



Arc Environmental Limited  
Solum House, Unit 1 Elliott Court  
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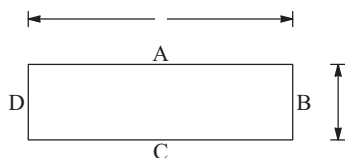
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP01</b>
Job No 16-433	Date 24-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

0	A	B	C	D	0	Legend
1					1	
2					2	
3					3	
4					4	

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.75		Dark brown very sandy slightly gravelly soil, with occasional brick and pottery (MADE GROUND).	0.20-0.40	DJ1	
0.75-1.45		Yellowish brown fine to medium SAND (SHIRDLEY HILL SAND).	0.60	CBR1	3.0%
1.45-2.20		Soft (low strength) greyish brown very sandy slightly organic CLAY, with sand pockets, occasional decomposed plant remains and a low organic content (BOULDER CLAY).	0.90-1.10	B2	
2.20-3.50		Firm (medium strength) slightly sandy gravelly CLAY, with occasional sand pockets. Gravel consists of mudstone (BOULDER CLAY).	1.60-1.80	B3	25kN/m <sup>2</sup>
			1.70	V1	
			2.40	V2	40kN/m <sup>2</sup>
			2.40-2.80	B4	
3.50		Trial pit terminated at 3.50m due to instability.	3.00	V3	45kN/m <sup>2</sup>

Shoring/Support: None  
Stability: All faces unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

All dimensions in metres  
Scale 1:50

Client CDP

Method/  
Plant Used

JCB 3CX

Logged By

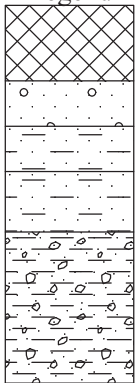
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## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP02</b>
Job No 16-433	Date 24-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

0	A	B	C	D	0	Legend 
1					1	
2					2	
3					3	
4					4	

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.50		Rough grass over dark brown very sandy soil, with occasional pottery (MADE GROUND).	0.10-0.40	DJ1	
0.50-0.80		Dark brown and orangish brown slightly gravelly fine to medium SAND (SHIRDLEY HILL SAND).	0.50	CBR1	6.5%
0.80-1.10		Yellowish brown fine to medium SAND, with occasional sandy clay pockets (SHIRDLEY HILL SAND).	0.60-0.80	B2	
1.10-1.50		Grey clayey fine to medium SAND, with clay pockets (SHIRDLEY HILL SAND).	0.90-1.10	B3	
1.50-2.50		Soft to firm (low to medium strength) brown sandy gravelly CLAY. Gravel consists of mudstone (BOULDER CLAY).	1.20-1.40	B4	
			1.50	V1	35kN/m <sup>2</sup>
			1.70-2.00	B5	
2.50		Trial pit terminated at 2.50m due to instability.	2.20	V2	42kN/m <sup>2</sup>

Shoring/Support: None Stability: All faces unstable.		GENERAL REMARKS  WATER: Trial pit remained DRY throughout.
		

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By NJW
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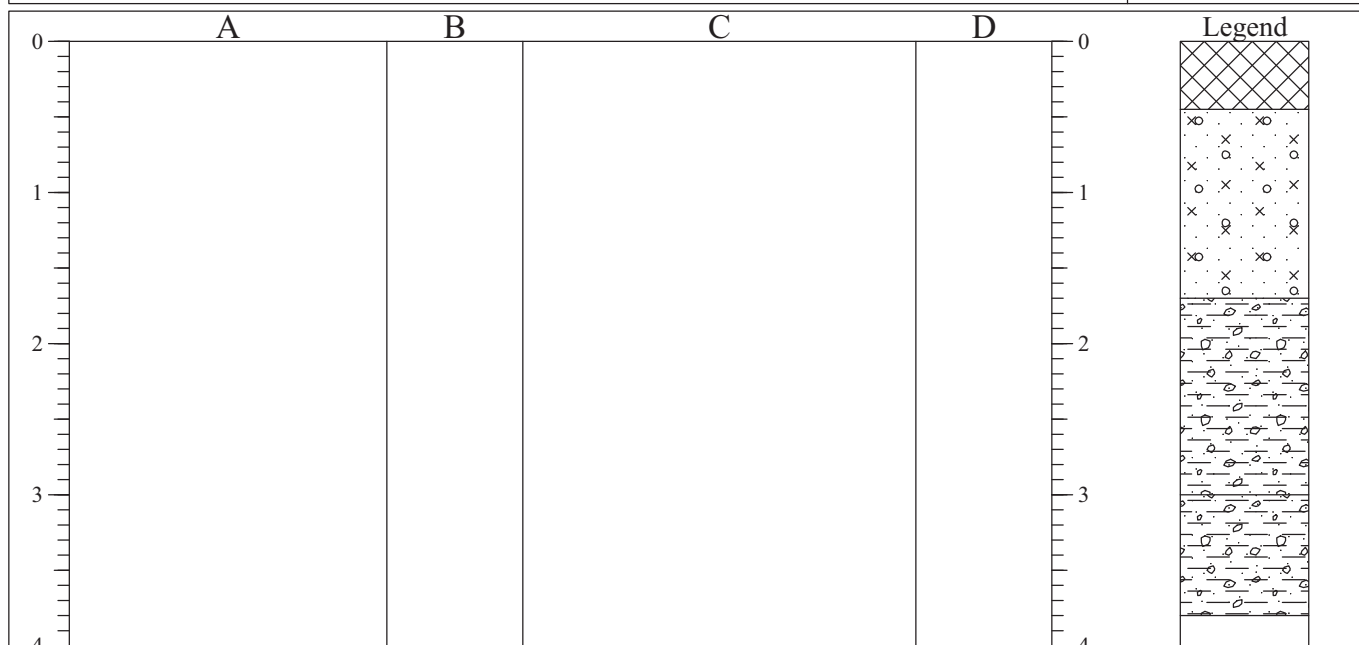
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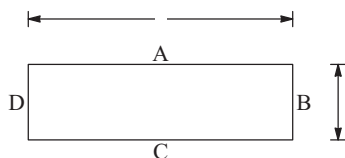
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP03</b>
Job No 16-433	Date 24-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.45		Dolomite surfacing over dark grey sandy gravel, with dolomite and occasional ash (MADE GROUND).	0.10-0.40	DJ1	
0.45-1.70		Dark brown and light brown slightly gravelly silty fine to medium SAND. Gravel consists of sandstone (SHIRDLEY HILL SAND).	0.80-1.20	B2	
1.70-3.00		Firm (medium strength) brown very sandy CLAY, with many light brown and dark brown fine to medium sand pockets (possible made ground) (BOULDER CLAY).	1.80	V1	50kN/m <sup>2</sup>
			1.80-2.20	B3	
			2.30	V2	40kN/m <sup>2</sup>
			2.70	V3	42kN/m <sup>2</sup>
3.00-3.80		Firm (medium strength) brown sandy gravelly CLAY. Gravel consists of mudstone (BOULDER CLAY).	3.20-3.60	B4	
			3.20	V4	50kN/m <sup>2</sup>
			3.50	V5	65kN/m <sup>2</sup>
3.80		Trial pit complete at 3.80m.			

Shoring/Support: None  
Stability: All faces unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Water seepages at 1.70m.

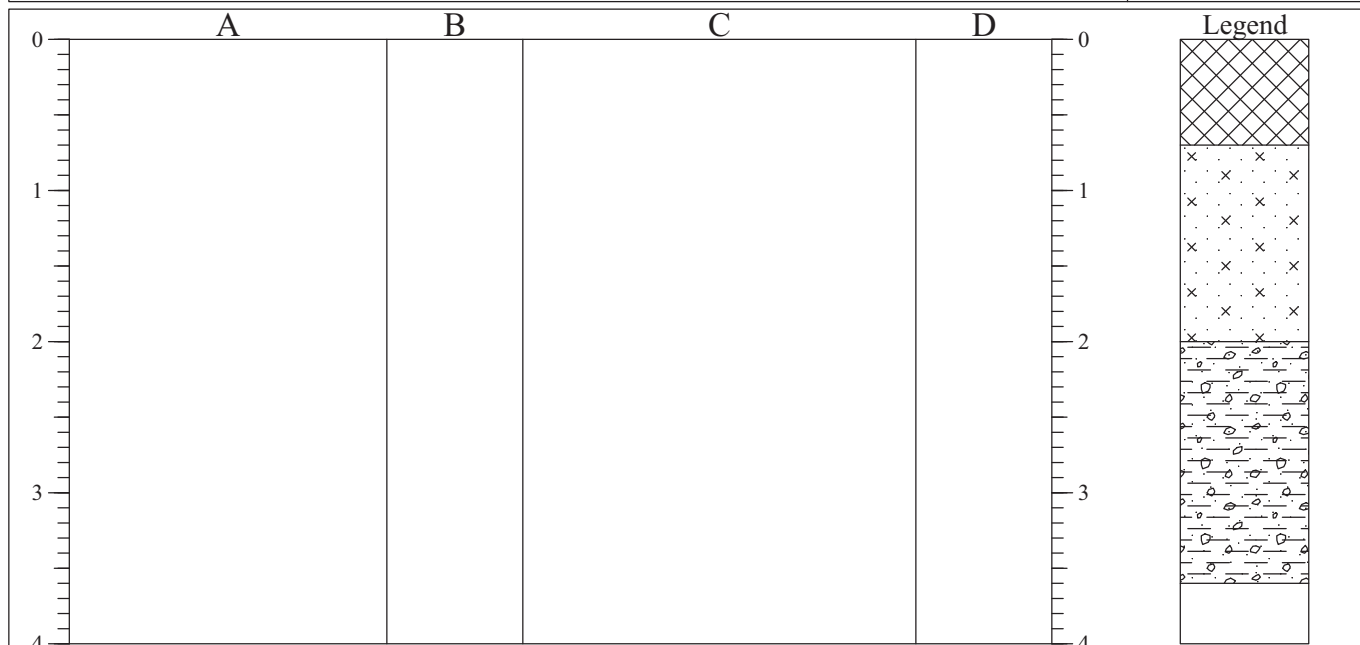
All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By NJW
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## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP04</b>
Job No 16-433	Date 24-04-14	Ground Level (m)	Co-Ordinates ( )	
Contractor Arc Environmental Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.70		Dark brown sandy gravelly soil, with dolomite and brick (MADE GROUND).	0.20-0.60	DJ1	
0.70-2.00		Dark brown becoming light brown silty fine to medium SAND (SHIRDLEY HILL SAND).	0.70	CBR1	3.5%
			0.90-1.05	B2	
			1.20-1.60	B3	
2.00-3.60		Soft becoming firm (low to medium strength) brown sandy gravelly CLAY, with sand pockets. Gravel consists of mudstone (BOULDER CLAY).	2.20	V1	30kN/m <sup>2</sup>
			2.20-2.40	B4	
			2.90	V2	50kN/m <sup>2</sup>
			3.30	V3	70kN/m <sup>2</sup>
3.60		Trial pit complete at 3.60m.			

Shoring/Support: None Stability: All faces unstable in sand. Stable in clay.		GENERAL REMARKS
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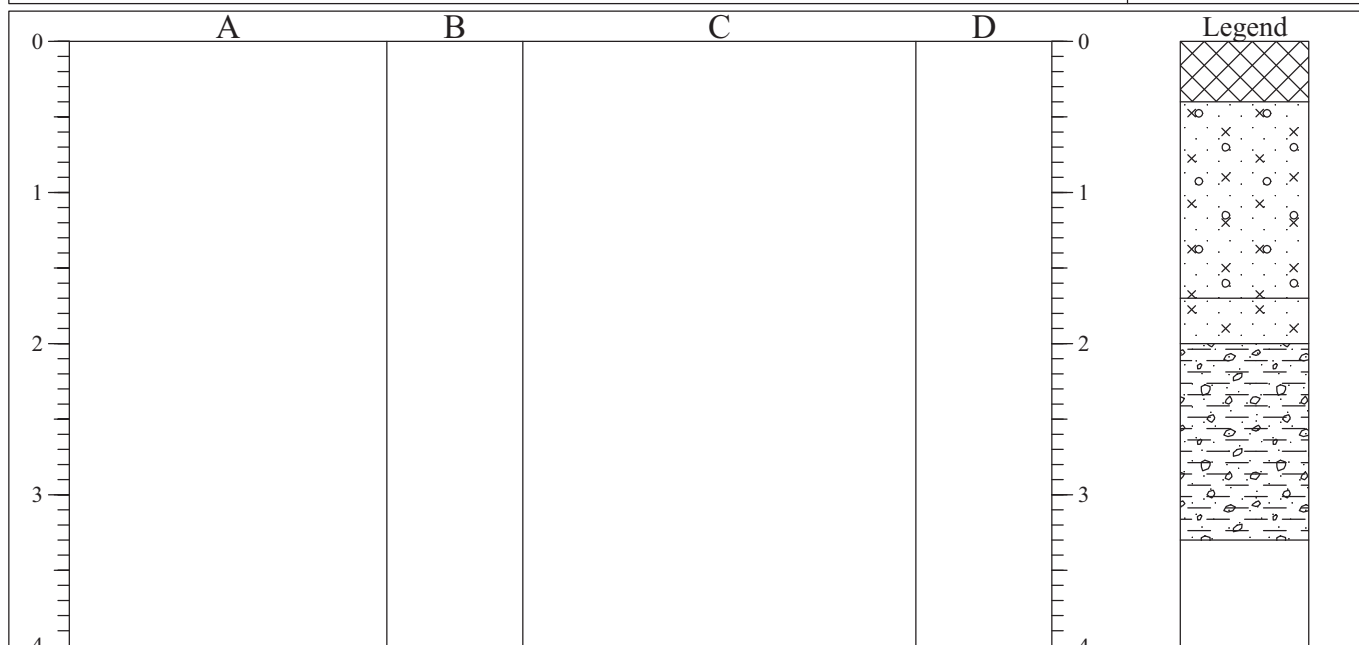
All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By NJW
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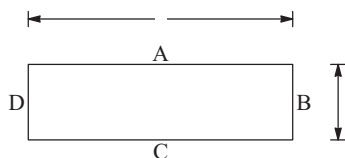
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP05</b>
Job No 16-433	Date 24-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.40		Dark brown gravelly very sandy soil, with mudstone, brick and occasional concrete (MADE GROUND).	0.10-0.30	DJ1	
0.40-1.70		Dark brown becoming light brown slightly gravelly silty fine to medium SAND (SHIRDLEY HILL SAND).	0.50	CBR1	4.0%
			0.70-1.00	B2	
1.70-2.00		Light grey and brown slightly silty fine to medium SAND, with very sandy clay pockets and occasional decomposed plant remains (SHIRDLEY HILL SAND).	1.80-2.00	B3	
2.00-3.30		Firm (medium strength) brown slightly gravelly sandy CLAY, with occasional sand pockets. Gravel consists of mudstone (BOULDER CLAY).	2.20	V1	46kN/m <sup>2</sup>
			2.40-2.80	B4	
			2.80	V2	50kN/m <sup>2</sup>
3.30		Trial pit terminated at 3.30m due to instability.			

Shoring/Support: None  
Stability: All faces unstable.



### GENERAL REMARKS

WATER: Water seepages at 2.00m.

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By NJW
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## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP06</b>
Job No 16-433	Date 24-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

A		B		C		D		Legend	
0									
1									
2									
3									
4									

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.65		Dark brown very sandy soily brick and concrete rubble, with occasional metal and wiring (MADE GROUND).	0.10-0.40	DJ1	32kN/m <sup>2</sup>  30kN/m <sup>2</sup>
0.65-1.10		Dark brown slightly clayey slightly gravelly fine to medium sand, with occasional brick (MADE GROUND).	0.70-0.90	B2	
1.10-2.05		Light brown and dark brown slightly silty fine to medium SAND, with occasional silty sand pockets and decomposed plant remains (SHIRDLEY HILL SAND).	1.20-1.40	B3	
2.05-2.50		Light grey slightly clayey silty fine to medium SAND (SHIRDLEY HILL SAND).	2.10-2.30	B4	
2.50-3.10		Soft (low strength) brown slightly gravelly sandy CLAY, with sand pockets. Gravel consists of mudstone (BOULDER CLAY).	2.40-2.60	B5	
			2.60	V1	
3.10		Trial pit terminated at 3.10m due to instability.	3.00	V2	

Shoring/Support: None Stability: All faces unstable.	GENERAL REMARKS
	WATER: Water seepage at 2.50m.

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By NJW
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## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP07</b>
Job No 16-433	Date 24-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

A	B	C	D	Legend
0				
1				
2				
3				
4				

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.50		Grass over dark brown very sandy soil (MADE GROUND).	0.20-0.40	DJ1	
0.50-0.75		Firm brown slightly gravelly very sandy CLAY. Gravel consists of mudstone.	0.50	CBR1	3.0%
0.75-1.25		Orangish brown fine to medium SAND (SHIRDLEY HILL SAND).	0.50-0.75	B2	
1.25-2.00		Firm (medium strength) brown slightly sandy slightly gravelly CLAY, with occasional sand pockets (BOULDER CLAY).	0.80-1.00	B3	
2.00		Trial pit complete at 2.00m.	1.40-1.60	B4	60kN/m <sup>2</sup>
			1.50	V1	

Shoring/Support: None Stability: All faces unstable in sand. Stable in clay.			GENERAL REMARKS	
			WATER: Trial pit remained DRY throughout.	

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By NJW
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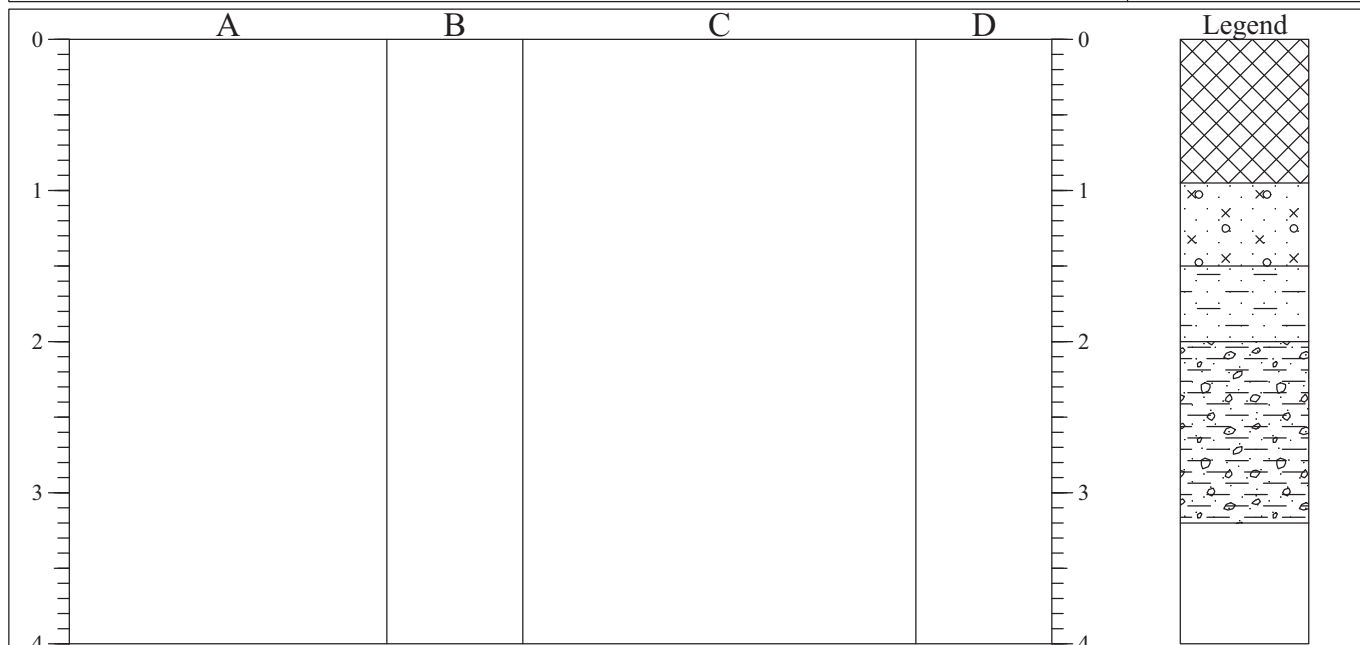
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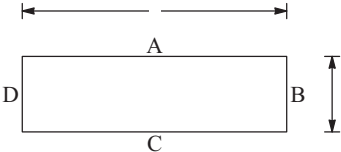
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## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP08</b>
Job No 16-433	Date 24-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.95		Grass over dark brown slightly sandy gravelly clay, with brick, limestone, mudstone and occasional concrete (MADE GROUND).	0.20-0.60	DJ1	
0.95-1.50		Dark brown slightly gravelly silty fine to medium SAND. Gravel consists of mudstone (possible made ground) (SHIRDLEY HILL SAND).	1.00-1.20	B2	
1.50-2.00		Orangish brown slightly clayey fine to medium SAND, with occasional very sandy clay pockets (SHIRDLEY HILL SAND).	1.60-1.80	B3	
2.00-3.20		Firm (medium strength) brown slightly sandy gravelly CLAY, with occasional sand pockets. Gravel consists of mudstone (BOULDER CLAY).	2.20	V1	70kN/m <sup>2</sup>
			2.40-2.60	B4	
			2.80	V2	60kN/m <sup>2</sup>
3.20		Trial pit complete at 3.20m.			

Shoring/Support: None Stability: All faces unstable in sand. Stable in clay.		GENERAL REMARKS  WATER: Trial pit remained DRY throughout.
		

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By NJW
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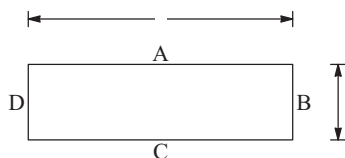
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP09</b>
Job No 16-433	Date 24-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

0	A	B	C	D	0	<b>Legend</b> 
1					1	
2					2	
3					3	
4					4	

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.70		Grass over dark brown very sandy soil (MADE GROUND).	0.20-0.50	DJ1	
0.70-1.50		Dark brown and light brown slightly clayey fine to medium SAND, with occasional very sandy clay pockets (SHIRDLEY HILL SAND).	0.70	CBR1	4.5%
			0.80-1.00	B2	
1.50-2.50		Firm (medium strength) brown slightly sandy slightly gravelly CLAY, with occasional sand pockets. Gravel consists of mudstone (BOULDER CLAY).	1.80	V1	70kN/m <sup>2</sup>
			1.80-2.00	B3	
			2.10	V2	60kN/m <sup>2</sup>
2.50		Trial pit complete at 2.50m.			

Shoring/Support: None  
Stability: All faces slightly unstable.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

All dimensions in metres  
Scale 1:50

Client CDP

Method/  
Plant Used

JCB 3CX

Logged By  
NJW



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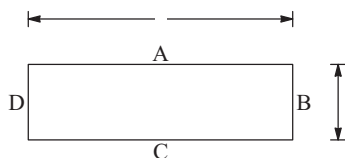
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP10</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

A		B		C		D		Legend	
0							0		
1							1		
2							2		
3							3		
4							4		

STRATA				SAMPLES & TESTS		
Depth	No	DESCRIPTION		Depth	No	Remarks/Tests
0.00-0.50		Rough grass over dark brown very sandy slightly gravelly soil, with occasional brick and pottery (MADE GROUND).		0.30	DJ	3.6
0.50-2.20		Yellowish brown fine to medium SAND, with occasional sandy clay pockets and occasional decomposed plant remains (SHIRDLEY HILL SAND).		0.50	CBR	
1.20		Becoming dark brown.		1.00	B	
2.20-3.00		Soft (low strength) greyish brown very sandy CLAY, with sand pockets (BOULDER CLAY).		2.00	B	29kN/m <sup>2</sup>
2.50		Becoming firm (medium strength).		2.40	V	
3.00		Trial pit terminated at 3.00m due to instability.		3.00	B	52kN/m <sup>2</sup>
				3.00	V	

Shoring/Support: None  
Stability: All faces unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

All dimensions in metres  
Scale 1:50

Client CDP

Method/  
Plant Used

JCB 3CX

Logged By

MB



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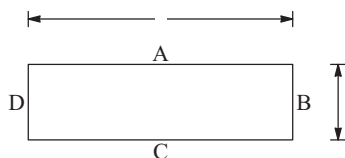
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP11</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

0	A	B	C	D	0	Legend
1					1	
2					2	
3					3	
4					4	

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.50		Rough grass over dark brown very sandy gravelly soil, with occasional brick and concrete (MADE GROUND).			
0.50		Trial pit refused at 0.50m on concrete.			

Shoring/Support: None  
Stability: All faces slightly unstable.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

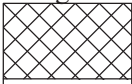
All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TP12</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

0	A	B	C	D	0	<b>Legend</b> 
1					1	
2					2	
3					3	
4					4	

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.50		Rough grass over dark brown very sandy gravelly soil, with occasional brick and concrete (MADE GROUND).	0.40	DJ	
0.50		Trial pit refused at 0.50m on concrete.			

Shoring/Support: None Stability: All faces slightly unstable.  	<b>GENERAL REMARKS</b>  WATER: Trial pit remained DRY throughout.
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All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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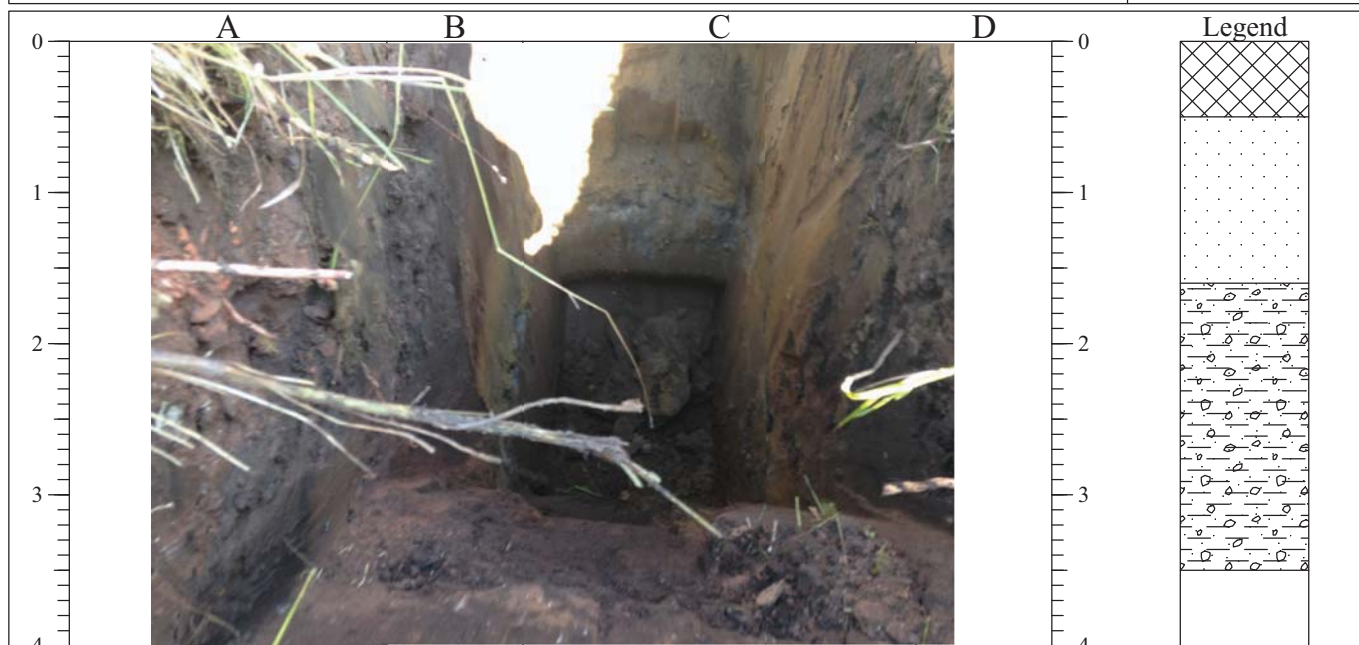
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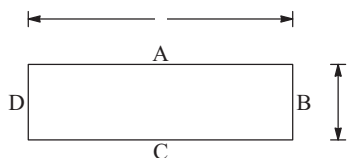
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TPA</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.50		Rough grass over dark brown very sandy soil, with occasional brick (MADE GROUND).	0.25	DJ	3
0.50-1.60		Yellowish brown fine to medium SAND, with occasional sandy clay pockets (SHIRDLEY HILL SAND).	0.60	CBR	
			1.00	B	
1.60-3.50		Firm (medium strength) brown very sandy gravelly CLAY, with occasional sand pockets. Gravel consists of mudstone (BOULDER CLAY).	2.00	B	56kN/m <sup>2</sup>
			2.00	V	
			3.00	B	63kN/m <sup>2</sup>
			3.00	V	
3.50		Trial pit terminated at 3.50m.			

Shoring/Support: None  
Stability: All faces slightly unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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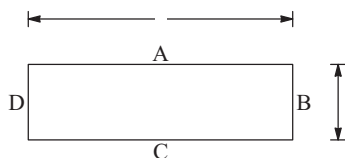
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TPB</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.30		Rough grass over firm brown sandy gravelly clay, with occasional brick concrete and sandstone (MADE GROUND).	0.20	DJ	
0.30-1.70		Brown and grey slightly gravelly fine to medium SAND, with occasional sandy clay pockets (SHIRDLEY HILL SAND).	0.80	CBR	3.8
			1.00	B	
1.70-2.20		Soft (low strength) greyish brown very sandy CLAY, with sand pockets (BOULDER CLAY).	2.00	B	
2.20-3.50		Firm (medium strength) brown slightly sandy gravelly CLAY, with occasional sand pockets. Gravel consists of mudstone (BOULDER CLAY).	2.00	V	30kN/m <sup>2</sup>
			3.00	B	
			3.00	V	60kN/m <sup>2</sup>
3.50		Trial pit terminated at 3.50m.			

Shoring/Support: None  
Stability: All faces slightly unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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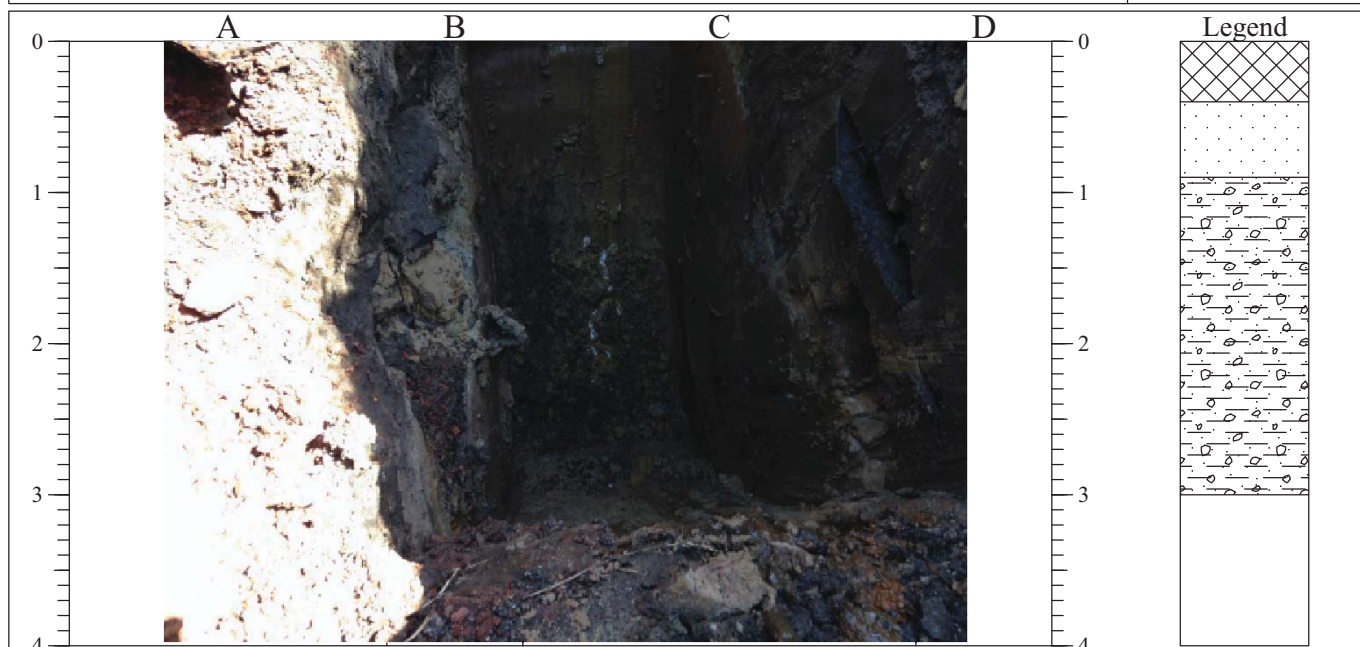




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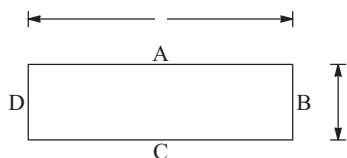
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TPC</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.40		Rough grass over dark brown very sandy soil, with occasional brick and cobbles (MADE GROUND).	0.30	DJ	3.9
0.40-0.90		Brown and grey fine to medium SAND, with occasional sandy clay pockets (SHIRDLEY HILL SAND).	0.50	CBR	
0.90-3.00		Firm (medium strength) brown slightly sandy gravelly CLAY, with occasional sand pockets. Gravel consists of mudstone (BOULDER CLAY).	1.00	B	55kN/m <sup>2</sup>
			1.50	V	
			2.00	B	65kN/m <sup>2</sup>
			2.00	V	
3.00		Trial pit terminated at 3.00m. Note. Relic drain noted at c.0.40m with concrete in side of pit c.150mm thick.	3.00	B	82kN/m <sup>3</sup>
			3.00	V	

Shoring/Support: None  
Stability: All faces slightly unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

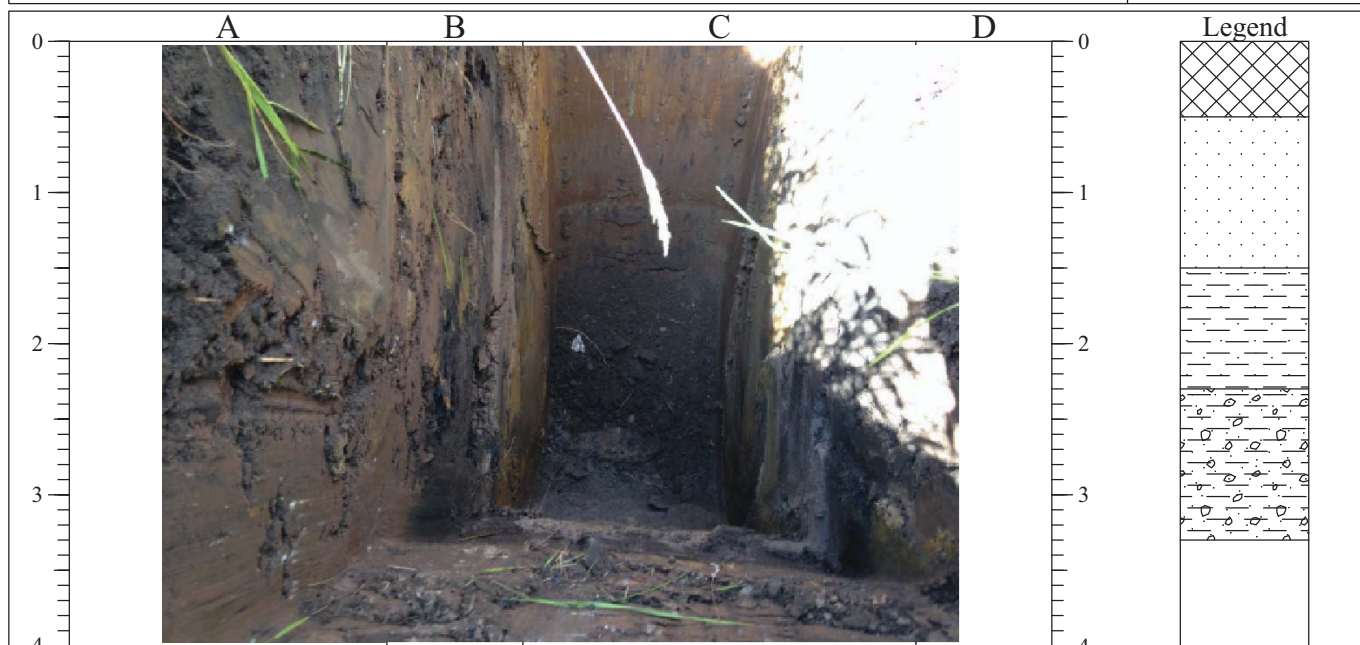
All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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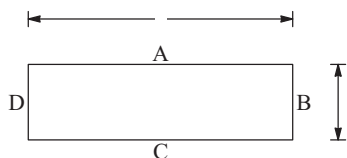
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TPD</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.50		Rough grass over firm brown sandy gravelly clay, with occasional brick concrete and sandstone (MADE GROUND).			
0.50-1.50		Brown and grey fine to medium SAND, with occasional sandy clay pockets (SHIRDLEY HILL SAND).	0.40	DJ	
			0.70	CBR	5.5
			1.00	B	
1.50-2.30		Soft (low strength) greyish brown very sandy CLAY, with sand pockets (BOULDER CLAY).			
			2.00	B	
			2.00	V	35kN/m <sup>2</sup>
2.30-3.30		Firm (medium strength) brown slightly sandy gravelly CLAY, with occasional sand pockets. Gravel consists of mudstone (BOULDER CLAY).			
			3.00	B	
			3.00	V	68kN/m <sup>2</sup>
3.30		Trial pit terminated at 3.30m.			

Shoring/Support: None  
Stability: All faces slightly unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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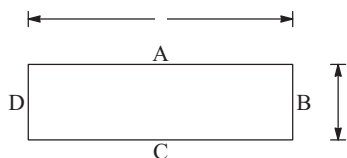
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TPE</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ( )	
Contractor Arc Environmental Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.40		Rough grass over dark brown very sandy soil, with occasional brick (MADE GROUND).			
0.40-1.50		Brown and grey fine to medium SAND, with occasional sandy clay pockets (SHIRDLEY HILL SAND).	0.30	DJ	
			1.00	B	
			1.00	CBR	5
1.50-2.00		Soft (low strength) greyish brown very sandy CLAY, with sand pockets (BOULDER CLAY).			
2.00-3.50		Firm (medium strength) brown slightly sandy gravelly CLAY, with occasional sand pockets. Gravel consists of mudstone (BOULDER CLAY).	2.00	B	
			2.00	V	40kN/m <sup>2</sup>
			3.00	B	
			3.00	V	68kN/m <sup>2</sup>
3.50		Trial pit terminated at 3.30m.			

Shoring/Support: None  
Stability: All faces slightly unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

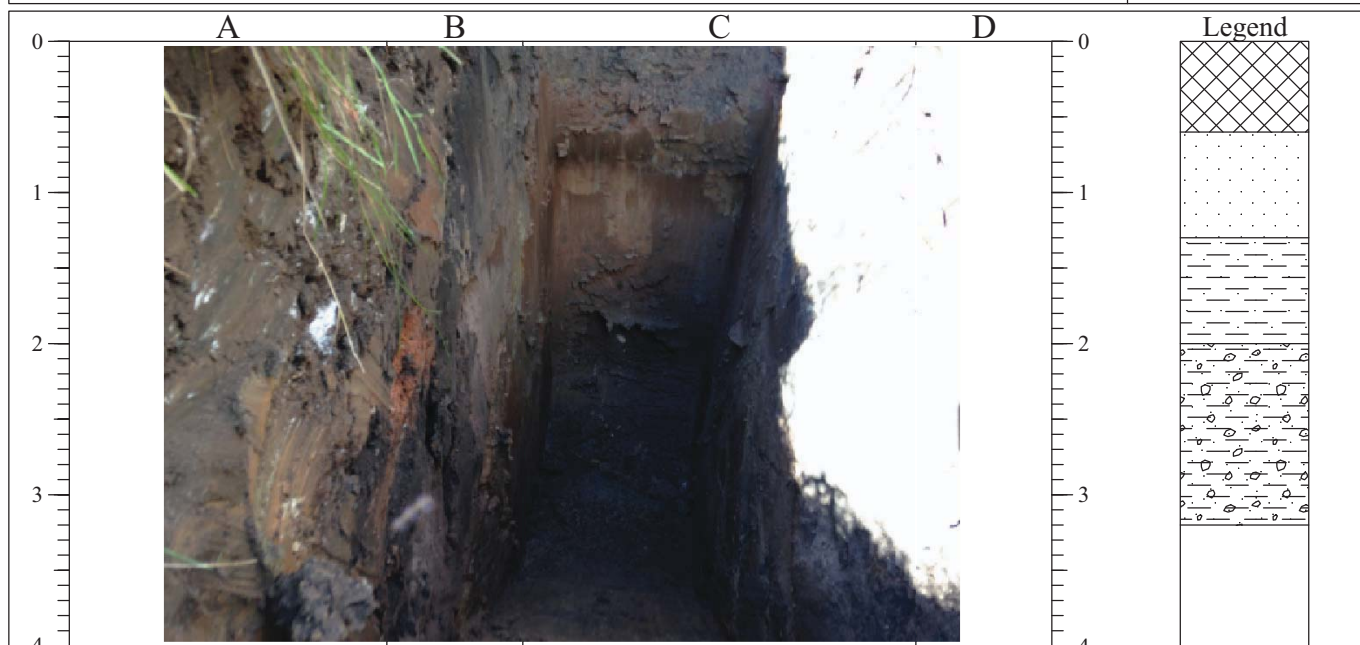
All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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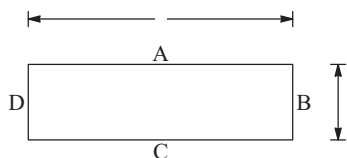
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TPF</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.60		Rough grass over firm brown sandy gravelly clay, with occasional brick concrete and sandstone (MADE GROUND).			
0.60-1.30		Brown and grey fine to medium SAND, with occasional sandy clay pockets (SHIRDLEY HILL SAND).	0.50	DJ	
			0.80	CBR	4.8
			1.00	B	
1.30-2.00		Soft (low strength) greyish brown very sandy CLAY, with sand pockets (BOULDER CLAY).	1.50	V	35kN/m <sup>2</sup>
2.00-3.20		Firm (medium strength) brown slightly sandy gravelly CLAY, with occasional sand pockets. Gravel consists of mudstone (BOULDER CLAY).	2.00	B	
			2.00	V	45kN/m <sup>2</sup>
3.20		Trial pit terminated at 3.30m.	3.00	B	
			3.00	V	70kN/m <sup>3</sup>

Shoring/Support: None  
Stability: All faces slightly unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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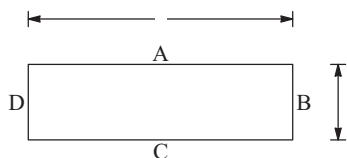
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TPG</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

0	A	B	C	D	0	Legend
1					1	
2					2	
3					3	
4					4	

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.50		Black sandy clayey gravel. Gravel is fine to coarse comprising concrete and brick. Cobbles (MADE GROUND).			
0.50		Trial pit terminated at 0.50m due to refusal on concrete.	0.40	DJ	

Shoring/Support: None  
Stability: All faces slightly unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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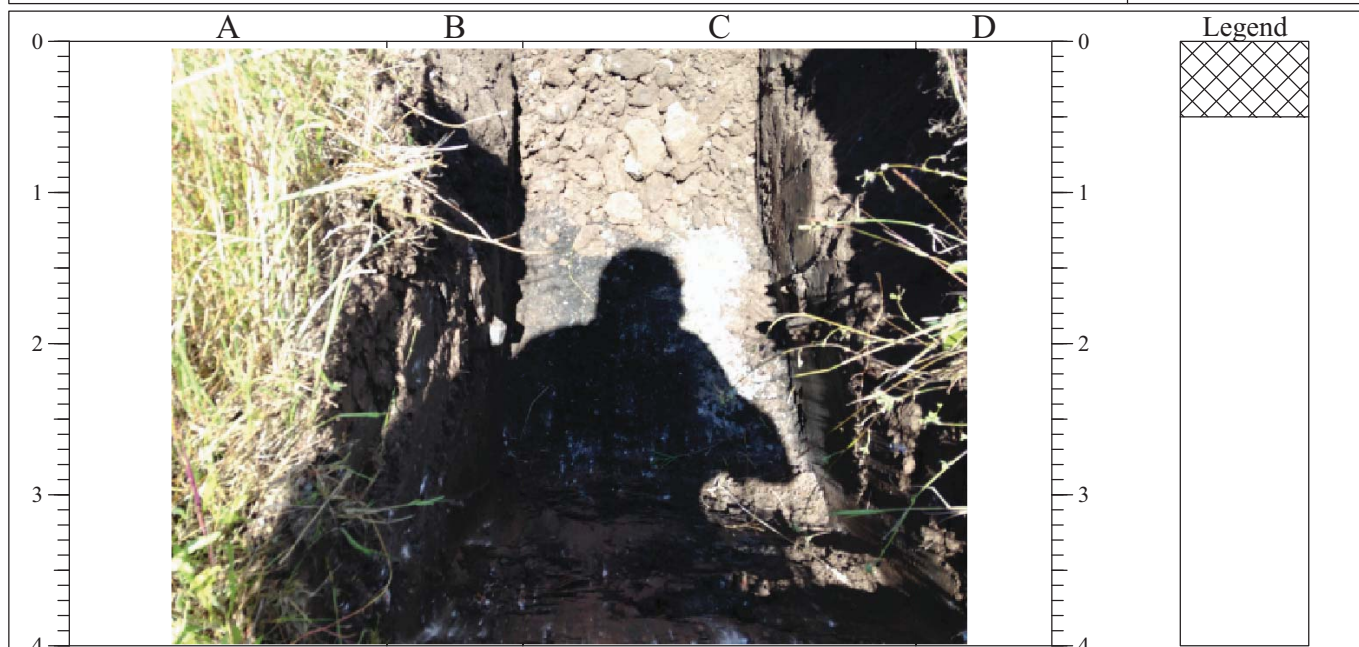




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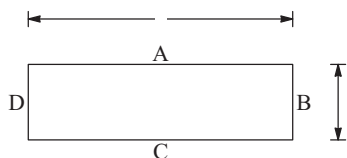
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TPH</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.50		Black sandy clayey gravel. Gravel is fine to coarse comprising concrete and brick. Cobbles (MADE GROUND).			
0.50		Trial pit terminated at 0.50m due to refusal on concrete.	0.40	DJ	

Shoring/Support: None  
Stability: All faces slightly unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.



All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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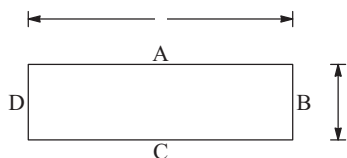
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TPI</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

0	A	B	C	D	0	Legend
1					1	
2					2	
3					3	
4					4	

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.40		Black sandy clayey gravel. Gravel is fine to coarse comprising concrete and brick. Cobbles (MADE GROUND).			
0.40		Trial pit terminated at 0.40m due to refusal on concrete.			

Shoring/Support: None  
Stability: All faces slightly unstable in sand. Stable in clay.



### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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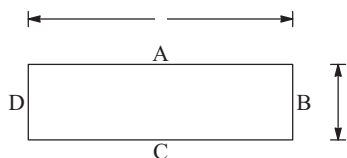
## TRIAL PIT LOG

Project Land off Estuary Boulevard, Speke, Liverpool				TRIAL PIT No <b>TPJ</b>
Job No 16-433	Date 17-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

0	A	B	C	D	0	Legend
1					1	
2					2	
3					3	
4					4	

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.30		Black sandy clayey gravel. Gravel is fine to coarse comprising concrete and brick. Cobbles (MADE GROUND).			
0.30		Trial pit terminated at 0.30m due to refusal on concrete.			

Shoring/Support: None  
Stability: All faces slightly unstable in sand. Stable in clay.

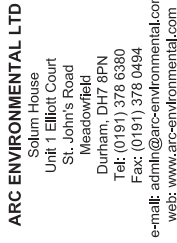


### GENERAL REMARKS

WATER: Trial pit remained DRY throughout.

All dimensions in metres Scale 1:50	Client CDP	Method/ Plant Used JCB 3CX	Logged By MB
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The contractor shall check all dimensions on site prior to commencement of works. No dimensions to be scaled off this drawing

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1. TRAIL PIT TPC WAS INITIALLY CARRIED OUT DURING THE FIRST PHASE OF INVESTIGATION WORKS ACROSS THE MEDIC POND. WHILE THIS PROCEEDED, THE INVESTIGATOR OBSERVED CONCRETE WAS RECORDED ON ONE PLANS. SHALLOW UNFINISHED CONCRETE WAS QUANTIFIED AT THIS POSITION AND THE EXCAVATION WAS TERMINATED ON THIS OBSTRUCTION AS NO BREAKING OUT GEAR WAS AVAILABLE DURING THIS PHASE OF THE INVESTIGATION WORKS.
2. A SECOND VISIT WAS AGREED WITH BREAKING OUT EQUIPMENT TO FURTHER ELUCIDATE THE EXTENTS OF THE FORMER POND. TRAIL PITS THK AND THL PROVIDED THE DEPTH OF THE HISTORIC POND. FEATURE (SEE BELOW SECTIONS) AND TRAIL PITS THL, THK AND THL PROVIDED THE UNFINISHED CONCRETE AT SHALLOW DEPTH.



- STRATA 1 BLACK SANDY GRAVEL (MADE GROUND)  
STRATA 2 CONCRETE WITH RE-BAR (MADE GROUND)  
STRATA 3 BROWN, BLACK AND GREY OLIGOMITE LIMESTONE HARDWARE, WET (MADE GROUND)  
STRATA 4 BLACK SANDY GRAVEL, GRAVEL COMPRISES BRICK, GLASS, WOOD, CONCRETE, ROPE, POTTERY, BAG, BURNT ASH, SHOES AND BOTTLES. ORGANIC PEATY COLOUR NOTED (MADE GROUND)  
STRATA 5 GREY AND DARK BROWN ORGANIC SILT WITH DECOMPOSED ROOTS NOTED. \*\*BASE OF FORMER STRATA 6 GREY AND BROWN SAND  
STRATA 7 FIRM BROWN AND GREY CLAY



- |          |  |
|----------|--|
| STRATA 1 | BLACK SANDY CLAYEY GRAVEL (MADE GROUND)  |
| STRATA 2 | CONCRETE WITH RE-BAR (MADE GROUND)   |
| STRATA 3 | BROWN, BLACK AND GREY DOLOMITIC LIMESTONE  |
| STRATA 4 | HARDWARE, MET (MADE GROUND)  |
| STRATA 4 | BLACK SANDY SANDY GRAVEL, COMPRESSES BRICK, GLASS, WOOD, CONCRETE, ROPE, POTTERY, RAG, BURNT ASH, SHOES AND BOTTLES, ORGANIC PEATY |
| STRATA 5 | COLOUR NOTED (MADE GROUND)   |
| STRATA 5 | GREY AND DARK BROWN ORGANIC SILT WITH DECOMPOSED ROOTS NOTED. **BASE OF FORMER POND**  |
| STRATA 6 | GREY AND BROWN SAND  |

[illegible]

**ADEPT CONSULTING ENGINEERS LTD**

Project Title:  
Proposed Commerical Development  
Hercules Drive  
Spokane, Livermood, 124 8AD

Drawing Title:

Historic Pond Cross Sections (Phase 3)


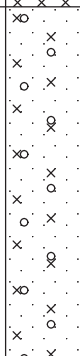











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Job Ref:	Org no:	Rev:
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# BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No  <b>BH01</b>
Job No 16-433	Date 02-04-14	Ground Level (m)	Co-Ordinates ( )	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA			Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)		
0.50	D					0.30	Grass overlying sandy soil (MADE GROUND).	
						(2.70)	Loose becoming medium dense brown slightly gravelly very silty fine to medium SAND (SHIRDLEY HILL SAND).	
1.50-2.00	B	N=7				(2.70)		
1.50-1.95	SPT							
2.50-3.00	B	N=10				3.00		
2.50-2.95	SPT							
3.00	D						Firm to stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).	
3.50-3.95	U			45 blows				
4.50-5.00	B	N=19				(5.00)		
4.50-4.95	SPT							
5.50-5.95	U	60 blows						
7.00-7.50	B	N=26						
7.00-7.45	SPT							
8.00	D					8.00	Borehole complete at 8.00m.	

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Dia. mm	Water Dpt	From	To	Hours	From	To	
02-04-14	00.00	8.00	8.00	150	1.50						
											WATER: Damp at 1.50m. REMARKS: Inspection pit - 1hr.
All dimensions in metres Scale 1:56.25		Client CDP				Method/ Plant Used Cable Percussion					Logged By CS

AGS3 UK BH 14-156 BH &amp; TP LOGS.GPJ AGS3\_ALL.GDT 10/6/14





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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BH02</b>
Job No 16-433	Date 02-04-14	Ground Level (m)	Co-Ordinates ( )	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.50	D					0.20	Grass overlying sandy soil (MADE GROUND).		
						(1.50)	Loose brown fine to medium SAND (SHIRDLEY HILL SAND).		
1.50-2.00	B	N=17				1.70			
1.50-1.95	SPT								
2.00	D						Stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).		
2.50-2.95	U	40 blows							
3.50-4.00	B								
3.50-3.95	SPT	N=23							
4.50-4.95	U	50 blows				(6.30)			
5.50-6.00	B								
5.50-5.95	SPT	N=25							
7.00-7.45	U	65 blows							
8.00	D					8.00	Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
02-04-14	00.00	8.00	8.00	150	1.20						WATER: Damp at 1.20m. REMARKS: Inspection pit - 1hr.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By CS		

AGS3 UK BH 14-156 BH & TP LOGS.GPJ AGS3 ALL GDT 10/6/14



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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BH03</b>
Job No 16-433	Date 03-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.20	D					0.20	Grass overlying sandy soil (MADE GROUND).		
0.50	D					0.50	Black ash sand and gravel fill (MADE GROUND).		
1.50	D					(1.00)	Loose brown clayey fine to medium SAND (SHIRDLEY HILL SAND).		
2.50-3.00	B					1.50	Soft becoming firm and stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).		
2.50-2.95	SPT	N=15							
2.50-2.95	U	50 blows							
4.50-5.00	B					(6.50)			
4.50-4.95	SPT	N=22							
4.50-4.95	U	60 blows							
7.00-7.50	B								
7.00-7.45	SPT	N=25							
7.00-7.45	U	65 blows							
8.00	D					8.00	Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
03-04-14	00.00	8.00	8.00	150	Dry						WATER: Borehole remained DRY throughout. REMARKS: Inspection pit - 30mins.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By CS		

AGS3 UK BH 14-156 BH & TP LOGS.GPJ AGS3 ALL GDT 10/6/14



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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BH04</b>
Job No 16-433	Date 04-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
0.50	D					0.20	Grass overlying sandy soil (MADE GROUND).		
						(1.70)	Loose brown fine to medium SAND (SHIRDLEY HILL SAND).		
1.50-2.00	B	N=8				1.90			
1.50-1.95	SPT								
2.00	D						Stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).		
2.50-2.95	U	45 blows							
3.50-4.00	B								
3.50-3.95	SPT	N=20							
4.50-4.95	U	50 blows				(6.10)			
5.50-6.00	B								
5.50-5.95	SPT	N=27							
7.00-7.45	U	65 blows							
8.00	D					8.00	Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
04-04-14	00.00	8.00	8.00	150	Dry						WATER: Borehole remained DRY throughout. REMARKS: Inspection pit - 30mins.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By CS		

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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BH05</b>
Job No 16-433	Date 04-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.50	D					0.10	Grey hardcore (MADE GROUND).		
						0.50	Black ash sand and gravel fill (MADE GROUND).		
						(1.50)	Loose brown slightly gravelly very silty fine to medium SAND (SHIRDLEY HILL SAND).		
1.50-2.00	B	N=7				2.00	Stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).		
1.50-1.95	SPT								
2.00	D								
2.50-3.00	B	N=16							
2.50-2.95	SPT								
3.50-3.95	U	45 blows							
4.50-5.00	B	N=20							
4.50-4.95	SPT								
5.50-5.95	U	60 blows							
7.00-7.50	B	N=28							
7.00-7.45	SPT								
8.00	D					8.00	Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS	
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To		
04-04-14	00.00	8.00	8.00	150	1.50							
All dimensions in metres Scale 1:56.25		Client    CDP				Method/ Plant Used      Cable Percussion					Logged By CS	

AGS3 UK BH 14-156 BH & TP LOGS.GPJ AGS3 ALL GDT 10/6/14



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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BH06</b>
Job No 16-433	Date 02-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.50	D					0.30	Grass overlying sandy soil (MADE GROUND).		
1.50-2.00	B	N=12				(1.30)	Loose brown fine to medium SAND (SHIRDLEY HILL SAND).		
1.50-1.95	SPT					1.60			
2.00	D						Firm to stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).		
2.50-2.95	U	40 blows							
3.50-4.00	B								
3.50-3.95	SPT	N=20							
4.50-4.95	U	50 blows				(6.40)			
5.50-6.00	B								
5.50-5.95	SPT	N=21							
7.00-7.45	U	65 blows							
8.00	D					8.00	Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
02-04-14	00.00	8.00	8.00	150	Dry						WATER: Borehole remained DRY throughout. REMARKS: Inspection pit - 30mins.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By CS		

AGS3 UK BH 14-156 BH & TP LOGS.GPJ AGS3 ALL GDT 10/6/14



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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BH07</b>
Job No 16-433	Date 03-04-14	Ground Level (m)	Co-Ordinates ( )	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.20	D					(0.50) 0.50	Brick ash and concrete fill with cobbles (MADE GROUND).		
1.00	D					(1.00) 1.50	Loose yellowish brown clayey fine to medium SAND (SHIRDLEY HILL SAND).		
1.50-2.00 1.50-1.95	B SPT	N=14					Stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).		
2.00	D								
2.50-2.95	U	50 blows							
3.50-4.00 3.50-3.95	B SPT	N=23							
4.50-4.95	U	60 blows				(6.50)			
5.50-6.00 5.50-5.95	B SPT	N=25							
7.00-7.45	U	65 blows							
8.00	D					8.00	Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
03-04-14	00.00	8.00	8.00	150	0.20						WATER: Damp at 0.20m. REMARKS: Inspection pit - 30mins. Winching onto position - 1hr.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By CS		

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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BH08</b>
Job No 16-433	Date 03-04-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
0.50	D					(1.00)	Brick ash and sand fill (MADE GROUND).		
1.00	D					1.00	Loose brown fine to medium SAND (SHIRDLEY HILL SAND).		
1.50-2.00	B	N=7				(1.00)			
1.50-1.95	SPT					2.00			
2.00	D						Stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).		
2.50-2.95	B								
2.50-2.95	U 40	(NR) blows							
3.50-4.00	B								
3.50-3.95	SPT	N=21							
4.50-4.95	U	50 blows				(6.00)			
5.50-6.00	B								
5.50-5.95	SPT	N=23							
7.00-7.45	U	65 blows							
8.00	D					8.00	Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
03-04-14	00.00	8.00	8.00	150	1.50						WATER: Damp at 1.50m. REMARKS: Inspection pit - 30mins. Winching onto position - 1hr.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By CS		

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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BH09</b>
Job No 16-433	Date 18-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 2

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.40	D					0.30	Grass overlying sandy soil (MADE GROUND).		
1.50-1.95	SPT	N=8				(2.90)	Loose brown and grey gravelly clayey silty fine to medium SAND (SHIRDLEY HILL SAND).		
2.00	D								
2.50-3.00	B SPT	N=8				3.20	Firm to stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).		
2.50-2.95									
3.50-3.95	U100	40 Blows							
4.50-5.00	B SPT	N=19							
4.50-4.95									
6.00-6.50	B SPT	N=22							
6.00-6.45									
7.50-7.95	U100	54kN/m <sup>2</sup>							
8.00	D								

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											WATER: Borehole remained DRY throughout. REMARKS: Inspection pit - 1 Hour.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By RD		

AGS3 UK BH 14-156 ADDITIONAL BH LOGS GPJ AGS3 ALL GDT 9/1/14





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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BH09</b>
Job No 16-433	Date 18-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 2 of 2

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
9.00-9.50 9.00-9.45	B SPT	N=23				(11.80)	Firm to stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY). <i>(continued)</i>		
10.50-10.95	U100	80 Blows							
11.50	D								
12.00-12.50 12.00-12.45	B SPT	N=25							
13.00	D								
13.50-13.95	U100	45kN/m <sup>2</sup>							
14.50-14.95	SPT	N=28							
15.00	D					15.00	Borehole complete at 15.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
18-07-14	00.00	15.00	4.50	150	Dry						WATER: Borehole remained DRY throughout. REMARKS: Inspection pit - 1 Hour.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By RD		

AGS3 UK BH 14-156 ADDITIONAL BH LOGS GPJ AGS3 ALL GDT 9/1/14



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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BH10</b>
Job No 16-433	Date 19-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.20	D					(0.50) 0.50	Grass overlying sandy soil (MADE GROUND).		
1.00	D						Loose brown and grey fine to medium SAND (SHIRDLEY HILL SAND).		
1.50-1.95	SPT	N=9				(2.40)			
2.00	D								
2.50-2.95	SPT	N=12				2.90			
3.20	D						Firm to stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).		
3.50-3.95	SPT	N=18							
4.00	D								
4.50-4.95	U100	62kN/m <sup>2</sup>							
5.50	D					(5.10)			
6.00-6.50	B								
6.00-6.45	SPT	N=18							
7.50-7.95	U100	80 Blows				8.00			
							Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
19-07-14	00.00	8.00	3.00	150	Dry						WATER: Borehole remained DRY throughout. REMARKS: Inspection pit - 1 Hour.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By RD		

AGS3 UK BH 14-156 ADDITIONAL BH LOGS GPJ AGS3 ALL GDT 9/1/14



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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No  <b>BH11</b>
Job No 16-433	Date 18-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
0.40	D					0.30	Grass overlying sandy soil (MADE GROUND).		
1.50-1.95	SPT	N=6				(3.00)	Loose brown and grey fine to medium SAND (SHIRDLEY HILL SAND).		
2.00	D								
2.50-2.95	SPT	N=12							
3.00	D					3.30			
3.50-4.00	B SPT	N=16					Firm to stiff reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).		
3.50-3.95									
4.50-4.95	U100	60 Blows							
5.50	D					(4.70)			
6.00-6.50	B SPT	N=17							
6.00-6.45									
7.50-7.95	U100	70 Blows				8.00			
							Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
18-07-14	00.00	8.00	4.50	150	Dry						WATER: Borehole remained DRY throughout. REMARKS: Inspection pit - 1 Hour.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By RD		

AGS3 UK BH 14-156 ADDITIONAL BH LOGS GPJ AGS3 ALL GDT 9/1/14



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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BHA</b>
Job No 16-433	Date 20-07-14	Ground Level (m)	Co-Ordinates ( )	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.50	D					0.30	Grass overlying sandy clayey soil with brick fragments (MADE GROUND).		
1.50-2.00 1.50-1.95	B SPT	N=9				(3.30)	Loose yellow and brown slightly gravelly clayey fine to medium SAND (SHIRDLEY HILL SAND).		
2.50-2.95	SPT	N=9							
3.00	D								
3.50-3.95	SPT	N=18				3.60			
4.00	D						Firm to stiff (medium strength) brown slightly sandy gravelly CLAY (BOULDER CLAY).		
4.50-4.95	U100	40kN/m <sup>2</sup>							
5.50	D					(4.40)			
6.00-6.50 6.00-6.45	B SPT	N=21							
7.50-7.95	U100	83kN/m <sup>2</sup>				8.00			
							Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
20-07-14	00.00	8.00	4.40	150	Dry						WATER: Borehole remained DRY throughout. REMARKS: Inspection pit - 1 Hour.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By RD		

AGS3 UK BH 14-156 PHASE 3 BH LOGS GPJ AGS3 ALL GDT 11/21/14



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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BHB</b>
Job No 16-433	Date 19-07-14	Ground Level (m)	Co-Ordinates ( )	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
						0.30	Grass overlying sandy soil with brick fragments (MADE GROUND).		
0.50	D						Loose grey and brown slightly gravelly clayey silty fine to medium SAND (SHIRDLEY HILL SAND).		
1.00	D								
1.50-1.95	SPT	N=5				(2.90)			
2.50-3.00	B						Firm to stiff becoming soft in places (low to medium strength) brown slightly sandy gravelly CLAY (BOULDER CLAY).		
2.50-2.95	SPT	N=8							
						3.20			
3.50-3.95	U100	93kN/m <sup>2</sup>							
4.50-4.95	SPT	N=19							
5.00	D					(4.80)			
6.00-6.45	U100	21kN/m <sup>2</sup>							
7.50-7.95	SPT	N=26							
						8.00			
							Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
19-07-14	00.00	8.00	4.50	150	Dry						
All dimensions in metres Scale 1:56.25		Client CDP				Method/ Plant Used		Cable Percussion			Logged By RD

AGS3 UK BH 14-156 PHASE 3 BH LOGS GPJ AGS3 ALL GDT 11/21/14



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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BHC</b>
Job No 16-433	Date 19-07-14	Ground Level (m)	Co-Ordinates ()	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.30	D					0.30	Grass overlying sandy soil with brick fragments (MADE GROUND).		
						(1.20)	Grey and brown fine to medium sand (MADE GROUND).		
1.50-3.00	B SPT	50 Blows				1.50	Brick obstruction (MADE GROUND).		
1.50-1.51						(1.60)			
2.50-2.95	CPT	N=49				3.10			
3.50-4.00	B SPT	N=18					Firm to stiff (high strength) reddish brown slightly sandy gravelly CLAY (BOULDER CLAY).		
3.50-3.95									
4.50-4.95	U100	95kN/m <sup>2</sup>				(4.90)			
5.50	D								
6.00-6.45	SPT	N=23							
6.50	D								
7.50	B U100	N/R				8.00			
7.50-7.95									
8.00-8.45	SPT	N=25					Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
19-07-14	00.00	8.00	4.50	150	Dry						WATER: Borehole remained DRY throughout. REMARKS: Inspection pit - 1 Hour.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By RD		

AGS3 UK BH 14-156 PHASE 3 BH LOGS GPJ AGS3 ALL GDT 11/21/14



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## BOREHOLE LOG

Project Land off Estuary Boulevard, Speke, Liverpool				BOREHOLE No <b>BHD</b>
Job No 16-433	Date 20-07-14	Ground Level (m)	Co-Ordinates ( )	
Contractor Arc Environmental Ltd				Sheet 1 of 1

SAMPLES & TESTS			Water	STRATA				Geology	Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.50	D					0.30	Grass overlying sandy clayey soil with brick fragments (MADE GROUND).		
1.00	D					(2.90)	Medium dense becoming loose grey and brown gravelly clayey silty fine to medium SAND (SHIRDLEY HILL SAND).		
1.50-3.00	B SPT	N=15							
2.50	SPT	N=9							
3.20	D					3.20	Firm to stiff (medium strength) brown slightly sandy gravelly CLAY (BOULDER CLAY).		
3.50-3.95	U	68kN/m <sup>2</sup>							
4.50-4.95	SPT	N=18							
5.00	D					(4.80)			
6.00-6.50	B SPT	N=21							
6.00-6.45									
7.50-7.95	U	57kN/m <sup>2</sup>				8.00	Borehole complete at 8.00m.		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
20-07-14	00.00	8.00	4.50	150	Dry						WATER: Borehole remained DRY throughout. REMARKS: Inspection pit - 1 Hour.
All dimensions in metres Scale 1:56.25			Client CDP			Method/ Plant Used Cable Percussion			Logged By RD		

AGS3 UK BH 14-156 PHASE 3 BH LOGS.GPJ AGS3 ALL GDT 11/21/14