

		EXPLORATORY HOLE PHOTOGRAPHS		Exploratory Hole	
				S2-TP203	
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282077.95	Equipment	JCB 220X 1c
Client	Walters UK Ltd	Northing	211961.74	Method	TP
Project No	G23012	Level	223.68 mAOD	Termination Reason	Scheduled depth.

Sheet 2 of 3



S2-TP203 Face A



S2-TP203 Spoil

EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole
S2-TP203

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282077.95	Equipment	JCB 220X 1c
Client	Walters UK Ltd	Northing	211961.74	Method	TP
Project No	G23012	Level	223.68 mAOD	Termination Reason	Scheduled depth.

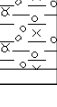
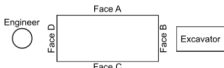
Sheet 3 of 3



S2-TP203 Face B



S2-TP203 Face D

				TRIAL PIT EXPLORATORY HOLE LOG				Exploratory Hole Progress by Time			Exploratory Hole	
Date and Time		Depth	Water Depth					S2-TP204				
16/05/2023 09:20		0.00	3.87	Sheet 1 of 2								
16/05/2023 14:50		4.00										
Project		Global Centre of Rail Excellence (GCRE) Stage 2				Equipment		JCB 20 tonne				
Client		Walters UK Ltd				Method		TP				
Project No		G23012	Level		227.88 mAOD		Orientation		0 degrees			
Easting		282943.53	Northing		211890.41		Length		4.50			
Termination Reason		Scheduled depth.		Width		0.60		Checked		AP		
Samples	Sampling and Testing Depths	Insitu Testing and Depth Related Remarks		Depth (Thickness)	Level (mAOD)	Legend	Description			Scale	Backfill	
1 ES	0.20 - 0.30	PID: 0.0ppmv		0.00	227.08		Firm to stiff greyish brown slightly gravelly slightly sandy clayey SILT with low cobble content. Gravel is angular to rounded fine to coarse of mudstone siltstone quartzite and rare coal. Cobbles are subangular to subrounded of medium strong to strong sandstone (160×130×90mm). Sand is fine to coarse. Frequent rootlets (up to 1mm) (MADE GROUND) Geology Code: MGR 2nd Geology Code: CL			0.50		
2 B	0.30 - 0.50			(0.80)								
3 D	0.40 - 0.50											
4 ES	0.50 - 0.60	PID: 0.1ppmv		0.80								
5 D	0.70 - 0.80			225.88		0.70m - 0.80m Soft dark brown silt with frequent decaying roots (up to 2mm). Palaeo-soil. Soft to firm grey mottled brownish yellow locally mottled greenish brown slightly gravelly sandy CLAY with occasional pockets of pinkish brown fine sand (up to 110mm.) Gravel is subangular to rounded medium to coarse of siltstone and sandstone. Sand is fine. (GLACIAL TILL) Geology Code: GT 2nd Geology Code: CL			1.00			
6 ES	0.90 - 1.00	PID: 0.1ppmv				(1.20)						
7 D	1.20 - 1.30											
8 ES	1.40 - 1.50	PID: 0.0ppmv HV: P: 26kPa R: 15kPa HV: P: 35kPa R: 20kPa HV: P: 41kPa R: 28kPa				2.00						
9 D	1.70 - 1.80			(2.00)		Firm to stiff grey gravelly silty CLAY with medium cobble content and low boulder content. Gravel is angular fine to coarse of siltstone and mudstone. Cobbles are angular to rounded frequently tabular of medium strong siltstone (190×130×100mm). Boulders are rounded of medium strong to strong sandstone (650×600×450mm). (GLACIAL TILL) Geology Code: GT 2nd Geology Code: CL			2.00			
10 D	2.20 - 2.30					2.50						
11 B	2.70 - 2.90					3.00						
12 D	3.20 - 3.30					3.50						
13 B	3.70 - 3.90			223.88		Continued on next Sheet			4.00			
Weather		Sunny				Trial Pit Excavation Onsite Layout					Water Strikes	
Shoring		None					Date and Time		Strike	Rising to	Time	Remarks
Stability		Minor collapses in face A and C between 2-4m expanding pit by up to 150mm laterally each side.					16/05/2023 14:50		4.00	3.87	20mins	
Remarks Machine excavated trial pit from GL to 4.00m.												

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JACKSON GEO SERVICES		TRIAL PIT EXPLORATORY HOLE LOG						Exploratory Hole Progress by Time			Exploratory Hole		
								Date and Time		Depth	Water Depth	S2-TP204	
								16/05/2023 09:20 16/05/2023 14:50		0.00 4.00	3.87		
Project	Global Centre of Rail Excellence (GCRE) Stage 2			Equipment	JCB 20 tonne			Sheet 2 of 2					
Client	Walters UK Ltd			Method	TP			Scale	1:20				
Project No	G23012	Level	227.88 mAOD	Orientation		0 degrees		Logged	AE				
Easting	282943.53	Northing	211890.41	Length		4.50		Checked	AP				
Termination Reason		Scheduled depth.		Width		0.60							
Samples	Sampling and Testing Depths	Insitu Testing and Depth Related Remarks		Depth (Thickness)	Level (mAOD)	Legend	Description			Scale	Backfill		
							End of Exploratory Hole at 4.00m						
											4.50		
											5.00		
											5.50		
											6.00		
											6.50		
											7.00		
											7.50		
											8.00		
Weather	Sunny		Trial Pit Excavation Onsite Layout Engineer Face A Face B Face C Face D Excavator				Water Strikes						
Shoring	None						Date and Time		Strike	Rising to	Time	Remarks	
Stability	Minor collapses in face A and C between 2-4m expanding pit by up to 150mm laterally each side.		16/05/2023 14:50		4.00	3.87	20mins						
Remarks													
Machine excavated trial pit from GL to 4.00m.													

EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole

S2-TP204

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282943.53	Equipment	JCB 20 tonne	Sheet 1 of 4
Client	Walters UK Ltd	Northing	211890.41	Method	TP	
Project No	G23012	Level	227.88 mAOD	Termination Reason	Scheduled depth.	



S2-TP204 Face D



S2-TP204 Face C

 JACKSON GEO SERVICES		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-TP204
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282943.53	Equipment	JCB 20 tonne	Sheet 2 of 4
Client	Walters UK Ltd	Northing	211890.41	Method	TP	
Project No	G23012	Level	227.88 mAOD	Termination Reason	Scheduled depth.	



S2-TP204 Face A



S2-TP204 Face B

		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-TP204
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282943.53	Equipment	JCB 20 tonne	Sheet 3 of 4
Client	Walters UK Ltd	Northing	211890.41	Method	TP	
Project No	G23012	Level	227.88 mAOD	Termination Reason	Scheduled depth.	



S2-TP204 Spoil

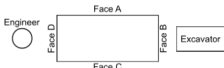


S2-TP204 Pre Excavation

		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-TP204
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282943.53	Equipment	JCB 20 tonne	Sheet 4 of 4
Client	Walters UK Ltd	Northing	211890.41	Method	TP	
Project No	G23012	Level	227.88 mAOD	Termination Reason	Scheduled depth.	



S2-TP204 Post Excavation

				TRIAL PIT EXPLORATORY HOLE LOG				Exploratory Hole Progress by Time			Exploratory Hole		
Date and Time		Depth	Water Depth					S2-TP205					
18/05/2023 09:05		0.00	Dry	Sheet 1 of 1									
18/05/2023 09:50		3.50											
Project		Global Centre of Rail Excellence (GCRE) Stage 2				Equipment		JCB 220X Ic					
Client		Walters UK Ltd				Method		TP					
Project No		G23012				Level		252.54 mAOD		Orientation		85 degrees	
Easting		283783.56		Northing		211807.47		Length		4.00			
Termination Reason		Scheduled depth		Width		0.65		Checked		AP			
Samples	Sampling and Testing Depths	Insitu Testing and Depth Related Remarks		Depth (Thickness)	Level (mAOD)	Legend	Description				Scale	Backfill	
1 D	0.10 - 0.20	PID: 0.0ppmv		0.00 (0.20)	252.34		Soft dark brown silty CLAY with frequent rootlets (up to 1mm). (GLACIAL TILL) Geology Code: GT 2nd Geology Code: CL						
2 ES	0.20 - 0.30 0.20			0.20									
3 D	0.50 - 0.60	PID: 0.0ppmv		(0.90)			Soft grey mottled greyish brown slightly gravelly silty CLAY with low cobble content. Gravel is angular to subrounded fine to coarse of mudstone and siltstone. Cobbles are subrounded of medium strong sandstone (160x100x80mm). (GLACIAL TILL) Geology Code: GT 2nd Geology Code: CL				0.50		
4 ES	0.50 - 0.60 0.50												
5 D	0.90 - 1.00	PID: 0.0ppmv		1.10	251.44		1.00m - 1.10m Spongy brown fibrous peat with frequent rootlets (up to 1mm).				1.00		
6 ES	0.90 - 1.00 0.90												
7 D	1.50 - 1.60	HV: P: 19kPa R: 13kPa HV: P: 21kPa R: 11kPa HV: P: 24kPa R: 18kPa PID: 0.0ppmv		(1.00)			Very soft grey mottled yellowish brown slightly gravelly slightly sandy silty CLAY with occasional pockets of pinkish brown fine sand (up to 70mm.) Gravel is rounded fine to medium of siltstone and sandstone. Sand is fine. (GLACIAL TILL) Geology Code: GT 2nd Geology Code: CL				1.50		
8 ES	1.50 - 1.60 1.50 1.50 1.50 1.50												
9 D	1.90 - 2.00			2.10	250.44		Soft to firm dark grey slightly gravelly sandy CLAY.Gravel is angular fine of mudstone and rare coal. Sand is fine occasionally coarse. Slight hydrocarbon odour. (GLACIAL TILL) Geology Code: GT 2nd Geology Code: CL				2.00		
													
10 D	2.50 - 2.60 2.50 2.50 2.50	HV: P: 43kPa R: 21kPa HV: P: 46kPa R: 24kPa HV: P: 66kPa R: 24kPa		2.70	249.84		Light yellowish brown slightly clayey sandy silty angular fine to coarse GRAVEL of fine grained sandstone with low cobble content. Cobbles are angular of weak to medium strong fine grained sandstone (150x90x60mm). Sand is fine to coarse. (Weathered SOUTH WALES COAL MEASURES FORMATION) Geology Code: SWCM 2nd Geology Code: GR				2.50		
													
11 B	3.00 - 3.20			(0.80)			End of Exploratory Hole at 3.50m				3.00		
													
												3.50	
												4.00	
Weather		Sunny		Trial Pit Excavation Onsite Layout 				Water Strikes					
Shoring								Date and Time		Strike	Rising to	Time	Remarks
Stability		Collapse Faces A and C GL-0.50m											
Remarks													
Machine excavated trial pit from GL to 3.50m.													

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		EXPLORATORY HOLE PHOTOGRAPHS		Exploratory Hole	
				S2-TP205	
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	283783.56	Equipment	JCB 220X Ic
Client	Walters UK Ltd	Northing	211807.47	Method	TP
Project No	G23012	Level	252.54 mAOD	Termination Reason	Scheduled depth

Sheet 1 of 4



S2-TP205 Pre Excavation



S2-TP205 Face C

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	283783.56	Equipment	JCB 220X 1c	Sheet 2 of 4
Client	Walters UK Ltd	Northing	211807.47	Method	TP	
Project No	G23012	Level	252.54 mAOD	Termination Reason	Scheduled depth	



S2-TP205 Face D



S2-TP205 Post Excavation

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	283783.56	Equipment	JCB 220X lc	Sheet 3 of 4
Client	Walters UK Ltd	Northing	211807.47	Method	TP	
Project No	G23012	Level	252.54 mAOD	Termination Reason	Scheduled depth	



S2-TP205 Face B



S2-TP205 Face A



EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole

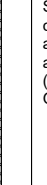
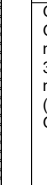
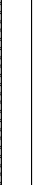
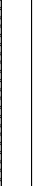
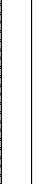
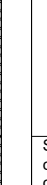
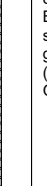
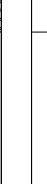
S2-TP205

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	283783.56	Equipment	JCB 220X 1c
Client	Walters UK Ltd	Northing	211807.47	Method	TP
Project No	G23012	Level	252.54 mAOD	Termination Reason	Scheduled depth

Sheet 4 of 4



S2-TP205 Spoil

JACKSON GEO SERVICES				TRIAL PIT EXPLORATORY HOLE LOG				Exploratory Hole Progress by Time			Exploratory Hole	
Date and Time		Depth	Water Depth					S2-TP206				
19/04/2023 15:30 19/04/2023 16:20		0.00 3.50	Dry									
Project	Global Centre of Rail Excellence (GCRE) Stage 2			Equipment	JCB 220X Ic			Sheet 1 of 1				
Client	Walters UK Ltd			Method	TP			Scale		1:20		
Project No	G23012	Level	238.86 mAOD	Orientation		90 degrees		Logged		CE		
Easting	281787.47	Northing	211856.09	Length		3.80		Checked		AP		
Termination Reason		Scheduled depth		Width		0.60						
Samples	Sampling and Testing Depths	Insitu Testing and Depth Related Remarks		Depth (Thickness)	Level (mAOD)	Legend	Description			Scale	Backfill	
1 ES 2 D	0.00 - 0.50 0.20 - 0.30 0.20 - 0.30	Too granular for hand vane tests		0.00 (0.50)	238.36		Soft greyish brown and brownish grey sandy gravelly CLAY with high cobble content. Gravel is angular to subrounded fine to coarse of siltstone, sandstone and mudstone. Cobbles (150x80x80mm) are angular of medium strong siltstone and sandstone. Sand is fine and medium. Frequent roots (up to 20mm). (MADE GROUND) Geology Code: MGR 2nd Geology Code: CL			0.50		
3 ES 4 B	0.50 - 0.60 0.60 - 0.80			0.50	238.36		Greyish brown slightly sandy clayey angular to subrounded fine to coarse GRAVEL of siltstone, sandstone and mudstone with high cobble content and medium boulder content. Cobbles (200x150x80mm) and boulders (450x300x300mm) are angular of medium strong siltstone and sandstone. Sand is medium. (MADE GROUND) Geology Code: MGR 2nd Geology Code: GR			1.00		
5 ES	0.90 - 1.00				238.36					1.50		
6 B	1.60 - 1.80			(2.30)	238.36					2.00		
7 ES	1.90 - 2.00				238.36					2.50		
8 B	2.60 - 2.80				238.36					3.00		
9 ES	2.80 - 3.50 2.90 - 3.00	Too granular for hand vane tests		2.80	236.06		Soft greyish brown and brownish grey slightly sandy gravelly CLAY with high cobble content and low boulder content. Gravel is angular to subrounded fine to coarse of siltstone, sandstone and mudstone. Cobbles (150x80x80mm) and Boulders (500x400x300mm) are angular of medium strong siltstone and sandstone. Sand is fine and medium. Occasional angular to subangular coarse gravel and cobbles (up to 100mm) of coal. (MADE GROUND) Geology Code: MGR 2nd Geology Code: CL			3.50		
10 D	3.10 - 3.20			(0.70)	235.36		End of Exploratory Hole at 3.50m			4.00		
Weather		Sunny		Trial Pit Excavation Onsite Layout Engineer Face D Face A Face B Face C Excavator			Water Strikes					
Shoring		None					Date and Time	Strike	Rising to	Time	Remarks	
Stability		Collapse GL-3.00m in Faces A and C										
Log presents Face A unless otherwise noted.												
Remarks												
Machine excavated trial pit from GL to 3.50m												

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Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	281787.47	Equipment	JCB 220X 1c	Sheet 1 of 4
Client	Walters UK Ltd	Northing	211856.09	Method	TP	
Project No	G23012	Level	238.86 mAOD	Termination Reason	Scheduled depth	



S2-TP206 Spoil



S2-TP206 Face A

		EXPLORATORY HOLE PHOTOGRAPHS		Exploratory Hole	
				S2-TP206	
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	281787.47	Equipment	JCB 220X 1c
Client	Walters UK Ltd	Northing	211856.09	Method	TP
Project No	G23012	Level	238.86 mAOD	Termination Reason	Scheduled depth

Sheet 2 of 4



S2-TP206 Face C



S2-TP206 Spoil

		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-TP206
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	281787.47	Equipment	JCB 220X 1c	Sheet 3 of 4
Client	Walters UK Ltd	Northing	211856.09	Method	TP	
Project No	G23012	Level	238.86 mAOD	Termination Reason	Scheduled depth	



S2-TP206 Face B



S2-TP206 Pre Excavation

		EXPLORATORY HOLE PHOTOGRAPHS		Exploratory Hole	
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	281787.47	Equipment	JCB 220X 1c
Client	Walters UK Ltd	Northing	211856.09	Method	TP
Project No	G23012	Level	238.86 mAOD	Termination Reason	Scheduled depth

Sheet 4 of 4



S2-TP206 Post Excavtion



S2-TP206 Face D

		TRIAL PIT EXPLORATORY HOLE LOG					Exploratory Hole Progress by Time			Exploratory Hole		
							Date and Time		Depth	Water Depth	S2-TP207	
							18/04/2023 15:00 18/04/2023 16:00		0.00 3.10	Dry		
Project	Global Centre of Rail Excellence (GCRE) Stage 2			Equipment	JCB 220X Ic				Sheet 1 of 1			
Client	Walters UK Ltd			Method	TP				Scale	1:20		
Project No	G23012	Level	248.54 mAOD	Orientation		255 degrees			Logged	CE		
Easting	281567.97	Northing	211642.11	Length		5.00			Checked	AP		
Termination Reason		Terminated due to collapse		Width		0.60						
Samples	Sampling and Testing Depths	Insitu Testing and Depth Related Remarks		Depth (Thickness)	Level (mAOD)	Legend	Description		Scale	Backfill		
1 ES 2 B	0.20 - 0.30 0.20 0.30 - 0.50	PID: 0.0ppmv		0.00			Dark grey sandy clayey angular and subangular fine to coarse GRAVEL of siltstone, sandstone and mudstone with high cobble content and medium boulder content. Cobbles (200x120x70mm) and boulders (600x400x200mm) are angular of siltstone and sandstone. Sand is fine and medium. (MADE GROUND) Geology Code: MGR 2nd Geology Code: GR					
3 ES	0.50 - 0.60 0.50	PID: 0.0ppmv		(1.50)					0.50			
4 ES	0.90 - 1.00 0.90	PID: 0.0ppmv							1.00			
5 B	1.30 - 1.50			1.50	247.04		Soft to firm dark grey sandy gravelly silty CLAY with high cobble content and low boulder content. Gravel is angular and subangular fine to coarse of siltstone, sandstone and rare mudstone. Cobbles (200x120x70mm) and boulders (350x250x200mm) are angular of siltstone and sandstone. Sand is fine to coarse. Localized pockets of grey silt (up to 400mm) (MADE GROUND) Geology Code: MGR 2nd Geology Code: CL		1.50			
6 D	1.70 - 1.80	PID: 0.0ppmv		(1.10)					2.00			
7 ES	1.90 - 2.00 1.90			2.60	245.94		Dark grey sandy very clayey angular and subangular fine to coarse GRAVEL of siltstone, sandstone and mudstone with high cobble content and medium boulder content. Cobbles (200x120x70mm) and boulders (up to1400mmx800mm) are angular of siltstone and sandstone. Sand is fine to coarse. (MADE GROUND) Geology Code: MGR 2nd Geology Code: GR		2.50			
8 D	2.20 - 2.30	PID: 0.0ppmv		(0.50)					3.00			
10 B 9 ES	2.90 - 3.00 2.90 - 3.10 2.90			245.44			End of Exploratory Hole at 3.10m		3.50			
									4.00			
Weather	Sunny	Trial Pit Excavation Onsite Layout					Water Strikes					
Shoring	None						Date and Time		Strike	Rising to	Time	Remarks
Stability	Collapse GL-3.10m Faces A and C											
Remarks Machine excavated trial pit from GL to 3.10m												

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