

# **APPENDIX 3**

## **Site Photographs**

# PHOTOGRAPHS

Project Number : PCI24991

Project : Bacton Low Rise, Gospel Oak, North London



North East Area, BH1, looking east



North East Area, BH2, looking west

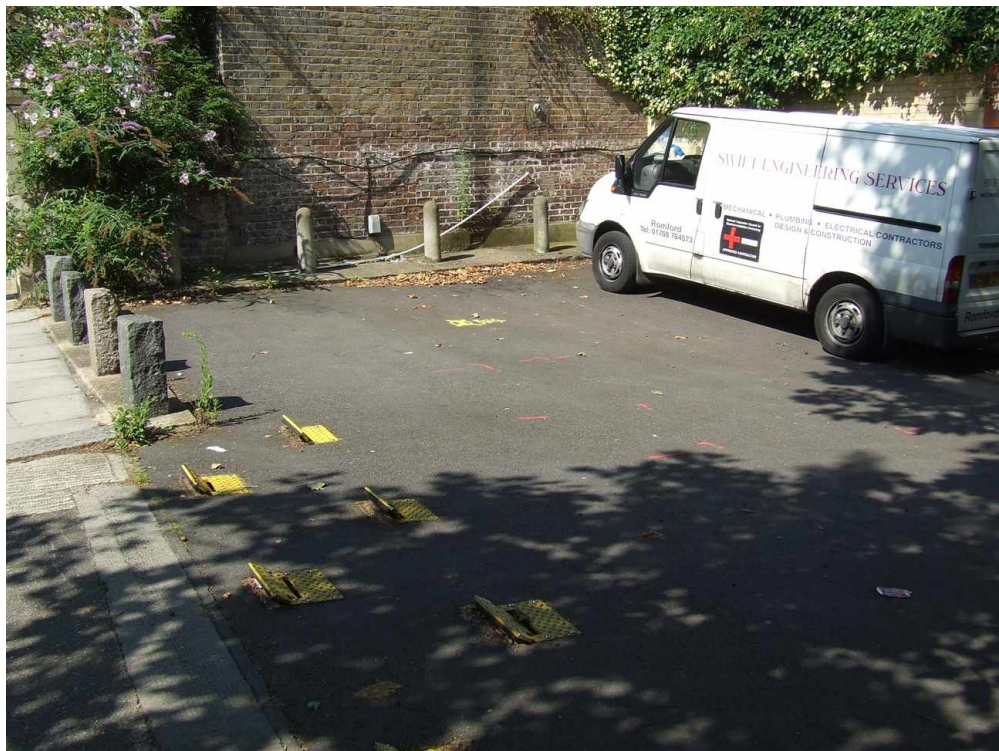
# PHOTOGRAPHS

Project Number : PCI24991

Project : Bacton Low Rise, Gospel Oak, North London



North East Area, BH3, looking north



North East Area, BH4, looking west

# PHOTOGRAPHS

Project Number : PCI24991

Project : Bacton Low Rise, Gospel Oak, North London



South West Area, BH5, looking north east



South West Area, BH6, looking north

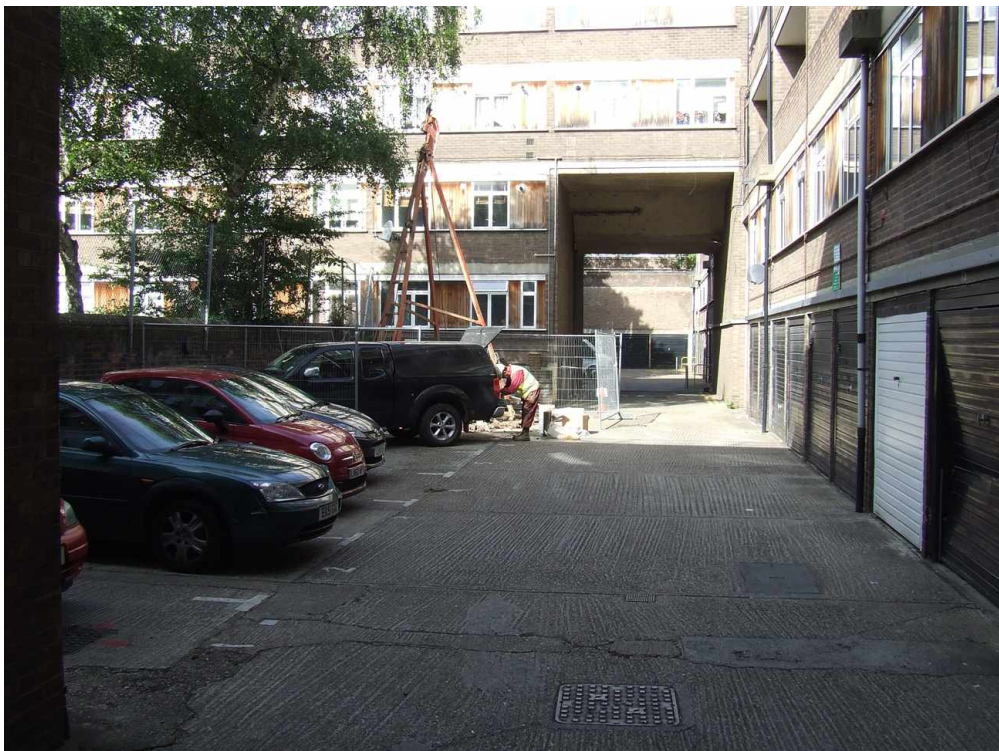
# PHOTOGRAPHS

Project Number : PCI24991

Project : Bacton Low Rise, Gospel Oak, North London



South West Area, BH7, looking south east



South West area, BH8, looking west

# PHOTOGRAPHS

Project Number : PCI24991

Project : Bacton Low Rise, Gospel Oak, North London



South West Area, BH9, looking south

# **APPENDIX 4**

## **Borehole Records**

# DATA SHEET - Symbols and Abbreviations used on Records

## Sample Types

B	Bulk disturbed sample
BLK	Block sample
C	Core sample
D	Small disturbed sample (tub/jar)
E	Environmental test sample
ES	Environmental soil sample
EW	Environmental water sample
G	Gas sample
L	Liner sample
LB	Large bulk disturbed sample
P	Piston sample (PF - failed P sample)
TW	Thin walled push in sample
U	Open Tube - 102mm diameter with blows to take sample. (UF - failed U sample)
UT	Thin wall open drive tube sampler - 102mm diameter with blows to take sample. (UTF - failed UT sample)
V	Vial sample
W	Water sample
#	Sample Not Recovered




## Insitu Testing / Properties

CBRP	CBR using TRL probe
CHP	Constant Head Permeability Test
COND	Electrical conductivity
HV	Strength from Hand Vane
ICBR	CBR Test
IDEN	Density Test
IRES	Resistivity Test
MEX	CBR using Mexecon Probe Test
PKR	Packer Permeability Test
PLT	Plate Load Test
PP	Strength from Pocket Penetrometer
Temp	Temperature
VHP	Variable Head Permeability Test
VN	Strength from Insitu Vane
w%	Water content
(All other strengths from undrained triaxial testing)	
S	Standard Penetration Test (SPT)
C	SPT with cone
N	SPT Result
-/-	Blows/penetration (mm) after seating drive
-*/-(mm)	Total blows/penetration (mm)
( )	Extrapolated value










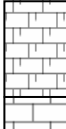
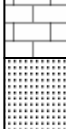


## Groundwater

Water Strike	
Depth Water Rose To	









## Instrumentation

Seal	
Filter	
Seal	










## Strata

Made Ground Type 1	
Type 2	
Topsoil	
Cobbles and Boulders	
Gravel	
Sand	
Silt	
Clay	
Peat	
<b>Note: Composite soil types shown by combined symbols</b>	
Chalk	
Limestone	
Sandstone	
Coal	

## Strata, Continued

Mudstone	
Siltstone	
<b>Metamorphic Rock</b>	
Fine Grained	
Medium Grained	
Coarse Grained	
<b>Igneous Rock</b>	
Fine Grained	
Medium Grained	
Coarse Grained	

## Backfill Materials

Arisings	
Bentonite Seal	
Concrete	
Fine Gravel Filter	
General Fill	
Gravel Filter	
Grout	
Sand Filter	
Tarmacadam	

## Rotary Core

RQD	Rock Quality Designation (% of intact core >100mm)
FRACTURE INDEX	
Fractures/metre	
FRACTURE SPACING (mm)	Maximum
NI	Non-intact core
NR	No core recovery
AZCL	Assumed zone of core loss
(where core recovery is unknown it is assumed to be at the base of the run)	



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**

Engineer **ROLTON GROUP**

Borehole Project No **BH1 PC124991**

Client **ROLTON GROUP**

Ground Level **42.45 m OD**


Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
0.30	D					Tarmac. ** [MADE GROUND]	G.L.		42.45		
0.30	E						0.10		42.35		
0.50- 0.70	B					Concrete. ** [MADE GROUND]	0.30		42.15		
0.50	D						0.50		41.95		
0.70- 1.00	B					Orangish brown mottled grey and black slightly clayey very gravelly sand. Gravel is angular to subangular fine to coarse quartzite, flint and brick.	0.70		41.75		
0.70	D										
1.00	D										
1.00	E										
1.20- 1.65	D	1.20 (DRY)			S7	[MADE GROUND]					
1.70- 1.90	B					Soft greyish brown mottled black sandy gravelly clay. Gravel is angular to rounded fine to coarse quartzite, flint and brick. With a slight hydrocarbon odour.	1.70		40.75		
1.70	D										
2.00	D						2.00		40.45		
2.00	E										
2.20- 2.65	U53	1.50 (DRY)	54	23		[MADE GROUND]					
2.65	D					Very soft dark grey mottled bluish grey and orange slightly sandy slightly gravelly slightly organic clay. Gravel is angular to subrounded fine to coarse flint, quartzite, brick and slag. With a slight hydrocarbon odour.	2.65		39.80		
2.70- 3.10	B					[MADE GROUND]					
						At 1.00m, mottling absent. Below 1.20m, becoming greenish grey mottled bluish grey.					
3.90- 4.35	D	1.50 (DRY)			S23	Soft orangish brown mottled black sandy gravelly clay. Gravel is angular to subrounded fine to coarse flint, quartzite and brick.					
						[MADE GROUND]					
						Stiff brown mottled bluish grey slightly gravelly CLAY. Gravel is subrounded fine to medium flint. At 2.20m, medium strength					
						Stiff fissured brown mottled grey CLAY. Fissures are extremely closely spaced, randomly orientated and stained bluish grey. At 2.65m, with rare subangular medium claystone gravel Below 3.90m, becoming laminated in parts. At 4.10m, driller notes presence of claystone layer. Below 5.85m, slightly micaceous, fissures becoming extremely closely to very closely spaced smooth, dull and occasionally stained orange.					
5.40- 5.85	U55	1.50 (DRY)									
5.85	D										
7.00- 7.45	D	1.50 (DRY)			S15						
8.00	D										
8.20- 8.65	UT70	1.50 (DRY)	115	30		Below 8.00m, becoming dark brownish grey with occasional fine to medium gravel sized silt pockets. Fissures generally subhorizontal to subvertical, dull, some polished. At 8.20m, high strength					
8.65	D										
9.80-10.25	D	1.50 (DRY)			S20	Below 9.80m, becoming very stiff.					

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		Inspection Pit	DC	G.I.			16/08/12	08:00						None encountered during boring.
30.00	0.15	Cable Percussion	DC	14.80	1.50	DRY	16/08/12	18:00						
				14.80	1.50	DRY	17/08/12	08:00						
				30.00	1.50	DRY	17/08/12	18:00						

Remarks **ABS** Inspection pit hand excavated to 1.20m depth.  
**\*\* Drillers description.**  
 E sample = 1 x vial, 1 x plastic jar and 1 amber jar  
 A 50mm standpipe was installed to 10.00m with a slotted section from 2.00m to 10.00m with flush lockable protective cover. Backfill details from base of hole: bentonite seal up to 10.00m, gravel filter up to 2.00m, bentonite seal up to 0.30m, concrete up to ground level.  
 Chiselling: 15.90-16.30m for 60 minutes.

Logged by **sc / co**  
 Figure **1 of 3**  
 20/09/2012

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**

Engineer **ROLTON GROUP**

Borehole **BH1**  
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **42.45** m OD

Sampling			Properties			Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD	
10.30-10.70	B									
11.30-11.75	U80	1.50 (DRY)	157	28		At 11.30m, very high strength				
11.75	D									
12.80-13.25	D	1.50 (DRY)			S27					
14.30-14.75	U120	1.50 (DRY)	115	26		At 14.30m, high strength				
14.75	D					At 14.75m, with some fine to coarse gravel sized fragments of claystone.				
15.90-16.70	D					At 15.90m, claystone boulder.** Recovered as dark grey fine to coarse claystone gravel.				
16.70-17.15	D	1.50 (DRY)			S29	At 16.70m, with occasional fine to medium gravel sized silt pockets of rare shell fragments.				
18.20-18.50	UT130	1.50 (DRY)								
18.50	D					Below 18.50m, silt pockets absent.				
19.70-20.15	D	1.50 (DRY)			S33					


Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks **Driller notes claystone boulder pushed ahead of borehole from 15.9 to 16.7m, pushed aside at 16.7m.** Logged by **sc / co**

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Figure **2 of 3**  
20/09/2012



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**

Engineer **ROLTON GROUP**


Borehole **BH1**  
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **42.45** m OD

Sampling			Properties			Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD	
21.20-21.65	U120	1.50 (DRY)	125	28		At 21.20m, high strength				
21.65	D									
22.70-23.15	D	1.50 (DRY)			S32					
24.20-24.50	U130	1.50 (DRY)				Below 24.85m, fissures subhorizontal and extremely closely spaced polished with an occasional silt dusting.				
24.50	D									
25.70-26.15	D	1.50 (DRY)			S30					
27.40-27.85	UT110	1.50 (DRY)	165	26		Below 27.00m, fissure spacing increasing becoming randomly orientated, smooth, dull and clean. At 27.40m, very high strength				
27.85	D									
29.00-29.45	D	1.50 (DRY)			S33					
30.00	D									
End of Borehole							30.00		12.45	


Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks 

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **sc / co**  
Figure **3 of 3**  
20/09/2012



# Fieldwork Results - SPT Results Summary

**Project** BACTON LOW RISE, GOSPEL OAK, NORTH LONDON

**Project No** PC124991

**Client** ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive		Test Drive				SPT 'N' Value	Uncorrected SPT 'N'					
					0-75 (mm)	75-150 (mm)	0-75 (mm)	75-150 (mm)	150-225 (mm)	225-300 (mm)		10	20	30	40	50	
BH1	1.20	41.25	S	-	1	1	1	2	2	2	7	*					
BH1	3.90	38.55	S	-	1	1	2	10	6	5	23		*				
BH1	7.00	35.45	S	-	2	3	3	3	4	5	15		*				
BH1	9.80	32.65	S	-	3	3	4	5	5	6	20		*				
BH1	12.80	29.65	S	-	3	3	5	5	8	9	27			*			
BH1	16.70	25.75	S	-	5	6	6	9	6	8	29			*			
BH1	19.70	22.75	S	-	5	5	7	8	9	9	33			*			
BH1	22.70	19.75	S	-	5	6	7	8	8	9	32			*			
BH1	25.70	16.75	S	-	6	6	6	7	8	9	30			*			
BH1	29.00	13.45	S	-	7	7	8	8	8	9	33			*			
							<b>Remarks</b> In accordance with BS EN ISO22476-3:2005										

-/- Blows/penetration (mm) after seating  
 -\*/- Total blows/penetration (mm)  
 SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)  
 C - SPT with cone  
 L - Split Spoon with liner used



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH2** Project No **PC124991**

Client **ROLTON GROUP** Ground Level **43.45** m OD

Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
0.30- 0.50	B					Tarmac. ** [MADE GROUND]	G.L.		43.45		
0.30	D						0.08		43.37		
0.30	E					Concrete. ** [MADE GROUND]	0.30		43.15		
0.50- 1.00	B						0.50		42.95		
0.50	D										
1.00	D					Light brown mottled grey black, orange and yellow slightly clayey very gravelly sand. Gravel is angular to subangular fine to coarse brick, concrete and clinker.	1.00		42.45		
1.00	E										
1.10	D						1.20		42.25		
1.20- 1.65	D	1.20 (DRY)			S6	[MADE GROUND]					
						Very soft brown mottled black, orange and yellow sandy gravelly clay. Gravel is angular to rounded fine to coarse clinker, brick and concrete.	2.00		41.45		
2.00	D					[MADE GROUND]					
2.00	E										
2.70- 3.15	U50	1.50 (DRY)	55	33		Soft greyish brown mottled black, orange and yellow sandy gravelly slightly organic clay. Gravel is angular to subrounded fine to coarse flint, quartzite, brick and clinker.					
						[MADE GROUND]					
						At 1.10m, becoming slightly gravelly.					
3.15	D						3.15		40.30		
3.20- 3.60	B					Soft greyish brown mottled bluish grey and orange slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to coarse flint and quartz.					
						[POSSIBLE MADE GROUND]					
						Firm brown mottled bluish grey slightly sandy CLAY. At 2.70m, medium strength					
4.20- 4.65	D	1.50 (DRY)			S13						
						Firm fissured brown mottled bluish grey CLAY with some sand and fine gravel sized gypsum crystals. Fissures are extremely to very closely spaced randomly orientated, smooth, dull and occasionally stained orange.					
						Below 4.20m, thinly laminated in parts.					
5.70- 6.15	U70	1.50 (DRY)	96	31							
						At 5.70m, fissures slightly polished with light blue grey staining.					
						At 5.70m, high strength					
6.15	D										
						Below 7.00m, becoming stiff.					
7.20- 7.65	D	1.50 (DRY)			S17						
8.70- 9.00	UT100	1.50 (DRY)									
9.00	D										
						Below 9.00m, becoming very stiff and dark greyish brown in colour.					
9.20- 9.50	B										
						At 9.00m, recovered with angular to subrounded fine to coarse gravel sized fragments of claystone.					

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		Inspection Pit	DC	G.I.			20/08/12	08:00						None encountered during boring.
20.00	0.15	Cable Percussion	DC	20.00	1.50	DRY	20/08/12	18:00						

**Remarks** Inspection pit hand excavated to 1.20m depth, 0.5 hours breaking out concrete. **\*\* Drillers description.**  
 E sample = 1 x vial, 1 x plastic jar and 1 amber jar  
 At 8.70m, UT shoe damaged  
 A 50mm standpipe was installed to 10.00m with a geowrapped slotted section from 2.00m to 10.00m with flush lockable protective cover. Backfill details from base of hole: arisings up to 12.00m, bentonite seal up to 10.00m, gravel filter up to 2.00m, bentonite seal up to 0.30m, concrete up to ground level.

Logged in accordance with BS5930:1999 + A2:2010


Logged by **CO**  
 Figure **1 of 2**  
 20/09/2012

# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH2** Project No **PC124991**  
 Client **ROLTON GROUP** Ground Level **43.45** m OD


Sampling			Properties			Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD	
10.20-10.65	D	1.50 (DRY)			S24	Below 10.20m, light bluish grey mottling absent.				
11.60	D					At 11.60m, recovered as angular to subrounded fine to coarse gravel sized fragments of light grey claystone.				
11.80-12.25	U90	1.50 (DRY)								
12.25	D					Below 12.25m, fissures becoming very closely spaced, randomly orientated, smooth, dull and with a slight silt dusting.				
13.30-13.75	D	1.50 (DRY)			S31					
14.80-15.25	U95	1.50 (DRY)								
15.25	D					Below 15.25m, with rare fine to medium gravel sized shell fragments, fissure spacing increasing and silt dusting absent.				
16.30-16.75	D	1.50 (DRY)			S29					
17.80	D					At 17.80m, recovered as angular to subrounded fine to coarse gravel sized fragments of light grey claystone.				
18.00-18.45	UT125	1.50 (DRY)								
18.45	D					At 18.70m, recovered as angular to subrounded fine to coarse gravel sized fragments of light grey claystone.				
18.70	D									
19.50-19.95	D	1.50 (DRY)			S36					
End of Borehole							20.00		23.45	

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks 

Symbols and abbreviations are explained on the accompanying key sheet.  
 All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **co**  
 Figure **2 of 2**  
 20/09/2012



# Fieldwork Results - SPT Results Summary

**Project** BACTON LOW RISE, GOSPEL OAK, NORTH LONDON

**Project No** PC124991

**Client** ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive		Test Drive				SPT 'N' Value	Uncorrected SPT 'N'					
					0-75 (mm)	75-150 (mm)	0-75 (mm)	75-150 (mm)	150-225 (mm)	225-300 (mm)		10	20	30	40	50	
BH2	1.20	42.25	S	-	1	1	2	1	2	1	6	*					
BH2	4.20	39.25	S	-	1	2	3	3	3	4	13		*				
BH2	7.20	36.25	S	-	2	3	4	4	4	5	17			*			
BH2	10.20	33.25	S	-	3	4	4	7	7	6	24				*		
BH2	13.30	30.15	S	-	3	5	8	8	6	9	31					*	
BH2	16.30	27.15	S	-	2	5	5	7	8	9	29					*	
BH2	19.50	23.95	S	-	4	7	7	8	9	12	36						*
<b>Driller</b>			David Cowling			<b>Remarks</b> Equipment checked and calibration carried out in accordance with BS EN ISO 22476-3: 2005											
<b>Hammer No.</b>			EQU436														
<b>Energy Ratio, Er (%)</b>			74.00														
<b>Calibration Date</b>			23/03/2012														

-/- Blows/penetration (mm) after seating  
 -\*/- Total blows/penetration (mm)  
 SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)  
 C - SPT with cone  
 L - Split Spoon with liner used



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH3** Project No **PC124991**

Client **ROLTON GROUP** Ground Level **43.78** m OD


Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
0.30	D					Asphalt. ** [MADE GROUND]	G.L.		43.78		
0.50	D					Concrete. ** [MADE GROUND]	0.07		43.71		
1.00	E					Firm orange brown mottled red and blue sandy gravelly clay. Gravel is angular to subrounded fine to coarse brick, concrete, slate and flint. [MADE GROUND]	0.40		43.38		
1.20- 1.65	D	NIL (DRY)			S10		1.30		42.48		
2.00	E					Firm orange brown slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to coarse flint and quartz.					
2.70- 3.15	U30	NIL (DRY)	72	31		Firm to stiff fissured brown mottled bluish grey CLAY. Fissures are extremely to very closely spaced, randomly orientated, smooth and dull with a slight silt dusting and occasional orange staining. At 2.70m, medium strength	2.50		41.28		
3.20	D										
4.20- 4.65	D	2.50 (DRY)				Below 4.20m, becoming thinly laminated in places.					
5.70- 6.15	U40	2.50 (DRY)									
6.20	D					At 6.20m, becoming slightly micaceous and with occasional orange staining on fissure surfaces.					
7.20- 7.65	D	2.50 (DRY)									
8.70- 9.15	U70	2.50 (DRY)									
9.20	D					Below 9.20m, becoming very stiff and greyish brown in colour. Orange staining on fissure surfaces absent.					

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		Inspection Pit	CR/PJ	G.I.			16/08/12	08:00						None encountered during boring.
30.20	0.15	Cable Percussion	CR/PJ	7.20	2.50	DRY	16/08/12	18:00						
				7.20	2.50	DRY	17/08/12	08:00						
				30.20	2.50	DRY	17/08/12	18:00						

Remarks **ABS** Inspection pit hand excavated to 1.20m depth. \*\* Drillers description.  
 E sample = 1 x vial, 1 x plastic jar and 1 amber jar  
 A 50mm standpipe was installed to 5.00m with a geowrapped slotted section from 1.00m to 5.00m with flush lockable protective cover. Backfill details from base of hole: arisings up to 7.00m, bentonite seal up to 5.00m, gravel filter up to 1.00m, bentonite seal up to 0.30m, concrete up to ground level.

Logged by **SC/CO**  
 Figure **1 of 4**  
 20/09/2012

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010





# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**

Engineer **ROLTON GROUP**


Borehole **BH3**  
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **43.78** m OD

Sampling			Properties			Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD	
10.20-10.65	D	2.50 (DRY)			S41	Between 10.20-10.65m, recovered with subangular medium to coarse claystone gravel. At 10.30m, driller notes thin mudstone band.				
11.70-12.15	U70	2.50 (DRY)								
12.20	D									
13.20-13.65	D	2.50 (DRY)			S29	Below 13.20m, becoming dark grey in colour and occasional silt partings.				
14.70-15.15	U80	2.50 (DRY)								
15.20	D									
15.50	D									
16.20-16.65	D	2.50 (DRY)			S27					
17.70-18.15	U80	2.50 (DRY)				At 17.50m, driller notes thin mudstone band.				
18.20	D									
19.20-19.65	D	2.50 (DRY)			S38					

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater


Remarks 

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **sc/co**

Figure **2 of 4**  
20/09/2012



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP**


Borehole **BH3**  
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **43.78** m OD

Sampling			Properties			Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD	
20.70-21.15	U80	2.50 (DRY)								
21.20	D									
22.20-22.65	D	2.50 (DRY)			43					
23.70-24.15	U85	2.50 (DRY)								
24.20	D					Below 24.20m, fissures becoming randomly orientated occasionally subhorizontal very closely spaced, smooth, occasionally polished with black mottling.				
25.20-25.65	D	2.50 (DRY)			S50/295					
26.70-27.15	U85	2.50 (DRY)								
27.20	D									
28.20-28.63	D	2.50 (DRY)			S50/280					
29.70-30.15	U100	2.50 (DRY)								


Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks 

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **sc/co**  
Figure **3 of 4**  
20/09/2012



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**

Engineer **ROLTON GROUP**


Borehole **BH3**  
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **43.78** m OD

Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
30.20	D					<p>At 30.20m, fissures become extremely closely spaced, subhorizontal, smooth, dull and clean with occasional black mottling.</p> <p style="text-align: center;">End of Borehole</p>	30.20		13.58		


Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks 

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **sc/co**  
Figure **4 of 4**  
20/09/2012



# Fieldwork Results - SPT Results Summary

**Project** BACTON LOW RISE, GOSPEL OAK, NORTH LONDON

**Project No** PC124991

**Client** ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive		Test Drive				SPT 'N' Value	Uncorrected SPT 'N'				
					0-75 (mm)	75-150 (mm)	0-75 (mm)	75-150 (mm)	150-225 (mm)	225-300 (mm)		10	20	30	40	50
BH3	1.20	42.58	S	-	1	-	2	1	3	4	10	*				
BH3	4.20	39.58	S	-	1	3	3	3	4	5	15	*				
BH3	7.20	36.58	S	-	3	3	4	5	6	6	21		*			
BH3	10.20	33.58	S	-	3	10	10	9	10	12	41					*
BH3	13.20	30.58	S	-	4	5	6	7	7	9	29			*		
BH3	16.20	27.58	S	-	4	5	5	7	7	8	27			*		
BH3	19.20	24.58	S	-	4	5	8	8	10	12	38					*
BH3	22.20	21.58		-	5	8	10	9	10	14	43					*
BH3	25.20	18.58	S	-	6	10	12	14	11	13/70	50/295					>
BH3	28.20	15.58	S	-	5	10	14	14	15	7/55	50/280					>
<b>Driller</b>			Chris Rainsbury				<b>Remarks</b> Equipment checked and calibration carried out in accordance with BS EN ISO 22476-3: 2005									
<b>Hammer No.</b>			SDS04													
<b>Energy Ratio, Er (%)</b>			81.00													
<b>Calibration Date</b>			13/02/2012													

-/- Blows/penetration (mm) after seating

-\*/- Total blows/penetration (mm)

SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)

C - SPT with cone

L - Split Spoon with liner used



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH4** Project No **PC124991**

Client **ROLTON GROUP** Ground Level **41.65** m OD

Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
0.30- 0.60	B					Tarmac. ** [MADE GROUND]	G.L.		41.65		
0.30	D					Concrete with reinforcing. ** [MADE GROUND]	0.10		41.55		
0.30	E						0.30		41.35		
1.00	D						1.10		40.55		
1.00	E					Firm light brown, locally mottled grey and orange brown, slightly sandy slightly gravelly clay with occasional pockets (up to 3mm in size) of black carbonaceous deposits. Gravel is angular to subrounded fine to medium quartzite, flint and calcareous siltstone. [PROBABLE MADE GROUND] At 1.00m, driller notes presence of claystone.	1.10		40.55		
1.10	D										
1.20- 1.65	D	1.20 (DRY)			S9						
2.00	D										
2.00	E					Firm thinly laminated in parts, brown locally bluish grey and orange brown mottled slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to medium calcareous siltstone.	2.00		39.65		
2.70- 3.15	U40	1.20 (DRY)	67	34		Firm brown locally bluish grey and orange brown mottled CLAY, thinly laminated in parts. At 2.70m, medium strength					
3.15	D					Below 3.15m, fissured with rare medium to coarse sand sized gypsum crystals. Fissures are extremely closely spaced and randomly orientated.					
4.20- 4.65	D	1.50 (DRY)			S11						
5.70- 6.15	U70	1.50 (DRY)									
6.15	D					Below 6.15m, polished surface on some discontinuities.					
7.20- 7.65	D	1.50 (DRY)			S15						
7.70- 8.00	B					Stiff thinly laminated fissured brownish grey micaceous CLAY. Fissures are extremely to very closely spaced randomly orientated with rare white silt dustings on some surfaces.	7.50		34.15		
8.70- 9.15	UT90	1.50 (DRY)									
9.15	D					Below 9.15m, with occasional dark grey silt dustings on some surfaces.					
9.60	D					At 9.60m, recovered as angular to subrounded medium to coarse gravel and cobble sized fragments of medium strong grey calcareous siltstone.					

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20	0.15	Inspection Pit	DC	G.I.			21/08/12	08:00						None encountered during boring.
20.00		Cable Percussion	DC	20.00	1.50	DRY	21/08/12	18:00						

**Remarks** Inspection pit hand excavated to 1.20m depth, 0.5 hours breaking out concrete. \*\* Drillers description.  
E sample = 1 x vial, 1 x plastic jar and 1 amber jar  
A 50mm standpipe was installed to 5.00m with a geowrapped slotted section from 2.00m to 5.00m with flush lockable protective cover. Backfill details from base of hole: arisings up to 7.00m, bentonite seal up to 5.00m, gravel filter up to 2.00m, bentonite seal up to 0.30m, concrete up to ground level.

Logged by **NT/CO**  
Figure **1 of 2**  
20/09/2012

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010


# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole Project No **BH4 PC124991**

Client **ROLTON GROUP** Ground Level **41.65 m OD**

Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
10.20-10.65	D	1.50 (DRY)			S26						
11.70-12.15	U100	1.50 (DRY)									
12.15	D										
13.20-13.65	D	1.50 (DRY)			S25						
14.70-15.15	U110	1.50 (DRY)									
15.15	D					Below 15.15m, becoming stiff to very stiff and grey and brownish grey in colour.					
15.50	D										
16.40-16.85	D	1.50 (DRY)			S31	Between 16.40-16.85m, with rare fine gravel sized shell fragments and rare orange brown silt dustings on some discontinuities.					
17.90-18.35	UT110	1.50 (DRY)									
18.35	D					Below 18.35m, with occasional angular to subrounded fine to coarse gravel sized calcareous siltstone / mudstone.					
19.50-19.95	D	1.50 (DRY)			S38						
End of Borehole							20.00		21.65		


Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks 

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **NT/CO**  
Figure **2 of 2**  
20/09/2012



# Fieldwork Results - SPT Results Summary

**Project** BACTON LOW RISE, GOSPEL OAK, NORTH LONDON

**Project No** PC124991

**Client** ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive		Test Drive				SPT 'N' Value	Uncorrected SPT 'N'					
					0-75 (mm)	75-150 (mm)	0-75 (mm)	75-150 (mm)	150-225 (mm)	225-300 (mm)		10	20	30	40	50	
BH4	1.20	40.45	S	-	1	1	2	2	2	3	9	*					
BH4	4.20	37.45	S	-	1	2	2	3	3	3	11	*					
BH4	7.20	34.45	S	-	2	3	3	4	4	4	15	*					
BH4	10.20	31.45	S	-	3	4	6	6	7	7	26			*			
BH4	13.20	28.45	S	-	3	4	6	6	6	7	25			*			
BH4	16.40	25.25	S	-	3	5	7	7	7	10	31			*			
BH4	19.50	22.15	S	-	3	10	8	9	10	11	38				*		
<b>Driller</b>			David Cowling			<b>Remarks</b> Equipment checked and calibration carried out in accordance with BS EN ISO 22476-3: 2005											
<b>Hammer No.</b>			EQU436														
<b>Energy Ratio, Er (%)</b>			74.00														
<b>Calibration Date</b>			23/03/2012														

-/- Blows/penetration (mm) after seating  
 -\*/- Total blows/penetration (mm)  
 SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)  
 C - SPT with cone  
 L - Split Spoon with liner used



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH5** Project No **PC124991**  
 Client **ROLTON GROUP** Ground Level **44.75** m OD

Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
0.30- 0.90	B					Tarmac. ** [MADE GROUND]	G.L.		44.75		
0.30	D						0.05		44.70		
0.30	E					Concrete. ** [MADE GROUND]	0.30		44.45		
0.90- 1.20	B					Soft brown sandy gravelly clay with occasional roots. Gravel is angular to subangular fine to coarse brick, flint, clinker and concrete. [MADE GROUND]	0.90		43.85		
0.90	D										
0.90	E										
1.20- 1.65	D	1.20 (DRY)			S6	Firm greyish brown mottled orangish brown slightly sandy CLAY with occasional rootlets. With rare angular to subangular fine to medium flint gravel. Below 1.80m, becoming brown mottled bluish grey and slightly micaceous.					
1.80	D										
1.90- 2.40	B										
1.90	E										
1.90- 2.35	UF40	1.50 (DRY)									
2.40- 2.85	U43	1.50 (DRY)									
2.85	D										
3.20	D					At 3.20m, recovered with angular to subangular coarse gravel of claystone.					
3.30- 3.90	B					Below 3.30m, becoming stiff with occasional firm to medium gravel sized sandy pockets.					
3.30	D										
3.90- 4.35	D	1.50 (DRY)			S12	Below 3.90m, becoming thinly laminated in places and fissured. Fissures are randomly orientated extremely closely to very closely spaced, dull and clean with occasional black staining and an occasional silt dusting.					
5.40- 5.85	U78	1.50 (DRY)									
5.85	D					Below 5.80m, fissures becoming extremely to very closely spaced, subhorizontal to subvertical.					
6.90- 7.35	D	1.50 (DRY)			S18						
8.20	D					Below 8.20m, becoming very stiff and dark greyish brown in colour. Fissures slightly polished with dark orangish brown staining in places.					
8.40- 8.70	UT90	1.50 (DRY)	76	30		At 8.40m, high strength					
8.70	D										
8.90- 9.30	B										
9.90-10.35	D	1.50 (DRY)			S23						

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		Inspection Pit		G.I.			13/08/12	08:00						None encountered during boring.
30.00	0.15	Cable Percussion	DC/LC	25.50	1.50	DRY	13/08/12	18:00						
			DC/LC	25.50	1.50	DRY	14/08/12	08:00						
				30.00	1.50	DRY	14/08/12	18:00						

**Remarks** Inspection pit hand excavated to 1.20m depth. **\*\* Drillers description.**  
 E sample = 1 x vial, 1 x plastic jar and 1 amber jar  
 A 50mm standpipe was installed to 5.00m with a slotted section from 2.00m to 5.00m with flush lockable protective cover. Backfill details from base of hole: gravel filter up to 7.00m, bentonite seal up to 5.00m, gravel filter up to 2.00m, bentonite seal up to 0.30m, concrete up to ground level.

Symbols and abbreviations are explained on the accompanying key sheet.  
 All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **SC**  
 Figure **1 of 4**  
 20/09/2012




# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole Project No **BH5 PC124991**  
 Client **ROLTON GROUP** Ground Level **44.75** m OD


Sampling			Properties			Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD	
11.40-11.85	U100	1.50 (DRY)	156	24		At 11.40m, very high strength				
11.85	D					At 11.85m, becoming slightly sandy and with occasional shell fragments. Laminae absent.				
12.90-13.35	D	1.50 (DRY)			S26	Below 12.95m, with silt partings (up to 1mm in thickness) and occasional silt pockets (up to 1cm in size).				
14.40-14.85	U110	1.50 (DRY)								
14.85	D					Below 14.85m, with occasional black staining on fissure surfaces.				
16.00-16.45	D	1.50 (DRY)			S35					
17.50-17.80	UT120	1.50 (DRY)	151	27		At 17.50m, thinly laminated. At 17.50m, very high strength				
17.80	D									
19.00-19.45	D	1.50 (DRY)			S36					
						Below 20.00m, with occasional shell fragments.				

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks  Driller notes claystone boulder pushed from 26.6 to 28.0m, pushed aside at 28.0m.

Symbols and abbreviations are explained on the accompanying key sheet.  
 All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **SC**  
 Figure **2 of 4**  
 20/09/2012



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole Project No **BH5 PC124991**  
 Client **ROLTON GROUP** Ground Level **44.75** m OD


Sampling			Properties			Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD	
20.50-20.80	U130	1.50 (DRY)								
20.80	D									
22.00-22.45	D	1.50 (DRY)			S34					
23.50-23.95	U120	1.50 (DRY)	87	28		At 23.50m, with occasional fine gravel sized shell fragments. At 23.50m, high strength Between 23.95-26.62m, fissures occasionally polished.				
23.95	D									
25.00-25.45	D	1.50 (DRY)			S48					
26.40-26.60	UTF 130	1.50 (DRY)				At 26.60m, driller notes presence of claystone boulder.				
26.60-26.60	D									
26.60-27.50	B									
26.80-26.80		1.50 (DRY)			C50*/1					
28.00-28.50	B									
28.00	D									
28.00-28.45	UF100	1.50 (DRY)								
28.50-28.95	D	1.50 (DRY)			S51					
29.50-29.95	U130	1.50 (DRY)	17	28		At 29.50m, extremely closely fissured, randomly orientated and open (possibly affected by disturbance during sampling) At 29.95m, Fissures become subhorizontal and extremely closely spaced. At 29.50m, very low strength				
29.95	D						30.00		14.75	

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks **ABS** At 23.50 and 29.50, measured undrained strength possibly affected by fissuring in test specimen and disturbance during sampling.  
 At 26.40m, UT sample shoe damaged.

Symbols and abbreviations are explained on the accompanying key sheet.  
 All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **SC**  
 Figure **3 of 4**  
 20/09/2012



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP**


Borehole **BH5**  
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **44.75** m OD

Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
						<b>End of Borehole</b>	<b>30.00</b>		<b>14.75</b>		


Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks 

Symbols and abbreviations are explained on the accompanying key sheet.  
All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **sc**  
Figure **4 of 4**  
20/09/2012



# Fieldwork Results - SPT Results Summary

**Project** BACTON LOW RISE, GOSPEL OAK, NORTH LONDON

**Project No** PC124991

**Client** ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive		Test Drive				SPT 'N' Value	Uncorrected SPT 'N'					
					0-75 (mm)	75-150 (mm)	0-75 (mm)	75-150 (mm)	150-225 (mm)	225-300 (mm)		10	20	30	40	50	
BH5	1.20	43.55	S	-	1	-	1	1	2	2	6	*					
BH5	3.90	40.85	S	-	2	3	3	3	3	3	12	*					
BH5	6.90	37.85	S	-	2	3	4	4	5	5	18		*				
BH5	9.90	34.85	S	-	4	4	4	6	6	7	23			*			
BH5	12.90	31.85	S	-	3	4	6	6	7	7	26			*			
BH5	16.00	28.75	S	-	6	8	8	9	9	9	35				*		
BH5	19.00	25.75	S	-	6	7	8	9	9	10	36				*		
BH5	22.00	22.75	S	-	6	8	8	8	9	9	34				*		
BH5	25.00	19.75	S	-	8	8	10	11	13	14	48					*	
BH5	26.80	17.95	C	-	50/1						50*/1						>
BH5	28.50	16.25	S	-	6	7	11	11	13	16	51						*
<b>Driller</b>			David Cowling				<b>Remarks</b> Equipment checked and calibration carried out in accordance with BS EN ISO 22476-3: 2005										
<b>Hammer No.</b>			EQU436														
<b>Energy Ratio, Er (%)</b>			74.00														
<b>Calibration Date</b>			23/03/2012														

-/- Blows/penetration (mm) after seating  
 -\*/- Total blows/penetration (mm)  
 SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)  
 C - SPT with cone  
 L - Split Spoon with liner used



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH6** Project No **PC124991**

Client **ROLTON GROUP** Ground Level **43.13** m OD


Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
0.30	E					Concrete slab. ** [MADE GROUND]	G.L.		43.13		
0.50	D					Brick fill. ** [MADE GROUND]	0.17		42.96		
1.00	E					Soft brown mottled bluish grey and black slightly sandy slightly gravelly clay. Gravel is angular to subrounded fine to medium quartz, flint, brick and clinker. [MADE GROUND]	0.50		42.63		
1.20- 1.65	D	NIL (DRY)			S9		1.20		41.93		
2.00	D					Stiff brown mottled bluish grey CLAY.					
2.70- 3.15	U40	NIL (DRY)	82	32		At 2.70m, high strength					
3.20	D					Stiff fissured brown mottled bluish grey and orange CLAY, thinly laminated in parts. Fissures are extremely to very closely spaced, randomly orientated, dull and clean with occasional orangish brown staining.	3.20		39.93		
4.20- 4.65	D	2.50 (DRY)			S18						
5.70- 6.15	U45	2.50 (DRY)				At 6.20m, with a little sand and fine gravel sized gypsum crystals.					
6.20	D										
7.20- 7.65	D	2.50 (DRY)			S24	Below 7.20m, becoming dark greyish brown with occasional fine to coarse gravel sized pockets of grey silt.					
8.70- 9.15	U50	2.50 (DRY)				Below 9.20m, becoming dark brownish grey in colour.					
9.20	D										

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20	0.15	Inspection Pit	CR/PJ	G.I.	2.50	DRY	20/08/12	08:00						None encountered during boring.
19.65		Cable Percussion	CR/PJ	19.65			20/08/12	18:00						

Remarks **ABS** Inspection pit hand excavated to 1.20m depth.  
**\*\* Drillers description.**  
**E sample = 1 x vial, 1 x plastic jar and 1 amber jar**  
**Backfill details from base of hole: arisings up to ground level.**

Symbols and abbreviations are explained on the accompanying key sheet.  
 All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **CO**  
 Figure **1 of 2**  
 20/09/2012




# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole Project No **BH6 PC124991**  
 Client **ROLTON GROUP** Ground Level **43.13** m OD


Sampling			Properties			Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD	
10.20-10.65	D	2.50 (DRY)			S23	At 10.20m, with rare fine gravel sized shell fragments.				
11.70-12.15	U55	2.50 (DRY)								
12.20	D					Below 12.20m, fissures becoming closely spaced with a silt dusting.				
13.20-13.65	D	2.50 (DRY)			S32					
14.70-15.15	U60	2.50 (DRY)				Below 15.20m, becoming very stiff. Fissures becoming occasionally polished with black mottling, silt dusting absent.				
15.20	D									
16.20-16.65	D	2.50 (DRY)			S31					
17.70-18.15	U75	2.50 (DRY)								
18.20	D									
19.20-19.65	D	2.50 (DRY)			S37					
End of Borehole							19.65		23.48	

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks 

Symbols and abbreviations are explained on the accompanying key sheet.  
 All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **co**  
 Figure **2 of 2**  
 20/09/2012



# Fieldwork Results - SPT Results Summary

**Project** BACTON LOW RISE, GOSPEL OAK, NORTH LONDON

**Project No** PC124991

**Client** ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive		Test Drive				SPT 'N' Value	Uncorrected SPT 'N'					
					0-75 (mm)	75-150 (mm)	0-75 (mm)	75-150 (mm)	150-225 (mm)	225-300 (mm)		10	20	30	40	50	
BH6	1.20	41.93	S	-	1	1	2	2	2	3	9	*					
BH6	4.20	38.93	S	-	2	3	4	4	5	5	18		*				
BH6	7.20	35.93	S	-	2	4	5	6	6	7	24			*			
BH6	10.20	32.93	S	-	3	4	5	6	5	7	23			*			
BH6	13.20	29.93	S	-	3	5	6	8	8	10	32				*		
BH6	16.20	26.93	S	-	2	4	6	7	8	10	31				*		
BH6	19.20	23.93	S	-	4	6	8	8	9	12	37					*	
<b>Driller</b>			Chris Rainsbury			<b>Remarks</b> Equipment checked and calibration carried out in accordance with BS EN ISO 22476-3: 2005											
<b>Hammer No.</b>			SDS04														
<b>Energy Ratio, Er (%)</b>			81.00														
<b>Calibration Date</b>			13/02/2012														

-/- Blows/penetration (mm) after seating  
 -\*/- Total blows/penetration (mm)  
 SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)  
 C - SPT with cone  
 L - Split Spoon with liner used



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH7** Project No **PC124991**

Client **ROLTON GROUP** Ground Level **42.10** m OD

Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
						Concrete with reinforcing. ** [MADE GROUND]	G.L.		42.10		
0.30	D					Brown mottled red, orange and bluish grey very gravelly sand, very clayey in places. Gravel is subangular to subrounded fine to medium brick, clinker, concrete and flint. [MADE GROUND]	0.20		41.90		
0.30	E										
0.50- 1.00	B										
0.50	W										
1.00	D					Dark brown mottled black and reddish brown very sandy gravel with a high brick and concrete cobble content and rare fine to medium gravel sized pockets of clay. Gravel is angular to subangular fine to coarse brick, slag concrete and clinker. [MADE GROUND]	0.80		41.30		
1.00	E										
1.10	D										
1.30- 1.75	D	1.30 (1.00)			S7			1.10		41.00	
1.80- 2.20	B					Firm fissured brown mottled bluish grey CLAY. Fissures are extremely to very closely spaced, randomly orientated, dull and smooth occasionally stained bluish grey.					
2.00	D										
2.00	E										
2.80- 3.25	U47	1.50 (DRY)	98	32		At 2.80m, high strength					
3.25	D					Between 3.25-4.75m, thinly laminated and micaceous.					
4.30- 4.75	D	1.50 (DRY)			S18	Below 4.30m, fissures stained orangish brown.					
5.80- 6.25	U85	1.50 (DRY)				At 6.25m, becoming stiff and laminated with occasional fine gravel sized shell fragments. Occasionally with silt partings up to 1mm thick.					
6.25	D										
7.30- 7.75	D	1.50 (DRY)			S22	At 8.80m, becoming very stiff and dark greyish brown. Fissures very closely spaced, slightly polished occasionally stained dark brown. At 8.80m, high strength Below 9.25m, laminae absent.					
7.80- 8.30	B										
8.80- 9.25	UT90	1.50 (DRY)	110	29							
9.25	D										

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		Inspection Pit	DC	G.I.			14/08/12	08:00	0.50	NIL			1.50	
20.00	0.15	Cable Percussion	DC	10.80	1.50	DRY	14/08/12	18:00						
				10.80	1.50	DRY	15/08/12	08:00						
				20.00	1.50	DRY	15/08/12	18:00						

**Remarks** **ABS** Inspection pit hand excavated to 1.20m depth, 0.5hours breaking out concrete. \*\* Drillers description.  
 E sample = 1 x vial, 1 x plastic jar and 1 amber jar  
 A 50mm standpipe was installed to 5.00m with a geowrapped slotted section from 2.00m to 5.00m with flush lockable protective cover. Backfill details from base of hole: arisings up to 7.00m, bentonite seal up to 5.00m, gravel filter up to 2.00m, bentonite seal up to 0.30m, concrete up to ground level.

Logged by **SC**  
 Figure **1 of 2**  
 20/09/2012

geotechnics

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010




# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH7** Project No **PC124991**  
 Client **ROLTON GROUP** Ground Level **42.10** m OD

Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
10.30-10.75	D	1.50 (DRY)			S28						
11.80-12.25	U100	1.50 (DRY)	136	28		At 11.80m, high strength					
12.25	D					Below 12.25m, Fissure spacing increasing, silt and staining absent					
13.30-13.75	D	1.50 (DRY)			S31						
14.80-15.25	U120	1.50 (DRY)									
15.25	D										
16.40-16.85	D	1.50 (DRY)			S26	At 16.40m, with occasional light grey rootlet tracks.					
17.70	D					At 17.70m, claystone boulder, recovered as angular to subangular medium to coarse gravel sized fragments.					
18.00-18.45	UT110	1.50 (DRY)	114	28		At 18.00m, fissure approximately 45 degrees, very closely to closely spaced and sub-vertical, slightly polished.					
18.45	D					At 18.45m, fissures extremely closely spaced, randomly orientated, smooth, occasionally stepped and clean.					
						At 18.00m, high strength					
19.50-19.95	D	1.50 (DRY)			S28						
End of Borehole							20.00		22.10		


Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks 

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **sc**  
 Figure **2 of 2**  
 20/09/2012



# Fieldwork Results - SPT Results Summary

**Project** BACTON LOW RISE, GOSPEL OAK, NORTH LONDON

**Project No** PC124991

**Client** ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive		Test Drive				SPT 'N' Value	Uncorrected SPT 'N'					
					0-75 (mm)	75-150 (mm)	0-75 (mm)	75-150 (mm)	150-225 (mm)	225-300 (mm)		10	20	30	40	50	
BH7	1.30	40.80	S	-	1	1	1	2	2	2	7	*					
BH7	4.30	37.80	S	-	1	2	3	4	5	6	18		*				
BH7	7.30	34.80	S	-	2	4	5	5	6	6	22			*			
BH7	10.30	31.80	S	-	4	6	6	7	7	8	28				*		
BH7	13.30	28.80	S	-	5	6	8	7	7	9	31				*		
BH7	16.40	25.70	S	-	3	6	5	7	7	7	26				*		
BH7	19.50	22.60	S	-	4	5	6	7	7	8	28				*		
<b>Driller</b>			David Cowling				<b>Remarks</b> Equipment checked and calibration carried out in accordance with BS EN ISO 22476-3: 2005										
<b>Hammer No.</b>			EQU436														
<b>Energy Ratio, Er (%)</b>			74.00														
<b>Calibration Date</b>			23/03/2012														

-/- Blows/penetration (mm) after seating  
 -\*/- Total blows/penetration (mm)  
 SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)  
 C - SPT with cone  
 L - Split Spoon with liner used



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH8** Project No **PC124991**  
 Client **ROLTON GROUP** Ground Level **42.20** m OD

Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
0.30- 0.50	B					Concrete with reinforcing. ** [MADE GROUND]	G.L.		42.20		
0.30	D					Firm brown mottled red, orange and black very gravelly sand, occasionally very clayey. Gravel is subangular to subrounded fine to medium brick, clinker and concrete. [MADE GROUND]	0.20		42.00		
0.30	E						0.50		41.70		
0.50- 0.80	B					Soft dark brown mottled red, orange, yellow and black sandy gravelly clay, with occasional timber fragments (upto 15cm in size) and a medium cobble content of subangular brick and concrete. Gravel is angular to subangular fine to coarse brick, concrete and clinker. [MADE GROUND]	1.20		41.00		
0.50	D						1.70		40.50		
1.00	D				S10	Soft dark brownish grey mottled black slightly sandy slightly gravelly slightly organic clay, fissured in parts. Fissures are randomly orientated extremely closely spaced. Gravel is angular to subrounded fine to medium brick, quartzite and flint. [MADE GROUND]					
1.00	E	1.20 (DRY)									
1.20- 1.70	B					Stiff fissured brown mottled bluish grey slightly micaceous CLAY, thinly laminated in parts and with occasional rootlets. Fissures are randomly orientated, extremely to very closely spaced, smooth, dull with a slight silt dusting. At 2.20m, medium strength					
1.20- 1.65	D				S18						
1.70	D					Soft dark brownish grey mottled black slightly sandy slightly gravelly slightly organic clay, fissured in parts. Fissures are randomly orientated extremely closely spaced. Gravel is angular to subrounded fine to medium brick, quartzite and flint. [MADE GROUND]					
2.00	D										
2.00	E					Stiff fissured brown mottled bluish grey slightly micaceous CLAY, thinly laminated in parts and with occasional rootlets. Fissures are randomly orientated, extremely to very closely spaced, smooth, dull with a slight silt dusting. At 2.20m, medium strength					
2.20- 2.65	U50	1.50 (DRY)	55	33							
2.65	D					Stiff fissured brown mottled bluish grey slightly micaceous CLAY, thinly laminated in parts and with occasional rootlets. Fissures are randomly orientated, extremely to very closely spaced, smooth, dull with a slight silt dusting. At 2.20m, medium strength					
3.80- 4.25	D	1.50 (DRY)			S18	At 5.30m, high strength					
5.30- 5.75	U65	1.50 (DRY)	87	30		Below 5.75m, becoming very stiff and dark greyish brown, with occasional fine to medium gravel sized shell fragments and orange staining on fissure surfaces.					
5.75	D										
6.80- 7.25	D	1.50 (DRY)			S21	Below 8.05m, orange staining absent.					
7.40	D					Between 9.10-10.95m, with rare silt pockets (upto 10mm in size).					
7.60- 8.05	UT100	1.50 (DRY)									
8.05	D					Between 9.10-10.95m, with rare silt pockets (upto 10mm in size).					
9.10- 9.55	D	1.50 (DRY)			S22						
10.00-10.40	B										

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20	0.15	Inspection Pit	DC/LC	G.I.	NIL	DRY	15/08/12	08:00						None encountered during boring.
20.00		Cable Percussion	DC/LC	10.00	1.50	DRY	15/08/12	18:00						
				10.00	1.50	DRY	16/08/12	08:00						
				20.00	1.50	DRY	16/08/12	18:00						

Remarks **ABS** Inspection pit hand excavated to 1.20m depth, 1 hour breaking out concrete.  
**\*\* Drillers description.**  
 E sample = 1 x vial, 1 x plastic jar and 1 amber jar  
 Backfill details from base of hole: arisings up to 2.50m, bentonite seal up to 0.50m, concrete up to ground level.

Logged by **CO**  
 Figure **1 of 2**  
 20/09/2012

geotechnics

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP**


Borehole **BH8**  
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **42.20** m OD

Sampling			Properties			Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD	
10.50-10.95	U90	1.50 (DRY)				Below 10.95m, fissures mottled black.				
10.98	D									
12.00-12.45	D	1.50 (DRY)			S24					
13.50-13.95	U100	1.50 (DRY)								
13.95	D									
15.00-15.45	D	1.50 (DRY)			S27					
15.80	D					At 15.80m, with a subrounded claystone cobble				
16.50-16.80	UT130	1.50 (DRY)								
18.00-18.45	D	1.50 (DRY)			S30	Below 18.00m, fissure spacing increasing and silt absent.				
18.80	D									
19.50-19.80	U130	1.50 (DRY)				At 19.80m, fissures predominantly subhorizontal.				
19.80	D									
20.00	D									
End of Borehole							20.00		22.20	


Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks 

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **co**  
Figure **2 of 2**  
20/09/2012



# Fieldwork Results - SPT Results Summary

**Project** BACTON LOW RISE, GOSPEL OAK, NORTH LONDON

**Project No** PC124991

**Client** ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive		Test Drive				SPT 'N' Value	Uncorrected SPT 'N'					
					0-75 (mm)	75-150 (mm)	0-75 (mm)	75-150 (mm)	150-225 (mm)	225-300 (mm)		10	20	30	40	50	
BH8	1.20	41.00	S	-	1	1	2	2	4	2	10	*					
BH8	3.80	38.40	S	-	2	2	3	4	5	6	18		*				
BH8	6.80	35.40	S	-	2	3	5	5	5	6	21		*				
BH8	9.10	33.10	S	-	3	4	4	5	5	8	22		*				
BH8	12.00	30.20	S	-	4	4	5	6	6	7	24		*				
BH8	15.00	27.20	S	-	3	6	6	6	7	8	27		*				
BH8	18.00	24.20	S	-	5	6	7	7	8	8	30		*				
							<p><b>Remarks</b> In accordance with BS EN ISO22476-3:2005</p>										

-/- Blows/penetration (mm) after seating  
 -\*/- Total blows/penetration (mm)  
 SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)  
 C - SPT with cone  
 L - Split Spoon with liner used



# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH9** Project No **PC124991**

Client **ROLTON GROUP** Ground Level **42.09** m OD

Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
						Reinforced concrete slab. ** [MADE GROUND]	G.L.		42.09		
0.30	D					Brown slightly clayey gravelly sand. Gravel is angular to subangular fine to coarse brick, concrete, quartzite and flint. [MADE GROUND]	0.20		41.89		
0.30	E										
0.70	D					Firm orangish brown slightly sandy CLAY.					
1.00	E										
1.20- 1.65	D	NIL (DRY)			S9			1.20		40.89	
1.20- 1.65	E										
2.00	E										
2.70- 3.15	U40	NIL (DRY)	65	35		At 2.70m, medium strength					
3.20	D					Below 3.20m, thinly laminated in places and fissured. Fissures are subhorizontal extremely closely to very closely spaced dull with a silt dusting and occasional orange staining.					
4.20- 4.65	D	2.50 (DRY)			S14	Stiff fissured dark greyish brown mottled orangish brown slightly micaceous CLAY, slightly sandy in parts. Fissures are extremely closely to very closely spaced and randomly orientated with occasional silt dusting and occasional orange staining.	4.00		38.09		
5.70- 6.15	U55	2.50 (DRY)									
6.20	D					Below 6.20m, orange staining absent.					
7.20- 7.65	D	2.50 (DRY)			S22	Below 7.20m, becoming stiff, mottling absent with silt partings on fissure surfaces (upto 1mm in thickness)					
8.70- 9.15	U55	2.50 (DRY)	80	29		At 8.70m, high strength					
9.20	D					At 9.20m, with occasional silt layers (upto 5mm in thickness)					

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		Inspection Pit	CR/PJ	G.I.			15/08/12	08:00						None encountered during boring.
30.15	0.15	Cable Percussion	CR/PJ	18.20	2.50	DRY	15/08/12	18:00						
				18.20	2.50	DRY	16/08/12	08:00						
				30.15	2.50	DRY	16/08/12	18:00						

**Remarks** Inspection pit hand excavated to 1.20m depth. **\*\* Drillers description.**  
 E sample = 1 x vial, 1 x plastic jar and 1 amber jar  
 A standpipe was installed to 5.00m with a geowrapped slotted section from 2.00m to 5.00m with flush lockable protective cover. Backfill details from base of hole: arisings up to 7.00m, bentonite seal up to 5.00m, fine gravel filter up to 2.00m, bentonite seal up to 0.50m, concrete up to ground level.

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010


Logged by **sc / co**  
 Figure **1 of 4**  
 20/09/2012

# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH9** Project No **PC124991**  
 Client **ROLTON GROUP** Ground Level **42.09** m OD

Sampling			Properties			Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD	
10.20-10.65	D	2.50 (DRY)			S29	Below 10.00m, becoming very stiff greyish brown with occasional fine gravel sized shell fragments, silt layers absent.				
11.70-12.15	U60	2.50 (DRY)								
12.20	D					Below 12.20m, fissures occasionally polished.				
13.20-13.65	D	2.50 (DRY)			S46	At 13.60m, recovered with angular medium to coarse gravel of claystone				
14.70-15.15	U75	2.50 (DRY)	113	29						
15.20	D					At 14.70m, high strength				
16.20-16.65	D	2.50 (DRY)			S34	Below 15.20m, fissure spacing increasing, silt dusting absent.				
17.70-18.15	U75	2.50 (DRY)								
18.20	D									
19.20-19.65	D	2.50 (DRY)			S33					

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks **At 14.70m, measured undrained strength possibly affected by fissuring in test specimen.** Logged by **sc / co**  
 Symbols and abbreviations are explained on the accompanying key sheet. Figure **2 of 4**  
 All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010 20/09/2012  


# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH9** Project No **PC124991**  
 Client **ROLTON GROUP** Ground Level **42.09** m OD


Sampling			Properties			Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD	
20.70-21.15	U75	2.50 (DRY)	111	26		At 20.70m, high strength				
21.20	D					Below 21.20m, with occasional black staining on fissure surfaces.				
22.20-22.65	D	2.50 (DRY)			S41					
23.70-24.15	U80	2.50 (DRY)								
24.20	D									
25.20-25.65	D	2.50 (DRY)			S36					
26.50	D					At 26.50m, medium strong grey claystone cobble or boulder, recovered as angular medium to coarse gravel sized fragments				
26.70-27.15	U80	2.50 (DRY)	107	26		At 26.70m, with occasional coarse gravel sized fragments of light brown claystone. Fissures extremely to very closely spaced, randomly orientated and open (possibly affected by disturbance during sampling).				
27.20	D					Below 27.20m, with rare fine to medium gravel sized silt pockets				
28.20-28.65	D	2.50 (DRY)			S45	At 26.70m, high strength				
29.70-30.15	U100	2.50 (DRY)								

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks **At 20.70m, measured undrained strength possibly affected by fissuring in test specimen.**  
**At 26.70m, measured undrained strength possibly affected by fissuring in test specimen and disturbance during sampling.**

Symbols and abbreviations are explained on the accompanying key sheet.  
 All dimensions are in metres. Logged in accordance with BS5930:1999 + A2:2010

Logged by **sc / co**  
 Figure **3 of 4**  
 20/09/2012





# BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP**


Borehole **BH9**  
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **42.09** m OD

Sampling			Properties			Strata			Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD		
						End of Borehole	30.15		11.94		


Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks 

Symbols and abbreviations are explained on the accompanying key sheet.  
All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **sc / co**  
Figure **4 of 4**  
20/09/2012



# Fieldwork Results - SPT Results Summary

**Project** BACTON LOW RISE, GOSPEL OAK, NORTH LONDON

**Project No** PC124991

**Client** ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive		Test Drive				SPT 'N' Value	Uncorrected SPT 'N'						
					0-75 (mm)	75-150 (mm)	0-75 (mm)	75-150 (mm)	150-225 (mm)	225-300 (mm)		10	20	30	40	50		
BH9	1.20	40.89	S	-	1	2	2	2	2	3	9	*						
BH9	4.20	37.89	S	-	2	2	4	3	4	3	14		*					
BH9	7.20	34.89	S	-	1	2	5	5	5	7	22			*				
BH9	10.20	31.89	S	-	2	2	6	6	8	9	29				*			
BH9	13.20	28.89	S	-	3	4	5	6	25	10	46							*
BH9	16.20	25.89	S	-	2	5	7	9	8	10	34				*			
BH9	19.20	22.89	S	-	3	5	8	7	8	10	33				*			
BH9	22.20	19.89	S	-	3	7	10	10	10	11	41					*		
BH9	25.20	16.89	S	-	4	7	9	9	9	9	36				*			
BH9	28.20	13.89	S	-	4	6	8	10	14	13	45							*
							<b>Remarks</b> In accordance with BS EN ISO22476-3:2005											

-/- Blows/penetration (mm) after seating  
 -\*/- Total blows/penetration (mm)  
 SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)  
 C - SPT with cone  
 L - Split Spoon with liner used

