

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	283626.31	Equipment	Teredo dc3/Insulated hand tools	Sheet 10 of 10
Client	Walters UK Ltd	Northing	210807.26	Method	RC/IP/RO/DS	
Project No	G23012	Level	257.73 mAOD	Termination Reason	Scheduled depth	

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**JACKSON
GEO SERVICES**

Project Name	QCRE STAGE 2	Project Number	Q23012
Client	WALTERS GROUP	Date	7 JUNE 2023
Exploratory Hole Number	SI-BH120	Box / Face Number	
Depth (m) from	28.50 to 30.00	Engineer	RF

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

27.00m 28.50m 30.00m

JACKSON GEO SERVICES

THIS CORE IS INTENTIONALLY COVERED

JACKSON GEO SERVICES

S1-BH120 28.50 m to 30.00 m



Exploratory Hole Progress by Time				Exploratory Hole	
Date and Time	Depth	Casing Depth	Water Depth	S2-BH201	
13/06/2023 08:30	0.00	36.00	Dry		
13/06/2023 16:45	20.00	18.00	Dry	Sheet 1 of 4	
14/06/2023 08:30	20.00	18.00	Dry	Scale	1:50
14/06/2023 16:45	30.00	30.00	Dry	Drilled	AM
15/06/2023 08:30	30.00	30.00	Dry	Logged	RF/AF
15/06/2023 16:45	38.00			Checked	AP

[illegible]

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Exploratory Hole Progress by Time				Exploratory Hole	
Date and Time	Depth	Casing Depth	Water Depth	S2-BH201	
				Sheet 2 of 4	
				Scale	1:50
				Drilled	AM
				Logged	RF/AF
				Checked	AP

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Exploratory Hole Progress by Time				Exploratory Hole	
Date and Time	Depth	Casing Depth	Water Depth	S2-BH201	
				Sheet 3 of 4	
				Scale	1:50
				Drilled	AM
				Logged	RF/AF
				Checked	AP

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Exploratory Hole Progress by Time				Exploratory Hole	
Date and Time	Depth	Casing Depth	Water Depth	S2-BH201	
				Sheet 4 of 4	
				Scale	1:50
				Drilled	AM
				Logged	RF/AF
				Checked	AP

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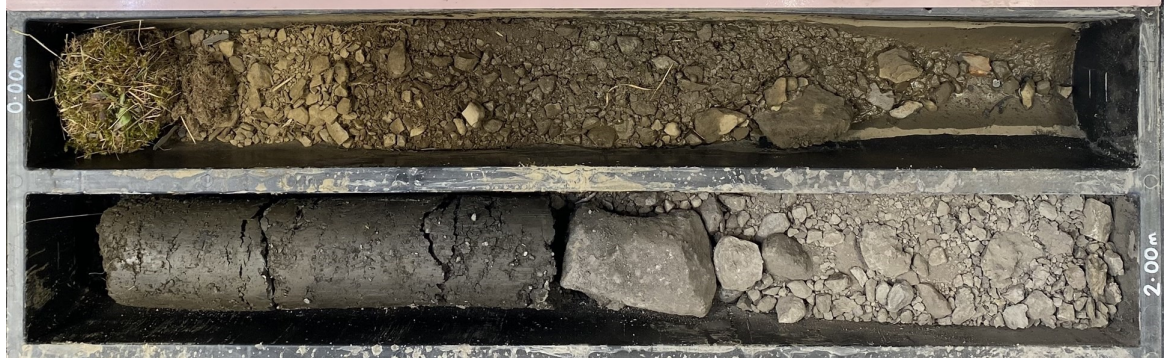
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282376.80	Equipment	Eijkelkamp-Fraste SRS XL Duo	Sheet 1 of 9
Client	Walters UK Ltd	Northing	212058.91	Method	SNC	
Project No	G23012	Level	196.30 mAOD	Termination Reason	As per Atkins instruction	

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	14 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	0.00 to 2.00	Engineer	RF



S2-BH201 0.00 m to 2.00 m

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	14 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	2.00 to 4.00	Engineer	RF



S2-BH201 2.00 m to 4.00 m

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282376.80	Equipment	Eijkelpamp-Fraste SRS XL Duo
Client	Walters UK Ltd	Northing	212058.91	Method	SNC
Project No	G23012	Level	196.30 mAOD	Termination Reason	As per Atkins instruction

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	14 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	4.00 to 6.00	Engineer	RF



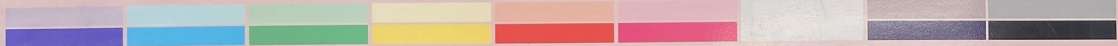


S2-BH201 4.00 m to 6.00 m

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	14 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	6.00 to 8.00	Engineer	RF





S2-BH201 6.00 m to 8.00 m

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282376.80	Equipment	Eijkelpamp-Fraste SRS XL Duo
Client	Walters UK Ltd	Northing	212058.91	Method	SNC
Project No	G23012	Level	196.30 mAOD	Termination Reason	As per Atkins instruction

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	14 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	8.00 to 10.00	Engineer	RF



S2-BH201 8.00 m to 10.00 m

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	14 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	10.00 to 12.00	Engineer	RF



S2-BH201 10.00 m to 12.00 m

		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-BH201
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282376.80	Equipment	Eijkelpamp-Fraste SRS XL Duo	Sheet 4 of 9
Client	Walters UK Ltd	Northing	212058.91	Method	SNC	
Project No	G23012	Level	196.30 mAOD	Termination Reason	As per Atkins instruction	

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	14 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	12.00 to 14.00	Engineer	RF




S2-BH201 12.00 m to 14.00 m

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	14 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	14.00 to 16.00	Engineer	RF




S2-BH201 14.00 m to 16.00 m

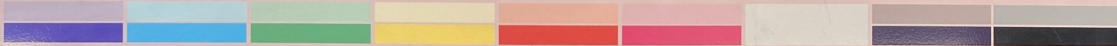
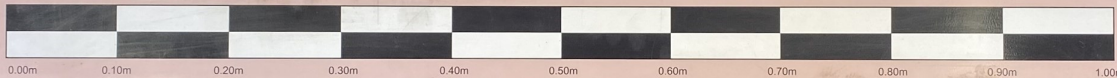
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282376.80	Equipment	Eijkelpamp-Fraste SRS XL Duo	Sheet 5 of 9
Client	Walters UK Ltd	Northing	212058.91	Method	SNC	
Project No	G23012	Level	196.30 mAOD	Termination Reason	As per Atkins instruction	

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	14 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	16.00 to 18.00	Engineer	RF

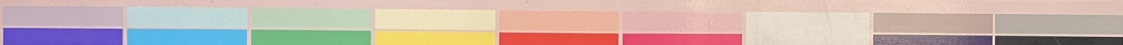
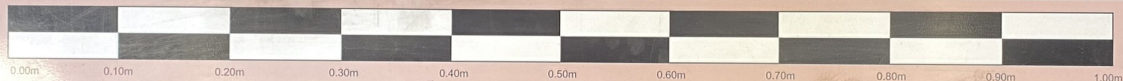

S2-BH201 16.00 m to 18.00 m

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	14 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	18.00 to 20.00	Engineer	RF


S2-BH201 18.00 m to 20.00 m

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282376.80	Equipment	Eijkelpamp-Fraste SRS XL Duo
Client	Walters UK Ltd	Northing	212058.91	Method	SNC
Project No	G23012	Level	196.30 mAOD	Termination Reason	As per Atkins instruction

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	15 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	24:00 to 26:00	Engineer	A





S2-BH201 24.00 m to 26.00 m

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	15 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	26:00 to 28:00	Engineer	A





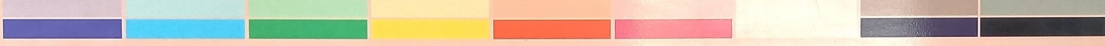
S2-BH201 26.00 m to 28.00 m

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282376.80	Equipment	Eijkelpamp-Fraste SRS XL Duo
Client	Walters UK Ltd	Northing	212058.91	Method	SNC
Project No	G23012	Level	196.30 mAOD	Termination Reason	As per Atkins instruction

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	15 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	28:00 to 30:00	Engineer	A



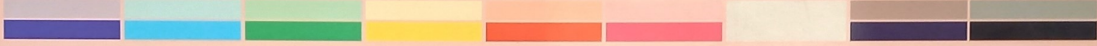


S2-BH201 28.00 m to 30.00 m

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	16 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	30:00 to 32:00	Engineer	A





S2-BH201 30.00 m to 32.00 m

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282376.80	Equipment	Eijkelpamp-Fraste SRS XL Duo
Client	Walters UK Ltd	Northing	212058.91	Method	SNC
Project No	G23012	Level	196.30 mAOD	Termination Reason	As per Atkins instruction

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	16 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	32.00 to 34.00	Engineer	A



S2-BH201 32.00 m to 34.00 m

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	16 JUNE 2023
Exploratory Hole Number	S2-BH201	Box / Face Number	
Depth (m) from	34.00 to 36.00	Engineer	A



S2-BH201 34.00 m to 36.00 m

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282376.80	Equipment	Eijkelkamp-Fraste SRS XL Duo
Client	Walters UK Ltd	Northing	212058.91	Method	SNC
Project No	G23012	Level	196.30 mAOD	Termination Reason	As per Atkins instruction

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The logo for Jackson Geo Services, featuring a stylized red and orange 'J' symbol to the left of the company name 'JACKSON GEO SERVICES' in bold, black, sans-serif capital letters.

A horizontal bar with nine color patches: purple, cyan, green, yellow, orange, red, white, black, and grey.

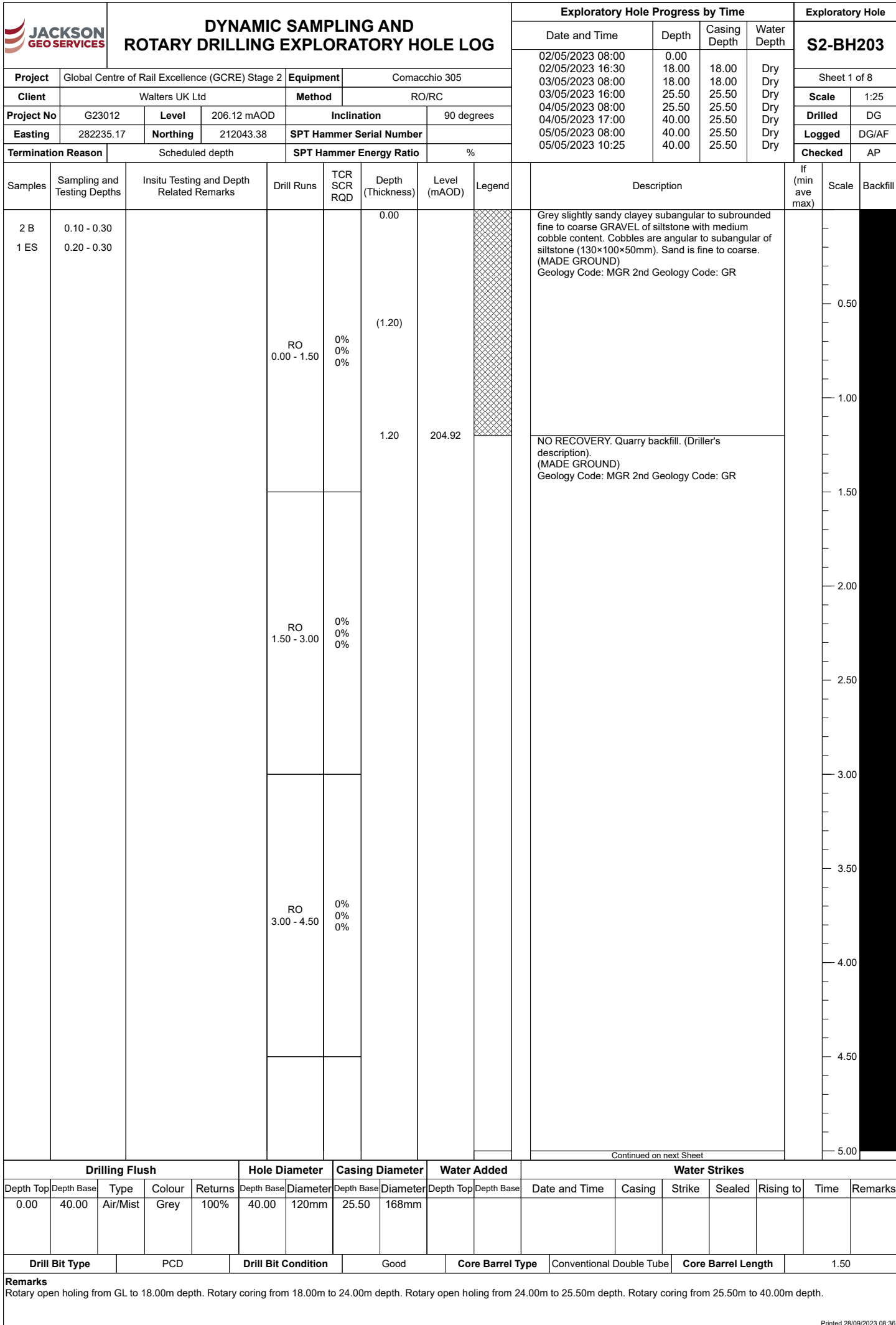
Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	16 JUNE 2023
Exploratory Hole Number	52-BH201	Box / Face Number	
Depth (m) from	36.00 to 38.00	Engineer	A

A horizontal scale bar with markings from 0.00m to 1.00m in increments of 0.10m. The bar is black with white markings and text.

A photograph showing a row of rock samples in a black tray. The samples are dark grey and brown, with some showing distinct layering or fracturing. The tray is labeled '36.00m' on the left and '38.00m' on the right.

A photograph showing a row of rock samples in a black tray, similar to the one above. The samples are dark grey and brown, with some showing distinct layering or fracturing. The tray is labeled '36.00m' on the left and '38.00m' on the right.

S2-BH201 36.00 m to 38.00 m



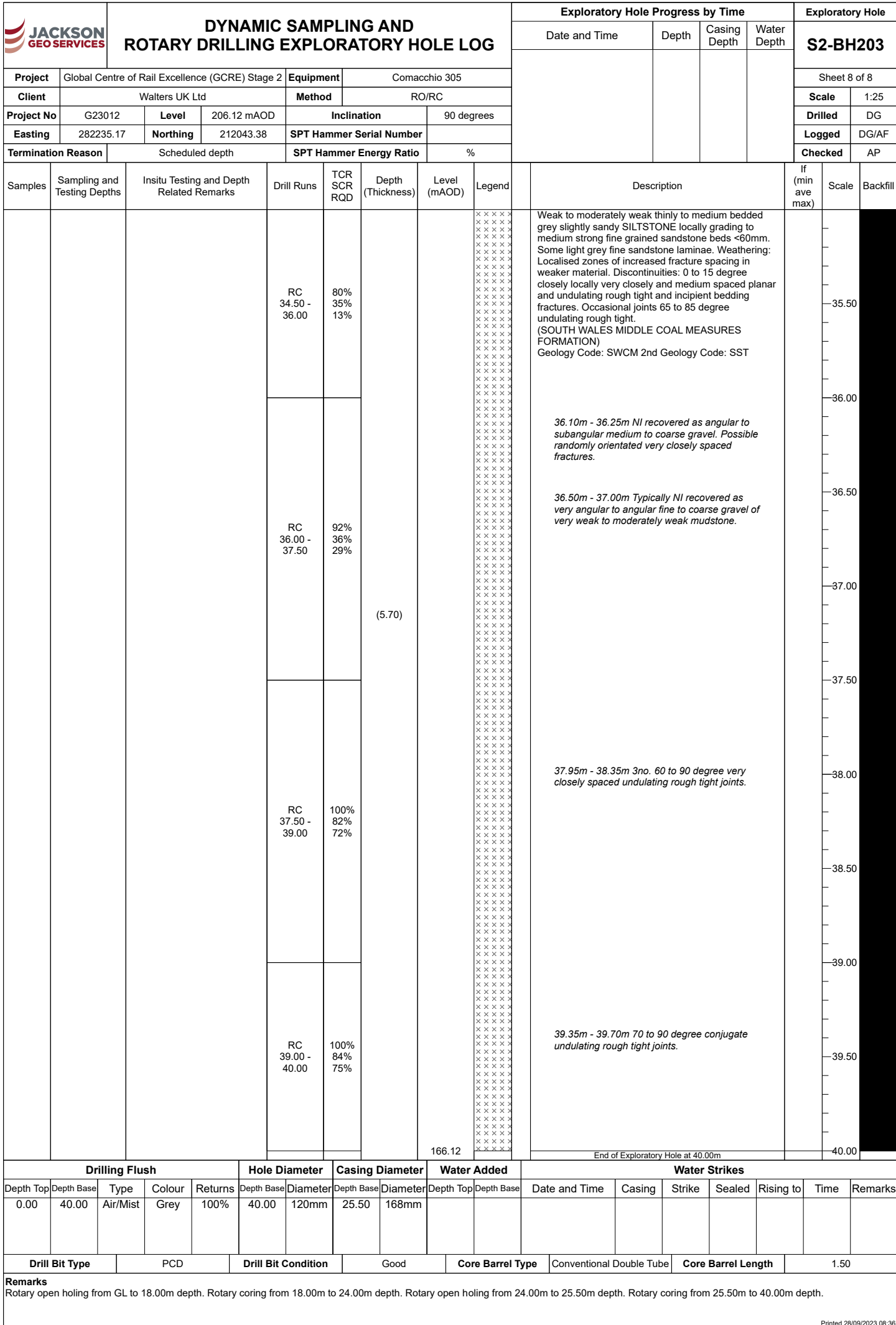
		DYNAMIC SAMPLING AND ROTARY DRILLING EXPLORATORY HOLE LOG						Exploratory Hole Progress by Time				Exploratory Hole					
								Date and Time		Depth	Casing Depth	Water Depth	S2-BH203				
Project		Global Centre of Rail Excellence (GCRE) Stage 2				Equipment		Comacchio 305				Sheet 2 of 8					
Client		Walters UK Ltd				Method		RO/RC				Scale	1:25				
Project No		G23012		Level		206.12 mAOD		Inclination		90 degrees		Drilled	DG				
Easting		282235.17		Northing		212043.38		SPT Hammer Serial Number				Logged	DG/AF				
Termination Reason		Scheduled depth				SPT Hammer Energy Ratio		%				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		
						RO 4.50 - 6.00	0% 0% 0%				NO RECOVERY. Quarry backfill. (Driller's description). (MADE GROUND) Geology Code: MGR 2nd Geology Code: GR						
						RO 6.00 - 7.50	0% 0% 0%										
						RO 7.50 - 9.00	0% 0% 0%										
						RO 9.00 - 10.50	0% 0% 0%	(16.80)									
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
0.00	40.00	Air/Mist	Grey	100%	40.00	120mm	25.50	168mm									
Drill Bit Type		PCD		Drill Bit Condition		Good		Core Barrel Type		Conventional Double Tube		Core Barrel Length		1.50			
Remarks																	
Rotary open holing from GL to 18.00m depth. Rotary coring from 18.00m to 24.00m depth. Rotary open holing from 24.00m to 25.50m depth. Rotary coring from 25.50m to 40.00m depth.																	
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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	S2-BH203				
Project		Global Centre of Rail Excellence (GCRE) Stage 2				Equipment		Comacchio 305				Sheet 4 of 8					
Client		Walters UK Ltd				Method		RO/RC				Scale	1:25				
Project No		G23012		Level		206.12 mAOD		Inclination		90 degrees		Drilled	DG				
Easting		282235.17		Northing		212043.38		SPT Hammer Serial Number				Logged	DG/AF				
Termination Reason		Scheduled depth				SPT Hammer Energy Ratio		%				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			
						RO 15.00 - 16.50	0% 0% 0%				NO RECOVERY. Quarry backfill. (Driller's description). (MADE GROUND) Geology Code: MGR 2nd Geology Code: GR						
						RO 16.50 - 18.00	0% 0% 0%										
						RC 18.00 - 19.50	23% 0% 0%	18.00	188.12		Partial recovery. Core losse presumed to be of weaker/more weathered material. Recovered core comprises grey to dark grey angular to subrounded COBBLES of medium strong to strong fine to medium sandstone with some very angular to subangular fine to coarse gravel of predominantly sandstone and occasional siltstone. (MADE GROUND) Geology Code: MGR 2nd Geology Code: CO						
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
0.00	40.00	Air/Mist	Grey	100%	40.00	120mm	25.50	168mm									
Drill Bit Type		PCD		Drill Bit Condition		Good		Core Barrel Type		Conventional Double Tube		Core Barrel Length		1.50			
Remarks Rotary open holing from GL to 18.00m depth. Rotary coring from 18.00m to 24.00m depth. Rotary open holing from 24.00m to 25.50m depth. Rotary coring from 25.50m to 40.00m depth.																	

JACKSON GEO SERVICES		DYNAMIC SAMPLING AND ROTARY DRILLING EXPLORATORY HOLE LOG						Exploratory Hole Progress by Time				Exploratory Hole					
								Date and Time		Depth	Casing Depth	Water Depth	S2-BH203				
Project		Global Centre of Rail Excellence (GCRE) Stage 2				Equipment		Comacchio 305				Sheet 5 of 8					
Client		Walters UK Ltd				Method		RO/RC				Scale	1:25				
Project No		G23012		Level		206.12 mAOD		Inclination		90 degrees		Drilled	DG				
Easting		282235.17		Northing		212043.38		SPT Hammer Serial Number				Logged	DG/AF				
Termination Reason		Scheduled depth				SPT Hammer Energy Ratio		%				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			
						RC 19.50 - 21.00	30% 0% 0%	(6.00)			Partial recovery. Core losse presumed to be of weaker/more weathered material. Recovered core comprises grey to dark grey angular to subrounded COBBLES of medium strong to strong fine to medium sandstone with some very angular to subangular fine to coarse gravel of predominantly sandstone and occasional siltstone. (MADE GROUND) Geology Code: MGR 2nd Geology Code: CO	20.50					
						RC 21.00 - 22.50	67% 9% 9%										
						RC 22.50 - 24.00	17% 3% 0%	24.00	182.12		NO RECOVERY. Quarry backfill. (Driller's description). (MADE GROUND) Geology Code: MGR 2nd Geology Code: GR	22.00					
						RO 24.00 - 25.50	0% 0% 0%	(1.50)				23.00					
												23.50					
												24.00					
												24.50					
													25.00				
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
0.00	40.00	Air/Mist	Grey	100%	40.00	120mm	25.50	168mm									
Drill Bit Type		PCD		Drill Bit Condition		Good		Core Barrel Type		Conventional Double Tube		Core Barrel Length		1.50			
Remarks																	
Rotary open holing from GL to 18.00m depth. Rotary coring from 18.00m to 24.00m depth. Rotary open holing from 24.00m to 25.50m depth. Rotary coring from 25.50m to 40.00m depth.																	

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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	S2-BH203										
Project		Global Centre of Rail Excellence (GCRE) Stage 2				Equipment		Comacchio 305				Sheet 7 of 8											
Client		Walters UK Ltd				Method		RO/RC				Scale	1:25										
Project No		G23012		Level		206.12 mAOD		Inclination		90 degrees		Drilled	DG										
Easting		282235.17		Northing		212043.38		SPT Hammer Serial Number				Logged	DG/AF										
Termination Reason		Scheduled depth				SPT Hammer Energy Ratio		%				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								
103 C	30.01 - 30.31				RC 30.00 - 31.50	95% 75% 69%	(4.80)			Strong thinly and medium bedded light grey fine to medium SANDSTONE. Some thin light grey fine to medium grained sandstone and grey siltstone laminae (<6mm). Weathering: Occasional light brown non penetrative staining on fracture surfaces. Discontinuities: 0 to 20 degree closely locally medium spaced planar smooth tight and incipient bedding fractures, locally with <1-2mm sand infill. Some 60 to 90 degree planar and undulating tight joints. (SOUTH WALES MIDDLE COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: SST 30.00m - 30.25m 70 to 90 degree quartz veins and incipient joints. 30.90m - 30.96m 60 degree undulating rough tight joint. 31.25m - 31.32m 80 to 90 degree very closely spaced undulating rough tight joints. 31.50m - 32.30m 70 to 90 degree closely spaced undulating rough tight joints. 33.20m - 33.50m NI recovered as very angular to angular coarse gravel and cobbles. Randomly orientated very closely spaced fractures. 34.00m - 34.35m 70 to 90 degree very closely spaced conjugate undulating rough tight joints. Weak to moderately weak thinly to medium bedded grey slightly sandy SILTSTONE locally grading to medium strong fine grained sandstone beds <60mm. Some light grey fine sandstone laminae. Weathering: Localised zones of increased fracture spacing in weaker material. Discontinuities: 0 to 15 degree closely locally very closely and medium spaced planar and undulating rough tight and incipient bedding fractures. Occasional joints 65 to 85 degree undulating rough tight. (SOUTH WALES MIDDLE COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: SST			Set 1 NI 180 380	30.50	31.00	31.50	32.00	32.50	33.00	33.50	34.00	34.50	35.00
										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						
0.00	40.00	Air/Mist	Grey	100%	40.00	120mm	25.50	168mm															
Drill Bit Type		PCD			Drill Bit Condition		Good		Core Barrel Type		Conventional Double Tube		Core Barrel Length		1.50								
Remarks																							
Rotary open holing from GL to 18.00m depth. Rotary coring from 18.00m to 24.00m depth. Rotary open holing from 24.00m to 25.50m depth. Rotary coring from 25.50m to 40.00m depth.																							





Exploratory Hole

S2-BH203

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282235.17	Equipment	Comacchio 305	Sheet 1 of 1
Client	Walters UK Ltd	Northing	212043.38	Method	RO/RC	
Project No	G23012	Level	206.12 mAOD	Termination Reason	Scheduled depth	



EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole

S2-BH203A

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282233.41	Equipment	Insulated hand tools	Sheet 1 of 1
Client	Walters UK Ltd	Northing	212043.29	Method	IP	
Project No	G23012	Level	206.30 mAOD	Termination Reason	Terminated on cobble.	

JACKSON GEO SERVICES		DYNAMIC SAMPLING AND ROTARY DRILLING EXPLORATORY HOLE LOG						Exploratory Hole Progress by Time				Exploratory Hole					
								Date and Time		Depth	Casing Depth	Water Depth	S2-BH204				
Project		Global Centre of Rail Excellence (GCRE) Stage 2			Equipment		Comacchio 305					Sheet 1 of 7					
Client		Walters UK Ltd			Method		RO/IP/RC					Scale 1:25					
Project No		G23012		Level		212.01 mAOD		Inclination		90 degrees		Drilled DG					
Easting		282129.80		Northing		212033.07		SPT Hammer Serial Number				Logged AF					
Termination Reason		Scheduled depth			SPT Hammer Energy Ratio		%				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			
1 B 2 ES	0.00 - 0.20 0.10 - 0.20 0.20		Inspection pit terminated due to boulder.					0.00 (0.20) 0.20	211.81		Soft to firm grey slightly sandy gravelly CLAY with medium to high cobble content. Gravel is angular to sub angular fine to coarse siltstone. Cobbles are angular to sub angular siltstone (140×130×50 (MADE GROUND) Geology Code: MGR 2nd Geology Code: CL Quarry/ opencast backfill. (Driller's description) (MADE GROUND) Geology Code: MGR 0.20m - 0.22m Siltstone boulder.						
						RO 0.20 - 1.50	0% 0% 0%						0.50				
						RO 1.50 - 3.00	0% 0% 0%						1.00				
													1.50				
													2.00				
													2.50				
													3.00				
													3.50				
						RO 3.00 - 4.50	0% 0% 0%						4.00				
													4.50				
													5.00				
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
0.20	29.00	Air/Mist	grey	100%	33.00	120mm	21.00	168mm									
29.00	30.50	Air/Mist	black	100%													
30.50	33.00	Air/Mist	grey	100%													
Drill Bit Type		PCD			Drill Bit Condition		Good		Core Barrel Type		Conventional Double Tube		Core Barrel Length		1.50		
Remarks																	
Hand excavated inspection pit from GL to 0.20m depth. Rotary open holing from 0.20m to 21.00m depth. Rotary coring from 21.00m to 33.00m depth.																	
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Exploratory Hole Progress by Time				Exploratory Hole	
Date and Time	Depth	Casing Depth	Water Depth	S2-BH204	
				Sheet 2 of 7	
				Scale	1:25
				Drilled	DG
				Logged	AF
				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
0.20	29.00	Air/Mist	grey	100%	33.00	120mm	21.00	168mm									
29.00	30.50	Air/Mist	black	100%													
30.50	33.00	Air/Mist	grey	100%													
Drill Bit Type		PCD			Drill Bit Condition		Good		Core Barrel Type		Conventional Double Tube		Core Barrel Length		1.50		

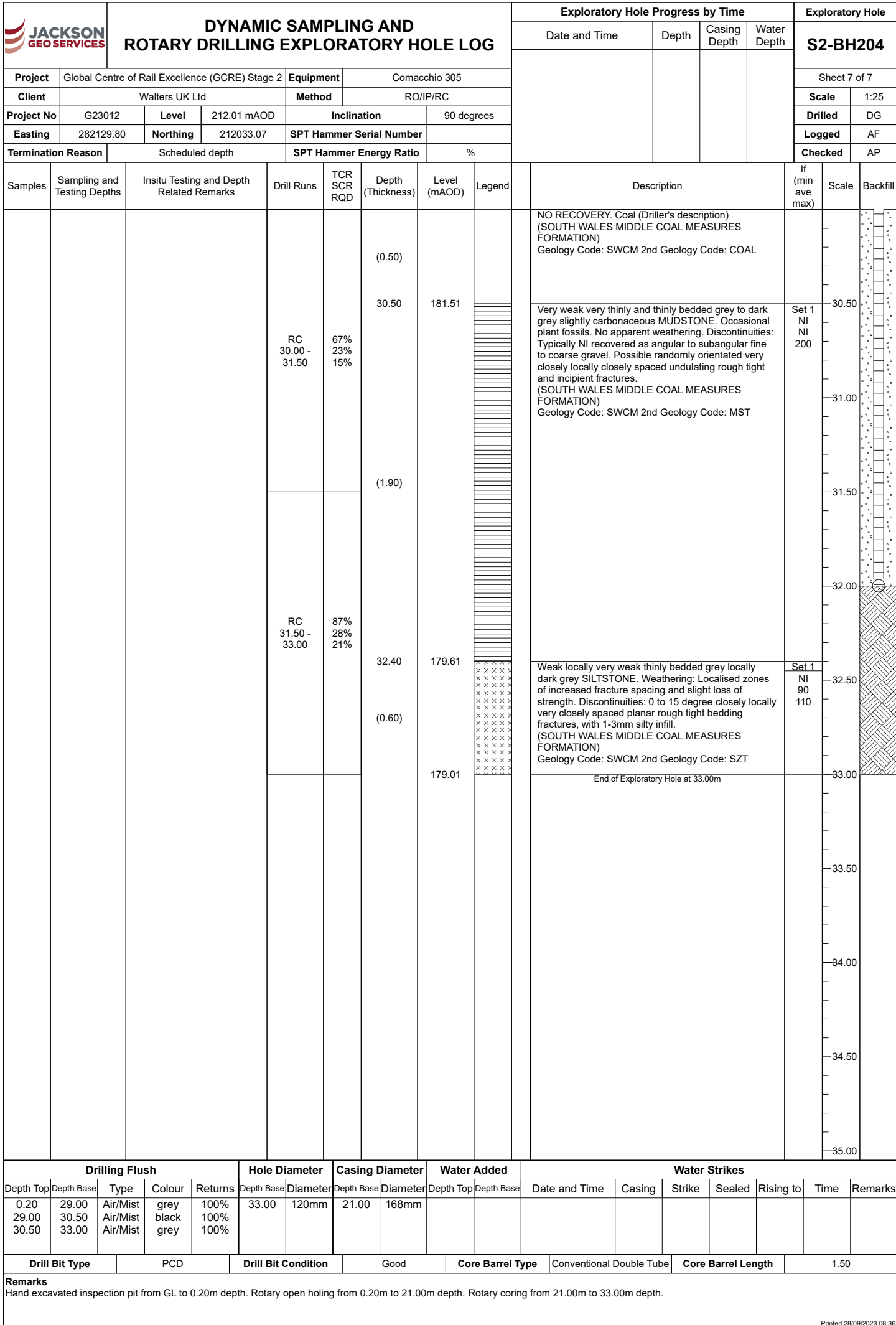
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		DYNAMIC SAMPLING AND ROTARY DRILLING EXPLORATORY HOLE LOG						Exploratory Hole Progress by Time				Exploratory Hole					
								Date and Time		Depth	Casing Depth	Water Depth	S2-BH204				
Project		Global Centre of Rail Excellence (GCRE) Stage 2				Equipment		Comacchio 305				Sheet 6 of 7					
Client		Walters UK Ltd				Method		RO/IP/RC				Scale	1:25				
Project No		G23012		Level		212.01 mAOD		Inclination		90 degrees		Drilled	DG				
Easting		282129.80		Northing		212033.07		SPT Hammer Serial Number				Logged	AF				
Termination Reason		Scheduled depth				SPT Hammer Energy Ratio		%				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			
103 C	25.10 - 25.34							(6.40)			Medium strong locally strong medium locally thinly bedded grey and light grey fine to medium SANDSTONE with some thin to thick laminae grey siltstone. Weathering: Locally with occasional brown non penetrative staining on fractures. Discontinuities: 20 to 30 degree medium locally closely spaced planar smooth and rough tight and incipient bedding fractures. Occasional randomly orientated planar rough tight joints. (SOUTH WALES MIDDLE COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: SST						
						RC 25.50 - 27.00	95% 89% 79%				26.00m - 26.09m 40 degree planar rough tight joint infilled with 1-3mm silty fine sand.						
						RC 27.00 - 28.50	97% 80% 63%				26.40m - 27.30m Strong light grey medium grained SANDSTONE with many some thin and thick grey siltstone and fine sandstone laminae.						
						RC 28.50 - 30.00	73% 21% 0%	29.10 (0.20) 29.30 (0.70) 30.00	182.91 182.71 182.01		Very weak dark grey slightly carbonaceous MUDSTONE. No apparent weathering. Discontinuities: 10 to 25 degree extremely closely to very closely spaced planar and undulating smooth tight bedding fractures, partially NI. (SOUTH WALES MIDDLE COAL MEASURES FORMATION.) Geology Code: SWCM 2nd Geology Code: MST Very weak black COAL. No weathering apparent. Discontinuities: 20 to 30 degree and randomly orientated extremely closely to very closely spaced planar smooth tight and incipient fractures. (SOUTH WALES MIDDLE COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: COAL 29.80m - 29.82m Very weak dark grey SILTSTONE NI, recovered as very angular fine to coarse gravel. Possible randomly orientated extremely closely spaced fractures.	Set 1 NI 20 30 Set 1 NI 20 30					
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
0.20	29.00	Air/Mist	grey	100%	33.00	120mm	21.00	168mm									
29.00	30.50	Air/Mist	black	100%													
30.50	33.00	Air/Mist	grey	100%													
Drill Bit Type		PCD			Drill Bit Condition		Good		Core Barrel Type		Conventional Double Tube		Core Barrel Length		1.50		
Remarks																	
Hand excavated inspection pit from GL to 0.20m depth. Rotary open holing from 0.20m to 21.00m depth. Rotary coring from 21.00m to 33.00m depth.																	



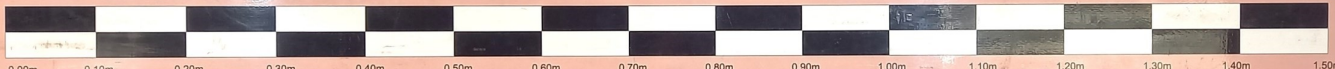
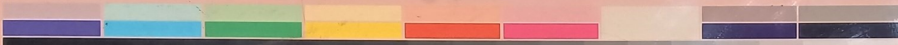
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						S2-BH204
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282129.80	Equipment	Comacchio 305	Sheet 1 of 4
Client	Walters UK Ltd	Northing	212033.07	Method	RO/IP/RC	
Project No	G23012	Level	212.01 mAOD	Termination Reason	Scheduled depth	

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	11 APRIL 2023
Exploratory Hole Number	S2-BH204	Box / Face Number	
Depth (m) from	21:00 to 22:50	Engineer	A





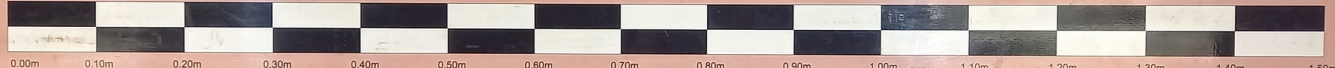
S2-BH204 21.00 m to 22.50 m

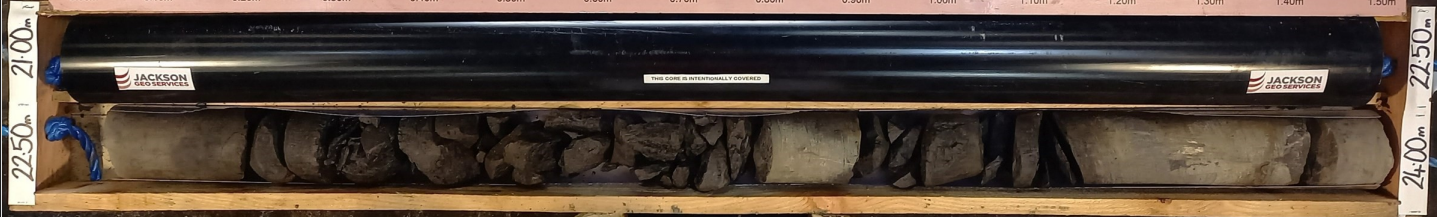
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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	11 APRIL 2023
Exploratory Hole Number	S2-BH204	Box / Face Number	
Depth (m) from	22:50 to 24:00	Engineer	A



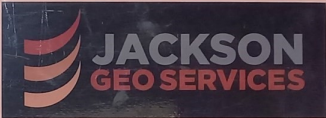


S2-BH204 22.50 m to 24.00 m

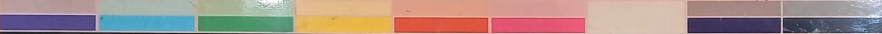
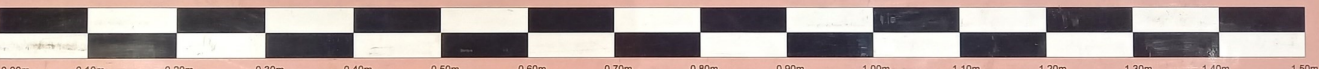
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						S2-BH204
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282129.80	Equipment	Comacchio 305	Sheet 2 of 4
Client	Walters UK Ltd	Northing	212033.07	Method	RO/IP/RC	
Project No	G23012	Level	212.01 mAOD	Termination Reason	Scheduled depth	

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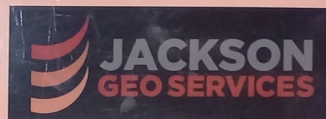
Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	11 APRIL 2023
Exploratory Hole Number	S2-BH 204	Box / Face Number	
Depth (m) from	24.00 to 25.50	Engineer	A

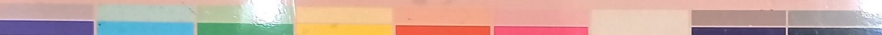
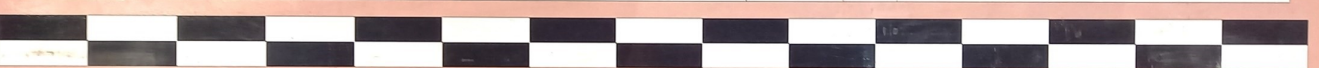

S2-BH204 24.00 m to 25.50 m

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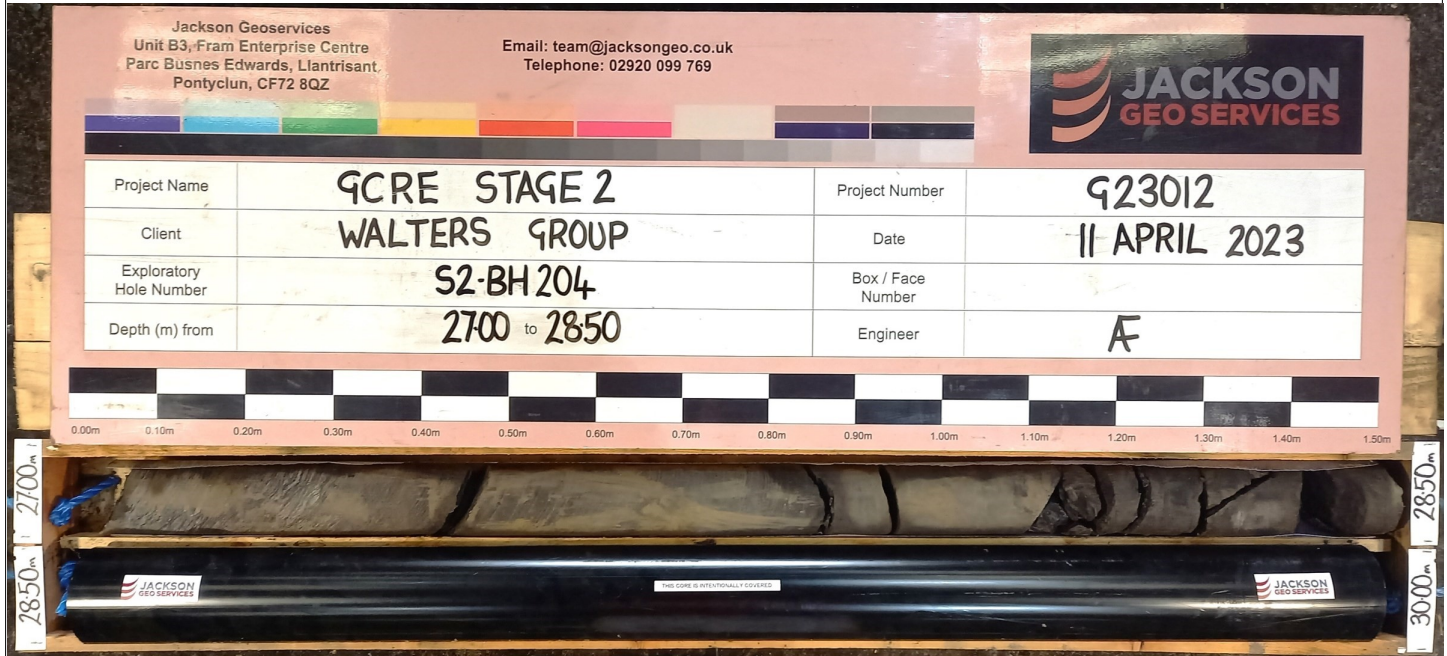


Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	11 APRIL 2023
Exploratory Hole Number	S2-BH 204	Box / Face Number	
Depth (m) from	25.50 to 27.00	Engineer	A


S2-BH204 25.50 m to 27.00 m

		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-BH204
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282129.80	Equipment	Comacchio 305	Sheet 3 of 4
Client	Walters UK Ltd	Northing	212033.07	Method	RO/IP/RC	
Project No	G23012	Level	212.01 mAOD	Termination Reason	Scheduled depth	



S2-BH204 27.00 m to 28.50 m



S2-BH204 28.50 m to 30.00 m

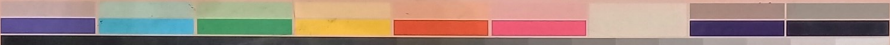
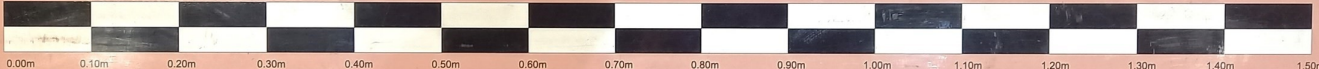
		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-BH204
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282129.80	Equipment	Comacchio 305	Sheet 4 of 4
Client	Walters UK Ltd	Northing	212033.07	Method	RO/IP/RC	
Project No	G23012	Level	212.01 mAOD	Termination Reason	Scheduled depth	

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	11 APRIL 2023
Exploratory Hole Number	S2-BH 204	Box / Face Number	
Depth (m) from	30.00 to 31.50	Engineer	A



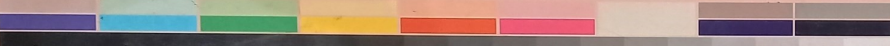
S2-BH204 30.00 m to 31.50 m

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Project Name	GCRE STAGE 2	Project Number	G23012
Client	WALTERS GROUP	Date	11 APRIL 2023
Exploratory Hole Number	S2-BH 204	Box / Face Number	
Depth (m) from	31.50 to 33.00	Engineer	A






S2-BH204 31.50 m to 33.00 m