

EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole

S2-TP294

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	284645.82	Equipment	JCB 220X 1c	Sheet 1 of 3
Client	Walters UK Ltd	Northing	210457.68	Method	TP	
Project No	G23012	Level	237.05 mAOD	Termination Reason	Scheduled depth	



S2-TP294 Face D



S2-TP294 Face A

 JACKSON GEO SERVICES		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-TP294
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	284645.82	Equipment	JCB 220X 1c	Sheet 2 of 3
Client	Walters UK Ltd	Northing	210457.68	Method	TP	
Project No	G23012	Level	237.05 mAOD	Termination Reason	Scheduled depth	



S2-TP294 Spoil



S2-TP294 Face C



EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole

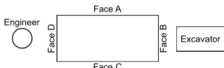
S2-TP294

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	284645.82	Equipment	JCB 220X 1c
Client	Walters UK Ltd	Northing	210457.68	Method	TP
Project No	G23012	Level	237.05 mAOD	Termination Reason	Scheduled depth

Sheet 3 of 3



S2-TP294 Face B

		TRIAL PIT EXPLORATORY HOLE LOG						Exploratory Hole Progress by Time			Exploratory Hole		
								Date and Time		Depth	Water Depth	S2-TP294A	
								04/04/2023 09:20 04/04/2023 09:45		0.00 0.50	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	236.90 mAOD	Orientation		4 degrees				Logged	AE		
Easting	284647.79	Northing	210465.17	Length		3.80				Checked	AP		
Termination Reason		Concrete obstruction		Width		0.60							
Samples	Sampling and Testing Depths	Insitu Testing and Depth Related Remarks		Depth (Thickness)	Level (mAOD)	Legend	Description			Scale	Backfill		
	0.00 - 0.50	No sample taken		0.00			Dark grey gravelly fine rarely coarse SAND. Gravel is subangular to subrounded fine to coarse of siltstone, mudstone and rare coal. Rare brick fragments (up to 70mm) and industrial metal scrap (up to 400mm). (MADE GROUND) Geology Code: MGR 2nd Geology Code: SD			0.50			
	0.50	Concrete obstruction		236.40									
							End of Exploratory Hole at 0.50m						
										1.00			
										1.50			
										2.00			
										2.50			
										3.00			
										3.50			
										4.00			
Weather	Clear	Trial Pit Excavation Onsite Layout 					Water Strikes						
Shoring	None						Date and Time		Strike	Rising to	Time	Remarks	
Stability	Stable												
Remarks													
Machine excavated trial pit from GL to 0.50m. No photographs available. Pit relocated to S2-TP294B.													

Printed 28/09/2023 08:16

		TRIAL PIT EXPLORATORY HOLE LOG						Exploratory Hole Progress by Time			Exploratory Hole		
								Date and Time		Depth	Water Depth	S2-TP294B	
								04/04/2023 09:55 04/04/2023 10:20		0.00 1.00	0.95		
Project	Global Centre of Rail Excellence (GCRE) Stage 2			Equipment	JCB 220X Ic			Sheet 1 of 1		Scale 1:20			
Client	Walters UK Ltd			Method	TP								
Project No	G23012	Level	236.92 mAOD	Orientation		94 degrees		Logged AE		Checked AP			
Easting	284647.33	Northing	210462.71	Length		4.05							
Termination Reason		Concrete obstruction		Width		0.60							
Samples	Sampling and Testing Depths	Insitu Testing and Depth Related Remarks		Depth (Thickness)	Level (mAOD)	Legend	Description			Scale	Backfill		
	0.00 - 1.00	No samples taken		0.00			Dark grey gravelly fine rarely coarse SAND. Gravel is subangular to subrounded fine to coarse of siltstone, mudstone and rare coal. Rare brick fragments (up to 70mm) and industrial metal scrap (up to 400mm). (MADE GROUND) Geology Code: MGR 2nd Geology Code: SD			0.50			
	1.00	Concrete obstruction		235.92									
							End of Exploratory Hole at 1.00m			1.00			
										1.50			
										2.00			
										2.50			
										3.00			
										3.50			
										4.00			
Weather	Clear	Trial Pit Excavation Onsite Layout					Water Strikes						
Shoring	None						Date and Time		Strike	Rising to	Time	Remarks	
Stability	Stable						04/04/2023 10:00		0.95	0.95	20mins		
Remarks													
Machine excavated trial pit from GL to 1.00m. No photographs available. Pit relocated to S2-TP294.													

Printed 28/09/2023 08:16

		TRIAL PIT EXPLORATORY HOLE LOG						Exploratory Hole Progress by Time			Exploratory Hole		
								Date and Time		Depth	Water Depth	S2-TP298	
								30/03/2023 14:40 30/03/2023 15:40		0.00 3.20			
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	238.43 mAOD		Orientation	100 degrees				Logged	AE		
Easting	284832.86	Northing	210463.10		Length	5.50				Checked	AP		
Termination Reason	Terminated due to collapse				Width	1.80							
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 - 0.40 0.30 - 0.50		Suspected inactive services.		0.00 (0.70)	237.73		Dark grey sandy subangular to rounded fine to coarse GRAVEL of siltstone and bituminous coated material with medium cobble content. Cobbles are subangular to subrounded of medium strong siltstone (180x130x75mm). Sand is fine to coarse. Rare brick fragments (up to 170mm). (MADE GROUND) Geology Code: MGR 2nd Geology Code: GR			0.50		
3 ES	0.50 - 0.60				0.70								
4 ES 5 B	0.90 - 1.00 0.90 - 1.20												
6 ES 7 B	1.90 - 2.00 1.90 - 2.20				(2.50)	235.23		Dark grey gravelly fine to coarse SAND with low cobble content. Gravel is angular to subangular fine to coarse of siltstone, coal and bituminous coated material. Cobbles are subangular to subrounded frequently tabular of medium strong siltstone (130x130x95mm) and moderately weak to medium strong coal (240x150x90mm). (MADE GROUND) Geology Code: MGR 2nd Geology Code: SD			1.00 1.50 2.00 2.50 3.00		
8 ES 9 B	2.90 - 3.00 2.90 - 3.20												
								End of Exploratory Hole at 3.20m			3.50 4.00		
Weather	Overcast		Trial Pit Excavation Onsite Layout					Water Strikes					
Shoring	Benched due inactive services.							Date and Time		Strike	Rising to	Time	Remarks
Stability	Collapse Face A and C 0.00-3.20m.												
Remarks													
Machine excavated trial pit from GL to 3.20m													

Printed 28/09/2023 08:16

		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-TP298
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	284832.86	Equipment	JCB 220X 1c	Sheet 1 of 3
Client	Walters UK Ltd	Northing	210463.10	Method	TP	
Project No	G23012	Level	238.43 mAOD	Termination Reason	Terminated due to collapse	



S2-TP298 Face D



S2-TP298 Face C

		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-TP298
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	284832.86	Equipment	JCB 220X 1c	Sheet 2 of 3
Client	Walters UK Ltd	Northing	210463.10	Method	TP	
Project No	G23012	Level	238.43 mAOD	Termination Reason	Terminated due to collapse	



S2-TP298 Face A



S2-TP298 Spoil

		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-TP298
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	284832.86	Equipment	JCB 220X lc	Sheet 3 of 3
Client	Walters UK Ltd	Northing	210463.10	Method	TP	
Project No	G23012	Level	238.43 mAOD	Termination Reason	Terminated due to collapse	



S2-TP298 Face B

				TRIAL PIT EXPLORATORY HOLE LOG				Exploratory Hole Progress by Time			Exploratory Hole	
Date and Time		Depth	Water Depth					S2-TP299				
13/04/2023 15:00 13/04/2023 16:10		0.00 4.00	3.95									
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	238.29 mAOD	Orientation	270 degrees			Logged	AE			
Easting	284584.57	Northing	210460.82	Length	4.20			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	0.20 - 0.30			0.00			Dark grey sandy clayey angular fine to coarse GRAVEL of siltstone and sandstone with low cobble content. Cobbles are angular of moderately weak to medium strong siltstone and limestone (110x60x40mm). Sand is fine to coarse. Occasional fragments of brick (up to 200mm,) rare concrete fragments (up to 150mm), rare timber fragments (up to 50mm) and rare plastic fragments (up to 20mm). (MADE GROUND) Geology Code: MGR 2nd Geology Code: GR					
2 B	0.40 - 0.60											
3 ES	0.50 - 0.60							0.50				
4 ES	0.90 - 1.00			(1.80)			1.30m - 1.40m Large timber fragments (up to 1000mm)	1.00				
5 B	1.50 - 1.70							1.50				
6 ES	1.90 - 2.00			1.80	236.49		Greyish brown sandy clayey angular and subangular fine to coarse GRAVEL of mudstone and siltstone. Sand is fine to coarse. (MADE GROUND) Geology Code: MGR 2nd Geology Code: GR 1.80m - 2.10m Large section of strip metal (up to 1800mm in length). Located diagonally across pit.	2.00				
				(0.90)				2.50				
7 B	2.50 - 2.70						Very soft and soft greyish yellow and grey sandy slightly gravelly silty CLAY with rare pockets of pinkish brown fine sand (up to 80mm) and low cobble content. Gravel is subangular to rounded fine to coarse of sandstone and limestone. Cobbles are subrounded and rounded of moderately weak sandstone and medium strong limestone. Sand is fine and medium. (GLACIAL TILL) Geology Code: GT 2nd Geology Code: CL	3.00				
8 D	2.80 - 2.90			2.70	235.59			3.50				
9 ES	3.10 - 3.20			(0.60)			Soft locally firm grey mottled yellowish brown slightly sandy gravelly locally very gravelly silty CLAY with occasional pockets of yellowish brown angular fine to coarse gravel of mudstone (up to 100mm), rare lenses of black organic matter (up to 300mm) and low cobble content and low boulder. Gravel is angular to rounded fine to coarse of sandstone, mudstone and limestone. Cobbles and boulders are subrounded and rounded of moderately weak sandstone and medium strong limestone. Sand is fine. (GLACIAL TILL) Geology Code: GT 2nd Geology Code: CL					
10 D	3.40 - 3.50			3.30	234.99			4.00				
				(0.70)			End of Exploratory Hole at 4.00m					
234.29												
Weather	Dry	Trial Pit Excavation Onsite Layout				Water Strikes						
Shoring	None	Engineer Face D Face A Face B Face C Excavator				Date and Time	Strike	Rising to	Time	Remarks		
Stability	Collapse 1.80-2.70m Faces A and C					13/04/2023 15:25	2.30	3.95	20mins	Seepage. Filled base of pit to 3.95m after 20 minutes		
Remarks												
Machine excavated trial pit from GL to 4.00m.												
Printed 28/09/2023 08:16												

EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole
S2-TP299

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	284584.57	Equipment	JCB 220X 1c
Client	Walters UK Ltd	Northing	210460.82	Method	TP
Project No	G23012	Level	238.29 mAOD	Termination Reason	Scheduled depth

Sheet 1 of 4



S2-TP299 Face B



S2-TP299 Face D

		EXPLORATORY HOLE PHOTOGRAPHS		Exploratory Hole	
				S2-TP299	
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	284584.57	Equipment	JCB 220X 1c
Client	Walters UK Ltd	Northing	210460.82	Method	TP
Project No	G23012	Level	238.29 mAOD	Termination Reason	Scheduled depth

Sheet 2 of 4



S2-TP299 Face C



S2-TP299 Face A

		EXPLORATORY HOLE PHOTOGRAPHS				Exploratory Hole
						S2-TP299
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	284584.57	Equipment	JCB 220X 1c	Sheet 3 of 4
Client	Walters UK Ltd	Northing	210460.82	Method	TP	
Project No	G23012	Level	238.29 mAOD	Termination Reason	Scheduled depth	



S2-TP299 Pre Excavation



S2-TP299 Post Excavation

EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole

S2-TP299

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	284584.57	Equipment	JCB 220X 1c
Client	Walters UK Ltd	Northing	210460.82	Method	TP
Project No	G23012	Level	238.29 mAOD	Termination Reason	Scheduled depth

Sheet 4 of 4



S2-TP299 Spoil

		TRIAL PIT EXPLORATORY HOLE LOG				Exploratory Hole Progress by Time			Exploratory Hole					
						Date and Time		Depth	Water Depth	S2-TP300				
Project		Global Centre of Rail Excellence (GCRE) Stage 2		Equipment		JCB 220X Ic		16/05/2023 10:50 16/05/2023 11:50		0.00 6.50	5.50	Sheet 1 of 2		
Client		Walters UK Ltd		Method		TP						Scale	1:20	
Project No		G23012		Level		229.73 mAOD		Orientation		265 degrees		Logged		AE
Easting		282971.07		Northing		211882.34		Length		8.00		Checked		AP
Termination Reason		Collapse.		Width		3.50								
Samples	Sampling and Testing Depths	Insitu Testing and Depth Related Remarks		Depth (Thickness)	Level (mAOD)	Legend	Description					Scale	Backfill	
				0.00	229.33		Soft brown slightly gravelly silty CLAY with frequent rootlets (up to 1mm.) Gravel is subangular to subrounded of siltstone and sandstone. (MADE GROUND) Geology Code: MGR 2nd Geology Code: CL					0.50		
				(0.40)										
				0.40	227.43		Very soft dark grey sandy very gravelly CLAY with medium cobble content. Gravel is angular fine to coarse of siltstone and mudstone. Cobbles are angular to subangular of moderately weak to medium strong mudstone and siltstone (170x120x50mm). Sand is fine to coarse. Rare timber fragments (up to 140mm) and rare wire rope (up to 800mm). (MADE GROUND) Geology Code: MGR 2nd Geology Code: CL					1.00		
(1.90)														
2.30	227.43		1.80m - 2.30m Undulating boundary between Made Ground and palaeo-soil. Possible historic excavation/sink hole that has been backfilled.					2.00						
(2.20)														
							Soft to firm grey mottled yellowish brown gravelly silty CLAY. Gravel is subangular to subrounded fine to coarse of siltstone, mudstone and rare coal. (GLACIAL TILL) Geology Code: GT 2nd Geology Code: CL 2.30m - 2.40m Very soft dark brown silt, with frequent rootlets (up to 1mm). Palaeo-soil.					2.50		
														3.00
												3.50		
														4.00
Continued on next Sheet														
Weather		Sunny		Trial Pit Excavation Onsite Layout				Water Strikes						
Shoring		None						Date and Time		Strike	Rising to	Time	Remarks	
Stability		Collapses Face A and C GL-6.00m						16/05/2023 14:53 16/05/2023 14:55		5.00 6.50	4.95 5.50	5mins 20mins		
Remarks Machine excavated trial pit from GL to 6.50m														

		TRIAL PIT EXPLORATORY HOLE LOG						Exploratory Hole Progress by Time			Exploratory Hole		
								Date and Time		Depth	Water Depth	S2-TP300	
								16/05/2023 10:50 16/05/2023 11:50		0.00 6.50	5.50		
Project	Global Centre of Rail Excellence (GCRE) Stage 2				Equipment	JCB 220X Ic		Sheet 2 of 2		Scale 1:20			
Client	Walters UK Ltd				Method	TP							
Project No	G23012	Level	229.73 mAOD		Orientation	265 degrees		Logged AE		Checked AP			
Easting	282971.07	Northing	211882.34		Length	8.00							
Termination Reason		Collapse.				Width	3.50						
Samples	Sampling and Testing Depths	Insitu Testing and Depth Related Remarks		Depth (Thickness)	Level (mAOD)	Legend	Description			Scale	Backfill		
				4.50	225.23		Soft to firm grey mottled yellowish brown gravelly silty CLAY. Gravel is subangular to subrounded fine to coarse of siltstone, mudstone and rare coal. (GLACIAL TILL) Geology Code: GT 2nd Geology Code: CL			4.50			
				Soft dark grey slightly sandy gravelly silty CLAY with low cobble content and low boulder content. Gravel is angular to rounded fine to coarse of mudstone and siltstone. Cobbles are angular to rounded of medium strong siltstone (180x160x120mm). Boulders are subrounded to subangular of medium strong to strong siltstone (330x260x210mm). Sand is fine occasionally coarse. (GLACIAL TILL) Geology Code: GT 2nd Geology Code: CL									
				(2.00)	223.23		5.00m - 6.50m Collapses comprise mine working in Face A and C 1.5m wide, infilled with; grey sandy angular frequently tabular fine to coarse GRAVEL of mudstone, siltstone and rare coal Frequent decaying timber fragments (up to 250mm).			5.00			
										5.50			
										6.00			
										6.50			
							End of Exploratory Hole at 6.50m			7.00			
										7.50			
										8.00			
Weather	Sunny	Trial Pit Excavation Onsite Layout Log presents Face A unless otherwise noted.					Water Strikes						
Shoring	None						Date and TimeStrikeRising toTimeRemarks						
Stability	Collapses Face A and C GL-6.00m						16/05/2023 14:535.004.955mins 16/05/2023 14:556.505.5020mins						
Remarks Machine excavated trial pit from GL to 6.50m													

EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole

S2-TP300

Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282971.07	Equipment	JCB 220X 1c
Client	Walters UK Ltd	Northing	211882.34	Method	TP
Project No	G23012	Level	229.73 mAOD	Termination Reason	Collapse.

Sheet 1 of 4



S2-TP300 Face B



S2-TP300 Face D

		EXPLORATORY HOLE PHOTOGRAPHS		Exploratory Hole S2-TP300	
Project	Global Centre of Rail Excellence (GCRE) Stage 2	Easting	282971.07	Equipment	JCB 220X 1c
Client	Walters UK Ltd	Northing	211882.34	Method	TP
Project No	G23012	Level	229.73 mAOD	Termination Reason	Collapse.



S2-TP300 Pre Excavation



S2-TP300 Face C