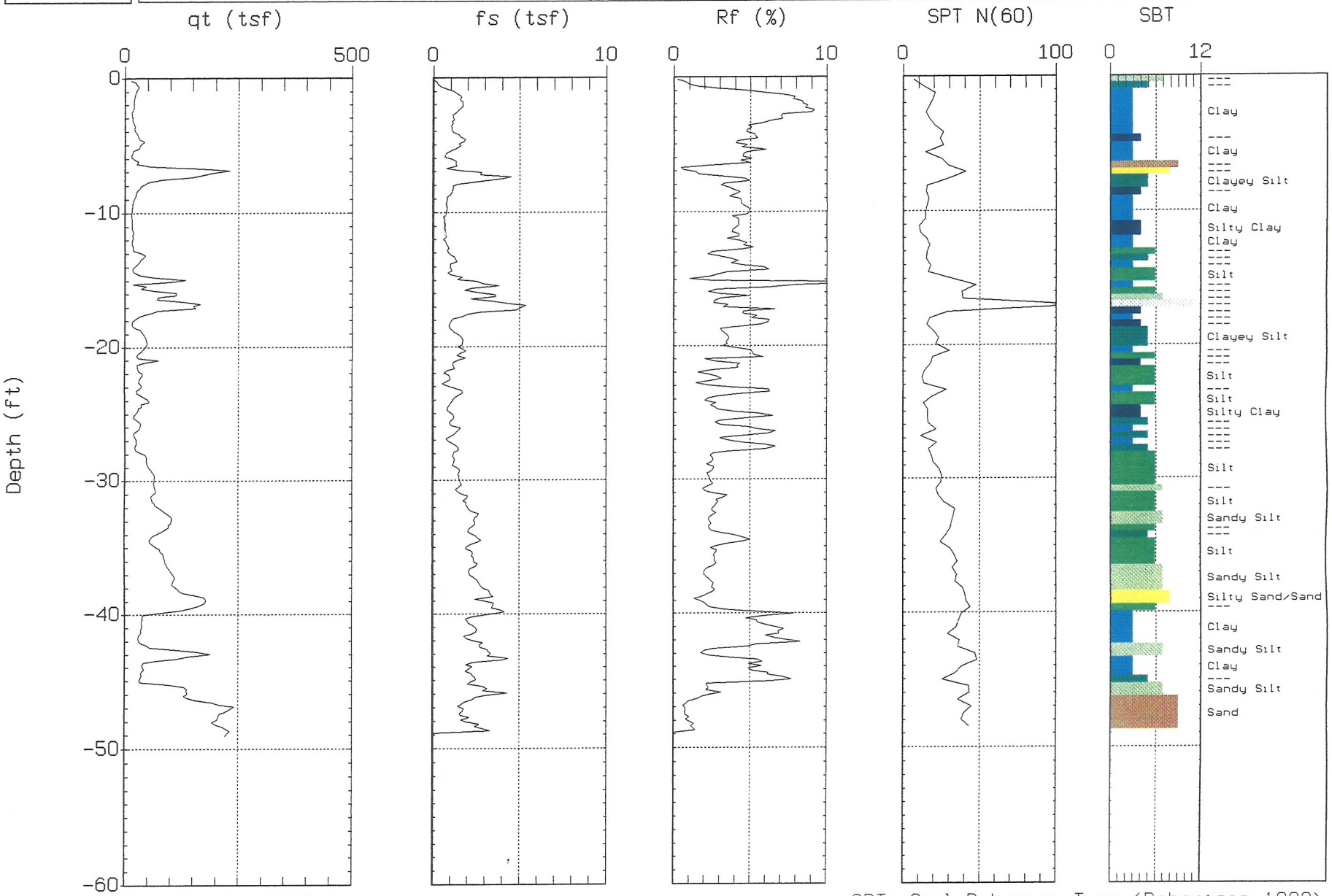
GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-916

Operator: R.AGUILAR
Date: 09/21/06 08:36



Max. Depth: 49.05 (ft)
Depth Inc.: 0.164 (ft)

SBT: Soil Behavior Type (Robertson 1990)

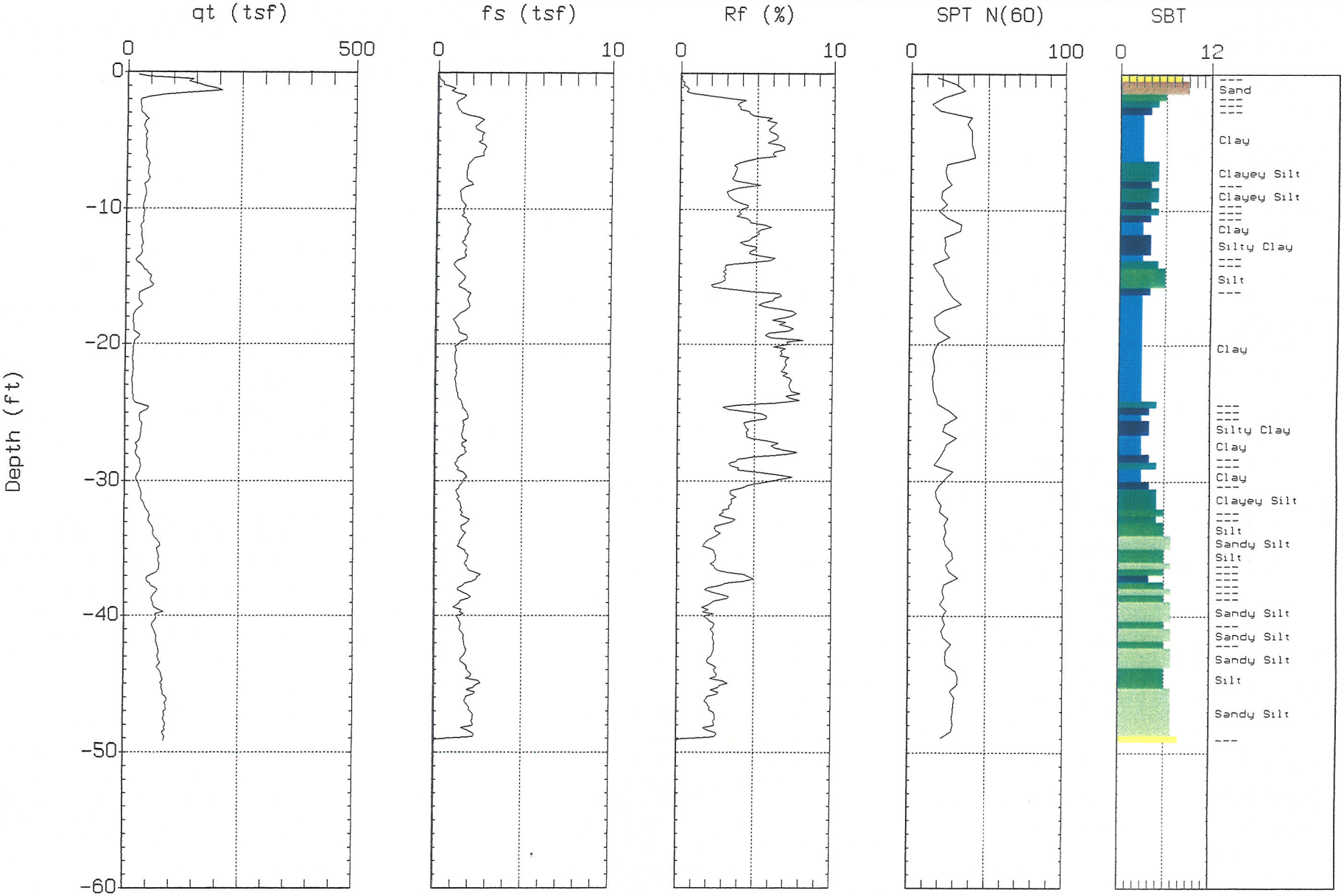
GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-917 1

Operator: R.AGUILAR
Date: 09/20/06 10:43

Rev. 1



Max. Depth: 49.21 (ft)
Depth Inc.: 0.164 (ft)

SBT: Soil Behavior Type (Robertson 1990)

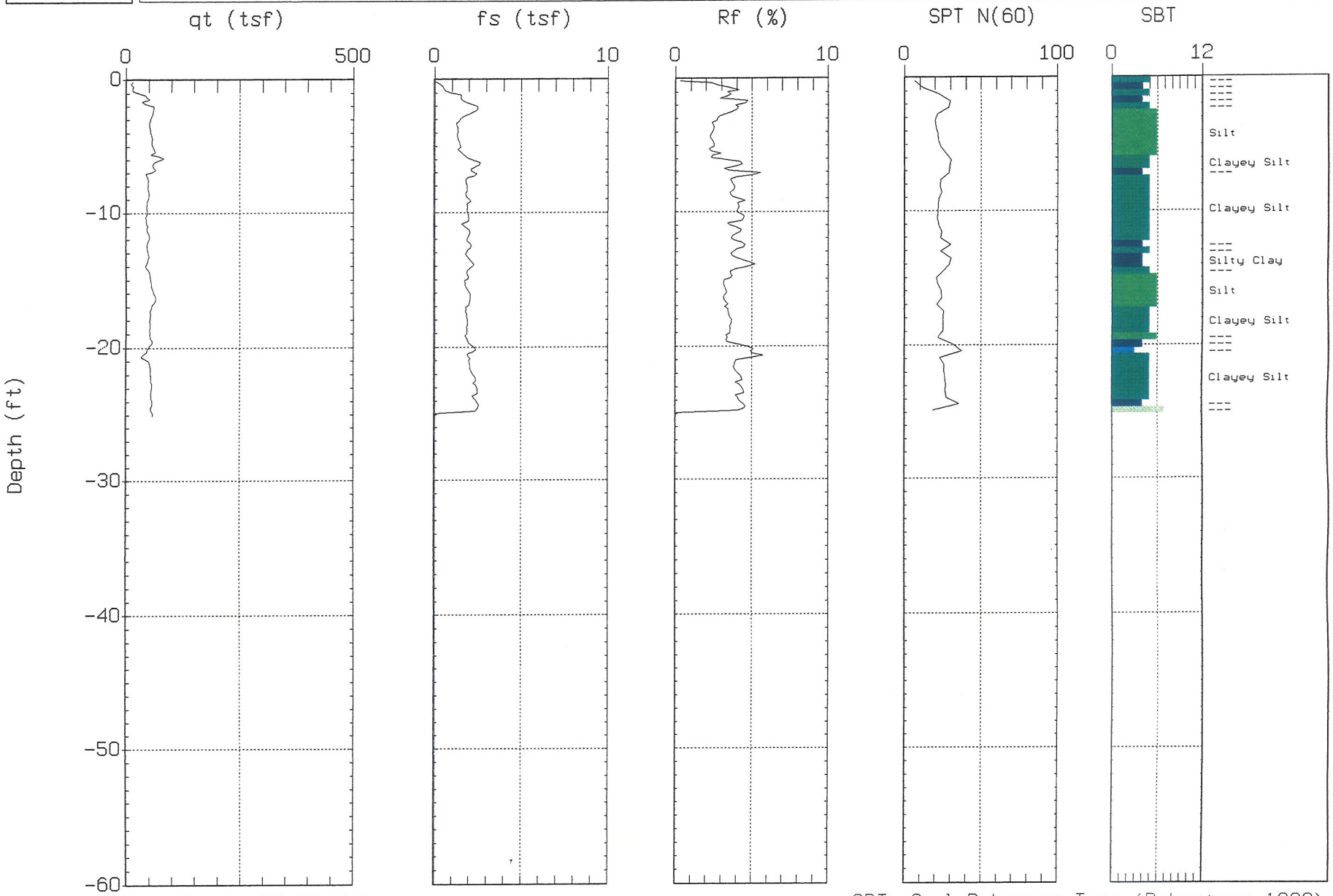
Rev 1 JS 11-6-06
MACTEC

GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-918

Operator: R.AGUILAR
Date: 09/18/06 13:38



Max. Depth: 25.10 (ft)
Depth Inc.: 0.164 (ft)

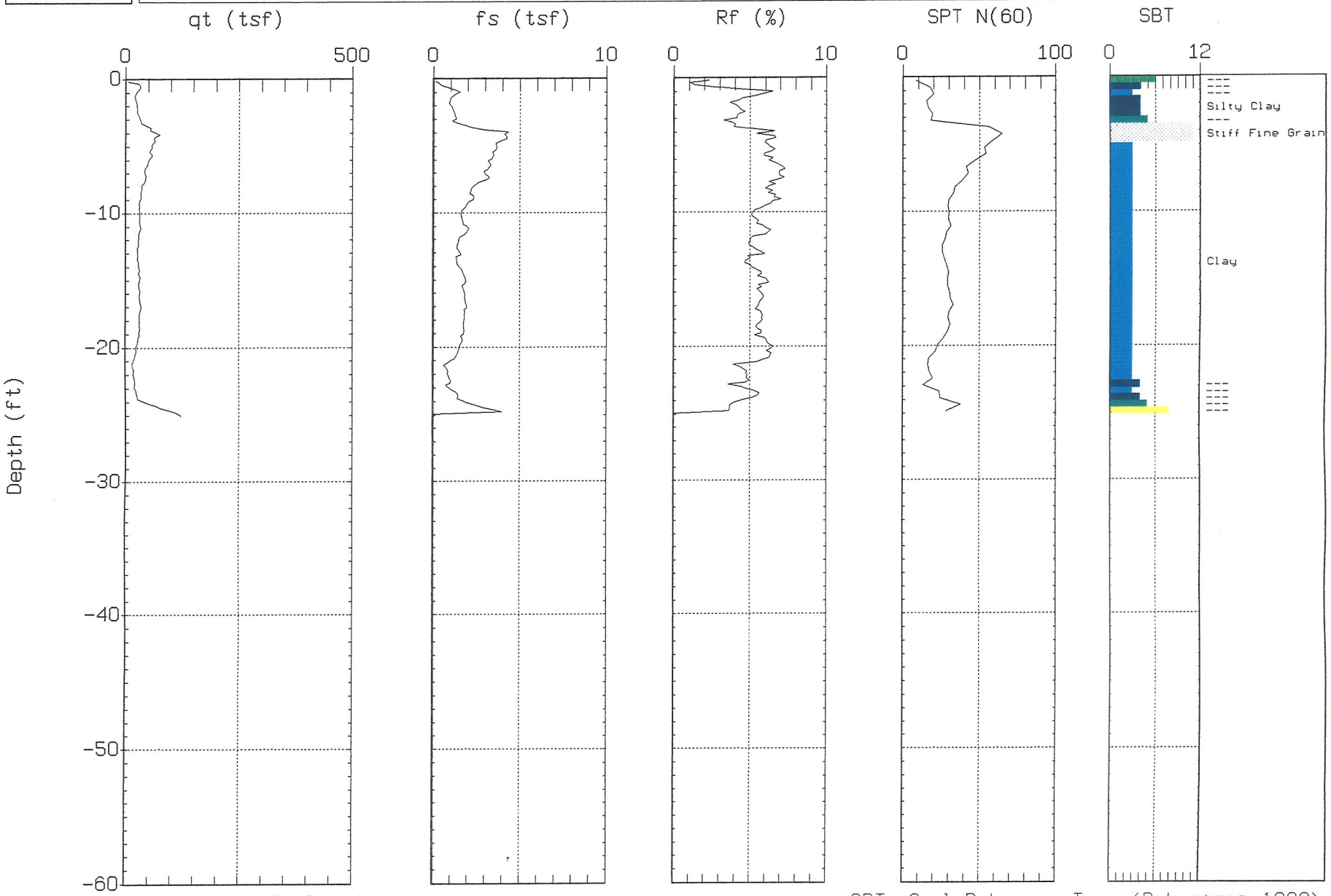
SBT: Soil Behavior Type (Robertson 1990)

GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-919

Operator: R.AGUILAR
Date: 09/20/06 07:51



Max. Depth: 25.10 (ft)
Depth Inc.: 0.164 (ft)

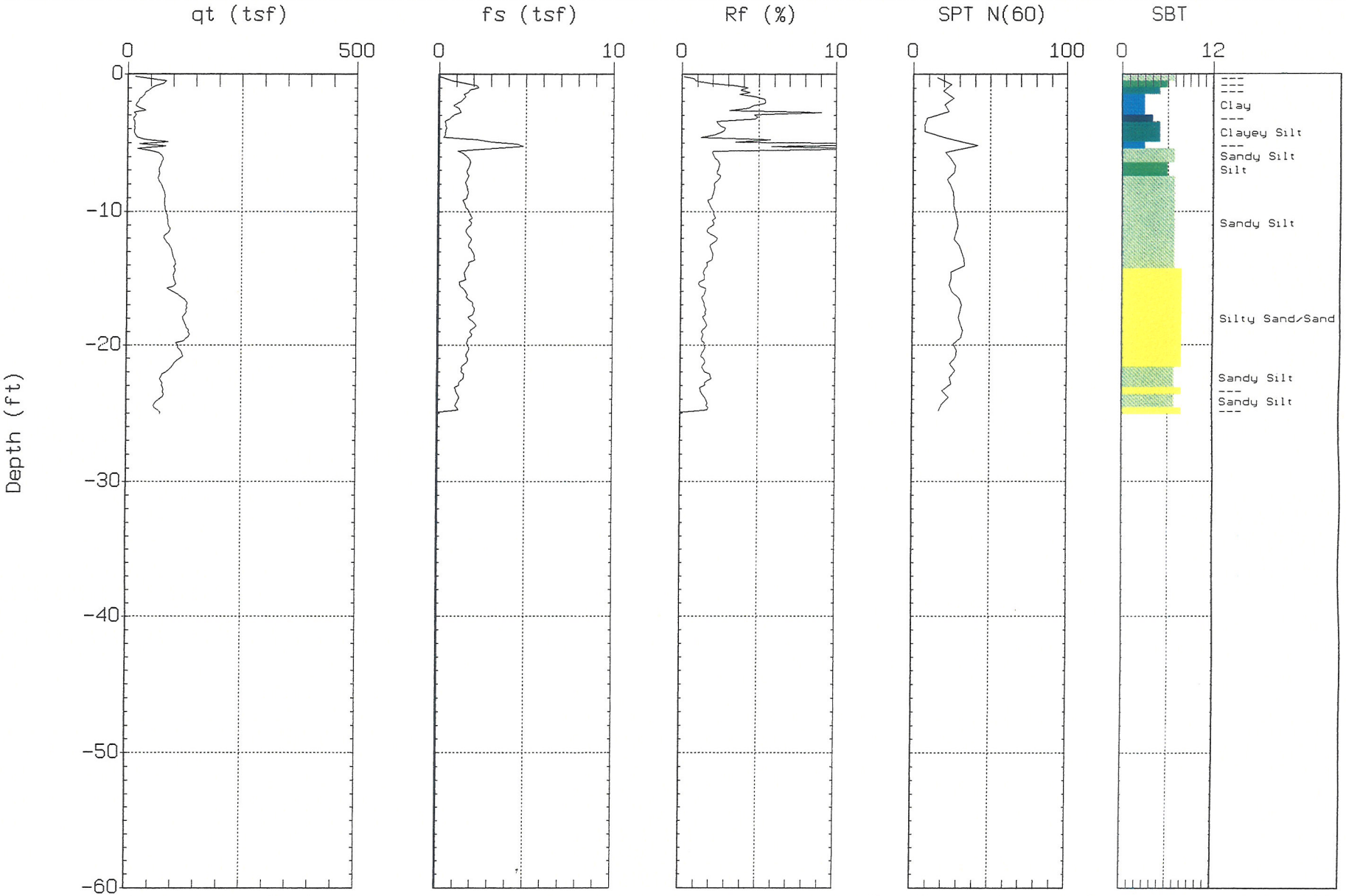
SBT: Soil Behavior Type (Robertson 1990)

GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-920

Operator: R.AGUILAR
Date: 09/18/06 13:05



Max. Depth: 25.10 (ft)
Depth Inc.: 0.164 (ft)

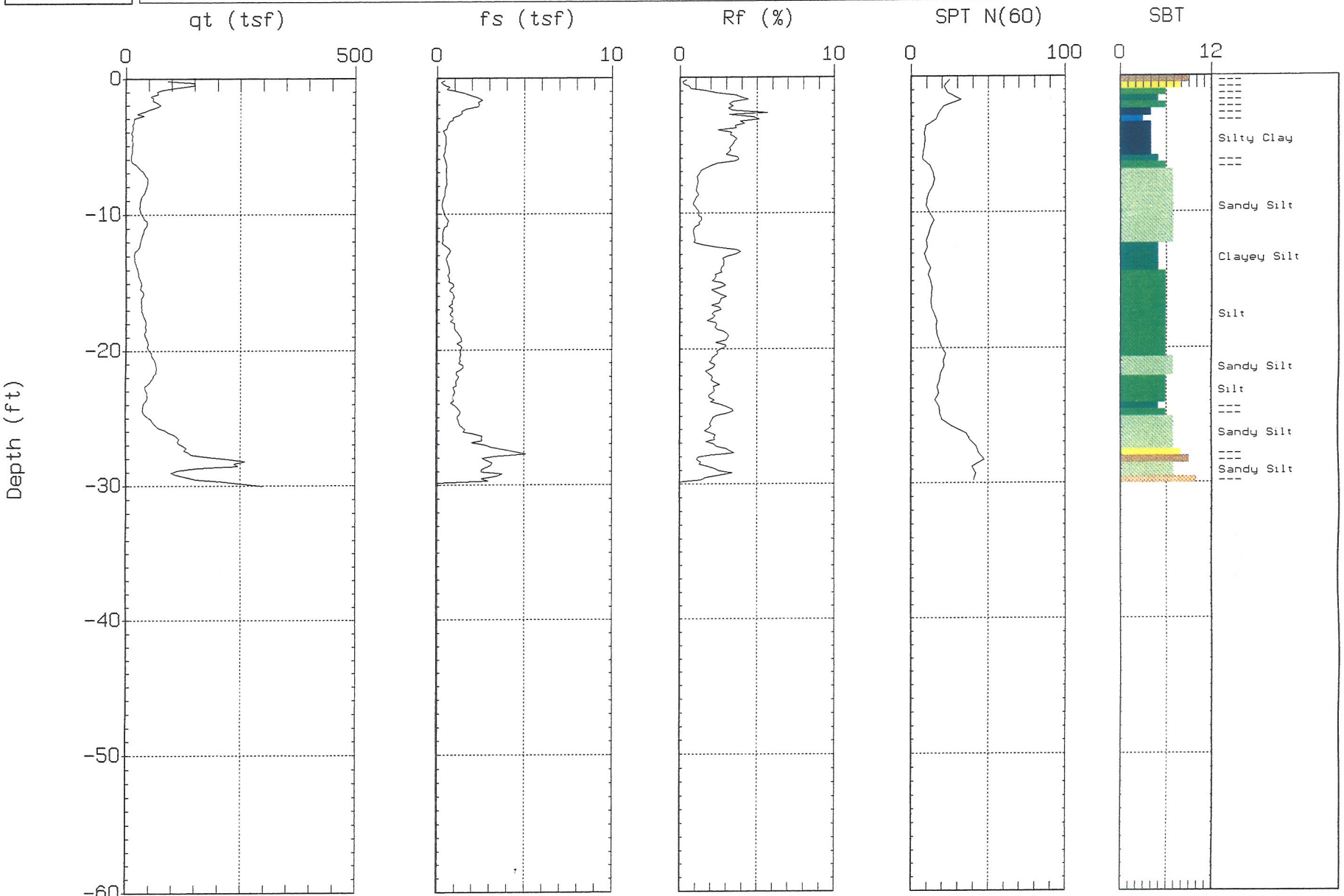
SBT: Soil Behavior Type (Robertson 1990)

GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-921

Operator: R.AGUILAR
Date: 09/25/06 05:48



Max. Depth: 30.02 (ft)
Depth Inc.: 0.164 (ft)

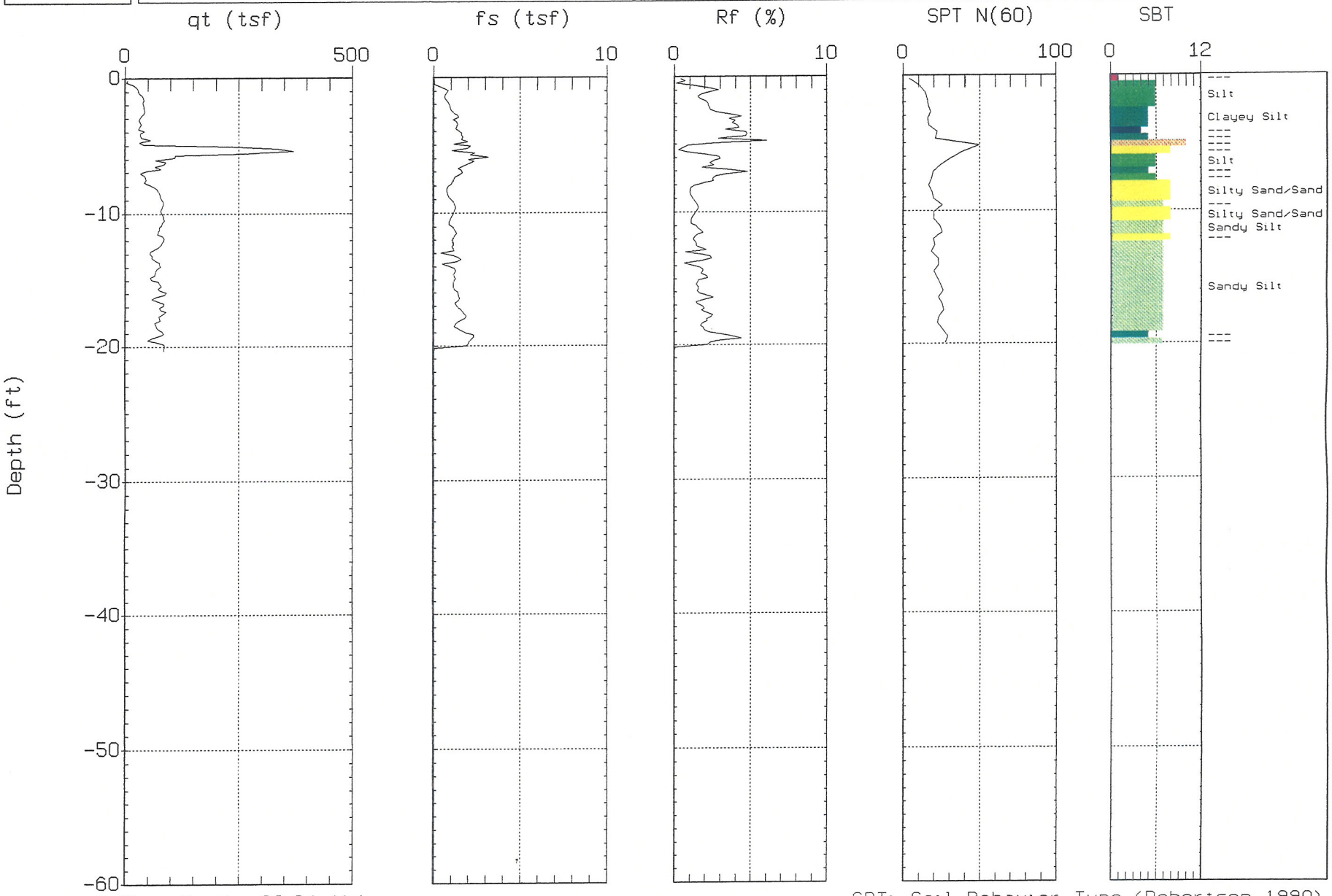
SBT: Soil Behavior Type (Robertson 1990)

GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-922

Operator: R.AGUILAR
Date: 09/22/06 10:27



Max. Depth: 20.34 (ft)
Depth Inc.: 0.164 (ft)

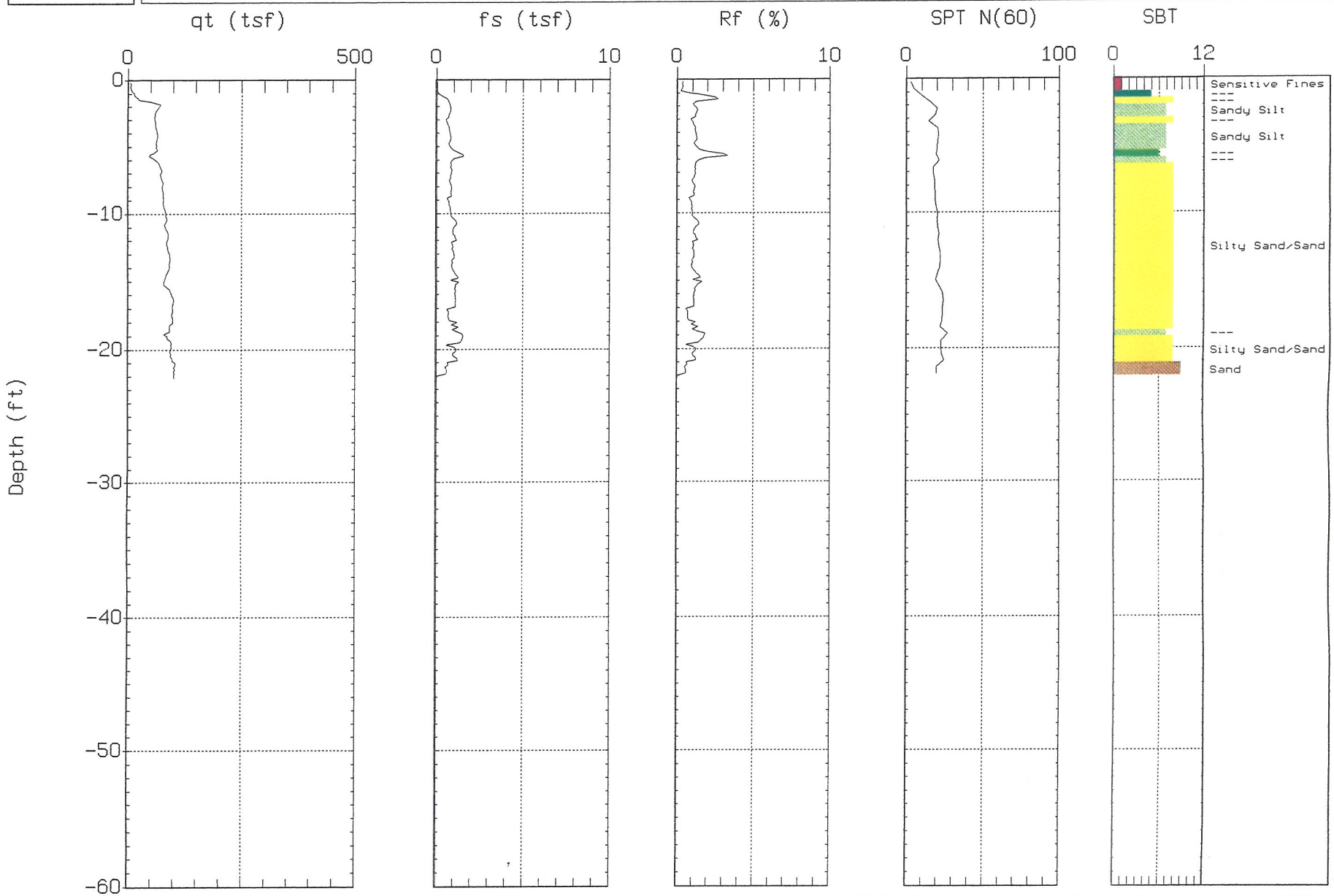
SBT: Soil Behavior Type (Robertson 1990)

GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-923

Operator: R.AGUILAR
Date: 09/22/06 11:09



Max. Depth: 22.15 (ft)
Depth Inc.: 0.164 (ft)

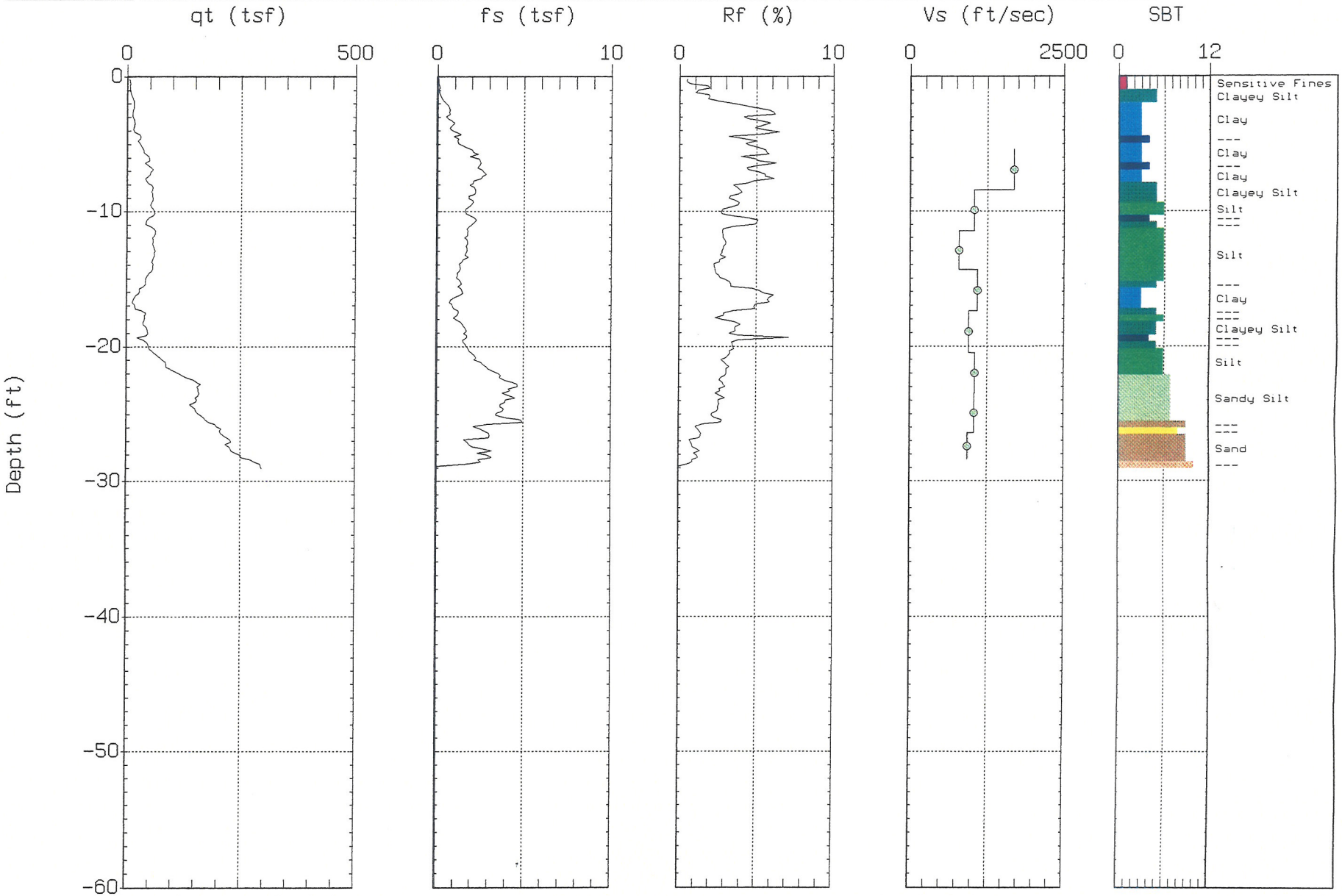
SBT: Soil Behavior Type (Robertson 1990)

GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-902

Operator: R.AGUILAR
Date: 09/21/06 05:27



Max. Depth: 29.04 (ft)
Depth Inc.: 0.164 (ft)

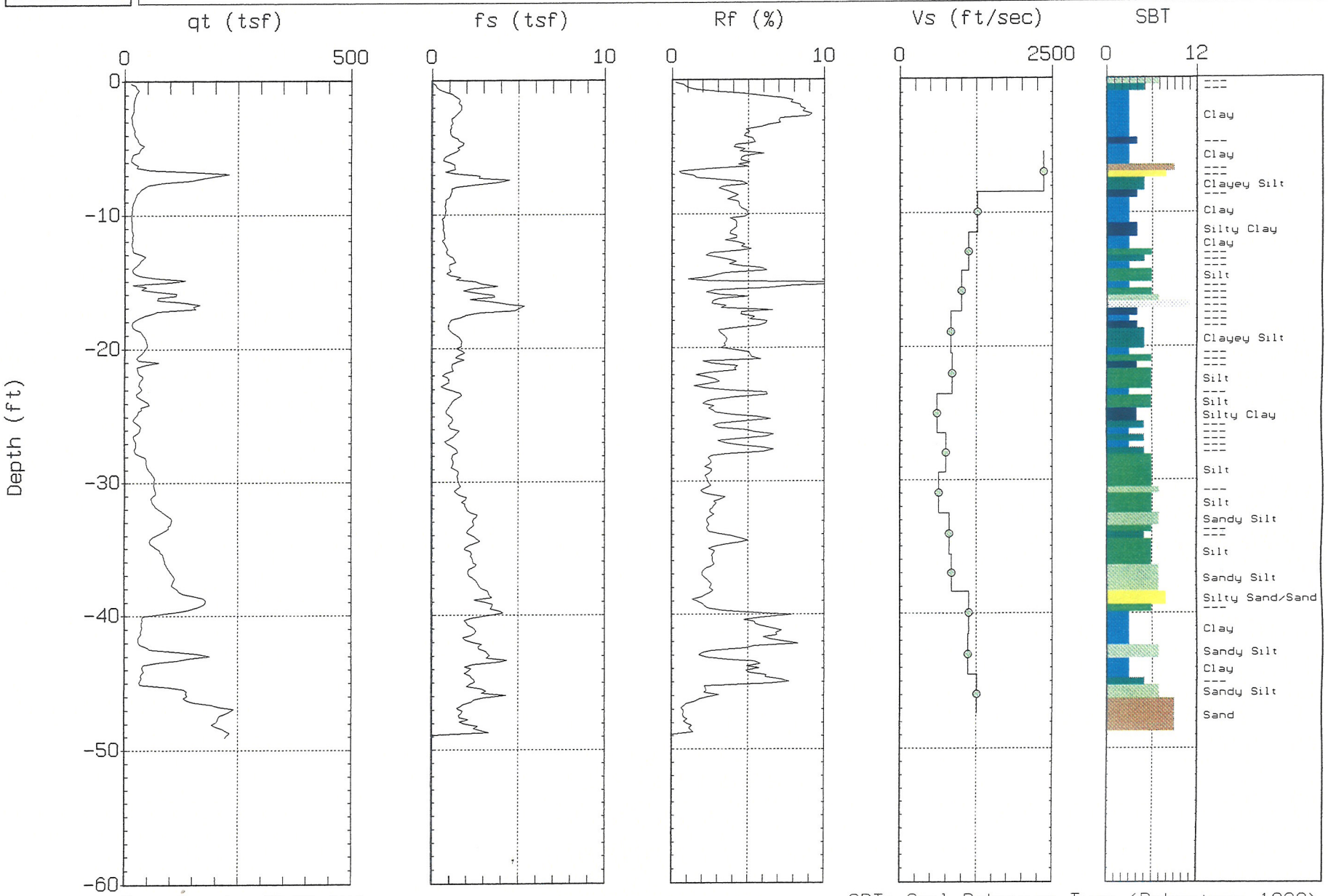
SBT: Soil Behavior Type (Robertson 1990)

GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-916

Operator: R.AGUILAR
Date: 09/21/06 08:36



Max. Depth: 49.05 (ft)
Depth Inc.: 0.164 (ft)

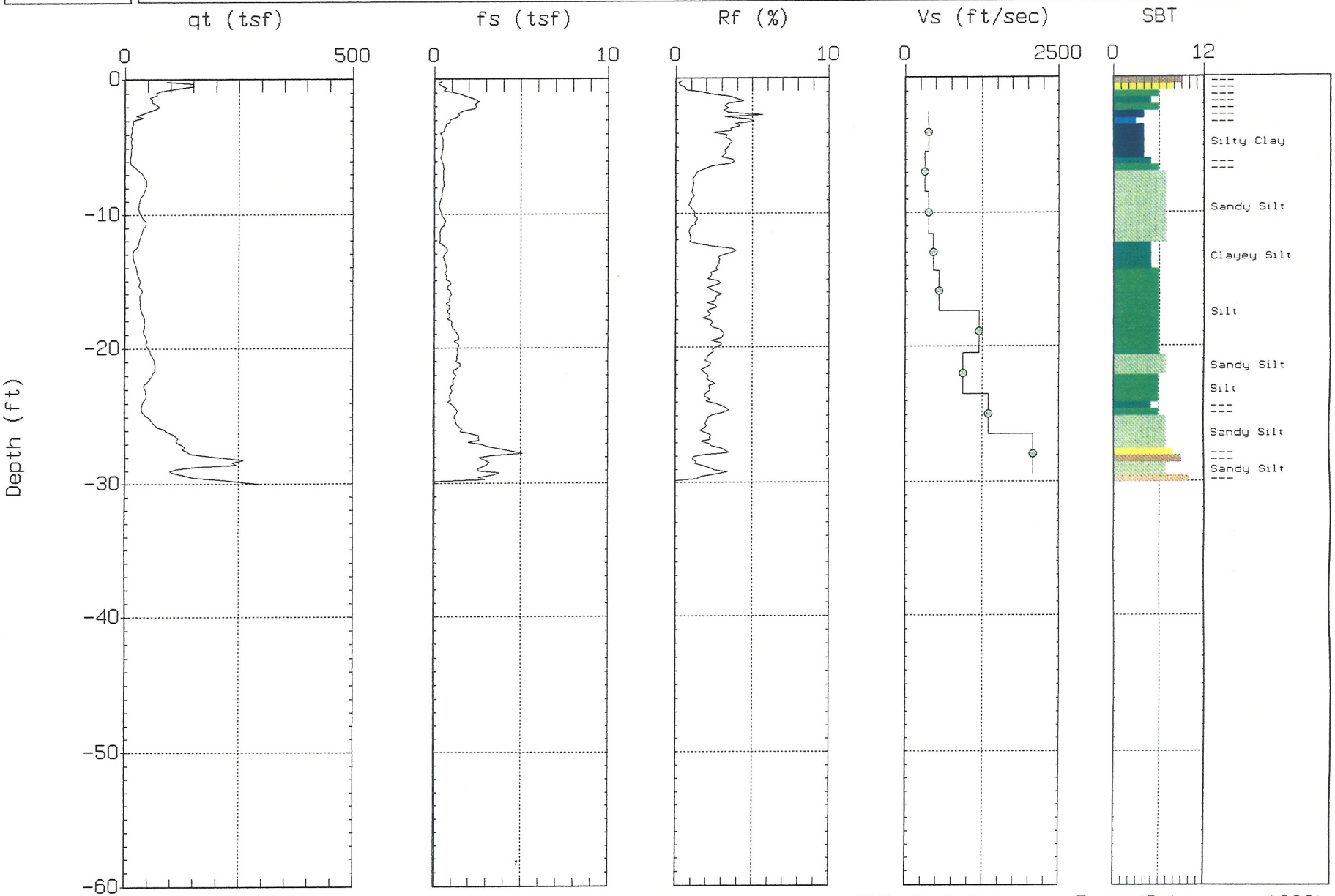
SBT: Soil Behavior Type (Robertson 1990)

GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-921

Operator: R.AGUILAR
Date: 09/25/06 05:48



Max. Depth: 30.02 (ft)
Depth Inc.: 0.164 (ft)

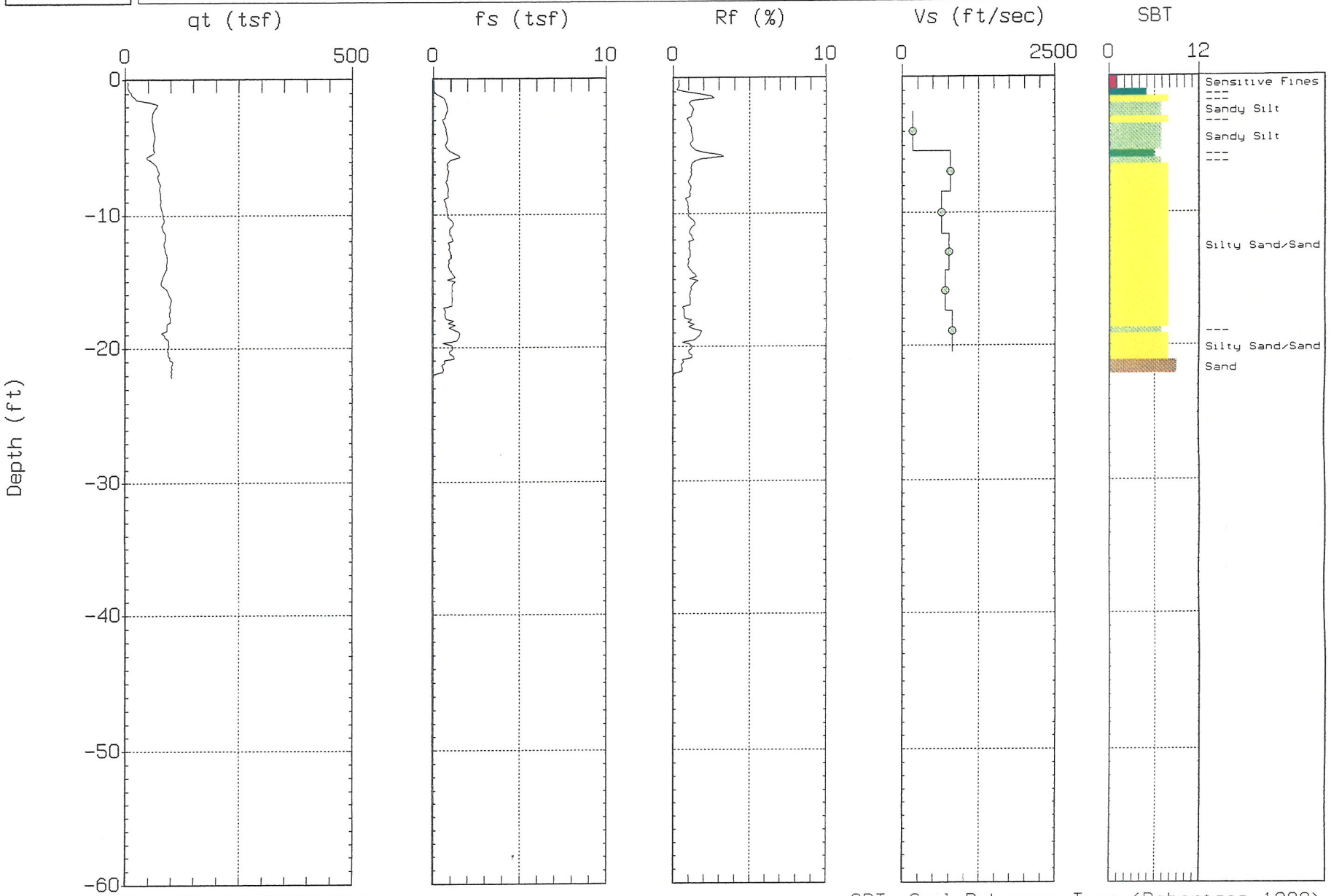
SBT: Soil Behavior Type (Robertson 1990)

GREGG

MACTEC

Site: NORTH ANNA COL.
Location: CPT-923

Operator: R.AGUILAR
Date: 09/22/06 11:09



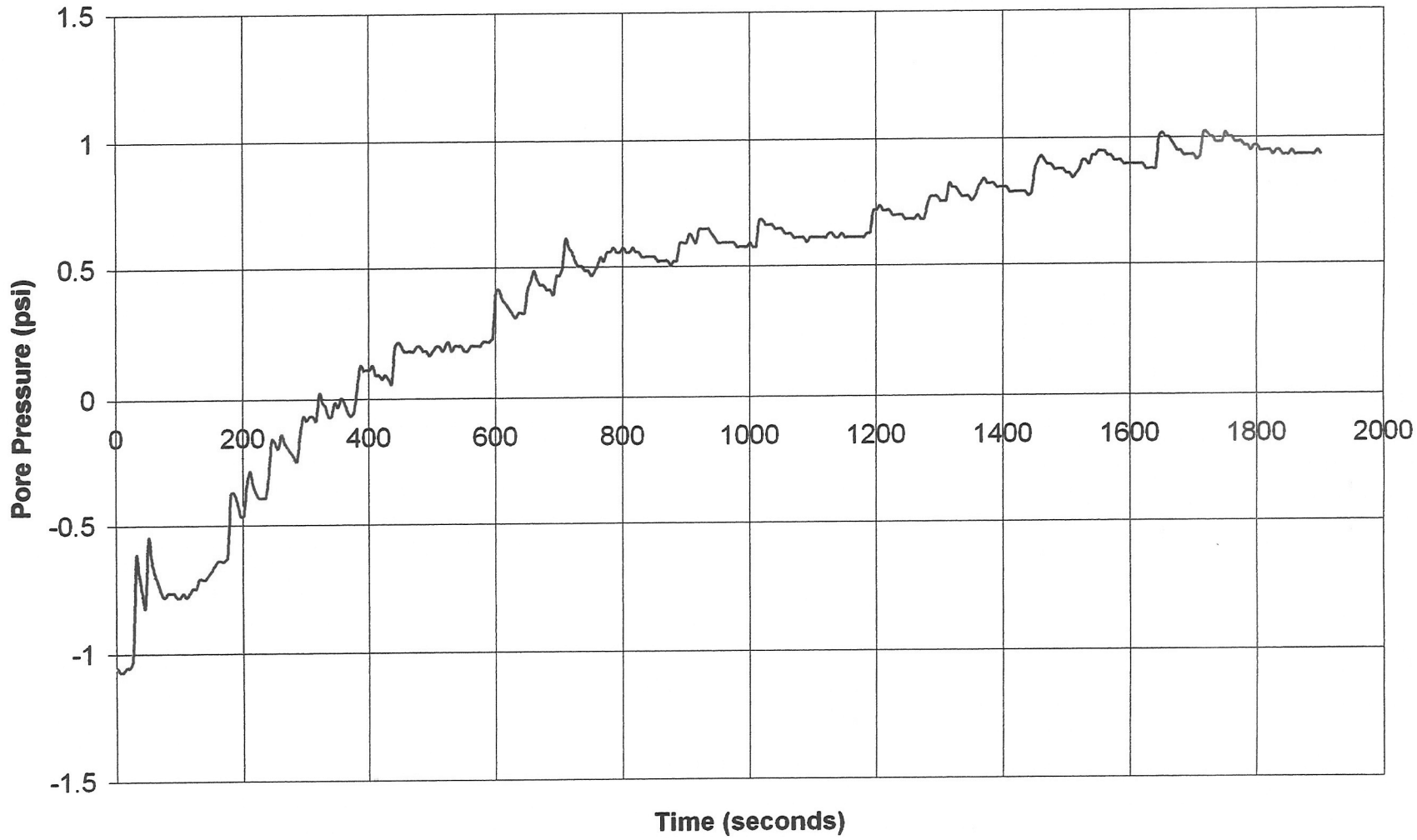
Max. Depth: 22.15 (ft)
Depth Inc.: 0.164 (ft)

SBT: Soil Behavior Type (Robertson 1990)

GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

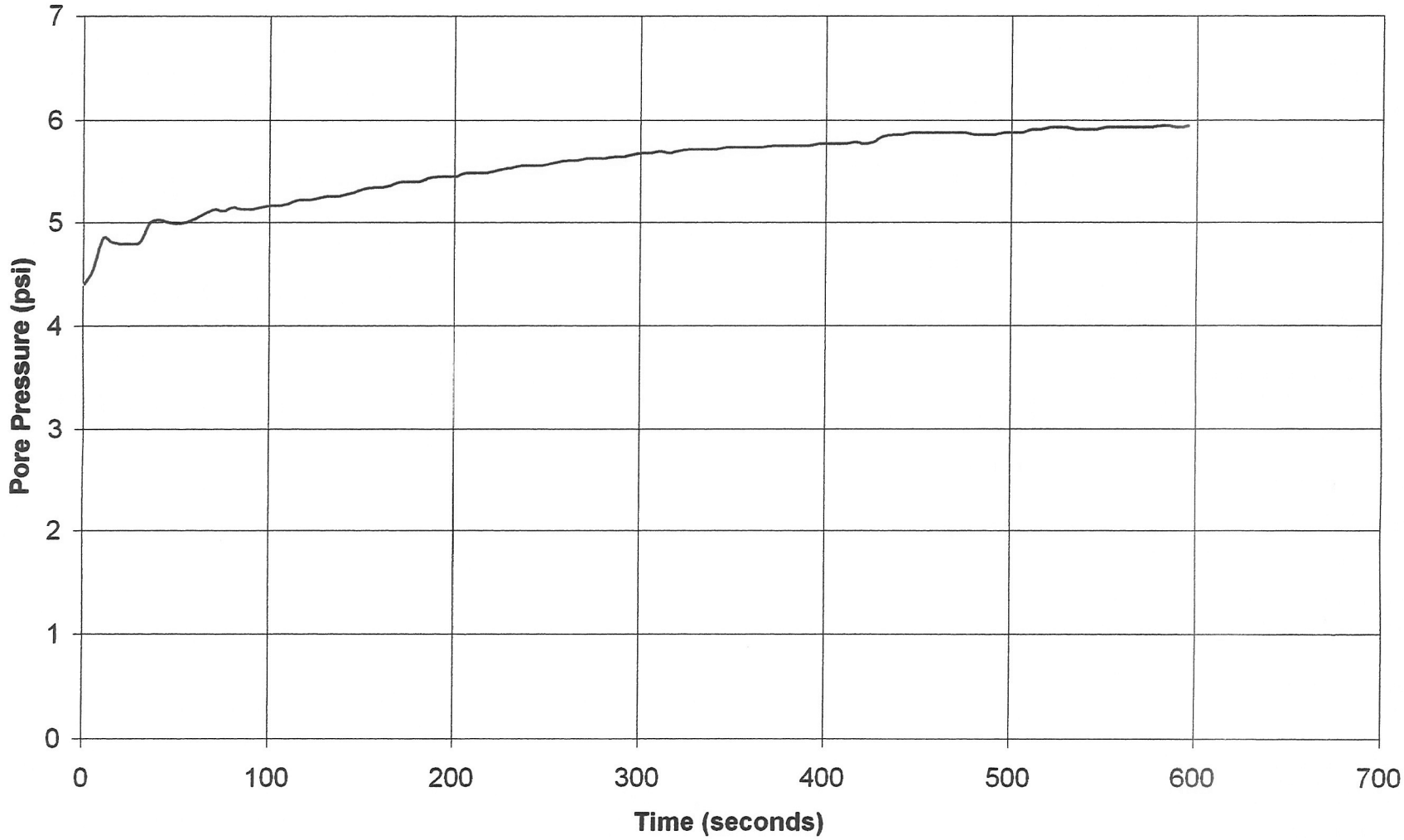
Sounding: c-902
Depth: 29.035
Site: N.ANNA COL.
Operator: R.AGUILAR



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

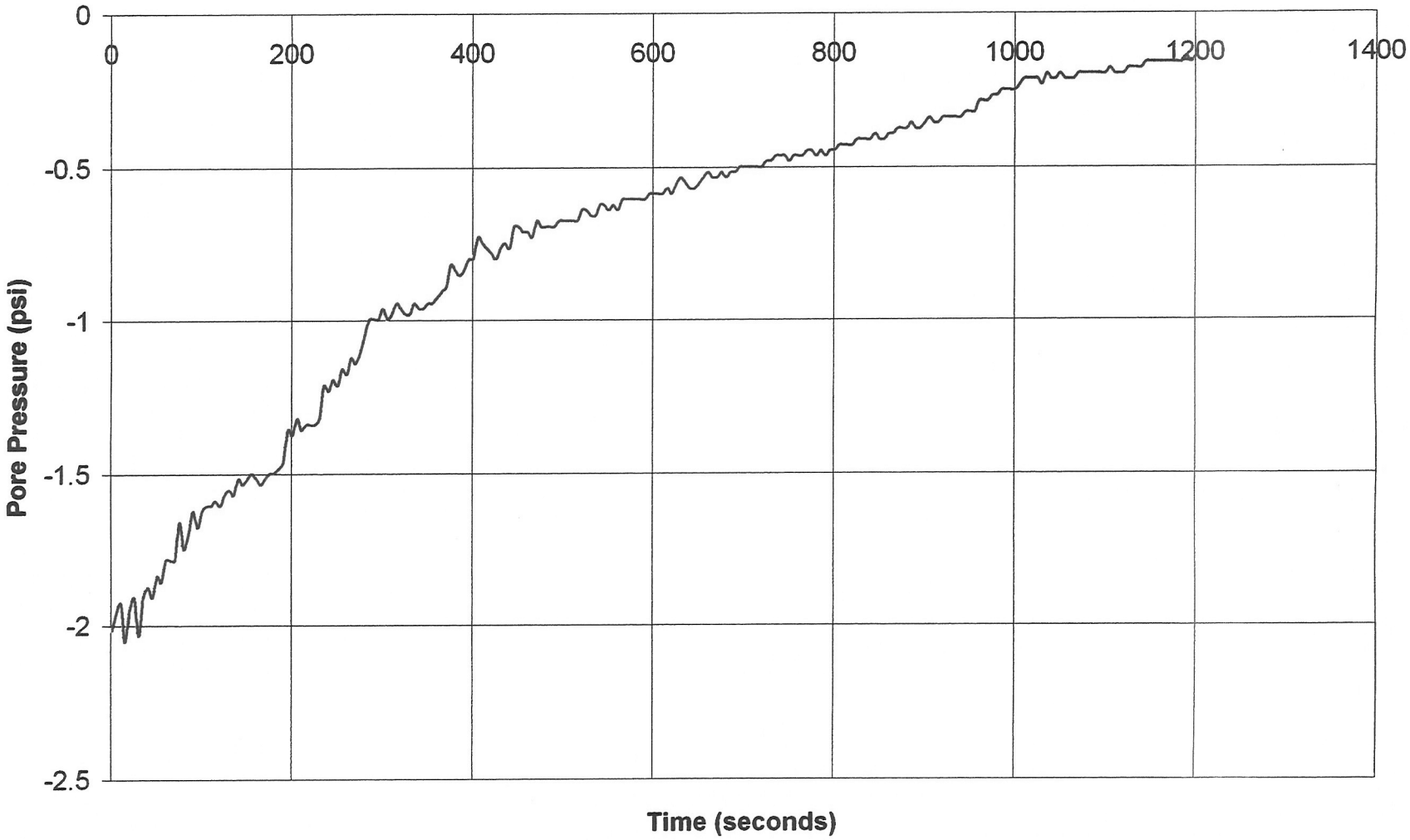
Sounding: c-904b
Depth: 21.489
Site: N.ANNA COL.
Operator: R.AGUILAR



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

Sounding: c-911
Depth: 13.287
Site: N.ANNA COL.
Operator: R.AGUILAR

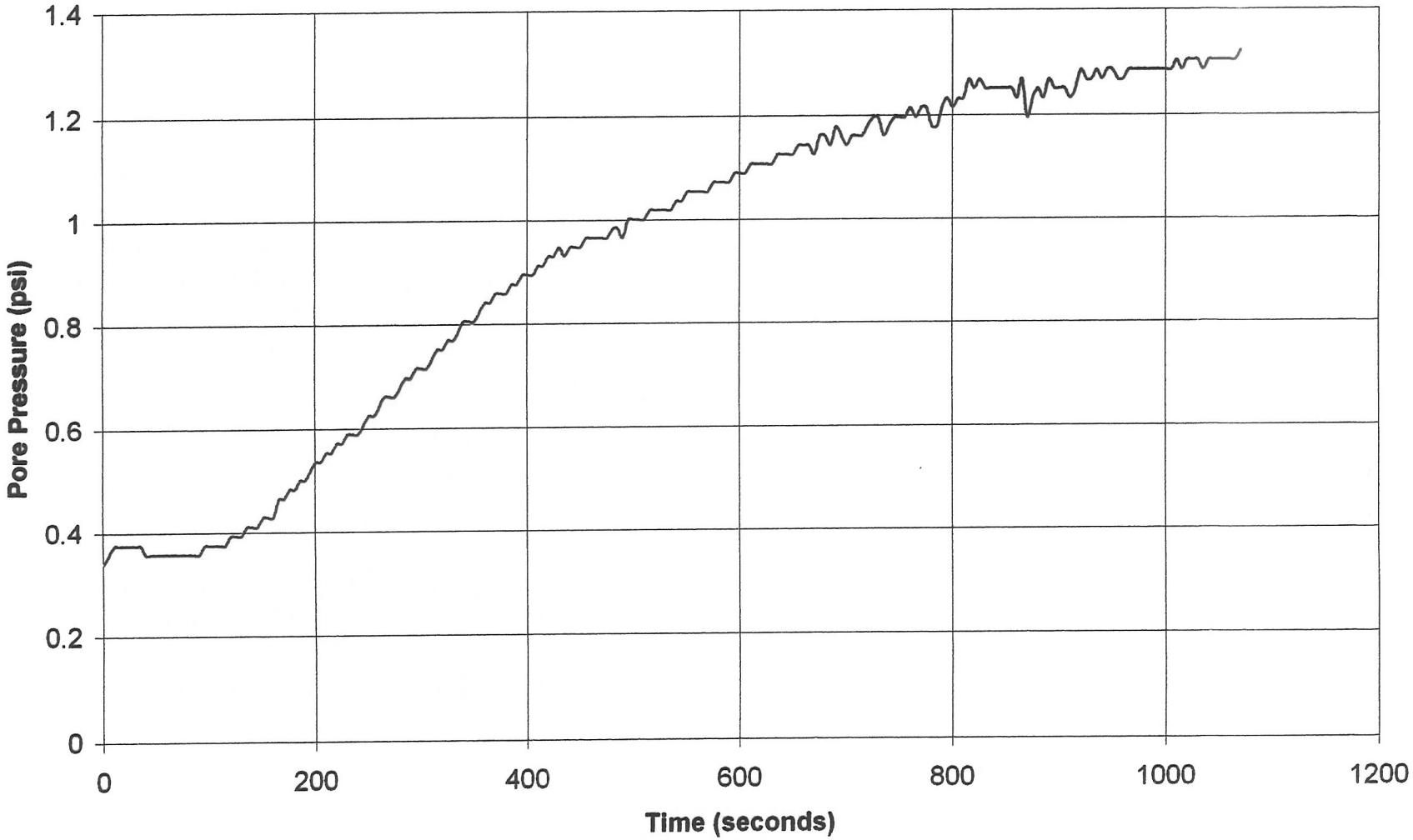


GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

Sounding: c-917
Depth: 22.146
Site: N.ANNA COL.
Engineer: R.AGUILAR

1 Rev. 1



Rev. 1 11-6-06
MACTEC

Shear Wave Velocity Calculations

Mactec
North Anna College

Geophone Offset: 0.66 Feet
Source Offset: 9.17 Feet

06-101sc
c-902

Test Depth (Feet)	Geophone Depth (Feet)	Waveform Ray Path (Feet)	Incremental Distance (Feet)	Characteristic Arrival Time (ms)	Incremental Time Interval (ms)	Interval Velocity (Ft/Sec)	Interval Depth (Feet)
6.07	5.41	10.65		16.7500			
9.02	8.36	12.41	1.76	17.8000	1.0500	1679.7	6.89
12.14	11.48	14.69	2.28	20.0000	2.2000	1037.2	9.92
15.09	14.43	17.10	2.41	23.0500	3.0500	789.1	12.96
18.04	17.38	19.65	2.56	25.4000	2.3500	1087.7	15.91
21.16	20.50	22.46	2.80	28.3500	2.9500	950.5	18.94
24.11	23.45	25.18	2.72	30.9500	2.6000	1047.8	21.98
27.07	26.41	27.95	2.77	33.6000	2.6500	1045.6	24.93
29.04	28.38	29.82	1.87	35.6000	2.0000	933.3	27.39

Shear Wave Velocity Calculations

Mactec
North Anna College

Geophone Offset: 0.66 Feet
Source Offset: 9.17 Feet

06-101sc
c-916

Test Depth (Feet)	Geophone Depth (Feet)	Waveform Ray Path (Feet)	Incremental Distance (Feet)	Characteristic Arrival Time (ms)	Incremental Time Interval (ms)	Interval Velocity (Ft/Sec)	Interval Depth (Feet)
6.07	5.41	10.65		18.9000			
9.02	8.36	12.41	1.76	19.6500	0.7500	2351.5	6.89
12.14	11.48	14.69	2.28	21.4500	1.8000	1267.6	9.92
15.09	14.43	17.10	2.41	23.6000	2.1500	1119.4	12.96
18.04	17.38	19.65	2.56	26.1500	2.5500	1002.4	15.91
21.16	20.50	22.46	2.80	29.5500	3.4000	824.7	18.94
24.11	23.45	25.18	2.72	32.7500	3.2000	851.3	21.98
27.07	26.41	27.95	2.77	37.3000	4.5500	608.9	24.93
30.02	29.36	30.76	2.80	41.0500	3.7500	747.9	27.88
33.14	32.48	33.75	2.99	45.7500	4.7000	635.7	30.92
36.25	35.59	36.76	3.01	49.5000	3.7500	802.5	34.03
39.04	38.38	39.46	2.71	52.7000	3.2000	845.8	36.99
42.16	41.50	42.50	3.04	55.4000	2.7000	1125.1	39.94
45.11	44.45	45.39	2.89	58.0000	2.6000	1110.6	42.98
48.06	47.40	48.28	2.90	60.3000	2.3000	1258.9	45.93

Shear Wave Velocity Calculations

Mactec
North Anna College

Geophone Offset: 0.66 Feet
Source Offset: 9.17 Feet

06-101sc
c-921

Test Depth (Feet)	Geophone Depth (Feet)	Waveform Ray Path (Feet)	Incremental Distance (Feet)	Characteristic Arrival Time (ms)	Incremental Time Interval (ms)	Interval Velocity (Ft/Sec)	Interval Depth (Feet)
3.12	2.46	9.49	9.49	14.0500			
6.07	5.41	10.65	1.15	17.1500	3.1000	372.0	3.93
9.02	8.36	12.41	1.76	22.8000	5.6500	312.2	6.89
12.30	11.64	14.82	2.41	29.1500	6.3500	379.6	10.00
15.09	14.43	17.10	2.28	34.1500	5.0000	455.6	13.04
18.04	17.38	19.65	2.56	38.8500	4.7000	543.9	15.91
21.16	20.50	22.46	2.80	41.2000	2.3500	1193.2	18.94
24.11	23.45	25.18	2.72	44.1000	2.9000	939.4	21.98
27.07	26.41	27.95	2.77	46.1500	2.0500	1351.6	24.93
30.02	29.36	30.76	2.80	47.5000	1.3500	2077.5	27.88

Shear Wave Velocity Calculations

Mactec
North Anna College

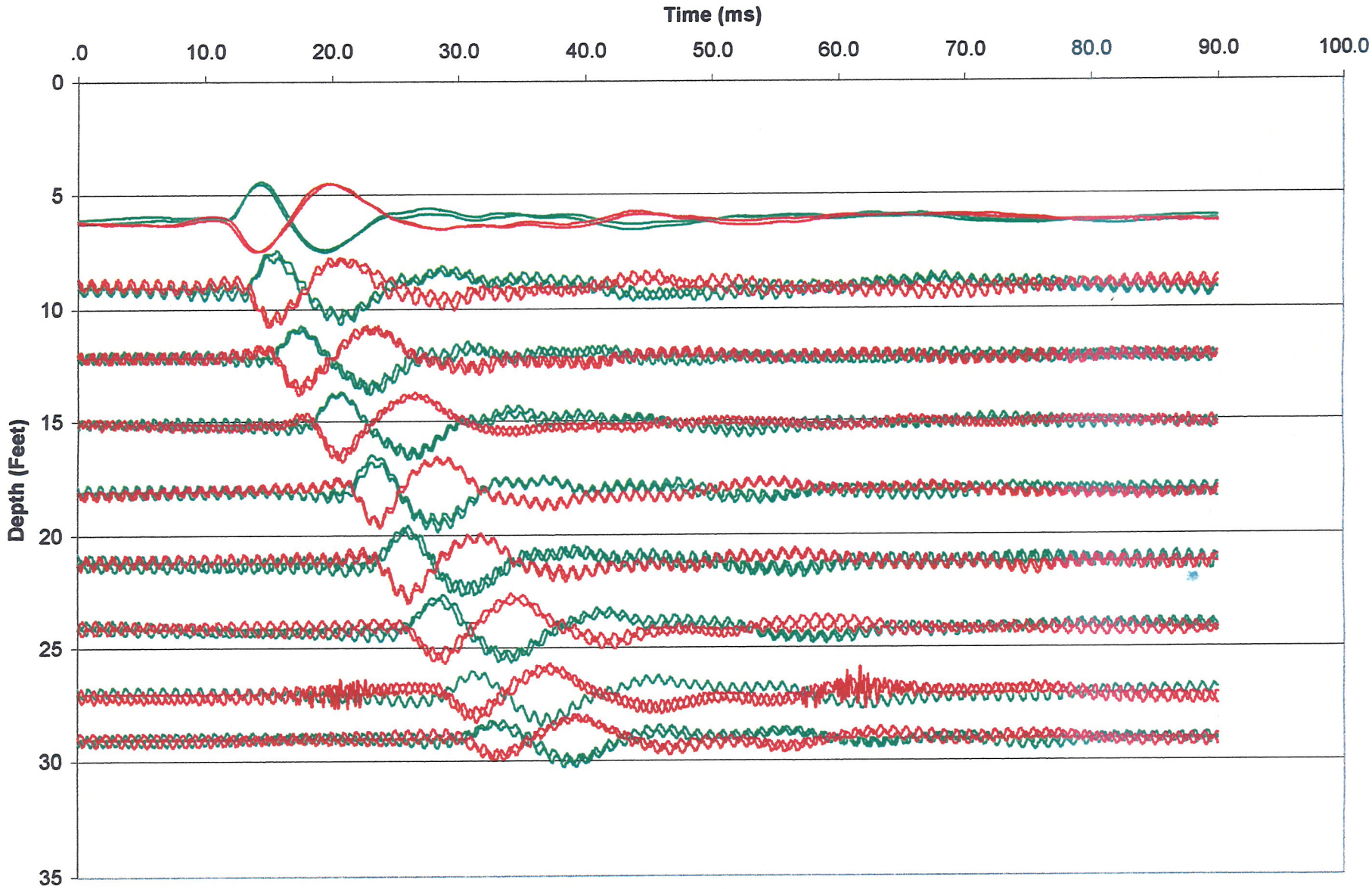
Geophone Offset: 0.66 Feet
Source Offset: 9.17 Feet

06-101sc
c-923

Test Depth (Feet)	Geophone Depth (Feet)	Waveform Ray Path (Feet)	Incremental Distance (Feet)	Characteristic Arrival Time (ms)	Incremental Time Interval (ms)	Interval Velocity (Ft/Sec)	Interval Depth (Feet)
3.12	2.46	9.49	9.49	12.9500			
6.07	5.41	10.65	1.15	19.7500	6.8000	169.6	3.93
9.02	8.36	12.41	1.76	22.0000	2.2500	783.8	6.89
12.30	11.64	14.82	2.41	25.8000	3.8000	634.3	10.00
15.09	14.43	17.10	2.28	28.8000	3.0000	759.4	13.04
18.04	17.38	19.65	2.56	32.4500	3.6500	700.3	15.91
21.16	20.50	22.46	2.80	35.9000	3.4500	812.7	18.94

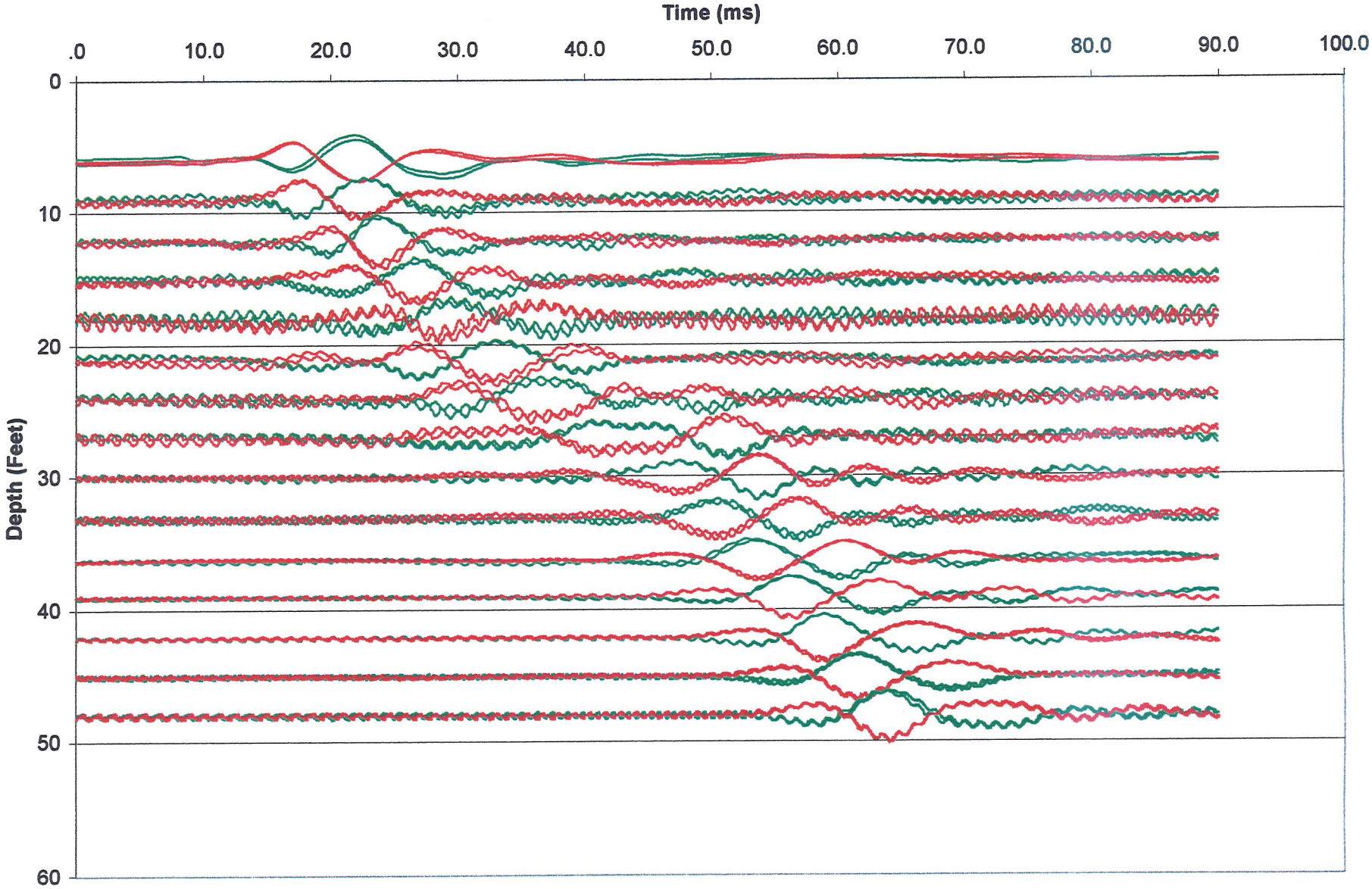
GREGG

Waveforms for sounding c-902



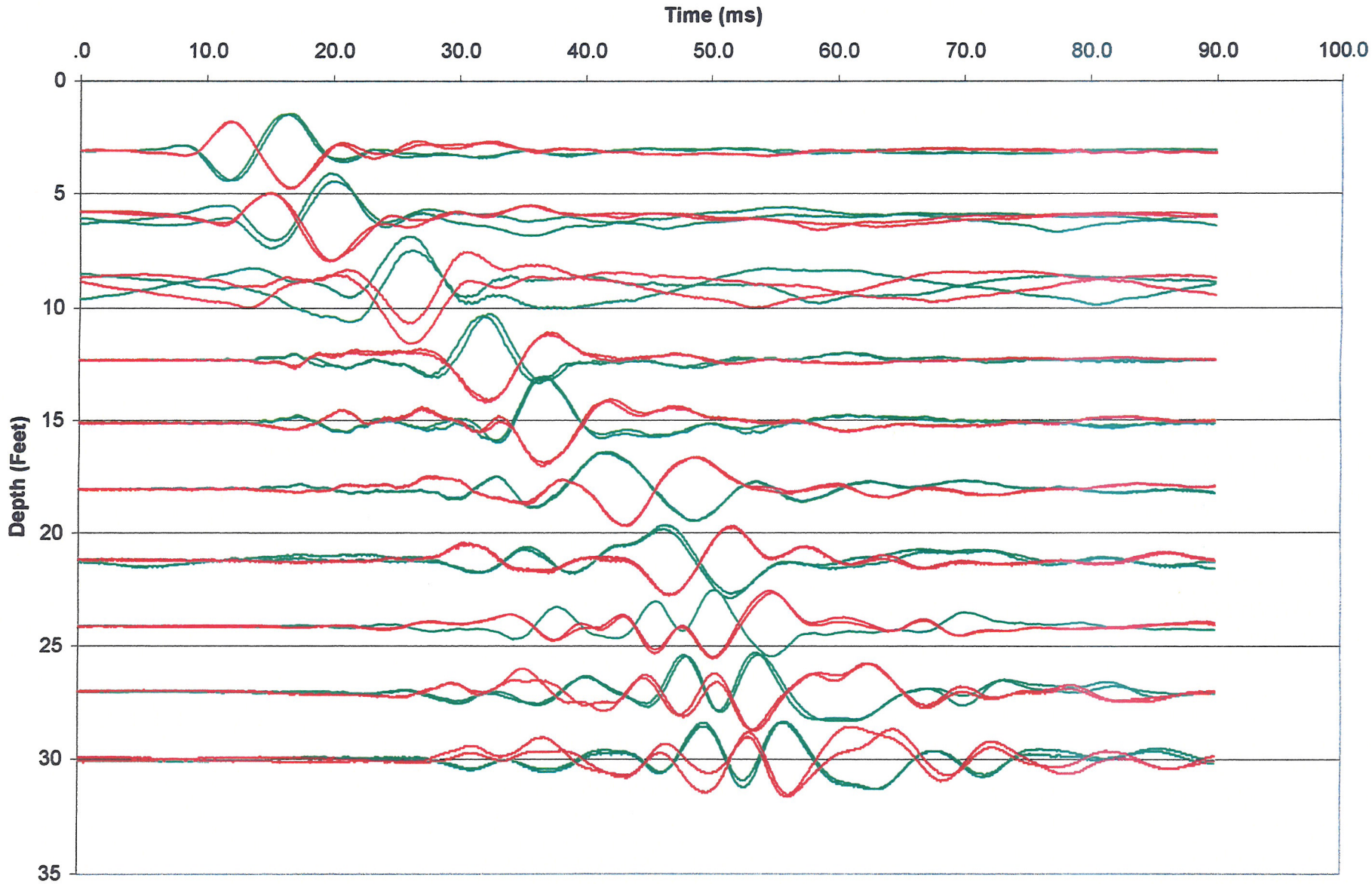
GREGG

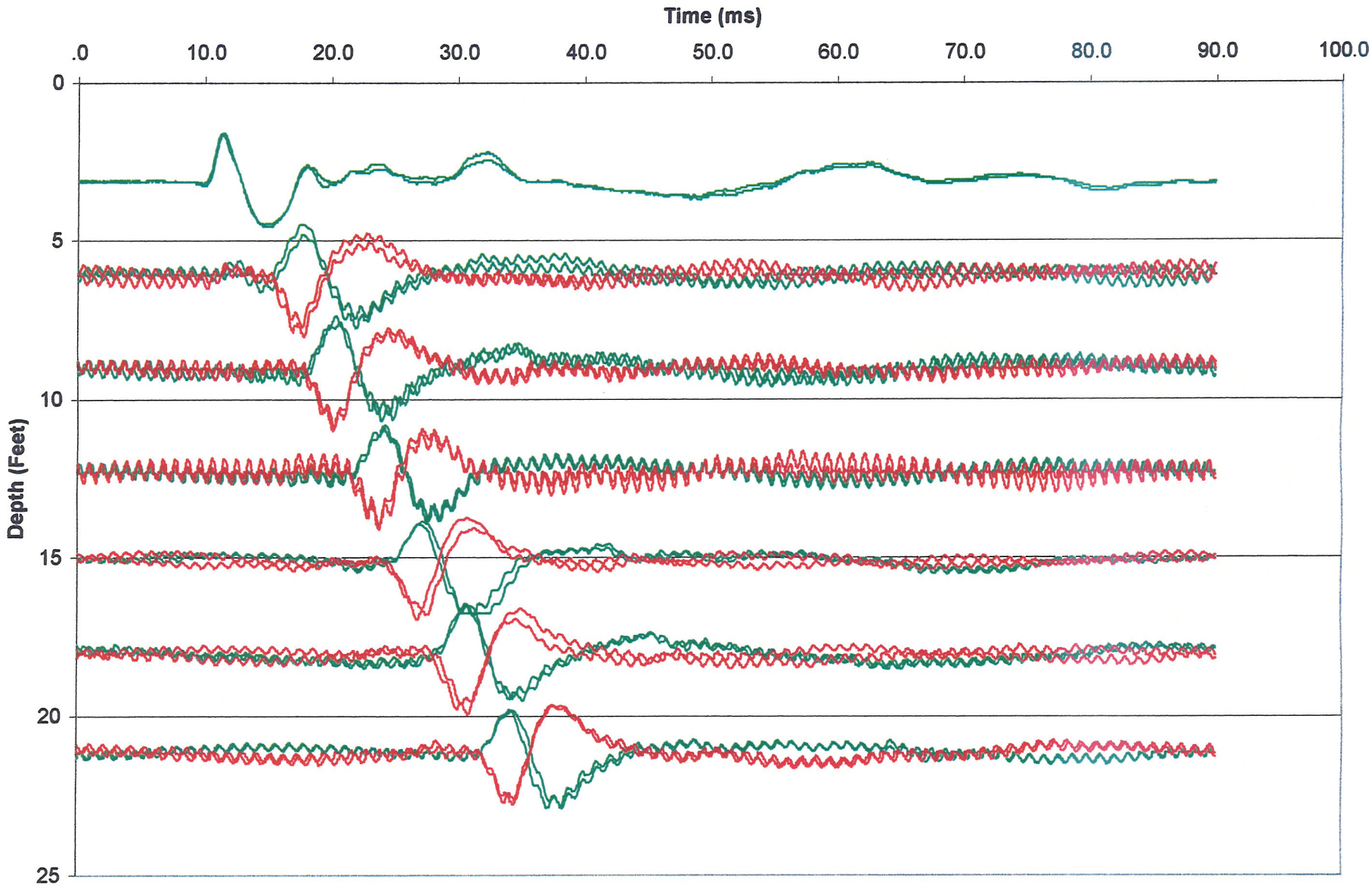
Waveforms for sounding c-916



GREGG

Waveforms for sounding c-921



GREGG

Waveforms for sounding c-923