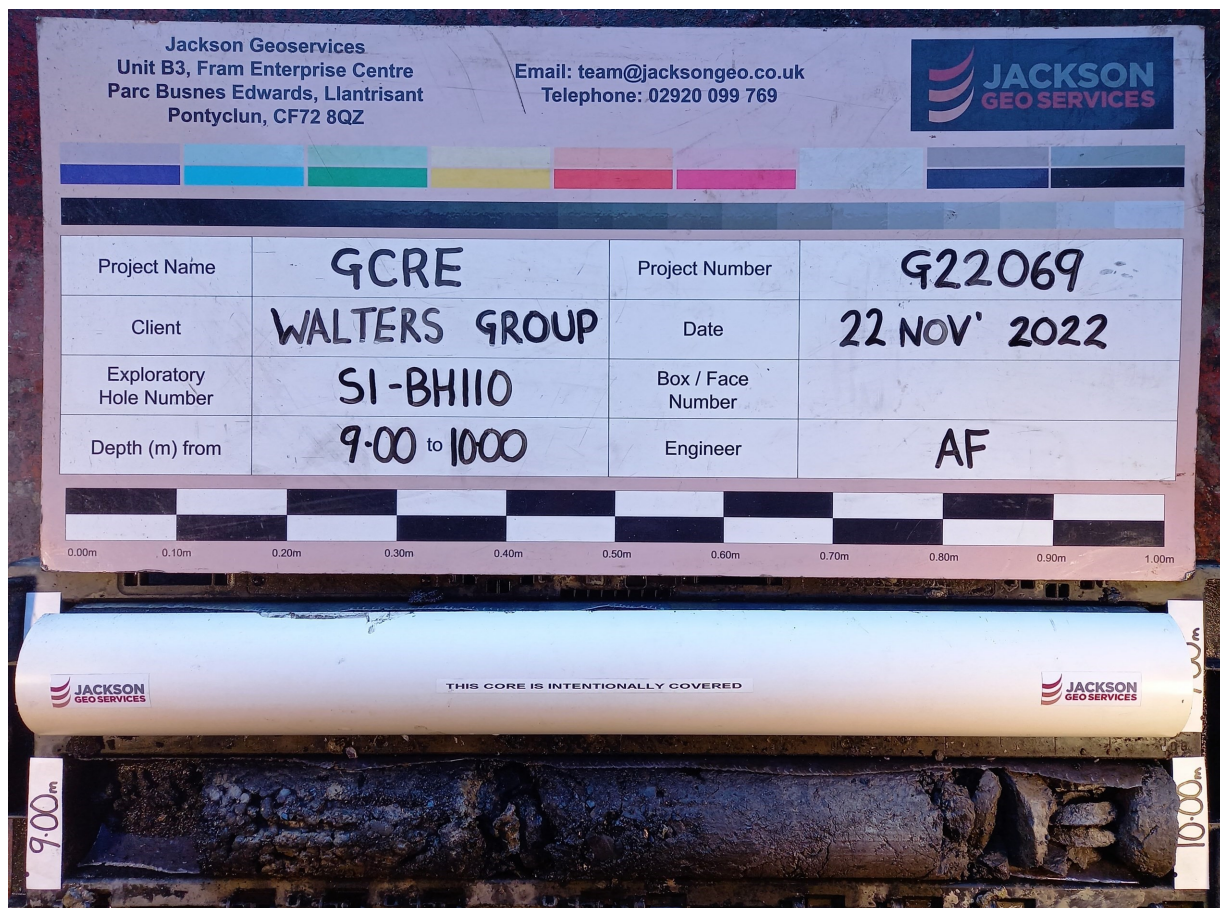


		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 0.80m. Dynamic sampling from 0.80m to 9.00m. Rotary coring from 9.00 to 12.00m.	Exploratory Hole S1-BH110
Project	Global Centre of Rail Excellence	Easting	284595.14	Equipment	Insulated Digging Tools/Comacchio 305
Client	Walters UK Limited	Northing	210619.88	Method	IP/RC/DS
Project No	G22069	Level	234.05 mAOD	Termination Reason	Scheduled depth

Sheet 4 of 5



S1-BH110 8.00 m to 9.00 m



S1-BH110 9.00 m to 10.00 m

		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 0.80m. Dynamic sampling from 0.80m to 9.00m. Rotary coring from 9.00 to 12.00m.	Exploratory Hole S1-BH110
Project	Global Centre of Rail Excellence	Easting	284595.14	Equipment	Insulated Digging Tools/Comacchio 305
Client	Walters UK Limited	Northing	210619.88	Method	IP/RC/DS
Project No	G22069	Level	234.05 mAOD	Termination Reason	Scheduled depth

Sheet 5 of 5



S1-BH110 10.00 m to 11.00 m



S1-BH110 11.00 m to 12.00 m



Exploratory Hole Progress by Time				Exploratory Hole	
Date and Time	Depth	Casing Depth	Water Depth	S1-BH112	
14/12/2022 08:15	0.00				
14/12/2022 16:15	6.20	4.50	Dry	Sheet 1 of 7	
15/12/2022 08:15	6.20	4.50	Dry	Scale	1:25
15/12/2022 16:15	15.90	4.50	7	Drilled	TP
16/12/2022 08:15	15.90	4.50	Wet	Logged	AF/JP
16/12/2022 15:00	21.90	4.50	19.96	Checked	AP
19/12/2022 08:15	21.90	4.50	10.97		
19/12/2022 15:00	30.40	4.50	Wet		

Drilling Flush					Hole Diameter		Casing Diameter		Water Added		Water Strikes						
Depth Top	Depth Base	Type	Colour	Returns	Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Date and Time	Casing	Strike	Sealed	Rising to	Time	Remarks
6.20	7.00	Air/Mist	Brown	100%	30.40	146mm	4.50	200mm									
7.00	28.00	Air/Mist	Grey	100%													
28.00	30.40	Air/Mist	Brown	100%													
Drill Bit Type			PCD		Drill Bit Condition		Good		Core Barrel Type		Wireline Triple Tube			Core Barrel Length		1.50	

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Exploratory Hole Progress by Time				Exploratory Hole	
Date and Time	Depth	Casing Depth	Water Depth	S1-BH112	
				Sheet 2 of 7	
				Scale	1:25
				Drilled	TP
				Logged	AF/JP
				Checked	AP

Drilling Flush					Hole Diameter		Casing Diameter		Water Added		Water Strikes						
Depth Top	Depth Base	Type	Colour	Returns	Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Date and Time	Casing	Strike	Sealed	Rising to	Time	Remarks
6.20	7.00	Air/Mist	Brown	100%	30.40	146mm	4.50	200mm									
7.00	28.00	Air/Mist	Grey	100%													
28.00	30.40	Air/Mist	Brown	100%													
Drill Bit Type			PCD		Drill Bit Condition		Good		Core Barrel Type		Wireline Triple Tube			Core Barrel Length		1.50	

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Exploratory Hole Progress by Time				Exploratory Hole	
Date and Time	Depth	Casing Depth	Water Depth	S1-BH112	
				Sheet 3 of 7	
				Scale	1:25
				Drilled	TP
				Logged	AF/JP
				Checked	AP

Drilling Flush					Hole Diameter		Casing Diameter		Water Added		Water Strikes						
Depth Top	Depth Base	Type	Colour	Returns	Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Date and Time	Casing	Strike	Sealed	Rising to	Time	Remarks
6.20	7.00	Air/Mist	Brown	100%	30.40	146mm	4.50	200mm									
7.00	28.00	Air/Mist	Grey	100%													
28.00	30.40	Air/Mist	Brown	100%													
Drill Bit Type			PCD		Drill Bit Condition		Good		Core Barrel Type		Wireline Triple Tube			Core Barrel Length		1.50	

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Exploratory Hole Progress by Time				Exploratory Hole	
Date and Time	Depth	Casing Depth	Water Depth	S1-BH112	
				Sheet 5 of 7	
				Scale	1:25
				Drilled	TP
				Logged	AF/JP
				Checked	AP

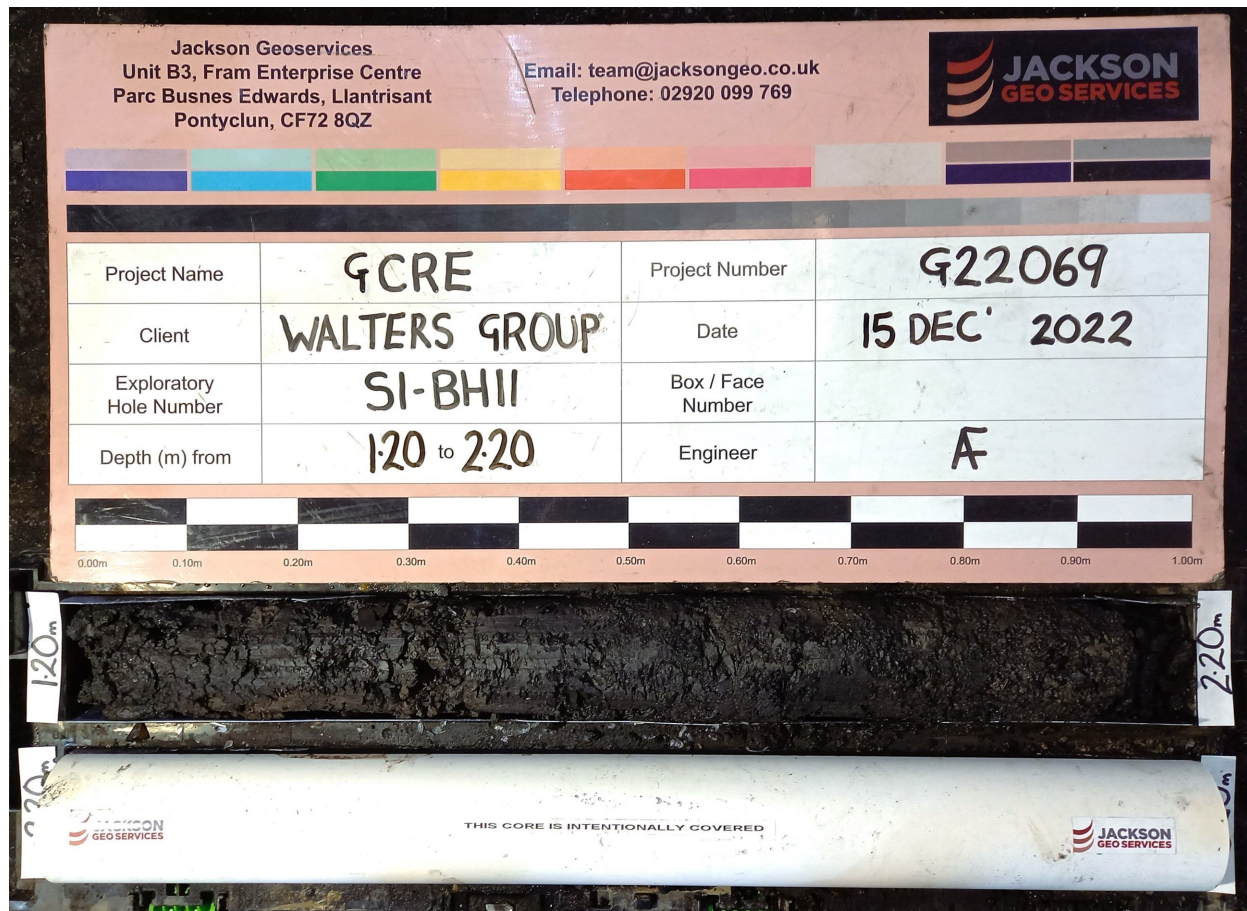
Drilling Flush					Hole Diameter		Casing Diameter		Water Added		Water Strikes						
Depth Top	Depth Base	Type	Colour	Returns	Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Date and Time	Casing	Strike	Sealed	Rising to	Time	Remarks
6.20	7.00	Air/Mist	Brown	100%	30.40	146mm	4.50	200mm									
7.00	28.00	Air/Mist	Grey	100%													
28.00	30.40	Air/Mist	Brown	100%													
Drill Bit Type			PCD		Drill Bit Condition		Good		Core Barrel Type		Wireline Triple Tube			Core Barrel Length		1.50	

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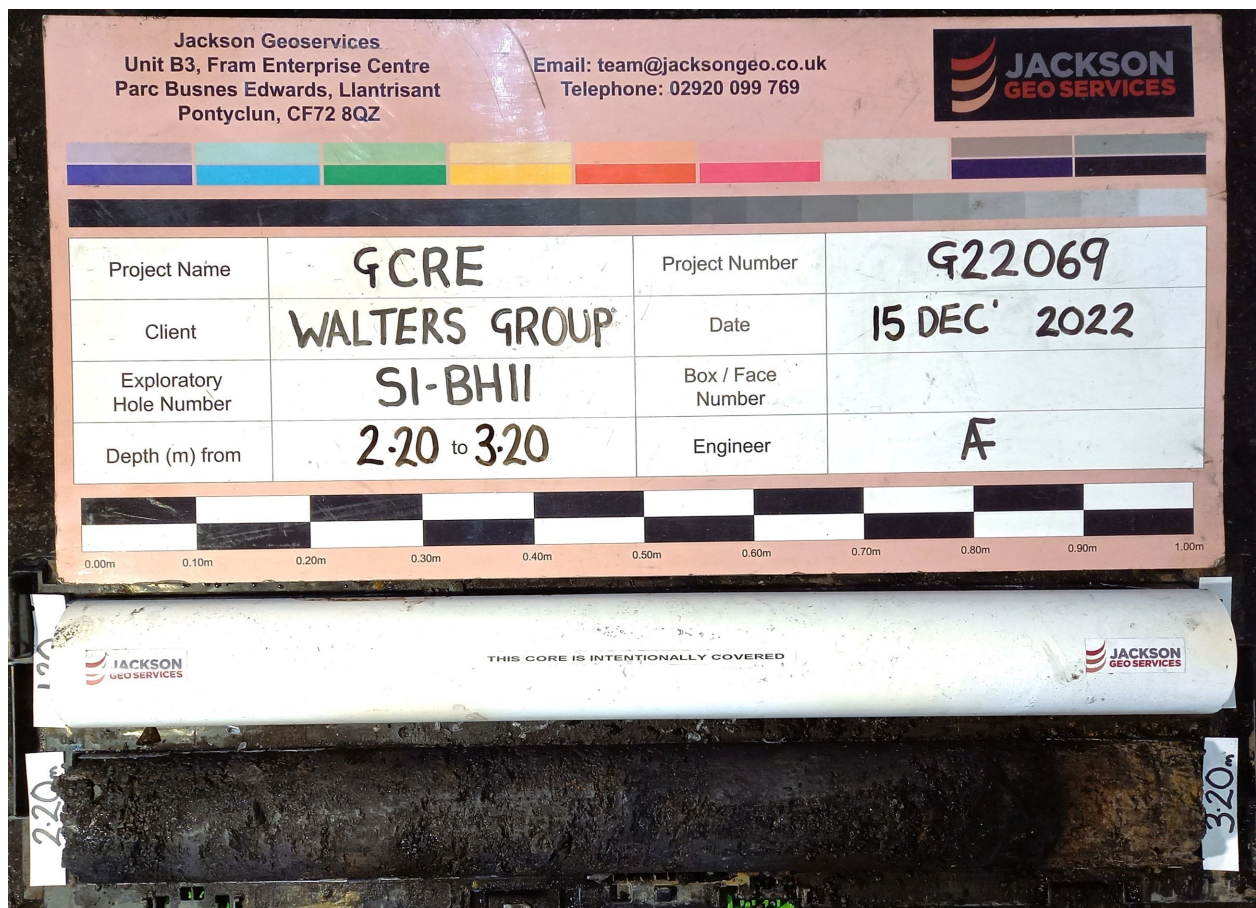
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		DYNAMIC SAMPLING AND ROTARY DRILLING EXPLORATORY HOLE LOG										Exploratory Hole Progress by Time							Exploratory Hole						
												Date and Time		Depth	Casing Depth	Water Depth	S1-BH112								
Project		Global Centre of Rail Excellence				Equipment		Commachio 305/Insulated Digging Tools				Sheet 7 of 7													
Client		Walters UK Limited				Method		RC/IP/DS				Scale	1:25												
Project No		G22069		Level		237.94 mAOD		Inclination		90 degrees		Drilled	TP												
Easting		284882.07		Northing		210599.97		SPT Hammer Serial Number		AR2394		Logged	AF/JP												
Termination Reason		Scheduled depth				SPT Hammer Energy Ratio		67 %				Checked	AP												
Samples	Sampling and Testing Depths	Insitu Testing and Depth Related Remarks				Drill Runs	TCR SCR RQD	Depth (Thickness)	Level (mAOD)	Legend	Description	If (min ave max)	Scale	Backfill											
								(0.70)	207.54		Medium strong to strong thinly bedded grey fine grained SANDSTONE. No apparent weathering. Discontinuities: sub-horizontal to 15 degree closely spaced planar rough tight bedding, locally infilled with <2-5mm silty fine to medium sand. Joints are sub-vertical to 80 degree conjugate planar rough tight, infilled with <5mm sandy angular fine gravel. (SOUTH WALES LOWER COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: SST End of Exploratory Hole at 30.40m														
													30.50												
													31.00												
													31.50												
													32.00												
													32.50												
													33.00												
													33.50												
													34.00												
													34.50												
													35.00												
Drilling Flush														Hole Diameter		Casing Diameter		Water Added		Water Strikes					
Depth Top	Depth Base	Type	Colour	Returns	Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Date and Time	Casing	Strike	Sealed	Rising to	Time	Remarks								
6.20	7.00	Air/Mist	Brown	100%	30.40	146mm	4.50	200mm																	
7.00	28.00	Air/Mist	Grey	100%																					
28.00	30.40	Air/Mist	Brown	100%																					
Drill Bit Type		PCD			Drill Bit Condition		Good		Core Barrel Type		Wireline Triple Tube		Core Barrel Length		1.50										
Remarks																									
Hand excavated inspection pit from GL to 1.20m. Dynamic sampling from 1.20m to 6.20m. Rotary coring from 6.20m to 30.40m.																									
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		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 1.20m. Dynamic sampling from 1.20m to 6.20m. Rotary coring from 6.20m to 30.40m.		Exploratory Hole S1-BH112
Project	Global Centre of Rail Excellence	Easting	284882.07	Equipment	Commachio 305/Insulated Digging Tools	Sheet 1 of 11
Client	Walters UK Limited	Northing	210599.97	Method	RC/IP/DS	
Project No	G22069	Level	237.94 mAOD	Termination Reason	Scheduled depth	



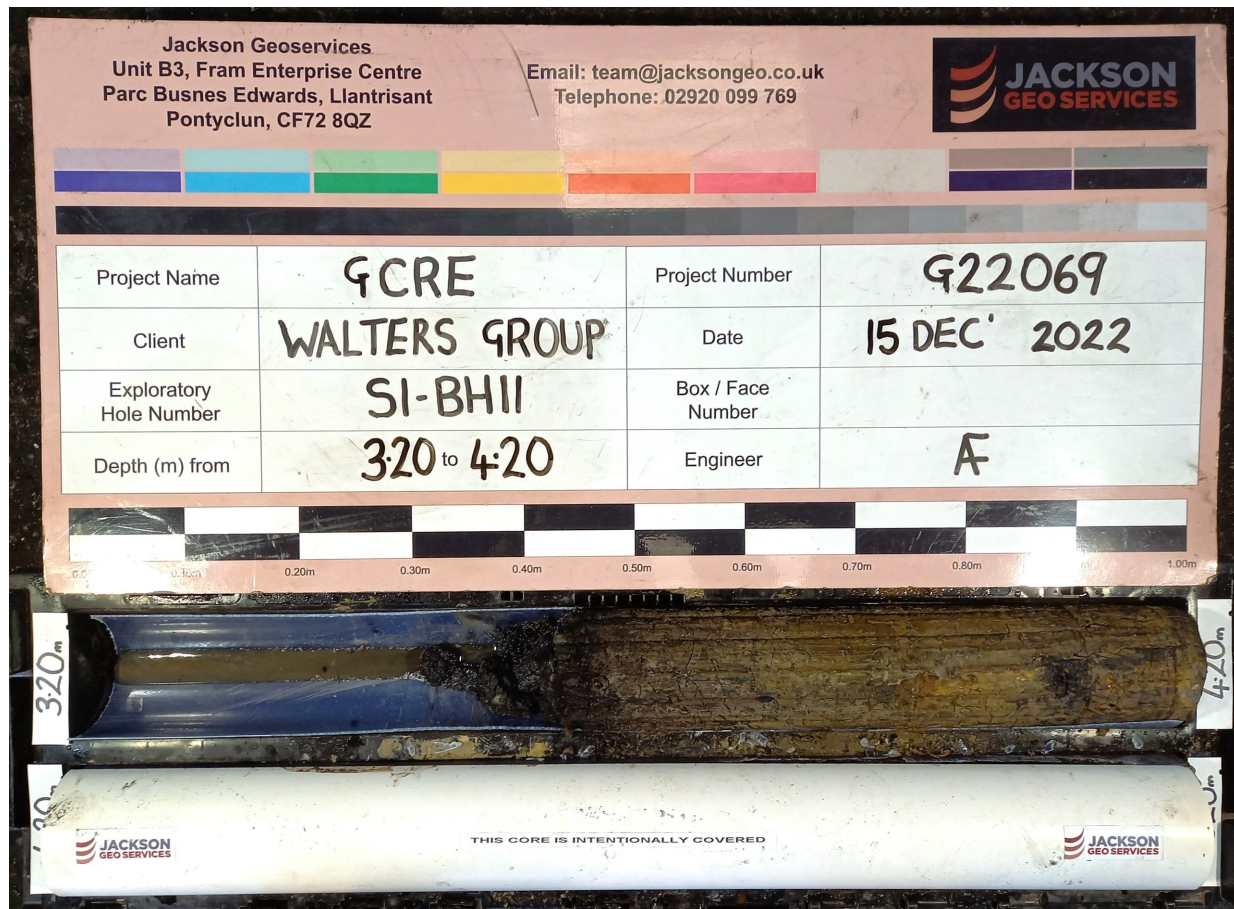
S1-BH112 1.20 m to 2.20 m



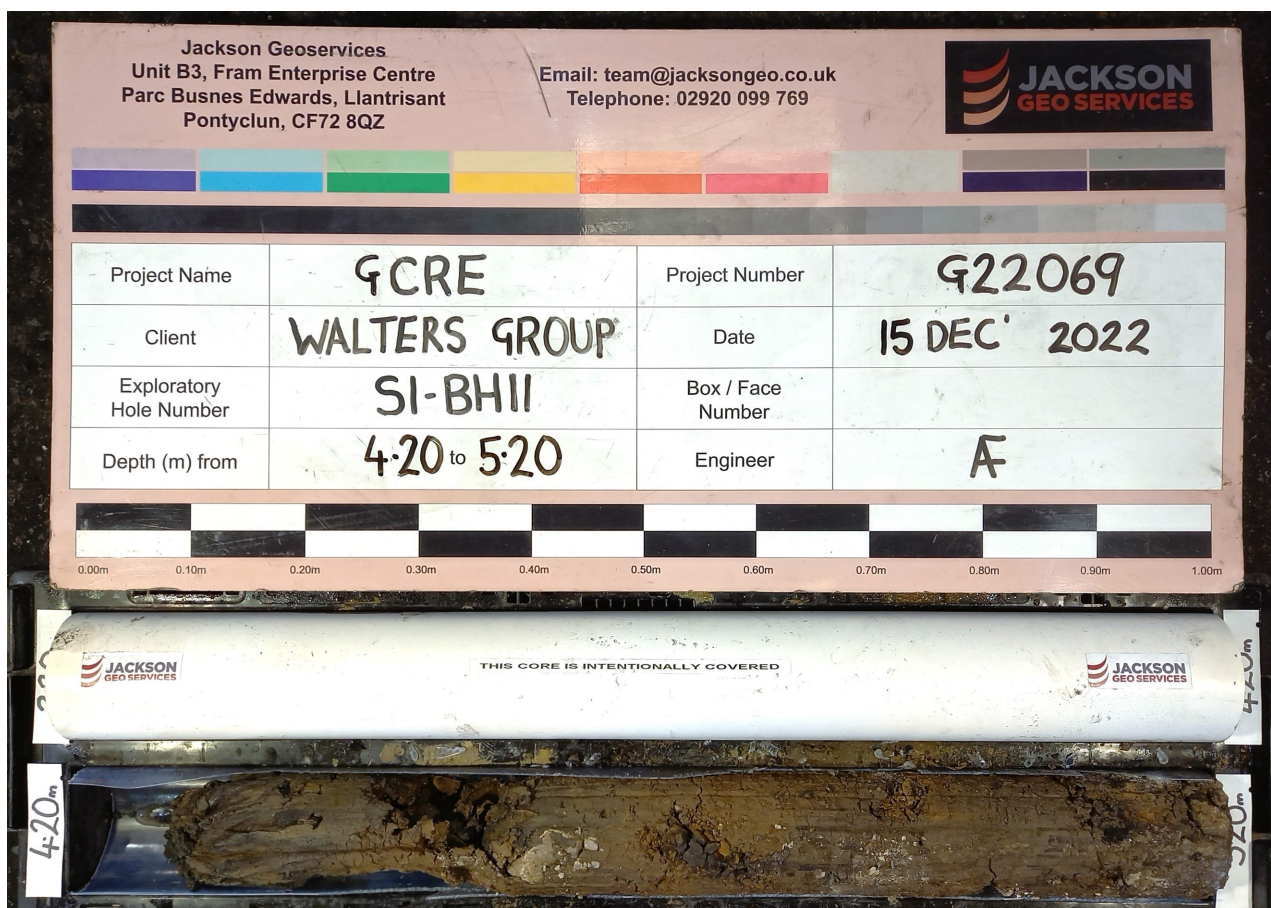
S1-BH112 2.20 m to 3.20 m

		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 1.20m. Dynamic sampling from 1.20m to 6.20m. Rotary coring from 6.20m to 30.40m.	Exploratory Hole S1-BH112
Project	Global Centre of Rail Excellence	Easting	284882.07	Equipment	Commachio 305/Insulated Digging Tools
Client	Walters UK Limited	Northing	210599.97	Method	RC/IP/DS
Project No	G22069	Level	237.94 mAOD	Termination Reason	Scheduled depth

Sheet 2 of 11



S1-BH112 3.20 m to 4.20 m



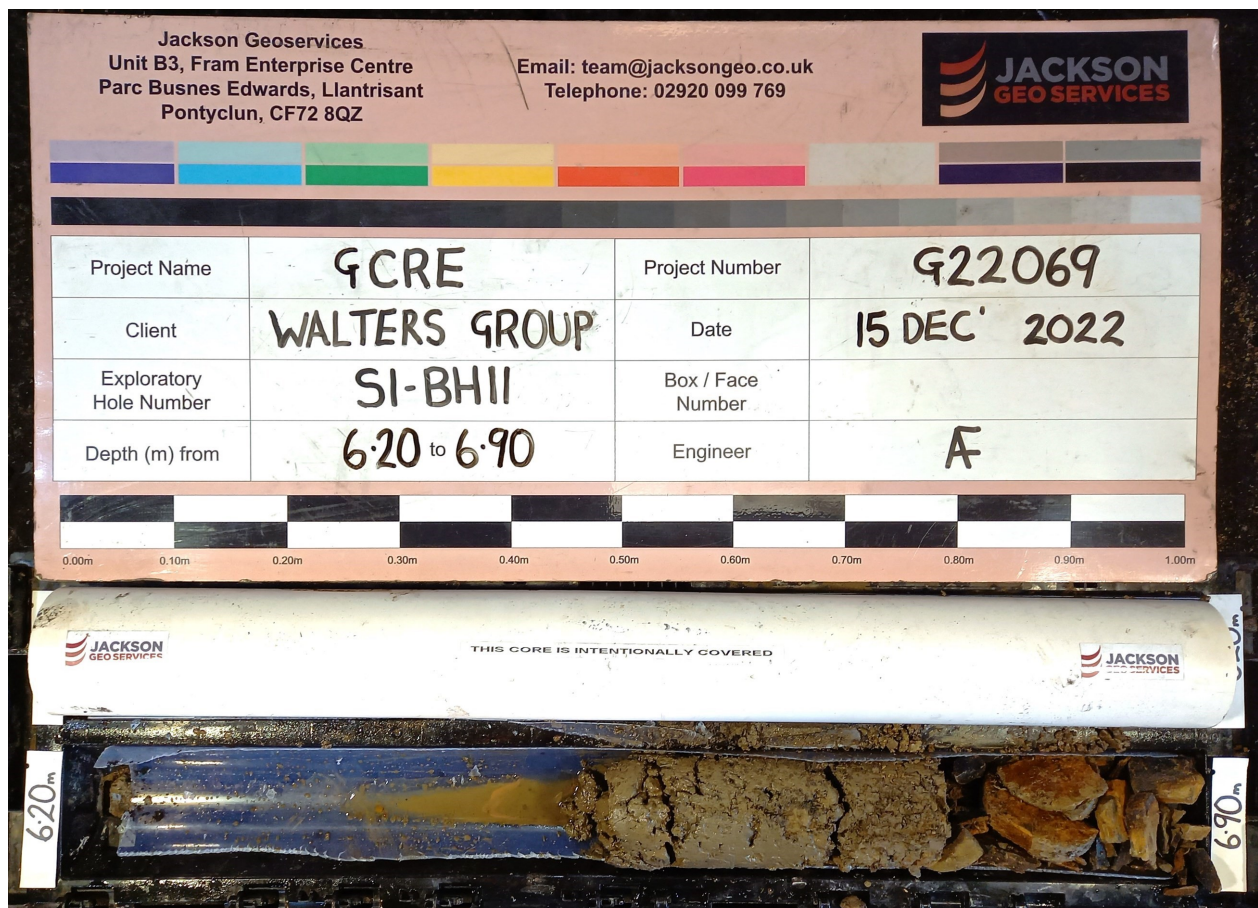
S1-BH112 4.20 m to 5.20 m

		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 1.20m. Dynamic sampling from 1.20m to 6.20m. Rotary coring from 6.20m to 30.40m.	Exploratory Hole S1-BH112
Project	Global Centre of Rail Excellence	Easting	284882.07	Equipment	Commachio 305/Insulated Digging Tools
Client	Walters UK Limited	Northing	210599.97	Method	RC/IP/DS
Project No	G22069	Level	237.94 mAOD	Termination Reason	Scheduled depth

Sheet 3 of 11



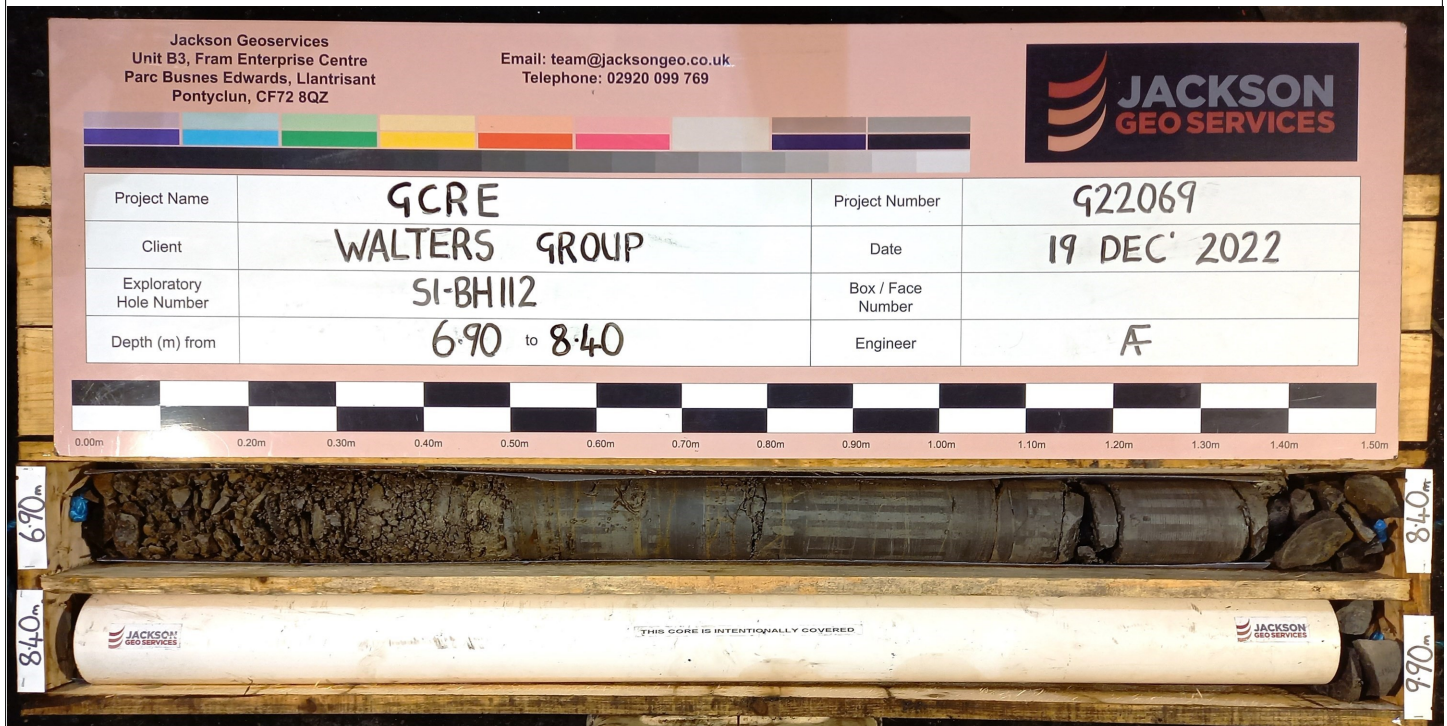
S1-BH112 5.20 m to 6.20 m



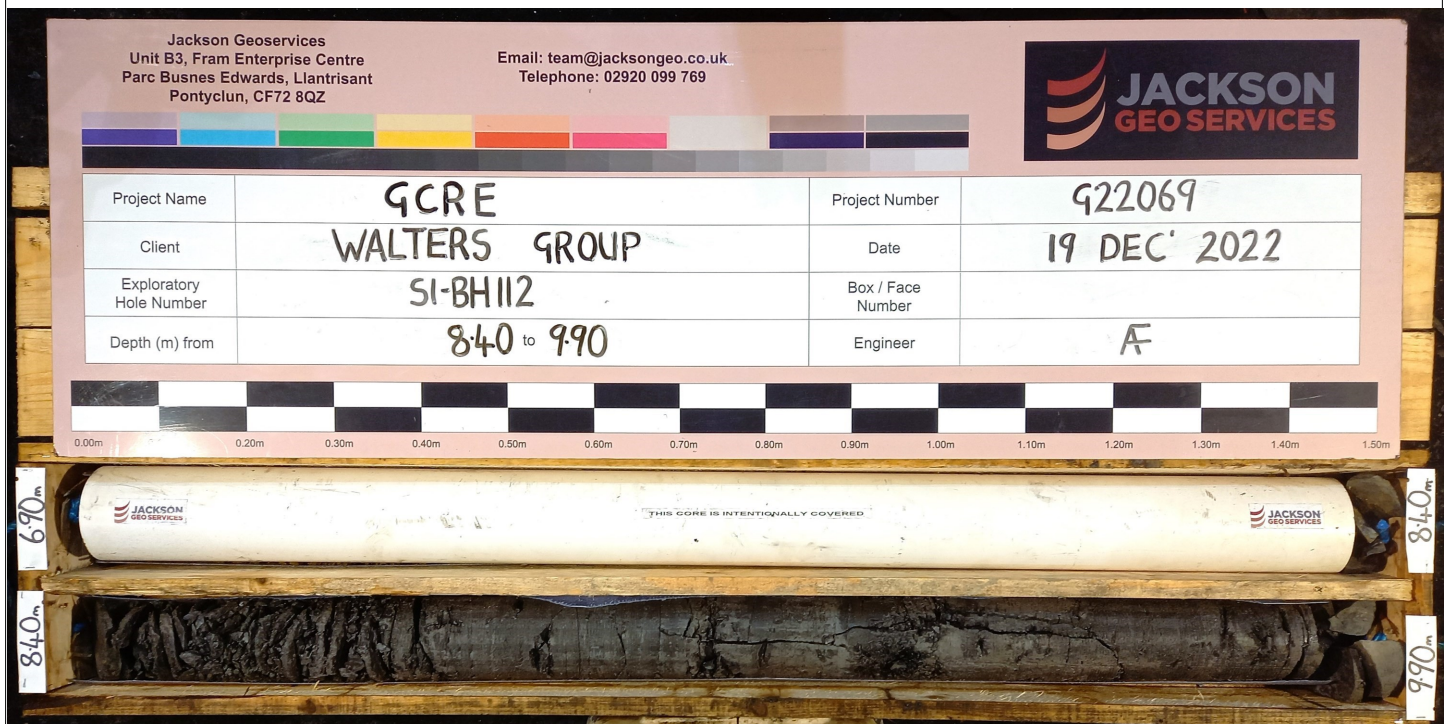
S1-BH112 6.20 m to 6.90 m

		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 1.20m. Dynamic sampling from 1.20m to 6.20m. Rotary coring from 6.20m to 30.40m.	Exploratory Hole S1-BH112
Project	Global Centre of Rail Excellence	Easting	284882.07	Equipment	Commachio 305/Insulated Digging Tools
Client	Walters UK Limited	Northing	210599.97	Method	RC/IP/DS
Project No	G22069	Level	237.94 mAOD	Termination Reason	Scheduled depth

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S1-BH112 6.90 m to 8.40 m



S1-BH112 8.40 m to 9.90 m

		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 1.20m. Dynamic sampling from 1.20m to 6.20m. Rotary coring from 6.20m to 30.40m.	Exploratory Hole S1-BH112
Project	Global Centre of Rail Excellence	Easting	284882.07	Equipment	Commachio 305/Insulated Digging Tools
Client	Walters UK Limited	Northing	210599.97	Method	RC/IP/DS
Project No	G22069	Level	237.94 mAOD	Termination Reason	Scheduled depth

Sheet 5 of 11

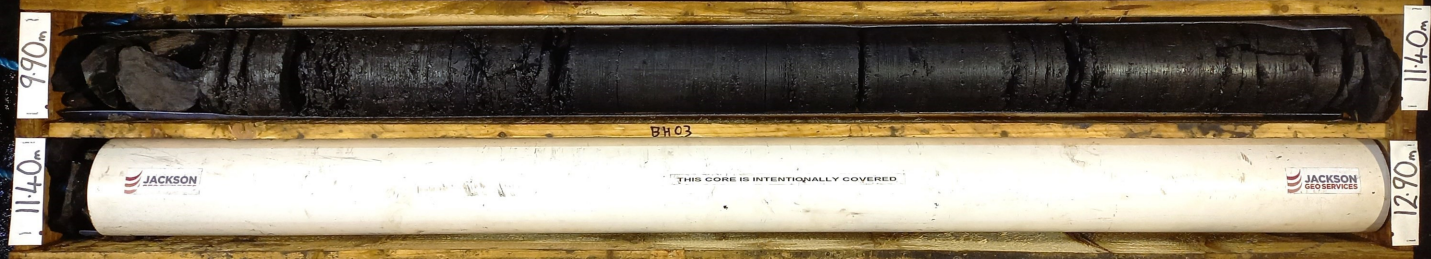
Jackson Geoservices
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Telephone: 02920 099 769



Project Name	GCRE	Project Number	G22069
Client	WALTERS GROUP	Date	19 DEC' 2022
Exploratory Hole Number	S1-BH112	Box / Face Number	
Depth (m) from	990 to 1140	Engineer	A



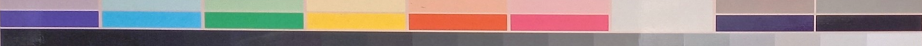
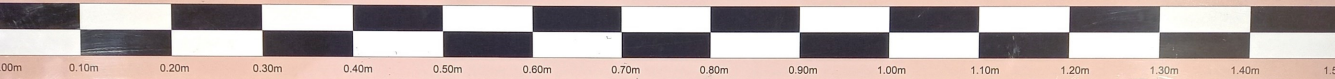
S1-BH112 9.90 m to 11.40 m

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Project Name	GCRE	Project Number	G22069
Client	WALTERS GROUP	Date	19 DEC' 2022
Exploratory Hole Number	S1-BH112	Box / Face Number	
Depth (m) from	1140 to 1290	Engineer	A



S1-BH112 11.40 m to 12.90 m

		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 1.20m. Dynamic sampling from 1.20m to 6.20m. Rotary coring from 6.20m to 30.40m.	Exploratory Hole S1-BH112
Project	Global Centre of Rail Excellence	Easting	284882.07	Equipment	Commachio 305/Insulated Digging Tools
Client	Walters UK Limited	Northing	210599.97	Method	RC/IP/DS
Project No	G22069	Level	237.94 mAOD	Termination Reason	Scheduled depth

Sheet 6 of 11

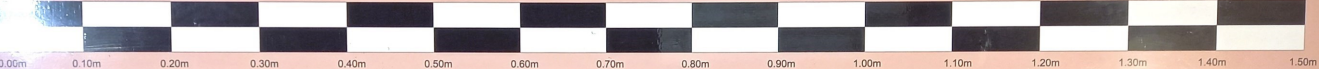
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Project Name	GCRE	Project Number	G22069
Client	WALTERS GROUP	Date	19 DEC' 2022
Exploratory Hole Number	S1-BH112	Box / Face Number	
Depth (m) from	12.90 to 14.40	Engineer	A







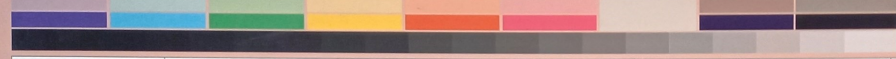
S1-BH112 12.90 m to 14.40 m

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Project Name	GCRE	Project Number	G22069
Client	WALTERS GROUP	Date	19 DEC' 2022
Exploratory Hole Number	S1-BH112	Box / Face Number	
Depth (m) from	14.40 to 15.90	Engineer	A







S1-BH112 14.40 m to 15.90 m

		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 1.20m. Dynamic sampling from 1.20m to 6.20m. Rotary coring from 6.20m to 30.40m.	Exploratory Hole S1-BH112
Project	Global Centre of Rail Excellence	Easting	284882.07	Equipment	Commachio 305/Insulated Digging Tools
Client	Walters UK Limited	Northing	210599.97	Method	RC/IP/DS
Project No	G22069	Level	237.94 mAOD	Termination Reason	Scheduled depth

Sheet 7 of 11

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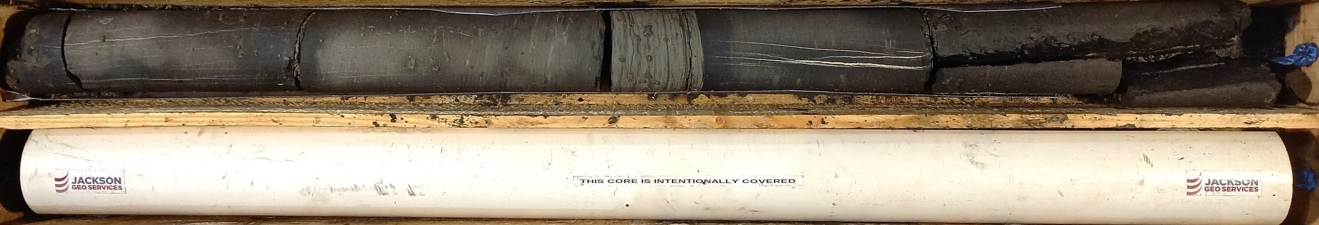
Project Name	GCRE	Project Number	G22069
Client	WALTERS GROUP	Date	19 DEC' 2022
Exploratory Hole Number	S1-BH112	Box / Face Number	
Depth (m) from	15.90 to 17.40	Engineer	AF

Project Name	GCRE	Project Number	G22069
Client	WALTERS GROUP	Date	19 DEC' 2022
Exploratory Hole Number	S1-BH112	Box / Face Number	
Depth (m) from	15.90 to 17.40	Engineer	AF

0.00m 0.10m 0.20m 0.30m 0.40m 0.50m 0.60m 0.70m 0.80m 0.90m 1.00m 1.10m 1.20m 1.30m 1.40m 1.50m



15.90m



17.40m

S1-BH112 15.90 m to 17.40 m

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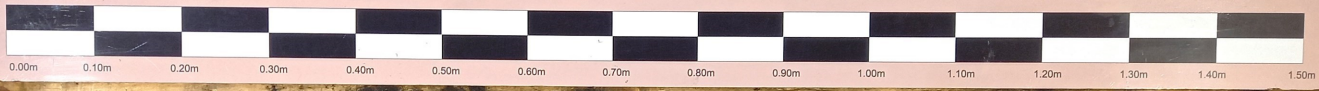
Email: team@jacksonge.co.uk
Telephone: 02920 099 769



Project Name	GCRE	Project Number	G22069
Client	WALTERS GROUP	Date	19 DEC' 2022
Exploratory Hole Number	S1-BH112	Box / Face Number	
Depth (m) from	15.90 to 17.40	Engineer	AF

Project Name	GCRE	Project Number	G22069
Client	WALTERS GROUP	Date	19 DEC' 2022
Exploratory Hole Number	S1-BH112	Box / Face Number	
Depth (m) from	15.90 to 17.40	Engineer	AF

0.00m 0.10m 0.20m 0.30m 0.40m 0.50m 0.60m 0.70m 0.80m 0.90m 1.00m 1.10m 1.20m 1.30m 1.40m 1.50m



15.90m



17.40m

S1-BH112 17.40 m to 18.90 m

		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 1.20m. Dynamic sampling from 1.20m to 6.20m. Rotary coring from 6.20m to 30.40m.	Exploratory Hole S1-BH112
Project	Global Centre of Rail Excellence	Easting	284882.07	Equipment	Commachio 305/Insulated Digging Tools
Client	Walters UK Limited	Northing	210599.97	Method	RC/IP/DS
Project No	G22069	Level	237.94 mAOD	Termination Reason	Scheduled depth

Sheet 8 of 11



S1-BH112 18.90 m to 20.40 m



S1-BH112 20.40 m to 21.90 m