



Plate 1 – Landscaping to the west of flats building, looking south.



Plate 2 – Landscaping to the west of flats building and area of HP03, looking southeast.



Plate 3 – Landscaping to the west of flats building and area of HP02, looking north.



Plate 4 – Landscaping to the north of flats building and area of HP01, looking west.



Plate 5 – Area of landscaping in the north of site and area of HP05.



Plate 6 – Area of landscaping in the north of site adjacent to Spring Lane, and area of HP06.



Plate 7 – Area of landscaping within the west of site and area of HP07 and HP08.



Plate 8 – HP01 GL to 0.60mbgl and arisings, with 0.2m of topsoil.



Plate 9 – HP01 GL to 0.6m bgl with 0.2m of topsoil.



Plate 10 – HP01 Down-hole image



Plate 11 – HP02 GL to 0.60mbgl and arisings, with 0.15m of topsoil.



Plate 12 – HP02 GL to 0.6m bgl with 0.15m of topsoil.



Plate 13 – HP02 Down-hole image



Plate 14 – HP03 GL to 0.60mbgl and arisings, with 0.15m of topsoil.



Plate 15 – HP03 GL to 0.6m bgl with 0.15m of topsoil.



Plate 16 – HP03 Down-hole image



Plate 17 – HP04 GL to 0.30mbgl and arisings, with 0.15m of topsoil.



Plate 18 – HP04 GL to 0.3m bgl with 0.15m of topsoil.



Plate 19 – HP04 Down-hole image



Plate 20 – HP05 GL to 0.60mbgl and arisings, with 0.20m of topsoil.



Plate 21 – HP05 GL to 0.6m bgl with 0.20m of topsoil.



Plate 22 – HP05 Down-hole image



Plate 23 – HP06 GL to 0.60mbgl and arisings, with 0.20m of topsoil.



Plate 24 – HP06 GL to 0.3m bgl with 0.15m of topsoil.



Plate 25 – HP06 Down-hole image



Plate 26 – HP07 GL to 0.30mbgl and arisings, with 0.15m of topsoil.



Plate 27 – HP07 GL to 0.3m bgl with 0.15m of topsoil.



Plate 28 – HP07 Down-hole image



Plate 29 – HP08 GL to 0.30mbgl and arisings, with 0.15m of topsoil.



Plate 30 – HP08 GL to 0.3m bgl with 0.15m of topsoil.



Plate 31 – HP08 Down-hole image



Plate 32 – Hard to dig layer image provided by Terra Nova.



Plate 33 – Hard to dig layer image provided by Terra Nova.



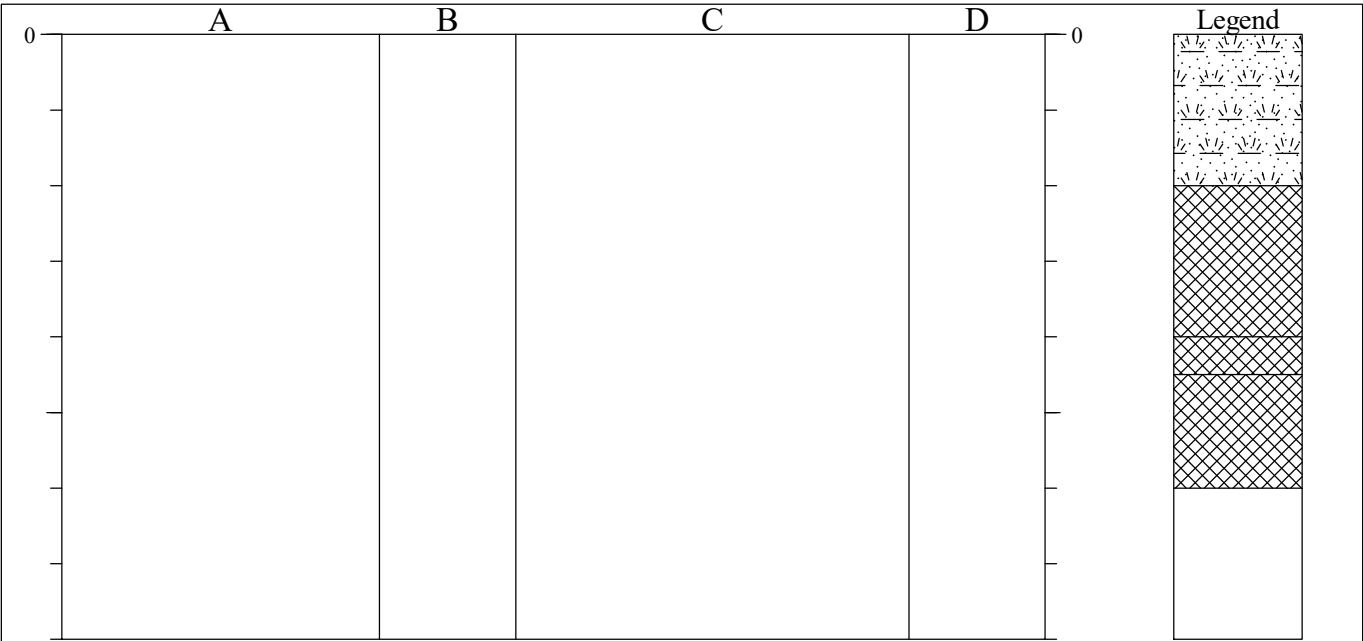
Plate 34 – Hard to dig layer image provided by Terra Nova.



Plate 35 – Hard to dig layer image provided by Terra Nova.

TRIAL PIT LOG

Project East Lancs Paper Mill Island				TRIAL PIT No HP01
Job No NX418	Date 05-06-24	Ground Level (m)	Co-Ordinates ()	
Contractor Taylor Drilling Ltd				Sheet 1 of 1

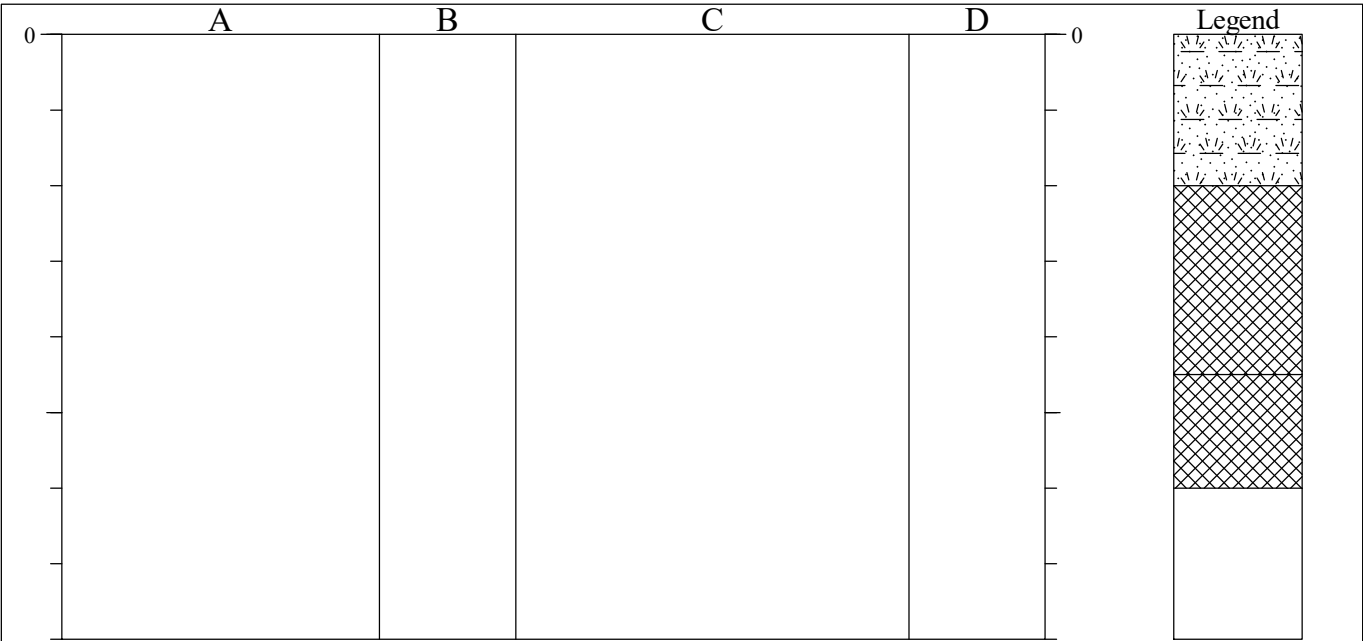


STRATA				SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests	
0.00-0.20		TOPSOIL: (Slightly wet) Soft black/brown slightly silty slightly sandy clay with rare gravel. Gravel is fine to coarse, subangular to rounded of mudstone, sandstone and other mixed natural lithology. 0.10 ...very rare rootlets.				
0.20-0.40		SUBSOIL: Uncompact brown/light grey fine to coarse sand with rare gravel. Gravel is fine to coarse, subangular to rounded of siltstone, sandstone and other mixed lithology.				
0.40-0.45		MADE GROUND: Compact light grey sandy gravel of limestone (MOT TYPE 1 Material).				
0.45-0.60		MADE GROUND: Compact brown/light grey fine to coarse sand with occasional gravel. Gravel is fine to coarse, subangular to rounded of concrete, brick, limestone, sandstone and other mixed lithology (Probable 6F2 Type Material).				
0.60		...handpit ended at 600mm bgl.				

Shoring/Support: Stability: All dimensions in metres Scale 1:10			GENERAL REMARKS No visual or olfactory evidence of hydrocarbon or solvent contamination. No groundwater recorded.	
Client Homes England		Method/ Plant Used Manually excavated		Logged By MT

TRIAL PIT LOG

Project East Lancs Paper Mill Island				TRIAL PIT No HP02
Job No NX418	Date 05-06-24	Ground Level (m)	Co-Ordinates ()	
Contractor Taylor Drilling Ltd				Sheet 1 of 1



STRATA				SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests	
0.00-0.20		TOPSOIL: (Slightly wet) Soft black/brown slightly silty sandy clay with rare gravel. Gravel is fine to coarse, subangular to rounded of mudstone, sandstone and other mixed natural lithology.				
0.20-0.45		SUBSOIL: Uncompact brown/light grey fine to coarse sand with rare gravel. Gravel is fine to coarse, subangular to rounded of siltstone, sandstone and other mixed lithology.				
0.45-0.60		MADE GROUND: Compact brown/light grey fine to coarse sand with occasional gravel. Gravel is fine to coarse, subangular to rounded of concrete, brick, limestone, sandstone and other mixed lithology (Probable 6F2 Type Material).				
0.60		...handpit ended at 600mmagl.				

Shoring/Support:
Stability:

A: 0.2
B: 0.2

GENERAL REMARKS

No visual or olfactory evidence of hydrocarbon or solvent contamination. No groundwater recorded.

All dimensions in metres Scale 1:10	Client Homes England	Method/ Plant Used Manually excavated	Logged By MT
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TRIAL PIT LOG

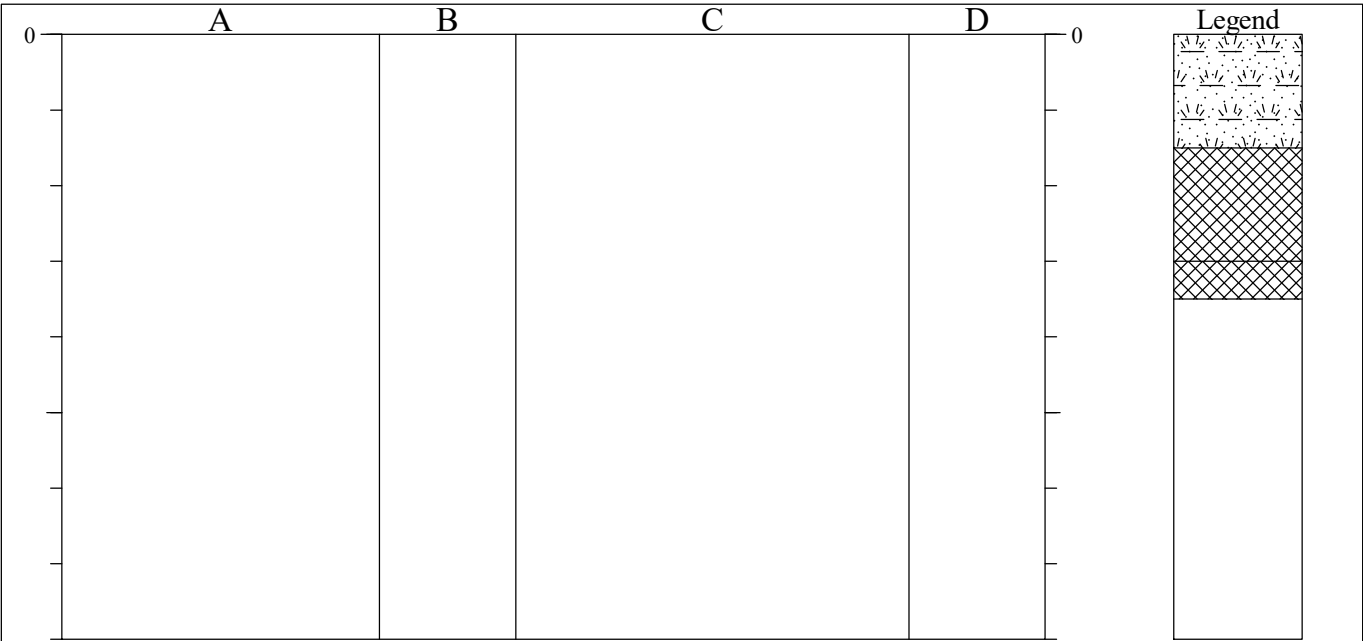
Project East Lancs Paper Mill Island				TRIAL PIT No HP03
Job No NX418	Date 05-06-24	Ground Level (m)	Co-Ordinates ()	
Contractor Taylor Drilling Ltd				Sheet 1 of 1

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		TOPSOIL: (Slightly wet) Soft black/brown slightly silty clay with rare gravel. Gravel is fine to coarse, subangular to rounded of mudstone, sandstone and other mixed natural lithology.			
0.20-0.45		SUBSOIL: Uncompact brown/light grey fine to coarse sand with rare gravel. Gravel is fine to coarse, subangular to rounded of siltstone, sandstone and other mixed lithology.			
0.45-0.60		MADE GROUND: Compact brown/light grey fine to coarse sand with occasional gravel. Gravel is fine to coarse, subangular to rounded of concrete, brick, limestone, sandstone and other mixed lithology (Probable 6F2 Type Material).			
0.60		...handpit ended at 600mmbgl.			

Shoring/Support: Stability: 	GENERAL REMARKS No visual or olfactory evidence of hydrocarbon or solvent contamination. No groundwater recorded.
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TRIAL PIT LOG

Project East Lancs Paper Mill Island				TRIAL PIT No HP04
Job No NX418	Date 13-06-24	Ground Level (m)	Co-Ordinates ()	
Contractor Taylor Drilling Ltd				Sheet 1 of 1



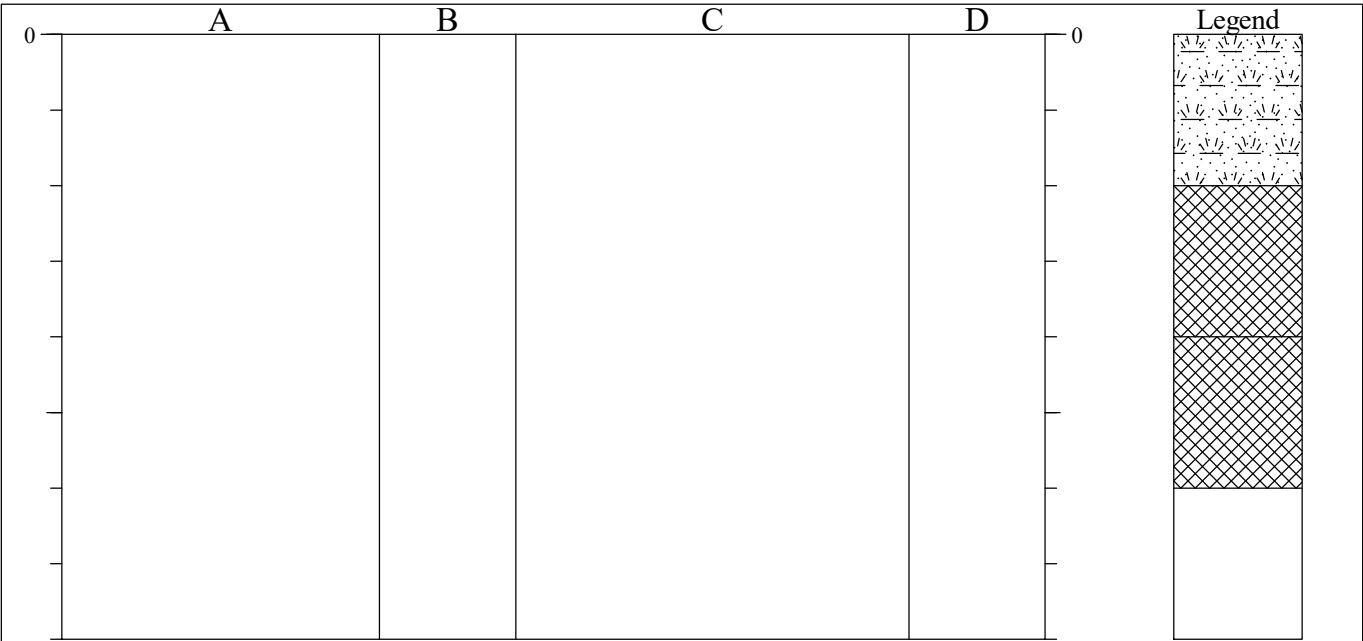
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.15		TOPSOIL: (Slightly wet) Soft black/brown slightly silty clay with rare gravel. Gravel is fine to coarse, subangular to rounded of mudstone, sandstone and other mixed natural lithology.			
0.15-0.30		SUBSOIL: Uncompact brown/light grey fine to coarse sand with rare gravel. Gravel is fine to coarse, subangular to rounded of siltstone, sandstone and other mixed lithology.			
0.30-0.35		MADE GROUND: Compact brown/light grey fine to coarse sand with occasional gravel. Gravel is fine to coarse, subangular to rounded of concrete, brick, limestone, sandstone and other mixed lithology (Probable 6F2 Type Material).			
0.35		...handpit ended at 350mm bgl.			

Shoring/Support: Stability: N			GENERAL REMARKS No visual or olfactory evidence of hydrocarbon or solvent contamination. No groundwater recorded.
All dimensions in metres Scale 1:10	Client Homes England	Method/ Plant Used Manually excavated	Logged By MT

AGS3 UK TP NX418 RECTORY LANE, RADCLIFFE GPJ AGS 3_1.GDT 17/6/24

TRIAL PIT LOG

Project East Lancs Paper Mill Island				TRIAL PIT No HP05
Job No NX418	Date 13-06-24	Ground Level (m)	Co-Ordinates ()	
Contractor Taylor Drilling Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		TOPSOIL: (Slightly wet) Soft black/brown slightly silty clay with rare gravel. Gravel is fine to coarse, subangular to rounded of mudstone, sandstone and other mixed natural lithology.			
0.20-0.40		SUBSOIL: Uncompact brown/light grey fine to coarse sand with rare gravel. Gravel is fine to coarse, subangular to rounded of siltstone, sandstone and other mixed lithology.			
0.40-0.60		MADE GROUND: Compact brown/light grey fine to coarse sand with occasional gravel. Gravel is fine to coarse, subangular to rounded of concrete, brick, limestone, sandstone and other mixed lithology (Probable 6F2 Type Material).			
0.60		...handpit ended at 600mmagl.			

Shoring/Support:
Stability:

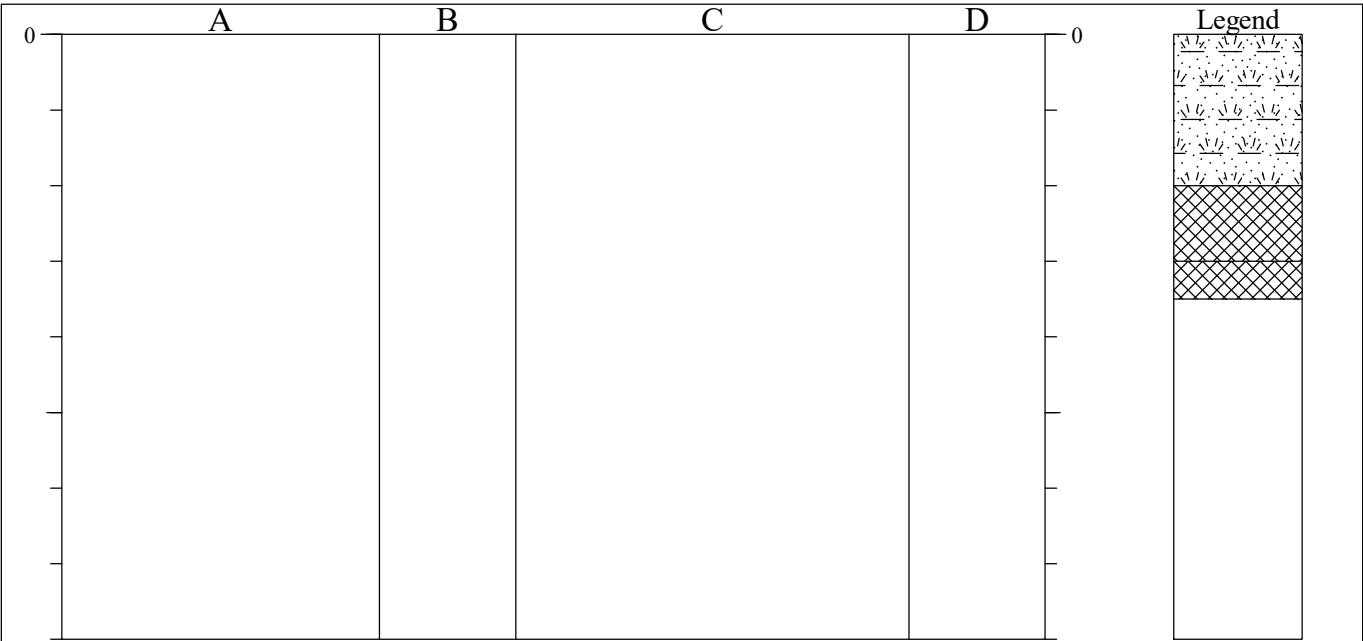
GENERAL REMARKS

No visual or olfactory evidence of hydrocarbon or solvent contamination. No groundwater recorded.

All dimensions in metres Scale 1:10	Client Homes England	Method/ Plant Used Manually excavated	Logged By MT
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TRIAL PIT LOG

Project East Lancs Paper Mill Island				TRIAL PIT No HP06
Job No NX418	Date 13-06-24	Ground Level (m)	Co-Ordinates ()	
Contractor Taylor Drilling Ltd				Sheet 1 of 1



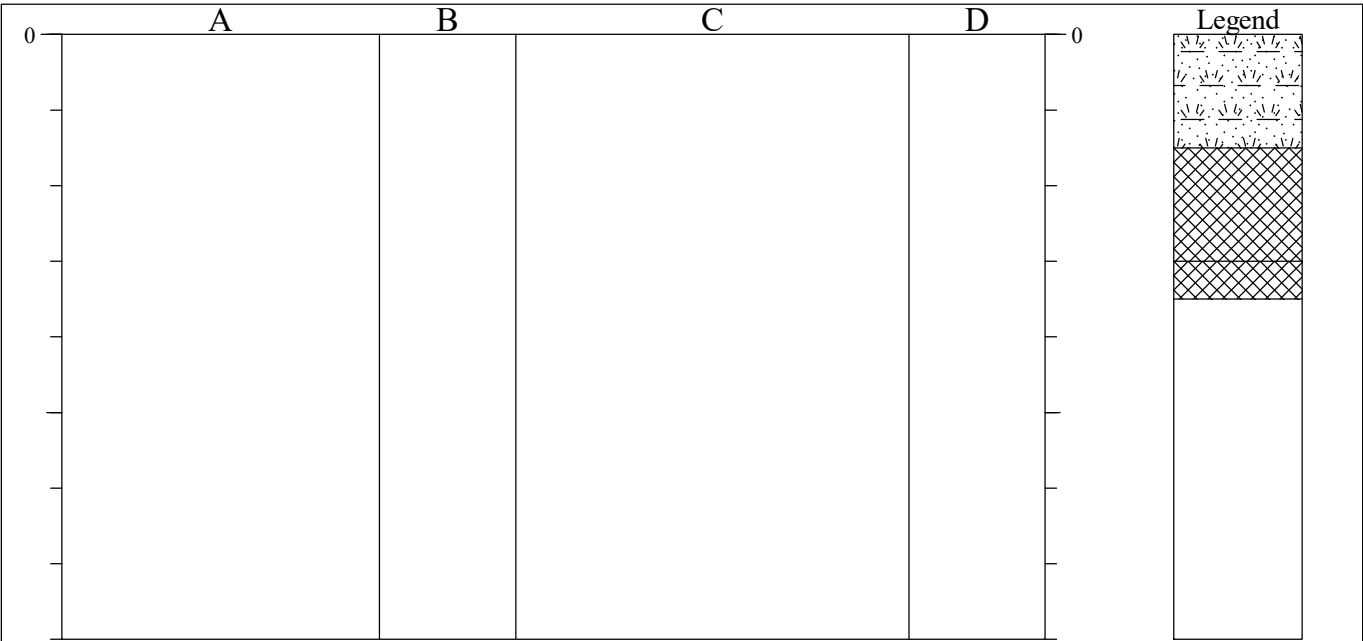
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		TOPSOIL: (Slightly wet) Soft black/brown slightly silty clay with rare gravel. Gravel is fine to coarse, subangular to rounded of mudstone, sandstone and other mixed natural lithology.			
0.20-0.30		SUBSOIL: Uncompact brown/light grey fine to coarse sand with rare gravel. Gravel is fine to coarse, subangular to rounded of siltstone, sandstone and other mixed lithology.			
0.30-0.35		MADE GROUND: Compact brown/light grey fine to coarse sand with occasional gravel. Gravel is fine to coarse, subangular to rounded of concrete, brick, limestone, sandstone and other mixed lithology (Probable 6F2 Type Material).			
0.35		...handpit ended at 350mmagl.			

Shoring/Support: Stability:			GENERAL REMARKS	
0.2 A D C B 0.2 N			No visual or olfactory evidence of hydrocarbon or solvent contamination. No groundwater recorded.	
All dimensions in metres Scale 1:10	Client Homes England	Method/ Plant Used Manually excavated	Logged By MT	

AGS3 UK TP NX418 RECTORY LANE, RADCLIFFE.GPJ AGS 3_1.GDT 17/6/24

TRIAL PIT LOG

Project East Lancs Paper Mill Island				TRIAL PIT No HP07
Job No NX418	Date 13-06-24	Ground Level (m)	Co-Ordinates ()	
Contractor Taylor Drilling Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.15		TOPSOIL: (Slightly wet) Soft black/brown slightly silty clay with rare gravel. Gravel is fine to coarse, subangular to rounded of mudstone, sandstone and other mixed natural lithology.			
0.15-0.30		SUBSOIL: Uncompact brown/light grey fine to coarse sand with rare gravel. Gravel is fine to coarse, subangular to rounded of siltstone, sandstone and other mixed lithology.			
0.30-0.35		MADE GROUND: Compact brown/light grey fine to coarse sand with occasional gravel. Gravel is fine to coarse, subangular to rounded of concrete, brick, limestone, sandstone and other mixed lithology (Probable 6F2 Type Material).			
0.35		...handpit ended at 350mm bgl.			

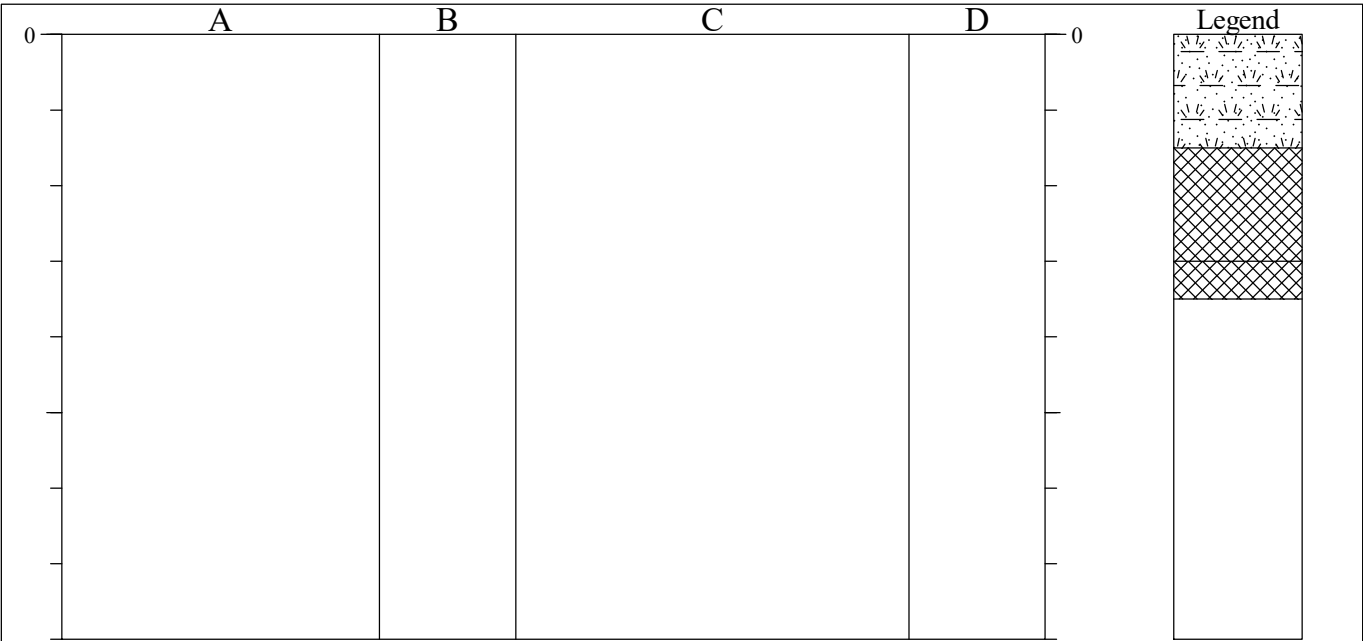
Shoring/Support: Stability:		GENERAL REMARKS
		No visual or olfactory evidence of hydrocarbon or solvent contamination. No groundwater recorded.

All dimensions in metres Scale 1:10	Client Homes England	Method/ Plant Used Manually excavated	Logged By MT
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AGS3 UK TP NX418 RECTORY LANE, RADCLIFFE GPJ AGS 3_1.GDT 17/6/24

TRIAL PIT LOG

Project East Lancs Paper Mill Island				TRIAL PIT No HP08
Job No NX418	Date 13-06-24	Ground Level (m)	Co-Ordinates ()	
Contractor Taylor Drilling Ltd				Sheet 1 of 1



STRATA				SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests	
0.00-0.15		TOPSOIL: (Slightly wet) Soft black/brown slightly silty clay with rare gravel. Gravel is fine to coarse, subangular to rounded of mudstone, sandstone and other mixed natural lithology.				
0.15-0.30		SUBSOIL: Uncompact brown/light grey fine to coarse sand with rare gravel. Gravel is fine to coarse, subangular to rounded of siltstone, sandstone and other mixed lithology.				
0.30-0.35		MADE GROUND: Compact brown/light grey fine to coarse sand with occasional gravel. Gravel is fine to coarse, subangular to rounded of concrete, brick, limestone, sandstone and other mixed lithology (Probable 6F2 Type Material).				
0.35		...handpit ended at 350mm bgl.				

Shoring/Support: Stability:			0.2 A B C D 0.2 N		GENERAL REMARKS No visual or olfactory evidence of hydrocarbon or solvent contamination. No groundwater recorded.
All dimensions in metres Scale 1:10	Client Homes England	Method/ Plant Used Manually excavated	Logged By MT		

AGS3 UK TP NX418 RECTORY LANE, RADCLIFFE GPJ AGS 3_1.GDT 17/6/24



Specialists in Ground Engineering & Energy

B - NX Topsoil Verification Testing Results



Certificate of Analysis

Certificate Number 24-04699

Issued: 15-Mar-24

Client NX Consulting Ltd
Station House
Stamford New Road
Altricham
WA14 1EP

Our Reference 24-04699

Client Reference ~ NX418

Order No ~ NX418

Contract Title ~ Widnes Topsoil to East Lancs Paper Mill Site

Description 3 Soil samples.

Date Received 05-Mar-24

Date Started 05-Mar-24

Date Completed 15-Mar-24

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

Kirk Bridgewood
General Manager



Normec DETS Limited

Unit 2, Park Road Industrial Estate South, Consett, Co Durham, DH8 5PY

Symbol key at end of report Tel: 01207 582333 • email: info@dets.co.uk • www.dets.co.uk

Page 1 of 8

Summary of Chemical Analysis

Soil Samples

Our Ref 24-04699

Client Ref ~ NX418

Contract Title ~ Widnes Topsoil to East Lancs Paper Mill Site

Lab No	2307993	2307994	2307995
Sample ID ~	S1	S2	S3
Depth ~	0.20	0.20	0.20
Other ID ~			
Sample Type ~	SOIL	SOIL	SOIL
Sampling Date ~	29/02/2024	29/02/2024	29/02/2024
Sampling Time ~	n/s	n/s	n/s

Test	Method	LOD	Units			
Metals						
Arsenic	DETSC 2301#	0.2	mg/kg	24	22	22
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.6	0.6	0.5
Cadmium	DETSC 2301#	0.1	mg/kg	0.8	0.9	0.8
Chromium	DETSC 2301#	0.15	mg/kg	23	25	37
Copper	DETSC 2301#	0.2	mg/kg	130	110	120
Lead	DETSC 2301#	0.3	mg/kg	130	140	110
Mercury	DETSC 2325#	0.05	mg/kg	0.20	0.19	0.18
Nickel	DETSC 2301#	1	mg/kg	24	24	24
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Zinc	DETSC 2301#	1	mg/kg	200	180	180
Inorganics						
pH	DETSC 2008#		pH	6.6	6.5	6.6
Cyanide, Total	DETSC 2130#	0.1	mg/kg	11	0.8	0.8
Organic matter	DETSC 2002#	0.1	%	4.1		
Sulphide	DETSC 2024*	10	mg/kg	< 10	< 10	16
Sulphate as SO ₄ , Total	DETSC 2321#	100	mg/kg	428	568	524
Petroleum Hydrocarbons						
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
PAHs						
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.06	0.06	0.04
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03

Summary of Chemical Analysis Soil Samples

Our Ref 24-04699

Client Ref ~ NX418

Contract Title ~ Widnes Topsoil to East Lancs Paper Mill Site

Lab No	2307993	2307994	2307995
Sample ID ~	S1	S2	S3
Depth ~	0.20	0.20	0.20
Other ID ~			
Sample Type ~	SOIL	SOIL	SOIL
Sampling Date ~	29/02/2024	29/02/2024	29/02/2024
Sampling Time ~	n/s	n/s	n/s

Test	Method	LOD	Units			
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.18	0.16	0.13
Pyrene	DETSC 3303#	0.03	mg/kg	0.16	0.14	0.12
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.06	0.05	0.05
Chrysene	DETSC 3303	0.03	mg/kg	0.07	0.06	0.06
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.09	0.07	0.06
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.06	0.05	0.04
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.05	0.03	0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.78	0.59	0.50
Phenols						
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	0.7	0.3

BS 3882:2015 Topsoil Analytical Report

Our Ref 24-04699

Client Ref ~ NX418

Contract Title ~ Widnes Topsoil to East Lancs Paper Mill Site

Lab No	2307993
Sample ID ~	S1
Depth ~	0.20
Other ID ~	
Sample Type ~	SOIL
Sampling Date ~	29/02/2024
Sampling Time ~	n/s

Parameter	Method	Result	Compliant with multi purpose range?	Compliant with specific purpose range? (Y/N)				
			(Y/N)	Acid.	Calc	Low F.	Low F. acidic	Low F. calc.
Texture								
Clay content %	\$	0	See Figure 1 on Textural class sheet					
Silt content %	\$	30						
Sand content %	\$	70						
Soil texture – (see figure 1)	\$	Sandy Loam						
Soil organic matter content % (varying with clay content)								
Clay 5-20%	DETSC 2002#	4.1	Y	Y	Y	Y	Y	Y
Clay 20-35%	DETSC 2002#		N/A	N/A	N/A	N/A	N/A	N/A
Maximum coarse fragment - Content % m/m								
>2 mm	\$	6	Y	Y	Y	Y	Y	Y
>20 mm	\$	0	Y	Y	Y	Y	Y	Y
>50 mm	\$	0	Y	Y	Y	Y	Y	Y
Soil pH value	DETSC 2008#	6.6	Y	N	N	Y	N	N
Carbonate (Calcareous only) %	DETSC 2005	0	N/A	N/A	N	N/A	N/A	N
Available plant nutrient content								
Total Nitrogen %	DETSC 2121*	0.4	Y	Y	Y	N/A	N/A	N/A
Extractable phosphate mg/l	DETSC 2310*	44	Y	Y	Y	N	N	N
Extractable potassium mg/l	DETSC 2309*	81	N	N	N	N/A	N/A	N/A
Extractable magnesium mg/l	DETSC 2309*	140	Y	Y	Y	N/A	N/A	N/A
Carbon: Nitrogen ratio		5.95	Y	Y	Y	Y	Y	Y
Electrical Conductivity	DETSC 2009	1900	Y	N/A	N/A	N/A	N/A	N/A
Phytotoxic contaminants (by soil pH) mg/kgDS								
Zinc (Nitric acid extract)	DETSC 2308*	75	Y	Y	Y	Y	Y	Y
Copper (Nitric acid extract)	DETSC 2308*	23	Y	Y	Y	Y	Y	Y
Nickel (Nitric acid extract)	DETSC 2308*	12	Y	Y	Y	Y	Y	Y
Visible contaminants % m/m								
>2 mm	*	0	Y	Y	Y	Y	Y	Y
...of which plastics	*	0	Y	Y	Y	Y	Y	Y
...man made sharps	*	0	Y	Y	Y	Y	Y	Y

Additional analytical certificate(s) for particle size distribution analysis are appended.

- MCERTS (accred. only implied if report carries the MCERTS logo). * - unaccredited test. \$ - completed by approved subcontractor.

DECLARATION: I certify that this sample of soil has been analysed in accordance with BS3882:2015

Signature:



BS 3882: Textural Class

Our Ref 24-04699

Client Ref ~ NX418

Contract Title ~ Widnes Topsoil to East Lancs Paper Mill Site

Results: Proportion in class (%)			Help messages
Clay	Silt	Sand	
0	30	70	

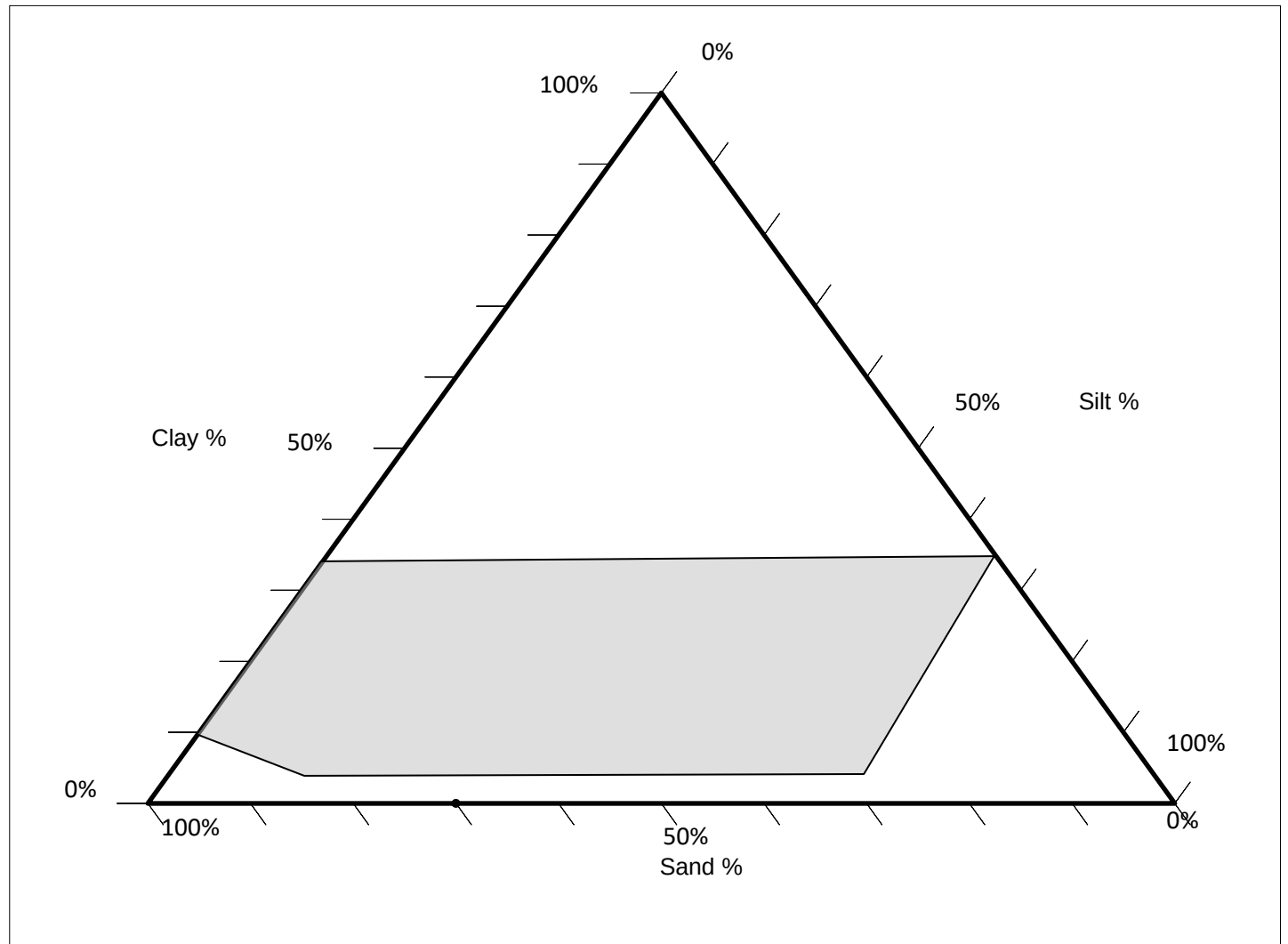


Figure 1

The textural class is required to be in the shaded area to be compliant with BS3882:2015

Results are shown by the grey point in the chart

Plotting parameters		Help messages
Printer correction:	1.1	
Tick interval (0 - 0.5):	0.1	
Tick length (0 - 0.2):	0.03	
Plot lines? (Y or N):	n	

BS 3882:2015 Topsoil

Threshold Values

Parameter	Multipurpose Topsoil	Specific purpose topsoil				
		Acidic	Calcareous	Low fertility	Low fertility acidic	Low fertility calcareous
Soil texture <2mm fraction % m/m						
Clay content %	10 to 35					
Silt content %	0 to 65					
Sand content %	35 to 85					
Maximum course fraction % m/m						
>2 mm	30					
>20mm	10					
>50mm	0					
Mass loss on Ignition %						
Clay 5% to 20%	3 to 20	3 to 30	3 to 20	2 to 20	2 to 30	2 to 20
Clay 20% to 35%	5 to 20	5 to 30	5 to 20	2 to 20	2 to 30	2 to 20
Soil pH	5.5 to 8.5	3.5 to5.5	7.5 to 9.0	3.5 to 9.0	3.5 to 5.5	7.5 to 9.0
Carbonate % m/m			>1			>1
Plant nutrient content						
Total nitrogen % m/m	>0.15	>0.15	>0.15	-	-	-
Extractable phosphate mg/l	16 to 140	16 to 140	16 to 140	≤20	≤20	≤20
Extractable potasium mg/l	121 to 1500	121 to 1500	121 to 1500	-	-	-
Extractable magnesium mg/l	51 to 600	51 to 600	51 to 600	-	-	-
Carbon : Nitrogen ratio	<20:1	<20:1	<20:1	<35:1	<35:1	<20:1
Electrical conductivity μS.cm-1	If greater than 3 300, carry out exchangeable sodium					

Multi purpose and specific purpose topsoils			
Potentially Phytotoxic elements (mg/kg dry basis)	Soil pH <6.0	Soil pH 6.0 to 7.0	Soil pH >7.0
Zn	<200	<200	<300
Cu	<100	<135	<200
Ni	<60	<75	<110
Visible contaminants %m/m			
of which plastics	<0.5		
Sharps, number	<0.25		

Summary of Asbestos Analysis Soil Samples

Our Ref 24-04699

Client Ref ~ NX418

Contract Title ~ Widnes Topsoil to East Lancs Paper Mill Site

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2307993	S1 0.20	SOIL	NAD	none	Josh Best
2307994	S2 0.20	SOIL	NAD	none	Josh Best
2307995	S3 0.20	SOIL	NAD	none	Josh Best

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref ~ 24-04699
 Client Ref ~ NX418
 Contract ~ Widnes Topsoil to East Lancs Paper Mill Site

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
2307993	S1 0.20 SOIL	29/02/24	GJ 250ml, GJ 60ml, PG, PT 1L		
2307994	S2 0.20 SOIL	29/02/24	GJ 250ml, GJ 60ml, PT 1L		
2307995	S3 0.20 SOIL	29/02/24	GJ 250ml, GJ 60ml, PT 1L		

Key: G-Glass P-Plastic J-Jar G-Bag T-Tub

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.
 Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
 The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
 Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Key:

~ Sample details are provided by the client and can affect the validity of the results
 * -not accredited.
 # -MCERTS (accreditation only applies if report carries the MCERTS logo).
 \$ -subcontracted.
 n/s -not supplied.
 I/S -insufficient sample.
 U/S -unsuitable sample.
 t/f -to follow.
 nd -not detected.

End of Report



Certificate of Analysis

Certificate Number 24-06145

Issued: 02-Apr-24

Client NX Consulting Ltd
Station House
Stamford New Road
Altricham
WA14 1EP

Our Reference 24-06145

Client Reference ~ NX418

Order No ~ NX418

Contract Title ~ Shire Hill Quarry to ELPM

Description 3 Soil samples.

Date Received 22-Mar-24

Date Started 22-Mar-24

Date Completed 02-Apr-24

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

Kirk Bridgewood
General Manager



Normec DETS Limited

Unit 2, Park Road Industrial Estate South, Consett, Co Durham, DH8 5PY

Symbol key at end of report Tel: 01207 582333 • email: info@dets.co.uk • www.dets.co.uk

Page 1 of 5

Summary of Chemical Analysis

Soil Samples

Our Ref 24-06145

Client Ref ~ NX418

Contract Title ~ Shire Hill Quarry to ELPM

Lab No	2316083	2316084	2316085
Sample ID ~	S1	S2	S3
Depth ~			
Other ID ~			
Sample Type ~	SOIL	SOIL	SOIL
Sampling Date ~	20/03/2024	20/03/2024	20/03/2024
Sampling Time ~	n/s	n/s	n/s

Test	Method	LOD	Units			
Metals						
Arsenic	DETSC 2301#	0.2	mg/kg	2.4	2.5	2.0
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	< 0.2	0.2	< 0.2
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.4	0.2
Chromium	DETSC 2301#	0.15	mg/kg	15	20	14
Copper	DETSC 2301#	0.2	mg/kg	11	14	9.5
Lead	DETSC 2301#	0.3	mg/kg	10	19	8.5
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Nickel	DETSC 2301#	1	mg/kg	17	23	16
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Zinc	DETSC 2301#	1	mg/kg	54	70	56
Inorganics						
pH	DETSC 2008#		pH	7.3	7.4	7.6
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Total Organic Carbon	DETSC 2084#	0.5	%	< 0.5	0.5	< 0.5
Sulphide	DETSC 2024*	10	mg/kg	12	12	< 10
Sulphate as SO ₄ , Total	DETSC 2321#	100	mg/kg	37900	1240	151
Petroleum Hydrocarbons						
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
PAHs						
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03

Summary of Chemical Analysis Soil Samples

Our Ref 24-06145

Client Ref ~ NX418

Contract Title ~ Shire Hill Quarry to ELPM

Lab No	2316083	2316084	2316085
Sample ID ~	S1	S2	S3
Depth ~			
Other ID ~			
Sample Type ~	SOIL	SOIL	SOIL
Sampling Date ~	20/03/2024	20/03/2024	20/03/2024
Sampling Time ~	n/s	n/s	n/s

Test	Method	LOD	Units			
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10	< 0.10
Phenols						
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3

Summary of Asbestos Analysis

Soil Samples

Our Ref 24-06145

Client Ref ~ NX418

Contract Title ~ Shire Hill Quarry to ELPM

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2316083	S1	SOIL	NAD	none	Ben Barsby
2316084	S2	SOIL	NAD	none	Ben Barsby
2316085	S3	SOIL	NAD	none	Ben Barsby

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Information in Support of the Analytical Results

Our Ref 24-06145
 Client Ref ~ NX418
 Contract ~ Shire Hill Quarry to ELPM

Containers Received & Deviating Samples

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t/f -to follow.

nd -not detected.

End of Report