

Appendix 3 - Borehole Records

CABLE PERCUSSION BOREHOLE LOG

SITE: Glan Gors, Wrexham
 LOCN: Glan Gors, Wrexham, LL13 8TH
 CLIENT: Pennaf Housing Group

BOREHOLE No:
BH BD 1

Sheet 1 of 2

Dates : 14/02/2013

Project : E0500

Elev (maOD) : 57.70

Casing dia : 150 mm to 16.95 m

Logged : HLJ

Engineer : e-geo Solutions Ltd

Depth (m)	Sample/ Test	Field Record	Depth (m)	Description	Strata Depth(m)	Casing Depth(m)	Water Depth(m)
			0.10	Dark brown silty TOPSOIL	0.10		
			0.20				
			0.30				
			0.40				
			0.50	Made Ground - Loose dark brown silty fine to coarse sand with some angular gravel of sandstone, brick and slate			
			0.60				
			0.70				
			0.80				
			0.90				
1.00 - 1.45	CPT=8	1,1,2,2,2,2	1.00				
1.00	D		1.10				
			1.20				
			1.30				
			1.40				
			1.50		1.40		
			1.60	Soft dark and light grey slightly sandy clayey SILT			
			1.70				
			1.80				
			1.90		1.80		
2.00 - 2.45	SPT=3	0,1,0,1,1,1	2.00				
2.00	D		2.10	Soft dark brown to black silty slightly clayey PEAT			
			2.20				
			2.30				
			2.40				
			2.50				
			2.60				
			2.70				
			2.80				
			2.90				
3.00 - 3.45	CPT=12	2,3,3,2,3,4	3.00		2.90		
3.00	B		3.10	Loose to medium dense medium grey slightly silty fine to coarse SAND and GRAVEL. Gravel is subrounded of various lithologies		3.00	3.00 Medium inflow rising to 1.60 (20min)
			3.20				
			3.30				
			3.40				
			3.50				
			3.60				
			3.70				
			3.80				
			3.90				
			4.00				
4.00 - 4.45	SPT=10	1,1,2,3,2,3	4.10				
4.00	D		4.20				
			4.30				
			4.40				
			4.50				
			4.60				
			4.70				
			4.80				
			4.90		4.80		
5.00 - 5.45	SPT=10	1,1,2,3,2,3	5.00				
5.00	D		5.10				
			5.20				
			5.30				
			5.40				
			5.50				
			5.60				
			5.70	Loose to medium dense medium brown very silty fine SAND with occasional lenses and partings of medium brown very sandy silt			
			5.80				
			5.90				
			6.00				
6.00 - 6.45	SPT=8	1,1,1,2,2,2	6.10				
6.00	D		6.20				
			6.30				
			6.40				
			6.50				
			6.60				
			6.70				
			6.80				
			6.90				
			7.00				
			7.10				
			7.20				
			7.30				
			7.40				
			7.50				
7.50 - 7.95	SPT=13	1,2,3,3,3,4	7.60				
			7.70				
			7.80				
			7.90				
			8.00				
			8.10				
			8.20				
			8.30				
			8.40				
			8.50				

Remarks

CABLE PERCUSSION BOREHOLE LOG

SITE: Glan Gors, Wrexham
 LOCN: Glan Gors, Wrexham, LL13 8TH
 CLIENT: Pennaf Housing Group

BOREHOLE No:
BH BD 1

Sheet 2 of 2

Dates : 14/02/2013

Project : E0500

Elev (maOD) : 57.70

Casing dia : 150 mm to 16.95 m

Logged : HLJ

Engineer : E-GEO Solutions Ltd

Depth (m)	Sample/ Test	Field Record	Depth (m)	Description	Strata Depth(m)	Casing Depth(m)	Water Depth(m)
9.00 - 9.45 9.00	SPT=21 D	3,4,5,5,5,6	8.60		8.90		
			8.70				
			8.80				
			8.90				
			9.00				
			9.10				
			9.20				
			9.30				
			9.40				
			9.50				
10.50 - 10.95 10.00	SPT=37 D	4,6,6,8,10,13	9.60				
			9.70				
			9.80				
			9.90				
			10.00				
			10.10				
			10.20				
			10.30				
			10.40				
			10.50				
12.00 - 12.45 12.00	CPT=32 D	4,6,6,6,8,12	10.60				
			10.70				
			10.80				
			10.90				
			11.00				
			11.10				
			11.20				
			11.30				
			11.40				
			11.50				
13.50 - 13.95 13.50	CPT=45 D	6,7,9,9,10,17	11.60				
			11.70				
			11.80				
			11.90				
			12.00				
			12.10				
			12.20				
			12.30				
			12.40				
			12.50				
15.00 - 15.50 15.00	CPT=48 D	6,9,10,10,12,16	12.60				
			12.70				
			12.80				
			12.90				
			13.00				
			13.10				
			13.20				
			13.30				
			13.40				
			13.50				
16.50 - 16.95 16.50	CPT=47 D	8,8,11,10,13,13	13.60				
			13.70				
			13.80				
			13.90				
			14.00				
			14.10				
			14.20				
			14.30				
			14.40				
			14.50				
			14.60				
			14.70				
			14.80				
			14.90				
			15.00				
			15.10				
			15.20				
			15.30				
			15.40				
			15.50				
			15.60				
			15.70				
			15.80				
			15.90				
			16.00				
			16.10				
			16.20				
			16.30				
			16.40				
			16.50				
			16.60				
			16.70				
			16.80				
			16.90				
			17.00				

Stiff to very stiff dark brown sandy silty
 CLAY with some to much fine to
 coarse gravel and occasional cobbles

End of borehole at 16.95m

Remarks

Installation: Slotted 50mm dia. well screen from 12.00m to 3.00m with gravel surround. Plain pipe from 3.00m to 0.00m

E-GEO SOLUTIONS LTD, OAK HOUSE GROES LWYD, ABERGELE

Tel: 01745 828494. Mob: 07899980958



Chiseling from 11.00 to 11.20m

CABLE PERCUSSION BOREHOLE LOG

SITE: Glan Gors, Wrexham
 LOCN: Glan Gors, Wrexham, LL13 8TH
 CLIENT: Pennaf Housing Group

BOREHOLE No:
BH BD2

Sheet 1 of 2

Dates : 15/02/2013

Project : E0500

Elev (maOD) : 58.00

Casing dia : 150 mm to 16.95 m

Logged : HLJ

Engineer : E-GEO Solutions Ltd

Depth (m)	Sample/ Test	Field Record	Depth (m)	Description	Strata Depth(m)	Casing Depth(m)	Water Depth(m)
			0.10	Dark brown silty TOPSOIL	0.10		
			0.20				
			0.30				
			0.40	Made Ground - Loose dark brown silty fine to coarse sand with some angular gravel of sandstone, brick slate and ash			
			0.50				
			0.60				
			0.70				
			0.80				
			0.90				
1.00 - 1.45	CPT=5	1,2,2,1,1,1	1.00				
1.00	D		1.10				
			1.20				
			1.30				
			1.40	Soft dark brown to black silty slightly clayey PEAT	1.20		
			1.50				
			1.60				
			1.70	Loose light grey clayey silty fine to coarse SAND and GRAVEL	1.60		
			1.80				
			1.90				
2.00 - 2.45	SPT=5	1,1,1,1,2,1	2.00				
2.00	D		2.10				
			2.20				
			2.30				
			2.40				
			2.50	Soft medium brown sandy clayey SILT			
			2.60				
			2.70				
			2.80				
			2.90				
3.00 - 3.45	SPT=6	1,1,1,2,2,1	3.00		2.90		
3.00	D		3.10				
			3.20				
			3.30				
			3.40				
			3.50				
			3.60				
			3.70				
			3.80				
			3.90				
4.00 - 4.45	SPT=6	1,1,2,1,2,1	4.00				
4.00	D		4.10				
			4.20				
			4.30				
			4.40				
			4.50				
			4.60				
			4.70				
			4.80				
			4.90				
5.00 - 5.45	SPT=6	1,1,1,2,1,2	5.00				
5.00	D		5.10				
			5.20				
			5.30				
			5.40				
			5.50				
			5.60		5.50	5.50	5.50
			5.70				Slow inflow rising to 3.60
			5.80				
			5.90				
			6.00				
6.00 - 6.45	SPT=7	1,1,2,1,2,2	6.10	Loose to medium dense medium brown very silty fine SAND with occasional lenses and partings of medium brown very sandy silt			
6.00	D		6.20				
			6.30				
			6.40				
			6.50				
			6.60				
			6.70				
			6.80				
			6.90				
			7.00				
			7.10				
			7.20				
			7.30				
			7.40				
7.50 - 7.95	SPT=13	2,2,3,3,3,4	7.50				
			7.60				
			7.70				
			7.80				
			7.90				
			8.00				
			8.10				
			8.20				
			8.30				
			8.40				
			8.50				

Remarks

CABLE PERCUSSION BOREHOLE LOG

SITE: Glan Gors, Wrexham
 LOCN: Glan Gors, Wrexham, LL13 8TH
 CLIENT: Pennaf Housing Group

BOREHOLE No:
BH BD2

Sheet 2 of 2

Dates : 15/02/2013

Project : E0500

Elev (maOD) : 58.00

Casing dia : 150 mm to 16.95 m

Logged : HLJ

Engineer : E-GEO Solutions Ltd

Depth (m)	Sample/ Test	Field Record	Depth (m)	Description	Strata Depth(m)	Casing Depth(m)	Water Depth(m)
9.00 - 9.45 9.00	SPT=9 D	1,1,2,2,3,2	8.60	Soft medium brown slightly sandy clayey SILT	8.80		
			8.70				
			8.80				
			8.90				
			9.00				
			9.10				
			9.20				
			9.30				
			9.40				
			9.50				
			9.60				
			9.70				
			9.80				
			9.90				
			10.00				
10.50 - 10.95 10.00	SPT=36 D	5,8,8,9,9,10	10.10	Stiff to very stiff dark brown sandy silty CLAY with some to much fine to coarse gravel and occassional cobbles	10.20		
			10.20				
			10.30				
			10.40				
			10.50				
			10.60				
			10.70				
			10.80				
			10.90				
			11.00				
			11.10				
			11.20				
			11.30				
			11.40				
			11.50				
12.00 - 12.45 12.00	CPT=38 D	5,6,8,9,9,12	11.60				
			11.70				
			11.80				
			11.90				
			12.00				
			12.10				
			12.20				
			12.30				
			12.40				
			12.50				
			12.60				
			12.70				
			12.80				
			12.90				
			13.00				
13.50 - 13.95 13.50	CPT=45 D	6,6,7,9,13,16	13.10				
			13.20				
			13.30				
			13.40				
			13.50				
			13.60				
			13.70				
			13.80				
			13.90				
			14.00				
			14.10				
			14.20				
			14.30				
			14.40				
			14.50				
15.00 - 15.50 15.00	CPT=52 D	5,9,11,12,12,17	14.60				
			14.70				
			14.80				
			14.90				
			15.00				
			15.10				
			15.20				
			15.30				
			15.40				
			15.50				
			15.60				
			15.70				
			15.80				
			15.90				
			16.00				
16.50 - 16.95 16.50	CPT=53 D	7,10,12,12,,13,16	16.10	End of borehole at 16.95m			
			16.20				
			16.30				
			16.40				
			16.50				
			16.60				
			16.70				
			16.80				
			16.90				
			17.00				

Remarks

Installation: Slotted 50mm dia. well screen from 12.00m to 3.00m with gravel surround. Plain pipe from 3.00m to 0.00m

E-GEO SOLUTIONS LTD, OAK HOUSE GROES LWYD, ABERGELE

Tel: 01745 828494. Mob: 07899980958



Chiseling from 11.70 to 11.90m

CABLE PERCUSSION BOREHOLE LOG

SITE: Glan Gors, Wrexham
 LOCN: Glan Gors, Wrexham, LL13 8TH
 CLIENT: Pennaf Housing Group

BOREHOLE No:

BH BD3

Sheet 1 of 2

Dates : 18/02/2013

Project : E0500

Elev (maOD) : 58.50

Casing dia : 150 mm to 16.95 m

Logged : HLJ

Engineer : E-GEO Solutions Ltd

Depth (m)	Sample/ Test	Field Record	Depth (m)	Description	Strata Depth(m)	Casing Depth(m)	Water Depth(m)
			0.10	Dark brown silty TOPSOIL	0.10		
			0.20				
			0.30				
			0.40				
			0.50				
			0.60				
			0.70				
			0.80				
			0.90				
1.00 - 1.45	CPT=5	1,2,1,1,2,1	1.00	Made Ground - Loose dark brown silty fine to coarse sand with some angular gravel of sandstone, brick slate and ash and occasional plastic film and tube			
1.00	D		1.10				
			1.20				
			1.30				
			1.40				
			1.50				
			1.60				
			1.70				
			1.80				
			1.90				
			2.00				
2.00 - 2.45	SPT=7	1,2,2,2,1,2	2.10				
2.00	D		2.20				
			2.30				
			2.40				
			2.50				
			2.60				
			2.70				
			2.80		2.70		
			2.90				
3.00 - 3.45	SPT=8	1,1,1,2,2,3	3.00				
3.00	D		3.10				
			3.20				
			3.30	Soft medium brown sandy clayey SILT			
			3.40				
			3.50				
			3.60				
			3.70				
			3.80				
			3.90				
			4.00				
4.00 - 4.45	SPT=6	1,1,2,1,2,1	4.10			4.00	4.00
4.00	D		4.20				Slow inflow
			4.30				rising to 3.80
			4.40				
			4.50				
			4.60				
			4.70				
			4.80				
			4.90				
			5.00				
5.00 - 5.45	SPT=6	1,1,1,2,2,1	5.10				
5.00	D		5.20				
			5.30				
			5.40				
			5.50				
			5.60				
			5.70				
			5.80				
			5.90				
			6.00				
6.00 - 6.45	SPT=8	1,1,2,2,1,3	6.10				
6.00	D		6.20				
			6.30				
			6.40				
			6.50				
			6.60				
			6.70				
			6.80				
			6.90				
			7.00				
			7.10				
			7.20				
			7.30				
			7.40				
			7.50				
7.50 - 7.95	SPT=8	1,1,2,2,2,2	7.60				
			7.70				
			7.80				
			7.90				
			8.00				
			8.10				
			8.20				
			8.30				
			8.40				
			8.50				

Remarks

CABLE PERCUSSION BOREHOLE LOG

SITE: Glan Gors, Wrexham
 LOCN: Glan Gors, Wrexham, LL13 8TH
 CLIENT: Pennaf Housing Group

BOREHOLE No:
BH BD3

Sheet 2 of 2

Dates : 18/02/2013

Project : E0500

Elev (maOD) : 58.50

Casing dia : 150 mm to 16.95 m

Logged : HLJ

Engineer : E-GEO Solutions Ltd

Depth (m)	Sample/ Test	Field Record	Depth (m)	Description	Strata Depth(m)	Casing Depth(m)	Water Depth(m)
9.00 - 9.45 9.00	SPT=8 D	1,2,2,2,2	8.60		9.10		
			8.70				
			8.80				
			8.90				
			9.00				
			9.10				
			9.20				
			9.30				
			9.40				
			9.50				
10.50 - 10.95 10.00	SPT=26 D	1,3,4,7,7,8	9.60				
			9.70				
			9.80				
			9.90				
			10.00				
			10.10				
			10.20				
			10.30				
			10.40				
			10.50				
12.00 - 12.45 12.00	CPT=29 D	5,5,6,6,8,9	10.60				
			10.70				
			10.80				
			10.90				
			11.00				
			11.10				
			11.20				
			11.30				
			11.40				
			11.50				
13.50 - 13.95 13.50	CPT=47 D	7,8,9,12,12,14	11.60				
			11.70				
			11.80				
			11.90				
			12.00				
			12.10				
			12.20				
			12.30				
			12.40				
			12.50				
15.00 - 15.50 15.00	CPT=44 D	7,6,7,10,11,16	12.60				
			12.70				
			12.80				
			12.90				
			13.00				
			13.10				
			13.20				
			13.30				
			13.40				
			13.50				
16.50 - 16.95 16.50	CPT=52 D	9,10,10,14,14,14	13.60				
			13.70				
			13.80				
			13.90				
			14.00				
			14.10				
			14.20				
			14.30				
			14.40				
			14.50				
			14.60				
			14.70				
			14.80				
			14.90				
			15.00				
			15.10				
			15.20				
			15.30				
			15.40				
			15.50				
			15.60				
			15.70				
			15.80				
			15.90				
			16.00				
			16.10				
			16.20				
			16.30				
			16.40				
			16.50				
			16.60				
			16.70				
			16.80				
			16.90				
			17.00				

Stiff to very stiff dark brown sandy silty
 CLAY with some to much fine to
 coarse gravel and occasional cobbles

End of borehole at 16.95m

Remarks

Installation: Slotted 50mm dia. well screen from 12.00m to 3.00m with gravel surround. Plain pipe from 3.00m to 0.00m

E-GEO SOLUTIONS LTD, OAK HOUSE GROES LWYD, ABERGELE

Tel: 01745 828494. Mob: 07899980958



Chiseling from 10.30 to 10.50m