Rust Environmental

Project	Amber Park, South Normanton	Borehole	106R (Sheet 1 of 2)
Contractor	Hydracrat Water	Client	Wilson Bowden Homes	Project No.	EGMLS283
Elevation	141.03mOD	Co-ordinates	2217.78mE 4085.06mN	Logged By	JG
				Checked By	GRD

Run (Flush) %	TCR %	SCR %	RQD %	MAX MIN CL	F.I.	Description	Depth	Legend	Level O.D.
						Orange clay	0.00		141.03
						Grey MUDSTONE	2.40		138.63
						Light yellow-brown SANDSTONE	3.30		137.73
						Light brown SANDSTONE	4.60		136.43
						MUDSTONE with sandstone layers	7.80		133.23
9.00	75	11	0	4 1		Dark grey with some orange-brown staining on joints thinly to thickly laminated silty MUDSTONE, very weak	9.00		132.03
						Light brown indurated argillaceous SILTSTONE, moderately weak to moderately strong	9.90 9.95	XXXX	131.13 131.08

Drilling Data

Depth	Method	Bit Type	Hole Dia.	Core Dia.	Casing Depth	Casing Size
0.00-9.00	Rotary Open Hole	Tricone Bit	120mm		2.50m	140mm
9.00-17.40	Rotary Core	Tungsten Bit	120mm	75mm		
17.40-20.00	Rotary Open Hole	Tricone Bit	120mm			

Progress/Groundwater Behaviour

Date/Time	Hole Depth	Casing Depth	Water Depth	Depth Struck	Depth Sealed
29.08.96	9.00	2.50	DRY		-
30.08.96	20.00	2.50	10.40	seepage	-

Remarks

Symbols and abbreviations are explained on the accompanying key. All linear dimensions are in metres unless otherwise stated.

Ref:RRHLS95.1

Rust Environmental

Project	Amber Park, South Normanton	Borehole	106R (Sheet 2 of 2)
Contractor	Hydracrat Water	Client	Wilson Bowden Homes	Project No.	EGMLS283
Elevation	141.03mOD	Co-ordinates	2217.78mE 4085.06mN	Logged By	JG
				Checked By	

Run (Flush) %	TCR %	SCR %	RQD %	MAX MIN CL	F.I.	Description	Depth	Legend	Level O.D.
	75	11	0	4 1		Grey with occasional orange-brown staining on joints, silty MUDSTONE, very weak to weak			
10.50						White and black with occasional orange weathered zones on joints, thinly laminated, closely spaced jointed SANDSTONE. Grey silty clay filling open joints	10.50		130.53
						Black extremely closely fractured COAL	11.00 11.10 11.20		130.03 129.93 129.83
						Black thinly laminated slightly silty, MUDSTONE, weak	11.50		129.53
	77	61	55	39 <1		Grey, occasionally black, slightly carbonaceous MUDSTONE, weak to moderately weak. Occasional clay smeared on surfaces			
12.40						Grey extremely closely fractured MUDSTONE very weak to weak, friable. Broken ground 11.80-12.40m	12.40		128.63
						Grey MUDSTONE, core lost	12.90		128.13
						Grey thinly to thickly laminated MUDSTONE, weak to moderately weak, occasional clay smeared on surfaces			
	82	78	33	43 <1		Grey extremely closely spaced fractured very silty MUDSTONE, very weak, friable	13.95		127.08
						Grey and brown very thinly bedded argillaceous SILTSTONE, moderately weak	14.00 14.15		127.03 126.88
						Grey very thinly bedded silty MUDSTONE, very weak to weak	14.45		126.58
						Black with occasionally brown weathered zones on joints, very thinly bedded COAL, very weak	14.90 15.00		126.13 126.03
15.20						Black thinly laminated slightly silty MUDSTONE, very weak	15.55		125.48
						Grey very thinly bedded silty MUDSTONE, weak to moderately weak. Occasional clay on surfaces. Thinly laminated SILTSTONE at 15.20-15.25. Becoming fossiliferous between 15.25-15.55	15.70		125.33
	100	63	4	10 <1		Grey thinly interbedded argillaceous SILTSTONE, moderately weak SANDSTONE, moderately strong to strong and MUDSTONE, weak to very weak	16.00		125.03
						Grey thinly bedded very closely spaced to closely spaced fractured argillaceous SILTSTONE. Orange weathered zones on vertical joints			
17.40						Grey thinly interbedded SILTSTONE, moderately strong and MUDSTONE, weak to moderately weak	17.40		123.62
						Layers of MUDSTONE and SANDSTONE			
						Base of Borehole	20.00		121.03

Drilling Data

Depth	Method	Bit Type	Hole Dia.	Core Dia.	Casing Depth	Casing Size
0.00-9.00	Rotary Open Hole	Tricone Bit	120mm			
9.00-17.40	Rotary Core	Tungsten Bit	120mm			
17.40-20.00	Rotary Open Hole	Tricone Bit	120mm	75mm	-	-

Progress/Groundwater Behaviour

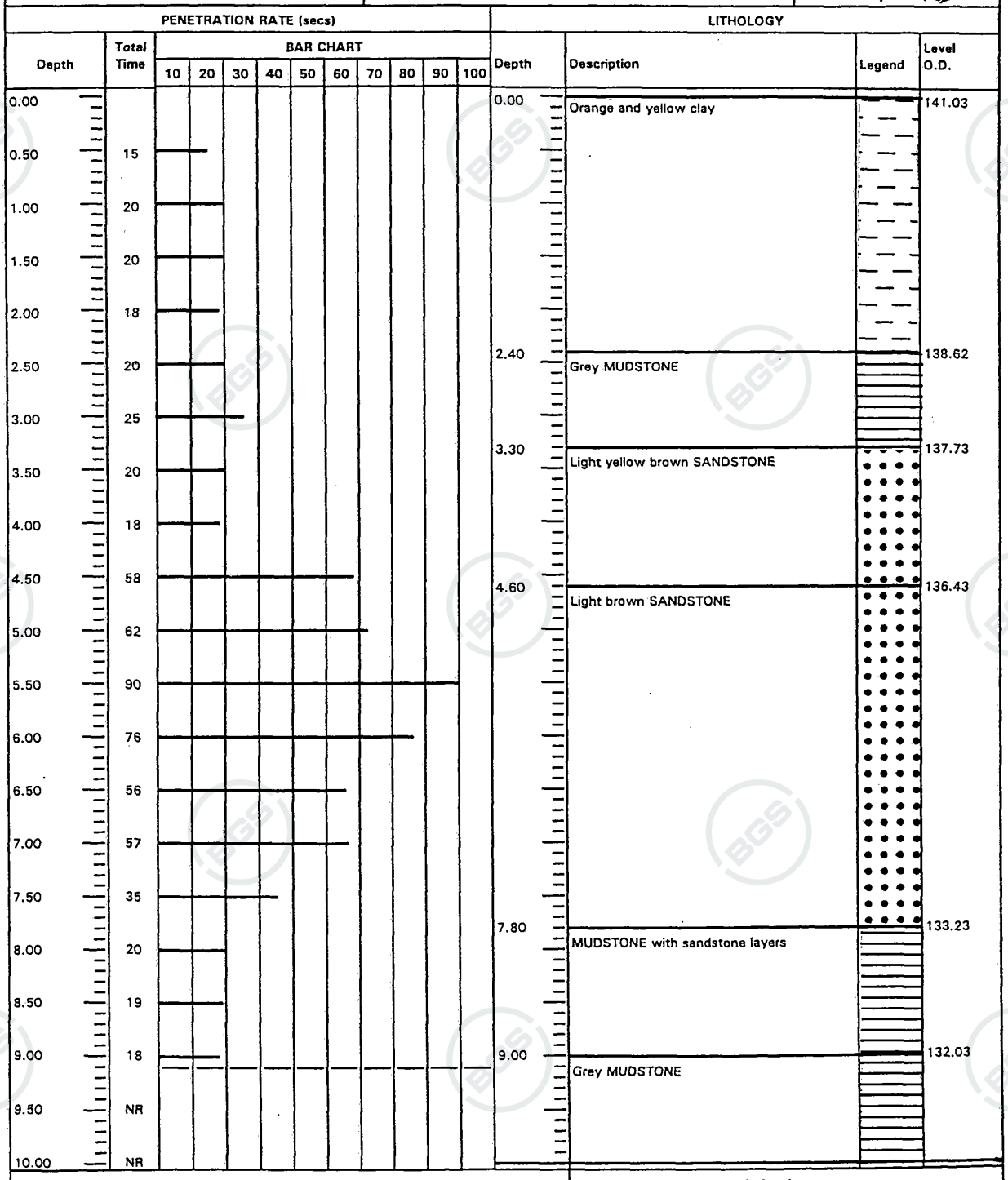
Date/Time	Hole Depth	Casing Depth	Water Depth	Depth Struck	Depth Sealed
29.08.96	9.00	-	-		-
30.08.96	20.00	-	10.40	seepage	-

Remarks

Symbols and abbreviations are explained on the accompanying key. All linear dimensions are in metres unless otherwise stated.

Ref:RRHLS95.1

Rust Environmental	Project: Amber Park, South Normanton	Borehole: 106R (Sheet 1 of 2)
Contractor: Hydracrat Water	Client: Wilson Bowden Properties	Project No.: EGMLS283
Elevation: 141.03mOD	Co-ordinates: 2217.78mE 4085.06mN	Logged By: JG Checked By: GRA



Drilling Data

Depth	Method	Bit Type	Hole Dia.	Casing Depth	Casing Size
0.00-9.00	Rotary Open Hole	Tricone Bit	120mm	1.50m	140mm
9.00-17.40	Rotary Core	Tungsten Bit	120mm		
17.40-20.00	Rotary Open Hole	Tricone Bit	120mm		

Progress/Groundwater Behaviour

Date/Time	Hole Depth	Casing Depth	Water Depth	Depth Struck	Depth Sealed
29.08.96	10.50	1.50	seepage	10.40	-
30.08.96	20.00			-	

Remarks
NR - denotes not recorded

Symbols and abbreviations are explained on the accompanying key. All linear dimensions are in metres unless otherwise stated.

Ref:RRHL1195.2

Rust Environmental	Project: Amber Park, South Normanton	Borehole: 106R (Sheet 2 of 2)
Contractor: Hydracrat Water	Client: Wilson Bowden Properties	Project No.: EGMLS283
Elevation: 141.03mOD	Co-ordinates: 2217.78mE 4085.06mN	Logged By: JG Checked By:

PENETRATION RATE (secs)

Depth	Total Time	BAR CHART 10	20	30	40	50	60	70	80	90	100
10.00	NR										
10.50	NR										
11.00	NR										
11.50	NR										
12.00	NR										
12.50	NR										
13.00	NR										
13.50	NR										
14.00	NR										
14.50	NR										
15.00	NR										
15.50	NR										
16.00	NR										
16.50	NR										
17.00	NR										
17.50	30										
18.00	32										
18.50	25										
19.00	34										
19.50	25										
20.00	27										

LITHOLOGY

Depth	Description	Legend	Level O.D.
	Grey MUDSTONE		
10.40	SANDSTONE with black carbonaceous laminae		130.63
11.00	COAL		130.03
11.10			129.93
11.20	Black MUDSTONE		129.83
	Grey MUDSTONE		
14.45	Black COAL		126.58
14.90	Grey MUDSTONE with sandstone and siltstone layers		126.13
20.00	Base of Borehole		121.03

Drilling Data

Depth	Method	Bit Type	Hole Dia.	Casing Depth	Casing Size
0.00-9.00	Rotary Open Hole	Tricone Bit	120mm	1.50m	140mm
9.00-17.40	Rotary Core	Tungsten Bit	120mm		
17.40-20.00	Rotary Open Hole	Tricone Bit	120mm		

Progress/Groundwater Behaviour

Date/Time	Hole Depth	Casing Depth	Water Depth	Depth Struck	Depth Sealed
29.08.96	10.50	1.50	seepage	10.40	-
30.08.96	20.00			-	

Remarks
NR - denotes not recorded

Symbols and abbreviations are explained on the accompanying key. All linear dimensions are in metres unless otherwise stated.

Ref: RRHL1135.2

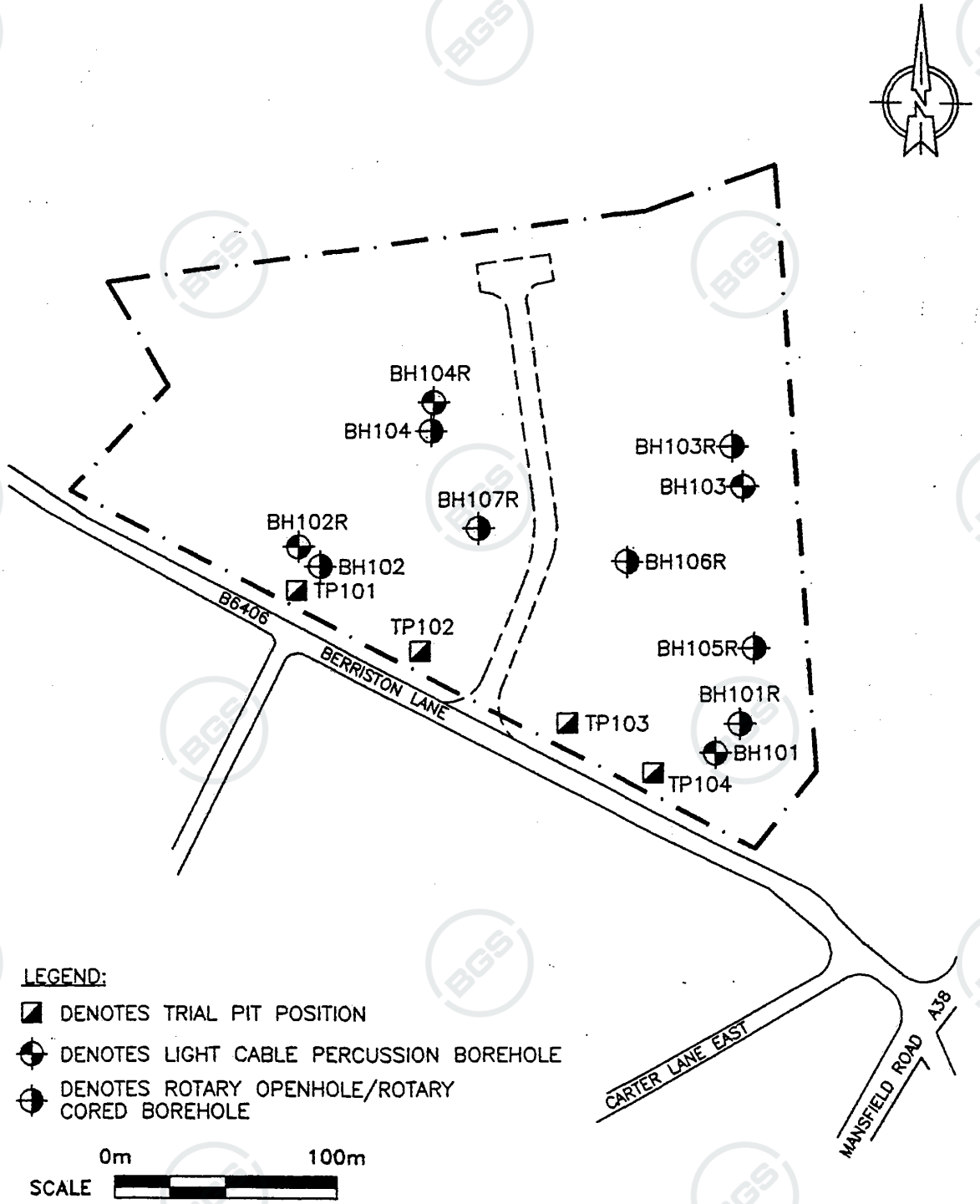
Rust Environmental

Data Sheet

Project Amber Park
South Normanton

FIGURE A-1

TRIAL PIT AND BOREHOLE LOCATION PLAN



EGMLS283.Z59

Filename: 283-01.DWG