

Rust Environmental						Project Amber Park, South Normanton		Borehole 105R (Sheet 1 of 3)				
Contractor Hydracrat Water						Client Wilson Bowden Homes		Project No. EGMLS283				
Elevation 142.23mOD						Co-ordinates 2270.14mE 4075.85mN		Logged By Checked By				
Run (Flush) %	TCR %	SCR %	RQD %	MAX MIN CL	F.I.	Description	Depth	Legend	Level O.D.			
						Orange clay	0.00		142.26			
						Grey occasionally yellow-brown, MUDSTONE	2.10		140.16			
						Dark grey MUDSTONE	5.50		136.76			
						Black MUDSTONE with coal layers	5.80 5.90		136.46 136.36			
						Grey MUDSTONE						
						Black COAL	7.10		135.16			
						Grey MUDSTONE	8.00		134.26			
Drilling Data						Progress/Groundwater Behaviour						
Depth	Method	Bit Type	Hole Dia.	Core Dia.	Casing		Date/Time	Hole Depth	Casing Depth	Water Depth	Depth Struck	Depth Sealed
					Depth	Size						
0.00-12.00	Rotary Open Hole	Tricone Bit	120mm		3.00m	140mm	29.08.96 2.00pm	20.00	3.00	20.00	20.00	-
12.00-24.50	Rotary Core	Tungsten Bit	120mm	75mm			29.08.96 3.00pm	24.90	3.00	DRY	-	-
Remarks												
Symbols and abbreviations are explained on the accompanying key. All linear dimensions are in metres unless otherwise stated.												



Rust Environmental						Project		Borahole															
Contractor						Client		(Sheet 2 of 3)															
Elevation						Co-ordinates		Project No.															
Run (Flush) %						Description		Logged By															
TCR %						Depth		Checked By															
SCR %						Legend		Level O.D.															
RQD %																							
MAX MIN CL																							
F.I.																							
12.00						Grey MUDSTONE		131.66															
						Grey MUDSTONE with sandstone layers		131.26															
						Light yellow SANDSTONE		130.26															
15.00						Buff, light grey and light yellow-brown with occasional dark orange-brown weathered zones along weathered joints, silty fine SANDSTONE very weak to weak, locally weak and weak to moderately weak, with carbonaceous laminae. Bedding dipping at 5° to horizontal. Several vertical and subvertical weathered joints, occasionally clay smear on surfaces		126.66															
						Dark orange brown silty fine, occasionally medium, SANDSTONE, very weak friable		126.36															
						Dark orange brown silty fine, occasionally medium, SANDSTONE, very weak friable - core loss		125.66															
16.60						Dark orange brown silty fine occasionally medium, SANDSTONE, very weak friable		125.26															
						Grey with some dark orange-brown staining on joints, silty MUDSTONE/argillaceous SILTSTONE, very weak to weak		124.26															
18.20						Grey with dark orange-brown and yellow brown staining on joints, highly jointed silty MUDSTONE, very weak, locally very weak to weak		122.76															
						Grey, with occasional yellow-brown staining on joints, silty MUDSTONE, weak																	
20.00																							
Drilling Data						Progress/Groundwater Behaviour																	
Depth		Method		Bit Type		Hole Dia.		Core Dia.		Casing		Date/Time		Hole Depth		Casing Depth		Water Depth		Depth Struck		Depth Sealed	
0.00-12.00		Rotary Open Hole		Tricone Bit		120mm		75mm		3.00m		29.08.96 2.00pm		20.00		3.00		20.00		-		-	
12.00-24.50		Rotary Core		Tungsten Bit		120mm						29.08.96 3.00pm		24.90		3.00		DRY		-		-	
Remarks																							

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

Ref:RRL595.1



Rust Environmental						Project	Amber Park, South Normanton		Borehole		105R (Sheet 3 of 3)				
Contractor						Hydracrat Water		Client		Wilson Bowden Homes		Project No.		EGMLS283	
Elevation						142.26mOD		Co-ordinates		2270.14mE 4075.85mN		Logged By		GRD	
Checked By						GRD		GRD		GRD		GRD		GRD	
Run (Flush) %	TCR %	SCR %	RQD %	MAX MIN CL	F.I.	Description	Depth	Legend	Level O.D.						
20.00						Grey with occasional yellow-brown staining on joints, silty MUDSTONE, weak									
	62	41	0	15		COAL with little clay and rounded mudstone fragments. Very rapid penetration of packed workings	20.50		121.70						
						Grey, with occasional yellow-brown staining on joints, silty MUDSTONE, weak	21.25		121.01						
22.00						Grey silty MUDSTONE, very weak recovered as mudstone gravel in a clay matrix	22.10		120.16						
	82	61	22	17		Grey thinly to thickly laminated silty MUDSTONE, very weak	22.90		119.36						
24.50						Base of Borehole	24.50		117.76						

Drilling Data						Progress/Groundwater Behaviour							
Depth	Method	Bit Type	Hole Dia.	Core Dia.	Casing		Date/Time	Hole Depth	Casing Depth	Water Depth	Depth Struck	Depth Sealed	
					Depth	Size							
0.00-12.00	Rotary Open Hole	Tricone Bit	120mm	75mm	3.00m	140mm	29.08.96 2.00pm	20.00	3.00	20.00	20.00	-	
12.00-24.50	Rotary Core	Tungsten Bit	120mm	75mm			29.08.96 3.00pm	24.90	3.00	DRY	-	-	

Remarks

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



Rust Environmental			Project		Borehole											
Contractor			Client		Project No.											
Elevation			Co-ordinates		Logged By											
					Checked By											
PENETRATION RATE (secs)			LITHOLOGY													
Depth	Total Time	BAR CHART										Depth	Description	Legend	Level O.D.	
		10	20	30	40	50	60	70	80	90	100					
0.00												0.00	Orange and yellow clay (PROBABLE GLACIAL DEPOSITS)		142.26	
0.50	30															
1.00	24															
1.50	19															
2.00	20											2.10	Grey, occasionally yellow brown, weathered MUDSTONE		140.16	
2.50	20															
3.00	20															
3.50	25															
4.00	25															
4.50	18															
5.00	21															
5.50	47											5.50	Dark grey MUDSTONE		136.76	
6.00	15											5.80	Black MUDSTONE		136.46	
6.50	44											5.90	Grey MUDSTONE		136.36	
7.00	35															
7.50	35											7.10	Black COAL		135.16	
8.00	24											8.00	Grey MUDSTONE		134.26	
8.50	19															
9.00	31															
9.50	18															
10.00	19															
Drilling Data												Progress/Groundwater Behaviour				
Depth	Method	Bit Type	Hole Dia.	Casing		Date/Time	Hole Depth	Casing Depth	Water Depth	Depth Struck	Depth Sealed					
				Depth	Size											
0.00-12.00	Rotary Open Hole	Tricone Bit	120mm	3.00m	140mm	29.08.96	24.50	3.00	20.00	20.00	-					
12.00-24.50	Rotary Core	Tungsten Bit	120mm													
Remarks																
NR - denotes not recorded																
Symbols and abbreviations are explained on the accompanying key. All linear dimensions are in metres unless otherwise stated.																



Rust Environmental				Project		Amber Park, South Normanton		Borehole		105R (Sheet 2 of 3)					
Contractor				Hydracrat Water		Client		Wilson Bowden Properties		Project No.		EGMLS283			
Elevation				142.26mOD		Co-ordinates		2270.14mE 4075.85mN		Logged By		JG Cep			
PENETRATION RATE (secs)						LITHOLOGY									
Depth	Total Time	BAR CHART										Depth	Description	Legend	Level O.D.
		10	20	30	40	50	60	70	80	90	100				
10.00	19												Gray MUDSTONE		
10.50	16												10.60 MUDSTONE with some sandstone layers		131.66
11.00	27												11.00 Light yellow SANDSTONE, occasionally broken		131.26
11.50	38														
12.00	30														
12.50	63														
13.00	92														
13.50	177														
14.00	148														
14.50	163														
15.00	156														
15.50	NR														
16.00	160														
16.50	190														
17.00	160												17.00 Gray MUDSTONE		125.26
17.50	120														
18.00	205														
18.50	180														
19.00	NR														
19.50	NR														
20.00	NR														
Drilling Data						Progress/Groundwater Behaviour									
Depth	Method	Bit Type	Hole Dia.	Casing		Date/Time	Hole Depth	Casing Depth	Water Depth	Depth Struck	Depth Sealed				
				Depth	Size										
0.00-12.00	Rotary Open Hole	Tricone Bit	120mm	3.00m	140mm	29.08.96	24.50	3.00	20.00	20.00	-				
12.00-24.50	Rotary Core	Tungsten Bit	120mm												
Remarks															
NR - denotes not recorded															
Symbols and abbreviations are explained on the accompanying key. All linear dimensions are in metres unless otherwise stated.															

Ref: RRM/1195.2



Rust Environmental											Project		Borehole		
Contractor Hydracrat Water											Amber Park, South Normanton		105R (Sheet 3 of 3)		
Elevation 142.26mOD											Client Wilson Bowden Properties		Project No. EGMLS283		
Co-ordinates 2270.14mE 4075.85mN											Logged By JG Checked By GED				
PENETRATION RATE (secs)											LITHOLOGY				
Depth	Total Time	BAR CHART										Depth	Description	Legend	Level O.D.
		10	20	30	40	50	60	70	80	90	100				
20.00	NR												Grey MUDSTONE		
20.50	NR												20.50 Black COAL with a little clay and rounded mudstone fragments (probably partial workings)		121.76
21.00	NR												21.25 Grey MUDSTONE		121.01
21.50	NR														
22.00	NR														
22.50	NR														
23.00	NR														
23.50	NR														
24.00	NR														
24.50	NR												24.50 Base of Borehole		117.76
Drilling Data											Progress/Groundwater Behaviour				
Depth	Method	Bit Type	Hole Dia.	Casing		Date/Time	Hole Depth	Casing Depth	Water Depth	Depth Struck	Depth Sealed				
				Depth	Size										
0.00-12.00 12.00-24.50	Rotary Open Hole Rotary Core	Tricone Bit Tungsten Bit	120mm 120mm	3.00m	140mm	29.08.96	24.50	3.00	20.00	20.00	-				
Remarks NR - denotes not recorded Rapid penetration 20.50-21.25m Symbols and abbreviations are explained on the accompanying key. All linear dimensions are in metres unless otherwise stated.															

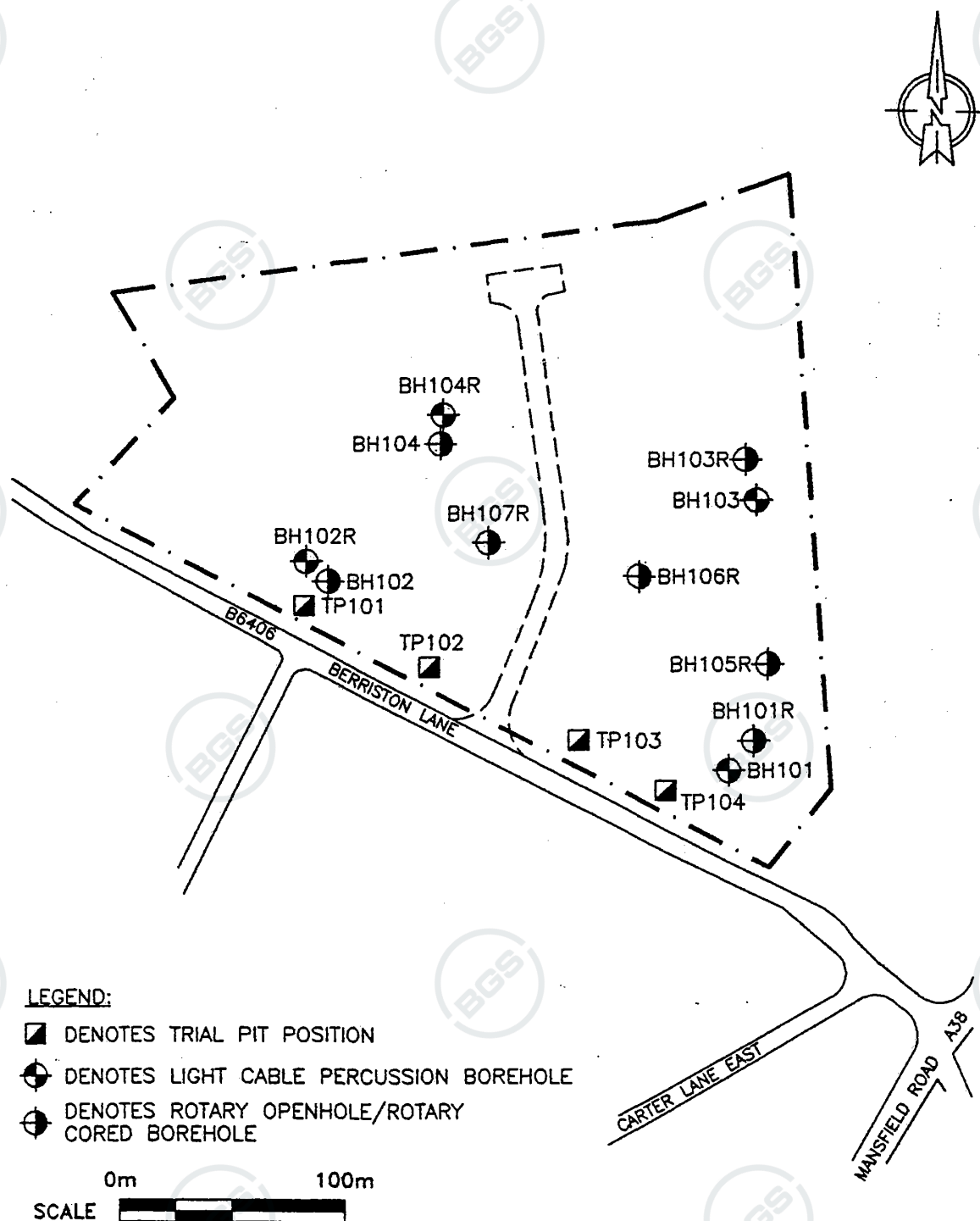
Ref: BRHL1195.2

Data Sheet

Project Amber Park
South Normanton

FIGURE A-1

TRIAL PIT AND BOREHOLE LOCATION PLAN



EGMLS283.Z59

Filename: 283-01.DWG