

**Geological, Geochemical, Geotechnical,
and Physical Work
Report on the Tulsequah Property**

VOLUME 2 - APPENDICES

**Tulsequah River Area
Northwestern BC
NTS 104K/12 and 104K/13**

**BC Geological Survey
Assessment Report
31030b**

Atlin Mining Division

58°43'N 133°35'W

**Owner & Operator:
Redfern Resources Ltd.
800-1281 West Georgia Street
Vancouver, BC**

Work performed on mineral claims:

513807

513812

513813

513814

513818

513820

590422

**M. A. O'Donnell, P. Geo
B. Armstrong
G. Giles**

**Statements of Work: May 27, 2009
Submission Date: Aug. 24, 2009**

LIST OF APPENDICES

- | | | |
|--------------|---|--|
| APPENDIX I | - | Analytical Procedures |
| APPENDIX II | - | Assay Certificates |
| APPENDIX III | - | ARD Sample Descriptions and Analytical Results |
| APPENDIX IV | - | Road Geology Station Notes |
| APPENDIX V | - | Road Geology Rock Sample Descriptions and Analytical Results |
| APPENDIX VI | - | CPT Logs |
| APPENDIX VII | - | Statement of Expenditures |

APPENDIX I
ANALYTICAL PROCEDURES

SAMPLE PREPARATION

Rock samples are 2 stage crushed to minus 10 mesh and a 250 gram subsample is pulverized on a ring mill pulverizer to -140 mesh. The subsample is rolled, homogenized and bagged in a prenumbered bag.

GEOCHEMICAL GOLD ANALYSIS

The sample is weighed to 30 grams and fused along with proper fluxing materials. The bead is digested in aqua regia and analyzed on an atomic absorption instrument. Over-range values for rocks are re-analyzed using gold assay methods.

Appropriate reference materials accompany the samples through the process allowing for quality control assessment. Results are entered and printed along with quality control data (repeats and standards). The data is mailed to the client.

GOLD ASSAY

Samples are sorted and dried (if necessary). The samples are crushed through a jaw crusher and cone or rolls crusher to -10 mesh. The sample is split through a Jones riffle until a -250 gram sub sample is achieved. The sub sample is pulverized in a ring & puck pulverizer to 95% -140 mesh. The sample is rolled to homogenize.

A ½ 1.0 A.T. sample size I fire assayed using appropriate fluxes. The resultant dore bead is parted and then digested with aqua regia and then analyzed on a Perkin Elmer AA instrument.

Appropriate standards and repeat sample (Quality Control Components) accompany the samples on the data sheet.

METALLIC GOLD ASSAY

Samples are catalogued and dried. Rock samples are two stage crushed to minus 10 mesh, then split to achieve a 250 gram (approximate) sub sample. The sample is pulverized to 95% -140 mesh. The sample is weighed, then rolled and homogenized and screened at 140 mesh.

The -140 mesh fraction is homogenized and 2 samples are fire assayed for Au. The +140 mesh material is assayed entirely. The resultant fire assay bead is digested with acid and after parting is analyzed on a Perkin Elmer atomic absorption machine using air-acetylene flame to .03 grams/t detection limit.

The entire set of samples is redone if the quality control standard is outside 2 standard deviations or if the blank is greater than .015 g/t.

The values are calculated back to the original sample weight providing a net gold value as well as 2-140 values and a single +140 mesh value.

Results are collated by computer and are printed along with accompanying quality control data (repeats and standards). Results are printed on a laser printer and are mailed to the client.

MULTI ELEMENT ICP ANALYSIS

A 0.5 gram sample is digested with 3ml of a 3:1:2 (HCl:HN03:H20) which contains beryllium which acts as an internal standard for 90 minutes in a water bath at 95°C. The sample is then diluted to 10ml with water. The sample is analysed on a Jarrell Ash ICP unit.

Results are collated by computer and are printed along with accompanying quality control data (repeats and standards). Results are mailed to the client.

<i>Detection Limit</i>		<i>Detection Limit</i>			
	<i>Low</i>	<i>Upper</i>			
Ag	0.2ppm	30.0ppm	Mo	1ppm	10,000ppm
Al	0.01%	10.0%	Na	0.01%	10.00%
As	5ppm	10,000ppm	Ni	1ppm	10,000ppm
Ba	5ppm	10,000ppm	P	10ppm	10,000ppm
Bi	5ppm	10,000ppm	Pb	2ppm	10,000ppm
Ca	0.01%	10.00%	Sb	5ppm	10,000ppm
Cd	1ppm	10,000ppm	Sn	20ppm	10,000ppm
Co	1ppm	10,000ppm	Sr	1ppm	10,000ppm
Cr	1ppm	10,000ppm	Ti	0.01%	10.00%
Cu	1ppm	10,000ppm	U	10ppm	10,000ppm
Fe	0.01%	10.00%	V	1ppm	10,000ppm
La	10ppm	10,000ppm	Y	1ppm	10,000ppm
Mg	0.01%	10.00%	Zn	1ppm	10,000ppm
Mn	1ppm	10,000ppm			

BASE METAL ASSAYS (Ag,Cu,Pb,Zn)

Samples are catalogued and dried. Rock samples are 2 stage crushed followed by pulverizing a 250 gram subsample. The subsample is rolled and homogenized and bagged in a prenumbered bag.

A suitable sample weight is digested with aqua regia. The sample is allowed to cool, bulked up to a suitable volume and analysed by an atomic absorption instrument, to .01 % detection limit.

Appropriate certified reference materials accompany the samples through the process providing accurate quality control. Result data is entered along with standards and repeat values and are mailed to the client.



Canadian Environmental & Metallurgical Inc.

Static Test Procedures for Redfern Tulsequah Project

February, 2009

1.0 Sample Receiving

Samples received were received from the Redfern Tulsequah project between August and October 2008. The samples were weighed and logged in.

2.0 Sample Preparation

Where necessary, samples were crushed in a jaw crusher to approximately 80% -1/4 inch. Each sample was mixed by passing through a ½ inch splitter box and recombining. A 200 g split was then made and pulverized in a ring pulverizer to 80% -200 mesh. Splits of the pulverized samples were then submitted for analysis.

3.0 Analytical Procedures

3.1 Paste pH

Paste pH was conducted according to the procedure by Sobek A., et. al. 1978 “Field and Laboratory Methods Applicable to Overburdens and Minesoils” (Report EPA-600/2-78-054).

3.2 Acid Base Accounting

Acid base accounting was conducted by the Modified ABA procedure as outlined in MEND Project 1.16.1c, 1991.

3.3 Total Sulphur

Total sulphur was determined by Assayers Canada Ltd. using a Leco furnace.

3.4 Inorganic carbon

Total inorganic carbon was conducted by Assayers Canada. A 0.0500 to 0.1100 gram sub-sample is weighed from the pulp bag for analysis into a glass test tube. Each batch of 30 assays includes three duplicates, at least one certified standard and one reagent grade standard, and a blank. The model 5014 Total Carbon Apparatus with the Acidification Module is used for the determination of Total Inorganic Carbon.

3.5 Sulphate-Sulphur

Sulphate-sulphur was determined by Assayers Canada Ltd. by the procedure outlined in ASTM D2492-02, “Standard Test Method for Forms of Sulfur in Coal”. In this procedure sulphate sulphur is dissolved with hydrochloric acid and the solution measured for sulphur by ICP-OES against known standards.

3.6 Sulphide-Sulphur

Sulphide-sulphur was determined by Assayers Canada Ltd. by the procedure outlined in ASTM D2492-02, “Standard Test Method for Forms of Sulfur in Coal”. In this procedure the residue from the sulphate sulphur leach is treated with 1:7 nitric acid : water and the solution analysed for sulphur by ICP-OES against known standards.

3.7 Total Metals

Total metals were conducted at Assayers Canada on the pulverized sample by digesting 0.500 g in aqua regia at 95°C for one hour. The extract is then diluted to 10.0 mL and analysed for metals by ICP-MS.

3.8 Whole Rock Analysis

Whole rock analysis was conducted by Assayers Canada Ltd.. In this procedure a -200 mesh sample of pulp is roasted to determine “Loss on Ignition”. 100 mg of sample is fused with lithium metaborate/lithium carbonate flux at 1000°C. The flux is then dissolved in nitric acid and the metals analysed by ICP-AES. The major elements are expressed as oxides.

3.0 Quality Control

For sample preparation the pulverizer is cleaned with silca sand. For analysis of sulphur forms, total inorganic carbon and metals a blank control is analysed. For all analysis a reference standard is run and duplicates are analysed every 10th sample.

Standard Operating Procedure

Modified Acid Base Accounting

Objectives:

- To determine the balance between acid producing and acid consuming components of a mine waste.

Procedure:

1. Crush and pulverize the sample to a target size of 80 percent minus 200 mesh (Tyler). Tailings samples should be tested at the received particle size.
2. Submit a sample of the material for total sulphur and sulphate sulphur analyses.
3. Place approximately 0.5 g of pulverized sample on a piece of aluminum foil or in a small shallow dish. Add one or two drops of 25 percent HCl to the sample. The presence of carbonate will be indicated by a bubbling or an audible “fizz”. Rate the “fizz” as: None, Slight, Moderate, and Strong.
4. Weight 2.00 g of the pulverized sample into a 250 mL Erlenmeyer flask and, as a first approximation, add the volume and normality of HCl.
5. Agitate the contents of the flask for 24 hours by placing on a shaking apparatus (@150 RPM). During the treatment period, check the pH of the pulp regularly (3-4 times). If the pH is above 2.0, add an appropriate volume of hydrochloric acid of the same strength as originally added.
6. At the end of the shaking period, check the pulp pH. If the total volume and strength of acid was appropriate, the end pH will be in the range 1.5-2.0. If the pH is above this range, the amount of acid added is judged to be insufficient for reaction. If the pH is below the range, the amount of acid added is judged to be too high, causing over-reaction. In either case, repeat the test using the next higher or lower volume or strength of HCl as required.
7. Titrate the contents of the flask using NaOH (corresponding to the normality of HCl used in step 5) to pH 8.3. Titrate with NaOH until a constant reading of 8.3 remains for at least 30 seconds.

NOTE: As a part of QA/QC, repeat the test for every 1st, 10th, 20th, and 34th sample.

Source: Acid Rock Drainage Prediction Manual. March 1991



8282 Sherbrooke Street,
Vancouver, B.C.
Canada V5X 4R6
Tel: 604 327-3436
Fax: 604 327-3423

Procedure Summary:

Total Inorganic Carbon (TIC) Analysis

Elements (Element Symbol) – C

Elements(s) Analyzed: Carbon

Unit of measurement - %

Procedure:

A 0.0500 to 0.1100 gram sub-sample is weighed from the pulp bag for analysis into a glass test tube. Each batch of 30 assays includes three duplicates, at least one certified standard and one reagent grade standard, and a blank. The model 5014 Total Carbon Apparatus with the Acidification Module is used for the determination of Total Inorganic Carbon.

Sweeping gas is pre-scrubbed in a potassium hydroxide solution. The solid sample is then acidified with hydrochloric acid in a heated reaction vessel to evolve forms of inorganic carbon as CO₂. Interfering gases are scrubbed out of the system by a potassium iodide scrubber. TIC is measured through coulometric titration by the carbon dioxide analyzer. The reaction time is about four to eight minutes.

Reagents and instrument parameters

Pre-scrubber	45% (w/v) KOH
Post scrubber	50% (w/v) KI
Acid	5 mL of 2N HCl
Reaction time	4 to 8 minutes
Temperature	100-105°C

Detection Limit: 0.01%



8282 Sherbrooke Street,
Vancouver, B.C.
Canada V5X 4R6
Tel: 604 327-3436
Fax: 604 327-3423

Procedure Summary:

Sulfate (SO_4) Assay

Element(s) Analyzed:

Sulfate SO_4 – %

Procedure:

A 4.000 gram sub-sample is weighed from the pulp bag for analysis. Each batch of 30 assays includes three duplicates, at least one natural standard, and a blank. The samples are digested with 20% HCl. This is a partial digestion process. After digestion is complete, the flasks are cooled, diluted to volume and mixed.

The resulting solutions are analyzed on an Inductively Coupled Plasma-Atomic Emission Spectrometer using the appropriate standard sets. The natural standard digested along with this set must be within established quality control parameters or the whole set is re-assayed.

Detection limit: 0.01 %



8282 Sherbrooke Street,
Vancouver, B.C.
Canada V5X 4R6
Tel: 604 327-3436
Fax: 604 327-3423

Procedure Summary:

Sulfide Assay

Element(s) Analyzed:

S as Sulfide %

Procedure:

A 1.000 gram sub-sample is weighed from the pulp bag for analysis. Each batch of 30 assays includes three duplicates, at least one natural standard, and a blank. The samples are leached with 40% HCl overnight. This is a partial digestion process. The residues are filtered and digested with 12.5% HNO₃. After digestion is complete, the flasks are cooled, diluted to volume and mixed.

The resulting solutions are analyzed on an Inductively Coupled Plasma-Atomic Emission Spectrometer using the appropriate standard sets. The natural standard digested along with this set must be within established quality control parameters or the whole set is re-assayed.

Detection limit: 0.01 %



8282 Sherbrooke Street,
Vancouver, B.C.
Canada V5X 4R6
Tel: 604 327-3436
Fax: 604 327-3423

Procedure Summary:

49 Element Aqua Regia Leach ICP-MS

Elements Analyzed:

Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr

Procedure:

0.500 grams of the sample pulp is digested for 2 hours at 95°C with a 3:1 HCl:HNO₃ mixture. After cooling, the sample is diluted to 25mL with deionized water.

The solutions are analyzed by Inductively Coupled Plasma-Mass Spectra using standard operating conditions.

Each batch has 22 samples, 3 duplicates, one blank and two standards. Each batch will be rerun if the duplicates or the standards do not match the expected values.

Detection limit and analytical range are element specific.



8282 Sherbrooke Street,
Vancouver, B.C.
Canada V5X 4R6
Tel: 604 327-3436
Fax: 604 327-3423

Procedure Summary:

Whole Rock Analysis (silicate rocks)

Elements Analyzed:

Al₂O₃, Ba, CaO, Fe₂O₃, LOI (loss on ignition), MgO, MnO, P₂O₅, K₂O, Sc, SiO₂, Na₂O, Sr, TiO₂, Y, Zr
C, S

Procedure:

- 100 mg sample is weighed into a carbon crucible containing 0.5 g of lithium metaborate/lithium carbonate flux
- mix thoroughly.
- Place in a muffle pre-heated at 1000° C and fused for 10 minutes.
- Pour resulting melt directly into a teflon or polypropylene bottle containing 50ml 10% HNO₃ with 20 ppm Cd as an internal standard.
- Place bottles on a shaking tray for 4 hours.
- Transfer solution to polystyrene auto-sampler test tubes for analysis by ICP-AES.

APPENDIX II
ASSAY CERTIFICATES

CERTIFICATE OF ASSAY AK 2008-1865

Redfern Resources
800-1281 West Georgia Street
Vancouver, B.C.
Postal Code V6E 3J7

22-Nov-08

No. of samples received: 6

Sample Type: Rock

Project: Tulsequah

Submitted by: Graham Giles

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)	Pb (%)	Zn (%)
1	837051	0.14	0.004				
2	837052	2.11	0.062	240	7.00	5.40	4.86
3	837053	0.07	0.002				
4	837054	<0.03	<0.001				
5	837055	<0.03	<0.001				
6	837056	<0.03	<0.001				

QC DATA:

Repeat:

1	837051	0.13	0.004				
2	837052	1.86	0.054	238	6.94	5.38	4.85

Resplit:

1	837051	0.15	0.004				
---	--------	------	-------	--	--	--	--

Standard:

OXi67	1.83	0.053					
Pb129			24.3	0.71	1.23	2.02	

JJ/ndw
XLS/08

ECO TECH LABORATORY LTD.
Jutta Jealouse
B.C. Certified Assayer

ICP CERTIFICATE OF ANALYSIS AW 2008- 1865

Redfern Resources
 800-1281 West Georgia Street
Vancouver, B.C.
 Postal Code V6E 3J7

Phone: 250-573-5700
 Fax : 250-573-4557

No. of samples received: 6
 Sample Type: Rock
Project: Tulsequah
 Submitted by: Graham Giles

Values in ppm unless otherwise reported

Et #.	Tag #	Ag ppm	Al %	As ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Se ppm	Sr ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
1	837051	0.5	1.82	>10000	60.0	1.02	2.27	0.41	22.6	75.5	73.0	13.39	5.1	15	0.19	2.0	1.58	657	1.32	0.051	22.1	1175	33.49	4.38	248.40	5.2	9.0	60.5	0.84	0.7	0.006	0.12	<0.1	52	0.1	57.2
2	837052	>30	0.07	2781.0	4.0	24.10	0.69	1488.00	22.4	141.5	2229.0	11.73	2.3	1250	0.03	1.5	0.29	531	1.15	0.029	35.8	119	>10000	>10	819.60	1.4	4.6	22.0	19.78	0.3	0.005	0.34	<0.1	4	<0.1	>10000
3	837053	1.0	0.52	1053.0	92.0	0.32	9.52	3.28	88.6	516.0	78.3	5.54	1.4	340	0.27	2.5	3.70	441	1.91	0.051	1109.0	1502	58.97	3.88	163.60	11.4	18.5	206.5	0.10	0.8	0.001	0.24	1.5	30	0.8	60.8
4	837054	0.8	0.52	30.7	103.5	3.46	>10	3.88	6.3	48.5	14.8	3.50	1.7	120	0.27	4.5	5.19	296	1661.00	0.041	23.7	1018	159.80	3.10	83.88	6.4	4.6	279.5	0.22	1.1	0.001	0.58	12.6	36	1.9	73.1
5	837055	0.2	0.91	18.7	86.5	0.44	7.16	0.23	26.2	34.5	85.9	5.54	2.9	15	0.38	2.0	2.29	1483	5.08	0.045	15.9	958	9.61	1.76	16.64	7.0	2.9	178.0	0.12	0.6	0.010	0.20	0.4	56	0.4	82.3
6	837056	0.4	0.74	9.0	19.5	1.06	0.15	0.29	16.8	94.0	13.9	6.01	2.8	15	0.24	4.0	0.59	115	9.54	0.047	17.8	634	22.51	4.90	3.18	2.3	17.1	8.0	0.30	2.3	0.004	0.10	0.5	24	<0.1	22.6

QC DATA:**Repeat:**

1	837051	0.4	1.71	>10000	56.5	0.94	2.18	0.43	24.3	71.0	73.8	14.46	5.0	15	0.18	2.0	1.48	636	1.57	0.045	23.4	1203	33.00	4.56	267.30	5.2	10.5	61.0	0.90	0.6	0.007	0.12	<0.1	50	0.1	57.9
---	--------	-----	------	--------	------	------	------	------	------	------	------	-------	-----	----	------	-----	------	-----	------	-------	------	------	-------	------	--------	-----	------	------	------	-----	-------	------	------	----	-----	------

Standard:

Pb129a	11.7	0.84	15.8	80.0	0.56	0.47	63.59	4.9	12.0	1419.0	1.66	2.5	85	0.08	4.5	0.67	370	2.10	0.056	5.2	431	6209.00	0.82	18.48	0.7	0.3	29.5	0.30	0.4	0.028	0.04	0.1	18	0.2	>10000
--------	------	------	------	------	------	------	-------	-----	------	--------	------	-----	----	------	-----	------	-----	------	-------	-----	-----	---------	------	-------	-----	-----	------	------	-----	-------	------	-----	----	-----	--------



Assayers Canada
8282 Sherbrooke St.
Vancouver, B.C.
V5X 4R6
Tel: (604) 327-3436
Fax: (604) 327-3423

Quality Assaying for over 25 Years

Assay Certificate

8V-2623-PA1

Company: **CEM Inc.**
Project: 0744/1745 **REDFERN**
Attn: Sohan Basra **TULSEQUAH**

Jul-23-08

We hereby certify the following assay of 5 pulp samples
submitted Jul-22-08

Sample Name	S-Total %	S-SO4 %	S-Sulphide %	TIC %
GGNAG001	0.15	<0.01	0.16	10.7
GGNAG003	0.05	<0.01	0.05	2.21
GGNAG004	0.05	0.02	0.01	1.79
GGNAG005	0.07	<0.01	0.06	0.50
GGNAG006	0.37	0.06	0.04	1.31
DUP-GGNAG001	0.14	<0.01	0.16	10.7
*AU 5	1.46			
*RTS-1		1.27		
*RTS-3			3.84	
*SY-4				0.90
*BLANK	<0.01	<0.01	<0.01	<0.01

Certified by _____

CEM Inc.

Attention: Sohan Basra

Project: 0744/1745

Sample type: Pulp

Assayers Canada
8282 Sherbrooke St., Vancouver, B.C., V5X 4R6
Tel: (604) 327-3436 Fax: (604) 327-3423

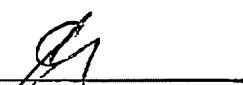
Report No : 8V2623PX
 Date : Jul-23-08

ICP-MS Report

Aqua Regia Digestion

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %
GGNAG001	<0.1	0.17	<0.5	392	<1	0.1	>10.00	1.0	4	1.3	15	0.4	2.2	0.65	1	<0.1	0.1	0.1	0.03	0.06	2	3.8	1.38	370	2.1	<0.01
GGNAG003	0.1	3.12	47.3	227	<1	<0.1	5.55	0.2	24	25.9	255	6.2	21.1	5.09	8	0.1	<0.1	<0.1	0.04	0.38	12	83.2	2.68	1856	0.5	0.03
GGNAG004	0.1	4.22	29.8	100	<1	<0.1	5.42	0.2	6	21.0	43	3.6	56.5	5.38	12	0.1	<0.1	<0.1	0.04	0.36	2	34.5	2.41	644	0.7	0.13
GGNAG005	0.1	3.18	4.4	17	<1	<0.1	1.64	0.1	4	29.7	61	1.6	53.3	5.01	10	0.1	<0.1	<0.1	0.01	0.03	1	54.7	3.05	760	0.5	0.04
GGNAG006	0.2	>5.00	68.2	215	<1	0.1	4.80	0.1	4	16.6	51	4.8	95.6	4.58	15	0.1	<0.1	<0.1	0.04	1.06	2	40.4	1.79	840	2.0	0.38

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95°C for 90 min and diluted to 25 ml.



CEM Inc.

Attention: Sohan Basra

Project: 0744/1745

Sample type: Pulp

Assayers Canada
 8282 Sherbrooke St., Vancouver, B.C., V5X 4R6
 Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V2623PX
 Date : Jul-23-08

ICP-MS Report

Aqua Regia Digestion

Sample Number	Nb ppm	Ni ppm	P %	Pb ppm	Rb ppm	Re ppb	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
GGHAG001	0.2	9.9	0.002	5.4	2.4	<5	0.17	1.9	1.1	<0.5	<0.1	828	<0.1	0.1	0.2	0.033	<0.1	1.2	16	0.2	5.3	36	2.2
GGHAG003	0.2	89.1	0.068	3.8	14.0	<5	0.06	8.3	16.0	<0.5	0.4	148	<0.1	<0.1	3.5	0.088	0.1	1.3	112	0.4	9.9	70	0.9
GGHAG004	0.1	25.0	0.053	1.9	11.9	<5	0.07	5.3	12.1	<0.5	0.2	112	<0.1	<0.1	0.3	0.087	0.1	0.1	148	0.2	5.9	88	0.6
GGHAG005	0.1	28.2	0.063	1.3	1.1	<5	0.09	3.4	10.2	<0.5	0.2	43	<0.1	<0.1	0.1	0.116	<0.1	0.1	144	0.3	4.5	69	0.7
GGHAG006	0.2	20.7	0.063	2.1	34.3	<5	0.42	19.4	14.7	<0.5	0.4	135	<0.1	0.1	0.3	0.135	0.3	0.1	158	0.3	6.5	65	0.8

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO₃ at 95°C for 90 min and diluted to 25 ml.



CEM Inc.

Attention: Sohan Basra

Project: 0744/1745 REDFERNS

Sample type: Pulp TULSEQUATH .

Assayers Canada
 8282 Sherbrooke St., Vancouver, B.C., V5X 4R6
 Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V2623PL
 Date : Jul-23-08

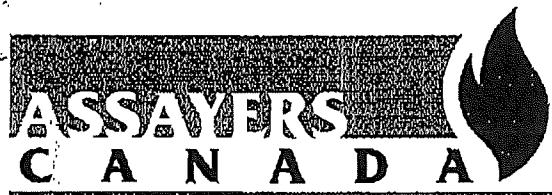
ICP-AES Whole Rock Assay

Lithium Metaborate Fusion

Sample Number	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	CaO %	MgO %	Na ₂ O %	K ₂ O %	TiO ₂ %	P ₂ O ₅ %	MnO %	BaO %	Cr ₂ O ₃ %	LOI %	Total %	C %	S %
GGMAG001	6.59	1.62	1.05	44.30	3.53	0.03	0.44	0.05	0.02	0.04	0.05	<0.01	40.95	98.67	10.80	0.15
GGMAG003	44.84	12.69	8.20	10.15	6.26	2.29	1.47	0.66	0.19	0.24	0.08	0.04	11.57	98.68	2.27	0.05
GGMAG004	43.78	16.26	7.84	9.67	5.15	2.93	1.29	0.94	0.18	0.12	0.04	0.01	10.46	98.67	1.87	0.05
GGMAG005	46.53	17.27	9.96	6.31	6.40	4.58	0.29	1.15	0.21	0.16	0.01	0.01	5.76	98.65	0.55	0.07
GGMAG006	47.23	17.46	7.09	10.30	4.20	2.56	1.94	0.87	0.21	0.12	0.04	0.01	6.60	98.64	1.40	0.37

These elements are not included in the total column: C, S

Sample is fused with Lithium metaborate
and dissolved in dilute HCl/HNO₃.



Assayers Canada
8282 Sherbrooke St.
Vancouver, B.C.
V5X 4R6
Tel: (604) 327-3436
Fax: (604) 327-3423

Quality Assaying for over 25 Years

Assay Certificate

8V-3351-PA1

Sep-26-08

Company: CEM Inc.
Project: 0744 Redfern Tulsequah
Attn:

We hereby certify the following assay of 22 pulp samples
submitted Sep-18-08

Sample Name	S-Total %	S-SO4 %	S-Sulphide %	TIC %
5200 ABA 08001	4.86	0.04	4.75	0.10
5200 ABA 08002	2.49	0.01	2.48	0.09
5200 ABA 08003	2.93	0.03	2.89	0.05
5200 ABA 08004	3.17	0.03	3.13	0.01
5200 ABA 08005	3.06	0.01	3.05	0.06
5200 ABA 08006	0.06	0.01	0.05	0.06
5200 ABA 08007	0.06	0.02	0.04	0.41
5200 ABA 08008	0.03	0.02	0.01	0.80
5200 ABA 08009	0.02	0.01	0.01	0.08
5200 ABA 08010	0.05	0.01	0.04	0.16
5200 ABA 08011	0.01	0.01	<0.01	0.13
5200 ABA 08012	0.03	0.01	0.02	0.04
5200 ABA 08013	0.01	0.01	<0.01	0.59
5200 ABA 08014	0.04	0.04	<0.01	0.44
5200 ABA 08015	0.10	0.03	0.07	0.35
5200 ABA 08016	0.01	0.01	<0.01	0.56
5200 ABA 08017	0.05	0.03	0.02	0.45
5200 ABA 08018	0.09	0.01	0.08	0.13
5200 ABA 08019	0.02	0.01	<0.01	<0.01
5200 ABA 08020	0.01	0.01	<0.01	0.23
5200 ABA 08021	0.01	0.01	<0.01	0.49
5200 ABA 08022	0.02	0.01	0.01	0.08
*DUP 5200 ABA 08001	4.96	0.05	4.64	0.10
*DUP 5200 ABA 08010	0.05	0.01	0.04	0.16
*DUP 5200 ABA 08020	0.01	0.01	<0.01	0.23
*Au-5	1.49			
*RTS-1		1.29		
*RTS-3			3.88	
*SY-4				0.90
*BLANK	<0.01	<0.01	<0.01	<0.01

Certified by _____



Assayers Canada
8282 Sherbrooke St.
Vancouver, B.C.
V5X 4R6
Tel: (604) 327-3436
Fax: (604) 327-3423

Quality Assaying for over 25 Years

Assay Certificate

8V-3351-PA2

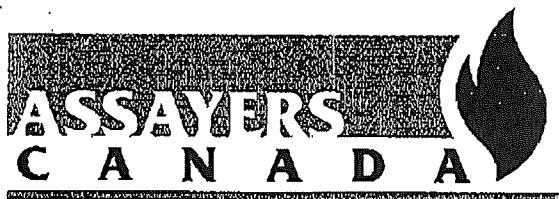
Company: **CEM Inc.**
Project: 0744 Redfern Tulsequah
Attn:

Sep-26-08

We hereby certify the following assay of 22 pulp samples submitted Sep-18-08

Sample Name	S-Total %	S-SO4 %	S-Sulphide %	TIC %
5400 ABA 08001	2.07	0.02	1.94	0.04
5400 ABA 08002	0.05	0.02	0.02	0.66
5400 ABA 08003	0.02	<0.01	0.02	0.06
5400 ABA 08004	0.02	<0.01	0.01	0.67
5400 ABA 08005	0.01	<0.01	<0.01	0.80
5400 ABA 08006	0.01	<0.01	<0.01	0.16
5400 ABA 08007	0.09	<0.01	0.08	1.05
5400 ABA 08008	4.73	0.01	4.12	0.49
5400 ABA 08009	5.13	0.03	5.06	0.28
5400 ABA 08010	0.03	<0.01	0.03	1.61
5400 ABA 08011	2.65	<0.01	2.46	0.05
5400 ABA 08012	2.80	0.01	2.63	0.20
5400 ABA 08013	0.10	<0.01	0.09	0.09
5400 ABA 08014	0.14	<0.01	0.14	0.08
5400 ABA 08015	1.90	<0.01	1.74	0.06
5400 ABA 08016	2.78	0.01	2.55	0.01
5400 ABA 08017	3.85	0.02	3.60	0.02
5400 ABA 08018	1.81	0.02	1.76	<0.01
5400 ABA 08019	1.94	0.02	1.90	<0.01
5400 ABA 08020	3.41	0.03	2.95	0.02
5400 ABA 08021	2.26	0.03	2.19	0.04
5400 ABA 08022	3.93	0.11	3.53	<0.01
*DUP 5400 ABA 08001	2.01	0.02	1.95	0.04
*DUP 5400 ABA 08010	0.04	<0.01	0.03	1.57
*DUP 5400 ABA 08020	3.36	0.03	2.89	0.02
*Au-5	1.47			
*RTS-1		1.26		
*RTS-3			3.93	
*SY-4				0.90
*BLANK	<0.01	<0.01	<0.01	<0.01

Certified by _____



Assayers Canada
8282 Sherbrooke St.
Vancouver, B.C.
V5X 4R6
Tel: (604) 327-3436
Fax: (604) 327-3423

Quality Assaying for over 25 Years

Assay Certificate

8V-3351-PA3

Company: CEM Inc.
Project: 0744 Redfern Tulsequah
Attn:

Sep-26-08

We hereby certify the following assay of 22 pulp samples
submitted Sep-18-08

Sample Name	S-Total %	S-SO4 %	S-Sulphide %	TIC %
5400 ABA 08023	2.15	0.09	1.74	0.10
5400 ABA 08024	0.09	0.01	0.07	0.03
5400 ABA 08025	0.35	0.02	0.33	0.02
5400 ABA 08026	21.3	0.15	17.9	0.01
5400 ABA 08027	0.06	<0.01	0.05	0.61
5400 ABA 08028	0.15	<0.01	0.15	0.81
5400 ABA 08029	3.02	0.07	2.77	0.02
5400 ABA 08030	2.67	0.04	2.63	<0.01
5400 ABA 08031	1.37	0.04	1.33	0.56
5400 ABA 08032	3.29	0.02	3.00	<0.01
5400 ABA 08033	1.56	0.02	1.52	0.05
5400 ABA 08034	1.00	0.01	0.98	0.02
5400 ABA 08035	5.81	0.10	5.71	0.02
5400 ABA 08036	2.82	0.11	2.70	0.01
5400 ABA 08037	4.07	0.04	3.81	0.04
5400 ABA 08038	3.03	0.05	2.97	0.07
5400 ABA 08039	9.52	0.10	9.22	0.01
5400 ABA 08040	1.97	0.04	1.93	0.01
5400 ABA 08041	11.5	0.02	11.2	0.07
5400 ABA 08042	5.91	0.07	5.80	<0.01
5400 ABA 08043	0.18	0.04	0.14	0.04
5400 ABA 08044	0.12	0.01	0.11	0.50
*DUP 5400 ABA 08023	2.00	0.08	1.81	0.09
*DUP 5400 ABA 08032	3.06	0.02	3.02	<0.01
*DUP 5400 ABA 08042	5.75	0.07	5.68	<0.01
*Au-5	1.49			
*RTS-1		1.27		
*RTS-3			4.02	
*SY-4				0.91
*BLANK	<0.01	<0.01	<0.01	<0.01

Certified by _____



Assayers Canada
8282 Sherbrooke St.
Vancouver, B.C.
V5X 4R6
Tel: (604) 327-3436
Fax: (604) 327-3423

Quality Assaying for over 25 Years

Assay Certificate

8V-3351-PA4

Company: CEM Inc.
Project: 0744 Redfern Tulsequah
Attn:

Sep-26-08

We hereby certify the following assay of 12 pulp samples
submitted Sep-18-08

Sample Name	S-Total %	S-SO4 %	S-Sulphide %	TIC %
5400 ABA 08045	7.74	0.04	6.83	0.14
5400 ABA 08046	2.20	1.27	0.90	0.05
5400 ABA 08047	0.07	0.02	0.05	0.01
5400 ABA 08048	0.22	0.13	0.09	<0.01
5400 ABA 08049	0.05	0.04	0.01	0.01
5400 ABA 08050	0.03	0.02	<0.01	<0.01
5400 ABA 08051	0.05	0.04	0.01	<0.01
5400 ABA 08052	0.18	0.03	0.14	<0.01
5400 ABA 08053	0.89	0.28	0.60	0.02
5400 ABA 08054	0.03	0.02	<0.01	0.20
5400 ABA 08055	0.07	0.01	0.05	0.04
5400 ABA 08056	0.11	0.09	0.01	<0.01
*DUP 5400 ABA 08045	7.59	0.03	7.03	0.13
*DUP 5400 ABA 08054	0.03	0.03	<0.01	0.19
*Au-5	1.47			
*RTS-1		1.27		
*RTS-3			3.98	
*SY-4				0.90
*BLANK	<0.01	<0.01	<0.01	<0.01

Certified by _____

CEM Inc.

Attention:

Project: 0744 Redfern Tulsequah

Sample type:

Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6

Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V3351PL

Date : Sep-26-08

ICP-AES Whole Rock Assay

Lithium Metaborate Fusion

Sample Number	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	CaO %	MgO %	Na ₂ O %	K ₂ O %	TiO ₂ %	P ₂ O ₅ %	MnO %	BaO %	Cr ₂ O ₃ %	LOI %	Total %	G %	S %
5200 ABA 08001	65.26	13.42	6.14	0.58	1.15	2.47	3.42	0.76	0.15	0.04	0.16	0.01	6.11	99.65	0.13	4.86
5200 ABA 08002	67.88	14.39	4.42	0.44	1.92	3.03	3.19	0.39	0.06	0.08	0.16	0.01	3.49	99.44	0.12	2.49
5200 ABA 08003	66.42	14.59	4.70	0.27	2.39	0.07	5.44	0.56	0.09	0.05	0.28	0.01	4.60	99.47	0.09	2.93
5200 ABA 08004	67.46	15.13	4.31	0.14	1.56	0.15	5.33	0.44	0.04	0.04	0.24	<0.01	4.76	99.62	0.03	3.17
5200 ABA 08005	66.75	13.87	4.76	0.36	1.85	0.03	5.26	0.45	0.07	0.08	0.36	0.01	4.63	98.48	0.10	3.06
5200 ABA 08006	69.51	16.41	2.59	0.64	1.60	0.63	4.86	0.37	0.08	0.03	0.09	<0.01	2.77	99.60	0.09	0.06
5200 ABA 08007	70.14	13.16	2.89	2.47	1.32	1.99	3.33	0.29	0.05	0.04	0.09	0.01	3.54	99.31	0.48	0.06
5200 ABA 08008	48.69	16.38	8.65	8.91	6.69	1.86	1.33	0.76	0.15	0.16	0.02	0.05	6.05	99.70	0.39	0.03
5200 ABA 08009	48.70	18.08	9.36	7.80	7.56	2.40	1.54	0.66	0.17	0.18	0.09	0.04	2.83	99.61	0.11	0.02
5200 ABA 08010	69.86	14.15	2.87	1.34	1.27	3.86	2.88	0.31	0.06	0.04	0.07	0.01	2.82	99.54	0.22	0.05
5200 ABA 08011	70.45	14.15	2.95	2.26	1.41	3.24	2.70	0.31	0.05	0.04	0.07	0.01	1.87	99.51	0.17	0.01
5200 ABA 08012	50.37	18.58	8.94	3.94	8.02	2.65	3.32	0.86	0.14	0.23	0.12	0.04	2.23	99.42	0.07	0.03
5200 ABA 08013	68.70	13.18	2.72	3.79	1.72	1.45	3.25	0.29	0.05	0.04	0.07	<0.01	4.24	99.51	0.72	0.01
5200 ABA 08014	49.26	17.68	8.99	7.43	6.92	0.82	3.46	0.79	0.16	0.17	0.04	0.03	3.85	99.59	0.60	0.04
5200 ABA 08015	51.64	16.57	8.07	8.13	6.56	2.57	0.78	0.73	0.15	0.15	0.04	0.03	4.03	99.46	0.47	0.10
5200 ABA 08016	49.97	16.81	8.52	6.23	6.61	4.35	1.17	0.72	0.16	0.16	0.04	0.03	4.84	99.62	0.67	0.01
5200 ABA 08017	51.17	16.48	7.70	8.82	5.78	4.00	0.79	0.77	0.15	0.15	0.03	0.03	3.97	99.85	0.53	0.05
5200 ABA 08018	50.56	17.43	8.84	8.10	6.61	4.41	0.28	0.79	0.17	0.14	0.01	0.03	2.29	99.66	0.19	0.09
5200 ABA 08019	50.70	17.24	8.81	7.13	7.14	3.17	2.11	0.79	0.18	0.11	0.14	0.03	2.21	99.76	0.01	0.02
5200 ABA 08020	50.16	16.88	9.14	7.56	6.72	2.93	1.20	0.77	0.16	0.15	0.04	0.03	3.97	99.72	0.29	0.01
5200 ABA 08021	49.81	17.21	8.79	7.77	6.57	3.02	1.37	0.72	0.16	0.13	0.04	0.03	4.10	99.71	0.57	0.01
5200 ABA 08022	51.36	17.09	8.93	6.26	7.55	4.03	1.07	0.77	0.13	0.15	0.04	0.03	2.50	99.92	0.11	0.02
5400 ABA 08001	69.52	14.45	3.12	0.33	0.74	0.74	6.24	0.34	0.07	0.03	0.27	<0.01	3.96	99.79	0.07	2.07
5400 ABA 08002	61.12	14.30	4.59	3.96	3.24	3.03	2.80	0.49	0.10	0.12	1.01	<0.01	4.78	99.55	0.72	0.05
5400 ABA 08003	51.37	17.33	8.42	6.79	6.60	4.08	1.53	0.77	0.15	0.15	0.10	0.02	2.43	99.75	0.07	0.02
5400 ABA 08004	50.77	16.59	7.86	5.56	6.64	4.87	0.69	0.67	0.14	0.16	0.03	0.02	5.95	99.93	0.76	0.02
5400 ABA 08005	48.61	16.75	8.04	7.48	6.77	3.82	1.33	0.68	0.16	0.17	0.03	0.01	5.94	99.80	0.92	0.01
5400 ABA 08006	45.69	19.59	10.09	6.05	8.07	2.57	2.65	0.78	0.17	0.15	0.07	0.02	3.71	99.60	0.19	0.01
5400 ABA 08007	48.55	15.65	8.29	9.13	6.64	2.34	1.68	0.70	0.16	0.19	0.07	0.01	5.93	99.34	1.14	0.09
5400 ABA 08008	53.73	16.94	8.86	6.05	2.30	0.41	3.73	0.77	0.10	0.29	0.21	<0.01	5.99	99.36	0.56	4.73

These elements are not included in the total column: C, S

Sample is fused with Lithium metaborate
and dissolved in dilute HCl/HNO₃.

CEM Inc.

Attention:

Project: 0744 Redfern Tulsequah

Sample type:

Assayers Canada
 8282 Sherbrooke St., Vancouver, B.C., V5X 4R6
 Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V3351PL
 Date : Sep-26-08

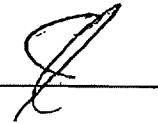
ICP-AES Whole Rock Assay

Lithium Metaborate Fusion

Sample Number	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	CaO %	MgO %	Na ₂ O %	K ₂ O %	TiO ₂ %	P ₂ O ₅ %	MnO %	BaO %	Cr ₂ O ₃ %	LOI %	Total %	C %	S %
5400 ABA 08009	50.63	18.43	10.89	4.28	3.54	0.24	4.24	0.82	0.12	0.25	0.17	<0.01	6.04	99.65	0.31	5.13
5400 ABA 08010	37.95	19.75	7.81	13.64	5.76	2.56	2.43	1.07	0.13	0.32	0.10	0.01	7.86	99.39	1.74	0.03
5400 ABA 08011	47.69	18.63	11.26	4.25	8.40	0.81	1.97	0.85	0.14	0.20	0.07	<0.01	5.38	99.62	0.08	2.65
5400 ABA 08012	44.48	22.60	9.46	5.39	6.20	1.41	3.42	1.02	0.23	0.13	0.10	<0.01	4.79	99.22	0.22	2.80
5400 ABA 08013	51.36	17.88	10.11	3.62	8.87	0.71	1.50	0.79	0.12	0.19	0.04	<0.01	4.40	99.56	0.11	0.10
5400 ABA 08014	51.33	17.74	9.76	3.80	9.01	0.97	1.47	0.81	0.12	0.18	0.05	0.01	4.13	99.38	0.09	0.14
5400 ABA 08015	47.87	18.91	10.76	3.45	8.61	1.68	1.83	0.85	0.14	0.20	0.07	<0.01	5.13	99.48	0.07	1.90
5400 ABA 08016	48.58	17.53	12.13	2.60	7.85	1.70	1.87	1.04	0.24	0.26	0.08	<0.01	5.44	99.30	0.02	2.78
5400 ABA 08017	57.98	17.75	6.67	2.54	2.96	2.41	3.66	0.91	0.22	0.17	0.18	<0.01	4.00	99.44	0.07	3.85
5400 ABA 08018	68.70	14.80	3.59	0.48	1.46	1.64	4.28	0.41	0.05	0.08	0.24	<0.01	3.21	98.92	0.01	1.81
5400 ABA 08019	66.18	15.92	4.54	0.28	1.91	0.20	5.86	0.43	0.08	0.10	0.27	<0.01	3.70	99.45	0.01	1.94
5400 ABA 08020	66.24	14.69	5.68	0.43	1.70	0.03	5.34	0.40	0.07	0.10	0.29	<0.01	4.33	99.31	0.03	3.41
5400 ABA 08021	70.80	12.99	4.03	0.53	0.88	1.91	3.42	0.39	0.06	0.04	0.20	<0.01	3.16	98.42	0.07	2.26
5400 ABA 08022	69.37	11.87	5.36	0.31	0.35	0.09	7.15	0.38	0.02	0.01	0.77	<0.01	3.15	98.84	0.02	3.93
5400 ABA 08023	70.64	12.31	3.17	0.73	0.41	0.33	6.41	0.34	0.06	0.02	1.08	0.02	3.34	98.85	0.12	2.15
5400 ABA 08024	49.41	13.79	8.32	9.56	8.52	0.19	5.35	0.75	0.34	0.20	0.65	0.05	2.48	99.63	0.05	0.09
5400 ABA 08025	52.03	17.18	9.65	1.87	6.37	0.16	7.26	0.81	0.41	0.15	0.26	0.02	3.63	99.82	0.03	0.35
5400 ABA 08026	43.38	9.19	25.70	0.23	0.43	0.62	4.80	0.28	0.03	0.01	0.66	0.01	14.31	99.66	0.02	21.30
5400 ABA 08027	58.18	16.06	6.38	5.92	3.80	3.73	1.83	0.70	0.17	0.12	0.13	0.02	2.53	99.57	0.69	0.06
5400 ABA 08028	56.57	15.61	6.19	6.48	3.74	3.64	1.78	0.67	0.16	0.13	0.15	0.03	4.14	99.29	0.85	0.15
5400 ABA 08029	71.56	11.98	3.86	0.34	0.43	1.91	2.91	0.32	0.05	0.01	1.63	0.01	3.60	98.59	0.03	3.02
5400 ABA 08030	69.81	12.38	4.75	0.24	1.62	0.04	4.78	0.33	0.06	0.02	0.34	0.01	4.54	98.93	0.01	2.67
5400 ABA 08031	47.85	16.88	8.77	7.61	8.09	0.42	4.61	0.78	0.11	0.23	0.88	0.06	2.91	99.20	0.63	1.37
5400 ABA 08032	60.18	15.05	7.41	0.40	6.54	0.10	4.02	0.42	0.07	0.10	0.29	<0.01	5.11	99.69	0.01	3.29
5400 ABA 08033	56.93	16.82	6.70	1.02	6.86	0.54	4.87	0.67	0.13	0.16	0.34	0.03	4.58	99.63	0.06	1.56
5400 ABA 08034	57.01	15.77	7.59	0.44	8.16	0.05	3.98	0.63	0.11	0.17	0.24	0.03	5.47	99.65	0.03	1.00
5400 ABA 08035	61.70	11.00	11.28	0.34	4.89	0.04	2.94	0.32	0.06	0.11	0.16	0.01	6.81	99.66	0.04	5.81
5400 ABA 08036	67.39	12.72	5.64	0.35	2.31	0.06	5.43	0.36	0.06	0.05	0.62	<0.01	4.69	99.69	0.03	2.82
5400 ABA 08037	69.13	11.84	6.01	0.31	1.21	0.53	4.32	0.33	0.07	0.03	1.37	0.01	4.22	99.37	0.05	4.07
5400 ABA 08038	71.08	12.30	4.82	0.47	1.03	0.21	4.47	0.37	0.07	0.03	0.99	0.01	3.60	99.45	0.09	3.03

These elements are not included in the total column: C, S

Sample is fused with Lithium metaborate
and dissolved in dilute HCl/HNO₃.



CEM Inc.

Attention:

Project: 0744 Redfern Tulsequah

Sample type:

Assayers Canada
8282 Sherbrooke St., Vancouver, B.C., V5X 4R6
Tel: (604) 327-3436 Fax: (604) 327-3423

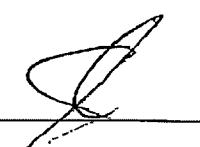
Report No : 8V3351PL
 Date : Sep-26-08

ICP-AES Whole Rock Assay

Lithium Metaborate Fusion

Sample Number	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	CaO %	MgO %	Na ₂ O %	K ₂ O %	TiO ₂ %	P ₂ O ₅ %	MnO %	BaO %	Cr ₂ O ₃ %	LOI %	Total %	C %	S %
5400 ABA 08039	58.33	14.03	11.66	0.13	0.41	1.15	3.84	0.33	0.02	0.01	1.64	0.01	7.63	99.20	0.03	9.52
5400 ABA 08040	73.97	11.84	3.63	0.16	1.34	0.17	4.19	0.32	0.04	0.03	0.42	0.01	3.43	99.54	0.02	1.97
5400 ABA 08041	41.40	14.66	20.77	0.38	6.18	0.02	2.68	1.10	0.27	0.21	0.20	0.01	11.37	99.45	0.15	11.50
5400 ABA 08042	55.27	13.34	12.22	0.87	5.49	0.02	2.74	1.10	0.64	0.13	0.16	0.01	7.54	99.52	0.03	5.91
5400 ABA 08043	78.09	12.61	0.94	0.18	0.17	3.36	2.55	0.04	0.02	0.02	0.09	0.01	1.65	99.73	0.03	0.18
5400 ABA 08044	48.09	17.13	8.60	3.68	11.22	3.61	0.63	0.82	0.11	0.34	0.04	0.07	5.21	99.53	0.48	0.12
5400 ABA 08045	47.02	14.94	15.73	0.79	6.98	0.39	2.54	0.69	0.12	0.22	<0.01	10.11	99.74	0.15	7.74	
5400 ABA 08046	54.40	13.46	6.62	6.80	9.87	1.25	0.60	0.96	0.45	0.18	0.18	0.08	6.58	>100.00	0.05	2.20
5400 ABA 08047	64.19	18.66	2.29	2.90	2.37	0.78	4.42	0.38	0.04	0.05	0.65	<0.01	3.76	>100.00	0.02	0.07
5400 ABA 08048	47.77	18.13	10.66	8.51	8.02	2.61	0.19	0.90	0.21	0.21	0.02	0.01	3.48	>100.00	0.03	0.22
5400 ABA 08049	63.84	17.14	3.61	2.12	2.48	6.54	1.26	0.33	0.06	0.05	0.08	0.01	1.92	99.44	0.03	0.05
5400 ABA 08050	64.89	15.54	3.38	1.73	3.08	5.53	1.69	0.33	<0.01	0.06	0.13	0.01	2.08	99.45	0.03	0.03
5400 ABA 08051	55.57	15.16	8.94	4.96	7.50	3.05	0.30	0.73	0.16	0.15	0.02	0.01	3.87	>100.00	0.01	0.05
5400 ABA 08052	47.96	16.99	10.68	7.06	9.67	2.54	0.31	0.78	0.15	0.23	0.01	0.01	3.86	>100.00	0.01	0.18
5400 ABA 08053	73.44	13.75	1.86	0.51	0.43	5.85	0.99	0.23	0.04	0.01	0.06	0.01	1.54	98.73	0.04	0.89
5400 ABA 08054	73.21	14.10	1.55	1.27	0.40	3.48	2.85	0.09	<0.01	0.05	0.12	0.01	2.17	99.28	0.24	0.03
5400 ABA 08055	49.13	17.24	8.01	8.20	9.69	2.53	0.65	0.83	0.13	0.24	0.02	0.05	3.70	>100.00	0.06	0.07
5400 ABA 08056	50.74	16.95	8.19	8.44	8.44	2.94	0.75	0.84	0.13	0.13	0.20	0.05	2.77	>100.00	0.02	0.11

These elements are not included in the total column: C, S

Sample is fused with Lithium metaborate
and dissolved in dilute HCl/HNO₃.


CEM Inc.

Attention:

Project: 0744 Redfem Tulsequah

Sample type: Pulp

Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6

Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V3351PX

Date : Sep-26-08

ICP-MS Report

Aqua Regia Digestion

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %
S200 ABA 08001	0.2	0.14	54.2	54	<1	0.1	0.24	0.1	7	21.2	20	0.4	156.2	3.79	<1	<0.1	<0.1	0.1	0.01	0.10	3	1.6	0.12	160	1.6	0.01
S200 ABA 08002	<0.1	0.49	28.8	100	<1	0.1	0.17	0.1	13	6.6	33	1.5	165.6	2.50	1	<0.1	<0.1	<0.1	0.02	0.26	7	14.2	0.50	502	0.9	0.02
S200 ABA 08003	0.2	0.41	25.8	113	<1	0.1	0.09	0.1	14	11.2	17	1.4	34.4	2.69	1	<0.1	<0.1	<0.1	0.02	0.28	6	8.8	0.39	203	2.4	0.01
S200 ABA 08004	0.1	0.13	10.7	72	<1	0.1	0.04	0.4	12	6.1	12	0.5	28.1	2.64	<1	<0.1	<0.1	0.1	0.02	0.12	6	1.4	0.04	78	2.0	<0.01
S200 ABA 08005	0.1	0.21	50.1	103	<1	0.1	0.14	0.1	15	9.5	20	0.5	33.5	2.60	<1	<0.1	<0.1	0.1	0.01	0.17	7	2.1	0.11	230	2.1	0.01
S200 ABA 08006	0.1	0.84	58.2	106	<1	<0.1	0.25	0.3	25	3.4	12	1.2	40.2	1.05	1	<0.1	<0.1	<0.1	0.01	0.17	12	13.2	0.46	203	0.5	0.02
S200 ABA 08007	<0.1	0.66	15.6	92	<1	0.1	1.81	<0.1	23	3.6	26	2.0	8.9	1.02	2	<0.1	<0.1	<0.1	0.01	0.33	9	5.9	0.39	213	0.6	0.03
S200 ABA 08008	<0.1	>5.00	24.6	130	<1	<0.1	3.81	0.1	6	24.5	141	2.6	43.1	4.81	8	<0.1	<0.1	<0.1	0.02	1.13	2	42.8	2.72	856	0.5	0.38
S200 ABA 08009	0.1	4.41	12.1	277	<1	<0.1	1.19	<0.1	6	27.8	178	2.4	36.8	4.32	7	<0.1	<0.1	<0.1	0.01	1.14	2	34.8	3.90	990	0.5	0.23
S200 ABA 08010	<0.1	0.80	2.4	47	<1	0.1	0.57	<0.1	20	4.4	26	4.0	52.8	1.23	2	<0.1	<0.1	<0.1	0.01	0.46	8	8.3	0.32	200	0.7	0.04
S200 ABA 08011	<0.1	1.42	3.0	60	<1	<0.1	1.12	0.1	10	4.5	22	2.4	22.6	1.17	4	<0.1	0.1	<0.1	0.01	0.50	5	14.3	0.53	214	0.5	0.12
S200 ABA 08012	0.1	>5.00	6.4	743	<1	<0.1	1.97	<0.1	8	25.9	208	7.6	43.9	5.05	12	<0.1	<0.1	<0.1	0.03	2.47	4	43.1	3.53	906	0.2	0.47
S200 ABA 08013	<0.1	1.29	1.6	49	<1	<0.1	1.93	0.1	26	4.6	18	3.1	38.3	1.34	2	<0.1	<0.1	<0.1	0.01	0.27	11	18.6	0.51	262	0.4	0.06
S200 ABA 08014	0.1	>5.00	12.7	280	1	<0.1	4.25	0.1	7	24.3	182	19.7	22.6	5.96	12	0.1	<0.1	<0.1	0.04	2.87	3	78.6	2.94	1127	0.3	0.32
S200 ABA 08015	0.1	4.41	9.5	199	<1	<0.1	3.17	0.1	6	25.4	140	1.9	30.9	3.92	8	<0.1	0.1	<0.1	0.01	0.60	3	39.4	3.55	825	0.6	0.26
S200 ABA 08016	0.1	3.53	3.1	228	<1	<0.1	2.63	0.1	7	25.7	174	4.7	29.2	4.77	9	0.1	0.1	<0.1	0.01	0.95	3	38.0	3.52	1034	0.3	0.06
S200 ABA 08017	0.1	2.80	3.1	93	<1	<0.1	2.13	0.1	8	22.1	115	2.7	96.7	3.29	6	<0.1	0.1	<0.1	0.01	0.41	4	26.4	2.66	755	0.6	0.12
S200 ABA 08018	0.1	2.61	25.2	40	<1	<0.1	1.17	<0.1	8	26.8	105	0.9	72.9	3.57	5	<0.1	0.1	<0.1	0.01	0.14	3	15.1	2.86	599	1.0	0.06
S200 ABA 08019	0.1	3.05	5.1	345	<1	<0.1	0.51	<0.1	8	26.5	155	2.4	88.0	4.06	5	<0.1	0.1	<0.1	0.01	1.46	3	17.4	2.59	546	0.5	0.08
S200 ABA 08020	0.1	3.56	3.9	257	<1	<0.1	1.41	0.1	9	33.9	158	3.2	96.2	4.91	6	<0.1	0.1	<0.1	0.01	1.09	4	27.9	4.03	992	0.7	0.11
S200 ABA 08021	0.2	4.31	3.5	280	<1	<0.1	2.78	0.2	6	25.8	198	4.0	138.6	4.72	8	0.1	0.1	<0.1	0.01	1.12	2	35.7	3.15	768	0.4	0.17
S200 ABA 08022	0.1	3.52	6.9	205	<1	<0.1	1.03	0.2	6	26.9	142	1.5	129.0	4.36	6	<0.1	0.1	<0.1	0.01	0.85	2	16.8	3.46	811	1.1	0.19
S400 ABA 08001	0.6	0.24	53.9	103	<1	0.1	0.26	0.3	16	5.8	32	0.2	31.4	1.79	1	<0.1	<0.1	0.2	0.01	0.16	8	0.9	0.10	104	3.6	0.01
S400 ABA 08002	<0.1	2.79	25.3	4161	<1	<0.1	3.60	0.1	12	20.2	105	4.9	16.3	2.94	8	<0.1	<0.1	<0.1	0.02	1.15	7	32.4	2.09	803	1.2	0.13
S400 ABA 08003	<0.1	2.59	3.0	370	<1	<0.1	1.06	<0.1	8	21.5	178	3.8	10.6	3.19	7	0.1	0.1	<0.1	0.01	0.94	3	26.0	2.74	645	0.3	0.04
S400 ABA 08004	0.1	3.34	2.1	122	<1	<0.1	3.75	0.1	8	27.4	136	2.6	11.2	4.47	11	0.1	<0.1	<0.1	0.02	0.45	3	46.1	4.27	876	0.3	0.07
S400 ABA 08005	0.1	4.19	1.8	238	<1	<0.1	5.61	0.1	6	28.3	173	3.5	48.7	4.45	12	0.1	<0.1	0.01	1.08	3	31.3	4.14	1108	0.3	0.22	
S400 ABA 08006	0.2	>5.00	2.0	465	<1	<0.1	2.39	0.1	7	34.6	227	4.8	181.9	5.85	14	0.1	<0.1	<0.1	0.02	2.07	3	44.5	5.53	945	0.4	0.25
S400 ABA 08007	0.1	4.21	13.5	317	<1	<0.1	5.85	0.2	6	27.7	137	4.0	68.2	4.24	11	<0.1	<0.1	<0.1	0.05	1.06	2	63.7	2.92	873	0.7	0.33
S400 ABA 08008	0.5	4.55	22.7	67	<1	0.3	4.23	1.5	2	29.2	28	1.7	100.4	5.63	8	<0.1	<0.1	0.03	0.77	1	21.8	1.06	1821	0.7	0.20	

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95°C for 90 min and diluted to 25 ml.

CEM Inc.

Attention:

Project: 0744 Redfern Tulsequah

Sample type: Pulp

Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6

Tel: (604) 327-3436 Fax: (604) 327-3423

Report No

8V3351PX

Date

Sep-26-08

ICP-MS Report

Aqua Regia Digestion

Sample Number	Nb ppm	Ni ppm	P %	Pb ppm	Rb ppm	Re ppb	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
5200 ABA 08001	0.1	3.3	0.053	20.6	2.7	<5	4.63	6.1	0.9	1.5	0.1	11	<0.1	2.2	0.5	<0.005	<0.1	0.1	<2	0.2	2.4	30	0.3
5200 ABA 08002	0.1	3.6	0.019	2.8	8.9	<5	2.30	3.4	1.9	<0.5	0.2	14	<0.1	0.1	1.9	0.007	0.1	0.2	<2	0.1	2.3	37	0.9
5200 ABA 08003	0.1	3.0	0.034	9.2	8.0	<5	2.84	4.7	1.1	<0.5	0.1	19	<0.1	0.8	0.8	<0.005	0.1	0.3	<2	0.2	2.2	29	0.6
5200 ABA 08004	<0.1	2.6	0.016	23.9	3.3	<5	3.03	9.0	0.5	2.2	<0.1	4	<0.1	3.5	0.9	<0.005	<0.1	0.1	<2	0.1	1.1	95	0.5
5200 ABA 08005	<0.1	4.0	0.029	8.9	4.1	<5	2.91	4.2	0.7	<0.5	0.1	15	<0.1	0.3	1.2	<0.005	<0.1	0.1	<2	0.1	2.3	16	0.6
5200 ABA 08006	<0.1	3.9	0.035	9.2	4.9	<5	0.07	11.6	0.9	<0.5	0.1	10	<0.1	0.1	2.5	<0.005	<0.1	0.3	<2	0.1	3.8	45	0.6
5200 ABA 08007	0.4	3.8	0.023	9.1	9.4	<5	0.05	3.1	1.5	<0.5	0.2	52	<0.1	<0.1	2.8	0.031	0.1	0.3	4	0.2	4.3	33	1.1
5200 ABA 08008	0.1	57.2	0.045	1.1	20.7	<5	0.05	12.7	11.0	<0.5	0.2	132	<0.1	<0.1	0.3	0.124	0.2	0.1	136	0.1	6.2	48	0.4
5200 ABA 08009	0.1	83.4	0.072	0.4	14.8	<5	<0.05	0.5	4.2	<0.5	0.1	52	<0.1	<0.1	0.2	0.139	0.1	0.1	81	0.2	5.8	61	2.6
5200 ABA 08010	0.7	2.9	0.017	5.8	12.3	<5	0.07	3.1	1.5	<0.5	0.3	35	<0.1	<0.1	2.8	0.036	0.1	0.4	<2	0.2	4.8	32	1.1
5200 ABA 08011	0.9	2.7	0.028	6.7	15.0	<5	<0.05	1.7	1.7	<0.5	0.4	68	<0.1	<0.1	1.0	0.084	0.1	0.2	4	0.3	5.1	48	1.0
5200 ABA 08012	0.1	67.1	0.055	2.2	48.4	<5	<0.05	7.8	19.4	<0.5	0.3	241	<0.1	<0.1	0.4	0.099	0.3	0.1	183	0.2	7.2	60	0.3
5200 ABA 08013	0.2	1.7	0.017	4.0	9.8	<5	<0.05	2.4	1.6	<0.5	0.2	66	<0.1	<0.1	2.7	0.020	0.1	0.4	<2	0.1	5.9	29	0.8
5200 ABA 08014	0.1	65.0	0.054	2.6	71.0	<5	<0.05	6.5	18.7	<0.5	0.3	129	<0.1	<0.1	0.3	0.193	0.4	0.1	179	1.4	7.0	55	0.3
5200 ABA 08015	0.1	66.6	0.070	0.7	10.7	<5	0.10	1.8	7.4	<0.5	0.2	50	<0.1	<0.1	0.2	0.181	0.1	0.1	116	0.2	6.1	57	2.0
5200 ABA 08016	0.1	64.7	0.067	0.6	23.4	<5	<0.05	1.0	6.7	<0.5	0.2	25	<0.1	<0.1	0.2	0.221	0.1	0.1	145	0.2	6.8	70	1.0
5200 ABA 08017	0.2	56.7	0.065	1.2	11.7	<5	0.07	6.7	5.5	<0.5	0.1	52	<0.1	<0.1	0.3	0.162	0.1	0.1	87	0.2	7.6	45	1.9
5200 ABA 08018	0.1	65.5	0.077	0.3	3.1	<5	0.11	0.4	1.9	<0.5	0.1	16	<0.1	<0.1	0.3	0.155	<0.1	0.1	47	0.3	6.2	45	2.0
5200 ABA 08019	0.1	55.3	0.064	1.0	28.9	<5	<0.05	0.3	4.8	<0.5	0.1	23	<0.1	<0.1	0.2	0.166	0.1	0.1	83	0.2	5.5	70	2.0
5200 ABA 08020	0.1	73.7	0.071	0.1	22.2	<5	<0.05	1.4	5.1	<0.5	0.1	46	<0.1	<0.1	0.2	0.151	0.1	0.1	96	0.2	6.7	57	1.2
5200 ABA 08021	0.1	59.5	0.063	1.9	27.3	<5	<0.05	1.0	8.5	<0.5	0.3	56	<0.1	<0.1	0.2	0.179	0.1	0.1	155	0.3	6.2	91	0.9
5200 ABA 08022	0.1	67.4	0.064	1.3	15.3	<5	<0.05	0.2	2.5	<0.5	0.2	13	<0.1	<0.1	0.2	0.121	0.1	0.1	77	0.2	5.5	91	1.3
S400 ABA 08001	0.1	2.6	0.039	28.2	2.3	<5	2.03	6.6	0.9	<0.5	0.2	10	<0.1	<0.1	1.3	<0.005	0.4	0.1	<2	0.2	2.4	61	0.6
S400 ABA 08002	0.1	46.2	0.053	11.6	21.9	<5	<0.05	13.2	10.8	<0.5	0.3	162	<0.1	<0.1	1.2	0.079	0.3	0.2	66	0.5	5.2	76	0.5
S400 ABA 08003	0.1	55.3	0.086	1.0	31.0	<5	<0.05	0.6	4.9	<0.5	0.2	32	<0.1	<0.1	0.1	0.220	0.1	0.1	117	0.3	6.7	55	1.4
S400 ABA 08004	0.1	79.8	0.078	1.6	10.6	<5	<0.05	5.4	13.4	<0.5	0.1	48	<0.1	<0.1	0.2	0.127	0.1	0.1	131	0.2	6.6	64	0.3
S400 ABA 08005	0.1	82.6	0.082	1.0	31.2	<5	<0.05	1.6	12.3	<0.5	0.2	50	<0.1	<0.1	0.2	0.180	0.1	<0.1	162	0.2	6.7	93	0.7
S400 ABA 08006	0.1	95.4	0.094	1.1	57.8	<5	<0.05	4.1	11.2	<0.5	0.4	72	<0.1	<0.1	0.2	0.239	0.3	<0.1	208	0.2	6.5	84	0.4
S400 ABA 08007	0.1	78.8	0.078	5.0	24.0	<5	0.10	13.1	15.9	<0.5	0.3	126	<0.1	<0.1	0.2	0.102	0.2	0.1	150	0.5	6.8	86	0.2
S400 ABA 08008	0.2	11.9	0.044	117.8	20.0	<5	4.73	5.0	11.3	<0.5	0.2	74	<0.1	0.3	0.2	0.145	0.2	0.1	137	0.4	5.0	342	0.6

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95°C for 90 min and diluted to 25 ml.

CEM Inc.

Attention:

Project: 0744 Redfern Tulsequah

Sample type: Pulp

Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6

Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V3351PX

Date : Sep-26-08

ICP-MS Report

Aqua Regia Digestion

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %
5400 ABA 08009	0.7	4.65	57.0	40	<1	0.1	3.33	1.3	2	35.1	29	1.5	159.5	7.41	10	0.1	<0.1	0.1	0.05	1.01	1	33.3	2.23	1392	0.8	0.17
5400 ABA 08010	0.2	>5.00	3.0	645	<1	<0.1	>10.00	0.5	3	26.8	146	2.2	103.9	4.51	18	0.1	<0.1	<0.1	0.06	1.97	1	26.1	3.49	1859	0.3	0.73
5400 ABA 08011	0.3	>5.00	12.7	127	<1	0.1	4.57	0.7	2	34.3	33	2.6	84.7	6.98	19	0.1	<0.1	<0.1	0.06	1.22	1	49.4	5.76	1210	0.8	0.53
5400 ABA 08012	0.3	>5.00	17.0	98	<1	0.2	4.26	0.2	3	39.0	35	3.8	67.6	6.18	14	<0.1	<0.1	<0.1	0.05	1.35	1	32.6	4.08	842	0.7	0.69
5400 ABA 08013	0.1	>5.00	6.3	217	<1	<0.1	3.60	0.2	2	25.9	40	1.6	103.4	6.15	18	0.1	<0.1	<0.1	0.05	0.96	1	32.9	5.66	1055	0.4	0.42
5400 ABA 08014	0.2	>5.00	5.9	278	<1	<0.1	3.24	0.2	2	23.5	43	1.2	106.5	5.84	15	<0.1	<0.1	<0.1	0.05	1.08	1	36.4	4.79	986	0.4	0.37
5400 ABA 08015	0.4	>5.00	32.7	208	<1	<0.1	3.15	0.2	2	28.3	41	1.2	176.5	7.03	18	0.1	<0.1	<0.1	0.08	0.88	1	47.5	5.41	1128	0.3	0.45
5400 ABA 08016	0.7	>5.00	16.0	90	<1	0.1	2.04	0.2	4	34.0	43	1.5	380.6	8.58	18	0.1	<0.1	<0.1	0.08	1.00	2	51.2	6.00	1423	0.5	0.43
5400 ABA 08017	2.4	2.97	89.1	69	1	0.4	2.03	2.7	6	21.3	25	1.2	107.9	4.53	8	<0.1	<0.1	0.2	0.03	0.82	3	13.2	1.77	1090	1.9	0.38
5400 ABA 08018	0.2	0.56	31.8	96	<1	0.1	0.11	0.1	19	2.0	37	1.4	60.6	2.05	2	<0.1	<0.1	<0.1	0.02	0.40	9	4.0	0.33	334	2.0	0.03
5400 ABA 08019	0.3	0.71	13.7	104	<1	1.5	0.14	0.5	18	4.6	41	1.5	40.9	2.43	2	<0.1	<0.1	<0.1	0.05	0.49	8	5.4	0.45	313	2.6	0.03
5400 ABA 08020	1.7	0.54	131.3	85	<1	0.5	0.36	0.1	16	6.4	45	0.9	105.2	3.14	2	<0.1	<0.1	0.1	0.02	0.36	8	1.9	0.23	301	3.6	0.02
5400 ABA 08021	0.3	0.31	20.8	124	<1	0.7	0.33	0.1	13	2.0	68	0.2	108.3	2.15	1	<0.1	<0.1	0.1	0.01	0.15	7	1.9	0.16	146	3.2	0.02
5400 ABA 08022	0.4	0.17	37.3	42	<1	1.1	0.13	<0.1	16	3.0	54	0.2	22.2	3.34	<1	<0.1	<0.1	0.2	<0.01	0.11	7	0.5	0.06	25	5.6	0.01
5400 ABA 08023	0.2	0.14	19.6	101	<1	1.7	0.38	0.1	15	2.0	59	0.3	11.4	1.71	<1	<0.1	<0.1	0.1	<0.01	0.11	7	0.8	0.05	73	5.7	0.01
5400 ABA 08024	0.2	3.45	15.0	673	<1	0.1	1.63	0.1	3	15.6	190	3.8	105.1	2.86	6	0.1	0.1	<0.1	<0.01	1.65	1	16.3	1.99	564	0.6	0.04
5400 ABA 08025	0.1	4.75	8.7	785	1	0.1	1.12	<0.1	4	23.3	107	4.5	71.5	5.70	8	0.1	0.1	<0.1	0.02	3.56	2	16.6	2.34	842	0.3	0.04
5400 ABA 08026	1.8	0.18	40.3	6	<1	6.8	0.08	0.3	7	8.7	45	0.3	44.5	>10.00	1	0.2	0.1	0.4	0.01	0.13	3	0.9	0.10	44	9.4	0.01
5400 ABA 08027	<0.1	2.57	12.1	427	1	<0.1	3.13	<0.1	2	23.5	126	1.9	12.8	4.71	26	1.5	<0.1	0.4	0.01	1.03	6	31.0	2.51	991	<0.1	0.09
5400 ABA 08028	0.1	2.50	9.4	330	<1	0.1	3.74	0.3	10	16.9	100	3.0	13.6	3.78	9	0.1	0.1	<0.1	0.04	0.84	5	24.4	1.83	946	2.4	0.07
5400 ABA 08029	0.6	0.17	17.6	48	<1	1.4	0.11	0.8	11	1.2	45	0.2	12.4	2.40	1	<0.1	<0.1	0.1	0.01	0.08	5	0.6	0.05	28	4.1	0.02
5400 ABA 08030	0.6	0.39	16.6	138	<1	0.4	0.13	0.8	13	1.1	50	0.8	16.5	2.34	1	<0.1	<0.1	0.1	0.01	0.28	7	2.1	0.19	48	4.7	0.01
5400 ABA 08031	0.1	>5.00	16.4	206	<1	1.1	6.24	0.2	5	37.3	400	2.6	62.0	5.42	14	0.1	<0.1	<0.1	0.04	3.99	2	13.4	3.96	1526	0.4	0.22
5400 ABA 08032	0.1	2.87	12.9	99	<1	0.6	0.21	0.1	12	1.7	21	1.1	10.1	4.73	6	<0.1	<0.1	<0.1	0.01	0.75	5	20.1	2.96	762	2.7	0.03
5400 ABA 08033	0.1	3.61	7.8	257	<1	0.5	0.79	0.1	6	12.6	127	2.1	40.4	4.10	8	0.1	<0.1	0.02	1.43	3	23.6	3.34	954	2.0	0.06	
5400 ABA 08034	0.1	3.93	6.4	355	<1	0.2	0.34	0.1	11	16.3	143	1.4	41.9	5.06	8	0.1	<0.1	<0.1	0.01	1.02	5	30.3	3.93	1173	0.8	0.01
5400 ABA 08035	0.1	2.54	15.3	47	<1	0.9	0.17	0.2	5	3.4	31	1.1	35.1	8.18	5	0.1	<0.1	<0.1	0.01	0.48	2	23.6	2.33	866	1.3	0.01
5400 ABA 08036	0.1	0.76	8.7	74	<1	0.7	0.26	0.1	12	4.1	28	0.5	13.0	3.25	2	<0.1	<0.1	<0.1	<0.01	0.55	5	3.4	0.51	237	2.2	0.01
5400 ABA 08037	0.1	0.26	5.0	34	<1	0.8	0.15	0.1	12	3.0	38	0.2	16.7	3.34	1	<0.1	<0.1	<0.1	<0.01	0.16	5	1.5	0.16	117	1.5	0.01
5400 ABA 08038	0.1	0.28	4.9	66	<1	1.2	0.39	0.1	18	5.1	50	0.3	26.3	2.47	1	<0.1	<0.1	0.1	<0.01	0.20	9	1.3	0.16	101	3.7	0.01

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95°C for 90 min and diluted to 25 ml.

CEM Inc.

Attention:

Project: 0744 Redfern Tulsequah

Sample type: Pulp

Assayers Canada
8282 Sherbrooke St., Vancouver, B.C., V5X 4R6
Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V3351PX
 Date : Sep-26-08

ICP-MS Report

Aqua Regia Digestion

Sample Number	Nb ppm	Ni ppm	P %	Pb ppm	Rb ppm	Re ppb	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
5400 ABA 08009	0.2	13.4	0.067	229.5	22.5	<5	5.44	10.1	10.0	<0.5	0.2	31	<0.1	1.3	0.2	0.143	0.2	<0.1	123	0.9	5.2	654	0.5
5400 ABA 08010	0.1	59.1	0.072	12.0	43.1	<5	<0.05	4.2	36.6	<0.5	0.4	70	<0.1	<0.1	0.2	0.153	0.4	0.1	302	0.2	10.4	148	0.6
5400 ABA 08011	0.1	13.1	0.075	19.6	27.5	<5	2.43	10.5	29.8	<0.5	0.4	54	<0.1	0.4	0.1	0.150	0.3	<0.1	284	0.2	6.9	344	0.3
5400 ABA 08012	0.1	15.9	0.128	24.0	33.9	<5	2.74	6.3	21.8	<0.5	0.2	106	<0.1	0.9	0.2	0.107	0.3	<0.1	217	0.1	3.5	171	0.2
5400 ABA 08013	0.1	12.3	0.062	8.5	24.6	<5	0.15	5.7	28.4	<0.5	0.5	44	<0.1	<0.1	0.2	0.124	0.2	<0.1	278	0.2	3.7	205	0.2
5400 ABA 08014	0.1	11.4	0.054	8.9	23.6	<5	0.18	3.4	26.0	<0.5	0.3	33	<0.1	0.1	0.2	0.140	0.2	<0.1	268	0.4	4.0	173	0.2
5400 ABA 08015	0.1	10.9	0.074	16.3	17.6	<5	1.86	8.5	25.9	<0.5	0.3	28	<0.1	1.8	0.2	0.161	0.2	<0.1	299	0.3	6.0	332	0.3
5400 ABA 08016	0.2	11.0	0.121	13.9	19.9	<5	2.90	16.5	21.9	<0.5	0.4	38	<0.1	1.7	0.3	0.191	0.2	<0.1	224	0.4	5.4	237	0.3
5400 ABA 08017	0.3	9.9	0.131	152.3	17.9	<5	3.86	11.9	10.2	<0.5	0.3	26	<0.1	2.0	0.3	0.227	0.7	0.1	90	0.4	6.6	657	0.6
5400 ABA 08018	0.4	2.0	0.028	50.0	14.8	<5	1.79	5.5	2.3	<0.5	0.2	5	<0.1	1.1	1.0	0.050	0.2	0.1	<2	0.2	5.3	47	0.8
5400 ABA 08019	0.3	2.8	0.031	10.2	15.6	<5	2.10	3.9	1.8	<0.5	0.2	11	<0.1	2.9	0.9	0.026	0.4	0.1	<2	0.1	4.4	145	0.9
5400 ABA 08020	0.5	6.6	0.040	14.4	9.6	<5	3.28	3.0	1.7	<0.5	0.4	8	<0.1	4.7	0.9	0.038	0.3	0.1	<2	0.2	9.4	25	0.9
5400 ABA 08021	0.1	2.5	0.030	8.1	3.2	<5	2.46	5.2	1.4	<0.5	0.1	12	<0.1	1.8	0.6	0.007	0.2	0.1	3	0.1	2.7	16	0.6
5400 ABA 08022	0.1	2.5	0.018	12.7	1.8	<5	3.98	1.2	0.4	2.1	0.1	23	<0.1	1.6	0.4	<0.005	0.1	<0.1	<2	0.1	1.3	5	0.6
5400 ABA 08023	0.1	2.2	0.018	15.6	2.9	<5	2.06	2.0	0.9	<0.5	0.1	45	<0.1	2.1	0.5	0.005	<0.1	<0.1	<2	0.1	2.5	9	0.5
5400 ABA 08024	0.1	62.1	0.132	9.0	49.4	<5	0.12	6.0	2.8	<0.5	0.2	169	<0.1	0.1	0.4	0.194	0.4	0.1	102	0.4	3.7	81	1.2
5400 ABA 08025	0.2	41.9	0.133	5.1	84.2	<5	0.37	3.0	14.4	<0.5	0.7	126	<0.1	0.2	0.9	0.256	0.8	0.2	146	0.3	3.7	83	1.1
5400 ABA 08026	0.3	6.1	0.005	30.7	3.8	5	>10.00	3.6	0.8	7.8	0.1	6	<0.1	8.7	0.2	0.012	0.3	0.1	2	0.1	1.2	42	1.9
5400 ABA 08027	3.6	36.3	0.086	27.5	5.7	<5	0.06	11.8	15.7	4.2	<0.1	78	5.3	11.7	6.4	0.218	4.9	3.8	145	5.7	3.4	4084	54.5
5400 ABA 08028	0.3	28.7	0.071	15.4	24.9	<5	0.16	2.3	13.9	<0.5	0.3	78	<0.1	0.1	4.5	0.199	0.3	0.6	118	0.2	5.4	87	1.5
5400 ABA 08029	0.1	1.7	0.018	14.5	1.6	<5	2.90	1.5	0.5	0.5	0.2	16	<0.1	3.6	0.4	<0.005	0.2	<0.1	<2	0.1	3.3	34	0.6
5400 ABA 08030	0.3	1.0	0.023	26.6	9.0	<5	2.81	1.8	1.5	0.5	0.2	8	<0.1	1.7	1.1	0.022	0.4	<0.1	<2	0.1	8.3	101	0.7
5400 ABA 08031	0.1	106.3	0.049	10.5	91.1	<5	1.26	9.7	33.9	0.6	0.6	94	<0.1	0.9	0.2	0.336	0.9	0.1	262	0.6	10.4	129	0.8
5400 ABA 08032	0.1	1.5	0.032	10.1	14.2	<5	3.07	1.3	2.6	<0.5	0.2	18	<0.1	0.9	1.1	0.022	0.2	0.1	<2	0.1	6.4	95	0.8
5400 ABA 08033	0.1	45.9	0.064	7.5	30.7	<5	1.43	4.6	9.5	<0.5	0.3	52	<0.1	0.9	0.6	0.133	0.3	0.1	75	0.1	5.0	94	0.5
5400 ABA 08034	0.1	52.2	0.053	5.7	21.4	<5	1.00	2.7	7.8	<0.5	0.2	20	<0.1	0.3	0.6	0.104	0.2	<0.1	68	0.1	4.7	74	0.7
5400 ABA 08035	0.2	1.3	0.024	11.2	11.9	<5	6.22	3.9	2.6	3.8	0.2	9	<0.1	1.9	0.4	0.041	0.1	<0.1	8	0.1	3.3	69	0.7
5400 ABA 08036	0.4	1.6	0.029	11.9	14.1	<5	3.20	1.3	3.2	1.9	0.2	20	<0.1	1.2	0.7	0.059	0.1	0.1	4	0.2	7.3	25	0.8
5400 ABA 08037	0.1	1.2	0.020	7.5	3.6	<5	4.10	0.6	1.0	1.6	0.1	47	<0.1	1.0	0.5	0.006	<0.1	<0.1	<2	0.1	2.9	22	0.5
5400 ABA 08038	0.1	1.6	0.027	6.8	3.9	<5	3.23	1.5	1.2	1.9	0.1	45	<0.1	1.8	0.6	0.006	<0.1	<0.1	<2	0.1	4.4	14	0.6

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95°C for 90 min and diluted to 25 ml.

CEM Inc.

Attention:

Project: 0744 Redfern Tulsequah

Sample type: Pulp

Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6

Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V3351PX

Date : Sep-26-08

ICP-MS Report

Aqua Regia Digestion

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %
5400 ABA 08039	0.2	0.22	6.0	11	<1	1.8	0.06	<0.1	10	16.7	42	0.2	19.4	6.55	1	0.1	<0.1	0.1	<0.01	0.15	4	0.9	0.08	29	8.4	0.01
5400 ABA 08040	0.2	0.24	3.7	142	<1	1.2	0.06	<0.1	17	4.8	41	0.4	24.5	1.81	1	<0.1	<0.1	0.2	<0.01	0.17	8	1.9	0.12	75	3.9	0.01
5400 ABA 08041	0.4	3.55	29.8	22	<1	4.2	0.22	0.2	4	33.6	25	0.9	203.9	>10.00	7	0.1	<0.1	0.1	0.03	0.12	2	57.4	2.48	1582	4.2	<0.01
5400 ABA 08042	0.4	2.85	18.1	67	<1	2.0	0.72	0.1	6	15.0	39	0.9	1052.5	7.65	7	0.1	<0.1	<0.1	0.05	0.15	2	41.0	2.81	917	1.8	0.01
5400 ABA 08043	0.1	0.12	18.5	79	<1	0.3	0.04	0.1	17	0.7	70	0.1	12.4	0.36	<1	<0.1	0.2	<0.1	<0.01	0.08	10	0.7	0.03	103	2.3	0.02
5400 ABA 08044	<0.1	4.85	3.3	177	<1	<0.1	1.79	<0.1	8	27.2	474	1.4	55.0	5.29	9	0.1	<0.1	<0.1	0.04	0.34	4	48.3	4.41	1964	0.2	0.11
5400 ABA 08045	0.2	>5.00	21.8	48	<1	0.8	0.45	0.1	3	16.6	32	1.2	40.1	>10.00	9	0.1	<0.1	<0.1	0.02	0.13	1	69.4	3.73	1893	1.7	0.02
5400 ABA 08046	1.5	4.05	27.1	136	<1	0.7	3.12	1.4	10	21.1	234	1.2	142.6	2.69	9	<0.1	<0.1	0.2	0.02	0.17	5	29.7	2.25	452	1.7	0.27
5400 ABA 08047	0.7	2.07	5.2	805	<1	0.2	1.89	1.1	9	1.5	19	1.2	93.6	0.56	4	<0.1	<0.1	<0.1	0.01	0.41	5	7.0	0.45	105	0.3	0.12
5400 ABA 08048	0.8	4.32	7.6	137	<1	0.2	2.82	0.3	6	20.9	68	0.5	129.7	4.12	8	<0.1	0.1	<0.1	0.01	0.03	2	8.7	1.88	537	0.6	0.34
5400 ABA 08049	<0.1	1.56	2.9	269	<1	<0.1	0.63	0.1	15	3.8	50	0.7	7.3	1.69	7	<0.1	<0.1	<0.1	0.01	0.50	8	15.5	1.09	196	1.0	0.06
5400 ABA 08050	0.3	1.76	5.7	565	<1	<0.1	0.30	0.4	16	4.8	49	0.5	34.0	1.80	6	<0.1	<0.1	<0.1	0.01	0.69	8	18.6	1.38	378	1.2	0.05
5400 ABA 08051	0.1	3.13	3.7	173	<1	<0.1	1.43	0.1	6	19.4	82	0.4	80.9	3.74	9	<0.1	0.1	<0.1	0.01	0.09	3	8.2	2.90	636	0.4	0.13
5400 ABA 08052	0.2	4.07	3.9	66	<1	0.1	2.27	0.1	5	21.5	67	0.6	96.1	4.19	8	<0.1	<0.1	<0.1	0.01	0.06	2	14.5	2.86	704	0.3	0.34
5400 ABA 08053	0.1	0.20	4.0	133	<1	0.3	0.26	0.2	15	2.7	64	0.1	15.3	0.94	1	<0.1	<0.1	<0.1	<0.01	0.05	7	2.2	0.11	84	1.8	0.03
5400 ABA 08054	0.1	0.33	0.7	341	<1	0.6	1.22	0.4	25	1.2	64	0.4	5.1	0.42	1	<0.1	0.2	<0.1	<0.01	0.13	14	1.3	0.10	272	3.2	0.03
5400 ABA 08055	0.1	3.00	2.3	57	<1	<0.1	3.00	0.1	4	9.7	119	2.4	42.0	1.52	7	<0.1	<0.1	<0.1	0.01	0.18	2	18.2	1.57	335	0.2	0.35
5400 ABA 08056	2.1	4.23	26.3	1253	<1	<0.1	2.53	2.1	12	30.2	211	0.6	151.0	3.38	11	<0.1	0.1	0.3	0.03	0.51	5	25.1	3.76	350	1.6	0.35

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95°C for 90 min and diluted to 25 ml.

CEM Inc.

Attention:

Project: 0744 Redfern Tulsequah

Sample type: Pulp

Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6

Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V335IPX

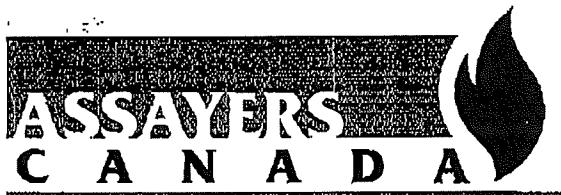
Date : Sep-26-08

ICP-MS Report

Aqua Regia Digestion

Sample Number	Nb ppm	Ni ppm	P %	Pb ppm	Rb ppm	Re ppb	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
5400 ABA 08039	0.1	1.6	0.002	13.4	2.7	<5	9.50	2.2	1.0	8.4	0.1	43	<0.1	1.8	0.2	0.007	<0.1	<0.1	4	0.1	1.0	8	0.5
5400 ABA 08040	0.2	1.0	0.014	2.7	5.6	<5	2.36	1.2	0.8	0.7	0.1	5	<0.1	1.7	0.6	0.010	0.1	<0.1	<2	0.1	4.8	5	0.6
5400 ABA 08041	0.1	6.9	0.082	16.6	4.0	<5	>10.00	1.0	6.0	2.8	0.1	11	<0.1	6.9	0.2	0.014	0.2	<0.1	90	0.2	3.5	115	0.2
5400 ABA 08042	0.1	14.6	0.271	8.9	4.2	<5	5.50	1.8	6.9	1.6	0.1	20	<0.1	3.4	0.2	0.010	0.1	0.1	107	0.1	4.6	92	0.3
5400 ABA 08043	0.5	1.2	0.006	26.4	3.0	<5	0.22	0.7	0.3	<0.5	0.1	6	<0.1	0.2	8.6	<0.005	<0.1	2.6	<2	0.1	2.8	20	4.1
5400 ABA 08044	0.1	102.7	0.040	2.0	13.7	<5	0.13	0.9	28.9	<0.5	0.3	37	<0.1	<0.1	0.2	0.095	0.1	0.1	237	0.2	9.2	59	0.2
5400 ABA 08045	0.1	6.3	0.051	8.1	3.7	<5	8.29	0.6	6.8	3.9	0.1	17	<0.1	1.1	0.2	0.009	0.1	<0.1	69	0.4	2.6	121	0.3
5400 ABA 08046	0.2	117.3	0.160	152.2	6.2	<5	2.01	11.5	2.3	<0.5	0.2	978	<0.1	0.1	1.5	0.062	1.6	0.2	41	3.0	2.6	289	0.7
5400 ABA 08047	0.1	1.4	0.028	100.4	13.7	<5	0.09	4.6	1.1	<0.5	0.2	212	<0.1	<0.1	3.7	0.019	2.0	0.3	4	0.2	3.8	350	0.7
5400 ABA 08048	0.1	26.2	0.070	30.5	1.0	<5	0.21	5.8	4.7	<0.5	0.1	308	<0.1	<0.1	0.2	0.110	0.1	0.1	123	0.5	4.7	132	1.1
5400 ABA 08049	0.4	1.7	0.032	6.9	12.0	<5	0.05	1.8	3.1	<0.5	0.8	39	<0.1	<0.1	3.5	0.061	0.5	0.3	19	0.2	5.4	92	0.6
5400 ABA 08050	0.3	3.1	0.019	31.2	14.4	<5	<0.05	1.1	2.9	<0.5	0.7	28	<0.1	<0.1	2.2	0.070	0.4	0.1	17	0.4	4.4	187	0.6
5400 ABA 08051	0.1	26.3	0.065	7.5	2.0	<5	<0.05	1.9	8.4	<0.5	0.5	82	<0.1	<0.1	0.2	0.119	<0.1	0.1	153	0.4	4.2	75	1.7
5400 ABA 08052	0.1	28.1	0.061	8.4	1.9	<5	0.19	5.9	7.0	<0.5	0.1	148	<0.1	<0.1	0.1	0.104	<0.1	<0.1	147	0.4	4.2	75	0.6
5400 ABA 08053	<0.1	1.9	0.020	29.1	1.5	<5	0.85	0.5	0.7	<0.5	0.1	9	<0.1	0.2	1.9	<0.005	<0.1	0.3	<2	0.2	4.0	30	1.0
5400 ABA 08054	0.2	1.7	0.007	43.3	4.4	<5	<0.05	0.6	0.5	<0.5	0.2	50	<0.1	0.2	9.2	0.005	<0.1	2.1	2	0.2	4.2	26	6.6
5400 ABA 08055	0.1	41.2	0.046	7.7	5.5	<5	0.05	4.3	3.5	<0.5	0.1	124	<0.1	<0.1	0.3	0.110	0.1	0.1	80	0.1	2.6	46	0.3
5400 ABA 08056	0.1	120.7	0.102	160.2	7.6	<5	0.14	3.8	2.2	<0.5	0.3	117	<0.1	0.1	1.0	0.121	0.1	0.2	75	0.5	10.5	532	1.7

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95°C for 90 min and diluted to 25 ml.



Assayers Canada
8282 Sherbrooke St.
Vancouver, B.C.
V5X 4R6
Tel: (604) 327-3436
Fax: (604) 327-3423

Quality Assaying for over 25 Years

Assay Certificate

8V-3620-PA1

Company: **CEMI**
Project: 0744/1830 REDFERN
Attn: Sohan Basra TULSEQUAH

Oct-14-08

We hereby certify the following assay of 4 pulp samples
submitted Aug-10-08

Sample Name	S-Total %	S-SO4 %	S-Sulphide %	TIC %
5400 08033	1.61	0.03	1.53	0.07
5400 08034	0.93	0.02	0.86	0.02
5400 08048	0.23	0.07	0.18	0.02
5400 08052	0.13	0.03	0.10	0.01
*DUP 5400 08033	1.57	0.03	1.52	0.07
*AU 5	1.49			
*RTS-1		1.28		
*RTS-3			3.96	
*SY-4				0.91
*BLANK	<0.01	<0.01	<0.01	<0.01

Certified by _____

CEMI
 Attention: Sohan Basra
 Project: 0744/1830
 Sample type: Pulp

Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6
 Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V3620PL
 Date : Oct-14-08

ICP-AES Whole Rock Assay

Lithium Metaborate Fusion

Sample Number	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	CaO %	MgO %	Na ₂ O %	K ₂ O %	TiO ₂ %	P ₂ O ₅ %	MnO %	BaO %	Cr ₂ O ₃ %	LOI %	Total %	C %	S %
5400 08033	55.39	16.74	7.07	1.32	7.00	0.74	4.94	0.72	0.10	0.19	0.24	0.02	4.68	99.14	0.07	1.61
5400 08034	54.81	16.56	7.63	0.45	8.67	0.10	4.53	0.69	0.09	0.19	0.19	0.02	5.02	98.95	0.03	0.93
5400 08048	46.05	18.96	10.24	8.17	7.93	2.72	0.26	0.92	0.20	0.22	0.03	0.02	2.64	98.35	0.02	0.23
5400 08052	47.08	17.72	10.31	6.87	9.60	2.62	0.23	0.84	0.15	0.24	0.01	0.01	2.98	98.66	0.01	0.13

These elements are not included in the total column: C, S

Sample is fused with Lithium metaborate
 and dissolved in dilute HCl/HNO₃.



Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6

Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V3620PX

Date : Oct-14-08

PAGE 21
CEMI

Attention: Sohan Basra

Project: 0744/1830

Sample type: Pulp

ICP-MS Report

Aqua Regia Digestion

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P %	Po ppm	Rb ppm	Re ppb	S %
5400 08033	0.1	3.78	6.2	168	<1	0.5	0.69	0.1	7	14.1	120	1.5	43.1	4.25	8	<0.1	0.1	<0.1	0.02	1.35	3	25.0	3.43	1030	1.3	0.08	0.1	49.1	0.064	8.6	25.9	<5	1.67
5400 08034	0.1	4.19	5.4	439	<1	0.2	0.30	<0.1	12	16.7	150	1.1	43.3	4.83	8	<0.1	<0.1	<0.1	0.02	1.05	6	27.4	3.64	1131	0.4	0.01	0.1	55.3	0.047	5.7	22.1	<5	1.08
5400 08048	1.1	4.83	11.1	242	<1	0.2	2.84	0.4	8	24.2	105	0.6	148.7	4.79	11	0.2	0.1	0.1	0.02	0.05	3	7.7	2.40	664	0.2	0.50	0.1	31.7	0.085	47.4	1.5	<5	0.29
5400 08052	0.3	4.28	4.6	80	<1	0.1	1.58	0.1	6	24.9	83	0.5	103.6	5.05	8	0.1	0.1	<0.1	0.01	0.04	3	12.9	2.87	806	0.1	0.40	0.1	30.6	0.069	12.1	1.2	<5	0.16

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95°C for 90 min and diluted to 25 ml.



2645535

17:00

02/26/2009

CEMI

Attention: Sohan Basra

Project: 0744/1830

Sample type: Pulp

Assayers Canada
 8282 Sherbrooke St.; Vancouver, B.C., V5X 4R6
 Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V3620PX
 Date : Oct-14-08

ICP-MS Report
 Aqua Regia Digestion

Sample Number	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
5400 08033	4.3	7.8	<0.5	0.3	53	<0.1	0.8	0.6	0.109	0.2	0.1	56	0.2	5.2	99	1.3
5400 08034	2.8	8.4	<0.5	0.2	19	<0.1	0.3	0.6	0.104	0.2	0.1	69	0.2	4.6	68	1.3
5400 08046	10.4	9.8	<0.5	0.2	402	<0.1	0.1	0.2	0.212	0.2	0.1	183	0.7	6.1	173	2.3
5400 08052	7.7	8.8	<0.5	0.1	183	<0.1	<0.1	0.2	0.134	0.1	0.1	173	0.4	5.0	74	0.8

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO₃ at 95°C for 90 min and diluted to 25 ml.





Assayers Canada
8282 Sherbrooke St.
Vancouver, B.C.
V5X 4R6
Tel: (604) 327-3436
Fax: (604) 327-3423

Quality Assaying for over 25 Years

Assay Certificate

8V-3767-PA1

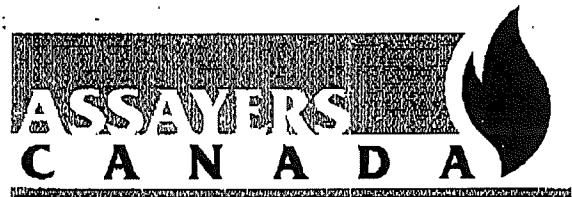
Company: CEM Inc.
Project: 0744/1847 REDFEEN
Attn: Sohan Basra TULSEQUATH

Oct-30-08

We hereby certify the following assay of 22 pulp samples
submitted Oct-24-08

Sample Name	S-Total %	S-SO4 %	S-Sulphide %	TIC %
5400ABA08057	1.22	0.04	1.17	0.17
5400ABA08058	0.01	<0.01	<0.01	0.07
5400ABA08059	0.02	<0.01	0.02	0.18
5400ABA08060	0.01	<0.01	<0.01	0.03
5400ABA08061	0.01	<0.01	<0.01	0.50
5400ABA08062	0.01	<0.01	<0.01	0.31
5400ABA08063	0.01	<0.01	<0.01	0.02
5400ABA08064	<0.01	<0.01	<0.01	0.03
5400ABA08065	0.01	<0.01	<0.01	0.12
5400ABA08066	0.09	0.02	0.07	0.91
5400ABA08067	0.02	<0.01	0.02	0.40
5400ABA08068	0.02	<0.01	0.02	0.64
5400ABA08069	0.02	0.01	0.01	0.93
5400ABA08070	0.23	0.02	0.19	0.32
5400ABA08071	0.01	<0.01	<0.01	4.14
5400ABA08072	0.09	0.01	0.08	0.89
5400ABA08073	0.10	0.01	0.08	0.62
5400ABA08074	0.11	0.02	0.10	1.27
5400ABA08075	4.43	0.09	3.76	<0.01
5400ABA08076	0.01	0.01	<0.01	<0.01
5400ABA08077	0.17	0.02	0.15	<0.01
5400ABA08078	0.03	0.03	<0.01	<0.01
*DUP 5400ABA08057	1.23	0.03	1.16	0.18
*DUP 5400ABA08066	0.09	0.01	0.08	0.92
*DUP 5400ABA08076	0.01	0.01	<0.01	<0.01
*AU-5	1.47			
*RTS-1		1.27		
*RTS-3			4.02	
*SY-4				0.91
*BLANK	<0.01	<0.01	<0.01	<0.01

Certified by _____



Certifying Assaying for over 25 Years

Assayers Canada
8282 Sherbrooke St.
Vancouver, B.C.
V5X 4R6
Tel: (604) 327-3436
Fax: (604) 327-3423

Assay Certificate

Company: **CEM Inc.**
Project: 0744/1847
Attn: Sohan Basra

We hereby certify the following assay of 5 pulp samples submitted Oct-24-08

Sample Name	S-Total %	S-SO4 %	S-Sulphide %	TIC %
5400ABA08079	0.01	0.01	<0.01	0.01
5400ABA08080	0.22	0.03	0.19	0.10
5400ABA08081	0.07	0.03	0.04	0.10
5400ABA08082	0.19	0.08	0.10	0.44
5400ABA08083	0.01	0.01	<0.01	0.21
*DUP 5400ABA08079	0.01	0.01	<0.01	0.01
*AU-5	1.47			
*RTS-1		1.28		
*RTS-3			4.12	
*SY-4				0.90
*BLANK	<0.01	<0.01	<0.01	<0.01

Certified by

Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6

Report No : 8V3767PX

CEM Inc.

Attention: Sohan Basra

Project: 0744/1847

Sample type: pulp

Tel: (604) 327-3436 Fax: (604) 327-3423

Date : Oct-30-08

PAGE 25

PAGE

CDN ENV AND MET INC

2645535

17:00

02/26/2009

ICP-MS Report

Aqua Regia Digestion

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	
S400ABA08057	0.3	0.22	28.4	260	<1	0.1	0.61	0.1	25	3.6	96	0.1	9.4	1.30	1	<0.1	<0.1	<0.1	0.17	16	0.6	0.06	185	3.6	
S400ABA08058	0.1	0.88	6.5	110	<1	0.1	0.28	0.1	29	2.6	60	0.6	6.2	1.68	2	<0.1	<0.1	<0.1	0.23	14	3.8	0.41	341	0.5	
S400ABA08059	0.1	0.43	5.7	134	<1	0.1	0.68	0.1	28	3.6	79	0.5	9.3	0.78	1	<0.1	<0.1	<0.1	0.25	13	1.7	0.13	442	0.4	
S400ABA08060	0.2	0.85	16.1	75	<1	0.1	0.18	0.2	86	4.0	89	0.9	12.6	1.66	3	<0.1	<0.1	<0.1	0.02	0.40	84	3.9	0.42	231	0.9
S400ABA08061	0.1	0.97	1.0	84	<1	0.1	1.34	0.2	30	3.4	21	0.7	13.7	1.20	2	<0.1	<0.1	<0.1	0.01	0.64	14	4.0	0.65	507	<0.1
S400ABA08062	0.1	0.93	5.9	94	<1	0.1	1.07	0.1	42	3.8	42	1.3	2.4	1.07	2	<0.1	0.1	<0.1	0.01	0.50	21	5.8	0.26	233	<0.1
S400ABA08063	<0.1	0.41	13.6	95	<1	0.1	0.03	0.1	28	2.5	92	0.7	11.2	0.36	1	<0.1	<0.1	<0.1	<0.1	0.22	12	2.9	0.08	104	0.2
S400ABA08064	<0.1	0.40	4.2	104	<1	<0.1	0.16	0.1	29	3.4	68	0.4	3.1	0.48	1	<0.1	<0.1	<0.1	<0.1	0.23	11	3.8	0.09	130	0.1
S400ABA08065	<0.1	0.85	5.6	201	<1	<0.1	0.50	<0.1	25	2.7	84	1.8	2.1	0.62	1	<0.1	<0.1	<0.1	<0.1	0.33	10	7.7	0.24	146	0.1
S400ABA08066	0.1	4.06	17.2	181	<1	<0.1	3.21	0.1	7	26.1	219	9.3	32.1	5.12	11	0.1	<0.1	<0.1	0.04	1.10	3	53.2	2.80	1021	0.1
S400ABA08067	0.1	1.62	1.8	63	1	<0.1	1.73	0.1	16	5.0	51	1.9	17.0	1.63	3	<0.1	<0.1	<0.1	0.01	0.43	7	10.6	0.31	200	0.1
S400ABA08068	0.1	0.92	0.9	172	<1	<0.1	1.98	0.2	24	2.1	45	1.2	6.3	0.89	2	<0.1	<0.1	<0.1	0.01	0.33	14	12.4	0.42	274	0.1
S400ABA08069	0.1	3.50	5.9	124	1	0.1	3.57	0.1	33	4.8	24	6.2	16.5	2.33	7	<0.1	<0.1	<0.1	0.02	1.23	21	29.6	1.52	670	<0.1
S400ABA08070	0.1	4.74	14.3	86	<1	0.1	1.43	0.3	5	36.4	155	6.1	41.6	7.23	12	0.1	<0.1	<0.1	0.04	0.37	2	77.8	3.16	1242	0.1
S400ABA08071	0.1	1.87	27.2	162	1	<0.1	>10.00	0.2	5	23.1	368	0.2	17.7	2.75	3	0.1	<0.1	<0.1	0.01	0.02	2	48.9	3.91	884	0.4
S400ABA08072	0.1	3.46	7.5	144	<1	<0.1	3.17	0.1	9	27.6	188	5.0	5.1	5.27	11	0.1	<0.1	<0.1	0.04	0.53	4	70.9	3.20	847	0.6
S400ABA08073	0.1	3.15	13.0	54	<1	<0.1	2.75	<0.1	10	21.1	138	1.8	1.6	3.78	8	0.1	0.1	<0.1	0.02	0.14	4	48.6	2.62	605	0.1
S400ABA08074	0.1	4.19	6.3	201	1	<0.1	4.31	0.1	10	38.0	351	5.4	7.8	5.25	10	0.1	<0.1	<0.1	0.03	0.95	4	63.6	4.76	938	0.2
S400ABA08075	37.9	0.52	295.2	28	<1	0.7	0.15	49.6	8	3.1	22	0.5	1645.5	2.98	1	<0.1	<0.1	8.5	0.27	0.20	4	2.9	0.13	29	4.2
S400ABA08076	0.1	2.43	4.2	403	<1	<0.1	0.54	0.1	13	5.1	28	0.6	1.9	1.58	5	<0.1	<0.1	<0.1	0.01	0.53	6	21.3	1.78	282	<0.1
S400ABA08077	0.7	>5.00	5.9	74	<1	0.1	1.76	0.2	8	25.5	81	0.4	100.6	5.13	9	0.1	0.1	<0.1	0.01	0.02	3	11.0	3.48	825	<0.1
S400ABA08078	0.2	1.73	2.1	348	<1	0.1	0.32	0.1	17	3.9	34	0.4	33.9	1.71	6	<0.1	<0.1	<0.1	0.01	0.90	9	15.8	1.37	299	0.2
S400ABA08079	0.1	1.99	1.5	.289	<1	0.1	0.32	0.1	11	3.5	62	0.5	13.3	1.68	4	<0.1	<0.1	<0.1	0.01	0.86	5	17.2	1.11	343	0.1
S400ABA08080	0.2	3.76	13.4	102	1	0.2	2.59	0.2	7	26.7	161	0.9	119.1	3.48	7	0.1	0.1	<0.1	0.01	0.19	3	20.1	1.05	346	0.4
S400ABA08081	0.3	2.24	3.8	435	<1	0.1	0.75	0.3	13	12.3	63	1.4	83.8	3.46	7	0.1	<0.1	<0.1	0.01	0.19	7	17.1	2.52	579	0.4
S400ABA08082	0.1	1.53	1.0	1990	1	0.1	1.71	0.4	23	3.0	77	1.1	14.5	1.83	5	<0.1	<0.1	<0.1	0.02	0.40	11	9.7	0.87	629	0.6
S400ABA08083	0.2	1.53	1.7	70	<1	0.1	0.89	0.2	17	3.4	78	0.6	9.3	1.17	4	<0.1	<0.1	<0.1	0.01	0.33	8	19.6	0.97	592	0.1

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95°C for 90 min and diluted to 25 ml.

Assayers Canada

8282 Sherbrooke St., Vancouver, B.C., V5X 4R6

Report No : 8V3767PX

CEM Inc.

Attention: Sohan Basra

Project: 0744/1847

Sample type: pulp

PAGE 26

CDN ENV AND MET INC

2645535

02/26/2009 17:00

Tel: (604) 327-3436 Fax: (604) 327-3423

Date : Oct-30-08

ICP-MS Report

Aqua Regia Digestion

Sample Number	Na %	Nb ppm	Ni ppm	P %	Pb ppm	Rb ppm	Re ppb	S %	Sb ppm	Sc ppm	Se ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm	
5400ABA08057	0.03	<0.1	2.4	0.018	13.0	3.7	<5	1.23	3.0	0.9	<0.5	0.1	50	<0.1	<0.1	1.4	<0.005	0.7	0.1	<2	0.1	3.2	23	0.6
5400ABA08058	0.05	0.2	2.1	0.022	8.4	6.4	<5	<0.05	1.8	3.7	<0.5	0.3	12	<0.1	<0.1	2.0	0.033	0.1	0.2	11	0.2	3.6	56	1.0
5400ABA08059	0.03	0.1	2.4	0.020	8.9	7.8	<5	<0.05	2.2	1.6	<0.5	0.1	47	<0.1	<0.1	1.6	0.014	0.1	0.3	3	0.1	4.2	35	0.9
5400ABA08060	0.05	0.1	3.2	0.026	11.4	11.4	<5	<0.05	3.7	2.5	<0.5	0.3	15	<0.1	<0.1	1.5	0.021	0.1	0.2	8	0.2	3.3	72	0.6
5400ABA08061	0.03	0.1	1.8	0.027	8.7	14.9	<5	<0.05	1.8	2.7	<0.5	0.2	89	<0.1	<0.1	2.2	0.036	0.1	0.5	10	0.2	3.7	40	0.8
5400ABA08062	0.03	0.3	1.5	0.016	4.1	13.8	<5	<0.05	3.8	2.2	<0.5	0.2	33	<0.1	<0.1	2.9	0.032	0.1	0.4	5	0.2	3.9	38	1.5
5400ABA08063	0.03	<0.1	2.9	0.020	3.8	4.5	<5	<0.05	6.3	0.9	<0.5	0.1	6	<0.1	<0.1	1.6	<0.005	<0.1	0.2	<2	0.2	2.3	17	1.0
5400ABA08064	0.03	0.1	2.1	0.016	4.1	5.6	<5	<0.05	2.0	0.9	<0.5	0.1	8	<0.1	<0.1	1.6	0.009	<0.1	0.3	4	0.1	3.5	27	1.2
5400ABA08065	0.04	0.1	12.2	0.013	2.6	8.4	<5	<0.05	4.3	1.2	<0.5	0.1	38	<0.1	<0.1	1.3	0.009	0.1	0.2	4	0.1	2.8	19	0.8
5400ABA08066	0.19	0.1	70.6	0.053	2.4	39.7	<5	0.05	11.5	24.0	<0.5	0.3	77	<0.1	<0.1	0.3	0.154	0.3	0.1	209	0.4	7.5	60	0.3
5400ABA08067	0.14	0.5	2.3	0.022	5.1	14.4	<5	<0.05	4.6	2.1	<0.5	0.2	117	<0.1	<0.1	2.0	0.058	0.1	0.6	12	0.2	6.7	42	0.8
5400ABA08068	0.05	0.1	1.6	0.012	19.7	11.6	<5	<0.05	1.1	1.2	<0.5	0.2	54	<0.1	<0.1	1.7	0.018	0.1	0.2	4	0.1	3.9	59	0.9
5400ABA08069	0.26	0.1	4.6	0.026	6.2	45.0	<5	<0.05	5.6	3.4	<0.5	0.5	154	<0.1	<0.1	3.4	0.045	0.2	0.4	13	0.3	7.2	54	0.8
5400ABA08070	0.11	0.1	52.3	0.042	7.6	13.6	<5	0.19	8.0	28.6	<0.5	0.2	88	<0.1	<0.1	0.4	0.112	0.1	0.1	253	0.3	4.7	93	0.2
5400ABA08071	0.01	0.1	284.6	0.046	3.5	0.5	<5	<0.05	5.7	7.9	<0.5	<0.1	356	<0.1	<0.1	0.2	0.016	<0.1	0.3	57	0.1	3.8	19	0.4
5400ABA08072	0.12	0.1	60.7	0.066	1.5	17.5	<5	0.07	2.3	24.3	<0.5	0.2	76	<0.1	<0.1	0.3	0.122	0.1	0.1	197	0.3	8.4	51	0.3
5400ABA08073	0.08	0.1	47.0	0.073	2.0	4.4	<5	0.10	5.4	13.2	<0.5	0.3	66	<0.1	<0.1	0.3	0.156	<0.1	0.1	150	0.5	10.0	41	0.9
5400ABA08074	0.10	0.1	195.3	0.057	1.6	30.7	<5	0.08	2.7	24.4	<0.5	0.2	133	<0.1	<0.1	0.3	0.123	0.2	0.1	191	0.1	7.6	60	0.3
5400ABA08075	0.04	<0.1	3.3	0.014	5609.1	4.2	<5	4.25	117.8	0.8	1.4	0.1	37	<0.1	<0.1	1.5	<0.005	1.0	0.2	3	0.8	2.2	>10000	1.6
5400ABA08076	0.13	<0.1	2.0	0.038	11.4	13.9	<5	<0.05	0.9	1.9	<0.5	0.2	81	<0.1	<0.1	1.6	0.024	1.3	0.2	6	0.2	5.8	105	0.9
5400ABA08077	0.43	0.1	31.3	0.068	17.8	0.5	<5	0.17	5.3	9.2	<0.5	0.1	238	<0.1	<0.1	0.2	0.179	0.1	0.1	161	0.5	6.4	121	1.5
5400ABA08078	0.11	0.1	1.8	0.022	7.0	21.1	<5	<0.05	0.7	2.8	<0.5	0.5	37	<0.1	<0.1	2.6	0.076	0.6	0.2	13	0.2	6.1	112	1.1
5400ABA08079	0.09	0.2	2.4	0.015	7.2	16.8	<5	<0.05	1.2	2.0	<0.5	0.4	35	<0.1	<0.1	2.0	0.067	0.4	0.2	9	0.2	6.1	100	1.0
5400ABA08080	0.29	0.2	37.9	0.140	24.9	6.5	<5	0.24	6.6	4.3	<0.5	0.2	356	<0.1	<0.1	0.6	0.164	0.2	0.2	92	0.5	4.6	59	1.7
5400ABA08081	0.10	0.1	17.6	0.043	20.8	5.1	<5	<0.05	2.4	8.1	<0.5	0.3	57	<0.1	<0.1	1.4	0.105	0.1	0.2	101	0.2	6.2	140	0.8
5400ABA08082	0.10	0.1	2.7	0.018	19.3	12.6	<5	0.22	0.9	3.0	<0.5	0.5	138	<0.1	0.1	2.8	0.028	0.2	0.4	15	0.3	6.7	72	1.1
5400ABA08083	0.04	0.1	2.9	0.015	18.7	8.1	<5	<0.05	1.6	1.6	<0.5	0.3	37	<0.1	<0.1	2.2	0.024	0.1	0.4	8	0.1	6.1	91	1.2

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95°C for 90 min and diluted to 25 ml.

CEM Inc.

Attention: Sohan Basra

Project: 0744/1847

Sample type: pulp

Assayers Canada
 8282 Sherbrooke St., Vancouver, B.C., V5X 4R6
 Tel: (604) 327-3436 Fax: (604) 327-3423

Report No : 8V3767PL
 Date : Oct-30-08

ICP-AES Whole Rock Assay

Lithium Metaborate Fusion

Sample Number	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	CaO %	MgO %	Na ₂ O %	K ₂ O %	TiO ₂ %	P ₂ O ₅ %	MnO %	BaO %	Cr ₂ O ₃ %	LOI %	Total %	C %	S %
5400ABA08057	76.01	10.67	2.26	1.07	0.49	3.19	2.32	0.27	0.07	0.04	0.13	0.02	3.33	99.87	0.18	1.22
5400ABA08058	73.15	12.71	2.74	0.56	0.87	5.73	1.17	0.31	0.08	0.05	0.04	0.01	2.50	99.92	0.07	0.01
5400ABA08059	74.93	11.97	1.98	1.23	0.62	3.43	2.55	0.30	0.08	0.06	0.07	0.02	2.67	99.90	0.19	0.02
5400ABA08060	77.39	10.74	2.90	0.36	0.96	3.53	1.74	0.26	0.09	0.04	0.03	0.02	1.78	99.84	0.03	0.01
5400ABA08061	70.87	11.64	3.08	2.07	1.89	1.53	3.86	0.34	0.08	0.07	0.05	0.01	4.41	99.88	0.51	0.01
5400ABA08062	66.68	15.88	2.99	1.85	1.13	3.16	4.22	0.37	0.06	0.04	0.05	0.01	3.46	99.90	0.31	0.01
5400ABA08063	80.19	11.25	0.91	0.15	0.31	1.88	2.76	0.26	0.07	0.02	0.07	0.02	1.98	99.87	0.02	0.01
5400ABA08064	77.40	11.84	1.43	0.27	0.43	3.23	3.00	0.28	0.07	0.02	0.10	0.02	1.83	99.91	0.04	<0.01
5400ABA08065	78.07	11.26	1.60	0.94	0.82	0.40	3.73	0.26	0.05	0.02	0.09	0.02	2.56	99.83	0.12	0.01
5400ABA08066	50.58	15.84	8.45	6.46	6.05	3.74	1.60	0.78	0.21	0.18	0.03	0.04	5.86	99.83	0.97	0.09
5400ABA08067	68.99	13.48	3.66	3.92	0.90	1.21	3.26	0.37	0.08	0.04	0.06	0.01	3.90	99.89	0.41	0.02
5400ABA08068	76.41	8.62	1.94	3.65	1.21	1.67	2.09	0.20	0.05	0.04	0.06	0.01	3.90	99.85	0.65	0.02
5400ABA08069	59.63	14.68	4.32	5.33	3.57	0.53	4.77	0.36	0.09	0.10	0.10	0.01	6.46	99.95	1.02	0.02
5400ABA08070	50.99	16.34	11.52	3.15	6.50	4.26	0.87	1.04	0.17	0.22	0.02	0.03	4.75	99.85	0.33	0.23
5400ABA08071	33.38	4.72	6.45	18.47	14.82	0.09	0.10	0.24	0.15	0.12	0.02	0.17	21.10	99.83	4.20	0.01
5400ABA08072	52.14	14.90	8.48	5.47	5.92	4.42	0.98	0.85	0.20	0.15	0.03	0.03	6.32	99.90	0.94	0.09
5400ABA08073	54.65	14.17	7.76	6.87	5.38	4.10	0.33	0.89	0.24	0.16	0.02	0.03	5.28	99.89	0.64	0.10
5400ABA08074	48.58	13.23	7.84	6.54	9.95	2.45	1.43	0.72	0.24	0.14	0.05	0.08	8.62	99.88	1.40	0.11
5400ABA08075	66.55	14.54	3.09	1.53	2.59	3.28	2.61	0.31	0.07	0.04	0.14	0.01	5.21	99.96	0.02	4.43
5400ABA08076	63.87	16.23	5.43	0.53	0.90	0.62	4.37	0.38	0.12	0.01	1.72	0.01	2.98	97.15	0.01	0.01
5400ABA08077	65.86	15.51	3.60	2.38	3.52	1.15	3.07	0.36	0.12	0.05	0.36	0.01	3.96	99.94	0.01	0.17
5400ABA08078	49.31	16.87	11.00	7.54	8.84	2.57	0.04	0.90	0.27	0.23	0.02	0.02	2.15	99.75	0.01	0.03
5400ABA08079	72.19	12.60	2.87	1.45	2.34	2.99	2.15	0.27	0.05	0.06	0.12	0.02	2.84	99.96	0.02	0.01
5400ABA08080	54.78	13.42	8.73	10.50	5.71	1.54	0.50	0.73	0.46	0.17	0.03	0.05	3.21	99.82	0.11	0.22
5400ABA08081	63.53	13.38	5.83	2.72	5.03	4.37	0.43	0.52	0.14	0.12	0.06	0.02	3.71	99.87	0.10	0.07
5400ABA08082	66.91	13.44	3.15	3.25	1.96	3.90	2.40	0.29	0.06	0.09	0.44	0.02	4.05	99.95	0.44	0.19
5400ABA08083	70.28	12.72	2.26	2.31	2.24	3.27	2.62	0.27	0.06	0.08	0.08	0.02	3.71	99.92	0.22	0.01

These elements are not included in the total column: C, S

Sample is fused with Lithium metaborate
and dissolved in dilute HCl/HNO₃.


APPENDIX III
ARD SAMPLE DESCRIPTIONS AND ANALYTICAL RESULTS

Sample	NAD83 E	NAD83 N	Rock Type	NAG/PAG from ABA	py %	Fizz Test (10% HCl)	Description
GGNAG001	581002	6511649	LS	NAG		strong	Grey, massive limestone with trace red stain on fracture surfaces. Sample is taken from entryway to old office.
GGNAG003	581046	6511696	RAT	NAG	0.5	moderate	Blue-grey silica rich well foliated rhyolite with abundant carbonate veinlets following fracture and foliation. Sample is 5% carbonate. Rare pyrite crystals observed, composing at most 0.5% of rock.
GGNAG004	580927	6511554	LS	NAG		moderate	Dirty grey-blue massive limestone with white calcite veinlets and fracture fill. Veinlets are up to 1cm wide.
GGNAG005	580935	6511514	BIN	NAG	0.2	moderate	Massive basalt intrusive. Rock has frequent fracture fill carbonate (5% of rock) and trace pyrite and possible chalcopyrite amounting to .2% of rock.
GGNAG006	580826	6511489	LS	NAG		moderate	Dirty blue-grey massive limestone with carbonate fracture fill and veinlets which follow foliation. No sulphides observed.



Surface ABA Results - 2008

Tulsequah Chief

1

Sample	GGNAG001	GGNAG003	GGNAG004	GGNAG005	GGNAG006
NAD83 E	581002	581046	580927	580935	580826
NAD83 N	6511649	6511696	6511554	6511514	6511489
Rock Type	LS	RAT	LS	BIN	LS
NAG/PAG	NAG	NAG	NAG	NAG	NAG
Ag ppm	<0.1	0.1	0.1	0.1	0.2
Al %	0.17	3.12	4.22	3.18	>5.00
As ppm	<0.5	47.3	29.8	4.4	68.2
Ba ppm	392	227	100	17	215
Be ppm	<1	<1	<1	<1	<1
Bi ppm	0.1	<0.1	<0.1	<0.1	0.1
Ca %	>10.00	5.55	5.42	1.64	4.8
Cd ppm	1	0.2	0.2	0.1	0.1
Ce ppm	4	24	6	4	4
Co ppm	1.3	25.9	21	29.7	16.6
Cr ppm	15	255	43	61	51
Cs ppm	0.4	6.2	3.6	1.6	4.8
Cu ppm	2.2	21.1	56.5	53.3	95.6
Fe %	0.65	5.09	5.38	5.01	4.58
Ga ppm	1	8	12	10	15
Ge ppm	<0.1	0.1	0.1	0.1	0.1
Hf ppm	0.1	<0.1	<0.1	<0.1	<0.1
Hg ppm	0.1	<0.1	<0.1	<0.1	<0.1
In ppm	0.03	0.04	0.04	0.01	0.04
K %	0.06	0.38	0.36	0.03	1.06
La ppm	2	12	2	1	2
Li ppm	3.8	83.2	34.5	54.7	40.4
Mg %	1.38	2.68	2.41	3.06	1.79
Mn ppm	370	1856	844	760	840
Mo ppm	2.1	0.5	0.7	0.5	2
Na %	<0.01	0.03	0.13	0.04	0.38
Nb ppm	0.2	0.2	0.1	0.1	0.2
Ni ppm	9.9	89.1	25	28.2	20.7
P %	0.002	0.068	0.053	0.063	0.063
Pb ppm	5.4	3.8	1.9	1.3	2.1
Rb ppm	2.4	14	11.9	1.1	34.3
Re ppb	<5	<5	<5	<5	<5
S %	0.17	0.06	0.07	0.09	0.42
Sb ppm	1.9	8.3	5.3	3.4	19.4
Sc ppm	1.1	18	12.1	10.2	14.7
Se ppm	<0.5	<0.5	<0.5	<0.5	<0.5
Sn ppm	<0.1	0.4	0.2	0.2	0.4
Sr ppm	828	148	112	43	135
Ta ppm	<0.1	<0.1	<0.1	<0.1	<0.1
Te ppm	0.1	<0.1	<0.1	<0.1	0.1

Sample	GGNAG001	GGNAG003	GGNAG004	GGNAG005	GGNAG006
Th ppm	0.2	3.5	0.3	0.1	0.3
Ti %	0.033	0.088	0.087	0.116	0.135
Tl ppm	<0.1	0.1	0.1	<0.1	0.3
U ppm	1.2	1.3	0.1	0.1	0.1
V ppm	16	112	148	144	158
W ppm	0.2	0.4	0.2	0.3	0.3
Y ppm	5.3	9.9	5.9	4.5	6.5
Zn ppm	36	70	88	69	65
Zr ppm	2.2	0.9	0.6	0.7	0.8
Lab	CEMI	CEMI	CEMI	CEMI	CEMI
Cert	8V-2624PX	8V-2624PX	8V-2624PX	8V-2624PX	8V-2624PX
Method	ICP-MS (aqua regia digestion)				
LAB		Certificate		Date	
Assayers Canada	8V-2624PX		July 23, 2008		
CEMI project 0744			July 24, 2008		

Sample	GGNAG001	GGNAG003	GGNAG004	GGNAG005	GGNAG006			
NAD83 E	581002	581046	580927	580935	580826			
NAD83 N	6511649	6511696	6511554	6511514	6511489			
Rock Type	LS	RAT	LS	BIN	LS			
NAG/PAG	NAG	NAG	NAG	NAG	NAG			
SiO₂ %	6.59	44.84	43.78	46.53	47.23			
Al₂O₃ %	1.62	12.69	16.26	17.27	17.46			
Fe₂O₃ %	1.05	8.2	7.84	9.96	7.09			
CaO %	44.3	10.15	9.67	6.31	10.3			
MgO %	3.53	6.26	5.15	6.4	4.2			
Na₂O %	0.03	2.29	2.93	4.58	2.56			
K₂O %	0.44	1.47	1.29	0.29	1.94			
TiO₂ %	0.05	0.66	0.94	1.15	0.87			
P₂O₅ %	0.02	0.19	0.18	0.21	0.21			
MnO %	0.04	0.24	0.12	0.16	0.12			
BaO %	0.05	0.08	0.04	0.01	0.04			
Cr₂O₃ %	<0.01	0.04	0.01	0.01	0.01			
LOI %	40.95	11.57	10.46	5.76	6.6			
Total %	98.67	98.68	98.67	98.65	98.64			
C %	10.8	2.27	1.87	0.55	1.4			
S %	0.15	0.05	0.05	0.07	0.37			
Cert	8V-2624PL	8V-2624PL	8V-2624PL	8V-2624PL	8V-2624PL			
Method	whole rock ICP-AES (lithium metaborate fusion)							
LAB		Certificate		Date				
Assayers Canada		8V-2624PL		July 23, 2008				
CEMI project 0744				Oct 20, 2008				

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5400	5400ABA08 001	581064	6511542	south	2	RLT	NAG	Light to medium grey rhyolite lapilli ash tuff with strong silicification. No sericite present. Pyrite occurs as disseminated cubes and thin stringers (2%). Rock is not calcareous	2	none	27/07/2008
5400	5400ABA08 002	581114	6511560	south	2	RTF	NAG	Cream coloured rhyolite tuff? Rock is moderately crackle fractured and healed with glassy quartz, carbonate and maganese stain. Rock is highly siliceous and may be a dyke. Weak carbonate alteration.	0	moderate	27/07/2008
5400	5400ABA08 003	581158	6511577	south	4	BIN	NAG	Medium grain equigranular basalt intrusive with chlorite/epidote/carbonate sausseritization. No sulphides noted. Rock is weakly pervasively calcareous with sub-mm stringers.	0	slight	27/07/2008
5400	5400ABA08 004	581204	6511593	south	4	BIN	NAG	Fine to medium grain mafic intrusive. Rock is weakly chloritized with no pyrite. Weak carbonate alteration and calcite stringers.	0	moderate	27/07/2008
5400	5400ABA08 005	581252	6511610	south	4	BIN	NAG	Dark green very fine grain mafic volcanic with weak to moderate silica alteration as well as moderate to pervasive carbonate alteration. No sulphides observed, non-magnetic. Rock has blocky fracture.	0	moderate	27/07/2008
5400	5400ABA08 006	581298	6511629	north	4	BIN	NAG	Massive mafic volcanic with pervasive carbonate alteration. Rock is aphanitic, monotonous with no pyrite.	0	slight	27/07/2008
5400	5400ABA08 007	581347	6511646	north	4	BIN	NAG	Dark grey silicified mafic volcanic. Rock is medium grained, weakly chloritized with blocky fracture. Rock is non-magnetic, calcareous along fractures and contains less than 1% pyrite	1	moderate	27/07/2008
5400	5400ABA08 008	581378	6511657	north	2	RYU	NAG	Medium grey, rhyodacitic tuff with wispy QSP alteration, giving rock a tiger striped appearance. Pyrite is cubic, anhedral to euhedral and 4-5% overall. Minor calcite stringers occur along fractures.	5	moderate	27/07/2008
5400	5400ABA08 009	581383	6511659	north	1	BAU	NAG	Strongly pyritic-quartz blob hosted mafic to intermediate volcanic with moderate quartz-sericite-pyrite. Pyrite is 8% overall. Weak carbonate on fractures.	8	slight	27/07/2008
5400	5400ABA08 010	581387	6511661	north	1	BAU	NAG	Massive mafic volcanic with blocky fracture and pervasive carbonate alteration. No pyrite. Rock contains patches of white carbonate.	0	moderate	27/07/2008

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5400	5400ABA08 011	581392	6511662	north	1	BAU	NAG	Bleached green to medium green weakly foliated quartz amygdaloidal basalt. Bleaching is controlled by foliation and may be a hyaloclastic margin. Streaky dark green foliation controlled quartz-chlorite alteration. Total pyrite is 2-3%	3	slight	27/07/2008
5400	5400ABA08 012	581396	6511664	north	1	BAU	NAG	QSP altered mafic volcanic. Rock contains possible brecciation controlled alteration. Rock is possibly a tuff?, but it is difficult to confirm. 4-6% pyrite occurring as fine grain disseminations. Weak carbonate alteration as fracture fill.	6	slight	27/07/2008
5400	5400ABA08 013	581403	6511667	north	1	BAU	NAG	Very dark green to black very fine grained mafic volcanic. 5 to 10% irregular quartz filled clots/amygdules. Pyrite is associated with quartz and comprises <1% overall. Rock is non-calcareous and non-magnetic.	1	slight	27/07/2008
5400	5400ABA08 014	581407	6511668	north	1	BAU	NAG	Very dark green aphanitic mafic volcanic with irregular up to 2cm wide quartz filled clots/amygdules. Rock is non-magnetic and weakly silicified. Trace pyrite .5 to 1%. No carbonate.	0.1	slight	27/07/2008
5400	5400ABA08 015	581411	6511670	north	1	BAU	NAG	Quartz filled amygdaloidal basalt. Rock is fine grained, and has a weakly chloritized/sericitized matrix, particularly near quartz/calcite amygdules. 1% pyrite occurs as cubes surrounding amygdules.	1	slight	27/07/2008
5400	5400ABA08 016	581418	6511670	south	1	DAT	NAG	Dark grey dacitic ash-tuff. Ash particles are subrounded and medium grey to cream coloured. Matrix is weakly sericite/chlorite altered. Euhedral to subhedral pyrite (3-4%). Very weakly calcareous along fractures.	4	none	27/07/2008
5400	5400ABA08 017	581422	6511671	north	1	DAT	NAG	Medium grey dacite ash tuff hosting 30% pale felsic subrounded frags. Rock is moderately QSP altered with 4-5% pyrite occurring as up to 1mm wide euhedral crystals and as very fine grain disseminations. Non calcareous.	5	slight	27/07/2008
5400	5400ABA08 018	581427	6511673	north	1	RAT	NAG	QSP altered rhyolite ash tuff. Rock is strongly altered with 4% pyrite. No carbonate.	4	none	27/07/2008
5400	5400ABA08 019	581431	6511674	south	1	QSP	NAG	QSP-altered felsic tuff. Felsic fragments/tephra colour varies from medium to dark green. Rare quartz blobs. Pyrite content associated with wispy QSP. Pyrite occurs as cubes and disseminations (5%). No carbonate.	5	none	27/07/2008

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5400	5400ABA08 020	581434	6511678	north	1	RAT	NAG	Medium to pale green-grey rhyolite ash tuff. Rock is moderately QSP altered and weakly foliated. Pyrite occurs as euhedral cubes and fine specks (3-4%). Rock has irregular quartz blebs/sweats. Very weak calcite associated with quartz stringers.	4	none	27/07/2008
5400	5400ABA08 021	581439	6511680	north	1	QSP	NAG	Silica-rich qsp-altered intermediate to felsic volcanic. Rock contains rare wisps of sericite and fine grain pyrite throughout groundmass (3-4%). Silicification is strong with original textures obscured or not evident.	4	none	28/07/2008
5400	5400ABA08 022	581444	6511682	north	1	QSP	NAG	QSP altered rhyolite volcanic. Rock is highly siliceous and contains wisps and pods of medium grain gritty pyrite (7-8%). Sericite occurs in conjunction with mineralization. No carbonate observed.	8	none	28/07/2008
5400	5400ABA08 023	581449	6511683	north	1	QSP	NAG	QSP-Altered rhyolite volcanic. Moderate to strong silicification, weak peppered sericite. Clots/blebs of medium grain pyrite observed. No Carbonate.	4	slight	28/07/2008
5400	5400ABA08 024	581454	6511682	south	1	BAU	NAG	Dark blue-grey basalt intrusive or dike. Rock has blocky fracture, chlorite alteration and no sulphides or carbonate present.	0	none	28/07/2008
5400	5400ABA08 025	581458	6511686	north	1	BAU	NAG	Dark grey-black mafic volcanic. Rock is massive and aphanitic with .5% pyrite occurring as fine grain disseminations. Carbonate occurs as fracture fill and sub-mm veinlets.	0.5	none	28/07/2008
5400	5400ABA08 026	581463	6511688	north	1	QSP	NAG	QSP altered rhyolite. Rock contains 15% pyrite occurring as pods of semi massive fine and medium grains. Sericite occurs throughout groundmass. Rock is highly silicic. No carbonate.	15	none	28/07/2008
5400	5400ABA08 027	581470	6511688	south	1	BAU	NAG	Dark grey-black porphyritic mafic dike. Rock contains up to 1cm wide plagioclase crystals and a weakly pervasive calcite alteration throughout groundmass. No pyrite.	0	moderate	28/07/2008
5400	5400ABA08 028	581472	6511691	north	1	BAU	NAG	Blue-grey basalt intrusive with weak pervasive alteration of groundmass. Rock is medium grained and contains up to 1/2cm wide white plagioclase xtals that have a subtle silicification. Trace medium grain pyrite occurs as rare flecks (.1%).	0.1	moderate	28/07/2008
5400	5400ABA08 029	581477	6511693	north	1	QSP	NAG	QSP-altered rhyolite tuff/intrusive. Rock contains wisps and blebs of sericite, moderate silica and 4-6% pyrite.	5	none	28/07/2008

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5400	5400ABA08 030	581482	6511695	north	1	QSP	NAG	Blue-grey qsp-altered rhyolite tuff/intrusive. Rock is peppered with cubic pyrite grains occurring as clots in addition to fine grain disseminations. 8% pyrite.	8	none	28/07/2008
5400	5400ABA08 031	581488	6511695	north	1	BAU	NAG	Dark grey to black massive mafic volcanic, possibly a dike. Rock is chloritic and contains wisps and stringers of fine grain pyrite (2%). Carbonate appears as fracture fill.	2	moderate	28/07/2008
5400	5400ABA08 032	581490	6511698	north	1	QSP	NAG	Grey QSP altered intermediate to felsic tuff. Rock is moderately siliceous with wispy sericite and chlorite stripes. Pyrite is common as very fine grain disseminations and medium grain cubes and stringers (5% overall). No calcite observed.	5	none	28/07/2008
5400	5400ABA08 033	581498	6511697	south	1	BAU	NAG	Dark bluish-grey mafic volcanic. Rock is massive with thin rhomb calcite occurring as fracture fill. Weak chlorite alteration. No pyrite. Possible dike.	0	none	28/07/2008
5400	5400ABA08 034	581501	6511701	north	1	BAU	NAG	Blue-grey aphanitic mafic volcanic or dike. Rock is dense, massive, chlorite rich with subtle silicification. Rock is not magnetic. No pyrite or carbonate observed.	0	none	28/07/2008
5400	5400ABA08 035	581505	6511703	north	1	QSP	NAG	QSP-altered mafic volcanic. Rock has wispy sericite throughout and is weakly silicified. Pyrite occurs in conjunction with silica alteration as coarse grain crystals as well as disseminations (8-10%). No carbonate observed.	10	none	28/07/2008
5400	5400ABA08 036	581511	6511703	south	1	DAT	NAG	Weakly qsp altered intermediate possibly dacitic tuff. Rock is light blue to grey, is weakly to moderately silicic and contains wisps and blebs of dark grey/black chlorite. Pyrite cubes and clots occur throughout groundmass (2-3%). 1-2mm wide silicified feldspars noted. Carbonate alteration is very subtle and occurs in conjunction with chlorite alteration.	3	none	28/07/2008
5400	5400ABA08 037	581516	6511705	south	1	QSP	NAG	Light-grey intermediate to felsic ashtuff. Rock is quite silicified and contains trace sericite and 1-2% coarse grain pyrite as disseminations and stringers. Rare calcite occurs on fractures.	2	none	28/07/2008
5400	5400ABA08 038	581520	6511709	north	1	QSP	NAG	Ash-grey intermediate tuff (ashtuff). Rock is weakly to moderately silicified with trace sericite and 2-3% coarse grain pyrite occurring as blebs and stringers. Carbonate fracture fill and pervasive alteration.	3	none	28/07/2008

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5400	5400ABA08 039	581525	6511710	north	1	RAT	NAG	Light-grey rhyolite ash tuff. Rock is quite silicified, qsp altered and contains 10-12% pyrite as disseminations and clots. No carbonate.	12	none	28/07/2008
5400	5400ABA08 040	581529	6511711	north	1	RAT	NAG	Light grey silicified rhyolite tuff/ash tuff. Rock has weak sericite peppering throughout with pods/clots of coarse grain pyrite as well as fine to medium grain disseminations throughout groundmass.	4	none	28/07/2008
5400	5400ABA08 041	581535	6511711	south	1	DAT	NAG	Light grey to dark grey foliated mafic to intermediate lapilli tuff. Rock has wispy black chlorite alteration which occurs near with fine to medium grain pyrite. Pyrite is 5-6% overall. Trace calcite on fractures.	6	none	28/07/2008
5400	5400ABA08 042	581541	6511713	south	1	DAT	NAG	Dark grey-blue weakly silicified mafic to intermediate lapilli tuff. Rock has weak to moderate chlorite alteration and peppered sericite. Pyrite occurs as coarse grains and disseminations (2%). No carbonate observed.	2	none	29/07/2008
5400	5400ABA08 043	581545	6511715	south	1	RAT	NAG	Highly silicic cream coloured rhyolite ash tuff. Rock has a faint banding foliation with subtle sericite	4	none	29/07/2008
5400	5400ABA08 044	581548	6511718	north	1	BIN	NAG	Blocky fractured basalt dike/intrusive with slickensided fractures. Rock is fine grain aphanitic with calcite occurring on fractures. Rare trace fine grain pyrite crystals. (.1%)	0.1	moderate	29/07/2008
5400	5400ABA08 045	581555	6511718	south	1	QSP	NAG	QSP altered intermediate to mafic lapilli tuff. Rock is weakly silicified with occasional rounded felsic lapilli up to .5cm wide. Rock has dark green to black chlorite which occurs in conjunction with fine grain pyrite (5%).	5	slight	29/07/2008
5400	5400ABA08 046	581698	6511773	south	1	QSP	NAG	QSP altered intermediate to mafic volcanic. Rock is weakly silicified and chlorite rich. Pyrite is abundant occurring as fine grain disseminations and medium grain crystals (8-10% pyrite). No carbonate.	10	none	29/07/2008
5400	5400ABA08 047	581704	6511782	north	2	DLT	NAG	Mafic to intermediate lapilli tuff. Rock contains up to .5cm long stretched lapilli or felsic frags. Rock is dark blue/grey, weakly to moderately foliated and weakly silicified and chloritized. Trace pyrite .5%.	0.5	none	29/07/2008
5400	5400ABA08 048	581711	6511789	north	2	DAT	NAG	Blue-grey 'gritty' mafic to intermediate ash tuff. Rock is fine grained, magnetic and weakly chlorite altered. Subtle silicification. No carbonate or pyrite identified.	0	none	29/07/2008

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5400	5400ABA08 049	581716	6511798	north	2	DAU	NAG	Weakly silicified mafic volcanic. Rock is medium grey-blue and spotted with sub-mm wide plagioclase crystals that are partially silicified. Rock contains no pyrite and no carbonate.	0	none	29/07/2008
5400	5400ABA08 050	581721	6511806	south	2	DTF	NAG	Weakly to moderately silicified mafic tuff. Rock contains up to 1-2mm wide clasts and white coloured lapilli/crystals. Difficult to identify. No Carbonate or pyrite evident.	0	none	29/07/2008
5400	5400ABA08 051	581729	6511814	south	2	BIN	NAG	Green chlorite rich concoidally fractured aphanitic basalt intrusive or dike. Rock is fine grained with 5%sub-mm porphyritic crystals of chlorite/epidote altered mafic minerals including epidote altered plagioclase. No pyrite, no carbonate.	0	none	29/07/2008
5400	5400ABA08 052	581732	6511823	north	2	BIN	NAG	Medium green-grey aphanitic basalt intrusive. Rock is fine grained and chlorite/epidote altered. No pyrite, no carbonate.	0	none	29/07/2008
5400	5400ABA08 053	581738	6511831	north	2	RTF	NAG	Light grey rhyolite tuff. Rock is highly silicic and massive. Pyrite occurs as very fine grain disseminations throughout groundmass. Calcite occurs on fractures.	1	none	29/07/2008
5400	5400ABA08 054	581744	6511840	north	2	RAT	NAG	Creamy grey to light green rhyolite ash tuff. Rock is highly siliceous with faint banding evident through wispy chlorite-sericite alteration. No pyrite evident. Weak pervasive carbonate alteration.	0	slight	29/07/2008
5400	5400ABA08 055	581783	6511898	south	4	BIN	NAG	Fine to medium grain equigranular basalt intrusive. Rock is chlorite rich and contains no pyrite and no carbonate.	0	slight	29/07/2008
5400	5400ABA08 056	581809	6511940	south	4	BIN	NAG	Basalt intrusive. No carbonate or pyrite observed.	0	none	29/07/2008
5400	5400ABA08 057	581070	6511547	north	2	RYU	NAG	medium grey, mottled rhyolite lapilli ash tuff; 15% white angular felsic frags (avg 3mm) in grey felsic matrix; cut by myriad crackle quartz stringers (+/- calcite); 0.5-1% pyrite as very fine grained disseminations and wisps; not magnetic	0.5-1%	slight	18/10/2008
5400	5400ABA08 058	581075	6511550	south	2	RYU	NAG	medium grey-green, fairly equigranular felsic ash tuff (?); weak to moderate sericite and chlorite in matrix as very fine specks; not magnetic; no visible pyrite; weak carbonate along hairline quartz-calcite-chlorite fractures	0	slight	18/10/2008

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5400	5400ABA08 059	581081	6511548	north	2	RYU	NAG	medium grey-brown felsic lapilli ash tuff; up to 40% cream to green angular ash and lapilli; weakly sheared and moderately to strong carb (calcite and siderite) altered and weak manganese stain; matrix is moderately sericitic; traces very fine grained pyrite	trace	slight	18/10/2008
5400	5400ABA08 060	581084	6511553	north	2	RYU	NAG	very rusty weathered cream colored aphanitic rhyolite (dike?); many microfractures (difficult to see a fresh surface); moderate manganese and rusty stains along microfractures; not magnetic; no visible pyrite; not calcareous	0	none	18/10/2008
5400	5400ABA08 061	581089	6511554	north	2	BAU	NAG	medium to dark green, medium grained and fairly equigranular intermediate to mafic volcanic (dike?); weakly silicified; moderately magnetic; no visible pyrite; moderately pervasively calcareous	0	slight	18/10/2008
5400	5400ABA08 062	581094	6511556	north	2	SRD	NAG	pale to medium grey-green speckly felsic volcanic, possibly Sloko rhyolite dike; weakly pervasively calcareous; cut by numerous quartz-calcite-siderite stringers; no visible pyrite; not magnetic	0	slight	18/10/2008
5400	5400ABA08 063	581099	6511558	north	2	SRD	NAG	pale grey-green aphanitic felsic, probable Sloko rhyolite dike; very weakly sheared; minor manganese stain; no visible pyrite; weakly calcareous along fractures	0	none	18/10/2008
5400	5400ABA08 064	581103	6511559	north	2	SRD	NAG	pale cream-green aphanitic, speckly rhyolite (Sloko dike?) with fracture controlled chlorite and manganese stain; not magnetic; no visible pyrite; not calcareous	0	none	18/10/2008
5400	5400ABA08 065	581106	6511561	north	2	RYU	NAG	medium grey aphanitic rhyolite, very siliceous, weakly sericitic; no visible pyrite; not magnetic; weak calcite along microfractures	0	slight	18/10/2008
5400	5400ABA08 066	581111	6511559	south	2	BAU	NAG	very dark green to black very fine grained mafic intrusive (dike?); strongly pervasively calcareous; moderately chloritic; not magnetic; no visible pyrite	0	moderate	18/10/2008
5400	5400ABA08 067	581117	6511565	north	2	BAU	NAG	medium to dark green, medium to coarse grained mafic volcanic intrusive (?); moderate to strongly magnetic; hosts euhedral flashy feldspar crystals; weakly chloritic-sericitic matrix; no visible pyrite; weak to moderately pervasively calcareous; trace hematite; cut by thin quartz stringers	0	moderate	18/10/2008
5400	5400ABA08 068	581122	6511566	north	2	RYU	NAG	medium green felsic ash tuff; siliceous and silicified (?); siliceous aphanitic matrix hosts similar colored fine frags <1 mm; cut and flooded by hairline quartz-calcite-chlorite stringers (minor calcite); not magnetic; no visible pyrite	0	moderate	18/10/2008

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5400	5400ABA08 069	581127	6511568	north	2	RYU	NAG	very dark green to black, fine grained mafic subvolcanic; weakly pervasively silicified and very weakly foliated; weak to moderately magnetic; cut by greenish quartz-sericite stringers; no visible pyrite; weak to moderately calcareous along fractures and stringers	0	moderate	18/10/2008
5400	5400ABA08 070	581133	6511567	south	2	BAU	NAG	very dark green to black, fine grained mafic volcanic; trace to 0.5% fine specks pyrite; weakly sheared; weakly magnetic; moderately pervasively calcareous	tr-0.5%	moderate	18/10/2008
5400	5400ABA08 071	581136	6511571	north	2	BAU	NAG	dark green to black, strongly chloritized mafic volcanic (?); strongly sheared and hosting numerous calcite-siderite (+/-quartz) flooding and stringers; strongly pervasively calcareous; not magnetic; no visible pyrite	0	moderate	18/10/2008
5400	5400ABA08 072	581141	6511573	north	4	BIN	NAG	dark grey-green to black, weakly to moderately chloritized, fine grained mafic volcanic (dike?); weakly to moderately silicified; moderate to strongly magnetic; moderate to strongly pervasively calcareous; no visible pyrite	0	moderate	18/10/2008
5400	5400ABA08 073	581146	6511575	north	4	BIN	NAG	medium green, medium grained, speckled, equigranular mafic subvolcanic; weak to moderately magnetic; fairly strongly pervasively calcareous; moderately pervasively saussuritized (chlorite-epidote-calcite); no visible pyrite; rare quartz-calcite veinlets	0	moderate	18/10/2008
5400	5400ABA08 074	581151	6511576	north	4	BIN	NAG	very dark green to black, fine to medium grained, equigranular mafic subvolcanic; not magnetic; traces cubic pyrite; weakly calcareous along fractures and as calcite "sweats"	trace	moderate	18/10/2008
5400	5400ABA08 075	581700	6511778	north	2	RLT	NAG	blotchy light to medium grey felsic lapilli ash tuff; aphanitic felsic matrix hosting 35% white to cream subangular to subrounded felsic ash to lapilli sized frags; matrix is moderately sericitized; total pyrite 8-10% as very fine grained blebs, streaks and subhedral cubes	8-10%	none	19/10/2008
5400	5400ABA08 076	581707	6511786	north	2	RYU	NAG	medium grey green, felsic crystal ash tuff; moderately sericitized and chloritized felsic matrix hosting 20-25% subangular pale green-cream felsic frags < 2 mm (rarely to 10 mm) and 2-3% round quartz eyes; not magnetic; very weak calcite along fractures; traces cubic pyrite	trace	none	19/10/2008
5400	5400ABA08 077	581716	6511792	south	2	BIN	NAG	very dark green to black, very fine grained mafic volcanic (dike?); very strongly magnetic; 0.5% very fine grained specks and streaks pyrite associated with microfractures; not calcareous	0.50%	none	19/10/2008

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5400	5400ABA08078	581719	6511802	north	2	BIN	NAG	very dark green to black matrix hosting 10-15% cream to pale green speckled subround to subangular felsic frags (?)...these may be altered feldspars but are not zoned or altered); not magnetic; no visible pyrite; very weakly pervasively calcareous	0	none	19/10/2008
5400	5400ABA08079	581724	6511810	north	2	BIN	NAG	very dark green to black matrixed felsic to intermediate lapilli ash tuff, showing 20% subangular cream colored frags (1-4 mm), some large (10 cm); no visible pyrite; not magnetic; weakly sericitized-chloritized frags and matrix; very weakly pervasively calcareous	0	none	19/10/2008
5400	5400ABA08080	581730	6511819	north	2	BIN	NAG	very dark green to black, medium to fine grained equigranular mafic subvolcanic; trace to 0.5% pyrite as cubes; strongly magnetic; cut by wormy quartz veinlets and sweets; not calcareous	tr-0.5%	slight	19/10/2008
5400	5400ABA08081	581735	6511827	north	4	BIN	NAG	dark green to black, equigranular, fine grained mafic subvolcanic; strongly magnetic; moderate to strongly pervasively calcareous, especially along fractures; traces cubic pyrite	trace	slight	19/10/2008
5400	5400ABA08082	581740	6511835	north	4	BIN	NAG	medium green, moderately silicified and sheared (platey) felsic volcanic (?)...original textures overprinted; no visible pyrite; cut by quartz-calcite-hematite-magnetite stringers	0	moderate	19/10/2008
5400	5400ABA08083	581746	6511844	north	4	BIN	NAG	note: sample from sheared rock in timbered fault zone); medium green, highly sheared probable felsic volcanic tuff (?); greasy feel; ghost textures of tephra evident; moderate to strongly sericitic and minor chlorite, trace hematite; no visible pyrite; moderate calcite along foliation	0	moderate	19/10/2008
5400	5400ABA08033_duplicate			south	1	BAU	NAG	replicate		None	
5400	5400ABA08034_duplicate			north	1	BAU	NAG	replicate		None	
5400	5400ABA08048_duplicate			north	2	QSP	NAG	replicate		None	
5400	5400ABA08052_duplicate			north	2	QSP	NAG	replicate		None	
5200	5200ABA08001	580978	6511323	north	2	QSP	NAG	Grey-blue intermediate to felsic silicified volcanic. Rock is moderately siliceous with subtle chlorite alteration. Pyrite is common (5-8% of rock) and occurs as very fine grain disseminations. No Carbonate Observed	8	none	2008-July-24

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5200	5200ABA08 002	580986	6511329	north	2	QSP	NAG	Grey-Blue intermediate to felsic volcanic. Rock contains moderate to strong silica content in conjunction with subtle chlorite and epidote patches. Occasional fine to medium grain blebs of chalcopyrite present with very fine grain pyrite occurring as disseminations. 5% pyrite overall. No carbonate observed.	5	slight	2008-July-24
5200	5200ABA08 003	581002	6511341	south	2	QSP	NAG	Silica-rich grey-blue intermediate ash-tuff with moderate to strong silicification and 8-10% fine grain disseminate pyrite. No carbonate observed.	10	none	2008-July-24
5200	5200ABA08 004	581018	6511354	south	2	QSP	NAG	Weakly sheared intermediate tuff with weak silicification and small mm-wide crystals or clasts. 3-4% fine grain disseminated pyrite present. No carbonate observed.	4	none	2008-July-24
5200	5200ABA08 005	581032	6511370	north	2	QSP	NAG	Rhyo-dacitic lapilli ash tuff. Rock is moderately QSP altered and contains 20-40% ash which is pale green in colour. Quartz-sericite occurs as wisps along foliation plane/	3	none	2008-July-25
5200	5200ABA08 006	581047	6511382	north	2	RAT	NAG	Rhyo-dacitic ash tuff exhibiting sub-hedral to subrounded fragments (40%) set in a pale green siliceous matrix. Rock contains rare sausseritized felsic fragments up to 10mm width. Matrix is weakly sericitic and contains trace cubic pyrite. Rock is virtually non-calcareous except for sausseritized frags.	0.1	slight	2008-July-25
5200	5200ABA08 007	581063	6511392	south	2	RTF	NAG	Medium grain quartz-sericite altered rhyolite tuff. Trace to .5% fine grain pyrite specks noted. Chlorite alteration occurs along fracture in conjunction with carbonate. Rock is weakly magnetic and contains a weak hematite stain.	0.5	moderate	2008-July-25
5200	5200ABA08 008	581077	6511408	north	4	BIN	NAG	Fine grain equigranular basalt intrusive. Rock is weakly sausseritized, weakly magnetic and contains calcite fracture fill and stringers. Trace fine grain pyrite.	0.1	moderate	2008-July-25
5200	5200ABA08 009	581084	6511415	north	4	BIN	NAG	Blocky fractured equigranular basalt intrusive. Rock contains euhedral plagioclase crystals, no visible sulphides (0%). Rock contains sub-mm wide wispy fractures infilled with carbonate.	0	slight	2008-July-25

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5200	5200ABA08 010	581094	6511423	north	2	DTF	NAG	Variably tuffaceous felsic to intermediate tuff with up to .5cm wide chlorite clasts/lapilli. Rock is dark blue/grey and has .5mm wide silica crystals that are possibly silicified feldspars. Occasional 1mm wide pyrite crystals observed scattered throughout matrix (1-2% overall). Small carbonate fracture veinlets occur (1%) throughout rock.	0.5	slight	2008-July-25
5200	5200ABA08 011	581100	6511428	north	2	DTF	NAG	Light grey to bluish green intermediate to felsic tuff with weak chloritic alteration and silicification. Rock contains sub-mm wide white flecks of silicified feldspars or lapilli. No pyrite observed. Carbonate is common on fracture surfaces and in groundmass.	0	slight	2008-July-25
5200	5200ABA08 012	581107	6511435	north	4	BIN	NAG	Dark greyish blue to black massive mafic volcanic. Rock is fine grain aphanitic with weak chloritic colouration. .5% carbonate occurs on fractures. Pyrite not observed.	0	slight	2008-July-25
5200	5200ABA08 013	581117	6511440	south	4	DAT	NAG	Weakly to moderately silicified intermediate to felsic lapilli ash tuff. Rock is non-magnetic with occasional silicified lapilli clasts. No pyrite visible (0%). Chlorite occurs along fracture in conjunction with calcite.	0	moderate	2008-July-25
5200	5200ABA08 014	581131	6511455	north	4	BIN	NAG	Dark green fine grain basalt dike or intrusive chill?Rock is non-magnetic and contains trace pyrite pyrite along fractures. Moderately to strongly calcareous pervasive alteration.	0.1	moderate	2008-July-25
5200	5200ABA08 015	581145	6511469	north	4	BIN	NAG	Fine to medium grain equigranular basalt intrusive. Rock has blocky fracture and a weakly sausseritized matrix. Trace cubic pyrite noted. Calcite also occurs on fractures.	0.1	moderate	2008-July-25
5200	5200ABA08 016	581161	6511482	north	4	BIN	NAG	Weakly altered basalt intrusive. Rock contains chlorite altered mafic minerals and weakly sausseritized feldspars. Rock is non-magnetic with no sulphides (0%). Rock is moderately calcareous.	0	moderate	2008-July-25
5200	5200ABA08 017	581175	6511495	north	4	BIN	NAG	Green massive basalt/mafic with blocky fracture and featureless aphanitic groundmass. Rock contains 1mm wide crystals of pyrite comprising 1% of rock. Small sub-mm fractures contain carbonate in conjunction with a subtle alteration of groundmass.	1	moderate	2008-July-25
5200	5200ABA08 018	581192	6511506	south	4	BIN	NAG	Medium grained equigranular basalt intrusive. Rock is moderately sausseritized, non-magnetic, and contains pervasive carbonate in groundmass and as fracture fill.	0	slight	2008-July-25

Level	Sample	NAD83_E	NAD83_N	Side of tunnel	Mine Unit	Rock code	PAG/NAG from ABA	Description	Pyrite %	Fizz Test	Sample_Date
5200	5200ABA08 019	581207	6511519	south	4	BIN	NAG	Medium grained equigranular basalt intrusive with weak sausseritization. No sulphides observed. Rock is weakly calcareous along fractures.	0	none	2008-July-25
5200	5200ABA08 020	581222	6511533	south	4	BIN	NAG	Medium green fine to medium grain equigranular basalt intrusive with blocky fracture. Weak chlorite alteration of mafic minerals. Rock is weakly calcareous along fracture. Trace pyrite (.1%)	0.1	slight	2008-July-25
5200	5200ABA08 021	581236	6511547	north	4	BIN	NAG	Weakly chlorite altered basalt intrusive with weakly sausseritized feldspars. Rock has possible shear features due to slickensided fracture. Rock is strongly calcareous with trace pyrite (.1%). Alteration is pervasive.	0.1	moderate	2008-July-25
5200	5200ABA08 022	581251	6511561	north	4	BIN	NAG	Green to greenish black equigranular intrusive with blocky fracture. Rock is weakly sausseritized and non-magnetic. Rock is weakly calcareous along fractures and contains trace fine grain specks of pyrite.	0.1	slight	2008-July-25

Level	Sample	NAD83_E	NAD83_N	Mine Unit	Rock code	Paste pH	S(T)	S(SO4)	AP w/o Ba	BaO (%)	Insoluble S (%) (Ba XRF)	S2- (%) w. XRF	AP (w/ Ba XRF)	TIC (%)
5400	5400ABA08001	581064	6511542	2	RLT	7.81	2.07	0.02	64.1	0.27	0.06	1.994	62.3	0.04
5400	5400ABA08002	581114	6511560	2	RTF	8.85	0.05	0.02	0.9	1.01	0.21	0.005	0.2	0.66
5400	5400ABA08003	581158	6511577	4	BIN	9.61	0.02	0.005	0.6	0.10	0.02	0.005	0.2	0.06
5400	5400ABA08004	581204	6511593	4	BIN	9.26	0.02	0.005	0.6	0.03	0.01	0.009	0.3	0.67
5400	5400ABA08005	581252	6511610	4	BIN	9.43	0.01	0.005	0.3	0.03	0.01	0.005	0.2	0.8
5400	5400ABA08006	581298	6511629	4	BIN	9.21	0.01	0.005	0.3	0.07	0.01	0.005	0.2	0.16
5400	5400ABA08007	581347	6511646	4	BIN	9.39	0.09	0.005	2.8	0.07	0.01	0.070	2.2	1.05
5400	5400ABA08008	581378	6511657	2	RYU	8.59	4.73	0.01	147.5	0.21	0.04	4.676	146.1	0.49
5400	5400ABA08009	581383	6511659	1	BAU	7.59	5.13	0.03	159.4	0.17	0.04	5.064	158.3	0.28
5400	5400ABA08010	581387	6511661	1	BAU	9.5	0.03	0.005	0.9	0.10	0.02	0.004	0.1	1.61
5400	5400ABA08011	581392	6511662	1	BAU	8.63	2.65	0.005	82.8	0.07	0.01	2.630	82.2	0.05
5400	5400ABA08012	581396	6511664	1	BAU	8.7	2.8	0.01	87.2	0.10	0.02	2.769	86.5	0.2
5400	5400ABA08013	581403	6511667	1	BAU	9.16	0.1	0.005	3.1	0.04	0.01	0.087	2.7	0.09
5400	5400ABA08014	581407	6511668	1	BAU	8.92	0.14	0.005	4.4	0.05	0.01	0.125	3.9	0.08
5400	5400ABA08015	581411	6511670	1	BAU	8.42	1.9	0.005	59.4	0.07	0.01	1.880	58.8	0.06
5400	5400ABA08016	581418	6511670	1	DAT	8.1	2.78	0.01	86.6	0.08	0.02	2.753	86.0	0.01
5400	5400ABA08017	581422	6511671	1	DAT	7.81	3.85	0.02	119.7	0.18	0.04	3.792	118.5	0.02
5400	5400ABA08018	581427	6511673	1	RAT	6.67	1.81	0.02	55.9	0.24	0.05	1.740	54.4	<0.01
5400	5400ABA08019	581431	6511674	1	QSP	6.63	1.94	0.02	60.0	0.27	0.06	1.864	58.2	<0.01
5400	5400ABA08020	581434	6511678	1	RAT	7.16	3.41	0.03	105.6	0.29	0.06	3.319	103.7	0.02
5400	5400ABA08021	581439	6511680	1	QSP	7.47	2.26	0.03	69.7	0.20	0.04	2.188	68.4	0.04
5400	5400ABA08022	581444	6511682	1	QSP	5.78	3.93	0.11	119.4	0.77	0.16	3.659	114.3	<0.01
5400	5400ABA08023	581449	6511683	1	QSP	7.62	2.15	0.09	67.2	1.08	0.23	1.834	57.3	0.1
5400	5400ABA08024	581454	6511682	1	BAU	8.73	0.09	0.01	2.8	0.65	0.14	0.005	0.2	0.03
5400	5400ABA08025	581458	6511686	1	BAU	8.45	0.35	0.02	10.9	0.26	0.05	0.276	8.6	0.02
5400	5400ABA08026	581463	6511688	1	QSP	4.37	21.3	0.15	665.6	0.66	0.14	21.012	656.6	0.01
5400	5400ABA08027	581470	6511688	1	BAU	9.09	0.06	0.005	1.9	0.13	0.03	0.028	0.9	0.61
5400	5400ABA08028	581472	6511691	1	BAU	9.01	0.15	0.005	4.7	0.15	0.03	0.114	3.6	0.81
5400	5400ABA08029	581477	6511693	1	QSP	6.37	3.02	0.07	94.4	1.63	0.34	2.609	81.5	0.02
5400	5400ABA08030	581482	6511695	1	QSP	6.89	2.67	0.04	83.4	0.34	0.07	2.559	80.0	<0.01

Level	Sample	NAD83_E	NAD83_N	Mine Unit	Rock code	Paste pH	S(T)	S(SO4)	AP w/o Ba	BaO (%)	Insoluble S (%) (Ba XRF)	S2- (%) w. XRF	AP (w/ Ba XRF)	TIC (%)
5400	5400ABA08031	581488	6511695	1	BAU	9.68	1.37	0.04	42.8	0.88	0.18	1.146	35.8	0.56
5400	5400ABA08032	581490	6511698	1	QSP	7.93	3.29	0.02	102.8	0.29	0.06	3.209	100.3	<0.01
5400	5400ABA08033	581498	6511697	1	BAU	7.84	1.56	0.02	48.8	0.34	0.07	1.469	45.9	0.05
5400	5400ABA08034	581501	6511701	1	BAU	8.52	1	0.01	31.3	0.24	0.05	0.940	29.4	0.02
5400	5400ABA08035	581505	6511703	1	QSP	6.54	5.81	0.1	181.6	0.16	0.03	5.677	177.4	0.02
5400	5400ABA08036	581511	6511703	1	DAT	6.28	2.82	0.11	88.1	0.62	0.13	2.580	80.6	0.01
5400	5400ABA08037	581516	6511705	1	QSP	8.43	4.07	0.04	127.2	1.37	0.29	3.744	117.0	0.04
5400	5400ABA08038	581520	6511709	1	QSP	8.6	3.03	0.05	94.7	0.99	0.21	2.773	86.7	0.07
5400	5400ABA08039	581525	6511710	1	RAT	4.77	9.52	0.1	297.5	1.64	0.34	9.077	283.7	0.01
5400	5400ABA08040	581529	6511711	1	RAT	7.09	1.97	0.04	61.6	0.42	0.09	1.842	57.6	0.01
5400	5400ABA08041	581535	6511711	1	DAT	6.89	11.5	0.02	359.4	0.20	0.04	11.438	357.4	0.07
5400	5400ABA08042	581541	6511713	1	DAT	4.86	5.91	0.07	184.7	0.16	0.03	5.807	181.5	<0.01
5400	5400ABA08043	581545	6511715	1	RAT	5.68	0.18	0.04	5.6	0.09	0.02	0.121	3.8	0.04
5400	5400ABA08044	581548	6511718	1	BIN	8.44	0.12	0.01	3.8	0.04	0.01	0.102	3.2	0.5
5400	5400ABA08045	581555	6511718	1	QSP	8.08	7.74	0.04	241.9	0.22	0.05	7.654	239.2	0.14
5400	5400ABA08046	581698	6511773	1	QSP	6.23	2.2	1.27	68.8	0.18	0.04	0.892	27.9	0.05
5400	5400ABA08047	581704	6511782	2	DLT	8.98	0.07	0.02	2.2	0.65	0.14	0.005	0.2	0.01
5400	5400ABA08048	581711	6511789	2	DAT	8.73	0.22	0.13	6.9	0.02	0.00	0.086	2.7	<0.01
5400	5400ABA08049	581716	6511798	2	DAU	8.79	0.05	0.04	1.6	0.08	0.02	0.005	0.2	0.01
5400	5400ABA08050	581721	6511806	2	DTF	8.89	0.03	0.02	0.9	0.13	0.03	0.005	0.2	<0.01
5400	5400ABA08051	581729	6511814	2	BIN	8.83	0.05	0.04	1.6	0.02	0.00	0.006	0.2	<0.01
5400	5400ABA08052	581732	6511823	2	BIN	9	0.18	0.03	5.6	0.01	0.00	0.148	4.6	<0.01
5400	5400ABA08053	581738	6511831	2	RTF	7.89	0.89	0.28	27.8	0.06	0.01	0.597	18.7	0.02
5400	5400ABA08054	581744	6511840	2	RAT	8.5	0.03	0.02	0.9	0.12	0.03	0.005	0.2	0.2
5400	5400ABA08055	581783	6511898	4	BIN	8.79	0.07	0.01	2.2	0.02	0.00	0.056	1.7	0.04
5400	5400ABA08056	581809	6511940	4	BIN	8.81	0.11	0.09	3.4	0.20	0.04	0.005	0.2	<0.01
5400	5400ABA08057	581070	6511547	2	RYU	8.25	1.22	0.04	36.6	0.13	0.03	1.153	36.0	0.17
5400	5400ABA08058	581075	6511550	2	RYU	9.65	0.01	0.005	<0.3	0.04	0.01	0.005	0.2	0.07
5400	5400ABA08059	581081	6511548	2	RYU	9.40	0.02	0.005	0.6	0.07	0.01	0.0004	0.0	0.18
5400	5400ABA08060	581084	6511553	2	RYU	9.36	0.01	0.005	<0.3	0.03	0.01	0.005	0.2	0.03

Level	Sample	NAD83_E	NAD83_N	Mine Unit	Rock code	Paste pH	S(T)	S(SO4)	AP w/o Ba	BaO (%)	Insoluble S (%) (Ba XRF)	S2- (%) w. XRF	AP (w/ Ba XRF)	TIC (%)
5400	5400ABA08061	581089	6511554	2	BAU	9.77	0.01	0.005	<0.3	0.05	0.01	0.005	0.2	0.5
5400	5400ABA08062	581094	6511556	2	SRD	9.57	0.01	0.005	<0.3	0.05	0.01	0.005	0.2	0.31
5400	5400ABA08063	581099	6511558	2	SRD	9.30	0.01	0.005	<0.3	0.07	0.01	0.005	0.2	0.02
5400	5400ABA08064	581103	6511559	2	SRD	9.68	0.005	0.005	<0.3	0.1	0.02	0.005	0.2	0.03
5400	5400ABA08065	581106	6511561	2	RYU	9.21	0.01	0.005	<0.3	0.09	0.02	0.005	0.2	0.12
5400	5400ABA08066	581111	6511559	2	BAU	9.67	0.09	0.02	2.2	0.03	0.01	0.064	2.0	0.91
5400	5400ABA08067	581117	6511565	2	BAU	9.52	0.02	0.005	0.6	0.06	0.01	0.002	0.1	0.4
5400	5400ABA08068	581122	6511566	2	RYU	9.55	0.02	0.005	0.6	0.06	0.01	0.002	0.1	0.64
5400	5400ABA08069	581127	6511568	2	RYU	9.51	0.02	0.01	0.3	0.1	0.02	0.005	0.2	0.93
5400	5400ABA08070	581133	6511567	2	BAU	9.26	0.23	0.02	5.9	0.02	0.00	0.21	6.4	0.32
5400	5400ABA08071	581136	6511571	2	BAU	9.00	0.01	0.005	<0.3	0.02	0.00	0.001	0.0	4.14
5400	5400ABA08072	581141	6511573	4	BIN	9.48	0.09	0.01	2.5	0.03	0.01	0.074	2.3	0.89
5400	5400ABA08073	581146	6511575	4	BIN	9.35	0.1	0.01	2.5	0.02	0.00	0.086	2.7	0.62
5400	5400ABA08074	581151	6511576	4	BIN	9.28	0.11	0.02	3.1	0.05	0.01	0.080	2.5	1.27
5400	5400ABA08075	581700	6511778	2	RLT	6.41	4.43	0.09	117.5	0.14	0.03	4.3	134.7	<0.01
5400	5400ABA08076	581707	6511786	2	RYU	9.53	0.01	0.01	<0.3	1.72	0.36	0.005	0.2	<0.01
5400	5400ABA08077	581716	6511792	2	BIN	9.19	0.17	0.02	4.7	0.36	0.08	0.075	2.3	<0.01
5400	5400ABA08078	581719	6511802	2	BIN	8.99	0.03	0.03	<0.3	0.02	0.00	0.005	0.2	<0.01
5400	5400ABA08079	581724	6511810	2	BIN	9.84	0.01	0.01	<0.3	0.12	0.03	0.005	0.2	0.01
5400	5400ABA08080	581730	6511819	2	BIN	8.66	0.22	0.03	5.9	0.03	0.01	0.18	5.7	0.1
5400	5400ABA08081	581735	6511827	4	BIN	8.94	0.07	0.03	1.3	0.06	0.01	0.027	0.9	0.1
5400	5400ABA08082	581740	6511835	4	BIN	8.84	0.19	0.08	3.1	0.44	0.09	0.018	0.6	0.44
5400	5400ABA08083	581746	6511844	4	BIN	9.07	0.01	0.01	<0.3	0.08	0.02	0.005	0.2	0.21
5400	5400ABA08033_dup	581498	6511697	1	BAU	8.57	1.61	0.03	47.8	0.24	0.05	1.530	47.8	0.07
5400	5400ABA08034_dup	581501	6511701	1	BAU	9.04	0.93	0.02	26.9	0.19	0.04	0.870	27.2	0.02
5400	5400ABA08048_dup	581711	6511789	2	QSP	9.14	0.23	0.07	5.6	0.03	0.01	0.154	4.8	0.02
5400	5400ABA08052_dup	581732	6511823	2	QSP	9.43	0.13	0.03	3.1	0.01	0.00	0.098	3.1	0.01
5200	5200ABA08001	580978	6511322.6	2	QSP	6.7	4.86	0.04	150.6	0.16	0.03	4.787	149.6	0.1
5200	5200ABA08002	580986	6511329.1	2	QSP	8.47	2.49	0.01	77.5	0.16	0.03	2.447	76.5	0.09
5200	5200ABA08003	581002	6511340.7	2	QSP	5.66	2.93	0.03	90.6	0.28	0.06	2.841	88.8	0.05

5400 and 5200 Levels

Level	Sample	NAD83_E	NAD83_N	Mine Unit	Rock code	Paste pH	S(T)	S(SO4)	AP w/o Ba	BaO (%)	Insoluble S (%) (Ba XRF)	S2- (%) w. XRF	AP (w/ Ba XRF)	TIC (%)
5200	5200ABA08004	581018	6511354.4	2	QSP	5.02	3.17	0.03	98.1	0.24	0.05	3.090	96.6	0.01
5200	5200ABA08005	581032	6511369.5	2	QSP	7.44	3.06	0.01	95.3	0.36	0.08	2.975	93.0	0.06
5200	5200ABA08006	581047	6511382.4	2	RAT	8.53	0.06	0.01	1.6	0.09	0.02	0.031	1.0	0.06
5200	5200ABA08007	581063	6511391.9	2	RTF	9.03	0.06	0.02	1.3	0.09	0.02	0.021	0.7	0.41
5200	5200ABA08008	581077	6511408.2	4	BIN	8.97	0.03	0.02	0.3	0.02	0.00	0.006	0.2	0.8
5200	5200ABA08009	581084	6511415.3	4	BIN	9.19	0.02	0.01	0.3	0.09	0.02	0.005	0.2	0.08
5200	5200ABA08010	581094	6511423	2	DTF	9.29	0.05	0.01	1.3	0.07	0.01	0.025	0.8	0.16
5200	5200ABA08011	581100	6511428.3	2	DTF	9.16	0.01	0.01	0.3	0.07	0.01	0.005	0.2	0.13
5200	5200ABA08012	581107	6511435.3	4	BIN	9.66	0.03	0.01	0.6	0.12	0.03	0.005	0.2	0.04
5200	5200ABA08013	581117	6511440.1	4	DAT	9.05	0.01	0.01	0.3	0.07	0.01	0.005	0.2	0.59
5200	5200ABA08014	581131	6511455.4	4	BIN	9.31	0.04	0.04	1.3	0.04	0.01	0.005	0.2	0.44
5200	5200ABA08015	581145	6511469	4	BIN	8.97	0.1	0.03	2.2	0.04	0.01	0.062	1.9	0.35
5200	5200ABA08016	581161	6511481.9	4	BIN	9.2	0.01	0.01	0.3	0.04	0.01	0.005	0.2	0.56
5200	5200ABA08017	581175	6511494.6	4	BIN	9.12	0.05	0.03	0.6	0.03	0.01	0.014	0.4	0.45
5200	5200ABA08018	581192	6511506.4	4	BIN	8.99	0.09	0.01	2.5	0.01	0.00	0.078	2.4	0.13
5200	5200ABA08019	581207	6511519.4	4	BIN	8.98	0.02	0.01	0.3	0.14	0.03	0.005	0.2	<0.01
5200	5200ABA08020	581222	6511533	4	BIN	9.21	0.01	0.01	0.3	0.04	0.01	0.005	0.2	0.23
5200	5200ABA08021	581236	6511547.3	4	BIN	9.35	0.01	0.01	0.3	0.04	0.01	0.005	0.2	0.49
5200	5200ABA08022	581251	6511561.1	4	BIN	9.51	0.02	0.01	0.3	0.04	0.01	0.002	0.1	0.08

Level	Sample	CO3 NP	Sobek NP	Net NP	Unavail able NP	Adj-SNPR (XRF)	PAG/NAG from ABA	Pyrite %	Fizz Test 10% HCl	lab	certificate
5400	5400ABA08001	3.3	6.8	-57.3	5.0	0.0	PAG	2	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08002	55.0	67.7	66.8	5.0	401	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08003	5.0	13.7	13.1	5.0	55.9	NAG	0	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08004	55.8	66.1	65.5	5.0	224	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08005	66.7	82.9	82.6	5.0	499	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08006	13.3	23.1	22.8	5.0	116	NAG	0	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08007	87.5	102.5	99.7	5.0	44.3	NAG	1	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08008	40.8	52.2	-95.3	5.0	0.3	PAG	5	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08009	23.3	32.3	-127.1	5.0	0.2	PAG	8	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08010	134.2	155.0	154.0	5.0	1173	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08011	4.2	15.3	-67.5	5.0	0.1	PAG	3	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08012	16.7	25.0	-62.2	5.0	0.2	PAG	6	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08013	7.5	17.6	14.4	5.0	4.6	NAG	1	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08014	6.7	16.0	11.6	5.0	2.8	NAG	0.1	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08015	5.0	13.1	-46.3	5.0	0.1	PAG	1	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08016	0.8	11.5	-75.1	5.0	0.1	PAG	4	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08017	1.7	11.9	-107.8	5.0	0.1	PAG	5	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08018	<0.8	3.5	-52.5	5.0	0.0	PAG	4	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08019	<0.8	4.1	-55.9	5.0	0.0	PAG	5	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08020	1.7	4.2	-101.4	5.0	0.0	PAG	4	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08021	3.3	6.3	-63.4	5.0	0.0	PAG	4	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08022	<0.8	0.9	-118.5	5.0	0.0	PAG	8	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08023	8.3	10.9	-56.3	5.0	0.1	PAG	4	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08024	2.5	16.1	13.3	5.0	71.0	NAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08025	1.7	15.7	4.8	5.0	1.2	PAG	0.5	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08026	0.8	1.6	-664.0	5.0	0.0	PAG	15	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08027	50.8	62.4	60.5	5.0	66.0	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08028	67.5	77.8	73.2	5.0	20.5	NAG	0.1	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08029	1.7	2.6	-91.8	5.0	0.0	PAG	5	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08030	<0.8	3.0	-80.5	5.0	0.0	PAG	8	none	Assayers Canada	8V-3351-PA1

Level	Sample	CO3 NP	Sobek NP	Net NP	Unavail able NP	Adj-SNPR (XRF)	PAG/NAG from ABA	Pyrite %	Fizz Test 10% HCl	lab	certificate
5400	5400ABA08031	46.7	64.4	21.5	5.0	1.7	PAG	2	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08032	<0.8	5.3	-97.5	5.0	0.0	PAG	5	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08033	4.2	11.1	-37.6	5.0	0.1	PAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08034	1.7	8.4	-22.8	5.0	0.1	PAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08035	1.7	5.8	-175.7	5.0	0.0	PAG	10	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08036	0.8	3.0	-85.2	5.0	0.0	PAG	3	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08037	3.3	5.9	-121.2	5.0	0.0	PAG	2	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08038	5.8	8.8	-85.9	5.0	0.0	PAG	3	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08039	0.8	1.4	-296.1	5.0	0.0	PAG	12	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08040	0.8	2.7	-58.8	5.0	0.0	PAG	4	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08041	5.8	7.6	-351.8	5.0	0.0	PAG	6	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08042	<0.8	9.7	-175.0	5.0	0.0	PAG	2	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08043	3.3	1.1	-4.5	5.0	0.0	PAG	4	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08044	41.7	45.8	42.0	5.0	12.8	NAG	0.1	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08045	11.7	14.4	-227.5	5.0	0.0	PAG	5	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08046	4.2	14.6	-54.1	5.0	0.3	PAG	10	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08047	0.8	8.1	5.9	5.0	19.6	NAG	0.5	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08048	<0.8	9.1	2.2	5.0	1.5	PAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08049	0.8	6.8	5.3	5.0	11.7	NAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08050	<0.8	6.7	5.8	5.0	10.9	NAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08051	<0.8	7.7	6.1	5.0	14.8	NAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08052	<0.8	9.6	3.9	5.0	1.0	PAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08053	1.7	4.1	-23.7	5.0	0.0	PAG	1	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08054	16.7	17.2	16.3	5.0	78.4	NAG	0	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08055	3.3	15.0	12.8	5.0	5.7	NAG	0	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08056	<0.8	9.9	6.5	5.0	31.5	NAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08057	14.2	18.4	-18.2	5.0	0.4	PAG	0.5-1%	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08058	5.8	10.5	10.5	5.0	35.5	NAG	0	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08059	15.0	20.1	19.5	5.0	1327	NAG	trace	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08060	2.5	7.4	7.4	5.0	15.6	NAG	0	none	Assayers Canada	8V-3351-PA1

Level	Sample	CO3 NP	Sobek NP	Net NP	Unavail able NP	Adj-SNPR (XRF)	PAG/NAG from ABA	Pyrite %	Fizz Test 10% HCl	lab	certificate
5400	5400ABA08061	41.7	46.8	46.8	5.0	268	NAG	0	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08062	25.8	32.6	32.6	5.0	176	NAG	0	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08063	1.7	3.2	3.2	5.0	0.0	NAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08064	2.5	3.1	3.1	5.0	0.0	NAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08065	10.0	14.3	14.3	5.0	59.3	NAG	0	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08066	75.8	88.8	86.7	5.0	42.1	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08067	33.3	40.7	40.1	5.0	465	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08068	53.3	59.1	58.4	5.0	705	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08069	77.5	83.2	82.9	5.0	501	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08070	26.7	44.2	38.2	5.0	6.1	NAG	tr-0.5%	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08071	345.0	367.7	367.7	5.0	14183	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08072	74.2	85.7	83.2	5.0	35.0	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08073	51.7	63.9	61.4	5.0	22.0	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08074	105.8	118.2	115.1	5.0	45.5	NAG	trace	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08075	<0.8	2.1	-115.4	5.0	0.0	PAG	8-10%	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08076	<0.8	6.6	6.6	5.0	10.1	NAG	trace	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08077	<0.8	10.8	6.1	5.0	2.5	NAG	0.50%	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08078	<0.8	7.1	7.1	5.0	13.3	NAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08079	0.8	7.3	7.3	5.0	14.8	NAG	0	none	Assayers Canada	8V-3351-PA1
5400	5400ABA08080	8.3	25.0	19.0	5.0	3.5	NAG	tr-0.5%	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08081	8.3	16.4	15.1	5.0	13.3	NAG	trace	slight	Assayers Canada	8V-3351-PA1
5400	5400ABA08082	36.7	41.4	38.3	5.0	64.8	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08083	17.5	26.2	26.2	5.0	136	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5400	5400ABA08033_dup	5.8	13.2	-34.6	5.0	0.2	PAG	0	None	Assayers Canada	8V-3351-PA1
5400	5400ABA08034_dup	1.7	10.3	-16.6	5.0	0.2	PAG	0	None	Assayers Canada	8V-3351-PA1
5400	5400ABA08048_dup	1.7	11.5	5.9	5.0	1.4	PAG	0	None	Assayers Canada	8V-3351-PA1
5400	5400ABA08052_dup	0.8	11.3	8.2	5.0	2.1	NAG	0	None	Assayers Canada	8V-3351-PA1
5200	5200ABA08001	8.3	11.3	-139.3	5.0	0.0	PAG	8	none	Assayers Canada	8V-3351-PA1
5200	5200ABA08002	7.5	10.0	-67.5	5.0	0.1	PAG	5	slight	Assayers Canada	8V-3351-PA1
5200	5200ABA08003	4.2	5.0	-85.7	5.0	0.0	PAG	10	none	Assayers Canada	8V-3351-PA1

Level	Sample	CO3 NP	Sobek NP	Net NP	Unavail able NP	Adj-SNPR (XRF)	PAG/NAG from ABA	Pyrite %	Fizz Test 10% HCl	lab	certificate
5200	5200ABA08004	0.8	3.0	-95.1	5.0	0.0	PAG	4	none	Assayers Canada	8V-3351-PA1
5200	5200ABA08005	5.0	8.6	-86.8	5.0	0.0	PAG	3	none	Assayers Canada	8V-3351-PA1
5200	5200ABA08006	5.0	8.7	7.1	5.0	3.8	NAG	0.1	slight	Assayers Canada	8V-3351-PA1
5200	5200ABA08007	34.2	39.2	38.0	5.0	51.7	NAG	0.5	moderate	Assayers Canada	8V-3351-PA1
5200	5200ABA08008	66.7	82.3	82.0	5.0	425.3	NAG	0.1	moderate	Assayers Canada	8V-3351-PA1
5200	5200ABA08009	6.7	17.4	17.1	5.0	79.2	NAG	0	slight	Assayers Canada	8V-3351-PA1
5200	5200ABA08010	13.3	19.1	17.9	5.0	17.8	NAG	0.5	slight	Assayers Canada	8V-3351-PA1
5200	5200ABA08011	10.8	16.5	16.2	5.0	73.6	NAG	0	slight	Assayers Canada	8V-3351-PA1
5200	5200ABA08012	3.3	14.4	13.8	5.0	60.1	NAG	0	slight	Assayers Canada	8V-3351-PA1
5200	5200ABA08013	49.2	59.1	58.7	5.0	346.0	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5200	5200ABA08014	36.7	55.7	54.5	5.0	324.5	NAG	0.1	moderate	Assayers Canada	8V-3351-PA1
5200	5200ABA08015	29.2	46.9	44.7	5.0	21.8	NAG	0.1	moderate	Assayers Canada	8V-3351-PA1
5200	5200ABA08016	46.7	61.4	61.1	5.0	361.1	NAG	0	moderate	Assayers Canada	8V-3351-PA1
5200	5200ABA08017	37.5	50.2	49.6	5.0	105.5	NAG	1	moderate	Assayers Canada	8V-3351-PA1
5200	5200ABA08018	10.8	21.3	18.8	5.0	6.7	NAG	0	slight	Assayers Canada	8V-3351-PA1
5200	5200ABA08019	<0.8	12.2	11.8	5.0	45.8	NAG	0	none	Assayers Canada	8V-3351-PA1
5200	5200ABA08020	19.2	33.1	32.8	5.0	179.6	NAG	0.1	slight	Assayers Canada	8V-3351-PA1
5200	5200ABA08021	40.8	55.9	55.6	5.0	326.0	NAG	0.1	moderate	Assayers Canada	8V-3351-PA1
5200	5200ABA08022	6.7	18.7	18.4	5.0	267.6	NAG	0.1	slight	Assayers Canada	8V-3351-PA1

Sample	NAD83_E	NAD83_N	Unit	Litho	PAG/NAG from ABA	Ag_ppm	Al_%	As_ppm	Ba_ppm	Be_ppm	Bi_ppm	Ca_%	Cd_ppm	Ce_ppm	Co_ppm	Cr_ppm	Cs_ppm	Cu_ppm
5400ABA08001	581064	6511542	2	RLT	PAG	0.6	0.24	53.9	103	<1	0.1	0.26	0.3	16	5.8	32	0.2	31.4
5400ABA08002	581114	6511560	2	RTF	NAG	<0.1	2.79	25.3	4161	<1	<0.1	3.6	0.1	12	20.2	105	4.9	16.3
5400ABA08003	581158	6511577	4	BIN	NAG	<0.1	2.59	3	370	<1	<0.1	1.06	<0.1	8	21.5	178	3.8	10.6
5400ABA08004	581204	6511593	4	BIN	NAG	0.1	3.34	2.1	122	<1	<0.1	3.75	0.1	8	27.4	136	2.6	11.2
5400ABA08005	581252	6511610	4	BIN	NAG	0.1	4.19	1.8	238	<1	<0.1	5.61	0.1	6	28.3	173	3.5	48.7
5400ABA08006	581298	6511629	4	BIN	NAG	0.2	>5.00	2	465	<1	<0.1	2.39	0.1	7	34.6	227	4.8	181.9
5400ABA08007	581347	6511646	4	BIN	NAG	0.1	4.21	13.5	317	<1	<0.1	5.85	0.2	6	27.7	137	4	68.2
5400ABA08008	581378	6511657	2	RYU	PAG	0.5	4.55	22.7	67	<1	0.3	4.23	1.5	2	29.2	28	1.7	100.4
5400ABA08009	581383	6511659	1	BAU	PAG	0.7	4.65	57	40	<1	0.1	3.33	1.3	2	35.1	29	1.5	159.5
5400ABA08010	581387	6511661	1	BAU	NAG	0.2	>5.00	3	645	<1	<0.1	>10.00	0.5	3	26.8	146	2.2	103.9
5400ABA08011	581392	6511662	1	BAU	PAG	0.3	>5.00	12.7	127	<1	0.1	4.57	0.7	2	34.3	33	2.6	84.7
5400ABA08012	581396	6511664	1	BAU	PAG	0.3	>5.00	17	98	<1	0.2	4.26	0.2	3	39	35	3.8	67.6
5400ABA08013	581403	6511667	1	BAU	NAG	0.1	>5.00	6.3	217	<1	<0.1	3.6	0.2	2	25.9	40	1.6	103.4
5400ABA08014	581407	6511668	1	BAU	NAG	0.2	>5.00	5.9	278	<1	<0.1	3.24	0.2	2	23.5	43	1.2	106.5
5400ABA08015	581411	6511670	1	BAU	PAG	0.4	>5.00	32.7	208	<1	<0.1	3.15	0.2	2	28.3	41	1.2	176.5
5400ABA08016	581418	6511670	1	DAT	PAG	0.7	>5.00	16	90	<1	0.1	2.04	0.2	4	34	43	1.5	380.6
5400ABA08017	581422	6511671	1	DAT	PAG	2.4	2.97	89.1	69	1	0.4	2.03	2.7	6	21.3	25	1.2	107.9
5400ABA08018	581427	6511673	1	RAT	PAG	0.2	0.56	31.8	96	<1	0.1	0.11	0.1	19	2	37	1.4	60.6
5400ABA08019	581431	6511674	1	QSP	PAG	0.3	0.71	13.7	104	<1	1.5	0.14	0.5	18	4.6	41	1.5	40.9
5400ABA08020	581434	6511678	1	RAT	PAG	1.7	0.54	131.3	85	<1	0.5	0.36	0.1	16	6.4	45	0.9	105.2
5400ABA08021	581439	6511680	1	QSP	PAG	0.3	0.31	20.8	124	<1	0.7	0.33	0.1	13	2	68	0.2	108.3
5400ABA08022	581444	6511682	1	QSP	PAG	0.4	0.17	37.3	42	<1	1.1	0.13	<0.1	16	3	54	0.2	22.2
5400ABA08023	581449	6511683	1	QSP	PAG	0.2	0.14	19.6	101	<1	1.7	0.38	0.1	15	2	59	0.3	11.4
5400ABA08024	581454	6511682	1	BAU	NAG	0.2	3.45	15	673	<1	0.1	1.63	0.1	3	15.6	190	3.8	105.1
5400ABA08025	581458	6511686	1	BAU	PAG	0.1	4.75	8.7	785	1	0.1	1.12	<0.1	4	23.3	107	4.5	71.5
5400ABA08026	581463	6511688	1	QSP	PAG	1.8	0.18	40.3	6	<1	6.8	0.08	0.3	7	8.7	45	0.3	44.5
5400ABA08027	581470	6511688	1	BAU	NAG	<0.1	2.57	12.1	427	1	<0.1	3.13	<0.1	2	23.5	126	1.9	12.8
5400ABA08028	581472	6511691	1	BAU	NAG	0.1	2.5	9.4	330	<1	0.1	3.74	0.3	10	16.9	100	3	13.6

Sample	NAD83_E	NAD83_N	Unit	Litho	PAG/NAG from ABA	Ag_ppm	Al_%	As_ppm	Ba_ppm	Be_ppm	Bi_ppm	Ca_%	Cd_ppm	Ce_ppm	Co_ppm	Cr_ppm	Cs_ppm	Cu_ppm
5400ABA08029	581477	6511693	1	QSP	PAG	0.6	0.17	17.6	48	<1	1.4	0.11	0.8	11	1.2	45	0.2	12.4
5400ABA08030	581482	6511695	1	QSP	PAG	0.6	0.39	16.6	138	<1	0.4	0.13	0.8	13	1.1	50	0.8	16.5
5400ABA08031	581488	6511695	1	BAU	PAG	0.1	>5.00	16.4	206	<1	1.1	6.24	0.2	5	37.3	400	2.6	62
5400ABA08032	581490	6511698	1	QSP	PAG	0.1	2.87	12.9	99	<1	0.6	0.21	0.1	12	1.7	21	1.1	10.1
5400ABA08033	581498	6511697	1	BAU	PAG	0.1	3.61	7.8	257	<1	0.5	0.79	0.1	6	12.6	127	2.1	40.4
5400ABA08034	581501	6511701	1	BAU	PAG	0.1	3.93	6.4	355	<1	0.2	0.34	0.1	11	16.3	143	1.4	41.9
5400ABA08035	581505	6511703	1	QSP	PAG	0.1	2.54	15.3	47	<1	0.9	0.17	0.2	5	3.4	31	1.1	35.1
5400ABA08036	581511	6511703	1	DAT	PAG	0.1	0.76	8.7	74	<1	0.7	0.26	0.1	12	4.1	28	0.5	13
5400ABA08037	581516	6511705	1	QSP	PAG	0.1	0.26	5	34	<1	0.8	0.15	0.1	12	3	38	0.2	16.7
5400ABA08038	581520	6511709	1	QSP	PAG	0.1	0.28	4.9	66	<1	1.2	0.39	0.1	18	5.1	50	0.3	26.3
5400ABA08039	581525	6511710	1	RAT	PAG	0.2	0.22	6	11	<1	1.8	0.06	<0.1	10	16.7	42	0.2	19.4
5400ABA08040	581529	6511711	1	RAT	PAG	0.2	0.24	3.7	142	<1	1.2	0.06	<0.1	17	4.8	41	0.4	24.5
5400ABA08041	581535	6511711	1	DAT	PAG	0.4	3.55	29.8	22	<1	4.2	0.22	0.2	4	33.6	25	0.9	203.9
5400ABA08042	581541	6511713	1	DAT	PAG	0.4	2.85	18.1	67	<1	2	0.72	0.1	6	15	39	0.9	1052.5
5400ABA08043	581545	6511715	1	RAT	PAG	0.1	0.12	18.5	79	<1	0.3	0.04	0.1	17	0.7	70	0.1	12.4
5400ABA08044	581548	6511718	1	BIN	NAG	<0.1	4.85	3.3	177	<1	<0.1	1.79	<0.1	8	27.2	474	1.4	55
5400ABA08045	581555	6511718	1	QSP	PAG	0.2	>5.00	21.8	48	<1	0.8	0.45	0.1	3	16.6	32	1.2	40.1
5400ABA08046	581698	6511773	1	QSP	PAG	1.5	4.05	27.1	136	<1	0.7	3.12	1.4	10	21.1	234	1.2	142.6
5400ABA08047	581704	6511782	2	DLT	NAG	0.7	2.07	5.2	806	<1	0.2	1.89	1.1	9	1.5	19	1.2	93.6
5400ABA08048	581711	6511789	2	DAT	PAG	0.8	4.32	7.6	137	<1	0.2	2.82	0.3	6	20.9	68	0.5	129.7
5400ABA08049	581716	6511798	2	DAU	NAG	<0.1	1.56	2.9	269	<1	<0.1	0.63	0.1	15	3.8	50	0.7	7.3
5400ABA08050	581721	6511806	2	DTF	NAG	0.3	1.76	5.7	565	<1	<0.1	0.3	0.4	16	4.8	49	0.5	34
5400ABA08051	581729	6511814	2	BIN	NAG	0.1	3.13	3.7	173	<1	<0.1	1.43	0.1	6	19.4	82	0.4	80.9
5400ABA08052	581732	6511823	2	BIN	PAG	0.2	4.07	3.9	66	<1	0.1	2.27	0.1	5	21.5	67	0.6	96.1
5400ABA08053	581738	6511831	2	RTF	PAG	0.1	0.2	4	133	<1	0.3	0.26	0.2	15	2.7	64	0.1	15.3
5400ABA08054	581744	6511840	2	RAT	NAG	0.1	0.33	0.7	341	<1	0.6	1.22	0.4	25	1.2	64	0.4	5.1
5400ABA08055	581783	6511898	4	BIN	NAG	0.1	3	2.3	57	<1	<0.1	3	0.1	4	9.7	119	2.4	42
5400ABA08056	581809	6511940	4	BIN	NAG	2.1	4.23	26.3	1253	<1	<0.1	2.53	2.1	12	30.2	211	0.6	151
5400ABA08057	581070	6511547	2	RYU	PAG	0.3	0.22	28.4	260	<1	0.1	0.61	0.1	25	3.6	96	0.1	9.4

Sample	NAD83_E	NAD83_N	Unit	Litho	PAG/NAG from ABA	Ag_ppm	Al_%	As_ppm	Ba_ppm	Be_ppm	Bi_ppm	Ca_%	Cd_ppm	Ce_ppm	Co_ppm	Cr_ppm	Cs_ppm	Cu_ppm
5400ABA08058	581075	6511550	2	RYU	NAG	0.1	0.88	6.5	110	<1	0.1	0.28	0.1	29	2.6	60	0.6	6.2
5400ABA08059	581081	6511548	2	RYU	NAG	0.1	0.43	5.7	134	<1	0.1	0.68	0.1	28	3.6	79	0.5	9.3
5400ABA08060	581084	6511553	2	RYU	NAG	0.2	0.85	16.1	75	<1	0.1	0.18	0.2	86	4	89	0.9	12.6
5400ABA08061	581089	6511554	2	BAU	NAG	0.1	0.97	1	84	<1	0.1	1.34	0.2	30	3.4	21	0.7	13.7
5400ABA08062	581094	6511556	2	SRD	NAG	0.1	0.93	5.9	94	<1	0.1	1.07	0.1	42	3.8	42	1.3	2.4
5400ABA08063	581099	6511558	2	SRD	NAG	<0.1	0.41	13.6	95	<1	0.1	0.08	0.1	28	2.5	92	0.7	11.2
5400ABA08064	581103	6511559	2	SRD	NAG	<0.1	0.4	4.2	104	<1	<0.1	0.16	0.1	29	3.4	68	0.4	3.1
5400ABA08065	581106	6511561	2	RYU	NAG	<0.1	0.85	5.6	201	<1	<0.1	0.5	<0.1	25	2.7	84	1.8	2.1
5400ABA08066	581111	6511559	2	BAU	NAG	0.1	4.06	17.2	181	<1	<0.1	3.21	0.1	7	26.1	219	9.3	32.1
5400ABA08067	581117	6511565	2	BAU	NAG	0.1	1.62	1.8	63	1	<0.1	1.73	0.1	16	5	51	1.9	17
5400ABA08068	581122	6511566	2	RYU	NAG	0.1	0.92	0.9	172	<1	<0.1	1.98	0.2	24	2.1	45	1.2	6.3
5400ABA08069	581127	6511568	2	RYU	NAG	0.1	3.5	5.9	124	1	0.1	3.57	0.1	33	4.8	24	6.2	16.5
5400ABA08070	581133	6511567	2	BAU	NAG	0.1	4.74	14.3	86	<1	0.1	1.43	0.3	5	36.4	155	6.1	41.6
5400ABA08071	581136	6511571	2	BAU	NAG	0.1	1.87	27.2	162	1	<0.1	>10.00	0.2	5	23.1	368	0.2	17.7
5400ABA08072	581141	6511573	4	BIN	NAG	0.1	3.46	7.5	144	<1	<0.1	3.17	0.1	9	27.6	188	5	5.1
5400ABA08073	581146	6511575	4	BIN	NAG	0.1	3.15	13	54	<1	<0.1	2.75	<0.1	10	21.1	138	1.8	1.6
5400ABA08074	581151	6511576	4	BIN	NAG	0.1	4.19	6.3	201	1	<0.1	4.31	0.1	10	38	351	5.4	7.8
5400ABA08075	581700	6511778	2	RLT	PAG	37.9	0.52	295.2	28	<1	0.7	0.15	49.6	8	3.1	22	0.5	1645.5
5400ABA08076	581707	6511786	2	RYU	NAG	0.1	2.43	4.2	408	<1	<0.1	0.54	0.1	13	5.1	28	0.6	1.9
5400ABA08077	581716	6511792	2	BIN	NAG	0.7	>5.00	5.9	74	<1	0.1	1.76	0.2	8	25.5	81	0.4	100.6
5400ABA08078	581719	6511802	2	BIN	NAG	0.2	1.73	2.1	348	<1	0.1	0.32	0.1	17	3.9	34	0.4	33.9
5400ABA08079	581724	6511810	2	BIN	NAG	0.1	1.99	1.5	289	<1	0.1	0.32	0.1	11	3.5	62	0.5	13.3
5400ABA08080	581730	6511819	2	BIN	NAG	0.2	3.76	13.4	102	1	0.2	2.59	0.2	7	26.7	161	0.9	119.1
5400ABA08081	581735	6511827	4	BIN	NAG	0.3	2.24	3.8	435	<1	0.1	0.75	0.3	13	12.3	63	1.4	83.8
5400ABA08082	581740	6511835	4	BIN	NAG	0.1	1.53	1	1990	1	0.1	1.71	0.4	23	3	77	1.1	14.5
5400ABA08083	581746	6511844	4	BIN	NAG	0.2	1.53	1.7	70	<1	0.1	0.89	0.2	17	3.4	78	0.6	9.3
5400ABA08033_duplicate			1	BAU	PAG	0.1	3.78	6.2	168	<1	0.5	0.69	0.1	7	14.1	120	1.5	43.1
5400ABA08034_duplicate			1	BAU	PAG	0.1	4.19	5.4	439	<1	0.2	0.3	<0.1	12	16.7	150	1.1	43.3
5400ABA08048_duplicate			2	QSP	PAG	1.1	4.83	11.1	242	<1	0.2	2.84	0.4	8	24.2	105	0.6	148.7

Sample	NAD83_E	NAD83_N	Unit	Litho	PAG/NAG from ABA	Ag_ppm	Al_%	As_ppm	Ba_ppm	Be_ppm	Bi_ppm	Ca_%	Cd_ppm	Ce_ppm	Co_ppm	Cr_ppm	Cs_ppm	Cu_ppm
5400ABA08052_duplicate			2	QSP	NAG	0.3	4.28	4.6	80	<1	0.1	1.58	0.1	6	24.9	83	0.5	103.6
5200ABA08001	580978.1	6511322.6	2	QSP	PAG	0.2	0.14	54.2	54	<1	0.1	0.24	0.1	7	21.2	20	0.4	156.2
5200ABA08002	580985.7	6511329.1	2	QSP	PAG	<0.1	0.49	28.8	100	<1	0.1	0.17	0.1	13	6.6	33	1.5	165.6
5200ABA08003	581001.9	6511340.7	2	QSP	PAG	0.2	0.41	25.8	113	<1	0.1	0.09	0.1	14	11.2	17	1.4	34.4
5200ABA08004	581018.3	6511354.4	2	QSP	PAG	0.1	0.13	10.7	72	<1	0.1	0.04	0.4	12	6.1	12	0.5	28.1
5200ABA08005	581031.9	6511369.5	2	QSP	PAG	0.1	0.21	50.1	103	<1	0.1	0.14	0.1	15	9.5	20	0.5	33.5
5200ABA08006	581047.1	6511382.4	2	RAT	NAG	0.1	0.84	58.2	106	<1	<0.1	0.25	0.3	25	3.4	12	1.2	40.2
5200ABA08007	581062.6	6511391.9	2	RTF	NAG	<0.1	0.66	15.6	92	<1	0.1	1.81	<0.1	23	3.6	26	2	8.9
5200ABA08008	581077.1	6511408.2	4	BIN	NAG	<0.1	>5.00	24.6	130	<1	<0.1	3.81	0.1	6	24.5	141	2.6	43.1
5200ABA08009	581084.4	6511415.3	4	BIN	NAG	0.1	4.41	12.1	277	<1	<0.1	1.19	<0.1	6	27.8	178	2.4	36.8
5200ABA08010	581093.7	6511423	2	DTF	NAG	<0.1	0.8	2.4	47	<1	0.1	0.57	<0.1	20	4.4	26	4	52.8
5200ABA08011	581099.6	6511428.3	2	DTF	NAG	<0.1	1.42	3	60	<1	<0.1	1.12	0.1	10	4.5	22	2.4	22.6
5200ABA08012	581107.1	6511435.3	4	BIN	NAG	0.1	>5.00	6.4	743	<1	<0.1	1.97	<0.1	8	25.9	208	7.6	43.9
5200ABA08013	581117.3	6511440.1	4	DAT	NAG	<0.1	1.29	1.6	49	<1	<0.1	1.93	0.1	26	4.6	18	3.1	38.3
5200ABA08014	581130.7	6511455.4	4	BIN	NAG	0.1	>5.00	12.7	280	1	<0.1	4.25	0.1	7	24.3	182	19.7	22.6
5200ABA08015	581145.3	6511469	4	BIN	NAG	0.1	4.41	9.5	199	<1	<0.1	3.17	0.1	6	25.4	140	1.9	30.9
5200ABA08016	581160.8	6511481.9	4	BIN	NAG	0.1	3.53	3.1	228	<1	<0.1	2.83	0.1	7	25.7	174	4.7	29.2
5200ABA08017	581175.3	6511494.6	4	BIN	NAG	0.1	2.8	3.1	93	<1	<0.1	2.13	0.1	8	22.1	115	2.7	96.7
5200ABA08018	581191.7	6511506.4	4	BIN	NAG	0.1	2.61	25.2	40	<1	<0.1	1.17	<0.1	8	26.8	105	0.9	72.9
5200ABA08019	581207.4	6511519.4	4	BIN	NAG	0.1	3.06	5.1	345	<1	<0.1	0.51	<0.1	8	26.5	155	2.4	88
5200ABA08020	581222.3	6511533	4	BIN	NAG	0.1	3.56	3.9	257	<1	<0.1	1.41	0.1	9	33.9	158	3.2	96.2
5200ABA08021	581235.9	6511547.3	4	BIN	NAG	0.2	4.31	3.5	280	<1	<0.1	2.78	0.2	6	25.8	198	4	138.6
5200ABA08022	581251.1	6511561.1	4	BIN	NAG	0.1	3.52	6.9	205	<1	<0.1	1.03	0.2	6	26.9	142	1.5	129

Sample	Fe_%	Ga_ppm	Ge_ppm	Hf_ppm	Hg_ppm	In_ppm	K_%	La_ppm	Li_ppm	Mg_%	Mn_ppm	Mo_ppm	Na_%	Nb_ppm	Ni_ppm	P_%	Pb_ppm	Rb_ppm	Re_ppb	S_%
5400ABA08001	1.79	1	<0.1	<0.1	0.2	0.01	0.16	8	0.9	0.1	104	3.6	0.01	0.1	2.6	0.039	28.2	2.3	<5	2.03
5400ABA08002	2.94	8	<0.1	<0.1	<0.1	0.02	1.15	7	32.4	2.09	803	1.2	0.13	0.1	46.2	0.053	11.6	21.9	<5	<0.05
5400ABA08003	3.19	7	0.1	0.1	<0.1	0.01	0.94	3	26	2.74	645	0.3	0.04	0.1	55.3	0.086	1	31	<5	<0.05
5400ABA08004	4.47	11	0.1	<0.1	<0.1	0.02	0.45	3	46.1	4.27	876	0.3	0.07	0.1	79.8	0.078	1.6	10.6	<5	<0.05
5400ABA08005	4.45	12	0.1	0.1	<0.1	0.01	1.08	3	31.3	4.14	1108	0.3	0.22	0.1	82.6	0.082	1	31.2	<5	<0.05
5400ABA08006	5.85	14	0.1	<0.1	<0.1	0.02	2.07	3	44.5	5.53	945	0.4	0.25	0.1	95.4	0.094	1.1	57.8	<5	<0.05
5400ABA08007	4.24	11	<0.1	<0.1	<0.1	0.05	1.06	2	63.7	2.92	873	0.7	0.33	0.1	78.8	0.078	5	24	<5	0.1
5400ABA08008	5.63	8	<0.1	<0.1	<0.1	0.03	0.77	1	21.8	1.06	1821	0.7	0.2	0.2	11.9	0.044	117.8	20	<5	4.73
5400ABA08009	7.41	10	0.1	<0.1	0.1	0.05	1.01	1	33.3	2.23	1392	0.8	0.17	0.2	13.4	0.067	229.5	22.5	<5	5.44
5400ABA08010	4.51	18	0.1	<0.1	<0.1	0.06	1.97	1	26.1	3.49	1859	0.3	0.73	0.1	59.1	0.072	12	43.1	<5	<0.05
5400ABA08011	6.98	19	0.1	<0.1	<0.1	0.06	1.22	1	49.4	5.76	1210	0.8	0.53	0.1	13.1	0.075	19.6	27.5	<5	2.43
5400ABA08012	6.18	14	<0.1	<0.1	<0.1	0.05	1.35	1	32.6	4.08	842	0.7	0.69	0.1	15.9	0.128	24	33.9	<5	2.74
5400ABA08013	6.15	18	0.1	<0.1	<0.1	0.05	0.96	1	32.9	5.66	1055	0.4	0.42	0.1	12.3	0.062	8.5	24.6	<5	0.15
5400ABA08014	5.84	15	<0.1	<0.1	<0.1	0.05	1.08	1	36.4	4.79	986	0.4	0.37	0.1	11.4	0.054	8.9	23.6	<5	0.18
5400ABA08015	7.03	18	0.1	<0.1	<0.1	0.08	0.88	1	47.5	5.41	1128	0.3	0.45	0.1	10.9	0.074	16.3	17.6	<5	1.86
5400ABA08016	8.58	18	0.1	<0.1	<0.1	0.08	1	2	51.2	6	1423	0.5	0.43	0.2	11	0.121	13.9	19.9	<5	2.9
5400ABA08017	4.53	8	<0.1	<0.1	0.2	0.03	0.82	3	13.2	1.77	1090	1.9	0.38	0.3	9.9	0.131	152.3	17.9	<5	3.86
5400ABA08018	2.05	2	<0.1	<0.1	<0.1	0.02	0.4	9	4	0.33	334	2	0.03	0.4	2	0.028	50	14.8	<5	1.79
5400ABA08019	2.43	2	<0.1	<0.1	<0.1	0.05	0.49	8	5.4	0.45	313	2.6	0.03	0.3	2.8	0.031	10.2	15.6	<5	2.1
5400ABA08020	3.14	2	<0.1	<0.1	0.1	0.02	0.36	8	1.9	0.23	301	3.6	0.02	0.5	6.6	0.04	14.4	9.6	<5	3.28
5400ABA08021	2.15	1	<0.1	<0.1	0.1	0.01	0.15	7	1.9	0.16	146	3.2	0.02	0.1	2.5	0.03	8.1	3.2	<5	2.46
5400ABA08022	3.34	<1	<0.1	<0.1	0.2	<0.01	0.11	7	0.5	0.06	25	5.6	0.01	0.1	2.5	0.018	12.7	1.8	<5	3.98
5400ABA08023	1.71	<1	<0.1	<0.1	0.1	<0.01	0.11	7	0.8	0.05	73	5.7	0.01	0.1	2.2	0.018	15.6	2.9	<5	2.06
5400ABA08024	2.86	6	0.1	0.1	<0.1	<0.01	1.65	1	16.3	1.99	564	0.6	0.04	0.1	62.1	0.132	9	49.4	<5	0.12
5400ABA08025	5.7	8	0.1	0.1	<0.1	0.02	3.56	2	16.6	2.34	842	0.3	0.04	0.2	41.9	0.133	5.1	84.2	<5	0.37
5400ABA08026	>10.00	1	0.2	0.1	0.4	0.01	0.13	3	0.9	0.1	44	9.4	0.01	0.3	6.1	0.005	30.7	3.8	5	>10.00
5400ABA08027	4.71	26	1.5	<0.1	0.4	0.01	1.03	6	31	2.51	991	<0.1	0.09	3.6	36.3	0.086	27.5	5.7	<5	0.06
5400ABA08028	3.78	9	0.1	0.1	<0.1	0.04	0.84	5	24.4	1.83	946	2.4	0.07	0.3	28.7	0.071	15.4	24.9	<5	0.16

Sample	Fe_%	Ga_ppm	Ge_ppm	Hf_ppm	Hg_ppm	In_ppm	K_%	La_ppm	Li_ppm	Mg_%	Mn_ppm	Mo_ppm	Na_%	Nb_ppm	Ni_ppm	P_%	Pb_ppm	Rb_ppm	Re_ppb	S_%
5400ABA08029	2.4	1	<0.1	<0.1	0.1	0.01	0.08	5	0.6	0.05	28	4.1	0.02	0.1	1.7	0.018	14.5	1.6	<5	2.9
5400ABA08030	2.34	1	<0.1	<0.1	0.1	0.01	0.28	7	2.1	0.19	48	4.7	0.01	0.3	1	0.023	26.6	9	<5	2.81
5400ABA08031	5.42	14	0.1	<0.1	<0.1	0.04	3.99	2	13.4	3.96	1526	0.4	0.22	0.1	106.3	0.049	10.5	91.1	<5	1.26
5400ABA08032	4.73	6	<0.1	<0.1	<0.1	0.01	0.75	5	20.1	2.96	762	2.7	0.03	0.1	1.5	0.032	10.1	14.2	<5	3.07
5400ABA08033	4.1	8	0.1	<0.1	<0.1	0.02	1.43	3	23.6	3.34	954	2	0.06	0.1	45.9	0.064	7.5	30.7	<5	1.43
5400ABA08034	5.06	8	0.1	<0.1	<0.1	0.01	1.02	5	30.3	3.93	1173	0.8	0.01	0.1	52.2	0.053	5.7	21.4	<5	1
5400ABA08035	8.18	5	0.1	<0.1	<0.1	0.01	0.48	2	23.6	2.33	866	1.3	0.01	0.2	1.3	0.024	11.2	11.9	<5	6.22
5400ABA08036	3.25	2	<0.1	<0.1	<0.1	<0.01	0.55	5	3.4	0.51	237	2.2	0.01	0.4	1.6	0.029	11.9	14.1	<5	3.2
5400ABA08037	3.34	1	<0.1	<0.1	<0.1	<0.01	0.16	5	1.5	0.16	117	1.5	0.01	0.1	1.2	0.02	7.5	3.6	<5	4.1
5400ABA08038	2.47	1	<0.1	<0.1	0.1	<0.01	0.2	9	1.3	0.16	101	3.7	0.01	0.1	1.6	0.027	6.8	3.9	<5	3.23
5400ABA08039	6.55	1	0.1	<0.1	0.1	<0.01	0.15	4	0.9	0.08	29	8.4	0.01	0.1	1.6	0.002	13.4	2.7	<5	9.5
5400ABA08040	1.81	1	<0.1	<0.1	0.2	<0.01	0.17	8	1.9	0.12	75	3.9	0.01	0.2	1	0.014	2.7	5.6	<5	2.36
5400ABA08041	>10.00	7	0.1	<0.1	0.1	0.03	0.12	2	57.4	2.48	1582	4.2	<0.01	0.1	6.9	0.082	16.6	4	<5	>10.00
5400ABA08042	7.65	7	0.1	<0.1	<0.1	0.05	0.15	2	41	2.81	917	1.8	0.01	0.1	14.6	0.271	8.9	4.2	<5	5.5
5400ABA08043	0.36	<1	<0.1	0.2	<0.1	<0.01	0.08	10	0.7	0.03	103	2.3	0.02	0.5	1.2	0.006	26.4	3	<5	0.22
5400ABA08044	5.29	9	0.1	<0.1	<0.1	0.04	0.34	4	48.3	4.41	1964	0.2	0.11	0.1	102.7	0.04	2	13.7	<5	0.13
5400ABA08045	>10.00	9	0.1	<0.1	<0.1	0.02	0.13	1	69.4	3.73	1893	1.7	0.02	0.1	6.3	0.051	8.1	3.7	<5	8.29
5400ABA08046	2.69	9	<0.1	<0.1	0.2	0.02	0.17	5	29.7	2.25	452	1.7	0.27	0.2	117.3	0.16	152.2	6.2	<5	2.01
5400ABA08047	0.56	4	<0.1	<0.1	<0.1	0.01	0.41	5	7	0.45	105	0.3	0.12	0.1	1.4	0.028	100.4	13.7	<5	0.09
5400ABA08048	4.12	8	<0.1	0.1	<0.1	0.01	0.03	2	8.7	1.88	537	0.6	0.34	0.1	26.2	0.07	30.5	1	<5	0.21
5400ABA08049	1.69	7	<0.1	<0.1	<0.1	0.01	0.5	8	15.5	1.09	196	1	0.06	0.4	1.7	0.032	6.9	12	<5	0.05
5400ABA08050	1.8	6	<0.1	<0.1	<0.1	0.01	0.69	8	18.6	1.38	378	1.2	0.05	0.3	3.1	0.019	31.2	14.4	<5	<0.05
5400ABA08051	3.74	9	<0.1	0.1	<0.1	0.01	0.09	3	8.2	2.9	636	0.4	0.13	0.1	26.3	0.065	7.5	2	<5	<0.05
5400ABA08052	4.19	8	<0.1	<0.1	<0.1	0.01	0.06	2	14.5	2.86	704	0.3	0.34	0.1	28.1	0.061	8.4	1.9	<5	0.19
5400ABA08053	0.94	1	<0.1	<0.1	<0.1	<0.01	0.05	7	2.2	0.11	84	1.8	0.03	<0.1	1.9	0.02	29.1	1.5	<5	0.85
5400ABA08054	0.42	1	<0.1	0.2	<0.1	<0.01	0.13	14	1.3	0.1	272	3.2	0.03	0.2	1.7	0.007	43.3	4.4	<5	<0.05
5400ABA08055	1.52	7	<0.1	<0.1	<0.1	0.01	0.18	2	18.2	1.57	335	0.2	0.35	0.1	41.2	0.046	7.7	5.5	<5	0.05
5400ABA08056	3.38	11	<0.1	0.1	0.3	0.03	0.51	5	25.1	3.76	350	1.6	0.35	0.1	120.7	0.102	180.2	7.8	<5	0.14
5400ABA08057	1.3	1	<0.1	<0.1	<0.1	<0.01	0.17	16	0.6	0.06	185	3.6	0.03	<0.1	2.4	0.018	13	3.7	<5	1.23

Sample	Fe_%	Ga_ppm	Ge_ppm	Hf_ppm	Hg_ppm	In_ppm	K_%	La_ppm	Li_ppm	Mg_%	Mn_ppm	Mo_ppm	Na_%	Nb_ppm	Ni_ppm	P_%	Pb_ppm	Rb_ppm	Re_ppb	S_%
5400ABA08058	1.68	2	<0.1	<0.1	<0.1	0.02	0.23	14	3.8	0.41	341	0.5	0.06	0.2	2.1	0.022	8.4	6.4	<5	<0.05
5400ABA08059	0.78	1	<0.1	<0.1	<0.1	0.01	0.25	13	1.7	0.13	442	0.4	0.03	0.1	2.4	0.02	8.9	7.8	<5	<0.05
5400ABA08060	1.66	3	<0.1	<0.1	<0.1	0.02	0.4	84	3.9	0.42	231	0.9	0.05	0.1	3.2	0.026	11.4	11.4	<5	<0.05
5400ABA08061	1.2	2	<0.1	<0.1	<0.1	0.01	0.64	14	4	0.65	507	<0.1	0.03	0.1	1.8	0.027	8.7	14.9	<5	<0.05
5400ABA08062	1.07	2	<0.1	0.1	<0.1	0.01	0.5	21	5.8	0.26	233	<0.1	0.03	0.3	1.5	0.016	4.1	13.8	<5	<0.05
5400ABA08063	0.36	1	<0.1	<0.1	<0.1	<0.01	0.22	12	2.9	0.08	104	0.2	0.03	<0.1	2.9	0.02	3.8	4.5	<5	<0.05
5400ABA08064	0.48	1	<0.1	<0.1	<0.1	<0.01	0.23	11	3.8	0.09	130	0.1	0.03	0.1	2.1	0.016	4.1	5.6	<5	<0.05
5400ABA08065	0.62	1	<0.1	<0.1	<0.1	<0.01	0.33	10	7.7	0.24	146	0.1	0.04	0.1	12.2	0.013	2.6	8.4	<5	<0.05
5400ABA08066	5.12	11	0.1	<0.1	<0.1	0.04	1.1	3	53.2	2.8	1021	0.1	0.19	0.1	70.6	0.053	2.4	39.7	<5	0.05
5400ABA08067	1.63	3	<0.1	<0.1	<0.1	0.01	0.43	7	10.6	0.31	200	0.1	0.14	0.5	2.3	0.022	5.1	14.4	<5	<0.05
5400ABA08068	0.89	2	<0.1	<0.1	<0.1	0.01	0.33	14	12.4	0.42	274	0.1	0.05	0.1	1.6	0.012	19.7	11.6	<5	<0.05
5400ABA08069	2.33	7	<0.1	<0.1	<0.1	0.02	1.23	21	29.6	1.52	670	<0.1	0.26	0.1	4.6	0.026	6.2	45	<5	<0.05
5400ABA08070	7.23	12	0.1	<0.1	<0.1	0.04	0.37	2	77.8	3.16	1242	0.1	0.11	0.1	52.3	0.042	7.6	13.6	<5	0.19
5400ABA08071	2.75	3	0.1	<0.1	<0.1	0.01	0.02	2	48.9	3.91	884	0.4	0.01	0.1	284.6	0.046	3.5	0.5	<5	<0.05
5400ABA08072	5.27	11	0.1	<0.1	<0.1	0.04	0.53	4	70.9	3.2	847	0.6	0.12	0.1	60.7	0.066	1.5	17.5	<5	0.07
5400ABA08073	3.78	8	0.1	0.1	<0.1	0.02	0.14	4	48.6	2.62	605	0.1	0.08	0.1	47	0.073	2	4.4	<5	0.1
5400ABA08074	5.25	10	0.1	<0.1	<0.1	0.03	0.95	4	63.6	4.76	938	0.2	0.1	0.1	195.3	0.067	1.6	30.7	<5	0.08
5400ABA08075	2.98	1	<0.1	<0.1	8.5	0.27	0.2	4	2.9	0.13	29	4.2	0.04	<0.1	3.3	0.014	5609.1	4.2	<5	4.25
5400ABA08076	1.58	5	<0.1	<0.1	<0.1	0.01	0.53	6	21.3	1.78	282	<0.1	0.13	<0.1	2	0.038	11.4	13.9	<5	<0.05
5400ABA08077	5.13	9	0.1	0.1	<0.1	0.01	0.02	3	11	3.48	825	<0.1	0.43	0.1	31.3	0.088	17.8	0.5	<5	0.17
5400ABA08078	1.71	6	<0.1	<0.1	<0.1	0.01	0.9	9	15.8	1.37	299	0.2	0.11	0.1	1.8	0.022	7	21.1	<5	<0.05
5400ABA08079	1.68	4	<0.1	<0.1	<0.1	0.01	0.86	5	17.2	1.11	343	0.1	0.09	0.2	2.4	0.015	7.2	16.8	<5	<0.05
5400ABA08080	3.48	7	0.1	0.1	<0.1	0.01	0.19	3	20.1	1.05	346	0.4	0.29	0.2	37.9	0.14	24.9	6.5	<5	0.24
5400ABA08081	3.46	7	0.1	<0.1	<0.1	0.01	0.19	7	17.1	2.52	579	0.4	0.1	0.1	17.6	0.043	20.8	5.1	<5	<0.05
5400ABA08082	1.83	5	<0.1	<0.1	<0.1	0.02	0.4	11	9.7	0.87	629	0.6	0.1	0.1	2.7	0.018	19.3	12.6	<5	0.22
5400ABA08083	1.17	4	<0.1	0.1	<0.1	0.01	0.33	8	19.6	0.97	592	0.1	0.04	0.1	2.9	0.015	18.7	8.1	<5	<0.05
5400ABA08033_di	4.25	8	<0.1	0.1	<0.1	0.02	1.35	3	25	3.43	1030	1.3	0.08	0.1	49.1	0.064	8.6	25.9	<5	1.67
5400ABA08034_di	4.83	8	<0.1	<0.1	<0.1	0.02	1.05	6	27.4	3.64	1131	0.4	0.01	0.1	55.3	0.047	5.7	22.1	<5	1.08
5400ABA08048_di	4.79	11	0.2	0.1	0.1	0.02	0.05	3	7.7	2.4	664	0.2	0.5	0.1	31.7	0.085	47.4	1.5	<5	0.29

Sample	Fe_%	Ga_ppm	Ge_ppm	Hf_ppm	Hg_ppm	In_ppm	K_%	La_ppm	Li_ppm	Mg_%	Mn_ppm	Mo_ppm	Na_%	Nb_ppm	Ni_ppm	P_%	Pb_ppm	Rb_ppm	Re_ppb	S_%
5400ABA08052_d1	5.05	8	0.1	0.1	<0.1	0.01	0.04	3	12.9	2.87	806	0.1	0.4	0.1	30.6	0.069	12.1	1.2	<5	0.16
5200ABA08001	3.79	<1	<0.1	<0.1	0.1	0.01	0.1	3	1.6	0.12	180	1.6	0.01	0.1	3.3	0.053	20.6	2.7	<5	4.63
5200ABA08002	2.5	1	<0.1	<0.1	<0.1	0.02	0.26	7	14.2	0.5	502	0.9	0.02	0.1	3.6	0.019	2.8	8.9	<5	2.3
5200ABA08003	2.69	1	<0.1	<0.1	<0.1	0.02	0.28	6	8.8	0.39	203	2.4	0.01	0.1	3	0.034	9.2	8	<5	2.84
5200ABA08004	2.64	<1	<0.1	<0.1	0.1	0.02	0.12	6	1.4	0.04	78	2	<0.01	<0.1	2.6	0.016	23.9	3.3	<5	3.03
5200ABA08005	2.6	<1	<0.1	<0.1	0.1	0.01	0.17	7	2.1	0.11	230	2.1	0.01	<0.1	4	0.029	8.9	4.1	<5	2.91
5200ABA08006	1.05	1	<0.1	<0.1	<0.1	0.01	0.17	12	13.2	0.46	203	0.5	0.02	<0.1	3.9	0.035	9.2	4.9	<5	0.07
5200ABA08007	1.02	2	<0.1	<0.1	<0.1	0.01	0.33	9	5.9	0.39	213	0.6	0.03	0.4	3.8	0.023	9.1	9.4	<5	0.05
5200ABA08008	4.81	8	<0.1	<0.1	<0.1	0.02	1.13	2	42.8	2.72	856	0.5	0.38	0.1	57.2	0.045	1.1	20.7	<5	0.05
5200ABA08009	4.32	7	<0.1	0.1	<0.1	0.01	1.14	2	34.8	3.9	990	0.5	0.23	0.1	83.4	0.072	0.4	14.8	<5	<0.05
5200ABA08010	1.23	2	<0.1	<0.1	<0.1	0.01	0.46	8	8.3	0.32	200	0.7	0.04	0.7	2.9	0.017	5.8	12.3	<5	0.07
5200ABA08011	1.17	4	<0.1	0.1	<0.1	0.01	0.5	5	14.3	0.53	214	0.5	0.12	0.9	2.7	0.028	6.7	15	<5	<0.05
5200ABA08012	5.05	12	<0.1	<0.1	<0.1	0.03	2.47	4	43.1	3.53	906	0.2	0.47	0.1	67.1	0.055	2.2	48.4	<5	<0.05
5200ABA08013	1.34	2	<0.1	<0.1	<0.1	0.01	0.27	11	18.6	0.51	262	0.4	0.06	0.2	1.7	0.017	4	9.8	<5	<0.05
5200ABA08014	5.96	12	0.1	<0.1	<0.1	0.04	2.87	3	78.6	2.94	1127	0.3	0.32	0.1	65	0.054	2.6	71	<5	<0.05
5200ABA08015	3.92	8	<0.1	0.1	<0.1	0.01	0.6	3	39.4	3.55	825	0.6	0.26	0.1	66.6	0.07	0.7	10.7	<5	0.1
5200ABA08016	4.77	9	0.1	0.1	<0.1	0.01	0.95	3	38	3.52	1034	0.3	0.06	0.1	64.7	0.067	0.6	23.4	<5	<0.05
5200ABA08017	3.29	6	<0.1	0.1	<0.1	0.01	0.41	4	26.4	2.66	755	0.6	0.12	0.2	56.7	0.065	1.2	11.7	<5	0.07
5200ABA08018	3.57	5	<0.1	0.1	<0.1	0.01	0.14	3	15.1	2.86	599	1	0.06	0.1	65.5	0.077	0.3	3.1	<5	0.11
5200ABA08019	4.06	5	<0.1	0.1	<0.1	0.01	1.46	3	17.4	2.59	546	0.5	0.08	0.1	55.3	0.064	1	28.9	<5	<0.05
5200ABA08020	4.91	6	<0.1	0.1	<0.1	0.01	1.09	4	27.9	4.03	992	0.7	0.11	0.1	73.7	0.071	0.1	22.2	<5	<0.05
5200ABA08021	4.72	8	0.1	0.1	<0.1	0.01	1.12	2	35.7	3.15	768	0.4	0.17	0.1	59.5	0.063	1.9	27.3	<5	<0.05
5200ABA08022	4.36	6	<0.1	0.1	<0.1	0.01	0.85	2	16.8	3.46	811	1.1	0.19	0.1	67.4	0.064	1.3	15.3	<5	<0.05

Sample	Sb_ppm	Sc_ppm	Se_ppm	Sn_ppm	Sr_ppm	Ta_ppm	Te_ppm	Th_ppm	Ti_%	Tl_ppm	U_ppm	V_ppm	W_ppm	Y_ppm	Zn_ppm	Zr_ppm	lab	certificate
5400ABA08001	6.6	0.9	<0.5	0.2	10	<0.1	<0.1	1.3	<0.005	0.4	0.1	<2	0.2	2.4	61	0.6	Assayers Canada	8V-3351-PA1
5400ABA08002	13.2	10.8	<0.5	0.3	162	<0.1	<0.1	1.2	0.079	0.3	0.2	66	0.5	5.2	76	0.5	Assayers Canada	8V-3351-PA1
5400ABA08003	0.6	4.9	<0.5	0.2	32	<0.1	<0.1	0.1	0.22	0.1	0.1	117	0.3	6.7	55	1.4	Assayers Canada	8V-3351-PA1
5400ABA08004	5.4	13.4	<0.5	0.1	48	<0.1	<0.1	0.2	0.127	0.1	0.1	131	0.2	6.6	64	0.3	Assayers Canada	8V-3351-PA1
5400ABA08005	1.6	12.3	<0.5	0.2	50	<0.1	<0.1	0.2	0.18	0.1	<0.1	162	0.2	6.7	93	0.7	Assayers Canada	8V-3351-PA1
5400ABA08006	4.1	11.2	<0.5	0.4	72	<0.1	<0.1	0.2	0.239	0.3	<0.1	208	0.2	6.5	84	0.4	Assayers Canada	8V-3351-PA1
5400ABA08007	13.1	15.9	<0.5	0.3	126	<0.1	<0.1	0.2	0.102	0.2	0.1	150	0.5	6.8	86	0.2	Assayers Canada	8V-3351-PA1
5400ABA08008	5	11.3	<0.5	0.2	74	<0.1	0.3	0.2	0.145	0.2	0.1	137	0.4	5	342	0.6	Assayers Canada	8V-3351-PA1
5400ABA08009	10.1	10	<0.5	0.2	31	<0.1	1.3	0.2	0.143	0.2	<0.1	123	0.9	5.2	654	0.5	Assayers Canada	8V-3351-PA1
5400ABA08010	4.2	36.6	<0.5	0.4	70	<0.1	<0.1	0.2	0.153	0.4	0.1	302	0.2	10.4	148	0.6	Assayers Canada	8V-3351-PA1
5400ABA08011	10.5	29.8	<0.5	0.4	54	<0.1	0.4	0.1	0.15	0.3	<0.1	284	0.2	6.9	344	0.3	Assayers Canada	8V-3351-PA1
5400ABA08012	6.3	21.8	<0.5	0.2	106	<0.1	0.9	0.2	0.107	0.3	<0.1	217	0.1	3.5	171	0.2	Assayers Canada	8V-3351-PA1
5400ABA08013	5.7	28.4	<0.5	0.5	44	<0.1	<0.1	0.2	0.124	0.2	<0.1	278	0.2	3.7	205	0.2	Assayers Canada	8V-3351-PA1
5400ABA08014	3.4	26	<0.5	0.3	33	<0.1	0.1	0.2	0.14	0.2	<0.1	268	0.4	4	173	0.2	Assayers Canada	8V-3351-PA1
5400ABA08015	8.5	25.9	<0.5	0.3	28	<0.1	1.8	0.2	0.161	0.2	<0.1	299	0.3	6	332	0.3	Assayers Canada	8V-3351-PA1
5400ABA08016	16.5	21.9	<0.5	0.4	38	<0.1	1.7	0.3	0.191	0.2	<0.1	224	0.4	5.4	237	0.3	Assayers Canada	8V-3351-PA1
5400ABA08017	11.9	10.2	<0.5	0.3	26	<0.1	2	0.3	0.227	0.7	0.1	90	0.4	6.6	657	0.6	Assayers Canada	8V-3351-PA1
5400ABA08018	5.5	2.3	<0.5	0.2	5	<0.1	1.1	1	0.05	0.2	0.1	<2	0.2	5.3	47	0.8	Assayers Canada	8V-3351-PA1
5400ABA08019	3.9	1.8	<0.5	0.2	11	<0.1	2.9	0.9	0.026	0.4	0.1	<2	0.1	4.4	145	0.9	Assayers Canada	8V-3351-PA1
5400ABA08020	3	1.7	<0.5	0.4	8	<0.1	4.7	0.9	0.038	0.3	0.1	<2	0.2	9.4	25	0.9	Assayers Canada	8V-3351-PA1
5400ABA08021	5.2	1.4	<0.5	0.1	12	<0.1	1.8	0.6	0.007	0.2	0.1	3	0.1	2.7	16	0.6	Assayers Canada	8V-3351-PA1
5400ABA08022	1.2	0.4	2.1	0.1	23	<0.1	1.6	0.4	<0.005	0.1	<0.1	<2	0.1	1.3	5	0.6	Assayers Canada	8V-3351-PA1
5400ABA08023	2	0.9	<0.5	0.1	45	<0.1	2.1	0.5	0.005	<0.1	<0.1	<2	0.1	2.5	9	0.5	Assayers Canada	8V-3351-PA1
5400ABA08024	6	2.8	<0.5	0.2	169	<0.1	0.1	0.4	0.194	0.4	0.1	102	0.4	3.7	81	1.2	Assayers Canada	8V-3351-PA1
5400ABA08025	3	14.4	<0.5	0.7	128	<0.1	0.2	0.9	0.256	0.8	0.2	146	0.3	3.7	83	1.1	Assayers Canada	8V-3351-PA1
5400ABA08026	3.6	0.8	7.8	0.1	6	<0.1	8.7	0.2	0.012	0.3	0.1	2	0.1	1.2	42	1.9	Assayers Canada	8V-3351-PA1
5400ABA08027	11.8	15.7	4.2	<0.1	78	5.3	11.7	6.4	0.218	4.9	3.8	145	5.7	3.4	4084	54.5	Assayers Canada	8V-3351-PA1
5400ABA08028	2.3	13.9	<0.5	0.3	78	<0.1	0.1	4.5	0.199	0.3	0.6	118	0.2	5.4	87	1.5	Assayers Canada	8V-3351-PA1

Sample	Sb_ppm	Sc_ppm	Se_ppm	Sn_ppm	Sr_ppm	Ta_ppm	Te_ppm	Th_ppm	Ti_%	Tl_ppm	U_ppm	V_ppm	W_ppm	Y_ppm	Zn_ppm	Zr_ppm	lab	certificate
5400ABA08029	1.5	0.5	0.5	0.2	16	<0.1	3.6	0.4	<0.005	0.2	<0.1	<2	0.1	3.3	34	0.6	Assayers Canada	8V-3351-PA1
5400ABA08030	1.8	1.5	0.5	0.2	8	<0.1	1.7	1.1	0.022	0.4	<0.1	<2	0.1	8.3	101	0.7	Assayers Canada	8V-3351-PA1
5400ABA08031	9.7	33.9	0.6	0.6	94	<0.1	0.9	0.2	0.336	0.9	0.1	262	0.6	10.4	129	0.8	Assayers Canada	8V-3351-PA1
5400ABA08032	1.3	2.6	<0.5	0.2	18	<0.1	0.9	1.1	0.022	0.2	0.1	<2	0.1	6.4	95	0.8	Assayers Canada	8V-3351-PA1
5400ABA08033	4.6	9.5	<0.5	0.3	52	<0.1	0.9	0.6	0.133	0.3	0.1	75	0.1	5	94	0.5	Assayers Canada	8V-3351-PA1
5400ABA08034	2.7	7.8	<0.5	0.2	20	<0.1	0.3	0.6	0.104	0.2	<0.1	68	0.1	4.7	74	0.7	Assayers Canada	8V-3351-PA1
5400ABA08035	3.9	2.6	3.8	0.2	9	<0.1	1.9	0.4	0.041	0.1	<0.1	8	0.1	3.3	69	0.7	Assayers Canada	8V-3351-PA1
5400ABA08036	1.3	3.2	1.9	0.2	20	<0.1	1.2	0.7	0.059	0.1	0.1	4	0.2	7.3	25	0.8	Assayers Canada	8V-3351-PA1
5400ABA08037	0.6	1	1.6	0.1	47	<0.1	1	0.5	0.006	<0.1	<0.1	<2	0.1	2.9	22	0.5	Assayers Canada	8V-3351-PA1
5400ABA08038	1.5	1.2	1.9	0.1	45	<0.1	1.8	0.6	0.006	<0.1	<0.1	<2	0.1	4.4	14	0.6	Assayers Canada	8V-3351-PA1
5400ABA08039	2.2	1	8.4	0.1	43	<0.1	1.8	0.2	0.007	<0.1	<0.1	4	0.1	1	8	0.5	Assayers Canada	8V-3351-PA1
5400ABA08040	1.2	0.8	0.7	0.1	5	<0.1	1.7	0.6	0.01	0.1	<0.1	<2	0.1	4.8	5	0.6	Assayers Canada	8V-3351-PA1
5400ABA08041	1	6	2.8	0.1	11	<0.1	6.9	0.2	0.014	0.2	<0.1	90	0.2	3.5	115	0.2	Assayers Canada	8V-3351-PA1
5400ABA08042	1.8	6.9	1.6	0.1	20	<0.1	3.4	0.2	0.01	0.1	0.1	107	0.1	4.6	92	0.3	Assayers Canada	8V-3351-PA1
5400ABA08043	0.7	0.3	<0.5	0.1	6	<0.1	0.2	8.6	<0.005	<0.1	2.6	<2	0.1	2.8	20	4.1	Assayers Canada	8V-3351-PA1
5400ABA08044	0.9	28.9	<0.5	0.3	37	<0.1	<0.1	0.2	0.095	0.1	0.1	237	0.2	9.2	59	0.2	Assayers Canada	8V-3351-PA1
5400ABA08045	0.6	6.8	3.9	0.1	17	<0.1	1.1	0.2	0.009	0.1	<0.1	69	0.4	2.6	121	0.3	Assayers Canada	8V-3351-PA1
5400ABA08046	11.5	2.3	<0.5	0.2	978	<0.1	0.1	1.5	0.062	1.6	0.2	41	3	2.6	289	0.7	Assayers Canada	8V-3351-PA1
5400ABA08047	4.6	1.1	<0.5	0.2	212	<0.1	<0.1	3.7	0.019	2	0.3	4	0.2	3.8	350	0.7	Assayers Canada	8V-3351-PA1
5400ABA08048	5.8	4.7	<0.5	0.1	308	<0.1	<0.1	0.2	0.11	0.1	0.1	123	0.5	4.7	132	1.1	Assayers Canada	8V-3351-PA1
5400ABA08049	1.8	3.1	<0.5	0.8	39	<0.1	<0.1	3.5	0.061	0.5	0.3	19	0.2	5.4	92	0.6	Assayers Canada	8V-3351-PA1
5400ABA08050	1.1	2.9	<0.5	0.7	28	<0.1	<0.1	2.2	0.07	0.4	0.1	17	0.4	4.4	187	0.6	Assayers Canada	8V-3351-PA1
5400ABA08051	1.9	8.4	<0.5	0.5	82	<0.1	<0.1	0.2	0.119	<0.1	0.1	153	0.4	4.2	75	1.7	Assayers Canada	8V-3351-PA1
5400ABA08052	5.9	7	<0.5	0.1	148	<0.1	<0.1	0.1	0.104	<0.1	<0.1	147	0.4	4.2	75	0.6	Assayers Canada	8V-3351-PA1
5400ABA08053	0.5	0.7	<0.5	0.1	9	<0.1	0.2	1.9	<0.005	<0.1	0.3	<2	0.2	4	30	1	Assayers Canada	8V-3351-PA1
5400ABA08054	0.6	0.5	<0.5	0.2	50	<0.1	0.2	9.2	0.005	<0.1	2.1	2	0.2	4.2	26	6.6	Assayers Canada	8V-3351-PA1
5400ABA08055	4.3	3.5	<0.5	0.1	124	<0.1	<0.1	0.3	0.11	0.1	0.1	80	0.1	2.6	46	0.3	Assayers Canada	8V-3351-PA1
5400ABA08056	3.8	2.2	<0.5	0.3	117	<0.1	0.1	1	0.121	0.1	0.2	75	0.5	10.5	532	1.7	Assayers Canada	8V-3351-PA1
5400ABA08057	3	0.9	<0.5	0.1	50	<0.1	<0.1	1.4	<0.005	0.7	0.1	<2	0.1	3.2	23	0.6	Assayers Canada	8V-3351-PA1

Sample	Sb_ppm	Sc_ppm	Se_ppm	Sn_ppm	Sr_ppm	Ta_ppm	Te_ppm	Th_ppm	Ti_%	Tl_ppm	U_ppm	V_ppm	W_ppm	Y_ppm	Zn_ppm	Zr_ppm	lab	certificate
5400ABA08058	1.8	3.7	<0.5	0.3	12	<0.1	<0.1	2	0.033	0.1	0.2	11	0.2	3.6	56	1	Assayers Canada	8V-3351-PA1
5400ABA08059	2.2	1.6	<0.5	0.1	47	<0.1	<0.1	1.6	0.014	0.1	0.3	3	0.1	4.2	35	0.9	Assayers Canada	8V-3351-PA1
5400ABA08060	3.7	2.5	<0.5	0.3	15	<0.1	<0.1	1.5	0.021	0.1	0.2	8	0.2	3.3	72	0.6	Assayers Canada	8V-3351-PA1
5400ABA08061	1.8	2.7	<0.5	0.2	89	<0.1	<0.1	2.2	0.036	0.1	0.5	10	0.2	3.7	40	0.8	Assayers Canada	8V-3351-PA1
5400ABA08062	3.8	2.2	<0.5	0.2	33	<0.1	<0.1	2.9	0.032	0.1	0.4	5	0.2	3.9	38	1.5	Assayers Canada	8V-3351-PA1
5400ABA08063	6.3	0.9	<0.5	0.1	6	<0.1	<0.1	1.6	<0.005	<0.1	0.2	<2	0.2	2.3	17	1	Assayers Canada	8V-3351-PA1
5400ABA08064	2	0.9	<0.5	0.1	8	<0.1	<0.1	1.6	0.009	<0.1	0.3	4	0.1	3.5	27	1.2	Assayers Canada	8V-3351-PA1
5400ABA08065	4.3	1.2	<0.5	0.1	38	<0.1	<0.1	1.3	0.009	0.1	0.2	4	0.1	2.8	19	0.8	Assayers Canada	8V-3351-PA1
5400ABA08066	11.5	24	<0.5	0.3	77	<0.1	<0.1	0.3	0.154	0.3	0.1	209	0.4	7.5	60	0.3	Assayers Canada	8V-3351-PA1
5400ABA08067	4.6	2.1	<0.5	0.2	117	<0.1	<0.1	2	0.058	0.1	0.6	12	0.2	6.7	42	0.8	Assayers Canada	8V-3351-PA1
5400ABA08068	1.1	1.2	<0.5	0.2	54	<0.1	<0.1	1.7	0.018	0.1	0.2	4	0.1	3.9	59	0.9	Assayers Canada	8V-3351-PA1
5400ABA08069	5.6	3.4	<0.5	0.5	154	<0.1	<0.1	3.4	0.045	0.2	0.4	13	0.3	7.2	54	0.8	Assayers Canada	8V-3351-PA1
5400ABA08070	8	28.6	<0.5	0.2	88	<0.1	<0.1	0.4	0.112	0.1	0.1	253	0.3	4.7	93	0.2	Assayers Canada	8V-3351-PA1
5400ABA08071	5.7	7.9	<0.5	<0.1	356	<0.1	<0.1	0.2	0.016	<0.1	0.3	57	0.1	3.8	19	0.4	Assayers Canada	8V-3351-PA1
5400ABA08072	2.3	24.3	<0.5	0.2	76	<0.1	<0.1	0.3	0.122	0.1	0.1	197	0.3	8.4	51	0.3	Assayers Canada	8V-3351-PA1
5400ABA08073	5.4	13.2	<0.5	0.3	66	<0.1	<0.1	0.3	0.156	<0.1	0.1	150	0.5	10	41	0.9	Assayers Canada	8V-3351-PA1
5400ABA08074	2.7	24.4	<0.5	0.2	133	<0.1	<0.1	0.3	0.123	0.2	0.1	191	0.1	7.6	60	0.3	Assayers Canada	8V-3351-PA1
5400ABA08075	117.8	0.8	1.4	0.1	37	<0.1	1.1	1.5	<0.005	1	0.2	3	0.8	2.2	>10000	1.6	Assayers Canada	8V-3351-PA1
5400ABA08076	0.9	1.9	<0.5	0.2	81	<0.1	<0.1	1.6	0.024	1.3	0.2	6	0.2	5.8	105	0.9	Assayers Canada	8V-3351-PA1
5400ABA08077	5.3	9.2	<0.5	0.1	238	<0.1	<0.1	0.2	0.179	0.1	0.1	161	0.5	6.4	121	1.5	Assayers Canada	8V-3351-PA1
5400ABA08078	0.7	2.8	<0.5	0.5	37	<0.1	<0.1	2.6	0.076	0.6	0.2	13	0.2	6.1	112	1.1	Assayers Canada	8V-3351-PA1
5400ABA08079	1.2	2	<0.5	0.4	35	<0.1	<0.1	2	0.067	0.4	0.2	9	0.2	6.1	100	1	Assayers Canada	8V-3351-PA1
5400ABA08080	6.6	4.3	<0.5	0.2	356	<0.1	<0.1	0.6	0.164	0.2	0.2	92	0.5	4.6	59	1.7	Assayers Canada	8V-3351-PA1
5400ABA08081	2.4	8.1	<0.5	0.3	57	<0.1	<0.1	1.4	0.105	0.1	0.2	101	0.2	6.2	140	0.8	Assayers Canada	8V-3351-PA1
5400ABA08082	0.9	3	<0.5	0.5	138	<0.1	0.1	2.8	0.028	0.2	0.4	15	0.3	6.7	72	1.1	Assayers Canada	8V-3351-PA1
5400ABA08083	1.6	1.6	<0.5	0.3	37	<0.1	<0.1	2.2	0.024	0.1	0.4	8	0.1	6.1	91	1.2	Assayers Canada	8V-3351-PA1
5400ABA08033_di	4.3	7.8	<0.5	0.3	53	<0.1	0.8	0.6	0.109	0.2	0.1	56	0.2	5.2	99	1.3	Assayers Canada	8V-3351-PA1
5400ABA08034_di	2.8	8.4	<0.5	0.2	19	<0.1	0.3	0.6	0.104	0.2	0.1	69	0.2	4.6	68	1.3	Assayers Canada	8V-3351-PA1
5400ABA08048_di	10.4	9.8	<0.5	0.2	402	<0.1	0.1	0.2	0.212	0.2	0.1	183	0.7	6.1	173	2.3	Assayers Canada	8V-3351-PA1

Sample	Sb_ppm	Sc_ppm	Se_ppm	Sn_ppm	Sr_ppm	Ta_ppm	Te_ppm	Th_ppm	Ti_%	Tl_ppm	U_ppm	V_ppm	W_ppm	Y_ppm	Zn_ppm	Zr_ppm	lab	certificate
5400ABA08052_d	7.7	8.8	<0.5	0.1	183	<0.1	<0.1	0.2	0.134	0.1	0.1	173	0.4	5	74	0.8	Assayers Canada	8V-3351-PA1
5200ABA08001	6.1	0.9	1.5	0.1	11	<0.1	2.2	0.5	<0.005	<0.1	0.1	<2	0.2	2.4	30	0.3	Assayers Canada	8V-3351-PA1
5200ABA08002	3.4	1.9	<0.5	0.2	14	<0.1	0.1	1.9	0.007	0.1	0.2	<2	0.1	2.3	37	0.9	Assayers Canada	8V-3351-PA1
5200ABA08003	4.7	1.1	<0.5	0.1	19	<0.1	0.8	0.8	<0.005	0.1	0.3	<2	0.2	2.2	29	0.6	Assayers Canada	8V-3351-PA1
5200ABA08004	9	0.5	2.2	<0.1	4	<0.1	3.5	0.9	<0.005	<0.1	0.1	<2	0.1	1.1	95	0.5	Assayers Canada	8V-3351-PA1
5200ABA08005	4.2	0.7	<0.5	0.1	15	<0.1	0.3	1.2	<0.005	<0.1	0.1	<2	0.1	2.3	16	0.6	Assayers Canada	8V-3351-PA1
5200ABA08006	11.6	0.9	<0.5	0.1	10	<0.1	0.1	2.5	<0.005	<0.1	0.3	<2	0.1	3.8	45	0.6	Assayers Canada	8V-3351-PA1
5200ABA08007	3.1	1.5	<0.5	0.2	52	<0.1	<0.1	2.8	0.031	0.1	0.3	4	0.2	4.3	33	1.1	Assayers Canada	8V-3351-PA1
5200ABA08008	12.7	11	<0.5	0.2	132	<0.1	<0.1	0.3	0.124	0.2	0.1	136	0.1	6.2	48	0.4	Assayers Canada	8V-3351-PA1
5200ABA08009	0.5	4.2	<0.5	0.1	52	<0.1	<0.1	0.2	0.139	0.1	0.1	81	0.2	5.8	61	2.6	Assayers Canada	8V-3351-PA1
5200ABA08010	3.1	1.5	<0.5	0.3	35	<0.1	<0.1	2.8	0.036	0.1	0.4	<2	0.2	4.8	32	1.1	Assayers Canada	8V-3351-PA1
5200ABA08011	1.7	1.7	<0.5	0.4	68	<0.1	<0.1	1	0.084	0.1	0.2	4	0.3	5.1	48	1	Assayers Canada	8V-3351-PA1
5200ABA08012	7.8	19.4	<0.5	0.3	241	<0.1	<0.1	0.4	0.099	0.3	0.1	183	0.2	7.2	60	0.3	Assayers Canada	8V-3351-PA1
5200ABA08013	2.4	1.6	<0.5	0.2	66	<0.1	<0.1	2.7	0.02	0.1	0.4	<2	0.1	5.9	29	0.8	Assayers Canada	8V-3351-PA1
5200ABA08014	6.5	18.7	<0.5	0.3	129	<0.1	<0.1	0.3	0.193	0.4	0.1	179	1.4	7	55	0.3	Assayers Canada	8V-3351-PA1
5200ABA08015	1.8	7.4	<0.5	0.2	50	<0.1	<0.1	0.2	0.181	0.1	0.1	116	0.2	6.1	57	2	Assayers Canada	8V-3351-PA1
5200ABA08016	1	6.7	<0.5	0.2	25	<0.1	<0.1	0.2	0.221	0.1	0.1	145	0.2	6.8	70	1	Assayers Canada	8V-3351-PA1
5200ABA08017	6.7	5.5	<0.5	0.1	52	<0.1	<0.1	0.3	0.162	0.1	0.1	87	0.2	7.6	45	1.9	Assayers Canada	8V-3351-PA1
5200ABA08018	0.4	1.9	<0.5	0.1	16	<0.1	<0.1	0.3	0.155	<0.1	0.1	47	0.3	6.2	45	2	Assayers Canada	8V-3351-PA1
5200ABA08019	0.3	4.8	<0.5	0.1	23	<0.1	<0.1	0.2	0.166	0.1	0.1	83	0.2	5.5	70	2	Assayers Canada	8V-3351-PA1
5200ABA08020	1.4	5.1	<0.5	0.1	46	<0.1	<0.1	0.2	0.151	0.1	0.1	96	0.2	6.7	57	1.2	Assayers Canada	8V-3351-PA1
5200ABA08021	1	8.5	<0.5	0.3	56	<0.1	<0.1	0.2	0.179	0.1	0.1	155	0.3	6.2	91	0.9	Assayers Canada	8V-3351-PA1
5200ABA08022	0.2	2.5	<0.5	0.2	13	<0.1	<0.1	0.2	0.121	0.1	0.1	77	0.2	5.5	91	1.3	Assayers Canada	8V-3351-PA1

sample	NAD83_E	NAD83_N	Unit	Litho	PAG/NAG from ABA	SiO2_%	Al2O3_%	Fe2O3_%	CaO_%	MgO_%	Na2O_%	K2O_%
5400ABA08001	581064	6511542	2	RLT	PAG	69.52	14.45	3.12	0.33	0.74	0.74	6.24
5400ABA08002	581114	6511560	2	RTF	NAG	61.12	14.3	4.59	3.96	3.24	3.03	2.8
5400ABA08003	581158	6511577	4	BIN	NAG	51.37	17.33	8.42	6.79	6.6	4.08	1.53
5400ABA08004	581204	6511593	4	BIN	NAG	50.77	16.59	7.86	5.56	6.64	4.87	0.69
5400ABA08005	581252	6511610	4	BIN	NAG	48.61	16.75	8.04	7.48	6.77	3.82	1.33
5400ABA08006	581298	6511629	4	BIN	NAG	45.69	19.59	10.09	6.05	8.07	2.57	2.65
5400ABA08007	581347	6511646	4	BIN	NAG	48.55	15.65	8.29	9.13	6.64	2.34	1.68
5400ABA08008	581378	6511657	2	RYU	PAG	53.73	16.94	8.86	6.05	2.3	0.41	3.73
5400ABA08009	581383	6511659	1	BAU	PAG	50.63	18.43	10.89	4.28	3.54	0.24	4.24
5400ABA08010	581387	6511661	1	BAU	NAG	37.95	19.75	7.81	13.64	5.76	2.56	2.43
5400ABA08011	581392	6511662	1	BAU	PAG	47.69	18.63	11.26	4.25	8.4	0.81	1.97
5400ABA08012	581396	6511664	1	BAU	PAG	44.48	22.6	9.48	5.39	6.2	1.41	3.42
5400ABA08013	581403	6511667	1	BAU	NAG	51.36	17.88	10.11	3.62	8.87	0.71	1.5
5400ABA08014	581407	6511668	1	BAU	NAG	51.33	17.74	9.76	3.8	9.01	0.97	1.47
5400ABA08015	581411	6511670	1	BAU	PAG	47.87	18.91	10.76	3.45	8.61	1.68	1.83
5400ABA08016	581418	6511670	1	DAT	PAG	48.58	17.53	12.13	2.6	7.85	1.7	1.87
5400ABA08017	581422	6511671	1	DAT	PAG	57.98	17.75	6.67	2.54	2.96	2.41	3.66
5400ABA08018	581427	6511673	1	RAT	PAG	68.7	14.8	3.59	0.48	1.46	1.64	4.28
5400ABA08019	581431	6511674	1	QSP	PAG	66.18	15.92	4.54	0.28	1.91	0.2	5.86
5400ABA08020	581434	6511678	1	RAT	PAG	66.24	14.69	5.68	0.43	1.7	0.03	5.34
5400ABA08021	581439	6511680	1	QSP	PAG	70.8	12.99	4.03	0.53	0.88	1.91	3.42
5400ABA08022	581444	6511682	1	QSP	PAG	69.37	11.87	5.36	0.31	0.35	0.09	7.15
5400ABA08023	581449	6511683	1	QSP	PAG	70.64	12.31	3.17	0.73	0.41	0.33	6.41
5400ABA08024	581454	6511682	1	BAU	NAG	49.41	13.79	8.32	9.56	8.52	0.19	5.35
5400ABA08025	581458	6511686	1	BAU	PAG	52.03	17.18	9.65	1.87	6.37	0.16	7.26
5400ABA08026	581463	6511688	1	QSP	PAG	43.38	9.19	25.7	0.23	0.43	0.62	4.8
5400ABA08027	581470	6511688	1	BAU	NAG	58.18	16.06	6.38	5.92	3.8	3.73	1.83
5400ABA08028	581472	6511691	1	BAU	NAG	56.57	15.61	6.19	6.48	3.74	3.64	1.78
5400ABA08029	581477	6511693	1	QSP	PAG	71.56	11.98	3.86	0.34	0.43	1.91	2.91
5400ABA08030	581482	6511695	1	QSP	PAG	69.81	12.38	4.75	0.24	1.62	0.04	4.78

sample	NAD83_E	NAD83_N	Unit	Litho	PAG/NAG from ABA	SiO2_%	Al2O3_%	Fe2O3_%	CaO_%	MgO_%	Na2O_%	K2O_%
5400ABA08031	581488	6511695	1	BAU	PAG	47.85	16.88	8.77	7.61	8.09	0.42	4.61
5400ABA08032	581490	6511698	1	QSP	PAG	60.18	15.05	7.41	0.4	6.54	0.1	4.02
5400ABA08033	581498	6511697	1	BAU	PAG	56.93	16.82	6.7	1.02	6.86	0.54	4.87
5400ABA08034	581501	6511701	1	BAU	PAG	57.01	15.77	7.59	0.44	8.16	0.06	3.98
5400ABA08035	581505	6511703	1	QSP	PAG	61.7	11	11.28	0.34	4.89	0.04	2.94
5400ABA08036	581511	6511703	1	DAT	PAG	67.39	12.72	5.64	0.35	2.31	0.06	5.43
5400ABA08037	581516	6511705	1	QSP	PAG	69.13	11.84	6.01	0.31	1.21	0.53	4.32
5400ABA08038	581520	6511709	1	QSP	PAG	71.08	12.3	4.82	0.47	1.03	0.21	4.47
5400ABA08039	581525	6511710	1	RAT	PAG	58.33	14.03	11.66	0.13	0.41	1.15	3.84
5400ABA08040	581529	6511711	1	RAT	PAG	73.97	11.84	3.63	0.16	1.34	0.17	4.19
5400ABA08041	581535	6511711	1	DAT	PAG	41.4	14.66	20.77	0.38	6.18	0.02	2.88
5400ABA08042	581541	6511713	1	DAT	PAG	55.27	13.34	12.22	0.87	5.49	0.02	2.74
5400ABA08043	581545	6511715	1	RAT	PAG	78.09	12.61	0.94	0.18	0.17	3.36	2.55
5400ABA08044	581548	6511718	1	BIN	NAG	48.09	17.13	8.6	3.68	11.22	3.61	0.63
5400ABA08045	581555	6511718	1	QSP	PAG	47.02	14.94	15.73	0.79	6.98	0.39	2.54
5400ABA08046	581698	6511773	1	QSP	PAG	54.4	13.46	6.62	6.8	9.87	1.25	0.6
5400ABA08047	581704	6511782	2	DLT	NAG	64.19	18.66	2.29	2.9	2.37	0.78	4.42
5400ABA08048	581711	6511789	2	DAT	PAG	47.77	18.13	10.66	8.51	8.02	2.61	0.19
5400ABA08049	581716	6511798	2	DAU	NAG	63.84	17.14	3.61	2.12	2.48	6.54	1.26
5400ABA08050	581721	6511806	2	DTF	NAG	64.89	16.54	3.38	1.73	3.08	5.53	1.69
5400ABA08051	581729	6511814	2	BIN	NAG	55.57	15.16	8.94	4.96	7.5	3.05	0.3
5400ABA08052	581732	6511823	2	BIN	PAG	47.96	16.99	10.68	7.06	9.67	2.54	0.31
5400ABA08053	581738	6511831	2	RTF	PAG	73.44	13.75	1.86	0.51	0.43	5.85	0.99
5400ABA08054	581744	6511840	2	RAT	NAG	73.21	14.1	1.55	1.27	0.4	3.48	2.85
5400ABA08055	581783	6511898	4	BIN	NAG	49.13	17.24	8.01	8.2	9.69	2.53	0.65
5400ABA08056	581809	6511940	4	BIN	NAG	50.74	16.95	8.19	8.44	8.44	2.94	0.75
5400ABA08057	581070	6511547	2	RYU	PAG	76.01	10.67	2.26	1.07	0.49	3.19	2.32
5400ABA08058	581075	6511550	2	RYU	NAG	73.15	12.71	2.74	0.56	0.87	5.73	1.17
5400ABA08059	581081	6511548	2	RYU	NAG	74.93	11.97	1.98	1.23	0.62	3.43	2.55
5400ABA08060	581084	6511553	2	RYU	NAG	77.39	10.74	2.9	0.36	0.96	3.53	1.74

sample	NAD83_E	NAD83_N	Unit	Litho	PAG/NAG from ABA	SiO2_%	Al2O3_%	Fe2O3_%	CaO_%	MgO_%	Na2O_%	K2O_%
5400ABA08061	581089	6511554	2	BAU	NAG	70.87	11.64	3.08	2.07	1.89	1.53	3.86
5400ABA08062	581094	6511556	2	SRD	NAG	66.68	15.88	2.99	1.85	1.13	3.16	4.22
5400ABA08063	581099	6511558	2	SRD	NAG	80.19	11.25	0.91	0.15	0.31	1.88	2.76
5400ABA08064	581103	6511559	2	SRD	NAG	77.4	11.84	1.43	0.27	0.43	3.23	3
5400ABA08065	581106	6511561	2	RYU	NAG	78.07	11.26	1.6	0.94	0.82	0.4	3.73
5400ABA08066	581111	6511559	2	BAU	NAG	50.58	15.84	8.45	6.46	6.05	3.74	1.6
5400ABA08067	581117	6511565	2	BAU	NAG	68.99	13.48	3.66	3.92	0.9	1.21	3.26
5400ABA08068	581122	6511566	2	RYU	NAG	76.41	8.62	1.94	3.65	1.21	1.67	2.09
5400ABA08069	581127	6511568	2	RYU	NAG	59.63	14.68	4.32	5.33	3.57	0.53	4.77
5400ABA08070	581133	6511567	2	BAU	NAG	50.99	16.34	11.52	3.15	6.5	4.26	0.87
5400ABA08071	581136	6511571	2	BAU	NAG	33.38	4.72	6.45	18.47	14.82	0.09	0.1
5400ABA08072	581141	6511573	4	BIN	NAG	52.14	14.9	8.48	5.47	5.92	4.42	0.98
5400ABA08073	581146	6511575	4	BIN	NAG	54.65	14.17	7.76	6.87	5.38	4.1	0.33
5400ABA08074	581151	6511576	4	BIN	NAG	48.58	13.23	7.84	6.54	9.95	2.45	1.43
5400ABA08075	581700	6511778	2	RLT	PAG	66.55	14.54	3.09	1.53	2.59	3.28	2.61
5400ABA08076	581707	6511786	2	RYU	NAG	63.87	16.23	5.43	0.53	0.9	0.62	4.37
5400ABA08077	581716	6511792	2	BIN	NAG	65.86	15.51	3.6	2.38	3.52	1.15	3.07
5400ABA08078	581719	6511802	2	BIN	NAG	49.31	16.87	11	7.54	8.84	2.57	0.04
5400ABA08079	581724	6511810	2	BIN	NAG	72.19	12.6	2.87	1.45	2.34	2.99	2.15
5400ABA08080	581730	6511819	2	BIN	NAG	54.78	13.42	8.73	10.5	5.71	1.54	0.5
5400ABA08081	581735	6511827	4	BIN	NAG	63.53	13.38	5.83	2.72	5.03	4.37	0.43
5400ABA08082	581740	6511835	4	BIN	NAG	66.91	13.44	3.15	3.25	1.96	3.9	2.4
5400ABA08083	581746	6511844	4	BIN	NAG	70.28	12.72	2.26	2.31	2.24	3.27	2.62
5400ABA08033_d	581498	6511697	1	BAU	PAG	55.39	16.74	7.07	1.32	7	0.74	4.94
5400ABA08034_d	581501	6511701	1	BAU	PAG	54.81	16.56	7.63	0.45	8.67	0.1	4.53
5400ABA08048_d	581711	6511789	2	QSP	PAG	46.05	18.96	10.24	8.17	7.93	2.72	0.26
5400ABA08052_d	581732	6511823	2	QSP	NAG	47.08	17.72	10.31	6.87	9.6	2.62	0.23
5200ABA08001	580978	6511323	2	QSP	PAG	65.26	13.42	6.14	0.58	1.15	2.47	3.42
5200ABA08002	580986	6511329	2	QSP	PAG	67.88	14.39	4.42	0.44	1.92	3.03	3.19
5200ABA08003	581002	6511341	2	QSP	PAG	66.42	14.59	4.7	0.27	2.39	0.07	5.44

sample	NAD83_E	NAD83_N	Unit	Litho	PAG/NAG from ABA	SiO2_%	Al2O3_%	Fe2O3_%	CaO_%	MgO_%	Na2O_%	K2O_%
5200ABA08004	581018	6511354	2	QSP	PAG	67.46	15.13	4.31	0.14	1.56	0.15	5.33
5200ABA08005	581032	6511370	2	QSP	PAG	66.75	13.87	4.76	0.36	1.85	0.03	5.26
5200ABA08006	581047	6511382	2	RAT	NAG	69.51	16.41	2.59	0.64	1.6	0.63	4.86
5200ABA08007	581063	6511392	2	RTF	NAG	70.14	13.16	2.89	2.47	1.32	1.99	3.33
5200ABA08008	581077	6511408	4	BIN	NAG	48.69	16.38	8.65	8.91	6.69	1.86	1.33
5200ABA08009	581084	6511415	4	BIN	NAG	48.7	18.08	9.36	7.8	7.56	2.4	1.54
5200ABA08010	581094	6511423	2	DTF	NAG	69.86	14.15	2.87	1.34	1.27	3.86	2.88
5200ABA08011	581100	6511428	2	DTF	NAG	70.45	14.15	2.95	2.26	1.41	3.24	2.7
5200ABA08012	581107	6511435	4	BIN	NAG	50.37	18.58	8.94	3.94	8.02	2.65	3.32
5200ABA08013	581117	6511440	4	DAT	NAG	68.7	13.18	2.72	3.79	1.72	1.45	3.25
5200ABA08014	581131	6511455	4	BIN	NAG	49.26	17.68	8.99	7.43	6.92	0.82	3.46
5200ABA08015	581145	6511469	4	BIN	NAG	51.64	16.57	8.07	8.13	6.56	2.57	0.78
5200ABA08016	581161	6511482	4	BIN	NAG	49.97	16.81	8.52	6.23	6.61	4.35	1.17
5200ABA08017	581175	6511495	4	BIN	NAG	51.17	16.48	7.7	8.82	5.78	4	0.79
5200ABA08018	581192	6511506	4	BIN	NAG	50.56	17.43	8.84	8.1	6.61	4.41	0.28
5200ABA08019	581207	6511519	4	BIN	NAG	50.7	17.24	8.81	7.13	7.14	3.17	2.11
5200ABA08020	581222	6511533	4	BIN	NAG	50.16	16.88	9.14	7.56	6.72	2.93	1.2
5200ABA08021	581236	6511547	4	BIN	NAG	49.81	17.21	8.79	7.77	6.57	3.02	1.37
5200ABA08022	581251	6511561	4	BIN	NAG	51.36	17.09	8.93	6.26	7.55	4.03	1.07

sample	TiO2_%	P2O5_%	MnO_%	BaO_%	Cr2O3_%	LOI_%	Total_%	C_%	S_%	lab	certificate
5400ABA08001	0.34	0.07	0.03	0.27	<0.01	3.96	99.79	0.07	2.07	Assayers Canada	8V-3351-PA1
5400ABA08002	0.49	0.1	0.12	1.01	<0.01	4.78	99.55	0.72	0.05	Assayers Canada	8V-3351-PA1
5400ABA08003	0.77	0.15	0.15	0.1	0.02	2.43	99.75	0.07	0.02	Assayers Canada	8V-3351-PA1
5400ABA08004	0.67	0.14	0.16	0.03	0.02	5.95	99.93	0.76	0.02	Assayers Canada	8V-3351-PA1
5400ABA08005	0.68	0.16	0.17	0.03	0.01	5.94	99.8	0.92	0.01	Assayers Canada	8V-3351-PA1
5400ABA08006	0.78	0.17	0.15	0.07	0.02	3.71	99.6	0.19	0.01	Assayers Canada	8V-3351-PA1
5400ABA08007	0.7	0.16	0.19	0.07	0.01	5.93	99.34	1.14	0.09	Assayers Canada	8V-3351-PA1
5400ABA08008	0.77	0.1	0.29	0.21	<0.01	5.99	99.36	0.56	4.73	Assayers Canada	8V-3351-PA1
5400ABA08009	0.82	0.12	0.25	0.17	<0.01	6.04	99.65	0.31	5.13	Assayers Canada	8V-3351-PA1
5400ABA08010	1.07	0.13	0.32	0.1	0.01	7.86	99.39	1.74	0.03	Assayers Canada	8V-3351-PA1
5400ABA08011	0.85	0.14	0.2	0.07	<0.01	5.38	99.62	0.08	2.65	Assayers Canada	8V-3351-PA1
5400ABA08012	1.02	0.23	0.13	0.1	<0.01	4.79	99.22	0.22	2.8	Assayers Canada	8V-3351-PA1
5400ABA08013	0.79	0.12	0.19	0.04	<0.01	4.4	99.56	0.11	0.1	Assayers Canada	8V-3351-PA1
5400ABA08014	0.81	0.12	0.18	0.05	0.01	4.13	99.38	0.09	0.14	Assayers Canada	8V-3351-PA1
5400ABA08015	0.85	0.14	0.2	0.07	<0.01	5.13	99.48	0.07	1.9	Assayers Canada	8V-3351-PA1
5400ABA08016	1.04	0.24	0.26	0.08	<0.01	5.44	99.3	0.02	2.78	Assayers Canada	8V-3351-PA1
5400ABA08017	0.91	0.22	0.17	0.18	<0.01	4	99.44	0.07	3.85	Assayers Canada	8V-3351-PA1
5400ABA08018	0.41	0.05	0.08	0.24	<0.01	3.21	98.92	0.01	1.81	Assayers Canada	8V-3351-PA1
5400ABA08019	0.43	0.08	0.1	0.27	<0.01	3.7	99.45	0.01	1.94	Assayers Canada	8V-3351-PA1
5400ABA08020	0.4	0.07	0.1	0.29	<0.01	4.33	99.31	0.03	3.41	Assayers Canada	8V-3351-PA1
5400ABA08021	0.39	0.06	0.04	0.2	<0.01	3.16	98.42	0.07	2.26	Assayers Canada	8V-3351-PA1
5400ABA08022	0.38	0.02	0.01	0.77	<0.01	3.15	98.84	0.02	3.93	Assayers Canada	8V-3351-PA1
5400ABA08023	0.34	0.06	0.02	1.08	0.02	3.34	98.85	0.12	2.15	Assayers Canada	8V-3351-PA1
5400ABA08024	0.75	0.34	0.2	0.65	0.05	2.48	99.63	0.05	0.09	Assayers Canada	8V-3351-PA1
5400ABA08025	0.81	0.41	0.15	0.26	0.02	3.63	99.82	0.03	0.35	Assayers Canada	8V-3351-PA1
5400ABA08026	0.28	0.03	0.01	0.66	0.01	14.31	99.66	0.02	21.3	Assayers Canada	8V-3351-PA1
5400ABA08027	0.7	0.17	0.12	0.13	0.02	2.53	99.57	0.69	0.06	Assayers Canada	8V-3351-PA1
5400ABA08028	0.67	0.16	0.13	0.15	0.03	4.14	99.29	0.85	0.15	Assayers Canada	8V-3351-PA1
5400ABA08029	0.32	0.05	0.01	1.63	0.01	3.6	98.59	0.03	3.02	Assayers Canada	8V-3351-PA1
5400ABA08030	0.33	0.06	0.02	0.34	0.01	4.54	98.93	0.01	2.67	Assayers Canada	8V-3351-PA1

sample	TiO2_%	P2O5_%	MnO_%	BaO_%	Cr2O3_%	LOI_%	Total_%	C_%	S_%	lab	certificate
5400ABA08031	0.78	0.11	0.23	0.88	0.06	2.91	99.2	0.63	1.37	Assayers Canada	8V-3351-PA1
5400ABA08032	0.42	0.07	0.1	0.29	<0.01	5.11	99.69	0.01	3.29	Assayers Canada	8V-3351-PA1
5400ABA08033	0.67	0.13	0.16	0.34	0.03	4.58	99.63	0.06	1.56	Assayers Canada	8V-3351-PA1
5400ABA08034	0.63	0.11	0.17	0.24	0.03	5.47	99.65	0.03	1	Assayers Canada	8V-3351-PA1
5400ABA08035	0.32	0.06	0.11	0.16	0.01	6.81	99.66	0.04	5.81	Assayers Canada	8V-3351-PA1
5400ABA08036	0.36	0.06	0.05	0.62	<0.01	4.69	99.69	0.03	2.82	Assayers Canada	8V-3351-PA1
5400ABA08037	0.33	0.07	0.03	1.37	0.01	4.22	99.37	0.05	4.07	Assayers Canada	8V-3351-PA1
5400ABA08038	0.37	0.07	0.03	0.99	0.01	3.6	99.45	0.09	3.03	Assayers Canada	8V-3351-PA1
5400ABA08039	0.33	0.02	0.01	1.64	0.01	7.63	99.2	0.03	9.52	Assayers Canada	8V-3351-PA1
5400ABA08040	0.32	0.04	0.03	0.42	0.01	3.43	99.54	0.02	1.97	Assayers Canada	8V-3351-PA1
5400ABA08041	1.1	0.27	0.21	0.2	0.01	11.37	99.45	0.15	11.5	Assayers Canada	8V-3351-PA1
5400ABA08042	1.1	0.64	0.13	0.16	0.01	7.54	99.52	0.03	5.91	Assayers Canada	8V-3351-PA1
5400ABA08043	0.04	0.02	0.02	0.09	0.01	1.65	99.73	0.03	0.18	Assayers Canada	8V-3351-PA1
5400ABA08044	0.82	0.11	0.34	0.04	0.07	5.21	99.53	0.48	0.12	Assayers Canada	8V-3351-PA1
5400ABA08045	0.69	0.12	0.22	0.22	<0.01	10.11	99.74	0.15	7.74	Assayers Canada	8V-3351-PA1
5400ABA08046	0.96	0.45	0.18	0.18	0.08	6.58	>100.00	0.06	2.2	Assayers Canada	8V-3351-PA1
5400ABA08047	0.38	0.04	0.05	0.65	<0.01	3.76	>100.00	0.02	0.07	Assayers Canada	8V-3351-PA1
5400ABA08048	0.9	0.21	0.21	0.02	0.01	3.48	>100.00	0.03	0.22	Assayers Canada	8V-3351-PA1
5400ABA08049	0.33	0.06	0.06	0.08	0.01	1.92	99.44	0.03	0.05	Assayers Canada	8V-3351-PA1
5400ABA08050	0.33	<0.01	0.06	0.13	0.01	2.08	99.45	0.03	0.03	Assayers Canada	8V-3351-PA1
5400ABA08051	0.73	0.16	0.15	0.02	0.01	3.87	>100.00	0.01	0.05	Assayers Canada	8V-3351-PA1
5400ABA08052	0.78	0.15	0.23	0.01	0.01	3.86	>100.00	0.01	0.18	Assayers Canada	8V-3351-PA1
5400ABA08053	0.23	0.04	0.01	0.06	0.01	1.54	98.73	0.04	0.89	Assayers Canada	8V-3351-PA1
5400ABA08054	0.09	<0.01	0.05	0.12	0.01	2.17	99.28	0.24	0.03	Assayers Canada	8V-3351-PA1
5400ABA08055	0.83	0.13	0.24	0.02	0.05	3.7	>100.00	0.06	0.07	Assayers Canada	8V-3351-PA1
5400ABA08056	0.84	0.13	0.13	0.2	0.05	2.77	>100.00	0.02	0.11	Assayers Canada	8V-3351-PA1
5400ABA08057	0.27	0.07	0.04	0.13	0.02	3.33	99.87	0.18	1.22	Assayers Canada	8V-3351-PA1
5400ABA08058	0.31	0.08	0.05	0.04	0.01	2.5	99.92	0.07	0.01	Assayers Canada	8V-3351-PA1
5400ABA08059	0.3	0.08	0.06	0.07	0.02	2.67	99.9	0.19	0.02	Assayers Canada	8V-3351-PA1
5400ABA08060	0.26	0.09	0.04	0.03	0.02	1.78	99.84	0.03	0.01	Assayers Canada	8V-3351-PA1

sample	TiO2_%	P2O5_%	MnO_%	BaO_%	Cr2O3_%	LOI_%	Total_%	C_%	S_%	lab	certificate
5400ABA08061	0.34	0.08	0.07	0.05	0.01	4.41	99.88	0.51	0.01	Assayers Canada	8V-3351-PA1
5400ABA08062	0.37	0.06	0.04	0.05	0.01	3.46	99.9	0.31	0.01	Assayers Canada	8V-3351-PA1
5400ABA08063	0.26	0.07	0.02	0.07	0.02	1.98	99.87	0.02	0.01	Assayers Canada	8V-3351-PA1
5400ABA08064	0.28	0.07	0.02	0.1	0.02	1.83	99.91	0.04	<0.01	Assayers Canada	8V-3351-PA1
5400ABA08065	0.26	0.05	0.02	0.09	0.02	2.56	99.83	0.12	0.01	Assayers Canada	8V-3351-PA1
5400ABA08066	0.78	0.21	0.18	0.03	0.04	5.88	99.83	0.97	0.09	Assayers Canada	8V-3351-PA1
5400ABA08067	0.37	0.08	0.04	0.06	0.01	3.9	99.89	0.41	0.02	Assayers Canada	8V-3351-PA1
5400ABA08068	0.2	0.05	0.04	0.06	0.01	3.9	99.85	0.65	0.02	Assayers Canada	8V-3351-PA1
5400ABA08069	0.36	0.09	0.1	0.1	0.01	6.46	99.95	1.02	0.02	Assayers Canada	8V-3351-PA1
5400ABA08070	1.04	0.17	0.22	0.02	0.03	4.75	99.85	0.33	0.23	Assayers Canada	8V-3351-PA1
5400ABA08071	0.24	0.15	0.12	0.02	0.17	21.1	99.83	4.2	0.01	Assayers Canada	8V-3351-PA1
5400ABA08072	0.85	0.2	0.15	0.03	0.03	6.32	99.9	0.94	0.09	Assayers Canada	8V-3351-PA1
5400ABA08073	0.89	0.24	0.16	0.02	0.03	5.28	99.89	0.64	0.1	Assayers Canada	8V-3351-PA1
5400ABA08074	0.72	0.24	0.14	0.05	0.08	8.62	99.88	1.4	0.11	Assayers Canada	8V-3351-PA1
5400ABA08075	0.31	0.07	0.04	0.14	0.01	5.21	99.96	0.02	4.43	Assayers Canada	8V-3351-PA1
5400ABA08076	0.38	0.12	0.01	1.72	0.01	2.98	97.15	0.01	0.01	Assayers Canada	8V-3351-PA1
5400ABA08077	0.36	0.12	0.05	0.36	0.01	3.96	99.94	0.01	0.17	Assayers Canada	8V-3351-PA1
5400ABA08078	0.9	0.27	0.23	0.02	0.02	2.15	99.75	0.01	0.03	Assayers Canada	8V-3351-PA1
5400ABA08079	0.27	0.05	0.06	0.12	0.02	2.84	99.96	0.02	0.01	Assayers Canada	8V-3351-PA1
5400ABA08080	0.73	0.46	0.17	0.03	0.05	3.21	99.82	0.11	0.22	Assayers Canada	8V-3351-PA1
5400ABA08081	0.52	0.14	0.12	0.06	0.02	3.71	99.87	0.1	0.07	Assayers Canada	8V-3351-PA1
5400ABA08082	0.29	0.06	0.09	0.44	0.02	4.05	99.95	0.44	0.19	Assayers Canada	8V-3351-PA1
5400ABA08083	0.27	0.06	0.08	0.08	0.02	3.71	99.92	0.22	0.01	Assayers Canada	8V-3351-PA1
5400ABA08033_d	0.72	0.1	0.19	0.24	0.02	4.68	99.14	0.07	1.61	Assayers Canada	8V-3351-PA1
5400ABA08034_d	0.69	0.09	0.19	0.19	0.02	5.02	98.95	0.03	0.93	Assayers Canada	8V-3351-PA1
5400ABA08048_d	0.92	0.2	0.22	0.03	0.02	2.64	98.35	0.02	0.23	Assayers Canada	8V-3351-PA1
5400ABA08052_d	0.84	0.15	0.24	0.01	0.01	2.98	98.66	0.01	0.13	Assayers Canada	8V-3351-PA1
5200ABA08001	0.76	0.15	0.04	0.16	0.01	6.11	99.65	0.13	4.86	Assayers Canada	8V-3351-PA1
5200ABA08002	0.39	0.06	0.08	0.16	0.01	3.49	99.44	0.12	2.49	Assayers Canada	8V-3351-PA1
5200ABA08003	0.56	0.09	0.06	0.28	0.01	4.6	99.47	0.09	2.93	Assayers Canada	8V-3351-PA1

APPENDIX IV
ROAD GEOLOGY STATION NOTES

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
1	582397	6504145	RLAT	Rhyolite Lapilli Ash Tuff/Crystal Tuff	weak sericite	trace py		25% ash + lapilli
2	580040	6514230	MSX	Massive Sulphide	iron oxide	massive po/py		Replacement in Limestone?
3	580080	6514110	SLT	siltstone with Argillite	weak sericite	0.5% py, trace cp	S0=358/70	Well bedded, thinly bedded, interbedded, schistose.
4	580105	6514055	BAU	Basalt Volcanic	chlorite		S1=180/90	Chlorite schist (+hb)
5	580125	6513940	BAU	Basalt Volcanic	chlorite		S1=000/85	Chlorite schist (+hb)
6	580125	6513920	BAU	Basalt Volcanic				Volcanic
7	580124	6513901	BFL	Basalt Flow	weak to moderate chlorite	2% py		Variable basalt flow/unidentified mafic unit with areas of increased fissility, fe-ox stain on surface in conjunction with up to 2-3% pyrite in local areas. Some carbonate present as small veinlets/fracture fill. Rock is possibly PAG. Spoke with foreman from Arctic and was told it was being blasted for side ditch only.
8	580150	6513845	BAU	Basalt Volcanic		1-2% py	S1=262/85	Hyaloclastite/cherty areas
9	580160	6513725	BAU	Basalt Volcanic				Mafic volcanic
10	580165	6513690	RLAT	Rhyolite Lapilli Ash Tuff				"Ribbony" text (contact zone?) (+/- xtals)
11	580165	6513675	RLAT	Rhyolite Lapilli Ash Tuff		trace-1% py, trace cp		20% lenticular lapilli (+/- xtals)
12	580170	6513665	RLAT	Rhyolite Lapilli Ash Tuff		trace-1% py, trace cp	S0=110/90	Banded/welded?
13	580210	6513595	RAT	Rhyolite Ash Tuff	weak sericite	trace-1% py, trace cp	S0=62/?	Mainly ash
14	580230	6513575	RAT	Rhyolite Ash Tuff	weak sericite	trace-2% py, trace cp		Sub-parallel wormy qtz sweats
15	580275	6513530	QSP	QSP altered	strong sericite, silica	2-5% py	S0=004/38	Wavy textured

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
16	580316	6513521	DACB	Banded Dacite	weak chlorite, subtle carbonate and maripositesite	3% py		Silicic area of banded dacitic ash tuff or possible rhyolite. Rock has increased levels of pyrite in association with chloritic altering. Some disseminations of anhedral to subhedral pyrite comprising 2-3% overall. Some trace carbonate alteration occurs in conjunction with maripositesite alteration/staining. Definite PAG. Not for causeway use.
17	580333	6513509	DAT	Dacite Ash Tuff	weak to strong chlorite and sericite	4% blebbly py, minor mariposite		Near shears, still mainly DAT
18	580320	6513507	QSP	QSP Altered Dacite	weak carbonate, chlorite and QSP	3% py	S1=125/85	Weakly QSP-altered Dacite or Rhyolite. Snow on ground makes looking at entire outcrop impossible. Previous flag exists at outcrop as Coster has previously mapped this outcrop. Rock is variably silicified with silicic light grey clasts/lapilli up to 1cm wide. Rock appears ashy grey where silicified. weak carbonate and quartz-silica-carbonate observed. Calicite veins up to 1cm also noted. Pyrite 3% overall. SAMPLE GGR08002.
19	580320	6513500	RAT	Rhyolite Ash Tuff/Lapilli Tuff	weak sericite	1-2% py	S1=148/85	Rare lapilli
20	580339	6513489	DAT	Dacite Ash Tuff	weak sericite, chlorite and calcite	trace - 1% py		Banded, foliated dk grey-green
21	580384	6513439	DAT	Dacite Ash Tuff	weak sericite, chlorite and calcite	trace py		Banded, foliated dk grey-green
22	580372	6513415	DAT	Dacite Ash Tuff	weak sericite, chlorite and calcite	trace py		Banded, foliated dk grey-green

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
23	580443	6513308	DAT	Dacite Ash Tuff	weak sericite, chlorite and calcite	trace-1% py, trace cp	S1=110/90	Banded, foliated dk grey-green
24	580484	6513176	DAT	Dacite Ash Tuff	weak sericite, chlorite and calcite	trace-1% py	S1=168/90	Banded, foliated dark grey-green
25	580479	6513115	DAT	Dacite Ash Tuff	weak sericite, chlorite and calcite	trace py		Banded, foliated dark grey-green
26	580485	6513089	DAT	Dacite Ash Tuff	weak to strong chlorite and sericite	2-4% py	S1=345/85	20 m of QSP in DAT/RAT
27	580492	6513080	QSP	QSP Altered Rhyolite	moderate QSP	5% py		Rusty outcrop of QSP-altered rhyolite. Rock is silica rich with abundant pyrite composing 5% overall. Pyrite occurs as fine grain clots and disseminations. trace chalcopyrite may also be present, however positive identification is difficult. Altered part of outcrop is 10m wide in exposure and bound by dacite volcanic (tuff) on either side. Overall, rock is silica rich with occasional clasts and abundant silica flooding/veining. Weak sericite noted. SAMPLE GGR08003.
28	580523	6513060	FLZN	Fault Zone	clay-limonite gouges		FT=115/90	Very sheared, numerous gouges
29	580523	6513059	DIAB	Diabase Dike	saussuritized feldspars, chlorite and biotite			Magnetic dike in shear/fault zone
30	580518	6513045	DAT	Dacite Ash Tuff/Lapilli Ash Tuff	minor chlorite, sericite	trace py	S0=325/85, FT=60to110/90	Some phyllitic sheared areas

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
31	580560	6512797	DAT	Dacite Ash Tuff	weak sericite, chlorite and calcite	trace to 2% py		Banded, foliated dark grey-green
32	580540	6512699	BAU	Basalt Volcanic	weak calcite and quartz flooding	0.1% py		Foliated mafic volcanic likely basalt with sub-cm quartz-calcite veinlets following foliation as well as abundant calcite occurring as flooding in matrix and along fracture planes. trace fine grained pyrite occurs in conjunction with silica flooding (.1% overall, with small local pods up to 1% as observed in blast float).
33	580546	6512698	DAT	Dacite Ash Tuff	weak sericite, chlorite and calcite	trace py		Banded, foliated dark grey-green
34	580514	6512691	BAU	Basalt Volcanic	weak calcite and quartz flooding, weak chlorite and epidote	0.1% py		Foliated mafic volcanic with frequent carbonate/calcite veins and fracture fill. Carbonate ranges from milky white to slightly pinkish in colour due to trace hematite associated with the veins. Other veins contain chlorite and epidote. Rare trace pyrite observed. (0.1% overall)
35	580519	6512663	BAU	Basalt Volcanic	weak chlorite, weak epidote			Mafic volcanic with quartz blebs and veinlets. Frequent carbonate fracture fill. Rock is well foliated.
36	580507	6512630	DAT	Dacite Ash Tuff	weak to moderate sericite, chlorite, calcite	trace py	S1=308/85	Banded, foliated dark grey-green
37	580524	6512513	DAT	Dacite Ash Tuff	weak sericite, chlorite, calcite and magnetite	trace py		Banded, foliated dark grey-green
38	580541	6512480	DAT	Dacite Ash Tuff	weak sericite, chlorite, calcite and magnetite	trace py		Banded, foliated dark grey-green

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
39	580536	6512455	BAT	Basalt Ash Tuff	weak chlorite, subtle carbonate.	0.75% py		Blasted trench of possible volcanic siltstone or ash tuff. Section is 5m wide in exposure and surrounded by mafic volcanic on either side. Rock has increased fissility and well developed banding bedding. Broken surfaces have an iron stain due to surficial weathering. trace pyrite occurs with some small localities containing up to 1%. Calcite occurs as fracture fill and rare veinlets (1%).
40	580563	6512449	BAU	Basalt Volcanic	weak carbonate.	0.1% py		Foliated mafic volcanic with frequent carbonate and trace (0.1%) pyrite occurring with silica flooding along foliation.
41	580589	6512437	DAT	Dacite Ash Tuff	weak silica and carbonate.			Dacitic volcanic ash tuff. Silica rich, weakly to moderately abundant carbonate (3-5%) occurs as alteration, veinlets, and fracture fill. quartz knots and veinlets also noted.
42	580596	6512437	BAU	Basalt Volcanic	weak to subtle carbonate and silica flooding, weak chlorite	0.1% py	S1=292/75	Foliated mafic volcanic with chloritic green coloration, quartz-carbonate veinlets and flooding. Calcite also occurs as fracture fill. Carbonate is common (3-5%).
43	580583	6512435	DAT	Dacite Ash Tuff	weak sericite, chlorite, calcite and magnetite	trace py	S1=116/65	Banded, foliated dark grey-green
44	580587	6512428	DACB	Banded Dacite	weak silica.			Banded dacite tuffs. Well banded with silica knots and veinlets
45	580577	6512426	BAU	Basalt Volcanic	weak silica and carbonate.	.1% py, trace cp		Mafic volcanic likely basalt with frequent quartz veins occurring with carbonate along foliation as well as flooding. trace pyrite and possible trace chalcopyrite .1% overall
46	580577	6512416	DAT	Dacite Ash Tuff	weak sericite, chlorite, calcite and magnetite	trace py		Banded, foliated dark grey-green

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
47	580611	6512410	BAU	Basalt Volcanic				2m wide massive mafic dike crosscutting foliated mafic volcanic. Rock has abundant calcite fracture fill and veinlets following foliation.
48	580605	6512406	BDK	Basalt Dike			S1=310/80, CNTC=080/82	Magnetic 1.3 m dike
49	580619	6512405	DAU	Dacite Volcanic	increased silicification compared to nearby stations	0.25% py		Sheared mafic to intermediate volcanic. Slightly increased silica content. Carbonate and silica occur as flooding as well as boudinaged veinlets that follow foliation. trace pyrite (0.25%). Carbonate is 3-5% of rock.
50	580627	6512383	DAT	Dacite Ash Tuff	weak sericite, moderate chlorite, calcite	trace-1% py		Banded, foliated dark grey-green
51	580639	6512363	BLT	Basalt Lapilli Tuff	weak chlorite, silica and carbonate alteration of groundmass.	0.1% py		Green chlorite altered, foliated mafic volcanic with silica and carbonate flooding. Possible stretched lapilli observed within preferred fabric. Carbonate estimated at 3-5% overall. trace fine grain pyrite occurs in conjunction with silica (.1%).
52	580668	6512306	DAT	Dacite Ash Tuff	weak sericite, moderate chlorite, calcite	trace-1% py		Banded, foliated dark grey-green
53	580671	6512291	DAT	Dacite Ash Tuff	weak sericite, moderate chlorite, calcite, magnetite	trace py, cp	S1=312/82	Banded, foliated dark grey-green
54	580699	6512254	BAU	Basalt Volcanic	weak chlorite, carbonate	0.1% py	S1=290/80	Foliated mafic volcanic with frequent carbonate and quartz veining, flooding and carbonate fracture fill. trace pyrite is 0.1% overall with occasional blast float pieces containing up to 0.5 to 1% pyrite.

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
55	580713	6512232	DAT	Dacite Ash Tuff	weak sericite, moderate chlorite, calcite, magnetite	trace py		Banded, foliated dark grey-green
56	580772	6512208	DAT	Dacite Ash Tuff	weak sericite, moderate chlorite, calcite, magnetite	trace py		Banded, foliated dark grey-green
57	580868	6512124	DAT	Dacite Ash Tuff	strong epidote, calcite, hematite and magnetite.	trace py		Banded, foliated dark grey-green
58	580892	6512080	DAT	Dacite Ash Tuff	moderate sericite, chlorite, calcite and magnetite	trace-1% py		Phyllitic, friable, platy, shistose
59	580902	6512033	DAT	Dacite Ash Tuff	weak sericite, chlorite, calcite	trace py		Banded, foliated dk grey-green
60	580992	6511983	BIN	Basalt Intrusive	weak Pervasive carbonate and silica	trace cp		Medium grained, strong magnetite
61	581034	6511964	DAT	Dacite Ash Tuff	weak sericite, chlorite, calcite, magnetite	trace py		Banded, foliated dark grey-green
62	581018	6511938	DAT	Dacite Ash Tuff	weak sericite, chlorite, calcite, magnetite	trace py	S1=222/78	Phyllitic, friable, platey, shistose
63	581044	6511938	DAT	Dacite Ash Tuff	weak sericite, chlorite, calcite, magnetite			Banded, foliated dark grey-green
64	581027	6511815	BIN	Basalt Intrusive	weak Pervasive carbonate and silica			Medium grained, strong magnetite

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
65	580942	6511634	LS	Limey siltstone	weak carbonate			Dark grey limey siltstone showing rare subangular cream colored felsic frag as well as subrounded limestone frag (clast)
66	580910	6511564	BAU	Basalt Volcanic	weak silica, carbonate	trace to 1% py, tr cp		Medium green aphanitic mafic rock?; silicified and pervasive carb alt'n and vfg crackle stringers of quartz-calcite with up to 2% cubic py and tr cp associated with stringers
67	580918	6511564	SLT	Limey siltstone	moderate calcite	trace-1% py trace cp		Blasted rubble on NE(upper) area B bench; dark grey limey siltstone cut by numerous, irregular and discontinuous qtz-calc stringers and hairline ladders; fracture and stringer controlled coarse cubic py and coarse cp, traces silvery tetrahedrons
68	580916	6511559	FPD	Feldspar Porphyry Dike	weak carbonate.			Dark grey crowded feldspar porphyry dike, approx 1.5 m wide, hosting 25-35% white euhedral feldspar phenos up to 1 cm; obscure, irregular contacts
69	580935	6511559	LS	Limey siltstone	weak silica, carbonate		FT=172/80	Poor exposure of rusty, highly sheared, faulted limey siltstone (?), weakly silicified perv.
70	580905	6511552	QZVN	quartz Vein	weak carbonate.	5% py and trace - 0.5% cp	VN=035/70	Series of 3 (4?) 2-5 cm wide quartz veins crackled and healed with chlorite and sub-anhedral pyrite and anhedral chalco; pyritized wallrock
71	580922	6511546	SLT	Silty Limestone	weak to moderate calcite			Area of silty limestone conglomerate with up to 30% white to ser-green rinded rounded white to grey limestone clasts up to 15 cm large, all set into a dk gey, gritty limy siltstone; cut by numerous calcite gashes
72	580936	6511546	FLZN	Fault Zone	iron oxides, silica, carbonate		FT=210/80	Narrow fault/shear in silicified mafic volcanic; rocks are weakly sheared throughout and weakly silicified, lighter in color; moderate pervasive carb (calc) alt'n and vfg crackle stringers of quartz-calcite

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
73	580945	6511546	BLT	Basalt Lapilli Tuff	weak chlorite.		VN=298/88	Blue-green mafic volcanic containing 1/2cm long needles of horneblende. Rock is weakly carbonate altered with pervasive alteration of groundmass. Calcite veins are found trending 298/88 and are up to 5cm wide. Station is adjacent to contact with siltstone. Rock unit is possibly an intrusive given presence of horneblende .
74	580825	6511528	SLT	siltstone	iron oxides and carbonate	trace-3% vfg py, tr cp	FT=154/75	7 m wide area of platey highly foliated and sheared (fault zone?) brick red limy gritty siltstone and dk grey to black vfg limey siltstone, both of which have a sugary-pasty texture, so may be recrystallized; red rock virtually unfoliated, black rock quite foliated; 154/75W shearing particularly on west side of exposure; rocks locally host tr-3% vfg py and traces chalco
75	580853	6511522	SLT	Limey siltstone	moderate calcite		S0=220/80	Contact with clast bearing limey siltstone and sheared, friable and carbed similar rock type
76	580833	6511518	SLT	siltstone	iron oxides and carbonate	trace py		Black limey siltstone hosting rare white limestone clasts; highly foliated/sheared and platey; pervasively calcareous and cut by occas. qtz-calc stringer +/- white translucent, acicular crystals up to 2 cm (actinolite?)
77	580843	6511515	FLZ	Fault Zone				5 to 10m wide faultzone excavated 5m down containing clay and rock shards. Area is located directly adjacent to two competent siltstone outcrops. Location may be a topographic low or one of the outcrops a spalled off very large boulder.
78	580876	6511505	SLT	Limey siltstone				Localized area of limestone clast conglomerate in dark grey limey siltstone at the bottom end of sheer wall

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
79	580911	6511496	QZVN	quartz Vein		30% arsenopyrite	VN=352/60	Subcrop of mineralized quartz-calcite vein from 6-12 cm wide, but variable and poorly exposed in blasted rock. Probable trend is 170/60NE. Vein material hosts approx 30% euhedral silver metallic sulphide crystals that are prismatic elongate (acicular) with triangular x-sections, along near massive bands in a weakly brecciated quartz - calcite +/- clay gangue. This mineral is as yet unidentified, but may be tetrahedrite or arsenopyrite or perhaps some bizarre silver bearing mineral. Spectacular crystals. Vein material also hosts minor sericite and traces of pyrite, chalcopyrite and bornite. Selective grab sample taken. SAMPLE ICR08001
80	580923	6511496	QZVN	quartz Vein		5-10% arsenopyrite		Mineralized vein traced from yesterday, within fairly massive grey gritty limey siltstone, cut by irreg qtz+/- calc stringers and gashes; vn is vuggy, 3-4 cm wide, banded and hosts 5-10% unidentified silvery, metallic mineral as described yesterday
81	580934	6511495	FLZN	Fault Zone	iron oxides		FT=350/90	1-1.5 m wide gougy, rusty fault zone in dark grey limey siltstone
82	580919	6511494	SLT	siltstone	weak carbonate.	0.5% py	VN=205/88	Carbonate altered siltstone with linear veining trending along possible bedding plane. Rock contains fracture fill mm-wide veinlets of calcite in conjunction with pyrite.
83	580920	6511491	QFP	quartz-Feldspar Porphyritic Dike	weak carbonate.		FT=035/85	Irregular QFP dike found proximal to a 50cm wide small fault at 035/85. Rock contains 1-3cm wide white feldspar crystals in a dark green chlorite aphanitic matrix. Exposure is 2-3m wide with irregular contacts.

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
84	580877	6511463	SLT	Limey siltstone	limonite, carbonate and clay		FT=140/90	Weak and narrow fault/shear in limey siltstone; 10 cm of rusty gouge
85	580911	6511463	LS	Limey siltstone				Dark grey, gritty (tuffaceous?) limey siltstone with 5-10% subangular to subrounded cream to pale green (ser) felsic frags as well as cream colored limestone frags
86	580916	6511459	FPD	Feldspar Porphyry Dike				Feldspar porphyry dike running approx 020 degrees vertically up proposed retaining wall
87	580895	6511454	LS	Limestone with Argillite		0.1% py		Exposed ridge of silty cooked up limestone with minor brecciation and weak silicification. Outcrop is quite massive. Crude bedding is observed but is quite variable generally striking 170-180 with shallow to steep dip to the east.
88	580920	6511442	SLT	siltstone	iron oxides and carbonate	4-5%		PAG area roughly 20x20 m variable geology: ashy siliceous tuff and limey tuffaceous siltstone, all with irregular qtz(-calc) stringers; contains 4-5% py as very fine grained disseminations and as cubes in qtz(-calc) v-lets that also host tr cp; also hosts smeary py, po, cp along dry fractures
89	580922	6511439	LS	Limey siltstone	weak silica, carbonate	1-2 % py		Fairly massive black limey siltstone cut by stringers of quartz-calcite in numerous directions; 1-2% euhedral pyrite mainly with stringers and dry fractures
90	580902	6511432	LS	Limey siltstone	weak carbonate	trace to 1% py		Grey, tuffaceous gritty clast bearing limey siltstone with <10% subrounded to subangular LS clasts 3-20 mm in size, rarely to 40 mm; tr to half % diss py and tr cp

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
91	580892	6511416	SLT	siltstone	iron oxides and carbonate	trace py		10x10 m outcrop on south edge of ridge closer to river; limestone clast bearing limey siltstone; med dk grey fine grained silty matrix hosting 15% subrounded to sub-angular limestone clasts 2mm to 2 cm; trace py; cut by irregular calcite gashes and stringers; very well fractured and crumbly; rusty weathering due to being overlain by rusty (oxidized) clayey cobbley river deposits
92	580927	6511412	LS	Tuffaceous Limestone	weak carbonate, sericite	3-5% py, trace cp	S1=138/80	Small outcrop of gritty, tuffaceous limey siltstone; with 5-15% subangular to subrounded clasts/lapilli of weakly sericitized felsic material; in a gritty felsic ash, limey matrix; calling it PAG so it doesn't end up on the causeway
93	580910	6511407	SLT	siltstone	iron oxides and carbonate	trace py		Rusty red crumbly outcrop of weakly sheared limey siltstone hosting trace pyrite and variously oriented calcite stringers; rusty from proximity to fault zone (?), or more probably due to overlying oxidized river gravels
94	580891	6511405	SLT	Limey siltstone	weak calcite, weak sericite	trace py		Limestone clast bearing limey siltstone; trace py, wk ser; lowest SW outcrop of area A
95	581552	6509115	BLT	Basalt Lapilli Tuff/Debris Flow	weak chlorite, moderate epidote	trace py		Mafic volcanic lapilli tuff/debris flow; rock may be a coarse flow beccia amygdaloidal basalt; rock is still matrix supported with 30-40% coarse subangular to subrounded epidotized fragments; blocky fractured; trace py (locally 1%); minor irregular qtz-calc-ep veinlets

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
96	581559	6509110	BIN	Basalt Intrusive		trace py		Contact between BLT-DF to the south and BIN(?) dike or sill to north, perhaps 10 m wide; dark green black spotted, fine to medium grained, equigranular, fairly massive, blocky fractured; "spots" are very dark green, black phenocrysts of amphibole or pyroxene in interlocking matrix of plagioclase and ferromag. minerals; 1% suspected magnetite (no magnet available); cannot see contact relationship as yet because drill is working right here
97	581547	6509098	BDF	Basalt Debris Flow	weak/moderate chlorite, weak epidote	0.1% py		Basalt/mafic debris flow with large quartz nodule bearing lapilli tuff clasts up to 50cm wide. Matrix is chlorite-rich ashy tuff material. trace pervasive carbonate.
98	581530	6509044	BAU	Basalt Volcanic		trace-2% py	CNTC=083/74	Contact with weakly foliated/bedded mafic volcanic hosting 5% elongated 0.5-2 cm white felsic clasts; trace to locally 2% streaky and cubic py
99	581509	6508960	BLT	Basalt Lapilli Tuff/Debris Flow	weak chlorite, moderate epidote	trace py		Mafic volcanic lapilli tuff/debris flow; rock may be a course flow beccia amygdaloidal basalt; cut by a 5 cm qtz-epidote vein at 028/42W
100	581485	6508930	BDF	Basalt Debris Flow	moderate to strong chlorite, epidote	trace py		Chloritized mafic lapilli tuff/debris flow with 5-25% clasts up to 15 cm (angular -rounded); clasts polymictic but predom. epidote alt'd quartz eye (filled amygdules?) mafic volc; minor darker fg mafic volc, minor limestone clasts
101	581485	6508892	BLT	Basalt Lapilli Tuff	weak chlorite			Chlorite rich mafic tuff. Rock is generally massive with occasional quartz rich lapilli, various lithology clasts. Groundmass is aphanitic and appears to almost be an intrusive.

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
102	581477	6508850	BLT	Basalt Lapilli Tuff	weak chlorite.			Variably textured basalt lapilli tuff/volcanoclastic. Chlorite rich mafic volcanoclastic with rounded to angular clasts/lapilli/stretched lapilli of mafic to felsic to limestone clasts. Clasts of porous hyaloclastite are intermixed with chlorite altered mafic clasts. Rare up to 5cm wide limestone clasts noted. Other clasts range from sub-cm to 5cm across. Some sections of rock are fine grained and appear to be ash tuff. Rocks are generally classified as mafic volcanoclastic with very subtle silicification.
103	581444	6508698	BLT	Basalt Lapilli Tuff	weak chlorite of groundmass			Basalt lapilli or crystal tuff located proximal to limestone creek which is likely a faulted contact with the limestone. Rock is green with rare crystallized sections containing 1/2cm wide white feldspars as well black pyroxene and horneblende crystals. Groundmass is chlorite rich. Pre-blasted outcrop is 15m long, 5m wide and follows topography trending 318°
104	581416	6508648	LS	Limestone with Argillite	subtle silicification	0.1% py		Massive white and grey coloured limestone.
105	581420	6508643	LS	Limestone				Massive white and grey coloured limestone.

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
106	581431	6508643	LS	Limestone with Argillite		5% py		More limestone proximal to north-south trending dike has been exposed. Limestone contains breccia textures proximal to cooked up argillite or dyke. Brecciated limestone clasts are separated by small fractures infilled with carbonate. Limestone contains a notable dusting of fine grain pyrite/marcasite up to 5%. Rock is 95% carbonate. Dyke may possibly be a cooked up argillite as calcareous argillite is found on strike with competent dyke. Argillite is variably graphitic. Contact trends 010/75.
107	581420	6508610	LS	Limey siltstone	weak calcite, weak sericite	8-15% vfg py, 8-10% mo(?)		Float boulders of suspected sheared moly (?) or graphite in brecciated limestone associated with a thin (20 cm) brown, gritty sediment-tuff horizon hosting 15% fine grained pyrite. Thin horizon nearly flat lying. SAMPLE ICR08003
108	581420	6508610	SLT	Limey siltstone	moderate calcite and iron oxide	trace-0.5% py		Variably sheared, sporadically conglomeratic limey siltstone; variably rusty weathering with pods and clots of limonite, after preferred differentially weathered limestone clasts
109	581426	6508596	LS	Limestone	moderate maripositesite, carbonate alteration	0.5% py	FT=354/78	Green to black silty mudstone interlayered within white limestone. Adjacent to mudstone is a quartz vein with green maripositesite alteration pods with large up to 1cm wide crystals of pyrite. Rock appears to be a fluid conduit. Sediment layer is offset with a minor fault against limestone. Lighter epidote? also present. Green maripositesite alteration and pyrite mineralization is 50cm wide at most and continues east-west to exposure on other side of the road. (Sample GGR08001)
110	581410	6508559	LS	Limestone				Weak brecciated, massive white/grey
111	581394	6508460	LS	Limestone				Massive, white to cream

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
112	581384	6508394	LS	Limestone with Mudstone Interbed	QSP along shear contact			10m mudstone bed, QSP sheared contact
113	581376	6508387	LS	Limestone				Massive, white to cream
114	581379	6508288	BAU	Basalt Volcanic	weak chlorite in basalt.	0.1% py		Boulder fill stored on shoulder of road. Rocks are a mixture of green mafic volcanic and white limestone. Mafic volcanic contains centimetre to sub-cm wide calcite veins and fracture fill. trace fine grain pyrite crystals comprise 0.1% of mafic rock. No pyrite observed in limestone. At southern edge of fill pile (581383E,6508192N) mafic rock contains up to 0.5% pyrite in a few boulders as well as carbonate.
115	581379	6508216	LS	Limestone				Massive, white to cream
116	581378	6508200	LS	Limestone with Mudstone Interbed	QSP along shear contact			As above, minor maripositesite
117	581388	6508174	LS	Silty Limestone	carbonate altered siltstone			DACB strongly carbonatized with maripositesite
118	581380	6508083	LS	Silty Limestone	carbonate altered siltstone			Bedded near contact with DACB
119	581376	6508061	LS	Limestone		S0=125/85		Bedded with mudstone/silt interbeds
120	581363	6507983	DACB	Banded Dacite/Ash Tuff	strong quartz-carbonate and bleaching	trace-2% py		Pale bleached, myriad of veinlets
121	581383	6507919	DACB	Banded Dacite/Ash Tuff	moderate quartz-carbonate and hematite	trace-2% py		Mainly aphanitic; fewer veinlets
122	581490	6507867	LS	Limestone	trace mariposite		S0=145/?	Massive

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
123	581458	6507846	DAT	Dacite Ash Tuff	moderate silica, epidote, calcite, weak hematite, chlorite	trace to 2% py	VN=000/85	Medium grey-green altered intermediate volcanic (?), may be fine tuff, vfg to aphanitic matrix; strong, fine flooding/stringers of qtz-calc-ep (hem) <1mm wide; calcite, mn stain and hem along fract; weakly pervasively chloritized
124	581459	6507846	DAT	Dacite Ash Tuff	weak epidote, silica	1-2% py		Banded/bedded felsic to intermediate tuffaceous sediment (?), hosting 1-2% fine grained and streaky pyrite; this unit may grade northward to darker argillite/mudstone and then into limestone
125	581482	6507843	DACB	Banded Dacite/Ash Tuff	moderate quartz-carbonate and hematite	trace-2% py		Aphanitic to ash layers; ladder veinlets
126	581414	6507841	DACB	Banded Dacite/Ash Tuff	weak quartz carbonate	trace-1% py	S1=130/90	Mainly aphanitic; fewer veinlets
127	581467	6507834	BAT	Basalt Ash Tuff	weak carbonate	1% py	S1=212/85	Weakly sheared light grey to light green ashy sediment with pervasive weak carbonate alteration. Outcrop is located adjacentg to white limestone. Some parts of the outcrop have stretched chlorite wisps, possibly flattend lapilli/clasts that are 1mm wide and up to 1cm long. Pyrite is common and gives outcrop a rust red appearance (locally up to 3-4%). Rock is NAG.
128	581559	6507771	BFX	Basalt Fragmental	weak to moderate epidote, chlorite	trace py		Rolled fragments and chlorite clots
129	581575	6507590	BIN	Basalt Intrusive			CNTC=110/70	Coarser grained, rare feldsapr phenos
130	581601	6507558	SLT	siltstone		1-2 % py, trace cp	S0=344/85	Well bedded slatey mudstone

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
131	581660	6507413	BLAT	Basalt Lapilli Ash Tuff/Fragmental	strong epidote			Very green, hosting mudstone clasts
132	581678	6507316	SLT	siltstone with Mudstone Interbeds		1-2% vfg py, trace cp		Mudstone w/ coarser tuff? interbeds
133	581689	6507254	SLT	siltstone with Mudstone Interbeds		1-2% vfg py, trace cp	S0=175/85	Mudstone w/ coarser tuff? interbeds
134	581660	6507140	BAU	Basalt Volcanic			CNTC=130/90	Gradational contact
135	581660	6507130	LS	Limestone			CNTC=130/90	Gradational contact
136	581649	6507062	LS	Limestone			S0=348/80	Well bedded limestone
137	581636	6506995	LS	Limestone with silt interbeds		1 (-2%) py, trace cp	S0=328/80	Limestone with silt/mud interbeds
138	581630	6506947	LS	Limestone			S0=120/70	Banded/bedded
139	581615	6506918	LS	Limestone		trace py, cp, malachite		
140	581615	6506918	BDK	Basalt Dike			CNTC=020/25	1-2 m wide dike
141	581554	6506790	BFX	Basalt Fragmental	strong chlorite, moderate silica, iron carbonates	trace py, cp, malachite	S1=120/90	choritic (sericitic) foliated, schistose
142	581543	6506776	BFX	Basalt Fragmental	strong silicification, iron carbonates	trace py	Fractures=080 /90, 178/85	Fractured
143	581490	6506710	BFX	Basalt Fragmental	strong silicification, iron carbonates	trace py, malachite		Area of patchy alteration
144	581490	6506545	BFX	Basalt Fragmental	strong silicification, iron carbonates, bleaching	trace py	S1=104/90	Pervasive qtz-carb bleaching

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
145	581504	6506440	BFX	Basalt Fragmental	strong silicification, iron carbonates, bleaching	trace py, cp	S1=090/90	Pervasive qtz-carb bleaching
146	581510	6506190	BAU	Basalt Volcanic	strong silicification, iron carbonates	trace py		Still fragmental, protolith mafic?
147	581498	6506164	BFX	Basalt Fragmental	strong silicification, iron carbonates	trace py	S1=015/85	Bleached/silic'd/flooding (pervasive)
148	581475	6506073	BFX	Basalt Fragmental	strong silicification, iron carbonates	trace py, cp	S1=080/90	Bleached/silic'd/flooding (pervasive)
149	581480	6506045	BFX	Basalt Fragmental	weak epidote, hematite and magnetite			Some felsic frags (tuff?, breccia?)
150	581501	6506015	BFX	Basalt Fragmental	weak epidote, hematite	trace py, disseminated cp	S1=220/78	15% large subround epidote altered fragments (+hb)
151	581451	6505665	BAU	Basalt Volcanic	strong magnetite, weak calcite and epidote	trace py, cp	FT=028/85	Chaotic wispy cal vlets (+hb+fspar)
152	581455	6505645	ADK	Andesite Dike				35% fspar phenos (megacryst)
153	581495	6505520	BAU	Basalt Volcanic	strong silicification, iron carbonates, bleaching			Chaotic sweats+veinlets (+hb+fspar)

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
154	581510	6505427	BAU	Basalt Volcanic	weak hematite, carbonate and epidote	.01% py		Medium to coarse grain mafic volcanic/basalt intrusive. Frequent up to 0.5cm wide hornblende crystals present in a chlorite/carbonate rich groundmass. Rock has frequent carbonate veinlets in conjunction with hematite and silica. Minute trace of chalcopyrite. 10cm wide shear gouge identified trending 174/85. Good fill material.
155	581513	6505427	BAU	Basalt Volcanic	mafic basalt with carbonate/hematite/epidote alteration.	0.1% py	SH=112/80	Mafic basalt with carbonate/epidote/hematite alteration. Medium dark green fine to medium grained coarsely phric basalt. Rock is massive to sheared in appearance. trace chalcopyrite occurs in conjunction with quartz carbonate sweat.
156	581495	6505420	BAU	Basalt Volcanic	strong silicification, iron carbonates, bleaching			Chaotic sweats+veinlets (+hb+fspar)
157	581507	6505417	BAU	Basalt Volcanic	weak carbonate.	0.1% py		Mafic volcanic with trace pyrite and abundant carbonate.
158	581525	6505413	BAU	Basalt Volcanic	weak carbonate.	0.1% py		Blue-grey mafic with frequent carbonate veinlets, alteration of groundmass and fracture fill. Rare trace chalcopyrite.
159	501469	6505404	BAU	Basalt Volcanic	moderate hematite, epidote, carbonate	trace to half % py		Hornblend and feldspar phric medium grained mafic volcanic; moderately fractured; pervasive and fracture hematite, epidote, calcite
160	581496	6505404	BAU	Basalt Volcanic	weak chlorite and weak carbonate	0.5% py		Mafic/Basalt unit with abundant carbonate veinlets and flooding/alteration. Carbonate is 3-5% of rock. trace pyrite 0.5%
161	581499	6505391	BAU	Basalt Volcanic	weak chlorite	0.1% py		Basalt with frequent carbonate veinlets and fracture fill. Rock is 5-8% carbonate with weak chlorite alteration. Outcrop is quite massive.

stn	NAD83_E	NAD83_N	rock code	rock type	alteration	mineralization	structure (RH rule)	remarks
162	581542	6505235	BAU	Basalt Volcanic	strong magnetite, weak calcite			No qtz-carb alteration (+hb+fsp)
163	581665	6505019	BAU	Basalt Volcanic	trace calcite	trace py		Chloritic
164	581755	6504863	BAU	Basalt Volcanic				With Horneblende
165	581776	6504827	QZVN	quartz Vein	contains mariposite	15% py, 5% gn, 5% sph	VN=200/72	12 cm vein along weak shear. SAMPLE ICR08002
166	581811	6504790	BAU	Basalt Volcanic	calcite veinlets			
167	581875	6504689	QZVN	quartz Vein	contains mariposite	trace py, gn, sph		45 cm wide (float)
168	581971	6504626	QZVN	quartz Vein		trace py, gn, sph	VN=020/90	10 cm wide, vuggy
169	582027	6504619	QZVN	quartz Vein	contains mariposite	trace py, cp, gn, sp		8cm wide (float)
170	582012	6504616	QZVN	quartz Vein	contains mariposite	4% py, 1% cp, 6% sph, 5%gn	VN=038/90	8cm wide
171	582068	6504600	RAT	Rhyolite Ash Tuff/Lapilli Tuff	moderate sericite	2-3% py	CNTC=348/50	fractured/weathered
172	582097	6504572	RLAT	Rhyolite Lapilli Ash Tuff			CNTC=028/?	as above 15% lapilli
173	582295	6504347	OVB	Overburden				Glacio-fluvial gravel northern extent up S. Rd

APPENDIX V
ROAD GEOLOGY ROCK SAMPLE DESCRIPTIONS
AND ANALYTICAL RESULTS

Tag#	NAD83 E	NAD83 N Litho		py %	cp %	gn %	sph %	asp %	mo %	Notes	sample type	date
837053	581426	6508596	LS	0.50						Green to black mafic dike intruding into white limestone. Adjacent to mafic dike is a quartz vein with green mariposite alteration. Pyrite pods with large up to 1cm wide crystals of pyrite. Alteration 50cm wide at most and continues east-west to exposure on other side of the road.		080720
837055	580320	6513507	QSP	3						Weakly QSP-altered dacite or rhyolite. Rock is variably silicified with light grey siliceous clasts/lapilli up to 1cm wide. Rock appears ashy grey where silicified. Weak carbonate and quartz-silica-carbonate observed. Calcite veins up to 1cm also noted. Pyrite 3% overall.	grab	081102
837056	580492	6513080	QSP	5	0.01					Rusty outcrop of QSP-altered rhyolite. Rock is silica rich with 5% pyrite in fine grains, clots, and disseminations. Trace chalcopyrite. Altered part of outcrop is 10m wide in exposure and bound by dacite tuff on either side. Overall, rock is silica rich with occasional clasts and abundant silica flooding/veining. Weak sericite noted.	grab	081102
837051	580911	6511496	QZVN		0.01			30		Subcrop of mineralized quartz-calcite vein from 6-12 cm wide, but variable and poorly exposed in blasted rock. Probable trend is 170/60NE. Vein material hosts approx 30% acicular arsenopyrite along near massive bands in a weakly brecciated quartz - calcite +/- clay gangue. Vein material also hosts minor sericite and traces of pyrite, chalcopyrite and bornite. Selective grab for arsenopyrite rich material.	grab	080926
837052	581776	6504827	QZVN	15		5	5			12 cm quartz vein with 25% pyrite-galena-sphalerite along weak shear; selective grab for sulphide-rich material	selective grab	080530
837054	581420	6508610	LS	15					10	float boulders of suspected sheared moly (?) or graphite in brecciated limestone associated with a thin (20 cm) brown, gritty sediment-tuff horizon hosting 15% fine grained pyrite. Thin horizon nearly flat lying.	selective grab	081020

Analyses by Eco tech Laboratories, Kamloops BC						
Certificate # AW2008-1865						
multi-element ICP, gold assay; numbers in red are re-assays for over-limit results						
Sample:	837051	837052	837053	837054	837055	837056
NAD83_E	580911	581776	581426	581420	580320	580492
NAD83_N	6511496	6504827	6508596	6508610	6513507	6513080
rock type	QZVN	QZVN	LS, BDK	LS	QSP	QSP
Au gpt	0.14	2.11	0.07	<0.03	<0.03	<0.03
Ag ppm	0.5	240.0	1.0	0.8	0.2	0.4
Al %	1.82	0.07	0.52	0.52	0.91	0.74
As ppm	10001.0	2781.0	1053.0	30.7	18.7	9.0
Ba ppm	60.0	4.0	92.0	103.5	86.5	19.5
Bi ppm	1.02	24.10	0.32	3.46	0.44	1.06
Ca %	2.27	0.69	9.52	>10	7.16	0.15
Cd ppm	0.41	1488.00	3.28	3.88	0.23	0.29
Co ppm	22.6	22.4	88.6	6.3	26.2	16.8
Cr ppm	75.5	141.5	516.0	48.5	34.5	94.0
Cu ppm	73.0	2229.0	78.3	14.8	85.9	13.9
Fe %	13.39	11.73	5.54	3.50	5.54	6.01
Ga ppm	5.1	2.3	1.4	1.7	2.9	2.8
Hg ppb	15	1250	340	120	15	15
K %	0.19	0.03	0.27	0.27	0.38	0.24
La ppm	2.0	1.5	2.5	4.5	2.0	4.0
Mg %	1.58	0.29	3.70	5.19	2.29	0.59
Mn ppm	657	531	441	296	1483	115
Mo ppm	1.32	1.15	1.91	1661.00	5.08	9.54
Na %	0.051	0.029	0.051	0.041	0.045	0.047
Ni ppm	22.1	35.8	1109.0	23.7	15.9	17.8
P ppm	1175	119	1502	1018	958	634
Pb ppm	33.49	54000	58.97	159.80	9.61	22.51
S %	4.38	>10	3.88	3.10	1.76	4.90
Sb ppm	248.40	819.60	163.60	83.88	16.64	3.18
Sc ppm	5.2	1.4	11.4	6.4	7.0	2.3
Se ppm	9.0	4.6	18.5	4.6	2.9	17.1
Sr ppm	60.5	22.0	206.5	279.5	178.0	8.0
Te ppm	0.84	19.78	0.10	0.22	0.12	0.30
Th ppm	0.7	0.3	0.8	1.1	0.6	2.3
Ti %	0.006	0.005	0.001	0.001	0.010	0.004
Tl ppm	0.12	0.34	0.24	0.58	0.20	0.10
U ppm	<0.1	<0.1	1.5	12.6	0.4	0.5
V ppm	52	4	30	36	56	24
W ppm	0.1	<0.1	0.8	1.9	0.4	<0.1
Zn ppm	57	48600	61	73	82	23

APPENDIX VI

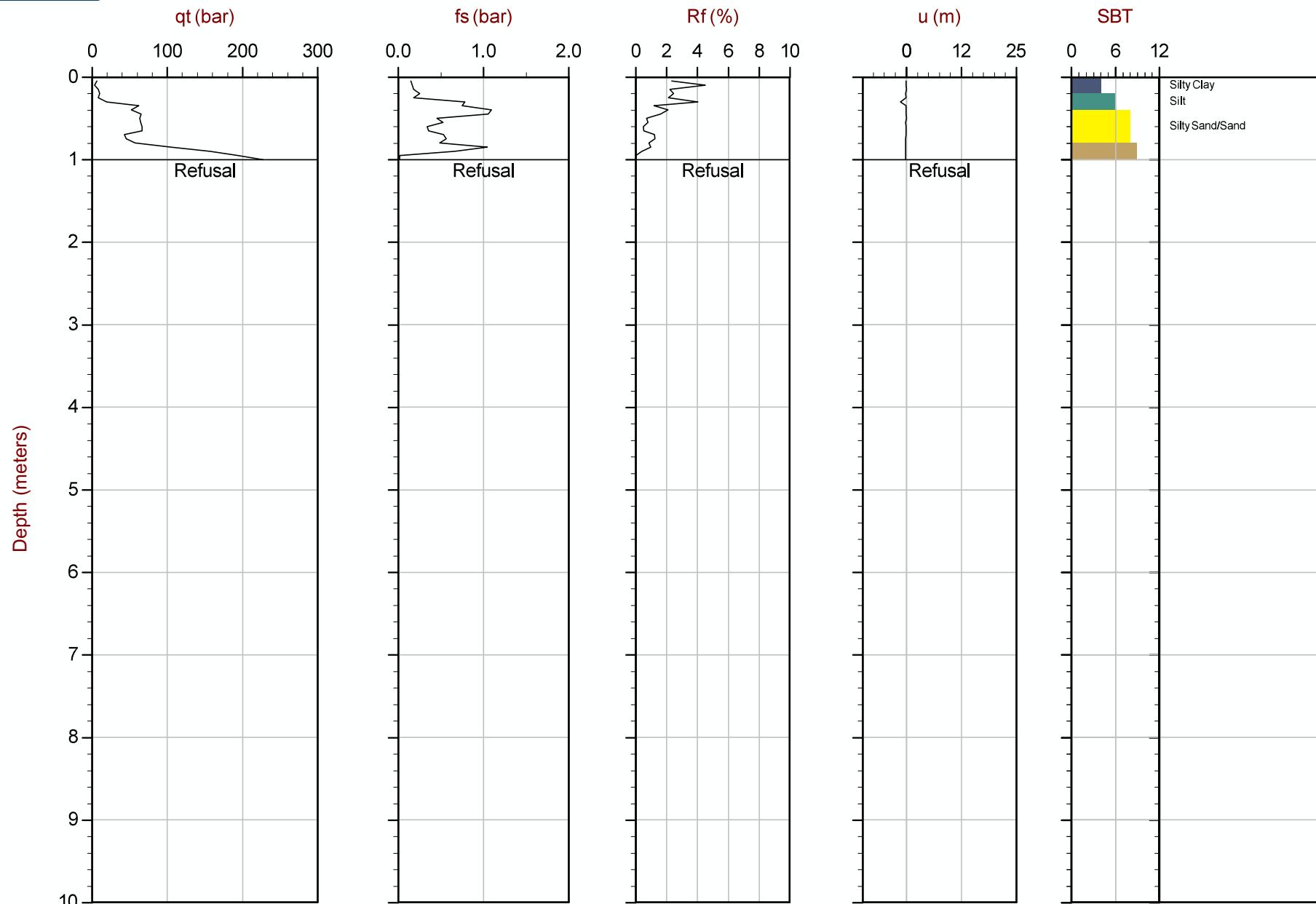
CPT LOGS

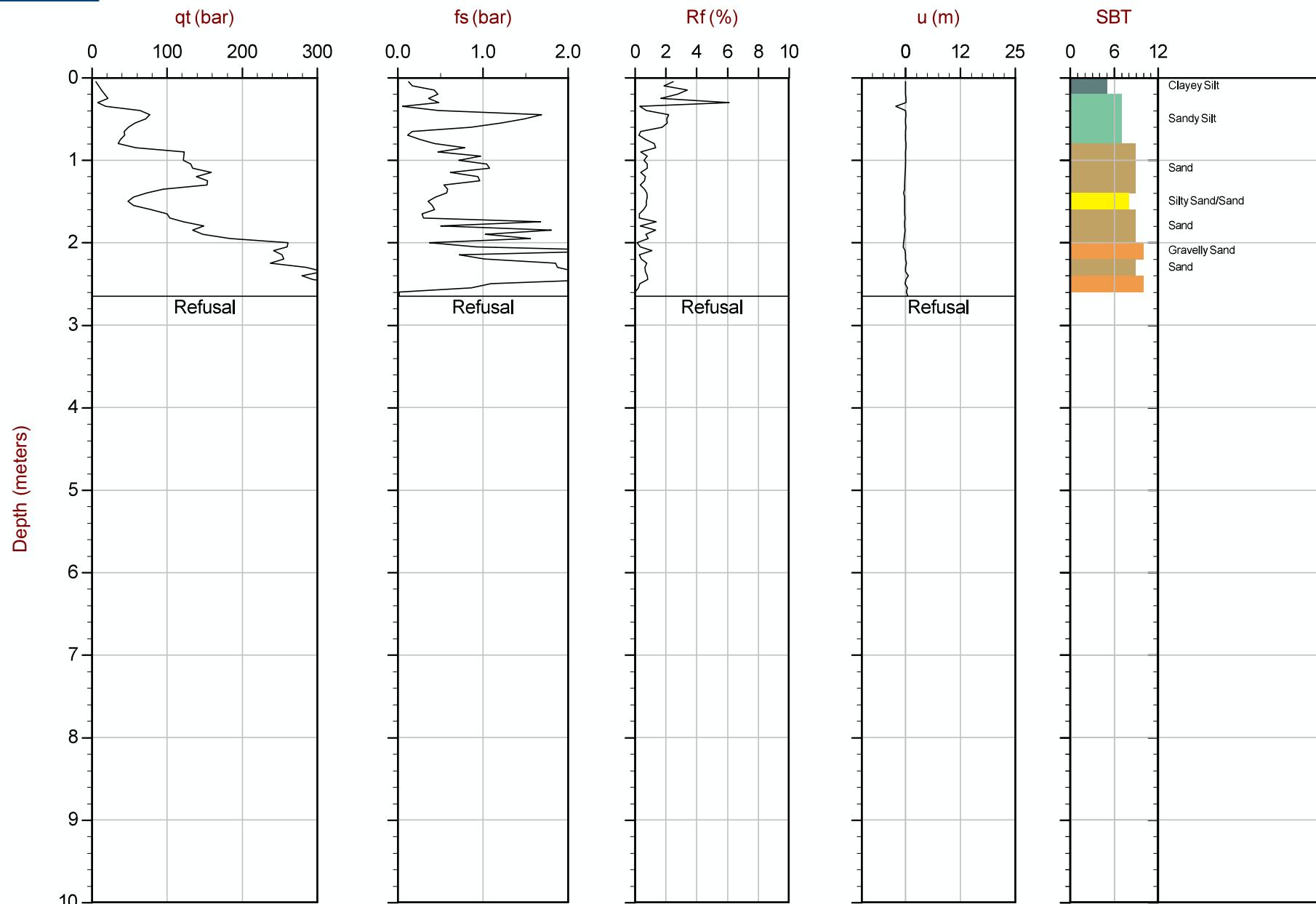


Job No: 08-189
Client: Redfern Resources
Project: Tailings Management Facility, Tulsequah, BC
Date: Oct. 18-28, 2008

CPT SUMMARY				
CPT Sounding	File Name	Date	Cone	Final Depth (m)
CPT08-01	189CP01	10/18/08	STD 20T 202	1.00
CPT08-01B	189CP01B	10/18/08	STD 20T 202	2.65
CPT08-02	189CP02	10/18/08	STD 20T 202	0.75
CPT08-06	189CP06	10/19/08	STD 20T 202	6.85
CPT08-07	189CP07	10/19/08	STD 20T 202	3.55
CPT08-08	189CP08	10/19/08	STD 20T 202	2.85
CPT08-09	189CP09	10/19/08	STD 20T 202	7.40
CPT08-10	189CP10	10/19/08	STD 20T 202	1.05
CPT08-10B	189CP10B	10/19/08	STD 20T 202	1.20
CPT08-13	189CP13	10/20/08	STD 20T 202	8.45
CPT08-16	189CP16	10/20/08	STD 20T 202	4.90
CPT08-17	189CP17	10/20/08	STD 20T 202	4.45
CPT08-18	189CP18	10/21/08	STD 20T 202	2.45
CPT08-18B	189CP18B	10/21/08	STD 20T 202	4.85
CPT08-23	189CP23	10/21/08	STD 20T 236	3.80
CPT08-24	189CP24	10/21/08	STD 20T 236	4.80
CPT08-25	189CP25	10/21/08	STD 20T 236	2.90
CPT08-26	189CP26	10/21/08	STD 20T 236	3.50
CPT08-27	189CP27	10/22/08	STD 20T 236	3.70
CPT08-31	189CP31	10/22/08	STD 20T 236	5.85
CPT08-32	189CP32	10/22/08	STD 20T 236	3.50
CPT08-41**	189CP41	10/23/08	STD 20T 236	3.20
CPT08-43	189CP43	10/23/08	STD 20T 236	15.55
CPT08-51	189CP51	10/24/08	STD 20T 236	4.35
CPT08-54	189CP54	10/24/08	STD 20T 236	7.95
CPT08-55	189CP55	10/24/08	STD 20T 236	4.10
CPT08-56	189CP56	10/24/08	STD 20T 236	3.55
CPT08-65	189CP65	10/28/08	STD 20T 236	9.05
CPT08-66	189CP66	10/28/08	STD 20T 236	5.55
CPT08-68	189CP68	10/28/08	STD 20T 236	10.55

**Sounding depth achieved was less than pre-punch depth, therefore only PPD file is included.

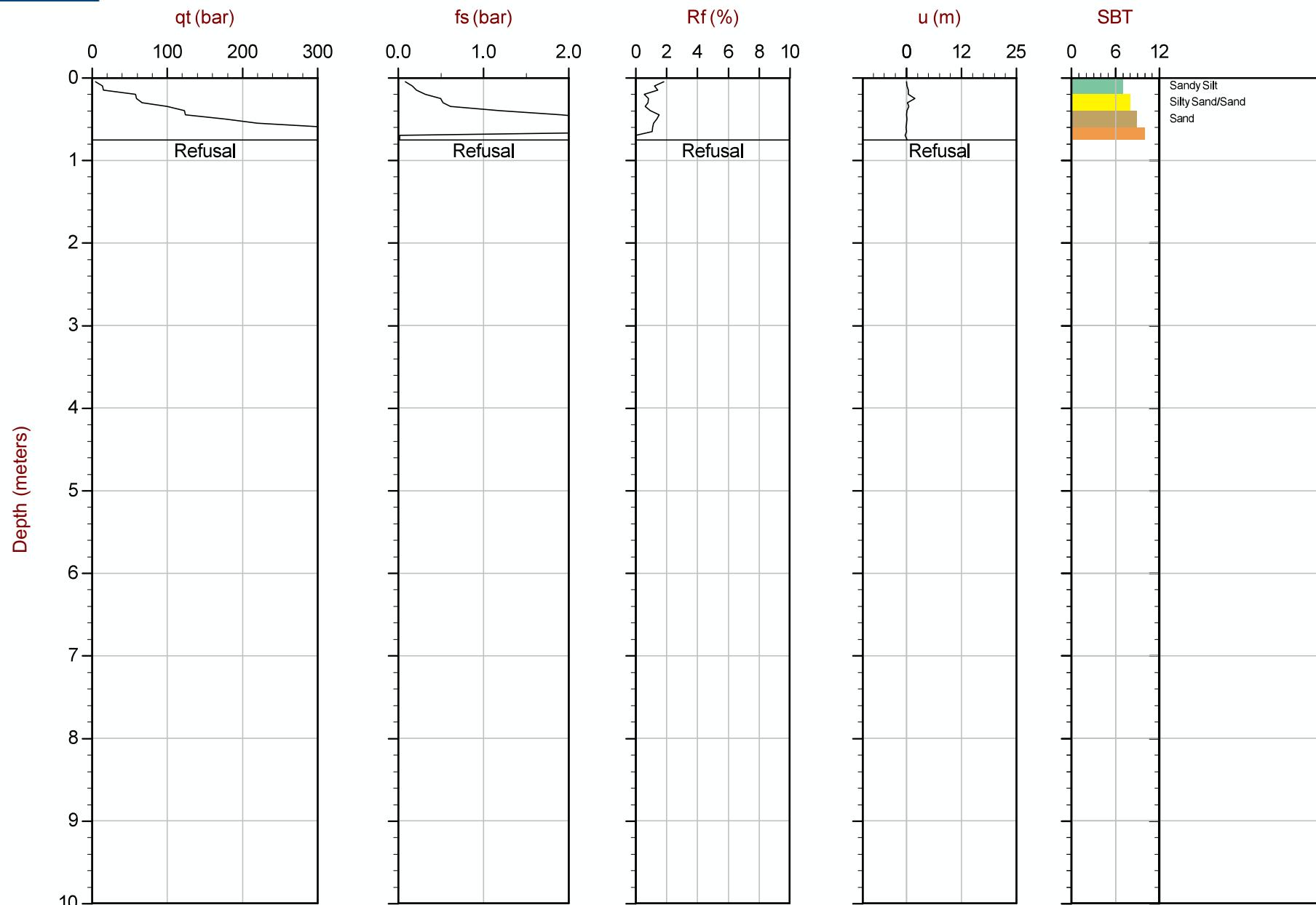




Max Depth: 2.650 m / 8.69 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP01B.COR
Unit Wt: SBT Chart Soil Zones

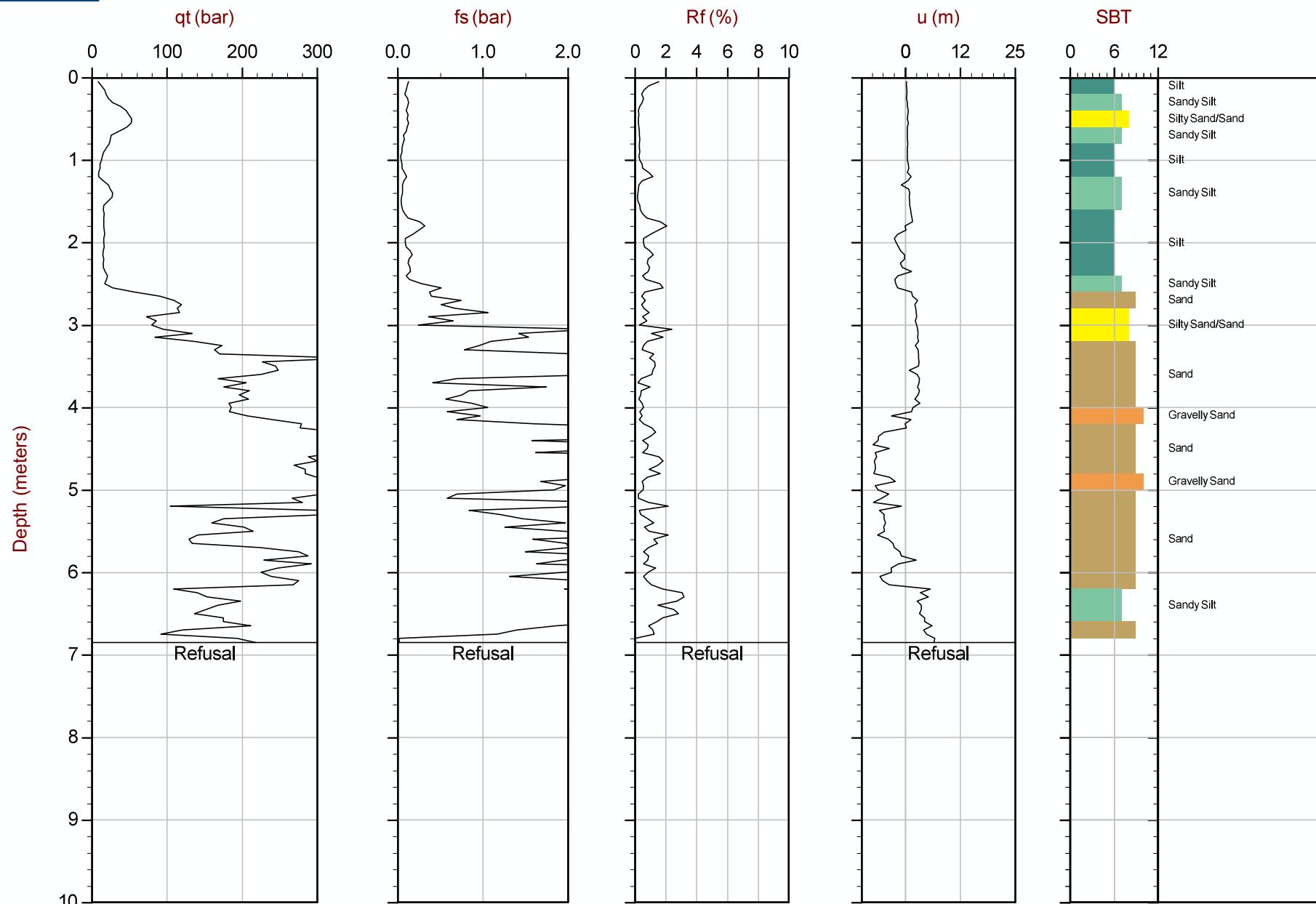
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 0.750 m / 2.46 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP02.COR
Unit Wt: SBT Chart Soil Zones

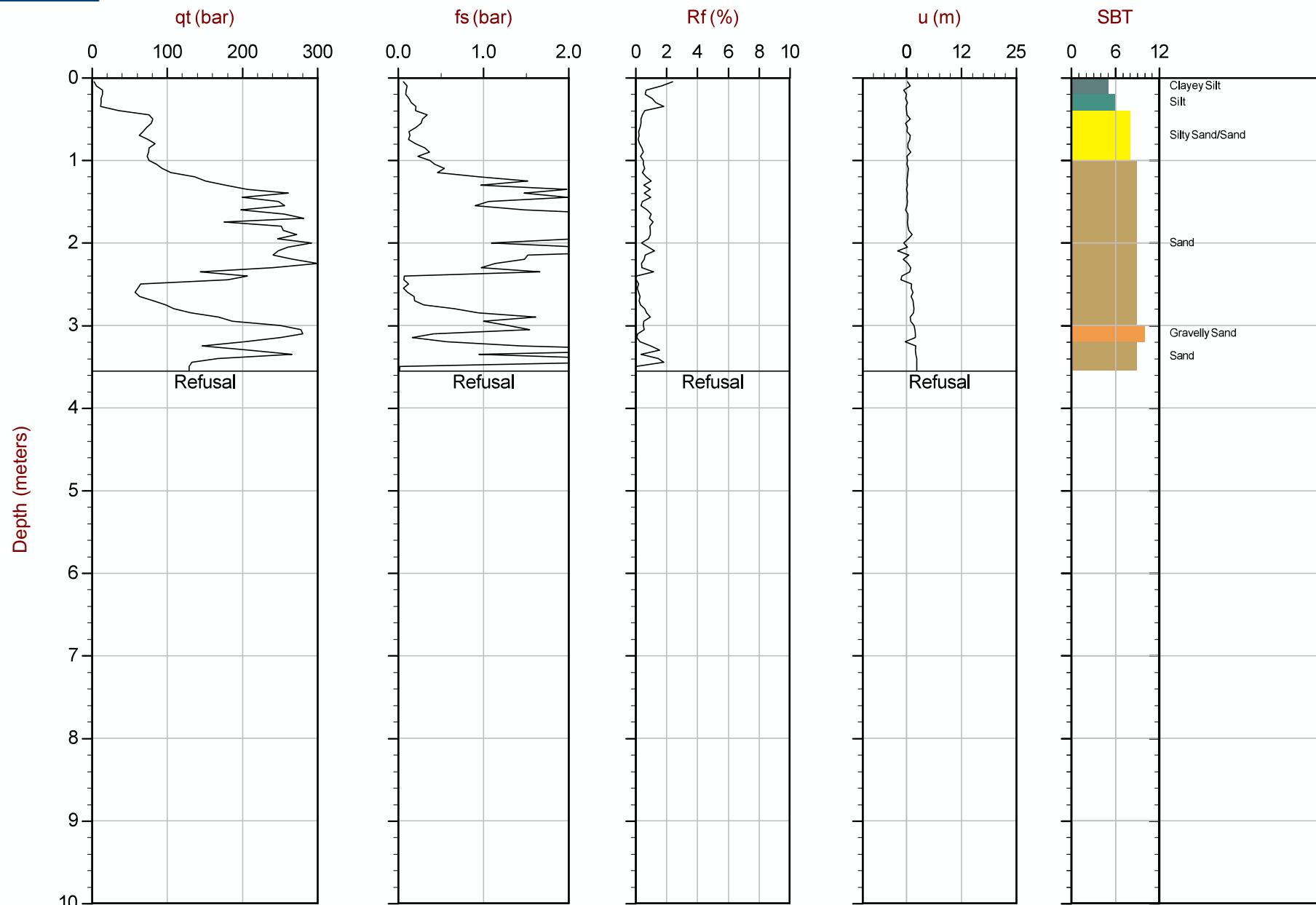
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 6.850 m / 22.47 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP06.COR
Unit Wt: SBT Chart Soil Zones

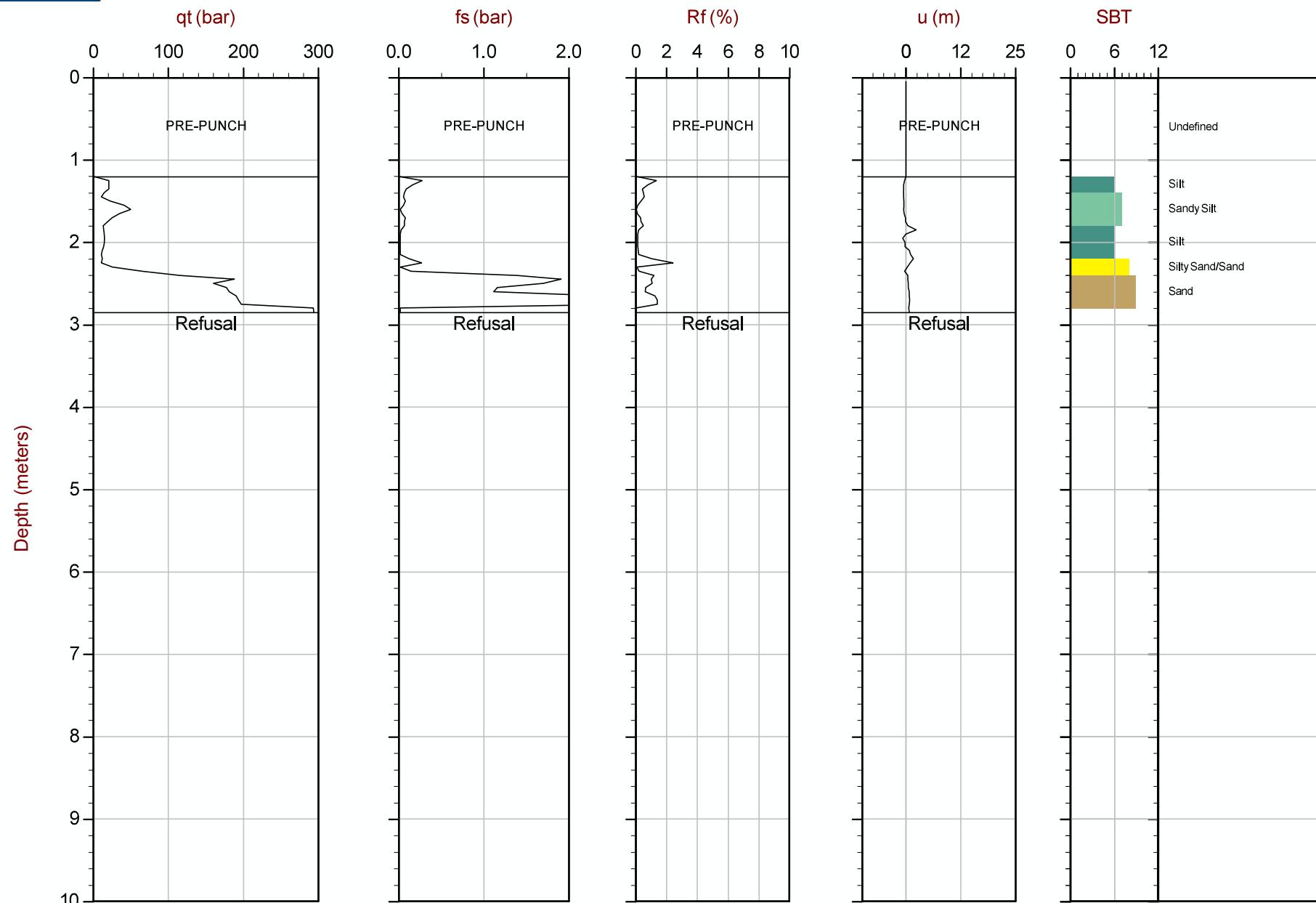
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 3.550 m / 11.65 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP07.COR
Unit Wt: SBT Chart Soil Zones

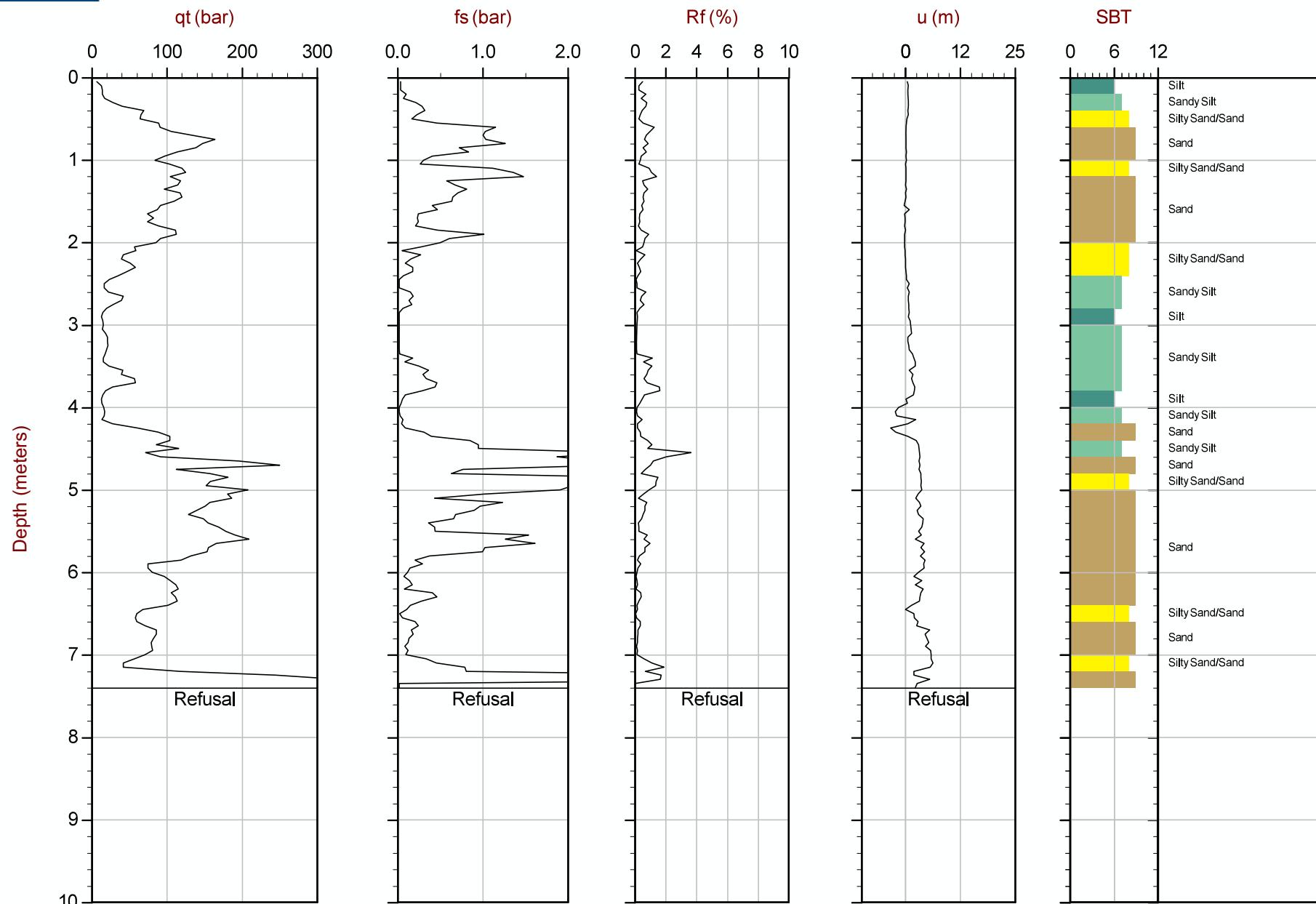
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 2.850 m / 9.35 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP08.COR
Unit Wt: SBT Chart Soil Zones

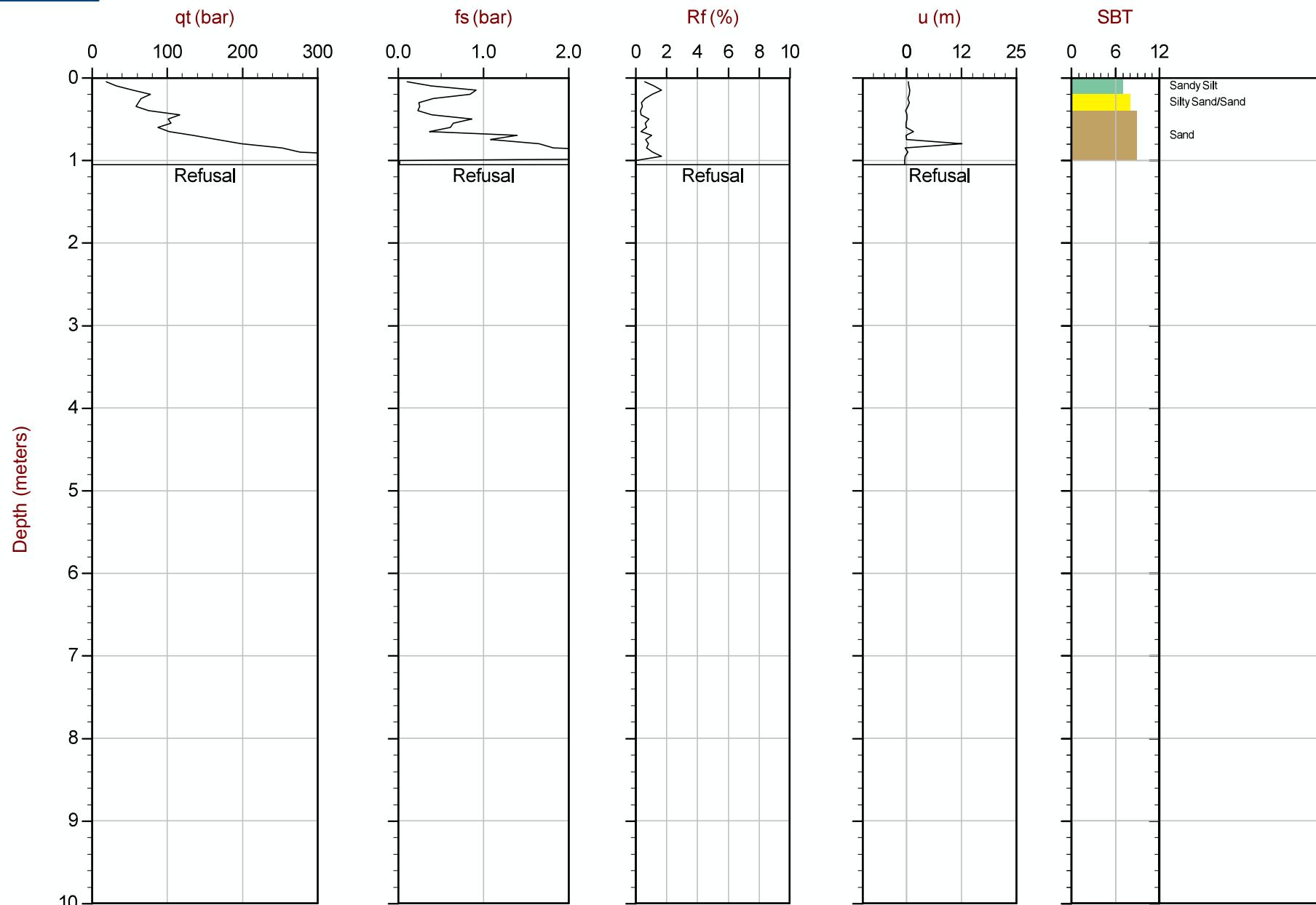
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 7.400 m / 24.28 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP09.COR
Unit Wt: SBT Chart Soil Zones

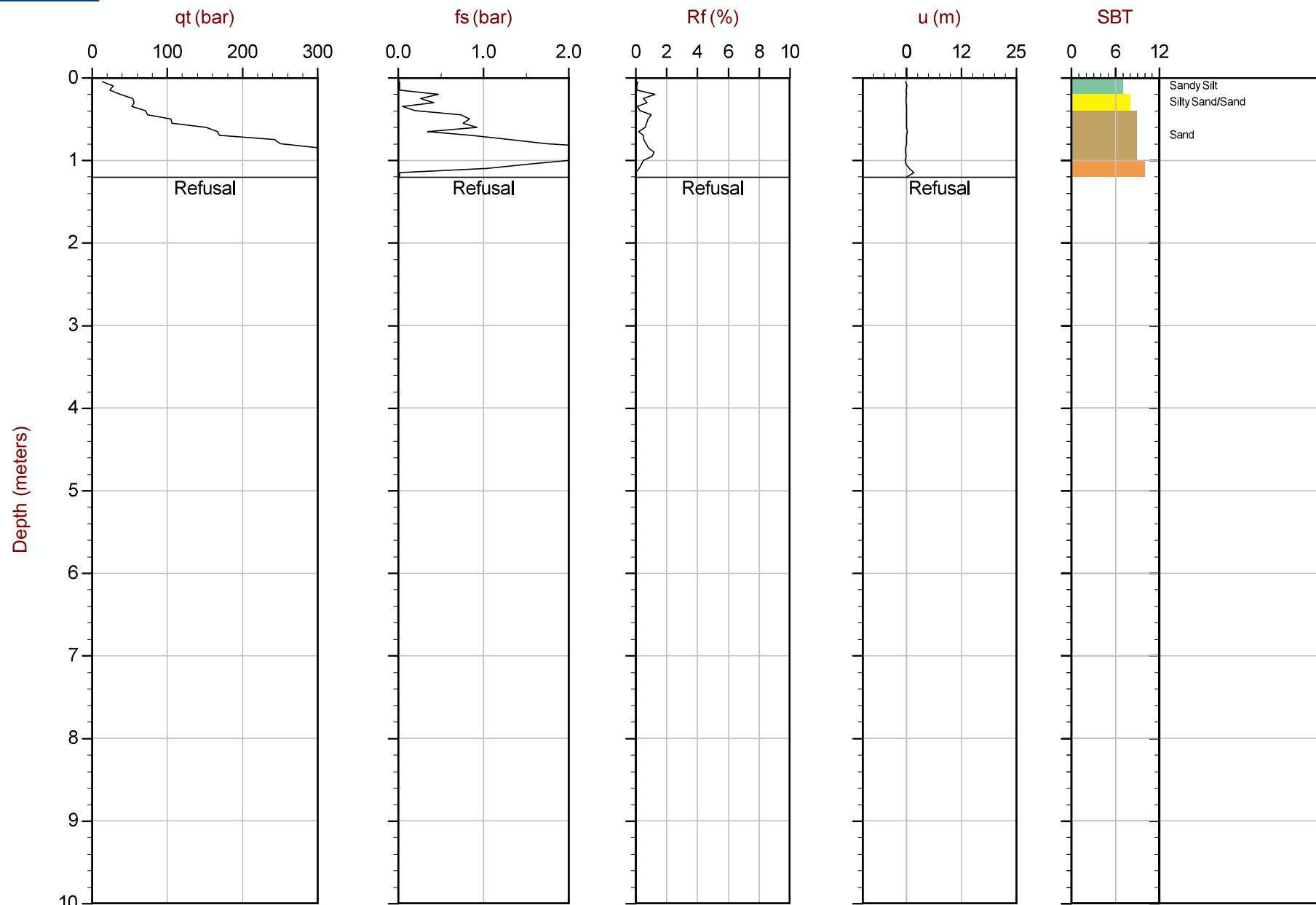
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 1.050 m / 3.44 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP10.COR
Unit Wt: SBT Chart Soil Zones

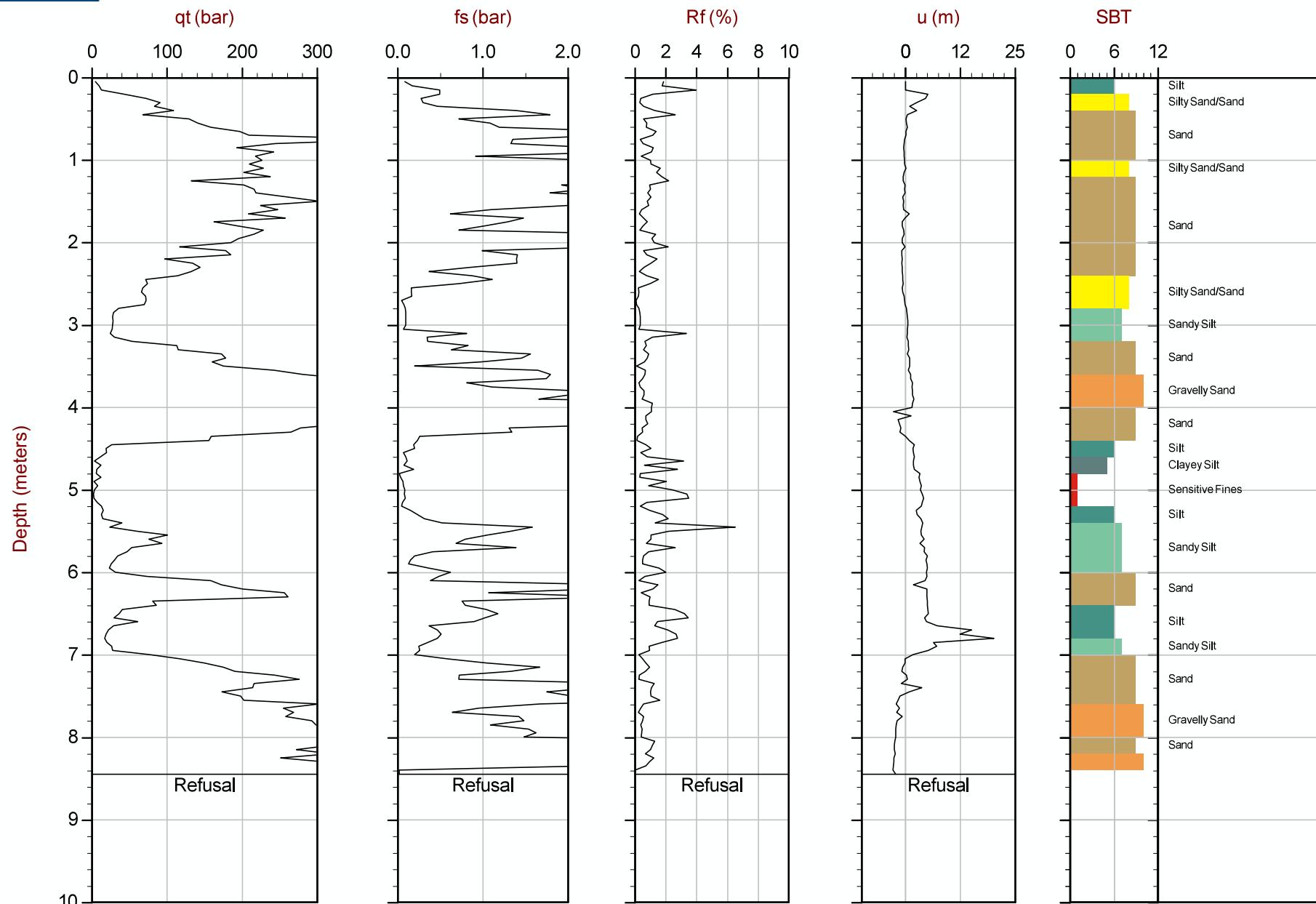
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 1.200 m / 3.94 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP10B.COR
Unit Wt: SBT Chart Soil Zones

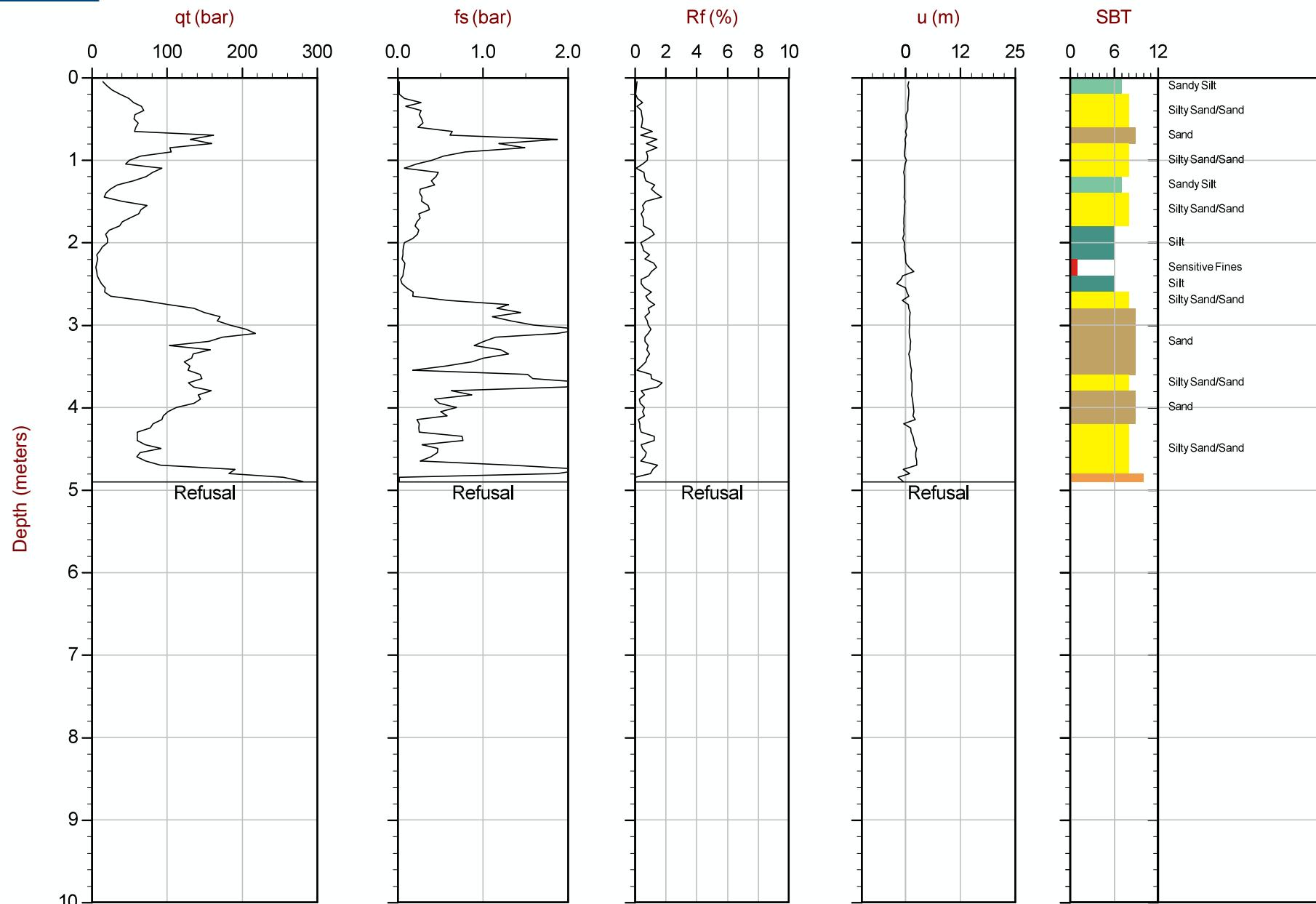
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 8.450 m / 27.72 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP13.COR
Unit Wt: SBT Chart Soil Zones

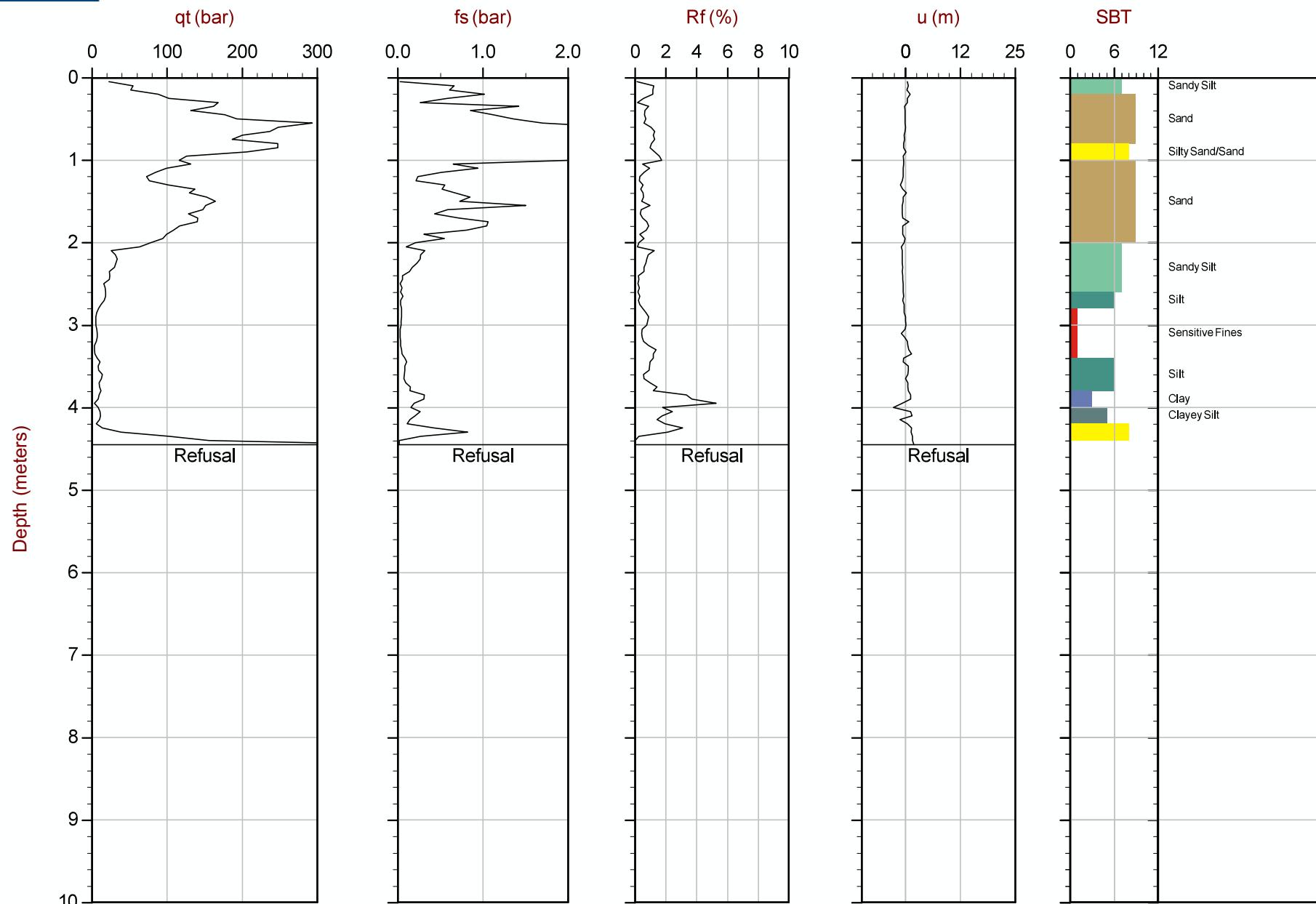
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.900 m / 16.08 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP16.COR
Unit Wt: SBT Chart Soil Zones

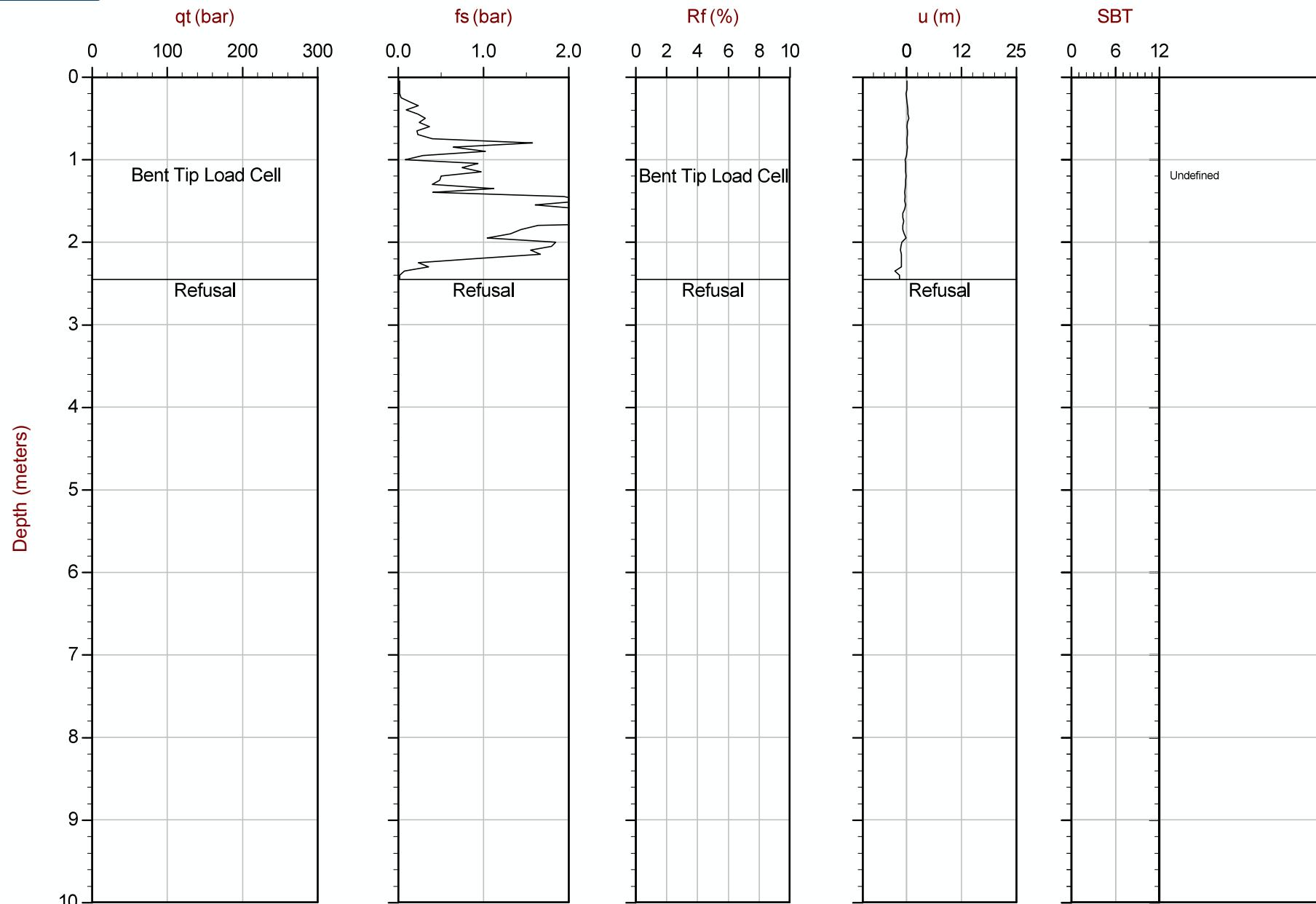
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.450 m / 14.60 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP17.COR
Unit Wt: SBT Chart Soil Zones

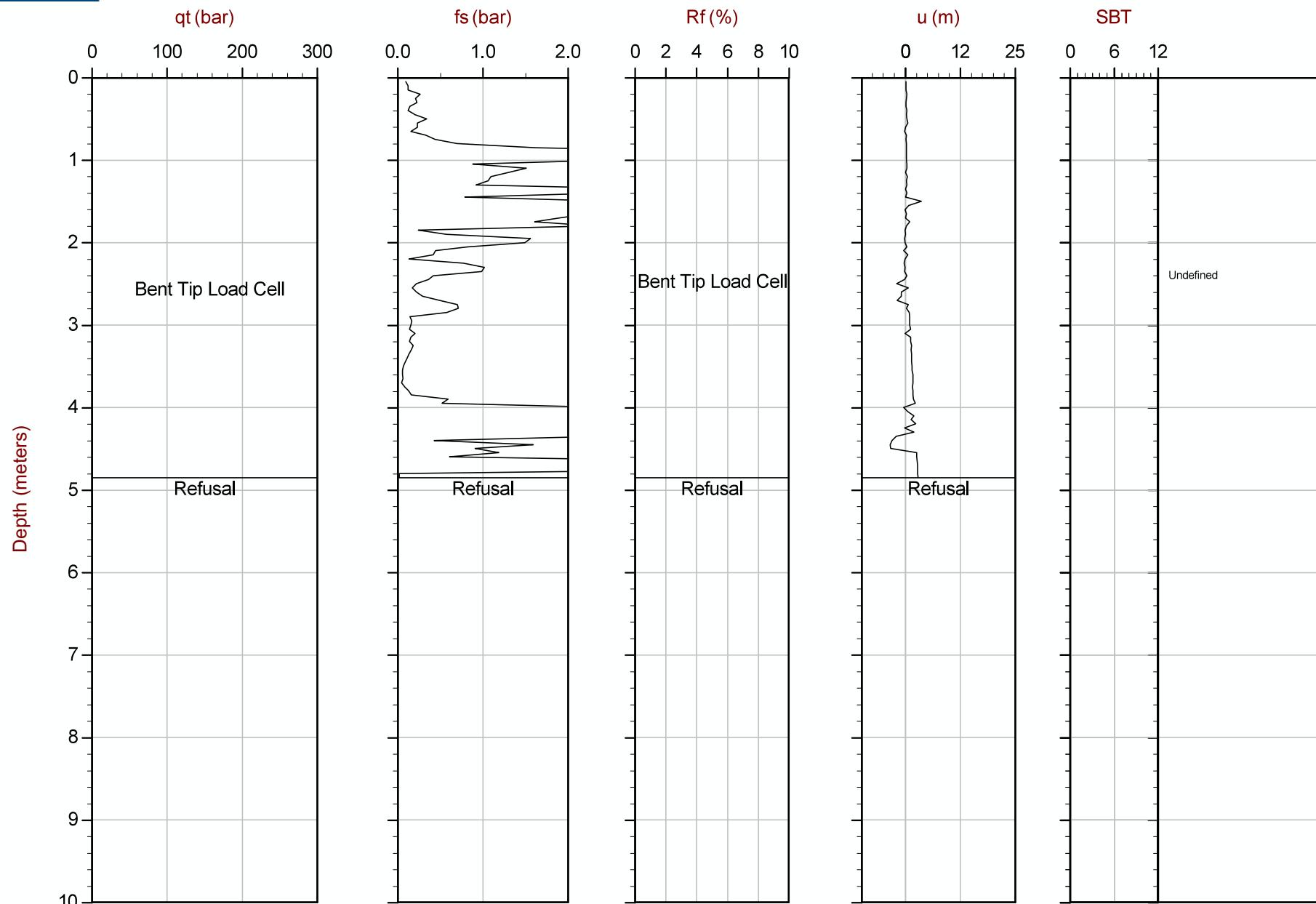
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 2.450 m / 8.04 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP18.COR
Unit Wt: SBT Chart Soil Zones

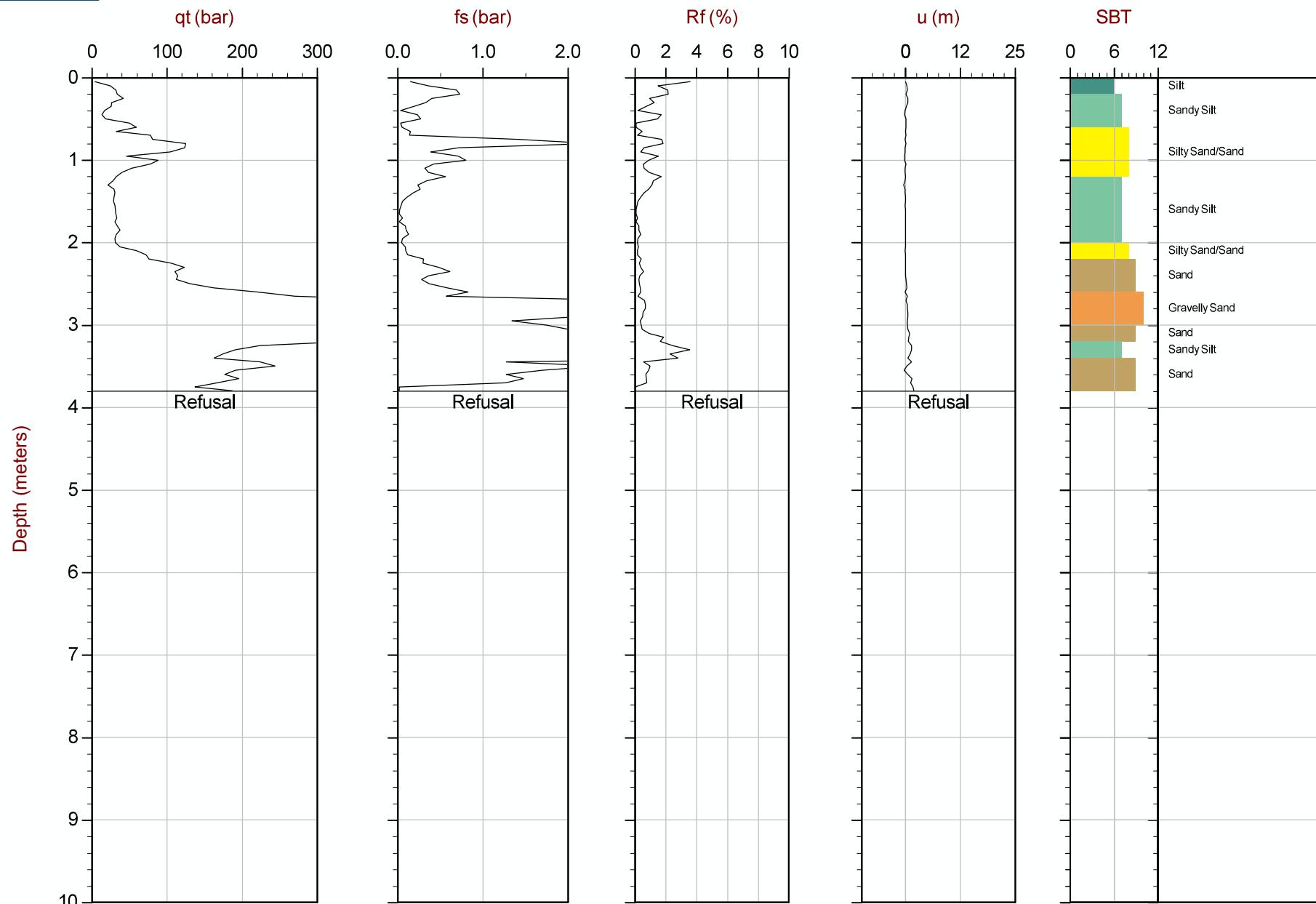
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.850 m / 15.91 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP18B.COR
Unit Wt: SBT Chart Soil Zones

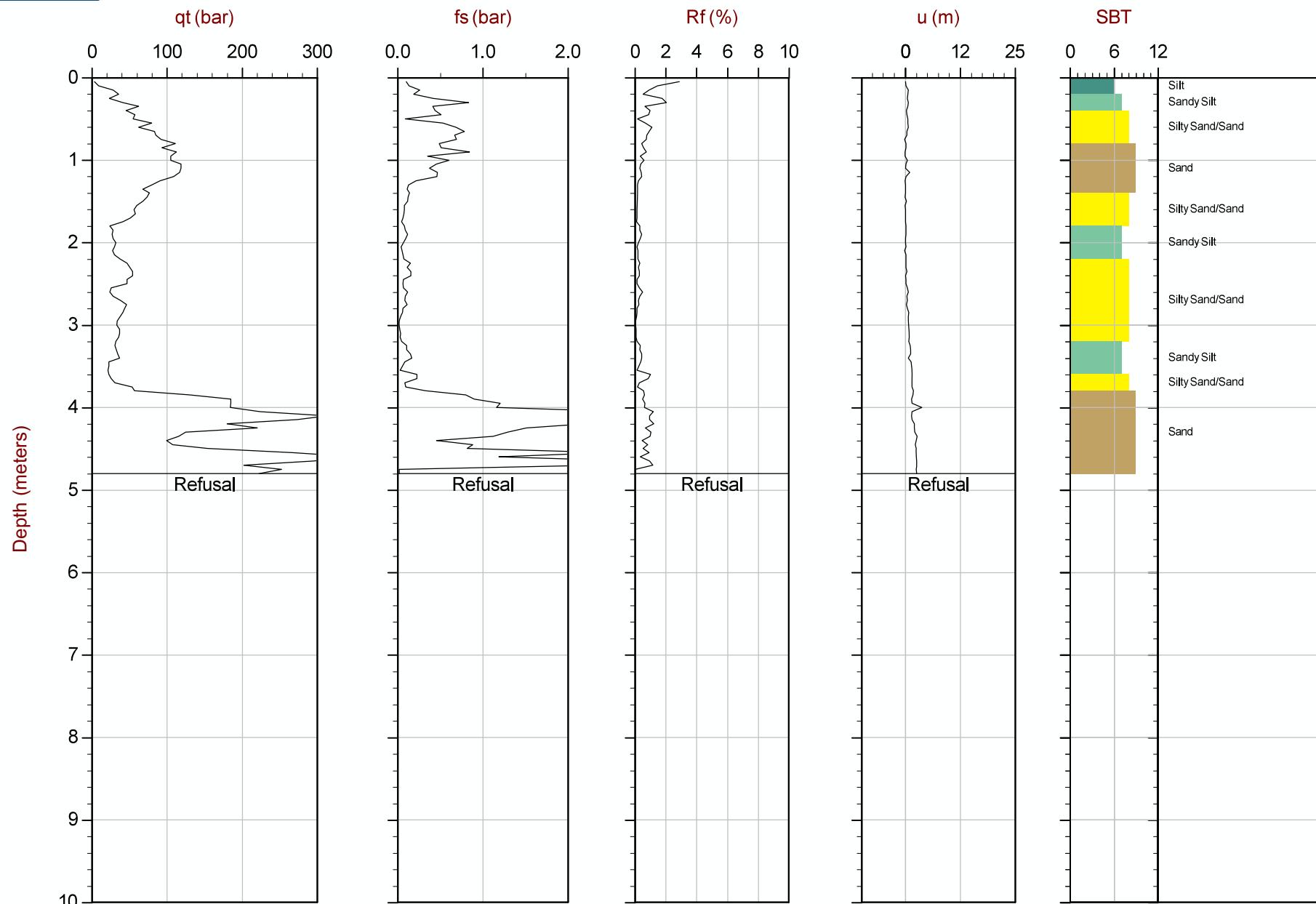
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 3.800 m / 12.47 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP23.COR
Unit Wt: SBT Chart Soil Zones

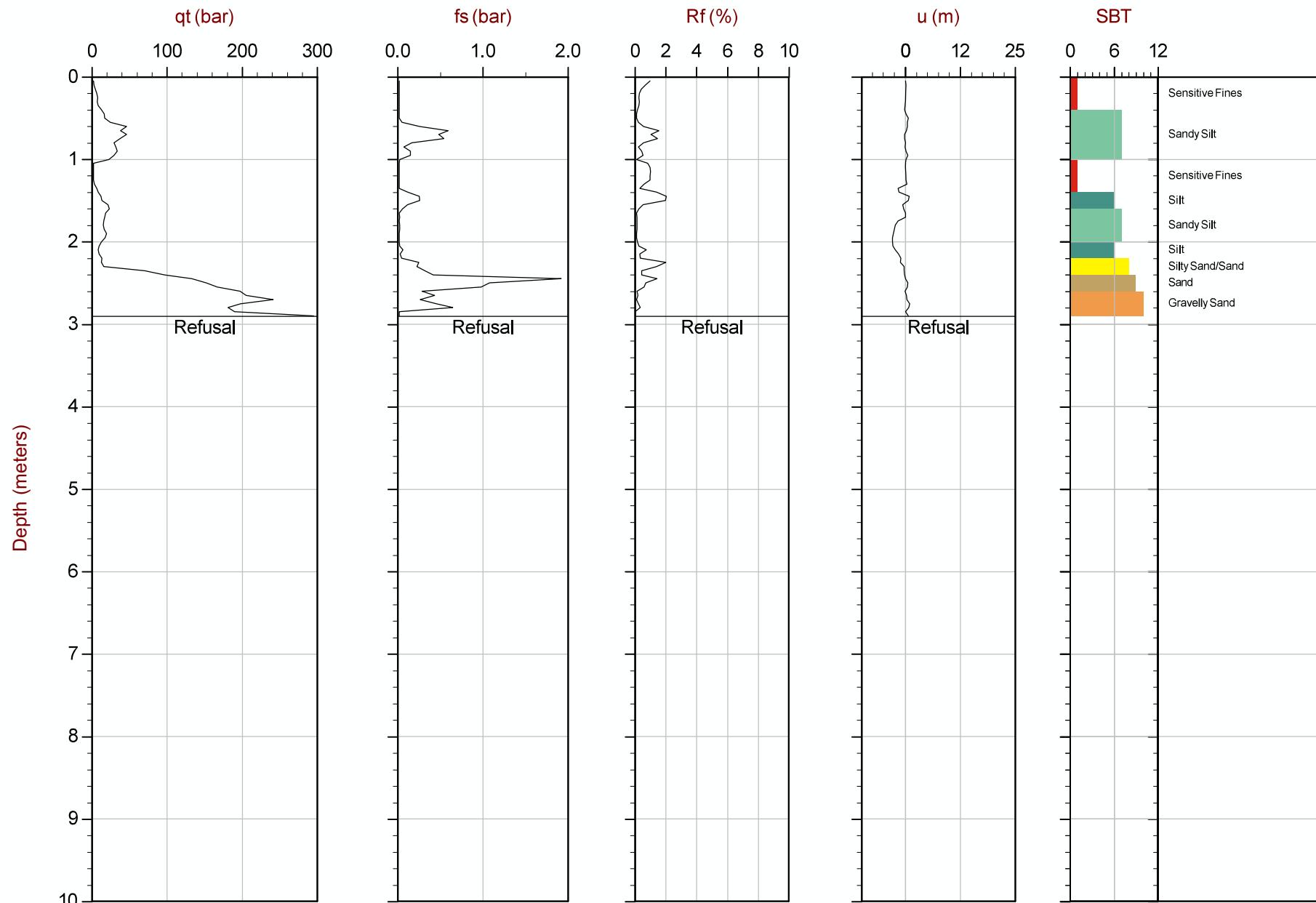
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.800 m / 15.75 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP24.COR
Unit Wt: SBT Chart Soil Zones

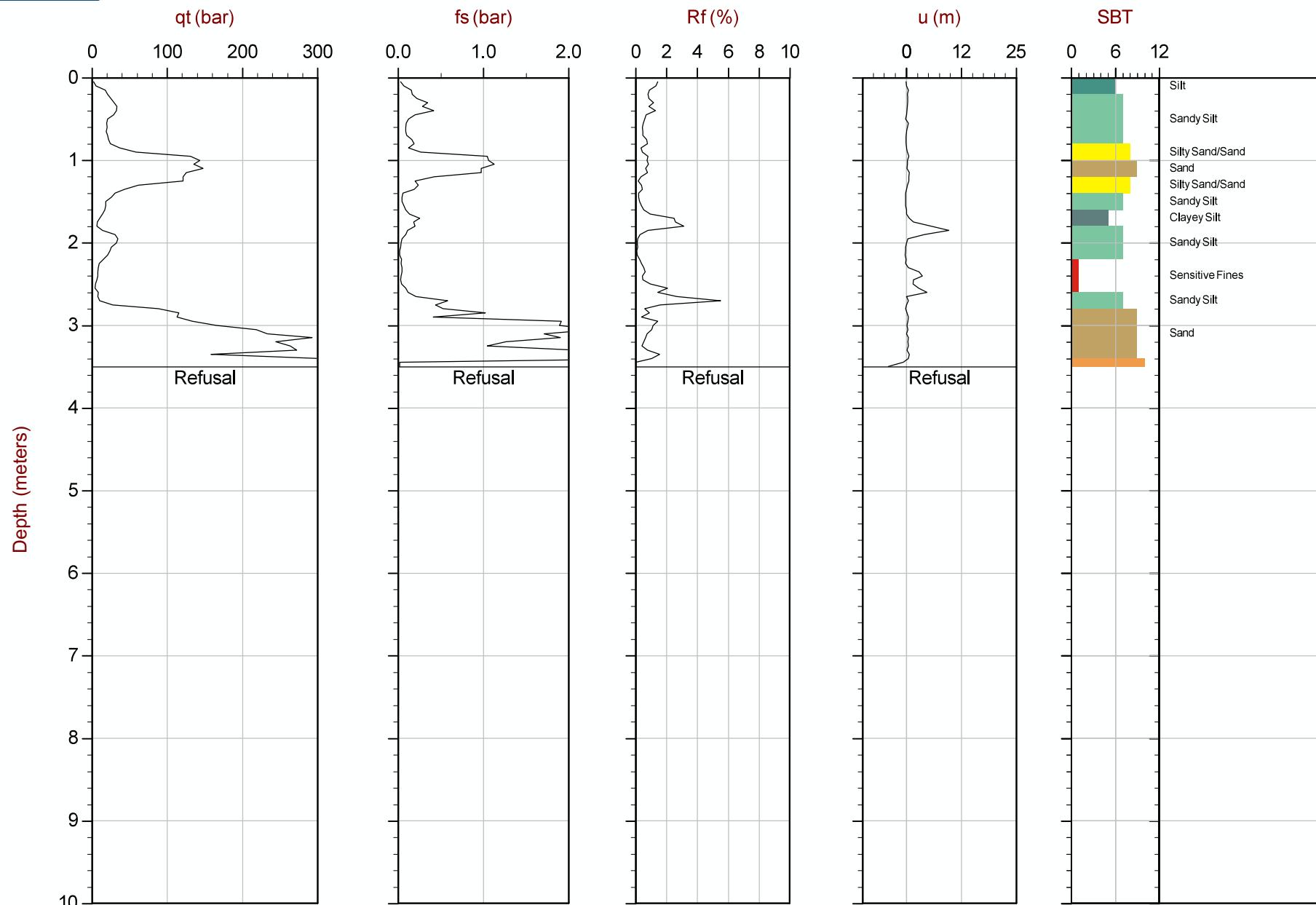
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 2.900 m / 9.51 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP25.COR
Unit Wt: SBT Chart Soil Zones

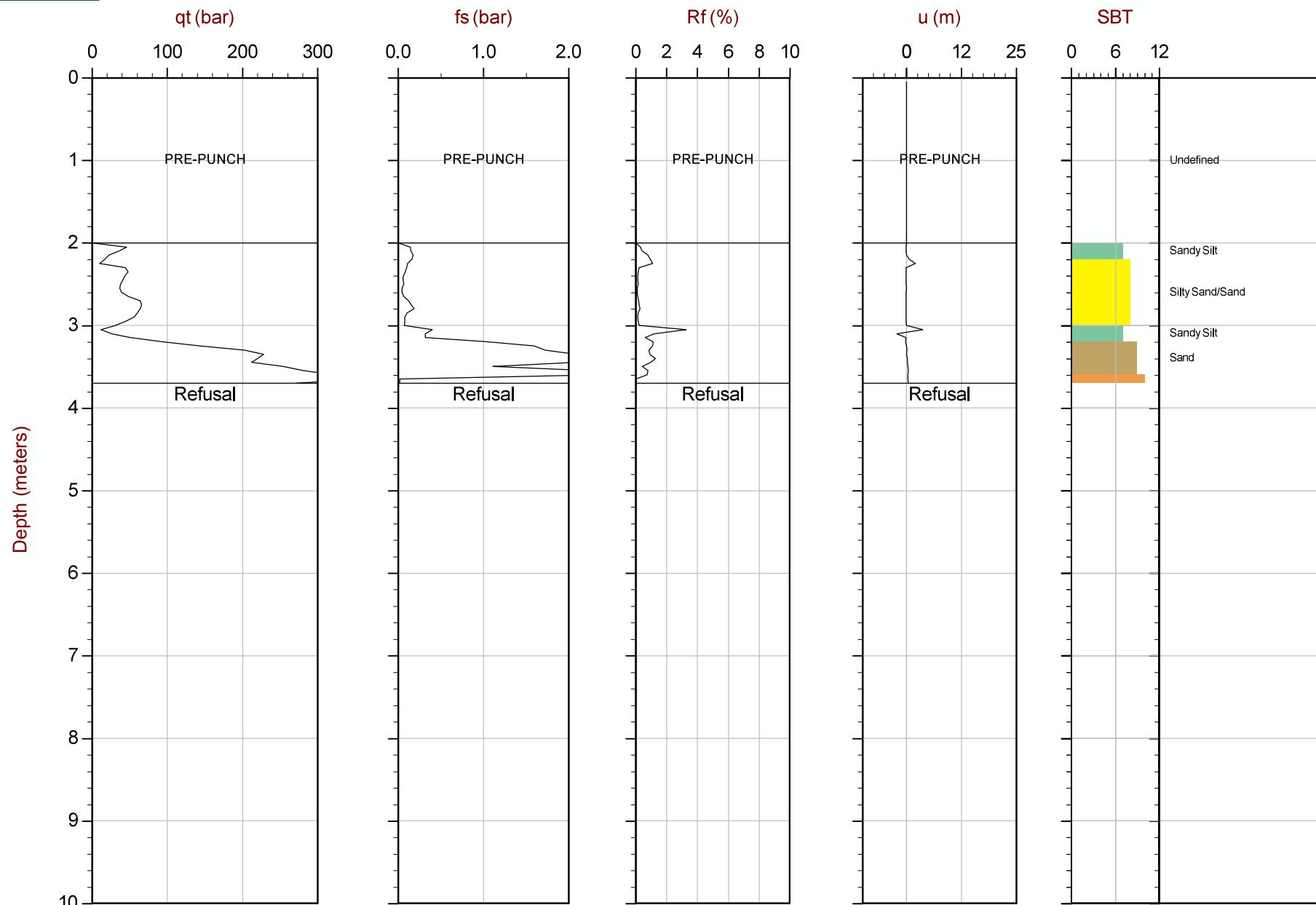
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 3.500 m / 11.48 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP26.COR
Unit Wt: SBT Chart Soil Zones

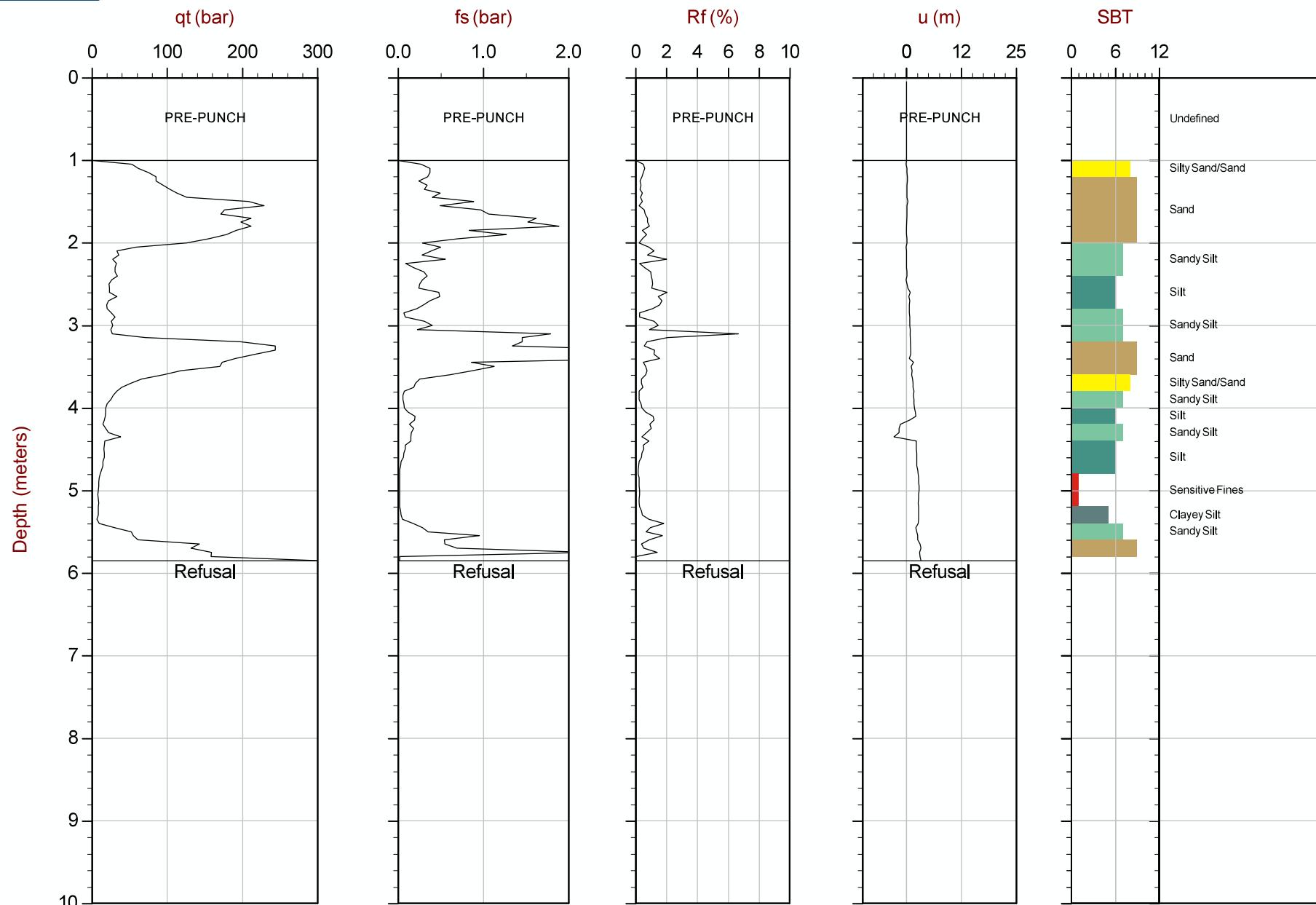
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 3.700 m / 12.14 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP27.COR
Unit Wt: SBT Chart Soil Zones

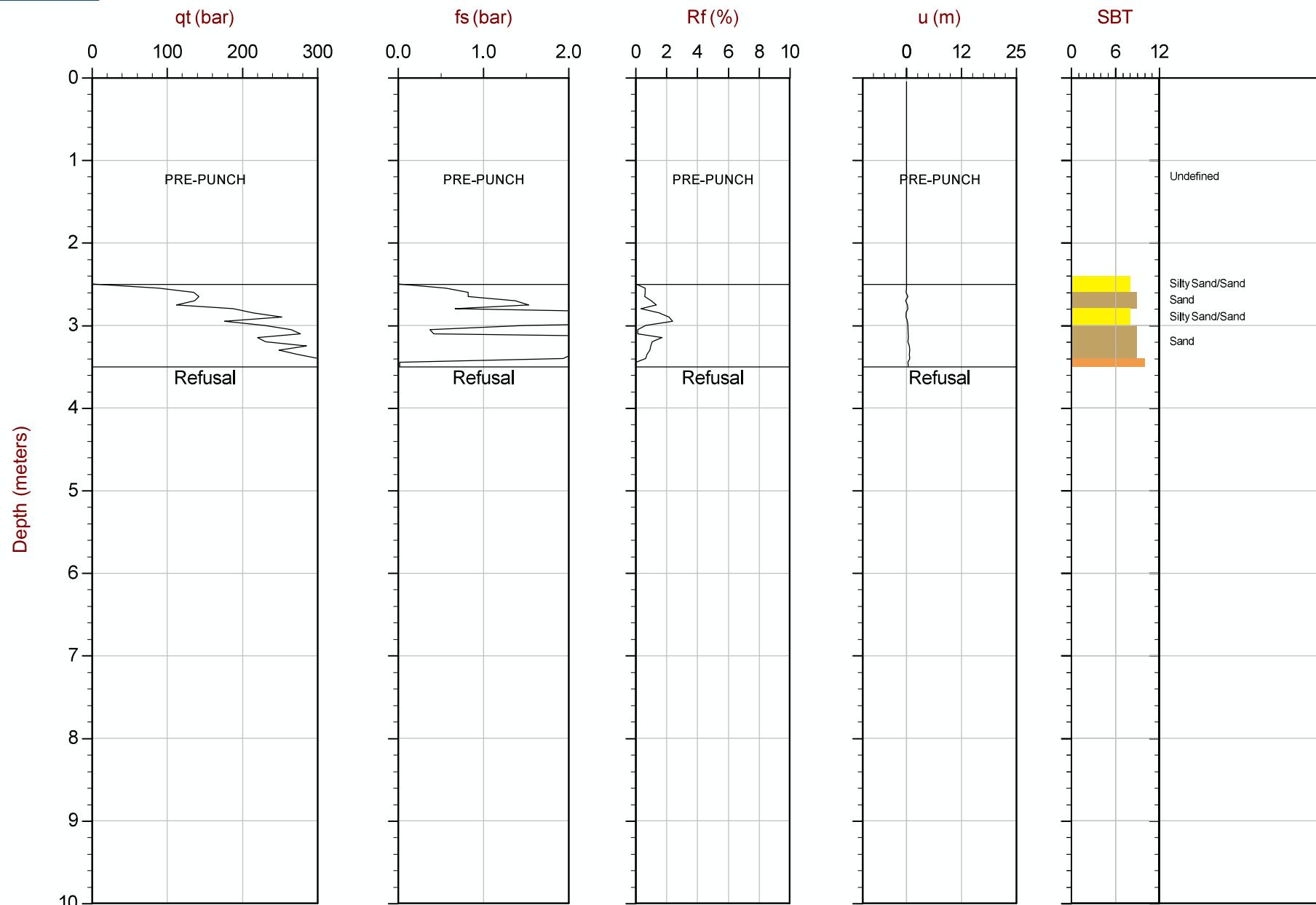
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 5.850 m / 19.19 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP31.COR
Unit Wt: SBT Chart Soil Zones

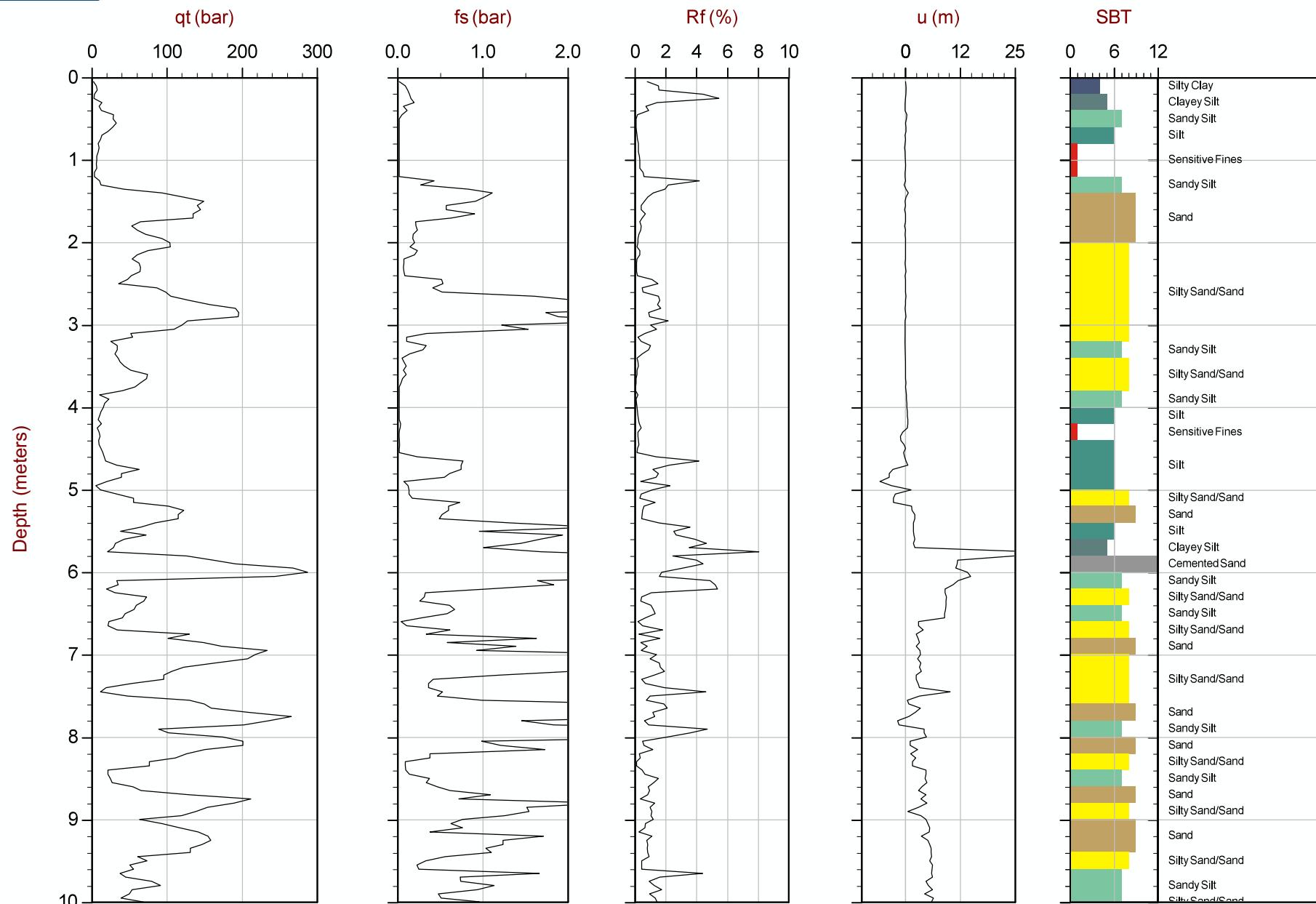
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

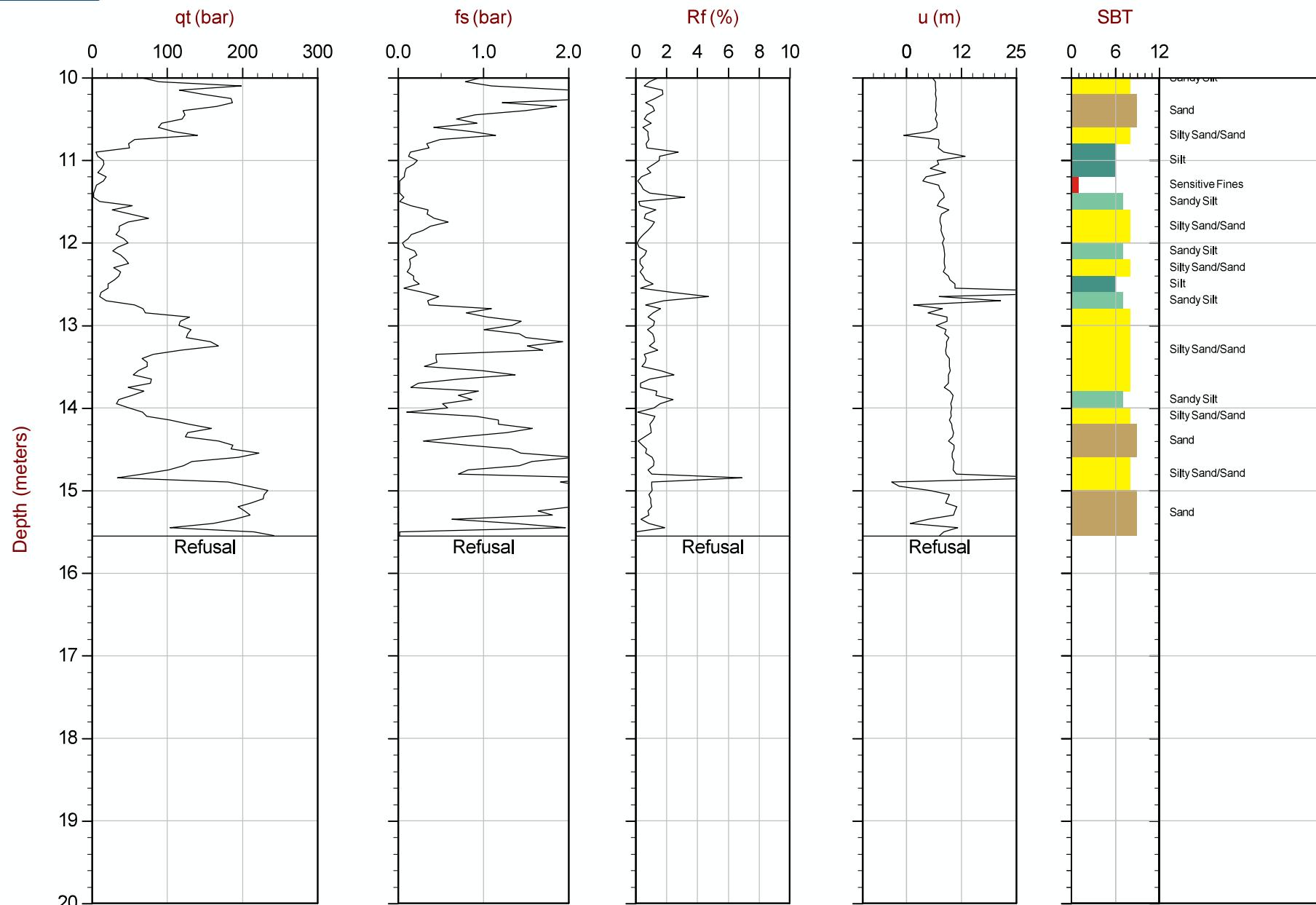


Max Depth: 3.500 m / 11.48 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP32.COR
Unit Wt: SBT Chart Soil Zones

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

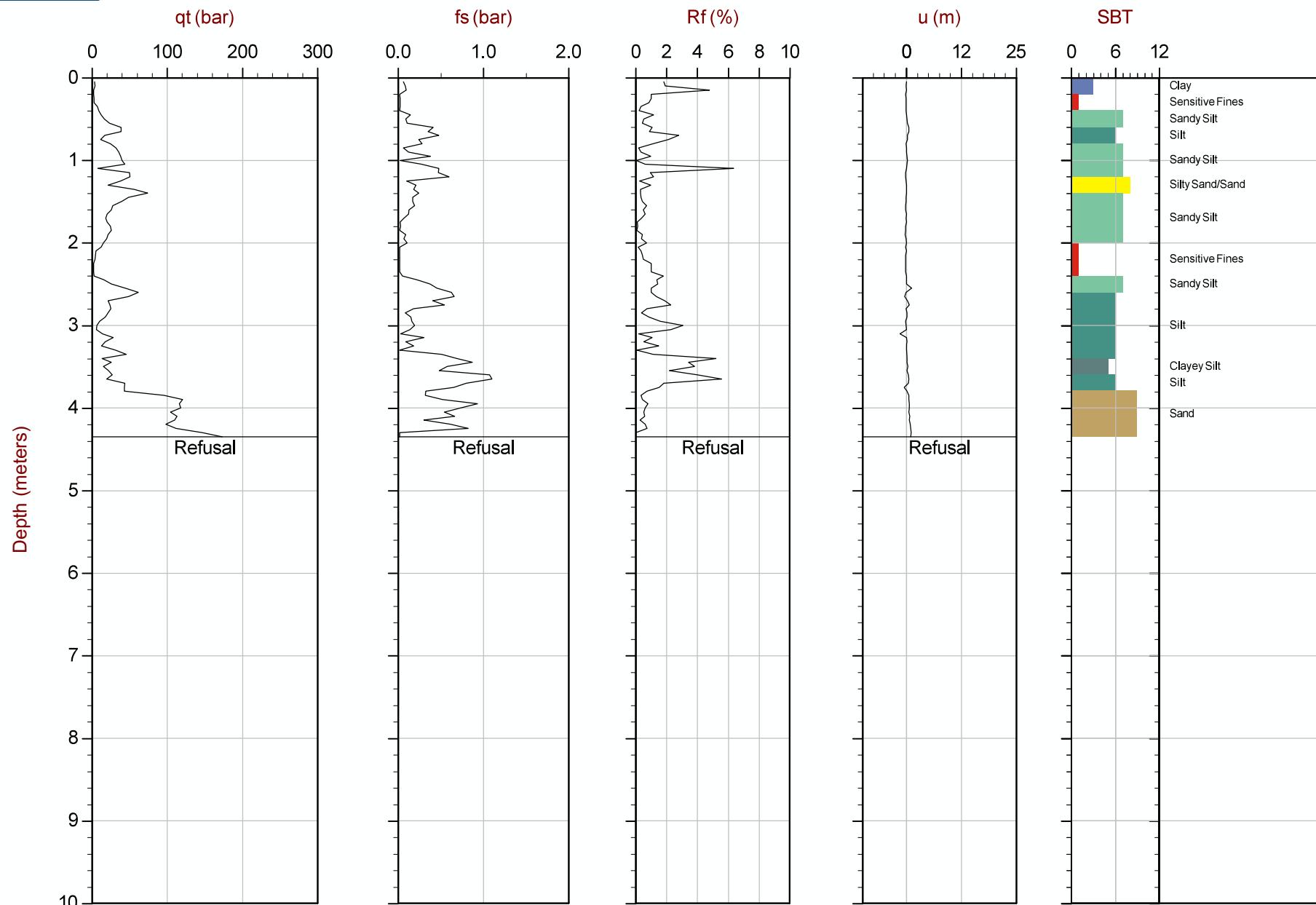




Max Depth: 15.550 m / 51.02 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP43.COR
Unit Wt: SBT Chart Soil Zones

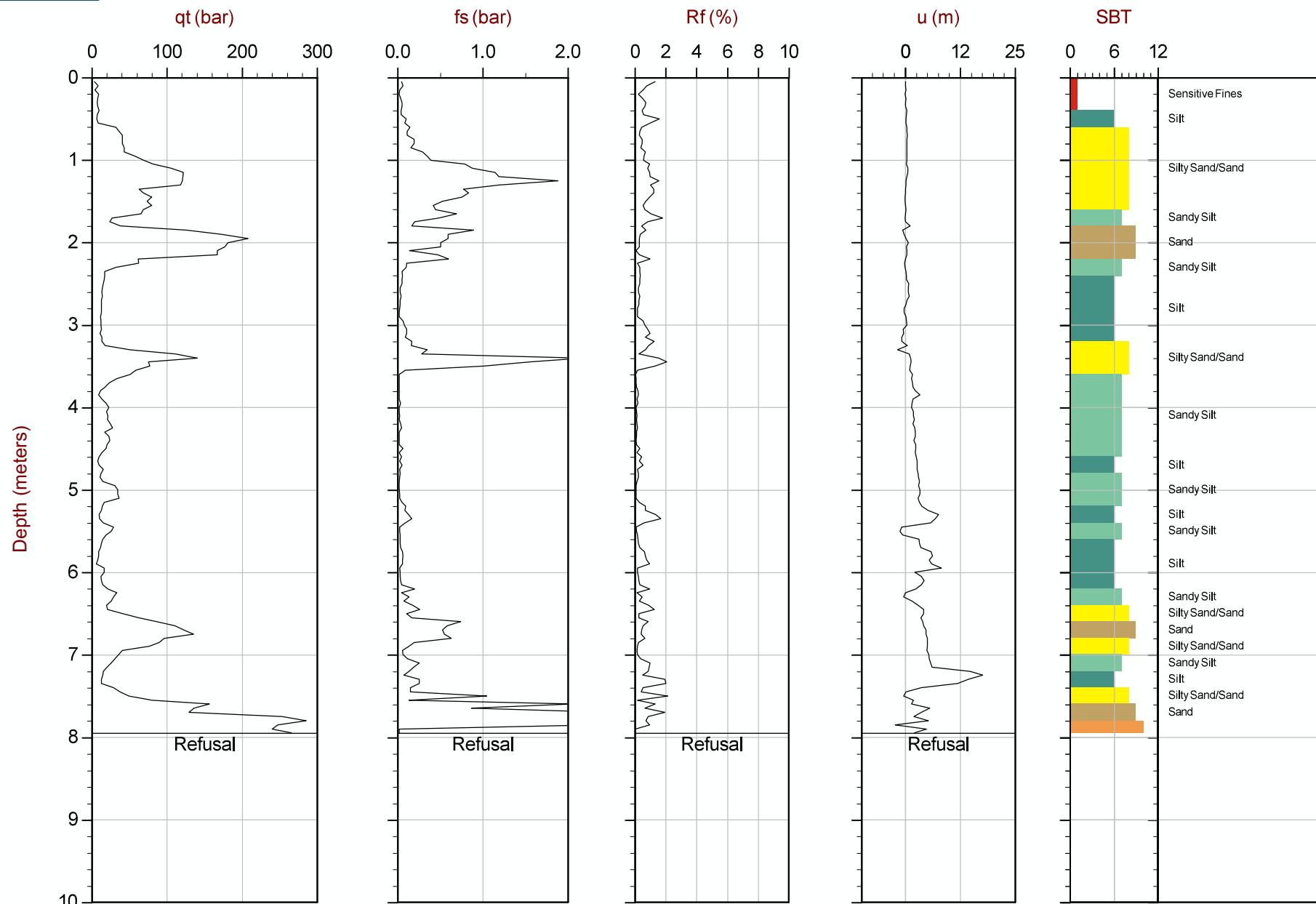
SBT: Lunne, Robertson and Powell, 1997
Page No: 2 of 2



Max Depth: 4.350 m / 14.27 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP51.COR
Unit Wt: SBT Chart Soil Zones

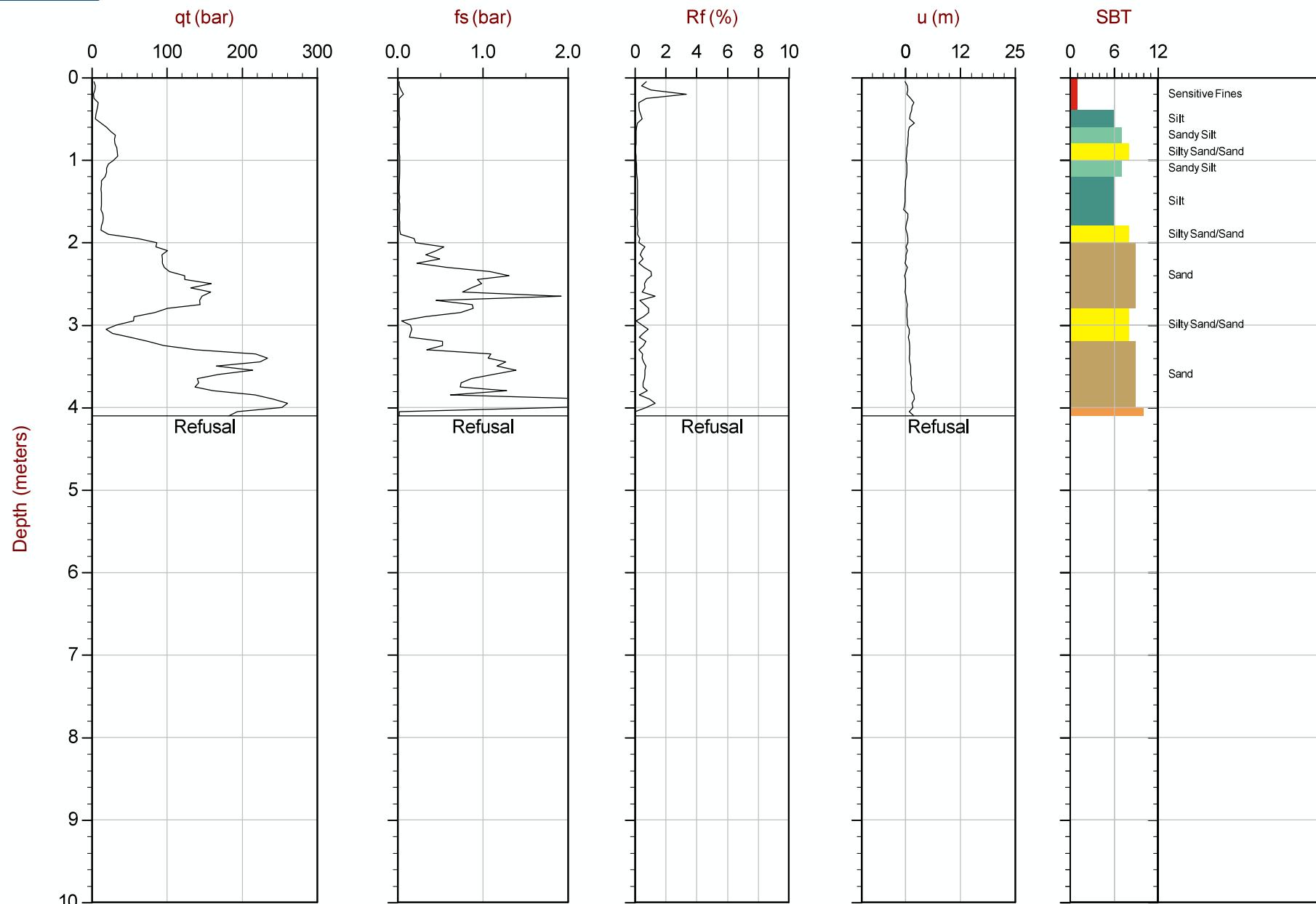
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 7.950 m / 26.08 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP54.COR
Unit Wt: SBT Chart Soil Zones

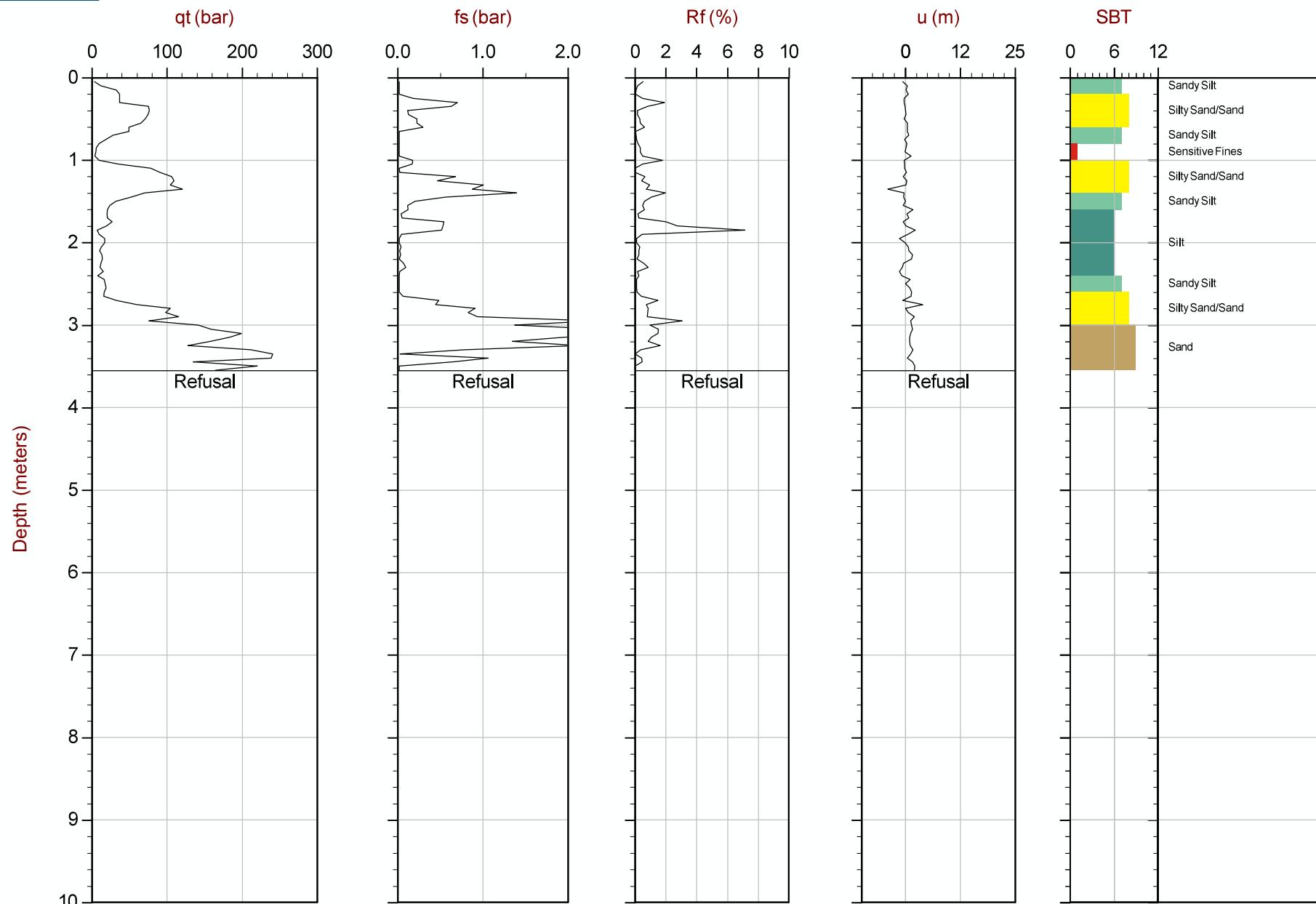
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

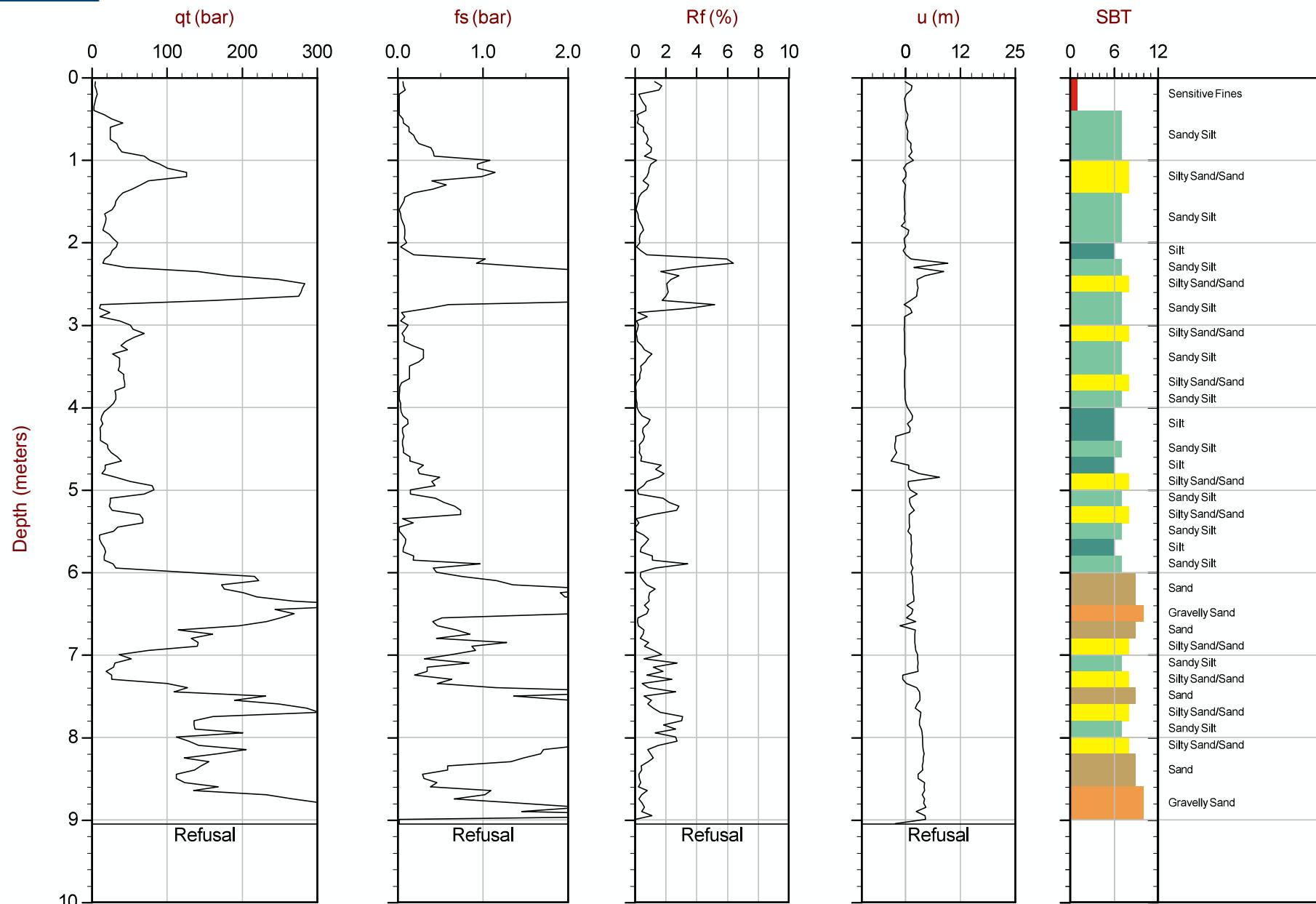


Max Depth: 4.100 m / 13.45 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP55.COR
Unit Wt: SBT Chart Soil Zones

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

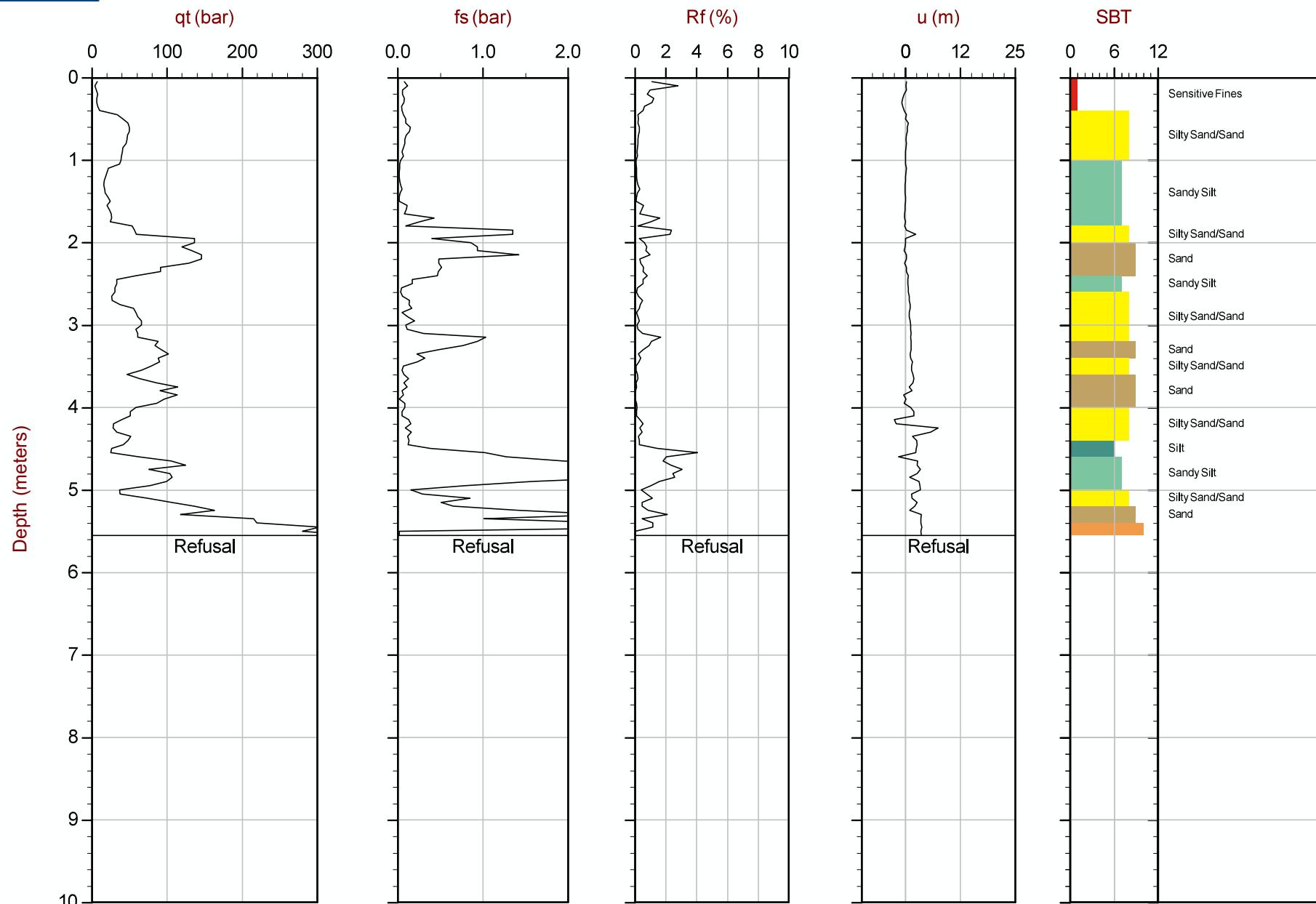




Max Depth: 9.050 m / 29.69 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP65.COR
Unit Wt: SBT Chart Soil Zones

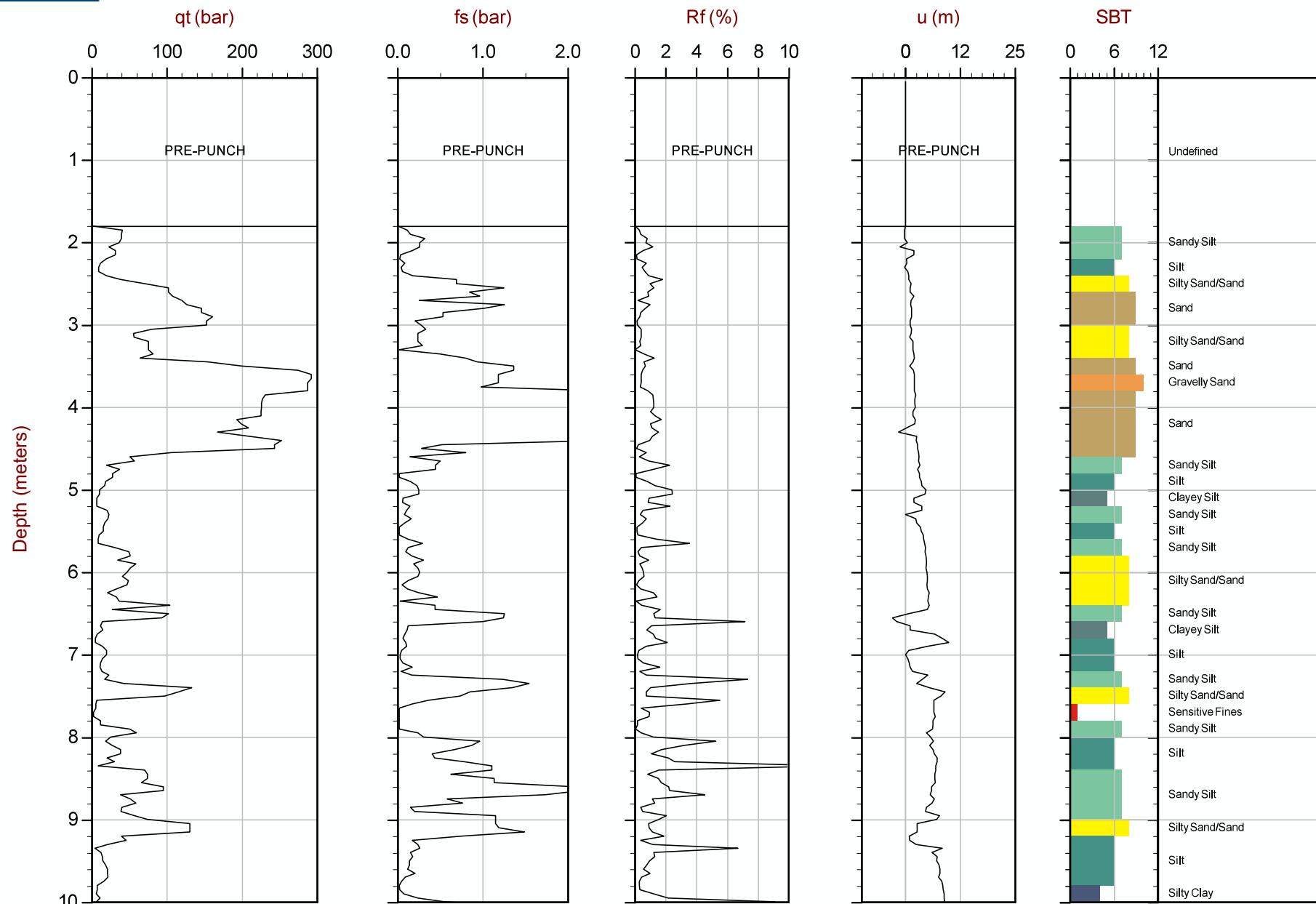
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 5.550 m / 18.21 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP66.COR
Unit Wt: SBT Chart Soil Zones

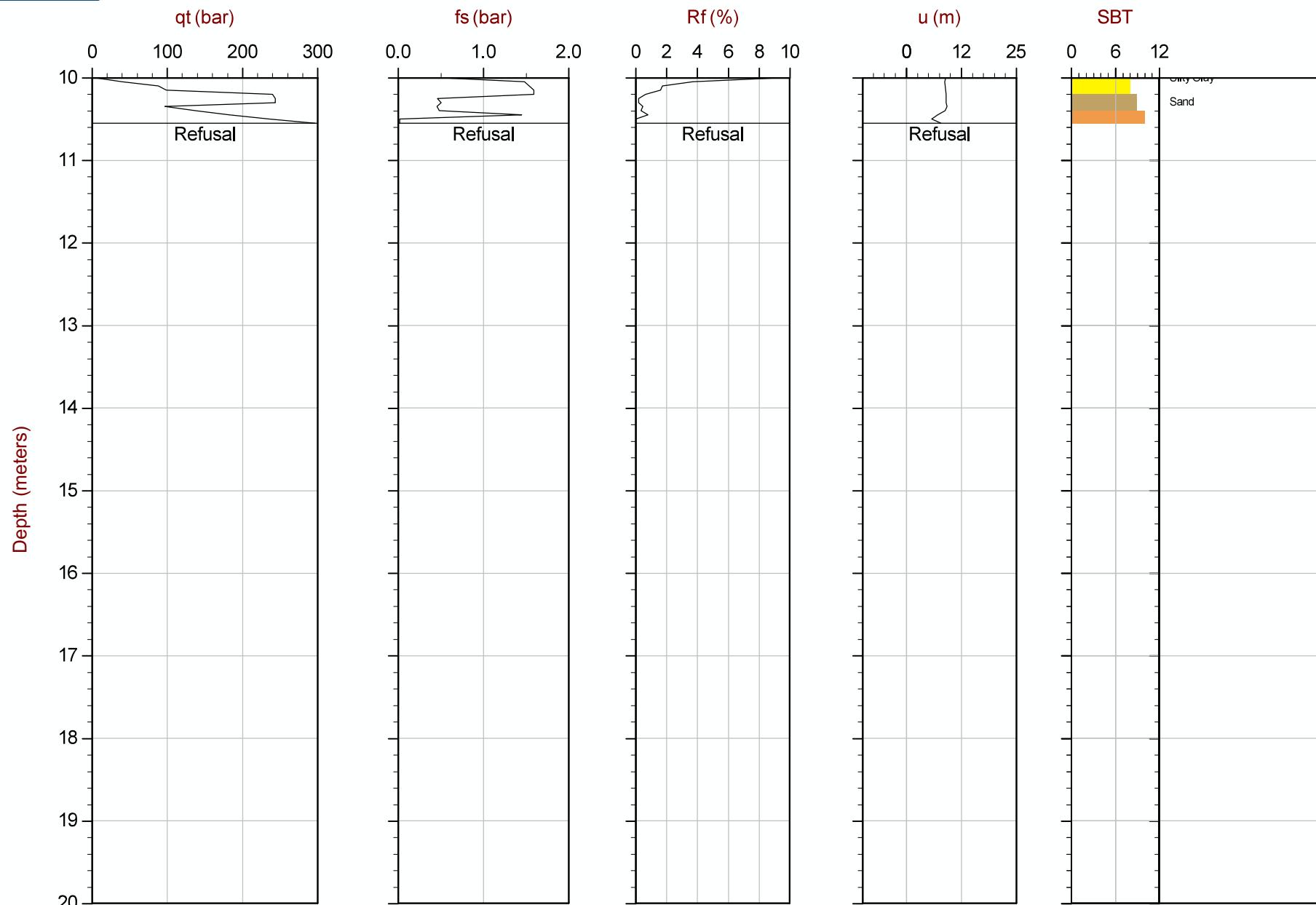
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 10.550 m / 34.61 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP68.COR
Unit Wt: SBT Chart Soil Zones

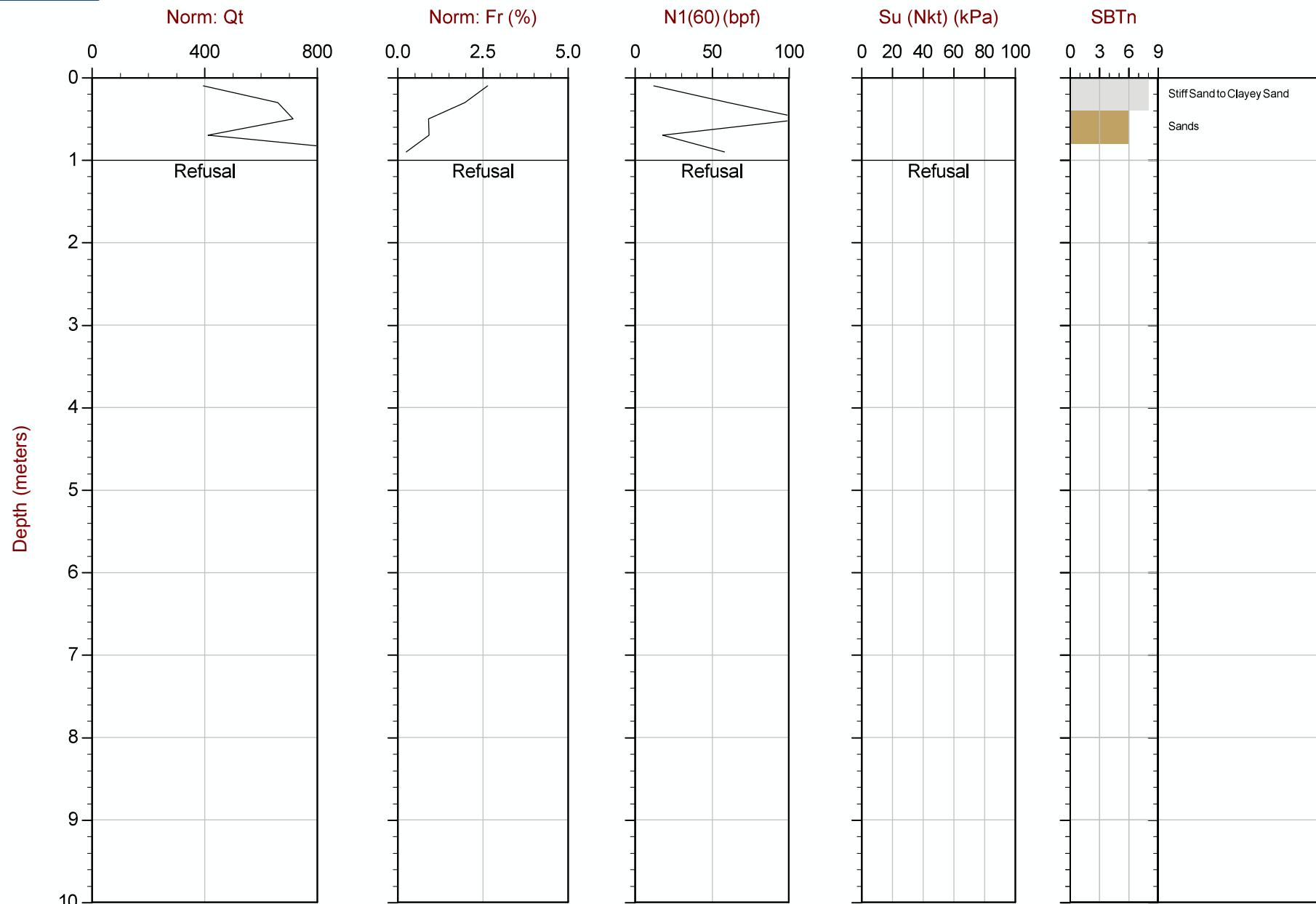
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 2



Max Depth: 10.550 m / 34.61 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP68.COR
Unit Wt: SBT Chart Soil Zones

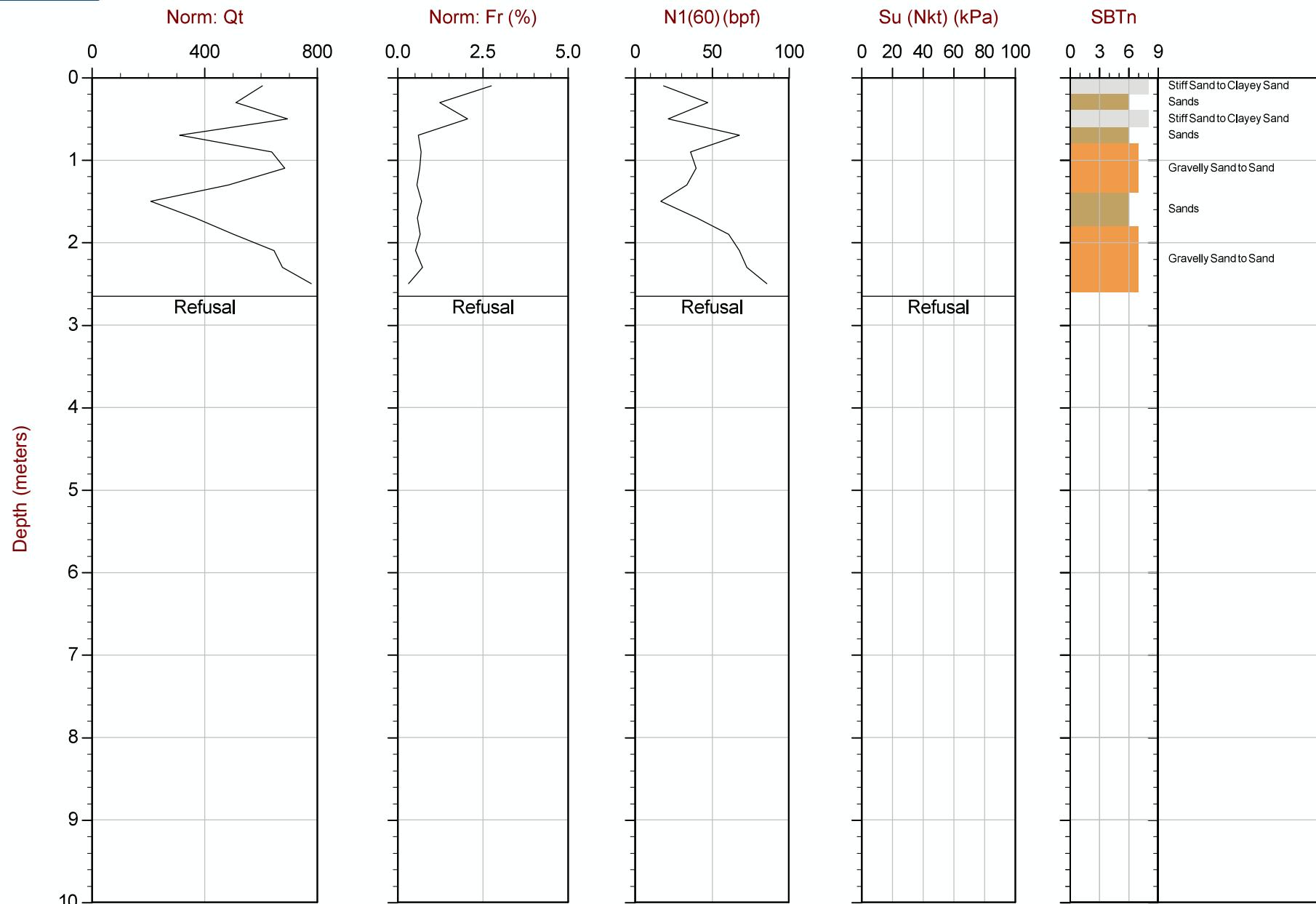
SBT: Lunne, Robertson and Powell, 1997
Page No: 2 of 2



Max Depth: 1.000 m / 3.28 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP01.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

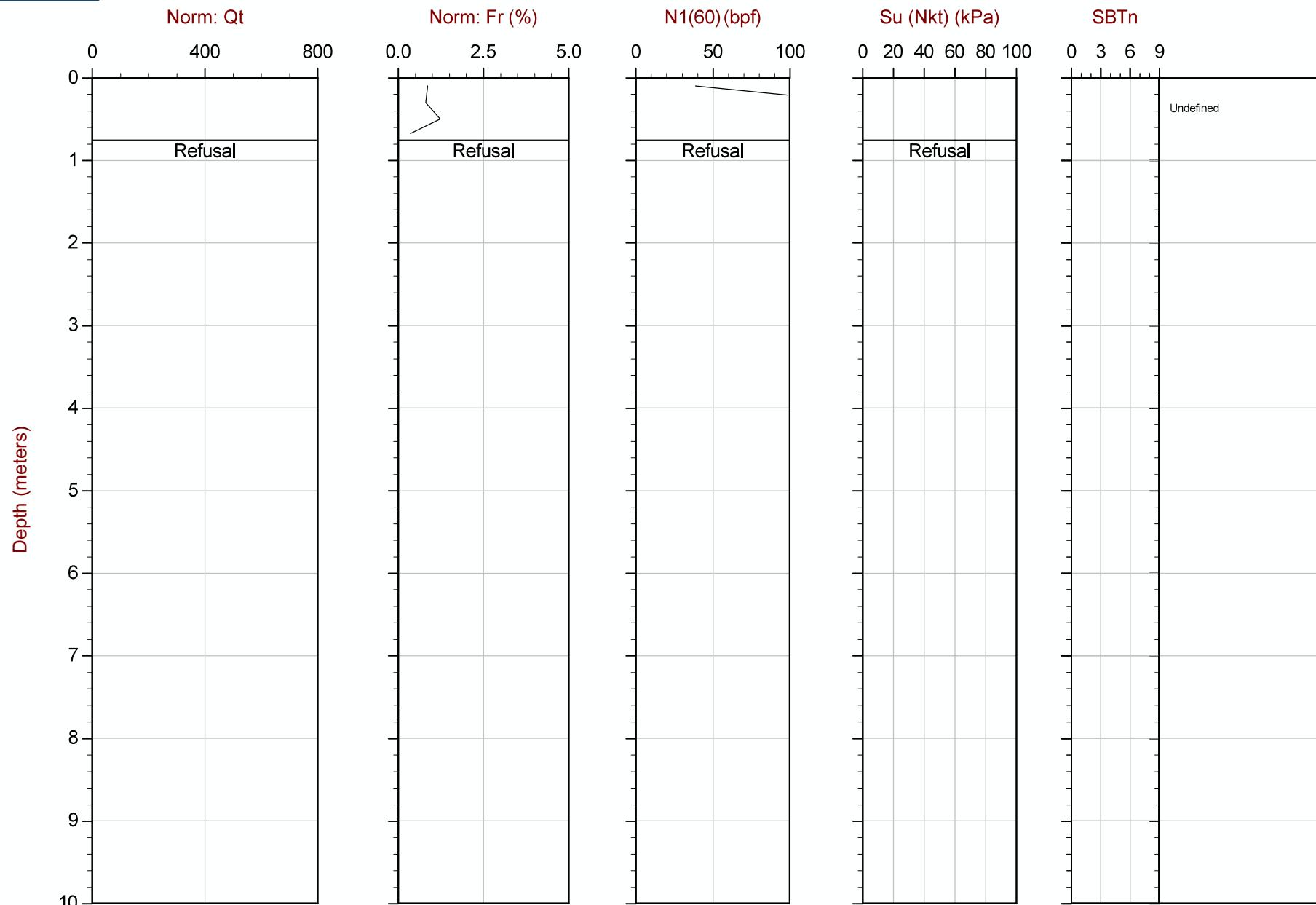
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 2.650 m / 8.69 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP01B.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

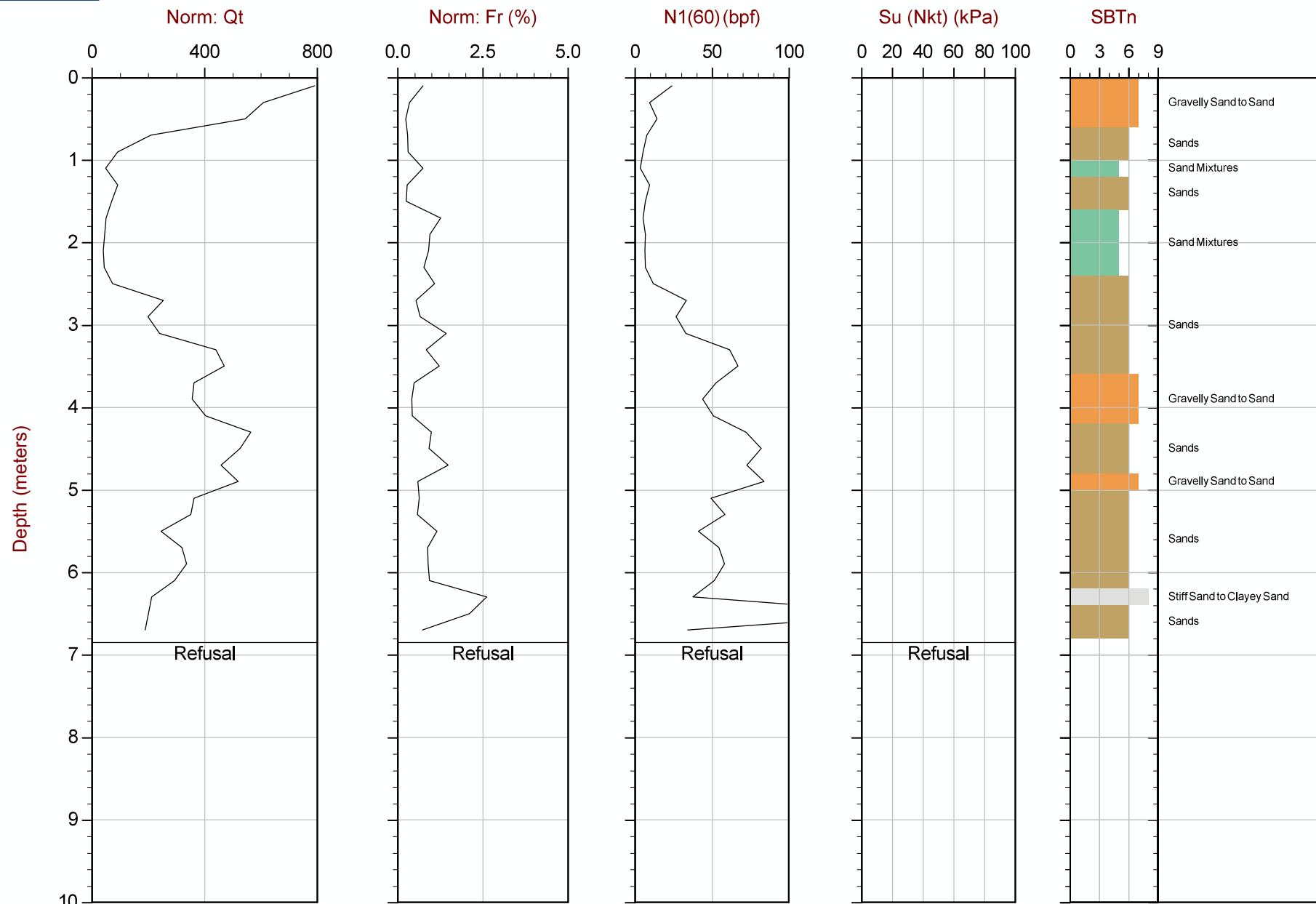
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

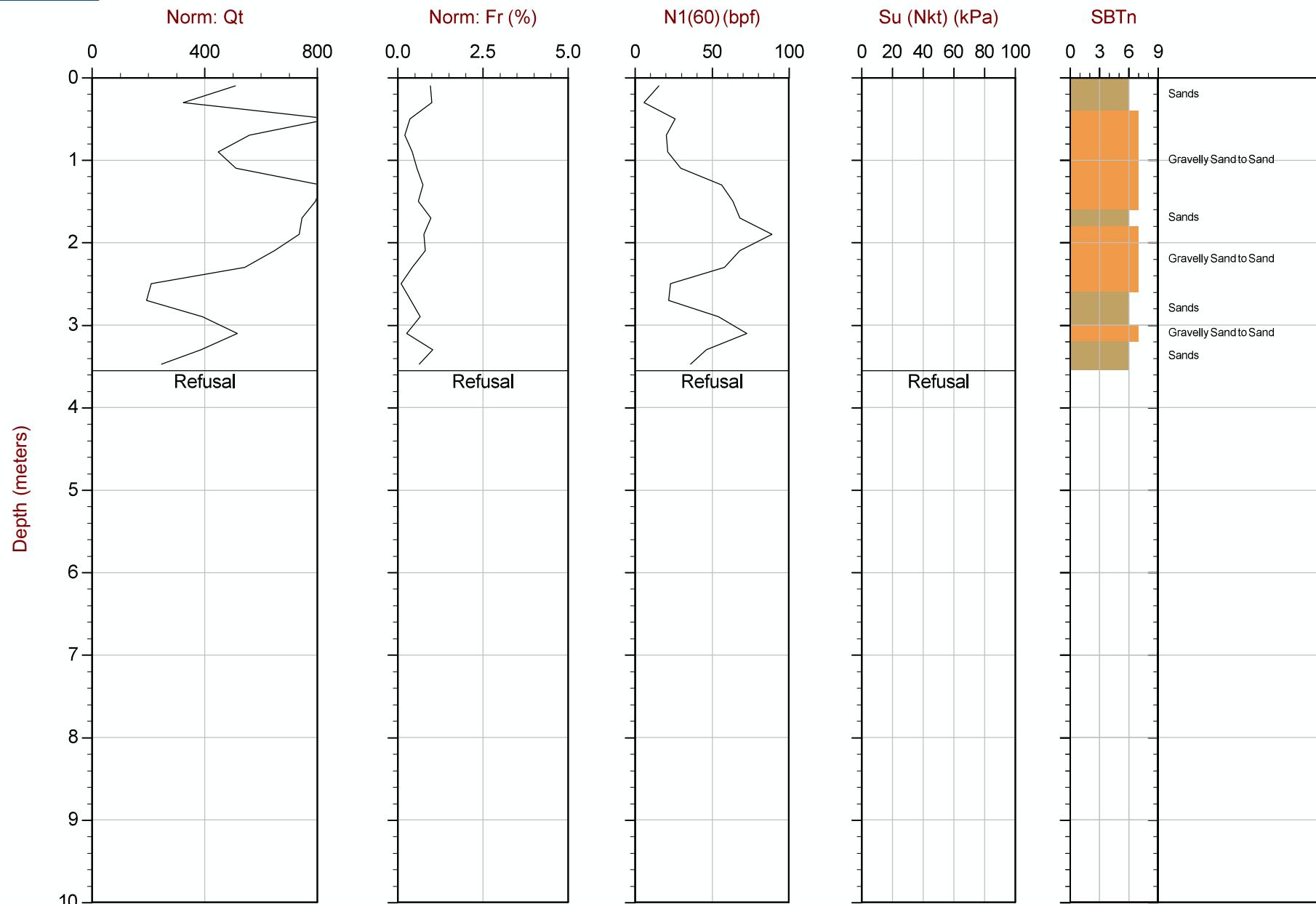


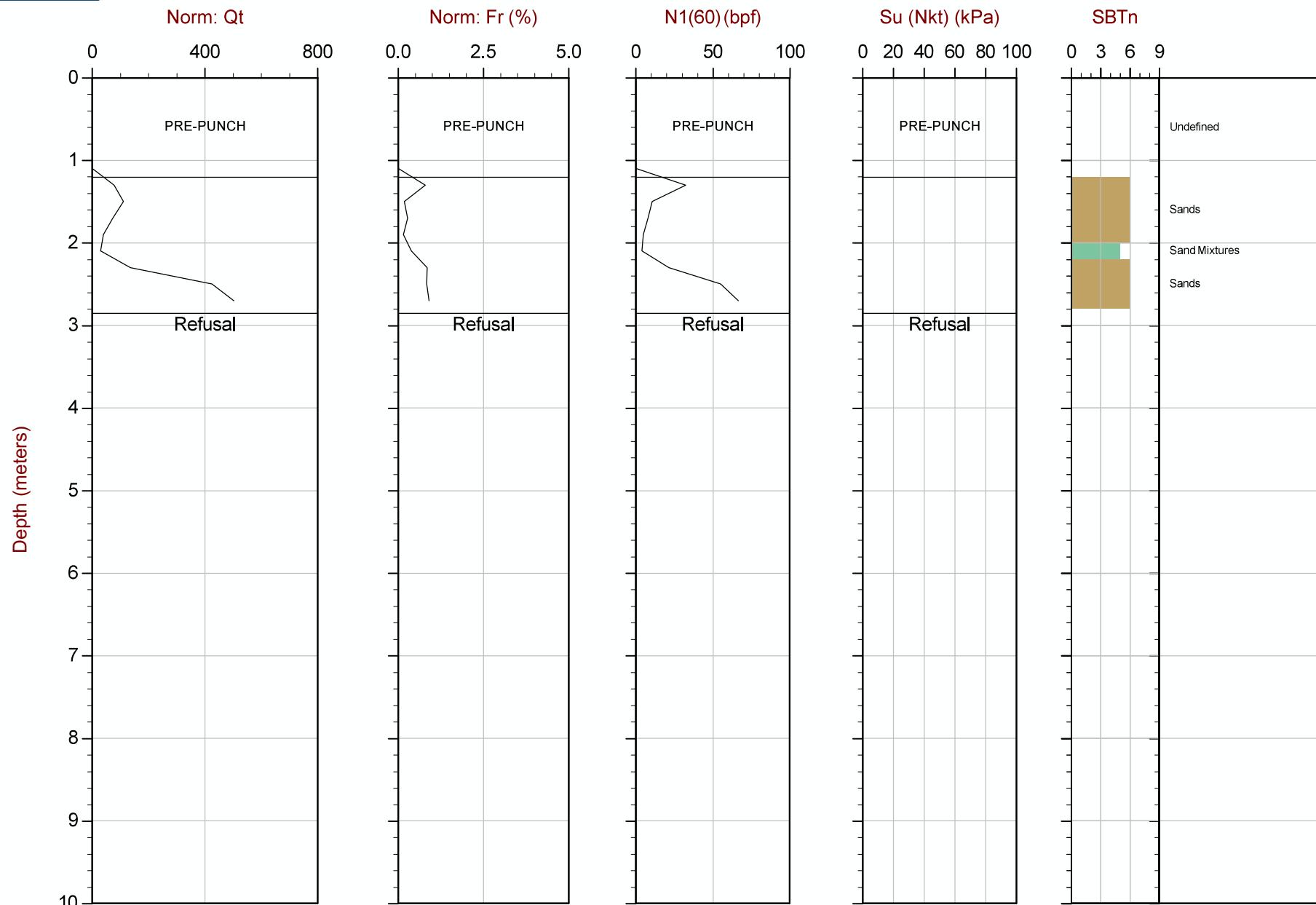
Max Depth: 0.750 m / 2.46 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP02.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



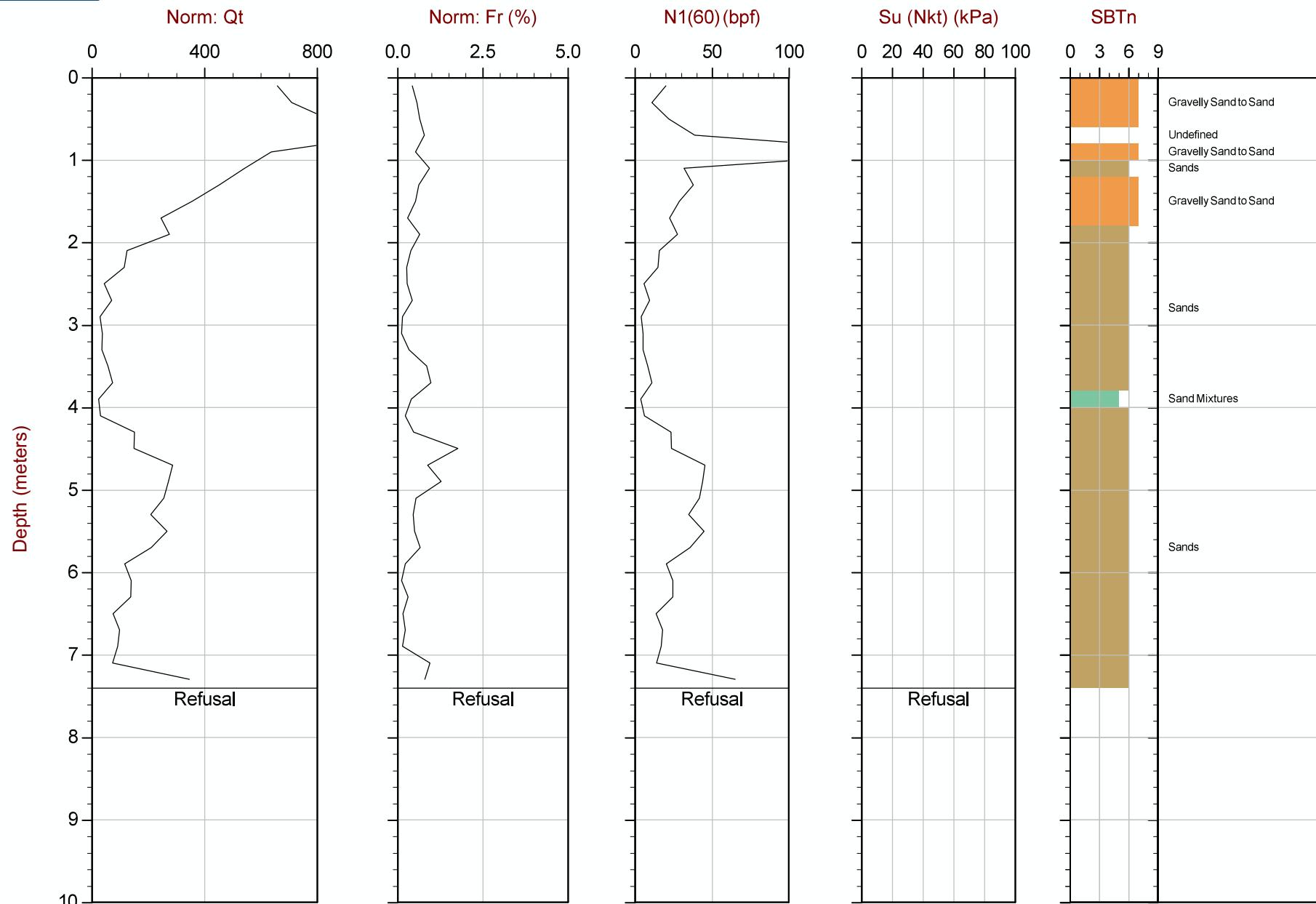




Max Depth: 2.850 m / 9.35 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP08.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

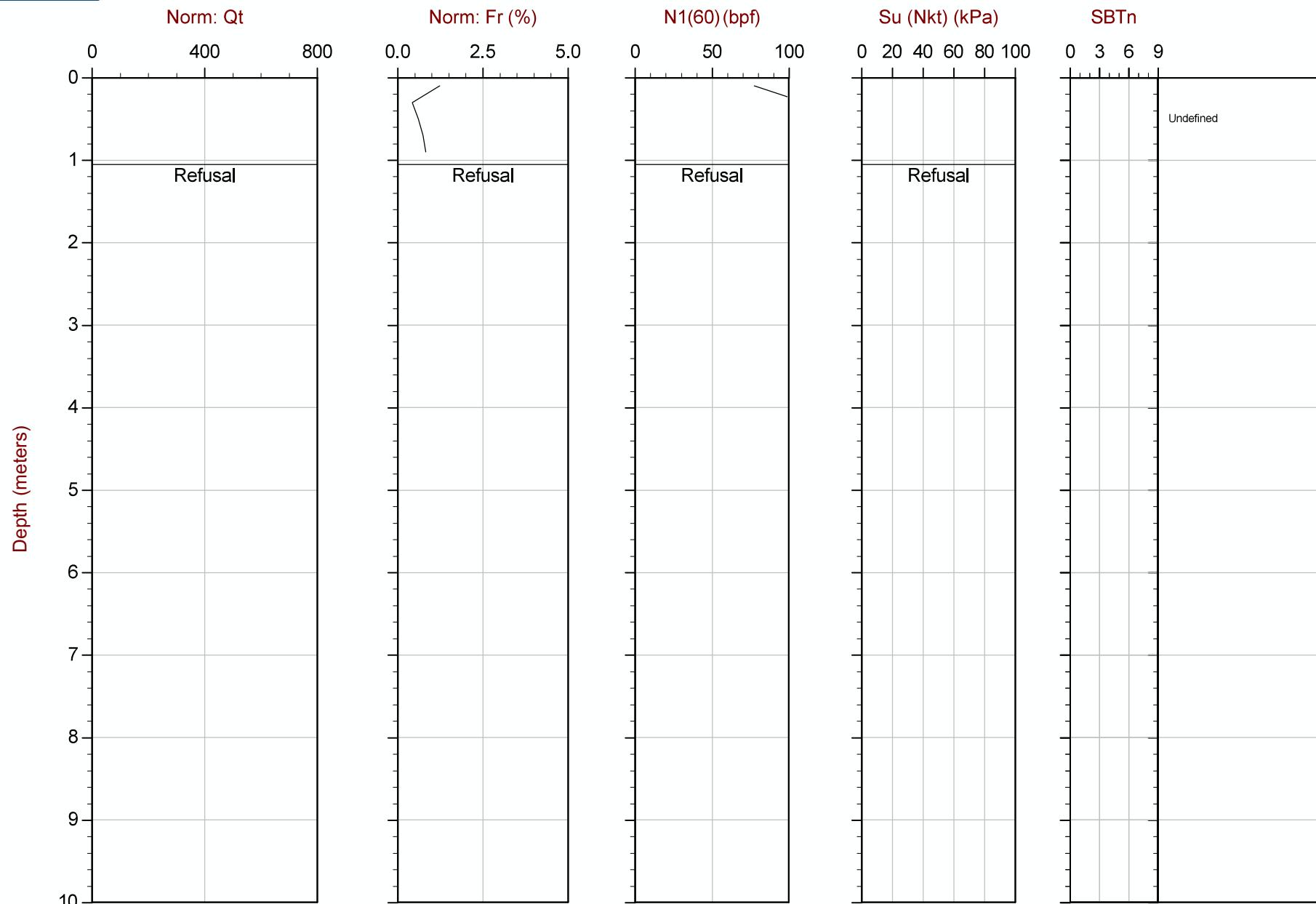
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

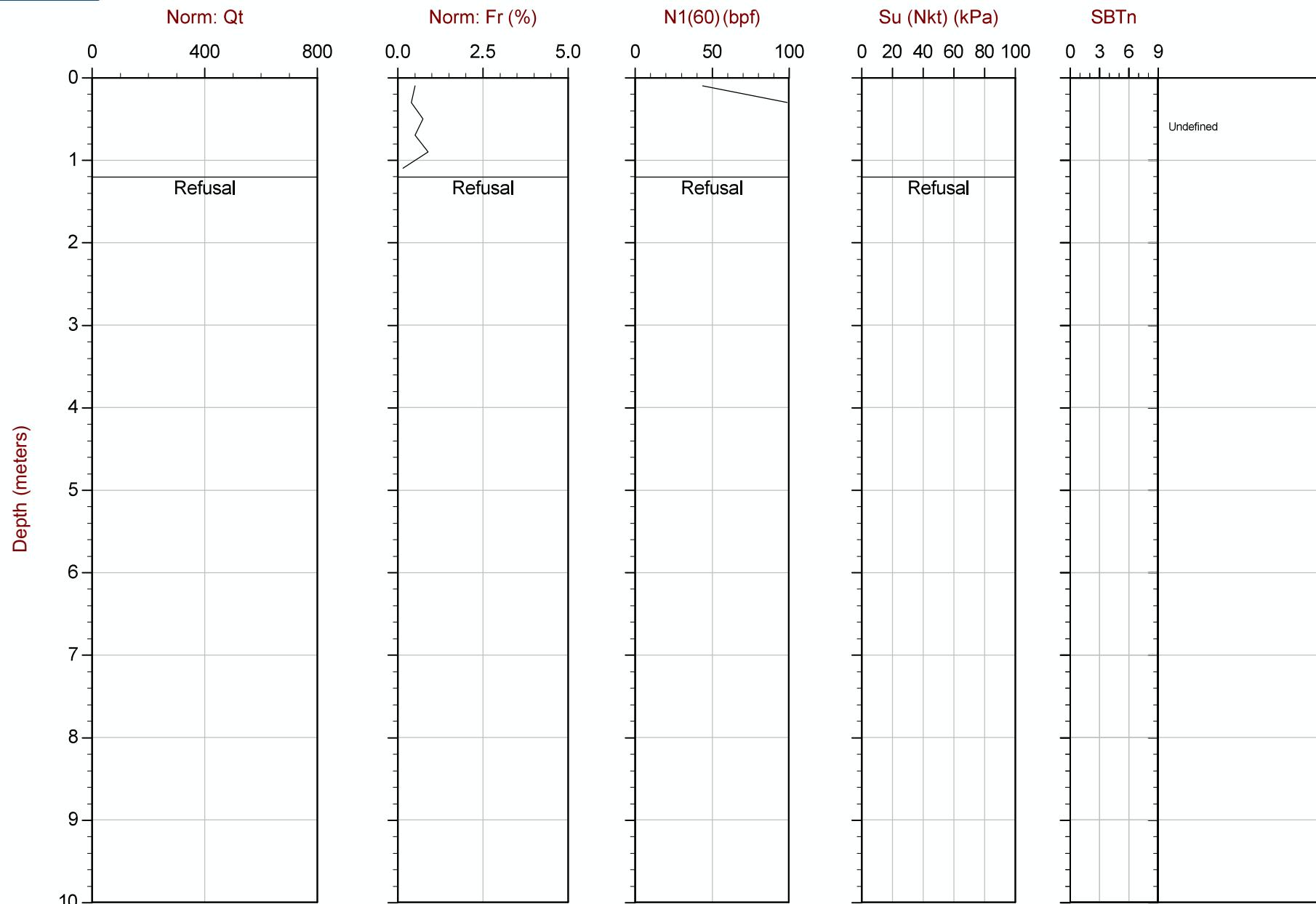


Max Depth: 7.400 m / 24.28 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP09.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

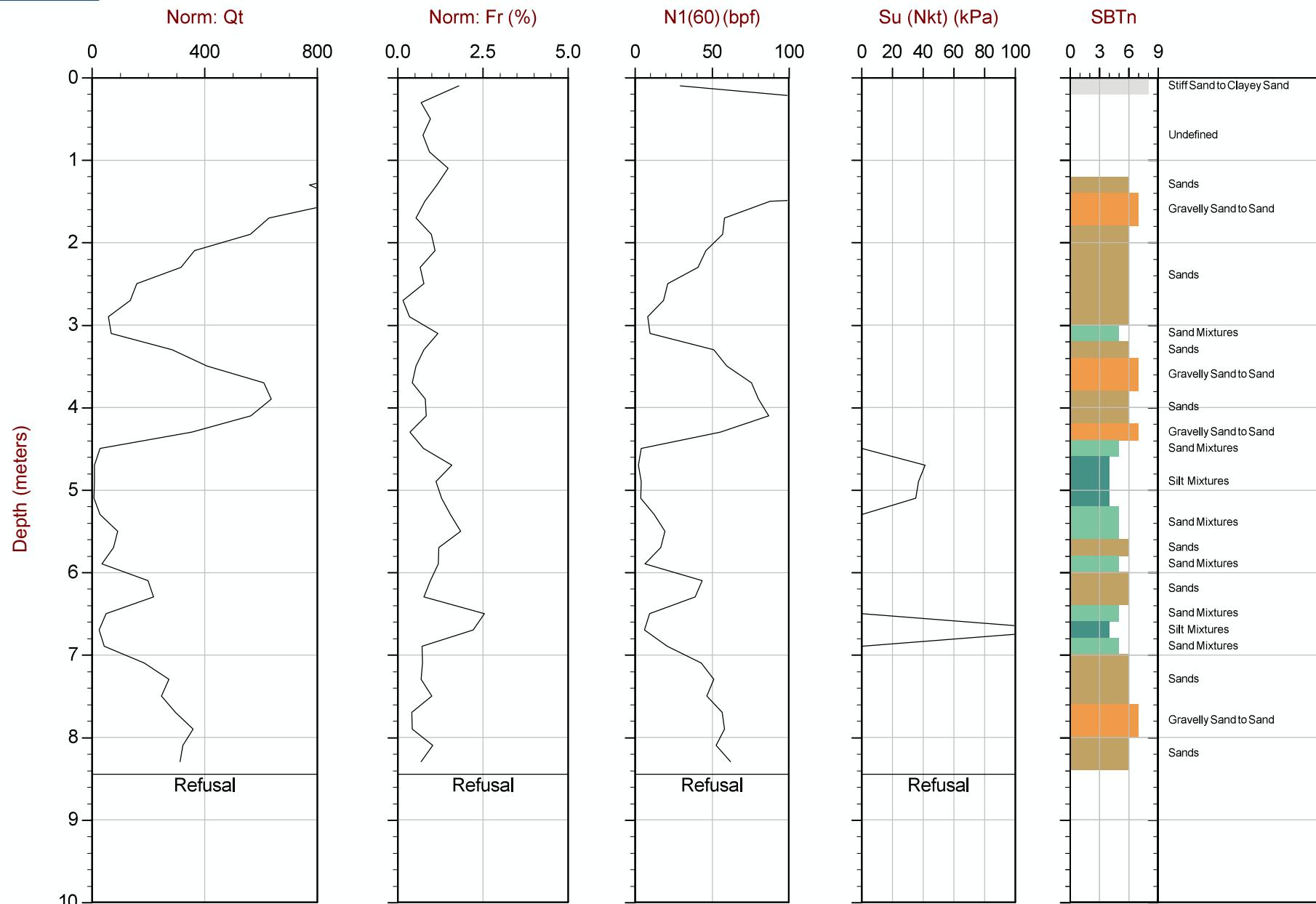




Max Depth: 1.200 m / 3.94 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP10B.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

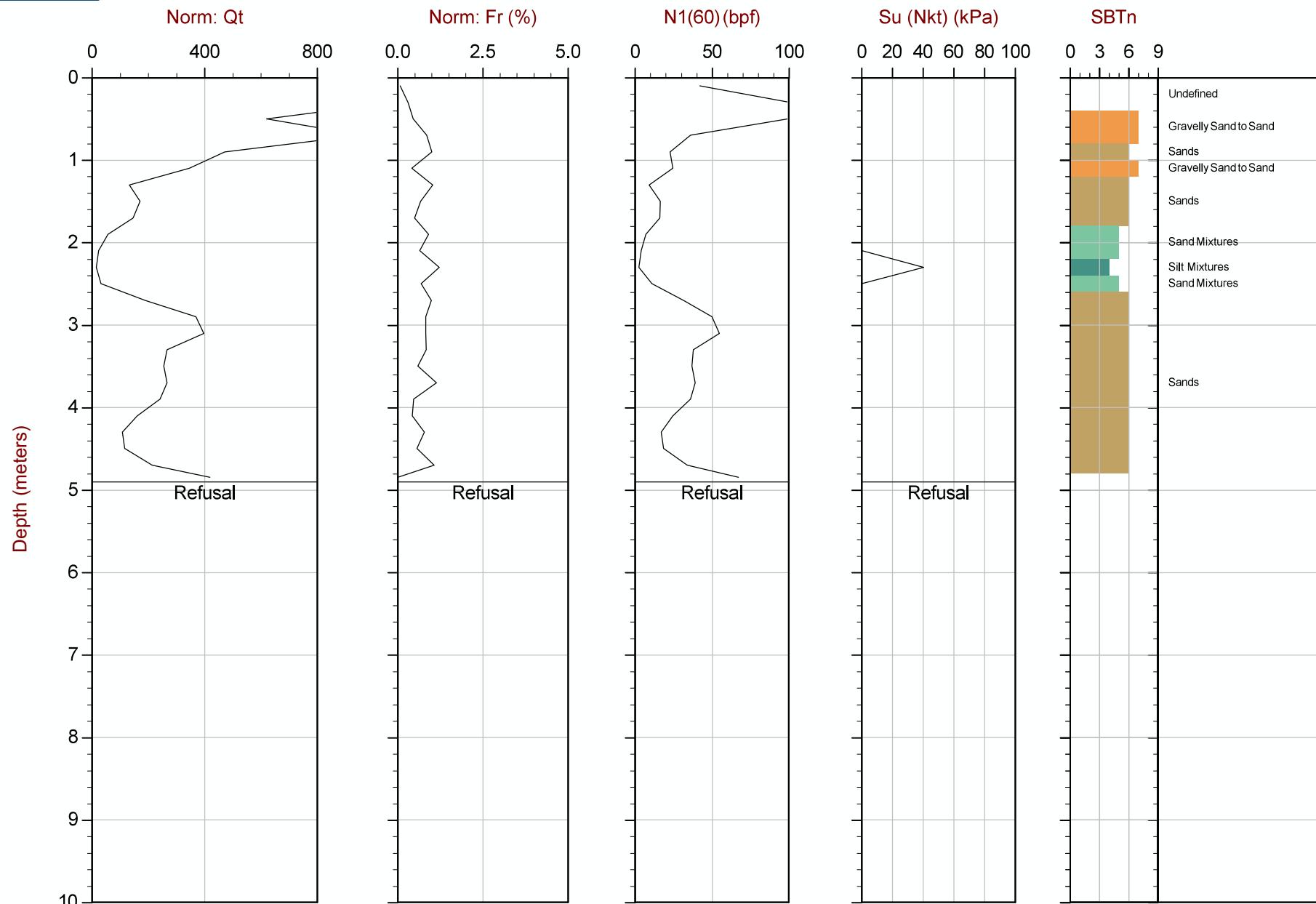
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

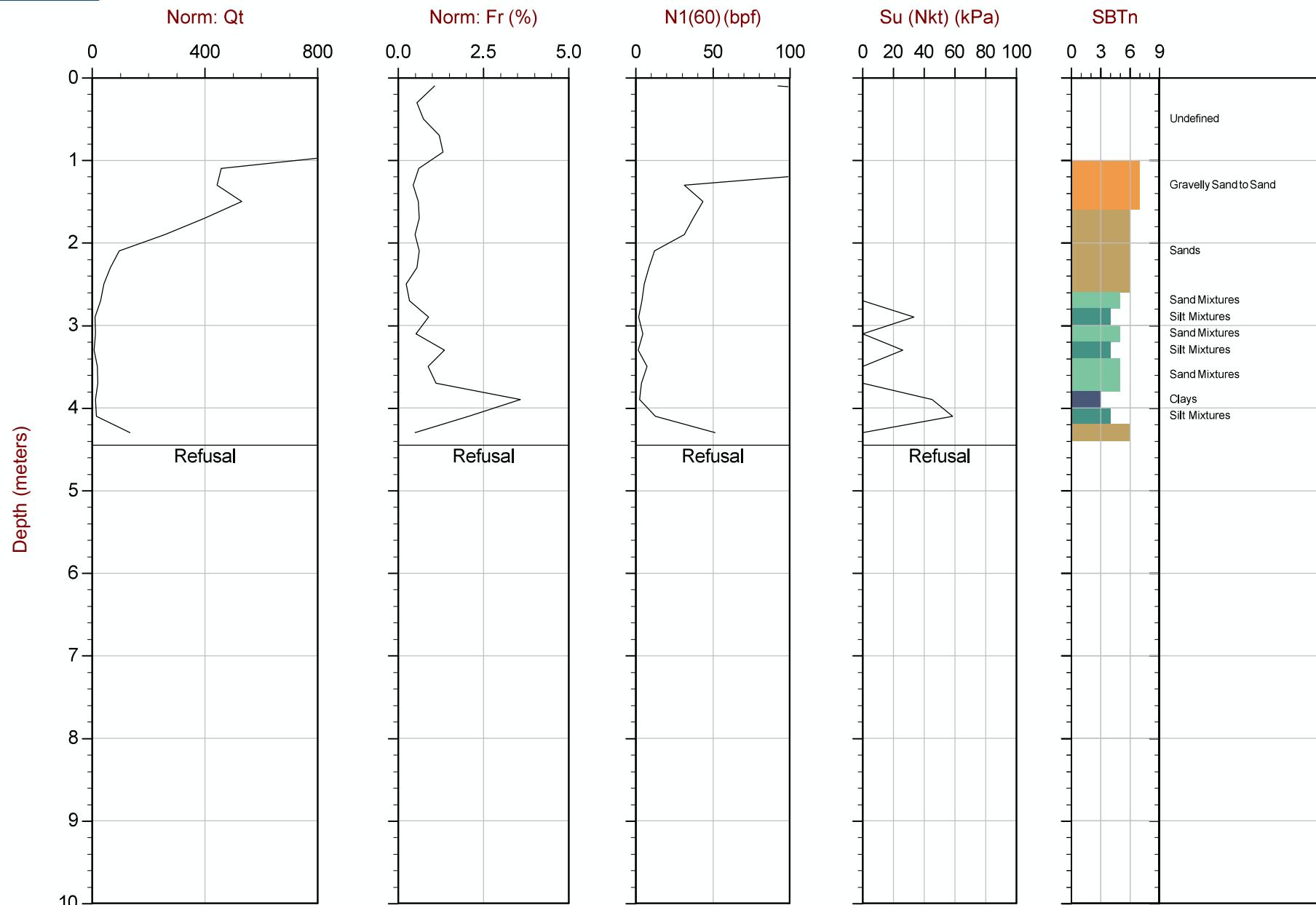


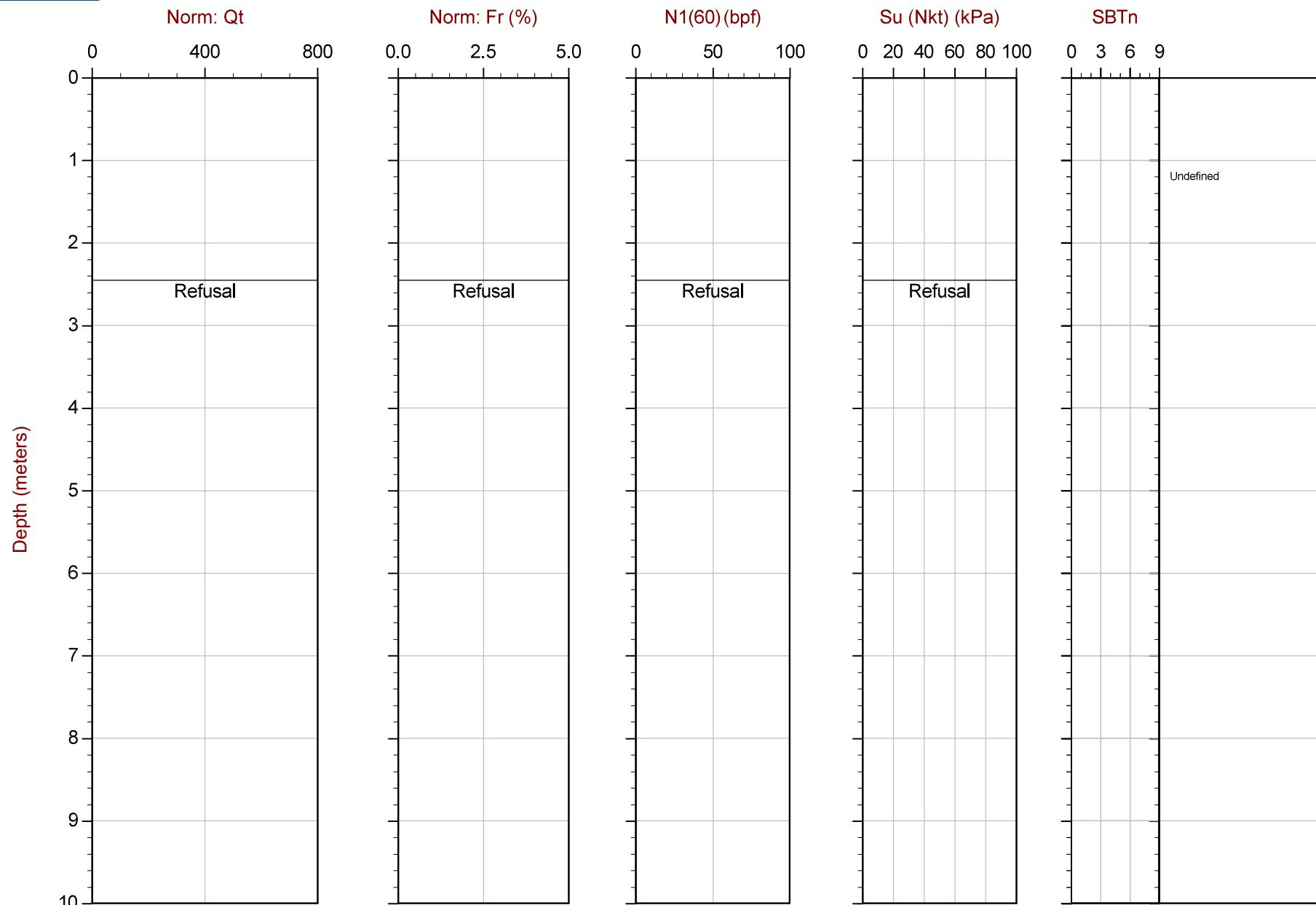
Max Depth: 8.450 m / 27.72 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP13.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



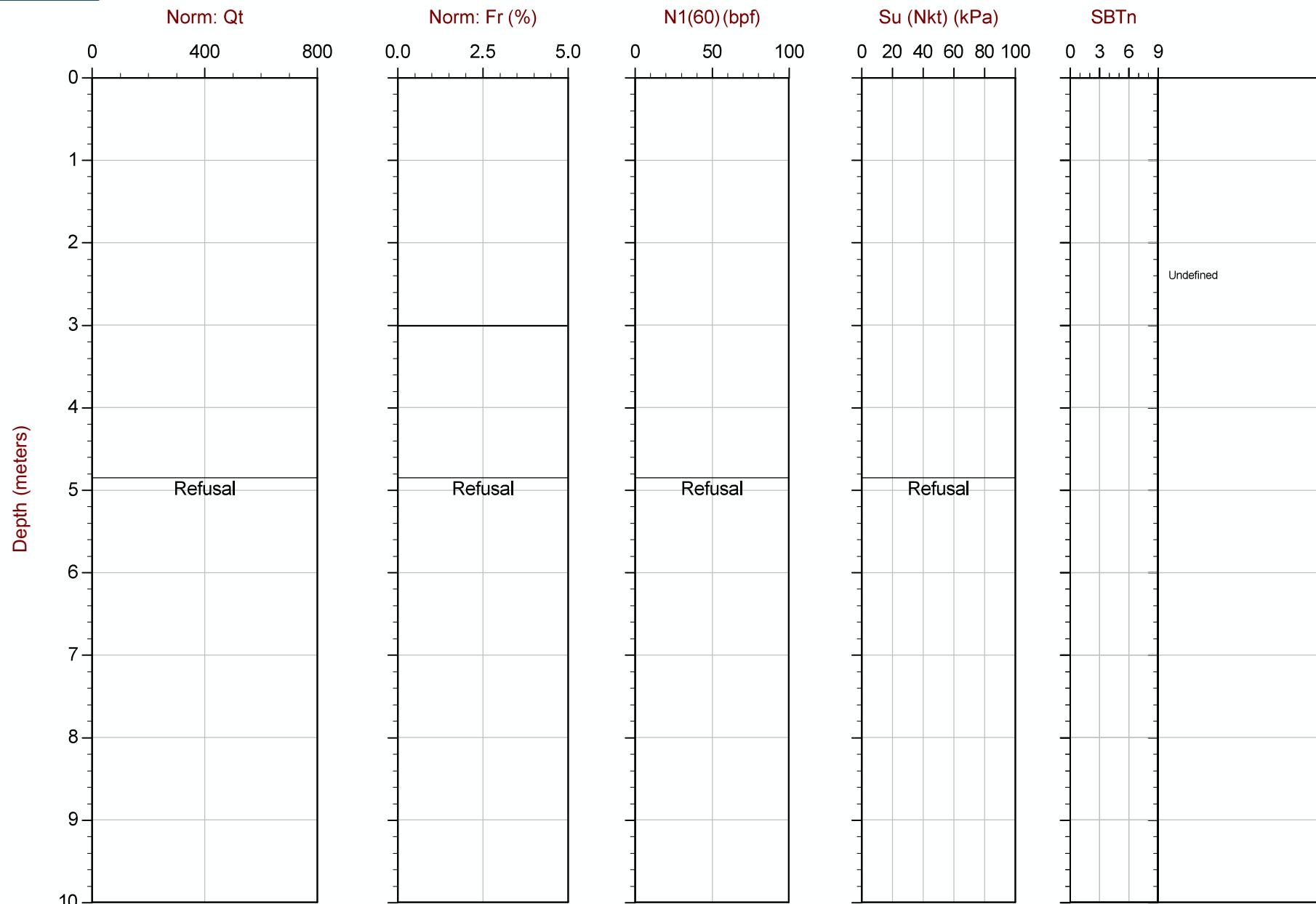




Max Depth: 2.450 m / 8.04 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP18.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

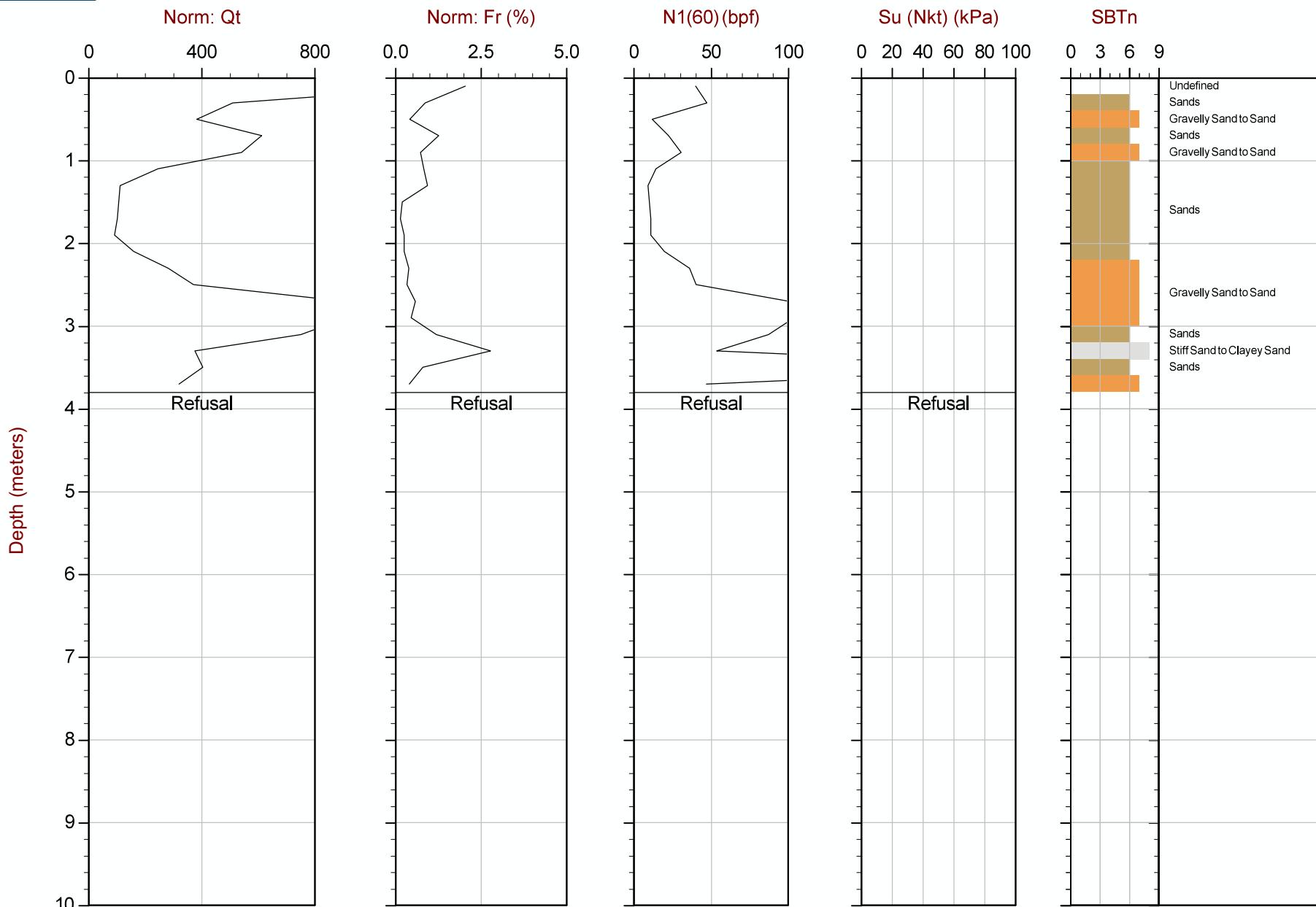
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.850 m / 15.91 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP18B.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

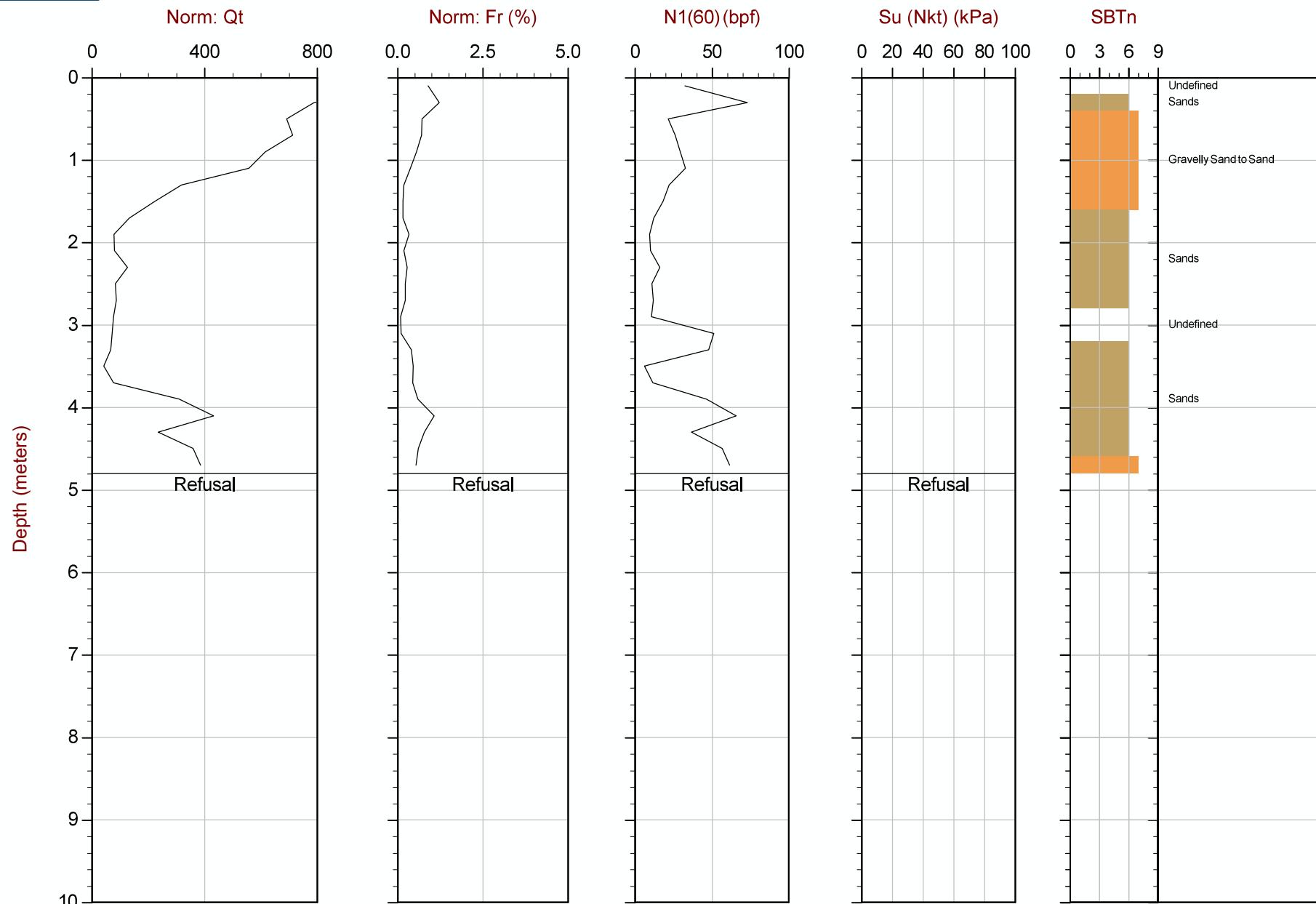
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

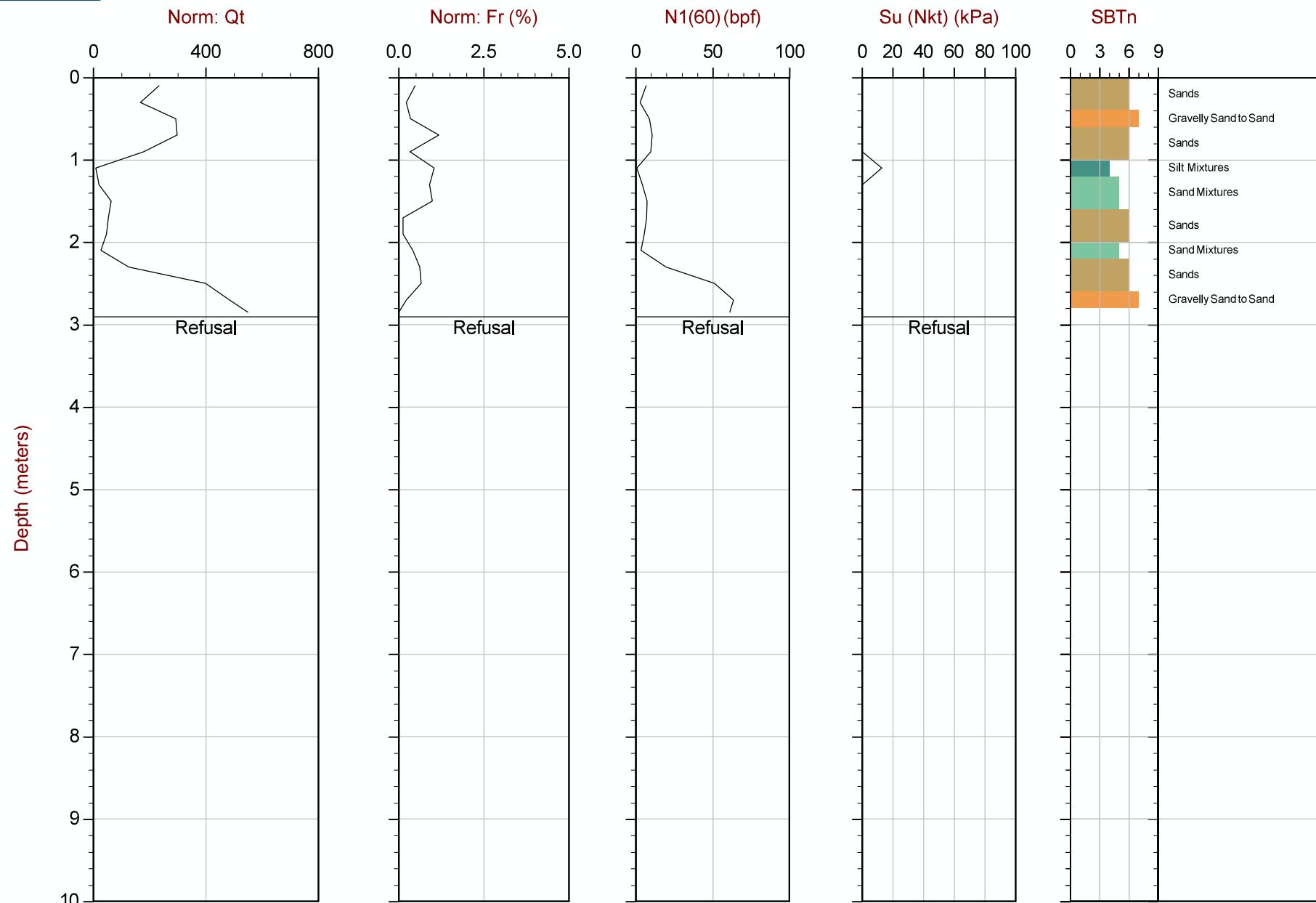


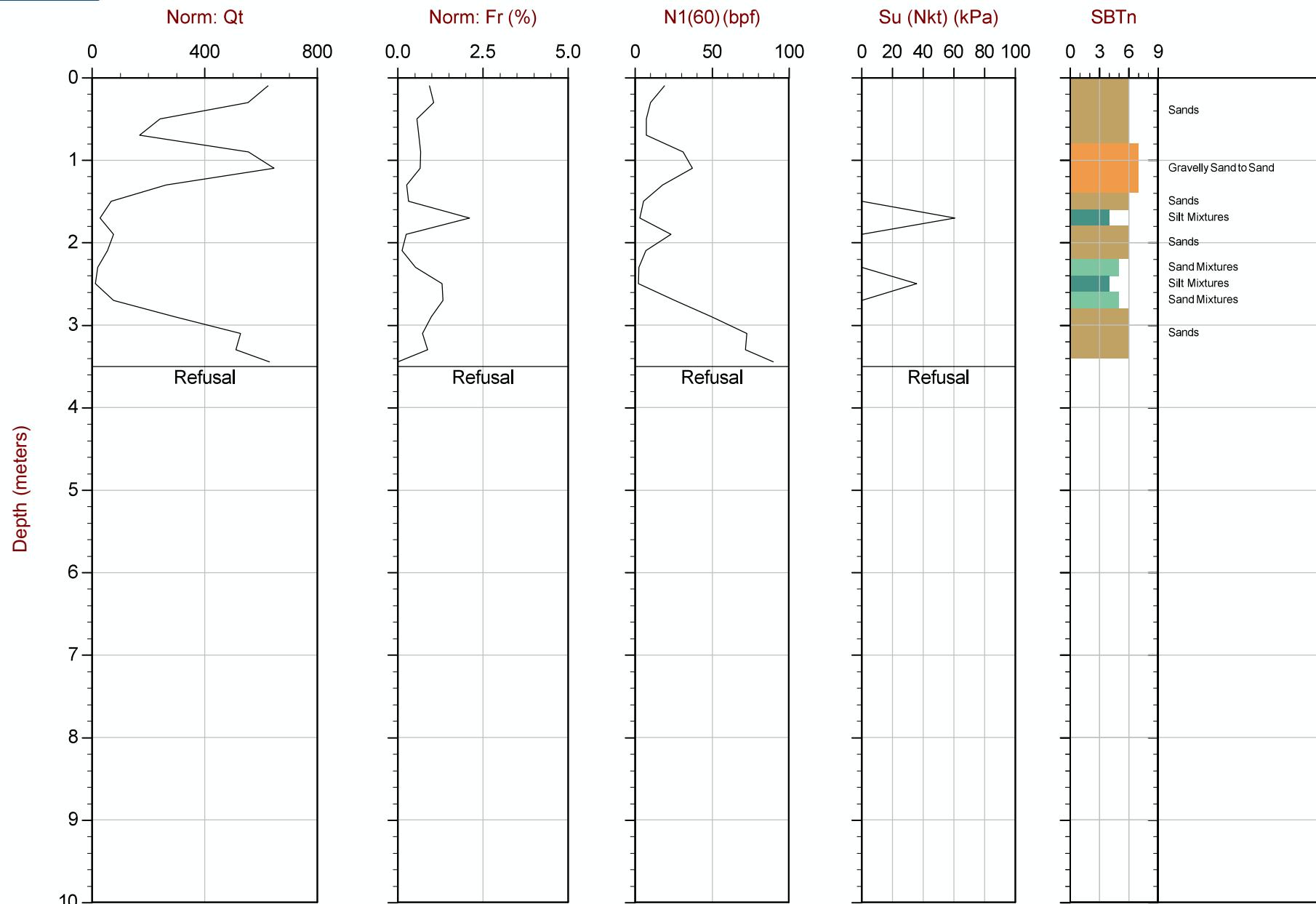
Max Depth: 3.800 m / 12.47 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

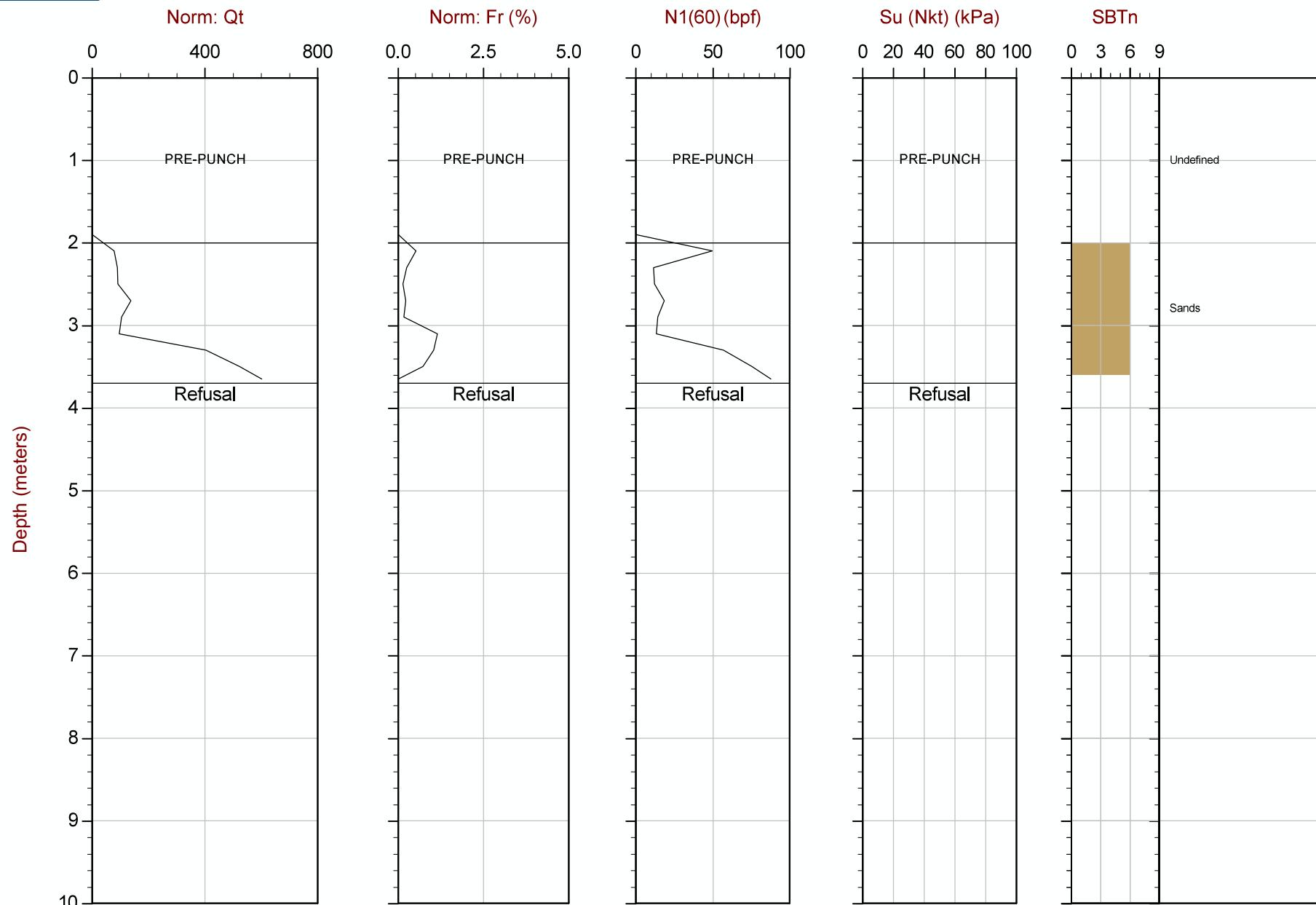
File: 189CP23.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1





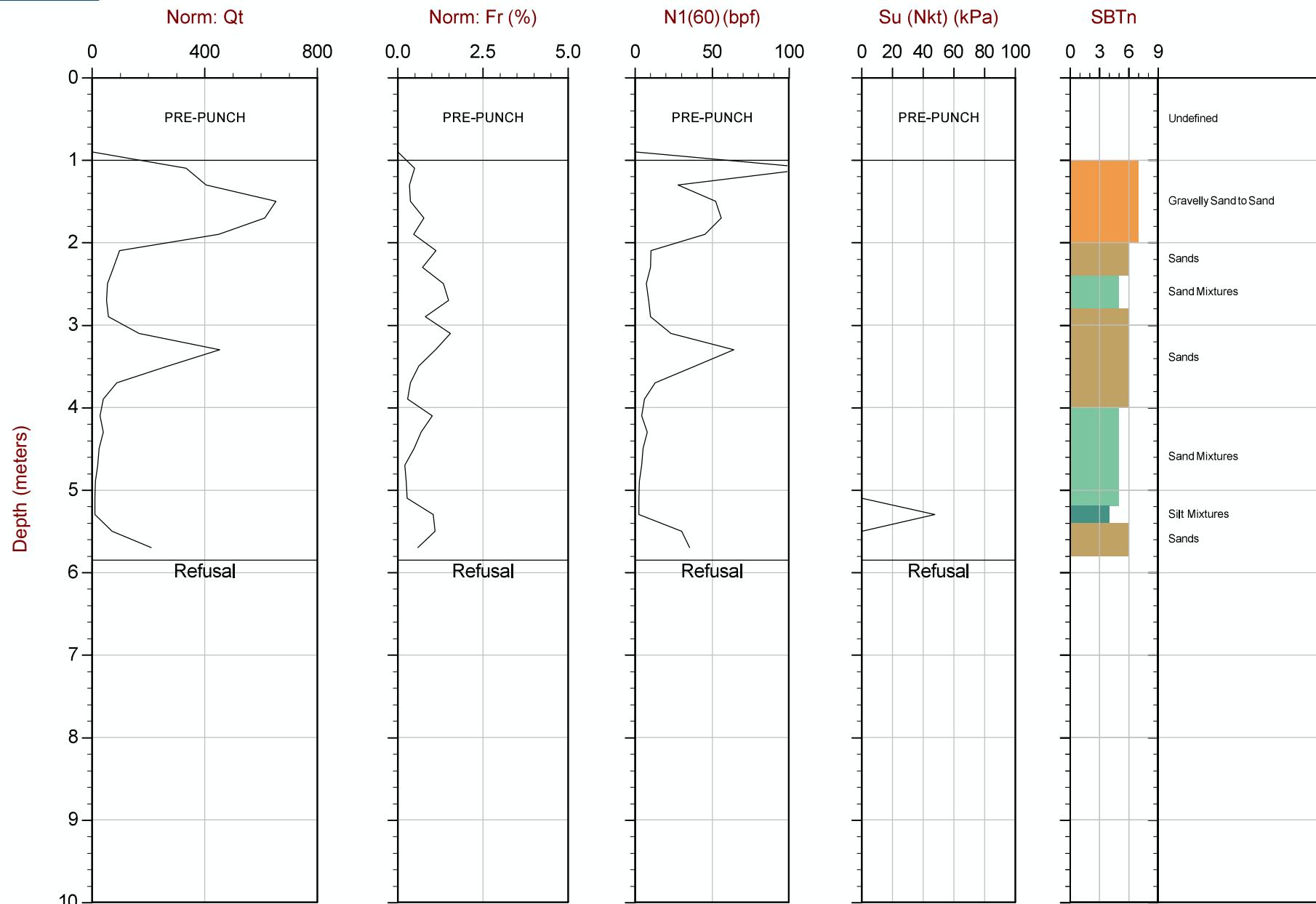




Max Depth: 3.700 m / 12.14 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP27.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

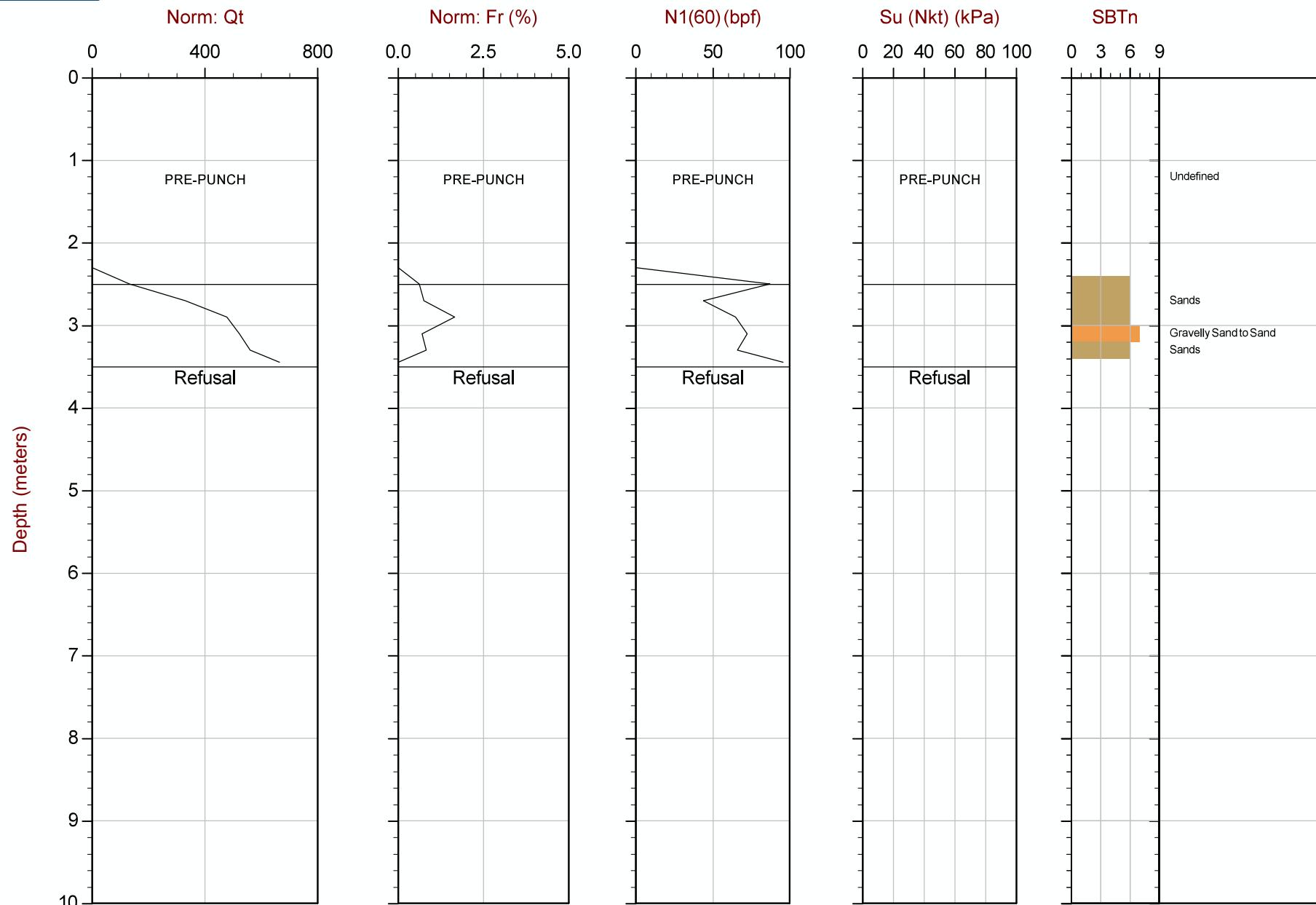
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 5.850 m / 19.19 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP31.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

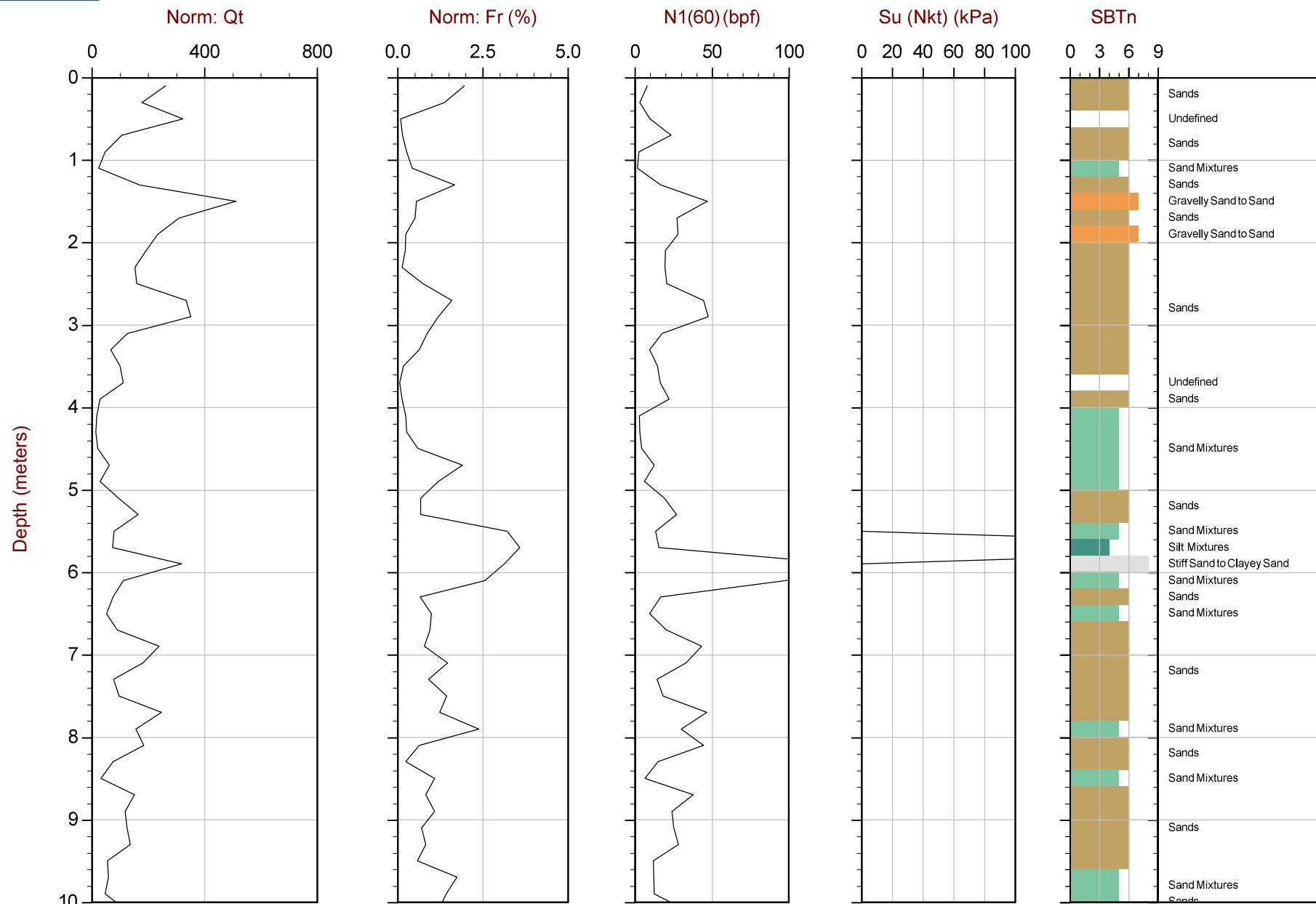
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

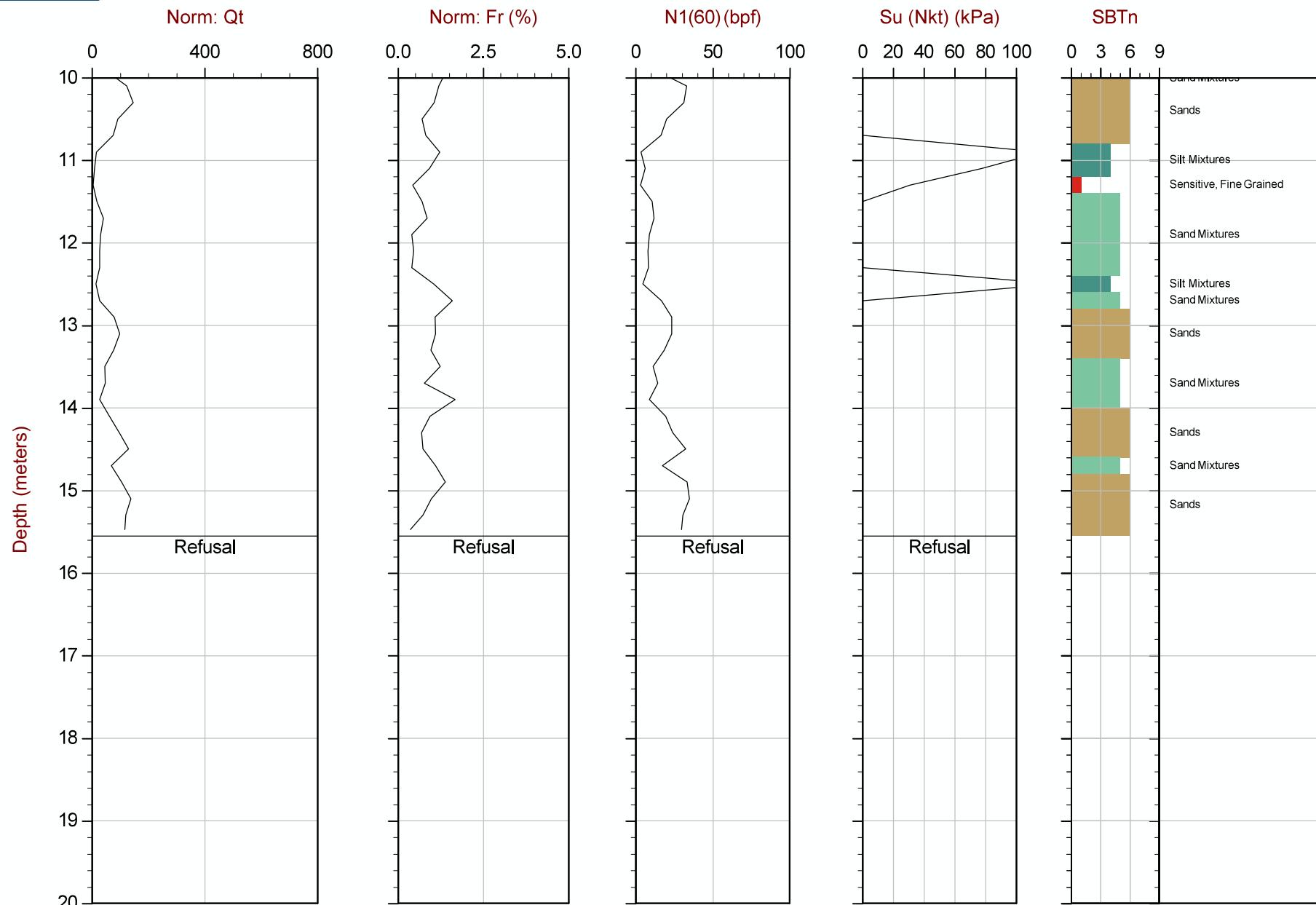


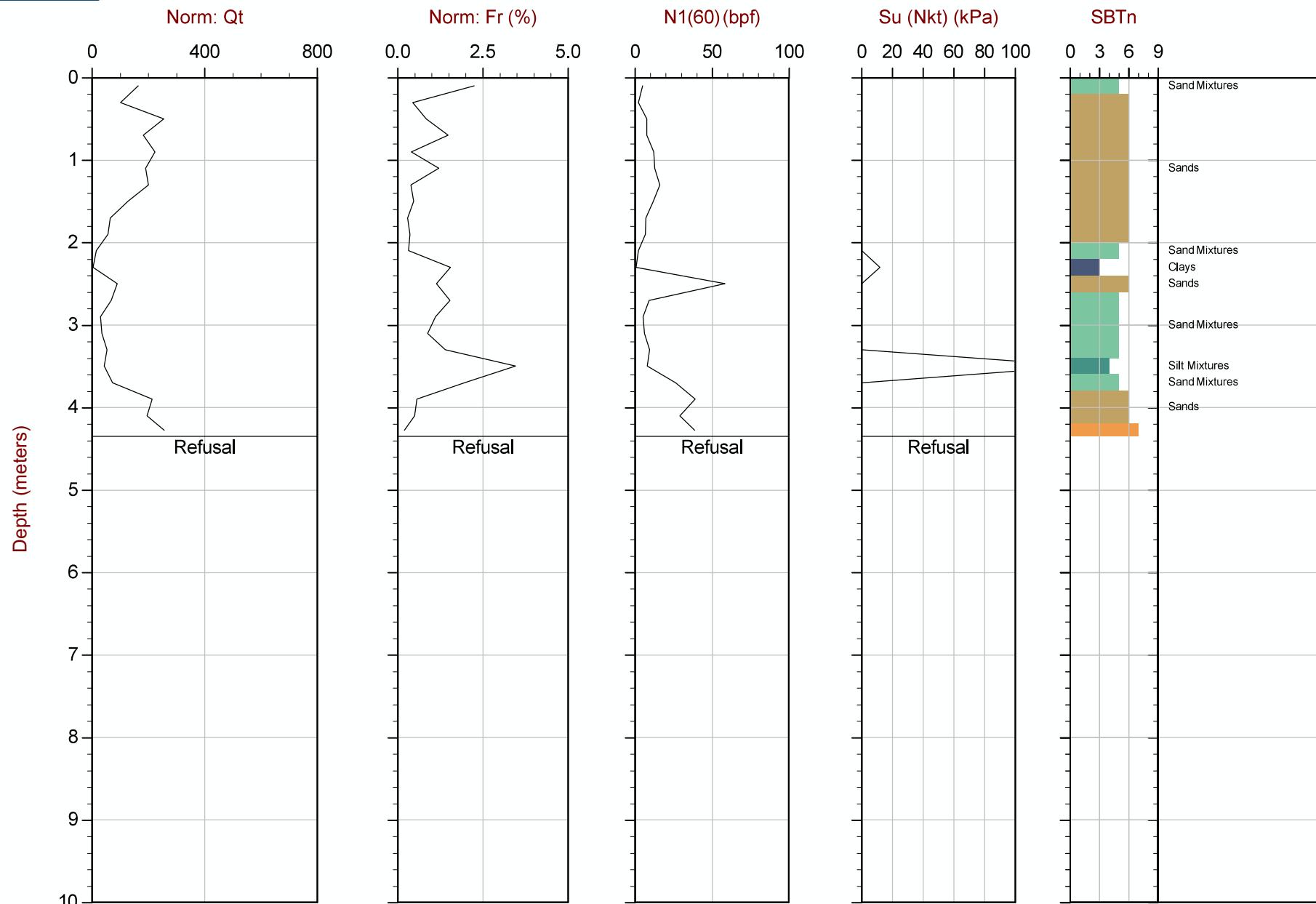
Max Depth: 3.500 m / 11.48 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

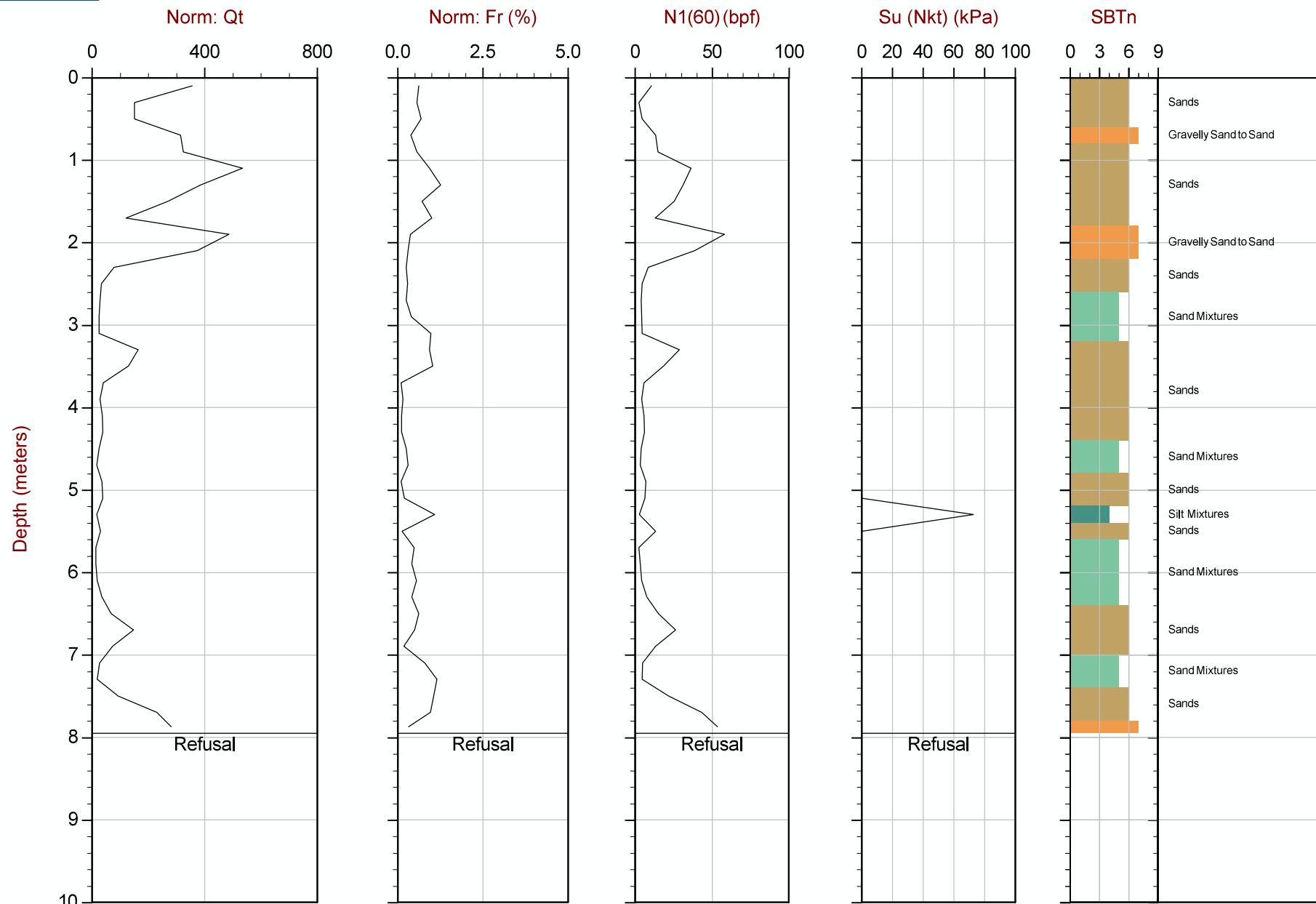
File: 189CP32.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

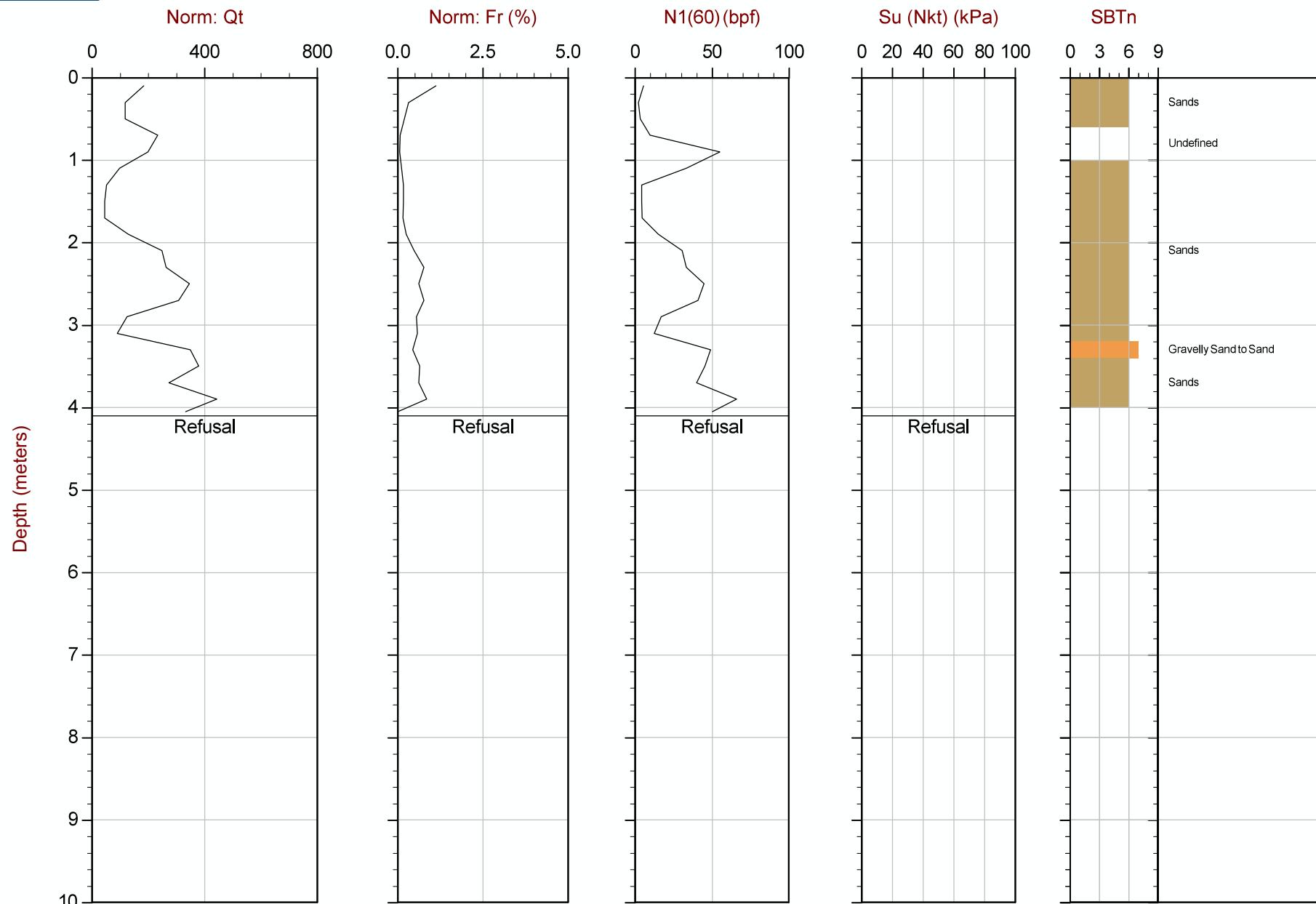
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

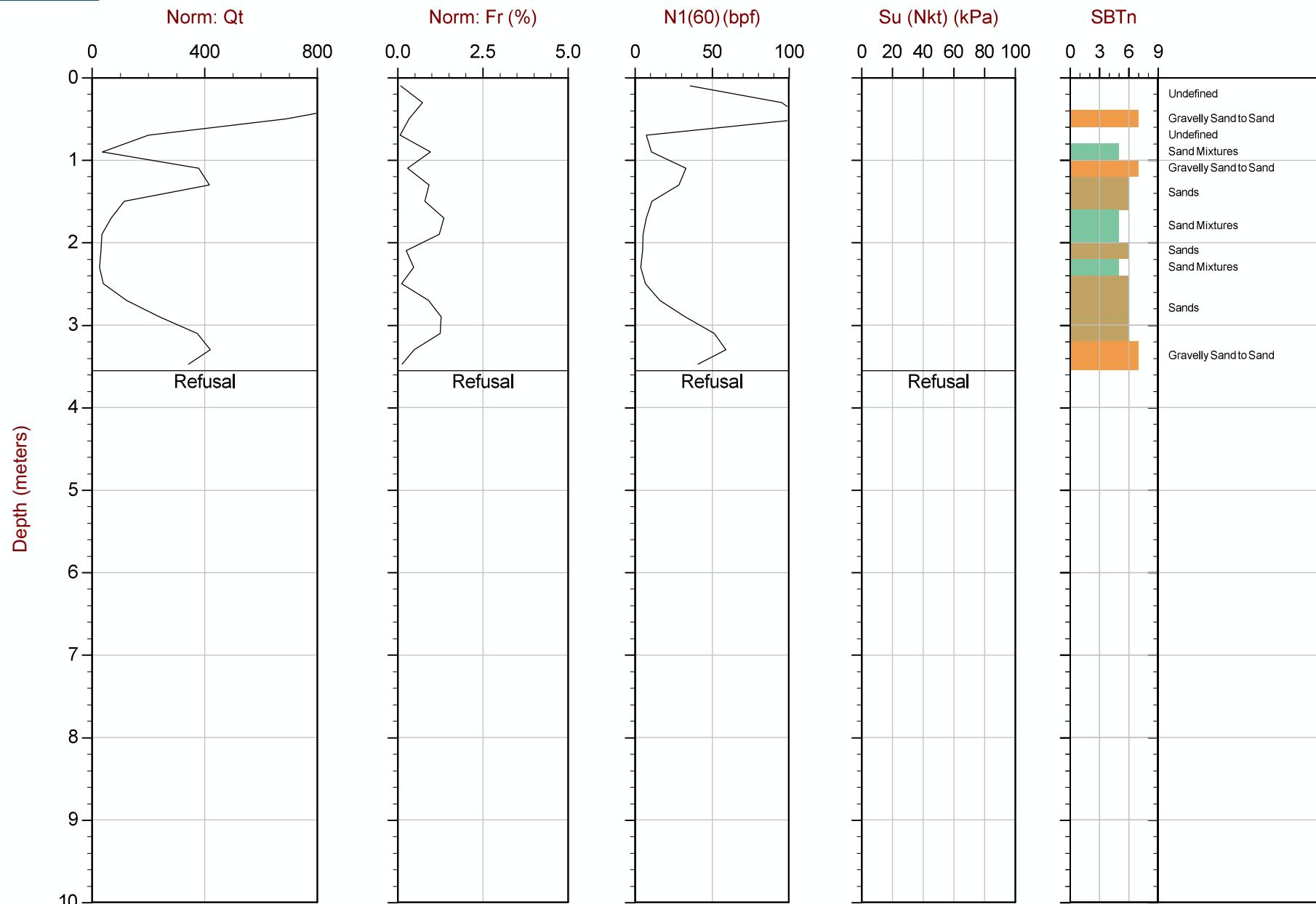


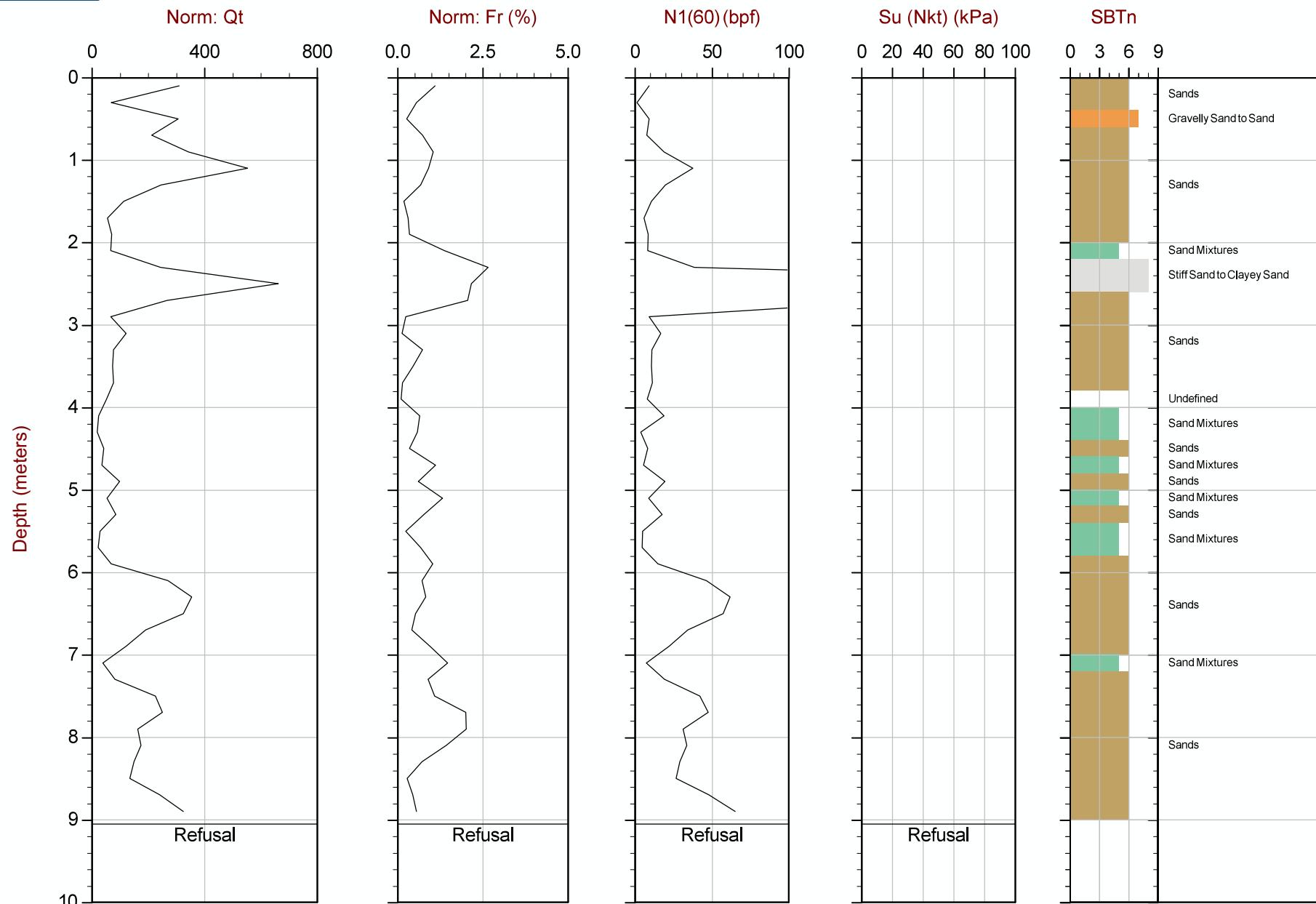


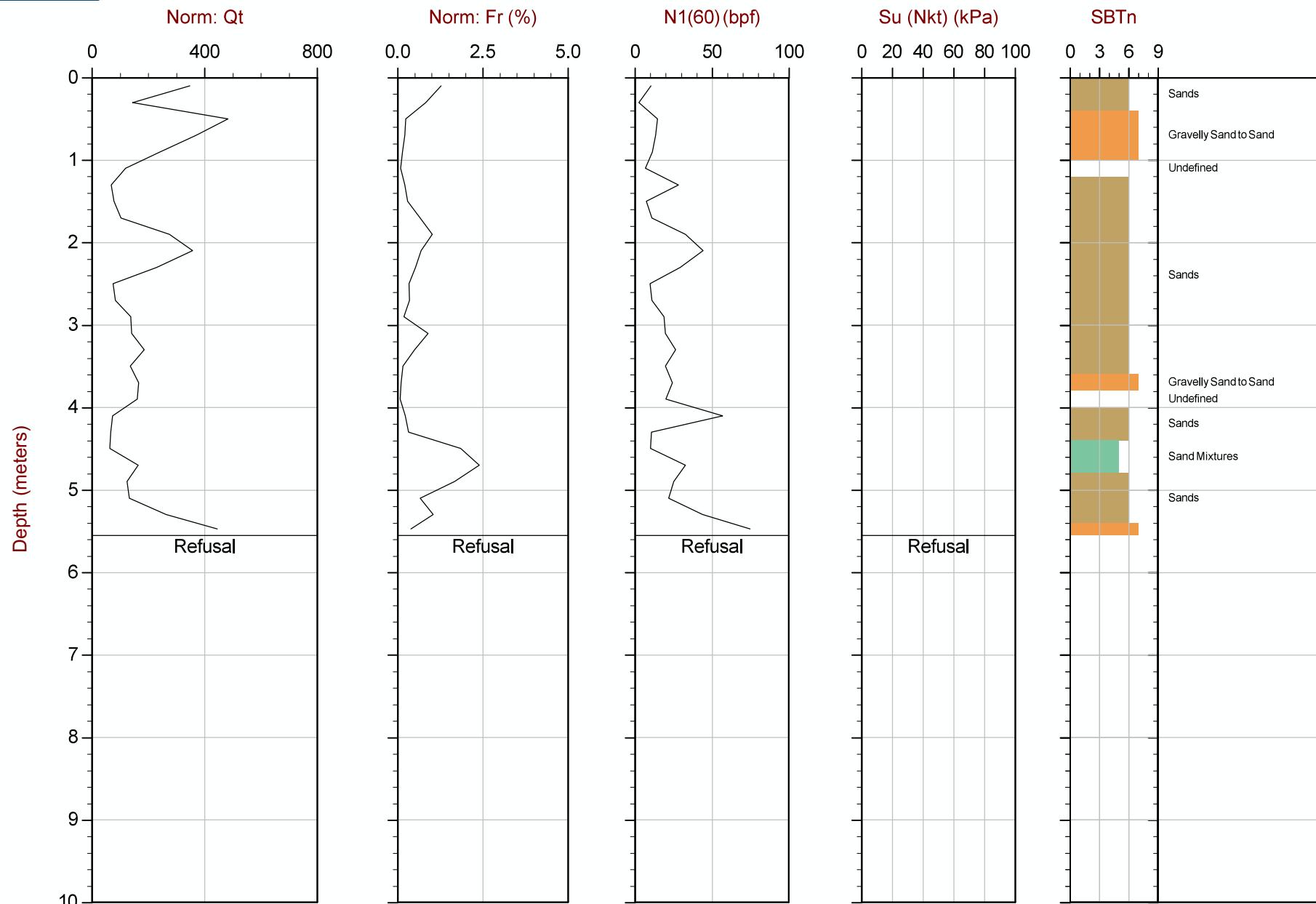


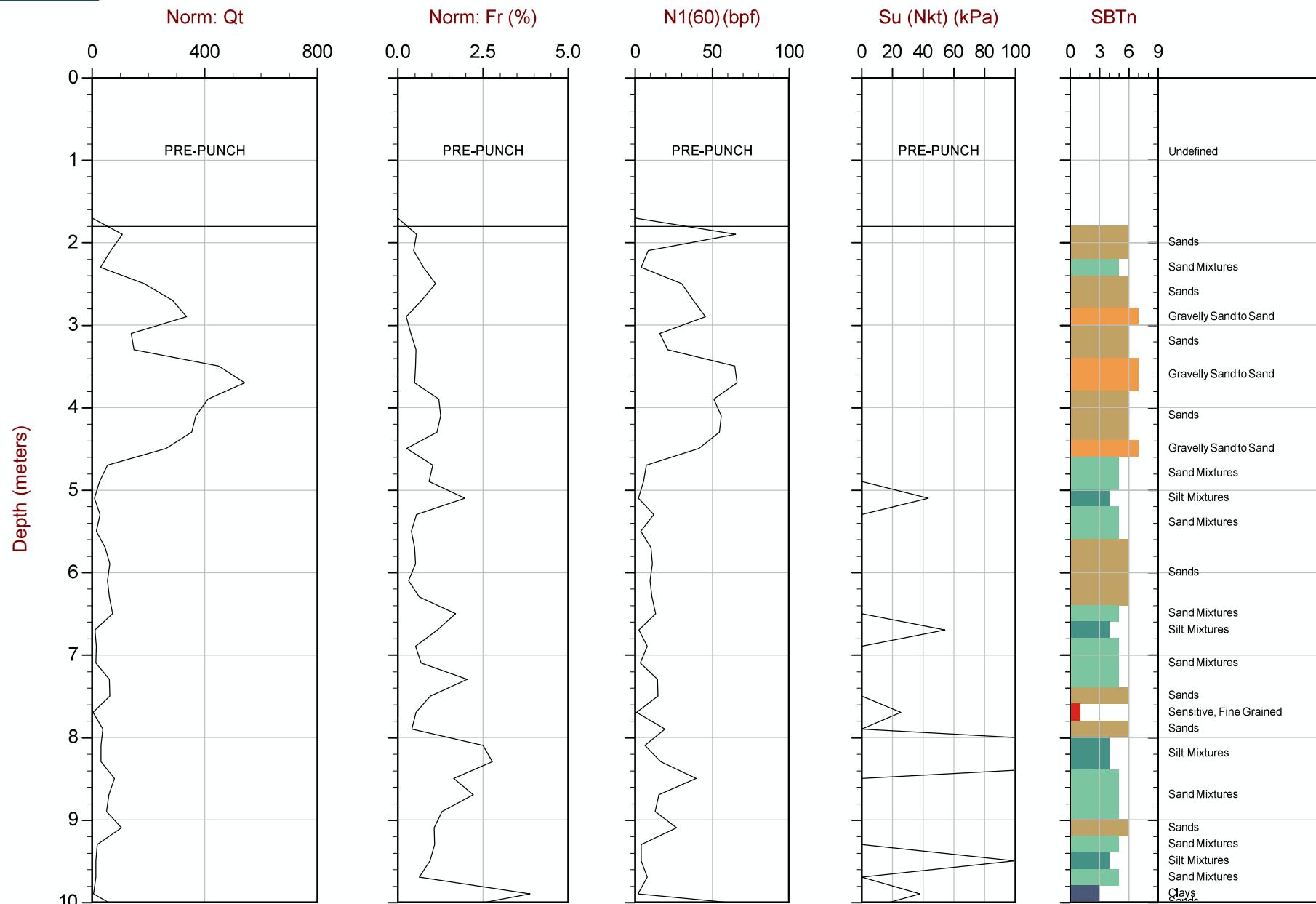








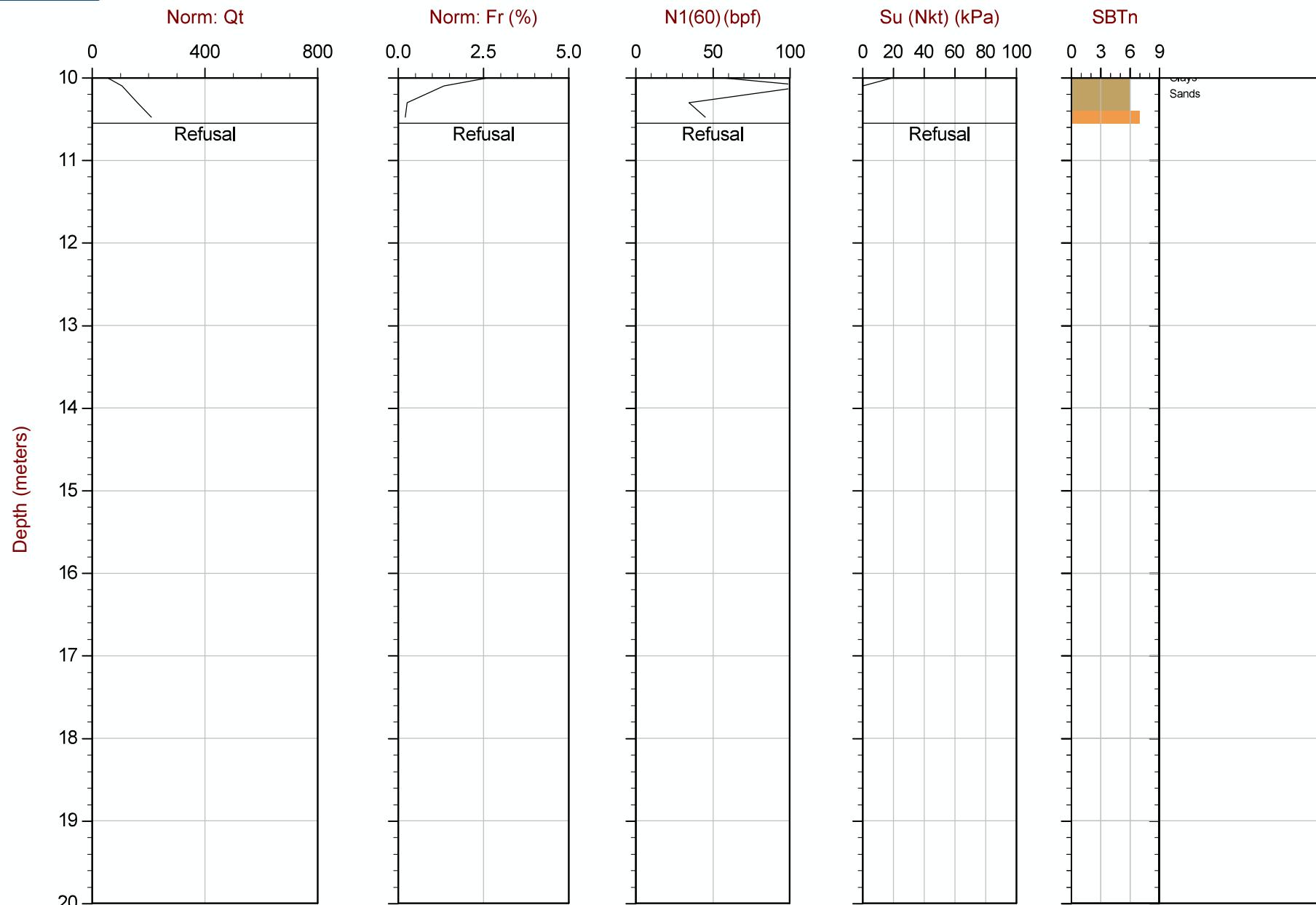




Max Depth: 10.550 m / 34.61 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP68.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 2



Max Depth: 10.550 m / 34.61 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP68.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

SBT: Lunne, Robertson and Powell, 1997
Page No: 2 of 2

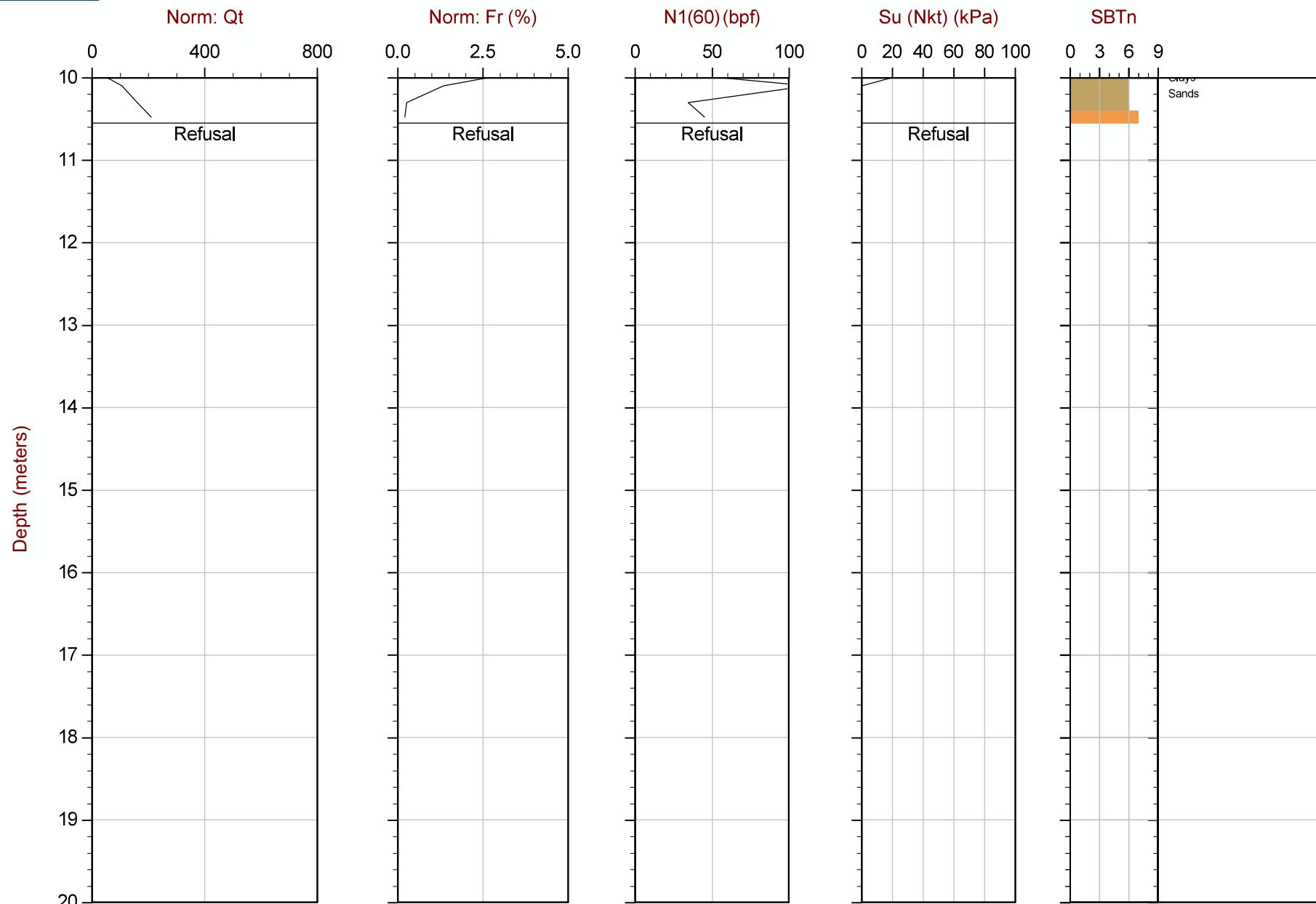


Job No: 08-189
Client: Redfern Resources
Project: Tailings Management Facility, Tulsequah, BC
Date: Oct. 18-28, 2008

PPD SUMMARY

CPT Sounding	Duration (s)	Test Depth (m)	Equilibrium Pore Pressure $U_{eq}(m)^*$	Calculated Phreatic Surface (m)
CPT08-01B	860	2.65	0.7	2.0
CPT08-09	800	7.40	Not Achieved	-
CPT08-13	800	4.75	3.3	1.5
CPT08-16	300	2.50	0.6	1.9
CPT08-18B	600	2.50	0.7	1.8
CPT08-23	400	3.80	1.9	1.9
CPT08-24	200	4.80	2.9	1.9
CPT08-26	300	3.50	1.1	2.4
CPT08-27	600	3.70	0.7	3.0
CPT08-31	700	5.85	3.5	2.3
CPT08-41	600	3.20	0.0	>3.2
CPT08-43	405	4.50	1.0	3.5
	300	11.00	7.6	3.4
	700	12.60	9.0	3.6
CPT08-51	400	4.35	1.3	3.1
CPT08-54	400	5.55	3.7	1.9
	400	7.95	6.2	1.8
CPT08-55	400	3.85	1.7	2.2
CPT08-56	300	3.55	1.8	1.7
CPT08-65	600	4.65	0.6	4.0
	300	9.05	4.9	4.2
CPT08-66	400	4.60	3.0	1.6
CPT08-68	400	5.05	3.7	1.4
	300	10.55	9.5	1.0

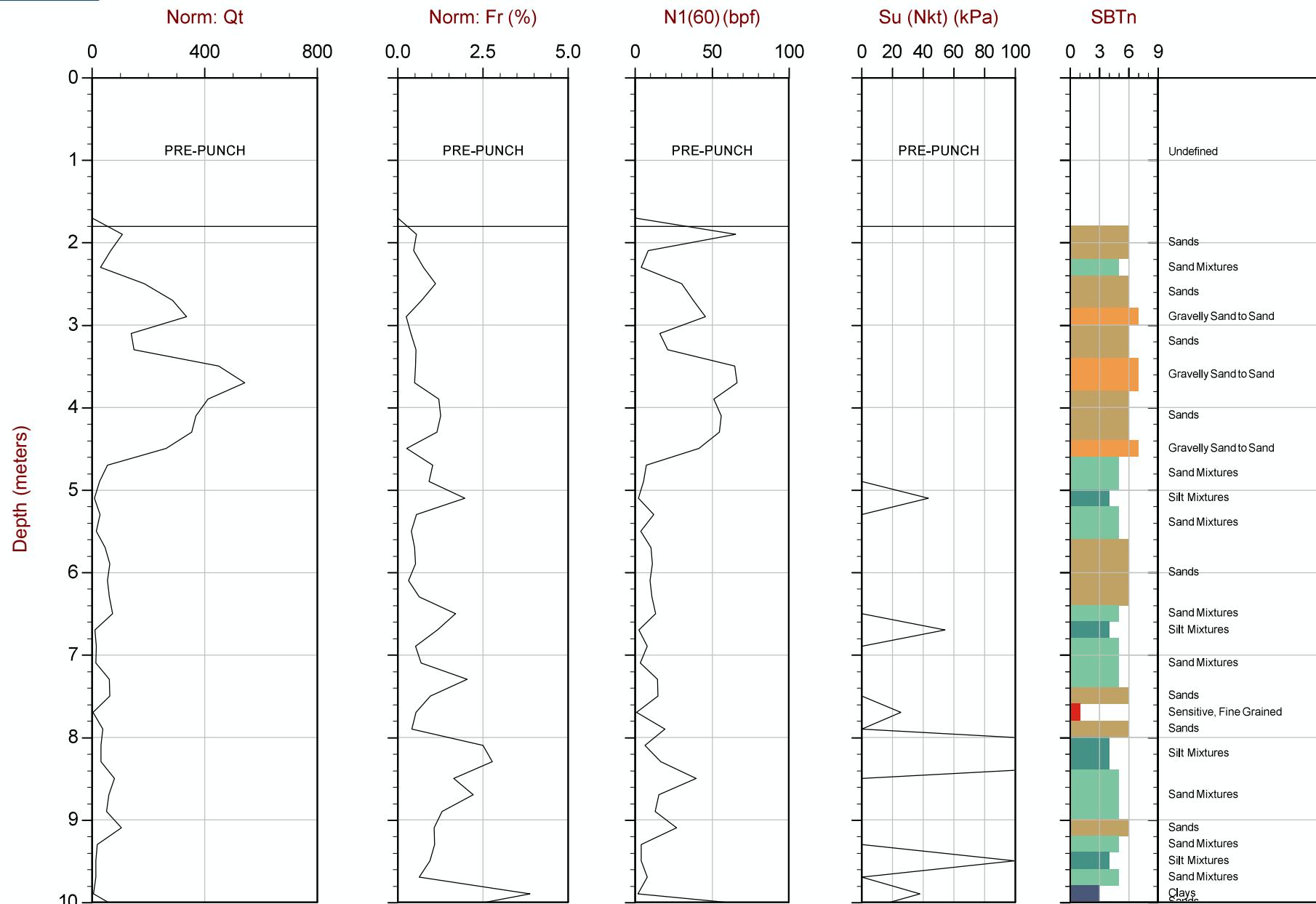
* Equilibrium pore pressure estimated from dissipation tests.



Max Depth: 10.550 m / 34.61 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP68.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

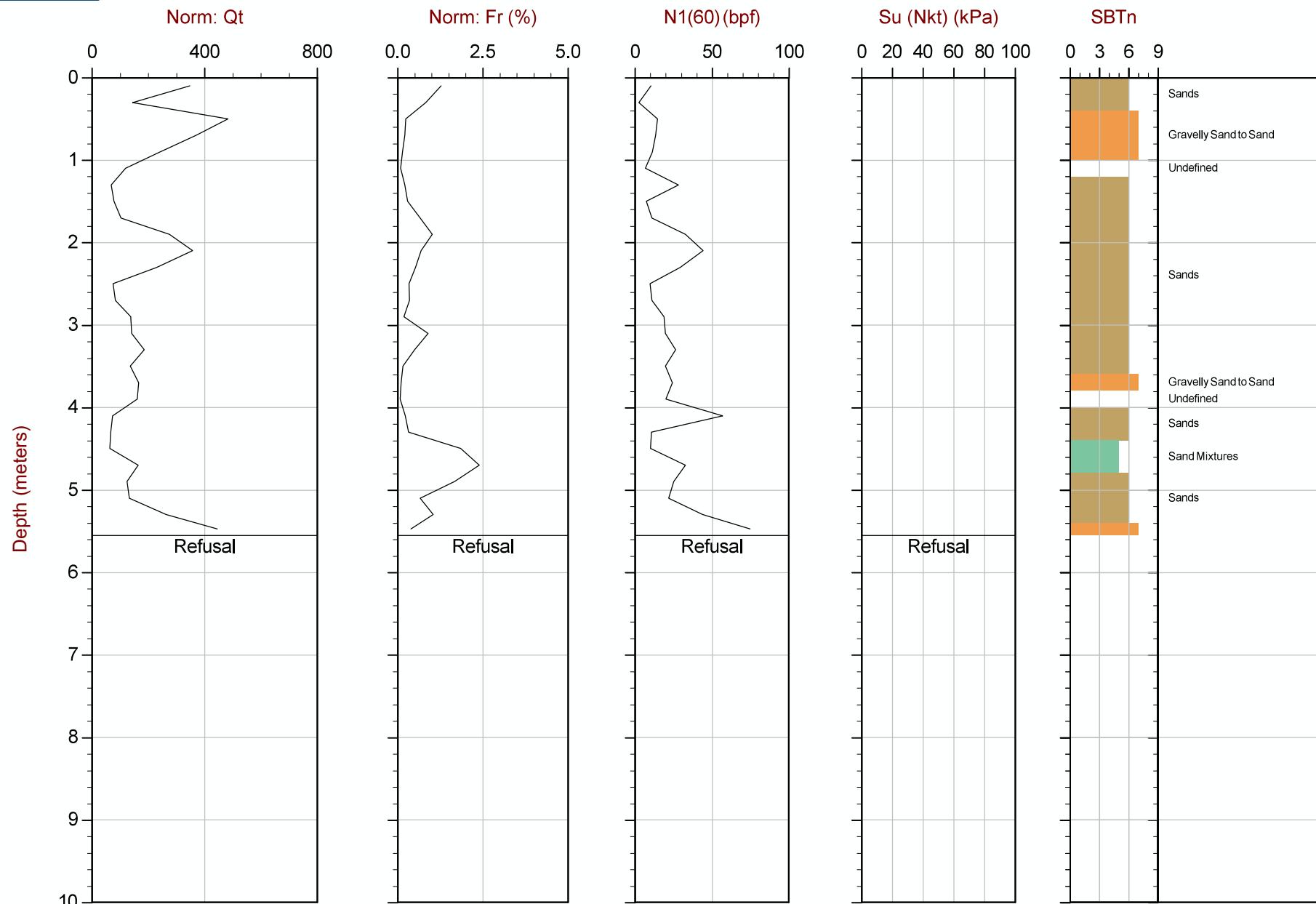
SBT: Lunne, Robertson and Powell, 1997
Page No: 2 of 2

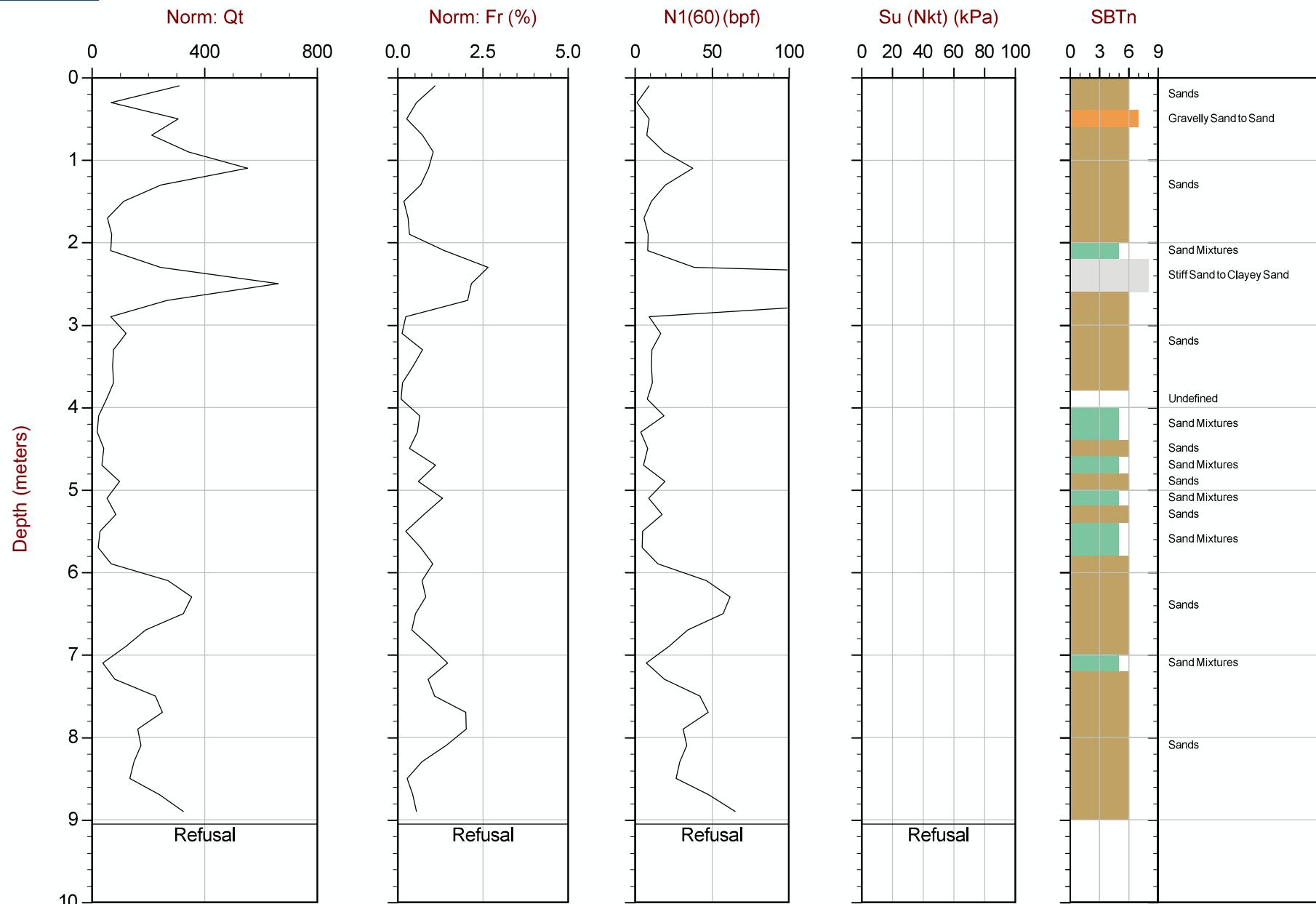


Max Depth: 10.550 m / 34.61 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP68.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 2

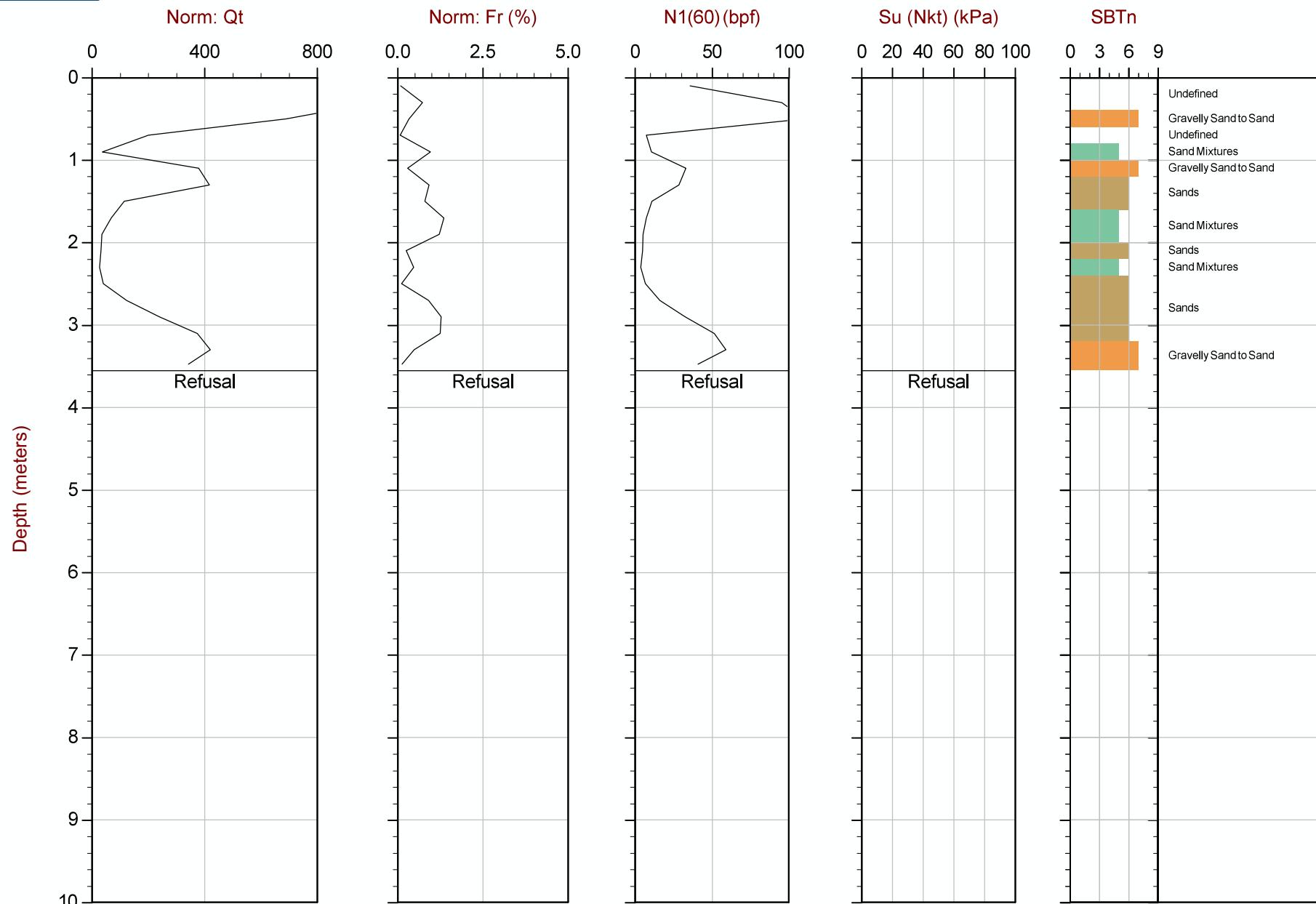


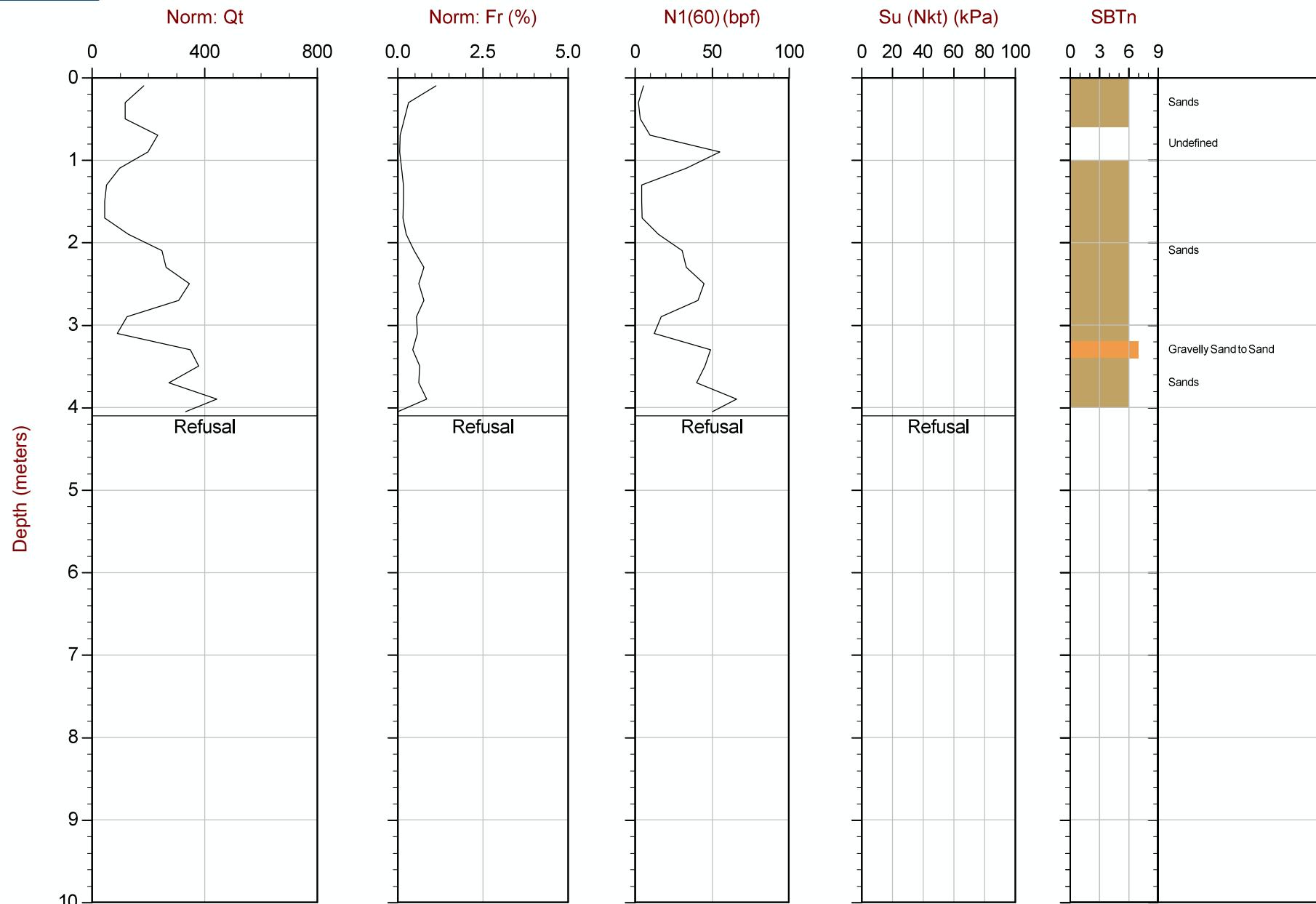


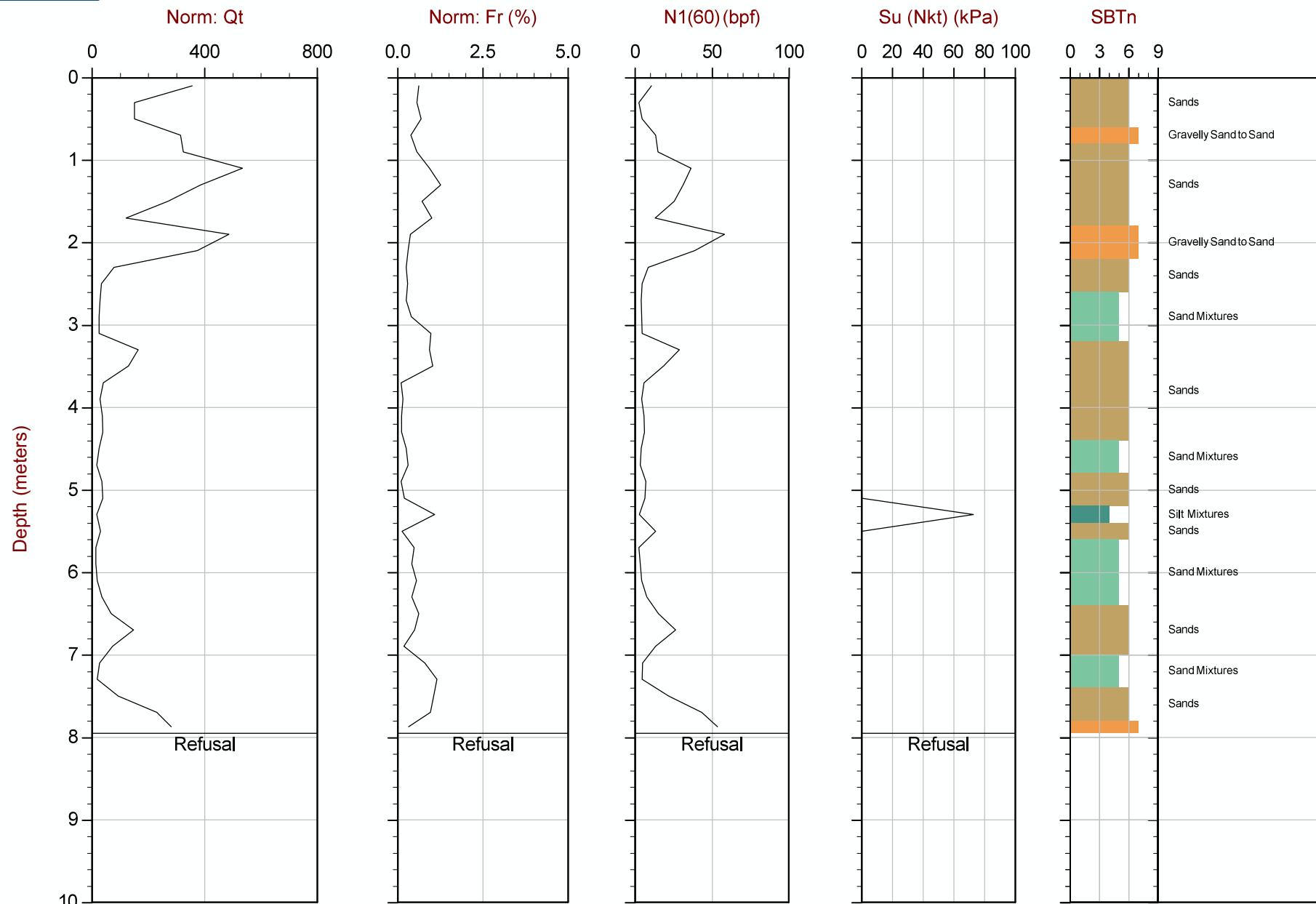
Max Depth: 9.050 m / 29.69 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

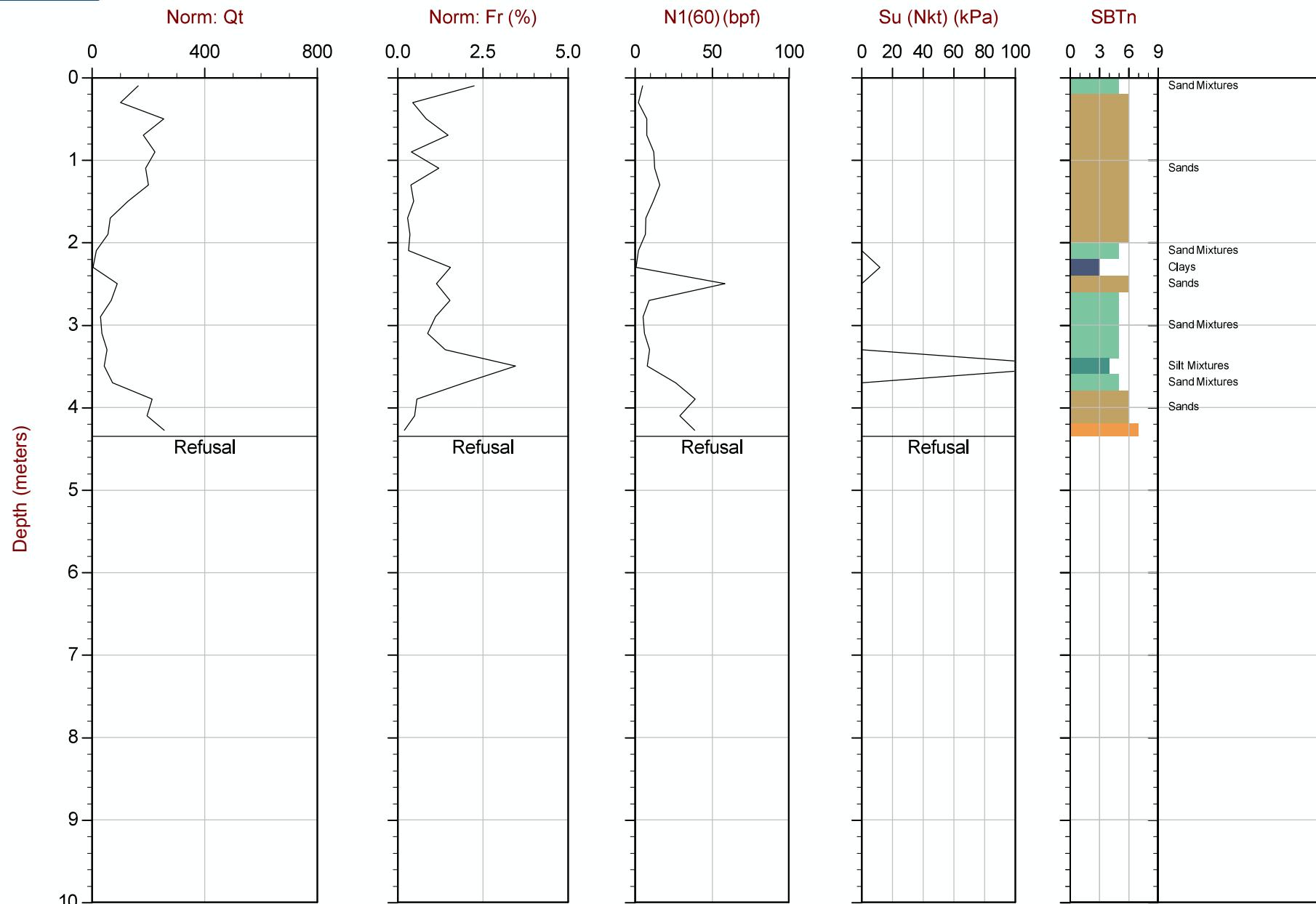
File: 189CP65.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

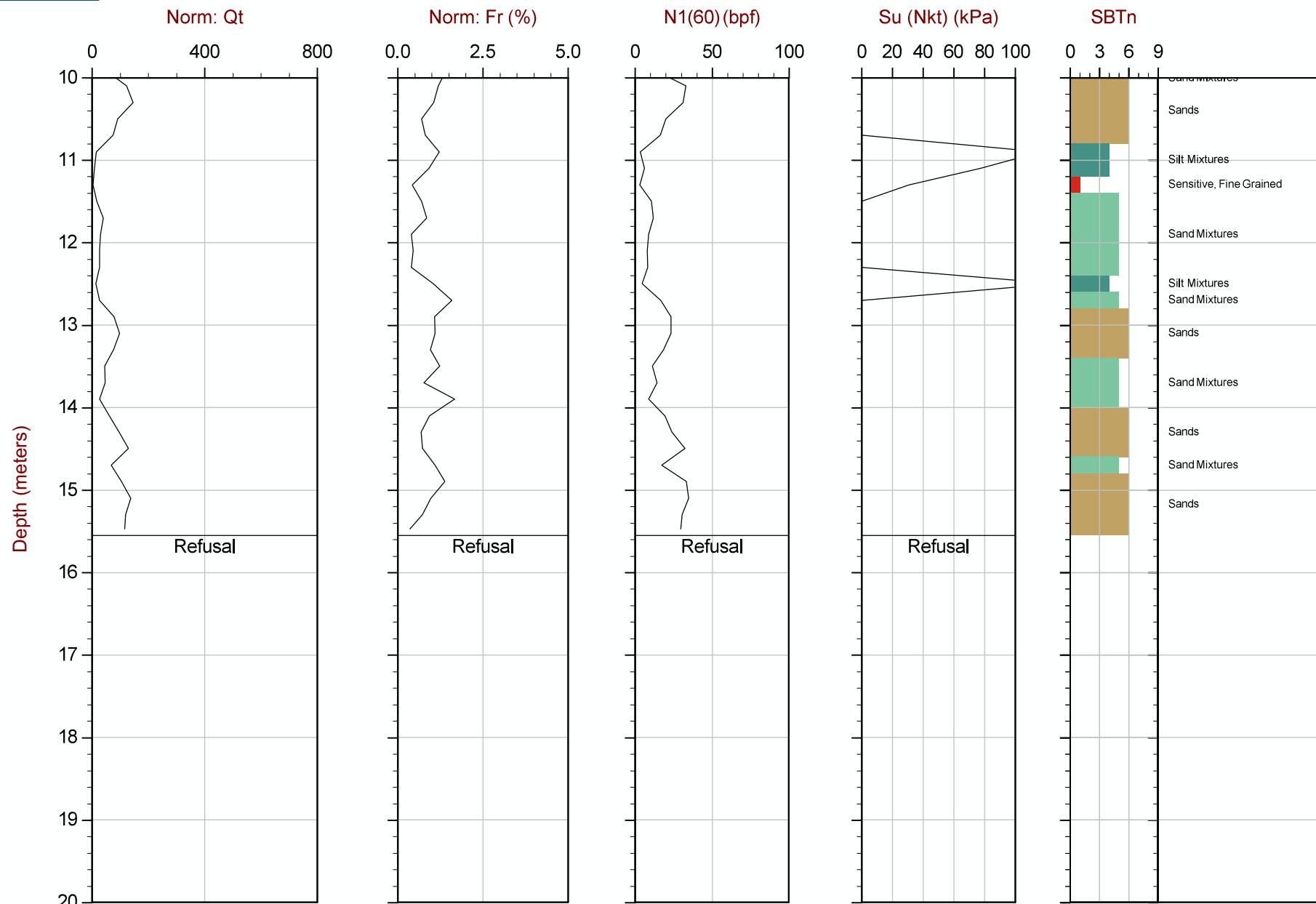
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

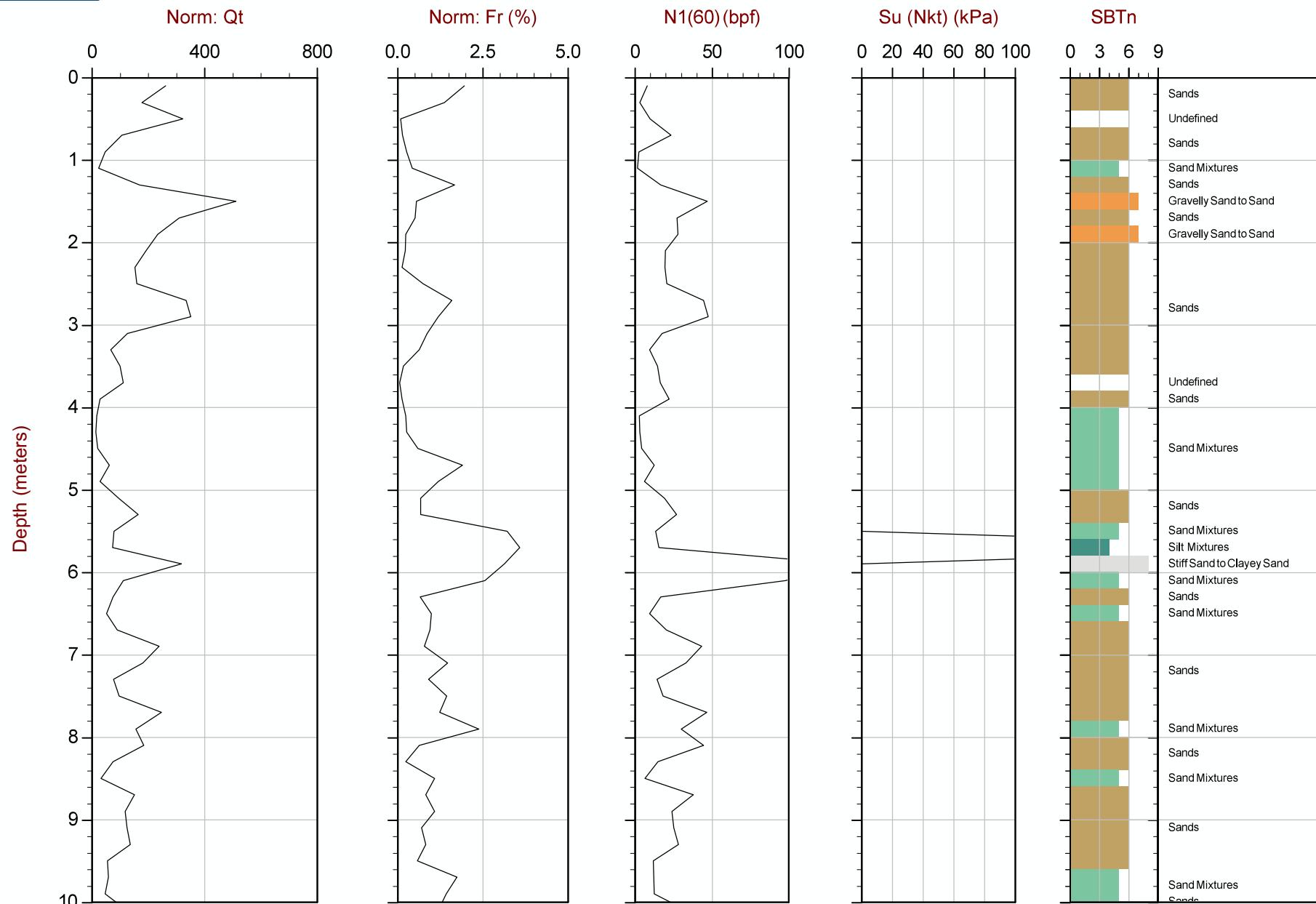








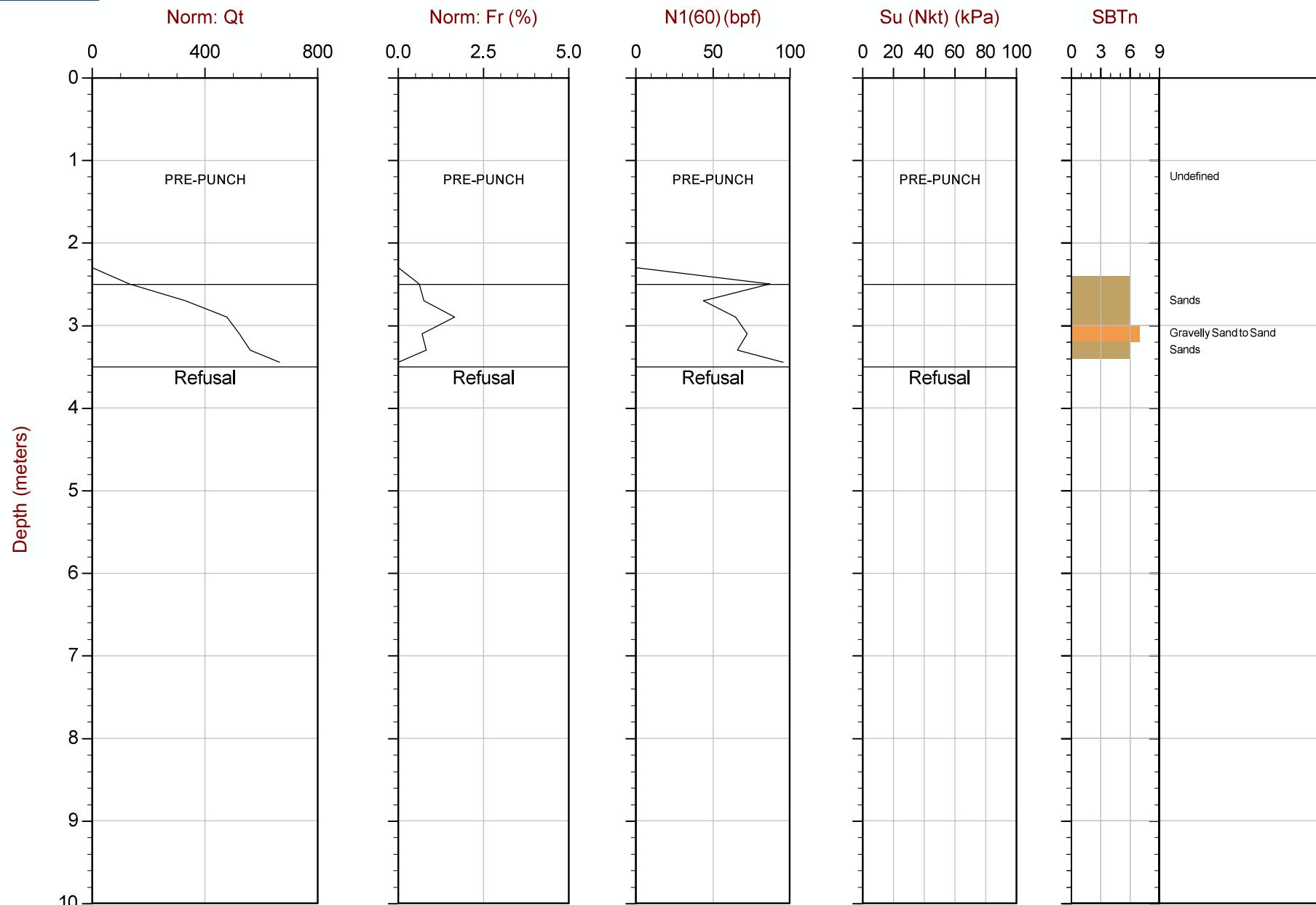




Max Depth: 15.550 m / 51.02 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP43.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

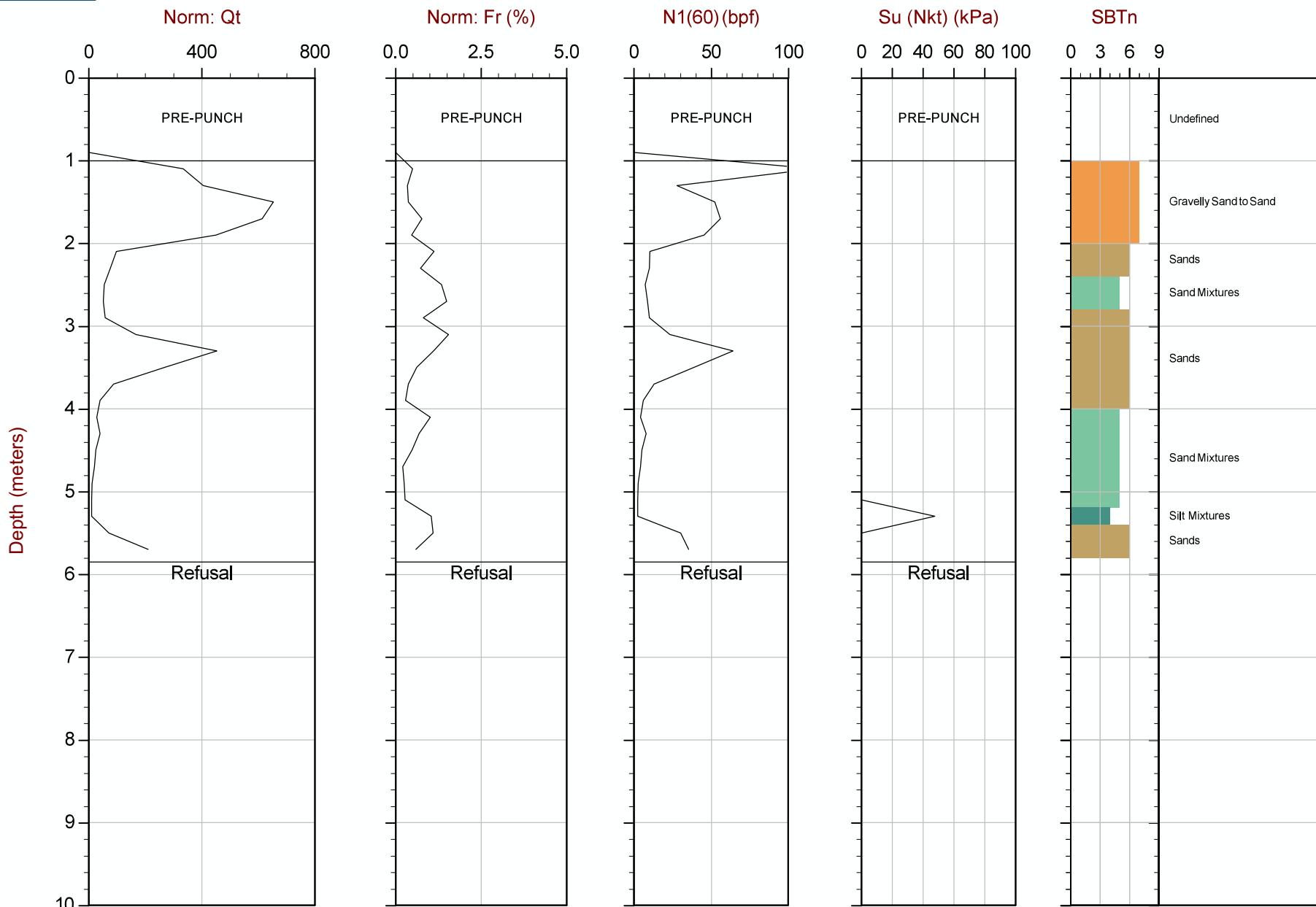
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 2



Max Depth: 3.500 m / 11.48 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP32.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

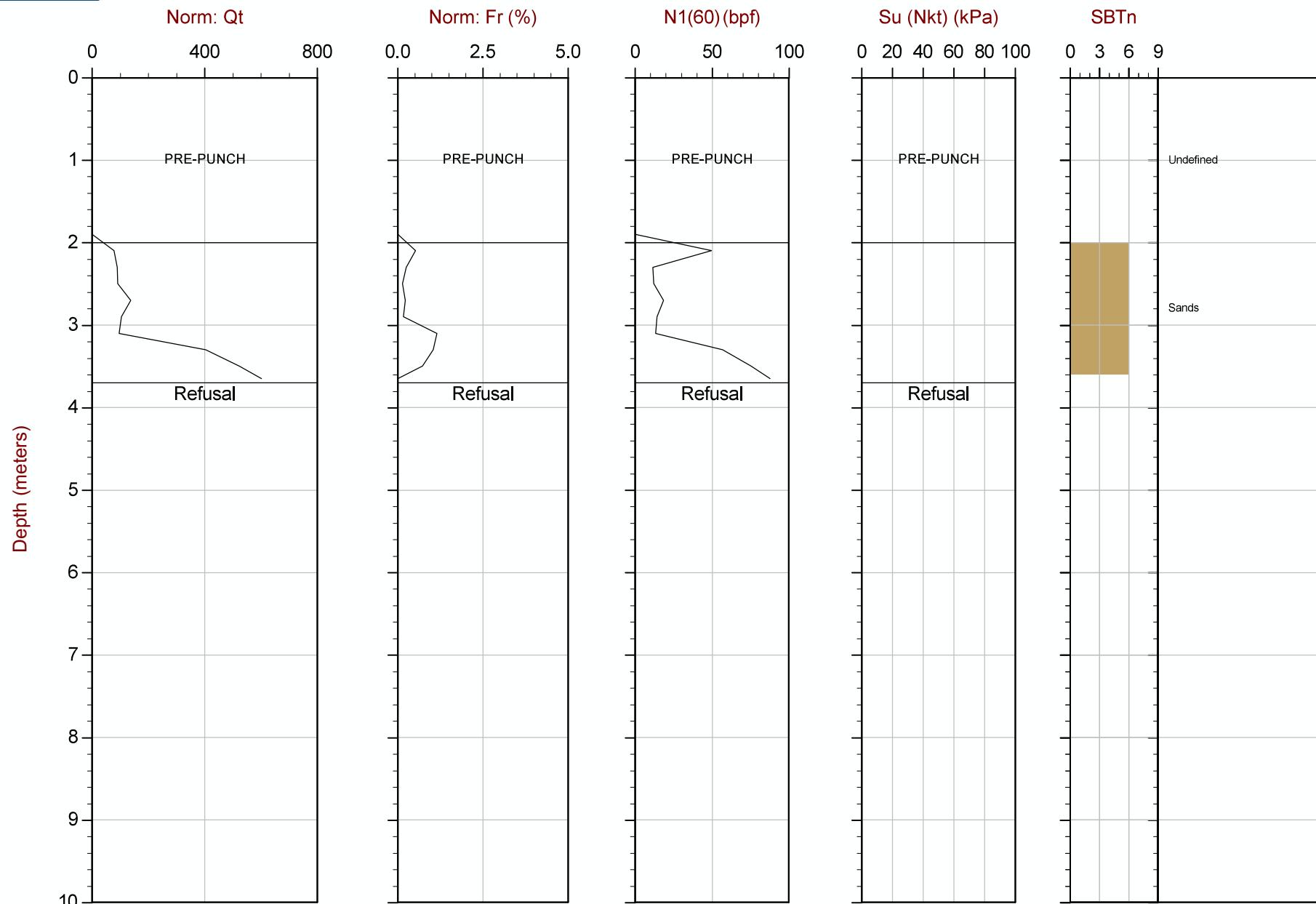
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 5.850 m / 19.19 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP31.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

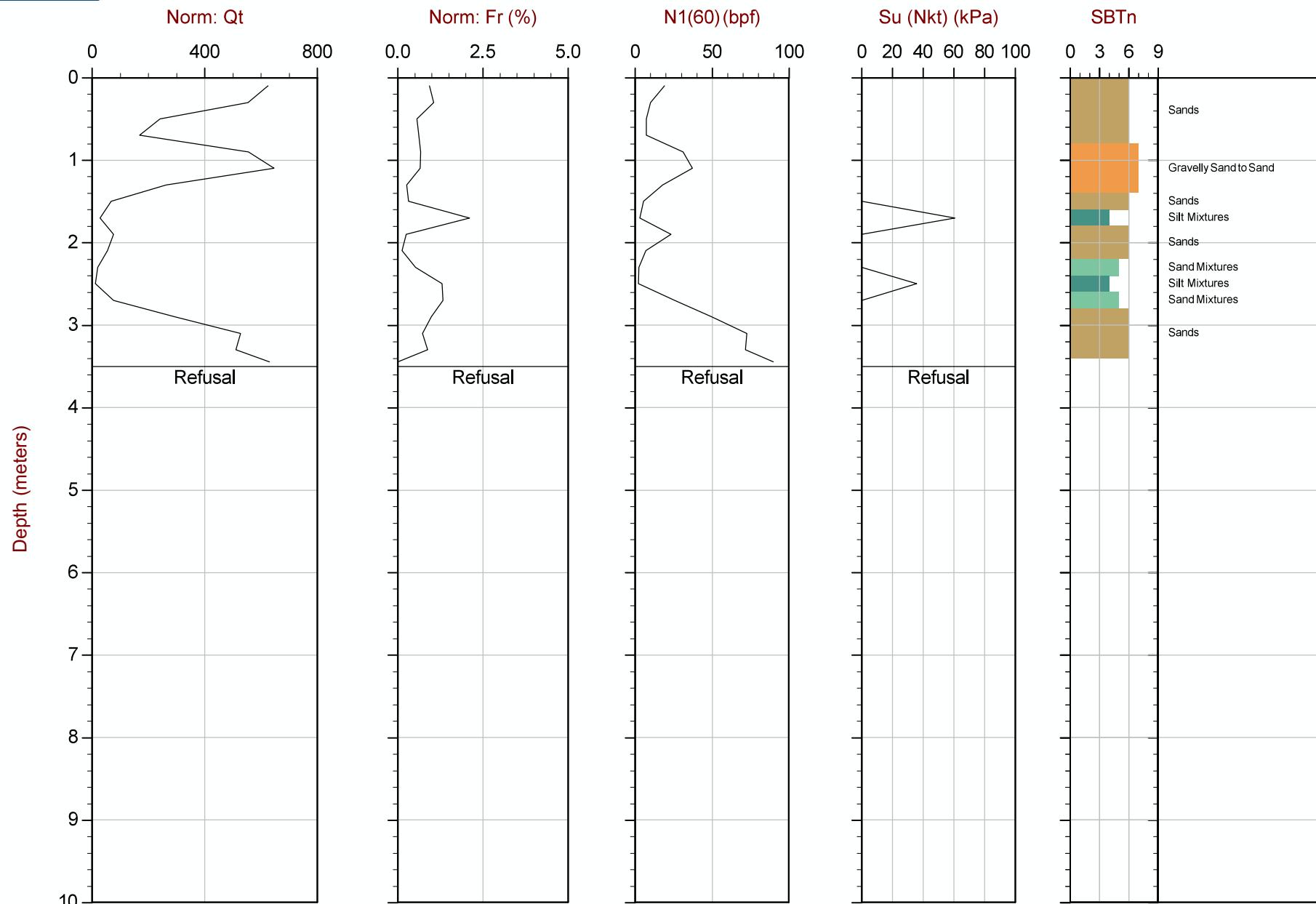
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

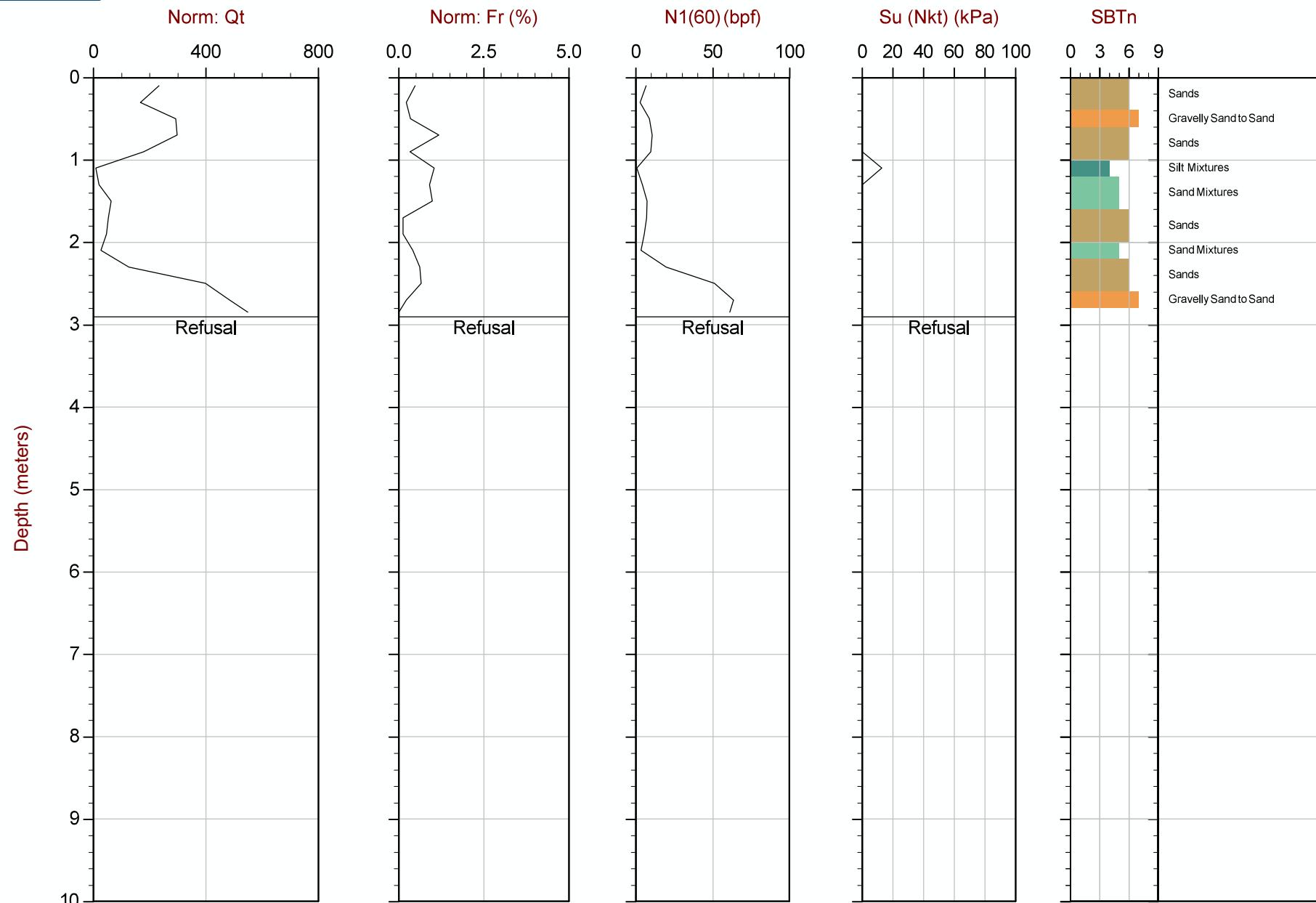


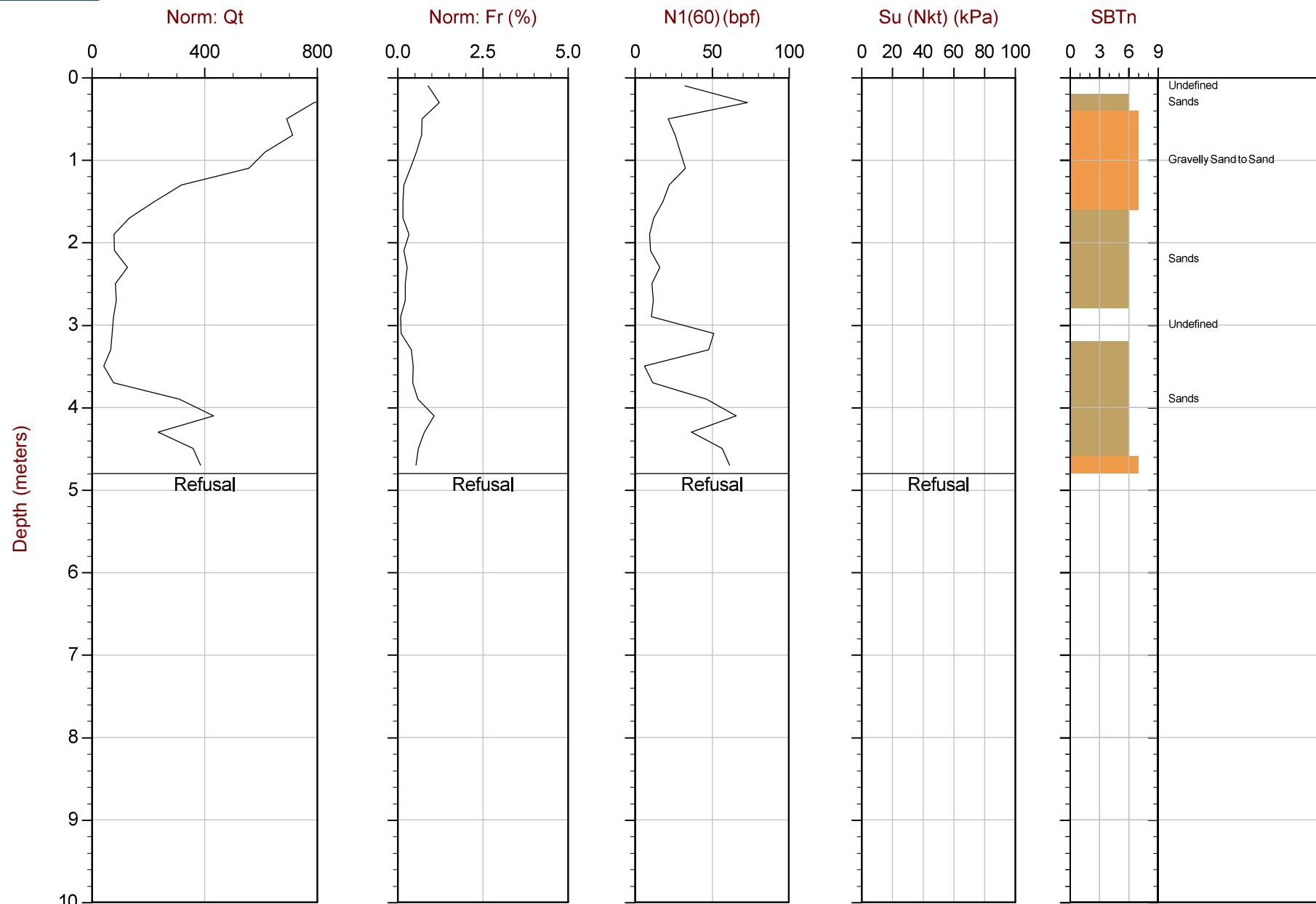
Max Depth: 3.700 m / 12.14 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

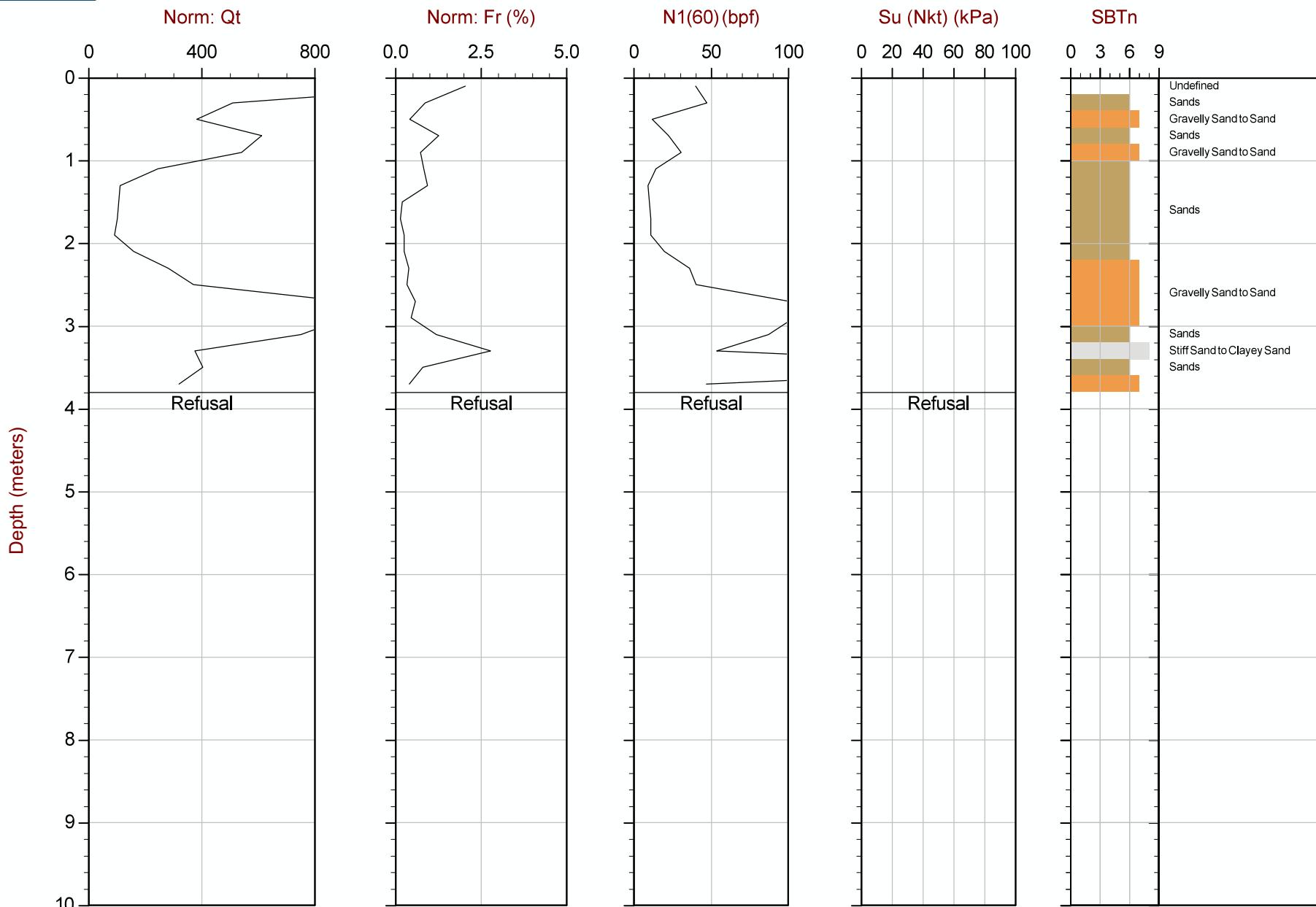
File: 189CP27.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1





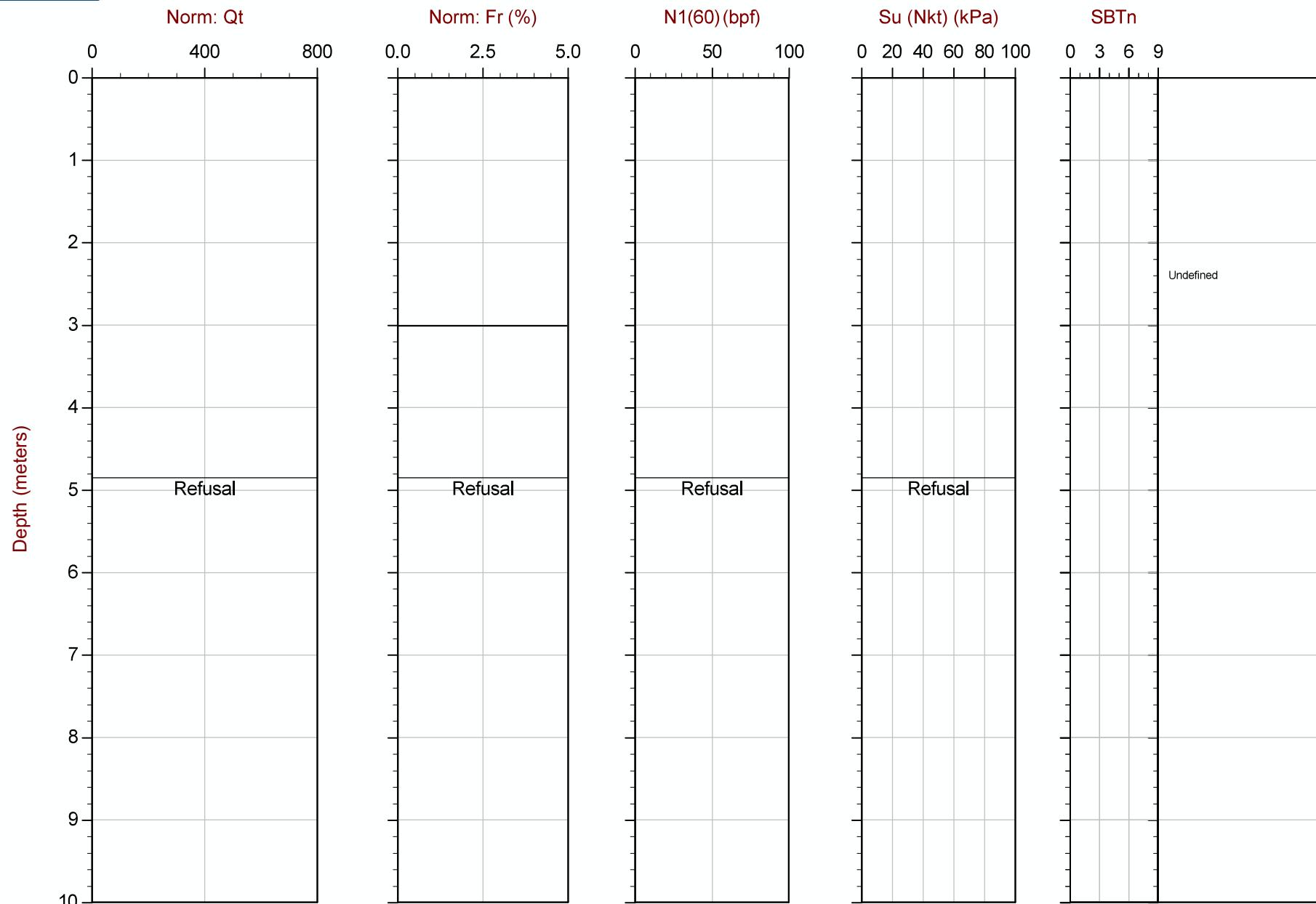




Max Depth: 3.800 m / 12.47 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP23.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

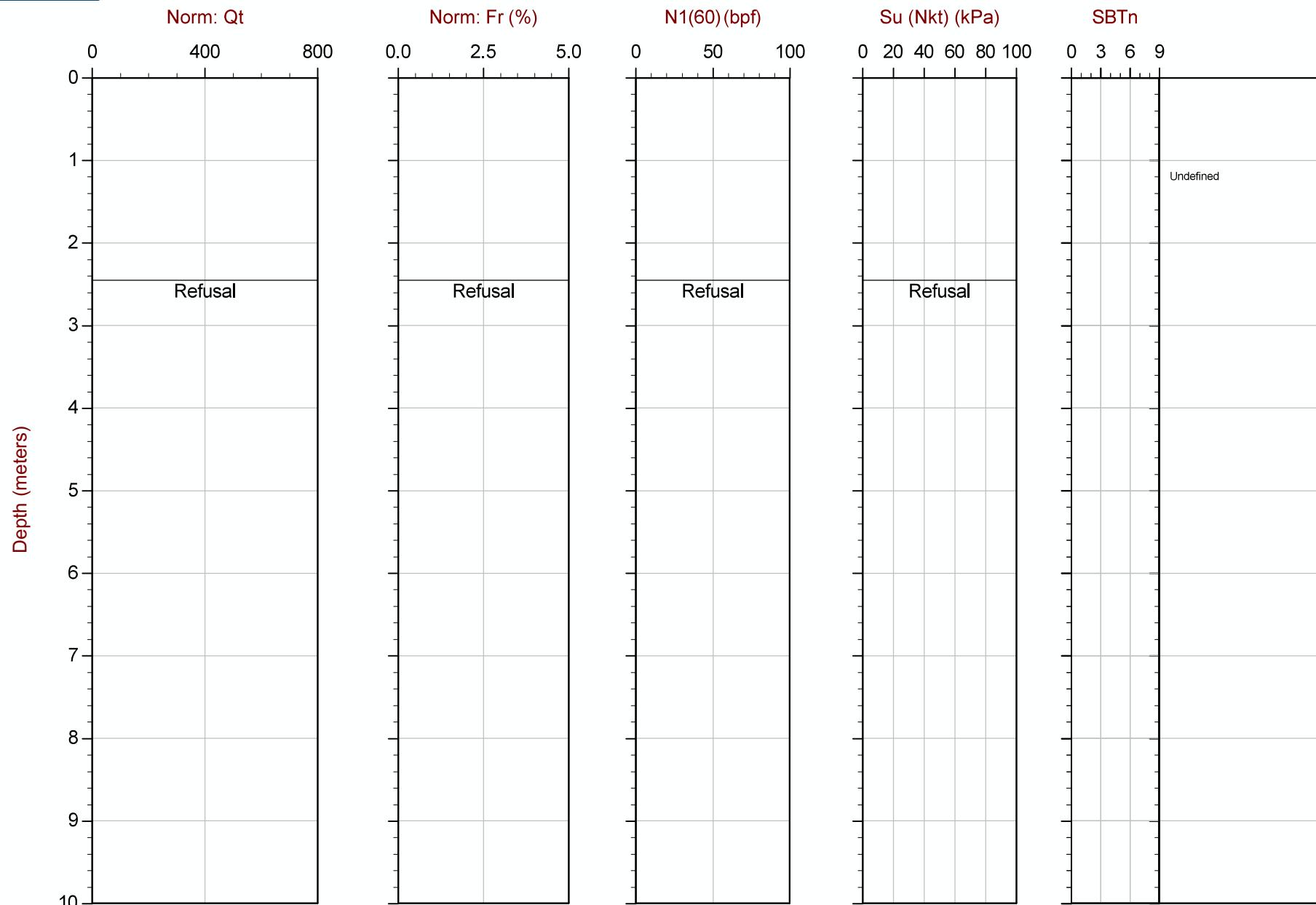
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.850 m / 15.91 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP18B.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

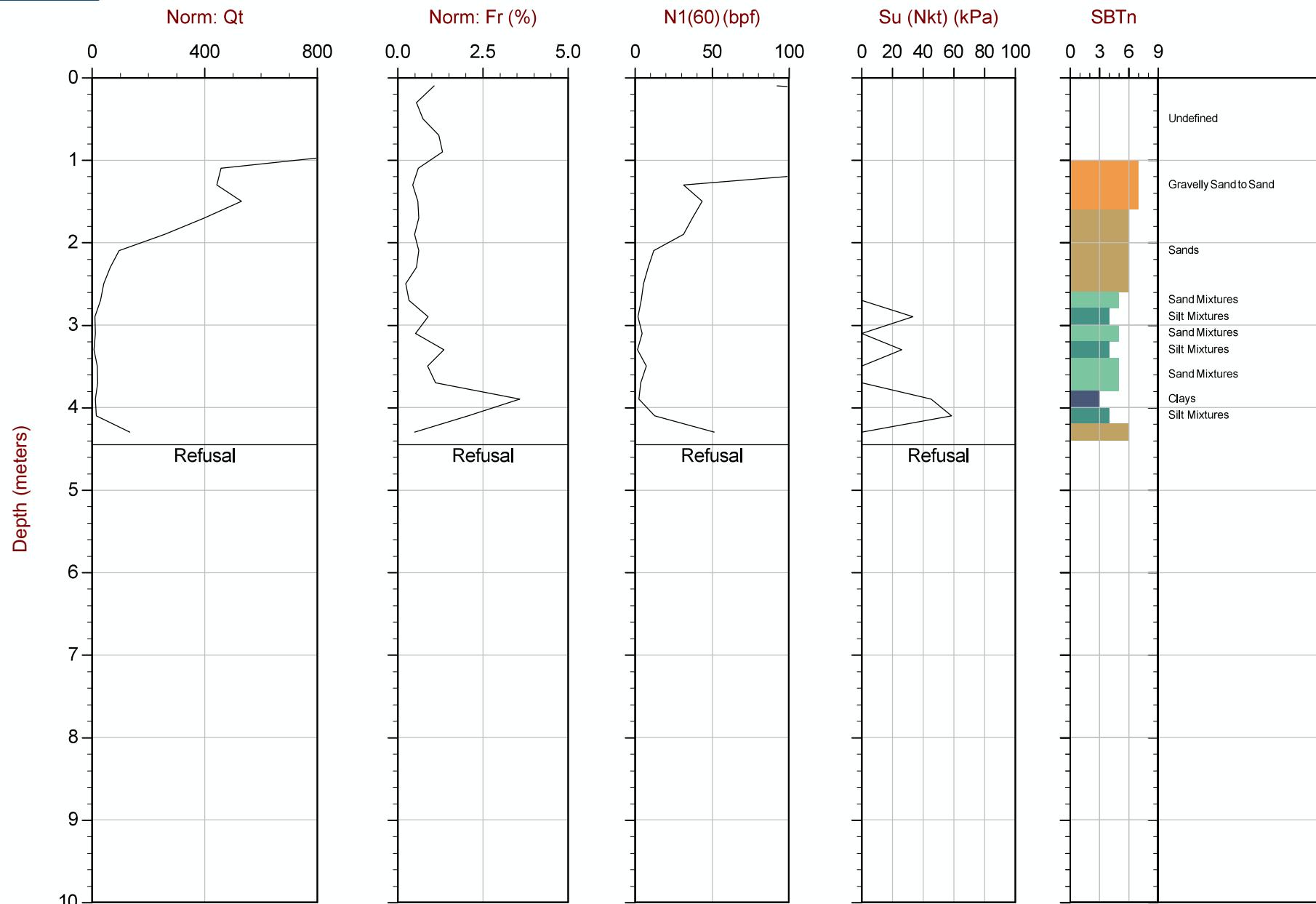
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

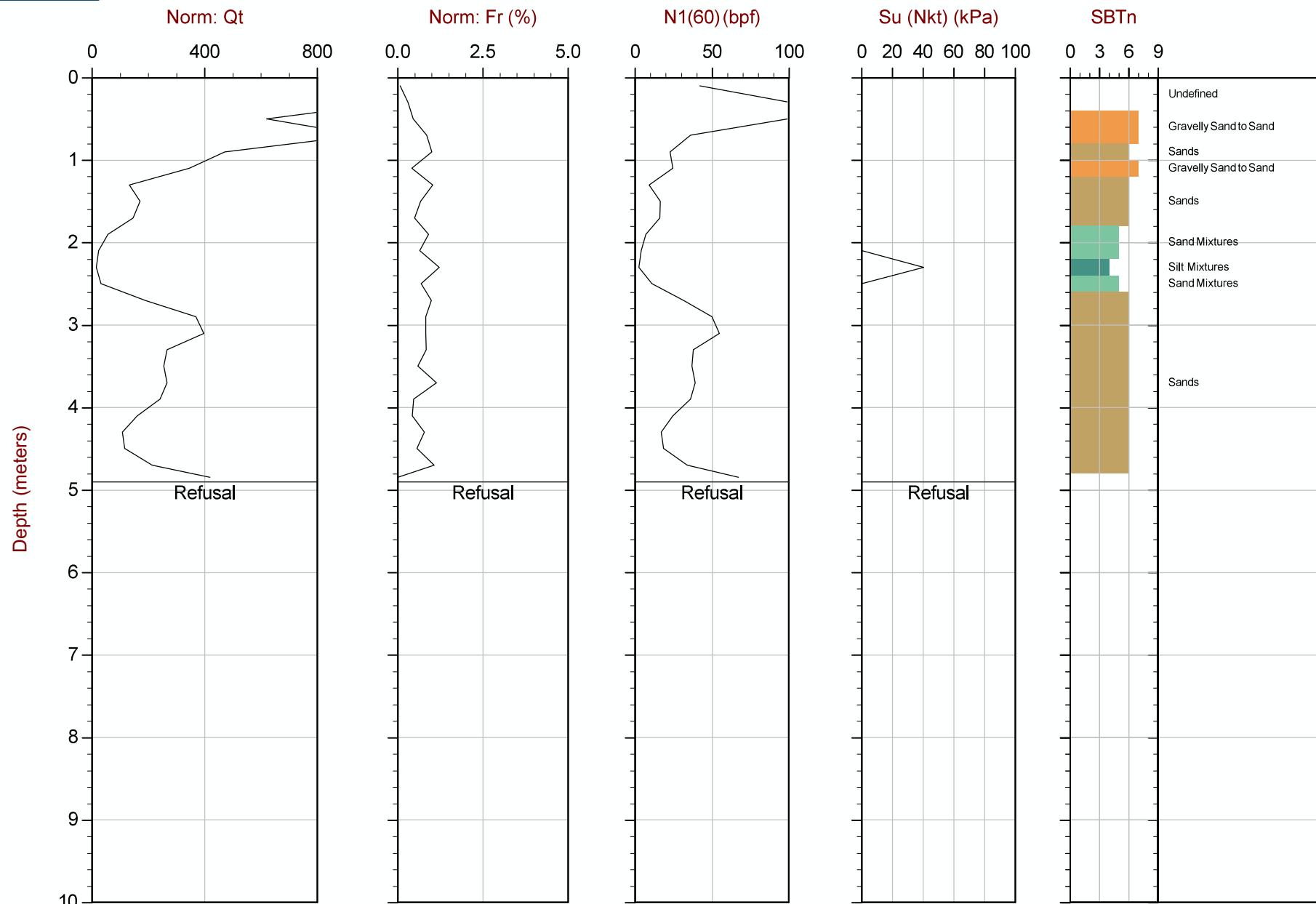


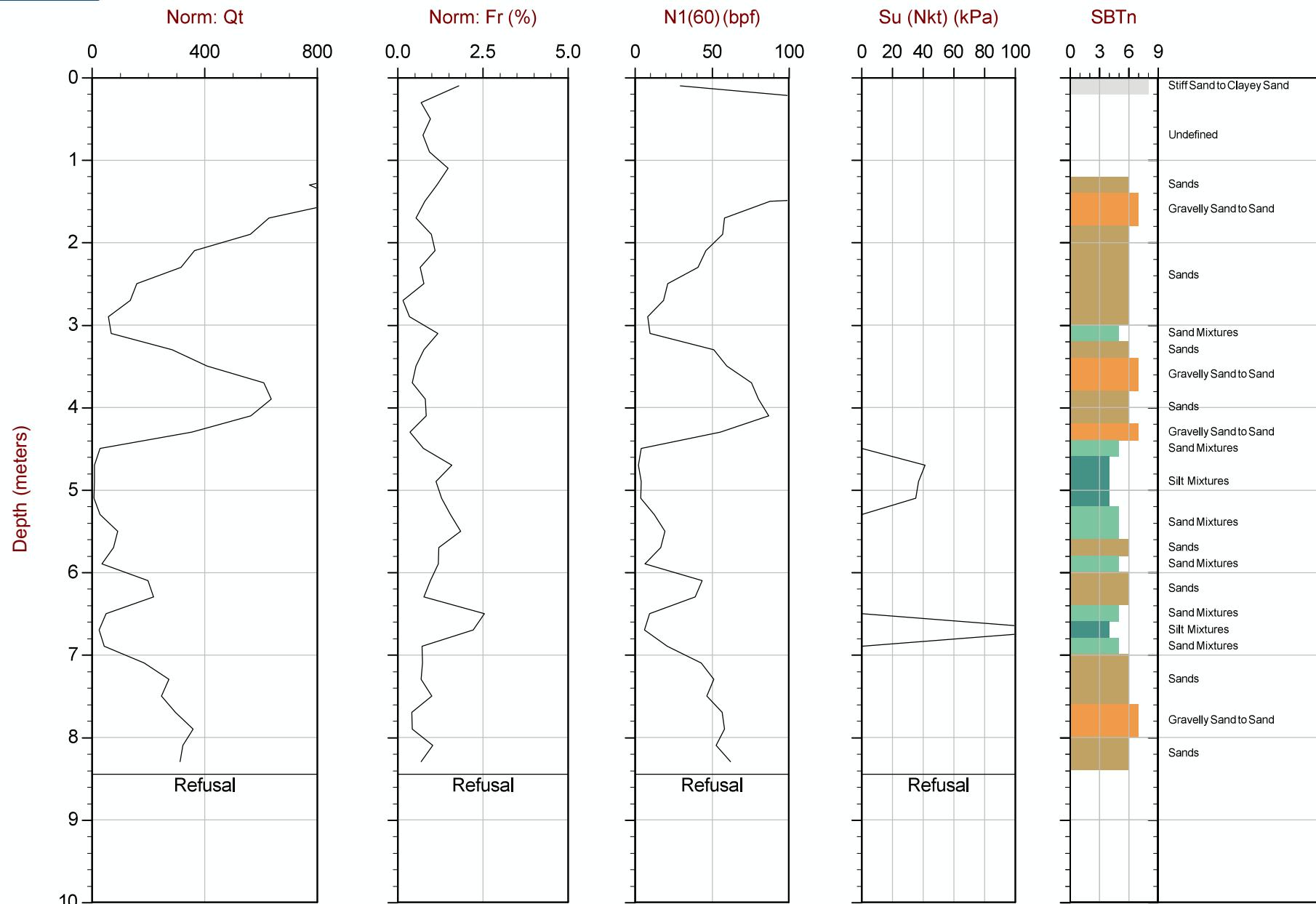
Max Depth: 2.450 m / 8.04 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP18.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



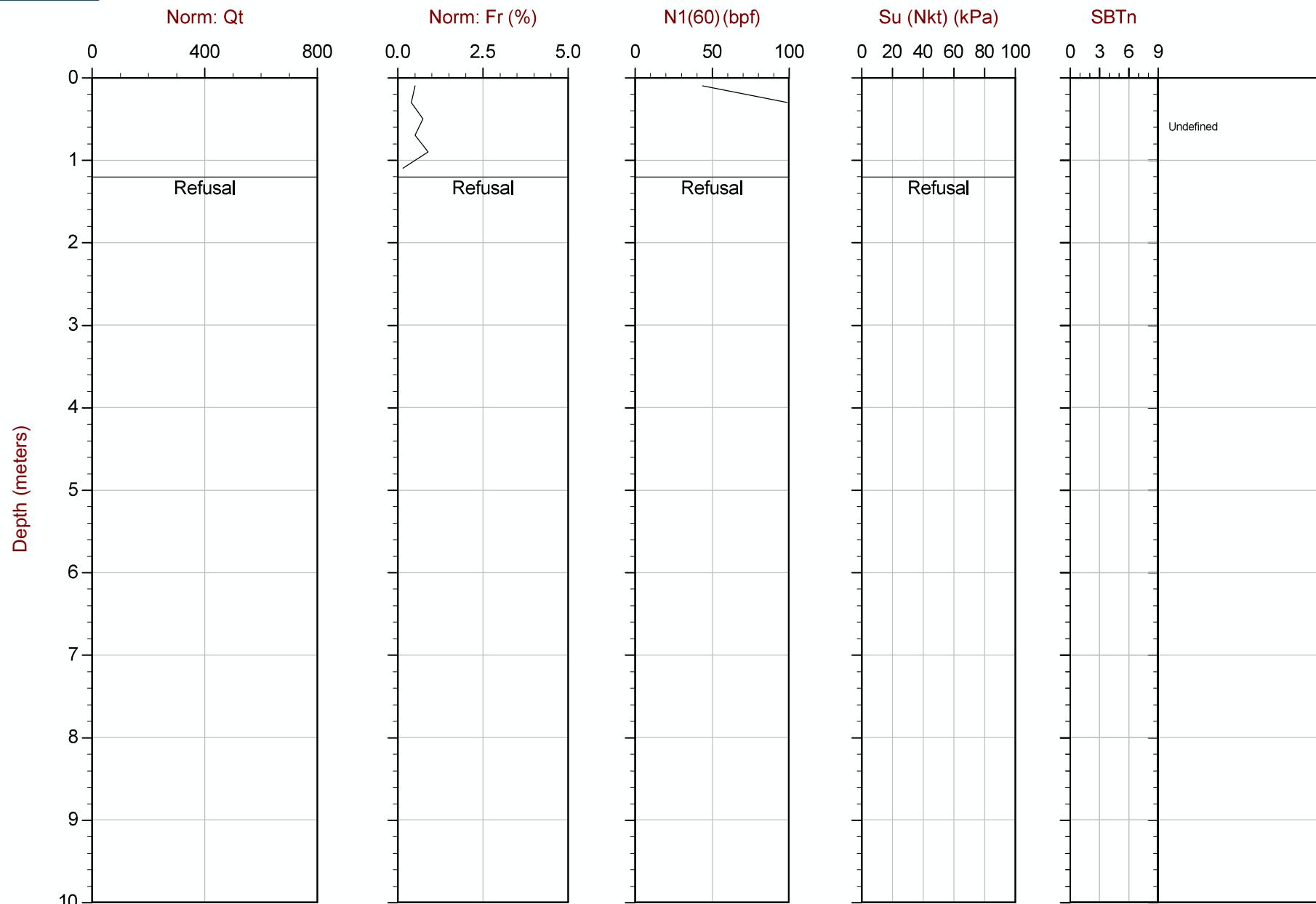




Max Depth: 8.450 m / 27.72 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP13.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

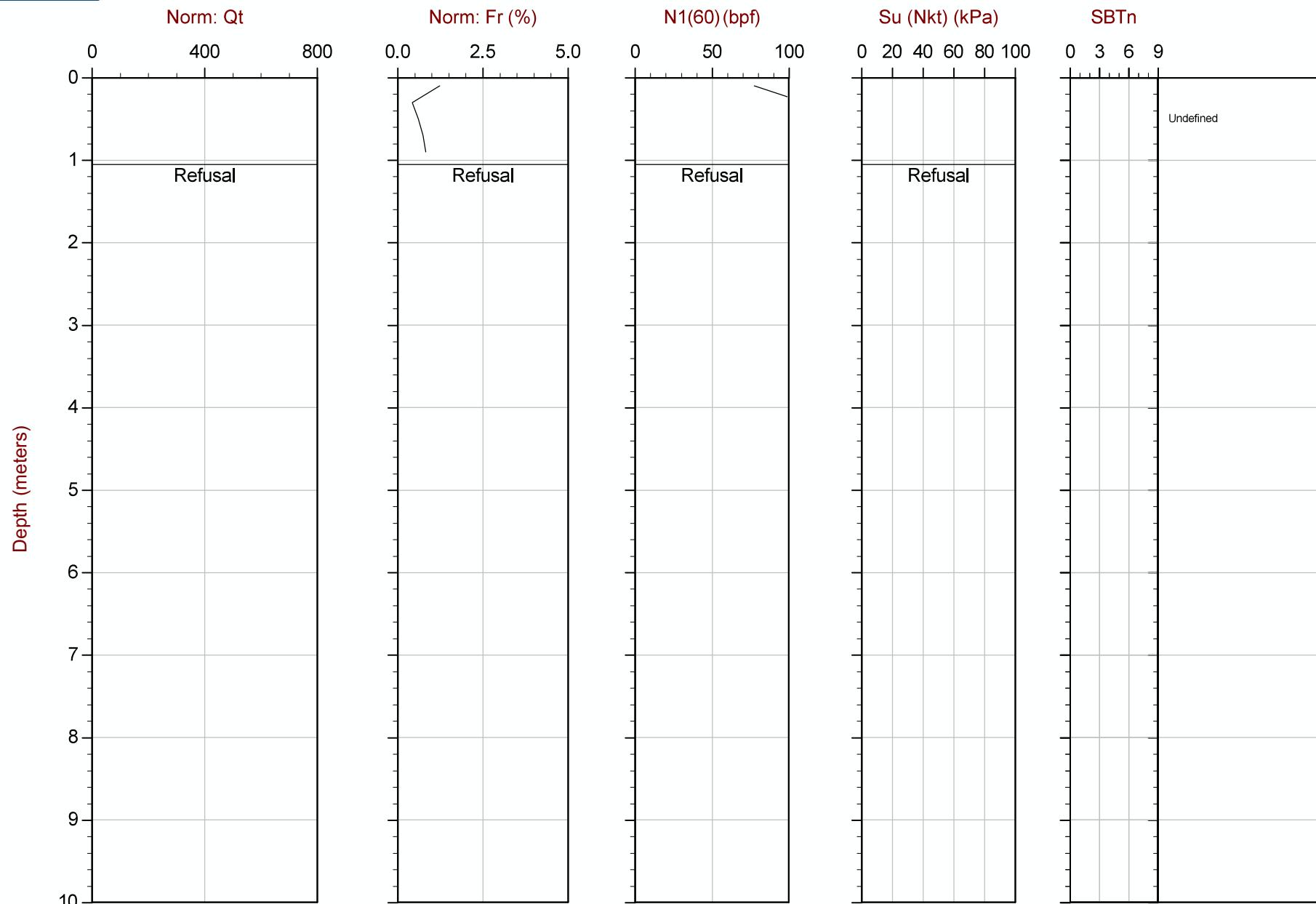
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 1.200 m / 3.94 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP10B.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

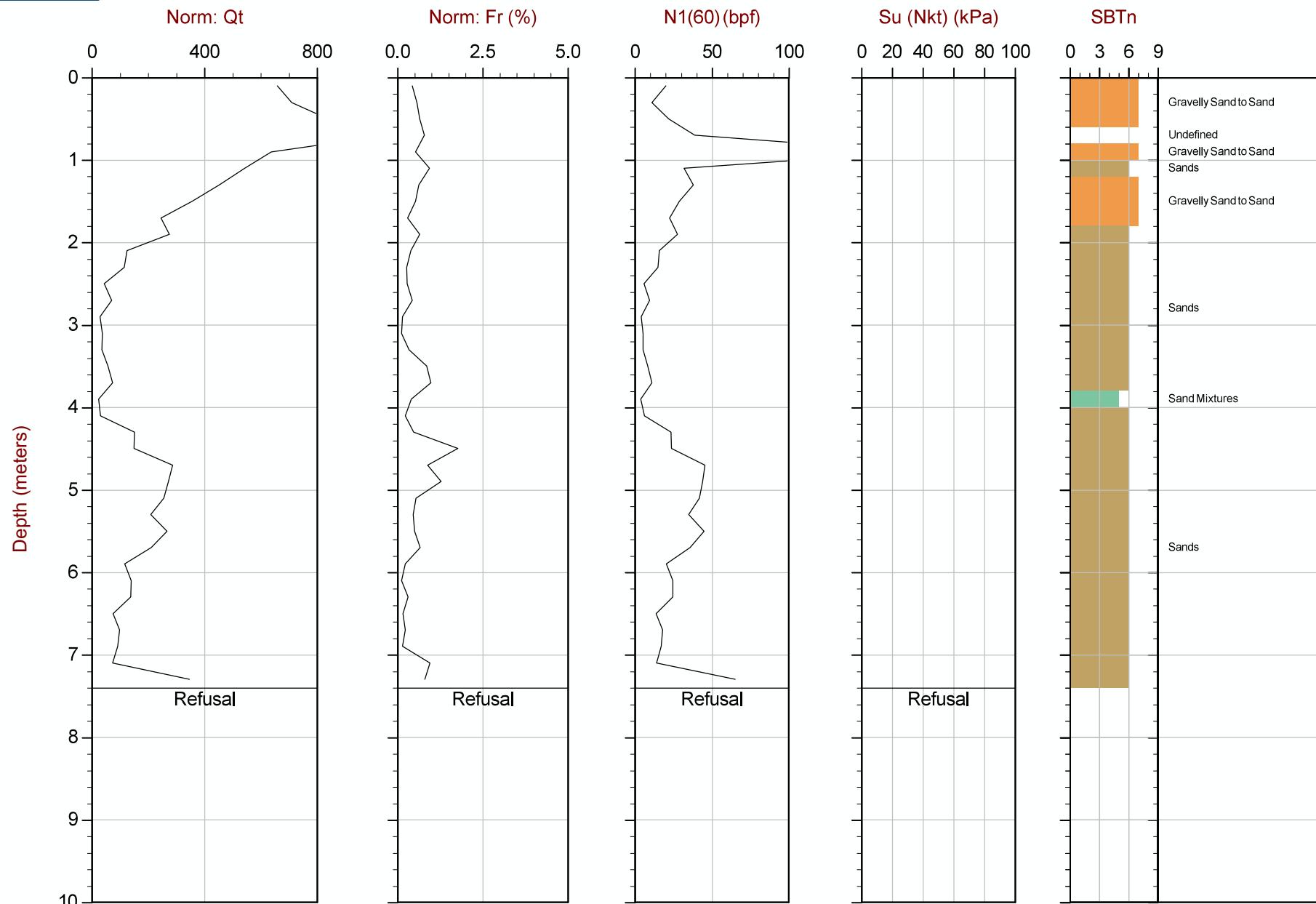
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 1.050 m / 3.44 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP10.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

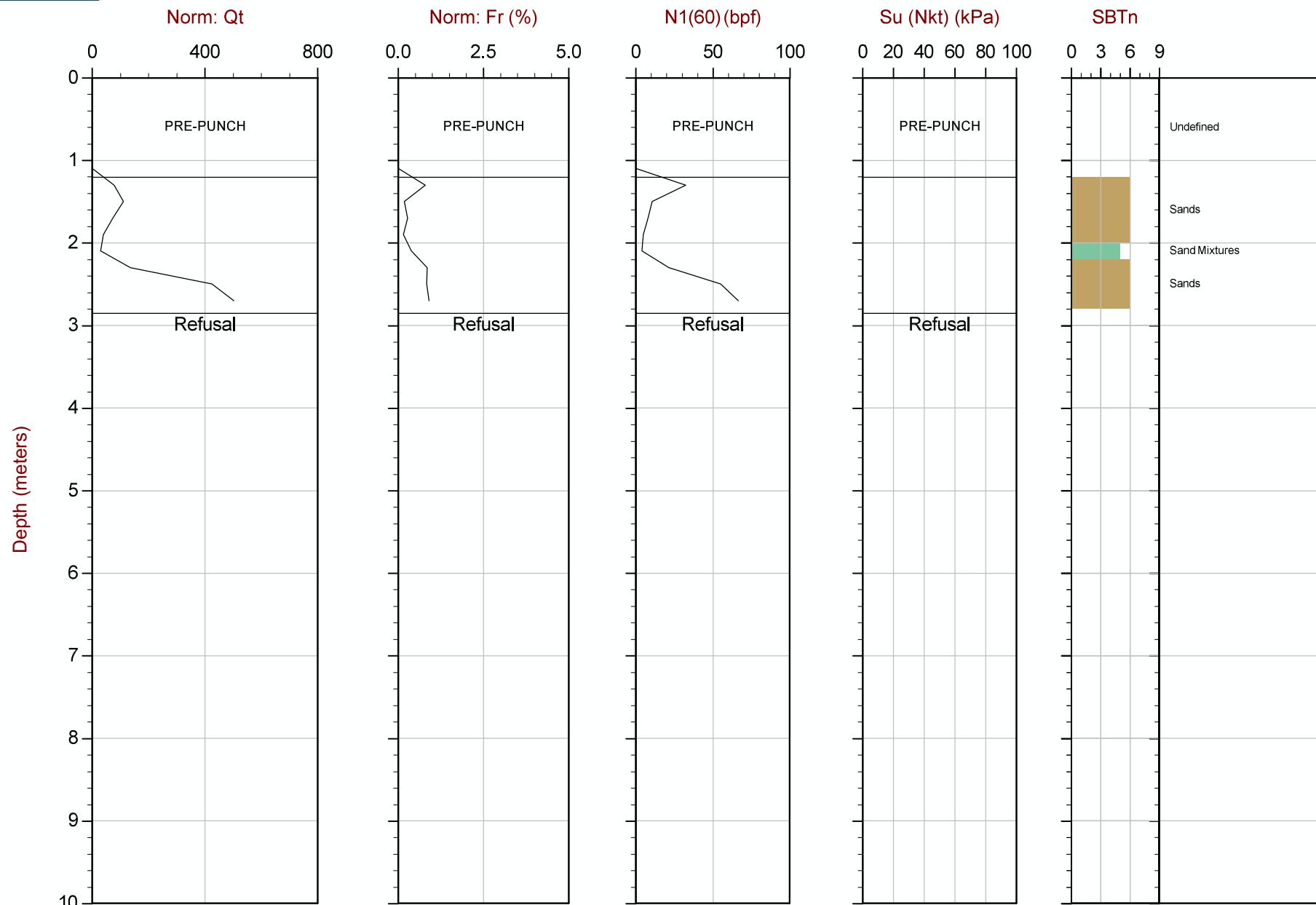
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 7.400 m / 24.28 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP09.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

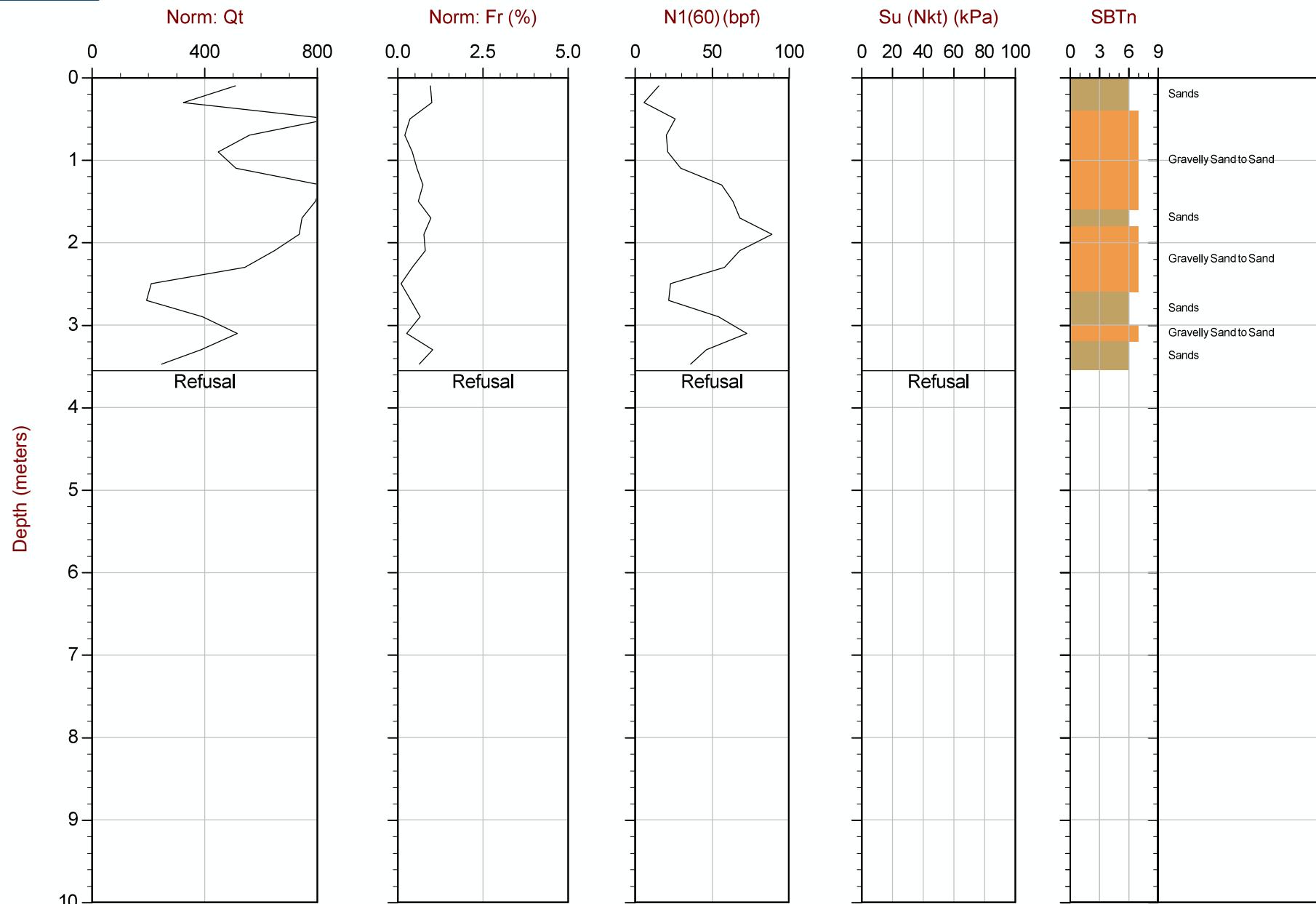
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

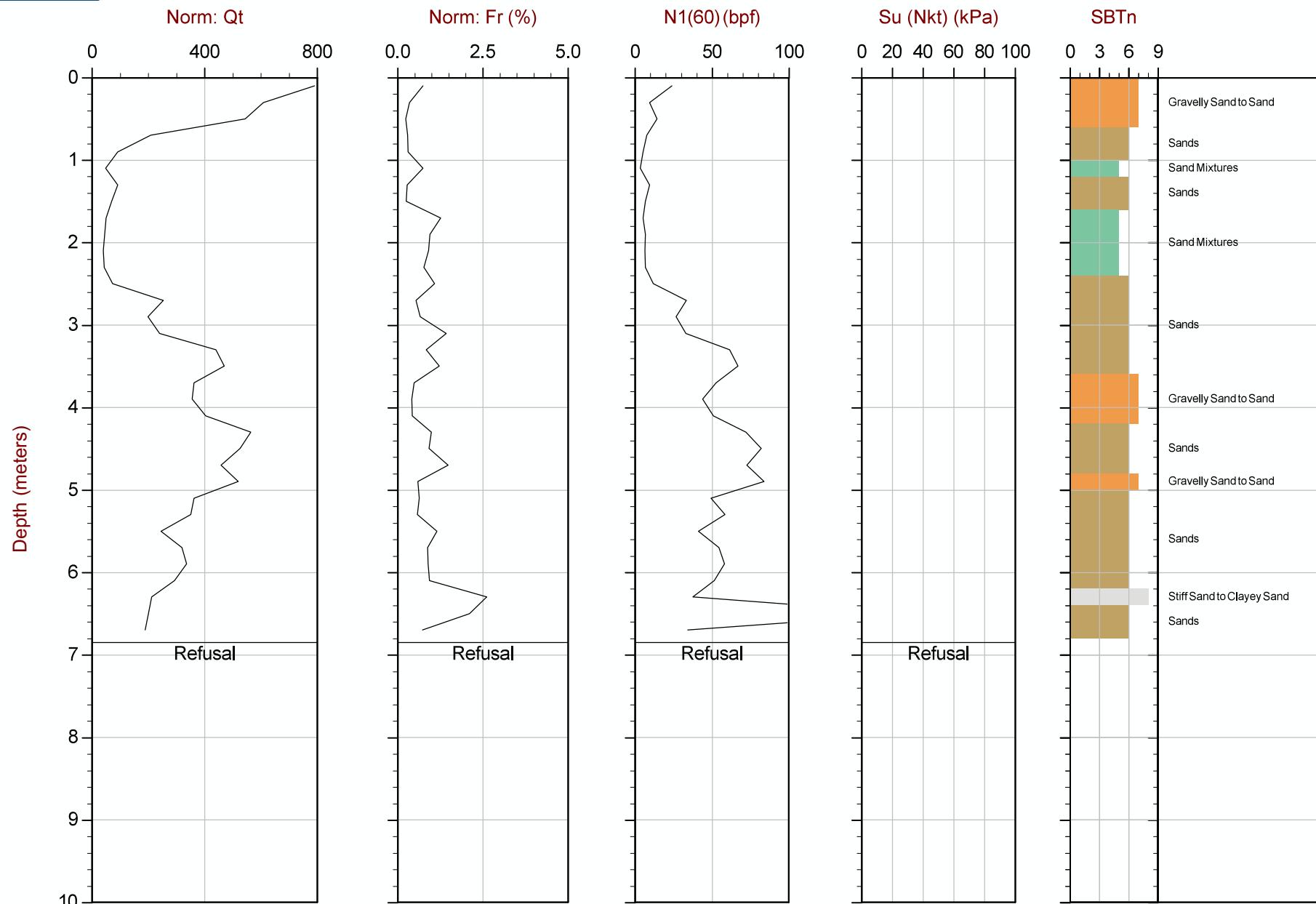


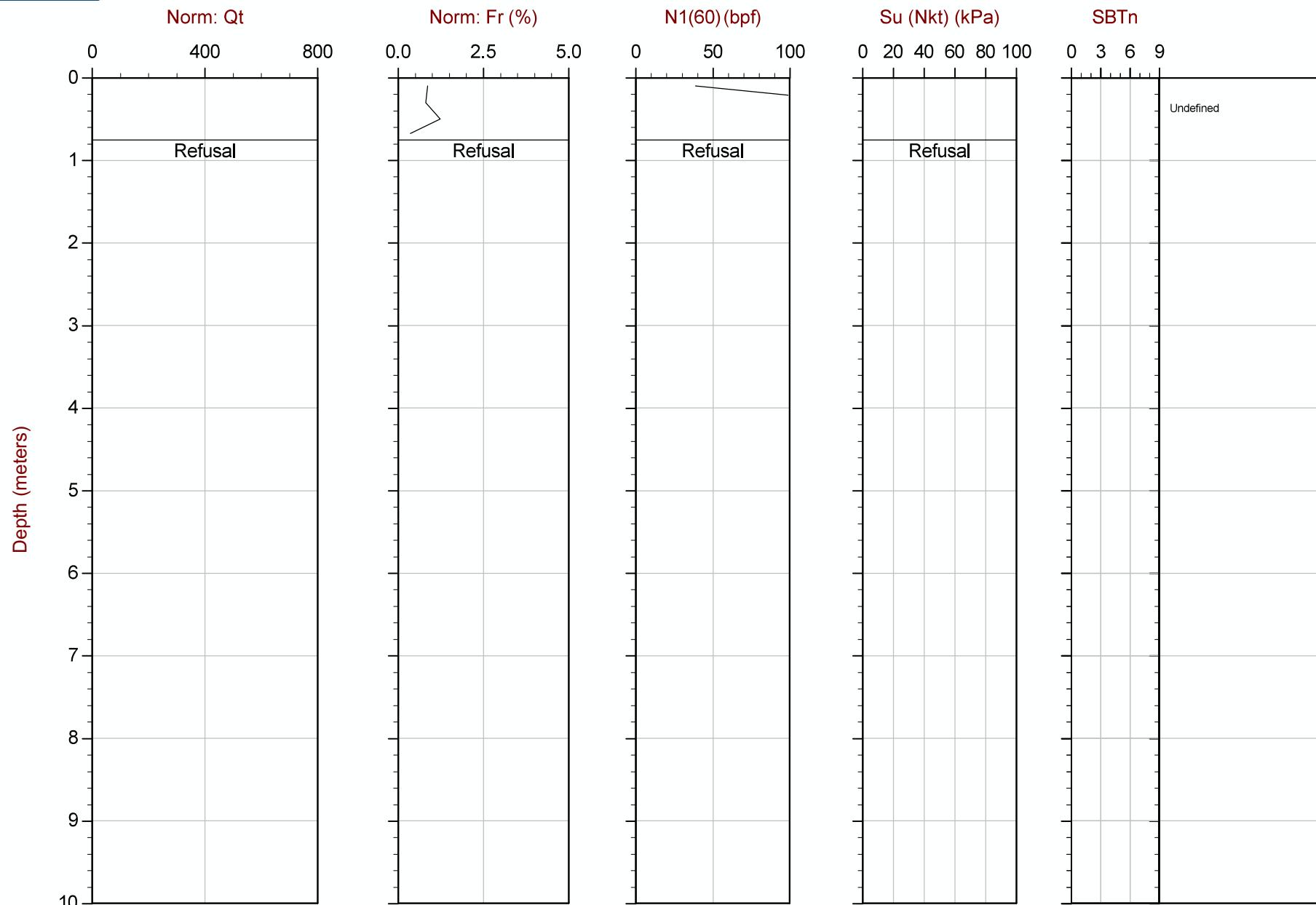
Max Depth: 2.850 m / 9.35 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP08.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



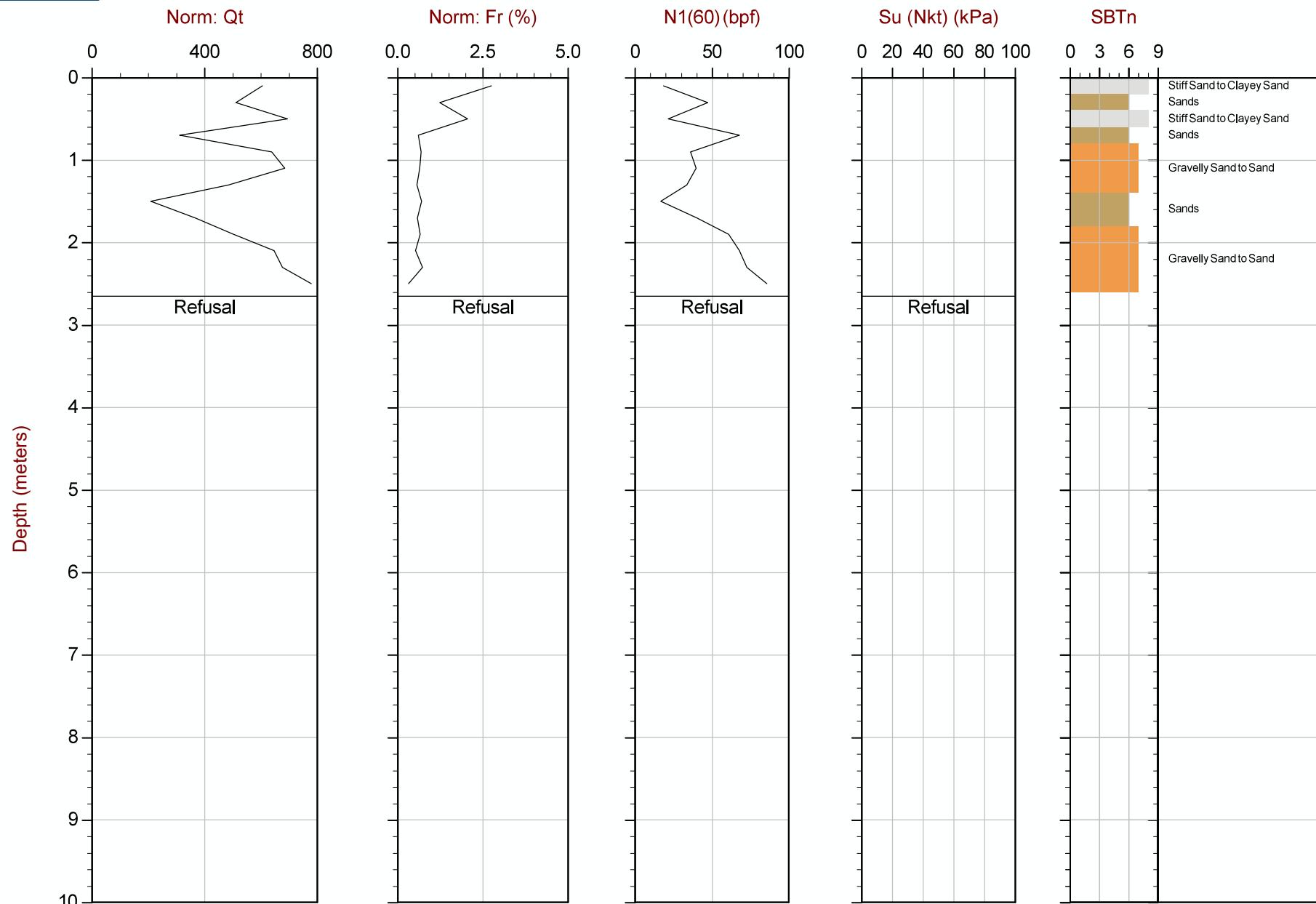




Max Depth: 0.750 m / 2.46 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP02.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

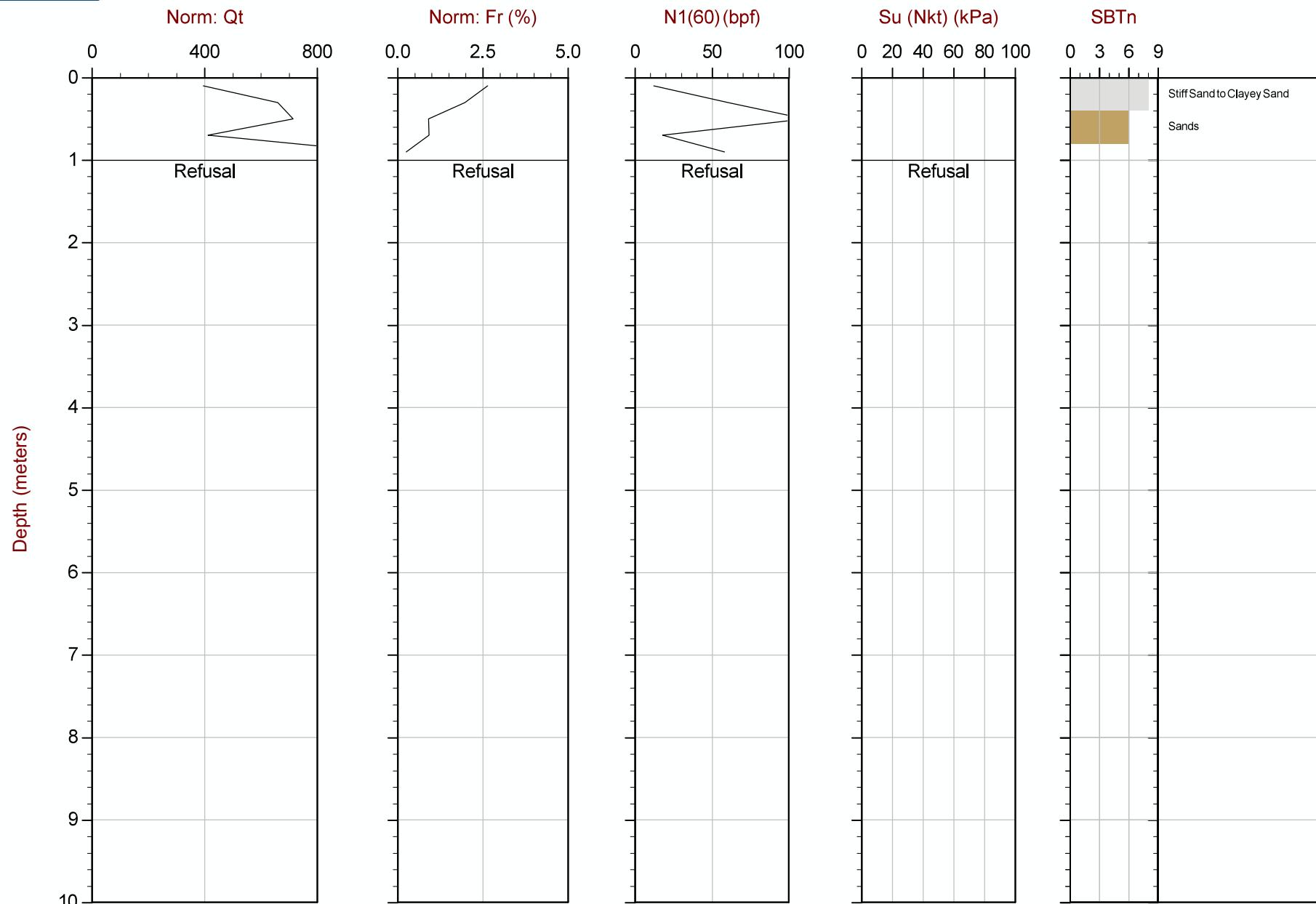
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 2.650 m / 8.69 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP01B.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

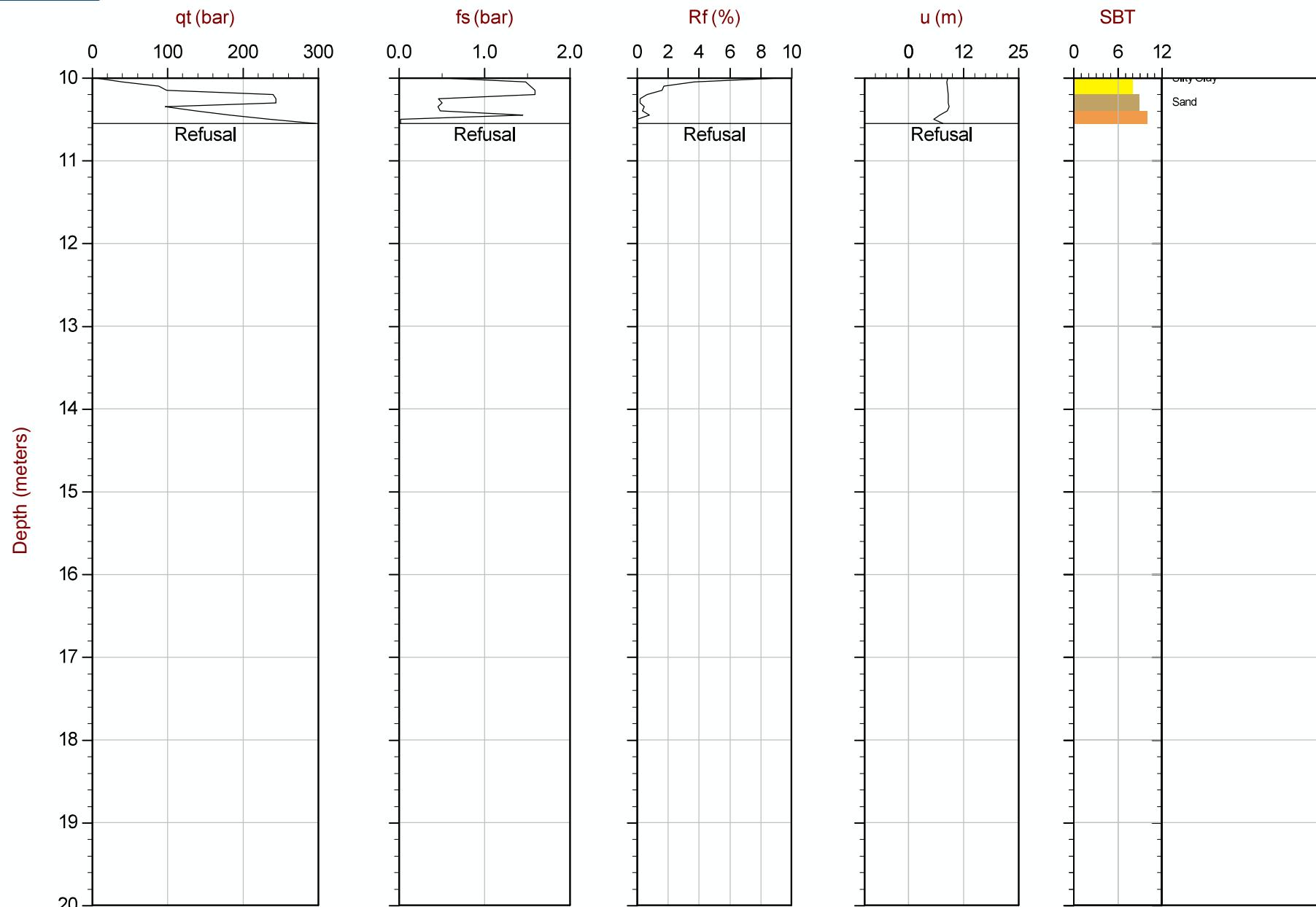
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 1.000 m / 3.28 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP01.COR
Unit Wt: SBT Chart Soil Zones
Su Nkt: 15.0

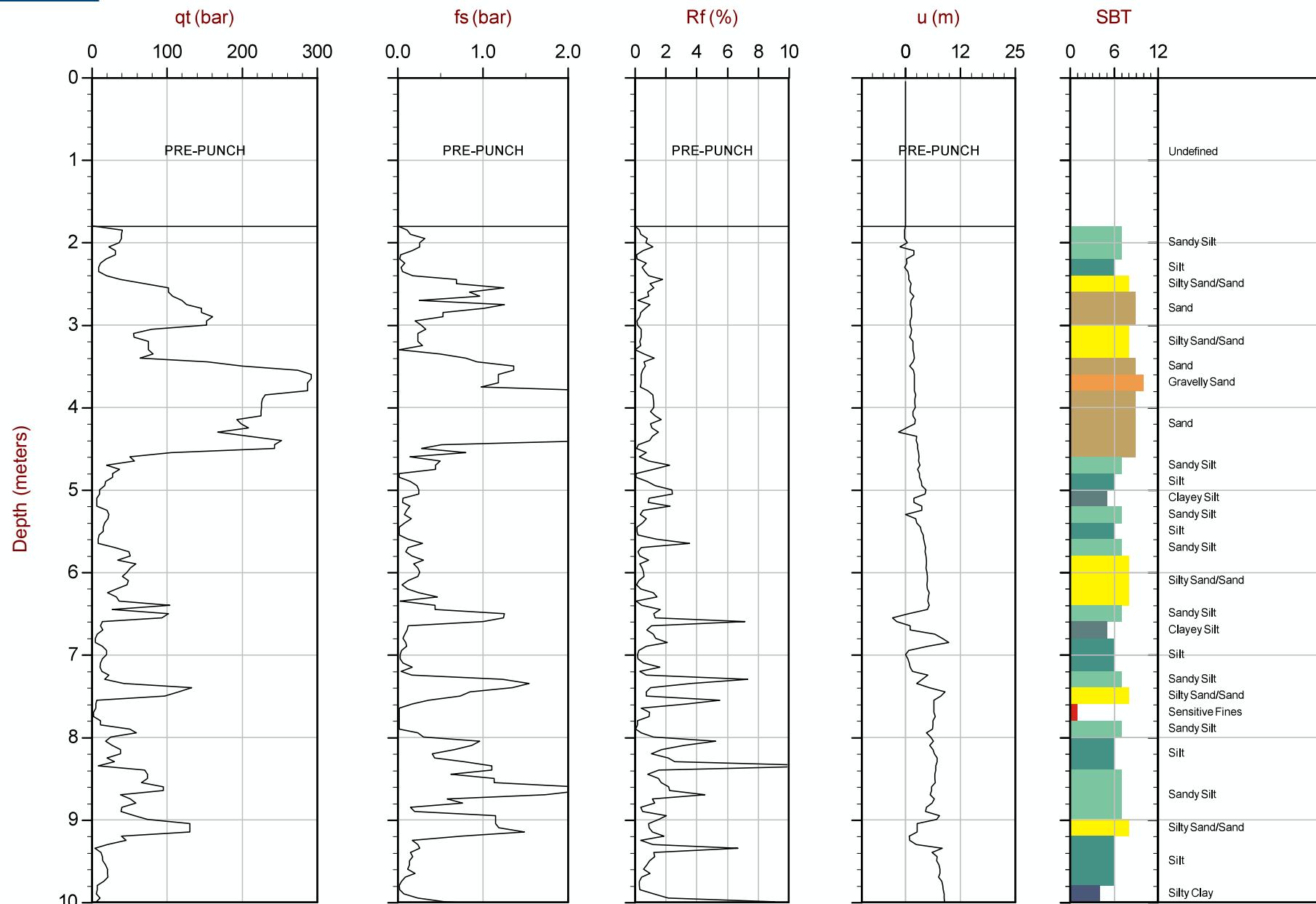
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1

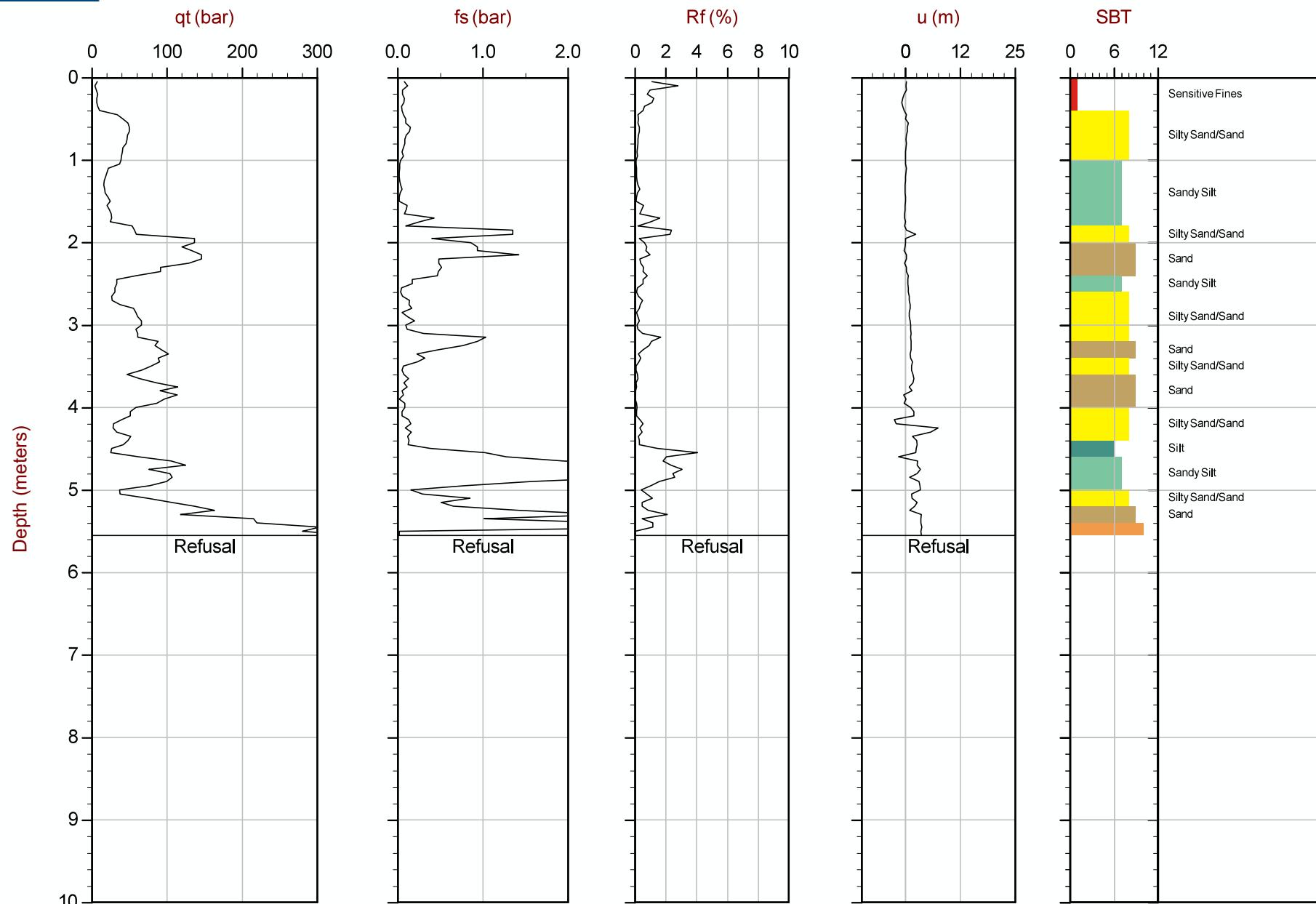


Max Depth: 10.550 m / 34.61 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP68.COR
Unit Wt: SBT Chart Soil Zones

SBT: Lunne, Robertson and Powell, 1997
Page No: 2 of 2

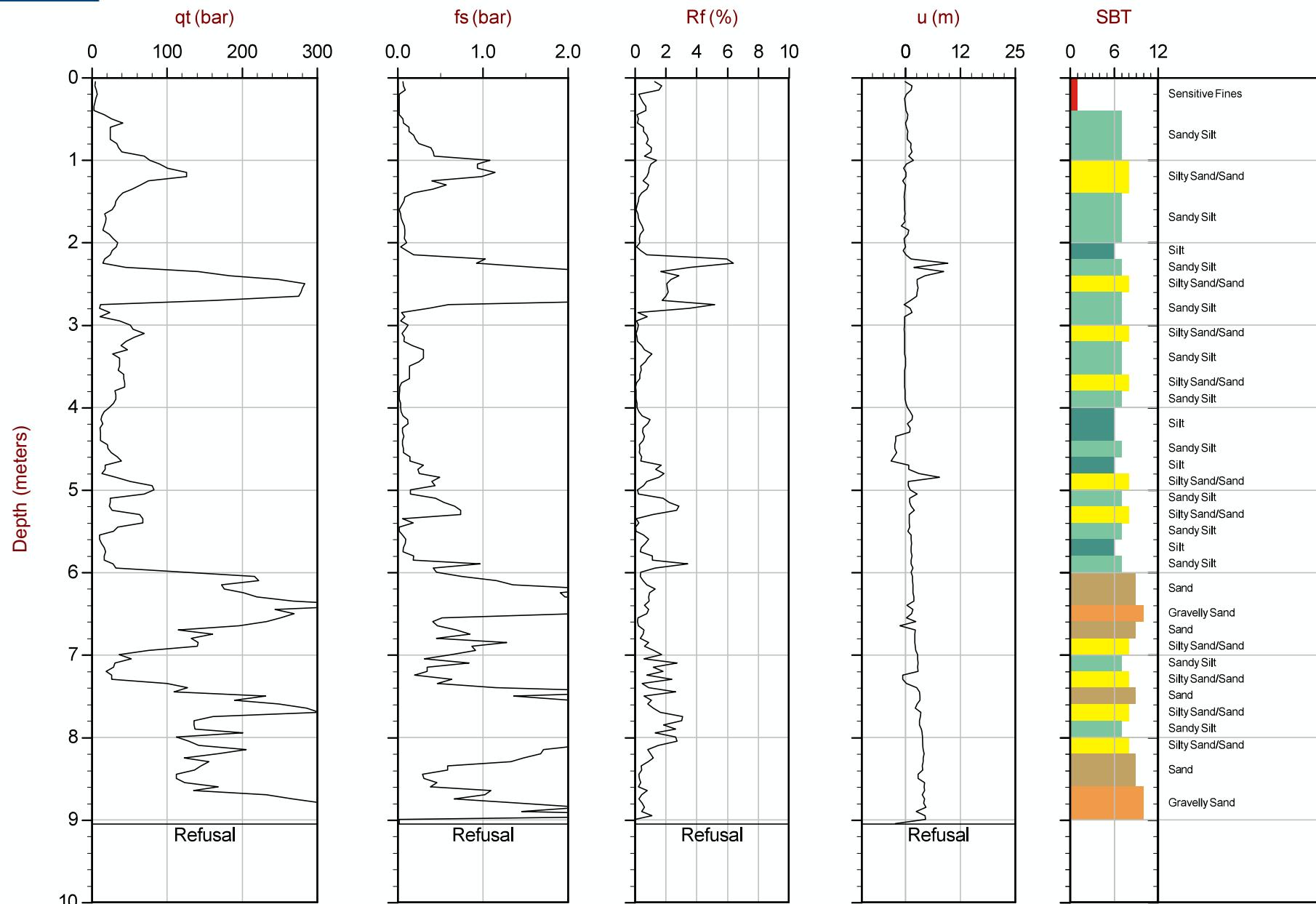




Max Depth: 5.550 m / 18.21 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP66.COR
Unit Wt: SBT Chart Soil Zones

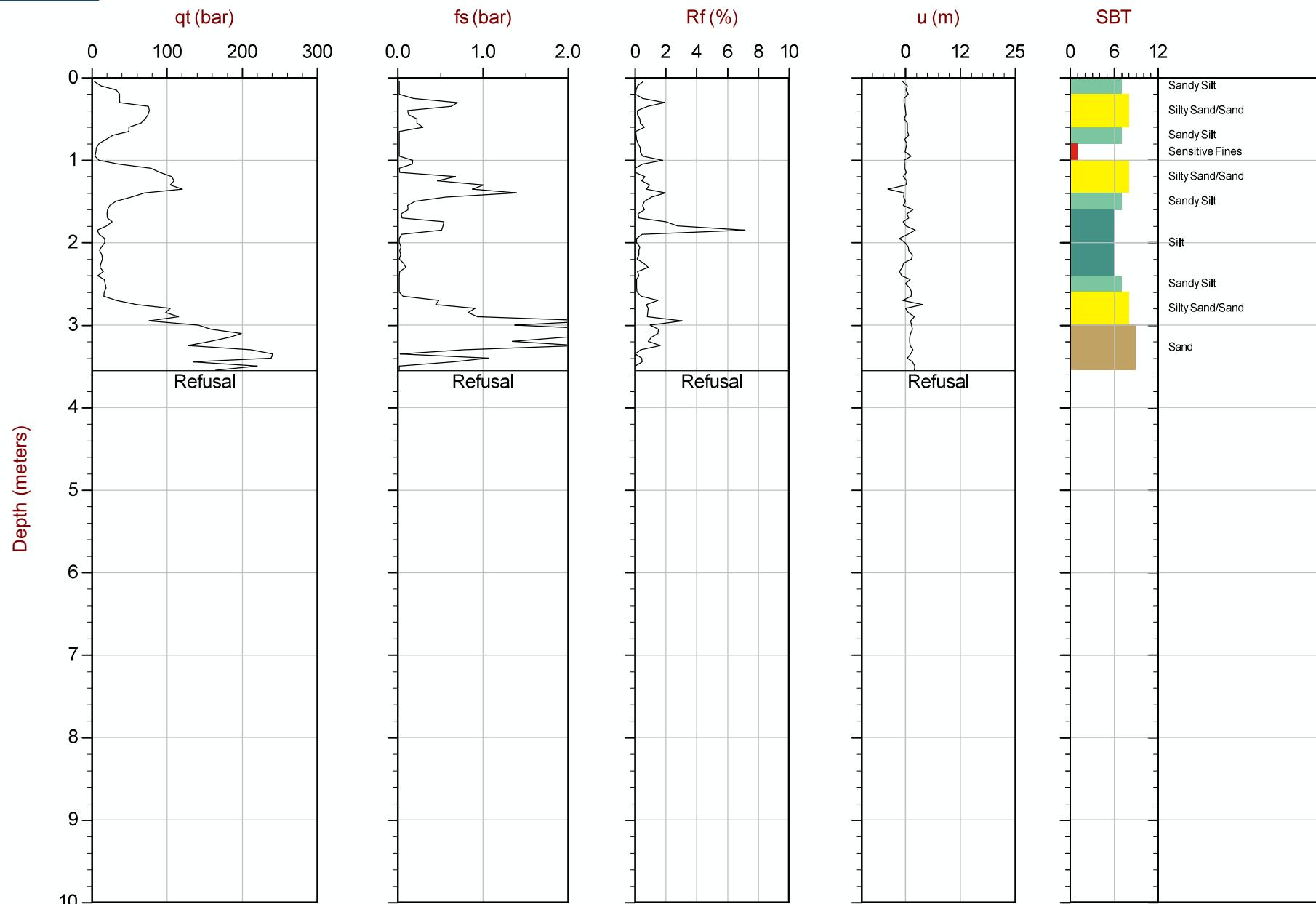
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 9.050 m / 29.69 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP65.COR
Unit Wt: SBT Chart Soil Zones

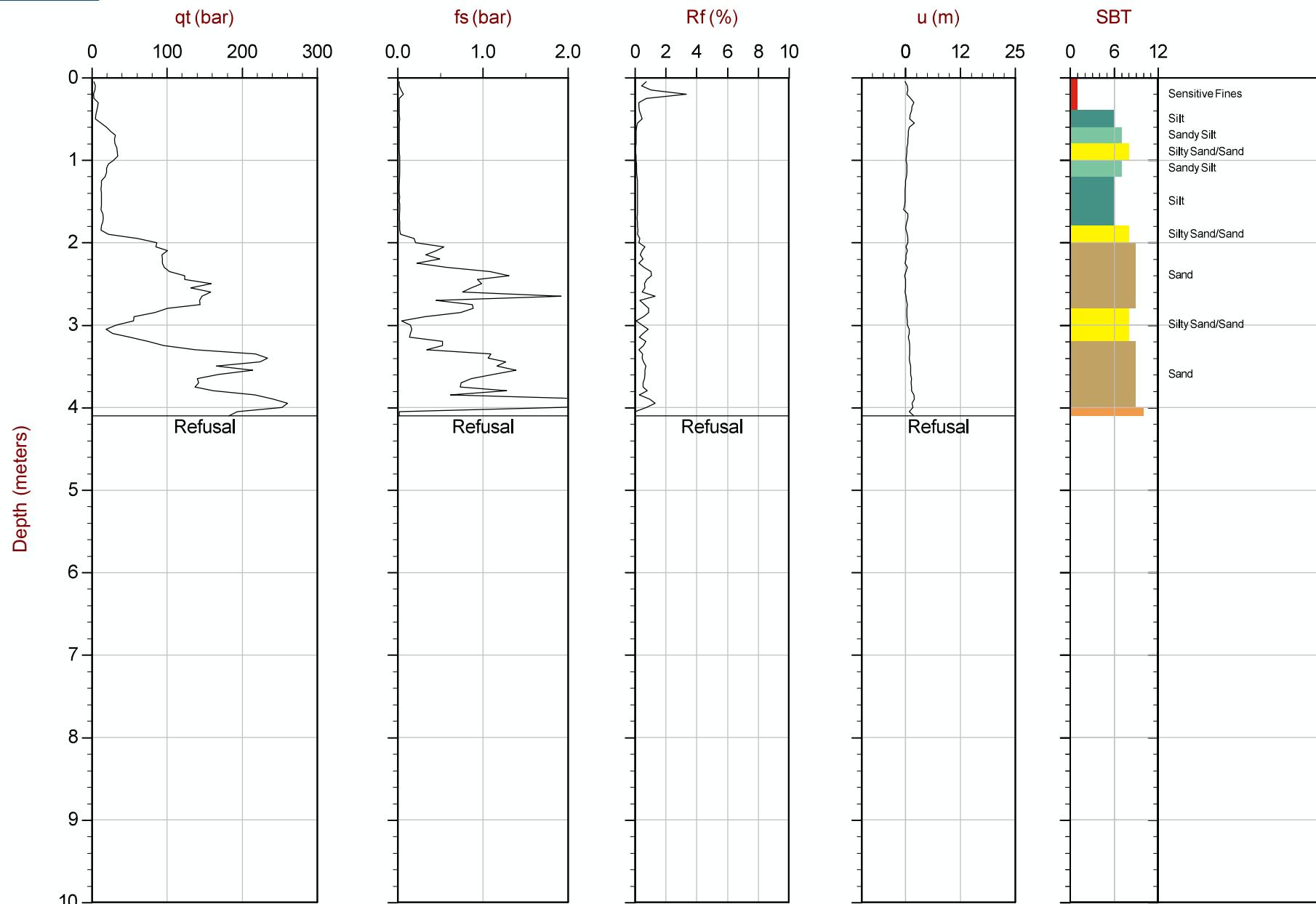
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 3.550 m / 11.65 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP56.COR
Unit Wt: SBT Chart Soil Zones

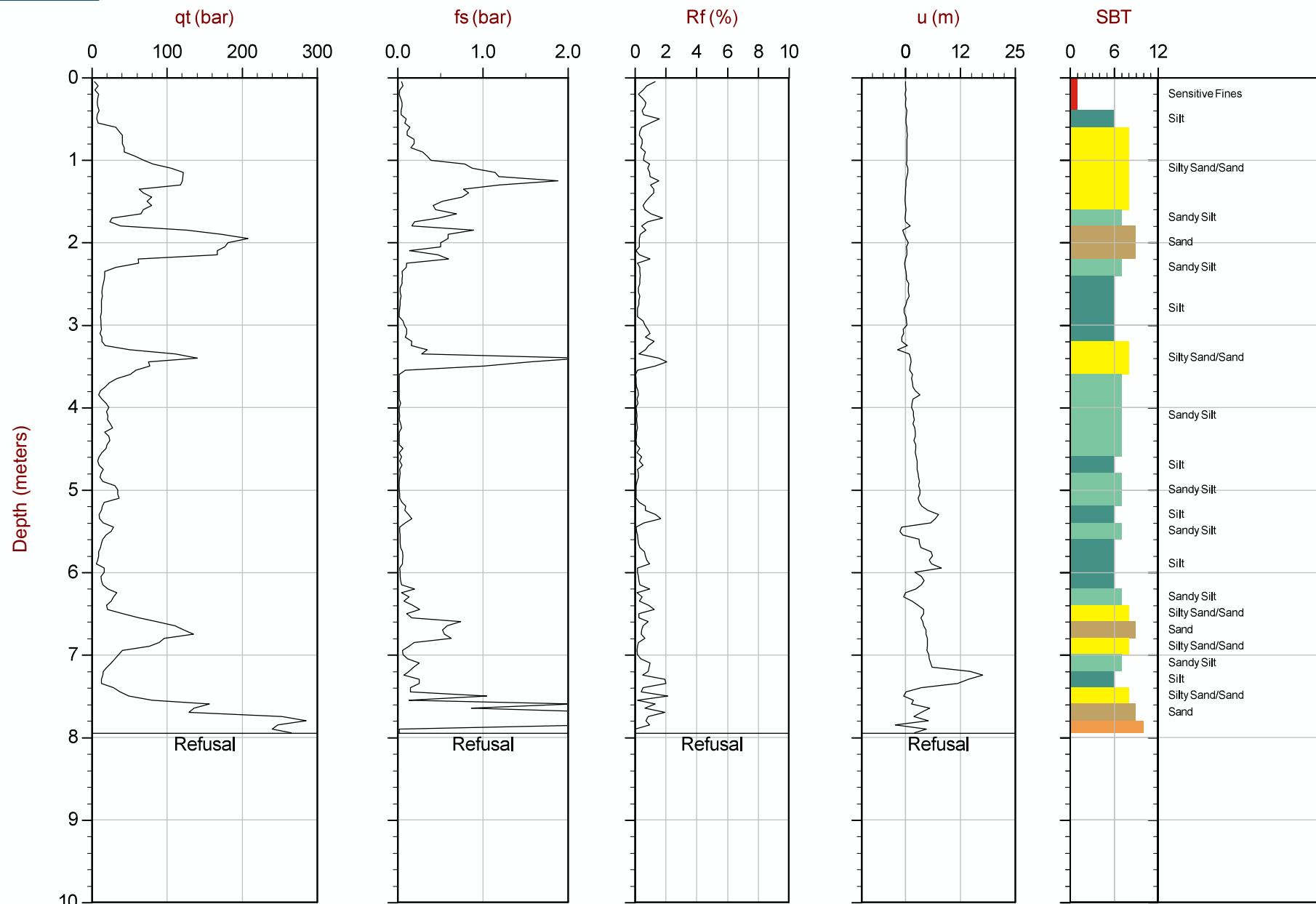
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.100 m / 13.45 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP55.COR
Unit Wt: SBT Chart Soil Zones

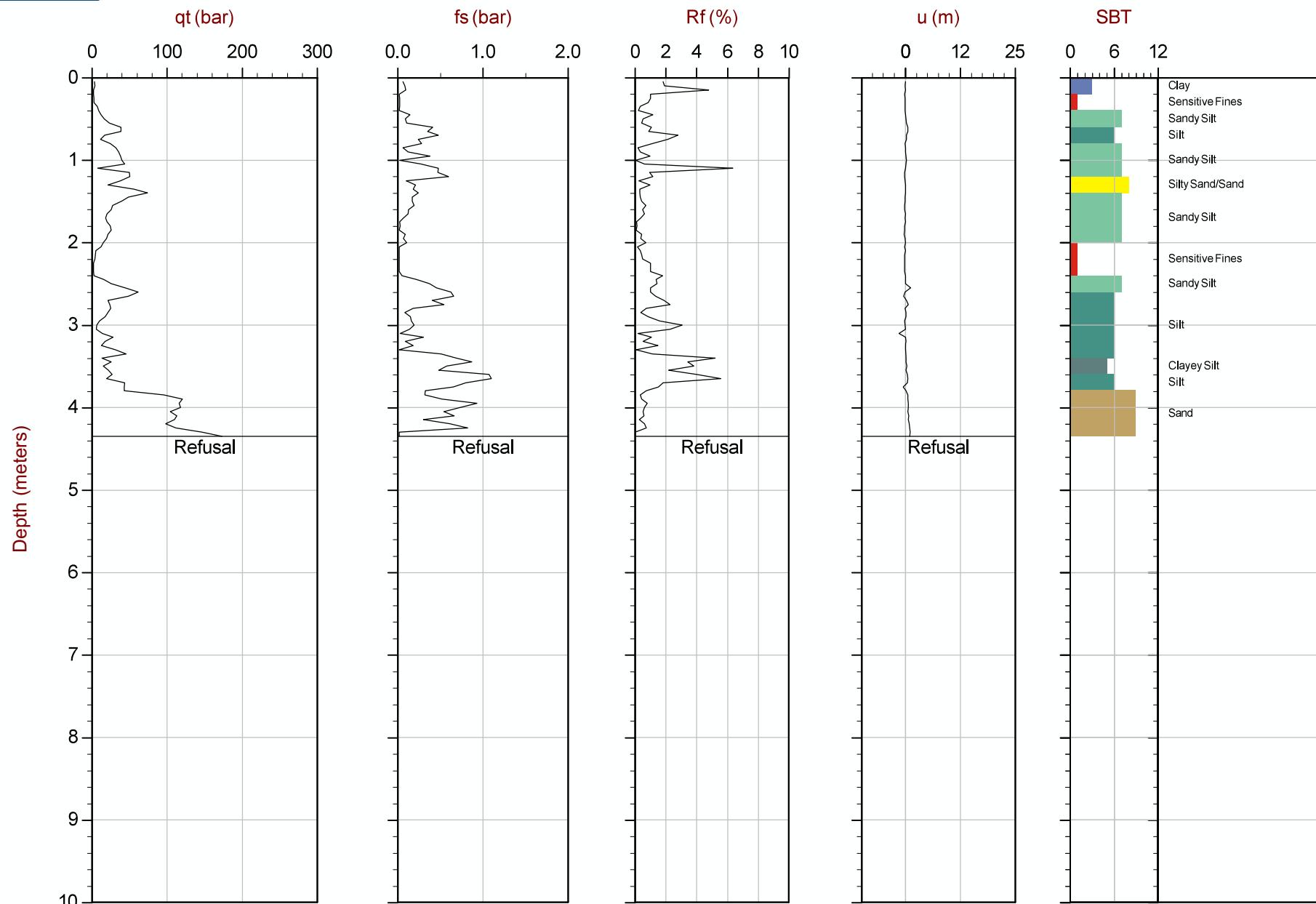
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 7.950 m / 26.08 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP54.COR
Unit Wt: SBT Chart Soil Zones

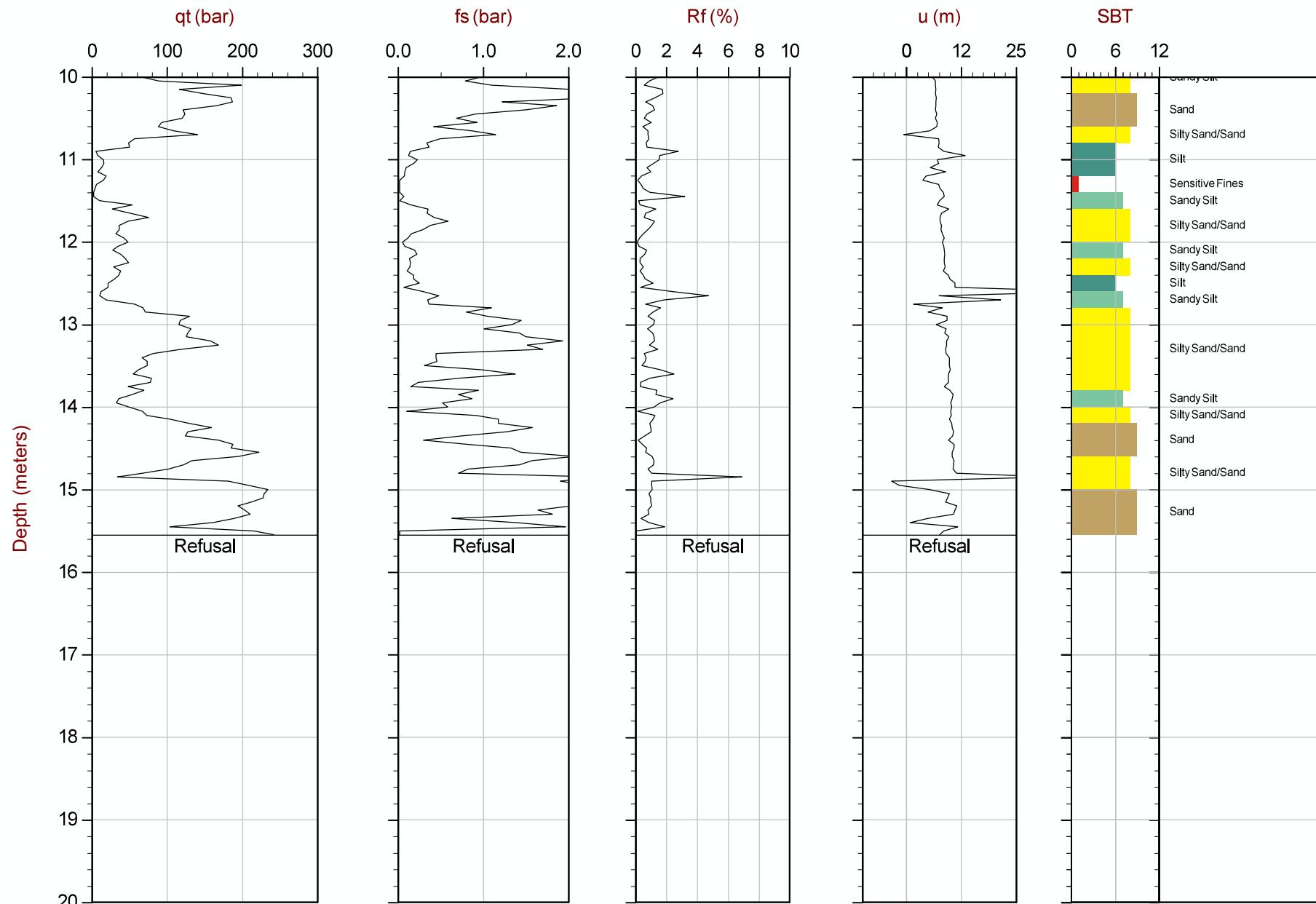
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.350 m / 14.27 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP51.COR
Unit Wt: SBT Chart Soil Zones

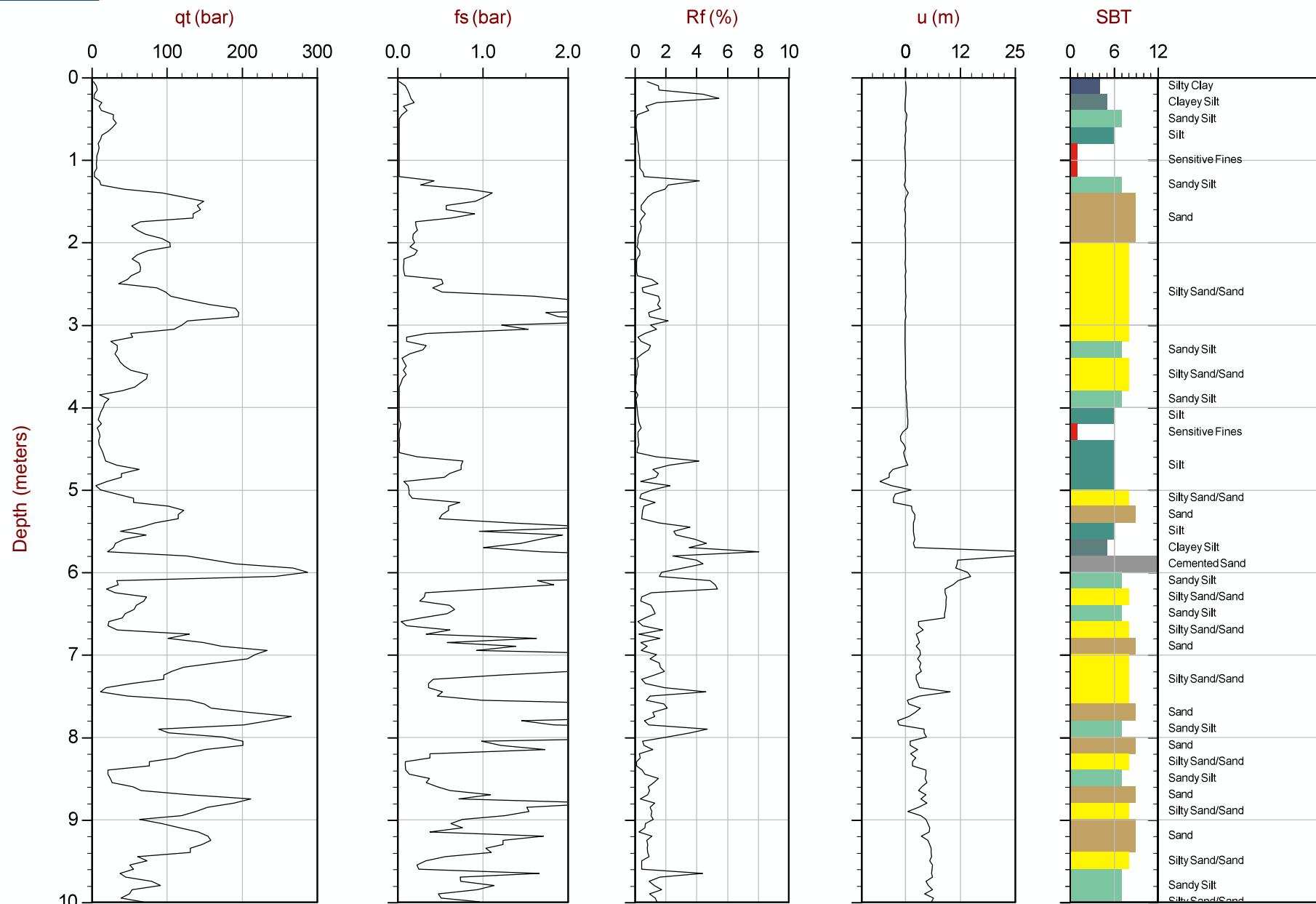
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 15.550 m / 51.02 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP43.COR
Unit Wt: SBT Chart Soil Zones

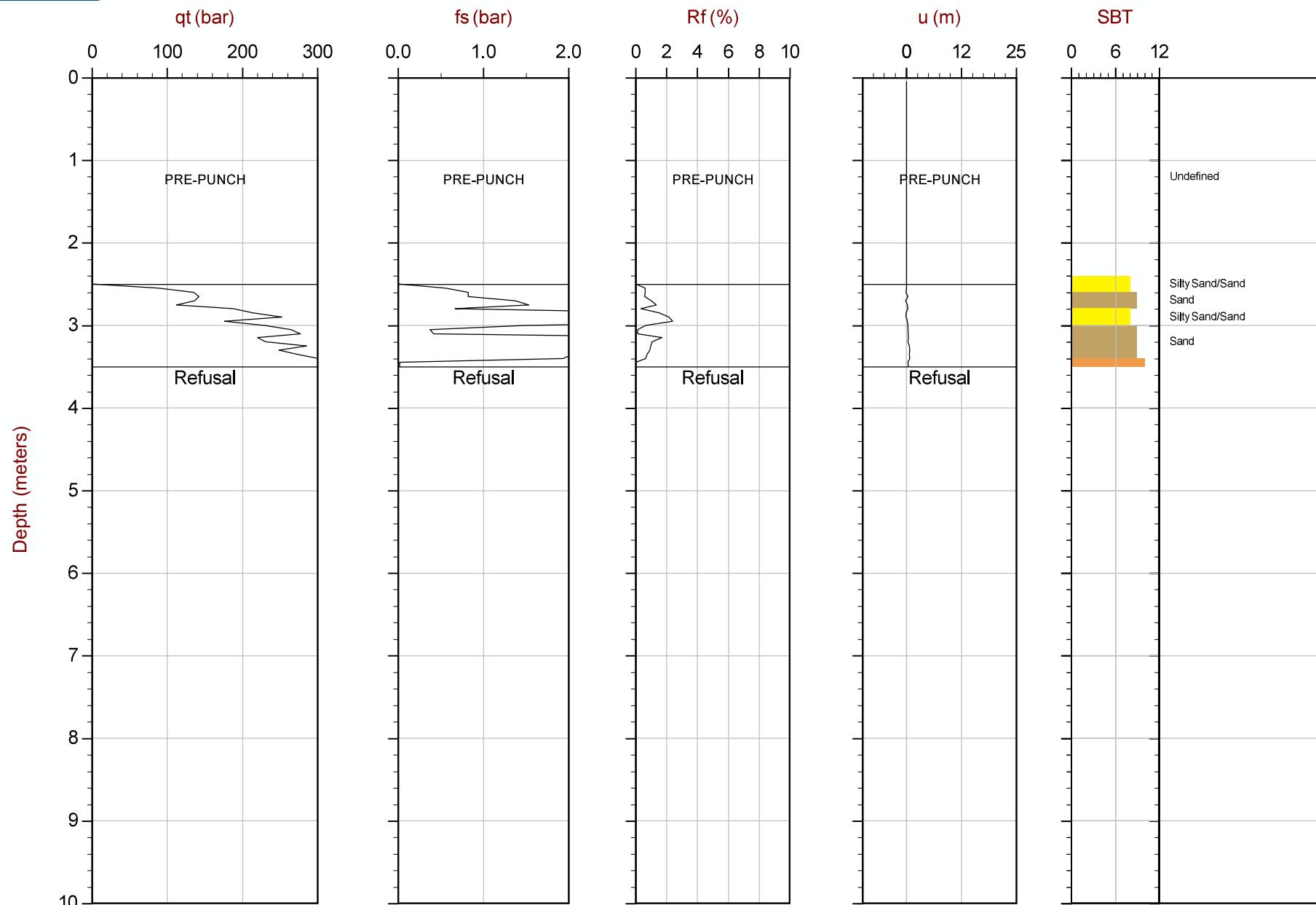
SBT: Lunne, Robertson and Powell, 1997
Page No: 2 of 2



Max Depth: 15.550 m / 51.02 ft
 Depth Inc: 0.050 m / 0.164 ft
 Avg Int: 0.200 m

File: 189CP43.COR
 Unit Wt: SBT Chart Soil Zones

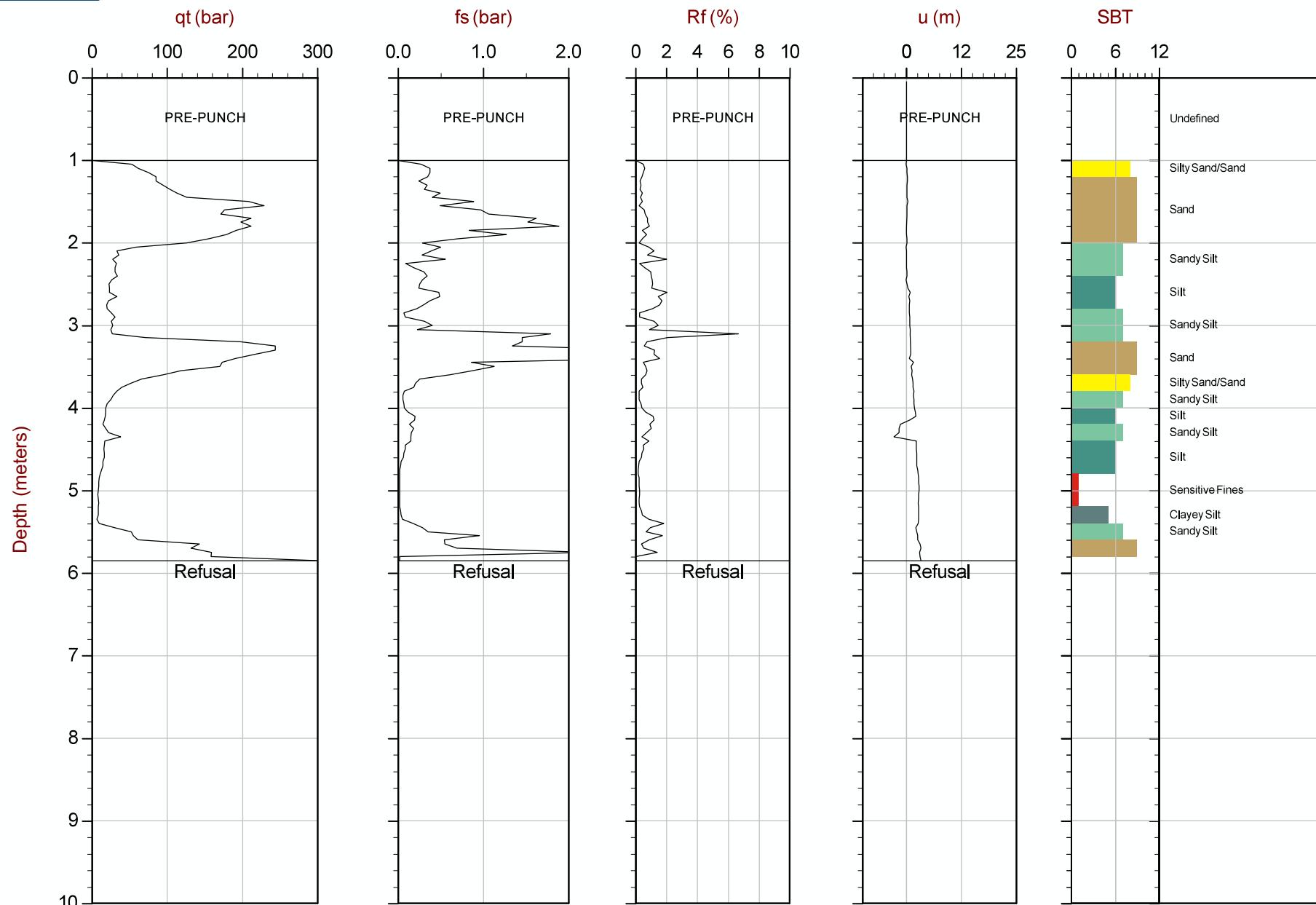
SBT: Lunne, Robertson and Powell, 1997
 Page No: 1 of 2



Max Depth: 3.500 m / 11.48 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP32.COR
Unit Wt: SBT Chart Soil Zones

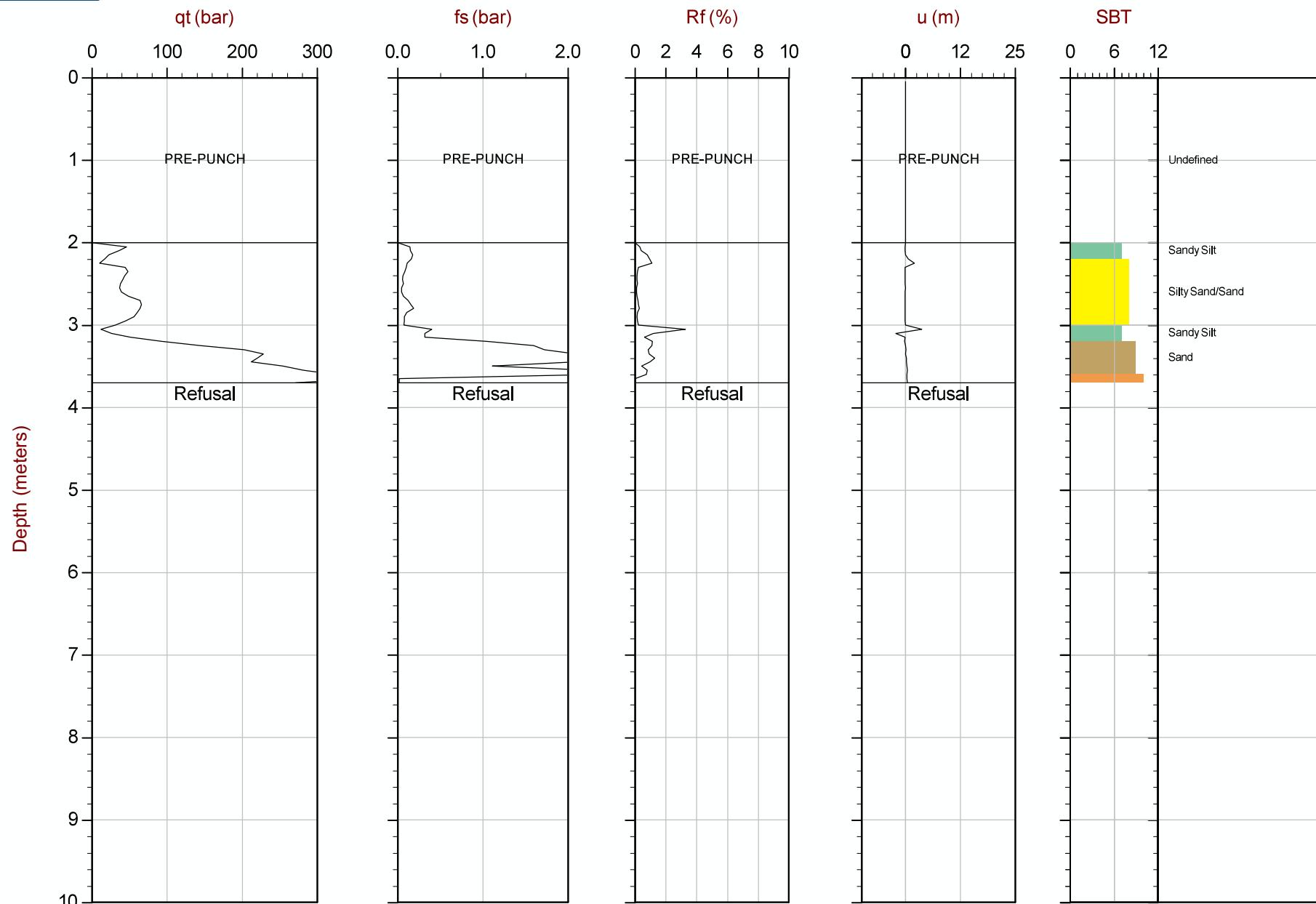
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 5.850 m / 19.19 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP31.COR
Unit Wt: SBT Chart Soil Zones

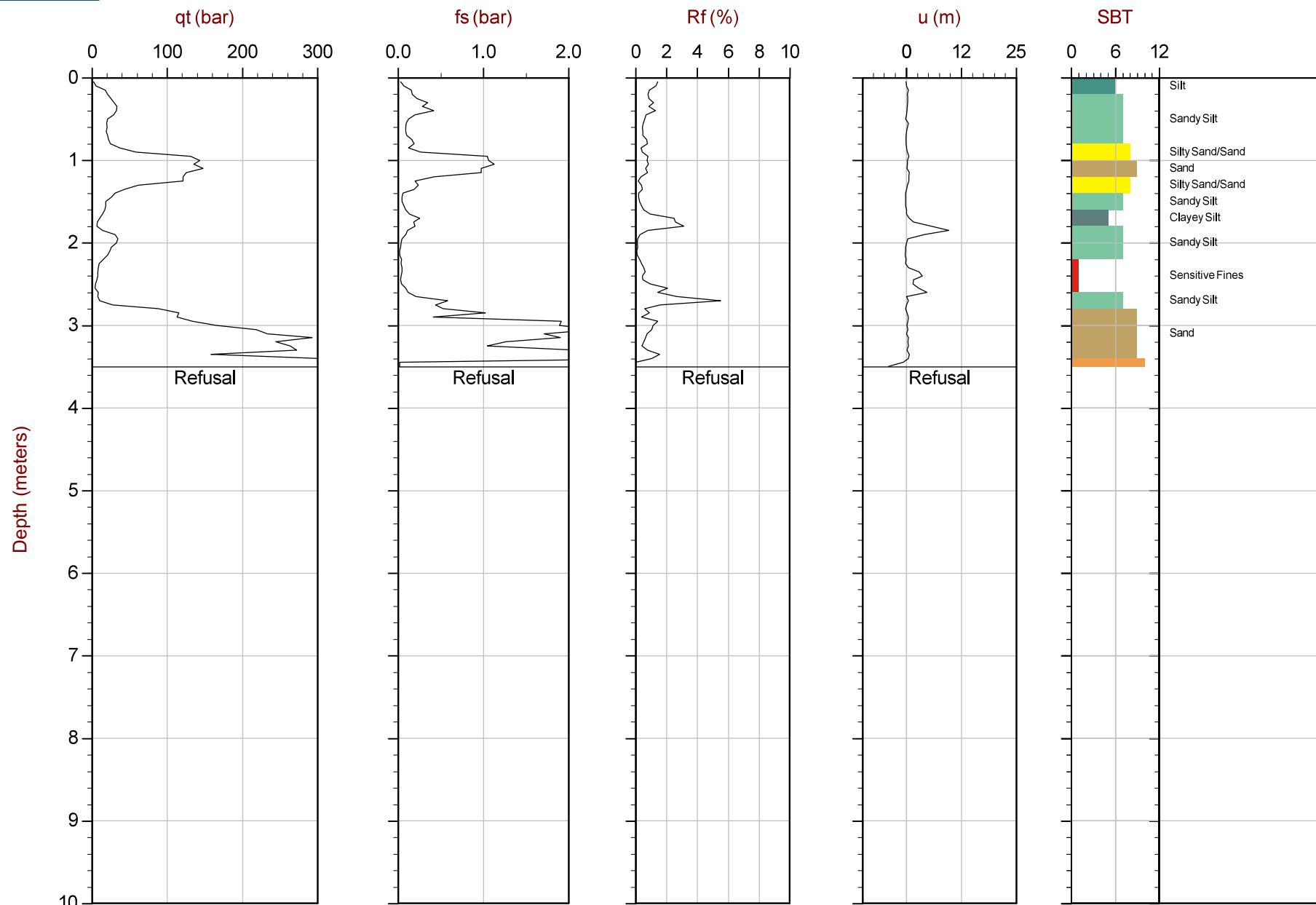
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 3.700 m / 12.14 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP27.COR
Unit Wt: SBT Chart Soil Zones

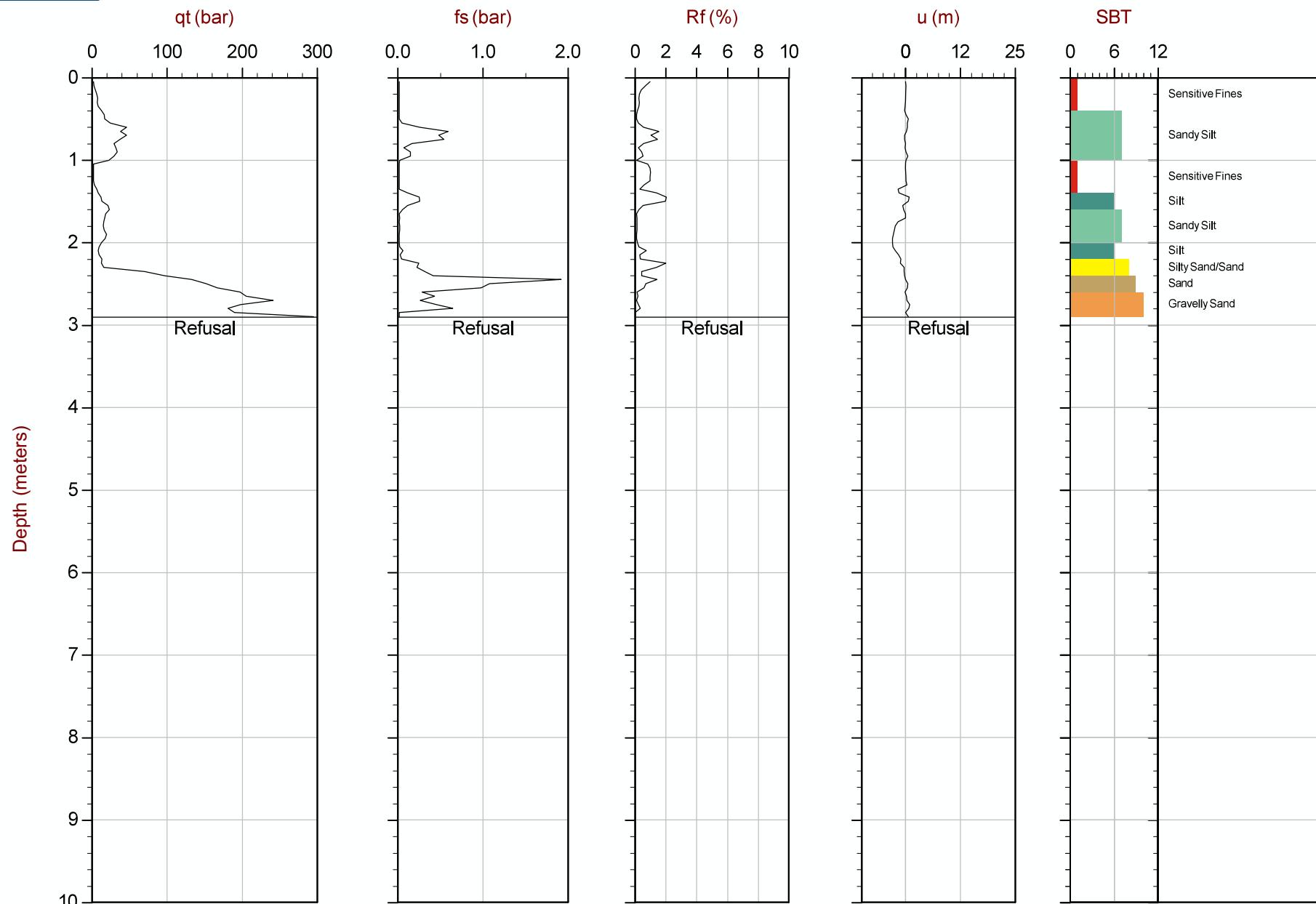
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 3.500 m / 11.48 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP26.COR
Unit Wt: SBT Chart Soil Zones

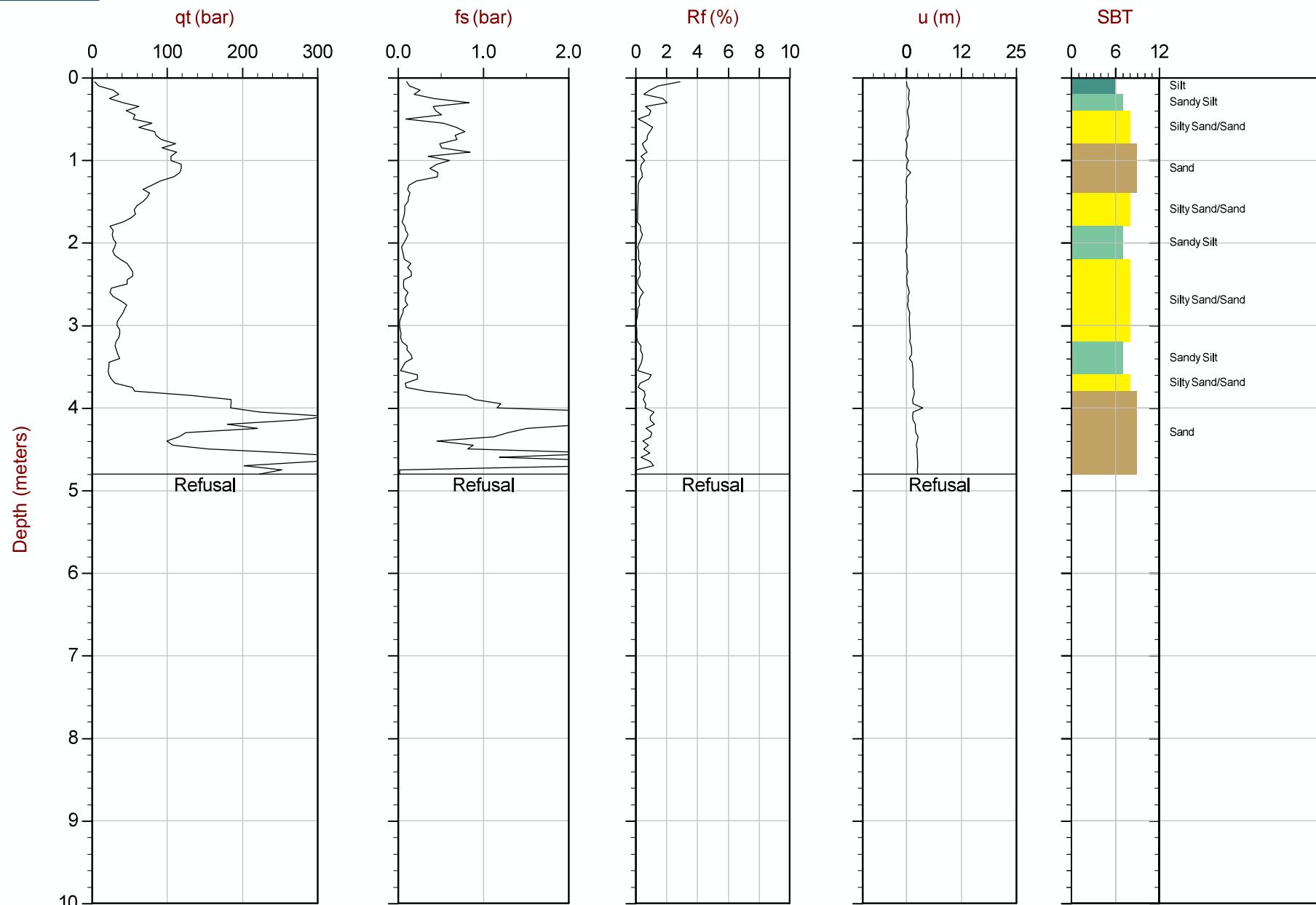
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 2.900 m / 9.51 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP25.COR
Unit Wt: SBT Chart Soil Zones

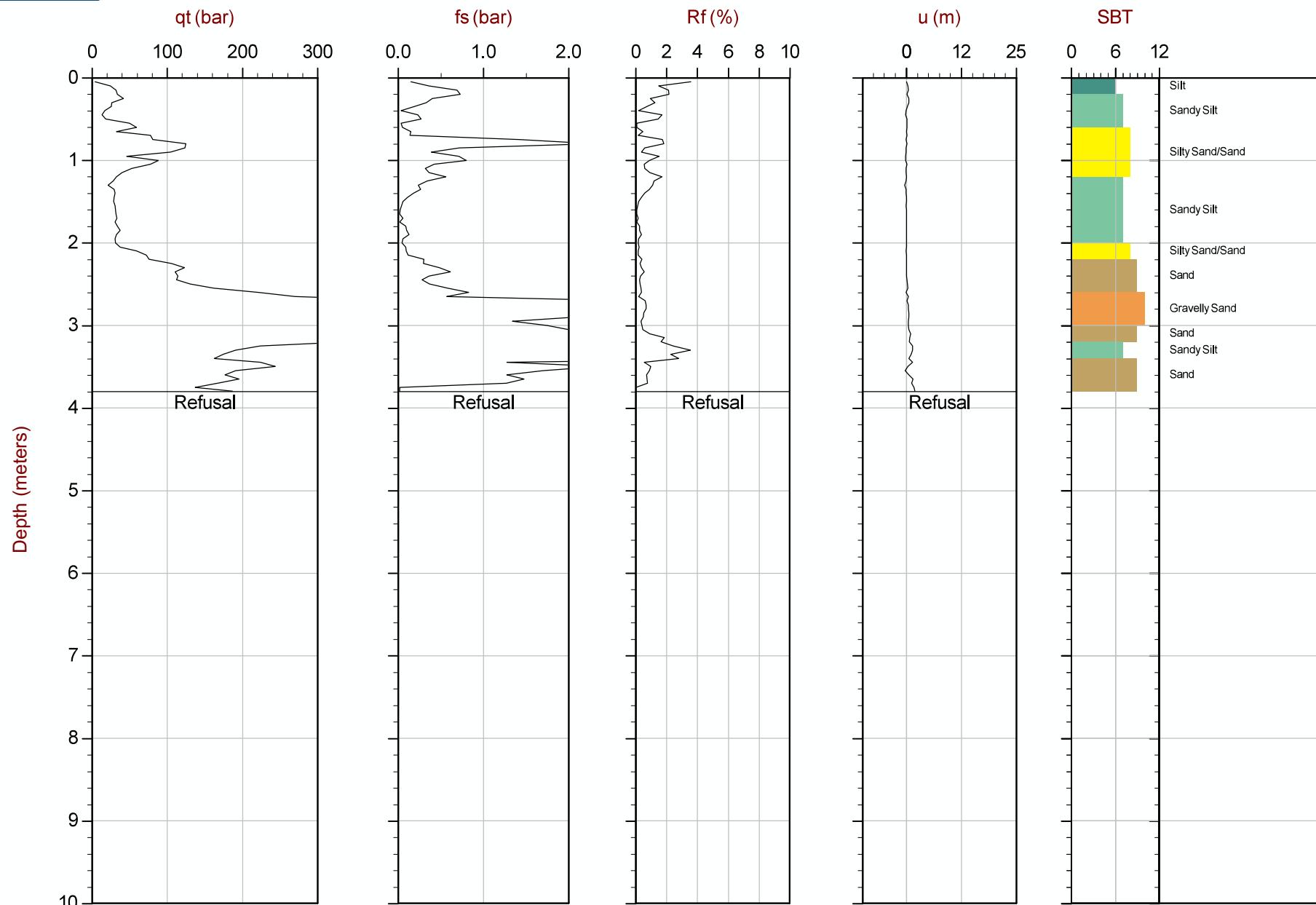
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.800 m / 15.75 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP24.COR
Unit Wt: SBT Chart Soil Zones

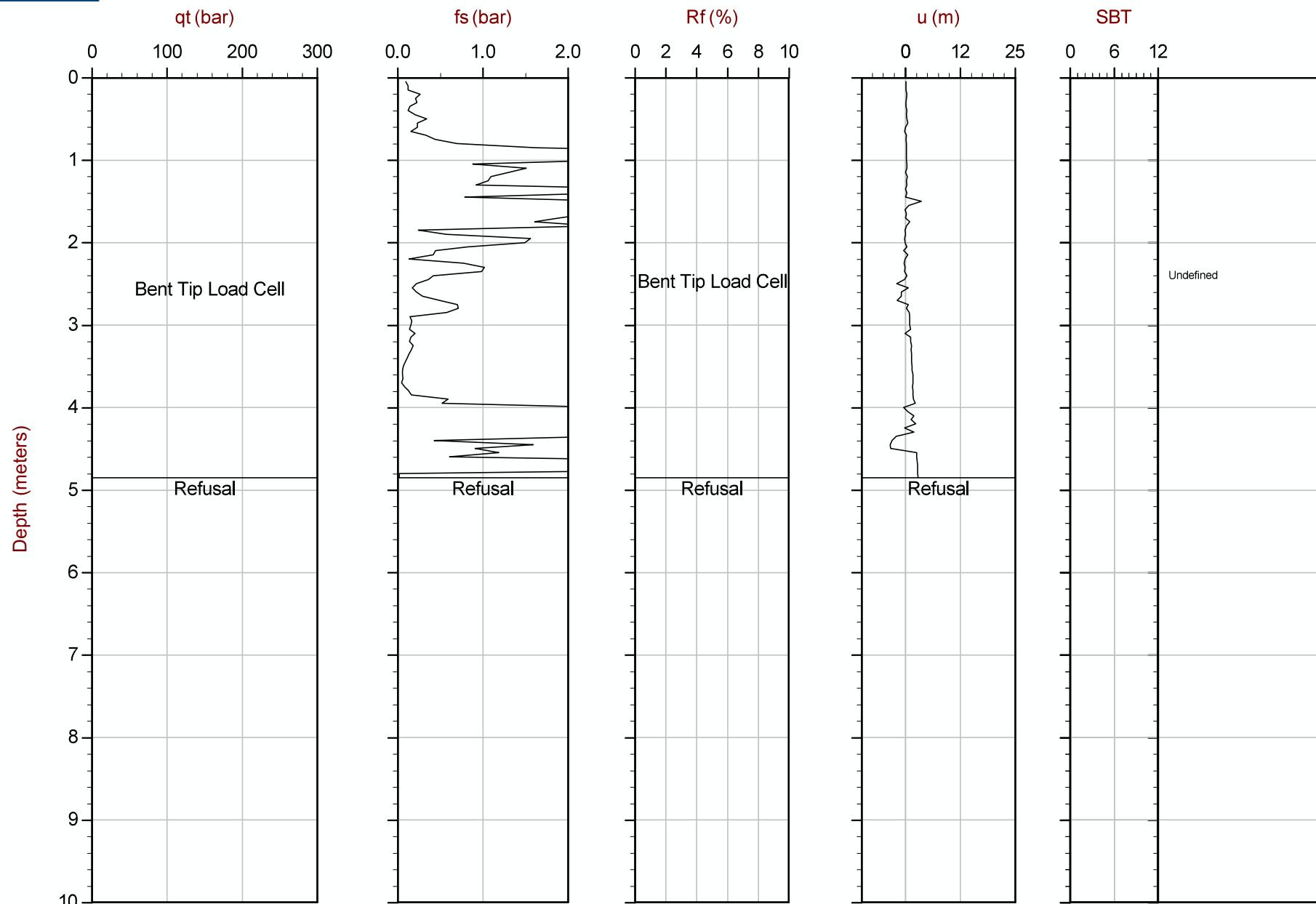
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 3.800 m / 12.47 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP23.COR
Unit Wt: SBT Chart Soil Zones

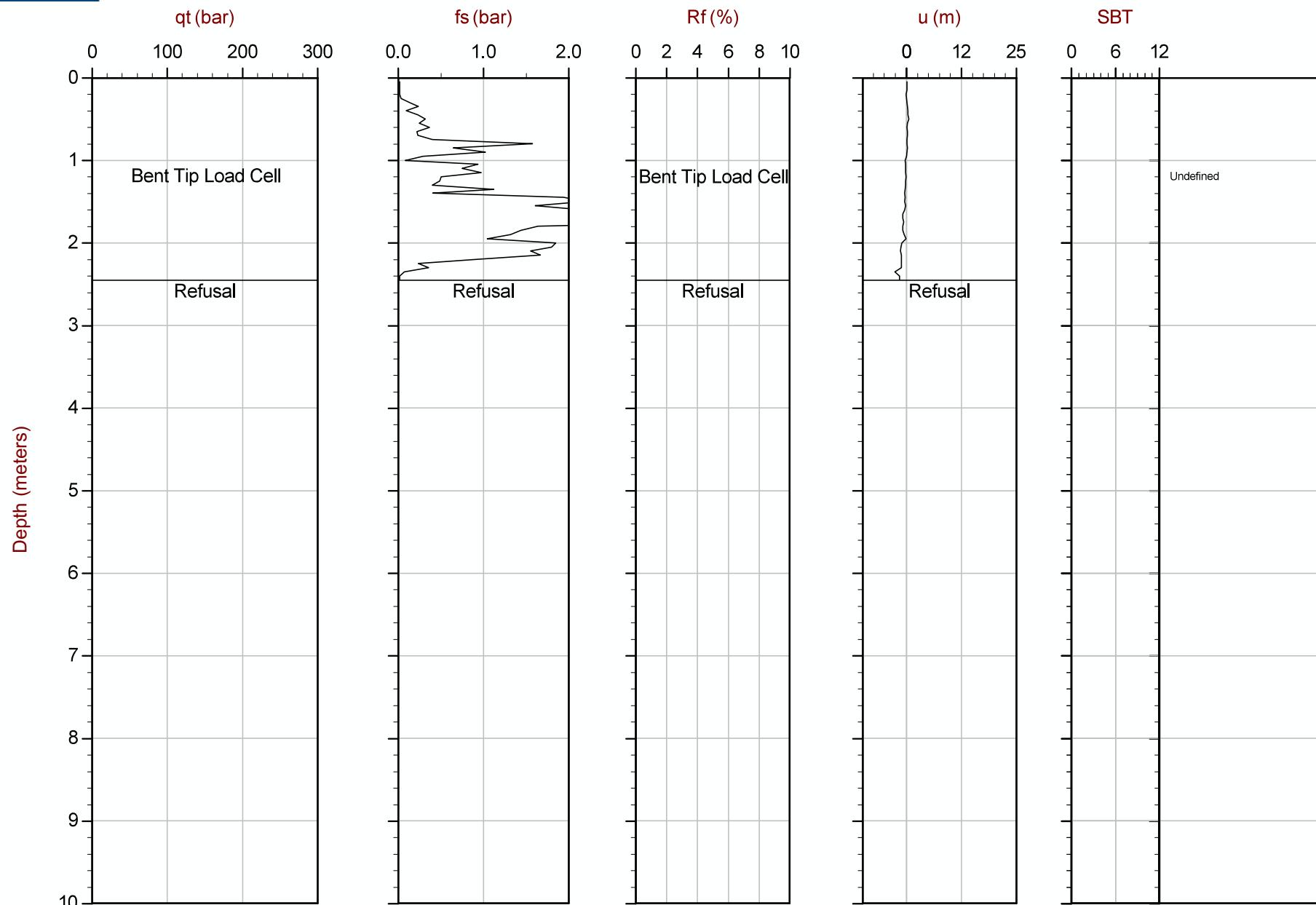
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.850 m / 15.91 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP18B.COR
Unit Wt: SBT Chart Soil Zones

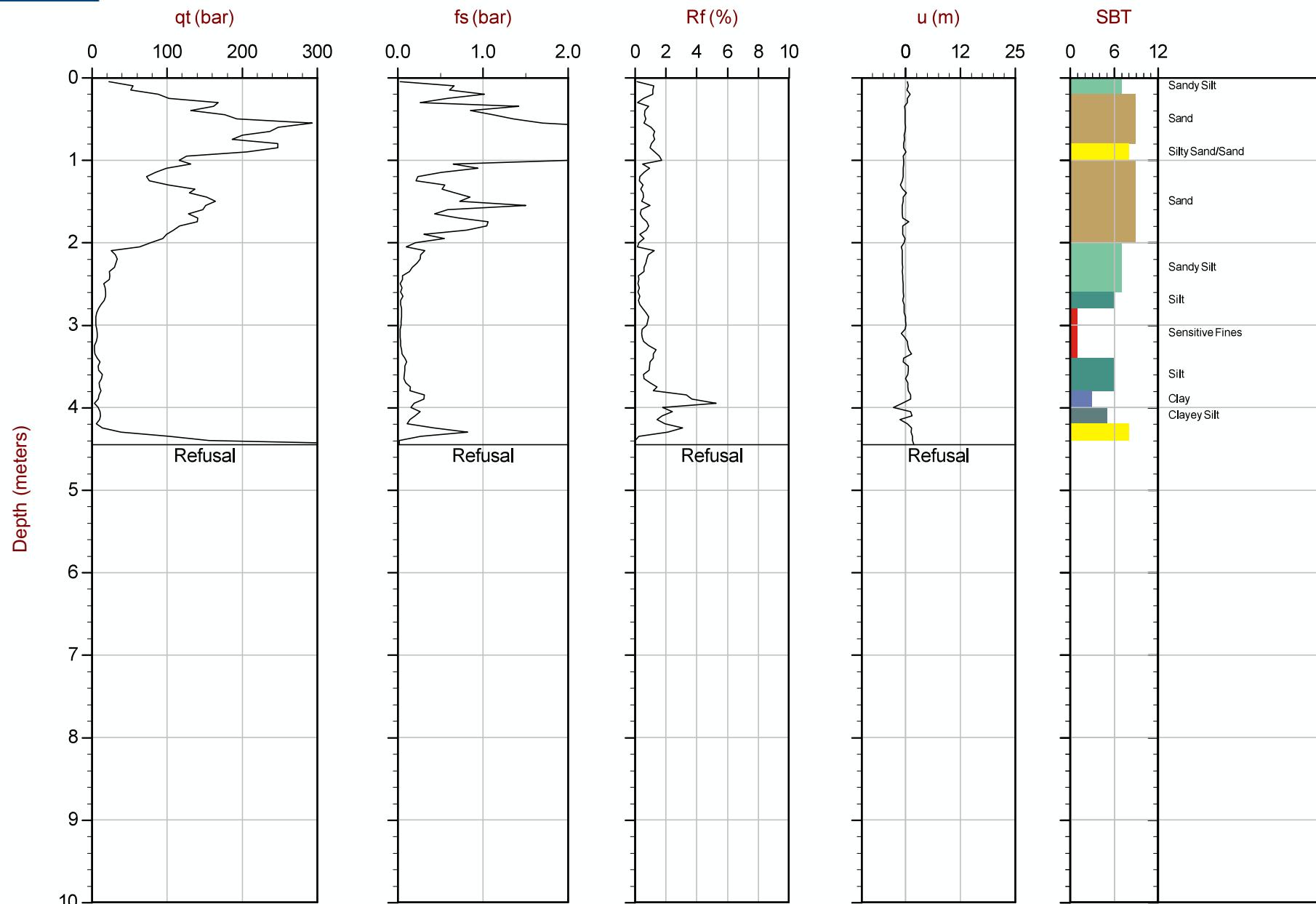
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 2.450 m / 8.04 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP18.COR
Unit Wt: SBT Chart Soil Zones

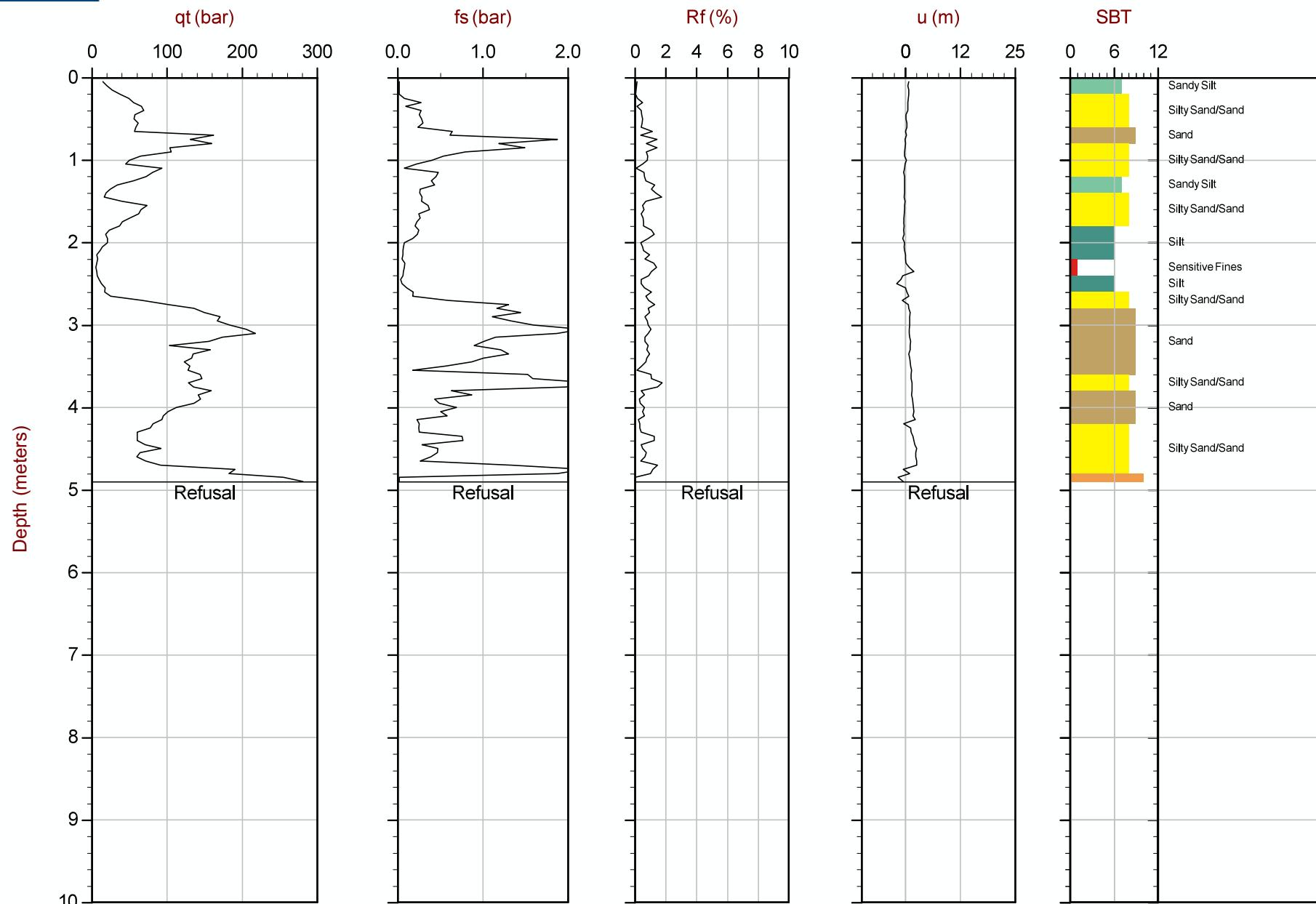
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.450 m / 14.60 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP17.COR
Unit Wt: SBT Chart Soil Zones

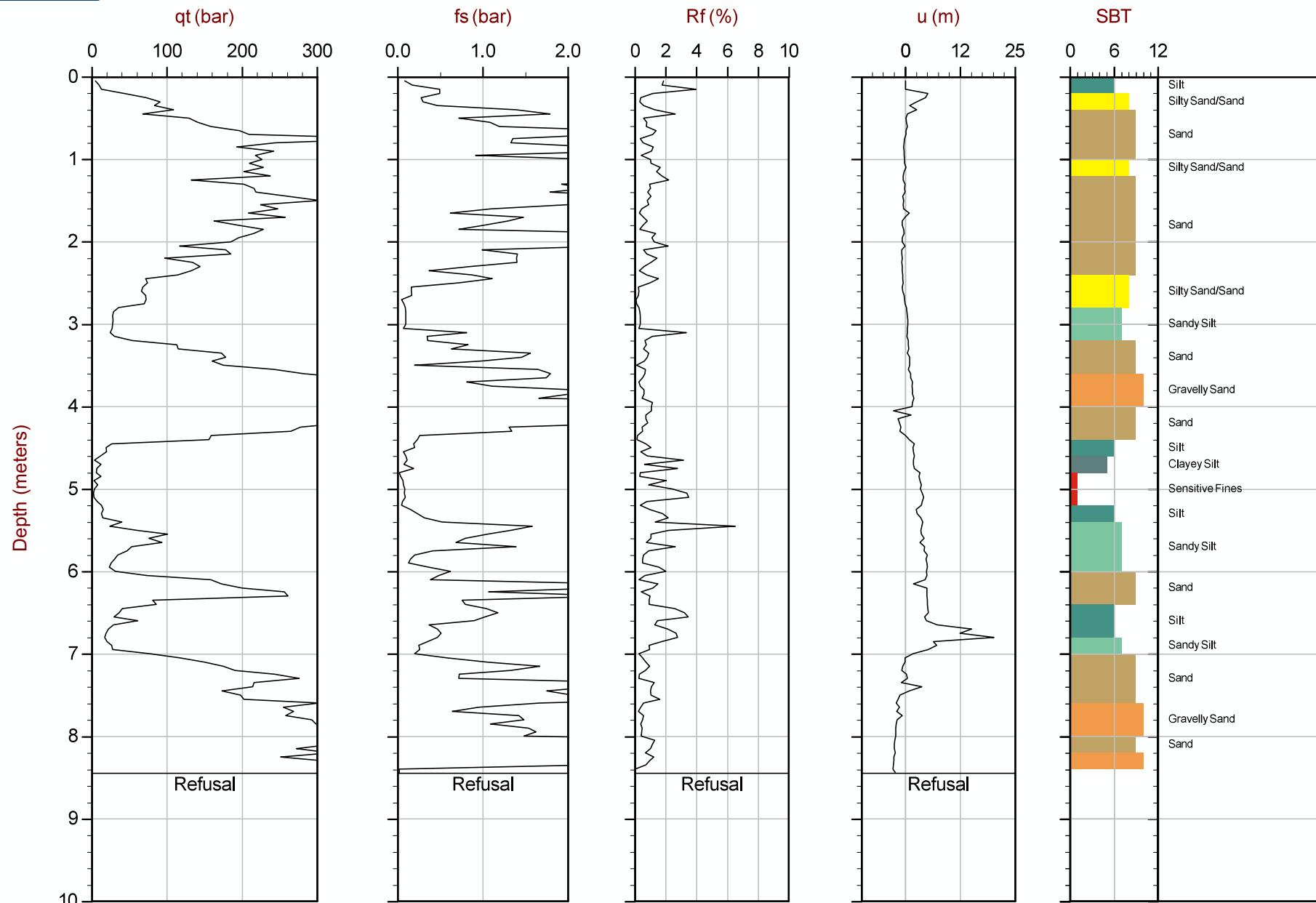
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 4.900 m / 16.08 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP16.COR
Unit Wt: SBT Chart Soil Zones

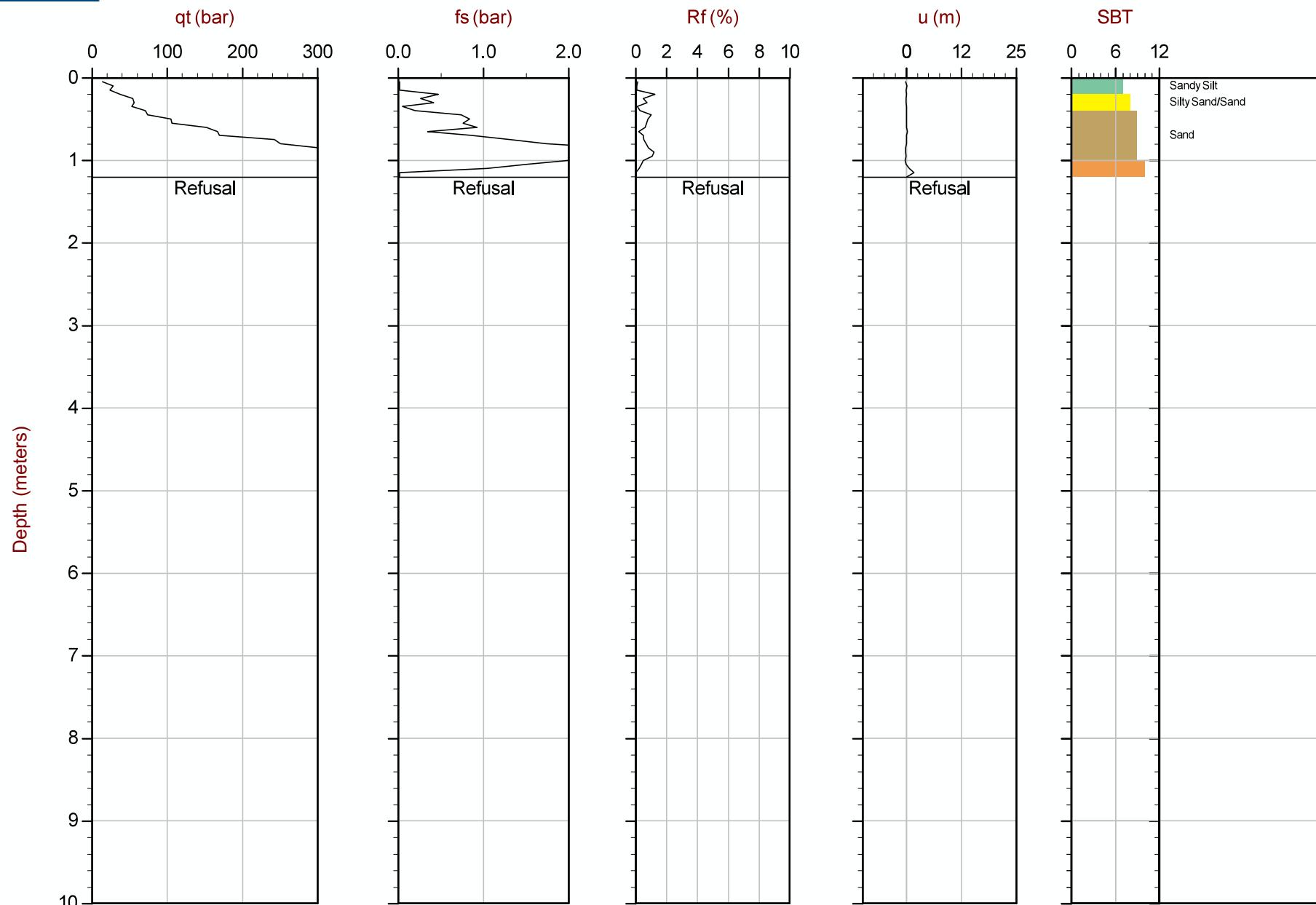
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 8.450 m / 27.72 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP13.COR
Unit Wt: SBT Chart Soil Zones

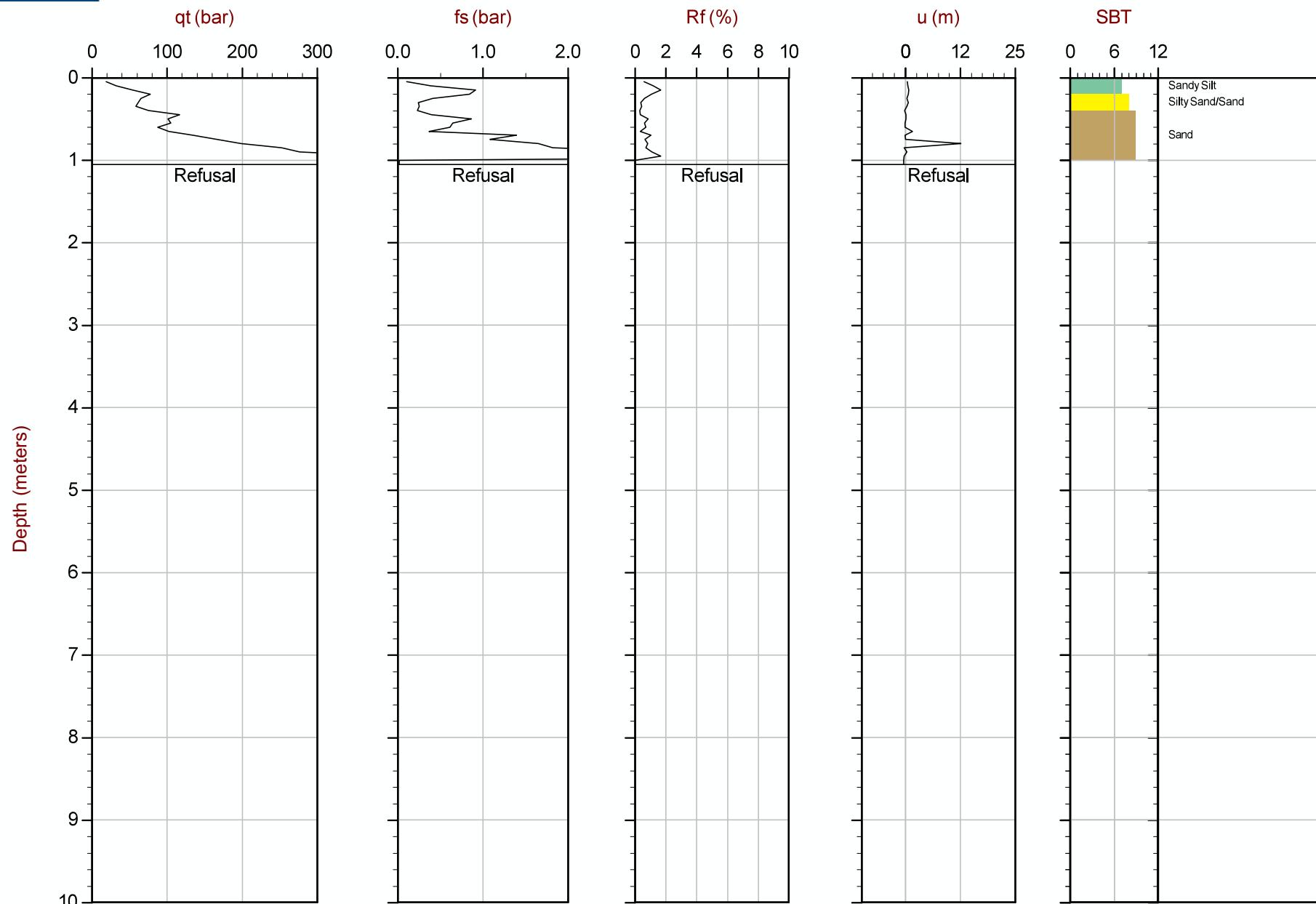
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 1.200 m / 3.94 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP10B.COR
Unit Wt: SBT Chart Soil Zones

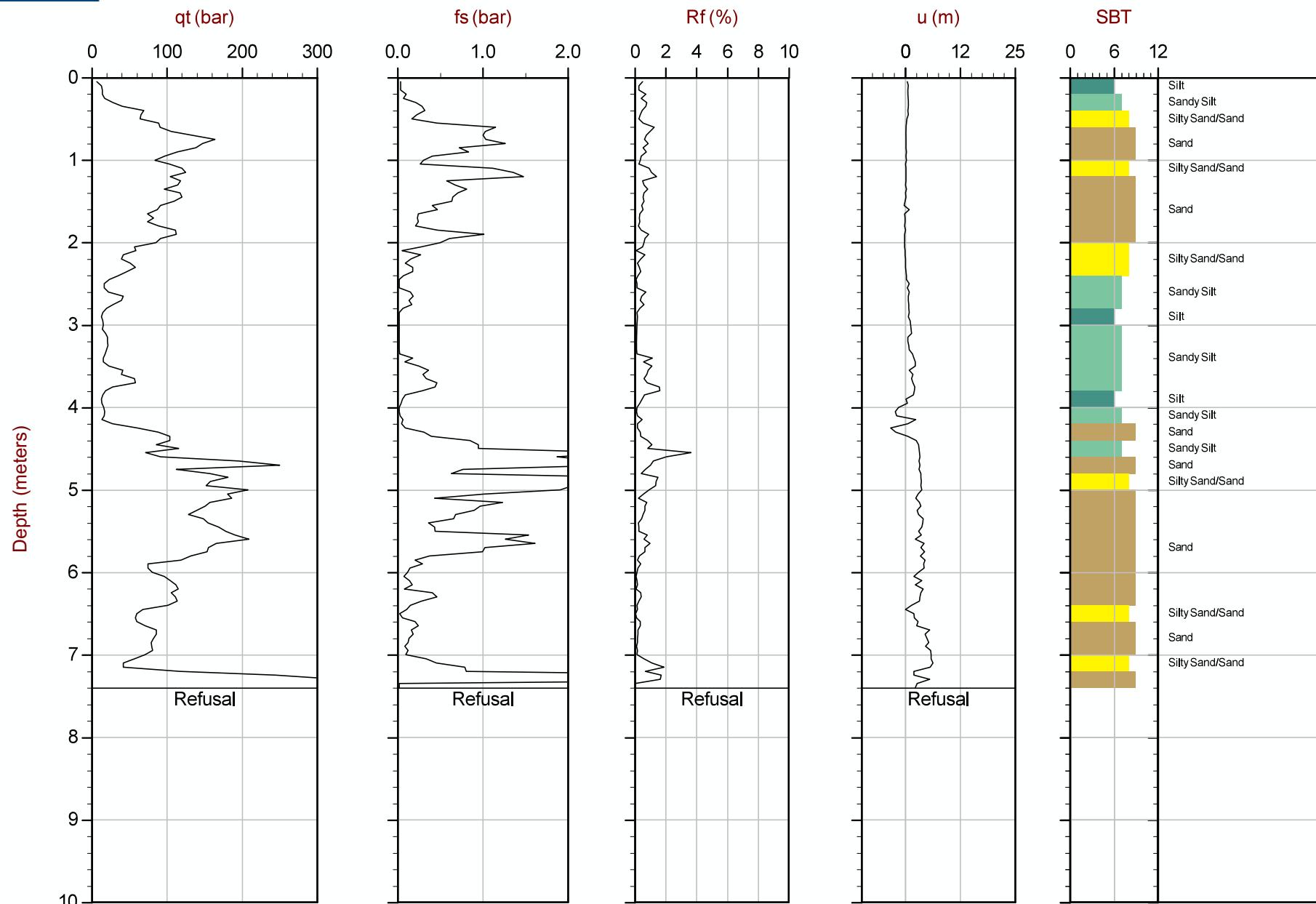
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 1.050 m / 3.44 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP10.COR
Unit Wt: SBT Chart Soil Zones

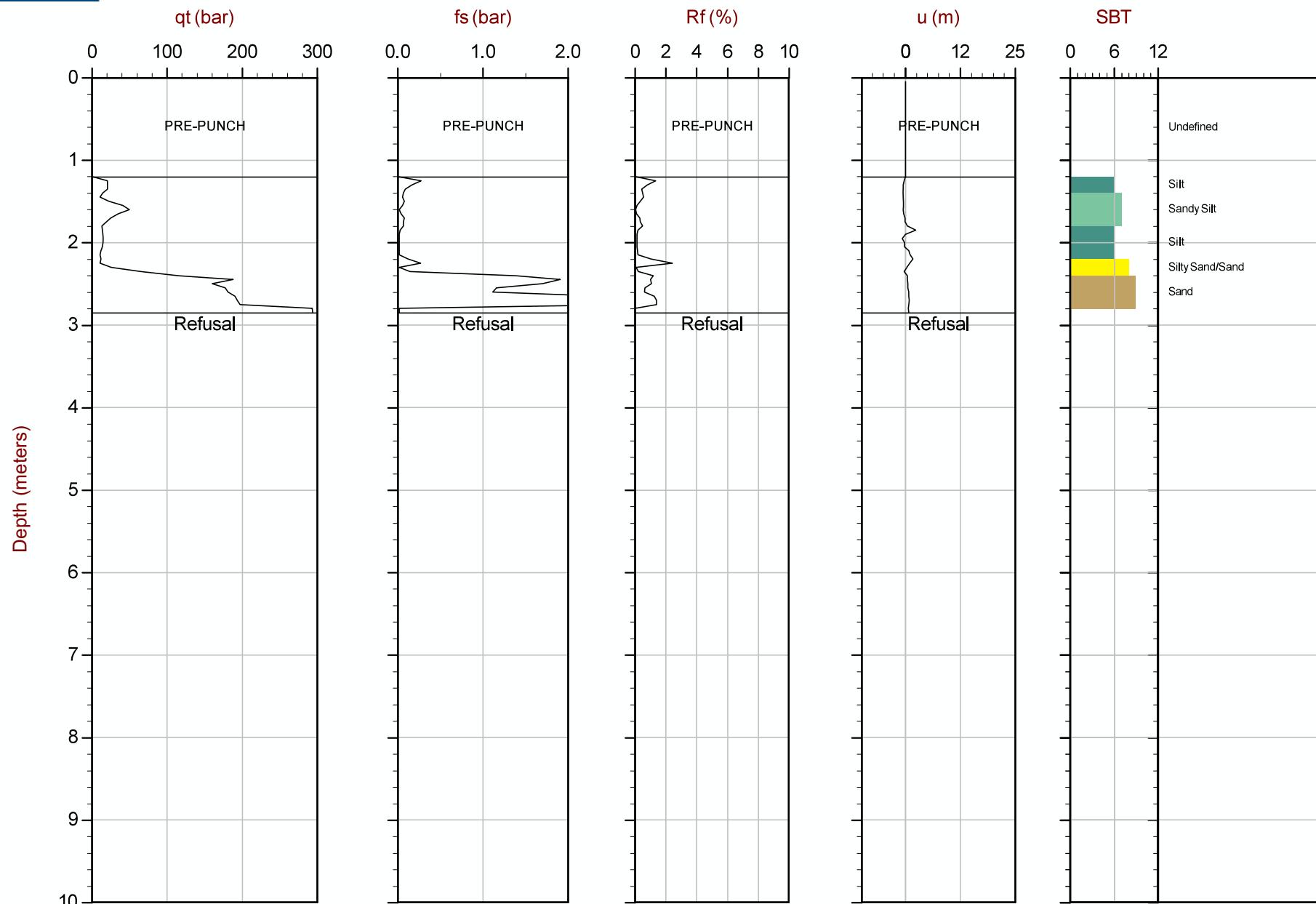
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 7.400 m / 24.28 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP09.COR
Unit Wt: SBT Chart Soil Zones

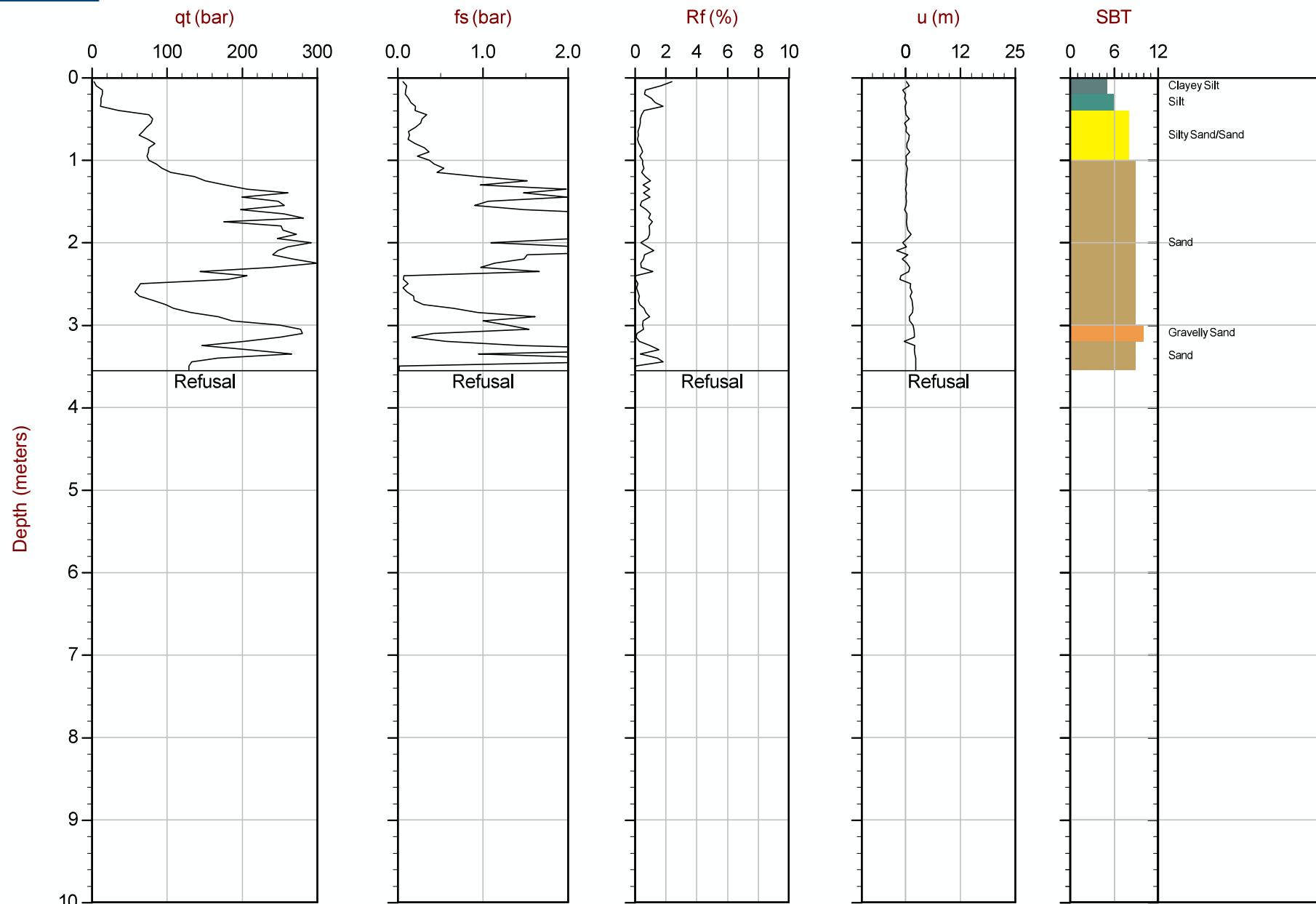
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 2.850 m / 9.35 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP08.COR
Unit Wt: SBT Chart Soil Zones

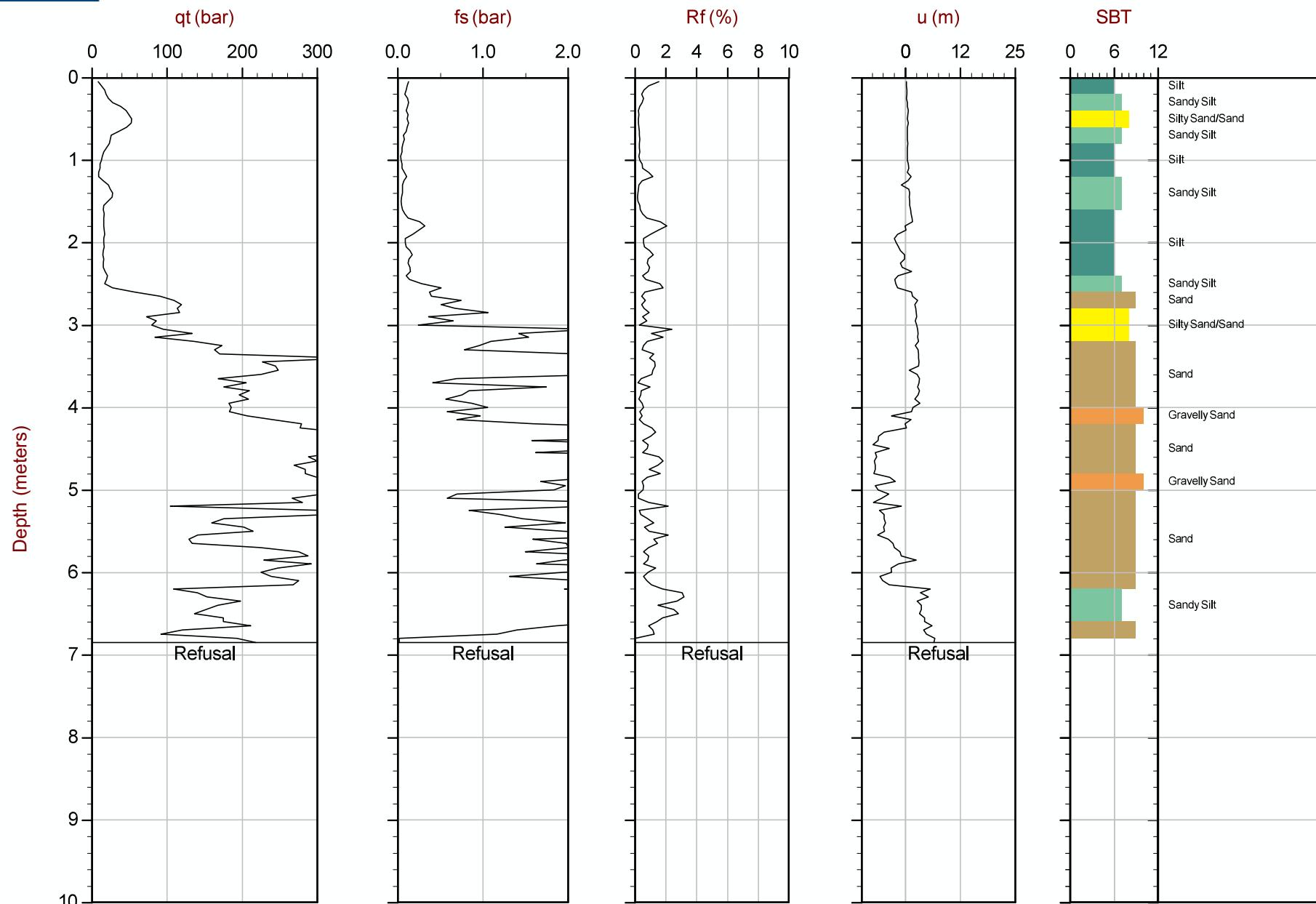
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 3.550 m / 11.65 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP07.COR
Unit Wt: SBT Chart Soil Zones

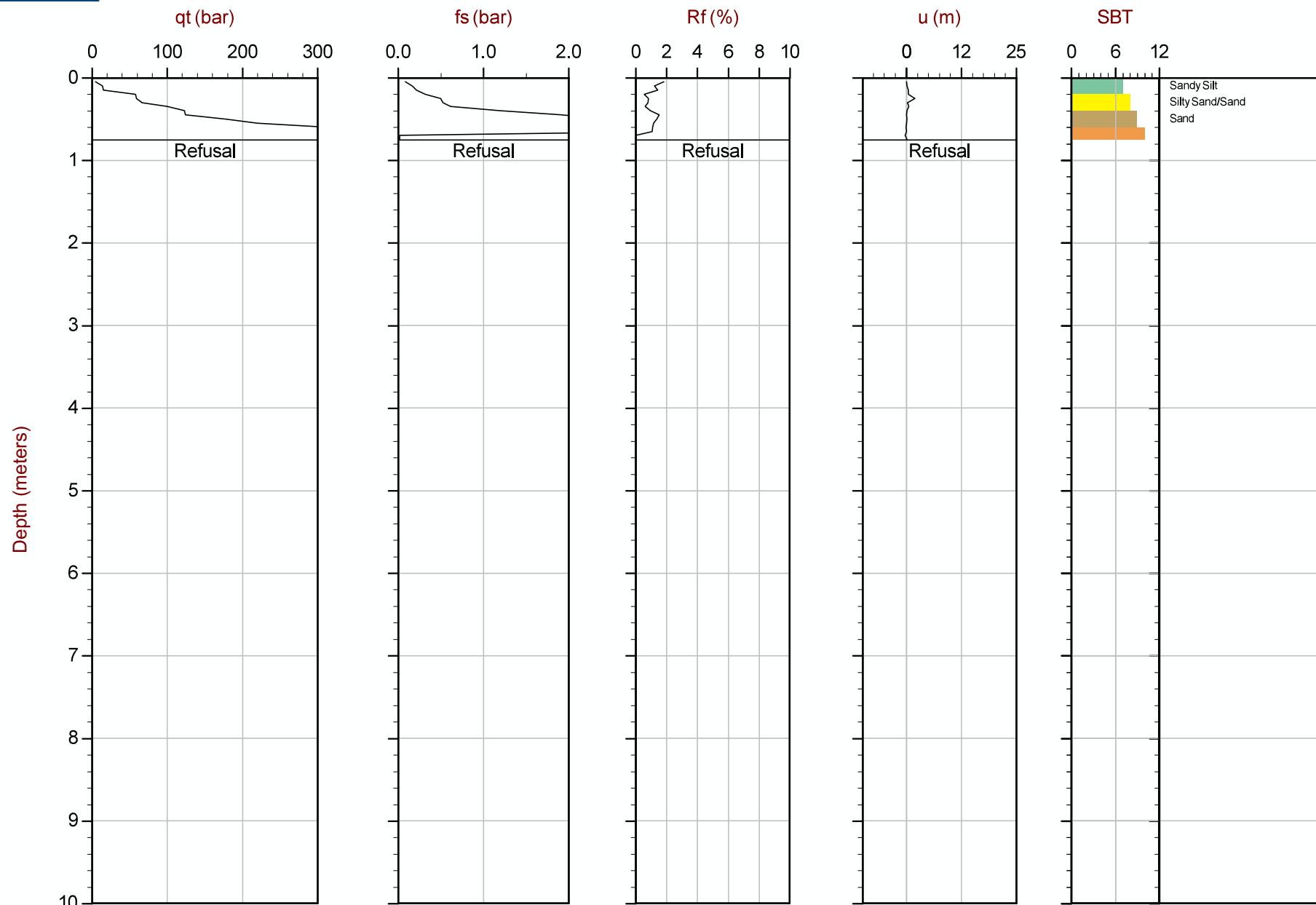
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 6.850 m / 22.47 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP06.COR
Unit Wt: SBT Chart Soil Zones

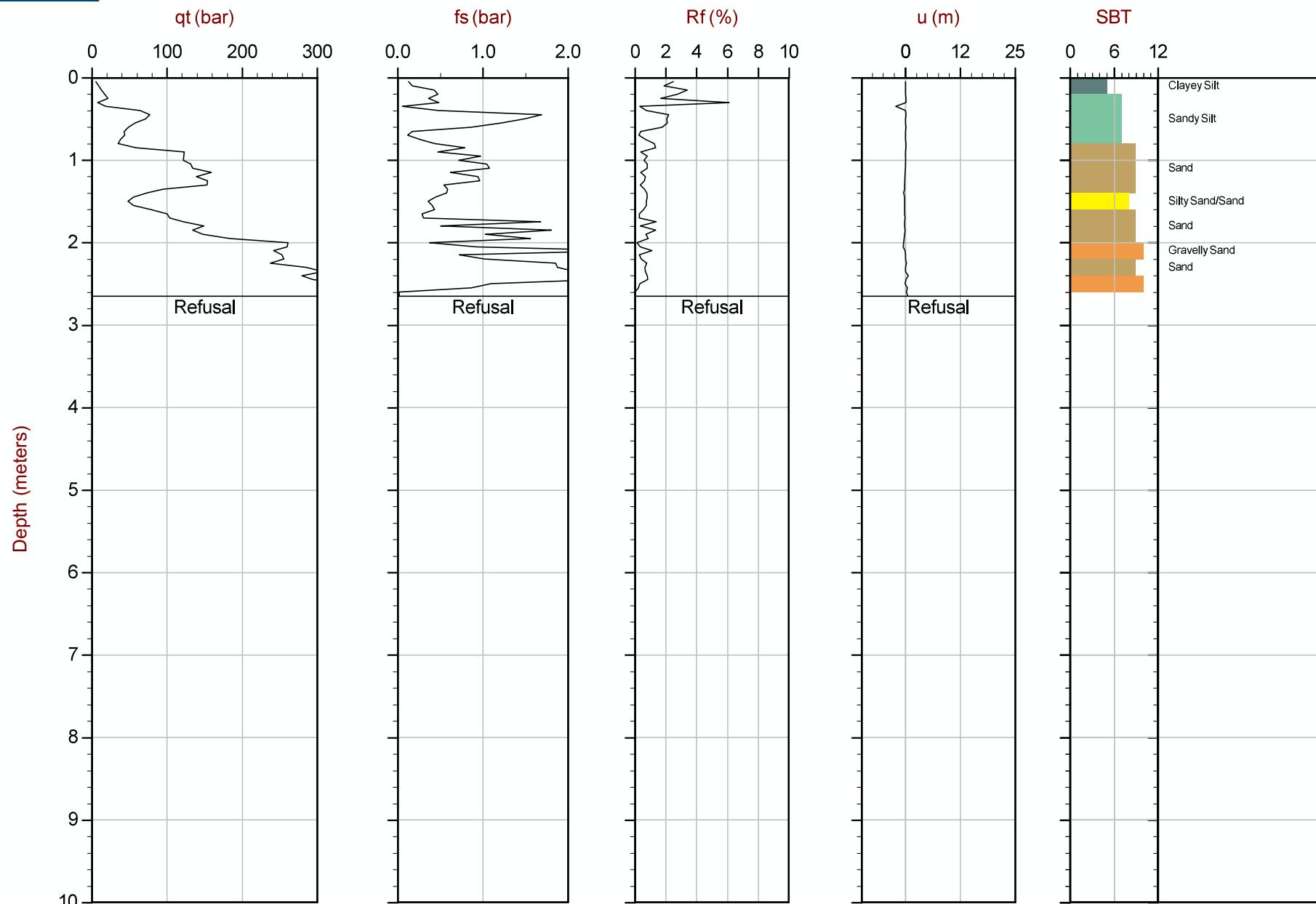
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 0.750 m / 2.46 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP02.COR
Unit Wt: SBT Chart Soil Zones

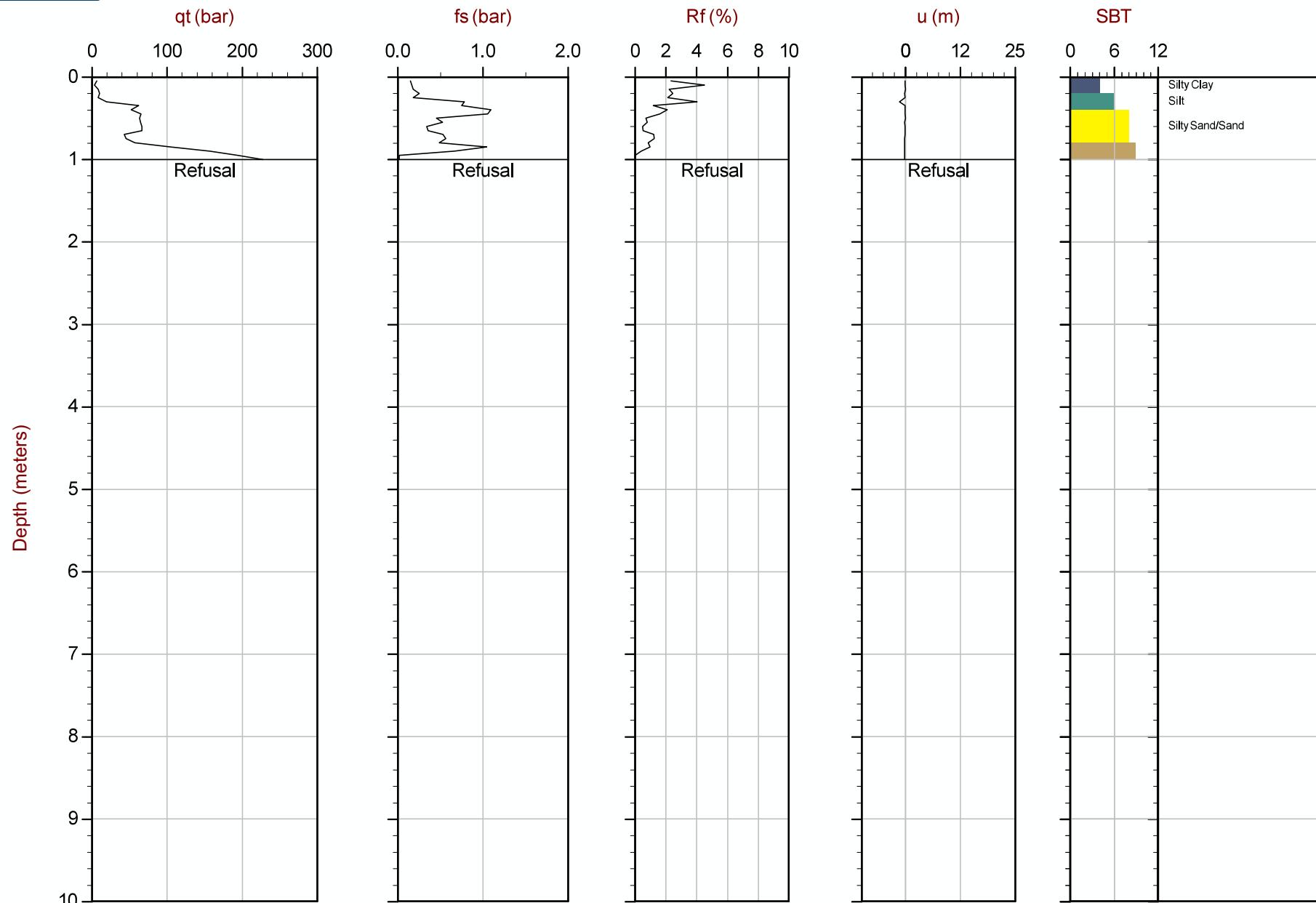
SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 2.650 m / 8.69 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP01B.COR
Unit Wt: SBT Chart Soil Zones

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Max Depth: 1.000 m / 3.28 ft
Depth Inc: 0.050 m / 0.164 ft
Avg Int: 0.200 m

File: 189CP01.COR
Unit Wt: SBT Chart Soil Zones

SBT: Lunne, Robertson and Powell, 1997
Page No: 1 of 1



Job No: 08-189
Client: Redfern Resources
Project: Tailings Management Facility, Tulsequah, BC
Date: Oct. 18-28, 2008

CPT SUMMARY				
CPT Sounding	File Name	Date	Cone	Final Depth (m)
CPT08-01	189CP01	10/18/08	STD 20T 202	1.00
CPT08-01B	189CP01B	10/18/08	STD 20T 202	2.65
CPT08-02	189CP02	10/18/08	STD 20T 202	0.75
CPT08-06	189CP06	10/19/08	STD 20T 202	6.85
CPT08-07	189CP07	10/19/08	STD 20T 202	3.55
CPT08-08	189CP08	10/19/08	STD 20T 202	2.85
CPT08-09	189CP09	10/19/08	STD 20T 202	7.40
CPT08-10	189CP10	10/19/08	STD 20T 202	1.05
CPT08-10B	189CP10B	10/19/08	STD 20T 202	1.20
CPT08-13	189CP13	10/20/08	STD 20T 202	8.45
CPT08-16	189CP16	10/20/08	STD 20T 202	4.90
CPT08-17	189CP17	10/20/08	STD 20T 202	4.45
CPT08-18	189CP18	10/21/08	STD 20T 202	2.45
CPT08-18B	189CP18B	10/21/08	STD 20T 202	4.85
CPT08-23	189CP23	10/21/08	STD 20T 236	3.80
CPT08-24	189CP24	10/21/08	STD 20T 236	4.80
CPT08-25	189CP25	10/21/08	STD 20T 236	2.90
CPT08-26	189CP26	10/21/08	STD 20T 236	3.50
CPT08-27	189CP27	10/22/08	STD 20T 236	3.70
CPT08-31	189CP31	10/22/08	STD 20T 236	5.85
CPT08-32	189CP32	10/22/08	STD 20T 236	3.50
CPT08-41**	189CP41	10/23/08	STD 20T 236	3.20
CPT08-43	189CP43	10/23/08	STD 20T 236	15.55
CPT08-51	189CP51	10/24/08	STD 20T 236	4.35
CPT08-54	189CP54	10/24/08	STD 20T 236	7.95
CPT08-55	189CP55	10/24/08	STD 20T 236	4.10
CPT08-56	189CP56	10/24/08	STD 20T 236	3.55
CPT08-65	189CP65	10/28/08	STD 20T 236	9.05
CPT08-66	189CP66	10/28/08	STD 20T 236	5.55
CPT08-68	189CP68	10/28/08	STD 20T 236	10.55

**Sounding depth achieved was less than pre-punch depth, therefore only PPD file is included.

Bibliography

Robertson, P.K., "Soil Classification using the Cone Penetration Test", Canadian Geotechnical Journal, Vol 27, 1990 pp 151-158.

Robertson, P.K., R.G. Campanella, D. Gillespie and A. Rice, "Seismic CPT to Measure In-Situ Shear Wave Velocity", Journal of Geotechnical Engineering ASCE, Vol. 112, No. 8, 1986 pp 791-803.

Campanella, R.G. and I. Weemees, "Development and Use of An Electrical Resistivity Cone for Groundwater Contamination Studies", Canadian Geotechnical Journal, Vol. 27 No. 5, 1990 pp 557-567.

Kurfurst, P.J. and D.J. Woeller, "Electric Cone Penetrometer – Development and Field Results From the Canadian Arctic", Penetration Testing 1988 ISOPT, Orlando, Volume 2 pp 823-830.

Zemo, D.A., T.A. Delfino, J.D. Gallinatti, V.A. Baker and L.R. Hilpert, "Field Comparison of Analytical Results from Discrete-Depth Groundwater Samplers" BAT Enviroprobe and QED Hydropunch, Sixth national Outdoor Action Conference, Las Vegas, Nevada Proceedings, 1992, pp 299-312.

Lunne, T., Robertson, P.K. and Powell, J.J.M., 1997, "Cone Penetration Testing in Geotechnical Practice", E & FN Spon, ISBN 0 419 23750, www.sponpress.com, 312 pages, 3rd printing.

Greig, J.W., R.G. Campanella and P.K. Robertson, "Comparison of Field Vane Results With Other In-Situ Test Results", International Symposium, on Laboratory and Field Vane Shear Strength Testing, ASTM, Tampa, FL, Proceedings, 1987.

DeGroot, D.J. and A.J. Lutenegger, "Reliability of Soil Gas Sampling and Characterization Techniques", International Site Characterization Conference - Atlanta, 1998.

Daniel, C.R., J.A. Howie and A. Sy, "A Method for Correlating Large Penetration Test (LPT) to Standard Penetration Test (SPT) Blow Counts", 55th Canadian Geotechnical Conference, Niagara Falls, Ontario, Proceedings ,2002.

Woeller, D.J., P.K. Robertson, T.J. Boyd and Dave Thomas, "Detection of Polycyclic Aromatic Hydrocarbon Contaminants Using the UVIF-CPT", 53rd Canadian Geotechnical Conference Montreal, QC October pp 733-739, 2000.

CPT Basic Interpretations (TBL Extension)

ConeTec's basic CPT interpretation output files are generally delivered in text files with a TBL extension. The root file name is the same as the COR files. A number of calculated geotechnical parameters are presented in these files. The files are stored as ASCII text files that can be viewed using any text editor such as Notepad or Wordpad. The files do not contain any page formatting. These files are not distributed if the enhanced interpretation files are provided.

CPT Enhanced Interpretations (IFI, IFP, XLS Extension)

ConeTec's enhanced CPT interpretation output files are delivered in several formats, each file type containing the exact same information but formatted slightly differently. The files typically have any of the following file extensions:

1. IFI an importable TAB delimited ASCII text file containing approximately 47 data columns of geotechnical interpretations. The file is designed for easy import to Excel. A companion document describes the techniques used for the interpretations (usually reproduced at the beginning of the Interpretation Appendix). Text editors can be used to view the file contents, however, they may remove the tabs or replace the tabs with spaces upon saving the file destroying the feature that makes them easy to import into Excel.

Because Excel imports the data as text and the sheet is protected two steps may be necessary to modify the data or use the values in certain Excel functions:

- a) Under Tools (Excel 2000) Select the Protection Option and then Unprotect the sheet
- b) Select the entire sheet, copy and then use Paste Special to paste as values to a second sheet.

Future versions of our interpretation routine will address these inconveniences.

2. IFP a printable ASCII text file containing the same 47 columns of geotechnical interpretations as the IFI file. This file type has been formatted as a multi-page document with up to 132 characters per line and up to 68 lines per page. Each page has been separated into multiple sections to accommodate all the data fields. Each physical page has a header section and a page/section number. The file is designed for direct printing to laser printers set into compressed font mode. This output is typically provided in the Interpretation Appendix.

An abbreviated set of interpretations (containing 36 columns of output) may be generated instead. These files usually have the extensions NLI and NLP. XLS files can be generated from these as well.

3. XLS an Excel format file that has been generated directly from the corresponding IFI file. IFI and IFP files are not distributed if the XLS files are generated. The XLS files may have been generated from abbreviated NLI interpretation files.

In each case root file name is the same as the COR files.

CPT Dissipation Files (PPF Extension)

CPT Dissipation files have the same naming convention as the CPT sounding files and have the extension PPD or PPF. PPF (and PPD) files consist of the following components:

1. Two lines of header information
2. Data records

Header Lines (same as COR file):

Line 1: Columns 1-6 may be blank or may indicate the version number of the recording software
Columns 7-21 contain the sounding Date and Time
Columns 22-36 contain the sounding Operator

Line 2: Columns 1-16 contain the Job Location
Columns 17-31 contain the Cone ID
Columns 32-47 contain the sounding number

Data Records

The data records immediately follow the header lines. Each data record can occupy several lines in the file and is a complete record of a dissipation test at a particular depth. Each data record starts with a line containing two values separated by spaces; the first value being an index number (not currently used by the Software) and the second being the dissipation test depth in meters. Following this line are the dissipation pore pressure values stored at 5 second intervals with a maximum of 12 entries per line. The last line of the dissipation record may not contain a full 12 entries. The data record is terminated with an ASCII 30 character (appears as a triangle in some editors).

This sequence is repeated for every dissipation test in the sounding. No marker is used to indicate end of file. Units information is not stored in this file. Users would have to check the CPT file for the units that were used.

APPENDIX VII
STATEMENT OF EXPENDITURES

APPENDIX VII
STATEMENT OF EXPENDITURES

TULSEQUAH 2008 EXPLORATION EXPENDITURES

Statement of Work Event Numbers 4284701 and 4284702

Redfern Field Personnel	483,783.38
Air support - Fixed Wing	1,592,976.00
Air support - Helicopter	1,938,624.00
Assay and geochemical analysis	26,820.30
Communications	306,622.79
Contractor Services:	
Arctic Constr. & subcontractors	12,317,336.82
Geotechnical (ConeTec)	75,166.40
Underground (Ampex)	70,339.79
Equipment Rental	8,219,543.69
Explosives	450,720.25
First Aid and Fire protection	104,714.28
Fuel - Aviation	792,671.19
Fuel - Diesel	1,599,220.33
Fuel - Gasoline	21,072.17
Fuel - Propane	48,561.15
Groceries & Camp Catering	1,307,540.52
Rent (camp)	125,491.31
Supplies - Operating	849,431.00
Travel - Accommodations	38,459.64
Travel - Transportation	369,126.54
Vehicle - Rentals	4,731.23
Report Costs	37,684.02
Grand Total	30,780,636.79

expenditures for work in area covered by claim 590422 incurred prior to Aug 26, 2008 are not included
expenditures for work on crown grants are not included

Redfern Field Personnel Costs
2008 Tulsequah Project

<u>Name</u>		<u>Position</u>	<u>Hourly Rate</u>	<u>2008 Hours</u>	<u>Daily Rate</u>	<u>Site</u>	<u>Travel</u>	<u>Days</u>	<u>Total</u>
REDFERN									
Bychyk	Christine	First Aid	28.50	444.00	228.00	55		55.50	12,654.00
Giesbrecht	Annette	Cook	42.75	170.00	342.00	21		21.25	7,267.50
Hardy	Tess	First Aid	28.50	176.00	228.00	22		22.00	5,016.00
Jack	June	Cooks Helper	28.50	110.00	228.00	13		13.75	3,135.00
Knight	Peter	Safety	43.84	401.35	350.76	50		50.17	17,596.95
REDCORP									
Allen	Michael	Mine Manager	63.03	1,256.00	504.21	137	20	157.00	79,160.71
Budge	Greg	Environmental Monitor	45.18	1,776.00	361.41	200	22	222.00	80,234.11
Coster	Ian	geologist	49.32	896.00	394.60	104	8	112.00	44,194.64
Giles	Graham	geologist	43.84	712.00	350.76	77	12	89.00	31,217.21
		Safety	50.69	2,166.75	405.56			270.84	109,841.13
Nelega	Peter	Mine Manager	68.51	384.00	548.05	42	6	48.00	26,306.31
Van Veen	Lana	Environmental Monitor	38.36	1,552.00	306.91	172	22	194.00	59,539.81
Redfern Consultants									
Marsland	Robert	Environmental Engineer	108.86	70.00		12		8.75	7,620.00
Total								1264	483,783.38
Report Writing (2009)									
Armstrong	Brett	geologist	50.15	240.00	401.17			30.00	12,035.12
Giles	Graham	geologist	43.84	240.00	350.76			30.00	10,522.66
O'Donnell	Megan	Expl Manager	63.03	240.00	504.21			30.00	15,126.25
Total									37,684.02

Arctic Construction Equipment Rental and Field Personnel Rates, Tulsequah Project 2008

Description	Hr Rate	standby	Day Rate
Administrator			500
Ambulance & Attendant (Unit 345)	100		800
Ambulance (Unit 345)	100		350
Attendant - 2nd			500
Bare Camp	500		1000
Blaster	90		
Boat	75		
Crane Operator	110		
Crew Bus Unit 357	300	150	
CrewCab - ACL - Unit 346	200	80	
CrewCab - ACL - Unit 353	200	80	
CrewCab - ACL - Unit 354	200	80	
CrewCab - ACL - Unit 358	200	80	
CrewCab - ACL - Unit 359	200	80	
CrewCab - MC T-06103	200	80	
CrewCab - MC T-06107	200	80	
Crusher Package	70	1000	
Dozer D6 - Unit 605	110	300	
Dozer D7 - Unit 703	145	350	
Dozer D7 - Unit 709	145	350	
Dozer D8T - Unit 805	257	450	
Dozer D9 - Unit 902	285	500	
Driller	85		
Driller Helper	65		
Ex 270 - Unit 1015	150	335	
Ex 270 - Unit 1017	150	335	
Ex 330 - Unit 1019	170	350	
Ex 330 - Unit 1020	170	350	
Ex 350 - Unit 1023	185	375	
Ex 350 - Unit 1024	185	375	
Ex 450 - Unit 1025	230	400	
Faller c/w saw	65		
Fuel Truck - Unit 2014	200	125	
G-D Rock Drill	200	600	
Grader 160H - Unit G450	80	250	
Grapple Skidder - Unit 480	70	150	
IR Packer - Unit 411	80	250	
IR Packer - Unit 412	80	250	
IR Packer - Unit 413	80	250	
IR Packer - Unit 411	80	250	
Kenworth - Unit 2018		250	500
Kubota	35	0	
KW #2009 & Lowboy #209		250	500
Labourer	55		

Description	Hr Rate	standby	Day Rate
Administrator			500
Ambulance & Attendant (Unit 345)		100	800
Loader 950 - Unit 482	70	350	
Loader 966G - Unit 483	100	375	
Loader 966G - Unit 484	100	375	
Loader 980G - Unit 485	100	375	
Mechanic	80		
Medic only	500		
Mill	55		
Operator	80		
Operator - McCaws	80		
Quad	150	150	
Rock Drill Atlin	200	600	
Rock Drill D-0642	200	600	
Rock Drill D-0744	200	600	
Rock Drill D-9727	200	600	
Rock Drill D-9935	200	600	
Rock Truck 30T - Unit 3001	120	335	
Rock Truck 30T - Unit 3002	120	335	
Rock Truck 30T - Unit 3004	120	335	
Rock Truck 30T - Unit 3005	120	335	
Rock Truck 30T - Unit 3006	120	335	
Rock Truck 30T - Unit 3007	120	335	
Rock Truck 30T - Unit 3008	120	335	
Rock Truck 30T - Unit 3009	120	335	
Safety Officer			1000
Safety Officer QA/QC			1000
SawMill	55		
Service Truck - Unit 340	250	125	
Service Truck - Unit 355	250	125	
Service Truck - Unit 356	250	125	
Skidder - Unit 480	70	150	
Superintendent			1100
Superintendent Accomodations			100
Supervisor			1000
Supervisor- McCaws			1000
Water Truck - Unit 2015		150	300
Welder	80		
Crusher crew travel	55		