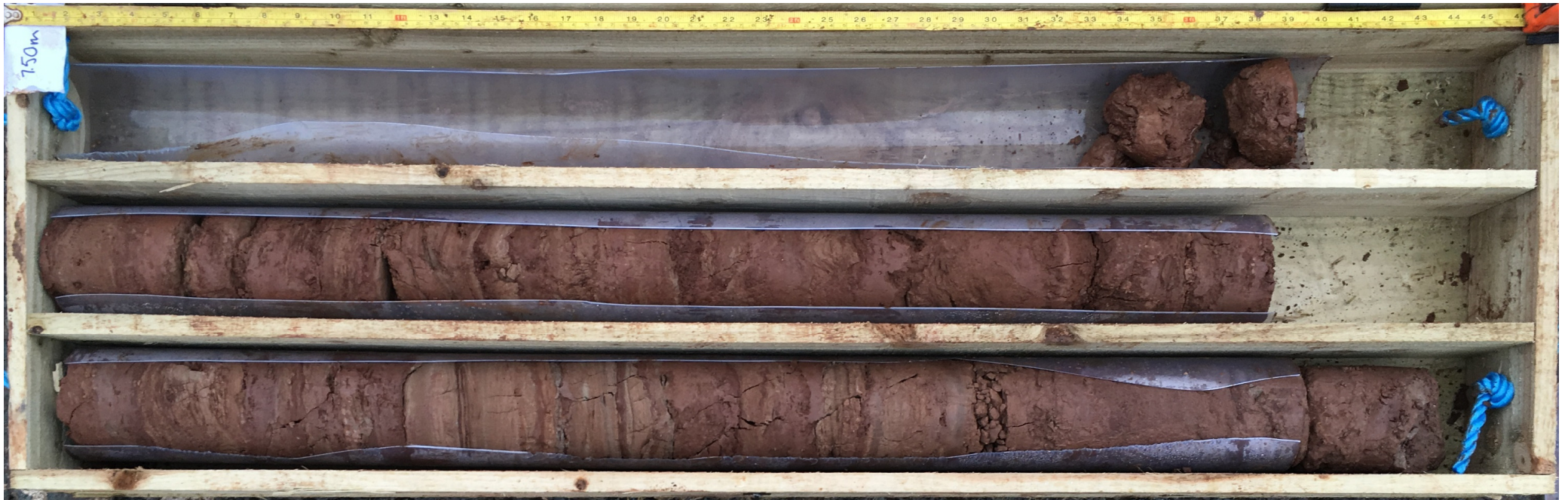




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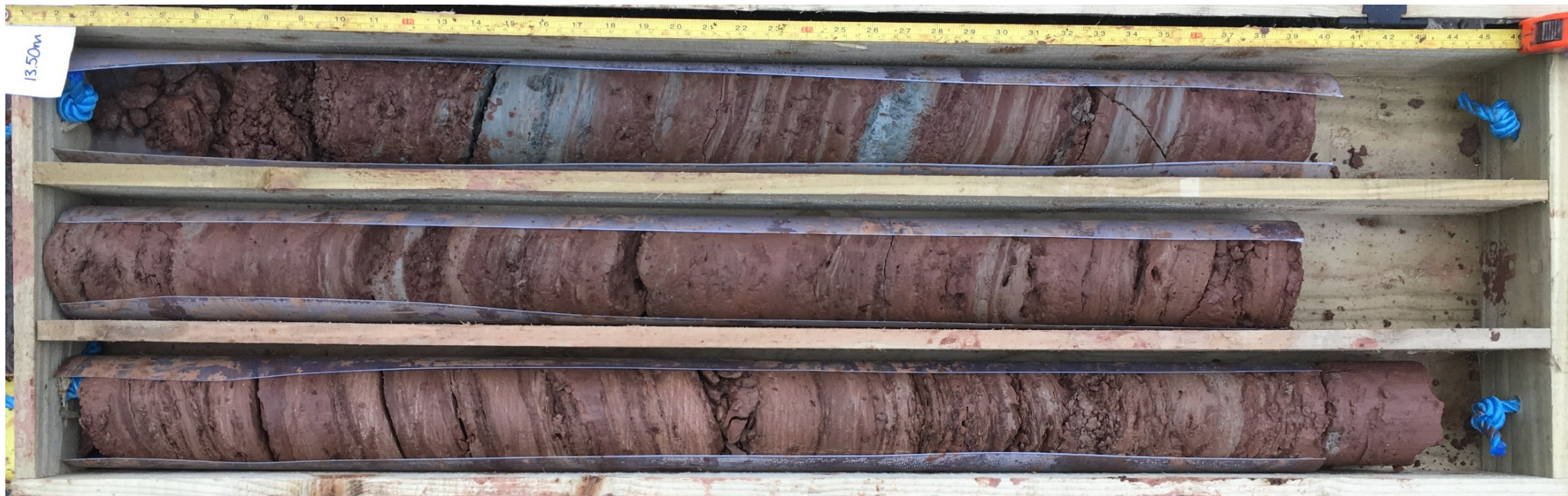
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	PROJECT TITLE	The Hut Group, Hive	SKETCH TITLE	Rock Core Photos	ES



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	PROJECT TITLE	The Hut Group, Hive	SKETCH TITLE	Rock Core Photos	ES



COMPLEX CHALLENGES ... MADE SIMPLE



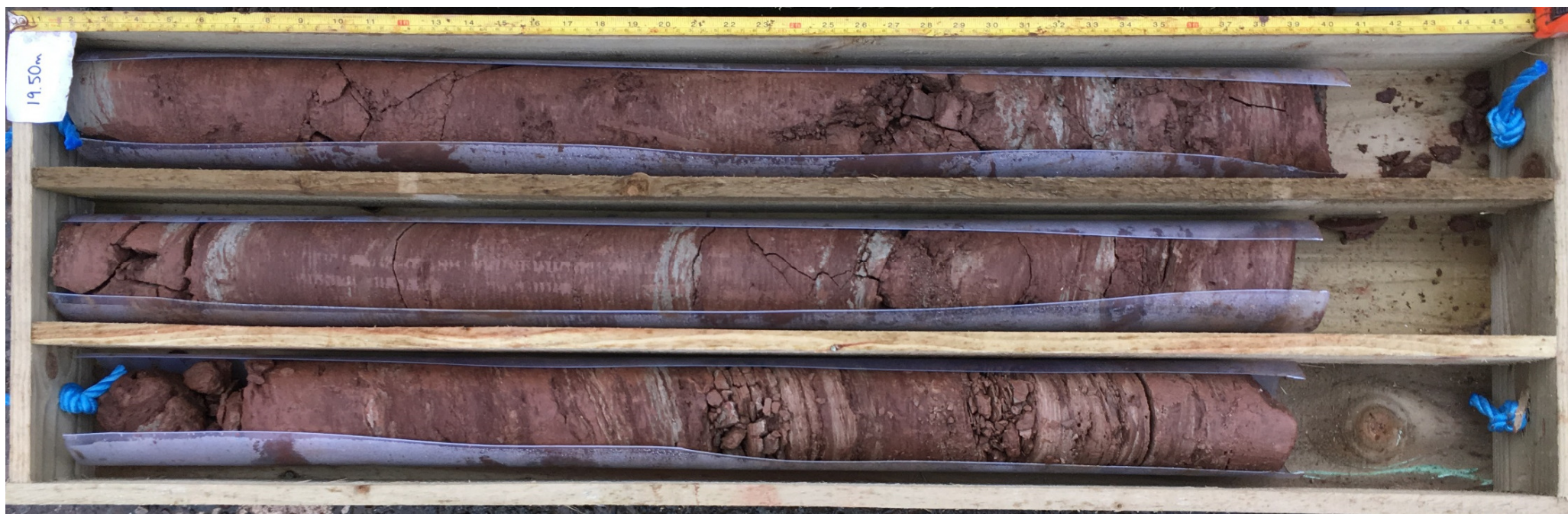
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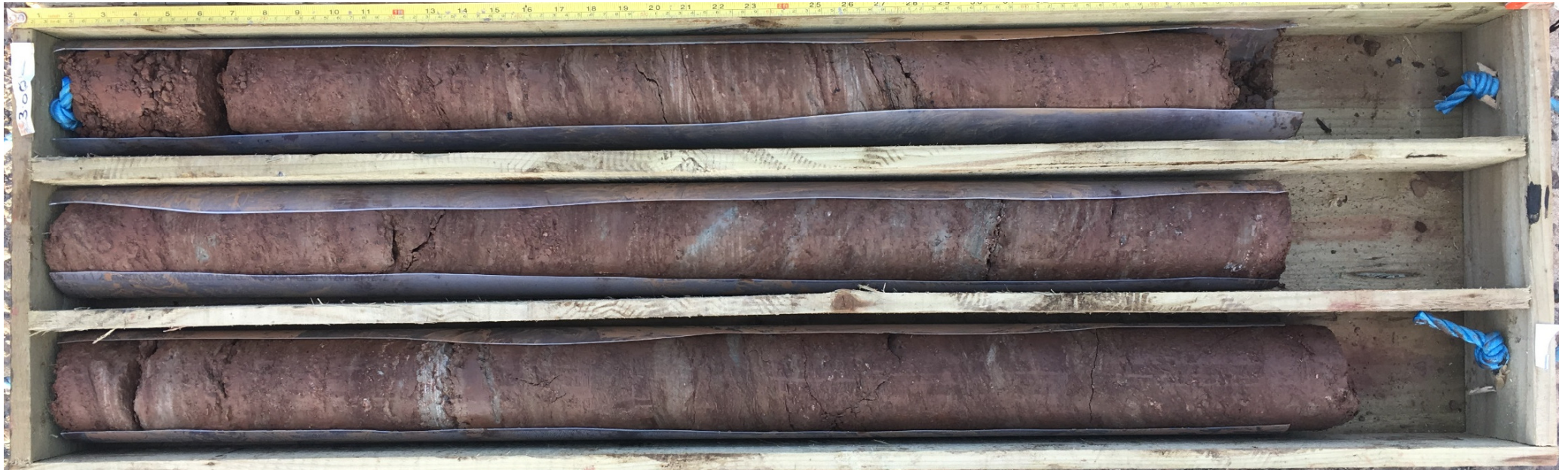
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COMPLEX CHALLENGES ... MADE SIMPLE



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	PROJECT TITLE	The Hut Group, Hive	SKETCH TITLE	Rock Core Photos	ES



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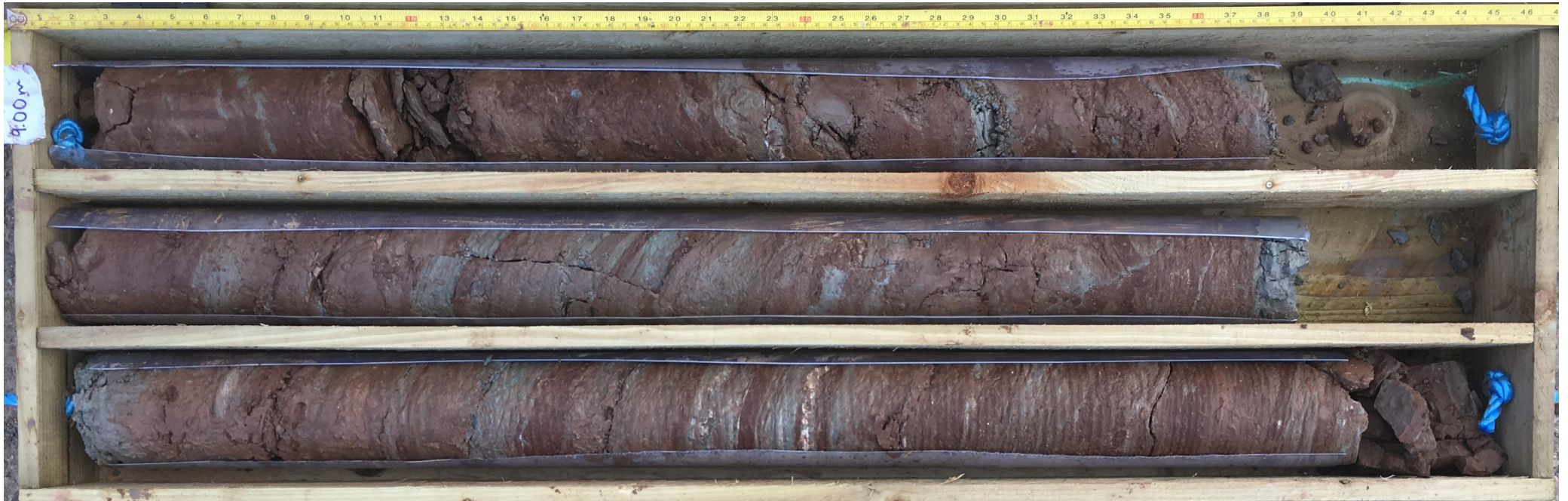
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	JOB NO	3647	SKETCH	BH106	DRAWN BY
	PROJECT TITLE	The Hut Group, Hive	SKETCH TITLE	Rock Core Photos	ES



COMPLEX CHALLENGES ... MADE SIMPLE



	JOB NO	3647	SKETCH	BH106	DRAWN BY
	PROJECT TITLE	The Hut Group, Hive	SKETCH TITLE	Rock Core Photos	ES



	JOB NO	3647	SKETCH	BH106	DRAWN BY
	PROJECT TITLE	The Hut Group, Hive	SKETCH TITLE	Rock Core Photos	ES

Percussion Drilling Log

Project Name: THG HIVE, Airport City North		Client: Airport City Partnerships		Date: 06/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382080.15 N385799.32	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: Archway Dart	
Borehole Number WS101	Hole Type CP	Level 68.12m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.15	68.12		Vegetation and organic matter over dark brown clayey SAND. Frequent roots and rootlets. (TOPSOIL)	1
					0.50	67.97		Brown slightly gravelly slightly clayey SAND. Gravel is medium to coarse rounded of sandstone. (GLACIAL TILL)	
					0.80	67.62		Brown becoming orangish brown slightly sandy CLAY. Rare tree roots. (GLACIAL TILL)	
					1.00	67.32		Brown slightly clayey fine to medium SAND. (GLACIAL TILL)	
		1.00 - 1.45 1.00	D SPT	N=14 (2,3/3,3,4,4)				Reddish brown mottled grey friable CLAY. (GLACIAL TILL)	2
		2.00 - 2.45 2.00	D SPT	N=8 (2,1/2,1,2,3)					3
		3.00 - 3.38 3.00	D SPT	50 (2,10/50 for 227mm)	3.00	67.12		Reddish brown mottled grey de-structured MUDSTONE. (BOLLIN MUDSTONE MEMBER)	4
					3.38	65.12		 3.350 - 3.355m white quartz band	
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 3.377mbgl at request of site engineer 4) Borehole backfilled with arisings on completion

Percussion Drilling Log

Project Name: THG HIVE, Airport City North		Client: Airport City Partnerships		Date: 07/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382188.38 N385794.19	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: Archway Dart	
Borehole Number WS102	Hole Type CP	Level 70.10m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 2

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.60	ES					Sparse grass over brown gravelly CLAY. Gravels are fine to coarse subangular to rounded of sandstone, limestone, brick and concrete. Frequent rootlets in upper 0.20m. (REWORKED TOPSOIL) ... at 0.40m occasional half brick fragments	
		1.00 - 1.45 1.00	D SPT	N=8 (4,2/2,2,2,2)	1.55	70.10		Yellowish brown mottled greyish brown sandy CLAY. (GLACIAL TILL) ... 1.55m tree roots	1
		2.00 - 2.45 2.00	D SPT	N=9 (1,2/1,3,2,3)	1.70	68.55		Reddish brown mottled grey and black CLAY. (GLACIAL TILL) ... 1.70 - 2.50m rare coal fragments ... 2.00m becoming gravelly. Gravels fine to medium angular of mudstone and siltstone	2
		3.00 - 3.45 3.00	D SPT	N=23 (3,3/4,5,7,7)				... 2.90m becoming friable	3
		4.00 - 4.45 4.00	D SPT	N=38 (5,6/8,8,10,12)	4.00	68.40		Reddish brown clayey silty de-structured MUDSTONE. (BOLLIN MUDSTONE MEMBER)	4
		5.00 - 5.42	D						5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 5.425mbgl at request of site engineer 4) Borehole backfilled with arisings on completion

Project Name: THG HIVE, Airport City North		Client: Airport City Partnerships		Date: 07/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382188.38 N385794.19	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: Archway Dart	
Borehole Number WS102	Hole Type CP	Level 70.10m AoD	Logged By LS	Scale 1:25	Page Number Sheet 2 of 2

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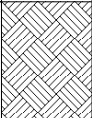
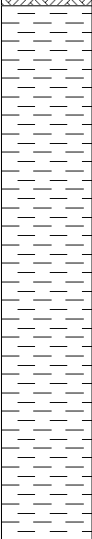
Remarks

1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 5.425mbgl at request of site engineer 4) Borehole backfilled with arisings on completion



Percussion Drilling Log

Project Name: THG H!VE, Airport City North		Client: Airport City Partnerships		Date: 06/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382130.18 N385745.13	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: Archway Dart	
Borehole Number WS103	Hole Type CP	Level 68.72m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 1

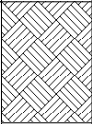
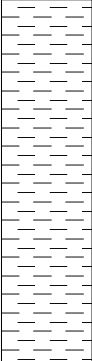
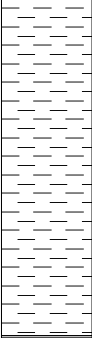
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		0.40	68.72		Brown slightly silty gravelly CLAY. Gravel is fine subangular to rounded. (TOPSOIL)	1
		1.00 - 1.45 1.00	D SPT	N=9 (1,3/2,2,2,3)				Reddish brown mottled grey silty CLAY. (GLACIAL TILL)	
		2.00 - 2.45 2.00	D SPT	N=5 (1,1/1,1,1,2)				...2.20m becoming very silty	2
		2.50 - 2.59 2.50	D SPT	50 (25 for 30mm/50 for 60mm)	2.50 2.52 2.59	68.32 66.12 66.10		Dark grey de-structured MUDSTONE. (BOLLIN MUDSTONE MEMBER) White and light grey GYPSUM. (BOLLIN MUDSTONE MEMBER)	3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 2.59mbgl at request of site engineer 4) Borehole backfilled with arisings on completion

Percussion Drilling Log

Project Name: THG HIVE, Airport City North		Client: Airport City Partnerships		Date: 07/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382161.97 N385678.59	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: Archway Dart	
Borehole Number WS104	Hole Type CP	Level 68.61m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 1

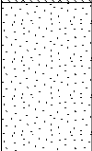
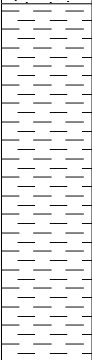
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.40	68.61		Dark brown slightly gravelly CLAY. Gravel is fine subangular of mixed lithology. Frequent roots and organic matter. (TOPSOIL)	
		1.00 - 1.45 1.00	D SPT	N=5 (1,2/1,2,1,1)				... 0.30m occasional subangular cobbles of limestone and sandstone Firm reddish brown mottled grey silty CLAY. (GLACIAL TILL)	1
		2.00 - 2.45 2.00	D SPT	N=6 (0,0/2,3,1,0)				... 1.00m becoming soft and slightly gravelly. Gravel is fine to medium subangular of siltstone	2
		3.00 - 3.30	D		2.70	68.21		Reddish brown mottled grey clayey friable de-structured MUDSTONE. (BOLLIN MUDSTONE MEMBER)	3
					3.30	65.91			4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 3.30mbgl at request of site engineer 4) Borehole backfilled with arisings on completion

Percussion Drilling Log

Project Name: THG HIVE, Airport City North		Client: Airport City Partnerships		Date: 06/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382135.52 N385634.80	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: Archway Dart	
Borehole Number WS105	Hole Type CP	Level 69.41m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 1

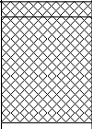
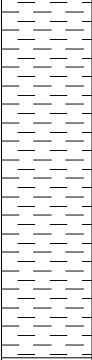
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.30	69.41		Brown slightly clayey slightly gravelly SAND. Gravel is fine subangular to subrounded of mudstone. Frequent roots and rootlets. (TOPSOIL)	1
					0.80	69.11		Reddish brown slightly clayey gravelly SAND. Gravel is fine to coarse angular to subangular of mudstone. (GLACIAL TILL)	
		1.00 - 1.45 1.00	D SPT	N=50 (4,5/50 for 235mm)				Firm to stiff reddish brown silty CLAY. Occasional rootlets. (GLACIAL TILL)	
		2.00 - 2.38 2.00	D SPT	N=50 (4,5/50 for 235mm)	2.00	68.61		Reddish brown silty de-structured MUDSTONE. Occasional rootlets. (BOLLIN MUDSTONE MEMBER)	2
					2.39	67.41			3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 2.385mbgl at request of site engineer 4) Borehole backfilled with arisings on completion

Percussion Drilling Log

Project Name: THG HIVE, Airport City North		Client: Airport City Partnerships		Date: 06/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382068.46 N385694.84	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: Archway Dart	
Borehole Number WS106	Hole Type CP	Level 69.66m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 1

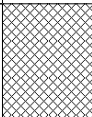
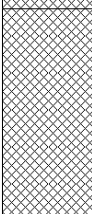
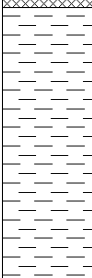
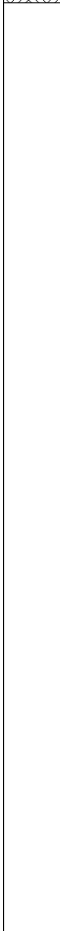
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.05	ES		0.05	69.66		Grey and dark grey fine to coarse angular GRAVEL of sandstone and limestone. (MADE GROUND)	1
		0.30						Brown slightly clayey very gravelly SAND. Gravel is fine to coarse angular to subrounded of limestone, sandstone and mudstone. (MADE GROUND)	
			D SPT	N=15 (5,2/3,4,4,4)	0.50	69.61		... 0.30m becoming yellowish brown with frequent coarse subangular limestone gravels. ... 0.40m geotextile netting	
		1.00 - 1.45						Firm grey mottled yellowish brown CLAY with rare fine subangular gravels. (GLACIAL TILL)	
		1.00						... 1.20m becoming grey mottled reddish brown	
			D SPT	N=50 (5,6/50 for 285mm)	1.60	69.26		Grey mottled reddish brown friable CLAY. (GLACIAL TILL)	2
		2.00 - 2.44			2.00	68.06		... 1.95m becoming reddish brown mottled grey	
		2.00						Grey mottled reddish brown de-structured MUDSTONE. (GLACIAL TILL)	
		2.44			2.44	67.66			3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks 1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 2.435mbgl at request of site engineer 4) Borehole backfilled with arisings on completion										
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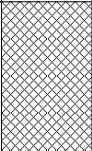
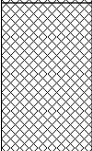
Percussion Drilling Log

Project Name: THG HIVE, Airport City North		Client: Airport City Partnerships		Date: 07/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382221.58 N385752.59	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: Archway Dart	
Borehole Number WS201	Hole Type CP	Level 70.40m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		1.00	ES		0.40	70.40		Brown gravelly slightly sandy CLAY. Gravel is fine to coarse angular to subangular of mudstone, tarmac and brick. Rare wood pieces. (MADE GROUND)	1
					1.10	70.00		Dark brown mottled black sandy CLAY. Rare plastic sheeting, organic matter and glass shards. (MADE GROUND)	
					2.00	69.30		Soft to firm reddish brown mottled grey CLAY. (GLACIAL TILL)	
									2

Percussion Drilling Log

Project Name: THG H!VE, Airport City North		Client: Airport City Partnerships		Date: 07/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382222.40 N385767.18	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: N/A	
Borehole Number WS202	Hole Type CP	Level 69.45m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 1

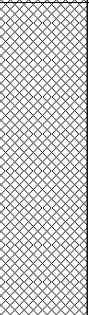
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.50	69.45		Grass over brown gravelly slightly sandy CLAY. Gravel is fine to coarse angular to subangular of mudstone, tarmac and brick. Rare wood pieces. (MADE GROUND)	1
					1.00	68.95		Dark brown and black slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded of brick, sandstone and mudstone. Frequent organic matter, occasional half brick fragments and plastic sheeting. (MADE GROUND) ... 0.80m becoming very ashy	
									2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 1.00mbgl due to boulder 4) Borehole backfilled with arisings on completion

Percussion Drilling Log

Project Name: THG HIVE, Airport City North		Client: Airport City Partnerships		Date: 07/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382219.09 N385763.97	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: Archway Dart	
Borehole Number WS202A	Hole Type CP	Level 69.28m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		1.40	ES		0.30	69.28		Brown gravelly slightly sandy CLAY. Gravel is fine to coarse angular to subangular of mudstone, tarmac and brick. Rare wood pieces. (MADE GROUND)	1
								Blackish brown sandy slightly gravelly CLAY. Gravel is fine subangular of brick, sandstone and mudstone. Occasional organic matter. (MADE GROUND)	
					1.35	68.98		Black slightly sandy fine to medium subangular GRAVEL of asphalt. (MADE GROUND)	
					1.40	67.93		Brownish black slightly sandy CLAY. (REWORKED CLAY)	
					1.55	67.88		Brown mottled grey CLAY. (GLACIAL TILL)	
								... 2.50m becoming reddish brown mottled grey	2
					3.00	67.73			3
									4
									5

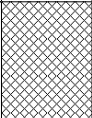
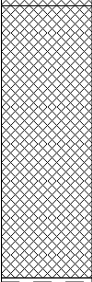
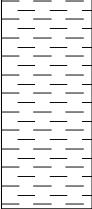
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 3.00mbgl at request of site engineer 4) Borehole backfilled with arisings on completion

Percussion Drilling Log

Project Name: THG HIVE, Airport City North		Client: Airport City Partnerships		Date: 07/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382207.82 N385767.07	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: Archway Dart	
Borehole Number WS203	Hole Type CP	Level 69.16m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 1

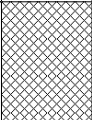
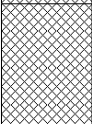
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		1.20	ES		0.40	69.16		Brown gravelly slightly sandy CLAY. Gravel is fine to coarse angular to subangular of mudstone, tarmac and brick. Rare wood pieces. (MADE GROUND)	1
								Blackish brown sandy slightly gravelly CLAY. Gravel is fine subangular of brick, sandstone and mudstone. Occasional organic matter. (MADE GROUND)	
					1.30	68.76		Reddish brown mottled grey CLAY. (GLACIAL TILL)	
					2.00	67.86			2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 2.00mbgl at request of site engineer 4) Borehole backfilled with arisings on completion

Percussion Drilling Log

Project Name: THG HIVE, Airport City North		Client: Airport City Partnerships		Date: 07/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382207.74 N385753.39	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: N/A	
Borehole Number WS204	Hole Type CP	Level 70.63m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 1

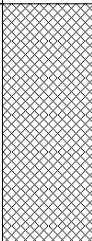
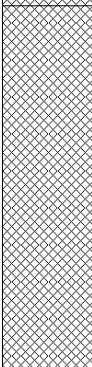
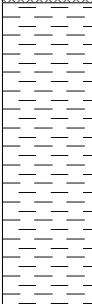
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.80	ES		0.40	70.63		Brown gravelly slightly sandy CLAY. Gravel is fine to coarse angular to subangular of mudstone, tarmac and brick. Rare wood pieces. (MADE GROUND)	1
					0.80	70.23		Blackish brown sandy slightly gravelly CLAY. Gravel is fine subangular of brick, sandstone and mudstone. Occasional organic matter. (MADE GROUND)	
									2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 0.80mbgl at request of site engineer 4) Borehole backfilled with arisings on completion

Percussion Drilling Log

Project Name: THG HIVE, Airport City North		Client: Airport City Partnerships		Date: 07/11/2018	
Location: Manchester Airport		Contractor: Taylor Drilling Services Ltd		Co-ords: E382211.29 N385756.82	
Project No. : 3647		Crew Name: I. Taylor		Drilling Equipment: Archway Dart	
Borehole Number WS204A	Hole Type CP	Level 69.10m AoD	Logged By LS	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
		Depth (m)	Type	Results						
		1.30	ES		0.80	69.10		Brown gravelly slightly sandy CLAY. Gravel is fine to coarse angular to subangular of mudstone, tarmac and brick. Rare wood pieces. (MADE GROUND)	1	
							... 0.70m half brick fragments 	Blackish brown sandy slightly gravelly CLAY. Gravel is fine subangular of brick, sandstone and mudstone. Occasional organic matter. (MADE GROUND)		
							... 1.90m becoming brown 	Reddish brown mottled grey CLAY. (GLACIAL TILL)	2	
							3	67.10		

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1) Hand dug inspection pit completed to 1.2mbgl 2) No groundwater encountered 3) Borehole terminated at 3.00mbgl at request of site engineer 4) Borehole backfilled with arisings on completion



APPENDIX C - CHEMICAL TESTING RESULTS



Final Test Report

Envirolab Job Number: 18/09271
Issue Number: 1

Date: 20-Nov-18

Client: ROCP LIMITED
Commercial Wharf 6 Commercial Street
Castlefield
Manchester
M15 4PZ

Project Manager: Elizabeth Stewart
Project Name: THG
Project Ref: 3647
Order No: 1367

Date Samples Received: 6-Nov-18
Date Instructions Received: 7-Nov-18
Date Analysis Completed: 19-Nov-18

Notes - Soil analysis

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

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Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

Superscript "M" indicates method accredited to MCERTS.

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Superscript # indicates method accredited to ISO 17025.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

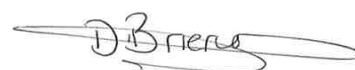
Please contact us if you need any further information.

Prepared by:



Melanie Marshall
Laboratory Coordinator

Approved by:



Danielle Brierley
Client Manager



Sample Details					Landfill Waste Acceptance Criteria Limits			
Lab Sample ID	Method	ISO17025	MCERTS	18/09271/1				
Client Sample Number					Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill	
Client Sample ID				BH101				
Depth to Top				1.2				
Depth to Bottom								
Date Sampled				01/11/2018				
Sample Type				Soil - ES				
Sample Matrix Code				6A				
Solid Waste Analysis								
pH (pH Units) _D	A-T-031	Y	Y	8.10		-	>6	-
ANC to pH 4 (mol/kg) _D	A-T-ANC	N	N	0.96		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg) _D	A-T-ANC	N	N	0.29		-	to be evaluated	to be evaluated
Loss on Ignition (%) _D	A-T-030	N	N	4.4		-	-	10
Total Organic Carbon (%) _D	A-T-032	Y	Y	1.2		3	5	6
PAH Sum of 17 (mg/kg) _A	A-T-019	N	N	4.21		100	-	-
Mineral Oil (mg/kg) _A	A-T-007	N	N	62		500	-	-
Sum of 7 PCBs (mg/kg) _A	A-T-004	N	N	<0.007		1	-	-
Sum of BTEX (mg/kg) _A	A-T-022	N	N	<0.01		6	-	-
Eluate Analysis				10:1	10:1	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
				mg/l	mg/kg			
Arsenic	A-T-025	N	N	0.004	0.040	0.5	2	25
Barium	A-T-025	N	N	0.042	0.420	20	100	300
Cadmium	A-T-025	N	N	<0.001	<0.01	0.04	1	5
Chromium	A-T-025	N	N	<0.001	<0.01	0.5	10	70
Copper	A-T-025	N	N	0.013	0.130	2	50	100
Mercury	A-T-025	N	N	<0.0005	<0.005	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.003	0.030	0.5	10	30
Nickel	A-T-025	N	N	0.002	0.020	0.4	10	40
Lead	A-T-025	N	N	0.018	0.180	0.5	10	50
Antimony	A-T-025	N	N	0.001	0.010	0.06	0.7	5
Selenium	A-T-025	N	N	0.001	0.010	0.1	0.5	7
Zinc	A-T-025	N	N	0.010	0.100	4	50	200
Chloride	A-T-026	N	N	4	39	800	15000	25000
Fluoride	A-T-026	N	N	0.6	6.0	10	150	500
Sulphate as SO ₄	A-T-026	N	N	12	119	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	54	540	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<0.2	<200	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.4				
Conductivity (µS/cm)	A-T-037			107				
Mass Sample (kg)				0.199				
Dry Matter (%)	A-T-044	N	N	87.9				
Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation								

Final Test Report

Envirolab Job Number: 18/09383
Issue Number: 1

Date: 22-Nov-18

Client: ROCP LIMITED
Commercial Wharf 6 Commercial Street
Castlefield
Manchester
M15 4PZ

Project Manager: Elizabeth Stewart
Project Name: THG
Project Ref: 3647
Order No: 1367

Date Samples Received: 8-Nov-18
Date Instructions Received: 9-Nov-18
Date Analysis Completed: 22-Nov-18

Notes - Soil analysis

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

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All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

Superscript "M" indicates method accredited to MCERTS.

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Superscript # indicates method accredited to ISO 17025.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

Prepared by:



Melanie Marshall
Laboratory Coordinator

Approved by:



Richard Wong
Client Manager



Sample Details								
Lab Sample ID	Method	ISO17025	MCERTS	18/09383/8	Landfill Waste Acceptance Criteria Limits			
Client Sample Number					Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill	
Client Sample ID				WS203				
Depth to Top				1.2				
Depth to Bottom								
Date Sampled				07/11/2018				
Sample Type				Soil - ES				
Sample Matrix Code				6				
Solid Waste Analysis								
pH (pH Units) _D	A-T-031	Y	Y	8.15	-	>6	-	
ANC to pH 4 (mol/kg) _D	A-T-ANC	N	N	0.32	-	to be evaluated	to be evaluated	
ANC to pH 6 (mol/kg) _D	A-T-ANC	N	N	0.06	-	to be evaluated	to be evaluated	
Loss on Ignition (%) _D	A-T-030	Y	Y	4.1	-	-	10	
Total Organic Carbon (%) _D	A-T-032	Y	Y	1.39	3	5	6	
PAH Sum of 17 (mg/kg) _A	A-T-019	N	N	3.97	100	-	-	
Mineral Oil (mg/kg) _A	A-T-007	N	N	<10	500	-	-	
Sum of 7 PCBs (mg/kg) _A	A-T-004	N	N	<0.007	1	-	-	
Sum of BTEX (mg/kg) _A	A-T-022	N	N	<0.01	6	-	-	
Eluate Analysis				10:1	10:1	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
				mg/l	mg/kg			
Arsenic	A-T-025	N	N	0.006	0.060	0.5	2	25
Barium	A-T-025	N	N	0.040	0.400	20	100	300
Cadmium	A-T-025	N	N	<0.001	<0.01	0.04	1	5
Chromium	A-T-025	N	N	<0.001	<0.01	0.5	10	70
Copper	A-T-025	N	N	0.006	0.060	2	50	100
Mercury	A-T-025	N	N	<0.0005	<0.005	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.009	0.090	0.5	10	30
Nickel	A-T-025	N	N	0.001	0.010	0.4	10	40
Lead	A-T-025	N	N	0.002	0.020	0.5	10	50
Antimony	A-T-025	N	N	0.004	0.040	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	<0.01	0.1	0.5	7
Zinc	A-T-025	N	N	0.002	0.020	4	50	200
Chloride	A-T-026	N	N	2	18	800	15000	25000
Fluoride	A-T-026	N	N	0.8	8.0	10	150	500
Sulphate as SO ₄	A-T-026	N	N	4	41	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	77	770	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<0.2	<200	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.9				
Conductivity (µS/cm)	A-T-037	N	N	153				
Mass Sample (kg)				0.208				
Dry Matter (%)	A-T-044	N	N	84.1				
Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation								

Final Test Report

Envirolab Job Number: 18/09148
Issue Number: 1

Date: 15-Nov-18

Client: ROCP LIMITED
Commercial Wharf 6 Commercial Street
Castlefield
Manchester
M15 4PZ

Project Manager: Elizabeth Stewart
Project Name: THG
Project Ref: 3647
Order No: 1367

Date Samples Received: 1-Nov-18
Date Instructions Received: 2-Nov-18
Date Analysis Completed: 15-Nov-18

Notes - Soil analysis

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

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All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

Superscript "M" indicates method accredited to MCERTS.

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Superscript # indicates method accredited to ISO 17025.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

Prepared by:



Elisha Hartley
Admin Assistant

Approved by:



Richard Wong
Client Manager



Sample Details					Landfill Waste Acceptance Criteria Limits			
Lab Sample ID	Method	ISO17025	MCERTS	18/09148/4	Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill	
Client Sample Number								
Client Sample ID				BH104				
Depth to Top				0.3				
Depth to Bottom								
Date Sampled				31/10/2018				
Sample Type				Soil - ES				
Sample Matrix Code				6A				
Solid Waste Analysis								
pH (pH Units) _D	A-T-031	Y	Y	7.97	-	>6	-	
ANC to pH 4 (mol/kg) _D	A-T-ANC	N	N	0.37	-	to be evaluated	to be evaluated	
ANC to pH 6 (mol/kg) _D	A-T-ANC	N	N	0.12	-	to be evaluated	to be evaluated	
Loss on Ignition (%) _D	A-T-030	N	N	3.7	-	-	10	
Total Organic Carbon (%) _D	A-T-032	Y	Y	1.06	3	5	6	
PAH Sum of 17 (mg/kg) _A	A-T-019	N	N	1.89	100	-	-	
Mineral Oil (mg/kg) _A	A-T-007	N	N	24	500	-	-	
Sum of 7 PCBs (mg/kg) _A	A-T-004	N	N	<0.007	1	-	-	
Sum of BTEX (mg/kg) _A	A-T-022	N	N	<0.01	6	-	-	
Eluate Analysis				10:1	10:1	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
				mg/l	mg/kg			
Arsenic	A-T-025	N	N	0.005	0.050	0.5	2	25
Barium	A-T-025	N	N	0.036	0.360	20	100	300
Cadmium	A-T-025	N	N	<0.001	<0.01	0.04	1	5
Chromium	A-T-025	N	N	0.003	0.030	0.5	10	70
Copper	A-T-025	N	N	0.009	0.090	2	50	100
Mercury	A-T-025	N	N	<0.0005	<0.005	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.003	0.030	0.5	10	30
Nickel	A-T-025	N	N	0.001	0.010	0.4	10	40
Lead	A-T-025	N	N	0.023	0.230	0.5	10	50
Antimony	A-T-025	N	N	0.002	0.020	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	<0.01	0.1	0.5	7
Zinc	A-T-025	N	N	0.013	0.130	4	50	200
Chloride	A-T-026	N	N	2	19	800	15000	25000
Fluoride	A-T-026	N	N	0.6	6.0	10	150	500
Sulphate as SO ₄	A-T-026	N	N	9	92	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	82	820	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<0.2	<200	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	8.0				
Conductivity (µS/cm)	A-T-037	N	N	165				
Mass Sample (kg)				0.204				
Dry Matter (%)	A-T-044	N	N	85.8				
Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation								