

Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
		Version:

Co-ordinates (National): 4467E 6861N	Ground level (mAOD): 98.14	Method: CABLE PERCUSSION			Record of Borehole No: BH 1
Date: 13/09/94 to 13/09/94	Depth of Hole: 12.00	Hole diameter: 150mm	Casing diameter: 150mm	Sheet: 1 of 2	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
0.10-0.60	1	B		0		MADE GROUND : Dark grey, grey and brown slightly silty ashy very sandy fine to medium and some coarse sub-angular to sub-rounded gravel with rootlets.	MADE GROUND			
0.60	1	D		0.60	97.54					
1.00-1.45	2	S/D	S1	1		MADE GROUND : Very loose grey silty fine sand with a little fine angular gravel. Becoming clayey below 2.00 m depth.	MADE GROUND			
2.00-2.45	3	S/D	S1	2						
2.50	4	D		2.50	95.64	MADE GROUND : Very soft dark brown and black silty clayey fibrous peat with fragments of pottery. Very soft, spongy, brown, dark brown and orange brown fibrous PEAT.	PEAT			
2.90	5	D		2.60	95.54					
3.00-3.45	6	S/D	S1	3		Very soft dark brown and brown with some black mottling very peaty very silty CLAY with pockets of dark brown and black fibrous peat. Very soft purplish grey and grey very silty CLAY.	ALLUVIUM			
3.80	7	S		3.80	94.34					
4.00-4.45	8	S/D	S2	4		Very loose grey and purplish grey very clayey SILT with occasional mottles of peat. Becoming dark grey below 6.60 m depth	ALLUVIUM			
4.70	9	D		4.70	93.44					
5.00-5.45	10	S/D	SANK	5			ALLUVIUM			
5.80	11	D		6.00						
6.00-6.45	12	S/D	S1	6			ALLUVIUM			
6.60	13	D		6.60						
6.90-7.35	14	S/D	S1	7			ALLUVIUM			
7.90	15	D		7.90						

Boring Progress & Water Obs.							Chiselling		
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins
13/9/94	08:30	0.00	0.00						
13/9/94	09:30	2.00	2.00	2.00	2.00	2.60			
13/9/94	10:30	5.30	5.00	5.30	3.10				
13/9/94	15:00	12.00	12.00						

Remarks:
A little water added from ground level to assist drilling.

FOR ABBREVIATIONS AND SYMBOLS SEE KEY SHEET



Scale: 1:50	Processed by: J. GIBSON	Logged by: J. GIBSON
All dimensions in metres		

Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
Co-ordinates (National): 4445E 6855N		Version:

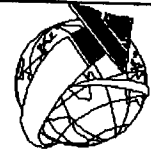
Ground level (mAOD): 97.32	Method: CABLE PERCUSSION		Record of Borehole No: BH 2
Date: 13/09/94 to 14/09/94	Depth of Hole: 9.06	Hole diameter: 150mm	
		Casing diameter: 150mm	Sheet: 1 of 2

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
0.10-0.60	1	B		0.20	97.12	MADE GROUND : Very soft black with dark brown mottles slightly clayey fibrous peat with occasional fragments of brick and pockets of ash Very soft, spongy, black with dark brown mottles slightly clayey fibrous PEAT.	MG			
0.90	1	D								
1.00-1.45	2	S/D	SANK							
1.80	3	D								
2.00-2.45	4	S/D	S1	3.40						
2.70	5	D								
2.90-3.35	6	S/D	SANK							
3.70	7	D		3.60	93.72	Very loose brownish grey very clayey SILT with mottles of peat.	PEAT			
4.00-4.45	8	S/D	S1	0.90						
4.60	9	D		4.50	92.82					
5.00-5.45	10	S/D	S3			Very loose brownish grey very clayey SILT with a little fine sub-angular gravel.	ALLUVIUM			
5.60	11	D								
6.00-6.45	12	S/D	S4	3.50						
6.70	13	D								
7.10-7.55	14	S/D	S1			Becoming loose at 6.00 m depth. Becoming very loose at 6.70 m depth.				
				8.00	89.32					

Boring Progress & Water Obs.							Chiselling		
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins
14/9/94	08:30	0.00	0.00				9.00	9.06	60
14/9/94	11:00	4.00	4.00	2.70	2.70				
14/9/94	14:00	9.05	9.05						

Remarks:
A little water added from ground level to assist drilling.

FOR ABBREVIATIONS AND SYMBOLS SEE KEY SHEET



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Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
Version: ROYAL ORDNANCE BISHOPTON		

Co-ordinates (National): 4445E 6855N	Ground level (mAOD): 97.32	Method: CABLE PERCUSSION			Record of Borehole No: BH 2
Date: 13/09/94 to 14/09/94	Depth of Hole: 9.06	Hole diameter: 150mm	Casing diameter: 150mm	Sheet: 2 of 2	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
8.00	15	D		8		Very soft very clayey very fine sandy SILT.	ALLUVIUM	[Symbol]	[Symbol]	[Symbol]
8.40-8.85	16	S/D	SANK	1.00						
9.00-9.05	17	S/D	S > 50	9	9.00 88.32 9.06 88.26	Dark grey fine grained slightly weathered LIMESTONE, strong. (Recovered as angular coarse gravel).				

Boring Progress & Water Obs.						Chiselling			
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins
14/9/94	08:30	0.00	0.00				9.00	9.06	60
14/9/94	11:00	4.00	4.00	2.70	2.70				
14/9/94	14:00	9.05	9.05						

Remarks:
A little water added from ground level to assist drilling.

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All dimensions in metres		

Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
Co-ordinates (National): 4452E 6867N		Version:

Ground level (mAOD): 97.37	Method: CABLE PERCUSSION	Record of Borehole No: BH 3
Depth of Hole: 12.00	Hole diameter: 150mm	
Date: 14/09/94 to 15/09/94	Casing diameter: 150mm	Sheet: 1 of 2

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
0.10-0.60	1	B		0.10	97.27	TOPSOIL / MADE GROUND : Soft dark brown peaty silty clay topsoil.	TS			
0.80	1	D		0.40	96.87	MADE GROUND : Dark brown and black clayey silty ashly medium to coarse sand / fine to medium sub-angular gravel with rootlets.	MG			
1.00-1.45	2	S/D	SANK			Very soft, spongy, black with dark brown mottles clayey fibrous PEAT.	PEAT			
1.80	3	D								
2.00-2.45	4	S/D	SANK							
2.70	5	D								
2.90-3.35	6	S/D	SANK							
3.70	7	D		3.70	93.67					
4.00-4.45	8	S/D	S2	4.00	93.37	Very soft dark brown with black mottles sandy very silty CLAY with pockets of dark brown fibrous peat.	ALLUVIUM			
4.90	9	D	(150)	4.80	92.57	Very soft grey very silty CLAY.				
5.00-5.45	2	U/B				Stiff and very stiff reddish brown and brown silty very sandy CLAY with some to much fine to coarse sub-angular and angular gravel and cobbles and boulders of sandstone, quartzite, basalt and dolerite.				
6.00-6.45	10	S/D	S25				GLACIAL TILL			
6.80	11	D								
7.00-7.45	12	S/D	S23			Becoming reddish purplish brown in colour.				
7.90	13	D								

Boring Progress & Water Obs.						Chiselling			
Date	Time	Depth	Casing	Water	Rose	Scaled	From	To	Mins
14/9/94	14:30	0.00	0.00						
14/9/94	15:00	0.70	0.00	0.70	0.70				
14/9/94	17:30	7.00	7.00						
15/9/94	08:00	7.00	7.00						
15/9/94	11:30	12.00	10.00						

Remarks:
A little water added from ground level to assist drilling.

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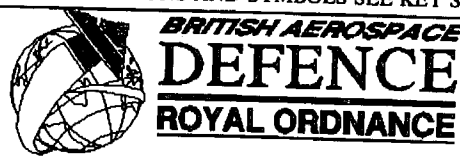
Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
Version:		

Co-ordinates (National): 4452E 6867N	Ground level (mAOD): 97.37	Method: CABLE PERCUSSION			Record of Borehole No: BH 3
Date: 14/09/94 to 15/09/94	Depth of Hole: 12.00	Hole diameter: 150mm	Casing diameter: 150mm	Sheet: 2 of 2	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
8.00-8.45	3	U/B	(150)	8		Stiff and very stiff reddish purplish brown silty very sandy CLAY with much fine to coarse sub-angular and angular gravel and cobbles and boulders of sandstone, quartzite, basalt and dolerite.	GLACIAL TILL			
9.30	14	D		7.20						
9.50-9.95	15	S/D	S24	9						
10.50	16	D		10						
11.00-11.45	17	S/D	S27	12	85.37					

Boring Progress & Water Obs.						Chiselling			Remarks: A little water added from ground level to assist drilling.
Date	Time	Depth	Casing	Water	Rose	Scaled	From	To	
14/9/94	14:30	0.00	0.00						
14/9/94	15:00	0.70	0.00	0.70	0.70				
14/9/94	17:30	7.00	7.00						
15/9/94	08:00	7.00	7.00						
15/9/94	11:30	12.00	10.00						

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All dimensions in metres		

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Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
		Version:

Co-ordinates (National): 4448E 6917N	Ground level (mAOD): 101.11	Method: CABLE PERCUSSION			Record of Borehole No: BH 4
Date: 15/09/94 to 15/09/94	Depth of Hole: 9.50	Hole diameter: 150mm	Casing diameter: 150mm	Sheet: 1 of 2	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
0.00-0.50	1	B		0		MADE GROUND : Dark brown, pale brown, grey and black silty ashy medium to coarse sand / fine to medium sub-angular to sub-rounded gravel with cobbles of coarse grained sandstone and half bricks.	M.GROUND			
0.80	1	D		0.70	100.41					
1.00-1.45	2	S/D	SANK	1		Very soft, spongy, dark brown and black slightly clayey fibrous PEAT.	PEAT			
1.90	3	D		2						
2.10-2.55	4	S/D	SANK	2						
2.80	5	D		3						
3.00-3.45	6	S/D	S1	3						
3.60	7	D		4						
3.90-4.35	8	S/D	S2	4						
4.70	9	D		5	4.60 96.51					
4.90-5.35	10	S/D	S1	5		Very loose pale grey brown very clayey SILT	ALLUVIUM			
5.80	11	D		6	5.80 95.31					
6.00-6.45	12	S/D	S2	6		Very soft pale grey brown very silty CLAY.				
6.80	13	D		7						
7.00-7.45	14	S/D	S2	7		With a little fine to medium sub-angular gravel below 7.40 m depth.	TILL			
				8	7.50 93.61					

Boring Progress & Water Obs.							Chiselling		
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins
15/9/94	12:30	0.00	0.00				7.60	9.50	90
15/9/94	14:00	4.60	4.50	4.60	2.90	9.00			
15/9/94	18:00	9.50	9.00						

Remarks:
A little water added from ground level to assist drilling. Pushing boulder ahead of tool from 7.60 to 9.50 m depth. Borehole terminated due to obstruction.

FOR ABBREVIATIONS AND SYMBOLS SEE KEY SHEET

Scale: 1:50	Processed by: J. GIBSON	Logged by: J. GIBSON
All dimensions in metres		



Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
		Version:

Co-ordinates (National): 4448E 6917N	Ground level (mAOD): 101.11	Method: CABLE PERCUSSION			Record of Borehole No: BH 4
Date: 15/09/94 to 15/09/94	Depth of Hole: 9.50	Hole diameter: 150mm	Casing diameter: 150mm	Sheet: 2 of 2	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
				8		Stiff and very stiff reddish brown and brown silty very sandy CLAY with much fine to coarse angular and sub-angular gravel and cobbles and boulders of sandstone and quartzite.	GLACIAL TILL			
				9.50	91.61					

Boring Progress & Water Obs.							Chiselling		
Date	Time	Depth	Casing	Water	Rose	Scaled	From	To	Mins
15/9/94	12:30	0.00	0.00				7.60	9.50	90
15/9/94	14:00	4.60	4.50	4.60	2.90	9.00			
15/9/94	18:00	9.50	9.00						

Remarks:
A little water added from ground level to assist drilling. Pushing boulder ahead of tool from 7.60 to 9.50 m depth. Borehole terminated due to obstruction.

FOR ABBREVIATIONS AND SYMBOLS SEE KEY SHEET



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All dimensions in metres		

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Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
		Version:

Co-ordinates (National): 4435E 6946N	Ground level (mAOD): 99.65	Method: CABLE PERCUSSION		Record of Borehole No: BH 5
Date: 20/09/94 to 20/09/94	Depth of Hole: 8.50	Hole diameter: 150mm	Casing diameter: 150mm	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
0.10-0.80	1	B		0		MADE GROUND : Dark grey and black silty ash medium to coarse sand / fine to medium angular and sub-angular gravel.	MADE GROUND	[Symbol]		[Symbol]
0.90	1	D		0.90	98.75					
1.00-1.45	2	S/D	S2	1	98.55	MADE GROUND : Black and orange brown mottled silty clayey fine to coarse sand / fine to medium sub-angular and tabular gravel of clinker and burnt shale. Very soft, spongy, dark brown and black slightly clayey fibrous PEAT.	MADE GROUND	[Symbol]		[Symbol]
1.70	3	D								
2.00-2.45	4	S/D	S1	2		Very soft grey brown very silty CLAY.	PEAT	[Symbol]		[Symbol]
2.80	5	D	S1							
2.90-3.35	6	S/D		3	96.25	Very soft grey brown very silty CLAY.	PEAT	[Symbol]		[Symbol]
4.80	7	D		4		Loose to medium dense grey brown thinly laminated clayey SILT.	ALLUVIUM	[Symbol]		[Symbol]
5.00-5.45	8	S/D	S10	5	94.65					
6.10	9	D		6	93.55	Stiff and very stiff reddish brown silty very sandy CLAY with much fine to coarse angular and sub-angular gravel and cobbles and boulders of sandstone, quartzite, basalt and dolerite.	GLACIAL TILL	[Symbol]		[Symbol]
6.20-6.65	10	S/D	S39	7						

Boring Progress & Water Obs.							Chiselling		
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins
20/9/94	08:00	0.00	0.00						
20/9/94	08:30	1.10	1.00	1.10	1.10	8.00			
20/9/94	13:00	8.50	8.00						

Remarks:
A little water added from ground level to assist drilling. Pushing boulder ahead of tool from 3.60 to 4.60 m depth and 6.65 to 8.50 m depth. Borehole terminated due to obstruction.

FOR ABBREVIATIONS AND SYMBOLS SEE KEY SHEET




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Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
		Version:

Co-ordinates (National): 4435E 6946N	Ground level (mAOD): 99.65	Method: CABLE PERCUSSION			Record of Borehole No: BH 5
Date: 20/09/94 to 20/09/94	Depth of Hole: 8.50	Hole diameter: 150mm	Casing diameter: 150mm	Sheet: 2 of 2	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
				8						
				8.50	91.15	Stiff and very stiff reddish brown silty very sandy CLAY with much fine to coarse angular and sub-angular gravel and cobbles and boulders of sandstone, quartzite, basalt and dolerite.	TILL			

Boring Progress & Water Obs.							Chiselling			Remarks: A little water added from ground level to assist drilling. Pushing boulder ahead of tool from 3.60 to 4.60 m depth and 6.65 to 8.50 m depth. Borehole terminated due to obstruction.	
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins		
20/9/94	08:00	0.00	0.00								
20/9/94	08:30	1.10	1.00	1.10	1.10	8.00					
20/9/94	13:00	8.50	8.00								
FOR ABBREVIATIONS AND SYMBOLS SEE KEY SHEET											
Scale: 1:50			Processed by: J. GIBSON				Logged by: J. GIBSON				 BRITISH AEROSPACE DEFENCE ROYAL ORDNANCE ENVIRONMENTAL SERVICES GROUP
All dimensions in metres											

Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
		Version:

Co-ordinates (National): 4419E 6969N	Ground level (mAOD): 98.98	Method: CABLE PERCUSSION			Record of Borehole No: BH 6
Date: 19/09/94 to 20/09/94	Depth of Hole: 9.20	Hole diameter: 150mm	Casing diameter: 150mm	Sheet: 1 of 2	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Pierro Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
0.10-0.60	1	B		0		<p>MADE GROUND : Dark grey and black silty ashy medium to coarse sand / fine to medium with some coarse angular and sub-angular gravel with occasional half bricks.</p> <p>Stiff and very stiff reddish brown silty very sandy CLAY with much fine to coarse angular and sub-angular gravel and cobbles and boulders of sandstone, quartzite, basalt and dolerite.</p>	MG	[Symbol]	[Symbol]	[Symbol]
0.60	1	D		0.40	98.58					
1.00-1.45	2	S/D	S10	1						
1.90	3	D		2						
2.00-2.45	4	S/D	S17	2						
2.80	5	D		3						
3.00-3.45	6	S/D	S29	3						
3.90	7	D		4	6.60					
4.00-4.45	8	S/D	S15	4						
4.90	9	D		5						
5.10-5.55	10	S/D	S22	5						
6.00-6.45	2	U/B	150	6						
7.00	11	D		7	7.00					
7.20-7.65	12	S/D	S35	7	91.98					
				8		<p>Very stiff reddish brown slightly sandy silty CLAY with some fine to coarse angular and sub-angular gravel and cobbles and boulders of sandstone, quartzite, basalt and dolerite.</p>				

Boring Progress & Water Obs.							Chiselling		
Date	Time	Depth	Casing	Water	Rose	Scaled	From	To	Mins
19/9/94	14:00	0.00	0.00				0.40	0.60	45
19/9/94	17:30	6.00	1.50				9.00	9.20	15
20/9/94	08:00	6.00	1.50						
20/9/94	11:30	9.20	1.50						

Remarks:
A little water added from ground level to assist drilling.

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All dimensions in metres		


Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
		Version:

Co-ordinates (National): 4419E 6969N	Ground level (mAOD): 98.98	Method: CABLE PERCUSSION		Record of Borehole No: BH 6
Date: 19/09/94 to 20/09/94	Depth of Hole: 9.20	Hole diameter: 150mm	Casing diameter: 150mm Sheet: 2 of 2	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
8.50	13	D		8.00	89.98	Very stiff reddish brown slightly sandy silty CLAY with some fine to coarse angular and sub-angular gravel and cobbles and boulders of sandstone, quartzite, basalt and dolerite.	MST GLACIAL TILL	[Symbol]		[Symbol]
9.00	14	D		9.00	89.78					
				9.20	89.78	Grey slightly weathered MUDSTONE, moderately strong.				

Boring Progress & Water Obs.							Chiselling			Remarks: A little water added from ground level to assist drilling.
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins	
19/9/94	14:00	0.00	0.00				0.40	0.60	45	
19/9/94	17:30	6.00	1.50				9.00	9.20	15	
20/9/94	08:00	6.00	1.50							
20/9/94	11:30	9.20	1.50							

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BRITISH AEROSPACE
DEFENCE
ROYAL ORDNANCE

ENVIRONMENTAL SERVICES GROUP

Scale: 1:50	Processed by: J. GIBSON	Logged by: J. GIBSON
All dimensions in metres		

Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
		Version:

Co-ordinates (National): 4392E 6968N	Ground level (mAOD): 98.25	Method: CABLE PERCUSSION		Record of Borehole No: BH 7
Date: 16/09/94 to 16/09/94	Depth of Hole: 4.00	Hole diameter: 150mm	Casing diameter: 150mm	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
0.00-0.50	1	B		0.10 0.24	98.15 98.01	MADE GROUND : Dark grey silty ashy coarse sand / fine sub-angular gravel. CONCRETE SLAB	MG			
1.00-1.45	1	S/D	S8	1.00	97.25	MADE GROUND : Dark grey and black silty ashy sandy clay with occasional half bricks.				
1.70	2	D				Firm to stiff and stiff reddish brown silty sandy CLAY with some to much fine to medium angular and sub-angular gravel and cobbles and boulders of sandstone, quartzite, basalt and dolerite.	GLACIAL TILL			
1.90-2.35	3	S/D	S22							
2.80	4	D								
3.00-3.45	5	S/D	S28							
3.70	6	D								
4.00			S > 50	4.00	94.25					

Boring Progress & Water Obs.							Chiselling		
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins
16/9/94	08:00	0.00	0.00				0.10	0.25	30
16/9/94	12:00	4.00	1.50				4.00	4.00	60

Remarks:
A little water added from ground level to assist drilling. Borehole terminated on rock - no penetration.

FOR ABBREVIATIONS AND SYMBOLS SEE KEY SHEET



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Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
		Version:

Co-ordinates (National): 4391E 6947N	Ground level (mAOD): 97.39	Method: CABLE PERCUSSION			Record of Borehole No: BH 8
Date: 20/09/94 to 20/09/94	Depth of Hole: 12.00	Hole diameter: 150mm	Casing diameter: 150mm	Sheet: 1 of 2	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
0.00-0.50	1	B		0		MADE GROUND : Black coarse sand and fine to coarse angular gravel of coal.	MADE GROUND			
0.80	1	D		0.50	96.89	Firm black with brown and grey mottles silty sandy clay with much medium to coarse sand / fine to medium angular gravel of coal.				
1.00-1.45	2	S/D	S4	1	96.39	Loose grey and grey brown thinly laminated very clayey SILT.	ALLUVIUM			
1.70	3	D		1.40						
2.00-2.45	4	S/D	S4	2	94.99	Loose grey and grey brown thinly laminated very clayey SILT with laminations of fine sand.	ALLUVIUM			
3.00	5	D		2.40						
3.20-3.65	6	S/D	S4	3		Very soft dark grey very silty CLAY.	ALLUVIUM			
4.00	7	D		3.60						
4.20-4.65	8	S/D	SANK	4	93.39	Very loose dark grey very clayey SILT.	ALLUVIUM			
4.90	9	D		4.60						
5.10-5.55	10	S/D	SANK	5	91.89	Very soft dark grey very silty CLAY.	ALLUVIUM			
5.80	11	D		5.50						
6.00-6.45	12	S/D	S1	6	91.39		ALLUVIUM			
6.90	13	D		6.40						
7.10-7.55	14	S/D	SANK	7			ALLUVIUM			
				8						

Boring Progress & Water Obs.							Chiselling			Remarks: A little water added between ground level and 4.00 m to assist drilling. 150 litres of water added between 4.00 m and 12.00 m to prevent borehole blowing.
Date	Time	Depth	Casing	Water	Rose	Scaled	From	To	Mins	
20/9/94	14:00	0.00	0.00							
20/9/94	15:00	2.00	1.50	2.00	2.00					
20/9/94	18:00	12.00	12.00							
FOR ABBREVIATIONS AND SYMBOLS SEE KEY SHEET										
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BRITISH AEROSPACE DEFENCE ROYAL ORDNANCE ENVIRONMENTAL SERVICES GROUP										

Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
		Version:

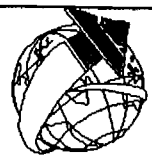
Co-ordinates (National): 4399E 6911N	Ground level (mAOD): 96.81	Method: CABLE PERCUSSION		Record of Borehole No: BH 9
Date: 21/09/94 to 21/09/94	Depth of Hole: 12.00	Hole diameter: 150mm	Casing diameter: 150mm	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
0.10-0.60	1	B		0.10	96.71	TOPSOIL / MADE GROUND : Firm brown silty sandy clay topsoil with a little fine to medium gravel and rootlets.	MADE GROUND	[Symbol]		[Symbol]
				0.40	96.31					
1.00-1.45	1	S/D	S25	1.00		MADE GROUND : Firm dark brown and black mottled slightly sandy very silty clay with some fine to medium gravel of burnt shale and occasional half bricks.	MADE GROUND	[Symbol]		[Symbol]
				1.50	95.31	MADE GROUND : Stiff black, dark brown, brown and cream slightly sandy silty clay with much fine to coarse gravel of burnt shale, coal and sandstone and pockets of soft black fibrous peat.				
1.80	2	D		0.40	1.90	94.91				
2.00-2.45	3	S/D	S4			Loose grey slightly clayey thinly laminated SILT.	ALLUVIUM	[Symbol]		[Symbol]
2.80	4	D		1.60						
3.00-3.45	5	S/D	S5							
3.60	6	D		3.50	93.31	Firm dark grey brown thinly laminated very silty CLAY.				
4.20-4.65	7	S/D	S8				ALLUVIUM	[Symbol]		[Symbol]
4.80	8	D		2.30						
5.00-5.45	9	S/D	S9							
5.90	10	D		5.80	91.01	Loose dark grey very clayey SILT.	ALLUVIUM	[Symbol]		[Symbol]
6.00-6.45	11	S/D	S6							
				7.00	89.81		GLACIAL TILL	[Symbol]		[Symbol]
				1.20		Very stiff dark grey brown silty very sandy CLAY with much fine to coarse angular and sub-angular gravel and cobbles and boulders of sandstone, quartzite, basalt and dolerite.				

Boring Progress & Water Obs.							Chiselling		
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins
21/9/94	08:00	0.00	0.00						
21/9/94	09:00	2.00	1.50	2.00	1.60	8.50			
21/9/94	13:00	12.00	8.50						

Remarks:
A little water added from ground level to assist drilling.

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Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
Co-ordinates (National): 4399E 6911N		Version:

Ground level (mAOD): 96.81	Method: CABLE PERCUSSION		Record of Borehole No: BH 9
Depth of Hole: 12.00	Hole diameter: 150mm	Casing diameter: 150mm	
Date: 21/09/94 to 21/09/94	Sheet: 2 of 2		

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Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
8.25	12	D	S24	8		Very stiff dark grey brown silty very sandy CLAY with much fine to coarse angular and sub-angular gravel and cobbles and boulders of sandstone, quartzite, basalt and dolerite.	GLACIAL TILL			
8.30-8.75	13	S/D								
9.50	14	D		9						
10.00-10.45			S37	10	85.00					
11.50-12.00	2	B		12	84.81					

Boring Progress & Water Obs.							Chiselling		
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins
21/9/94	08:00	0.00	0.00						
21/9/94	09:00	2.00	1.50	2.00	1.60	8.50			
21/9/94	13:00	12.00	8.50						

Remarks:
A little water added from ground level to assist drilling.

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Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95 Version:

Co-ordinates (National): 4418E 6865N	Ground level (mAOD): 96.58	Method: CABLE PERCUSSION			Record of Borehole No: BH 10
Date: 21/09/94 to 21/09/94	Depth of Hole: 12.00	Hole diameter: 150mm	Casing diameter: 150mm	Sheet: 1 of 2	

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
0.10-0.70	1	B		0		TOPSOIL : Firm dark brown and grey mottled slightly sandy silty clay with rootlets and a little fine to medium sub-angular gravel.	TS			
0.80	1	D		0.30	96.28	Firm brown, grey and orange brown mottled silty very sandy CLAY interbedded with silty very clayey SAND with some fine to coarse sub-angular and angular ironstone gravel and cobbles.				
1.00-1.45	2	S/D	S1	1.20	95.38					
1.80	3	D		0.60	94.78	Very loose dark grey clayey fine sandy SILT interbedded with orange brown clayey silty fine SAND .	ALLUVIUM			
2.00-2.45	4	S/D	S5	0.40	94.38	Loose grey brown clayey very silty fine SAND .				
2.70	5	D		0.50	93.88	Very loose and loose dark grey silty fine SAND .				
2.90-3.35	6	S/D	S4	2.70	93.88	Very loose dark grey brown clayey very silty fine SAND .				
3.90	7	D		4.30		Becoming dark grey below 4.90 m depth.				
4.00-4.45	8	S/D	S2							
4.90	9	D								
5.10-5.55	10	S/D	S3							
6.00	11	D		6		Very loose dark blue grey clayey very sandy SILT .				
6.20-6.65	12	S/D	S4							
7.00	13	D		7	89.58					
7.20-7.65	14	D	SANK	1.00						
7.65	14	D		8	88.58					

Boring Progress & Water Obs.							Chiselling			Remarks: A little water added between ground level and 2.20 m to assist drilling. 300 litres of water added between 2.20 m and 12.00 m to prevent borehole blowing. FOR ABBREVIATIONS AND SYMBOLS SEE KEY SHEET
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins	
21/9/94	14:00	0.00	0.00							
21/9/94	15:00	2.20	2.00	2.20	2.20					
21/9/94	18:00	12.00	12.00							
Scale: 1:50		Processed by: J. GIBSON			Logged by: J. GIBSON			 BRITISH AEROSPACE DEFENCE ROYAL ORDNANCE ENVIRONMENTAL SERVICES GROUP		
All dimensions in metres										

Project Name: ROYAL ORDNANCE BISHOPTON		Status: FINAL
Project No: 2079/95	Client: ROYAL ORDNANCE BISHOPTON	Date: 24/03/95
Co-ordinates (National): 4418E 6865N		Version:

Ground level (mAOD): 96.58	Method: CABLE PERCUSSION		Record of Borehole No: BH 10
Depth of Hole: 12.00	Hole diameter: 150mm	Casing diameter: 150mm	
Date: 21/09/94 to 21/09/94	Sheet: 2 of 2		

Samples & Tests				Strata		Description of Strata	Geology	Legend	Water	Piezo Backfill
Depth (m)	No.	Type	SPT CPT 'N' value	Depth (m)	Reduced Level (m)					
8.00	15	D		8		Very soft dark grey brown slightly sandy very silty CLAY.	ALLUVIUM			
8.50-8.95	16	S/D	S1							
9.30	17	D		9						
10.00-10.45	18	S/D	S1	10 (4.00)						
11.00	19	D		11						
11.50-11.95	20	S/D	S1	12	12.00 84.58					

Boring Progress & Water Obs.							Chiselling		
Date	Time	Depth	Casing	Water	Rose	Sealed	From	To	Mins
21/9/94	14:00	0.00	0.00						
21/9/94	15:00	2.20	2.00	2.20	2.20				
21/9/94	18:00	12.00	12.00						

Remarks:
A little water added between ground level and 2.20 m to assist drilling. 300 litres of water added between 2.20 m and 12.00 m to prevent borehole blowing.

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