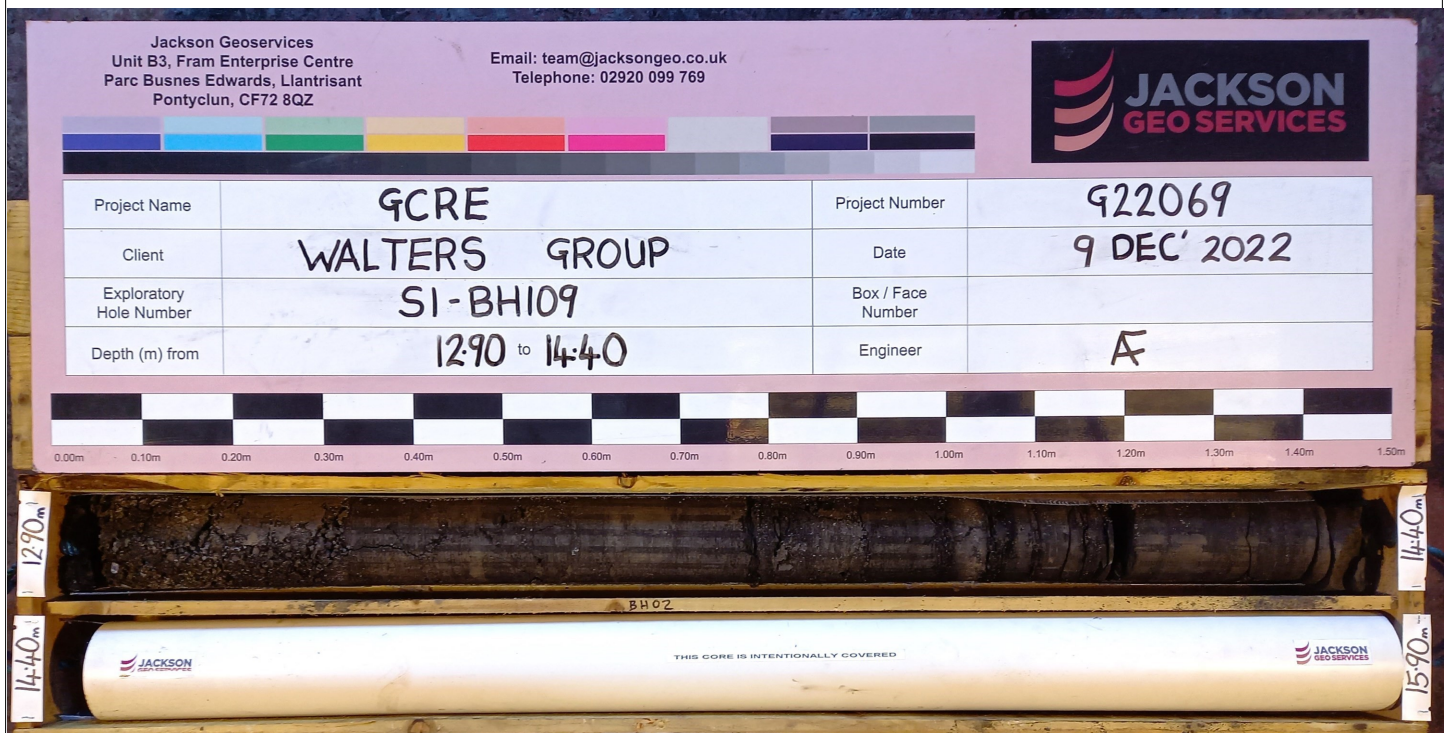


		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 1.20m. Dynamic sampling from 1.20m to 10.40m. Rotary coring from 10.40m to 15.90m.		Exploratory Hole S1-BH109
Project	Global Centre of Rail Excellence	Easting	284752.18	Equipment	Comacchio 305	Sheet 6 of 7
Client	Walters UK Limited	Northing	210629.62	Method	IP/DS/RC	
Project No	G22069	Level	236.37 mAOD	Termination Reason	Scheduled depth	



S1-BH109 11.40 m to 12.90 m



S1-BH109 12.90 m to 14.40 m

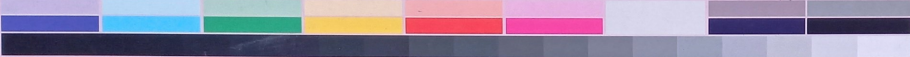
		EXPLORATORY HOLE PHOTOGRAPHS		Remarks Hand excavated inspection pit from GL to 1.20m. Dynamic sampling from 1.20m to 10.40m. Rotary coring from 10.40m to 15.90m.		Exploratory Hole S1-BH109
Project	Global Centre of Rail Excellence	Easting	284752.18	Equipment	Comacchio 305	Sheet 7 of 7
Client	Walters UK Limited	Northing	210629.62	Method	IP/DS/RC	
Project No	G22069	Level	236.37 mAOD	Termination Reason	Scheduled depth	

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Project Name	GCRE	Project Number	G22069
Client	WALTERS GROUP	Date	9 DEC' 2022
Exploratory Hole Number	S1-BH109	Box / Face Number	
Depth (m) from	14.40 to 15.90	Engineer	A






S1-BH109 14.40 m to 15.90 m

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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-BH110					
		22/11/2022 08:30		11.00	11.00	6.10			Sheet 2 of 3										
		22/11/2022 14:00		12.00	11.00	5.80			Scale	1:25									
									Drilled	TP									
									Logged	JJ/AF									
									Checked										
Project		Global Centre of Rail Excellence			Equipment		Insulated Digging Tools/Comacchio 305												
Client		Walters UK Limited			Method		IP/RC/DS												
Project No		G22069	Level	234.05 mAOD	Inclination		90 degrees												
Easting		284595.14	Northing	210619.88	SPT Hammer Serial Number		AR2724												
Termination Reason		Scheduled depth			SPT Hammer Energy Ratio		69 %												
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						
9 D	5.45 - 5.60	PID: 0.0ppmv			DS 5.45 - 6.45	55% 0% 0%	5.10	228.95		Soft to firm dark brown psuedo-fibrous PEAT with occasional plant remains. Geology Code: PEAT	5.50								
110 ES	5.90 - 6.00						(1.15)	6.25	227.80					Soft becoming soft to firm grey slightly sandy silty CLAY with rare black staining. (Possible Residual Soil - LOWER SOUTH WALES COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: CL 5.45m - 5.90m No DS recovery. Material collapsed from above.					
111 D	6.10 - 6.15																		
10 D	6.45 - 6.90 6.45	SPT(S) N=16 (1,2/3,4,4,5) Casing: 4.50 Water: 2.44			DS 6.45 - 7.45	55% 0% 0%	(0.65)	227.15	Firm dark brown mottled orangish brown and black slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular and subangular fine to coarse of mudstone and siltstone lithorelicts. (Possible Residual Soil - LOWER SOUTH WALES COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: CL 6.45m - 6.90m No DS recovery. Material collapsed from above.	6.50									
112 D	7.00 - 7.10 7.00	PID: 0.0ppmv	Blows: 25 Rec: 100% Dia: 100mm Water: 4.75	(0.45)			7.35		226.70					Recovered as grey stained brown slightly sandy very clayey very angular to angular fine to coarse GRAVEL of extremely weak and very weak mudstone and siltstone lithorelicts. Sand is fine to coarse. (Possible Residual Soil - LOWER SOUTH WALES COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: GR					
20 UT	7.45 - 8.00																		
113 B	8.00 - 9.00 8.00	PID: 0.0ppmv			DS 8.00 - 9.00	90% 0% 0%	(1.35)	225.35	Very weak black COAL. NI, recovered as slightly sandy very angular to angular fine gravel. Possible randomly orientated extremately closely spaced incipient fractures. (SOUTH WALES LOWER COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: COAL	Set 1 NI NI NI	7.50								
24 D	9.00 - 9.45 9.00 9.00 10.00	SPT(S) N=100 (12,10/100 for 155mm) Casing: 7.50 Water: 3.77 PID: 0.0ppmv					RC 9.00 - 10.00		40% 3% 0%				(0.60)	224.45 224.35		Very stiff dark grey thinly laminated slightly gravelly silty CLAY. Gravel is angular to subangular fine lithorelicts of extremely weak carbonaceous mudstone. (Weathered SOUTH WALES LOWER COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: CL NO RECOVERY. Material collapsed from above.	Set 1 NA NA NA	8.00	
																Very stiff grey gravelly silty CLAY. Gravel is angular to subangular fine lithorelicts of extremely weak mudstone. (Weathered LOWER SOUTH WALES COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: CL			
					Very weak to weak thickly laminated and very thinly bedded grey SILTSTONE. Weathering: Some loss of strength and increased fracture spacing throughout rock mass. Occasional brown staining on fracture surfaces penetrating <1-2mm. Recovered core is typically NI, recovered as slightly silty slightly sandy very angular to subangular fine to coarse gravel. Discontinuities: possible sub-horizontal to 15 degree extremely closely to very closely spaced locally closely spaced in stronger material planar and undulating smooth bedding fractures. (Weathered LOWER SOUTH WALES COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: SZT 9.70m - 9.79m Intact core comprises weak SILTSTONE. 9.97m - 10.00m Intact core comprises weak SILTSTONE.														
					Continued on next Sheet														
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		
9.00	12.00	Air/Mist	Black	100%	12.00	146mm	7.50 12.00	200mm 146mm			17/11/2022 10:10	0.00	2.50		1.94	20mins			
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 0.80m. Dynamic sampling from 0.80m to 9.00m. Rotary coring from 9.00 to 12.00m.																			

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		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 1 of 5



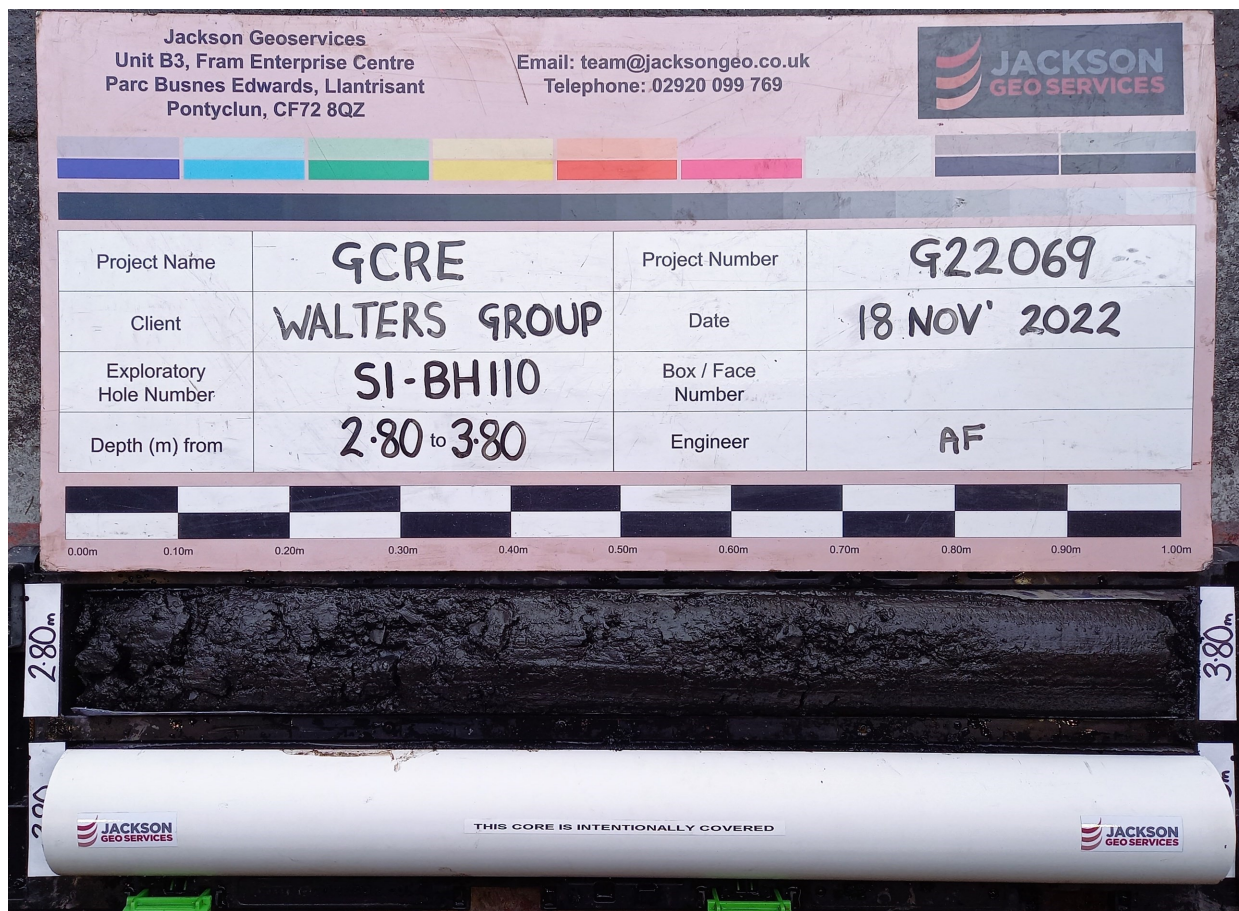
S1-BH110 0.80 m to 1.80 m



S1-BH110 1.80 m to 2.80 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 2 of 5



S1-BH110 2.80 m to 3.80 m

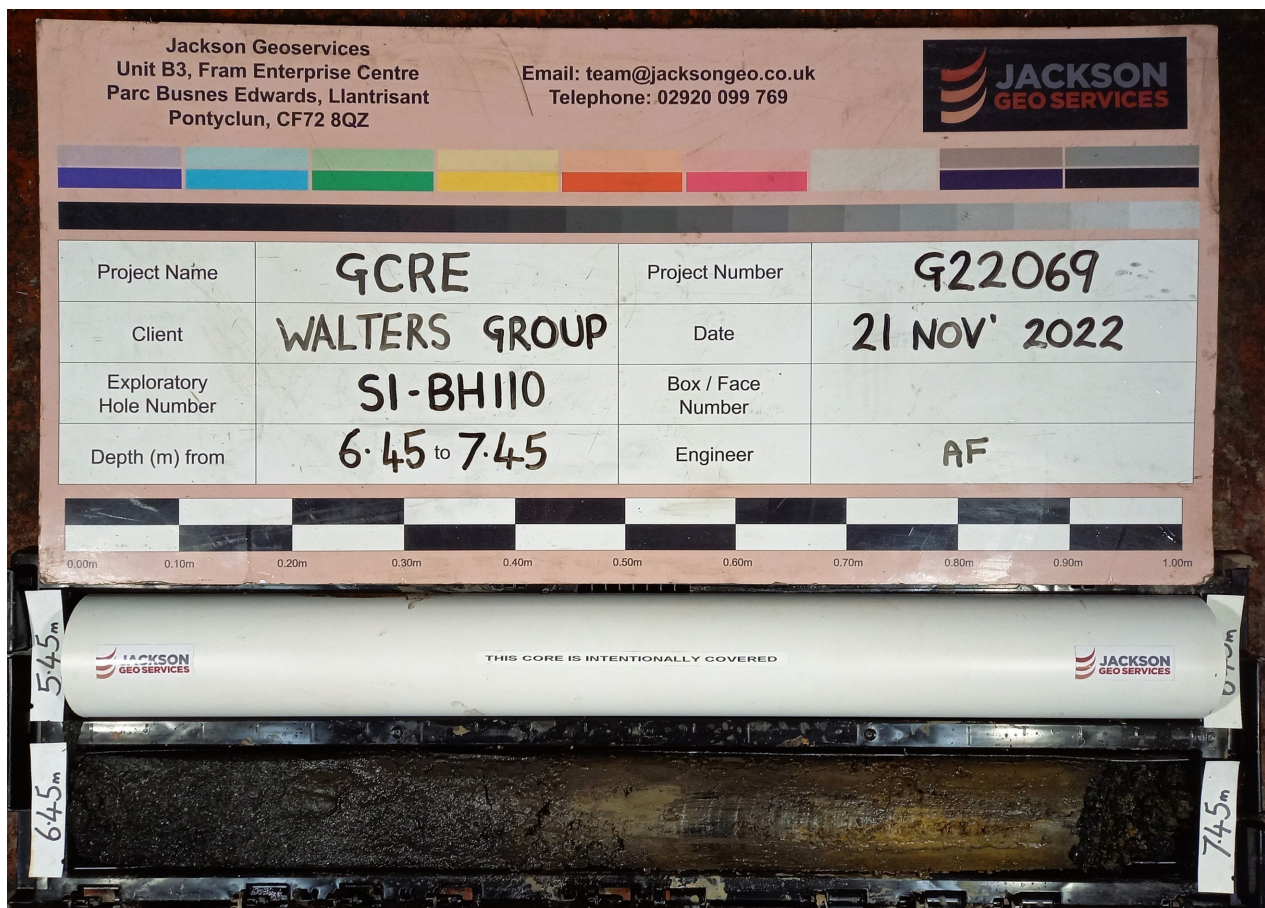


S1-BH110 3.80 m to 4.80 m

		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	Sheet 3 of 5
Client	Walters UK Limited	Northing	210619.88	Method	IP/RC/DS	
Project No	G22069	Level	234.05 mAOD	Termination Reason	Scheduled depth	



S1-BH110 5.45 m to 6.45 m



S1-BH110 6.45 m to 7.45 m