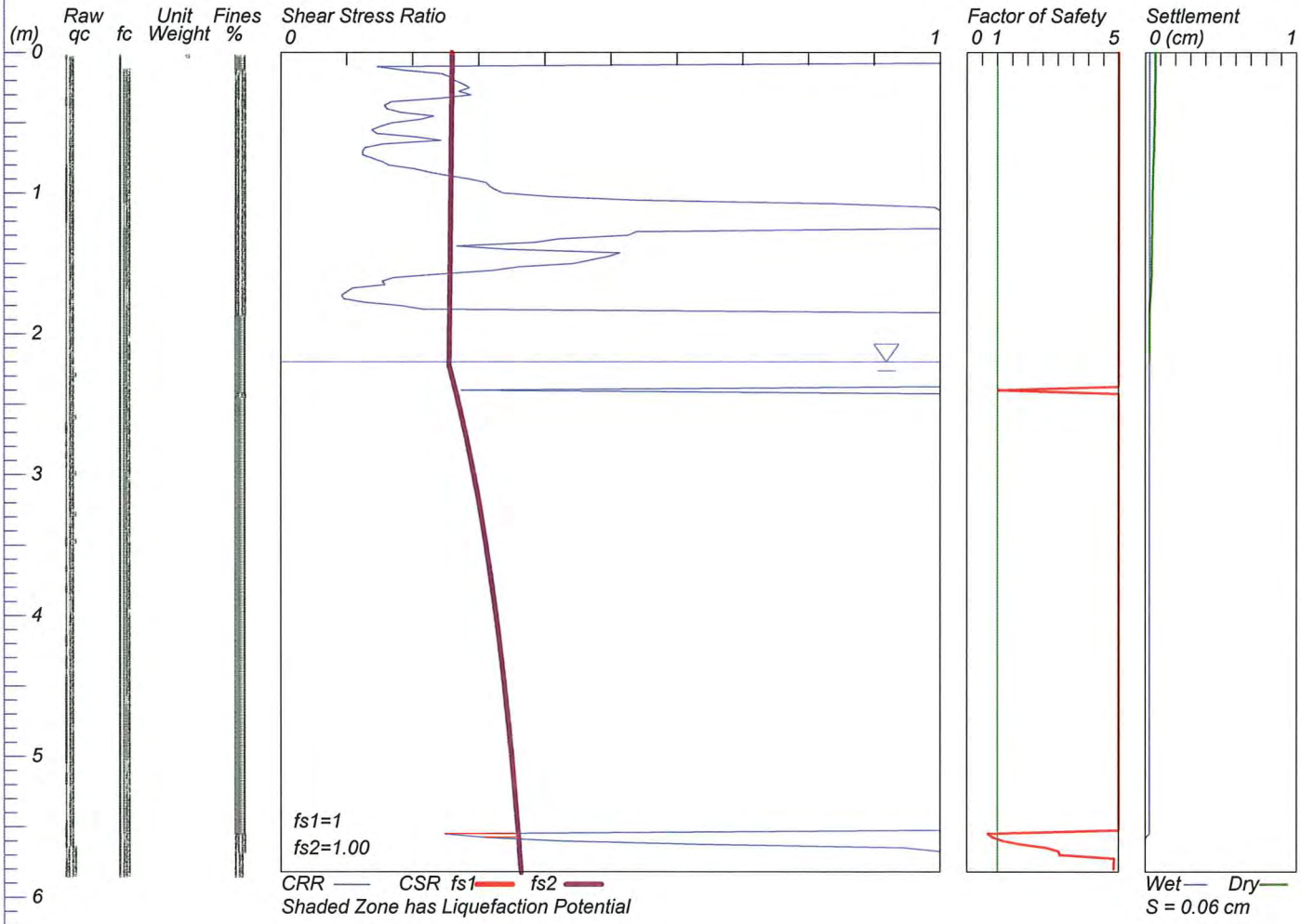
LIQUEFACTION ANALYSIS

JACKS POINT - ULS

Hole No.=20 Water Depth=2.2 m Surface Elev.=338.5

Magnitude=8.0
Acceleration=0.40g



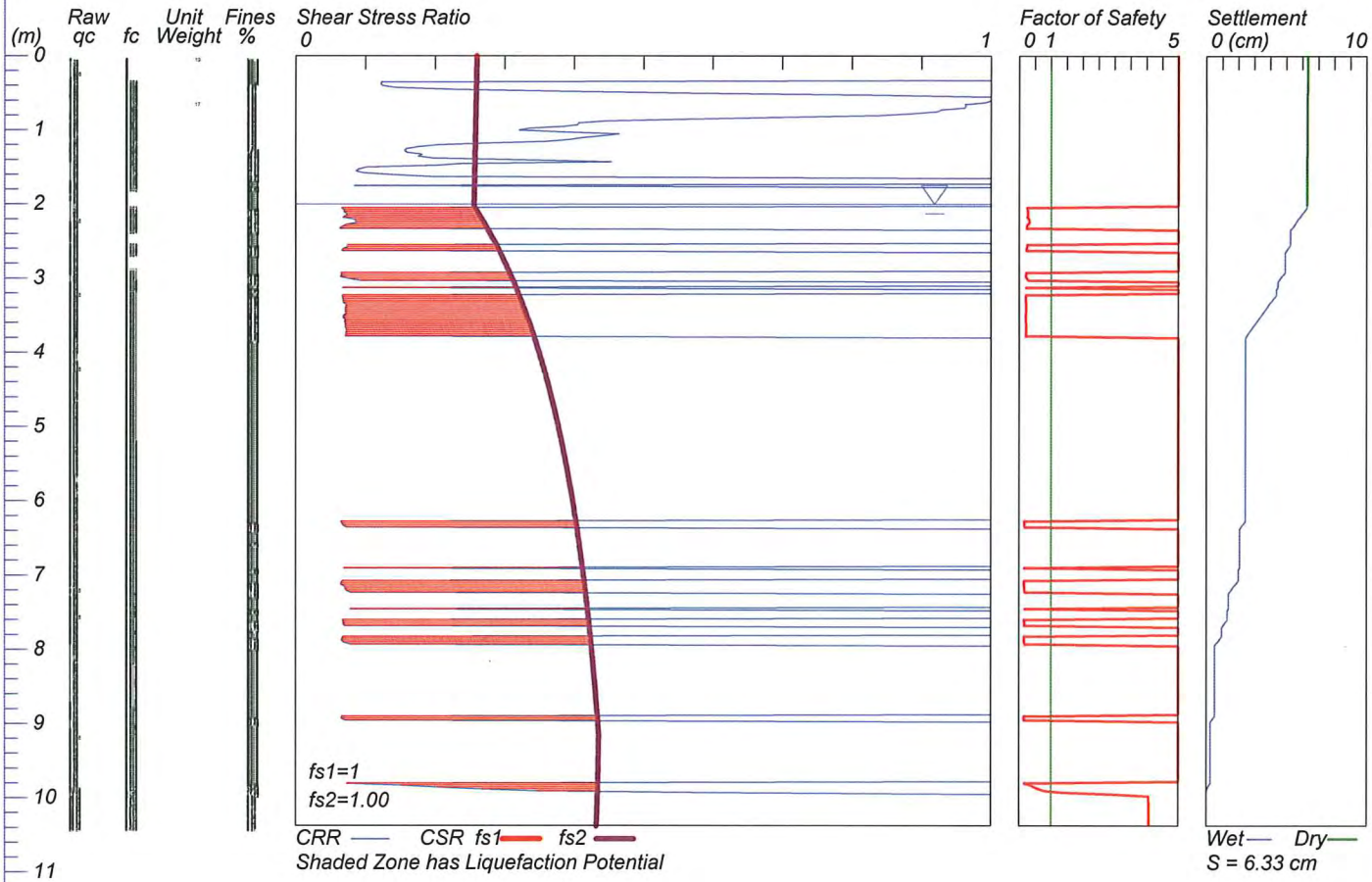
LiquefyPro CivilTech Software USA www.civiltech.com

LIQUEFACTION ANALYSIS

JACKS POINT - ULS

Hole No.=21 Water Depth=2.0 m Surface Elev.=345.0

Magnitude=8.0
Acceleration=0.40g



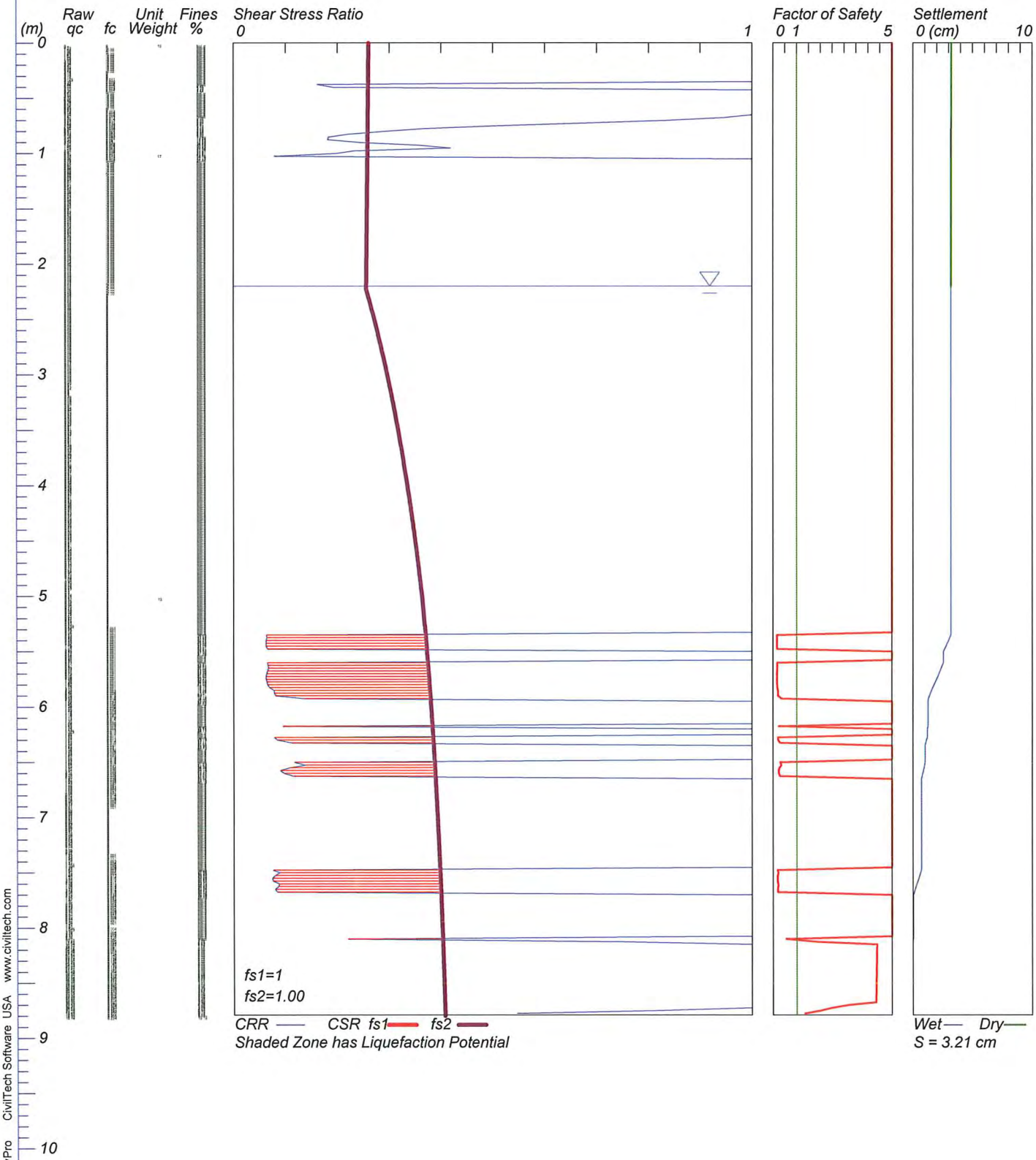
LiquefyPro CivilTech Software USA www.civiltech.com

LIQUEFACTION ANALYSIS

JACKS POINT - ULS

Hole No.=22 Water Depth=2.2 m Surface Elev.=347.5

Magnitude=8.0
Acceleration=0.40g

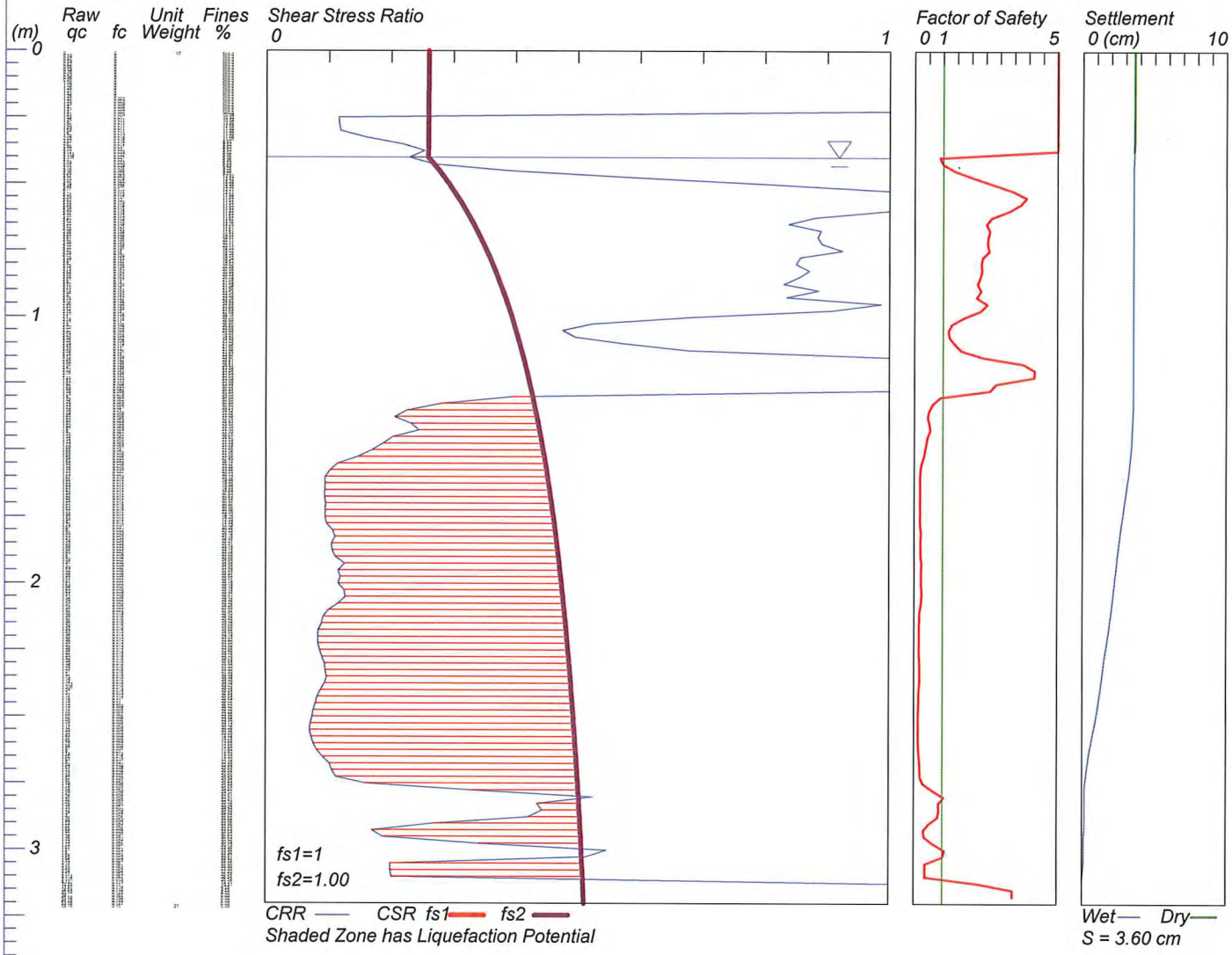


LIQUEFACTION ANALYSIS

JACKS POINT - ULS

Hole No.=23 Water Depth=0.4 m Surface Elev.=349.5

Magnitude=8.0
Acceleration=0.40g



LiquefyPro CivilTech Software USA www.civiltech.com

Appendix G: Scala Logs, Pocket Penetrometer Results and Shear Vane Results

TONKIN & TAYLOR

SCALA PENETROMETER LOG

Job No: *880054*
Project: *Jacks Point Henly Downs*

Date: *29/08/2007*
Operated by: *FAW*
Logged by: *FAW*

Test Number *SC1*

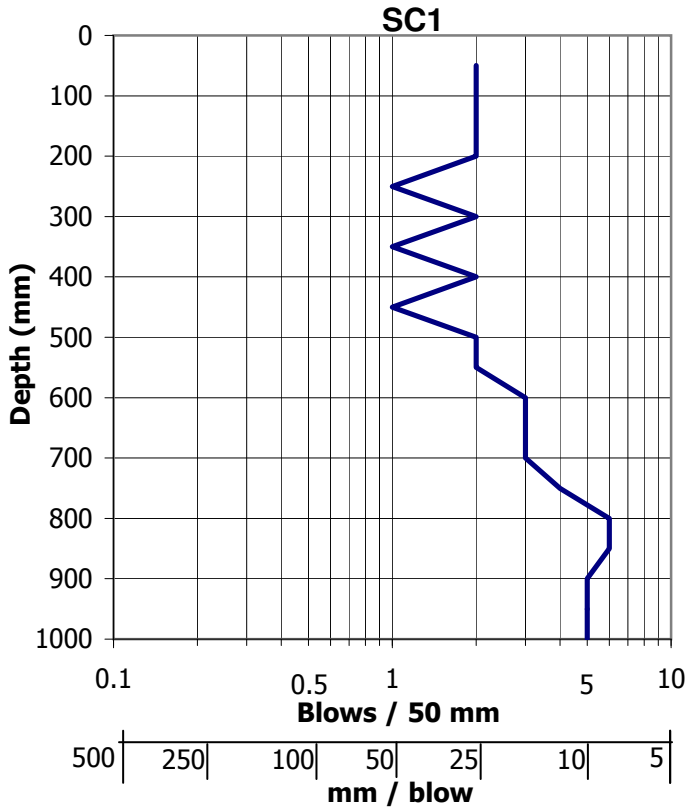
Sheet *1*
of *1*

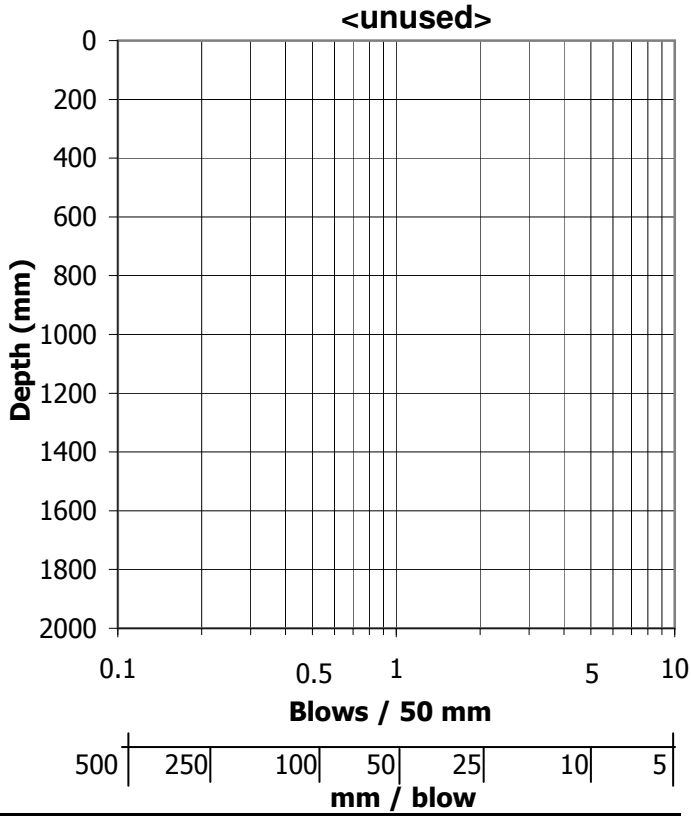
SC1
Location: TP 1
RL: From 1.1in TP

mm Driven	No. of Blows
50	2
100	2
150	2
200	2
250	1
300	2
350	1
400	2
450	1
500	2
550	2
600	3
650	3
700	3
750	4
800	6
850	6
900	5
950	5
1000	5
Inferred Soil Type	
Watertable Depth	

Location:
RL: 0m

mm Driven	No. of Blows
50	
100	
150	
200	
250	
300	
350	
400	
450	
500	
550	
600	
650	
700	
750	
800	
850	
900	
950	
1000	
Inferred Soil Type	
Watertable Depth	





TONKIN & TAYLOR

SCALA PENETROMETER LOG

Job No: *880054*
Project: *Jacks Point Henley Downs*

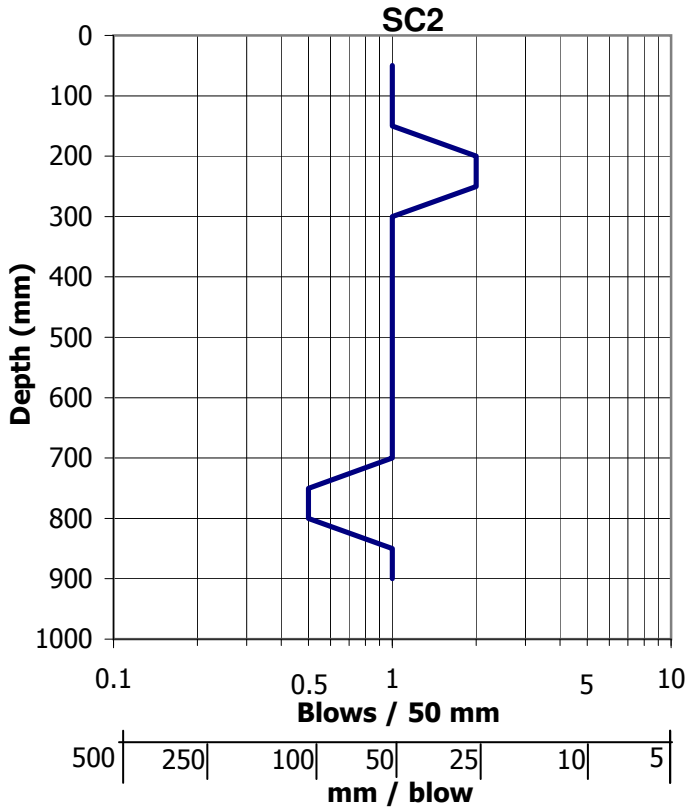
Date: *29/08/2007*
Operated by: *FAW*
Logged by: *FAW*

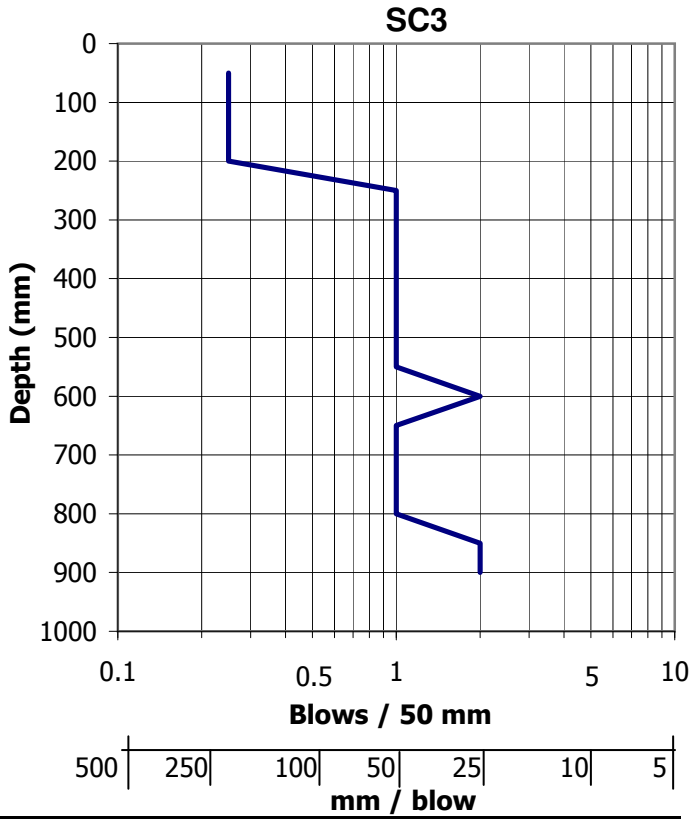
Test Number *SC2 & SC3*

Sheet *1*
of *1*

SC2 Location: TP 3 RL: 1m in TP	
mm Driven	No. of Blows
50	1
100	1
150	1
200	2
250	2
300	1
350	1
400	1
450	1
500	1
550	1
600	1
650	1
700	1
750	0.5
800	0.5
850	1
900	1
950	
1000	
Inferred Soil Type	
Watertable Depth	

SC3 Location: TP 3 RL: 1.7m in TP	
mm Driven	No. of Blows
50	0.25
100	0.25
150	0.25
200	0.25
250	1
300	1
350	1
400	1
450	1
500	1
550	1
600	2
650	1
700	1
750	1
800	1
850	2
900	2
950	
1000	
Inferred Soil Type	
Watertable Depth	





TONKIN & TAYLOR

SCALA PENETROMETER LOG

Job No: *880054*
Project: *Jacks Point Henley Downs*

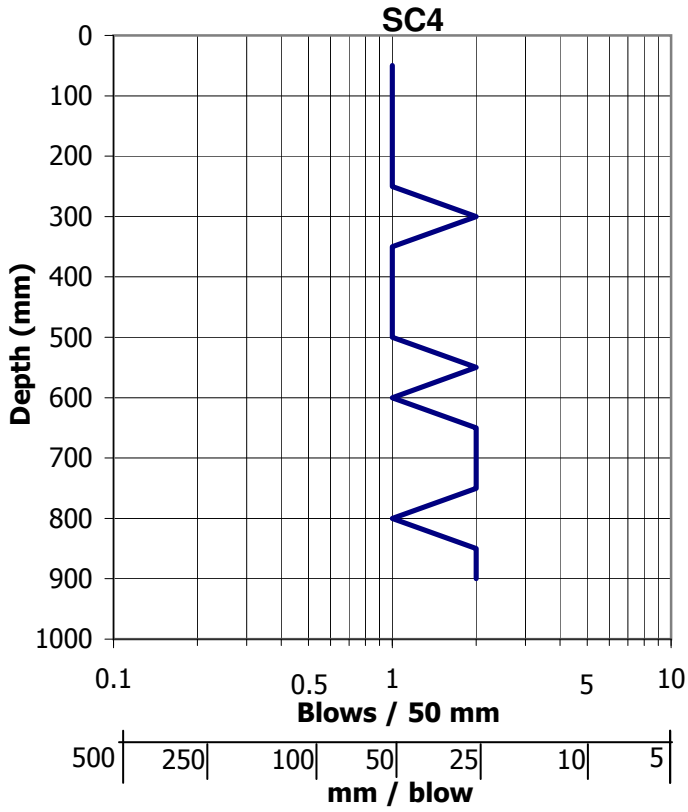
Date: *30/08/2007*
Operated by: *FAW*
Logged by: *GSH*

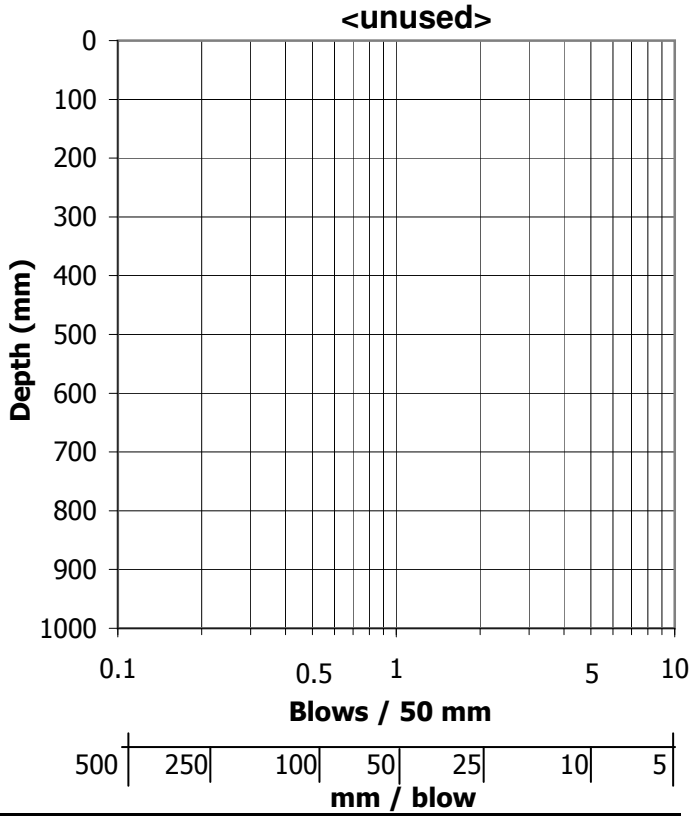
Test Number *SC4*

Sheet *1*
of *1*

SC4 Location: TP 12 RL: 1.5m in TP	
mm Driven	No. of Blows
50	1
100	1
150	1
200	1
250	1
300	2
350	1
400	1
450	1
500	1
550	2
600	1
650	2
700	2
750	2
800	1
850	2
900	2
950	
1000	
Inferred Soil Type	
Watertable Depth	

Location: RL: 0m	
mm Driven	No. of Blows
50	
100	
150	
200	
250	
300	
350	
400	
450	
500	
550	
600	
650	
700	
750	
800	
850	
900	
950	
1000	
Inferred Soil Type	
Watertable Depth	





TONKIN & TAYLOR

SCALA PENETROMETER LOG

Job No: *880054*
Project: *Jacks point Henley Downs*

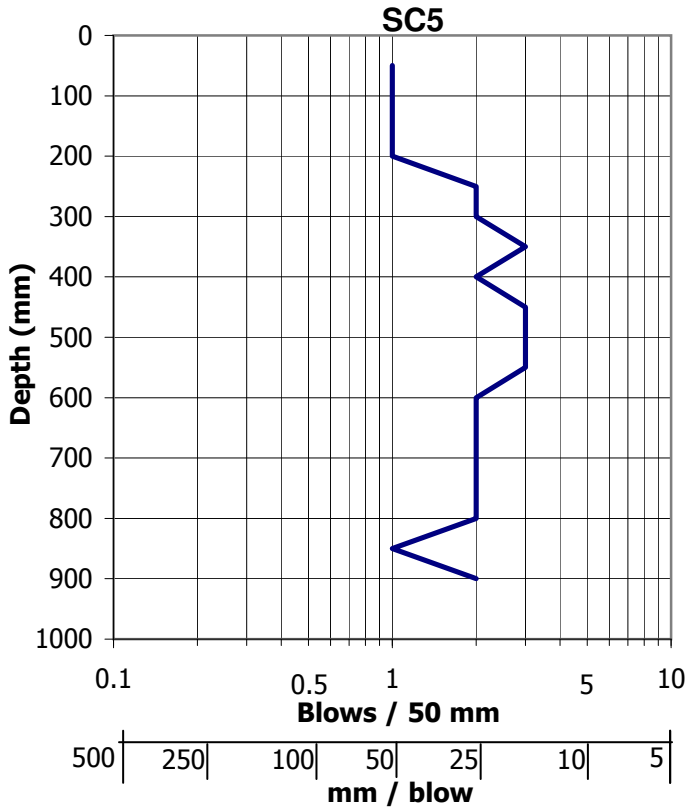
Date: *30/08/2007*
Operated by: *FAW*
Logged by: *FAW*

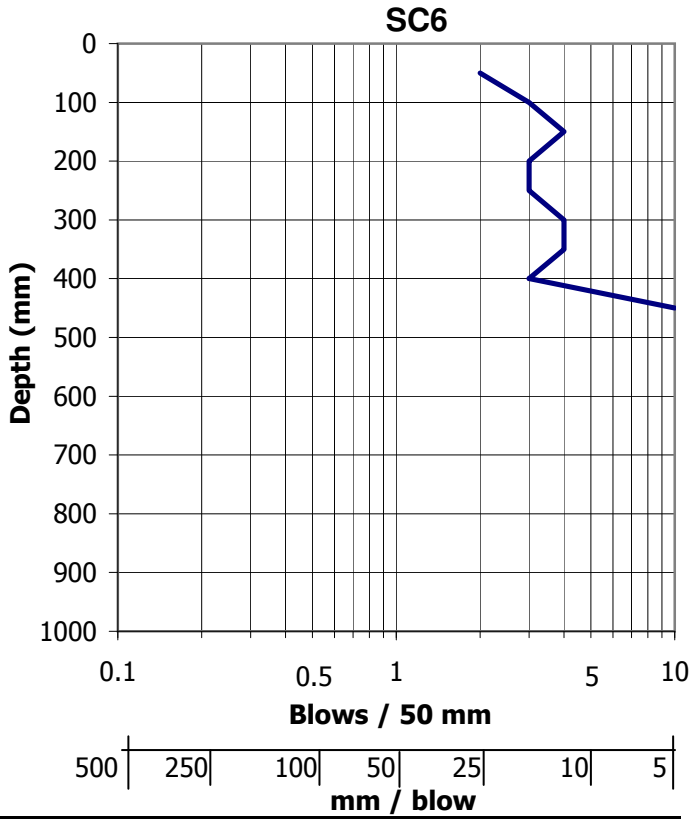
Test Number *SC5 & SC6*

Sheet *1*
of *1*

SC5 Location: TP 17 RL: 0.4m in TP	
mm Driven	No. of Blows
50	1
100	1
150	1
200	1
250	2
300	2
350	3
400	2
450	3
500	3
550	3
600	2
650	2
700	2
750	2
800	2
850	1
900	2
950	
1000	
Inferred Soil Type	
Watertable Depth	

SC6 Location: TP 17 RL: 1.9m in TP	
mm Driven	No. of Blows
50	2
100	3
150	4
200	3
250	3
300	4
350	4
400	3
450	10
500	REF
550	
600	
650	
700	
750	
800	
850	
900	
950	
1000	
Inferred Soil Type	
Watertable Depth	





TONKIN & TAYLOR

SCALA PENETROMETER LOG

Job No: *880054*
Project: *Jacks Point Henley Downs*

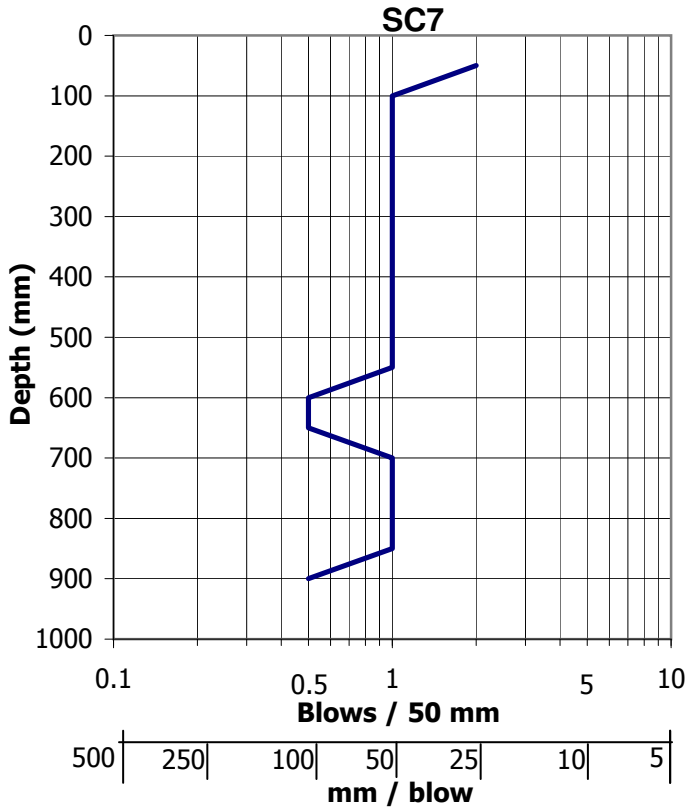
Date: *30/08/2007*
Operated by: *FAW*
Logged by: *FAW*

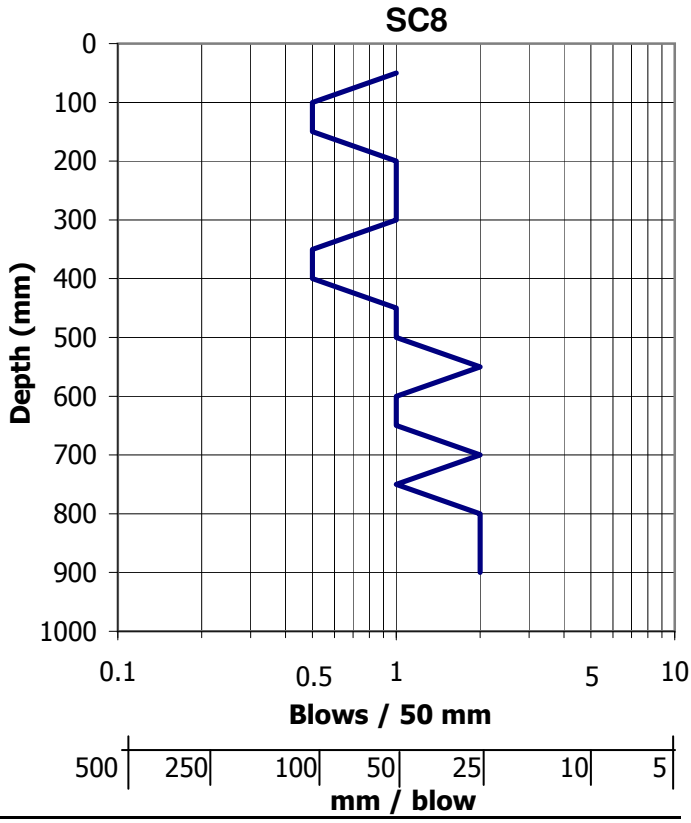
Test Number *SC7 & SC8*

Sheet *1*
of *1*

SC7 Location: TP 18 RL: 0.7m in pit	
mm Driven	No. of Blows
50	2
100	1
150	1
200	1
250	1
300	1
350	1
400	1
450	1
500	1
550	1
600	0.5
650	0.5
700	1
750	1
800	1
850	1
900	0.5
950	
1000	
Inferred Soil Type	
Watertable Depth	

SC8 Location: TP 18 RL: 1.6m in pit	
mm Driven	No. of Blows
50	1
100	0.5
150	0.5
200	1
250	1
300	1
350	0.5
400	0.5
450	1
500	1
550	2
600	1
650	1
700	2
750	1
800	2
850	2
900	2
950	
1000	
Inferred Soil Type	
Watertable Depth	





TONKIN & TAYLOR

SCALA PENETROMETER LOG

Job No: *880054*
Project: *Jacks point Henley Downs*

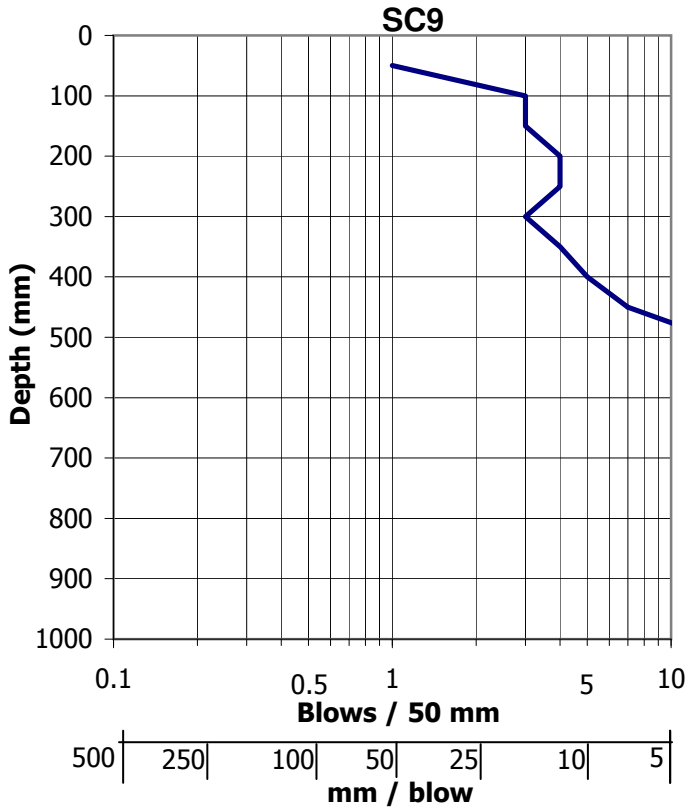
Date: *5/09/2007*
Operated by: *FAW*
Logged by: *FAW*

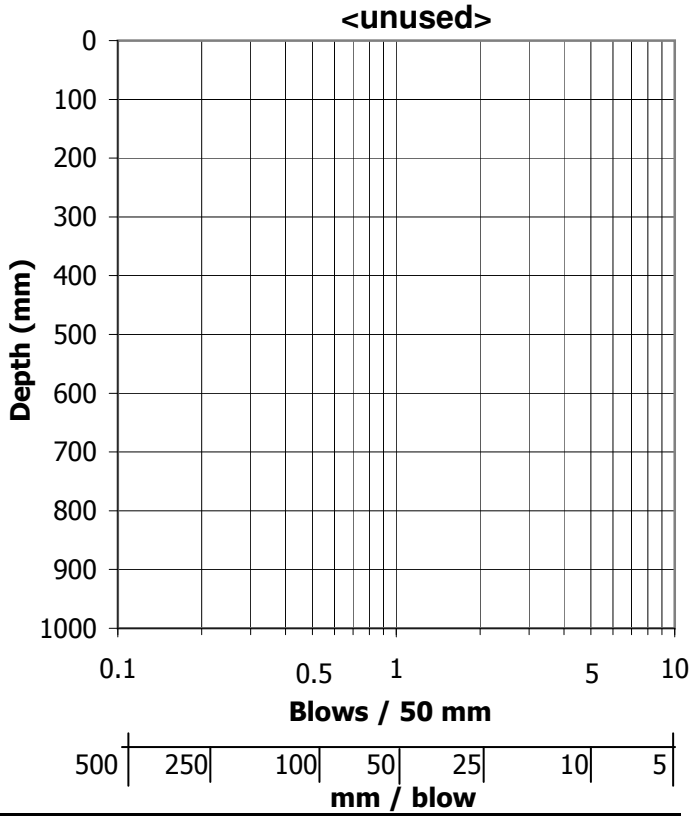
Test Number *SC9*

Sheet *1*
of *1*

SC9 Location: TP 19 RL: 1.8m in TP	
mm Driven	No. of Blows
50	1
100	3
150	3
200	4
250	4
300	3
350	4
400	5
450	7
500	14
550	
600	
650	
700	
750	
800	
850	
900	
950	
1000	
Inferred Soil Type	
Watertable Depth	

Location: RL: 0m	
mm Driven	No. of Blows
50	
100	
150	
200	
250	
300	
350	
400	
450	
500	
550	
600	
650	
700	
750	
800	
850	
900	
950	
1000	
Inferred Soil Type	
Watertable Depth	





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SCALA PENETROMETER LOG

Job No: *880054*
Project: *Jacks Point Henley Downs*

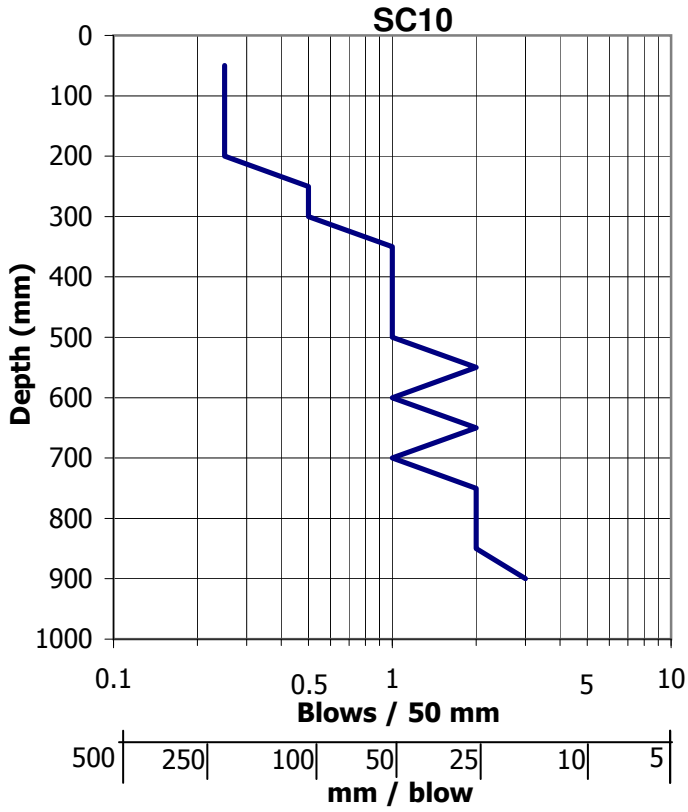
Date: *5/09/2007*
Operated by: *FAW*
Logged by: *FAW*

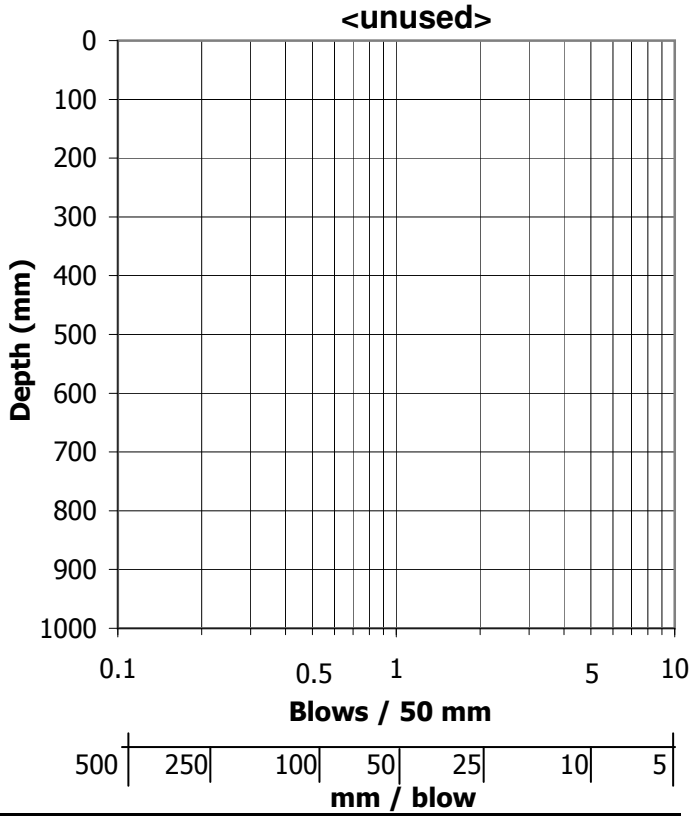
Test Number *SC10*

Sheet *1*
of *1*

SC10 Location: TP 20 RL: 1.7m in pit	
mm Driven	No. of Blows
50	0.25
100	0.25
150	0.25
200	0.25
250	0.5
300	0.5
350	1
400	1
450	1
500	1
550	2
600	1
650	2
700	1
750	2
800	2
850	2
900	3
950	
1000	
Inferred Soil Type	
Watertable Depth	

Location: RL: 0m	
mm Driven	No. of Blows
50	
100	
150	
200	
250	
300	
350	
400	
450	
500	
550	
600	
650	
700	
750	
800	
850	
900	
950	
1000	
Inferred Soil Type	
Watertable Depth	





TONKIN & TAYLOR

SCALA PENETROMETER LOG

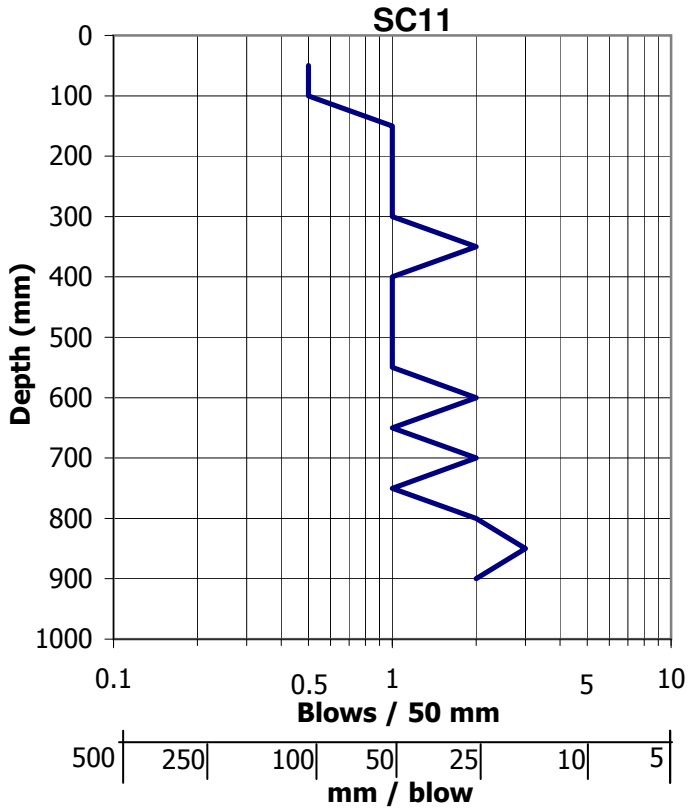
Job No: *880054*
Project: *Jacks Point Henley Downs*

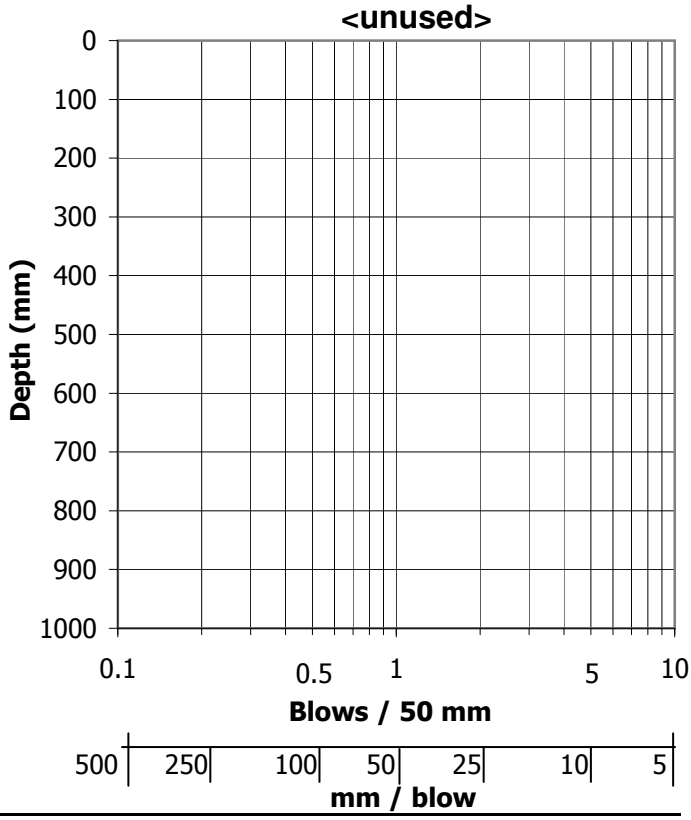
Date: *24/09/2007*
Operated by: *FAW*
Logged by: *FAW*

Test Number	*SC11*
Sheet	*1*
of	*1*

SC11 Location: TP 25 RL: 0.4m in TP	
mm Driven	No. of Blows
50	*0.5*
100	*0.5*
150	*1*
200	*1*
250	*1*
300	*1*
350	*2*
400	*1*
450	*1*
500	*1*
550	*1*
600	*2*
650	*1*
700	*2*
750	*1*
800	*2*
850	*3*
900	*2*
950	
1000	
Inferred Soil Type	
Watertable Depth	

Location: RL: 0m	
mm Driven	No. of Blows
50	
100	
150	
200	
250	
300	
350	
400	
450	
500	
550	
600	
650	
700	
750	
800	
850	
900	
950	
1000	
Inferred Soil Type	
Watertable Depth	





TONKIN & TAYLOR

SCALA PENETROMETER LOG

Job No: *880054*
Project: *Jacks Point Heleny Downs*

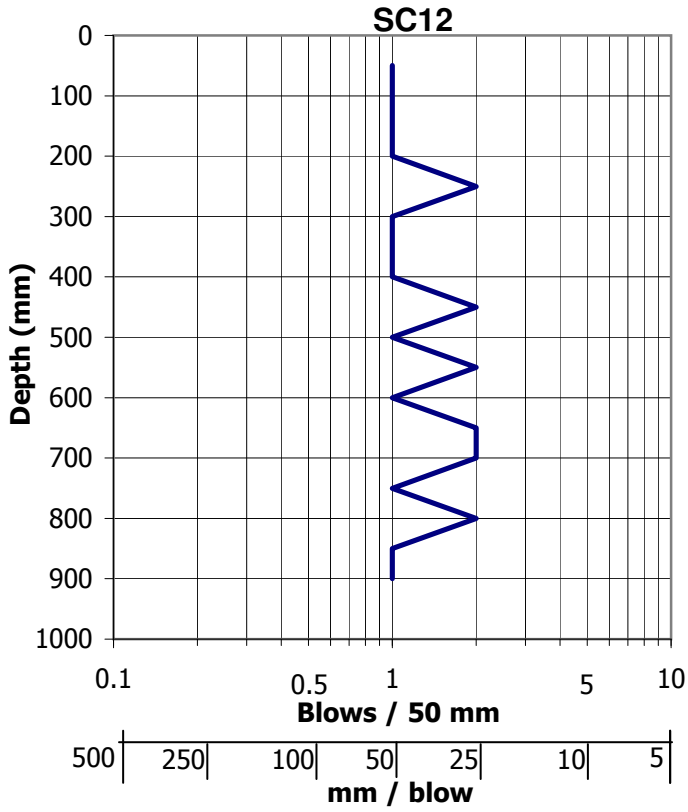
Date: *5/09/2007*
Operated by: *FAW*
Logged by: *FAW*

Test Number *SC12*

Sheet *1*
of *1*

SC12 Location: TP 29 RL: 0.5m in pit	
mm Driven	No. of Blows
50	1
100	1
150	1
200	1
250	2
300	1
350	1
400	1
450	2
500	1
550	2
600	1
650	2
700	2
750	1
800	2
850	1
900	1
950	
1000	
Inferred Soil Type	
Watertable Depth	

Location: RL: 0m	
mm Driven	No. of Blows
50	
100	
150	
200	
250	
300	
350	
400	
450	
500	
550	
600	
650	
700	
750	
800	
850	
900	
950	
1000	
Inferred Soil Type	
Watertable Depth	



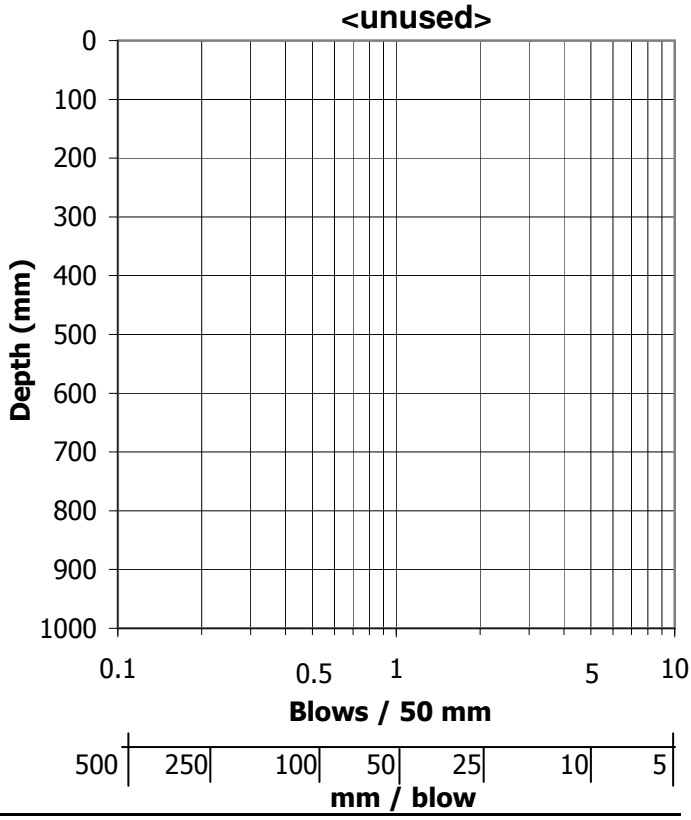


Figure 2: Table of Pocket Penetrometer and Shear Vane Results

Test pit number	Test pit depth (m)	Pocket Penetrometer Test Results		Shear Vane Test Results	
		Field Reading (kg/cm2)	Estimated Undrained Shear Strength (kPa)	Uncorrected Field Reading	Estimated Undrained Shear Strength (kPa)
TP 1	1.0-1.4	4.5	225	---	---
TP 1	1.4-1.6	2.5	125	---	---
TP 1	1.6-1.8	2.5	125	---	---
TP 1	1.8-1.85	2	100	---	---
TP 1	1.85-1.95	3.5	175	---	---
TP 2	2.5	---	---	6-12	9-19
TP 3	3	0.25	12.5	11-12 / R= 4-5	17-19
TP 4	3.6	---	---	12 / R= 2-3	19
TP 6	3	---	---	11-17 / R=2	17-26
TP 7	3.2	---	---	14-18 / R= 2-3	22-28
TP 27	2.1-2.4	3 (against bedding plane)	150	---	---
TP 27	2.1-2.4	2 (with bedding plane)	100	---	---
TP 27	2.4-3.5	1.5-1.75 (with bedding plane)	75-87.5	---	---
TP 27	2.4-3.5	1.25 (against bedding plane)	60	---	---
TP 29	2.4-2.8	2.5-3.0	125-150	---	---
TP 32	0.2-0.5	approx 2	100	---	---

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