718
Vol. Before Consol.	(cu ft)	0.01462	
Vol. Before Consol.	(cc)	413.872	
Change in Vol.	(cc)	15.600	
Cell Exp.	(cc)	0.000	
Vol. After Consol.	(cc)	398.272	
Vol. After Consol.	(cu ft)	0.01406	
Effective Porosity %		44.13	
Pressure Difference (psi):		0.00	
C =		0.55306	

Specific Gravity	2.87
Assumed?	No
Init. Saturation	71.7
Init. Void Ratio	0.790
Final Saturation	100.0
Final Void Ratio	0.722
Buret Constant, a	0.994
Buret Stand	3

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.		
PROJECT:	Mt. Polley Mine TSF		
BORING NO.	Trench 2 Blend	PROJECT NO. :	1377P-L100
DEPTH		LAB NO. :	L99182
SAMPLE NO.		SAMPLE ID:	300.99.1860
SAMPLE TYPE	Remolded	TEST STARTED :	11/01/99
CONF. PRESSURE. (psi)	58	TEST FINISHED :	11/06/99
		SATURATED TEST:	YES

Permeability Test Trials

Time min.	Cap Elevation cm	Pedestal Elevation cm	Elevation Head cm	Total Head cm	Permeability k cm/sec
0.0	50.0	0.0	50.0	50.3	
45.7	47.0	3.0	44.0	44.3	6.7E-04
0.0	50.0	0.0	50.0	50.3	
45.9	47.0	3.0	44.0	44.3	6.7E-04
0.0	50.0	0.0	50.0	50.3	
45.4	47.0	3.0	44.0	44.3	6.8E-04
0.0	50.0	0.0	50.0	50.3	
46.0	47.0	3.0	44.0	44.3	6.7E-04
0.0	50.0	0.0	50.0	50.3	
45.6	47.0	3.0	44.0	44.3	6.7E-04
			Average of Last 4 Readings		6.7E-04

General Test Notes:

1) Tap water was used as the permeant.
2) Back pressure saturation continued until 'B' parameter a minimum of 0.95.
3) Target remolding criteria: 1600 kg/m^3 @ natural moisture content.

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.	PROJECT NO. :	1377P-L100
PROJECT:	Mt. Polley Mine TSF	LAB NO. :	L99182
BORING NO.	Trench 2 Blend	SAMPLE ID:	300.99.1860
DEPTH		TEST STARTED :	11/01/99
SAMPLE NO.		TEST FINISHED :	11/06/99
SAMPLE TYPE	Remolded	SATURATED TEST:	YES
CONF. PRESSURE. (psi)	87		

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	794.50	828.30
Wt. Wet Soil & Pan (g)	794.50	941.70
Wt. Dry Soil & Pan (g)	663.60	777.00
Wt. Moisture Lost (g)	130.90	164.70
Wt. of Pan Only (g)	0.00	113.40
Wt. of Dry Soil (g)	663.60	663.60
Moisture Content %	19.7	24.8
Wet Density (pcf)	119.8	130.6
Dry Density (pcf)	100.1	104.6

Init. Diameter	(in)	2.418	(cm)	6.142
Init. Area	(sq in)	4.592	(sq cm)	29.626
Init. Height	(in)	5.500	(cm)	13.970
Height Change	(in)	0.051	(cm)	0.130
Consol. Height	(in)	5.449	(cm)	13.840
Area After Consol.	(sq in)	4.433	(sq cm)	28.603
Vol. Before Consol.	(cu ft)	0.01462		
Vol. Before Consol.	(cc)	413.872	Specific Gravity	2.87
Change in Vol.	(cc)	18.000	Assumed?	No
Cell Exp.	(cc)	0.000		
Vol. After Consol.	(cc)	395.872	Init. Saturation	71.7
Vol. After Consol.	(cu ft)	0.01398	Init. Void Ratio	0.790
Effective Porosity %		44.13	Final Saturation	100.0
Pressure Difference (psi):		0.00	Final Void Ratio	0.712
C =		0.55417		
			Buret Constant, a	0.994
			Buret Stand	3

FLEXIBLE WALL PERMEABILITY TEST
ASTM D 5084-90
Increasing Tailwater Pressure - Method C

CLIENT:	Knight Piésold Ltd.		
PROJECT:	Mt. Polley Mine TSF	PROJECT NO. :	1377P-L100
BORING NO.	Trench 2 Blend	LAB NO. :	L99182
DEPTH		SAMPLE ID:	300.99.1860
SAMPLE NO.		TEST STARTED :	11/01/99
SAMPLE TYPE	Remolded	TEST FINISHED :	11/06/99
CONF. PRESSURE. (psi)	87	SATURATED TEST:	YES

Permeability Test Trials

Time min.	Cap Elevation cm	Pedestal Elevation cm	Elevation Head cm	Total Head cm	Permeability k cm/sec
0.0	50.0	0.0	50.0	50.3	
191.7	40.0	10.0	30.0	30.2	6.4E-04
0.0	50.0	0.0	50.0	50.3	
110.3	45.0	5.0	40.0	40.2	4.9E-04
0.0	50.0	0.0	50.0	50.3	
110.2	45.0	5.0	40.0	40.2	4.9E-04
0.0	50.0	0.0	50.0	50.3	
111.3	45.0	5.0	40.0	40.2	4.8E-04
0.0	50.0	0.0	50.0	50.3	
111.0	45.0	5.0	40.0	40.2	4.8E-04
			Average of Last 4 Readings		4.9E-04

General Test Notes:

1) Tap water was used as the permeant.
2) Back pressure saturation continued until 'B' parameter a minimum of 0.95.
3) Target remolding criteria: 1600 kg/m^3 @ natural moisture content.
4) Specimen was sheared after this stress.

Knight Piésold
CONSULTING

APPENDIX C

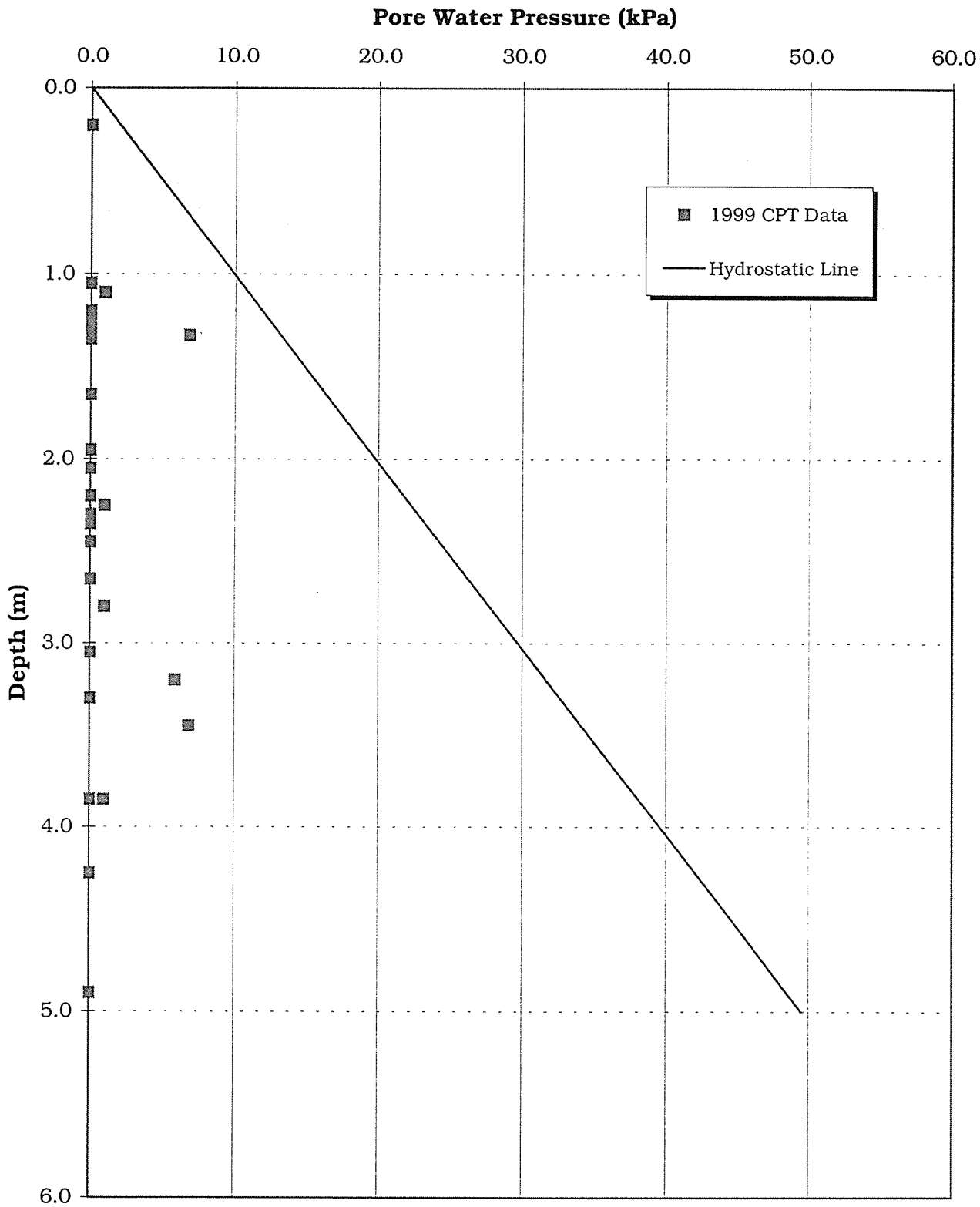
CONE PENETRATION TESTING

C1 CPT DATA
C2 CONTEC FIELD REPORT

Knight Piésold
CONSULTING

APPENDIX C1

CPT DATA



MOUNT POLLEY MINING CORPORATION

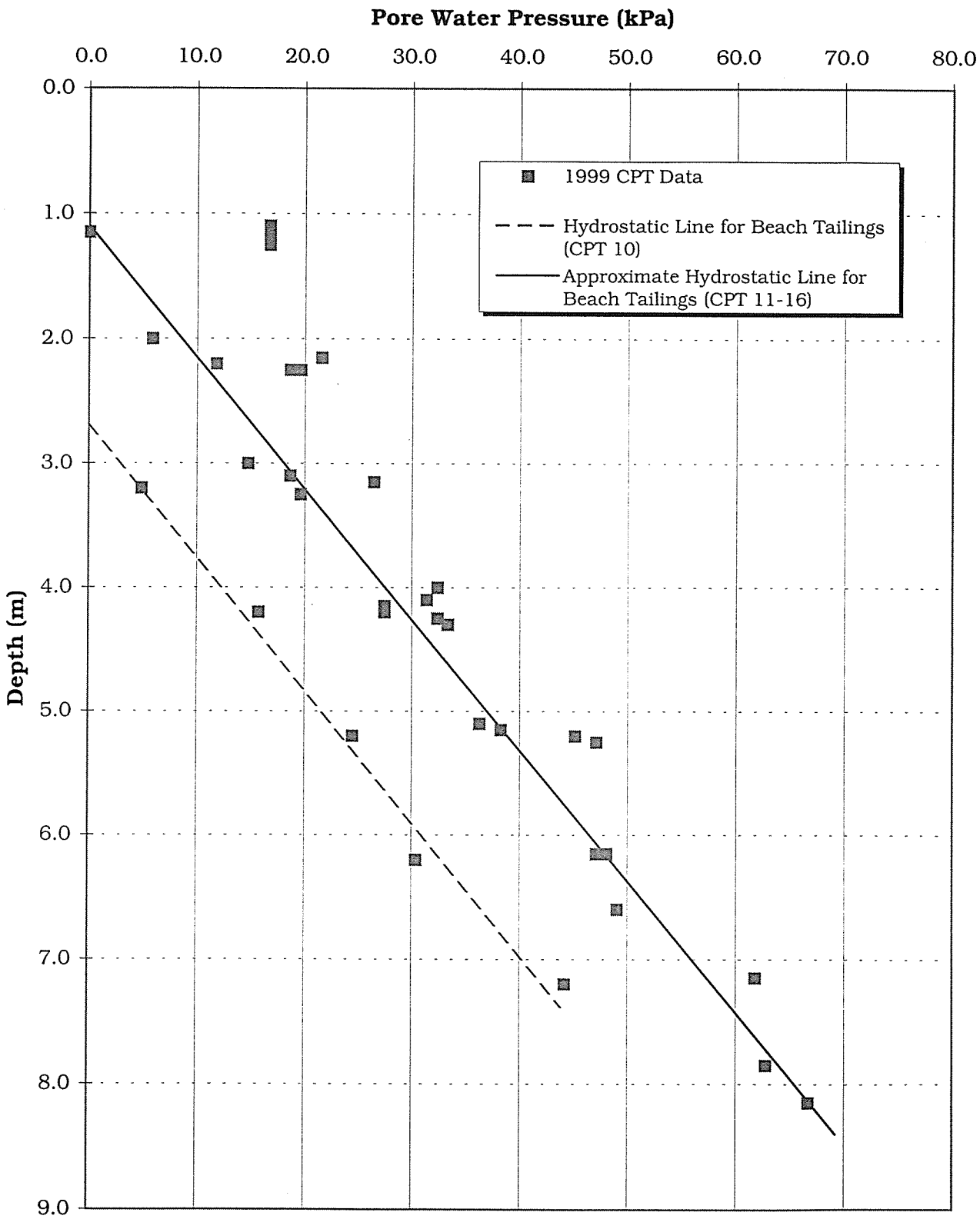
MOUNT POLLEY MINE

CYCLONED SANDS
DOWNSTREAM TRIAL AREA
MEASURED PORE WATER PRESSURES

Knight Piésold CONSULTING

PROJECT	REF. NO.	REV.
11162/12	2	0

FIGURE C1.1



MOUNT POLLEY MINING CORPORATION

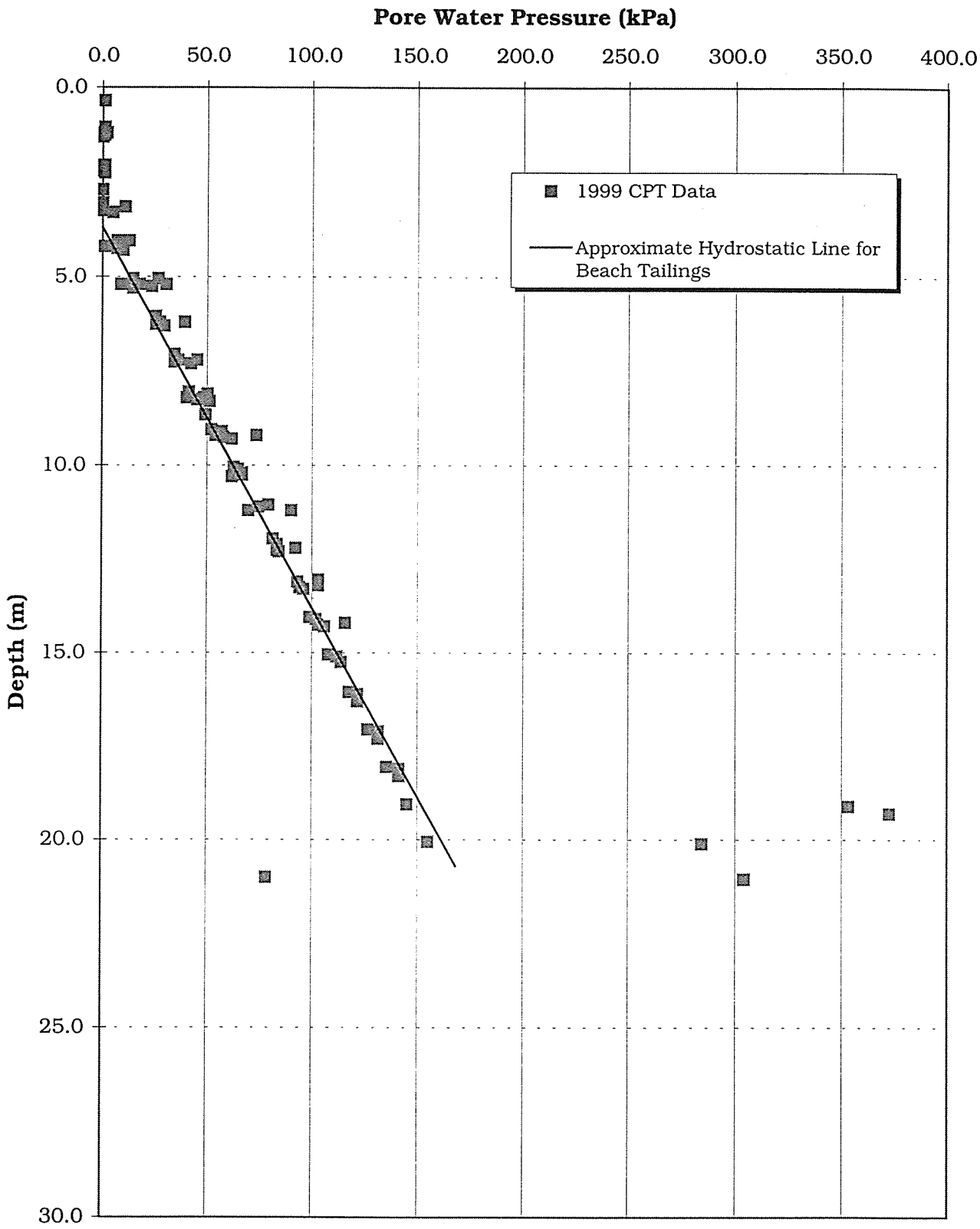
MOUNT POLLEY MINE

PERIMETER EMBANKMENT
UPSTREAM TRIAL BERM
MEASURED PORE WATER PRESSURES

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
11162/12	2	0

FIGURE C1.2



MOUNT POLLEY MINING CORPORATION

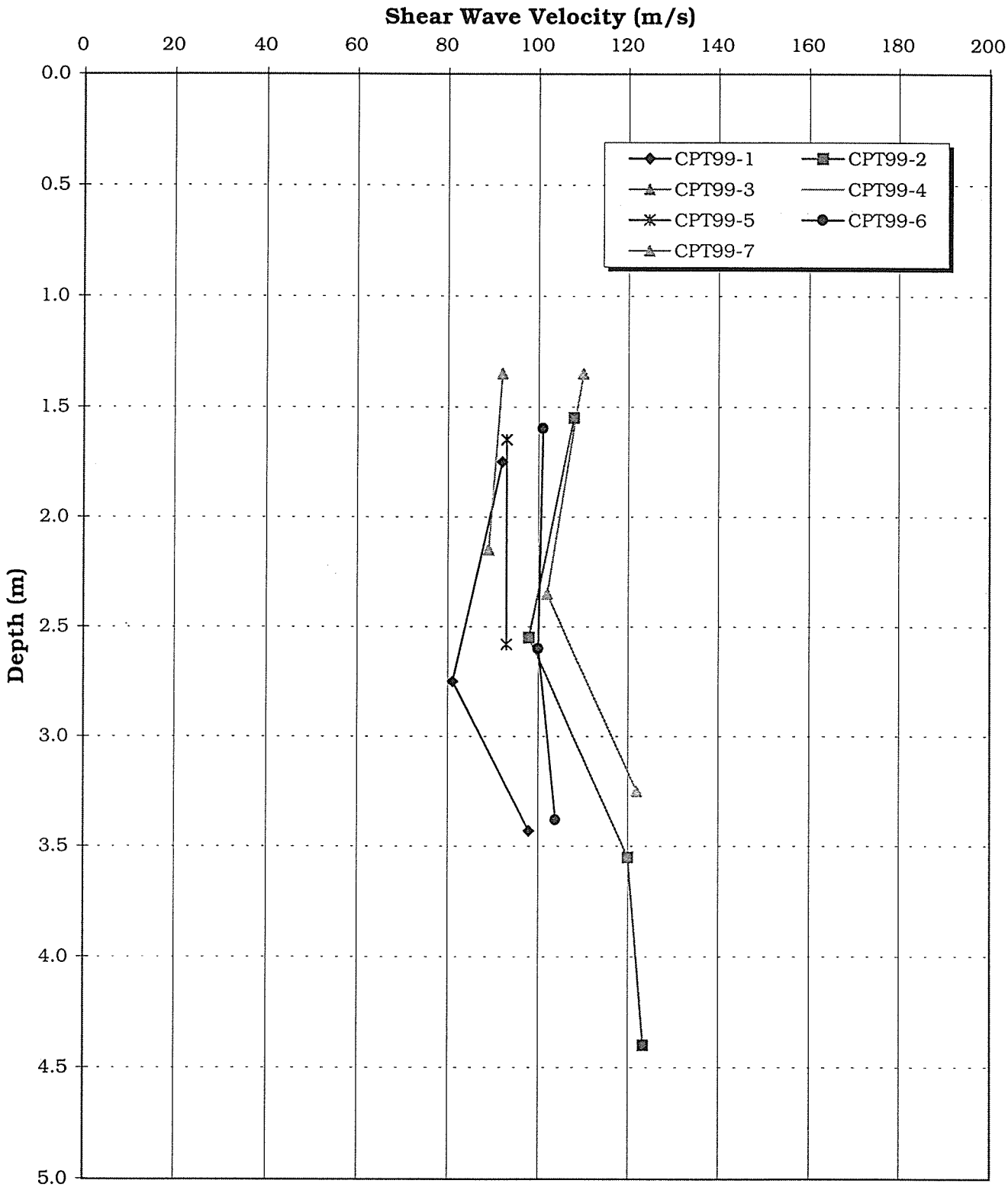
MOUNT POLLEY MINE

MAIN EMBANKMENT
UPSTREAM TRIAL BERM
MEASURED PORE WATER PRESSURES

Knight Piésold CONSULTING

PROJECT	REF. NO.	REV.
11162/12	2	0

FIGURE C1.3



MOUNT POLLEY MINING CORPORATION

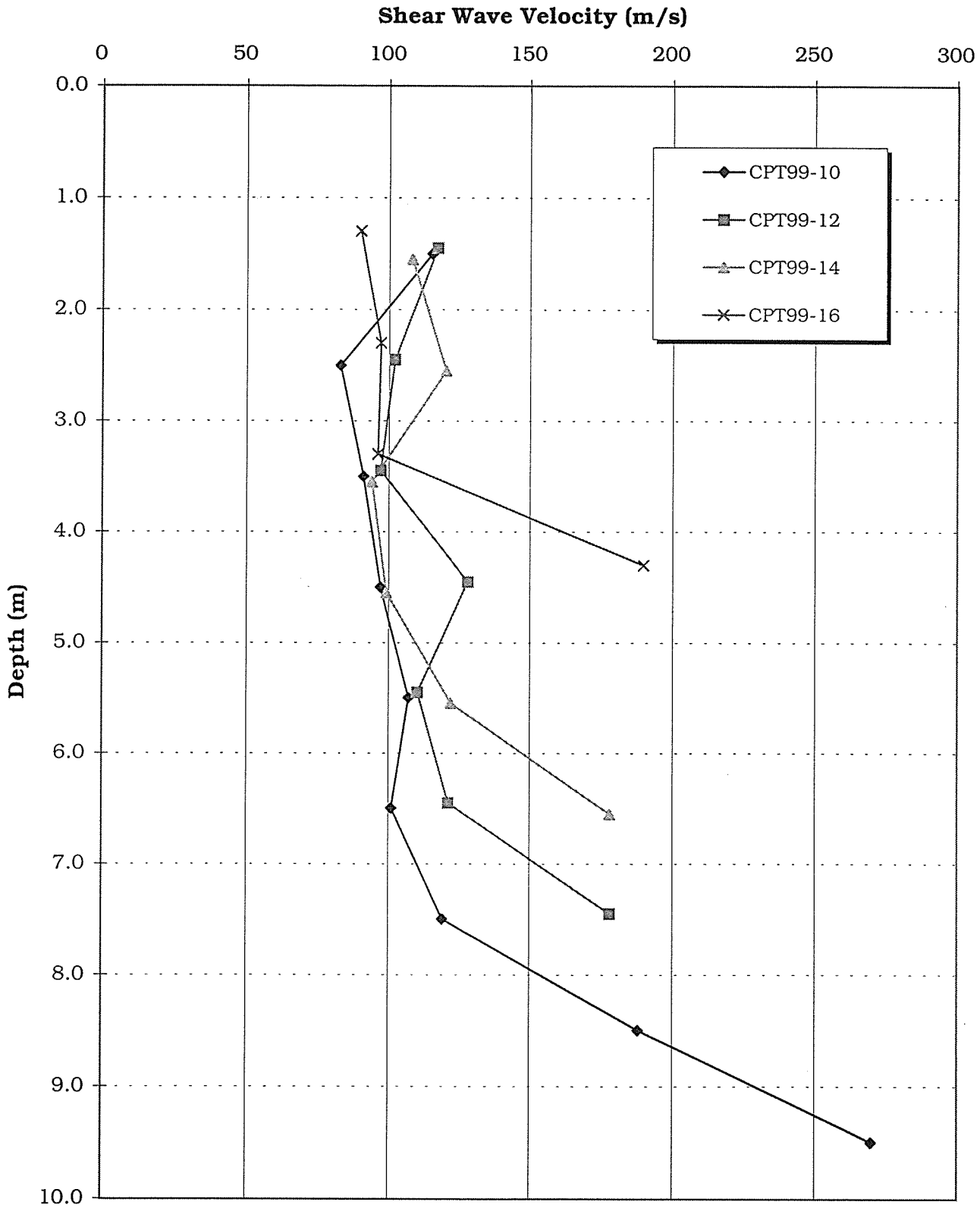
MOUNT POLLEY MINE

CYCLONED SANDS
DOWNSTREAM TRIAL AREA
SHEAR WAVE VELOCITY PROFILES

Knight Piésold CONSULTING

PROJECT	REF. NO.	REV.
11162/12	2	0

FIGURE C1.4



MOUNT POLLEY MINING CORPORATION

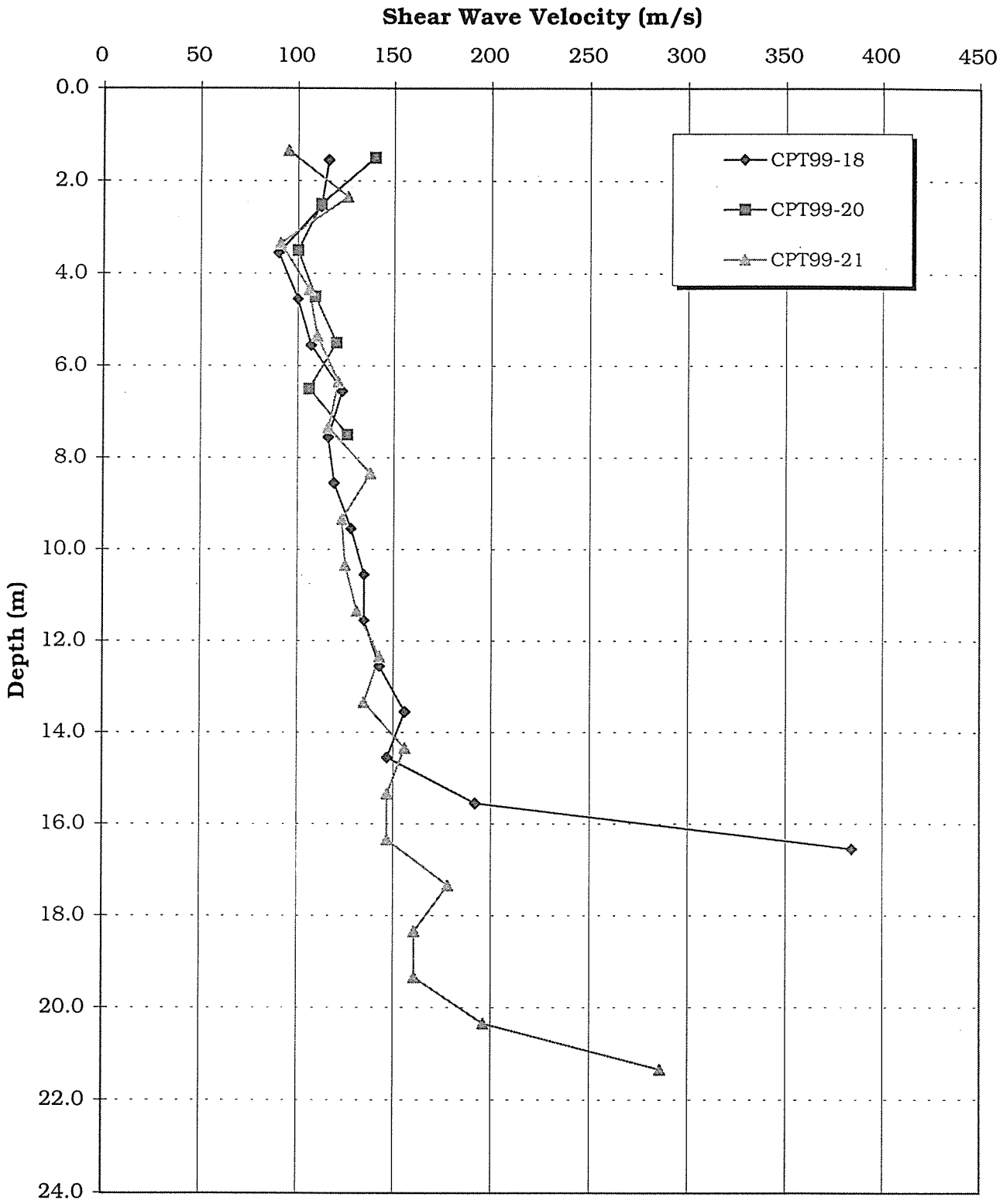
MOUNT POLLEY MINE

PERIMETER EMBANKMENT
UPSTREAM TRIAL BERM
SHEAR WAVE VELOCITY PROFILES

Knight Piésold CONSULTING

PROJECT NO.	REF.	REV
11162/12	2	0

FIGURE C1.5



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

MAIN EMBANKMENT
UPSTREAM TRIAL BERM
SHEAR WAVE VELOCITY PROFILES

Knight Piésold CONSULTING

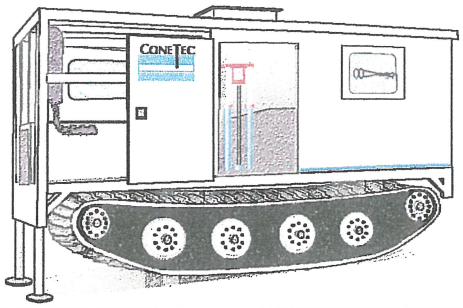
PROJECT	REF. NO.	REV.
11162/12	2	0

FIGURE C1.6

Knight Piésold
CONSULTING

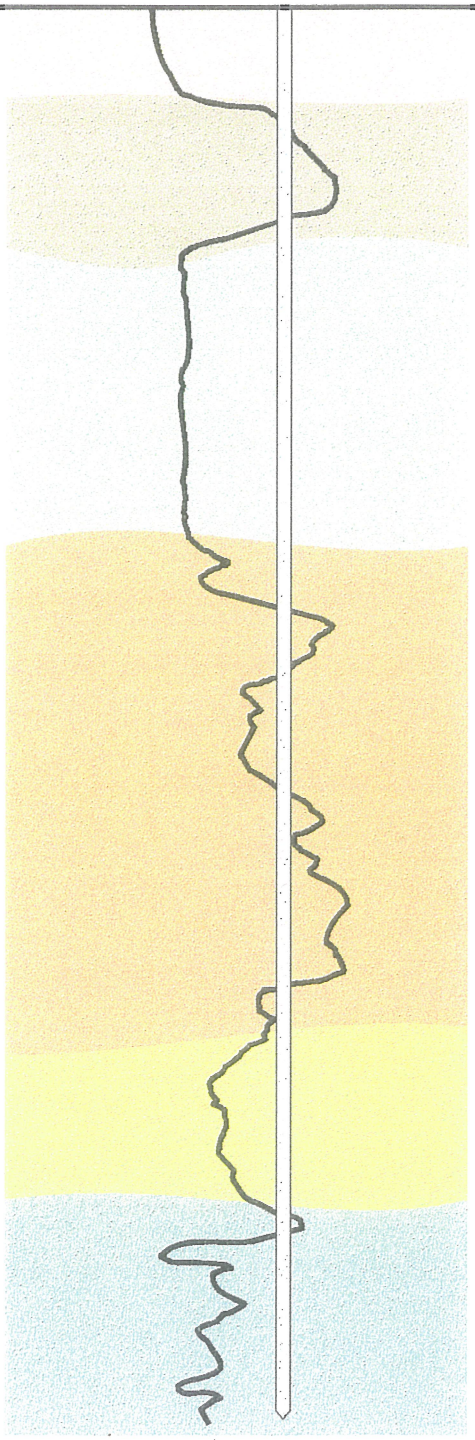
APPENDIX C2

CONTEC FIELD REPORT



CONETEC

Geotechnical and Environmental In Situ Testing Contractors



ConeTec Field Report

Prepared for:

Knight Piésold Ltd.
Vancouver, BC

Cone Penetration Test Data
Mount Polly Mine
Likely, BC

- November 22, 1999 -

Vancouver • Edmonton • Salt Lake City • New Jersey • Los Angeles • San Francisco • Houston
Tel: (604) 327-4311 • Fax: (604) 327-4066 • Email: insitu@conetec.com

TABLE OF CONTENTS

1.0 INTRODUCTION

This report presents the results of a cone penetration testing (CPT) program carried out at the Mount Polly mine, near Likely, B.C. A total of 23 CPT's with pore pressure dissipation tests were performed for this investigation, with 14 of the CPTs being seismic CPTs. This testing was carried out over the period of November 2nd to November 4th, 1999.

2.0 FIELD EQUIPMENT AND PROCEDURES

2.1 CPT Procedures

The cone penetration tests (CPT's) were carried out by ***ConeTec Investigations Ltd.*** of Vancouver, B.C. using an integrated electronic cone system. A 10 ton compression type cone was used for all of the soundings. The 10 ton cone has a tip area of 10 sq cm and friction sleeve area of 150 sq cm. A piezometer element 6 mm thick is located immediately behind the cone tip. The compression cones are designed with an equal end area friction sleeve and a tip end area ratio of 0.85. The cone system used during the program recorded the following parameters at 5.0 cm depth increments:

- Tip Resistance (Qc) in bars
- Sleeve Friction (Fs) in bars
- Dynamic Pore Pressure (Ut) in metres of water

The above parameters were printed simultaneously on a printer and stored on digital media for future analysis and reference.

The porous plastic pore pressure element was located directly behind the cone tip. Each of the elements were saturated in glycerin under vacuum pressure prior to penetration. Pore pressure dissipations were recorded at 5 second intervals during all pauses in the penetration.

A complete set of baseline readings were taken prior to and after each sounding to determine if any zero load offsets had occurred due a temperature change of the probe. Establishing the presence of temperature shifts and load offsets enables the operator to make corrections to the cone data if necessary. These corrections can be important, especially where the load conditions are relatively low, and generally are the single largest source of error with respect to the accuracy of cone data. Since the probes are temperature compensated, load shifts due to changes in probe temperature are only a problem when there are extreme temperature changes from before the test is started and while the probe is in situ. For the testing done on this project keeping the cone within an

operating temperature range that did not produce load offsets was not a problem. The cone was pushed using track mounted M5 drill provided by Mud Bay Drilling.

The following is a list of the CPT names, test depths and water tables.

CPT File	CPT Test Name	Depth (m)	Water Table (m)	Seismic
219cp01	CPT 99-01	3.8	2.7	Y
219cp02	CPT 99-02	4.95	--	Y
219cp03	CPT 99-03	3.85	--	Y
219cp04	CPT 99-04	2.3	--	Y
219cp05	CPT 99-05	3.25	2.5	Y
219cp06	CPT 99-06	3.85	--	Y
219cp07	CPT 99-07	2.65	--	Y
219cp08	CPT 99-08	1.325	0.6	
219cp09	CPT 99-09	2.8	--	
219cp10	CPT 99-10	10.2	2.8	Y
219cp11	CPT 99-11	6.15	1.2	
219cp12	CPT 99-12	8.3	1.2	Y
219cp13	CPT 99-13	6.6	1.3	
219cp14	CPT 99-14	7.85	1.0	Y
219cp15	CPT 99-15	5.1	1.0	
219cp16	CPT 99-16	5.00	1.0	Y
219cp17	CPT 99-17	12.75	4.1	
219cp18	CPT 99-18	17.35	3.6	Y
219cp19	CPT 99-19	22.15	3.4	
219cp20	CPT 99-20	8.65	3.2	Y

219cp21	CPT 99-21	22.55	3.5	Y
219cp22	CPT 99-22	20.55	3.8	
219cp23	CPT 99-23	17.20	2.0	

2.2 Seismic CPT Test Procedures

The equipment and procedures used for determining shear wave velocities were in general as reported by Robertson et al, 1993. The procedure was incorporated within the cone penetration test (CPT) and conducted when the penetration was stopped to add additional push rods. At the end of the first push and at one metre intervals thereafter, shear wave velocity measurements were made. The CPT rods are one metre long, and therefore accurate depth intervals were ensured by always pushing the cone rods one metre. Before taking shear wave velocity measurements the rods were decoupled from the drill rig to minimize background noise.

Shear waves were generated by striking a steel beam held beneath the rear stabilizers of the drill. The horizontal offset of the source to the cone was accounted for in the velocity calculations. At each test location four impacts were recorded to check the consistency of the waveform generated. An electrical contact trigger between the auger and the hammer produced accurate triggering times and allowed for the accurate timing of S wave markers.

The shear wave receiver used was an horizontally active geophone located in the body of the piezocone. The geophone is located 0.2 metres behind the cone tip. This offset is accounted for in all calculations. Data was sampled at a frequency of 20 kHz (ie: 20,000 samples per second) with between 2000 and 5000 sample points recorded per wave trace depending on the depth

3.0 CONE PENETRATION TEST DATA

3.1 CPT Data

The cone penetration test data is presented in graphical form in Appendix A following the text of this report. For each test there are two sets of plots. The first plot consists of Tip Resistance (Qt) in bars, Sleeve Friction (Fs) in bars, Pore Pressure (U) in metres of water, and Friction Ratio (Rf) plotted versus depth. The second plot consists of Qt, SPT N60, SPT (N1)60, and Undrained Strength (Su) in kPa. The CPT data is also stored as ASCII text on the accompanying data disk. Penetration data is referenced to existing ground.

Stratigraphic interpretations appears on the right side of both plot sets. The stratigraphic interpretation is based on a chart relating cone bearing Qc, and sleeve friction Fs developed by Robertson et al, 1986 as shown in Figure 1. Detailed interpretations of the CPT data are included in Appendix B. A description of the interpretation methods is included at the end of Appendix B.

3.2 Pore Pressure Dissipation Test Results

Pore pressure dissipations were recorded during selected pauses in penetration for all CPTs tests. The pore pressure data was recorded at 5 second intervals. The pore pressure dissipation data for each CPT is included on the data disk. Pore pressure dissipation data in fine grained soils provides a good indication of the consolidation characteristics. Data from pore pressure dissipation tests in tabular format is presented in Appendix C. The coefficient of consolidation in the horizontal direction, c_h, was calculated using the equation following equation.

$$c_h = \frac{T^* r^2 \sqrt{I_r}}{t}$$

where:

T*	-	time constant=0.245 for 50% dissipation
r	-	radius of the cone
Ir	-	Rigidity Index = G/Su
t	-	time for dissipation

For all the dissipations the time for 50 percent dissipation was used to calculate c_h. A value of 200 for the rigidity index was used in all calculations. The resulting values of c_h ranged from 4.1 cm^2/min to 224 cm^2/min, with most values falling between 50 cm^2/min to 200 cm^2/min. In most cases when excess pore pressure was generated during penetration dissipation to equilibrium was fairly rapid providing numerous points to determine the equilibrium pore pressure, which was essentially hydrostatic.

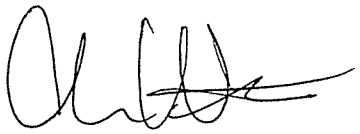
3.2 Shear Wave Velocity Test Results

Plots of shear wave velocity versus depth and tabular results for all the tests are presented in Appendix D. The velocity profiles show the shear wave velocity plotted at a depth midway between the one metre test intervals. For the most part the measured shear wave velocities in the tailing generally fall in the range of 85 to 150 m/s, increasing with depth.

We trust that the information presented in this report is sufficient for your purposes. If you have any questions regarding the contents of this report, please do not hesitate to contact our office.

Yours truly,

ConeTec Investigations Ltd.

Per: 

Ilmar Weemees, P.Eng.

ref: 99-219.wpd

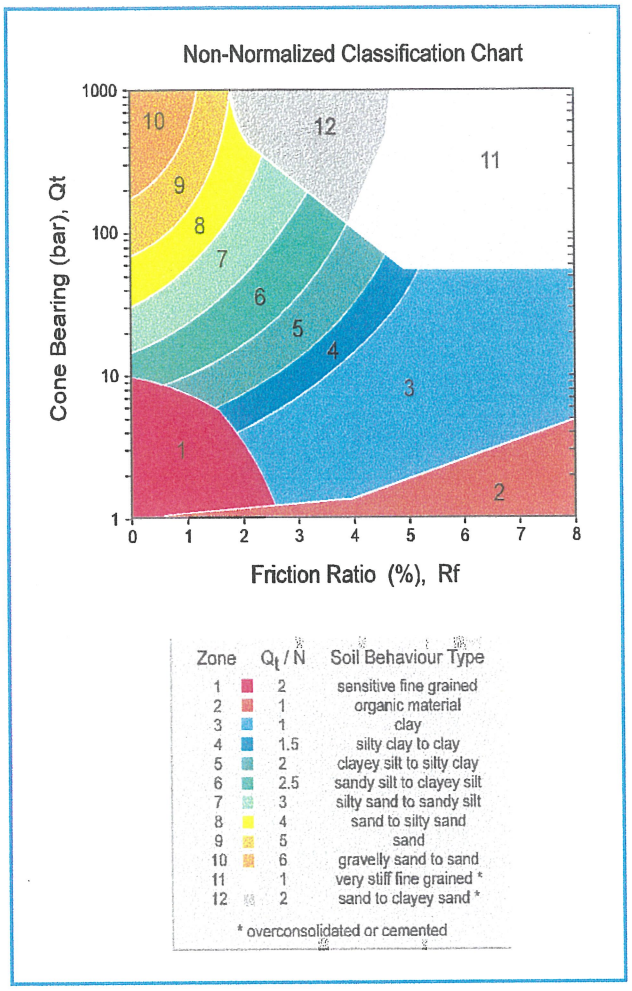


Figure 1. Soil Behaviour Type Classification Chart

APPENDIX A

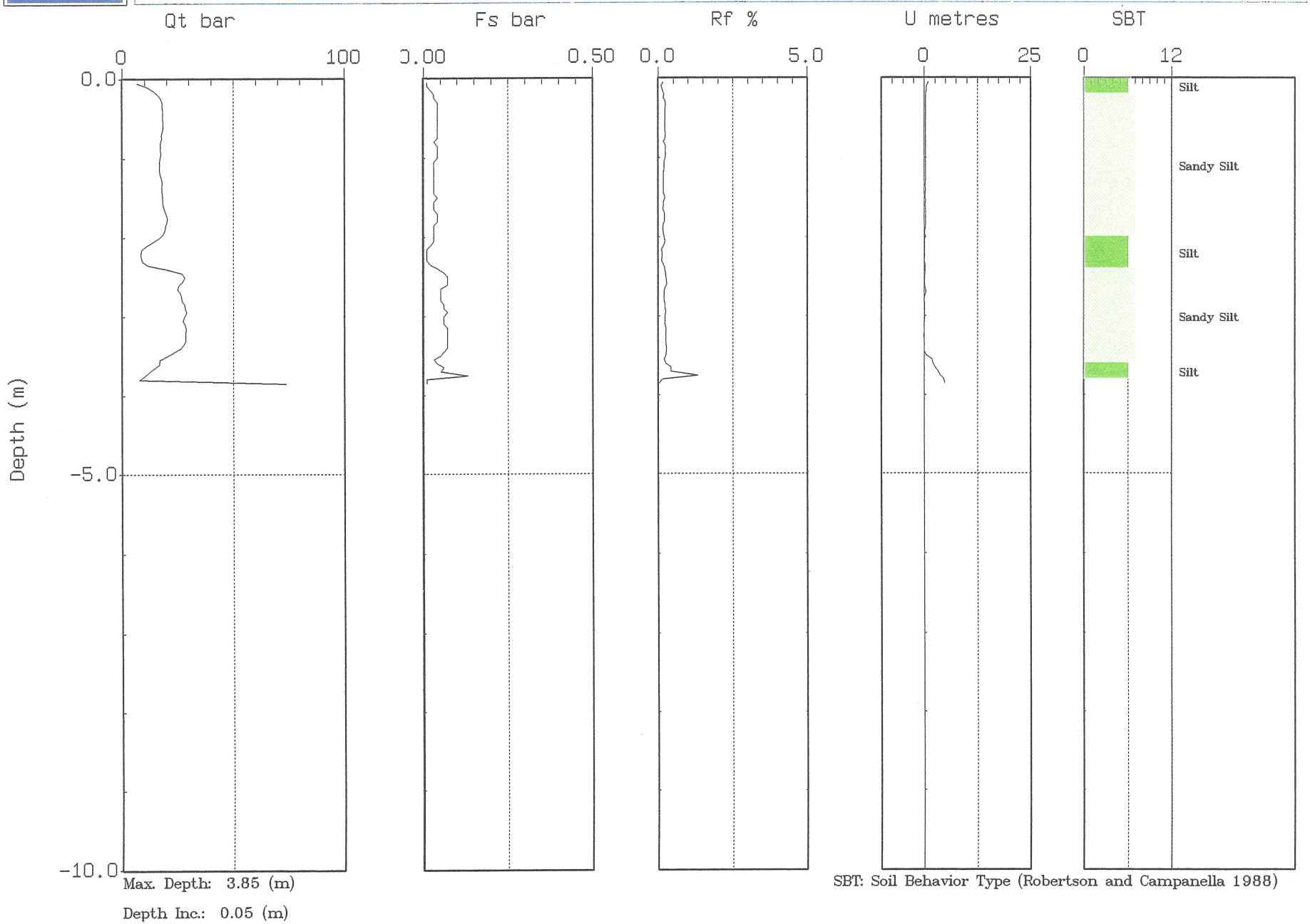
CPT Plots

CONETEC

Knight Piesold

Site: 99-219 CPT 99-03
Location: DOWN SRTEAM TEST

Cone: 10 TON A 057
Date: 11:02:99 13:38



Max. Depth: 3.85 (m)

Depth Inc.: 0.05 (m)

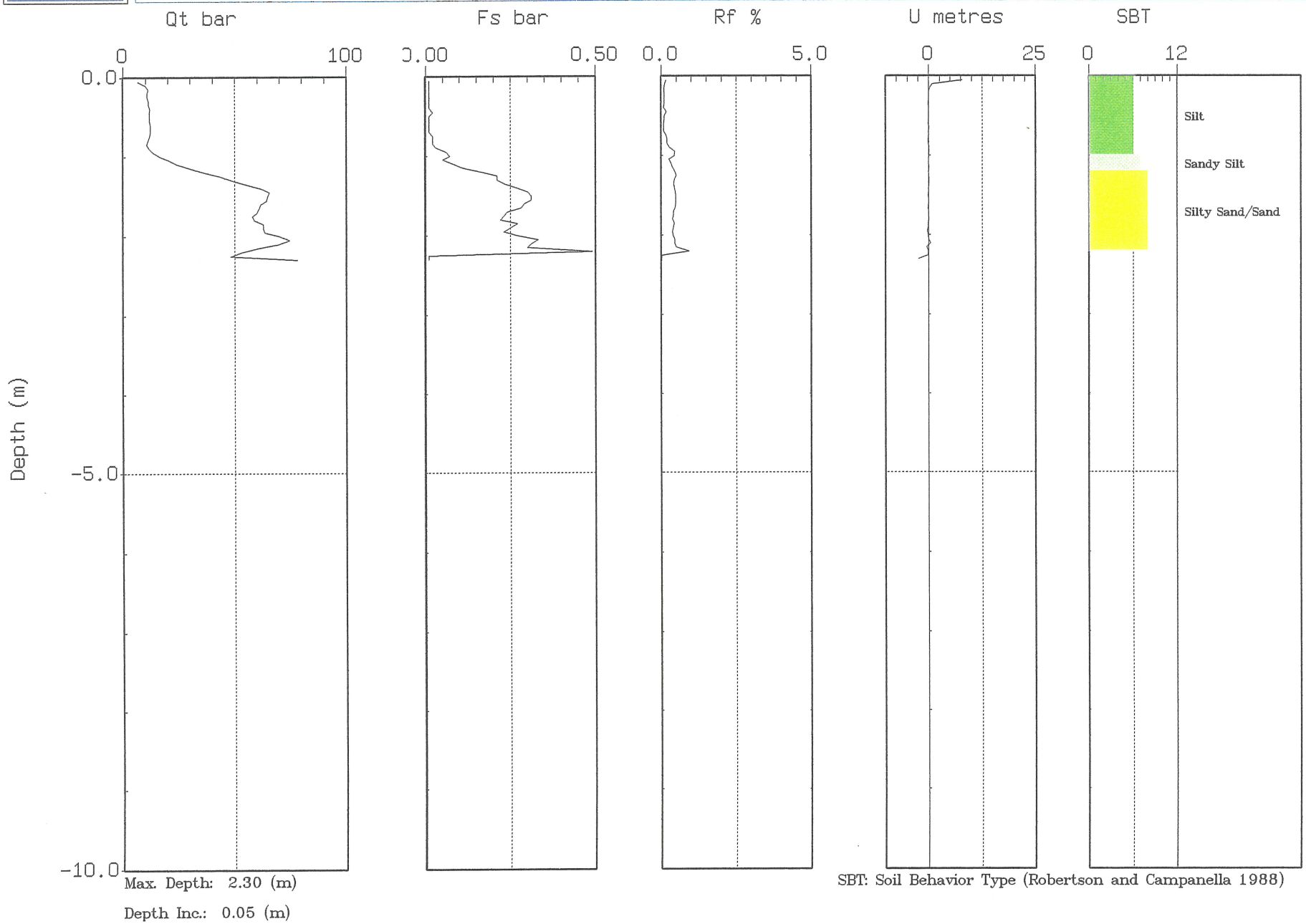
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-4
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 14:27



Max. Depth: 2.30 (m)

Depth Inc.: 0.05 (m)

SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-239 CPT 99-05
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 11:00

Max. Depth: 3.25 (m)

Depth Inc.: 0.05 (m)

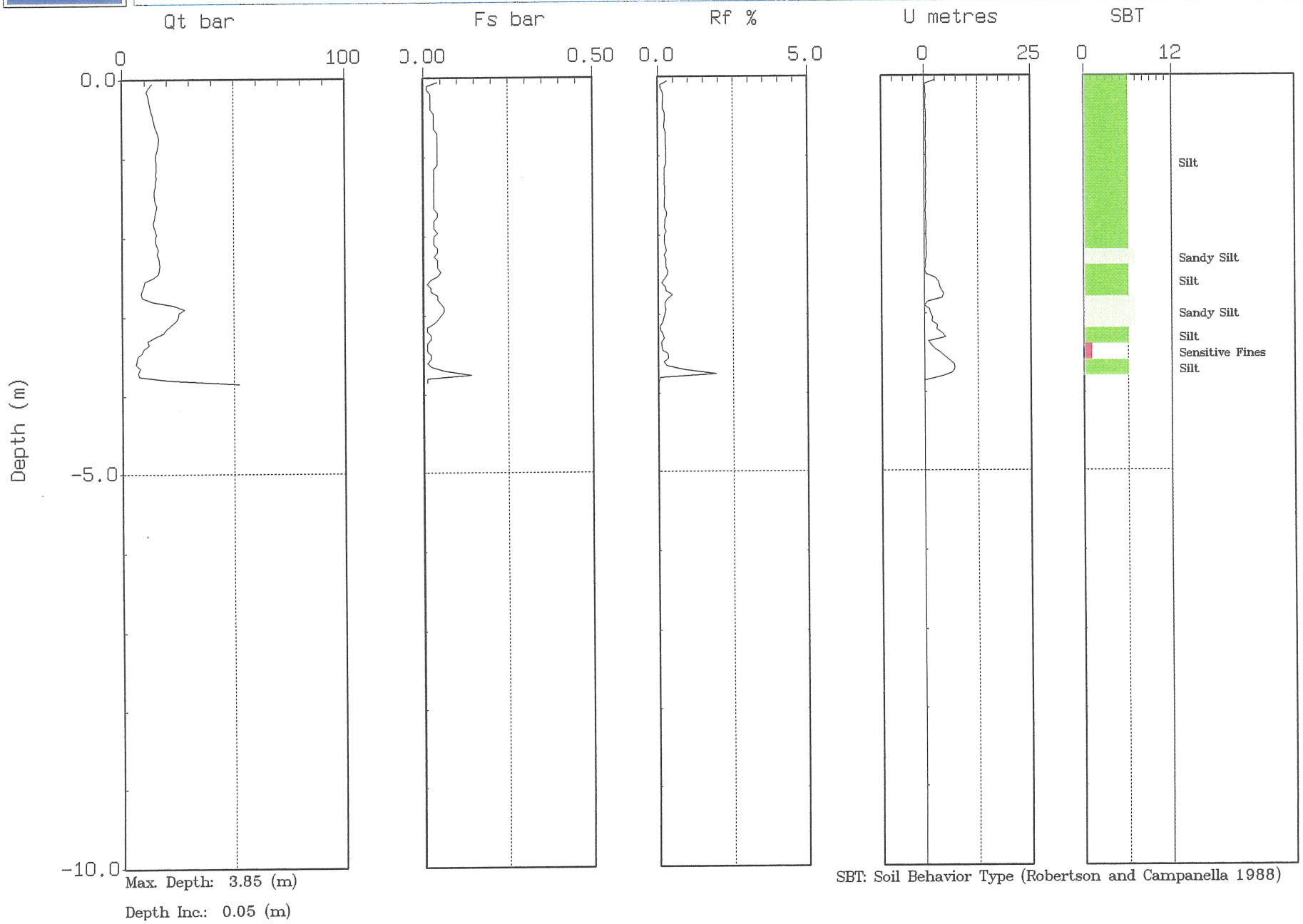
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-239 CPT 99-06
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 11:39



Max. Depth: 3.85 (m)

Depth Inc.: 0.05 (m)

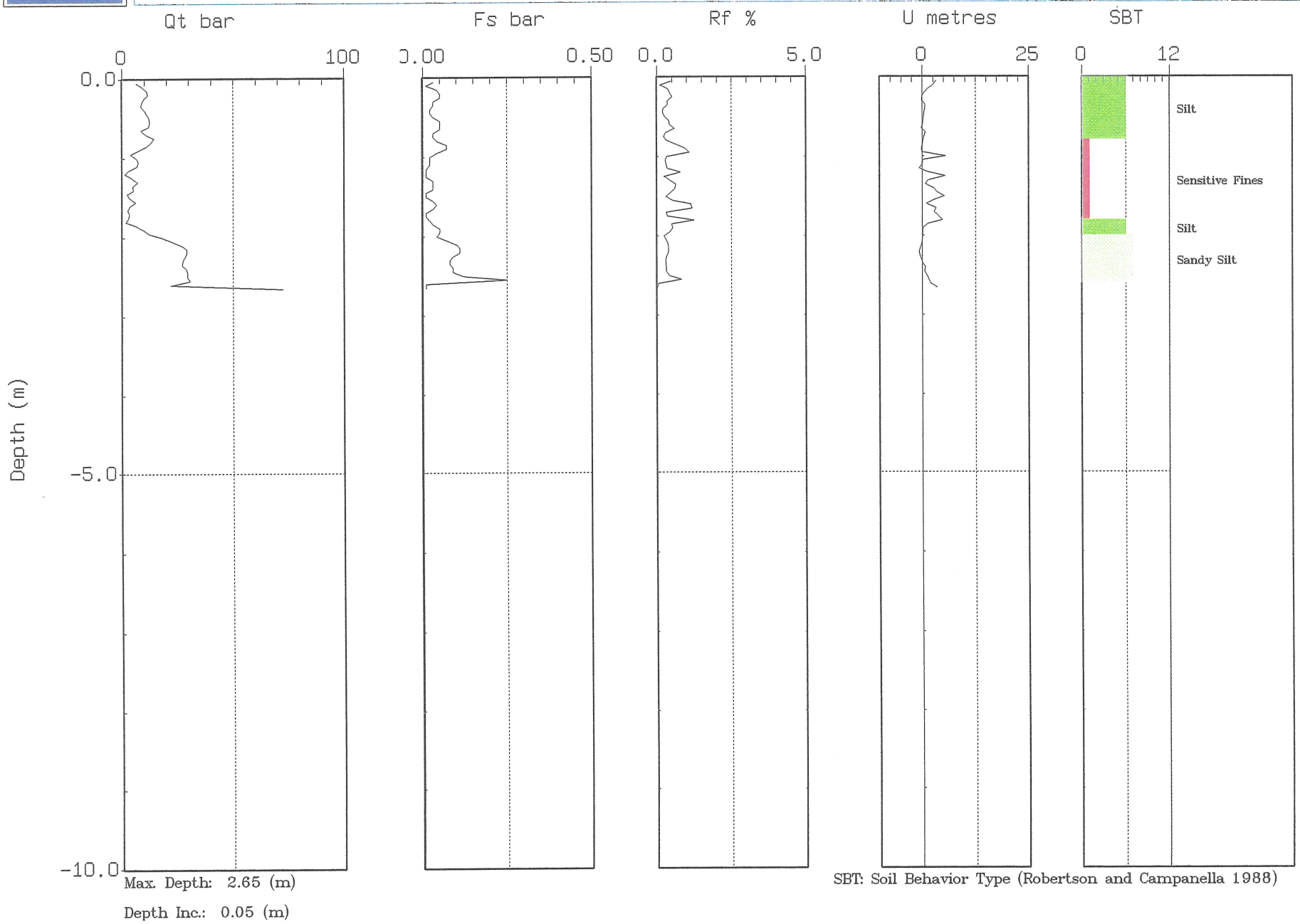
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-239 CPT 99-07
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 12:46



Max. Depth: 2.65 (m)

Depth Inc.: 0.05 (m)

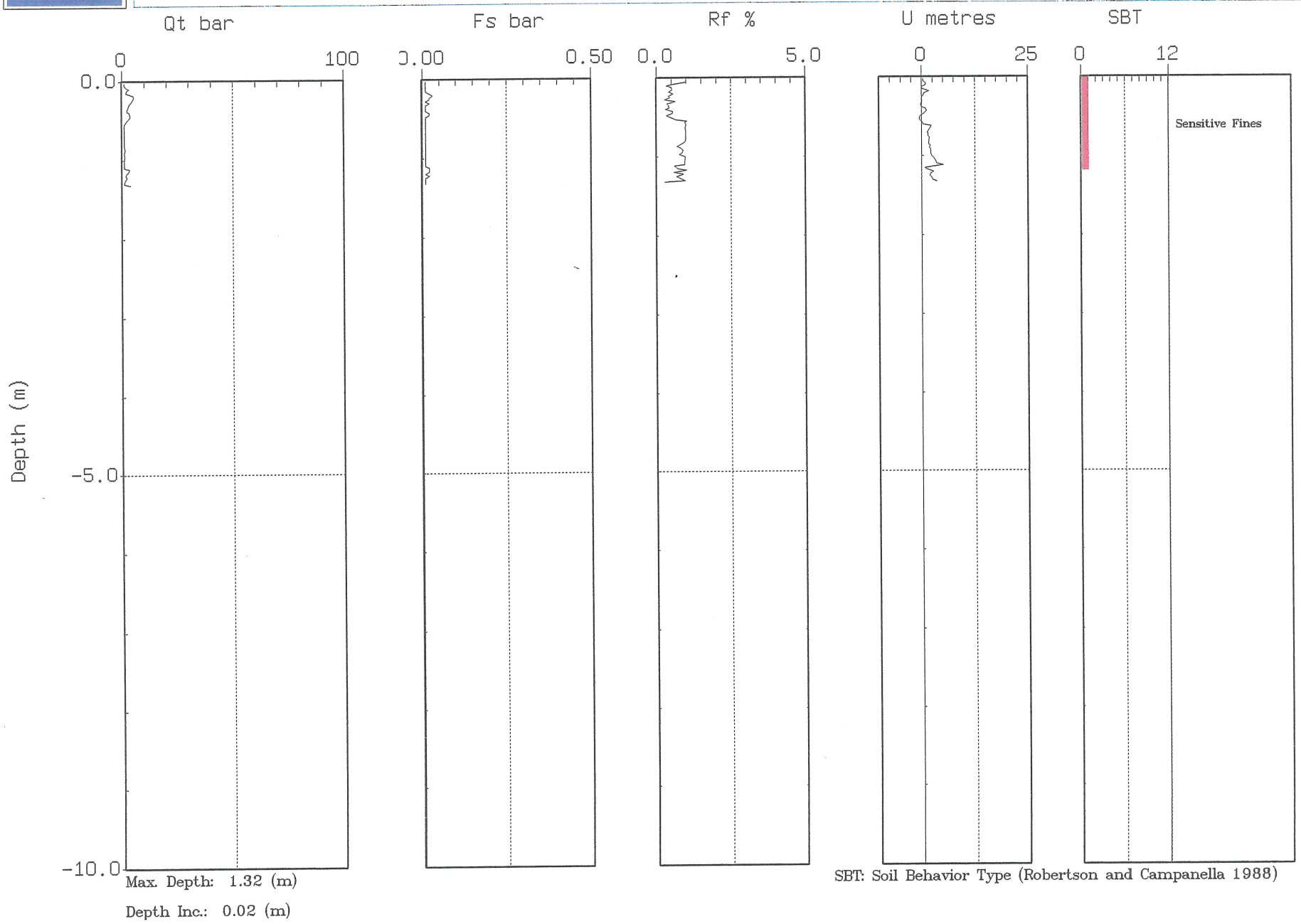
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-8
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 15:08



Max. Depth: 1.32 (m)

Depth Inc.: 0.02 (m)

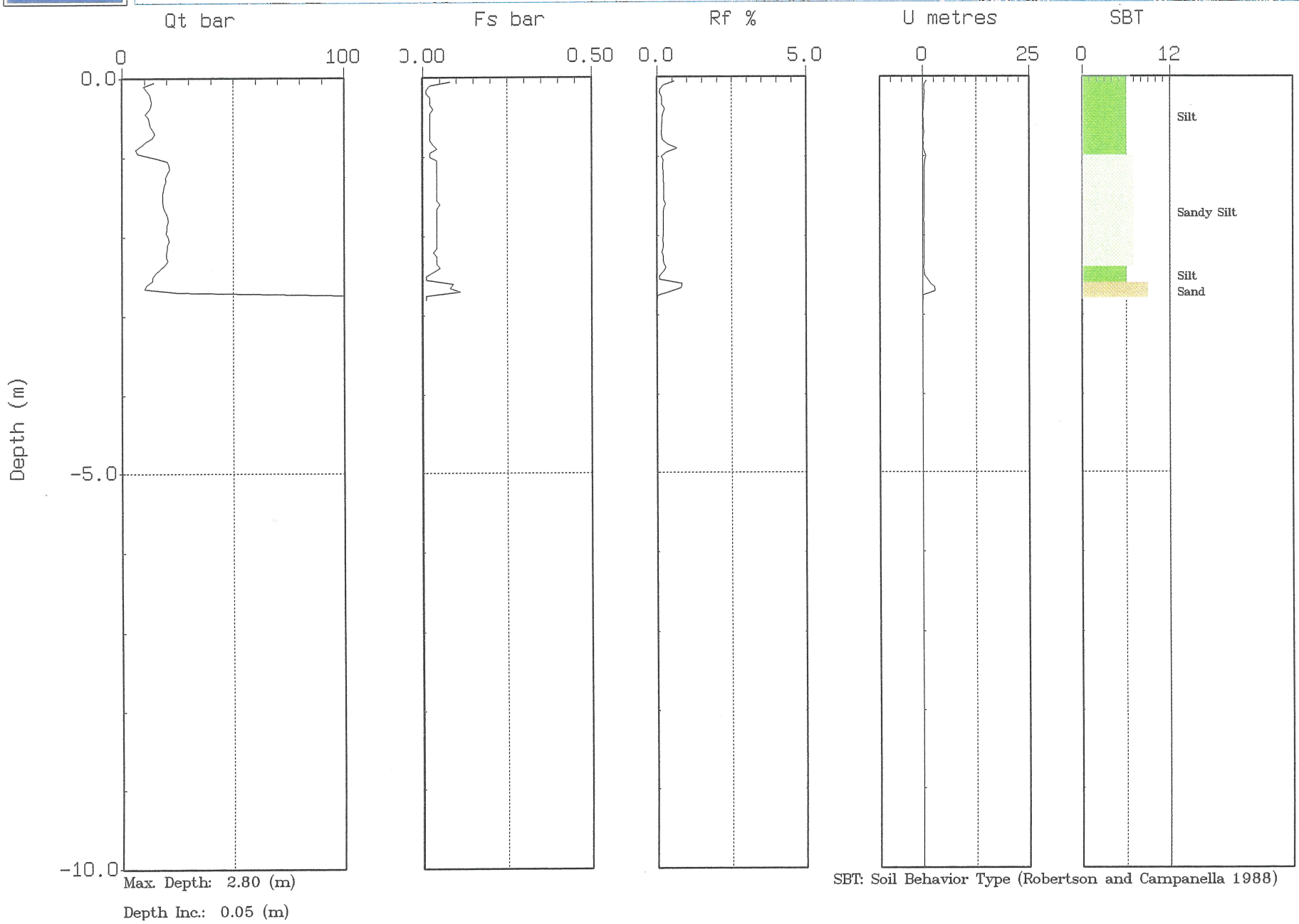
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-09
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 15:48



Max. Depth: 2.80 (m)

Depth Inc.: 0.05 (m)

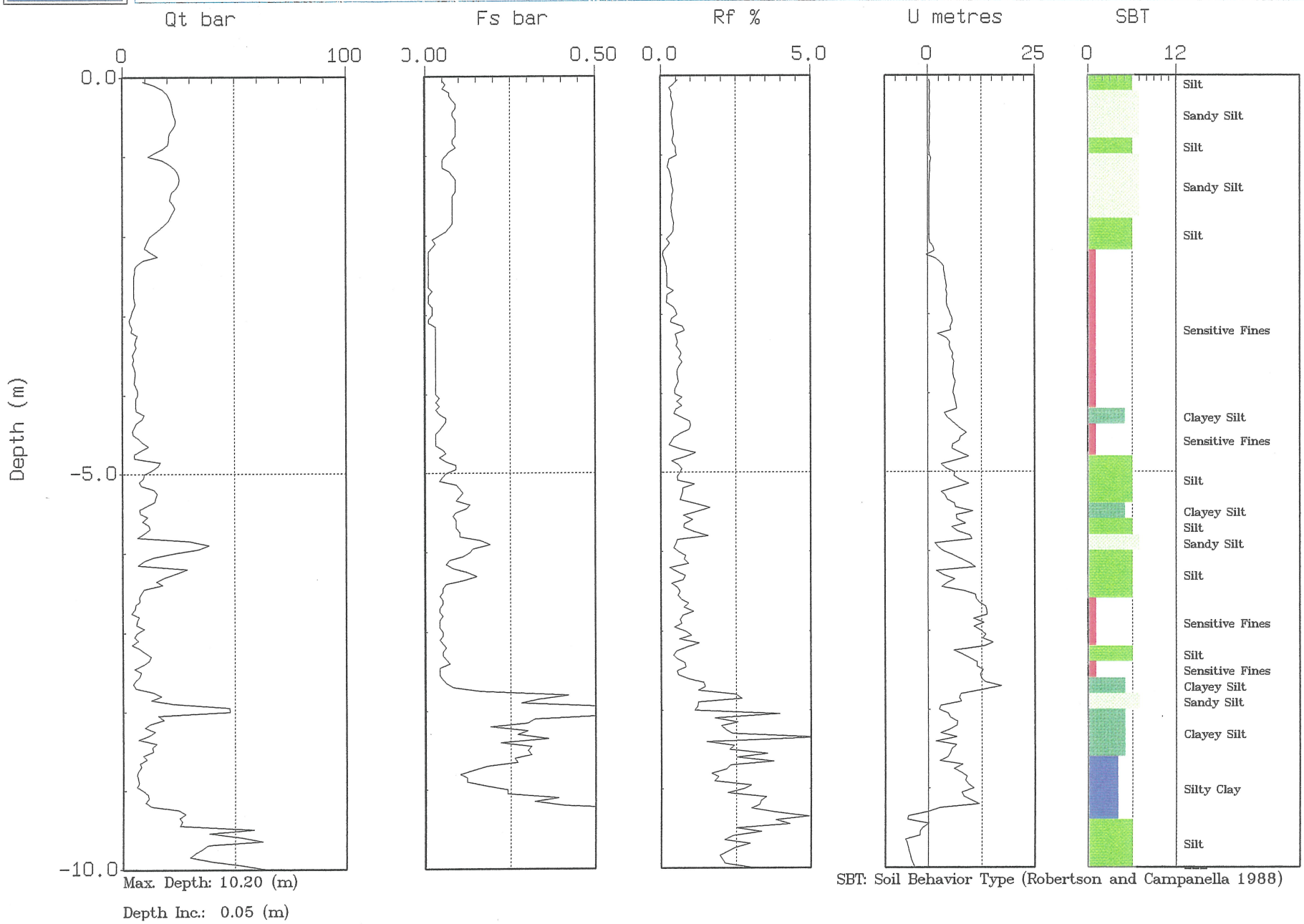
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-10
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 07:52



Max. Depth: 10.20 (m)

Depth Inc.: 0.05 (m)

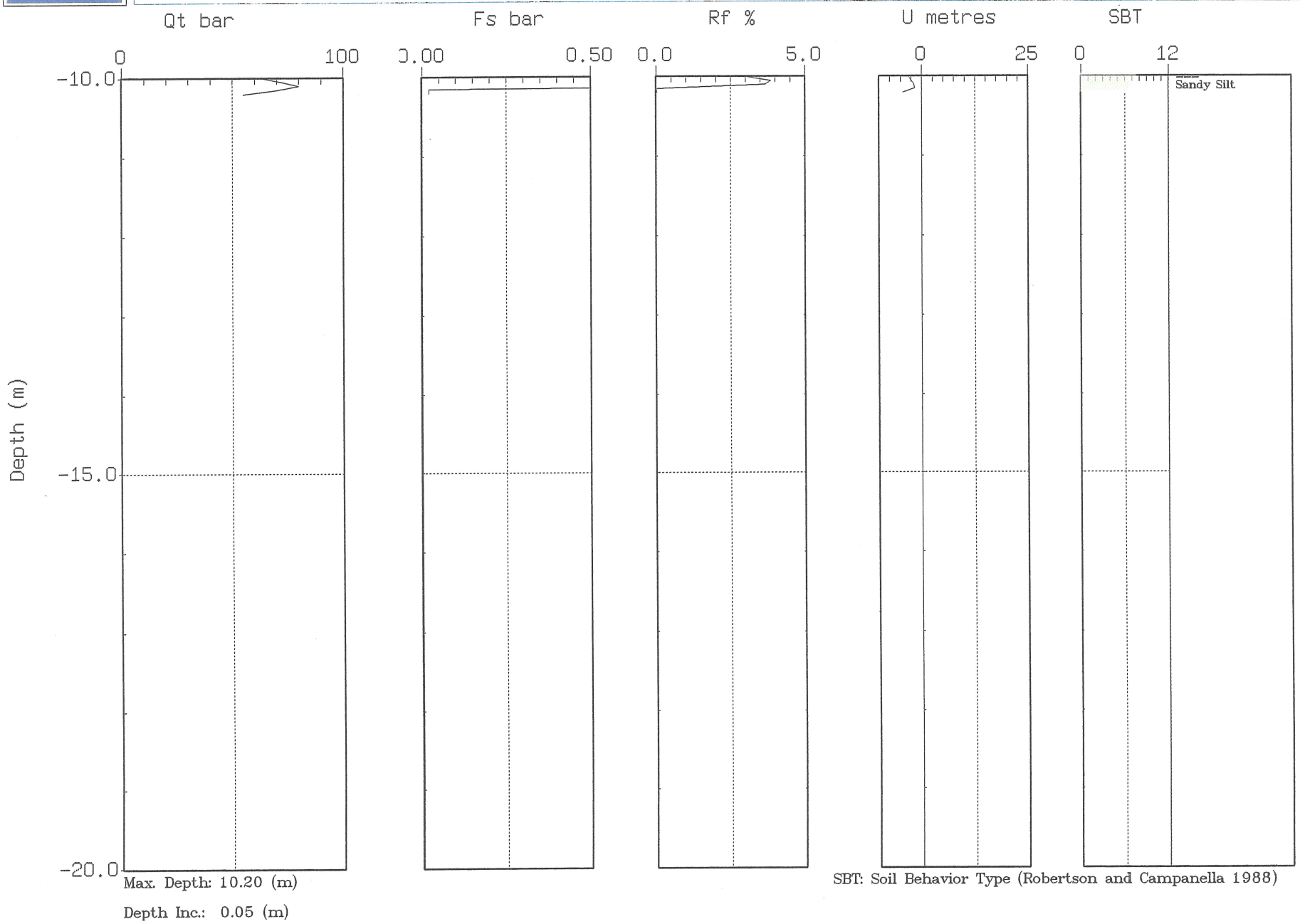
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-10
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 07:52



Max. Depth: 10.20 (m)

Depth Inc.: 0.05 (m)

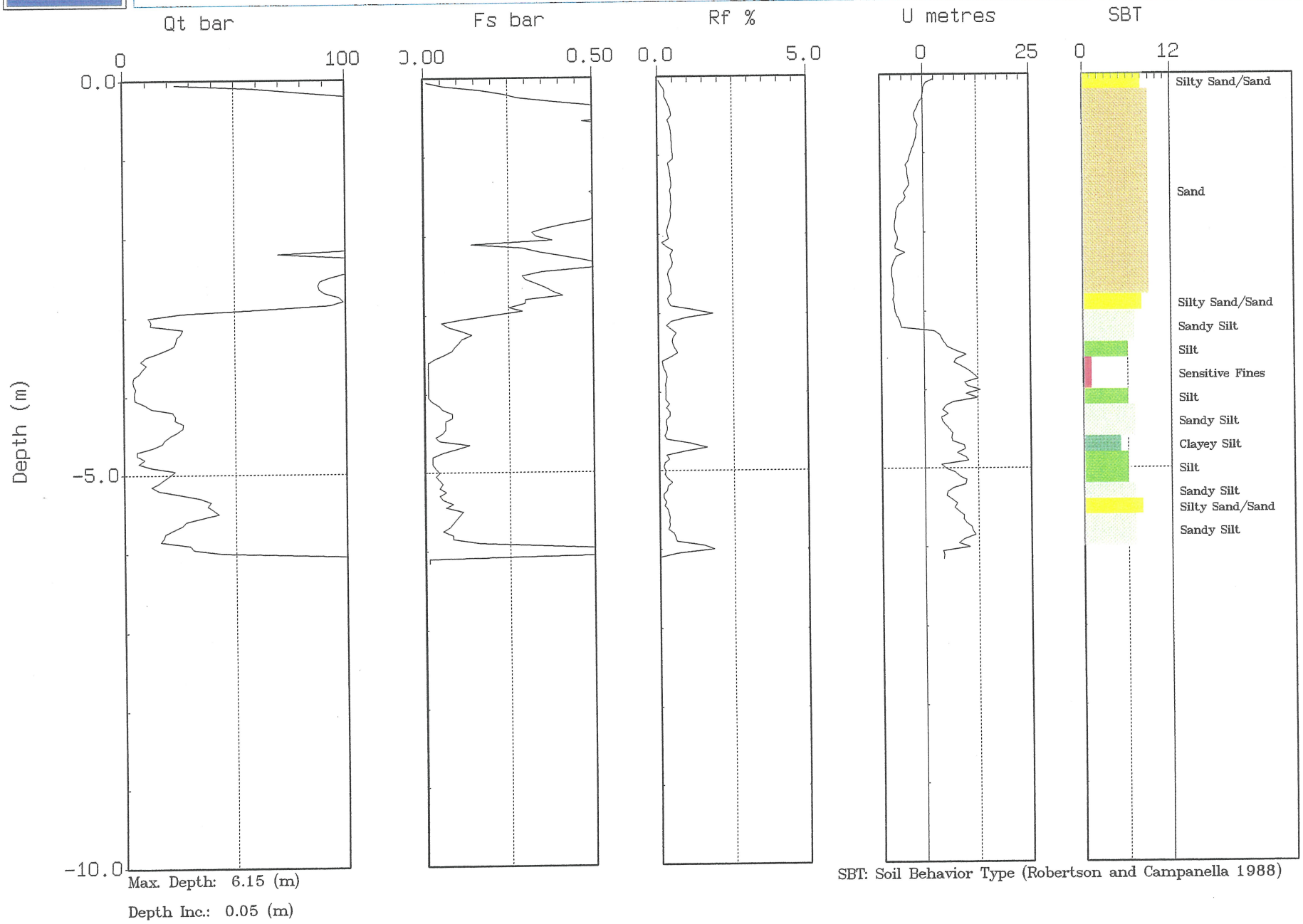
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-11
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 09:19



Max. Depth: 6.15 (m)

Depth Inc.: 0.05 (m)

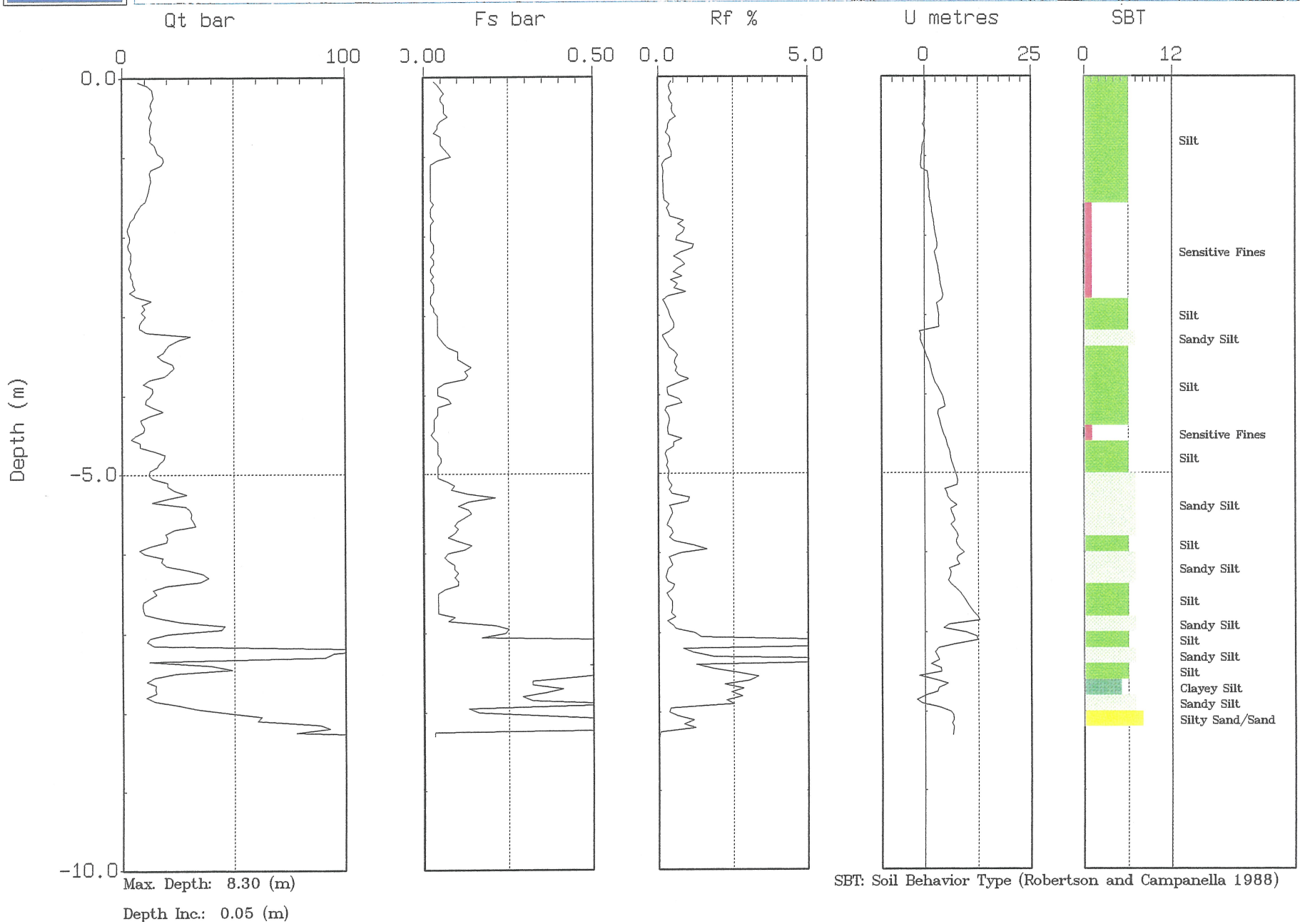
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT-12
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 10:28



Max. Depth: 8.30 (m)

Depth Inc.: 0.05 (m)

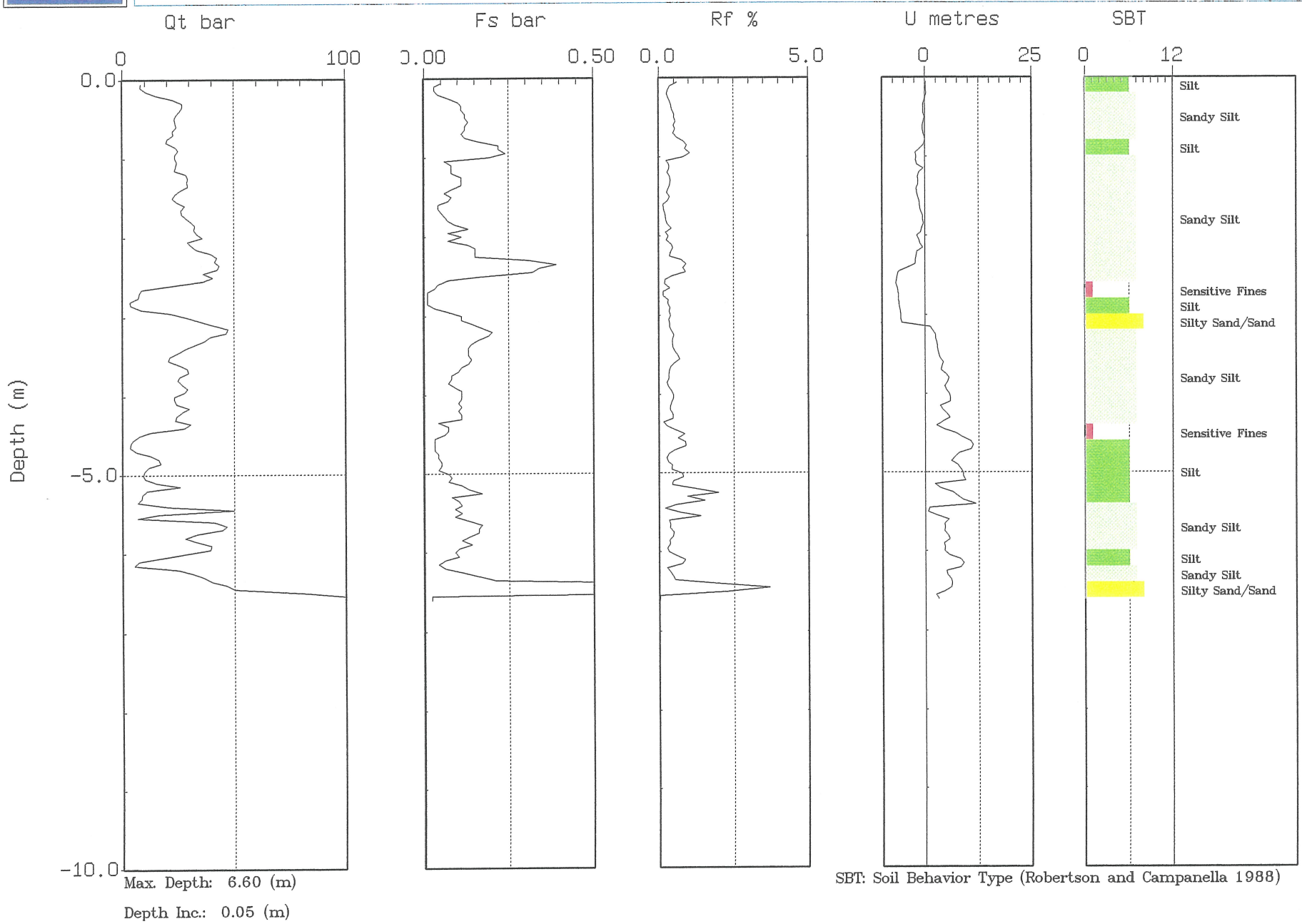
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT-13
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 12:08



Max. Depth: 6.60 (m)

Depth Inc.: 0.05 (m)

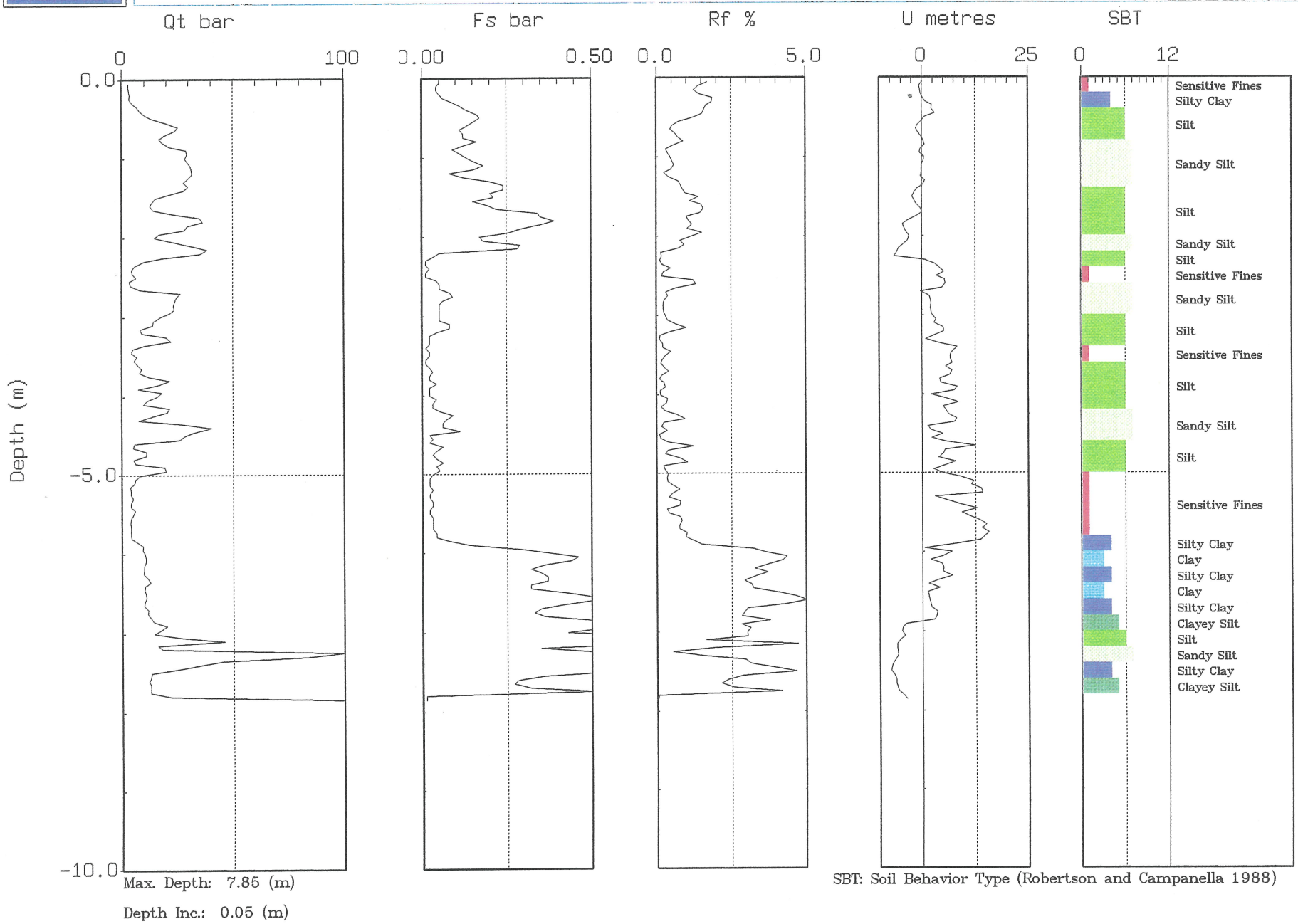
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-14
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 13:16



Max. Depth: 7.85 (m)

Depth Inc.: 0.05 (m)

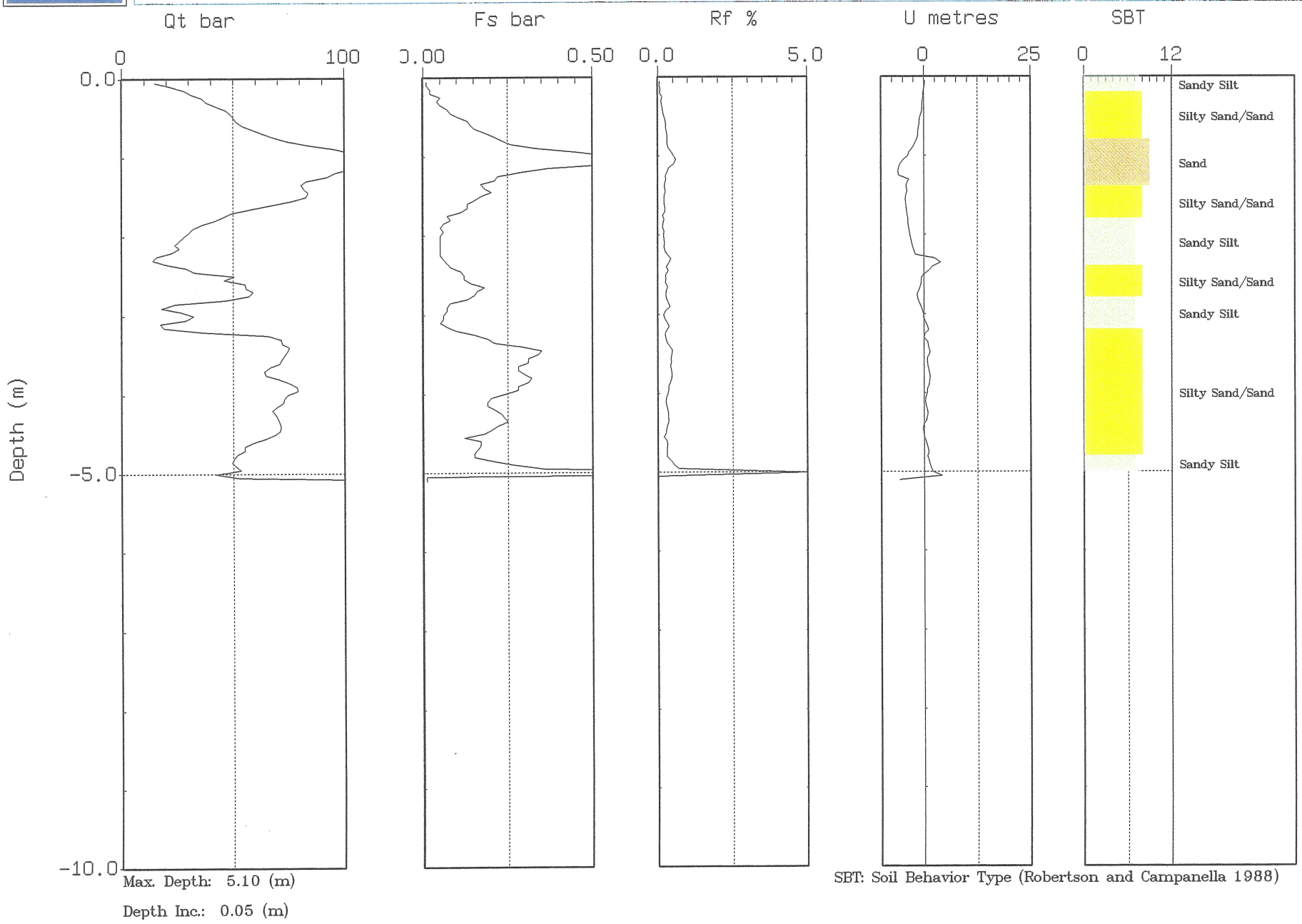
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-15
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 14:06



Max. Depth: 5.10 (m)

Depth Inc.: 0.05 (m)

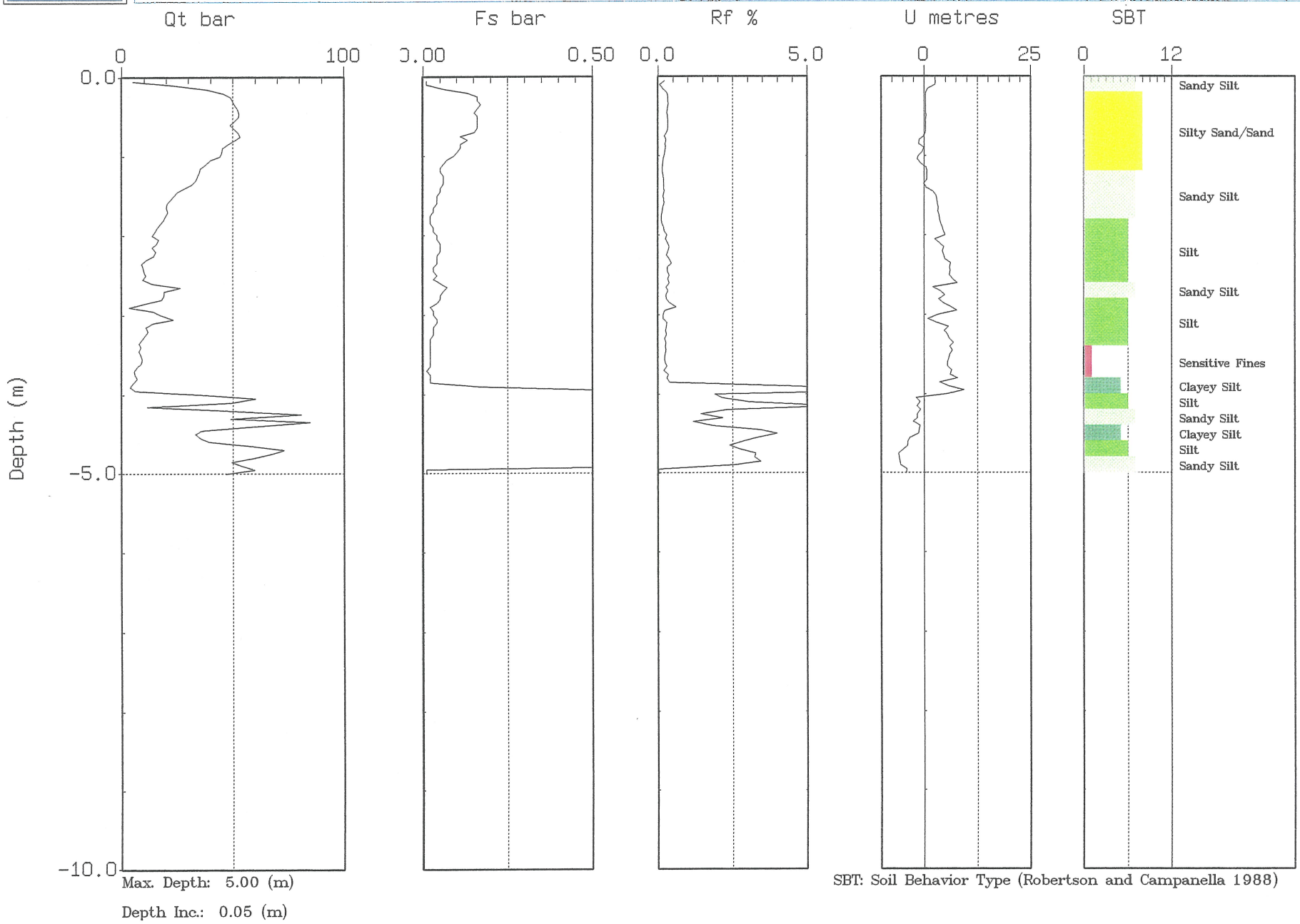
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-16
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 15:41



Max. Depth: 5.00 (m)

Depth Inc.: 0.05 (m)

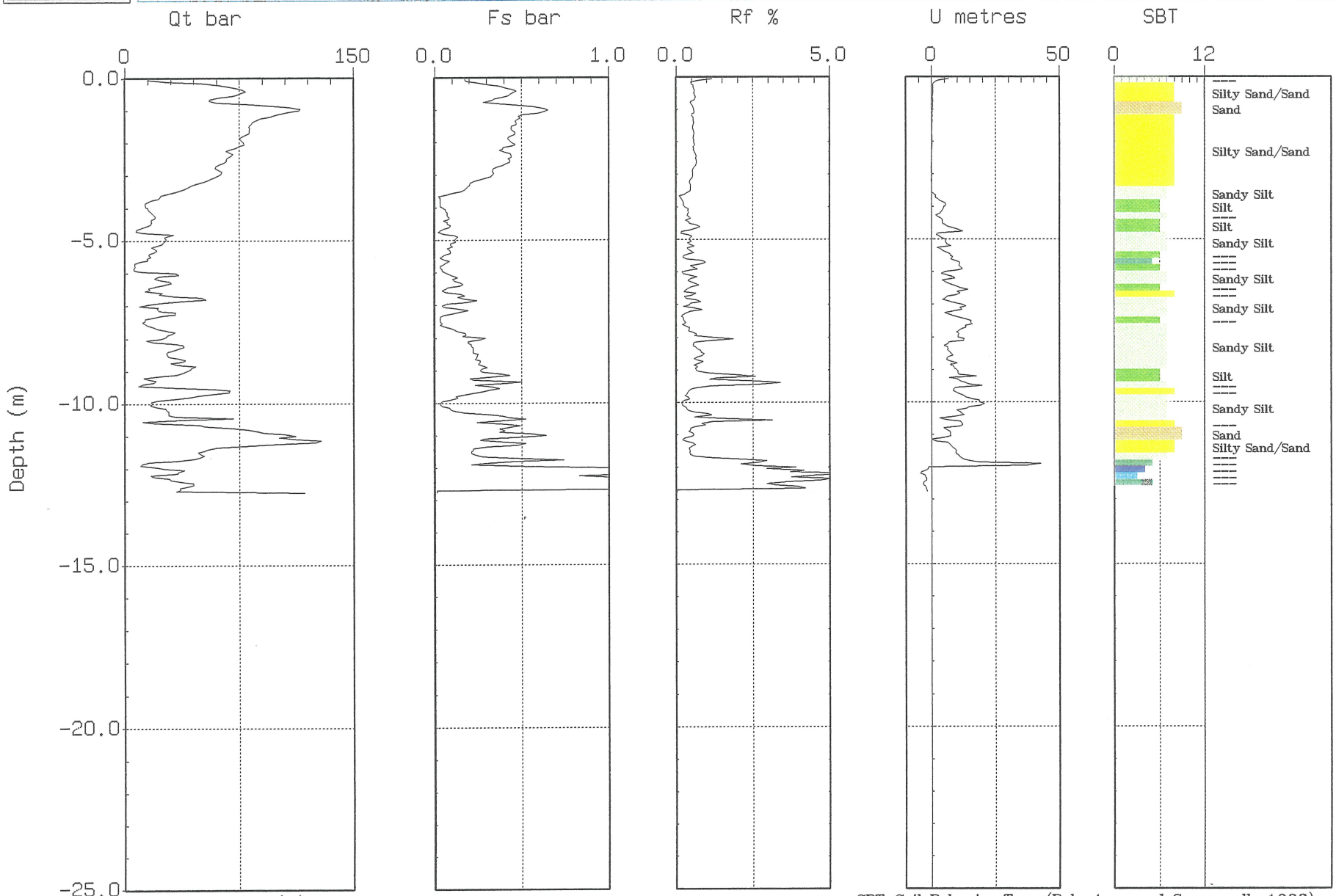
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT-17
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 08:46



Max. Depth: 12.75 (m)

Depth Inc.: 0.05 (m)

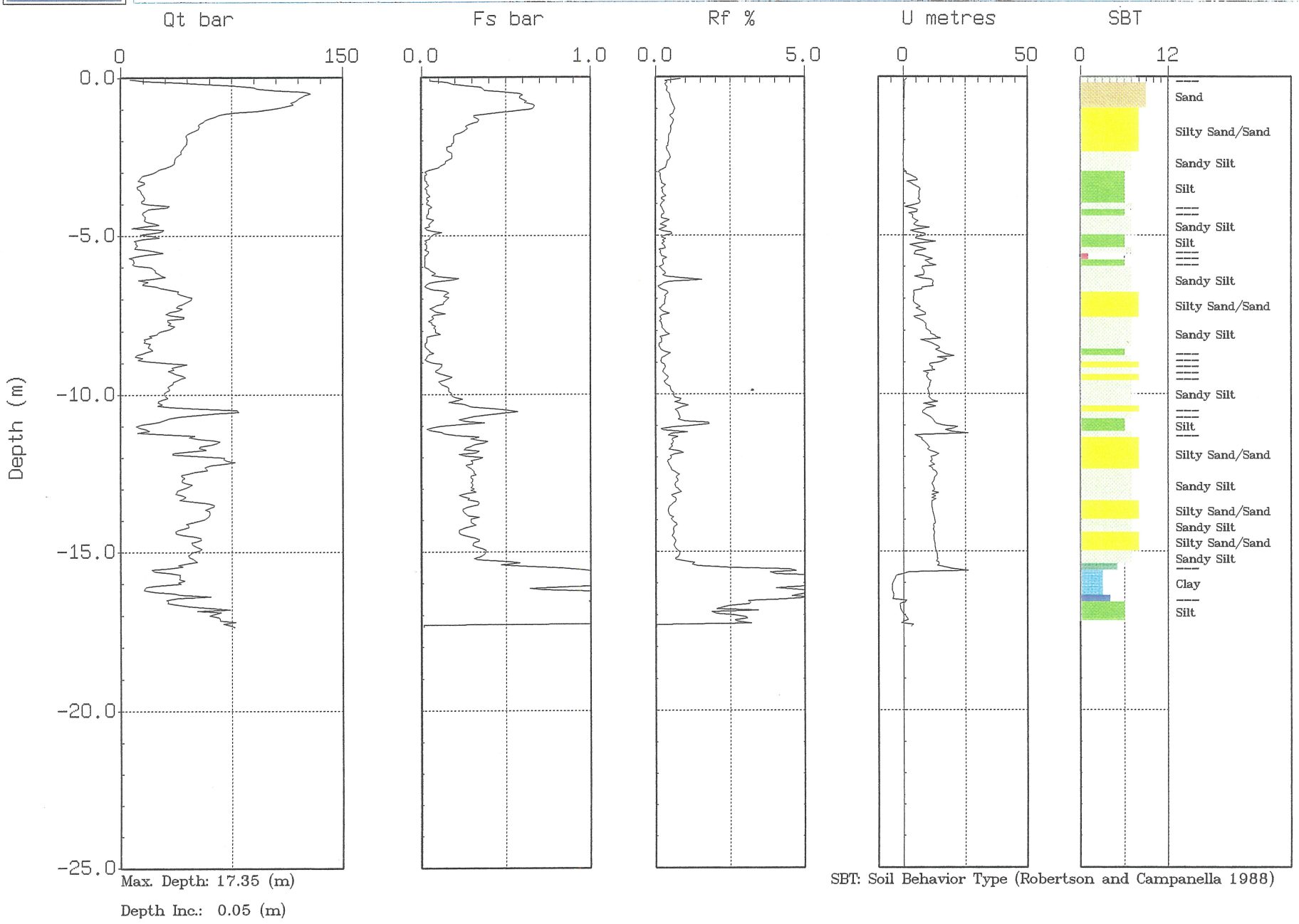
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT-18
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 09:47



Max. Depth: 17.35 (m)

Depth Inc.: 0.05 (m)

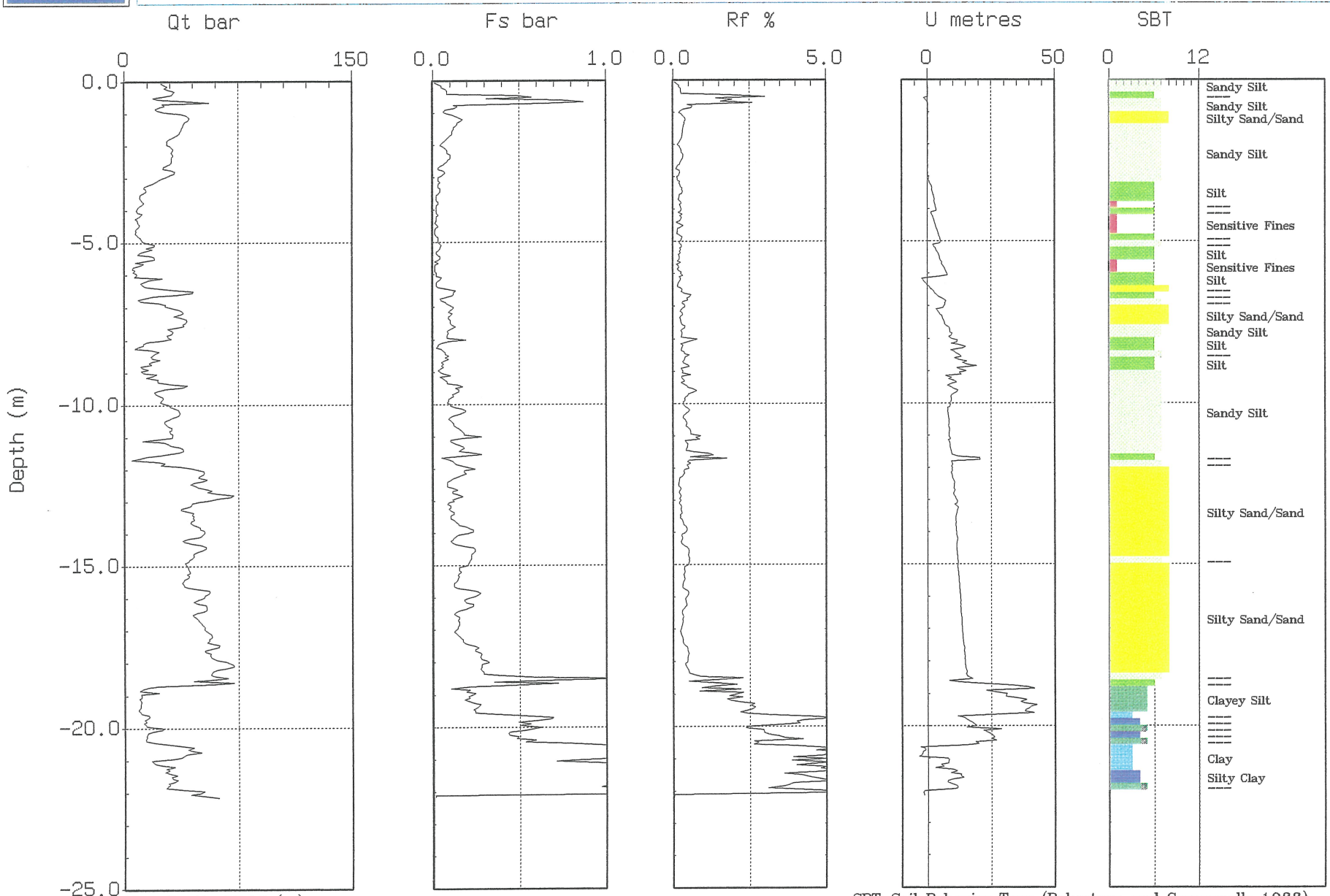
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-19
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 11:27



Max. Depth: 22.15 (m)

Depth Inc.: 0.05 (m)

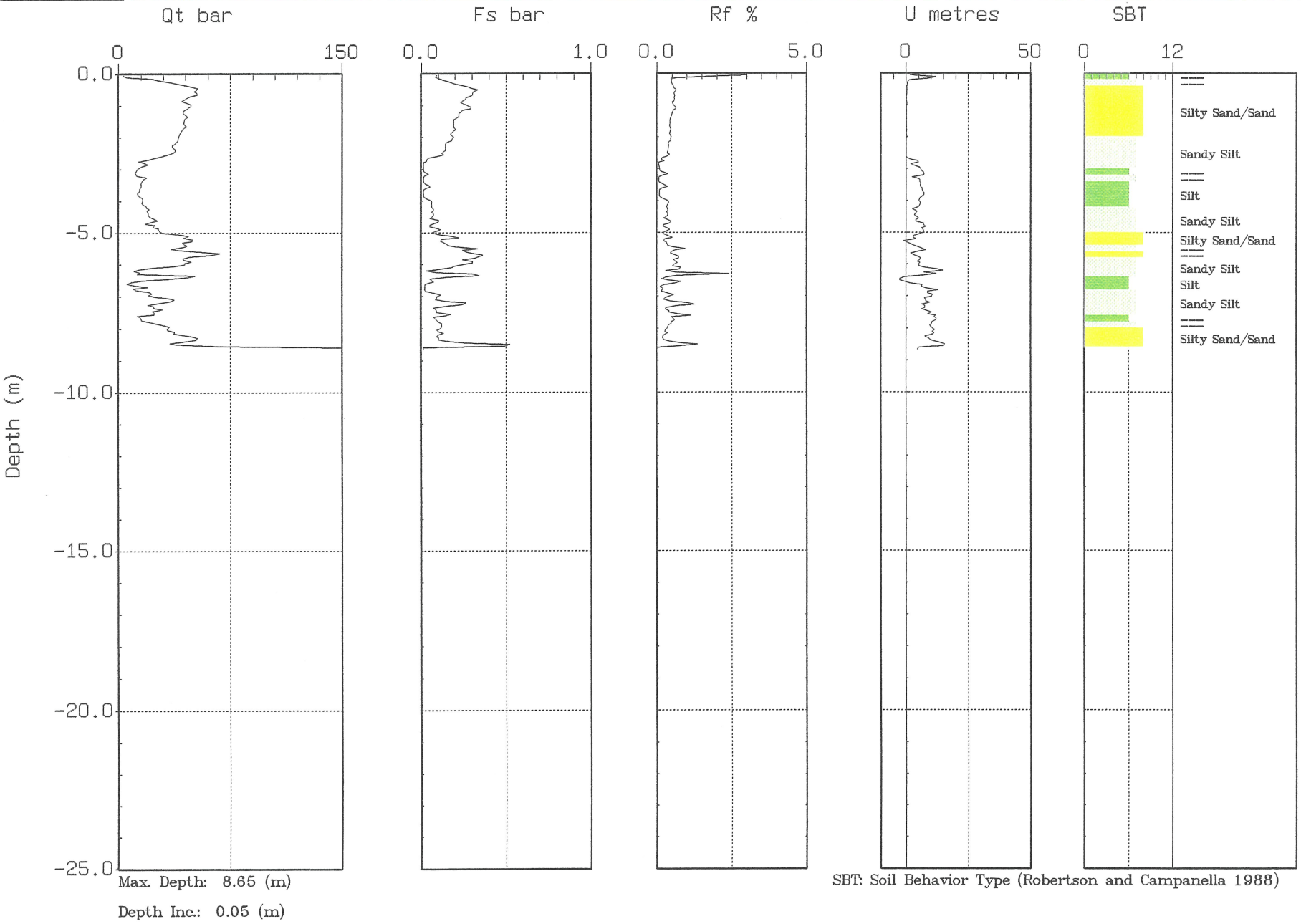
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-20
Location: MAIN EMBAMKMENT

Cone: 10 TON A 057
Date: 11:04:99 12:44



Max. Depth: 8.65 (m)

Depth Inc.: 0.05 (m)

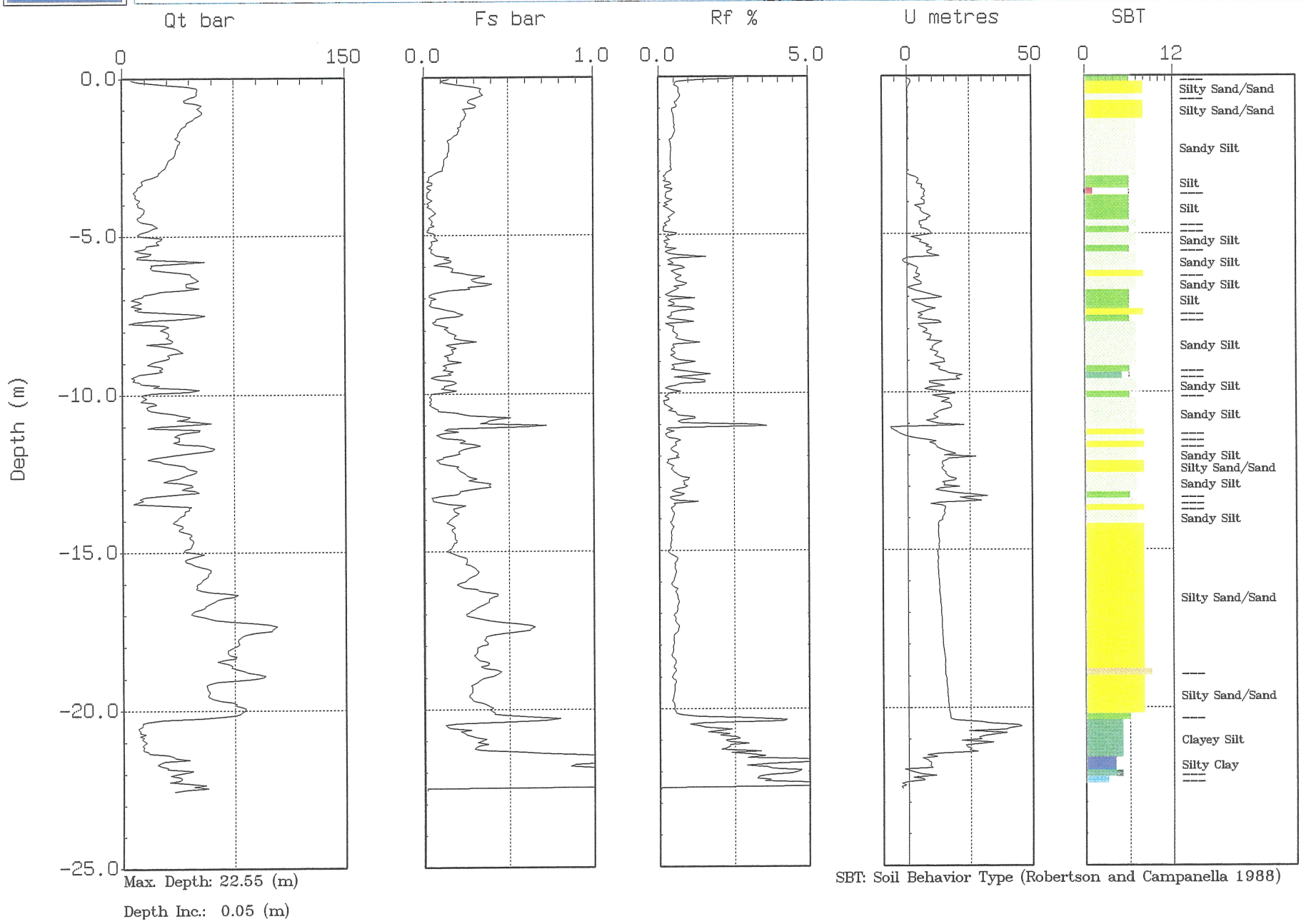
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-21
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 13:42



Max. Depth: 22.55 (m)

Depth Inc.: 0.05 (m)

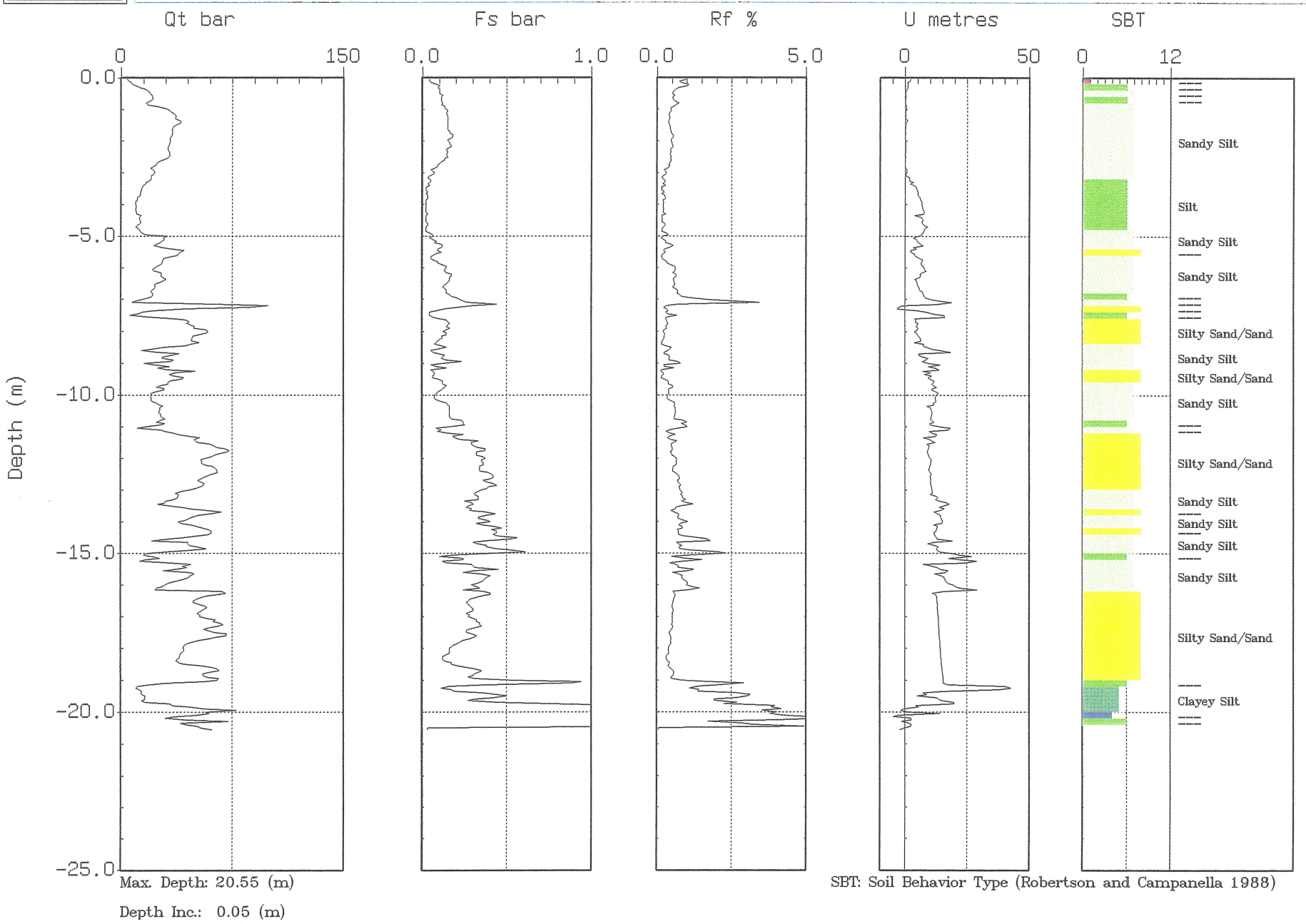
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-22
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 15:06



Max. Depth: 20.55 (m)

Depth Inc.: 0.05 (m)

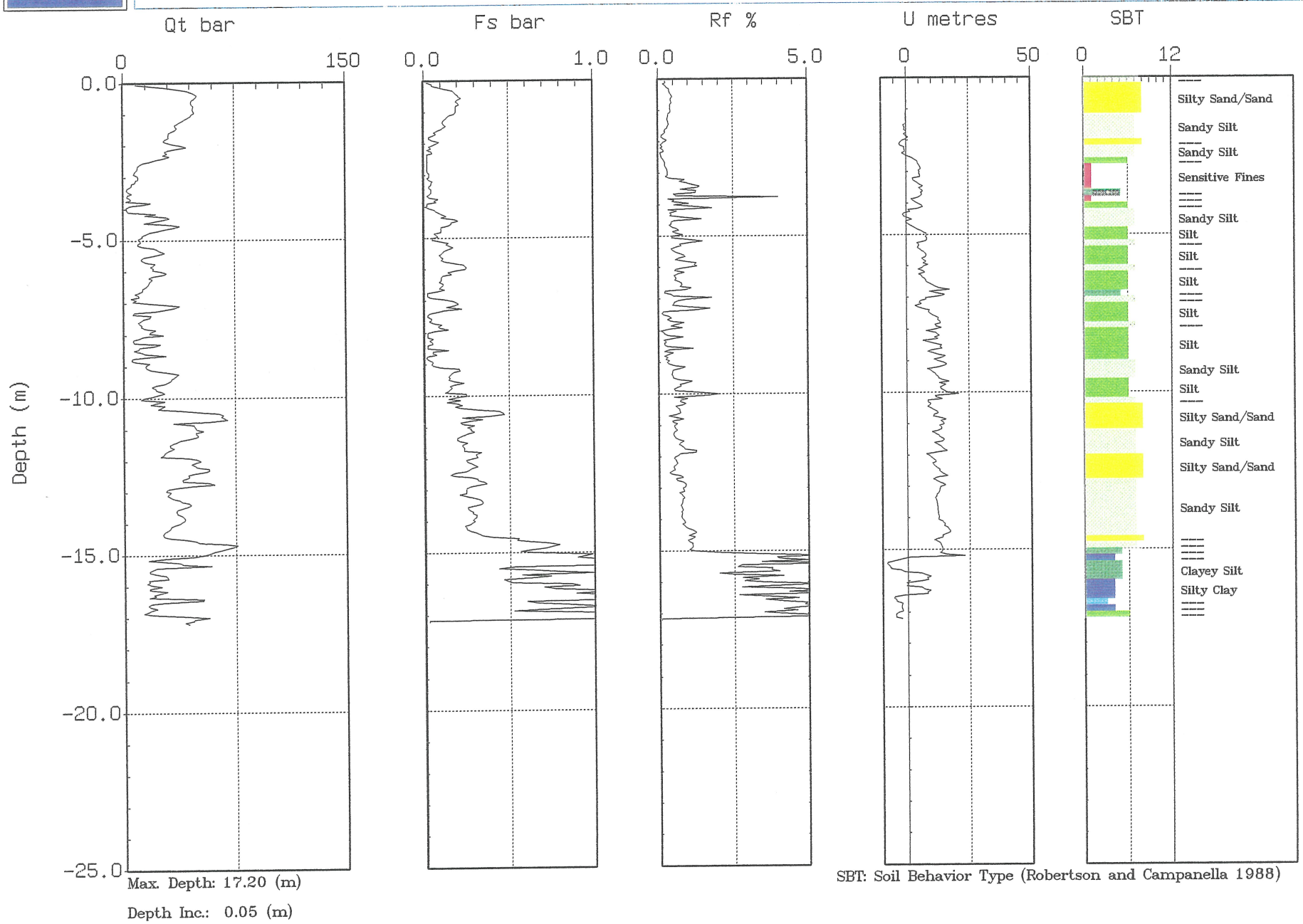
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-23
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 16:03



Max. Depth: 17.20 (m)

Depth Inc.: 0.05 (m)

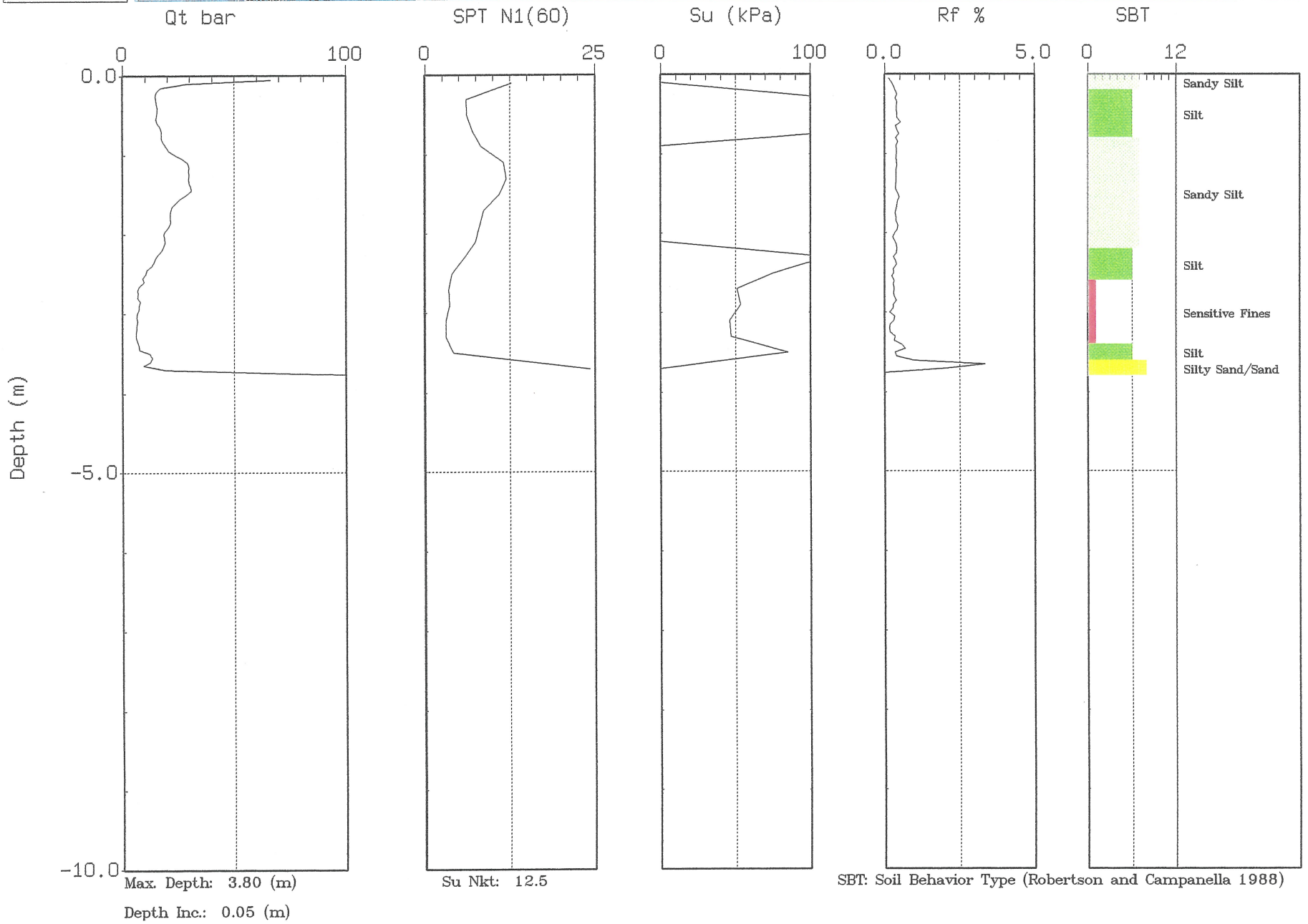
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-1
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 08:35



Max. Depth: 3.80 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

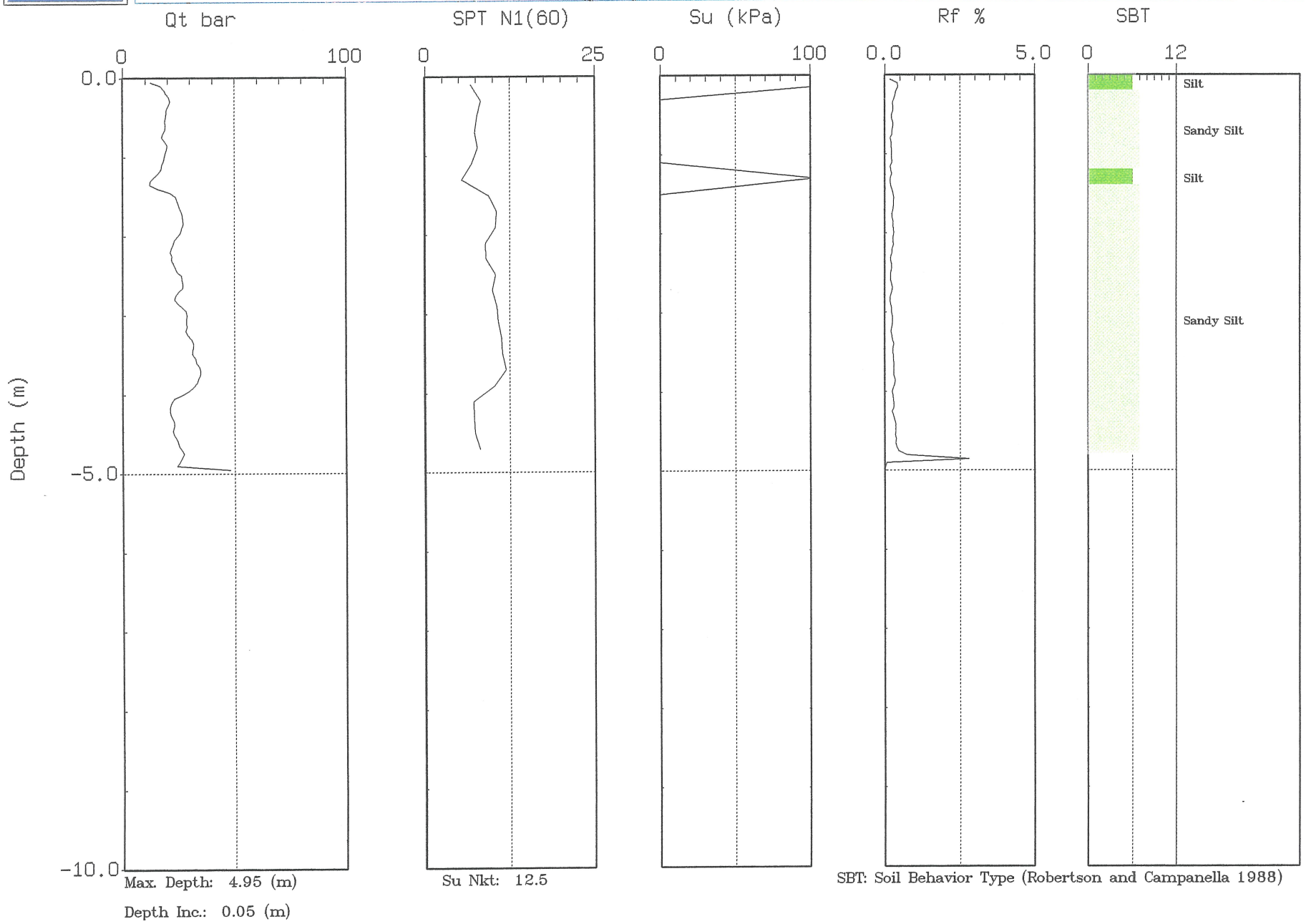
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-02
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 09:38



Max. Depth: 4.95 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

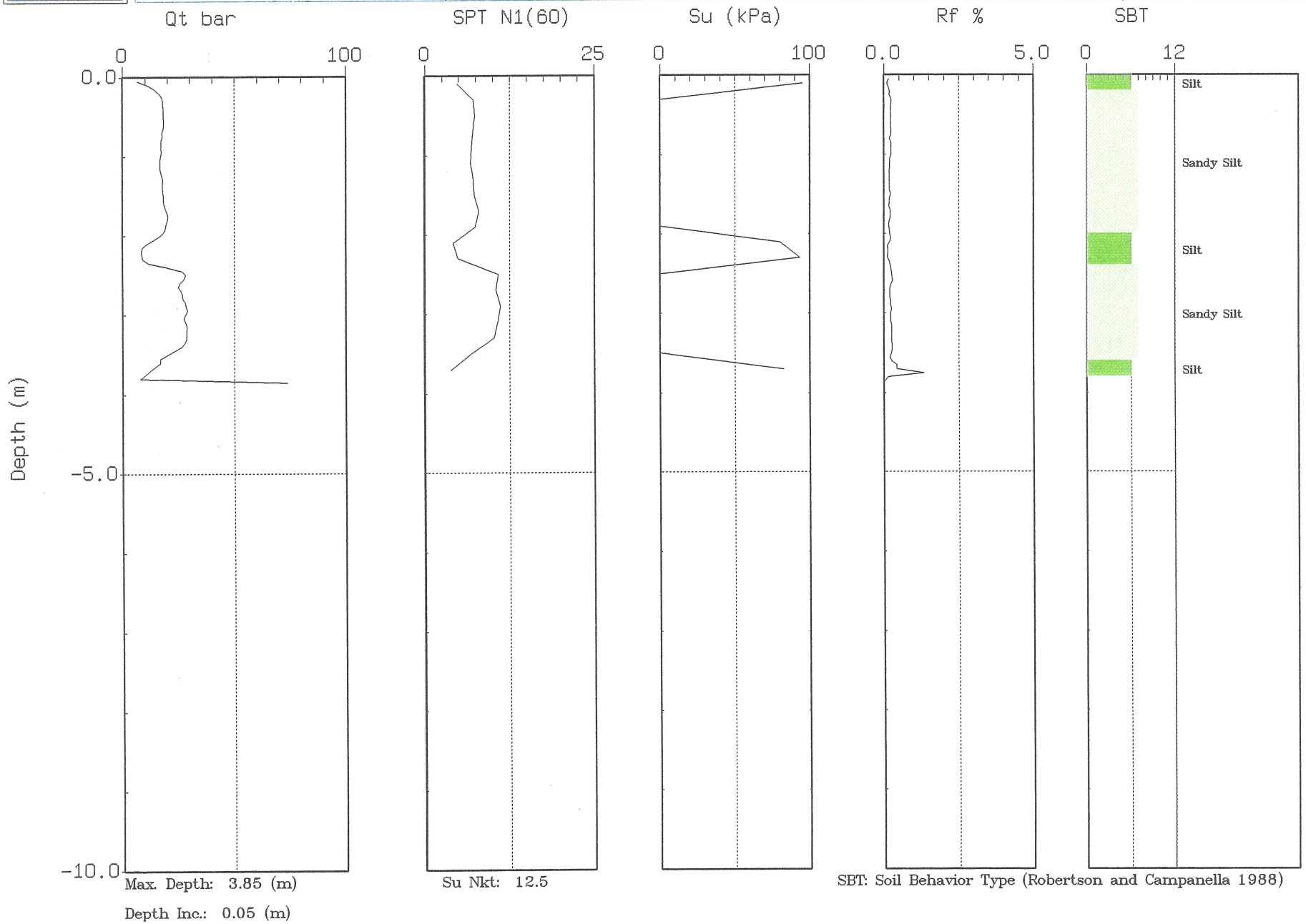
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-03
Location: DOWN SRTEAM TEST

Cone: 10 TON A 057
Date: 11:02:99 13:38



Max. Depth: 3.85 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

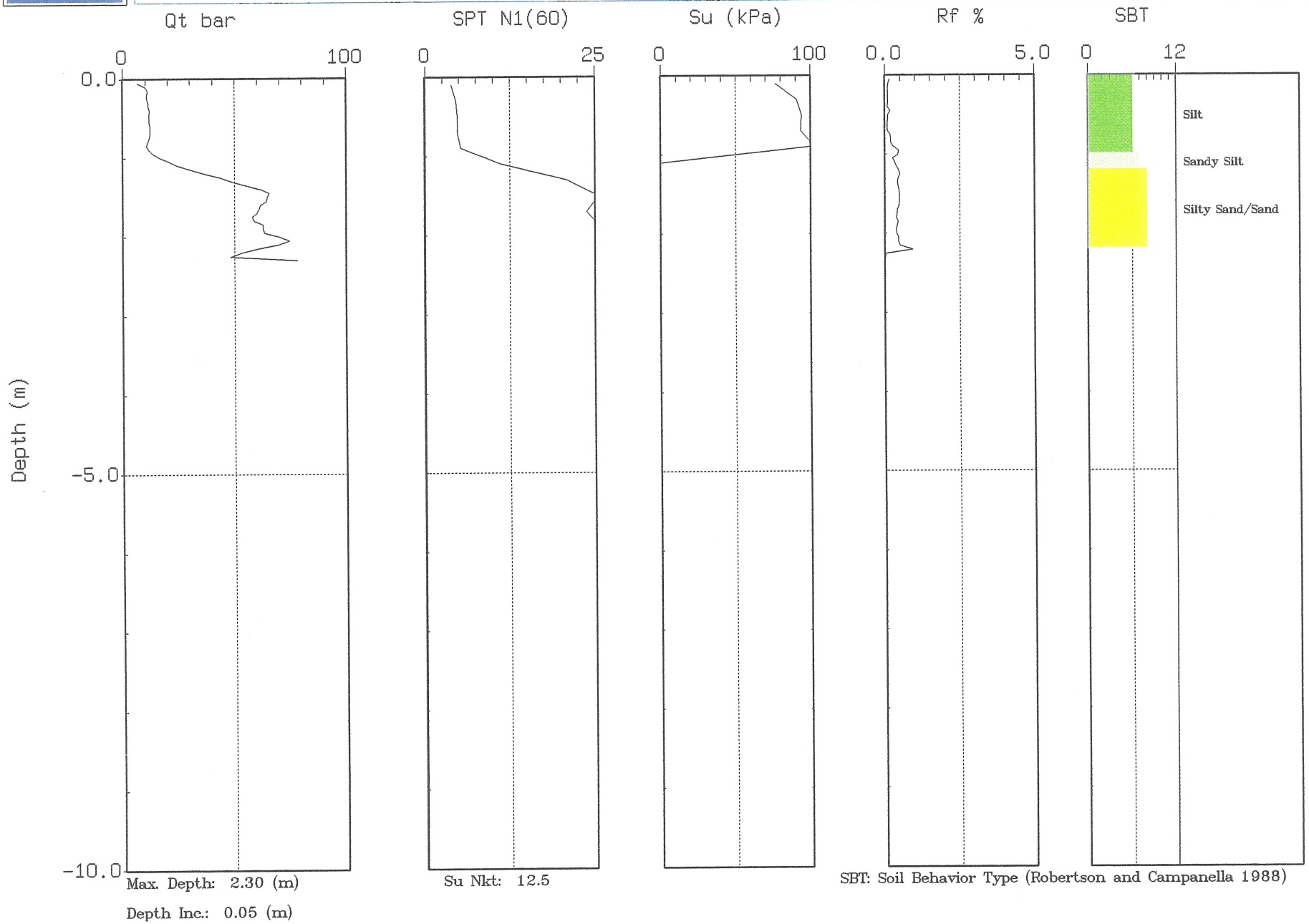
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-4
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 14:27



Max. Depth: 2.30 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

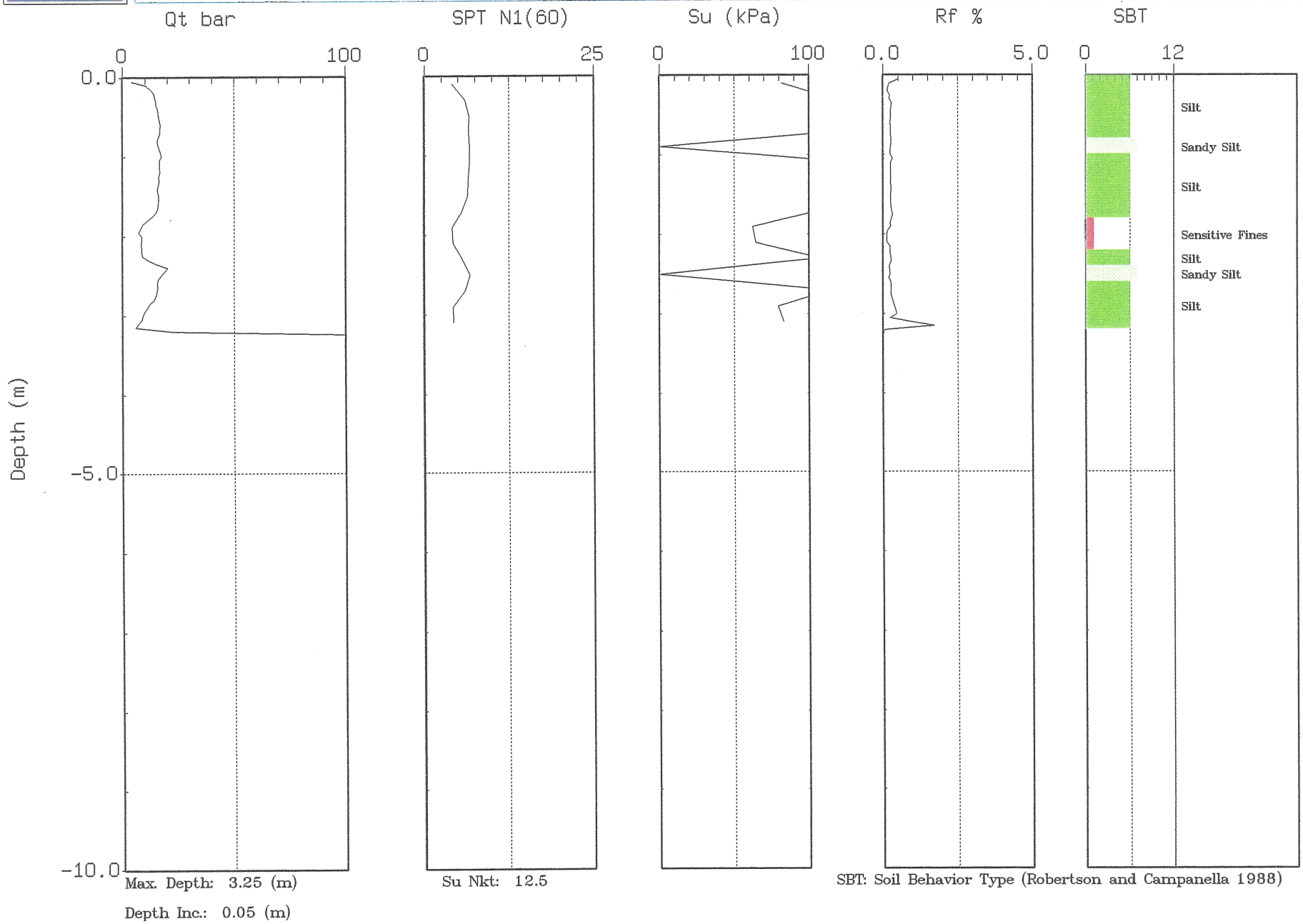
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-239 CPT 99-05
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 11:00



Max. Depth: 3.25 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

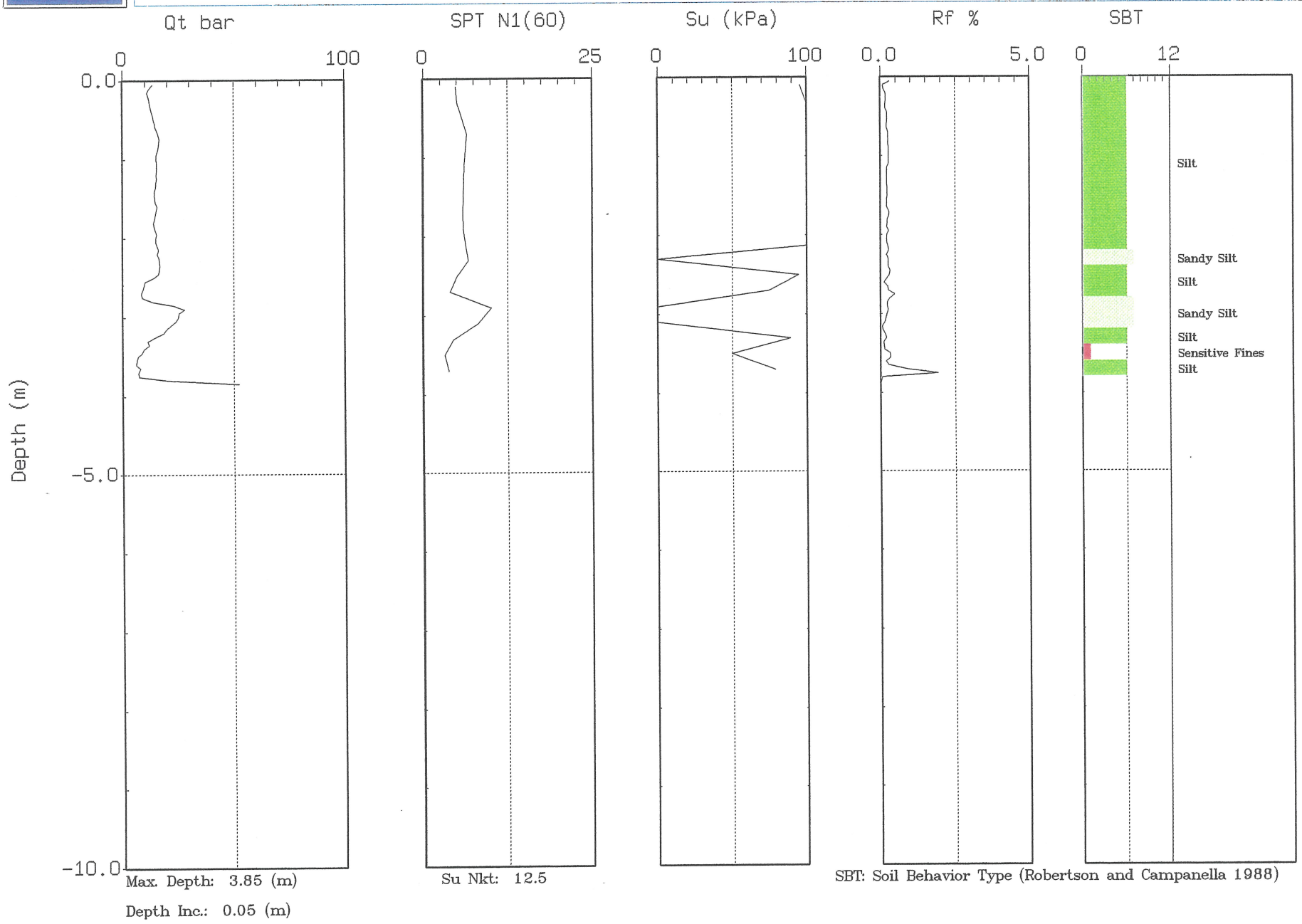
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-239 CPT 99-06
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 11:39



Max. Depth: 3.85 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

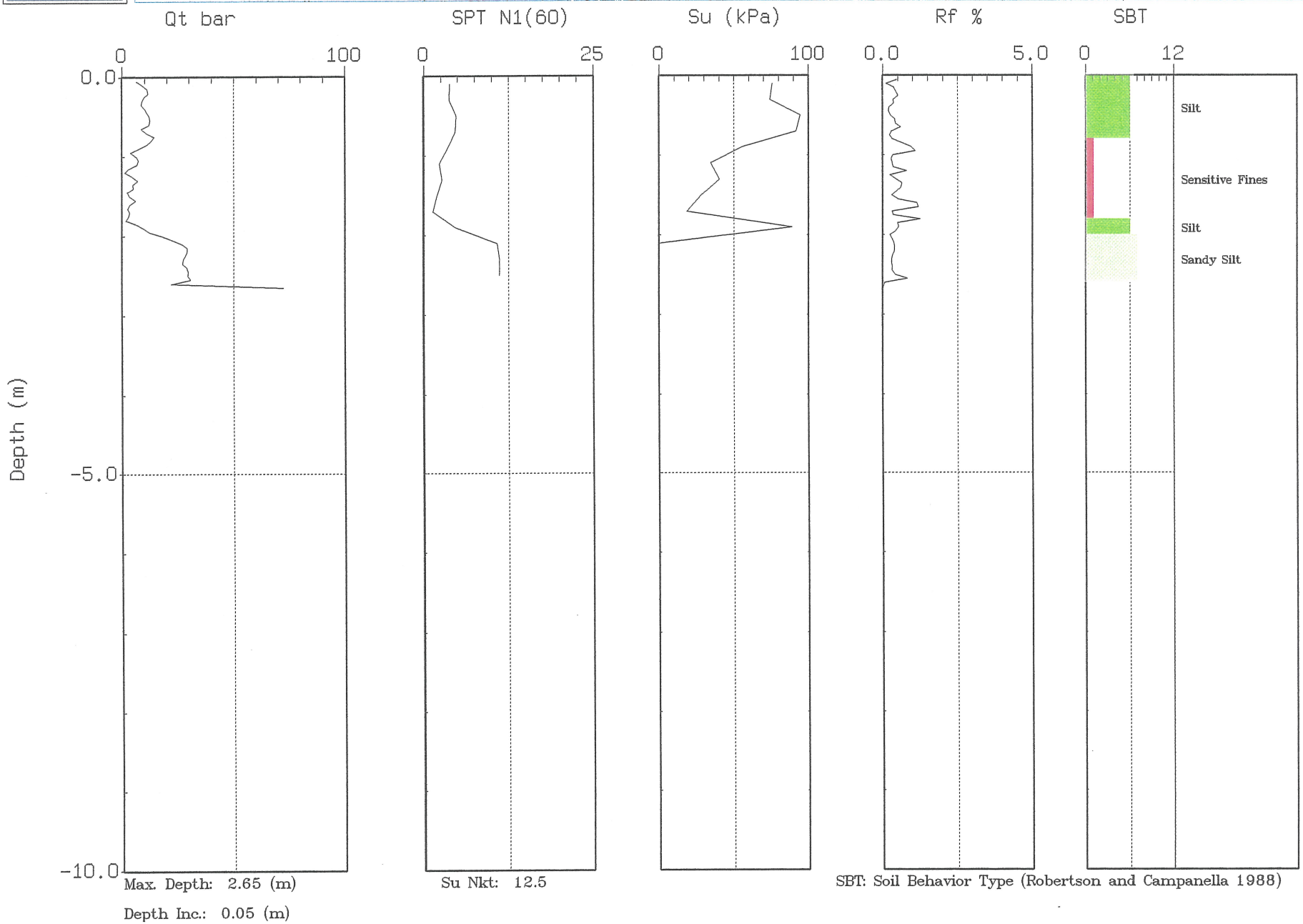
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-239 CPT 99-07
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 12:46



Max. Depth: 2.65 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

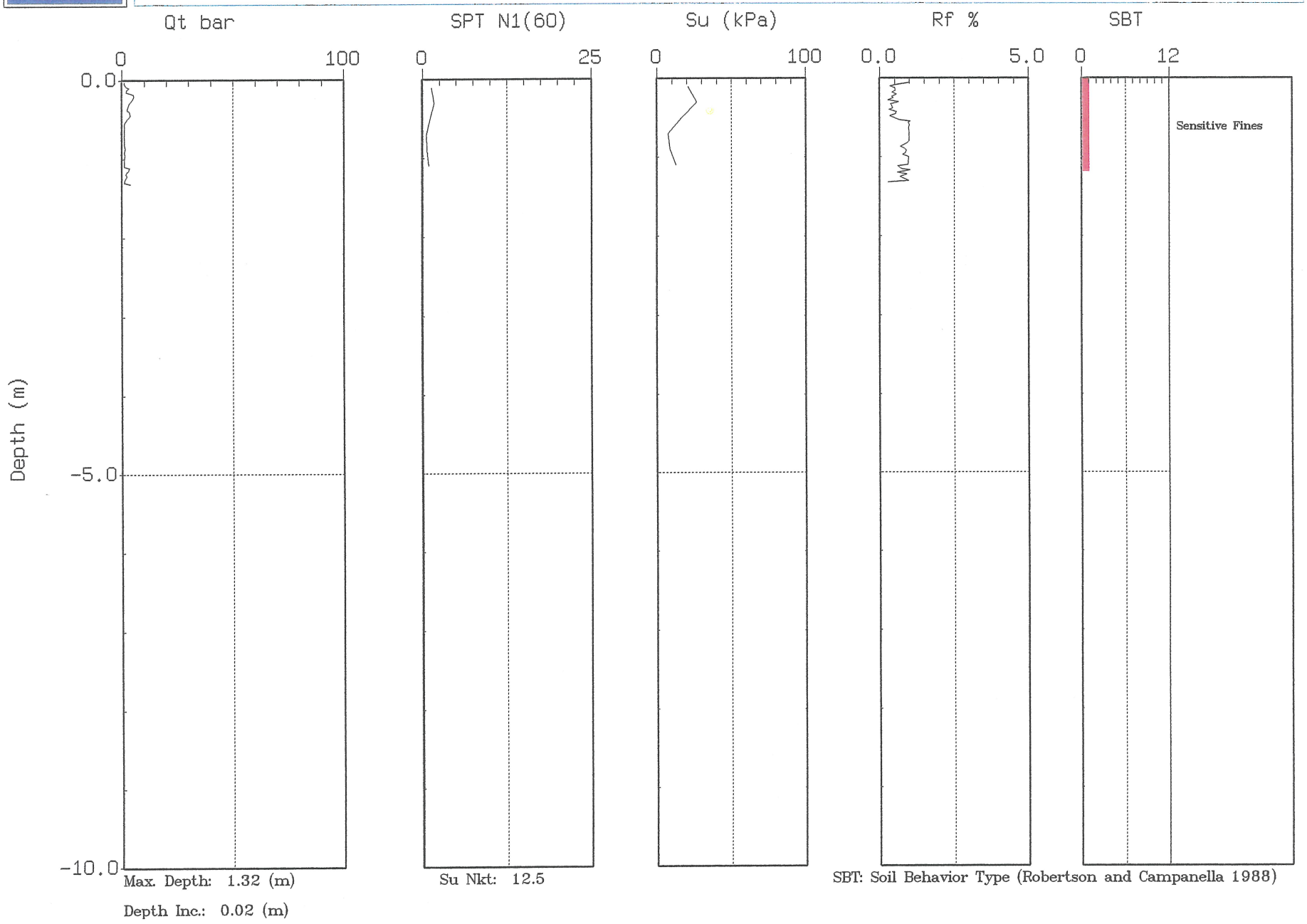
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-8
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 15:08

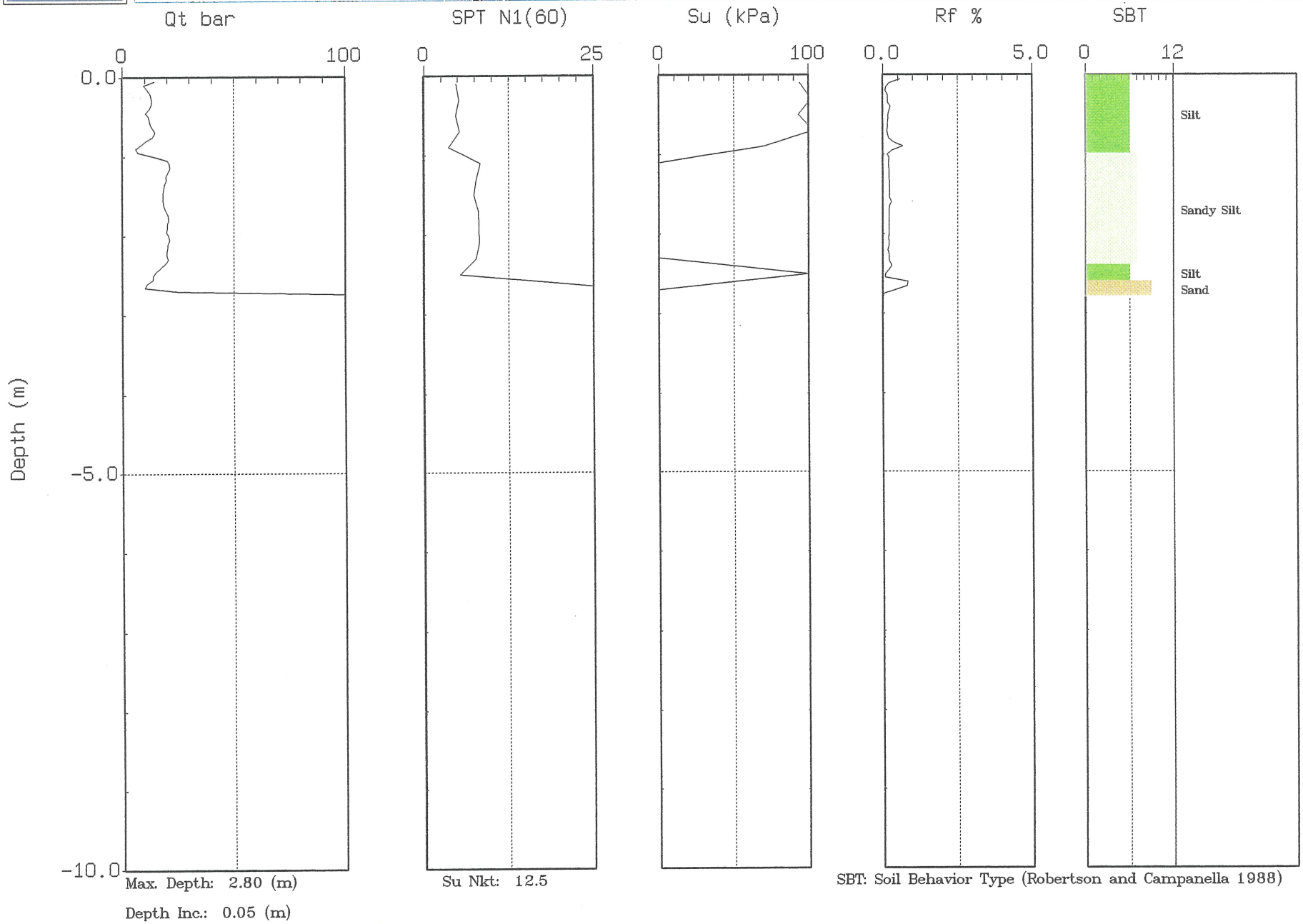


CONETEC

Knight Piesold

Site: 99-219 CPT 99-09
Location: DOWN STREAM TEST

Cone: 10 TON A 057
Date: 11:02:99 15:48



Max. Depth: 2.80 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

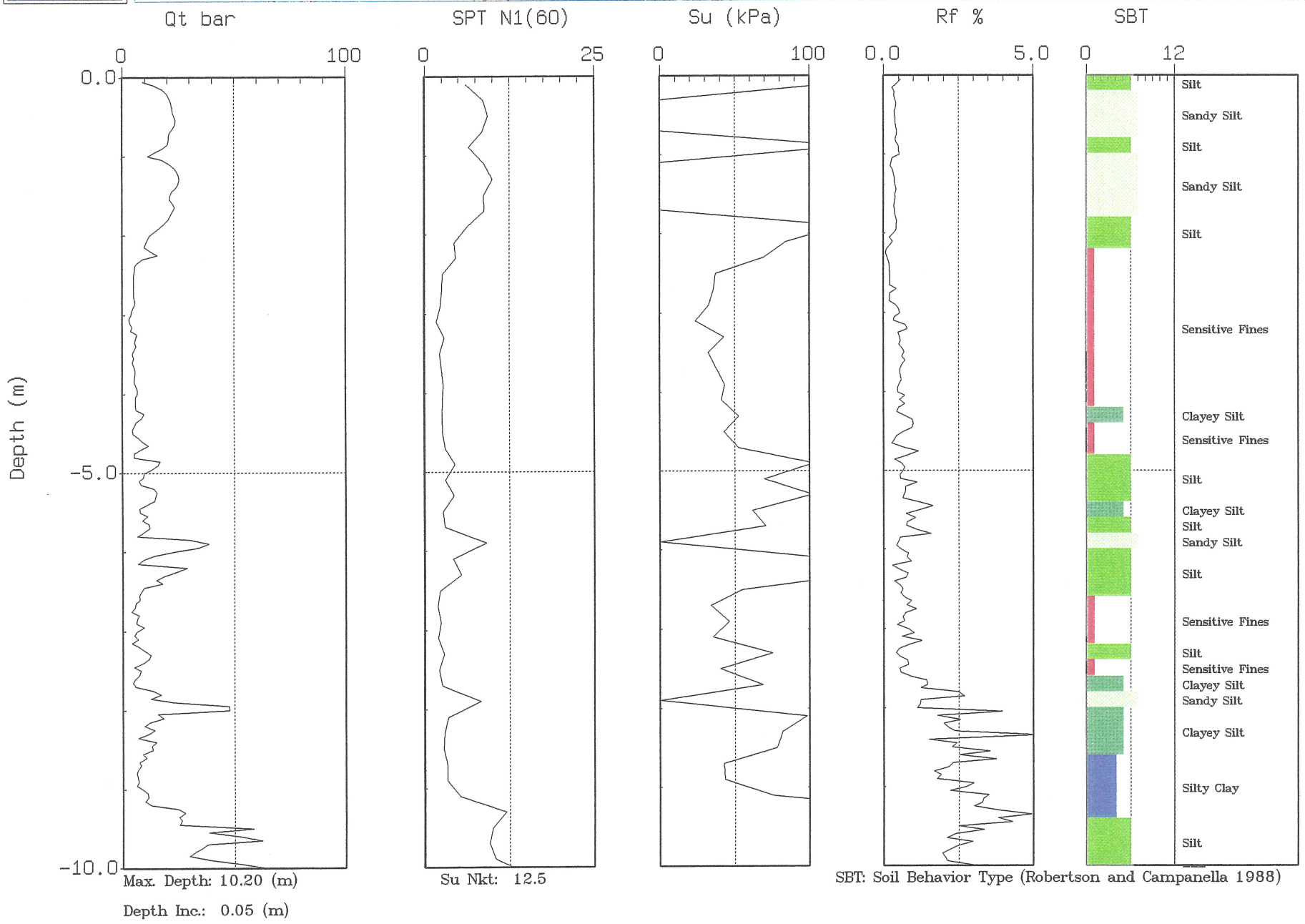
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-10
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 07:52



Max. Depth: 10.20 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

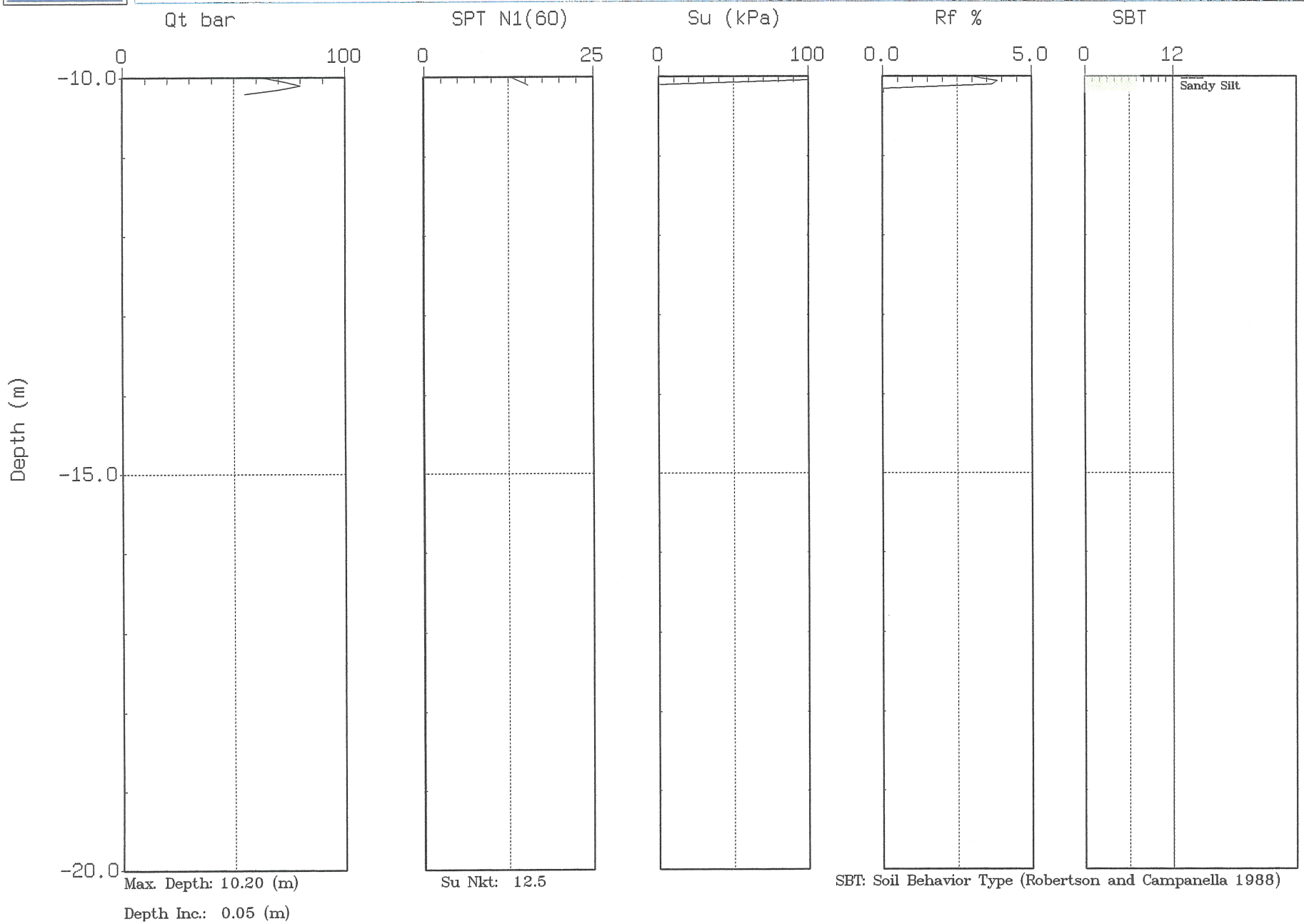
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-10
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 07:52



Max. Depth: 10.20 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

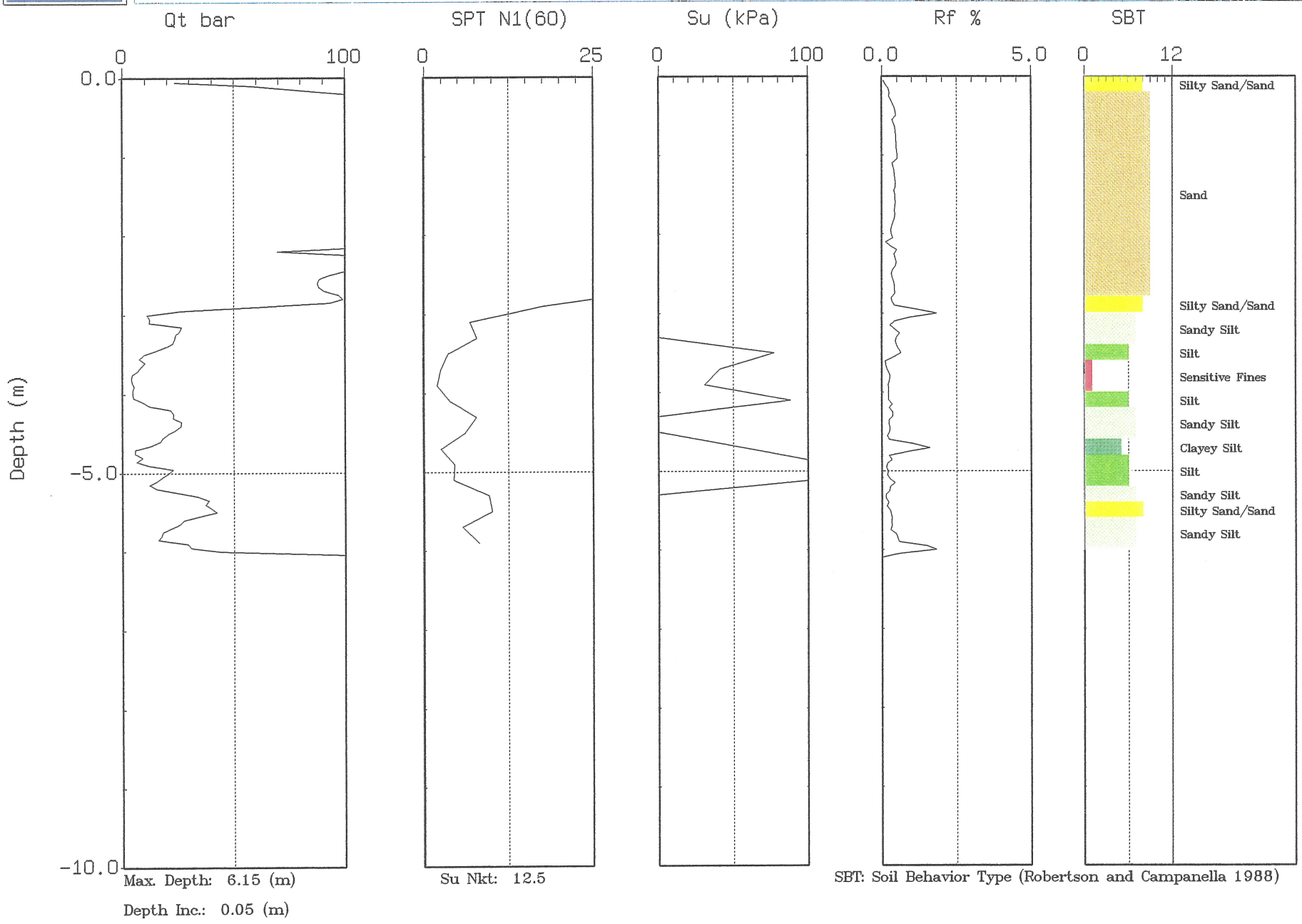
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-11
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 09:19



Max. Depth: 6.15 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

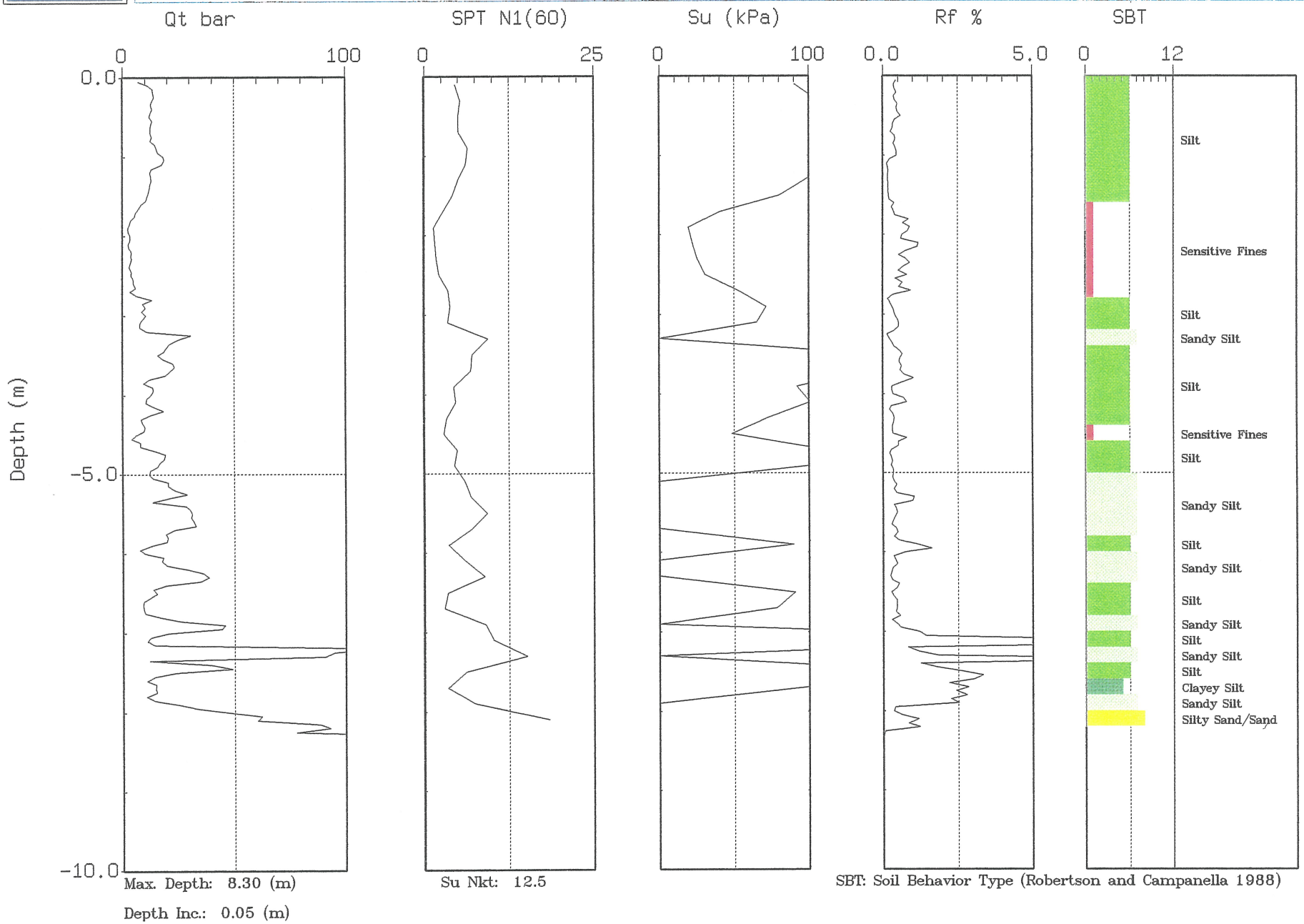
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT-12
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 10:28



Max. Depth: 8.30 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

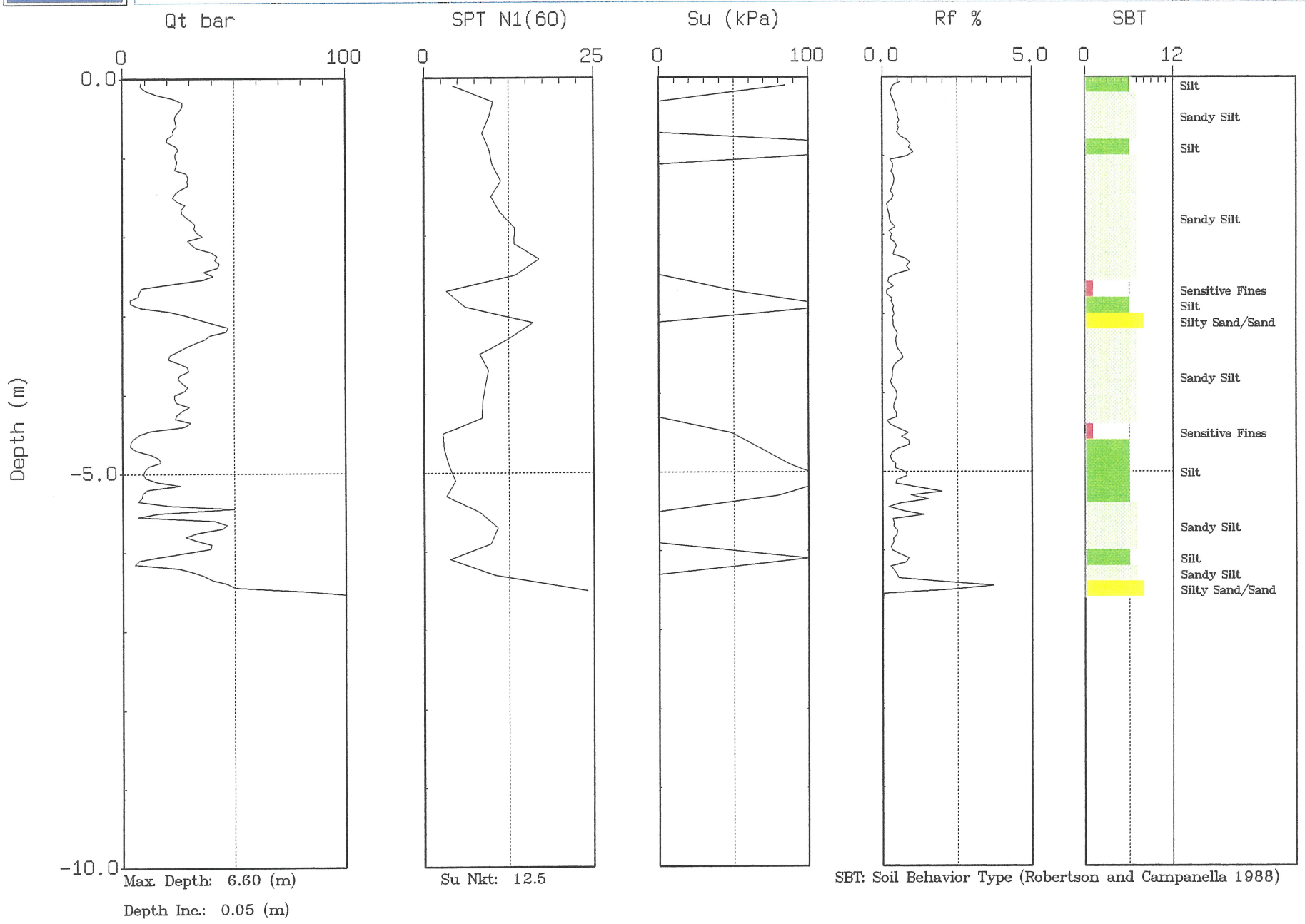
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT-13
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 12:08



Max. Depth: 6.60 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

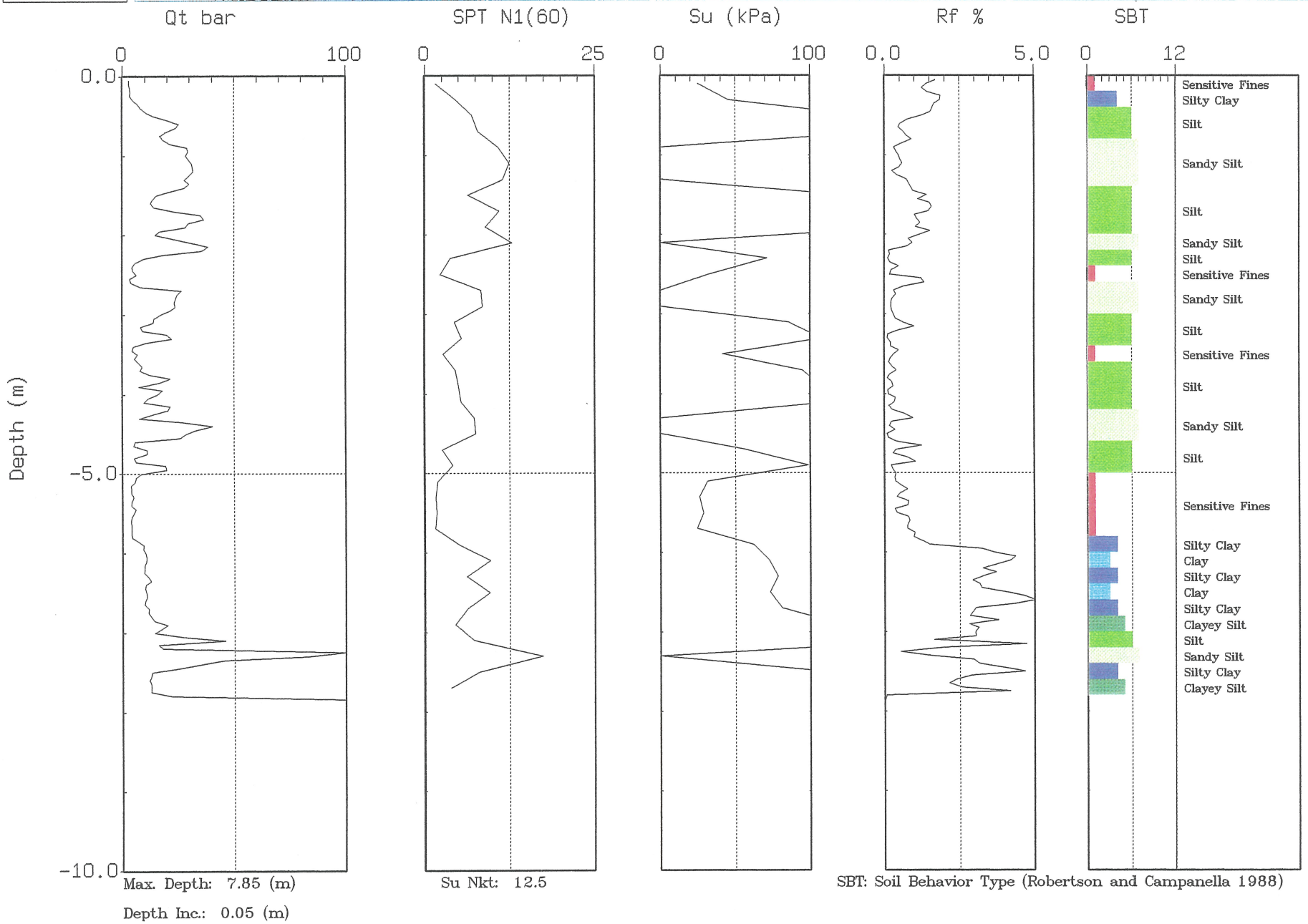
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-14
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 13:16



Max. Depth: 7.85 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

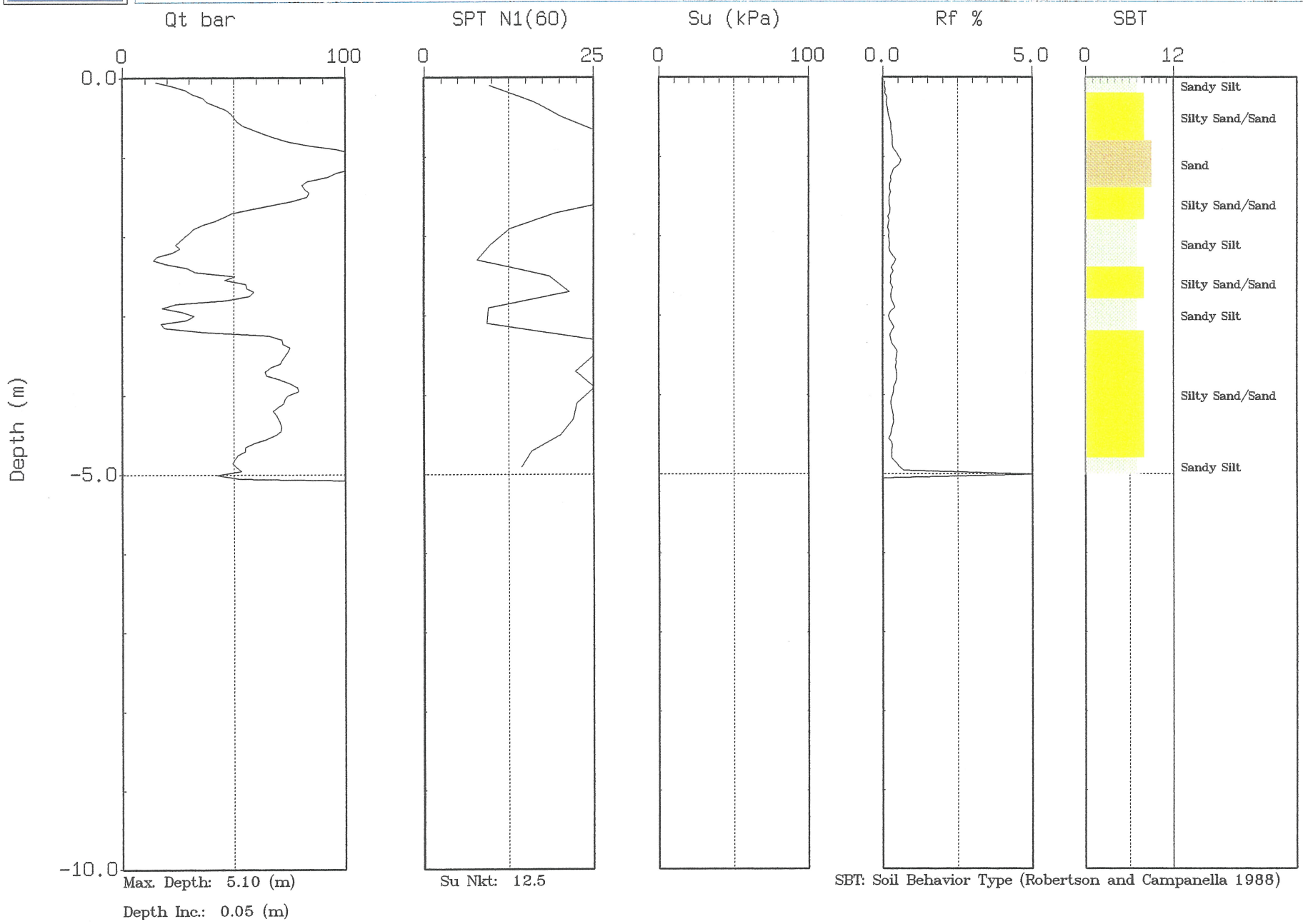
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-15
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 14:06



Max. Depth: 5.10 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

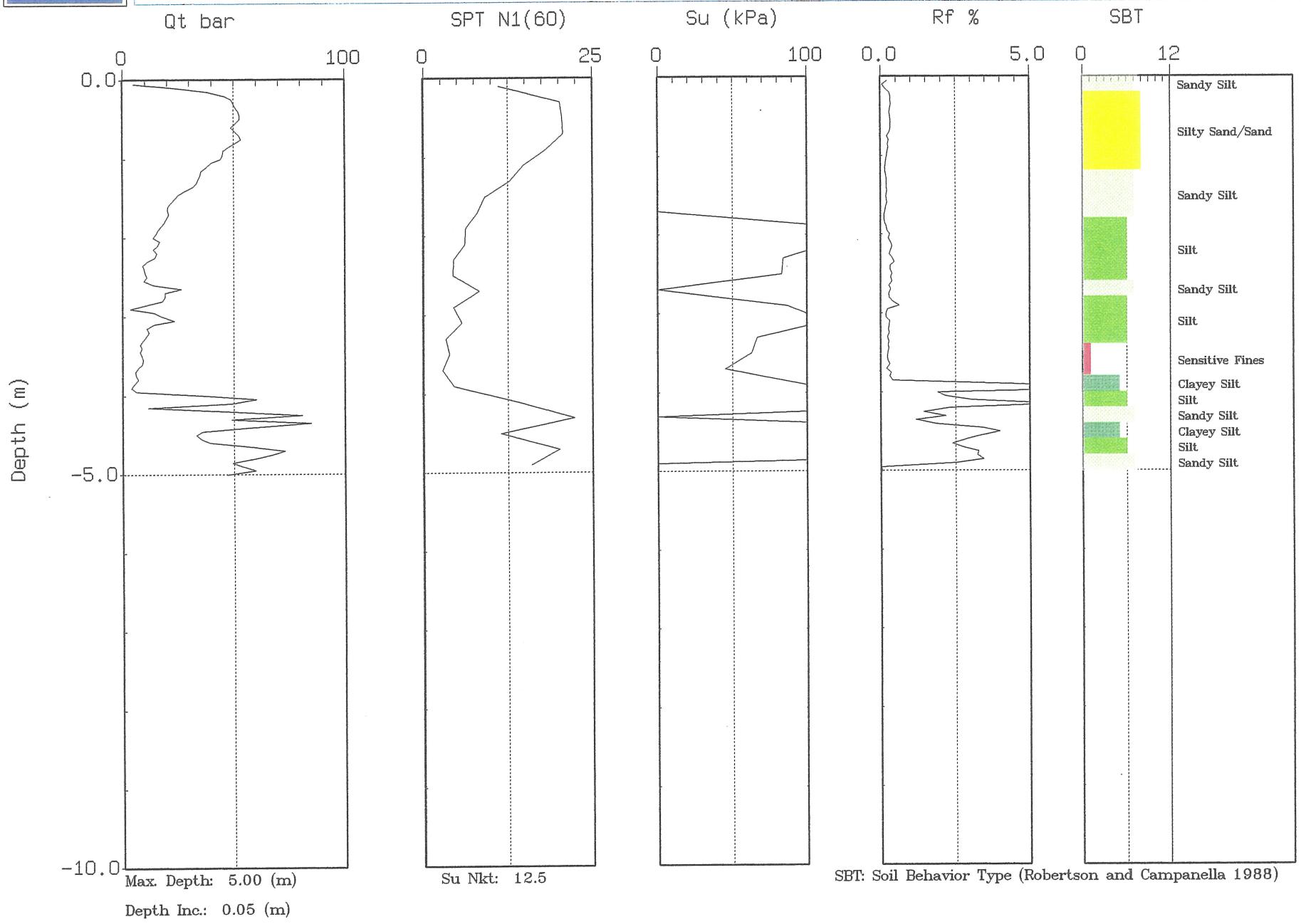
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-16
Location: UPSTREAM TEST

Cone: 10 TON A 057
Date: 11:03:99 15:41



Max. Depth: 5.00 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

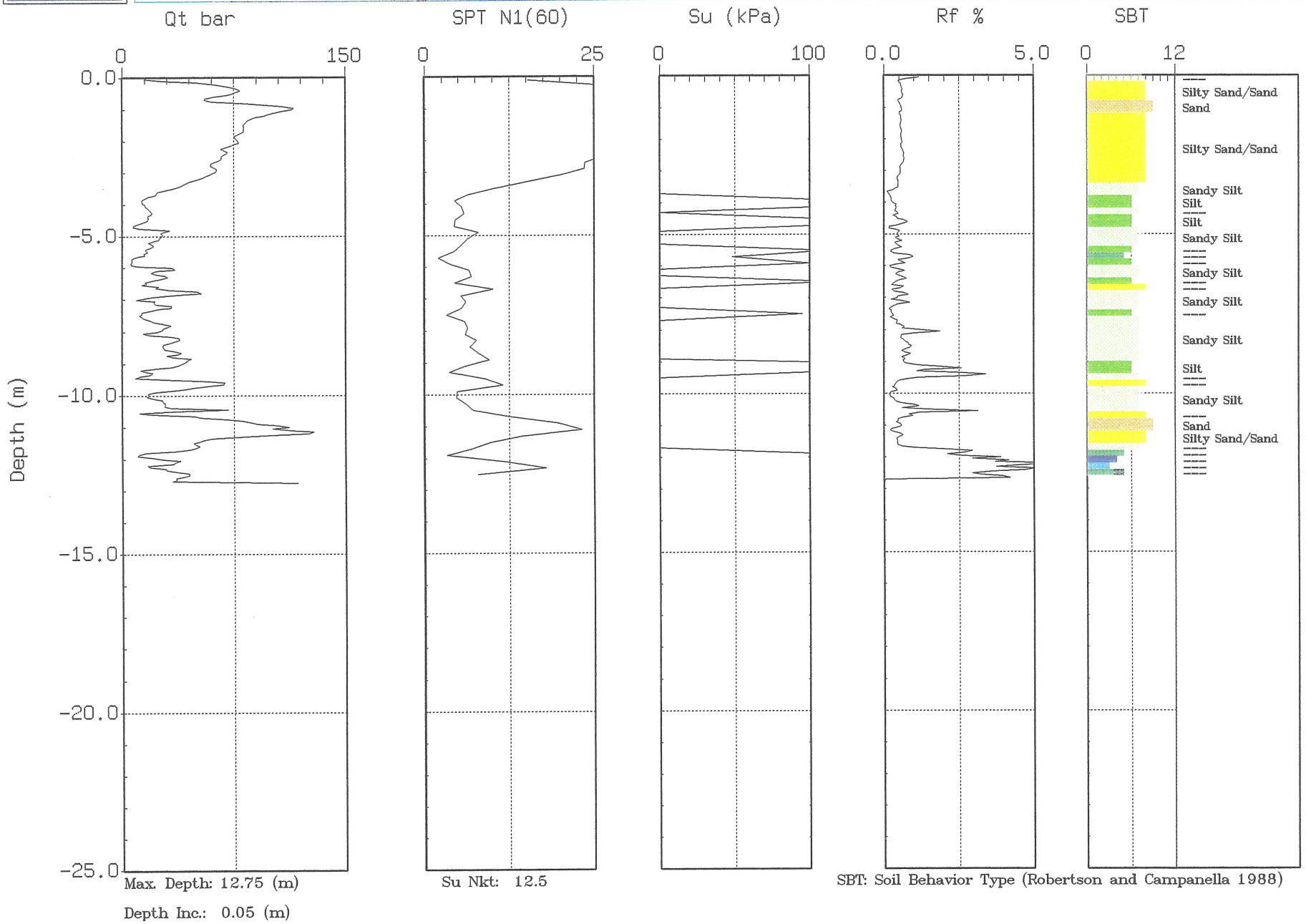
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT-17
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 08:46



Max. Depth: 12.75 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

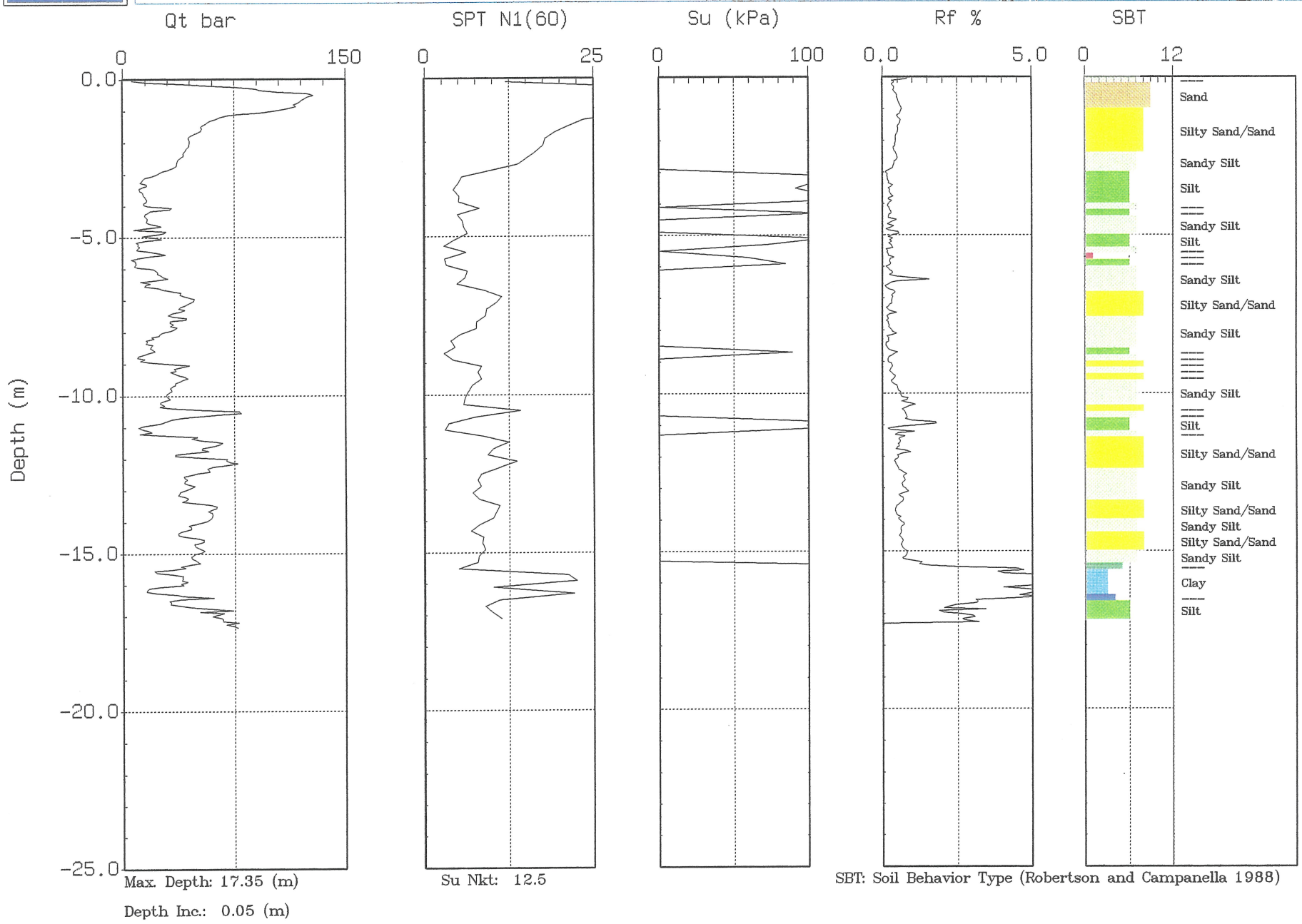
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT-18
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 09:47



Max. Depth: 17.35 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

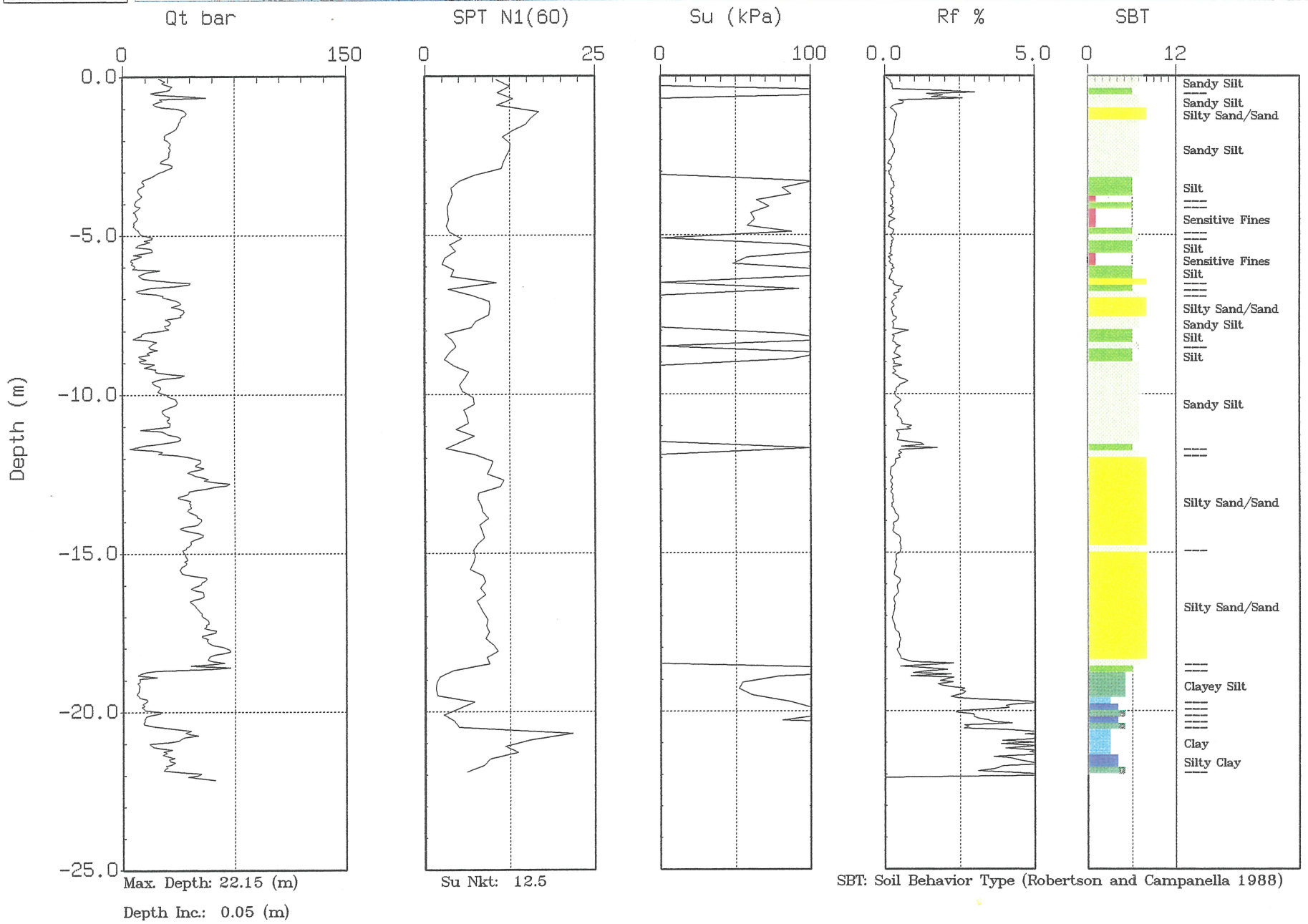
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-19
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 11:27



Max. Depth: 22.15 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

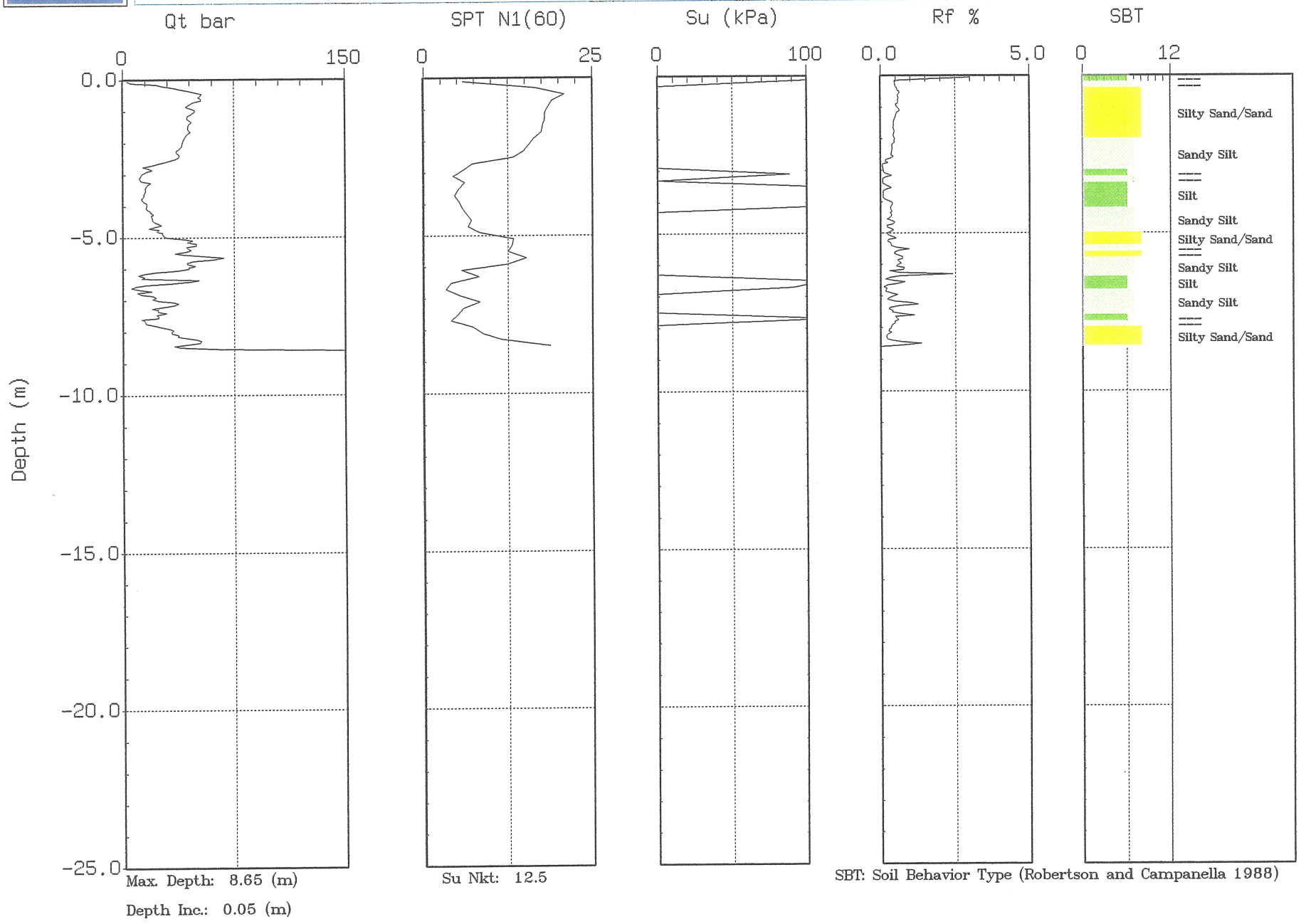
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-20
Location: MAIN EMBAMKMENT

Cone: 10 TON A 057
Date: 11:04:99 12:44



Max. Depth: 8.65 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

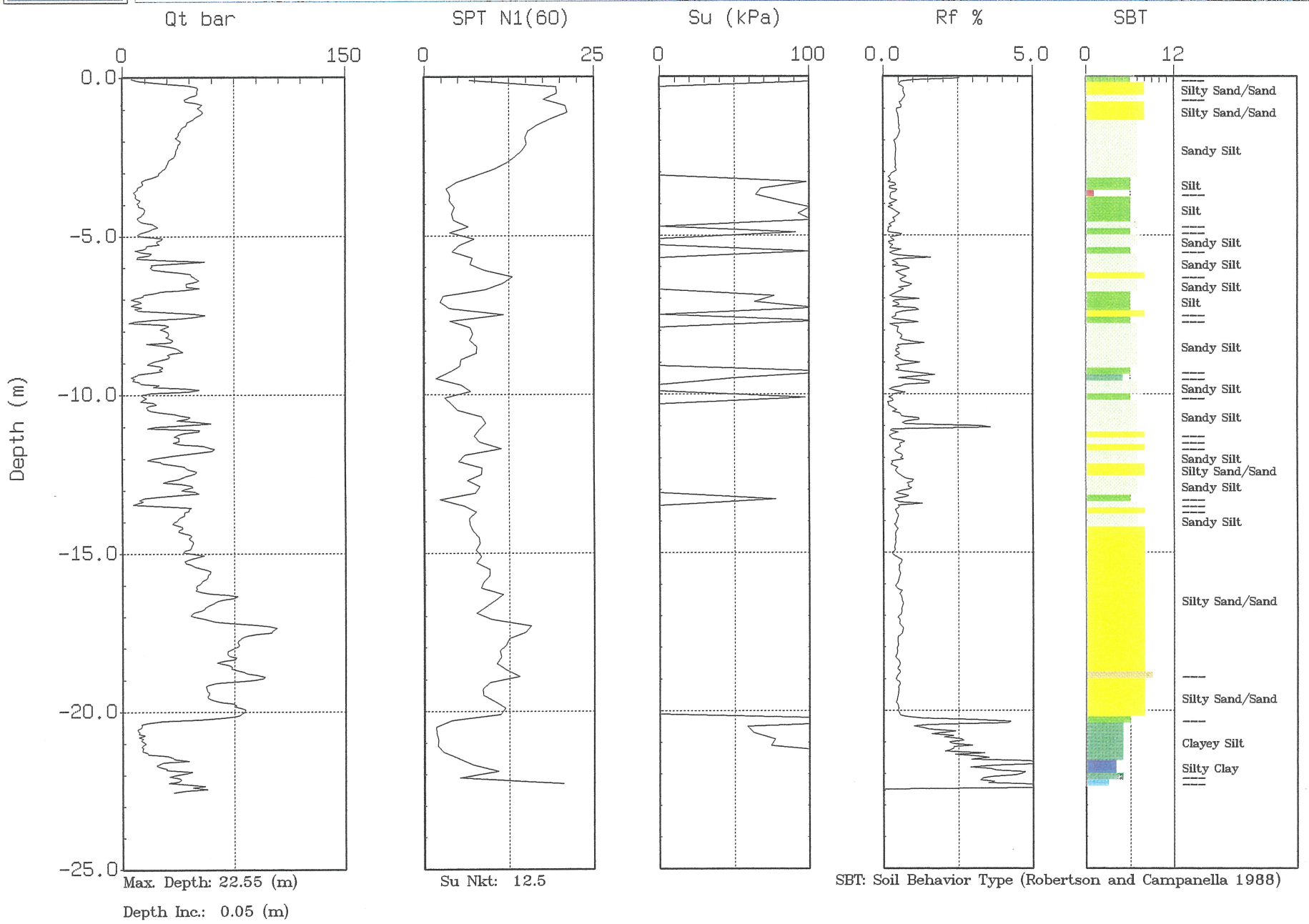
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-21
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 13:42



Max. Depth: 22.55 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

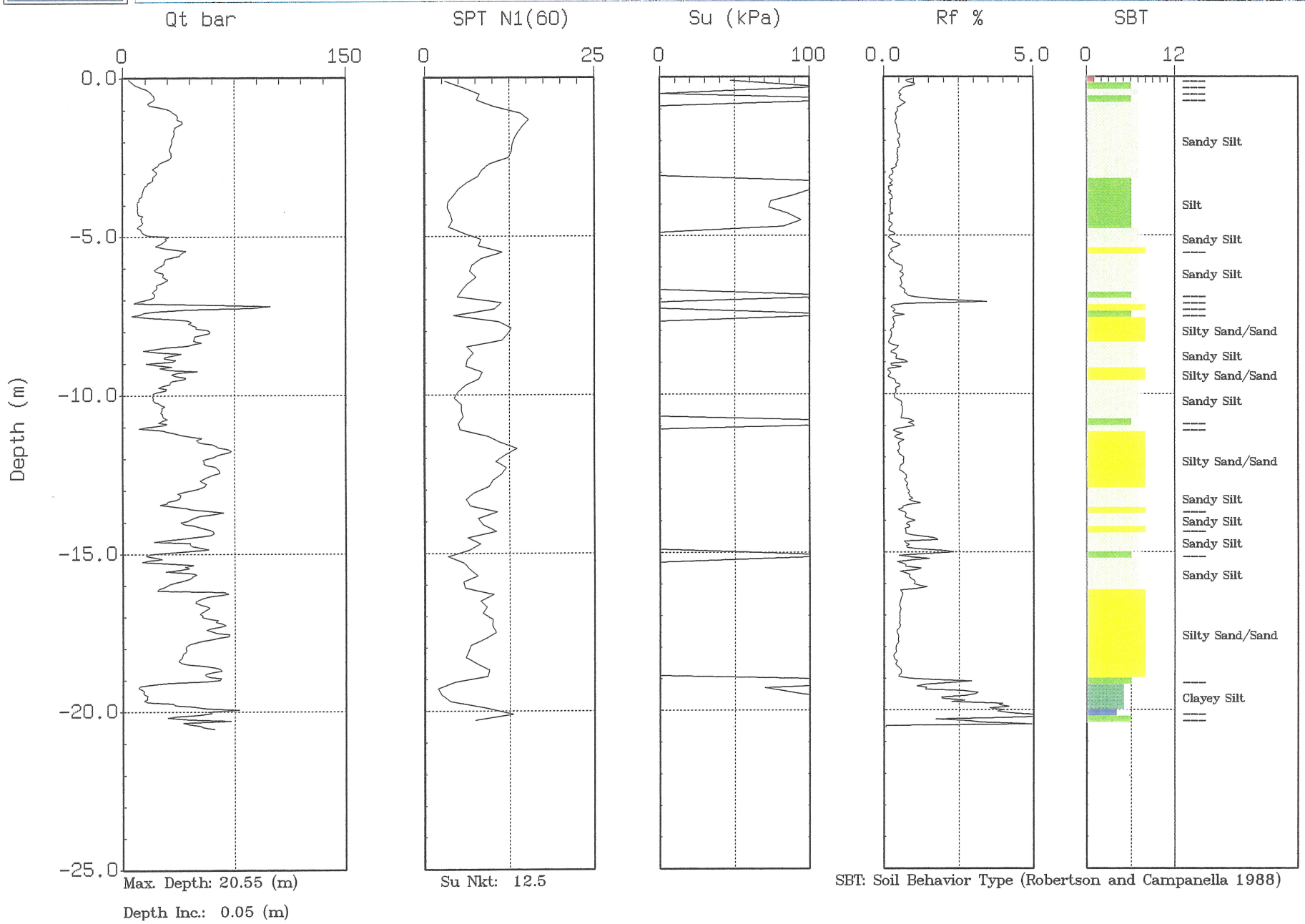
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-22
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 15:06



Max. Depth: 20.55 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

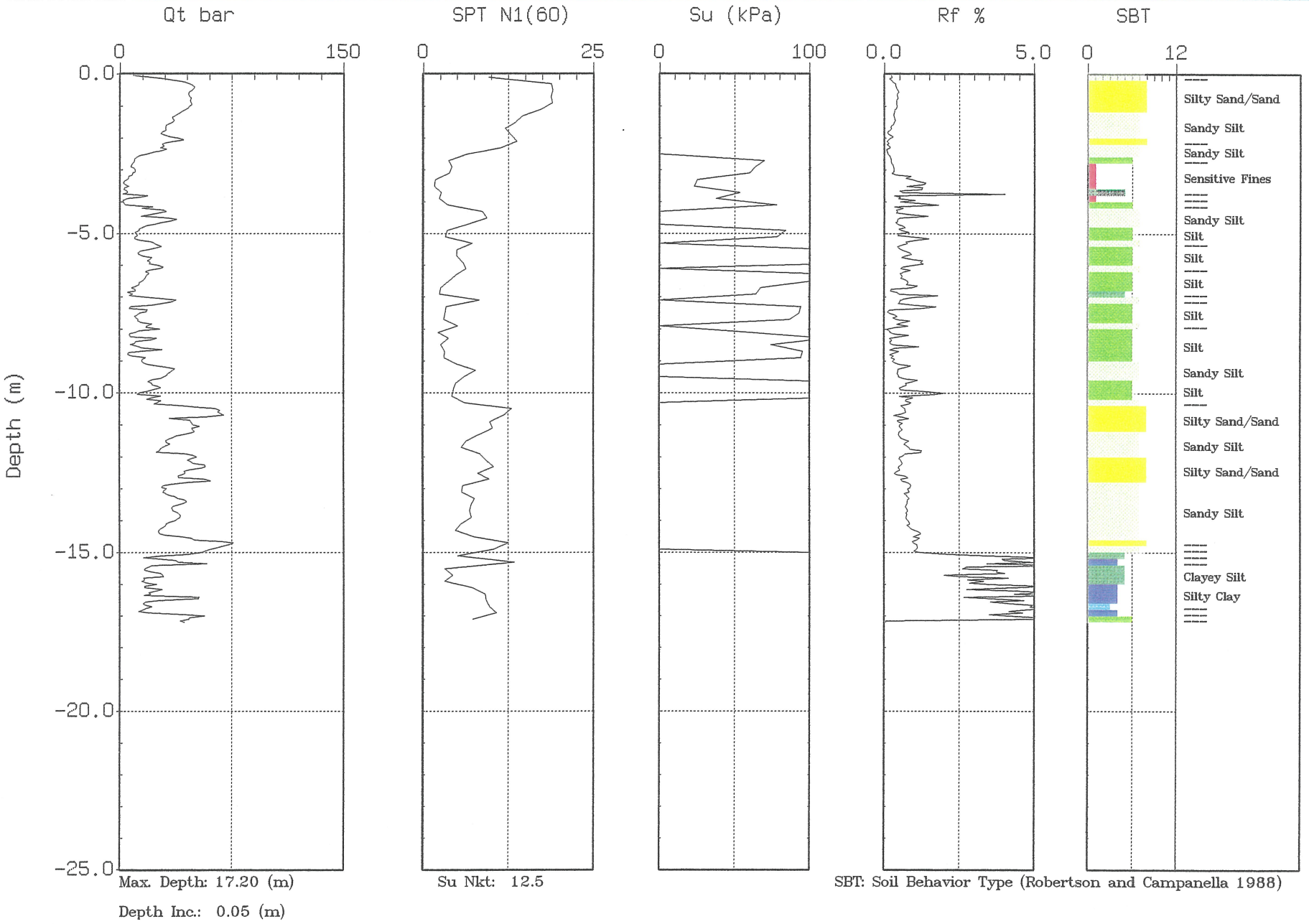
SBT: Soil Behavior Type (Robertson and Campanella 1988)

CONETEC

Knight Piesold

Site: 99-219 CPT 99-23
Location: MAIN EMBANKMENT

Cone: 10 TON A 057
Date: 11:04:99 16:03



Max. Depth: 17.20 (m)

Depth Inc.: 0.05 (m)

Su Nkt: 12.5

SBT: Soil Behavior Type (Robertson and Campanella 1988)

APPENDIX B

CPT Interpretations

ConeTec CPT Interpretations as of August 8, 1997 (Release 1.00.13)

ConeTec's interpretation routine should be considered a calculator of current published CPT correlations and is subject to change to reflect the current state of practice. The interpreted values are not considered valid for all soil types. The interpretations are presented only as a guide for geotechnical use and should be carefully scrutinized for consideration in any geotechnical design. Reference to current literature is strongly recommended.

The CPT interpretations are based on values of tip, sleeve friction and pore pressure averaged over a user specified interval (typically 0.25m). Note that Qt is the recorded tip value, Qc, corrected for pore pressure effects. Since all ConeTec cones have equal end area friction sleeves, pore pressure corrections to sleeve friction, Fs, are not required.

The tip correction is: $Qt = Qc + (1-a) \bullet Ud$

where: *Qt* is the corrected tip load
Qc is the recorded tip load
Ud is the recorded dynamic pore pressure
a is the Net Area Ratio for the cone (typically 0.85 for ConeTec cones)

Effective vertical overburden stresses are calculated based on a hydrostatic distribution of equilibrium pore pressures below the water table or from a user defined equilibrium pore pressure profile (this can be obtained from CPT dissipation tests). The stress calculations use unit weights assigned to the Soil Behaviour Type zones or from a user defined unit weight profile.

Details regarding the interpretation methods for all of the interpreted parameters is given in table 1. The appropriate references referred to in table 1 are listed in table 2.

The estimated Soil Behaviour Type ise based on the charts developed by Robertson and Campanella shown in figure 1.

Table 1 CPT Interpretation Methods

Interpreted Parameter	Description	Equation	Ref
Depth	mid layer depth		
AvgQt	Averaged corrected tip (Qt)	$AvgQt = \frac{1}{n}\sum_{i=1}^{n} Qt_i$	
AvgFs	Averaged sleeve friction (Fs)	$AvgFs = \frac{1}{n}\sum_{i=1}^{n} Fs_i$	
AvgRf	Averaged friction ratio (Rf)	$AvgRf = 100\% \bullet \frac{AvgFs}{AvgQt}$	
AvgUd	Averaged dynamic pore pressure (Ud)	$AvgUd = \frac{1}{n}\sum_{i=1}^{n} Ud_i$	
SBT	Soil Behavior Type as defined by Robertson and Campanella		1

U.Wt.	Unit Weight of soil determined from: 1) uniform value or 2) value assigned to each SBT zone 3) user supplied unit weight profile		
TStress	Total vertical overburden stress at mid layer depth	$TStress = \sum_{i=1}^{n} \gamma_i h_i$ where γ_i is layer unit weight h_i is layer thickness	
EStress	Effective vertical overburden stress at mid layer depth	$EStress = TStress - Ueq$	
Ueq	Equilibrium pore pressure determined from: 1) hydrostatic from water table depth 2) user supplied profile		
Cn	SPT N_{60} overburden correction factor	$Cn=(\sigma_v')^{-0.5}$ where σ_v' *is in tsf* $0.5 < C_n < 2.0$	
N_{60}	SPT N value at 60% energy calculated from Qt/N ratios assigned to each SBT zone		3
$(N1)_{60}$	SPT N_{60} value corrected for overburden pressure	$N1_{60} = Cn \bullet N_{60}$	3
$\Delta(N1)_{60}$	Equivalent Clean Sand Correction to $(N1)_{60}$	$\Delta(N1)_{60} = \frac{K_{SPT}}{1 - K_{SPT}} \bullet (N1)_{60}$ Where: K_{SPT} is defined as: 0.0 for FC < 5% 0.0167 • (FC - 5) for 5% < FC < 35% 0.5 for FC > 35% FC - Fines Content in %	7
$(N1)_{60cs}$	Equivalent Clean Sand $(N1)_{60}$	$(N1)_{60cs} = (N1)_{60} + \Delta(N1)_{60}$	7
Su	Undrained shear strength - Nkt is use selectable	$Su = \frac{Qt - \sigma_v}{N_{kt}}$	2
k	Coefficient of permeability (assigned to each SBT zone)		6
Bq	Pore pressure parameter	$Bq = \frac{\Delta u}{Qt - \sigma_v}$	2
Qtn	Normalized Qt for Soil Behavior Type classification as defined by Robertson, 1990	$Qtn = \frac{Qt - \sigma_v}{\sigma'_v}$	4
Rfn	Normalized Rf for Soil Behavior Type classification as defined by Robertson, 1990	$Rfn = 100\% \bullet \frac{f_s}{Qt - \sigma_v}$	4
SBTn	Normalized Soil Behavior Type (slightly modified from that published by Robertson, 1990. This version includes all the soil zones of the original non-normalized SBT chart - see figure 1)		4
Qc1	Normalized Qt for seismic analysis	$qc1 = qc \bullet (Pa/\sigma_v')^{0.5}$ where: Pa = atm. pressure	5
Qc1N	Dimensionless Normalized Qt1	qc1N = qc1 / Pa where: Pa = atm. pressure	

ΔQc1N1	Equivalent clean sand correction	$\Delta qc1N = \frac{K_{CPT}}{1 - K_{CPT}} \bullet qc1N$ Where: K_{CPT} is defined as: 0.0 for FC < 5% 0.0267 • (FC - 5) for 5% < FC < 35% 0.5 for FC > 35% FC - Fines Content in %	5
Qc1Ncs	Clean Sand equivalent Qc1N	$qc1Ncs = qc1N + \Delta qc1N$	5
Ic	Soil index for estimating grain characteristics	$Ic = [(3.47 - logQ)^2 + (log F + 1.22)^2]^{0.5}$	5
FC	Fines content (%)	$FC=1.75(Ic^{3.25}) - 3.7$ $FC=100$ for $Ic > 3.5$ $FC=0$ for $Ic < 1.26$ $FC = 5\%$ if $1.64 < Ic < 2.6$ AND $Rfn<0.5$	8
PHI	Friction Angle	Campanella and Robertson Durunoglu and Mitchel Janbu	1
Dr	Relative Density	Ticino Sand Hokksund Sand Schmertmann 1976 Jamiolkowski - All Sands	1
OCR	Over Consolidation Ratio		1
State Parameter			8
CRR	Cyclic Resistance Ratio		7

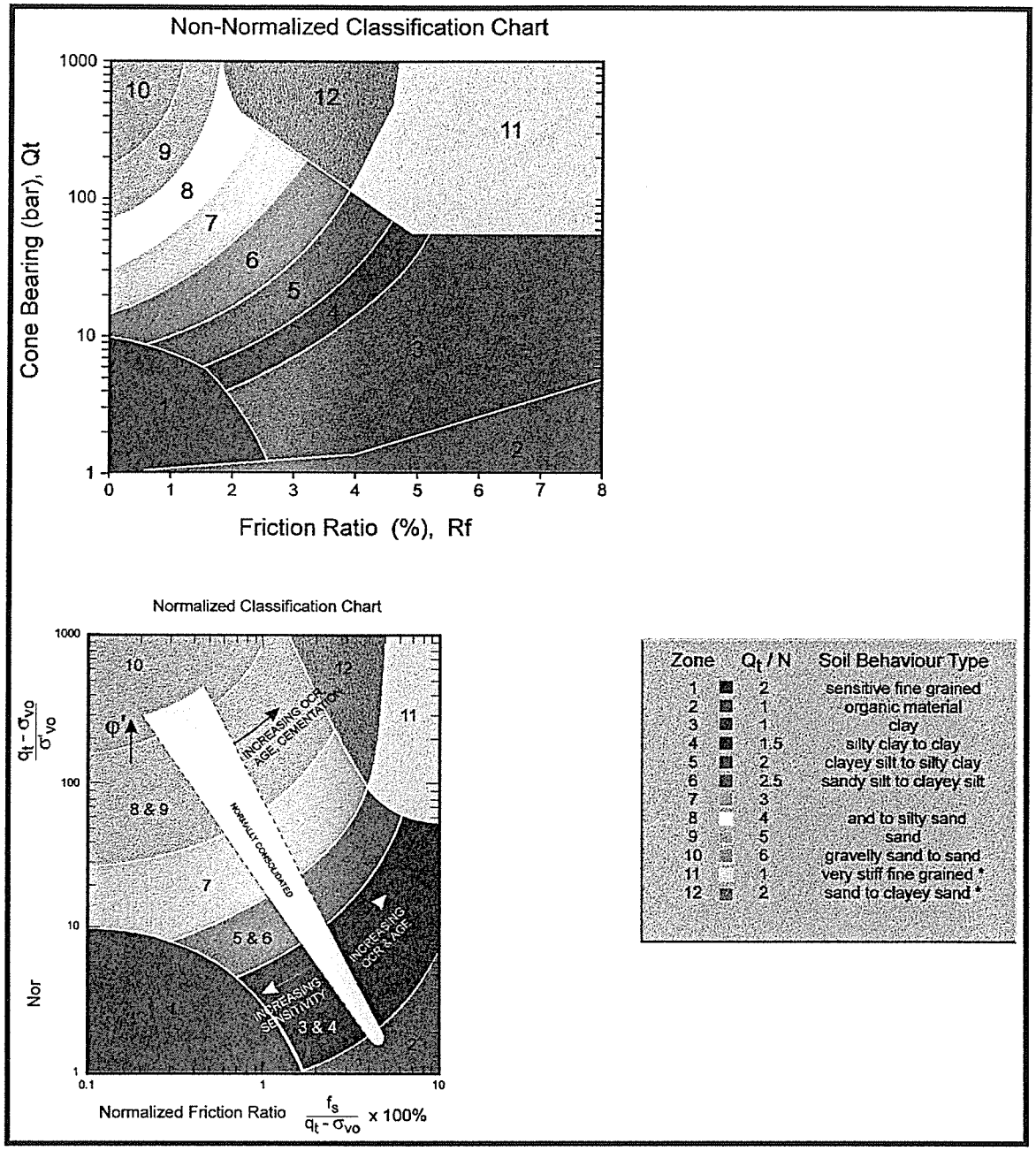


Figure 1 Non-Normalized and Normalized Soil Behaviour Type Classification Charts

Table 2 References

No.	Reference
1	Robertson, P.K. and Campanella, R.G., 1986, "Guidelines for Use, Interpretation and Application of the CPT and CPTU", UBC, Soil Mechanics Series No. 105, Civil Eng. Dept., Vancouver, B.C., Canada
2	Robertson, P.K., Campanella, R.G., Gillespie, D. and Greig, J., 1986, "Use of Piezometer Cone Data", Proceedings of InSitu 86, ASCE Specialty Conference, Blacksburg, Virginia.
3	Robertson, P.K. and Campanella, R.G., 1989, "Guidelines for Geotechnical Design Using CPT and CPTU", UBC, Soil Mechanics Series No. 120, Civil Eng. Dept., Vancouver, B.C., Canada
4	Robertson, P.K., 1990, "Soil Classification Using the Cone Penetration Test", Canadian Geotechnical Journal, Volume 27.
5	Robertson, P.K. and Fear, C.E., 1995, "Liquefaction of Sands and its Evaluation", Keynote Lecture, First International Conference on Earthquake Geotechnical Enginnering, Tokyo, Japan.
6	ConeTec Internal Report
7	Robertson, P.K. and Wride, C.E., 1997, "Cyclic Liquefaction and its Evaluation Based on SPT and CPT", NCEER Workshop Paper, January 22, 1997
8	Wride, C.E. and Robertson, P.K., 1997, "Phase II Data Review Report (Massey and Kidd Sites, Fraser River Delta)", Volume 1 - Data Report (June 1997), University of Alberta.
9	Plewes, H.D., Davies, M.P. and Jefferies, M.G., 1992, "CPT Based Screening Procedure for Evaluating Liquefaction Susceptibility", 45th Canadian Geotechnical Conference, Toronto, Ontario, October 1992.

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5558
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-1
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 08:35
CPT File: 219CP01.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.70 (ft): 8.9
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60 (blows/ft)	Su (kPa)	CRR
0.12	28.3	0.06	0.21	0.48	7	18.5	2.3	2.3	0.00	2.00	9.4	18.9	UnDef	0.10
0.38	15.3	0.06	0.38	0.41	6	18.0	6.9	6.9	0.00	2.00	6.1	12.2	121.6	0.08
0.62	16.4	0.07	0.43	0.44	6	18.0	11.4	11.4	0.00	2.00	6.6	13.1	130.2	0.08
0.88	19.8	0.08	0.38	0.47	7	18.5	15.9	15.9	0.00	2.00	6.6	13.2	UnDef	0.09
1.12	29.0	0.11	0.38	0.47	7	18.5	20.6	20.6	0.00	2.00	9.7	19.3	UnDef	0.10
1.38	29.8	0.11	0.38	0.36	7	18.5	25.2	25.2	0.00	1.95	9.9	19.4	UnDef	0.10
1.62	22.9	0.09	0.40	0.15	7	18.5	29.8	29.8	0.00	1.79	7.6	13.7	UnDef	0.09
1.88	20.2	0.08	0.39	0.17	7	18.5	34.4	34.4	0.00	1.67	6.7	11.2	UnDef	0.08
2.12	17.9	0.06	0.35	0.19	7	18.5	39.1	39.1	0.00	1.57	6.0	9.4	UnDef	0.00
2.38	12.6	0.04	0.32	0.76	6	18.0	43.6	43.6	0.00	1.48	5.0	7.4	97.0	0.00
2.62	7.9	0.02	0.28	3.41	1	17.5	48.1	48.1	0.00	1.41	3.9	5.5	59.0	0.00
2.88	7.1	0.02	0.28	4.42	1	17.5	52.4	50.7	1.72	1.37	3.5	4.9	52.5	0.00
3.12	6.3	0.01	0.22	5.13	1	17.5	56.8	52.6	4.17	1.35	3.1	4.2	45.6	0.00
3.38	7.8	0.03	0.43	5.08	1	17.5	61.2	54.6	6.62	1.32	3.9	5.2	57.7	0.00
3.62	26.5	0.18	0.66	6.00	7	18.5	65.7	56.6	9.07	1.30	8.8	11.5	UnDef	0.09

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5558
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-1
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 08:35
CPT File: 219CP01.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.70 (ft): 8.9
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-04	0.00	1000.0	0.21	10	56.7	0.0	56.7	0.0	50	85.1	1.0	-0.25	0.0	
0.38	5.0E-05	0.00	221.1	0.38	9	30.5	0.0	30.5	1.3	46	51.8	10.0	-0.17	0.0	
0.62	5.0E-05	0.00	143.1	0.43	9	32.8	0.0	32.8	3.8	44	46.6	10.0	-0.15	0.0	
0.88	5.0E-04	0.00	123.4	0.39	9	39.7	0.0	39.7	4.3	42	47.2	1.0	-0.12	0.0	
1.12	5.0E-04	0.00	139.9	0.38	9	58.0	0.0	58.0	3.5	44	54.4	1.0	-0.13	0.0	
1.38	5.0E-04	0.00	117.5	0.38	9	59.4	0.0	59.4	4.6	42	52.4	1.0	-0.12	0.0	
1.62	5.0E-04	0.00	75.7	0.41	9	41.9	0.0	41.9	5.0	40	42.3	1.0	-0.09	0.0	
1.88	5.0E-04	0.00	57.7	0.39	9	34.5	0.0	34.5	5.0	40	36.7	1.0	-0.06	0.0	
2.12	5.0E-04	0.00	44.9	0.35	9	28.7	0.0	28.7	5.0	38	31.5	1.0	-0.03	0.0	
2.38	5.0E-05	0.01	27.8	0.33	7	19.0	0.0	19.0	5.0	36	30.0	6.0	0.02	0.0	
2.62	1.0E-07	0.05	15.4	0.30	7	11.3	0.0	11.3	5.0	UnDef	UnDef	6.0	UnDef	0.0	
2.88	1.0E-07	0.06	12.9	0.30	7	9.9	0.0	9.9	5.0	UnDef	UnDef	6.0	UnDef	0.0	
3.12	1.0E-07	0.08	10.8	0.25	7	8.6	0.0	8.6	5.0	UnDef	UnDef	3.0	UnDef	0.0	
3.38	1.0E-07	0.06	13.2	0.47	7	10.6	0.0	10.6	5.0	UnDef	UnDef	6.0	UnDef	0.0	
3.62	5.0E-04	0.02	45.6	0.68	7	35.2	14.0	49.2	15.7	38	37.3	1.0	-0.08	2.5	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5607
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-02
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 09:38
CPT File: 219CP02.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 4.95 (ft): 16.2
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	17.5	0.06	0.35	0.43	6	18.0	2.2	2.2	0.00	2.00	7.0	14.0	140.2	0.08
0.38	19.9	0.05	0.25	0.28	7	18.5	6.8	6.8	0.00	2.00	6.6	13.3	UnDef	0.09
0.62	18.4	0.04	0.24	0.27	7	18.5	11.4	11.4	0.00	2.00	6.1	12.3	UnDef	0.08
0.88	19.1	0.04	0.20	0.22	7	18.5	16.1	16.1	0.00	2.00	6.4	12.7	UnDef	0.09
1.12	16.5	0.03	0.21	0.23	7	18.5	20.7	20.7	0.00	2.00	5.5	11.0	UnDef	0.08
1.38	16.9	0.04	0.21	0.27	7	18.5	25.3	25.3	0.00	1.95	5.6	11.0	UnDef	0.08
1.62	25.4	0.07	0.27	0.29	7	18.5	29.9	29.9	0.00	1.79	8.5	15.2	UnDef	0.09
1.88	26.2	0.07	0.26	0.10	7	18.5	34.6	34.6	0.00	1.66	8.7	14.5	UnDef	0.09
2.12	22.1	0.06	0.25	0.19	7	18.5	39.2	39.2	0.00	1.56	7.4	11.5	UnDef	0.08
2.38	23.6	0.05	0.19	0.13	7	18.5	43.8	43.8	0.00	1.48	7.9	11.6	UnDef	0.08
2.62	25.7	0.05	0.21	0.11	7	18.5	48.4	48.4	0.00	1.41	8.6	12.1	UnDef	0.08
2.88	26.3	0.05	0.19	0.13	7	18.5	53.1	53.1	0.00	1.34	8.8	11.8	UnDef	0.08
3.12	28.6	0.07	0.23	0.10	7	18.5	57.7	57.7	0.00	1.29	9.5	12.3	UnDef	0.08
3.38	31.3	0.08	0.26	-0.01	7	18.5	62.3	62.3	0.00	1.24	10.4	12.9	UnDef	0.09
3.62	33.9	0.10	0.28	-0.04	7	18.5	66.9	66.9	0.00	1.20	11.3	13.5	UnDef	0.09
3.88	31.0	0.09	0.29	0.14	7	18.5	71.6	71.6	0.00	1.16	10.3	12.0	UnDef	0.08
4.12	21.6	0.06	0.27	2.62	7	18.5	76.2	76.2	0.00	1.12	7.2	8.1	UnDef	0.00
4.38	22.6	0.07	0.33	1.93	7	18.5	80.8	80.8	0.00	1.09	7.5	8.2	UnDef	0.00
4.62	25.5	0.10	0.38	2.85	7	18.5	85.4	85.4	0.00	1.06	8.5	9.0	UnDef	0.00

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5607
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-02
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 09:38
CPT File: 219CP02.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 4.95 (ft): 16.2
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-05	0.00	778.7	0.35	10	35.1	0.0	35.1	0.0	50	71.8	10.0	-0.28	0.0	
0.38	5.0E-04	0.00	291.3	0.25	10	39.8	0.0	39.8	0.0	46	59.5	1.0	-0.16	0.0	
0.62	5.0E-04	0.00	160.1	0.24	9	36.9	0.0	36.9	1.5	44	49.9	1.0	-0.11	0.0	
0.88	5.0E-04	0.00	118.0	0.20	9	38.2	0.0	38.2	2.7	42	46.1	1.0	-0.07	0.0	
1.12	5.0E-04	0.00	78.8	0.21	9	33.0	0.0	33.0	5.0	42	38.2	1.0	-0.03	0.0	
1.38	5.0E-04	0.00	65.8	0.22	9	33.6	0.0	33.6	5.0	40	36.0	1.0	-0.02	0.0	
1.62	5.0E-04	0.00	84.0	0.27	9	46.5	0.0	46.5	5.0	42	45.3	1.0	-0.06	0.0	
1.88	5.0E-04	0.00	74.7	0.26	9	44.5	0.0	44.5	5.0	40	44.1	1.0	-0.05	0.0	
2.12	5.0E-04	0.00	55.4	0.26	9	35.3	0.0	35.3	5.0	40	37.4	1.0	-0.02	0.0	
2.38	5.0E-04	0.00	52.9	0.20	9	35.6	0.0	35.6	5.0	40	37.7	1.0	0.00	0.0	
2.62	5.0E-04	0.00	52.1	0.21	9	37.0	0.0	37.0	5.0	38	38.8	1.0	0.00	0.0	
2.88	5.0E-04	0.00	48.6	0.19	9	36.1	0.0	36.1	5.0	38	38.1	1.0	0.01	0.0	
3.12	5.0E-04	0.00	48.5	0.24	9	37.6	0.0	37.6	5.0	38	39.3	1.0	0.00	0.0	
3.38	5.0E-04	0.00	49.2	0.26	9	39.6	0.0	39.6	5.0	38	40.7	1.0	-0.01	0.0	
3.62	5.0E-04	0.00	49.6	0.29	9	41.4	0.0	41.4	5.0	38	42.0	1.0	-0.02	0.0	
3.88	5.0E-04	0.00	42.4	0.30	9	36.7	0.0	36.7	5.0	38	38.5	1.0	-0.01	0.0	
4.12	5.0E-04	0.01	27.4	0.28	7	24.8	0.0	24.8	5.0	36	30.0	1.0	0.03	0.0	
4.38	5.0E-04	0.01	27.0	0.34	7	25.1	0.0	25.1	5.0	36	30.0	1.0	0.02	0.0	
4.62	5.0E-04	0.01	28.9	0.39	7	27.6	0.0	27.6	5.0	36	30.4	1.0	0.00	0.0	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5651
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-03
Location: DOWN SRTEAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 13:38
CPT File: 219CP03.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.85 (ft): 12.6
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	13.0	0.02	0.15	0.53	6	18.0	2.2	2.2	0.00	2.00	5.2	10.4	103.6	0.00
0.38	18.1	0.04	0.22	0.30	7	18.5	6.8	6.8	0.00	2.00	6.0	12.1	UnDef	0.08
0.62	18.1	0.04	0.22	0.30	7	18.5	11.4	11.4	0.00	2.00	6.0	12.0	UnDef	0.08
0.88	17.1	0.04	0.22	0.33	7	18.5	16.1	16.1	0.00	2.00	5.7	11.4	UnDef	0.08
1.12	17.0	0.03	0.18	0.32	7	18.5	20.7	20.7	0.00	2.00	5.7	11.3	UnDef	0.08
1.38	18.0	0.03	0.18	0.23	7	18.5	25.3	25.3	0.00	1.95	6.0	11.6	UnDef	0.08
1.62	19.1	0.03	0.18	0.25	7	18.5	29.9	29.9	0.00	1.79	6.4	11.4	UnDef	0.08
1.88	18.8	0.03	0.17	0.23	7	18.5	34.6	34.6	0.00	1.66	6.3	10.4	UnDef	0.08
2.12	10.0	0.02	0.16	0.08	6	18.0	39.1	39.1	0.00	1.56	4.0	6.3	76.9	0.00
2.38	19.0	0.04	0.21	0.14	7	18.5	43.7	43.7	0.00	1.48	6.3	9.4	UnDef	0.00
2.62	26.1	0.06	0.22	0.17	7	18.5	48.3	48.3	0.00	1.41	8.7	12.2	UnDef	0.08
2.88	28.1	0.06	0.21	0.08	7	18.5	52.9	52.9	0.00	1.35	9.4	12.6	UnDef	0.09
3.12	28.3	0.07	0.23	-0.02	7	18.5	57.6	57.6	0.00	1.29	9.4	12.2	UnDef	0.08
3.38	25.1	0.06	0.26	0.06	7	18.5	62.2	62.2	0.00	1.24	8.4	10.4	UnDef	0.08
3.62	13.9	0.06	0.44	2.64	6	18.0	66.8	66.8	0.00	1.20	5.6	6.7	106.2	0.00

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5651
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-03
Location: DOWN SRTEAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 13:38
CPT File: 219CP03.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.85 (ft): 12.6
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-05	0.00	575.8	0.15	10	26.0	0.0	26.0	0.0	50	63.1	10.0	-0.18	0.0	
0.38	5.0E-04	0.00	264.7	0.22	10	36.2	0.0	36.2	0.0	46	56.8	1.0	-0.14	0.0	
0.62	5.0E-04	0.00	156.9	0.22	9	36.1	0.0	36.1	1.5	44	49.3	1.0	-0.10	0.0	
0.88	5.0E-04	0.00	105.7	0.22	9	34.3	0.0	34.3	3.6	42	42.9	1.0	-0.07	0.0	
1.12	5.0E-04	0.00	81.0	0.18	9	33.9	0.0	33.9	4.9	42	39.0	1.0	-0.02	0.0	
1.38	5.0E-04	0.00	70.0	0.18	9	35.7	0.0	35.7	5.0	40	37.8	1.0	-0.01	0.0	
1.62	5.0E-04	0.00	62.9	0.18	9	34.9	0.0	34.9	5.0	40	37.1	1.0	0.00	0.0	
1.88	5.0E-04	0.00	53.3	0.17	9	31.9	0.0	31.9	5.0	40	34.6	1.0	0.01	0.0	
2.12	5.0E-05	0.00	24.6	0.17	7	16.0	0.0	16.0	5.0	34	30.0	6.0	0.08	0.0	
2.38	5.0E-04	0.00	42.4	0.22	9	28.7	0.0	28.7	5.0	38	31.5	1.0	0.02	0.0	
2.62	5.0E-04	0.00	52.9	0.23	9	37.5	0.0	37.5	5.0	40	39.1	1.0	-0.01	0.0	
2.88	5.0E-04	0.00	52.1	0.22	9	38.6	0.0	38.6	5.0	38	40.0	1.0	0.00	0.0	
3.12	5.0E-04	0.00	48.1	0.24	9	37.3	0.0	37.3	5.0	38	39.0	1.0	0.00	0.0	
3.38	5.0E-04	0.00	39.3	0.26	9	31.8	0.0	31.8	5.0	38	34.4	1.0	0.01	0.0	
3.62	5.0E-05	0.02	19.9	0.47	7	17.1	0.0	17.1	5.0	34	30.0	6.0	0.02	0.0	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5695
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-4
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 14:27
CPT File: 219CP04.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.30 (ft): 7.5
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60 (blows/ft)	Su (kPa)	CRR
0.12	9.8	0.01	0.10	1.76	6	18.0	2.2	2.2	0.00	2.00	3.9	7.9	78.4	0.00
0.38	11.7	0.01	0.10	-0.03	6	18.0	6.8	6.8	0.00	2.00	4.7	9.4	93.1	0.00
0.62	12.0	0.01	0.10	-0.01	6	18.0	11.2	11.2	0.00	2.00	4.8	9.6	95.2	0.00
0.88	12.6	0.04	0.32	0.02	6	18.0	15.8	15.8	0.00	2.00	5.0	10.1	99.7	0.00
1.12	31.0	0.12	0.39	0.03	7	18.5	20.3	20.3	0.00	2.00	10.3	20.7	UnDef	0.10
1.38	59.2	0.26	0.45	0.00	8	19.0	25.0	25.0	0.00	1.96	14.8	29.0	UnDef	0.23
1.62	60.9	0.27	0.44	-0.04	8	19.0	29.8	29.8	0.00	1.79	15.2	27.3	UnDef	0.21
1.88	63.6	0.25	0.39	-0.11	8	19.0	34.5	34.5	0.00	1.67	15.9	26.5	UnDef	0.20
2.12	61.2	0.29	0.47	-0.05	8	19.0	39.2	39.2	0.00	1.56	15.3	23.9	UnDef	0.17

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5695
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-4
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 14:27
CPT File: 219CP04.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.30 (ft): 7.5
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-05	0.02	435.6	0.10	10	19.6	0.0	19.6	0.0	48	55.1	10.0	-0.12	0.0	
0.38	5.0E-05	0.00	172.3	0.10	10	23.4	0.0	23.4	0.0	44	44.4	10.0	-0.04	0.0	
0.62	5.0E-05	0.00	105.8	0.10	9	24.0	0.0	24.0	2.3	42	37.8	10.0	0.00	0.0	
0.88	5.0E-05	0.00	79.2	0.32	9	25.2	0.0	25.2	5.0	42	34.4	10.0	-0.07	0.0	
1.12	5.0E-04	0.00	151.5	0.40	9	62.0	0.0	62.0	3.2	44	56.5	1.0	-0.14	0.0	
1.38	5.0E-03	0.00	235.9	0.45	9	118.5	0.0	118.5	1.5	46	72.1	1.0	-0.19	0.0	
1.62	5.0E-03	0.00	203.7	0.45	9	111.6	0.0	111.6	2.2	46	70.4	1.0	-0.18	0.0	
1.88	5.0E-03	0.00	183.3	0.39	9	108.3	0.0	108.3	2.2	44	69.6	1.0	-0.16	0.0	
2.12	5.0E-03	0.00	154.8	0.47	9	97.6	0.0	97.6	3.8	44	66.6	1.0	-0.16	0.0	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5739
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-239 CPT 99-05
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 11:00
CPT File: 219CP05.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.50 (ft): 8.2
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	11.0	0.02	0.20	0.25	6	18.0	2.2	2.2	0.00	2.00	4.4	8.8	88.1	0.00
0.38	15.5	0.04	0.25	0.24	6	18.0	6.8	6.8	0.00	2.00	6.2	12.4	123.3	0.08
0.62	16.6	0.04	0.24	0.27	7	18.5	11.3	11.3	0.00	2.00	5.5	11.1	UnDef	0.08
0.88	16.4	0.04	0.24	0.26	6	18.0	15.9	15.9	0.00	2.00	6.5	13.1	129.6	0.08
1.12	16.5	0.04	0.25	0.25	6	18.0	20.4	20.4	0.00	2.00	6.6	13.2	130.7	0.08
1.38	16.0	0.04	0.25	0.13	6	18.0	24.9	24.9	0.00	1.96	6.4	12.5	125.7	0.08
1.62	15.2	0.04	0.26	0.06	6	18.0	29.4	29.4	0.00	1.81	6.1	11.0	119.3	0.00
1.88	8.7	0.02	0.21	1.75	1	17.5	33.8	33.8	0.00	1.68	4.4	7.3	67.0	0.00
2.12	8.6	0.02	0.19	2.35	1	17.5	38.2	38.2	0.00	1.58	4.3	6.8	65.4	0.00
2.38	16.5	0.04	0.23	1.14	6	18.0	42.6	42.6	0.00	1.50	6.6	9.9	128.2	0.00
2.62	15.4	0.04	0.25	2.43	6	18.0	47.1	45.9	1.23	1.44	6.2	8.9	119.8	0.00
2.88	11.1	0.04	0.36	3.68	6	18.0	51.6	47.9	3.68	1.41	4.4	6.3	84.8	0.00

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5739
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-239 CPT 99-05
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 11:00
CPT File: 219CP05.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.50 (ft): 8.2
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-05	0.00	489.2	0.20	10	22.1	0.0	22.1	0.0	48	58.5	10.0	-0.19	0.0	
0.38	5.0E-05	0.00	228.4	0.25	10	31.0	0.0	31.0	0.1	46	52.4	10.0	-0.14	0.0	
0.62	5.0E-04	0.00	145.6	0.24	9	33.2	0.0	33.2	2.0	44	47.0	1.0	-0.10	0.0	
0.88	5.0E-05	0.00	102.1	0.25	9	32.7	0.0	32.7	4.1	42	41.8	10.0	-0.07	0.0	
1.12	5.0E-05	0.00	80.2	0.26	9	33.1	0.0	33.1	5.0	42	38.5	10.0	-0.05	0.0	
1.38	5.0E-05	0.00	63.2	0.25	9	31.9	0.0	31.9	5.0	40	34.6	10.0	-0.03	0.0	
1.62	5.0E-05	0.00	50.7	0.27	9	28.0	0.0	28.0	5.0	38	30.8	10.0	-0.02	0.0	
1.88	1.0E-07	0.02	24.8	0.21	7	15.0	0.0	15.0	5.0	UnDef	UnDef	6.0	UnDef	0.0	
2.12	1.0E-07	0.03	21.4	0.20	7	13.8	0.0	13.8	5.0	UnDef	UnDef	6.0	UnDef	0.0	
2.38	5.0E-05	0.01	37.6	0.24	9	25.2	0.0	25.2	5.0	38	30.0	6.0	0.02	0.0	
2.62	5.0E-05	0.02	32.6	0.25	9	22.8	0.0	22.8	5.0	36	30.0	6.0	0.03	0.0	
2.88	5.0E-05	0.03	22.1	0.38	7	16.1	0.0	16.1	5.0	34	30.0	6.0	0.03	0.0	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5783
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-239 CPT 99-06
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 11:39
CPT File: 219CP06.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.85 (ft): 12.6
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	12.0	0.02	0.17	0.74	6	18.0	2.2	2.2	0.00	2.00	4.8	9.6	95.6	0.00
0.38	13.1	0.02	0.18	0.36	6	18.0	6.8	6.8	0.00	2.00	5.2	10.5	104.3	0.00
0.62	15.5	0.03	0.22	0.45	6	18.0	11.2	11.2	0.00	2.00	6.2	12.4	122.8	0.08
0.88	15.7	0.04	0.25	0.38	6	18.0	15.8	15.8	0.00	2.00	6.3	12.6	124.5	0.08
1.12	15.2	0.03	0.22	0.43	6	18.0	20.2	20.2	0.00	2.00	6.1	12.1	119.8	0.08
1.38	14.5	0.03	0.21	0.36	6	18.0	24.8	24.8	0.00	1.97	5.8	11.4	114.4	0.00
1.62	14.9	0.03	0.23	0.33	6	18.0	29.2	29.2	0.00	1.81	5.9	10.8	116.6	0.00
1.88	14.6	0.03	0.22	0.39	6	18.0	33.8	33.8	0.00	1.68	5.8	9.8	113.9	0.00
2.12	15.7	0.03	0.22	0.47	6	18.0	38.2	38.2	0.00	1.58	6.3	9.9	122.6	0.00
2.38	15.9	0.04	0.26	0.26	6	18.0	42.8	42.8	0.00	1.50	6.4	9.5	123.9	0.00
2.62	9.0	0.02	0.24	3.52	6	18.0	47.2	47.2	0.00	1.42	3.6	5.1	68.4	0.00
2.88	22.8	0.05	0.23	1.49	7	18.5	51.8	51.8	0.00	1.36	7.6	10.3	UnDef	0.08
3.12	19.6	0.02	0.11	2.72	7	18.5	56.4	56.4	0.00	1.30	6.5	8.5	UnDef	0.00
3.38	9.5	0.01	0.15	2.67	6	18.0	61.0	61.0	0.00	1.25	3.8	4.8	71.2	0.00
3.62	6.9	0.05	0.73	6.25	1	17.5	65.4	65.4	0.00	1.21	3.4	4.1	49.6	0.09

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5783
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-239 CPT 99-06
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 11:39
CPT File: 219CP06.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.85 (ft): 12.6
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-05	0.01	530.9	0.17	10	23.9	0.0	23.9	0.0	48	60.8	10.0	-0.18	0.0	
0.38	5.0E-05	0.00	193.2	0.18	10	26.2	0.0	26.2	0.2	44	47.7	10.0	-0.10	0.0	
0.62	5.0E-05	0.00	136.4	0.22	9	30.9	0.0	30.9	2.2	44	45.1	10.0	-0.09	0.0	
0.88	5.0E-05	0.00	98.8	0.26	9	31.4	0.0	31.4	4.4	42	40.7	10.0	-0.07	0.0	
1.12	5.0E-05	0.00	73.9	0.23	9	30.4	0.0	30.4	5.0	40	36.1	10.0	-0.04	0.0	
1.38	5.0E-05	0.00	57.8	0.21	9	29.1	0.0	29.1	5.0	40	32.0	10.0	-0.01	0.0	
1.62	5.0E-05	0.00	49.8	0.23	9	27.5	0.0	27.5	5.0	38	30.3	6.0	0.00	0.0	
1.88	5.0E-05	0.00	42.2	0.22	9	25.1	0.0	25.1	5.0	38	30.0	6.0	0.01	0.0	
2.12	5.0E-05	0.00	40.1	0.22	9	25.4	0.0	25.4	5.0	38	30.0	6.0	0.02	0.0	
2.38	5.0E-05	0.00	36.2	0.27	9	24.3	0.0	24.3	5.0	38	30.0	6.0	0.01	0.0	
2.62	5.0E-05	0.04	18.1	0.26	7	13.1	0.0	13.1	5.0	32	30.0	6.0	0.08	0.0	
2.88	5.0E-04	0.01	43.0	0.23	9	31.7	0.0	31.7	5.0	38	34.3	1.0	0.01	0.0	
3.12	5.0E-04	0.01	33.6	0.12	9	26.0	0.0	26.0	5.0	36	30.0	1.0	0.09	0.0	
3.38	5.0E-05	0.03	14.6	0.16	7	12.2	0.0	12.2	5.0	32	30.0	6.0	0.13	0.0	
3.62	1.0E-07	0.10	9.5	0.81	6	8.5	33.9	42.4	42.4	UnDef	UnDef	3.0	UnDef	4.1	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5827
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-239 CPT 99-07
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 12:46
CPT File: 219CP07.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.65 (ft): 8.7
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	9.6	0.04	0.38	1.45	6	18.0	2.2	2.2	0.00	2.00	3.8	7.6	76.2	0.00
0.38	10.2	0.03	0.26	0.37	6	18.0	6.8	6.8	0.00	2.00	4.1	8.1	80.7	0.00
0.62	11.5	0.04	0.36	0.26	6	18.0	11.2	11.2	0.00	2.00	4.6	9.2	91.4	0.00
0.88	8.3	0.05	0.58	1.07	6	18.0	15.8	15.8	0.00	2.00	3.3	6.6	64.8	0.00
1.12	4.5	0.01	0.31	1.18	1	17.5	20.2	20.2	0.00	2.00	2.2	4.5	34.2	0.00
1.38	4.4	0.02	0.50	2.69	1	17.5	24.6	24.6	0.00	1.97	2.2	4.4	33.5	0.00
1.62	3.6	0.02	0.66	2.63	1	17.5	28.9	28.9	0.00	1.82	1.8	3.3	26.8	0.08
1.88	9.5	0.04	0.40	1.28	6	18.0	33.4	33.4	0.00	1.69	3.8	6.4	73.2	0.00
2.12	27.1	0.10	0.35	-0.41	7	18.5	37.9	37.9	0.00	1.59	9.0	14.4	UnDef	0.09
2.38	28.4	0.09	0.32	0.46	7	18.5	42.6	42.6	0.00	1.50	9.5	14.2	UnDef	0.09

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5827
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-239 CPT 99-07
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 12:46
CPT File: 219CP07.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.65 (ft): 8.7
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-05	0.01	423.5	0.38	10	19.1	0.0	19.1	0.0	48	54.3	10.0	-0.23	0.0	
0.38	5.0E-05	0.00	149.4	0.26	9	20.3	0.0	20.3	2.0	44	40.3	10.0	-0.11	0.0	
0.62	5.0E-05	0.00	101.6	0.37	9	23.1	0.0	23.1	5.0	42	36.7	10.0	-0.10	0.0	
0.88	5.0E-05	0.01	51.4	0.59	9	16.5	4.8	21.4	13.5	38	30.0	10.0	-0.08	1.1	
1.12	1.0E-07	0.03	21.2	0.33	7	9.0	0.0	9.0	5.0	UnDef	UnDef	6.0	UnDef	0.0	
1.38	1.0E-07	0.06	17.1	0.53	7	8.9	13.4	22.3	27.5	UnDef	UnDef	6.0	UnDef	2.6	
1.62	1.0E-07	0.08	11.6	0.72	6	6.8	27.0	33.8	37.2	UnDef	UnDef	3.0	UnDef	3.3	
1.88	5.0E-05	0.01	27.4	0.42	7	16.4	0.0	16.4	5.0	36	30.0	6.0	0.00	0.0	
2.12	5.0E-04	0.00	70.6	0.36	9	44.1	0.0	44.1	5.0	40	43.8	1.0	-0.07	0.0	
2.38	5.0E-04	0.00	65.7	0.33	9	43.5	0.0	43.5	5.0	40	43.4	1.0	-0.06	0.0	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5871
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-8
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 15:08
CPT File: 219CP08.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 0.60 (ft): 2.0
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	3.1	0.01	0.49	0.58	1	17.5	2.2	2.2	0.00	2.00	1.5	3.1	24.2	0.00
0.38	3.0	0.01	0.43	0.24	1	17.5	6.6	6.6	0.00	2.00	1.5	3.0	23.8	0.00
0.62	1.1	0.01	0.93	0.96	1	17.5	10.9	10.7	0.25	2.00	0.5	1.1	7.7	0.00
0.88	1.2	0.01	0.85	1.93	1	17.5	15.3	12.6	2.70	2.00	0.6	1.2	8.1	0.00
1.12	1.8	0.01	0.79	2.65	1	17.5	19.7	14.5	5.15	2.00	0.9	1.8	12.6	0.00

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5871
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-8
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 15:08
CPT File: 219CP08.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 0.60 (ft): 2.0
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60 (N1
0.12	1.0E-07	0.02	138.5	0.50	9	6.1	0.0	6.1	4.6	UnDef	UnDef	10.0	UnDef	0.0
0.38	1.0E-07	0.01	45.2	0.44	9	6.1	0.0	6.1	5.0	UnDef	UnDef	6.0	UnDef	0.0
0.62	1.0E-07	0.10	9.0	1.04	6	2.2	8.6	10.8	46.1	UnDef	UnDef	3.0	UnDef	1.1
0.88	1.0E-07	0.16	8.1	0.98	6	2.3	9.4	11.7	48.1	UnDef	UnDef	3.0	UnDef	1.2
1.12	1.0E-07	0.13	10.9	0.89	6	3.6	14.2	17.8	40.4	UnDef	UnDef	3.0	UnDef	1.8

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5937
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-09
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 15:48
CPT File: 219CP09.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.80 (ft): 9.2
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	12.0	0.03	0.23	0.44	6	18.0	2.2	2.2	0.00	2.00	4.8	9.6	95.8	0.00
0.38	12.1	0.02	0.18	0.15	6	18.0	6.8	6.8	0.00	2.00	4.8	9.7	96.3	0.00
0.62	13.3	0.02	0.15	0.21	6	18.0	11.2	11.2	0.00	2.00	5.3	10.7	105.6	0.00
0.88	9.2	0.03	0.28	0.31	6	18.0	15.8	15.8	0.00	2.00	3.7	7.4	72.4	0.00
1.12	20.5	0.04	0.20	0.39	7	18.5	20.3	20.3	0.00	2.00	6.8	13.6	UnDef	0.09
1.38	18.7	0.04	0.21	0.32	7	18.5	24.9	24.9	0.00	1.96	6.2	12.2	UnDef	0.08
1.62	19.1	0.04	0.22	0.32	7	18.5	29.6	29.6	0.00	1.80	6.4	11.5	UnDef	0.08
1.88	20.2	0.04	0.20	0.28	7	18.5	34.2	34.2	0.00	1.67	6.7	11.3	UnDef	0.08
2.12	20.3	0.04	0.19	0.31	7	18.5	38.8	38.8	0.00	1.57	6.8	10.6	UnDef	0.08
2.38	17.1	0.03	0.20	0.30	7	18.5	43.4	43.4	0.00	1.48	5.7	8.4	UnDef	0.00
2.62	37.3	0.06	0.16	1.68	8	19.0	48.1	48.1	0.00	1.41	9.3	13.2	UnDef	0.09

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5937
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-09
Location: DOWN STREAM TEST
Cone: 10 TON A 057
CPT Date: 99/02/11
CPT Time: 15:48
CPT File: 219CP09.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.80 (ft): 9.2
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N
0.12	5.0E-05	0.00	532.0	0.23	10	24.0	0.0	24.0	0.0	48	60.9	10.0	-0.21	0.0	
0.38	5.0E-05	0.00	178.3	0.18	10	24.2	0.0	24.2	0.5	44	45.4	10.0	-0.09	0.0	
0.62	5.0E-05	0.00	117.4	0.15	9	26.6	0.0	26.6	2.2	42	40.8	10.0	-0.04	0.0	
0.88	5.0E-05	0.00	57.5	0.29	9	18.4	0.0	18.4	5.0	40	30.0	10.0	-0.03	0.0	
1.12	5.0E-04	0.00	99.7	0.20	9	40.9	0.0	40.9	3.7	42	44.6	1.0	-0.05	0.0	
1.38	5.0E-04	0.00	73.9	0.22	9	37.4	0.0	37.4	5.0	40	39.1	1.0	-0.03	0.0	
1.62	5.0E-04	0.00	63.7	0.22	9	35.2	0.0	35.2	5.0	40	37.3	1.0	-0.02	0.0	
1.88	5.0E-04	0.00	58.1	0.20	9	34.5	0.0	34.5	5.0	40	36.8	1.0	-0.01	0.0	
2.12	5.0E-04	0.00	51.2	0.19	9	32.5	0.0	32.5	5.0	38	35.1	1.0	0.01	0.0	
2.38	5.0E-04	0.00	38.3	0.20	9	25.9	0.0	25.9	5.0	38	30.0	1.0	0.03	0.0	
2.62	5.0E-03	0.00	76.6	0.16	9	53.8	0.0	53.8	5.0	40	49.5	1.0	-0.01	0.0	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5975
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-10
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 07:52
CPT File: 219CP10.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.80 (ft): 9.2
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	16.2	0.06	0.37	0.44	6	18.0	2.2	2.2	0.00	2.00	6.5	13.0	129.6	0.08
0.38	22.2	0.08	0.38	0.45	7	18.5	6.8	6.8	0.00	2.00	7.4	14.8	UnDef	0.09
0.62	22.3	0.09	0.40	0.41	7	18.5	11.4	11.4	0.00	2.00	7.4	14.9	UnDef	0.09
0.88	17.0	0.08	0.45	0.40	6	18.0	16.0	16.0	0.00	2.00	6.8	13.6	134.5	0.08
1.12	22.3	0.06	0.27	0.53	7	18.5	20.6	20.6	0.00	2.00	7.4	14.9	UnDef	0.09
1.38	23.5	0.09	0.37	0.36	7	18.5	25.2	25.2	0.00	1.95	7.8	15.3	UnDef	0.09
1.62	22.2	0.08	0.36	0.32	7	18.5	29.8	29.8	0.00	1.79	7.4	13.2	UnDef	0.09
1.88	16.5	0.07	0.40	0.31	6	18.0	34.4	34.4	0.00	1.67	6.6	11.0	129.5	0.00
2.12	11.8	0.02	0.15	0.66	6	18.0	38.9	38.9	0.00	1.57	4.7	7.4	91.5	0.00
2.38	6.3	0.01	0.16	3.26	1	17.5	43.3	43.3	0.00	1.49	3.1	4.7	46.6	0.00
2.62	4.9	0.01	0.24	4.30	1	17.5	47.7	47.7	0.00	1.42	2.5	3.5	35.5	0.00
2.88	4.7	0.02	0.34	4.70	1	17.5	52.1	51.3	0.74	1.37	2.3	3.2	33.3	0.08
3.12	4.1	0.02	0.54	4.86	1	17.5	56.4	53.2	3.19	1.34	2.0	2.7	28.1	0.00
3.38	5.3	0.03	0.56	5.15	1	17.5	60.8	55.2	5.64	1.32	2.7	3.5	37.7	0.08
3.62	5.1	0.03	0.59	5.90	1	17.5	65.2	57.1	8.09	1.30	2.5	3.3	35.4	0.08
3.88	5.9	0.03	0.50	6.10	1	17.5	69.6	59.0	10.55	1.27	3.0	3.8	42.0	0.09
4.12	6.6	0.04	0.55	5.99	1	17.5	73.9	60.9	13.00	1.25	3.3	4.1	46.5	0.09
4.38	5.7	0.05	0.84	6.64	1	17.5	78.3	62.9	15.45	1.23	2.9	3.5	39.7	0.08
4.62	8.0	0.04	0.50	6.74	6	18.0	82.8	64.8	17.90	1.22	3.2	3.9	57.2	0.09
4.88	12.0	0.07	0.57	5.88	6	18.0	87.2	66.9	20.36	1.20	4.8	5.8	89.2	0.09
5.12	10.7	0.08	0.73	6.49	6	18.0	91.8	68.9	22.81	1.18	4.3	5.1	78.6	0.10
5.38	11.0	0.11	0.97	6.34	6	18.0	96.2	71.0	25.26	1.16	4.4	5.1	80.1	0.11
5.62	10.5	0.09	0.86	6.91	6	18.0	100.8	73.0	27.71	1.15	4.2	4.8	75.8	0.10
5.88	26.1	0.14	0.55	5.54	7	18.5	105.3	75.1	30.17	1.13	8.7	9.8	UnDef	0.09
6.12	16.4	0.09	0.54	7.24	6	18.0	109.9	77.3	32.62	1.11	6.6	7.3	122.4	0.09
6.38	13.7	0.08	0.61	5.19	6	18.0	114.4	79.3	35.07	1.10	5.5	6.0	100.8	0.09
6.62	5.8	0.04	0.75	12.30	1	17.5	118.8	81.3	37.52	1.09	2.9	3.2	37.2	0.08
6.88	7.0	0.04	0.63	12.11	1	17.5	123.2	83.2	39.98	1.07	3.5	3.7	45.8	0.09
7.12	6.5	0.05	0.77	12.12	1	17.5	127.6	85.1	42.43	1.06	3.2	3.4	41.6	0.08
7.38	9.1	0.05	0.57	10.74	6	18.0	132.0	87.1	44.88	1.05	3.6	3.8	62.4	0.09
7.62	7.1	0.08	1.10	13.60	5	18.0	136.5	89.2	47.33	1.04	3.5	3.7	45.8	0.08
7.88	29.4	0.43	1.45	5.58	6	18.0	141.0	91.2	49.79	1.02	11.8	12.1	224.3	0.12
8.12	13.8	0.34	2.50	5.70	5	18.0	145.5	93.3	52.24	1.01	6.9	7.0	98.4	0.11
8.38	11.8	0.29	2.48	4.66	5	18.0	150.0	95.3	54.69	1.00	5.9	5.9	82.1	0.10
8.62	8.1	0.23	2.86	5.28	4	18.0	154.5	97.4	57.14	0.99	5.4	5.4	52.5	0.00
8.88	6.8	0.15	2.25	9.08	4	18.0	159.0	99.4	59.60	0.98	4.5	4.4	41.4	0.00
9.12	13.7	0.42	3.06	8.16	5	18.0	163.5	101.5	62.05	0.97	6.9	6.7	96.8	0.11
9.38	32.5	1.17	3.59	-2.18	5	18.0	168.0	103.5	64.50	0.96	16.2	15.6	246.4	0.46
9.62	45.3	1.17	2.58	-3.76	6	18.0	172.5	105.5	66.95	0.95	18.1	17.2	348.3	0.29

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60 (blows/ft)	Su (kPa)	CRR
9.88	43.4	1.02	2.36	-3.88	6	18.0	177.0	107.6	69.41	0.94	17.3	16.4	332.8	0.25

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1142-5975
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-10
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 07:52
CPT File: 219CP10.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.80 (ft): 9.2
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-05	0.00	720.3	0.37	10	32.5	0.0	32.5	0.0	50	69.5	10.0	-0.28	0.0	
0.38	5.0E-04	0.00	325.4	0.38	10	44.5	0.0	44.5	0.0	48	62.7	1.0	-0.21	0.0	
0.62	5.0E-04	0.00	194.3	0.40	9	44.7	0.0	44.7	2.1	44	55.4	1.0	-0.17	0.0	
0.88	5.0E-05	0.00	105.1	0.45	9	33.9	0.0	33.9	5.0	42	42.7	10.0	-0.12	0.0	
1.12	5.0E-04	0.00	107.5	0.27	9	44.6	0.0	44.6	4.0	42	47.0	1.0	-0.08	0.0	
1.38	5.0E-04	0.00	92.3	0.38	9	46.8	0.0	46.8	5.0	42	45.5	1.0	-0.10	0.0	
1.62	5.0E-04	0.00	73.3	0.37	9	40.6	0.0	40.6	5.0	40	41.4	1.0	-0.07	0.0	
1.88	5.0E-05	0.00	47.1	0.41	9	28.2	0.0	28.2	5.0	38	31.0	6.0	-0.04	0.0	
2.12	5.0E-05	0.01	29.4	0.16	9	19.0	0.0	19.0	5.0	36	30.0	6.0	0.07	0.0	
2.38	1.0E-07	0.05	13.5	0.17	7	9.5	0.0	9.5	5.0	UnDef	UnDef	6.0	UnDef	0.0	
2.62	1.0E-07	0.09	9.3	0.27	7	7.1	0.0	7.1	5.0	UnDef	UnDef	3.0	UnDef	0.0	
2.88	1.0E-07	0.11	8.1	0.38	6	6.5	26.1	32.7	39.7	UnDef	UnDef	3.0	UnDef	3.2	
3.12	1.0E-07	0.13	6.6	0.63	6	5.6	22.4	28.0	48.2	UnDef	UnDef	3.0	UnDef	2.7	
3.38	1.0E-07	0.10	8.5	0.64	6	7.2	28.7	35.8	42.5	UnDef	UnDef	3.0	UnDef	3.5	
3.62	1.0E-07	0.11	7.8	0.68	6	6.7	26.9	33.6	45.2	UnDef	UnDef	3.0	UnDef	3.3	
3.88	1.0E-07	0.09	8.9	0.57	6	7.7	31.0	38.7	40.6	UnDef	UnDef	3.0	UnDef	3.8	
4.12	1.0E-07	0.08	9.5	0.62	6	8.4	33.6	42.0	39.8	UnDef	UnDef	3.0	UnDef	4.1	
4.38	1.0E-07	0.10	7.9	0.97	6	7.2	29.0	36.2	48.4	UnDef	UnDef	3.0	UnDef	3.5	
4.62	5.0E-05	0.07	11.0	0.56	6	9.9	39.6	49.6	36.0	30	30.0	3.0	0.07	3.9	
4.88	5.0E-05	0.03	16.7	0.61	7	14.7	26.4	41.1	29.0	32	30.0	6.0	0.02	3.9	
5.12	5.0E-05	0.04	14.3	0.79	7	12.9	44.6	57.6	34.0	32	30.0	6.0	0.02	4.8	
5.38	5.0E-05	0.04	14.1	1.06	6	13.0	52.1	65.2	37.0	32	30.0	6.0	0.00	5.1	
5.62	5.0E-05	0.04	13.0	0.95	6	12.3	49.1	61.4	37.5	32	30.0	6.0	0.01	4.8	
5.88	5.0E-04	0.01	33.4	0.57	7	30.1	16.6	46.7	18.3	36	32.9	1.0	-0.04	2.8	
6.12	5.0E-05	0.03	19.8	0.58	7	18.7	23.2	41.9	25.8	34	30.0	6.0	0.01	3.9	
6.38	5.0E-05	0.01	15.9	0.67	7	15.4	33.2	48.6	30.6	32	30.0	6.0	0.02	4.5	
6.62	1.0E-07	0.18	5.7	0.95	6	6.5	25.9	32.4	56.2	UnDef	UnDef	1.5	UnDef	3.2	
6.88	1.0E-07	0.14	6.9	0.77	6	7.6	30.5	38.1	49.3	UnDef	UnDef	3.0	UnDef	3.7	
7.12	1.0E-07	0.15	6.1	0.96	6	7.0	28.1	35.1	54.6	UnDef	UnDef	1.5	UnDef	3.4	
7.38	5.0E-05	0.08	9.0	0.67	6	9.8	39.1	48.9	41.8	30	30.0	3.0	0.08	3.8	
7.62	5.0E-06	0.15	6.4	1.36	4	7.5	30.0	37.5	57.7	UnDef	UnDef	3.0	UnDef	3.7	
7.88	5.0E-05	0.00	30.7	1.53	7	30.8	47.0	77.8	27.6	36	33.6	6.0	-0.11	7.3	
8.12	5.0E-06	0.00	13.2	2.80	6	14.2	57.0	71.2	50.8	UnDef	UnDef	6.0	UnDef	7.0	
8.38	5.0E-06	-0.01	10.8	2.85	4	12.0	48.2	60.2	55.7	UnDef	UnDef	3.0	UnDef	5.9	
8.62	5.0E-07	-0.01	6.7	3.54	1	8.2	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
8.88	5.0E-07	0.06	5.2	2.94	1	6.8	UnDef	UnDef	100.0	UnDef	UnDef	1.5	UnDef	UnDef	
9.12	5.0E-06	0.01	11.9	3.47	4	13.6	54.6	68.2	56.5	UnDef	UnDef	3.0	UnDef	6.7	
9.38	5.0E-06	-0.03	29.8	3.79	6	31.9	127.7	159.7	39.8	UnDef	UnDef	6.0	UnDef	15.6	
9.62	5.0E-05	-0.02	41.2	2.68	6	44.1	86.7	130.8	29.8	38	43.8	6.0	-0.21	12.2	

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
9.88	5.0E-05	-0.03	38.7	2.46	7	41.8	80.8	122.6	29.7	38	42.3	6.0	-0.19	11.5	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0030
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-11
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 09:19
CPT File: 219CP11.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 1.20 (ft): 3.9
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	75.7	0.15	0.20	0.76	8	19.0	2.4	2.4	0.00	2.00	18.9	37.9	UnDef	0.40
0.38	142.3	0.56	0.39	-1.17	9	19.5	7.2	7.2	0.00	2.00	28.5	56.9	UnDef	0.00
0.62	152.0	0.63	0.41	-1.56	9	19.5	12.1	12.1	0.00	2.00	30.4	60.8	UnDef	0.00
0.88	158.0	0.77	0.48	-2.23	9	19.5	16.9	16.9	0.00	2.00	31.6	63.2	UnDef	0.00
1.12	145.8	0.59	0.40	-3.70	9	19.5	21.8	21.8	0.00	2.00	29.2	58.3	UnDef	0.00
1.38	126.6	0.54	0.43	-3.78	9	19.5	26.7	25.0	1.72	1.96	25.3	49.6	UnDef	0.00
1.62	121.4	0.52	0.43	-5.48	9	19.5	31.6	27.4	4.17	1.87	24.3	45.4	UnDef	0.00
1.88	113.1	0.38	0.34	-6.65	9	19.5	36.4	29.8	6.62	1.79	22.6	40.6	UnDef	0.00
2.12	100.7	0.31	0.31	-6.00	9	19.5	41.3	32.2	9.07	1.72	20.1	34.7	UnDef	0.00
2.38	104.0	0.43	0.41	-7.09	9	19.5	46.2	34.7	11.53	1.66	20.8	34.6	UnDef	0.00
2.62	90.4	0.36	0.39	-7.24	9	19.5	51.1	37.1	13.98	1.61	18.1	29.1	UnDef	0.38
2.88	57.7	0.27	0.46	-7.01	8	19.0	55.9	39.4	16.43	1.56	14.4	22.5	UnDef	0.15
3.12	20.0	0.10	0.48	-4.20	7	18.5	60.6	41.7	18.88	1.52	6.7	10.1	UnDef	0.08
3.38	17.8	0.09	0.49	5.06	6	18.0	65.1	43.8	21.34	1.48	7.1	10.5	137.4	0.08
3.62	7.4	0.01	0.19	8.71	1	17.5	69.6	45.8	23.79	1.45	3.7	5.3	53.6	0.00
3.88	4.5	0.01	0.22	11.34	1	17.5	73.9	47.7	26.24	1.42	2.2	3.2	29.7	0.00
4.12	14.1	0.04	0.28	7.58	6	18.0	78.4	49.7	28.69	1.39	5.6	7.8	106.2	0.00
4.38	23.9	0.06	0.26	4.88	7	18.5	82.9	51.8	31.15	1.36	8.0	10.8	UnDef	0.08
4.62	11.7	0.07	0.58	7.55	6	18.0	87.5	53.9	33.60	1.33	4.7	6.2	86.7	0.08
4.88	13.8	0.03	0.19	7.22	6	18.0	92.0	55.9	36.05	1.31	5.5	7.2	103.3	0.00
5.12	17.1	0.04	0.26	8.21	7	18.5	96.6	58.1	38.50	1.28	5.7	7.3	UnDef	0.00
5.38	38.3	0.07	0.18	6.20	8	19.0	101.2	60.3	40.96	1.26	9.6	12.1	UnDef	0.09
5.62	25.5	0.08	0.31	9.31	7	18.5	105.9	62.5	43.41	1.24	8.5	10.5	UnDef	0.08
5.88	27.4	0.32	1.15	10.04	7	18.5	110.6	64.7	45.86	1.22	9.1	11.1	UnDef	0.10

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0030
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-11
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 09:19
CPT File: 219CP11.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 1.20 (ft): 3.9
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-03	0.00	1000.0	0.20	10	151.5	0.0	151.5	0.0	50	95.0	1.0	-0.25	0.0	
0.38	5.0E-02	0.00	1000.0	0.39	10	284.6	0.0	284.6	0.0	50	95.0	1.0	-0.31	0.0	
0.62	5.0E-02	0.00	1000.0	0.41	10	304.0	0.0	304.0	0.0	50	95.0	1.0	-0.31	0.0	
0.88	5.0E-02	0.00	932.0	0.49	10	316.0	0.0	316.0	0.0	50	95.0	1.0	-0.32	0.0	
1.12	5.0E-02	0.00	667.6	0.41	10	291.7	0.0	291.7	0.0	50	95.0	1.0	-0.28	0.0	
1.38	5.0E-02	0.00	505.9	0.43	10	253.2	0.0	253.2	0.0	48	93.9	1.0	-0.26	0.0	
1.62	5.0E-02	0.00	442.1	0.43	10	232.0	0.0	232.0	0.0	48	91.4	1.0	-0.25	0.0	
1.88	5.0E-02	-0.01	378.2	0.34	10	207.2	0.0	207.2	0.0	48	88.2	1.0	-0.21	0.0	
2.12	5.0E-02	-0.01	311.2	0.31	10	177.4	0.0	177.4	0.0	46	83.7	1.0	-0.19	0.0	
2.38	5.0E-02	-0.01	298.6	0.41	10	176.6	0.0	176.6	0.4	46	83.6	1.0	-0.21	0.0	
2.62	5.0E-02	-0.01	242.3	0.40	9	148.4	0.0	148.4	1.0	46	78.6	1.0	-0.19	0.0	
2.88	5.0E-03	-0.01	144.9	0.47	9	91.9	0.0	91.9	4.1	44	64.9	1.0	-0.16	0.0	
3.12	5.0E-04	-0.03	46.4	0.50	9	30.9	0.0	30.9	5.0	38	33.6	1.0	-0.06	0.0	
3.38	5.0E-05	0.02	39.2	0.51	9	26.9	10.7	37.6	15.6	38	30.0	6.0	-0.04	2.3	
3.62	1.0E-07	0.09	14.6	0.21	7	10.9	0.0	10.9	5.0	UnDef	UnDef	6.0	UnDef	0.0	
3.88	1.0E-07	0.23	7.8	0.27	1	6.5	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
4.12	5.0E-05	0.03	26.7	0.30	7	19.9	0.0	19.9	5.0	36	30.0	6.0	0.03	0.0	
4.38	5.0E-04	0.01	44.5	0.27	9	33.2	0.0	33.2	5.0	38	35.7	1.0	-0.01	0.0	
4.62	5.0E-05	0.04	20.1	0.63	7	16.0	20.7	36.7	26.2	34	30.0	6.0	0.00	3.4	
4.88	5.0E-05	0.03	23.1	0.20	7	18.5	0.0	18.5	5.0	34	30.0	6.0	0.08	0.0	
5.12	5.0E-04	0.03	27.8	0.27	7	22.4	0.0	22.4	5.0	36	30.0	1.0	0.04	0.0	
5.38	5.0E-03	0.01	61.8	0.18	9	49.3	0.0	49.3	5.0	40	47.0	1.0	0.00	0.0	
5.62	5.0E-04	0.02	39.1	0.32	9	32.2	0.0	32.2	5.0	38	34.8	1.0	-0.01	0.0	
5.88	5.0E-04	0.02	40.7	1.20	7	34.1	26.5	60.7	21.4	38	36.5	1.0	-0.12	4.2	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0080
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT-12
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 10:28
CPT File: 219CP12.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 1.30 (ft): 4.3
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	11.9	0.05	0.39	0.19	6	18.0	2.2	2.2	0.00	2.00	4.8	9.5	94.9	0.00
0.38	12.7	0.06	0.47	0.10	6	18.0	6.8	6.8	0.00	2.00	5.1	10.1	100.8	0.00
0.62	12.8	0.04	0.33	0.00	6	18.0	11.2	11.2	0.00	2.00	5.1	10.2	101.1	0.00
0.88	15.2	0.06	0.41	-0.47	6	18.0	15.8	15.8	0.00	2.00	6.1	12.1	120.1	0.08
1.12	14.7	0.02	0.16	-0.17	6	18.0	20.2	20.2	0.00	2.00	5.9	11.8	116.1	0.00
1.38	11.9	0.02	0.17	1.02	6	18.0	24.8	24.0	0.74	2.00	4.8	9.5	93.2	0.00
1.62	7.3	0.02	0.30	1.62	1	17.5	29.2	26.0	3.19	1.92	3.7	7.1	56.4	0.00
1.88	2.9	0.02	0.76	2.36	1	17.5	33.6	27.9	5.64	1.85	1.5	2.7	20.6	0.00
2.12	3.3	0.03	0.80	2.76	1	17.5	37.9	29.8	8.09	1.79	1.6	2.9	23.1	0.00
2.38	3.6	0.03	0.72	3.14	1	17.5	42.3	31.8	10.55	1.74	1.8	3.1	25.4	0.08
2.62	4.9	0.03	0.53	3.99	1	17.5	46.7	33.7	13.00	1.69	2.5	4.2	35.9	0.08
2.88	10.2	0.03	0.28	3.32	6	18.0	51.1	35.7	15.45	1.64	4.1	6.7	77.1	0.00
3.12	13.1	0.04	0.31	1.59	6	18.0	55.6	37.7	17.90	1.59	5.2	8.3	100.0	0.00
3.38	19.9	0.08	0.38	-0.33	7	18.5	60.2	39.8	20.36	1.55	6.6	10.3	UnDef	0.08
3.62	20.7	0.12	0.59	1.36	7	18.5	64.8	42.0	22.81	1.51	6.9	10.4	UnDef	0.09
3.88	12.1	0.06	0.49	3.07	6	18.0	69.4	44.1	25.26	1.47	4.9	7.2	91.5	0.08
4.12	13.1	0.05	0.41	4.04	6	18.0	73.9	46.2	27.71	1.44	5.2	7.6	99.0	0.00
4.38	8.5	0.03	0.33	3.90	1	17.5	78.3	48.1	30.17	1.41	4.2	6.0	61.5	0.00
4.62	10.5	0.04	0.36	5.44	6	18.0	82.8	50.1	32.62	1.38	4.2	5.8	77.7	0.00
4.88	14.9	0.04	0.30	6.68	6	18.0	87.2	52.2	35.07	1.35	6.0	8.1	112.0	0.00
5.12	21.1	0.08	0.39	6.58	7	18.5	91.8	54.3	37.52	1.33	7.0	9.4	UnDef	0.00
5.38	24.6	0.14	0.58	6.28	7	18.5	96.4	56.5	39.98	1.30	8.2	10.7	UnDef	0.09
5.62	27.5	0.10	0.36	6.82	7	18.5	101.1	58.6	42.43	1.28	9.2	11.7	UnDef	0.08
5.88	13.8	0.10	0.72	8.05	6	18.0	105.6	60.7	44.88	1.26	5.5	6.9	102.1	0.09
6.12	23.9	0.08	0.34	7.01	7	18.5	110.2	62.9	47.33	1.23	8.0	9.8	UnDef	0.08
6.38	24.2	0.08	0.32	6.61	7	18.5	114.8	65.0	49.79	1.21	8.1	9.8	UnDef	0.00
6.62	9.8	0.04	0.41	10.13	6	18.0	119.4	67.1	52.24	1.19	3.9	4.7	68.8	0.00
6.88	30.4	0.17	0.57	8.91	7	18.5	123.9	69.2	54.69	1.18	10.1	11.9	UnDef	0.09
7.12	50.3	0.92	1.82	7.46	7	18.5	128.6	71.4	57.14	1.16	16.8	19.4	UnDef	0.16
7.38	42.9	1.01	2.35	3.04	6	18.0	133.1	73.5	59.60	1.14	17.1	19.6	332.3	0.18
7.62	13.7	0.37	2.74	2.55	5	18.0	137.6	75.6	62.05	1.13	6.8	7.7	98.3	0.13
7.88	26.2	0.30	1.16	1.36	6	18.0	142.1	77.6	64.50	1.11	10.5	11.6	198.1	0.10
8.12	76.4	0.59	0.77	6.61	8	19.0	146.8	79.8	66.95	1.10	19.1	20.9	UnDef	0.17

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0080
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT-12
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 10:28
CPT File: 219CP12.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 1.30 (ft): 4.3
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-05	0.00	527.2	0.39	10	23.8	0.0	23.8	0.0	48	60.6	10.0	-0.25	0.0	
0.38	5.0E-05	0.00	186.8	0.48	9	25.3	0.0	25.3	2.8	44	46.7	10.0	-0.18	0.0	
0.62	5.0E-05	0.00	112.3	0.33	9	25.5	0.0	25.5	4.4	42	39.6	10.0	-0.10	0.0	
0.88	5.0E-05	0.00	95.3	0.41	9	30.3	0.0	30.3	5.0	42	39.7	10.0	-0.11	0.0	
1.12	5.0E-05	0.00	71.6	0.17	9	29.4	0.0	29.4	5.0	40	35.2	10.0	-0.01	0.0	
1.38	5.0E-05	0.01	48.5	0.17	9	23.8	0.0	23.8	5.0	38	30.0	6.0	0.02	0.0	
1.62	1.0E-07	0.02	27.1	0.31	7	14.4	0.0	14.4	5.0	UnDef	UnDef	6.0	UnDef	0.0	
1.88	1.0E-07	0.07	9.2	0.86	6	5.5	22.0	27.5	43.6	UnDef	UnDef	3.0	UnDef	2.7	
2.12	1.0E-07	0.07	9.7	0.90	6	6.0	23.9	29.9	43.1	UnDef	UnDef	3.0	UnDef	2.9	
2.38	1.0E-07	0.06	10.0	0.82	6	6.4	25.5	31.9	41.4	UnDef	UnDef	3.0	UnDef	3.1	
2.62	1.0E-07	0.06	13.3	0.58	7	8.5	24.2	32.7	32.7	UnDef	UnDef	6.0	UnDef	3.6	
2.88	5.0E-05	0.02	27.0	0.29	7	17.0	0.0	17.0	5.0	36	30.0	6.0	0.03	0.0	
3.12	5.0E-05	0.00	33.1	0.32	9	21.3	0.0	21.3	5.0	36	30.0	6.0	0.01	0.0	
3.38	5.0E-04	-0.01	48.5	0.39	9	31.5	0.0	31.5	5.0	38	34.2	1.0	-0.04	0.0	
3.62	5.0E-04	0.00	47.8	0.61	9	32.0	10.7	42.7	14.4	38	34.6	1.0	-0.08	1.9	
3.88	5.0E-05	0.00	25.9	0.52	7	18.3	13.8	32.0	21.1	36	30.0	6.0	-0.01	2.6	
4.12	5.0E-05	0.01	26.8	0.44	7	19.3	0.0	19.3	5.0	36	30.0	6.0	0.00	0.0	
4.38	1.0E-07	0.01	16.0	0.36	7	12.2	0.0	12.2	5.0	UnDef	UnDef	6.0	UnDef	0.0	
4.62	5.0E-05	0.02	19.4	0.39	7	14.9	0.0	14.9	5.0	34	30.0	6.0	0.04	0.0	
4.88	5.0E-05	0.02	26.8	0.31	7	20.6	0.0	20.6	5.0	36	30.0	6.0	0.03	0.0	
5.12	5.0E-04	0.01	37.2	0.41	9	28.7	0.0	28.7	5.0	38	31.5	1.0	-0.02	0.0	
5.38	5.0E-04	0.01	41.9	0.60	7	32.8	13.3	46.1	15.8	38	35.3	1.0	-0.06	2.4	
5.62	5.0E-04	0.01	45.1	0.38	9	35.9	0.0	35.9	5.0	38	37.9	1.0	-0.03	0.0	
5.88	5.0E-05	0.03	21.0	0.78	7	17.7	25.8	43.6	27.2	34	30.0	6.0	-0.02	4.1	
6.12	5.0E-04	0.01	36.2	0.36	9	30.1	0.0	30.1	5.0	38	32.9	1.0	-0.01	0.0	
6.38	5.0E-04	0.01	35.4	0.34	9	30.0	0.0	30.0	5.0	38	32.7	1.0	0.00	0.0	
6.62	5.0E-05	0.05	12.8	0.47	7	12.0	0.0	12.0	5.0	32	30.0	6.0	0.07	0.0	
6.88	5.0E-04	0.01	42.1	0.59	7	36.5	14.5	51.0	15.7	38	38.4	1.0	-0.06	2.6	
7.12	5.0E-04	0.00	68.6	1.87	7	59.5	37.2	96.7	19.4	40	52.4	1.0	-0.21	6.2	
7.38	5.0E-05	-0.01	56.5	2.43	7	50.0	54.1	104.1	24.5	40	47.4	10.0	-0.23	9.4	
7.62	5.0E-06	-0.03	16.3	3.04	6	15.7	62.9	78.6	47.7	UnDef	UnDef	6.0	UnDef	7.7	
7.88	5.0E-05	-0.02	31.9	1.23	7	29.7	33.7	63.4	24.9	36	32.5	6.0	-0.10	5.8	
8.12	5.0E-03	0.00	93.9	0.79	9	85.5	12.1	97.6	9.6	42	62.8	1.0	-0.16	1.8	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0135
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT-13
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 12:08
CPT File: 219CP13.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 1.50 (ft): 4.9
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	13.0	0.04	0.34	0.21	6	18.0	2.2	2.2	0.00	2.00	5.2	10.4	103.6	0.00
0.38	25.3	0.11	0.44	-0.35	7	18.5	6.8	6.8	0.00	2.00	8.4	16.9	UnDef	0.09
0.62	22.7	0.12	0.53	-0.43	7	18.5	11.4	11.4	0.00	2.00	7.6	15.1	UnDef	0.09
0.88	23.1	0.21	0.89	-1.17	6	18.0	16.0	16.0	0.00	2.00	9.2	18.5	183.2	0.09
1.12	25.9	0.08	0.32	-1.53	7	18.5	20.6	20.6	0.00	2.00	8.6	17.3	UnDef	0.09
1.38	25.9	0.09	0.34	-1.80	7	18.5	25.2	25.2	0.00	1.95	8.6	16.9	UnDef	0.09
1.62	26.6	0.05	0.20	-1.10	7	18.5	29.8	28.6	1.23	1.83	8.9	16.3	UnDef	0.09
1.88	32.8	0.09	0.29	-0.91	7	18.5	34.4	30.8	3.68	1.76	10.9	19.3	UnDef	0.10
2.12	35.1	0.13	0.37	-1.43	7	18.5	39.1	32.9	6.13	1.71	11.7	19.9	UnDef	0.10
2.38	40.8	0.31	0.75	-4.26	7	18.5	43.7	35.1	8.58	1.65	13.6	22.4	UnDef	0.12
2.62	16.1	0.03	0.20	-6.54	6	18.0	48.2	37.2	11.04	1.60	6.5	10.4	125.3	0.00
2.88	12.9	0.05	0.36	-5.97	6	18.0	52.8	39.3	13.49	1.56	5.2	8.1	99.3	0.00
3.12	41.5	0.16	0.39	-1.17	8	19.0	57.4	41.4	15.94	1.52	10.4	15.8	UnDef	0.10
3.38	28.4	0.14	0.49	2.84	7	18.5	62.1	43.7	18.39	1.48	9.5	14.0	UnDef	0.09
3.62	25.9	0.11	0.43	4.08	7	18.5	66.7	45.8	20.85	1.45	8.6	12.5	UnDef	0.09
3.88	26.3	0.09	0.35	5.23	7	18.5	71.3	48.0	23.30	1.41	8.8	12.4	UnDef	0.09
4.12	25.6	0.11	0.41	4.86	7	18.5	75.9	50.2	25.75	1.38	8.5	11.8	UnDef	0.08
4.38	20.2	0.07	0.35	4.88	7	18.5	80.6	52.4	28.20	1.35	6.7	9.1	UnDef	0.00
4.62	5.9	0.03	0.54	9.88	1	17.5	85.1	54.4	30.66	1.33	3.0	3.9	40.5	0.09
4.88	12.7	0.05	0.39	7.56	6	18.0	89.5	56.4	33.11	1.30	5.1	6.6	94.4	0.00
5.12	14.0	0.11	0.80	6.08	6	18.0	94.0	58.4	35.56	1.28	5.6	7.2	104.4	0.09
5.38	20.2	0.10	0.48	5.96	7	18.5	98.6	60.5	38.01	1.26	6.7	8.5	UnDef	0.09
5.62	34.4	0.14	0.41	4.33	7	18.5	103.2	62.7	40.47	1.24	11.5	14.2	UnDef	0.09
5.88	33.7	0.11	0.34	4.91	7	18.5	107.8	64.9	42.92	1.21	11.2	13.7	UnDef	0.09
6.12	17.1	0.07	0.43	7.17	6	18.0	112.4	67.0	45.37	1.20	6.8	8.2	127.9	0.00
6.38	51.2	1.00	1.95	5.62	7	18.5	116.9	69.1	47.82	1.18	17.1	20.1	UnDef	0.17

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0135
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT-13
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 12:08
CPT File: 219CP13.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 1.50 (ft): 4.9
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-05	0.00	575.7	0.34	10	26.0	0.0	26.0	0.0	50	63.1	10.0	-0.25	0.0	
0.38	5.0E-04	0.00	371.0	0.44	10	50.7	0.0	50.7	0.0	48	66.4	1.0	-0.23	0.0	
0.62	5.0E-04	0.00	197.4	0.53	9	45.4	0.0	45.4	2.9	46	55.8	1.0	-0.19	0.0	
0.88	5.0E-05	-0.01	143.1	0.90	9	46.1	3.1	49.2	7.3	44	51.5	10.0	-0.21	0.7	
1.12	5.0E-04	-0.01	125.0	0.32	9	51.8	0.0	51.8	3.6	42	51.2	1.0	-0.11	0.0	
1.38	5.0E-04	-0.01	101.9	0.34	9	51.7	0.0	51.7	5.0	42	48.3	1.0	-0.10	0.0	
1.62	5.0E-04	0.00	92.1	0.20	9	49.8	0.0	49.8	4.2	42	47.3	1.0	-0.04	0.0	
1.88	5.0E-04	0.00	105.7	0.29	9	59.2	0.0	59.2	4.3	42	52.3	1.0	-0.09	0.0	
2.12	5.0E-04	-0.01	105.4	0.37	9	61.1	0.0	61.1	5.0	42	53.2	1.0	-0.11	0.0	
2.38	5.0E-04	-0.01	114.9	0.76	9	68.8	5.7	74.5	7.9	42	56.6	1.0	-0.18	1.1	
2.62	5.0E-05	-0.05	42.1	0.20	9	26.5	0.0	26.5	5.0	38	30.0	6.0	0.02	0.0	
2.88	5.0E-05	-0.06	31.6	0.37	7	20.6	0.0	20.6	5.0	36	30.0	6.0	-0.01	0.0	
3.12	5.0E-03	-0.01	98.9	0.40	9	64.5	0.0	64.5	5.0	42	54.7	1.0	-0.11	0.0	
3.38	5.0E-04	0.00	63.6	0.50	9	42.9	0.0	42.9	5.0	40	43.0	1.0	-0.09	0.0	
3.62	5.0E-04	0.01	55.1	0.44	9	38.3	0.0	38.3	5.0	40	39.7	1.0	-0.06	0.0	
3.88	5.0E-04	0.01	53.3	0.36	9	38.0	0.0	38.0	5.0	40	39.5	1.0	-0.04	0.0	
4.12	5.0E-04	0.01	49.5	0.43	9	36.1	0.0	36.1	5.0	38	38.1	1.0	-0.05	0.0	
4.38	5.0E-04	0.01	37.0	0.36	9	27.9	0.0	27.9	5.0	38	30.7	1.0	-0.01	0.0	
4.62	1.0E-07	0.13	9.3	0.63	6	8.0	32.1	40.1	40.5	UnDef	UnDef	3.0	UnDef	3.9	
4.88	5.0E-05	0.03	20.9	0.42	7	16.9	0.0	16.9	5.0	34	30.0	6.0	0.03	0.0	
5.12	5.0E-05	0.02	22.3	0.86	7	18.3	26.1	44.4	27.0	34	30.0	6.0	-0.03	4.2	
5.38	5.0E-04	0.01	31.8	0.51	7	26.0	14.1	40.1	18.2	36	30.0	1.0	-0.03	2.4	
5.62	5.0E-04	0.00	53.2	0.43	9	43.4	0.0	43.4	5.0	40	43.4	1.0	-0.06	0.0	
5.88	5.0E-04	0.00	50.3	0.35	9	41.8	0.0	41.8	5.0	38	42.3	1.0	-0.04	0.0	
6.12	5.0E-05	0.02	23.9	0.46	7	20.9	0.0	20.9	5.0	34	30.0	6.0	0.01	0.0	
6.38	5.0E-04	0.00	72.3	2.00	7	61.6	38.8	100.4	19.5	40	53.4	1.0	-0.23	6.4	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0184
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-14
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 13:16
CPT File: 219CP14.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 1.20 (ft): 3.9
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	3.1	0.05	1.53	-0.24	1	17.5	2.2	2.2	0.00	2.00	1.6	3.1	25.0	0.00
0.38	8.7	0.13	1.51	1.80	5	18.0	6.6	6.6	0.00	2.00	4.4	8.7	69.4	0.00
0.62	21.0	0.13	0.60	-0.72	7	18.5	11.2	11.2	0.00	2.00	7.0	14.0	UnDef	0.09
0.88	25.2	0.12	0.48	0.13	7	18.5	15.8	15.8	0.00	2.00	8.4	16.8	UnDef	0.09
1.12	30.7	0.14	0.44	-0.05	7	18.5	20.4	20.4	0.00	2.00	10.2	20.5	UnDef	0.10
1.38	24.3	0.22	0.90	-0.85	7	18.5	25.1	23.3	1.72	2.00	8.1	16.2	UnDef	0.10
1.62	19.7	0.25	1.27	-0.95	6	18.0	29.6	25.5	4.17	1.94	7.9	15.3	155.4	0.09
1.88	25.0	0.29	1.16	-3.76	6	18.0	34.1	27.5	6.62	1.87	10.0	18.7	197.5	0.10
2.12	29.2	0.17	0.57	-5.16	7	18.5	38.7	29.6	9.07	1.80	9.7	17.5	UnDef	0.10
2.38	6.0	0.01	0.20	3.27	1	17.5	43.2	31.7	11.53	1.74	3.0	5.3	44.9	0.00
2.62	13.2	0.06	0.47	3.38	6	18.0	47.6	33.6	13.98	1.69	5.3	8.9	101.7	0.00
2.88	21.7	0.05	0.24	2.16	7	18.5	52.2	35.8	16.43	1.64	7.2	11.9	UnDef	0.08
3.12	12.9	0.05	0.42	3.87	6	18.0	56.8	37.9	18.88	1.59	5.2	8.2	98.9	0.00
3.38	9.5	0.02	0.19	5.42	6	18.0	61.2	39.9	21.34	1.55	3.8	5.9	71.3	0.00
3.62	8.2	0.02	0.22	6.59	1	17.5	65.7	41.9	23.79	1.51	4.1	6.2	60.4	0.00
3.88	15.6	0.02	0.15	5.32	6	18.0	70.1	43.9	26.24	1.48	6.3	9.2	119.5	0.00
4.12	15.2	0.05	0.32	6.13	6	18.0	74.6	45.9	28.69	1.44	6.1	8.8	115.6	0.00
4.38	27.0	0.06	0.24	4.82	7	18.5	79.2	48.0	31.15	1.41	9.0	12.7	UnDef	0.09
4.62	11.6	0.04	0.31	6.07	6	18.0	83.8	50.2	33.60	1.38	4.6	6.4	86.2	0.00
4.88	11.6	0.04	0.38	4.98	6	18.0	88.2	52.2	36.05	1.35	4.7	6.3	86.0	0.00
5.12	4.7	0.02	0.47	12.19	1	17.5	92.7	54.2	38.50	1.33	2.3	3.1	29.8	0.08
5.38	4.7	0.02	0.51	8.12	1	17.5	97.1	56.1	40.96	1.31	2.3	3.1	29.8	0.08
5.62	3.9	0.03	0.82	13.90	1	17.5	101.4	58.0	43.41	1.28	1.9	2.5	22.9	0.00
5.88	7.9	0.18	2.34	8.67	4	18.0	105.9	60.0	45.86	1.26	5.2	6.6	54.4	0.09
6.12	10.0	0.39	3.87	4.27	3	17.5	110.3	62.0	48.31	1.24	10.0	12.4	71.0	0.00
6.38	10.9	0.36	3.32	3.49	4	18.0	114.8	64.0	50.77	1.22	7.3	8.9	78.1	0.11
6.62	10.6	0.42	3.96	2.12	3	17.5	119.2	66.0	53.22	1.20	10.6	12.8	75.4	0.00
6.88	15.6	0.48	3.10	-1.44	5	18.0	123.6	68.0	55.67	1.19	7.8	9.3	114.9	0.16
7.12	41.4	0.64	1.55	-5.48	7	18.5	128.2	70.1	58.12	1.17	13.8	16.1	UnDef	0.13
7.38	40.1	1.06	2.65	-6.79	6	18.0	132.8	72.2	60.58	1.15	16.0	18.5	310.4	0.21
7.62	12.4	0.35	2.83	-6.19	5	18.0	137.2	74.2	63.03	1.14	6.2	7.1	88.5	0.11

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0184
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-14
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 13:16
CPT File: 219CP14.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 1.20 (ft): 3.9
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	1.0E-07	-0.01	142.7	1.54	9	6.3	1.2	7.5	11.0	UnDef	UnDef	10.0	UnDef	0.4	
0.38	5.0E-06	0.02	131.0	1.52	9	17.5	3.7	21.2	11.6	UnDef	UnDef	10.0	UnDef	1.1	
0.62	5.0E-04	0.00	186.5	0.60	9	42.0	0.0	42.0	3.8	44	53.9	1.0	-0.20	0.0	
0.88	5.0E-04	0.00	158.4	0.49	9	50.4	0.0	50.4	3.7	44	54.2	1.0	-0.17	0.0	
1.12	5.0E-04	0.00	149.1	0.45	9	61.4	0.0	61.4	3.7	44	56.2	1.0	-0.15	0.0	
1.38	5.0E-04	0.00	103.1	0.91	9	48.7	7.1	55.7	9.7	42	47.6	1.0	-0.18	1.4	
1.62	5.0E-05	-0.01	76.3	1.29	7	39.1	14.1	53.2	14.9	40	40.4	10.0	-0.19	3.0	
1.88	5.0E-05	-0.02	89.8	1.17	9	47.7	12.4	60.1	12.7	42	46.1	10.0	-0.19	2.8	
2.12	5.0E-04	-0.02	97.2	0.58	9	53.6	4.1	57.7	7.6	42	49.4	1.0	-0.14	0.8	
2.38	1.0E-07	0.04	17.7	0.21	7	10.7	0.0	10.7	5.0	UnDef	UnDef	6.0	UnDef	0.0	
2.62	5.0E-05	0.02	37.8	0.49	7	22.7	0.0	22.7	5.0	38	30.0	6.0	-0.04	0.0	
2.88	5.0E-04	0.00	59.3	0.25	9	36.3	0.0	36.3	5.0	40	38.3	1.0	-0.02	0.0	
3.12	5.0E-05	0.02	32.7	0.44	7	21.0	0.0	21.0	5.0	36	30.0	6.0	-0.02	0.0	
3.38	5.0E-05	0.04	22.3	0.20	7	15.1	0.0	15.1	5.0	34	30.0	6.0	0.08	0.0	
3.62	1.0E-07	0.05	18.0	0.24	7	12.7	0.0	12.7	5.0	UnDef	UnDef	6.0	UnDef	0.0	
3.88	5.0E-05	0.02	34.0	0.16	9	23.6	0.0	23.6	5.0	36	30.0	6.0	0.06	0.0	
4.12	5.0E-05	0.02	31.5	0.33	7	22.4	0.0	22.4	5.0	36	30.0	6.0	0.01	0.0	
4.38	5.0E-04	0.01	54.6	0.24	9	39.0	0.0	39.0	5.0	40	40.3	1.0	-0.02	0.0	
4.62	5.0E-05	0.02	21.5	0.33	7	16.4	0.0	16.4	5.0	34	30.0	6.0	0.04	0.0	
4.88	5.0E-05	0.01	20.6	0.41	7	16.1	0.0	16.1	5.0	34	30.0	6.0	0.03	0.0	
5.12	1.0E-07	0.22	6.9	0.59	6	6.3	25.3	31.6	46.7	UnDef	UnDef	3.0	UnDef	3.1	
5.38	1.0E-07	0.10	6.6	0.64	6	6.3	25.1	31.4	48.4	UnDef	UnDef	3.0	UnDef	3.1	
5.62	1.0E-07	0.32	4.9	1.12	4	5.1	20.4	25.5	62.1	UnDef	UnDef	1.5	UnDef	2.5	
5.88	5.0E-07	0.06	11.3	2.71	4	10.1	40.6	50.7	53.7	UnDef	UnDef	3.0	UnDef	6.6	
6.12	5.0E-08	-0.01	14.3	4.35	1	12.7	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	
6.38	5.0E-07	-0.02	15.3	3.71	4	13.6	54.5	68.2	52.2	UnDef	UnDef	6.0	UnDef	8.9	
6.62	5.0E-08	-0.03	14.3	4.46	1	13.1	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	
6.88	5.0E-06	-0.05	21.1	3.37	6	18.9	75.7	94.6	44.1	UnDef	UnDef	6.0	UnDef	9.3	
7.12	5.0E-04	-0.03	57.3	1.60	7	49.5	32.7	82.2	19.9	40	47.1	1.0	-0.18	5.4	
7.38	5.0E-05	-0.03	53.8	2.74	7	47.2	64.0	111.2	26.5	40	45.8	10.0	-0.25	10.4	
7.62	5.0E-06	-0.11	14.9	3.18	4	14.4	57.7	72.2	50.2	UnDef	UnDef	6.0	UnDef	7.1	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0239
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-15
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 14:06
CPT File: 219CP15.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 1.00 (ft): 3.3
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-04	0.00	1000.0	0.08	10	52.8	0.0	52.8	0.0	50	83.1	1.0	-0.18	0.0	
0.38	5.0E-03	0.00	640.9	0.15	10	89.9	0.0	89.9	0.0	50	82.5	1.0	-0.19	0.0	
0.62	5.0E-03	0.00	502.9	0.27	10	118.4	0.0	118.4	0.0	48	82.9	1.0	-0.22	0.0	
0.88	5.0E-02	0.00	562.9	0.39	10	186.8	0.0	186.8	0.0	50	91.1	1.0	-0.26	0.0	
1.12	5.0E-02	-0.01	505.5	0.41	10	204.8	0.0	204.8	0.0	48	90.9	1.0	-0.25	0.0	
1.38	5.0E-02	-0.01	362.8	0.23	10	164.8	0.0	164.8	0.0	48	83.0	1.0	-0.17	0.0	
1.62	5.0E-03	-0.01	236.4	0.20	10	118.8	0.0	118.8	0.0	46	72.2	1.0	-0.13	0.0	
1.88	5.0E-04	-0.01	121.4	0.18	9	64.0	0.0	64.0	2.4	42	54.5	1.0	-0.06	0.0	
2.12	5.0E-04	-0.02	75.5	0.23	9	41.7	0.0	41.7	5.0	40	42.2	1.0	-0.04	0.0	
2.38	5.0E-04	0.00	90.7	0.31	9	51.8	0.0	51.8	5.0	42	48.4	1.0	-0.08	0.0	
2.62	5.0E-03	0.00	160.1	0.28	9	93.9	0.0	93.9	1.9	44	65.5	1.0	-0.12	0.0	
2.88	5.0E-04	-0.01	79.7	0.29	9	48.8	0.0	48.8	5.0	42	46.7	1.0	-0.06	0.0	
3.12	5.0E-04	-0.01	85.7	0.26	9	53.9	0.0	53.9	5.0	42	49.6	1.0	-0.06	0.0	
3.38	5.0E-03	0.00	179.6	0.38	9	115.3	0.0	115.3	2.2	44	71.3	1.0	-0.16	0.0	
3.62	5.0E-03	0.00	156.5	0.44	9	103.4	0.0	103.4	3.4	44	68.2	1.0	-0.16	0.0	
3.88	5.0E-03	0.00	166.2	0.38	9	112.6	0.0	112.6	2.6	44	70.7	1.0	-0.15	0.0	
4.12	5.0E-03	0.00	147.0	0.29	9	102.2	0.0	102.2	2.5	44	67.9	1.0	-0.12	0.0	
4.38	5.0E-03	0.00	140.3	0.31	9	100.0	0.0	100.0	2.9	44	67.3	1.0	-0.12	0.0	
4.62	5.0E-03	-0.01	108.4	0.27	9	79.3	0.0	79.3	4.0	42	60.6	1.0	-0.08	0.0	
4.88	5.0E-04	-0.01	89.3	1.37	9	67.0	21.1	88.1	14.0	42	55.8	1.0	-0.21	3.9	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0288
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-16
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 15:41
CPT File: 219CP16.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 1.30 (ft): 4.3
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	32.0	0.07	0.23	1.34	7	18.5	2.3	2.3	0.00	2.00	10.7	21.3	UnDef	0.10
0.38	51.6	0.16	0.31	0.34	8	19.0	7.0	7.0	0.00	2.00	12.9	25.8	UnDef	0.18
0.62	51.1	0.15	0.29	0.24	8	19.0	11.8	11.8	0.00	2.00	12.8	25.6	UnDef	0.18
0.88	46.5	0.11	0.23	-0.90	8	19.0	16.5	16.5	0.00	2.00	11.6	23.2	UnDef	0.15
1.12	36.4	0.06	0.16	-0.12	8	19.0	21.2	21.2	0.00	2.00	9.1	18.2	UnDef	0.12
1.38	28.2	0.05	0.18	1.20	7	18.5	25.9	25.2	0.74	1.95	9.4	18.4	UnDef	0.10
1.62	20.5	0.03	0.16	3.23	7	18.5	30.6	27.4	3.19	1.87	6.8	12.8	UnDef	0.09
1.88	16.1	0.03	0.17	4.22	7	18.5	35.2	29.5	5.64	1.80	5.4	9.7	UnDef	0.00
2.12	15.1	0.05	0.31	3.90	6	18.0	39.8	31.7	8.09	1.74	6.0	10.5	117.3	0.00
2.38	10.0	0.04	0.36	5.78	6	18.0	44.2	33.7	10.55	1.69	4.0	6.8	76.6	0.00
2.62	17.4	0.05	0.30	5.01	7	18.5	48.8	35.8	13.00	1.64	5.8	9.5	UnDef	0.00
2.88	12.7	0.03	0.27	4.96	6	18.0	53.4	37.9	15.45	1.59	5.1	8.0	97.0	0.00
3.12	14.0	0.03	0.24	3.89	6	18.0	57.9	40.0	17.90	1.55	5.6	8.7	107.7	0.00
3.38	8.3	0.02	0.24	6.27	1	17.5	62.3	42.0	20.36	1.51	4.1	6.2	61.2	0.00
3.62	7.2	0.02	0.25	5.85	1	17.5	66.7	43.9	22.81	1.48	3.6	5.3	52.4	0.00
3.88	11.9	0.31	2.57	6.34	5	18.0	71.1	45.9	25.26	1.45	6.0	8.6	89.5	0.14
4.12	49.4	1.14	2.31	-1.44	6	18.0	75.6	47.9	27.71	1.41	19.8	27.9	389.2	0.20
4.38	52.5	1.14	2.17	-1.54	6	18.0	80.1	50.0	30.17	1.38	21.0	29.1	413.4	0.20
4.62	54.6	1.58	2.89	-4.42	6	18.0	84.6	52.0	32.62	1.36	21.9	29.7	430.4	0.27

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0288
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-16
Location: UPSTREAM TEST
Cone: 10 TON A 057
CPT Date: 99/03/11
CPT Time: 15:41
CPT File: 219CP16.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 1.30 (ft): 4.3
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-04	0.00	1000.0	0.23	10	64.0	0.0	64.0	0.0	50	88.6	1.0	-0.26	0.0	
0.38	5.0E-03	0.00	736.2	0.31	10	103.2	0.0	103.2	0.0	50	86.4	1.0	-0.26	0.0	
0.62	5.0E-03	0.00	434.1	0.29	10	102.2	0.0	102.2	0.0	48	78.7	1.0	-0.21	0.0	
0.88	5.0E-03	0.00	280.6	0.23	10	92.9	0.0	92.9	0.0	46	71.1	1.0	-0.15	0.0	
1.12	5.0E-03	0.00	170.1	0.16	9	72.7	0.0	72.7	0.5	44	60.5	1.0	-0.08	0.0	
1.38	5.0E-04	0.00	111.1	0.19	9	56.3	0.0	56.3	2.9	42	50.8	1.0	-0.05	0.0	
1.62	5.0E-04	0.01	73.7	0.16	9	39.1	0.0	39.1	5.0	40	40.4	1.0	-0.01	0.0	
1.88	5.0E-04	0.02	53.4	0.18	9	29.7	0.0	29.7	5.0	40	32.5	1.0	0.01	0.0	
2.12	5.0E-05	0.02	46.3	0.31	9	26.8	0.0	26.8	5.0	38	30.0	6.0	-0.02	0.0	
2.38	5.0E-05	0.05	28.4	0.38	7	17.3	0.0	17.3	5.0	36	30.0	6.0	0.01	0.0	
2.62	5.0E-04	0.02	47.3	0.31	9	29.1	0.0	29.1	5.0	38	31.9	1.0	-0.02	0.0	
2.88	5.0E-05	0.03	32.0	0.28	9	20.6	0.0	20.6	5.0	36	30.0	6.0	0.02	0.0	
3.12	5.0E-05	0.02	33.7	0.25	9	22.2	0.0	22.2	5.0	36	30.0	6.0	0.02	0.0	
3.38	1.0E-07	0.05	18.2	0.26	7	12.8	0.0	12.8	5.0	UnDef	UnDef	6.0	UnDef	0.0	
3.62	1.0E-07	0.05	14.9	0.27	7	10.9	0.0	10.9	5.0	UnDef	UnDef	6.0	UnDef	0.0	
3.88	5.0E-06	0.03	24.4	2.73	6	17.6	70.3	87.9	38.4	UnDef	UnDef	6.0	UnDef	8.6	
4.12	5.0E-05	-0.01	101.5	2.35	7	71.4	36.7	108.1	17.7	42	57.6	10.0	-0.29	7.5	
4.38	5.0E-05	-0.01	103.4	2.20	7	74.2	34.6	108.8	16.9	42	58.7	10.0	-0.28	7.2	
4.62	5.0E-05	-0.01	103.5	2.93	7	75.8	50.4	126.1	20.0	42	59.3	10.0	-0.34	9.9	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0338
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT-17
Location: MAIN EMBANKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 08:46
CPT File: 219CP17.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 4.10 (ft): 13.5
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	43.9	0.25	0.57	2.22	7	18.5	2.3	2.3	0.00	2.00	14.6	29.3	UnDef	0.14
0.38	75.7	0.44	0.58	0.46	8	19.0	7.0	7.0	0.00	2.00	18.9	37.9	UnDef	0.40
0.62	60.4	0.35	0.58	0.38	8	19.0	11.8	11.8	0.00	2.00	15.1	30.2	UnDef	0.24
0.88	102.1	0.54	0.53	0.41	9	19.5	16.6	16.6	0.00	2.00	20.4	40.9	UnDef	0.00
1.12	98.0	0.54	0.55	0.26	8	19.0	21.4	21.4	0.00	2.00	24.5	49.0	UnDef	0.00
1.38	83.3	0.46	0.55	0.19	8	19.0	26.1	26.1	0.00	1.91	20.8	39.9	UnDef	0.00
1.62	81.2	0.45	0.55	0.07	8	19.0	30.9	30.9	0.00	1.76	20.3	35.7	UnDef	0.37
1.88	76.5	0.43	0.56	0.10	8	19.0	35.6	35.6	0.00	1.64	19.1	31.3	UnDef	0.28
2.12	72.1	0.41	0.57	0.05	8	19.0	40.4	40.4	0.00	1.54	18.0	27.8	UnDef	0.22
2.38	68.5	0.43	0.62	-0.05	8	19.0	45.1	45.1	0.00	1.46	17.1	25.0	UnDef	0.18
2.62	62.7	0.40	0.64	-0.14	8	19.0	49.9	49.9	0.00	1.39	15.7	21.7	UnDef	0.15
2.88	61.9	0.33	0.54	-0.16	8	19.0	54.6	54.6	0.00	1.32	15.5	20.5	UnDef	0.14
3.12	53.1	0.26	0.48	-0.16	8	19.0	59.4	59.4	0.00	1.27	13.3	16.9	UnDef	0.11
3.38	38.5	0.18	0.46	-0.08	7	18.5	64.1	64.1	0.00	1.22	12.8	15.7	UnDef	0.09
3.62	22.5	0.05	0.21	1.18	7	18.5	68.7	68.7	0.00	1.18	7.5	8.9	UnDef	0.00
3.88	13.7	0.03	0.23	4.55	6	18.0	73.2	73.2	0.00	1.14	5.5	6.3	103.9	0.00
4.12	17.5	0.07	0.38	3.43	6	18.0	77.8	77.5	0.25	1.11	7.0	7.8	134.1	0.00
4.38	17.5	0.07	0.40	3.68	6	18.0	82.2	79.6	2.70	1.10	7.0	7.7	133.6	0.00
4.62	10.1	0.05	0.54	8.44	6	18.0	86.8	81.6	5.15	1.08	4.0	4.4	73.7	0.10
4.88	27.7	0.10	0.38	3.20	7	18.5	91.3	83.7	7.60	1.07	9.2	9.9	UnDef	0.08
5.12	21.4	0.09	0.44	5.35	7	18.5	95.9	85.9	10.06	1.06	7.1	7.5	UnDef	0.00
5.38	17.6	0.07	0.41	5.51	6	18.0	100.5	88.0	12.51	1.04	7.1	7.4	133.0	0.00
5.62	10.2	0.05	0.53	9.17	6	18.0	105.0	90.0	14.96	1.03	4.1	4.2	73.4	0.09
5.88	12.4	0.04	0.32	9.79	6	18.0	109.5	92.1	17.41	1.02	5.0	5.0	90.2	0.00
6.12	25.4	0.10	0.41	6.18	7	18.5	114.1	94.2	19.87	1.01	8.5	8.5	UnDef	0.00
6.38	21.4	0.12	0.54	8.29	7	18.5	118.7	96.4	22.32	1.00	7.1	7.1	UnDef	0.09
6.62	28.4	0.11	0.38	10.14	7	18.5	123.3	98.5	24.77	0.99	9.5	9.3	UnDef	0.00
6.88	27.5	0.14	0.51	7.52	7	18.5	127.9	100.7	27.22	0.98	9.2	9.0	UnDef	0.09
7.12	26.2	0.12	0.47	9.97	7	18.5	132.6	102.9	29.68	0.96	8.7	8.4	UnDef	0.00
7.38	15.8	0.03	0.22	11.10	6	18.0	137.1	105.0	32.13	0.96	6.3	6.0	115.5	0.00
7.62	18.8	0.06	0.34	13.82	7	18.5	141.7	107.1	34.58	0.95	6.3	5.9	UnDef	0.00
7.88	28.1	0.19	0.66	10.28	7	18.5	146.3	109.3	37.03	0.94	9.4	8.8	UnDef	0.10
8.12	28.4	0.21	0.75	8.63	7	18.5	150.9	111.5	39.49	0.93	9.5	8.8	UnDef	0.10
8.38	29.9	0.23	0.76	6.64	7	18.5	155.6	113.6	41.94	0.92	10.0	9.2	UnDef	0.10
8.62	34.0	0.25	0.72	6.76	7	18.5	160.2	115.8	44.39	0.91	11.3	10.3	UnDef	0.10
8.88	41.4	0.27	0.65	8.81	7	18.5	164.8	118.0	46.84	0.90	13.8	12.4	UnDef	0.10
9.12	24.4	0.32	1.30	11.06	6	18.0	169.4	120.1	49.30	0.89	9.8	8.7	181.7	0.19
9.38	17.6	0.33	1.90	13.64	6	18.0	173.9	122.1	51.75	0.89	7.0	6.2	127.0	0.13
9.62	60.2	0.27	0.44	9.29	8	19.0	178.5	124.3	54.20	0.88	15.1	13.2	UnDef	0.09

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60 (blows/ft)	Su (kPa)	CRR
9.88	26.6	0.08	0.31	15.61	7	18.5	183.2	126.5	56.65	0.87	8.9	7.7	UnDef	0.00
10.12	23.8	0.07	0.29	15.50	7	18.5	187.8	128.7	59.11	0.86	7.9	6.8	UnDef	0.00
10.38	39.5	0.36	0.91	9.44	7	18.5	192.4	130.9	61.56	0.86	13.2	11.3	UnDef	0.11
10.62	40.5	0.38	0.95	10.33	7	18.5	197.1	133.1	64.01	0.85	13.5	11.5	UnDef	0.12
10.88	94.9	0.46	0.49	6.34	9	19.5	201.8	135.3	66.46	0.84	19.0	16.0	UnDef	0.13
11.12	113.9	0.39	0.35	3.82	9	19.5	206.7	137.8	68.92	0.83	22.8	19.0	UnDef	0.17
11.38	58.1	0.28	0.49	8.18	8	19.0	211.5	140.1	71.37	0.83	14.5	12.0	UnDef	0.11
11.62	45.8	0.38	0.83	10.50	7	18.5	216.2	142.4	73.82	0.82	15.3	12.5	UnDef	0.11
11.88	16.8	0.51	3.01	22.21	5	18.0	220.8	144.5	76.27	0.81	8.4	6.8	116.7	0.00
12.12	28.5	1.17	4.10	-3.00	4	18.0	225.2	146.5	78.73	0.81	19.0	15.4	210.1	0.00
12.38	37.1	1.46	3.93	-2.63	5	18.0	229.8	148.6	81.18	0.80	18.5	14.9	278.3	0.41

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0338
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT-17
Location: MAIN EMBANKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 08:46
CPT File: 219CP17.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 4.10 (ft): 13.5
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-04	0.00	1000.0	0.57	10	87.8	0.0	87.8	0.0	50	95.0	1.0	-0.34	0.0	
0.38	5.0E-03	0.00	1000.0	0.58	10	151.4	0.0	151.4	0.0	50	95.0	1.0	-0.35	0.0	
0.62	5.0E-03	0.00	512.7	0.58	10	120.7	0.0	120.7	0.0	48	83.5	1.0	-0.29	0.0	
0.88	5.0E-02	0.00	615.7	0.53	10	204.3	0.0	204.3	0.0	50	93.7	1.0	-0.29	0.0	
1.12	5.0E-03	0.00	457.7	0.55	10	196.1	0.0	196.1	0.0	48	88.8	1.0	-0.27	0.0	
1.38	5.0E-03	0.00	318.0	0.56	9	163.0	0.0	163.0	1.1	46	81.3	1.0	-0.24	0.0	
1.62	5.0E-03	0.00	261.9	0.56	9	146.1	0.0	146.1	1.9	46	78.1	1.0	-0.22	0.0	
1.88	5.0E-03	0.00	213.7	0.56	9	128.1	0.0	128.1	2.8	46	74.4	1.0	-0.21	0.0	
2.12	5.0E-03	0.00	177.6	0.57	9	113.5	0.0	113.5	3.8	44	70.9	1.0	-0.19	0.0	
2.38	5.0E-03	0.00	150.9	0.63	9	102.0	0.3	102.3	5.1	44	67.8	1.0	-0.18	0.0	
2.62	5.0E-03	0.00	124.7	0.65	9	88.7	3.7	92.4	6.5	42	63.9	1.0	-0.17	0.6	
2.88	5.0E-03	0.00	112.2	0.54	9	83.7	3.1	86.8	6.3	42	62.2	1.0	-0.14	0.5	
3.12	5.0E-03	0.00	88.5	0.49	9	69.0	0.0	69.0	5.0	42	56.6	1.0	-0.11	0.0	
3.38	5.0E-04	0.00	59.2	0.47	9	48.2	0.0	48.2	5.0	40	46.3	1.0	-0.08	0.0	
3.62	5.0E-04	0.01	31.8	0.22	9	27.2	0.0	27.2	5.0	36	30.0	1.0	0.04	0.0	
3.88	5.0E-05	0.03	17.7	0.25	7	16.0	0.0	16.0	5.0	32	30.0	6.0	0.08	0.0	
4.12	5.0E-05	0.02	21.6	0.39	7	19.9	0.0	19.9	5.0	34	30.0	6.0	0.03	0.0	
4.38	5.0E-05	0.02	21.0	0.42	7	19.6	0.0	19.6	5.0	34	30.0	6.0	0.03	0.0	
4.62	5.0E-05	0.08	11.3	0.59	6	11.2	44.7	55.8	35.9	30	30.0	3.0	0.06	4.4	
4.88	5.0E-04	0.01	32.0	0.39	7	30.3	0.0	30.3	5.0	36	33.0	1.0	-0.01	0.0	
5.12	5.0E-04	0.02	23.8	0.46	7	23.1	0.0	23.1	5.0	34	30.0	1.0	0.01	0.0	
5.38	5.0E-05	0.02	18.9	0.43	7	18.8	0.0	18.8	5.0	32	30.0	6.0	0.03	0.0	
5.62	5.0E-05	0.08	10.2	0.59	6	10.8	43.1	53.9	38.0	30	30.0	3.0	0.07	4.2	
5.88	5.0E-05	0.07	12.3	0.35	7	12.9	0.0	12.9	5.0	30	30.0	3.0	0.09	0.0	
6.12	5.0E-04	0.02	25.7	0.43	7	26.1	0.0	26.1	5.0	34	30.0	1.0	0.01	0.0	
6.38	5.0E-04	0.03	21.0	0.57	7	21.8	24.6	46.4	24.8	34	30.0	1.0	0.00	3.5	
6.62	5.0E-04	0.03	27.6	0.40	7	28.6	0.0	28.6	5.0	36	31.4	1.0	0.01	0.0	
6.88	5.0E-04	0.02	26.1	0.53	7	27.4	20.7	48.2	21.1	34	30.2	1.0	-0.01	3.3	
7.12	5.0E-04	0.03	24.1	0.49	7	25.8	0.0	25.8	5.0	34	30.0	1.0	0.00	0.0	
7.38	5.0E-05	0.05	13.8	0.24	7	15.4	0.0	15.4	5.0	32	30.0	6.0	0.11	0.0	
7.62	5.0E-04	0.06	16.2	0.37	7	18.1	0.0	18.1	5.0	32	30.0	1.0	0.06	0.0	
7.88	5.0E-04	0.02	24.4	0.70	7	26.9	27.7	54.6	24.0	34	30.0	1.0	-0.02	4.1	
8.12	5.0E-04	0.02	24.1	0.79	7	26.9	31.2	58.1	25.1	34	30.0	1.0	-0.03	4.4	
8.38	5.0E-04	0.01	25.0	0.80	7	28.1	31.1	59.1	24.7	34	30.8	1.0	-0.04	4.5	
8.62	5.0E-04	0.01	28.0	0.76	7	31.6	28.1	59.7	22.6	36	34.2	1.0	-0.04	4.3	
8.88	5.0E-04	0.01	33.7	0.68	7	38.1	23.6	61.6	19.3	36	39.6	1.0	-0.05	3.9	
9.12	5.0E-05	0.03	18.9	1.40	6	22.3	83.7	106.0	34.6	32	30.0	6.0	-0.05	8.5	
9.38	5.0E-05	0.05	13.0	2.10	6	15.9	63.8	79.7	46.9	32	30.0	6.0	-0.04	6.2	
9.62	5.0E-03	0.01	47.0	0.46	9	54.0	0.0	54.0	5.0	38	49.6	1.0	-0.05	0.0	

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
9.88	5.0E-04	0.04	19.6	0.33	7	23.7	0.0	23.7	5.0	34	30.0	1.0	0.05	0.0	
10.12	5.0E-04	0.04	17.0	0.32	7	21.0	0.0	21.0	5.0	32	30.0	1.0	0.07	0.0	
10.38	5.0E-04	0.01	28.7	0.95	7	34.5	36.0	70.5	24.1	36	36.8	1.0	-0.06	5.3	
10.62	5.0E-04	0.01	29.0	1.00	7	35.1	37.6	72.7	24.4	36	37.3	1.0	-0.07	5.5	
10.88	5.0E-02	0.00	68.6	0.50	9	81.6	0.0	81.6	5.0	40	61.4	1.0	-0.09	0.0	
11.12	5.0E-02	0.00	81.2	0.35	9	97.1	0.0	97.1	5.0	42	66.4	1.0	-0.08	0.0	
11.38	5.0E-03	0.00	40.0	0.51	9	49.1	18.7	67.9	15.3	38	46.9	1.0	-0.05	2.5	
11.62	5.0E-04	0.01	30.6	0.87	7	38.3	33.5	71.8	22.5	36	39.8	1.0	-0.06	5.2	
11.88	5.0E-06	0.10	10.1	3.47	1	14.0	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
12.12	5.0E-07	-0.04	17.9	4.45	1	23.6	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	
12.38	5.0E-06	-0.03	23.4	4.18	4	30.4	121.7	152.1	45.6	UnDef	UnDef	6.0	UnDef	14.9	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0398
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT-18
Location: MAIN EMBANKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 09:47
CPT File: 219CP18.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.60 (ft): 11.8
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60 (blows/ft)	Su (kPa)	CRR
0.12	39.2	0.13	0.34	0.61	8	19.0	2.4	2.4	0.00	2.00	9.8	19.6	UnDef	0.12
0.38	107.9	0.43	0.40	0.33	9	19.5	7.2	7.2	0.00	2.00	21.6	43.1	UnDef	0.00
0.62	121.1	0.60	0.49	0.25	9	19.5	12.1	12.1	0.00	2.00	24.2	48.4	UnDef	0.00
0.88	110.6	0.65	0.59	0.10	9	19.5	16.9	16.9	0.00	2.00	22.1	44.2	UnDef	0.00
1.12	73.6	0.41	0.55	0.04	8	19.0	21.8	21.8	0.00	2.00	18.4	36.8	UnDef	0.38
1.38	55.6	0.31	0.56	0.12	8	19.0	26.5	26.5	0.00	1.90	13.9	26.4	UnDef	0.20
1.62	50.6	0.25	0.50	0.10	8	19.0	31.2	31.2	0.00	1.75	12.7	22.2	UnDef	0.15
1.88	44.7	0.19	0.43	0.09	8	19.0	36.0	36.0	0.00	1.63	11.2	18.2	UnDef	0.12
2.12	43.5	0.17	0.39	0.02	8	19.0	40.8	40.8	0.00	1.53	10.9	16.7	UnDef	0.11
2.38	39.9	0.17	0.43	-0.10	7	18.5	45.4	45.4	0.00	1.45	13.3	19.3	UnDef	0.10
2.62	36.2	0.15	0.41	-0.10	7	18.5	50.1	50.1	0.00	1.38	12.1	16.7	UnDef	0.09
2.88	27.2	0.07	0.24	0.24	7	18.5	54.7	54.7	0.00	1.32	9.1	12.0	UnDef	0.08
3.12	14.2	0.02	0.15	3.74	6	18.0	59.2	59.2	0.00	1.27	5.7	7.2	109.0	0.00
3.38	13.2	0.03	0.23	3.89	6	18.0	63.8	63.8	0.00	1.23	5.3	6.4	100.1	0.00
3.62	14.0	0.04	0.26	6.38	6	18.0	68.2	68.0	0.25	1.19	5.6	6.6	106.5	0.00
3.88	15.4	0.03	0.21	6.35	6	18.0	72.8	70.1	2.70	1.17	6.2	7.2	117.3	0.00
4.12	22.9	0.05	0.20	3.78	7	18.5	77.3	72.2	5.15	1.15	7.6	8.8	UnDef	0.00
4.38	15.7	0.04	0.26	3.53	6	18.0	81.9	74.3	7.60	1.14	6.3	7.1	118.8	0.00
4.62	17.4	0.04	0.25	6.18	7	18.5	86.4	76.4	10.06	1.12	5.8	6.5	UnDef	0.00
4.88	22.7	0.07	0.30	6.20	7	18.5	91.1	78.6	12.51	1.10	7.6	8.4	UnDef	0.00
5.12	14.1	0.03	0.24	7.52	6	18.0	95.6	80.7	14.96	1.09	5.6	6.1	105.2	0.00
5.38	14.4	0.03	0.21	5.82	6	18.0	100.1	82.7	17.41	1.08	5.8	6.2	107.3	0.00
5.62	13.9	0.03	0.19	7.65	6	18.0	104.6	84.8	19.87	1.06	5.6	5.9	103.1	0.00
5.88	11.1	0.02	0.18	10.03	6	18.0	109.1	86.8	22.32	1.05	4.4	4.7	80.0	0.00
6.12	24.1	0.06	0.25	8.11	7	18.5	113.7	88.9	24.77	1.04	8.0	8.4	UnDef	0.00
6.38	19.3	0.13	0.65	9.40	6	18.0	118.2	91.0	27.22	1.03	7.7	7.9	145.1	0.09
6.62	27.6	0.06	0.20	8.59	7	18.5	122.8	93.1	29.68	1.01	9.2	9.3	UnDef	0.00
6.88	43.8	0.15	0.34	4.20	8	19.0	127.5	95.4	32.13	1.00	10.9	11.0	UnDef	0.09
7.12	41.6	0.11	0.27	5.05	8	19.0	132.2	97.7	34.58	0.99	10.4	10.3	UnDef	0.09
7.38	35.2	0.08	0.23	7.43	7	18.5	136.9	99.9	37.03	0.98	11.7	11.5	UnDef	0.08
7.62	36.4	0.06	0.16	6.30	8	19.0	141.6	102.1	39.49	0.97	9.1	8.8	UnDef	0.08
7.88	32.4	0.07	0.23	9.34	7	18.5	146.3	104.4	41.94	0.96	10.8	10.3	UnDef	0.08
8.12	20.9	0.06	0.30	12.50	7	18.5	150.9	106.5	44.39	0.95	7.0	6.6	UnDef	0.00
8.38	17.8	0.02	0.13	10.98	7	18.5	155.6	108.7	46.84	0.94	5.9	5.6	UnDef	0.00
8.62	16.6	0.05	0.28	15.01	6	18.0	160.1	110.8	49.30	0.93	6.6	6.2	119.8	0.00
8.88	17.1	0.03	0.20	16.53	7	18.5	164.7	112.9	51.75	0.92	5.7	5.3	UnDef	0.00
9.12	36.9	0.11	0.29	11.46	8	19.0	169.4	115.2	54.20	0.91	9.2	8.4	UnDef	0.08
9.38	39.3	0.13	0.34	9.34	8	19.0	174.1	117.5	56.65	0.90	9.8	8.9	UnDef	0.08
9.62	34.7	0.12	0.35	10.71	7	18.5	178.8	119.7	59.11	0.89	11.6	10.3	UnDef	0.08

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60 (blows/ft)	Su (kPa)	CRR
9.88	30.9	0.17	0.54	10.07	7	18.5	183.4	121.9	61.56	0.89	10.3	9.1	UnDef	0.09
10.12	28.1	0.20	0.70	11.37	7	18.5	188.1	124.1	64.01	0.88	9.4	8.2	UnDef	0.10
10.38	44.1	0.35	0.78	9.89	7	18.5	192.7	126.2	66.46	0.87	14.7	12.8	UnDef	0.11
10.62	52.8	0.40	0.76	9.04	8	19.0	197.4	128.5	68.92	0.86	13.2	11.4	UnDef	0.12
10.88	20.1	0.24	1.21	13.25	6	18.0	202.0	130.6	71.37	0.86	8.0	6.9	144.6	0.14
11.12	17.2	0.08	0.47	20.86	6	18.0	206.5	132.7	73.82	0.85	6.9	5.8	120.8	0.12
11.38	55.6	0.31	0.56	6.63	8	19.0	211.1	134.9	76.27	0.84	13.9	11.7	UnDef	0.11
11.62	57.8	0.29	0.51	9.59	8	19.0	215.9	137.1	78.73	0.84	14.4	12.1	UnDef	0.11
11.88	48.2	0.30	0.62	12.19	8	19.0	220.6	139.4	81.18	0.83	12.0	10.0	UnDef	0.11
12.12	69.4	0.30	0.43	11.52	8	19.0	225.4	141.7	83.63	0.82	17.3	14.3	UnDef	0.10
12.38	53.7	0.30	0.55	11.96	8	19.0	230.1	144.0	86.08	0.82	13.4	10.9	UnDef	0.11
12.62	41.6	0.30	0.72	12.76	7	18.5	234.8	146.3	88.54	0.81	13.9	11.2	UnDef	0.11
12.88	44.5	0.30	0.67	11.85	7	18.5	239.4	148.4	90.99	0.80	14.8	11.9	UnDef	0.11
13.12	39.6	0.27	0.67	12.45	7	18.5	244.1	150.6	93.44	0.80	13.2	10.5	UnDef	0.11
13.38	50.9	0.31	0.61	11.70	8	19.0	248.8	152.9	95.89	0.79	12.7	10.1	UnDef	0.11
13.62	60.0	0.26	0.43	11.53	8	19.0	253.5	155.2	98.35	0.79	15.0	11.8	UnDef	0.09
13.88	57.6	0.29	0.50	12.22	8	19.0	258.2	157.5	100.80	0.78	14.4	11.2	UnDef	0.11
14.12	45.3	0.29	0.64	12.38	7	18.5	262.9	159.7	103.25	0.77	15.1	11.7	UnDef	0.11
14.38	40.5	0.23	0.57	12.28	7	18.5	267.6	161.9	105.70	0.77	13.5	10.4	UnDef	0.10
14.62	51.1	0.32	0.63	12.39	8	19.0	272.2	164.1	108.16	0.76	12.8	9.8	UnDef	0.11
14.88	51.5	0.35	0.68	12.89	8	19.0	277.0	166.4	110.61	0.76	12.9	9.8	UnDef	0.11
15.12	47.4	0.34	0.72	13.54	7	18.5	281.7	168.6	113.06	0.75	15.8	11.9	UnDef	0.12
15.38	41.9	0.60	1.42	14.46	7	18.5	286.3	170.8	115.51	0.75	14.0	10.4	UnDef	0.23
15.62	31.0	1.42	4.58	8.94	3	17.5	290.8	172.8	117.97	0.74	31.0	23.1	225.0	0.00
15.88	40.3	2.37	5.89	-3.85	3	17.5	295.2	174.8	120.42	0.74	40.3	29.9	299.0	0.00
16.12	19.2	1.00	5.24	-4.69	3	17.5	299.6	176.7	122.87	0.74	19.2	14.1	129.4	0.00
16.38	41.2	2.06	5.02	-4.20	3	17.5	303.9	178.6	125.32	0.73	41.2	30.1	304.9	0.00
16.62	41.1	1.12	2.73	-0.60	6	18.0	308.4	180.6	127.78	0.73	16.4	12.0	303.9	0.41
16.88	63.1	1.48	2.34	-0.67	6	18.0	312.9	182.6	130.23	0.72	25.2	18.3	479.4	0.00
17.12	69.3	2.03	2.93	0.57	6	18.0	317.4	184.7	132.68	0.72	27.7	20.0	529.2	0.00

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0398
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT-18
Location: MAIN EMBANKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 09:47
CPT File: 219CP18.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.60 (ft): 11.8
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-03	0.00	1000.0	0.34	10	78.4	0.0	78.4	0.0	50	94.0	1.0	-0.30	0.0	
0.38	5.0E-02	0.00	1000.0	0.40	10	215.7	0.0	215.7	0.0	50	95.0	1.0	-0.31	0.0	
0.62	5.0E-02	0.00	1000.0	0.49	10	242.1	0.0	242.1	0.0	50	95.0	1.0	-0.33	0.0	
0.88	5.0E-02	0.00	651.8	0.59	10	221.1	0.0	221.1	0.0	50	95.0	1.0	-0.31	0.0	
1.12	5.0E-03	0.00	337.3	0.56	10	147.1	0.0	147.1	0.9	48	80.3	1.0	-0.24	0.0	
1.38	5.0E-03	0.00	209.0	0.57	9	108.1	0.0	108.1	2.9	46	69.5	1.0	-0.20	0.0	
1.62	5.0E-03	0.00	161.0	0.50	9	90.6	0.0	90.6	3.8	44	64.4	1.0	-0.17	0.0	
1.88	5.0E-03	0.00	123.1	0.43	9	74.5	0.0	74.5	4.8	42	58.8	1.0	-0.13	0.0	
2.12	5.0E-03	0.00	105.8	0.39	9	68.2	0.0	68.2	5.0	42	56.3	1.0	-0.11	0.0	
2.38	5.0E-04	0.00	86.9	0.43	9	59.2	0.0	59.2	5.0	42	52.3	1.0	-0.10	0.0	
2.62	5.0E-04	0.00	71.3	0.42	9	51.1	0.0	51.1	5.0	40	48.0	1.0	-0.08	0.0	
2.88	5.0E-04	0.00	48.8	0.25	9	36.8	0.0	36.8	5.0	38	38.7	1.0	-0.01	0.0	
3.12	5.0E-05	0.03	23.0	0.16	7	18.5	0.0	18.5	5.0	34	30.0	6.0	0.09	0.0	
3.38	5.0E-05	0.03	19.6	0.24	7	16.5	0.0	16.5	5.0	32	30.0	6.0	0.08	0.0	
3.62	5.0E-05	0.05	19.6	0.27	7	17.0	0.0	17.0	5.0	32	30.0	6.0	0.07	0.0	
3.88	5.0E-05	0.04	20.9	0.22	7	18.4	0.0	18.4	5.0	34	30.0	6.0	0.08	0.0	
4.12	5.0E-04	0.01	30.7	0.21	9	27.0	0.0	27.0	5.0	36	30.0	1.0	0.05	0.0	
4.38	5.0E-05	0.02	20.0	0.27	7	18.2	0.0	18.2	5.0	34	30.0	6.0	0.06	0.0	
4.62	5.0E-04	0.03	21.7	0.27	7	20.0	0.0	20.0	5.0	34	30.0	1.0	0.06	0.0	
4.88	5.0E-04	0.02	27.8	0.31	7	25.7	0.0	25.7	5.0	36	30.0	1.0	0.03	0.0	
5.12	5.0E-05	0.04	16.3	0.26	7	15.7	0.0	15.7	5.0	32	30.0	6.0	0.09	0.0	
5.38	5.0E-05	0.03	16.2	0.22	7	15.8	0.0	15.8	5.0	32	30.0	6.0	0.10	0.0	
5.62	5.0E-05	0.04	15.2	0.20	7	15.1	0.0	15.1	5.0	32	30.0	6.0	0.11	0.0	
5.88	5.0E-05	0.08	11.5	0.20	7	11.9	0.0	11.9	5.0	30	30.0	3.0	0.14	0.0	
6.12	5.0E-04	0.02	25.9	0.26	7	25.6	0.0	25.6	5.0	34	30.0	1.0	0.05	0.0	
6.38	5.0E-05	0.04	19.9	0.69	7	20.3	29.1	49.3	27.1	34	30.0	6.0	0.00	4.6	
6.62	5.0E-04	0.02	28.3	0.21	7	28.6	0.0	28.6	5.0	36	31.4	1.0	0.05	0.0	
6.88	5.0E-03	0.00	44.5	0.35	9	44.8	0.0	44.8	5.0	38	44.3	1.0	-0.03	0.0	
7.12	5.0E-03	0.00	41.2	0.28	9	42.1	0.0	42.1	5.0	38	42.5	1.0	0.00	0.0	
7.38	5.0E-04	0.01	33.9	0.24	9	35.2	0.0	35.2	5.0	36	37.4	1.0	0.03	0.0	
7.62	5.0E-03	0.01	34.3	0.17	9	36.1	0.0	36.1	5.0	36	38.0	1.0	0.06	0.0	
7.88	5.0E-04	0.02	29.6	0.24	7	31.7	0.0	31.7	5.0	36	34.3	1.0	0.04	0.0	
8.12	5.0E-04	0.04	18.2	0.32	7	20.3	0.0	20.3	5.0	32	30.0	1.0	0.06	0.0	
8.38	5.0E-04	0.04	14.9	0.15	7	17.1	0.0	17.1	5.0	32	30.0	1.0	0.14	0.0	
8.62	5.0E-05	0.07	13.5	0.31	7	15.7	0.0	15.7	5.0	32	30.0	6.0	0.09	0.0	
8.88	5.0E-04	0.07	13.7	0.22	7	16.1	0.0	16.1	5.0	32	30.0	1.0	0.12	0.0	
9.12	5.0E-03	0.02	30.6	0.30	7	34.4	0.0	34.4	5.0	36	36.7	1.0	0.02	0.0	
9.38	5.0E-03	0.01	32.0	0.36	7	36.3	0.0	36.3	5.0	36	38.2	1.0	0.00	0.0	
9.62	5.0E-04	0.01	27.5	0.37	7	31.7	0.0	31.7	5.0	36	34.3	1.0	0.01	0.0	

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
9.88	5.0E-04	0.01	23.8	0.57	7	28.0	25.5	53.5	22.9	34	30.8	1.0	-0.01	3.9	
10.12	5.0E-04	0.02	21.1	0.75	7	25.2	35.0	60.1	26.8	34	30.0	1.0	-0.02	4.7	
10.38	5.0E-04	0.01	33.4	0.82	7	39.2	28.7	67.9	20.8	36	40.5	1.0	-0.07	4.6	
10.62	5.0E-03	0.00	39.6	0.79	7	46.6	25.7	72.3	18.3	38	45.4	1.0	-0.08	3.3	
10.88	5.0E-05	0.03	13.8	1.35	6	17.6	70.3	87.9	40.0	32	30.0	6.0	-0.02	6.9	
11.12	5.0E-05	0.09	11.4	0.53	7	14.9	59.7	74.6	35.0	30	30.0	3.0	0.07	5.8	
11.38	5.0E-03	0.00	39.6	0.58	7	47.8	20.7	68.5	16.3	38	46.1	1.0	-0.06	2.7	
11.62	5.0E-03	0.00	40.5	0.53	9	49.3	19.0	68.4	15.4	38	47.0	1.0	-0.05	2.5	
11.88	5.0E-03	0.01	33.0	0.65	7	40.8	25.2	66.0	19.3	36	41.6	1.0	-0.05	3.1	
12.12	5.0E-03	0.00	47.4	0.44	9	58.3	0.0	58.3	5.0	38	51.8	1.0	-0.05	0.0	
12.38	5.0E-03	0.01	35.7	0.58	7	44.7	22.4	67.1	17.5	38	44.2	1.0	-0.05	2.9	
12.62	5.0E-04	0.01	26.8	0.76	7	34.4	32.8	67.2	23.3	36	36.7	1.0	-0.04	4.9	
12.88	5.0E-04	0.01	28.4	0.71	7	36.6	30.0	66.6	21.9	36	38.4	1.0	-0.04	4.7	
13.12	5.0E-04	0.01	24.7	0.71	7	32.3	33.2	65.5	24.0	34	34.9	1.0	-0.03	4.9	
13.38	5.0E-03	0.00	31.6	0.64	7	41.1	26.6	67.8	19.7	36	41.8	1.0	-0.04	3.3	
13.62	5.0E-03	0.00	37.0	0.45	9	48.2	0.0	48.2	5.0	38	46.3	1.0	-0.03	0.0	
13.88	5.0E-03	0.00	35.0	0.53	7	45.9	22.1	68.1	17.2	38	45.0	1.0	-0.04	2.9	
14.12	5.0E-04	0.00	26.7	0.67	7	35.9	31.1	67.0	22.4	36	37.9	1.0	-0.03	4.8	
14.38	5.0E-04	0.00	23.4	0.61	7	31.8	31.6	63.5	23.7	34	34.5	1.0	-0.01	4.7	
14.62	5.0E-03	0.00	29.5	0.66	7	39.9	29.4	69.3	20.9	36	40.9	1.0	-0.04	3.5	
14.88	5.0E-03	0.00	29.3	0.72	7	39.9	31.7	71.6	21.6	36	41.0	1.0	-0.05	3.7	
15.12	5.0E-04	0.00	26.4	0.77	7	36.5	35.8	72.3	23.6	36	38.4	1.0	-0.04	5.3	
15.38	5.0E-04	0.01	22.8	1.53	7	32.0	86.2	118.3	32.3	34	34.6	1.0	-0.08	8.8	
15.62	5.0E-08	-0.01	16.3	5.06	1	23.6	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	
15.88	5.0E-08	-0.04	21.4	6.35	1	30.5	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	
16.12	5.0E-08	-0.10	9.2	6.21	1	14.4	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
16.38	5.0E-08	-0.04	21.3	5.41	1	30.8	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	
16.62	5.0E-05	-0.04	21.0	2.95	6	30.6	122.3	152.8	42.2	34	33.3	6.0	-0.14	12.0	
16.88	5.0E-05	-0.02	32.8	2.46	6	46.7	123.2	169.9	32.2	36	45.4	6.0	-0.17	15.2	
17.12	5.0E-05	-0.02	35.8	3.07	6	51.0	168.5	219.5	33.7	38	48.0	6.0	-0.21	18.4	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0470
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-19
Location: MAIN EMBANKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 11:27
CPT File: 219CP19.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.50 (ft): 11.5
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	26.7	0.04	0.16	0.02	7	18.5	2.3	2.3	0.00	2.00	8.9	17.8	UnDef	0.09
0.38	28.4	0.26	0.91	0.10	7	18.5	6.9	6.9	0.00	2.00	9.5	18.9	UnDef	0.10
0.62	33.5	0.54	1.60	-0.55	6	18.0	11.5	11.5	0.00	2.00	13.4	26.8	266.9	0.11
0.88	25.6	0.09	0.36	0.15	7	18.5	16.1	16.1	0.00	2.00	8.5	17.1	UnDef	0.09
1.12	41.4	0.14	0.35	0.08	8	19.0	20.8	20.8	0.00	2.00	10.4	20.7	UnDef	0.13
1.38	38.2	0.13	0.34	0.08	8	19.0	25.5	25.5	0.00	1.94	9.6	18.5	UnDef	0.12
1.62	34.5	0.10	0.30	0.09	7	18.5	30.2	30.2	0.00	1.78	11.5	20.5	UnDef	0.10
1.88	28.6	0.06	0.21	0.05	7	18.5	34.8	34.8	0.00	1.66	9.5	15.8	UnDef	0.09
2.12	31.3	0.07	0.24	0.03	7	18.5	39.4	39.4	0.00	1.56	10.4	16.2	UnDef	0.09
2.38	31.1	0.09	0.30	0.03	7	18.5	44.1	44.1	0.00	1.47	10.4	15.3	UnDef	0.09
2.62	28.0	0.05	0.16	0.04	7	18.5	48.7	48.7	0.00	1.40	9.3	13.1	UnDef	0.09
2.88	29.8	0.05	0.18	0.04	7	18.5	53.3	53.3	0.00	1.34	9.9	13.3	UnDef	0.09
3.12	18.3	0.03	0.18	0.60	7	18.5	57.9	57.9	0.00	1.29	6.1	7.8	UnDef	0.00
3.38	12.8	0.04	0.28	1.74	6	18.0	62.5	62.5	0.00	1.24	5.1	6.3	97.3	0.00
3.62	10.9	0.02	0.20	2.42	6	18.0	67.0	65.8	1.23	1.21	4.4	5.3	81.9	0.00
3.88	9.3	0.02	0.24	3.02	6	18.0	71.5	67.8	3.68	1.19	3.7	4.4	68.5	0.00
4.12	9.3	0.02	0.24	2.04	6	18.0	76.0	69.9	6.13	1.17	3.7	4.3	68.0	0.00
4.38	9.0	0.02	0.22	2.68	6	18.0	80.5	71.9	8.58	1.15	3.6	4.2	65.9	0.00
4.62	7.6	0.01	0.16	3.74	1	17.5	84.9	73.9	11.04	1.14	3.8	4.3	54.1	0.00
4.88	11.3	0.03	0.25	4.82	6	18.0	89.4	75.9	13.49	1.12	4.5	5.1	83.3	0.00
5.12	16.8	0.04	0.24	3.06	7	18.5	93.9	78.0	15.94	1.11	5.6	6.2	UnDef	0.00
5.38	15.2	0.03	0.20	4.20	6	18.0	98.5	80.1	18.39	1.09	6.1	6.6	113.7	0.00
5.62	9.9	0.02	0.18	5.37	6	18.0	103.0	82.2	20.85	1.08	4.0	4.3	71.1	0.00
5.88	6.7	0.01	0.21	6.92	1	17.5	107.4	84.1	23.30	1.07	3.4	3.6	45.1	0.00
6.12	14.2	0.03	0.23	1.35	6	18.0	111.9	86.1	25.75	1.05	5.7	6.0	104.6	0.00
6.38	24.9	0.06	0.23	0.43	7	18.5	116.4	88.2	28.20	1.04	8.3	8.6	UnDef	0.00
6.62	23.8	0.09	0.39	3.60	7	18.5	121.1	90.4	30.66	1.03	7.9	8.2	UnDef	0.00
6.88	23.5	0.08	0.36	6.80	7	18.5	125.7	92.6	33.11	1.02	7.8	8.0	UnDef	0.00
7.12	36.2	0.10	0.28	4.55	7	18.5	130.3	94.8	35.56	1.01	12.1	12.1	UnDef	0.08
7.38	39.5	0.10	0.24	6.09	8	19.0	135.0	97.0	38.01	0.99	9.9	9.8	UnDef	0.09
7.62	33.0	0.10	0.32	7.92	7	18.5	139.7	99.2	40.47	0.98	11.0	10.8	UnDef	0.08
7.88	28.6	0.10	0.36	9.08	7	18.5	144.3	101.4	42.92	0.97	9.5	9.3	UnDef	0.00
8.12	11.2	0.04	0.39	11.98	6	18.0	148.9	103.5	45.37	0.96	4.5	4.3	77.3	0.10
8.38	19.3	0.07	0.35	11.47	7	18.5	153.4	105.6	47.82	0.95	6.4	6.1	UnDef	0.00
8.62	18.6	0.07	0.36	13.08	7	18.5	158.1	107.8	50.28	0.94	6.2	5.8	UnDef	0.00
8.88	12.1	0.04	0.36	14.82	6	18.0	162.6	109.9	52.73	0.93	4.9	4.5	84.1	0.10
9.12	19.3	0.07	0.34	10.09	7	18.5	167.2	112.0	55.18	0.92	6.4	5.9	UnDef	0.00
9.38	31.8	0.12	0.38	9.57	7	18.5	171.8	114.2	57.63	0.92	10.6	9.7	UnDef	0.00
9.62	21.9	0.13	0.60	10.65	7	18.5	176.4	116.4	60.09	0.91	7.3	6.6	UnDef	0.10

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
9.88	25.6	0.09	0.36	9.14	7	18.5	181.1	118.5	62.54	0.90	8.5	7.7	UnDef	0.00
10.12	34.1	0.15	0.45	8.29	7	18.5	185.7	120.7	64.99	0.89	11.4	10.1	UnDef	0.08
10.38	31.1	0.11	0.36	8.19	7	18.5	190.3	122.9	67.44	0.88	10.4	9.1	UnDef	0.00
10.62	28.8	0.13	0.44	8.32	7	18.5	194.9	125.0	69.90	0.88	9.6	8.4	UnDef	0.00
10.88	30.8	0.19	0.63	8.47	7	18.5	199.6	127.2	72.35	0.87	10.3	8.9	UnDef	0.10
11.12	23.8	0.13	0.53	8.50	7	18.5	204.2	129.4	74.80	0.86	7.9	6.8	UnDef	0.10
11.38	36.2	0.18	0.49	9.01	7	18.5	208.8	131.6	77.25	0.85	12.1	10.3	UnDef	0.10
11.62	14.5	0.14	0.97	14.37	6	18.0	213.4	133.7	79.71	0.85	5.8	4.9	98.9	0.10
11.88	35.7	0.17	0.48	9.55	7	18.5	217.9	135.8	82.16	0.84	11.9	10.0	UnDef	0.10
12.12	50.7	0.17	0.34	9.49	8	19.0	222.6	138.0	84.61	0.83	12.7	10.6	UnDef	0.09
12.38	48.3	0.09	0.19	10.17	8	19.0	227.4	140.3	87.06	0.83	12.1	10.0	UnDef	0.09
12.62	55.1	0.11	0.20	10.45	8	19.0	232.1	142.6	89.52	0.82	13.8	11.3	UnDef	0.09
12.88	61.4	0.14	0.22	10.71	8	19.0	236.9	144.9	91.97	0.81	15.4	12.5	UnDef	0.09
13.12	41.1	0.09	0.22	11.52	8	19.0	241.6	147.2	94.42	0.81	10.3	8.3	UnDef	0.08
13.38	44.4	0.11	0.24	11.44	8	19.0	246.4	149.5	96.87	0.80	11.1	8.9	UnDef	0.08
13.62	45.1	0.13	0.28	11.03	8	19.0	251.1	151.8	99.33	0.79	11.3	8.9	UnDef	0.08
13.88	51.2	0.21	0.41	11.17	8	19.0	255.9	154.1	101.78	0.79	12.8	10.1	UnDef	0.09
14.12	43.7	0.12	0.27	11.53	8	19.0	260.6	156.4	104.23	0.78	10.9	8.6	UnDef	0.08
14.38	50.6	0.18	0.35	11.38	8	19.0	265.4	158.7	106.68	0.78	12.6	9.8	UnDef	0.09
14.62	45.6	0.23	0.50	11.52	8	19.0	270.1	161.0	109.14	0.77	11.4	8.8	UnDef	0.10
14.88	41.1	0.21	0.51	11.77	7	18.5	274.8	163.2	111.59	0.77	13.7	10.5	UnDef	0.10
15.12	42.1	0.15	0.36	11.85	8	19.0	279.5	165.5	114.04	0.76	10.5	8.0	UnDef	0.08
15.38	40.0	0.14	0.35	12.18	8	19.0	284.2	167.8	116.49	0.76	10.0	7.6	UnDef	0.08
15.62	44.5	0.14	0.31	12.43	8	19.0	289.0	170.1	118.95	0.75	11.1	8.3	UnDef	0.08
15.88	53.3	0.25	0.46	12.70	8	19.0	293.8	172.4	121.40	0.75	13.3	9.9	UnDef	0.09
16.12	49.6	0.20	0.41	12.89	8	19.0	298.5	174.6	123.85	0.74	12.4	9.2	UnDef	0.08
16.38	50.2	0.16	0.32	13.00	8	19.0	303.2	176.9	126.30	0.74	12.5	9.2	UnDef	0.08
16.62	47.8	0.14	0.30	13.26	8	19.0	308.0	179.2	128.76	0.73	12.0	8.7	UnDef	0.08
16.88	52.2	0.14	0.27	13.46	8	19.0	312.8	181.5	131.21	0.73	13.1	9.5	UnDef	0.09
17.12	56.5	0.14	0.25	13.70	8	19.0	317.5	183.8	133.66	0.72	14.1	10.2	UnDef	0.09
17.38	58.4	0.19	0.33	13.94	8	19.0	322.2	186.1	136.11	0.72	14.6	10.5	UnDef	0.09
17.62	55.2	0.26	0.47	14.36	8	19.0	327.0	188.4	138.57	0.71	13.8	9.8	UnDef	0.09
17.88	62.2	0.29	0.47	14.56	8	19.0	331.8	190.7	141.02	0.71	15.6	11.0	UnDef	0.09
18.12	66.0	0.28	0.42	14.83	8	19.0	336.5	193.0	143.47	0.70	16.5	11.6	UnDef	0.09
18.38	60.2	0.58	0.97	15.53	8	19.0	341.2	195.3	145.92	0.70	15.0	10.5	UnDef	0.15
18.62	42.3	0.49	1.17	19.04	7	18.5	345.9	197.6	148.38	0.70	14.1	9.8	UnDef	0.23
18.88	12.9	0.19	1.49	32.37	6	18.0	350.5	199.7	150.83	0.69	5.1	3.6	74.9	0.09
19.12	10.3	0.20	1.97	34.58	5	18.0	355.0	201.7	153.28	0.69	5.2	3.6	54.3	0.00
19.38	9.7	0.25	2.57	39.87	5	18.0	359.5	203.8	155.73	0.69	4.9	3.3	49.0	0.00
19.62	13.9	0.50	3.60	26.98	4	18.0	364.0	205.8	158.19	0.68	9.3	6.3	82.1	0.00
19.88	15.9	0.55	3.48	17.22	4	18.0	368.5	207.9	160.64	0.68	10.6	7.2	97.4	0.00
20.12	17.1	0.48	2.81	22.67	5	18.0	373.0	209.9	163.09	0.68	8.6	5.8	107.2	0.00
20.38	17.9	0.57	3.20	24.38	5	18.0	377.5	212.0	165.54	0.67	9.0	6.0	113.2	0.00
20.62	43.9	1.89	4.32	5.92	4	18.0	382.0	214.0	168.00	0.67	29.2	19.6	320.4	0.00
20.88	33.2	1.68	5.07	-0.57	3	17.5	386.4	216.0	170.45	0.67	33.2	22.1	234.9	0.00
21.12	24.5	1.12	4.55	7.06	3	17.5	390.8	217.9	172.90	0.66	24.5	16.3	165.0	0.00
21.38	29.8	1.35	4.52	9.23	3	17.5	395.2	219.8	175.35	0.66	29.8	19.6	206.5	0.00
21.62	31.2	1.44	4.62	10.30	3	17.5	399.6	221.8	177.81	0.66	31.2	20.5	217.3	0.00
21.88	39.2	1.63	4.16	8.41	5	18.0	404.0	223.7	180.26	0.65	19.6	12.8	281.6	0.00

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0470
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-19
Location: MAIN EMBANKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 11:27
CPT File: 219CP19.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.50 (ft): 11.5
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-04	0.00	1000.0	0.16	10	53.4	0.0	53.4	0.0	50	83.4	1.0	-0.23	0.0	
0.38	5.0E-04	0.00	408.2	0.91	9	56.8	0.0	56.8	2.3	48	69.4	1.0	-0.31	0.0	
0.62	5.0E-05	0.00	290.1	1.61	9	67.0	3.8	70.7	7.0	46	66.9	10.0	-0.35	0.9	
0.88	5.0E-04	0.00	158.5	0.36	9	51.2	0.0	51.2	2.7	44	54.4	1.0	-0.14	0.0	
1.12	5.0E-03	0.00	198.7	0.35	9	82.9	0.0	82.9	1.5	46	64.6	1.0	-0.16	0.0	
1.38	5.0E-03	0.00	148.8	0.34	9	75.7	0.0	75.7	2.8	44	59.3	1.0	-0.13	0.0	
1.62	5.0E-04	0.00	113.4	0.30	9	62.9	0.0	62.9	4.0	42	54.0	1.0	-0.10	0.0	
1.88	5.0E-04	0.00	81.3	0.21	9	48.6	0.0	48.6	5.0	42	46.6	1.0	-0.04	0.0	
2.12	5.0E-04	0.00	78.3	0.24	9	49.8	0.0	49.8	5.0	42	47.3	1.0	-0.05	0.0	
2.38	5.0E-04	0.00	69.6	0.31	9	46.9	0.0	46.9	5.0	40	45.6	1.0	-0.06	0.0	
2.62	5.0E-04	0.00	56.4	0.17	9	40.1	0.0	40.1	5.0	40	41.1	1.0	0.01	0.0	
2.88	5.0E-04	0.00	54.8	0.18	9	40.8	0.0	40.8	5.0	40	41.6	1.0	0.01	0.0	
3.12	5.0E-04	0.00	30.5	0.18	9	24.0	0.0	24.0	5.0	36	30.0	1.0	0.06	0.0	
3.38	5.0E-05	0.01	19.5	0.30	7	16.2	0.0	16.2	5.0	32	30.0	6.0	0.06	0.0	
3.62	5.0E-05	0.02	15.6	0.21	7	13.4	0.0	13.4	5.0	32	30.0	6.0	0.10	0.0	
3.88	5.0E-05	0.03	12.6	0.26	7	11.3	0.0	11.3	5.0	30	30.0	6.0	0.11	0.0	
4.12	5.0E-05	0.02	12.2	0.26	7	11.1	0.0	11.1	5.0	30	30.0	3.0	0.11	0.0	
4.38	5.0E-05	0.02	11.5	0.24	7	10.7	0.0	10.7	5.0	30	30.0	3.0	0.12	0.0	
4.62	1.0E-07	0.04	9.2	0.18	1	8.9	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
4.88	5.0E-05	0.03	13.7	0.27	7	13.0	0.0	13.0	5.0	32	30.0	6.0	0.10	0.0	
5.12	5.0E-04	0.01	20.4	0.25	7	19.1	0.0	19.1	5.0	34	30.0	1.0	0.07	0.0	
5.38	5.0E-05	0.02	17.7	0.21	7	17.0	0.0	17.0	5.0	32	30.0	6.0	0.09	0.0	
5.62	5.0E-05	0.04	10.8	0.20	7	10.9	0.0	10.9	5.0	30	30.0	3.0	0.14	0.0	
5.88	1.0E-07	0.08	6.7	0.25	1	7.3	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
6.12	5.0E-05	-0.01	15.2	0.24	7	15.3	0.0	15.3	5.0	32	30.0	6.0	0.09	0.0	
6.38	5.0E-04	-0.01	26.8	0.24	7	26.5	0.0	26.5	5.0	36	30.0	1.0	0.04	0.0	
6.62	5.0E-04	0.00	25.0	0.41	7	25.1	0.0	25.1	5.0	34	30.0	1.0	0.01	0.0	
6.88	5.0E-04	0.02	24.0	0.38	7	24.4	0.0	24.4	5.0	34	30.0	1.0	0.02	0.0	
7.12	5.0E-04	0.00	36.9	0.29	9	37.2	0.0	37.2	5.0	38	38.9	1.0	0.00	0.0	
7.38	5.0E-03	0.01	39.3	0.25	9	40.1	0.0	40.1	5.0	38	41.1	1.0	0.01	0.0	
7.62	5.0E-04	0.01	31.9	0.33	7	33.1	0.0	33.1	5.0	36	35.6	1.0	0.01	0.0	
7.88	5.0E-04	0.02	26.8	0.38	7	28.4	0.0	28.4	5.0	36	31.2	1.0	0.01	0.0	
8.12	5.0E-05	0.07	9.3	0.46	6	11.0	43.9	54.8	37.8	30	30.0	3.0	0.10	4.3	
8.38	5.0E-04	0.04	16.8	0.38	7	18.7	0.0	18.7	5.0	32	30.0	1.0	0.05	0.0	
8.62	5.0E-04	0.05	15.8	0.39	7	17.9	0.0	17.9	5.0	32	30.0	1.0	0.06	0.0	
8.88	5.0E-05	0.09	9.6	0.42	6	11.6	46.3	57.9	36.7	30	30.0	3.0	0.10	4.5	
9.12	5.0E-04	0.02	15.7	0.37	7	18.2	0.0	18.2	5.0	32	30.0	1.0	0.06	0.0	
9.38	5.0E-04	0.01	26.3	0.40	7	29.7	0.0	29.7	5.0	36	32.5	1.0	0.01	0.0	
9.62	5.0E-04	0.02	17.3	0.66	7	20.3	36.2	56.5	29.0	32	30.0	1.0	0.01	4.4	

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
9.88	5.0E-04	0.01	20.1	0.39	7	23.5	0.0	23.5	5.0	34	30.0	1.0	0.04	0.0	
10.12	5.0E-04	0.01	26.7	0.48	7	31.0	0.0	31.0	5.0	36	33.7	1.0	-0.01	0.0	
10.38	5.0E-04	0.00	23.7	0.38	7	28.0	0.0	28.0	5.0	34	30.8	1.0	0.02	0.0	
10.62	5.0E-04	0.00	21.5	0.47	7	25.8	0.0	25.8	5.0	34	30.0	1.0	0.02	0.0	
10.88	5.0E-04	0.00	22.7	0.67	7	27.3	30.7	58.0	24.8	34	30.1	1.0	-0.02	4.4	
11.12	5.0E-04	0.00	16.8	0.58	7	20.9	35.2	56.1	28.5	32	30.0	1.0	0.02	4.4	
11.38	5.0E-04	0.00	26.0	0.52	7	31.6	23.5	55.1	21.0	36	34.3	1.0	-0.01	3.7	
11.62	5.0E-05	0.05	9.2	1.13	6	12.5	50.1	62.7	46.5	30	30.0	3.0	0.03	4.9	
11.88	5.0E-04	0.00	24.7	0.51	7	30.7	24.5	55.2	21.6	34	33.4	1.0	0.00	3.8	
12.12	5.0E-03	0.00	35.1	0.35	9	43.2	0.0	43.2	5.0	38	43.2	1.0	-0.01	0.0	
12.38	5.0E-03	0.00	32.8	0.20	9	40.8	0.0	40.8	5.0	36	41.6	1.0	0.05	0.0	
12.62	5.0E-03	0.00	37.0	0.21	9	46.1	0.0	46.1	5.0	38	45.1	1.0	0.03	0.0	
12.88	5.0E-03	0.00	40.7	0.23	9	51.0	0.0	51.0	5.0	38	48.0	1.0	0.01	0.0	
13.12	5.0E-03	0.00	26.3	0.24	7	33.9	0.0	33.9	5.0	36	36.3	1.0	0.05	0.0	
13.38	5.0E-03	0.00	28.1	0.26	7	36.3	0.0	36.3	5.0	36	38.2	1.0	0.04	0.0	
13.62	5.0E-03	0.00	28.0	0.30	7	36.6	0.0	36.6	5.0	36	38.4	1.0	0.03	0.0	
13.88	5.0E-03	0.00	31.6	0.44	7	41.3	0.0	41.3	5.0	36	41.9	1.0	-0.01	0.0	
14.12	5.0E-03	0.00	26.3	0.29	7	35.0	0.0	35.0	5.0	36	37.1	1.0	0.03	0.0	
14.38	5.0E-03	0.00	30.2	0.37	7	40.2	0.0	40.2	5.0	36	41.1	1.0	0.00	0.0	
14.62	5.0E-03	0.00	26.7	0.53	7	36.0	26.0	62.0	20.7	36	38.0	1.0	-0.01	3.1	
14.88	5.0E-04	0.00	23.5	0.54	7	32.2	28.9	61.1	22.7	34	34.8	1.0	0.00	4.4	
15.12	5.0E-03	0.00	23.8	0.39	7	32.7	0.0	32.7	5.0	34	35.3	1.0	0.02	0.0	
15.38	5.0E-03	0.00	22.1	0.38	7	30.9	0.0	30.9	5.0	34	33.6	1.0	0.03	0.0	
15.62	5.0E-03	0.00	24.5	0.34	7	34.1	0.0	34.1	5.0	34	36.4	1.0	0.03	0.0	
15.88	5.0E-03	0.00	29.2	0.49	7	40.6	0.0	40.6	5.0	36	41.4	1.0	-0.02	0.0	
16.12	5.0E-03	0.00	26.7	0.43	7	37.5	0.0	37.5	5.0	36	39.2	1.0	0.00	0.0	
16.38	5.0E-03	0.00	26.6	0.34	7	37.7	0.0	37.7	5.0	36	39.3	1.0	0.02	0.0	
16.62	5.0E-03	0.00	24.9	0.32	7	35.7	0.0	35.7	5.0	34	37.8	1.0	0.03	0.0	
16.88	5.0E-03	0.00	27.0	0.29	7	38.8	0.0	38.8	5.0	36	40.1	1.0	0.03	0.0	
17.12	5.0E-03	0.00	29.0	0.26	7	41.6	0.0	41.6	5.0	36	42.2	1.0	0.03	0.0	
17.38	5.0E-03	0.00	29.6	0.35	7	42.8	0.0	42.8	5.0	36	42.9	1.0	0.01	0.0	
17.62	5.0E-03	0.00	27.6	0.50	7	40.2	0.0	40.2	5.0	36	41.2	1.0	-0.01	0.0	
17.88	5.0E-03	0.00	30.9	0.49	7	45.1	0.0	45.1	5.0	36	44.4	1.0	-0.02	0.0	
18.12	5.0E-03	0.00	32.4	0.44	7	47.5	0.0	47.5	5.0	36	45.9	1.0	-0.02	0.0	
18.38	5.0E-03	0.00	29.1	1.03	7	43.0	47.3	90.4	24.6	36	43.1	1.0	-0.07	5.1	
18.62	5.0E-04	0.01	19.7	1.27	7	30.1	87.3	117.5	32.9	34	32.9	1.0	-0.05	8.5	
18.88	5.0E-05	0.18	4.7	2.05	4	9.1	36.4	45.5	72.3	30	30.0	1.5	0.09	3.6	
19.12	5.0E-06	0.27	3.4	3.01	1	7.3	UnDef	UnDef	100.0	UnDef	UnDef	1.5	UnDef	UnDef	
19.38	5.0E-06	0.38	3.0	4.08	1	6.8	UnDef	UnDef	100.0	UnDef	UnDef	1.0	UnDef	UnDef	
19.62	5.0E-07	0.10	5.0	4.87	1	9.7	UnDef	UnDef	100.0	UnDef	UnDef	1.5	UnDef	UnDef	
19.88	5.0E-07	0.01	5.9	4.54	1	11.0	UnDef	UnDef	100.0	UnDef	UnDef	1.5	UnDef	UnDef	
20.12	5.0E-06	0.04	6.4	3.60	1	11.8	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
20.38	5.0E-06	0.05	6.7	4.06	1	12.3	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
20.62	5.0E-07	-0.03	18.7	4.73	1	30.0	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	
20.88	5.0E-08	-0.06	13.6	5.74	1	22.6	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	
21.12	5.0E-08	-0.05	9.5	5.41	1	16.6	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
21.38	5.0E-08	-0.03	11.7	5.21	1	20.1	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
21.62	5.0E-08	-0.03	12.2	5.29	1	20.9	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
21.88	5.0E-06	-0.03	15.7	4.64	1	26.2	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0541
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-20
Location: MAIN EMBAMKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 12:44
CPT File: 219CP20.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.30 (ft): 10.8
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	18.2	0.11	0.61	5.04	6	18.0	2.2	2.2	0.00	2.00	7.3	14.6	145.6	0.08
0.38	47.5	0.26	0.55	0.38	8	19.0	6.9	6.9	0.00	2.00	11.9	23.8	UnDef	0.16
0.62	49.9	0.29	0.59	0.23	8	19.0	11.6	11.6	0.00	2.00	12.5	24.9	UnDef	0.17
0.88	45.7	0.25	0.55	0.21	8	19.0	16.4	16.4	0.00	2.00	11.4	22.9	UnDef	0.15
1.12	44.6	0.25	0.57	0.13	8	19.0	21.1	21.1	0.00	2.00	11.2	22.3	UnDef	0.15
1.38	44.9	0.20	0.45	0.10	8	19.0	25.9	25.9	0.00	1.92	11.2	21.6	UnDef	0.14
1.62	44.1	0.19	0.44	0.09	8	19.0	30.6	30.6	0.00	1.77	11.0	19.5	UnDef	0.13
1.88	41.0	0.18	0.44	0.07	8	19.0	35.4	35.4	0.00	1.65	10.3	16.9	UnDef	0.11
2.12	38.4	0.16	0.41	-0.03	7	18.5	40.1	40.1	0.00	1.55	12.8	19.8	UnDef	0.10
2.38	36.8	0.13	0.36	-0.06	7	18.5	44.7	44.7	0.00	1.46	12.3	18.0	UnDef	0.10
2.62	23.1	0.06	0.28	1.27	7	18.5	49.3	49.3	0.00	1.39	7.7	10.7	UnDef	0.08
2.88	15.6	0.01	0.06	4.17	7	18.5	53.9	53.9	0.00	1.33	5.2	6.9	UnDef	0.00
3.12	13.0	0.02	0.15	5.77	6	18.0	58.5	58.5	0.00	1.28	5.2	6.7	99.4	0.00
3.38	15.6	0.02	0.12	5.37	7	18.5	63.1	62.3	0.74	1.24	5.2	6.5	UnDef	0.00
3.62	13.7	0.02	0.15	6.43	6	18.0	67.6	64.4	3.19	1.22	5.5	6.7	104.5	0.00
3.88	15.0	0.03	0.19	5.91	6	18.0	72.1	66.5	5.64	1.20	6.0	7.2	114.2	0.00
4.12	17.8	0.06	0.35	4.76	7	18.5	76.7	68.6	8.09	1.18	5.9	7.0	UnDef	0.00
4.38	19.8	0.07	0.33	3.78	7	18.5	81.3	70.8	10.55	1.16	6.6	7.7	UnDef	0.00
4.62	22.6	0.07	0.33	5.32	7	18.5	85.9	72.9	13.00	1.15	7.5	8.6	UnDef	0.00
4.88	26.5	0.08	0.29	6.81	7	18.5	90.6	75.1	15.45	1.13	8.8	10.0	UnDef	0.08
5.12	46.1	0.14	0.31	2.69	8	19.0	95.2	77.3	17.90	1.11	11.5	12.8	UnDef	0.09
5.38	42.2	0.20	0.46	3.20	8	19.0	100.0	79.6	20.36	1.10	10.5	11.6	UnDef	0.09
5.62	54.9	0.30	0.55	4.20	8	19.0	104.8	81.9	22.81	1.08	13.7	14.8	UnDef	0.11
5.88	44.8	0.28	0.63	5.22	7	18.5	109.4	84.2	25.26	1.07	14.9	15.9	UnDef	0.10
6.12	19.5	0.12	0.61	9.24	6	18.0	114.0	86.3	27.71	1.05	7.8	8.2	146.6	0.09
6.38	31.4	0.18	0.57	2.49	7	18.5	118.6	88.4	30.17	1.04	10.5	10.9	UnDef	0.09
6.62	10.6	0.03	0.30	4.32	6	18.0	123.1	90.5	32.62	1.03	4.2	4.4	75.1	0.00
6.88	19.6	0.07	0.34	10.13	7	18.5	127.7	92.6	35.07	1.02	6.5	6.7	UnDef	0.00
7.12	30.4	0.16	0.54	7.77	7	18.5	132.3	94.8	37.52	1.01	10.1	10.2	UnDef	0.09
7.38	24.5	0.10	0.39	7.93	7	18.5	136.9	97.0	39.98	0.99	8.2	8.1	UnDef	0.00
7.62	16.3	0.11	0.68	11.13	6	18.0	141.5	99.1	42.43	0.98	6.5	6.4	118.9	0.10
7.88	28.9	0.11	0.39	10.07	7	18.5	146.1	101.2	44.88	0.97	9.6	9.4	UnDef	0.00
8.12	39.8	0.10	0.26	10.21	8	19.0	150.8	103.4	47.33	0.96	9.9	9.6	UnDef	0.09
8.38	44.5	0.23	0.51	11.64	8	19.0	155.5	105.7	49.79	0.95	11.1	10.6	UnDef	0.10

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0541
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-20
Location: MAIN EMBAMKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 12:44
CPT File: 219CP20.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.30 (ft): 10.8
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-05	0.03	809.1	0.62	10	36.5	0.0	36.5	0.0	50	72.9	10.0	-0.33	0.0	
0.38	5.0E-03	0.00	690.0	0.55	10	95.0	0.0	95.0	0.0	50	84.3	1.0	-0.31	0.0	
0.62	5.0E-03	0.00	428.2	0.59	10	99.8	0.0	99.8	0.4	48	78.2	1.0	-0.27	0.0	
0.88	5.0E-03	0.00	278.3	0.55	9	91.5	0.0	91.5	1.6	46	70.8	1.0	-0.23	0.0	
1.12	5.0E-03	0.00	210.4	0.57	9	89.3	0.0	89.3	2.9	46	66.4	1.0	-0.20	0.0	
1.38	5.0E-03	0.00	172.5	0.46	9	88.2	0.0	88.2	3.1	44	63.7	1.0	-0.17	0.0	
1.62	5.0E-03	0.00	143.0	0.44	9	79.7	0.0	79.7	3.9	44	60.8	1.0	-0.15	0.0	
1.88	5.0E-03	0.00	115.0	0.45	9	69.0	0.0	69.0	5.0	42	56.6	1.0	-0.13	0.0	
2.12	5.0E-04	0.00	94.8	0.42	9	60.7	0.0	60.7	5.0	42	52.9	1.0	-0.11	0.0	
2.38	5.0E-04	0.00	81.5	0.37	9	55.1	0.0	55.1	5.0	42	50.2	1.0	-0.08	0.0	
2.62	5.0E-04	0.01	45.8	0.28	9	32.8	0.0	32.8	5.0	38	35.4	1.0	-0.01	0.0	
2.88	5.0E-04	0.03	27.8	0.07	9	21.2	0.0	21.2	5.0	36	30.0	1.0	0.15	0.0	
3.12	5.0E-05	0.05	21.2	0.16	7	17.0	0.0	17.0	5.0	34	30.0	6.0	0.10	0.0	
3.38	5.0E-04	0.03	24.1	0.12	7	19.8	0.0	19.8	5.0	34	30.0	1.0	0.11	0.0	
3.62	5.0E-05	0.05	20.3	0.15	7	17.1	0.0	17.1	5.0	34	30.0	6.0	0.11	0.0	
3.88	5.0E-05	0.04	21.5	0.20	7	18.4	0.0	18.4	5.0	34	30.0	6.0	0.08	0.0	
4.12	5.0E-04	0.02	24.8	0.36	7	21.5	0.0	21.5	5.0	34	30.0	1.0	0.02	0.0	
4.38	5.0E-04	0.01	26.9	0.35	7	23.6	0.0	23.6	5.0	36	30.0	1.0	0.02	0.0	
4.62	5.0E-04	0.02	29.8	0.34	7	26.5	0.0	26.5	5.0	36	30.0	1.0	0.01	0.0	
4.88	5.0E-04	0.02	34.1	0.30	9	30.6	0.0	30.6	5.0	36	33.3	1.0	0.01	0.0	
5.12	5.0E-03	0.00	58.4	0.32	9	52.4	0.0	52.4	5.0	40	48.8	1.0	-0.04	0.0	
5.38	5.0E-03	0.00	51.7	0.48	9	47.3	0.0	47.3	5.0	38	45.8	1.0	-0.06	0.0	
5.62	5.0E-03	0.00	65.7	0.56	9	60.7	11.0	71.6	10.7	40	52.9	1.0	-0.10	1.6	
5.88	5.0E-04	0.01	51.9	0.64	9	48.8	15.1	63.9	13.9	38	46.7	1.0	-0.09	2.8	
6.12	5.0E-05	0.03	21.2	0.64	7	21.0	25.3	46.3	25.5	34	30.0	6.0	0.00	4.3	
6.38	5.0E-04	0.00	34.1	0.60	7	33.4	18.3	51.6	18.3	36	35.8	1.0	-0.05	3.1	
6.62	5.0E-05	0.01	10.4	0.34	7	11.2	0.0	11.2	5.0	30	30.0	3.0	0.10	0.0	
6.88	5.0E-04	0.03	19.8	0.36	7	20.4	0.0	20.4	5.0	34	30.0	1.0	0.04	0.0	
7.12	5.0E-04	0.01	30.7	0.56	7	31.2	19.2	50.5	19.3	36	33.9	1.0	-0.03	3.2	
7.38	5.0E-04	0.02	23.9	0.41	7	24.9	0.0	24.9	5.0	34	30.0	1.0	0.02	0.0	
7.62	5.0E-05	0.04	15.0	0.74	7	16.4	45.0	61.4	32.5	32	30.0	6.0	0.02	5.4	
7.88	5.0E-04	0.02	27.1	0.42	7	28.7	0.0	28.7	5.0	36	31.5	1.0	0.01	0.0	
8.12	5.0E-03	0.01	37.0	0.27	9	39.1	0.0	39.1	5.0	38	40.4	1.0	0.01	0.0	
8.38	5.0E-03	0.01	40.6	0.53	9	43.2	16.6	59.9	15.4	38	43.2	1.0	-0.05	2.2	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0596
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-21
Location: MAIN EMBANKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 13:42
CPT File: 219CP21.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.60 (ft): 11.8
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	22.0	0.15	0.69	0.91	7	18.5	2.3	2.3	0.00	2.00	7.3	14.7	UnDef	0.09
0.38	50.2	0.33	0.66	0.33	8	19.0	7.0	7.0	0.00	2.00	12.5	25.1	UnDef	0.17
0.62	44.4	0.30	0.68	0.20	7	18.5	11.7	11.7	0.00	2.00	14.8	29.6	UnDef	0.15
0.88	51.4	0.28	0.54	0.23	8	19.0	16.4	16.4	0.00	2.00	12.8	25.7	UnDef	0.18
1.12	51.9	0.24	0.47	0.24	8	19.0	21.1	21.1	0.00	2.00	13.0	26.0	UnDef	0.18
1.38	44.6	0.23	0.51	0.26	8	19.0	25.9	25.9	0.00	1.92	11.2	21.5	UnDef	0.14
1.62	38.9	0.21	0.53	0.25	7	18.5	30.6	30.6	0.00	1.77	13.0	23.0	UnDef	0.11
1.88	37.3	0.17	0.46	0.22	7	18.5	35.2	35.2	0.00	1.65	12.4	20.5	UnDef	0.10
2.12	37.3	0.15	0.40	0.13	7	18.5	39.8	39.8	0.00	1.55	12.4	19.3	UnDef	0.10
2.38	35.5	0.14	0.41	0.12	7	18.5	44.4	44.4	0.00	1.47	11.8	17.4	UnDef	0.09
2.62	30.8	0.12	0.40	0.09	7	18.5	49.1	49.1	0.00	1.40	10.3	14.4	UnDef	0.09
2.88	27.0	0.11	0.39	0.11	7	18.5	53.7	53.7	0.00	1.34	9.0	12.0	UnDef	0.08
3.12	18.6	0.04	0.21	1.81	7	18.5	58.3	58.3	0.00	1.28	6.2	8.0	UnDef	0.00
3.38	11.7	0.03	0.27	4.82	6	18.0	62.9	62.9	0.00	1.23	4.7	5.8	88.8	0.00
3.62	8.4	0.03	0.31	6.52	1	17.5	67.3	67.1	0.25	1.20	4.2	5.0	61.7	0.00
3.88	10.5	0.03	0.29	6.42	6	18.0	71.8	69.1	2.70	1.18	4.2	5.0	78.4	0.00
4.12	13.5	0.04	0.30	5.09	6	18.0	76.2	71.1	5.15	1.16	5.4	6.3	102.0	0.00
4.38	11.3	0.05	0.42	7.58	6	18.0	80.8	73.1	7.60	1.14	4.5	5.2	84.1	0.00
4.62	19.7	0.05	0.23	5.70	7	18.5	85.3	75.3	10.06	1.13	6.6	7.4	UnDef	0.00
4.88	13.4	0.04	0.30	8.17	6	18.0	89.9	77.4	12.51	1.11	5.4	6.0	100.0	0.00
5.12	24.6	0.06	0.24	4.32	7	18.5	94.4	79.5	14.96	1.10	8.2	9.0	UnDef	0.00
5.38	13.3	0.04	0.31	8.46	6	18.0	99.0	81.6	17.41	1.08	5.3	5.8	98.8	0.00
5.62	16.4	0.09	0.54	7.81	6	18.0	103.5	83.6	19.87	1.07	6.6	7.0	123.0	0.09
5.88	30.6	0.12	0.40	-0.40	7	18.5	108.1	85.7	22.32	1.06	10.2	10.8	UnDef	0.08
6.12	35.6	0.20	0.56	3.85	7	18.5	112.7	87.9	24.77	1.04	11.9	12.4	UnDef	0.09
6.38	47.9	0.31	0.65	4.14	8	19.0	117.4	90.2	27.22	1.03	12.0	12.3	UnDef	0.11
6.62	40.8	0.29	0.71	3.14	7	18.5	122.1	92.4	29.68	1.02	13.6	13.9	UnDef	0.10
6.88	12.8	0.05	0.42	8.58	6	18.0	126.6	94.5	32.13	1.01	5.1	5.2	92.4	0.00
7.12	10.0	0.04	0.38	4.80	6	18.0	131.1	96.5	34.58	1.00	4.0	4.0	69.2	0.09
7.38	29.8	0.17	0.56	7.66	7	18.5	135.7	98.7	37.03	0.99	9.9	9.8	UnDef	0.09
7.62	24.2	0.10	0.41	7.06	7	18.5	140.3	100.8	39.49	0.97	8.1	7.9	UnDef	0.00
7.88	28.3	0.11	0.40	7.40	7	18.5	144.9	103.0	41.94	0.96	9.4	9.1	UnDef	0.00
8.12	30.8	0.17	0.56	8.23	7	18.5	149.6	105.2	44.39	0.95	10.3	9.8	UnDef	0.09
8.38	28.3	0.21	0.73	10.78	7	18.5	154.2	107.3	46.84	0.94	9.4	8.9	UnDef	0.10
8.62	35.7	0.17	0.48	10.60	7	18.5	158.8	109.5	49.30	0.94	11.9	11.1	UnDef	0.08
8.88	25.5	0.15	0.60	12.97	7	18.5	163.4	111.7	51.75	0.93	8.5	7.9	UnDef	0.09
9.12	24.1	0.13	0.52	12.13	7	18.5	168.1	113.9	54.20	0.92	8.0	7.4	UnDef	0.09
9.38	11.0	0.11	1.04	17.37	6	18.0	172.6	116.0	56.65	0.91	4.4	4.0	74.2	0.09
9.62	15.1	0.15	0.97	14.14	6	18.0	177.1	118.0	59.11	0.90	6.0	5.4	106.7	0.11

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60 (blows/ft)	Su (kPa)	CRR
9.88	33.8	0.12	0.35	11.71	7	18.5	181.7	120.1	61.56	0.89	11.3	10.1	UnDef	0.08
10.12	15.4	0.04	0.23	14.87	6	18.0	186.2	122.2	64.01	0.89	6.1	5.4	108.0	0.00
10.38	18.3	0.05	0.27	16.59	7	18.5	190.8	124.3	66.46	0.88	6.1	5.3	UnDef	0.00
10.62	37.6	0.26	0.68	12.00	7	18.5	195.4	126.5	68.92	0.87	12.5	10.9	UnDef	0.10
10.88	42.8	0.45	1.05	10.51	7	18.5	200.1	128.7	71.37	0.86	14.3	12.3	UnDef	0.12
11.12	39.5	0.23	0.59	-0.15	7	18.5	204.7	130.9	73.82	0.86	13.2	11.3	UnDef	0.10
11.38	36.6	0.15	0.40	0.89	7	18.5	209.3	133.0	76.27	0.85	12.2	10.3	UnDef	0.08
11.62	54.5	0.27	0.49	10.89	8	19.0	214.0	135.3	78.73	0.84	13.6	11.5	UnDef	0.11
11.88	35.0	0.18	0.51	15.80	7	18.5	218.7	137.5	81.18	0.83	11.7	9.8	UnDef	0.10
12.12	29.2	0.10	0.33	17.45	7	18.5	223.3	139.7	83.63	0.83	9.7	8.1	UnDef	0.00
12.38	46.5	0.21	0.44	14.09	8	19.0	228.0	141.9	86.08	0.82	11.6	9.6	UnDef	0.09
12.62	35.5	0.27	0.75	16.57	7	18.5	232.7	144.2	88.54	0.82	11.8	9.6	UnDef	0.11
12.88	42.8	0.36	0.84	16.57	7	18.5	237.3	146.3	90.99	0.81	14.3	11.6	UnDef	0.11
13.12	35.1	0.20	0.56	16.76	7	18.5	241.9	148.5	93.44	0.80	11.7	9.4	UnDef	0.10
13.38	14.2	0.07	0.52	24.16	6	18.0	246.5	150.6	95.89	0.80	5.7	4.5	93.7	0.10
13.62	43.6	0.19	0.44	13.55	8	19.0	251.1	152.8	98.35	0.79	10.9	8.6	UnDef	0.08
13.88	37.7	0.17	0.46	14.33	7	18.5	255.8	155.0	100.80	0.79	12.6	9.9	UnDef	0.08
14.12	37.6	0.15	0.41	12.65	7	18.5	260.4	157.2	103.25	0.78	12.5	9.8	UnDef	0.00
14.38	42.8	0.17	0.40	12.18	8	19.0	265.1	159.4	105.70	0.78	10.7	8.3	UnDef	0.08
14.62	46.5	0.18	0.39	12.41	8	19.0	269.9	161.7	108.16	0.77	11.6	8.9	UnDef	0.08
14.88	44.1	0.15	0.34	12.42	8	19.0	274.6	164.0	110.61	0.76	11.0	8.4	UnDef	0.08
15.12	47.2	0.21	0.44	11.93	8	19.0	279.4	166.3	113.06	0.76	11.8	9.0	UnDef	0.08
15.38	48.9	0.26	0.53	12.06	8	19.0	284.1	168.6	115.51	0.75	12.2	9.2	UnDef	0.11
15.62	57.9	0.31	0.53	12.09	8	19.0	288.9	170.9	117.97	0.75	14.5	10.8	UnDef	0.11
15.88	52.7	0.25	0.47	12.35	8	19.0	293.6	173.2	120.42	0.74	13.2	9.8	UnDef	0.09
16.12	51.7	0.25	0.49	12.55	8	19.0	298.4	175.5	122.87	0.74	12.9	9.5	UnDef	0.11
16.38	70.5	0.40	0.57	12.68	8	19.0	303.1	177.8	125.32	0.73	17.6	12.9	UnDef	0.12
16.62	57.6	0.36	0.62	13.07	8	19.0	307.9	180.1	127.78	0.73	14.4	10.5	UnDef	0.12
16.88	48.1	0.27	0.57	13.25	8	19.0	312.6	182.4	130.23	0.72	12.0	8.7	UnDef	0.11
17.12	67.3	0.34	0.51	13.44	8	19.0	317.4	184.7	132.68	0.72	16.8	12.1	UnDef	0.12
17.38	101.0	0.62	0.61	13.51	8	19.0	322.1	187.0	135.13	0.72	25.2	18.1	UnDef	0.16
17.62	82.2	0.43	0.52	13.76	8	19.0	326.9	189.3	137.59	0.71	20.5	14.6	UnDef	0.13
17.88	76.9	0.36	0.46	13.93	8	19.0	331.6	191.6	140.04	0.71	19.2	13.6	UnDef	0.10
18.12	71.1	0.31	0.43	14.26	8	19.0	336.4	193.9	142.49	0.70	17.8	12.5	UnDef	0.09
18.38	70.1	0.32	0.45	14.69	8	19.0	341.1	196.2	144.94	0.70	17.5	12.2	UnDef	0.09
18.62	75.2	0.37	0.49	14.82	8	19.0	345.9	198.5	147.40	0.69	18.8	13.1	UnDef	0.12
18.88	90.3	0.41	0.46	14.90	8	19.0	350.6	200.8	149.85	0.69	22.6	15.6	UnDef	0.10
19.12	61.8	0.30	0.49	15.32	8	19.0	355.4	203.1	152.30	0.69	15.4	10.6	UnDef	0.11
19.38	57.1	0.28	0.49	15.57	8	19.0	360.1	205.4	154.75	0.68	14.3	9.8	UnDef	0.11
19.62	63.3	0.27	0.43	15.82	8	19.0	364.9	207.7	157.21	0.68	15.8	10.7	UnDef	0.09
19.88	79.4	0.37	0.47	16.10	8	19.0	369.6	210.0	159.66	0.68	19.9	13.4	UnDef	0.10
20.12	70.6	0.47	0.67	16.50	8	19.0	374.4	212.3	162.11	0.67	17.6	11.9	UnDef	0.13
20.38	16.1	0.47	2.90	22.87	5	18.0	379.0	214.4	164.56	0.67	8.0	5.4	98.4	0.00
20.62	11.2	0.20	1.77	38.62	5	18.0	383.5	216.5	167.02	0.67	5.6	3.7	58.8	0.00
20.88	12.9	0.30	2.34	32.48	5	18.0	388.0	218.5	169.47	0.66	6.4	4.3	72.0	0.00
21.12	13.2	0.32	2.42	26.12	5	18.0	392.5	220.6	171.92	0.66	6.6	4.3	73.9	0.00
21.38	26.1	0.77	2.96	19.33	5	18.0	397.0	222.6	174.37	0.66	13.1	8.6	177.3	0.00
21.62	28.5	1.19	4.18	8.21	4	18.0	401.5	224.7	176.83	0.65	19.0	12.4	195.5	0.00
21.88	36.6	1.46	3.98	5.18	5	18.0	406.0	226.7	179.28	0.65	18.3	11.9	260.4	0.00
22.12	35.2	1.27	3.61	5.25	5	18.0	410.5	228.8	181.73	0.65	17.6	11.4	249.0	0.00
22.38	48.7	2.25	4.62	-0.29	4	18.0	415.0	230.8	184.18	0.64	32.5	20.9	356.6	0.00

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0596
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-21
Location: MAIN EMBANKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 13:42
CPT File: 219CP21.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.60 (ft): 11.8
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60 (N
0.12	5.0E-04	0.00	950.1	0.69	10	44.0	0.0	44.0	0.0	50	77.9	1.0	-0.36	0.0
0.38	5.0E-03	0.00	715.6	0.66	10	100.3	0.0	100.3	0.0	50	85.6	1.0	-0.33	0.0
0.62	5.0E-04	0.00	378.7	0.68	9	88.8	0.0	88.8	1.3	48	74.8	1.0	-0.27	0.0
0.88	5.0E-03	0.00	312.6	0.54	9	102.7	0.0	102.7	1.1	46	74.1	1.0	-0.24	0.0
1.12	5.0E-03	0.00	244.8	0.47	9	103.9	0.0	103.9	1.6	46	70.8	1.0	-0.20	0.0
1.38	5.0E-03	0.00	171.5	0.51	9	87.7	0.0	87.7	3.5	44	63.5	1.0	-0.18	0.0
1.62	5.0E-04	0.00	126.4	0.54	9	70.4	0.9	71.4	5.5	44	57.2	1.0	-0.15	0.2
1.88	5.0E-04	0.00	105.0	0.46	9	62.9	0.0	62.9	5.0	42	54.0	1.0	-0.12	0.0
2.12	5.0E-04	0.00	92.8	0.40	9	59.2	0.0	59.2	5.0	42	52.2	1.0	-0.10	0.0
2.38	5.0E-04	0.00	78.9	0.41	9	53.3	0.0	53.3	5.0	42	49.2	1.0	-0.09	0.0
2.62	5.0E-04	0.00	61.8	0.40	9	44.0	0.0	44.0	5.0	40	43.7	1.0	-0.07	0.0
2.88	5.0E-04	0.00	49.2	0.40	9	36.8	0.0	36.8	5.0	38	38.6	1.0	-0.05	0.0
3.12	5.0E-04	0.01	30.9	0.22	9	24.4	0.0	24.4	5.0	36	30.0	1.0	0.04	0.0
3.38	5.0E-05	0.04	17.7	0.29	7	14.8	0.0	14.8	5.0	32	30.0	6.0	0.07	0.0
3.62	1.0E-07	0.08	11.5	0.34	7	10.2	0.0	10.2	5.0	UnDef	UnDef	3.0	UnDef	0.0
3.88	5.0E-05	0.06	14.2	0.31	7	12.7	0.0	12.7	5.0	32	30.0	6.0	0.09	0.0
4.12	5.0E-05	0.04	17.9	0.31	7	16.0	0.0	16.0	5.0	32	30.0	6.0	0.06	0.0
4.38	5.0E-05	0.06	14.4	0.46	7	13.2	0.0	13.2	5.0	32	30.0	6.0	0.06	0.0
4.62	5.0E-04	0.02	25.0	0.24	7	22.7	0.0	22.7	5.0	34	30.0	1.0	0.05	0.0
4.88	5.0E-05	0.05	16.2	0.32	7	15.2	0.0	15.2	5.0	32	30.0	6.0	0.07	0.0
5.12	5.0E-04	0.01	29.8	0.25	7	27.6	0.0	27.6	5.0	36	30.4	1.0	0.03	0.0
5.38	5.0E-05	0.05	15.1	0.34	7	14.8	0.0	14.8	5.0	32	30.0	6.0	0.07	0.0
5.62	5.0E-05	0.04	18.4	0.57	7	17.9	25.3	43.3	26.9	32	30.0	6.0	0.02	4.1
5.88	5.0E-04	-0.01	34.4	0.41	7	33.1	0.0	33.1	5.0	36	35.6	1.0	-0.02	0.0
6.12	5.0E-04	0.00	39.2	0.58	7	37.9	16.5	54.4	16.3	38	39.5	1.0	-0.05	2.9
6.38	5.0E-03	0.00	51.8	0.67	9	50.4	16.3	66.7	14.1	38	47.6	1.0	-0.09	2.2
6.62	5.0E-04	0.00	42.9	0.73	7	42.5	19.6	62.0	16.8	38	42.7	1.0	-0.08	3.4
6.88	5.0E-05	0.05	12.2	0.47	7	13.2	0.0	13.2	5.0	30	30.0	3.0	0.07	0.0
7.12	5.0E-05	0.01	9.0	0.44	6	10.1	40.5	50.7	38.4	30	30.0	3.0	0.10	4.0
7.38	5.0E-04	0.01	28.9	0.58	7	30.1	20.7	50.8	20.3	36	32.8	1.0	-0.03	3.4
7.62	5.0E-04	0.01	22.6	0.44	7	24.1	0.0	24.1	5.0	34	30.0	1.0	0.02	0.0
7.88	5.0E-04	0.01	26.0	0.42	7	27.9	0.0	27.9	5.0	36	30.6	1.0	0.01	0.0
8.12	5.0E-04	0.01	27.9	0.59	7	30.0	22.0	52.0	20.8	36	32.8	1.0	-0.02	3.5
8.38	5.0E-04	0.02	25.0	0.77	7	27.4	29.4	56.7	24.4	34	30.1	1.0	-0.03	4.3
8.62	5.0E-04	0.02	31.1	0.50	7	34.1	0.0	34.1	5.0	36	36.4	1.0	-0.02	0.0
8.88	5.0E-04	0.03	21.4	0.64	7	24.1	28.6	52.7	25.3	34	30.0	1.0	0.00	4.0
9.12	5.0E-04	0.03	19.7	0.56	7	22.6	27.9	50.5	25.7	34	30.0	1.0	0.01	3.9
9.38	5.0E-05	0.12	8.0	1.23	6	10.2	40.9	51.1	50.9	30	30.0	3.0	0.05	4.0
9.62	5.0E-05	0.06	11.3	1.09	6	13.9	55.6	69.5	41.8	30	30.0	3.0	0.02	5.4

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
9.88	5.0E-04	0.02	26.7	0.37	7	30.9	0.0	30.9	5.0	36	33.6	1.0	0.02	0.0	
10.12	5.0E-05	0.06	11.0	0.27	7	13.9	0.0	13.9	5.0	30	30.0	3.0	0.12	0.0	
10.38	5.0E-04	0.06	13.2	0.31	7	16.4	0.0	16.4	5.0	32	30.0	1.0	0.10	0.0	
10.62	5.0E-04	0.01	28.1	0.72	7	33.4	28.2	61.6	22.1	36	35.8	1.0	-0.04	4.4	
10.88	5.0E-04	0.01	31.7	1.10	7	37.7	38.6	76.4	23.9	36	39.3	1.0	-0.09	5.7	
11.12	5.0E-04	-0.02	28.6	0.62	7	34.5	25.5	60.0	20.9	36	36.8	1.0	-0.03	4.1	
11.38	5.0E-04	-0.02	25.9	0.42	7	31.7	0.0	31.7	5.0	36	34.3	1.0	0.00	0.0	
11.62	5.0E-03	0.01	38.7	0.51	7	46.8	18.9	65.8	15.8	38	45.5	1.0	-0.04	2.5	
11.88	5.0E-04	0.02	23.9	0.54	7	29.9	26.2	56.0	22.5	34	32.7	1.0	0.00	4.0	
12.12	5.0E-04	0.03	19.3	0.36	7	24.7	0.0	24.7	5.0	34	30.0	1.0	0.05	0.0	
12.38	5.0E-03	0.01	31.2	0.47	7	39.0	0.0	39.0	5.0	36	40.3	1.0	-0.02	0.0	
12.62	5.0E-04	0.02	23.0	0.80	7	29.6	37.6	67.2	26.0	34	32.4	1.0	-0.03	5.2	
12.88	5.0E-04	0.02	27.7	0.89	7	35.4	36.8	72.2	24.1	36	37.5	1.0	-0.06	5.4	
13.12	5.0E-04	0.02	22.0	0.60	7	28.8	31.0	59.8	24.4	34	31.6	1.0	0.00	4.5	
13.38	5.0E-05	0.12	7.8	0.63	6	11.6	46.2	57.8	44.5	30	30.0	3.0	0.10	4.5	
13.62	5.0E-03	0.01	26.9	0.47	7	35.3	0.0	35.3	5.0	36	37.4	1.0	-0.01	0.0	
13.88	5.0E-04	0.01	22.7	0.50	7	30.3	0.0	30.3	5.0	34	33.0	1.0	0.01	0.0	
14.12	5.0E-04	0.01	22.2	0.44	7	30.0	0.0	30.0	5.0	34	32.7	1.0	0.02	0.0	
14.38	5.0E-03	0.00	25.2	0.42	7	33.9	0.0	33.9	5.0	34	36.3	1.0	0.01	0.0	
14.62	5.0E-03	0.00	27.1	0.42	7	36.5	0.0	36.5	5.0	36	38.4	1.0	0.00	0.0	
14.88	5.0E-03	0.00	25.2	0.37	7	34.4	0.0	34.4	5.0	34	36.7	1.0	0.02	0.0	
15.12	5.0E-03	0.00	26.7	0.47	7	36.6	0.0	36.6	5.0	36	38.5	1.0	0.00	0.0	
15.38	5.0E-03	0.00	27.3	0.56	7	37.6	27.6	65.3	20.9	36	39.3	1.0	-0.02	3.3	
15.62	5.0E-03	0.00	32.2	0.56	7	44.3	25.2	69.5	18.6	36	43.9	1.0	-0.03	3.2	
15.88	5.0E-03	0.00	28.8	0.50	7	40.1	0.0	40.1	5.0	36	41.1	1.0	-0.02	0.0	
16.12	5.0E-03	0.00	27.7	0.52	7	39.0	26.3	65.3	20.1	36	40.3	1.0	-0.02	3.2	
16.38	5.0E-03	0.00	38.0	0.60	7	52.9	24.7	77.6	16.9	38	49.0	1.0	-0.05	3.2	
16.62	5.0E-03	0.00	30.3	0.65	7	42.9	30.1	73.0	20.4	36	43.0	1.0	-0.04	3.6	
16.88	5.0E-03	0.00	24.6	0.61	7	35.6	32.2	67.8	22.8	34	37.7	1.0	-0.02	3.7	
17.12	5.0E-03	0.00	34.7	0.54	7	49.5	24.4	74.0	17.4	38	47.1	1.0	-0.04	3.2	
17.38	5.0E-03	0.00	52.3	0.63	9	73.8	22.3	96.1	13.7	40	58.6	1.0	-0.09	3.1	
17.62	5.0E-03	0.00	41.7	0.54	9	59.7	22.5	82.3	15.3	38	52.5	1.0	-0.06	3.0	
17.88	5.0E-03	0.00	38.4	0.48	9	55.6	0.0	55.6	5.0	38	50.4	1.0	-0.04	0.0	
18.12	5.0E-03	0.00	34.9	0.45	7	51.1	0.0	51.1	5.0	38	48.0	1.0	-0.03	0.0	
18.38	5.0E-03	0.00	34.0	0.47	7	50.0	0.0	50.0	5.0	36	47.4	1.0	-0.03	0.0	
18.62	5.0E-03	0.00	36.2	0.52	7	53.4	24.1	77.5	16.6	38	49.3	1.0	-0.04	3.2	
18.88	5.0E-03	0.00	43.2	0.47	9	63.7	0.0	63.7	5.0	38	54.3	1.0	-0.05	0.0	
19.12	5.0E-03	0.00	28.7	0.52	7	43.3	28.0	71.3	19.7	36	43.3	1.0	-0.02	3.4	
19.38	5.0E-03	0.00	26.1	0.52	7	39.9	29.6	69.5	21.0	36	40.9	1.0	-0.01	3.5	
19.62	5.0E-03	0.00	28.7	0.46	7	43.9	0.0	43.9	5.0	36	43.7	1.0	-0.01	0.0	
19.88	5.0E-03	0.00	36.1	0.49	7	54.8	0.0	54.8	5.0	38	50.0	1.0	-0.03	0.0	
20.12	5.0E-03	0.00	31.5	0.71	7	48.5	34.1	82.5	20.5	36	46.5	1.0	-0.05	4.1	
20.38	5.0E-06	0.05	5.7	3.79	1	11.0	UnDef	UnDef	100.0	UnDef	UnDef	1.5	UnDef	UnDef	
20.62	5.0E-06	0.29	3.4	2.70	1	7.6	UnDef	UnDef	100.0	UnDef	UnDef	1.5	UnDef	UnDef	
20.88	5.0E-06	0.17	4.1	3.35	1	8.7	UnDef	UnDef	100.0	UnDef	UnDef	1.5	UnDef	UnDef	
21.12	5.0E-06	0.09	4.2	3.44	1	8.9	UnDef	UnDef	100.0	UnDef	UnDef	1.5	UnDef	UnDef	
21.38	5.0E-06	0.01	10.0	3.49	1	17.5	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
21.62	5.0E-07	-0.04	10.9	4.86	1	19.0	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef	
21.88	5.0E-06	-0.04	14.4	4.48	1	24.3	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	
22.12	5.0E-06	-0.04	13.6	4.08	1	23.3	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	
22.38	5.0E-07	-0.04	19.3	5.05	1	32.1	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1143-0673
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-22
Location: MAIN EMBANKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 15:06
CPT File: 219CP22.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 3.80 (ft): 12.5
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	6.7	0.06	0.92	1.35	5	18.0	2.2	2.2	0.00	2.00	3.4	6.7	53.6	0.00
0.38	17.0	0.10	0.58	0.48	6	18.0	6.8	6.8	0.00	2.00	6.8	13.6	135.2	0.08
0.62	20.3	0.11	0.55	0.07	7	18.5	11.3	11.3	0.00	2.00	6.8	13.5	UnDef	0.09
0.88	23.8	0.13	0.53	0.24	7	18.5	15.9	15.9	0.00	2.00	7.9	15.8	UnDef	0.09
1.12	35.4	0.15	0.41	0.11	7	18.5	20.6	20.6	0.00	2.00	11.8	23.6	UnDef	0.11
1.38	38.3	0.15	0.39	0.32	7	18.5	25.2	25.2	0.00	1.95	12.8	24.9	UnDef	0.12
1.62	34.6	0.15	0.45	0.01	7	18.5	29.8	29.8	0.00	1.79	11.5	20.7	UnDef	0.10
1.88	33.3	0.17	0.50	0.00	7	18.5	34.4	34.4	0.00	1.67	11.1	18.5	UnDef	0.10
2.12	32.0	0.16	0.49	0.06	7	18.5	39.1	39.1	0.00	1.57	10.7	16.7	UnDef	0.10
2.38	32.3	0.14	0.45	0.03	7	18.5	43.7	43.7	0.00	1.48	10.8	15.9	UnDef	0.09
2.62	26.2	0.11	0.43	-0.04	7	18.5	48.3	48.3	0.00	1.41	8.7	12.3	UnDef	0.08
2.88	21.5	0.07	0.32	0.35	7	18.5	52.9	52.9	0.00	1.35	7.2	9.6	UnDef	0.00
3.12	20.0	0.04	0.22	1.12	7	18.5	57.6	57.6	0.00	1.29	6.7	8.6	UnDef	0.00
3.38	15.1	0.03	0.20	3.55	6	18.0	62.1	62.1	0.00	1.24	6.0	7.5	116.0	0.00
3.62	12.6	0.03	0.21	5.09	6	18.0	66.6	66.6	0.00	1.20	5.0	6.0	95.5	0.00
3.88	10.1	0.02	0.22	6.40	6	18.0	71.1	70.4	0.74	1.17	4.0	4.7	74.9	0.00
4.12	9.9	0.02	0.20	7.26	6	18.0	75.6	72.4	3.19	1.15	3.9	4.5	72.9	0.00
4.38	12.1	0.02	0.18	6.30	6	18.0	80.1	74.5	5.64	1.13	4.9	5.5	90.8	0.00
4.62	11.6	0.02	0.21	7.55	6	18.0	84.6	76.5	8.09	1.12	4.6	5.2	85.6	0.00
4.88	17.2	0.04	0.23	6.80	7	18.5	89.2	78.6	10.55	1.10	5.7	6.3	UnDef	0.00
5.12	26.8	0.07	0.27	4.84	7	18.5	93.8	80.8	13.00	1.09	8.9	9.7	UnDef	0.00
5.38	33.2	0.10	0.31	3.88	7	18.5	98.4	83.0	15.45	1.07	11.1	11.9	UnDef	0.08
5.62	33.3	0.06	0.18	4.97	7	18.5	103.1	85.2	17.90	1.06	11.1	11.8	UnDef	0.08
5.88	25.6	0.12	0.45	6.94	7	18.5	107.7	87.3	20.36	1.05	8.5	8.9	UnDef	0.00
6.12	24.7	0.15	0.60	7.00	7	18.5	112.3	89.5	22.81	1.03	8.2	8.5	UnDef	0.09
6.38	27.2	0.15	0.57	4.72	7	18.5	116.9	91.7	25.26	1.02	9.1	9.3	UnDef	0.09
6.62	21.6	0.13	0.61	5.70	7	18.5	121.6	93.8	27.71	1.01	7.2	7.3	UnDef	0.09
6.88	19.0	0.18	0.94	8.17	6	18.0	126.1	96.0	30.17	1.00	7.6	7.6	141.6	0.11
7.12	53.0	0.29	0.54	8.30	8	19.0	130.8	98.1	32.62	0.99	13.2	13.1	UnDef	0.11
7.38	19.3	0.07	0.34	7.68	7	18.5	135.4	100.4	35.07	0.98	6.4	6.3	UnDef	0.00
7.62	37.1	0.12	0.32	6.68	7	18.5	140.1	102.5	37.52	0.97	12.4	12.0	UnDef	0.08
7.88	52.1	0.14	0.27	4.68	8	19.0	144.8	104.8	39.98	0.96	13.0	12.4	UnDef	0.09
8.12	50.8	0.12	0.24	5.43	8	19.0	149.5	107.1	42.43	0.95	12.7	12.0	UnDef	0.09
8.38	44.0	0.10	0.22	6.72	8	19.0	154.2	109.4	44.88	0.94	11.0	10.3	UnDef	0.09
8.62	26.4	0.08	0.32	10.92	7	18.5	158.9	111.6	47.33	0.93	8.8	8.1	UnDef	0.00
8.88	28.0	0.14	0.52	8.14	7	18.5	163.6	113.8	49.79	0.92	9.3	8.6	UnDef	0.09
9.12	31.9	0.08	0.24	11.33	7	18.5	168.2	115.9	52.24	0.91	10.6	9.7	UnDef	0.00
9.38	37.5	0.07	0.19	9.65	8	19.0	172.9	118.2	54.69	0.90	9.4	8.4	UnDef	0.08
9.62	29.4	0.13	0.43	11.60	7	18.5	177.6	120.4	57.14	0.89	9.8	8.7	UnDef	0.00

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60 (blows/ft)	Su (kPa)	CRR
9.88	24.2	0.09	0.39	12.05	7	18.5	182.2	122.6	59.60	0.88	8.1	7.1	UnDef	0.00
10.12	21.0	0.09	0.45	12.13	7	18.5	186.8	124.8	62.05	0.88	7.0	6.1	UnDef	0.00
10.38	26.3	0.16	0.60	10.36	7	18.5	191.4	126.9	64.50	0.87	8.8	7.6	UnDef	0.10
10.62	27.2	0.16	0.60	10.65	7	18.5	196.1	129.1	66.95	0.86	9.1	7.8	UnDef	0.10
10.88	24.5	0.22	0.92	11.31	7	18.5	200.7	131.3	69.41	0.85	8.2	7.0	UnDef	0.13
11.12	28.3	0.13	0.47	13.78	7	18.5	205.3	133.5	71.86	0.85	9.4	8.0	UnDef	0.09
11.38	49.9	0.24	0.48	10.41	8	19.0	210.0	135.7	74.31	0.84	12.5	10.5	UnDef	0.10
11.62	66.0	0.33	0.50	9.31	8	19.0	214.8	138.0	76.76	0.83	16.5	13.7	UnDef	0.12
11.88	63.3	0.34	0.53	9.50	8	19.0	219.5	140.3	79.22	0.83	15.8	13.1	UnDef	0.12
12.12	55.8	0.35	0.63	10.34	8	19.0	224.2	142.6	81.67	0.82	14.0	11.4	UnDef	0.11
12.38	63.5	0.36	0.57	9.97	8	19.0	229.0	144.9	84.12	0.81	15.9	12.9	UnDef	0.12
12.62	54.7	0.40	0.72	10.24	8	19.0	233.8	147.2	86.57	0.81	13.7	11.0	UnDef	0.12
12.88	52.0	0.40	0.76	10.58	8	19.0	238.5	149.5	89.03	0.80	13.0	10.4	UnDef	0.12
13.12	38.6	0.32	0.83	11.60	7	18.5	243.2	151.7	91.48	0.79	12.9	10.2	UnDef	0.12
13.38	30.7	0.29	0.94	15.13	7	18.5	247.8	153.9	93.93	0.79	10.2	8.1	UnDef	0.14
13.62	54.8	0.33	0.59	13.73	8	19.0	252.5	156.1	96.38	0.78	13.7	10.7	UnDef	0.11
13.88	45.5	0.36	0.80	14.64	7	18.5	257.2	158.4	98.84	0.78	15.2	11.8	UnDef	0.12
14.12	50.5	0.39	0.78	13.00	7	18.5	261.8	160.5	101.29	0.77	16.8	13.0	UnDef	0.12
14.38	54.4	0.46	0.85	12.15	8	19.0	266.5	162.8	103.74	0.77	13.6	10.4	UnDef	0.12
14.62	37.6	0.38	1.01	12.93	7	18.5	271.2	165.0	106.19	0.76	12.5	9.5	UnDef	0.14
14.88	40.6	0.48	1.17	14.29	7	18.5	275.8	167.2	108.65	0.76	13.5	10.3	UnDef	0.17
15.12	18.1	0.18	0.97	23.53	6	18.0	280.4	169.3	111.10	0.75	7.2	5.4	122.0	0.11
15.38	40.5	0.30	0.74	13.87	7	18.5	284.9	171.4	113.55	0.75	13.5	10.1	UnDef	0.12
15.62	43.3	0.33	0.77	15.14	7	18.5	289.6	173.6	116.00	0.74	14.4	10.7	UnDef	0.12
15.88	35.7	0.34	0.95	17.07	7	18.5	294.2	175.7	118.46	0.74	11.9	8.8	UnDef	0.16
16.12	42.4	0.33	0.78	19.65	7	18.5	298.8	177.9	120.91	0.73	14.1	10.4	UnDef	0.12
16.38	54.9	0.32	0.59	12.69	8	19.0	303.5	180.1	123.36	0.73	13.7	10.0	UnDef	0.11
16.62	54.2	0.28	0.52	13.02	8	19.0	308.2	182.4	125.81	0.72	13.5	9.8	UnDef	0.11
16.88	52.8	0.28	0.53	13.28	8	19.0	313.0	184.7	128.27	0.72	13.2	9.5	UnDef	0.11
17.12	63.6	0.32	0.51	13.52	8	19.0	317.8	187.0	130.72	0.72	15.9	11.4	UnDef	0.11
17.38	60.3	0.29	0.48	13.67	8	19.0	322.5	189.3	133.17	0.71	15.1	10.7	UnDef	0.11
17.62	63.7	0.29	0.45	13.88	8	19.0	327.2	191.6	135.62	0.71	15.9	11.3	UnDef	0.09
17.88	43.8	0.19	0.43	14.14	8	19.0	332.0	193.9	138.08	0.70	11.0	7.7	UnDef	0.08
18.12	40.8	0.15	0.36	14.36	8	19.0	336.8	196.2	140.53	0.70	10.2	7.1	UnDef	0.00
18.38	39.1	0.14	0.36	14.63	8	19.0	341.5	198.5	142.98	0.69	9.8	6.8	UnDef	0.00
18.62	61.3	0.29	0.48	14.95	8	19.0	346.2	200.8	145.43	0.69	15.3	10.6	UnDef	0.11
18.88	59.6	0.35	0.58	15.31	8	19.0	351.0	203.1	147.89	0.69	14.9	10.2	UnDef	0.12
19.12	25.1	0.50	1.98	26.14	6	18.0	355.6	205.3	150.34	0.68	10.0	6.9	172.2	0.14
19.38	13.9	0.33	2.37	14.80	5	18.0	360.1	207.3	152.79	0.68	7.0	4.7	82.8	0.00
19.62	19.1	0.44	2.29	16.10	6	18.0	364.6	209.4	155.24	0.68	7.6	5.2	123.8	0.11
19.88	54.6	2.11	3.86	1.67	5	18.0	369.1	211.4	157.70	0.67	27.3	18.4	407.1	0.00
20.12	43.9	1.97	4.49	2.27	4	18.0	373.6	213.5	160.15	0.67	29.3	19.6	321.4	0.00
20.38	52.3	1.28	2.44	1.05	6	18.0	378.1	215.5	162.60	0.67	20.9	13.9	387.8	0.00

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
9.88	5.0E-04	0.03	18.3	0.42	7	21.9	0.0	21.9	5.0	32	30.0	1.0	0.04	0.0	
10.12	5.0E-04	0.03	15.4	0.49	7	18.8	0.0	18.8	5.0	32	30.0	1.0	0.04	0.0	
10.38	5.0E-04	0.02	19.2	0.65	7	23.4	33.6	57.0	27.1	32	30.0	1.0	0.00	4.5	
10.62	5.0E-04	0.01	19.5	0.64	7	23.9	33.3	57.2	26.8	34	30.0	1.0	0.00	4.5	
10.88	5.0E-04	0.02	17.1	1.00	7	21.4	61.9	83.2	32.8	32	30.0	1.0	-0.02	6.1	
11.12	5.0E-04	0.02	19.6	0.51	7	24.5	28.3	52.7	25.1	34	30.0	1.0	0.02	4.0	
11.38	5.0E-03	0.01	35.3	0.51	7	42.9	19.8	62.7	16.8	38	43.0	1.0	-0.03	2.6	
11.62	5.0E-03	0.00	46.3	0.52	9	56.2	17.3	73.5	13.8	38	50.7	1.0	-0.06	2.4	
11.88	5.0E-03	0.00	43.6	0.55	9	53.4	19.1	72.6	14.9	38	49.3	1.0	-0.06	2.6	
12.12	5.0E-03	0.00	37.6	0.66	7	46.8	24.0	70.7	17.7	38	45.5	1.0	-0.06	3.1	
12.38	5.0E-03	0.00	42.2	0.60	7	52.7	21.0	73.7	15.7	38	48.9	1.0	-0.06	2.8	
12.62	5.0E-03	0.00	35.6	0.76	7	45.1	28.1	73.2	19.4	38	44.4	1.0	-0.07	3.5	
12.88	5.0E-03	0.00	33.2	0.80	7	42.5	30.6	73.1	20.7	36	42.7	1.0	-0.06	3.7	
13.12	5.0E-04	0.01	23.8	0.89	7	31.3	41.4	72.7	26.3	34	34.0	1.0	-0.04	5.6	
13.38	5.0E-04	0.02	18.4	1.02	7	24.8	62.4	87.2	31.8	32	30.0	1.0	-0.03	6.6	
13.62	5.0E-03	0.01	33.5	0.62	7	43.9	25.6	69.4	18.8	36	43.6	1.0	-0.05	3.2	
13.88	5.0E-04	0.01	27.1	0.85	7	36.2	37.1	73.3	24.0	36	38.1	1.0	-0.05	5.5	
14.12	5.0E-04	0.01	29.9	0.82	7	39.9	34.4	74.3	22.3	36	40.9	1.0	-0.06	5.3	
14.38	5.0E-03	0.00	31.8	0.89	7	42.7	35.8	78.5	22.1	36	42.9	1.0	-0.07	4.2	
14.62	5.0E-04	0.01	21.1	1.08	7	29.2	59.0	88.2	30.0	34	32.0	1.0	-0.05	6.9	
14.88	5.0E-04	0.01	22.7	1.26	7	31.4	65.8	97.2	30.3	34	34.1	1.0	-0.06	7.5	
15.12	5.0E-05	0.08	9.0	1.15	6	13.9	55.5	69.4	47.3	30	30.0	3.0	0.04	5.4	
15.38	5.0E-04	0.01	22.0	0.79	7	31.0	42.0	73.0	26.6	34	33.7	1.0	-0.03	5.7	
15.62	5.0E-04	0.01	23.3	0.83	7	32.8	42.2	75.0	26.1	34	35.4	1.0	-0.03	5.8	
15.88	5.0E-04	0.01	18.6	1.03	7	26.9	66.6	93.6	31.7	32	30.0	1.0	-0.03	7.1	
16.12	5.0E-04	0.02	22.2	0.84	7	31.8	45.1	76.9	27.0	34	34.4	1.0	-0.03	6.0	
16.38	5.0E-03	0.00	28.8	0.62	7	40.9	29.7	70.6	20.7	36	41.7	1.0	-0.03	3.6	
16.62	5.0E-03	0.00	28.0	0.55	7	40.1	27.7	67.8	20.3	36	41.1	1.0	-0.02	3.4	
16.88	5.0E-03	0.00	26.9	0.56	7	38.9	29.0	67.9	21.0	36	40.2	1.0	-0.02	3.5	
17.12	5.0E-03	0.00	32.3	0.54	7	46.5	25.6	72.0	18.3	36	45.3	1.0	-0.03	3.2	
17.38	5.0E-03	0.00	30.1	0.51	7	43.8	25.7	69.5	18.9	36	43.6	1.0	-0.02	3.2	
17.62	5.0E-03	0.00	31.5	0.48	7	46.0	0.0	46.0	5.0	36	45.0	1.0	-0.02	0.0	
17.88	5.0E-03	0.00	20.9	0.46	7	31.5	0.0	31.5	5.0	34	34.1	1.0	0.02	0.0	
18.12	5.0E-03	0.00	19.1	0.40	7	29.1	0.0	29.1	5.0	32	31.9	1.0	0.04	0.0	
18.38	5.0E-03	0.00	18.0	0.40	7	27.8	0.0	27.8	5.0	32	30.5	1.0	0.04	0.0	
18.62	5.0E-03	0.00	28.8	0.51	7	43.2	27.1	70.3	19.4	36	43.2	1.0	-0.02	3.4	
18.88	5.0E-03	0.00	27.6	0.62	7	41.8	32.2	74.0	21.3	36	42.3	1.0	-0.03	3.8	
19.12	5.0E-05	0.05	10.5	2.30	6	17.5	70.0	87.5	53.0	30	30.0	3.0	-0.02	6.9	
19.38	5.0E-06	-0.01	5.0	3.19	1	9.7	UnDef	UnDef	100.0	UnDef	UnDef	1.5	UnDef	UnDef	
19.62	5.0E-05	0.00	7.4	2.83	4	13.2	52.9	66.1	64.9	30	30.0	3.0	0.00	5.2	
19.88	5.0E-06	-0.03	24.1	4.14	4	37.5	150.1	187.7	44.9	UnDef	UnDef	6.0	UnDef	18.4	
20.12	5.0E-07	-0.03	18.8	4.90	1	30.1	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef	
20.38	5.0E-05	-0.03	22.5	2.63	6	35.6	142.4	178.0	39.3	34	37.7	6.0	-0.13	13.9	

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1135-5836
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-23
Location: MAIN EMBANKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 16:03
CPT File: 219CP23.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.30 (ft): 7.5
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
0.12	27.7	0.07	0.24	-0.06	7	18.5	2.3	2.3	0.00	2.00	9.2	18.4	UnDef	0.10
0.38	48.3	0.19	0.39	-0.05	8	19.0	7.0	7.0	0.00	2.00	12.1	24.2	UnDef	0.16
0.62	46.5	0.20	0.44	-0.03	8	19.0	11.8	11.8	0.00	2.00	11.6	23.2	UnDef	0.15
0.88	47.2	0.19	0.40	-0.06	8	19.0	16.5	16.5	0.00	2.00	11.8	23.6	UnDef	0.16
1.12	42.0	0.14	0.34	-0.17	8	19.0	21.2	21.2	0.00	2.00	10.5	21.0	UnDef	0.14
1.38	35.6	0.12	0.33	-0.34	7	18.5	25.9	25.9	0.00	1.92	11.9	22.8	UnDef	0.11
1.62	31.0	0.07	0.23	-0.58	7	18.5	30.6	30.6	0.00	1.77	10.3	18.3	UnDef	0.10
1.88	31.3	0.05	0.17	-0.52	7	18.5	35.2	35.2	0.00	1.65	10.4	17.2	UnDef	0.09
2.12	33.2	0.04	0.11	-1.98	8	19.0	39.9	39.9	0.00	1.55	8.3	12.9	UnDef	0.09
2.38	24.9	0.03	0.10	-0.65	7	18.5	44.6	43.8	0.74	1.48	8.3	12.3	UnDef	0.08
2.62	10.5	0.02	0.19	3.78	6	18.0	49.1	45.9	3.19	1.44	4.2	6.0	79.8	0.00
2.88	8.5	0.02	0.28	5.32	1	17.5	53.6	47.9	5.64	1.41	4.2	6.0	63.7	0.00
3.12	7.6	0.03	0.45	4.28	1	17.5	57.9	49.8	8.09	1.39	3.8	5.2	55.8	0.00
3.38	3.5	0.04	1.01	4.94	1	17.5	62.3	51.8	10.55	1.36	1.8	2.4	23.4	0.00
3.62	3.3	0.04	1.21	5.94	1	17.5	66.7	53.7	13.00	1.34	1.7	2.2	21.2	0.00
3.88	8.0	0.04	0.45	3.47	1	17.5	71.1	55.6	15.45	1.31	4.0	5.3	58.3	0.00
4.12	14.2	0.07	0.51	3.86	6	18.0	75.5	57.6	17.90	1.29	5.7	7.3	107.8	0.08
4.38	24.4	0.15	0.63	-0.24	7	18.5	80.1	59.7	20.36	1.27	8.1	10.3	UnDef	0.09
4.62	27.5	0.12	0.44	1.04	7	18.5	84.7	61.9	22.81	1.24	9.2	11.4	UnDef	0.08
4.88	12.0	0.07	0.60	6.41	6	18.0	89.2	64.0	25.26	1.22	4.8	5.9	89.2	0.09
5.12	12.8	0.11	0.87	7.21	6	18.0	93.8	66.0	27.71	1.20	5.1	6.2	94.9	0.09
5.38	23.6	0.13	0.54	5.06	7	18.5	98.3	68.1	30.17	1.19	7.9	9.3	UnDef	0.09
5.62	14.8	0.10	0.70	7.26	6	18.0	102.9	70.3	32.62	1.17	5.9	6.9	110.0	0.09
5.88	20.5	0.23	1.11	7.43	6	18.0	107.4	72.3	35.07	1.15	8.2	9.5	155.8	0.10
6.12	22.0	0.14	0.62	5.94	7	18.5	111.9	74.4	37.52	1.13	7.3	8.3	UnDef	0.09
6.38	16.3	0.10	0.63	7.06	6	18.0	116.5	76.5	39.98	1.12	6.5	7.3	120.7	0.09
6.62	10.7	0.08	0.75	12.33	6	18.0	121.0	78.6	42.43	1.10	4.3	4.7	76.1	0.10
6.88	9.5	0.07	0.76	11.41	6	18.0	125.5	80.6	44.88	1.09	3.8	4.1	65.7	0.09
7.12	30.0	0.18	0.61	5.58	7	18.5	130.1	82.7	47.33	1.08	10.0	10.8	UnDef	0.09
7.38	12.4	0.05	0.42	7.62	6	18.0	134.6	84.8	49.79	1.06	5.0	5.3	88.3	0.00
7.62	11.1	0.05	0.47	12.10	6	18.0	139.1	86.9	52.24	1.05	4.4	4.7	77.8	0.10
7.88	19.6	0.08	0.40	12.30	7	18.5	143.7	89.0	54.69	1.04	6.5	6.8	UnDef	0.00
8.12	8.6	0.03	0.32	11.21	6	18.0	148.2	91.1	57.14	1.03	3.5	3.5	57.2	0.09
8.38	14.5	0.03	0.21	10.55	6	18.0	152.8	93.2	59.60	1.01	5.8	5.9	103.5	0.00
8.62	15.0	0.07	0.44	11.24	6	18.0	157.2	95.2	62.05	1.00	6.0	6.0	107.7	0.00
8.88	11.8	0.03	0.27	13.07	6	18.0	161.8	97.2	64.50	0.99	4.7	4.7	81.1	0.00
9.12	24.9	0.14	0.58	13.18	7	18.5	166.3	99.4	66.95	0.98	8.3	8.1	UnDef	0.09
9.38	32.5	0.15	0.46	11.02	7	18.5	170.9	101.5	69.41	0.97	10.8	10.5	UnDef	0.08
9.62	21.9	0.18	0.81	14.47	6	18.0	175.5	103.6	71.86	0.96	8.8	8.4	161.4	0.10

Depth (m)	AvgQt (bar)	AvgFs (bar)	AvgRf (%)	AvgUd (m)	SBT	U.Wt. (kN/m^3)	TStress (kPa)	EStress (kPa)	Ueq (kPa)	Cn	N60 (blows/ft)	(N1)60	Su (kPa)	CRR
9.88	21.3	0.18	0.85	14.49	6	18.0	180.0	105.7	74.31	0.95	8.5	8.1	155.8	0.11
10.12	21.2	0.17	0.81	13.25	6	18.0	184.5	107.7	76.76	0.94	8.5	8.0	154.9	0.11
10.38	40.1	0.27	0.68	8.93	7	18.5	189.1	109.8	79.22	0.93	13.4	12.5	UnDef	0.10
10.62	65.4	0.37	0.57	11.30	8	19.0	193.8	112.1	81.67	0.92	16.3	15.1	UnDef	0.12
10.88	44.8	0.25	0.55	14.28	8	19.0	198.5	114.4	84.12	0.92	11.2	10.3	UnDef	0.10
11.12	49.6	0.26	0.53	12.72	8	19.0	203.2	116.7	86.57	0.91	12.4	11.2	UnDef	0.10
11.38	35.3	0.21	0.59	13.14	7	18.5	207.9	118.9	89.03	0.90	11.8	10.6	UnDef	0.10
11.62	30.2	0.23	0.75	13.01	7	18.5	212.6	121.1	91.48	0.89	10.1	8.9	UnDef	0.10
11.88	39.1	0.30	0.77	11.85	7	18.5	217.2	123.3	93.93	0.88	13.0	11.5	UnDef	0.11
12.12	49.4	0.27	0.55	10.40	8	19.0	221.9	125.5	96.38	0.87	12.3	10.8	UnDef	0.10
12.38	49.0	0.22	0.45	11.96	8	19.0	226.6	127.8	98.84	0.87	12.2	10.6	UnDef	0.09
12.62	47.6	0.28	0.59	13.35	8	19.0	231.4	130.1	101.29	0.86	11.9	10.2	UnDef	0.11
12.88	33.9	0.28	0.83	13.39	7	18.5	236.1	132.3	103.74	0.85	11.3	9.6	UnDef	0.11
13.12	31.7	0.24	0.76	12.58	7	18.5	240.7	134.5	106.19	0.84	10.6	8.9	UnDef	0.11
13.38	41.7	0.32	0.77	11.53	7	18.5	245.3	136.7	108.65	0.84	13.9	11.6	UnDef	0.11
13.62	35.9	0.26	0.73	12.03	7	18.5	249.9	138.8	111.10	0.83	12.0	9.9	UnDef	0.11
13.88	39.1	0.29	0.75	12.36	7	18.5	254.6	141.0	113.55	0.82	13.0	10.7	UnDef	0.11
14.12	30.1	0.25	0.82	14.06	7	18.5	259.2	143.2	116.00	0.82	10.0	8.2	UnDef	0.12
14.38	29.8	0.32	1.07	16.37	7	18.5	263.8	145.4	118.46	0.81	9.9	8.1	UnDef	0.17
14.62	62.8	0.65	1.03	12.61	8	19.0	268.5	147.6	120.91	0.81	15.7	12.6	UnDef	0.14
14.88	60.9	0.66	1.08	13.57	7	18.5	273.2	149.8	123.36	0.80	20.3	16.2	UnDef	0.15
15.12	30.6	1.07	3.51	13.18	5	18.0	277.8	151.9	125.81	0.79	15.3	12.1	222.4	0.26
15.38	30.9	1.29	4.17	-6.33	4	18.0	282.2	154.0	128.27	0.79	20.6	16.3	224.7	0.00
15.62	24.5	0.76	3.12	-2.62	5	18.0	286.8	156.0	130.72	0.78	12.3	9.6	173.2	0.17
15.88	17.8	0.59	3.32	7.49	5	18.0	291.2	158.1	133.17	0.78	8.9	6.9	119.3	0.00
16.12	20.9	0.91	4.34	2.18	3	17.5	295.7	160.1	135.62	0.77	20.9	16.1	143.2	0.00
16.38	33.7	1.29	3.84	3.59	5	18.0	300.1	162.0	138.08	0.77	16.8	12.9	245.2	0.00
16.62	17.6	0.82	4.67	-3.90	3	17.5	304.6	164.0	140.53	0.76	17.6	13.4	116.4	0.00
16.88	29.0	1.18	4.07	-2.71	4	18.0	309.0	166.0	142.98	0.76	19.3	14.7	207.4	0.00

ConeTec Inc. - CPT Interpretation
Interpretation Output - Release 1.00.17
Run No: 99-1121-1135-5836
Job No: 97-100
Client: Knight Piesold
Project: Mount Polly Tailings
Site: 99-219 CPT 99-23
Location: MAIN EMBANKMENT
Cone: 10 TON A 057
CPT Date: 99/04/11
CPT Time: 16:03
CPT File: 219CP23.COR
Northing (m): 0.000
Easting (m): 0.000
Elevation (m): 0.000

Water Table (m): 2.30 (ft): 7.5
Su Nkt used: 12.50
Averaging Increment (m): 0.25
Phi Method : Robertson and Campanella, 1983
Dr Method : Jamiolkowski - All Sands
State Parameter M: 1.20
Used Unit Weights Assigned to Soil Zones
Values of 1.0E9 or UnDef are printed for parameters that are not valid for the material type (SBT)

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60	(N1
0.12	5.0E-04	0.00	1000.0	0.24	10	55.3	0.0	55.3	0.0	50	84.4	1.0	-0.27	0.0	
0.38	5.0E-03	0.00	689.6	0.39	10	96.7	0.0	96.7	0.0	50	84.6	1.0	-0.28	0.0	
0.62	5.0E-03	0.00	394.7	0.44	10	93.0	0.0	93.0	0.0	48	76.0	1.0	-0.24	0.0	
0.88	5.0E-03	0.00	284.9	0.40	10	94.4	0.0	94.4	0.5	46	71.6	1.0	-0.20	0.0	
1.12	5.0E-03	0.00	196.8	0.34	9	84.1	0.0	84.1	1.5	46	64.6	1.0	-0.16	0.0	
1.38	5.0E-04	0.00	136.4	0.33	9	70.0	0.0	70.0	3.2	44	57.0	1.0	-0.12	0.0	
1.62	5.0E-04	0.00	100.3	0.23	9	56.0	0.0	56.0	4.0	42	50.7	1.0	-0.06	0.0	
1.88	5.0E-04	0.00	88.1	0.17	9	52.8	0.0	52.8	4.3	42	49.0	1.0	-0.03	0.0	
2.12	5.0E-03	-0.01	82.2	0.11	9	52.6	0.0	52.6	4.0	42	48.8	1.0	0.01	0.0	
2.38	5.0E-04	0.00	55.8	0.11	9	37.6	0.0	37.6	5.0	40	39.3	1.0	0.05	0.0	
2.62	5.0E-05	0.03	21.7	0.20	7	15.4	0.0	15.4	5.0	34	30.0	6.0	0.08	0.0	
2.88	1.0E-07	0.06	16.6	0.30	7	12.3	0.0	12.3	5.0	UnDef	UnDef	6.0	UnDef	0.0	
3.12	1.0E-07	0.05	14.0	0.49	7	10.7	0.0	10.7	5.0	UnDef	UnDef	6.0	UnDef	0.0	
3.38	1.0E-07	0.13	5.7	1.23	4	4.9	19.7	24.7	59.6	UnDef	UnDef	1.5	UnDef	2.4	
3.62	1.0E-07	0.17	4.9	1.51	4	4.5	18.1	22.6	66.2	UnDef	UnDef	1.5	UnDef	2.2	
3.88	1.0E-07	0.03	13.1	0.49	7	10.7	0.0	10.7	5.0	UnDef	UnDef	6.0	UnDef	0.0	
4.12	5.0E-05	0.01	23.4	0.53	7	18.7	16.8	35.6	22.7	34	30.0	6.0	0.00	3.1	
4.38	5.0E-04	-0.01	39.5	0.65	7	31.6	15.0	46.5	17.0	38	34.2	1.0	-0.07	2.6	
4.62	5.0E-04	0.00	43.1	0.45	9	35.0	0.0	35.0	5.0	38	37.2	1.0	-0.04	0.0	
4.88	5.0E-05	0.03	17.4	0.65	7	15.0	26.0	41.1	28.7	32	30.0	6.0	0.01	3.9	
5.12	5.0E-05	0.04	18.0	0.94	7	15.8	37.9	53.7	31.5	32	30.0	6.0	-0.02	4.9	
5.38	5.0E-04	0.01	33.2	0.57	7	28.6	15.7	44.3	18.3	36	31.4	1.0	-0.04	2.7	
5.62	5.0E-05	0.03	19.6	0.76	7	17.6	28.3	45.9	28.1	34	30.0	6.0	-0.01	4.3	
5.88	5.0E-05	0.02	26.9	1.17	7	24.2	34.1	58.3	26.9	36	30.0	6.0	-0.07	5.5	
6.12	5.0E-04	0.01	28.1	0.65	7	25.6	19.9	45.5	21.4	36	30.0	1.0	-0.03	3.1	
6.38	5.0E-05	0.02	19.7	0.68	7	18.6	26.6	45.1	27.0	34	30.0	6.0	0.00	4.2	
6.62	5.0E-05	0.08	12.1	0.84	6	12.1	48.4	60.5	37.7	30	30.0	3.0	0.03	4.7	
6.88	5.0E-05	0.08	10.2	0.88	6	10.5	42.2	52.7	41.7	30	30.0	3.0	0.05	4.1	
7.12	5.0E-04	0.00	34.7	0.63	7	33.0	18.5	51.5	18.4	38	35.5	1.0	-0.05	3.1	
7.38	5.0E-05	0.02	13.0	0.47	7	13.4	0.0	13.4	5.0	32	30.0	6.0	0.06	0.0	
7.62	5.0E-05	0.07	11.2	0.53	7	11.9	47.7	59.6	35.4	30	30.0	3.0	0.07	4.7	
7.88	5.0E-04	0.04	20.4	0.43	7	20.7	0.0	20.7	5.0	34	30.0	1.0	0.03	0.0	
8.12	5.0E-05	0.07	7.9	0.39	6	9.0	36.2	45.2	40.5	30	30.0	3.0	0.12	3.5	
8.38	5.0E-05	0.03	13.9	0.23	7	15.0	0.0	15.0	5.0	32	30.0	6.0	0.11	0.0	
8.62	5.0E-05	0.04	14.1	0.49	7	15.4	0.0	15.4	5.0	32	30.0	6.0	0.05	0.0	
8.88	5.0E-05	0.06	10.4	0.32	7	11.9	0.0	11.9	5.0	30	30.0	3.0	0.11	0.0	
9.12	5.0E-04	0.03	23.4	0.62	7	24.9	25.0	50.0	23.8	34	30.0	1.0	-0.01	3.7	
9.38	5.0E-04	0.01	30.3	0.48	7	32.2	0.0	32.2	5.0	36	34.8	1.0	-0.02	0.0	
9.62	5.0E-05	0.03	19.5	0.88	7	21.5	40.7	62.2	29.5	34	30.0	6.0	-0.02	5.8	

Depth (m)	k (cm/s)	Bq	Qtn	Rfn (%)	SBTn	Qc1N	DeltaQc1N	Qc1Ncs	Fc (%)	Phi (Deg)	Dr (%)	OCR	State Param	Del(n1)60 (N
9.88	5.0E-05	0.03	18.4	0.92	7	20.7	46.0	66.7	30.8	32	30.0	6.0	-0.02	6.1
10.12	5.0E-05	0.03	18.0	0.89	7	20.4	45.8	66.2	30.9	32	30.0	6.0	-0.01	6.1
10.38	5.0E-04	0.00	34.7	0.72	7	38.2	23.6	61.8	19.3	38	39.7	1.0	-0.06	3.9
10.62	5.0E-03	0.00	56.6	0.59	9	61.8	15.4	77.2	12.5	40	53.5	1.0	-0.09	2.2
10.88	5.0E-03	0.01	37.5	0.58	7	41.9	19.5	61.5	16.9	38	42.4	1.0	-0.05	2.5
11.12	5.0E-03	0.01	40.8	0.55	9	45.9	18.1	64.1	15.6	38	45.0	1.0	-0.05	2.4
11.38	5.0E-04	0.01	28.0	0.63	7	32.4	24.7	57.2	21.2	36	35.0	1.0	-0.03	3.9
11.62	5.0E-04	0.01	23.2	0.81	7	27.4	34.7	62.1	25.9	34	30.2	1.0	-0.03	4.8
11.88	5.0E-04	0.01	29.9	0.82	7	35.2	30.1	65.3	22.3	36	37.3	1.0	-0.06	4.7
12.12	5.0E-03	0.00	37.6	0.58	7	44.1	20.4	64.5	16.9	38	43.8	1.0	-0.05	2.7
12.38	5.0E-03	0.00	36.5	0.47	7	43.3	0.0	43.3	5.0	38	43.3	1.0	-0.03	0.0
12.62	5.0E-03	0.01	34.8	0.62	7	41.7	23.0	64.7	18.3	38	42.2	1.0	-0.05	2.9
12.88	5.0E-04	0.01	23.8	0.89	7	29.5	38.8	68.3	26.3	34	32.2	1.0	-0.04	5.3
13.12	5.0E-04	0.01	21.8	0.82	7	27.3	39.0	66.3	27.0	34	30.1	1.0	-0.03	5.2
13.38	5.0E-04	0.00	28.7	0.82	7	35.7	32.6	68.2	22.9	36	37.7	1.0	-0.05	5.0
13.62	5.0E-04	0.00	24.1	0.79	7	30.5	35.5	66.0	25.2	34	33.2	1.0	-0.03	5.0
13.88	5.0E-04	0.00	25.9	0.80	7	32.9	34.4	67.3	24.1	36	35.4	1.0	-0.04	5.0
14.12	5.0E-04	0.01	19.2	0.90	7	25.2	49.8	74.9	29.9	34	30.0	1.0	-0.02	5.8
14.38	5.0E-04	0.02	18.7	1.18	7	24.7	72.8	97.6	33.0	32	30.0	1.0	-0.04	7.1
14.62	5.0E-03	0.00	40.7	1.08	7	51.7	36.3	88.0	20.5	38	48.3	1.0	-0.11	4.4
14.88	5.0E-04	0.00	38.8	1.14	7	49.7	39.2	89.0	21.5	38	47.2	1.0	-0.11	6.2
15.12	5.0E-06	0.00	18.3	3.86	4	24.8	99.2	124.0	49.1	UnDef	UnDef	6.0	UnDef	12.1
15.38	5.0E-07	-0.07	18.2	4.59	1	24.9	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef
15.62	5.0E-06	-0.07	13.9	3.53	4	19.6	78.5	98.1	53.4	UnDef	UnDef	6.0	UnDef	9.6
15.88	5.0E-06	-0.04	9.4	3.97	1	14.2	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef
16.12	5.0E-08	-0.06	11.2	5.06	1	16.5	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef
16.38	5.0E-06	-0.03	18.9	4.21	1	26.4	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef
16.62	5.0E-08	-0.12	8.9	5.65	1	13.7	UnDef	UnDef	100.0	UnDef	UnDef	3.0	UnDef	UnDef
16.88	5.0E-07	-0.07	15.6	4.55	1	22.5	UnDef	UnDef	100.0	UnDef	UnDef	6.0	UnDef	UnDef

APPENDIX C

Summary of Dissipations and Pore Pressure Plots

Summary of Pore Pressure Dissipations

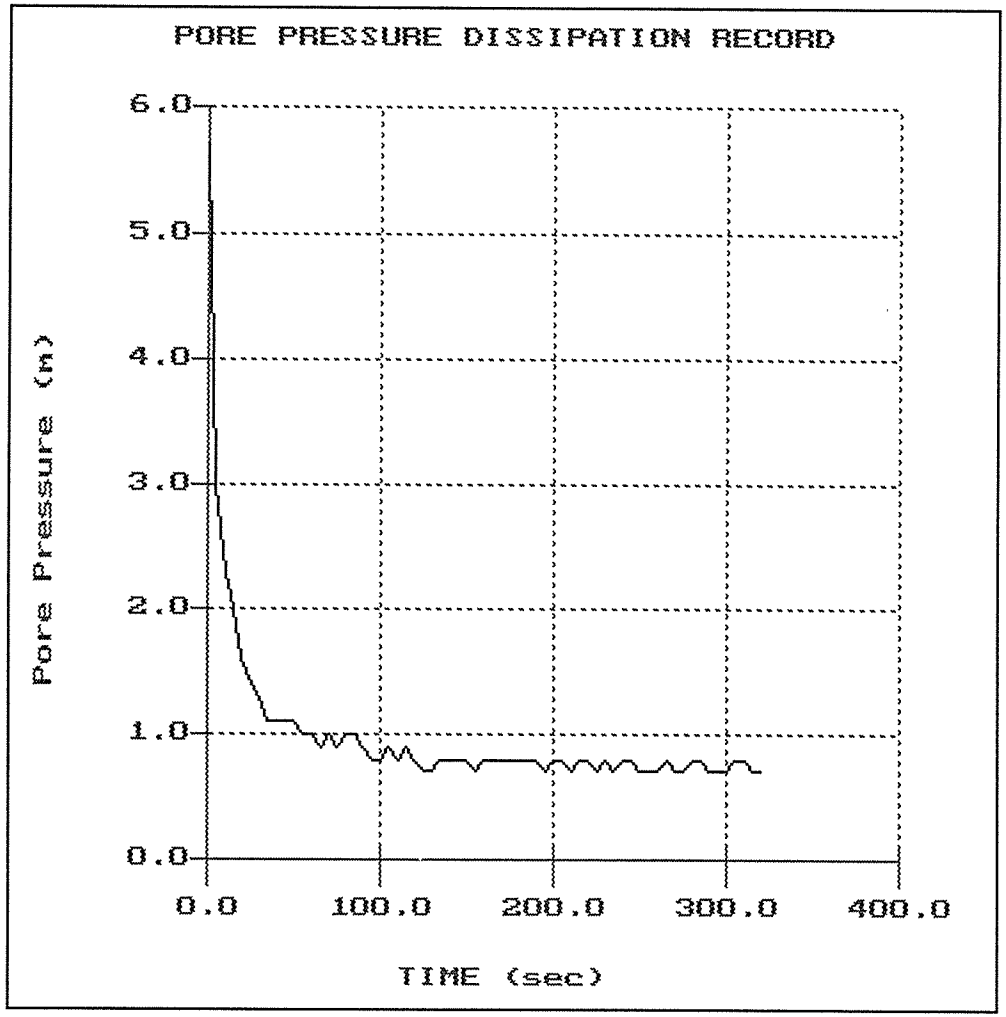
CPT	Depth (m)	t-50 (sec)	c_h (cm^2/min)
99-1	3.45	4.6	147
99-05	3.2	14.4	47
99-10	4.2	3.8	176
	5.2	3.8	180
	6.2	11.5	58.7
	7.2	6.3	107
99-11	4.2	4.5	151
99-12	3.15	166	4.1
	4.15	10.9	61.7
	5.15	6.4	105
	6.15	6.4	105
	7.15	109	6.2
99-13	5.1	4.0	168
99-14	4.25	6.1	111
	5.25	25.3	26.7
99-16	2.0	4.2	161
	3.0	10.0	67.5
	4.0	37.5	18.0
99-17	5.2	4,7	143
	7.2	6.0	113
	9.2	3.6	188
99-18	4.25	3.8	178
	6.25	3.6	185

99-18	8.25	3.9	174
	10.25	3.4	199
	12.25	3.6	188
99-19	7.05	3.9	171
	9.1	8.2	82.8
99-20	6.2	4.5	155
	8.2	3.8	177
99-21	5.05	9.3	72.4
	7.05	31.8	21.2
	9.05	3.4	201
	11.05	4.3	158
99-22	5.3	3.6	186
	9.3	5.5	122
	10.3	3.0	224
99-23	7.2	7.5	90

Knight Piesold

Hole:99-219 CPT 99-1
Location:DOWNSTREAM TEST

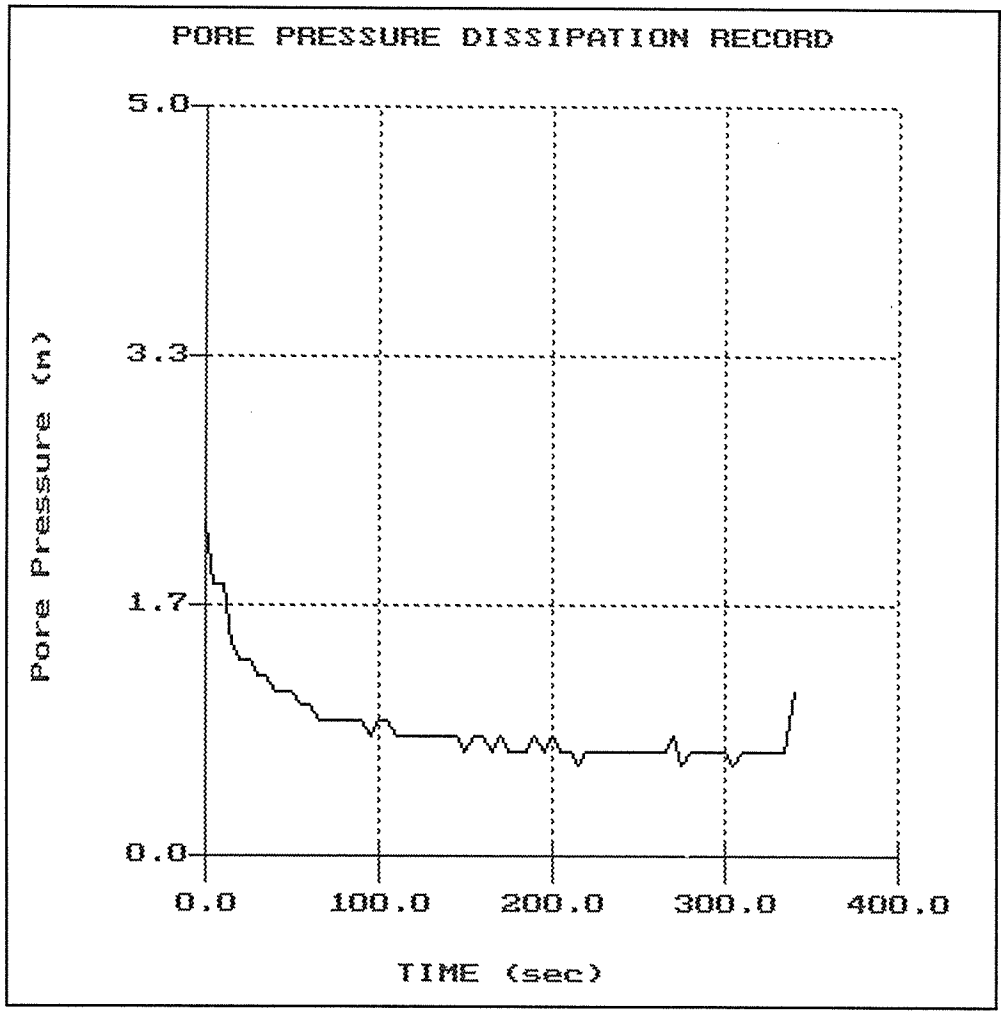
Cone:10 TON A 057
Date:11:02:99 08:35



File: 219CP01.PPD
Depth (m): 3.45
(ft): 11.32
Duration : 320.0s

Knight Piesold

Hole:99-219 CPT 99-05 Cone:10 TON A 057
Location:DOWN STREAM TEST Date:11:02:99 11:00

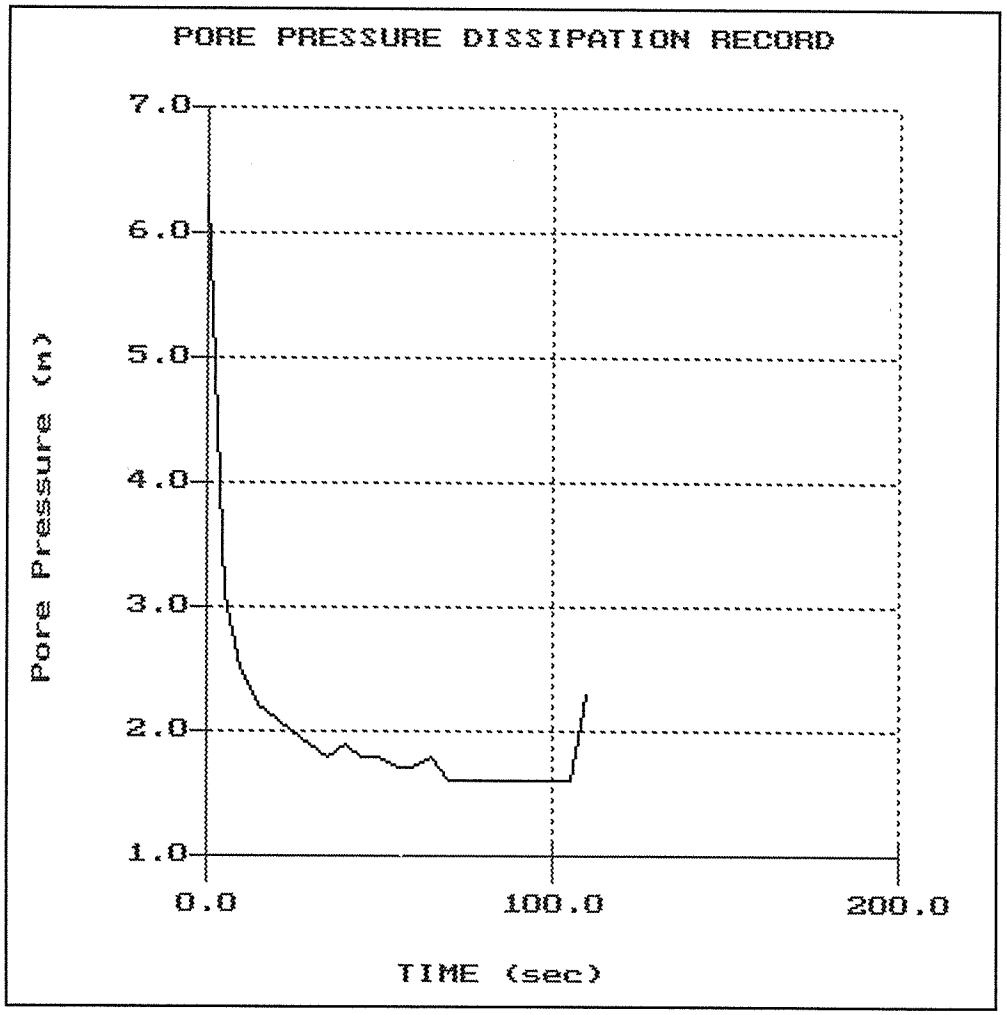


File: 219CP05.PPD
Depth (m): 3.20
(ft): 10.50
Duration : 340.0s

Knight Piesold

Hole:99-219 CPT 99-10
Location:UPSTREAM TEST

Cone:10 TON A 057
Date:11:03:99 07:52

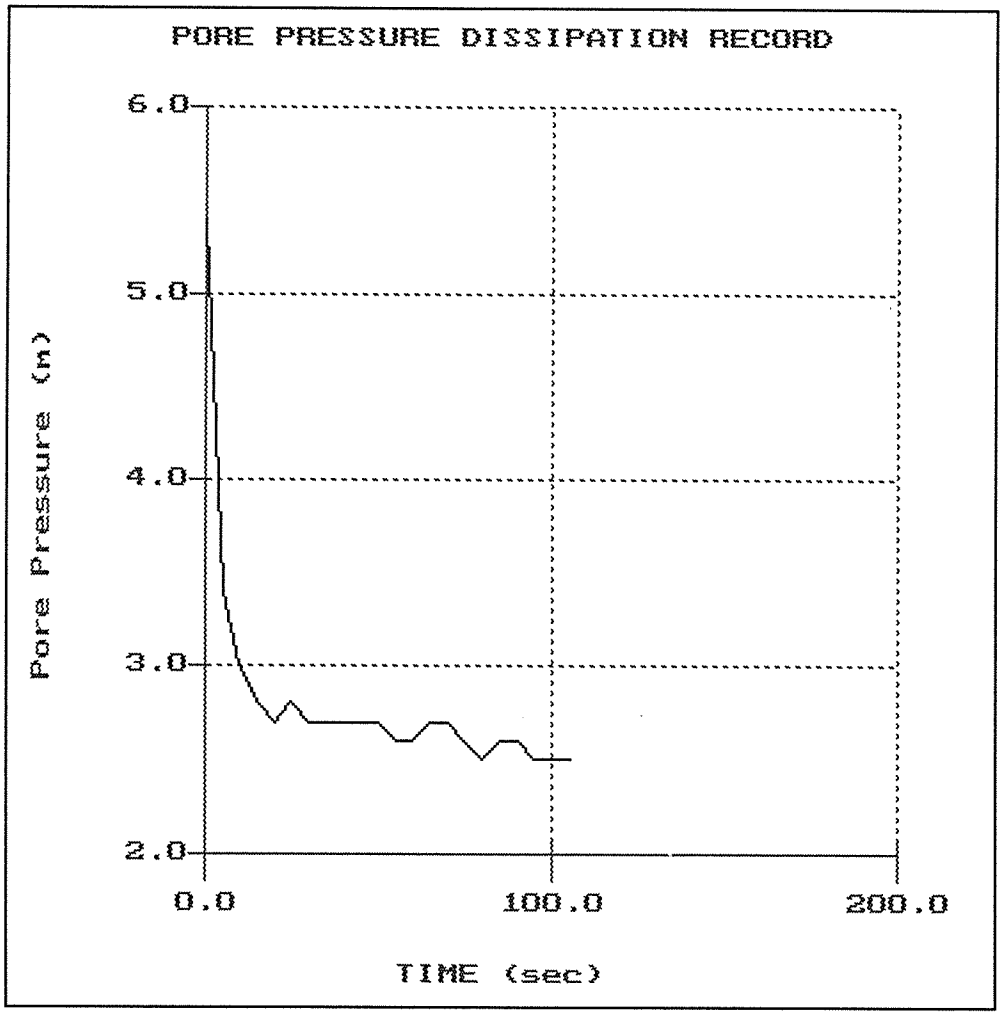


File: 219CP10.PPD
Depth (m): 4.20
(ft): 13.78
Duration : 110.0s

Knight Piesold

Hole:99-219 CPT 99-10
Location:UPSTREAM TEST

Cone:10 TON A 057
Date:11:03:99 07:52

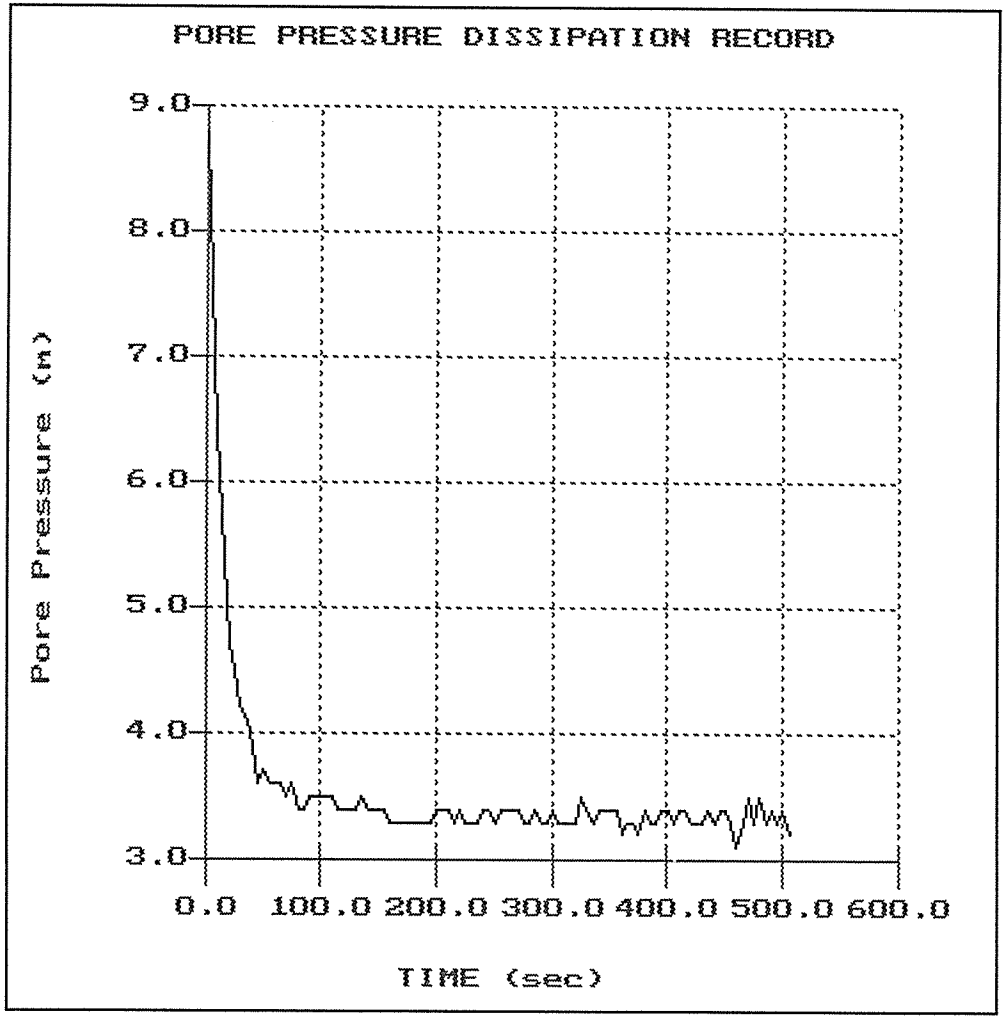


File: 219CP10.PPD
Depth (m): 5.20
(ft): 17.06
Duration : 105.0s

Knight Piesold

Hole:99-219 CPT 99-10
Location:UPSTREAM TEST

Cone:10 TON A 057
Date:11:03:99 07:52



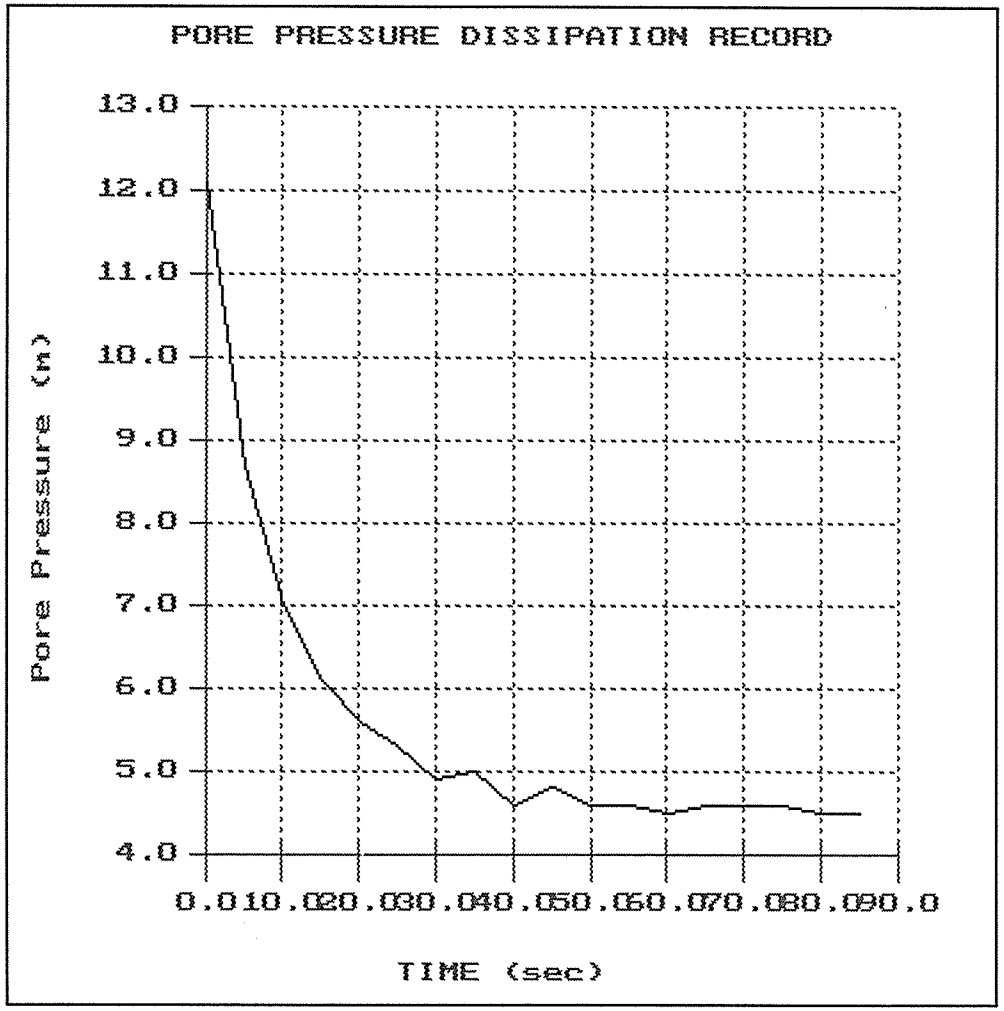
File: 219CP10.PPD
Depth (m): 6.20
(ft): 20.34
Duration : 505.0s

Knight Piesold

Hole:99-219 CPT 99-10
Location:UPSTREAM TEST

Cone:10 TON A 057
Date:11:03:99 07:52

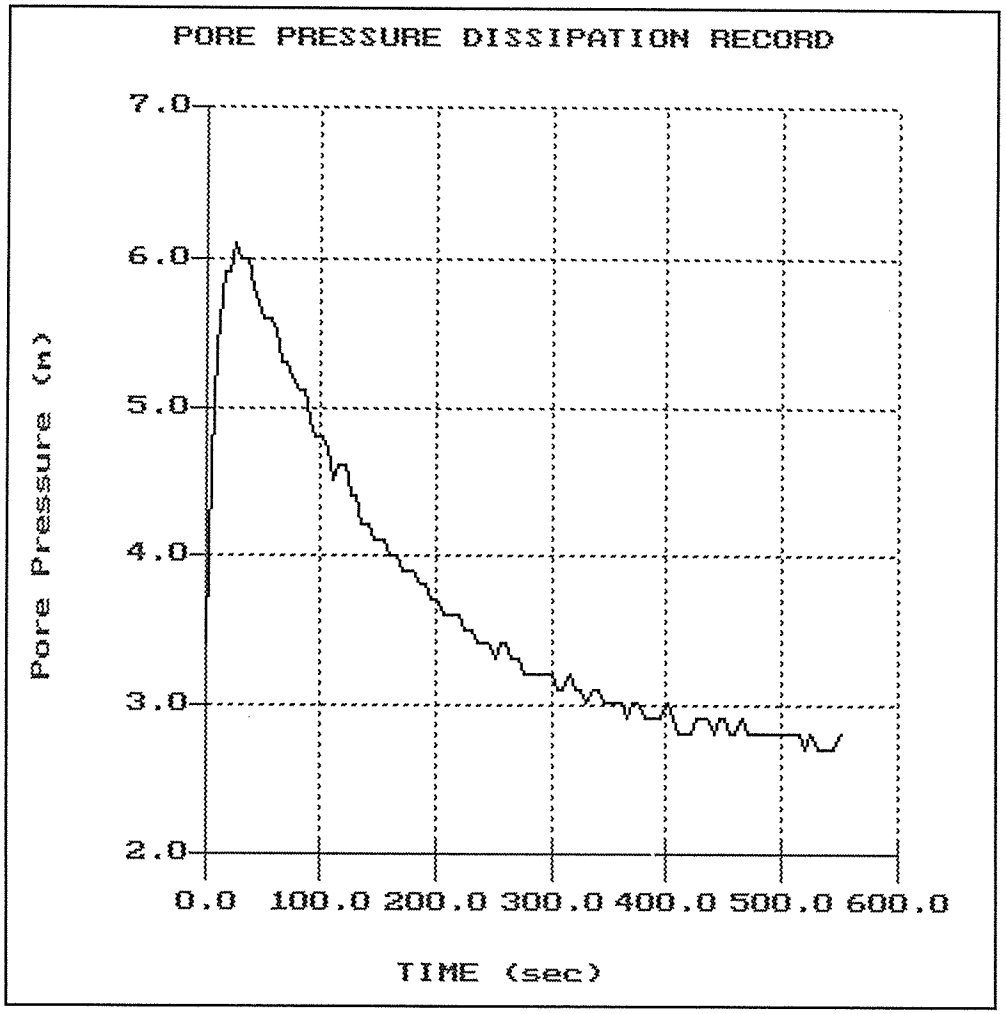
File: 219CP10.PPD
Depth (m): 7.20
(ft): 23.62
Duration : 85.0s



Knight Piesold

Hole:99-219 CPT-12
Location:UPSTREAM

Cone:10 TON A 057
Date:11:03:99 10:28

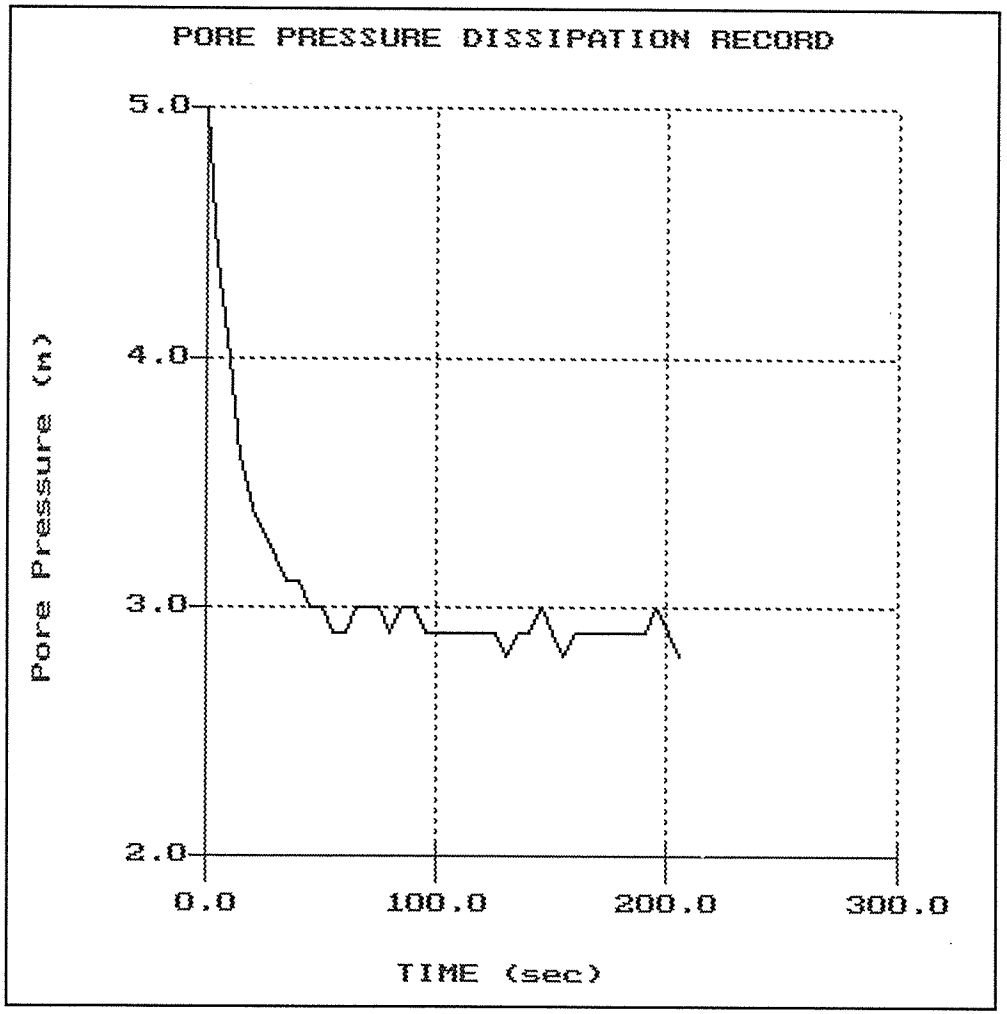


File: 219CP12.PPD
Depth (m): 3.15
(ft): 10.33
Duration : 550.0s

Knight Piesold

Hole:99-219 CPT-12
Location:UPSTREAM

Cone:10 TON A 057
Date:11:03:99 10:28

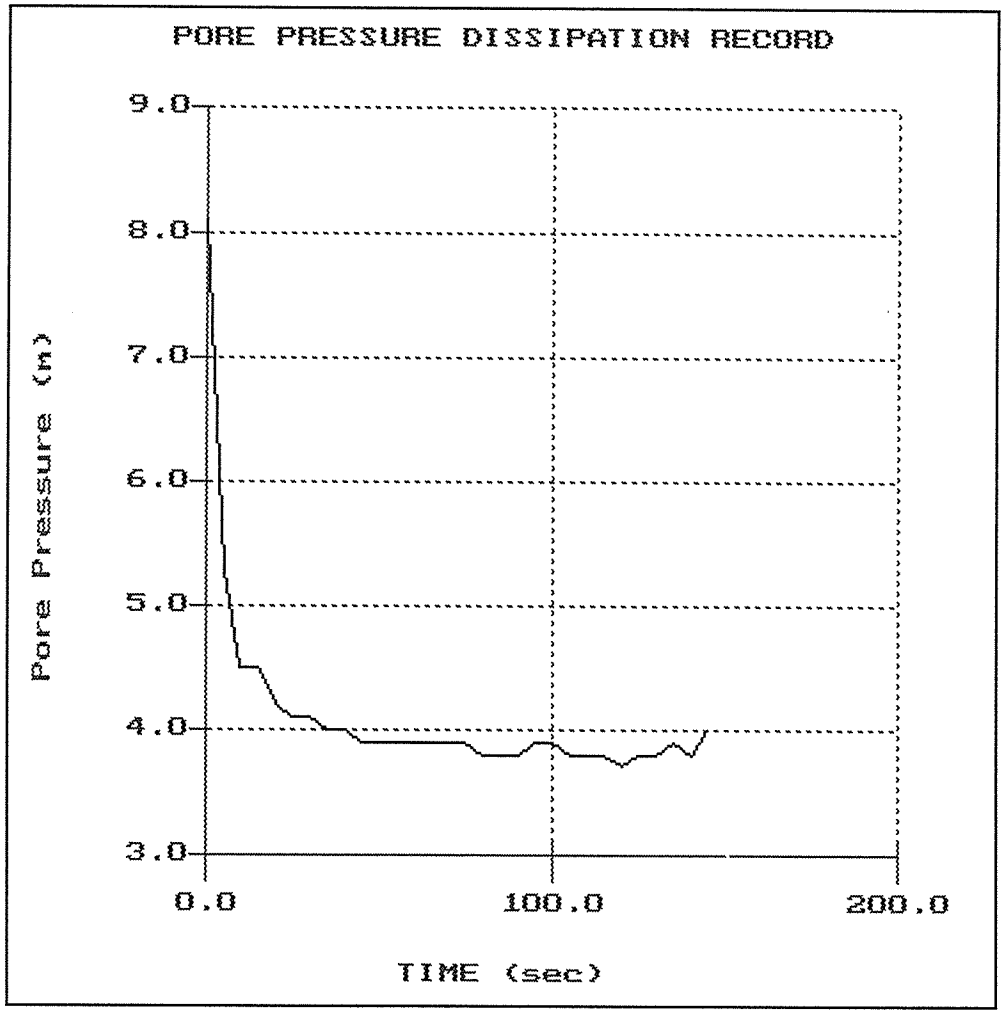


File: 219CP12.PPD
Depth (m): 4.15
(ft): 13.62
Duration : 205.0s

Knight Piesold

Hole:99-219 CPT-13
Location:UPSTREAM TEST

Cone:10 TON A 057
Date:11:03:99 12:08

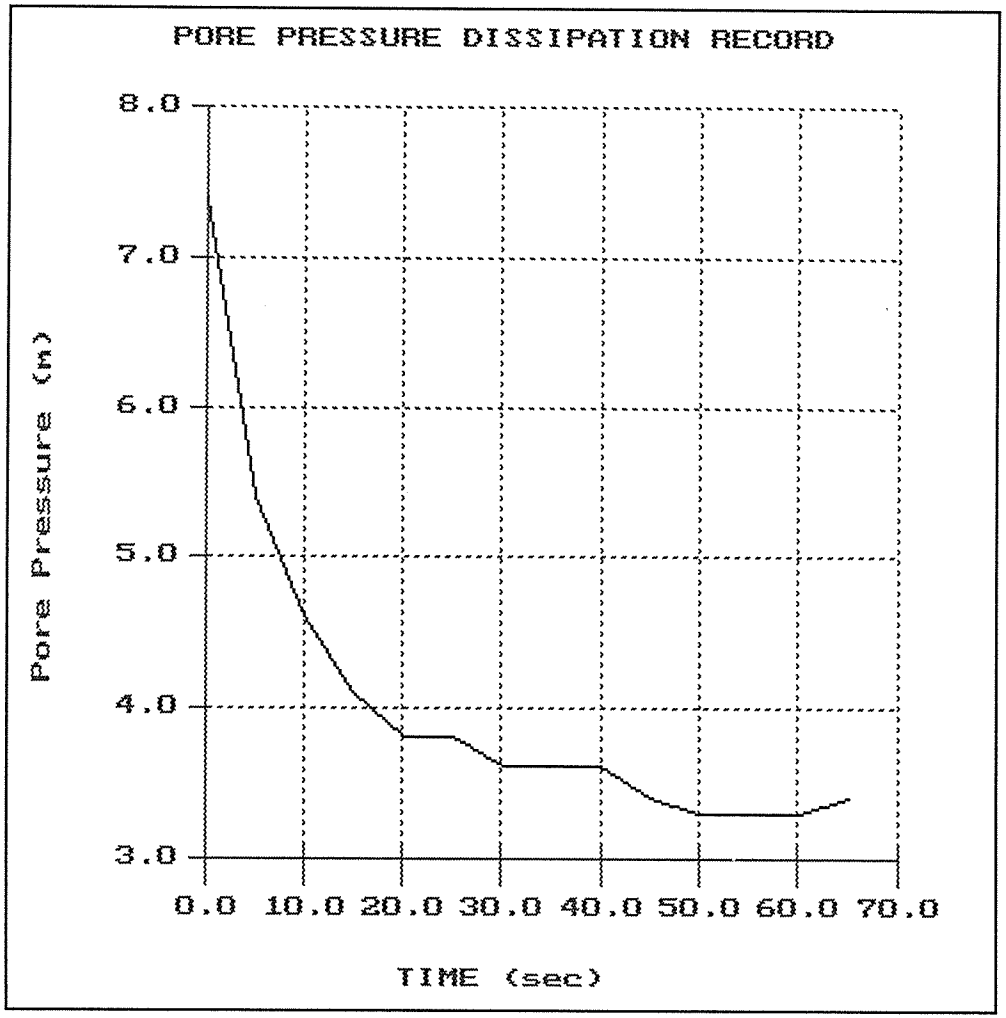


File: 219CP13.PPD
Depth (m): 5.10
(ft): 16.73
Duration : 145.0s

Knight Piesold

Hole:99-219 CPT 99-14
Location:UPSTREAM TEST

Cone:10 TON A 057
Date:11:03:99 13:16

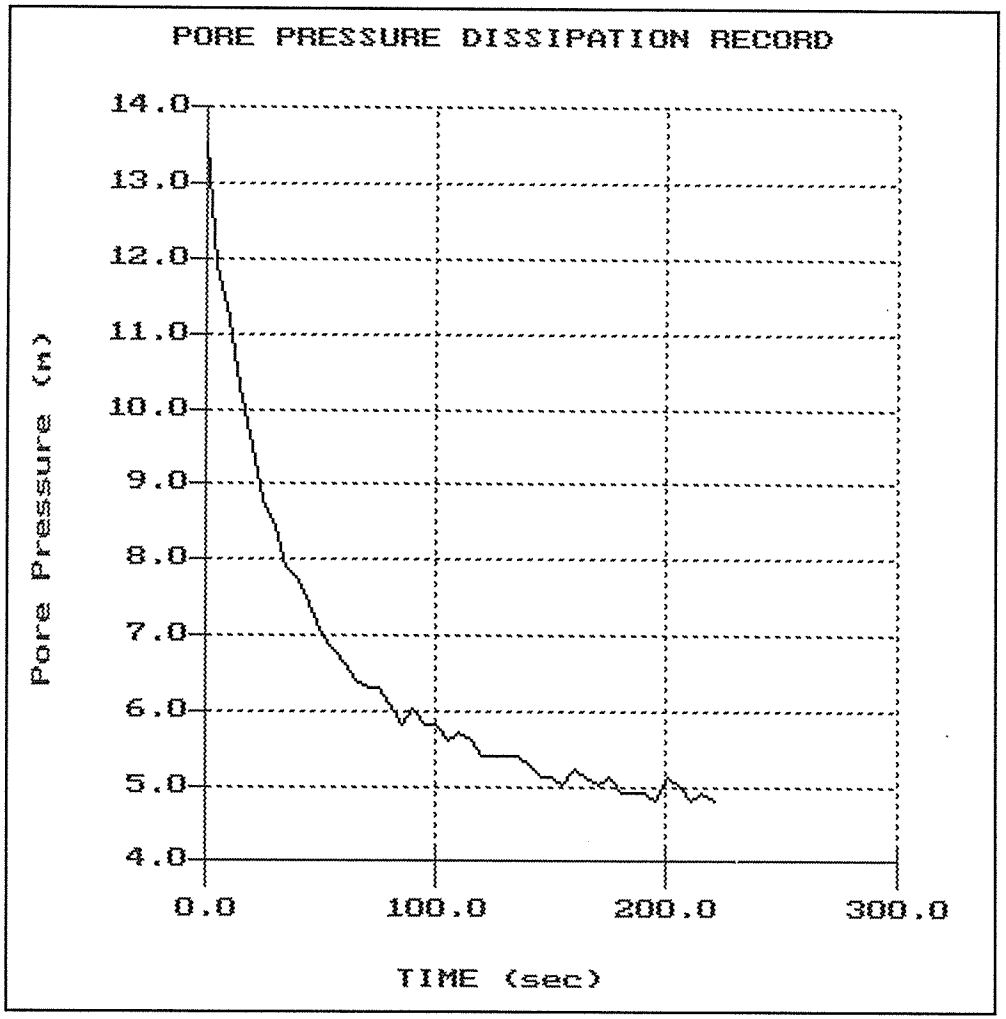


File: 219CP14.PPD
Depth (m): 4.25
(ft): 13.94
Duration : 65.0s

Knight Piesold

Hole:99-219 CPT 99-14
Location:UPSTREAM TEST

Cone:10 TON A 057
Date:11:03:99 13:16



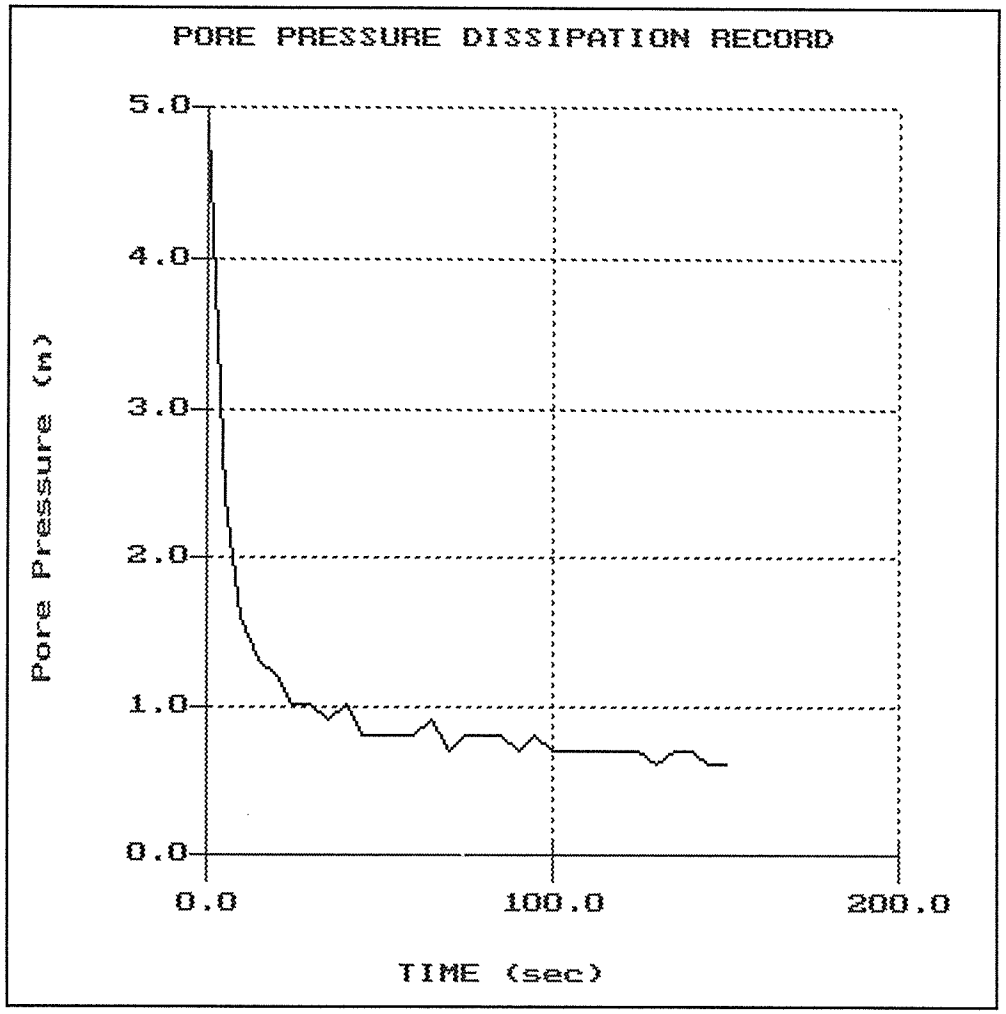
File: 219CP14.PPD
Depth (m): 5.25
(ft): 17.22
Duration : 220.0s

Knight Piesold

Hole:99-219 CPT 99-16
Location:UPSTREAM TEST

Cone:10 TON A 057
Date:11:03:99 15:41

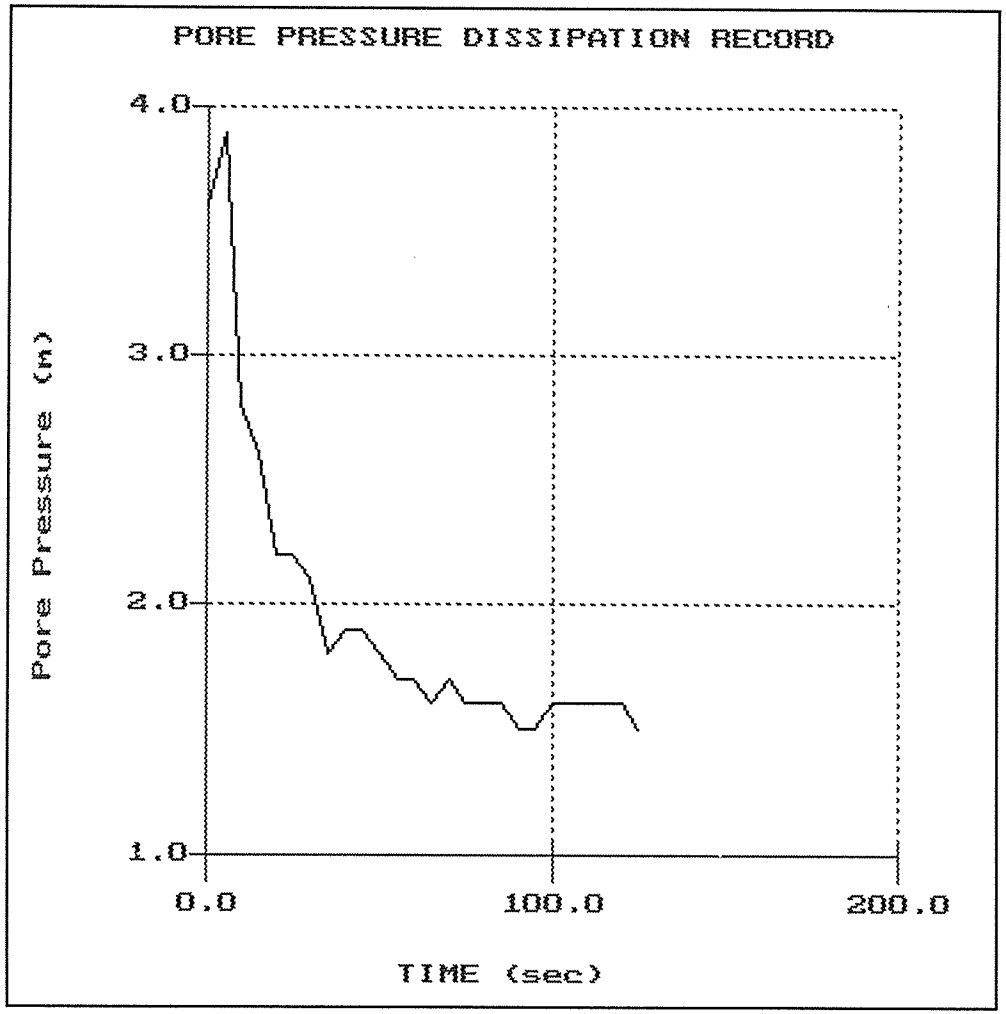
File: 219CP16.PPD
Depth (m): 2.00
(ft): 6.56
Duration : 150.0s



Knight Piesold

Hole:99-219 CPT 99-16
Location:UPSTREAM TEST

Cone:10 TON A 057
Date:11:03:99 15:41

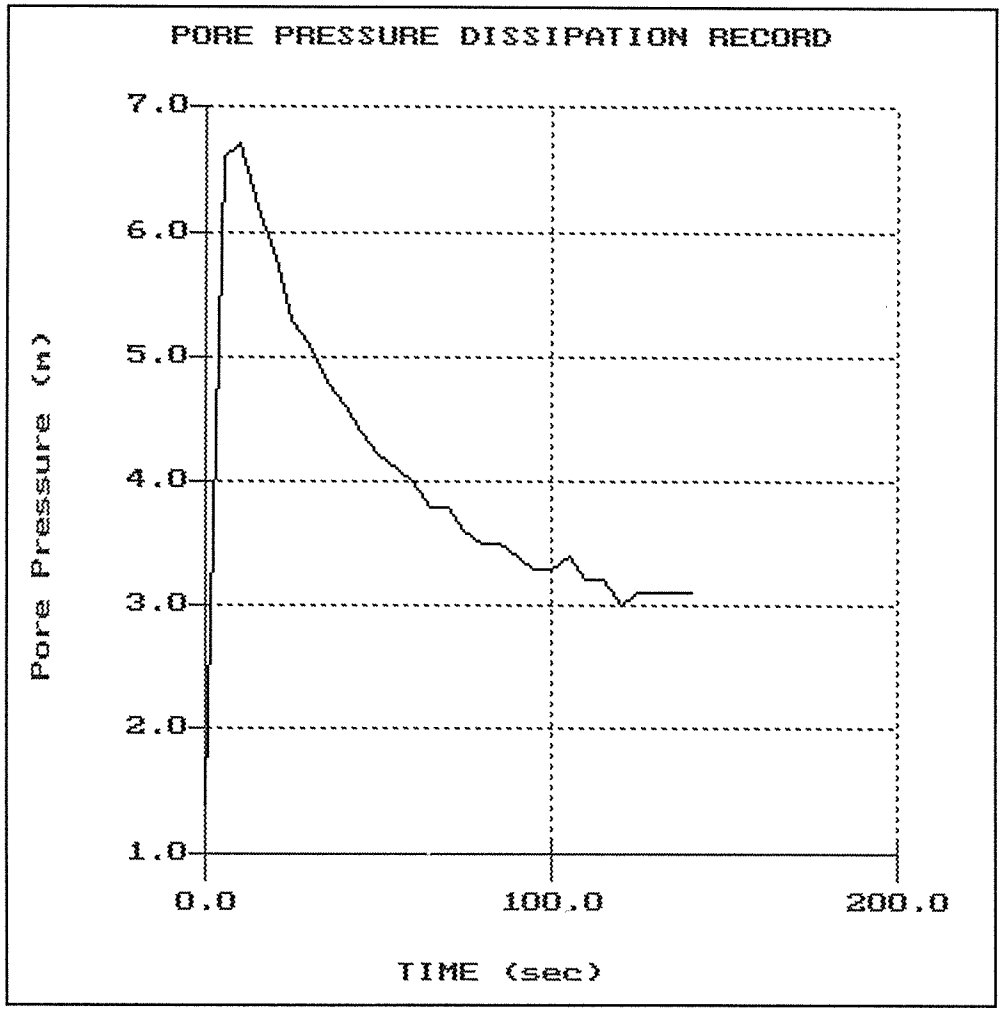


File: 219CP16.PPD
Depth (m): 3.00
(ft): 9.84
Duration : 125.0s

Knight Piesold

Hole:99-219 CPT 99-16
Location:UPSTREAM TEST

Cone:10 TON A 057
Date:11:03:99 15:41

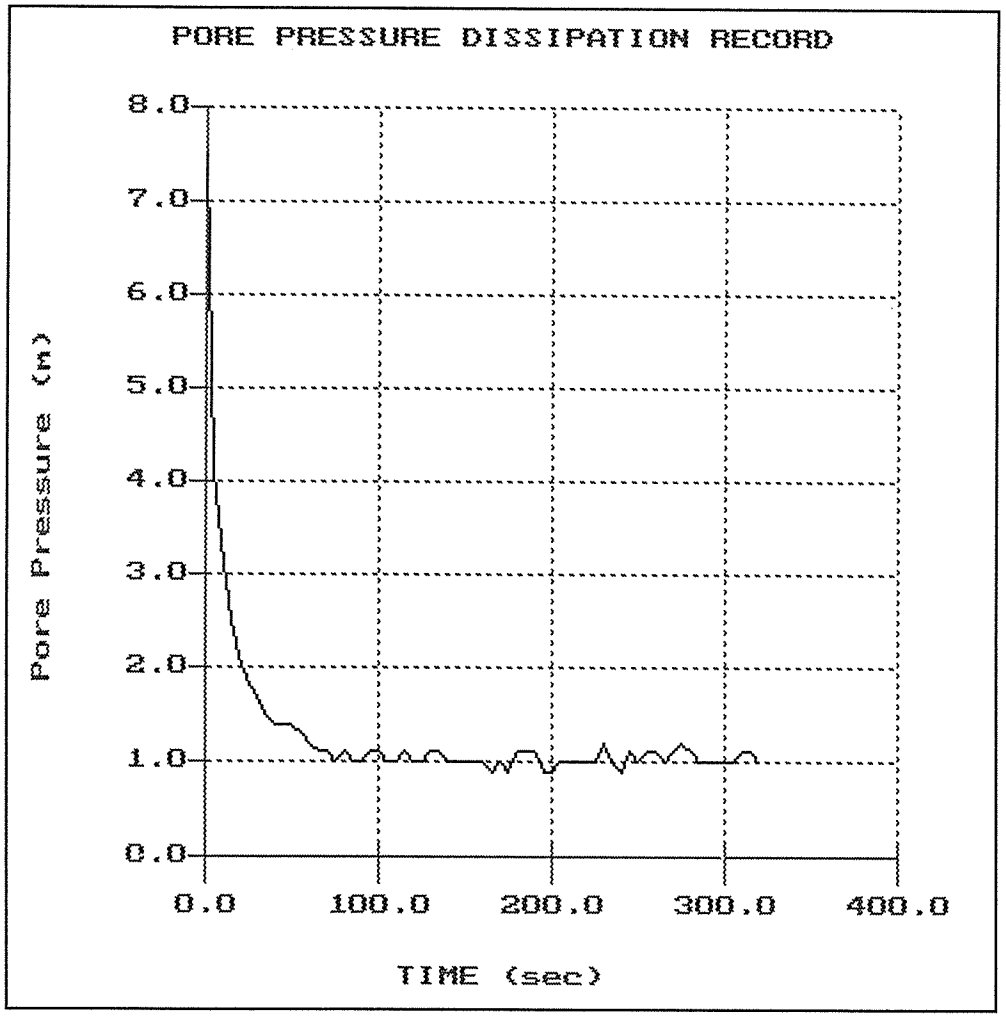


File: 219CP16.PPD
Depth (m): 4.00
(ft): 13.12
Duration : 140.0s

Knight Piesold

Hole:99-219 CPT-17
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 08:46

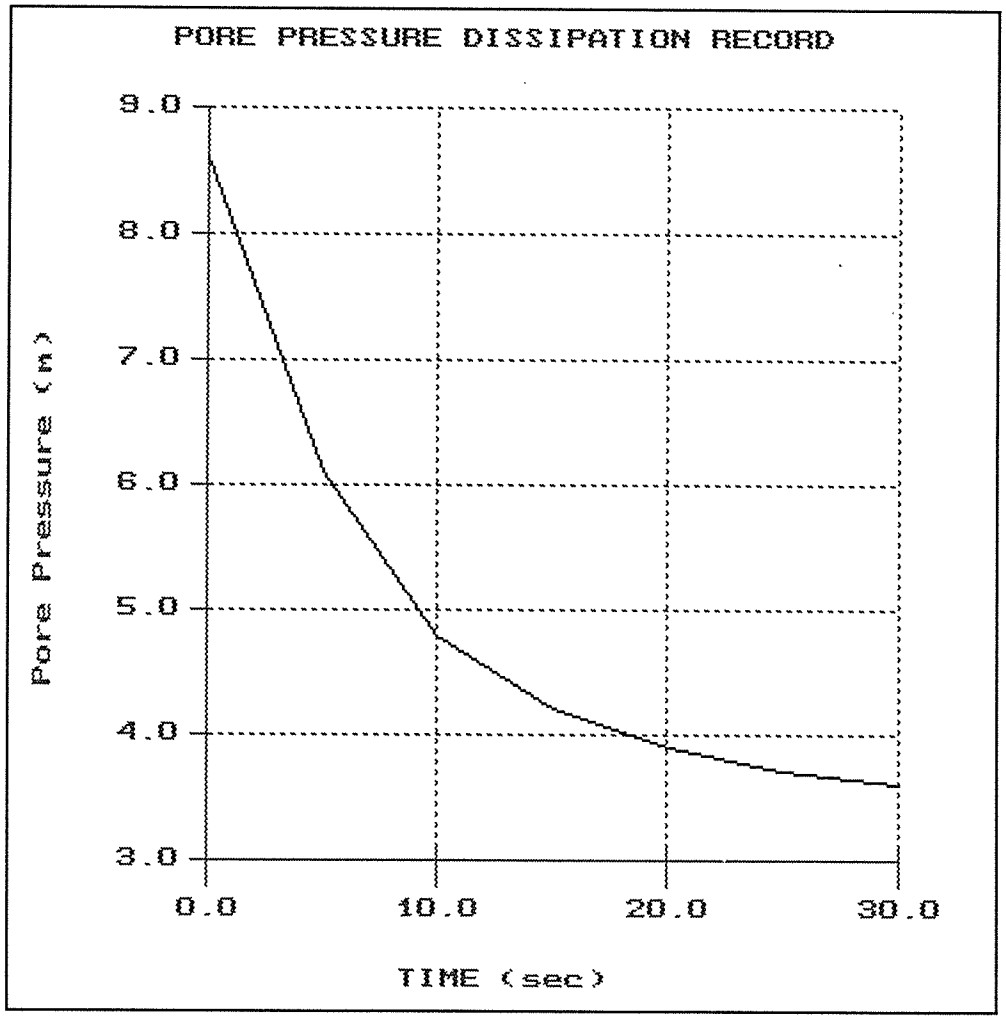


File: 219CP17.PPD
Depth (m): 5.20
(ft): 17.06
Duration : 320.0s

Knight Piesold

Hole:99-219 CPT-17
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 08:46

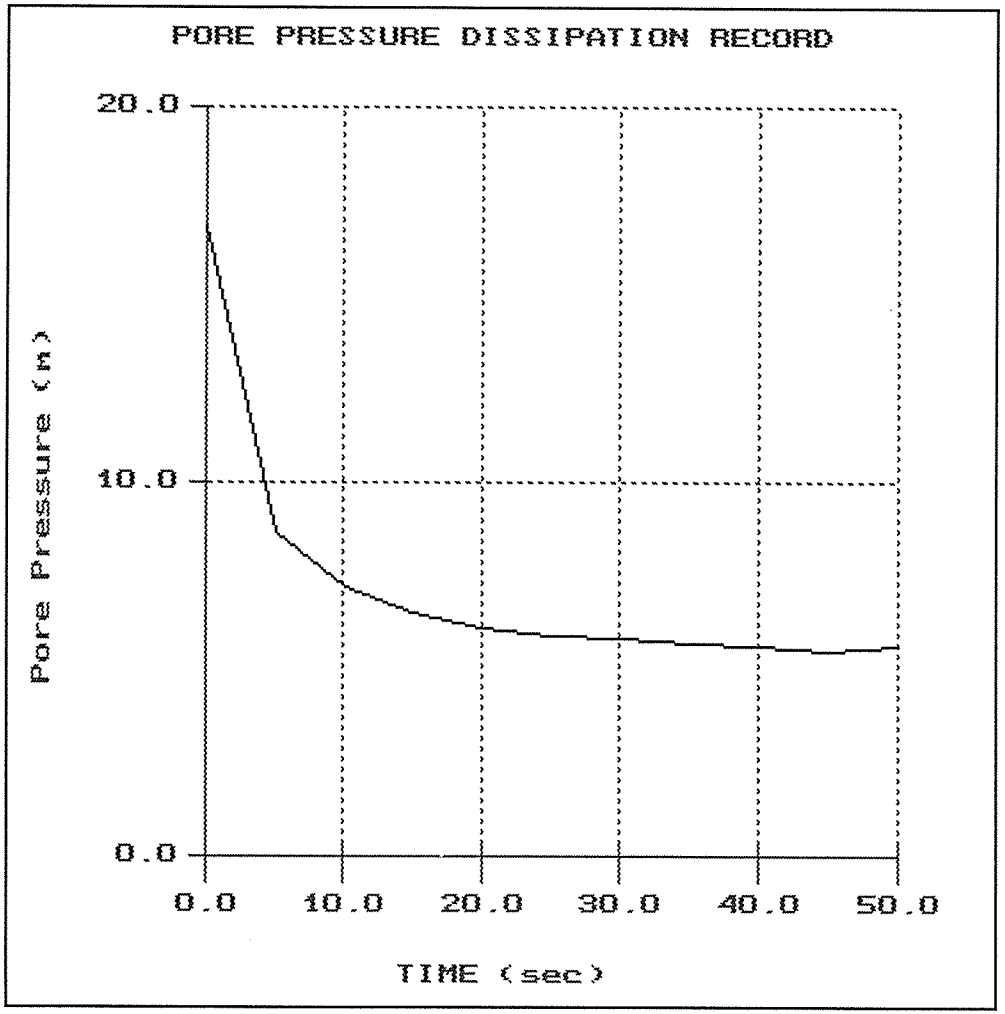


File: 219CP17.PPD
Depth (m): 7.20
(ft): 23.62
Duration : 30.0s

Knight Piesold

Hole:99-219 CPT-17
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 08:46

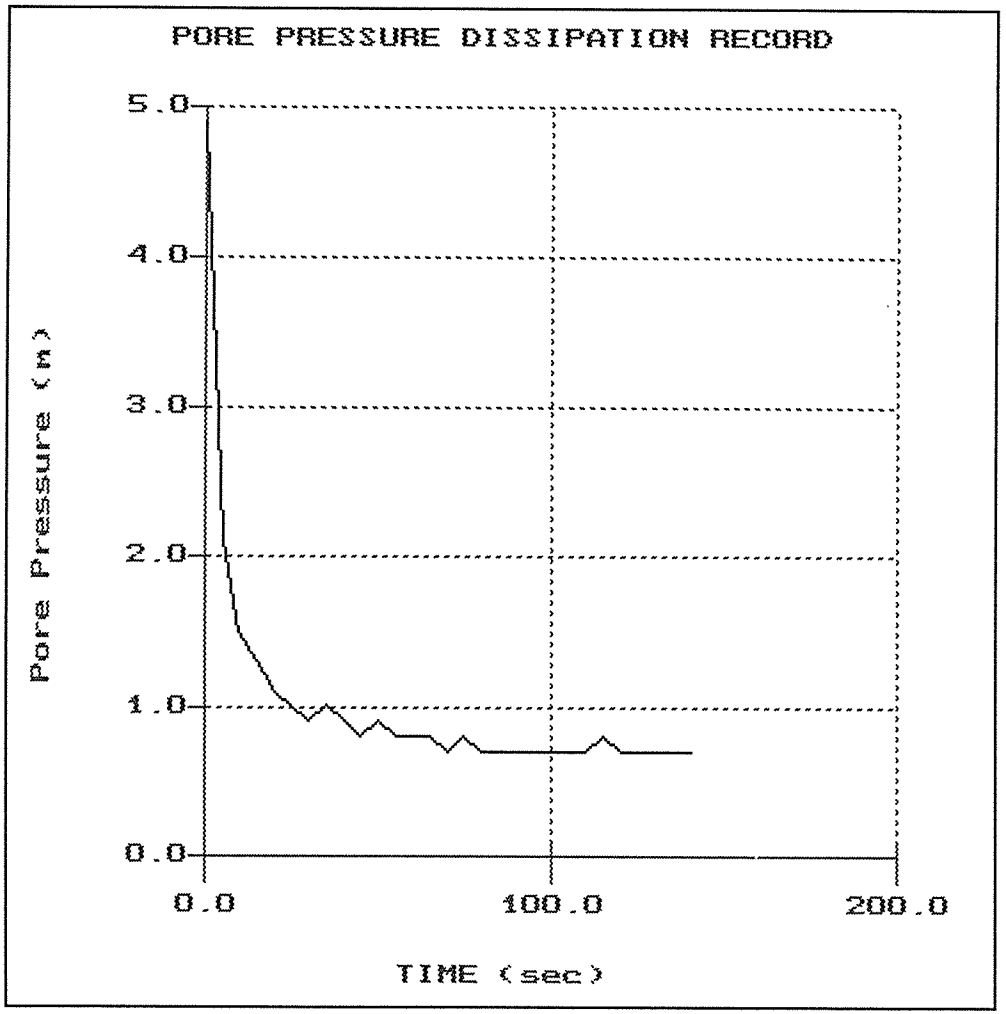


File: 219CP17.PPD
Depth (m): 9.20
(ft): 30.18
Duration : 50.0s

Knight Piesold

Hole:99-219 CPT-18
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 09:47



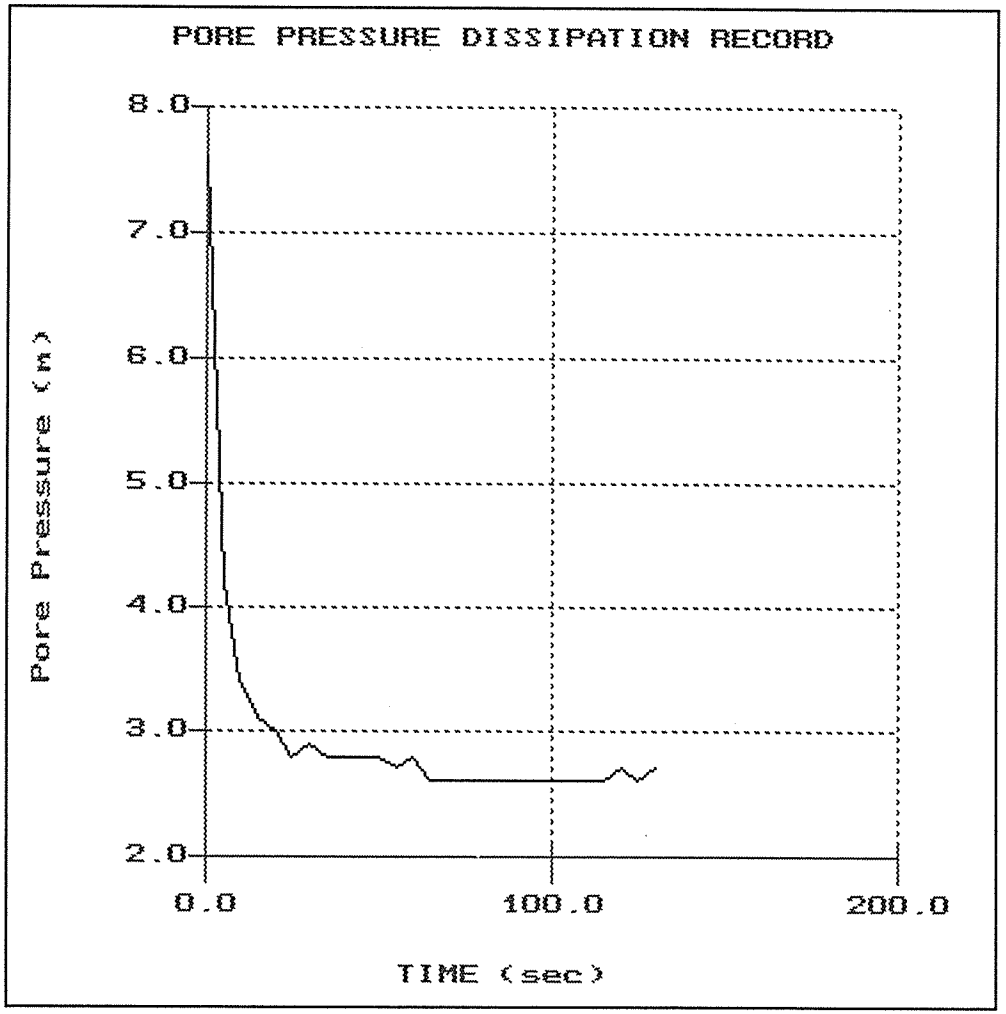
File: 219CP18.PPD
Depth (m): 4.25
(ft): 13.94
Duration : 140.0s

Knight Piesold

Hole:99-219 CPT-18
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 09:47

File: 219CP18.PPD
Depth (m): 6.25
(ft): 20.51
Duration : 130.0s

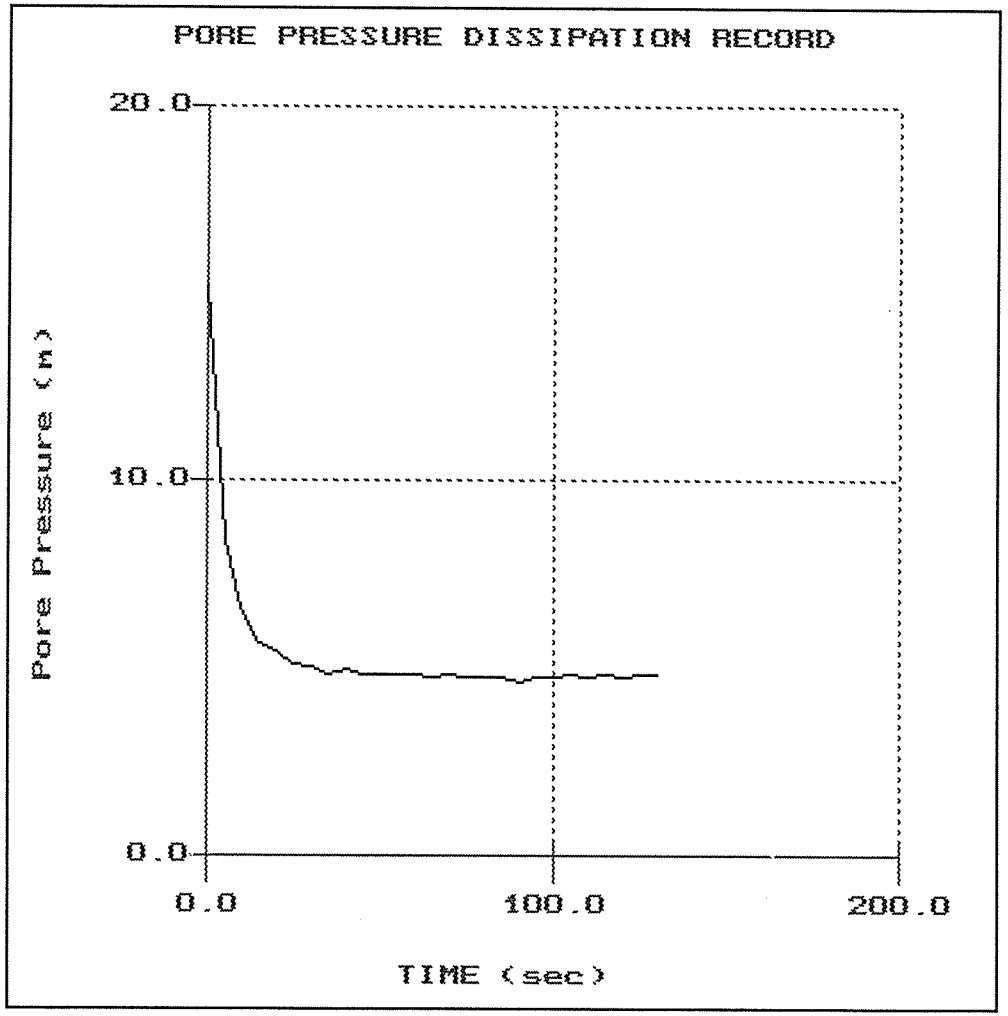


Knight Piesold

Hole:99-219 CPT-18
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 09:47

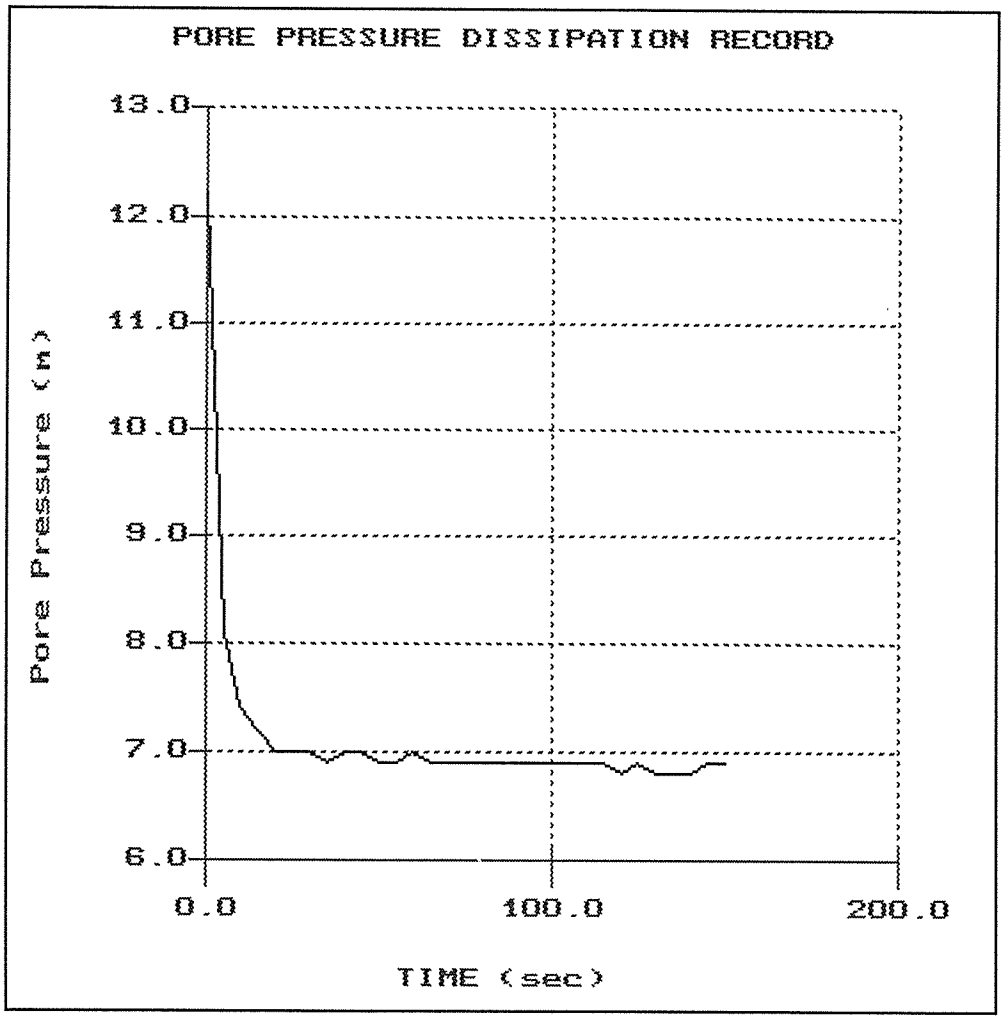
File: 219CP18.PPD
Depth (m): 8.25
(ft): 27.07
Duration : 130.0s



Knight Piesold

Hole:99-219 CPT-18
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 09:47

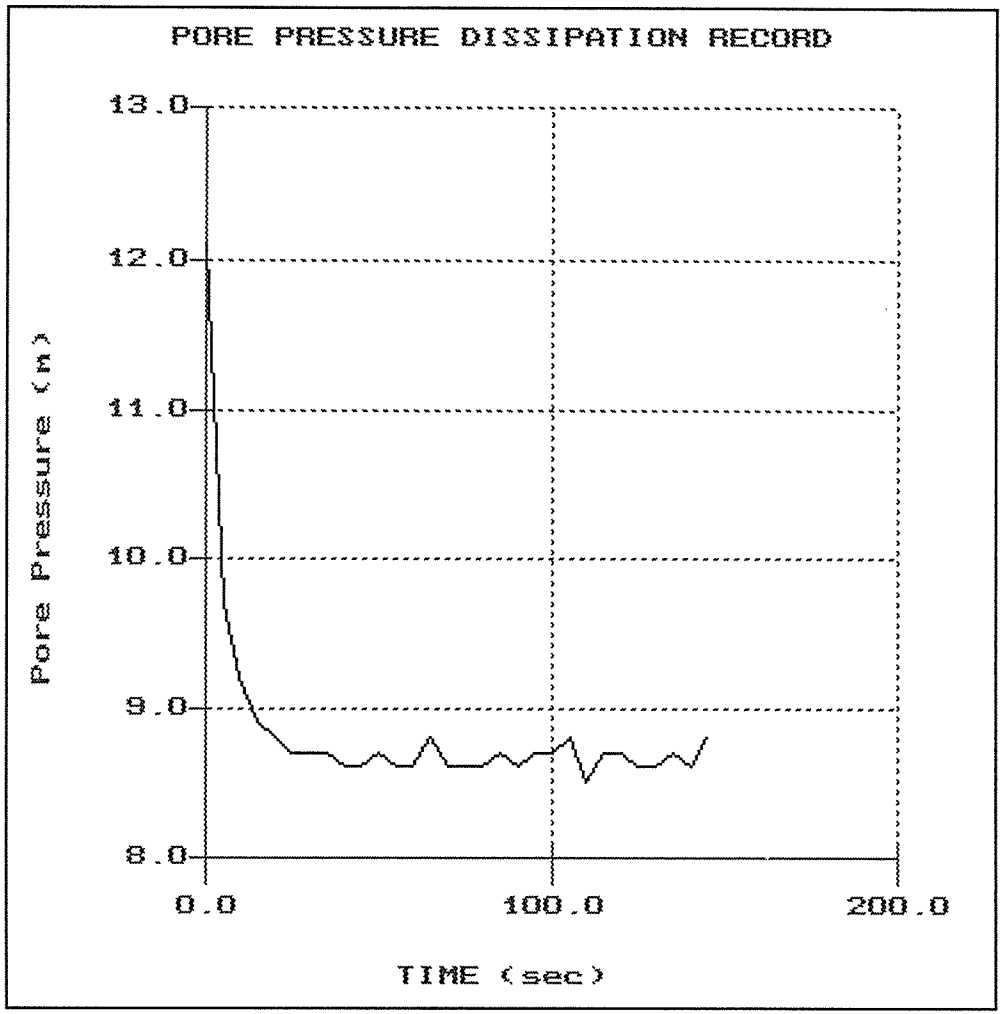


File: 219CP18.PPD
Depth (m): 10.25
(ft): 33.63
Duration : 150.0s

Knight Piesold

Hole:99-219 CPT-18
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 09:47

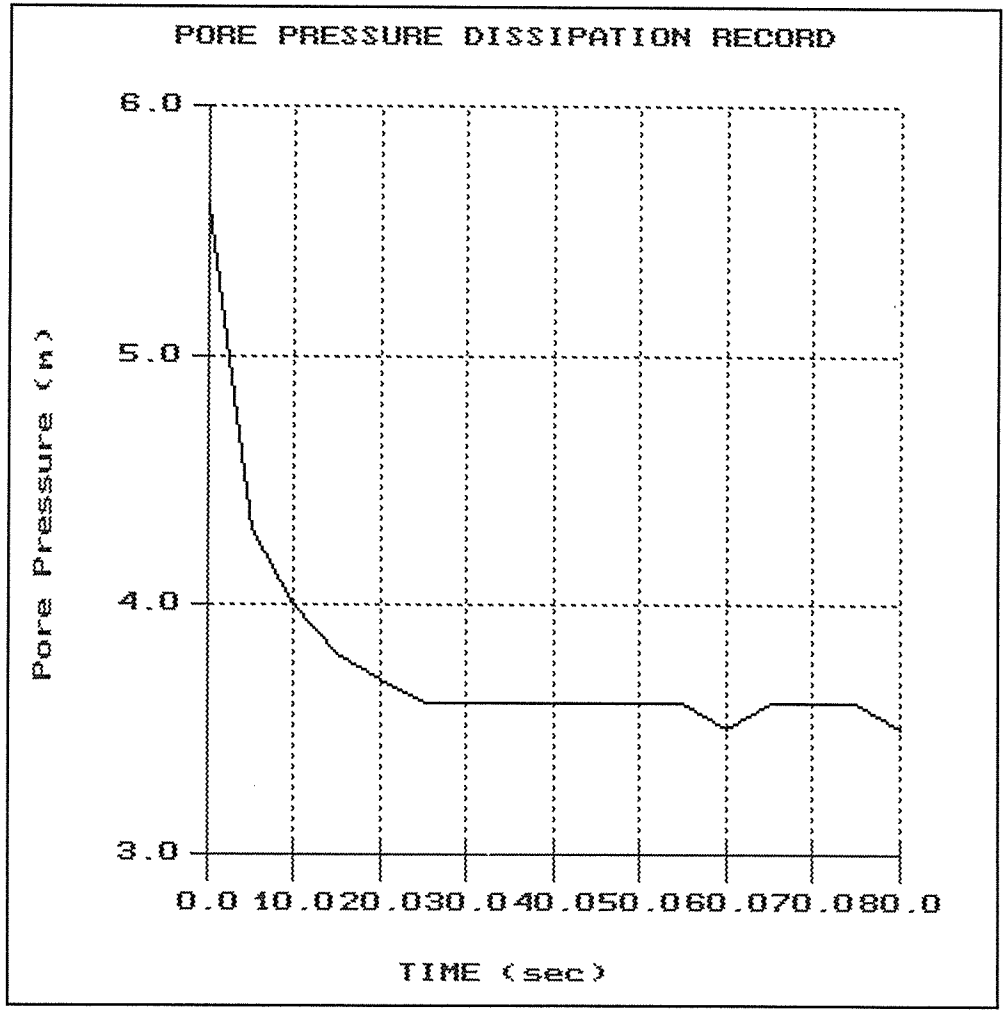


File: 219CP18.PPD
Depth (m): 12.25
(ft): 40.19
Duration : 145.0s

Knight Piesold

Hole:99-219 CPT 99-19
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 11:27

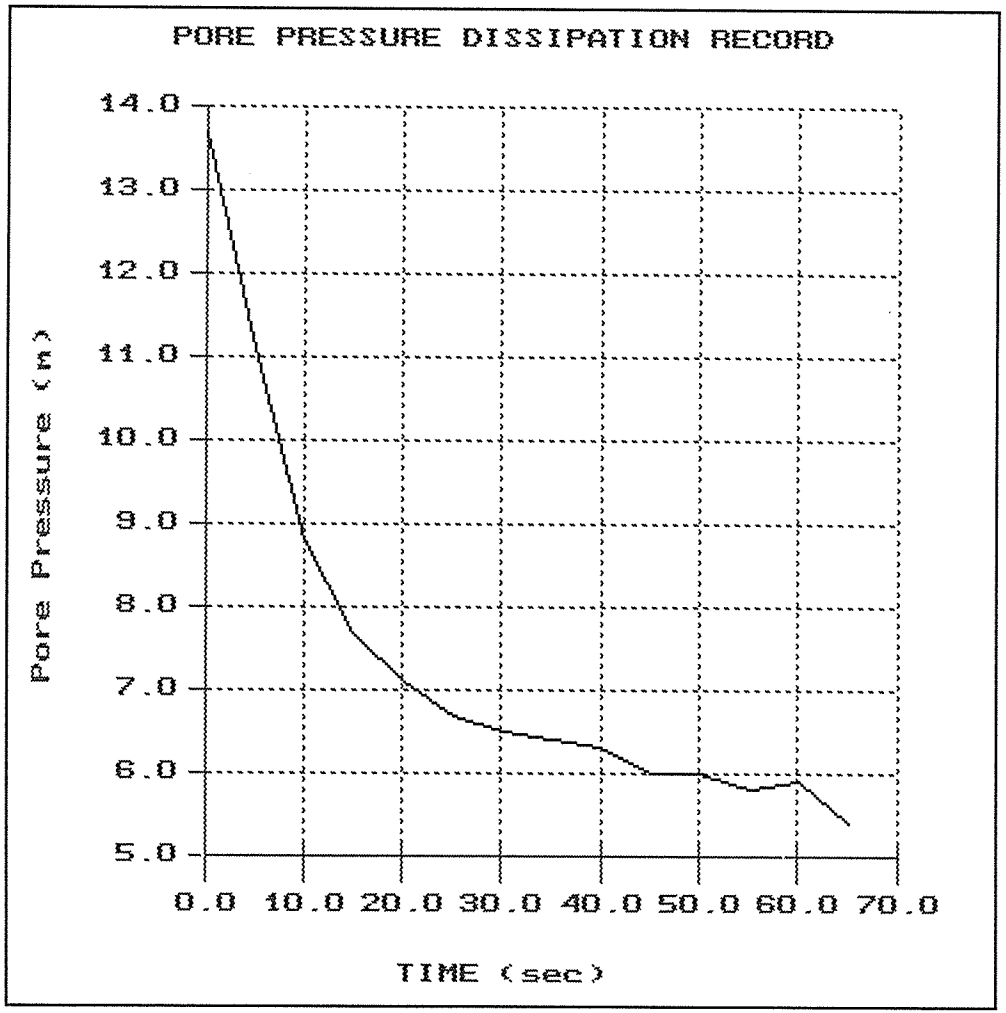


File: 219CP19.PPD
Depth (m): 7.05
(ft): 23.13
Duration : 80.0s

Knight Piesold

Hole:99-219 CPT 99-19
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 11:27

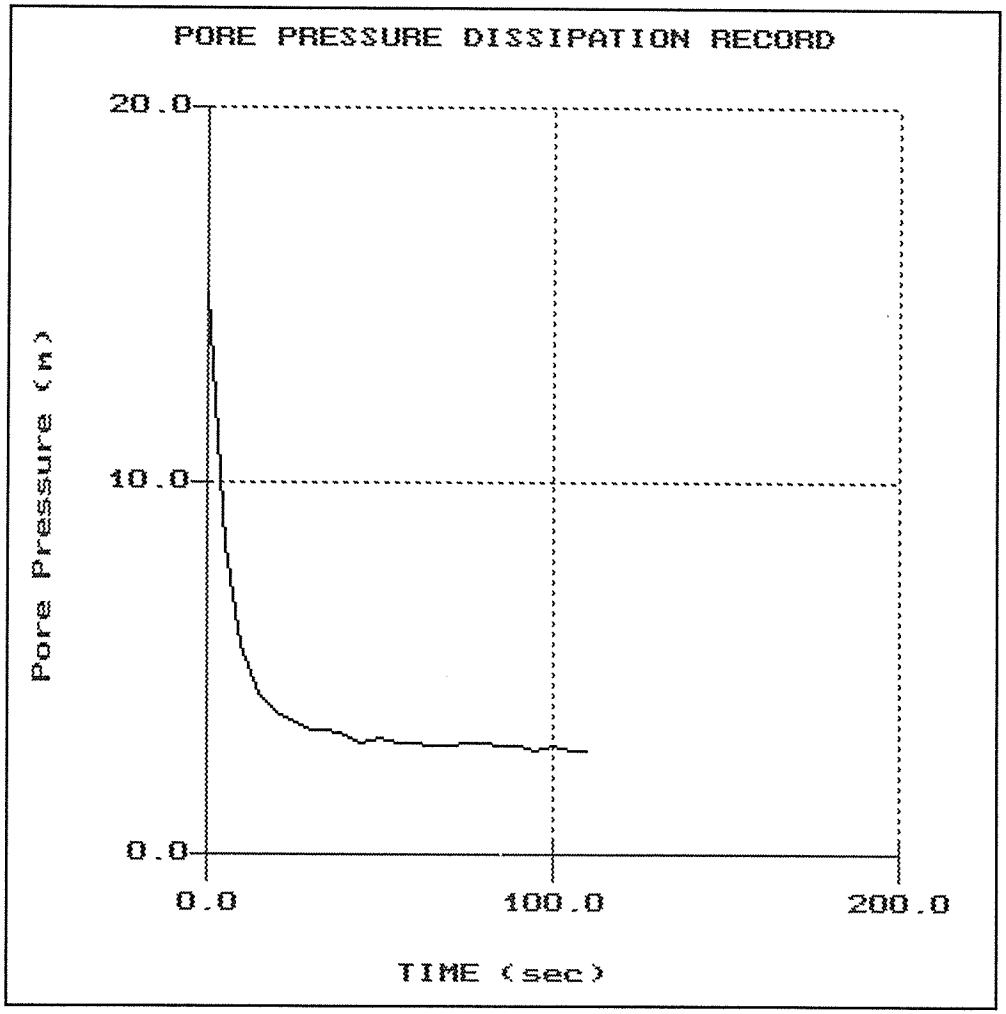


File: 219CP19.PPD
Depth (m): 9.10
(ft): 29.86
Duration : 65.0s

Knight Piesold

Hole:99-219 CPT 99-20
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 12:44



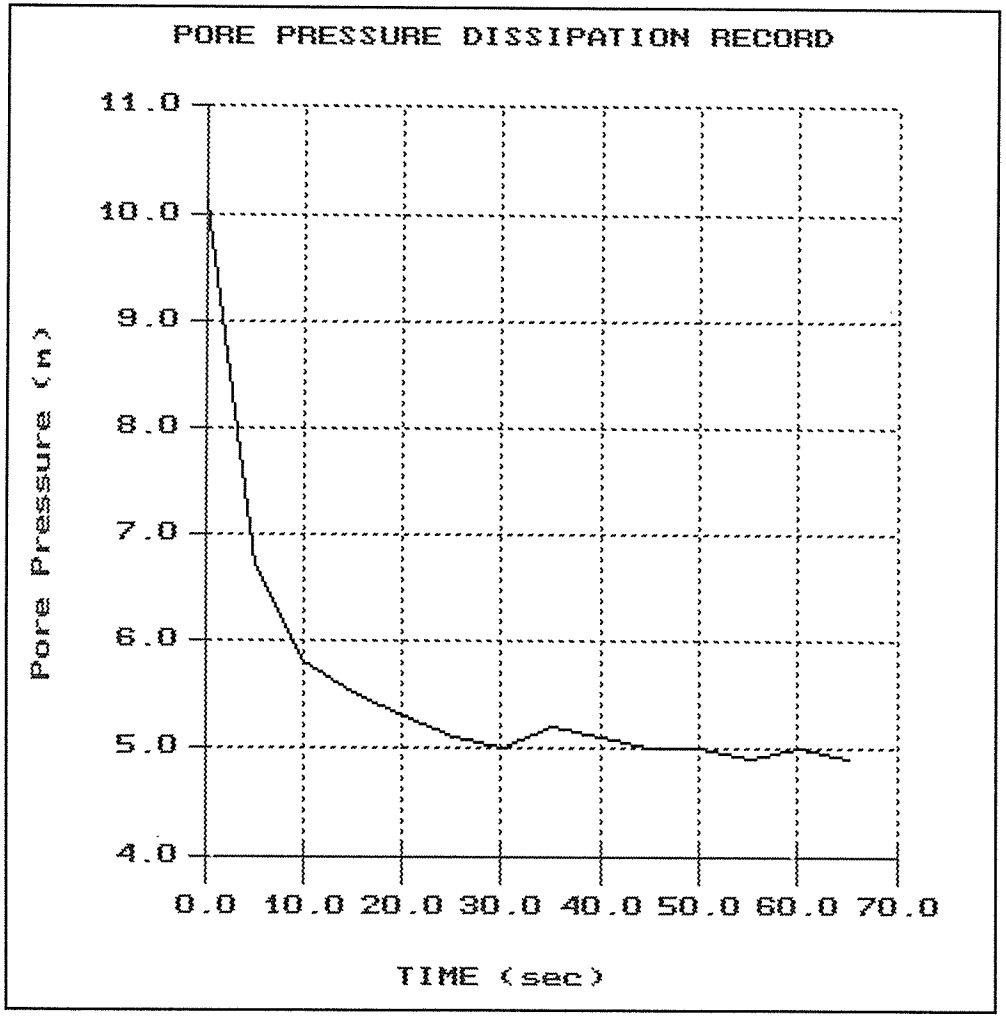
File: 219CP20.PPD
Depth (m): 6.20
(ft): 20.34
Duration : 110.0s

Knight Piesold

Hole:99-219 CPT 99-20
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 12:44

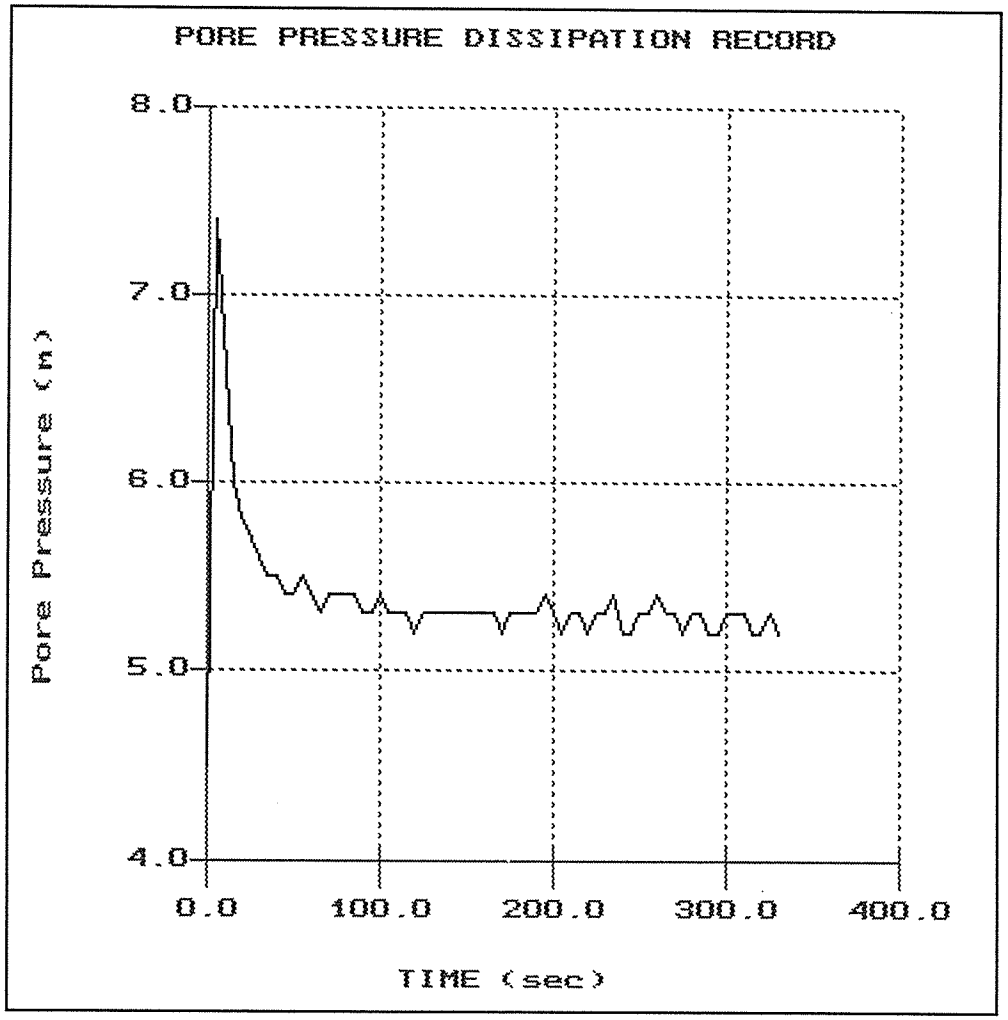
File: 219CP20.PPD
Depth (m): 8.20
(ft): 26.90
Duration : 65.0s



Knight Piesold

Hole:99-219 CPT 99-20
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 12:44

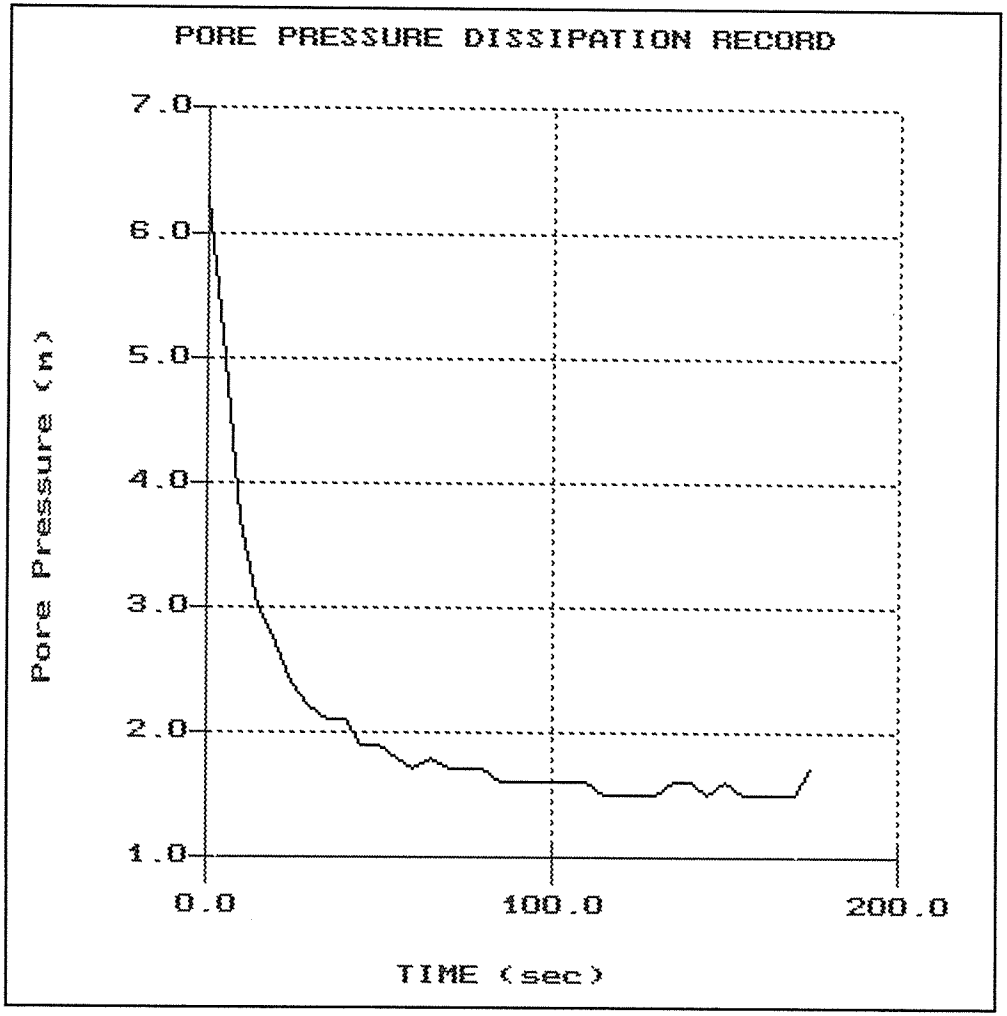


File: 219CP20.PPD
Depth (m): 8.65
(ft): 28.38
Duration : 330.0s

Knight Piesold

Hole:99-219 CPT 99-21
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 13:42

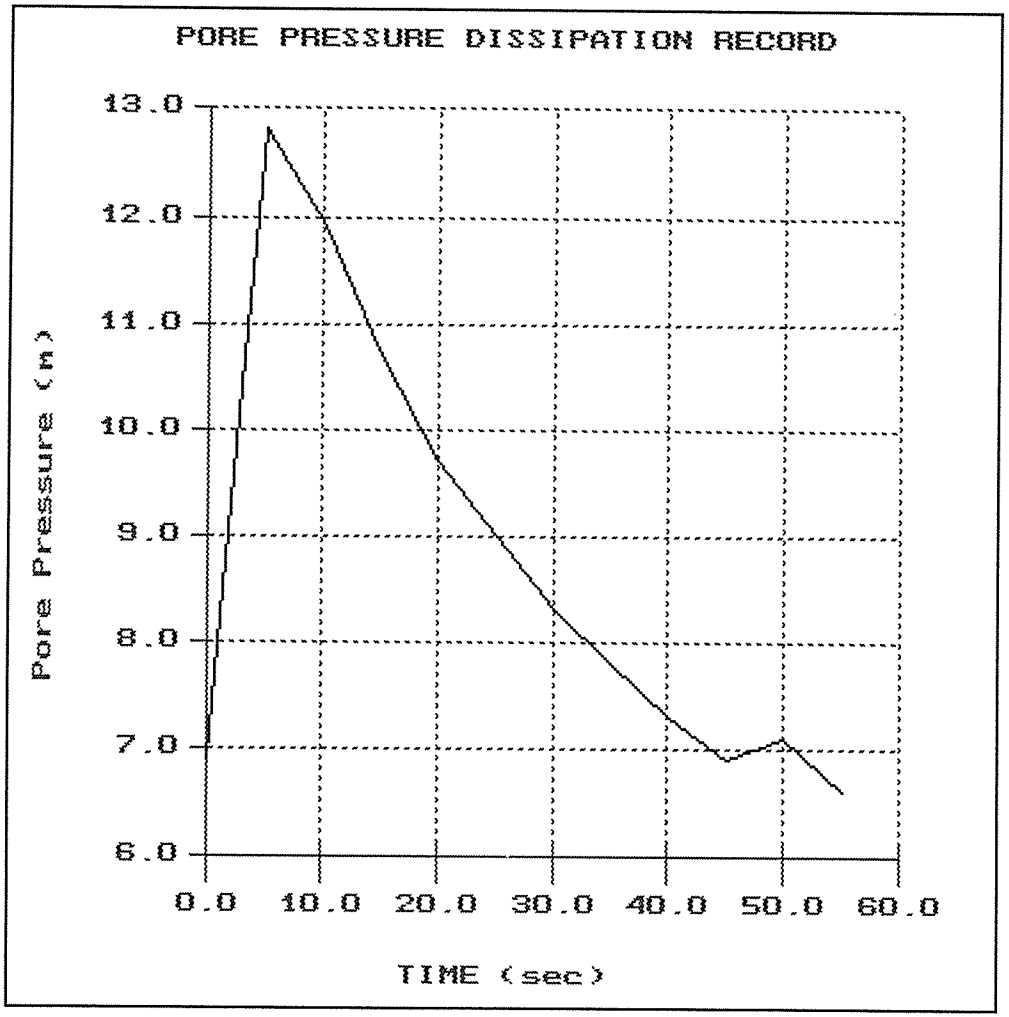


File: 219CP21.PPD
Depth (m): 5.05
(ft): 16.57
Duration : 175.0s

Knight Piesold

Hole:99-219 CPT 99-21
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 13:42

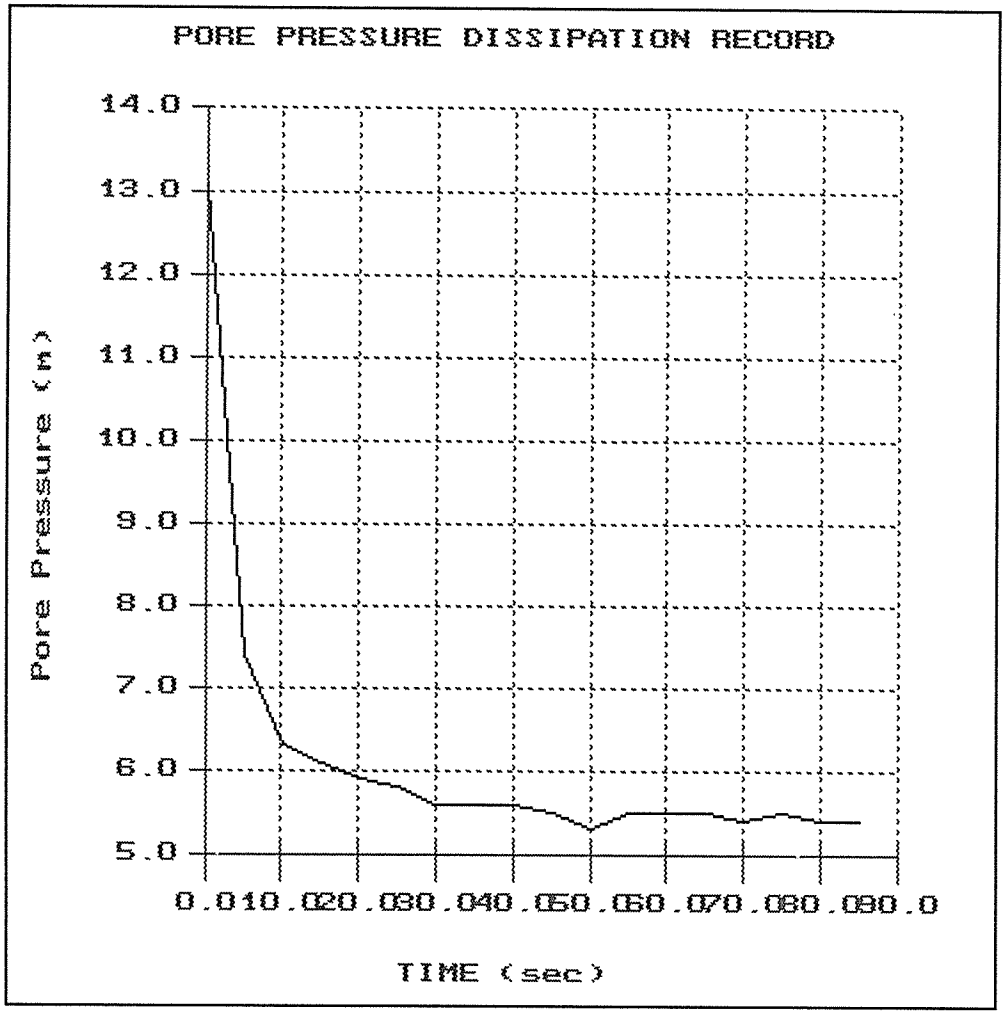


File: 219CP21.PPD
Depth (m): 7.05
(ft): 23.13
Duration : 55.0s

Knight Piesold

Hole:99-219 CPT 99-21
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 13:42

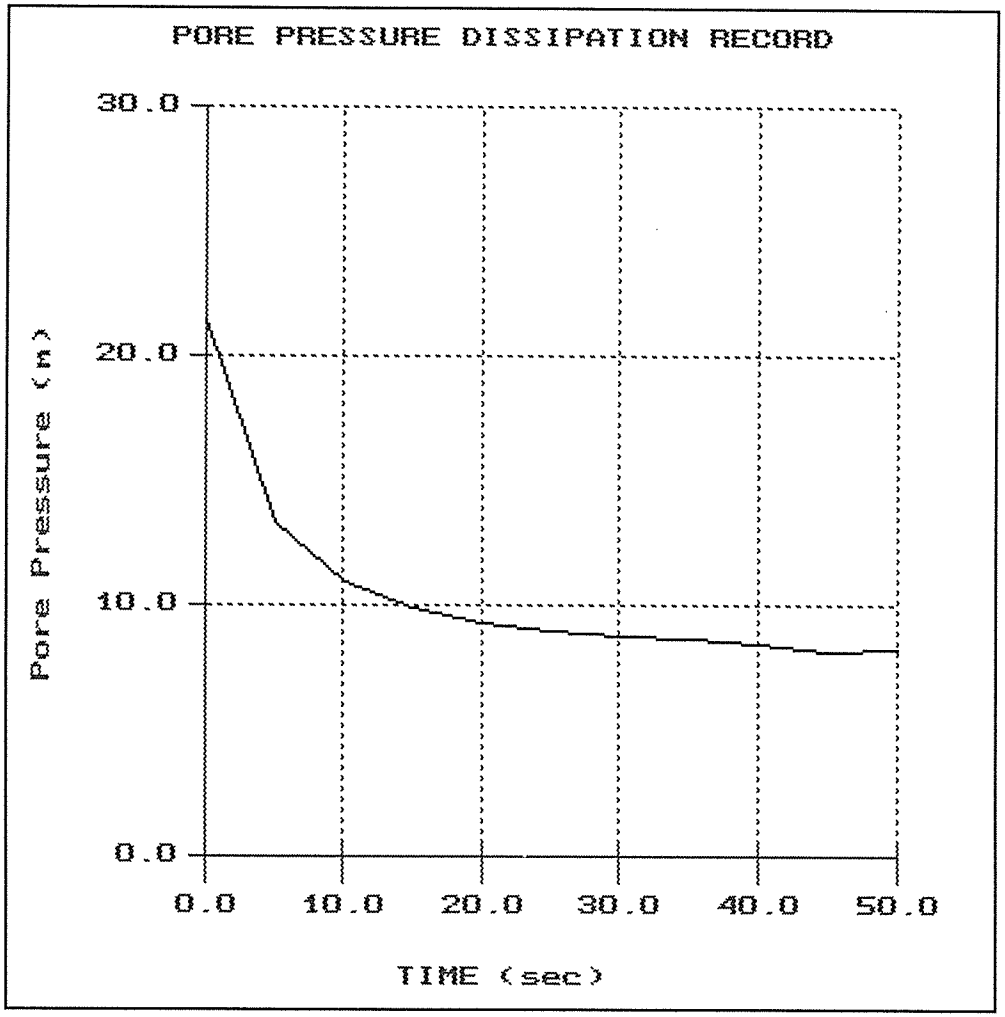


File: 219CP21.PPD
Depth (m): 9.05
(ft): 29.69
Duration : 85.0s

Knight Piesold

Hole:99-219 CPT 99-21
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 13:42

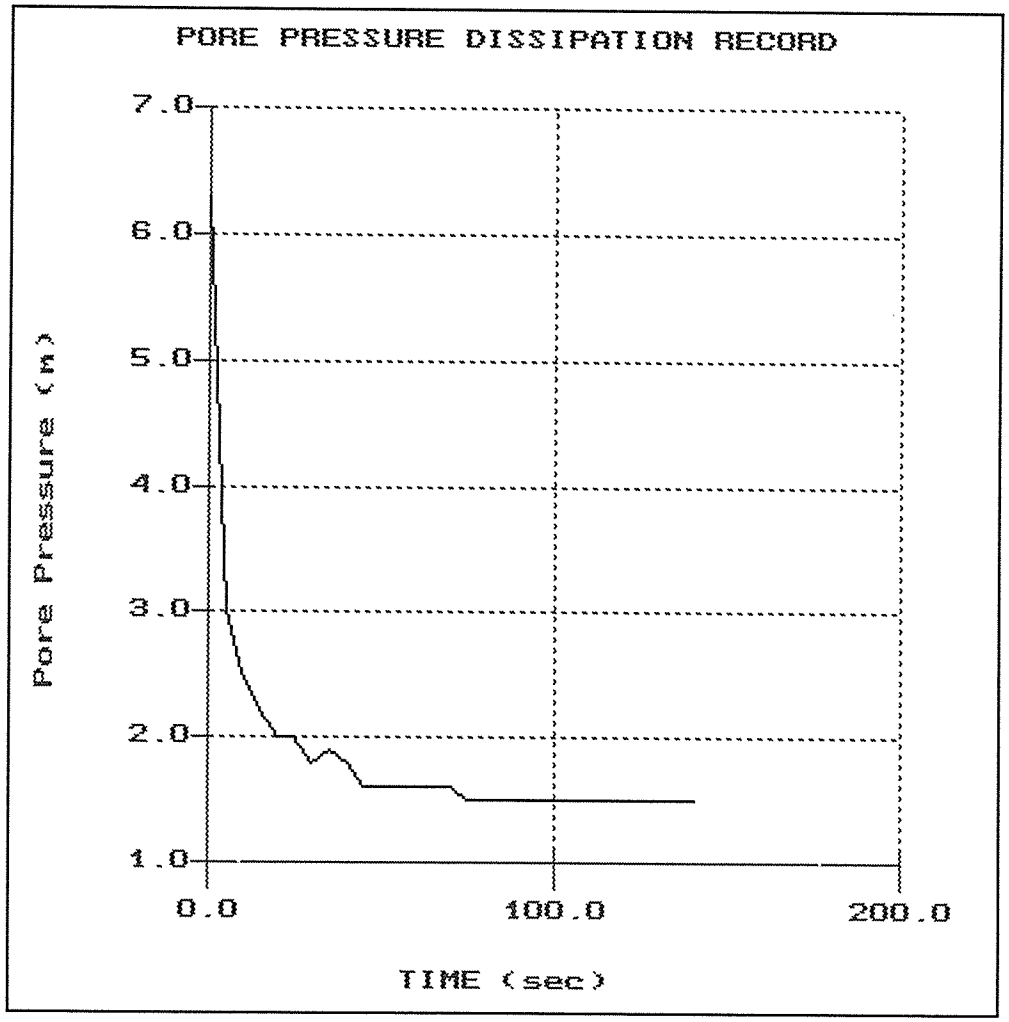


File: 219CP21.PPD
Depth (m): 11.05
(ft): 36.25
Duration : 50.0s

Knight Piesold

Hole:99-219 CPT 99-22
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 15:06

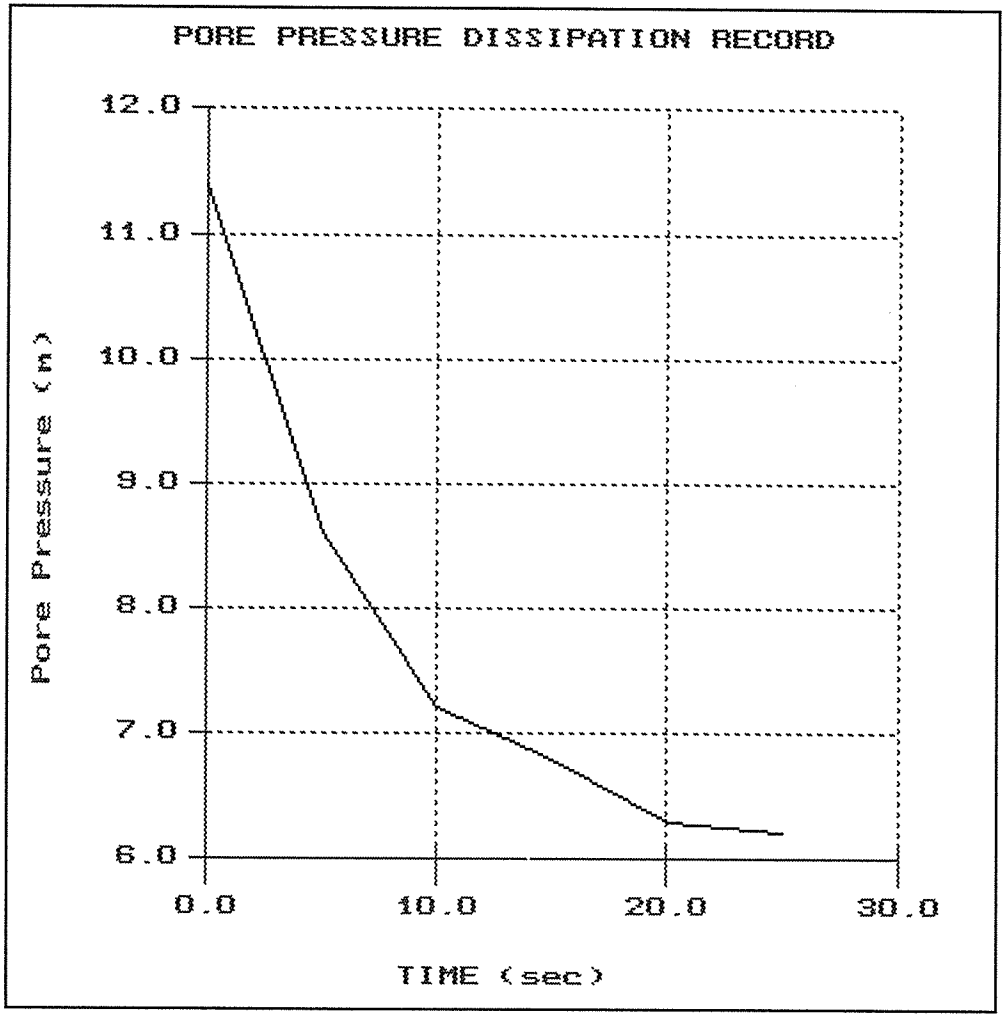


File: 219CP22.PPD
Depth (m): 5.30
(ft): 17.39
Duration : 140.0s

Knight Piesold

Hole:99-219 CPT 99-22
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 15:06

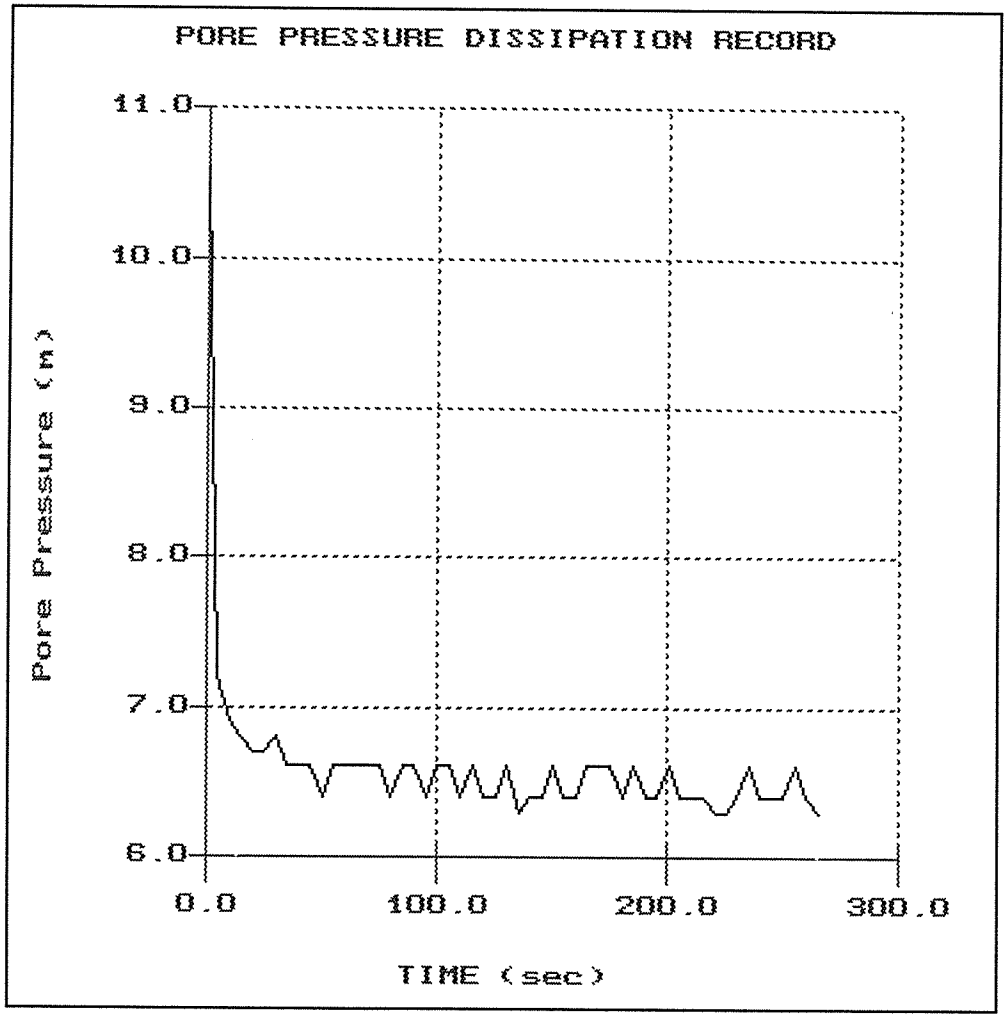


File: 219CP22.PPD
Depth (m): 9.30
(ft): 30.51
Duration : 25.0s

Knight Piesold

Hole:99-219 CPT 99-22
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 15:06

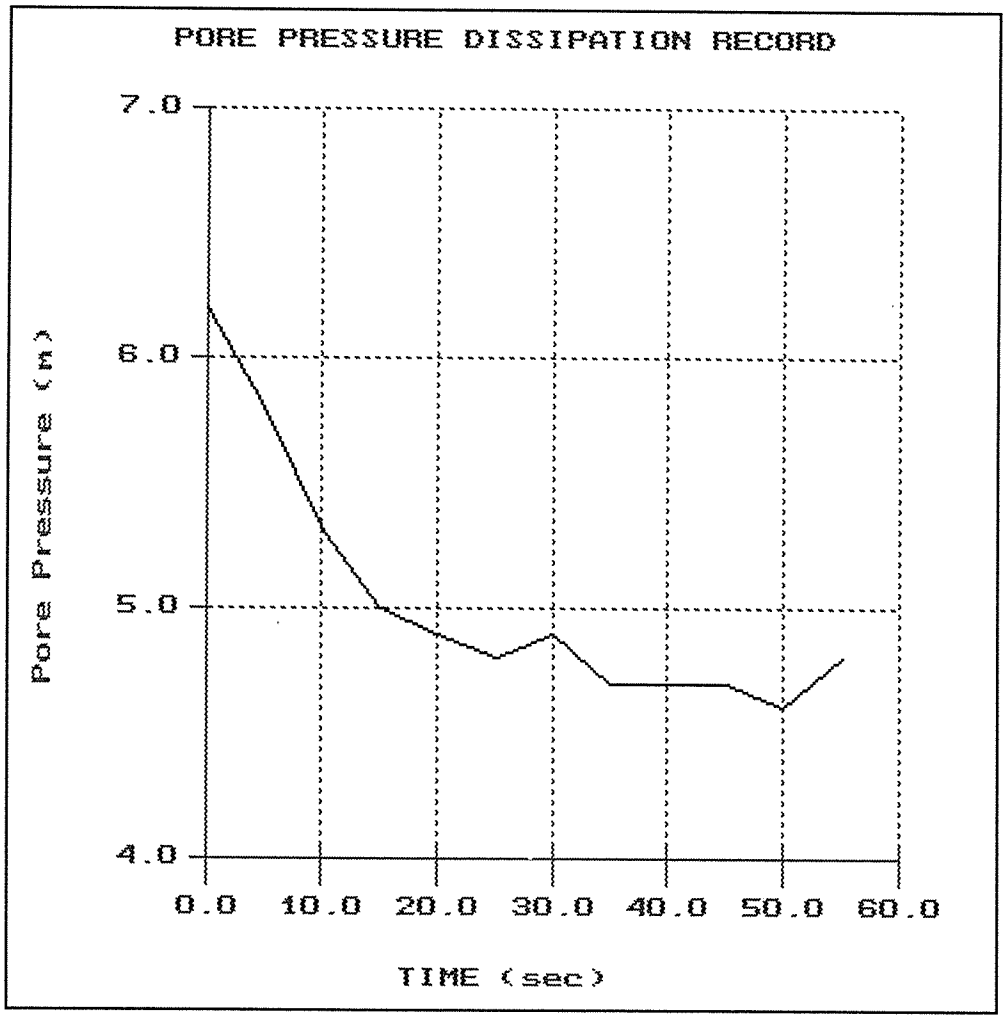


File: 219CP22.PPD
Depth (m): 10.30
(ft): 33.79
Duration : 265.0s

Knight Piesold

Hole:99-219 CPT 99-23
Location:MAIN EMBANKMENT

Cone:10 TON A 057
Date:11:04:99 16:03



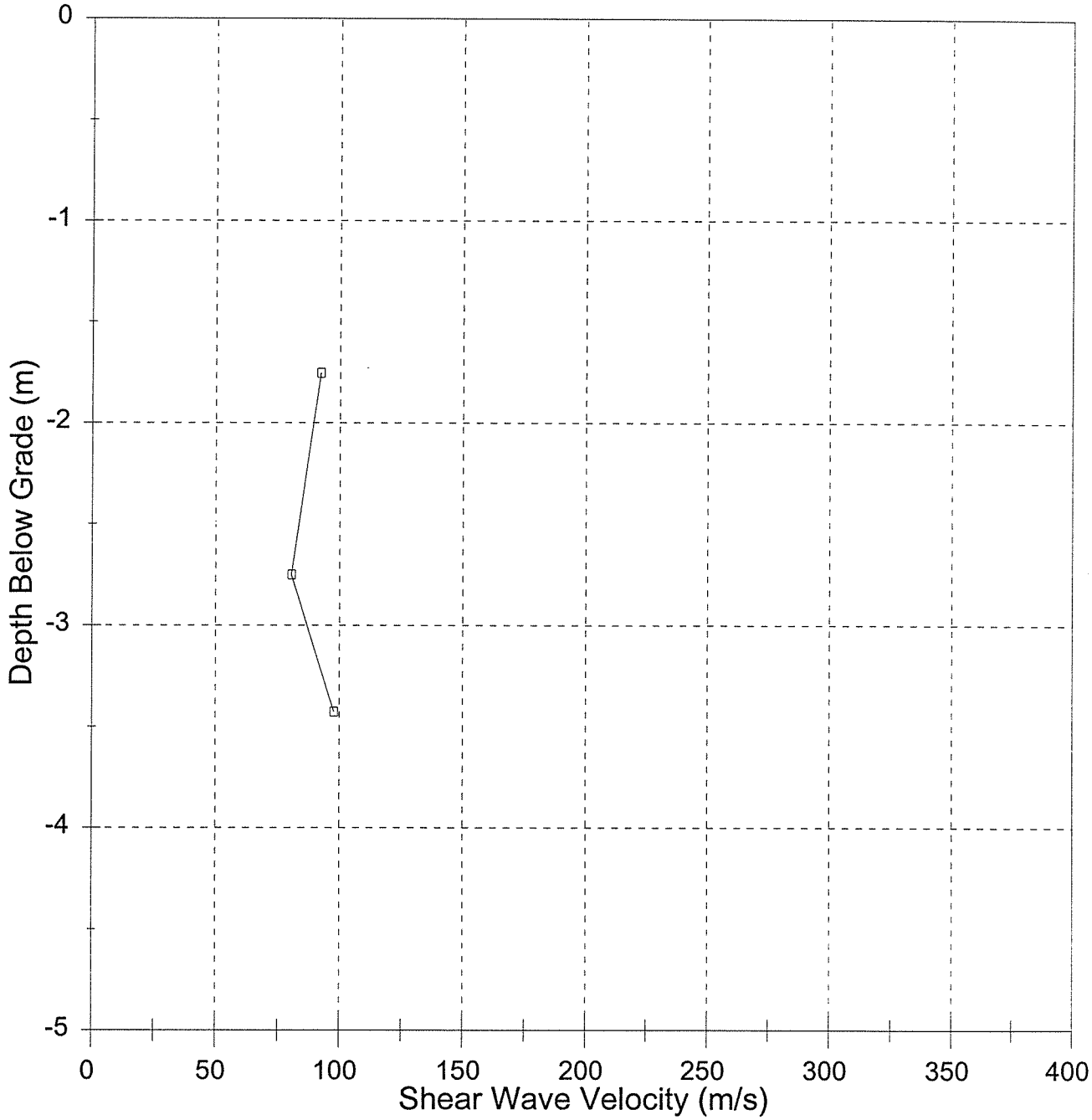
File: 219CP23.PPD
Depth (m): 7.20
(ft): 23.62
Duration : 55.0s

APPENDIX D

Seismic Shear Wave Velocity Results

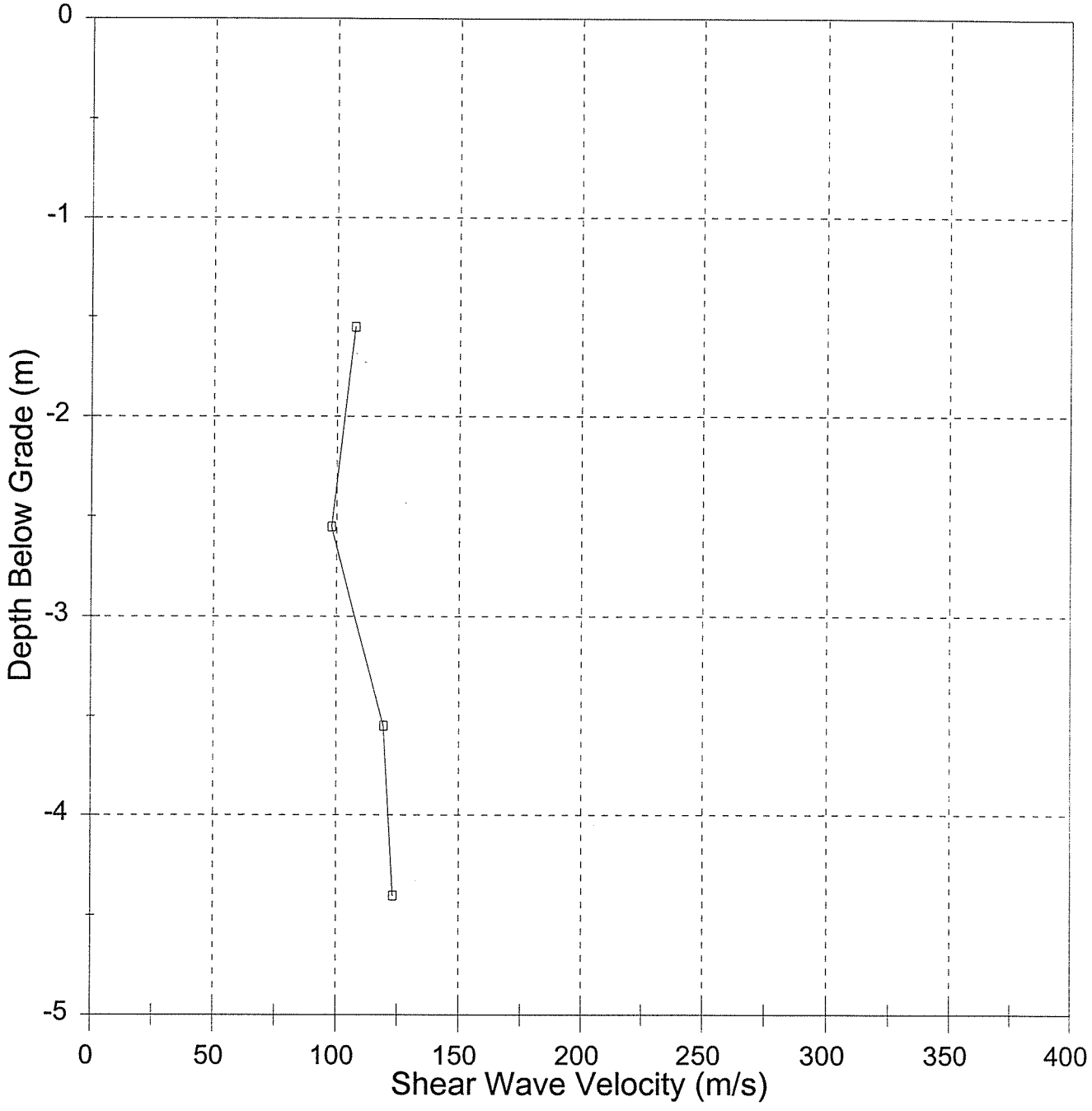
Shear Wave Velocity vs Depth

Mt Polly - Downstrem area - CPT 99-1



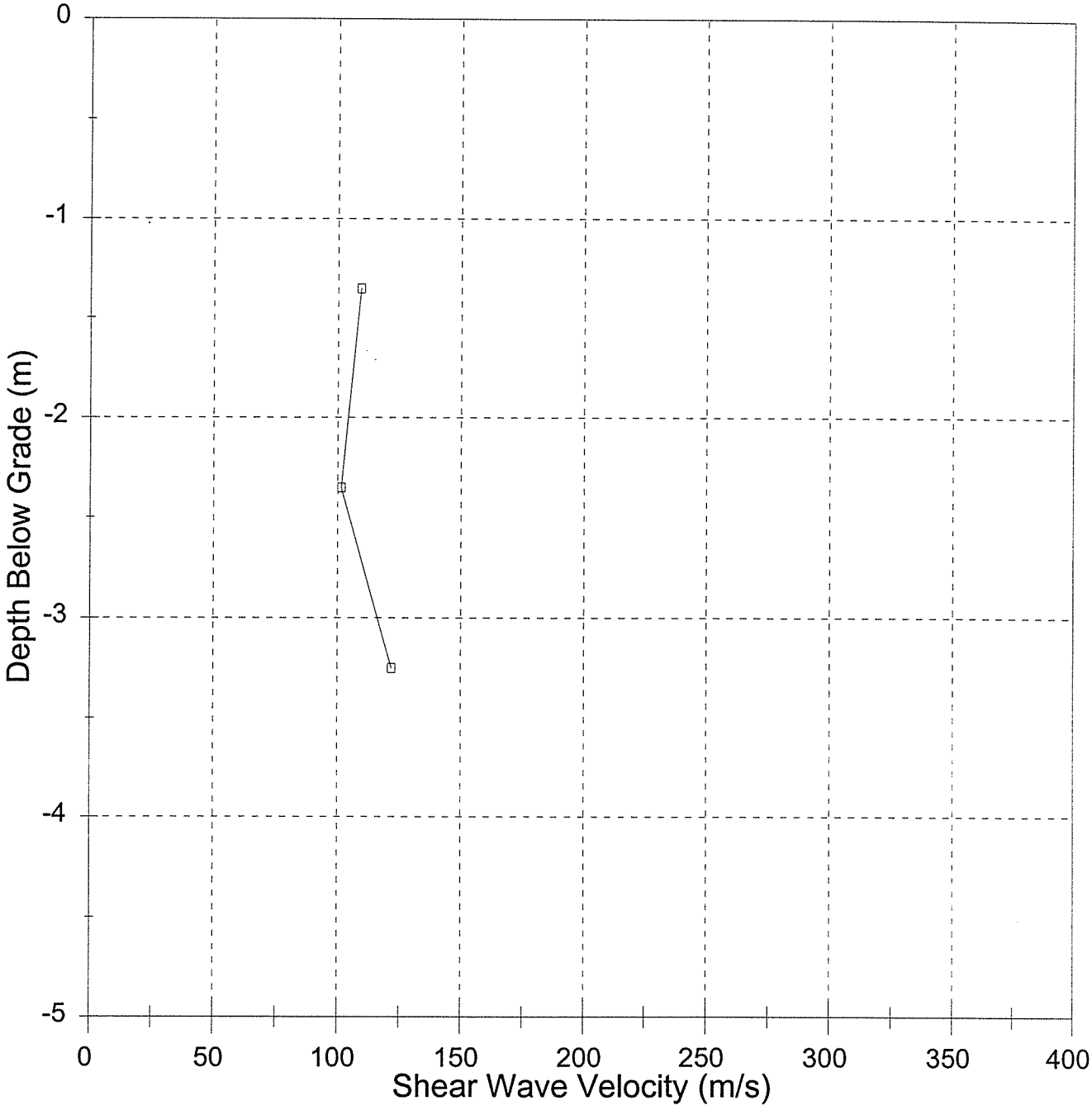
Shear Wave Velocity vs Depth

Mt Polly - Downstrem area - CPT 99-2



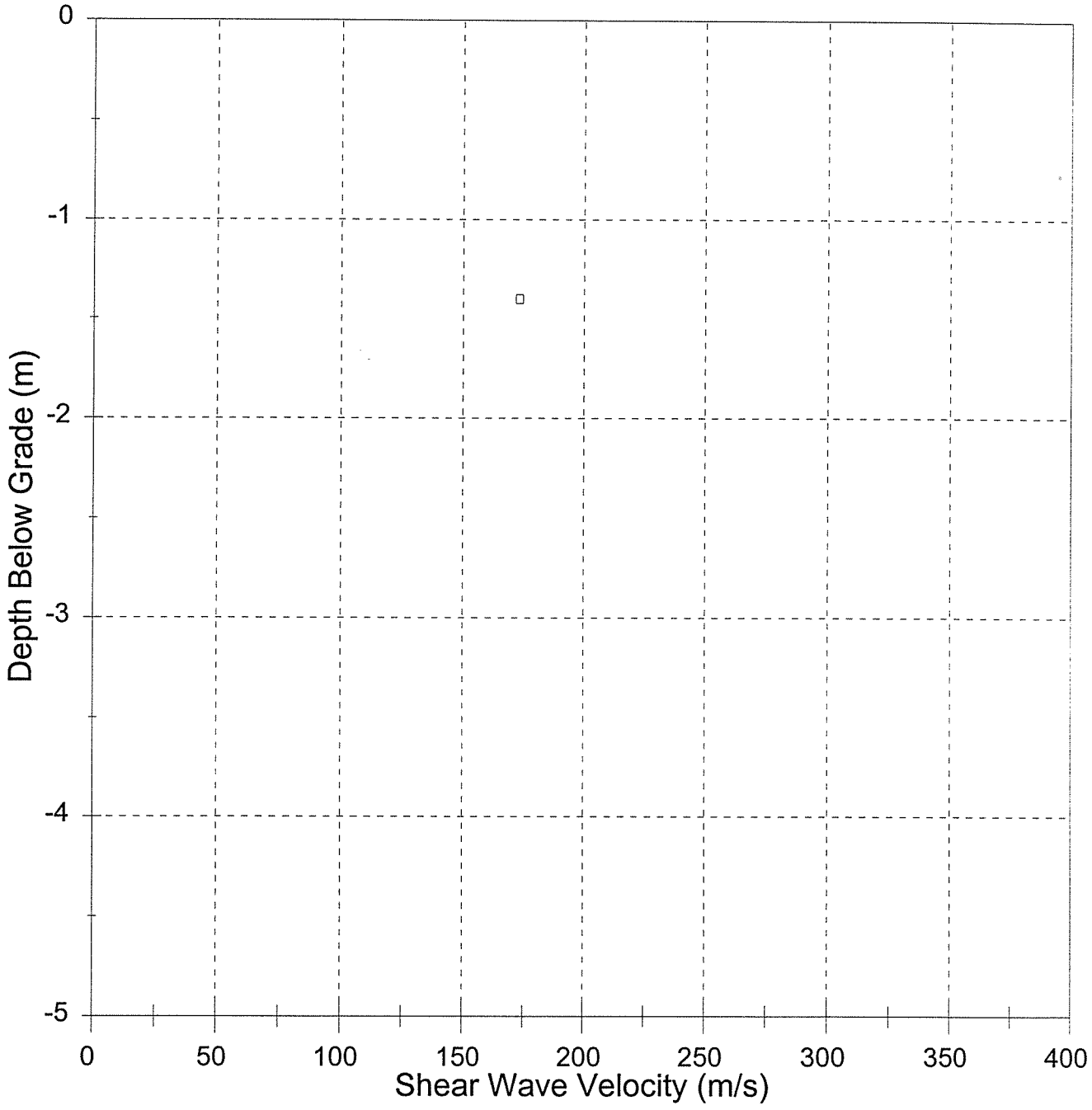
Shear Wave Velocity vs Depth

Mt Polly - Downstrem area - CPT 99-3



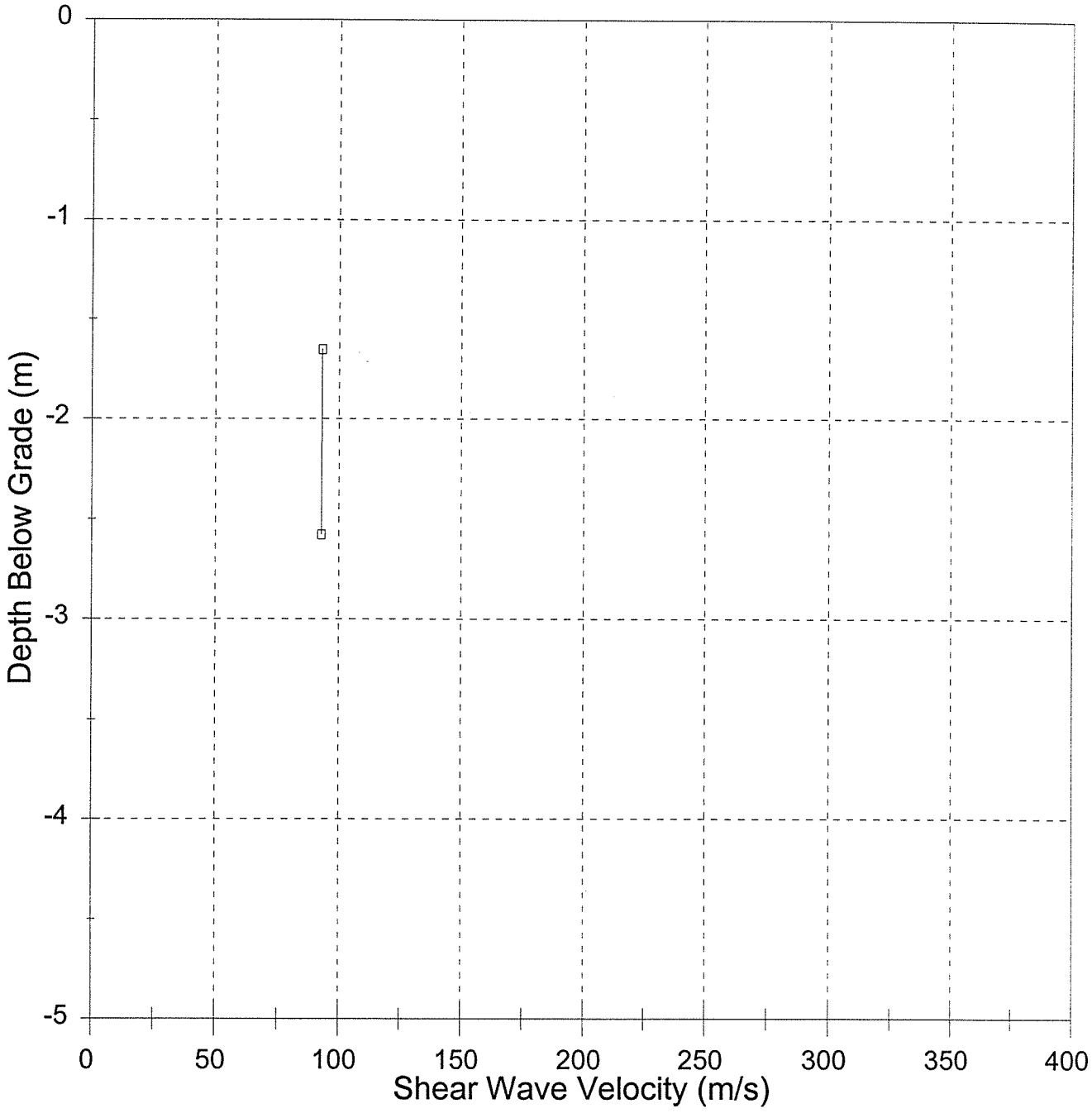
Shear Wave Velocity vs Depth

Mt Polly - Downstrem area - CPT 99-4



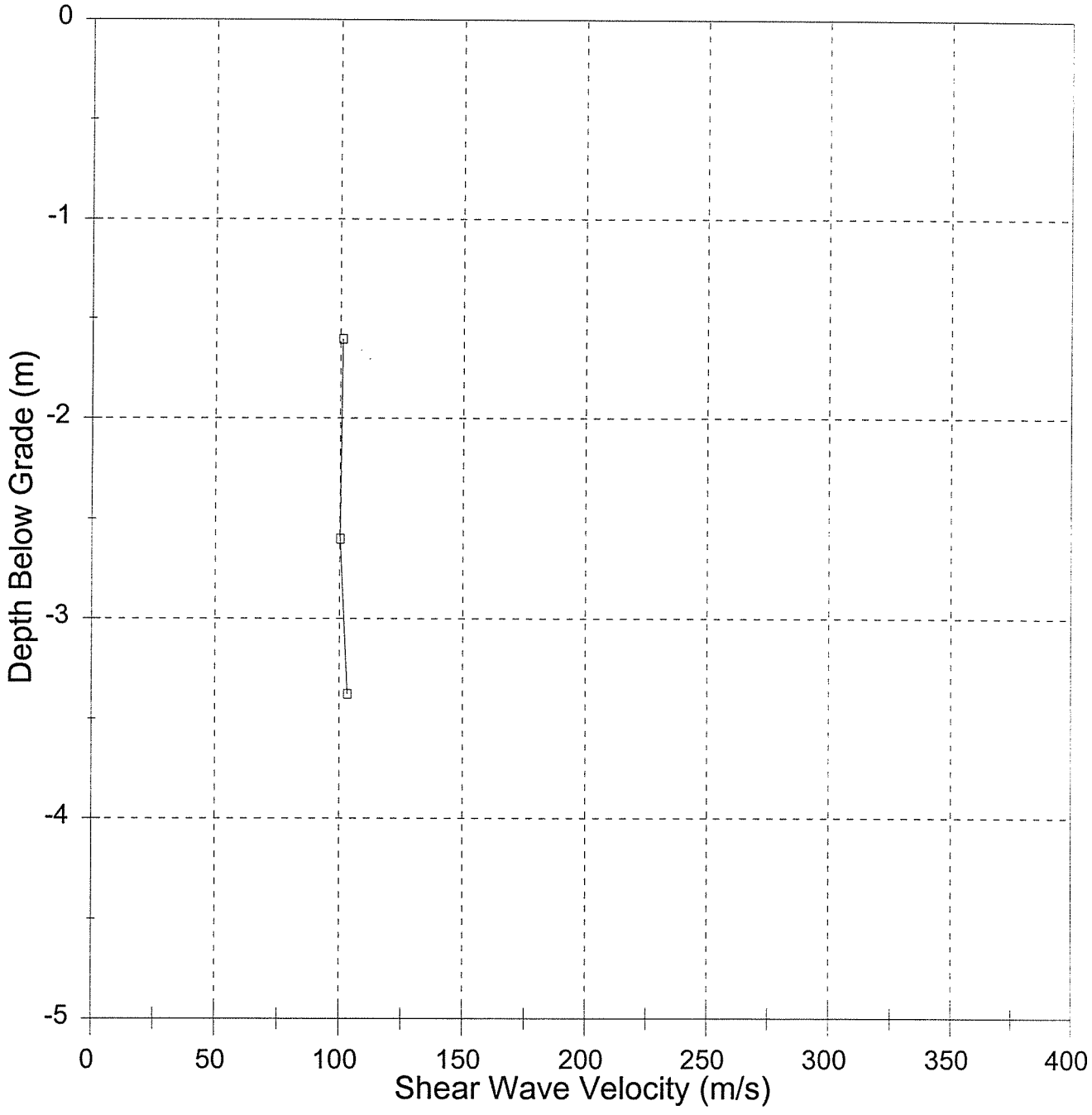
Shear Wave Velocity vs Depth

Mt Polly - Downstrem area - CPT 99-5



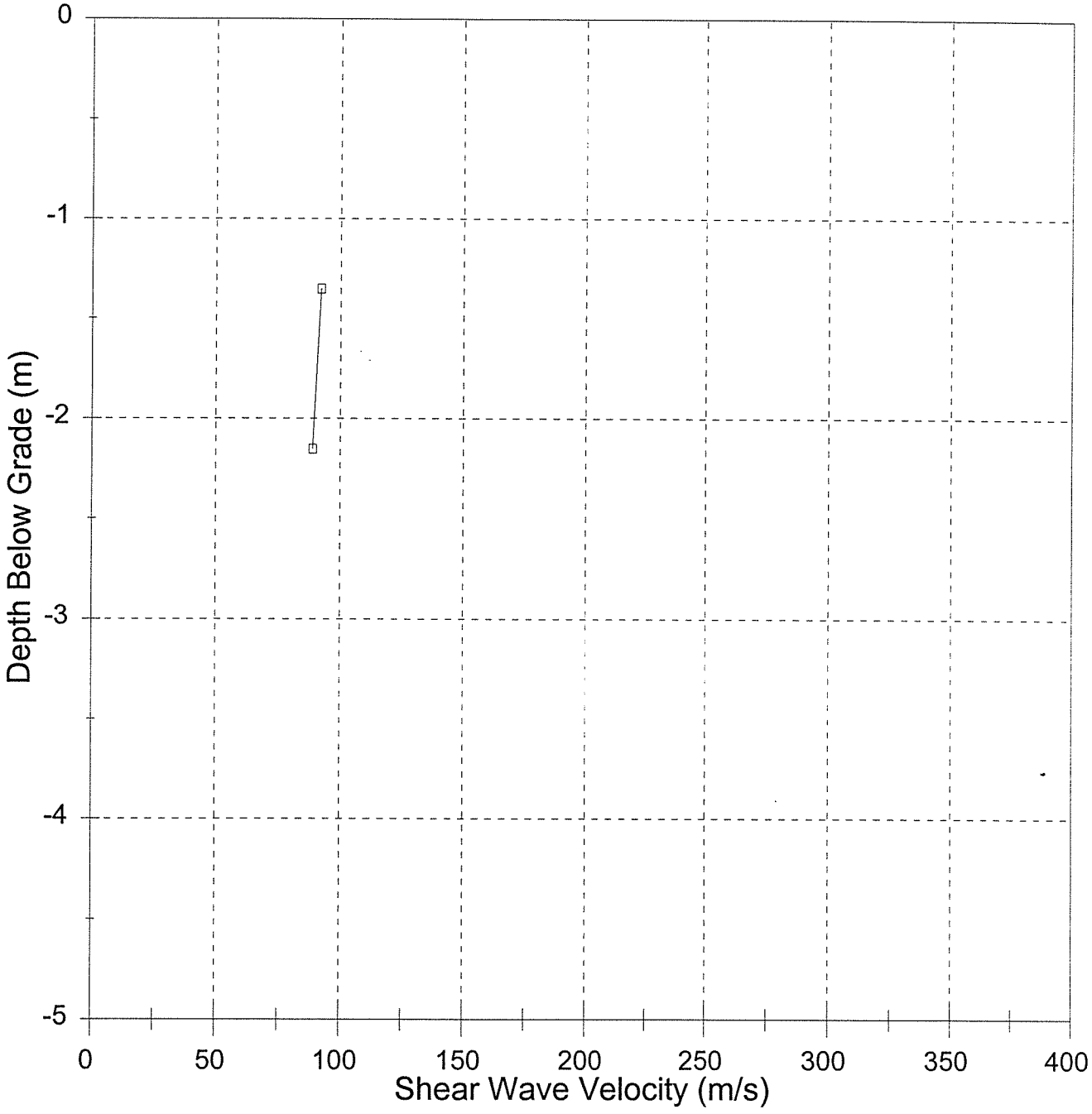
Shear Wave Velocity vs Depth

Mt Polly - Downstrem area - CPT 99-6



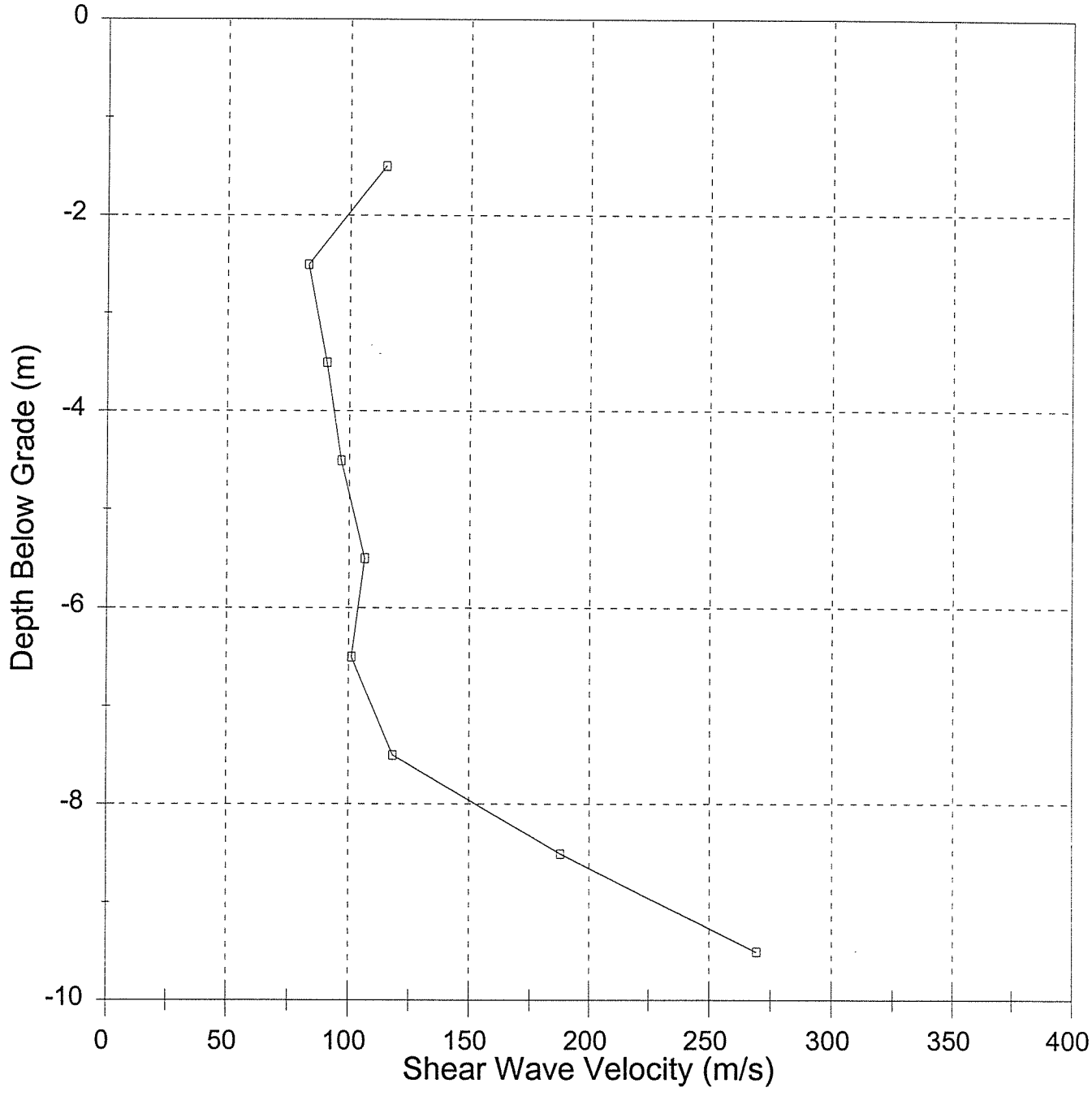
Shear Wave Velocity vs Depth

Mt Polly - Downstrem area - CPT 99-7



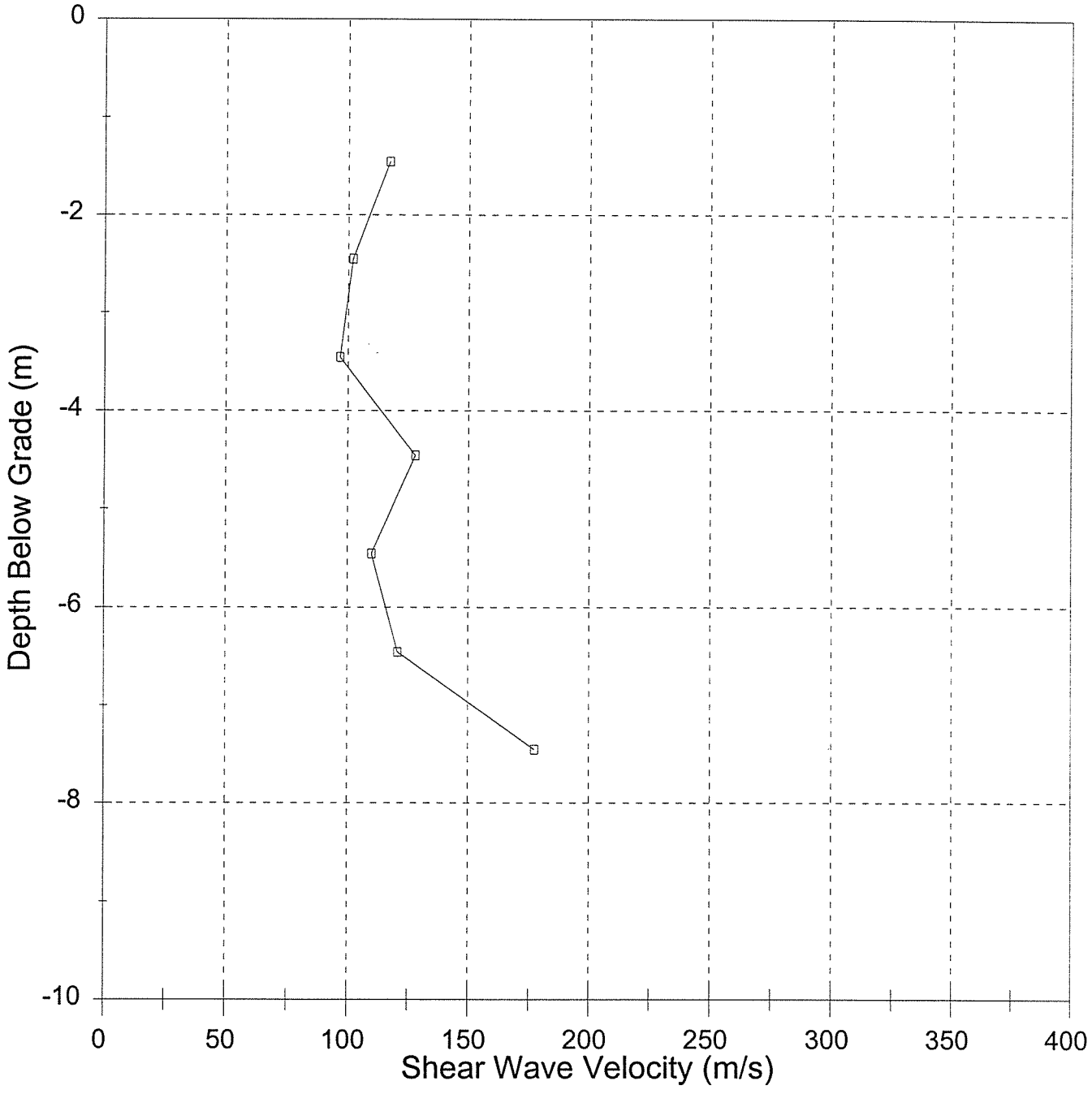
Shear Wave Velocity vs Depth

Mt Polly - Upstream area - CPT 99-10



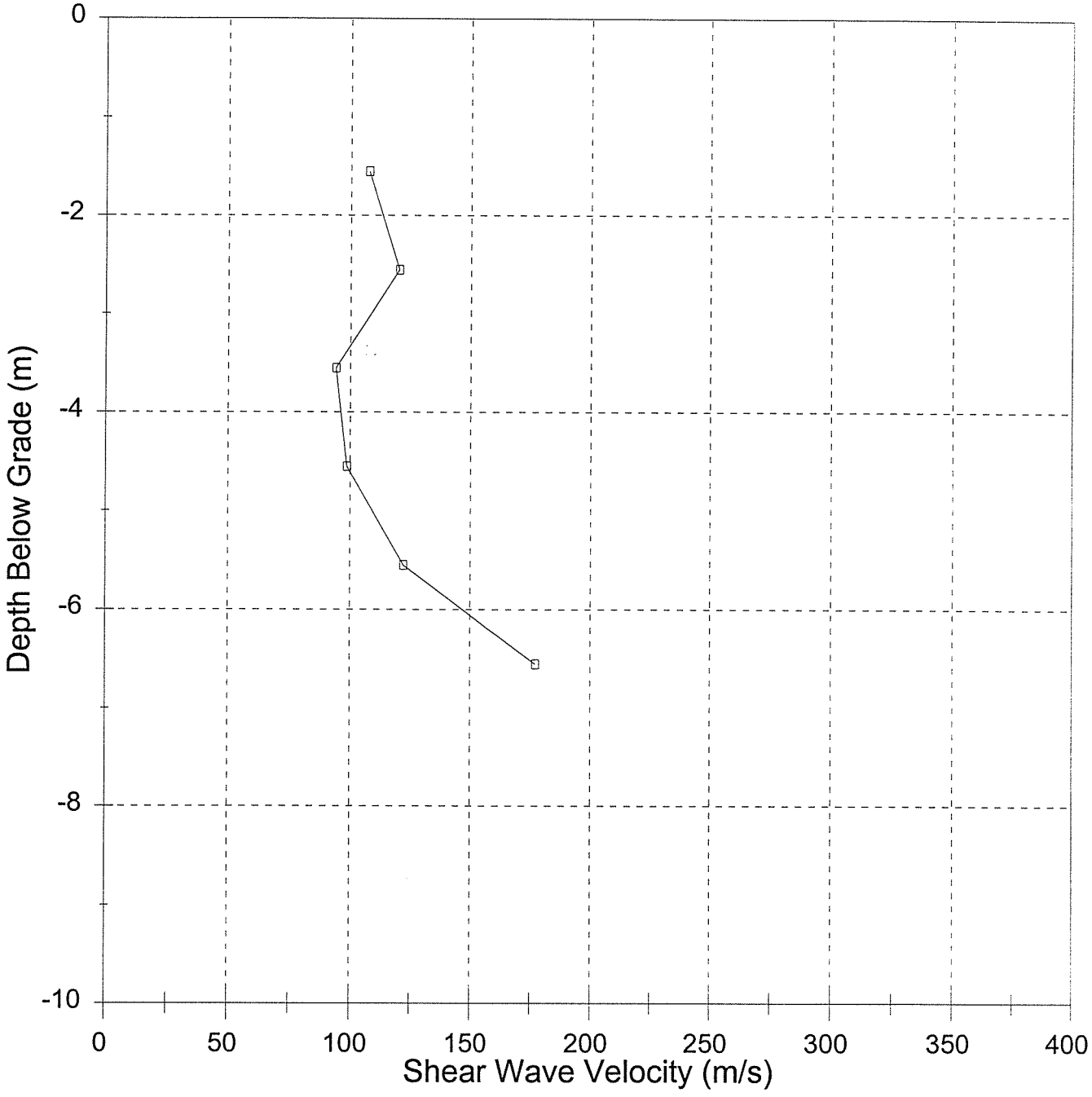
Shear Wave Velocity vs Depth

Mt Polly - Upstream area - CPT 99-12



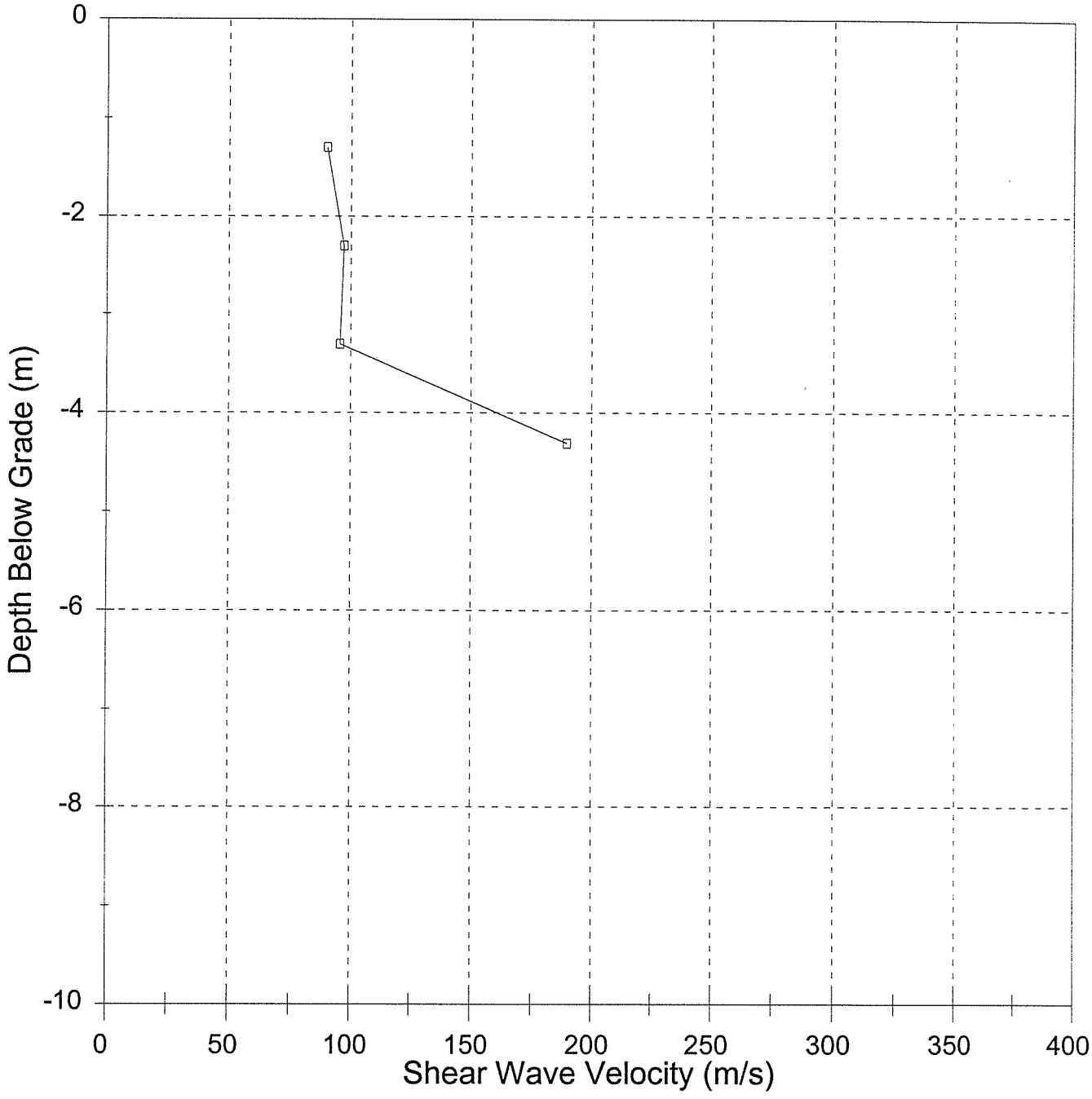
Shear Wave Velocity vs Depth

Mt Polly - Upstream area - CPT 99-14



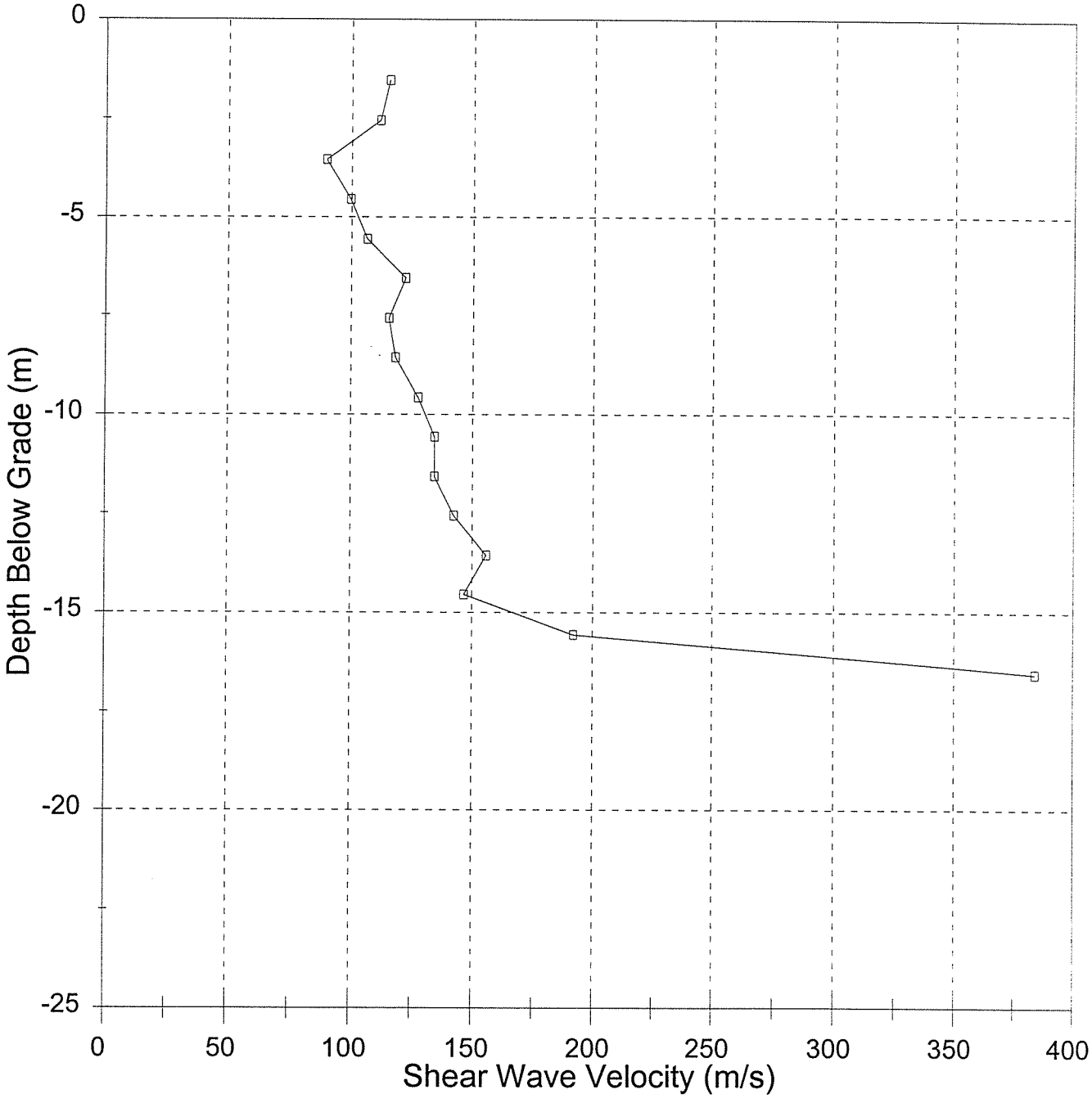
Shear Wave Velocity vs Depth

Mt Polly - Upstream area - CPT 99-16



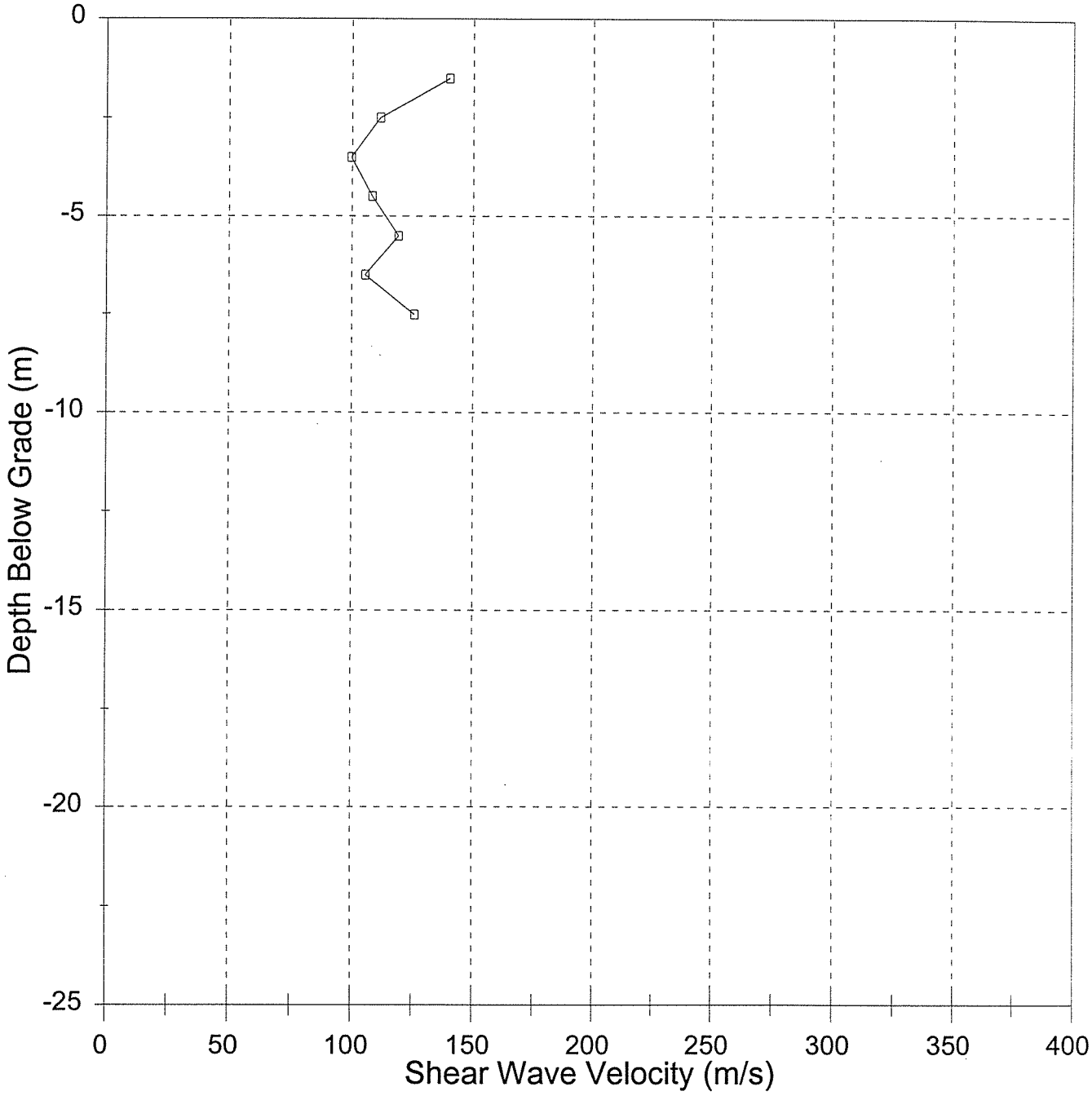
Shear Wave Velocity vs Depth

Mt Polly - Main Embankment - CPT 99-18



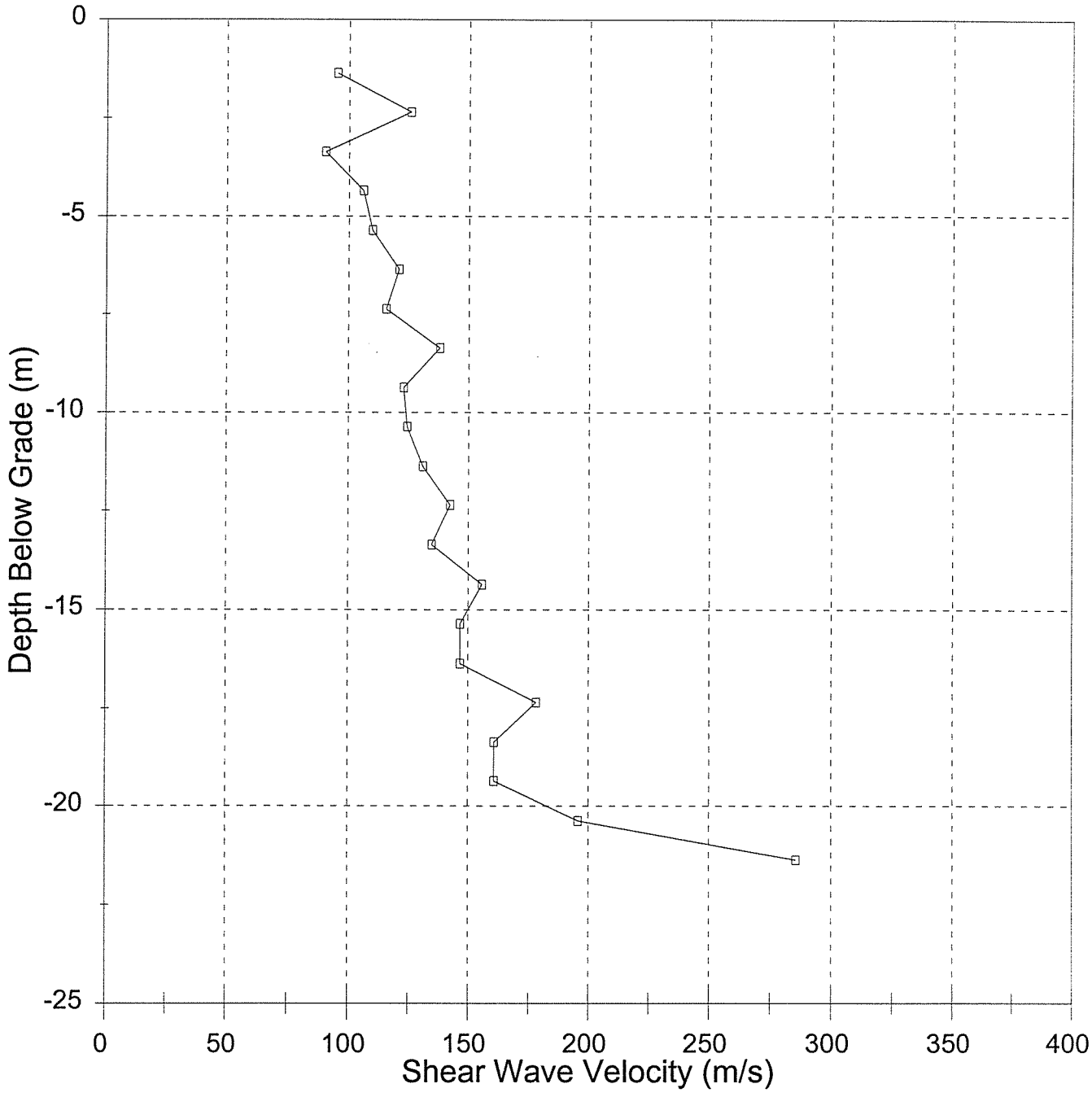
Shear Wave Velocity vs Depth

Mt Polly - Main Embankment - CPT 99-20



Shear Wave Velocity vs Depth

Mt Polly - Main Embankment - CPT 99-21



ConeTec Shear Wave Velocity data reduction sheet

Hole:	CPT 99-1
Location:	Mt Polly - Downstream test area
Date	Nov 2/99
Source:	Hammer and Beam
Source depth:	0
Source offset:	0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
1.25	1.43			
2.25	2.36	10.0	92	1.75
3.25	3.32	12.0	81	2.75
3.60	3.67	3.5	98	3.43

ConeTec Shear Wave Velocity data reduction sheet

Hole:	CPT 99-2
Location:	Mt Polly - Downstream test area
Date	Nov 2/99
Source:	Hammer and Beam
Source depth:	0
Source offset:	0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
1.05	1.26			
2.05	2.17	8.4	108	1.55
3.05	3.13	9.8	98	2.55
4.05	4.11	8.2	120	3.55
4.75	4.80	5.60	123.4	4.40

ConeTec Shear Wave Velocity data reduction sheet

Hole:	CPT 99-3
Location:	Mt Polly - Downstream test area
Date	Nov 2/99
Source:	Hammer and Beam
Source depth:	0
Source offset:	0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
0.85	1.10			
1.85	1.98	8.0	110	1.35
2.85	2.93	9.4	102	2.35
3.65	3.72	6.4	122	3.25

ConeTec Shear Wave Velocity data reduction sheet

Hole:	CPT 99-4
Location:	Mt Polly - Downstream test area
Date	Nov 2/99
Source:	Hammer and Beam
Source depth:	0
Source offset:	0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
0.90	1.14			
1.90	2.02	5.1	173	1.40

ConeTec Shear Wave Velocity data reduction sheet

Hole:	CPT 99-5
Location:	Mt Polly - Downstream test area
Date	Nov 2/99
Source:	Hammer and Beam
Source depth:	0
Source offset:	0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
1.15	1.35			
2.15	2.26	9.8	93	1.65
3.00	3.08	8.8	93	2.58

ConeTec Shear Wave Velocity data reduction sheet

Hole:	CPT 99-6
Location:	Mt Polly - Downstream test area
Date	Nov 2/99
Source:	Hammer and Beam
Source depth:	0
Source offset:	0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
1.10	1.30			
2.10	2.21	9.0	101	1.60
3.10	3.18	9.6	100	2.60
3.65	3.72	5.2	104	3.38

ConeTec Shear Wave Velocity data reduction sheet

Hole:	CPT 99-7
Location:	Mt Polly - Downstream test area
Date	Nov 2/99
Source:	Hammer and Beam
Source depth:	0
Source offset:	0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
0.85	1.10			
1.85	1.98	9.5	92	1.35
2.45	2.55	6.4	89	2.15

ConeTec Shear Wave Velocity data reduction sheet

Hole: CPT 99-10
Location: Mt Polly - Upstream test area
Date Nov 3/99
Source: Hammer and Beam
Source depth: 0
Source offset: 0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
1.00	1.22			
2.00	2.12	7.8	115	1.50
3.00	3.08	11.6	83	2.50
4.00	4.06	10.8	91	3.50
5.00	5.05	10.2	97	4.50
6.00	6.04	9.3	107	5.50
7.00	7.03	9.8	101	6.50
8.00	8.03	8.4	119	7.50
9.00	9.03	5.3	188	8.50
10.00	10.02	3.7	270	9.50

ConeTec Shear Wave Velocity data reduction sheet

Hole:	CPT 99-12
Location:	Mt Polly - Upstream test area
Date	Nov 3/99
Source:	Hammer and Beam
Source depth:	0
Source offset:	0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
0.95	1.18			
1.95	2.07	7.6	117	1.45
2.95	3.03	9.4	102	2.45
3.95	4.01	10.1	97	3.45
4.95	5.00	7.7	128	4.45
5.95	5.99	9.0	110	5.45
6.95	6.99	8.2	121	6.45
7.95	7.98	5.6	178	7.45

ConeTec Shear Wave Velocity data reduction sheet

Hole:	CPT 99-14
Location:	Mt Polly - Upstream test area
Date	Nov 3/99
Source:	Hammer and Beam
Source depth:	0
Source offset:	0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
1.05	1.26			
2.05	2.17	8.4	108	1.55
3.05	3.13	8.0	120	2.55
4.05	4.11	10.4	94	3.55
5.05	5.10	10.0	99	4.55
6.05	6.09	8.1	122	5.55
7.05	7.08	5.6	178	6.55

ConeTec Shear Wave Velocity data reduction sheet

Hole:	CPT 99-16
Location:	Mt Polly - Upstream test area
Date	Nov 3/99
Source:	Hammer and Beam
Source depth:	0
Source offset:	0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
0.80	1.06			
1.80	1.93	9.6	90	1.30
2.80	2.89	9.8	97	2.30
3.80	3.86	10.2	96	3.30
4.80	4.85	5.2	190	4.30

ConeTec Shear Wave Velocity data reduction sheet

Hole: CPT 99-18
Location: Mt Polly - Main embankment
Date Nov 4/99
Source: Hammer and Beam
Source depth: 0
Source offset: 0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
1.05	1.26			
2.05	2.17	7.8	116	1.55
3.05	3.13	8.6	112	2.55
4.05	4.11	10.9	90	3.55
5.05	5.10	9.9	100	4.55
6.05	6.09	9.3	107	5.55
7.05	7.08	8.1	123	6.55
8.05	8.08	8.6	116	7.55
9.05	9.08	8.4	119	8.55
10.05	10.07	7.8	128	9.55
11.05	11.07	7.4	135	10.55
12.05	12.07	7.4	135	11.55
13.05	13.07	7.0	143	12.55
14.05	14.07	6.4	156	13.55
15.05	15.07	6.8	147	14.55
16.05	16.07	5.2	192	15.55
17.05	17.06	2.6	384	16.55

ConeTec Shear Wave Velocity data reduction sheet

Hole:	CPT 99-20
Location:	Mt Polly - Main embankment
Date	Nov 4/99
Source:	Hammer and Beam
Source depth:	0
Source offset:	0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
1.00	1.22			
2.00	2.12	6.4	140	1.50
3.00	3.08	8.6	112	2.50
4.00	4.06	9.8	100	3.50
5.00	5.05	9.1	109	4.50
6.00	6.04	8.3	120	5.50
7.00	7.03	9.4	106	6.50
8.00	8.03	7.9	126	7.50

ConeTec Shear Wave Velocity data reduction sheet

Hole: CPT 99-21
Location: Mt Polly - Main embankment
Date Nov 4/99
Source: Hammer and Beam
Source depth: 0
Source offset: 0.7

Depth (m)	Travel Path (m)	Interval time (ms)	Vs (m/s)	Interval Depth (m)
0.85	1.10			
1.85	1.98	9.2	95	1.35
2.85	2.93	7.6	126	2.35
3.85	3.91	10.8	91	3.35
4.85	4.90	9.3	106	4.35
5.85	5.89	9.0	110	5.35
6.85	6.89	8.2	121	6.35
7.85	7.88	8.6	116	7.35
8.85	8.88	7.2	138	8.35
9.85	9.87	8.1	123	9.35
10.85	10.87	8.0	125	10.35
11.85	11.87	7.6	131	11.35
12.85	12.87	7.0	143	12.35
13.85	13.87	7.4	135	13.35
14.85	14.87	6.4	156	14.35
15.85	15.87	6.8	147	15.35
16.85	16.86	6.8	147	16.35
17.85	17.86	5.6	178	17.35
18.85	18.86	6.2	161	18.35
19.85	19.86	6.2	161	19.35
20.85	20.86	5.1	196	20.35
21.85	21.86	3.5	286	21.35