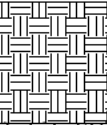
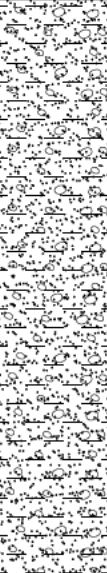
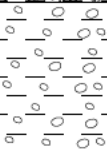


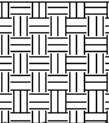
Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
2.40	HSV	62,60,64		(0.40) 0.40		Crop stubble over brown clayey gravelly TOPSOIL. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
				(1.90) 2.30		Brown gravelly clayey SAND with pockets of gravelly sandy clay. Gravel is sub-angular to rounded, fine to coarse of quartz, chert and sandstone. [GLACIOFLUVIAL DEPOSITS]		
				(0.50) 2.80		Firm brown mottled grey gravelly CLAY with pockets of reddish brown sand. Gravel is sub-angular to sub-rounded, fine to coarse of quartz, chert and chalk. [GLACIOFLUVIAL DEPOSITS]		
						Trial Pit Terminated @ 2.80m		

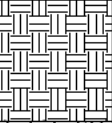
General Remarks:
 1) Excavation stable.
 2) Groundwater encountered - slow ingress at 2.40m.
 3) No evidence of contamination identified.
 4) Trial pit terminated at 2.80m.
 5) Excavation backfilled with arisings on completion.

Dimensions:

Plant Used:
Kubota KX080 (Maddock Geotechnical Support Ltd)

General Remarks: 1) Excavation stable. 2) No groundwater encountered. 3) No evidence of contamination identified. 4) Trial pit terminated at 2.50m. 5) Excavation backfilled with arisings on completion.	
Dimensions:	Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)

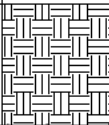
Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
0.20	ES1			(0.40)		Crop stubble over brown sandy gravelly TOPSO L. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
				0.40		Brown gravelly SAND with pockets of damp and clayey sand. Gravel is rounded to sub-rounded, fine to coarse of quartz and chert. [GLACIOFLUVIAL DEPOSITS]		
				(2.20)				
				2.60		Trial Pit Terminated @ 2.60m		

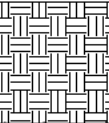
Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
1.00	B1			(0.40)		Crop stubble over brown sandy gravelly TOPSO L. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
				0.40				
				(1.80)		Brown to reddish brown very gravelly SAND with pockets of sandy gravelly clay. Gravel is rounded to sub-rounded, fine to coarse of quartz and chert. [GLACIOFLUVIAL DEPOSITS]		
				2.20		Trial Pit Terminated @ 2.20m		

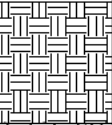
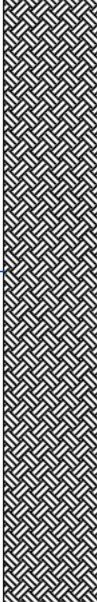
General Remarks:

- Excavation stable.
- No groundwater encountered.
- No evidence of contamination identified.
- Trial pit terminated at 2.20m.
- Excavation backfilled with arisings on completion.

Dimensions:	Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)
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Samples & In-Situ Testing			Strata Details						
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description		Water	Backfill
0.80	B1			(0.40)		Crop stubble over brown sandy gravelly TOPSO L. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.			
				0.40		Brown very gravelly SAND with pockets of clayey sand. Gravel is rounded to sub-rounded, fine to coarse of quartz and chert. [GLACIOFLUVIAL DEPOSITS]			
				(2.20)					
				2.60		Trial Pit Terminated @ 2.60m			

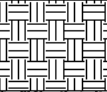
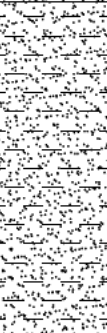
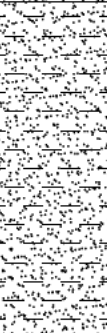
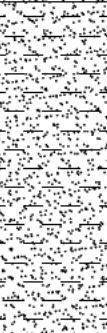
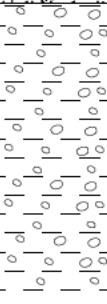
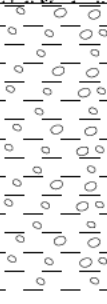
Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
0.80	D1			(0.40)		Crop stubble over brown sandy gravelly TOPSO L. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
				0.40				
				(2.20)		Brown very gravelly SAND with pockets of orange very gravelly sandy clay. Gravel is rounded to sub-angular, fine to coarse of quartz, chert, chalk lignite, sandstone and mudstone. [GLACIOFLUVIAL DEPOSITS]		
				2.60		Trial Pit Terminated @ 2.60m		

Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
				0.40		Crop stubble over brown sandy gravelly TOPSO L. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
				(2.00)		Brown very gravelly SAND with pockets of clayey gravelly sand and sandy gravelly clay. Gravel is rounded to sub-angular, fine to coarse of quartz, chert, chalk lignite, sandstone and mudstone. [GLACIOFLUVIAL DEPOSITS] 1.0 Becoming damp from 1.00m. Slow groundwater and running sands noted at 1.30m.		
				2.40		Trial Pit Terminated @ 2.40m		
						3.0 4.0		

General Remarks:
 1) Excavation stable.
 2) Groundwater encountered at 1.30m.
 3) No evidence of contamination identified.
 4) Trial pit terminated at 2.40m.
 5) Excavation backfilled with arisings on completion.

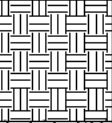
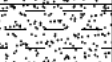
Dimensions:	Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)
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General Remarks: 1) Excavation stable. 2) No groundwater encountered. 3) No evidence of contamination identified. 4) Trial pit terminated at 2.60m. 5) Excavation backfilled with arisings on completion.	
Dimensions:	Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)

 GEOTECHNICAL ENGINEERS Delivering Innovative Solutions PJS Geotechnical Engineers Limited, Unit 4 Winking Hill Farm, Kingslton on Soar, Nottingham, NG11 0DP. Registered Number: 11882468 Tel: 0115 704 3950 Email: Enquiries@pjs-geo.co.uk			Site Name: Brascote Lane, Newbold Verdon				Client: Richborough Estates			Trial Pit ID: TP12			
Job Number: PJSG21-47		Date Logged: 23/02/2022		Logged By: NB		Checked By: AM		Coordinates: 444525, 303041		Ground Level: -		Scale: 1:25	
Samples & In-Situ Testing			Strata Details										
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description				Water	Backfill		
0.40	ES1			(0.30)		Crop stubble over brown sandy gravelly TOPSO L. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.							
				(0.20)		Brown clayey gravelly SAND. Gravel is rounded to sub-angular, fine to coarse of quartz, chert, lignite, sandstone. [GLACIOFLUVIAL DEPOSITS]							
				(0.20)		Firm orangeish brown mottled grey sandy CLAY with pockets of reddish brown sand. Occasional gravel of rounded, fine to medium of quartz. [GLACIOFLUVIAL DEPOSITS]							
0.90	HSV	55,60,60		(1.10)		Firm orangeish brown mottled grey sandy CLAY with pockets of reddish brown sand. Occasional gravel of rounded, fine to medium of quartz. [GLACIOFLUVIAL DEPOSITS]							
				(1.10)		Firm orangeish brown mottled grey sandy CLAY with pockets of reddish brown sand. Occasional gravel of rounded, fine to medium of quartz. [GLACIOFLUVIAL DEPOSITS]							
1.80	HSV	70,75,70		(1.00)		Firm grey mottled orangeish brown gravelly CLAY. Gravel is angular, fine to medium of chalk and mudstone. [OADBY MEMBER]							
				(1.00)		Firm grey mottled orangeish brown gravelly CLAY. Gravel is angular, fine to medium of chalk and mudstone. [OADBY MEMBER]							
						Trial Pit Terminated @ 2.60m							
General Remarks: 1) Excavation stable. 2) No groundwater encountered. 3) No evidence of contamination identified. 4) Trial pit terminated at 2.60m. 5) Excavation backfilled with arisings on completion.													
Dimensions:						Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)							

General Remarks: 1) Excavation stable. 2) No groundwater encountered. 3) No evidence of contamination identified. 4) Trial pit terminated at 2.60m. 5) Excavation backfilled with arisings on completion.	
Dimensions:	Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)

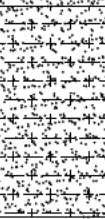
General Remarks: 1) Excavation unstable below 1.00m. 2) Groundwater encountered at 1.00m. 3) No evidence of contamination identified. 4) Trial pit terminated at 1.20m due to instability. 5) Excavation backfilled with arisings on completion.	
Dimensions:	Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)

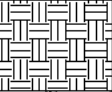
Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
0.20	ES1			(0.40)		Crop stubble over dark brown sandy gravelly TOPSO L. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
1.00	D1			(1.00)		Firm orangeish brown sandy slightly gravelly CLAY. Gravel is sub-angular to sub-rounded, fine to medium of quartz. [PROBABLE ALLUVIUM]		
				(0.20)		Light grey slightly clayey SAND. [GLACIOFLUVIAL DEPOSITS]		
				(0.60)		Reddish brown wet clayey sandy GRAVEL of sub-rounded to rounded, fine to coarse of quartz. Occasional rounded, cobbles of quartz. [GLACIOFLUVIAL DEPOSITS]		
				2.20		Groundwater ingress at 2.00m causing instability and side walls of excavation to collapse.		
						Trial Pit Terminated @ 2.20m		

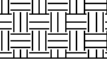
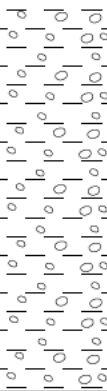
General Remarks:

- Excavation unstable below 2.00m.
- Groundwater encountered at 2.00m.
- No evidence of contamination identified.
- Trial pit terminated at 2.20m due to instability.
- Excavation backfilled with arisings on completion.

Dimensions:	Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)
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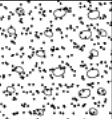
 GEOTECHNICAL ENGINEERS Delivering Innovative Solutions PJS Geotechnical Engineers Limited, Unit 4 Winking Hill Farm, Kingsdon on Soar, Nottingham, NG11 0DP. Registered Number: 11882468 Tel: 0115 704 3950 Email: Enquiries@pjs-geo.co.uk			Site Name: Brascote Lane, Newbold Verdon				Client: Richborough Estates			Trial Pit ID: TP17			
Job Number: PJSG21-47		Date Logged: 22/02/2022		Logged By: BH		Checked By: AM		Coordinates: 444877, 303088		Ground Level: -		Scale: 1:25	
Sheet 1 of 1													
Samples & In-Situ Testing			Strata Details										
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description					Water	Backfill	
0.10	ES1			(0.20) 0.20		Crop stubble over dark brown sandy gravelly TOPSO L. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.							
				(2.10) 2.30		Orangeish brown gravelly SAND. Gravel is rounded, fine to medium of chert and sandstone. Becoming mottled reddish brown with depth. Occasional rounded, cobble of chert. [GLACIOFLUVIAL DEPOSITS] 1.0 Becoming very gravelly from 1.20m. Becoming wet from 1.30m. 2.0							
				(0.70) 3.00		Firm reddish brown slightly sandy slightly silty CLAY. Occasional rounded, cobble of chert. [GLACIOFLUVIAL DEPOSITS] 3.0							
						Trial Pit Terminated @ 3.00m 4.0							
General Remarks: 1) Excavation stable. 2) Groundwater encountered at 1.30m. 3) No evidence of contamination identified. 4) Trial pit terminated at 3.00m. 5) Excavation backfilled with arisings on completion.													
Dimensions:						Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)							

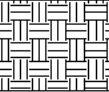
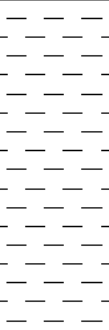
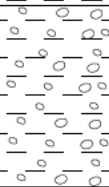
 GEOTECHNICAL ENGINEERS Delivering Innovative Solutions PJS Geotechnical Engineers Limited, Unit 4 Winking Hill Farm, Kingslton on Soar, Nottingham, NG11 0DP. Registered Number: 11882468 Tel: 0115 704 3950 Email: Enquiries@pjs-geo.co.uk			Site Name: Brascote Lane, Newbold Verdon				Client: Richborough Estates			Trial Pit ID: TP16			
Job Number: PJSG21-47		Date Logged: 22/02/2022		Logged By: BH		Checked By: AM		Coordinates: 444778, 303089		Ground Level: -		Scale: 1:25	
Samples & In-Situ Testing			Strata Details										
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description				Water	Backfill		
2.40 2.50	D1 B1			(0.30) 0.30		Crop stubble over dark brown sandy gravelly TOPSO L. Gravel is sub-rounded to rounded, fine to coarse of quartz.							
				(0.80) 1.10		Orangeish brown mottled grey gravelly clayey SAND with lenses of reddish brown sand. Gravel is rounded, fine to medium of quartz. Occasional rounded, cobbles of quartz. [PROBABLE ALLUVIUM] Becoming clayey from 0.60m.							
				(1.20) 2.30		Reddish brown clayey GRAVEL of rounded, fine to coarse quartz and chert. Pockets of gravelly clay. [GLACIOFLUVIAL DEPOSITS] Becoming sandy from 1.60m. Running sands and groundwater ingress at 2.00m.							
				(0.70) 3.00		Pale grey mottled orangeish brown very silty SAND. [GLACIOFLUVIAL DEPOSITS]							
						Trial Pit Terminated @ 3.00m							
General Remarks: 1) Excavation unstable between 2.00m - 2.20m. 2) Groundwater encountered at 2.00m. 3) No evidence of contamination identified. 4) Trial pit terminated at 3.00m. 5) Excavation backfilled with arisings on completion.													
Dimensions:						Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)							

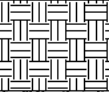
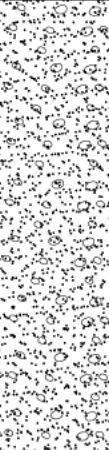
Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
2.70	B1			(0.20) 0.20		Crop stubble over brown slightly sandy slightly gravelly clayey TOPSO L. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
				(1.30) 1.50		Firm grey mottled brown gravelly CLAY with pockets of reddish brown sand. Gravel is sub-rounded to rounded, fine to coarse of quartz and chert.		
				(1.00) 2.50		Firm grey mottled brown slightly gravelly very sandy CLAY. Gravel is sub-angular, fine to medium of chalk. [OADBY MEMBER] Groundwater ingress at 1.70m when left open.		
				(0.40) 2.90		Grey and brown mottled orangeish brown very clayey sandy GRAVEL sub-angular, fine to medium of chalk. [OADBY MEMBER]		
						Trial Pit Terminated @ 2.90m		

General Remarks:
 1) Excavation unstable below 1.50m.
 2) Groundwater encountered at 1.70m.
 3) No evidence of contamination identified.
 4) Trial pit terminated at 2.90m due to instability.
 5) Excavation backfilled with arisings on completion.

Dimensions:	Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)
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Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
1.00	D1			(0.40)		Dark brown gravelly SAND. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
				0.40		Orangeish brown mottled reddish brown gravelly SAND with occasional clayey pockets. Gravel is sub-rounded to sub-angular, fine to coarse of chert. [GLACIOFLUVIAL DEPOSITS]		
				(2.50)		Instability from 1.20m. Becoming reddish brown and wet from 1.80m. Becoming very gravelly from 2.50m.		
				2.90		Trial Pit Terminated @ 2.90m		

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Job Number: PJSG21-47		Date Logged: 22/02/2022		Logged By: BH		Checked By: AM		Coordinates: 444771, 303005		Ground Level: -		Scale: 1:25	
Sheet 1 of 1													
Samples & In-Situ Testing			Strata Details										
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description					Water	Backfill	
0.50	ES1			(0.30) 0 30		Crop stubble over dark brown clayey gravelly TOPSO L. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.							
				(1.10) 1 10		Firm to stiff orangeish brown CLAY with pockets of reddish brown sand.							
				1.40									
				(0.60) 2 00		Firm light grey gravelly CLAY with pockets of reddish brown sand. Gravel is rounded, fine to medium of chalk. (PROBABLE OADBY MEMBER - POSSIBLE GLACIOFLUVIAL DEPOSIT) Running sand and slight groundwater ingress at 1.60m.							
				(0.60) 2 60		Stiff dark grey gravelly CLAY. Gravel is rounded, fine to medium of chalk. [OADBY MEMBER]							
						Trial Pit Terminated @ 2.60m							
General Remarks: 1) Excavation stable. 2) No groundwater encountered. 3) No evidence of contamination identified. 4) Trial pit terminated at 2.60m. 5) Excavation backfilled with arisings on completion.													
Dimensions:						Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)							

Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
2.30	D1			(0.30) 0.30		Crop stubble over dark brown sandy gravelly TOPSO L. Gravel is rounded, fine to coarse of chert.		
				(1.50) 1.80		Orangeish brown gravelly SAND. Gravel is rounded, fine to coarse of chert. [GLACIOFLUVIAL DEPOSITS]		
				(0.40) 2.20		Orangeish brown mottled grey sandy GRAVEL of rounded, medium to coarse of chert. Unstable below 1.80m. [GLACIOFLUVIAL DEPOSITS] Becoming damp and slightly silty from 2.00m.		
				(0.30) 2.50		Brown slightly gravelly slightly silty SAND. [GLACIOFLUVIAL DEPOSITS]		
						Trial Pit Terminated @ 2.50m		

Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
				(0.30) 0.30		Dark brown slightly gravelly SAND.		
				(2.10) 2.40		Firm orange mottled grey and red slightly sandy gravelly CLAY. Pockets of reddish brown clayey sand. [GLACIOFLUVIAL DEPOSITS]		
				(0.60) 3.00		Orangeish brown silty SAND. Becoming unstable below 2.50m. [GLACIOFLUVIAL DEPOSITS]		
				(0.20) 3.20		Orangeish brown sandy GRAVEL. Strata is wet. [GLACIOFLUVIAL DEPOSITS]		
						Trial Pit Terminated @ 3.20m		

General Remarks:

- Excavation stable.
- Groundwater encountered at 3.00m.
- No evidence of contamination identified.
- Trial pit terminated at 3.20m.
- Excavation backfilled with arisings on completion.

Dimensions:

Plant Used:
Kubota KX080 (Maddock Geotechnical Support Ltd)

General Remarks: 1) Excavation stable. 2) No groundwater encountered. 3) No evidence of contamination identified. 4) Trial pit terminated at 2.50m. 5) Excavation backfilled with arisings on completion.	
Dimensions:	Plant Used: Kubota KX080 (Maddock Geotechnical Support Ltd)

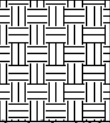
General Remarks: 1) Borehole stable. 2) No groundwater encountered during drilling. Groundwater noted at base after completion. 3) No evidence of contamination identified. 4) Borehole terminated at 3 00m due to SPT refusal. 5) Borehole installed with gas and groundwater monitoring ancillaries.		Plant Used: Premier Compact 110 (Dynamic Sampling Ltd)
Dimensions:		

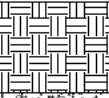
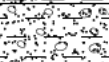
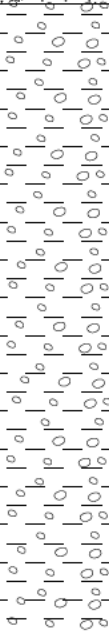
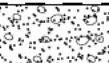
Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
0.20	ES1			(0.30) 0.30		Stubble over reworked agricultural clayey gravelly TOPSOIL. Gravel is rounded, fine to coarse quartz and fragments of rare brick.		
				(0.70) 1.00		Firm brown sandy gravelly CLAY. Gravel is angular to rounded, fine to coarse of quartz and chalk. [PROBABLE ALLUVIUM] Becoming grey mottled brown at 0.80m. Black organic staining at 0.90m.		
1.20	SPT	N = 11 (1,1/2,3,3,3)		(1.10) 2.10		Firm grey mottled brown very gravelly CLAY. Gravel is angular, fine to medium of quartz, chalk and sandstone. [GLACIOFLUVIAL DEPOSITS] Becoming sandy at 1.40m.		
2.00	SPT	N = 18 (3,3/4,4,5,5)		(1.90) 4.00		Stiff dark grey very gravelly CLAY. Gravel is angular to sub-angular, fine to medium of mudstone, chalk and quartz. [OADBY MEMBER] Becoming silty at 3.60m.		
3.00	SPT	N = 23 (3,3/5,5,6,7)		4.00		Borehole Terminated @ 4.00m		
4.00	SPT	N = 27 (5,5/6,6,6,9)						

General Remarks:

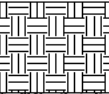
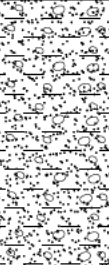
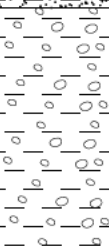
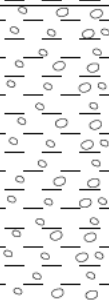
- 1) Borehole stable.
- 2) No groundwater encountered during drilling. Groundwater noted at base of borehole after completion.
- 3) No evidence of contamination identified.
- 4) Borehole terminated at 4.00m after reaching target depth.
- 5) Borehole installed with gas and groundwater monitoring ancillaries.

Dimensions:	Plant Used: Premier Compact 110 (Dynamic Sampling Ltd)
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 GEOTECHNICAL ENGINEERS Delivering Innovative Solutions PJS Geotechnical Engineers Limited, Unit 4 Winking Hill Farm, Kingsdon on Soar, Nottingham, NG11 0DP. Registered Number: 11882468 Tel: 0115 704 3950 Email: Enquiries@pjs-geo.co.uk			Site Name: Brascote Lane, Newbold Verdon				Client: Richborough Estates			Trial Pit ID: WS03			
Job Number: PJSG21-47		Date Logged: 21/02/2022		Logged By: BH		Checked By: AM		Coordinates: 444439, 303190		Ground Level: -		Scale: 1:25	
Samples & In-Situ Testing			Strata Details										
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description				Water	Backfill		
1.20	SPT	N = 21 (3,4/4,5,6,6)		(0.40)		Crop stubble over dark brown sandy gravelly TOPSO L. Gravel is rounded, fine to coarse of quartz.							
				(0.70)		Brown slightly gravelly SAND. [GLACIOFLUVIAL DEPOSITS]							
				1.10		Medium dense reddish brown gravelly SAND. Gravel is rounded, fine to medium of chert and chalk. Pockets of reddish brown clayey sand. Very gravelly between 1.10m - 1.90m. [GLACIOFLUVIAL DEPOSITS]							
2.00	SPT	N = 14 (4,4/5,3,3,3)				2.0							
3.00	SPT	N = 8 (2,2/2,2,2,2)		(2.90)		2.0 Becoming wet from 2.50m.							
						3.0 Becoming loose at 3.00m.							
4.00	SPT	N = 15 (2,2/4,4,3,4)		4.00		4.0 Becoming medium dense at 4.00m.							
						5.0 Borehole Terminated @ 4.00m							
General Remarks: 1) Borehole stable. 2) Groundwater encountered at 2.50m, receded to 3.00m below ground level after completion. 3) No evidence of contamination identified. 4) Borehole terminated at 4.00m after reaching target depth. 5) Borehole backfilled with arisings upon completion.													
Dimensions:						Plant Used: Premier Compact 110 (Dynamic Sampling Ltd)							

 GEOTECHNICAL ENGINEERS Delivering Innovative Solutions PJS Geotechnical Engineers Limited, Unit 4 Winking Hill Farm, Kingsdon on Soar, Nottingham, NG11 0DP. Registered Number: 11882468 Tel: 0115 704 3950 Email: Enquiries@pjs-geo.co.uk			Site Name: Brascote Lane, Newbold Verdon				Client: Richborough Estates			Trial Pit ID: WS04			
Job Number: PJSG21-47		Date Logged: 21/02/2022		Logged By: NB		Checked By: AM		Coordinates: 444526, 303180		Ground Level: -		Scale: 1:25	
Sheet 1 of 1													
Samples & In-Situ Testing			Strata Details										
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description					Water	Backfill	
1.20	SPT	N = 9 (2,2/3,2,2,2)		(0.30) 0.30		Crop stubble over brown clayey gravelly TOPSOIL. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.							
				(1.20) 1.50		Firm orangeish brown slightly sandy gravelly CLAY with pockets of clayey gravelly sand. Gravel is rounded to sub-rounded, fine to coarse of quartz. [ALLUVIUM] Becoming sandy at 1.00m.							
2.00	SPT	N = 21 (3,3/4,5,6,6)		(0.20) 1.70		Soft grey mottled brown sandy CLAY. [ALLUVIUM]							
				(3.50) 3.80		Stiff grey mottled brown gravelly CLAY. Gravel is angular to sub-angular, fine to coarse of chalk, quartz and sandstone. [GLACIOFLUVIAL DEPOSITS] Becoming dark grey at 2.40m.							
3.00	SPT	N = 23 (4,4/4,6,6,7)		(0.20) 4.00		Grey medium to coarse gravelly SAND. Gravel is angular, fine of chalk. [GLACIOFLUVIAL DEPOSITS]							
						Borehole Terminated @ 4.00m							
4.00	SPT	N = 22 (5,4/5,5,6,6)											
General Remarks: 1) Borehole stable. 2) No groundwater encountered during drilling. Groundwater rose to 0.30m below ground level after completion. 3) No evidence of contamination identified. 4) Borehole terminated at 4.00m after reaching target depth. 5) Borehole backfilled with arisings upon completion.													
Dimensions:						Plant Used: Premier Compact 110 (Dynamic Sampling Ltd)							

General Remarks: 1) Borehole stable. 2) No groundwater encountered during drilling. Groundwater rose to 0.30m below ground level after completion. 3) No evidence of contamination identified. 4) Borehole terminated at 4.00m after reaching target depth. 5) Borehole backfilled with arisings upon completion.		Plant Used: Premier Compact 110 (Dynamic Sampling Ltd)
Dimensions:		

Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
0.20	ES1			(0.30) 0 30		Crop stubble over brown clayey gravelly TOPSOIL. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
1.20	SPT	N = 14 (1,2/4,4,3,3)		(0.90) 1 20		Firm orangeish brown occasionally mottled grey sandy gravelly CLAY. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
2.00	SPT	N = 26 (3,3/4,6,8,8)		(0.80) 2 00		Firm brown mottled grey gravelly CLAY. Gravel is sub-angular to sub-rounded, fine to coarse of quartz and chalk. Pocket of orangeish brown fine to coarse SAND between 1.30m - 1.40m. [OADBY MEMBER]		
3.00	SPT	N = 50 (6,8/12,12,15,11/75mm)		(1.00) 3 00		Stiff brown mottled grey very gravelly CLAY. Gravel is sub-angular to sub rounded, fine to medium of chalk, quartz, sandstone and rare lignite. [OADBY MEMBER] Becoming dark grey with fine gravel from 2.40m.		
						Borehole Terminated @ 3.00m		

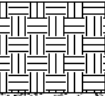
General Remarks:

- 1) Borehole stable.
- 2) No groundwater encountered during drilling. Groundwater noted at base of borehole after completion.
- 3) No evidence of contamination identified.
- 4) Borehole terminated at 3.00m due to SPT refusal.
- 5) Borehole installed with gas and groundwater monitoring ancillaries.

Dimensions:

Plant Used:	Premier Compact 110 (Dynamic Sampling Ltd)
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 GEOTECHNICAL ENGINEERS Delivering Innovative Solutions PJS Geotechnical Engineers Limited, Unit 4 Winking Hill Farm, Kingsdon on Soar, Nottingham, NG11 0DP. Registered Number: 11882468 Tel: 0115 704 3950 Email: Enquiries@pjs-geo.co.uk			Site Name: Brascote Lane, Newbold Verdon				Client: Richborough Estates			Trial Pit ID: WS07	
			Job Number:	Date Logged:	Logged By:	Checked By:	Coordinates:	Ground Level:	Scale:	Sheet 1 of 1	
			PJSG21-47	21/02/2022	NB	AM	444668, 303130	-	1:25		

Samples & In-Situ Testing			Strata Details						
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill	
1.20	SPT	N = 8 (2,2/2,2,2,2)		(0.30)		Crop stubble over brown clayey gravelly TOPSOIL. Gravel is rounded, fine to coarse of quartz.			
				0.30		Reddish brown slightly clayey slightly gravelly SAND. Gravel is rounded, fine to medium of chert. [GLACIOFLUVIAL DEPOSITS]			
2.00	SPT	N = 14 (2,2/3,3,4,4)		(3.70)		Becoming wet at 2.00m. Low recovery between 2.00m - 3.00m.			
3.00	SPT	N = 20 (2,2/3,5,5,7)				Becoming very gravelly from 3.00m.			
4.00	SPT	N = 14 (4,3/3,3,4,4)		4.00		Borehole Terminated @ 4.00m			

General Remarks:
1) Borehole stable.
2) Groundwater encountered at 2.00m during drilling rising to 1.00m below ground level after completion.
3) No evidence of contamination identified.
4) Borehole terminated at 4.00m after reaching target depth.
5) Borehole backfilled with arisings upon completion.

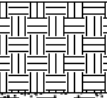
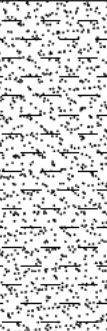
Dimensions:

Plant Used:
Premier Compact 110 (Dynamic Sampling Ltd)

General Remarks: 1) Borehole stable. 2) No groundwater encountered. 3) No evidence of contamination identified. 4) Borehole terminated at 4 00m after reaching target depth. 5) Borehole installed with gas and groundwater monitoring ancillaries.		Plant Used: Premier Compact 110 (Dynamic Sampling Ltd)
Dimensions:		

Dimensions:	Plant Used: Premier Compact 110 (Dynamic Sampling Ltd)
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 GEOTECHNICAL ENGINEERS Delivering Innovative Solutions PJS Geotechnical Engineers Limited, Unit 4 Winking Hill Farm, Kingsdon on Soar, Nottingham, NG11 0DP. Registered Number: 11882468 Tel: 0115 704 3950 Email: Enquiries@pjs-geo.co.uk			Site Name: Brascote Lane, Newbold Verdon				Client: Richborough Estates			Trial Pit ID: WS10	
			Job Number:	Date Logged:	Logged By:	Checked By:	Coordinates:	Ground Level:	Scale:	Sheet 1 of 1	
			PJSG21-47	21/02/2022	BH	AM	444484, 303045	-	1:25		

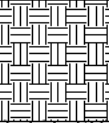
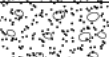
Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
1.00	SPT	N = 18 (4,4/5,4,4,5)		(0.30) 0 30		Crop stubble over brown clayey gravelly TOPSOIL. Gravel is rounded, fine to coarse of quartz.		
				(0.60) 0 90		Brown gravelly slightly clayey SAND. Gravel is rounded, fine to medium of chert. [GLACIOFLUVIAL DEPOSITS]		
2.00	SPT	N = 20 (4,4/4,4,6,6)		(1.60) 2 50		Medium dense orangeish brown slightly gravelly SAND. Gravel is rounded, fine to medium of chert. [GLACIOFLUVIAL DEPOSITS] Becoming wet from 1.50m.		
				(0.40) 2 90		Orangeish brown sandy very gravelly CLAY. Gravel is rounded, fine to medium of chert. [GLACIOFLUVIAL DEPOSITS]		
3.00	SPT	N = 18 (3,4/4,4,4,6)		(1.10) 4 00		Medium dense reddish brown slightly clayey SAND. [GLACIOFLUVIAL DEPOSITS]		
4.00	SPT	N = 8 (1,2/2,2,2,2)				Becoming loose at 4.00m.		
						Borehole Terminated @ 4.00m		

General Remarks:
1) Borehole stable.
2) Groundwater encountered at 1.50m.
3) No evidence of contamination identified.
4) Borehole terminated at 4 00m after reaching target depth.
5) Borehole backfilled with arisings upon completion.

Dimensions:

Plant Used:
Premier Compact 110 (Dynamic Sampling Ltd)

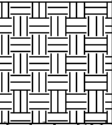
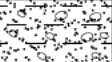
General Remarks: 1) Borehole cased between to 2.00m due to unstable sand stratas. 2) Groundwater encountered at 2.10m during drilling rising to 1.00m below ground level after completion. 3) No evidence of contamination identified. 4) Borehole terminated at 4.00m after reaching target depth. 5) Borehole installed with gas and groundwater monitoring ancillaries.		Plant Used: Premier Compact 110 (Dynamic Sampling Ltd)
Dimensions:		

 GEOTECHNICAL ENGINEERS Delivering Innovative Solutions PJS Geotechnical Engineers Limited, Unit 4 Winking Hill Farm, Kingsdon on Soar, Nottingham, NG11 0DP. Registered Number: 11882468 Tel: 0115 704 3950 Email: Enquiries@pjs-geo.co.uk			Site Name: Brascote Lane, Newbold Verdon				Client: Richborough Estates			Trial Pit ID: WS12			
Job Number: PJSG21-47		Date Logged: 21/02/2022		Logged By: NB		Checked By: AM		Coordinates: 444776, 303127		Ground Level: -		Scale: 1:25	
Sheet 1 of 1													
Samples & In-Situ Testing			Strata Details										
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description					Water	Backfill	
0.90 1.00	D1 SPT	N = 7 (1,2/2,1,2,2)		(0.40) 0.40		Crop stubble over dark brown clayey gravelly TOPSO L. Gravel is rounded, fine to coarse of quartz.							
				(0.70) 1.10		Firm light brown mottled orange and grey slightly sandy gravelly CLAY. Gravel is rounded, fine to medium of quartz. Occasionally very sandy. (PROBABLY ALLUVIUM)					▼		
2.00	SPT	N = 9 (1,1/3,2,2,2)		1.10		Becoming wet from 1.00m.					▼		
				(2.90) 4.00		Loose reddish brown slightly gravelly SAND. [GLACIOFLUVIAL DEPOSITS] Pockets of sandy clay at 1.20m. Pockets of sandy clay at 1.80m. Low recovery between 2.00m - 4.00m.							
3.00	SPT	N = 4 (1,0/1,1,1,1)		3.00		Borehole Terminated @ 4.00m							
				4.00									
4.00	SPT	N = 15 (1,1/2,4,4,3)		4.00									
General Remarks: 1) Borehole stable. 2) Groundwater encountered during drilling at 1.00m, rising to 0.50m below ground level after completion. 3) No evidence of contamination identified. 4) Borehole terminated at 4.00m after reaching target depth. 5) Borehole installed with gas and groundwater monitoring ancillaries.													
Dimensions:						Plant Used: Premier Compact 110 (Dynamic Sampling Ltd)							

Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
0.90 1.00	D1 SPT	N = 10 (1,1/2,2,3,3)		(0.40)		Crop stubble over brown slightly clayey sandy gravelly TOPSO L. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
				(0.40)		Orangeish brown very gravelly clayey SAND. Gravel is angular to sub-rounded, fine to coarse of sandstone, quartz, chert and lignite. [GLACIOFLUVIAL DEPOSITS]		
2.00	SPT	N = 11 (1,3/3,2,3,3)		(2.70)		Firm reddish brown very gravelly very sandy CLAY. Gravel is angular to sub-rounded, fine to coarse of sandstone, quartz, chert and lignite with pockets of clayey sand. [GLACIOFLUVIAL DEPOSITS] Becoming mottled orange and grey.		
				(2.70)		Firm reddish brown very gravelly very sandy CLAY. Gravel is angular to sub-rounded, fine to coarse of sandstone, quartz, chert and lignite with pockets of clayey sand. [GLACIOFLUVIAL DEPOSITS] Becoming mottled orange and grey.		
3.00	SPT	N = 14 (5,4/4,3,3,4)		(3.50)		Medium dense reddish brown very gravelly clayey SAND. Gravel is angular to sub-rounded, fine to coarse of sandstone, quartz, chert and lignite. [GLACIOFLUVIAL DEPOSITS] Becoming wet from 2.50m. Low recovery between 2.60m - 3.50m.		
				(3.50)		Medium dense reddish brown very gravelly clayey SAND. Gravel is angular to sub-rounded, fine to coarse of sandstone, quartz, chert and lignite. [GLACIOFLUVIAL DEPOSITS] Becoming wet from 2.50m. Low recovery between 2.60m - 3.50m.		
4.00	SPT	N = 11 (1,0/1,3,4,4)		(4.00)		Borehole Terminated @ 4.00m		
				(4.00)		Borehole Terminated @ 4.00m		

General Remarks: 1) Borehole stable. 2) Groundwater encountered during drilling at 2.10m rising to 0.60m below ground level after completion. 3) No evidence of contamination identified. 4) Borehole terminated at 4 00m after reaching target depth. 5) Borehole backfilled with arisings upon completion.	
Dimensions:	Plant Used: Premier Compact 110 (Dynamic Sampling Ltd)

 GEOTECHNICAL ENGINEERS Delivering Innovative Solutions PJS Geotechnical Engineers Limited, Unit 4 Winking Hill Farm, Kingsdon on Soar, Nottingham, NG11 0DP. Registered Number: 11882468 Tel: 0115 704 3950 Email: Enquiries@pjs-geo.co.uk			Site Name: Brascote Lane, Newbold Verdon				Client: Richborough Estates			Trial Pit ID: WS15	
			Job Number:	Date Logged:	Logged By:	Checked By:	Coordinates:	Ground Level:	Scale:	Sheet 1 of 1	
			PJSG21-47	21/02/2022	NB	AM	444819, 303087	-	1:25		

Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
1.00	SPT	N = 9 (2,3/3,2,2,2)		(0.40)		Crop stubble over brown clayey gravelly TOPSOIL. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
				0.40		Loose orangeish brown gravelly very clayey SAND. Gravel is angular to sub-rounded, fine to coarse of sandstone, quartz, chert and lignite. [GLACIOFLUVIAL DEPOSITS]		
2.00	SPT	N = 7 (0,1/1,2,2,2)		(3.60)		1.0 Pockets of sandy CLAY between 1.10m - 2.10m.		
						2.0 Becoming slightly silty from 2.10m. Becoming wet at 2.20m.		
3.00	SPT	N = 6 (1,1/1,1,2,2)		(3.60)		3.0 Low recovery from 3.00m.		
						4.0 Becoming medium dense at 4.00m.		
4.00	SPT	N = 13 (1,2/3,3,3,4)		4.00		4.0 Borehole Terminated @ 4.00m		
						5.0		

General Remarks:

- 1) Borehole stable.
- 2) No groundwater encountered during drilling. Groundwater rose to 0.50m below ground level after completion.
- 3) No evidence of contamination identified.
- 4) Borehole terminated at 4.00m after reaching target depth.
- 5) Borehole backfilled with arisings upon completion.

Dimensions:

Plant Used:
Premier Compact 110 (Dynamic Sampling Ltd)



GEOTECHNICAL ENGINEERS
 Delivering Innovative Solutions

PJS Geotechnical Engineers Limited, Unit 4 Winking Hill Farm,
 Kingsdon on Soar, Nottingham, NG11 0DP.
 Registered Number: 11882468 Tel: 0115 704 3950 Email: Enquiries@pjs-geo.co.uk

Site Name:
 Brascote Lane, Newbold Verdon

Client:
 Richborough Estates

Trial Pit ID:
WS16

Sheet 1 of 1

Job Number:
 PJSG21-47

Date Logged:
 21/02/2022

Logged By:
 NB

Checked By:
 AM

Coordinates:
 444770, 303039

Ground Level:
 -

Scale:
 1:25

General Remarks:
 1) Borehole stable.
 2) Groundwater encountered at 2.90m.
 3) No evidence of contamination identified.
 4) Borehole terminated at 4.00m after reaching target depth.
 5) Borehole backfilled with arisings upon completion.

Dimensions:

Plant Used:
 Premier Compact 110 (Dynamic Sampling Ltd)

General Remarks: 1) Borehole stable. 2) No groundwater encountered. 3) No evidence of contamination identified. 4) Borehole terminated at 4 00m after reaching target depth. 5) Borehole backfilled with arisings upon completion.		Plant Used: Premier Compact 110 (Dynamic Sampling Ltd)
Dimensions:		

Samples & In-Situ Testing			Strata Details					
Depths	Type	Test Results	Reduced Level	Depth (Thickness)	Legend	Strata Description	Water	Backfill
1.00	SPT	N = 9 (1,2/2,1,3,3)		(0.20) 0.20		Crop stubble over dark brown sandy clayey gravelly TOPSOIL. Gravel is sub-rounded to sub-angular, fine to coarse of quartz.		
				(0.90) 1.10		Firm orangeish brown slightly gravelly CLAY. Gravel is rounded, fine to medium of chert. [PROBABLE ALLUVIUM]		
				(2.90) 4.00		Firm reddish brown slightly sandy slightly gravelly CLAY. Gravel is sub-rounded to sub-angular, fine to coarse of chert, lignite, sandstone, mudstone and quartz. [GLACIOFLUVIAL DEPOSITS] Becoming sandy at 1.50m. Becoming gravelly at 2.50m. Becoming very soft at 3.00m with low recovery between 3.00m - 4.00m.		
2.00	SPT	N = 10 (2,3/2,2,3,3)						
3.00	SPT	N = 2 (1,0/1,0,0,1)						
4.00	SPT	N = 6 (1,1/1,2,2,1)						
						Borehole Terminated @ 4.00m		

General Remarks:

- 1) Borehole stable.
- 2) No groundwater encountered.
- 3) No evidence of contamination identified.
- 4) Borehole terminated at 4.00m due to reaching target depth.
- 5) Borehole installed with gas and groundwater monitoring ancillaries.

Dimensions:

Plant Used:
Premier Compact 110 (Dynamic Sampling Ltd)

Appendix C: SPT Trip Hammer Calibration Certificates





Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Dynamic sampling
Unit 8
Victory parkway
Victory rd
Derby
DE24 8ZF

Hammer Ref: 110..45
Test Date: 03/07/2021
Report Date: 07/07/2021
File Name: 110..45.spt
Test Operator: AP

Instrumented Rod Data

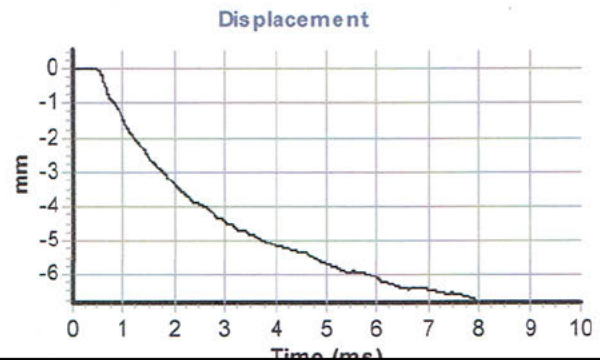
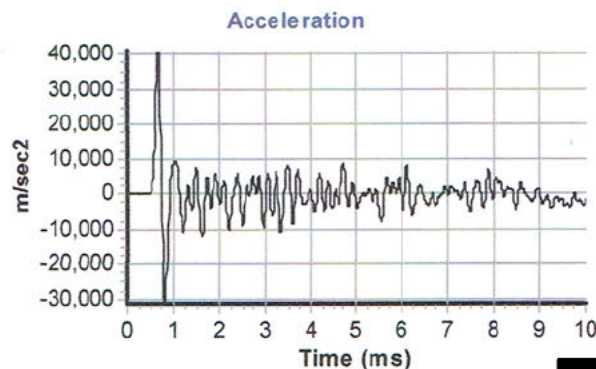
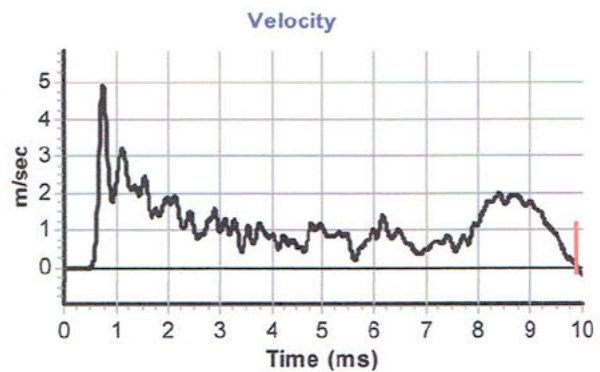
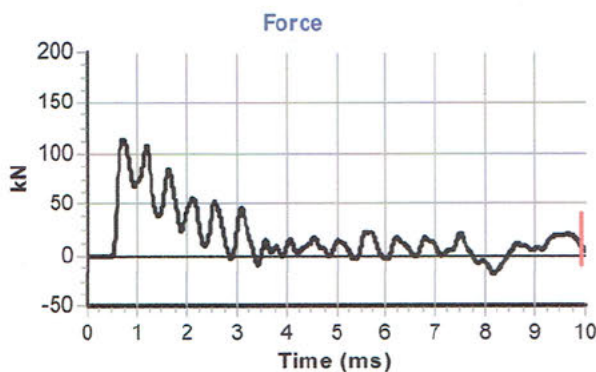
Diameter d_r (mm): 54
Wall Thickness t_r (mm): 6.0
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 62901
Accelerometer No.2: 62902

Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
String Length L (m): 15.0

Comments / Location

Hammer tested at Dynamic samplings yard.



Calculations

Area of Rod A (mm²): 905
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 342

Energy Ratio E_r (%): **72**

Signed: A.parker

Title: Associate Director

The recommended calibration interval is 12 months



Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Dynamic sampling
Unit 8
Victory parkway
Victory rd
Derby
DE24 8ZF

Hammer Ref: 110..49
Test Date: 19/05/2021
Report Date: 19/05/2021
File Name: 110..49.spt
Test Operator: AP

Instrumented Rod Data

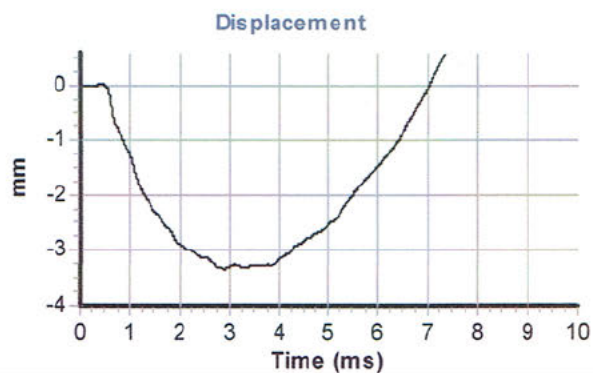
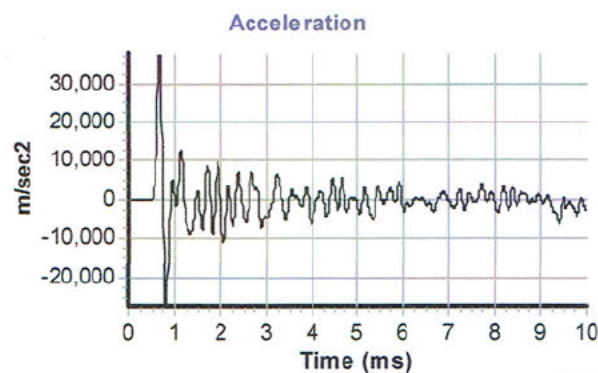
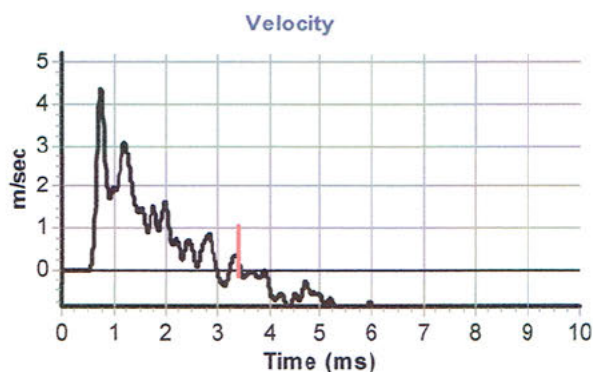
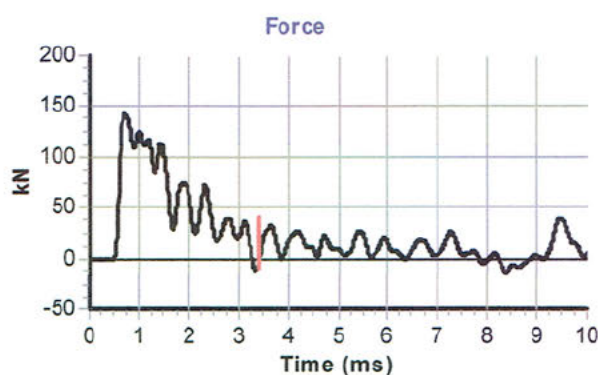
Diameter d_r (mm): 54
Wall Thickness t_r (mm): 6.5
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 62901
Accelerometer No.2: 62902

Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
String Length L (m): 15.0

Comments / Location

Hammer tested at Dynamic samplings yard.



Calculations

Area of Rod A (mm^2): 970
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 326

Energy Ratio E_r (%):

69

Title: Associate Director

The recommended calibration interval is 12 months



Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Dynamic sampling
Unit 8
Victory parkway
Victory rd
Derby
DE24 8ZF

Hammer Ref: 110.54
Test Date: 21/05/2021
Report Date: 21/05/2021
File Name: 110.54.spt
Test Operator: AP

Instrumented Rod Data

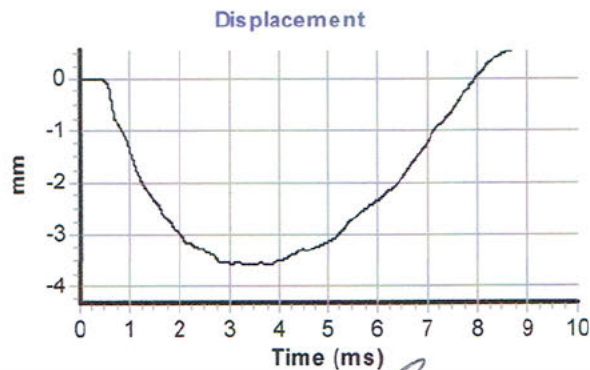
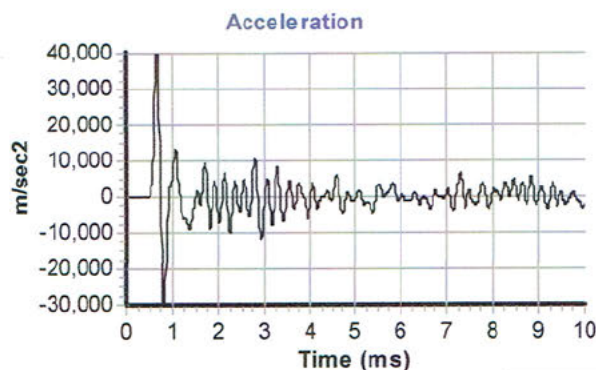
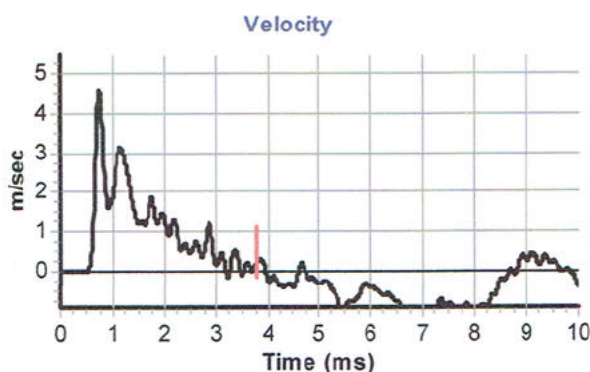
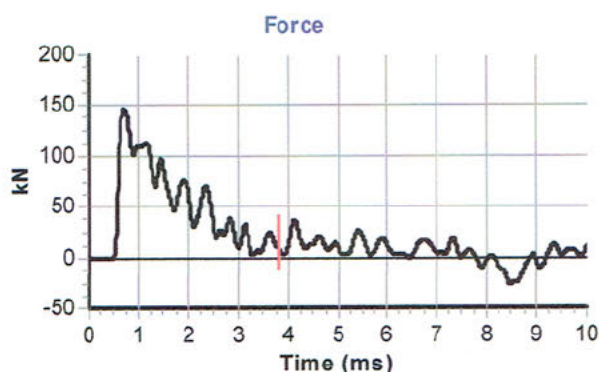
Diameter d_r (mm): 54
Wall Thickness t_r (mm): 6.5
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 62901
Accelerometer No.2: 62902

Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
String Length L (m): 15.0

Comments / Location

Hammer tested at Dynamic samplings yard.



Calculations

Area of Rod A (mm²): 970
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 341

Energy Ratio E_r (%): **72**

Signed: A.parker
Title: Associate Director

The recommended calibration interval is 12 months

Appendix D: Chemical Testing Results



**Laura Westoby**

Exploration & Testing Associates Limited
3 Siskin Drive
Middlemarch Business Park
Coventry
CV3 4FJ

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

e: results@explorationtesting.uk

Analytical Report Number : 22-42517

Project / Site name:	Newbold Verdon, PJSG21-47	Samples received on:	24/05/2022
Your job number:	C10237	Samples instructed on/ Analysis started on:	25/02/2022
Your order number:	PO-2067	Analysis completed by:	04/03/2022
Report Issue Number:	1	Report issued on:	04/03/2022
Samples Analysed:	3 leachate samples - 10 soil samples		

Signed:

Joanna Wawrzeczko
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 22-42517
Project / Site name: Newbold Verdon, PJSG21-47
Your Order No: PO-2067

Lab Sample Number				2188530	2188531	2188532	2188533	2188534
Sample Reference				WS01	WS02	WS06	TP05	TP11
Sample Number				1	1	1	1	1
Depth (m)				0.20	0.20	0.20	0.20	0.40
Date Sampled				21/02/2022	21/02/2022	21/02/2022	23/02/2022	23/02/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	18	18	8.8	12
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.0	1.0	1.0

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	-
Asbestos Analyst ID	N/A	N/A	N/A	NTK	NTK	NTK	NTK	

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.1	7.3	7.6	7.9	7.1
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0042	0.0084	0.0057	0.0062	0.0074
Organic Matter (automated)	%	0.1	MCERTS	2.6	4.1	3.2	1.8	0.9

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.9	11	8.3	6.5	5.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12	19	16	12	12
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	19	18	16	9.5
Lead (aqua regia extractable)	mg/kg	1	MCERTS	29	32	29	28	12
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	9.3	15	11	10	10
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	47	69	57	47	33

Pesticide and Herbicide Screen

GCMS Pesticide Screen		N/A	NONE	-	-	None Detected	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-42517
Project / Site name: Newbold Verdon, PJSG21-47
Your Order No: PO-2067

Lab Sample Number				2188535	2188536	2188537	2188538	2188539
Sample Reference				TP12	TP14	TP17	TP20	TP23
Sample Number				1	1	1	1	1
Depth (m)				0.40	0.10	0.10	0.50	0.20
Date Sampled				23/02/2022	22/02/2022	22/02/2022	22/02/2022	22/02/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	15	11	14	17
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.0	1.0	1.0

Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	Not-detected	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A		JMA	JMA		JMA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.2	7.8	8.3	7.8
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0043	0.013	0.0060	0.019	0.021
Organic Matter (automated)	%	0.1	MCERTS	0.9	4.3	2.5	0.9	2.6

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.1	11	7.2	12	9.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	1.1	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12	24	14	33	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	23	14	25	18
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	33	26	14	27
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	8.6	17	10	31	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	39	72	41	57	67

Pesticide and Herbicide Screen

GCMS Pesticide Screen		N/A	NONE	-	-	None Detected	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 22-42517

Project / Site name: Newbold Verdon, PJSG21-47

Your Order No: PO-2067

Lab Sample Number	2188540	2188541	2188542
Sample Reference	TP11	TP12	TP20
Sample Number	1	1	1
Depth (m)	0.40	0.40	0.50
Date Sampled	23/02/2022	23/02/2022	22/02/2022
Time Taken	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	Units	Limit of detection	Accreditation Status

Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	1.5	2.3	0.8
Copper (dissolved)	µg/l	0.7	ISO 17025	6.9	6.0	0.8
Lead (dissolved)	µg/l	1	ISO 17025	5.6	3.7	3.4
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	4.3	5.1	2.9
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	4.9	6.8	2.4

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 22-42517

Project / Site name: Newbold Verdon, PJSG21-47

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2188530	WS01	1	0.2	Brown clay and loam with vegetation.
2188531	WS02	1	0.2	Brown clay and loam with vegetation.
2188532	WS06	1	0.2	Brown clay and loam with vegetation.
2188533	TP05	1	0.2	Brown clay and sand with vegetation and gravel
2188534	TP11	1	0.4	Brown clay and sand.
2188535	TP12	1	0.4	Brown clay and sand.
2188536	TP14	1	0.1	Brown clay and sand with vegetation and gravel
2188537	TP17	1	0.1	Brown clay and loam with vegetation.
2188538	TP20	1	0.5	Brown clay and sand with vegetation and gravel
2188539	TP23	1	0.2	Brown clay and loam with vegetation.

Analytical Report Number : 22-42517

Project / Site name: Newbold Verdon, PJSG21-47

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
GC Pesticide Screen (TIC)	Analysis of unknown pesticides by GCMS	GC Pesticide Screen (TIC)	L064B	D	NONE
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.