# BOREHOLE LOG

Borehole No.
**BHHYD-01**
Sheet 1 of 2

| | | | |
|---|---|---|---|
| Project Name: Hydrus | Coordinates | Drilling Method: Cable Percussive | Hole Type Cable |
| Project No. JER4173 | Northings: 459810.88 | Start Date: 17/03/2009 | Hole Details: Hole Diameter (mm) 200 150; Casing Depth (m) 7.00 15.00 |
| Location: AWE Aldermaston | Eastings: 459810.88 | End Date: 18/03/2009 | Scale 1:50 |
| Client: AWE plc | Ground Level: 99.900 m OD | Logged By: BC | |

| Well | Water Strikes | Samples & In Situ Testing: Depth (m) | Type | Results | Level (m AOD) | Depth (m) | Legend | Description Of Strata | |
|---|---|---|---|---|---|---|---|---|---|
| | | 0.00 | PID1 | VOCs =0.00ppm | | | | | |
| | | 0.00-0.40 | D1 | | | | | | |
| | | 0.00-0.40 | E1 | | | | | | |
| | | 0.00 | W1 | | 99.50 | 0.40 | | Soft to firm dark brown black slightly sandy gravelly clay with frequent rootlets. Occasional whole and broken red brick fragments. Gravels are fine to coarse subangular to subrounded flint. (MADE GROUND) | 99.40 |
| | | 0.00-0.40 | X1 | | | | | | |
| | | 0.40 | PID2 | VOCs =0.00ppm | | | | | |
| | | 0.40-1.20 | D2 | | 99.15 | 0.75 | | Soft dark brown very gravelly CLAY. Gravel is fine to coarse angular to subrounded flint. (SILCHESTER GRAVEL) | 98.90 |
| | | 0.40-1.20 | E2 | | | | | Orange brown slightly clayey GRAVEL. Gravel is fine to coarse angular to subrounded flint. (SILCHESTER GRAVEL) | 98.40 |
| | | | | | | | | | 97.90 |
| | | | | | 97.55 | 2.35 | | Firm orange mottled grey gravelly CLAY. Gravel is fine to coarse subangular to subrounded flint. (BAGSHOT FORMATION) | 97.40 |
| | | | | | | | | | 96.90 |
| | | | | | | | | | 96.40 |
| | | | | | | | | | 95.90 |
| | | | | | 95.65 | 4.25 | | Stiff to very stiff dark grey CLAY. (LONDON CLAY) | 95.40 |
| | | | | | | | | | 94.90 |
| | | | | | | | | | 94.40 |
| | | | | | | | | | 93.90 |
| | | | | | | | | | 93.40 |
| | | | | | 93.10 | 6.80 | | Soft to firm dark grey green slightly sandy CLAY. (PROBABLE LONDON CLAY) | 92.90 |
| | | | | | | | | Band of stiff dark grey clay at 7.5mbGL | 92.40 |
| | | | | | | | | | 91.90 |
| | | | | | | | | Clay becomes wet and very soft from 8.5mbGL | 91.40 |
| | | | | | | | | | 90.90 |
| | | | | | | | | | 90.40 |

Continued next sheet

Remarks: Hand dug service inspection pit to 1.2mbGL

| Chiselling Details | | | | Groundwater Notes | | |
|---|---|---|---|---|---|---|
| Time Taken | Depth From (m) | Depth To (m) | Tool Used | Strike (m) | Casing Depth (m) | Level After 20 Mins (m) |
| | | | | 10.50 | - | 7.56 |

HoleBASE II (Bd 418.4) Standard Borehole Log v1 dated 26th Mar 03

AGS

# BOREHOLE LOG

Borehole No.
**BHHYD-01**
Sheet 2 of 2

| | | | |
|---|---|---|---|
| Project Name: Hydrus | Coordinates | Drilling Method: Cable Percussive | Hole Type Cable |
| Project No. JER4173 | Northings: 459810.88 | Start Date: 17/03/2009 | Hole Details: Hole Diameter (mm) 200 150; Casing Depth (m) 7.00 15.00 |
| Location: AWE Aldermaston | Eastings: 459810.88 | End Date: 18/03/2009 | Scale 1:50 |
| Client: AWE plc | Ground Level: 99.900 m OD | Logged By: BC | |

| Well | Water Strikes | Samples & In Situ Testing: Depth (m) | Type | Results | Level (m AOD) | Depth (m) | Legend | Description Of Strata |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Soft to firm dark grey green slightly sandy CLAY. (PROBABLE LONDON CLAY) |
| | | 14.00<br>14.00<br>14.00 | PID3<br>D3<br>E3 | VOCs =0.00ppm | | | | |
| | | | | | 84.90 | 15.00 | | End of Borehole at 15.00 m |

89.40 88.90 88.40 87.90 87.40 86.90 86.40 85.90 85.40 84.90 84.40 83.90 83.40 82.90 82.40 81.90 81.40 80.90 80.40

Remarks: Hand dug service inspection pit to 1.2mbGL

| Chiselling Details | | | | Groundwater Notes | | |
|---|---|---|---|---|---|---|
| Time Taken | Depth From (m) | Depth To (m) | Tool Used | Strike (m) | Casing Depth (m) | Level After 20 Mins (m) |
| | | | | 10.50 | - | 7.56 |

HoleBASE II (Bd 418.4) Standard Borehole Log v1 dated 26th Mar 03

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# BOREHOLE LOG

Borehole No.
**BHHYD-02**
Sheet 1 of 1

| | | | |
|---|---|---|---|
| Project Name: Hydrus | Coordinates | Drilling Method: Cable Percussive | Hole Type Cable |
| Project No. JER4173 | Northings: 459816.07 | Start Date: 17/03/2009 | Hole Details: Hole Diameter (mm) 200 / 150; Casing Depth (m) 0.50 / 6.00 |
| Location: AWE Aldermaston | Eastings: 164483.45 | End Date: 18/03/2009 | Scale 1:50 |
| Client: AWE plc | Ground Level: 99.890 m OD | Logged By: BC | |

| Well | Water Strikes | Samples & In Situ Testing: Depth (m) | Type | Results | Level (m AOD) | Depth (m) | Legend | Description Of Strata | |
|---|---|---|---|---|---|---|---|---|---|
| | | 0.00 | PID1 | VOCs =0.00ppm | | | | | |
| | | 0.00-0.40 | D1 | | | | | | |
| | | 0.00-0.40 | E1 | | | | | | |
| | | 0.00 | W1 | | 99.49 | 0.40 | | Soft to firm dark brown black slightly sandy gravelly clay with frequent rootlets. Occasional whole and broken red brick fragments. Gravels are fine to coarse subangular to subrounded flint. (MADE GROUND) | 99.39 |
| | | 0.00-0.40 | X1 | | | | | | |
| | | 0.40 | PID2 | VOCs =0.00ppm | | | | | |
| | | 0.40-1.20 | D2 | | 99.14 | 0.75 | | Soft light brown orange grey sandy very gravelly CLAY. Gravel is fine to coarse subangular to subrounded flint. (SILCHESTER GRAVEL) | 98.89 |
| | | 0.40-1.20 | E2 | | | | | Brown, yellow and white very sandy fine to coarse angular to subrounded flint GRAVEL. (SILCHESTER GRAVEL) | 98.39 |
| | | | | | | | | | 97.89 |
| | | | | | 97.49 | 2.40 | | Soft to firm brown grey mottled orange sandy very gravelly CLAY. Gravel is fine to coarse angular to subrounded flint. Lenses of fine to coarse angular to subrounded flint gravel. (BAGSHOT FORMATION) | 97.39 |
| | | | | | | | | | 96.89 |
| | | | | | | | | | 96.39 |
| | | | | | | | | | 95.89 |
| | | | | | 95.64 | 4.25 | | Stiff to very stiff dark grey CLAY. (LONDON CLAY) | 95.39 |
| | | | | | | | | | 94.89 |
| | | | | | | | | | 94.39 |
| | | 6.00 | E3 | | 93.89 | 6.00 | | End of Borehole at 6.00 m | 93.89 |
| | | | | | | | | | 93.39 |
| | | | | | | | | | 92.89 |
| | | | | | | | | | 92.39 |
| | | | | | | | | | 91.89 |
| | | | | | | | | | 91.39 |
| | | | | | | | | | 90.89 |
| | | | | | | | | | 90.39 |

Remarks: Hand dug service inspection pit to 1.2mbGL

| Chiselling Details | | | | Groundwater Notes | | |
|---|---|---|---|---|---|---|
| Time Taken | Depth From (m) | Depth To (m) | Tool Used | Strike (m) | Casing Depth (m) | Level After 20 Mins (m) |
| | | | | | | |

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HoleBASE II (Bld 418.4) Standard Borehole Log v1 dated 26th Mar 03

# BOREHOLE LOG

Borehole No.
**BHHYD-03**
Sheet 1 of 2

| | | | |
|---|---|---|---|
| Project Name: Hydrus | Coordinates | Drilling Method: Cable Percussive | Hole Type Cable |
| Project No. JER4173 | Northings: 459906.30 | Start Date: 18/03/2009 | Hole Details: Hole Diameter (mm) 200 150; Casing Depth (m) 7.00 15.00 |
| Location: AWE Aldermaston | Eastings: 164400.36 | End Date: 20/03/2009 | Scale 1:50 |
| Client: AWE plc | Ground Level: 99.110 m OD | Logged By: LKS | |

| Well | Water Strikes | Samples & In Situ Testing: Depth (m) | Type | Results | Level (m AOD) | Depth (m) | Legend | Description Of Strata | |
|---|---|---|---|---|---|---|---|---|---|
| | | 0.00 | PID1 | VOCs =0.00ppm | | | | | |
| | | 0.00-0.30 | D1 | | | | | | |
| | | 0.00-0.30 | E1 | | 98.81 | 0.30 | | Soft dark brown gravelly clay with frequent rootlets. Gravels are fine to coarse subangular to rounded flint. Occasional red brick fragments. (MADE GROUND) | 98.61 |
| | | 0.00 | W1 | | | | | | |
| | | 0.00-0.30 | X1 | | | | | Soft dark brown very gravelly CLAY. Gravel is fine to coarse angular to subrounded flint. (SILCHESTER GRAVEL) | |
| | | 0.30 | PID2 | VOCs =0.00ppm | | | | | |
| | | 0.30-1.20 | D2 | | | | | | |
| | | 0.30-1.20 | E2 | | 98.21 | 0.90 | | Orange brown slightly clayey GRAVEL. Gravel is fine to coarse angular to subrounded flint. (SILCHESTER GRAVEL) | 98.11 |
| | | | | | | | | | 97.61 |
| | | | | | | | | | 97.11 |
| | | | | | | | | | 96.61 |
| | | | | | 96.51 | 2.60 | | Firm orange mottled grey gravelly CLAY. Gravel is fine to coarse subangular to subrounded flint. (BAGSHOT FORMATION) | |
| | | | | | 96.31 | 2.80 | | Firm to stiff grey CLAY. (LONDON CLAY) | 96.11 |
| | | | | | | | | | 95.61 |
| | | | | | | | | | 95.11 |
| | | | | | | | | | 94.61 |
| | | | | | | | | | 94.11 |
| | | | | | | | | | 93.61 |
| | | | | | | | | | 93.11 |
| | | | | | | | | | 92.61 |
| | | | | | 92.11 | 7.00 | | Soft to firm dark grey green slightly sandy CLAY. (PROBABLE LONDON CLAY) | 92.11 |
| | | | | | | | | | 91.61 |
| | | | | | | | | | 91.11 |
| | | | | | | | | | 90.61 |
| | | | | | | | | | 90.11 |
| | | | | | | | | | 89.61 |

Continued next sheet

Remarks: Hand dug service inspection pit to 1.2mbGL

| Chiselling Details | | | | Groundwater Notes | | |
|---|---|---|---|---|---|---|
| Time Taken | Depth From (m) | Depth To (m) | Tool Used | Strike (m) | Casing Depth (m) | Level After 20 Mins (m) |
| | | | | 10.50 | - | 8.50 |

HoleBASE II (Bd 418.4) Standard Borehole Log v1 dated 26th Mar 03

# BOREHOLE LOG

Borehole No.
**BHHYD-03**
Sheet 2 of 2

| | | | |
|---|---|---|---|
| Project Name: Hydrus | Coordinates | Drilling Method: Cable Percussive | Hole Type Cable |
| Project No. JER4173 | Northings: 459906.30 | Start Date: 18/03/2009 | Hole Details: Hole Diameter (mm) 200 150; Casing Depth (m) 7.00 15.00 |
| Location: AWE Aldermaston | Eastings: 164400.36 | End Date: 20/03/2009 | Scale 1:50 |
| Client: AWE plc | Ground Level: 99.110 m OD | Logged By: LKS | |

| Well | Water Strikes | Samples & In Situ Testing: Depth (m) | Type | Results | Level (m AOD) | Depth (m) | Legend | Description Of Strata |
|---|---|---|---|---|---|---|---|---|
| | | 11.00 | E3 | | | | | Soft to firm dark grey green slightly sandy CLAY. (PROBABLE LONDON CLAY) |
| | | | | | | | | Clay becomes wet and very soft from 10.5mbGL |
| | | | | | 84.11 | 15.00 | | End of Borehole at 15.00 m |

88.61 88.11 87.61 87.11 86.61 86.11 85.61 85.11 84.61 84.11 83.61 83.11 82.61 82.11 81.61 81.11 80.61 80.11 79.61

Remarks: Hand dug service inspection pit to 1.2mbGL

| Chiselling Details | | | | Groundwater Notes | | |
|---|---|---|---|---|---|---|
| Time Taken | Depth From (m) | Depth To (m) | Tool Used | Strike (m) | Casing Depth (m) | Level After 20 Mins (m) |
| | | | | 10.50 | - | 8.50 |

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HoleBASE II (Bld 418.4) Standard Borehole Log v1 dated 26th Mar 03

# WINDOW SAMPLE LOG

Borehole No.
**WSHYD-04**
Sheet 1 of 1

| | | | | |
|---|---|---|---|---|
| Project Name: Hydrus | Coordinates | Drilling Method: Window Sampling | | Hole Type WS |
| Project No. JER4173 | Northings: 459785.02 | Start Date: 23/03/2009 | Hole Details | |
| Location: AWE Aldermaston | Eastings: 164382.80 | End Date: 23/03/2009 | Hole Diameter (mm) 98 / Casing Depth (m) 3.00 | Scale 1:50 |
| Client: AWE plc | Ground Level: 100.340 m OD | Logged By: LKS | | |

| Well | Water Strikes | Samples & In Situ Testing: Depth (m) | Type | Results | Level (m AOD) | Depth (m) | Legend | Description Of Strata | |
|---|---|---|---|---|---|---|---|---|---|
| | | 0.00 | PID1 | VOCs =0.20ppm | | | | | |
| | | 0.00-0.30 | D1 | | | | | | |
| | | 0.00-0.30 | E1 | | 100.04 | 0.30 | | Soft dark brown silt/clay with frequent gravels and frequent rootlets. Gravels are fine to coarse subangular to rounded flint. Occasional red brick fragments. (MADE GROUND) | 99.84 |
| | | 0.00 | W1 | | | | | | |
| | | 0.00-0.30 | X1 | | | | | | |
| | | 0.30 | PID2 | VOCs =0.00ppm | | | | | |
| | | 0.30-1.20 | D2 | | | | | | |
| | | 0.30-1.20 | E2 | | 99.44 | 0.90 | | Soft dark brown very gravelly CLAY. Gravel is fine to coarse subrounded to angular flint. (SILCHESTER GRAVEL) | 99.34 |
| | | | | | | | | Orange brown slightly clayey GRAVEL. Gravels are fine subangular to angular flint with occasional flint cobbles. (SILCHESTER GRAVEL) | 98.84 |
| | | | | | 98.44 | 1.90 | | Firm orange mottled grey SILT/CLAY with occasional fine to coarse subangular to rounded flint gravel. (BAGSHOT FORMATION) | 98.34 |
| | | | | | | | | Silt/clay becomes damp from 2.5mbGL. | 97.84 |
| | | 3.00 | E3 | | 97.34 | 3.00 | | End of Borehole at 3.00 m | 97.34 |
| | | | | | | | | | 96.84 |
| | | | | | | | | | 96.34 |
| | | | | | | | | | 95.84 |
| | | | | | | | | | 95.34 |
| | | | | | | | | | 94.84 |
| | | | | | | | | | 94.34 |
| | | | | | | | | | 93.84 |
| | | | | | | | | | 93.34 |
| | | | | | | | | | 92.84 |
| | | | | | | | | | 92.34 |
| | | | | | | | | | 91.84 |
| | | | | | | | | | 91.34 |
| | | | | | | | | | 90.84 |

Remarks: Hand dug service inspection pit to 1.2mbGL

| Chiselling Details | | | | Groundwater Notes | | |
|---|---|---|---|---|---|---|
| Time Taken | Depth From (m) | Depth To (m) | Tool Used | Strike (m) | Casing Depth (m) | Level After 20 Mins (m) |
| | | | | | | |

HoleBASE II (Bld 418.4) Standard Borehole Log v1 dated 26th Mar 03

# WINDOW SAMPLE LOG

Borehole No.
**WSHYD-05**
Sheet 1 of 1

| | | | | |
|---|---|---|---|---|
| Project Name: Hydrus | Coordinates | Drilling Method: Window Sampling | | Hole Type WS |
| Project No. JER4173 | Northings: 459833.09 | Start Date: 23/03/2009 | Hole Details | |
| Location: AWE Aldermaston | Eastings: 164408.20 | End Date: 23/03/2009 | Hole Diameter (mm) 98 / Casing Depth (m) 3.00 | Scale 1:50 |
| Client: AWE plc | Ground Level: 100.100 m OD | Logged By: LKS | | |

| Well | Water Strikes | Samples & In Situ Testing: Depth (m) | Type | Results | Level (m AOD) | Depth (m) | Legend | Description Of Strata |
|---|---|---|---|---|---|---|---|---|
| | | 0.00 | PID1 | VOCs =0.00ppm | | | | Soft dark brown gravelly clay with frequent rootlets. Gravels are fine to coarse subangular to rounded flint. Occasional red brick fragments and plastic tape fragments. (MADE GROUND) |
| | | 0.00-0.45 | D1 | | | | | |
| | | 0.00-0.45 | E1 | | | | | |
| | | 0.00 | W1 | | | | | |
| | | 0.00-0.45 | X1 | | 99.65 | 0.45 | | |
| | | 0.45 | PID2 | VOCs =0.20ppm | | | | Brown grey clayey GRAVEL. Gravels are fine to coarse subangular to subrounded flint. (SILCHESTER GRAVEL) Slight organic odour within clays from 0.45 - 0.70mbGL. |
| | | 0.45-0.70 | D2 | | 99.40 | 0.70 | | |
| | | 0.70 | PID3 | VOCs =0.00ppm | | | | Orange brown very sandy GRAVEL. Gravels are fine to medium angular to subrounded flint. (SILCHESTER GRAVEL) |
| | | 0.70-1.20 | D3 | | | | | |
| | | 0.70-1.20 | E3 | | | | | |
| | | | | | 98.50 | 1.60 | | Firm to stiff orange mottled grey SILT/CLAY with occasional plant debris. Fine orange subrounded to rounded sand pockets throughout. (BAGSHOT FORMATION) Silt/clay becomes damp from 1.6mbGL. |
| | | 3.00 | E4 | | 97.10 | 3.00 | | End of Borehole at 3.00 m |

Remarks: Hand dug service inspection pit to 1.2mbGL

| Chiselling Details | | | | Groundwater Notes | | |
|---|---|---|---|---|---|---|
| Time Taken | Depth From (m) | Depth To (m) | Tool Used | Strike (m) | Casing Depth (m) | Level After 20 Mins (m) |
| | | | | | | |

HoleBASE II (Bld 418.4) Standard Borehole Log v1 dated 26th Mar 03

# WINDOW SAMPLE LOG

Borehole No.
**WSHYD-06**
Sheet 1 of 1

| | | | | |
|---|---|---|---|---|
| Project Name: Hydrus | Coordinates | Drilling Method: Window Sampling | | Hole Type WS |
| Project No. JER4173 | Northings: 459877.29 | Start Date: 23/03/2009 | Hole Details | |
| Location: AWE Aldermaston | Eastings: 164426.87 | End Date: 23/03/2009 | Hole Diameter (mm) 98 / Casing Depth (m) 3.00 | Scale 1:50 |
| Client: AWE plc | Ground Level: 99.760 m OD | Logged By: LKS | | |

| Well | Water Strikes | Samples & In Situ Testing: Depth (m) | Type | Results | Level (m AOD) | Depth (m) | Legend | Description Of Strata |
|---|---|---|---|---|---|---|---|---|
| | | 0.00 | PID1 | VOCs =0.30ppm | 99.61 | 0.15 | | Soft light brown to brown sandy gravelly clay with frequent rootlets. Gravel is fine to coarse angular to subrounded flint. Rare red brick fragments. (MADE GROUND) |
| | | 0.00-0.40 | D1 | | | | | |
| | | 0.00-0.40 | E1 | | | | | |
| | | 0.00 | W1 | | 99.36 | 0.40 | | Light brown orange grey black sandy clayey gravel with rare red brick fragments. Gravel is fine to coarse subangular to subrounded flint. (MADE GROUND) |
| | | 0.00-0.40 | X1 | | | | | |
| | | 0.40 | PID2 | VOCs =0.00ppm | | | | Light brown orange slightly clayey GRAVEL. Gravels are fine to coarse subrounded to angular flint with occasional subrounded flint cobbles.. (SILCHESTER GRAVEL) |
| | | 0.40-1.20 | D2 | | | | | |
| | | 0.40-1.20 | E2 | | | | | |
| | | | | | 97.41 | 2.35 | | Firm to stiff orange mottled grey very gravelly CLAY. Gravels are fine to coarse subrounded to angular flint. (BAGSHOT FORMATION) Clay becomes damp from 2.35mbGL. |
| | | 3.00 | E3 | | 96.76 | 3.00 | | End of Borehole at 3.00 m |

99.26 98.76 98.26 97.76 97.26 96.76 96.26 95.76 95.26 94.76 94.26 93.76 93.26 92.76 92.26 91.76 91.26 90.76 90.26

Remarks: Hand dug service inspection pit to 1.2mbGL

| Chiselling Details | | | | Groundwater Notes | | |
|---|---|---|---|---|---|---|
| Time Taken | Depth From (m) | Depth To (m) | Tool Used | Strike (m) | Casing Depth (m) | Level After 20 Mins (m) |
| | | | | | | |

HoleBASE II (Bld 418.4) Standard Borehole Log v1 dated 26th Mar 03

AGS

| BAE SYSTEMS | BAE Systems Environmental | Site: AWE B Area North | Borehole Number: BH01 |
|---|---|---|---|
| Boring Method: Cable Percussion | Casing Diameter | Ground Level (mOD) | Client: Atomic Weapons Establishment | Job Number: A620/01 |
| | Location | Dates: 17/10/2007 | Engineer: BAE Systems Environmental | Sheet: 1/2 |

| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water | Instr |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | (0.10) 0.10 | TOPSOIL. Brown sandy clay with rootlets. | | | |
| 1.00 | DT1 | | | | | | MADE GROUND: Reworked gravelly clay with abundant cobbles of flint. Gravel is fine to coarse, sub angular to sub rounded flint. Becoming sandy gravel with abundant flint cobbles with depth | | | |
| 1.00 | DJ2 | | | | | | | | | |
| 1.00 | S1 | | | | | | | | | |
| 1.00 | DJ1 | | | | | (2.65) | | | | |
| 1.50 | S2 | | | | | | | | | |
| 2.50 | DJ3 | | | | | | | | | |
| 2.50 | DT2 | | | | | 2.75 | | | | |
| 2.50 | S3 | | | | | | Firm grey sandy SILT with occasional fine to coarse sub angular to sub rounded flint with occasional cobbles. | | | |
| 2.80 | S4 | | | | | (0.45) | | | | |
| 2.80 | DT3 | | | | | | | | ▽1 | |
| 2.80 | DJ4 | | | Water strike(1) at 3.20m. | | 3.20 | Grey/brown clayey SAND with pockets of grey sandy silt. | | | |
| | | | | | | (0.60) | | | | |
| 3.80 | DT4 | | | | | 3.80 | | | | |
| 3.80 | S5 | | | | | | Firm dark grey slightly sandy CLAY with occasional pockets of grey sandy silt. | | | |
| 3.80 | DJ5 | | | | | | | | | |
| 6.00 | DJ6 | | | | | | | | | |
| 6.00 | DT5 | | | | | | | | | |
| 6.00 | S6 | | | | | (5.10) | | | | |
| 8.00 | DJ8 | | | | | | | | | |
| 8.00 | DT6 | | | | | | | | | |
| 8.00 | DT7 | | | | | | | | | |
| 8.00 | DJ7 | | | | | | | | | |
| 8.00 | S7 | | | | | | | | | |
| | | | | | | 8.90 | Orange very soft sandy CLAY. | | | |

**Remarks**

| Scale (approx) | Logged By |
|---|---|
| 1:50 | JT |

**Figure No.** A620/01.BH01

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BAE SYSTEMS

**BAE Systems Environmental**

| Site | Borehole Number |
|---|---|
| AWE B Area North | BH01 |

| Boring Method | Casing Diameter | Ground Level (mOD) | Client | Job Number |
|---|---|---|---|---|
| Cable Percussion | | | Atomic Weapons Establishment | A620/01 |
| | **Location** | **Dates** 17/10/2007 | **Engineer** BAE Systems Environmental | **Sheet** 2/2 |

| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water | Instr |
|---|---|---|---|---|---|---|---|---|---|---|
| 10.00 | S8 | | | | | (2.60) | ... as previous | | | |
| | | | | | | 11.50 | Complete at 11.50m | | | |

**Remarks**

| Scale (approx) | Logged By |
|---|---|
| 1:50 | JT |

**Figure No.** A620/01.BH01

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BAE SYSTEMS

**BAE Systems Environmental**

| Site | Borehole Number |
|---|---|
| AWE B Area North | BH02 |

| Boring Method | Casing Diameter | Ground Level (mOD) | Client | Job Number |
|---|---|---|---|---|
| Cable Percussion | | | Atomic Weapons Establishment | A620/01 |
| | **Location** | **Dates** 17/10/2007 | **Engineer** BAE Systems Environmental | **Sheet** 1/1 |

| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water | Instr |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | (0.10) | TOPSOIL. Brown sandy clay with rootlets. | | | |
| | | | | | | 0.10 | | | | |
| 0.20 | DJ2 | | | | | (0.35) | MADE GROUND: Brown sandy clay with abundant gravel. Gravel is fine to coarse sub angular to sub rounded flint with cobbles | | | |
| 0.20 | DT1 | | | | | 0.45 | | | | |
| 0.20 | DJ1 | | | | | | Brown sandy CLAY with abundant gravel. Gravel is fine to coarse sub angular to sub rounded flint with cobbles | | | |
| 0.20 | S1 | | | | | | | | | |
| 0.20 | DJ3 | | | | | (1.05) | | | | |
| 1.00 | DJ4 | | | | | | | | | |
| 1.00 | DT2 | | | | | 1.50 | | | | |
| | | | | | | (0.40) | Firm brown sandy CLAY with abundant fine to coarse sub angular to sub rounded flint. Occasional pockets of grey sandy silt. | | | |
| 1.70 | DJ5 | | | | | 1.90 | | | | |
| 1.70 | DT3 | | | | | | Firm grey sandy SILT. | | | |
| 1.90 | S2 | | | | | (0.60) | | | | |
| 2.00 | DJ6 | | | | | 2.50 | | | ▽1 | |
| | | | | Water strike(1) at 2.50m. | | | Red/brown clayey SAND. Pocket of light grey sandy clay at 7.50m.bgl. | | | |
| 2.80 | DT4 | | | | | | | | | |
| 3.60 | DJ7 | | | | | | | | | |
| 3.60 | DT5 | | | | | | | | | |
| 5.00 | DT6 | | | | | | | | | |
| 5.00 | DJ8 | | | | | (5.50) | | | | |
| 7.00 | DJ9 | | | | | | | | | |
| 7.00 | DT7 | | | | | | | | | |
| | | | | | | 8.00 | Dark grey very soft sandy CLAY. | | | |
| | | | | | | (1.00) | | | | |
| | | | | | | 9.00 | | | | |
| | | | | | | | Complete at 9.00m | | | |

**Remarks**

| Scale (approx) | Logged By |
|---|---|
| 1:50 | JT |

**Figure No.** A620/01.BH02

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BAE SYSTEMS

**BAE Systems Environmental**

| Site | Borehole Number |
|---|---|
| AWE B Area North | BH03 |

| Boring Method | Casing Diameter | Ground Level (mOD) | Client | Job Number |
|---|---|---|---|---|
| Cable Percussion | | | Atomic Weapons Establishment | A620/01 |
| | **Location** | **Dates** 17/10/2007 | **Engineer** BAE Systems Environmental | **Sheet** 1/1 |

| Depth (m) | Sample / Tests | Casing Depth (m) | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water | Instr |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | (0.10) 0.10 | TOPSOIL. Brown sandy clay with rootlets. | | | |
| 0.30 | DJ1 | | | | | (0.40) | MADE GROUND: Brown sandy clay with abundant gravel. Gravel is fine to coarse sub angular to sub rounded flint with cobbles | | | |
| 0.30 | DT1 | | | | | 0.50 | | | | |
| 0.30 | S1 | | | | | (0.40) | Brown sandy CLAY with abundant gravel. Gravel is fine to coarse sub angular to sub rounded flint with cobbles | | | |
| 0.30 | DJ2 | | | | | 0.90 | | | | |
| 1.00 | DJ3 | | | | | | Firm brown sandy gravelly CLAY with abundant fine to cobble sized sub angular to sub rounded gravel of flint. | | | |
| 1.00 | DT2 | | | | | (1.70) | | | | |
| 1.00 | S2 | | | | | | | | | |
| 2.00 | DT3 | | | | | | | | | |
| 2.00 | DJ4 | | | | | | | | | |
| 2.00 | S3 | | | | | | | | ▽1 | |
| 2.40 | S4 | | | Water strike(1) at 2.40m. | | | | | | |
| 2.40 | DT4 | | | | | 2.60 | Firm brown sandy CLAY with pockets of red/orange sand. | | | |
| 2.40 | DJ5 | | | | | | | | | |
| 3.00 | S5 | | | | | (1.30) | | | | |
| 3.20 | DJ6 | | | | | | | | | |
| 3.20 | DT5 | | | | | 3.90 | Firm dark grey slightly sandy CLAY with pockets of grey clay. Becoming very firm with depth. | | | |
| 4.30 | DT6 | | | | | | | | | |
| 4.30 | DJ7 | | | | | | | | | |
| 4.30 | S6 | | | | | | | | | |
| | | | | | | (3.40) | | | | |
| 6.00 | DJ8 | | | | | | | | | |
| 6.00 | DT7 | | | | | | | | | |
| 6.00 | S7 | | | | | | | | | |
| | | | | | | 7.30 | Dark grey very soft sandy CLAY. | | | |
| | | | | | | (0.70) | | | | |
| 8.00 | S8 | | | | | 8.00 | Complete at 8.00m | | | |

**Remarks**

| Scale (approx) | Logged By |
|---|---|
| 1:50 | JT |

**Figure No.** A620/01.BH03

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BAE SYSTEMS

**BAE Systems Environmental**

| Site | Trial Pit Number |
|---|---|
| AWE B Area North | TP01 |

| Excavation Method | Dimensions | Ground Level (mOD) | Client | Job Number |
|---|---|---|---|---|
| JCB 3CX | 0.50 x 2.50 | | Atomic Weapons Establishment | A620/01 |
| | **Location** | **Dates** 19/10/2007 | **Engineer** BAE Systems Environmental | **Sheet** 1/1 |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
|---|---|---|---|---|---|---|---|---|
| | | | | | (0.10) 0.10 | TOPSOIL. Brown sandy clay with rootlets. | | |
| 0.30 | D2 | | | | (0.30) 0.40 | MADE GROUND: Brown sandy clay with abundant fine gravel. | | |
| 0.30 | D1 | | | | | | | |
| 0.50 | D3 | | | | (0.50) 0.90 | Light brown clayey SAND with abundant fine to coarse sub angular to sub rounded gravel. | | |
| 1.20 | D4 | | | | (0.70) 1.60 | Sandy GRAVEL. Gravel is fine to coarse sub angular to sub rounded flint. | | |
| 1.80 | D5 | | | | (0.60) 2.20 | Red/brown clayey SAND with abundant pockets of fine to coarse sub angular to sub rounded gravel of flint. | | |
| 2.40 | D6 | | | | (0.60) 2.80 | Firm grey sandy CLAY with pockets of brown sandy clay. | | |
| 3.30 | D7 | | | | (0.80) 3.60 | Light brown/grey mottled soft sandy CLAY with cobbles of dark grey clay. | | |
| | | | | | | Complete at 3.60m | | |

**Plan**

**Remarks**

| Scale (approx) | Logged By | Figure No. |
|---|---|---|
| 1:50 | JT | A620/01.TP01 |

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BAE SYSTEMS

**BAE Systems Environmental**

| Site | Trial Pit Number |
|---|---|
| AWE B Area North | TP02 |

| Excavation Method | Dimensions | Ground Level (mOD) | Client | Job Number |
|---|---|---|---|---|
| JCB 3CX | 0.50 x 2.50 | | Atomic Weapons Establishment | A620/01 |
| | **Location** | **Dates** 19/10/2007 | **Engineer** BAE Systems Environmental | **Sheet** 1/1 |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
|---|---|---|---|---|---|---|---|---|
| | | | | | (0.10) 0.10 | TOPSOIL. Brown sandy clay with rootlets. | | |
| 0.30 | D1 | | | | (0.40) | MADE GROUND: Brown sandy clay with abundant fine gravel. | | |
| 0.30 | D2 | | | | 0.50 | | | |
| 0.30 | D3 | | | | | Light brown/orange clayey SAND with abundant fine to coarse sub angular to sub rounded gravel. | | |
| 0.80 | D4 | | | | (0.60) | | | |
| | | | | | 1.10 | Sandy GRAVEL. Gravel is fine to coarse sub angular to sub rounded flint. | | |
| 1.50 | D5 | | | | (1.20) | | | |
| | | | | | 2.30 | Light brown clayey sandy GRAVEL with abundant fine to coarse sub angular to sub rounded gravel. | | |
| | | | | | (0.40) | | | |
| | | | | | 2.70 | Soft grey CLAY with abundant fine to coarse sub angular to sub rounded gravel. | | |
| | | | | | (0.40) | | | |
| | | | | | 3.10 | Red/brown clayey SAND with pockets of grey clay and fine to coarse sub angular to sub rounded gravel. | | |
| 3.20 | D6 | | | | (0.20) 3.30 | | | |
| 3.50 | D7 | | | | (0.30) 3.60 | Firm grey sandy CLAY with pockets of brown clayey sand. | | |
| | | | | | | Complete at 3.60m | | |

**Plan**

**Remarks**

| Scale (approx) | Logged By | Figure No. |
|---|---|---|
| 1:50 | JT | A620/01.TP02 |

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BAE SYSTEMS

**BAE Systems Environmental**

| Site | Trial Pit Number |
|---|---|
| AWE B Area North | TP03 |

| Excavation Method | Dimensions | Ground Level (mOD) | Client | Job Number |
|---|---|---|---|---|
| JCB 3CX | 0.50 x 2.50 | | Atomic Weapons Establishment | A620/01 |
| | **Location** | **Dates** 19/10/2007 | **Engineer** BAE Systems Environmental | **Sheet** 1/1 |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
|---|---|---|---|---|---|---|---|---|
| | | | | | (0.10) | TOPSOIL. Brown sandy clay with rootlets. | | |
| | | | | | 0.10 | | | |
| 0.20 | D1 | | | | (0.20) | MADE GROUND: Light brown sandy clay with abundant fine to coarse sub angular to sub rounded gravel. | | |
| 0.20 | D2 | | | | 0.30 | | | |
| 0.20 | D3 | | | | (0.50) | | | |
| 0.50 | D4 | | | | | Light brown clayey SAND with abundant fine to coarse sub angular to sub rounded gravel. | | |
| | | | | | 0.80 | | | |
| 1.00 | D5 | | | | | Sandy GRAVEL. Gravel is fine to coarse sub angular to sub rounded flint. | | |
| | | | | | (1.20) | | | |
| 1.80 | D6 | | | | | | | |
| | | | | | 2.00 | Light brown clayey sandy GRAVEL. Gravel is fine to coarse sub angular to sub rounded flint. | | |
| | | | | | (0.80) | | | |
| | | | | | 2.80 | | | |
| | | | | | | Complete at 2.80m | | |

**Plan**

**Remarks**

| Scale (approx) | Logged By | Figure No. |
|---|---|---|
| 1:50 | JT | A620/01.TP03 |

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BAE SYSTEMS

**BAE Systems Environmental**

| Site | Trial Pit Number |
|---|---|
| AWE B Area North | TP04 |

| Excavation Method | Dimensions | Ground Level (mOD) | Client | Job Number |
|---|---|---|---|---|
| JCB 3CX | 0.50 x 2.50 | | Atomic Weapons Establishment | A620/01 |
| | **Location** | **Dates** 19/10/2007 | **Engineer** BAE Systems Environmental | **Sheet** 1/1 |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
|---|---|---|---|---|---|---|---|---|
| | | | | | (0.10) 0.10 | TOPSOIL. Brown sandy clay with rootlets. | | |
| 0.30 | D3 | | | | (0.30) | MADE GROUND: Brown sandy clay with abundant fine to coarse sub angular to sub rounded gravel of flint. | | |
| 0.30 | D2 | | | | 0.40 | | | |
| 0.30 | D1 | | | | (0.60) | Light brown clayey SAND with abundant fine to coarse sub angular to sub rounded gravel of flint. | | |
| 0.60 | D4 | | | | 1.00 | | | |
| | | | | | | Brown clayey sandy GRAVEL and cobbles. | | |
| 1.20 | D5 | | | | (0.70) | | | |
| | | | | | 1.70 | | | |
| 1.80 | D6 | | | | | Firm grey sandy CLAY with pockets of brown sandy clay. | | |
| 2.40 | D7 | | | | (1.40) | | | |
| | | | | | 3.10 | | | |
| | | | | | (0.10) | Red/brown clayey SAND with pockets of grey sandy clay. Occasional pockets of sand. | | |
| 3.20 | D8 | | | | 3.20 | | | |
| | | | | | | Complete at 3.20m | | |

**Plan**

**Remarks**

| Scale (approx) | Logged By | Figure No. |
|---|---|---|
| 1:50 | JT | A620/01.TP04 |

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BAE SYSTEMS

**BAE Systems Environmental**

| Site | Trial Pit Number |
|---|---|
| AWE B Area North | TP05 |

| Excavation Method | Dimensions | Ground Level (mOD) | Client | Job Number |
|---|---|---|---|---|
| JCB 3CX | 0.50 x 2.50 | | Atomic Weapons Establishment | A620/01 |
| | **Location** | **Dates** 19/10/2007 | **Engineer** BAE Systems Environmental | **Sheet** 1/1 |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records | Level (mOD) | Depth (m) (Thickness) | Description | Legend | Water |
|---|---|---|---|---|---|---|---|---|
| | | | | | (0.10) 0.10 | TOPSOIL. Brown sandy clay with rootlets. | | |
| 0.20 | D1 | | | | (0.50) | MADE GROUND: Brown sandy clay with abundant fine to coarse sub angular to sub rounded gravel of flint. | | |
| 0.20 | D2 | | | | | | | |
| 0.20 | D3 | | | | 0.60 | | | |
| 0.80 | D4 | | | | (0.50) | Light brown sandy GRAVEL and cobbles. | | |
| | | | | | 1.10 | | | |
| 1.20 | D5 | | | | (0.40) | Light brown soft very sandy gravely CLAY. Gravel is fine to coarse sub angular to sub rounded flint. | | |
| | | | | | 1.50 | | | |
| 1.70 | D6 | | | | (1.20) | Firm grey CLAY with abundant pockets of brown clayey sand. | | |
| | | | | | 2.70 | | | |
| 2.80 | D7 | | | | (0.60) | Red/brown firm CLAY with abundant pockets of orange sandy clay. | | |
| 3.30 | D8 | | | | 3.30 | | | |
| | | | | | | Complete at 3.30m | | |

**Plan**

**Remarks**

| Scale (approx) | Logged By | Figure No. |
|---|---|---|
| 1:50 | JT | A620/01.TP05 |

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| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion<br>Equipment Dando 2000<br>Dates Drilled Start 12/03/2007<br>End 14/03/2007 | Borehole Diameter<br>250mm to 3.00m<br>200mm to 4.50m<br>150mm to 25.00m<br>Logged by CC 14/03/2007<br>Compiled by rl 15/03/2007<br>Checked by | Casing Diameter<br>250mm to 3.00m<br>200mm to 4.50m<br>150mm to 20.50m | **BOREHOLE No. CP1001**<br>Coordinates 2712.4 E<br>(Local Grid) 1480.3 N<br>Ground Level 100.30 m OD |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12/03 | | | 0.10 | | CDKV | 1 | | | Grass over TOPSOIL. | (0.10) 0.10 | 100.20 | |
| | | | 0.50 | | CDKV | 2 | | | Orange brown slightly clayey slightly sandy subangular to subrounded fine to coarse flint GRAVEL. Occasional pockets of grey clay up to 30mm. Rare rootlets. [Silchester Gravel] | (0.50) 0.60 | 99.70 | |
| | | | 0.50 | | B | 3 | | | | | | |
| | | | 1.00 | | CDKV | 4 | | | Brown slightly clayey slightly sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] Below 1.50m; white grey brown slightly sandy gravel. | (1.40) | | |
| | | | 2.00 | | CDKV | 5 | | | | 2.00 | 98.30 | |
| | 2.00 | 0.50 | 2.00-2.50 | | B | 6 | C25 | | Light grey brown and orange brown slightly clayey, slightly sandy subangular to subrounded fine to coarse flint GRAVEL with frequent pockets of grey clay. [Silchester Gravel] | (0.70) | | |
| | | | 2.70 | | CDKV | 7 | | | | 2.70 | 97.60 | |
| | | | 2.70-3.00 | | B | 8 | | | Firm orange brown mottled grey slightly gravelly sandy CLAY. Gravel is subangular to subrounded fine to coarse flint. Pockets/lenses up to 50mm of orange brown silty fine sand and soft grey clay. From 3.00m to 3.40m; locally interlaminated orange brown slightly silty sand and light grey clay. rare organic material At 3.10m; 10mm ironstone nodule | | | |
| | 3.00 | DRY | 3.00-4.00 | | TW | 9 | | | | (0.70) | | |
| | | | | | | | | | | 3.40 | 96.90 | |
| | | | | | | | | | | (0.60) | | |
| | 3.00 | DRY | 4.00 | | D | 10 | S21 | | | 4.00 | 96.30 | |
| | | | 4.00-4.50 | | B | 11 | | | Firm to stiff fissured laminated and interlaminated brown and orange CLAY with silty texture. Frequent laminae of orange brown and light grey silty fine sand. Fissures are extremely closely spaced sub vertical and randomly orientated, locally slightly polished. | | | |
| | | | 4.00 | | CDKV | 12 | | | | | | |
| | | | 4.70 | | W | 20 | | | | | | |
| | | | 5.00 | | CDKV | 13 | | | | | | |
| | 4.50 | WET | 5.00-6.00 | | TW | 14 | | | Firm to stiff thinly laminated fissured dark grey CLAY with frequent partings of grey silty fine sand. Occasional orange brown staining. Fissures are extremely closely spaced randomly orientated, locally slightly polished. [London Clay Claygate Member] From 5.10m to 5.20m; locally clayey sand From 5.85m to 6.00m; locally brown staining on fissure surfaces | (3.00) | | |
| | 4.50 | WET | 6.00 | | D | 15 | S25 | | | | | |
| | | | 6.00-6.50 | | B | 16 | | | | | | |
| | 4.50 | WET | 7.00-8.00 | | TW | 17 | | | | 7.00 | 93.30 | |
| | | | 7.40-7.60 | | CL | 201 | | | Approximate boundary Stiff to very stiff fissured grey brown CLAY with silty texture. Fissures are extremely closely spaced, randomly orientated, tight locally polished, locally brown staining on fissure surfaces. Occasional light grey brown silty fine sand partings. Surface oxidizes brown. [London Clay Unit E] At 7.40m; locally clay/silt. Below 7.70m; occasional becoming frequent with depth partings/lenses of green glauconitic sand (smears to clay) also dispersed throughout. | (1.00) | | |
| | 4.50 | WET | 8.00 | | D | 18 | S28 | | | 8.00 | 92.30 | |
| | | | 8.00-8.50 | | B | 19 | | | | | | |
| 12/03 | 8.50 | WET | | | | | | | | | | |
| 13/03 | 8.50 | 4.70 | | | | | | | | | | |
| | 9.00 | 2.00 | 9.00-9.50 | | TW | 21 | | | Approximate boundary (Stiff) apparently unstructured probably [illegible] flint GRAVEL. [Silchester Gravel] Below 1.50m; white grey brown slightly sandy gravel. | | | |
| | | | 9.25-9.50 | | CL | 202 | | | | | | |
| | | | 2.00 | | CDKV | 5 | | | | 2.00 | 98.30 | |
| | 2.00 | 0.50 | 2.00-2.50 | | B | 6 | C25 | | Light grey brown and orange brown slightly clayey, slightly sandy subangular to subrounded fine to coarse flint GRAVEL with frequent pockets of grey clay. [Silchester Gravel] | (0.70) | | |
| | | | 2.70 | | CDKV | 7 | | | | 2.70 | 97.60 | |
| | | | 2.70-3.00 | | B | 8 | | | Firm orange brown mottled grey slightly gravelly sandy CLAY. Gravel is subangular to subrounded fine to coarse flint. Pockets/lenses up to 50mm of orange brown silty fine sand and soft grey clay. From 3.00m to 3.40m; locally interlaminated orange brown slightly silty sand and light grey clay. rare organic material At 3.10m; 10mm ironstone nodule | | | |
| | 3.00 | DRY | 3.00-4.00 | | TW | 9 | | | | (0.70) | | |
| | | | | | | | | | | 3.40 | 96.90 | |
| | | | | | | | | | | (0.60) | | |
| | 3.00 | DRY | 4.00 | | D | 10 | S21 | | | 4.00 | 96.30 | |
| | | | 4.00-4.50 | | B | 11 | | | Firm to stiff fissured laminated and interlaminated brown and orange CLAY with silty texture. Frequent laminae of orange brown and light grey silty fine sand. Fissures are extremely closely spaced sub | | | |
| | | | 4.00 | | CDKV | 12 | | | | | | |

| Drilling Method | Cable Percussion | Borehole Diameter | Casing Diameter | BOREHOLE No. | CP1001 |
|---|---|---|---|---|---|
| Equipment | Dando 2000 | 250mm to 3.00m<br>200mm to 4.50m<br>150mm to 25.00m | 250mm to 3.00m<br>200mm to 4.50m<br>150mm to 20.50m | Coordinates<br>(Local Grid)<br>Ground Level | 2712.4 E<br>1480.3 N<br>100.30 m OD |
| Dates Drilled | Start 12/03/2007<br>End 14/03/2007 | Logged by<br>CC<br>14/03/2007 | Compiled by<br>rl<br>15/03/2007 | Checked by | |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10.00 | 10.50 | B | 23 | | | Dark grey sandy SILT (as previous sheet) From about 10.00m to about 18.25m; frequent partings of grey silty fine sand. | | | |
| | 11.50 | 4.40 | 11.50 | 12.50 | TW | 24 | | | | | | |
| | | | 11.70 | 11.95 | CL | 203 | | | From 12.00m to 12.50m; frequent burrows infilled with light grey silty fine sand.<br>At 12.50m; clasts/laminae of dark grey clay with silty texture. | (9.50) | | |
| | 11.50 | 4.40 | 13.00 | | D | 25 | S25 | | | | | |
| | | | 13.00 | 13.50 | B | 26 | | | | | | |
| | 14.50 | 2.60 | 14.50 | 14.90 | TW | 27 | | | At 14.60m; occasional clasts/laminae of dark brown grey clay with silty texture.<br>At 14.90m; 2no. 40mm pyrite nodules. | | | |
| | 16.00 | 3.00 | 16.00 | | D | 28 | S25 | | | | | |
| | | | 16.00 | 16.50 | B | 29 | | | | | | |
| | 17.50 | 2.40 | 17.50 | 18.25 | TW | 30 | | | Very stiff (friable) indistinctly fissured dark brown grey sandy CLAY with silty texture, locally clay/silt. [London Clay Unit D] From 17.70m to 18.25m; occasional burrows infilled with light grey silty fine sand. Below 18.00m; rare white speckling on fissure surfaces. | 17.50 | 82.80 | |
| | 19.00 | 3.90 | 19.00 | | D | 31 | S50/ 240 | | | | | |
| | 11.50 | 4.40 | 11.50 | 12.50 | TW | 24 | | | | | | |
| | | | 11.70 | 11.95 | CL | 203 | | | From 12.00m to 12.50m; frequent burrows infilled with light grey silty fine sand.<br>At 12.50m; clasts/laminae of dark grey clay with silty texture. | (9.50) | | |
| | 11.50 | 4.40 | 13.00 | | D | 25 | S25 | | | | | |
| | | | 13.00 | 13.50 | B | 26 | | | | | | |
| | 14.50 | 2.60 | 14.50 | 14.90 | TW | 27 | | | At 14.60m; occasional clasts/laminae of dark brown grey clay with silty texture. | | | |

Drilling Method Cable Percussion

Equipment Dando 2000

Dates Drilled Start 12/03/2007
End 14/03/2007

Borehole Diameter
250mm to 3.00m
200mm to 4.50m
150mm to 25.00m

Casing Diameter
250mm to 3.00m
200mm to 4.50m
150mm to 20.50m

Logged by CC 14/03/2007

Compiled by rl 15/03/2007

Checked by

# BOREHOLE No. CP1001

Coordinates 2712.4 E
(Local Grid) 1480.3 N
Ground Level 100.30 m OD

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13/03 | 20.50 | 2.10 | | | | | | | Generally sandy CLAY (as previous sheet) | | | |
| 14/03 | 20.50 | 16.00 | 20.50 | 21.50 | TW | 33 | | | Below 20.50m; locally frequent partings of light grey brown silty fine sand. | | | |
| | | | 20.60 | 20.75 | CS | 204 | | | | (7.50) | | |
| | 20.50 | 17.90 | 22.00 | | D | 34 | S33 | | At 22.00m; occasional lenses of silty fine sand | | | |
| | | | 22.00 | 22.50 | B | 35 | | | | | | |
| | 20.50 | 18.60 | 23.50 | 24.50 | TW | 36 | | | | | | |
| | | | | | | | | | At 24.50m; occasional shell fragments up to 40mm | | | |
| 14/03 | 20.50 | 19.40 | | | | | | | | | | |
| | | | 25.00 | | D | 37 | | | | 25.00 | 75.30 | |
| | | | | | | | | | End of Borehole | | | |
| | | | | | | | | | | (7.50) | | |
| | 20.50 | 17.90 | 22.00 | | D | 34 | S33 | | At 22.00m; occasional lenses of silty fine sand | | | |
| | | | 22.00 | 22.50 | B | 35 | | | | | | |
| | 20.50 | 18.60 | 23.50 | 24.50 | TW | 36 | | | | | | |
| | | | | | | | | | At 24.50m; occasional shell fragments up to 40mm | | | |

Drilling Method Cable Percussion

Equipment Dando 2000

Dates Drilled Start 11/04/2007
End 16/04/2007

Borehole Diameter
250mm to 3.00m
200mm to 10.50m
150mm to 25.00m

Casing Diameter
250mm to 3.00m
200mm to 10.50m
150mm to 25.00m

Logged by CC 17/04/2007

Compiled by rl 19/04/2007

Checked by DA

# BOREHOLE No. CP1002

Coordinates 2749.3 E
(Local Grid) 1497.5 N
Ground Level 100.15 m OD

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strate | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/04 | | | 0.10 | | CDKV | 1 | | | Turf and TOPSOIL to 0.10m over orange brown coarse flint GRAVEL (drillers description). | (0.50) | | |
| | | | 0.50 | | CDKV | 2 | | | | 0.50 | 99.65 | |
| | | | 0.50 | | D | 3 | | | Dense and very dense orange brown slightly clayey sandy slightly cobbly subangular to subrounded fine to coarse flint GRAVEL. Cobbles are subangular to subrounded, <70mm. Occasional fibrous rootlets. [Silchester Gravel] Between 1.20m and 1.70m; becomes light orange brown sandy angular to subrounded fine to coarse flint gravel. Below 1.70m; slightly sandy | | | |
| | | | 0.50-1.00 | | B | 4 | | | | | | |
| | 1.10 | DRY | 1.20-1.70 | | B | 5 | C46 | | | | | |
| | | | 1.50 | | CDKV | 6 | | | | (2.40) | | |
| | | | 2.00 | | D | 7 | | | | | | |
| | 1.70 | DRY | 2.20-2.70 | | B | 8 | C50/ 190 | | | | | |
| | | | 2.50 | | CDKV | 9 | | | | | | |
| | | | 2.90 | | D | 10 | | | | 2.90 | 97.25 | |
| | | | 3.10-4.10 | | TW | 11 | | | Soft to firm orange brown mottled grey slightly sandy CLAY with rare subangular to subrounded fine and medium flint gravel. With lenses (<40mm) of orange brown silty fine sand and (soft) grey clay. Sand is predominantly fine. Below 3.10m; interlaminated with orange brown silty sand. | | | |
| | | | 3.50 | | CDKV | 14 | | | | (1.10) | | |
| | | | 3.80-3.95 | | CL | 101 | | | | | | |
| | 3.00 | DAMP | 4.10-4.55 | | D | 12 | S16 | | Firm to stiff grey locally mottled orange brown slightly sandy CLAY with frequent partings of light grey locally orange brown silty fine sand. [London Clay Claygate Member] To 4.10m; partings orange brown | 4.00 | 96.15 | |
| | | | 4.10-4.60 | | B | 13 | | | | | | |
| 11/04 | 4.50 | DAMP | 4.50 | | CDKV | 15 | | | | (1.00) | | |
| 12/04 | 4.50 | DRY | | | | | | | | | | |
| | | | 4.80 | | D | 16 | | | | | | |
| | | | 5.00-6.00 | | TW | 17 | | | | 5.00 | 95.15 | |
| | | | | | | | | | Approximate boundary Stiff to very stiff fissured grey brown CLAY with silty texture. Fissures are extremely closely spaced, randomly orientated, tight, locally brown staining on surfaces. Occasional light grey brown silty fine sand partings. [London Clay Unit E] At about 5.35m; 15mm pyrite nodule. | | | |
| | | | 5.50-5.70 | | CL | 102 | | | | | | |
| | 4.50 | DRY | 6.00-6.45 | | D | 18 | S22 | | | | | |
| | | | 6.00-6.50 | | B | 19 | | | | (2.60) | | |
| | | | 6.80 | | D | 20 | | | | | | |
| | | | 7.00-8.00 | | TW | 21 | | | From 7.00m to 7.60m; frequent partings/lenses of green glauconitic sand (smears to clay) and with glauconite dispersed throughout. | | | |
| | | | 7.20-7.45 | | CL | 103 | | | | | | |
| | | | | | | | | | | 7.60 | 92.55 | |
| | 6.60 | DRY | 8.00-8.45 | | D | 22 | S31 | | (Stiff) apparently unstructured bioturbated dark grey sandy SILT. Rare pockets of dark grey clay up to 5mm. Occasional burrows/partings infilled with light grey silty fine sand. [London Clay Unit D] | | | |
| | | | 8.00-8.50 | | B | 23 | | | | | | |
| | | | 8.80 | | D | 24 | | | | | | |
| | | | 9.00-10.00 | | TW | 25 | | | | | | |
| | | | 9.10-9.35 | | CL | 104 | | | | | | |
| | | | 1.50 | | CDKV | 6 | | | [Silchester Gravel] Between 1.20m and 1.70m; becomes light orange brown sandy angular to subrounded fine to coarse flint gravel. Below 1.70m; slightly sandy | (2.40) | | |
| | | | 2.00 | | D | 7 | | | | | | |
| | 1.70 | DRY | 2.20-2.70 | | B | 8 | C50/ 190 | | | | | |
| | | | 2.50 | | CDKV | 9 | | | | | | |
| | | | 2.90 | | D | 10 | | | | 2.90 | 97.25 | |
| | | | 3.10-4.10 | | TW | 11 | | | Soft to firm orange brown mottled grey slightly sandy CLAY with rare subangular to subrounded fine and medium flint gravel. With lenses (<40mm) of orange brown silty fine sand and (soft) grey clay. Sand is predominantly fine. Below 3.10m; interlaminated with orange brown silty sand. | | | |
| | | | 3.50 | | CDKV | 14 | | | | (1.10) | | |
| | | | 3.80-3.95 | | CL | 101 | | | | | | |
| | 3.00 | DAMP | 4.10-4.55 | | D | 12 | S16 | | Firm to stiff grey locally mottled orange brown slightly sandy CLAY with frequent partings of light grey locally orange brown silty fine sand. [London Clay Claygate Member] | 4.00 | 96.15 | |
| | | | 4.10-4.60 | | B | 13 | | | | | | |
| 11/04 | 4.50 | DAMP | 4.50 | | CDKV | 15 | | | | (1.00) | | |

| Drilling Method | Cable Percussion | Borehole Diameter | Casing Diameter | BOREHOLE No. | CP1002 |
|---|---|---|---|---|---|
| Equipment | Dando 2000 | 250mm to 3.00m<br>200mm to 10.50m<br>150mm to 25.00m | 250mm to 3.00m<br>200mm to 10.50m<br>150mm to 25.00m | Coordinates<br>(Local Grid)<br>Ground Level | 2749.3 E<br>1497.5 N<br>100.15 m OD |
| Dates Drilled | Start 11/04/2007<br>End 16/04/2007 | Logged by<br>CC<br>17/04/2007 | Compiled by<br>rl<br>19/04/2007 | Checked by | |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10.00 | 10.50 | B | 27 | | | (Stiff) sandy SILT (as previous sheet) | | | |
| | | | 10.80 | | D | 28 | | | | | | |
| | | | 11.00 | 12.00 | TW | 29 | | | | | | |
| | | | 11.50 | 11.75 | CL | 105 | | | | | | |
| 12/04 | 11.60 | DAMP | | | | | | | | | | |
| 13/04 | 11.60 | DAMP | | | | | | | | (9.40) | | |
| | 11.60 | DAMP | 12.50 | 12.95 | D | 30 | S39 | | | | | |
| | | | 12.50 | 13.00 | B | 31 | | | | | | |
| | | | 13.50 | | D | 32 | | | | | | |
| | | | 14.00 | 15.00 | TW | 33 | | | | | | |
| | | | 14.50 | 14.75 | CL | 106 | | | | | | |
| | | | | | | | | | Below about 15.00m; very stiff | | | |
| | 13.50 | DAMP | 15.50 | 15.95 | D | 34 | S44 | | | | | |
| | | | 15.50 | 16.00 | B | 35 | | | | | | |
| | | | 16.50 | | D | 36 | | | | | | |
| | | | 17.00 | 18.00 | TW | 37 | | | | 17.00 | 83.15 | |
| | | | 17.20 | 17.35 | CL | 107 | | | Very stiff (friable) indistinctly fissured dark brown grey sandy CLAY with silty texture locally clay/silt. Frequent burrows infilled with light grey brown silty sand. Rare white speckling on fissure surfaces. [London Clay Unit D] | | | |
| 13/04 | 18.00 | DAMP | | | | | | | | | | |
| 16/04 | 18.00 | 6.00 | | | | | | | | | | |
| | 18.40 | 6.00 | 18.50 | 18.95 | D | 38 | S64 | | | | | |
| | | | 18.50 | 19.00 | B | 39 | | | | | | |
| | | | 11.50 | 11.75 | CL | 105 | | | | | | |
| 12/04 | 11.60 | DAMP | | | | | | | | | | |
| 13/04 | 11.60 | DAMP | | | | | | | | (9.40) | | |
| | 11.60 | DAMP | 12.50 | 12.95 | D | 30 | S39 | | | | | |
| | | | 12.50 | 13.00 | B | 31 | | | | | | |
| | | | 13.50 | | D | 32 | | | | | | |
| | | | 14.00 | 15.00 | TW | 33 | | | | | | |
| | | | 14.50 | 14.75 | CL | 106 | | | | | | |

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 250mm to 3.00m, 200mm to 10.50m, 150mm to 25.00m | Casing Diameter 250mm to 3.00m, 200mm to 10.50m, 150mm to 25.00m | **BOREHOLE No. CP1002** |
| Equipment Dando 2000 | Logged by CC 17/04/2007 | Compiled by rl 19/04/2007 | Coordinates 2749.3 E<br>(Local Grid) 1497.5 N<br>Ground Level 100.15 m OD |
| Dates Drilled Start 11/04/2007 End 16/04/2007 | Checked by | | |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 20.10-20.35 | CL | 108 | | | Very stiff dark brown grey sandy CLAY (as previous sheet) | (8.00) | | |
| | 20.30 | DAMP | 21.50-21.95 | D | 42 | S43 | | | | | |
| | | | 21.50-22.00 | B | 43 | | | | | | |
| | | | 22.50 | D | 44 | | | | | | |
| | | | 23.00-24.00 | TW | 45 | | | Below 23.00m; occasional pink/brown bivalve shell fragments up to 30mm. Single pyrite nodule 20mm. | | | |
| | | | 23.20-23.45 | CL | 109 | | | | | | |
| | 22.50 | DRY | 24.50-24.95 | D | 46 | S50/ 285 | | Below 24.50m; with frequent partings of light grey silty fine sand. | | | |
| | | | 24.50-25.00 | B | 47 | | | | | | |
| 16/04 | 25.00 | DRY | | | | | | | 25.00 | 75.15 | |
| | | | | | | | | End of Borehole | | | |
| | 20.30 | DAMP | 21.50-21.95 | D | 42 | S43 | | | | | |
| | | | 21.50-22.00 | B | 43 | | | | | | |
| | | | 22.50 | D | 44 | | | | | | |
| | | | 23.00-24.00 | TW | 45 | | | Below 23.00m; occasional pink/brown bivalve shell fragments up to 30mm. Single pyrite nodule 20mm. | | | |
| | | | 23.20-23.45 | CL | 109 | | | | | | |
| | 22.50 | DRY | 24.50-24.95 | D | 46 | S50/ 285 | | Below 24.50m; with frequent partings of light grey silty fine sand. | | | |

Drilling Method Cable Percussion

Equipment Dando 2000

Dates Drilled Start 06/03/2007
End 08/03/2007

Borehole Diameter
250mm to 3.00m
200mm to 4.50m
150mm to 20.35m

Casing Diameter
250mm to 3.00m
200mm to 4.50m
150mm to 19.00m

Logged by CC/CM 12/03/2007
Compiled by mbd 12/03/2007
Checked by

# BOREHOLE No. CP1003

Coordinates 2619.1 E
(Local Grid) 1538.3 N
Ground Level 100.25 m OD

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 06/03 | | | 0.10 | | CDKV | 1 | | | Grass over TOPSOIL (drillers description). | (0.10) | | |
| | | | | | | | | | | 0.10 | 100.15 | |
| | | | 0.50 | | CDKV | 2 | | | Orange brown slightly silty slightly sandy to sandy subangular to subrounded fine and medium flint GRAVEL. [Silchester Gravel] At top; dark brown silty and slightly organic | (0.50) | | |
| | | | | | | | | | | 0.60 | 99.65 | |
| | | | 1.00 | | B | 3 | | | | | | |
| | | | 1.50 | | CDKV | 4 | | | Brown slightly clayey slightly sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] At 1.50m; mainly light grey coarse flint gravel | (1.60) | | |
| | 2.00 | 0.80 | 2.00-2.50 | | B | 5 | C17 | | | | | |
| | | | 2.20 | | CDKV | 6 | | | Firm to stiff orange brown slightly (fine) sandy CLAY. Locally mottled grey. | 2.20 | 98.05 | |
| | | | 3.00-4.00 | | TW | 7 | | | Below about 3.00m; becomes mainly grey with laminae of orange brown sand | (1.55) | | |
| | | | 3.55-3.75 | | CL | 201 | | | | | | |
| 06/03 | 4.00 | DAMP | | | | | | | | 3.75 | 96.50 | |
| | | | 4.00 | | D | 8 | S17 | | Approximate boundary Firm to stiff thinly laminated fissured grey CLAY with abundant sub horizontal partings/laminae <2mm of light grey silty fine sand. Fissures (clay only) extremely closely spaced, sub vertical and randomly orientated. [London Clay Claygate Member] | | | |
| 07/03 | 4.00 | DRY | 4.00-4.50 | | B | 9 | | | | (1.25) | | |
| | | | 4.00 | | CDKV | 10 | | | | | | |
| | | | 5.00 | | CDKV | 11 | | | | 5.00 | 95.25 | |
| | | | 5.00-6.00 | | TW | 12 | | | Approximate boundary Stiff to very stiff fissured grey brown CLAY with silty texture. Fissures are extremely closely spaced, randomly orientated, tight, locally slightly polished. Occasional partings light grey brown silty fine sand. [London Clay Unit E] | | | |
| | | | 5.60 | | W | 29 | | | | | | |
| | | | 5.65-5.85 | | CL | 202 | | | | | | |
| | 4.00 | DRY | 6.00 | | D | 13 | S25 | | Below 5.50m; rare brown staining on fissure surfaces. | | | |
| | | | 6.00-6.50 | | B | 14 | | | | | | |
| | | | | | | | | | | (3.00) | | |
| | | | 7.00-8.00 | | TW | 15 | | | | | | |
| | | | 7.10-7.30 | | CL | 203 | | | | | | |
| | | | | | | | | | Below 7.60m; occasional becoming frequent with depth partings/lenses of green glauconitic sand (smears to clay) also dispersed throughout. | | | |
| | 4.00 | DRY | 8.00 | | D | 16 | S42 | | | 8.00 | 92.25 | |
| | | | 8.00-8.50 | | B | 17 | | | Approximate boundary (Stiff) unstructured bioturbated dark grey sandy SILT with occasional burrows infilled with light grey silty fine sand. [London Clay Unit D] | | | |
| | | | 9.00-10.00 | | TW | 18 | | | | | | |
| | | | 9.10-9.30 | | CL | 204 | | | | | | |
| | | | 1.50 | | CDKV | 4 | | | Brown slightly clayey slightly sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] At 1.50m; mainly light grey coarse flint gravel | (1.60) | | |
| | 2.00 | 0.80 | 2.00-2.50 | | B | 5 | C17 | | | | | |
| | | | 2.20 | | CDKV | 6 | | | Firm to stiff orange brown slightly (fine) sandy CLAY. Locally mottled grey. | 2.20 | 98.05 | |
| | | | 3.00-4.00 | | TW | 7 | | | Below about 3.00m; becomes mainly grey with laminae of orange brown sand | (1.55) | | |
| | | | 3.55-3.75 | | CL | 201 | | | | | | |
| 06/03 | 4.00 | DAMP | | | | | | | | 3.75 | 96.50 | |
| | | | 4.00 | | D | 8 | S17 | | Approximate boundary Firm to stiff thinly laminated fissured grey CLAY with abundant sub horizontal partings/laminae <2mm of light grey silty fine sand. Fissures (clay only) extremely closely spaced, sub vertical and randomly orientated. | | | |
| 07/03 | 4.00 | DRY | 4.00-4.50 | | B | 9 | | | | (1.25) | | |
| | | | 4.00 | | CDKV | 10 | | | | | | |

| Drilling Method | Cable Percussion | Borehole Diameter | Casing Diameter | BOREHOLE No. | CP1003 |
|---|---|---|---|---|---|
| Equipment | Dando 2000 | 250mm to 3.00m<br>200mm to 4.50m<br>150mm to 20.35m | 250mm to 3.00m<br>200mm to 4.50m<br>150mm to 19.00m | Coordinates<br>(Local Grid) | 2619.1 E<br>1538.3 N |
| Dates Drilled | Start 06/03/2007<br>End 08/03/2007 | Logged by<br>CC/CM<br>12/03/2007 | Compiled by<br>mbd<br>12/03/2007 | Ground Level | 100.25 m OD |
| | | | Checked by | | |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10.00 | 10.50 | B | 20 | | | (Stiff) sandy SILT (as previous sheet) | | | |
| | | | 11.50 | 12.50 | TW | 21 | | | | | | |
| | | | 11.90 | 12.10 | CL | 205 | | | | | | |
| | 13.00 | 9.90 | 13.00 | | D | 22 | S30 | | | | | |
| | | | 13.00 | 13.50 | B | 23 | | | | (12.35) | | |
| | | | 14.50 | 15.50 | TW | 24 | | | At 14.60m; layer 10 to 20mm of pink/brown bivalve shell fragments. Rare burrows infilled with green glauconitic clay. | | | |
| | | | 15.15 | 15.35 | CS | 206 | | | | | | |
| | 16.00 | 11.70 | 16.00 | | D | 25 | S42 | | | | | |
| | | | 16.00 | 16.50 | B | 26 | | | | | | |
| | 17.50 | 14.80 | 17.50 | | D | 27 | S41 | | | | | |
| | | | 17.50 | 18.00 | B | 28 | | | | | | |
| | | | 19.00 | 19.55 | TW | 29 | | | From 19.00m to 19.10m; light grey brown silty fine sand | | | |
| 07/03 | 10.00 | 16.40 | | | | | | | | | | |
| | | | 11.50 | 12.50 | TW | 21 | | | | | | |
| | | | 11.90 | 12.10 | CL | 205 | | | | | | |
| | 13.00 | 9.90 | 13.00 | | D | 22 | S30 | | | | | |
| | | | 13.00 | 13.50 | B | 23 | | | | (12.35) | | |
| | | | 14.50 | 15.50 | TW | 24 | | | At 14.60m; layer 10 to 20mm of pink/brown bivalve shell fragments. Rare burrows | | | |

Drilling Method Cable Percussion

Equipment Dando 2000

Dates Drilled Start 06/03/2007
End 08/03/2007

Borehole Diameter
250mm to 3.00m
200mm to 4.50m
150mm to 20.35m

Casing Diameter
250mm to 3.00m
200mm to 4.50m
150mm to 19.00m

Logged by CC/CM 12/03/2007

Compiled by mbd 12/03/2007

Checked by

# BOREHOLE No. CP1003

Coordinates 2619.1 E
(Local Grid) 1538.3 N
Ground Level 100.25 m OD

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08/03 | 19.00 | 7.20 | | | | | | | (Stiff) sandy SILT (as previous sheet) | | | |
| | | | | | | | | | | 20.35 | 79.90 | |
| | | | | | | | | | End of Borehole | | | |

| | | | |
|---|---|---|---|
| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | 250mm to 3.00m<br>200mm to 3.10m<br>140mm to 35.30m |
| Equipment | Dando 2000/Knebel Coring | Casing Diameter | 250mm to 3.00m<br>200mm to 3.10m |
| Drill Fluid | Mud | Logged by | CC |
| Orientation (°) | | Compiled by | rl |
| Dates Drilled | Start 05/03/2007<br>End 29/03/2007 | Checked by | 29/03/2007 30/03/2007 |

**BOREHOLE No. R1001**

| | | |
|---|---|---|
| Coordinates | 2726.5 | E |
| (Local Grid) | 1473.0 | N |
| Ground Level | 100.50 | m OD |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | U100 Blows/ Rec. mm | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 05/03 | | | 0.10 | | CDK | 1 | | | | | | TOPSOIL | (0.10) 0.10 | 100.40 | |
| 05/03 | | | 0.50 | | CDK | 2 | | | | | | Orange brown slightly sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | | | |
| 06/03 | | | 1.00 | | B | 3 | | | | | | | | | |
| | | | 1.50 | | CDK | 4 | | | | | | | (2.50) | | |
| | 2.00 | ADD | 2.00-2.50 | | B | 5 | | | | C31 | | | | | |
| | | | 2.60 | | CDK | 6 | | | | | | | 2.60 | 97.90 | |
| | | | 2.60-3.10 | | B | 7 | | | | | | Orange brown slightly sandy slightly gravelly CLAY with occasional light grey mottling. Sand is fine. | (0.50) | | |
| 06/03 | 3.10 | DRY | | | | | | | | | | | 3.10 | 97.40 | |
| 26/03 | 3.10 | 3.00 | 3.45-3.50 | | CC | 8 | | | | | | Firm orange brown mottled light blue grey CLAY and SAND, orange brown clayey SAND, light blue grey sandy CLAY with silty texture. Rare fine and medium flint gravel. From 3.70m to 3.90m; rare blue grey clay, predominantly orange brown clayey sand. Below 4.00m; firm thinly laminated and interlaminated fissured brown clay with frequent laminae of orange brown silty sand and light blue grey silty sand. | | | |
| | | | 3.50 | | CDK | 101 | | | | | | | (1.15) | | |
| | | (100) | 3.10-4.50 | | 90 | 90 | | | | | | | | | |
| | | | 3.90-4.00 | | CS | 9 | | | | | | | | | |
| | | | 4.00-4.25 | | B | 25 | | | | | | | | | |
| 26/03 | 3.10 | | 4.35-4.50 | | B | 26 | | | | | | | 4.25 | 96.25 | |
| 27/03 | 3.10 | 3.00 | 4.50 | | CDK | 102 | | | | | | Stiff thinly laminated fissured grey CLAY with abundant subhorizontal partings <2mm and locally interlaminated up to 5mm with light grey silty fine sand. Fissures only in clay are extremely to very closely spaced, randomly orientated locally subvertical, locally slightly polished, locally brown staining on surfaces. [London Clay Claygate Member] At 4.30m; laminae 3mm of black organic material. From 4.50m to 4.70m; recovered as cavings | | | |
| | | | 4.70-4.90 | | CL | 10 | | | | | | | | | |
| | | | 5.00-5.10 | | CS | 11 | | | | | | | (1.85) | | |
| | | (100) | 4.50-6.00 | | 88 | 88 | | | | | | | | | |
| | | | 5.40-5.45 | | CC | 12 | | | | | | | | | |
| | | | 6.55-6.80 | | CL | 13 | | | | | | | 6.10 | 94.40 | |
| | | (100) | 6.00-7.50 | | 97 | 97 | | | | | | Stiff to very stiff (locally slightly friable) fissured grey brown CLAY with silty texture. Fissures are extremely closely spaced, randomly orientated, tight, locally slightly polished, locally 10mm staining on fissure surfaces. [London Clay Unit E] | (1.40) | | |
| | | | | | | | | | | | | | 7.50 | 93.00 | |
| | | (100) | 7.50-8.50 | | 0 | 0 | | | | | | Assumed Zone of Core Loss (AZCL) Self Boring Pressuremeter (SBPM) Test | (1.00) | | |
| | | | 8.50-8.80 | | B | 27 | | | | | | Stiff to very stiff (locally slightly friable) indistinctly fissured grey brown CLAY with silty texture. With pockets and partings of green glauconitic sand. [London Clay Unit E] | 8.50 | 92.00 | |
| | | (100) | 8.50-9.00 | | 90 | 90 | | | | | | | (0.50) | | |
| | | | | | | | | | | | | (Stiff) apparently unstructured probably bioturbated dark grey sandy and very sandy SILT, locally very silty sand. | 9.00 | 91.50 | |
| | | | 1.50 | | CDK | 4 | | | | | | | (2.50) | | |
| | 2.00 | ADD | 2.00-2.50 | | B | 5 | | | | C31 | | | | | |
| | | | 2.60 | | CDK | 6 | | | | | | | 2.60 | 97.90 | |
| | | | 2.60-3.10 | | B | 7 | | | | | | Orange brown slightly sandy slightly gravelly CLAY with occasional light grey mottling. Sand is fine. | (0.50) | | |
| 06/03 | 3.10 | DRY | | | | | | | | | | | 3.10 | 97.40 | |
| 26/03 | 3.10 | 3.00 | 3.45-3.50 | | CC | 8 | | | | | | Firm orange brown mottled light blue grey CLAY and SAND, orange brown clayey SAND, light blue grey sandy CLAY with silty texture. Rare fine and medium flint gravel. From 3.70m to 3.90m; rare blue grey clay, predominantly orange brown clayey sand. Below 4.00m; firm thinly laminated and interlaminated fissured brown clay with frequent laminae of orange brown silty sand and light blue grey silty sand. | | | |
| | | | 3.50 | | CDK | 101 | | | | | | | (1.15) | | |
| | | (100) | 3.10-4.50 | | 90 | 90 | | | | | | | | | |
| | | | 3.90-4.00 | | CS | 9 | | | | | | | | | |
| | | | 4.00-4.25 | | B | 25 | | | | | | | | | |
| 26/03 | 3.10 | | 4.35-4.50 | | B | 26 | | | | | | | 4.25 | 96.25 | |
| 27/03 | 3.10 | 3.00 | 4.50 | | CDK | 102 | | | | | | | | | |

| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | Casing Diameter | BOREHOLE No. | R1001 |
|---|---|---|---|---|---|
| Equipment | Dando 2000/Knebel Coring | 250mm to 3.00m<br>200mm to 3.10m<br>140mm to 35.30m | 250mm to 3.00m<br>200mm to 3.10m | Coordinates<br>(Local Grid) | 2726.5 E<br>1473.0 N |
| Drill Fluid | Mud | | | Ground Level | 100.50 m OD |
| Orientation (°) | | Logged by | Compiled by | Checked by | |
| Dates Drilled | Start 05/03/2007<br>End 29/03/2007 | CC<br>29/03/2007 | rl<br>30/03/2007 | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | (Stiff) dark grey sandy and very sandy SILT (as previous sheet) | | | |
| | | | | | | | | | | Below 10.50m; locally clay/silt | (3.00) | | |
| | | (100) | 10.50-12.00 | | | 87 | 87 | | | At 10.80m; pocket 20mm of light grey clay with silty texture. | | | |
| | | | 11.60-11.65 | | CC | 15 | | | | | | | |
| | | | 11.70-11.80 | | CS | 16 | | | | At 11.85m; pocket 30mm of light grey clay with silty texture. | 12.00 | 88.50 | |
| | | (100) | 12.00-13.00 | | | 50 | 50 | | | AZCL SBPM Test | (1.00) | | |
| | | | | | | | | | | | 13.00 | 87.50 | |
| | | (100) | 13.10-13.15 | | CC | 17 | | | | (Stiff) apparently unstructured probably bioturbated dark grey sandy and very sandy SILT. Locally sandy clay with silty texture. [London Clay Unit D] | | | |
| | | | 13.00-13.50 | | | 90 | 90 | | | | | | |
| | | (100) | 13.50-15.00 | | | 68 | 68 | | | | | | |
| | | | 14.60-14.65 | | CC | 18 | | | | | | | |
| 27/03 | 3.10 | 1.60 | | | | | | | | From 14.90m to 15.00m; occasional clasts/laminae up to 15mm of stiff brown grey clay with silty texture. | (4.00) | | |
| 28/03 | 3.10 | 3.00 | | | | | | | | | | | |
| | | (100) | 15.00-15.75 | | | 93 | 93 | | | | | | |
| | | (100) | 16.00-16.05 | | CC | 19 | | | | At 16.15m; occasional clasts/laminae up to 15mm of stiff brown grey clay with silty texture. | | | |
| | | | 15.75-16.50 | | | 69 | 69 | | | | | | |
| | | (100) | 16.50-16.80 | | B | 29 | | | | From 16.40m to 16.50m; moderately weak to moderately strong grey claystone. | | | |
| | | | 16.50-17.00 | | | 92 | 92 | | | From 16.50m to 17.00m; (friable) sandy clay with silty texture. | 17.00 | 83.50 | |
| | | (100) | 17.00-18.00 | | | 44 | 44 | | | AZCL SBPM Test | (1.00) | | |
| | | | | | | | | | | | 18.00 | 82.50 | |
| | | | | | | | | | | (Stiff) apparently unstructured probably bioturbated dark grey sandy and very sandy SILT. [London Clay Unit D] | (0.30) | | |
| | | | | | | | | | | | 18.30 | 82.20 | |
| | | (100) | 18.00-19.50 | | | 99 | 99 | | | Very stiff (friable) dark brown grey sandy CLAY with silty texture, locally very clayey sand. Locally indistinctly laminated and indistinctly fissured. | | | |
| | | | 18.85-19.15 | | B | | 30 | | | | | | |
| | | (100) | 18.50-12.00 | | | 87 | 87 | | | | | | |
| | | | 11.60-11.65 | | CC | 15 | | | | | | | |
| | | | 11.70-11.80 | | CS | 16 | | | | At 11.85m; pocket 30mm of light grey clay with silty texture. | 12.00 | 88.50 | |
| | | (100) | 12.00-13.00 | | | 50 | 50 | | | AZCL SBPM Test | (1.00) | | |
| | | | | | | | | | | | 13.00 | 87.50 | |
| | | (100) | 13.10-13.15 | | CC | 17 | | | | (Stiff) apparently unstructured probably bioturbated dark grey sandy and very sandy SILT. Locally sandy clay with silty texture. [London Clay Unit D] | | | |
| | | | 13.00-13.50 | | | 90 | 90 | | | | | | |
| | | (100) | 13.50-15.00 | | | 68 | 68 | | | | | | |
| | | | 14.60-14.65 | | CC | 18 | | | | | | | |

| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | Casing Diameter | BOREHOLE No. | R1001 |
|---|---|---|---|---|---|
| Equipment | Oando 2000/Knebel Coring | 250mm to 3.00m<br>200mm to 3.10m<br>140mm to 35.30m | 250mm to 3.00m<br>200mm to 3.10m | Coordinates<br>(Local Grid)<br>Ground Level | 2726.5 E<br>1473.0 N<br>100.50 m OD |
| Drill Fluid | Mud | | | | |
| Orientation (°) | | Logged by | Compiled by | Checked by | |
| Dates Drilled | Start 05/03/2007<br>End 29/03/2007 | CC<br>29/03/2007 | rl<br>30/03/2007 | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 19.50-21.00 | | 95 | 95 | | | Very stiff (friable) dark brown grey sandy CLAY with silty texture (as previous sheet) | | | |
| | | | | | | | | | | (5.70) | | |
| | | (100) | 21.00-22.50 | | 99 | 99 | | | | | | |
| | | | 22.00-22.10 | CS | | 21 | | | | | | |
| | | | 22.50-22.55 | CC | | 22 | | | | | | |
| | | (100) | 22.50-24.00 | | 100 | 100 | | | Below 23.10m; occasional pink brown bivalve and gastropod shell fragments up to 35mm. | | | |
| | | | 23.35-23.65 | B | | 31 | | | From 23.35m to 23.65m; slightly sandy | | | |
| | | | | | | | | | | 24.00 | 76.50 | |
| | | (100) | 24.00-25.00 | | 51 | 51 | | | AZCL SBPM Test | (1.00) | | |
| | | | | | | | | | | 25.00 | 75.50 | |
| | | (100) | 25.00-25.50 | | 100 | 100 | | | Very stiff (friable) dark brown grey sandy CLAY with silty texture. Locally indistinctly laminated and indistinctly fissured, locally occasionally subhorizontal partings of fine sand. [London Clay Unit D] | | | |
| | | | 26.00-26.25 | CL | | 23 | | | At 25.35m; clay lamination 6mm thick. From 25.50m to 26.40m; less friable slightly sandy to sandy clay. | (1.75) | | |
| | | (100) | 25.50-27.00 | | 100 | 100 | | | Below 26.00m; locally hard. From 26.40m to 26.60m; black rounded fine to coarse flint gravel with chatter marks in a clay matrix. | | | |
| 28/03 | 3.10 | 1.50 | | | | | | | From 26.60m to 26.75m; occasional fine to coarse black rounded flint gravel. | 26.75 | 73.75 | |
| 29/03 | 3.10 | 3.00 | | | | | | | Very stiff (friable) dark brown grey sandy CLAY with silty texture. Locally indistinctly laminated and indistinctly fissured, locally occasionally subhorizontal partings of fine sand. Possibly London Clay Unit D or sub-unit of Unit C to 30.15m. [London Clay Unit C] | | | |
| | | (100) | 27.00-28.50 | | 98 | 98 | | | From 26.75m to 26.85m; moderately weak to moderately strong grey claystone with burrows at top. From 27.30m to 28.50m; occasional (possible) burrows infilled with light grey silty fine sand. At 28.15m; pyrite nodule 15mm. At 28.30m; shell fragments 40mm. | | | |
| | | (100) | 28.50-30.00 | CC | | CC | | | | | | |
| | | (100) | 21.00-22.50 | | 99 | 99 | | | | | | |
| | | | 22.00-22.10 | CS | | 21 | | | | | | |
| | | | 22.50-22.55 | CC | | 22 | | | | | | |
| | | (100) | 22.50-24.00 | | 100 | 100 | | | Below 23.10m; occasional pink brown bivalve and gastropod shell fragments up to 35mm. | | | |
| | | | 23.35-23.65 | B | | 31 | | | From 23.35m to 23.65m; slightly sandy | | | |
| | | | | | | | | | | 24.00 | 76.50 | |
| | | (100) | 24.00-25.00 | | 51 | 51 | | | AZCL SBPM Test | (1.00) | | |

| | | | |
|---|---|---|---|
| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | Casing Diameter |
| Equipment | Dando 2000/Knebel Coring | 250mm to 3.00m<br>200mm to 3.10m<br>140mm to 35.30m | 250mm to 3.00m<br>200mm to 3.10m |
| Drill Fluid | Mud | | |
| Orientation (°) | | | |
| Dates Drilled | Start 05/03/2007<br>End 29/03/2007 | | |

| Logged by | Compiled by | Checked by |
|---|---|---|
| CC<br>29/03/2007 | rl<br>30/03/2007 | |

**BOREHOLE No. R1001**

| | | |
|---|---|---|
| Coordinates | 2726.5 | E |
| (Local Grid) | 1473.0 | N |
| Ground Level | 100.50 | m OD |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type TCR % | No. SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 30.00 | 31.50 | 100 | 100 | | | Very stiff (friable) dark brown grey sandy CLAY with silty texture (as previous sheet)<br>At 30.15m; 30mm layer of black rounded fine to coarse flint gravel with shell fragments<br>At 30.20m; occasional locally frequent pink brown gastropod and bivalve shells and shell fragments up to 40mm. | (8.55) | | |
| | | (100) | 31.50<br>32.20 | 33.00<br>32.45 | 99<br>CL | 99<br>24 | | | From 31.60m to 31.70m; three laminae up to 15mm thick of firm dark grey clay<br>From 31.60m to 31.80m; very clayey sand | | | |
| | | (100) | 33.00 | 34.50 | 100 | 100 | | | At 33.50m; many silty sand laminae <1mm with prismatic crystals<br>Below 34.00m; possible intermixed bioturbated sandy clay and clayey sand possibly with burrows infilled with firm brown clay | | | |
| | | (100) | 34.50 | 35.30 | 100 | 100 | | | | | | |
| 29/03 | 3.10 | 1.20 | | | | | | | | 35.30 | 65.20 | |
| | | | | | | | | | End of Borehole | | | |


| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 31.50 | 33.00<br>32.45 | 99<br>CL | 99<br>24 | | | From 31.60m to 31.70m; three laminae up to 15mm thick of firm dark grey clay<br>From 31.60m to 31.80m; very clayey sand | | | |
| | | (100) | 33.00 | 34.50 | 100 | 100 | | | At 33.50m; many silty sand laminae <1mm with prismatic crystals<br>Below 34.00m; possible intermixed bioturbated sandy clay and clayey sand possibly with burrows infilled with firm brown clay | | | |

| | | | |
|---|---|---|---|
| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | 250mm to 3.00m<br>200mm to 3.20m<br>146mm to 35.10m |
| Equipment | Dando 2000/Knebel Coring | Casing Diameter | 250mm to 3.00m<br>200mm to 3.20m |
| Drill Fluid | Mud | | |
| Orientation (°) | | | |
| Dates Drilled | Start 30/03/2007<br>End 11/04/2007 | Logged by | MS/CC<br>17/04/2007 |
| | | Compiled by | rl<br>18/04/2007 |
| | | Checked by | |

**BOREHOLE No. R1002**

| | | |
|---|---|---|
| Coordinates | 2763.0 | E |
| (Local Grid) | 1519.2 | N |
| Ground Level | 99.90 | m OD |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type TCR % | No. SCR % | RQD % | SPT Blows /N Core Size (mm) | U100 Blows/ Rec. mm | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30/03 | | | 0.50 | | D | 1 | | | | TOPSOIL | (0.25) 0.25 | 99.65 | |
| | | | 0.50 | | CDKV | 2 | | | | Brown slightly clayey sandy subangular to subrounded fine to coarse flint GRAVEL with rare subangular to subrounded flint cobbles (<80mm). Frequent fibrous rootlets. [Silchester Gravel] | (0.75) 1.00 | 98.90 | |
| | 1.10 | DRY | 0.50-1.00 | | B | 3 | | | | | | | |
| | | | 1.20-1.70 | | B | 4 | | C47/ 150 | | (Stiff) light brown to light orange brown slightly sandy to sandy gravelly to very gravelly CLAY. Gravel is subangular to subrounded fine to coarse flint and possible chalk. | | | |
| | | | 1.50 | | CDKV | 5 | | | | | | | |
| 30/03 | 2.10 | | | | | | | | | | (1.50) | | |
| 02/04 | 2.10 | 1.80 | 2.20-2.70 | | B | 6 | | C42 | | | 2.50 | 97.40 | |
| | | | 2.50 | | CDKV | 7 | | | | | | | |
| | | | 2.60 | | D | 8 | | | | Firm orange brown mottled light grey slightly sandy CLAY with frequent lenses (<30mm) of orange brown silty fine sand and laminae of grey clay. Sand is fine. | | | |
| | 2.50 | DAMP | 2.60-3.05 | | U | 9 | | | 37/ 450 | | (0.55) | | |
| 02/04 | 3.00 | | 3.05-3.20 | | D | 10 | | | | | 3.05 | 96.85 | |
| 10/04 | 3.00 | 2.90 | | | | | | | | Firm thinly laminated fissured grey brown CLAY with silty texture locally interlaminated with orange brown sand and occasional pockets of orange brown and grey sand. Fissures extremely closely spaced, randomly orientated. At top; mottled orange brown | (1.05) | | |
| | | (100) | 3.20-4.00 | | 100 | 100 | | | | | 4.10 | 95.80 | |
| | | | 3.70-3.80 | | CS | 11 | | | | | | | |
| | | (100) | 4.00-4.50 | | 100 | 100 | | | | Stiff thinly laminated fissured grey CLAY with abundant subhorizontal partings <2mm and locally interlaminated up to 5mm with light grey silty fine sand. [London Clay Claygate Member] At 4.45m; pyrite nodule 40mm | (1.15) | | |
| | | | | | | | | | | Approximate Boundary | | | |
| | | (100) | 4.50-6.00 | | 92 | 92 | | | | Stiff to very stiff (locally firm) fissured grey brown CLAY with silty texture. Fissures are extremely closely spaced, randomly orientated, tight, locally slightly polished, locally brown staining on surfaces. Occasional light grey brown silty fine sand partings. [London Clay Unit E] | 5.25 | 94.65 | |
| | | | 5.15-5.40 | | CL | 12 | | | | | | | |
| | | | 5.50-5.60 | | CS | 13 | | | | | | | |
| | | | 6.10-6.35 | | CL | 14 | | | | | (1.75) | | |
| | | (100) | 6.00-7.50 | | 87 | 87 | | | | Below 6.70m; occasional becoming frequent with depth partings/lenses of green glauconitic sand (smears to clay) and dispersed throughout. | | | |
| | | | | | | | | | | Stiff to very stiff friable grey green brown sandy to very sandy CLAY with silty texture. Abundant disseminated glauconitic sand. Occasional partings of light grey silty fine sand. [London Clay Unit E] | 7.00 | 92.90 | |
| | | | | | | | | | | | (0.50) | | |
| | | | 7.50 | | D | 101 | | | | | 7.50 | 92.40 | |
| | | | 7.95-8.20 | | CL | 15 | | | | (Stiff) apparently unstructured probably bioturbated dark grey sandy SILT grading through sandy CLAY/SILT to very (fine) sandy CLAY with depth. Occasional to frequent pockets/burrows infilled with light grey silty fine sand. Rare fragments of black organic material. [London Clay Unit D] To 8.00m; without pockets/burrows. From 8.70m to 8.80m; laminae/clasts up to 30mm of stiff brown clay, locally fissured with polished surfaces. At 9.00m; layer 20mm of light grey brown incipient claystone and pyrite nodule 15mm. At 9.30m; laminae/clasts up to 10mm of stiff brown clay. | | | |
| | | (100) | 7.50-9.00 | | 100 | 100 | | | | | | | |
| | | | 8.20-8.25 | | CC | 16 | | | | | | | |
| | | (100) | 9.00-10.50 | | 97 | 97 | | | | | | | |

Remarks (See notes & keysheets)

1 Aquifer protection was carried out by sealing the base of the hole at a depth of 2.60m and continuing in reduced diameter casing.

2 Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.

3 On completion of boring a 50mm slotted standpipe was installed with a slotted section from 3.00m to 15.00m with flush cover. Detail as follows from base of hole: grout up to 15.50m, bentonite seal up to 15.00m, gravel filter up to 3.00m, bentonite seal up to 0.50m, concrete up to ground level.

4 Groundwater was not apparent during boring but this may have been masked by water added.

Scale 1:50

FUGRO

Project
AWE ALDERMASTON HYDRUS
Golder Associates (UK) Ltd
Golder Associates (UK) Ltd

Contract No. WAL070027

Figure No. FRB2 (1 of 4)

308/03

| | | | |
|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 3.00m; 200mm to 3.20m; 146mm to 35.10m | Casing Diameter: 250mm to 3.00m; 200mm to 3.20m | **BOREHOLE No. R1002** |
| Equipment: Dando 2000/Knebel Coring | | | Coordinates: 2763.0 E; (Local Grid) 1519.2 N |
| Drill Fluid: Mud | | | Ground Level: 99.90 m OD |
| Orientation (°): | Logged by: MS/CC 17/04/2007 | Compiled by: rl 18/04/2007 | Checked by: |
| Dates Drilled: Start 30/03/2007; End 11/04/2007 | | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From–To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N; Core Size (mm) | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10.10-10.35 | CL | 17 | | | | Stiff SILT and CLAY/SILT (as previous sheet) | | | |
| | | | 10.50 | B | 2 | | | | | | | |
| | | | 10.55-10.60 | CC | 18 | | | | | | | |
| | | | 11.00-11.10 | CS | 19 | | | | | | | |
| | | (100) | 10.50-12.00 | 100 | 100 | | | | From 11.70m to 11.90m; laminae/clasts up to 30mm of stiff brown clay, locally fissured with polished surfaces. At 11.75m; persistent layer 10mm thick of thinly laminated black orgainc matter. | | | |
| | | | 12.40-12.45 | CC | 20 | | | | | | | |
| | | | 12.50-12.75 | CL | 21 | | | | | | | |
| | | (100) | 12.00-13.50 | 97 | 97 | | | | | | | |
| | | | 13.00 | B | 3 | | | | | | | |
| | | | 14.00 | B | 4 | | | | From 13.60m to 13.80m; frequent clasts up to about 30mm of stiff fissured grey brown clay with silty texture. Fissures extremely closely spaced randomly orientated locally polished. | (12.00) | | |
| | | (100) | 13.50-15.00 | 93 | 93 | | | | From 14.30m to 14.40m and from 14.70m to 14.80m; thinly laminated and interlaminated grey sandy silt and light brown grey silty fine sand. | | | |
| | | | 15.00 | D | 105 | | | | From 15.00m to 15.70m; locally thinly laminated | | | |
| | | | 15.30-15.55 | CL | 22 | | | | | | | |
| | | (100) | 15.00-16.50 | 100 | 100 | | | | | | | |
| | | | 15.70-15.75 | CC | 24 | | | | | | | |
| | | | 16.10-16.20 | CS | 23 | | | | From 16.00m to 16.05m; clasts up to 50mm of very stiff fissured grey brown clay locally white. | | | |
| | | | 16.50 | B | 5 | | | | | | | |
| | | | 17.00 | D | 107 | | | | From 17.10m to 17.50m; occasional clasts up to 50mm of very stiff fissured grey brown clay with silty texture. Fissures locally polished and locally white speckling on fissure surfaces. | | | |
| | | (100) | 16.50-18.00 | 98 | 98 | | | | | | | |
| | | | 17.50-17.55 | CC | 25 | | | | | | | |
| | | | 18.00-18.25 | CL | 26 | | | | Below 18.00m; mainly sandy clay | | | |
| | | | 18.00 | D | 108 | | | | From 18.30m to 18.40m; locally thinly laminated. | | | |
| | | (100) | 18.00-19.50 | 95 | 95 | | | | | | | |
| | | | 19.00 | D | 109 | | | | | | | |
| | | | 20.00-20.10 | CS | 27 | | | | Very stiff locally friable dark brown grey sandy CLAY with silty texture. Locally indistinctly laminated. Locally indistinctly fissured. Occasional to frequent subhorizontal partings of light grey silty fine sand. [London Clay Unit D] | 19.50 | 80.40 | |

Remarks
(See notes & keysheets)

Scale 1:50

| | | |
|---|---|---|
| FUGRO | Project: AWE ALDERMASTON HYDRUS; Golder Associates (UK) Ltd; Golder Associates (UK) Ltd | Contract No. WAL070027 |
| | | Figure No. FR82 (2 of 4) |

| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | Casing Diameter | BOREHOLE No. | R1002 |
|---|---|---|---|---|---|
| Equipment | Dando 2000/Knebel Coring | 250mm to 3.00m<br>200mm to 3.20m<br>146mm to 35.10m | 250mm to 3.00m<br>200mm to 3.20m | Coordinates | 2763.0 E |
| Drill Fluid | Mud | | | (Local Grid) | 1519.2 N |
| Orientation (°) | | | | Ground Level | 99.90 m OD |
| Dates Drilled | Start 30/03/2007<br>End 11/04/2007 | Logged by<br>MS/CC<br>17/04/2007 | Compiled by<br>rl<br>18/04/2007 | Checked by | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 19.50-21.00 | | 98 | 98 | | | | Very stiff sandy CLAY (as previous sheet) | | | |
| 10/04 | 3.00 | FULL | | | | | | | | | | | |
| 11/04 | 3.00 | 2.95 | | | | | | | | | | | |
| | | | 21.35-21.60 | | CL | 28 | | | | To 21.50m; locally white speckling on fissure surfaces | | | |
| | | (100) | 21.00-22.50 | | 100 | 100 | | | | At 22.15m; pyrite nodule 15mm | | | |
| | | | 22.50 | | D | 110 | | | | | (6.40) | | |
| | | (100) | 22.50-24.00 | | 100 | 100 | | | | At 23.00m; 50mm layer moderately strong light brown grey claystone<br>At 23.70m; 10mm pocket of green glauconitic sand<br>At 23.90m; 20mm claystone nodule | | | |
| | | | 24.00-24.10 | | CS | 29 | | | | At 24.15m; 50mm claystone nodule | | | |
| | | (100) | 24.00-25.50 | | 99 | 99 | | | | At 24.85m; 40mm pyrite nodule | | | |
| | | | 25.00-25.25 | | CL | 30 | | | | From 25.30m to 25.65m; fissure persistent subvertical, planar, smooth. | | | |
| | | (100) | 25.50-27.00 | | 100 | 100 | | | | From 25.75m to 25.90m; black rounded medium and coarse flint gravel with chatter marks in a clay matrix. | 25.90 | 74.00 | |
| | | | | | | | | | | Very stiff locally friable dark brown grey sandy CLAY with silty texture. Locally indistinctly laminated. Locally indistinctly fissured. Occasional to frequent subhorizontal partings of light grey silty fine sand.<br>[London Clay Unit C]<br>At top; very sandy, locally clayey sand<br>From 26.50m to 26.90m; frequent burrows infilled with light grey brown silty fine sand. | | | |
| | | | 27.50 | | D | 111 | | | | | | | |
| | | (100) | 27.00-28.50 | | 100 | 100 | | | | From 28.00m to 28.30m; frequent infilled burrows with light grey silty fine sand. | | | |
| | | (100) | 28.50-30.00 | | 97 | 97 | | | | From 29.65m to 29.80m; moderately strong to strong grey claystone with calcite veins. | | | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

Project
AWE ALDERMASTON HYDRUS
Golder Associates (UK) Ltd
Golder Associates (UK) Ltd

Contract No. WAL070027

Figure No. FRB2 (3 of 4)

| | | |
|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole<br>Equipment: Dando 2000/Knebel Coring<br>Drill Fluid: Mud<br>Orientation (°)<br>Dates Drilled: Start 30/03/2007, End 11/04/2007 | Borehole Diameter: 250mm to 3.00m; 200mm to 3.20m; 146mm to 35.10m<br>Casing Diameter: 250mm to 3.00m; 200mm to 3.20m<br>Logged by: MS/CC 17/04/2007<br>Compiled by: rl 18/04/2007<br>Checked by: | **BOREHOLE No. R1002**<br>Coordinates: 2763.0 E<br>(Local Grid): 1519.2 N<br>Ground Level: 99.90 m OD |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From–To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N; Core Size (mm) | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 30.10-30.20 | CS | 31 | | | | Very stiff sandy CLAY (as previous sheet) Below 30.20m; occasional to frequent pink brown gastropod and bivalve shells and shell fragments. | | | |
| | | (100) | 30.00-31.50 | 100 | 100 | | | | | (9.20) | | |
| | | | 30.70-30.95 | CL | 32 | | | | | | | |
| | | (100) | 31.50-33.00 | 97 | 97 | | | | At 31.75m; pyrite nodule 40mm | | | |
| | | (100) | 33.00-33.65 | 97 | 97 | | | | | | | |
| | | (100) | 33.65-35.10 | 100 | 100 | | | | Below 33.75m; shell prismatic calcite? | | | |
| 11/04 | 3.00 | FULL | | | | | | | | | | |
| | | | | | | | | | End of Borehole | 35.10 | 64.80 | |

Remarks
(See notes & keysheets)

Scale 1:50

| | | |
|---|---|---|
| FUGRO | Project: AWE ALDERMASTON HYDRUS<br>Golder Associates (UK) Ltd<br>Golder Associates (UK) Ltd | Contract No. WAL070027<br>Figure No. FRB2 (4 of 4) |

304/03

| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | Casing Diameter | BOREHOLE No. | R1003 |
|---|---|---|---|---|---|
| Equipment | Dando 2000/Knebel Coring | 250mm to 3.10m<br>200mm to 3.10m<br>140mm to 35.00m | 250mm to 3.10m<br>200mm to 3.10m | Coordinates<br>(Local Grid)<br>Ground Level | 2726.3 E<br>1528.9 N<br>100.05 m OD |
| Drill Fluid | Mud | | | | |
| Orientation (°) | | Logged by | Compiled by | Checked by | |
| Dates Drilled | Start 23/02/2007<br>End 21/03/2007 | CC<br>22/03/2007 | CC<br>23/03/2007 | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N | Core Size (mm) | U100 Blows/ Rec. mm | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23/02 | | | 0.10 | B | 1 | | | | | | | Grass over TOPSOIL. | (0.40) | | |
| | | | 0.10 | CDKV | 7 | | | | | | | | 0.40 | 99.65 | |
| | | | 0.40 | B | 2 | | | | | | | Brown slightly clayey slightly sandy angular to rounded fine to coarse flint GRAVEL. [Silchester Gravel] To.040m; clayey with frequent rootlets | (0.60) | | |
| | | | 0.50 | CDKV | 8 | | | | | | | | 1.00 | 99.05 | |
| | | | 1.00 | B | 3 | | | | | | | Brown slightly sandy clayey angular to rounded fine to coarse flint GRAVEL. With occasional pockets up to 30mm of brown gravelly clay [Silchester Gravel] Below 1.50m; white brown grey slightly sandy angular to rounded fine to coarse flint GRAVEL. | (1.00) | | |
| | | | 1.50-2.00 | B | 4 | | | | | | | | 2.00 | 98.05 | |
| | 2.00 | ADD | 1.50 | CDKV | 9 | | | | | | | | (0.60) | | |
| | | | 2.00-2.50 | B | 5 | | | | | C50 | | | 2.60 | 97.45 | |
| | | | 2.50 | CDKV | 10 | | | | | | | Brown slightly sandy angular to rounded fine to coarse flint GRAVEL. With occasional pockets up to 40mm of (soft) brown mottled grey clay. [Silchester Gravel] | (0.40) | | |
| 23/02 | 3.10 | | 2.60-3.10 | B | 6 | | | | | | | | 3.00 | 97.05 | |
| 07/03 | 3.10 | | | | | | | | | | | Firm brown mottled light blue grey slightly sandy slightly gravelly CLAY. Gravel is angular to rounded fine to coarse flint. | (0.50) | | |
| | | (50) | 3.10-4.00 | 51 | 51 | | | | | | | | 3.50 | 96.55 | |
| | | | 3.40 | B | 101 | | | | | | | Firm light blue grey laminated CLAY locally slightly sandy and silty texture. Occasional partings of sand. Occasional partings of orange silty sand. Below 3.10m; assumed zone of core loss. | (1.00) | | |
| | | | 3.50 | CDKV | 12 | | | | | | | | 4.50 | 95.55 | |
| | | | 3.85-3.95 | CS | 11 | | | | | | | | (0.50) | | |
| | | (50) | 4.00-4.25 | CL | 13 | | | | | | | Firm orange brown and blue grey sandy very gravelly CLAY with silty texture. Gravel is subangular and subrounded fine to coarse of flint. Occasional pockets of orange brown clayey sand, blue grey clay and clay silt. | 5.00 | 95.05 | |
| | | | 4.00-4.50 | 100 | 100 | | | | | | | | | | |
| | | | 4.25-4.50 | B | 102 | | | | | | | | | | |
| | | | 4.50 | CDKV | 14 | | | | | | | | | | |
| | | | 4.50-4.80 | B | 106 | | | | | | | | | | |
| | | | 5.10-5.35 | CL | 15 | | | | | | | | | | |
| | | (65) | 4.50-6.00 | 88 | 88 | | | | | | | | | | |
| | | | | | | | | | | | | Stiff thinly laminated fissured grey CLAY. Fissures are extremely closely spaced, randomly orientated, locally slightly polished and locally with brown staining on surfaces. With occasional to abundant subhorizontal partings <2mm, and locally interlaminated with light grey silty fine sand. [London Clay Claygate Member] | (2.50) | | |
| | | (70) | 6.00-7.50 | 80 | 80 | | | | | | | Stiff to very stiff (friable) fissured brown grey CLAY with silty texture. Fissures are extremely closely spaced randomly orientated, tight, locally slightly polished, locally with brown staining on surfaces. Occasional light grey brown silty fine sand partings. [London Clay Unit E] At 6.15m; pyrite nodule 5mm From 7.20m to 7.50m; frequent partings and pockets of green glauconitic sand (smears to clay), also dispersed throughout. | 7.50 | 92.55 | |
| 07/03 | 3.10 | 3.00 | | | | | | | | | | | | | |
| 08/03 | 3.10 | 3.00 | | | | | | | | | | | | | |
| | | | 7.50-8.50 | 0 | 0 | | | | | | | | (1.00) | | |
| | | (80) | | | | | | | | | | Assumed Zone of Core Loss (AZCL) Self Boring Pressuremeter Test (SBPM) TEST | 8.50 | 91.55 | |
| | | | 8.50-8.80 | B | 103 | | | | | | | (Stiff) apparently unstructured probably bioturbated dark grey sandy and very sandy SILT locally very silty sand. Rare fragments of black organic material. | | | |
| | | | 8.50-9.00 | 90 | 90 | | | | | | | | | | |
| | | | | | | | | | | | | Brown slightly sandy clayey angular to rounded fine to coarse flint GRAVEL. With occasional pockets up to 30mm of brown gravelly clay [Silchester Gravel] Below 1.50m; white brown grey slightly sandy angular to rounded fine to coarse flint GRAVEL. | (1.00) | | |
| | | | 1.50-2.00 | B | 4 | | | | | | | | 2.00 | 98.05 | |
| | 2.00 | ADD | 1.50 | CDKV | 9 | | | | | | | | (0.60) | | |
| | | | 2.00-2.50 | B | 5 | | | | | C50 | | | 2.60 | 97.45 | |
| | | | 2.50 | CDKV | 10 | | | | | | | Brown slightly sandy angular to rounded fine to coarse flint GRAVEL. With occasional pockets up to 40mm of (soft) brown mottled grey clay. [Silchester Gravel] | (0.40) | | |
| 23/02 | 3.10 | | 2.60-3.10 | B | 6 | | | | | | | | 3.00 | 97.05 | |
| 07/03 | 3.10 | | | | | | | | | | | Firm brown mottled light blue grey slightly sandy slightly gravelly CLAY. Gravel is angular to rounded fine to coarse flint. | (0.50) | | |
| | | (50) | 3.10-4.00 | 51 | 51 | | | | | | | | 3.50 | 96.55 | |
| | | | 3.40 | B | 101 | | | | | | | Firm light blue grey laminated CLAY locally slightly sandy and silty texture. Occasional partings of sand. Occasional partings of orange silty sand. Below 3.10m; assumed zone of core loss. | (1.00) | | |
| | | | 3.50 | CDKV | 12 | | | | | | | | 4.50 | 95.55 | |
| | | | 3.85-3.95 | CS | 11 | | | | | | | | | | |
| | | (50) | 4.00-4.25 | CL | 13 | | | | | | | | | | |
| | | | 4.00-4.50 | 100 | 100 | | | | | | | | | | |
| | | | 4.25-4.50 | B | 102 | | | | | | | | | | |
| | | | 4.50 | CDKV | 14 | | | | | | | Firm orange brown and blue grey sandy very gravelly CLAY with silty texture. | | | |

| | | | |
|---|---|---|---|
| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | Casing Diameter |
| Equipment | Oando 2000/Knebel Coring | 250mm to 3.10m<br>200mm to 3.10m<br>140mm to 35.00m | 250mm to 3.10m<br>200mm to 3.10m |
| Drill Fluid | Mud | | |
| Orientation (°) | | | |
| Dates Drilled | Start 23/02/2007<br>End 21/03/2007 | Logged by CC 22/03/2007 | Compiled by cc 23/03/2007 |
| | | Checked by | |

**BOREHOLE No. R1003**

| | | |
|---|---|---|
| Coordinates | 2726.3 | E |
| (Local Grid) | 1528.9 | N |
| Ground Level | 100.05 | m OD |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Dark grey sandy and very sandy SILT (as previous sheet). | (3.50) | | |
| | | (100) | 10.50 | 12.00 | | 100 | 100 | | | | | | |
| | | | | | | | | | | AZCL SBPM TEST | 12.00 | 88.05 | |
| | | (100) | 12.00 | 13.00 | | 0 | 0 | | | | (1.00) | | |
| | | | 13.00 | 13.50 | | 70 | 70 | | | (Stiff) apprently unstructured probably biotubated dark grey sandy and very sandy SILT, locally very silty sand. [London Clay Unit D] Below 13.70m; locally silt/clay | 13.00 | 87.05 | |
| | | (100) | 13.50 | 15.00 | | 95 | 95 | | | Below 13.90m; occasional clasts/laminae up to 20mm of stiff brown grey clay with silty texture. | | | |
| | | | | | | | | | | Between 14.70m and 14.90m; frequent laminae/clasts up to 50mm of stiff brown grey clay with silty texture. | (3.50) | | |
| | | (100) | 15.00 | 16.50 | | 96 | 96 | | | At 15.35m; shell fragment 15mm From 15.40m to 15.55m; moderately strong to strong brown grey claystone with occasional calcite veins. Below 15.70m; grading to very sandy clay with silty texture. | | | |
| 08/03 | 3.10 | 1.50 | | | | | | | | | 16.50 | 83.55 | |
| 12/03 | 3.10 | 3.00 | 16.50 | 17.10 | | 0 | 0 | | | AZCL SBPM aborted on claystone at 17.00m, recovered as frequent up to 60mm fragments of moderately strong to strong grey claystone. | (0.60) | | |
| | | (100) | 17.10 | 18.00 | | 72 | 72 | | | (Stiff) apprently unstructured probably bioturbated dark grey sandy and very sandy SILT, locally very silty sand. Disturbed by drilling. [London Clay Unit D] | 17.10<br>(0.90) | 82.95 | |
| 12/03 | 3.10 | 1.50 | 17.85 | 18.15 | B | | 104 | | | | 18.00 | 82.05 | |
| 13/03 | 3.10 | 3.00 | 18.00 | 18.50 | | 0 | 0 | | | AZCL SBPM aborted on claystone at 18.50m. | (0.50) | | |
| | | (100) | 18.50<br>19.00 | 19.50<br>19.30 | | 87<br>B | 87<br>105 | | | (Stiff) apprently unstructured probably bioturbated dark grey sandy and very sandy SILT, locally very silty sand. [London Clay Unit D] At 18.60m; moderately strong claystone. | 18.50<br>(0.20)<br>18.70 | 81.55<br>81.35 | |
| | | (100) | 19.30 | 12.00 | | 100 | 100 | | | Very stiff (friable) dark brown grey. | (0.80) | | |
| | | | | | | | | | | AZCL SBPM TEST | 12.00 | 88.05 | |
| | | (100) | 12.00 | 13.00 | | 0 | 0 | | | | (1.00) | | |
| | | | 13.00 | 13.50 | | 70 | 70 | | | (Stiff) apprently unstructured probably biotubated dark grey sandy and very sandy SILT, locally very silty sand. [London Clay Unit D] Below 13.70m; locally silt/clay | 13.00 | 87.05 | |
| | | (100) | 13.50 | 15.00 | | 95 | 95 | | | Below 13.90m; occasional clasts/laminae up to 20mm of stiff brown grey clay with silty texture. | | | |
| | | | | | | | | | | Between 14.70m and 14.90m; frequent | | | |

| | | | |
|---|---|---|---|
| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | Casing Diameter |
| Equipment | Dando 2000/Knebel Coring | 250mm to 3.10m<br>200mm to 3.10m<br>140mm to 35.00m | 250mm to 3.10m<br>200mm to 3.10m |
| Drill Fluid | Mud | | |
| Orientation (°) | | | |
| Dates Drilled | Start 23/02/2007<br>End 21/03/2007 | Logged by CC 22/03/2007 | Compiled by cc 23/03/2007 |
| | | Checked by | |

**BOREHOLE No. R1003**

| | | |
|---|---|---|
| Coordinates | 2726.3 | E |
| (Local Grid) | 1528.9 | N |
| Ground Level | 100.05 | m OD |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | | | | | | | | AZCL SBPM TEST | | | |
| | | | 20.50 | 21.00 | 100 | 100 | | | | Very stiff (friable) dark brown grey sandy CLAY with silty texture. Locally indistinctly fissured. Occasional partings of subhorizontal dark grey and light grey silty fine sand. Occasional pink and brown bivalve and gastropod shells and shell fragments up to 50mm. [London Clay Unit D] From 21.50m to 22.50m; rare white speckling on fissure surfaces. | 20.50 | 79.55 | |
| | | | 21.15 | 21.40 | CL | 16 | | | | | | | |
| | | (100) | 21.00 | 22.50 | 100 | 100 | | | | At 22.20m; frequent light brown grey silty fine sand partings. | (3.50) | | |
| 19/03 | 3.10 | 1.50 | | | | | | | | | | | |
| 20/03 | 3.10 | 3.00 | | | | | | | | | | | |
| | | (100) | 22.50 | 24.00 | 100 | 100 | | | | At 23.00m; layer 40mm thick of moderately weak light brown claystone with occasional calcite veins. From 23.50m to 23.65m; some glauconite sand (smears to clay) dispersed throughout. | | | |
| | | | 23.70 | 23.75 | CC | 17 | | | | | | | |
| 20/03 | 3.10 | 1.50 | | | | | | | | | 24.00 | 76.05 | |
| 21/03 | 3.10 | 3.00 | | | | | | | | AZCL SBPM TEST | | | |
| | | (100) | 24.00 | 25.00 | 0 | 0 | | | | | (1.00) | | |
| | | | | | | | | | | | 25.00 | 75.05 | |
| | | (100) | 25.00 | 25.50 | 100 | 100 | | | | Very stiff (friable) dark brown grey sandy CLAY with silty texture. [London Clay Unit D] From 25.70m to 25.85m; black rounded fine to coarse flint gravel with chatter marks in a clay matrix. From 25.85m to 26.35m; locally clay/silt rare black rounded fine and medium flint gravel. | (1.35) | | |
| | | (100) | 25.50 | 27.00 | 100 | 90 | | | | | | | |
| | | | 26.55 | 26.60 | CC | 18 | | | | | 26.35 | 73.70 | |
| | | | 27.30 | 27.55 | CL | 19 | | | | Very stiff (friable) dark brown grey sandy CLAY with silty texture. Possibly London Clay Unit D or sub-unit of Unit C to 29.40m. [London Clay Unit C] From 27.05m to 27.10m; two laminae of firm dark grey clay, upper laminae is 8-10mm thick and lower laminee is 20-25mm thick. From 27.75m to 29.30m; clay/silt locally silt | | | |
| | | (100) | 27.00 | 28.50 | 100 | 100 | | | | | | | |
| | | | 28.40<br>28.55 | 28.45<br>28.60 | CC<br>CC | 20<br>21 | | | | From 29.30m to 29.35m; moderately weak to moderately strong light brown grey claystone locally pyritised with occasional shell fragments. pink brown shell fragment 50mm on upper surface. From 29.35m to 29.40m; black rounded pink and brown bivalve and gastropod shells and shell fragments up to 50mm. [London Clay Unit D] From 21.50m to 22.50m; rare white speckling on fissure surfaces. | | | |
| | | (100) | 29.50 | 29.90 | 93 | 93 | | | | | | | |
| | | | 21.00 | 22.50 | 100 | 100 | | | | | | | |
| 19/03 | 3.10 | 1.50 | | | | | | | | At 22.20m; frequent light brown grey silty fine sand partings. | (3.50) | | |
| 20/03 | 3.10 | 3.00 | | | | | | | | | | | |
| | | (100) | 22.50 | 24.00 | 100 | 100 | | | | At 23.00m; layer 40mm thick of moderately weak light brown claystone with occasional calcite veins. From 23.50m to 23.65m; some glauconite sand (smears to clay) dispersed throughout. | | | |
| | | | 23.70 | 23.75 | CC | 17 | | | | | | | |
| 20/03 | 3.10 | 1.50 | | | | | | | | | 24.00 | 76.05 | |
| 21/03 | 3.10 | 3.00 | | | | | | | | AZCL SBPM TEST | | | |
| | | (100) | 24.00 | 25.00 | 0 | 0 | | | | | (1.00) | | |

| | | | |
|---|---|---|---|
| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | 250mm to 3.10m<br>200mm to 3.10m<br>140mm to 35.00m |
| Equipment | Dando 2000/Knebel Coring | Casing Diameter | 250mm to 3.10m<br>200mm to 3.10m |
| Drill Fluid | Mud | | |
| Orientation (°) | | | |
| Dates Drilled | Start 23/02/2007<br>End 21/03/2007 | Logged by | CC<br>22/03/2007 |
| | | Compiled by | cc<br>23/03/2007 |
| | | Checked by | |

**BOREHOLE No. R1003**

| | | |
|---|---|---|
| Coordinates | 2726.3 | E |
| (Local Grid) | 1528.9 | N |
| Ground Level | 100.05 | m OD |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 30.05 | 30.10 | CC | 22 | | | | Very stiff sandy CLAY (as previous sheet). | | | |
| | | (100) | 30.00 | 31.50 | 100 | 100 | | | | From 30.80 to 31.30m; very sandy | (8.85) | | |
| | | (100) | 31.50 | 33.00 | 97 | 97 | | | | At 31.50m; layer 40mm thick of pink brown bivalve shells and shell fragments up to 30 mm.<br>From 31.50m to 31.80m; very sandy | | | |
| | | | 32.30 | 32.40 | CS | 23 | | | | | | | |
| | | (100) | 33.00 | 34.50 | 100 | 100 | | | | At 33.10m; abundant pink brown bivalve shells and shell fragments up to 30mm. | | | |
| | | (100) | 34.50 | 35.20 | 100 | 100 | | | | From 34.70m to 34.80m; clay with occasional highly polished fissure surfaces. Fragment (60mm) of moderately strong light brown grey claystone with occasional calcite veins.<br>At 34.80m; shells with prismatic calcite? | | | |
| 21/03 | 3.10 | 1.50 | | | | | | | | | 35.20 | 64.85 | |
| | | | | | | | | | | End of Borehole | | | |
| | | (100) | 31.50 | 33.00 | 97 | 97 | | | | At 31.50m; layer 40mm thick of pink brown bivalve shells and shell fragments up to 30 mm.<br>From 31.50m to 31.80m; very sandy | | | |
| | | | 32.30 | 32.40 | CS | 23 | | | | | | | |
| | | (100) | 33.00 | 34.50 | 100 | 100 | | | | At 33.10m; abundant pink brown bivalve shells and shell fragments up to 30mm. | | | |
| | | | | | | | | | | From 34.70m to 34.80m; clay with | | | |

| | | | |
|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole<br>Equipment: Dando 2000/Knebel<br>Drill Fluid: Mud<br>Orientation (°)<br>Dates Drilled: Start 26/02/2007, End 12/03/2007 | Borehole Diameter: 250mm to 3.00m, 200mm to 3.50m, 146mm to 35.00m<br>Casing Diameter: 250mm to 3.00m, 200mm to 3.50m<br>Logged by: CC 14/03/2007<br>Compiled by: mbd 15/03/2007<br>Checked by: | **BOREHOLE No. R1004**<br>Coordinates: 2692.7 E<br>(Local Grid): 1509.0 N<br>Ground Level: 100.30 m OD | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From–To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | U100 Blows/ Rec. mm | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26/02 | | | 0.10 | B | 1 | | | | | | Grass over TOPSOIL | (0.10) | | |
| | | | 0.10 | CDKV | 9 | | | | | | | 0.10 | 100.20 | |
| | | | | | | | | | | | Brown slightly sandy clayey angular to rounded fine to coarse flint GRAVEL. Frequent rootlets [Silchester Gravel] | (0.40) | | |
| | | | 0.50 | B | 2 | | | | | | | 0.50 | 99.80 | |
| | | | 0.50 | CDKV | 10 | | | | | | | | | |
| | | | 1.00 | B | 3 | | | | | | Brown slightly clayey, slightly sandy angular to rounded fine to coarse flint GRAVEL. Some rootlets [Silchester Gravel] | (1.50) | | |
| | | | 1.50-2.00 | B | 4 | | | | | | At 1.00m; clay absent, slightly silty. Below 1.50m; white grey brown slightly sandy angular to rounded fine to coarse gravel | | | |
| | | | 1.50 | CDKV | 11 | | | | | | | | | |
| | 2.00 | 1.40 | 2.00 | B | 5 | | | | C50/ 230 | | | 2.00 | 98.30 | |
| | | | | | | | | | | | White brown grey slightly silty slightly sandy angular to rounded fine to coarse flint GRAVEL. Rare pockets up to 30mm of brown mottled grey clay. [Silchester Gravel] | (0.80) | | |
| | | | 2.50 | CDKV | 61 | | | | | | | | | |
| | | | 2.80 | B | 6 | | | | | | Firm brown mottled blue grey slightly sandy slightly gravelly CLAY. Gravel is angular to rounded fine to coarse flint. Occasional partings of sand. | 2.80 | 97.50 | |
| | 3.00 | 2.00 | 3.00 | U | 7 | | | | | 60/ 450 | | (0.70) | | |
| 26/02 | 3.50 | | | | | | | | | | | | | |
| | | | 3.50 | D | 8 | | | | | | | 3.50 | 96.80 | |
| 07/03 | 3.50 | | 3.50 | CDKV | 59 | | | | | | Firm thinly laminated fissured light brown grey and brown CLAY with silty texture, locally clay/silt. Fissures extremely closely spaced randomly orientated tight locally polished. Occasional subhorizontal laminae of light grey silt and fine sand. Occasional pockets of orange brown silty fine sand. At top; assumed zone of core loss. Occasional flint gravel | (0.90) | | |
| | | (100) | 3.70-3.80 | CS | 12 | | | NA | | | | | | |
| | | | 3.50-4.45 | 42 | 42 | | | | | | | 4.40 | 95.90 | |
| | | | 4.50-4.60 | CS | 13 | | | | | | | | | |
| | | | 4.50 | CDKV | 60 | | | | | | | | | |
| | | (100) | 4.45-5.20 | 60 | 60 | | | NA | | | Stiff thinly laminated fissured grey CLAY. With abundant subhorizontal partings <2mm, and locally interlaminated with light grey silty fine sand. Fissures in clay only typically extremely closely spaced randomly orientated locally slightly polished and locally with brown staining on surfaces. [London Clay Claygate Member] | (1.10) | | |
| | | | 5.40-5.60 | CS | 14 | | | | | | | | | |
| | | (100) | 5.20-5.95 | 100 | 100 | | | NA | | | | 5.50 | 94.80 | |
| | | | 5.50-5.60 | CS | 15 | | | | | | | | | |
| | | (100) | 5.95-7.45 | 83 | 83 | | | NA | | | Stiff to very stiff (friable) fissured brown grey slightly sandy CLAY with silty texture. Fissures are extremely closely spaced, randomly orientated tight locally slightly polished, locally brown staining on surfaces. Occasional light grey brown silty fine sand partings [London Clay Unit E] At 5.75m; weak light brown claystone nodule 40mm From 5.95m to 6.60m; recovered disturbed with flint gravel, possible cavings From 7.45m to 7.60m; stiff friable bioturbated very sandy clay/silt, indistinctly fissured locally with brown staining From 7.60m to 8.00m; frequent partings and pockets of green glauconitic sand (smears to clay), also throughout | (2.60) | | |
| | | | 7.20-7.30 | CS | 16 | | | | | | | | | |
| 07/03 | 3.50 | | 7.30-7.40 | CS | 17 | | | | | | | | | |
| 08/03 | 3.50 | | 7.45-7.75 | B | 103 | | | | | | | | | |
| | | (100) | 7.45-8.10 | 100 | 100 | | | NA | | | | | | |
| | | | 7.50 | B | 1 | | | | | | | | | |
| | | | 7.90-8.00 | CS | 18 | | | | | | | | | |
| | | | 8.15-8.40 | B | 104 | | | | | | | 8.10 | 92.20 | |
| | | (100) | 8.10-8.95 | 100 | 100 | | | NA | | | | | | |
| | | | 8.60-8.70 | CS | 19 | | | | | | | | | |
| | | | 8.70-8.80 | CS | 20 | | | | | | | | | |
| | | | 9.50 | B | 2 | | | | | | (Stiff) apparently unstructured probably bioturbated dark grey sandy and very sandy SILT grading into sandy to very sandy CLAY with depth. Rare fragments of black organic material. [London Clay Unit D] To 8.30m; locally with pockets up to 100mm of clay To 8.40m; silty fine sand From 8.80m to 8.95m; laminae / clasts of light brown clay with infilled burrows From about 9.50m to 10.50m; sandy silt. Sand content decreasing with depth | | | |
| | | | 9.50-9.60 | CS | 21 | | | | | | | | | |
| | | (100) | 8.95-10.45 | 90 | 90 | | | NA | | | | | | |

Remarks (See notes & keysheets)

1 Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.

2 Aquifer protection was carried out by sealing the base of the hole at a depth of 3.50m and continuing in reduced diameter casing.

3 On completion of boring a vibrating wire piezometer was installed with a tip at 14.00m with flush cover. Detail as follows from base of hole: cement/bentonite grout up to ground level.

4 Groundwater was not apparent during boring.

Scale 1:50

FUGRO

Project: AWE ALDERMASTON HYDRUS
Golder Associates (UK) Ltd
Golder Associates (UK) Ltd

Contract No. WAL070027

Figure No. FRB4 (1 of 4)

308/03

| | | | |
|---|---|---|---|
| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | 250mm to 3.00m<br>200mm to 3.50m<br>146mm to 35.00m |
| Equipment | Dando 2000/Knebel | Casing Diameter | 250mm to 3.00m<br>200mm to 3.50m |
| Drill Fluid | Mud | | |
| Orientation (°) | | | |
| Dates Drilled | Start 26/02/2007<br>End 12/03/2007 | Logged by | CC<br>14/03/2007 |
| | | Compiled by | mbd<br>15/03/2007 |
| | | Checked by | |

**BOREHOLE No. R1004**

| | | |
|---|---|---|
| Coordinates | 2692.7 | E |
| (Local Grid) | 1509.0 | N |
| Ground Level | 100.30 | m OD |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Apparently unstructured SILT (as previous sheet)<br>At 9.95m; infilled burrow<br>Below about 10.50m; becoming (very stiff friable) very sandy clay with silty texture, locally clay/silt<br>Below 10.60m; occasional to frequent pockets / burrows infilled with light grey silty fine sand. | (5.50) | | |
| | | | 10.50-10.75 | | CS | 22 | | | | | | | | |
| | | | 10.80-10.90 | | CS | 23 | | | | | | | | |
| | | | 10.90-11.00 | | CS | 24 | | | | | | | | |
| | | (100) | 10.45-11.95 | | 100 | 100 | | | NA | | | | | |
| | | | 12.00-12.10 | | CS | 25 | | | | | Below 12.30m; rare black organic matter<br>At 12.45m; laminae / clasts up to 20mm of stiff brown grey clay with silty texture | | | |
| | | | 12.10-12.20 | | CS | 26 | | | | | | | | |
| | | | 12.20 | | B | 3 | | | | | | | | |
| | | (100) | 11.95-13.45 | | 100 | 100 | | | NA | | | | | |
| | | | | | | | | | | | (Stiff to very stiff) apparently unstructured probably bioturbated dark grey sandy SILT, locally silt/clay. With depth grading into sandy to very sandy CLAY.<br>[London Clay Unit D]<br>Below 14.00m; visible bioturbation structures, and burrows infilled with lighr grey silty fine sand<br>From 14.35m to 14.50m; occasional clasts of stiff dark grey brown clay with fissures extremely closely spaced randomly orientated locally polished<br>From 14.80m to 14.95m; abundant burrows infilled with light grey silty fine sand<br>From 15.70m to 16.00m; occasional clasts up to 40mm of very stiff dark grey brown clay with fissures extremely closely spaced randomly orientated locally polished<br>From 16.30m to 16.40m; moderately weak to moderately strong grey claystone with occasional calcite veins | 13.60 | 86.70 | |
| | | (100) | 13.45-14.95 | | 100 | 100 | | | NA | | | | | |
| | | | 14.20 | | B | 4 | | | | | | | | |
| | | | 14.60-14.70 | | CS | 27 | | | | | | | | |
| | | | 14.70-14.80 | | CS | 28 | | | | | | | | |
| | | | 15.00-15.25 | | CS | 29 | | | | | | | | |
| | | (100) | 14.95-16.45 | | 95 | 95 | | | NA | | | | | |
| | | | 15.95-16.05 | | CS | 30 | | | | | | | | |
| | | | 16.05-16.15 | | CS | 31 | | | | | | | | |
| | | | | | | | | | | | At 17.05m.; pink shell fragment 20mm<br>At 17.35m; occasional clasts of very stiff dark grey brown clay with fissures extremely closely spaced with white speckling on fissure surfaces.<br>Below 17.40m; grading to sandy clay with silty texture and locally clay/silt<br>From 17.95m to 18.05m; moderately weak to moderately strong grey claystone with occasional calcite veins | (6.20) | | |
| | | | 17.10-17.20 | | CS | 32 | | | | | | | | |
| | | (100) | 16.45-17.95 | | 95 | 95 | | | NA | | | | | |
| | | | 17.20 | | B | 5 | | | | | | | | |
| | | | 17.50-17.60 | | CS | 33 | | | | | | | | |
| | | | 17.60-17.70 | | CS | 34 | | | | | | | | |
| | | | 18.35-18.65 | | B | 105 | | | | | | | | |
| | | (100) | 17.95-19.45 | | 100 | 100 | | | NA | | | | | |
| | | | 19.50-19.60 | | CS | 36 | | | | | At 19.35m; 80mm moderately weak to moderately strong grey claystone with occasional calcite veins<br>At 19.50m; locally clay/silt. | | | |
| | | | 19.60-19.70 | | CS | 37 | | | | | | | | |
| | | | | | | | | | | | Very stiff sandy CLAY | 19.80 | 80.50 | |

Remarks
(See notes & keysheets)

Scale 1:50

FUGRO

Project
AWE ALDERMASTON HYDRUS
Golder Associates (UK) Ltd
Golder Associates (UK) Ltd

Contract No. WAL070027

Figure No. FRB4 (2 of 4)

304/03

| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | Casing Diameter | BOREHOLE No. | R1004 |
|---|---|---|---|---|---|
| Equipment | Dando 2000/Knebel | 250mm to 3.00m<br>200mm to 3.50m<br>146mm to 35.00m | 250mm to 3.00m<br>200mm to 3.50m | Coordinates | 2692.7 E |
| Drill Fluid | Mud | | | (Local Grid) | 1509.0 N |
| Orientation (°) | | Logged by | Compiled by | Checked by | Ground Level | 100.30 m OD |
| Dates Drilled | Start 26/02/2007<br>End 12/03/2007 | CC<br>14/03/2007 | mbd<br>15/03/2007 | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 19.45-20.95<br>20.35-20.65 | 100<br>B | 100<br>106 | | NA | | Very stiff locally friable dark brown grey sandy CLAY with silty texture. Locally indistinctly laminated. Locally indistinctly fisured. Occasional to frequent subhorizontal partings of light grey silty fine sand. Occasional pink and brown bivalve and gastropod shells and shell fragments up to 60mm. [London Clay Unit D] | | | |
| | | (100) | 21.20-21.30<br>21.50-21.60<br>21.60-21.70<br>20.95-22.45<br>22.00-22.25 | CS<br>CS<br>CS<br>91<br>CL | 38<br>39<br>40<br>91<br>41 | | NA | | At 21.40m; parting of green silt<br>Below 22.45m; occasional shell fragments | | | |
| | | (100) | 22.45-23.95<br>23.50-23.60<br>23.60-23.70 | 100<br>CS<br>CS | 100<br>42<br>43 | | NA | | | (7.00) | | |
| | | (100) | 23.95-25.45<br>24.85-25.15<br>25.20-25.30 | 100<br>B<br>CS | 100<br>107<br>44 | | NA | | At 24.15m; pink brown bivalve shell fragment 40mm<br>From 25.00m to 26.45m; slightly sandy | | | |
| | | (100) | 25.50-25.60<br>25.60-25.70<br>25.45-26.95 | CS<br>CS<br>97 | 45<br>46<br>97 | | NA | | From 26.45m to 26.80m; black rounded fine to coarse flint gravel with chatter marks in a clay matrix | | | |
| 08/03 | 3.50 | | | | | | | | | 26.80 | 73.50 | |
| 09/03 | 3.50 | (100) | 27.50-27.60<br>27.60-27.70<br>26.95-28.45 | CS<br>CS<br>97 | 47<br>48<br>97 | | NA | | Very stiff locally friable dark brown grey sandy CLAY with silty texture. Locally indistinctly laminated and/or indistinctly fissured. Occasional partings of silty fine sandy. Possibly London Clay Unit D or sub-unit of Unit C to 30.05m. [London Clay Unit C] From 26.95m to 27.25m; locally sandy clay/silt<br>At 28.40m; pink bivalve fragment 60mm From 28.50m to 29.80m; sandy clay/silt, locally clayey sand | | | |
| | | (100) | 29.45-29.55<br>21.50-21.60<br>21.60-21.70<br>20.95-22.45<br>22.00-22.25 | CS<br>CS<br>CS<br>91<br>CL | 38<br>39<br>40<br>91<br>41 | | NA | | At 21.40m; parting of green silt<br>Below 22.45m; occasional shell fragments | | | |
| | | (100) | 22.45-23.95<br>23.50-23.60<br>23.60-23.70 | 100<br>CS<br>CS | 100<br>42<br>43 | | NA | | | (7.00) | | |
| | | | | | | | | | At 24.15m; pink brown bivalve shell fragment 40mm | | | |

| | | | |
|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 3.00m; 200mm to 3.50m; 146mm to 35.00m | Casing Diameter: 250mm to 3.00m; 200mm to 3.50m | **BOREHOLE No. R1004** |
| Equipment: Dando 2000/Knebel | | | Coordinates: 2692.7 E |
| Drill Fluid: Mud | | | (Local Grid): 1509.0 N |
| Orientation (°): | Logged by: CC 14/03/2007 | Compiled by: mbd 15/03/2007 | Ground Level: 100.30 m OD |
| Dates Drilled: Start 26/02/2007, End 12/03/2007 | | Checked by: | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From | To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N | Core Size (mm) | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 29.95 | 30.45 | | | 80 | 40 | NA | | | Very stiff sandy CLAY (as previous sheet) From 30.05m to 31.35m; frequent shell fragments up to 20mm<br>At 30.35m; moderately strong grey claystone with calcite veins recovered as angular fragments up to 80mm | | | |
| | | (100) | 30.45 | 31.45 | | | 89 | 89 | NA | | | | (8.20) | | |
| | | | 31.50 | 31.60 | CS | 52 | | | | | | Below 31.45m; intermixed sandy clay/silt with very clayey sand and sandy clay with silty texture. With frequent shell fragments up to 20mm | | | |
| | | | 31.60 | 31.70 | CS | 53 | | | | | | | | | |
| | | | 31.70 | 32.00 | B | 108 | | | | | | | | | |
| | | | 32.00 | 32.25 | CL | 54 | | | | | | Below 32.00m; locally hard. | | | |
| | | (100) | 31.45 | 32.95 | | | 95 | 95 | NA | | | | | | |
| 09/03 | 3.50 | | | | | | | | | | | | | | |
| 12/03 | 3.50 | | 33.20 | 33.45 | CL | 55 | | | | | | | | | |
| | | | 33.50 | 33.60 | CS | 56 | | | | | | At 33.45m; occasional partings of black silty fine sand and shells with prismatic calcite? | | | |
| | | | 33.60 | 33.70 | CS | 57 | | | | | | | | | |
| | | (100) | 32.95 | 34.45 | | | 100 | 100 | NA | | | | | | |
| | | | | | | | | | | | | From 34.35m to 34.45m; strong grey claystone with shell fragments and possible calcite veining | | | |
| | | (100) | 34.45 | 35.00 | | | 82 | 36 | NA | | | | | | |
| 12/03 | 3.50 | | 34.80 | 34.90 | CS | 58 | | | | | | | | | |
| | | | | | | | | | | | | End of Borehole | 35.00 | 65.30 | |
| | | | 31.50 | 31.60 | CS | 52 | | | | | | Below 31.45m; intermixed sandy clay/silt with very clayey sand and sandy clay with silty texture. With frequent shell fragments up to 20mm | | | |
| | | | 31.60 | 31.70 | CS | 53 | | | | | | | | | |
| | | | 31.70 | 32.00 | B | 108 | | | | | | | | | |
| | | | 32.00 | 32.25 | CL | 54 | | | | | | Below 32.00m; locally hard. | | | |
| | | (100) | 31.45 | 32.95 | | | 95 | 95 | NA | | | | | | |
| 09/03 | 3.50 | | | | | | | | | | | | | | |
| 12/03 | 3.50 | | 33.20 | 33.45 | CL | 55 | | | | | | | | | |
| | | | 33.50 | 33.60 | CS | 56 | | | | | | At 33.45m; occasional partings of black silty fine sand and shells with prismatic calcite? | | | |
| | | | 33.60 | 33.70 | CS | 57 | | | | | | | | | |
| | | (100) | 32.95 | 34.45 | | | 100 | 100 | NA | | | | | | |
| | | | | | | | | | | | | From 34.35m to 34.45m; strong grey claystone with shell fragments and possible calcite veining | | | |

| | | | |
|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 3.50m; 200mm to 3.50m; 146mm to 34.35m | Casing Diameter: 250mm to 3.00m; 200mm to 3.50m | **BOREHOLE No. R1005** |
| Equipment: Dando 2000/Knebel | | | Coordinates: 2746.0 E |
| Drill Fluid: Polymer GS550 | | | (Local Grid): 1458.1 N |
| Orientation (°): | Logged by: CC 12/03/2007 | Compiled by: mbd 13/03/2007 | Ground Level: 100.10 m OD |
| Dates Drilled: Start 22/02/2007, End 06/03/2007 | Checked by: | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | U100 Blows/ Rec. mm | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22/02 | | | 0.10 | B | 1 | | | | | | Grass over TOPSOIL | (0.10) | | |
| | | | 0.10 | D | 2 | | | | | | | 0.10 | 100.00 | |
| | | | 0.10 | CDKV | 101 | | | | | | Brown slightly sandy angular to rounded fine to coarse flint GRAVEL. Occasional pockets up to 100mm of friable slightly sandy clay. Abundant rootlets [Silchester Gravel] | (0.40) | | |
| | | | 0.50 | B | 3 | | | | | | | 0.50 | 99.60 | |
| | | | 0.50 | CDKV | 102 | | | | | | | | | |
| | | | 1.00 | B | 4 | | | | | | | | | |
| | | | 1.50-2.00 | B | 5 | | | | | | Brown slightly sandy clayey angular to rounded fine to coarse flint GRAVEL. Some rootlets [Silchester Gravel] Below 1.00m; rootlets absent Below 1.50m; white grey brown slightly sandy gravel | (1.80) | | |
| | | | 1.50 | CDKV | 103 | | | | | | | | | |
| | 2.00 | DRY | 2.00-2.50 | B | 6 | | | | C39 | | | | | |
| | | | 2.50 | CDKV | 104 | | | | | | Light brown slightly sandy angular to rounded fine to coarse flint GRAVEL. Occasional pockets up to 40mm of soft brown mottled grey clay. [Silchester Gravel] | 2.30 | 97.80 | |
| | | | | | | | | | | | | (0.50) | | |
| | | | 2.80 | B | 7 | | | | | | | 2.80 | 97.30 | |
| | 3.00 | 2.60 | 3.00-3.45 | U | 8 | | | | | 60/ 450 | Firm brown mottled blue grey slightly sandy slightly gravelly CLAY. Gravel is angular to rounded fine to coarse flint. Rare pockets and lenses of sand and of clay with silty texture. | (0.70) | | |
| 22/02 | 3.50 | 2.60 | | | | | | | | | | | | |
| | | | 3.50 | D | 9 | | | | | | | 3.50 | 96.60 | |
| 27/02 | 3.50 | | 3.50 | D | 102 | | | | | | | | | |
| | | (100) | 3.50-4.35 | 36 | 36 | | | NA | 102 | | Firm thinly laminated grey brown and brown CLAY with silty texture, locally clay/silt. Many subhorizontal laminae of light grey silty fine sand and occasional laminae of orange brown silty fine sand. Core dopped and recovered after overdrilling. | (0.85) | | |
| | | | 3.50 | CDKV | 105 | | | | | | | 4.35 | 95.75 | |
| | | | 5.00 | CDKV | 106 | | | | | | Stiff thinly laminated fissured grey CLAY. With abundant subhorizontal partings <2mm, and locally interlaminated up to 8mm with light grey silty fine sand. Fissures in clay only typically very closely spaced randomly orientated locally subvertical locally slightly polished. [London Clay Claygate Member] At 6.15m; 50x15mm pyrite nodule | | | |
| | | (100) | 4.35-5.85 | 51 | 51 | | | NA | | | | (1.85) | | |
| | | | 5.30-5.55 | CL | 10 | | | | | | | | | |
| | | | | | | | | | | | Stiff to very stiff fissured grey brown CLAY with silty texture. Fissures are extremely closely spaced, randomly orientated tight locally slightly polished, locally brown staining on surfaces. Occasional light grey brown silty fine sand partings. [London Clay Unit E] Below 7.40m; occasional becoming frequent with depth partings / lenses of green glauconitic sand (smears to clay) also dispersed throughout | 6.20 | 93.90 | |
| | | (100) | 5.85-7.35 | 86 | 86 | | | NA | | | | (1.35) | | |
| | | | 6.90-7.15 | CL | 11 | | | | | | | | | |
| | | | 7.35-7.65 | B | 103 | | | | | | | 7.55 | 92.55 | |
| | | | 7.70-7.95 | CL | 12 | | | | | | | (0.40) | | |
| | | | 7.95-8.25 | B | 104 | | | | | | Stiff to very stiff (friable) grey sandy to very sandy CLAY with silty texture, locally clay/silt. Abundant disseminated glauconitic sand. Frequent partings of light brown grey and light grey silty fine sand. Approximate boundary. [London Clay Unit E] | 7.95 | 92.15 | |
| | | (100) | 7.35-8.85 | 100 | 100 | | | NA | | | | | | |
| | | | | | | | | | | | (Stiff) apparently unstructured probably bioturbated dark grey sandy SILT locally silty sand grading into sandy to very sandy CLAY with depth. Rare fragments of rounded fine to coarse flint GRAVEL. | | | |
| | | | 9.10-9.35 | CL | 13 | | | | | | | | | |
| | | | 1.50-2.00 | B | 5 | | | | | | Some rootlets [Silchester Gravel] Below 1.00m; rootlets absent Below 1.50m; white grey brown slightly sandy gravel | (1.80) | | |
| | | | 1.50 | CDKV | 103 | | | | | | | | | |
| | 2.00 | DRY | 2.00-2.50 | B | 6 | | | | C39 | | | | | |
| | | | 2.50 | CDKV | 104 | | | | | | Light brown slightly sandy angular to rounded fine to coarse flint GRAVEL. Occasional pockets up to 40mm of soft brown mottled grey clay. [Silchester Gravel] | 2.30 | 97.80 | |
| | | | | | | | | | | | | (0.50) | | |
| | | | 2.80 | B | 7 | | | | | | | 2.80 | 97.30 | |
| | 3.00 | 2.60 | 3.00-3.45 | U | 8 | | | | | 60/ 450 | Firm brown mottled blue grey slightly sandy slightly gravelly CLAY. Gravel is angular to rounded fine to coarse flint. Rare pockets and lenses of sand and of clay with silty texture. | (0.70) | | |
| 22/02 | 3.50 | 2.60 | | | | | | | | | | | | |
| | | | 3.50 | D | 9 | | | | | | | 3.50 | 96.60 | |
| 27/02 | 3.50 | | 3.50 | D | 102 | | | | | | | | | |
| | | (100) | 3.50-4.35 | 36 | 36 | | | NA | 102 | | Firm thinly laminated grey brown and brown CLAY with silty texture, locally clay/silt. Many subhorizontal laminae of light grey silty fine sand and occasional laminae of orange brown silty fine sand. Core dopped and recovered after overdrilling. | (0.85) | | |
| | | | 3.50 | CDKV | 105 | | | | | | | 4.35 | 95.75 | |

| | | | |
|---|---|---|---|
| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | Casing Diameter |
| Equipment | Dando 2000/Knebel | 250mm to 3.50m | 250mm to 3.00m |
| Drill Fluid | Polymer GS550 | 200mm to 3.50m | 200mm to 3.50m |
| Orientation (°) | | 146mm to 34.35m | |
| Dates Drilled | Start 22/02/2007 | Logged by CC 12/03/2007 | Compiled by mbd 13/03/2007 |
| | End 06/03/2007 | | Checked by |

**BOREHOLE No. R1005**

| | | |
|---|---|---|
| Coordinates | 2746.0 | E |
| (Local Grid) | 1458.1 | N |
| Ground Level | 100.10 | m OD |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Apparently unstructured SILT (as previous sheet) | | | |
| | | | | | | | | | | At 9.50m; occasional clasts of light brown clay | | | |
| | | | | | | | | | | Below 9.80m; occasional to frequent pockets / burrows infilled with light grey silty fine sand | (5.40) | | |
| | | (100) | 10.35 | 11.85 | | 95 | 95 | NA | | Below 10.70m; grading to friable sandy to very sandy clay with silty texture | | | |
| | | | | | | | | | | From 11.85m to 12.25m; probably vertical and horizontal burrows up to 15mm wide and 100mm long infilled with grey silty fine sand | | | |
| | | (100) | 11.85 | 13.35 | | 90 | 90 | NA | | From 12.20m to 12.30m; frequent clasts up to about 20mm of stiff fissured brown grey clay with silty texture. Fissures extremely closely spaced randomly orientated, locally polished | | | |
| 27/02 | 3.50 | | | | | | | | | At 12.60m; persistent layer 10mm thick of thinly laminated black organic matter, possible leaves | 13.35 | 86.75 | |
| 01/03 | 3.50 | | | | | | | | | (Stiff to very stiff) apparently unstructured probably bioturbated dark grey sandy SILT with depth grading into sandy to very sandy CLAY with very clayey SAND. [London Clay Unit D] | | | |
| | | (100) | 14.00 | 14.25 | CL | 14 | | NA | | From 14.20m to 19.35m; visible bioturbation structures | | | |
| | | | 13.35 | 14.85 | 100 | 100 | | | | Below 14.20m; sandy clay with silty texture and clayey sand. With burrows infilled with light grey silty fine sand and with rare black organic matter | | | |
| | | | 15.30 | 15.55 | CL | 15 | | | | At 15.25m; occasional clasts up to 20mm of stiff fissured dark grey brown clay. Fissures extremely to very closely spaced randomly orientated locally polished | | | |
| | | (100) | 14.85 | 16.35 | 91 | 91 | | NA | | At 15.70m, clasts of fissured clay as 15.25m | | | |
| | | | | | | | | | | At 16.00m; clasts of clay as 15.25m | | | |
| | | | | | | | | | | From 16.30m; moderately weak grey claystone nodule / layer persistent across core | | | |
| | | | 16.80 | 17.05 | CL | 16 | | | | From 16.60m to 17.10m; clasts of clay as 15.25m | (6.75) | | |
| | | (100) | 16.35 | 17.85 | 100 | 100 | | NA | | At 17.90m; clasts of clay as 15.25m | | | |
| | | | 18.30 | 18.55 | CL | 17 | | | | | | | |
| | | (100) | 17.85 | 19.35 | 83 | 83 | | NA | | | | | |
| | | | 18.85 | 19.15 | B | 105 | | | | | | | |
| | | | | | | | | | | From 11.85m to 12.25m; probably vertical and horizontal burrows up to 15mm wide and 100mm long infilled with grey silty fine sand | | | |
| | | (100) | 11.85 | 13.35 | | 90 | 90 | NA | | From 12.20m to 12.30m; frequent clasts up to about 20mm of stiff fissured brown grey clay with silty texture. Fissures extremely closely spaced randomly orientated, locally polished | | | |
| 27/02 | 3.50 | | | | | | | | | At 12.60m; persistent layer 10mm thick of thinly laminated black organic matter, possible leaves | 13.35 | 86.75 | |
| 01/03 | 3.50 | | | | | | | | | (Stiff to very stiff) apparently unstructured probably bioturbated dark grey sandy SILT with depth grading into sandy to very sandy CLAY with very clayey SAND. [London Clay Unit D] | | | |
| | | (100) | 14.00 | 14.25 | CL | 14 | | NA | | From 14.20m to 19.35m; visible bioturbation structures | | | |
| | | | 13.35 | 14.85 | 100 | 100 | | | | Below 14.20m; sandy clay with silty texture and clayey sand. With burrows | | | |

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|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 3.50m; 200mm to 3.50m; 146mm to 34.35m | Casing Diameter: 250mm to 3.00m; 200mm to 3.50m | **BOREHOLE No. R1005** |
| Equipment: Dando 2000/Knebel | | | Coordinates: 2746.0 E |
| Drill Fluid: Polymer GS550 | | | (Local Grid): 1458.1 N |
| Orientation (°): | Logged by: CC 12/03/2007 | Compiled by: mbd 13/03/2007 | Ground Level: 100.10 m OD |
| Dates Drilled: Start 22/02/2007, End 06/03/2007 | | Checked by: | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From–To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N | Core Size (mm) | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/03 | 3.50 | (100) | 19.35-20.85 | | | 83 | 83 | NA | | | Very stiff locally friable dark brown grey sandy CLAY with silty texture, locally very clayey sand. Locally indistinctly laminated. Occasional to frequent subhorizontal partings of light grey silty fine sand. Occasional pink and brown bivalve and gastopod shells and shell fragments up to 50mm. [London Clay Unit D] From 20.10m to 27.50m; rare white speckling | 20.10 | 80.00 | |
| 02/03 | 3.50 | | 20.85-21.15 | B | | 106 | | | | | | | | |
| | | (100) | 21.50-21.75<br>20.85-22.35 | CL<br>97 | 18<br>97 | | | NA | | | At 22.35m; frequent burrows infilled with light grey silty fine sand | | | |
| | | | 22.50-22.60 | CS | 19 | | | | | | | | | |
| | | | 22.65-22.75 | CS | 20 | | | | | | At 22.90m; 20mm pyrite nodule | | | |
| | | (100) | 22.35-23.85 | 100 | 100 | | | NA | | | At 23.15m; persistent lamination of light grey silty fine sand From 23.35m to 23.45m; occasional pink brown shell fragments up to 30mm. At 23.85m; 40mm pyrite nodule | (7.30) | | |
| 02/03 | 3.50 | (100) | 23.85-25.35 | 95 | 95 | | | NA | | | At 24.30m; 50mm fragment of shell | | | |
| 05/03 | 3.50 | | 25.95-26.05 | CS | 21 | | | | | | From 26.05m to 26.10m; 20mm fragment of pyritised wood From about 26.30m to 27.40m; recovered as about 50mm of black rounded medium and coarse flint gravel with chatter marks in clay matrix. Assumed zone of core loss due to gravel and SPT disturbance | | | |
| | | (100) | 25.35-26.85 | 64 | 64 | | | NA | | | | | | |
| | | | 26.10-26.20 | CS | 22 | | | | | | | | | |
| 05/03 | 3.50 | | | | | | | | | | | | | |
| 06/03 | 3.50 | | 26.85-27.30 | | | | | | S47 | | | | | |
| | | | 26.85 | D | 29 | | | | | | | 27.40 | 72.70 | |
| | | (100) | 26.85-28.35 | 65 | 65 | | | NA | | | Very stiff locally friable dark brown grey sandy CLAY with silty texture. Locally indistinctly laminated and/or indistinctly fissured. Occasional partings of silty fine sand. Possibly London Clay Unit D or sub-unit of Unit C to 30.00m. [London Clay Unit C] From about 27.40m to 30.00m; possible rare black rounded flint gravel with, at 30.00m, single layer of black rounded coarse gravel. | | | |
| | | | 28.35-28.80 | | | | | | S37 | | | | | |
| | | | 28.35 | D | 30 | | | | | | | | | |
| | | (100) | 28.35-29.85 | 97 | 97 | | | NA | | | From 20.10m to 27.50m; rare white speckling | | | |
| | | (100) | 21.50-21.75<br>20.85-22.35 | CL<br>97 | 18<br>97 | | | NA | | | At 22.35m; frequent burrows infilled with light grey silty fine sand | | | |
| | | | 22.50-22.60 | CS | 19 | | | | | | | | | |
| | | | 22.65-22.75 | CS | 20 | | | | | | At 22.90m; 20mm pyrite nodule | | | |
| | | (100) | 22.35-23.85 | 100 | 100 | | | NA | | | At 23.15m; persistent lamination of light grey silty fine sand From 23.35m to 23.45m; occasional pink brown shell fragments up to 30mm. At 23.85m; 40mm pyrite nodule | (7.30) | | |
| | | (100) | 23.85-25.35 | 95 | 95 | | | NA | | | At 24.30m; 50mm fragment of shell | | | |

| | | | |
|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 3.50m; 200mm to 3.50m; 146mm to 34.35m | Casing Diameter: 250mm to 3.00m; 200mm to 3.50m | **BOREHOLE No. R1005** |
| Equipment: Dando 2000/Knebel | | | Coordinates: 2746.0 E |
| Drill Fluid: Polymer GS550 | | | (Local Grid): 1458.1 N |
| Orientation (°): | Logged by: CC 12/03/2007 | Compiled by: mbd 13/03/2007 | Ground Level: 100.10 m OD |
| Dates Drilled: Start 22/02/2007, End 06/03/2007 | | Checked by: | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From–To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N; Core Size (mm) | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 29.85 | D | 31 | | | | Very stiff sandy CLAY (as previous sheet) | | | |
| | | | 30.40-30.65 | CL | 25 | | | | | | | |
| | | | 29.85-31.35 | 100 | 100 | | NA | | | (6.95) | | |
| | | | 31.35-31.68 | | | | | S50/180 | At 31.40m; occasional to frequent shell fragments up to 40mm | | | |
| | | | 31.35 | D | 32 | | | | | | | |
| | | (100) | 31.35-32.85 | 95 | 95 | | NA | | | | | |
| | | | 32.10-32.20 | CS | 26 | | | | | | | |
| | | | 32.20-32.30 | CS | 27 | | | | | | | |
| | | | 32.85-33.18 | | | | | S50/180 | | | | |
| | | | 32.85 | D | 33 | | | | | | | |
| | | | 33.40-33.65 | CL | 28 | | | | | | | |
| | | (100) | 32.85-34.35 | 87 | 87 | | NA | | At 33.90m; shell fragments up to 50mm with pearl coating | | | |
| 06/03 | | | 34.35-34.66 | | | | | S45/160 | | 34.35 | 65.75 | |
| | | | | | | | | | End of Borehole | | | |
| | | | 34.35 | D | 34 | | | | | | | |
| | | | 31.35-31.68 | | | | | S50/180 | At 31.40m; occasional to frequent shell fragments up to 40mm | | | |
| | | | 31.35 | D | 32 | | | | | | | |
| | | (100) | 31.35-32.85 | 95 | 95 | | NA | | | | | |
| | | | 32.10-32.20 | CS | 26 | | | | | | | |
| | | | 32.20-32.30 | CS | 27 | | | | | | | |
| | | | 32.85-33.18 | | | | | S50/180 | | | | |
| | | | 32.85 | D | 33 | | | | | | | |
| | | | 33.40-33.65 | CL | 28 | | | | | | | |
| | | (100) | 32.85-34.35 | 87 | 87 | | NA | | At 33.90m; shell fragments up to 50mm with pearl coating | | | |
| 06/03 | | | 34.35-34.66 | | | | | S45/160 | | 34.35 | 65.75 | |
| | | | | | | | | | End of Borehole | | | |
| | | | 34.35 | D | 34 | | | | | | | |

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|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole<br>Equipment: Dando 2000/Knebel<br>Drill Fluid<br>Orientation (°)<br>Dates Drilled: Start 26/02/2007, End 03/04/2007 | Borehole Diameter: 250mm to 3.00m, 146mm to 70.50m, 168mm to 72.00m<br>Casing Diameter: 200mm to 3.00m, 250mm to 3.00m<br>Logged by: CC 03/04/2007<br>Compiled by: rl 04/04/2007<br>Checked by: | **BOREHOLE No. R1006**<br>Coordinates: 2705.2 E<br>(Local Grid): 1439.4 N<br>Ground Level: 99.75 m OD | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From–To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | U100 Blows/ Rec. mm | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26/02 | | | 0.10 | B | 1 | | | | | | Grass over TOPSOIL. | (0.10) | | |
| | | | 0.10 | CDKV | 8 | | | | | | | 0.10 | 99.65 | |
| | | | 0.50 | B | 2 | | | | | | Dark brown organic slightly silty sandy GRAVEL. Gravel is subangular to subrounded fine to coarse of flint. [Silchester Gravel] | (0.20) | | |
| | | | 0.50 | CDKV | 9 | | | | | | | 0.30 | 99.45 | |
| | | | 0.70 | B | 3 | | | | | | | (1.20) | | |
| | | | | | | | | | | | Brown slightly sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | | | |
| | | | 1.50-2.00 | B | 4 | | | | | | | 1.50 | 98.25 | |
| | | | 1.50 | CDKV | 10 | | | | | | Orange brown slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse flint. | | | |
| | 2.00 | 1.20 | 2.00-2.20 | U | 5 | | | | | 60/ | | (1.00) | | |
| | | | 2.00-2.50 | D | 6 | | | | | 200 | | | | |
| | | | 2.50-3.00 | B | 7 | | | | | | | 2.50 | 97.25 | |
| | | | 2.50 | CDKV | 11 | | | | | | Firm fissured laminated and interlaminated brown and orange slightly sandy becoming sandy CLAY with silty texture. Laminae are frequent of orange brown silty fine sand and occasional light grey silty fine sand. Fissures (in clay only) are subvertical and random, extremely closely spaced, locally slightly polished. | | | |
| 26/02 | 3.00 | DRY | | | | | | | | | | (1.30) | | |
| 27/03 | 3.00 | 2.90 | | | | | | | | | | | | |
| | | (100) | 3.00-4.00 | 95 | 95 | | | | | | | 3.80 | 95.95 | |
| | | | 3.50 | CDKV | 12 | | | | | | Stiff thinly laminated fissured grey CLAY with abundant subhorizontal partings <2mm and locally interlaminated up to 5mm with light grey silty fine sand. Fissures (in clay only) are extremely closely spaced, randomly orientated, locally slightly polished. [London Clay Claygate Member] | (1.10) | | |
| | | (100) | 4.00-4.75 | 87 | 87 | | | | | | | 4.90 | 94.85 | |
| | | | 4.50 | CDKV | 13 | | | | | | Approximate Boundary | | | |
| | | | 5.00-5.25 | CL | 101 | | | | | | | | | |
| | | | 5.25-5.30 | CS | 102 | | | | | | Stiff to very stiff fissured grey brown CLAY with silty texture. Fissures are extremely closely spaced, randomly orientated, tight, locally polished, locally brown staining on surfaces. Occasional light grey brown silty fine sand partings. [London Clay Unit E] | | | |
| | | (100) | 4.75-6.00 | 92 | 92 | | | | | | | (2.55) | | |
| | | (100) | 6.00-7.50 | 95 | 95 | | | | | | | | | |
| | | | 6.95-7.00 | CS | 103 | | | | | | | | | |
| | | | 7.15-7.35 | B | 14 | | | | | | Below 7.00m; occasional becoming frequent with depth partings/lenses of green glauconitic sand (smears to clay) also dispersed throughout. | | | |
| | | | 7.60-7.80 | B | 15 | | | | | | | 7.45 | 92.30 | |
| | | (100) | 7.50-9.00 | 73 | 73 | | | | | | (Stiff) apparently unstructured probably bioturbated dark grey sandy SILT with rare black organic fragments. Locally SILT/CLAY. [London Clay Unit D] To 7.70m; occasional clasts/laminae of grey sandy clay with glauconitic sand dispersed throughout and light brown clay within burrows. From 8.20m to 8.30m; clasts up to 30mm of light grey and brown incipient claystone. From 9.00m to 9.10m; claystone clasts and lignite fragments 20mm. | | | |
| | | | | | | | | | | | [Silchester Gravel] | | | |
| | | | 1.50-2.00 | B | 4 | | | | | | | 1.50 | 98.25 | |
| | | | 1.50 | CDKV | 10 | | | | | | Orange brown slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse flint. | | | |
| | 2.00 | 1.20 | 2.00-2.20 | U | 5 | | | | | 60/ | | (1.00) | | |
| | | | 2.00-2.50 | D | 6 | | | | | 200 | | | | |
| | | | 2.50-3.00 | B | 7 | | | | | | | 2.50 | 97.25 | |
| | | | 2.50 | CDKV | 11 | | | | | | Firm fissured laminated and interlaminated brown and orange slightly sandy becoming sandy CLAY with silty texture. Laminae are frequent of orange brown silty fine sand and occasional light grey silty fine sand. Fissures (in clay only) are subvertical and random, extremely closely spaced, locally slightly polished. | | | |
| 26/02 | 3.00 | DRY | | | | | | | | | | (1.30) | | |
| 27/03 | 3.00 | 2.90 | | | | | | | | | | | | |
| | | (100) | 3.00-4.00 | 95 | 95 | | | | | | | 3.80 | 95.95 | |
| | | | 3.50 | CDKV | 12 | | | | | | Stiff thinly laminated fissured grey CLAY with abundant subhorizontal partings <2mm and locally interlaminated up to 5mm with light grey silty fine sand. Fissures (in clay only) are extremely closely spaced, randomly orientated, locally slightly | (1.10) | | |
| | | (100) | 4.00-4.75 | 87 | 87 | | | | | | | 4.90 | 94.85 | |
| | | | 4.50 | CDKV | 13 | | | | | | | | | |

| | | | |
|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 3.00m; 146mm to 70.50m; 168mm to 72.00m | Casing Diameter: 200mm to 3.00m; 250mm to 3.00m | **BOREHOLE No. R1006** |
| Equipment: Dando 2000/Knebel | Logged by: CC 03/04/2007 | Compiled by: rl 04/04/2007 | Coordinates: 2705.2 E; (Local Grid): 1439.4 N |
| Drill Fluid | Checked by: | | Ground Level: 99.75 m OD |
| Orientation (°) | | | |
| Dates Drilled: Start 26/02/2007; End 03/04/2007 | | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From–To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N | Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 9.75-10.50 | 100 | 100 | | | | | (Stiff) sandy SILT (as previous sheet). Below 10.00m; occasional pockets/burrows infilled with light grey silty fine sand. | | | |
| | | | 11.00-11.05 | CS | 105 | | | | | | | | |
| | | (100) | 10.50-12.00 | 93 | 93 | | | | | At 11.90m; persistent layer 10mm thick of thinly laminated black organic matter. | | | |
| | | | 12.00-12.25 | CL | 106 | | | | | | (9.65) | | |
| | | (100) | 12.00-13.50 | 100 | 100 | | | | | | | | |
| 27/03 | 13.50 | 1.00 | | | | | | | | | | | |
| 28/03 | 13.50 | 2.80 | 13.55-13.60 | CL | 107 | | | | | From 13.75m to 13.95m; occasional clasts up to about 20mm of stiff brown fissured clay. Fissures are extremely closely spaced, locally polished. | | | |
| | | (100) | 13.50-15.00 | 81 | 81 | | | | | From 14.50m to 15.60m; very silty sand. | | | |
| | | | 15.15-15.20 | CS | 108 | | | | | At 15.15m; layer 30mm thick of incipient light brown claystone and clayey sand. From 15.15m to 15.45m; indistinctly thinly laminated. | | | |
| | | (100) | 15.00-16.50 | 100 | 100 | | | | | At 15.75m; occasional clasts up to about 20mm of stiff brown fissured clay. Fissures are extremely closely spaced, locally polished. Below 16.25m; locally very sandy clay with silty texture or clay/silt. Below 16.50m; locally indistinctly laminated. | | | |
| | | | 16.00-16.25 | CL | 109 | | | | | | | | |
| | | (100) | 16.50-18.00 | 97 | 97 | | | | | Very stiff (friable) indistinctly fissured dark brown grey sandy CLAY with silty texture, locally clayey sand or clay/silt. Locally indistinctly laminated. Occasional subhorizontal partings of light grey silty fine sand. [London Clay Unit D] From 17.30m to 21.70m; white speckling on fissure surfaces. | 17.10 | 82.65 | |
| | | (100) | 18.00-19.50 | 100 | 100 | | | | | From 18.90m to 18.95m; moderately weak to moderately strong grey claystone with calcite veins. | | | |
| | | (100) | 18.50-12.00 | 93 | 93 | | | | | At 11.90m; persistent layer 10mm thick of thinly laminated black organic matter. | | | |
| | | | 12.00-12.25 | CL | 106 | | | | | | (9.65) | | |
| | | (100) | 12.00-13.50 | 100 | 100 | | | | | | | | |
| 27/03 | 13.50 | 1.00 | | | | | | | | | | | |
| 28/03 | 13.50 | 2.80 | 13.55-13.60 | CL | 107 | | | | | From 13.75m to 13.95m; occasional clasts up to about 20mm of stiff brown fissured clay. Fissures are extremely closely spaced, locally polished. | | | |
| | | (100) | 13.50-15.00 | 81 | 81 | | | | | From 14.50m to 15.60m; very silty sand. | | | |

| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | Casing Diameter | BOREHOLE No. | R1006 |
|---|---|---|---|---|---|
| Equipment | Dando 2000/Knebel | 250mm to 3.00m<br>146mm to 70.50m<br>168mm to 72.00m | 200mm to 3.00m<br>250mm to 3.00m | Coordinates<br>(Local Grid) | 2705.2 E<br>1439.4 N |
| Drill Fluid | | | | Ground Level | 99.75 m OD |
| Orientation (°) | | Logged by | Compiled by | Checked by | |
| Dates Drilled | Start 26/02/2007<br>End 03/04/2007 | CC<br>03/04/2007 | rl<br>04/04/2007 | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 19.50 | 21.00 | | 100 | 100 | | | Very stiff sandy CLAY (as previous sheet) | | | |
| | | (100) | 21.00 | 22.50 | | 100 | 100 | | | | (9.60) | | |
| | | | 22.00 | 22.05 | CS | | 111 | | | | | | |
| | | (100) | 22.50 | 24.00 | | 100 | 100 | | | Below 22.50m; rare pink brown bivalve and gastropod shells and shell fragments.<br>From 23.10m to 23.20m; moderately weak to moderately strong grey brown claystone with calcite veins. | | | |
| | | (100) | 24.00 | 25.50 | | 97 | 97 | | | | | | |
| | | | 25.55 | 25.80 | CL | | 112 | | | From 25.50m to 25.70m; abundant laminae/partings of light grey brown silty fine sand <2mm (possible cross lamination).<br>From 26.00m to 27.00m; 0.50m recovered as black rounded medium and coarse flint gravel with chatter marks. | | | |
| | | | 25.80 | 26.00 | B | | 16 | | | | | | |
| | | (100) | 25.50 | 27.00 | | 69 | 69 | | | | 26.70 | 73.05 | |
| | | (100) | 27.00 | 28.50 | | 97 | 97 | | | Very stiff (friable) indistinctly fissured dark brown grey sandy CLAY with silty texture, locally clayey sand or clay/silt. Locally indistinctly laminated. Occasional subhorizontal partings of light grey silty fine sand. [London Clay Unit C]<br>From 28.10m to 29.40m; locally very sandy clay/silt. | | | |
| | | | 28.00 | 28.05 | CC | | 113 | | | | | | |
| | | | 28.80 | 29.00 | B | | 17 | | | | | | |
| | | | 29.00 | 29.05 | CS | | 114 | | | | | | |
| | | (100) | 21.00 | 22.50 | | 100 | 100 | | | | (9.60) | | |
| | | | 22.00 | 22.05 | CS | | 111 | | | | | | |
| | | (100) | 22.50 | 24.00 | | 100 | 100 | | | Below 22.50m; rare pink brown bivalve and gastropod shells and shell fragments.<br>From 23.10m to 23.20m; moderately weak to moderately strong grey brown claystone with calcite veins. | | | |

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|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 3.00m; 146mm to 70.50m; 168mm to 72.00m | Casing Diameter: 200mm to 3.00m; 250mm to 3.00m | **BOREHOLE No. R1006** |
| Equipment: Dando 2000/Knebel | | | Coordinates: 2705.2 E |
| Drill Fluid | | | (Local Grid): 1439.4 N |
| Orientation (°) | Logged by: CC 03/04/2007 | Compiled by: rl 04/04/2007 | Ground Level: 99.75 m OD |
| Dates Drilled: Start 26/02/2007, End 03/04/2007 | | Checked by: | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From | To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N | Core Size (mm) | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29/03 | 30.00 | 3.10 | 30.00-30.10 | | CS | 115 | | | | | Very stiff (friable) sandy CLAY (as previous sheet) | | | |
| | | | 30.10-30.20 | | CS | 116 | | | | | | | | |
| | | | 30.20-30.25 | | D | 117 | | | | | | | | |
| | | (100) | 30.00-31.50 | | 100 | 100 | | | | | Below 30.45m; occasional pink/brown shells and fragments of bivalve and gastropod. From 31.10m to 31.15m; abundant bivalve and gastropod shells and shell fragments. | | | |
| | | | 32.00-32.25 | | CL | 118 | | | | | At 31.80m; abundant pink brown gastropod shells 30mm. | | | |
| | | (100) | 31.50-33.00 | | 98 | 98 | | | | | | | | |
| | | | 33.00-33.10 | | CS | 119 | | | | | | | | |
| | | | 33.10-33.15 | | D | 120 | | | | | | | | |
| | | (100) | 33.00-34.50 | | 99 | 99 | | | | | From 33.50m to 34.50m; locally very sandy and frequent infilled burrows with light grey silty fine sand. At 33.65m; 60mm bivalve shell | (13.80) | | |
| | | (100) | 34.50-36.00 | | 100 | 100 | | | | | At 34.55m; abundant shells prismatic crystals. Possible 30mm cemented nodule. Below 34.60m; occasional black silty fine sand partings. From 35.45m to 35.50m; strong grey claystone nodule with cream coloured infill (<1mm) on fracture surface. | | | |
| | | | 36.00-36.10 | | CS | 121 | | | | | Below 36.00m; slightly sandy. | | | |
| | | | 36.10-3.20 | | CS | 122 | | | | | | | | |
| | | | 36.20-36.25 | | D | 123 | | | | | | | | |
| | | (100) | 36.00-37.50 | | 95 | 95 | | | | | | | | |
| | | | 37.90-38.95 | | CL | 124 | | | | | At 37.85m; abundant shells replaced by prismatic crystals. | | | |
| | | (100) | 37.50-39.00 | | 100 | 100 | | | | | | | | |
| | | | 39.00-39.10 | | CS | 125 | | | | | Below 39.00m; slightly sandy | | | |
| | | | 32.00-32.25 | | CL | 118 | | | | | At 31.80m; abundant pink brown gastropod shells 30mm. | | | |
| | | (100) | 31.50-33.00 | | 98 | 98 | | | | | | | | |
| | | | 33.00-33.10 | | CS | 119 | | | | | | | | |
| | | | 33.10-33.15 | | D | 120 | | | | | | | | |
| | | (100) | 33.00-34.50 | | 99 | 99 | | | | | From 33.50m to 34.50m; locally very sandy and frequent infilled burrows with light grey silty fine sand. At 33.65m; 60mm bivalve shell | (13.80) | | |
| | | | | | | | | | | | At 34.55m; abundant shells prismatic crystals. Possible 30mm cemented nodule. | | | |

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|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 3.00m; 146mm to 70.50m; 168mm to 72.00m | Casing Diameter: 200mm to 3.00m; 250mm to 3.00m | **BOREHOLE No. R1006** |
| Equipment: Dando 2000/Knebel | | | Coordinates: 2705.2 E |
| Drill Fluid | | | (Local Grid): 1439.4 N |
| Orientation (°) | Logged by: CC 03/04/2007 | Compiled by: rl 04/04/2007 | Ground Level: 99.75 m OD |
| Dates Drilled: Start 26/02/2007, End 03/04/2007 | Checked by: | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 40.10-40.30 | B | 18 | | | | Very stiff slightly sandy CLAY. (as previous sheet)<br>From 40.35m to 40.50m; frequent black and rare white rounded medium and coarse flint gravel with chatter marks. | 40.50 | 59.25 | |
| | | (100) | 40.50-40.70<br>40.50-42.00 | B<br>89 | 19<br>89 | | | | Light grey possibly green locally clayey coarse SAND locally thinly and thickly subhorizontally interlaminated with dark brown grey fissured clay with silty texture.<br>[London Clay Unit B2]<br>From 40.75m to 40.90m; very stiff fissured dark grey clay with silty texture. Fissures are very closely spaced, planar, tight, locally slightly polished.<br>From 40.90m to 41.05m; moderately weak to moderately strong thickly interlaminated grey sandstone and claystone. | (4.50) | | |
| | | (100) | 42.20-42.25<br>42.00-43.50 | D<br>100 | 127<br>100 | | | | | | | |
| | | (100) | 43.50-43.55<br>43.50-45.00 | CC<br>73 | 130<br>73 | | | | | 45.00 | 54.75 | |
| | | (100) | 45.00-45.75<br>45.40-45.50 | 67<br>CS | 67<br>128 | | | | Very stiff fissured dark brown grey locally slightly sandy CLAY with silty texture. Fissures are typically very closely to closely spaced, randomly orientated. Occasional light grey and brown and dark grey black silty fine sand partings, occasional bivalve and gastropod shells and shell fragments.<br>[London Clay Unit B2] | | | |
| | | (100) | 45.75-46.50 | 100 | 100 | | | | | | | |
| 29/03 | 46.50 | 0.90 | | | | | | | At 46.40m; 20mm layer of light grey brown silty fine sand. | | | |
| 30/03 | 46.50 | 2.90 | 46.50-46.55 | D | 129 | | | | To 46.50m; sandy, frequent partings, possible infilled burrows. | | | |
| | | (100) | 46.50-48.00 | 100 | 100 | | | | | | | |
| | | | 47.75-47.80<br>47.80-47.90 | D<br>CS | 131<br>132 | | | | | | | |
| | | (100) | 47.90-48.00<br>48.00-48.80 | CS<br>100 | 133<br>100 | | | | From 48.25m to 48.40m; abundant light grey brown silty fine sand partings / pockets.<br>From 48.55m to 52.00m; shell replaced by prismatic crystals. Fissures locally slightly polished. | | | |
| | | (100) | 48.80-49.50 | 100 | 100 | | | | | | | |
| | | (100) | 40.50-42.00 | 89 | 89 | | | | brown grey fissured clay with silty texture.<br>[London Clay Unit B2]<br>From 40.75m to 40.90m; very stiff fissured dark grey clay with silty texture. Fissures are very closely spaced, planar, tight, locally slightly polished.<br>From 40.90m to 41.05m; moderately weak to moderately strong thickly interlaminated grey sandstone and claystone. | | | |
| | | (100) | 42.20-42.25<br>42.00-43.50 | D<br>100 | 127<br>100 | | | | | (4.50) | | |
| | | (100) | 43.50-43.55<br>43.50-45.00 | CC<br>73 | 130<br>73 | | | | | | | |

| | | | |
|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 3.00m; 146mm to 70.50m; 168mm to 72.00m | Casing Diameter: 200mm to 3.00m; 250mm to 3.00m | **BOREHOLE No. R1006** |
| Equipment: Dando 2000/Knebel | | | Coordinates: 2705.2 E |
| Drill Fluid | | | (Local Grid): 1439.4 N |
| Orientation (°) | Logged by: CC 03/04/2007 | Compiled by: rl 04/04/2007 | Ground Level: 99.75 m OD |
| Dates Drilled: Start 26/02/2007, End 03/04/2007 | | Checked by: | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From | To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N | Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 49.50 | 51.00 | | | 95 | 95 | | | | Very stiff slightly sandy CLAY (as previous sheet)<br>At 50.25m; 50mm lignite fragment<br>At 50.40m; 30mm gastropod shell | | | |
| | | | 51.05 | 51.15 | CS | 134 | | | | | | From 51.20m to 51.25m; possible burrows/intermixed biotubation infilled with light grey silty fine sand partings.<br>From 51.30m to 51.50m; frequent subhorizontal silty fine sand laminae (3mm). | | | |
| | | | 51.15 | 51.20 | D | 135 | | | | | | | | | |
| | | (100) | 51.00 | 52.50 | | | 93 | 93 | | | | | | | |
| 30/03 | 52.50 | 1.00 | | | | | | | | | | At 52.20m; frequent subhorizontal silty fine sand laminae (3mm). | (14.30) | | |
| 02/04 | 52.50 | 3.10 | | | | | | | | | | | | | |
| | | (100) | 52.50 | 54.00 | | | 100 | 100 | | | | | | | |
| | | | 54.20 | 54.30 | CS | 136 | | | | | | From 54.00m to 55.00m; locally extremely closely fissured. Fissures locally polished, slickensided. Locally persistent subvertical fissures. | | | |
| | | | 54.30 | 54.40 | CS | 137 | | | | | | | | | |
| | | | 54.40 | 54.45 | D | 138 | | | | | | | | | |
| | | (100) | 54.00 | 55.50 | | | 100 | 100 | | | | | | | |
| | | (100) | 55.50 | 57.00 | | | 98 | 98 | | | | | | | |
| | | | 57.20 | 57.30 | CS | 139 | | | | | | | | | |
| | | | 57.30 | 57.35 | D | 140 | | | | | | | | | |
| | | (100) | 57.00 | 58.50 | | | 96 | 96 | | | | | | | |
| | | | 59.00 | 59.20 | B | 20 | | | | | | Very stiff fissured dark brown grey locally slightly sandy CLAY with silty texture. Fissures are typically very closely to closely spaced, randomly | | | |
| | | (100) | 50.50 | 50.70 | | | 100 | 100 | | | | burrows/intermixed biotubation infilled with light grey silty fine sand partings. | | | |
| | | (100) | 51.00 | 52.50 | | | 93 | 93 | | | | From 51.30m to 51.50m; frequent subhorizontal silty fine sand laminae (3mm). | | | |
| 30/03 | 52.50 | 1.00 | | | | | | | | | | At 52.20m; frequent subhorizontal silty fine sand laminae (3mm). | (14.30) | | |
| 02/04 | 52.50 | 3.10 | | | | | | | | | | | | | |
| | | (100) | 52.50 | 54.00 | | | 100 | 100 | | | | | | | |
| | | | 54.20 | 54.30 | CS | 136 | | | | | | From 54.00m to 55.00m; locally extremely closely fissured. Fissures locally polished, slickensided. Locally persistent subvertical fissures. | | | |
| | | | 54.30 | 54.40 | CS | 137 | | | | | | | | | |
| | | | 54.40 | 54.45 | D | 138 | | | | | | | | | |

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|---|---|---|---|
| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | 250mm to 3.00m<br>146mm to 70.50m<br>168mm to 72.00m |
| | | Casing Diameter | 200mm to 3.00m<br>250mm to 3.00m |
| Equipment | Dando 2000/Knebel | | |
| Drill Fluid | | | |
| Orientation (°) | | | |
| Dates Drilled | Start 26/02/2007<br>End 03/04/2007 | Logged by | CC<br>03/04/2007 |
| | | Compiled by | rl<br>04/04/2007 |
| | | Checked by | |

**BOREHOLE No. R1006**

| | | |
|---|---|---|
| Coordinates | 2705.2 | E |
| (Local Grid) | 1439.4 | N |
| Ground Level | 99.75 | m OD |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 03/04 | 60.00 | 2.85 | 60.05-60.15 | CS | 141 | | | | | Very stiff slightly sandy CLAY (as previous sheet) | | | |
| | | | 60.15-60.25 | CS | 142 | | | | | | | | |
| | | | 60.25-60.50 | CL | 143 | | | | | | | | |
| | | | 60.50-60.55 | D | 144 | | | | | | | | |
| | | (100) | 60.00-61.50 | 100 | 100 | | | | | From 60.90m to 60.95m; moderately strong to strong light grey brown claystone. | | | |
| | | | | | | | | | | At 61.60m; 40mm light grey brown claystone | (4.70) | | |
| | | (100) | 61.50-63.00 | 99 | 99 | | | | | At 62.35m; 40mm bivalve shell fragments. | | | |
| | | | 63.20-63.30 | CS | 145 | | | | | | | | |
| | | | 63.30-63.35 | D | 146 | | | | | | | | |
| | | | 63.60-63.80 | B | 22 | | | | | From 63.80m to 64.00m; some black and white rounded fine and medium flint gravel with chatter marks and shell fragments. | | | |
| | | (100) | 63.00-64.50 | 99 | 99 | | | | | | 64.00 | 35.75 | |
| | | | 64.25-64.45 | B | 23 | | | | | Very stiff fissured dark brown grey slightly sandy CLAY with silty texture. Occasional partings of silty fine sand. [London Clay Unit A3] At 64.25m; 40mm moderately strong light grey brown claystone. | | | |
| | | (100) | 64.50-66.00 | 100 | 100 | | | | | At 65.00m; abundant infilled burrows with light grey brown silty fine sand (2mm x 15mm). At 65.50m; occasional tubular shell fragments (2-3mm x 10mm). | | | |
| | | | 66.00-66.10 | CS | 147 | | | | | | | | |
| | | | 66.10-66.20 | CS | 148 | | | | | | | | |
| | | | 66.20-66.25 | D | 149 | | | | | At 66.30m; pyrite nodule (flat 60mm long) gold sheen on surface. | | | |
| | | (100) | 66.00-67.50 | 100 | 100 | | | | | | (6.50) | | |
| | | (100) | 67.50-69.00 | 100 | 100 | | | | | Below 67.70m; frequent pockets of light grey brown silty fine sand (possible biotubation). From 68.35m to 70.00m; fissure persistent subvertical, planar, smooth. | | | |
| | | | 69.10-69.20 | CS | 150 | | | | | | | | |
| | | | | | | | | | | At 61.60m; 40mm light grey brown claystone | (4.70) | | |
| | | (100) | 61.50-63.00 | 99 | 99 | | | | | At 62.35m; 40mm bivalve shell fragments. | | | |
| | | | 63.20-63.30 | CS | 145 | | | | | | | | |
| | | | 63.30-63.35 | D | 146 | | | | | | | | |
| | | | 63.60-63.80 | B | 22 | | | | | From 63.80m to 64.00m; some black and white rounded fine and medium flint gravel with chatter marks and shell fragments. | | | |
| | | (100) | 63.00-64.50 | 99 | 99 | | | | | | 64.00 | 35.75 | |
| | | | 64.25-64.45 | B | 23 | | | | | Very stiff fissured dark brown grey slightly sandy CLAY with silty texture. Occasional partings of silty fine sand. [London Clay Unit A3] At 64.25m; 40mm moderately strong light | | | |

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|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 3.00m; 146mm to 70.50m; 168mm to 72.00m | Casing Diameter: 200mm to 3.00m; 250mm to 3.00m | **BOREHOLE No. R1006** |
| Equipment: Dando 2000/Knebel | | | Coordinates: 2705.2 E |
| Drill Fluid | | | (Local Grid): 1439.4 N |
| Orientation (°) | Logged by: CC 03/04/2007 | Compiled by: rl 04/04/2007 | Ground Level: 99.75 m OD |
| Dates Drilled: Start 26/02/2007, End 03/04/2007 | | Checked by: | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From | To | Type TCR % | No. SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 03/04 | 3.00 | 1.00 | | | | | | | Very stiff slightly sandy CLAY (as previous sheet) | | | |
| | | | | | | | | | | 70.50 | 29.25 | |
| | | | | | | | | | End of Borehole | | | |

| | | | |
|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 4.30m; 200mm to 4.50m; 146mm to 35.30m | Casing Diameter: 250mm to 4.30m; 200mm to 4.50m | **BOREHOLE No. R1007** |
| Equipment: Dando 2000/Knebel Coring | | | Coordinates: 2767.7 E |
| Drill Fluid: Mud | | | (Local Grid): 1460.8 N |
| Orientation (°): | Logged by: CC 04/04/2007 | Compiled by: rl/sm 10/04/2007 | Ground Level: 100.10 m OD |
| Dates Drilled: Start 08/03/2007; End 04/04/2007 | | Checked by: | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From–To | Type | No. | RQD % | SPT Blows /N; Core Size (mm) | U100 Blows/ Rec. mm | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08/03 | | | 0.10 | CDKV | 1 | | | | Grass over TOPSOIL | (0.10) 0.10 | 100.00 | |
| | | | 0.50 | CDKV | 2 | | | | Medium dense to dense grey brown subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | | | |
| | | | 0.50 | B | 3 | | | | | | | |
| | | | 1.00 | CDKV | 4 | | | | | | | |
| | | | 1.00 | B | 5 | | | | | | | |
| | | | 2.00 | CDKV | 6 | | | | | (3.70) | | |
| | 2.00 | 0.90 | 2.00-2.50 | B | 7 | | C42 | | | | | |
| | | | 3.00 | CDKV | 8 | | | | | | | |
| | 3.00 | 1.20 | 3.00-3.50 | B | 9 | | C23 | | | | | |
| | | | 3.80 | CDKV | 10 | | | | Firm fissured, laminated and interlaminated, brown grey orange, sandy CLAY with silty texture. Laminae mainly of orange brown, silty fine sand and occasionally light grey silty fine sand. Fissures (clay only) are subvertical and randomly orientated, extremely closely spaced, locally slightly polished. At top; recovered as (stiff) orange brown slightly sandy CLAY with occasional light grey mottling. Sand is fine. | 3.80 | 96.30 | |
| | | | 3.80 | B | 11 | | | | | | | |
| | 4.00 | WET | 4.00-4.45 | U | 12 | | | 60/ 450 | | | | |
| 08/03 | 4.50 | DRY | | | | | | | | (0.90) | | |
| | | | 4.50 | D | 15 | | | | | | | |
| 02/04 | 4.50 | 3.00 | | | | | | | | 4.70 | 95.40 | |
| | | (100) | 4.50-6.00 | 100 | 100 | | | | Stiff fissured, thinly laminated, grey CLAY with frequent to abundant subhorizontal partings (<2mm) and locally interlaminated, up to 5mm, with light grey silty fine sand. Fissures (clay only) typically very closely spaced, randomly orientated, locally subvertical, locally polished. [London Clay Claygate Member] At 5.25m; pyrite nodule, 40mm. | (1.30) | | |
| | | | 5.90-6.00 | CS | 16 | | | | | 6.00 | 94.10 | |
| | | (100) | 6.00-7.50 | 98 | 98 | | | | Stiff to very stiff fissured grey brown CLAY with silty texture. Fissures extremely closely spaced, randomly orientated, tight, locally slightly polished with local brown staining on surfaces. Occasional light grey brown silty fine sand partings. [London Clay Unit E] Below 6.70m; occasional becoming frequent with depth partings/lenses of green glauconitic sand (smears to clay) also dispersed throughout. | (1.00) | | |
| | | | 7.00-7.10 | CS | 17 | | | | | 7.00 | 93.10 | |
| | | | 7.70-7.75 | CC | 18 | | | | | (0.50) | | |
| | | | | | | | | | | 7.50 | 92.60 | |
| | | (100) | 7.50-9.00 | 95 | 95 | | | | Stiff to very stiff (friable) grey, sandy to very sandy CLAY. Abundant disseminated glauconitic sand. [London Clay Unit E] | | | |
| | | | | | | | | | (Stiff) apparently unstructured, probably bioturbated, dark grey sandy SILT to very silty SAND, grading with depth to sandy clay/silt. With rare fragments of black | | | |
| | | | 2.00 | CDKV | 6 | | | | | (3.70) | | |
| | 2.00 | 0.90 | 2.00-2.50 | B | 7 | | C42 | | | | | |
| | | | 3.00 | CDKV | 8 | | | | | | | |
| | 3.00 | 1.20 | 3.00-3.50 | B | 9 | | C23 | | | | | |
| | | | 3.80 | CDKV | 10 | | | | Firm fissured, laminated and interlaminated, brown grey orange, sandy CLAY with silty texture. Laminae mainly of orange brown, silty fine sand and occasionally light grey silty fine sand. Fissures (clay only) are subvertical and randomly orientated, extremely closely spaced, locally slightly polished. | 3.80 | 96.30 | |
| | | | 3.80 | B | 11 | | | | | | | |
| | 4.00 | WET | 4.00-4.45 | U | 12 | | | 60/ 450 | | | | |
| 08/03 | 4.50 | DRY | | | | | | | | (0.90) | | |
| | | | 4.50 | D | 15 | | | | | | | |
| 02/04 | 4.50 | 3.00 | | | | | | | | 4.70 | 95.40 | |

| | | | |
|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole | Borehole Diameter: 250mm to 4.30m; 200mm to 4.50m; 146mm to 35.30m | Casing Diameter: 250mm to 4.30m; 200mm to 4.50m | **BOREHOLE No. R1007** |
| Equipment: Dando 2000/Knebel Coring | | | Coordinates: 2767.7 E |
| Drill Fluid: Mud | | | (Local Grid): 1460.8 N |
| Orientation (°): | Logged by: CC 04/04/2007 | Compiled by: rl/sm 10/04/2007 | Ground Level: 100.10 m OD |
| Dates Drilled: Start 08/03/2007, End 04/04/2007 | | Checked by: | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From | To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N | Core Size (mm) | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Dark grey sandy SILT (as previous sheet) From 9.00m to 9.15m; frequent pockets, up to 5mm, of light brown clay. From 10.10m to 10.15m; occasional clasts/laminae, up to 20mm, of (soft) brown grey clay with silty texture. With locally polished fissure surfaces. | | | |
| | | (100) | 10.50 | 12.00 | 99 | 99 | | | | | | From 11.50m to 12.30m; CLAY/SILT | | | |
| | | | 12.00 | 12.05 | CC | 21 | | | | | | | | | |
| | | (100) | 12.00 | 13.50 | 78 | 78 | | | | | | | | | |
| 02/04 | 4.50 | 1.50 | 13.15 | 13.25 | CS | 22 | | | | | | | (11.30) | | |
| 03/04 | 4.50 | 3.00 | | | | | | | | | | | | | |
| | | | 14.00 | 14.25 | CL | 23 | | | | | | | | | |
| | | (100) | 13.50 | 15.00 | 100 | 100 | | | | | | At 14.70m; pyrite nodule, 15mm. From 14.90m to 15.10m; frequent laminae/clasts up to 50mm of stiff brown grey clay with silty texture. Locally polished fissure surfaces. | | | |
| | | | 15.40 | 15.50 | CS | 24 | | | | | | | | | |
| | | (100) | 15.00 | 16.50 | 65 | 65 | | | | | | At 15.65m; moderately weak to moderately strong brown grey claystone nodule (80mm) with rare calcite veins. From 15.75m to 15.85m; moderately strong brown grey claystone with rare calcite veins. Below 16.50m; mainly sandy clay with silty texture, locally CLAY/SILT and sandy SILT. | | | |
| | | | 17.05 | | CC | 25 | | | | | | | | | |
| | | (100) | 16.50 | 18.00 | 100 | 100 | | | | | | From 17.60m to 17.70m; moderately strong brown grey claystone with rare calcite veining. | | | |
| | | | | | | | | | | | | At 18.40m; pink/brown bivalve, 20mm. | | | |
| | | (100) | 18.00 | 19.50 | 97 | 97 | | | | | | Very stiff (friable) dark brown grey sandy CLAY with silty texture, locally very clayey sand. Locally indistinctly fissured. Occasional partings of subhorizontal dark grey and light grey | 18.80 | 81.30 | |
| | | (100) | 10.50 | 12.00 | 99 | 99 | | | | | | From 11.50m to 12.30m; CLAY/SILT | | | |
| | | | 12.00 | 12.05 | CC | 21 | | | | | | | | | |
| | | (100) | 12.00 | 13.50 | 78 | 78 | | | | | | | | | |
| 02/04 | 4.50 | 1.50 | 13.15 | 13.25 | CS | 22 | | | | | | | (11.30) | | |
| 03/04 | 4.50 | 3.00 | | | | | | | | | | | | | |
| | | | 14.00 | 14.25 | CL | 23 | | | | | | | | | |
| | | (100) | 13.50 | 15.00 | 100 | 100 | | | | | | At 14.70m; pyrite nodule, 15mm. | | | |

| | | | |
|---|---|---|---|
| Drilling Method: Cable Percussion & Rotary Hole<br>Equipment: Dando 2000/Knebel Coring<br>Drill Fluid: Mud<br>Orientation (°):<br>Dates Drilled: Start 08/03/2007, End 04/04/2007 | Borehole Diameter: 250mm to 4.30m, 200mm to 4.50m, 146mm to 35.30m<br>Casing Diameter: 250mm to 4.30m, 200mm to 4.50m<br>Logged by: CC 04/04/2007<br>Compiled by: rl/sm 10/04/2007<br>Checked by: | **BOREHOLE No. R1007**<br>Coordinates: 2767.7 E<br>(Local Grid): 1460.8 N<br>Ground Level: 100.10 m OD | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery: Depth (m) From–To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N | Core Size (mm) | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 19.50-21.00 | | 100 | 100 | | | | Very stiff sandy CLAY (as previous sheet)<br>At 20.80m; white speckling on fissure surface. | | | |
| | | (100) | 21.20-21.45<br>21.00-22.50 | CL | 27<br>98 | 98 | | | | At 21.70m; white speckling on fissure surface. | | | |
| | | (100) | 23.10-23.20<br>22.50-24.00 | CS | 28<br>100 | 100 | | | | At 22.70m; white speckling on fissure surface.<br>From 23.30m to 23.50m; possible infilled burrow.<br>From 23.70m to 24.15m; occasional glauconite dispersed throughout and occasional pockets of glauconitic sand. | (7.55) | | |
| | | (100) | 24.50-24.60<br>24.00-25.50 | CS | 29<br>96 | 96 | | | | From 24.40m to 26.00m; slightly sandy.<br>At 25.25m; 30mm bivalve fragment, 5mm thick shell | | | |
| | | (100) | 25.50-27.00 | | 100 | 100 | | | | From 26.05m to 26.35m; black, rounded, fine to coarse flint gravel with chatter marks, some clay matrix. | 26.35 | 73.75 | |
| | | (100) | 27.10-27.20<br>27.00-28.50<br>27.75-28.00 | CS<br>CL | 30<br>97<br>31 | 97 | | | | Very stiff (friable) dark brown grey, sandy CLAY with silty texture, locally very clayey sand. Locally indistinctly fissured. Occasional partings of subhorizontal dark grey and light grey silty fine sand. Occasional pink/brown bivalve and gastropod shells and shell fragments.<br>[London Clay Unit C]<br>From 26.35m to 27.05m; CLAY/SILT.<br>From 27.75m to 28.00m; hard.<br>From 28.80m to 29.90m; CLAY/SILT.<br>At 28.65m; frequent pink/brown gastropod and bivalve shell fragments. | | | |
| | | (100) | 29.50-30.00 | | 100 | 100 | | | | | | | |
| | | (100) | 21.00-22.50 | | 98 | 98 | | | | At 21.70m; white speckling on fissure surface. | | | |
| | | (100) | 23.10-23.20<br>22.50-24.00 | CS | 28<br>100 | 100 | | | | At 22.70m; white speckling on fissure surface.<br>From 23.30m to 23.50m; possible infilled burrow.<br>From 23.70m to 24.15m; occasional glauconite dispersed throughout and occasional pockets of glauconitic sand. | (7.55) | | |
| | | | 24.50-24.60 | CS | 29 | | | | | From 24.40m to 26.00m; slightly sandy. | | | |

| | | | |
|---|---|---|---|
| Drilling Method | Cable Percussion & Rotary Hole | Borehole Diameter | Casing Diameter |
| Equipment | Dando 2000/Knebel Coring | 250mm to 4.30m<br>200mm to 4.50m<br>146mm to 35.30m | 250mm to 4.30m<br>200mm to 4.50m |
| Drill Fluid | Mud | | |
| Orientation (°) | | | |
| Dates Drilled | Start 08/03/2007<br>End 04/04/2007 | | |

| Logged by | Compiled by | Checked by |
|---|---|---|
| CC | rl/sm | |
| 04/04/2007 | 10/04/2007 | |

**BOREHOLE No. R1007**

| | | |
|---|---|---|
| Coordinates | 2767.7 | E |
| (Local Grid) | 1460.8 | N |
| Ground Level | 100.10 | m OD |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type TCR % | No. SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 30.00 | 31.50 | 100 | 100 | | | Very stiff sandy CLAY (as previous sheet)<br><br>From 30.50m to 30.60m; frequent pink/brown gastropod and bivalve shell and shell fragments upto 50mm.<br>From 30.80m to 31.50m; very sandy. | (8.95) | | |
| | | | 30.70 | 30.80 | CS | 32 | | | | | | |
| | | (100) | 31.50 | 33.00 | 100 | 100 | | | | | | |
| 03/04 | 4.50 | 1.70 | | | | | | | At 32.95m; shell replacement with prismatic crystals. | | | |
| 04/04 | 4.50 | 3.00 | | | | | | | | | | |
| | | (100) | 33.00 | 34.50 | 98 | 98 | | | | | | |
| | | | 34.05 | 34.30 | CL | 33 | | | | | | |
| | | (100) | 34.50 | 35.30 | 95 | 95 | | | | | | |
| | | | 35.10 | 35.20 | CS | 34 | | | | | | |
| 04/04 | 4.50 | 1.60 | | | | | | | End of Borehole | 35.30 | 64.80 | |
| | | (100) | 31.50 | 33.00 | 100 | 100 | | | | | | |
| 03/04 | 4.50 | 1.70 | | | | | | | At 32.95m; shell replacement with prismatic crystals. | | | |
| 04/04 | 4.50 | 3.00 | | | | | | | | | | |
| | | (100) | 33.00 | 34.50 | 98 | 98 | | | | | | |
| | | | 34.05 | 34.30 | CL | 33 | | | | | | |

| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1001** |
| Surface Dimensions | 0.60m x 2.80m | | Coordinates 2559.1 E |
| Date Excavated Start | 21/03/2007 | → 0 ° | (Local Grid) 1505.3 N |
| End | 21/03/2007 | | Ground Level 100.65 m OD |
| Logged by CM 21/03/2007 | Compiled by rl 22/03/2007 | Checked by | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.50 | CDKV | 1 | MADE GROUND: Brown organic clayey sandy subangular to subrounded fine to coarse flint gravel. Rare angular fragments <200mm of tile and tarmacadam. | | | |
| | | | 0.50 | B | 2 | | | | |
| | | | 0.50 | D | 3 | | (1.15) | | |
| | | | | | | | 1.15 | 99.50 | |
| | | | 1.50 | B | 4 | Light grey brown silty sandy subangular to subrounded fine to coarse flint GRAVEL. Sand is medium and coarse. Rare lenses up to 50mm of soft grey clay. [Silchester Gravel] | | | |
| | | | 1.50 | D | 5 | | (1.35) | | |
| | | | 2.50 | CDKV | 6 | | | | |
| | | | 2.50 | D | 7 | End of Trial Pit | 2.50 | 98.15 | |
| | | | | | | | 1.15 | 99.50 | |
| | | | 1.50 | B | 4 | Light grey brown silty sandy subangular to subrounded fine to coarse flint GRAVEL. Sand is medium and coarse. Rare lenses up to 50mm of soft grey clay. [Silchester Gravel] | | | |
| | | | 1.50 | D | 5 | | (1.35) | | |

| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1002** |
| Surface Dimensions | 0.60m x 3.00m | | Coordinates 2586.6 E |
| Date Excavated Start | 23/03/2007 | → 90 ° | (Local Grid) 1473.3 N |
| End | 23/03/2007 | | Ground Level 100.70 m OD |
| Logged by CM 23/03/2007 | Compiled by cm 23/03/2007 | Checked by | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.10 | D | 1 | TOPSOIL - Brown, organic, silty, gravelly SAND with rootlets. | (0.20) | | |
| | | | | | | | 0.20 | 100.50 | |
| | | | | | | Orange brown, slightly silty sandy subangular to subrounded fine to coarse flint GRAVEL with rare flint cobbles. [Silchester Gravel] | (0.50) | | |
| | | | 0.50 | D | 2 | | | | |
| | | | 0.50 | B | 3 | | | | |
| | | | 0.50 | CDKV | 4 | | | | |
| | | | | | | | 0.70 | 100.00 | |
| | | | | | | Tan sandy subangular to subrounded fine to coarse flint GRAVEL with rare flint cobbles. Sand is medium and coarse. [Silchester Gravel] | | | |
| | | | 1.50 | D | 5 | | (1.50) | | |
| | | | 1.50 | B | 6 | | | | |
| | | | | | | | 2.20 | 98.50 | |
| | | | | | | Orange brown and grey, slightly clayey, sandy subangular to subrounded fine to coarse flint GRAVEL. Sand is medium and coarse. [Silchester Gravel] | (0.30) | | |
| | | | 2.50 | D | 7 | | 2.50 | 98.20 | |
| | | | 2.50 | B | 8 | | | | |
| | | | 2.50 | CDKV | 9 | End of Trial Pit | | | |
| | | | | | | | 0.70 | 100.00 | |
| | | | | | | Tan sandy subangular to subrounded fine to coarse flint GRAVEL with rare flint cobbles. Sand is medium and coarse. [Silchester Gravel] | | | |
| | | | 1.50 | D | 5 | | (1.50) | | |
| | | | 1.50 | B | 6 | | | | |
| | | | | | | | 2.20 | 98.50 | |
| | | | | | | Orange brown and grey, slightly clayey, sandy subangular to subrounded fine to coarse flint GRAVEL. Sand is medium and | (0.30) | | |

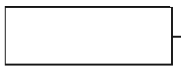
| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1003** |
| Surface Dimensions | 0.60m x 3.00m | | Coordinates 2635.7 E |
| Date Excavated Start | 23/03/2007 | 90 ° | (Local Grid) 1463.4 N |
| End | 23/03/2007 | | Ground Level 100.60 m OD |
| Logged by | Compiled by | Checked by | |
| CM | cm | | |
| 23/03/2007 | 23/03/2007 | | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.10 | D | 1 | TOPSOIL - Dark brown, organic, silty, gravelly SAND with rootlets. | (0.25) | | |
| | | | | | | | 0.25 | 100.35 | |
| | | | 0.50 | D | 2 | Brown, slightly silty, slightly cobbley, sandy subangular to subrounded fine to coarse flint GRAVEL. Cobbles are subrounded flint. [Silchester Gravel] | (0.50) | | |
| | | | 0.50 | B | 3 | | | | |
| | | | 0.50 | CDKV | 4 | | | | |
| | | | | | | | 0.75 | 99.85 | |
| | | | | | | Orange brown, sandy subangular to subrounded fine to coarse flint GRAVEL with rare cobbles. Sand is medium and coarse, cobbles are subrounded of flint. [Silchester Gravel] | (0.95) | | |
| | | | 1.50 | D | 5 | | | | |
| | | | 1.50 | B | 6 | | | | |
| | | | | | | | 1.70 | 98.90 | |
| | | | | | | Grey and brown, slightly clayey, sandy subrounded to subangular fine to coarse flint GRAVEL. Sand is medium and coarse. [Silchester Gravel] | (0.80) | | |
| | | | 2.00 | D | 7 | | | | |
| | | | 2.00 | B | 8 | | | | |
| | | | 2.50 | CDKV | 9 | | 2.50 | 98.10 | |
| | | | | | | End of Trial Pit | | | |
| | | | | | | | 0.75 | 99.85 | |
| | | | | | | Orange brown, sandy subangular to subrounded fine to coarse flint GRAVEL with rare cobbles. Sand is medium and coarse, cobbles are subrounded of flint. [Silchester Gravel] | (0.95) | | |
| | | | 1.50 | D | 5 | | | | |
| | | | 1.50 | B | 6 | | | | |
| | | | | | | | 1.70 | 98.90 | |
| | | | | | | Grey and brown, slightly clayey, sandy subrounded to subangular fine to coarse flint GRAVEL. Sand is medium and coarse. [Silchester Gravel] | (0.80) | | |
| | | | 2.00 | D | 7 | | | | |
| | | | 2.00 | B | 8 | | | | |

Method of Excavation CASE 590SM
Surface Dimensions 2.80m x 0.65m
Date Excavated Start 02/04/2007
End 02/04/2007

Logged by DB 02/04/2007
Compiled by js 05/04/2007
Checked by

Plan




# TRIAL PIT No. TP1004SW

Coordinates 2694.1 E
(Local Grid) 1389.3 N
Ground Level 97.10 m OD

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.10 | D | 1 | Firm brown slightly gravelly, sandy CLAY. Gravel is subangular to rounded, fine to coarse flint. Occasional rootlets and roots up to 100mm. | (0.20) | | |
| | | | 0.20-0.40 | D | 2 | | 0.20 | 96.90 | |
| | | | 0.20-0.40 | B | 3 | | (0.20) | | |
| 0.50 | VN | 42/50/50 | | | | Firm orange mottled grey, slightly gravelly, slightly sandy locally sandy CLAY/SILT. Gravel is subrounded to rounded, fine to coarse flint. Occasional roots up to 50mm. | 0.40 | 96.70 | |
| | VR | 20/42/18 | | | | | | | |
| | | | | | | Firm locally stiff, indistinctly fissured, possibly laminated, orange brown mottled grey, slightly sandy locally sandy CLAY/SILT with occasional lenses up to 70mm of light grey silt. Fissures are indistinctly, closely to medium spaced, randomly orientated. Laminae possibly medium spaced, up to 5mm of grey silt. Below 1.20m; becomes dark grey and slightly gravelly. Gravel is subrounded to rounded, fine to coarse of flint. | | | |
| | | | 0.90-1.00 | D | 4 | | (1.00) | | |
| 1.00 | VN | 48/46/52 | 0.90-1.00 | B | 5 | | | | |
| | VR | 18/22/24 | | | | | | | |
| | | | 1.30-1.50 | D | 6 | | | | |
| | | | 1.30-1.50 | B | 7 | | | | |
| | | | | | | Grey, slightly sandy subrounded to rounded, fine to coarse flint GRAVEL with occasional subrounded flint cobbles. [Silchester Gravel] | 1.40 | 95.70 | |
| | | | | | | | (0.60) | | |
| | | | 2.00-2.10 | D | 8 | | 2.00 | 95.10 | |
| | | | 2.00-2.10 | B | 9 | Stiff, grey mottled orange brown, sandy CLAY/SILT. Laminae are closely spaced up to 7mm of grey brown sand. Occasional lenses up to 20mm of possibly manganese and or iron staining. | (0.10) | | |
| | | | | | | | 2.10 | 95.00 | |
| | | | | | | End of Trial Pit | | | |
| | | | | | | Firm locally stiff, indistinctly fissured, possibly laminated, orange brown mottled grey, slightly sandy locally sandy CLAY/SILT with occasional lenses up to 70mm of light grey silt. Fissures are indistinctly, closely to medium spaced, randomly orientated. Laminae possibly medium spaced, up to 5mm of grey silt. Below 1.20m; becomes dark grey and slightly gravelly. Gravel is subrounded to rounded, fine to coarse of flint. | | | |
| | | | 0.90-1.00 | D | 4 | | (1.00) | | |
| 1.00 | VN | 48/46/52 | 0.90-1.00 | B | 5 | | | | |
| | VR | 18/22/24 | | | | | | | |
| | | | 1.30-1.50 | D | 6 | | | | |
| | | | 1.30-1.50 | B | 7 | | | | |
| | | | | | | Grey, slightly sandy subrounded to rounded, fine to coarse flint GRAVEL with occasional subrounded flint cobbles. [Silchester Gravel] | 1.40 | 95.70 | |
| | | | | | | | (0.60) | | |
| | | | 2.00-2.10 | D | 8 | | 2.00 | 95.10 | |
| | | | 2.00-2.10 | B | 9 | Stiff, grey mottled orange brown, sandy CLAY/SILT. Laminae are closely spaced up to 7mm of grey brown sand. Occasional lenses up to 20mm of possibly manganese and or iron staining. | (0.10) | | |
| | | | | | | | 2.10 | 95.00 | |

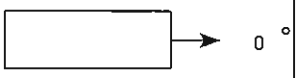
| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1005SW** |
| Surface Dimensions | 3.20m x 0.65m | | Coordinates 2728.8 E |
| Date Excavated Start | 04/04/2007 | 0 ° | (Local Grid) 1388.6 N |
| End | 04/04/2007 | | Ground Level 96.00 m OD |
| Logged by CM 04/04/2007 | Compiled by js 05/04/2007 | Checked by | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | MADE GROUND. Dark brown organic sandy clay with rootlets. | (0.10) 0.10 | 95.90 | |
| | | | 0.20 | CDKV | 1 | MADE GROUND: Brown slightly gravelly slightly cobbly, slightly sandy clay. Gravel is subangular to subrounded fine to coarse flint, with flint cobbles and fragments of brick. | (0.30) | | |
| | | | 0.20 | D | 2 | | 0.40 | 95.60 | |
| 0.80 | HV | 18/20/18 | 0.80 | D | 3 | Brown, slightly gravelly sandy CLAY with silty texture. Gravel is subangular to subrounded, fine to coarse flint. | (0.80) | | |
| | | | 0.80 | B | 4 | | 1.20 | 94.80 | |
| | | | 1.30 | D | 5 | Grey and brown clayey subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | | | |
| | | | 1.30 | B | 6 | | (0.80) | | |
| | | | | | | | 2.00 | 94.00 | |
| | | | | | | Orange brown slightly clayey sandy subangular to subrounded, fine to coarse flint GRAVEL. [Silchester Gravel] | | | |
| | | | 2.50 | D | 7 | At 2.50m; clay absent, slightly silty. | | | |
| | | | 2.50 | B | 8 | | (2.30) | | |
| | | | 3.50 | D | 9 | | | | |
| | | | 4.00 | CDKV | 10 | | | | |
| | | | | | | End of Trial Pit | 4.30 | 91.70 | |
| 0.80 | HV | 18/20/18 | 0.80 | D | 3 | silty texture. Gravel is subangular to subrounded, fine to coarse flint. | (0.80) | | |
| | | | 0.80 | B | 4 | | 1.20 | 94.80 | |
| | | | 1.30 | D | 5 | Grey and brown clayey subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | | | |
| | | | 1.30 | B | 6 | | (0.80) | | |
| | | | | | | | 2.00 | 94.00 | |
| | | | | | | Orange brown slightly clayey sandy subangular to subrounded, fine to coarse flint GRAVEL. [Silchester Gravel] | | | |

Method of Excavation CASE 590SM
Surface Dimensions 0.65m x 2.50m
Date Excavated Start 29/03/2007
End 29/03/2007

Logged by CM 29/03/2007
Compiled by rl 30/03/2007
Checked by

Plan




# TRIAL PIT No. TP1006SW

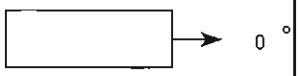
Coordinates 2660.6 E
(Local Grid) 1471.1 N
Ground Level 100.55 m OD

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | TOPSOIL - Dark brown organic silty gravelly SAND with rootlets. | (0.10) 0.10 | 100.45 | |
| | | | 0.30 | D | 1 | Brown slightly organic slightly silty SAND and subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | (0.40) | | |
| | | | 0.30 | B | 2 | | | | |
| | | | 0.30 | CDKV | 3 | | 0.50 | 100.05 | |
| | | | | | | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | | | |
| | | | 1.00 | D | 4 | | | | |
| | | | 1.00 | B | 5 | | (1.40) | | |
| | | | 1.80 | CDKV | 6 | | | | |
| | | | | | | | 1.90 | 98.65 | |
| | | | 2.00 | D | 7 | Grey clayey subangular to subrounded fine to coarse flint GRAVEL with occasional brown staining. [Silchester Gravel] | (0.10) 2.00 | 98.55 | |
| | | | | | | End of Trial Pit | | | |
| | | | | | | [Silchester Gravel] | | | |
| | | | 1.00 | D | 4 | | | | |
| | | | 1.00 | B | 5 | | (1.40) | | |
| | | | 1.80 | CDKV | 6 | | | | |
| | | | | | | | 1.90 | 98.65 | |
| | | | 2.00 | D | 7 | Grey clayey subangular to subrounded fine to coarse flint GRAVEL with occasional brown staining. [Silchester Gravel] | (0.10) 2.00 | 98.55 | |
| | | | | | | End of Trial Pit | | | |

Method of Excavation CASE 590SM
Surface Dimensions 0.70m x 2.15m
Date Excavated Start 27/03/2007
End 27/03/2007

Logged by CM 27/03/2007
Compiled by mbd 28/03/2007
Checked by

Plan



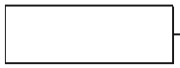

# TRIAL PIT No. TP1007SW

Coordinates 2678.3 E
(Local Grid) 1542.4 N
Ground Level 100.10 m OD

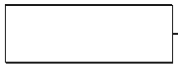
| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | TOPSOIL - Dark brown organic silty sandy GRAVEL with rootlets. | (0.25) | | |
| | | | 0.30 | CDKV | 1 | | 0.25 | 99.85 | |
| | | | 0.50 | D | 2 | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | | | |
| | | | 0.50 | B | 3 | | | | |
| | | | | | | | (1.65) | | |
| | | | 1.50 | D | 4 | | | | |
| | | | 2.00 | D | 5 | | 1.90 | 98.20 | |
| | | | 2.00 | CDKV | 6 | Grey mottled brown clayey sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | (0.20) | | |
| | | | | | | | 2.10 | 98.00 | |
| | | | | | | End of Trial Pit | | | |
| | | | | | | | (1.65) | | |
| | | | 1.50 | D | 4 | | | | |
| | | | 2.00 | D | 5 | | 1.90 | 98.20 | |
| | | | 2.00 | CDKV | 6 | Grey mottled brown clayey sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | (0.20) | | |
| | | | | | | | 2.10 | 98.00 | |
| | | | | | | End of Trial Pit | | | |

| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | TRIAL PIT No. TP1008 |
| Surface Dimensions | 0.30m x 3.00m | | Coordinates 2696.3 E |
| Date Excavated Start | 27/03/2007 | → 0 ° | (Local Grid) 1564.2 N |
| End | 27/03/2007 | | Ground Level 99.75 m OD |
| Logged by: CM 27/03/2007 | Compiled by: mbd 28/03/2007 | Checked by: | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | MADE GROUND. Dark brown organic silty gravelly sand, with rootlets and rare bricks. Gravel is subangular to subrounded fine to coarse. | (0.15) 0.15 | 99.60 | |
| | | | 0.50 | CDKV | 1 | MADE GROUND. Brown very clayey sandy gravel. Gravel is subangular to subrounded fine to coarse of flint, rare brick and tarmacadam. | | | |
| | | | 0.50 | D | 2 | | | | |
| | | | 0.50 | B | 3 | | | | |
| | | | | | | | (1.35) | | |
| | | | | | | | 1.50 | 98.25 | |
| | | | | | | Light grey slightly clayey subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | | | |
| | | | 1.80 | B | 4 | | | | |
| | | | 1.80 | D | 5 | | | | |
| | | | | | | | (1.50) | | |
| | | | 2.50 | CDKV | 6 | | | | |
| | | | 2.50 | W | 7 | | | | |
| | | | | | | | 3.00 | 96.75 | |
| | | | | | | End of Trial Pit | | | |
| | | | | | | | (1.35) | | |
| | | | | | | | 1.50 | 98.25 | |
| | | | | | | Light grey slightly clayey subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | | | |
| | | | 1.80 | B | 4 | | | | |
| | | | 1.80 | D | 5 | | | | |
| | | | | | | | (1.50) | | |

| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1009** |
| Surface Dimensions | 0.60m x 2.80m |  | Coordinates 2733.8 E |
| Date Excavated Start | 21/03/2007 | | (Local Grid) 1554.3 N |
| End | 21/03/2007 | | Ground Level 99.85 m OD |
| Logged by CM 21/03/2007 | Compiled by rl 22/03/2007 | Checked by | |

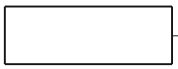
| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.10 | CDKV | 1 | MADE GROUND: Dark brown organic very gravelly sand with rootlets. Rare fragments <200mm of tarmacadam. | (0.30) | | |
| | | | | | | | 0.30 | 99.55 | |
| | | | 0.50 | B | 2 | MADE/DISTURBED GROUND: Brown organic sandy subangular to subrounded fine to coarse flint GRAVEL. Rare rootlets. Rare tarmacadam fragments. | (0.60) | | |
| | | | | | | | 0.90 | 98.95 | |
| | | | 1.00 | B | 4 | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL. At top; slightly silty. [Silchester Gravel] | (0.80) | | |
| | | | | | | | 1.70 | 98.15 | |
| | | | 2.00 | B | 5 | Light grey slightly clayey slightly sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] At 2.00m; locally slightly silty. | (0.70) | | |
| | | | 2.50 | CDKV | 6 | | 2.40 | 97.45 | |
| | | | 2.50 | B | 7 | Orange brown mottled blue grey slightly clayey fine SAND. [Silchester Gravel] | (0.20) | | |
| | | | | | | | 2.60 | 97.25 | |
| | | | | | | End of Trial Pit | | | |
| | | | 1.00 | B | 4 | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL. At top; slightly silty. [Silchester Gravel] | 0.90 | 98.95 | |
| | | | | | | | (0.80) | | |
| | | | | | | | 1.70 | 98.15 | |
| | | | 2.00 | B | 5 | Light grey slightly clayey slightly sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] At 2.00m; locally slightly silty. | (0.70) | | |

| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP101OSW** |
| Surface Dimensions | 0.65m x 2.70m |  | Coordinates 2779.4 E |
| Date Excavated Start | 05/04/2007 | | (Local Grid) 1542.1 N |
| End | 05/04/2007 | | Ground Level 99.60 m OD |
| Logged by: CM 05/04/2007 | Compiled by: js 05/04/2007 | Checked by: | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.20 | D | 1 | Dark brown organic silty sandy sub angular to rounded, fine to coarse GRAVEL with rootlets. | (0.40) | | |
| | | | 0.50 | CDKV | 2 | Orange brown sandy sub angular to sub rounded, fine to coarse flint GRAVEL. At top; slightly silty. [Silchester Gravel] | 0.40 | 99.20 | |
| | | | 0.50 | D | 3 | | | | |
| | | | 0.50 | B | 4 | | (1.00) | | |
| | | | 1.50 | CDKV | 5 | Grey mottled brown slightly clayey sandy, sub angular to sub rounded, fine to coarse flint GRAVEL. [Silchester Gravel] | 1.40 (0.10) | 98.20 | |
| | | | 1.50 | D | 6 | | 1.50 | 98.10 | |
| | | | | | | End of Trial Pit | | | |
| | | | | | | [Silchester Gravel] | (1.00) | | |
| | | | 1.50 | CDKV | 5 | Grey mottled brown slightly clayey sandy, sub angular to sub rounded, fine to coarse flint GRAVEL. [Silchester Gravel] | 1.40 (0.10) | 98.20 | |
| | | | 1.50 | D | 6 | | 1.50 | 98.10 | |
| | | | | | | End of Trial Pit | | | |

| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1011** |
| Surface Dimensions | 0.60m x 3.00m | | Coordinates 2809.9 E |
| Date Excavated Start | 23/03/2007 | | (Local Grid) 1523.9 N |
| End | 23/03/2007 | 0 ° | Ground Level 99.55 m OD |
| Logged by CM 23/03/2007 | Compiled by cm 23/03/2007 | Checked by | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.10 | D | 1 | TOPSOIL - Dark brown, organic, silty, gravelly SAND with rootlets and rare flint cobbles. | (0.20) 0.20 | 99.35 | |
| | | | 0.50 | D | 2 | Orange brown, slightly silty, sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | | | |
| | | | 0.50 | B | 3 | | | | |
| | | | 0.50 | CDKV | 4 | | (0.90) | | |
| | | | | | | Grey brown, slightly clayey, sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | 1.10 | 98.45 | |
| | | | 1.50 | D | 5 | | | | |
| | | | 1.50 | B | 6 | | (1.40) | | |
| | | | 2.20 | D | 7 | | | | |
| | | | 2.20 | CDKV | 8 | | | | |
| | | | 2.20 | W | 9 | | | | |
| | | | | | | End of Trial Pit | 2.50 | 97.05 | |
| | | | | | | Grey brown, slightly clayey, sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | 1.10 | 98.45 | |
| | | | 1.50 | D | 5 | | | | |
| | | | 1.50 | B | 6 | | (1.40) | | |
| | | | 2.20 | D | 7 | | | | |
| | | | 2.20 | CDKV | 8 | | | | |
| | | | 2.20 | W | 9 | | | | |

| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1012** |
| Surface Dimensions | 0.60m x 3.00m |  | Coordinates 2856.3 E |
| Date Excavated Start | 27/03/2007 | | (Local Grid) 1515.8 N |
| End | 27/03/2007 | | Ground Level 99.70 m OD |
| Logged by CM 27/03/2007 | Compiled by mbd 27/03/2007 | Checked by | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.20 | CDKV | 1 | Dark brown organic silty gravelly SAND, with rootlets. Gravel is subangular to subrounded fine to coarse flint. | (0.30) | | |
| | | | 0.20 | D | 2 | | 0.30 | 99.40 | |
| | | | | | | Brown sandy subangular to subrounded fine to coarse flint GRAVEL, with rare flint cobbles. [Silchester Gravel] | (0.85) | | |
| | | | 1.00 | D | 3 | | | | |
| | | | 1.00 | B | 4 | | 1.15 | 98.55 | |
| | | | | | | Grey with brown mottled clayey sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | (0.45) | | |
| | | | 1.40 | D | 5 | | | | |
| | | | 1.40 | B | 6 | | 1.60 | 98.10 | |
| | | | | | | Grey and brown mottled sandy CLAY, with grey sand lenses up to 300mm long. | (1.40) | | |
| | | | 2.50 | D | 7 | At 2.50m; rare roots. | | | |
| | | | 2.50 | B | 8 | | | | |
| | | | 3.00 | CDKV | 9 | | 3.00 | 96.70 | |
| | | | | | | End of Trial Pit | | | |
| | | | | | | | (D.85) | | |
| | | | 1.00 | D | 3 | | | | |
| | | | 1.00 | B | 4 | | 1.15 | 98.55 | |
| | | | | | | Grey with brown mottled clayey sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | (0.45) | | |
| | | | 1.40 | D | 5 | | | | |
| | | | 1.40 | B | 6 | | 1.60 | 98.10 | |
| | | | | | | Grey and brown mottled sandy CLAY, with grey sand lenses up to 300mm long. | (1.40) | | |

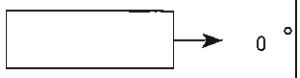
| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1013** |
| Surface Dimensions | 0.60m x 3.00m | | Coordinates 2839.3 E |
| Date Excavated Start | 27/03/2007 | → 0 ° | (Local Grid) 1503.6 N |
| End | 27/03/2007 | | Ground Level 99.70 m OD |
| Logged by: CM 27/03/2007 | Compiled by: mbd 27/03/2007 | Checked by: | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.20 | CDKV | 1 | MADE GROUND: Dark brown organic silty gravelly sand, with rootlets and pottery fragments. | (0.30) | | |
| | | | 0.20 | D | 2 | | 0.30 | 99.40 | |
| | | | | | | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL, with occasional flint cobbles. [Silchester Gravel] | | | |
| | | | 1.00 | D | 3 | | | | |
| | | | 1.00 | B | 4 | | | | |
| | | | | | | | (2.10) | | |
| | | | 2.00 | D | 5 | | | | |
| | | | | | | | 2.40 | 97.30 | |
| | | | | | | Grey mottled brown clayey sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | (0.10) | | |
| | | | 2.60 | B | 6 | | 2.50 | 97.20 | |
| | | | 2.60 | D | 7 | | | | |
| | | | 2.60 | CDKV | 8 | Grey mottled brown sandy CLAY with orange brown sand lenses. Sand is fine and medium. | (0.50) | | |
| | | | | | | | 3.00 | 96.70 | |
| | | | | | | End of Trial Pit | | | |
| | | | 1.00 | D | 3 | | | | |
| | | | 1.00 | B | 4 | | | | |
| | | | | | | | (2.10) | | |
| | | | 2.00 | D | 5 | | | | |

Method of Excavation CASE 590SM
Surface Dimensions 0.60m x 3.00m
Date Excavated Start 27/03/2007
End 27/03/2007

Logged by CM 27/03/2007
Compiled by mbd 27/03/2007
Checked by

Plan




# TRIAL PIT No. TP1014

Coordinates 2867.8 E
(Local Grid) 1486.7 N
Ground Level 99.65 m OD

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.20 | CDKV | 1 | MADE GROUND. Brown organic silty gravelly sand, with rootlets. Gravel is subangular to subrounded fine to coarse of flint, with occasional brick and tarmacadam fragments. | (0.28) | | |
| | | | 0.20 | D | 2 | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | 0.28 | 99.37 | |
| | | | 0.80 | D | 3 | At 0.80m; silty. | | | |
| | | | 0.80 | B | 4 | | (1.12) | | |
| | | | | | | Blue grey mottled brown sandy CLAY, with rare gravel. Sand is fine and medium. | 1.40 | 98.25 | |
| | | | 1.80 | D | 5 | At 1.80m; locally with silty texture. | | | |
| | | | 1.80 | B | 6 | | (1.60) | | |
| | | | 2.80 | D | 7 | | | | |
| | | | 2.80 | CDKV | 8 | | | | |
| | | | | | | End of Trial Pit | 3.00 | 96.65 | |
| | | | 0.80 | D | 3 | At 0.80m; silty. | | | |
| | | | 0.80 | B | 4 | | (1.12) | | |
| | | | | | | Blue grey mottled brown sandy CLAY, with rare gravel. Sand is fine and medium. | 1.40 | 98.25 | |
| | | | 1.80 | D | 5 | At 1.80m; locally with silty texture. | | | |
| | | | 1.80 | B | 6 | | (1.60) | | |

| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1015** |
| Surface Dimensions | 0.60m x 3.00m | | Coordinates 2844.4 E |
| Date Excavated Start | 27/03/2007 | → 0 ° | (Local Grid) 1481.4 N |
| End | 27/03/2007 | | Ground Level 99.85 m OD |
| Logged by CM 27/03/2007 | Compiled by mbd 27/03/2007 | Checked by | |

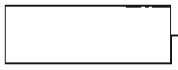
| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.20 | CDKV | 1 | Dark brown organic silty gravelly SAND, with rootlets. Gravel is subangular to subrounded fine to coarse flint. | (0.30) | | |
| | | | 0.20 | D | 2 | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL, with rare flint cobbles. [Silchester Gravel] | 0.30 | 99.55 | |
| | | | 1.00 | D | 3 | | (1.10) | | |
| | | | 1.00 | B | 4 | | | | |
| | | | 1.50 | D | 5 | Grey mottled brown clayey sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | 1.40 | 98.45 | |
| | | | 1.50 | B | 6 | | (0.50) | | |
| | | | | | | Blue grey mottled orange brown sandy CLAY/clayey SAND, with orange sand lenses up to 300mm across. Sand is fine and medium. | 1.90 | 97.95 | |
| | | | 2.50 | D | 7 | | (1.10) | | |
| | | | 2.50 | B | 8 | | | | |
| | | | 2.50 | CDKV | 9 | | | | |
| | | | | | | End of Trial Pit | 3.00 | 96.85 | |
| | | | 1.00 | D | 3 | | (1.10) | | |
| | | | 1.00 | B | 4 | | | | |
| | | | 1.50 | D | 5 | Grey mottled brown clayey sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | 1.40 | 98.45 | |
| | | | 1.50 | B | 6 | | (0.50) | | |
| | | | | | | Blue grey mottled orange brown sandy CLAY/clayey SAND, with orange sand lenses up to 300mm across. Sand is fine and medium. | 1.90 | 97.95 | |

| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1016** |
| Surface Dimensions | 0.60m x 3.00m | | Coordinates 2861.1 E |
| Date Excavated Start | 27/03/2007 | → 0 ° | (Local Grid) 1465.6 N |
| End | 27/03/2007 | | Ground Leval 99.35 m OD |
| Logged by CM 27/03/2007 | Compiled by mbd 28/03/2007 | Checked by | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.20 | CDKV | 1 | Dark brown organic silty sandy subangular to subrounded fine to coarse flint GRAVEL, with rootlets and occasional brick fragments. Possible Made Ground. | (0.35) | | |
| | | | 0.20 | D | 2 | | 0.35 | 99.00 | |
| | | | | | | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | (1.05) | | |
| | | | 1.00 | D | 3 | | | | |
| | | | 1.00 | B | 4 | | | | |
| | | | | | | | 1.40 | 97.95 | |
| | | | 1.50 | D | 5 | Light grey mottled brown clayey subangular to subrounded fine to coarse flint GRAVEL. Clay is soft. [Silchester Gravel] | (0.35) | | |
| | | | 1.50 | B | 6 | | 1.75 | 97.60 | |
| | | | | | | Light grey mottled brown sandy CLAY, with occasional sand lenses up to 300mm long. Sand is fine. | (1.25) | | |
| | | | 2.50 | D | 7 | | | | |
| | | | 2.50 | B | 8 | | | | |
| | | | 3.00 | CDKV | 9 | | 3.00 | 96.35 | |
| | | | | | | End of Trial Pit | | | |
| | | | 1.00 | D | 3 | | (1.05) | | |
| | | | 1.00 | B | 4 | | | | |
| | | | | | | | 1.40 | 97.95 | |
| | | | 1.50 | D | 5 | Light grey mottled brown clayey subangular to subrounded fine to coarse flint GRAVEL. Clay is soft. [Silchester Gravel] | (0.35) | | |
| | | | 1.50 | B | 6 | | 1.75 | 97.60 | |
| | | | | | | Light grey mottled brown sandy CLAY, with occasional sand lenses up to 300mm long. Sand is fine. | (1.25) | | |

| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1017** |
| Surface Dimensions | 0.60m x 3.00m | | |
| Date Excavated Start | 22/03/2007 | | Coordinates 2636.4 E |
| End | 22/03/2007 | 0 ° | (Local Grid) 1537.7 N |
| | | | Ground Level 100.30 m OD |
| Logged by CM 22/03/2007 | Compiled by mdns 23/03/2007 | Checked by | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | TOPSOIL - Dark brown organic gravelly SAND with rootlets. | (0.10) 0.10 | 100.20 | |
| | | | 0.30 | D | 1 | Brown slightly organic sandy subangular to subrounded fine to coarse flint GRAVEL. | (0.35) | | |
| | | | 0.30 | B | 2 | | | | |
| | | | 0.30 | CDKV | 3 | | 0.45 | 99.85 | |
| | | | 0.50 | D | 4 | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL [Silchester Gravel] | (0.15) | | |
| | | | 0.50 | B | 5 | | 0.60 | 99.70 | |
| | | | | | | Brown slightly cobbly sandy subangular to subrounded fine to coarse flint GRAVEL. Cobbles are subrounded flint. Occasional orange stained areas. [Silchester Gravel] | | | |
| | | | 1.50 | B | 6 | | | | |
| | | | | | | | (2.40) | | |
| | | | 2.00 | B | 7 | | | | |
| | | | 2.00 | CDKV | 8 | | | | |
| | | | | | | End of Trial Pit | 3.00 | 97.30 | |
| | | | | | | Brown slightly cobbly sandy subangular to subrounded fine to coarse flint GRAVEL. Cobbles are subrounded flint. Occasional orange stained areas. [Silchester Gravel] | | | |
| | | | 1.50 | B | 6 | | | | |
| | | | | | | | (2.40) | | |
| | | | 2.00 | B | 7 | | | | |
| | | | 2.00 | CDKV | 8 | | | | |

| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1018** |
| Surface Dimensions | 0.60m x 3.00m |  | Coordinates 2608.0 E |
| Date Excavated Start | 22/03/2007 | | (Local Grid) 1553.2 N |
| End | 22/03/2007 | | Ground Level 100.45 m OD |
| Logged by CM 22/03/2007 | Compiled by mdns 23/03/2007 | Checked by | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | TOPSOIL - Brown organic gravelly SAND with rootlets | (0.10) 0.10 | 100.35 | |
| | | | 0.50 | CDKV | 1 | Brown slightly organic silty sandy subangular to subrounded fine to coarse flint GRAVEL with occasional flint cobbles. | (0.65) | | |
| | | | 0.50 | B | 2 | | | | |
| | | | 0.50 | D | 3 | | | | |
| | | | | | | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | 0.75 | 99.70 | |
| | | | 1.50 | B | 4 | | | | |
| | | | 1.50 | D | 5 | | (1.95) | | |
| | | | 2.00 | CDKV | 10 | | | | |
| | | | 2.50 | D | 6 | | | | |
| | | | | | | | 2.70 | 97.75 | |
| | | | 2.80 | D | 7 | Orange brown and blue grey mottled CLAY with orange sandy lenses up to 200mm long. Sand is fine. | (0.20) | | |
| | | | 2.80 | CDKV | 9 | | 2.90 | 97.55 | |
| | | | | | | End of Trial Pit | | | |
| | | | | | | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL. [Silchester Gravel] | 0.75 | 99.70 | |
| | | | 1.50 | B | 4 | | | | |
| | | | 1.50 | D | 5 | | (1.95) | | |
| | | | 2.00 | CDKV | 10 | | | | |

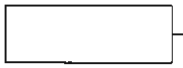
| | | | |
|---|---|---|---|
| Method of Excavation | CASE 590SM | Plan | **TRIAL PIT No. TP1019** |
| Surface Dimensions | 0.60m x 2.80m | | Coordinates 2590.1 E |
| Date Excavated Start | 22/03/2007 | → 0 ° | (Local Grid) 1523.8 N |
| End | 22/03/2007 | | Ground Level 100.55 m OD |
| Logged by CM 22/03/2007 | Compiled by mdns 23/03/2007 | Checked by | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | MADE GROUND : Brown organic gravelly sand with rootlets. | (0.15) | | |
| | | | | | | | 0.15 | 100.40 | |
| | | | 0.20 | D | 1 | MADE GROUND : Orange brown slightly organic slightly clayey sandy subangular to subrounded fine to coarse flint gravel. | (0.10) | | |
| | | | 0.30 | CDKV | 2 | | 0.25 | 100.30 | |
| | | | 0.50 | B | 3 | MADE GROUND : Grey sandy subangular to subrounded fine to coarse flint and rare tarmacadam gravel with a 10mm layer of black staining at the base of the stratum. | (0.55) | | |
| | | | 0.50 | D | 4 | | | | |
| | | | | | | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL. Sand is fine and medium. [Silchester Gravel] | 0.80 | 99.75 | |
| | | | 1.50 | B | 5 | At 1.50m; silty. | | | |
| | | | 1.50 | D | 6 | | | | |
| | | | | | | | (2.00) | | |
| | | | 2.50 | D | 7 | | | | |
| | | | 2.80 | CDKV | 8 | | | | |
| | | | | | | End of Trial Pit | 2.80 | 97.75 | |
| | | | | | | Orange brown sandy subangular to subrounded fine to coarse flint GRAVEL. Sand is fine and medium. [Silchester Gravel] | 0.80 | 99.75 | |
| | | | 1.50 | B | 5 | At 1.50m; silty. | | | |
| | | | 1.50 | D | 6 | | | | |
| | | | | | | | (2.00) | | |

Method of Excavation CASE 590SM
Surface Dimensions 0.60m x 3.00m
Date Excavated Start 22/03/2007
End 22/03/2007

Logged by CM 22/03/2007
Compiled by mdns 23/03/2007
Checked by

Plan




# TRIAL PIT No. TP1020

Coordinates 2636.6 E
(Local Grid) 1522.7 N
Ground Level 100.30 m OD

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | Dark brown organic silty sandy subangular to subrounded fine to coarse flint GRAVEL. | (0.35) | | |
| | | | 0.50 | CDKV | 1 | | 0.35 | 99.95 | |
| | | | 0.50 | D | 2 | Orange brown slightly silty sandy cobbley subangular to subrounded fine to coarse flint GRAVEL. Cobbles are subrounded flint. [Silchester Gravel] | (0.45) | | |
| | | | 0.50 | B | 3 | | | | |
| | | | | | | | 0.80 | 99.50 | |
| | | | | | | Orange brown slightly cobbly sandy subangular to subrounded fine to coarse flint GRAVEL. Cobbles are subrounded flint. Occasional pockets up to 0.50m diameter of dark brown slightly sandy gravel. [Silchester Gravel] | (1.30) | | |
| | | | 1.50 | D | 4 | | | | |
| | | | 1.50 | B | 5 | | | | |
| | | | | | | | 2.10 | 98.20 | |
| | | | | | | Light grey blue with occasional orange brown mottled SAND with soft grey clay lenses and partings. Sand is fine and medium. | (0.90) | | |
| | | | 2.50 | D | 6 | | | | |
| | | | 2.50 | B | 7 | | | | |
| | | | 2.50 | CDKV | 8 | | | | |
| | | | | | | End of Trial Pit | 3.00 | 97.30 | |
| | | | | | | Orange brown slightly cobbly sandy subangular to subrounded fine to coarse flint GRAVEL. Cobbles are subrounded flint. Occasional pockets up to 0.50m diameter of dark brown slightly sandy gravel. [Silchester Gravel] | 0.80 | 99.50 | |
| | | | 1.50 | D | 4 | | (1.30) | | |
| | | | 1.50 | B | 5 | | | | |
| | | | | | | Light grey blue with occasional orange brown mottled SAND with soft grey clay lenses and partings. Sand is fine and medium. | 2.10 | 98.20 | |

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 200mm to 2.50m, 150mm to 20.00m | Casing Diameter 200mm to 2.50m, 150mm to 10.00m | **BOREHOLE No. 0900** |
| Equipment Dando 2000 | | | Coordinates 459775.744 E (National Grid) 164376.245 N |
| Dates Drilled Start 06/05/2004 End 10/05/2004 | Logged by EDHC 06/05/2004 | Compiled by pb 13/05/2004 | Checked by 19/10/04 |
| | | | Ground Level 100.45 m OD |
| | | | Location Co ords - E 2646.792, N 1498.712 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 06/05 | | | 0.00 | 0.20 | B | 3 | | | TOPSOIL | (0.20) | | |
| | | | 0.00 | | PID | | 0 | | | 0.20 | 100.25 | |
| | | | 0.00 | | CD | 4 | | | Probably MADE GROUND: Dark grey brown slightly clayey sandy gravel. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | | | |
| | | | 0.00 | | K | 5 | | | | | | |
| | | | 0.00 | | VL | 6 | | | | (0.80) | | |
| | | | 0.20 | 0.55 | B | 7 | | | | | | |
| | | | 0.95 | 1.00 | B | 8 | | | | 1.00 | 99.45 | |
| | | | 1.00 | | PID | | 0 | | Dense grey brown, white and dark grey slightly silty, slightly sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. | | | |
| | | | 1.00 | | CD | 9 | | | | | | |
| | | | 1.00 | | K | 10 | | | | (0.80) | | |
| | Nil | Dry | 1.20 | 1.65 | | | C43 | | | | | |
| | | | 1.00 | | VL | 11 | | | | | | |
| | | | 1.00 | 1.20 | B | 12 | | | | | | |
| | | | 1.20 | 1.70 | B | 13 | | | | | | |
| | | | 1.80 | | D | 14 | | | | 1.80 | 98.65 | |
| | | | 1.80 | 2.20 | B | 15 | | | Firm laminated orange and light grey, locally stained dark orange brown, slightly sandy CLAY with lenses and laminae of orange, yellow brown and light grey sand. Sand is fine to coarse. (BAGSHOT FORMATION) | | | |
| | | | 2.00 | | PID | | 0 | | | | | |
| | | | 2.00 | | V | | | | | | | |
| | | | 2.00 | | CD | 18 | | | | | | |
| | | | 2.00 | | K | 19 | | | | | | |
| | | | 2.00 | | VL | 20 | | | | (1.80) | | |
| | 2.20 | Dry | 2.20 | 2.65 | U | 21 | | 65/ 450 | | | | |
| | | | 2.65 | | D | 22 | | | | | | |
| | 2.20 | Dry | 2.70 | 3.15 | | | S17 | | | | | |
| | | | 2.70 | 3.15 | D | 23 | | | | | | |
| | | | 2.70 | 3.20 | B | 24 | | | | | | |
| | | | 3.00 | | PID | | 0 | | | | | |
| | | | 3.00 | | CD | 25 | | | | 3.60 | 96.85 | |
| | | | 3.00 | | K | 26 | | | Firm to stiff thinly laminated dark grey CLAY with thin laminae and lenses of light grey sand. Sand is fine to medium. Rare coal fragments up to 30mm. (TRANSITIONAL ZONE) | | | |
| | | | 3.00 | | VL | 27 | | | | | | |
| | 3.00 | Dry | 3.20 | 3.65 | U | 28 | | 100/ 450 | | | | |
| | | | 3.65 | | D | 29 | | | | | | |
| | | | 3.80 | 3.25 | D | 30 | | | | | | |
| | 3.80 | Dry | 3.80 | 4.25 | | | S14 | | | | | |
| | | | 3.80 | 4.30 | B | 31 | | | | | | |
| | | | 4.00 | | PID | | 0 | | | (2.15) | | |
| | | | 4.00 | | V | 33 | | | | | | |
| | | | 4.00 | | CD | 34 | | | | | | |
| | | | 4.00 | | K | 35 | | | | | | |
| | | | 4.00 | | VL | 36 | | | | | | |
| | 4.00 | Dry | 4.30 | 4.75 | U | 37 | | 65/ 450 | | | | |
| | | | 4.75 | | D | 38 | | | | | | |
| | | | 4.80 | 5.25 | D | 39 | | | | | | |
| | 4.00 | Dry | 4.80 | 5.25 | | | S17 | | | | | |
| | | | 4.80 | 5.30 | B | 40 | | | | 5.75 | 94.70 | |
| | | | 5.00 | | PID | | 0 | | Firm fissile dark grey and dark brown grey mottled locally slightly sandy CLAY. Sand is mainly fine. Rare sand lenses up to 10mm. (TRANSITIONAL ZONE) | | | |
| | | | 5.00 | | CD | 41 | | | | | | |
| | | | 5.00 | | K | 42 | | | | | | |
| | | | 5.00 | | VL | 43 | | | | | | |
| | 5.30 | Dry | 5.30 | 5.75 | U | 44 | | 120/ 450 | | | | |
| | | | 5.75 | | D | 45 | | | | | | |
| | | | 5.80 | 6.25 | D | 46 | | | | | | |
| | 5.30 | Dry | 5.80 | 6.25 | | | S19 | | | | | |
| | | | 6.00 | | V | 48 | | | | | | |
| | | | 6.30 | 6.80 | B | 49 | | | | | | |
| | 6.50 | Dry | 6.80 | 7.25 | U | 50 | | 110/ 450 | | | | |
| | | | 7.25 | | D | 51 | | | | (3.00) | | |
| | | | 7.30 | 7.75 | D | 52 | | | | | | |
| | 6.50 | Dry | 7.30 | 7.75 | | | S22 | | | | | |
| | | | 7.90 | | D | 53 | | | Below 7.90m: Sand is dark green, fine to coarse. With occasional lenses up to 3mm of dark green clay. | | | |
| | | | 7.90 | 8.30 | B | 54 | | | | | | |
| | | | 8.00 | | V | | | | | | | |
| | 8.10 | Dry | 8.30 | 8.75 | U | 57 | | 150/ 450 | | | | |
| | | | 8.75 | | D | 58 | | | | 8.75 | 91.70 | |
| 06/05 | 8.10 | Dry | 8.80 | 9.25 | D | 59 | | | Stiff becoming very stiff with depth, dark brown grey sandy CLAY, grading locally to silty sand. With occasional lenses of medium dense and dense grey sand. Sand is fine and medium. Rare coal fragments up to 20mm. (TRANSITIONAL ZONE) | | | |
| | | | 8.80 | 9.25 | | | S29 | | | | | |
| 10/05 | 8.10 | Dry | 9.00 | 9.50 | B | 60 | | | | | | |
| | 9.00 | dry | 9.50 | 9.95 | U | 61 | | 110/ 450 | | | | |
| | | | 9.95 | | D | 62 | | | | | | |

**Remarks** (See notes & keysheets)

1. Groundwater was apparent during boring at 11.00m.
2. An amount of water was added to facilitate boring and to maintain a positive hydrostatic head in granular strata from 11.00m to 20.00m.
3. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
4. The borehole was advanced by chiselling methods from 1.60m to 1.70m (30 mins).
5. Aquifer protection was carried out by sealing the base of the hole at a depth of 2.50m continuing in reduced diameter casing.

Scale 1:50

FUGRO

Project: AWE ALDERMASTON, NEW HR FACILITY GI, Golders Associates (UK) Limited, EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0900 (1 of 4)

301/04

| Drilling Method | Cable Percussion | Borehole Diameter | Casing Diameter | **BOREHOLE No.** | **0900** |
|---|---|---|---|---|---|
| Equipment | Dando 2000 | 200mm to 2.50m<br>150mm to 20.00m | 200mm to 2.50m<br>150mm to 10.00m | Coordinates (National Grid) | 459775.744 E<br>164376.245 N |
| Dates Drilled | Start 06/05/2004<br>End 10/05/2004 | Logged by EDHC 06/05/2004 | Compiled by pb 13/05/2004 | Ground Level | 100.45 m OD |
| | | | Checked by DPM 19/10/04 | Location | Co ords - E 2646.792, N 1498.712 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9.00 | Dry | 10.00 | 10.45 | | | S31 | | | | | |
| | | | 10.00 | 10.45 | D | 63 | | | | | | |
| | | | 10.00 | | V | 65 | | | | | | |
| | | | 10.50 | 11.00 | B | 66 | | | | | | |
| | 10.00 | Dry | 11.00 | 11.50 | U#B | 67 | | | | | | |
| | | | 11.50 | 11.95 | D | 68 | | | | | | |
| | 10.00 | Dry | 11.50 | 11.95 | | | S27 | | | | | |
| | | | 12.00 | | V | | | | | | | |
| | | | 12.00 | 12.50 | B | 71 | | | | | | |
| | 10.00 | Dry | 12.50 | 12.95 | U | 72 | | 140/ 450 | Below 12.45m: With occasional lenses up to 20mm of fissile dark grey clay. | | | |
| | | | 12.95 | | D | 73 | | | | | | |
| | 10.00 | Dry | 13.00 | 13.45 | | | S29 | | | (8.75) | | |
| | | | 13.00 | 13.45 | D | 74 | | | | | | |
| | | | 13.00 | 13.50 | B | 75 | | | | | | |
| | 10.00 | Dry | 13.50 | 13.25 | U | 76 | | 150/ 450 | | | | |
| | | | 13.95 | | D | 77 | | | | | | |
| | 10.00 | Dry | 14.00 | 14.45 | | | S33 | | Below 14.00m: With rare shell fragments up to 5mm. | | | |
| | | | 14.00 | | V | | | | | | | |
| | | | 14.00 | 14.45 | D | 78 | | | | | | |
| | | | 14.50 | 15.00 | B | 81 | | | | | | |
| | 10.00 | Dry | 15.00 | 15.45 | U | 82 | | 150/ 450 | | | | |
| | | | 15.45 | | D | 83 | | | | | | |
| | 10.00 | Dry | 15.50 | 15.95 | | | S40 | | | | | |
| | | | 15.50 | 15.95 | D | 84 | | | | | | |
| | | | 16.00 | | V | | | | | | | |
| | | | 16.00 | 16.50 | B | 87 | | | | | | |
| | 10.00 | Dry | 16.50 | 16.95 | U | 88 | | 150/ 450 | | | | |
| | | | 16.90 | | D | 89 | | | | | | |
| | 10.00 | Dry | 16.95 | 17.39 | | | S50/ 285 | | | | | |
| | | | 16.95 | 17.39 | D | 90 | | | | | | |
| | | | 17.50 | 18.00 | B | 93 | | | | 17.50 | 82.95 | |
| | | | | | | | | | Very stiff, locally fissile, dark grey slightly sandy CLAY, grading locally to silty sand. Sand is fine and medium. Rare shell fragments up to 20mm. (LONDON CLAY) | | | |
| | | | 18.00 | | V | | | | | | | |
| | 10.00 | Dry | 18.00 | 18.30 | U | 94 | | 150/ 300 | | | | |
| | | | 18.30 | | D | 95 | | | | | | |
| | 10.00 | Dry | 18.35 | 18.79 | | | S50/ 290 | | | | | |
| | | | 18.35 | 18.70 | D | 96 | | | | (2.50) | | |
| | | | 19.00 | 19.50 | B | 97 | | | | | | |
| | 10.00 | Dry | 19.50 | 19.80 | U | 98 | | 150/ 300 | | | | |
| 10/05 | 10.00 | Dry | 19.80 | | D | 99 | | | | | | |
| | | | 19.85 | 20.26 | | | S50/ | | | 20.00 | 80.45 | |
| | | | | | | | | | End of Borehole | | | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

| Project | Contract No. | BAS040081 |
|---|---|---|
| AWE ALDERMASTON<br>NEW HR FACILITY GI<br>Golders Associates (UK) Limited<br>EDGE Consultants UK Ltd | Figure No. | 0900 (2 of 4) |

301/04

| Drilling Method | Cable Percussion | Borehole Diameter | Casing Diameter | BOREHOLE No. | 0900 |
|---|---|---|---|---|---|
| Equipment | Dando 2000 | 200mm to 2.50m<br>150mm to 20.00m | 200mm to 2.50m<br>150mm to 10.00m | Coordinates (National Grid) | 459775.744 E<br>164376.245 N |
| Dates Drilled | Start 06/05/2004<br>End 10/05/2004 | Logged by: EDHC 06/05/2004 | Compiled by: pb 13/05/2004 | Ground Level | 100.45 m OD |
| | | Checked by: DB 19/10/04 | | Location | Co ords - E 2646.792, N 1498.712 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10.00 | Dry | 19.85 | 20.15 | D | 100 | 260 | | | 20.00 | 80.45 | |
| | | | 20.00 | | V | 101 | | | | | | |

**Remarks**
(See notes & keysheets)

Scale 1:50

| | | | |
|---|---|---|---|
| FUGRO | Project<br>AWE ALDERMASTON<br>NEW HR FACILITY GI<br>Golders Associates (UK) Limited<br>EDGE Consultants UK Ltd | Contract No. | BAS040081 |
| | | Figure No. | 0900 (3 of 4) |

| | | |
|---|---|---|
| **Drilling Method** Cable Percussion<br>**Equipment** Dando 2000<br>**Dates Drilled** Start 06/05/2004 End 10/05/2004 | **Borehole Diameter** 200mm to 2.50m, 150mm to 20.00m<br>**Casing Diameter** 200mm to 2.50m, 150mm to 10.00m<br>**Logged by** EDHC 06/05/2004<br>**Compiled by** pb 13/05/2004<br>**Checked by** DM 19/10/04 | **BOREHOLE No. 0900**<br>**Coordinates** (National Grid) 459775.744 E, 164376.245 N<br>**Ground Level** 100.45 m OD<br>**Location** Co ords - E 2646.792, N 1498.712 |

| Description | Depth (m) | Level m OD | |
|---|---|---|---|
| Concrete | 1.00 | 99.45 | Flush lockable stopcock box cover. Pipe diameter 50mm to 15.00m. |
| Cement/Bentonite Grout | 8.00 | 92.45 | |
| Bentonite Seal | 9.00 | 91.45 | |
| Sand Filter | 15.00 | 85.45 | |
| Bentonite Seal | 16.00 | 84.45 | |
| Cement/Bentonite Grout | 20.00 | 80.45 | Base of Hole |

**Remarks**
(See notes & keysheets)

Not to Scale

FUGRO

**Project**
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0900 (4 of 4)

309/03

| | | |
|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 150mm to 20.00m; Casing Diameter 150mm to 9.00m | **BOREHOLE No. 0901** |
| Equipment Dando 2000 | | Coordinates (National Grid) 459829.123 E, 164404.606 N |
| | | Ground Level 99.95 m OD |
| Dates Drilled Start 29/04/2004 End 05/05/2004 | Logged by pb 29/04/2004; Compiled by 11/05/2004; Checked by DGA 19/05/04 | Location Co ords - E 2705.988, N 1486.485 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29/04 | | | 0.00 | | VL | 1 | | | TOPSOIL | (0.05) 0.05 | 99.90 | |
| | | | 0.00 | | PID | | 0 | | | | | |
| | | | 0.00 | | CD/K | 1 | | | MADE GROUND: Dark brown and dark grey slightly clayey, slightly sandy gravel with occasional cobbles. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint and concrete. Cobbles are of angular flint and concrete | (0.45) 0.50 | 99.45 | |
| | | | 0.00 | | V | 1 | | | | | | |
| | | | 0.05-0.50 | | B | 2 | | | | | | |
| | | | 0.50-1.20 | | B | 4 | | | | | | |
| | | | 1.00 | | CD/K | 3 | | | | | | |
| | | | 1.00 | | PID | | 0 | | | | | |
| | | | 1.00 | | VL | 3 | | | Very dense grey brown, white and dark grey slightly clayey slightly sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | | | |
| | | | 1.20-1.70 | | B | 5 | | | | | | |
| | Nil | Dry | 1.20-1.54 | | | | C50/ 190 | | | (2.00) | | |
| 29/04 | 2.20 | Added | | | | | | | | | | |
| | | | 2.00 | | V | | | | Below 2.00m: orange brown and light grey clayey gravel. | | | |
| 30/04 | 2.20 | | 2.00 | | PID | | 0 | | | | | |
| | | | 2.00 | | CD/K | 6 | | | | | | |
| | | | 2.00 | | VL | 6 | | | | | | |
| | 2.20 | Added | 2.20-2.65 | | | | C14 | | | 2.50 | 97.45 | |
| | | | 2.20-2.70 | | B | 7 | | | Firm thinly laminated grey brown CLAY with thin laminae and lenses of orange and light brown sand. Sand is mainly fine and medium. (BAGSHOT FORMATION) | | | |
| | 2.70 | Damp | 2.70-3.15 | | U | 8 | | 49/ 450 | | | | |
| | | | 3.00 | | CD/K | 11 | | | | | | |
| | | | 3.00 | | PID | | 0 | | | | | |
| | | | 3.00 | | VL | 11 | | | | (1.60) | | |
| | | | 3.15 | | D | 9 | | | | | | |
| | 2.70 | Damp | 3.20-3.65 | | | | S17 | | | | | |
| | | | 3.20-3.65 | | D | 10 | | | | | | |
| | | | 3.20-3.70 | | B | 12 | | | | | | |
| | 3.70 | Dry | 3.70-4.15 | | U | 13 | | 74/ 450 | | | | |
| | | | 4.00 | | CD/K | 16 | | | | | | |
| | | | 4.00 | | PID | | 0 | | | 4.10 | 95.85 | |
| | | | 4.00 | | VL | 16 | | | Becoming stiff to very stiff with local bands of sandy CLAY. | | | |
| | | | 4.15 | | D | 14 | | | | | | |
| | 3.70 | Dry | 4.20-4.65 | | | | S25 | | | (1.05) | | |
| | | | 4.20-4.65 | | D | 15 | | | | | | |
| | | | 4.20-4.70 | | B | 17 | | | | | | |
| | 4.70 | Dry | 4.70-5.15 | | U | 18 | | 69/ 450 | | | | |
| | | | 5.00 | | CD/K | 21 | | | | | | |
| | | | 5.00 | | PID | | 0 | | | 5.15 | 94.80 | |
| | | | 5.00 | | VL | 21 | | | Stiff thinly laminated dark grey CLAY with thin laminae of light green grey fine and medium sand. (TRANSITIONAL ZONE) | | | |
| | | | 5.15 | | D | 19 | | | | | | |
| | 4.70 | Dry | 5.20-5.65 | | | | S24 | | | | | |
| | | | 5.20-5.65 | | D | 20 | | | | | | |
| | | | 5.70-6.20 | | B | 22 | | | | (1.60) | | |
| | | | 6.00 | | V | 21 | | | | | | |
| | 4.70 | Dry | 6.30-6.75 | | U | 23 | | 94/ 400 | | | | |
| | | | 6.50 | | W | 30 | | | | | | |
| | | | 6.60 | | W | 51 | | | | | | |
| | | | 6.75 | | D | 24 | | | | 6.75 | 93.20 | |
| | | | 6.80-7.25 | | D | 25 | | | Stiff to very stiff fissile grey brown slightly sandy CLAY with occasional lenses of grey fine and medium sand. (TRANSITIONAL ZONE) | | | |
| | 4.70 | Dry | 6.80-7.25 | | | | S33 | | | (0.95) | | |
| | | | 7.30-7.70 | | B | 26 | | | | | | |
| | 4.70 | Dry | 7.70-8.15 | | U | 27 | | 120/ 400 | | 7.70 | 92.25 | |
| | | | 8.00 | | V | 29 | | | Dense dark brown grey slightly sandy CLAY. Sand is fine and medium. (TRANSITIONAL ZONE) | | | |
| | | | 8.15 | | D | 28 | | | | | | |
| | 4.70 | Dry | 8.20-8.65 | | | | S44 | | | | | |
| | | | 8.20-8.65 | | D | 29 | | | | (1.95) | | |
| | | | 8.70-9.20 | | B | 31 | | | | | | |
| 30/04 | 4.70 | Dry | | | | | | | | | | |
| 04/05 | 4.70 | 6.50 | | | | | | | | | | |
| | 9.00 | Added | 9.20-9.65 | | U | 32 | | 140/ 450 | | | | |
| | | | 9.65 | | D | 33 | | | | 9.65 | 90.30 | |
| | 9.00 | Added | 9.70-10.15 | | | | S42 | | Very stiff dark grey sandy SILT. Sand is fine to medium (TRANSITIONAL ZONE) | | | |
| | | | 9.70-10.15 | | D | 34 | | | | | | |

**Remarks** (See notes & keysheets)

1 Groundwater was encountered at 6.50m at the start of shift 04.05.2004..

2 The borehole was advanced by chiselling methods from 1.80m to 2.00m (30 mins) and 2.00m to 2.20m (30 mins) and 16.50m to 16.80m (45 mins) also 16.20m to 16.50m (45 mins).

3 Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.

4 Aquifer protection was carried out by sealing the base of the hole at a depth of 3.00m and continuing in reduced diameter casing.

Scale 1:50

FUGRO

Project: AWE ALDERMASTON, NEW HR FACILITY GI, Golders Associates (UK) Limited, EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0901 (1 of 4)

301/04

| | | |
|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 150mm to 20.00m / Casing Diameter 150mm to 9.00m | **BOREHOLE No. 0901** |
| Equipment Dando 2000 | | Coordinates 459829.123 E (National Grid) 164404.606 N |
| Dates Drilled Start 29/04/2004 End 05/05/2004 | Logged by 29/04/2004 / Compiled by pb 11/05/2004 / Checked by 19/10/04 | Ground Level 99.95 m OD Datum<br>Location Co ords - E 2705.988, N 1486.485 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10.00 | | V | | | | Between 9.65m and 10.15m: Rare lenses up to 3mm of dark green clay. | | | |
| | | | 10.20 | 10.70 | B | 35 | | | | | | |
| | 9.00 | Added | 10.70 | 11.15 | U | 36 | | 150/ 400 | | (2.35) | | |
| | | | 11.15 | | D | 37 | | | Below 11.20m: With occasional lenses of grey brown sand. | | | |
| | 9.00 | Added | 11.20 | 11.65 | | | S51 | | | | | |
| | | | 11.20 | 11.65 | D | 38 | | | | | | |
| | | | 11.70 | 12.20 | B | 39 | | | | | | |
| | | | 12.00 | | V | 38 | | | | 12.00 | 87.95 | |
| | 9.00 | Added | 12.20 | 12.65 | U | 40 | | 400/ 150 | Very stiff dark grey sandy CLAY. Sand is fine. (TRANSITIONAL ZONE) | | | |
| | | | 12.65 | | D | 41 | | | At 12.65m: 25mm pyrite nodule. | | | |
| | 9.00 | Added | 12.70 | 13.10 | | | S50/ 245 | | | | | |
| | | | 12.70 | 13.09 | D | 42 | | | | | | |
| | | | 13.20 | 13.70 | B | 43 | | | | | | |
| | 9.00 | Added | 13.70 | 14.15 | U | 44 | | 150/ 400 | | | | |
| | | | 14.00 | | V | | | | Below 14.15m: Grading locally to silty sand. | | | |
| | | | 14.15 | | D | 45 | | | | | | |
| | 9.00 | Added | 14.20 | 14.58 | | | S50/ 225 | | | | | |
| | | | 14.20 | 14.57 | D | 46 | | | At 14.70m: 60mm band of strong grey siltstone. | | | |
| | | | 14.70 | 15.20 | B | 47 | | | | | | |
| | 9.00 | Added | 15.20 | 15.65 | U | 48 | | 150/ 400 | | (6.75) | | |
| | | | 15.65 | | D | 49 | | | Below 15.70m: Rare shell fragments up to 20mm. | | | |
| | 9.00 | Added | 15.70 | 16.02 | | | S50/ 165 | | | | | |
| 05/05 | 9.00 | 6.60 | 15.70 | 16.02 | D | 50 | | | At 16.20m: Driller notes siltstone band. | | | |
| | | | 16.00 | | V | | | | | | | |
| 04/05 | 9.00 | Added | 16.20 | 16.80 | B | 52 | | | | | | |
| | 9.00 | Added | 16.80 | 17.25 | U | 53 | | 150/ 450 | | | | |
| | | | 17.25 | | D | 54 | | | | | | |
| | | | 17.30 | 17.73 | D | 55 | | | | | | |
| | 9.00 | Added | 17.30 | 17.73 | | | S50/ 280 | | | | | |
| | | | 17.80 | 18.30 | B | 56 | | | | | | |
| | | | 18.00 | | V | | | | At 18.00m: Becoming slightly clayey silty sand to base. Sand is fine. | | | |
| | 9.00 | Added | 18.30 | 18.75 | U | 57 | | 150/ 400 | | | | |
| | | | 18.75 | | D | 58 | | | | 18.75 | 81.20 | |
| | | | 18.80 | 19.19 | D | 59 | | | Very stiff dark grey locally slightly sandy CLAY with lenses of brown grey fine and medium sand. Occasional shell fragments up to 20mm. (LONDON CLAY) | | | |
| | 9.00 | Added | 18.80 | 19.19 | | | S50/ 235 | | | | | |
| | | | 19.10 | 19.50 | B | 60 | | | | | | |
| | | | 19.50 | 19.95 | U | 60 | | | At 18.75m: Becoming slightly clayey silty sand to base. Sand is fine. | (1.55) | | |
| | | | 19.50 | 20.00 | B | 61 | | | | | | |
| 05/05 | 9.00 | Added | | | | | | | | | | |
| | | | 20.00 | | V | | | | Below 20.00m: Fissured. Fissures are randomly orientated, surfaces speckled | | | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

Project
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0901 (2 of 4)

301/04

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 150mm to 20.00m | Casing Diameter 150mm to 9.00m | **BOREHOLE No. 0901** |
| Equipment Dando 2000 | | | Coordinates 459829.123 E<br>(National Grid) 164404.606 N<br>Ground Level 99.95 m OD |
| Dates Drilled Start 29/04/2004<br>End 05/05/2004 | Logged by 29/04/2004 | Compiled by pb 11/05/2004 | Checked by PLM 19/10/04<br>Location Co ords - E 2705.988, N 1486.485 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9.00 | Added | 20.00 | 20.36 | | | S50/ 210 | | white. Occasional fine to coarse gravel sized fragments of very weak claystone. | | | |
| | | | 20.00 | 20.36 | D | 62 | | | End of Borehole | 20.30 | 79.65 | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

Project
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0901 (3 of 4)

301/04

| | | |
|---|---|---|
| Drilling Method Cable Percussion<br>Equipment Dando 2000<br>Dates Drilled Start 29/04/2004<br>End 05/05/2004 | Borehole Diameter 150mm to 20.00m<br>Casing Diameter 150mm to 9.00m<br>Logged by 29/04/2004<br>Compiled by pb 11/05/2004<br>Checked by DBM 19/10/04 | **BOREHOLE No. 0901**<br>Coordinates 459829.123 E<br>(National Grid) 164404.606 N<br>Ground Level 99.95 m OD<br>Location<br>Co ords - E 2705.988, N 1486.485 |

| Description | Depth (m) | Level m OD | |
|---|---|---|---|
| Concrete | 0.50 | 99.45 | Flush lockable stopcock box cover.<br>Pipe diameter 50mm to 2.50m. |
| Bentonite Seal | 1.50 | 98.45 | |
| Gravel Filter | 2.50 | 97.45 | |
| Bentonite Seal | 3.50 | 96.45 | |
| Cement/Bentonite Grout | 20.00 | 79.95 | Base of Hole |

**Remarks**
(See notes & keysheets)

Not to Scale

FUGRO

**Project**
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0901 (4 of 4)

309/03

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion | **Borehole Diameter** 200mm to 4.20m, 150mm to 20.00m | **Casing Diameter** 200mm to 4.20m, 150mm to 10.40m | **BOREHOLE No.** 0902 |
| **Equipment** Dando 2000 | | | **Coordinates** 459879.060 E; **(National Grid)** 164422.894 N; **Ground Level** 100.25 m OD |
| **Dates Drilled** Start 21/04/2004, End 22/04/2004 | **Logged by** EDHC 21/04/2004; **Compiled by** pb 30/04/2004; **Checked by** DBM 19/10/04 | | **Location** Co ords - E 2756.106, N 1468.699 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21/04 | | | 0.00 | | V | | | | TOPSOIL | (0.10) | | |
| | | | 0.00 | | PID | | 0 | | | 0.10 | 100.15 | |
| | | | 0.00 | | CD/K | 1 | | | Dense to very dense brown slightly clayey, slightly sandy GRAVEL with occasional subangular flint cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | | | |
| | | | 0.00 | | VL | 1 | | | | | | |
| | | | 0.10 | -1.20 | B | 3 | | | | | | |
| | | | 1.00 | | CD/K | 2 | | | | | | |
| | | | 1.00 | | PID | | 0.2 | | Below 1.20m: Very dense, grey brown, white and dark grey | | | |
| | | | 1.00 | | VL | 2 | | | | | | |
| | | | 1.20 | -1.70 | B | 4 | | | | | | |
| | Nil | Dry | 1.20 | -1.54 | | | C50/ 190 | | | (3.10) | | |
| | | | 2.00 | | V | | | | From 2.00m: Becoming slightly sandy gravel. Gravel is fine to coarse. Sand is fine to coarse. | | | |
| | | | 2.00 | | PID | | 0.0 | | | | | |
| | | | 2.00 | | CD/K | 5 | | | | | | |
| | | | 2.00 | | VL | 5 | | | | | | |
| | 2.20 | Added | 2.20 | -2.60 | | | C50/ 245 | | | | | |
| | | | 2.20 | -2.70 | B | 6 | | | | | | |
| 21/04 | 2.20 | | 2.30 | | W | 8 | | | | | | |
| | | | 3.00 | | CD/K | 7 | | | | | | |
| 22/04 | 2.20 | | 3.00 | | PID | | 0 | | | | | |
| | | | 3.00 | | VL | 7 | | | | 3.20 | 97.05 | |
| | | | 3.20 | | D | 9 | | | Firm dark orange brown and light grey mottled, slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (BAGSHOT FORMATION) | (0.50) | | |
| | | | 3.20 | | CD/K | 10 | | | | | | |
| | | | 3.20 | | VL | 10 | | | | 3.70 | 96.55 | |
| | 3.30 | Damp | 3.30 | -3.75 | U | 11 | | 47/ 450 | | | | |
| | | | 3.75 | | D | 12 | | | | | | |
| | | | 3.80 | -4.25 | D | 13 | | | | | | |
| | 3.30 | Damp | 3.80 | -4.25 | | | S16 | | Stiff fissured thinly laminated brown grey CLAY with thin and thick laminae and lenses of grey silty sand and orange sandy clay. Sand is mainly fine and medium. (TRANSITIONAL ZONE) | (1.05) | | |
| | | | 3.80 | -4.30 | B | 14 | | | | | | |
| | | | 4.00 | | PID | | 2.8 | | | | | |
| | | | 4.00 | | V | | | | | | | |
| | | | 4.30 | | CD/K | 15 | | | | | | |
| | | | 4.30 | | VL | 15 | | | | 4.75 | 95.50 | |
| | 4.20 | Damp | 4.30 | -4.85 | U | 16 | | 51/ 450 | Stiff becoming very stiff with depth, fissile dark grey CLAY with thin laminae and lenses up to 5mm of grey fine and medium sand. (TRANSITIONAL ZONE) | | | |
| | | | 4.85 | | D | 17 | | | | | | |
| | | | 4.90 | -5.35 | D | 18 | | | | | | |
| | 4.20 | Damp | 4.90 | -5.35 | | | S17 2.4 | | | | | |
| | | | 5.00 | | PID | | | | | | | |
| | | | 5.00 | | CD/K | 19 | | | | | | |
| | | | 5.00 | | VL | 19 | | | | | | |
| | | | 5.40 | -5.90 | B | 20 | | | | | | |
| | 5.90 | Dry | 5.90 | -6.35 | U | 21 | | 79/ 400 | | (2.75) | | |
| | | | 6.00 | | V | | | | | | | |
| | | | 6.35 | | D | 22 | | | Below 6.35m: Extremely closely fissured, fissures are randomly orientated, occasionally coated with sand. With occasional thin laminae and lenses of grey fine and medium sand. Below 6.90m: With common coarse gravel sized fragments of very stiff (hard) clay. | | | |
| | | | 6.40 | -6.85 | D | 23 | | | | | | |
| | 5.90 | Dry | 6.40 | -6.85 | | | S24 | | | | | |
| | | | 6.90 | -7.40 | B | 24 | | | | | | |
| | 7.40 | Damp | 7.40 | -7.85 | U | 25 | | 101/ 450 | | 7.50 | 92.75 | |
| | | | 7.85 | | D | 26 | | | Stiff dark grey slightly sandy, locally sandy, CLAY. Sand is fine and medium. (TRANSITIONAL ZONE) Between 9.35m and 9.85m: grading locally to slightly silty sand with occasional medium and coarse gravel sized fragments of very stiff grey brown clay. | | | |
| | | | 7.90 | -8.27 | D | 27 | | | | | | |
| | 7.40 | Damp | 7.90 | -8.27 | | | S50/ 220 | | | | | |
| | | | 8.00 | | V | | | | | | | |
| | | | 8.40 | -8.90 | B | 28 | | | | | | |
| | 8.90 | Added | 8.40 | -9.35 | U | 29 | | 110/ 450 | | | | |
| | | | 9.35 | | D | 30 | | | | | | |
| | | | 9.40 | -9.85 | D | 31 | | | | | | |
| | 8.90 | Added | 9.40 | -9.85 | | | S48 | | | (4.75) | | |
| | | | 9.90 | -10.40 | B | 32 | | | | | | |

**Remarks** (See notes & keysheets)

1. Groundwater was encountered at 2.30m at the start of shift 22.04.2004.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. Aquifer protection was carried out by sealing the base of the 200mm hole at a depth of 4.20m and continuing in 150mm casing.
4. The borehole was advanced by chiselling methods from 1.30m to 1.60m (3/4 hours).
5. On completion of boring a 50mm diameter standpipe was installed to 17.0m. For details see separate sheet.

Scale 1:50

FUGRO

**Project** AWE ALDERMASTON, NEW HR FACILITY GI, Golders Associates (UK) Limited, EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0902 (1 of 3)

301/04

| Drilling Method | Cable Percussion | Borehole Diameter | Casing Diameter | BOREHOLE No. | 0902 |
|---|---|---|---|---|---|
| Equipment | Dando 2000 | 200mm to 4.20m<br>150mm to 20.00m | 200mm to 4.20m<br>150mm to 10.40m | Coordinates (National Grid) | 459879.060 E<br>164422.894 N |
| Dates Drilled | Start 21/04/2004<br>End 22/04/2004 | Logged by EDHC 21/04/2004 | Compiled by pb 30/04/2004 | Checked by DPM 19/10/04 | Ground Level 100.25 m OD<br>Location Co ords - E 2756.106, N 1468.699 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Streta | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10.00 | | V | | | | | | | |
| | 10.40 | Added | 10.40-10.85 | | U | 33 | | 150/400 | | | | |
| | | | 10.85 | | D | 34 | | | | | | |
| | | | 10.90-11.29 | | D | 35 | | | | | | |
| | 10.40 | Added | 10.90-11.30 | | | | S50/245 | | | | | |
| | | | 11.40-11.90 | | B | 36 | | | Below 11.40m: Very stiff. With occasional pockets up to 20mm of green grey sand. | | | |
| | 10.40 | Added | 11.80-12.25 | | U | 37 | | 120/450 | | | | |
| | | | 12.00 | | V | | | | | | | |
| | | | 12.25 | | D | 38 | | | | 12.25 | 88.00 | |
| | | | 12.30-12.75 | | D | 39 | | | Dense to very dense thinly laminated dark grey clayey silty SAND, grading locally to sandy clay. Sand is fine and medium. (TRANSITIONAL ZONE) | | | |
| | 10.40 | Added | 12.30-12.75 | | | | S48 | | | | | |
| | | | 12.80-13.40 | | B | 40 | | | | | | |
| | 10.40 | Added | 13.40-13.85 | | U | 41 | | 120/450 | | | | |
| | | | 13.85 | | D | 42 | | | | | | |
| | | | 13.90-14.34 | | D | 43 | | | Between 13.90m and 14.30m: Very stiff sandy clay with thin laminae of grey fine and medium sand and occasional pockets of dark grey clay. | | | |
| | 10.40 | Added | 13.90-14.34 | | | | S50/290 | | | | | |
| | | | 14.00 | | V | | | | | | | |
| | | | 14.40-14.90 | | B | 44 | | | | (4.65) | | |
| | 10.40 | Added | 14.90-15.30 | | U | 45 | | 150/400 | | | | |
| | | | 15.30 | | D | 46 | | | | | | |
| | 10.40 | Added | 15.35-15.74 | | | | S50/240 | | | | | |
| | | | 15.35-15.74 | | D | 47 | | | | | | |
| | | | 15.90-16.40 | | B | 48 | | | | | | |
| | | | 16.00 | | V | | | | | | | |
| | 10.40 | Added | 16.40-16.85 | | U | 49 | | 150/350 | | | | |
| | | | 16.85 | | D | 50 | | | | 16.90 | 83.35 | |
| | | | 16.90-17.27 | | D | 51 | | | Stiff thinly laminated dark grey CLAY/SILT with thin laminae of grey fine and medium sand. (LONDON CLAY) | (0.50) | | |
| | 10.40 | Added | 16.90-17.28 | | | | S50/225 | | | 17.40 | 82.85 | |
| | | | 17.40-17.90 | | B | 52 | | | Very stiff dark grey sandy CLAY grading locally to silty sand with occasional coarse gravel sized fragments of very stiff (hard) fissile grey brown clay. Sand is fine and medium. With rare shell fragments up to 5mm. (LONDON CLAY) | | | |
| | | | 18.00 | | V | | | | | | | |
| | 10.40 | Added | 18.00-18.45 | | U | 53 | | 150/350 | | | | |
| | | | 18.45 | | D | 54 | | | | | | |
| | 10.40 | | 18.50-18.94 | | | | S50/285 | | | (2.60) | | |
| | | | 18.50-18.93 | | D | 55 | | | | | | |
| | | | 19.00-19.50 | | B | 56 | | | | | | |
| | 10.40 | Added | 19.50-19.95 | | U | 57 | | 150/350 | Below 19.50m: Slightly sandy CLAY . | | | |
| 22/04 | 10.40 | | | | | | | | | | | |
| | | | 19.95 | | D | 58 | | | | 20.00 | 80.25 | |
| | | | | | | | | | End of Borehole | | | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

Project
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0902 (2 of 3)

| | | |
|---|---|---|
| **Drilling Method** Cable Percussion<br>**Equipment** Dando 2000<br>**Dates Drilled** Start 21/04/2004 End 22/04/2004 | **Borehole Diameter** 200mm to 4.20m, 150mm to 20.00m<br>**Casing Diameter** 200mm to 4.20m, 150mm to 10.40m<br>**Logged by** EDHC 21/04/2004<br>**Compiled by** pb 30/04/2004<br>**Checked by** 19/10/04 | **BOREHOLE No. 0902**<br>**Coordinates** 459879.060 E<br>**(National Grid)** 164422.894 N<br>**Ground Level** 100.25 m OD<br>**Location** Co ords - E 2756.106, N 1468.699 |

| Description | Depth (m) | Level m OD | |
|---|---|---|---|
| Concrete | 0.50 | 99.75 | Flush lockable stopcock box cover. Pipe diameter 50mm to 17.00m. |
| Cement/Bentonite Grout | 13.00 | 87.25 | |
| Bentonite Seal | 14.00 | 86.25 | |
| Sand Filter | 17.00 | 83.25 | |
| Bentonite Seal | 20.00 | 80.25 | Base of Hole |

**Remarks**
(See notes & keysheets)

Not to Scale

FUGRO

**Project**
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EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0902 (3 of 3)

309/03

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 200mm to 3.50m, 150mm to 20.00m | Casing Diameter 0mm to 0.00m, 200mm to 3.50m, 150mm to 10.00m | **BOREHOLE No. 0903** |
| Equipment Dando 2000 | | | Coordinates (National Grid) 459790.220 E, 164358.705 N |
| | | | Ground Level 100.60 m OD |
| Dates Drilled Start 30/04/2004, End 05/05/2004 | Logged by 30/04/2004 | Compiled by pb 12/05/2004 | Checked by PDM 19/10/04 |
| | | | Location Co ords - E 2646.744, N 1475.970 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30/04 | | | 0.00 | | CD | 3 | | | TOPSOIL | (0.15) | | |
| | | | 0.00 | | PID | | 0 | | | 0.15 | 100.45 | |
| | | | 0.00 | | K | 4 | | | MADE GROUND: Dark brown slightly clayey sandy gravel. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. | (0.55) | | |
| | | | 0.00 | | VL | 5 | | | | | | |
| | | | 0.00-0.15 | | B | 6 | | | | | | |
| | | | 0.15-0.70 | | B | 7 | | | | | | |
| | | | 0.20-1.20 | | B | 8 | | | | | | |
| | | | 1.00 | | CD | 9 | | | (SILCHESTER GRAVEL) | 0.70 | 99.90 | |
| | | | 1.00 | | PID | | 0 | | Medium dense dark orange brown slightly clayey, slightly sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. | | | |
| | | | 1.00 | | K | 10 | | | | | | |
| | | | 1.00 | | VL | 11 | | | | | | |
| | Nil | Dry | 1.20-1.65 | | C | 23 | C23 | | | (1.50) | | |
| | | | 1.20-1.70 | | B | 12 | | | (SILCHESTER GRAVEL | | | |
| | | | 2.00 | | V | | | | | | | |
| | | | 2.00 | | PID | | 0 | | | 2.20 | 98.40 | |
| | | | 2.00 | | CD | 15 | | | Very dense grey brown white and dark grey slightly sandy GRAVEL with occasional cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. Cobbles are subangular flint. | (0.70) | | |
| | | | 2.00 | | K | 16 | | | | | | |
| | 2.20 | 1.10 | 2.20-2.61 | | C | 50/ 261 | C50/ 261 | | | | | |
| | | | 2.00 | | VL | 17 | | | | | | |
| | | | 2.20-2.70 | | B | 18 | | | | | | |
| | | | 2.90 | | D | 19 | | | (SILCHESTER GRAVEL) | 2.90 | 97.70 | |
| | | | 3.00 | | PID | | 0 | | | | | |
| | | | 3.00 | | CD | 20 | | | Firm laminated orange, light grey and brown locally slightly sandy CLAY. With thin beds, laminae and lenses of yellow brown and orange sand. Sand is fine to coarse. | (1.10) | | |
| | | | 3.00 | | K | 21 | | | | | | |
| | | | 3.00 | | VL | 22 | | | | | | |
| | 3.20 | Dry | 3.20-3.65 | | U | 23 | | 65/ 450 | | | | |
| | | | 3.65 | | D | 24 | | | (BAGSHOT FORMATION) | | | |
| | 3.20 | Dry | 3.70-4.15 | | S | 11 | S11 | | | | | |
| | | | 3.70-4.15 | | D | 25 | | | | 4.00 | 96.60 | |
| | | | 3.70-4.00 | | B | 26 | | | Firm thinly laminated dark grey CLAY with thin laminae and lenses of light grey fine and medium sand. | | | |
| | | | 4.00 | | PID | | 0 | | | | | |
| | | | 4.00 | | V | | | | | | | |
| | | | 4.00 | | D | 27 | | | (TRANSITIONAL ZONE) | | | |
| | | | 4.00 | | CD | 30 | | | | | | |
| | | | 4.00 | | K | 31 | | | | | | |
| 30/04 | 4.20 | Dry | 4.00 | | VL | 32 | | | | | | |
| | | | 4.70-5.15 | | S | 17 | S17 | | At 5.00m: 65mm subangular pyrite nodule. | (2.00) | | |
| | 4.20 | Dry | 4.20-4.65 | | U | 33 | | 60/ 450 | | | | |
| | 4.20 | Dry | 4.65 | | D | 34 | | | | | | |
| 05/05 | 4.20 | | 4.70-5.15 | | D | 35 | | | | | | |
| | | | 5.00 | | PID | | 0 | | | | | |
| | | | 5.00 | | CD | 36 | | | | | | |
| | | | 5.00 | | K | 37 | | | | | | |
| | | | 5.00 | | VL | 38 | | | | | | |
| | | | 5.00-5.50 | | B | 39 | | | | 6.00 | 94.60 | |
| | | | 5.00 | | W | 40 | | | Stiff fissile dark brown grey CLAY with occasional lenses up to 5mm of light grey fine sand. | | | |
| | 5.50 | Dry | 5.50-5.95 | | U | 41 | | | | | | |
| | | | 5.95 | | D | 42 | | | | | | |
| | 5.50 | Dry | 6.00-6.45 | | S | 35 | S35 | | (TRANSITIONAL ZONE) | | | |
| | | | 6.00 | | V | | | | | | | |
| | | | 6.00-6.45 | | D | 43 | | | | | | |
| | | | 6.50-7.00 | | B | 46 | | | | | | |
| | 5.50 | Dry | 7.00-7.45 | | U | 47 | | 140/ 450 | | (2.10) | | |
| | | | 7.45 | | D | 48 | | | | | | |
| | 5.50 | Dry | 7.50-7.95 | | S | 36 | S36 | | | | | |
| | | | 7.50-7.95 | | D | 49 | | | | | | |
| | | | 8.00 | | V | | | | | | | |
| | | | 8.10 | | D | 52 | | | | 8.10 | 92.50 | |
| | | | 8.10-8.50 | | B | 53 | | | Stiff locally fissile, dark brown grey slightly sandy CLAY. Sand is dark green fine to coarse. | | | |
| | 5.50 | added | 8.50-8.95 | | U | 54 | | 150/ 450 | (TRANSITIONAL ZONE) | (0.70) | | |
| | | | 8.95 | | D | 55 | | | | 8.80 | 91.80 | |
| | 9.00 | Added | 9.00-9.45 | | S | 48 | S48 | | Dense dark brown grey silty SAND. Sand is fine and medium. | | | |
| | | | 9.00-9.45 | | D | 56 | | | (TRANSITIONAL ZONE) | (0.80) | | |
| | | | 9.00-9.50 | | B | 57 | | | | | | |
| | | | 9.60 | | D | 58 | | | | 9.60 | 91.00 | |
| | | | 10.00 | | V | | | | Stiff dark grey sandy CLAY, grading locally to silty sand. With rare lenses of dark green clay. Sand is fine and medium. (TRANSITIONAL ZONE) | | | |

**Remarks** (See notes & keysheets)

1. A seepage of groundwater was encountered at 8.10m.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. The borehole was backfilled on completion with cement:bentonite grout.
4. The borehole was advanced by chiselling methods from 2.10m to 2.20m (30 mins) and #m to #m (# hours).
5. An amount of water was added to facilitate boring and to maintain a positive hydrostatic head in granular strata from 8.80m to 20.00m.
6. Aquifer protection was carried out by sealing the base of the hole at a depth of 3.40m and continuing in reduced

Scale 1:50

FUGRO

Project
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Golders Associates (UK) Limited
EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0903 (1 of 2)

301/04

| | | |
|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 200mm to 3.50m, 150mm to 20.00m; Casing Diameter 0mm to 0.00m, 200mm to 3.50m, 150mm to 10.00m | **BOREHOLE No. 0903** |
| Equipment Dando 2000 | | Coordinates (National Grid) 459790.220 E, 164358.705 N; Ground Level 100.60 m OD |
| Dates Drilled Start 30/04/2004, End 05/05/2004 | Logged by 30/04/2004; Compiled by pb 12/05/2004; Checked by DBM 09/10/04 | Location Co ords - E 2646.744, N 1475.970 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm: Test | U100 Blows/ Recovery mm: Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10.00 | added | 10.00 | 10.40 | U | 59 | | 150/45 | | | | |
| | | | 10.40 | | D | 60 | | | | | | |
| | 10.00 | Added | 10.45 | 10.90 | | | S46 | | | | | |
| | | | 10.45 | 10.85 | D | 61 | | | | | | |
| | | | 11.00 | 11.50 | B | 64 | | | | | | |
| | 10.00 | added | 11.50 | 11.80 | U | 65 | | 150/300 | | | | |
| | | | 11.80 | | D | 66 | | | Below 11.80m: Very stiff. | | | |
| | 10.00 | Added | 11.85 | 12.26 | | | S50/260 | | | | | |
| | | | 11.85 | 12.26 | D | 67 | | | | | | |
| | | | 12.00 | | V | | | | | | | |
| | | | 12.00 | 14.00 | SB | 68 | | | | | | |
| | | | 12.50 | 13.00 | B | 70 | | | | | | |
| | 10.00 | added | 13.00 | 13.45 | U | 71 | | 150/450 | | | | |
| | | | 13.45 | | D | 72 | | | Between 13.45m and 13.95m: With occasional silt lenses. | | | |
| | 10.00 | Added | 13.50 | 13.91 | | | S50/255 | | | | | |
| | | | 13.50 | 13.91 | D | 73 | | | | | | |
| | | | 14.00 | | V | | | | | | | |
| | | | 14.00 | 14.50 | B | 76 | | | | | | |
| | 10.00 | added | 14.50 | 14.90 | U | 77 | | 150/400 | | (10.40) | | |
| | | | 14.90 | | D | 78 | | | | | | |
| | 10.00 | Added | 14.95 | 15.36 | | | S50/255 | | | | | |
| | | | 14.95 | 15.36 | D | 79 | | | | | | |
| | | | 15.50 | 16.00 | B | 80 | | | | | | |
| | | | 16.00 | | V | | | | | | | |
| | 10.00 | added | 16.00 | 16.30 | U | 83 | | 150/300 | Below 16.35m: With occasional silt lenses up to 40mm. | | | |
| | | | 16.30 | | D | 84 | | | | | | |
| | 10.00 | Added | 16.35 | 16.79 | | | S50/285 | | | | | |
| | | | 16.35 | 16.79 | D | 85 | | | | | | |
| | | | 17.00 | 17.50 | B | 86 | | | | | | |
| | 10.00 | added | 17.50 | 17.80 | U | 87 | | 150/300 | | | | |
| | | | 17.80 | | D | 88 | | | | | | |
| | 10.00 | Added | 17.85 | 18.27 | | | S50/265 | | | | | |
| | | | 17.85 | 18.25 | D | 89 | | | | | | |
| | | | 18.00 | | V | | | | | | | |
| | | | 18.50 | 19.00 | B | 92 | | | | | | |
| | 10.00 | added | 19.00 | 19.30 | U | 93 | | 150/300 | | | | |
| | | | 19.30 | | D | 94 | | | | | | |
| | 10.00 | Added | 19.35 | 19.73 | | | S50/225 | | | | | |
| | | | 19.35 | 19.65 | D | 95 | | | | | | |
| 05/05 | | | 20.00 | | V | | | | | 20.00 | 80.60 | |
| | | | | | | | | | End of Borehole | | | |

**Remarks** (See notes & keysheets) diameter casing.

Scale 1:50

| | | |
|---|---|---|
| FUGRO | Project: AWE ALDERMASTON, NEW HR FACILITY GI, Golders Associates (UK) Limited, EDGE Consultants UK Ltd | Contract No. BAS040081; Figure No. 0903 (2 of 2) |

301/04

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion & Rotary | **Borehole Diameter** 300mm to 2.50m, 200mm to 3.00m | **Casing Diameter** 300mm to 2.50m, 200mm to 3.00m | **BOREHOLE No. 0904** |
| **Equipment** Dando 2000 | | | **Coordinates** 459827.567 E |
| **Drill Fluid** | | | **(National Grid)** 164352.447 N |
| **Orientation (°)** 90 | **Logged by** EDHC | **Compiled by** pb | **Ground Level** 100.25 m OD |
| **Dates Drilled** Start 29/04/2004 | 29/04/2004 | 11/05/2004 | **Location** Co ords - E 2671.505, N 1447.319 |
| End 29/04/2004 | | **Checked by** DM 19/10/04 | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N | Core Size (mm) | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29/04 | | | 0.00 | 2.00 | SB | 1 | | | | | | TOPSOIL with gravel (Drillers Description) (SILCHESTER GRAVEL) | (0.25) 0.25 | 100.00 | |
| | | | 0.00 | | PID | | | | | 0 | | | | | |
| | | | 0.00 | 2.00 | V | 2 | | | | | | | | | |
| | | | 0.00 | 2.00 | CD | 3 | | | | | | | | | |
| | | | 0.00 | 2.00 | K | 4 | | | | | | | | | |
| | | | 0.00 | 2.00 | V | 5 | | | | | | | | | |
| | | | 0.25 | | B | 6 | | | | | | | | | |
| | | | 0.25 | 0.60 | B | 7 | | | | | | Dense dark brown slightly clayey slightly sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) Below 0.60m: With occasional subangular flint cobbles. Below 1.20m: Dense orange slightly sandy clayey gravel. | (1.65) | | |
| | | | 0.60 | 1.20 | B | 8 | | | | | | | | | |
| | | | 1.00 | | PID | | | | | 0 | | | | | |
| | | | 1.00 | | CD | 9 | | | | | | | | | |
| | | | 1.00 | | K | 10 | | | | | | | | | |
| | 1.20 | Dry | 1.20 | 1.65 | | | | | | C36 | | | | | |
| | | | 1.00 | | V | 11 | | | | | | | | | |
| | | | 1.20 | 1.70 | B | 12 | | | | | | | | | |
| | | | 1.90 | | D | 13 | | | | | | | 1.90 | 98.35 | |
| | | | 2.00 | | PID | | | | | 0 | | Firm thinly laminated light grey, orange and brown grey locally slightly sandy CLAY with occasional lenses of sand. Sand is fine to coarse. (BAGSHOT FORMATION) | (0.75) | | |
| | | | 1.90 | 2.40 | B | 14 | | | | | | | | | |
| | | | 2.00 | 3.00 | SB | 15 | | | | | | | | | |
| | | | 2.00 | | V | 16 | | | | | | | | | |
| | | | 2.00 | | CD | 17 | | | | | | | 2.65 | 97.60 | |
| | | | 2.00 | | K | 18 | | | | | | | (0.35) | | |
| 29/04 | | | 2.00 | | V | 19 | | | | | | Medium dense laminated yellow and dark orange locally slightly silty SAND with thin laminae and lenses of light grey clay. Sand is fine to coarse. (TRANSITIONAL ZONE) | 3.00 | 97.25 | |
| | | | 2.70 | 3.15 | | | | | | S12 | | | | | |
| | 2.20 | Dry | 2.65 | | D | 21 | | | | | | | | | |
| | 2.20 | Dry | 2.20 | 2.65 | U | 20 | | | | | 60/ 450 | | | | |
| | | | 3.00 | | PID | | | | | 0 | | End of Borehole | | | |
| | | | 2.70 | 3.15 | SB | 22 | | | | | | | | | |
| | | | 3.00 | | CD | 23 | | | | | | | | | |
| | | | 3.00 | | K | 24 | | | | | | | | | |
| | | | 3.00 | | V | 25 | | | | | | | | | |

**Remarks** (See notes & keysheets)

1. Groundwater was not apparent during boring.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. Aquifer protection was carried out by sealing the base of the hole at a depth of 2.50m and continuing in reduced diameter casing.
4. Borehole completed to 51m BGL by open hole rotary drilling 146mm diameter.
5. 113mm UPVC diameter casing installed to 50m and grouted into position using cement bentonite grout mix.

Scale 1:50

FUGRO

**Project**
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0904 (1 of 1)

304/03

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion & Rotary | Borehole Diameter / Casing Diameter | **BOREHOLE No. 0905** | |
| Equipment Dando 2000 | 300mm to 2.50m / 300mm to 2.50m | Coordinates (National Grid) | 459849.360 E, 164363.202 N |
| Drill Fluid | 200mm to 3.10m / 200mm to 3.10m | Ground Level | 99.90 m OD |
| Orientation (°) 90 | 146mm to 31.10m / 146mm to 31.10m | Location | Co ords - E 2695.147, N 1441.693 |
| Dates Drilled Start 23/04/2004 | 165mm to 51.00m / 165mm to 51.00m | | |
| End 12/05/2004 | Logged by EDHC 23/04/2004 / Compiled by pb 30/04/2004 / Checked by DGM 19/10/04 | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | U100 Blows/ Rec. mm | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23/04 | | | 0.00 | | V | | | | | | | TOPSOIL (SILCHESTER GRAVEL) | (0.40) | | |
| | | | 0.00 | | PID | | | | | 0.0 | | | 0.40 | 99.50 | |
| | | | 0.00 | | CD | 3 | | | | | | Medium dense dark orange brown slightly clayey, slightly sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | | | |
| | | | 0.00 | | K | 4 | | | | | | | | | |
| | | | 0.00 | | VL | 5 | | | | | | | | | |
| | | | 0.00-0.40 | | B | 6 | | | | | | | | | |
| | | | 0.40-1.20 | | B | 7 | | | | | | | | | |
| | | | 1.00 | | CD | 8 | | | | | | | | | |
| | | | 1.00 | | PID | | | | | 0.0 | | Below 1.20m: Medium dense, grey brown, white and dark grey. | (1.60) | | |
| | | | 1.00 | | K | 9 | | | | | | | | | |
| | | | 1.00 | | VL | 10 | | | | | | | | | |
| | 1.20 | dry | 1.20-1.65 | | | | | | | S25 | | | | | |
| | | | 1.20-1.65 | | D | 11 | | | | | | | | | |
| | | | 1.20-1.70 | | B | 12 | | | | | | | | | |
| | | | 1.20-1.65 | | D | 101 | | | | | | | | | |
| | | | 2.00 | | V | | | | | | | | 2.00 | 97.90 | |
| | | | 2.00 | | PID | | | | | 0.0 | | Stiff, thinly laminated grey and orange locally slightly sandy CLAY with lenses and laminae of light grey clay and orange or yellow brown silty sand. (BAGSHOT FORMATION) | | | |
| | | | 2.00 | | D | 13 | | | | | | | | | |
| | | | 2.00 | | CD | 15 | | | | | | | (0.85) | | |
| | | | 2.00 | | K | 16 | | | | | | | | | |
| | | | 2.00 | | VL | 17 | | | | | | | | | |
| | | | 2.00-2.50 | | B | 18 | | | | | | | | | |
| | | | 2.85 | | D | 20 | | | | | | | 2.85 | 97.05 | |
| 23/04 | 3.10 | Dry | 3.00-3.45 | | D | 21 | | | | | | | (0.25) | | |
| | | | 3.00-3.45 | | | | | | | S10 | | Thinly laminated dark orange brown and light grey, slightly clayey SAND with laminae and lenses of light grey clay. (TRANSITIONAL ZONE) | 3.10 | 96.80 | |
| | 2.40 | Dry | 2.40-2.85 | | U | 19 | | | | | 60/ 450 | | | | |
| | 2.40 | Dry | | | | | | | | | | | | | |
| 10/05 | 3.10 | | 3.10-3.55 | | | | | | | S21 | | | (0.80) | | |
| | | | 3.00-3.45 | | D | 102 | | | | | | Stiff extremely closely fissured thinly laminated brown grey CLAY with laminae and lenses of orange silty fine or fine to coarse sand and orange clay. Fissures are randomly orientated, planar, locally polished. Below 3.50m; very stiff. (TRANSITIONAL ZONE) | | | |
| | | | 3.10-3.55 | | D | 103 | | | | | | | | | |
| | | (100) | 3.10-4.60 | | 100 | 100 | | | | | | | 3.90 | 96.00 | |
| | | | 3.30-3.54 | | C | 23 | | | | | | | | | |
| | | | 4.22-4.44 | | C | 24 | | | | | | | | | |
| | | | | | | | | | | | | | (1.39) | | |
| | | | 4.60-5.05 | | | | | | | S22 | | Soft to firm stiff extremely closely fissured thinly laminated dark grey CLAY with thin laminae and lenses of light grey slightly silty fine and medium sand, and occasional laminae of black clay. Fissures are randomly orientated, planar, smooth. (TRANSITIONAL ZONE) At 5.23m: 40mm pyrite nodule. | | | |
| | | | 4.60-5.05 | | D | 104 | | | | | | | | | |
| | | (100) | 4.60-6.10 | | 81 | 78 | | | | | | | 5.29 | 94.61 | |
| | | | 5.39-5.66 | | C | 25 | | | | | | | | | |
| | | | | | | | | | | | | | (1.46) | | |
| | | | 6.10-6.55 | | | | | | | S23 | | Stiff extremely closely fissured, locally thinly laminated dark grey brown grey, locally slightly sandy, CLAY. Sand is fine and medium. Fissures are randomly orientated, planar and irregular, locally stained, occasionally infilled with 1mm laminae of clay. (TRANSITIONAL ZONE) Between 6.25m and 6.75m; dark grey brown and dark grey mottled. Occasional lenses of grey brown sand and grey brown clay. | | | |
| | | | 6.10-6.55 | | D | 105 | | | | | | | | | |
| | | | 6.45-6.75 | | C | 26 | | | | | | | | | |
| | | (100) | 6.10-7.60 | | 89 | 83 | | | | | | | 6.75 | 93.15 | |
| | | | | | | | | | | | | | (1.12) | | |
| 10/05 | 3.10 | 0.50 | | | | | | | | | | Very stiff, very closely fissured fissile dark brown dark grey slightly sandy CLAY. Sand is fine to coarse. Fissures are randomly orientated occasionally infilled with <1mm of brown clay. (TRANSITIONAL ZONE) At 7.15m: 20mm of light grey sandy silt. Below 7.20m: becomes less sandy. Between 7.60m and 7.87m: Recovered as soft, locally firm dark grey brown clay. | | | |
| 11/05 | 3.10 | 0.50 | 7.60-8.05 | | | | | | | S28 | | | 7.87 | 92.03 | |
| | | | 7.60-8.05 | | D | 106 | | | | | | | (0.16) | | |
| | | | 8.10-8.40 | | SB | 27 | | | | | | | 8.03 | 91.87 | |
| | | (100) | 7.60-9.10 | | 95 | 57 | | | | | | | | | |
| | | | | | | | | | | | | Dark grey silty mainly fine SAND. (TRANSITIONAL ZONE) | | | |
| | | | 9.10-9.55 | | | | | | | S29 | | Stiff dark grey sandy SILT grading locally to silty sand. Sand is mainly fine. With occasional lenses and laminae (<20mm) of firm or stiff locally fissile dark green clay. Rare shell fragments. (TRANSITIONAL ZONE) Between 8.63m and 8.81m: Very stiff fissile grey brown clay with lenses of dark grey silty sand. | | | |
| | | | 9.10-9.55 | | D | 107 | | | | | | | | | |
| | | | 9.25-9.50 | | SB | 28 | | | | | | | | | |
| | | (100) | 9.10-10.60 | | 87 | 47 | | | | | | | | | |

**Remarks** (See notes & keysheets)

1. Groundwater was not apparent during boring.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. Aquifer protection was carried out by sealing the base of the 300mm diameter borehole at a depth of 2.50m and continuing in 200mm diameter casing.
4. The borehole was advanced by chiselling methods from 1.70m to 1.85m (1 hour).
5. The borehole was advanced by cable percussion means to 3.10m, rotary coring means to 30.00m, and open hole means to 51.00m.

Scale 1:50

FUGRO

Project
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0905 (1 of 6)

308/03

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion & Rotery | Borehole Diameter / Casing Diameter | **BOREHOLE No. 0905** | |
| Equipment Dando 2000 | 300mm to 2.50m / 300mm to 2.50m | Coordinates | 459849.360 E |
| Drill Fluid | 200mm to 3.10m / 200mm to 3.10m | (National Grid) | 164363.202 N |
| Orientation (°) 90 | 146mm to 31.10m / 146mm to 31.10m | Ground Level | 99.90 m OD |
| Dates Drilled Start 23/04/2004 | 165mm to 51.00m / 165mm to 51.00m | Location | |
| End 12/05/2004 | Logged by EDHC 23/04/2004 / Compiled by pb 30/04/2004 / Checked by 19/10/04 | Co ords - E 2695.147, N 1441.693 | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | At 8.84m: 45mm pyrite nodule. Between 8.89m and 9.10m: Thinly interlaminated with light grey sand. At 9.80m: 25mm pyrite nodule. Between 9.95m and 10.15m: Occasional pockets and lenses of grey fine and medium sand. At 10.47m: 1 No. black rounded coarse gravel of flint. Below 10.60m: very stiff. Between 10.65m and 10.85m: rare coal fragments (<15mm) and clay laminae. At 11.60m: 20mm pyrite nodule. Between 11.80m and 11.87m: Occasional wood fragments (<45mm). Below 12.00m: Occasional lenses of stiff or firm fissile dark grey brown clay. Between 12.12m and 13.20m: occasional lenses, (<20mm) of light grey green fine and medium sand. | | | |
| | | | 10.60-11.05 | | D | 108 | | | | S35 | | | | |
| | | (100) | 10.60-12.10 | | 100 | 31 | | | | | | | | |
| | | | 11.30-11.60 | | B | 29 | | | | | | | | |
| | | | 12.10-12.55 | | D | 109 | | | | S44 | | | | |
| | | | 12.60-12.90 | | C | 30 | | | | | At 12.24m: 30mm of light grey green silty sand, with occasional wood fragments (<60mm). From 12.50m: Stiff to very stiff. | (9.21) | | |
| | | (100) | 12.10-13.60 | | 100 | 99 | | | | | | | | |
| | | | | | | | | | | | At 13.55m: 75mm pyrite nodule. | | | |
| | | | 13.60-14.05 | | D | 110 | | | | S41 | | | | |
| | | | 13.60-14.05 | | | | | | | | | | | |
| | | (100) | 13.60-15.10 | | 90 | 61 | | | | | Between 14.34m and 14.98m: Occasional lenses (<20mm) of grey fine and medium sand. Slight sulphurous odour. | | | |
| | | | 14.58-14.88 | | C | 31 | | | | | | | | |
| | | | | | | | | | | | Between 14.98m and 15.10m: Slightly silty sand. Between 15.20m and 15.28m: Occasional laminae of soft fissile dark grey brown clay. Between 15.40m and 15.48m: Very stiff fissile dark grey brown clay. Between 15.75m and 16.15m: Occasional lenses (<20mm) of grey and green grey fine and medium sand. At 15.87m: 50mm lens of light grey shelly fine and medium sand. At 15.93m: 30mm of moderately weak grey mudstone. At 16.25m: 50mm of very stiff to very weak sandy clay/ siltstone. Between 16.78m and 16.92m: many bivalve fragments up to 60mm. | | | |
| | | | 15.10-15.55 | | D | 111 | | | | S64 | | | | |
| | | | 15.10-15.55 | | | | | | | | | | | |
| | | | 15.48-15.68 | | C | 32 | | | | | | | | |
| | | (100) | 15.10-16.60 | | 100 | 74 | | | | | | | | |
| | | | 16.60-17.05 | | D | 112 | | | | S48 | | | | |
| | | | 16.60-17.05 | | | | | | | | | | | |
| | | (100) | 16.60-18.10 | | 95 | 63 | | | | | Below 16.90m: Grading locally to slightly sandy clay. | 17.24 | 82.66 | |
| | | | 17.76-17.96 | | C | 33 | | | | | Very stiff friable dark grey slightly sandy CLAY grading locally to slightly silty fine and medium sand. With occasional lenses (<5mm) of light grey sand and rare shell fragments. (LONDON CLAY) | (1.66) | | |
| | | | 18.10-18.55 | | D | 113 | | | | S47 | | | | |
| | | | 18.10-18.55 | | | | | | | | | | | |
| | | | 18.60-18.90 | | C | 34 | | | | | At 18.34m: 6mm lamination of clay. At 18.55m: 10mm of thinly interlaminated black clay and grey fine and medium sand over 10mm of very weak dark grey mudstone. | | | |
| | | (100) | 18.10-19.60 | | 99 | 79 | | | | | At 18.57m: 20mm of thinly laminated dark grey dark grey brown sand. | 18.90 (0.25) 19.15 | 81.00 80.75 | |
| | | | | | | | | | | | Very stiff locally fissile dark brown grey CLAY with occasional laminae of grey fine and medium sand. (LONDON CLAY) | | | |
| | | | 19.60-20.05 | | D | 114 | | | | S50 | | | | |
| | | | 19.60-20.05 | | | | | | | | Between 18.97m and 19.04m: Strong dark grey shelly mudstone. | | | |

**Remarks** (See notes & keysheets)
6 On completion of borehole 113mm diameter PVC casing with end cap was grouted into the borehole.
7 Borehole grouted to between 50.00m and 51.00m using cement bentonite grout mix.
8 Borehole progressed using 165mm openhole drilling from 31.10m to 51.00m.

Scale 1:50

| | | |
|---|---|---|
| FUGRO | Project<br>AWE ALDERMASTON<br>NEW HR FACILITY GI<br>Golders Associates (UK) Limited<br>EDGE Consultants UK Ltd | Contract No. BAS040081<br>Figure No. 0905 (2 of 6) |

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| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion & Rotary | Borehole Diameter / Casing Diameter | **BOREHOLE No. 0905** | |
| Equipment Dando 2000 | 300mm to 2.50m / 300mm to 2.50m | Coordinates | 459849.360 E |
| Drill Fluid | 200mm to 3.10m / 200mm to 3.10m | (National Grid) | 164363.202 N |
| Orientation (°) 90 | 146mm to 31.10m / 146mm to 31.10m | Ground Level | 99.90 m OD |
| Dates Drilled Start 23/04/2004 | 165mm to 51.00m / 165mm to 51.00m | Location | |
| End 12/05/2004 | Logged by EDHC / Compiled by pb / Checked by DBM 19/10/04 | Co ords - E 2695.147, N 1441.693 | |
| | 23/04/2004 30/04/2004 | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (100) | 20.25-20.55<br>19.60-21.10 | C<br>100 | 35<br>66 | | | | | Very stiff friable locally fissile very closely fissured dark grey sandy CLAY, grading locally to slightly silty sand. Sand is fine and medium. With occasional laminae and lenses up to 5mm of light grey sand. Fissures are subvertical, irregular, rough, speckled white. (LONDON CLAY)<br>Between 19.60m and 20.20m: Clay.<br>Below 20.20m: Slightly sandy clay. | (1.95)<br>21.10 | 78.80 | |
| | | (100) | 21.10-21.55<br>21.10-21.55<br>21.40-21.55<br>21.10-22.60 | D<br>C<br>100 | 115<br>36<br>99 | | | | S37 | Very stiff, locally thinly laminated and fissile closely to very closely fissured dark brown grey locally slightly sandy CLAY. Sand is fine and medium. Fissures are subvertical, irregular, rough, speckled white. With occasional thin laminae and lenses up to 3mm of grey sand and rare shell fragments. (LONDON CLAY)<br>Between 22.10m and 22.22m: Very stiff to very weak.<br>Between 23.12m and 23.20m: Brown grey slightly clayey shelly sand. | | | |
| | | (100) | 22.60-23.05<br>22.60-23.05<br>22.60-24.10<br>23.30-23.50 | D<br>98<br>C | 116<br>69<br>37 | | | | S56 | Between 23.82m and 23.94m: Slightly sandy.<br>Below 24.10m: With thin laminae and lenses (<5mm) of grey sand. | (4.36) | | |
| | | (100) | 24.60-25.05<br>24.60-25.05<br>24.72-25.00<br>24.10-25.60 | D<br>C<br>100 | 117<br>38<br>99 | | | | S54 | At 25.01m: 15mm of light grey sandy silt. Sand is fine. 1 No. 20mm pyrite nodule.<br>At 25.05m: band of very stiff to very weak clay/mudstone. | 25.46 | 74.44 | |
| | | (100) | 25.60-26.05<br>25.60-26.05<br>25.65-26.95<br>25.60-27.10 | D<br>C<br>99 | 118<br>39<br>93 | | | | S54 | Very stiff, very closely fissured, fissile dark brown grey CLAY. Fissures are randomly orientated, irregular, rough. With occasional sand lenses up to 3mm and rare shell fragments. (LONDON CLAY) | (0.60)<br>26.06<br>(0.21)<br>26.27 | 73.84<br>73.63 | |
| | | | | | | | | | | Dark grey shelly clayey rounded fine to coarse flint GRAVEL. (LONDON CLAY) | | | |
| | | (100) | 27.10-28.60<br>27.80-28.10 | 100<br>C | 83<br>40 | | | | S54 | Very stiff very closely fissured, dark brown grey slightly sandy CLAY. Sand is fine. With occasional lenses up to 10mm of grey sand and rare shell fragments and rounded flint gravel. Fissures are randomly orientated, irregular, rough, surfaces occasionally coated with grey fine sand. (LONDON CLAY)<br>Below 27.05m: Locally slightly sandy, locally fissile.<br>Between 27.10m and 27.60m: With rare lenses up to 20mm of dark green clay.<br>Below 27.53m: rare, locally pyritised, fossiled wood fragments (<90mm). | (1.83)<br>28.10 | 71.80 | |
| 11/05 | 3.10 | 0.50 | | | | | | | | | | | |
| 12/05 | 3.10 | 0.50 | 28.60-28.98<br>28.60-28.98 | D | 119 | | | | S64/ 232 | | | | |
| | | (100) | 28.60-30.10<br>29.50-29.80 | 95<br>SB | 57<br>41 | | | | | Very stiff friable very closely fissured dark brown grey sandy CLAY grading locally to silty sand. Sand is fine and medium. With occasional lenses (<15mm) of grey sand and rare shell fragments. Fissures are randomly orientated, irregular, rough. (LONDON CLAY)<br>At 28.34m: 15mm of shelly clay. | (2.00) | | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

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Contract No. BAS040081

Figure No. 0905 (3 of 6)

304/03

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion & Rotary | Borehole Diameter / Casing Diameter | **BOREHOLE No.** | **0905** |
| Equipment Dando 2000 | 300mm to 2.50m / 300mm to 2.50m | Coordinates (National Grid) | 459849.360 E, 164363.202 N |
| Drill Fluid | 200mm to 3.10m / 200mm to 3.10m | Ground Level | 99.90 m OD |
| Orientation (°) 90 | 146mm to 31.10m / 146mm to 31.10m | Location | Co ords - E 2695.147, N 1441.693 |
| Dates Drilled Start 23/04/2004 | 165mm to 51.00m / 165mm to 51.00m | | |
| End 12/05/2004 | Logged by EDHC 23/04/2004 / Compiled by pb 30/04/2004 / Checked by DOM 19/10/04 | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Below 29.00m: grades to sandy clay/silt or locally silty sand.<br>At 29.42m: 30mm of very stiff to very weak clay/mudstone.<br>Below 29.98m: many bivalve fragments up to 35mm.<br><br>Rotary open Hole - Grey sandy CLAY (Drillers Description) | 30.10 | 69.80 | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

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EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0905 (4 of 6)

304/03

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion & Rotary | Borehole Diameter / Casing Diameter | **BOREHOLE No.** | **0905** |
| Equipment Dando 2000 | 300mm to 2.50m / 300mm to 2.50m | Coordinates (National Grid) | 459849.360 E<br>164363.202 N |
| Drill Fluid | 200mm to 3.10m / 200mm to 3.10m | Ground Level | 99.90 m OD |
| Orientation (°) 90 | 146mm to 31.10m / 146mm to 31.10m | Location | Co ords - E 2695.147, N 1441.693 |
| Dates Drilled Start 23/04/2004<br>End 12/05/2004 | 165mm to 51.00m / 165mm to 51.00m<br>Logged by EDHC 23/04/2004 / Compiled by pb 30/04/2004 / Checked by DBM 19/10/04 | | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | (20.90) | | |

**Remarks**
(See notes & keysheets)

Scale 1:50

| | | |
|---|---|---|
| FUGRO | Project<br>AWE ALDERMASTON<br>NEW HR FACILITY GI<br>Golders Associates (UK) Limited<br>EDGE Consultants UK Ltd | Contract No. BAS040081<br>Figure No. 0905 (5 of 6) |

304/03

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion & Rotary | Borehole Diameter / Casing Diameter | **BOREHOLE No. 0905** | |
| Equipment Dando 2000 | 300mm to 2.50m / 300mm to 2.50m | Coordinates | 459849.360 E |
| Drill Fluid | 200mm to 3.10m / 200mm to 3.10m | (National Grid) | 164363.202 N |
| Orientation (°) 90 | 146mm to 31.10m / 146mm to 31.10m | Ground Level | 99.90 m OD |
| Dates Drilled Start 23/04/2004 | 165mm to 51.00m / 165mm to 51.00m | Location | |
| End 12/05/2004 | Logged by EDHC 23/04/2004 / Compiled by pb 30/04/2004 / Checked by DBM 19/10/04 | Co ords - E 2695.147, N 1441.693 | |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type TCR % | No. SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12/05 | 3.10 | 0.50 | | | | | | | | | | |
| | | | | | | | | | | 51.00 | 48.90 | |
| | | | | | | | | | End of Borehole | | | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

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EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0905 (6 of 6)

304/03

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion & Rotary | **Borehole Diameter** 300mm to 2.30m; 200mm to 2.90m; 165mm to 51.00m | **Casing Diameter** 300mm to 2.30m; 200mm to 2.90m; 165mm to 51.00m | **BOREHOLE No.** 0906 |
| **Equipment** Dando 2000 | | | **Coordinates** 459866.423 E; **(National Grid)** 164372.499 N |
| **Drill Fluid** | | | **Ground Level** 99.65 m OD |
| **Orientation (°)** 90 | **Logged by** EDHC | **Compiled by** pb | **Checked by** DBM 19/10/04 |
| **Dates Drilled** Start 22/04/2004; End 22/04/2004 | 22/04/2004 | 30/04/2004 | **Location** Co ords - E 2714.217, N 1437.962 |

| Date & Time | Casing Depth (m) | Water Depth (m) (Flush Return) % | Sample/Core Recovery Depth (m) From | To | Type | No. | TCR % | SCR % | RQD % | SPT Blows /N Core Size (mm) | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22/04 | | | 0.00 | | V | | | | | | TOPSOIL (SILCHESTER GRAVEL) | (0.30) | | |
| | | | 0.00 | | | | | | | | | 0.30 | 99.35 | |
| | | | 0.00 | | CD | 3 | | | | | Dark brown slightly clayey, slightly sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) Below 0.50m: Orange brown. | | | |
| | | | 0.00 | | PID | | | | | 0 | | (1.00) | | |
| | | | 0.00 | | K | 4 | | | | | | | | |
| | | | 0.00 | | VL | 5 | | | | | | | | |
| | | | 0.00 | 0.30 | B | 6 | | | | | | | | |
| | | | 0.30 | 0.50 | B | 7 | | | | | | | | |
| | | | 0.50 | 1.20 | B | 8 | | | | | | | | |
| | | | 1.00 | | CD | 9 | | | | | | 1.30 | 98.35 | |
| | | | 1.00 | | PID | | | | | 0 | Stiff thinly laminated orange and light grey CLAY with occasional lenses up to 10mm wide of orange silty sand. Sand is fine and medium. (BAGSHOT FORMATION) | | | |
| | | | 1.00 | | K | 10 | | | | | | | | |
| | | | 1.00 | | VL | 11 | | | | | | | | |
| | 1.20 | Dry | 1.20 | 1.65 | | | | | | C10 | | (1.00) | | |
| | | | 1.30 | | D | 12 | | | | | | | | |
| | | | 1.30 | 1.80 | B | 13 | | | | | | | | |
| | 1.80 | Dry | 1.80 | 2.25 | U | 14 | | | | 25/450 | | | | |
| | | | 2.00 | | V | | | | | | | 2.30 | 97.35 | |
| | | | 2.00 | | PID | | | | | 0 | Stiff thinly laminated brown grey CLAY with thin and thick laminae of orange sand, yellow sand, orange brown clay and light grey sandy clay. Sand is fine to coarse. (TRANSITIONAL ZONE) | (0.60) | | |
| | | | 2.00 | | CD | 18 | | | | | | | | |
| | | | 2.00 | | K | 19 | | | | | | | | |
| 22/04 | 2.90 | Dry | 2.00 | | VL | 20 | | | | | | 2.90 | 96.75 | |
| | | | 2.30 | 2.75 | | | | | | S12 | | | | |
| | 1.80 | Dry | 2.25 | | D | 15 | | | | | | | | |
| | | | 2.30 | 2.75 | D | 16 | | | | | | | | |
| | | | 2.30 | | B | 21 | | | | | | | | |
| | | | | | | | | | | | End of Borehole | | | |

**Remarks** (See notes & keysheets)

1. Groundwater was not apparent during boring.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. Aquifer protection was carried out by sealing the base of the 300mm diameter borehole at a depth of 2.30m and continuing in 200mm diameter casing.
4. Borehole drilled to a total depth of 51.00m by open hole rotary drilling at 165mm diameter.
5. 113mm diameter UPVC casing installed to 50m and grouted into position using cement bentonite grout mix.

Scale 1:50

FUGRO

**Project**
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0906 (1 of 6)

304/03

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion | **Borehole Diameter** 200mm to 2.50m, 150mm to 20.00m | **Casing Diameter** 200mm to 2.50m, 150mm to 10.00m | **BOREHOLE No.** 0907 |
| **Equipment** Dando 2000 | | | **Coordinates** 459805.573 E; **(National Grid)** 164313.436 N; **Ground Level** 100.25 m OD |
| **Dates Drilled** Start 27/04/2004, End 28/04/2004 | **Logged by** 27/04/2004 | **Compiled by** pb 11/05/2004 | **Checked by** 19/10/04; **Location** Co ords - E2629.677, N 1431.319 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27/04 | | | 0.00 | 2.00 | B | 1 | | | TOPSOIL (SILCHESTER GRAVEL) | (0.20) | | |
| | | | 0.00 | | PID | | 0 | | | 0.20 | 100.05 | |
| | | | 0.00 | | V | 2 | | | Dark orange brown slightly clayey, slightly sandy GRAVEL with occasional subangular flint cobbles. Sand is fine to coarse. Gravel is subangular to rounded fine to coarse flint. (SILCHESTER GRAVEL) | | | |
| | | | 0.00 | | CD | 3 | | | | | | |
| | | | 0.00 | | K | 4 | | | | | | |
| | | | 0.00 | | V | 5 | | | | | | |
| | | | 0.00 | 0.20 | B | 6 | | | | | | |
| | | | 0.20 | 1.00 | B | 7 | | | | (1.70) | | |
| | | | 1.00 | | CD | 8 | | | | | | |
| | | | 1.00 | | PID | | 0 | | | | | |
| | | | 1.00 | | K | 9 | | | | | | |
| | | | 1.00 | | V | 10 | | | | | | |
| | 1.20 | Dry | 1.20 | 1.65 | | | C44 | | | | | |
| | | | 1.20 | 1.70 | B | 11 | | | | 1.90 | 98.35 | |
| | | | 1.90 | | D | 12 | | | Firm to stiff thinly laminated orange and light grey locally slightly sandy CLAY with lenses and laminae of orange, light grey and dark grey, slightly silty sand. Sand is fine to coarse. (BAGSHOT FORMATION) Between 2.70m and 3.60m: With thin beds of firm thinly laminated brown grey clay. | | | |
| | | | 2.00 | | PID | | 0 | | | | | |
| | | | 1.90 | 2.40 | B | 13 | | | | | | |
| | | | 2.00 | 4.00 | B | 14 | | | | | | |
| | | | 2.00 | | V | 15 | | | | | | |
| | | | 2.00 | | CD | 16 | | | | | | |
| | | | 2.00 | | K | 17 | | | | (1.70) | | |
| | | | 2.00 | | V | 18 | | | | | | |
| | 2.70 | Dry | 2.70 | 3.15 | | | S10 | | | | | |
| | 2.20 | Dry | 2.20 | 2.65 | U | 19 | | 55/ | | | | |
| | | | 2.65 | | D | 20 | | 450 | | | | |
| | | | 3.00 | | PID | | 0 | | | | | |
| | | | 2.70 | 3.15 | D | 21 | | | | | | |
| | | | 2.70 | 3.20 | B | 22 | | | | 3.60 | 96.65 | |
| | | | 3.00 | | CD | 23 | | | Firm thinly laminated dark grey CLAY with thin laminae and lenses of light grey fine sand. (TRANSITIONAL ZONE) | | | |
| | | | 3.00 | | K | 24 | | | | | | |
| | | | 3.00 | | V | 25 | | | | | | |
| | 3.00 | Dry | 3.40 | 3.85 | U | 26 | | 65/ | | | | |
| | | | 3.85 | | D | 27 | | 450 | | | | |
| | | | 3.90 | 4.35 | D | 28 | | | | | | |
| | 3.00 | Dry | 3.90 | 4.35 | | | S12 | | | | | |
| | | | 4.00 | | PID | | 0 | | | | | |
| | | | 4.00 | | CD | 29 | | | | | | |
| | | | 4.00 | | K | 30 | | | Below 4.95m: Stiff, locally slightly sandy. Sand is fine and medium. | | | |
| | | | 4.00 | | V | 31 | | | | | | |
| | | | 4.00 | 6.00 | B | 32 | | | | | | |
| | | | 4.00 | | V | 33 | | | | | | |
| | | | 4.00 | 4.50 | B | 34 | | | | | | |
| | 3.00 | Dry | 4.50 | 4.95 | U | 35 | | 75/ | | (3.80) | | |
| | | | 4.95 | | D | 36 | | 450 | | | | |
| | 3.00 | Dry | 5.00 | 5.45 | | | S17 | | | | | |
| | | | 5.00 | | PID | | 0 | | Below 5.95m: Derk grey, locally mottled grey brown. | | | |
| | | | 5.00 | 5.45 | D | 37 | | | | | | |
| | | | 5.00 | | CD | 38 | | | | | | |
| | | | 5.00 | | K | 39 | | | | | | |
| | | | 5.00 | | V | 40 | | | | | | |
| | | | 5.00 | 5.50 | B | 41 | | | | | | |
| | 5.00 | dry | 5.50 | 5.95 | U | 42 | | 110/ | | | | |
| | | | 5.95 | | D | 43 | | 350 | | | | |
| | 5.00 | Dry | 6.00 | 6.45 | | | S40 | | | | | |
| | | | 6.00 | 6.45 | D | 44 | | | | | | |
| | | | 6.00 | 8.00 | B | 45 | | | | | | |
| | | | 6.00 | | V | 46 | | | | | | |
| | | | 6.50 | 7.00 | B | 47 | | | | 7.40 | 92.85 | |
| | 5.00 | dry | 7.00 | 7.45 | U | 48 | | 130/ | Stiff locally fissile dark brown grey slightly sandy, locally sandy CLAY with occasional lenses of light brown sand and occasional lenses up to 5mm of dark green clay. Sand is dark green fine and medium. (TRANSITIONAL ZONE) | | | |
| | | | 7.45 | | D | 49 | | 450 | | | | |
| | 5.00 | Dry | 7.50 | 7.95 | | | S40 | | | | | |
| | | | 7.50 | 7.95 | D | 50 | | | | | | |
| | | | 8.00 | 10.00 | B | 51 | | | | (1.60) | | |
| | | | 8.00 | | V | 52 | | | | | | |
| | | | 8.00 | 8.50 | B | 53 | | | | | | |
| | | | 8.50 | 9.00 | B | 54 | | | | | | |
| 27/04 | 8.00 | 8.10 | | | | | | | | | | |
| | | | 9.00 | 9.45 | D | 55 | | | | 9.00 | 91.25 | |
| 28/04 | 8.00 | | 9.00 | 9.45 | | | S34 | | Stiff dark grey very clayey sandy SILT with layers of clay. Sand is fine. (TRANSITIONAL ZONE) | | | |
| | | | 9.50 | 10.00 | B | 56 | | | | | | |
| | | | | | | | | | | (1.45) | | |
| | | | 10.00 | 12.00 | B | 57 | | | | | | |

**Remarks** (See notes & keysheets)

1. Groundwater was not apparent during boring.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. Aquifer protection was carried out by sealing the base of the hole at a depth of 2.50m and continuing in reduced diameter casing.
4. An amount of water was added to facilitate boring and to maintain a positive hydrostatic head in granular strata from 1.20m to 1.90m and 8.50m to 20.00m.

Scale 1:50

FUGRO

**Project**
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0907 (1 of 3)

301/04

| | | |
|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 200mm to 2.50m, 150mm to 20.00m; Casing Diameter 200mm to 2.50m, 150mm to 10.00m | **BOREHOLE No. 0907** |
| Equipment Dando 2000 | | Coordinates (National Grid) 459805.573 E, 164313.436 N; Ground Level 100.25 m OD |
| Dates Drilled Start 27/04/2004, End 28/04/2004 | Logged by 27/04/2004; Compiled by pb 11/05/2004; Checked by DPM 19/10/04 | Location Co ords - E2629.677, N 1431.319 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10.00 | | V | 58 | | | | | | |
| | 10.00 | added | 10.00 | 10.45 | U | 59 | | 150/350 | | | | |
| | | | 10.45 | | D | 60 | | | | 10.45 | 89.80 | |
| | 10.00 | added | 10.50 | 10.95 | | | S38 | | Stiff dark grey slightly sandy CLAY with occasional layers of dark green and light grey sand. Sand is fine to coarse. (TRANSITIONAL ZONE) | | | |
| | | | 10.50 | 10.95 | D | 61 | | | | | | |
| | | | 11.00 | 11.50 | B | 62 | | | | | | |
| | 10.00 | added | 11.50 | 11.95 | U | 63 | | 150/400 | | | | |
| | | | 11.95 | | D | 64 | | | Below 11.95m: Very stiff. With occasional lenses of light grey sand. With rare coal fragments up to 20mm. | | | |
| | 10.00 | added | 12.00 | 12.45 | | | S45 | | | | | |
| | | | 12.00 | 12.45 | D | 65 | | | | | | |
| | | | 12.00 | 14.00 | B | 66 | | | | | | |
| | | | 12.00 | | V | 67 | | | | | | |
| | | | 12.50 | 13.00 | B | 68 | | | | | | |
| | 10.00 | added | 13.00 | 13.30 | U | 69 | | 150/300 | | | | |
| | | | 13.30 | | D | 70 | | | | | | |
| | 10.00 | added | 13.35 | 13.78 | | | S50/280 | | | | | |
| | | | 13.35 | 13.65 | D | 71 | | | | (6.55) | | |
| | | | 14.00 | 16.00 | B | 72 | | | | | | |
| | | | 14.00 | | V | 73 | | | | | | |
| | | | 14.00 | 14.50 | B | 74 | | | | | | |
| | 10.00 | added | 14.50 | 14.76 | U | 75 | | 150/300 | | | | |
| | | | 14.50 | | D | 76 | | | | | | |
| | 10.00 | added | 14.55 | 14.90 | | | S44/200 | | Below 14.80m: Grades locally to slightly silty sand. With occasional lenses of dark grey clay. | | | |
| | | | 14.55 | 14.80 | D | 77 | | | | | | |
| | | | 15.50 | 16.00 | B | 78 | | | From 15.50m: Sand is fine to medium. | | | |
| | | | 16.00 | 18.00 | B | 79 | | | | | | |
| | | | 16.00 | | V | 80 | | | | | | |
| | 10.00 | added | 16.00 | 16.35 | U | 81 | | 150/350 | | | | |
| | | | 16.35 | | D | 82 | | | | | | |
| | | | 16.40 | | D | 83 | | | | | | |
| | 10.00 | added | 16.40 | 16.85 | | | S45 | | | | | |
| | | | 17.00 | 17.50 | B | 84 | | | | 17.00 | 83.25 | |
| | 10.00 | added | 17.50 | 17.80 | U | 85 | | 150/300 | Stiff to very stiff dark grey sandy CLAY with occasional lenses and thin laminae of grey and grey brown sand. Sand is fine and medium with rare shell fragments. (LONDON CLAY) | | | |
| | | | 17.80 | | D | 86 | | | | | | |
| | 10.00 | added | 17.85 | 18.26 | | | S50/255 | | | | | |
| | | | 17.85 | 18.45 | D | 87 | | | | | | |
| | | | 18.00 | 20.00 | B | 88 | | | | | | |
| | | | 18.00 | | V | 89 | | | | (3.00) | | |
| | | | 18.50 | 19.00 | B | 90 | | | | | | |
| | 10.00 | added | 19.00 | 19.30 | U | 91 | | 150/300 | | | | |
| | | | 19.30 | | D | 92 | | | | | | |
| | 10.00 | added | 19.35 | 19.79 | | | S50/285 | | | | | |
| | | | 19.35 | 19.65 | D | 93 | | | | | | |
| 28/04 | 10.00 | 6.70 | 20.00 | | V | 94 | | | | 20.00 | 80.25 | |
| | | | | | | | | | End of Borehole | | | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

Project
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0907 (2 of 3)

| | | |
|---|---|---|
| **Drilling Method** Cable Percussion<br>**Equipment** Dando 2000<br>**Dates Drilled** Start 27/04/2004<br>End 28/04/2004 | **Borehole Diameter** 200mm to 2.50m<br>150mm to 20.00m<br>**Casing Diameter** 200mm to 2.50m<br>150mm to 10.00m<br>**Logged by** 27/04/2004<br>**Compiled by** pb 11/05/2004<br>**Checked by** PDM 19/10/04 | **BOREHOLE No. 0907**<br>**Coordinates** 459805.573 E<br>**(National Grid)** 164313.436 N<br>**Ground Level** 100.25 m OD<br>**Location**<br>Co ords - E2629.677, N 1431.319 |

| Description | Depth (m) | Level m OD | |
|---|---|---|---|
| Concrete | 0.50 | 99.75 | Flush lockable stopcock box cover.<br>Pipe diameter 50mm to 2.00m. |
| Bentonite Seal | 1.00 | 99.25 | |
| Sand Filter | 2.00 | 98.25 | |
| Bentonite Seal | 3.00 | 97.25 | |
| Cement/Bentonite Grout | 20.00 | 80.25 | Base of Hole |

**Remarks** (See notes & keysheets) Filter wrapped

Not to Scale

| | | |
|---|---|---|
| FUGRO | **Project**<br>AWE ALDERMASTON<br>NEW HR FACILITY GI<br>Golders Associates (UK) Limited<br>EDGE Consultants UK Ltd | **Contract No.** BAS040081<br>**Figure No.** 0907 (3 of 3)<br>309/03 |

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion | **Borehole Diameter** 200mm to 2.20m, 150mm to 20.00m | **Casing Diameter** 200mm to 1.70m, 150mm to 9.30m | **BOREHOLE No.** 0908 |
| **Equipment** Dando 2000 | | | **Coordinates** 459836.584 E; **(National Grid)** 164338.270 N |
| | | | **Ground Level** 99.70 m OD |
| **Dates Drilled** Start 27/04/2004, End 29/04/2004 | **Logged by** 27/04/2004 | **Compiled by** pb | **Checked by** DBM 19/10/04 |
| | | | **Location** Co ords - E 2669.400, N 1430.651 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm: Test | U100 Blows/ Recovery mm: Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27/04 | | | 0.00 | | V | | | | TOPSOIL (SILCHESTER GRAVEL) | (0.10) 0.10 | 99.60 | |
| | | | 0.00 | | PID | | 0 | | | | | |
| | | | 0.00 | | CD/K | 1 | | | Dark brown and dark orange brown slightly clayey slightly sandy GRAVEL with occasional subangular flint cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | (1.10) | | |
| | | | 0.00-2.00 | | B | 7 | | | | | | |
| | | | 0.10-1.20 | | B | 3 | | | | | | |
| | | | 1.00 | | CD/K | 2 | | | | | | |
| | | | 1.00 | | PID | | 0 | | | | | |
| | Nil | Dry | 1.20-1.65 | | U | 4 | | 39/ 450 | Firm to stiff thinly laminated orange and light grey slightly sandy CLAY with laminae and lenses of orange, light grey and yellow sand. Sand is fine to coarse. (BAGSHOT FORMATION) | 1.20 | 98.50 | |
| | | | 1.65 | | D | 5 | | | | | | |
| | Nil | Dry | 1.70-2.15 | | | | S17 | | | (1.45) | | |
| | | | 1.70-2.15 | | D | 6 | | | | | | |
| | | | 1.70-2.20 | | B | 8 | | | | | | |
| | | | 2.00 | | PID | | 0 | | | | | |
| | | | 2.00 | | CD/K | 7 | | | | | | |
| | | | 2.00 | | V | 7 | | | | | | |
| | | | 2.00-4.00 | | B | 16 | | | | | | |
| | 1.70 | Dry | 2.20-2.65 | | U | 9 | | 54/ 450 | Firm thinly laminated brown grey CLAY with thin laminae and lenses of grey and orange sand. Sand is fine to medium. (BAGSHOT FORMATION) | 2.65 | 97.05 | |
| | | | 2.65 | | D | 10 | | | | | | |
| | 1.70 | Dry | 2.70-3.15 | | | | S21 | | | (1.10) | | |
| | | | 2.70-3.15 | | D | 11 | | | | | | |
| | | | 2.70-3.30 | | B | 13 | | | | | | |
| | | | 3.00 | | PID | | 0 | | | | | |
| | | | 3.00 | | CD/K | 12 | | | | | | |
| | 3.30 | Damp | 3.30-3.75 | | U | 14 | | 59/ 450 | | | | |
| | | | 3.75 | | D | 15 | | | | 3.75 | 95.95 | |
| | | | 3.80-4.25 | | D | 16 | | | Stiff fissured thinly laminated dark grey CLAY with thin laminae and lenses of grey sand. Sand is fine to medium. Fissures are extremely closely spaced and randomly orientated. (TRANSITIONAL ZONE) | | | |
| | 3.30 | Damp | 3.80-4.25 | | | | S20 | | | | | |
| | | | 3.80-4.30 | | B | 18 | | | | | | |
| | | | 4.00 | | PID | | 0 | | | | | |
| | | | 4.00 | | V | 16 | | | | | | |
| | | | 4.00 | | CD/K | 17 | | | | | | |
| | | | 4.00-6.00 | | B | 26 | | | | | | |
| | 4.30 | Damp | 4.30-4.75 | | U | 19 | | 70/ 400 | Between 4.75m and 6.25m: Locally slightly sandy. Sand is fine and medium. | | | |
| | | | 4.75 | | D | 20 | | | | | | |
| | | | 4.80-5.25 | | D | 21 | | | | | | |
| | 4.30 | Damp | 4.80-5.25 | | | | S26 | | Below 5.30m: Fissures are locally blocky, surfaces stained dark grey brown. | | | |
| | | | 5.00 | | CD/K | 22 | | | | | | |
| | | | 5.00 | | PID | | 0 | | | | | |
| | | | 5.30-5.80 | | B | 23 | | | | (3.45) | | |
| 27/04 | 5.80 | Damp | | | | | | | | | | |
| 28/04 | 4.30 | damp | 5.80-6.25 | | U | 24 | | 74/ 450 | | | | |
| | | | 6.00 | | V | 26 | | | | | | |
| | | | 6.00-8.00 | | B | 30 | | | | | | |
| | | | 6.25 | | D | 25 | | | | | | |
| | | | 6.30-6.75 | | D | 26 | | | | | | |
| | 5.80 | Damp | 6.30-6.75 | | | | S24 | | | | | |
| | | | 6.40 | | W | 40 | | | | | | |
| | | | 6.80-7.30 | | B | 27 | | | | | | |
| | | | | | | | | | | 7.20 | 92.50 | |
| | 7.30 | Damp | 7.30-7.75 | | U | 28 | | 100/ 450 | Very dense apparently unstructured grey and grey brown fine and medium SAND. (TRANSITIONAL ZONE) | | | |
| | | | 7.75 | | D | 29 | | | | (1.05) | | |
| | | | 7.80-8.25 | | D | 30 | | | | | | |
| | 7.30 | Damp | 7.80-8.25 | | | | S49 | | | | | |
| | | | 8.00 | | V | 31 | | | | | | |
| | | | 8.00-10.00 | | B | 35 | | | | 8.25 | 91.45 | |
| | | | 8.00 | | V | 35 | | | Very dense, very dark grey very sandy CLAY grading locally to very clayey very silty SAND. Sand is fine and medium. (TRANSITIONAL ZONE) | | | |
| | | | 8.30-8.80 | | B | 31 | | | | | | |
| | 8.80 | Added | 8.80-9.25 | | U | 32 | | 127/ 450 | | | | |
| | | | 9.25 | | D | 33 | | | | | | |
| | | | 9.30-9.72 | | D | 34 | | | | | | |
| | 8.80 | Added | 9.30-9.73 | | | | S50/ 275 | | | | | |
| | | | 9.80-10.30 | | B | 35 | | | | | | |
| | | | 10.00-12.00 | | B | 43 | | | | | | |

**Remarks** (See notes & keysheets)

1. Groundwater was not apparent during boring but any entry may have been masked by the addition of water to assist drilling.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. Aquifer protection was carried out by sealing the base of the hole at a depth of2.20m and continuing in reduced diameter casing.
4. An amount of water was added to facilitate boring and to maintain a positive hydrostatic head in granular strata from 8.80m to 20.00m.

Scale 1:50

FUGRO

**Project**
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0908 (1 of 3)

301/04

| | | |
|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 200mm to 2.20m, 150mm to 20.00m; Casing Diameter 200mm to 1.70m, 150mm to 9.30m | **BOREHOLE No. 0908** |
| Equipment Dando 2000 | | Coordinates (National Grid) 459836.584 E, 164338.270 N |
| Dates Drilled Start 27/04/2004, End 29/04/2004 | Logged by 27/04/2004; Compiled by pb; Checked by DBM 19/10/04 | Ground Level 99.70 m OD; Location Co ords - E 2669.400, N 1430.651 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9.30 | Added | 10.30-10.75 | | U | 36 | | 138/ 450 | | | | |
| | | | 10.75 | | D | 37 | | | At 10.75m: With occasional clay lenses. | | | |
| | | | 10.80-10.25 | | D | 38 | | | | | | |
| | 9.30 | Added | 10.80-11.25 | | | | S50 | | | | | |
| | | | 11.30-11.80 | | B | 39 | | | | | | |
| 28/04 | 9.30 | added | | | | | | | | (7.00) | | |
| 29/04 | 9.30 | 6.40 | 11.80-12.25 | | U | 41 | | 140/ 450 | | | | |
| | | | 12.00 | | V | 43 | | | | | | |
| | | | 12.00-14.00 | | B | 47 | | | At 12.25m: 20mm pyrite nodule. Below 12.30m: With occasional thin laminae of grey clay and lenses of grey brown sand. With rare coal fragments. | | | |
| | | | 12.25 | | D | 42 | | | | | | |
| | | | 12.30-12.69 | | D | 43 | | | | | | |
| | 9.30 | Added | 12.30-12.70 | | | | S50/ 245 | | | | | |
| | | | 12.80-13.30 | | B | 44 | | | | | | |
| | 9.30 | Added | 13.30-13.75 | | U | 45 | | 150/ 450 | | | | |
| | | | 13.75 | | D | 46 | | | At 13.75m: Coomon bivalve and gastropod fragments up to 40mm and 20mm shark tooth. | | | |
| | | | 13.80-14.22 | | D | 47 | | | | | | |
| | 9.30 | Added | 13.80-14.22 | | | | S50/ 270 | | | | | |
| | | | 14.00 | | V | 47 | | | | | | |
| | | | 14.00-16.00 | | B | 52 | | | | | | |
| | | | 14.30-14.80 | | B | 48 | | | | | | |
| | 9.30 | Added | 14.80-15.25 | | U | 49 | | 150/ 350 | | | | |
| | | | 15.25 | | D | 50 | | | | 15.25 (0.35) | 84.45 | |
| | | | 15.30-15.65 | | D | 51 | | | Very dense dark grey, locally grey brown, slightly silty SAND. Sand is fine and medium. (TRANSITIONAL ZONE) | | | |
| | 9.30 | Added | 15.30-15.66 | | | | S50/ 210 | | | 15.60 | 84.10 | |
| | | | 15.80-16.30 | | B | 52 | | | Very stiff dark grey slightly sandy SILT. Sand is fine. (TRANSITIONAL ZONE) | | | |
| | | | 16.00 | | V | 52 | | | | | | |
| | | | 16.00-18.00 | | B | 59 | | | | | | |
| | 9.30 | Added | 16.30-16.75 | | U | 53 | | 150/ 400 | | | | |
| | | | 16.75 | | D | 54 | | | | (2.65) | | |
| | | | 16.80-17.24 | | D | 55 | | | | | | |
| | 9.30 | Added | 16.80-17.24 | | | | S50/ 290 | | | | | |
| | | | 17.30-17.80 | | B | 56 | | | | | | |
| | 9.30 | Added | 17.80-18.25 | | U | 57 | | 150/ 400 | | | | |
| | | | 18.00 | | V | 59 | | | | | | |
| | | | 18.00-20.00 | | B | 63 | | | | 18.25 | 81.45 | |
| | | | 18.25 | | D | 58 | | | Stiff to very stiff, locally thinly laminated dark grey locally slightly sandy CLAY with lenses of silty sand. Sand is fine. (LONDON CLAY) | | | |
| | | | 18.30-18.72 | | D | 59 | | | | | | |
| | 9.30 | Added | 18.30-18.73 | | | | S50/ 275 | | | | | |
| | | | 18.80-19.30 | | B | 60 | | | | (1.75) | | |
| | 9.30 | Added | 19.30-19.75 | | U | 61 | | 150/ 400 | | | | |
| | | | 19.75 | | D | 62 | | | | | | |
| 29/04 | 9.30 | added | 19.80-20.16 | | D | 63 | | | | | | |
| | | | 19.80-20.16 | | | | S50/ | | | 20.00 | 79.70 | |
| | | | | | | | | | End of Borehole | | | |

**Remarks** 5 (See notes & keysheets) The borehole was backfilled on completion with cement bentonite grout..

Scale 1:50

FUGRO

Project: AWE ALDERMASTON, NEW HR FACILITY GI, Golders Associates (UK) Limited, EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0908 (2 of 3)

301/04

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion<br>**Equipment** Dando 2000<br>**Dates Drilled** Start 27/04/2004 End 29/04/2004 | **Borehole Diameter** 200mm to 2.20m, 150mm to 20.00m<br>**Casing Diameter** 200mm to 1.70m, 150mm to 9.30m<br>**Logged by** 27/04/2004 **Compiled by** pb **Checked by** DM 19/10/04 | **BOREHOLE No.** 0908<br>**Coordinates (National Grid)** 459836.584 E, 164338.270 N<br>**Ground Level** 99.70 m OD<br>**Location** Co ords - E 2669.400, N 1430.651 | |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9.30 | Added | 20.00 | | V | 63 | 210 | | | 20.00 | 79.70 | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

**Project**
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0908 (3 of 3)

301/04

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion | **Borehole Diameter** 200mm to 2.00m, 150mm to 20.00m | **Casing Diameter** 200mm to 2.00m, 150mm to 10.50m | **BOREHOLE No.** 0909 |
| **Equipment** Dando 2000 | | | **Coordinates** 459866.199 E; **(National Grid)** 164353.529 N; **Ground Level** 98.80 m OD |
| **Dates Drilled** Start 23/04/2004, End 26/04/2004 | **Logged by** EDHC 26/04/2004 | **Compiled by** pb 30/04/2004 | **Checked by** DGM 19/10/04; **Location** Co ords - E 2701.939, N 1423.500 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm: Test | U100 Blows/ Recovery mm: Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23/04 | | | 0.00 | | V | | | | TOPSOIL (SILCHESTER GRAVEL) | (0.20) | | |
| | | | 0.00 | | PID | | 0 | | | 0.20 | 98.60 | |
| | | | 0.00 | | CD | 3 | | | Light brown slightly clayey slightly sandy GRAVEL. Sand is medium fine. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | | | |
| | | | 0.00 | | K | 4 | | | | | | |
| | | | 0.00 | | VL | 5 | | | | | | |
| | | | 0.00 | 0.20 | B | 6 | | | | | | |
| | | | 0.20 | 1.20 | B | 7 | | | | (1.10) | | |
| | | | 1.00 | | CD | 8 | | | | | | |
| | | | 1.00 | | PID | | 0 | | | | | |
| | | | 1.00 | | K | 9 | | | | | | |
| | | | 1.00 | | VL | 10 | | | | 1.30 | 97.50 | |
| | 1.20 | 1.10 | 1.20 | 1.65 | | | C36 | | Stiff orange brown and light grey mottled slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subrounded and rounded, fine to coarse flint. (BAGSHOT FORMATION) | (0.50) | | |
| | | | 1.30 | | D | 11 | | | | | | |
| | | | 1.30 | 1.70 | B | 12 | | | | | | |
| | | | 1.50 | | W | 28 | | | | 1.80 | 97.00 | |
| | 1.70 | Dry | 1.70 | 2.15 | U | 13 | | 75/ 450 | | | | |
| | | | 2.00 | | V | | | | | | | |
| | | | 2.00 | | PID | | 0 | | Firm fissured thinly laminated brown grey SILT with thin laminae and lenses of orange and yellow brown fine and medium sand. Fissures are extremely closely spaced, locally blocky. (TRANSITIONAL ZONE) Between 2.30m and 3.25m; Orange, light grey and brown grey. Below 3.25m; Brown grey, locally mottled orange. With thin laminae and lenses of light brown and light grey fine and medium sand. | | | |
| | | | 2.00 | | CD | 18 | | | | | | |
| | | | 2.00 | | K | 19 | | | | | | |
| | | | 2.00 | | VL | 20 | | | | | | |
| | 1.70 | Dry | 2.30 | 2.75 | | | S11 | | | (2.20) | | |
| | | | 2.15 | | D | 14 | | | | | | |
| | | | 2.30 | 2.75 | D | 15 | | | | | | |
| | | | 2.30 | 2.80 | B | 21 | | | | | | |
| | 2.80 | Dry | 2.80 | 3.25 | U | 22 | | 50/ 450 | | | | |
| | | | 3.00 | | CD | 25 | | | | | | |
| | | | 3.00 | | PID | | 0 | | | | | |
| | | | 3.00 | | K | 26 | | | | | | |
| | | | 3.00 | | VL | 27 | | | | | | |
| 23/04 | | | 3.25 | | D | 23 | | | | | | |
| | | | 3.40 | 3.85 | D | 24 | S11 | | | 4.00 | 94.80 | |
| 26/04 | 2.80 | Dry | 4.00 | | V | | | | Firm fissured fissile dark grey CLAY with rare lenses up to 5mm of grey fine and medium sand. Fissures are extremely closely spaced, randomly orientated. (TRANSITIONAL ZONE) | | | |
| | | | 4.00 | | PID | | 0 | | | | | |
| | | | 4.00 | 4.50 | B | 29 | | | | | | |
| | | | 4.00 | | CD | 32 | | | | | | |
| | | | 4.00 | | K | 33 | | | | | | |
| | | | 4.00 | | VL | 34 | | | | | | |
| | 4.50 | 4.50 | 4.50 | 4.95 | U | 35 | | 65/ 450 | | | | |
| | | | 4.95 | | D | 36 | | | | | | |
| | | | 5.00 | | PID | | 0 | | | | | |
| | | | 5.00 | | CD | 38 | | | | | | |
| | 4.50 | 4.50 | 5.10 | 5.55 | | | S14 | | | | | |
| | | | 5.00 | | K | 39 | | | | | | |
| | | | 5.00 | | VL | 40 | | | | | | |
| | | | 5.10 | 5.55 | D | 37 | | | | (3.55) | | |
| | | | 5.10 | 5.60 | B | 41 | | | Between 5.95m and 6.10m; Brown grey, slightly sandy. Sand is dark green, fine and medium. | | | |
| | 5.60 | Dry | 5.60 | 6.05 | U | 42 | | 65/ 450 | | | | |
| | | | 6.00 | | V | | | | | | | |
| | | | 6.05 | | D | 43 | | | | | | |
| | 5.60 | 4.50 | 6.10 | 6.55 | | | S15 | | | | | |
| | | | 6.10 | 6.55 | D | 44 | | | Below 6.70m; With lenses of light grey and grey brown silty fine and medium sand. At 6.70m; 50mm pyrite nodule. | | | |
| | | | 6.70 | | D | 47 | | | | | | |
| | | | 6.70 | 7.20 | B | 48 | | | | | | |
| | 7.00 | Damp | 7.10 | 7.55 | U | 49 | | 100/ 450 | | | | |
| | | | 7.55 | | D | 50 | | | | 7.55 | 91.25 | |
| | 7.70 | Damp | 7.70 | 8.15 | D | 51 | S38 | | Stiff dark grey sandy CLAY, grading locally to sandy silt, with occasional lenses of clay and grey sand. Sand is fine and medium. (TRANSITIONAL ZONE) | | | |
| | | | 8.00 | | V | | | | | | | |
| | | | 8.10 | 8.60 | B | 54 | | | | | | |
| | 8.50 | Damp | 8.60 | 9.05 | U | 55 | | 150/ 350 | | | | |
| | | | 9.05 | | D | 56 | | | | (3.00) | | |
| | 8.50 | Damp | 9.20 | 9.65 | D | 57 | S35 | | | | | |
| | | | 9.60 | 10.10 | B | 60 | | | | | | |
| | | | 10.00 | | V | | | | | | | |

**Remarks** (See notes & keysheets)

1. Seepages of groundwater were encountered at 4.50m and at 6.70m.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. The borehole was advanced by chiselling methods from 1.40m to 1.50m (30 minutes) and 14.70m to 14.80m (30 minutes).
4. An amount of water was added to facilitate boring and to maintain a positive hydrostatic head in granular strata from 10.50m to 20.00m.
5. Aquifer protection was carried out by sealing the base of the hole at a depth of 2.00m and continuing in reduced

Scale 1:50

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**Project**
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NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0909 (1 of 3)

301/04

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 200mm to 2.00m, 150mm to 20.00m | Casing Diameter 200mm to 2.00m, 150mm to 10.50m | **BOREHOLE No. 0909** |
| Equipment Dando 2000 | | | Coordinates 459866.199 E (National Grid) 164353.529 N |
| Dates Drilled Start 23/04/2004 End 26/04/2004 | Logged by EDHC 26/04/2004 | Compiled by pb 30/04/2004 | Checked by DRM 30/04/04 |
| | | | Ground Level 98.80 m OD |
| | | | Location Co ords - E 2701.939, N 1423.500 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From–To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10.00 | Damp | 10.10-10.55 | U | 61 | | 150/ 450 | | | | |
| | | | 10.55 | D | 62 | | | | 10.55 | 88.25 | |
| | 10.50 | Damp | 10.70-11.15 | D | 63 | S47 | | Firm to stiff dark brown grey sandy CLAY, grading locally to silty sand. Sand is fine and medium. (TRANSITIONAL ZONE) | | | |
| | | | 11.20-11.70 | B | 64 | | | | (1.60) | | |
| | 10.50 | GL | 11.70-12.15 | U | 65 | | 150/ 350 | | | | |
| | | | 12.00 | V | | | | | 12.15 | 86.65 | |
| | | | 12.15 | D | 66 | | | Very dense dark grey slightly silty, locally silty, fine SAND with occasional lenses of clay. (TRANSITIONAL ZONE) | | | |
| | 10.50 | GL | 12.20-12.65 | | | S50 | | | | | |
| | | | 12.20-12.65 | D | 67 | | | | | | |
| | | | 12.70-13.20 | B | 70 | | | | | | |
| | 10.50 | GL | 13.20-13.50 | U | 71 | | 150/ 300 | | (2.55) | | |
| | | | 13.50 | D | 72 | | | | | | |
| | 10.50 | GL | 13.55-13.80 | D | 73 | S50/ 205 | | | | | |
| | | | 14.00 | V | | | | | | | |
| | | | 14.20-14.70 | B | 76 | | | | | | |
| | | | 14.70 | U | | | 150 | | 14.70 | 84.10 | |
| | | | 14.70 | D | 77 | | | Very stiff dark grey slightly sandy CLAY with rare gravel. Sand is fine. Gravel is fine. (TRANSITIONAL ZONE) At 14.70m; Band of very strong dark grey siltstone. | | | |
| | | | 14.70-15.20 | B | 78 | | | | | | |
| | 10.50 | GL | 15.20-15.50 | U | 79 | | 150/ 300 | | | | |
| | | | 15.50 | D | 80 | | | | | | |
| | 10.50 | GL | 15.55-15.85 | D | 81 | S50/ 195 | | | (2.30) | | |
| | | | 16.00 | V | | | | | | | |
| | | | 16.20-16.70 | B | 84 | | | | | | |
| | 10.50 | GL | 16.70-17.00 | U | 85 | | 150/ 300 | | | | |
| | | | 17.00 | D | 86 | | | | 17.00 | 81.80 | |
| | 10.50 | GL | 17.05-17.46 | D | 87 | S50/ 260 | | Very stiff dark grey slightly sandy CLAY. Sand is fine. (LONDON CLAY) | | | |
| | | | 17.70-18.20 | B | 90 | | | | | | |
| | | | 18.00 | V | | | | | | | |
| | 10.50 | GL | 18.20-18.50 | U | 91 | | 150/ 300 | | | | |
| | | | 18.50 | D | 92 | | | Below 18.50m; With lenses of fine and medium sand. | (3.00) | | |
| | 10.50 | GL | 18.55-18.88 | D | 93 | S50/ 275 | | | | | |
| | | | 19.00-19.50 | B | 94 | | | | | | |
| | 10.50 | GL | 19.50-19.90 | U | 95 | | 150/ 400 | | | | |
| 26/04 | | | 19.90 | D | 96 | | | | 20.00 | 78.80 | |
| | | | | | | | | End of Borehole | | | |

**Remarks** (See notes & keysheets) diameter casing.

Scale 1:50

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Project
AWE ALDERMASTON
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EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0909 (2 of 3)

301/04

| | | |
|---|---|---|
| **Drilling Method** Cable Percussion<br>**Equipment** Dando 2000<br>**Dates Drilled** Start 23/04/2004 End 26/04/2004 | **Borehole Diameter** 200mm to 2.00m, 150mm to 20.00m<br>**Casing Diameter** 200mm to 2.00m, 150mm to 10.50m<br>**Logged by** EDHC 26/04/2004<br>**Compiled by** pb 30/04/2004<br>**Checked by** DBM 10/10/04 | **BOREHOLE No. 0909**<br>**Coordinates** 459866.199 E<br>**(National Grid)** 164353.529 N<br>**Ground Level** 98.80 m OD<br>**Location** Co ords - E 2701.939, N 1423.500 |

| Description | Depth (m) | Level m OD | |
|---|---|---|---|
| Concrete | 1.00 | 97.80 | Flush lockable stopcock box cover with gas tap.<br>Pipe diameter 50mm to 15.00m. |
| Cement/Bentonite Grout | 11.00 | 87.80 | |
| Bentonite Seal | 12.00 | 86.80 | |
| Sand Filter | 15.00 | 83.80 | |
| Bentonite Seal | 16.00 | 82.80 | |
| Cement/Bentonite Grout | 20.00 | 78.80 | Base of Hole |

**Remarks**
(See notes & keysheets)

Not to Scale

FUGRO

**Project**
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0909 (3 of 3)

309/03

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion | **Borehole Diameter** 200mm to 2.50m, 150mm to 20.00m | **Casing Diameter** 200mm to 2.50m, 150mm to 14.30m | **BOREHOLE No. 0910** |
| **Equipment** Dando 2000 | | | **Coordinates (National Grid)** 459893.452 E, 164365.726 N |
| | | | **Ground Level** 97.95 m OD |
| **Dates Drilled** Start 19/04/2004, End 21/04/2004 | **Logged by** EDHC 19/04/2004 | **Compiled by** pb 30/04/2004 | **Checked by** DBM 19/10/04 |
| | | | **Location** Co ords - E 2730.705, N 1415.500 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19/04 | | | 0.00 | | V | | | | TOPSOIL (SILCHESTER GRAVEL) | (0.20) | | |
| | | | 0.00 | | PID | | 0.8 | | | 0.20 | 97.75 | |
| | | | 0.00 | | CD/K | 1 | | | Brown slightly clayey sandy GRAVEL with rare cobbles. Sand is fine to coarse. Gravel is rounded, fine to coarse flint. (SILCHESTER GRAVEL) | | | |
| | | | 0.00 | | VL | 1 | | | | | | |
| | | | 0.20 | 1.20 | B | 3 | | | | (1.10) | | |
| | | | 1.00 | | CD/K | 2 | | | | | | |
| 19/04 | | | 1.00 | | PID | | 1 | | | | | |
| | | | 1.00 | | VL | 2 | | | | | | |
| 20/04 | | | 1.20 | 1.70 | B | 4 | | | | 1.30 | 96.65 | |
| | | | 1.20 | 1.65 | | | C8 | | Firm thinly laminated orange brown and grey brown slightly sandy CLAY with interbeds and lenses of orange fine and medium sand and light grey clay. (BAGSHOT FORMATION) | | | |
| | | | 2.00 | | V | | | | | (1.15) | | |
| | | | 2.00 | | PID | | 0.8 | | | | | |
| | | | 2.00 | | CD/K | 5 | | | | | | |
| | | | 2.00 | | VL | 5 | | | | | | |
| | 2.00 | Damp | 2.00 | 2.45 | U | 6 | | 47/ | | 2.45 | 95.50 | |
| | | | 2.45 | | D | 7 | | 450 | | | | |
| | 2.00 | Damp | 2.50 | 2.95 | | | S16 | | Firm to stiff fissured, thinly laminated grey brown CLAY with lenses and thin laminae of orange fine and medium sand. Fissures are extremely closely spaced, randomly orientated and blocky with stained orange brown surfaces. (BAGSHOT FORMATION) | | | |
| | | | 2.50 | 2.95 | D | 8 | | | | | | |
| | | | 2.50 | 3.00 | B | 9 | | | | (1.35) | | |
| | | | 3.00 | | CD/K | 10 | | | | | | |
| | | | 3.00 | | PID | | 0.5 | | | | | |
| | | | 3.00 | | VL | 10 | | | | | | |
| | 3.00 | Damp | 3.00 | 3.45 | U | 11 | | 60/ | Below 3.45m: Grey, with occasional lenses and thin laminae of orange fine and medium sand. | | | |
| | | | 3.45 | | D | 12 | | 400 | | | | |
| | 3.00 | Damp | 3.50 | 3.95 | | | S19 | | | | | |
| | | | 3.50 | 3.95 | D | 13 | | | | 3.80 | 94.15 | |
| | | | 3.50 | 4.00 | B | 14 | | | Stiff fissured, locally fissile, dark grey CLAY with occasional lenses and pockets up to 10mm wide of grey silty fine sand. Fissures are extremely closely spaced, randomly orientated, surfaces occasionally coated with fine sand. (TRANSITIONAL ZONE) | | | |
| | | | 4.00 | | V | | | | | | | |
| | | | 4.00 | | PID | | 0.3 | | | | | |
| | | | 4.00 | | CD/K | 15 | | | | | | |
| | | | 4.00 | | VL | 15 | | | | | | |
| | 4.00 | Damp | 4.00 | 4.45 | U | 16 | | 61/ | | | | |
| | | | 4.45 | | D | 17 | | 450 | | | | |
| | 4.00 | Damp | 4.50 | 4.95 | | | S18 | | | (2.20) | | |
| | | | 4.50 | 4.95 | D | 18 | | | Between 5.00m and 5.50m: Slightly sandy. Sand is black, fine. Locally grading to slightly sandy silt from 5.00m. | | | |
| | | | 5.00 | | CD/K | 19 | | | | | | |
| | | | 5.00 | | PID | | 0.2 | | | | | |
| | | | 5.00 | | VL | 19 | | | | | | |
| | | | 5.00 | 5.50 | B | 20 | | | | | | |
| | 5.50 | Damp | 5.50 | 5.95 | U | 21 | | 74/ | | | | |
| | | | 5.50 | | W | 37 | | 450 | | | | |
| | | | 5.95 | | D | 22 | | | | 6.00 | 91.95 | |
| | 5.50 | Damp | 6.00 | 6.45 | | | S49 | | Dense dark grey slightly silty fine SAND (TRANSITIONAL ZONE) | | | |
| | | | 6.00 | | V | | | | | | | |
| | | | 6.00 | 6.45 | D | 23 | | | | | | |
| | | | 6.50 | 7.00 | B | 24 | | | Between 6.50m and 7.00m: With occasional laminae of grey clay. | | | |
| | 7.00 | Added | 7.00 | 7.45 | U | 25 | | 100/ 300 | | | | |
| | | | 7.45 | | D | 26 | | | | | | |
| | 7.00 | Added | 7.50 | 7.95 | | | S44 | | | | | |
| | | | 7.50 | 7.95 | D | 27 | | | | (3.50) | | |
| | | | 8.00 | | V | | | | | | | |
| | | | 8.00 | 8.50 | B | 28 | | | | | | |
| | 8.50 | Added | 8.50 | 8.90 | U#B | 29 | | | | | | |
| | | | 9.00 | 9.45 | D | 30 | | | Between 9.00m and 9.45m: Grading locally to sandy silt. | | | |
| | 9.00 | Added | 9.00 | 9.45 | | | S46 | | | | | |
| | | | 9.50 | 10.00 | B | 31 | | | | 9.50 | 88.45 | |
| | | | | | | | | | Stiff dark grey sandy CLAY. Sand is fine. (TRANSITIONAL ZONE) | | | |
| | | | 10.00 | | V | | | | | (1.00) | | |

**Remarks** (See notes & keysheets)

1. Groundwater was encountered at 5.50m at start of shift 21.04.04.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. Aquifer protection was carried out by sealing the base of the 200mm diameter hole at a depth of 2.50m and continuing in 150mm diameter casing.
4. The borehole was backfilled on completion with cement bentonite grout.
5. The borehole was advanced by chiselling methods from 14.20m to 14.30m (0.50 hours) and 14.30m to 14.60m (1 hour).

Scale 1:50

FUGRO

**Project**
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0910 (1 of 2)

301/04

| | | |
|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 200mm to 2.50m, 150mm to 20.00m; Casing Diameter 200mm to 2.50m, 150mm to 14.30m | **BOREHOLE No. 0910** |
| Equipment Dando 2000 | | Coordinates (National Grid) 459893.452 E, 164365.726 N |
| Dates Drilled Start 19/04/2004, End 21/04/2004 | Logged by EDHC 19/04/2004; Compiled by pb 30/04/2004; Checked by DBM 19/10/04 | Ground Level 97.95 m OD; Location Co ords - E 2730.705, N 1415.500 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |
| | | | 10.50-10.95 | | D | 32 | | | | 10.50 | 87.45 | |
| | 10.50 | Added | 10.50-10.95 | | | | S47 | | Stiff dark grey sandy SILT with occasional laminae of light grey clay. Sand is fine. With rare coal/ organic nodules. (TRANSITIONAL ZONE) | | | |
| | | | 11.00-11.50 | | B | 33 | | | | (1.50) | | |
| | | | 12.00 | | V | | | | | 12.00 | 85.95 | |
| | 12.00 | Added | 12.00-12.42 | | | | S50/ 265 | | Stiff brown grey slightly sandy CLAY with pockets and lenses up to 10mm wide of fine and medium sand. (TRANSITIONAL ZONE) | | | |
| | | | 12.00-12.41 | | D | 34 | | | | | | |
| | | | 12.50-13.00 | | B | 35 | | | | | | |
| | | | 13.50-13.95 | | D | 36 | | | | | | |
| | 13.50 | Added | 13.50-13.95 | | | | S40 | | | | | |
| | | | 14.00 | | V | | | | | | | |
| 20/04 | 13.00 | Added | 14.20-14.70 | | B | 38 | | | Between 14.20m and 14.30m: Very strong grey siltstone. | | | |
| 21/04 | 13.00 | 5.50 | | | | | | | | | | |
| | | | 15.00-15.37 | | D | 39 | | | Below 15.00m: rare bivalve fragments up to 5mm. | (6.00) | | |
| | 14.30 | 7.10 | 15.00-15.38 | | | | S50/ 225 | | | | | |
| | | | 15.50-16.00 | | B | 40 | | | | | | |
| | | | 16.00 | | V | | | | | | | |
| | | | 16.50-16.86 | | D | 41 | | | Below 16.50m: With pockets, lenses and thin laminae of fine and medium sand. | | | |
| | 14.30 | 8.30 | 16.50-16.87 | | | | S50/ 215 | | | | | |
| | | | 17.00-17.50 | | B | 42 | | | | | | |
| | | | 18.00 | | V | | | | | 18.00 | 79.95 | |
| | 14.30 | 9.10 | 18.00-18.37 | | | | S50/ 220 | | Very stiff dark grey sandy CLAY. Sand is fine. (LONDON CLAY) | | | |
| | | | 18.00-18.37 | | D | 43 | | | | | | |
| | | | 18.50-19.00 | | B | 44 | | | | (1.50) | | |
| | | | 19.50-19.85 | | D | 45 | | | | 19.50 | 78.45 | |
| | 14.30 | 10.40 | 19.50-19.85 | | | | S50/ 200 | | Very stiff locally fissile brown grey CLAY with lenses and thin laminae of light grey brown fine and medium sand. (LONDON CLAY) | (0.50) | | |
| 21/04 | 14.30 | 10.40 | | | | | | | | | | |
| | | | 20.00 | | V | | | | | 20.00 | 77.95 | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

Project
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0910 (2 of 2)

301/04

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 200mm to 3.20m, 150mm to 17.00m | Casing Diameter 200mm to 3.20m, 150mm to 9.30m | **BOREHOLE No. 0911** |
| Equipment Dando 2000 | | | Coordinates (National Grid) 459838.877 E, 164307.970 N |
| Dates Drilled Start 23/04/2004, End 27/04/2004 | Logged by EDHC 23/04/2004 | Compiled by pb 30/04/2004 | Ground Level 99.25 m OD |
| | | Checked by 19/10/04 | Location Co ords - E 2651.831, N 1405.859 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm: Test | U100 Blows/ Recovery mm: Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23/04 | | | 0.00 | | V | | | | TOPSOIL (SILCHESTER GRAVEL) | (0.10) | | |
| | | | 0.00 | | PID | | 0 | | | 0.10 | 99.15 | |
| | | | 0.00 | | CD/K | 1 | | | Dark grey slightly sandy clayey GRAVEL. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | (0.35) | | |
| | | | 0.00 | | VL | 1 | | | | 0.45 | 98.80 | |
| | | | 0.10-0.45 | | B | 2 | | | | | | |
| | | | 0.45-1.20 | | B | 4 | | | | | | |
| | | | 1.00 | | V | | | | Dense dark brown slightly clayey slightly sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) Below 1.20m: dense, grey brown, white and dark grey slightly clayey, slightly sandy gravel. | | | |
| | | | 1.00 | | PID | | 0 | | | | | |
| | | | 1.00 | | CD/K | 3 | | | | (1.65) | | |
| | | | 1.00 | | VL | 3 | | | | | | |
| | Nil | Dry | 1.20-1.65 | | | | C34 | | | | | |
| | | | 1.20-1.70 | | B | 5 | | | | | | |
| | | | 2.00 | | V | | | | | | | |
| | | | 2.00 | | PID | | 0 | | | 2.10 | 97.15 | |
| | | | 2.00 | | CD/K | 6 | | | Firm thinly laminated dark orange brown and light grey CLAY with occasional lenses of orange brown sand and light grey slightly silty sand. Sand is mainly fine and medium. (BAGSHOT FORMATION) | | | |
| | | | 2.00 | | VL | 6 | | | | (0.65) | | |
| | | | 2.10 | | D | 7 | | | | | | |
| | 2.30 | Damp | 2.30-2.75 | | U | 8 | | 51/ 450 | | | | |
| | | | 2.75 | | D | 9 | | | | 2.75 | 96.50 | |
| | | | 2.80-3.25 | | D | 10 | | | | | | |
| | 2.30 | Damp | 2.80-3.25 | | | | S23 | | Stiff fissured fissile brown grey CLAY with thin laminae and lenses of grey sand and orange slightly silty sand. Sand is fine to coarse. Fissures are extremely closely spaced, stained orange brown and locally blocky. (TRANSITIONAL ZONE) Below 3.80m: With rare carbonaceous fragments up to 20mm. | | | |
| | | | 2.80-3.30 | | B | 12 | | | | | | |
| 23/04 | 2.30 | Damp | 3.00 | | PID | | 0 | | | | | |
| | | | 3.00 | | CD/K | 11 | | | | (1.35) | | |
| 26/04 | 3.40 | Damp | 3.00 | | VL | 11 | | | | | | |
| | 3.40 | Damp | 3.40-3.85 | | U | 13 | | 45/ 450 | | | | |
| | | | 3.85 | | D | 14 | | | | | | |
| | | | 3.90-4.35 | | D | 15 | | | | | | |
| | 3.40 | Damp | 3.90-4.35 | | | | S21 | | | 4.10 | 95.15 | |
| | | | 4.00 | | PID | | 0 | | Stiff fissile dark grey CLAY with occasional lenses up to 5mm of grey fine sand. With rare shell and carbonaceous fragments. (TRANSITIONAL ZONE) | | | |
| | | | 3.90-4.40 | | B | 17 | | | | | | |
| | | | 4.00 | | V | | | | | | | |
| | | | 4.00 | | CD/K | 16 | | | | | | |
| | | | 4.00 | | VL | 16 | | | | | | |
| | 4.40 | Dry | 4.40-4.85 | | U | 18 | | 50/ 400 | Between 4.90m and 6.35m: Fissured, and fissile. Fissures are extremely closely spaced, randomly orientated. | | | |
| | | | 4.85 | | D | 19 | | | | | | |
| | | | 4.90-5.35 | | D | 20 | | | | | | |
| | 4.40 | Dry | 4.90-5.35 | | | | S26 | | | | | |
| | | | 5.00 | | PID | | 0 | | | | | |
| | | | 4.90-5.40 | | B | 22 | | | | | | |
| | | | 5.00 | | CD/K | 21 | | | | | | |
| | | | 5.00 | | VL | 21 | | | | (3.20) | | |
| | 4.40 | Dry | 5.90-6.35 | | U | 23 | | 62/ 450 | | | | |
| | | | 6.00 | | V | | | | | | | |
| | | | 6.20 | | W | 53 | | | Below 6.35m: Slightly sandy, locally sandy. Sand is green and black, mainly fine and medium. Rare lenses of yellow sand. | | | |
| | | | 6.35 | | D | 24 | | | | | | |
| | | | 6.40-6.85 | | D | 25 | | | | | | |
| | 4.40 | Dry | 6.40-6.85 | | | | S24 | | | | | |
| | | | 6.90-7.40 | | B | 26 | | | | | | |
| | | | | | | | | | | 7.30 | 91.95 | |
| | 7.40 | Damp | 7.40-7.85 | | U | 27 | | 89/ 350 | Stiff dark grey sandy CLAY grading locally to silty sand. Sand is fine to medium. (TRANSITIONAL ZONE) | | | |
| | | | 7.85 | | D | 28 | | | | | | |
| | | | 7.90-8.35 | | D | 29 | | | | | | |
| | 7.40 | Damp | 7.90-8.35 | | | | S38 | | | | | |
| | | | 8.00 | | V | | | | | | | |
| | | | 8.40-8.90 | | B | 30 | | | | | | |
| | 8.90 | Added | 8.90-9.35 | | U | 31 | | 92/ 450 | | | | |
| | | | 9.35 | | D | 32 | | | | | | |
| | | | 9.40-9.84 | | D | 33 | | | | | | |
| | 8.90 | Added | 9.40-9.84 | | | | S50/ 285 | | | | | |
| | | | 9.90-10.40 | | B | 34 | | | | | | |

**Remarks** (See notes & keysheets)

1. Groundwater was not apparent during boring but its presence may have been masked by the addition of water to assist boring.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. Aquifer protection was carried out by sealing the base of the 200mm diameter hole at a depth of 3.30mm and continuing in 150mm diameter casing.

Scale 1:50

FUGRO

Project: AWE ALDERMASTON, NEW HR FACILITY GI, Golders Associates (UK) Limited, EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0911 (1 of 4)

301/04

| | | |
|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 200mm to 3.20m, 150mm to 17.00m; Casing Diameter 200mm to 3.20m, 150mm to 9.30m | **BOREHOLE No. 0911** |
| Equipment Dando 2000 | | Coordinates (National Grid) 459838.877 E, 164307.970 N |
| Dates Drilled Start 23/04/2004, End 27/04/2004 | Logged by EDHC 23/04/2004; Compiled by pb 30/04/2004; Checked by PBM 19/10/04 | Ground Level 99.25 m OD; Location Co ords - E 2651.831, N 1405.859 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10.00 | | V | | | | | | | |
| | 9.30 | Added | 10.40 | 10.85 | U | 35 | | 150/ 350 | | (6.00) | | |
| | | | 10.85 | | D | 36 | | | | | | |
| | | | 10.90 | 11.34 | D | 37 | | | | | | |
| | 9.30 | Added | 10.90 | 11.34 | | | S50/ 290 | | | | | |
| | | | 11.40 | 11.90 | B | 38 | | | | | | |
| | 9.30 | Added | 11.90 | 12.30 | U | 39 | | 150/ 350 | | | | |
| | | | 12.00 | | V | | | | | | | |
| | | | 12.35 | 12.78 | D | 40 | | | | | | |
| | 9.30 | Added | 12.35 | 12.79 | | | S50/ 285 | | | | | |
| | | | 12.90 | 13.40 | B | 41 | | | | | | |
| | 9.30 | Added | 13.40 | 13.85 | U | 42 | | 150/ 300 | Dense, becoming very dense with depth, dark grey slightly silty SAND grading locally to sandy silt. Sand is fine. (TRANSITIONAL ZONE) | 13.30 | 85.95 | |
| | | | 13.85 | | D | 43 | | | | (1.00) | | |
| | 9.30 | Added | 13.85 | 14.28 | | | S50/ 275 | | | | | |
| | | | 13.85 | 14.27 | D | 44 | | | | 14.30 | 84.95 | |
| | | | 14.00 | | V | | | | Very stiff dark grey very sandy CLAY. Sand is fine. (TRANSITIONAL ZONE) | | | |
| | | | 14.40 | 14.90 | B | 45 | | | | (1.10) | | |
| | 9.30 | Added | 14.90 | 15.35 | U | 46 | | 150/ 400 | | | | |
| | | | 15.35 | | D | 47 | | | | 15.40 | 83.85 | |
| | | | 15.40 | 15.80 | D | 48 | | | Very stiff dark grey sandy SILT. Sand is fine. (TRANSITIONAL ZONE) | | | |
| | 9.30 | Added | 15.40 | 15.81 | | | S50/ 255 | | | | | |
| | | | 15.90 | 16.40 | B | 49 | | | | | | |
| | | | 16.00 | | V | | | | | | | |
| | 9.30 | Added | 16.40 | 16.35 | U | 50 | | 150/ 400 | | (2.40) | | |
| | | | 16.85 | | D | 51 | | | | | | |
| | | | 16.90 | 17.25 | D | 52 | | | Below 16.90m: With lenses and thin laminae of grey fine and medium sand and rare shell fragments up to 10mm. | | | |
| 26/04 | 9.30 | Added | 16.90 | 17.25 | | | S50/ 195 | | | | | |
| | 9.30 | Added | | | | | | | | | | |
| 27/04 | 9.30 | Added | 17.40 | 17.70 | B | 54 | | | | | | |
| | | | 17.80 | | D | 55 | | | | 17.80 | 81.45 | |
| | 9.30 | added | 17.90 | 18.35 | U | 56 | | 150/ 400 | Very stiff dark grey slightly sandy CLAY with thin laminae and lenses of grey sand. Sand is fine. (LONDON CLAY) | | | |
| | | | 18.35 | | D | 57 | | | | | | |
| | | | 18.40 | 18.32 | D | 58 | | | | | | |
| | 9.30 | added | 18.40 | 18.82 | | | S50/ 270 | | | (2.20) | | |
| | | | 18.90 | 19.50 | B | 59 | | | | | | |
| | 9.30 | added | 19.50 | 19.95 | U | 60 | | 150/ 400 | | | | |
| | | | 19.95 | | D | 61 | | | | 20.00 | 79.25 | |
| | | | | | | | | | End of Borehole | | | |

**Remarks**
(See notes & keysheets)

Scale 1:50

FUGRO

Project
AWE ALDERMASTON
NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0911 (2 of 4)

301/04

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion<br>**Equipment** Dando 2000<br>**Dates Drilled** Start 23/04/2004 End 27/04/2004 | **Borehole Diameter** 200mm to 3.20m, 150mm to 17.00m<br>**Casing Diameter** 200mm to 3.20m, 150mm to 9.30m<br>**Logged by** EDHC 23/04/2004<br>**Compiled by** pb 30/04/2004<br>**Checked by** DBM 19/10/04 | **BOREHOLE No. 0911**<br>**Coordinates (National Grid)** 459838.877 E, 164307.970 N<br>**Ground Level** 99.25 m OD<br>**Location** Co ords - E 2651.831, N 1405.859 | |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27/04 | 9.30<br>9.30 | added<br>Added | 20.00-20.34<br>20.00-20.34 | | D | 62 | S50/ 190 | | | 20.00 | 79.25 | |

**Remarks**
(See notes & keysheets)

Scale 1:50

| | | |
|---|---|---|
| FUGRO | **Project**<br>AWE ALDERMASTON<br>NEW HR FACILITY GI<br>Golders Associates (UK) Limited<br>EDGE Consultants UK Ltd | **Contract No.** BAS040081<br>**Figure No.** 0911 (3 of 4)<br>301/04 |

| | | |
|---|---|---|
| Drilling Method Cable Percussion<br>Equipment Dando 2000<br>Dates Drilled Start 23/04/2004<br>End 27/04/2004 | Borehole Diameter<br>200mm to 3.20m<br>150mm to 17.00m<br>Casing Diameter<br>200mm to 3.20m<br>150mm to 9.30m<br>Logged by EDHC 23/04/2004<br>Compiled by pb 30/04/2004<br>Checked by DBM 19/10/04 | **BOREHOLE No. 0911**<br>Coordinates 459838.877 E<br>(National Grid) 164307.970 N<br>Ground Level 99.25 m OD<br>Location<br>Co ords - E 2651.831, N 1405.859 |

| Description | Depth (m) | Level m OD | |
|---|---|---|---|
| Concrete | 0.50 | 98.75 | Flush lockable stopcock box cover with gas tap.<br>Pipe diameter 50mm to 18.00m. |
| Cement/Bentonite Grout | 11.00 | 88.25 | |
| Bentonite Seal | 12.00 | 87.25 | |
| Sand Filter | 18.00 | 81.25 | |
| Bentonite Seal | 20.00 | 79.25 | Base of Hole |

**Remarks**
(See notes & keysheets)

Not to Scale

| | | |
|---|---|---|
| FUGRO | Project<br>AWE ALDERMASTON<br>NEW HR FACILITY GI<br>Golders Associates (UK) Limited<br>EDGE Consultants UK Ltd | Contract No. BAS040081<br>Figure No. 0911 (4 of 4)<br>309/03 |

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter / Casing Diameter | **BOREHOLE No. 0912** | |
| Equipment Dando 2000 | 200mm to 3.50m / 200mm to 3.50m<br>150mm to 20.00m / 150mm to 14.00m | Coordinates (National Grid) | 459895.329 E<br>164323.802 N |
| Dates Drilled Start 20/04/2004<br>End 22/04/2004 | Logged by EDHC 20/04/2004<br>Compiled by pb 30/04/2004<br>Checked by 17-11-04 | Ground Level<br>Location<br>Co ords - E 2705.398, 1382.024 | 96.10 m OD |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm: Test | U100 Blows/ Recovery mm: Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20/04 | | | 0.00 | | V | | | | TOPSOIL (SILCHESTER GRAVEL) | (0.30) | | |
| | | | 0.00 | | PID | | 0.0 | | | 0.30 | 95.80 | |
| | | | 0.00 | 0.30 | B | 3 | | | Grey brown slightly clayey silty sandy GRAVEL. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | (0.40) | | |
| | | | 0.00 | | CD | 4 | | | | 0.70 | 95.40 | |
| | | | 0.00 | | K | 5 | | | | | | |
| | | | 0.00 | | VL | 6 | | | | | | |
| | | | 0.30 | 0.70 | B | 7 | | | | | | |
| | | | 0.50 | | W | 8 | | | | | | |
| | | | 0.70 | 1.20 | B | 9 | | | Firm orange and light grey, locally dark orange brown mottled slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | (1.10) | | |
| | | | 1.00 | | PID | | 0.0 | | | | | |
| | | | 1.00 | | CD | 10 | | | | | | |
| | | | 1.00 | | K | 11 | | | | | | |
| | | | 1.00 | | VL | 12 | | | | | | |
| | 1.20 | 0.80 | 1.20 | 1.65 | U | 13 | | 100/ 450 | | | | |
| | | | 1.65 | | D | 14 | | | | 1.80 | 94.30 | |
| | 1.70 | 0.80 | 1.70 | 2.15 | | | S44 | | Dense orange brown slightly sandy clayey GRAVEL. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | (0.90) | | |
| | | | 1.70 | 2.15 | D | 15 | | | | | | |
| | | | 2.00 | | V | | | | | | | |
| | | | 2.00 | | PID | | 0.0 | | | | | |
| | | | 2.00 | | CD | 18 | | | | | | |
| | | | 2.00 | | K | 19 | | | | | | |
| | | | 2.00 | | VL | 20 | | | | 2.70 | 93.40 | |
| | | | 2.00 | 2.50 | B | 21 | | | Firm to stiff fissured, locally fissile orange brown locally slightly gravelly CLAY with occasional fine to coarse sand sized carbonaceous fragments and occasional lenses and thin laminae of light grey clay. Fissures are extremely closely spaced, randomly orientated. Gravel is subangular to rounded, fine to coarse flint. (BAGSHOT FORMATION) | | | |
| | | | 2.70 | | D | 22 | | | | | | |
| | | | 2.70 | 3.20 | B | 23 | | | | | | |
| | | | 3.00 | | CD | 24 | | | | | | |
| | | | 3.00 | | PID | | 0.0 | | | (1.30) | | |
| | | | 3.00 | | K | 25 | | | | | | |
| | | | 3.00 | | VL | 26 | | | | | | |
| | 3.00 | 1.10 | 3.00 | 3.40 | U#B | 27 | | | | | | |
| | | | 3.40 | | D | 28 | | | | | | |
| | 3.50 | 3.50 | 3.50 | 3.95 | U | 29 | | 65/ 450 | Below 3.40m: grades into stiff fissured clay. Fissures infilled with 2mm pink brown clay. | 4.00 | 92.10 | |
| | | | 3.75 | | D | 30 | | | | | | |
| | | | 4.00 | | V | | | | | | | |
| | 3.50 | dry | 4.00 | 4.45 | | | S25 | | At 3.95m: layer of laminated orange, dark orange brown, and light grey slightly silty fine and medium sand with occasional angular coarse gravel sized ironstone nodules. | | | |
| 20/04 | 4.50 | 3.70 | 4.00 | | PID | | 0.0 | | | (0.95) | | |
| | | | 4.00 | 4.45 | D | 31 | | | | | | |
| 21/04 | 5.00 | 1.60 | 4.00 | | CD | 34 | | | | | | |
| | | | 4.00 | | K | 35 | | | | | | |
| | | | 4.00 | | VL | 36 | | | | 4.95 | 91.15 | |
| | | | 4.00 | 4.50 | B | 37 | | | Firm fissured grey CLAY interlaminated with orange fine and medium SAND. Occasional lenses up to 20mm of grey fine and medium sand. Fissures are closely spaced, randomly orientated, stained dark orange brown. (TRANSITIONAL ZONE) | | | |
| | 4.50 | 4.50 | 4.50 | 4.25 | U | 38 | | 120/ 450 | | | | |
| | | | 4.60 | | W | 44 | | | | (0.85) | | |
| | | | 4.75 | | D | 39 | | | | | | |
| | 4.50 | 3.70 | 5.00 | 5.45 | | | S27 | | | | | |
| | | | 5.00 | | PID | | 0.0 | | | | | |
| | | | 5.00 | 5.45 | D | 40 | | | Firm becoming stiff with depth, dark grey slightly sandy CLAY, with occasional pockets up to 5mm of green grey fine and medium sand. (TRANSITIONAL ZONE) | 5.80 | 90.30 | |
| | | | 5.00 | | CD | 41 | | | | | | |
| | | | 5.00 | | K | 42 | | | | (0.70) | | |
| | | | 5.00 | | V | 43 | | | | | | |
| | | | 5.00 | 5.50 | B | 45 | | | | | | |
| | 5.50 | added | 5.50 | 5.95 | U | 46 | | 150/ 300 | | 6.50 | 89.60 | |
| | | | 5.95 | | D | 47 | | | | | | |
| | 5.50 | added | 6.00 | 6.45 | | | S24 | | Medium dense dark grey silty SAND grading locally to sandy silt, with occasional pockets of up to 5mm of green grey sand. Sand is fine to medium. (TRANSITIONAL ZONE) | | | |
| | | | 6.00 | | V | | | | | | | |
| | | | 6.00 | 6.45 | D | 48 | | | | | | |
| | | | 6.50 | 7.00 | B | 51 | | | | | | |
| | 7.00 | added | 7.00 | 7.45 | U | 52 | | 156/ 300 | | | | |
| | | | 7.45 | | D | 53 | | | Stiff, dark grey slightly sandy CLAY with occasional pockets of green grey fine and medium sand up to 5mm. (TRANSITIONAL ZONE) | | | |
| | 7.00 | added | 7.50 | 7.95 | | | S24 | | | | | |
| | | | 7.50 | 7.95 | D | 54 | | | | | | |
| | | | 8.00 | | V | | | | | | | |
| | | | 8.00 | 8.50 | B | 55 | | | | | | |
| | | | 8.50 | 9.00 | B | 58 | | | Between 8.50m and 9.00m: With rare carbonaceous fragments up to 5mm | | | |
| | | | 9.00 | 9.45 | D | 59 | | | | | | |
| | 9.00 | added | 9.00 | 9.45 | | | S36 | | | (5.45) | | |
| | | | 9.50 | 10.00 | B | 60 | | | | | | |
| | | | 10.00 | | V | | | | | | | |

**Remarks** (See notes & keysheets)

1. Aquifer protection was carried out by sealing the base of the 200mm diameter hole at a depth of 3.50m and continuing in 150mm diameter casing.
2. Groundwater was encountered at 0.50m during boring.
3. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
4. The borehole was advanced by chiselling methods from 2.10m to 2.30m (1 hour) and 12.70m to 12.90m (1 hour).
5. Groundwater was encountered at 4.60m during boring and rose to 4.30m after 5 mins,4.00m after 10 mins,3.80m after 15 mins,3.70m after 20 mins.

Scale 1:50

FUGRO

Project
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NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0912 (1 of 3)

301/04

| | | |
|---|---|---|
| **Drilling Method** Cable Percussion<br>**Equipment** Dando 2000<br>**Dates Drilled** Start 20/04/2004 End 22/04/2004 | **Borehole Diameter** 200mm to 3.50m, 150mm to 20.00m<br>**Casing Diameter** 200mm to 3.50m, 150mm to 14.00m<br>**Logged by** EDHC 20/04/2004<br>**Compiled by** pb 30/04/2004<br>**Checked by** 17-11-04 | **BOREHOLE No. 0912**<br>**Coordinates (National Grid)** 459895.329 E, 164323.802 N<br>**Ground Level** 96.10 m OD<br>**Location** Co ords - E 2705.398, 1382.024 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10.00 | added | 10.00 | 10.45 | U | 63 | | 150/ 450 | | | | |
| | | | 10.45 | | D | 64 | | | Between 10.45m and 10.95m: occasional bivalve fragments up to 10mm, and rare clay lenses up to 5mm. | | | |
| | 10.50 | added | 10.50 | 10.95 | | | S46 | | | | | |
| | | | 10.50 | 10.95 | D | 65 | | | | | | |
| | | | 11.00 | 11.50 | B | 66 | | | | | | |
| | 10.50 | added | 11.50 | 11.95 | U | 67 | | 150/ 400 | | | | |
| | | | 11.70 | 12.50 | B | 72 | | | | | | |
| | | | 11.95 | | D | 68 | | | | 11.95 | 84.15 | |
| | 11.50 | added | 12.00 | 12.43 | | | S50/ 280 | | Very dense apparently unstructured grey slightly silty fine to medium SAND. (TRANSITIONAL ZONE) | (0.75) | | |
| | | | 12.00 | | V | | | | | | | |
| | | | 12.00 | 12.45 | D | 69 | | | | | | |
| | | | 12.70 | | D | 73 | | | | 12.70 | 83.40 | |
| | | | 12.85 | | D | 74 | | | | | | |
| | 13.00 | added | 13.00 | 13.45 | U | 75 | | 150/ 400 | Stiff to very stiff, locally fissile, grey CLAY/SILT with lenses and thin laminae of silty fine and medium sand. (LONDON CLAY) | | | |
| | | | 13.45 | | D | 76 | | | | | | |
| | 13.00 | added | 13.50 | 13.93 | | | S50/ 275 | | | | | |
| | | | 13.50 | 13.95 | D | 77 | | | | | | |
| | | | 14.00 | | V | | | | Between 14.10m and 16.40m; Slightly sandy with occasional orange gravel sized clasts of very stiff (hard) clay. | | | |
| | | | 14.00 | 14.50 | B | 80 | | | | | | |
| | 14.00 | added | 14.50 | 14.95 | U | 81 | | 150/ 450 | | | | |
| | | | 14.95 | | D | 82 | | | | | | |
| | 14.00 | added | 15.00 | 15.40 | | | S50/ 250 | | | | | |
| | | | 15.00 | 15.40 | D | 83 | | | | | | |
| | | | 15.50 | 16.00 | B | 84 | | | | | | |
| | | | 16.00 | | V | | | | | (6.70) | | |
| | 14.00 | added | 16.00 | 16.40 | U | 87 | | 150/ 400 | | | | |
| | | | 16.40 | | D | 88 | | | Below 16.40m: rare shell fragments up to 15mm. | | | |
| | 14.00 | added | 16.45 | 16.85 | | | S50/ 250 | | | | | |
| | | | 16.45 | 16.80 | D | 89 | | | | | | |
| | | | 17.00 | 17.50 | B | 90 | | | | | | |
| | 14.00 | added | 17.50 | 17.95 | U | 91 | | 150/ 400 | | | | |
| | | | 17.85 | 18.30 | D | 93 | | | Below 17.90m: Slightly sandy, locally sandy, silt, with occasional lenses of grey clay. | | | |
| | 14.00 | added | 17.85 | 18.24 | | | S50/ 235 | | | | | |
| | | | 17.90 | | D | 92 | | | | | | |
| | | | 18.00 | | V | | | | | | | |
| | | | 18.50 | 19.00 | B | 96 | | | | | | |
| | 14.00 | added | 19.00 | 19.30 | U | 97 | | 150/ 300 | | | | |
| | | | 19.30 | | D | 98 | | | | 19.40 | 76.70 | |
| | 14.00 | added | 19.35 | 19.71 | | | S50/ 210 | | Very stiff grey slightly sandy CLAY, grading locally to silty sand. Sand is fine and medium. (LONDON CLAY) | (0.60) | | |
| 21/04 | 14.00 | | 19.35 | 19.65 | D | 99 | | | | | | |
| | | | 20.00 | | V | | | | | 20.00 | 76.10 | |
| | | | | | | | | | End of Borehole | | | |

**Remarks**
(See notes & keysheets)

Scale 1:50

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**Project**
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NEW HR FACILITY GI
Golders Associates (UK) Limited
EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0912 (2 of 3)

301/04

| | | |
|---|---|---|
| **Drilling Method** Cable Percussion<br>**Equipment** Dando 2000<br>**Dates Drilled** Start 20/04/2004 End 22/04/2004 | **Borehole Diameter** 200mm to 3.50m, 150mm to 20.00m<br>**Casing Diameter** 200mm to 3.50m, 150mm to 14.00m<br>**Logged by** EDHC 20/04/2004<br>**Compiled by** pb 30/04/2004<br>**Checked by** DGH 17-11-04 | **BOREHOLE No. 0912**<br>**Coordinates** 459895.329 E<br>**(National Grid)** 164323.802 N<br>**Ground Level** 96.10 m OD<br>**Location** Co ords - E 2705.398, 1382.024 |

| Description | Depth (m) | Level m OD | |
|---|---|---|---|
| Cement/Bentonite Grout | 1.00 | 95.10 | Flush stopcock box cover with gas tap. Pipe diameter 50mm to 4.00m. |
| Bentonite Seal | 2.00 | 94.10 | |
| Sand Filter | 4.00 | 92.10 | |
| Bentonite Seal | 5.00 | 91.10 | |
| Cement/Bentonite Grout | 20.00 | 76.10 | Base of Hole |

**Remarks**
(See notes & keysheets)

Not to Scale

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**Project**
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EDGE Consultants UK Ltd

**Contract No.** BAS040081

**Figure No.** 0912 (3 of 3)

309/03

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 150mm to 5.00m | Casing Diameter 150mm to 4.00m | **BOREHOLE No. 0926** |
| Equipment Dando 2000 | | | Coordinates 459753.020 E (National Grid) 164390.114 N |
| | | | Ground Level 100.20 m OD |
| Dates Drilled Start 05/05/2004 End 05/05/2004 | Logged by EDHC 05/05/2004 | Compiled by pb 12/05/2004 | Checked by DBA 19/1/2004 |
| | | | Location Co ords - E 2638.146, N 1523.892 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 05/05 | | | 0.00 | | V | | | | | | | |
| | | | 0.00 | | PID | | 0 | | TOPSOIL and gravel fill (Drillers Description) | (0.40) | | |
| | | | 0.00 | | CD/K | 1 | | | (SILCHESTER GRAVEL) | 0.40 | 99.80 | |
| | | | 0.00-2.00 | | B | 7 | | | At 0.10m: Driller notes gravel fill. | | | |
| | | | 0.10-0.40 | | B | 2 | | | | | | |
| | | | 0.40-1.20 | | B | 4 | | | Dark orange brown slightly clayey, slightly sandy GRAVEL. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. | (0.80) | | |
| | | | 1.00 | | CD/K | 3 | | | | | | |
| | | | 1.00 | | PID | | 0 | | (SILCHESTER GRAVEL) | 1.20 | 99.00 | |
| | 2.00 | added | 1.20-1.70 | | D | 5 | | | | | | |
| | Nil | Dry | 1.20-1.65 | | | | C28 | | Medium dense grey brown slightly silty, slightly gravelly SAND. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. | (0.70) | | |
| | | | | | | | | | | 1.90 | 98.30 | |
| | | | 1.90 | | D | 6 | | | (SILCHESTER GRAVEL) | (0.20) | | |
| | | | 2.00 | | PID | | 0 | | | 2.10 | 98.10 | |
| | | | 2.00 | | CD/K | 7 | | | Firm thinly laminated orange slightly sandy CLAY with lenses of light grey clay. Sand is fine to coarse. (BAGSHOT FORMATION) | | | |
| | | | 2.00 | | V | 7 | | | | | | |
| | | | 2.00-2.50 | | B | 8 | | | | | | |
| | | | 2.00-4.00 | | B | 16 | | | | | | |
| | 2.50 | Added | 2.50-2.95 | | | | S20 | | | (1.20) | | |
| | | | 2.50-2.95 | | D | 9 | | | Medium dense laminated orange brown, dark brown and light grey slightly silty SAND with thin laminae and lenses of light grey clay. Sand is fine to coarse. | | | |
| | | | 2.50-3.00 | | B | 10 | | | | | | |
| | | | 3.00 | | CD/K | 11 | | | | | | |
| | | | 3.00 | | PID | | 0 | | | | | |
| | 3.00 | Added | 3.00-3.45 | | U | 12 | | 58/ | (BAGSHOT FORMATION) | 3.30 | 96.90 | |
| | | | 3.45 | | D | 13 | | 450 | | | | |
| | 3.00 | Added | 3.50-3.95 | | | | S19 | | Firm thinly laminated dark brown grey CLAY with thin laminae and lenses of light grey, orange and yellow fine sand. | (0.60) | | |
| | | | 3.50-3.95 | | D | 14 | | | | | | |
| | | | 3.50-4.00 | | B | 15 | | | (TRANSITIONAL ZONE) | 3.90 | 96.30 | |
| | | | 4.00 | | CD/K | 16 | | | Below 3.50m: With occasional lenses of light grey and dark green clay. | | | |
| | | | 4.00 | | PID | | 0 | | | | | |
| | | | 4.00 | | V | 16 | | | | | | |
| | 4.00 | Damp | 4.00-4.45 | | U | 17 | | 61/ | | (1.10) | | |
| | | | 4.00-5.00 | | B | 21 | | 400 | Firm to stiff fissured, thinly laminated dark grey CLAY with thin laminae and lenses of light grey fine sand. Fissures are extremely closely spaced, randomly orientated, surfaces stained dark brown. | | | |
| | | | 4.45 | | D | 18 | | | | | | |
| | 4.00 | Damp | 4.50-4.95 | | | | S23 | | | | | |
| 05/05 | | | 4.50-4.95 | | D | 19 | | | | | | |
| | | | 4.50-5.00 | | B | 20 | | | | 5.00 | 95.20 | |
| | | | 5.00 | | CD/K | 21 | | | (TRANSITIONAL ZONE) | | | |
| | | | 5.00 | | PID | | 0 | | | | | |
| | | | 5.00 | | V | 21 | | | End of Borehole | | | |

**Remarks** (See notes & keysheets)
1 Groundwater was not apparent during boring.
2 Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.

Scale 1:50

FUGRO

Project
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Golders Associates (UK) Limited
EDGE Consultants UK Ltd

Contract No. BAS040081

Figure No. 0926 (1 of 2)

301/04

| | | |
|---|---|---|
| Drilling Method Cable Percussion<br>Equipment Dando 2000<br>Dates Drilled Start 05/05/2004<br>End 05/05/2004 | Borehole Diameter 150mm to 5.00m<br>Casing Diameter 150mm to 4.00m<br>Logged by EDHC 05/05/2004<br>Compiled by pb 12/05/2004<br>Checked by DGT 19/10/04 | **BOREHOLE No. 0926**<br>Coordinates 459753.020 E<br>(National Grid) 164390.114 N<br>Ground Level 100.20 m OD<br>Location<br>Co ords - E 2638.146, N 1523.892 |

| Description | Depth (m) | Level m OD | |
|---|---|---|---|
| Concrete | 0.50 | 99.70 | Flush lockable stopcock box cover.<br>Pipe diameter 50mm to 3.50m. |
| Bentonite Seal | 1.50 | 98.70 | |
| Gravel Filter | 3.50 | 96.70 | |
| Bentonite Seal | 5.00 | 95.20 | Base of Hole |

**Remarks**
(See notes & keysheets)

Not to Scale

| | | |
|---|---|---|
| FUGRO | Project<br>AWE ALDERMASTON<br>NEW HR FACILITY GI<br>Golders Associates (UK) Limited<br>EDGE Consultants UK Ltd | Contract No. BAS040081<br>Figure No. 0926 (2 of 2)<br>309/03 |

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion | **Borehole Diameter** 200mm to 3.00m, 150mm to 10.00m | **Casing Diameter** 200mm to 3.00m, 150mm to 10.00m | **BOREHOLE No. 0927** |
| **Equipment** Dando 2000 | | | **Coordinates (National Grid)** 459869.854 E, 164483.351 N |
| | | | **Ground Level** 99.65 m OD |
| **Dates Drilled** Start 15/04/2004, End 16/04/2004 | **Logged by** EDHC 16/04/2004 | **Compiled by** pb 21/04/2004 | **Checked by** DGM 19/10/04 |
| | | | **Location** Co ords - E 2787.596, N 1521.120 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15/04 | | | 0.00 | | V | | | | TOPSOIL (SILCHESTER GRAVEL) | (0.05) | | |
| | | | 0.00 | | PID | | 0.5 | | | 0.05 | 99.60 | |
| | | | 0.00 | | CD/K | 1 | | | Compact gravel FILL (Drillers description) (SILCHESTER GRAVEL) | (0.25) | | |
| | | | 0.00 | | VL | 1 | | | | 0.30 | 99.35 | |
| | | | 0.05-0.30 | | B | 2 | | | | | | |
| | | | 0.30-1.20 | | B | 4 | | | Dark brown slightly clayey, slightly sandy GRAVEL. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. With many rootlets to 0.30m. (SILCHESTER GRAVEL) Below 0.30m: Dark orange brown. | (0.90) | | |
| | | | 1.00 | | CD/K | 3 | | | | | | |
| | | | 1.00 | | PID | | 0 | | | 1.20 | 98.45 | |
| | | | 1.00 | | VL | 3 | | | | | | |
| | | | 1.20-1.70 | | B | 5 | | | | | | |
| | Nil | Dry | 1.20-1.48 | | | | C50/ 125 | | Very dense grey brown, white and dark grey slightly silty, slightly sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | (0.70) | | |
| | | | 1.90 | | D | 6 | | | | 1.90 | 97.75 | |
| | | | 2.00 | | PID | | 0.1 | | | | | |
| | | | 2.00 | | CD/K | 7 | | | | (0.70) | | |
| | | | 2.00 | | VL | 7 | | | | | | |
| 15/04 | 2.10 | damp | 2.60 | | D | 9 | | | Soft to firm orange and light grey mottled CLAY. (BAGSHOT FORMATION) | 2.60 | 97.05 | |
| | | | 2.70-3.15 | | D | 10 | | | | | | |
| | 2.10 | Damp | 2.10-2.55 | | U | 8 | | 58/ 450 | Firm fissured dark brown CLAY with lenses, pockets and thin laminae of orange, yellow and light grey fine and medium sand and light grey clay. Fissures are extremely closely spaced, blocky. (BAGSHOT FORMATION) | (0.60) | | |
| 16/04 | 2.10 | damp | 2.70-3.15 | | | | S18 | | | 3.20 | 96.45 | |
| | | | 2.70-3.20 | | B | 12 | | | | | | |
| | | | 3.00 | | CD/K | 11 | | | | | | |
| | | | 3.00 | | PID | | 0 | | | | | |
| | | | 3.00 | | VL | 11 | | | | | | |
| | 3.20 | Dry | 3.20-3.65 | | U | 13 | | 47/ 450 | Stiff fissured, locally fissile, dark grey CLAY with occasional thin laminae of light grey slightly silty fine and medium sand. Fissures are extremely closely spaced, blocky. (TRANSITIONAL ZONE) At 3.70m: 30mm pyrite nodule. Between 3.70m and 4.15m: Lignite fragments up to 30mm. Below 4.65m: Very stiff fissured dark grey clay. Fissure surfaces dark grey brown. | | | |
| | | | 3.65 | | D | 14 | | | | | | |
| | 3.20 | Dry | 3.70-4.15 | | | | S19 | | | | | |
| | | | 3.70-4.15 | | D | 15 | | | | | | |
| | | | 3.70-4.20 | | B | 17 | | | | | | |
| | | | 4.00 | | PID | | 0 | | | | | |
| | | | 4.00 | | V | | | | | | | |
| | | | 4.00 | | CD/K | 16 | | | | | | |
| | | | 4.00 | | VL | 16 | | | | | | |
| | 4.20 | Dry | 4.20-4.65 | | U | 18 | | 50/ 450 | | (4.00) | | |
| | | | 4.65 | | D | 19 | | | | | | |
| | 4.20 | Dry | 4.70-5.15 | | | | S22 | | | | | |
| | | | 4.70-5.15 | | D | 20 | | | | | | |
| | | | 4.70-5.20 | | B | 22 | | | | | | |
| | | | 5.00 | | PID | | 0 | | | | | |
| | | | 5.00 | | CD/K | 21 | | | | | | |
| | | | 5.00 | | VL | 21 | | | | | | |
| | 5.70 | Dry | 5.70-6.15 | | U | 23 | | 62/ 450 | | | | |
| | | | 6.00 | | V | | | | | | | |
| | | | 6.15 | | D | 24 | | | At 6.15m: Fissures infilled with up to 2mm dark grey brown silty fine and medium sand. Below 6.20m: With this laminae of black fine and medium sand and occasional lenses and pockets of dark green and grey brown fine and medium sand. | | | |
| | 5.70 | Dry | 6.20-6.65 | | | | S29 | | | | | |
| | | | 6.20-6.65 | | D | 25 | | | | | | |
| | | | 6.20-6.70 | | B | 26 | | | | | | |
| | | | 7.00-7.45 | | D | 27 | | | | | | |
| | 7.00 | Added | 7.00-7.45 | | | | S38 | | | | | |
| | | | 7.00-7.50 | | B | 28 | | | | 7.20 | 92.45 | |
| | | | 8.00 | | V | | | | Dense dark brown grey silty fine and medium SAND with occasional lenses and thin laminae of soft grey clay. (TRANSITIONAL ZONE) | | | |
| | | | 8.50-8.95 | | D | 29 | | | Between 8.50m and 8.95m: Grading locally to a medium dense clayey silty sand. | | | |
| | 8.50 | Added | 8.50-8.95 | | | | S38 | | | | | |
| | | | 8.50-9.00 | | B | 30 | | | | (3.25) | | |
| | | | 10.00 | | V | | | | Below 10.00m: with occasional lenses of light grey fine and medium sand. | | | |

**Remarks** (See notes & keysheets)

1. Groundwater was not apparent during boring.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. The borehole was advanced by chiselling methods from 1.40m to 1.80m (1.5 hours).
4. Aquifer protection was carried out by sealing the base of the hole at a depth of 3.00m and continuing in reduced diameter casing.
5. An amount of water was added to facilitate boring and to maintain a positive hydrostatic head in granular strata from 1.20m to 1.80m and 7.10 to 10.00m.

Scale 1:50

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**Contract No.** BAS040081

**Figure No.** 0927 (1 of 3)

301/04

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion | **Borehole Diameter** 200mm to 3.00m, 150mm to 10.00m | **Casing Diameter** 200mm to 3.00m, 150mm to 10.00m | **BOREHOLE No.** 0927 |
| **Equipment** Dando 2000 | | | **Coordinates** 459869.854 E<br>**(National Grid)** 164483.351 N<br>**Ground Level** 99.65 m OD |
| **Dates Drilled** Start 15/04/2004<br>End 16/04/2004 | **Logged by** EDHC 16/04/2004 | **Compiled by** pb 21/04/2004 | **Checked by** DBM 19/10/04<br>**Location** Co ords - E 2787.596, N 1521.120 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16/04 | 10.00<br>10.00 | Added | 10.00-10.45<br>10.00-10.45 | | D | 31 | S39 | | End of Borehole | 10.45 | 89.20 | |

**Remarks**
(See notes & keysheets)

Scale 1:50

| | | |
|---|---|---|
| FUGRO | **Project**<br>AWE ALDERMASTON<br>NEW HR FACILITY GI<br>Golders Associates (UK) Limited<br>EDGE Consultants UK Ltd | **Contract No.** BAS040081<br>**Figure No.** 0927 (2 of 3) |

301/04

| | | |
|---|---|---|
| **Drilling Method** Cable Percussion<br>**Equipment** Dando 2000<br>**Dates Drilled** Start 15/04/2004 End 16/04/2004 | **Borehole Diameter** 200mm to 3.00m, 150mm to 10.00m<br>**Casing Diameter** 200mm to 3.00m, 150mm to 10.00m<br>**Logged by** EDHC 16/04/2004<br>**Compiled by** pb 21/04/2004<br>**Checked by** 19/10/04 | **BOREHOLE No. 0927**<br>**Coordinates (National Grid)** 459869.854 E, 164483.351 N<br>**Ground Level** 99.65 m OD<br>**Location** Co ords - E 2787.596, N 1521.120 |

| Description | Depth (m) | Level m OD | |
|---|---|---|---|
| Concrete | 0.50 | 99.15 | Flush lockable stopcock box cover. Pipe diameter 50mm to 10.00m. |
| Cement/Bentonite Grout | 6.00 | 93.65 | |
| Bentonite Seal | 7.00 | 92.65 | |
| Sand Filter | 10.45 | 89.20 | Base of Hole |

**Remarks** (See notes & keysheets) Geotextile filter wrapped

Not to Scale

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**Contract No.** BAS040081

**Figure No.** 0927 (3 of 3)

309/03

| | | | |
|---|---|---|---|
| **Drilling Method** Cable Percussion | **Borehole Diameter** 200mm to 4.00m, 150mm to 10.00m | **Casing Diameter** 200mm to 4.00m, 150mm to 10.00m | **BOREHOLE No. 0928** |
| **Equipment** Dando 2000 | | | **Coordinates** 459786.563 E; **(National Grid)** 164460.029 N; **Ground Level** 100.00 m OD |
| **Dates Drilled** Start 14/04/2004, End 15/04/2004 | **Logged by** EDHC 14/04/2004 | **Compiled by** pb 21/04/2004 | **Checked by** DBM 19/10/04; **Location** Co ords - E 2708.586, N 1556.315 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14/04 | | | 0.00 | | V | | | | TOPSOIL | (0.10) 0.10 | 99.90 | |
| | | | 0.00 | | PID | | 0 | | | | | |
| | | | 0.00 | | CD/K | 1 | | | MADE GROUND: Brown locally mottled orange brown, slightly clayey, slightly sandy gravel with rare cobbles. Sand is fine to coarse. Gravel is angular and subrounded, fine to coarse flint, rarely brick, concrete, tarmacadam. | | | |
| | | | 0.00 | | VL | 1 | | | | | | |
| | | | 0.10-1.20 | | B | 3 | | | | | | |
| | | | 1.00 | | CD/K | 2 | | | | (1.80) | | |
| | | | 1.00 | | PID | | 0 | | (BAGSHOT FORMATION) Below 1.20m: Slightly sandy, clayey gravel with occasional lenses up to 50mm of soft light grey clay. Gravel is flint, with rare chalk. | | | |
| | | | 1.00 | | VL | 2 | | | | | | |
| | | | 1.20-1.80 | | B | 4 | | | | | | |
| | | | 1.90 | | D | 5 | | | | 1.90 | 98.10 | |
| | 1.80 | Dry | 1.90-2.29 | | | | C50/ 235 | | Very dense brown, dark grey and white slightly silty, slightly sandy GRAVEL with occasional subangular flint cobbles. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. (BAGSHOT FORMATION) | (1.00) | | |
| | | | 2.00 | | PID | | 0 | | | | | |
| | | | 1.90-2.40 | | B | 7 | | | | | | |
| | | | 2.00 | | V | | | | | | | |
| | | | 2.00 | | CD/K | 6 | | | | | | |
| | | | 2.00 | | VL | 6 | | | | 2.90 | 97.10 | |
| | | | 2.90-3.40 | | B | 9 | | | soft to firm orange brown slightly sandy CLAY/SILT with very closely spaced lenses of light grey silty sand. Sand is mainly fine and medium. (BAGSHOT FORMATION) | | | |
| | 2.90 | Added | 2.90-3.35 | | | | C27 | | | | | |
| | | | 3.00 | | PID | | 0 | | | (1.00) | | |
| | | | 3.00 | | CD/K | 8 | | | | | | |
| | | | 3.00 | | VL | 8 | | | | | | |
| | 3.20 | Damp | 3.40-3.85 | | U | 10 | | 47/ 450 | | | | |
| 14/04 | 4.00 | damp | | | | | | | | 3.90 | 96.10 | |
| | | | 3.90 | | D | 11 | | | Stiff fissured fissile dark grey CLAY. Fissures are extremely closely spaced, stained orange brown, infilled with 1mm light grey or orange brown silty fine sand. (TRANSITIONAL ZONE) | | | |
| 15/04 | 4.00 | damp | 4.00-4.45 | | | | S22 | | | (1.10) | | |
| | | | 4.00 | | PID | | 0 | | | | | |
| | | | 4.00 | | V | | | | | | | |
| | | | 4.00-4.45 | | D | 12 | | | | | | |
| | | | 4.00 | | CD/K | 13 | | | | | | |
| | | | 4.00 | | VL | 13 | | | | | | |
| | | | 4.00-4.50 | | B | 14 | | | | | | |
| | 4.50 | Dry | 4.50-4.95 | | U | 15 | | 77/ 400 | | 5.00 | 95.00 | |
| | | | 5.00 | | D | 16 | | | Stiff fissured locally fissile dark grey slightly sandy CLAY. With occasional lenses up to 3mm of grey brown fine sand. Fissures are extremely closely spaced, randomly orientated. (TRANSITIONAL ZONE) | | | |
| | | | 5.00 | | PID | | 0 | | | | | |
| | | | 5.00 | | CD/K | 17 | | | | | | |
| | 4.50 | Dry | 5.10-5.55 | | | | S27 | | | | | |
| | | | 5.00 | | VL | 17 | | | | | | |
| | | | 5.10-5.55 | | D | 18 | | | | | | |
| | | | 5.10-5.60 | | B | 19 | | | | | | |
| | | | 6.00 | | V | | | | At 6.60m: 30mm pyritised gastropod. | | | |
| | 6.00 | Damp | 6.00-6.45 | | U | 20 | | 80/ 450 | | (2.40) | | |
| | | | 6.50 | | D | 21 | | | Below 6.50m: Locally mottled dark brown. Occasional polished fissure surfaces. With occasional thin laminae of black fine and medium sand and lenses of light grey and brown silty fine sand. | | | |
| | | | 6.60-7.05 | | D | 22 | | | | | | |
| | 6.00 | Damp | 6.60-7.05 | | | | S26 | | | | | |
| | | | 6.60-7.10 | | B | 23 | | | | | | |
| | | | | | | | | | | 7.40 | 92.60 | |
| | 7.50 | Damp | 7.50-7.95 | | U | 24 | | 98/ 300 | Dense dark brown grey silty SAND, clayey in top 0.750m. Sand is fine. (TRANSITIONAL ZONE) Below 7.40m: Driller notes becomes more sandy with depth. | | | |
| | | | 7.95 | | D | 25 | | | | | | |
| | 7.50 | Damp | 8.00-8.45 | | | | S40 | | | | | |
| | | | 8.00 | | V | | | | | | | |
| | | | 8.00-8.45 | | D | 26 | | | | | | |
| | | | 8.00-8.50 | | B | 27 | | | | (2.60) | | |
| | | | 9.00-9.45 | | D | 28 | | | Below 9.00m: With occasional laminae up to 10mm of dark grey clay. | | | |
| | 9.00 | Damp | 9.00-9.45 | | | | S32 | | | | | |
| | | | 9.00-10.00 | | B | 29 | | | | | | |
| 15/04 | 10.00 | dry | | | | | | | | | | |
| | | | 10.00 | | V | | | | | 10.00 | 90.00 | |
| | | | | | | | | | End of Borehole | | | |

**Remarks** (See notes & keysheets)

1. Groundwater was not apparent during boring.
2. Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
3. The borehole was advanced by chiselling methods from 2.20m to 2.40m (0.5 hours).
4. Aquifer protection was carried out by sealing the base of the hole at a depth of 4.00m and continuing in reduced diameter casing.
5. An amount of water was added to facilitate boring and to maintain a positive hydrostatic head in granular strata from 1.90m to 3.20m.

Scale 1:50

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**Contract No.** BAS040081

**Figure No.** 0928 (1 of 2)

301/04

| | | |
|---|---|---|
| **Drilling Method** Cable Percussion<br>**Equipment** Dando 2000<br>**Dates Drilled** Start 14/04/2004<br>End 15/04/2004 | **Borehole Diameter** 200mm to 4.00m<br>150mm to 10.00m<br>**Casing Diameter** 200mm to 4.00m<br>150mm to 10.00m<br>**Logged by** EDHC 14/04/2004<br>**Compiled by** pb 21/04/2004<br>**Checked by** 19/4/04 | **BOREHOLE No. 0928**<br>**Coordinates** 459786.563 E<br>**(National Grid)** 164460.029 N<br>**Ground Level** 100.00 m OD<br>**Location**<br>Co ords - E 2708.586, N 1556.315 |

| Description | Depth (m) | Level m OD | |
|---|---|---|---|
| Concrete | 0.50 | 99.50 | Flush lockable stopcock box cover.<br>Pipe diameter 50mm to 10.00m. |
| Bentonite Seal | 1.00 | 99.00 | |
| Cement/Bentonite Grout | 6.00 | 94.00 | |
| Bentonite Seal | 7.00 | 93.00 | |
| Sand Filter | 10.00 | 90.00 | Base of Hole |

**Remarks** (See notes & keysheets) Geotextile filter wrapped

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**Figure No.** 0928 (2 of 2)

309/03

| | | | |
|---|---|---|---|
| Drilling Method Cable Percussion | Borehole Diameter 150mm to 5.00m | Casing Diameter 150mm to 3.00m | **BOREHOLE No. 0929** |
| Equipment Dando 2000 | | | Coordinates 459685.083 E (National Grid) 164331.591 N |
| Dates Drilled Start 10/05/2004 End 10/05/2004 | Logged by EDHC 10/05/2004 | Compiled by pb 21/05/2004 | Checked by 19/10/04 |
| | | | Ground Level 100.50 m OD Location Co ords - E 2548.494, N 1522.185 |

| Date & Time | Casing Depth (m) | Depth to Water (m) | Sample Details: Depth (m) From | To | Type | No. | SPT Blows/N Drive mm Test | U100 Blows/ Recovery mm Result | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/05 | | | 0.00 | 2.00 | SB | | | | TOPSOIL (SILCHESTER GRAVEL) | (0.30) | | |
| | | | 0.00 | | PID | | 0 | | | 0.30 | 100.20 | |
| | | | 0.00 | | V | 1 | | | Brown, white and dark grey slightly clayey, slightly sandy GRAVEL. Sand is fine to coarse. Gravel is subangular and rounded, fine to coarse flint. (SILCHESTER GRAVEL) | | | |
| | | | 0.00 | | CD/K | 1 | | | | (0.90) | | |
| | | | 0.30 | 1.20 | B | 3 | | | | | | |
| | | | 1.00 | | CD/K | 2 | | | | | | |
| | | | 1.00 | | PID | | 0 | | | | | |
| | | | 1.20 | 1.70 | B | 4 | | | | 1.20 | 99.30 | |
| | Nil | Dry | 1.20 | 1.59 | | | C50/ 235 | | Very dense to dense light orange brown, white, and dark grey slightly silty, slightly sandy GRAVEL with rare subangular flint cobbles. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | | | |
| | | | 2.00 | | V | | | | | (1.50) | | |
| | | | 2.00 | | PID | | 0 | | | | | |
| | | | 2.00 | 4.00 | SB | | | | | | | |
| | | | 2.00 | | CD/K | 5 | | | | | | |
| | 2.20 | Added | 2.20 | 2.65 | | | C43 | | | | | |
| | | | 2.20 | 2.70 | B | 6 | | | | 2.70 | 97.80 | |
| | | | 2.80 | | CD/K | 7 | | | Laminated orange brown and light grey clayey SAND with thin laminae and lenses of light grey clay. Sand is fine to coarse. (BAGSHOT FORMATION) | | | |
| | | | 2.90 | | D | 8 | | | | | | |
| | | | 3.00 | | PID | | 0 | | | (0.75) | | |
| | 3.00 | Damp | 3.00 | 3.45 | U | 9 | | 57/ 450 | | | | |
| | | | 3.45 | | D | 10 | | | | 3.45 | 97.05 | |
| | 3.00 | Damp | 3.50 | 3.95 | | | S21 | | Medium dense fissured, thinly laminated brown grey clayey SAND with thin laminae and lenses of light grey orange and light brown fine and medium clay. Fissures are extremely closely spaced, randomly orientated, locally stained brown. (TRANSITIONAL ZONE) | (0.55) | | |
| | | | 3.50 | 3.95 | D | 11 | | | | | | |
| | | | 3.50 | 4.00 | B | 12 | | | | 4.00 | 96.50 | |
| | | | 4.00 | | V | | | | | | | |
| | | | 4.00 | | PID | | 0 | | | | | |
| | | | 4.00 | | CD/K | 12 | | | | | | |
| | 3.00 | Dry | 4.00 | 4.45 | U | 13 | | 64/ 400 | | (1.00) | | |
| | | | 4.00 | 5.00 | SB | 18 | | | | | | |
| | | | 4.45 | | D | 14 | | | | | | |
| | 3.00 | Dry | 4.50 | 4.95 | | | S25 | | Firm thinly laminated dark grey CLAY with thin laminae and lenses of light grey, occasionally orange sand. Sand is fine and medium. Rare black carbonaceous fragments up to 30mm. (TRANSITIONAL ZONE) | | | |
| 10/05 | 3.00 | Dry | 4.50 | 4.95 | D | 15 | | | | 5.00 | 95.50 | |
| | | | 4.50 | 5.00 | B | 16 | | | | | | |
| | | | 5.00 | | V | 17 | | | | | | |
| | | | | | | | | | End of Borehole | | | |

**Remarks** (See notes & keysheets)
1 Groundwater was not apparent during boring.
2 Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand dug to 1.20m depth and rescanned using the CAT to check for services. services were not located.

Scale 1:50

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Contract No. BAS040081

Figure No. 0929 (1 of 2)

301/04

| | | |
|---|---|---|
| **Drilling Method** Cable Percussion<br>**Equipment** Dando 2000<br>**Dates Drilled** Start 10/05/2004<br>End 10/05/2004 | **Borehole Diameter** 150mm to 5.00m<br>**Casing Diameter** 150mm to 3.00m<br>**Logged by** EDHC 10/05/2004<br>**Compiled by** pb 21/05/2004<br>**Checked by** DDA 19/10/04 | **BOREHOLE No.** 0929<br>**Coordinates** 459685.083 E<br>**(National Grid)** 164331.591 N<br>**Ground Level** 100.50 m OD<br>**Location** Co ords - E 2548.494, N 1522.185 |

| Description | Depth (m) | Level m OD | |
|---|---|---|---|
| Concrete | 0.50 | 100.00 | Flush lockable stopcock box cover.<br>Pipe diameter 50mm to 3.00m. |
| Bentonite Seal | 1.50 | 99.00 | |
| Gravel Filter | 3.00 | 97.50 | |
| Bentonite Seal | 5.00 | 95.50 | Base of Hole |

**Remarks**
(See notes & keysheets)

Not to Scale

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**Contract No.** BAS040081

**Figure No.** 0929 (2 of 2)

309/03

| | | | |
|---|---|---|---|
| Method of Excavation | JCB 3CX | Plan | **TRIAL PIT No. TP0913** |
| Surface Dimensions | 0.60m x 2.90m | | |
| Date Excavated Start | 27/05/2004 | | Coordinates 459911.711 E |
| End | 27/05/2004 | 90° | (National Grid) 164346.383 N |
| | | | Ground Level 95.85 m OD |
| Logged by | Compiled by | Checked by | Location |
| EDHC | pb | PBM | Co ords - E 2732.420, N 1388.956 |
| 27/05/2004 | 02/06/2004 | 19/10/04 | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Leval | Lagend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| 0.00 | PID | 333 | | | | TOPSOIL | (0.10) 0.10 | 95.75 | |
| | | | 0.10 | CD | 1 | | | | |
| | | | 0.10 | K | 1 | Possibly MADE GROUND: Firm dark grey locally mottled dark red brown slightly sandy gravelly clay. With rare subangular flint cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. | (0.35) | | |
| | | | 0.10 | VL | 1 | | | | |
| | | | 0.30 | B | 2 | | | | |
| | | | 0.50 | B | 3 | (BAGSHOT FORMATION) | 0.45 | 95.40 | |
| | | | | | | Soft grey brown, locally mottled dark brown and orange locally slightly sandy, slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. With rare black organic fragments. | (0.35) | | |
| | | | 0.85 | W | 6 | | 0.80 | 95.05 | |
| 1.00 | PID | 147 | 1.00 | D | 4 | (BAGSHOT FORMATION) | (0.40) | | |
| | | | 1.00 | CD | 5 | | | | |
| | | | 1.00 | K | 5 | Firm orange and light grey mottled CLAY with occasional lenses of orange brown sand. Sand is fine to coarse. With common black rootlets. | | | |
| | | | 1.00 | VL | 5 | (BAGSHOT FORMATION) | 1.20 | 94.65 | |
| | | | | | | End of Trial Pit | | | |

**Remarks** (See notes & keysheets)

1 Minor spalling of sidewalls noted below 0.60m

2 Groundwater was encountered at 0.85m during excavation and rose to 0.70m after 15 mins,0.85m after 20 mins Flow of groundwater encountered at 0.85.

3 Pit abandoned at 1.20m due to inflow of groundwater and sidewalls collapse below 0.60m.

4 On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.

5 Soakaway test performed in nearby trial pit TP930 at 1.00m depth. See Appendix D for details.

Scale 1:25

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Contract No. BAS040081

Figure No. TP0913 (1 of 1)

302/03

| | | | |
|---|---|---|---|
| **Method of Excavation** JCB 3CX<br>**Surface Dimensions** 0.60m x 2.10m<br>**Date Excavated** Start 03/06/2004<br>End 03/06/2004 | Plan → 90° | **TRIAL PIT No.** | **TP0914** |
| | | **Coordinates** | 459656.516 E |
| | | **(National Grid)** | 164317.763 N |
| | | **Ground Level** | 100.55 m OD |
| | | **Location** | |
| | | Co ords - E 2517.674, N 1529.768 | |
| **Logged by** EDHC 03/06/2004 | **Compiled by** edhc 08/06/2004 | **Checked by** DJM 19/10/04 | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| 0.10 | PID | 0.1 | 0.10 | V | | TOPSOIL | (0.05) | | |
| | | | 0.10 | CD | 1 | | 0.05 | 100.50 | |
| | | | 0.10 | K | 1 | MADE GROUND: Grey slightly clayey sandy gravel. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. | (0.25) | | |
| | | | 0.10 | VL | 1 | | | | |
| | | | 0.20 | V | | With occasional rootlets. | 0.30 | 100.25 | |
| | | | 0.30 | V | | At 0.30m: Concrete slab across base of pit. | | | |
| | | | | | | End of Trial Pit | | | |

**Remarks** (See notes & keysheets)

1 The walls of the pit were stable during excavation.
2 Groundwater was not encountered during excavation.
3 Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.
4 The trial pit was terminated at 0.30m due to the presence of a concrete slab.
5 On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.

Scale 1:25

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**Project** AWE ALDERMASTON
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**Contract No.** BAS040081

**Figure No.** TP0914 (1 of 1)

302/03

| | | | |
|---|---|---|---|
| **Method of Excavation** JCB 3CX<br>**Surface Dimensions** 0.60m x 2.20m<br>**Date Excavated** Start 25/05/2004<br>End 25/05/2004 | **Plan** → 90° | **TRIAL PIT No. TP0915**<br>**Coordinates** 459708.080 E<br>**(National Grid)** 164350.159 N<br>**Ground Level** 100.53 m OD<br>**Location**<br>Co ords - E 2578.048, N 1521.806 | |
| **Logged by** EDHC 25/05/2004 | **Compiled by** pb 02/06/2004 | **Checked by** DGM 19/10/04 | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | TOPSOIL | (0.10) 0.10 | 100.43 | |
| 0.10 | PID | 0 | 0.10 | CD | 1 | MADE GROUND: Grey brown slightly clayey, slightly sandy gravel with occasional cobbles. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. Cobbles are subangular flint. With rare brick fragments and common rootlets. (SILCHESTER GRAVEL) At 0.25m: Tarmacadam fragments up to 200mm Below 0.30m: Brown grey, slightly clayey sandy gravel. | (0.65) | | |
| | | | 0.10 | K | 1 | | | | |
| | | | 0.10 | VL | 1 | | | | |
| | | | 0.50 | B | 2 | | | | |
| | | | 0.50 | B | 2 | | 0.75 | 99.78 | |
| 1.00 | PID | 0 | 1.00 | B | 3 | Light brown white and dark grey, locally slightly silty, slightly sandy GRAVEL with occasional cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to corse flint. Cobbles are subrounded flint. (SILCHESTER GRAVEL) Below 0.80m: Grades locally to orange brown. | | | |
| | | | 1.00 | B | 3 | | | | |
| | | | 1.00 | CD | 4 | | | | |
| | | | 1.00 | K | 4 | | | | |
| | | | 1.00 | VL | 4 | | (1.25) | | |
| | | | | | | Below 1.50m: Light yellow brown. Slightly clayey sandy gravel and cobbles. | | | |
| | | | 1.80 | B | 5 | | | | |
| | | | 1.80 | B | 5 | | | | |
| 2.00 | PID | 0 | 2.00 | CD | 6 | End of Trial Pit | 2.00 | 98.53 | |
| | | | 2.00 | K | 6 | | | | |
| | | | 2.00 | VL | 6 | | | | |

**Remarks** (See notes & keysheets)

1 Minor spalling in side walls below 0.40m
2 Groundwater was not apparent during excavation.
3 Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
4 On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
5 Soakaway test performed in nearby trial pit TP918 at 1.70m. See Appendix D for details.

Scale 1:25

FUGRO

**Project** AWE ALDERMASTON NEW HR FACILITY GI

**Contract No.** BAS040081

**Figure No.** TP0915 (1 of 1)

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| | | | |
|---|---|---|---|
| Method of Excavation | JCB 3CX | Plan | **TRIAL PIT No. TP0916** |
| Surface Dimensions | 1.00m x 2.70m | | |
| Date Excavated Start | 25/05/2004 | | Coordinates 459709.017 E |
| End | 25/05/2004 | 90° | (National Grid) 164313.508 N |
| | | | Ground Level 100.65 m OD |
| Logged by EDHC 25/05/2004 | Compiled by pb 02/06/2004 | Checked by DAM 19/10/04 | Location Co ords - E 2555.382, N 1492.990 |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| 0.00 | PID | 0 | 0.10 | CD | 1 | TOPSOIL | (0.10) 0.10 | 100.55 | |
| | | | 0.10 | K | 1 | MADE GROUND: Grey brown slightly clayey, slightly sandy gravel with occasional cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. Cobbles are angular and subangular flint, occasionally brick and tarmacadam. With rare wood fragments. At 0.20m: 300mm reinforcement bar Below 0.50m: Grey brown and light orange brown At 0.60m: 250mm tarmacadam fragment At 0.80m: 300mm wood fragment | (0.80) | | |
| | | | 0.10 | VL | 1 | | | | |
| | | | 0.30 | D | 2 | | | | |
| | | | 0.30 | B | 3 | | | | |
| | | | 0.30 | B | 3 | | | | |
| 1.00 | PID | 0 | 1.00 | D | 4 | MADE GROUND: Firm grey brown, orange and light grey mottled locally slightly sandy, slightly gravelly clay. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) At 1.30m: 1. No whole Brick At 1.40m: 400mm concrete fragment in north west side of pit. Occasional tarmacadam fragments up to 150mm | 0.90 (0.70) | 99.75 | |
| | | | 1.00 | CD | 5 | | | | |
| | | | 1.00 | K | 5 | | | | |
| | | | 1.00 | VL | 5 | | | | |
| | | | 1.00 | B | 6 | | | | |
| | | | 1.80 | B | 7 | Light orange brown, light grey, white and dark grey locally slightly silty, slightly sandy GRAVEL with occasional cobbles. Sand is fine to coarse. Gravel is subrounded and rounded, fine to coarse flint. Cobbles are subrounded and rounded flint. (SILCHESTER GRAVEL) | 1.60 (0.40) | 99.05 | |
| 2.00 | PID | 0 | 2.00 | CD | 8 | | 2.00 | 98.65 | |
| | | | 2.00 | K | 8 | | | | |
| | | | 2.00 | VL | 8 | End of Trial Pit | | | |

**Remarks** (See notes & keysheets)

1. The walls of the pit were stable during excavation.
2. Groundwater was not apparent during excavation.
3. On completion the trial pit was backfilled with compacted arisings.
4. On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
5. California Bearing Ratio (CBR) performed at 0.30m. See Appendix D for details.

Scale 1:25

FUGRO

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|---|---|
| Project AWE ALDERMASTON NEW HR FACILITY GI | Contract No. BAS040081 |
| | Figure No. TP0916 (1 of 1) |

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| | | | |
|---|---|---|---|
| **Method of Excavation** | JCB 3CX | **Plan** | **TRIAL PIT No. TP0917** |
| **Surface Dimensions** | 0.60m x 2.40m | | |
| **Date Excavated** Start | 03/06/2004 | → 90 ° | **Coordinates** 459714.371 E |
| End | 03/06/2004 | | **(National Grid)** 164421.781 N |
| **Logged by** EDHC 03/06/2004 | **Compiled by** edhc 08/06/2004 | **Checked by** 19/10/04 | **Ground Level** 100.10 m OD |
| | | | **Location** Co ords - E 2628.597, N 1572.935 |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | TOPSOIL | (0.10) | | |
| | | | | | | | 0.10 | 100.00 | |
| 0.10 | PID | 0 | 0.10 | V | | Probably MADE GROUND: Grey slightly clayey slightly sandy gravel with occasional cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. Cobbles are subangular to rounded flint. (SILCHESTER GRAVEL) | (0.20) | | |
| | | | 0.10 | CD | 1 | | | | |
| | | | 0.10 | K | 1 | | | | |
| | | | 0.10 | VL | 1 | | 0.30 | 99.80 | |
| | | | 0.40 | B | 2 | | | | |
| | | | 0.40 | B | 2 | | | | |
| | | | 0.40 | B | 2 | | | | |
| | | | 0.40 | B | 2 | Dark orange brown, locally slightly clayey, slightly sandy GRAVEL with occasional cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. Cobbles are subrounded flint. (SILCHESTER GRAVEL) | | | |
| 1.00 | PID | 0 | 1.00 | V | | | (1.50) | | |
| | | | 1.00 | CD | 3 | | | | |
| | | | 1.00 | K | 3 | | | | |
| | | | 1.00 | VL | 3 | | | | |
| | | | 1.50 | B | 4 | | | | |
| | | | 1.50 | B | 4 | Below 1.60m: Grey brown, slightly clayey. | | | |
| | | | 1.50 | B | 4 | | | | |
| | | | 1.50 | B | 4 | | | | |
| | | | | | | | 1.80 | 98.30 | |
| | | | | | | Firm thinly laminated light grey and orange mottled slightly sandy CLAY with laminae and lenses of yellow brown, light grey and orange brown sand. Sand is fine to coarse. With rare rootlets. (BAGSHOT FORMATION) | (0.20) | | |
| 1.90 | VN | 62/118/ 104/32 | 1.90 | D | 5 | | | | |
| | | | 1.90 | B | 6 | | 2.00 | 98.10 | |
| | VR | 10/34/30/ 10 | 2.00 | V | | | | | |
| | | | 2.00 | CD | 7 | | | | |
| 2.00 | PID | 0 | 2.00 | K | 7 | | | | |
| | | | 2.00 | VL | 7 | | | | |
| | | | | | | End of Trial Pit | | | |

**Remarks** (See notes & keysheets)

1. The walls of the pit were unstable between 0.60m and 1.80m.
2. Groundwater was not encountered during excavation.
3. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.
4. Hand Vane tests (VN/R) were carried out on pieces of material brought to the surface using a 19mm hand vane. Direct readings of undrained shear strength given in kPa.
5. On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
6. Soakaway test performed on nearby trial pit TP918 at 1.7m depth. See Appendix D for details.

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**Project** AWE ALDERMASTON NEW HR FACILITY GI

**Contract No.** BAS040081

**Figure No.** TP0917 (1 of 1)

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| | | | |
|---|---|---|---|
| Method of Excavation | JCB 3CX | Plan | **TRIAL PIT No. TP0918** |
| Surface Dimensions | 0.60m x 2.00m | | |
| Date Excavated Start | 25/05/2004 | | Coordinates 459729.713 E |
| End | 25/05/2004 | 90° | (National Grid) 164386.098 N |
| Logged by | Compiled by | Checked by | Ground Level 100.35 m OD |
| EDHC | pb | | Location |
| 25/05/2004 | 02/06/2004 | 19/10/04 | Co ords - E 2617.637, N 1535.670 |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | TOPSOIL | (0.05) | | |
| 0.10 | PID | 0 | 0.10 | CD | 1 | | 0.05 | 100.30 | |
| | | | 0.10 | K | 1 | Dark grey slightly clayey, slightly sandy GRAVEL with occasional subangular flint cobbles. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. With many rootlets. (SILCHESTER GRAVEL) | (0.45) | | |
| | | | 0.10 | VL | 1 | | | | |
| | | | | | | | 0.50 | 99.85 | |
| | | | 0.60 | B | 2 | Dark orange brown and white locally slightly silty, slightly sandy GRAVEL with occasional cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. Cobbles are subrounded flint. (SILCHESTER GRAVEL) | | | |
| | | | 0.60 | B | 2 | | | | |
| 1.00 | PID | 0 | 1.00 | CD | 3 | | | | |
| | | | 1.00 | K | 3 | | | | |
| | | | 1.00 | VL | 3 | | | | |
| | | | | | | | (1.40) | | |
| | | | | | | Below 1.30m: Yellow brown white and dark orange brown. | | | |
| | | | 1.40 | B | 4 | | | | |
| | | | 1.40 | B | 4 | | | | |
| | | | | | | | 1.90 | 98.45 | |
| 2.00 | PID | 0 | 2.00 | D | 5 | | (0.15) | | |
| | | | 2.00 | B | 6 | Firm locally thinly laminated orange and light grey CLAY with orange, yellow brown and light grey lenses of slightly silty sand. Sand is fine to coarse. With some rootlets in grey clay. (BAGSHOT FORMATION) | 2.05 | 98.30 | |
| | | | 2.00 | CD | 7 | | | | |
| | | | 2.00 | K | 7 | | | | |
| | | | 2.00 | K | 7 | | | | |
| | | | 2.00 | VL | 7 | | | | |
| | | | | | | End of Trial Pit | | | |

**Remarks** (See notes & keysheets)

1 Minor spalling of sidewalls noted below 0.50m
2 Groundwater was not apparent during excavation.
3 Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.
4 On completion the trial pit was backfilled with compacted arisings.
5 On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
6 Soakaway test performed in trial pit at 1.70m depth. See Appendix D for details.

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Project
AWE ALDERMASTON
NEW HR FACILITY GI

Contract No. BAS040081

Figure No. TP0918 (1 of 1)

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| | | | |
|---|---|---|---|
| **Method of Excavation** | JCB 3CX | **Plan** | **TRIAL PIT No.** **TP0919** |
| **Surface Dimensions** | 0.85m x 2.30m | | |
| **Date Excavated** Start | 26/05/2004 | → 90 ° | **Coordinates** 459765.216 E |
| End | 26/05/2004 | | **(National Grid)** 164341.411 N |
| **Logged by** EDHC 26/05/2004 | **Compiled by** pb 02/06/2004 | **Checked by** 19/10/04 | **Ground Level** 100.45 m OD |
| | | | **Location** Co ords - E 2616.457, N 1478.611 |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| 0.00 | | | | | | TOPSOIL | (0.10) | | |
| 0.10 | PID | 101 | 0.10 | CD | 1 | | 0.10 | 100.35 | |
| | | | 0.10 | K | 1 | MADE GROUND: Grey brown slightly clayey, locally clayey, slightly sandy gravel with occasional cobbles. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint, occasionally brick. Cobbles are angular and subangular flint and brick. At 0.20m: Dark grey brown and dark orange brown mottled. Below 0.30m: Slightly sandy, clayey gravel. At 0.40m: 300mm tarmacadam fragment. At 0.80m: 600mm steel reinforcement bar. Some fine to coarse gravel sized fragments of tarmacadam. | | | |
| | | | 0.10 | VL | 1 | | | | |
| | | | 0.30 | D | 2 | | | | |
| | | | 0.30 | B | 3 | | | | |
| 1.00 | PID | 12.2 | 1.00 | CD | 4 | | (1.40) | | |
| | | | 1.00 | K | 4 | | | | |
| | | | 1.00 | VL | 5 | | | | |
| | | | 1.00 | B | 5 | | | | |
| | | | | | | At 1.40m: 1 No. whole Brick | | | |
| | | | | | | MADE GROUND: Grey brown and dark grey mottled slightly sandy clayey GRAVEL. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. Rare brick and wood fragments. | 1.50 | 98.95 | |
| | | | 1.80 | B | 6 | | (0.70) | | |
| | | | 1.80 | D | 7 | | | | |
| 2.00 | PID | 44 | 2.00 | CD | 8 | | | | |
| | | | 2.00 | K | 8 | | | | |
| | | | 2.00 | VL | 8 | | | | |
| | | | | | | End of Trial Pit | 2.20 | 98.25 | |

**Remarks** (See notes & keysheets)

1 The walls of the pit were stable during excavation.

Seepage of groundwater encountered at 2.10m

2 .

3 Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.

4 On completion the trial pit was backfilled with compacted arisings.

5 On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.

6 California Bearing Ratio (CBR) performed at 0.30m. See Appendix D for details.

7 Soakaway test performed in trial pit at completion of excavation. See Appendix D for details.

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**Project** AWE ALDERMASTON NEW HR FACILITY GI

**Contract No.** BAS040081

**Figure No.** TP0919 (1 of 1)

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| | | | |
|---|---|---|---|
| Method of Excavation | JCB 3CX | Plan | **TRIAL PIT No. TP0920** |
| Surface Dimensions | 0.65m x 2.30m | | |
| Date Excavated Start | 03/06/2004 | | Coordinates 459757.384 E |
| End | 03/06/2004 | 90° | (National Grid) 164459.838 N |
| | | | Ground Level 99.90 m OD |
| Logged by EDHC 03/06/2004 | Compiled by edhc 08/06/2004 | Checked by 9/6/04 | Location Co ords - E 2685.998, N 1574.788 |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.10 | V | | TOPSOIL | (0.10) | | |
| | | | 0.10 | CD | 1 | | 0.10 | 99.80 | |
| | | | 0.10 | K | 1 | MADE GROUND: Grey slightly clayey slightly sandy gravel. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint, rarely brick and cement mortar. With many rootlets. | (0.20) | | |
| | | | 0.10 | VL | 1 | | 0.30 | 99.60 | |
| | | | 0.40 | B | 2 | | | | |
| | | | 0.40 | B | 2 | (SILCHESTER GRAVEL) | | | |
| | | | | | | Dark orange brown locally slightly silty sandy GRAVEL with occasional cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. Cobbles are subrounded and rounded flint. | (0.60) | | |
| | | | | | | (SILCHESTER GRAVEL) | 0.90 | 99.00 | |
| | | | 1.00 | V | | | | | |
| | | | 1.00 | CD | 3 | Light grey, white and brown mottled slightly sandy clayey GRAVEL with rare cobbles. Sand is fine to coarse. Gravel is subrounded and rounded, fine to coarse flint. Cobbles are subrounded flint. | | | |
| | | | 1.00 | K | 3 | | | | |
| | | | 1.00 | VL | 3 | | | | |
| | | | 1.20 | D | 4 | | | | |
| | | | | | | (SILCHESTER GRAVEL) | | | |
| | | | | | | Between 0.90m and 1.50m: 0.60m lens of orange brown sandy gravel across centre of pit. | (1.10) | | |
| | | | 1.50 | B | 5 | | | | |
| | | | 2.00 | V | | | 2.00 | 97.90 | |
| | | | 2.00 | CD | 6 | End of Trial Pit | | | |
| | | | 2.00 | K | 6 | | | | |
| | | | 2.00 | VL | 6 | | | | |

**Remarks** (See notes & keysheets)

1 The walls of the pit were unstable between 0.20m and 1.50m.
2 Groundwater was encountered at 1.60m during excavation, rising to 1.50m in 5 minutes.
3 Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.
4 On completion the trial pit was backfilled with compacted arisings.
5 On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
6 Soakaway test performed in nearby trial pit TP918 at 1.70m depth. See Appendix D for details.

Scale 1:25

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Project
AWE ALDERMASTON
NEW HR FACILITY GI

Contract No. BAS040081

Figure No. TP0920 (1 of 1)

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| | | | |
|---|---|---|---|
| **Method of Excavation** JCB 3CX<br>**Surface Dimensions** 0.65m x 2.10m<br>**Date Excavated** Start 01/06/2004<br>End 01/06/2004 | **Plan** → 90° | **TRIAL PIT No.** TP0921<br>**Coordinates** 459818.932 E<br>**(National Grid)** 164458.647 N<br>**Ground Level** 100.05 m OD<br>**Location**<br>Co ords - E 2732.625, N 1534.595 | |
| **Logged by** EDHC 01/06/2004 | **Compiled by** edhc 08/06/2004 | **Checked by** 19/10/04 | |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thickness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| 0.10 | PID | 0 | 0.10 | V | | TOPSOIL (SILCHESTER GRAVEL) | (0.20) | | |
| | | | 0.10 | CD | 1 | | 0.20 | 99.85 | |
| | | | 0.10 | K | 1 | Dark orange brown, locally slightly clayey, sandy GRAVEL with occasional cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. Cobbles are subangular flint. (SILCHESTER GRAVEL) Below 0.60m: Locally slightly silty and slightly sandy. | | | |
| | | | 0.10 | VL | 1 | | | | |
| | | | 0.30 | B | 2 | | | | |
| | | | 0.30 | B | 2 | | | | |
| | | | 0.30 | B | 2 | | | | |
| 1.00 | PID | 0 | 1.00 | V | | | (1.80) | | |
| | | | 1.00 | CD | 3 | | | | |
| | | | 1.00 | K | 3 | | | | |
| | | | 1.00 | VL | 3 | Below 1.20m: Grey brown, white and dark grey. | | | |
| | | | 1.50 | B | 4 | | | | |
| | | | 1.50 | B | 4 | | | | |
| | | | 1.50 | B | 4 | | | | |
| | | | 1.50 | B | 4 | | | | |
| 2.00 | PID | 0 | 2.00 | V | | | 2.00 | 98.05 | |
| | | | 2.00 | CD | 5 | End of Trial Pit | | | |
| | | | 2.00 | K | 5 | | | | |
| | | | 2.00 | VL | 5 | | | | |

**Remarks** (See notes & keysheets)

1 The walls of the pit were unstable below 0.60m during excavation.
2 A seepage of groundwater was encountered at 1.55m.
3 Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.
4 On completion the trial pit was backfilled with compacted arisings.
5 On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
6 Soakaway test performed in neaby trial pit TP924 at 1.20m depth. See Appendix D for details.

Scale 1:25

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**Project**
AWE ALDERMASTON
NEW HR FACILITY GI

**Contract No.** BAS040081

**Figure No.** TP0921 (1 of 1)

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| | | | |
|---|---|---|---|
| Method of Excavation | JCB 3CX | Plan | **TRIAL PIT No. TP0922** |
| Surface Dimensions | 0.60m x 2.20m | | |
| Date Excavated Start | 02/06/2004 | | Coordinates 459850.960 E |
| End | 02/06/2004 | → 90 ° | (National Grid) 164500.970 N |
| | | | Ground Level 99.60 m OD |
| Logged by EDHC 02/06/2004 | Compiled by edhc 08/06/2004 | Checked by DBM 19/10/04 | Location Co ords - E 2784.292, N 1546.742 |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | TOPSOIL | (0.10) 0.10 | 99.50 | |
| 0.10 | PID | 0 | 0.10 | V | | | | | |
| | | | 0.10 | CD | 1 | Probably MADE GROUND: Grey slightly clayey slightly sandy gravel with occasional cobbles. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. Cobbles are subangular flint. (SILCHESTER GRAVEL) | (0.30) | | |
| | | | 0.10 | K | 1 | | | | |
| | | | 0.10 | VL | 1 | | 0.40 | 99.20 | |
| | | | 0.70 | B | 2 | Dark orange brown slightly clayey slightly sandy GRAVEL with occasional cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. Cobbles are subangular and subrounded flint. (SILCHESTER GRAVEL) | (0.70) | | |
| | | | 0.70 | B | 2 | | | | |
| 1.00 | PID | 0 | 1.00 | V | | | | | |
| | | | 1.00 | CD | 3 | | | | |
| | | | 1.00 | K | 3 | | 1.10 | 98.50 | |
| | | | 1.00 | VL | 3 | Orange and light grey mottled slightly sandy clayey GRAVEL. Sand is fine to coarse. Gravel is subrounded and rounded, fine to coarse flint. (SILCHESTER GRAVEL) | (0.60) | | |
| | | | 1.20 | D | 4 | | | | |
| | | | 1.40 | B | 5 | | | | |
| | | | | | | | 1.70 | 97.90 | |
| | | | | | | Firm laminated orange and light grey slightly sandy CLAY with thin laminae and lenses of orange and yellow brown sand. Sand is fine to coarse. (BAGSHOT FORMATION) | (0.30) | | |
| 1.90 | VN | 28/34/42 | 1.90 | B | 6 | | | | |
| | VR | 15/14/14 | 2.00 | V | | | 2.00 | 97.60 | |
| 2.00 | PID | 0 | 2.00 | CD | 7 | End of Trial Pit | | | |
| | | | 2.00 | K | 7 | | | | |
| | | | 2.00 | VL | 7 | | | | |

**Remarks** (See notes & keysheets)

1 The walls of the pit were unstable between 0.20m and 1.10m.
2 Groundwater was not apparent during excavation.
3 Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.
4 Hand Vane tests (VN/R) were carried out on pieces of material brought to the surface using a 19mm hand vane. Direct readings of undrained shear strength given in kPa.
5 On completion the trial pit was backfilled with compacted arisings.
6 On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
7 Soakaway test performed in nearby trial pits TP0924 and TP0934 at 1.20m and 1.00m depth. See Appendix D for details.

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Project: AWE ALDERMASTON NEW HR FACILITY GI

Contract No. BAS040081

Figure No. TP0922 (1 of 1)

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| | | | |
|---|---|---|---|
| Method of Excavation | JCB 3CX | Plan | **TRIAL PIT No. TP0923** |
| Surface Dimensions | 0.80m x 3.00m | | |
| Date Excavated Start | 01/06/2004 | | Coordinates 459799.460 E |
| End | 01/06/2004 | → 90 ° | (National Grid) 164422.737 N |
| | | | Ground Level 100.35 m OD |
| Logged by EDHC 01/06/2004 | Compiled by pb 03/06/2004 | Checked by DAM 19/10/04 | Location Co ords - E 2694.718, N 1519.373 |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | TOPSOIL | (0.10) | | |
| 0.10 | PID | 0 | 0.10 | CO | 1 | | 0.10 | 100.25 | |
| | | | 0.10 | K | 1 | MADE GROUND: Grey slightly clayey sandy gravel. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint. Rare bricks many rootlets. (SILCHESTER GRAVEL) | (0.20) | | |
| | | | 0.10 | VL | 1 | | 0.30 | 100.05 | |
| | | | 0.30 | D | 2 | | | | |
| | | | 0.30 | D | 3 | | | | |
| | | | 0.30 | B | 4 | | | | |
| | | | 0.30 | B | 4 | Dark orange brown slightly clayey, slightly sandy GRAVEL. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) Below 0.80m: Locally slightly clayey, with occasional subangular cobbles of flint. | | | |
| 1.00 | PID | 0 | 1.00 | CD | 5 | | (1.35) | | |
| | | | 1.00 | K | 5 | | | | |
| | | | 1.00 | VL | 5 | | | | |
| | | | 1.00 | VL | 5 | | | | |
| | | | | | | Below 1.40m: Slightly sandy clayey gravel. | | | |
| | | | 1.50 | B | 6 | | | | |
| | | | 1.50 | B | 6 | | | | |
| | | | | | | | 1.65 | 98.70 | |
| | | | 1.75 | D | 7 | Firm laminated orange brown and light grey sandy CLAY. With laminae and lenses of orange, yellow brown and light grey sand. Sand is fine to coarse. (BAGSHOT FORMATION) | | | |
| | | | 1.80 | B | 8 | | (0.50) | | |
| 2.00 | PID | 0 | 2.00 | CD | 9 | | | | |
| | | | 2.00 | K | 9 | | | | |
| | | | 2.00 | VL | 9 | | | | |
| | | | | | | End of Trial Pit | 2.15 | 98.20 | |

**Remarks** (See notes & keysheets)

1. Minor spalling of the sidewalls noted between 0.30m and 1.65m.
2. Groundwater was not apparent during excavation.
3. On completion the trial pit was backfilled with compacted arisings.
4. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.
5. On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
6. California Bearing Ratio (CBR) performed at 0.30m. See Appendix D for details.
7. Soakaway tests performed in nearby trial pits TP0918, TP0924 and TP0925 at 1.70m, 1.20m and 1.30m depth. see Appendix D for details.

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| Project | AWE ALDERMASTON<br>NEW HR FACILITY GI |
| Contract No. | BAS040081 |
| Figure No. | TP0923 (1 of 1) |

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| | | | |
|---|---|---|---|
| **Method of Excavation** | JCB 3CX | **Plan** | **TRIAL PIT No. TP0924** |
| **Surface Dimensions** | 0.60m x 2.00m | | |
| **Date Excavated** Start | 28/05/2004 | → 90 ° | **Coordinates** 459847.791 E |
| End | 28/05/2004 | | **(National Grid)** 164444.995 N |
| **Logged by** EDHC 28/05/2004 | **Compiled by** pb 07/06/2004 | **Checked by** 17-11-04 | **Ground Level** 100.25 m OD |
| | | | **Location** Co ords - E 2746.134, N 1505.671 |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | 0.10 | CD | 1 | TOPSOIL | (0.10) | | |
| | | | 0.10 | K | 1 | | 0.10 | 100.15 | |
| | | | 0.10 | VL | 1 | MADE GROUND: Grey slightly clayey, slightly sandy gravel with occasional cobbles. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint rarely brick. Cobbles are subangular flint. (SILCHESTER GRAVEL) | (0.20) | | |
| | | | 0.30 | D | 2 | | 0.30 | 99.95 | |
| | | | 0.30 | D | 3 | | | | |
| | | | 0.30 | B | 4 | | | | |
| | | | 0.30 | B | 4 | | | | |
| | | | | | | Orange brown slightly clayey, slightly sandy GRAVEL with occasional sub angular cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | | | |
| | | | 1.00 | CD | 5 | | | | |
| | | | 1.00 | K | 5 | | | | |
| | | | 1.00 | VL | 5 | | (1.70) | | |
| | | | | | | Below 1.40m: Yellow brown and White. Locally slightly clayey, slightly sandy gravel. | | | |
| | | | 1.50 | B | 6 | | | | |
| | | | 1.50 | B | 6 | | | | |
| | | | 2.00 | CD | 7 | | 2.00 | 98.25 | |
| | | | 2.00 | K | 7 | End of Trial Pit | | | |
| | | | 2.00 | VL | 7 | | | | |

**Remarks** (See notes & keysheets)

1 Minor spalling of the walls of the pit below 0.60m
2 Groundwater was not apparent during excavation.
3 On completion the trial pit was backfilled with compacted arisings.
4 Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.
5 On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
6 California Bearing Ratio (CBR) performed at 0.30m. See Appendix D for details.
7 Soakaway test performed in trial pit at 1.20m depth. See Appendix D for details.

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**Project** AWE ALDERMASTON NEW HR FACILITY GI

**Contract No.** BAS040081

**Figure No.** TP0924 (1 of 1)

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| | | | |
|---|---|---|---|
| **Method of Excavation** | JCB 3CX | **Plan** | **TRIAL PIT No.** **TP0925** |
| **Surface Dimensions** | 0.70m x 1.60m | | |
| **Date Excavated** Start | 27/05/2004 | → 90 ° | **Coordinates** 459858.561 E |
| End | 27/05/2004 | | **(National Grid)** 164396.521 N |
| **Logged by** EDHC 27/05/2004 | **Compiled by** pb 07/06/2004 | **Checked by** DCM 19/10/04 | **Ground Level** 100.40 m OD |
| | | | **Location** Co ords - E 2723.493, N 1461.475 |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| 0.00 | PID | 166 | 0.10 | CD | 1 | TOPSOIL | (0.15) | | |
| | | | 0.10 | K | 1 | | 0.15 | 100.25 | |
| | | | 0.10 | K | 1 | MADE GROUND: Grey slightly clayey, slightly sandy gravel and cobbles. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint, with rare glass. Cobbles are subangular flint. (SILCHESTER GRAVEL) | (0.45) | | |
| | | | 0.30 | B | 2 | | 0.60 | 99.80 | |
| 1.00 | PID | 161 | 1.00 | CD | 3 | Yellow brown, dark brown and white locally slightly clayey, slightly sandy GRAVEL with occasional cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. Cobbles are subrounded and rounded flint. (SILCHESTER GRAVEL) | | | |
| | | | 1.00 | K | 3 | | | | |
| | | | 1.00 | VL | 3 | | | | |
| | | | 1.30 | B | 4 | | (1.40) | | |
| | | | | | | Below 1.70m: Slightly clayey, slightly sandy gravel with occasional cobbles. | | | |
| 2.00 | PID | 67 | 2.00 | CD | 5 | | 2.00 | 98.40 | |
| | | | 2.00 | K | 5 | End of Trial Pit | | | |
| | | | 2.00 | VL | 5 | | | | |
| | | | 2.00 | B | 6 | | | | |

**Remarks** (See notes & keysheets)

1. Minor spalling of the walls of the pit below 0.50m.
2. Groundwater was not apparent during excavation.
3. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.
4. On completion the trial pit was backfilled with compacted arisings.
5. On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
6. Soakaway test performed in trial pits at 1.30m depth. See Appendix D for details.

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**Project** AWE ALDERMASTON NEW HR FACILITY GI

**Contract No.** BAS040081

**Figure No.** TP0925 (1 of 1)

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| | | | |
|---|---|---|---|
| **Method of Excavation** | JCB 3CX | Plan | **TRIAL PIT No.** TP0930 |
| **Surface Dimensions** | 0.60m x 1.60m | | |
| **Date Excavated** Start | 27/05/2004 | → 90 ° | **Coordinates** 459866.397 E |
| End | 27/05/2004 | | **(National Grid)** 164329.780 N |
| **Logged by** EDHC 27/05/2004 | **Compiled by** pb 07/06/2004 | **Checked by** | **Ground Level** 97.95 m OD |
| | | | **Location** Co ords - E2686.937, N 1405.089 |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| 0.10 | PID | 16.5 | 0.10 | CD | 1 | TOPSOIL | (0.30) | | |
| | | | 0.10 | K | 1 | | | | |
| | | | 0.10 | VL | 1 | | | | |
| | | | 0.30 | B | 2 | | 0.30 | 97.65 | |
| | | | | | | MADE GROUND: Grey brown slightly sandy gravelly clay with rare cobbles. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint with brick. Cobbles are subangular flint and brick. (SILCHESTER GRAVEL) | (0.30) | | |
| | | | | | | | 0.60 | 97.35 | |
| | | | 0.70 | B | 3 | | | | |
| | | | 0.70 | B | 3 | Light brown, white and dark grey slightly silty sandy GRAVEL with occasional subangular flint cobbles. Sand is fine to coarse. Gravel is subangular to rounded fine to coarse flint. (SILCHESTER GRAVEL) Below 1.00m: Slightly sandy clayey gravel. | (0.60) | | |
| 1.00 | PID | 156 | 1.00 | CD | 4 | | | | |
| | | | 1.00 | K | 4 | | | | |
| | | | 1.00 | K | 4 | | 1.20 | 96.75 | |
| | | | | | | Firm orange and light grey mottled slightly sandy locally slightly gravelly CLAY. Sand is mainly fine. Gravel is subrounded and rounded fine to coarse flint. (BAGSHOT FORMATION) | (0.20) | | |
| | | | | | | | 1.40 | 96.55 | |
| | | | 1.60 | B | 5 | | | | |
| | | | 1.60 | B | 5 | | | | |
| | | | 1.60 | D | 6 | Stiff, locally thinly laminated, orange and light grey and grey brown locally slightly sandy CLAY with laminae and lenses of light grey, yellow brown and orange brown sand. Sand is fine to coarse. (BAGSHOT FORMATION) | (0.60) | | |
| 2.00 | PID | 16.9 | 2.00 | CD | 7 | | | | |
| | | | 2.00 | K | 7 | | | | |
| | | | 2.00 | VL | 7 | | 2.00 | 95.95 | |
| | | | | | | End of Trial Pit | | | |

**Remarks** (See notes & keysheets)

1 Minor spalling of the walls of the pit between 0.60m and 1.20m
2 Groundwater was encountered as a seepage at 1.90m.
3 Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.
4 On completion the trial pit was backfilled with compacted arisings.
5 On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
6 Soakaway test performed in trial pit at 1.00m depth. See Appendix D for details.

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**Project** AWE ALDERMASTON NEW HR FACILITY GI

**Contract No.** BAS040081

**Figure No.** TP0930 (1 of 1)

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| | | | |
|---|---|---|---|
| **Method of Excavation** | JCB 3CX | **Plan** | **TRIAL PIT No. TP0932** |
| **Surface Dimensions** | 0.70m x 2.30m | | |
| **Date Excavated** Start | 26/05/2004 | → 90 ° | **Coordinates** 459760.945 E |
| End | 26/05/2004 | | **(National Grid)** 164306.602 N |
| **Logged by** EDHC 26/05/2004 | **Compiled by** pb 07/06/2004 | **Checked by** DGH 19/10/04 | **Ground Level** 100.80 m OD |
| | | | **Location** Co ords - E 2590.956, N 1454.537 |

| In-situ Testing | | | Samples | | | Description of Strata | Depth (Thick-ness) (m) | Level | Legend |
|---|---|---|---|---|---|---|---|---|---|
| Depth (m) | Type | Result | Depth (m) | Type | No. | | | | |
| | | | | | | TOPSOIL | (0.10) 0.10 | 100.70 | |
| 0.10 | PID | 95.9 | 0.10 | CD | 1 | MADE GROUND: Grey brown white and dark grey slightly clayey, slightly sandy gravel with occasional cobbles. Sand is fine to coarse. Gravel is angular to rounded, fine to coarse flint and brick. Cobbles are subangular flint and brick. (SILCHESTER GRAVEL) Below 0.40m: Dark brown and dark grey mottled, slightly sandy clayey gravel with rare roots and rootlets. | | | |
| | | | 0.10 | K | 1 | | | | |
| | | | 0.10 | VL | 1 | | | | |
| | | | 0.50 | B | 2 | | (0.70) | | |
| | | | | | | | 0.80 | 100.00 | |
| 1.00 | PID | 123 | 1.00 | CD | 3 | Orange brown white and dark grey slightly clayey, slightly sandy GRAVEL with occasional subangular flint cobbles. Sand is fine to coarse. Gravel is subangular to rounded, fine to coarse flint. (SILCHESTER GRAVEL) | | | |
| | | | 1.00 | K | 3 | | | | |
| | | | 1.00 | VL | 3 | | | | |
| | | | 1.00 | B | 4 | | (1.20) | | |
| | | | 1.90 | B | 5 | | | | |
| 2.00 | PID | 112 | 2.00 | CD | 6 | | 2.00 | 98.80 | |
| | | | 2.00 | VL | 6 | End of Trial Pit | | | |
| | | | 2.00 | K | 7 | | | | |

**Remarks** (See notes & keysheets)

1 The walls of the pit were stable during excavation.
2 Groundwater was not apparent during excavation.
3 Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out.
4 On completion the trial pit was backfilled with compacted arisings.
5 On completion of the trial pit, the arisings were backfilled and compacted in layers with the bucket of the JCB.
6 Soakaway test performed in nearby trial pit TP0919 at 2.20m depth. See Appendix D for details.

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**Project** AWE ALDERMASTON NEW HR FACILITY GI

**Contract No.** BAS040081

**Figure No.** TP0932 (1 of 1)

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