

KEY TO SYMBOLS

CABLE PERCUSSIVE LOG SHEETS

S	Standard penetration test (split spoon)	U	Undisturbed sample
C	Standard penetration test (cone)	b	No. of blows to drive U100 using 160kg hammer
N	Penetration resistance: number of blows- (63.5kg hammer, 0.76m drop) for 300mm penetration	X%	Percentage recovery in U100 or SPT
D	Disturbed sample	V	Vane test
B	Bulk sample	P	Piston sample
W	Water sample	J	Jar sample
T	Small disturbed sample (plastic tub)		

ROTARY LOG SHEETS

OH	Open hole drilling	D	Disturbed sample
RR	Rock roller drilling	S	Standard penetration test (split spoon)
DTH	"Down the hole" hammer drilling	C	Standard penetration test (cone)
C	Coring		
W	Water sample		
L	Windowless liner sample		

TRIAL PIT LOG SHEETS

D	Disturbed sample	CBR(M)	California bearing ratio mould sample
B	Bulk disturbed sample	CBR(P)	California bearing ratio penetrometer method
U38	Undisturbed 38mm dia. sample	CBR(S)	California bearing ratio standard plunger method
U100	Undisturbed 100mm dia. sample	W	Water sample
BU	Block undisturbed sample	J	Jar sample
MP	Mackintosh probe test		
HSV	Hand shear vane test		
PBT	Plate bearing test		
T	Small disturbed sample (plastic tub)		

The logging of soils and rocks has been carried out in accordance with BS5930⁽¹⁹⁹⁹⁾ except where superseded by the soil and rock description methodology in BS EN14688-1⁽²⁰⁰²⁾, BS EN 14688-2⁽²⁰⁰⁴⁾ and BS EN 14689-1⁽²⁰⁰³⁾.

Cable Percussion Borehole Log Sheet

BH No: 1

Site: Wrexham

Start Date: 29/02/2016

Job Number: AE0143

Finish Date: 29/02/2016

Client: Pam Brown Associates

Vertical Scale: 1:50

Rig Type: Dando 2000

Sheet 1 of 1

Depth (m)	Sample Ref.	Standard Penetration Tests (SPT's)						U100 Blows / % recovery	Depth (m)	Thickness (m)	Legend	Description of Strata	Reduced Level (m O.D.)
		Test type	Blow Counts			Pen. (mm)							
			Seal.	Test Drive	N-value	Seal.	Test						
0.40	B1								0.20	(0.20)		MADE GROUND: grey hardcore FILL (Drillers description)	
1.20	U2						51b /					Soft, brown, silty, slightly sandy, gravelly CLAY. Gravel is angular to subrounded, fine to coarse of mudstone. Sand is fine to coarse. Occasional subrounded, up to 6mm cobbles of mudstone.	
1.65	D3									(2.80)			
2.00	D4												
2.20	B5	S	3,3	4,4,4,4	N=16	150	300					from 2.20 to 3.00m : becoming very sandy, gravelly. Gravel is angular to subrounded, fine to coarse of mudstone. Sand is fine to coarse.	
3.00	D6								3.00	(0.20)		Brown, clayey, silty, slightly gravelly, fine to coarse SAND. Gravel is angular to subrounded, fine to coarse of flint, mudstone.	
3.20	B7	S	4,6	6,7,5,4	N=22	150	300		3.20	(0.80)		Soft, brown, very sandy, slightly gravelly CLAY. Gravel is angular to subrounded, fine to medium of mudstone. Sand is fine to coarse.	
4.00	D8								4.00	(0.20)		Brown, clayey, silty, slightly gravelly, fine to coarse SAND. Gravel is angular to subrounded, fine to coarse of flint, mudstone.	
4.20	D9								4.20	(0.20)		Firm, reddish brown, silty, slightly sandy, slightly gravelly CLAY. Gravel is angular, fine of mudstone. Sand is fine.	
4.30	U10						78b /					Firm to stiff, reddish brown, silty, sandy CLAY. Sand is fine to medium.	
4.75	D11									(1.10)		Brown, silty, fine to coarse SAND. Gravel is angular to subrounded, fine to coarse of flint, mudstone.	
5.10	D12												
5.30	B13	S	4,6	7,9,9,11	N=36	150	300		5.30	(1.20)		Brown, silty, fine to coarse SAND.	
6.30	D14												
6.50	B15	S	3,4	6,6,6,6	N=24	150	300		6.50			END OF BOREHOLE	
7.60	D16												
8.00	B17	S	6,6	7,8,9,9	N=33	150	300			(3.50)		END OF BOREHOLE	
9.20	D18												
9.50	B19	S	5,7	7,9,11,11	N=38	150	300					END OF BOREHOLE	
10.00									10.00			END OF BOREHOLE	

Hole Progress with Time (Depths in m. below G.L.)					Chiselling			Casing Record		Groundwater Strikes (depths in m. below G.L.)				
Date	Hole depth	Casing depth	Depth to water	Remarks	From (m)	To (m)	Time (hrs)	Depth (m)	Dia. (mm)	Strike	Casing	Water (20mins)	Sealed	Remarks
	10.00	9.60			0.00	0.00		0.00 9.60				No Groundwater Encountered		

General Remarks:		Drilled By: RH Logged By: OM
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[illegible]

Cable Percussion Borehole Log Sheet

Site: **Wrexham**
 Job Number: **AE0143**
 Client: **Pam Brown Associates**
 Rig Type: **Dando 2000**

BH No: **2A**
 Start Date: **29/02/2016**
 Finish Date: **01/03/2016**
 Vertical Scale: **1:50**
 Sheet 1 of 1

Depth (m)	Sample Ref.	Standard Penetration Tests (SPT's)						U100 Blows / % recovery	Depth (m)	Thickness (m)	Legend	Description of Strata	Reduced Level (m O.D.)
		Test type	Blow Counts			Pen. (mm)							
			Seat	Test Drive	N-value	Seat	Test						
0.50	B1								0.20	(0.20)		MADE GROUND: Hardore FILL (Driller's description).	
									0.50	(0.30)		MADE GROUND: Dense, brick, boulders, concrete, clay. (Driller's description).	
1.20	B2	C	4,4	6,6,5,7	N=24	150	300					MADE GROUND: Soft, brown, slightly sandy, gravelly CLAY. Gravel is angular to subrounded, fine to coarse of mudstone. Occasional, subrounded, up to 70mm cobbles of mudstone. Sand is fine to coarse.	
2.00	D3											from 1.20 to 3.70m : becoming very gravelly.	
2.20	U4							58b /		(3.70)			
2.65	D5												
3.00	D6												
3.20	B7	S	9,16	50,-,-,-	N>50	105	20					from 3.20 to 3.70m : occasional, subrounded, up to 70mm cobbles of mudstone.	
4.30	D8								4.20	(0.20)		Soft, brown, silty, gravelly CLAY. Gravel is angular to subrounded, fine to medium of mudstone.	
4.40	B10 U9							150b /					
4.90	U11							150b /				Firm reddish brown, slightly sandy, silty CLAY. Sand is fine.	
5.30	B13	S	5,5	6,8,8,8	N=30	150	300						
6.20	D14									(3.20)		from 6.20 to 7.00m : becoming stiff.	
6.50	U15							108b /					
6.95	D16												
7.60	D17								7.60			Brown, silty, fine to coarse SAND.	
7.90	B12												
8.00	B18	S	4,5	6,8,9,12	N=35	150	300			(2.40)			
9.20	D19												
9.50	B20	S	5,6	7,8,9,11	N=35	150	300						
									10.00			END OF BOREHOLE	

Hole Progress with Time (Depths in m. below G.L.)					Chiselling			Casing Record		Groundwater Strikes (depths in m. below G.L.)				
Date	Hole depth	Casing depth	Depth to water	Remarks	From (m)	To (m)	Time (hrs)	Depth (m)	Dia. (mm)	Strike	Casing	Water (20mins)	Sealed	Remarks
	2.00	2.00			3.40	3.80		9.50						
	10.00	9.50			3.90	4.30								
					4.90	5.20								

General Remarks:

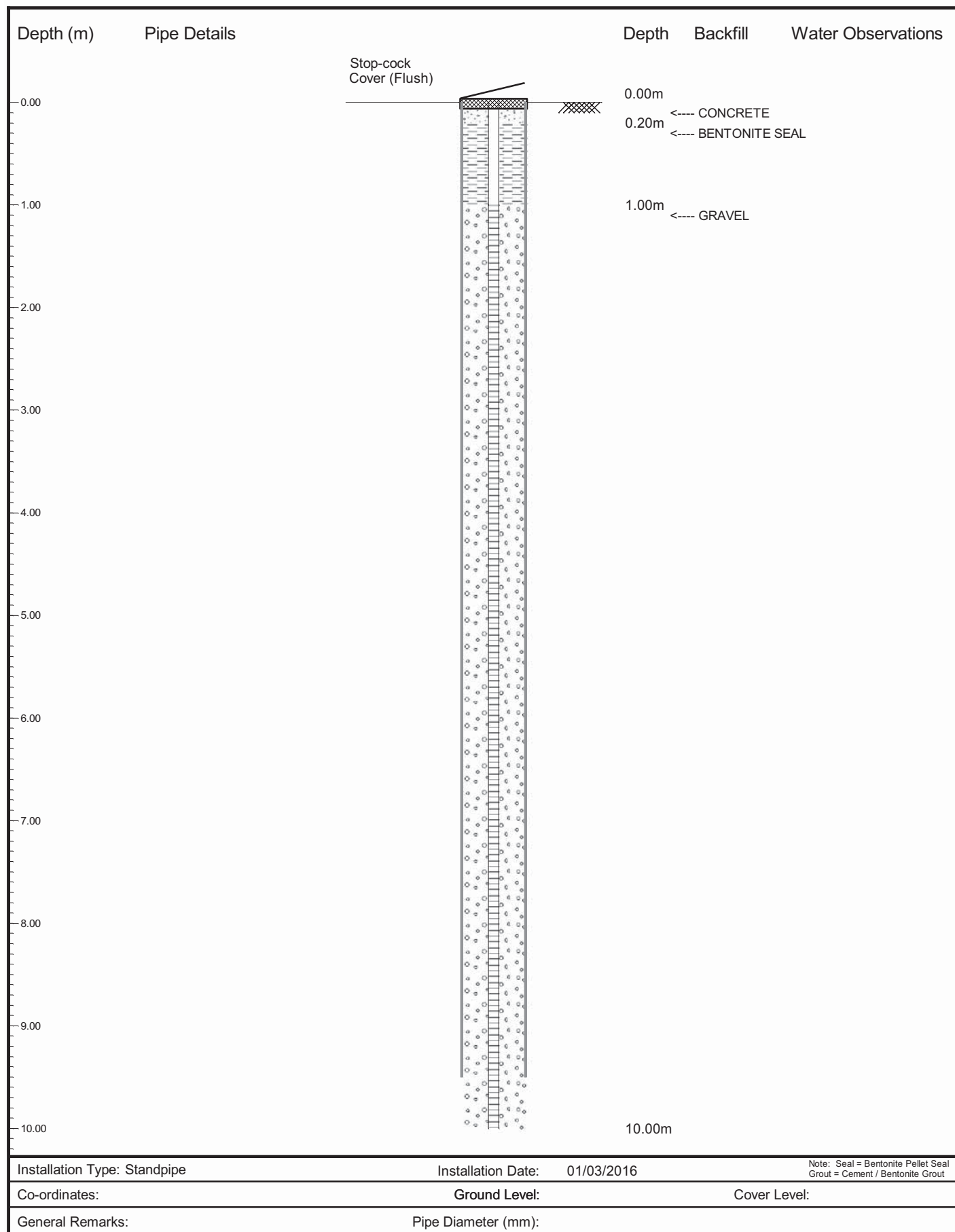
Drilled By: RH
 Logged By: OM

Monitoring Pipe Installation Details

BH No: **2A**

Site: Wrexham
 Job Number: AE0143
 Client: Pam Brown Associates
 Engineer:

Vertical Scale: 1:50
 Final BH Depth: 10.00m



Cable Percussion Borehole Log Sheet

Site: Wrexham
Job Number: AE0143
Client: Pam Brown Associates
Rig Type: Dando 2000

BH No: 3
Start Date: 01/03/2016
Finish Date: 01/03/2016
Vertical Scale: 1:50
Sheet 1 of 1

Depth (m)	Sample Ref.	Standard Penetration Tests (SPT's)						U100 Blows / % recovery	Depth (m)	Thickness (m)	Legend	Description of Strata	Reduced Level (m O.D.)
		Test type	Blow Counts			Pen. (mm)							
			Seat.	Test Drive	N-value	Seat	Test						
0.50	B1								0.20	(0.20)		Turf and Topsoil. (Driller's description).	
									0.50	(0.30)		MADE GROUND: Dense, brick, boulders, ash, concrete. (Driller's description).	
1.20	B2	C	5,7	10,10,8,7	N=35	150	300			(1.50)		MADE GROUND: Soft, brown, silty, slightly sandy, gravelly CLAY. Gravel is angular to subrounded, fine to coarse of red brick, flint, concrete. Sand is fine to coarse.	
2.00	D3							61b /	2.00			MADE GROUND: Firm, silty, very sandy CLAY. Sand is fine to coarse.	
2.20	U4									(0.65)			
2.65	D5								2.65			MADE GROUND: Soft, brown, silty, slightly sandy, gravelly CLAY. Gravel is angular to subrounded, fine to coarse of red brick, flint, concrete. Sand is fine to coarse.	
3.00	D6									(0.55)			
3.20	B7	S	3,3	4,4,5,6	N=19	150	300		3.20			Soft, brown, silty, sandy, slightly gravelly CLAY. Gravel is angular to rounded, fine to coarse of flint. Sand is fine to coarse.	
4.00	D8							51b /					
4.20	U9												
4.65	D10									(3.00)			
5.00	D11												
5.20	B12											from 5.20 to 5.70m : occasional subrounded, up to 100mm cobbles of sandstone.	
5.70		S		50,-,-,-	N>50	105	20						
6.20	D13							49b /	6.20			Firm to stiff silty very sandy CLAY. Sand is fine to coarse.	
6.50	U14									(0.75)			
6.75	D15								6.95			Soft to firm, reddish brown, silty, very sandy CLAY. Sand is fine to coarse.	
7.60	D16												
8.00	B17	S	5,6	8,9,10,11	N=38	150	300			(2.25)			
9.20	D18								9.20	(0.00)		Brown, silty, fine to coarse SAND. END OF BOREHOLE	

Hole Progress with Time (Depths in m. below G.L.)					Chiselling			Casing Record		Groundwater Strikes (depths in m. below G.L.)				
Date	Hole depth	Casing depth	Depth to water	Remarks	From (m)	To (m)	Time (hrs)	Depth (m)	Dia. (mm)	Strike	Casing	Water (20mins)	Sealed	Remarks
	9.20	9.00			5.30	5.70		9.00				No Groundwater Encountered		

General Remarks:

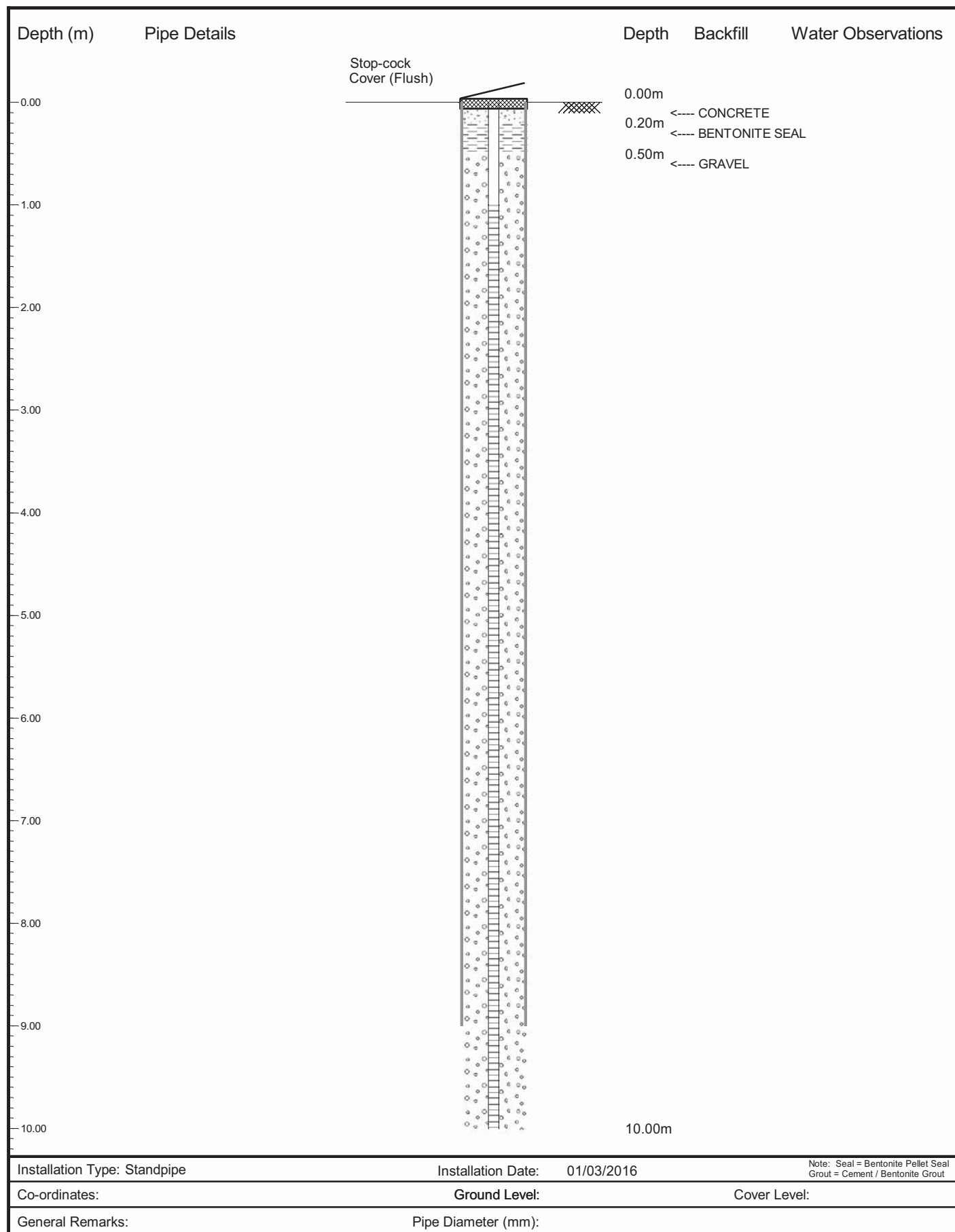
Drilled By: RH
Logged By: OM

Monitoring Pipe Installation Details

BH No: 3

Site: Wrexham
 Job Number: AE0143
 Client: Pam Brown Associates
 Engineer:

Vertical Scale: 1:50
 Final BH Depth: 9.20m



Cable Percussion Borehole Log Sheet

BH No: 4

Site: Wrexham

Start Date: 02/03/2016

Job Number: AE0143

Finish Date: 02/03/2016

Client: Pam Brown Associates

Vertical Scale: 1:50

Rig Type: Dando 2000

Sheet 1 of 1

Depth (m)	Sample Ref.	Standard Penetration Tests (SPT's)						U100 Blows / % recovery	Depth (m)	Thickness (m)	Legend	Description of Strata	Reduced Level (m O.D.)
		Test type	Blow Counts			Pen. (mm)							
			Seal	Test Drive	N-value	Seal	Test						
0.50	B1								0.50	(0.50)		MADE GROUND: Soft to firm, grey clay(fill) with brick, gravel. (Driller's description).	
1.20	B2	C	1,2	2,2,3,3	N=10	150	300			(2.50)		MADE GROUND: Soft, brown, silty, sandy, slightly gravelly CLAY. Gravel is angular to subrounded, fine to coarse of flint, coal. Sand is fine to coarse.	
1.90	D3												
2.20	U4							29b /					
2.65	D5												
3.00	D6								3.00				
3.10	D7												
3.20	B8	C	2,2	3,3,3,3	N=12	150	300			(0.80)		MADE GROUND: Soft, brown, slightly sandy, gravelly CLAY. Gravel is angular, fine to medium of clinker, red brick. Sand is fine.	
3.80	D9								3.80				
4.20	U10							59b /		(0.85)		Firm, brown, orange brown, silty, slightly gravelly CLAY. Gravel is angular, fine of mudstone.	
4.65	D11								4.65				
5.00	D12								5.00	(0.35)		Soft, brown, silty, sandy, slightly gravelly CLAY. Gravel is subangular to subrounded, fine to medium of flint. Sand is fine to medium.	
5.20	B13	S	1,2	2,3,3,3	N=11	150	300						
6.20	D14									(1.95)		Soft, reddish brown, silty, very sandy CLAY. Sand is fine to coarse. from 5.20 to 5.70m : becoming slightly gravelly. Gravel is subrounded, fine to medium of flint.	
6.50	U15							74b /					
6.95	D16								6.95				
7.60	D17									(1.05)		Firm to stiff, reddish brown, silty, slightly gravelly CLAY. Gravel is angular to subrounded, fine of flint, mudstone.	
8.00	B18	S	5,7	7,8,8,10	N=33	150	300		8.00				
9.20	D19									(2.00)		Reddish brown, clayey, slightly gravelly, fine to coarse SAND. Gravel is subrounded to rounded, fine to medium of flint.	
9.50	B20	S	7,8	12,18,20,-	N>50	150	225						
10.00									10.00				

END OF BOREHOLE

Hole Progress with Time (Depths in m. below G.L.)					Chiselling			Casing Record		Groundwater Strikes (depths in m. below G.L.)				
Date	Hole depth	Casing depth	Depth to water	Remarks	From (m)	To (m)	Time (hrs)	Depth (m)	Dia. (mm)	Strike	Casing	Water (20mins)	Sealed	Remarks
	10.00	9.50			0.00	0.00		9.50				No Groundwater Encountered		

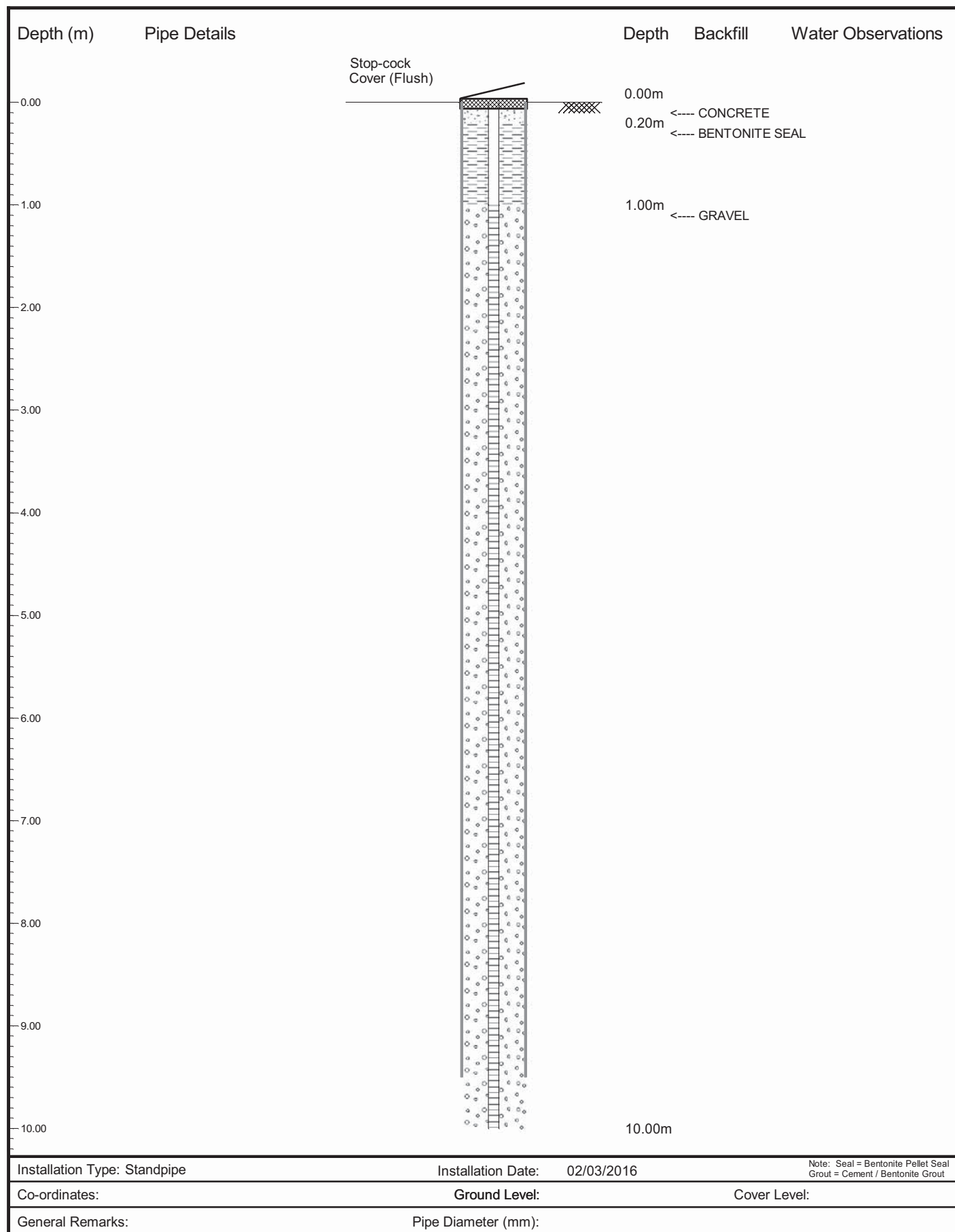
General Remarks:		Drilled By: RH Logged By: OM
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Monitoring Pipe Installation Details

BH No: 4

Site: Wrexham
 Job Number: AE0143
 Client: Pam Brown Associates
 Engineer:

Vertical Scale: 1:50
 Final BH Depth: 10.00m



Cable Percussion Borehole Log Sheet

Site: Wrexham
Job Number: AE0143
Client: Pam Brown Associates
Rig Type: Dando 2000

BH No: 5
Start Date: 03/03/2016
Finish Date: 04/03/2016
Vertical Scale: 1:50
Sheet 1 of 2

Depth (m)	Sample Ref.	Standard Penetration Tests (SPT's)						U100 Blows / % recovery	Depth (m)	Thickness (m)	Legend	Description of Strata	Reduced Level (m O.D.)				
		Test type	Blow Counts			Pen. (mm)											
			Seal.	Test Drive	N-value	Seal.	Test										
0.50	B1								0.50	(0.50)		MADE GROUND: Loose black, clay, fill with brick. (Driller's description).					
1.20	U2							26b /				MADE GROUND: Soft, brown, silty, sandy, slightly gravelly CLAY. Gravel is angular to subrounded, fine to coarse of flint, coal, mudstone. Sand is fine to coarse.					
1.65	D3																
2.00	D4																
2.20	B5	S		50,-,-,-	N>50		20			(3.50)		Firm, light brown, silty, slightly gravelly CLAY. Gravel is angular to subangular, fine of sandstone.					
3.00	D6																
3.20	B7	C	4,6	5,5,5,5	N=20	150	300										
4.00	D8							56b /									
4.20	U9									(0.65)		Soft, reddish brown, silty, sandy, slightly gravelly CLAY. Gravel is angular to subrounded, fine to medium of flint, sandstone. Sand is fine to coarse.					
4.65	D10																
5.00	D11																
5.20	B12	S	4,5	5,6,6,6	N=23	150	300			(1.55)		Firm, reddish brown, silty, very sandy CLAY. Sand is fine to coarse.					
6.20	D13																
6.50	B14	S	4,6	6,6,7,8	N=27	150	300			(1.40)		Reddish brown, silty, fine to coarse SAND.					
7.60	D15																
8.00	B16	S	6,7	7,7,9,9	N=32	150	300										
9.20	D17																
9.50	B18	S	5,8	8,9,15,17	N=49	150	300			(3.40)		Reddish brown, silty, fine to coarse SAND.					
(Continued on next sheet)																	
Hole Progress with Time (Depths in m. below G.L.)								Chiselling			Casing Record		Groundwater Strikes (depths in m. below G.L.)				
Date	Hole depth	Casing depth	Depth to water	Remarks				From (m)	To (m)	Time (hrs)	Depth (m)	Dia. (mm)	Strike	Casing	Water (20mins)	Sealed	Remarks
								2.20	2.50						No Groundwater Encountered		
General Remarks:														Drilled By: RH Logged By: OM			

Cable Percussion Borehole Log Sheet

Site: Wrexham
Job Number: AE0143
Client: Pam Brown Associates
Rig Type: Dando 2000

BH No: 5
Start Date: 03/03/2016
Finish Date: 04/03/2016
Vertical Scale: 1:50
Sheet 2 of 2

Depth (m)	Sample Ref.	Standard Penetration Tests (SPT's)						U100 Blows / % recovery	Depth (m)	Thickness (m)	Legend	Description of Strata	Reduced Level (m O.D.)										
		Test type	Blow Counts			Pen. (mm)																	
			Seat.	Test Drive	N-value	Seat	Test																
10.60	D19											Reddish brown, silty, fine to coarse SAND.											
11.00	B20	S	5,5	6,9,10,11	N=36	150	300		11.00														
11.80	D21																						
12.00	B22	S	3,4	5,8,9,8	N=30	150	300					Reddish brown, silty, gravelly, fine to coarse SAND. Gravel is angular to rounded, fine to coarse of flint, sandstone, mudstone.											
12.80	D23																						
13.00	B24	S	2,4	4,14,21,11	N>50	150	255																
13.80	D25																						
14.00	B26	S	4,4	5,14,14,17	N>50	150	285					from 13.80 to 14.00m : becoming clayey.											
14.80	D27								(6.50)														
15.00	B28	S	5,7	9,11,15,15	N>50	150	265																
15.80	D29																						
16.00	B30	S	4,6	7,9,14,20	N>50	150	285																
16.80	D31																						
17.00	B32	S	5,7	9,12,14,15	N>50	150	275		17.50			END OF BOREHOLE											
Hole Progress with Time (Depths in m. below G.L.)														Chiselling			Casing Record		Groundwater Strikes (depths in m. below G.L.)				
Date	Hole depth	Casing depth	Depth to water	Remarks	From (m)	To (m)	Time (hrs)	Depth (m)	Dia. (mm)	Strike	Casing	Water (20mins)	Sealed	Remarks									
	14.50 17.50	14.50 17.00						14.50 17.00				No Groundwater Encountered											
General Remarks:														Drilled By: RH Logged By: OM									











Job No. : 1572-16 Client: Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill lane, Wrexham

Easting		Start date	01/03/2016
Northing		Engineer	MM
Ground level		Backfill date	01/03/2016
Final depth	2.50	Page	1 of 1

Samples & Testing			Strata						
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.20	0.50	D					(0.10) 0.10 (0.10) 0.20 (0.30) 0.50	     	Brown mottled white slightly clayey organic gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of concrete and quartz. [TOPSOIL]
									Light grey mottled black sandy gravel of fine to coarse, sub-angular to sub-rounded of concrete (sbu-base). Sand is medium coarse. [MADE GROUND]
									Brown black, mottled white slightly ashy gravelly sand. Sand is medium to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of charcoal, brick, concrete, clinker and slag. Charcoal sits in ashy bands within the statum. [MADE GROUND]
1.50	1.70	D					(2.00)		Brown slightly gravelly clayey SAND. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of granite.
							2.50		End of Borehole

General remarks

End of trial pit at 2.5m bgl.

Excavation Method

Mechanical excavator

Checked By



Job No. : 1572-16 Client: Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	01/03/2016
Northing		Engineer	MM
Ground level		Backfill date	01/03/2016
Final depth	2.50	Page	1 of 1

Samples & Testing						Strata			
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.34	0.70	D					(0.34) 0.34 (0.36) 0.70 (0.30) 1.00		Brown mottled black, white organic clayey gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of granite, sandstone, ceramic pipe fragments and abundant roots and rootlets. [TOPSOIL] Brown mottled black clayey gravelly sand. Sand is fine to coarse. Gravel is medium to coarse, sub-angular to sub-rounded of granite, sandstone, brick, charcoal and slag. Charcoal / slag noted on eastern face of pit. Array of bricks noted on the western face of pit. [MADE GROUND] Grey fine to coarse sand. [MADE GROUND]
1.50	1.70	D					(1.50) 2.50		Brown, red-brown mottled orange, black very gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of sandstone, concrete, brick and ceramic pipe fragments. [MADE GROUND]
									End of Borehole

General remarks

End of trial pit at 2.5m bgl.

Excavation Method

Mechanical excavator

Checked By

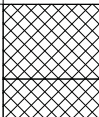
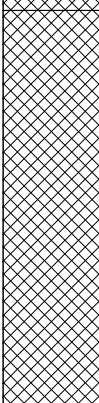
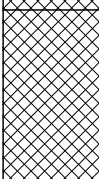


Job No. : 1572-16 Client: Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	01/03/2016
Northing		Engineer	MM
Ground level		Backfill date	01/03/2016
Final depth	2.80	Page	1 of 1

Samples & Testing			Strata						
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.60	0.90	D					(0.30)		Brown mottled black, white organic clayey gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of granite, sandstone, ceramic pipe fragments and abundant roots and rootlets. [TOPSOIL]
							0.30		
							(0.19)		
2.20		D					0.49		Brown black slightly clayey gravelly sand. Sand is medium to coarse. Gravel is fine to coarse, sub-angular to sub-rounded concrete, brick, sandstone and slag. [MADE GROUND]
							(1.61)		
							2.10		
							(0.70)		Brown black gravelly sandy clay. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of quarts and occasional concrete. [MADE GROUND]
							2.80		
									End of Borehole

General remarks

End of trial pit at 2.8 bgl.

Excavation Method

Mechanical excavator

Checked By

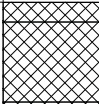
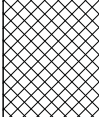
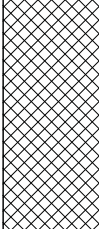



Job No. : 1572-16 Client: Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	01/03/2016
Northing		Engineer	MM
Ground level		Backfill date	01/03/2016
Final depth	1.90	Page	1 of 1

Samples & Testing						Strata			
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.20	0.40	D					(0.08) 0.08 (0.32) 0.40		Grey loose coarse sub-angular gravel of limestone. [MADE GROUND]
									Brown black, yellow-brown, slightly clayey very gravelly sand. Sand is fine to coarse. Gravel is medium to coarse, sub-angular to sub-rounded of brick, concrete and ceramic pipe fragments. Blue plastic liner noted at the base. [MADE GROUND]
							(1.40)		Grey black slightly sandy gravel. Sand is fine to coarse. Gravel is coarse, sub-angular to sub-rounded of basalt like rock. Water ingress noted at 1.0m bgl. [MADE GROUND]
1.80	1.90	D					1.80 (0.10) 1.90		Brown black clayey gravelly sand. Sand is medium to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of granite, quartz, sandstone, burnt wood and rope. [MADE GROUND]
									End of Borehole

General remarks

End of trial pit at 1.9m bgl.
Water ingress at 1.0m bgl.
Partial pit collapse from 1.0 m bgl onwards, as very loose materials fell into the excavation.

Excavation Method Mechanical excavator

Checked By

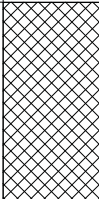
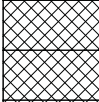
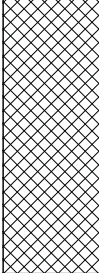


Job No. : 1572-16 Client: Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	01/03/2016
Northing		Engineer	MM
Ground level		Backfill date	01/03/2016
Final depth	2.80	Page	1 of 1

Samples & Testing						Strata			
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.80	1.30	D					(0.80)		Brown slightly clayey, gravelly sand. Sand is medium to coarse. Gravel is medium to coarse, sub-angular to sub-rounded of brick, concrete and quartzite. [MADE GROUND]
							0.80		Black gravelly sand. Sand is medium to coarse. Gravel is fine to medium, sub-angular to sub-rounded of charcoal, brick, slag and clinker. [MADE GROUND]
							(0.50)		
							1.30		
2.00	2.50	D					(0.20)		Brown slightly clayey, gravelly sand. Sand is medium to coarse. Gravel is medium to coarse, sub-angular to sub-rounded of brick, concrete and quartzite. [MADE GROUND]
							1.50		
							(0.20)		Black slightly clayey, gravelly sand. Sand is medium to coarse. Gravel is medium to coarse, sub-angular to sub-rounded of brick, concrete and quartzite. [MADE GROUND]
							1.70		
							(1.10)		Brown slightly clayey, gravelly sand / sandy gravel. Sand is medium to coarse. Gravel is medium to coarse, sub-angular to sub-rounded of brick, concrete and quartzite. Obsolete plastic pipe noted at 1.3m bgl. [MADE GROUND]
							2.80		
									End of Borehole

General remarks

End of trial pit at 2.8m bgl.

Excavation Method

Mechanical excavator

Checked By

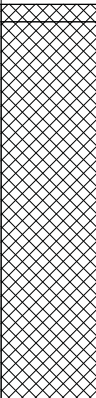
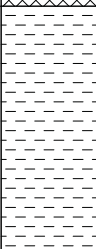


Job No. : 1572-16 Client: Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	02/03/2016
Northing		Engineer	MM
Ground level		Backfill date	02/03/2016
Final depth	2.60	Page	1 of 1

Samples & Testing						Strata			
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.50	0.90	D					(0.07) 0.07		Grey coarse subangular to subrounded gravel of brick and concrete (Demolition crush). [MADE GROUND]
							(1.53)		Brown slightly clayey, very gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of concrete, brick, ceramic pipe fragments and granite. Seepage noted at 1.6m bgl. [MADE GROUND]
							1.60		
2.00	2.50	D					(1.00)		Brown grey slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to medium, sub-angular to sub-rounded of quartzite.
							2.60		
									End of Borehole

General remarks

End of trial pit at 2.6m bgl.

Excavation Method

Mechanical excavator

Checked By



Job No. : 1572-16 Client: Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	02/03/2016
Northing		Engineer	MM
Ground level		Backfill date	02/03/2016
Final depth	2.50	Page	1 of 1

Samples & Testing						Strata			
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
							(0.05) 0.05		Brown, grey, white, fine to medium subangular to subrounded gravel of quartzite, granite (pea gravel) and occasional concrete. [MADE GROUND]
							(0.71) 0.76		Brown slightly clayey gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of concrete, brick and quartzite. [MADE GROUND]
0.80	1.00	D					(0.49) 1.25		Brown, yellow-brown slightly clayey gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite. [POSSIBLE NATURAL]
1.50	2.00	D					(0.83) 2.08		Brown slightly clayey gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite. Seepage noted within stratum. [POSSIBLE NATURAL]
							(0.42) 2.50		Brown, grey slightly gravelly sandy CLAY. Sand is fine to medium. Gravel is fine to medium, sub-angular to sub-rounded of quartzite.
									End of Borehole

General remarks

End of trial pit at 2.5m bgl.
Water seepage noted between 1.25-2.08m bgl.

Excavation Method Mechanical excavator

Checked By



Job No. : 1572-16 Client: Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	02/03/2016
Northing		Engineer	MM
Ground level		Backfill date	02/03/2016
Final depth	2.60	Page	1 of 1

Samples & Testing						Strata			
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.30	0.90	D					(0.27) 0.27		Reinforced concrete hardstanding. [MADE GROUND]
							(0.83)		Greym yellow-brown fine to coarse, sub-angular to sub-rounded gravel of limestone and quartzite. [MADE GROUND]
1.30	1.70	D					1.10 (1.50)		Brown, mottled black, white, slightly clayey very sandy gravel. Sand is fine to coarse. Gravel is medium to coarse, sub-angular to sub-rounded of concrete, quartzite and occasional brick. Broken reebar noted at the base. [MADE GROUND]
							2.60		End of Borehole

General remarks

End of trial pit at 2.6m bgl.

Excavation Method

Mechanical excavator

Checked By


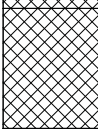
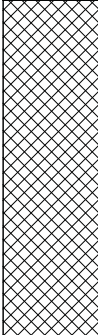



Job No. : 1572-16 Client: Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	02/03/2016
Northing		Engineer	MM
Ground level		Backfill date	02/03/2016
Final depth	2.50	Page	1 of 1

Samples & Testing						Strata			
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.30	0.70	D					(0.13)		Tarmacadam hardstanding [MADE GROUND]
							0.13		
							(0.14)		
							0.27		
							(0.48)		Brown, mottled wite, grey and black, sandy gravel (sub-base). Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of limestone. [MADE GROUND]
							0.75		
							(1.35)		Grey, brown mottled white and black, clayey very gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite, granite, concrete and occasional brick. [MADE GROUND] Brown, orange-brown very gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite with occasional rootlets. [POSSIBLE NATURAL]
2.10	2.40	D					2.10		Orange-brown gravelly SAND. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite.
							(0.40)		
							2.50		
									End of Borehole

General remarks

End of trial pit at 2.5m bgl.

Excavation Method

Mechanical excavator

Checked By



Job No. : 1572-16 **Client:** Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	02/03/2016
Northing		Engineer	MM
Ground level		Backfill date	02/03/2016
Final depth	2.30	Page	1 of 1

Samples & Testing						Strata			
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.40	0.40	D					(0.40)		Dark brown organic spongy slightly clayey slightly gravelly sand. Sand is fine to medium. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite, sandstone with abundant roots and rootlets. [TOPSOIL]
0.70	1.00	D					(0.80)		Dark brown slightly organic spongy slightly clayey slightly gravelly sand. Sand is fine to medium. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite, sandstone with occasional roots and rootlets. [MADE GROUND]
							(1.10)		Brown mottled grey, black very gravelly SAND. Sand is fine to medium. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite.
							2.30		End of Borehole

General remarks

End of trial pit at 2.3m bgl.
Partial pit collapse of loose materials from 1.5m onwards, into excavation area.

Excavation Method Mechanical excavator

Checked By



Job No. : 1572-16 **Client:** Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	02/03/2016
Northing		Engineer	MM
Ground level		Backfill date	02/03/2016
Final depth	2.30	Page	1 of 1

Samples & Testing						Strata			
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.40	0.40	D					(0.40)		Dark brown organic spongy slightly clayey slightly gravelly sand. Sand is fine to medium. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite, sandstone with abundant roots and rootlets. [TOPSOIL]
0.70	1.00	D					(0.80)		Dark brown slightly organic spongy slightly clayey slightly gravelly sand. Sand is fine to medium. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite, sandstone with occasional roots and rootlets. [MADE GROUND]
							(1.10)		Brown mottled grey, black very gravelly SAND. Sand is fine to medium. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite.
							2.30		End of Borehole

General remarks

End of trial pit at 2.3m bgl.
Partial pit collapse of loose materials from 1.5m onwards, into excavation area.

Excavation Method Mechanical excavator

Checked By



Job No. : 1572-16 Client: Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	03/03/2016
Northing		Engineer	MM
Ground level		Backfill date	03/03/2016
Final depth	2.00	Page	1 of 1

Samples & Testing						Strata			
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.50	1.00	D					(0.32) 0.32		Dark brown, organic spongy slightly clayey slightly gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite, sandstone with abundant roots and rootlets. [TOPSOIL]
1.70	2.00	D					(1.68) 2.00		Brown mottled black and white slightly clayey very gravelly sand. Sand is medium to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of brick and quartzite. [MADE GROUND]
									End of Borehole

General remarks































End of trial pit at 2.0m bgl.
Partial pit collapse, due to loose nature of fill materials.



TP112

Site Location: Pickhill Lane, Wrexham

Easting		Start date	03/03/2016
Northing		Engineer	MM
Ground level		Backfill date	03/03/2014
Final depth	2.10	Page	1 of 1

Samples & Testing				Strata					
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.30	0.70	D					(0.22) 0.22 (0.07) 0.29 (0.41) 0.70	                              	Grass over brown grey organic clayey gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of concrete and quartzite. [TOPSOIL] Light brown gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of concrete, brick, granite, quartzite and coal. [MADE GROUND] Firm brown, orange-brown gravelly very clayey sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of concrete, brick, granite, quartzite and coal. [MADE GROUND] Black ashy gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of concrete, brick, kerb stone, quartzite and coal. Creosote / hydrocarbon odour noted. [MADE GROUND]
1.50	1.90	D					(1.40)		
							2.10		End of Borehole

End of trial pit at 2.1m bgl.
Concrete obstructions encountered at base of pit.
Creosote / hydrocarbon odour noted between 1.7-2.1m bgl.

Excavation Method	Mechanical excavator	Checked By	
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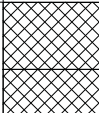
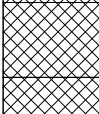
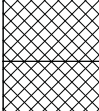
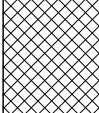
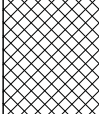
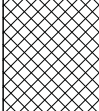


Job No. : 1572-16 Client: Maelor P

Site Name : Pickhill lane, Wrexham

Site Location: Pickhill Lane, Wrexham

Easting		Start date	03/03/2014
Northing		Engineer	MM
Ground level		Backfill date	03/03/2016
Final depth	2.70	Page	1 of 1

Samples & Testing						Strata			
Depths		Type	SPT	Installation	Water	Level (AOD)	Depth (bgl) (Thickness)	Legend	Strata Descriptions
From	To								
0.27	0.45	D					(0.27)		Grass over brown grey mottled black white clayey gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of concrete, limestone, quartzite and brick. [MADE GROUND]
							0.27		
							(0.18)		
							0.45		
0.80	1.00	D					(0.30)		Grey mottled white, black slightly clayey very sandy gravel. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite and brick. [MADE GROUND]
							0.75		
							(0.39)		
							1.14		
							(1.56)		Brown, light brown mottled black very clayey gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of concrete, limestone, quartzite and brick. [MADE GROUND]
									Black ashy fine to coarse, sub-angular to sub-rounded gravel of coal. [MADE GROUND]
									Brown mottled black, grey slightly clayey very gravelly sand. Sand is fine to coarse. Gravel is fine to coarse, sub-angular to sub-rounded of quartzite. [POSSIBLE NATURAL]
							2.70		End of Borehole

General remarks

End of trial pit at 2.7m bgl.
Continued collapse of coal-like, ashy materials into excavation area.

Excavation Method Mechanical excavator

Checked By