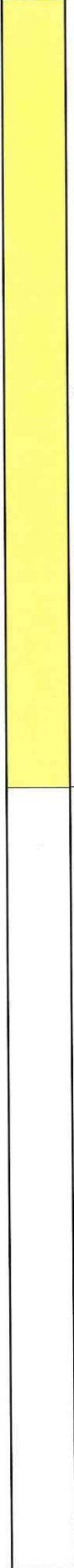


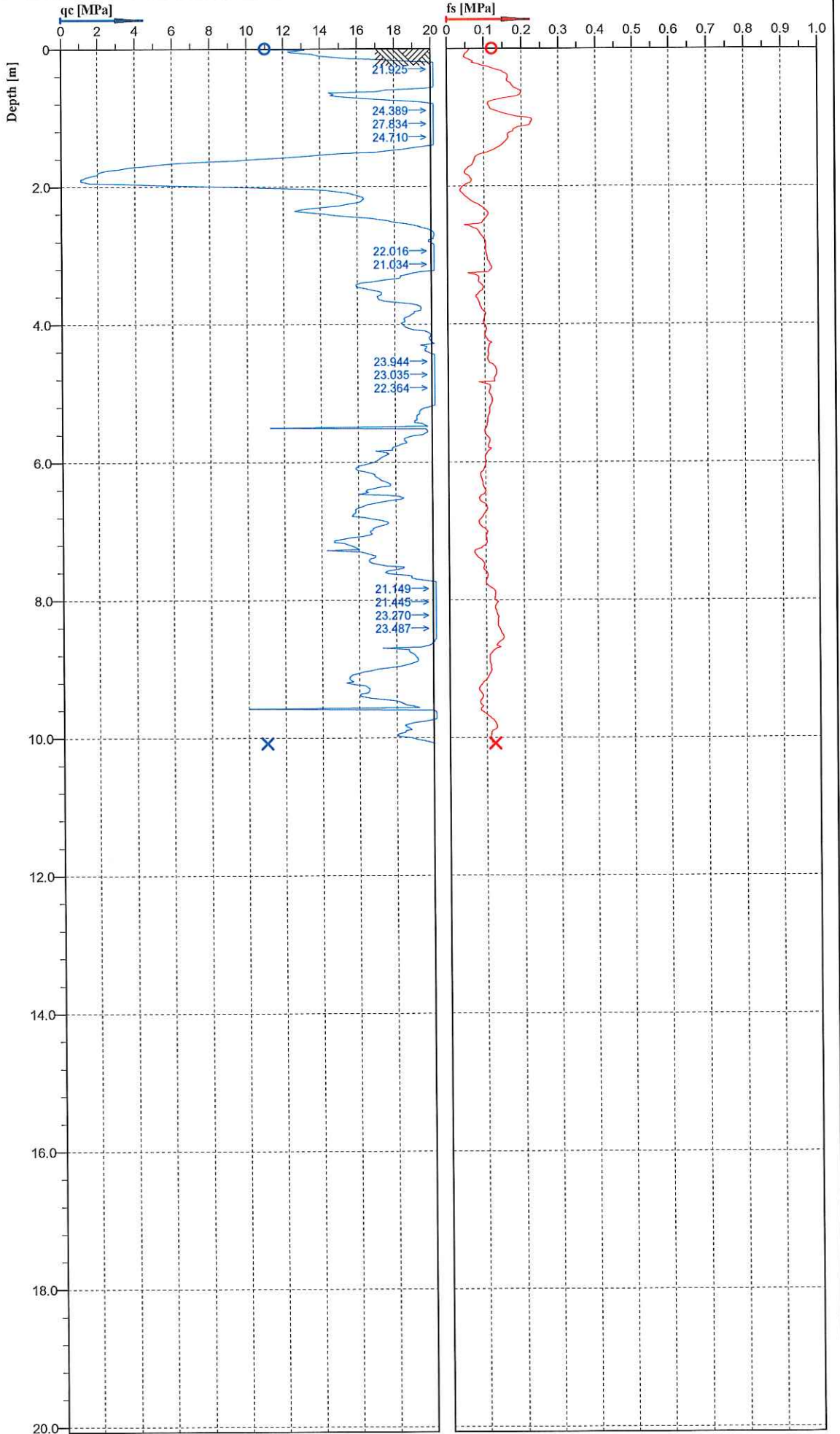
Appendix J

Verification CPT Logs

Classification by
Robertson 1986



Sand (9)



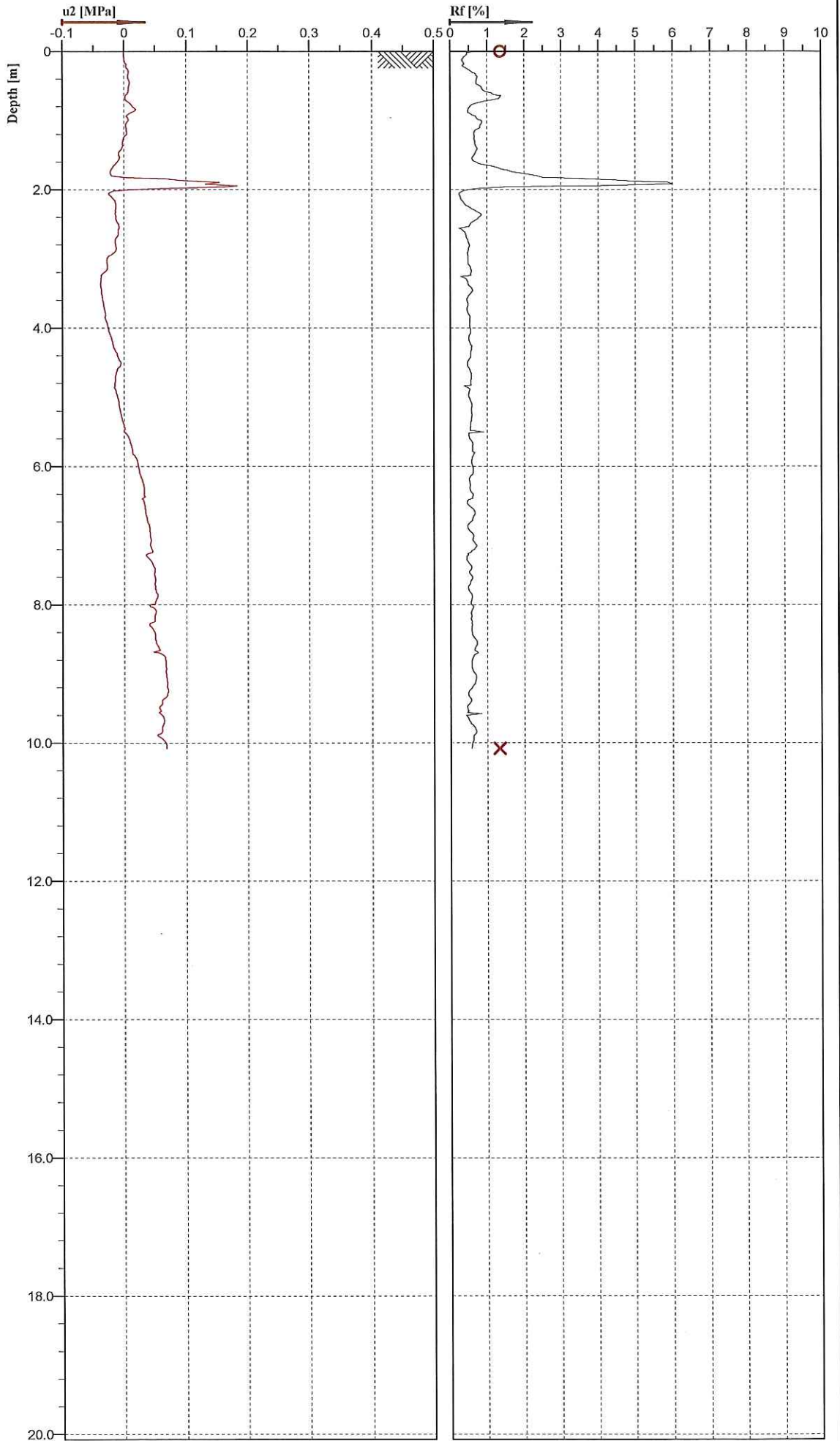
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Tip area [cm²]: 10
Sleeve area [cm²]: 150

Location:	CHCH	Position:	X: 0.00 m, Y: 0.00 m	Ground level:	0.00	Test no:	V7
Project ID:		Client:	AURECON	Date:	04/03/2015	Scale:	1 : 80
Project:	PRESTONS SOUTH STAGE M & N			Page:	1/1	Fig:	
				File:	Preston South CPTV7.cpt		

Classification by
Robertson 1986



Sand (9)



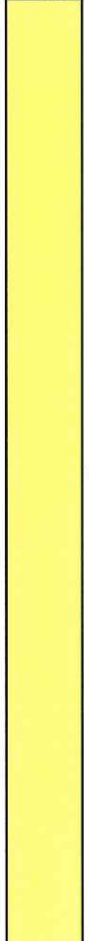
PRO-DRILL
SPECIALIST DRILLING ENGINEERS



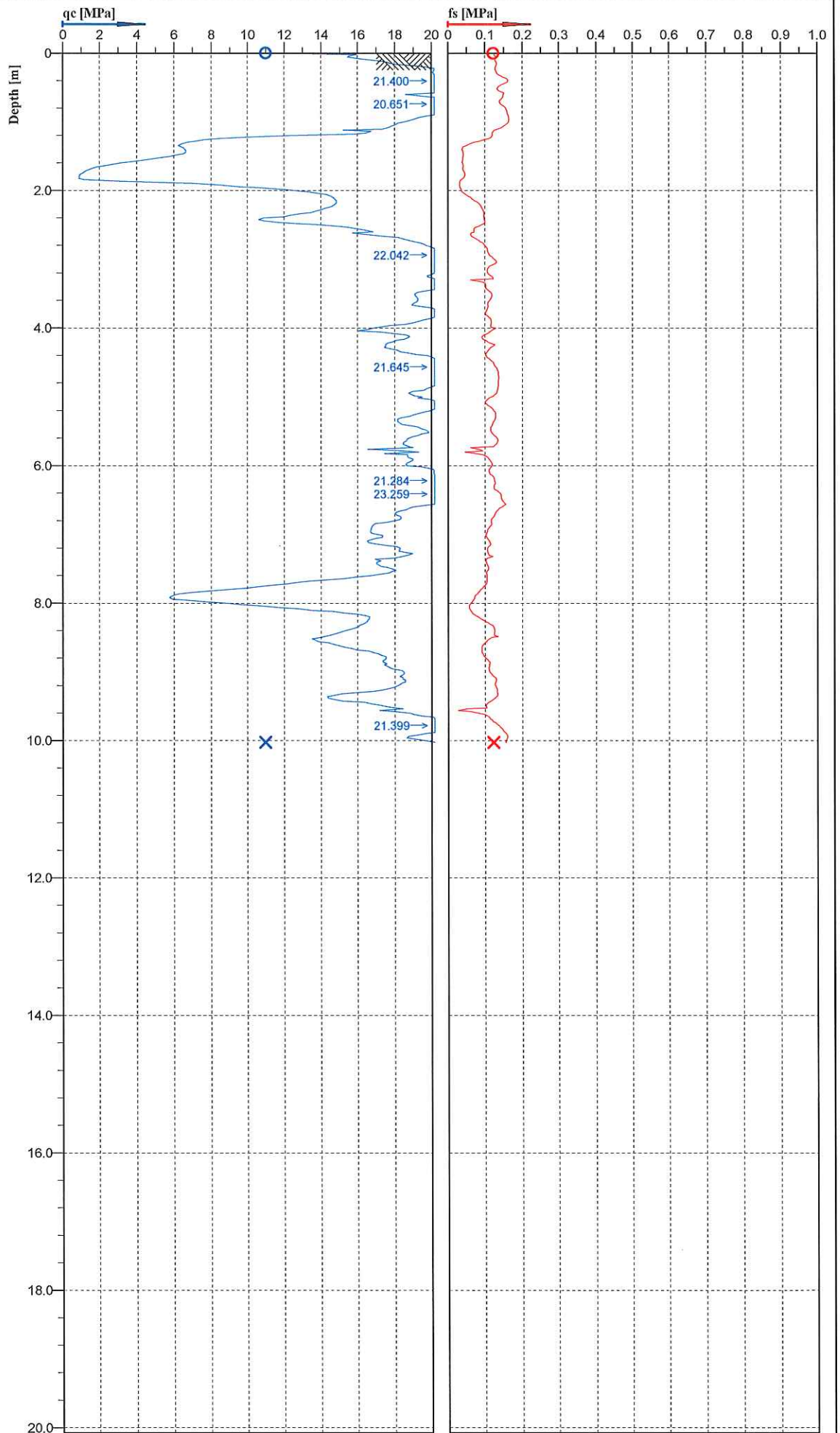
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Sleeve area [cm²]: 150

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Project ID:		Client:	AURECON	Date:	04/03/2015	Scale:	1 : 80
Project:	PRESTONS SOUTH STAGE M & N			Page:	1/1	Fig:	
				File:	Preston South CPTV7.cpt		

Classification by
Robertson 1986



Sand (9)

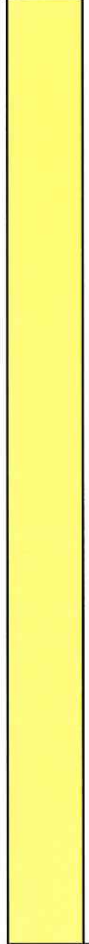


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Sleeve area [cm²]: 150

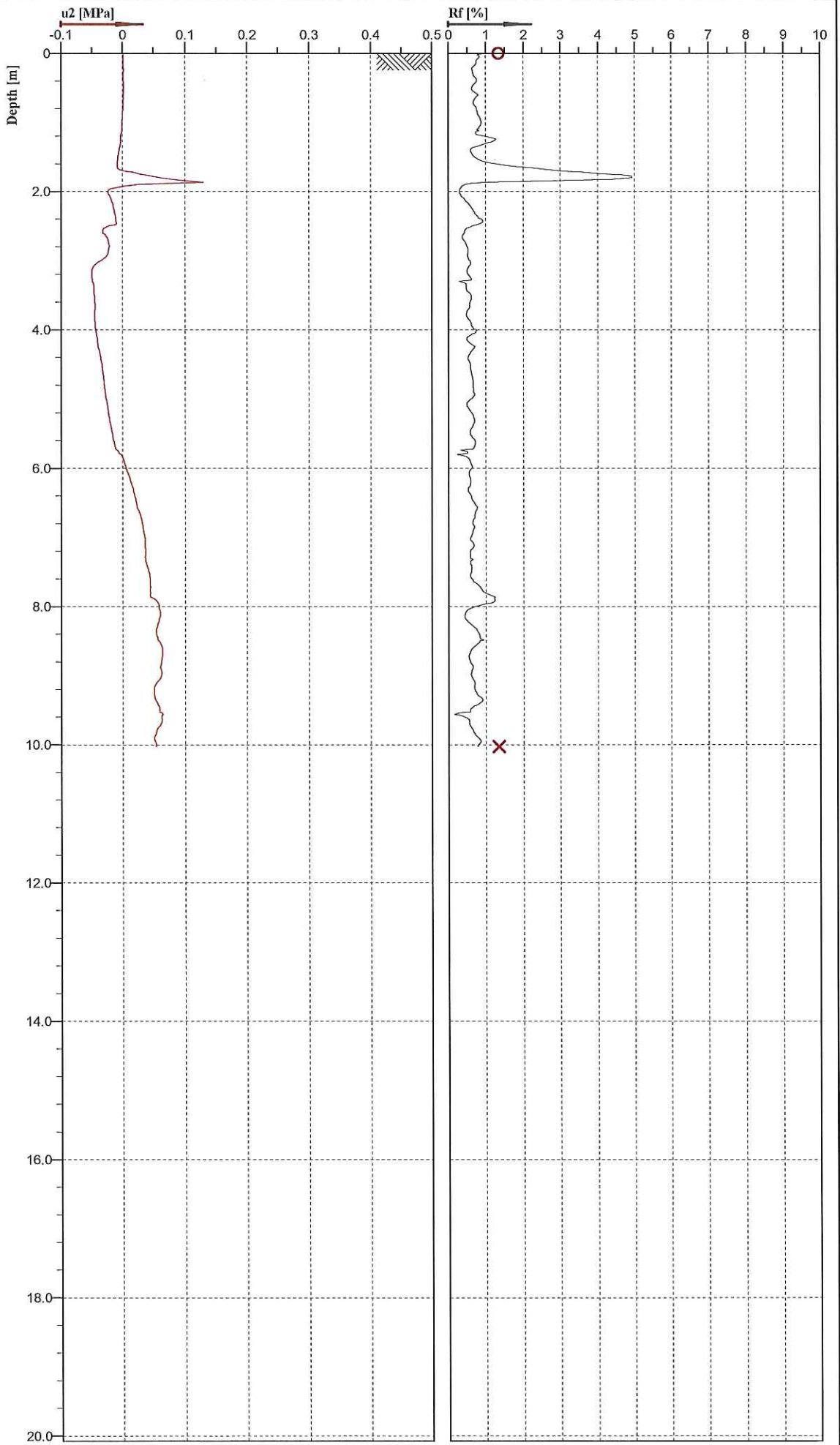
PRO-DRILL
SPECIALIST DRILLING ENGINEERS

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Project ID:		Client:	AURECON	Date:	04/03/2015	Scale:	1 : 80
Project:	PRESTONS SOUTH STAGE M & N			Page:	1/1	Fig:	
				File:	Preston South CPTV8.cpt		

Classification by
Robertson 1986



Sand (9)

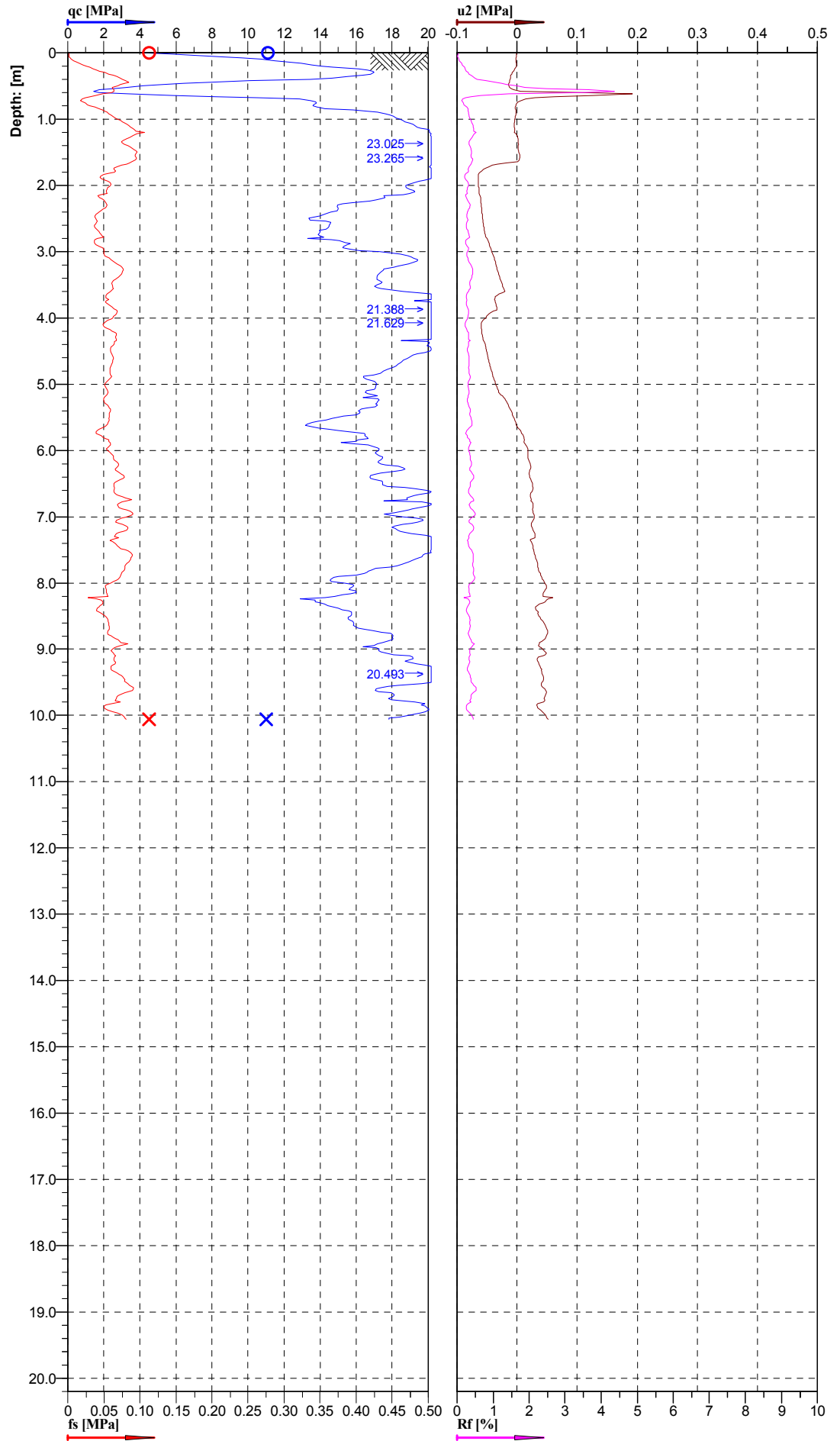
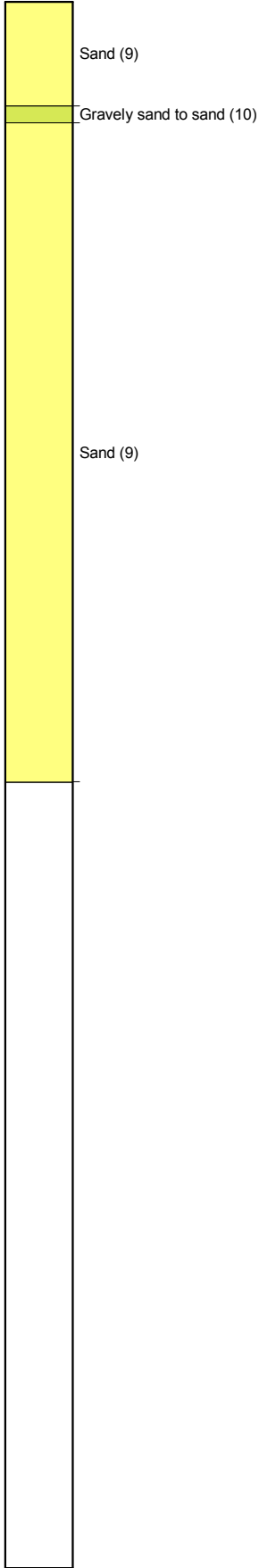


Cone No: 4486
Tip area [cm²]: 10
Sleeve area [cm²]: 150

PRO-DRILL
SPECIALIST DRILLING ENGINEERS

Location: CHCH	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test no: V8
Project ID:	Client: AURECON	Date: 04/03/2015	Scale: 1 : 80
Project: PRESTONS SOUTH STAGE M & N		Page: 1/1	Fig:
		File: Preston South CPTV8.cpt	

Classification by
Robertson 1986



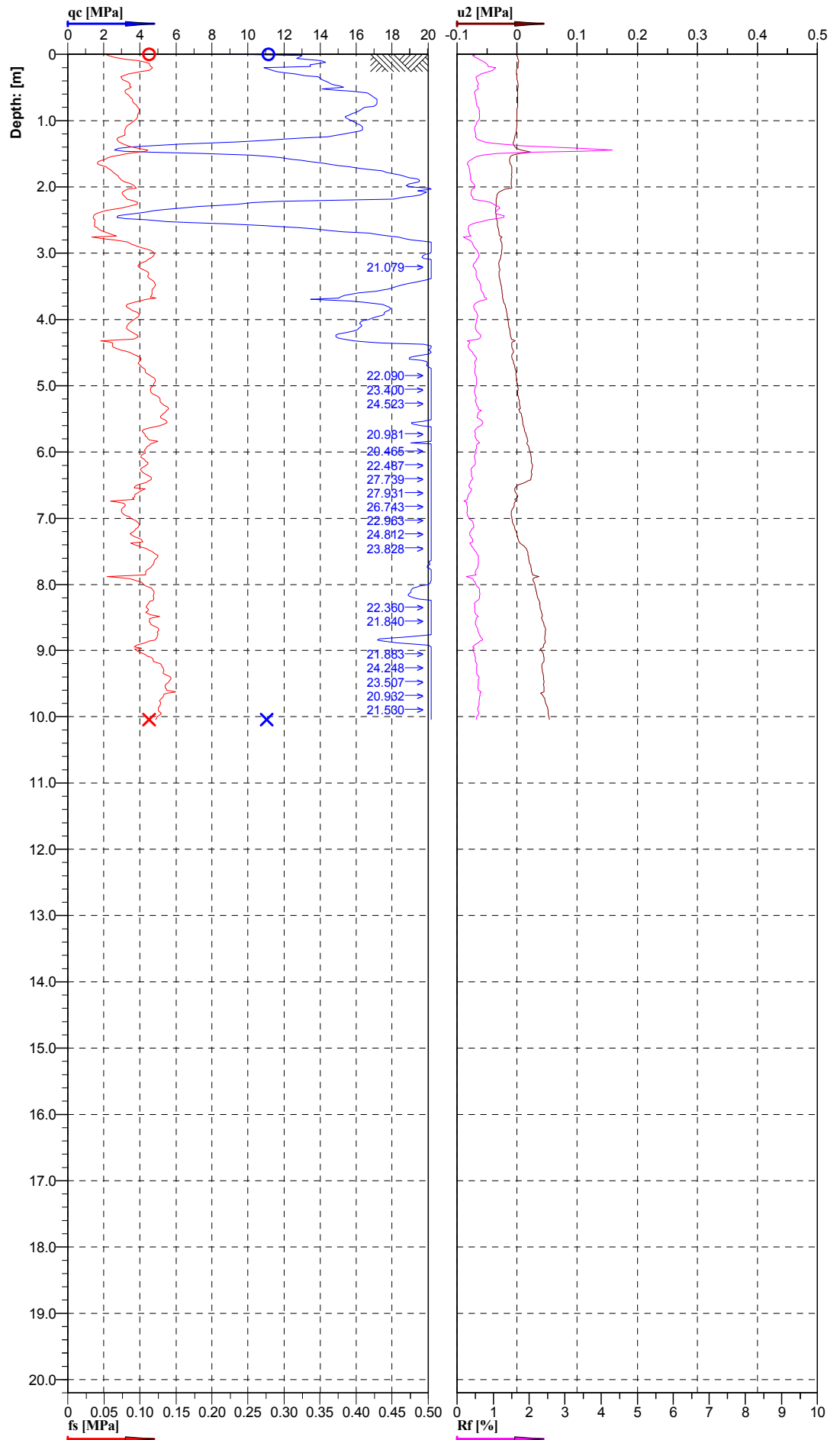
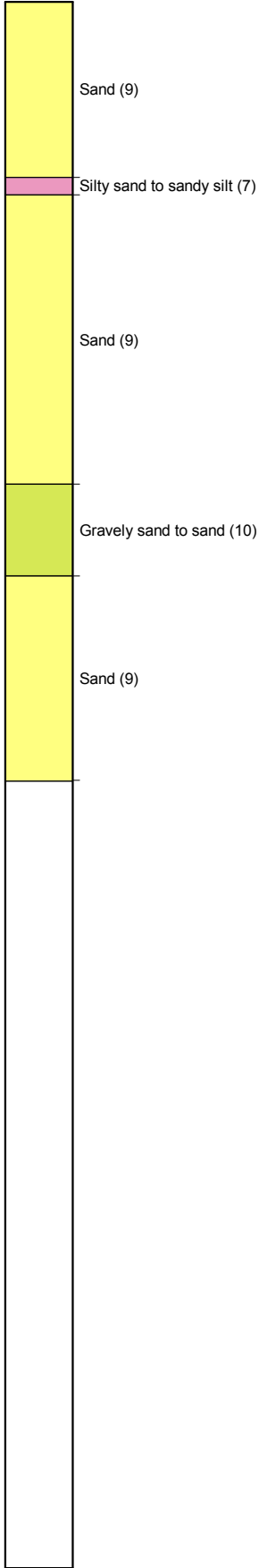
PRO-DRILL
SPECIALITY PROBING TECHNOLOGIES



Cone No: 4486
Tip area [cm²]: 10
Sleeve area [cm²]: 150

Location: CHCH	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test No.: V10
Project ID:	Client: Aurecon	Date: 15/10/2015	Scale: 1 : 87
Project: PRESTONS SOUTH		Page: 1/1	Fig.:
		File: PrestonSouthCPTV10.cpt	

Classification by
Robertson 1986



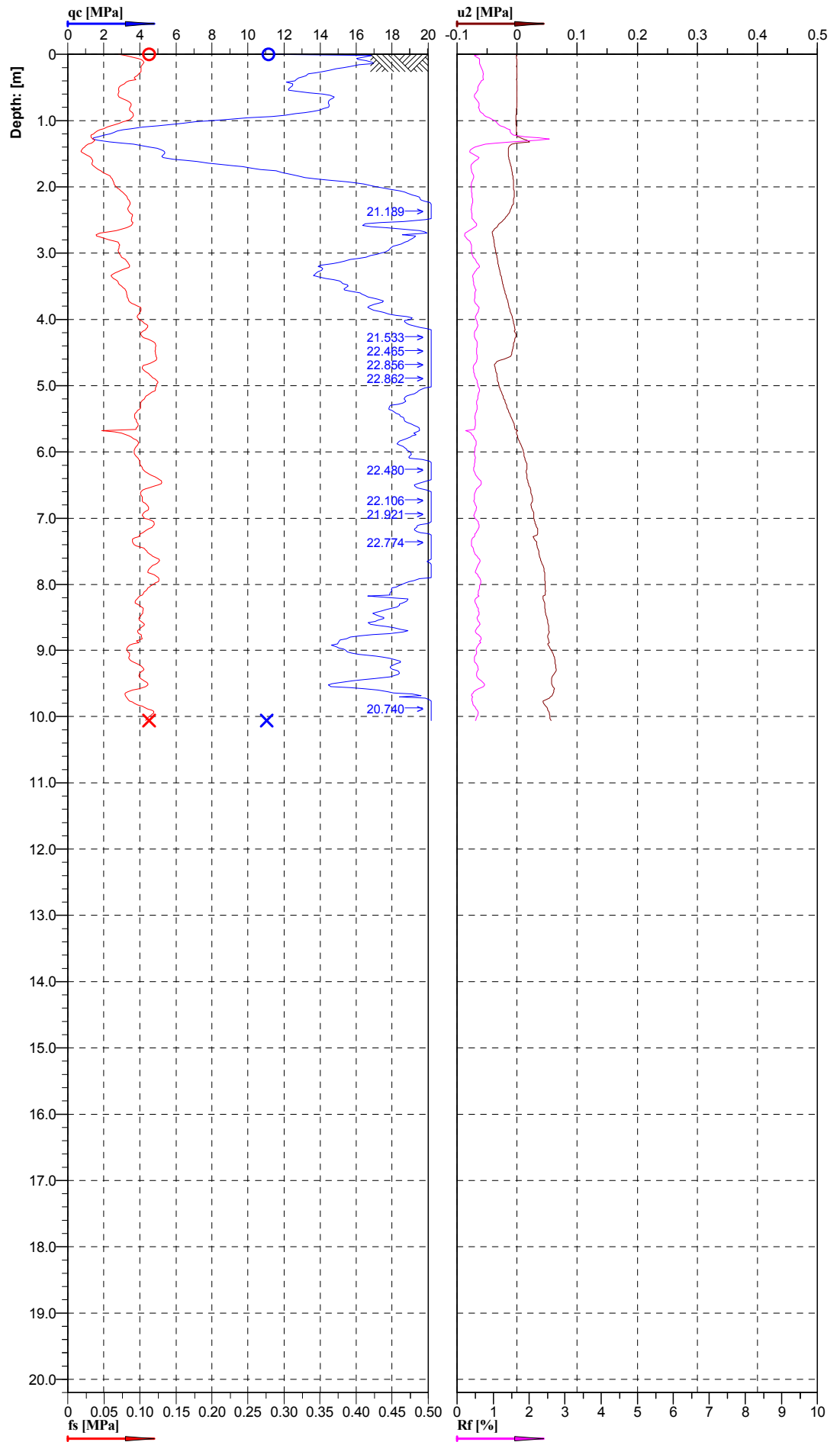
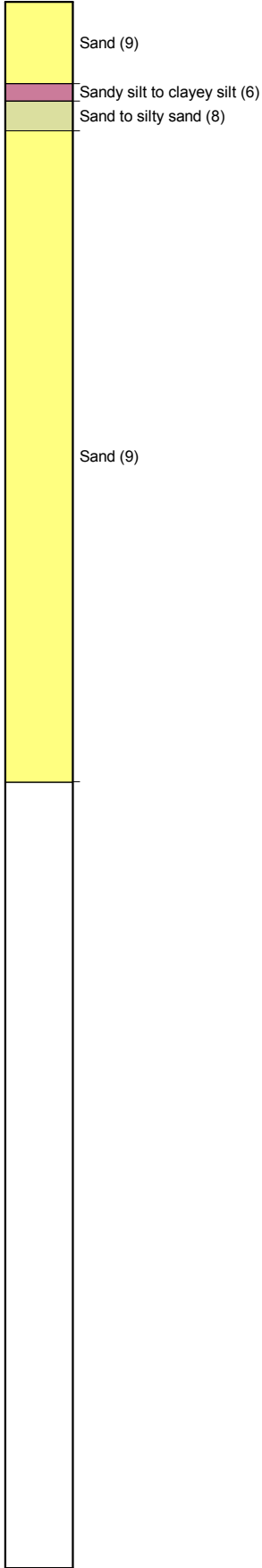
PRO-DRILL
SPECIALITY PROBING TECHNOLOGY



Cone No: 4486
Tip area [cm²]: 10
Sleeve area [cm²]: 150

Location: CHCH	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test No.: V11
Project ID:	Client: Aurecon	Date: 15/10/2015	Scale: 1 : 87
Project: PRESTONS SOUTH		Page: 1/1	Fig.:
		File: PrestonSouthCPTV11.cpt	

Classification by Robertson 1986



PRO-DRILL
SPECIALITY PROBING TECHNOLOGIES

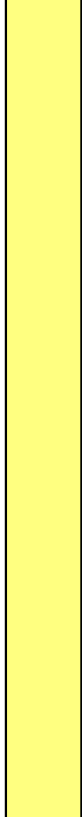


Cone No: 4486
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Sleeve area [cm²]: 150

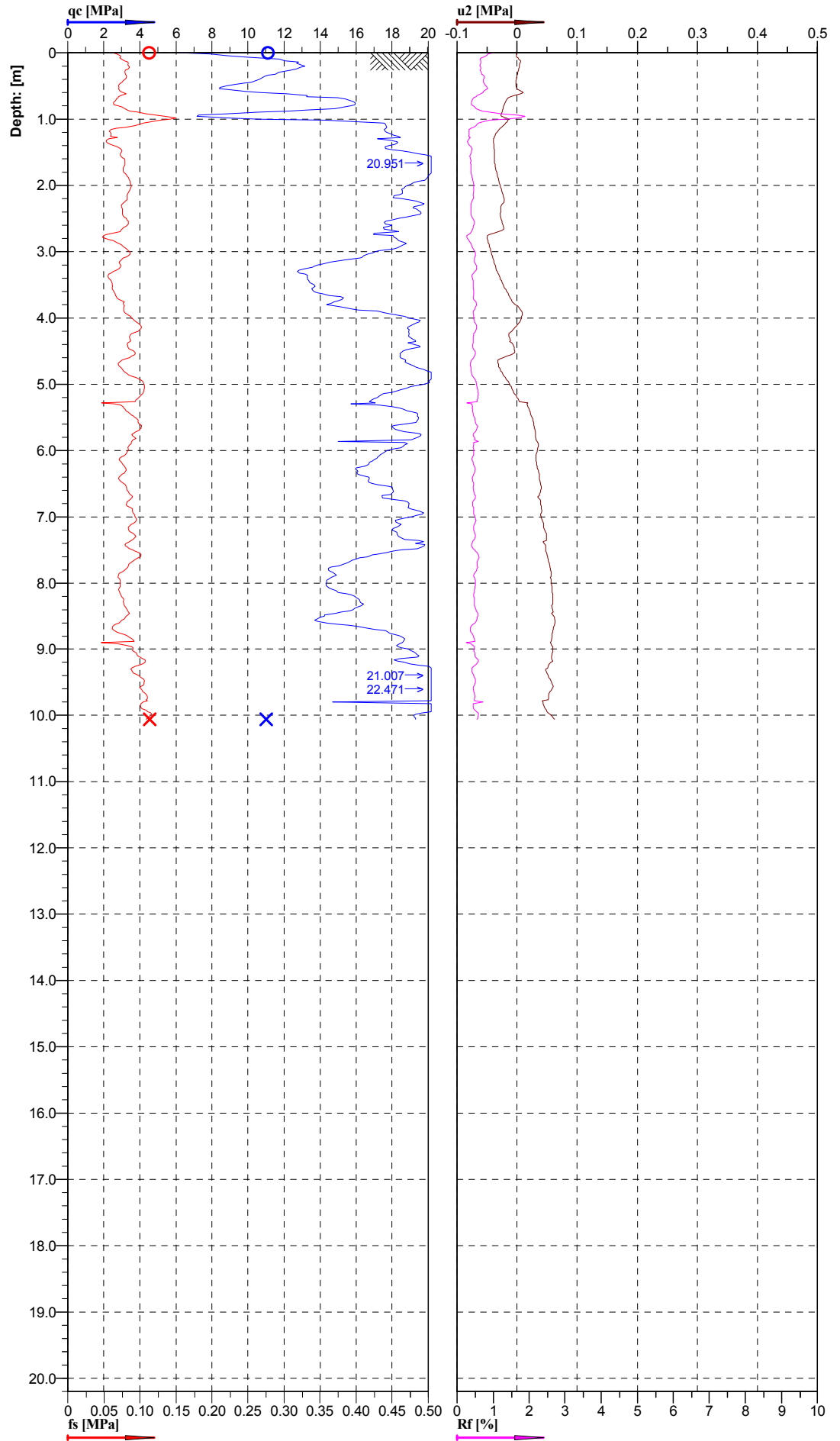
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Project ID:	Client: Aurecon	Date: 15/10/2015	Scale: 1 : 87
Project: PRESTONS SOUTH		Page: 1/1	Fig.:
		File: PrestonSouthCPTV12.cpt	

Classification by
Robertson 1986

Sand (9)
Sand to silty sand (8)



Sand (9)



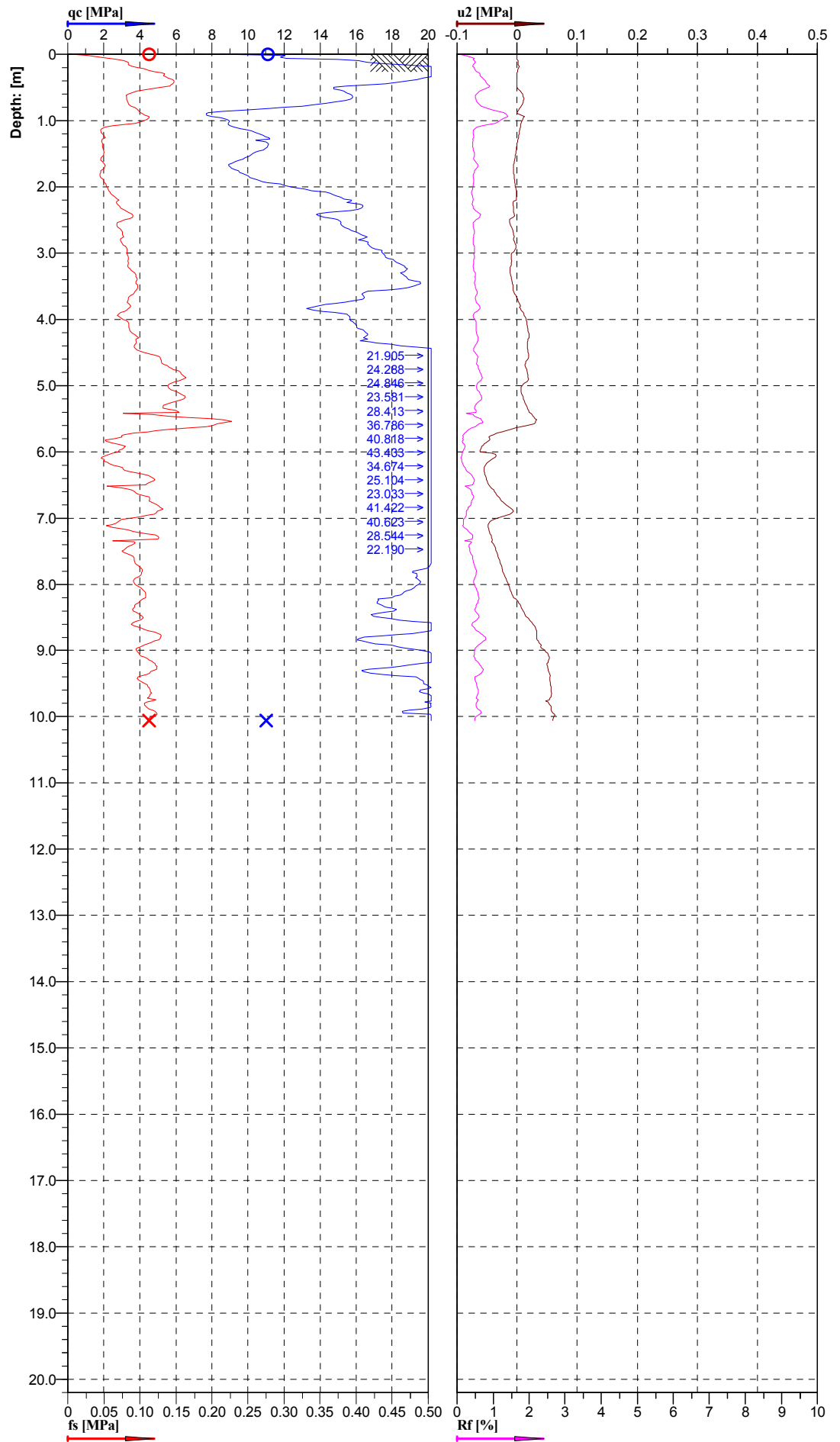
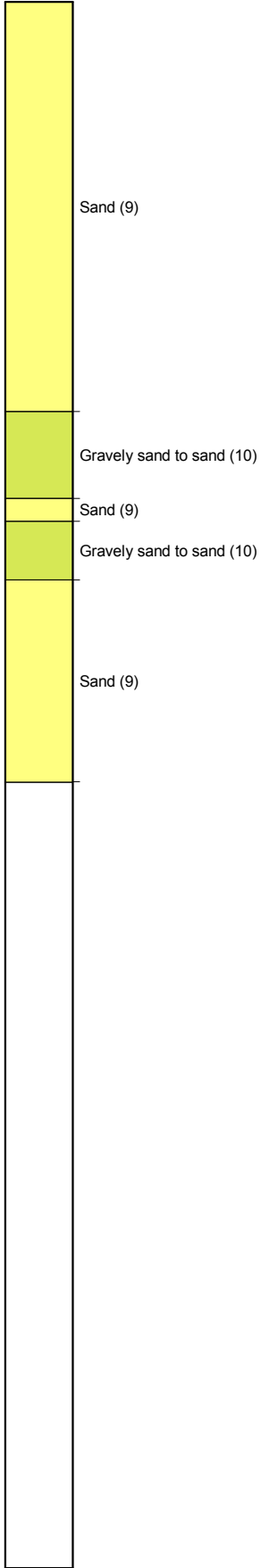
PRO-DRILL
SPECIALITY DRILLING SERVICES



Cone No: 4486
Tip area [cm²]: 10
Sleeve area [cm²]: 150

Location: CHCH	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test No.: V13
Project ID:	Client: Aurecon	Date: 15/10/2015	Scale: 1 : 87
Project: PRESTONS SOUTH		Page: 1/1	Fig.:
		File: PrestonSouthCPTV13.cpt	

Classification by
Robertson 1986



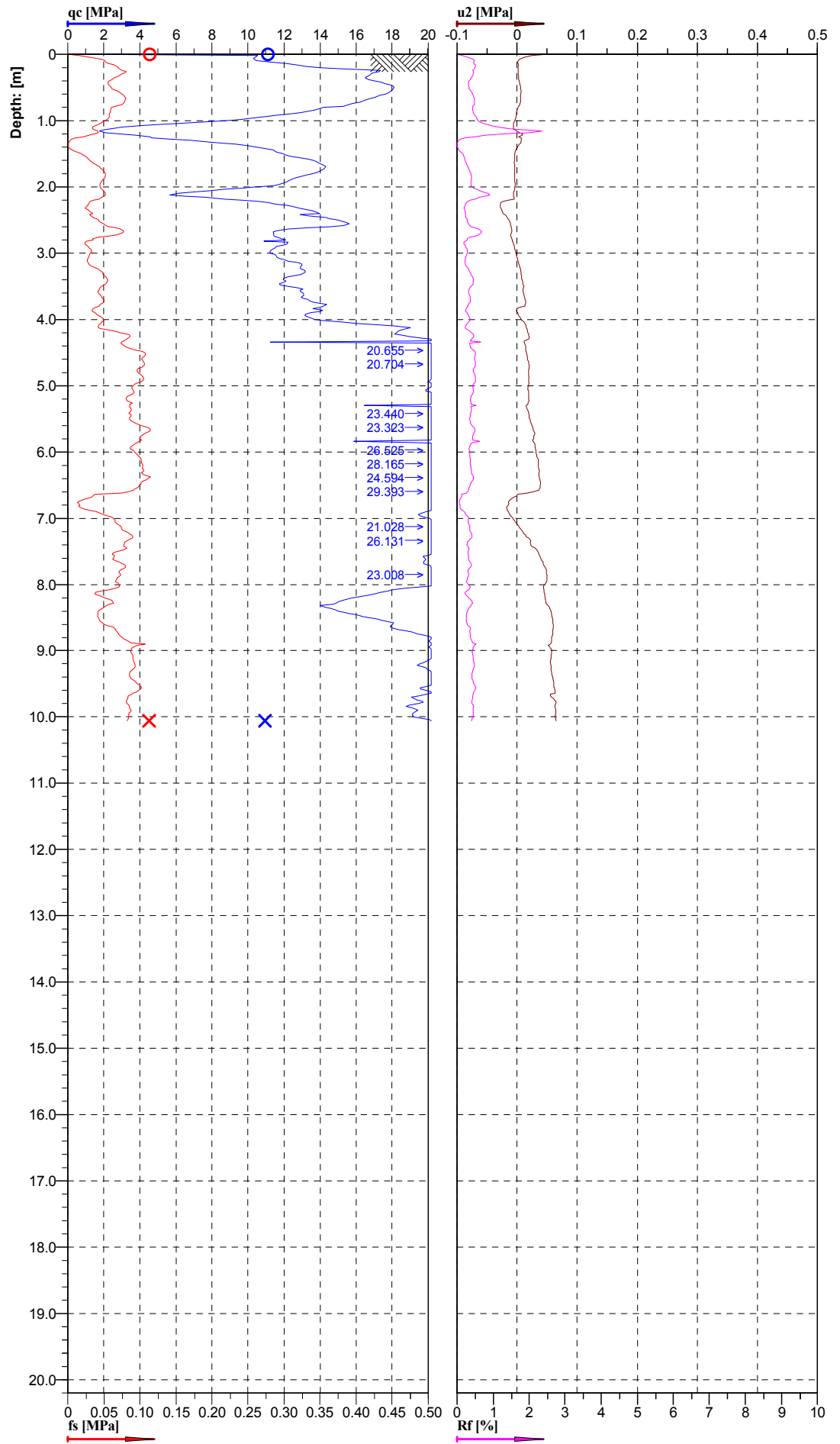
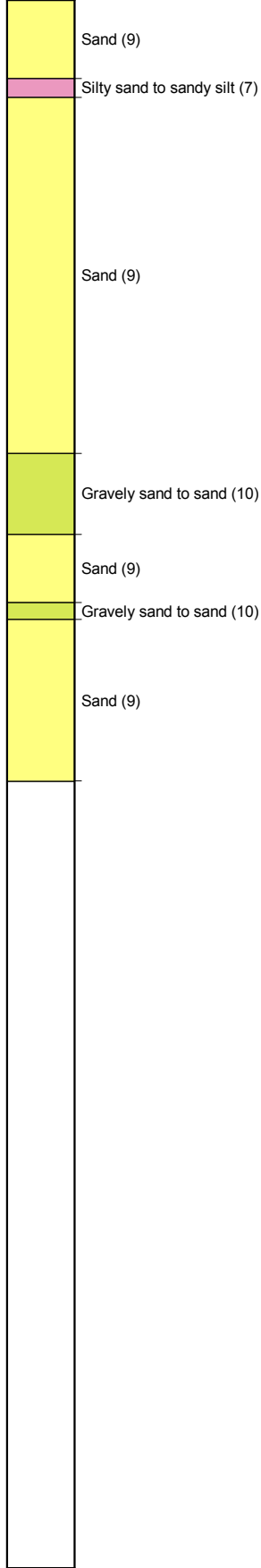
PRO-DRILL
SPECIALITY PROBING TECHNOLOGY



Cone No: 4486
Tip area [cm²]: 10
Sleeve area [cm²]: 150

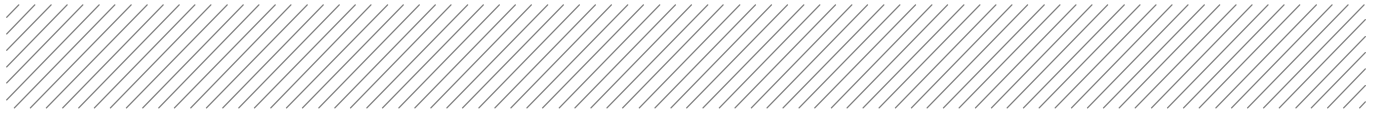
Location: CHCH	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test No.: V14
Project ID:	Client: Aurecon	Date: 15/10/2015	Scale: 1 : 87
Project: PRESTONS SOUT		Page: 1/1	Fig.:
		File: PrestonSouthCPTV14.cpt	

Classification by Robertson 1986



Cone No: 4486
 Tip area [cm²]: 10
 Sleeve area [cm²]: 150

Location: CHCH	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test No.: V15
Project ID:	Client: Aurecon	Date: 15/10/2015	Scale: 1 : 87
Project: PRESTONS SOUTH		Page: 1/1	Fig.:
		File: PrestonSouthCPTV15.cpt	



Appendix K Certification

Statement of Professional Opinion on the Suitability of Land for Building Construction

ISSUED BY: Aurecon New Zealand Limited
TO: CDL Land New Zealand Limited
TO BE SUPPLIED TO: Christchurch City Council
IN RESPECT OF: Prestons South Subdivision Stage O and P
AT: Prestons Road, Christchurch

I, Dr Jan Kupec, on behalf of Aurecon New Zealand Limited hereby confirm that:

1. I am a suitably qualified and experienced Geotechnical Engineer and my firm was retained by the developer to provide geotechnical engineering services on the above development.
2. The extent of my inspections, and the results of all tests carried out are as described in the geotechnical report *Geotechnical Completion Report Prestons South Stages O & P*, Revision 0, Project No. 235361, dated 30 May 2016.
3. In my professional opinion, not to be construed as a guarantee and based only on the extent of our inspections and tests in accordance with our scope of services, I consider that:

(a) The completed works give due regard to land slope and foundation stability considerations.

(b) The original ground not affected by filling and the filled ground are suitable for the construction of a development/subdivision and are not subject to erosion, subsidence or slippage in accordance with the provisions of Section 106 of the Resource Management Act 1991 provided that the recommendations made in the Aurecon Report *Geotechnical Completion Report Prestons South Stages O & P*, Revision 0, Project No. 235361, dated 30 May 2016 are followed.

4. This professional opinion is furnished to the territorial authority and the owner/developer for their purposes alone, on the express condition that it will not be relied upon by any other person and does not remove the necessity for the normal inspection of foundation conditions at the time of erection of any building.

5. This certificate shall be read in conjunction with my/the geotechnical report referred to in Clause 2 above, and shall not be copied or reproduced except in conjunction with the full geotechnical completion report.

6. The geotechnical engineering firm issuing this statement holds a current policy of professional indemnity insurance of no less than \$250,000.

(Minimum amount of insurance shall be commensurate with the current amounts recommended by IPENZ, ACENZ, TNZ, INGENIUM.)



Handwritten signature of Jan Kupec in blue ink.

(Signature of Engineer)

3/6/16
(Date)

Qualifications and experience:

PhD, MSc, candIng, MIPENZ, CPEng (Geotechnical & Project Management), IntPE



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W aurecongroup.com

Aurecon offices are located in:

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Lesotho, Libya, Malawi, Mozambique,
Namibia, New Zealand, Nigeria,
Philippines, Singapore, South Africa,
Swaziland, Tanzania, Thailand, Uganda,
United Arab Emirates, Vietnam.