

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 12/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384634.97 N399457.35	
Project No. : 4328		Crew Name:		Equipment: 13 Tonne Excavator	
Location Number TP203	Location Type TP	Level 32.24m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

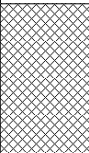
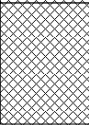
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.05			0.05	32.19		Asphalt (MADE GROUND)	
		0.30	ES					Black sandy fine to coarse sub angular to angular GRAVEL of brick and concrete. High whole and half brick cobble content. Containing plastic bags, metal beams and posts, glass, fabric, timber. Strong hydrocarbon odour (MADE GROUND)	1
		1.20	ES						
		1.50			1.50	30.74		Brown slightly clayey gravelly SAND. Gravel is fine to coarse sub rounded to rounded of mudstone and sandstone. Low mudstone and sandstone cobble content. (DEVENSIAN TILL)	2
		2.40			2.40	29.84		Very soft light brown mottled orangish and reddish brown sandy gravelly CLAY. Gravel is fine to coarse sub rounded to rounded of mudstone and sandstone. Low sandstone and mudstone cobble content (DEVENSIAN TILL)	
		2.90			2.90	29.34		Reddish brown slightly gravelly SAND. Gravel is fine to coarse rounded of sandstone and mudstone. Low sandstone and mudstone cobble content (CHESTER FORMATION)	3
		4.00			4.00	28.24		End of Borehole at 4.000m	4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
4.00	1.60	Stable					

Remarks 1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.							
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Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 14/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384650.66 N399405.60	
Project No. : 4328		Crew Name:		Equipment: 13 Tonne Excavator	
Location Number TP204	Location Type TP	Level 34.61m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.60	ES		0.50	34.11		Grey sandy fine to coarse sub angular to angular GRAVEL of brick and concrete. High whole and half brick cobble content (MADE GROUND)	1
					0.90	33.71		Dark brown sandy gravelly CLAY. Gravel is fine to coarse of brick. High whole and half brick metal and rubber fragments (MADE GROUND)	
					End of Borehole at 0.900m				
									2
									3
									4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
3.60	1.60	Stable					

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Trial pit was terminated at 0.90mbgl due to encountering masonry floor obstruction 4. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 13/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384658.09 N399432.14	
Project No. : 4328		Crew Name:		Equipment: 13 Tonne Excavator	
Location Number TP207	Location Type TP	Level 33.30m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.05	33.25		Asphalt (MADE GROUND)	
					0.30	33.00		Black slightly clayey gravelly SAND. Gravel is fine to medium sub angular to angular of brick and slate. (MADE GROUND)	
					0.42	32.88		Cobblestone setts (MADE GROUND)	
								Brown gravelly CLAY. Gravel is fine to medium sub angular to angular of brick and slate (MADE GROUND)	
								...at 0.80mbgl blue small diameter alkathene water pipe	1
								...at 1.00mbgl 150mm diameter clay pipe	
					1.50	31.80		End of Borehole at 1.500m	2
									3
									4
									5

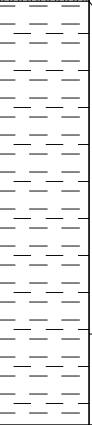
Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
3.00	1.60	Stable					

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Trial pit was terminated at 1.50mbgl due to services strike 4. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 15/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384668.20 N399390.71	
Project No. : 4328		Crew Name:		Equipment: 13 Tonne Excavator	
Location Number TP208	Location Type TP	Level 35.12m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.20	34.92		Grey reinforced concrete slab (MADE GROUND) ...at 0 to 1.30mbgl large concrete footing in southern fact of trial pit	1
					1.60	33.52		Stiff to very stiff orangish brown slightly gravelly CLAY. Gravel is fine to coarse sub angular to angular of sandstone and mudstone (DEVENISAN TILL)	
								End of Borehole at 1.600m	2
									3
									4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
3.60	2.00	Stable					

Remarks 1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings 4. A sketch of the foundation exposure had been completed and is available on sketch 4328-ROC-ZZ-XX-SK-ES-ESK110							
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Trial Pit Log

Project Name: Plots NT02-NT04

Client: FEC

Date: 19/07/2022

Location: Manchester

Contractor: DMW Drilling Ltd

Co-ords: E384705.86 N399483.40

Project No. : 4328

Crew Name:

Equipment: 13 Tonne Excavator

Location Number
TP213Location Type
TPLevel
32.00m AoDLogged By
RMScale
1:25Page Number
Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.80	ES		0.60	31.40		Greyish brown very gravelly SAND. Gravel is fine to coarse sub angular to angular of brick, limestone and concrete. High whole and half brick cobble content (MADE GROUND)	1
								Stiff brown mottled black CLAY (DEVENSIAN TILL)	
		1.20	D		1.10	30.90		Firm light brown mottled grey slightly gravelly sandy CLAY. Gravel is fine to coarse rounded of sandstone (DEVENSIAN TILL)	2
					2.10	29.90		End of Borehole at 2.100m	3
									4
									5

Dimensions

Trench Support and Comment

Pumping Data

Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
3.60	1.00	Stable					

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 18/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384756.33 N399467.65	
Project No. : 4328		Crew Name:		Equipment: 13 Tonne Excavator	
Location Number TP214	Location Type TP	Level 42.00m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.40	ES					Vegetation over dark brown gravelly SAND. Gravel is fine to coarse sub angular to angular of brick, slate, sandstone and concrete. High whole and half brick cobble content. Contains frequent fabric and plastic with occasional rubber, rebar, sheet metal food containers (MADE GROUND)	1
					2.00	40.00		...at 1.50mbgl section of loose masonry wall	2
								End of Borehole at 2.000m	3
									4
									5

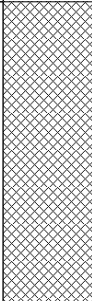
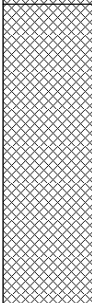
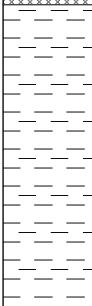
Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
3.60	1.00	Unstable					

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Trial pit was terminated at 2.00mbgl due to instability in north and south faces 4. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 18/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384767.60 N399486.01	
Project No. : 4328		Crew Name:		Equipment: 13 Tonne Excavator	
Location Number TP215	Location Type TP	Level 39.49m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		1.00	ES		1.00	38.49		Grass and small thorny bushes over brown gravelly SAND. Gravel is fine to coarse sub angular to angular of brick, concrete, clinker and slag. High whole and half brick cobble content. Occasional timber fragments (MADE GROUND)	1
		2.50	D		2.00	37.49		Soft to firm dark brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub angular to angular of brick (MADE GROUND) <i>...at 1.20mbgl sandstone flag</i>	
					3.00	36.49		Stiff brown mottled blueish grey CLAY (DEVENSIAN TILL)	2
								End of Borehole at 3.000m	3
									4
									5

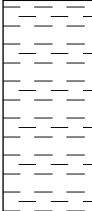
Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
3.60	1.00	Stable					

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 18/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384767.92 N399445.81	
Project No. : 4328		Crew Name:		Equipment: 13 Tonne Excavator	
Location Number TP216	Location Type TP	Level 40.40m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

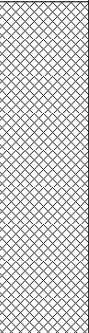
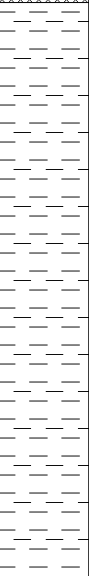
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.05	ES		0.05	40.35		Asphalt (MADE GROUND)	1
		0.20			0.25	40.15		Dark brown gravelly medium SAND. Gravel is fine to coarse sub angular to angular of brick. Low whole and half brick cobble content (MADE GROUND)	
					0.45	39.95		Light brown slightly gravelly SAND. Gravel is fine to coarse rounded of sandstone (MADE GROUND)	
		0.60	ES		0.80	39.60		Dark brown gravelly clayey SAND. Gravel is fine to coarse of brick and slate. High whole and half brick cobble content. Contains glass and rebar. (MADE GROUND)	
					1.10	39.30		Firm brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub angular to angular of brick. (MADE GROUND)	
		1.20	ES					Dark brown slightly clayey gravelly SAND. Gravel is fine to coarse sub angular to angular of brick, slate and coal. Low whole and half brick cobble content. Contains glass and occasional orange slag. (MADE GROUND)	
					2.70	37.70		Stiff light orangish brown mottled light grey slightly gravelly CLAY. Gravel is fine to medium subrounded to rounded of mudstone and sandstone (DEVENSIAN TILL)	3
					3.40	37.00		End of Borehole at 3.400m	4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
3.60	1.00	Stable					

Remarks 1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.							
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Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 18/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384779.95 N399466.05	
Project No. : 4328		Crew Name:		Equipment: 13 Tonne Excavator	
Location Number TP217	Location Type TP	Level 40.54m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	ES					Grass over brown gravelly SAND. Gravel is fine to coarse sub angular to angular of brick, slate, clinker and slag. High cobble content of whole and half bricks and stone setts (MADE GROUND)	1
					1.10	39.44		Stiff brown mottled blueish grey CLAY (DEVENSIAN TILL)	2
					3.00	37.54		End of Borehole at 3.000m	3
									4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
3.60	1.00	Stable					

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 19/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384810.33 N399486.82	
Project No. : 4328		Crew Name:		Equipment: 13 Tonne Excavator	
Location Number TP218	Location Type TP	Level 41.22m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	ES		0.40	40.82		Light grey sandy fine to medium sub angular to angular GRAVEL of limestone (MADE GROUND)	1
								Dark brown gravelly SAND. Gravel is fine to coarse sub angular to angular of brick. High whole and half brick cobble content (MADE GROUND) ...at 0.40 to 1.70mbgl masonry wall running perpendicular to eastern pit face ...at 0.40 to 2.80mbgl masonry wall in northern and southern faces of pit ...at 0.60mbgl arch like structure in western face ...at 1.20mbgl masonry floor	
					2.80	38.42		End of Borehole at 2.800m	3
									4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
3.60	0.80	Unstable					

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Trial pit terminated at 2.80mbgl due to instability in eastern and western faces 4. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 19/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384824.89 N399490.08	
Project No. : 4328		Crew Name:		Equipment: 13 Tonne Excavator	
Location Number TP219	Location Type TP	Level 41.24m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	ES		1.10	40.14		Grass over dark brown gravelly sandy CLAY. Gravel is fine to coarse sub angular to angular of brick, slate and ceramic. Low whole and half brick cobble content and chunks of masonry wall (MADE GROUND)	1
		2.00	D					Stiff light brown sandy gravelly CLAY. Gravel is fine to coarse rounded of mudstone and sandstone. Low mudstone and sandstone cobble content (DEVENSIAN TILL)	2
					2.80	38.44		End of Borehole at 2.800m	3
									4
									5

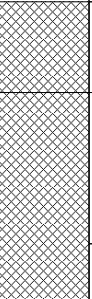
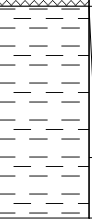
Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
3.60	1.00	Stable					

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 18/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384839.99 N399482.57	
Project No. : 4328		Crew Name:		Equipment: 13 Tonne Excavator	
Location Number TP220	Location Type TP	Level 41.49m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.70	ES		0.30	41.19		Light greyish brown sandy fine to coarse sub angular to angular GRAVEL of limestone (MADE GROUND)	1
					1.00	40.49		Dark brown gravelly SAND. Gravel is fine to coarse sub angular to angular of brick and concrete. Medium whole and half brick cobble content (MADE GROUND) ...at 0.80mbgl 150mm diameter clay pipe encountered	
					1.70	39.79		Stiff brown CLAY (DEVENSIAN TILL) ...at 1.50 to 1.70mbgl concrete footing encountered in southern face End of Borehole at 1.000m	
									2
									3
									4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
3.60	1.00	Stable					

Remarks 1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings 4. A sketch of the foundation exposure had been completed and is available on sketch 4328-ROC-ZZ-XX-SK-ES-ESK110							
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Project Name: Plots NT02-NT04		Client: FEC		Date: 13/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384593.59 N399421.44	
Project No. : 4328		Crew Name: LD		Drilling Equipment: Competitor 150	
Borehole Number WS201	Hole Type WS	Level 31.44m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

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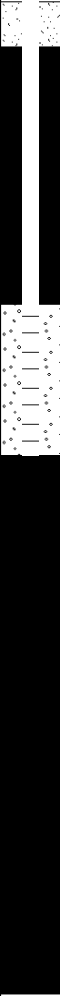
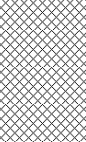
Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole was terminated at 0.30mbgl due to cobblestone road and potential drainage pipes in close vicinity to borehole. 4. Upon completion borehole was backfilled with arisings.



Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 21/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384608.06 N399407.49	
Project No. : 4328		Crew Name: LD, TH		Drilling Equipment: Competitor 150	
Borehole Number WS202	Hole Type WS	Level 32.05m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.30	31.75		Grey concrete slab (MADE GROUND)	1
					0.50	31.55		Black sandy fine to medium sub angular to angular GRAVEL of clinker (MADE GROUND)	
					1.00	31.05		Soft slightly sandy gravelly CLAY. Gravel is fine to medium sub angular to angular of brick (MADE GROUND)	
		1.20	SPT	N=15 (3,3/3,4,4,4)				Very soft brown mottled grey sandy CLAY. Solvent odour noted. (DEVENSIAN TILL)	2
		1.50	ES						
		2.00	SPT	N=15 (3,4/3,4,4,4)					
					2.50	29.55		Very dense slightly clayey red fine to medium SAND (CHESTER FORMATION)	3
		3.00	SPT	50 (10,13/50 for 275mm)					
					3.28	28.77		End of Borehole at 3.280m	
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole was terminated at 3.28mbgl due to SPT refusal in weathered sandstone 4. Upon completion borehole installed with a 50mm diameter standpipe with a response zone between 1.00 and 2.00mbgl.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 21/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384613.95 N399384.25	
Project No. : 4328		Crew Name: LD, TH		Drilling Equipment: Competitor 150	
Borehole Number WS203	Hole Type WS	Level 33.59m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.25	33.34		Grey concrete slab (MADE GROUND)	
		0.50	ES					Brown sandy fine to coarse sub angular to angular GRAVEL of brick (MADE GROUND)	
		1.00			1.00	32.59		Soft light brown mottled orangish brown slightly sandy CLAY. (DEVENSIAN TILL)	1
		1.20	SPT	N=11 (2,3/2,3,3,3)				...at 1.50mbgl becoming firm	
		2.00	SPT	N=6 (2,1/2,1,1,2)				...at 2.40mbgl becoming stiff	2
		2.50	D					...at 2.75 to 2.90mbgl clayey fine sand band	
		3.00	SPT	50 (6,10/50 for 290mm)	3.15	30.44		...at 3.00mbgl becoming very sandy	3
								End of Borehole at 3.150m	
									4
									5

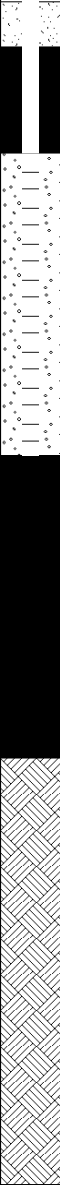
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole was terminated at 3.15mbgl due to SPT refusal in stiff clay 4. Upon completion borehole was installed with a 50mm standpipe with a response zone between 0.50 and 1.00mbgl

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 13/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384644.58 N399435.20	
Project No. : 4328		Crew Name: LD		Drilling Equipment: Competitor 150	
Borehole Number WS204	Hole Type WS	Level 32.91m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.10	32.81		Asphalt (MADE GROUND)	1
		0.40	ES					Black gravelly SAND. Gravel is fine to coarse sub angular to angular of brick, slate and slag with occasional fragments of wire, metal, glass and plastic (MADE GROUND)	
		1.20	SPT	N=18 (0,0/4,6,5,3)					
		1.40	ES		1.35	31.56		Stiff dark brown sandy slightly gravelly CLAY. Gravel is fine to medium sub angular to angular of brick. (MADE GROUND)	
					1.65	31.26		Stiff light brown mottled white and orangish brown slightly sandy slightly gravelly CLAY. Gravel is fine rounded of sandstone and mudstone (DEVENSIAN TILL)	
		2.00	SPT	N=6 (1,1/1,2,1,2)	1.90	31.01		Reddish brown fine to medium SAND (DEVENSIAN TILL)	
					2.00	30.91		Stiff light brown mottled white and orangish brown slightly sandy slightly gravelly CLAY. Gravel is fine rounded of sandstone and mudstone (DEVENSIAN TILL)	
					2.36	30.55		Medium dense reddish brown fine to medium SAND (CHESTER FORMATION)	
		3.00	SPT	N=13 (2,2/3,4,3,3)					
		3.50	SPT	50 (25 for 145mm/50 for 265mm)				...at 3.50mbgl becoming very dense	
					3.91	29.00		End of Borehole at 3.910m	4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole was terminated at 3.91mbgl due to SPT refusal in weathered sandstone 4. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 0.50 and 1.50mbgl.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 13/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384656.83 N399414.99	
Project No. : 4328		Crew Name: LD		Drilling Equipment: Competiror 150	
Borehole Number WS205	Hole Type WS	Level 34.41m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		0.60	33.81		Grey gravelly SAND. Gravel is fine to coarse sub angular to angular of concrete and brick with occasional whole and half brick cobbles (MADE GROUND)	
								End of Borehole at 0.600m	1
									2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole was terminated at 0.60mbgl due to encountering an un-recorded metal pipe 4. Upon completion borehole was backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 21/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384740.67 N399482.77	
Project No. : 4328		Crew Name: LD, TH		Drilling Equipment: Competitor 150	
Borehole Number WS208	Hole Type WS	Level 41.72m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.40	ES		0.50	41.22		Soft to firm brown sandy slightly gravelly CLAY. Gravel is fine to medium sub angular to angular of brick. Frequent roots and rootlets with occasional fragments of ceramic (MADE GROUND)	
		1.00	SPT	50 (15,10/50 for 250mm)	1.18	40.54		Very dense black gravelly SAND. Gravel is fine to coarse angular of asphalt (MADE GROUND)	1
								End of Borehole at 1.180m	2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole was terminated at 1.18mbgl due to SPT refusal on asphalt type material 4. Upon completion borehole was installed with a 50mm diameter standpipe with a response zone between 0.50 and 1.00mbgl.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 21/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384764.54 N399469.56	
Project No. : 4328		Crew Name: LD, TH		Drilling Equipment: Competitor 150	
Borehole Number WS209	Hole Type WS	Level 40.19m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.40	ES		0.20	39.99		Light brown silty gravelly SAND. Gravel is fine to coarse angular of ceramic and brick. Frequent roots and rootlets (MADE GROUND - TOPSOIL) Dark brown gravelly SAND. Gravel is fine to coarse sub rounded to sub angular of clinker (MADE GROUND)	1
		1.20	SPT	N=11 (2,3/2,3,3,3)	1.40	38.79		Firm brown slightly gravelly CLAY. Gravel is fine to medium angular of brick and clinker (MADE GROUND) <i>...at 1.65 to 1.75mbgl becoming dark brown</i>	
		2.00	SPT	N=15 (3,3/4,3,4,4)	1.75	38.44		Firm to stiff light brown mottled grey slightly gravelly CLAY. Gravel is fine rounded of sandstone and mudstone (DEVENSIAN TILL) <i>...at 2.20mbgl becoming very stiff</i>	2
		3.00 3.00	D SPT	N=50 (7,7/10,12,13,15)	3.44	36.75		End of Borehole at 3.440m	3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole was terminated at 3.44mbgl due to SPT refusal in very stiff clay 4. Upon completion borehole was installed with a 50mm standpipe with a response zone between 0.50 and 1.50mbgl.



Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 22/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384768.39 N399479.63	
Project No. : 4328		Crew Name: LD, TH		Drilling Equipment: Competitor 150	
Borehole Number WS210	Hole Type WS	Level 40.42m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 2

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	ES					Grass over dark brown slightly clayey gravelly SAND. Gravel is fine to coarse sub angular to angular of brick, ceramic, clinker and slag. Occasional whole and half bricks (MADE GROUND)	1
		1.30	ES		1.20	39.22		Brown slightly sandy clayey fine to coarse sub rounded to angular GRAVEL of clinker and slag. Frequent roots and rootlets (MADE GROUND)	
					1.40	39.02		Soft brown slightly sandy gravelly CLAY. Gravel is fine to medium sub angular to angular of brick (MADE GROUND)	
					2.00	38.42		Firm brown sandy gravelly CLAY. Gravel is fine to coarse rounded of mudstone and sandstone (DEVENSIAN TILL)	2
					2.50	37.92		Brown fine to medium SAND (DEVENSIAN TILL)	
					2.90	37.52		Firm reddish brown CLAY (DEVENSIAN TILL)	
					3.10	37.32		Stiff reddish brown slightly clayey SILT (DEVENSIAN TILL)	3
					3.50	36.92		Stiff reddish brown silty CLAY (DEVENSIAN TILL)	
					4.40	36.02		Stiff reddish brown slightly sandy clayey SILT (DEVENSIAN TILL)	4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 22/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384768.39 N399479.63	
Project No. : 4328		Crew Name: LD, TH		Drilling Equipment: Competitor 150	
Borehole Number WS210	Hole Type WS	Level 40.42m AoD	Logged By RM	Scale 1:25	Page Number Sheet 2 of 2

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					5.45	34.97	x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x	Stiff reddish brown slightly sandy clayey SILT (DEVENSIAN TILL)	
								End of Borehole at 5.450m	
									6
									7
									8
									9
									10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 22/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384789.54 N399483.08	
Project No. : 4328		Crew Name: LD, TH		Drilling Equipment: Competitor 150	
Borehole Number WS211	Hole Type WS	Level 40.96m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		1.50	39.46		Grass over dark brown gravelly SAND. Gravel is fine to coarse sub angular to angular of brick and ceramic with occasional whole and half brick cobbles and timber fragments (MADE GROUND)	1
								End of Borehole at 1.500m	2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole was terminated at 1.5mbgl due to an unknown obstruction within made ground deposits 4. Upon completion borehole was installed with a 50mm diameter standpipe with a response zone between 0.50 and 1.00mbgl.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 21/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384797.99 N399463.60	
Project No. : 4328		Crew Name: LD, TH		Drilling Equipment: Compeititor 150	
Borehole Number WS212	Hole Type WS	Level 41.35m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.20	41.15		Light grey sandy fine to coarse sub angular to angular GRAVEL of limestone (MADE GROUND)	1
					0.50	40.85		Reddish brown sandy fine to coarse sub angular to angular GRAVEL of brick. (MADE GROUND - RELIC BRICK WALL)	
								End of Borehole at 0.500m	
									2
									3
									4
									5

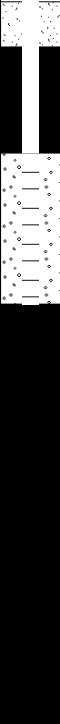
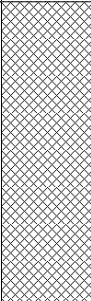
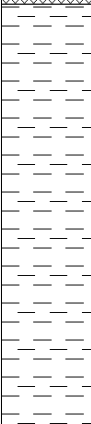
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole terminated at 0.50mbgl due to encountering a relic brick wall within the handpit 4. Upon completion borehole was backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 22/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384817.95 N399508.90	
Project No. : 4328		Crew Name: LD, TH		Drilling Equipment: Competitor 150	
Borehole Number WS213	Hole Type WS	Level 37.29m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	ES		1.00	36.29		Brown gravelly SAND. Gravel is fine to coarse rounded to sub angular of brick, mudstone and sandstone (MADE GROUND)	1
		1.20	SPT	N=17 (3,3/3,4,5,5)				Stiff brown slightly gravelly CLAY. Gravel is fine to medium sub rounded to rounded of sandstone and mudstone (DEVENSIAN TILL) ...at 1.50mbgl becoming very stiff reddish brown	2
		2.00	SPT	N=50 (6,10/50 for 245mm)	2.40	34.89		End of Borehole at 2.400m	3
									4
									5

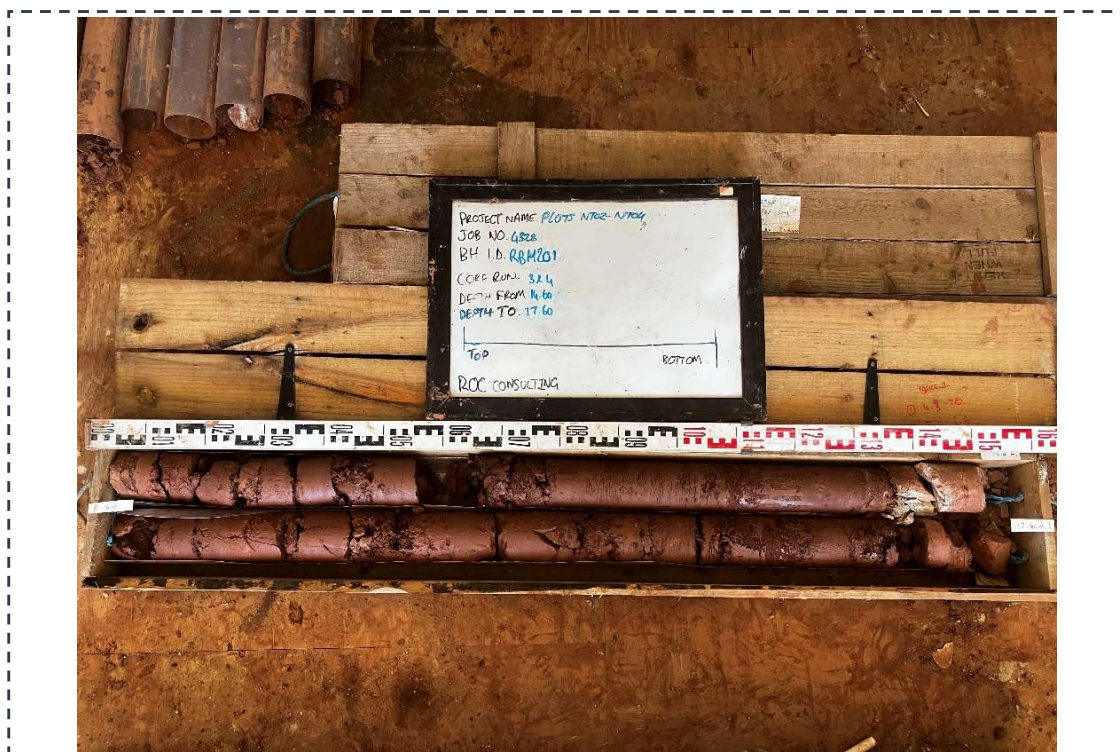
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole was terminated at 2.40mbgl due to SPT refusal in very stiff clay 4. Upon completion borehole was installed with a 50mm diameter standpipe with a response zone between 0.50 and 1.00mbgl.

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH201 – Core Run 1 & 2 11.80 to 14.60mbgl

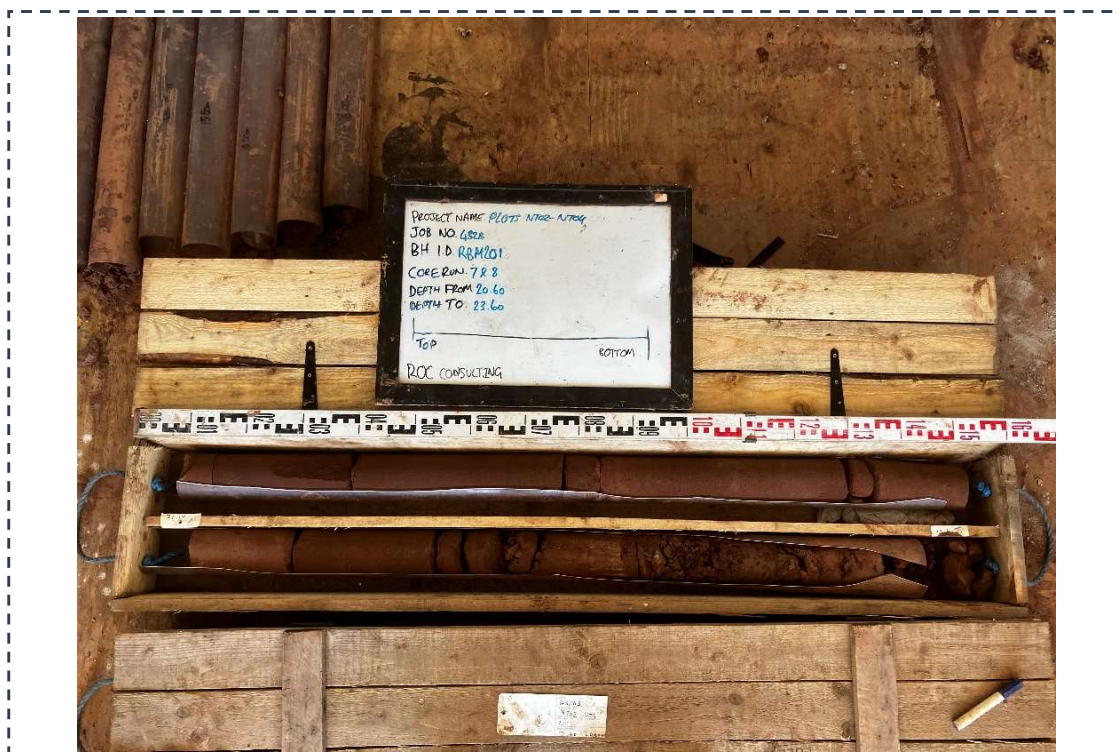


RBH201 – Core Run 3 & 4 14.60 to 17.60mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**

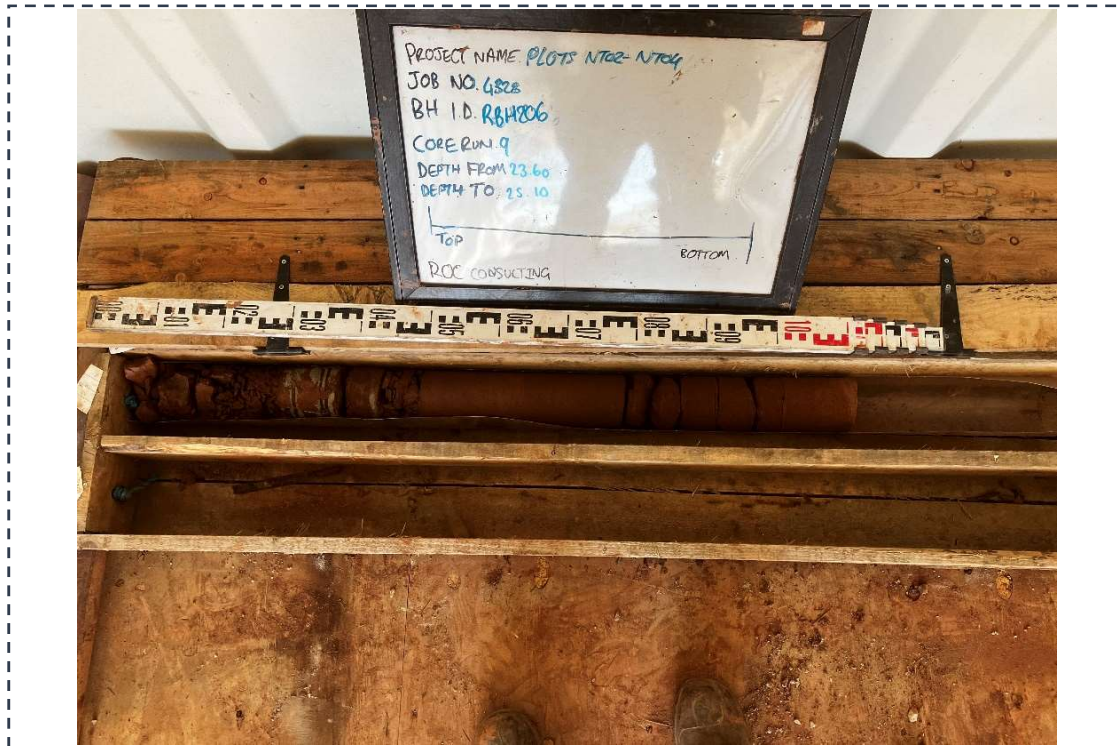


RBH201 – Core Run 5 & 6 17.60 to 20.60mbgl



RBH201 – Core Run 7 & 8 20.60 to 23.60mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH201 – Core Run 9 23.60 to 25.10mbgl



RBH202 – Core Runs 1 & 2 9.90 to 13.00mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH202 – Core Run 3 & 4 13.00 to 16.00mbgl

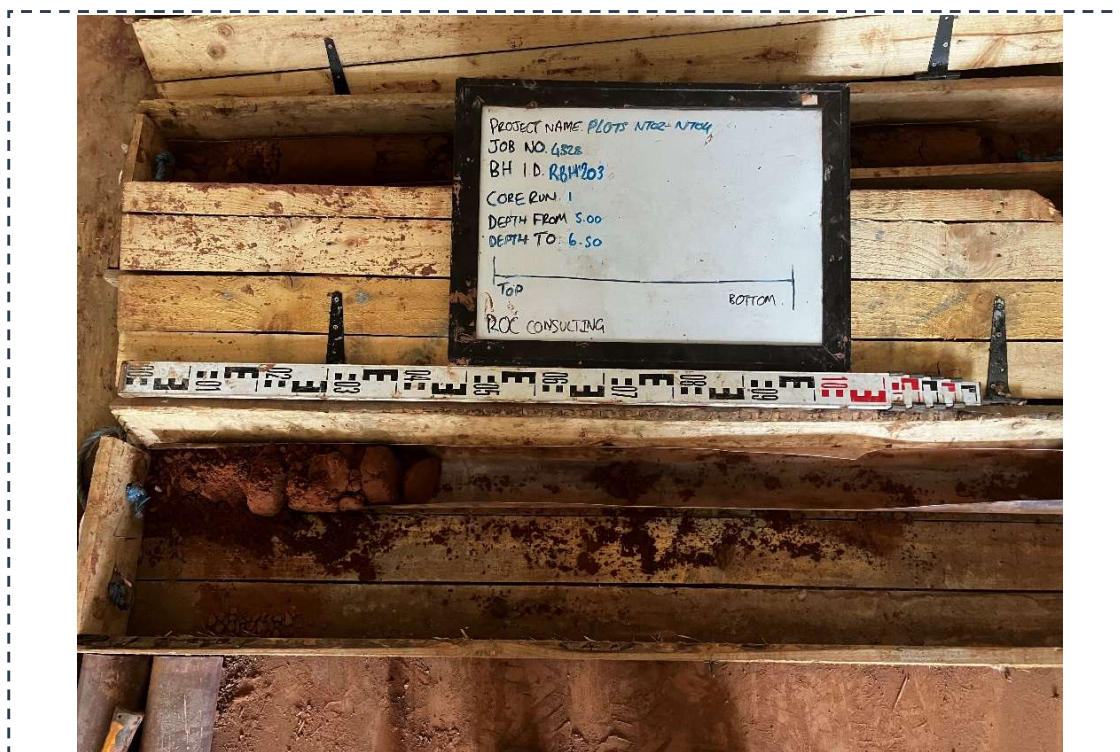


RBH202 – Core Runs 5 & 6 16.00 to 19.00mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**

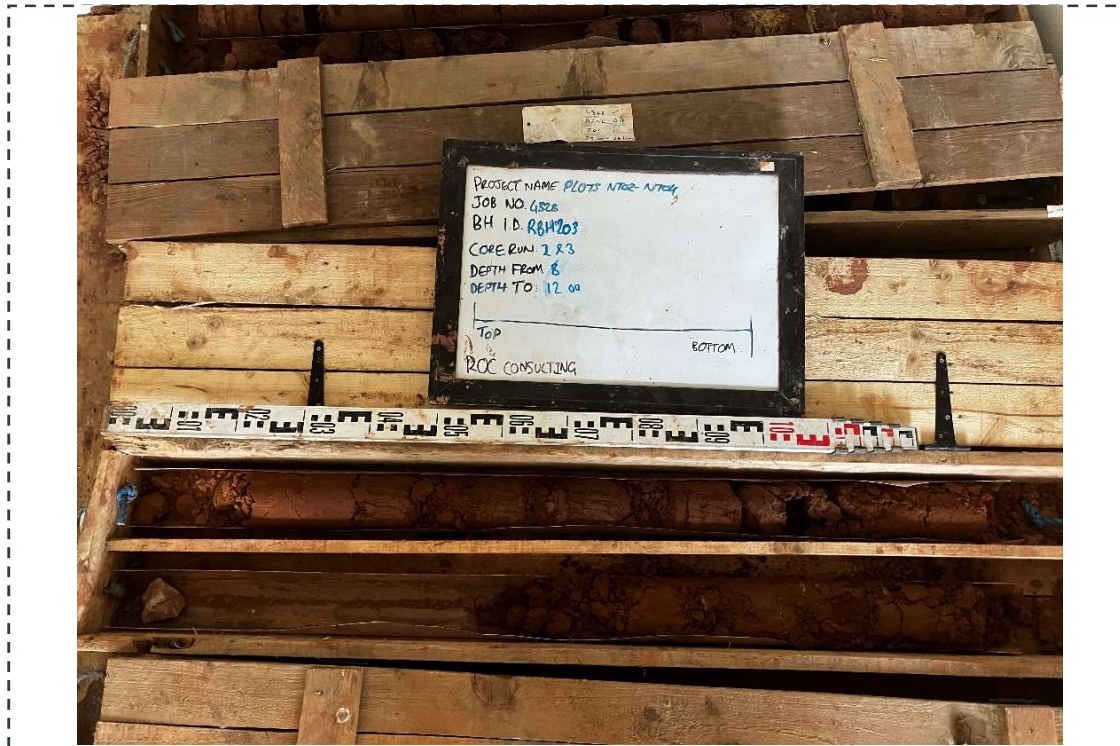


RBH202 – Core Run 7 & 8 19.00 to 22.00mbgl

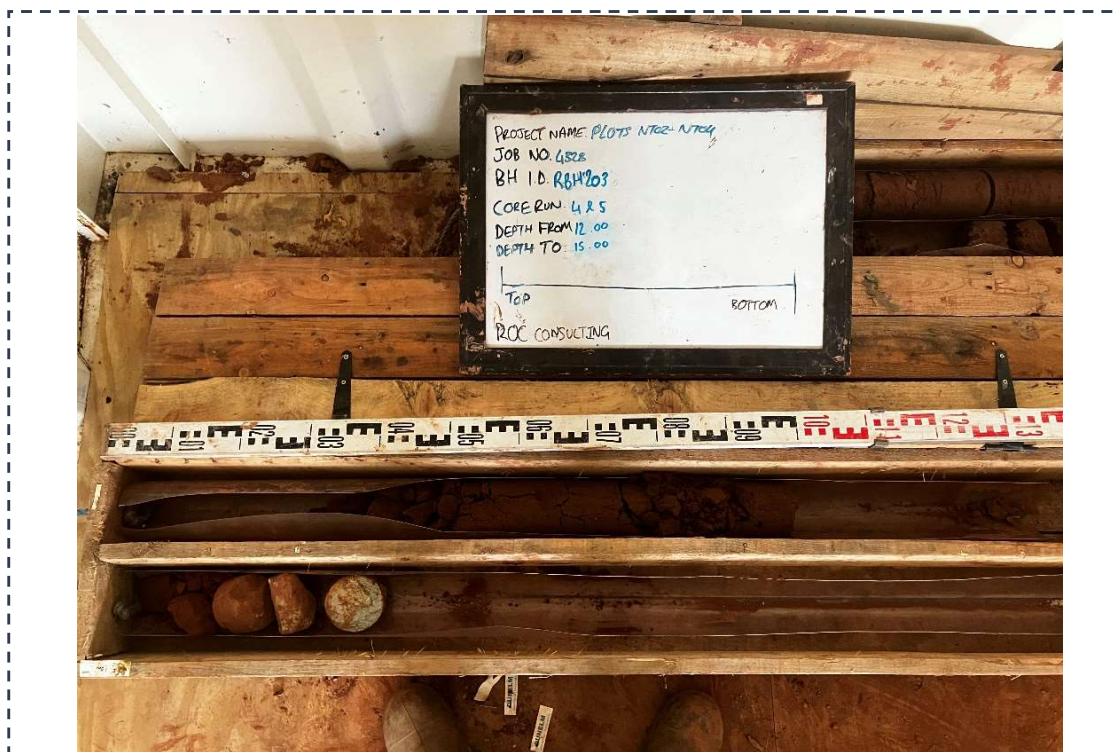


RBH203 – Core Run 1 5.00 to 6.50mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH203 – Core Run 2 & 3 8.00 to 12.00mbgl



RBH203 – Core Run 4 & 5 12.00 to 15.00mbgl