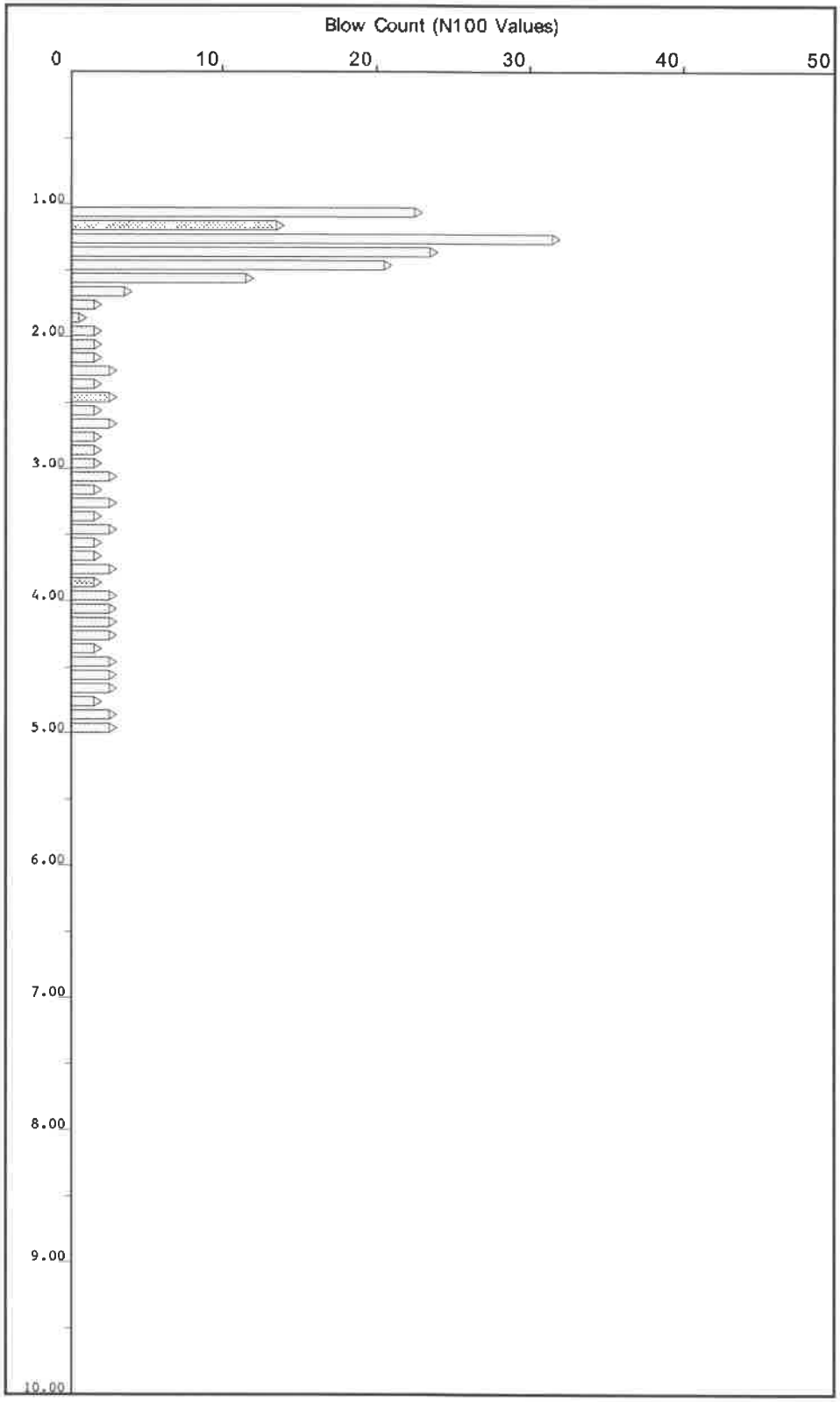
| GROUND ENGINEERING LIMITED<br>Tel: 01733-566566 www.groundengineering.co.uk | DYNAMIC PROBE PENETRATION TEST | Date 10/04/19<br>Project Number 14727 | PROBE No DP124<br>Sheet 1 of 1 |
|---|---|---|---|
| Method<br>BS 1377 : Part 9 : Clause 3.2 (DPSH) | Client<br>ED JERSEY LIMITED | Site<br>BRILL PLACE, LONDON NW1 | |

| Depth (m) | Torque | Blows (100mm) |
|---|---|---|
| .1 | | - |
| .2 | | - |
| .3 | | - |
| .4 | | - |
| .5 | | - |
| .6 | | - |
| .7 | | - |
| .8 | | - |
| .9 | | - |
| 1.0 | | - |
| .1 | | 23 |
| .2 | | 14 |
| .3 | | 32 |
| .4 | | 24 |
| .5 | | 21 |
| .6 | | 12 |
| .7 | | 4 |
| .8 | | 2 |
| .9 | | 1 |
| 2.0 | | 2 |
| .1 | | 2 |
| .2 | | 2 |
| .3 | | 3 |
| .4 | | 2 |
| .5 | | 3 |
| .6 | | 2 |
| .7 | | 3 |
| .8 | | 2 |
| .9 | | 2 |
| 3.0 | | 2 |
| .1 | | 3 |
| .2 | | 2 |
| .3 | | 3 |
| .4 | | 2 |
| .5 | | 3 |
| .6 | | 2 |
| .7 | | 2 |
| .8 | | 3 |
| .9 | | 2 |
| 4.0 | | 3 |
| .1 | | 3 |
| .2 | | 3 |
| .3 | | 3 |
| .4 | | 2 |
| .5 | | 3 |
| .6 | | 3 |
| .7 | | 3 |
| .8 | | 2 |
| .9 | | 3 |
| 5.0 | | 3 |




| Remarks : | | | |
|---|---|---|---|
| | Hammer | 63.5 kg | 14727 |
| | Standard Drop | 750 mm | |
| | Cone | 50 mm dia | |
| | Rod | 8kg / 35 mm | |

GROUND ENGINEERING LIMITED
Tel: 01733-566566
www.groundengineering.co.uk

Site: BRILL PLACE, LONDON NW1

TRIAL PIT
DP125

Date: 10/04/19

Pit Size: 0.40m L x 0.35m W x 1.00m D.

529884 mE 183138 mN
Ground Level: 18.66m. O.D.

| Samples and in-situ Tests | | | (Date) Water | Description of Strata | Legend | Depth m | O.D. Level m |
|---|---|---|---|---|---|---|---|
| Depth m | Type | Result | | | | | |
| 0.30 | D1 | | | MADE GROUND - Soft, brown, slightly sandy, slightly gravelly, silty CLAY with some concrete cobbles. Gravel of angular to sub-rounded flint, concrete, brick and ash. | | | |
| 0.60 | D2 | | | | | | |
| 0.90 | D3 | | | | | | |
| | | | | | | 1.20 | 17.46 |
| | | | | Pit completed at 1.20m depth | | | |

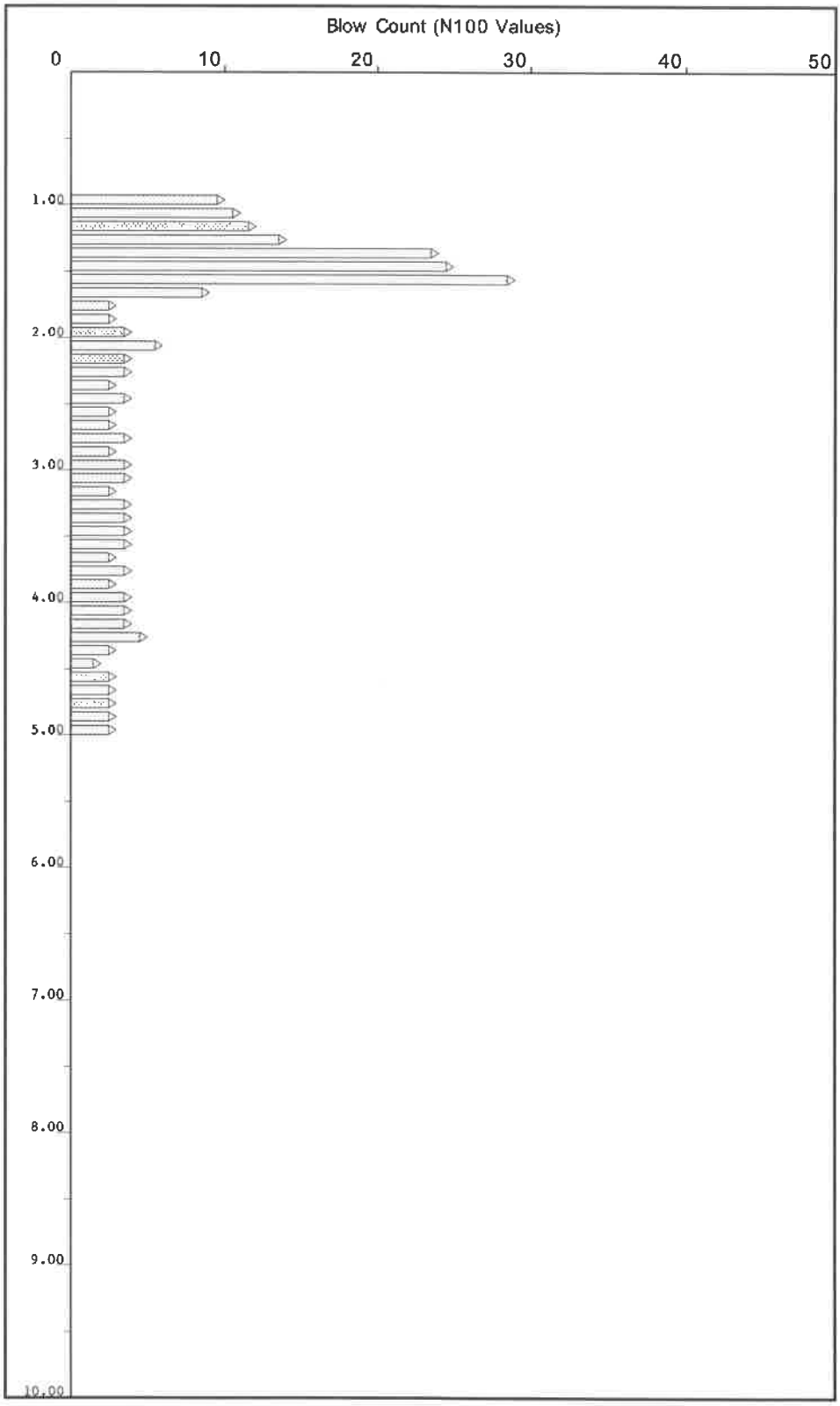
KEY
- D - Disturbed Sample
- B - Bulk Sample
- U - Undisturbed Sample
- R - Root Sample
- W - Water Sample
- ES - Environmental Sample
- ▽ Water Strike
- ▼ Water Rise
- ▼c Level on completion
- MP - Mackintosh Probe
- P( ) - Hand Penetrometer Cohesion ( ) kPa
- V - Vane Shear Test Cohesion ( ) kPa

REMARKS
1. Live roots observed to 0.70m depth
2. Pit dry
3. Pit sides stable
4. Hole extended by dynamic probe to 5.00m depth

| Project No | |
|---|---|
| 14727 | |
| Scale | Page |
| 1:25 | 1/1 |

| GROUND ENGINEERING LIMITED<br>Tel: 01733-566586 www.groundengineering.co.uk | DYNAMIC PROBE PENETRATION TEST | Date 10/04/19<br>Project Number 14727 | PROBE No DP125<br>Sheet 1 of 1 |
|---|---|---|---|
| Method<br>BS 1377 : Part 9 : Clause 3.2 (DPSH) | Client<br>ED JERSEY LIMITED | Site<br>BRILL PLACE, LONDON NW1 | |

| Depth (m) | Torque | Blows (100mm) |
|---|---|---|
| .1 | | - |
| .2 | | - |
| .3 | | - |
| .4 | | - |
| .5 | | - |
| .6 | | - |
| .7 | | - |
| .8 | | - |
| .9 | | - |
| 1.0 | | 10 |
| .1 | | 11 |
| .2 | | 12 |
| .3 | | 14 |
| .4 | | 24 |
| .5 | | 25 |
| .6 | | 29 |
| .7 | | 9 |
| .8 | | 3 |
| .9 | | 3 |
| 2.0 | | 4 |
| .1 | | 6 |
| .2 | | 4 |
| .3 | | 4 |
| .4 | | 3 |
| .5 | | 4 |
| .6 | | 3 |
| .7 | | 3 |
| .8 | | 4 |
| .9 | | 3 |
| 3.0 | | 4 |
| .1 | | 4 |
| .2 | | 3 |
| .3 | | 4 |
| .4 | | 4 |
| .5 | | 4 |
| .6 | | 4 |
| .7 | | 3 |
| .8 | | 4 |
| .9 | | 3 |
| 4.0 | | 4 |
| .1 | | 4 |
| .2 | | 4 |
| .3 | | 5 |
| .4 | | 3 |
| .5 | | 2 |
| .6 | | 3 |
| .7 | | 3 |
| .8 | | 3 |
| .9 | | 3 |
| 5.0 | | 3 |




| Remarks : | | | 14727 |
|---|---|---|---|
| | Hammer | 63.5 kg | |
| | Standard Drop | 750 mm | |
| | Cone | 50 mm dia | |
| | Rod | 8kg / 35 mm | |

**GROUND ENGINEERING LIMITED**

Tel: 01733-566566
www.groundengineering.co.uk

Site: **BRILL PLACE, LONDON NW1**

TRIAL PIT
**DP126**

Date: 10/04/19

Pit Size: 0.35m L x 0.30m W x 1.20m D.

529887 mE 183133 mN
Ground Level: 18.98m. O.D.

| Samples and In-situ Tests | | | (Date) Water | Description of Strata | Legend | Depth m | O.D. Level m |
|---|---|---|---|---|---|---|---|
| Depth m | Type | Result | | | | | |
| 0.30 | D1 | | | MADE GROUND - Soft, brown and dark brown mottled, slightly sandy, slightly gravelly, silty CLAY with some concrete cobbles. Gravel of angular to sub-rounded flint, brick, concrete and ash. | | 0.40 | 18.58 |
| 0.70 | D2 | | | MADE GROUND - Soft, brown, slightly sandy, slightly gravelly, silty CLAY. Gravel of angular to sub-rounded concrete, brick, flint, ash and plastic pipe fragments. | | 1.20 | 17.78 |
| 1.10 | D3 | | | Pit completed at 1.20m depth | | | |

KEY
- D - Disturbed Sample
- B - Bulk Sample
- U - Undisturbed Sample
- R - Root Sample
- W - Water Sample
- ES - Environmental Sample
- ▽ Water Strike
- ▼ Water Rise
- ▼c Level on completion
- MP - Mackintosh Probe
- P( ) - Hand Penetrometer Cohesion ( ) kPa
- V - Vane Shear Test Cohesion ( ) kPa

REMARKS
1. Live roots observed to at least 1.20m depth
2. Pit dry
3. Pit sides stable
4. Hole extended by dynamic probe to 5.00m depth

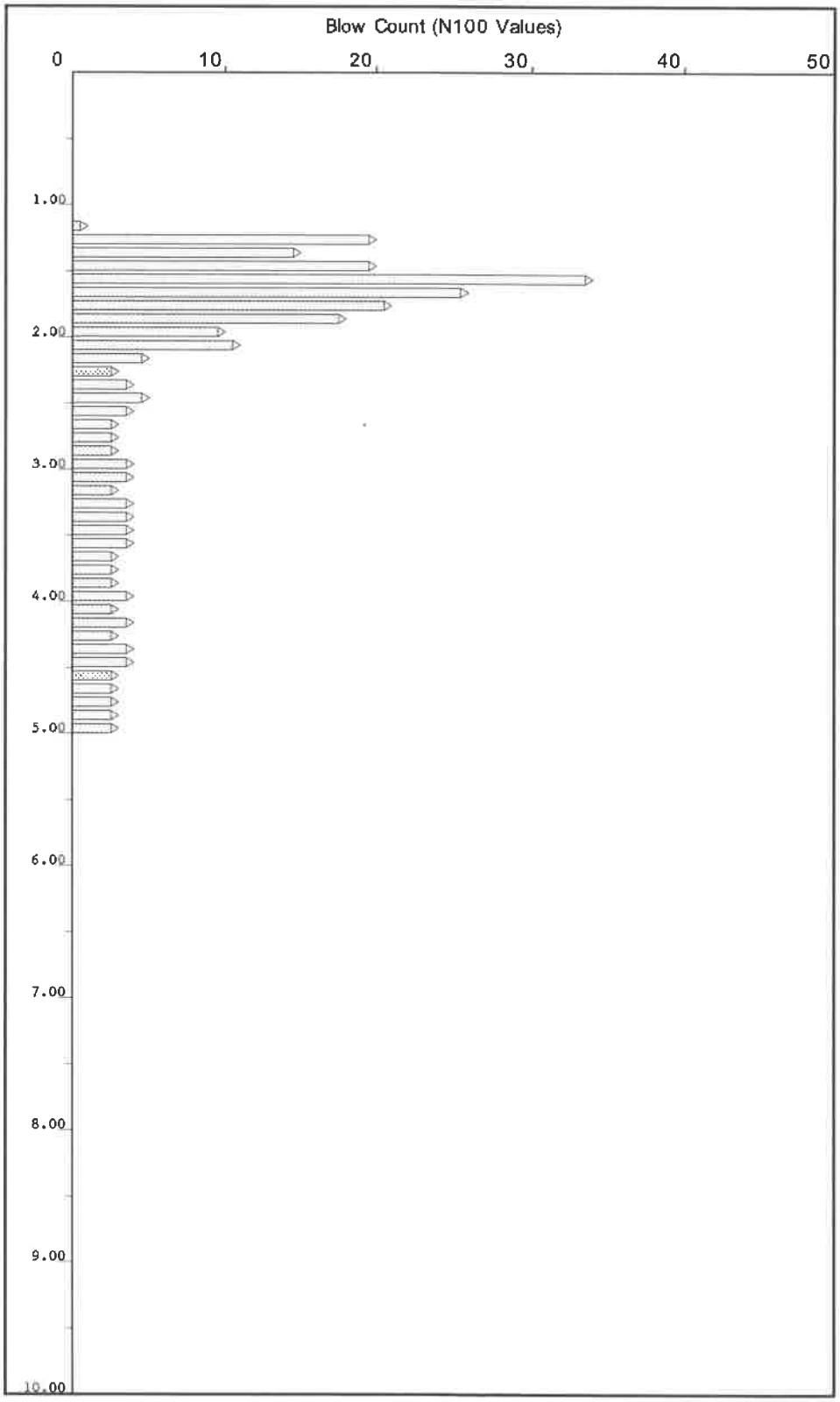
Project No 14727

Scale 1:25

Page 1/1

| GROUND ENGINEERING LIMITED<br>Tel: 01733-566566 www.groundengineering.co.uk | DYNAMIC PROBE PENETRATION TEST | Date 10/04/19<br>Project Number 14727 | PROBE No DP126<br>Sheet 1 of 1 |
|---|---|---|---|
| Method<br>BS 1377 : Part 9 : Clause 3.2 (DPSH) | Client<br>ED JERSEY LIMITED | Site<br>BRILL PLACE, LONDON NW1 | |

| Depth (m) | Torque | Blows (100mm) |
|---|---|---|
| .1 | | - |
| .2 | | - |
| .3 | | - |
| .4 | | - |
| .5 | | - |
| .6 | | - |
| .7 | | - |
| .8 | | - |
| .9 | | - |
| 1.0 | | - |
| .1 | | - |
| .2 | | 1 |
| .3 | | 20 |
| .4 | | 15 |
| .5 | | 20 |
| .6 | | 34 |
| .7 | | 26 |
| .8 | | 21 |
| .9 | | 18 |
| 2.0 | | 10 |
| .1 | | 11 |
| .2 | | 5 |
| .3 | | 3 |
| .4 | | 4 |
| .5 | | 5 |
| .6 | | 4 |
| .7 | | 3 |
| .8 | | 3 |
| .9 | | 3 |
| 3.0 | | 4 |
| .1 | | 4 |
| .2 | | 3 |
| .3 | | 4 |
| .4 | | 4 |
| .5 | | 4 |
| .6 | | 4 |
| .7 | | 3 |
| .8 | | 3 |
| .9 | | 3 |
| 4.0 | | 4 |
| .1 | | 3 |
| .2 | | 4 |
| .3 | | 3 |
| .4 | | 4 |
| .5 | | 4 |
| .6 | | 3 |
| .7 | | 3 |
| .8 | | 3 |
| .9 | | 3 |
| 5.0 | | 3 |




| Remarks : | | | |
|---|---|---|---|
| | Hammer | 63.5 kg | 14727 |
| | Standard Drop | 750 mm | |
| | Cone | 50 mm dia | |
| | Rod | 8kg / 35 mm | |

**GROUND ENGINEERING LIMITED**

Tel: 01733-566566
www.groundengineering.co.uk

Site: **BRILL PLACE, LONDON NW1**

**TRIAL PIT DP127**

Date: 10/04/19

Pit Size: 0.30m L x 0.30m W x 1.00m D.

529865 mE 183131 mN
Ground Level: 19.54m. O.D.

| Samples and in-situ Tests | | | (Date) Water | Description of Strata | Legend | Depth m | O.D. Level m |
|---|---|---|---|---|---|---|---|
| Depth m | Type | Result | | | | | |
| 0.20 | D1 | | | MADE GROUND - Soft, dark brown and brown mottled, slightly sandy, slightly gravelly, silty CLAY. Gravel of angular to sub-rounded flint, brick, concrete and ash. | | 0.30 | 19.24 |
| 0.70 | D2 | | | MADE GROUND - Soft, brown, slightly sandy, slightly gravelly, silty CLAY with some concrete cobbles. Gravel of angular to sub-rounded concrete, flint, brick, concrete and ash. | | 1.00 | 18.54 |
| | | | | Pit completed at 1.00m depth | | | |

KEY
- D - Disturbed Sample
- B - Bulk Sample
- U - Undisturbed Sample
- R - Root Sample
- W - Water Sample
- ES - Environmental Sample
- ▽ Water Strike
- ▼ Water Rise
- ▼c Level on completion
- MP - Mackintosh Probe
- P( ) - Hand Penetrometer Cohesion ( ) kPa
- V - Vane Shear Test Cohesion ( ) kPa

REMARKS
1. Live roots observed to at least 1.00m depth
2. Pit dry
3. Pit sides stable
4. Hole extended by dynamic probe to refusal at 2.00m depth

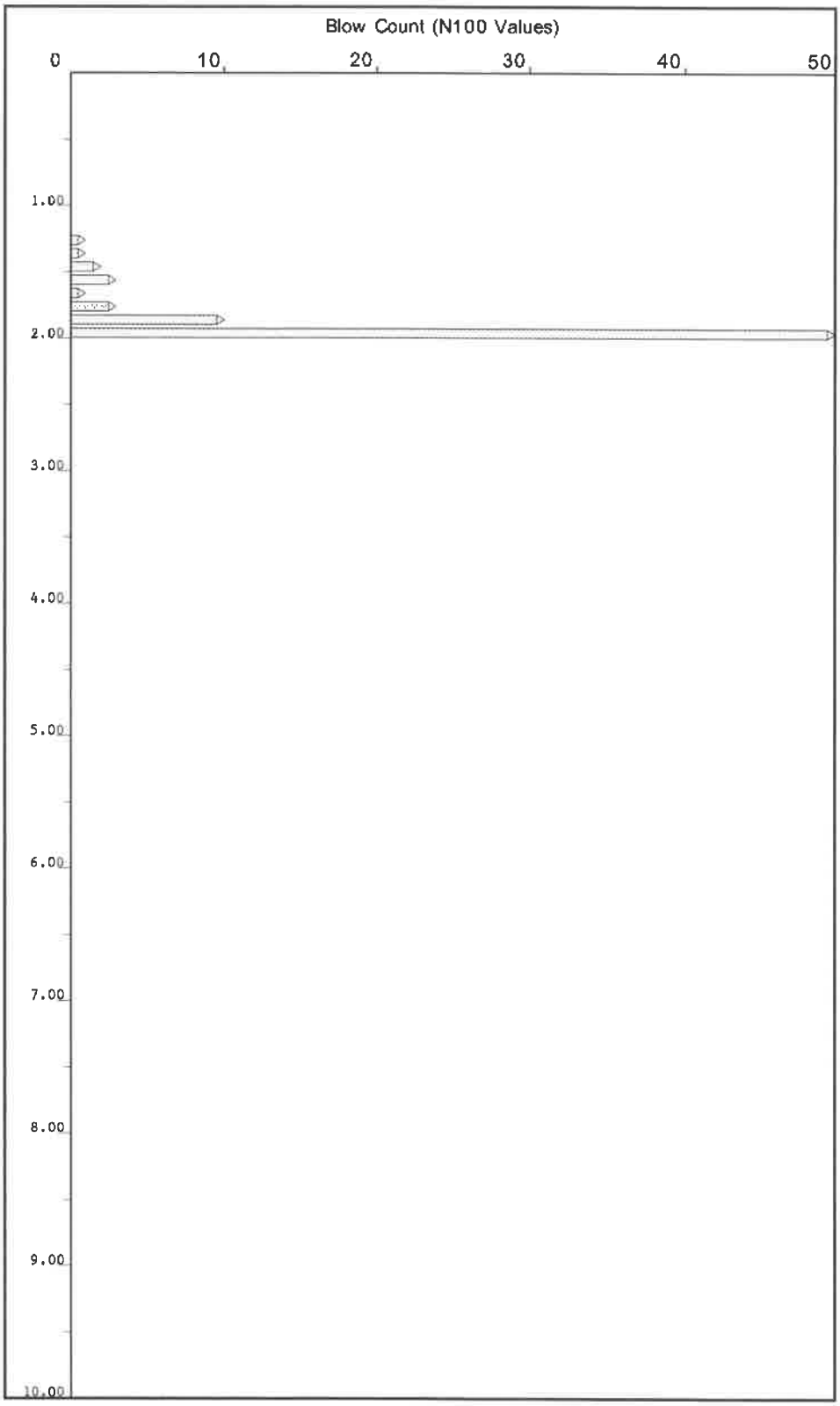
Project No 14727

Scale 1:25

Page 1/1

| GROUND ENGINEERING LIMITED<br>Tel: 01733-566566 www.groundengineering.co.uk | DYNAMIC PROBE PENETRATION TEST | Date 10/04/19<br>Project Number 14727 | PROBE No DP127<br>Sheet 1 of 1 |
|---|---|---|---|
| Method<br>BS 1377 : Part 9 : Clause 3.2 (DPSH) | Client<br>ED JERSEY LIMITED | Site<br>BRILL PLACE, LONDON NW1 | |

| Depth (m) | Torque | Blows (100mm) |
|---|---|---|
| .1 | | - |
| .2 | | - |
| .3 | | - |
| .4 | | - |
| .5 | | - |
| .6 | | - |
| .7 | | - |
| .8 | | - |
| .9 | | - |
| 1.0 | | - |
| .1 | | - |
| .2 | | - |
| .3 | | 1 |
| .4 | | 1 |
| .5 | | 2 |
| .6 | | 3 |
| .7 | | 1 |
| .8 | | 3 |
| .9 | | 10 |
| 2.0 | | 50 |




| Remarks : | | | |
|---|---|---|---|
| | Hammer | 63.5 kg | 14727 |
| | Standard Drop | 750 mm | |
| | Cone | 50 mm dia | |
| | Rod | 8kg / 35 mm | |

**Groundwater/Gas Monitoring Record**

**GROUND ENGINEERING LIMITED**

**Site:** **Brill Place, London NW1**

**Report Ref: C14727**

| Date | Borehole | Methane (% v/v) | | Carbon Dioxide (% v/v) | | Oxygen (% v/v) | | Flow Rate (l/hr) | Atmosph. Pressure (mb) | Depth of Well (m) | Depth to Groundwater (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Peak | Steady | Peak | Steady | Min. | Max. | | | | |
| | | | | | | | | | | | |
| 18/04/19 | WS 101 | <0.1 | <0.1 | 0.5 | 0.5 | 19.7 | 19.7 | <0.1 | 1022 | 1.40 | Dry |
| | WS 102A | <0.1 | <0.1 | 0.9 | 0.9 | 19.5 | 19.5 | <0.1 | 1022 | 1.00 | Dry |
| | WS 103 | <0.1 | <0.1 | 1.1 | 1.1 | 19.3 | 19.3 | <0.1 | 1022 | 2.50 | Dry |
| | WS 104B | <0.1 | <0.1 | 1.2 | 1.2 | 19.0 | 19.0 | <0.1 | 1022 | 1.10 | Dry |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

**Groundwater/Gas Monitoring Record**

**GROUND ENGINEERING LIMITED**

**Site:** **Brill Place, London NW1**

**Report Ref: C14727**

| Date | Borehole | Methane (% v/v) | | Carbon Dioxide (% v/v) | | Oxygen (% v/v) | | Flow Rate (l/hr) | Atmosph. Pressure (mb) | Depth of Well (m) | Depth to Groundwater (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Peak | Steady | Peak | Steady | Min. | Max. | | | | |
| | | | | | | | | | | | |
| 23/04/19 | WS 101 | <0.1 | <0.1 | 0.6 | 0.6 | 19.4 | 19.4 | <0.1 | 997 | 1.40 | Dry |
| | WS 102A | <0.1 | <0.1 | 0.9 | 0.9 | 19.3 | 19.3 | <0.1 | 997 | 1.00 | Dry |
| | WS 103 | <0.1 | <0.1 | 0.8 | 0.8 | 19.2 | 19.2 | <0.1 | 997 | 2.50 | Dry |
| | WS 104B | <0.1 | <0.1 | 1.6 | 1.6 | 18.8 | 18.8 | <0.1 | 997 | 1.10 | Dry |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Groundwater/Gas Monitoring Record

**GROUND ENGINEERING LIMITED**

**Site:** Brill Place, London NW1

**Report Ref:** C14727

| Date | Borehole | Methane (% v/v) | | Carbon Dioxide (% v/v) | | Oxygen (% v/v) | | Flow Rate (l/hr) | Atmosph. Pressure (mb) | Depth of Well (m) | Depth to Groundwater (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Peak | Steady | Peak | Steady | Min. | Max. | | | | |
| | | | | | | | | | | | |
| 26/04/19 | WS 101 | <0.1 | <0.1 | 0.9 | 0.9 | 19.4 | 19.4 | <0.1 | 1008 | 1.40 | Dry |
| | WS 102A | <0.1 | <0.1 | 1.5 | 1.5 | 18.6 | 18.6 | <0.1 | 1008 | 1.00 | Dry |
| | WS 103 | <0.1 | <0.1 | 1.2 | 1.2 | 19.0 | 19.0 | <0.1 | 1008 | 2.50 | Dry |
| | WS 104B | <0.1 | <0.1 | 1.5 | 1.5 | 18.9 | 18.9 | <0.1 | 1008 | 1.10 | Dry |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

**Groundwater/Gas Monitoring Record** **GROUND ENGINEERING LIMITED**

**Site:** **Brill Place, London NW1**

**Report Ref: C14727**

| Date | Borehole | Methane (% v/v) | | Carbon Dioxide (% v/v) | | Oxygen (% v/v) | | Flow Rate (l/hr) | Atmosph. Pressure (mb) | Depth of Well (m) | Depth to Groundwater (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Peak | Steady | Peak | Steady | Min. | Max. | | | | |
| | | | | | | | | | | | |
| 29/04/19 | WS 101 | <0.1 | <0.1 | 0.9 | 0.9 | 19.9 | 19.9 | <0.1 | 1026 | 1.40 | Dry |
| | WS 102A | <0.1 | <0.1 | 0.6 | 0.6 | 20.2 | 20.2 | <0.1 | 1026 | 1.00 | Dry |
| | WS 103 | <0.1 | <0.1 | 1.2 | 1.2 | 19.3 | 19.3 | <0.1 | 1026 | 2.50 | Dry |
| | WS 104B | <0.1 | <0.1 | 0.2 | 0.2 | 20.4 | 20.4 | <0.1 | 1026 | 1.10 | Dry |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

**Groundwater/Gas Monitoring Record**

**GROUND ENGINEERING LIMITED**

**Site:** **Brill Place, London NW1**

**Report Ref: C14727**

| Date | Borehole | Methane (% v/v) | | Carbon Dioxide (% v/v) | | Oxygen (% v/v) | | Flow Rate (l/hr) | Atmosph. Pressure (mb) | Depth of Well (m) | Depth to Groundwater (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Peak | Steady | Peak | Steady | Min. | Max. | | | | |
| | | | | | | | | | | | |
| 04/05/19 | WS 101 | <0.1 | <0.1 | 0.7 | 0.7 | 20.2 | 20.2 | <0.1 | 1006 | 1.40 | Dry |
| | WS 102A | <0.1 | <0.1 | 0.3 | 0.3 | 20.3 | 20.3 | <0.1 | 1006 | 1.00 | Dry |
| | WS 103 | <0.1 | <0.1 | 0.9 | 0.9 | 19.9 | 19.9 | <0.1 | 1006 | 2.50 | Dry |
| | WS 104B | <0.1 | <0.1 | <0.1 | <0.1 | 20.6 | 20.6 | <0.1 | 1006 | 1.10 | Dry |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

**Groundwater/Gas Monitoring Record** **GROUND ENGINEERING LIMITED**

**Site:** **Brill Place, London NW1**

**Report Ref: C14727**

| Date | Borehole | Methane (% v/v) | | Carbon Dioxide (% v/v) | | Oxygen (% v/v) | | Flow Rate (l/hr) | Atmosph. Pressure (mb) | Depth of Well (m) | Depth to Groundwater (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Peak | Steady | Peak | Steady | Min. | Max. | | | | |
| | | | | | | | | | | | |
| 07/05/19 | WS 101 | <0.1 | <0.1 | 1.1 | 1.1 | 19.9 | 19.9 | <0.1 | 1015 | 1.40 | Dry |
| | WS 102A | <0.1 | <0.1 | 0.6 | 0.6 | 20.0 | 20.0 | <0.1 | 1015 | 1.00 | Dry |
| | WS 103 | <0.1 | <0.1 | 0.9 | 0.9 | 19.9 | 19.9 | <0.1 | 1015 | 2.50 | Dry |
| | WS 104B | <0.1 | <0.1 | 0.5 | 0.5 | 20.2 | 20.2 | <0.1 | 1015 | 1.10 | Dry |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

# APPENDIX 1 – CHEMICAL TEST RESULTS

UKAS TESTING
2183

Chemtest
The right chemistry to deliver results
Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: Info@chemtest.com

# Final Report

| | | | |
|---|---|---|---|
| **Report No.:** | 19-13609-1 | | |
| **Initial Date of Issue:** | 29-Apr-2019 | | |
| **Client** | Ground Engineering Limited | | |
| **Client Address:** | Newark Road<br>Peterborough<br>Cambridgeshire<br>PE1 5UA | | |
| **Contact(s):** | Steve Fleming | | |
| **Project** | C14727 Brill Place, London NW1 | | |
| **Quotation No.:** | | **Date Received:** | 23-Apr-2019 |
| **Order No.:** | C14727 | **Date Instructed:** | 23-Apr-2019 |
| **No. of Samples:** | 20 | | |
| **Turnaround (Wkdays):** | 5 | **Results Due:** | 29-Apr-2019 |
| **Date Approved:** | 29-Apr-2019 | | |
| **Approved By:** | | | |
| **Details:** | Robert Monk, Technical Manager | | |

Chemtest
The right chemistry to deliver results

# Results - Soil

**Project: C14727 Brill Place, London NW1**

| **Client: Ground Engineering Limited** | | | | | **Chemtest Job No.:** | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: | | | | | **Chemtest Sample ID.:** | 814387 | 814388 | 814389 | 814390 | 814391 | 814392 | 814393 | 814394 |
| | | | | | Client Sample ID.: | D5 | D1 | D4 | D1 | D3 | D2 | D8 | D11 |
| | | | | | Sample Location: | WS101 | WS101A | WS101A | WS102A | WS102A | WS103 | WS103 | WS103 |
| | | | | | Sample Type: | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | | | | Top Depth (m): | 1.30 | 0.10 | 1.00 | 0.20 | 1.00 | 0.40 | 2.30 | 3.00 |
| | | | | | Date Sampled: | 11-Apr-2019 | 11-Apr-2019 | 11-Apr-2019 | 11-Apr-2019 | 11-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 |
| | | | | | Asbestos Lab: | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL |
| **Determinand** | **Accred.** | **SOP** | **Units** | **LOD** | | | | | | | | | |
| pH | U | 2010 | | N/A | | 8.7 | 9.9 | 9.0 | 8.1 | 8.8 | 8.4 | 7.9 | 7.8 |
| Moisture | N | 2030 | % | 0.020 | | 15 | 9.6 | 15 | 18 | 13 | 13 | 21 | 19 |
| Boron | N | 2450 | mg/kg | 0.40 | | 5.2 | 6.5 | 6.1 | 5.6 | 5.8 | 8.0 | 6.2 | 8.3 |
| Sulphate (2:1 Water Soluble) as SO4 | U | 2120 | g/l | 0.010 | | 0.063 | 0.28 | 0.13 | 0.026 | 0.073 | 0.10 | 0.78 | 1.0 |
| Cyanide (Free) | U | 2300 | mg/kg | 0.50 | | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Arsenic | U | 2450 | mg/kg | 1.0 | | 12 | 14 | 17 | 13 | 20 | 18 | 9.0 | 41 |
| Cadmium | U | 2450 | mg/kg | 0.10 | | 0.19 | 0.21 | 0.34 | 0.28 | 0.29 | 0.30 | < 0.10 | 0.14 |
| Chromium | U | 2450 | mg/kg | 1.0 | | 21 | 24 | 25 | 24 | 28 | 31 | 39 | 44 |
| Copper | U | 2450 | mg/kg | 0.50 | | 25 | 33 | 59 | 31 | 52 | 35 | 30 | 34 |
| Mercury | U | 2450 | mg/kg | 0.10 | | 0.27 | 0.22 | 0.42 | 0.32 | 0.75 | 0.84 | < 0.10 | 0.10 |
| Nickel | U | 2450 | mg/kg | 0.50 | | 19 | 22 | 21 | 17 | 24 | 30 | 34 | 56 |
| Lead | U | 2450 | mg/kg | 0.50 | | 420 | 130 | 900 | 210 | 290 | 190 | 29 | 25 |
| Selenium | U | 2450 | mg/kg | 0.20 | | 0.33 | < 0.20 | 0.87 | 1.3 | 0.61 | 0.81 | 0.70 | 1.9 |
| Zinc | U | 2450 | mg/kg | 0.50 | | 170 | 88 | 120 | 91 | 100 | 100 | 63 | 96 |
| Chromium (Hexavalent) | N | 2490 | mg/kg | 0.50 | | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Organic Matter | U | 2625 | % | 0.40 | | < 0.40 | 1.9 | 5.9 | 1.9 | 1.3 | 2.6 | < 0.40 | 0.47 |
| Acenaphthene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | 0.25 |
| Acenaphthylene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | 0.56 |
| Anthracene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | 0.24 | < 0.10 | 0.42 |
| Benzo[a]anthracene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 7.9 | 11 | 1.4 | 1.8 | 0.88 | < 0.10 | < 0.10 |
| Benzo[a]pyrene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 8.2 | 10 | 1.4 | 1.9 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[b]fluoranthene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 8.8 | 9.6 | 2.2 | 2.7 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[g,h,i]perylene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 5.6 | 5.7 | 1.2 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[k]fluoranthene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 4.2 | 5.1 | 1.1 | 1.2 | < 0.10 | < 0.10 | < 0.10 |
| Chrysene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 9.0 | 11 | 1.9 | 2.3 | 0.95 | < 0.10 | < 0.10 |
| Dibenz(a,h)Anthracene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 1.6 | 1.3 | 0.73 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Fluoranthene | U | 2700 | mg/kg | 0.10 | | 2.0 | 16 | 26 | 2.4 | 3.7 | 1.5 | < 0.10 | 0.65 |
| Fluorene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | 0.46 |
| Indeno(1,2,3-c,d)Pyrene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 5.7 | 5.6 | 0.92 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Naphthalene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Phenanthrene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | 0.95 | < 0.10 | 1.3 |
| Pyrene | U | 2700 | mg/kg | 0.10 | | 2.1 | 16 | 25 | 2.5 | 3.8 | 1.7 | < 0.10 | 0.67 |
| Total Of 16 PAH's | U | 2700 | mg/kg | 2.0 | | 4.1 | 83 | 110 | 16 | 17 | 6.2 | < 2.0 | 4.3 |
| Total Phenols | U | 2920 | mg/kg | 0.30 | | < 0.30 | < 0.30 | < 0.30 | < 0.30 | < 0.30 | < 0.30 | < 0.30 | < 0.30 |
| ACM Type | U | 2192 | | N/A | | - | - | - | - | - | - | - | - |
| Asbestos Identification | U | 2192 | % | 0.001 | | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected |

Chemtest
The right chemistry to deliver results

# Results - Soil

**Project: C14727 Brill Place, London NW1**

| **Client: Ground Engineering Limited** | | | | | **Chemtest Job No.:** | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: | | | | | **Chemtest Sample ID.:** | 814387 | 814388 | 814389 | 814390 | 814391 | 814392 | 814393 | 814394 |
| | | | | | Client Sample ID.: | D5 | D1 | D4 | D1 | D3 | D2 | D8 | D11 |
| | | | | | Sample Location: | WS101 | WS101A | WS101A | WS102A | WS102A | WS103 | WS103 | WS103 |
| | | | | | Sample Type: | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | | | | Top Depth (m): | 1.30 | 0.10 | 1.00 | 0.20 | 1.00 | 0.40 | 2.30 | 3.00 |
| | | | | | Date Sampled: | 11-Apr-2019 | 11-Apr-2019 | 11-Apr-2019 | 11-Apr-2019 | 11-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 |
| | | | | | Asbestos Lab: | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL |
| **Determinand** | **Accred.** | **SOP** | **Units** | **LOD** | | | | | | | | | |
| ACM Detection Stage | U | 2192 | | N/A | | - | - | - | - | - | - | - | - |
| Asbestos by Gravimetry | U | 2192 | % | 0.001 | | | | | | | | | |
| Total Asbestos | N | 2192 | % | 0.001 | | | | | | | | | |
| Aliphatic TPH >C5-C6 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C6-C8 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C8-C10 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C10-C12 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C12-C16 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C16-C21 | U | 2680 | mg/kg | 1.0 | | < 1.0 | 19 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C21-C35 | U | 2680 | mg/kg | 1.0 | | 47 | 80 | 24 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Total Aliphatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | | 47 | 100 | 24 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 |
| Aromatic TPH >C5-C7 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C7-C8 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C8-C10 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C10-C12 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C12-C16 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C16-C21 | U | 2680 | mg/kg | 1.0 | | < 1.0 | 35 | 8.3 | 22 | 30 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C21-C35 | U | 2680 | mg/kg | 1.0 | | 9.1 | 480 | 86 | 120 | 97 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | 7.5 | 4.4 | < 1.0 | < 1.0 | < 1.0 |
| Total Aromatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | | 9.1 | 520 | 95 | 150 | 130 | < 5.0 | < 5.0 | < 5.0 |
| Total Petroleum Hydrocarbons | N | 2680 | mg/kg | 10.0 | | 56 | 620 | 120 | 150 | 130 | < 10 | < 10 | < 10 |
| Benzene | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| m & p-Xylene | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-Xylene | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Methyl Tert-Butyl Ether | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Resorcinol | U | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Phenol | U | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Cresols | U | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Xylenols | U | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| 1-Naphthol | N | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Trimethylphenols | U | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |

# Results - Soil

| Client: Ground Engineering Limited | | | | | Chemtest Job No.: | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: | | | | | Chemtest Sample ID.: | 814395 | 814396 | 814397 | 814398 | 814399 | 814400 | 814401 | 814402 |
| | | | | | Client Sample ID.: | D16 | D2 | D5 | D7 | D2 | D2 | D3 | D1 |
| | | | | | Sample Location: | WS103 | WS104 | WS104 | WS104 | WS104A | DP101 | DP110 | DP115 |
| | | | | | Sample Type: | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | | | | Top Depth (m): | 4.70 | 0.30 | 1.20 | 1.80 | 0.40 | 0.70 | 0.50 | 0.30 |
| | | | | | Date Sampled: | 10-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 | 08-Apr-2019 | 09-Apr-2019 | 09-Apr-2019 |
| | | | | | Asbestos Lab: | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL |
| **Determinand** | **Accred.** | **SOP** | **Units** | **LOD** | | | | | | | | | |
| pH | U | 2010 | | N/A | | 7.9 | 8.0 | 8.9 | 8.2 | 9.4 | 9.0 | 8.8 | 9.2 |
| Moisture | N | 2030 | % | 0.020 | | 22 | 18 | 15 | 19 | 14 | 16 | 18 | 6.0 |
| Boron | N | 2450 | mg/kg | 0.40 | | 12 | 7.0 | 8.0 | 11 | 5.5 | 7.5 | 6.6 | 9.1 |
| Sulphate (2:1 Water Soluble) as SO4 | U | 2120 | g/l | 0.010 | | 0.82 | 0.043 | 0.12 | 0.080 | 0.11 | 0.064 | 0.023 | 0.15 |
| Cyanide (Free) | U | 2300 | mg/kg | 0.50 | | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | [B] < 0.50 | < 0.50 | < 0.50 |
| Arsenic | U | 2450 | mg/kg | 1.0 | | 14 | 14 | 22 | 11 | 16 | 17 | 18 | 20 |
| Cadmium | U | 2450 | mg/kg | 0.10 | | 0.80 | 0.29 | 0.36 | 0.10 | 0.34 | 0.25 | 0.31 | 0.46 |
| Chromium | U | 2450 | mg/kg | 1.0 | | 47 | 34 | 120 | 50 | 26 | 31 | 38 | 16 |
| Copper | U | 2450 | mg/kg | 0.50 | | 32 | 31 | 56 | 31 | 29 | 38 | 36 | 15 |
| Mercury | U | 2450 | mg/kg | 0.10 | | < 0.10 | 0.40 | 0.49 | < 0.10 | 0.28 | 0.67 | 0.65 | 0.19 |
| Nickel | U | 2450 | mg/kg | 0.50 | | 48 | 28 | 29 | 45 | 21 | 27 | 28 | 12 |
| Lead | U | 2450 | mg/kg | 0.50 | | 19 | 160 | 350 | 26 | 400 | 300 | 240 | 290 |
| Selenium | U | 2450 | mg/kg | 0.20 | | 0.94 | 1.2 | 0.78 | 0.75 | 1.0 | 0.85 | 0.74 | 0.36 |
| Zinc | U | 2450 | mg/kg | 0.50 | | 73 | 91 | 160 | 70 | 80 | 97 | 110 | 63 |
| Chromium (Hexavalent) | N | 2490 | mg/kg | 0.50 | | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Organic Matter | U | 2625 | % | 0.40 | | 0.64 | 3.3 | 8.1 | 0.43 | 3.3 | 2.6 | 1.7 | 0.91 |
| Acenaphthene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 1.2 | 0.68 | < 0.10 | 1.2 | < 0.10 | < 0.10 | < 0.10 |
| Acenaphthylene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 0.30 | 0.85 | < 0.10 | 0.41 | < 0.10 | < 0.10 | < 0.10 |
| Anthracene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 1.0 | 1.4 | < 0.10 | 1.0 | 0.32 | 0.40 | 1.1 |
| Benzo[a]anthracene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 1.6 | 3.3 | < 0.10 | 2.4 | 0.76 | 1.5 | 1.9 |
| Benzo[a]pyrene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | 2.9 | < 0.10 | 1.5 | < 0.10 | 1.6 | 1.5 |
| Benzo[b]fluoranthene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | 3.5 | < 0.10 | 2.4 | < 0.10 | 1.7 | 2.2 |
| Benzo[g,h,i]perylene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | 2.4 | < 0.10 | 1.0 | < 0.10 | 1.3 | 1.3 |
| Benzo[k]fluoranthene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | 1.8 | < 0.10 | 0.98 | < 0.10 | 0.99 | 0.92 |
| Chrysene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 1.8 | 3.3 | < 0.10 | 2.4 | 0.79 | 1.6 | 1.9 |
| Dibenz(a,h)Anthracene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | 0.28 | < 0.10 | 0.19 | < 0.10 | 0.13 | 0.14 |
| Fluoranthene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 5.4 | 7.6 | < 0.10 | 7.6 | 1.3 | 3.2 | 4.9 |
| Fluorene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 0.80 | 0.86 | < 0.10 | 0.70 | < 0.10 | < 0.10 | < 0.10 |
| Indeno(1,2,3-c,d)Pyrene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | 2.0 | < 0.10 | 0.90 | < 0.10 | 1.3 | 1.0 |
| Naphthalene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 2.0 | 2.7 | < 0.10 | 1.6 | < 0.10 | < 0.10 | < 0.10 |
| Phenanthrene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 6.4 | 6.1 | < 0.10 | 6.7 | 0.99 | 1.9 | 3.8 |
| Pyrene | U | 2700 | mg/kg | 0.10 | | < 0.10 | 5.1 | 7.3 | < 0.10 | 7.4 | 1.4 | 3.2 | 4.5 |
| Total Of 16 PAH's | U | 2700 | mg/kg | 2.0 | | < 2.0 | 26 | 47 | < 2.0 | 38 | 5.6 | 19 | 25 |
| Total Phenols | U | 2920 | mg/kg | 0.30 | | < 0.30 | < 0.30 | < 0.30 | < 0.30 | < 0.30 | < 0.30 | < 0.30 | < 0.30 |
| ACM Type | U | 2192 | | N/A | | - | - | Fibres/Clumps | - | - | - | - | - |
| Asbestos Identification | U | 2192 | % | 0.001 | | No Asbestos Detected | No Asbestos Detected | Amosite | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected |

Chemtest
The right chemistry to deliver results

# Results - Soil

**Project: C14727 Brill Place, London NW1**

| Client: Ground Engineering Limited | | | | | Chemtest Job No.: | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 | 19-13609 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: | | | | | Chemtest Sample ID.: | 814395 | 814396 | 814397 | 814398 | 814399 | 814400 | 814401 | 814402 |
| | | | | | Client Sample ID.: | D16 | D2 | D5 | D7 | D2 | D2 | D3 | D1 |
| | | | | | Sample Location: | WS103 | WS104 | WS104 | WS104 | WS104A | DP101 | DP110 | DP115 |
| | | | | | Sample Type: | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | | | | Top Depth (m): | 4.70 | 0.30 | 1.20 | 1.80 | 0.40 | 0.70 | 0.50 | 0.30 |
| | | | | | Date Sampled: | 10-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 | 08-Apr-2019 | 09-Apr-2019 | 09-Apr-2019 |
| | | | | | Asbestos Lab: | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL |
| **Determinand** | **Accred.** | **SOP** | **Units** | **LOD** | | | | | | | | | |
| ACM Detection Stage | U | 2192 | | N/A | | - | - | Stereo Microscopy | - | - | - | - | - |
| Asbestos by Gravimetry | U | 2192 | % | 0.001 | | | | <0.001 | | | | | |
| Total Asbestos | N | 2192 | % | 0.001 | | | | <0.001 | | | | | |
| Aliphatic TPH >C5-C6 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C6-C8 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C8-C10 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C10-C12 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C12-C16 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C16-C21 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C21-C35 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Total Aliphatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | [B] < 5.0 | < 5.0 | < 5.0 |
| Aromatic TPH >C5-C7 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C7-C8 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C8-C10 | U | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C10-C12 | U | 2680 | mg/kg | 1.0 | | < 1.0 | 6.5 | 4.1 | < 1.0 | 4.6 | [B] < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C12-C16 | U | 2680 | mg/kg | 1.0 | | < 1.0 | 20 | 20 | < 1.0 | 16 | [B] < 1.0 | < 1.0 | 7.1 |
| Aromatic TPH >C16-C21 | U | 2680 | mg/kg | 1.0 | | < 1.0 | 45 | 33 | < 1.0 | 60 | [B] < 1.0 | < 1.0 | 57 |
| Aromatic TPH >C21-C35 | U | 2680 | mg/kg | 1.0 | | < 1.0 | 62 | 64 | < 1.0 | 100 | [B] < 1.0 | < 1.0 | 96 |
| Aromatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 2.2 | [B] < 1.0 | < 1.0 | 2.8 |
| Total Aromatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | | < 5.0 | 130 | 120 | < 5.0 | 190 | [B] < 5.0 | < 5.0 | 160 |
| Total Petroleum Hydrocarbons | N | 2680 | mg/kg | 10.0 | | < 10 | 130 | 120 | < 10 | 190 | [B] < 10 | < 10 | 160 |
| Benzene | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Toluene | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| m & p-Xylene | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| o-Xylene | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Methyl Tert-Butyl Ether | U | 2760 | µg/kg | 1.0 | | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | [B] < 1.0 | < 1.0 | < 1.0 |
| Resorcinol | U | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Phenol | U | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Cresols | U | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Xylenols | U | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| 1-Naphthol | N | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Trimethylphenols | U | 2920 | mg/kg | 0.050 | | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |

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# Results - Soil

**Project: C14727 Brill Place, London NW1**

| **Client: Ground Engineering Limited** | | | | | **Chemtest Job No.:** | 19-13609 | 19-13609 | 19-13609 | 19-13609 |
|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: | | | | | **Chemtest Sample ID.:** | 814403 | 814404 | 814405 | 814406 |
| | | | | | Client Sample ID.: | D2 | D1 | D2 | D1 |
| | | | | | Sample Location: | DP117 | DP121 | DP126 | DP127 |
| | | | | | Sample Type: | SOIL | SOIL | SOIL | SOIL |
| | | | | | Top Depth (m): | 0.70 | 0.30 | 0.70 | 0.20 |
| | | | | | Date Sampled: | 09-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 |
| | | | | | Asbestos Lab: | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL |
| **Determinand** | **Accred.** | **SOP** | **Units** | **LOD** | | | | | |
| pH | U | 2010 | | N/A | | 9.5 | 8.7 | 8.6 | 8.8 |
| Moisture | N | 2030 | % | 0.020 | | 9.8 | 13 | 12 | 16 |
| Boron | N | 2450 | mg/kg | 0.40 | | 10 | 14 | 12 | 9.9 |
| Sulphate (2:1 Water Soluble) as SO4 | U | 2120 | g/l | 0.010 | | 0.12 | 0.12 | < 0.010 | 0.029 |
| Cyanide (Free) | U | 2300 | mg/kg | 0.50 | | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Arsenic | U | 2450 | mg/kg | 1.0 | | 19 | 15 | 14 | 15 |
| Cadmium | U | 2450 | mg/kg | 0.10 | | 0.51 | 0.63 | 0.25 | 0.54 |
| Chromium | U | 2450 | mg/kg | 1.0 | | 26 | 31 | 28 | 26 |
| Copper | U | 2450 | mg/kg | 0.50 | | 28 | 30 | 35 | 51 |
| Mercury | U | 2450 | mg/kg | 0.10 | | 0.28 | 0.43 | 0.52 | 0.38 |
| Nickel | U | 2450 | mg/kg | 0.50 | | 17 | 22 | 27 | 19 |
| Lead | U | 2450 | mg/kg | 0.50 | | 220 | 140 | 170 | 130 |
| Selenium | U | 2450 | mg/kg | 0.20 | | 0.73 | 1.2 | 0.86 | 1.2 |
| Zinc | U | 2450 | mg/kg | 0.50 | | 140 | 90 | 82 | 120 |
| Chromium (Hexavalent) | N | 2490 | mg/kg | 0.50 | | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Organic Matter | U | 2625 | % | 0.40 | | 2.6 | 1.9 | 1.7 | 3.8 |
| Acenaphthene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | 1.6 | < 0.10 |
| Acenaphthylene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | 1.2 | < 0.10 |
| Anthracene | U | 2700 | mg/kg | 0.10 | | 0.73 | 0.48 | 3.0 | 0.49 |
| Benzo[a]anthracene | U | 2700 | mg/kg | 0.10 | | 2.2 | 0.74 | 4.7 | 1.1 |
| Benzo[a]pyrene | U | 2700 | mg/kg | 0.10 | | 2.3 | < 0.10 | 3.6 | < 0.10 |
| Benzo[b]fluoranthene | U | 2700 | mg/kg | 0.10 | | 2.7 | < 0.10 | 4.1 | < 0.10 |
| Benzo[g,h,i]perylene | U | 2700 | mg/kg | 0.10 | | 1.9 | < 0.10 | 2.3 | < 0.10 |
| Benzo[k]fluoranthene | U | 2700 | mg/kg | 0.10 | | 1.3 | < 0.10 | 2.1 | < 0.10 |
| Chrysene | U | 2700 | mg/kg | 0.10 | | 2.2 | 1.3 | 4.4 | 1.3 |
| Dibenz(a,h)Anthracene | U | 2700 | mg/kg | 0.10 | | 0.22 | < 0.10 | 0.34 | < 0.10 |
| Fluoranthene | U | 2700 | mg/kg | 0.10 | | 4.5 | 1.7 | 14 | 2.5 |
| Fluorene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | 1.2 | < 0.10 |
| Indeno(1,2,3-c,d)Pyrene | U | 2700 | mg/kg | 0.10 | | 1.7 | < 0.10 | 2.1 | < 0.10 |
| Naphthalene | U | 2700 | mg/kg | 0.10 | | < 0.10 | < 0.10 | 4.6 | < 0.10 |
| Phenanthrene | U | 2700 | mg/kg | 0.10 | | 2.3 | 0.80 | 13 | 1.4 |
| Pyrene | U | 2700 | mg/kg | 0.10 | | 4.6 | 1.7 | 13 | 2.5 |
| Total Of 16 PAH's | U | 2700 | mg/kg | 2.0 | | 27 | 6.7 | 75 | 9.3 |
| Total Phenols | U | 2920 | mg/kg | 0.30 | | < 0.30 | < 0.30 | < 0.30 | < 0.30 |
| ACM Type | U | 2192 | | N/A | | - | - | - | - |
| Asbestos Identification | U | 2192 | % | 0.001 | | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected |

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# Results - Soil

**Project: C14727 Brill Place, London NW1**

| **Client: Ground Engineering Limited** | | | **Chemtest Job No.:** | | 19-13609 | 19-13609 | 19-13609 | 19-13609 |
|---|---|---|---|---|---|---|---|---|
| Quotation No.: | | | **Chemtest Sample ID.:** | | 814403 | 814404 | 814405 | 814406 |
| | | | Client Sample ID.: | | D2 | D1 | D2 | D1 |
| | | | Sample Location: | | DP117 | DP121 | DP126 | DP127 |
| | | | Sample Type: | | SOIL | SOIL | SOIL | SOIL |
| | | | Top Depth (m): | | 0.70 | 0.30 | 0.70 | 0.20 |
| | | | Date Sampled: | | 09-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 | 10-Apr-2019 |
| | | | Asbestos Lab: | | LIVERPOOL | LIVERPOOL | LIVERPOOL | LIVERPOOL |
| **Determinand** | **Accred.** | **SOP** | **Units** | **LOD** | | | | |
| ACM Detection Stage | U | 2192 | | N/A | - | - | - | - |
| Asbestos by Gravimetry | U | 2192 | % | 0.001 | | | | |
| Total Asbestos | N | 2192 | % | 0.001 | | | | |
| Aliphatic TPH >C5-C6 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C6-C8 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C8-C10 | U | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C10-C12 | U | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C12-C16 | U | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C16-C21 | U | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C21-C35 | U | 2680 | mg/kg | 1.0 | 37 | 20 | < 1.0 | 43 |
| Aliphatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Total Aliphatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | 37 | 20 | < 5.0 | 43 |
| Aromatic TPH >C5-C7 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C7-C8 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C8-C10 | U | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C10-C12 | U | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | 4.2 | < 1.0 |
| Aromatic TPH >C12-C16 | U | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | 55 | < 1.0 |
| Aromatic TPH >C16-C21 | U | 2680 | mg/kg | 1.0 | 11 | 6.8 | 270 | < 1.0 |
| Aromatic TPH >C21-C35 | U | 2680 | mg/kg | 1.0 | 65 | 33 | 380 | 20 |
| Aromatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | 11 | < 1.0 |
| Total Aromatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | 75 | 40 | 720 | 20 |
| Total Petroleum Hydrocarbons | N | 2680 | mg/kg | 10.0 | 110 | 60 | 720 | 63 |
| Benzene | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| m & p-Xylene | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-Xylene | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Methyl Tert-Butyl Ether | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Resorcinol | U | 2920 | mg/kg | 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Phenol | U | 2920 | mg/kg | 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Cresols | U | 2920 | mg/kg | 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Xylenols | U | 2920 | mg/kg | 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| 1-Naphthol | N | 2920 | mg/kg | 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |
| Trimethylphenols | U | 2920 | mg/kg | 0.050 | < 0.050 | < 0.050 | < 0.050 | < 0.050 |

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## Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

| Sample: | Sample Ref: | Sample ID: | Sample Location: | Sampled Date: | Deviation Code(s): | Containers Received: |
|---|---|---|---|---|---|---|
| 814400 | | D2 | DP101 | 08-Apr-2019 | B | Amber Glass 250ml |
| 814400 | | D2 | DP101 | 08-Apr-2019 | B | Plastic Tub 500g |

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# Test Methods

| SOP | Title | Parameters included | Method summary |
|---|---|---|---|
| 2010 | pH Value of Soils | pH | pH Meter |
| 2030 | Moisture and Stone Content of Soils(Requirement of MCERTS) | Moisture content | Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C. |
| 2120 | Water Soluble Boron, Sulphate, Magnesium & Chromium | Boron; Sulphate; Magnesium; Chromium | Aqueous extraction / ICP-OES |
| 2192 | Asbestos | Asbestos | Polarised light microscopy / Gravimetry |
| 2300 | Cyanides & Thiocyanate in Soils | Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate | Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser. |
| 2450 | Acid Soluble Metals in Soils | Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc | Acid digestion followed by determination of metals in extract by ICP-MS. |
| 2490 | Hexavalent Chromium in Soils | Chromium [VI] | Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide. |
| 2625 | Total Organic Carbon in Soils | Total organic Carbon (TOC) | Determined by high temperature combustion under oxygen, using an Eltra elemental analyser. |
| 2680 | TPH A/A Split | Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44 | Dichloromethane extraction / GCxGC FID detection |
| 2700 | Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID | Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene | Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds) |
| 2760 | Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS | Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule | Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds. |
| 2920 | Phenols in Soils by HPLC | Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded. | 60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection. |

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## Report Information

### Key

| | |
|---|---|
| U | UKAS accredited |
| M | MCERTS and UKAS accredited |
| N | Unaccredited |
| S | This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis |
| SN | This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis |
| T | This analysis has been subcontracted to an unaccredited laboratory |
| I/S | Insufficient Sample |
| U/S | Unsuitable Sample |
| N/E | not evaluated |
| < | "less than" |
| > | "greater than" |

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

### Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

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Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

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# Final Report

| | |
|---|---|
| **Report No.:** | 19-13614-1 |
| **Initial Date of Issue:** | 01-May-2019 |
| **Client** | Ground Engineering Limited |
| **Client Address:** | Newark Road<br>Peterborough<br>Cambridgeshire<br>PE1 5UA |
| **Contact(s):** | Steve Fleming |
| **Project** | C14727 Brill Place, London NW1 |

| | | | |
|---|---|---|---|
| **Quotation No.:** | | **Date Received:** | 23-Apr-2019 |
| **Order No.:** | C14727 | **Date Instructed:** | 23-Apr-2019 |
| **No. of Samples:** | 6 | | |
| **Turnaround (Wkdays):** | 7 | **Results Due:** | 01-May-2019 |
| **Date Approved:** | 01-May-2019 | | |

**Approved By:**

**Details:** Robert Monk, Technical Manager

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# Results - 2 Stage WAC

Project: C14727 Brill Place, London NW1

| | | | | | | | Landfill Waste Acceptance Criteria Limits | | |
|---|---|---|---|---|---|---|---|---|---|
| **Chemtest Job No:** | 19-13614 | | | | | | **Inert Waste Landfill** | **Stable, Non-reactive hazardous waste in non-hazardous Landfill** | **Hazardous Waste Landfill** |
| **Chemtest Sample ID:** | 814413 | | | | | | | | |
| **Sample Ref:** | | | | | | | | | |
| **Sample ID:** | D4 | | | | | | | | |
| **Sample Location:** | WS101A | | | | | | | | |
| **Top Depth(m):** | 1.00 | | | | | | | | |
| **Bottom Depth(m):** | | | | | | | | | |
| **Sampling Date:** | 11-Apr-2019 | | | | | | | | |
| **Determinand** | **SOP** | **Accred.** | **Units** | | | | | | |
| Total Organic Carbon | 2625 | U | % | | | 1.2 | 3 | 5 | 6 |
| Loss On Ignition | 2610 | U | % | | | 2.4 | -- | -- | 10 |
| Total BTEX | 2760 | U | mg/kg | | | < 0.010 | 6 | -- | -- |
| Total PCBs (7 Congeners) | 2815 | U | mg/kg | | | < 0.10 | 1 | -- | -- |
| TPH Total WAC (Mineral Oil) | 2670 | U | mg/kg | | | 100 | 500 | -- | -- |
| Total (Of 17) PAH's | 2700 | N | mg/kg | | | 2.7 | 100 | -- | -- |
| pH | 2010 | U | | | | 10.6 | -- | >6 | -- |
| Acid Neutralisation Capacity | 2015 | N | mol/kg | | | 0.035 | -- | To evaluate | To evaluate |
| **Eluate Analysis** | | | **2:1 mg/l** | **8:1 mg/l** | **2:1 mg/kg** | **Cumulative mg/kg 10:1** | **Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg** | | |
| Arsenic | 1450 | U | 0.0025 | 0.0028 | < 0.050 | < 0.050 | 0.5 | 2 | 25 |
| Barium | 1450 | U | 0.012 | 0.0073 | < 0.50 | < 0.50 | 20 | 100 | 300 |
| Cadmium | 1450 | U | < 0.00010 | < 0.00010 | < 0.010 | < 0.010 | 0.04 | 1 | 5 |
| Chromium | 1450 | U | 0.0098 | 0.0011 | < 0.050 | < 0.050 | 0.5 | 10 | 70 |
| Copper | 1450 | U | 0.037 | 0.010 | 0.073 | 0.057 | 2 | 50 | 100 |
| Mercury | 1450 | U | < 0.00050 | < 0.00050 | < 0.0010 | < 0.0050 | 0.01 | 0.2 | 2 |
| Molybdenum | 1450 | U | 0.031 | 0.0055 | 0.062 | 0.094 | 0.5 | 10 | 30 |
| Nickel | 1450 | U | 0.0037 | 0.0017 | < 0.050 | < 0.050 | 0.4 | 10 | 40 |
| Lead | 1450 | U | 0.0012 | 0.0078 | < 0.010 | 0.068 | 0.5 | 10 | 50 |
| Antimony | 1450 | U | 0.0080 | 0.0042 | 0.016 | 0.048 | 0.06 | 0.7 | 5 |
| Selenium | 1450 | U | 0.0034 | < 0.0010 | < 0.010 | < 0.010 | 0.1 | 0.5 | 7 |
| Zinc | 1450 | U | 0.0032 | < 0.0010 | < 0.50 | < 0.50 | 4 | 50 | 200 |
| Chloride | 1220 | U | 11 | 3.2 | 22 | 44 | 800 | 15000 | 25000 |
| Fluoride | 1220 | U | 0.55 | 0.32 | 1.1 | 3.5 | 10 | 150 | 500 |
| Sulphate | 1220 | U | 130 | 31 | 260 | 470 | 1000 | 20000 | 50000 |
| Total Dissolved Solids | 1020 | N | 290 | 120 | 570 | 1400 | 4000 | 60000 | 100000 |
| Phenol Index | 1920 | U | 1.5 | 0.16 | 3.0 | 3.7 | 1 | - | - |
| Dissolved Organic Carbon | 1610 | U | 35 | 25 | 68 | 260 | 500 | 800 | 1000 |

| **Solid Information** | |
|---|---|
| Dry mass of test portion/kg | 0.175 |
| Moisture (%) | 12 |

| **Leachate Test Information** | |
|---|---|
| Leachant volume 1st extract/l | 0.327 |
| Leachant volume 2nd extract/l | 1.400 |
| Eluant recovered from 1st extract/l | 0.268 |

## Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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# Results - 2 Stage WAC

**Project: C14727 Brill Place, London NW1**

| | | | | | | | Landfill Waste Acceptance Criteria Limits | | |
|---|---|---|---|---|---|---|---|---|---|
| **Chemtest Job No:** | 19-13614 | | | | | | **Inert Waste Landfill** | **Stable, Non-reactive hazardous waste in non-hazardous Landfill** | **Hazardous Waste Landfill** |
| **Chemtest Sample ID:** | 814414 | | | | | | | | |
| **Sample Ref:** | | | | | | | | | |
| **Sample ID:** | D3 | | | | | | | | |
| **Sample Location:** | WS102A | | | | | | | | |
| **Top Depth(m):** | 1.00 | | | | | | | | |
| **Bottom Depth(m):** | | | | | | | | | |
| **Sampling Date:** | 11-Apr-2019 | | | | | | | | |
| **Determinand** | **SOP** | **Accred.** | **Units** | | | | | | |
| Total Organic Carbon | 2625 | U | % | | | 1.7 | 3 | 5 | 6 |
| Loss On Ignition | 2610 | U | % | | | 3.6 | -- | -- | 10 |
| Total BTEX | 2760 | U | mg/kg | | | < 0.010 | 6 | -- | -- |
| Total PCBs (7 Congeners) | 2815 | U | mg/kg | | | < 0.10 | 1 | -- | -- |
| TPH Total WAC (Mineral Oil) | 2670 | U | mg/kg | | | 77 | 500 | -- | -- |
| Total (Of 17) PAH's | 2700 | N | mg/kg | | | 44 | 100 | -- | -- |
| pH | 2010 | U | | | | 8.8 | -- | >6 | -- |
| Acid Neutralisation Capacity | 2015 | N | mol/kg | | | 0.053 | -- | To evaluate | To evaluate |
| **Eluate Analysis** | | | **2:1 mg/l** | **8:1 mg/l** | **2:1 mg/kg** | **Cumulative mg/kg 10:1** | **Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg** | | |
| Arsenic | 1450 | U | 0.0049 | 0.0067 | < 0.050 | 0.065 | 0.5 | 2 | 25 |
| Barium | 1450 | U | 0.011 | 0.0054 | < 0.50 | < 0.50 | 20 | 100 | 300 |
| Cadmium | 1450 | U | < 0.00010 | < 0.00010 | < 0.010 | < 0.010 | 0.04 | 1 | 5 |
| Chromium | 1450 | U | 0.0082 | 0.0010 | < 0.050 | < 0.050 | 0.5 | 10 | 70 |
| Copper | 1450 | U | 0.0084 | 0.0029 | < 0.050 | < 0.050 | 2 | 50 | 100 |
| Mercury | 1450 | U | < 0.00050 | < 0.00050 | < 0.0010 | < 0.0050 | 0.01 | 0.2 | 2 |
| Molybdenum | 1450 | U | 0.031 | 0.0055 | 0.062 | 0.084 | 0.5 | 10 | 30 |
| Nickel | 1450 | U | 0.0016 | 0.0013 | < 0.050 | < 0.050 | 0.4 | 10 | 40 |
| Lead | 1450 | U | < 0.0010 | < 0.0010 | < 0.010 | < 0.010 | 0.5 | 10 | 50 |
| Antimony | 1450 | U | 0.050 | 0.031 | 0.099 | 0.33 | 0.06 | 0.7 | 5 |
| Selenium | 1450 | U | 0.0014 | < 0.0010 | < 0.010 | < 0.010 | 0.1 | 0.5 | 7 |
| Zinc | 1450 | U | 0.0016 | < 0.0010 | < 0.50 | < 0.50 | 4 | 50 | 200 |
| Chloride | 1220 | U | 16 | 6.0 | 32 | 71 | 800 | 15000 | 25000 |
| Fluoride | 1220 | U | 0.85 | 0.47 | 1.7 | 5.1 | 10 | 150 | 500 |
| Sulphate | 1220 | U | 180 | 38 | 350 | 540 | 1000 | 20000 | 50000 |
| Total Dissolved Solids | 1020 | N | 340 | 130 | 670 | 1500 | 4000 | 60000 | 100000 |
| Phenol Index | 1920 | U | 0.14 | 0.090 | < 0.30 | 0.96 | 1 | - | - |
| Dissolved Organic Carbon | 1610 | U | 20 | 17 | < 50 | 170 | 500 | 800 | 1000 |

| **Solid Information** | |
|---|---|
| Dry mass of test portion/kg | 0.175 |
| Moisture (%) | 11 |

| **Leachate Test Information** | |
|---|---|
| Leachant volume 1st extract/l | 0.328 |
| Leachant volume 2nd extract/l | 1.400 |
| Eluant recovered from 1st extract/l | 0.198 |

## Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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# Results - 2 Stage WAC

Project: C14727 Brill Place, London NW1

| | | | | | | | Landfill Waste Acceptance Criteria Limits | | |
|---|---|---|---|---|---|---|---|---|---|
| Chemtest Job No: | 19-13614 | | | | | | Inert Waste Landfill | Stable, Non-reactive hazardous waste in non-hazardous Landfill | Hazardous Waste Landfill |
| Chemtest Sample ID: | 814415 | | | | | | | | |
| Sample Ref: | | | | | | | | | |
| Sample ID: | D11 | | | | | | | | |
| Sample Location: | WS103 | | | | | | | | |
| Top Depth(m): | 3.00 | | | | | | | | |
| Bottom Depth(m): | | | | | | | | | |
| Sampling Date: | 10-Apr-2019 | | | | | | | | |
| **Determinand** | **SOP** | **Accred.** | **Units** | | | | | | |
| Total Organic Carbon | 2625 | U | % | | | 0.33 | 3 | 5 | 6 |
| Loss On Ignition | 2610 | U | % | | | 4.9 | -- | -- | 10 |
| Total BTEX | 2760 | U | mg/kg | | | < 0.010 | 6 | -- | -- |
| Total PCBs (7 Congeners) | 2815 | U | mg/kg | | | < 0.10 | 1 | -- | -- |
| TPH Total WAC (Mineral Oil) | 2670 | U | mg/kg | | | < 10 | 500 | -- | -- |
| Total (Of 17) PAH's | 2700 | N | mg/kg | | | < 2.0 | 100 | -- | -- |
| pH | 2010 | U | | | | 7.7 | -- | >6 | -- |
| Acid Neutralisation Capacity | 2015 | N | mol/kg | | | 0.010 | -- | To evaluate | To evaluate |
| **Eluate Analysis** | | | **2:1 mg/l** | **8:1 mg/l** | **2:1 mg/kg** | **Cumulative mg/kg 10:1** | **Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg** | | |
| Arsenic | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 0.5 | 2 | 25 |
| Barium | 1450 | U | 0.0031 | 0.0017 | < 0.50 | < 0.50 | 20 | 100 | 300 |
| Cadmium | 1450 | U | < 0.00010 | < 0.00010 | < 0.010 | < 0.010 | 0.04 | 1 | 5 |
| Chromium | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 0.5 | 10 | 70 |
| Copper | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 2 | 50 | 100 |
| Mercury | 1450 | U | < 0.00050 | < 0.00050 | < 0.0010 | < 0.0050 | 0.01 | 0.2 | 2 |
| Molybdenum | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 0.5 | 10 | 30 |
| Nickel | 1450 | U | 0.0012 | 0.0011 | < 0.050 | < 0.050 | 0.4 | 10 | 40 |
| Lead | 1450 | U | < 0.0010 | < 0.0010 | < 0.010 | < 0.010 | 0.5 | 10 | 50 |
| Antimony | 1450 | U | 0.0012 | < 0.0010 | < 0.010 | < 0.010 | 0.06 | 0.7 | 5 |
| Selenium | 1450 | U | 0.0013 | 0.0010 | < 0.010 | 0.010 | 0.1 | 0.5 | 7 |
| Zinc | 1450 | U | < 0.0010 | < 0.0010 | < 0.50 | < 0.50 | 4 | 50 | 200 |
| Chloride | 1220 | U | 21 | 12 | 41 | 130 | 800 | 15000 | 25000 |
| Fluoride | 1220 | U | 0.33 | 0.70 | < 1.0 | 6.6 | 10 | 150 | 500 |
| Sulphate | 1220 | U | 110 | 69 | 210 | 730 | 1000 | 20000 | 50000 |
| Total Dissolved Solids | 1020 | N | 210 | 160 | 420 | 1600 | 4000 | 60000 | 100000 |
| Phenol Index | 1920 | U | < 0.030 | < 0.030 | < 0.30 | < 0.50 | 1 | - | - |
| Dissolved Organic Carbon | 1610 | U | 7.0 | 14 | < 50 | 140 | 500 | 800 | 1000 |

| Solid Information | |
|---|---|
| Dry mass of test portion/kg | 0.175 |
| Moisture (%) | 18 |

| Leachate Test Information | |
|---|---|
| Leachant volume 1st extract/l | 0.311 |
| Leachant volume 2nd extract/l | 1.400 |
| Eluant recovered from 1st extract/l | 0.172 |

## Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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# Results - 2 Stage WAC

**Project: C14727 Brill Place, London NW1**

| | | | | | | | Landfill Waste Acceptance Criteria Limits | | |
|---|---|---|---|---|---|---|---|---|---|
| **Chemtest Job No:** | 19-13614 | | | | | | **Inert Waste Landfill** | **Stable, Non-reactive hazardous waste in non-hazardous Landfill** | **Hazardous Waste Landfill** |
| **Chemtest Sample ID:** | 814416 | | | | | | | | |
| **Sample Ref:** | | | | | | | | | |
| **Sample ID:** | D16 | | | | | | | | |
| **Sample Location:** | WS103 | | | | | | | | |
| **Top Depth(m):** | 4.70 | | | | | | | | |
| **Bottom Depth(m):** | | | | | | | | | |
| **Sampling Date:** | 10-Apr-2019 | | | | | | | | |
| **Determinand** | **SOP** | **Accred.** | **Units** | | | | | | |
| Total Organic Carbon | 2625 | U | % | | | 0.45 | 3 | 5 | 6 |
| Loss On Ignition | 2610 | U | % | | | 5.1 | -- | -- | 10 |
| Total BTEX | 2760 | U | mg/kg | | | < 0.010 | 6 | -- | -- |
| Total PCBs (7 Congeners) | 2815 | U | mg/kg | | | < 0.10 | 1 | -- | -- |
| TPH Total WAC (Mineral Oil) | 2670 | U | mg/kg | | | < 10 | 500 | -- | -- |
| Total (Of 17) PAH's | 2700 | N | mg/kg | | | < 2.0 | 100 | -- | -- |
| pH | 2010 | U | | | | 7.7 | -- | >6 | -- |
| Acid Neutralisation Capacity | 2015 | N | mol/kg | | | 0.0040 | -- | To evaluate | To evaluate |
| **Eluate Analysis** | | | **2:1 mg/l** | **8:1 mg/l** | **2:1 mg/kg** | **Cumulative mg/kg 10:1** | **Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg** | | |
| Arsenic | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 0.5 | 2 | 25 |
| Barium | 1450 | U | 0.013 | 0.0028 | < 0.50 | < 0.50 | 20 | 100 | 300 |
| Cadmium | 1450 | U | < 0.00010 | < 0.00010 | < 0.010 | < 0.010 | 0.04 | 1 | 5 |
| Chromium | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 0.5 | 10 | 70 |
| Copper | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 2 | 50 | 100 |
| Mercury | 1450 | U | < 0.00050 | < 0.00050 | < 0.0010 | < 0.0050 | 0.01 | 0.2 | 2 |
| Molybdenum | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 0.5 | 10 | 30 |
| Nickel | 1450 | U | 0.0014 | 0.0011 | < 0.050 | < 0.050 | 0.4 | 10 | 40 |
| Lead | 1450 | U | < 0.0010 | < 0.0010 | < 0.010 | < 0.010 | 0.5 | 10 | 50 |
| Antimony | 1450 | U | < 0.0010 | < 0.0010 | < 0.010 | < 0.010 | 0.06 | 0.7 | 5 |
| Selenium | 1450 | U | < 0.0010 | < 0.0010 | < 0.010 | < 0.010 | 0.1 | 0.5 | 7 |
| Zinc | 1450 | U | 0.016 | 0.0032 | < 0.50 | < 0.50 | 4 | 50 | 200 |
| Chloride | 1220 | U | 19 | 4.5 | 37 | 55 | 800 | 15000 | 25000 |
| Fluoride | 1220 | U | 0.66 | 0.51 | 1.3 | 5.2 | 10 | 150 | 500 |
| Sulphate | 1220 | U | 1200 | 230 | 2300 | 3000 | 1000 | 20000 | 50000 |
| Total Dissolved Solids | 1020 | N | 1400 | 330 | 2700 | 4000 | 4000 | 60000 | 100000 |
| Phenol Index | 1920 | U | < 0.030 | < 0.030 | < 0.30 | < 0.50 | 1 | - | - |
| Dissolved Organic Carbon | 1610 | U | 9.2 | 14 | < 50 | 140 | 500 | 800 | 1000 |

| **Solid Information** | |
|---|---|
| Dry mass of test portion/kg | 0.175 |
| Moisture (%) | 20 |

| **Leachate Test Information** | |
|---|---|
| Leachant volume 1st extract/l | 0.307 |
| Leachant volume 2nd extract/l | 1.400 |
| Eluant recovered from 1st extract/l | 0.128 |

## Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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# Results - 2 Stage WAC

**Project: C14727 Brill Place, London NW1**

| | | | | | | | Landfill Waste Acceptance Criteria Limits | | |
|---|---|---|---|---|---|---|---|---|---|
| **Chemtest Job No:** | 19-13614 | | | | | | **Inert Waste Landfill** | **Stable, Non-reactive hazardous waste in non-hazardous Landfill** | **Hazardous Waste Landfill** |
| **Chemtest Sample ID:** | 814417 | | | | | | | | |
| **Sample Ref:** | | | | | | | | | |
| **Sample ID:** | D7 | | | | | | | | |
| **Sample Location:** | WS104 | | | | | | | | |
| **Top Depth(m):** | 1.80 | | | | | | | | |
| **Bottom Depth(m):** | | | | | | | | | |
| **Sampling Date:** | 10-Apr-2019 | | | | | | | | |
| **Determinand** | **SOP** | **Accred.** | **Units** | | | | | | |
| Total Organic Carbon | 2625 | U | % | | | 0.21 | 3 | 5 | 6 |
| Loss On Ignition | 2610 | U | % | | | 5.1 | -- | -- | 10 |
| Total BTEX | 2760 | U | mg/kg | | | < 0.010 | 6 | -- | -- |
| Total PCBs (7 Congeners) | 2815 | U | mg/kg | | | < 0.10 | 1 | -- | -- |
| TPH Total WAC (Mineral Oil) | 2670 | U | mg/kg | | | 48 | 500 | -- | -- |
| Total (Of 17) PAH's | 2700 | N | mg/kg | | | < 2.0 | 100 | -- | -- |
| pH | 2010 | U | | | | 7.7 | -- | >6 | -- |
| Acid Neutralisation Capacity | 2015 | N | mol/kg | | | 0.0090 | -- | To evaluate | To evaluate |
| **Eluate Analysis** | | | **2:1 mg/l** | **8:1 mg/l** | **2:1 mg/kg** | **Cumulative mg/kg 10:1** | **Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg** | | |
| Arsenic | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 0.5 | 2 | 25 |
| Barium | 1450 | U | 0.0030 | 0.0031 | < 0.50 | < 0.50 | 20 | 100 | 300 |
| Cadmium | 1450 | U | < 0.00010 | < 0.00010 | < 0.010 | < 0.010 | 0.04 | 1 | 5 |
| Chromium | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 0.5 | 10 | 70 |
| Copper | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 2 | 50 | 100 |
| Mercury | 1450 | U | < 0.00050 | < 0.00050 | < 0.0010 | < 0.0050 | 0.01 | 0.2 | 2 |
| Molybdenum | 1450 | U | < 0.0010 | < 0.0010 | < 0.050 | < 0.050 | 0.5 | 10 | 30 |
| Nickel | 1450 | U | 0.0012 | 0.0011 | < 0.050 | < 0.050 | 0.4 | 10 | 40 |
| Lead | 1450 | U | < 0.0010 | < 0.0010 | < 0.010 | < 0.010 | 0.5 | 10 | 50 |
| Antimony | 1450 | U | < 0.0010 | < 0.0010 | < 0.010 | < 0.010 | 0.06 | 0.7 | 5 |
| Selenium | 1450 | U | < 0.0010 | < 0.0010 | < 0.010 | < 0.010 | 0.1 | 0.5 | 7 |
| Zinc | 1450 | U | 0.0020 | < 0.0010 | < 0.50 | < 0.50 | 4 | 50 | 200 |
| Chloride | 1220 | U | 8.1 | 6.1 | 16 | 62 | 800 | 15000 | 25000 |
| Fluoride | 1220 | U | 0.34 | 1.2 | < 1.0 | 11 | 10 | 150 | 500 |
| Sulphate | 1220 | U | 59 | 40 | 120 | 410 | 1000 | 20000 | 50000 |
| Total Dissolved Solids | 1020 | N | 120 | 140 | 240 | 1300 | 4000 | 60000 | 100000 |
| Phenol Index | 1920 | U | < 0.030 | < 0.030 | < 0.30 | < 0.50 | 1 | - | - |
| Dissolved Organic Carbon | 1610 | U | 8.5 | 14 | < 50 | 140 | 500 | 800 | 1000 |

| **Solid Information** | |
|---|---|
| Dry mass of test portion/kg | 0.175 |
| Moisture (%) | 20 |

| **Leachate Test Information** | |
|---|---|
| Leachant volume 1st extract/l | 0.305 |
| Leachant volume 2nd extract/l | 1.400 |
| Eluant recovered from 1st extract/l | 0.150 |

## Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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# Results - 2 Stage WAC

**Project: C14727 Brill Place, London NW1**

| | | | | | | | Landfill Waste Acceptance Criteria Limits | | |
|---|---|---|---|---|---|---|---|---|---|
| **Chemtest Job No:** | 19-13614 | | | | | | **Inert Waste Landfill** | **Stable, Non-reactive hazardous waste in non-hazardous Landfill** | **Hazardous Waste Landfill** |
| **Chemtest Sample ID:** | 814418 | | | | | | | | |
| **Sample Ref:** | | | | | | | | | |
| **Sample ID:** | D2 | | | | | | | | |
| **Sample Location:** | DP117 | | | | | | | | |
| **Top Depth(m):** | 0.70 | | | | | | | | |
| **Bottom Depth(m):** | | | | | | | | | |
| **Sampling Date:** | 09-Apr-2019 | | | | | | | | |
| **Determinand** | **SOP** | **Accred.** | **Units** | | | | | | |
| Total Organic Carbon | 2625 | U | % | | | 1.7 | 3 | 5 | 6 |
| Loss On Ignition | 2610 | U | % | | | 3.8 | -- | -- | 10 |
| Total BTEX | 2760 | U | mg/kg | | | < 0.010 | 6 | -- | -- |
| Total PCBs (7 Congeners) | 2815 | U | mg/kg | | | < 0.10 | 1 | -- | -- |
| TPH Total WAC (Mineral Oil) | 2670 | U | mg/kg | | | 130 | 500 | -- | -- |
| Total (Of 17) PAH's | 2700 | N | mg/kg | | | 45 | 100 | -- | -- |
| pH | 2010 | U | | | | 10.8 | -- | >6 | -- |
| Acid Neutralisation Capacity | 2015 | N | mol/kg | | | 0.059 | -- | To evaluate | To evaluate |
| **Eluate Analysis** | | | **2:1 mg/l** | **8:1 mg/l** | **2:1 mg/kg** | **Cumulative mg/kg 10:1** | **Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg** | | |
| Arsenic | 1450 | U | 0.0036 | 0.0053 | < 0.050 | 0.051 | 0.5 | 2 | 25 |
| Barium | 1450 | U | 0.019 | 0.013 | < 0.50 | < 0.50 | 20 | 100 | 300 |
| Cadmium | 1450 | U | < 0.00010 | < 0.00010 | < 0.010 | < 0.010 | 0.04 | 1 | 5 |
| Chromium | 1450 | U | 0.062 | 0.0088 | 0.12 | 0.16 | 0.5 | 10 | 70 |
| Copper | 1450 | U | 0.11 | 0.026 | 0.22 | 0.15 | 2 | 50 | 100 |
| Mercury | 1450 | U | < 0.00050 | < 0.00050 | < 0.0010 | < 0.0050 | 0.01 | 0.2 | 2 |
| Molybdenum | 1450 | U | 0.013 | 0.0021 | < 0.050 | < 0.050 | 0.5 | 10 | 30 |
| Nickel | 1450 | U | 0.0079 | 0.0025 | < 0.050 | < 0.050 | 0.4 | 10 | 40 |
| Lead | 1450 | U | < 0.0010 | 0.0043 | < 0.010 | 0.037 | 0.5 | 10 | 50 |
| Antimony | 1450 | U | 0.0035 | 0.0021 | < 0.010 | 0.023 | 0.06 | 0.7 | 5 |
| Selenium | 1450 | U | 0.0019 | 0.0015 | < 0.010 | 0.016 | 0.1 | 0.5 | 7 |
| Zinc | 1450 | U | 0.0029 | 0.0022 | < 0.50 | < 0.50 | 4 | 50 | 200 |
| Chloride | 1220 | U | 30 | 9.0 | 60 | 120 | 800 | 15000 | 25000 |
| Fluoride | 1220 | U | 0.48 | 0.38 | < 1.0 | 3.9 | 10 | 150 | 500 |
| Sulphate | 1220 | U | 180 | 30 | 360 | 500 | 1000 | 20000 | 50000 |
| Total Dissolved Solids | 1020 | N | 380 | 140 | 750 | 1700 | 4000 | 60000 | 100000 |
| Phenol Index | 1920 | U | < 0.030 | < 0.030 | < 0.30 | < 0.50 | 1 | - | - |
| Dissolved Organic Carbon | 1610 | U | 53 | 17 | 100 | 220 | 500 | 800 | 1000 |

| **Solid Information** | |
|---|---|
| Dry mass of test portion/kg | 0.175 |
| Moisture (%) | 10 |

| **Leachate Test Information** | |
|---|---|
| Leachant volume 1st extract/l | 0.330 |
| Leachant volume 2nd extract/l | 1.400 |
| Eluant recovered from 1st extract/l | 0.231 |

## Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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# Test Methods

| SOP | Title | Parameters included | Method summary |
|---|---|---|---|
| 1020 | Electrical Conductivity and Total Dissolved Solids (TDS) in Waters | Electrical Conductivity and Total Dissolved Solids (TDS) in Waters | Conductivity Meter |
| 1220 | Anions, Alkalinity & Ammonium in Waters | Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium | Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser. |
| 1450 | Metals in Waters by ICP-MS | Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc | Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS). |
| 1610 | Total/Dissolved Organic Carbon in Waters | Organic Carbon | TOC Analyser using Catalytic Oxidation |
| 1920 | Phenols in Waters by HPLC | Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded. | Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection. |
| 2010 | pH Value of Soils | pH | pH Meter |
| 2015 | Acid Neutralisation Capacity | Acid Reserve | Titration |
| 2030 | Moisture and Stone Content of Soils(Requirement of MCERTS) | Moisture content | Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C. |
| 2610 | Loss on Ignition | loss on ignition (LOI) | Determination of the proportion by mass that is lost from a soil by ignition at 550°C. |
| 2625 | Total Organic Carbon in Soils | Total organic Carbon (TOC) | Determined by high temperature combustion under oxygen, using an Eltra elemental analyser. |
| 2670 | Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID | TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40 | Dichloromethane extraction / GC-FID |
| 2700 | Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID | Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene: Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene | Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds) |
| 2760 | Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS | Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule | Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds. |
| 2815 | Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS | ICES7 PCB congeners | Acetone/Hexane extraction / GC-MS |
| 640 | Characterisation of Waste (Leaching) | Waste material including soil, sludges and granular waste | ComplianceTest for Leaching of Granular Waste Material and Sludge |

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## Report Information

### Key

| | |
|---|---|
| U | UKAS accredited |
| M | MCERTS and UKAS accredited |
| N | Unaccredited |
| S | This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis |
| SN | This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis |
| T | This analysis has been subcontracted to an unaccredited laboratory |
| I/S | Insufficient Sample |
| U/S | Unsuitable Sample |
| N/E | not evaluated |
| < | "less than" |
| > | "greater than" |

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

### Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

# Appendix E

## HISTORICAL SI INFORMATION

# CENTRAL SOMERS TOWN, LONDON

# FACTUAL AND INTERPRETATIVE REPORT ON GROUND INVESTIGATION

## VOLUME 1: FACTUAL REPORT

## Report No D5061-15/1

September 2016

Carried out for:

London Borough of Camden
5 Pancras Square
London
N1C 4AG

Engineer:

AKT II
100 St John Street
London
EC1M 4EH

**ESG**
Glossop House, Hogwood Industrial Estate, Hogwood Lane
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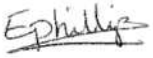
# Report No D5061-15/1

## September 2016

| Issue No Date | Status | Prepared by | Checked by | Approved by |
|---|---|---|---|---|
| 1<br>Feb 2016 | Draft report | NAME and QUALIFICATIONS<br>Ellen Phillips BSc FGS<br>SIGNATURE<br>  | NAME and QUALIFICATIONS<br>David Beskeen BSc<br>SIGNATURE<br>  | NAME and QUALIFICATIONS<br>Miles Martin BSc MSc FGS<br>SIGNATURE<br>  |
| 1<br>April 2016 | Full Draft report | NAME and QUALIFICATIONS<br>Miles Martin<br>BSc MSc FGS<br>SIGNATURE<br>  | NAME and QUALIFICATIONS<br>David Beskeen BSc<br>SIGNATURE<br>  | NAME and QUALIFICATIONS<br>Sean Wheeliker BSc<br>(Hons) FGS APMP<br>SIGNATURE<br>  |
| 1<br>April 2016 | Final report | NAME and QUALIFICATIONS<br>Miles Martin<br>BSc MSc FGS<br>SIGNATURE<br>  | NAME and QUALIFICATIONS<br>David Beskeen BSc<br>SIGNATURE<br>  | NAME and QUALIFICATIONS<br>Sean Wheeliker BSc<br>(Hons) FGS APMP<br>SIGNATURE<br>  |

## REPORT STRUCTURE

| DATE | TITLE | REPORT NO. |
|---|---|---|
| **September 2016** | **FACTUAL REPORT** | **D5061-15/1** |
| September 2016 | INTERPRETATIVE REPORT | D5061-15/2 |

**C O N T E N T S**

# 1 INTRODUCTION

In November 2015 ESG was commissioned by AKT II, on behalf of the London Borough of Camden, to carry out a ground investigation at Central Somers Town. The investigation was required to obtain geotechnical and geoenvironmental information for the proposed redevelopment of Edith Neville Primary School and the construction of new residential properties and local community facilities.

The scope of the investigation was specified by ESG and comprised cable percussion boreholes, windowless sampler boreholes, trial pits, in situ testing and laboratory testing. The investigation was performed in accordance with the contract specification, and the general requirements of BS 5930 (2015), BS EN 1997-2 (2007), BS EN ISO 22475-1 (2006) and other relevant related standards identified below. The fieldwork took place between 16 November and 7 January 2016.

# 2 SITE SETTING

## 2.1 Location and Description

Central Somers Town is located within the London Borough of Camden in central London at National Grid reference TQ 297 831, see Site Location Plan in Appendix A.

The site area can be divided in to three sections. The western part of the site comprises a children's play area, an outdoor fitness area and a community play project. The children's play area is on hard standing, whilst the outdoor fitness equipment is on a mix of grass and rubber matting. There is some vegetation in the form of trees and bushes around the perimeter of the area. The community play project consists of a building and outdoor play area which is divided into a hard standing football pitch and a grass covered play area.

The central part of the site comprises Edith Neville Primary School. There is vegetation, comprising trees and shrubs, mainly along the external boundaries of the school. This part of the site is predominately level with the exception of a playground in the south west corner of the school which is on a lower level, accessed by steps and a ramp.

The eastern end of the site comprises Brill Place Park. This area is mainly grassed with hard standing footpaths crossing the park. There are dense bushes along the eastern boundary of the site with mature trees scattered across the park. In the north east corner of the park there is a

children's play area on hard standing with additional play equipment immediately adjacent to the boundary of the park on rubber matting. The park is gently undulating and slopes down towards the north western corner.

### 2.2 Published Geology

The published geological map for the area, BGS Sheet 256 (2006) and the BGS Geology of Britain Viewer (2016) show the solid geology to comprise the London Clay Formation which is underlain by the Lambeth Group.

There is no record of any superficial deposits in the area, although the geology map shows localised areas of 'Reworked Ground' to the east and west of the site.

## 3 FIELDWORK

The fieldwork was carried out in general accordance with BS 5930 (2015), BS EN 1997-2 (2007) and BS EN ISO 22475-1 (2006).

The exploratory hole and in situ test locations were selected by AKT II. The locations were set out from local features. The co-ordinates and reduced levels were surveyed by ESG to National Grid and Ordnance Datum. The exploratory hole and in situ test locations are shown on the Site Plan in Appendix A.

### 3.1 Exploratory Holes

TABLE 1 : SUMMARY OF EXPLORATORY HOLES

| TYPE | QUANTITY | MAXIMUM DEPTH (m) | REMARKS |
|---|---|---|---|
| Cable Percussion Boring | 11 | 30.30 | Designated BH1, BH1A, BH2 to BH10 |
| Trial Pit (machine dug) | 2 | 2.20 | Designated TP4 and TP5 |
| Trial Pit (hand dug) | 2 | 1.20 | Designated HP2 and HP3. |
| Window Sampling | 46 | 7.65 | Designated WS2 to WS7, WS7B, WS8, WS9, WS9A, WS9B, WS10, WS10A, WS11, WS11A, WS11B, WS12, WS12A, WS13, WS13A, WS14, WS14A, WS14B, WS15, WS15A, WS16, WS17, WS17A, WS17B, WS18, WS19, WS20, WS20A, WS21, WS21A, WS22 to 24, WS24A, WS25, WS25A, WS26, WS26A and WS27 to 29. |

BH1A was terminated on an obstruction at 0.40 m depth and relocated to BH1. BH6 also encountered an obstruction (at 2.80 m depth), but could not be relocated due to the space restrictions and the presence of numerous buried services in that part of the site.

In addition, a number of window sampler boreholes were terminated short of their scheduled depth, either due to encountering obstructions or due to evidence of asbestos. Further details are provided on the borehole logs.

The exploratory hole logs are presented in Appendix B. These provide information including the equipment and methods used, samples taken, tests carried out, water observations and descriptions of the strata encountered. Explanation of the terms and abbreviations used on the logs is given in the Key to Exploratory Hole Records in Appendix B, together with other explanatory information. The logging of soil is in accordance with BS EN ISO 14688-1+A1 (2013), as amplified by BS 5930 (2015).

Photographs of the trial pits are presented in Appendix G.

On completion of the fieldwork geotechnical samples were transported to the Wokingham office of ESG for temporary retention, with those required for testing being transferred to the in-house laboratories. Geoenvironmental samples were transported from site directly to ESG's environmental chemistry laboratory.

### 3.2 Groundwater and Gas Monitoring

Instrumentation installed in the exploratory holes for groundwater and gas monitoring are shown on the logs and summarised in Appendix C. Records of the six rounds of monitoring, being carried out by ESG on 15 / 22 January, 17 February, 22 March, 12 April, 23 May and 20 June 2016, are presented in Appendix C.

### 3.3 In Situ Testing

In situ testing was carried out in accordance with the relevant standards as tabulated below. The testing is summarised in the following table and the results are presented in Appendix D unless noted otherwise.

Relevant calibration certificates are included with the results in the appendix.

TABLE 2: SUMMARY OF IN SITU TESTING

| TYPE | QUANTITY | REMARKS |
|---|---|---|
| Standard Penetration Tests | 122 | BS EN ISO 22476-3 (2011). Results presented on the borehole logs in Appendix B |
| Dynamic Cone Penetrometer Test | 8 | Designated TRL1, 2 and 5 to 10. Test results used to estimate California Bearing Ratio (CBR) values based on TRRL Overseas Road Note 8 (1990) |

## 4 LABORATORY TESTING

### 4.1 Geotechnical Testing

Geotechnical laboratory testing was scheduled by ESG and was carried out in accordance with BS 1377 (1990) unless otherwise stated. The tests completed are summarised below and the results presented in Appendix E.

TABLE 3 : SUMMARY OF GEOTECHNICAL LABORATORY TESTING

| TYPE | REMARKS |
|---|---|
| Water Content Determination | 36 tests |
| Atterberg Limit Determination | 36 tests |
| Particle Density | 6 tests |
| Particle Size Distribution Analysis | 4 tests |
| Oedometer Consolidation | 6 tests |
| Unconsolidated Undrained Triaxial Compression Testing | 58 tests |
| Consolidated Undrained Triaxial Compression Testing (Multistage) | 3 tests |
| Water-soluble Sulphate Content<br>Acid-soluble Sulphate Content<br>Total Sulphur Content<br>pH | Test methods are BS 1377 or others recognised in BRE Special Digest 1 (2005), as indicated on the results sheets in Appendix E. |

### 4.2 Geoenvironmental Testing

Geoenvironmental laboratory testing was scheduled by ESG on selected soil samples recovered during the fieldwork. The testing was carried out by ESG's environmental chemistry laboratory at Burton on Trent. The results are presented in Appendix F.

## REFERENCES


BGS England and Wales Sheet 256 : 2006 : North London. 1:50000 geological map (solid and drift) (Bedrock and Superficials). British Geological Survey.

BGS Geology of Britain Viewer : 2016. www.bgs.ac.uk. British Geological Survey.

BS 1377 : 1990 : Methods of test for soils for civil engineering purposes. British Standards Institution.

BS 5930 : 2015 : Code of practice for ground investigations. British Standards Institution.

BS EN 1997-2 : 2007 : Eurocode 7 - Geotechnical design - Part 2 Ground investigation and testing. British Standards Institution.

BS EN ISO 14688-1:2002+A1 : 2013 : Geotechnical investigation and testing - Identification and classification of soil - Part 1 Identification and description. British Standards Institution.

BS EN ISO 14688-2:2004+A1 : 2013 : Geotechnical investigation and testing - Identification and classification of soil - Part 2 Principles for a classification. British Standards Institution.

BS EN ISO 22475-1 : 2006 : Geotechnical investigation and testing – Sampling methods and groundwater measurements - Part 1 Technical principles for execution. British Standards Institution.

BS EN ISO 22476-3:2005+A1 : 2011 : Geotechnical investigation and testing - Field testing - Part 3 Standard penetration test. British Standards Institution.

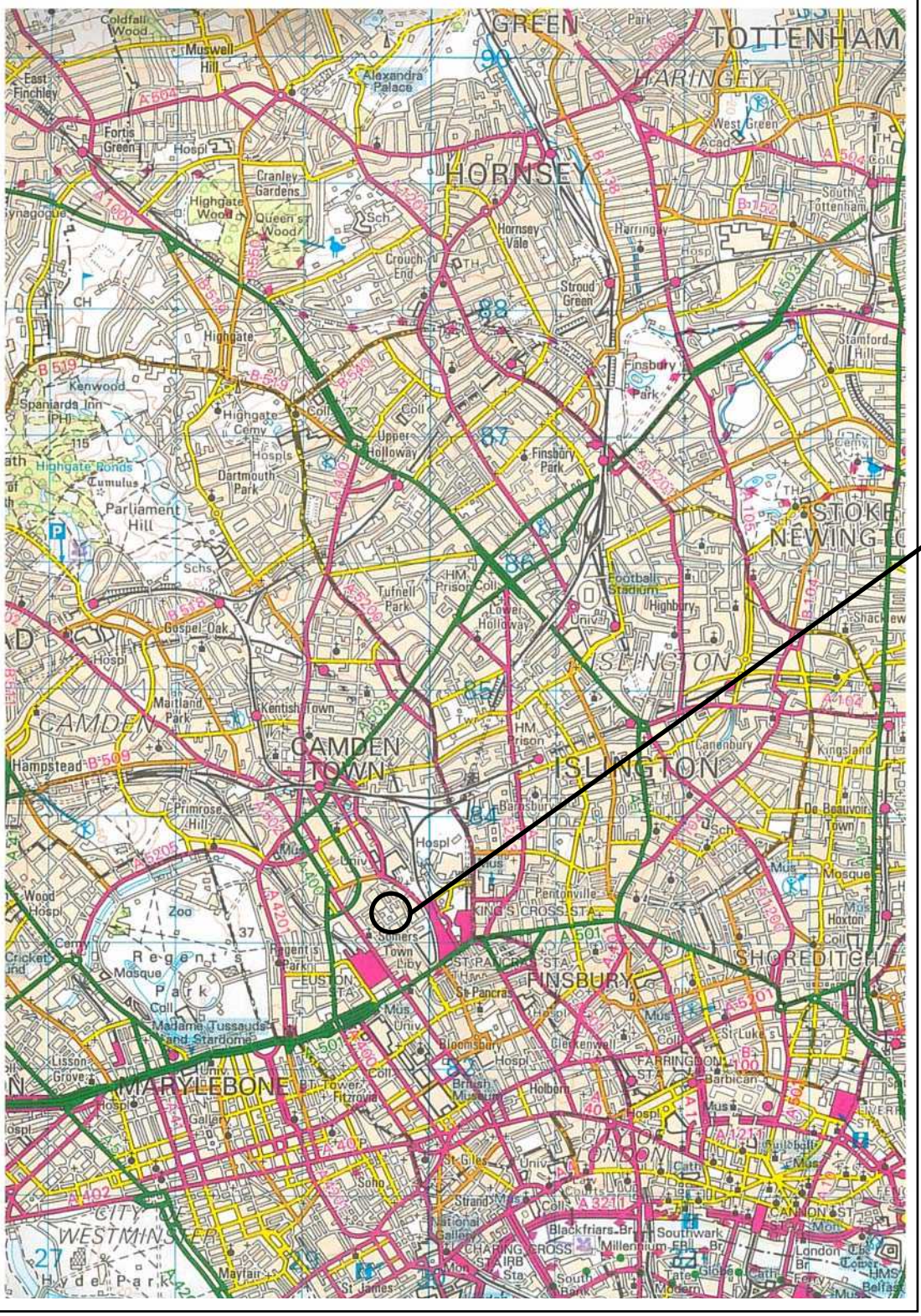
TRRL: 1990: Overseas Road Note 8 – A user's manual for a programme to analyse dynamic cone penetrometer data. Transport and Road.

## APPENDIX A

## FIGURES AND DRAWINGS

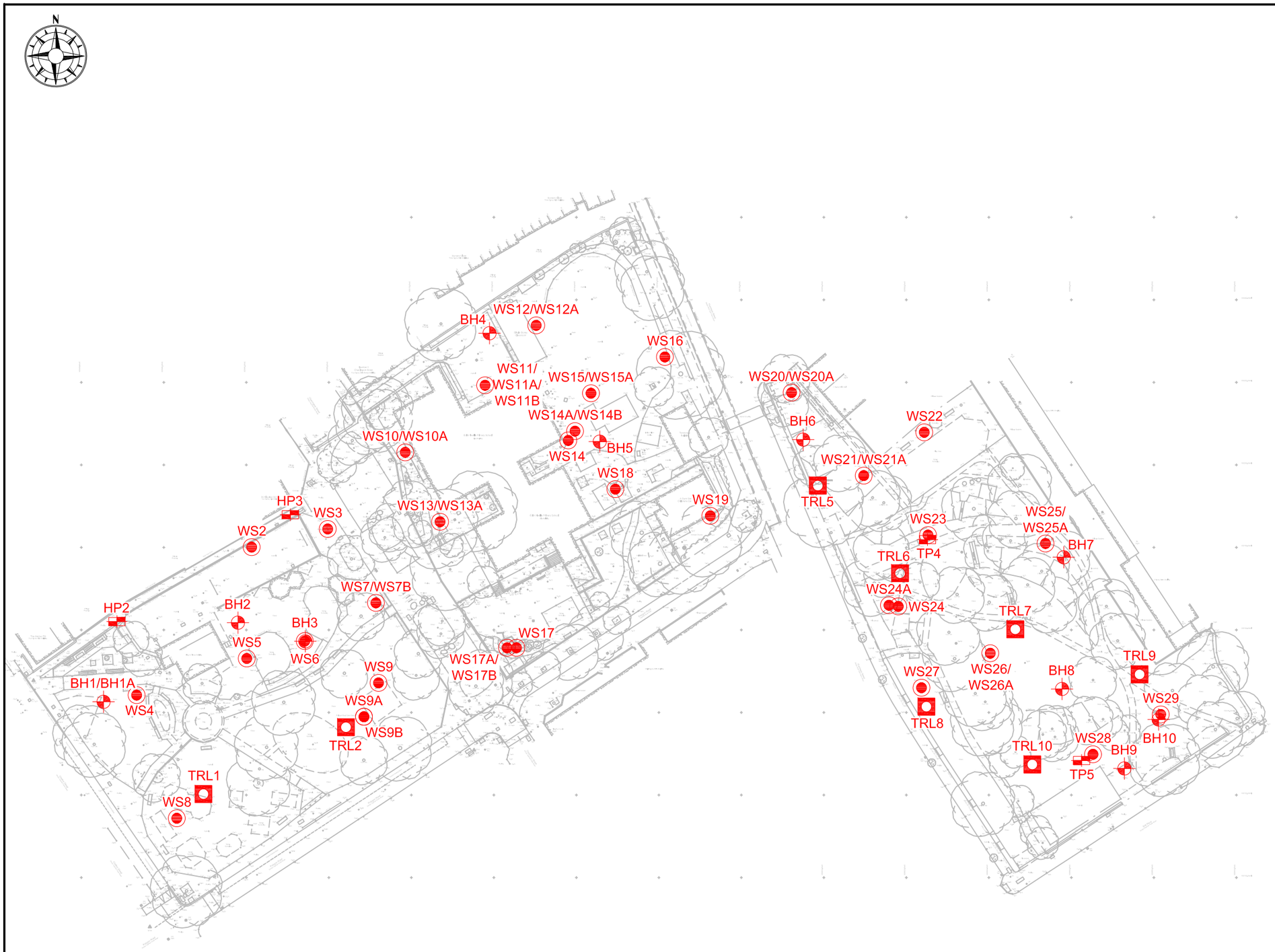
| | |
|---|---|
| Site Location Plan | A1 |
| Site Plan | A2 |

# Site Location Plan






| | | |
|---|---|---|
| Notes:<br>Scale 1:50 000 | **Project** Central Somers Town, London<br>**Project No.** D5061-15<br>**Carried out for** London Borough of Camden | **Figure**<br>**A1** |




GENERAL NOTES

1. Reproduced from Survey Solutions Drawing No. 12681UG–01 & 12681UG–02.
2. Hole Locations to National Grid Co–ordinate Reference System.

LEGEND TO SYMBOLS

- Borehole Location
- Window Sample Location
- Trial Pit Location
- DCP Test Location

Scale: 1:1000

0 10m 20 30 40 50

| Rev | Drawn | Date | Approv. | Date | Modification Details |
|---|---|---|---|---|---|
| x | x | x | x | x | x |

AMENDMENTS

Title

SITE PLAN

Project

CENTRAL SOMERS TOWN, LONDON

Client

LONDON BOROUGH OF CAMDEN

ESG

| Date | Drawn By | Approv. By |
|---|---|---|
| 29/04/2016 | BS | SW |

| Sheet Size | Scale | Project No |
|---|---|---|
| A3 | 1:1000 | D5061-15 |

| Drawing No | Rev |
|---|---|
| A2 | 0 |

## APPENDIX B

## EXPLORATORY HOLE RECORDS

| | |
|---|---|
| Key to Exploratory Hole Records | Key |
| SPT Hammer Energy Ratio Report | SPT Hammer References SM22 and SM28 |
| Borehole Logs | BH1, 1A, 2, to 10 |
| Trial Pit Logs | TP4 and 5, HP2 and 3 |
| Window Sampler Hole Logs | WS2 to 7, 7B, 8, 9, 9A, 9B, 10, 10A, 11, 11A, 11B, 12, 12A, 13, 13A, 14, 14A, 14B, 15, 15A, 16, 17, 17A, 17B, 18, 19, 20, 20A, 21, 21A, 22, 23, 24, 24A, 25, 25A, 26, 26A and 27 to 29 |

# Key to Exploratory Hole Records

## SAMPLES

**Undisturbed**

| | |
|---|---|
| U | Driven tube sample |
| UT | Driven thin wall tube sample |
| TW | Pushed thin wall tube sample |
| P | Pushed piston sample |

} nominally 100 mm diameter and full recovery unless otherwise stated

| | |
|---|---|
| L | Liner sample (from Windowless or similar sampler), full recovery unless otherwise stated |
| CBR | CBR mould sample |
| BLK | Block sample |
| CS | Core sample (from rotary core) taken for laboratory testing |
| AMAL | Amalgamated sample |

**Disturbed**

| | |
|---|---|
| D | Small sample |
| B | Bulk sample |

**Other**

| | |
|---|---|
| W | Water sample |
| G | Gas sample |
| | Environmental chemistry samples (in more than one container where appropriate) |
| ES | Soil sample |
| EW | Water sample |

**Comments** Sample reference numbers are assigned to every sample taken. A sample reference of 'NR' indicates that attempt was made to take a tube sample, however, there was no recovery.

Monitoring samples taken after completion of hole construction are not shown on the exploratory hole logs.

## TESTS

SPT S or SPT C Standard Penetration Test, open shoe (S) or solid cone (C)

The Standard Penetration Test is defined in BS EN ISO 22476-3:2005+A1:2011. The incremental blow counts are given in the Field Records column; each increment is 75 mm unless stated otherwise and any penetration under self weight in mm (SW) is noted. Where the full 300 mm test drive is achieved the total number of blows for the test drive is presented as N = ** in the Test column. Where the test drive blows reach 50 the total blow count beyond the seating drive is given (without the N = prefix).

| | |
|---|---|
| IV | *in situ* Vane shear strength, peak (p) and remoulded (r) |
| HV | Hand vane shear strength, peak (p) and remoulded (r) |
| PP | Pocket penetrometer test, converted to shear strength |
| KFH, KRH, KPI | Permeability tests (KFH = falling head, KRH = rising head; KPI = packer inflow); results provided in Field Records column (one value per stage for packer tests) |

## DRILLING RECORDS

The mechanical indices (TCR/SCR/RQD & If) are defined in BS 5930:2015

| | |
|---|---|
| TCR | Total Core Recovery, % |
| SCR | Solid Core Recovery, % |
| RQD | Rock Quality Designation, % |
| If | Fracture spacing, mm. Minimum, typical and maximum spacings are presented. The term non-intact (NI) is used where the core is fragmented. |

Flush returns, estimated percentage with colour where relevant, are given in the Records column

| | |
|---|---|
| CRF | Core recovered (length in m) in the following run |
| AZCL | Assessed zone of core loss |
| NR | Not recovered |

## GROUNDWATER

| | |
|---|---|
| ▼ | Groundwater strike |
| ▽ | Groundwater level after standing period |

# Key to Exploratory Hole Records

**INSTALLATION**

**Standpipe/ piezometer**

Details of standpipe/piezometer installations are given on the Record. Legend column shows installed instrument depths including slotted pipe section or tip depth, response zone filter material type and layers of backfill.

The type of instrument installed is indicated by a code in the Legend column at the depth of the response zone:

SP Standpipe
SPIE Standpipe piezometer
PPIE Pneumatic piezometer
EPIE Electronic piezometer

**Inclinometer or Slip Indicator**

The installation of vertical profiling instruments is indicated on the Record. The base of tubing is shown in the Legend column.

The type of instrument installed is indicated by a code in the Legend column at the base of the tubing:

ICE Biaxial inclinometer
ICM Inclinometer tubing for use with probe
SLIP Slip indicator

**Settlement Points or Pressure Cells**

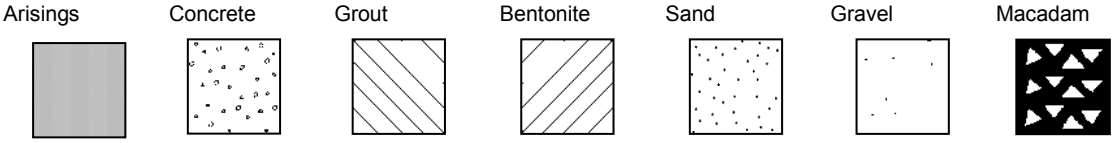
The installation of single point instruments is indicated on the Record. The location of the measuring device is shown in the Legend column.

The type of instrument installed is indicated by a code in the Legend column:

ESET Electronic settlement cell/gauge
ETM Magnetic extensometer settlement point
EPCE Electronic embedment pressure cell
PPCE Electronic push in pressure cell

**INSTALLATION LEGENDS**

A legend describing the installation is shown in the rightmost column. Legends used to describe the backfill materials as indicated below.




**NOTES**

1 Soils and rocks are described in accordance with BS EN ISO 14688-1:2002+A1:2013 and 14689-1:2003 respectively as amplified by BS 5930:2015.

2 For fine soils, consistency determined during description is reported for those strata where undisturbed samples are available. Where the logger considers that the sample may not be representative of the condition in situ, for whatever reason, the reported consistency is given in brackets. The reliability of the sample is indicated by Probably or Possibly as appropriate. Hence (Probably firm) indicates the logger is reasonably confident of the assessment, but (Possibly firm) means less certainty. Where the samples available are too disturbed to allow a reasonable assessment of the in situ condition, no consistency is given.

3 Evidence of the occurrence of very coarse particles (cobbles and boulders) is presented on the logs, however, because of their size in relation to the exploratory hole these records may not be fully representative of their size and frequency in the ground mass.

4 The declination of bedding and joints is given with respect to the normal to the core axis. Thus in a vertical borehole this will be the dip.

5 The assessment of SCR, RQD and Fracture Spacing excludes artificial fractures

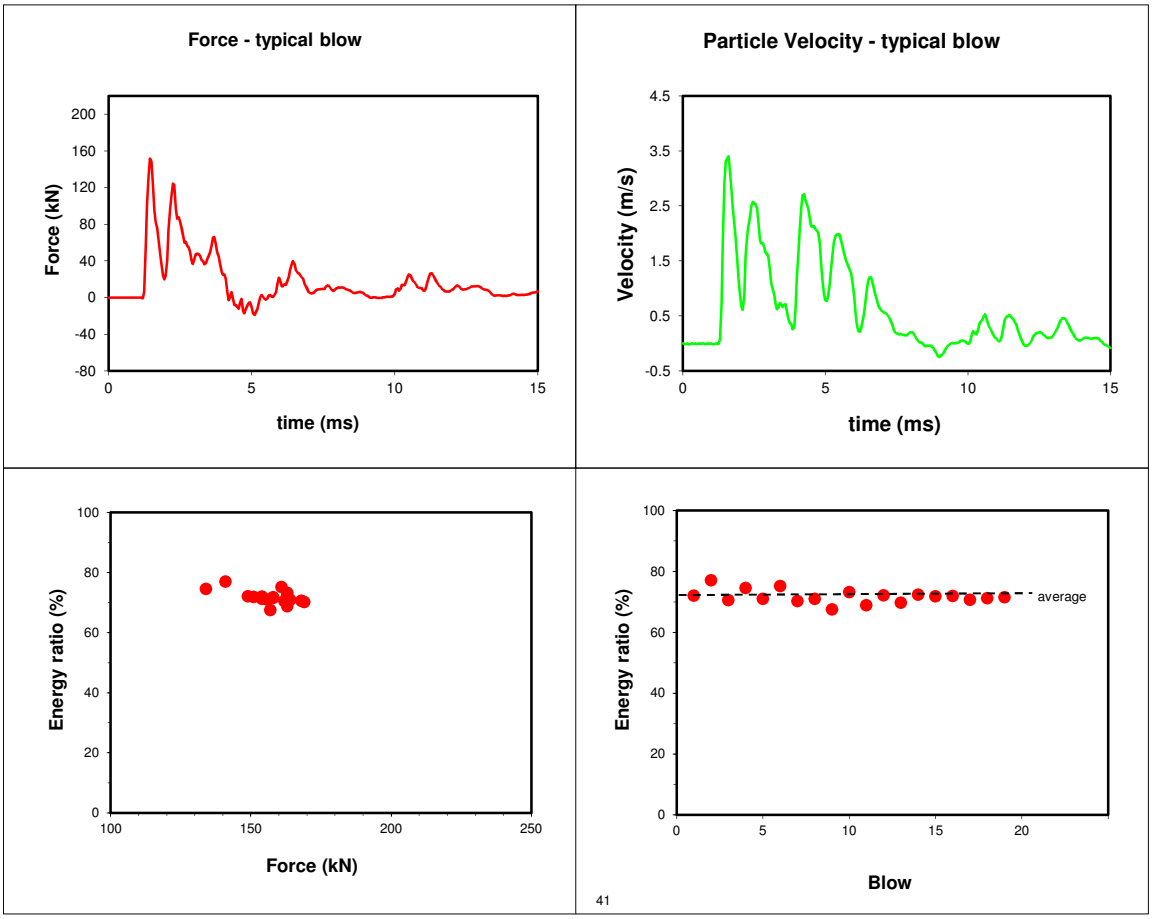
6 Water level observations of discernible entries during the advancing of the exploratory hole are given at the foot of the log and in the Legend column. The term "none observed" is used where no discrete entries are identified although this does not necessarily indicate that the hole has not been advanced below groundwater level. Under certain conditions groundwater cannot be observed, for instance, drilling with water flush or overwater, or boring at a rate much faster than water can make its way into the borehole In addition, where appropriate, water levels in the hole at the time of recovering individual samples or carrying out in situ tests and at shift changes are given in the Records column.

7 The borehole logs present the results of Standard Penetration Tests recorded in the field without correction or interpretation. However, in certain ground conditions (eg high hydraulic head or where very coarse particles are present) some judgement may be necessary in considering whether the results are representative of in situ mass conditions.

# Hammer Energy Report

| | | | |
|---|---|---|---|
| **Date of test:** | 23/07/2015 | **Hammer ID:** | SM22 |
| | | **Hammer mass (*m*)** | 63.5 kg |
| **Instrumented rod:** | | **Fall height (*h*)** | 0.76 m |
| **Type** | BW | **Test type:** | SPT |
| **Cross-sectional area (*A*a)** | 11.30 $cm^2$ | **Manufacturer:** | Archway |
| **Young's modulus (*E*a)** | 207000 MPa | **Model:** | Automatic Trip Hammer |
| **Length** | 0.60 m | | |
| | | **Rig:** | Geotech 10 |
| **Test rod type:** | NWY | **Rig ID:** | T61 |
| | | **Type:** | Rotary |
| | | **Foreman:** | J Swan |

**Remarks:**
Data obtained from test carried out in BH1, located in ESG Doncaster yard. Test carried out at depth of 5.36 mbgl, with a total blow count of 19. Energy determined from every blow.




**Theoretical energy ($E_{theor}$)** = *m x g x h* = **0.473 kN-m (473 J)**

**Measured energy ($E_{meas}$)** *average of 19 blows* = **0.339 kN-m**

**Energy ratio =** $\frac{E_{meas}}{E_{theor}}$ = **72 %**

Test carried out by: Malcolm Carr

Test carried out in accordance with BS EN ISO 22476-3:2005

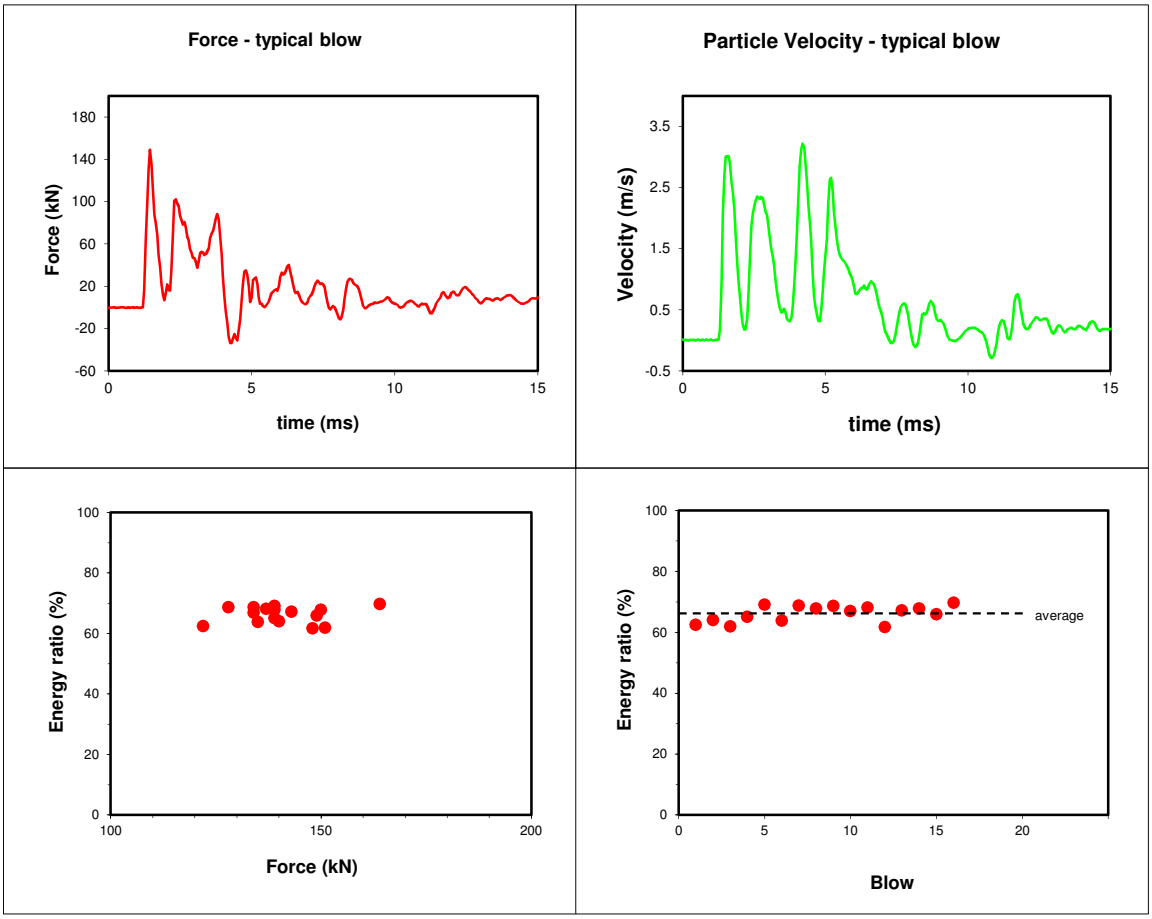
Signed for issue:

Equipment used: SPT Analyzer Serial No. 4032T

# Hammer Energy Report

| | | | |
|---|---|---|---|
| **Date of test:** | 23/07/2015 | **Hammer ID:** | SM28 |
| | | **Hammer mass (*m*)** | 63.5 kg |
| **Instrumented rod:** | | **Fall height (*h*)** | 0.76 m |
| **Type** | BW | **Test type:** | SPT |
| **Cross-sectional area (*A*a)** | 11.30 $cm^2$ | **Manufacturer:** | Archway |
| **Young's modulus (*E*a)** | 207000 MPa | **Model:** | Automatic Trip Hammer |
| **Length** | 0.60 m | | |
| | | **Rig:** | Geotech 10 |
| **Test rod type:** | NWY | **Rig ID:** | R61 |
| | | **Type:** | Rotary |
| | | **Foreman:** | J Swan |

**Remarks:**
Data obtained from test carried out in BH1, located in ESG Doncaster yard. Test carried out at depth of 5.42mbgl, with a total blow count of 16. Energy determined from every blow.




**Theoretical energy ($E_{theor}$)** = *m x g x h* = **0.473 kN-m (473 J)**

**Measured energy ($E_{meas}$)** *average of 16 blows* = **0.313 kN-m**

**Energy ratio =** $\frac{E_{meas}}{E_{theor}}$ = **66 %**

Test carried out by: Malcolm Carr

Test carried out in accordance with BS EN ISO 22476-3:2005

Signed for issue:

Equipment used: SPT Analyzer Serial No. 4032T

# Borehole Log

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.25 mOD |
| **Logged** | CM | 03/12/2015 | Dando 100 | 0.00 | 24.20 | 150 | 4.00 | **Coordinates (m)** | E 529625.39 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 24.20m. | | | | | **National Grid** | N 183142.60 |
| **Approved** | SW | 04/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 0.20 | D 2 | | | | (TOPSOIL) | | (0.25) | | |
| 0.20 | ES 1 | | | | Dark brown organic silty SAND with rootlets. | | 0.25 (0.05) +21.00 | | |
| 0.20 - 0.40 | B 3 | | | | (MADE GROUND) | | 0.30 +20.95 | | |
| 0.50 | D 5 | | | | Type 1 stone. | 0.40-1.20 Low cobble content. Occasional wood and metal fragments. | | | |
| 0.50 | ES 4 | | | | (DRILLER DESCRIPTION) | | | | |
| 0.50 - 0.70 | B 6 | | | | (MADE GROUND) | | | | |
| 1.00 | D 8 | | | | Brown and grey sandy gravelly CLAY, locally with low cobble content. Gravel is angular of brick, concrete and occasional pottery. Sand is fine to coarse. Cobbles are angular of brick and concrete. | | | | |
| 1.00 | ES 7 | | | | | | | | |
| 1.00 - 1.20 | B 9 | | 0.00 | dry | | | | | |
| 1.20 - 1.65 | SPTS | N=2 (1/1,,1,) | | | | | | | |
| 1.20 | D 10 | | | | | | | | |
| 1.20 - 1.70 | B 11 | | | | | | | | |
| | | | | | | | (2.90) | | |
| 2.20 - 2.65 | SPTS | N=2 (1/,1,,1) | 2.00 | dry | | | | | |
| 2.20 | D 12 | | | | | | | | |
| 2.20 - 2.70 | B 13 | | | | | | | | |
| 3.20 - 3.65 | SPTS | N=7 (1/1,1,2,3) | 3.00 | dry | | | | | |
| 3.20 | D 14 | | | | | | 3.20 +18.05 | | |
| 3.20 - 3.70 | B 15 | | | | Soft greyish brown slightly sandy slightly gravelly CLAY with black organic lenses (up to 30mm across). Sand is fine to coarse. (Possibly ALLUVIUM) | | | 1 | |
| | | | | | | | (0.60) | | |
| | | | | | Firm brown CLAY with frequent partings of orange silt. (LONDON CLAY FORMATION) | | 3.80 +17.45 | | |
| 4.20 - 4.65 | UT 16 | 30 blows 100% rec | 4.00 | dry | | | | | |
| 4.70 | D 17 | | | | | | | | |
| 5.20 - 5.65 | SPTS | N=14 (1,2/2,3,4,5) | 4.00 | dry | | 5.20 Occasional selenite crystals. | | 2 | |
| 5.20 | D 18 | | | | | | | | |
| | | | | | | | (4.00) | | |
| 6.20 | D 19 | | | | | | | | |
| 6.50 - 6.95 | UT 20 | 40 blows 100% rec | 4.00 | dry | | | | | |
| 7.00 | D 21 | | | | | | | | |
| 7.80 | D 22 | | | | | | 7.80 +13.45 | | |
| 8.00 - 8.45 | SPTS | N=15 (2,2/3,3,4,5) | 4.00 | dry | Stiff to very stiff fissured dark grey CLAY with occasional partings of grey silt. Fissures are randomly orientated, closed and clean. (LONDON CLAY FORMATION) | | | | |
| 8.00 | D 23 | | | | | | (1.20) | | |
| 9.00 | D 24 | | | | | | 9.00 +12.25 | | |
| 9.50 - 9.95 | UT 25 | 45 blows 100% rec | 4.00 | dry | Very stiff dark grey silty CLAY with occasional partings of dark grey silt and burrows infilled (up to 3mm diameter) with grey silt. (LONDON CLAY FORMATION) | | | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|
| 1 | 3.40 | Remained at 3.40 m after 20 minutes. | 3.50 |
| 2 | 5.20 | Remained at 5.20 m after 20 minutes. | |

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|
| 0.00 - 24.20 | SPT hammer ID SM28 (Er 66%) rod type NWY |

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH1**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.25 mOD |
| **Logged** | CM | 03/12/2015 | Dando 100 | 0.00 | 24.20 | 150 | 4.00 | **Coordinates (m)** | E 529625.39 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 24.20m. | | | | | **National Grid** | N 183142.60 |
| **Approved** | SW | 04/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| 10.00 | D 26 | | | | | | | |
| 11.00 - 11.45 | SPTS | N=26 (3,5/5,6,7,8) | 4.00 dry | | | | | |
| 11.00 | D 27 | | 03/12/15 1800 | | | | | |
| | | | 4.00 dry | | | | | |
| | | | 04/12/15 0800 | | | | | |
| | | | 4.00 dry | | | | | |
| 12.00 | D 28 | | | | | | | |
| 12.50 - 12.95 | UT 29 | 50 blows 100% rec | 4.00 dry | | | | | |
| 13.00 | D 30 | | | | | (8.00) | | |
| 14.00 - 14.45 | SPTS | N=28 (3,4/6,7,7,8) | 4.00 dry | | | | | |
| 14.00 | D 31 | | | | | | | |
| 15.00 | D 32 | | | | | | | |
| 15.50 - 15.95 | UT 33 | 55 blows 100% rec | 4.00 dry | | | | | |
| 16.00 | D 34 | | | | | | 3 | |
| 17.00 - 17.45 | SPTS | N=24 (3,3/5,5,6,8) | 4.00 damp | Very stiff fissured dark grey CLAY. Fissures are randomly orientated, closed and clean. (LONDON CLAY FORMATION) | | 17.00 +4.25 | | |
| 17.00 | D 35 | | | | | | | |
| 18.00 | D 36 | | | | | | | |
| 18.50 - 18.95 | UT 37 | 55 blows 100% rec | 4.00 damp | | | (3.00) | | |
| 19.00 | D 38 | | | | | | | |
| | | | | Hole continues on next sheet | | 20.00 +1.25 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|
| 3 | 16.00 | Remained at 16.00 m after 20 minutes. | |

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH1

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.25 mOD |
| **Logged** | CM | 03/12/2015 | Dando 100 | 0.00 | 24.20 | 150 | 4.00 | **Coordinates (m)** | E 529625.39 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 24.20m. | | | | | **National Grid** | N 183142.60 |
| **Approved** | SW | 04/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| 20.00 - 20.45<br>20.00 | SPTS<br>D 39 | N=31 (3,5/7,7,8,9) | 4.00 damp | Very stiff dark grey silty CLAY with partings of dark grey silt.<br>(LONDON CLAY FORMATION) | | (1.20) | | |
| 21.00 | D 40 | | | | | | | |
| 21.20 | D 41 | | | | | 21.20 +0.05 | | |
| 21.50 - 21.75 | UT 42 | 90 blows 100% rec | 4.00 damp | Very stiff fissured light grey mottled brown silty CLAY. Fissures are randomly orientated, closed and clean.<br>(LAMBETH GROUP) | | (1.30) | | |
| 21.80 | D 43 | | | | | | | |
| 22.50 | D 44 | | | Very stiff reddish brown mottled bluish grey CLAY.<br>(LAMBETH GROUP) | | 22.50 -1.25 | | |
| 23.00 - 23.45<br>23.00 | SPTS<br>D 45 | N=48 (4,6/9,11,12,16) | 4.00 damp | | | (1.70) | | |
| 24.00 | D 46 | | 04/12/15 1800<br>4.00 damp | | | 24.20 -2.95 | | |
| | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH1

# Borehole Log

| Drilled | | Start | Equipment, Methods and Remarks | Depth from (m) | to (m) | Diameter (mm) | Casing Depth (m) | Ground Level | 21.25 mOD |
|---|---|---|---|---|---|---|---|---|---|
| Logged | TO | 01/12/2015 | Hand tools<br>Hand dug pit from GL to 0.40m.<br>Pit terminated due to concrete obstruction. | | | | | Coordinates (m) | E 529625.39 |
| Checked | MM | End | | | | | | National Grid | N 183142.60 |
| Approved | SW | 01/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | 01/12/15<br>0.00<br>01/12/15<br>0.00 | 0800<br>0.00<br>0900<br>0.00 | (TOPSOIL)<br>Grass over brown clayey fine to coarse sand with occasional rootlets.<br>(MADE GROUND)<br>Brown gravelly fine to coarse SAND with a low cobble content. Gravel is angular to subangular, fine to coarse of brick and concrete. Cobbles are angular of brick. Rare wood fragments.<br>END OF EXPLORATORY HOLE | | (0.20)<br>0.20 +21.05<br>(0.20)<br>0.40 +20.85 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

Depth Related Remarks

| Depths (m) | Remarks |
|---|---|

Hard Boring

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| Project | Central Somers Town, London |
|---|---|
| Project No. | D5061-15 |
| Carried out for | London Borough of Camden |

Borehole

**BH1A**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.81 mOD |
| **Logged** | CM | 26/11/2015 | Dando 100 | 0.00 | 20.45 | 150 | 1.50 | **Coordinates (m)** | E 529657.69 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 20.45m. | | | | | **National Grid** | N 183161.76 |
| **Approved** | SW | 27/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (TOPSOIL) | | 0.10 (0.10) +20.71 | | |
| 0.20 | D 2 | | | | Dark brown organic silty SAND. | | | | |
| 0.20 | ES 1 | | | | (MADE GROUND) | | (0.40) | | |
| 0.20 - 0.40 | B 3 | 4 samples taken | | | Brown and grey gravelly silty SAND with low cobble content. Gravel is angular, fine to medium of brick and concrete. Cobbles are angular of brick and concrete. | | 0.50 +20.31 | | |
| 0.50 | D 5 | | | | | | | | |
| 0.50 | ES 4 | | | | | | | | |
| 0.50 - 0.70 | B 6 | 4 samples taken | | | | | (0.70) | | |
| | | | | | (MADE GROUND) | | | | |
| 1.00 | D 8 | | | | Soft grey mottled brown slightly gravelly CLAY. | | | | |
| 1.00 | ES 7 | | | | Gravel is angular, fine to medium of brick and flint. | | | | |
| 1.00 - 1.20 | B 9 | 4 samples taken | 0.00 | 1.10 | | | 1.20 +19.61 | | |
| 1.20 - 1.65 | SPTS | N=8 (1,1/1,2,2,3) | | | Firm grey silty CLAY with occasional black staining and orange silt partings. | | | | |
| 1.20 | D 10 | | | | (ALLUVIUM) | | | | |
| 1.50 | ES 11 | 4 samples taken | 26/11/15<br>1.50 | 1800<br>dry | | | (0.80) | | |
| | | | 27/11/15<br>1.50 | 0800<br>dry | | | | | |
| | | | | | | | 2.00 +18.81 | | |
| 2.20 - 2.65 | UT 12 | 40 blows 100% rec | 1.50 | dry | Firm brown silty CLAY with numerous partings of orange silt. (LONDON CLAY FORMATION) | | | | |
| 2.70 | D 13 | | | | | | | | |
| 3.20 - 3.65 | SPTS | N=12 (1,2/2,3,3,4) | 1.50 | dry | | | | | |
| 3.20 | D 14 | | | | | | | | |
| 4.20 - 4.65 | UT 15 | 40 blows 100% rec | 1.50 | dry | | | | | |
| 4.70 | D 16 | | | | | | (5.70) | | |
| 5.20 - 5.65 | SPTS | N=18 (2,3/3,4,5,6) | 1.50 | dry | | | | | |
| 5.20 | D 17 | | | | | | | | |
| 6.00 | D 18 | | | | | 6.00-7.00 Occasional selenite crystals and fissuring. | | | |
| 6.50 - 6.95 | UT 19 | 45 blows 100% rec | 1.50 | dry | | | | | |
| 7.00 | D 20 | | | | | | | | |
| 7.70 | D 21 | | | | | | 7.70 +13.11 | | |
| | | | | | Stiff dark grey CLAY with occasional partings of grey silt and burrows. | | | | |
| 8.00 - 8.45 | SPTS | N=19 (3,5/4,4,5,6) | 1.50 | dry | (LONDON CLAY FORMATION) | | | | |
| 8.00 | D 22 | | | | | | | | |
| 9.00 | D 23 | | | | | | | | |
| 9.50 - 9.95 | UT 24 | 45 blows 100% rec | 1.50 | dry | | | | | |
| | | | | | | | (4.30) | | |
| | | | | | Hole continues on next sheet | 10.00 No burrows. | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|
| 1 | 1.10 | Remained at 1.10 m after 20 minutes. | 1.20 |

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|
| 1.20 - 20.45 | SPT hammer ID SM28 (Er 66%) rod type NWY |

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH2

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.81 mOD |
| **Logged** | CM | 26/11/2015 | Dando 100 | 0.00 | 20.45 | 150 | 1.50 | **Coordinates (m)** | E 529657.69 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 20.45m. | | | | | **National Grid** | N 183161.76 |
| **Approved** | SW | 27/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 10.00 | D 25 | | | | | | | | |
| 11.00 - 11.45<br>11.00 | SPTS<br>D 26 | N=26 (3,5/5,6,7,8) | 1.50 | dry | | | | | |
| 12.00 | D 27 | | | | Stiff dark grey silty CLAY with numerous partings of grey silt.<br>(LONDON CLAY FORMATION) | | 12.00 +8.81 | | |
| 12.50 - 12.95 | UT 28 | 45 blows 100% rec | 1.50 | dry | | | | | |
| 13.00 | D 29 | | | | | | | | |
| 14.00 - 14.45<br>14.00 | SPTS<br>D 30 | N=29 (3,5/6,7,8,8) | 1.50 | dry | | | (4.00) | | |
| 15.00 | D 31 | | | | | | | | |
| 15.50 - 15.95 | UT 32 | 45 blows 100% rec | 1.50 | damp | | | | 2 | |
| 16.00 | D 33 | | | | Stiff fissured dark grey CLAY with occasional partings of dark grey silt. Fissures are closely spaced, randomly orientated, closed and clean.<br>(LONDON CLAY FORMATION) | | 16.00 +4.81 | | |
| 17.00 - 17.45<br>17.00 | SPTS<br>D 34 | N=29 (3,5/7,6,8,8) | 1.50 | damp | | | | | |
| 18.00 | D 35 | | | | | | (4.45) | | |
| 18.50 - 18.95 | UT 36 | 45 blows 100% rec | 1.50 | damp | | | | | |
| 19.00 | D 37 | | | | | | | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|
| 2 | 15.50 | Rose to 15.40 m after 20 minutes. | |

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH2

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.81 mOD |
| **Logged** | CM | 26/11/2015 | Dando 100<br>Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 20.45m. | 0.00 | 20.45 | 150 | 1.50 | **Coordinates (m)** | E 529657.69 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183161.76 |
| **Approved** | SW | 27/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 20.00 - 20.45<br>20.00 | SPTS<br>D 38 | N=33 (3,5/6,7,9,11) | 1.50<br>27/11/15<br>1.50 | damp<br>1800<br>damp | END OF EXPLORATORY HOLE | | 20.45 +0.36 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH2

# Borehole Log

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.73 mOD |
| **Logged** | CM | 30/11/2015 | Dando 100 | 0.00 | 23.90 | 150 | 2.30 | **Coordinates (m)** | E 529674.30 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 23.90m. | | | | | **National Grid** | N 183157.25 |
| **Approved** | SW | 01/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (TOPSOIL)<br>Dark brown organic silty SAND with rootlets. | | (0.25)<br>0.25 +20.48 | | |
| 0.20<br>0.20<br>0.20 - 0.40<br>0.50<br>0.50<br>0.50 - 0.70 | D 2<br>ES 1<br>B 3<br>D 5<br>ES 4<br>B 6 | | | | (MADE GROUND)<br>Greyish brown gravelly SAND with low cobble content. Gravel and cobbles are angular of brick and concrete. | | (0.60)<br>0.85 +19.88 | | |
| 1.00<br>1.00<br>1.00 - 1.20<br>1.20 - 1.65<br>1.20 | D 8<br>ES 7<br>B 9<br>SPTS<br>D 10 | N=7 (1,1/1,2,2,2) | 0.00 | dry | (MADE GROUND)<br>Dark grey and brown gravelly CLAY. Gravel is angular of brick, occasional oyster shells and black ash. | | (0.35)<br>1.20 +19.53 | | |
| 1.70 | ES 11 | | | | Firm grey slightly organic slightly sandy clayey SILT with occasional black staining (Possibly ALLUVIUM) | | (1.00) | | |
| 2.20 - 2.65 | UT 12 | 30 blows 100% rec | 1.60 | dry | Firm to stiff brown mottled grey CLAY with orangish brown silt partings.<br>(LONDON CLAY FORMATION) | | 2.20 +18.53 | | |
| 2.70 | D 13 | | | | | | | | |
| 3.20 - 3.65<br>3.20 | SPTS<br>D 14 | N=14 (2,2/3,3,3,5) | 2.30 | dry | | | | | |
| 4.20 - 4.65 | UT 15 | 40 blows 100% rec | 2.30 | dry | | | | | |
| 4.70 | D 16 | | | | | 4.70-5.20<br>Occasional selenite crystals. | (5.50) | | |
| 5.20 - 5.65<br>5.20 | SPTS<br>D 17 | N=15 (2,3/3,3,4,5) | 2.30 | dry | | | | | |
| 6.20 | D 18 | | | | | | | | |
| 6.50 - 6.95 | UT 19 | 40 blows 100% rec | 2.30 | dry | | | | | |
| | | | 30/11/15<br>2.30 | 1800<br>dry | | | | | |
| 7.00 | D 20 | | 01/12/15<br>2.30 | 0800<br>6.90 | | 7.00 Fissured. Fissures are randomly orientated, closed and clean. | | | |
| 7.70 | D 21 | | | | Stiff fissured dark grey CLAY. Fissures are randomly orientated, closed and clean.<br>(LONDON CLAY FORMATION) | | 7.70 +13.03 | | |
| 8.00 - 8.45<br>8.00 | SPTS<br>D 22 | N=18 (2,2/3,4,5,6) | 2.30 | damp | | | (1.30) | | |
| 9.00 | D 23 | | | | Stiff dark grey silty CLAY with partings of dark grey silt.<br>(LONDON CLAY FORMATION) | | 9.00 +11.73 | | |
| 9.50 - 9.95 | UT 24 | 45 blows 100% rec | 2.30 | dry | | | | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|
| 0.00 - 23.90 | SPT hammer ID SM28 (Er 66%) rod type NWY |

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH3**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.73 mOD |
| **Logged** | CM | 30/11/2015 | Dando 100 | 0.00 | 23.90 | 150 | 2.30 | **Coordinates (m)** | E 529674.30 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 23.90m. | | | | | **National Grid** | N 183157.25 |
| **Approved** | SW | 01/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 10.00 | D 25 | | | | | 10.00 Occasional burrows (up to 3mm Ø) infilled with grey silt. | (3.00) | | |
| 11.00 - 11.45<br>11.00 | SPTS<br>D 26 | N=25 (2,4/6,6,6,7) | 2.30 | dry | | 11.00 Fissured. Fissures are randomly orientated, closed and clean. | | | |
| 12.00 | D 27 | | | | Very stiff dark grey silty CLAY with occasional partings of dark grey silt.<br>(LONDON CLAY FORMATION) | 12.00 Fissured. Fissures are randomly orientated, closed and clean. | 12.00 +8.73 | | |
| 12.50 - 12.95 | UT 28 | 45 blows 100% rec | 2.30 | dry | | | | | |
| 13.00 | D 29 | | | | | | | | |
| 14.00 - 14.45<br>14.00 | SPTS<br>D 30 | N=27 (2,4/6,6,7,8) | 2.30 | dry | | | | | |
| 15.00 | D 31 | | | | | | | | |
| 15.50 - 15.95 | UT 32 | 45 blows 100% rec | 2.30 | dry | | | | | |
| 16.00 | D 33 | | | | | | (8.80) | | |
| 17.00 - 17.45<br>17.00 | SPTS<br>D 34 | N=33 (3,6/7,7,9,10) | 2.30 | dry | | | | | |
| 18.00 | D 35 | | | | | 18.00 Occasional burrows (up to 3mm Ø) infilled with grey silt. | | | |
| 18.50 - 18.85 | UT 36 | 55 blows 100% rec | 2.30 | dry | | | | | |
| 18.90 | D 37 | | | | | | | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH3

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.73 mOD |
| **Logged** | CM | 30/11/2015 | Dando 100<br>Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 23.90m. | 0.00 | 23.90 | 150 | 2.30 | **Coordinates (m)** | E 529674.30 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183157.25 |
| **Approved** | SW | 01/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 20.00 - 20.45<br>20.00 | SPTS<br>D 38 | N=39 (3,6/8,9,10,12) | 2.30 | dry | | | | | |
| 20.80 | D 39 | | | | | | 20.80 -0.07 | | |
| 21.00 - 21.30 | UT 40 | 70 blows 100% rec | 2.30 | dry | Very stiff fissured dark grey and light bluish grey mottled silty CLAY. Fissures are randomly orientated, closed and clean.<br>(LAMBETH GROUP) | | (1.20) | | |
| 21.35 | D 41 | | | | | | | | |
| 22.00 - 22.50 | B 42 | | | | Very dense light bluish grey and brown mottled very silty fine SAND.<br>(LAMBETH GROUP) | | 22.00 -1.27 | 1 | |
| 22.50 - 22.87<br>22.50 | SPTS<br>D 43 | 50 (7,12/12,14,24 for 70mm) | 2.30 | 21.90 | | | (1.90) | | |
| | | | 01/12/15<br>2.30 | 1800<br>21.90 | | | | | |
| | | | | | END OF EXPLORATORY HOLE | | 23.90 -3.17 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|
| 1 | 22.00 | Rose to 21.90 m after 20 minutes. | |

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH3**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.15 mOD |
| **Logged** | EP | 20/11/2015 | Dando 3000<br>Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 20.45m. | 0.00 | 20.45 | 150 | 2.50 | **Coordinates (m)** | E 529718.95 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183231.91 |
| **Approved** | SW | 23/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 0.20 | ES 2 | | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.05 | | |
| 0.20 | D 1 | 4 samples taken | | | (MADE GROUND) Dark brown to black silty gravelly SAND with high cobble content. Sand is fine to coarse. Gravel is angular to subrounded, fine to coarse of macadam and brick. Cobbles are angular of brick. | | (0.40) | | |
| 0.20 - 0.40 | B 3 | | | | | | 0.50 +19.65 | | |
| 0.50 | ES 5 | | | | | | (0.50) | | |
| 0.50 | D 4 | 4 samples taken | | | | | | | |
| 0.50 - 0.60 | B 6 | | | | | | | | |
| 1.00 | ES 8 | | | | (MADE GROUND) Soft to firm brown slightly gravelly CLAY with low cobble content. Gravel is angular to subangular, fine to medium of brick. Cobbles are angular of brick. | | 1.00 +19.15 | | |
| 1.00 | D 7 | 4 samples taken | | | | | (0.50) | | |
| 1.00 - 1.20 | B 9 | | 0.00 | dry | | | | | |
| 1.20 | D 10 | | | | | | 1.50 +18.65 | | |
| 1.20 - 1.70 | B 11 | | | | (MADE GROUND) Soft dark greenish brown slightly gravelly CLAY. Gravel is angular to subangular, fine to medium of brick and macadam. | | | | |
| 1.20 - 1.65 | SPTS | N=5 (1,1/1,1,1,2) | | | | | | | |
| 1.70 | ES 15 | 4 samples taken | | | | | | | |
| 2.00 | D 12 | | | | Firm becoming stiff brown mottled grey and orangish brown CLAY. (LONDON CLAY FORMATION) | | | | |
| 2.20 - 2.65 | UT 13 | 40 blows 100% rec | 1.50 | dry | | | | | |
| | | | 20/11/15<br>2.50 | 1800<br>dry | | | | | |
| 2.70 | D 14 | | | | | | | | |
| | | | 23/11/15<br>2.50 | 0800<br>dry | | | | | |
| 3.20 | D 16 | | | | | | | | |
| 4.20 - 4.60 | UT 17 | 45 blows 100% rec | 2.50 | dry | | | (5.20) | | |
| 4.65 | D 18 | | | | | 4.65-5.20 Fine to medium gravel sized selenite crystals | | | |
| 5.20 | D 19 | | 2.50 | dry | | | | | |
| 5.20 - 5.65 | SPTS | N=16 (1,2/3,4,4,5) | | | | | | | |
| 6.20 | D 20 | | | | | | | | |
| 6.50 - 6.95 | UT 21 | 45 blows 100% rec | 2.50 | dry | | | | | |
| | | | | | Firm to stiff fissured brownish grey CLAY. Fissures are randomly orientated, planar and smooth. (LONDON CLAY FORMATION) | | 6.70 +13.45 | | |
| 7.00 | D 22 | | | | | | | | |
| 7.80 - 8.00 | B 23 | | | | | | (2.30) | | |
| 8.00 | D 24 | | 2.50 | dry | | 8.00 Fine to medium gravel sized claystone. | | 1 | |
| 8.00 - 8.45 | SPTS | N=16 (2,3/4,3,4,5) | | | | | | | |
| 9.00 | D 25 | | | | | 9.00 Rare hard wood fragments (<5mm x 10mm). | 9.00 +11.15 | | |
| | | | | | Stiff fissured dark grey CLAY. Fissures are randomly orientated, planar, undulating and smooth. (LONDON CLAY FORMATION) | | | | |
| 9.50 - 9.85 | UT 26 | 50 blows 100% rec | 2.50 | damp | | | | | |
| 9.90 | D 27 | | | | | 9.70-9.90 Rare infilled burrows with light grey silt (1mm x 20mm). | | | |
| | | | | | Hole continues on next sheet | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|
| 1 | 8.00 | Rose to 7.90 m after 20 minutes. seepage | |

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|
| 1.20 - 20.45 | SPT hammer ID SM22 (Er 72%) rod type NWY |

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|
| 7.80 - 8.00 | 45 | Chisel |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH4**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.15 mOD |
| **Logged** | EP | 20/11/2015 | Dando 3000 | 0.00 | 20.45 | 150 | 2.50 | **Coordinates (m)** | E 529718.95 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 20.45m. | | | | | **National Grid** | N 183231.91 |
| **Approved** | SW | 23/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 11.00<br>11.00 - 11.45 | D 28<br>SPTS | N=19 (1,3/3,5,5,6) | 2.50 | damp | | 11.00-12.00 Silty. | (5.00) | | |
| 12.00 | D 29 | | | | | | | | |
| 12.50 - 12.95 | UT 30 | 50 blows 100% rec | 2.50 | damp | | | | | |
| 13.00 | D 31 | | | | | | | | |
| 14.00<br>14.00 - 14.45 | D 32<br>SPTS | N=29 (2,4/6,7,7,9) | 2.50 | damp | Stiff to very stiff fissured dark grey CLAY with partings of light brownish grey silt and rare silt infilled burrows (1mm x 10mm). (LONDON CLAY FORMATION) | | 14.00 +6.15 | | |
| 15.00 | D 33 | | | | | | | | |
| 15.50 - 15.95 | UT 34 | 55 blows 100% rec | 2.50 | damp | | | | | |
| 16.00 | D 35 | | | | | 16.00 Rare fine gravel sized pyrite. | | | |
| 17.00<br>17.00 - 17.45 | D 36<br>SPTS | N=26 (3,5/5,6,7,8) | 2.50 | damp | | | (6.45) | | |
| 18.00 - 18.95<br>18.00 | UT 38<br>D 37 | 55 blows 100% rec | 2.50 | damp | | | | | |
| 19.00 | D 39 | | | | | | | | |
| | | | | | Hole continues on next sheet | 20.00 Slightly sandy. | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|
| 2 | 15.50 | Remained at 15.50 m after 20 minutes. seepage | |

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH4

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.15 mOD |
| **Logged** | EP | 20/11/2015 | Dando 3000<br>Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 20.45m. | 0.00 | 20.45 | 150 | 2.50 | **Coordinates (m)** | E 529718.95 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183231.91 |
| **Approved** | SW | 23/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 20.00<br>20.00 - 20.45 | D 40<br>SPTS | N=32 (3,5/7,8,8,9) | 2.50<br><br>23/11/15<br>2.50 | damp<br><br>1800<br>damp | | | | | |
| | | | | | END OF EXPLORATORY HOLE | | 20.45 -0.30 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH4

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.17 mOD |
| **Logged** | | 24/11/2015 | Dando 100 | 0.00 | 20.45 | 150 | 1.80 | **Coordinates (m)** | E 529745.67 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 20.45m. | | | | | **National Grid** | N 183205.64 |
| **Approved** | SW | 25/11/2015 | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date / Casing | Time / Water |
|---|---|---|---|---|
| 0.20 | ES 2 | | | |
| 0.20 | D 1 | | | |
| 0.20 - 0.40 | B 3 | 4 samples taken | | |
| 0.50 | ES 5 | | | |
| 0.50 | D 4 | | | |
| 0.50 - 0.70 | B 6 | 4 samples taken | | |
| 1.00 | ES 8 | | | |
| 1.00 | D 7 | | | |
| 1.00 - 1.20 | B 9 | 4 samples taken | 0.00 | dry |
| 1.20 - 1.65 | SPTS | N=6 (1,1/1,1,2,2) | | |
| 1.20 | D 10 | | | |
| 1.55 | ES 11 | 4 samples taken | | |
| 2.20 - 2.65 | UT 12 | 35 blows 100% rec | 1.80 | dry |
| 2.70 | D 13 | | | |
| 3.20 - 3.65 | SPTS | N=12 (1,1/2,3,3,4) | 1.80 | dry |
| 3.20 | D 14 | | | |
| 4.20 - 4.65 | UT 15 | 45 blows 100% rec | 1.80 | dry |
| | | | 24/11/15 | 1800 |
| | | | 1.80 | dry |
| 4.70 | D 16 | | | |
| | | | 25/11/15 | 0800 |
| | | | 1.80 | dry |
| 5.20 - 5.65 | SPTS | N=15 (1,2/3,3,4,5) | 1.80 | dry |
| 5.20 | D 17 | | | |
| 6.20 | D 18 | | | |
| 6.50 - 6.95 | UT 19 | 45 blows 100% rec | 1.80 | dry |
| 7.00 | D 20 | | | |
| 8.00 - 8.45 | SPTS | N=18 (5,4/3,4,5,6) | 1.80 | dry |
| 8.00 | D 21 | | | |
| 9.00 | D 22 | | | |
| 9.50 - 9.95 | UT 23 | 45 blows 100% rec | 1.80 | dry |

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.07 | | |
| (MADE GROUND) Dark brown silty sandy GRAVEL with high cobble content. Gravel is angular to subangular, fine to coarse of macadam, brick and concrete. Sand is fine to coarse. Cobbles are angular of brick. Occasional tile fragments. | | (0.70) | | |
| (MADE GROUND) Dark brown clayey sandy GRAVEL with medium cobble content. Gravel is angular to subangular, fine to coarse of macadam, brick and concrete. Sand is fine to coarse. Cobbles are angular of brick. | | 0.80 +19.37 (0.50) 1.30 +18.87 | | |
| Firm to stiff brown CLAY. (Possibly LONDON CLAY FORMATION) | | (3.50) | | |
| Firm to stiff brownish grey CLAY with occasional partings of fine orange silt. (LONDON CLAY FORMATION) | 5.50-6.00 Rare fine to medium gravel size gypsum crystals. | 4.80 +15.37 | | |
| | | (3.20) | | |
| Grey CLAYSTONE recovered as fine to coarse gravel. (LONDON CLAY FORMATION) | | 8.00 +12.17 (0.20) 8.20 +11.97 | | |
| Stiff to very stiff fissured dark grey CLAY with partings of light grey silt. Fissures are randomly orientated, planar and undulating. (LONDON CLAY FORMATION) | | | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|
| 0.00 - 20.45 | SPT hammer ID SM28 (Er 66%) rod type NWY |

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH5**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.17 mOD |
| **Logged** | | 24/11/2015 | Dando 100 | 0.00 | 20.45 | 150 | 1.80 | **Coordinates (m)** | E 529745.67 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 20.45m. | | | | | **National Grid** | N 183205.64 |
| **Approved** | SW | 25/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 10.00 | D 24 | | | | | | | | |
| 11.00 - 11.45<br>11.00 | SPTS<br>D 25 | N=22 (3,4/5,5,6,6) | 1.80 | dry | | | (5.80) | | |
| 12.00 | D 26 | | | | | | | | |
| 12.50 - 12.95 | UT 27 | 45 blows 100% rec | 1.80 | dry | | | | | |
| 13.00 | D 28 | | | | | | | | |
| 14.00 - 14.45<br>14.00 | SPTS<br>D 29 | N=25 (3,4/4,6,7,8) | 1.80 | dry | Very stiff fissured dark grey CLAY with occasional partings of light grey silt. Fissures are planar and undulating. (LONDON CLAY FORMATION) | | 14.00 +6.17 | | |
| 15.00 | D 30 | | | | | | | | |
| 15.50 - 15.95 | UT 31 | 45 blows 100% rec | 1.80 | dry | | | | | |
| 16.00 | D 32 | | | | | | | | |
| 17.00 - 17.45<br>17.00 | SPTS<br>D 33 | N=28 (3,5/6,6,8,8) | 1.80 | dry | | | (6.45) | | |
| 18.00 | D 34 | | | | | | | | |
| 18.50 - 18.95 | UT 35 | 45 blows 100% rec | 1.80 | dry | | | | | |
| 19.00 | D 36 | | | | | | | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH5

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | PH/SS | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.17 mOD |
| **Logged** | | 24/11/2015 | Dando 100 | 0.00 | 20.45 | 150 | 1.80 | **Coordinates (m)** | E 529745.67 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 20.45m. | | | | | **National Grid** | N 183205.64 |
| **Approved** | SW | 25/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 20.00 - 20.45<br>20.00 | SPTS<br>D 37 | N=28 (3,5/5,6,8,9) | 1.80<br>25/11/15<br>1.80 | dry<br>1800<br>dry | END OF EXPLORATORY HOLE | | 20.45 -0.28 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH5

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 19.31 mOD |
| **Logged** | CM | 16/12/2015 | Dando 2000 | 0.00 | 2.80 | 150 | 2.50 | **Coordinates (m)** | E 529794.98 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 2.80m. | | | | | **National Grid** | N 183206.13 |
| **Approved** | SW | 18/12/2015 | Borehole terminated due to obstruction. | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (TOPSOIL)<br>Brown organic silty SAND with rootlets. | | 0.10 (0.10) +19.21 | | |
| 0.30 - 1.00 | B 4 | | | | (MADE GROUND)<br>Brown silty gravelly slightly organic SAND with low cobble content. Gravel and cobbles are of brick, concrete and occasional oyster shells. Occasional boulder sized concrete fragments. | | | | |
| 0.30 - 1.50 | ES 1 | | | | | | | | |
| 0.60 - 2.00 | ES 2 | | | | | | (1.40) | | |
| 1.00 | ES 3 | | | | | | | | |
| 1.20 - 1.50 | SPTC | 47 (12,12/19,28 for 75mm) | 0.00 | dry | | | | | |
| 1.50 - 2.00 | B 5 | | | | (MADE GROUND)<br>Brown and grey COBBLES and BOULDERS of brick and concrete with a little CLAY. | | 1.50 +17.81 | | |
| | | | 16/12/15 | 1800 dry | | | | | |
| 2.00 - 2.00 | SPTC | | 2.50 | dry | | | | | |
| 2.00 | ES 6 | | 17/12/15 | 0800 dry | | | (1.30) | | |
| 2.25 | D 7 | | | | | | | | |
| | | | 17/12/15 | 1800 dry | | | | | |
| | | | 2.50 | | | | | | |
| | | | | | END OF EXPLORATORY HOLE | | 2.80 +16.51 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|
| 1.20 - 2.00 | 150 | Chisel |
| 2.80 - 2.80 | 90 | Chisel |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH6**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 17.80 mOD |
| **Logged** | CM | 08/12/2015 | Dando 2000 | 0.00 | 22.75 | 200 | 1.50 | **Coordinates (m)** | E 529858.15 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 30.36m. | 22.75 | 30.00 | 150 | 26.00 | **National Grid** | N 183177.61 |
| **Approved** | SW | 15/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (TOPSOIL) | | 0.10 (0.10) +17.70 | | |
| | | | | | Brown organic silty SAND with rootlets. | | (0.30) | | |
| 0.30 | ES 1 | | | | (MADE GROUND) | | 0.40 +17.40 | | |
| | | | | | Grey silty SAND of ash. | | (0.45) | | |
| 0.60 | ES 2 | | | | (MADE GROUND) | | | | |
| 0.60 - 1.50 | B 4 | | | | Brown sandy GRAVEL with high cobble content. Gravel and cobbles are of brick and concrete. | | 0.85 +16.95 | | |
| 1.00 | ES 3 | | | | Occasional boulder sized concrete fragments. | | | | |
| | | | | | Firm to stiff locally fissured brown CLAY with occasional orange veins and rootlets. (LONDON CLAY FORMATION) | | | | |
| 1.50 - 1.95 | SPTS | N=9 (1,2/2,2,2,3) | 1.50 | dry | | | | | |
| 1.50 - 1.95 | D 5 | | | | | | | | |
| 2.25 | D 6 | | | | | 2.25-3.00 Gleying on fissure surfaces. 2.25-5.70 Clay is fissured. | | | |
| 2.50 - 2.95 | U 7 | 22 blows 100% rec | 1.50 | dry | | | | | |
| 3.00 | D 8 | | | | | 3.00-4.25 Occasional selenite crystals. | | | |
| 3.25 | D 9 | | | | | | (4.85) | | |
| 3.50 - 3.95 | SPTS | N=15 (2,2/4,3,4,4) | 1.50 | dry | | | | | |
| 3.50 - 3.95 | D 10 | | | | | | | | |
| 4.25 | D 11 | | | | | | | | |
| 4.50 - 4.95 | U 12 | 17 blows 100% rec | 1.50 | dry | | | | | |
| 5.00 | D 13 | | | | | | | | |
| 5.50 | D 14 | | | | | | | | |
| | | | | | | | 5.70 +12.10 | | |
| | | | | | Stiff fissured grey CLAY with occasional partings of grey silt. Fissures are randomly orientated, closed and clean. (LONDON CLAY FORMATION) | | | | |
| 6.00 - 6.45 | SPTS | N=16 (2,2/3,4,4,5) | 1.50 | dry | | | | | |
| 6.00 - 6.45 | D 15 | | | | | | | | |
| 7.00 | D 16 | | | | | | | | |
| 7.50 - 7.95 | U 17 | 21 blows 100% rec | 1.50 | dry | | | | | |
| | | | 08/12/15 | 1800 | | | | | |
| | | | 1.50 | dry | | | | | |
| 8.00 | D 18 | | | | | 8.00 Occasional burrows (up to 2mm Ø) infilled with grey silt. | | | |
| | | | 09/12/15 | 0800 | | | | | |
| | | | 1.50 | dry | | | | | |
| 8.50 | D 19 | | | | | | | | |
| 9.00 - 9.45 | SPTS | N=25 (2,4/6,6,6,7) | 1.50 | dry | | 9.00-13.00 Silty. | | | |
| 9.00 | D 20 | | | | | | | | |
| | | | | | Hole continues on next sheet | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH7

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 17.80 mOD |
| **Logged** | CM | 08/12/2015 | Dando 2000 | 0.00 | 22.75 | 200 | 1.50 | **Coordinates (m)** | E 529858.15 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 30.36m. | 22.75 | 30.00 | 150 | 26.00 | **National Grid** | N 183177.61 |
| **Approved** | SW | 15/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 10.00 | D 21 | | | | | | | | |
| 10.50 - 10.95 | U 22 | 31 blows 100% rec | 1.50 | dry | | | | | |
| 11.00 | D 23 | | | | | | | | |
| 11.50 | D 24 | | | | | | | | |
| 12.00 - 12.45 | SPTS | N=27 (2,3/6,7,7,7) | 1.50 | dry | | | | | |
| 12.00 - 12.45 | D 25 | | | | | | | | |
| | | | 09/12/15 | 1800 | | | (13.30) | | |
| | | | 1.50 | dry | | | | | |
| | | | 14/12/15 | 0800 | | | | | |
| | | | 1.50 | dry | | | | | |
| 13.00 | D 26 | | | | | | | | |
| 13.50 - 13.95 | U 27 | 34 blows 100% rec | 1.50 | dry | | | | | |
| 14.00 | D 28 | | | | | | | | |
| 14.50 | D 29 | | | | | | | | |
| 15.00 - 15.45 | SPTS | N=26 (2,3/6,6,7,7) | 1.50 | dry | | | | | |
| 15.00 - 15.45 | D 30 | | | | | | | | |
| 16.00 | D 31 | | | | | | | | |
| 16.50 - 16.95 | U 32 | 29 blows 100% rec | 1.50 | dry | | | | | |
| 17.00 | D 33 | | | | | | | | |
| 17.50 | D 34 | | | | | | | | |
| 18.00 - 18.45 | SPTS | N=31 (3,3/7,8,8,8) | 1.50 | dry | | | | | |
| 18.00 - 18.45 | D 35 | | | | | | | | |
| 19.00 | D 36 | | | | Very stiff brown light bluish grey mottled silty CLAY. (LAMBETH GROUP) | | 19.00 -1.20 | | |
| 19.50 - 19.95 | U 37 | 40 blows 100% rec | 1.50 | dry | | | (1.50) | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH7

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 17.80 mOD |
| **Logged** | CM | 08/12/2015 | Dando 2000 | 0.00 | 22.75 | 200 | 1.50 | **Coordinates (m)** | E 529858.15 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 30.36m. | 22.75 | 30.00 | 150 | 26.00 | **National Grid** | N 183177.61 |
| **Approved** | SW | 15/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 20.00 | D 38 | | | | | | | | |
| 20.50 | D 39 | | | | Very stiff reddish brown and bluish grey mottled silty CLAY. (LAMBETH GROUP) | | 20.50 -2.70 (1.50) | | |
| 21.00 - 21.45 | SPTS | N=40 (3,3/6,10,11,13) | 1.50 | dry | | | | | |
| 21.00 - 21.45 | D 40 | | | | | | | | |
| 22.00 | D 41 | | | | Very stiff fissured grey with occasional light bluish grey mottling CLAY. Fissures are randomly orientated, closed and clean. (LAMBETH GROUP) | | 22.00 -4.20 (0.25) 22.25 -4.45 | | |
| 22.50 - 22.70 | U 42 | 67 blows 100% rec | 1.50 | dry | Light bluish grey very silty SAND. Sand is fine. (LAMBETH GROUP) | | | | |
| 22.75 | D 43 | | | | | | | | |
| 22.75 - 23.80 | B 44 | | | | | | (1.75) | | |
| 24.00 - 24.45 | SPTS | N=49 (2,3/7,11,14,17) | 1.50 | damp | Very stiff bluish grey CLAY. (LAMBETH GROUP) | | 24.00 -6.20 | | |
| 24.00 - 24.45 | D 45 | | | | | | | | |
| | | | 14/12/15 1.50 | 1800 damp | | | | | |
| | | | 15/12/15 24.00 | 0800 damp | | | (1.00) | | |
| 25.00 | D 46 | | | | Very stiff dark grey sandy CLAY. Sand is fine. (LAMBETH GROUP) | | 25.00 -7.20 | | |
| 25.30 | D 47 | | | | | | (0.50) | | |
| 25.50 - 25.95 | SPTS | N=49 (7,8/10,10,14,15) | 24.00 | 25.50 | Dense dark grey clayey SAND. Sand is fine. (LAMBETH GROUP) | | 25.50 -7.70 | | |
| 25.50 | D 48 | | | | | | (1.00) | | |
| 26.50 | D 49 | | | | Very stiff reddish brown and bluish grey mottled CLAY with occasional orange silt lenses. (LAMBETH GROUP) | | 26.50 -8.70 | | |
| 27.00 - 27.44 | SPTS | 50 (3,6/9,14,15,12 for 67mm) | 26.00 | dry | | | | | |
| 27.00 | D 50 | | | | | | | | |
| 28.00 | D 51 | | | | | | (3.00) | | |
| 28.50 - 28.88 | SPTS | 51 (4,7/12,14,25,0 for 0mm) | 26.00 | dry | | | | | |
| 28.50 | D 52 | | | | | | | | |
| 29.50 | D 53 | | | | Very stiff brown silty CLAY. (LAMBETH GROUP) | | 29.50 -11.70 | | |
| | | | | | | | (0.86) | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|
| 1 | 22.75 | Rose to 21.90 m after 20 minutes. | 24.00 |
| 2 | 25.30 | Rose to 21.80 m after 20 minutes. | 26.00 |

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** BH7

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 17.80 mOD |
| **Logged** | CM | 08/12/2015 | Dando 2000 | 0.00 | 22.75 | 200 | 1.50 | **Coordinates (m)** | E 529858.15 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Cable percussive boring from 1.20m to 30.36m. | 22.75 | 30.00 | 150 | 26.00 | **National Grid** | N 183177.61 |
| **Approved** | SW | 15/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 30.00 - 30.36<br>30.00 | SPTS<br>D 54 | 50 (7,10/11,17,22 for 62mm) | 26.00<br>15/12/15<br>26.00 | dry<br>1800<br>dry | END OF EXPLORATORY HOLE | | 30.36 -12.56 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH7**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.51 mOD |
| **Logged** | EP | 03/12/2015 | Pilcon | 0.00 | 1.00 | 200 | 1.00 | **Coordinates (m)** | E 529857.74 |
| **Checked** | MM | **End** | CP | 1.00 | 24.00 | 150 | 2.50 | **National Grid** | N 183145.70 |
| **Approved** | SW | 04/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | 03/12/15 0800<br>0.00 | (MADE GROUND) Brick and concrete. (Driller's description) | | (1.30) | | |
| 1.50 - 1.95<br>1.50 | SPTS<br>D 5 | N=9 (1,1/2,2,2,3) | 1.00 | Firm brown silty CLAY with occasional light blue gleying and occasional partings of orange brown silt. (LONDON CLAY FORMATION) | | 1.30 +17.21 | | |
| 2.00 | ES 6 | | | | | (1.70) | | |
| 2.25 | D 7 | | | | | | | |
| 2.50 - 2.95 | U 8 | 17 blows 100% rec | | | | | | |
| 2.95 - 3.00 | D 9 | | | | | 3.00 +15.51 | | |
| 3.25 | D 10 | | | Stiff brown fissured CLAY with occasional selenite crystals. Fissures are extremely to very closely spaced, randomly orientated and closed with gleying on surfaces. Occasional partings of orange brown silt. (LONDON CLAY FORMATION) | | | | |
| 3.50 - 3.95<br>3.50 - 3.95 | SPTS<br>D 11 | N=16 (1,2/3,4,4,5) | 2.50 | | | | | |
| 4.25 | D 12 | | | | | | | |
| 4.50 - 4.95 | U 13 | 17 blows 100% rec | | | | | | |
| 4.95 - 5.00 | D 14 | | | | | (4.00) | | |
| 5.50 | D 15 | | | | | | | |
| 6.00 - 6.45<br>6.00 - 6.50 | SPTS<br>D 16 | N=17 (1,2/3,4,4,6) | 2.50 | | | | | |
| 7.00 | D 17 | | | Stiff dark grey CLAY with thin laminae of grey silt and occasional fine gravel sized mudstone nodules. (LONDON CLAY FORMATION) | | 7.00 +11.51 | | |
| 7.45 - 7.95 | U 18 | | | | | (1.00) | | |
| 7.95 - 8.00 | D 19 | | | Stiff dark grey fissured CLAY. Fissures are close, clean and randomly orientated. (LONDON CLAY FORMATION) | | 8.00 +10.51 | | |
| 8.50 | D 20 | | | | | (0.50) | | |
| 9.00 - 9.45<br>9.00 - 9.45 | SPTS<br>D 21 | N=22 (2,4/4,6,6,6) | 2.50 | Stiff dark grey silty CLAY with numerous partings of dark grey SILT and occasional burrows (>2mm) infilled with grey silt. (LONDON CLAY FORMATION) | | 8.50 +10.01 | | |
| | | | 03/12/15 1800<br>2.50 dry | | | | | |
| | | | 04/12/15 0800<br>2.50 dry | | | | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH8**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.51 mOD |
| **Logged** | EP | 03/12/2015 | Pilcon | 0.00 | 1.00 | 200 | 1.00 | **Coordinates (m)** | E 529857.74 |
| **Checked** | MM | **End** | CP | 1.00 | 24.00 | 150 | 2.50 | **National Grid** | N 183145.70 |
| **Approved** | SW | 04/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| 10.00 | D 22 | | | | | | | |
| 10.50 | U 23 | 29 blows 100% rec | | | | (4.50) | | |
| 10.95 - 11.00 | D 24 | | | | | | | |
| 11.50 | D 25 | | | | | | | |
| 12.00 - 12.45 | SPTS | N=25 (2,4/4,6,7,8) | 2.50 | | | | | |
| 12.00 - 12.45 | D 26 | | | | | | | |
| 13.00 | D 27 | | | Stiff to very stiff dark grey silty CLAY with numerous partings of dark grey silt. (LONDON CLAY FORMATION) | | 13.00 +5.51 | | |
| 13.50 - 13.95 | U 28 | 31 blows 100% rec | | | | | | |
| 13.95 - 30.00 | D 29 | | | | | | | |
| 14.50 | D 30 | | | | | | | |
| 15.00 - 15.45 | SPTS | N=22 (2,3/5,5,6,6) | 2.50 | | | | | |
| 15.00 - 15.45 | D 31 | | | | | | | |
| 16.00 | D 32 | | | | | (6.30) | | |
| 16.50 - 16.95 | U 33 | 33 blows 1000% rec | | | | | | |
| 16.95 - 17.00 | D 34 | | | | | | | |
| 17.50 | D 35 | | | | | | | |
| 18.00 - 18.45 | SPTS | N=25 (2,4/5,6,7,7) | 2.50 | | | | | |
| 18.00 - 18.45 | D 36 | | | | | | | |
| 19.30 | D 37 | | | Very stiff brown mottled bluish grey silty CLAY. (LAMBETH GROUP) | | 19.30 -0.79 | | |
| 19.50 - 19.95 | U 38 | 41 blows 100% rec | | | | | | |
| 19.95 - 20.00 | D 39 | | | | | | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH8**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.51 mOD |
| **Logged** | EP | 03/12/2015 | Pilcon | 0.00 | 1.00 | 200 | 1.00 | **Coordinates (m)** | E 529857.74 |
| **Checked** | MM | **End** | CP | 1.00 | 24.00 | 150 | 2.50 | **National Grid** | N 183145.70 |
| **Approved** | SW | 04/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | | | | (1.70) | | |
| 20.50 | D 40 | | | | | | | |
| 21.00 - 21.45 | SPTS | N=37 (2,3/7,9,10,11) | 2.50 | Very stiff brown, red and bluish grey mottled silty CLAY. (LAMBETH GROUP) | | 21.00 -2.49 | | |
| 21.00 - 21.45 | D 41 | | | | | | | |
| 22.00 | D 42 | | | | | | | |
| | | | | | | (2.70) | | |
| 22.50 - 22.95 | U 43 | 62 blows 100% rec | | | | | | |
| 22.95 - 23.00 | D 44 | | | | | | | |
| 23.50 | D 45 | | | | | | | |
| | | | 04/12/15 1800<br>2.50 dry | Very stiff brown with light bluish grey mottling silty CLAY with fine and medium gravel sized calcareous mudstone nodules. (LAMBETH GROUP) | | 23.70 -5.19<br>(0.30) | | |
| 24.00 - 24.23 | SPTS | 28 (6,13/17,11 for 0mm) | ~~2.50~~ | | | 24.00 -5.49 | | |
| 24.00 - 24.30 | D 46 | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH8**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.77 mOD |
| **Logged** | EP | 18/12/2015 | Dando 2000 | 0.00 | 25.00 | 200 | 3.30 | **Coordinates (m)** | E 529872.85 |
| **Checked** | MM | **End** | Hand dug pit to 1.00m, Cable percussion drilling from 1.00m to 25m. | | | | | **National Grid** | N 183126.44 |
| **Approved** | SW | 22/12/2015 | | | | | | | |

## Samples and Tests

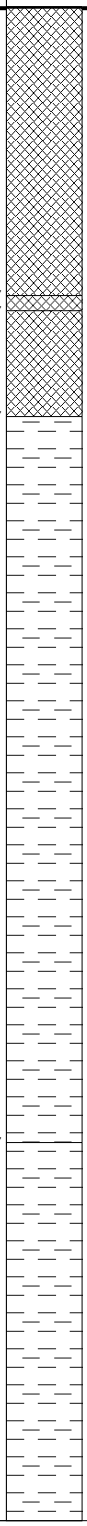
| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| | | | 18/12/15 | 0800 |
| | | | 0.00 | |
| | | | 18/12/15 | 1800 |
| | | | 0.00 | Dry |
| 1.20 - 1.50 | B 5 | | | |
| | | | 21/12/15 | 0800 |
| | | | 0.00 | Dry |
| 1.50 - 1.95 | SPTS | N=43 (3,14/14,9,13,7) | | |
| 1.50 - 1.95 | D 6 | | | |
| 2.00 - 2.40 | B 7 | | | |
| 2.40 - 2.70 | B 8 | | | |
| 2.70 | D 9 | | | |
| 2.70 - 3.50 | B 10 | | | |
| | | | 21/12/15 | 1800 |
| | | | 3.30 | Dry |
| 3.50 - 3.95 | U 11 | 14 blows 100% rec | 3.20 | Dry |
| | | | 22/12/15 | 0800 |
| | | | 3.30 | Dry |
| 4.00 | D 12 | | | |
| 4.25 | D 13 | | | |
| 4.50 - 4.95 | SPTS | N=14 (1,2/2,3,4,5) | 3.20 | |
| 4.50 - 4.95 | D 14 | | | |
| 5.50 | D 15 | | | |
| 6.00 - 6.45 | U 16 | 22 blows 100% rec | 3.20 | Dry |
| 7.00 | D 17 | | | |
| 7.10 - 7.40 | D 18 | | | |
| 7.50 - 7.95 | SPTS | N=16 (1,2/3,3,5,5) | 3.20 | |
| 7.50 - 7.95 | D 19 | | | |
| 8.50 | D 20 | | | |
| 9.00 - 9.45 | U 21 | 20 blows 100% rec | 3.20 | Dry |
| 9.50 | D 22 | | | |

## Strata Description

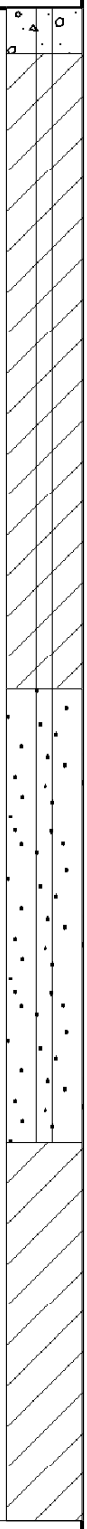
| Main | Detail | Depth, Level (Thickness) |
|---|---|---|
| (MADE GROUND) Brick concrete and flagstones (Driller's description) | | (1.90) |
| WOOD (Driller's description) | | 1.90 (0.10) +16.87<br>2.00 +16.77 |
| (MADE GROUND) Brown sandy clayey GRAVEL with high cobble content. Gravel is subangular to angular fine to coarse of brick and concrete. Cobbles are of concrete and brick. | | (0.70) |
| Firm becoming stiff brown CLAY with rare pockets of orange fine sand. (LONDON CLAY FORMATION) | | 2.70 +16.07 |
| | | (4.80) |
| | 7.10-7.40 Very weak to weak dark grey claystone. | |
| Stiff brownish grey CLAY with rare silt infilled burrows. (LONDON CLAY FORMATION) | | 7.50 +11.27 |
| | | (3.00) |

Hole continues on next sheet

**Legend**



**Backfill**



Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|
| 1 | 2.10 | Rose to 1.90 m after 20 minutes. Fast | 2.70 |
| 2 | 7.10 | Seepage | |

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|
| 1.00 - 1.20 | 90 | Chisel |
| 1.20 - 2.10 | 420 | Chisel |
| 7.10 - 7.40 | 45 | Chisel |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH9**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.77 mOD |
| **Logged** | EP | 18/12/2015 | Dando 2000<br>Hand dug pit to 1.00m, Cable percussion drilling from 1.00m to 25m. | 0.00 | 25.00 | 200 | 3.30 | **Coordinates (m)** | E 529872.85 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183126.44 |
| **Approved** | SW | 22/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 10.00 | D 23 | | | | | | | | |
| 10.50 - 10.95 | SPTS | N=20 (2,2/4,5,5,6) | 3.20 | | Stiff to very stiff brownish grey silty CLAY with rare light grey silt infilled burrows.<br>(LONDON CLAY FORMATION) | | 10.50 +8.27 | | |
| 10.50 - 10.95 | D 24 | | | | | | | | |
| 11.50 | D 25 | | | | | | | | |
| 12.00 - 12.45 | U 26 | 24 blows 100% rec | 3.20 | Dry | | | | | |
| 12.50 | D 27 | | | | | | | | |
| 13.00 | D 28 | | | | | | | | |
| 13.50 - 13.95 | D 29 | | | | | | | | |
| 13.95 - 14.40 | SPTS | N=26 (2,4/6,6,7,7) | 3.20 | | | | | | |
| 14.50 | D 30 | | | | | | | | |
| 15.00 - 15.45 | U 31 | 28 blows 100% rec | 3.20 | Dry | | | (9.10) | | |
| 15.50 | D 32 | | | | | | | | |
| 16.00 | D 33 | | | | | | | | |
| 16.50 - 16.95 | SPTS | N=27 (3,5/6,7,7,7) | 3.20 | | | | | | |
| 16.50 - 16.95 | D 34 | | | | | | | | |
| 17.50 | D 35 | | | | | | | | |
| 18.00 - 18.45 | U 36 | 35 blows 100% rec | 3.20 | Dry | | | | | |
| 18.50 | D 37 | | | | | | | | |
| 19.00 | D 38 | | | | | | | | |
| 19.50 - 19.95 | SPTS | N=55 (5,7/9,14,16,16) | 3.20 | | | | | | |
| 19.50 - 19.95 | D 39 | | | | Very stiff brownish red mottled bluish grey CLAY.<br>(LAMBETH GROUP) | | 19.60 -0.83 | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH9**

# Borehole Log

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.77 mOD |
| **Logged** | EP | 18/12/2015 | Dando 2000<br>Hand dug pit to 1.00m, Cable percussion drilling from 1.00m to 25m. | 0.00 | 25.00 | 200 | 3.30 | **Coordinates (m)** | E 529872.85 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183126.44 |
| **Approved** | SW | 22/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 20.50 | D 40 | | | | | | | | |
| 21.00 - 21.45 | U 41 | 41 blows 100% rec | 3.20 | Dry | | | | | |
| 21.50 | D 42 | | | | | | | | |
| 22.00 | D 43 | | | | | | (4.90) | | |
| 22.50 - 22.88<br>22.50 - 22.95 | SPTS<br>D 44 | 50 (4,7/10,18,22 for 75mm) | 3.20 | | | | | | |
| 23.50 | D 45 | | | | | | | | |
| 24.00 - 24.35 | U 46 | 80 blows 77% rec | 3.20 | Dry | | | | | |
| 24.40 | D 47 | | | | | | | | |
| | | | | | Very stiff brown mottled bluish grey gravelly CLAY. Gravel is subangular to angular fine to coarse of calcrete. (LAMBETH GROUP) | | 24.50 -5.73 | | |
| | | | 22/12/15<br>3.30 | 1800<br>Dry | | | (0.50) | | |
| 25.00 | D 48 | | | | END OF EXPLORATORY HOLE | | 25.00 -6.23 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH9**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.57 mOD |
| **Logged** | EP | 04/01/2016 | Dando 2000 | 0.00 | 30.30 | 200 | 2.80 | **Coordinates (m)** | E 529881.14 |
| **Checked** | MM | **End** | Hand dug pit to 1.20m, Cable percussion drilling from 1.20m to 30.30m. | | | | | **National Grid** | N 183138.30 |
| **Approved** | SW | 06/01/2016 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | 04/01/16 | 0800 Dry | (MADE GROUND) Dark brown clayey sandy GRAVEL with high cobble content. Gravel is subangular to angular fine to coarse of brick and concrete. Sand is fine to coarse. Cobbles are angular of concrete. | | (1.40) | | |
| 1.40 | D 5 | | | | | | 1.40 +17.17 | | |
| 1.50 - 1.95 | SPTS | N=18 (2,2/4,4,5,5) | 0.00 | Dry | (MADE GROUND) Firm to stiff brown mottled orange slightly gravelly CLAY. Gravel is angular to subangular fine to coarse of flint and brick. Occasional wood fragments (Driller notes occasional sleepers). Slight hydrocarbon odour. | | (0.85) | | |
| 1.50 - 1.95 | D 6 | | | | | | | | |
| | | | 04/01/16 | 1800 | | | | | |
| | | | 2.25 | Dry | | | | | |
| 2.25 | D 7 | | | | | | 2.25 +16.32 | | |
| | | | 05/01/16 | 0800 | Firm to stiff brown mottled grey CLAY. (LONDON CLAY FORMATION). | | | | |
| 2.50 - 2.95 | U 8 | 27 blows 100% rec | 2.25 | Dry | | | | | |
| | | | 2.80 | Dry | | | | | |
| 3.00 | D 9 | | | | | 3.00-3.05 Weak light brown claystone. | | | |
| 3.25 | D 10 | | | | | | | | |
| 3.50 - 3.95 | SPTS | N=14 (1,2/3,3,4,4) | 2.80 | Dry | | | (2.75) | | |
| 3.50 - 3.95 | D 11 | | | | | 3.70-3.75 Weak light brown claystone. | | | |
| 4.25 | D 12 | | | | | | | | |
| 4.50 - 4.95 | U 13 | 20 blows 100% rec | 2.80 | Dry | | | | | |
| 5.00 | D 14 | | | | Stiff brown mottled orange CLAY with fine sand partings and rare fine gravel sized gypsum crystals. (LONDON CLAY FORMATION). | | 5.00 +13.57 | | |
| 5.50 | D 15 | | | | | | (1.00) | | |
| 6.00 - 6.45 | SPTS | N=16 (1,2/3,4,4,5) | 2.80 | Dry | Stiff to very stiff dark greyish brown CLAY with rare grey silt infilled burrows (<1mm x 4mm) and rare fine gravel sized pockets of black silt. (LONDON CLAY FORMATION). | | 6.00 +12.57 | | |
| 6.00 - 6.45 | D 16 | | | | | | | | |
| 7.00 | D 17 | | | | | | | | |
| 7.50 - 7.95 | U 18 | 22 blows 100% rec | 2.80 | Dry | | | | | |
| 8.00 | D 19 | | | | | | | | |
| 8.50 | D 20 | | | | | | | | |
| 9.00 - 9.45 | SPTS | N=19 (2,3/4,5,5,5) | 2.80 | Dry | | | | | |
| 9.00 - 9.45 | D 21 | | | | | | (7.70) | | |

Hole continues on next sheet

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH10**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.57 mOD |
| **Logged** | EP | 04/01/2016 | Dando 2000<br>Hand dug pit to 1.20m, Cable percussion drilling from 1.20m to 30.30m. | 0.00 | 30.30 | 200 | 2.80 | **Coordinates (m)** | E 529881.14 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183138.30 |
| **Approved** | SW | 06/01/2016 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 10.00 | D 22 | | | | | | | | |
| 10.50 - 10.95 | U 23 | 25 blows 100% rec | 2.80 | Dry | | | | | |
| 11.00 | D 24 | | | | | | | | |
| 11.50 | D 25 | | | | | | | | |
| 12.00 - 12.45 | SPTS | N=24 (2,5/5,6,6,7) | 2.80 | Dry | | | | | |
| 12.00 - 12.45 | D 26 | | | | | | | | |
| 13.00 | D 27 | | | | | | | | |
| 13.50 - 13.95 | U 28 | 28 blows 100% rec | 2.80 | Dry | | | | | |
| | | | | | Very stiff dark brownish grey silty CLAY with rare grey silt infilled burrows (<1mm x 4mm). (LONDON CLAY FORMATION) | | 13.70 +4.87 | | |
| 14.00 | D 29 | | | | | | | | |
| 14.50 | D 30 | | | | | | | | |
| 15.00 - 15.45 | SPTS | N=28 (2,3/5,6,8,9) | 2.80 | Dry | | | | | |
| 15.00 - 15.45 | D 31 | | | | | | | | |
| 16.00 | D 32 | | | | | | | | |
| 16.50 - 16.95 | U 33 | 30 blows | 2.80 | Dry | | | | | |
| | | | | | | | (6.10) | | |
| 17.00 | D 34 | | | | | | | | |
| 17.50 | D 35 | | | | | | | | |
| 18.00 - 18.45 | SPTS | N=36 (3,5/6,9,10,11) | 2.80 | Dry | | | | | |
| 18.00 - 18.45 | D 36 | | | | | | | | |
| 19.00 | D 37 | | | | | | | | |
| 19.50 - 19.95 | U 38 | 32 blows | 2.80 | Dry | | | | | |
| | | | | | Very stiff becoming hard brownish red mottled | | 19.80 -1.23 | | |
| | | | | | Hole continues on next sheet | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH10**

# Borehole Log

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.57 mOD |
| **Logged** | EP | 04/01/2016 | Dando 2000 | 0.00 | 30.30 | 200 | 2.80 | **Coordinates (m)** | E 529881.14 |
| **Checked** | MM | **End** | Hand dug pit to 1.20m, Cable percussion drilling from 1.20m to 30.30m. | | | | | **National Grid** | N 183138.30 |
| **Approved** | SW | 06/01/2016 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Casing | Time / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 20.00 | D 39 | | | | bluish grey CLAY. (LAMBETH GROUP) | | | | |
| 20.50 | D 40 | | | | | | | | |
| 21.00 - 21.45 | SPTS | N=31 (4,4/6,7,9,9) | 2.80 | Dry | | | | | |
| 21.00 - 21.45 | D 41 | | | | | | | | |
| 22.00 | D 42 | | | | | | | | |
| 22.50 - 22.95 | U 43 | 47 blows | 2.80 | Dry | | | | | |
| 23.00 | D 44 | | | | | | | | |
| 23.50 | D 45 | | | | | | | | |
| 24.00 - 24.45 | SPTS | N=45 (4,8/10,10,11,14) | 2.80 | Dry | | | | | |
| 24.00 - 24.45 | D 46 | | | | | | | | |
| | | | 05/01/16 | 1800 | | | | | |
| | | | 2.80 | Dry | | | | | |
| 25.00 | D 47 | | | | | | (10.50) | | |
| | | | 06/01/16 | 0800 | | | | | |
| | | | 2.80 | Dry | | | | | |
| 25.50 - 25.95 | U 48 | 41 blows | 2.80 | Dry | | | | | |
| 26.00 | D 49 | | | | | | | | |
| 26.50 | D 50 | | | | | | | | |
| 27.00 - 27.45 | SPTS | N=47 (3,5/8,10,12,17) | 2.80 | Dry | | | | | |
| 27.00 - 27.45 | D 51 | | | | | | | | |
| 28.00 | D 52 | | | | | | | | |
| 28.50 - 28.95 | U 53 | 53 blows | 2.80 | Dry | | | | | |
| 29.00 | D 54 | | | | | | | | |
| 29.50 | D 55 | | | | | | | | |
| | | | | | Hole continues on next sheet | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH10**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.57 mOD |
| **Logged** | EP | 04/01/2016 | Dando 2000<br>Hand dug pit to 1.20m, Cable percussion drilling from 1.20m to 30.30m. | 0.00 | 30.30 | 200 | 2.80 | **Coordinates (m)** | E 529881.14 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183138.30 |
| **Approved** | SW | 06/01/2016 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | 06/01/16 1800<br>2.80 Dry | | | | | |
| 30.30 - 30.69<br>30.30 | SPTS<br>D 56 | 50 (5,8/12,16,16,6 for 19mm) | 2.80 Dry | END OF EXPLORATORY HOLE | | 30.30 -11.73 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**BH10**

# Trial Pit Log

| | | | | | |
|---|---|---|---|---|---|
| **Logged** TO<br>**Checked** MM<br>**Approved** SW | **Start**<br>24/11/2015<br>**End**<br>24/11/2015 | **Equipment, Methods and Remarks**<br>JCB 3CX<br>Machine excavated trial pit from GL to 2.20m.<br>Terminated at 2.20m due to concrete obstruction. | **Dimension and Orientation**<br>Width 0.80 m<br>Length 2.00 m<br>A D B C<br>56 (Deg) | **Ground Level** 19.66 mOD<br>**Coordinates (m)** E 529825.13<br>**National Grid** N 183181.90 | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|
| | | | (TOPSOIL)<br>Brown slightly clayey slightly gravelly fine to coarse SAND with occasional rootlets. Gravel is angular to subangular, fine to coarse of brick, flint and sandstone. | | (0.30) | | |
| 0.30<br>0.30 - 1.30 | ES1<br>B4 | 4 samples taken | (MADE GROUND) Brown gravelly fine to coarse SAND with medium cobble content and occasional boulders. Gravel is angular to subangular, fine to coarse of flint, brick, concrete and sandstone. Cobbles are angular of brick and concrete. Boulders are angular of concrete. Occasional metal and wood fragments. | | 0.30 +19.36 | | |
| 0.50<br>0.50 | D5<br>ES2 | 4 samples taken | | | | | |
| 1.00<br>1.00 | D6<br>ES3 | 4 samples taken | | | | | |
| 1.30 - 1.80 | B9 | | | | (1.90) | | |
| 1.50<br>1.50 | D8<br>ES7 | 4 samples taken | | | | | |
| 2.00 | D10 | | | | | | |
| 2.20 | D11 | | END OF EXPLORATORY HOLE | | 2.20 +17.46 | | |

Groundwater Entries
No. Depth Strike (m) Remarks

Remarks
Depths (m) Remarks

**Stability** Stable
**Shoring** None
**Weather** Dry

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:25



Project **Central Somers Town, London**
Project No. **D5061-15**
Carried out for **London Borough of Camden**

**Borehole**
**TP4**
Sheet 1 of 1

# Trial Pit Log

| | | | | | |
|---|---|---|---|---|---|
| **Logged** TO<br>**Checked** MM<br>**Approved** SW | **Start**<br>24/11/2015<br>**End**<br>24/11/2015 | **Equipment, Methods and Remarks**<br>JCB 3CX<br>Machine excavated trial pit from GL to 1.80m.<br>Trial pit terminated at 1.80m due to concrete obstruction. | **Dimension and Orientation**<br>Width 0.70 m<br>Length 2.20 m<br>A / D / B / C<br>76 (Deg) | **Ground Level** 19.52 mOD<br>**Coordinates (m)** E 529862.48<br>**National Grid** N 183128.37 | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|
| | | | (TOPSOIL)<br>Brown slightly clayey fine to coarse SAND with occasional rootlets. | | (0.20) | | |
| | | | | | 0.20 +19.32 | | |
| 0.30<br>0.30 - 1.00 | ES1<br>B4 | 4 samples taken | (MADE GROUND) Brown sandy gravelly CLAY with medium cobble content and occasional boulders. Gravel is angular to subangular, fine to coarse of brick, concrete, flint and sandstone. Cobbles are angular of brick and concrete. Boulders are angular of concrete. Rare fragments of glass, metal (including reinforcement bars) and wood. | | | | |
| 0.50<br>0.50 | D5<br>ES2 | 4 samples taken | | | | | |
| 1.00<br>1.00 | D6<br>ES3 | 4 samples taken | | | (1.60) | | |
| 1.30 - 1.80 | B8 | | | | | | |
| 1.50<br>1.50 | D9<br>ES7 | 4 samples taken | | | | | |
| 1.80 | D10 | | END OF EXPLORATORY HOLE | | 1.80 +17.72 | | |

Groundwater Entries
No. Depth Strike (m) Remarks

Remarks
Depths (m) Remarks

**Stability** Stable
**Shoring** None
**Weather** Dry

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:25



Project **Central Somers Town, London**
Project No. **D5061-15**
Carried out for **London Borough of Camden**

**Borehole**
**TP5**
Sheet 1 of 1

# Trial Pit Log

| | | | | | |
|---|---|---|---|---|---|
| **Logged** TO<br>**Checked** MM<br>**Approved** SW | **Start**<br>03/12/2015<br>**End**<br>03/12/2015 | **Equipment, Methods and Remarks**<br>Hand tools<br>Hand excavated trial pit from GL to 0.30m.<br>Terminated at 0.30m due to concrete obstruction. | **Dimension and Orientation**<br>Width<br>Length<br>A D B C | **Ground Level** 21.06 mOD<br>**Coordinates (m)** E 529628.63<br>**National Grid** N 183162.04 | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|
| | | | (MADE GROUND)<br>CONCRETE SLAB. | | (0.10)<br>0.10 +20.96 | | |
| | | | (MADE GROUND) Brown slightly gravelly fine to coarse SAND. Gravel is angular to subrounded, fine to coarse of flint and sandstone. | | (0.20)<br>0.30 +20.76 | | |
| | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries
No. Depth Strike (m) Remarks

Remarks
Depths (m) Remarks

**Stability** Stable
**Shoring** N/A
**Weather** Cloudy

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:25



Project **Central Somers Town, London**
Project No. **D5061-15**
Carried out for **London Borough of Camden**

**Borehole**
**HP2**
Sheet 1 of 1

# Trial Pit Log

| | | | | | |
|---|---|---|---|---|---|
| **Logged** TO<br>**Checked** MM<br>**Approved** SW | **Start**<br>02/12/2015<br>**End**<br>02/12/2015 | **Equipment, Methods and Remarks**<br>Hand tools<br>Hand excavated trial pit from GL to 1.20m. | **Dimension and Orientation**<br>Width 0.40 m<br>Length 0.50 m<br>A / D / B / C<br>127 (Deg) | **Ground Level** 21.09 mOD<br>**Coordinates (m)** E 529670.66<br>**National Grid** N 183187.92 | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|
| | | | (MADE GROUND)<br>CONCRETE SLAB. | | (0.10)<br>0.10 +20.99 | | |
| | | | (MADE GROUND) Brown gravelly fine to coarse SAND with low cobble content. Gravel is angular to subangular, fine to coarse of brick and concrete. Cobbles are angular of brick. | | (1.10) | | |
| | | | END OF EXPLORATORY HOLE | | 1.20 +19.89 | | |

Groundwater Entries
No. Depth Strike (m) Remarks

Remarks
Depths (m) Remarks

**Stability** Stable
**Shoring** None
**Weather** Sunny

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:25



Project **Central Somers Town, London**
Project No. **D5061-15**
Carried out for **London Borough of Camden**

**Borehole**
**HP3**
Sheet 1 of 1

# Borehole Log

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | BM/AM | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.11 mOD |
| **Logged** | EP | 24/11/2015 | Hand tools | 0.00 | 0.30 | 283 | | **Coordinates (m)** | E 529661.28 |
| **Checked** | MM | **End** | Hand dug inspection pit from GL to 0.30m. | | | | | **National Grid** | N 183180.07 |
| **Approved** | SW | 24/11/2015 | Hole terminated at 0.30m due to limits of the breaker. | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +21.01 | | |
| | | | | Strong grey CONCRETE. 70% matrix. 30% flint aggregate. | | (0.20) | | |
| | | | | END OF EXPLORATORY HOLE | | 0.30 +20.81 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS2**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GV | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.15 mOD |
| **Logged** | TO | 24/11/2015 | Hand dug inspection pit from GL to1.20m. Window sampling from 1.20m to 4.20m. | 1.20 | 2.20 | 101 | | **Coordinates (m)** | E 529679.72 |
| **Checked** | MM | **End** | Hole terminated at 4.20m during SPT due to refusal. | 2.20 | 4.20 | 87 | | **National Grid** | N 183184.48 |
| **Approved** | SW | 24/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | CONCRETE. | | 0.10 (0.10) +21.05 | | |
| 0.30 | ES 1 | | | | (MADE GROUND) | | | | |
| 0.30 - 1.20 | B 4 | 4 samples taken | | | Brown sandy angular to subangular, fine to coarse GRAVEL of flint, brick and concrete with low cobble content. Frequent pieces of wood and porcelain. Sand is fine to coarse. Cobbles are angular of brick. | | (0.60) | | |
| 0.50 | ES 2 | 4 samples taken | | | | | 0.70 +20.45 | | |
| 1.00 | ES 3 | 4 samples taken | | | (MADE GROUND) | | (0.50) | | |
| 1.20 - 1.65 | SPTS | N=5 (0,0/1,1,2,1) | | | Brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular, fine to coarse of brick, concrete and flint. | | 1.20 +19.95 | | |
| 1.20 | D 5 | | | | (MADE GROUND) | | | | |
| 1.50 | D 6 | | | | Brown slightly sandy gravelly CLAY. Sand is fine to medium, gravel is angular to subangular, fine to medium of brick and flint. | | | | |
| 2.00 | ES 7 | 4 samples taken | | | | | | | |
| 2.00 | D 8 | | | | | | | | |
| 2.20 - 2.65 | SPTS | N=9 (2,0/1,2,3,3) | | | | | | | |
| 2.50 | D 9 | | | | | | (3.00) | | |
| 3.00 | ES 10 | 4 samples taken | | | | | | | |
| 3.20 - 3.65 | SPTS | N=9 (2,2/2,2,2,3) | | | | | | | |
| 3.50 | D 11 | | | | | | | | |
| 4.20 - 4.65 | SPTS | N=30 (10,13/15,15,,) | | | END OF EXPLORATORY HOLE | | 4.20 +16.95 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|
| 1.20 - 2.00 | 0.60m recovery |
| 2.00 - 3.00 | 0.50m recovery |
| 3.00 - 4.00 | 0.40m recovery |

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS3**

# Borehole Log

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.17 mOD |
| **Logged** | TO | 25/11/2015 | Hand dug inspection pit from GL to1.20m. Window sampling from 1.20m to 7.65m. | 1.20 | 3.20 | 101 | | **Coordinates (m)** | E 529633.40 |
| **Checked** | MM | **End** | | 3.20 | 5.20 | 87 | | **National Grid** | N 183144.21 |
| **Approved** | SW | 25/11/2015 | | 5.20 | 6.20 | 77 | | | |
| | | | | 6.20 | 7.20 | 67 | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | | | |
| 0.30 - 1.20 | B 4 | 4 samples taken | | |
| 0.50 | ES 2 | 4 samples taken | | |
| 1.00 | ES 3 | 4 samples taken | | |
| 1.20 - 1.65 | SPTS | 1.20-2.00 0.70m recovery. | | |
| 1.20 | D 5 | N=4 (0,0/0,1,1,2) | | |
| 1.50 | ES 7 | | | |
| 1.50 | D 6 | 4 samples taken | | |
| 2.00 | D 8 | 2.00-3.00 0.70m recovery. | | |
| 2.20 - 2.65 | SPTS | N=7 (0,1/2,1,2,2) | | |
| 2.50 | D 9 | | | |
| 3.00 | D 10 | 3.00-4.00 0.60m recovery. | | |
| 3.20 - 3.65 | SPTS | N=10 (2,2/2,2,3,3) | | |
| 3.50 | D 11 | | | |
| 4.00 | D 12 | 4.00-5.00 0.80m recovery. | | |
| 4.20 - 4.65 | SPTS | N=31 (7,7/6,8,7,10) | | |
| 4.50 | D 13 | | | |
| 5.00 | D 14 | 5.00-6.00 0.70m recovery. | | |
| 5.20 - 5.65 | SPTS | N=38 (8,9/9,8,10,11) | | |
| 5.50 | D 15 | | | |
| 6.00 | D 16 | 6.00-7.00 0.60m recovery. | | |
| 6.20 - 6.65 | SPTS | N=38 (9,9/10,11,9,8) | | |
| 6.50 | D 17 | | | |
| 7.00 | D 18 | | | |
| 7.20 - 7.65 | SPTS | N=37 (8,10/9,9,9,10) | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) |
|---|---|---|
| (MADE GROUND)<br>Grass over brown slightly clayey fine to coarse SAND with occasional rootlets. | | (0.20)<br>0.20 +20.97 |
| (MADE GROUND)<br>Brown gravelly fine to coarse SAND with low cobble content. Gravel is angular to subangular, fine to coarse of brick, concrete and flint. Cobbles are angular of brick. | | (1.00) |
| Firm becoming stiff brown mottled grey silty CLAY. (LONDON CLAY FORMATION) | | 1.20 +19.97<br>(2.30) |
| Stiff brown mottled grey silty CLAY with occasional angular to subangular, fine to coarse gravel of siltstone. (LONDON CLAY FORMATION) | | 3.50 +17.67<br>(4.15) |
| END OF EXPLORATORY HOLE | | 7.65 +13.52 |

**Legend**

**Backfill**

1

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|
| 1 | 4.75 | | |

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS4**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.68 mOD |
| **Logged** | TO | 25/11/2015 | Hand dug inspection pit from GL to1.20m. Window sampling from 1.20m to 4.20m. | 1.20 | 2.20 | 101 | | **Coordinates (m)** | E 529660.10 |
| **Checked** | MM | **End** | | 2.20 | 4.20 | 87 | | **National Grid** | N 183153.09 |
| **Approved** | SW | 25/11/2015 | | 4.20 | 6.20 | 77 | | | |
| | | | | 6.20 | 7.20 | 67 | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | | | |
| 0.30 - 1.20 | B 4 | 4 samples taken | | |
| 0.50 | ES 2 | 4 samples taken | | |
| 1.00 | ES 3 | 4 samples taken | | |
| 1.20 - 1.65 | SPTS | N=4 (0,0/1,1,1,1) | | |
| 1.20 | D 5 | | | |
| 1.60 | ES 7 | | | |
| 1.60 | D 6 | 4 samples taken | | |
| 2.00 | D 8 | | | |
| 2.20 - 2.65 | SPTS | N=8 (0,1/2,2,2,2) | | |
| 2.50 | D 9 | | | |
| 3.00 | D 10 | | | |
| 3.20 - 3.65 | SPTS | N=13 (1,1/3,3,3,4) | | |
| 3.50 | D 11 | | | |
| 4.00 | D 12 | | | |
| 4.20 - 4.65 | SPTS | N=16 (2,2/3,4,4,5) | | |
| 4.50 | D 13 | | | |
| 5.00 | D 14 | | | |
| 5.20 - 5.65 | SPTS | N=18 (2,3/4,5,4,5) | | |
| 5.50 | D 15 | | | |
| 6.00 | D 16 | | | |
| 6.20 - 6.65 | SPTS | N=18 (3,3/5,4,4,5) | | |
| 6.50 | D 17 | | | |
| 7.00 | D 18 | | | |
| 7.20 - 7.65 | SPTS | N=24 (4,3/6,5,6,7) | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| Grass over TOPSOIL. | | 0.10 (0.10) +20.58 | | |
| (MADE GROUND) Brown slightly clayey slightly gravelly fine to coarse SAND with occasional rootlets. Gravel is angular to subangular, fine to coarse of brick, flint and concrete. | | 0.30 (0.20) +20.38 | | |
| (MADE GROUND) Brown slightly sandy gravelly CLAY with low cobble content. Gravel is angular to subangular, fine to coarse of brick, concrete and flint. Sand is fine to medium. Cobbles are angular of brick and concrete. | | 1.20 (0.90) +19.48 | | |
| (MADE GROUND) Brown mottled grey slightly gravelly silty CLAY. Gravel is angular to subangular, fine to coarse of brick and concrete. | | 1.60 (0.40) +19.08 | | |
| Firm locally stiff brown mottled grey silty CLAY. (LONDON CLAY FORMATION) | | 3.00 (1.40) +17.68 | | |
| Stiff brown mottled grey CLAY. (LONDON CLAY FORMATION) | | 7.65 (4.65) +13.03 | | |
| END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS5**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.72 mOD |
| **Logged** | TO | 25/11/2015 | Hand excavated inspection pit from GL to 1.20m. Window sampling from 1.20m to 2.20m. | | | | | **Coordinates (m)** | E 529674.16 |
| **Checked** | MM | **End** | Terminated at 2.20m due to concrete obstruction. | | | | | **National Grid** | N 183157.31 |
| **Approved** | SW | 25/11/2015 | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | | | |
| 0.30 - 1.20 | B 4 | 4 samples taken | | |
| 0.50 | ES 2 | 4 samples taken | | |
| 1.00 | ES 3 | 4 samples taken | | |
| 1.20 | D 5 | | | |
| 1.50 | D 6 | | | |
| 1.80 | ES 7 | 4 samples taken | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| Grass over TOPSOIL. | | (0.20) 0.20 +20.52 | | |
| (MADE GROUND) Brown mottled grey sandy gravelly CLAY with low cobble content. Gravel is angular to subangular, fine to coarse of brick, flint and concrete with occasional pieces of metal and glass. Sand is fine to medium. Cobbles are angular of brick and concrete. | | (0.60) 0.80 +19.92 | | |
| (MADE GROUND) Light brown mottled grey sandy GRAVEL with medium cobble content. Gravel is angular to subangular, fine of brick and concrete. Sand is fine to coarse. Cobbles are angular of brick. | | (0.40) 1.20 +19.52 | | |
| (MADE GROUND) Brown sandy GRAVEL. Gravel is angular, fine to coarse of brick and concrete. Sand is fine to coarse. | | (1.00) | | |
| END OF EXPLORATORY HOLE | | 2.20 +18.52 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|
| 1.00 - 2.00 | 0.70m recovery |

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS6**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.16 mOD |
| **Logged** | TO | 23/11/2015 | Hand tools<br>Hand dug inspection pit from GL to 0.50m.<br>Hole terminated at 0.50m due to asbestos. | | | | | **Coordinates (m)** | E 529691.40 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183166.57 |
| **Approved** | SW | 23/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Grass over TOPSOIL. | | 0.10 (0.10) +21.06 | | |
| 0.30 | ES 1 | 4 samples taken | | | (MADE GROUND)<br>Brown gravelly fine to coarse SAND with occasional asbestos fragments. Gravel is angular to subangular, fine to coarse of brick, concrete, flint, metal and glass. | | (0.40) | | |
| 0.50 | ES 2 | 4 samples taken | | | | | 0.50 +20.66 | | |
| | | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS7**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.16 mOD |
| **Logged** | TO | 23/11/2015 | Hand tools<br>Hand dug inspection pit from GL to 0.57m.<br>Hole terminated at 0.57m due to asbestos. | | | | | **Coordinates (m)** | E 529691.40 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183166.57 |
| **Approved** | SW | 23/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Grass over TOPSOIL. | | 0.10 (0.10) +21.06 | | |
| 0.30 | ES 1 | 4 samples taken | | | (MADE GROUND)<br>Brown gravelly fine to coarse SAND with occasional asbestos. Gravel is angular to subangular, fine to coarse of brick, concrete, flint, metal and glass. | | (0.47) | | |
| 0.50 | ES 2 | 4 samples taken | | | | | 0.57 +20.60 | | |
| | | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS7B**

# Borehole Log

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.20 mOD |
| **Logged** | TP | 03/12/2015 | Hand excavated inspection pit from GL to 1.20m. Window sampling from 1.20m to 7.65m. | 1.20 | 2.20 | 101 | | **Coordinates (m)** | E 529643.14 |
| **Checked** | MM | **End** | | 2.20 | 5.20 | 87 | | **National Grid** | N 183114.37 |
| **Approved** | SW | 03/12/2015 | | 5.20 | 7.65 | 77 | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | | | |
| 0.30 - 1.20 | B 4 | 4 samples taken | | |
| 0.50 | ES 2 | 4 samples taken | | |
| 1.00 | ES 3 | 4 samples taken | | |
| 1.20 - 1.65 | SPTS | 1.20-2.00 0.64m recovery | | |
| 1.20 | D 5 | N=9 (0,3/3,2,2,2) | | |
| 1.50 | ES 7 | | | |
| 1.50 | D 6 | 4 samples taken | | |
| 2.00 | D 8 | 2.00-3.00 0.90m recovery | | |
| 2.20 - 2.65 | SPTS | N=4 (0,0/2,2,0,0) | | |
| 2.60 | D 10 | | | |
| 2.60 | ES 9 | 4 samples taken | | |
| 3.00 | D 11 | 3.00-4.00 0.90m recovery | | |
| 3.20 - 3.65 | SPTS | N=11 (2,2/2,3,3,3) | | |
| 3.50 | D 12 | | | |
| 4.00 | D 13 | 4.00-5.00 0.90m recovery | | |
| 4.20 - 4.65 | SPTS | N=16 (2,2/3,4,4,5) | | |
| 4.50 | D 14 | | | |
| 5.00 | D 15 | 5.00-6.00 0.90m recovery | | |
| 5.20 - 5.65 | SPTS | N=17 (2,3/4,4,4,5) | | |
| 5.50 | D 16 | | | |
| 6.00 | D 17 | 6.00-7.00 0.80m recovery | | |
| 6.20 - 6.65 | SPTS | N=19 (3,3/4,4,5,6) | | |
| 6.50 | D 18 | | | |
| 7.00 | D 19 | | | |
| 7.20 - 7.65 | SPTS | N=21 (4,3/5,4,6,6) | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) |
|---|---|---|
| (MADE GROUND)<br>MACADAM. | | 0.10 (0.10) +21.10 |
| (MADE GROUND)<br>Brown slightly sandy gravelly CLAY with low cobble content. Gravel is angular to subangular, fine to coarse of brick, concrete and sandstone. Sand is fine to medium. Occasional pieces of metal and glass. Cobbles are angular of concrete. | | (0.50)<br>0.60 +20.60 |
| (MADE GROUND)<br>Light yellowish brown slightly gravelly SAND with low cobble content. Sand is fine to coarse. Gravel is angular to subangular, fine to coarse of brick and concrete. Cobbles are angular of brick and concrete. | | (0.40)<br>1.00 +20.20 |
| (MADE GROUND)<br>Loose dark brown slightly clayey gravelly fine to coarse SAND. Gravel is angular to subangular, fine to coarse of brick, concrete and sandstone. | | (1.50) |
| Firm becoming stiff brown mottled grey slightly sandy CLAY. Sand is fine to medium.<br>(LONDON CLAY FORMATION) | | 2.50 +18.70 |
| END OF EXPLORATORY HOLE | | (5.15)<br>7.65 +13.55 |

**Legend**

**Backfill**

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| **Depths (m)** | **Remarks** |

| Hard Boring | | |
|---|---|---|
| **Depths (m)** | **Duration (mins)** | **Tools used** |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS8**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.05 mOD |
| **Logged** | TO | 23/11/2015 | Hand tools<br>Hand dug inspection pit from GL to 0.47m.<br>Hole terminated at 0.47m due to asbestos. | | | | | **Coordinates (m)** | E 529692.04 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183147.17 |
| **Approved** | SW | 23/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Grass over TOPSOIL. | | 0.10 (0.10) +20.95 | | |
| 0.30 | ES 1 | 4 samples taken | | | (MADE GROUND)<br>Brown slightly clayey gravelly fine to coarse SAND with occasional asbestos fragments.<br>Gravel is angular to subangular, fine to coarse of brick, concrete, flint, wood and glass. | | (0.37) | | |
| | | | | | END OF EXPLORATORY HOLE | | 0.47 +20.58 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS9**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.14 mOD |
| **Logged** | TO | 23/11/2015 | Hand tools<br>Hand dug inspection pit from GL to 0.50m.<br>Hole terminated at 0.50m due to concrete obstruction. | | | | | **Coordinates (m)** | E 529688.52 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183138.69 |
| **Approved** | SW | 23/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Grass over TOPSOIL. | | 0.10 (0.10) +21.04 | | |
| 0.30 | ES 1 | 4 samples taken | | | (MADE GROUND)<br>Brown gravelly fine to coarse SAND with occasional metal fragments. Gravel is angular to subangular, fine to coarse of brick, concrete and flint. | | (0.40) | | |
| 0.50 | ES 2 | 4 samples taken | | | | | 0.50 +20.64 | | |
| | | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS9A**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 21.16 mOD |
| **Logged** | TO | 24/11/2015 | Hand dug inspection pit from GL to 1.20m. Window sampling from 1.20m to 1.65m. | 1.20 | 1.50 | 101 | | **Coordinates (m)** | E 529688.51 |
| **Checked** | MM | **End** | Hole terminated during SPT due to refusal. | | | | | **National Grid** | N 183138.97 |
| **Approved** | SW | 24/11/2015 | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | | | |
| 0.30 - 1.20 | B 4 | 4 samples taken | | |
| 0.50 | ES 2 | | | |
| 1.00 | ES 3 | 4 samples taken | | |
| 1.20 - 1.65 | SPTS | N=3 (0,0/0,1,1,1) | | |
| 1.20 | D 5 | | | |
| 1.40 | D 6 | | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| Grass over TOPSOIL. | | 0.10 (0.10) +21.06 | | |
| (MADE GROUND) Brown slightly clayey gravelly fine to coarse SAND with low cobble content. Gravel is angular to subangular, fine to coarse of brick, concrete and flint. Cobbles are angular of brick. | | (0.30) 0.40 +20.76 | | |
| (MADE GROUND) Brown mottled grey slightly sandy gravelly CLAY with low cobble content. Gravel is angular to subangular, fine to coarse of brick, concrete, flint and sandstone. Sand is fine to medium. Cobbles are angular of brick. | | (1.25) | | |
| END OF EXPLORATORY HOLE | | 1.65 +19.51 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|
| 1.20 - 1.50 | 0.15m recovery. |

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS9B**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | JW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.27 mOD |
| **Logged** | EP | 05/12/2015 | Hand excavated inspection pit from GL to 0.20m. | | | | | **Coordinates (m)** | E 529698.52 |
| **Checked** | MM | **End** | Terminated at 0.20m due to probable asbestos. | | | | | **National Grid** | N 183203.05 |
| **Approved** | SW | 05/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.17 | | |
| | | | | (MADE GROUND) Dark brown sandy GRAVEL with high cobble content. Gravel is angular to subangular, fine to coarse of brick, macadam and concrete. Sand is fine to coarse. Possible asbestos material observed. | | 0.20 (0.10) +20.07 | | |
| | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| | |
|---|---|
| **Project** | **Central Somers Town, London** |
| **Project No.** | **D5061-15** |
| **Carried out for** | **London Borough of Camden** |

**Borehole**

**WS10**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | BW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | | 20.27 mOD |
| **Logged** | EP | 09/12/2015 | Hand excavated inspection pit from GL to 1.20m. Window sampling from 1.20m to 4.65m. | 1.20 | 3.20 | 101 | | **Coordinates (m)** | | E 529698.52 |
| **Checked** | MM | **End** | Terminated at 4.6m due to collapse of hole. | 3.20 | 4.20 | 87 | | **National Grid** | | N 183203.05 |
| **Approved** | SW | 09/12/2015 | | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.20 | ES 1 | 4 samples taken | | |
| 0.70 | ES 2 | 4 samples taken | | |
| 1.20 - 1.65 | SPTS | N=4 (0,0/0,1,1,2) | | |
| 1.20 | D 3 | | | |
| 1.90 | D 4 | | | |
| 2.00 | D 5 | | | |
| 2.20 - 2.65 | SPTS | N=11 (1,2/2,3,3,3) | | |
| 2.50 | ES 6 | 4 samples taken | | |
| 3.00 | D 7 | | | |
| 3.20 - 3.65 | SPTS | N=13 (1,3/2,3,4,4) | | |
| 3.50 | D 8 | | | |
| 4.00 | D 9 | | | |
| 4.20 - 4.65 | SPTS | N=34 (5,5/7,10,8,9) | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.17 | | |
| (MADE GROUND) Brown slightly clayey becoming clayey sandy GRAVEL with occasional cobbles. Gravel is angular to subrounded, fine to coarse of brick, macadam and flint. Sand is fine to coarse. | | (0.70) | | |
| Firm becoming stiff brown mottled bluish grey CLAY. (LONDON CLAY FORMATION) | | 0.80 +19.47 | | |
| | | (3.85) | | |
| END OF EXPLORATORY HOLE | | 4.65 +15.62 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS10A**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | JW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.12 mOD |
| **Logged** | EP | 05/12/2015 | Hand excavated inspection pit from GL to 0.40m. | | | | | **Coordinates (m)** | E 529717.88 |
| **Checked** | MM | **End** | Terminated at 0.40m due to service. | | | | | **National Grid** | N 183219.30 |
| **Approved** | SW | 05/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.02 | | |
| | | | | (MADE GROUND) Dark brown sandy GRAVEL with high cobble content. Gravel is angular to subangular, fine to coarse of brick and macadam. Sand is fine to coarse. Possible asbestos material observed. | | (0.30) | | |
| | | | | END OF EXPLORATORY HOLE | | 0.40 +19.72 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS11**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | JW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.12 mOD |
| **Logged** | EP | 05/12/2015 | Hand excavated inspection pit from GL to 0.50m. | | | | | **Coordinates (m)** | E 529717.88 |
| **Checked** | MM | **End** | Terminated at 0.50m due to possible asbestos. | | | | | **National Grid** | N 183219.30 |
| **Approved** | SW | 05/12/2015 | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.02 | | |
| (MADE GROUND) Dark brown sandy GRAVEL with high cobble content. Gravel is angular to subrounded, fine to coarse of brick and macadam. Sand is fine to coarse. | | (0.40) | | |
| END OF EXPLORATORY HOLE | | 0.50 +19.62 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS11A**

# Borehole Log

| Drilled | | Start | Equipment, Methods and Remarks | Depth from (m) | to (m) | Diameter (mm) | Casing Depth (m) | Ground Level | 20.12 mOD |
|---|---|---|---|---|---|---|---|---|---|
| Logged | EP | 09/12/2015 | | | | | | Coordinates (m) | E 529717.88 |
| Checked | MM | End | Hand excavated inspection pit from GL to 0.20m. Terminated at 0.20m due to inability to break out. | | | | | National Grid | N 183219.30 |
| Approved | SW | 09/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.02 | | |
| | | | | | (MADE GROUND) Dark brown GRAVEL with occasional cobbles. Gravel is angular to subangular, fine to coarse of brick and macadam. | | 0.20 (0.10) +19.92 | | |
| | | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| Project | Central Somers Town, London |
|---|---|
| Project No. | D5061-15 |
| Carried out for | London Borough of Camden |

Borehole

**WS11B**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | BW/AM | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.20 mOD |
| **Logged** | EP | 21/11/2015 | Hand tools | | | | | **Coordinates (m)** | E 529730.27 |
| **Checked** | MM | **End** | Hand dug inspection pit from GL to 0.20m. | | | | | **National Grid** | N 183233.82 |
| **Approved** | SW | 21/11/2015 | Hole terminated at 0.20m due to asbestos. | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| 0.20 | D 1 | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.10 | | |
| | | | | (MADE GROUND) Dark brown to black sandy angular to subrounded, fine to coarse GRAVEL of brick, macadam and probable asbestos with high cobble content. Cobbles are angular of brick. | | 0.20 (0.10) +20.00 | | |
| | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole** WS12

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | BW/AM | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.20 mOD |
| **Logged** | EP | 21/11/2015 | Hand tools | | | | | **Coordinates (m)** | E 529730.27 |
| **Checked** | MM | **End** | Hand dug inspection pit from GL to 0.20m. | | | | | **National Grid** | N 183233.82 |
| **Approved** | SW | 21/11/2015 | Hole terminated at 0.20m due to asbestos. | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 0.20 | D 1 | | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.10 | | |
| | | | | | (MADE GROUND) Dark brown to black sandy angular to subrounded GRAVEL of brick, macadam and probable asbestos with high cobble content. Cobbles are angular of brick. | | 0.20 (0.10) +20.00 | | |
| | | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS12A**

# Borehole Log

| Drilled | | Start | Equipment, Methods and Remarks | Depth from (m) | to (m) | Diameter (mm) | Casing Depth (m) | Ground Level | 20.32 mOD |
|---|---|---|---|---|---|---|---|---|---|
| Logged | EP | 05/12/2015 | | | | | | Coordinates (m) | E 529706.96 |
| Checked | MM | End | Hand excavated inspection pit from GL to 0.20m. Terminated at 0.20m due to possible asbestos. | | | | | National Grid | N 183186.22 |
| Approved | SW | 05/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (MADE GROUND) Cobble paving. | | 0.10 (0.10) +20.22 | | |
| | | | | | (MADE GROUND) Dark brown sandy GRAVEL with high cobble content. Gravel is angular to subrounded, fine to coarse of brick. Sand is fine to coarse. | | 0.20 (0.10) +20.12 | | |
| | | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| Project | Central Somers Town, London |
|---|---|
| Project No. | D5061-15 |
| Carried out for | London Borough of Camden |

Borehole

**WS13**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | BW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.32 mOD |
| **Logged** | EP | 08/12/2015 | Hand excavated inspection pit from GL to 0.85m. | | | | | **Coordinates (m)** | E 529706.96 |
| **Checked** | MM | **End** | Terminated at 0.85m due to concrete obstruction. | | | | | **National Grid** | N 183186.22 |
| **Approved** | SW | 08/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | | (MADE GROUND) Cobble paving. | | 0.10 (0.10) +20.22 | | |
| 0.50 - 0.80 | B 1 | | | (MADE GROUND) Dark brown sandy GRAVEL with high cobble content. Gravel is angular to subangular, fine to coarse of brick and concrete. Sand is fine to coarse. Possible asbestos material observed. | | (0.75) | | |
| | | | | END OF EXPLORATORY HOLE | | 0.85 +19.47 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS13A**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | JW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.27 mOD |
| **Logged** | EP | 05/12/2015 | Hand excavated inspection pit from GL to 0.80m. | | | | | **Coordinates (m)** | E 529738.05 |
| **Checked** | MM | **End** | Terminated at 0.70m due to void and collapse of hole. | | | | | **National Grid** | N 183205.94 |
| **Approved** | SW | 05/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.18 | | |
| | | | | | (MADE GROUND) Brown COBBLES with some angular to subangular fine to coarse GRAVEL of brick and macadam. | | (0.60) | | |
| | | | | | END OF EXPLORATORY HOLE | | 0.70 +19.58 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS14**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | JW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.24 mOD |
| **Logged** | EP | 05/12/2015 | Hand excavated inspection pit from GL to 0.40m. | | | | | **Coordinates (m)** | E 529739.68 |
| **Checked** | MM | **End** | Terminated at 0.40m due to brick obstruction. | | | | | **National Grid** | N 183208.18 |
| **Approved** | SW | 05/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.14 | | |
| | | | | (MADE GROUND) Dark brown sandy GRAVEL. Gravel is angular to subangular, fine to coarse of brick and macadam. Sand is fine to coarse. | | (0.30) | | |
| | | | | END OF EXPLORATORY HOLE | | 0.40 +19.84 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS14A**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | JW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.24 mOD |
| **Logged** | EP | 05/12/2015 | Hand excavated inspection pit from GL to 0.10m. | | | | | **Coordinates (m)** | E 529706.96 |
| **Checked** | MM | **End** | Terminated at 0.10m due to bitumen obstruction. | | | | | **National Grid** | N 183208.18 |
| **Approved** | SW | 05/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (MADE GROUND)<br>MACADAM. | | 0.10 (0.10) +20.14 | | |
| | | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| **Depths (m)** | **Remarks** |

| Hard Boring | | |
|---|---|---|
| **Depths (m)** | **Duration (mins)** | **Tools used** |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS14B**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | JW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.19 mOD |
| **Logged** | EP | 05/12/2015 | Hand excavated inspection pit from GL to .20m. | | | | | **Coordinates (m)** | E 529743.55 |
| **Checked** | MM | **End** | Terminated at 0.20m due to probable asbestos. | | | | | **National Grid** | N 183217.36 |
| **Approved** | SW | 05/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.09 | | |
| | | | | (MADE GROUND) Dark brown sandy GRAVEL. Gravel is angular to subangular, fine to coarse of brick. Sand is fine to coarse. | | 0.20 (0.10) +19.99 | | |
| | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS15**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.19 mOD |
| **Logged** | EP | 05/12/2015 | | | | | | **Coordinates (m)** | E 529743.55 |
| **Checked** | MM | **End** | Hand excavated inspection pit from GL to 1.20m. Window sampling from 1.20m to 7.00m. | | | | | **National Grid** | N 183217.36 |
| **Approved** | SW | 05/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.09 | | |
| 0.50 | D 2 | | | | (MADE GROUND) Dark brown gravelly SAND. Sand is fine to coarse. Gravel is angular to subrounded, fine to coarse of brick, macadam and concrete. Possible asbestos material observed. | | (0.70) | | |
| 0.50 | ES 1 | 4 samples taken | | | | | | | |
| 0.80 | D 4 | | | | | | 0.80 +19.39 | | |
| 0.80 | ES 3 | 4 samples taken | | | (MADE GROUND) Dark brown clayey sandy GRAVEL. Gravel is angular to subrounded, fine to coarse of brick, macadam and concrete. Sand is fine to coarse. | | | | |
| 1.20 | D 5 | | | | | | (1.40) | | |
| 1.90 | D 6 | | | | | | | | |
| 2.00 | D 7 | | | | | | | | |
| 2.20 | ES 8 | 4 samples taken | | | | | 2.20 +17.99 | | |
| | | | | | Firm becoming stiff brown mottled bluish grey CLAY. (LONDON CLAY FORMATION) | | | | |
| 3.00 | D 9 | | | | | | | | |
| 3.50 | D 10 | | | | | | | | |
| 4.00 | D 11 | | | | | | | | |
| 4.50 | D 12 | | | | | | (4.80) | | |
| 5.00 | D 13 | | | | | | | | |
| 6.00 | D 14 | | | | | | | | |
| 6.50 | D 15 | | | | | | | | |
| 7.00 | D 16 | | | | END OF EXPLORATORY HOLE | | 7.00 +13.19 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS15A**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | BW/AM | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 19.97 mOD |
| **Logged** | EP | 21/11/2015 | Hand tools | | | | | **Coordinates (m)** | E 529761.46 |
| **Checked** | MM | **End** | Hand dug inspection pit from GL to 0.65m. | | | | | **National Grid** | N 183226.15 |
| **Approved** | SW | 21/11/2015 | Hole terminated at 0.65m due to concrete obstruction. | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (MADE GROUND) MACADAM. | | 0.10 (0.10) +19.87 | | |
| 0.30 | ES 2 | | | | (MADE GROUND) Dark brown sandy angular to subrounded, fine to coarse GRAVEL of brick, macadam and concrete with high cobble content. Cobbles are angular of concrete and brick. | | (0.55) | | |
| 0.30 | D 1 | 4 samples taken | | | | | | | |
| 0.50 | ES 4 | | | | | | | | |
| 0.50 | D 3 | 4 samples taken | | | | | 0.65 +19.32 | | |
| | | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



03/05/2016 11:47:28

| | |
|---|---|
| **Project** | **Central Somers Town, London** |
| **Project No.** | **D5061-15** |
| **Carried out for** | **London Borough of Camden** |

**Borehole**

**WS16**

Sheet 1 of 1

# Borehole Log

| Drilled | | Start | Equipment, Methods and Remarks | Depth from (m) | to (m) | Diameter (mm) | Casing Depth (m) | Ground Level | 19.16 mOD |
|---|---|---|---|---|---|---|---|---|---|
| Logged | EP | 04/12/2015 | Hand dug inspection pit from GL to 0.10m. | | | | | Coordinates (m) | E 529725.48 |
| Checked | MM | End | Terminated at 0.10m due to probable asbestos. | | | | | National Grid | N 183155.68 |
| Approved | SW | 04/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (MADE GROUND) Dark brown gravelly SAND. Sand is fine to coarse. Gravel is angular to subrounded, fine to coarse of brick and flint. Possible asbestos material observed. | | 0.10 (0.10) +19.06 | | |
| | | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| Project | Central Somers Town, London |
|---|---|
| Project No. | D5061-15 |
| Carried out for | London Borough of Camden |

Borehole

**WS17**

Sheet 1 of 1

# Borehole Log

| Drilled | | Start | Equipment, Methods and Remarks | Depth from (m) | to (m) | Diameter (mm) | Casing Depth (m) | Ground Level | 19.15 mOD |
|---|---|---|---|---|---|---|---|---|---|
| Logged | EP | 04/12/2015 | | | | | | Coordinates (m) | E 529723.19 |
| Checked | MM | End | Hand excavated inspection pit from GL to 0.20m. Terminated at 0.20m due to probable asbestos. | | | | | National Grid | N 183155.68 |
| Approved | SW | 04/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (MADE GROUND) Dark brown gravelly SAND. Sand is fine to coarse. Gravel is angular to subrounded, fine to coarse of brick and flint. | | (0.20) 0.20 +18.95 | | |
| | | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| Project | Central Somers Town, London |
|---|---|
| Project No. | D5061-15 |
| Carried out for | London Borough of Camden |

Borehole

**WS17A**

# Borehole Log

| Drilled | | Start | Equipment, Methods and Remarks | Depth from (m) | to (m) | Diameter (mm) | Casing Depth (m) | Ground Level | 19.15 mOD |
|---|---|---|---|---|---|---|---|---|---|
| Logged | EP | 08/12/2015 | Hand excavated inspection pit from GL to 0.60m. | | | | | Coordinates (m) | E 529723.19 |
| Checked | MM | End | Terminated at 0.60m due to concrete obstruction. | | | | | National Grid | N 183155.68 |
| Approved | SW | 08/12/2015 | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| (MADE GROUND) Dark brown gravelly SAND. Sand is fine to coarse. Gravel is angular to subrounded, fine to coarse of brick and flint. Possible asbestos material observed. | | (0.60) 0.60 +18.55 | | |
| END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | | |
|---|---|---|---|
| Depths (m) | Duration (mins) | Tools used | |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| Project | Central Somers Town, London |
|---|---|
| Project No. | D5061-15 |
| Carried out for | London Borough of Camden |

Borehole

**WS17B**

# Borehole Log

| Drilled | | Start | Equipment, Methods and Remarks | Depth from (m) | to (m) | Diameter (mm) | Casing Depth (m) | Ground Level | 20.19 mOD |
|---|---|---|---|---|---|---|---|---|---|
| Logged | EP | 05/12/2015 | Hand excavated inspection pit from GL to 1.20m. Window sampling from 1.20m to 7.00m. | | | | | Coordinates (m) | E 529749.45 |
| Checked | DB | End | | | | | | National Grid | N 183194.12 |
| Approved | SW | 05/12/2015 | | | | | | | |

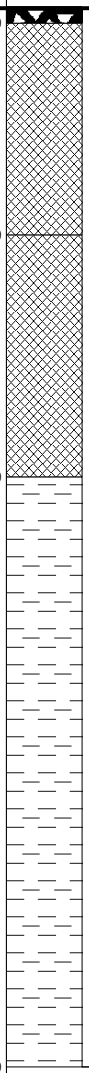
## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | 4 samples taken | | |
| 0.50 | ES 2 | 4 samples taken | | |
| 1.00 | ES 3 | 4 samples taken | | |
| 1.20 | D 4 | | | |
| 2.00 | D 5 | | | |
| 2.50 | ES 6 | 4 samples taken | | |
| 3.00 | D 7 | | | |
| 3.50 | ES 8 | 4 samples taken | | |
| 3.70 | D 9 | | | |
| 4.00 | D 10 | | | |
| 5.00 | D 11 | | | |
| 6.00 | D 12 | | | |
| 6.50 - 7.00 | B 13 | | | |
| 7.00 | D 14 | | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) |
|---|---|---|
| (MADE GROUND) MACADAM. | | 0.10 (0.10) +20.09 |
| (MADE GROUND) Brown sandy GRAVEL with high cobble content. Gravel is angular to subangular, fine to coarse of brick, macadam and concrete. Sand is fine to coarse. | | (1.40) |
| (MADE GROUND) Soft brown sandy gravelly CLAY. Gravel is angular to subangular, fine to coarse of brick and concrete. Sand is fine to coarse. | | 1.50 +18.69 (1.60) |
| Firm becoming stiff brown mottled grey CLAY. (LONDON CLAY FORMATION) | | 3.10 +17.09 (3.90) |
| END OF EXPLORATORY HOLE | | 7.00 +13.19 |

Legend



Backfill

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| Project | Central Somers Town, London |
|---|---|
| Project No. | D5061-15 |
| Carried out for | London Borough of Camden |

Borehole

**WS18**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.14 mOD |
| **Logged** | EP | 05/12/2015 | | | | | | **Coordinates (m)** | E 529772.47 |
| **Checked** | DB | **End** | Hand excavated inspection pit from GL to 1.20m. Window sampling from 1.20m to 7.00m. | | | | | **National Grid** | N 183184.66 |
| **Approved** | SW | 05/12/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (TOPSOIL)<br>Dark brown clayey SAND. Sand is fine to coarse. | | (0.20)<br>0.20 +19.94 | | |
| 0.50 | ES 1 | 4 samples taken | | | (MADE GROUND)<br>Dark brown slightly clayey gravelly SAND. Sand is fine to coarse. Gravel is angular to subrounded, fine to coarse of brick, concrete and flint. | | (0.40)<br>0.60 +19.55 | | |
| 0.80 | ES 2 | 4 samples taken | | | (MADE GROUND)<br>Light grey sandy GRAVEL. Gravel is angular to subrounded, fine to coarse of brick and flint. Sand is fine to coarse. | | (0.40)<br>1.00 +19.14 | | |
| 1.20 | D 3 | | | | (MADE GROUND)<br>Firm brown slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded, fine to coarse of flint and brick. Sand is fine to coarse. | | (1.50) | | |
| 1.50 | ES 4 | 4 samples taken | | | | | | | |
| 2.00 | D 5 | | | | | | | | |
| 2.50 | D 6 | | | | Firm to stiff brown mottled bluish grey CLAY.<br>(LONDON CLAY FORMATION) | | 2.50 +17.64 | | |
| 3.00 | D 7 | | | | | | | | |
| 3.50 | D 8 | | | | | | | | |
| 4.00 | D 9 | | | | | | | | |
| | | | | | | | (4.50) | | |
| 5.00 | D 10 | | | | | | | | |
| 6.00 | D 11 | | | | | | | | |
| 6.50 | D 12 | | | | | | | | |
| 7.00 | D 13 | | | | END OF EXPLORATORY HOLE | | 7.00 +13.14 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS19**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.47 mOD |
| **Logged** | | 30/11/2015 | | | | | | **Coordinates (m)** | E 529792.17 |
| **Checked** | DB | **End** | Hand dug inspection pit from GL to 0.80m. Terminated at 0.80m due to concrete obstruction. Strata not recorded. | | | | | **National Grid** | N 183217.52 |
| **Approved** | SW | 30/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Strata not recorded. | | (0.80) | | |
| | | | | | END OF EXPLORATORY HOLE | | 0.80 +17.67 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| **Depths (m)** | **Remarks** |

| Hard Boring | | |
|---|---|---|
| **Depths (m)** | **Duration (mins)** | **Tools used** |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS20**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.47 mOD |
| **Logged** | TO | 30/11/2015 | Hand excavated inspection pit from GL to 1.20m. Window sampling from 1.20m to 1.90m. | | | | | **Coordinates (m)** | E 529792.17 |
| **Checked** | MM | **End** | Terminated at 1.90m due to refusal | | | | | **National Grid** | N 183217.52 |
| **Approved** | SW | 30/11/2015 | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | | | |
| 0.30 - 1.20 | B 4 | 4 samples taken | | |
| 0.50 | ES 2 | 4 samples taken | | |
| 1.00 | ES 3 | 4 samples taken | | |
| 1.20 | D 5 | | | |
| 1.60 | D 6 | | | |
| 1.80 | ES 7 | 4 samples taken | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| Grass over TOPSOIL. | | 0.10 (0.10) +18.37 | | |
| (MADE GROUND) Brown slightly gravelly fine to coarse SAND with occasional rootlets. Gravel is angular to subangular, fine to coarse of brick and flint. | | 0.20 (0.10) +18.27 | | |
| (MADE GROUND) Brown gravelly fine to coarse SAND with low cobble content. Gravel is angular to subangular, fine to coarse brick, concrete and flint. Cobbles are angular of brick and concrete. | | (1.70) | | |
| END OF EXPLORATORY HOLE | | 1.90 +16.57 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|
| 1.20 - 1.90 | 0.70m recovery |

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS20A**

# Borehole Log

| Drilled | | Start | Equipment, Methods and Remarks | Depth from (m) | to (m) | Diameter (mm) | Casing Depth (m) | Ground Level | 18.10 mOD |
|---|---|---|---|---|---|---|---|---|---|
| Logged | CM | 30/11/2015 | Hand excavated inspection pit from GL to 0.50m. | | | | | Coordinates (m) | E 529809.66 |
| Checked | MM | End | Terminated at 0.50m due to concrete obstruction. | | | | | National Grid | N 183197.40 |
| Approved | SW | 30/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 0.30 | ES 1 | 4 samples taken | | | (TOPSOIL)<br>Dark brown organic sandy SILT with rootlets. | | (0.25)<br>0.25 +17.85 | | |
| | | | | | (MADE GROUND)<br>Dark brown gravelly sandy SILT with low cobble content. Gravel is angular, fine to coarse of brick, concrete and flint. Cobbles are angular of brick and concrete. | | (0.23)<br>0.48 (0.02) +17.68 | | |
| | | | | | (MADE GROUND)<br>Grey CONCRETE SLAB. | | | | |
| | | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| Project | Central Somers Town, London |
|---|---|
| Project No. | D5061-15 |
| Carried out for | London Borough of Camden |

Borehole

**WS21**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.10 mOD |
| **Logged** | CM | 30/11/2015 | Hand tools<br>Hand excavated inspection pit from GL to 0.55m.<br>Terminated at 0.55m due to concrete obstruction. | | | | | **Coordinates (m)** | E 529809.66 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183197.40 |
| **Approved** | SW | 30/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | | (TOPSOIL)<br>Dark brown sandy organic silty CLAY with rootlets. | | (0.25)<br>0.25 +17.85 | | |
| | | | | (MADE GROUND) Dark brown gravelly sandy SILT with low cobble content. Gravel is angular of brick and concrete. Cobbles are angular of brick and concrete. | 0.45 Granite sets (15mm x 15mm). | (0.25)<br>0.50 (0.05) +17.60<br>0.55 +17.55 | | |
| | | | | (MADE GROUND)<br>Medium strong grey CONCRETE. | | | | |
| | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS21A**

# Borehole Log

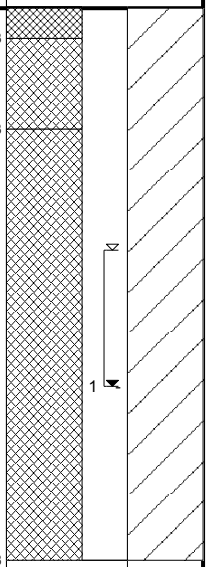
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 17.83 mOD |
| **Logged** | TO | 20/11/2015 | Hand dug inspection pit from GL to 1.20m. Window sampling from 1.20m to 3.65m. | 1.20 | 2.20 | 101 | | **Coordinates (m)** | E 529824.34 |
| **Checked** | MM | **End** | Hole terminated at 3.65m during SPT due to refusal. | 2.20 | 3.20 | 87 | | **National Grid** | N 183207.90 |
| **Approved** | SW | 20/11/2015 | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | | | |
| 0.30 - 1.20 | B 5 | 4 samples taken | | |
| 0.50 | ES 2 | | | |
| 1.00 | ES 3 | 4 samples taken | | |
| 1.20 - 1.65 | SPTS | N=8 (0,1/2,2,2,2) | | |
| 1.20 | D 6 | | | |
| 1.60 | D 7 | | | |
| 2.00 | D 8 | | | |
| 2.20 - 2.65 | SPTS | N=1 (0,0/0,1,0,0) | | |
| 2.40 | ES 4 | | | |
| 2.40 | D 9 | | | |
| 3.00 | D 10 | | | |
| 3.20 - 3.65 | SPTS | N=12 (20,7/4,3,3,2) | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) |
|---|---|---|
| (MADE GROUND) MACADAM. | | (0.20) 0.20 +17.63 |
| (MADE GROUND)<br>Brown gravelly fine to coarse SAND with low cobble content and occasional rootlets. Gravel is angular to subangular, fine to coarse of brick and concrete. Cobbles are angular of brick, flint and concrete. | | (0.60) 0.80 +17.03 |
| (MADE GROUND)<br>Soft to firm brown slightly sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is angular to subangular, fine to coarse of brick, flint and sandstone. | | (2.85) |
| END OF EXPLORATORY HOLE | | 3.65 +14.18 |




Legend: Backfill

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|
| 1 | 2.50 | Rose to 1.60 m after 20 minutes. | |

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|
| 1.20 - 2.00 | 0.70m recovery. |
| 2.00 - 3.20 | 0.60m recovery. |

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS22**

Sheet 1 of 1

# Borehole Log

| Drilled | | Start | Equipment, Methods and Remarks | Depth from (m) | to (m) | Diameter (mm) | Casing Depth (m) | Ground Level | 19.54 mOD |
|---|---|---|---|---|---|---|---|---|---|
| Logged | CM | 30/11/2015 | Hand excavated inspection pit from GL to 1.20m. Window sampling from 1.20m to 1.70m. | 1.20 | 1.70 | 87 | | Coordinates (m) | E 529825.24 |
| Checked | MM | End | Terminated at 1.70m due to refusal. | | | | | National Grid | N 183183.00 |
| Approved | SW | 30/11/2015 | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | | | |
| 0.30 - 0.90 | B 4 | 3 samples taken | | |
| 0.60 | ES 2 | 3 samples taken | | |
| 0.90 | ES 3 | 3 samples taken | | |
| 1.20 | D 5 | | | |
| 1.50 | D 6 | | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| (TOPSOIL)<br>Dark brown organic sandy CLAY with rootlets. | | (0.15)<br>0.15 +19.39 | | |
| (MADE GROUND)<br>Grey and brown gravelly sandy CLAY with low cobble content. Gravel is angular, fine to coarse of brick, concrete and occasional flint. Cobbles are angular, brick and concrete. | 0.80 Rare wood fragments. | (1.55) | | |
| END OF EXPLORATORY HOLE | | 1.70 +17.84 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| Project | Central Somers Town, London |
|---|---|
| Project No. | D5061-15 |
| Carried out for | London Borough of Camden |

Borehole

**WS23**

Sheet 1 of 1

# Borehole Log

| Drilled | | Start | Equipment, Methods and Remarks | Depth from (m) | to (m) | Diameter (mm) | Casing Depth (m) | Ground Level | 19.54 mOD |
|---|---|---|---|---|---|---|---|---|---|
| Logged | CM | 30/11/2015 | Hand excavated inspection pit from GL to 1.20m. Window sampling from 1.20m to 1.70m. | 1.20 | 1.70 | 87 | | Coordinates (m) | E 529825.24 |
| Checked | MM | End | Terminated at 1.70m due to refusal. | | | | | National Grid | N 183183.00 |
| Approved | SW | 30/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (TOPSOIL) Dark brown organic sandy CLAY with rootlets. | | (0.15) 0.15 +19.39 | | |
| 0.30 | ES 1 | | | | (MADE GROUND) Grey and brown gravelly sandy CLAY with low cobble content. Gravel is angular, fine to coarse of brick, concrete and occasional flint. Cobbles are angular, brick and concrete. | 0.80 Rare wood fragments. | (1.55) | | |
| 0.30 - 0.90 | B 4 | 3 samples taken | | | | | | | |
| 0.60 | ES 2 | 3 samples taken | | | | | | | |
| 0.90 | ES 3 | 3 samples taken | | | | | | | |
| 1.20 | D 5 | | | | | | | | |
| 1.50 | D 6 | | | | | | | | |
| | | | | | END OF EXPLORATORY HOLE | | 1.70 +17.84 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| Project | Central Somers Town, London |
|---|---|
| Project No. | D5061-15 |
| Carried out for | London Borough of Camden |

Borehole

**WS23**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.08 mOD |
| **Logged** | | 26/11/2015 | Hand excavated inspection pit from GL to 0.60m. | | | | | **Coordinates (m)** | E 529818.03 |
| **Checked** | DB | **End** | Terminated at 0.60m due to concrete obstruction. Strata not recorded. | | | | | **National Grid** | N 183165.71 |
| **Approved** | SW | 26/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Strata not recorded. | | (0.60) | | |
| | | | | | END OF EXPLORATORY HOLE | | 0.60 +19.48 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS24**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 19.97 mOD |
| **Logged** | | 26/11/2015 | | | | | | **Coordinates (m)** | E 529815.78 |
| **Checked** | DB | **End** | Hand excavated inspection pit from GL to 0.50m. Terminated at 0.50m due to concrete obstruction. Strata not recorded. | | | | | **National Grid** | N 183165.99 |
| **Approved** | SW | 26/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Strata not recorded. | | (0.50) | | |
| | | | | | END OF EXPLORATORY HOLE | | 0.50 +19.47 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| **Depths (m)** | **Remarks** |

| Hard Boring | | |
|---|---|---|
| **Depths (m)** | **Duration (mins)** | **Tools used** |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS24A**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | BW/AM | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 17.72 mOD |
| **Logged** | EP | 18/11/2015 | Hand Tools | | | | | **Coordinates (m)** | E 529853.72 |
| **Checked** | SW | **End** | Hand dug inspection pit from GL to 0.85m. | | | | | **National Grid** | N 183180.96 |
| **Approved** | SW | 18/11/2015 | Pit terminated at 0.85m due to concrete obstruction. | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | | (TOPSOIL)<br>Brown organic silty SAND with rootlets. | | 0.10 (0.10) +17.62 | | |
| | | | | (MADE GROUND)<br>Brown sandy GRAVEL with high cobble content.<br>Gravel and cobbles are of brick and concrete.<br>Occasional boulder sized concrete fragments. | | (0.75) | | |
| | | | | END OF EXPLORATORY HOLE | | 0.85 +16.87 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS25**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 17.72 mOD |
| **Logged** | TO | 18/11/2015 | Hand dug inspection pit from GL to 1.20m, window sampling from 1.20 to 2.65m. | 1.20 | 2.00 | 101 | | **Coordinates (m)** | E 529853.72 |
| **Checked** | MM | **End** | Hole terminated due to weather induced unsafe working conditions. | | | | | **National Grid** | N 183180.96 |
| **Approved** | SW | 18/11/2015 | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | | | |
| 0.30 - 1.20 | B 4 | 4 samples taken | | |
| 0.50 | ES 2 | | | |
| 1.00 | ES 3 | 4 samples taken | | |
| 1.20 - 1.65 | SPTS | N=23 (1,4/4,7,7,5) | | |
| 1.20 | D 5 | | | |
| 1.50 | D 6 | | | |
| 2.00 | D 7 | | | |
| 2.20 - 2.65 | SPTS | N=20 (2,3/3,5,5,7) | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| (MADE GROUND) Wood chippings. | | 0.10 (0.10) +17.62 | | |
| (MADE GROUND) Medium dense brown gravelly SAND with low cobble content. Gravel is angular to subangular, fine to coarse of concrete, brick and flint. Cobbles are angular of brick and concrete. | | (1.70) | | |
| Firm to stiff brown mottled grey silty CLAY. (LONDON CLAY FORMATION) | | 1.80 +15.92 | | |
| | | (0.85) | | |
| END OF EXPLORATORY HOLE | | 2.65 +15.07 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|
| 1.20 - 2.00 | 0.70m recovery. |

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS25A**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.89 mOD |
| **Logged** | | 27/11/2016 | Hand excavated inspection pit from GL to 0.60m. | | | | | **Coordinates (m)** | E 529840.34 |
| **Checked** | DB | **End** | Terminated at 0.60m due to concrete obstruction. Strata not recorded. | | | | | **National Grid** | N 183154.36 |
| **Approved** | SW | 27/11/2016 | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| Strata not recorded. | | (0.60) | | |
| END OF EXPLORATORY HOLE | | 0.60 +18.29 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS26**

# Borehole Log

| Drilled | | Start | Equipment, Methods and Remarks | Depth from (m) | to (m) | Diameter (mm) | Casing Depth (m) | Ground Level | 18.89 mOD |
|---|---|---|---|---|---|---|---|---|---|
| Logged | CM | 30/11/2015 | Hand excavated inspection pit from GL to 1.20m. Window sampling from 1.20m to 1.50m. | 1.20 | 1.50 | 87 | | Coordinates (m) | E 529840.34 |
| Checked | MM | End | | | | | | National Grid | N 183154.36 |
| Approved | SW | 30/11/2015 | | | | | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | | | |
| 0.30 - 0.90 | B 3 | 4 samples taken | | |
| 0.60 | ES 2 | 4 samples taken | | |
| 0.90 | ES 4 | 4 samples taken | | |
| 1.20 | D 6 | | | |
| 1.20 | ES 5 | 4 samples taken | | |
| 1.50 | D 7 | | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|
| (TOPSOIL)<br>Dark brown slightly sandy organic silty CLAY with rootlets. | 0.30 Boulder size concrete. | (0.20)<br>0.20 +18.69 | | |
| (MADE GROUND)<br>Dark brown slightly sandy CLAY with low cobble content. Sand is fine to coarse. Cobbles are angular of concrete and brick. | 0.90 Occasional oyster shells. | (1.30) | | |
| END OF EXPLORATORY HOLE | | 1.50 +17.39 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| Depths (m) | Remarks |

| Hard Boring | | |
|---|---|---|
| Depths (m) | Duration (mins) | Tools used |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



| Project | Central Somers Town, London |
|---|---|
| Project No. | D5061-15 |
| Carried out for | London Borough of Camden |

Borehole

**WS26A**

Sheet 1 of 1

# Borehole Log

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 20.19 mOD |
| **Logged** | TO | 17/11/2015 | Hand dug inspection pit from GL to1.20m. Window sampling from 1.20m to 7.20m. | 1.20 | 2.20 | 101 | | **Coordinates (m)** | E 529823.67 |
| **Checked** | MM | **End** | | 2.20 | 5.20 | 87 | | **National Grid** | N 183146.01 |
| **Approved** | SW | 17/11/2015 | | 5.20 | 7.20 | 77 | | | |

## Samples and Tests

| Depth | Type & No | Records | Date Casing | Time Water |
|---|---|---|---|---|
| 0.30 | ES 1 | | | |
| 0.30 - 1.20 | B 4 | 4 samples taken | | |
| 0.50 | ES 2 | 4 samples taken | | |
| 1.00 | ES 3 | 4 samples taken | | |
| 1.20 - 1.65 | SPTS | 1.20-2.00 0.58m recovery. | | |
| 1.20 | D 5 | N=11 (1,2/5,3,2,1) | | |
| 1.40 | D 6 | | | |
| 2.00 | D 7 | 2.00-3.00 0.80m recovery | | |
| 2.20 - 2.65 | SPTS | N=15 (3,3/3,3,4,5) | | |
| 2.50 | D 8 | | | |
| 3.00 | D 9 | 3.00-4.00 0.80m recovery. | | |
| 3.20 - 3.65 | SPTS | N=10 (1,2/2,2,3,3) | | |
| 3.50 | D 10 | | | |
| 4.00 | D 11 | 4.00-5.00 0.90m recovery. | | |
| 4.20 - 4.65 | SPTS | N=34 (6,7/7,9,10,8) | | |
| 4.20 | ES 4 | 4 samples taken | | |
| 4.60 | D 12 | | | |
| 5.00 | D 13 | 5.00-6.00 0.90m recovery. | | |
| 5.20 - 5.65 | SPTS | N=33 (8,7/8,9,7,9) | | |
| 5.50 | D 14 | | | |
| 6.00 | D 15 | 6.00-7.00 0.90m recovery. | | |
| 6.20 - 6.65 | SPTS | N=33 (8,6/9,8,9,7) | | |
| 6.60 | D 16 | | | |
| 7.00 | D 17 | | | |
| 7.20 - 7.65 | SPTS | N=34 (8,7/8,9,8,9) | | |

## Strata Description

| Main | Detail | Depth, Level (Thickness) |
|---|---|---|
| (MADE GROUND) Grass over brown slightly clayey fine to coarse SAND with occasional rootlets. | | (0.20) 0.20 +19.99 |
| (MADE GROUND) Brown slightly clayey slightly gravelly fine to coarse SAND. Gravel is angular to subangular, fine to coarse of brick and concrete. | | (1.00) |
| (MADE GROUND) Medium dense brown gravelly fine to coarse SAND with low cobble content. Gravel is angular to subangular, fine to coarse of brick and flint. Cobbles are angular of brick. | | 1.20 +18.99 (1.30) |
| (MADE GROUND) Brown slightly gravelly silty CLAY. Gravel is angular to subangular, fine to coarse of brick and flint. | | 2.50 +17.69 (0.50) |
| (MADE GROUND) Medium dense brown gravelly fine to coarse SAND. Gravel is angular to subangular, fine to coarse of brick and flint. | | 3.00 +17.19 (1.20) |
| Stiff brown mottled grey silty CLAY. (LONDON CLAY FORMATION) | | 4.20 +15.99 (3.45) |
| END OF EXPLORATORY HOLE | | 7.65 +12.54 |

**Legend**

**Backfill**

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

| Depth Related Remarks | |
|---|---|
| **Depths (m)** | **Remarks** |

| Hard Boring | | |
|---|---|---|
| **Depths (m)** | **Duration (mins)** | **Tools used** |

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS27**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 19.34 mOD |
| **Logged** | TO | 17/11/2015 | Hand dug inspection pit from GL to 1.20m. Window sampling from 1.20m to 1.60m. | 1.20 | 1.60 | 40 | | **Coordinates (m)** | E 529865.24 |
| **Checked** | MM | **End** | Hole terminated in SPT due to refusal. | | | | | **National Grid** | N 183129.88 |
| **Approved** | SW | 17/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date / Time Casing / Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|
| | | | | (MADE GROUND) Grass over brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is angular to subangular, fine to coarse of flint and brick. | | (0.30) 0.30 +19.05 | | |
| 0.30 | ES 1 | | | | | | | |
| 0.30 - 1.20 | B 4 | 4 samples taken | | | | | | |
| 0.50 | ES 2 | 4 samples taken | | | | (0.40) 0.70 +18.64 | | |
| | | | | (MADE GROUND) Brown gravelly clayey fine to coarse SAND with low cobble content. Gravel is angular to subangular, fine to coarse of brick, flint and concrete. Cobbles are angular of brick | | | | |
| 1.00 | ES 3 | 4 samples taken | | | | (0.90) | | |
| | | | | (MADE GROUND) Brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of brick and concrete. Cobbles are angular of brick. | | | | |
| 1.50 | D 5 | | | | | 1.60 +17.74 | | |
| | | | | END OF EXPLORATORY HOLE | | | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS28**

# Borehole Log

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drilled** | GW | **Start** | **Equipment, Methods and Remarks** | **Depth from (m)** | **to (m)** | **Diameter (mm)** | **Casing Depth (m)** | **Ground Level** | 18.37 mOD |
| **Logged** | TO | 16/11/2015 | Hand tools<br>Hand dug inspection pit from GL to 0.75m.<br>Pit moved to three near locations, terminated on a concrete obstruction. | | | | | **Coordinates (m)** | E 529881.66 |
| **Checked** | MM | **End** | | | | | | **National Grid** | N 183139.54 |
| **Approved** | SW | 16/11/2015 | | | | | | | |

## Samples and Tests

## Strata Description

| Depth | Type & No | Records | Date Casing | Time Water | Main | Detail | Depth, Level (Thickness) | Legend | Backfill |
|---|---|---|---|---|---|---|---|---|---|
| 0.30 | ES 1 | 4 samples taken | | | (MADE GROUND)<br>Brown gravelly fine to coarse SAND with medium cobble content and occasional pieces of metal. Gravel is angular to subangular, fine to coarse of flint, concrete and brick. Cobbles are angular of brick and concrete. | | (0.75) | | |
| 0.50 | ES 2 | 4 samples taken | | | | | | | |
| | | | | | END OF EXPLORATORY HOLE | | 0.75 +17.62 | | |

Groundwater Entries

| No. | Depth Strike (m) | Remarks | Depth Sealed (m) |
|---|---|---|---|

**Depth Related Remarks**

| Depths (m) | Remarks |
|---|---|

**Hard Boring**

| Depths (m) | Duration (mins) | Tools used |
|---|---|---|

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50



**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** London Borough of Camden

**Borehole**

**WS29**

# APPENDIX C
# INSTRUMENTATION AND MONITORING

# Groundwater Installation Details

| Instrument reference | Instrument type (see Notes) | Installation date | Pipe diameter (mm) | Instrument base (mbgl) | Response zone range (mbgl) | Pipe top details | Headworks | Remarks |
|---|---|---|---|---|---|---|---|---|
| BH1 (1) | SP | 04/12/2015 | 50 | 24.20 | 21.20 to 24.20 | Gas tap | Flush Cover | |
| BH1 (2) | SP | 04/12/2015 | 50 | 15.50 | 6.50 to 15.50 | Gas tap | Flush Cover | |
| BH10 | SP | 06/01/2016 | 50 | 30.30 | 21.00 to 30.00 | Gas tap | Flush Cover | |
| BH4 | SP | 24/11/2015 | 50 | 16.00 | 7.00 to 16.00 | Gas tap | Flush Cover | |
| BH7 | SP | 15/12/2015 | 50 | 30.36 | 20.00 to 30.36 | Gas tap | Flush Cover | |
| BH9 | SP | 22/12/2015 | 50 | 7.50 | 4.50 to 7.50 | Gas tap | Flush Cover | |

**ESG**

# Gas Monitoring Record

| | | | |
|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town |
| Date | 15/01/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Interface Meter (32482) | Wind Direction | N/A |
| | | Cloud Cover | None |
| | | Precipitation | None |

Sheet No: C2-1/1

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH1 | 1 | 24.20 | 13:45:00 | 1025 | 6 | 0.00 | 24.64 | 3.94 | 0.5 | 0.2 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 13:45:30 | 1025 | 6 | 0.00 | | | 0.3 | 0.1 | <0.1 | <0.1 | 20.5 | 0.3 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 13:46:00 | 1025 | 6 | 0.00 | | | 0.2 | 0.1 | <0.1 | <0.1 | 20.5 | 0.3 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 13:46:30 | 1025 | 6 | 0.00 | | | 0.2 | 0.1 | <0.1 | <0.1 | 20.5 | 0.3 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 13:47:00 | 1025 | 6 | 0.00 | | | 0.2 | 0.1 | <0.1 | <0.1 | 20.5 | 0.3 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 13:47:30 | 1025 | 6 | 0.00 | | | 0.2 | 0.1 | <0.1 | <0.1 | 20.5 | 0.3 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 13:48:00 | 1025 | 6 | 0.00 | | | 0.2 | 0.1 | <0.1 | <0.1 | 20.5 | 0.3 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 13:49:00 | 1025 | 6 | 0.00 | | | 0.2 | 0.1 | <0.1 | <0.1 | 20.5 | 0.3 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 13:50:00 | 1025 | 6 | 0.00 | | | 0.2 | 0.1 | <0.1 | <0.1 | 20.5 | 0.3 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH1 | 2 | 15.50 | 14:00:00 | 1025 | 6 | 0.00 | 15.33 | 3.82 | 0.3 | 0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:00:30 | 1025 | 6 | 0.00 | | | 0.2 | 0.1 | <0.1 | <0.1 | 19.2 | 1.2 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:01:00 | 1025 | 6 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 18.1 | 2.0 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:01:30 | 1025 | 6 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 18.1 | 2.0 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:02:00 | 1025 | 6 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 18.1 | 2.0 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:02:30 | 1025 | 6 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 18.1 | 2.0 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:03:00 | 1025 | 6 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 18.1 | 2.0 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:04:00 | 1025 | 6 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 18.1 | 2.0 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:05:00 | 1025 | 6 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 18.1 | 2.0 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

| | | | |
|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town |
| Date | 15/01/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Interface Meter (32482) | Wind Direction | N/A |
| | | Cloud Cover | None |
| | | Precipitation | None |

Sheet No: C21/2

| Detection Limits | | | | | | | |
|---|---|---|---|---|---|---|---|
| | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 |

| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BH4 | 1 | 16.00 | 14:25:00 | 1026 | 6 | 0.00 | 16.15 | 9.95 | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:25:30 | 1026 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:26:00 | 1026 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:26:30 | 1026 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:27:00 | 1026 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:27:30 | 1026 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:28:00 | 1026 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:29:00 | 1026 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:30:00 | 1026 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |

**ESG**

# Gas Monitoring Record

| | | | |
|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town |
| Date | 22/01/2016 | State of Ground | Damp |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Interface Meter (32482) | Wind Direction | N/A |
| | | Cloud Cover | Overcast |
| | | Precipitation | Moderate |

Sheet No: C2-1/3

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH7 | 1 | 30.00 | 11:00:00 | 1018 | 6 | 0.00 | 29.28 | 19.65 | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.00 | 11:00:30 | 1018 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.9 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.00 | 11:01:00 | 1018 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.6 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.00 | 11:01:30 | 1018 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.6 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.00 | 11:02:00 | 1018 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.6 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.00 | 11:02:30 | 1018 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.6 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.00 | 11:03:00 | 1018 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.6 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.00 | 11:04:00 | 1018 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.6 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.00 | 11:05:00 | 1018 | 6 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.6 | 0.2 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

| | | | |
|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 15/01/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Interface Meter (32482) | Wind Direction | N/A |
| | | Cloud Cover | None |
| | | Precipitation | None |

Sheet No: C2-1/4

| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp (°C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detection Limits | | | | | | | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| BH10 | 1 | 30.30 | 13:00:00 | 1025 | 6 | 0.00 | 30.32 | 15.28 | 0.2 | 0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 13:00:30 | 1025 | 6 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 19.8 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 13:01:00 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 19.6 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 13:01:30 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 19.6 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 13:02:00 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 19.6 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 13:02:30 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 19.6 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 13:03:00 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 19.6 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 13:04:00 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 19.6 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 13:05:00 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 19.6 | <0.1 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH9 | 1 | 7.50 | 13:15:00 | 1025 | 6 | 0.00 | 7.33 | 2.72 | <0.1 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 13:15:30 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 20.4 | 0.4 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 13:16:00 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 20.3 | 0.4 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 13:16:30 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 20.3 | 0.4 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 13:17:00 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 20.3 | 0.4 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 13:17:30 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 20.3 | 0.4 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 13:18:00 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 20.3 | 0.4 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 13:19:00 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 20.3 | 0.4 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 13:20:00 | 1025 | 6 | 0.00 | | | <0.1 | <0.1 | <0.1 | <0.1 | 20.3 | 0.4 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 17/02/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (32482) | Wind Direction | N/A |
| | | Cloud Cover | Overcast |
| | | Precipitation | None |

Sheet No: C2-2/1

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH1 | 1 | 24.20 | 11:05:00 | 1021 | 7 | 0.00 | 24.64 | 4.35 | -0.3 | -0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:05:30 | 1021 | 7 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:06:00 | 1021 | 7 | 0.00 | | | -0.1 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:06:30 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:07:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:07:30 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:08:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:09:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:10:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH1 | 2 | 15.50 | 11:15:00 | 1021 | 7 | 0.00 | 15.33 | 4.33 | -0.3 | -0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:15:30 | 1021 | 7 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:16:00 | 1021 | 7 | 0.00 | | | -0.1 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:16:30 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:17:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:17:30 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:18:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:19:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:20:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 17/02/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (32482) | Wind Direction | N/A |
| | | Cloud Cover | Overcast |
| | | Precipitation | None |

Sheet No: C2-2/2

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH4 | 1 | 16.00 | 10:30:00 | 1023 | 7 | 0.00 | 16.15 | 9.97 | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:30:30 | 1023 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:31:00 | 1023 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:31:30 | 1023 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:32:00 | 1023 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:32:30 | 1023 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:33:00 | 1023 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:34:00 | 1023 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:35:00 | 1023 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 17/02/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (32482) | Wind Direction | N/A |
| | | Cloud Cover | Overcast |
| | | Precipitation | None |

Sheet No: C2-2/3

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH7 | 1 | 30.36 | 11:40:00 | 1021 | 7 | 0.00 | 29.28 | 19.64 | 0.2 | 0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:40:30 | 1021 | 7 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 19.2 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:41:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.2 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:41:30 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.2 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:42:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.2 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:42:30 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.2 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:43:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.2 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:44:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.2 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:45:00 | 1021 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.2 | 0.2 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 17/02/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (32482) | Wind Direction | N/A |
| | | Cloud Cover | Overcast |
| | | Precipitation | None |

Sheet No: C2-2/4

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH10 | 1 | 30.30 | 12:10:00 | 1020 | 7 | 0.00 | 30.32 | 15.31 | 0.2 | 0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:10:30 | 1020 | 7 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 19.9 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:11:00 | 1020 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.8 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:11:30 | 1020 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.7 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:12:00 | 1020 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.7 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:12:30 | 1020 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.7 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:13:00 | 1020 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.7 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:14:00 | 1020 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.7 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:15:00 | 1020 | 7 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.7 | <0.1 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH9 | 1 | 7.50 | 11:55:00 | 1021 | 7 | 0.00 | 7.33 | 2.75 | 0.1 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 11:55:30 | 1021 | 7 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 11:56:00 | 1021 | 7 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 11:56:30 | 1021 | 7 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 11:57:00 | 1021 | 7 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 11:57:30 | 1021 | 7 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 11:58:00 | 1021 | 7 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 11:59:00 | 1021 | 7 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 12:00:00 | 1021 | 7 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 22/03/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (5303) | Wind Direction | N/A |
| | | Cloud Cover | Slight |
| | | Precipitation | None |

Sheet No: C2-3/1

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH1 | 1 | 24.20 | 14:45:00 | 1017 | 13 | 0.00 | 24.64 | 4.60 | 0.1 | 0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:45:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.6 | 1.4 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:46:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.8 | 1.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:46:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.0 | 0.8 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:47:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.5 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:47:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.5 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:48:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.5 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:49:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.5 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:50:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.5 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH1 | 2 | 15.50 | 14:55:00 | 1017 | 13 | 0.00 | 15.33 | 4.58 | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:55:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 18.4 | 0.9 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:56:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.0 | 0.7 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:56:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.3 | 0.6 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:57:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.5 | 0.5 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:57:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.5 | 0.5 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:58:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.5 | 0.5 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:59:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.5 | 0.5 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 15:00:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 19.5 | 0.5 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

| | | | |
|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 22/03/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (5303) | Wind Direction | N/A |
| | | Cloud Cover | Slight |
| | | Precipitation | None |

Sheet No: C2-3/2

| Detection Limits | | | | | | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH4 | 1 | 16.00 | 14:20:00 | 1019 | 13 | 0.00 | 16.15 | 9.95 | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:20:30 | 1019 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:21:00 | 1019 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:21:30 | 1019 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:22:00 | 1019 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:22:30 | 1019 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:23:00 | 1019 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:24:00 | 1019 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:25:00 | 1019 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |

**ESG**

# Gas Monitoring Record

| | | | |
|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 22/03/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (5303) | Wind Direction | N/A |
| | | Cloud Cover | Slight |
| | | Precipitation | None |

Sheet No: C2-3/3

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH7 | 1 | 30.36 | 15:10:00 | 1017 | 13 | 0.00 | 29.28 | 19.63 | 0.1 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:10:30 | 1017 | 13 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:11:00 | 1017 | 13 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:11:30 | 1017 | 13 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:12:00 | 1017 | 13 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:12:30 | 1017 | 13 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:13:00 | 1017 | 13 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:14:00 | 1017 | 13 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:15:00 | 1017 | 13 | 0.00 | | | 0.1 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 22/03/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (5303) | Wind Direction | N/A |
| | | Cloud Cover | Slight |
| | | Precipitation | None |

Sheet No: C2-3/4

| Detection Limits | | | | | | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH9 | 1 | 7.50 | 15:20:00 | 1017 | 13 | 0.00 | 7.33 | 2.76 | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:20:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:21:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:21:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:22:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:22:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:23:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:24:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:25:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH10 | 1 | 30.30 | 15:35:00 | 1017 | 13 | 0.00 | 30.32 | 15.32 | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 15:35:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 15:36:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | 0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 15:36:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | 0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 15:37:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | 0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 15:37:30 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | 0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 15:38:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | 0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 15:39:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | 0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 15:40:00 | 1017 | 13 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | 0.1 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 12/04/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (5303) | Wind Direction | N/A |
| | | Cloud Cover | Slight |
| | | Precipitation | None |

Sheet No: C2-4/1

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH1 | 1 | 24.20 | 11:15:00 | 1010 | 14 | 0.00 | 24.64 | 4.64 | -0.3 | -0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:15:30 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.7 | 1.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:16:00 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.6 | 1.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:16:30 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.6 | 1.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:17:00 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.6 | 1.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:17:30 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.6 | 1.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:18:00 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.6 | 1.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:19:00 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.6 | 1.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 11:20:00 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.6 | 1.2 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH1 | 2 | 15.50 | 11:25:00 | 1010 | 14 | 0.00 | 15.33 | 4.61 | -0.2 | -0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:25:30 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 17.1 | 2.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:26:00 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 17.8 | 1.8 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:26:30 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 18.2 | 1.5 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:27:00 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 18.8 | 1.0 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:27:30 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.1 | 0.9 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:28:00 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.1 | 0.9 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:29:00 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.1 | 0.9 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 11:30:00 | 1010 | 14 | 0.00 | | | -0.2 | -0.1 | <0.1 | <0.1 | 19.1 | 0.9 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 12/04/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (5303) | Wind Direction | N/A |
| | | Cloud Cover | Slight |
| | | Precipitation | None |

Sheet No: C2-4/2

| Detection Limits | | | | | | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH4 | 1 | 16.00 | 10:45:00 | 1012 | 14 | 0.00 | 16.15 | 9.94 | 0.2 | 0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:45:30 | 1012 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:46:00 | 1012 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:46:30 | 1012 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:47:00 | 1012 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:47:30 | 1012 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:48:00 | 1012 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:49:00 | 1012 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 10:50:00 | 1012 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH7 | 1 | 30.36 | 11:45:00 | 1009 | 14 | 0.00 | 29.28 | 19.56 | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:45:30 | 1009 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:46:00 | 1009 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:46:30 | 1009 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:47:00 | 1009 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:47:30 | 1009 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:48:00 | 1009 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:49:00 | 1009 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 11:50:00 | 1009 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 12/04/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (5303) | Wind Direction | N/A |
| | | Cloud Cover | Slight |
| | | Precipitation | None |

Sheet No: C2-4/3

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH9 | 1 | 7.50 | 12:00:00 | 1008 | 14 | 0.00 | 7.33 | 2.72 | 0.2 | 0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 12:00:30 | 1008 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 12:01:00 | 1008 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 12:01:30 | 1008 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 12:02:00 | 1008 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 12:02:30 | 1008 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 12:03:00 | 1008 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 12:04:00 | 1008 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 12:05:00 | 1008 | 14 | 0.00 | | | 0.1 | 0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH10 | 1 | 30.30 | 12:15:00 | 1008 | 14 | 0.00 | 30.32 | 15.28 | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:15:30 | 1008 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:16:00 | 1008 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.3 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:16:30 | 1008 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.3 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:17:00 | 1008 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.3 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:17:30 | 1008 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.3 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:18:00 | 1008 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.3 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:19:00 | 1008 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.3 | <0.1 | <1 | <1 | | |
| BH10 | 1 | 30.30 | 12:20:00 | 1008 | 14 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.3 | <0.1 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 23/05/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (5303) | Wind Direction | N/A |
| | | Cloud Cover | Slight |
| | | Precipitation | None |

Sheet No: C2-5/1

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH1 | 1 | 24.20 | 14:35:00 | 1019 | 20 | 0.00 | 24.64 | 4.76 | 0.1 | 0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:35:30 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.2 | 0.3 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:36:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.4 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:36:30 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.4 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:37:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.4 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:37:30 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.4 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:38:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.4 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:39:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.4 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 14:40:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.4 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH1 | 2 | 15.50 | 14:45:00 | 1019 | 20 | 0.00 | 15.33 | 4.74 | 0.1 | 0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:45:30 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 19.6 | 0.7 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:46:00 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 19.5 | 0.8 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:46:30 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 19.5 | 0.8 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:47:00 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 19.5 | 0.8 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:47:30 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 19.5 | 0.8 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:48:00 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 19.5 | 0.8 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:49:00 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 19.5 | 0.8 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 14:50:00 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 19.5 | 0.8 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 23/05/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (5303) | Wind Direction | N/A |
| | | Cloud Cover | Slight |
| | | Precipitation | None |

Sheet No: C2-5/2

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Detection Limits | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH4 | 1 | 16.00 | 14:00:00 | 1019 | 20 | 0.00 | 16.15 | 9.96 | 0.0 | 0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:00:30 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 20.5 | 0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:01:00 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 20.4 | 0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:01:30 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 20.4 | 0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:02:00 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 20.4 | 0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:02:30 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 20.4 | 0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:03:00 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 20.4 | 0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:04:00 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 20.4 | 0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:05:00 | 1019 | 20 | 0.00 | | | 0.0 | 0.1 | <0.1 | <0.1 | 20.4 | 0.1 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 23/05/2016 | State of Ground | Dry |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx (1463) / Dip Meter (5303) | Wind Direction | N/A |
| | | Cloud Cover | Slight |
| | | Precipitation | None |

Sheet No: C2-5/3

| Detection Limits | | | | | | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | <0.1 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp ($^{o}$C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | Nitrogen (%vol) | Remarks |
| BH7 | 1 | 30.36 | 15:05:00 | 1019 | 20 | 0.00 | 29.28 | 19.63 | 0.1 | 0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:05:30 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.1 | 0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:06:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:06:30 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:07:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:07:30 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:08:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:09:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 15:10:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.0 | 0.2 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH9 | 1 | 7.50 | 15:20:00 | 1019 | 20 | 0.00 | 7.33 | 2.73 | 0.0 | <0.1 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:20:30 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:21:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.4 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:21:30 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.4 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:22:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.4 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:22:30 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.4 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:23:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.4 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:24:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.4 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:25:00 | 1019 | 20 | 0.00 | | | 0.0 | <0.1 | <0.1 | <0.1 | 20.4 | <0.1 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

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|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 20/06/2016 | State of Ground | Damp |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx 1463 | Wind Direction | N/A |
| | | Cloud Cover | Overcast |
| | | Precipitation | Slight |

Sheet No: C2-6/1

| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp (°C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | VOCs (ppm) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detection Limits | | | | | | | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 15:10:00 | 1011 | 18 | 0.00 | 24.64 | 4.74 | 0.0 | 0.00 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 15:10:30 | | | | | | | 0.00 | <0.1 | <0.1 | 20.5 | 0.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 15:11:00 | | | | | | | 0.00 | <0.1 | <0.1 | 20.5 | 0.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 15:11:30 | | | | | | | 0.00 | <0.1 | <0.1 | 20.5 | 0.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 15:12:00 | | | | | | | 0.00 | <0.1 | <0.1 | 20.5 | 0.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 15:12:30 | | | | | | | 0.00 | <0.1 | <0.1 | 20.5 | 0.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 15:13:00 | | | | | | | 0.00 | <0.1 | <0.1 | 20.5 | 0.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 15:14:00 | | | | | | | 0.00 | <0.1 | <0.1 | 20.5 | 0.2 | <1 | <1 | | |
| BH1 | 1 | 24.20 | 15:15:00 | | | | | | | 0.00 | <0.1 | <0.1 | 20.5 | 0.2 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH1 | 2 | 15.50 | 15:20:00 | 1011 | 18 | 0.00 | 16.33 | 4.74 | -0.2 | -0.10 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 15:20:30 | | | | | | -0.1 | 0.00 | <0.1 | <0.1 | 19.6 | 1.2 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 15:21:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 19.4 | 1.6 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 15:21:30 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 19.1 | 1.9 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 15:22:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 19.1 | 1.9 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 15:22:30 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 19.1 | 1.9 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 15:23:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 19.1 | 1.9 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 15:24:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 19.1 | 1.9 | <1 | <1 | | |
| BH1 | 2 | 15.50 | 15:25:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 19.1 | 1.9 | <1 | <1 | | |
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**ESG**

# Gas Monitoring Record

| | | | |
|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 20/06/2016 | State of Ground | Damp |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx 1463 | Wind Direction | N/A |
| | | Cloud Cover | Overcast |
| | | Precipitation | Slight |

Sheet No: C2-6/2

| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp (°C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | VOCs (ppm) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detection Limits | | | | | | | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:00:00 | 1012 | 18 | 0.00 | 16.15 | 9.93 | 0.4 | 0.20 | <0.1 | <0.1 | 20.0 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:00:30 | | | | | | 0.2 | 0.10 | <0.1 | <0.1 | 20.8 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:01:00 | | | | | | 0.1 | 0.00 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:01:30 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:02:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:02:30 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:03:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:04:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |
| BH4 | 1 | 16.00 | 14:05:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.7 | <0.1 | <1 | <1 | | |

**ESG**

# Gas Monitoring Record

| | | | |
|---|---|---|---|
| Project No | D5061-15 | Project | Central Somers Town, London |
| Date | 20/06/2016 | State of Ground | Damp |
| Operator | AG | Wind | Light |
| Equipment Used | LMSx 1463 | Wind Direction | N/A |
| | | Cloud Cover | Overcast |
| | | Precipitation | None |

Sheet No: C2-6/3

| Borehole ID | Inst ID | Depth of Installation (m BGL) | Time of Reading hh:mm:ss | Barometric Pressure (mbars) | Air temp (°C) | Reading Depth (mBGL) | Dip to Base of Pipe | Depth to Groundwater (m BGL) | Differential Pressure (Pa) | FlowRate (l/hr) | CH4 (% vol) | CH4 (% LEL) | O2 (% vol) | CO2 (% vol) | CO (ppm) | H2S (ppm) | VOCs (ppm) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detection Limits | | | | | | | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 14:40:00 | 1010 | 18 | 0.00 | 29.28 | 19.54 | 0.1 | 0.00 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 14:40:30 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 16.5 | 1.2 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 14:41:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 16.4 | 1.3 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 14:41:30 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 16.4 | 1.3 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 14:42:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 16.4 | 1.3 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 14:42:30 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 16.4 | 1.3 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 14:43:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 16.4 | 1.3 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 14:44:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 16.4 | 1.3 | <1 | <1 | | |
| BH7 | 1 | 30.36 | 14:45:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 16.4 | 1.3 | <1 | <1 | | |
| | | | | | | | | | | | | | | | | | | |
| BH9 | 1 | 7.50 | 14:55:00 | 1010 | 18 | 0.00 | 7.33 | 2.67 | 0.1 | 0.00 | <0.1 | <0.1 | 20.9 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 14:55:30 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.6 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 14:56:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 14:56:30 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 14:57:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 14:57:30 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 14:58:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 14:59:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
| BH9 | 1 | 7.50 | 15:00:00 | | | | | | 0.0 | 0.00 | <0.1 | <0.1 | 20.5 | <0.1 | <1 | <1 | | |
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# APPENDIX D
# IN SITU TESTING

| | |
|---|---|
| Dynamic Cone Penetrometer Tests | TRL1, 2, 5 to 10 |

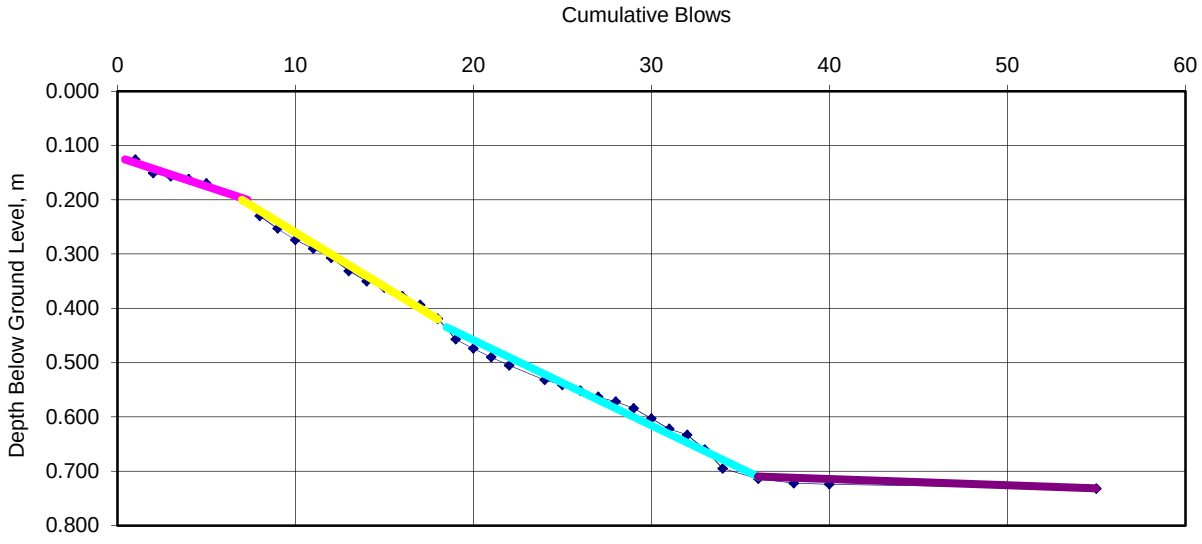
# Dynamic Cone Penetrometer Test

Date of Test: 06/01/2016 Test Depth: 0.000 mBGL

Method: TRRL Probe

Remarks:

| Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows |
|---|---|---|---|---|---|---|---|---|---|
| 0.126 | 1 | 0.584 | 29 | | | | | | |
| 0.151 | 2 | 0.603 | 30 | | | | | | |
| 0.157 | 3 | 0.622 | 31 | | | | | | |
| 0.162 | 4 | 0.633 | 32 | | | | | | |
| 0.170 | 5 | 0.660 | 33 | | | | | | |
| 0.199 | 7 | 0.695 | 34 | | | | | | |
| 0.230 | 8 | 0.714 | 36 | | | | | | |
| 0.253 | 9 | 0.722 | 38 | | | | | | |
| 0.274 | 10 | 0.724 | 40 | | | | | | |
| 0.290 | 11 | 0.732 | 55 | | | | | | |
| 0.307 | 12 | | | | | | | | |
| 0.331 | 13 | | | | | | | | |
| 0.350 | 14 | | | | | | | | |
| 0.362 | 15 | | | | | | | | |
| 0.378 | 16 | | | | | | | | |
| 0.394 | 17 | | | | | | | | |
| 0.419 | 18 | | | | | | | | |
| 0.457 | 19 | | | | | | | | |
| 0.474 | 20 | | | | | | | | |
| 0.490 | 21 | | | | | | | | |
| 0.505 | 22 | | | | | | | | |
| 0.532 | 24 | | | | | | | | |
| 0.541 | 25 | | | | | | | | |
| 0.552 | 26 | | | | | | | | |
| 0.563 | 27 | | | | | | | | |
| 0.572 | 28 | | | | | | | | |




**CBR Values**

| Top, mBGL | Base, mBGL | CBR, %[1] |
|---|---|---|
| 0.13 | 0.20 | 24 |
| 0.20 | 0.42 | 14 |
| 0.44 | 0.71 | 18 |
| 0.71 | 0.73 | 390 |
| | | |

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** AKT II

**Hole** **TRL1**

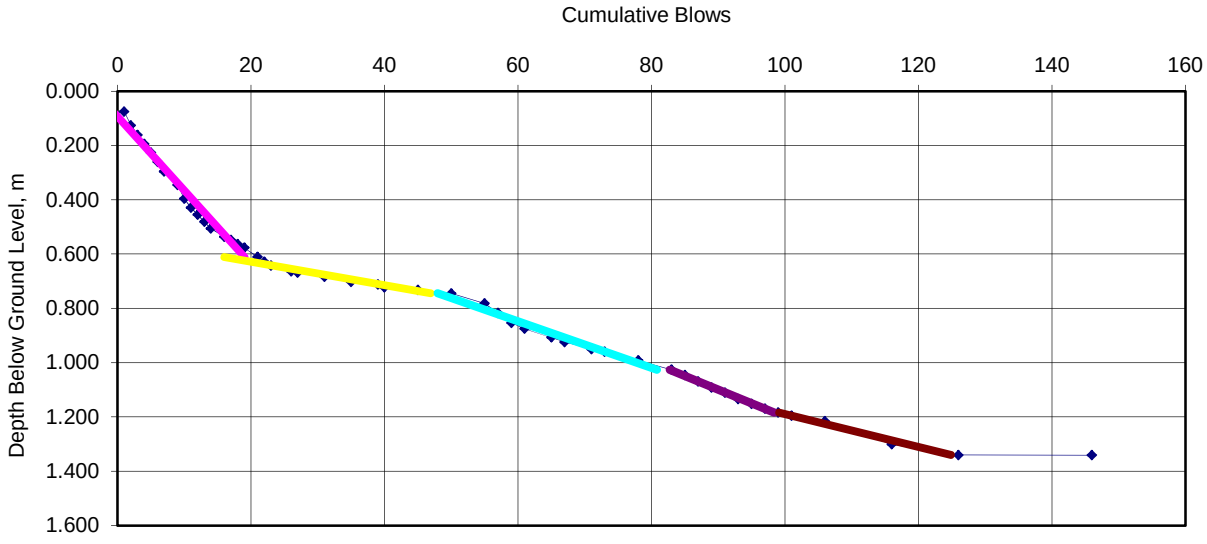
# Dynamic Cone Penetrometer Test

Date of Test: 06/01/2016 Test Depth: 0.000 mBGL

Method: TRRL Probe

Remarks:

| Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows |
|---|---|---|---|---|---|---|---|---|---|
| 0.075 | 1 | 0.732 | 45 | | | | | | |
| 0.126 | 2 | 0.745 | 50 | | | | | | |
| 0.161 | 3 | 0.782 | 55 | | | | | | |
| 0.194 | 4 | 0.817 | 57 | | | | | | |
| 0.226 | 5 | 0.853 | 59 | | | | | | |
| 0.260 | 6 | 0.875 | 61 | | | | | | |
| 0.296 | 7 | 0.907 | 65 | | | | | | |
| 0.345 | 9 | 0.924 | 67 | | | | | | |
| 0.396 | 10 | 0.950 | 71 | | | | | | |
| 0.429 | 11 | 0.960 | 73 | | | | | | |
| 0.455 | 12 | 0.992 | 78 | | | | | | |
| 0.481 | 13 | 1.026 | 83 | | | | | | |
| 0.506 | 14 | 1.046 | 85 | | | | | | |
| 0.536 | 16 | 1.069 | 87 | | | | | | |
| 0.548 | 17 | 1.092 | 89 | | | | | | |
| 0.564 | 18 | 1.111 | 91 | | | | | | |
| 0.577 | 19 | 1.134 | 93 | | | | | | |
| 0.611 | 21 | 1.152 | 95 | | | | | | |
| 0.628 | 22 | 1.169 | 97 | | | | | | |
| 0.643 | 23 | 1.184 | 99 | | | | | | |
| 0.664 | 26 | 1.196 | 101 | | | | | | |
| 0.668 | 27 | 1.216 | 106 | | | | | | |
| 0.684 | 31 | 1.301 | 116 | | | | | | |
| 0.703 | 35 | 1.340 | 126 | | | | | | |
| 0.712 | 39 | 1.341 | 146 | | | | | | |
| 0.723 | 40 | | | | | | | | |




**CBR Values**

| Top, mBGL | Base, mBGL | CBR, %[1] |
|---|---|---|
| 0.08 | 0.61 | 9.2 |
| 0.61 | 0.75 | 64 |
| 0.75 | 1.03 | 31 |
| 1.03 | 1.18 | 26 |
| 1.18 | 1.34 | 44 |

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** AKT II

**Hole** **TRL2**

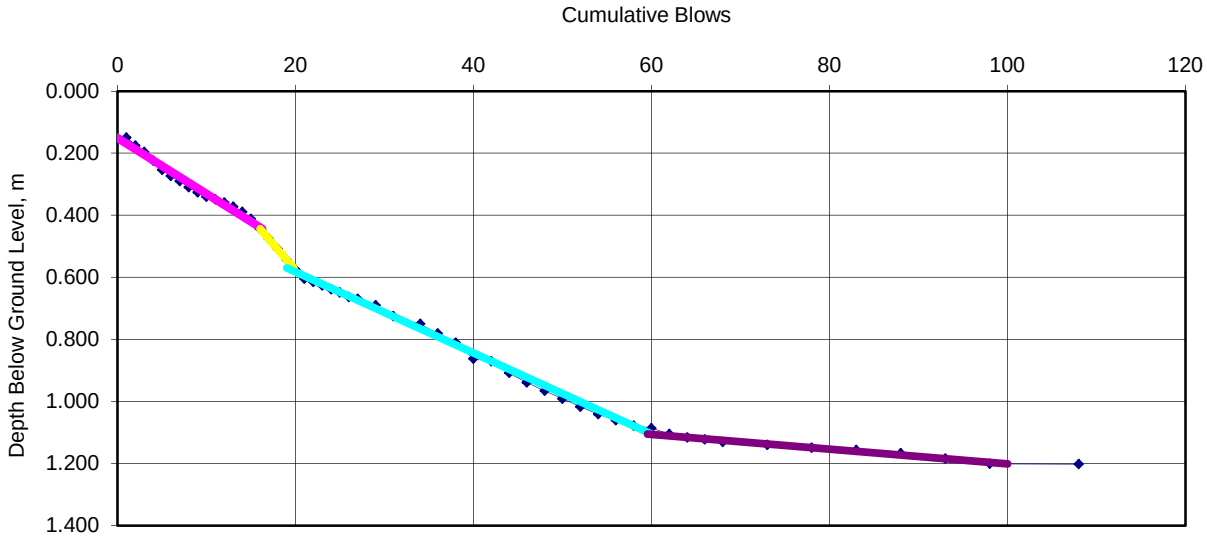
# Dynamic Cone Penetrometer Test

Date of Test: 06/01/2016 Test Depth: 0.000 mBGL

Method: TRRL Probe

Remarks:

| Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows |
|---|---|---|---|---|---|---|---|---|---|
| 0.149 | 1 | 0.669 | 27 | 1.201 | 98 | | | | |
| 0.175 | 2 | 0.690 | 29 | 1.202 | 108 | | | | |
| 0.196 | 3 | 0.725 | 31 | | | | | | |
| 0.224 | 4 | 0.750 | 34 | | | | | | |
| 0.254 | 5 | 0.781 | 36 | | | | | | |
| 0.273 | 6 | 0.811 | 38 | | | | | | |
| 0.290 | 7 | 0.862 | 40 | | | | | | |
| 0.309 | 8 | 0.871 | 42 | | | | | | |
| 0.326 | 9 | 0.908 | 44 | | | | | | |
| 0.340 | 10 | 0.939 | 46 | | | | | | |
| 0.349 | 11 | 0.966 | 48 | | | | | | |
| 0.359 | 12 | 0.991 | 50 | | | | | | |
| 0.372 | 13 | 1.017 | 52 | | | | | | |
| 0.389 | 14 | 1.041 | 54 | | | | | | |
| 0.412 | 15 | 1.061 | 56 | | | | | | |
| 0.444 | 16 | 1.078 | 58 | | | | | | |
| 0.475 | 17 | 1.086 | 60 | | | | | | |
| 0.509 | 18 | 1.105 | 62 | | | | | | |
| 0.544 | 19 | 1.116 | 64 | | | | | | |
| 0.575 | 20 | 1.122 | 66 | | | | | | |
| 0.604 | 21 | 1.131 | 68 | | | | | | |
| 0.615 | 22 | 1.140 | 73 | | | | | | |
| 0.626 | 23 | 1.149 | 78 | | | | | | |
| 0.639 | 24 | 1.156 | 83 | | | | | | |
| 0.649 | 25 | 1.167 | 88 | | | | | | |
| 0.663 | 26 | 1.184 | 93 | | | | | | |




**CBR Values**

| Top, mBGL | Base, mBGL | CBR, %[1] |
|---|---|---|
| 0.15 | 0.44 | 14 |
| 0.44 | 0.57 | 7.4 |
| 0.57 | 1.11 | 19 |
| 1.11 | 1.20 | 120 |
| | | |

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** AKT II

**Hole** **TRL5**

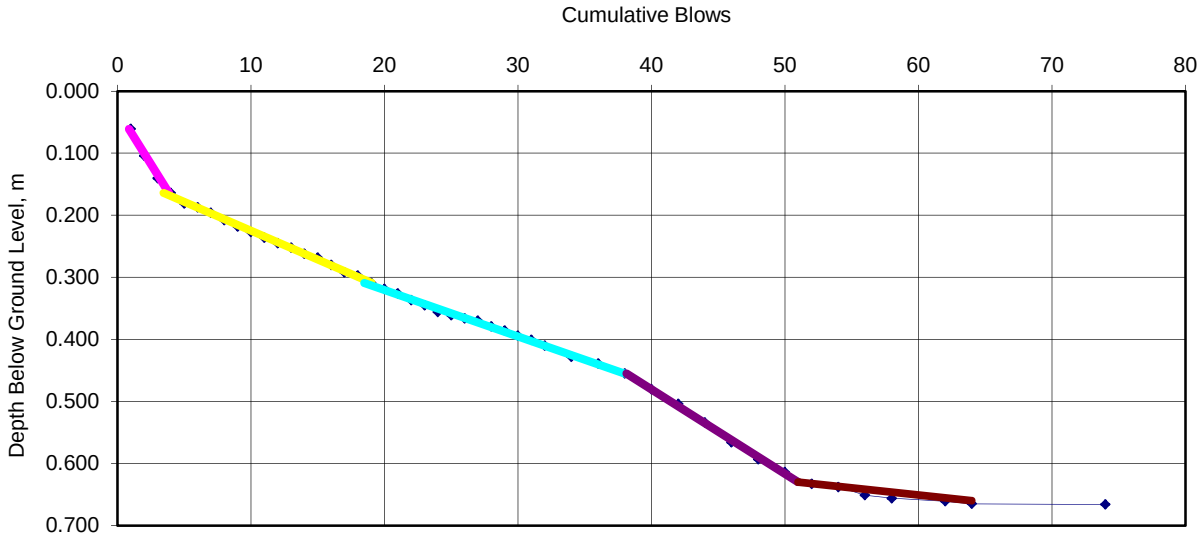
# Dynamic Cone Penetrometer Test

Date of Test: 06/01/2016 Test Depth: 0.000 mBGL

Method: TRRL Probe

Remarks:

| Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows |
|---|---|---|---|---|---|---|---|---|---|
| 0.061 | 1 | 0.370 | 27 | | | | | | |
| 0.104 | 2 | 0.379 | 28 | | | | | | |
| 0.140 | 3 | 0.386 | 29 | | | | | | |
| 0.164 | 4 | 0.394 | 30 | | | | | | |
| 0.181 | 5 | 0.401 | 31 | | | | | | |
| 0.187 | 6 | 0.410 | 32 | | | | | | |
| 0.196 | 7 | 0.428 | 34 | | | | | | |
| 0.208 | 8 | 0.439 | 36 | | | | | | |
| 0.218 | 9 | 0.455 | 38 | | | | | | |
| 0.227 | 10 | 0.480 | 40 | | | | | | |
| 0.236 | 11 | 0.504 | 42 | | | | | | |
| 0.245 | 12 | 0.534 | 44 | | | | | | |
| 0.252 | 13 | 0.566 | 46 | | | | | | |
| 0.262 | 14 | 0.593 | 48 | | | | | | |
| 0.268 | 15 | 0.614 | 50 | | | | | | |
| 0.280 | 16 | 0.633 | 52 | | | | | | |
| 0.292 | 17 | 0.638 | 54 | | | | | | |
| 0.297 | 18 | 0.651 | 56 | | | | | | |
| 0.309 | 19 | 0.656 | 58 | | | | | | |
| 0.319 | 20 | 0.661 | 62 | | | | | | |
| 0.326 | 21 | 0.665 | 64 | | | | | | |
| 0.337 | 22 | 0.666 | 74 | | | | | | |
| 0.345 | 23 | | | | | | | | |
| 0.356 | 24 | | | | | | | | |
| 0.361 | 25 | | | | | | | | |
| 0.366 | 26 | | | | | | | | |




**CBR Values**

| Top, mBGL | Base, mBGL | CBR, %[1] |
|---|---|---|
| 0.06 | 0.16 | 7.1 |
| 0.16 | 0.31 | 28 |
| 0.31 | 0.46 | 35 |
| 0.46 | 0.63 | 19 |
| 0.63 | 0.66 | 67 |

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** AKT II

**Hole** **TRL6**

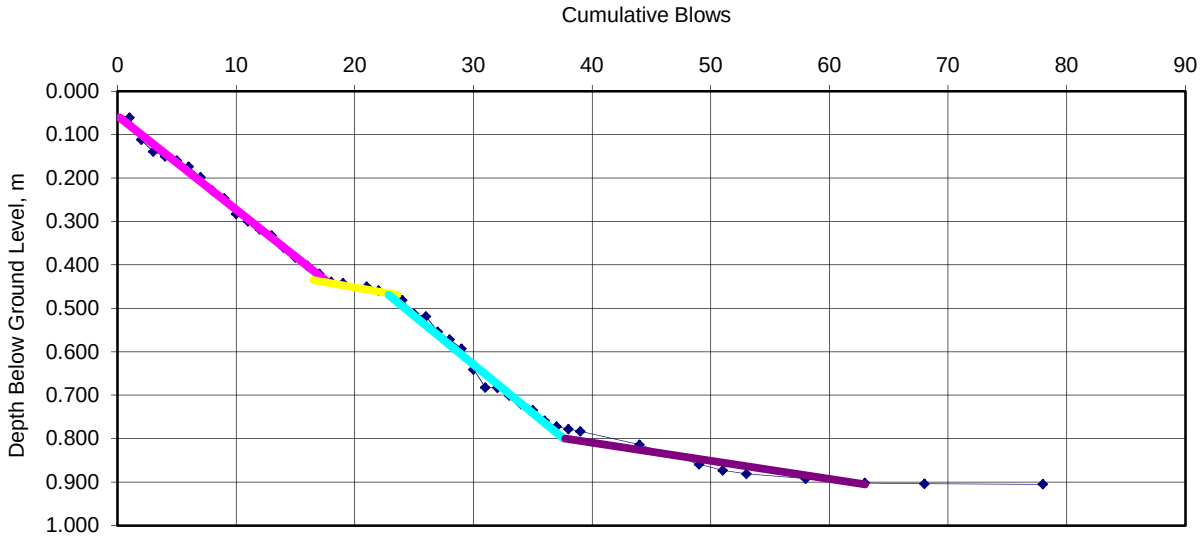
# Dynamic Cone Penetrometer Test

Date of Test: 06/01/2016 Test Depth: 0.000 mBGL

Method: TRRL Probe

Remarks:

| Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows |
|---|---|---|---|---|---|---|---|---|---|
| 0.061 | 1 | 0.572 | 28 | | | | | | |
| 0.112 | 2 | 0.593 | 29 | | | | | | |
| 0.139 | 3 | 0.641 | 30 | | | | | | |
| 0.150 | 4 | 0.682 | 31 | | | | | | |
| 0.160 | 5 | 0.683 | 32 | | | | | | |
| 0.174 | 6 | 0.701 | 33 | | | | | | |
| 0.198 | 7 | 0.721 | 34 | | | | | | |
| 0.229 | 8 | 0.735 | 35 | | | | | | |
| 0.247 | 9 | 0.759 | 36 | | | | | | |
| 0.283 | 10 | 0.772 | 37 | | | | | | |
| 0.300 | 11 | 0.778 | 38 | | | | | | |
| 0.318 | 12 | 0.783 | 39 | | | | | | |
| 0.332 | 13 | 0.814 | 44 | | | | | | |
| 0.360 | 14 | 0.859 | 49 | | | | | | |
| 0.383 | 15 | 0.873 | 51 | | | | | | |
| 0.402 | 16 | 0.881 | 53 | | | | | | |
| 0.421 | 17 | 0.892 | 58 | | | | | | |
| 0.439 | 18 | 0.902 | 63 | | | | | | |
| 0.442 | 19 | 0.904 | 68 | | | | | | |
| 0.450 | 21 | 0.905 | 78 | | | | | | |
| 0.459 | 22 | | | | | | | | |
| 0.469 | 23 | | | | | | | | |
| 0.481 | 24 | | | | | | | | |
| 0.513 | 25 | | | | | | | | |
| 0.519 | 26 | | | | | | | | |
| 0.554 | 27 | | | | | | | | |




**CBR Values**

| Top, mBGL | Base, mBGL | CBR, %[1] |
|---|---|---|
| 0.06 | 0.44 | 11 |
| 0.44 | 0.47 | 47 |
| 0.47 | 0.80 | 11 |
| 0.80 | 0.91 | 120 |
| | | |

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** AKT II

**Hole** **TRL7**

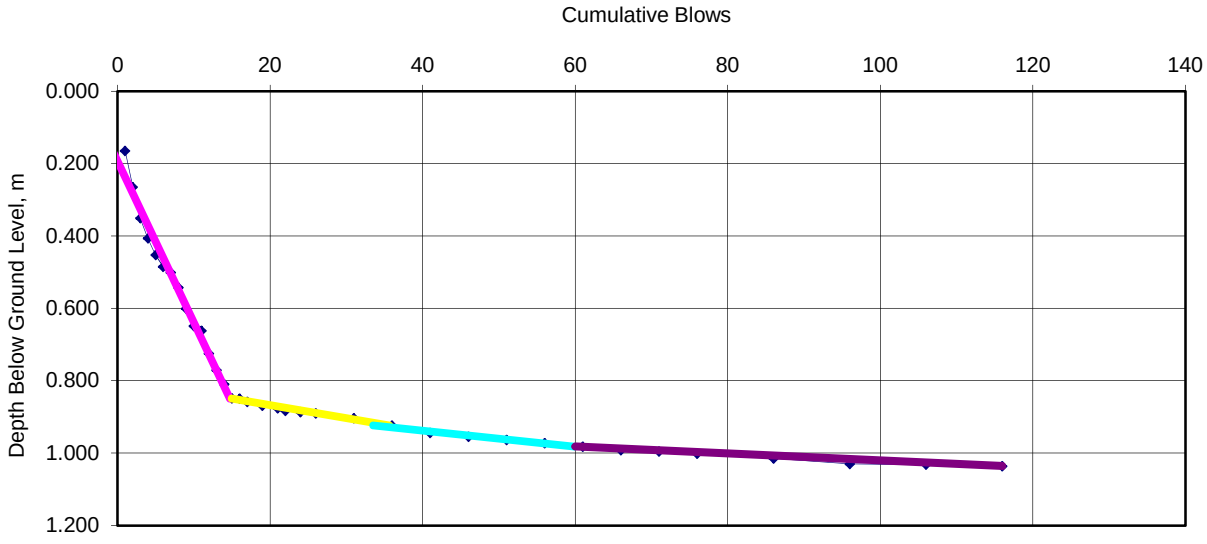
# Dynamic Cone Penetrometer Test

Date of Test: 06/01/2016 Test Depth: 0.000 mBGL

Method: TRRL Probe

Remarks:

| Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows |
|---|---|---|---|---|---|---|---|---|---|
| 0.165 | 1 | 0.964 | 51 | | | | | | |
| 0.265 | 2 | 0.973 | 56 | | | | | | |
| 0.351 | 3 | 0.982 | 61 | | | | | | |
| 0.407 | 4 | 0.992 | 66 | | | | | | |
| 0.453 | 5 | 0.996 | 71 | | | | | | |
| 0.485 | 6 | 1.002 | 76 | | | | | | |
| 0.501 | 7 | 1.015 | 86 | | | | | | |
| 0.543 | 8 | 1.030 | 96 | | | | | | |
| 0.601 | 9 | 1.032 | 106 | | | | | | |
| 0.649 | 10 | 1.036 | 116 | | | | | | |
| 0.662 | 11 | | | | | | | | |
| 0.725 | 12 | | | | | | | | |
| 0.771 | 13 | | | | | | | | |
| 0.810 | 14 | | | | | | | | |
| 0.849 | 15 | | | | | | | | |
| 0.850 | 16 | | | | | | | | |
| 0.859 | 17 | | | | | | | | |
| 0.869 | 19 | | | | | | | | |
| 0.876 | 21 | | | | | | | | |
| 0.883 | 22 | | | | | | | | |
| 0.887 | 24 | | | | | | | | |
| 0.890 | 26 | | | | | | | | |
| 0.904 | 31 | | | | | | | | |
| 0.924 | 36 | | | | | | | | |
| 0.944 | 41 | | | | | | | | |
| 0.955 | 46 | | | | | | | | |




**CBR Values**

| Top, mBGL | Base, mBGL | CBR, %[1] |
|---|---|---|
| 0.17 | 0.85 | 5.4 |
| 0.85 | 0.92 | 80 |
| 0.92 | 0.98 | 130 |
| 0.98 | 1.04 | 290 |
| | | |

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** AKT II

**Hole** **TRL8**

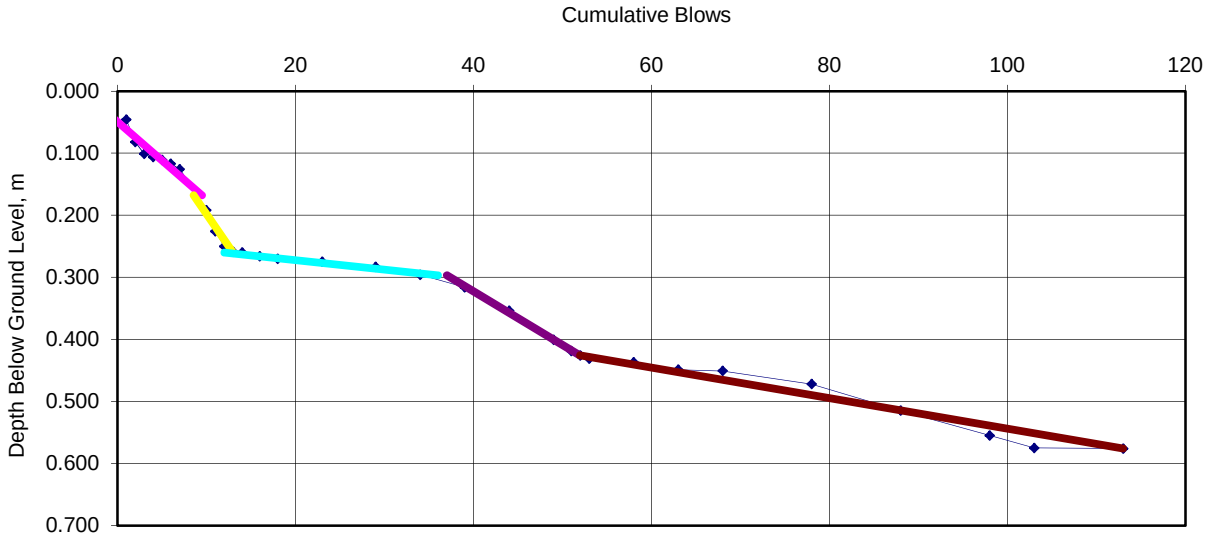
# Dynamic Cone Penetrometer Test

Date of Test: 06/01/2016 Test Depth: 0.000 mBGL

Method: TRRL Probe

Remarks:

| Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows |
|---|---|---|---|---|---|---|---|---|---|
| 0.046 | 1 | 0.451 | 68 | | | | | | |
| 0.082 | 2 | 0.472 | 78 | | | | | | |
| 0.101 | 3 | 0.515 | 88 | | | | | | |
| 0.106 | 4 | 0.555 | 98 | | | | | | |
| 0.111 | 5 | 0.575 | 103 | | | | | | |
| 0.117 | 6 | 0.576 | 113 | | | | | | |
| 0.126 | 7 | | | | | | | | |
| 0.168 | 9 | | | | | | | | |
| 0.192 | 10 | | | | | | | | |
| 0.226 | 11 | | | | | | | | |
| 0.250 | 12 | | | | | | | | |
| 0.259 | 13 | | | | | | | | |
| 0.260 | 14 | | | | | | | | |
| 0.266 | 16 | | | | | | | | |
| 0.270 | 18 | | | | | | | | |
| 0.275 | 23 | | | | | | | | |
| 0.283 | 29 | | | | | | | | |
| 0.296 | 34 | | | | | | | | |
| 0.316 | 39 | | | | | | | | |
| 0.354 | 44 | | | | | | | | |
| 0.401 | 49 | | | | | | | | |
| 0.419 | 51 | | | | | | | | |
| 0.426 | 52 | | | | | | | | |
| 0.431 | 53 | | | | | | | | |
| 0.437 | 58 | | | | | | | | |
| 0.449 | 63 | | | | | | | | |




**CBR Values**

| Top, mBGL | Base, mBGL | CBR, %[1] |
|---|---|---|
| 0.05 | 0.17 | 20 |
| 0.17 | 0.26 | 13 |
| 0.26 | 0.30 | 180 |
| 0.30 | 0.43 | 30 |
| 0.43 | 0.58 | 100 |

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** AKT II

**Hole** **TRL9**

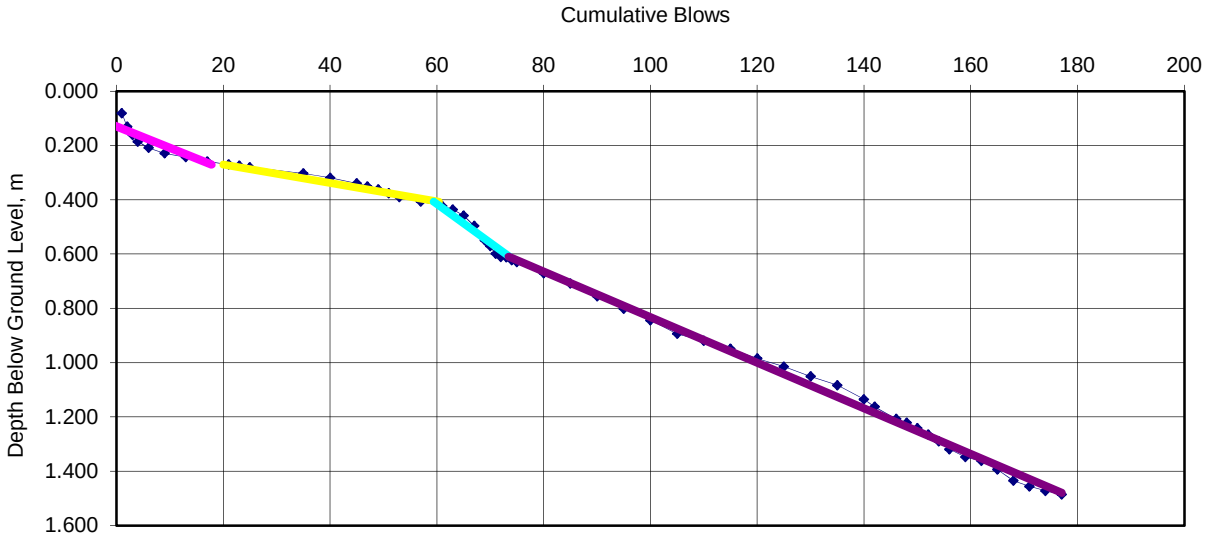
# Dynamic Cone Penetrometer Test

Date of Test: 06/01/2016 Test Depth: 0.000 mBGL

Method: TRRL Probe

Remarks:

| Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows | Depth, mBGL | Cumulative Blows |
|---|---|---|---|---|---|---|---|---|---|
| 0.081 | 1 | 0.611 | 72 | 1.394 | 165 | | | | |
| 0.131 | 2 | 0.612 | 73 | 1.435 | 168 | | | | |
| 0.161 | 3 | 0.622 | 74 | 1.456 | 171 | | | | |
| 0.186 | 4 | 0.630 | 75 | 1.472 | 174 | | | | |
| 0.209 | 6 | 0.671 | 80 | 1.486 | 177 | | | | |
| 0.229 | 9 | 0.709 | 85 | | | | | | |
| 0.243 | 13 | 0.756 | 90 | | | | | | |
| 0.259 | 17 | 0.802 | 95 | | | | | | |
| 0.270 | 21 | 0.844 | 100 | | | | | | |
| 0.275 | 23 | 0.894 | 105 | | | | | | |
| 0.280 | 25 | 0.920 | 110 | | | | | | |
| 0.303 | 35 | 0.949 | 115 | | | | | | |
| 0.319 | 40 | 0.985 | 120 | | | | | | |
| 0.340 | 45 | 1.015 | 125 | | | | | | |
| 0.351 | 47 | 1.051 | 130 | | | | | | |
| 0.362 | 49 | 1.083 | 135 | | | | | | |
| 0.376 | 51 | 1.135 | 140 | | | | | | |
| 0.390 | 53 | 1.163 | 142 | | | | | | |
| 0.407 | 57 | 1.207 | 146 | | | | | | |
| 0.423 | 61 | 1.222 | 148 | | | | | | |
| 0.436 | 63 | 1.241 | 150 | | | | | | |
| 0.458 | 65 | 1.265 | 152 | | | | | | |
| 0.496 | 67 | 1.290 | 154 | | | | | | |
| 0.549 | 69 | 1.319 | 156 | | | | | | |
| 0.571 | 70 | 1.348 | 159 | | | | | | |
| 0.599 | 71 | 1.362 | 162 | | | | | | |




**CBR Values**

| Top, mBGL | Base, mBGL | CBR, %[1] |
|---|---|---|
| 0.08 | 0.27 | 34 |
| 0.27 | 0.41 | 75 |
| 0.41 | 0.61 | 18 |
| 0.61 | 1.48 | 31 |
| | | |

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

**Project** Central Somers Town, London

**Project No.** D5061-15

**Carried out for** AKT II

**Hole** **TRL10**

## APPENDIX E

## GEOTECHNICAL LABORATORY TEST RESULTS

| | |
|---|---|
| Index Properties – Summary of Results | INDX1 and 2 |
| Particle Size Distribution Analyses | PSD1 to 4 |
| One Dimensional Consolidation Test | OED1 to 6 |
| Unconsolidated Undrained Triaxial Compression Tests – Summary of Results | UUSUM1 to 3 |
| Consolidated undrained triaxial compression with measurement of pore pressure (Multistage) | CUTXLM1 and 2 |
| Soil Sample Analysis Test Reports (Chemical Tests) | EFS/160970, 80 and 81 |

# INDEX PROPERTIES - SUMMARY OF RESULTS

| Project No | Project Name |
|---|---|
| D5061-15 | Central Somers Town, London |

| Hole No. | Sample No. | Depth (m) from | Depth (m) to | type | Soil Description | $p$ Mg/m³ | $p_d$ Mg/m³ | $w$ % | < 425 µm sieve % | $W_L$ % | $W_P$ % | $I_P$ | $p_s$ Mg/m³ | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BH1 | 16 | 4.20 | 4.65 | UT | Stiff brown CLAY. | | | | | | | | 2.79-p | |
| BH1 | 17 | 4.70 | | D | Light brown slightly sandy CLAY. | | | 30 | 100 n | 73 a | 32 | 41 | | |
| BH1 | 29 | 12.50 | 12.95 | UT | Very stiff to firm greyish brown slightly sandy silty CLAY | | | 22 | | | | | 2.68-p | |
| BH1 | 30 | 13.00 | | D | Dark brown slightly sandy CLAY. | | | 24 | 100 n | 70 a | 26 | 44 | | |
| BH1 | 39 | 20.00 | | D | Brown slightly sandy slightly gravelly CLAY. | | | 17 | 98 s | 48 a | 23 | 25 | | |
| BH1 | 43 | 21.80 | | D | Greyish brown slightly sandy CLAY. | | | 13 | 100 n | 42 a | 20 | 22 | | |
| BH1 | 46 | 24.00 | | D | Reddish brown slightly sandy CLAY. | | | 23 | 100 n | 81 a | 31 | 50 | | |
| BH2 | 10 | 1.20 | | D | Brown slightly sandy slightly gravelly CLAY. | | | 34 | 95 s | 64 a | 30 | 34 | | |
| BH2 | 12 | 2.20 | 2.65 | UT | Firm brown CLAY. | | | | | | | | 2.70-p | |
| BH2 | 16 | 4.70 | | D | Brown slightly sandy slightly gravelly CLAY. | | | 31 | 100 n | 76 a | 32 | 44 | | |
| BH2 | 23 | 9.00 | | D | Brown slightly sandy CLAY. | | | 26 | 100 n | 77 a | 31 | 46 | | |
| BH2 | 24 | 9.50 | 9.95 | UT | Stiff to very stiff laminated greyish brown slightly sandy CLAY. | | | 25 | | | | | 2.74-p | |
| BH2 | 29 | 13.00 | | D | Brown slightly sandy CLAY. | | | 23 | 100 n | 75 a | 31 | 44 | | |
| BH2 | 37 | 19.00 | | D | Brown slightly sandy silty CLAY. | | | 20 | 100 n | 58 a | 24 | 34 | | |
| BH3 | 10 | 1.20 | | D | Dark brown slightly sandy slightly gravelly CLAY. | | | 31 | 90 s | 53 a | 34 | 19 | | |
| BH3 | 12 | 2.20 | 2.65 | UT | Stiff brown mottled grey slightly gravelly CLAY with mudstone. | | | | | | | | 2.77-p | |
| BH3 | 21 | 7.70 | | D | Dark brown slightly sandy slightly gravelly CLAY. | | | 32 | 96 n | 77 a | 34 | 43 | | |
| BH3 | 32 | 15.50 | 15.95 | UT | Very stiff greyish brown slightly sandy CLAY becoming SILT towards base. | | | 21 | | | | | 2.69-p | |
| BH3 | 33 | 16.00 | | D | Dark brown slightly sandy CLAY. | | | 23 | 100 n | 64 a | 27 | 37 | | |
| BH3 | 41 | 21.35 | | D | Brown and grey slightly sandy CLAY. | | | 20 | 100 n | 65 a | 30 | 35 | | |
| BH4 | 20 | 6.20 | | D | Brown slightly sandy CLAY. | | | 29 | 100 n | 76 a | 30 | 46 | | |
| BH4 | 27 | 9.90 | | D | Brown slightly sandy CLAY. | | | 27 | 100 n | 76 a | 35 | 41 | | |
| BH4 | 33 | 15.00 | | D | Brown slightly sandy silty CLAY. | | | 19 | 100 n | 51 a | 21 | 30 | | |
| BH4 | 39 | 19.00 | | D | Brown slightly sandy CLAY. | | | 26 | 100 n | 70 a | 30 | 40 | | |
| BH5 | 28 | 13.00 | | D | Dark brown slightly sandy CLAY. | | | 25 | 100 n | 78 a | 29 | 49 | | |
| BH5 | 36 | 19.00 | | D | Brown slightly sandy CLAY. | | | 26 | 100 n | 78 a | 29 | 49 | | |
| BH7 | 5 | 1.50 | 1.95 | D | Brown slightly sandy CLAY. | | | 29 | 100 s | 78 a | 32 | 46 | | |
| BH7 | 13 | 5.00 | | D | Brown slightly sandy CLAY. | | | 32 | 100 n | 74 a | 30 | 44 | | |
| BH7 | 19 | 8.50 | | D | Brown slightly sandy CLAY. | | | 21 | 100 n | 64 a | 25 | 39 | | |
| BH7 | 28 | 14.00 | | D | Brown slightly sandy slightly gravelly CLAY. | | | 24 | 100 n | 68 a | 28 | 40 | | |
| BH7 | 36 | 19.00 | | D | Greyish brown slightly sandy silty CLAY. | | | 12 | 100 n | 44 a | 17 | 27 | | |
| BH7 | 45 | 24.00 | 24.45 | D | Brownish grey slightly sandy CLAY. | | | 26 | 100 s | 89 a | 35 | 54 | | |

General notes: All above tests carried out to BS1377 : 1990 unless annotated otherwise. See individual test reports for further details.

Key :

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| $p$ | bulk density, linear | $W_L$ Liquid limit | $W_P$ | Plastic limit | <425um preparation | $p_s$ | particle density |
| $p_d$ | dry density | a 4 point cone test | NP | non - plastic | n from natural soil | -g = gas jar | |
| $w$ | moisture content | b 1 point cone test | $I_P$ | Plasticity Index | s sieved specimen | -p = small pyknometer | |

# INDEX PROPERTIES - SUMMARY OF RESULTS

| Project No | Project Name |
|---|---|
| D5061-15 | Central Somers Town, London |

| Hole No. | Sample No. | Depth (m) from | Depth (m) to | type | Soil Description | $p$ Mg/m$^3$ | $p_d$ Mg/m$^3$ | $w$ % | < 425 µm sieve % | $W_L$ % | $W_P$ % | $I_P$ | $p_s$ Mg/m$^3$ | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BH7 | 51 | 28.00 | | D | Greyish brown slightly sandy silty CLAY. | | | 21 | 100 n | 72 a | 30 | 42 | | |
| BH9 | 12 | 4.00 | | D | Brown slightly gravelly silty CLAY. | | | 31 | 100 n | 76 a | 34 | 42 | | |
| BH9 | 20 | 8.50 | | D | Brown slightly sandy slightly gravelly CLAY. | | | 25 | 98 n | 71 a | 28 | 43 | | |
| BH9 | 33 | 16.00 | | D | Brown slightly sandy CLAY. | | | 25 | 100 n | 73 a | 31 | 42 | | |
| BH9 | 47 | 24.40 | | D | Brown slightly sandy CLAY. | | | 15 | 100 n | 44 a | 20 | 24 | | |
| BH10 | 9 | 3.00 | | D | Brown slightly sandy slightly gravelly CLAY. | | | 26 | 90 n | 72 a | 29 | 43 | | |
| BH10 | 17 | 7.00 | | D | Brown CLAY. | | | 31 | 100 n | 78 a | 30 | 48 | | |
| BH10 | 29 | 14.00 | | D | Brown slightly sandy CLAY. | | | 20 | 100 n | 55 a | 21 | 34 | | |
| BH10 | 40 | 20.50 | | D | Brown slightly sandy CLAY. | | | 23 | 100 n | 79 a | 31 | 48 | | |
| BH10 | 54 | 29.00 | | D | Red mottled grey slightly sandy CLAY. | | | 22 | 100 n | 75 a | 30 | 45 | | |

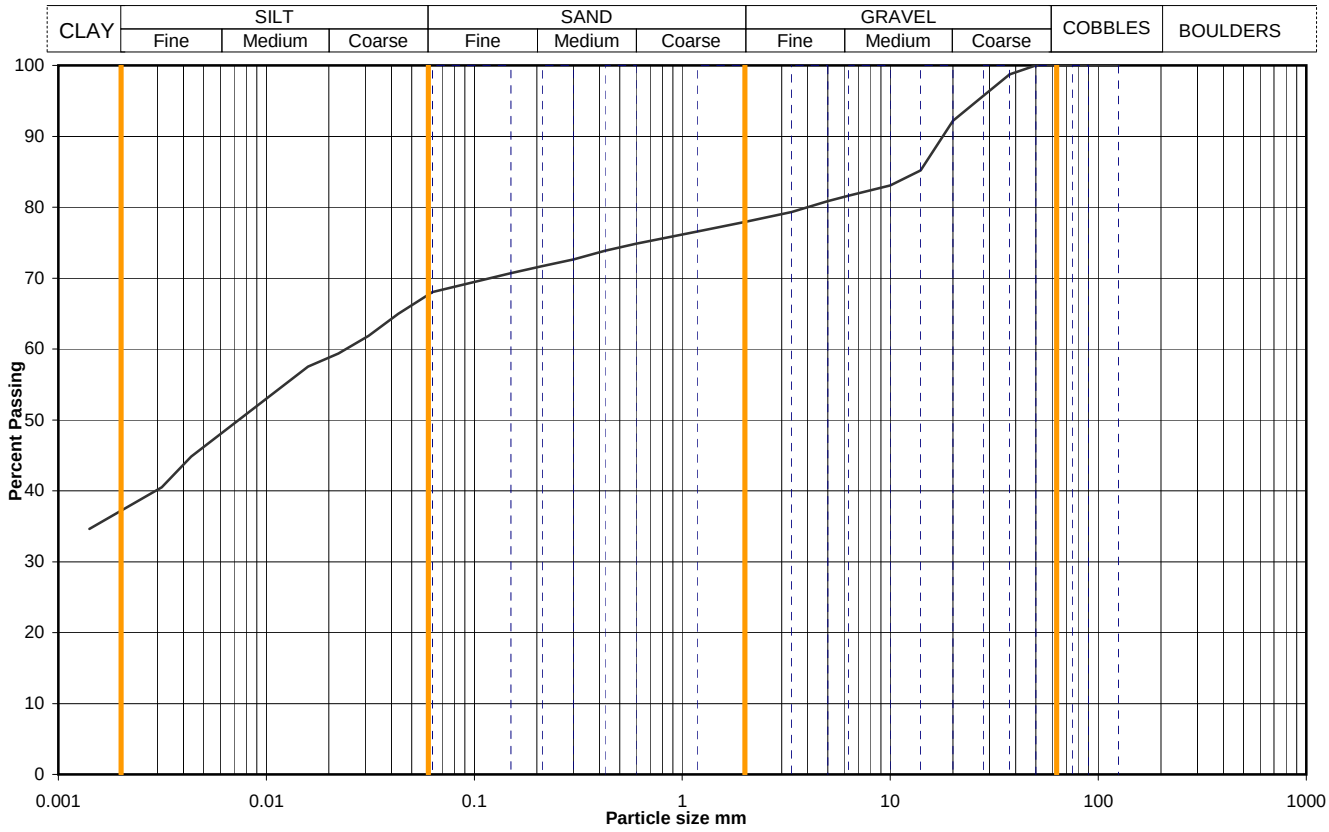
General notes: All above tests carried out to BS1377 : 1990 unless annotated otherwise. See individual test reports for further details.

Key :

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| $p$ | bulk density, linear | $W_L$ Liquid limit | $W_P$ | Plastic limit | <425um preparation | $p_s$ | particle density |
| $p_d$ | dry density | a 4 point cone test | NP | non - plastic | n from natural soil | -g = gas jar | |
| $w$ | moisture content | b 1 point cone test | $I_P$ | Plasticity Index | s sieved specimen | -p = small pyknometer | |

# Particle Size Distribution Analysis

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH1 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 3.20 | | |
| | | | Samp No | 15 | Type | B |
| | | | ID | D5061-1520160115104357 | | |
| | | | Spec Ref | | | |




| Sieving | | Sedimentation | |
|---|---|---|---|
| Particle Size mm | % Passing | Particle Size mm | % Passing |
| 125 | 100 | 0.0630 | 68 |
| 90 | 100 | 0.0431 | 65 |
| 75 | 100 | 0.0310 | 62 |
| 63 | 100 | 0.0222 | 59 |
| 50 | 100 | 0.0159 | 58 |
| 37.5 | 99 | 0.0084 | 51 |
| 28 | 96 | 0.0044 | 45 |
| 20 | 92 | 0.0031 | 41 |
| 14 | 85 | 0.0014 | 35 |
| 10 | 83 | | |
| 6.3 | 82 | | |
| 5.0 | 81 | | |
| 3.35 | 79 | | |
| 2.00 | 78 | | |
| 1.18 | 77 | Particle density, Mg/m3 | |
| 0.600 | 75 | | |
| 0.425 | 74 | 2.65 assumed | |
| 0.300 | 73 | Dry mass of sample, kg | |
| 0.212 | 72 | | |
| 0.150 | 71 | 9.4 | |
| 0.063 | 68 | | |

| | | | |
|---|---|---|---|
| Soil description | Grey and brown slightly sandy slightly gravelly CLAY. | | |
| Preparation / Pretreatment | Sieve: natural material Hydro: as BS1377 | | |
| Remarks | | | |
| **Sample Proportions** *<60mm values to aid description only | | Whole | *<63mm |
| | Cobbles / boulders | 0 | 0 |
| | Gravel | 22 | 22 |
| | Sand | 10 | 10 |
| | Silt | 31 | 31 |
| | Clay | 37 | 37 |

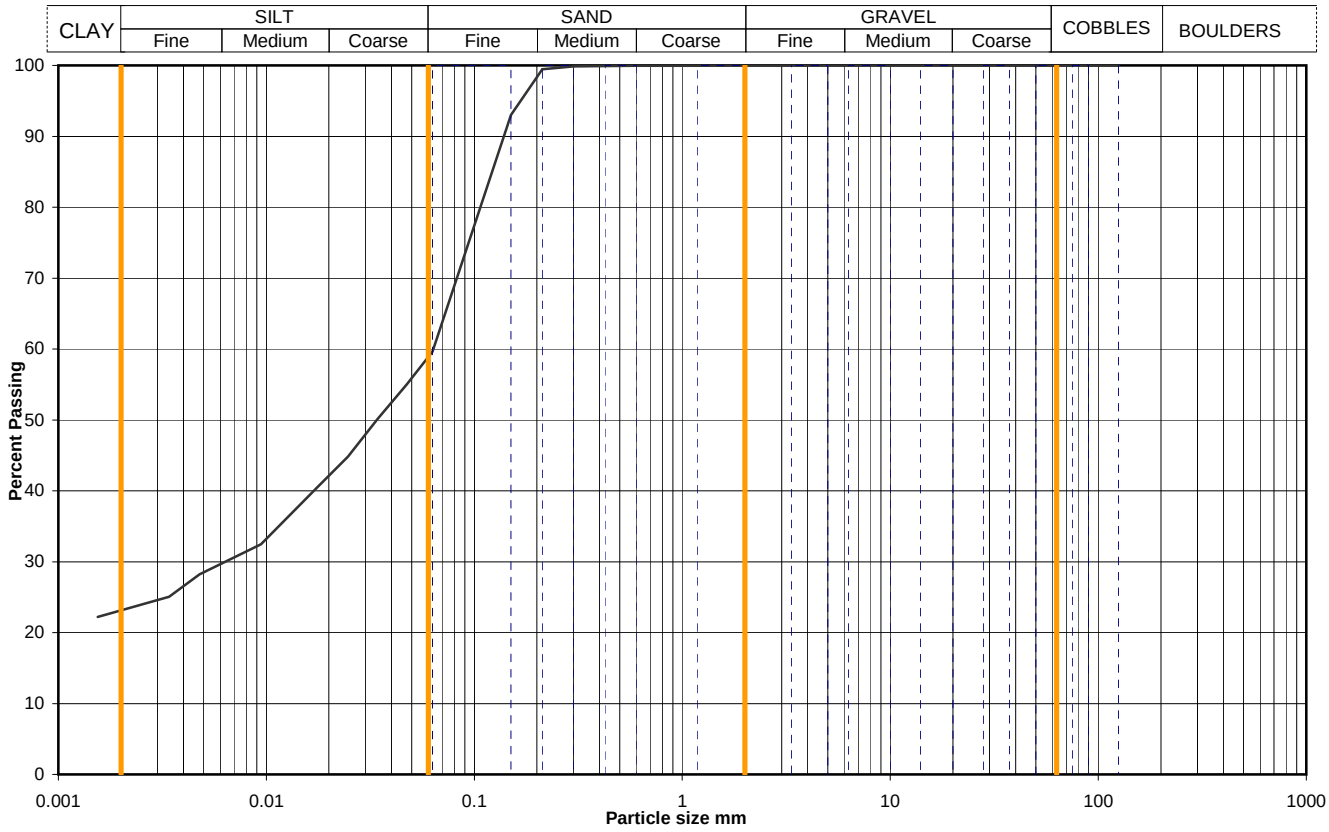
| | | |
|---|---|---|
| **Uniformity Coefficient** | $D_{60}$ / $D_{10}$ | Not applicable |

| | | |
|---|---|---|
| **Test Method** | BS 1377 : Part 2 : 1990 | |
| | Sieving | 9.2 wet sieve |
| | Sedimentation | 9.5 hydrometer |

| QA Ref | | | Figure |
|---|---|---|---|
| SLR 2,9 Rev 88 Aug 11 | ESG Environmental Scientifics Group | UKAS TESTING 1157 | Printed:29/02/2016 11:15 | **PSD** |

# Particle Size Distribution Analysis

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH3 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 22.00 | | |
| | | | Samp No | 42 | Type | B |
| | | | ID | D5061-1520160115024348 | | |
| | | | Spec Ref | | | |




| Sieving | | Sedimentation | |
|---|---|---|---|
| Particle Size mm | % Passing | Particle Size mm | % Passing |
| 125 | 100 | 0.0630 | 60 |
| 90 | 100 | 0.0474 | 55 |
| 75 | 100 | 0.0342 | 50 |
| 63 | 100 | 0.0247 | 45 |
| 50 | 100 | 0.0177 | 41 |
| 37.5 | 100 | 0.0094 | 32 |
| 28 | 100 | 0.0048 | 28 |
| 20 | 100 | 0.0034 | 25 |
| 14 | 100 | 0.0015 | 22 |
| 10 | 100 | | |
| 6.3 | 100 | | |
| 5.0 | 100 | | |
| 3.35 | 100 | | |
| 2.00 | 100 | | |
| 1.18 | 100 | Particle density, Mg/m3 | |
| 0.600 | 100 | | |
| 0.425 | 100 | 2.65 assumed | |
| 0.300 | 100 | Dry mass of sample, kg | |
| 0.212 | 99 | | |
| 0.150 | 93 | 6.5 | |
| 0.063 | 60 | | |

| | | | |
|---|---|---|---|
| Soil description | Light greenish grey sandy CLAY. | | |
| Preparation / Pretreatment | Sieve: natural material Hydro: as BS1377 | | |
| Remarks | | | |
| **Sample Proportions** *<60mm values to aid description only | | Whole | *<63mm |
| | Cobbles / boulders | 0 | 0 |
| | Gravel | 0 | 0 |
| | Sand | 41 | 41 |
| | Silt | 36 | 36 |
| | Clay | 23 | 23 |

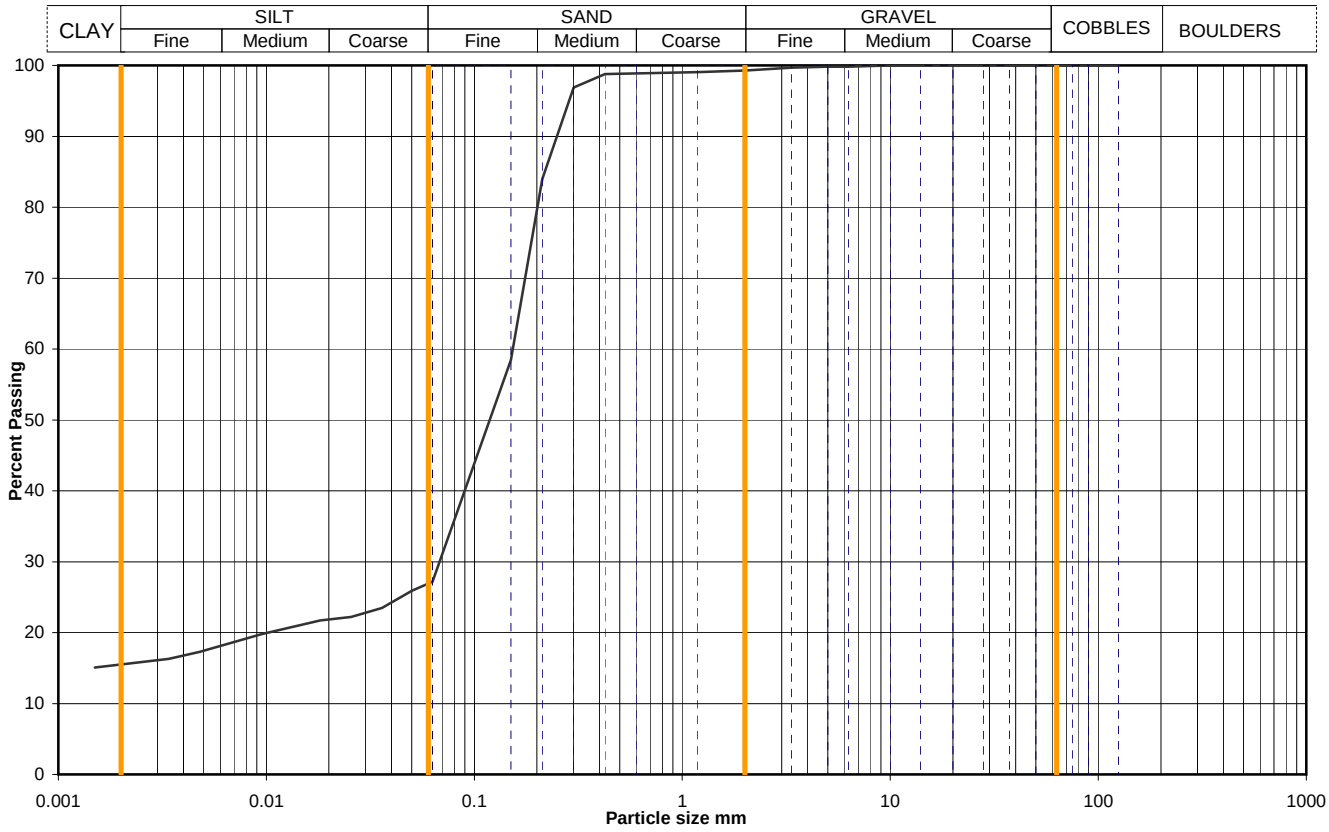
| | | |
|---|---|---|
| **Uniformity Coefficient** | $D_{60}$ / $D_{10}$ | Not applicable |

| | | |
|---|---|---|
| **Test Method** | BS 1377 : Part 2 : 1990 | |
| | Sieving | 9.2 wet sieve |
| | Sedimentation | 9.5 hydrometer |

| QA Ref | | | Figure |
|---|---|---|---|
| SLR 2,9 Rev 88 Aug 11 | ESG Environmental Scientifics Group | UKAS TESTING 1157 | Printed:29/02/2016 11:15 | **PSD** |

# Particle Size Distribution Analysis

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH7 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 22.75 | | |
| | | | Samp No | 44 | Type | B |
| | | | ID | D5061-1520160118093814 | | |
| | | | Spec Ref | | | |




| Sieving | | Sedimentation | |
|---|---|---|---|
| Particle Size mm | % Passing | Particle Size mm | % Passing |
| 125 | 100 | 0.0630 | 27 |
| 90 | 100 | 0.0502 | 26 |
| 75 | 100 | 0.0360 | 23 |
| 63 | 100 | 0.0256 | 22 |
| 50 | 100 | 0.0181 | 22 |
| 37.5 | 100 | 0.0095 | 20 |
| 28 | 100 | 0.0048 | 17 |
| 20 | 100 | 0.0034 | 16 |
| 14 | 100 | 0.0015 | 15 |
| 10 | 100 | | |
| 6.3 | 100 | | |
| 5.0 | 100 | | |
| 3.35 | 100 | | |
| 2.00 | 99 | | |
| 1.18 | 99 | Particle density, Mg/m3 | |
| 0.600 | 99 | | |
| 0.425 | 99 | 2.65 assumed | |
| 0.300 | 97 | Dry mass of sample, kg | |
| 0.212 | 84 | | |
| 0.150 | 58 | 17.2 | |
| 0.063 | 27 | | |

| | | | |
|---|---|---|---|
| Soil description | Yellowish brown slightly gravelly very sandy CLAY. | | |
| Preparation / Pretreatment | Sieve: natural material Hydro: as BS1377 | | |
| Remarks | | | |
| **Sample Proportions** *<60mm values to aid description only | | Whole | *<63mm |
| | Cobbles / boulders | 0 | 0 |
| | Gravel | 1 | 1 |
| | Sand | 72 | 72 |
| | Silt | 11 | 11 |
| | Clay | 16 | 16 |

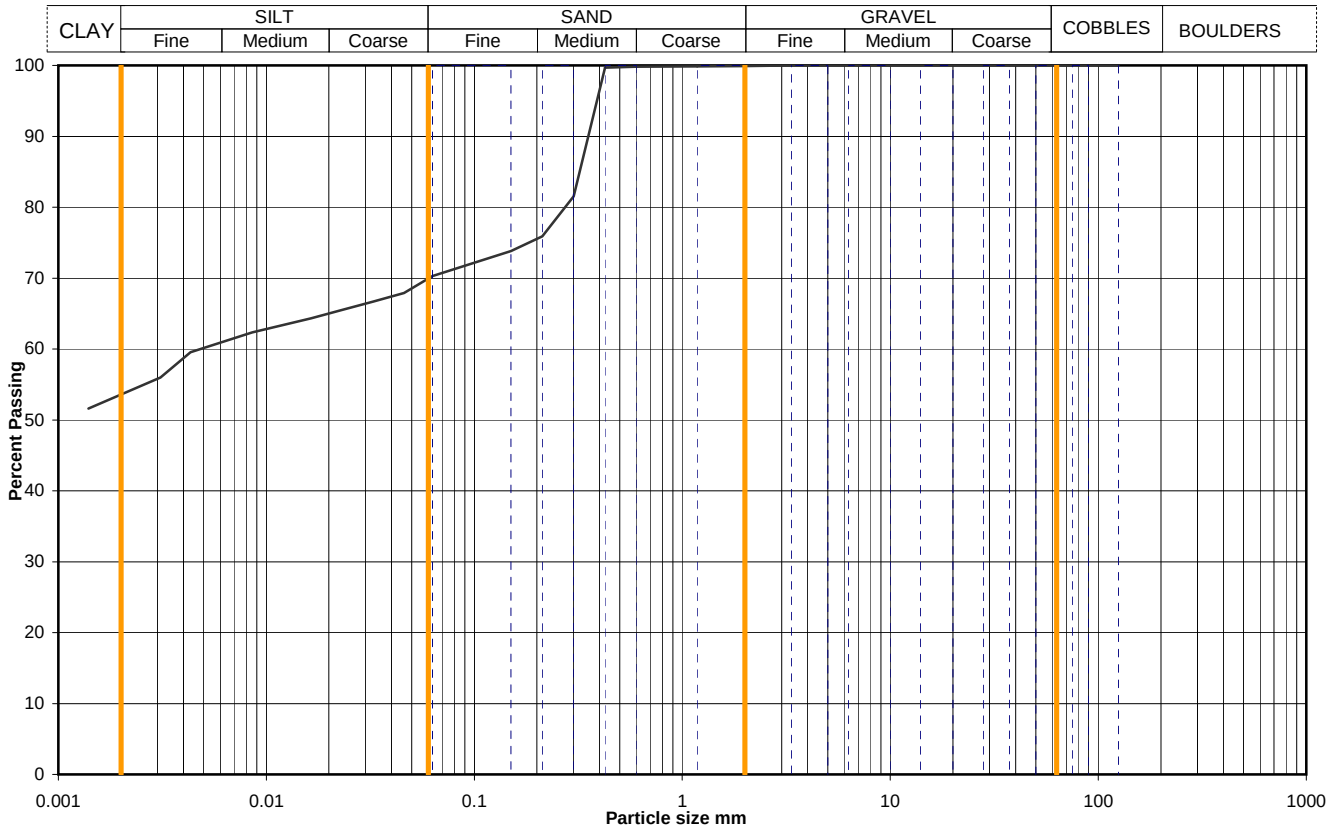
| | | |
|---|---|---|
| **Uniformity Coefficient** | $D_{60}$ / $D_{10}$ | Not applicable |

| | | |
|---|---|---|
| **Test Method** | BS 1377 : Part 2 : 1990 | |
| | Sieving | 9.2 wet sieve |
| | Sedimentation | 9.5 hydrometer |

| | | | | |
|---|---|---|---|---|
| **QA Ref** SLR 2,9 Rev 88 Aug 11 | ESG Environmental Scientifics Group | UKAS TESTING 1157 | Printed:29/02/2016 11:15 | **Figure** **PSD** |

# Particle Size Distribution Analysis

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH7 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 25.30 | | |
| | | | Samp No | 47 | Type | D |
| | | | ID | D5061-1520160118094020 | | |
| | | | Spec Ref | | | |




| Sieving | | Sedimentation | |
|---|---|---|---|
| Particle Size mm | % Passing | Particle Size mm | % Passing |
| 125 | 100 | 0.0630 | 70 |
| 90 | 100 | 0.0458 | 68 |
| 75 | 100 | 0.0326 | 67 |
| 63 | 100 | 0.0231 | 66 |
| 50 | 100 | 0.0164 | 64 |
| 37.5 | 100 | 0.0085 | 62 |
| 28 | 100 | 0.0043 | 60 |
| 20 | 100 | 0.0031 | 56 |
| 14 | 100 | 0.0014 | 52 |
| 10 | 100 | | |
| 6.3 | 100 | | |
| 5.0 | 100 | | |
| 3.35 | 100 | | |
| 2.00 | 100 | | |
| 1.18 | 100 | Particle density, Mg/m3 | |
| 0.600 | 100 | | |
| 0.425 | 100 | 2.65 assumed | |
| 0.300 | 82 | Dry mass of sample, kg | |
| 0.212 | 76 | | |
| 0.150 | 74 | 0.3 | |
| 0.063 | 70 | | |

| | | | |
|---|---|---|---|
| Soil description | Green and grey slightly sandy CLAY. | | |
| Preparation / Pretreatment | Sieve: natural material Hydro: as BS1377 | | |
| Remarks | | | |
| **Sample Proportions** *<60mm values to aid description only | | Whole | *<63mm |
| | Cobbles / boulders | 0 | 0 |
| | Gravel | 0 | 0 |
| | Sand | 30 | 30 |
| | Silt | 16 | 16 |
| | Clay | 54 | 54 |

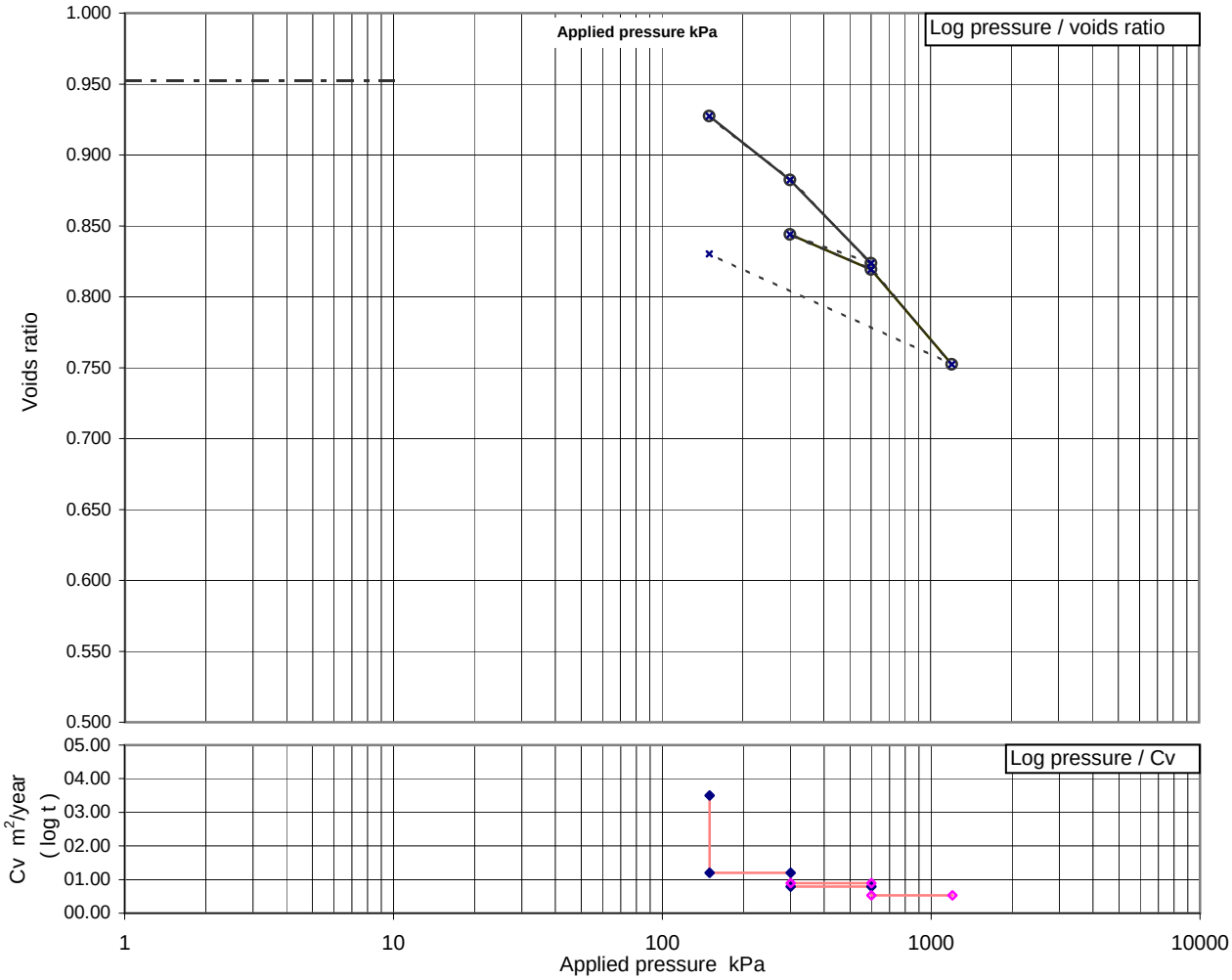
| | | |
|---|---|---|
| **Uniformity Coefficient** | $D_{60}$ / $D_{10}$ | Not applicable |

| | | |
|---|---|---|
| **Test Method** | BS 1377 : Part 2 : 1990 | |
| | Sieving | 9.2 wet sieve |
| | Sedimentation | 9.5 hydrometer |

| QA Ref | | | Figure |
|---|---|---|---|
| SLR 2,9 Rev 88 Aug 11 | ESG Environmental Scientifics Group | Printed:29/02/2016 11:16 | **PSD** |

# ONE DIMENSIONAL CONSOLIDATION TEST
## BS 1377 : Part 5 : 1990 : clause 3

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH1 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 4.20 | | |
| | | | Samp No | 16 | Type | UT |
| | | | ID | D5061-1520160115104408 | | |
| | | | Spec Ref | | | |




Soil description: Stiff brown CLAY.

Preparation: Undisturbed

Index properties (if available): Liquid limit % | Plastic limit %

| Specimen details | Initial | Final | |
|---|---|---|---|
| Particle density | 2.79 | measured | Mg/m³ |
| Diameter | 74.96 | | mm |
| Height | 19.06 | 17.87 | mm |
| Voids ratio | 0.953 | 0.830 | |
| Moisture content | 31 | 31 | % |
| Bulk density | 1.88 | 2.00 | Mg/m³ |
| Dry density | 1.43 | 1.52 | Mg/m³ |
| Saturation | 92 | 104 | % |
| Average temperature for test | 20 | | °C |

Swelling pressure: >75 kPa

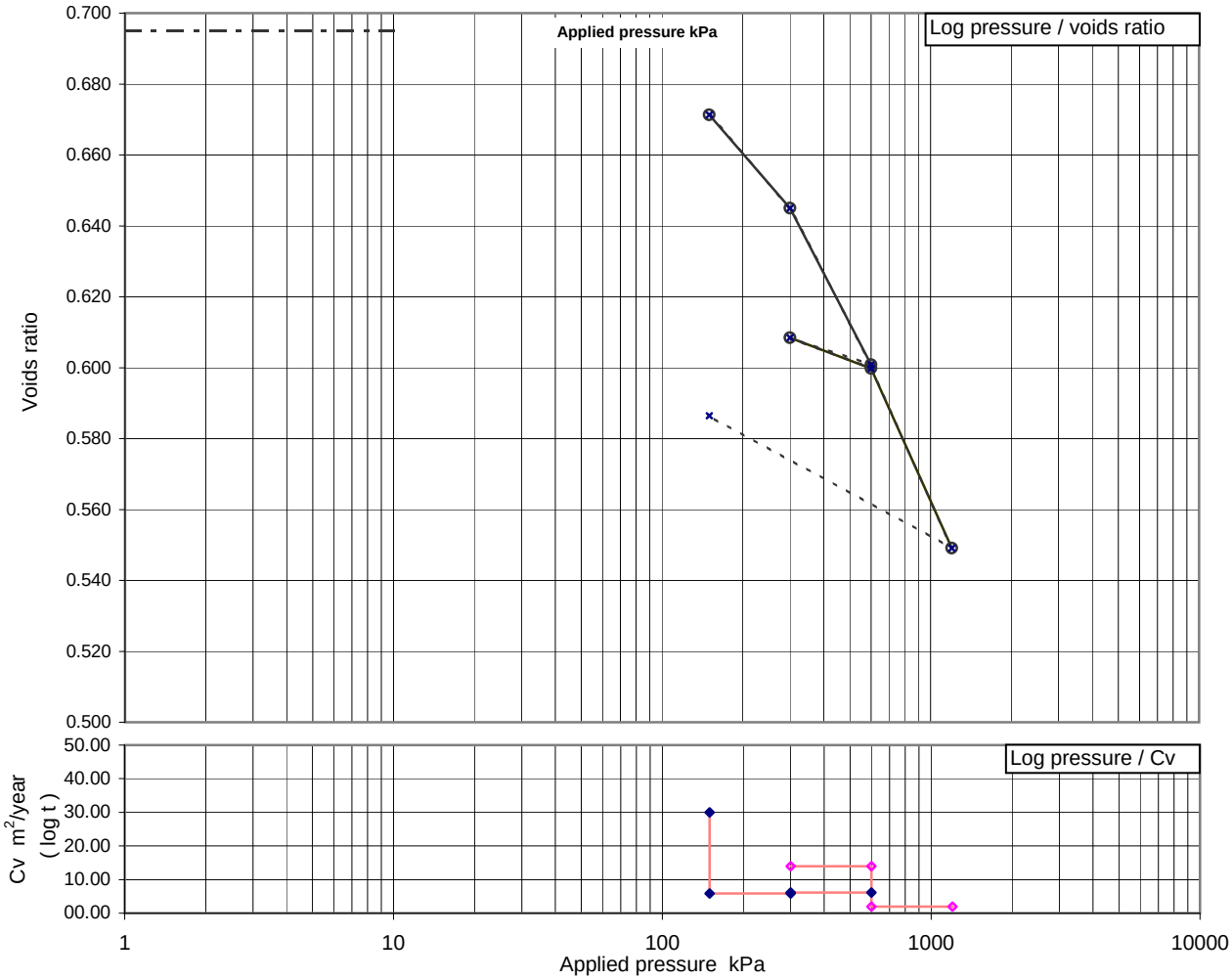
Notes :

Specimen taken 10 mm from base of sample

| Applied Pressure kPa | Voids ratio | $M_v$ m²/MN | $C_v$ ( $t_{50, log}$ ) m²/year | $C_v$ ( $t_{90, root}$ ) m²/year | |
|---|---|---|---|---|---|
| 75 | 0.9526 | | | | |
| 150 | 0.9274 | 0.172 | 3.5 | 3.9 | |
| 300 | 0.8823 | 0.156 | 1.2 | 1.3 | |
| 600 | 0.8237 | 0.104 | 0.79 | 0.82 | |
| 300 | 0.8439 | 0.037 | - | - | |
| 600 | 0.8192 | 0.045 | 0.89 | 0.94 | |
| 1200 | 0.7523 | 0.061 | 0.53 | 0.56 | |
| 150 | 0.8303 | 0.042 | - | - | |

# ONE DIMENSIONAL CONSOLIDATION TEST
## BS 1377 : Part 5 : 1990 : clause 3

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH1 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 12.50 | | |
| | | | Samp No | 29 | Type | UT |
| | | | ID | D5061-1520160115104800 | | |
| | | | Spec Ref | | | |







| | |
|---|---|
| Soil description | Very stiff to firm greyish brown slightly sandy silty CLAY |
| Preparation | Undisturbed |
| Index properties ( if available ) | Liquid limit % [ ] Plastic limit % [ ] |

| Specimen details | Initial | Final | |
|---|---|---|---|
| Particle density | 2.68 | measured | Mg/m³ |
| Diameter | 75.00 | | mm |
| Height | 19.04 | 17.82 | mm |
| Voids ratio | 0.695 | 0.586 | |
| Moisture content | 23 | 23 | % |
| Bulk density | 1.95 | 2.08 | Mg/m³ |
| Dry density | 1.58 | 1.69 | Mg/m³ |
| Saturation | 90 | 105 | % |
| Average temperature for test | 20 | | °C |

Swelling pressure: not measured kPa

Notes :

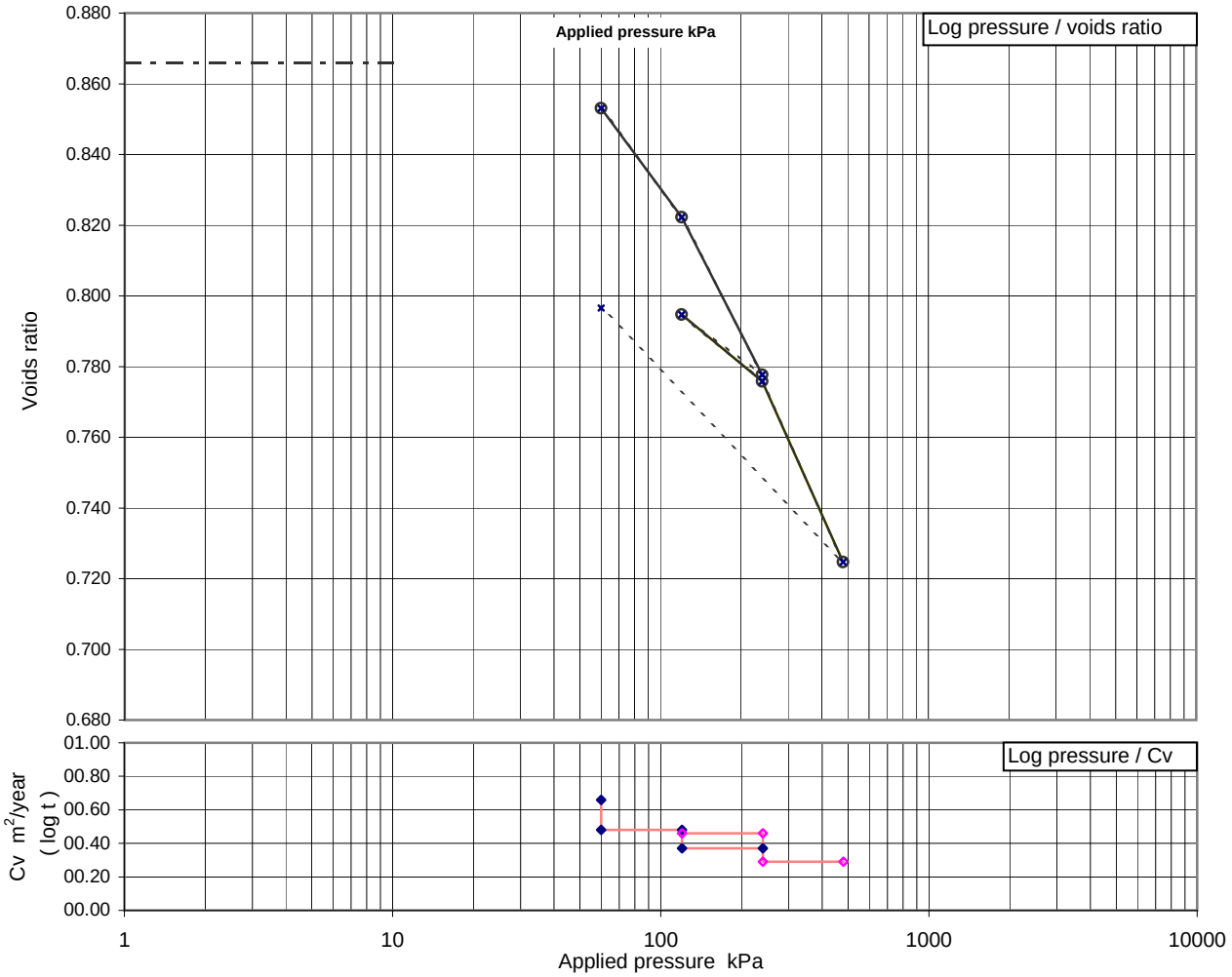
Specimen taken 10 mm from base of sample

| Applied Pressure kPa | Voids ratio | $M_v$ m²/MN | $C_v$ ( $t_{50, log}$ ) m²/year | $C_v$ ( $t_{90, root}$ ) m²/year | |
|---|---|---|---|---|---|
| 0 | 0.6951 | | | | |
| 150 | 0.6713 | 0.094 | 30 | 32 | |
| 300 | 0.6450 | 0.105 | 5.9 | 6.2 | |
| 600 | 0.6009 | 0.089 | 6.1 | 7 | |
| 300 | 0.6084 | 0.016 | - | - | |
| 600 | 0.5998 | 0.018 | 14 | 15 | |
| 1200 | 0.5491 | 0.053 | 2 | 2 | |
| 150 | 0.5864 | 0.023 | - | - | |

| QA Ref | | | Figure |
|---|---|---|---|
| SLR 5.3 Rev 146 Nov 14 | ESG Environmental Scientifics Group | Printed:29/02/2016 11:15 | OED |

# ONE DIMENSIONAL CONSOLIDATION TEST
## BS 1377 : Part 5 : 1990 : clause 3

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH2 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 2.20 | | |
| | | | Samp No | 12 | Type | UT |
| | | | ID | D5061-1520151215022650 | | |
| | | | Spec Ref | | | |




Soil description: Firm brown CLAY.

Preparation: Undisturbed

Index properties ( if available ): Liquid limit % | Plastic limit %

| Specimen details | Initial | Final | |
|---|---|---|---|
| Particle density | 2.70 | measured | $Mg/m^3$ |
| Diameter | 74.95 | | mm |
| Height | 19.02 | 18.31 | mm |
| Voids ratio | 0.866 | 0.797 | |
| Moisture content | 32 | 31 | % |
| Bulk density | 1.91 | 1.97 | $Mg/m^3$ |
| Dry density | 1.45 | 1.50 | $Mg/m^3$ |
| Saturation | 99 | 105 | % |
| Average temperature for test | 20 | | °C |

Swelling pressure: >30 kPa

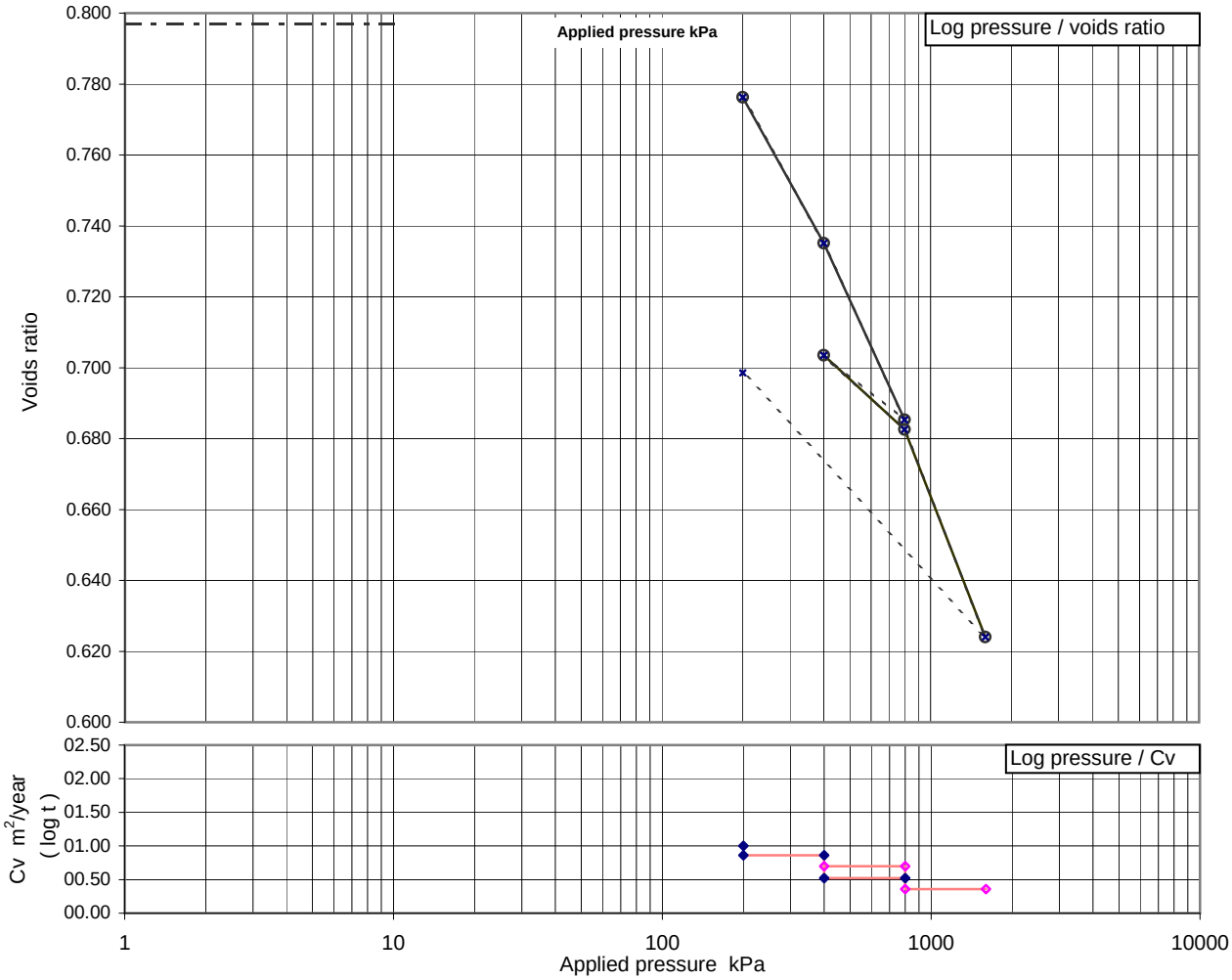
Notes :

Specimen taken 10 mm from base of sample

| Applied Pressure kPa | Voids ratio | $M_v$ $m^2/MN$ | $C_v$ ( $t_{50, log}$ ) $m^2$/year | $C_v$ ( $t_{90, root}$ ) $m^2$/year | |
|---|---|---|---|---|---|
| 30 | 0.8659 | | | | |
| 60 | 0.8531 | 0.230 | 0.66 | 0.73 | |
| 120 | 0.8223 | 0.277 | 0.48 | 0.5 | |
| 240 | 0.7776 | 0.204 | 0.37 | 0.4 | |
| 120 | 0.7947 | 0.080 | - | - | |
| 240 | 0.7758 | 0.088 | 0.46 | 0.5 | |
| 480 | 0.7247 | 0.120 | 0.29 | 0.31 | |
| 60 | 0.7966 | 0.099 | - | - | |

# ONE DIMENSIONAL CONSOLIDATION TEST
## BS 1377 : Part 5 : 1990 : clause 3

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH2 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 9.50 | | |
| | | | Samp No | 24 | Type | UT |
| | | | ID | D5061-1520151215022854 | | |
| | | | Spec Ref | | | |




Soil description: Stiff to very stiff laminated greyish brown slightly sandy CLAY.

Preparation: Undisturbed

Index properties ( if available ): Liquid limit % | Plastic limit %

| Specimen details | Initial | Final | |
|---|---|---|---|
| Particle density | 2.74 | measured | Mg/m³ |
| Diameter | 75.02 | | mm |
| Height | 19.01 | 17.97 | mm |
| Voids ratio | 0.797 | 0.699 | |
| Moisture content | 25 | 26 | % |
| Bulk density | 1.91 | 2.03 | Mg/m³ |
| Dry density | 1.52 | 1.61 | Mg/m³ |
| Saturation | 87 | 101 | % |
| Average temperature for test | 20 | | °C |

Swelling pressure: >100 kPa

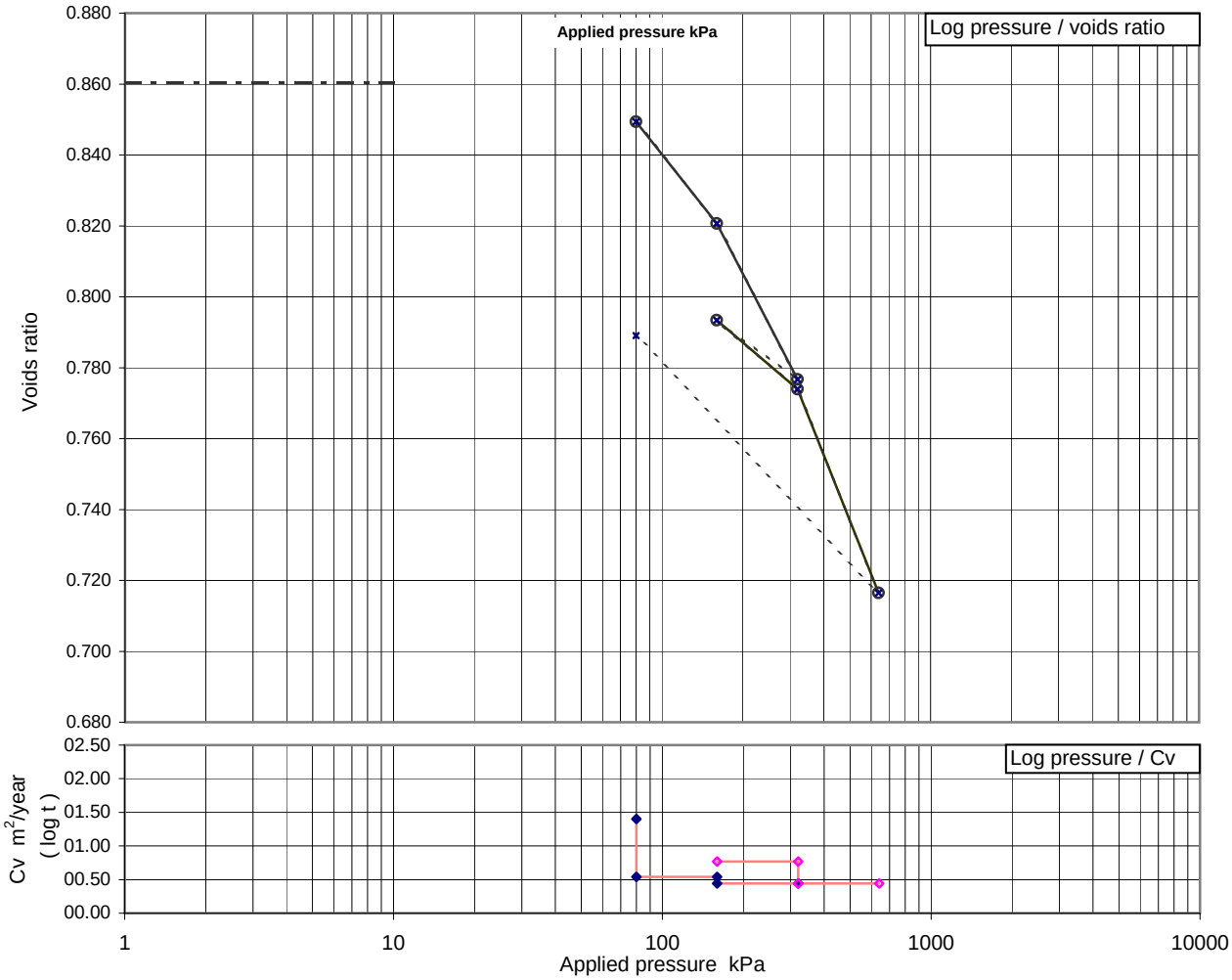
Notes :

Specimen taken 10 mm from base of sample

| Applied Pressure kPa | Voids ratio | $M_v$ m²/MN | $C_v$ ( $t_{50, log}$ ) m²/year | $C_v$ ( $t_{90, root}$ ) m²/year | |
|---|---|---|---|---|---|
| 100 | 0.7968 | | | | |
| 200 | 0.7762 | 0.115 | 1 | 1.1 | |
| 400 | 0.7351 | 0.116 | 0.86 | 0.95 | |
| 800 | 0.6853 | 0.072 | 0.52 | 0.56 | |
| 400 | 0.7035 | 0.027 | - | - | |
| 800 | 0.6825 | 0.031 | 0.7 | 0.73 | |
| 1600 | 0.6240 | 0.043 | 0.36 | 0.39 | |
| 200 | 0.6985 | 0.033 | - | - | |

# ONE DIMENSIONAL CONSOLIDATION TEST
## BS 1377 : Part 5 : 1990 : clause 3

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH3 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 2.20 | | |
| | | | Samp No | 12 | Type | UT |
| | | | ID | D5061-1520160115023654 | | |
| | | | Spec Ref | | | |




| | |
|---|---|
| Soil description | Stiff brown mottled grey slightly gravelly CLAY with mudstone. |
| Preparation | Undisturbed |
| Index properties ( if available ) | Liquid limit % [ ] Plastic limit % [ ] |

| Specimen details | Initial | Final | |
|---|---|---|---|
| Particle density | 2.77 | measured | Mg/m³ |
| Diameter | 74.99 | | mm |
| Height | 19.06 | 18.33 | mm |
| Voids ratio | 0.860 | 0.789 | |
| Moisture content | 31 | 30 | % |
| Bulk density | 1.95 | 2.01 | Mg/m³ |
| Dry density | 1.49 | 1.55 | Mg/m³ |
| Saturation | 99 | 104 | % |
| Average temperature for test | 20 | | °C |

Swelling pressure >40 kPa

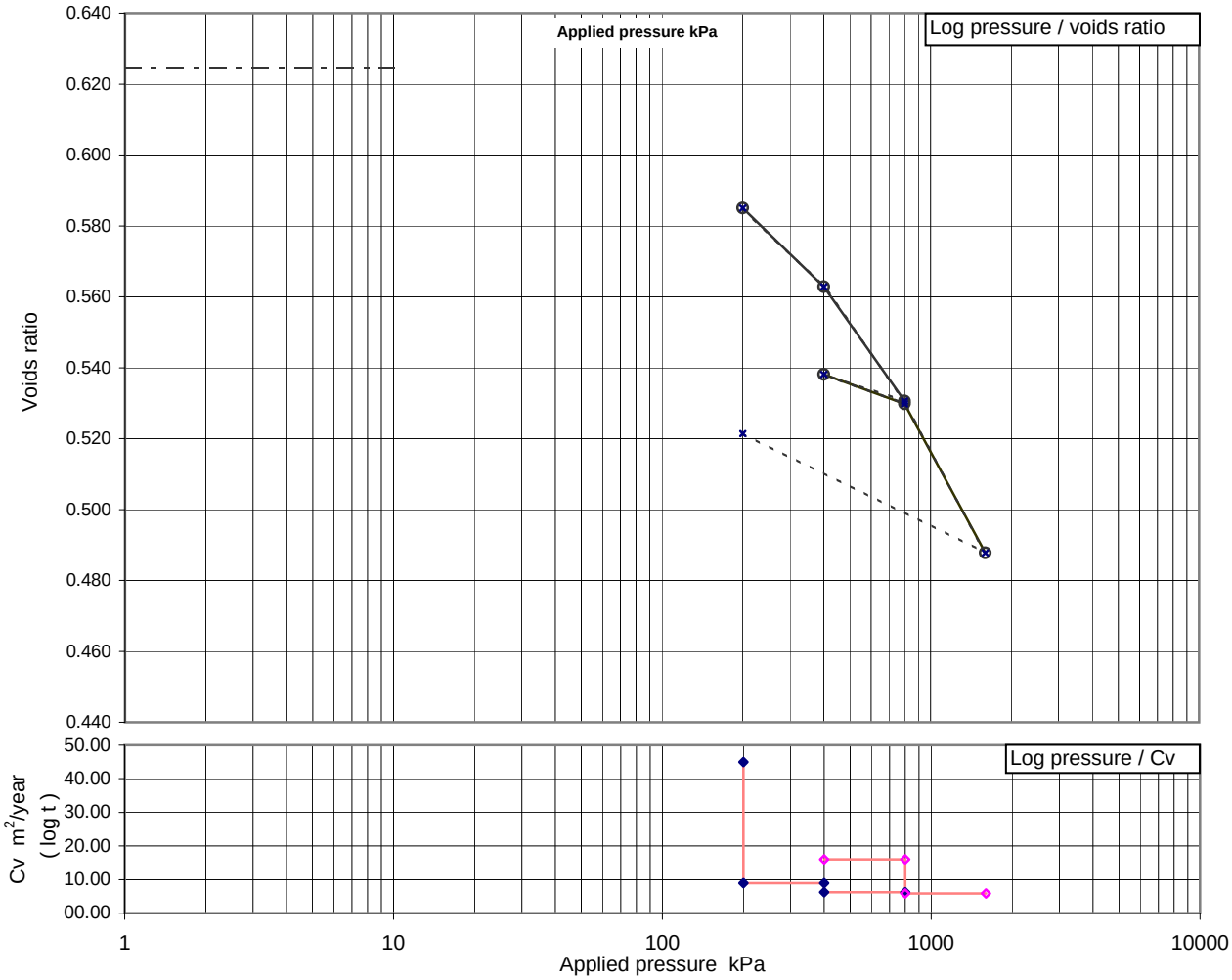
Notes :

Specimen taken 10 mm from base of sample

| Applied Pressure kPa | Voids ratio | $M_v$ m²/MN | $C_v$ ( $t_{50, log}$ ) m²/year | $C_v$ ( $t_{90, root}$ ) m²/year | |
|---|---|---|---|---|---|
| 40 | 0.8604 | | | | |
| 80 | 0.8494 | 0.148 | 1.4 | 1.4 | |
| 160 | 0.8207 | 0.194 | 0.54 | 0.6 | |
| 320 | 0.7767 | 0.151 | 0.44 | 0.47 | |
| 160 | 0.7934 | 0.059 | - | - | |
| 320 | 0.7739 | 0.068 | 0.77 | 0.84 | |
| 640 | 0.7164 | 0.101 | 0.44 | 0.48 | |
| 80 | 0.7891 | 0.076 | - | - | |

# ONE DIMENSIONAL CONSOLIDATION TEST
## BS 1377 : Part 5 : 1990 : clause 3

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH3 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 15.50 | | |
| | | | Samp No | 32 | Type | UT |
| | | | ID | D5061-1520160115024129 | | |
| | | | Spec Ref | | | |




| | |
|---|---|
| Soil description | Very stiff greyish brown slightly sandy CLAY becoming SILT towards base. |
| Preparation | Undisturbed |
| Index properties ( if available ) | Liquid limit % [ ] Plastic limit % [ ] |

| Specimen details | Initial | Final | |
|---|---|---|---|
| Particle density | 2.69 | measured | Mg/m³ |
| Diameter | 74.99 | | mm |
| Height | 18.99 | 17.78 | mm |
| Voids ratio | 0.624 | 0.521 | |
| Moisture content | 23 | 20 | % |
| Bulk density | 2.03 | 2.13 | Mg/m³ |
| Dry density | 1.66 | 1.77 | Mg/m³ |
| Saturation | 98 | 105 | % |
| Average temperature for test | 20 | | °C |

Swelling pressure: not measured kPa

Notes :

Specimen taken 10 mm from base of sample

| Applied Pressure kPa | Voids ratio | $M_v$ m²/MN | $C_v$ ( $t_{50, log}$ ) m²/year | $C_v$ ( $t_{90, root}$ ) m²/year | |
|---|---|---|---|---|---|
| 0 | 0.6245 | | | | |
| 200 | 0.5850 | 0.121 | 45 | 48 | |
| 400 | 0.5629 | 0.070 | 8.9 | 9.7 | |
| 800 | 0.5306 | 0.052 | 6.2 | 6.3 | |
| 400 | 0.5381 | 0.012 | - | - | |
| 800 | 0.5298 | 0.013 | 16 | 18 | |
| 1600 | 0.4877 | 0.034 | 5.9 | 5.8 | |
| 200 | 0.5214 | 0.016 | - | - | |

# UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TESTS WITHOUT MEASUREMENT OF PORE PRESSURE - SUMMARY OF RESULTS

| Project No | Project Name |
|---|---|
| D5061-15 | Central Somers Town, London |

| Hole No. | Sample No. | Depth (m) from | Depth (m) to | type | Soil Description | Density bulk Mg/m³ | Density dry Mg/m³ | *w* % | Test type | Dia. mm | ó₃ kPa | At failure / end of stage: Axial strain % | ó₁ - ó₃ kPa | $c_u$ kPa | MODE | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BH1 | 20 | 6.50 | 6.95 | UT | Very stiff laminated brown slightly sandy slightly gravelly CLAY. | 1.92 | 1.45 | 33 | UU | 103.7 | 130 | 5.4 | 236 | 118 | B | |
| BH1 | 25 | 9.50 | 9.95 | UT | Very stiff to hard laminated greyish brown slightly sandy CLAY. | 2.01 | 1.60 | 26 | UU | 104.3 | 190 | 6.0 | 438 | 219 | B | |
| BH1 | 29 | 12.50 | 12.95 | UT | Very stiff to firm greyish brown slightly sandy silty CLAY | 2.07 | 1.70 | 22 | UU | 103.5 | 250 | 7.9 | 475 | 238 | B | |
| BH1 | 33 | 15.50 | 15.95 | UT | Very stiff greyish brown slightly sandy CLAY. | 2.06 | 1.70 | 22 | UU | 104.1 | 310 | 5.4 | 603 | 301 | B | |
| BH1 | 37 | 18.50 | 18.95 | UT | Stiff to very stiff greyish brown slightly sandy CLAY. | 2.03 | 1.64 | 24 | UU | 103.8 | 370 | 6.4 | 608 | 304 | B | |
| BH1 | 42 | 21.50 | 21.75 | UT | Hard brown mottled grey CLAY. | 2.25 | 1.99 | 13 | UU | 103.6 | 430 | 8.4 | 1,563 | 781 | B | |
| BH2 | 15 | 4.20 | 4.65 | UT | Stiff to very stiff laminated brown slightly sandy CLAY. | 1.96 | 1.49 | 31 | UU | 103.8 | 90 | 3.0 | 206 | 103 | B | |
| BH2 | 19 | 6.50 | 6.95 | UT | Very stiff laminated brown slightly sandy CLAY. | 1.92 | 1.47 | 31 | UU | 103.3 | 130 | 4.5 | 277 | 139 | B | |
| BH2 | 24 | 9.50 | 9.95 | UT | Stiff to very stiff laminated greyish brown slightly sandy CLAY. | 2.03 | 1.62 | 25 | UU | 102.1 | 190 | 3.0 | 233 | 116 | B | |
| BH2 | 28 | 12.50 | 12.95 | UT | Very stiff greyish brown slightly sandy CLAY. | 2.01 | 1.60 | 26 | UU | 103.8 | 250 | 3.0 | 289 | 144 | B | |
| BH2 | 32 | 15.50 | 15.95 | UT | Very stiff to hard laminated greyish brown slightly sandy CLAY. | 2.01 | 1.61 | 25 | UU | 103.2 | 310 | 5.5 | 432 | 216 | B | |
| BH2 | 36 | 18.50 | 18.95 | UT | Very stiff greyish brown slightly sandy CLAY. | 2.08 | 1.73 | 20 | UU | 103.6 | 370 | 5.9 | 767 | 383 | B | |
| BH3 | 15 | 4.20 | 4.65 | UT | Stiff to very stiff laminated greyish brown slightly sandy CLAY with occasional gypsum. | 2.03 | 1.57 | 29 | UU | 101.9 | 85 | 4.5 | 272 | 136 | B | |
| BH3 | 19 | 6.50 | 6.95 | UT | Stiff to very stiff laminated brown slightly sandy CLAY. | 1.89 | 1.43 | 32 | UU | 103.7 | 130 | 3.5 | 196 | 98 | B | |
| BH3 | 24 | 9.50 | 9.95 | UT | Very stiff laminated greyish brown slightly sandy CLAY. | 2.00 | 1.59 | 26 | UU | 103.4 | 200 | 2.5 | 258 | 129 | B | |
| BH3 | 28 | 12.50 | 12.95 | UT | Very stiff greyish brown slightly sandy CLAY. | 2.04 | 1.67 | 22 | UU | 102.4 | 250 | 12.4 | 565 | 283 | C | |
| BH3 | 32 | 15.50 | 15.95 | UT | Very stiff greyish brown slightly sandy CLAY becoming SILT towards base. | 2.08 | 1.72 | 21 | UU | 101.9 | 310 | 6.4 | 645 | 322 | B | |
| BH3 | 36 | 18.50 | 18.85 | UT | Very stiff to hard laminated greyish brown slightly sandy CLAY. | 1.97 | 1.57 | 25 | UU | 104.7 | 370 | 5.5 | 534 | 267 | B | |
| BH3 | 40 | 21.00 | 21.30 | UT | Hard brown and grey slightly sandy CLAY. | 2.10 | 1.76 | 19 | UU | 104.2 | 420 | 4.5 | 773 | 387 | B | |
| BH4 | 13 | 2.20 | 2.65 | UT | Firm brown slightly sandy CLAY. | 1.94 | 1.47 | 32 | UU | 103.6 | 45 | 17.3 | 99 | 49 | P | |
| BH4 | 17 | 4.20 | 4.60 | UT | Stiff to very stiff brown slightly sandy slightly gravelly CLAY. Gravel is gypsum. | 1.91 | 1.45 | 32 | UU | 102.0 | 85 | 6.4 | 220 | 110 | B | |
| BH4 | 21 | 6.50 | 6.95 | UT | Stiff to very stiff greyish brown slightly sandy CLAY. | 1.96 | 1.50 | 30 | UU | 103.2 | 130 | 4.0 | 180 | 90 | B | |

General notes: Tests carried out in accordance with BS1377: Part 7: 1990, clause 8 for single stage, clause 9 for multistage tests. Specimens nominally 2:1 height diameter ratio and tested at a rate of strain of 2%/minute, unless annotated otherwise. See individual test reports for further details.

Legend

| | | | | | |
|---|---|---|---|---|---|
| UU - single stage test ( may be in sets of specimens ) | ó₃ | cell pressure | Mode of failure | P | plastic |
| UUM - multistage test on a single specimen | ó₁ - ó₃ | deviator stress | | B | brittle |
| suffix R - remoulded or recompacted | $c_u$ | undrained shear strength | | C | compound |

# UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TESTS WITHOUT MEASUREMENT OF PORE PRESSURE - SUMMARY OF RESULTS

| Project No | Project Name |
|---|---|
| D5061-15 | Central Somers Town, London |

| Hole No. | Sample No. | Depth (m) from | Depth (m) to | type | Soil Description | Density bulk Mg/m³ | Density dry Mg/m³ | *w* % | Test type | Dia. mm | $\sigma_3$ kPa | At failure / end of stage: Axial strain % | $\sigma_1 - \sigma_3$ kPa | $c_u$ kPa | MODE | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BH4 | 26 | 9.50 | 9.85 | UT | Very stiff greyish brown slightly sandy CLAY. | 1.98 | 1.55 | 28 | UU | 103.5 | 190 | 4.5 | 316 | 158 | B | |
| BH4 | 34 | 15.50 | 15.95 | UT | Very stiff laminated greyish brown slightly sandy CLAY. | 1.99 | 1.59 | 25 | UU | 103.7 | 310 | 4.5 | 410 | 205 | B | |
| BH4 | 38 | 18.00 | 18.95 | UT | Very stiff laminated greyish brown slightly sandy CLAY. | 2.02 | 1.60 | 27 | UU | 103.4 | 370 | 4.5 | 503 | 252 | B | |
| BH5 | 12 | 2.20 | 2.65 | UT | Firm to stiff brown slightly sandy CLAY. | 1.97 | 1.50 | 31 | UU | 102.8 | 45 | 7.4 | 176 | 88 | B | |
| BH5 | 15 | 4.20 | 4.65 | UT | Very stiff laminated brown slightly sandy CLAY. | 1.98 | 1.51 | 31 | UU | 102.8 | 85 | 5.4 | 279 | 140 | B | |
| BH5 | 19 | 6.50 | 6.95 | UT | Firm to stiff laminated greyish brown silty CLAY with gypsum. | 1.97 | 1.49 | 32 | UU | 102.8 | 130 | 4.5 | 253 | 126 | B | |
| BH5 | 23 | 9.50 | 9.95 | UT | Stiff laminated brownish grey slightly sandy CLAY. | 1.98 | 1.55 | 27 | UU | 103.4 | 190 | 5.9 | 379 | 189 | B | |
| BH5 | 27 | 12.50 | 12.95 | UT | Very stiff greyish brown slightly sandy CLAY. | 2.04 | 1.66 | 22 | UU | 103.0 | 250 | 7.4 | 425 | 213 | B | |
| BH5 | 31 | 15.50 | 15.95 | UT | Very stiff greyish brown slightly sandy CLAY. | 2.06 | 1.70 | 21 | UU | 103.0 | 310 | 5.9 | 524 | 262 | B | |
| BH5 | 35 | 18.50 | 18.95 | UT | Very stiff to hard laminated greyish brown slightly sandy CLAY. | 2.00 | 1.58 | 27 | UU | 103.5 | 370 | 5.0 | 582 | 291 | B | |
| BH7 | 7 | 2.50 | 2.95 | U | Very still laminated brown slightly sandy CLAY. | 1.95 | 1.51 | 29 | UU | 104.0 | 50 | 3.0 | 309 | 154 | B | |
| BH7 | 12 | 4.50 | 4.95 | U | Stiff to very stiff laminated slightly sandy CLAY | 1.90 | 1.44 | 32 | UU | 103.7 | 90 | 7.4 | 160 | 80 | B | |
| BH7 | 17 | 7.50 | 7.95 | U | Very stiff laminated greyish brown slightly sandy CLAY. | 1.98 | 1.57 | 26 | UU | 103.8 | 150 | 3.5 | 376 | 188 | B | |
| BH7 | 22 | 10.50 | 10.95 | U | Very stiff greyish brown slightly sandy CLAY. | 2.06 | 1.69 | 22 | UU | 103.6 | 210 | 7.9 | 446 | 223 | B | |
| BH7 | 27 | 13.50 | 13.95 | U | Very stiff greyish brown slightly sandy CLAY. | 2.05 | 1.67 | 23 | UU | 103.9 | 270 | 5.4 | 608 | 304 | B | |
| BH7 | 32 | 16.50 | 16.95 | U | Very stiff greyish brown slightly sandy CLAY. | 2.06 | 1.69 | 22 | UU | 103.9 | 330 | 19.8 | 372 | 186 | C | |
| BH7 | 37 | 19.50 | 19.95 | U | Hard grey mottled reddish brown slightly sandy CLAY. | 2.06 | 1.67 | 23 | UU | 104.1 | 390 | 19.3 | 303 | 151 | B | |
| BH8 | 8 | 2.50 | 2.95 | U | Stiff laminated brown slightly sandy CLAY. | 1.92 | 1.46 | 31 | UU | 103.3 | 50 | 4.9 | 162 | 81 | B | |
| BH8 | 13 | 4.50 | 4.95 | U | Stiff to very stiff brown slightly sandy CLAY with rare gypsum. | 1.93 | 1.46 | 32 | UU | 103.6 | 90 | 3.5 | 160 | 80 | B | |
| BH8 | 28 | 13.50 | 13.95 | U | Very stiff greyish brown slightly sandy CLAY. | 2.06 | 1.69 | 22 | UU | 103.9 | 270 | 7.9 | 499 | 250 | B | |
| BH8 | 43 | 22.50 | 22.95 | U | Hard brown mottled grey slightly sandy CLAY. | 2.15 | 1.88 | 15 | UU | 103.8 | 450 | 4.9 | 1,441 | 720 | B | |
| BH9 | 16 | 6.00 | 6.45 | U | Very stiff greyish brown slightly sandy CLAY. | 1.93 | 1.47 | 31 | UU | 103.7 | 120 | 3.5 | 167 | 83 | B | |

General notes: Tests carried out in accordance with BS1377: Part 7: 1990, clause 8 for single stage, clause 9 for multistage tests. Specimens nominally 2:1 height diameter ratio and tested at a rate of strain of 2%/minute, unless annotated otherwise. See individual test reports for further details.

Legend

UU - single stage test ( may be in sets of specimens )
UUM - multistage test on a single specimen
suffix R - remoulded or recompacted

$\sigma_3$ cell pressure
$\sigma_1 - \sigma_3$ deviator stress
$c_u$ undrained shear strength

Mode of failure: P plastic; B brittle; C compound

# UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TESTS WITHOUT MEASUREMENT OF PORE PRESSURE - SUMMARY OF RESULTS

| Project No | Project Name |
|---|---|
| D5061-15 | Central Somers Town, London |

| Hole No. | Sample No. | Depth (m) from | Depth (m) to | type | Soil Description | Density bulk Mg/m³ | Density dry Mg/m³ | *w* % | Test type | Dia. mm | $ó_3$ kPa | At failure / end of stage: Axial strain % | $ó_1 - ó_3$ kPa | $c_u$ kPa | MODE | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BH9 | 21 | 9.00 | 9.45 | U | Very stiff laminated greyish brown slightly sandy CLAY. | 1.96 | 1.53 | 28 | UU | 103.7 | 180 | 5.4 | 203 | 102 | B | |
| BH9 | 26 | 12.00 | 12.45 | U | Very stiff to hard laminated greyish brown slightly sandy CLAY. | 2.00 | 1.57 | 27 | UU | 103.6 | 240 | 3.0 | 362 | 181 | B | |
| BH9 | 36 | 18.00 | 18.45 | U | Very stiff greyish brown slightly sandy CLAY. | 2.10 | 1.75 | 19 | UU | 103.9 | 360 | 8.4 | 711 | 356 | P | |
| BH9 | 41 | 21.00 | 21.45 | U | Hard reddish brown mottled grey slightly sandy CLAY. | 2.09 | 1.69 | 23 | UU | 103.8 | 420 | 2.0 | 226 | 113 | B | |
| BH9 | 46 | 24.00 | 24.35 | U | Very stiff light brown and grey slightly sandy slightly gravelly CLAY. | 2.15 | 1.87 | 15 | UU | 104.8 | 480 | 10.4 | 730 | 365 | B | |
| BH10 | 8 | 2.50 | 2.95 | U | Very stiff laminated brown CLAY. | 1.96 | 1.50 | 31 | UU | 103.3 | 50 | 4.0 | 227 | 113 | B | |
| BH10 | 13 | 4.50 | 4.95 | U | Very stiff laminated brown and light brown slightly sandy CLAY. | 1.93 | 1.47 | 32 | UU | 103.5 | 90 | 3.5 | 197 | 99 | B | |
| BH10 | 18 | 7.50 | 7.95 | U | Very stiff laminated greyish brown slightly sandy CLAY. | 1.96 | 1.50 | 31 | UU | 103.3 | 150 | 3.0 | 185 | 92 | B | |
| BH10 | 23 | 10.50 | 10.95 | U | Very stiff greyish brown slightly sandy CLAY. | 2.02 | 1.62 | 25 | UU | 103.3 | 210 | 5.9 | 380 | 190 | B | |
| BH10 | 28 | 13.50 | 13.95 | U | Stiff to very stiff greyish brown slightly sandy CLAY. | 2.02 | 1.74 | 16 | UU | 103.7 | 270 | 4.4 | 463 | 231 | B | |
| BH10 | 33 | 16.50 | 16.95 | U | Very stiff laminated greyish brown slightly sandy CLAY. | 2.04 | 1.59 | 29 | UU | 103.8 | 330 | 6.0 | 613 | 307 | B | |
| BH10 | 38 | 19.50 | 19.95 | U | Very stiff dark brown slightly sandy CLAY. | 2.08 | 1.72 | 21 | UU | 103.2 | 390 | 5.4 | 565 | 283 | B | |
| BH10 | 43 | 22.50 | 22.95 | U | Hard reddish brown mottled grey CLAY. | 2.15 | 1.79 | 20 | UU | 103.3 | 450 | 1.5 | 374 | 187 | B | |
| BH10 | 48 | 25.50 | 25.95 | U | Hard dark grey CLAY. | 1.93 | 1.47 | 32 | UU | 103.4 | 310 | 3.0 | 341 | 170 | B | |

General notes: Tests carried out in accordance with BS1377: Part 7: 1990, clause 8 for single stage, clause 9 for multistage tests. Specimens nominally 2:1 height diameter ratio and tested at a rate of strain of 2%/minute, unless annotated otherwise. See individual test reports for further details.

Legend

| | | | | | |
|---|---|---|---|---|---|
| UU - single stage test ( may be in sets of specimens ) | $ó_3$ | cell pressure | Mode of failure | P | plastic |
| UUM - multistage test on a single specimen | $ó_1 - ó_3$ | deviator stress | | B | brittle |
| suffix R - remoulded or recompacted | $c_u$ | undrained shear strength | | C | compound |

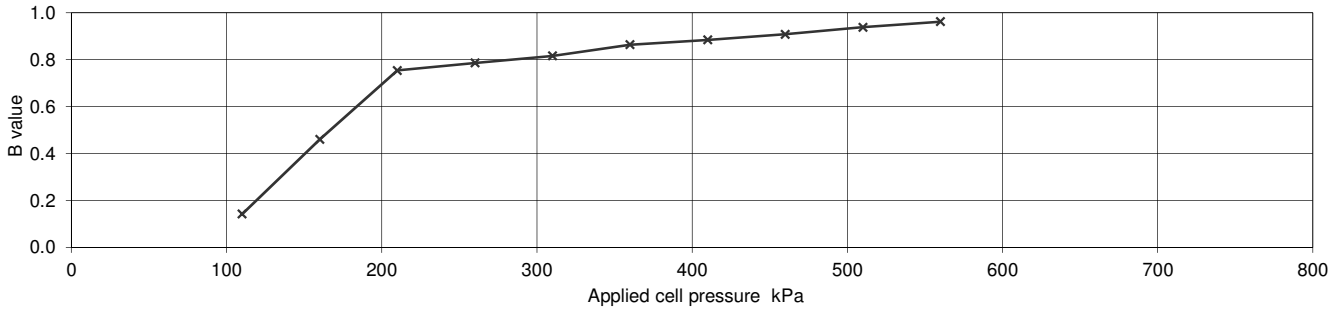
# Consolidated Undrained Triaxial Compression test with Measurement of Pore Water Pressure ( BS1377 : Part 8 : 1990 ) - Multistage test on a single specimen

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH1 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 4.20 - 4.65 | | |
| | | | No | 16 | Type | UT |
| | | | ID | | | |
| | | | Spec Ref | | | |

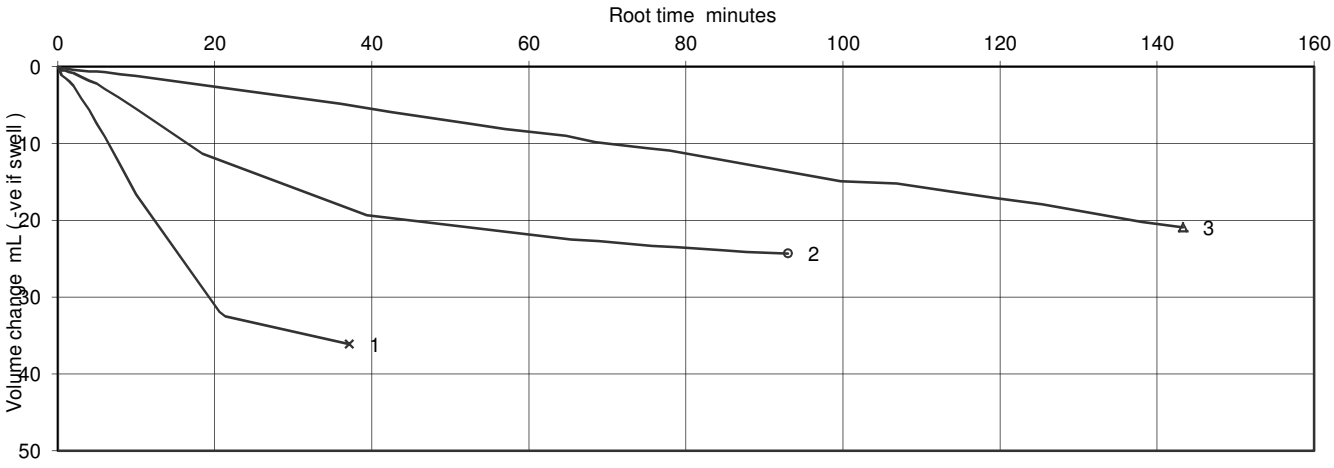
| Specimen Details | | |
|---|---|---|
| Initial | | |
| Length | mm | 203.11 |
| Diameter | mm | 103.62 |
| Bulk Density | Mg/m³ | 1.99 |
| Water Content | % | 32 |
| Dry density | Mg/m³ | 1.50 |
| After test | | |
| Bulk Density | Mg/m³ | 2.01 |
| Water Content | % | 31 |
| Dry density | Mg/m³ | 1.53 |

| | |
|---|---|
| Soil Description | Stiff brown CLAY |
| Specimen Type /Preparation | UNDISTURBED |

| Saturation Details | | Method of Saturation |
|---|---|---|
| | | |
| Cell pressure increments | kPa | 50 |
| Differential Pressure | kPa | 10 |
| Final Cell Pressure | kPa | 560 |
| Final pore water pressure | kPa | 548.9 |
| Final B Value | | 0.96 |




| Consolidation Details | | | | | | |
|---|---|---|---|---|---|---|
| | Drainage Conditions | | From radial boundary and one end | | | |
| | Stage No. | | 1 | 2 | 3 | |
| | Cell Pressure applied | | 590 | 630 | 710 | kPa |
| | Back Pressure applied | | 550 | 550 | 550 | kPa |
| | Effective Pressure | | 40 | 80 | 160 | kPa |
| | Pore pressure at start of consolidation | | 584 | 593 | 638 | kPa |
| | Pore pressure at end of consolidation | | 551 | 552 | 605 | kPa |
| | Pore pressure dissipation at end of consolidation | | 96 | 95 | 38 | % |
| Consolidation parameters ( see note to BS1377 : pt 8, clause 6.3.4 ) | Coefficient of Consolidation | $C_{vi}$ | 0.55 | 0.15 | 0.01 | $m^2$/year |
| | Coefficient of Compressibility | $M_{vi}$ | 0.62 | 0.34 | 0.37 | $m^2$/MN |
| | Coefficient of Permeability ( calculated ) | $k_{vi}$ | 1.1E-10 | 1.6E-11 | 1.5E-12 | m/s |

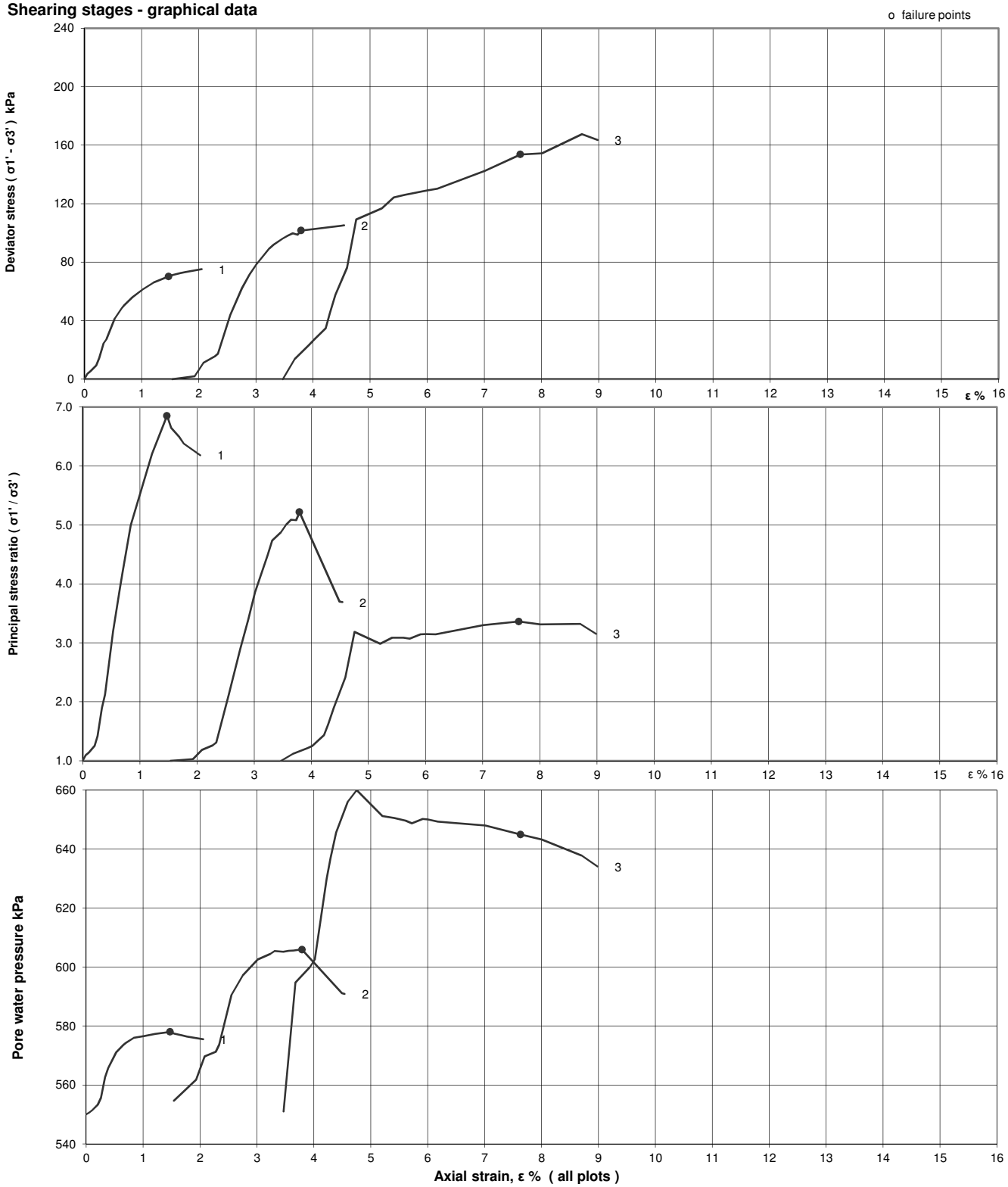


## Consolidated Undrained Triaxial Compression test with Measurement of Pore Water Pressure ( BS1377 : Part 8 : 1990 ) - Multistage test on a single specimen

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH1 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 4.20 - 4.65 | | |
| | | | No | 16 | Type | UT |
| | | | ID | | | |
| | | | Spec Ref | | | |

**Shearing stages - graphical data**

o failure points

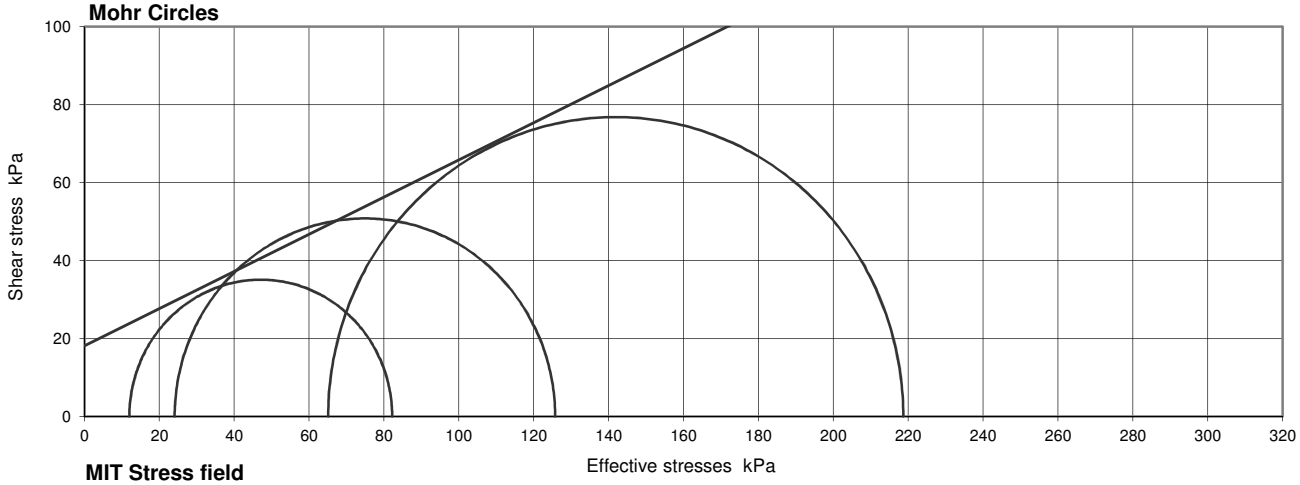



| Ref | | | Figure |
|---|---|---|---|
| SLR8.1<br>Rev 85<br>May 09 | ESG | 1157 | Printed:18/03/2016 12:13 | **CUM**<br>sheet 2 of 3 |

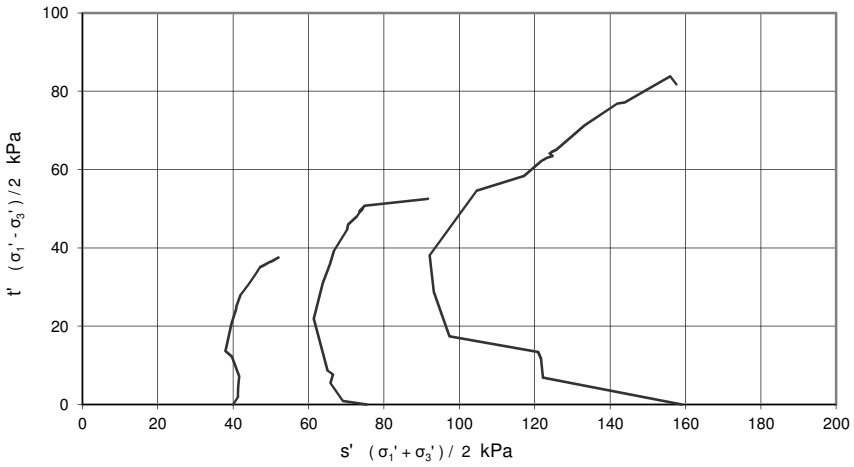
## Consolidated Undrained Triaxial Compression test with Measurement of Pore Water Pressure ( BS1377 : Part 8 : 1990 ) - Multistage test on a single specimen

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH1 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 4.20 - 4.65 | | |
| | | | No | 16 | Type | UT |
| | | | ID | | | |
| | | | Spec Ref | | | |

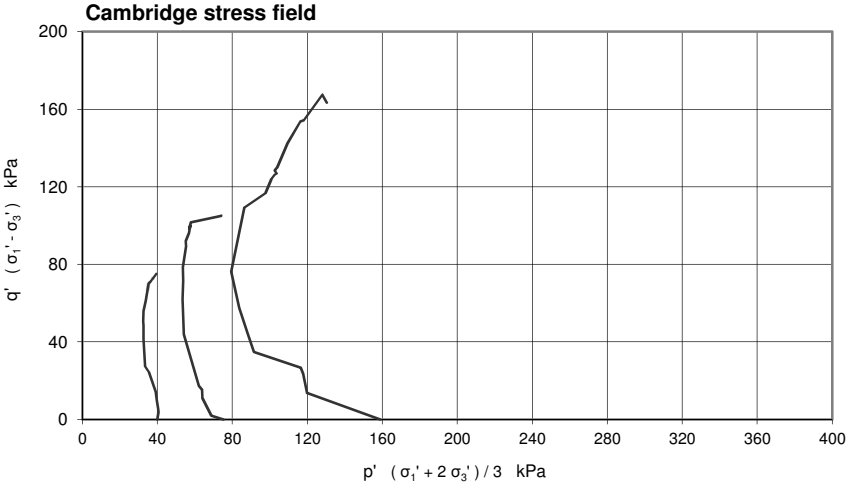
**Mohr Circles**




**MIT Stress field**




**Cambridge stress field**




**Compression stages**

| Stage | 1 | 2 | 3 | |
|---|---|---|---|---|
| Cell pressure | 590 | 630 | 710 | kPa |
| Initial pwp | 550 | 555 | 551 | kPa |
| Initial $\sigma_3'$ | 40 | 75 | 159 | kPa |
| Rate of strain | 0.39 | 0.39 | 0.39 | %/hr |

**Failure conditions**

| Criterion | Maximum effective principal stress ratio | | | |
|---|---|---|---|---|
| Axial strain | 1.47 | 3.79 | 7.63 | % |
| $( \sigma_1' / \sigma_3' )_f$ | 6.850 | 5.216 | 3.360 | |
| $( \sigma_1' - \sigma_3' )_f$ | 70.2 | 101.6 | 153.6 | kPa |
| $u_f$ | 578 | 606 | 645 | kPa |
| $\sigma_3'_f$ | 12 | 24 | 65 | kPa |
| $\sigma_1'_f$ | 82 | 126 | 219 | kPa |
| $A_f$ | 0.40 | 0.50 | 0.61 | |
| Time to failure | 3.8 | 9.7 | 19.4 | hrs |

**Shear Strength Parameters**

at peak stress ratio

| | | Linear regression |
|---|---|---|
| c ' | kPa | 18.1 |
| Ø ' | degrees | 25.5 |
| | | Manual re-assessment |
| c ' | kPa | - |
| Ø ' | degrees | - |

Mode of failure

Notes : Deviator stresses corrected for area change, vertical side drains and 0.616 mm thick rubber membrane(s)

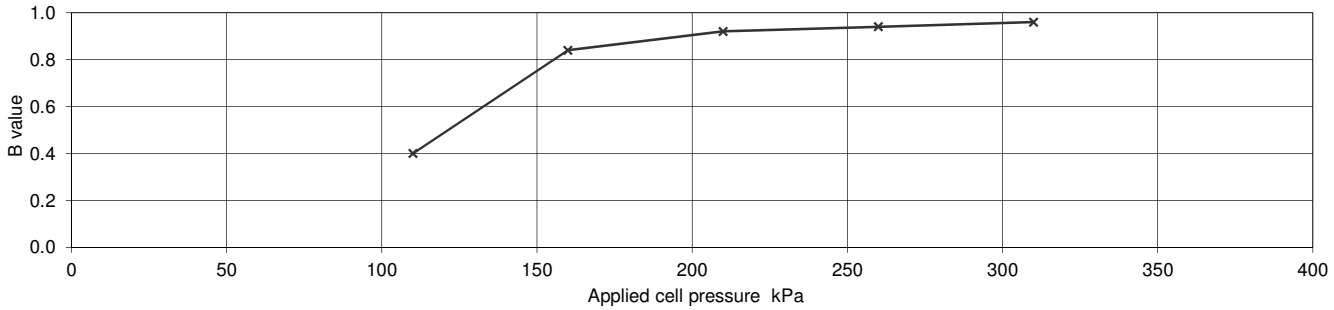
# Consolidated Undrained Triaxial Compression test with Measurement of Pore Water Pressure ( BS1377 : Part 8 : 1990 ) - Multistage test on a single specimen

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH2 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 2.20 - 2.65 | | |
| | | | No | 12 | Type | UT |
| | | | ID | | | |
| | | | Spec Ref | | | |

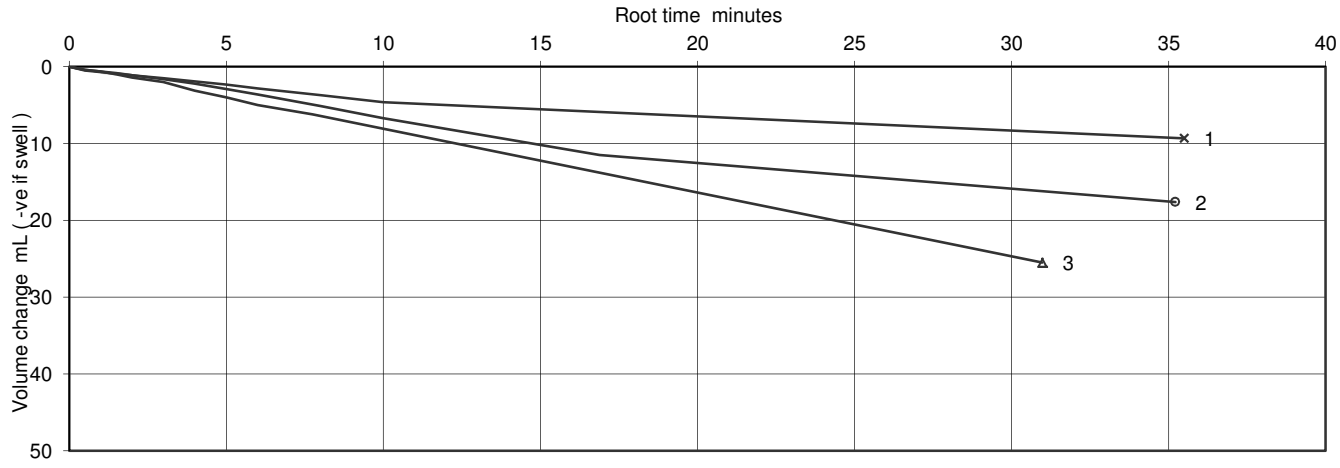
| Specimen Details | | |
|---|---|---|
| Initial | | |
| Length | mm | 203.90 |
| Diameter | mm | 103.25 |
| Bulk Density | Mg/m³ | 1.93 |
| Water Content | % | 32 |
| Dry density | Mg/m³ | 1.47 |
| After test | | |
| Bulk Density | Mg/m³ | 1.94 |
| Water Content | % | 32 |
| Dry density | Mg/m³ | 1.47 |

| | |
|---|---|
| Soil Description | Firm brown CLAY |
| Specimen Type /Preparation | UNDISTURBED |

| Saturation Details | | Method of Saturation |
|---|---|---|
| | | Increments of cell and back pressure |
| Cell pressure increments | kPa | 50 |
| Differential Pressure | kPa | 10 |
| Final Cell Pressure | kPa | 310 |
| Final pore water pressure | kPa | 292 |
| Final B Value | | 0.96 |




| Consolidation Details | Drainage Conditions | | From radial boundary and one end | | | |
|---|---|---|---|---|---|---|
| | Stage No. | | 1 | 2 | 3 | |
| | Cell Pressure applied | | 325 | 350 | 400 | kPa |
| | Back Pressure applied | | 300 | 300 | 300 | kPa |
| | Effective Pressure | | 25 | 50 | 100 | kPa |
| | Pore pressure at start of consolidation | | 313 | 326 | 352 | kPa |
| | Pore pressure at end of consolidation | | 300 | 300 | 302 | kPa |
| | Pore pressure dissipation at end of consolidation | | 100 | 100 | 96 | % |
| Consolidation parameters ( see note to BS1377 : pt 8, clause 6.3.4 ) | Coefficient of Consolidation | $C_{vi}$ | 0.52 | 0.52 | 0.33 | $m^2$/year |
| | Coefficient of Compressibility | $M_{vi}$ | 0.41 | 0.39 | 0.29 | $m^2$/MN |
| | Coefficient of Permeability ( calculated ) | $k_{vi}$ | 6.5E-11 | 6.2E-11 | 3.0E-11 | m/s |

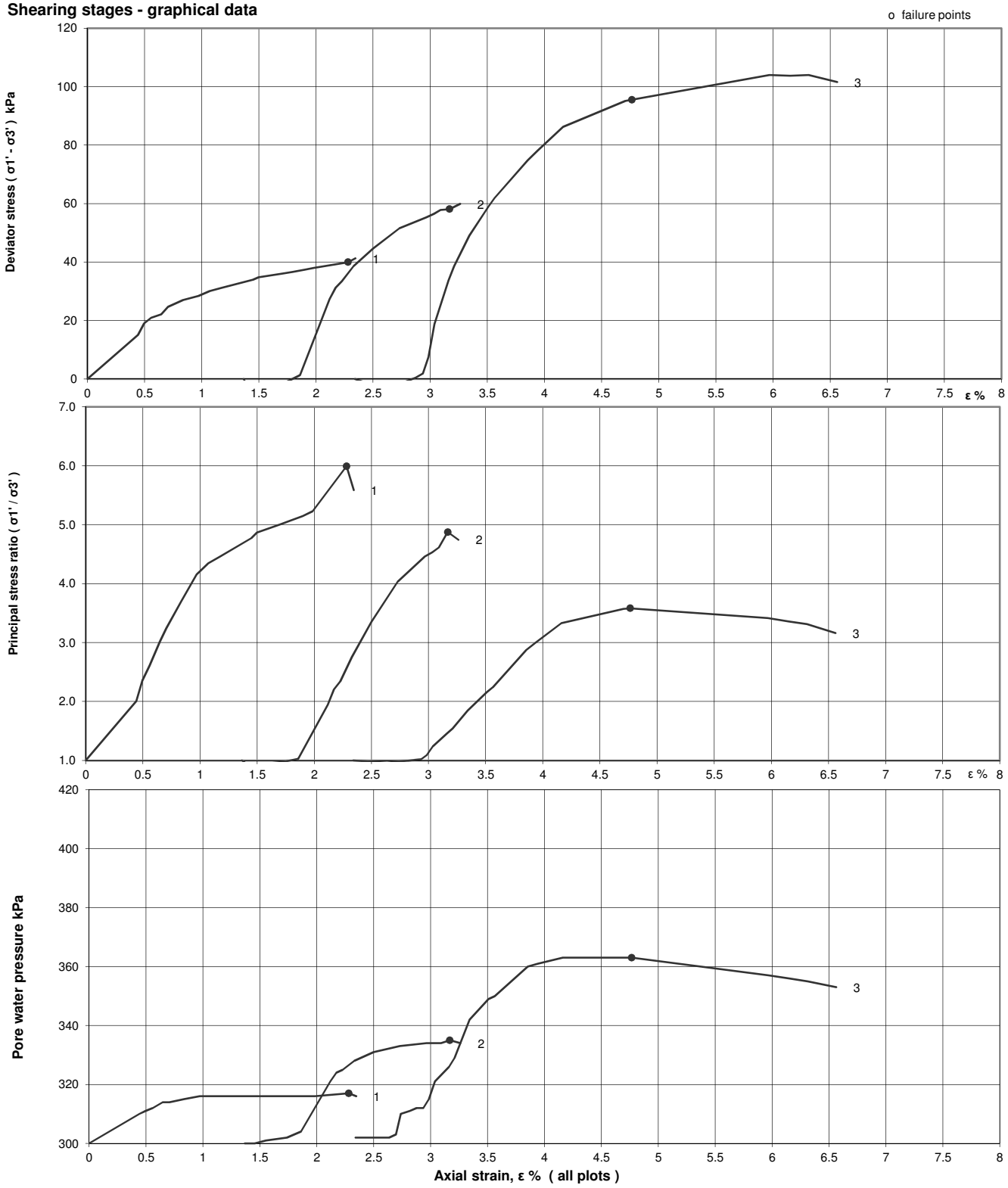



| Ref | | | Figure |
|---|---|---|---|
| SLR8.1 Rev 85 May 09 | ESG | UKAS TESTING 1157 | Printed:29/02/2016 11:16 | CUM sheet 1 of 3 |

## Consolidated Undrained Triaxial Compression test with Measurement of Pore Water Pressure ( BS1377 : Part 8 : 1990 ) - Multistage test on a single specimen

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH2 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 2.20 - 2.65 | | |
| | | | No | 12 | Type | UT |
| | | | ID | | | |
| | | | Spec Ref | | | |

**Shearing stages - graphical data**

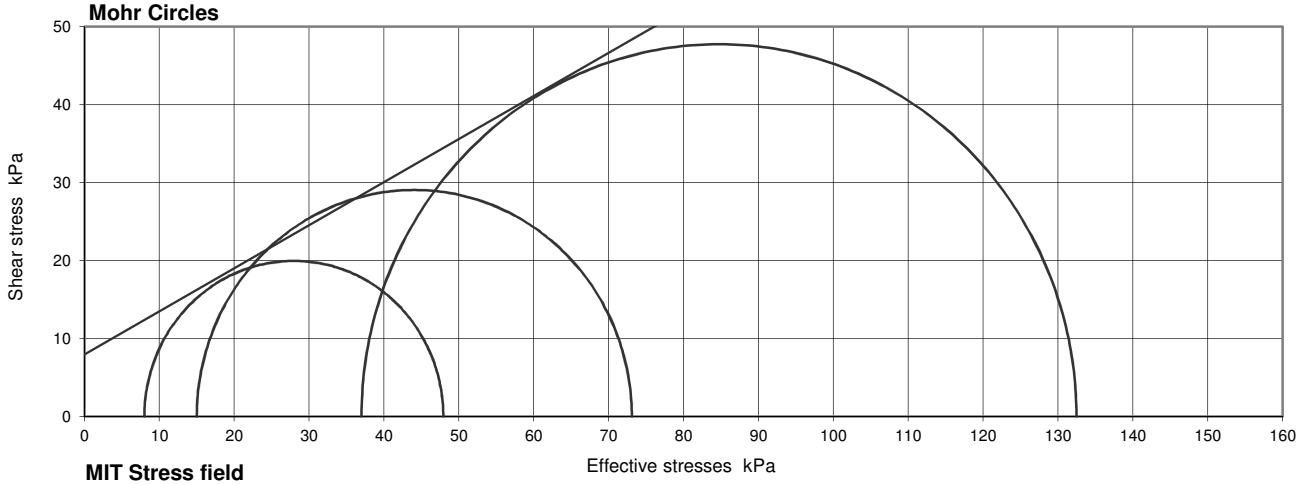



| Ref | | | Figure |
|---|---|---|---|
| SLR8.1<br>Rev 85<br>May 09 | ESG | 1157 | Printed:29/02/2016 11:16 | **CUM**<br>sheet 2 of 3 |

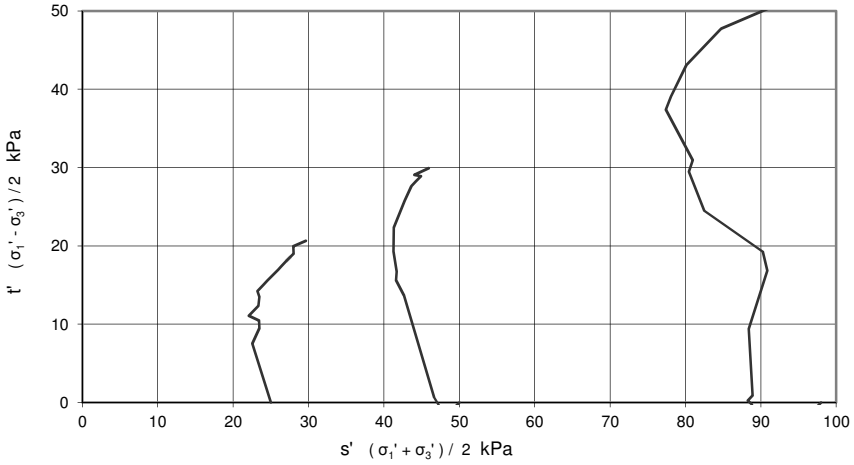
## Consolidated Undrained Triaxial Compression test with Measurement of Pore Water Pressure ( BS1377 : Part 8 : 1990 ) - Multistage test on a single specimen

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH2 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 2.20 - 2.65 | | |
| | | | No | 12 | Type | UT |
| | | | ID | | | |
| | | | Spec Ref | | | |

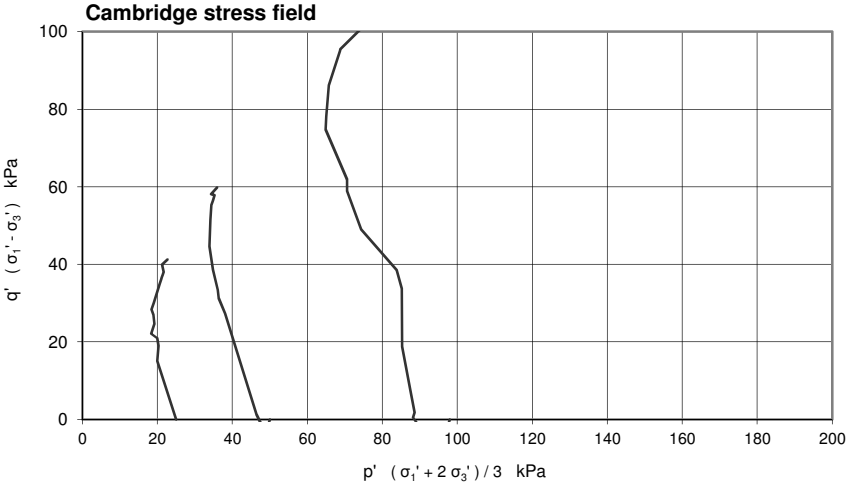
**Mohr Circles**




**MIT Stress field**




**Cambridge stress field**




**Compression stages**

| Stage | 1 | 2 | 3 | |
|---|---|---|---|---|
| Cell pressure | 325 | 350 | 400 | kPa |
| Initial pwp | 300 | 300 | 302 | kPa |
| Initial $\sigma_3'$ | 25 | 50 | 98 | kPa |
| Rate of strain | 0.38 | 0.38 | 0.38 | %/hr |

**Failure conditions**

| Criterion | Maximum effective principal stress ratio | | | |
|---|---|---|---|---|
| Axial strain | 2.28 | 3.17 | 4.77 | % |
| $( \sigma_1' / \sigma_3' )_f$ | 5.991 | 4.873 | 3.581 | |
| $( \sigma_1' - \sigma_3' )_f$ | 39.9 | 58.1 | 95.5 | kPa |
| $u_f$ | 317 | 335 | 363 | kPa |
| $\sigma_3'_f$ | 8 | 15 | 37 | kPa |
| $\sigma_1'_f$ | 48 | 73 | 132 | kPa |
| $A_f$ | 0.43 | 0.60 | 0.64 | |
| Time to failure | 6.0 | 8.4 | 12.6 | hrs |

**Shear Strength Parameters**

at peak stress ratio

| | | Linear regression |
|---|---|---|
| c ' | kPa | 8.0 |
| Ø ' | degrees | 28.9 |
| | | Manual re-assessment |
| c ' | kPa | - |
| Ø ' | degrees | - |

Mode of failure

Notes : Deviator stresses corrected for area change, vertical side drains and 0.308 mm thick rubber membrane(s)

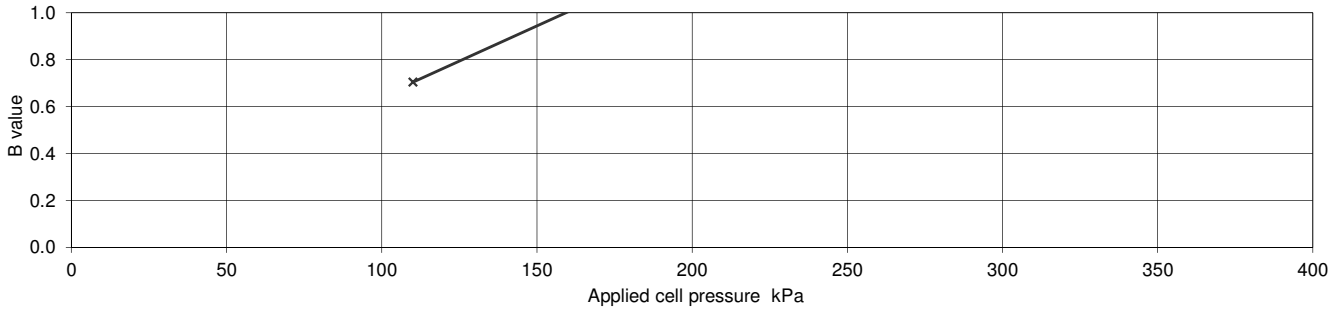
# Consolidated Undrained Triaxial Compression test with Measurement of Pore Water Pressure ( BS1377 : Part 8 : 1990 ) - Multistage test on a single specimen

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH3 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 2.20 - 2.65 | | |
| | | | No | 12 | Type | UT |
| | | | ID | | | |
| | | | Spec Ref | | | |

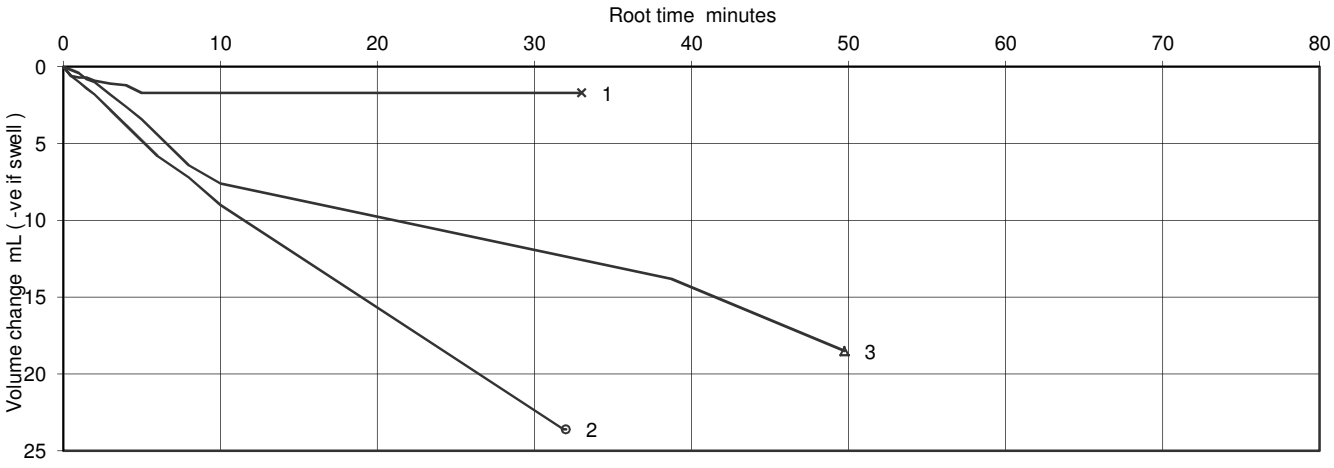
| Specimen Details | | |
|---|---|---|
| Initial | | |
| Length | mm | 203.75 |
| Diameter | mm | 103.21 |
| Bulk Density | Mg/m³ | 1.93 |
| Water Content | % | 30 |
| Dry density | Mg/m³ | 1.49 |
| After test | | |
| Bulk Density | Mg/m³ | 1.92 |
| Water Content | % | 30 |
| Dry density | Mg/m³ | 1.47 |

| | |
|---|---|
| Soil Description | Soft brown mottled grey CLAY. |
| Specimen Type /Preparation | UNDISTURBED |

| Saturation Details | | Method of Saturation |
|---|---|---|
| | | |
| Cell pressure increments | kPa | 50 |
| Differential Pressure | kPa | 10 |
| Final Cell Pressure | kPa | 160 |
| Final pore water pressure | kPa | 151.6 |
| Final B Value | | 1 |




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Consolidation Details | Drainage Conditions | | From radial boundary and one end | | | |
| | Stage No. | | 1 | 2 | 3 | |
| | Cell Pressure applied | | 325 | 350 | 400 | kPa |
| | Back Pressure applied | | 300 | 300 | 300 | kPa |
| | Effective Pressure | | 25 | 50 | 100 | kPa |
| | Pore pressure at start of consolidation | | 310 | 332 | 361 | kPa |
| | Pore pressure at end of consolidation | | 300 | 300 | 303 | kPa |
| | Pore pressure dissipation at end of consolidation | | 100 | 100 | 95 | % |
| Consolidation parameters ( see note to BS1377 : pt 8, clause 6.3.4 ) | Coefficient of Consolidation | $C_{vi}$ | 8.88 | 0.33 | 0.43 | $m^2$/year |
| | Coefficient of Compressibility | $M_{vi}$ | 0.10 | 0.42 | 0.18 | $m^2$/MN |
| | Coefficient of Permeability ( calculated ) | $k_{vi}$ | 2.7E-10 | 4.3E-11 | 2.5E-11 | m/s |

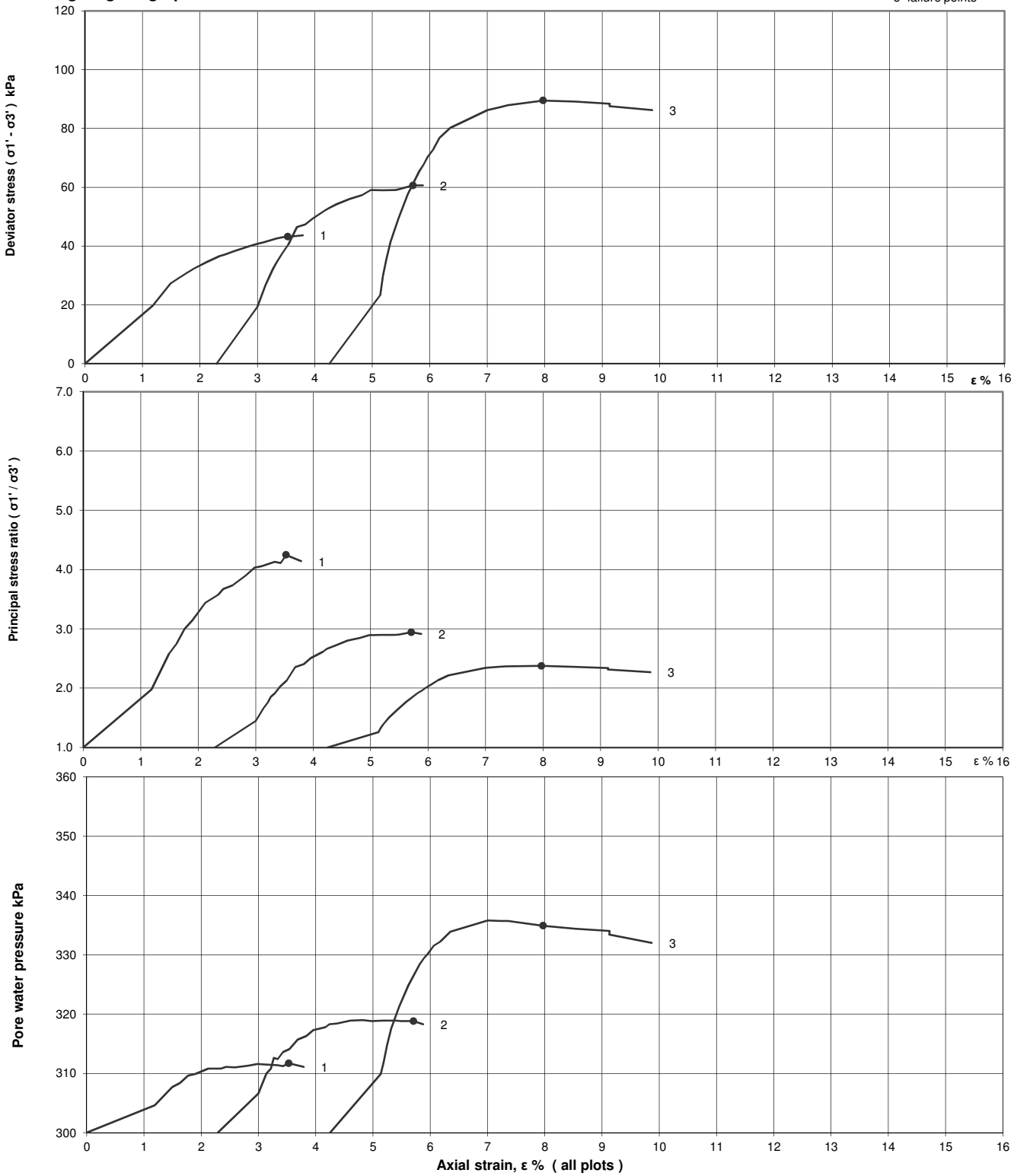


## Consolidated Undrained Triaxial Compression test with Measurement of Pore Water Pressure ( BS1377 : Part 8 : 1990 ) - Multistage test on a single specimen

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH3 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 2.20 - 2.65 | | |
| | | | No | 12 | Type | UT |
| | | | ID | | | |
| | | | Spec Ref | | | |

**Shearing stages - graphical data**

o failure points




| Ref | | | Figure |
|---|---|---|---|
| SLR8.1<br>Rev 85<br>May 09 | ESG | Printed:29/02/2016 11:18 | **CUM**<br>sheet 2 of 3 |

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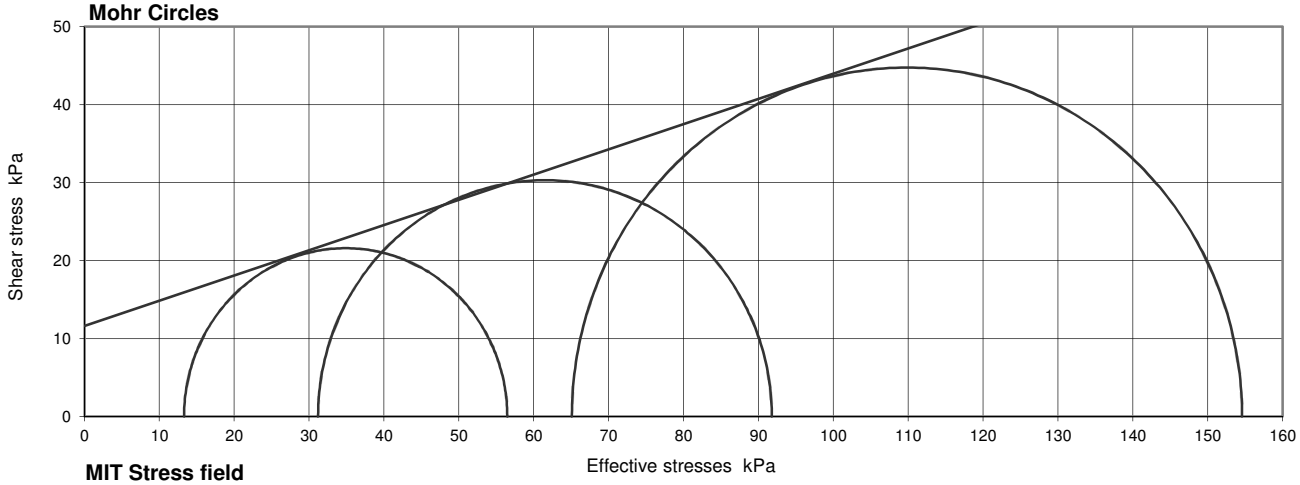
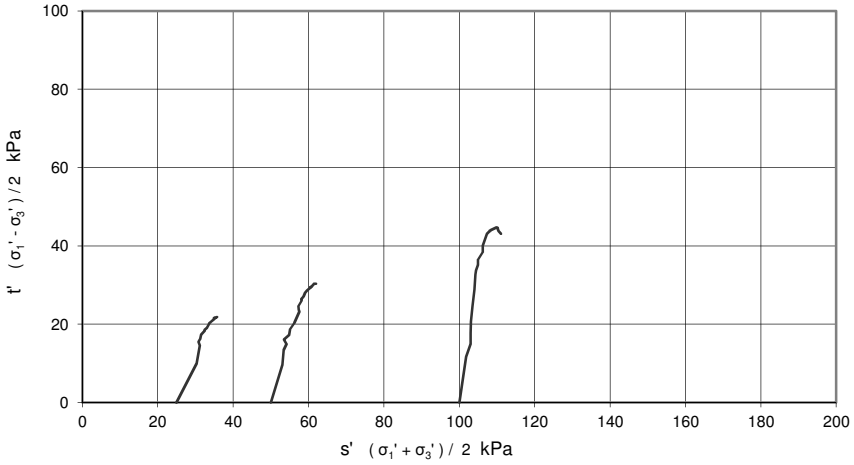
## Consolidated Undrained Triaxial Compression test with Measurement of Pore Water Pressure ( BS1377 : Part 8 : 1990 ) - Multistage test on a single specimen

| | | | | | | |
|---|---|---|---|---|---|---|
| Project No | D5061-15 | Sample Details: | Hole No | BH3 | | |
| Project Name | Central Somers Town, London | | Depth (m BGL) | 2.20 - 2.65 | | |
| | | | No | 12 | Type | UT |
| | | | ID | | | |
| | | | Spec Ref | | | |

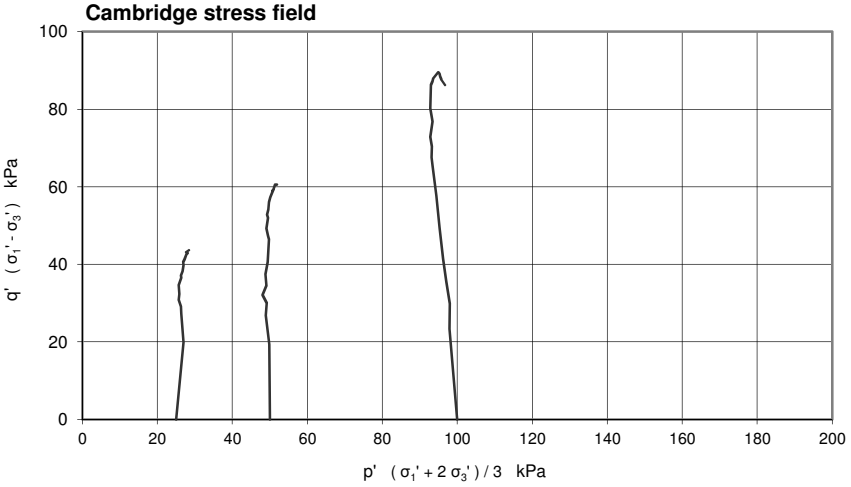
**Mohr Circles**




**MIT Stress field**




**Cambridge stress field**




**Compression stages**

| Stage | 1 | 2 | 3 | |
|---|---|---|---|---|
| Cell pressure | 325 | 350 | 400 | kPa |
| Initial pwp | 300 | 300 | 300 | kPa |
| Initial $\sigma_3'$ | 25 | 50 | 100 | kPa |
| Rate of strain | 2.00 | 2.00 | 2.00 | %/hr |

**Failure conditions**

| Criterion | Maximum effective principal stress ratio | | | |
|---|---|---|---|---|
| Axial strain | 3.53 | 5.71 | 7.97 | % |
| $( \sigma_1' / \sigma_3' )_f$ | 4.246 | 2.942 | 2.375 | |
| $( \sigma_1' - \sigma_3' )_f$ | 43.2 | 60.6 | 89.5 | kPa |
| $u_f$ | 312 | 319 | 335 | kPa |
| $\sigma_3'_f$ | 13 | 31 | 65 | kPa |
| $\sigma_1'_f$ | 56 | 92 | 155 | kPa |
| $A_f$ | 0.27 | 0.31 | 0.39 | |
| Time to failure | 1.8 | 2.9 | 4.0 | hrs |

**Shear Strength Parameters**

at peak stress ratio

| | | Linear regression |
|---|---|---|
| c ' | kPa | 11.6 |
| Ø ' | degrees | 17.9 |
| | | Manual re-assessment |
| c ' | kPa | - |
| Ø ' | degrees | - |

Mode of failure

Notes : Deviator stresses corrected for area change, vertical side drains and 0.616 mm thick rubber membrane(s)

# TEST REPORT

1252

## Report No. EFS/160979 (Ver. 1)

ESG Wokingham
Glossop House
Hogwood Lane Industrial Estate
Finchamstead
Wokingham
Berkshire
RG40 4QW

**Site: Central Somers Town, London**

The 19 samples described in this report were registered for analysis by ESG on 08-Feb-2016. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 12-Feb-2016

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

The following tables are contained in this report:



On behalf of
ESG :
Declan Burns

Managing Director
Multi-Sector Services

Date of Issue: 12-Feb-2016

Tests marked '^' have been subcontracted to another laboratory.
Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected. ESG accepts no responsibility for any sampling not carried out by our personnel.

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Units :** | | | mg/kg | mg/l | % | pH Units | | | | | | | | | | | | |
| **Method Codes :** | | | ICPACIDS | ICPWSS | TSBRE1 | WSLM50 | | | | | | | | | | | | |
| **Method Reporting Limits :** | | | 20 | 10 | 0.005 | | | | | | | | | | | | | |
| **UKAS Accredited :** | | | Yes | Yes | No | No | | | | | | | | | | | | |
| **LAB ID Number CL/** | **Client Sample Description** | **Sample Date** | **SO4-- (acid sol)** | **SO4-- (H2O sol) mg/l** | **Total Sulphur.** | **pH (BS1377)** | | | | | | | | | | | | |
| 1604388 | BH1 D 5 0.50 | | 1620 | 77 | 0.085 | 8.2 | | | | | | | | | | | | |
| 1604389 | BH1 D 19 6.20 | | 15700 | 2440 | 0.631 | 7.6 | | | | | | | | | | | | |
| 1604390 | BH1 D 32 15.00 | | 1890 | 753 | 0.418 | 8.3 | | | | | | | | | | | | |
| 1604391 | BH1 D 40 21.00 | | 2500 | 720 | 0.743 | 8.0 | | | | | | | | | | | | |
| 1604392 | BH1 D 44 22.50 | | 688 | 267 | 0.082 | 8.8 | | | | | | | | | | | | |
| 1604393 | BH10 D 5 1.40 | | 1290 | 525 | 0.076 | 8.1 | | | | | | | | | | | | |
| 1604394 | BH10 D 12 4.25 | | 10800 | 2440 | 0.366 | 7.8 | | | | | | | | | | | | |
| 1604395 | BH10 D 30 14.50 | | 1440 | 638 | 0.556 | 8.3 | | | | | | | | | | | | |
| 1604396 | BH10 D 42 22.00 | | 430 | 146 | 0.071 | 9.2 | | | | | | | | | | | | |
| 1604397 | BH10 D 52 28.00 | | 238 | 99 | 0.045 | 9.6 | | | | | | | | | | | | |
| 1604398 | BH2 D 2 0.20 | | 7100 | 1490 | 0.299 | 8.0 | | | | | | | | | | | | |
| 1604399 | BH2 D 13 2.70 | | 35500 | 1760 | 1.05 | 7.8 | | | | | | | | | | | | |
| 1604400 | BH2 D 18 6.00 | | 17500 | 2730 | 0.799 | 7.9 | | | | | | | | | | | | |
| 1604401 | BH2 D 27 12.00 | | 3530 | 1510 | 0.565 | 7.6 | | | | | | | | | | | | |
| 1604402 | BH2 D 35 18.00 | | 1350 | 511 | 0.564 | 8.7 | | | | | | | | | | | | |
| 1604403 | BH3 D 5 0.50 | | 1610 | 157 | 0.152 | 8.4 | | | | | | | | | | | | |
| 1604404 | BH3 D 13 2.70 | | 1800 | 543 | 0.169 | 7.6 | | | | | | | | | | | | |
| 1604405 | BH3 D 18 6.20 | | 11000 | 2380 | 0.522 | 7.9 | | | | | | | | | | | | |
| 1604406 | BH3 D 29 13.00 | | 2470 | 938 | 0.583 | 8.5 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |


Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

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**Client Name** **ESG Wokingham**

**Contact** Andrea Capon

# Central Somers Town, London

## Sample Analysis

| | |
|---|---|
| **Date Printed** | **12-Feb-2016** |
| **Report Number** | **EFS/160979** |
| **Table Number** | **1** |



Where individual results are flagged see report notes for status.

# Analytical and Deviating Sample Overview

**Customer** ESG Wokingham
**Site** Central Somers Town, London
**Report No** S160979

Consignment No S53458
Date Logged 08-Feb-2016
Report Due 15-Feb-2016

| ID Number | Description | MethodID | CustServ | Dep.Opt | | | ICPACIDS | ICPBRE | ICPWSS | KONECL | KoneNO3 | TSBRE1 | WSLM50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sampled | REPORT A | DO Cl if pH<5.5 | DO Mg if SO4(W)>3000 | DO NO3 if pH<5.5 | SO4-- (acid sol) | Magnesium (BRE) | SO4-- (H2O sol) mg/l | Chloride:(2:1) | Nitrate (BRE 2:1): mg/l | Total Sulphur. | pH (BS1377) |
| | | | | | | | ✓ | | ✓ | | | | |
| CL/1604388 | BH1 0.50 | D | D | D | D | D | D | D | D | D | D | D | D |
| CL/1604389 | BH1 6.20 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604390 | BH1 15.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604391 | BH1 21.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604392 | BH1 22.50 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604393 | BH10 1.40 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604394 | BH10 4.25 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604395 | BH10 14.50 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604396 | BH10 22.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604397 | BH10 28.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604398 | BH2 0.20 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604399 | BH2 2.70 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604400 | BH2 6.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604401 | BH2 12.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604402 | BH2 18.00 | D | D | | | | D | D | D | D | D | D | D |

**Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.**

**In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.**

**Deviating Sample Key**

| | |
|---|---|
| A | The sample was received in an inappropriate container for this analysis |
| B | The sample was received without the correct preservation for this analysis |
| C | Headspace present in the sample container |
| D | The sampling date was not supplied so holding time may be compromised - applicable to all analysis |
| E | Sample processing did not commence within the appropriate holding time |
| F | Sample processing did not commence within the appropriate handling time |

**Requested Analysis Key**

| | |
|---|---|
| | Analysis Required |
| | Analysis dependant upon trigger result - **Note: due date may be affected if triggered** |
| | No analysis scheduled |
| ^ | Analysis Subcontracted - **Note: due date may vary** |

Where individual results are flagged see report notes for status.


The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

# Analytical and Deviating Sample Overview

**Customer** ESG Wokingham
**Site** Central Somers Town, London
**Report No** S160979

Consignment No S53458
Date Logged 08-Feb-2016
Report Due 15-Feb-2016

| ID Number | Description | MethodID | CustServ | Dep.Opt | | | ICPACIDS | ICPBRE | ICPWSS | KONECL | KoneNO3 | TSBRE1 | WSLM50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sampled | REPORT A | DO Cl if pH<5.5 | DO Mg if SO4(W)>3000 | DO NO3 if pH<5.5 | SO4-- (acid sol) | Magnesium (BRE) | SO4-- (H2O sol) mg/l | Chloride:(2:1) | Nitrate (BRE 2:1): mg/l | Total Sulphur. | pH (BS1377) |
| | | | | | | | ✓ | | ✓ | | | | |
| CL/1604403 | BH3 0.50 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604404 | BH3 2.70 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604405 | BH3 6.20 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604406 | BH3 13.00 | D | D | | | | D | D | D | D | D | D | D |

**Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.**

**In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.**

| Deviating Sample Key | |
|---|---|
| A | The sample was received in an inappropriate container for this analysis |
| B | The sample was received without the correct preservation for this analysis |
| C | Headspace present in the sample container |
| D | The sampling date was not supplied so holding time may be compromised - applicable to all analysis |
| E | Sample processing did not commence within the appropriate holding time |
| F | Sample processing did not commence within the appropriate handling time |

| Requested Analysis Key | |
|---|---|
| | Analysis Required |
| | Analysis dependant upon trigger result - **Note: due date may be affected if triggered** |
| | No analysis scheduled |
| ^ | Analysis Subcontracted - **Note: due date may vary** |

Where individual results are flagged see report notes for status.


The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

# Method Descriptions

| Matrix | MethodID | Analysis Basis | Method Description |
|---|---|---|---|
| Soil | ICPACIDS | Oven Dried @ < 35°C | Determination of Total Sulphate in soil samples by Hydrochloric Acid extraction followed by ICPOES detection |
| Soil | ICPWSS | Oven Dried @ < 35°C | Determination of Water Soluble Sulphate in soil samples by water extraction followed by ICPOES detection |
| Soil | TSBRE1 | Oven Dried @ < 35°C | Determination of Total Carbon and/or Total Sulphur in solid samples by high temperature combustion/infrared detection |
| Soil | WSLM50 | Oven Dried @ < 35°C | Determination of pH of 2.5:1 deionised water to soil extracts using pH probe. |

Where individual results are flagged see report notes for status.

# Report Notes

## Generic Notes

**Soil/Solid Analysis**

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

**Waters Analysis**

Unless stated otherwise results are expressed as mg/l

**Nil**: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

**Oil analysis specific**

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm$^3$@ 15$^o$C

**Gas (Tedlar bag) Analysis**

Unless stated otherwise, results are expressed as ug/l

**Asbestos Analysis**

**CH** Denotes Chrysotile **TR** Denotes Tremolite
**CR** Denotes Crocidolite **AC** Denotes Actinolite
**AM** Denotes Amosite **AN** Denotes Anthophylite
**NAIIS** No Asbestos Identified in Sample
**NADIS** No Asbestos Detected In Sample

## Symbol Reference

**^** Sub-contracted analysis.
**$$** Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
**¥** Results for guidance only due to possible interference
**&** Blank corrected result
**I.S** Insufficient sample to complete requested analysis
**I.S(g)** Insufficient sample to re-analyse, results for guidance only
**Intf** Unable to analyse due to interferences
**N.D** Not determined **N.Det** Not detected
**N.F** No Flow
**NS** Information Not Supplied
**Req** Analysis requested, see attached sheets for results
**Þ** Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result
§ accreditation has been removed for this result as it is a non-accredited matrix

**Note:** The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

## Sample Descriptions

**Client :** ESG Wokingham

**Site :** Central Somers Town, London

**Report Number :** S16_0979

Note: major constituent in upper case

| Lab ID Number | Client ID | Description |
|---|---|---|
| CL/1604388 | BH1 D 5 0.50 | SILT |
| CL/1604389 | BH1 D 19 6.20 | CLAY |
| CL/1604390 | BH1 D 32 15.00 | CLAY |
| CL/1604391 | BH1 D 40 21.00 | CLAY |
| CL/1604392 | BH1 D 44 22.50 | CLAY |
| CL/1604393 | BH10 D 5 1.40 | CLAY |
| CL/1604394 | BH10 D 12 4.25 | CLAY |
| CL/1604395 | BH10 D 30 14.50 | CLAY |
| CL/1604396 | BH10 D 42 22.00 | CLAY |
| CL/1604397 | BH10 D 52 28.00 | CLAY |
| CL/1604398 | BH2 D 2 0.20 | MADE GROUND |
| CL/1604399 | BH2 D 13 2.70 | CLAY |
| CL/1604400 | BH2 D 18 6.00 | CLAY |
| CL/1604401 | BH2 D 27 12.00 | CLAY |
| CL/1604402 | BH2 D 35 18.00 | CLAY |
| CL/1604403 | BH3 D 5 0.50 | MADE GROUND |
| CL/1604404 | BH3 D 13 2.70 | MADE GROUND |
| CL/1604405 | BH3 D 18 6.20 | CLAY |
| CL/1604406 | BH3 D 29 13.00 | CLAY |

# TEST REPORT

1252

## Report No. EFS/160980 (Ver. 1)

ESG Wokingham
Glossop House
Hogwood Lane Industrial Estate
Finchamstead
Wokingham
Berkshire
RG40 4QW

**Site: Central Somers Town, London**

The 19 samples described in this report were registered for analysis by ESG on 08-Feb-2016. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 15-Feb-2016

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

The following tables are contained in this report:



On behalf of
ESG :
Declan Burns

Managing Director
Multi-Sector Services

Date of Issue: 15-Feb-2016

Tests marked '^' have been subcontracted to another laboratory.
Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected. ESG accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Units :** | | | mg/kg | mg/l | % | pH Units | | | | | | | | | | | | |
| **Method Codes :** | | | ICPACIDS | ICPWSS | TSBRE1 | WSLM50 | | | | | | | | | | | | |
| **Method Reporting Limits :** | | | 20 | 10 | 0.005 | | | | | | | | | | | | | |
| **UKAS Accredited :** | | | Yes | Yes | No | No | | | | | | | | | | | | |
| **LAB ID Number CL/** | **Client Sample Description** | **Sample Date** | **SO4-- (acid sol)** | **SO4-- (H2O sol) mg/l** | **Total Sulphur.** | **pH (BS1377)** | | | | | | | | | | | | |
| 1604407 | BH3 D 37 18.90 | | 1760 | 416 | 0.611 | 8.6 | | | | | | | | | | | | |
| 1604408 | BH3 D 39 20.80 | | 1280 | 463 | 0.248 | 8.7 | | | | | | | | | | | | |
| 1604409 | BH4 D 10 1.20 | | 633 | 226 | 0.090 | 8.0 | | | | | | | | | | | | |
| 1604410 | BH4 D 14 2.70 | | 572 | 233 | 0.052 | 8.2 | | | | | | | | | | | | |
| 1604411 | BH4 D 22 7.00 | | 1910 | 721 | 0.385 | 8.2 | | | | | | | | | | | | |
| 1604412 | BH4 D 31 13.00 | | 2200 | 1050 | 0.515 | 8.3 | | | | | | | | | | | | |
| 1604413 | BH4 D 40 20.00 | | 1680 | 514 | 0.903 | 8.5 | | | | | | | | | | | | |
| 1604414 | BH5 D 4 0.50 | | 1850 | 208 | 0.162 | 8.8 | | | | | | | | | | | | |
| 1604415 | BH5 D 14 3.20 | | 22100 | 1990 | 0.631 | 7.9 | | | | | | | | | | | | |
| 1604416 | BH5 D 18 6.20 | | 9810 | 2540 | 0.429 | 8.0 | | | | | | | | | | | | |
| 1604417 | BH5 D 26 12.00 | | 3310 | 1070 | 0.588 | 7.9 | | | | | | | | | | | | |
| 1604418 | BH5 D 34 18.00 | | 1280 | 550 | 0.565 | 8.7 | | | | | | | | | | | | |
| 1604419 | BH7 D 6 2.25 | | 5990 | 2310 | 0.303 | 8.0 | | | | | | | | | | | | |
| 1604420 | BH7 D 14 5.50 | | 5770 | 2780 | 0.300 | 8.0 | | | | | | | | | | | | |
| 1604421 | BH7 D 23 11.00 | | 2820 | 1070 | 0.490 | 7.6 | | | | | | | | | | | | |
| 1604422 | BH7 D 33 17.00 | | 2250 | 630 | 0.704 | 8.0 | | | | | | | | | | | | |
| 1604423 | BH7 D 40 21.00 | | 342 | 99 | 0.082 | 9.1 | | | | | | | | | | | | |
| 1604424 | BH7 D 46 25.00 | | 830 | 66 | 0.212 | 8.8 | | | | | | | | | | | | |
| 1604425 | BH7 D 53 29.50 | | 228 | 317 | 0.055 | 9.4 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |


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**Client Name** **ESG Wokingham**

**Contact** Andrea Capon

# Central Somers Town, London

## Sample Analysis

| | |
|---|---|
| **Date Printed** | **15-Feb-2016** |
| **Report Number** | **EFS/160980** |
| **Table Number** | **1** |



Where individual results are flagged see report notes for status.

# Analytical and Deviating Sample Overview

**Customer** ESG Wokingham
**Site** Central Somers Town, London
**Report No** S160980

Consignment No S53458
Date Logged 08-Feb-2016
Report Due 15-Feb-2016

| ID Number | Description | MethodID | CustServ | Dep.Opt | | | ICPACIDS | ICPBRE | ICPWSS | KONECL | KoneNO3 | TSBRE1 | WSLM50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sampled | REPORT A | DO Cl if pH<5.5 | DO Mg if SO4(W)>3000 | DO NO3 if pH<5.5 | SO4-- (acid sol) | Magnesium (BRE) | SO4-- (H2O sol) mg/l | Chloride:(2:1) | Nitrate (BRE 2:1): mg/l | Total Sulphur. | pH (BS1377) |
| | | | | | | | ✓ | | ✓ | | | | |
| CL/1604407 | BH3 18.90 | D | D | D | D | D | D | D | D | D | D | D | D |
| CL/1604408 | BH3 20.80 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604409 | BH4 1.20 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604410 | BH4 2.70 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604411 | BH4 7.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604412 | BH4 13.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604413 | BH4 20.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604414 | BH5 0.50 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604415 | BH5 3.20 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604416 | BH5 6.20 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604417 | BH5 12.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604418 | BH5 18.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604419 | BH7 2.25 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604420 | BH7 5.50 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604421 | BH7 11.00 | D | D | | | | D | D | D | D | D | D | D |

**Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.**

**In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.**

**Deviating Sample Key**

| | |
|---|---|
| A | The sample was received in an inappropriate container for this analysis |
| B | The sample was received without the correct preservation for this analysis |
| C | Headspace present in the sample container |
| D | The sampling date was not supplied so holding time may be compromised - applicable to all analysis |
| E | Sample processing did not commence within the appropriate holding time |
| F | Sample processing did not commence within the appropriate handling time |

**Requested Analysis Key**

| | |
|---|---|
| | Analysis Required |
| | Analysis dependant upon trigger result - **Note: due date may be affected if triggered** |
| | No analysis scheduled |
| ^ | Analysis Subcontracted - **Note: due date may vary** |

Where individual results are flagged see report notes for status.


The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

# Analytical and Deviating Sample Overview

**Customer** ESG Wokingham
**Site** Central Somers Town, London
**Report No** S160980

Consignment No S53458
Date Logged 08-Feb-2016
Report Due 15-Feb-2016

| ID Number | Description | MethodID | CustServ | Dep.Opt | | | ICPACIDS | ICPBRE | ICPWSS | KONECL | KoneNO3 | TSBRE1 | WSLM50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sampled | REPORT A | DO Cl if pH<5.5 | DO Mg if SO4(W)>3000 | DO NO3 if pH<5.5 | SO4-- (acid sol) | Magnesium (BRE) | SO4-- (H2O sol) mg/l | Chloride:(2:1) | Nitrate (BRE 2:1): mg/l | Total Sulphur. | pH (BS1377) |
| | | | | | | | ✓ | | ✓ | | | | |
| CL/1604422 | BH7 17.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604423 | BH7 21.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604424 | BH7 25.00 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604425 | BH7 29.50 | D | D | | | | D | D | D | D | D | D | D |

**Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.**

**In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.**

| Deviating Sample Key | |
|---|---|
| A | The sample was received in an inappropriate container for this analysis |
| B | The sample was received without the correct preservation for this analysis |
| C | Headspace present in the sample container |
| D | The sampling date was not supplied so holding time may be compromised - applicable to all analysis |
| E | Sample processing did not commence within the appropriate holding time |
| F | Sample processing did not commence within the appropriate handling time |

| Requested Analysis Key | |
|---|---|
| | Analysis Required |
| | Analysis dependant upon trigger result - **Note: due date may be affected if triggered** |
| | No analysis scheduled |
| ^ | Analysis Subcontracted - **Note: due date may vary** |

Where individual results are flagged see report notes for status.


The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

# Method Descriptions

| Matrix | MethodID | Analysis Basis | Method Description |
|---|---|---|---|
| Soil | ICPACIDS | Oven Dried @ < 35°C | Determination of Total Sulphate in soil samples by Hydrochloric Acid extraction followed by ICPOES detection |
| Soil | ICPWSS | Oven Dried @ < 35°C | Determination of Water Soluble Sulphate in soil samples by water extraction followed by ICPOES detection |
| Soil | TSBRE1 | Oven Dried @ < 35°C | Determination of Total Carbon and/or Total Sulphur in solid samples by high temperature combustion/infrared detection |
| Soil | WSLM50 | Oven Dried @ < 35°C | Determination of pH of 2.5:1 deionised water to soil extracts using pH probe. |

Where individual results are flagged see report notes for status.

# Report Notes

## Generic Notes

**Soil/Solid Analysis**

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

**Waters Analysis**

Unless stated otherwise results are expressed as mg/l

**Nil**: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

**Oil analysis specific**

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm$^3$@ 15$^o$C

**Gas (Tedlar bag) Analysis**

Unless stated otherwise, results are expressed as ug/l

**Asbestos Analysis**

**CH** Denotes Chrysotile **TR** Denotes Tremolite
**CR** Denotes Crocidolite **AC** Denotes Actinolite
**AM** Denotes Amosite **AN** Denotes Anthophylite
**NAIIS** No Asbestos Identified in Sample
**NADIS** No Asbestos Detected In Sample

## Symbol Reference

**^** Sub-contracted analysis.
**$$** Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
**¥** Results for guidance only due to possible interference
**&** Blank corrected result
**I.S** Insufficient sample to complete requested analysis
**I.S(g)** Insufficient sample to re-analyse, results for guidance only
**Intf** Unable to analyse due to interferences
**N.D** Not determined **N.Det** Not detected
**N.F** No Flow
**NS** Information Not Supplied
**Req** Analysis requested, see attached sheets for results
**Þ** Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result
§ accreditation has been removed for this result as it is a non-accredited matrix

**Note:** The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

## Sample Descriptions

**Client :** ESG Wokingham

**Site :** Central Somers Town, London

**Report Number :** S16_0980

Note: major constituent in upper case

| Lab ID Number | Client ID | Description |
|---|---|---|
| CL/1604407 | BH3 D 37 18.90 | CLAY |
| CL/1604408 | BH3 D 39 20.80 | CLAY |
| CL/1604409 | BH4 D 10 1.20 | CLAY |
| CL/1604410 | BH4 D 14 2.70 | CLAY |
| CL/1604411 | BH4 D 22 7.00 | CLAY |
| CL/1604412 | BH4 D 31 13.00 | CLAY |
| CL/1604413 | BH4 D 40 20.00 | CLAY |
| CL/1604414 | BH5 D 4 0.50 | MADE GROUND |
| CL/1604415 | BH5 D 14 3.20 | CLAY |
| CL/1604416 | BH5 D 18 6.20 | CLAY |
| CL/1604417 | BH5 D 26 12.00 | CLAY |
| CL/1604418 | BH5 D 34 18.00 | CLAY |
| CL/1604419 | BH7 D 6 2.25 | CLAY |
| CL/1604420 | BH7 D 14 5.50 | CLAY |
| CL/1604421 | BH7 D 23 11.00 | CLAY |
| CL/1604422 | BH7 D 33 17.00 | CLAY |
| CL/1604423 | BH7 D 40 21.00 | CLAY |
| CL/1604424 | BH7 D 46 25.00 | CLAY |
| CL/1604425 | BH7 D 53 29.50 | CLAY |

# TEST REPORT

1252

## Report No. EFS/160981 (Ver. 1)

ESG Wokingham
Glossop House
Hogwood Lane Industrial Estate
Finchamstead
Wokingham
Berkshire
RG40 4QW

**Site: Central Somers Town, London**

The 5 samples described in this report were registered for analysis by ESG on 08-Feb-2016. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 15-Feb-2016

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

The following tables are contained in this report:



On behalf of
ESG :
Declan Burns

Managing Director
Multi-Sector Services

Date of Issue: 15-Feb-2016

Tests marked '^' have been subcontracted to another laboratory.

Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected. ESG accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Units :** | | | mg/kg | mg/l | % | pH Units | | | | | | | | | | | | |
| **Method Codes :** | | | ICPACIDS | ICPWSS | TSBRE1 | WSLM50 | | | | | | | | | | | | |
| **Method Reporting Limits :** | | | 20 | 10 | 0.005 | | | | | | | | | | | | | |
| **UKAS Accredited :** | | | Yes | Yes | No | No | | | | | | | | | | | | |
| **LAB ID Number CL/** | **Client Sample Description** | **Sample Date** | **SO4-- (acid sol)** | **SO4-- (H2O sol) mg/l** | **Total Sulphur.** | **pH (BS1377)** | | | | | | | | | | | | |
| 1604426 | BH9 D 6 1.50 | | 2380 | 554 | 0.192 | 9.1 | | | | | | | | | | | | |
| 1604427 | BH9 D 9 2.70 | | 7530 | 1930 | 0.172 | 8.2 | | | | | | | | | | | | |
| 1604428 | BH9 D 22 9.50 | | 1600 | 541 | 0.507 | 8.5 | | | | | | | | | | | | |
| 1604429 | BH9 D 32 15.50 | | 1060 | 484 | 0.899 | 8.7 | | | | | | | | | | | | |
| 1604430 | BH9 D 48 25.00 | | 1300 | 224 | 0.180 | 8.9 | | | | | | | | | | | | |


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Burton-on-Trent, Staffordshire, DE15 0YZ

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**Client Name** ESG Wokingham

**Contact** Andrea Capon

# Central Somers Town, London

## Sample Analysis

| | |
|---|---|
| **Date Printed** | **15-Feb-2016** |
| **Report Number** | **EFS/160981** |
| **Table Number** | **1** |

# Analytical and Deviating Sample Overview

**Customer** ESG Wokingham
**Site** Central Somers Town, London
**Report No** S160981

Consignment No S53458.01
Date Logged 08-Feb-2016

Report Due 15-Feb-2016

| ID Number | Description | MethodID | CustServ | Dep.Opt | | | ICPACIDS | ICPBRE | ICPWSS | KONECL | KoneNO3 | TSBRE1 | WSLM50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sampled | REPORT A | DO Cl if pH<5.5 | DO Mg if SO4(W)>3000 | DO NO3 if pH<5.5 | SO4-- (acid sol) | Magnesium (BRE) | SO4-- (H2O sol) mg/l | Chloride:(2:1) | Nitrate (BRE 2:1): mg/l | Total Sulphur. | pH (BS1377) |
| | | | | | | | ✓ | | ✓ | | | | |
| CL/1604426 | BH9 1.50 | D | D | D | D | D | D | D | D | D | D | D | D |
| CL/1604427 | BH9 2.70 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604428 | BH9 9.50 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604429 | BH9 15.50 | D | D | | | | D | D | D | D | D | D | D |
| CL/1604430 | BH9 25.00 | D | D | | | | D | D | D | D | D | D | D |

**Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.**

**In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.**

**Deviating Sample Key**

| | |
|---|---|
| A | The sample was received in an inappropriate container for this analysis |
| B | The sample was received without the correct preservation for this analysis |
| C | Headspace present in the sample container |
| D | The sampling date was not supplied so holding time may be compromised - applicable to all analysis |
| E | Sample processing did not commence within the appropriate holding time |
| F | Sample processing did not commence within the appropriate handling time |

**Requested Analysis Key**

| | |
|---|---|
| | Analysis Required |
| | Analysis dependant upon trigger result - **Note: due date may be affected if triggered** |
| | No analysis scheduled |
| ^ | Analysis Subcontracted - **Note: due date may vary** |

Where individual results are flagged see report notes for status.


The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

# Method Descriptions

| Matrix | MethodID | Analysis Basis | Method Description |
|---|---|---|---|
| Soil | ICPACIDS | Oven Dried @ < 35°C | Determination of Total Sulphate in soil samples by Hydrochloric Acid extraction followed by ICPOES detection |
| Soil | ICPWSS | Oven Dried @ < 35°C | Determination of Water Soluble Sulphate in soil samples by water extraction followed by ICPOES detection |
| Soil | TSBRE1 | Oven Dried @ < 35°C | Determination of Total Carbon and/or Total Sulphur in solid samples by high temperature combustion/infrared detection |
| Soil | WSLM50 | Oven Dried @ < 35°C | Determination of pH of 2.5:1 deionised water to soil extracts using pH probe. |

Where individual results are flagged see report notes for status.

# Report Notes

## Generic Notes

**Soil/Solid Analysis**

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

**Waters Analysis**

Unless stated otherwise results are expressed as mg/l

**Nil**: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

**Oil analysis specific**

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm$^3$@ 15$^o$C

**Gas (Tedlar bag) Analysis**

Unless stated otherwise, results are expressed as ug/l

**Asbestos Analysis**

**CH** Denotes Chrysotile **TR** Denotes Tremolite
**CR** Denotes Crocidolite **AC** Denotes Actinolite
**AM** Denotes Amosite **AN** Denotes Anthophylite
**NAIIS** No Asbestos Identified in Sample
**NADIS** No Asbestos Detected In Sample

## Symbol Reference

**^** Sub-contracted analysis.
**$$** Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
**¥** Results for guidance only due to possible interference
**&** Blank corrected result
**I.S** Insufficient sample to complete requested analysis
**I.S(g)** Insufficient sample to re-analyse, results for guidance only
**Intf** Unable to analyse due to interferences
**N.D** Not determined **N.Det** Not detected
**N.F** No Flow
**NS** Information Not Supplied
**Req** Analysis requested, see attached sheets for results
**Þ** Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result
§ accreditation has been removed for this result as it is a non-accredited matrix

**Note:** The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

## Sample Descriptions

**Client :** ESG Wokingham

**Site :** Central Somers Town, London

**Report Number :** S16_0981

Note: major constituent in upper case

| Lab ID Number | Client ID | Description |
|---|---|---|
| CL/1604426 | BH9 D 6 1.50 | MADE GROUND |
| CL/1604427 | BH9 D 9 2.70 | CLAY |
| CL/1604428 | BH9 D 22 9.50 | CLAY |
| CL/1604429 | BH9 D 32 15.50 | CLAY |
| CL/1604430 | BH9 D 48 25.00 | SILT |

**APPENDIX F**

**GEOENVIRONMENTAL LABORATORY TEST RESULTS**

Soil Sample Analysis Test Report EFS/160820 v.2

# TEST REPORT

1252

## Report No. EFS/160820 (Ver. 2)

ESG Wokingham
Glossop House
Hogwood Lane Industrial Estate
Finchamstead
Wokingham
Berkshire
RG40 4QW

**Site: Central Somers Town, London**

The 15 samples described in this report were registered for analysis by ESG on 03-Feb-2016. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 22-Feb-2016

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

The following tables are contained in this report:



On behalf of
ESG :
Declan Burns

Managing Director
Multi-Sector Services

Date of Issue: 22-Feb-2016

Tests marked '^' have been subcontracted to another laboratory.

Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected. ESG accepts no responsibility for any sampling not carried out by our personnel.

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Units :** | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | pH Units | mg/kg | mg/kg | % | |
| **Method Codes :** | | | ICPMSS | ICPMSS | ICPMSS | ICPMSS | ICPMSS | ICPMSS | ICPMSS | ICPMSS | ICPMSS | ICPSOIL | ICPSOIL | PHSOIL | SFAPI | SFAPI | Sub002 | Sub002a |
| **Method Reporting Limits :** | | | 0.3 | 0.1 | 0.5 | 0.5 | 0.5 | 0.1 | 0.5 | 0.5 | 3 | 1 | 0.1 | | 0.5 | 0.5 | | |
| **UKAS Accredited :** | | | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **LAB ID Number CL/** | **Client Sample Description** | **Sample Date** | **Arsenic (MS)** | **Cadmium (MS)** | **Chromium (MS)** | **Copper (MS)** | **Lead (MS)** | **Mercury (MS)** | **Nickel (MS)** | **Selenium (MS)** | **Zinc (MS)** | **Barium.** | **Beryllium.** | **pH units (AR)** | **Cyanide(Total) (AR)** | **Phenol Index.(AR)** | **^Asbestos ID and Quantification** | **^Asbestos Screen** |
| 1603723 | BH1A ES 4 0.50 | | 32.8 | 0.36 | 24 | 36.4 | 33.3 | 0.2 | 28.1 | <0.5 | 97.5 | 953 | 0.781 | 8.2 | <0.5 | <0.5 | | NAIIS |
| 1603724 | BH4 ES 8 1.00 | | 17 | 0.32 | 32.4 | 29.9 | 72 | 0.4 | 24.4 | 0.5 | 77.2 | 163 | 1.05 | 7.5 | <0.5 | <0.5 | | NAIIS |
| 1603725 | BH5 ES 5 0.50 | | 16.6 | 0.25 | 26.4 | 51.6 | 276.8 | 0.86 | 29.5 | <0.5 | 92.8 | 157 | 0.882 | 9.0 | <0.5 | <0.5 | | NAIIS |
| 1603726 | BH6 ES 6 1.00 | | 15.5 | 0.43 | 26.7 | 50 | 319.6 | 0.63 | 24.3 | <0.5 | 167.7 | 162 | 0.805 | 8.2 | <0.5 | <0.5 | | NAIIS |
| 1603727 | BH7 ES 1 0.30 | | 7.9 | 0.48 | 21.5 | 58 | 89.8 | 0.21 | 29.4 | 0.8 | 106.6 | 231 | 1.06 | 7.9 | <0.5 | <0.5 | | NAIIS |
| 1603728 | WS3 ES 10 3.00 | | 11.4 | 0.32 | 43.9 | 27.4 | 79.6 | 0.24 | 41.2 | 0.8 | 75.1 | 77 | 1.07 | 8.4 | <0.5 | <0.5 | | NAIIS |
| 1603729 | WS5 ES 2 1.50 | | 11.8 | 0.18 | 48.1 | 31.1 | 32.5 | 0.11 | 43.7 | 0.6 | 86.4 | 62.5 | 1.3 | 7.9 | <0.5 | <0.5 | | NAIIS |
| 1603730 | WS8 ES 9 2.60 | | 19.5 | 0.21 | 43.7 | 45.8 | 98.2 | 0.18 | 45.4 | 0.9 | 105.8 | 110 | 1.24 | 7.9 | <0.5 | <0.5 | | NAIIS |
| 1603731 | WS16 ES 2 0.30 | | 7 | 0.43 | 39.8 | 25.9 | 50.4 | 0.13 | 15.4 | 0.8 | 59.4 | 71 | 0.328 | 8.7 | <0.5 | <0.5 | | NAIIS |
| 1603732 | WS26A ES 4 0.90 | | 12 | 0.23 | 35.6 | 29.4 | 142.8 | 0.37 | 28.9 | 0.7 | 69.2 | 102 | 0.817 | 8.4 | <0.5 | <0.5 | | NAIIS |
| 1603733 | WS27 ES 3 1.00 | | 13.6 | 10.64 | 78.5 | 115.1 | 121 | 1.52 | 38.3 | 6 | 270.9 | 547 | 1.5 | 8.0 | <0.5 | <0.5 | | NAIIS |
| 1603734 | WS28 ES 3 1.00 | | 11.7 | 0.62 | 33 | 37.6 | 178.6 | 0.44 | 25.3 | 0.6 | 112.7 | 144 | 0.797 | 8.5 | <0.5 | <0.5 | | NAIIS |
| 1603735 | WS29 ES 1 0.30 | | 12.3 | 0.2 | 26.7 | 22.2 | 123.6 | 0.48 | 24.4 | 0.5 | 65 | 94.7 | 0.631 | 8.7 | <0.5 | <0.5 | 0.005 | AM |
| 1603736 | TP2 ES 1 0.30 | | 15.6 | 3.04 | 38.8 | 68.5 | 221.9 | 1.4 | 26.3 | 1.1 | 239.6 | 229 | 0.904 | 8.0 | <0.5 | <0.5 | NADIS | CH |
| 1603737 | HP5 ES 3 1.00 | | 10.9 | 0.24 | 44.9 | 28.9 | 157.1 | 0.22 | 29 | 1.1 | 101.7 | 229 | 2.41 | 8.7 | <0.5 | <0.5 | 0.047 | CH AM |
| | | | | | | | | | | | | | | | | | | |
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ESG

Bretby Business Park, Ashby Road

Burton-on-Trent, Staffordshire, DE15 0YZ

Tel +44 (0) 1283 554400

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**Client Name** **ESG Wokingham**

**Contact** Sean Wheeliker

# Central Somers Town, London

## Sample Analysis

| | |
|---|---|
| **Date Printed** | **22-Feb-2016** |
| **Report Number** | **EFS/160820** |
| **Table Number** | **1** |



Where individual results are flagged see report notes for status.

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Units :** | | | mg/kg | mg/kg | % M/M | mg/kg | mg/kg | µg/kg | % M/M | mg/kg | | | | | | | | |
| **Method Codes :** | | | TPHFIDUS | TPHFIDUS | FOCS | ICPMSS | KONECR | PCBUSECDAR | WSLM59 | PAHMSUS | | | | | | | | |
| **Method Reporting Limits :** | | | 10 | 10 | 0.04 | 0.6 | 0.1 | | 0.04 | | | | | | | | | |
| **UKAS Accredited :** | | | Yes | Yes | No | No | No | No | No | Yes | | | | | | | | |
| **LAB ID Number CL/** | **Client Sample Description** | **Sample Date** | **TPH by GCFID (AR)** | **TPH Carbon Banding.** | **S.O.M. % (Calc)** | **Vanadium (MS)** | **Chromium vi:** | **PCB-7 Congeners Analysis** | **Total Organic Carbon** | **PAH (16) by GCMS** | | | | | | | | |
| 1603723 | BH1A ES 4 0.50 | | 55 | Req | 0.66 | 42.9 | <0.1 | Req | 0.38 | Req | | | | | | | | |
| 1603724 | BH4 ES 8 1.00 | | 23 | Req | 2.43 | 57.4 | <0.1 | Req | 1.41 | Req | | | | | | | | |
| 1603725 | BH5 ES 5 0.50 | | 135 | Req | 2.64 | 50.4 | <0.1 | Req | 1.53 | Req | | | | | | | | |
| 1603726 | BH6 ES 6 1.00 | | 36 | Req | 4.29 | 41.9 | 0.2 | Req | 2.49 | Req | | | | | | | | |
| 1603727 | BH7 ES 1 0.30 | | 122 | Req | 6.50 | 34.8 | <0.1 | Req | 3.77 | Req | | | | | | | | |
| 1603728 | WS3 ES 10 3.00 | | 23 | Req | 0.64 | 69.4 | <0.1 | Req | 0.37 | Req | | | | | | | | |
| 1603729 | WS5 ES 2 1.50 | | 54 | Req | 0.67 | 75.5 | <0.1 | Req | 0.39 | Req | | | | | | | | |
| 1603730 | WS8 ES 9 2.60 | | 196 | Req | 0.71 | 71.4 | <0.1 | Req | 0.41 | Req | | | | | | | | |
| 1603731 | WS16 ES 2 0.30 | | 2160 | Req | 6.88 | 51.7 | 0.1 | Req | 3.99 | Req | | | | | | | | |
| 1603732 | WS26A ES 4 0.90 | | 76 | Req | 2.31 | 46.1 | <0.1 | Req | 1.34 | Req | | | | | | | | |
| 1603733 | WS27 ES 3 1.00 | | 219 | Req | 4.29 | 48.9 | <0.1 | Req | 2.49 | Req | | | | | | | | |
| 1603734 | WS28 ES 3 1.00 | | 427 | Req | 2.05 | 38.6 | <0.1 | Req | 1.19 | Req | | | | | | | | |
| 1603735 | WS29 ES 1 0.30 | | 57 | Req | 0.98 | 37 | <0.1 | Req | 0.57 | Req | | | | | | | | |
| 1603736 | TP2 ES 1 0.30 | | 90 | Req | 4.69 | 47.8 | <0.1 | Req | 2.72 | Req | | | | | | | | |
| 1603737 | HP5 ES 3 1.00 | | 111 | Req | 1.55 | 95.9 | <0.1 | Req | 0.90 | Req | | | | | | | | |
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Tel +44 (0) 1283 554400

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**Client Name** **ESG Wokingham**

**Contact** Sean Wheeliker

# Central Somers Town, London

## Sample Analysis

| | |
|---|---|
| **Date Printed** | **22-Feb-2016** |
| **Report Number** | **EFS/160820** |
| **Table Number** | **1** |



Where individual results are flagged see report notes for status.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | BH1A ES 4 0.50 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603723 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | - | < 0.08 | - |
| Acenaphthylene | 208-96-8 | 4.15 | 0.12 | 96 |
| Acenaphthene | 83-32-9 | - | < 0.08 | - |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | - | < 0.08 | - |
| Anthracene | 120-12-7 | 5.51 | 0.12 | 100 |
| Fluoranthene | 206-44-0 | 6.76 | 0.21 | 94 |
| Pyrene | 129-00-0 | 7.04 | 0.23 | 95 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 0.13 | 83 |
| Chrysene | 218-01-9 | 8.76 | 0.22 | 87 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 0.31 | 74 |
| Benzo[k]fluoranthene | 207-08-9 | 10.28 | 0.15 | 74 |
| Benzo[a]pyrene | 50-32-8 | 10.67 | 0.27 | 97 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.04 | 0.24 | 91 |
| Dibenzo[a,h]anthracene | 53-70-3 | - | < 0.08 | - |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 0.24 | 95 |
| Total (USEPA16) PAHs | - | - | < 2.64 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 97 |
| Acenaphthene-d10 | 95 |
| Phenanthrene-d10 | 94 |
| Chrysene-d12 | 98 |
| Perylene-d12 | 101 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 87 |
| Terphenyl-d14 | 77 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | BH4 ES 8 1.00 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603724 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | - | < 0.08 | - |
| Acenaphthylene | 208-96-8 | - | < 0.08 | - |
| Acenaphthene | 83-32-9 | - | < 0.08 | - |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | - | < 0.08 | - |
| Anthracene | 120-12-7 | - | < 0.08 | - |
| Fluoranthene | 206-44-0 | - | < 0.08 | - |
| Pyrene | 129-00-0 | - | < 0.08 | - |
| Benzo[a]anthracene | 56-55-3 | - | < 0.08 | - |
| Chrysene | 218-01-9 | - | < 0.08 | - |
| Benzo[b]fluoranthene | 205-99-2 | - | < 0.08 | - |
| Benzo[k]fluoranthene | 207-08-9 | - | < 0.08 | - |
| Benzo[a]pyrene | 50-32-8 | - | < 0.08 | - |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | - | < 0.08 | - |
| Dibenzo[a,h]anthracene | 53-70-3 | - | < 0.08 | - |
| Benzo[g,h,i]perylene | 191-24-2 | - | < 0.08 | - |
| Total (USEPA16) PAHs | - | - | < 1.28 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 94 |
| Acenaphthene-d10 | 93 |
| Phenanthrene-d10 | 93 |
| Chrysene-d12 | 94 |
| Perylene-d12 | 95 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 102 |
| Terphenyl-d14 | 88 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | BH5 ES 5 0.50 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603725 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | 3.11 | 0.09 | 94 |
| Acenaphthylene | 208-96-8 | 4.16 | 0.20 | 96 |
| Acenaphthene | 83-32-9 | - | < 0.08 | - |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | 5.45 | 0.75 | 98 |
| Anthracene | 120-12-7 | 5.50 | 0.31 | 94 |
| Fluoranthene | 206-44-0 | 6.76 | 2.50 | 95 |
| Pyrene | 129-00-0 | 7.04 | 2.19 | 96 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 1.52 | 91 |
| Chrysene | 218-01-9 | 8.76 | 1.70 | 97 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 2.62 | 99 |
| Benzo[k]fluoranthene | 207-08-9 | 10.27 | 0.84 | 99 |
| Benzo[a]pyrene | 50-32-8 | 10.66 | 1.93 | 96 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.04 | 1.76 | 100 |
| Dibenzo[a,h]anthracene | 53-70-3 | 12.08 | 0.29 | 92 |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 1.55 | 96 |
| Total (USEPA16) PAHs | - | - | < 18.41 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 97 |
| Acenaphthene-d10 | 95 |
| Phenanthrene-d10 | 97 |
| Chrysene-d12 | 103 |
| Perylene-d12 | 115 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 100 |
| Terphenyl-d14 | 86 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | BH6 ES 6 1.00 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603726 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | - | < 0.08 | - |
| Acenaphthylene | 208-96-8 | - | < 0.08 | - |
| Acenaphthene | 83-32-9 | - | < 0.08 | - |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | - | < 0.08 | - |
| Anthracene | 120-12-7 | - | < 0.08 | - |
| Fluoranthene | 206-44-0 | - | < 0.08 | - |
| Pyrene | 129-00-0 | - | < 0.08 | - |
| Benzo[a]anthracene | 56-55-3 | - | < 0.08 | - |
| Chrysene | 218-01-9 | - | < 0.08 | - |
| Benzo[b]fluoranthene | 205-99-2 | - | < 0.08 | - |
| Benzo[k]fluoranthene | 207-08-9 | - | < 0.08 | - |
| Benzo[a]pyrene | 50-32-8 | - | < 0.08 | - |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | - | < 0.08 | - |
| Dibenzo[a,h]anthracene | 53-70-3 | - | < 0.08 | - |
| Benzo[g,h,i]perylene | 191-24-2 | - | < 0.08 | - |
| Total (USEPA16) PAHs | - | - | < 1.28 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 98 |
| Acenaphthene-d10 | 97 |
| Phenanthrene-d10 | 98 |
| Chrysene-d12 | 101 |
| Perylene-d12 | 102 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 94 |
| Terphenyl-d14 | 82 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | BH7 ES 1 0.30 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603727 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | 3.11 | 0.09 | 94 |
| Acenaphthylene | 208-96-8 | 4.15 | 0.12 | 94 |
| Acenaphthene | 83-32-9 | - | < 0.08 | - |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | 5.45 | 0.30 | 98 |
| Anthracene | 120-12-7 | 5.50 | 0.14 | 91 |
| Fluoranthene | 206-44-0 | 6.76 | 0.67 | 79 |
| Pyrene | 129-00-0 | 7.04 | 0.62 | 96 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 0.37 | 92 |
| Chrysene | 218-01-9 | 8.76 | 0.40 | 96 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 0.48 | 95 |
| Benzo[k]fluoranthene | 207-08-9 | 10.27 | 0.24 | 95 |
| Benzo[a]pyrene | 50-32-8 | 10.66 | 0.38 | 98 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.04 | 0.39 | 90 |
| Dibenzo[a,h]anthracene | 53-70-3 | - | < 0.08 | - |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 0.37 | 94 |
| Total (USEPA16) PAHs | - | - | < 4.81 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 99 |
| Acenaphthene-d10 | 98 |
| Phenanthrene-d10 | 99 |
| Chrysene-d12 | 106 |
| Perylene-d12 | 113 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 94 |
| Terphenyl-d14 | 81 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | WS3 ES 10 3.00 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603728 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | - | < 0.08 | - |
| Acenaphthylene | 208-96-8 | - | < 0.08 | - |
| Acenaphthene | 83-32-9 | - | < 0.08 | - |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | - | < 0.08 | - |
| Anthracene | 120-12-7 | - | < 0.08 | - |
| Fluoranthene | 206-44-0 | 6.77 | 0.09 | 98 |
| Pyrene | 129-00-0 | 7.05 | 0.09 | 77 |
| Benzo[a]anthracene | 56-55-3 | - | < 0.08 | - |
| Chrysene | 218-01-9 | - | < 0.08 | - |
| Benzo[b]fluoranthene | 205-99-2 | - | < 0.08 | - |
| Benzo[k]fluoranthene | 207-08-9 | - | < 0.08 | - |
| Benzo[a]pyrene | 50-32-8 | - | < 0.08 | - |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | - | < 0.08 | - |
| Dibenzo[a,h]anthracene | 53-70-3 | - | < 0.08 | - |
| Benzo[g,h,i]perylene | 191-24-2 | - | < 0.08 | - |
| Total (USEPA16) PAHs | - | - | < 1.30 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 99 |
| Acenaphthene-d10 | 99 |
| Phenanthrene-d10 | 101 |
| Chrysene-d12 | 105 |
| Perylene-d12 | 105 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 101 |
| Terphenyl-d14 | 88 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | WS5 ES 2 1.50 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603729 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | - | < 0.08 | - |
| Acenaphthylene | 208-96-8 | - | < 0.08 | - |
| Acenaphthene | 83-32-9 | - | < 0.08 | - |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | - | < 0.08 | - |
| Anthracene | 120-12-7 | - | < 0.08 | - |
| Fluoranthene | 206-44-0 | 6.76 | 0.38 | 92 |
| Pyrene | 129-00-0 | 7.04 | 0.41 | 96 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 0.31 | 93 |
| Chrysene | 218-01-9 | 8.77 | 0.30 | 96 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 0.48 | 71 |
| Benzo[k]fluoranthene | 207-08-9 | 10.27 | 0.20 | 71 |
| Benzo[a]pyrene | 50-32-8 | 10.67 | 0.38 | 98 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.05 | 0.27 | 95 |
| Dibenzo[a,h]anthracene | 53-70-3 | - | < 0.08 | - |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 0.25 | 96 |
| Total (USEPA16) PAHs | - | - | < 3.54 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 102 |
| Acenaphthene-d10 | 99 |
| Phenanthrene-d10 | 99 |
| Chrysene-d12 | 106 |
| Perylene-d12 | 109 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 91 |
| Terphenyl-d14 | 81 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | WS8 ES 9 2.60 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603730 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | 3.11 | 0.33 | 91 |
| Acenaphthylene | 208-96-8 | 4.15 | 0.26 | 97 |
| Acenaphthene | 83-32-9 | 4.26 | 0.26 | 95 |
| Fluorene | 86-73-7 | 4.64 | 0.16 | 99 |
| Phenanthrene | 85-01-8 | 5.45 | 2.33 | 99 |
| Anthracene | 120-12-7 | 5.50 | 0.62 | 95 |
| Fluoranthene | 206-44-0 | 6.76 | 4.62 | 95 |
| Pyrene | 129-00-0 | 7.04 | 3.96 | 96 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 2.20 | 93 |
| Chrysene | 218-01-9 | 8.76 | 2.30 | 96 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 2.51 | 100 |
| Benzo[k]fluoranthene | 207-08-9 | 10.27 | 1.08 | 100 |
| Benzo[a]pyrene | 50-32-8 | 10.66 | 2.05 | 98 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.04 | 1.45 | 99 |
| Dibenzo[a,h]anthracene | 53-70-3 | 12.08 | 0.26 | 95 |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 1.31 | 97 |
| Total (USEPA16) PAHs | - | - | 25.70 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 95 |
| Acenaphthene-d10 | 94 |
| Phenanthrene-d10 | 97 |
| Chrysene-d12 | 103 |
| Perylene-d12 | 113 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 92 |
| Terphenyl-d14 | 79 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | WS16 ES 2 0.30 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603731 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | - | < 0.08 | - |
| Acenaphthylene | 208-96-8 | 4.15 | 0.41 | 97 |
| Acenaphthene | 83-32-9 | 4.26 | 0.25 | 88 |
| Fluorene | 86-73-7 | 4.64 | 0.20 | 95 |
| Phenanthrene | 85-01-8 | 5.45 | 2.20 | 99 |
| Anthracene | 120-12-7 | 5.50 | 0.83 | 95 |
| Fluoranthene | 206-44-0 | 6.76 | 4.57 | 95 |
| Pyrene | 129-00-0 | 7.04 | 3.96 | 97 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 2.14 | 92 |
| Chrysene | 218-01-9 | 8.76 | 2.04 | 94 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 2.93 | 86 |
| Benzo[k]fluoranthene | 207-08-9 | 10.27 | 1.01 | 86 |
| Benzo[a]pyrene | 50-32-8 | 10.66 | 3.01 | 95 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.04 | 2.61 | 95 |
| Dibenzo[a,h]anthracene | 53-70-3 | 12.07 | 0.47 | 92 |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 2.34 | 95 |
| Total (USEPA16) PAHs | - | - | < 29.05 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 99 |
| Acenaphthene-d10 | 101 |
| Phenanthrene-d10 | 104 |
| Chrysene-d12 | 117 |
| Perylene-d12 | 138 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 86 |
| Terphenyl-d14 | 80 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | WS26A ES 4 0.90 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603732 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | 3.11 | 0.10 | 96 |
| Acenaphthylene | 208-96-8 | - | < 0.08 | - |
| Acenaphthene | 83-32-9 | 4.26 | 0.12 | 91 |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | 5.45 | 0.78 | 100 |
| Anthracene | 120-12-7 | 5.50 | 0.22 | 96 |
| Fluoranthene | 206-44-0 | 6.76 | 1.49 | 80 |
| Pyrene | 129-00-0 | 7.04 | 1.29 | 97 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 0.88 | 95 |
| Chrysene | 218-01-9 | 8.76 | 0.90 | 97 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 1.18 | 99 |
| Benzo[k]fluoranthene | 207-08-9 | 10.27 | 0.40 | 99 |
| Benzo[a]pyrene | 50-32-8 | 10.66 | 0.88 | 97 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.04 | 0.70 | 95 |
| Dibenzo[a,h]anthracene | 53-70-3 | 12.07 | 0.13 | 81 |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 0.60 | 97 |
| Total (USEPA16) PAHs | - | - | < 9.83 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 96 |
| Acenaphthene-d10 | 96 |
| Phenanthrene-d10 | 96 |
| Chrysene-d12 | 104 |
| Perylene-d12 | 121 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 98 |
| Terphenyl-d14 | 84 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | WS27 ES 3 1.00 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603733 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | - | < 0.08 | - |
| Acenaphthylene | 208-96-8 | 4.15 | 0.09 | 96 |
| Acenaphthene | 83-32-9 | - | < 0.08 | - |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | 5.45 | 0.31 | 97 |
| Anthracene | 120-12-7 | 5.50 | 0.11 | 97 |
| Fluoranthene | 206-44-0 | 6.76 | 0.95 | 95 |
| Pyrene | 129-00-0 | 7.04 | 0.91 | 97 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 0.59 | 90 |
| Chrysene | 218-01-9 | 8.76 | 0.63 | 91 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 0.77 | 96 |
| Benzo[k]fluoranthene | 207-08-9 | 10.27 | 0.32 | 96 |
| Benzo[a]pyrene | 50-32-8 | 10.67 | 0.59 | 96 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.04 | 0.49 | 93 |
| Dibenzo[a,h]anthracene | 53-70-3 | 12.08 | 0.09 | 35 |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 0.41 | 95 |
| Total (USEPA16) PAHs | - | - | < 6.50 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 100 |
| Acenaphthene-d10 | 99 |
| Phenanthrene-d10 | 101 |
| Chrysene-d12 | 108 |
| Perylene-d12 | 122 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 99 |
| Terphenyl-d14 | 84 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | WS28 ES 3 1.00 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603734 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | 3.11 | 0.32 | 94 |
| Acenaphthylene | 208-96-8 | 4.15 | 1.72 | 99 |
| Acenaphthene | 83-32-9 | 4.26 | 0.29 | 85 |
| Fluorene | 86-73-7 | 4.64 | 0.20 | 97 |
| Phenanthrene | 85-01-8 | 5.45 | 3.23 | 99 |
| Anthracene | 120-12-7 | 5.50 | 1.88 | 95 |
| Fluoranthene | 206-44-0 | 6.76 | 12.30 | 95 |
| Pyrene | 129-00-0 | 7.04 | 11.90 | 96 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 7.74 | 93 |
| Chrysene | 218-01-9 | 8.76 | 7.05 | 97 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 9.29 | 100 |
| Benzo[k]fluoranthene | 207-08-9 | 10.27 | 3.67 | 100 |
| Benzo[a]pyrene | 50-32-8 | 10.66 | 8.31 | 96 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.04 | 6.36 | 94 |
| Dibenzo[a,h]anthracene | 53-70-3 | 12.07 | 1.09 | 94 |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 5.25 | 96 |
| Total (USEPA16) PAHs | - | - | 80.60 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 95 |
| Acenaphthene-d10 | 96 |
| Phenanthrene-d10 | 98 |
| Chrysene-d12 | 113 |
| Perylene-d12 | 133 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 100 |
| Terphenyl-d14 | 87 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | WS29 ES 1 0.30 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603735 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | - | < 0.08 | - |
| Acenaphthylene | 208-96-8 | - | < 0.08 | - |
| Acenaphthene | 83-32-9 | - | < 0.08 | - |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | 5.45 | 0.22 | 98 |
| Anthracene | 120-12-7 | - | < 0.08 | - |
| Fluoranthene | 206-44-0 | 6.76 | 0.45 | 95 |
| Pyrene | 129-00-0 | 7.04 | 0.41 | 97 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 0.25 | 96 |
| Chrysene | 218-01-9 | 8.76 | 0.26 | 96 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 0.30 | 94 |
| Benzo[k]fluoranthene | 207-08-9 | 10.28 | 0.15 | 95 |
| Benzo[a]pyrene | 50-32-8 | 10.66 | 0.26 | 98 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.04 | 0.23 | 95 |
| Dibenzo[a,h]anthracene | 53-70-3 | - | < 0.08 | - |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 0.20 | 98 |
| Total (USEPA16) PAHs | - | - | < 3.21 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 97 |
| Acenaphthene-d10 | 99 |
| Phenanthrene-d10 | 99 |
| Chrysene-d12 | 108 |
| Perylene-d12 | 120 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 91 |
| Terphenyl-d14 | 81 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | TP2 ES 1 0.30 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603736 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | - | < 0.08 | - |
| Acenaphthylene | 208-96-8 | 4.15 | 0.09 | 95 |
| Acenaphthene | 83-32-9 | 4.26 | 0.09 | 87 |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | 5.45 | 0.74 | 99 |
| Anthracene | 120-12-7 | 5.50 | 0.22 | 93 |
| Fluoranthene | 206-44-0 | 6.76 | 1.51 | 96 |
| Pyrene | 129-00-0 | 7.04 | 1.32 | 97 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 0.75 | 91 |
| Chrysene | 218-01-9 | 8.76 | 0.73 | 95 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 0.90 | 99 |
| Benzo[k]fluoranthene | 207-08-9 | 10.27 | 0.39 | 98 |
| Benzo[a]pyrene | 50-32-8 | 10.67 | 0.74 | 92 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.04 | 0.60 | 99 |
| Dibenzo[a,h]anthracene | 53-70-3 | 12.08 | 0.10 | 93 |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 0.54 | 96 |
| Total (USEPA16) PAHs | - | - | < 8.88 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 96 |
| Acenaphthene-d10 | 98 |
| Phenanthrene-d10 | 100 |
| Chrysene-d12 | 107 |
| Perylene-d12 | 122 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 98 |
| Terphenyl-d14 | 85 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polycyclic Aromatic Hydrocarbons
## GC/MS (SIM)

| | | | |
|---|---|---|---|
| **Customer and Site Details:** | ESG Wokingham: Central Somers Town, London | | |
| **Sample Details:** | HP5 ES 3 1.00 | **Job Number:** | S16_0820 |
| **LIMS ID Number:** | CL1603737 | **Date Booked in:** | 03-Feb-16 |
| **QC Batch Number:** | 160140B | **Date Extracted:** | 05-Feb-16 |
| **Quantitation File:** | Initial Calibration | **Date Analysed:** | 06-Feb-16 |
| **Directory:** | 6\020516GC5\ | **Matrix:** | Soil |
| **Dilution:** | 1.0 | **Ext Method:** | Ultrasonic |

**UKAS accredited?: Yes**

| Target Compounds | CAS # | R.T. (min) | Concentration mg/kg | % Fit |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | - | < 0.08 | - |
| Acenaphthylene | 208-96-8 | 4.15 | 0.33 | 98 |
| Acenaphthene | 83-32-9 | 4.26 | 0.10 | 89 |
| Fluorene | 86-73-7 | - | < 0.08 | - |
| Phenanthrene | 85-01-8 | 5.45 | 1.06 | 99 |
| Anthracene | 120-12-7 | 5.50 | 0.46 | 95 |
| Fluoranthene | 206-44-0 | 6.76 | 3.52 | 95 |
| Pyrene | 129-00-0 | 7.04 | 3.24 | 96 |
| Benzo[a]anthracene | 56-55-3 | 8.71 | 2.00 | 93 |
| Chrysene | 218-01-9 | 8.76 | 1.77 | 97 |
| Benzo[b]fluoranthene | 205-99-2 | 10.24 | 2.31 | 100 |
| Benzo[k]fluoranthene | 207-08-9 | 10.27 | 1.12 | 100 |
| Benzo[a]pyrene | 50-32-8 | 10.66 | 2.07 | 96 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 12.04 | 1.58 | 100 |
| Dibenzo[a,h]anthracene | 53-70-3 | 12.07 | 0.26 | 92 |
| Benzo[g,h,i]perylene | 191-24-2 | 12.33 | 1.39 | 96 |
| Total (USEPA16) PAHs | - | - | < 21.37 | - |

"M" denotes that % fit has been manually interpreted

| Internal Standards | % Area |
|---|---|
| 1,4-Dichlorobenzene-d4 | NA |
| Naphthalene-d8 | 99 |
| Acenaphthene-d10 | 100 |
| Phenanthrene-d10 | 101 |
| Chrysene-d12 | 109 |
| Perylene-d12 | 129 |

| Surrogates | % Rec |
|---|---|
| Nitrobenzene-d5 | NA |
| 2-Fluorobiphenyl | 95 |
| Terphenyl-d14 | 84 |

Concentrations are reported on a wet weight basis.

The Total PAH result is the sum of non-rounded individual PAH results and therefore may differ to the sum of the rounded individual PAH results printed above. By convention, where any one or more result is a "less than", the total is expressed as a "less than" and includes the "less than" concentration within the total.

# Polychlorinated Biphenyls (congeners)

**Customer and Site Details:** ESG Wokingham: Central Somers Town, London
**Job Number:** S16_0820
**QC Batch Number:** 160141A
**Directory:** 0205PCB.GC8
**Method:** Ultrasonic

**Matrix:** SOIL
**Date Booked in:** 03-Feb-16
**Date Extracted:** 05-Feb-16
**Date Analysed:** 10-Feb-16

*** This sample data is not UKAS accredited.**

| | | | Concentration, (µg/kg) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Sample ID** | **Customer ID** | **PCB28** | **PCB52** | **PCB101** | **PCB118** | **PCB153** | **PCB138** | **PCB180** |
| * | CL1603723 | BH1A ES 4 0.50 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603724 | BH4 ES 8 1.00 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603725 | BH5 ES 5 0.50 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603726 | BH6 ES 6 1.00 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603727 | BH7 ES 1 0.30 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603728 | WS3 ES 10 3.00 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603729 | WS5 ES 2 1.50 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603730 | WS8 ES 9 2.60 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603731 | WS16 ES 2 0.30 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603732 | WS26A ES 4 0.90 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603733 | WS27 ES 3 1.00 | <5.0 | 24.4 | 26.6 | 10.0 | 9.3 | 10.6 | <5.0 |
| * | CL1603734 | WS28 ES 3 1.00 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603735 | WS29 ES 1 0.30 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603736 | TP2 ES 1 0.30 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| * | CL1603737 | HP5 ES 3 1.00 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Where individual results are flagged see report notes for status.

# Total Petroleum Hydrocarbons (TPH) Carbon Ranges

**Customer and Site Details:** ESG Wokingham : Central Somers Town, London
**Job Number:** S16_0820
**QC Batch Number:** 160141
**Directory:** D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\026F7201.D
**Method:** Ultra Sonic

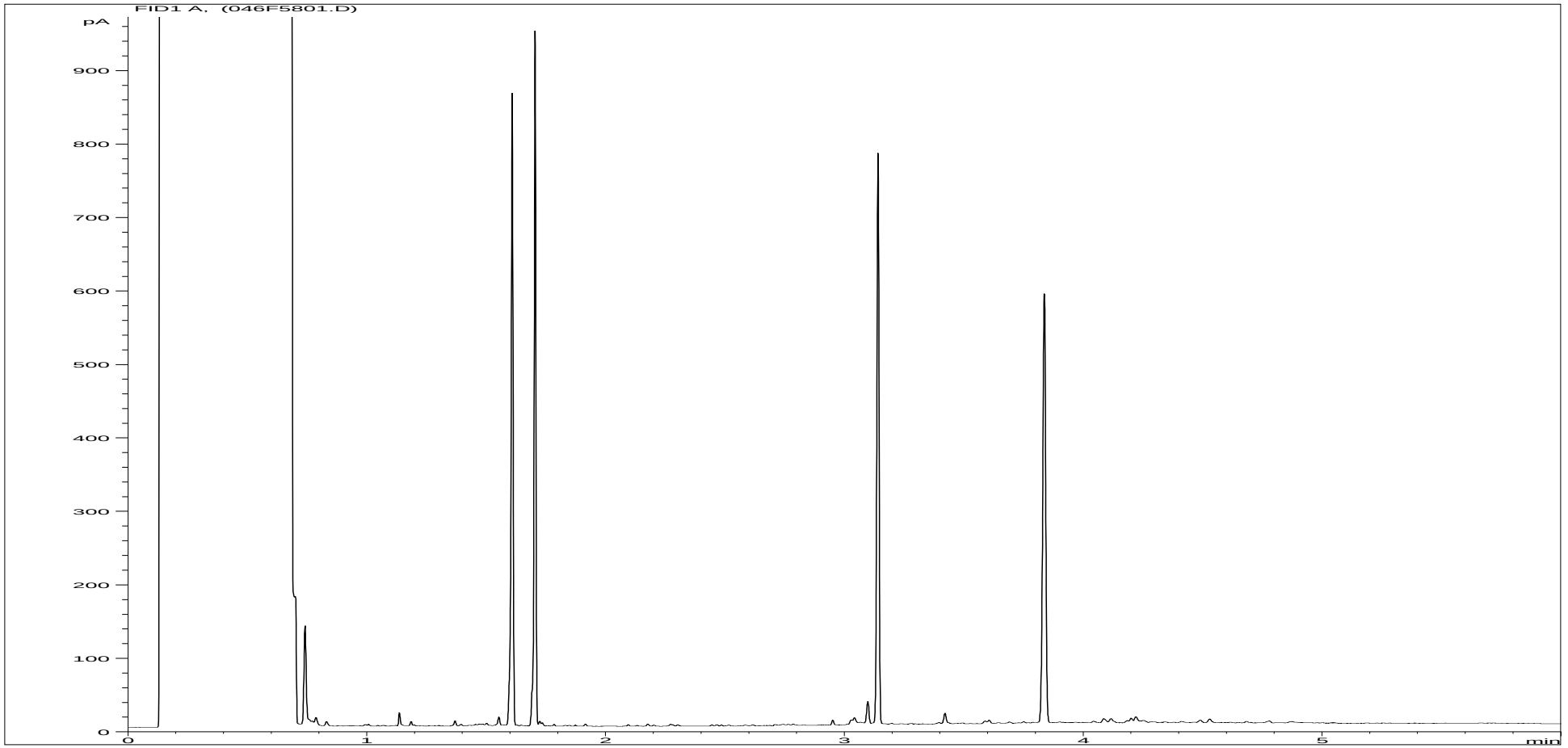
**Matrix:** Soil
**Date Booked in:** 03-Feb-16
**Date Extracted:** 05-Feb-16
**Date Analysed:** 06-Feb-16, 02:57:57

*** Sample data with an asterisk are not UKAS accredited.**

| | | Concentration, (mg/kg) - as wet weight | | | | |
|---|---|---|---|---|---|---|
| **Sample ID** | **Client ID** | **>C8 - C10** | **>C10 - C12** | **>C12 - C16** | **>C16 - C21** | **>C21 - C35** |
| CL1603723 | BH1A ES 4 0.50 | <2 | <2 | <2 | 4.88 | 43 |
| CL1603724 | BH4 ES 8 1.00 | <2 | <2 | <2 | 3.2 | 16.5 |
| CL1603725 | BH5 ES 5 0.50 | <2 | <2 | 2.07 | 19.9 | 106 |
| CL1603726 | BH6 ES 6 1.00 | <2 | <2 | <2 | 4.81 | 25.9 |
| CL1603727 | BH7 ES 1 0.30 | <2 | <2 | 2.64 | 19 | 91.7 |
| CL1603728 | WS3 ES 10 3.00 | <2 | <2 | <2 | 2.96 | 16.9 |
| CL1603729 | WS5 ES 2 1.50 | <2 | <2 | <2 | 6.83 | 42.1 |
| CL1603730 | WS8 ES 9 2.60 | <2 | 2.19 | 4.74 | 39.5 | 142 |
| CL1603731 | WS16 ES 2 0.30 | <2 | 8.54 | 5.8 | 85 | 1660 |
| CL1603732 | WS26A ES 4 0.90 | <2 | <2 | <2 | 13.3 | 49.6 |
| CL1603733 | WS27 ES 3 1.00 | <2 | <2 | <2 | 25.2 | 169 |
| CL1603734 | WS28 ES 3 1.00 | <2 | <2 | 7.72 | 91.3 | 306 |
| CL1603735 | WS29 ES 1 0.30 | <2 | <2 | <2 | 8.65 | 37 |
| CL1603736 | TP2 ES 1 0.30 | <2 | <2 | <2 | 13 | 67.4 |
| CL1603737 | HP5 ES 3 1.00 | <2 | <2 | <2 | 21.8 | 79.7 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Where individual results are flagged see report notes for status.

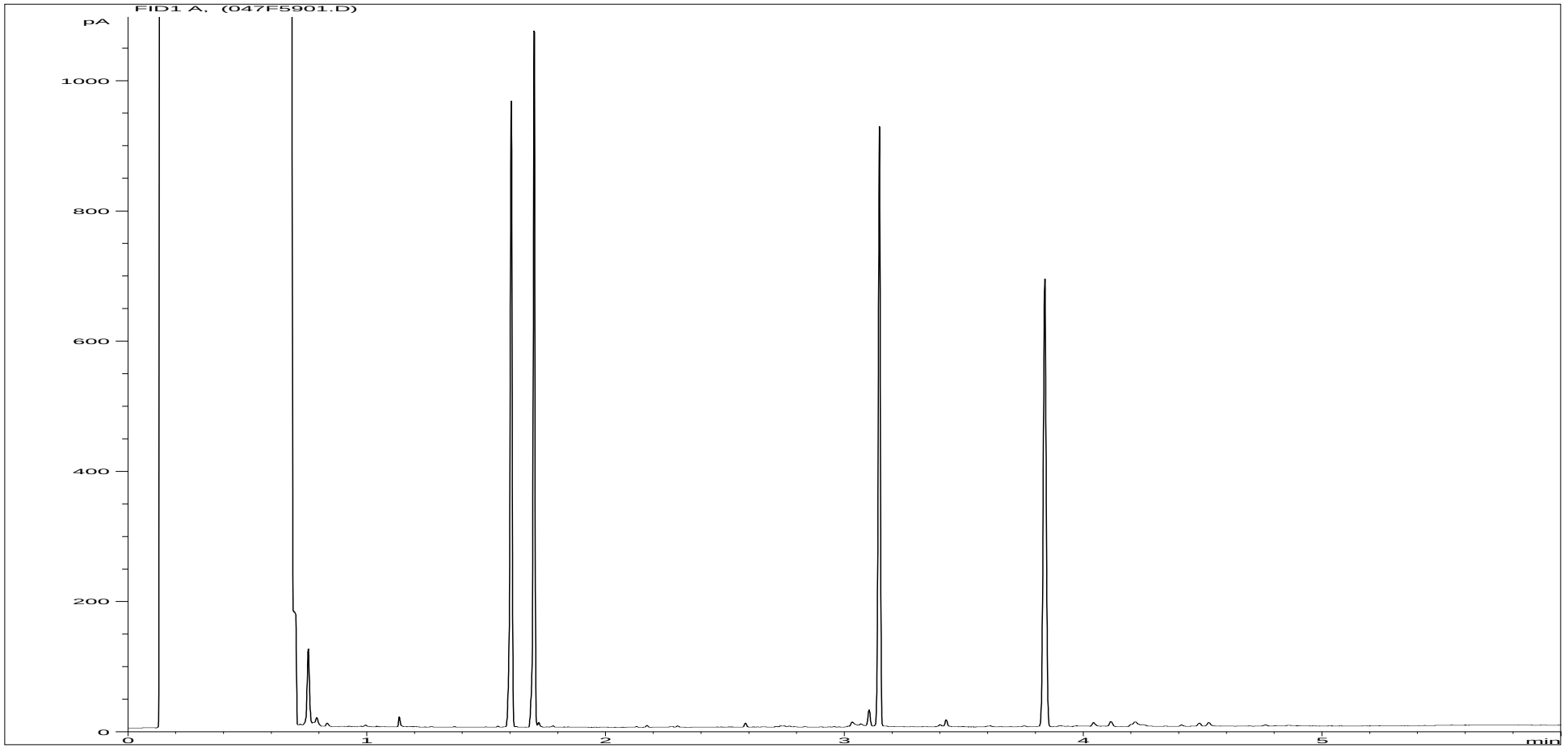
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603723 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | BH1A ES 4 0.50 |
| **Acquisition Date/Time:** | 05-Feb-16, 23:32:49 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\046F5801.D | | |

Where individual results are flagged see report notes for status.

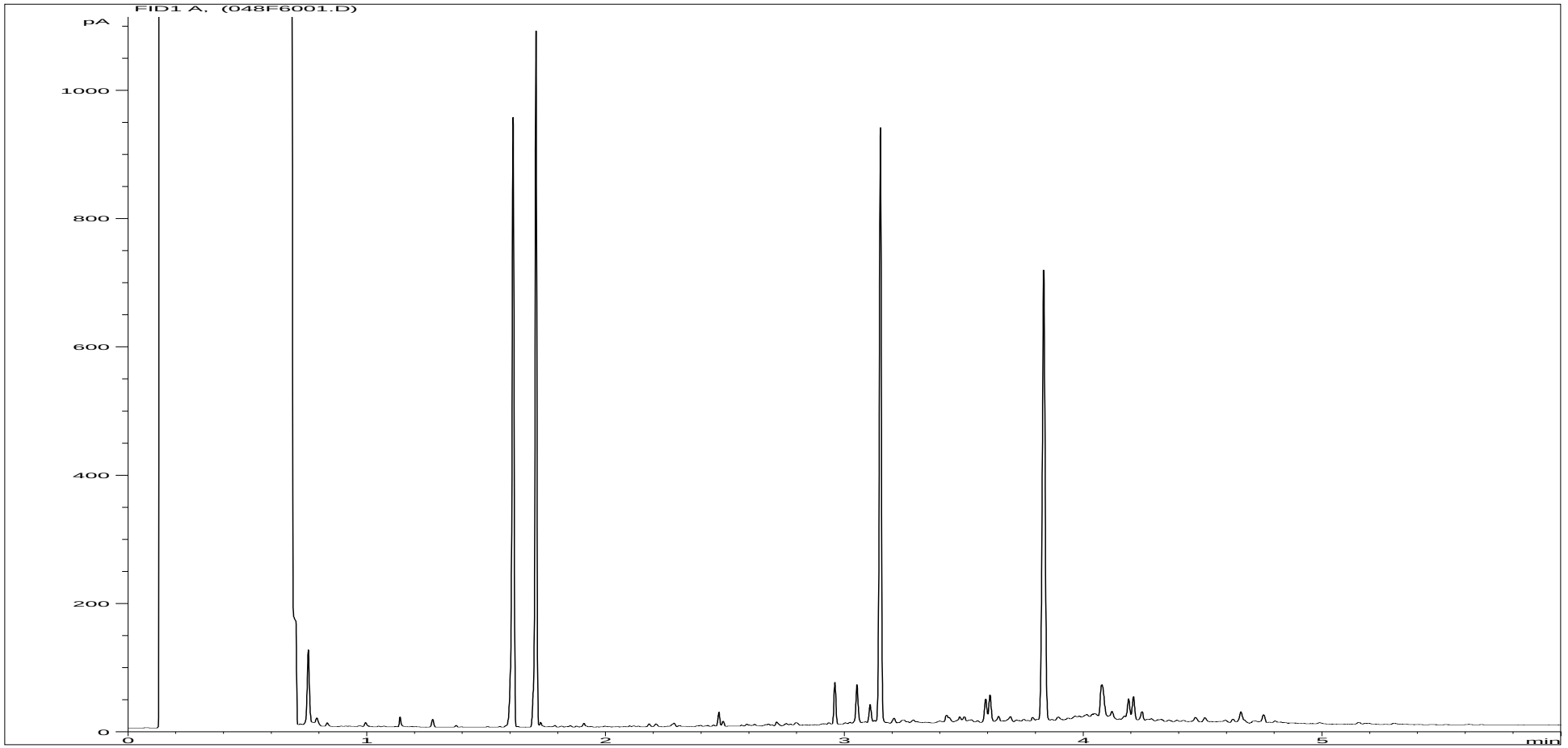
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603724 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | BH4 ES 8 1.00 |
| **Acquisition Date/Time:** | 05-Feb-16, 23:47:42 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\047F5901.D | | |

Where individual results are flagged see report notes for status.

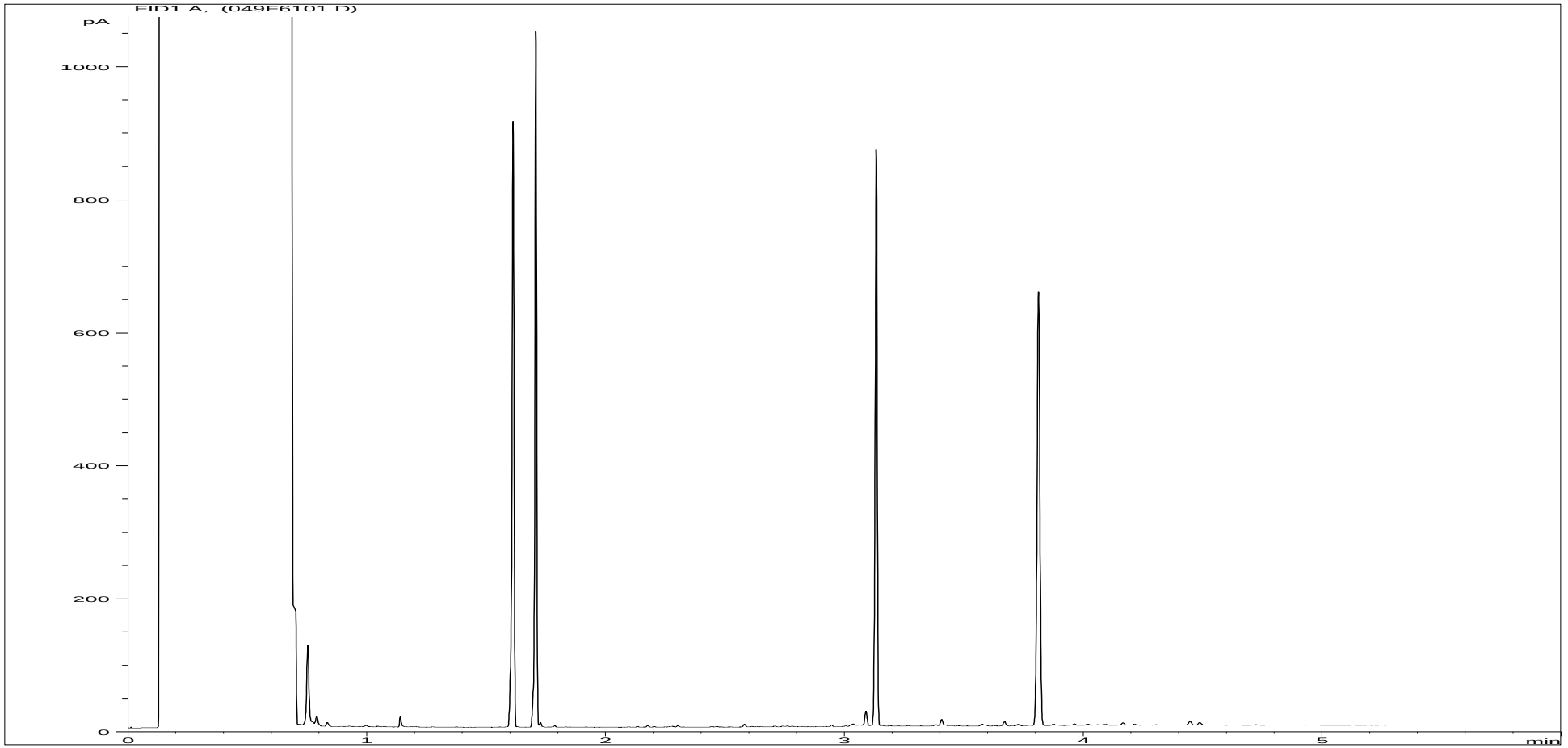
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603725 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | BH5 ES 5 0.50 |
| **Acquisition Date/Time:** | 06-Feb-16, 00:02:35 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\048F6001.D | | |

Where individual results are flagged see report notes for status.

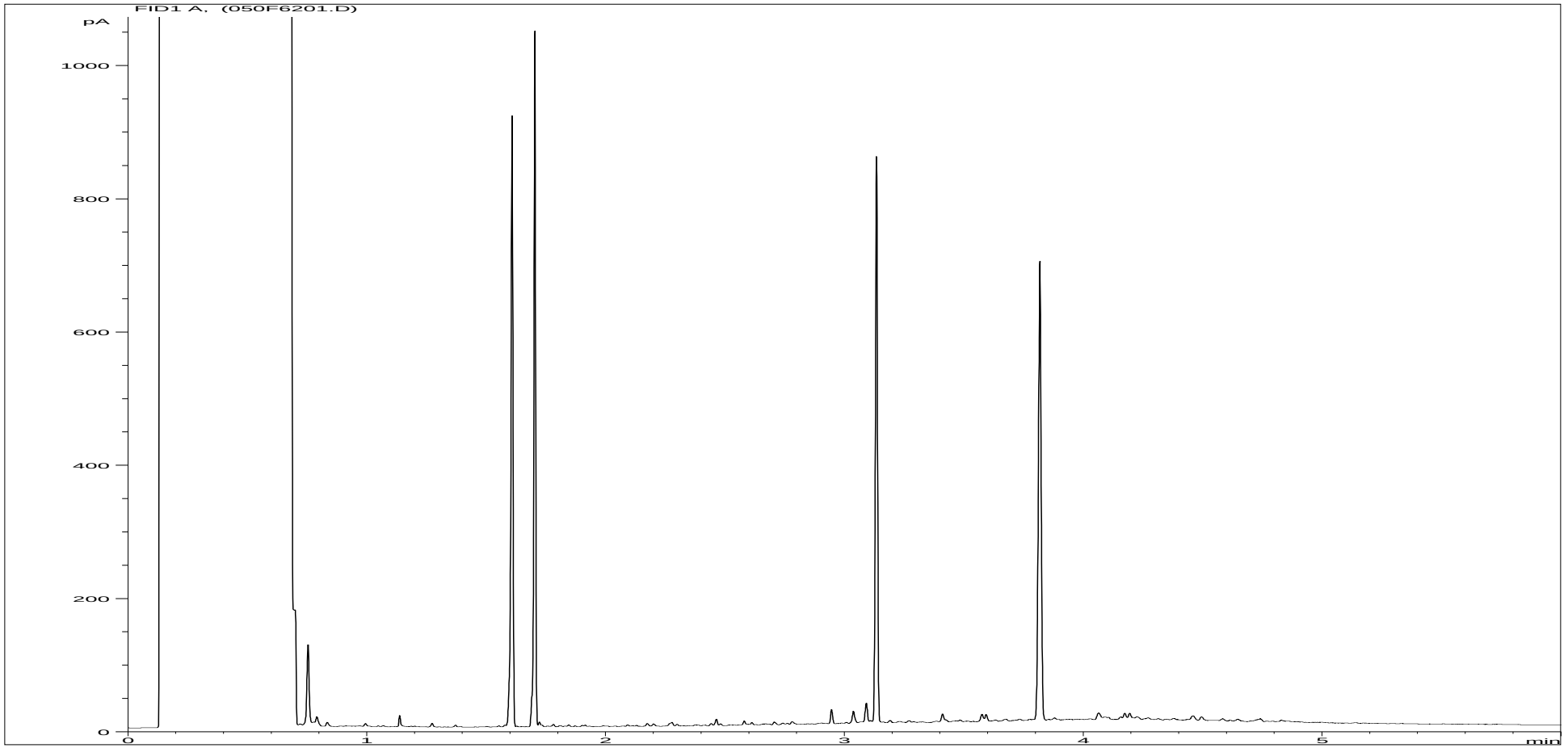
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603726 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | BH6 ES 6 1.00 |
| **Acquisition Date/Time:** | 06-Feb-16, 00:17:27 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\049F6101.D | | |

Where individual results are flagged see report notes for status.

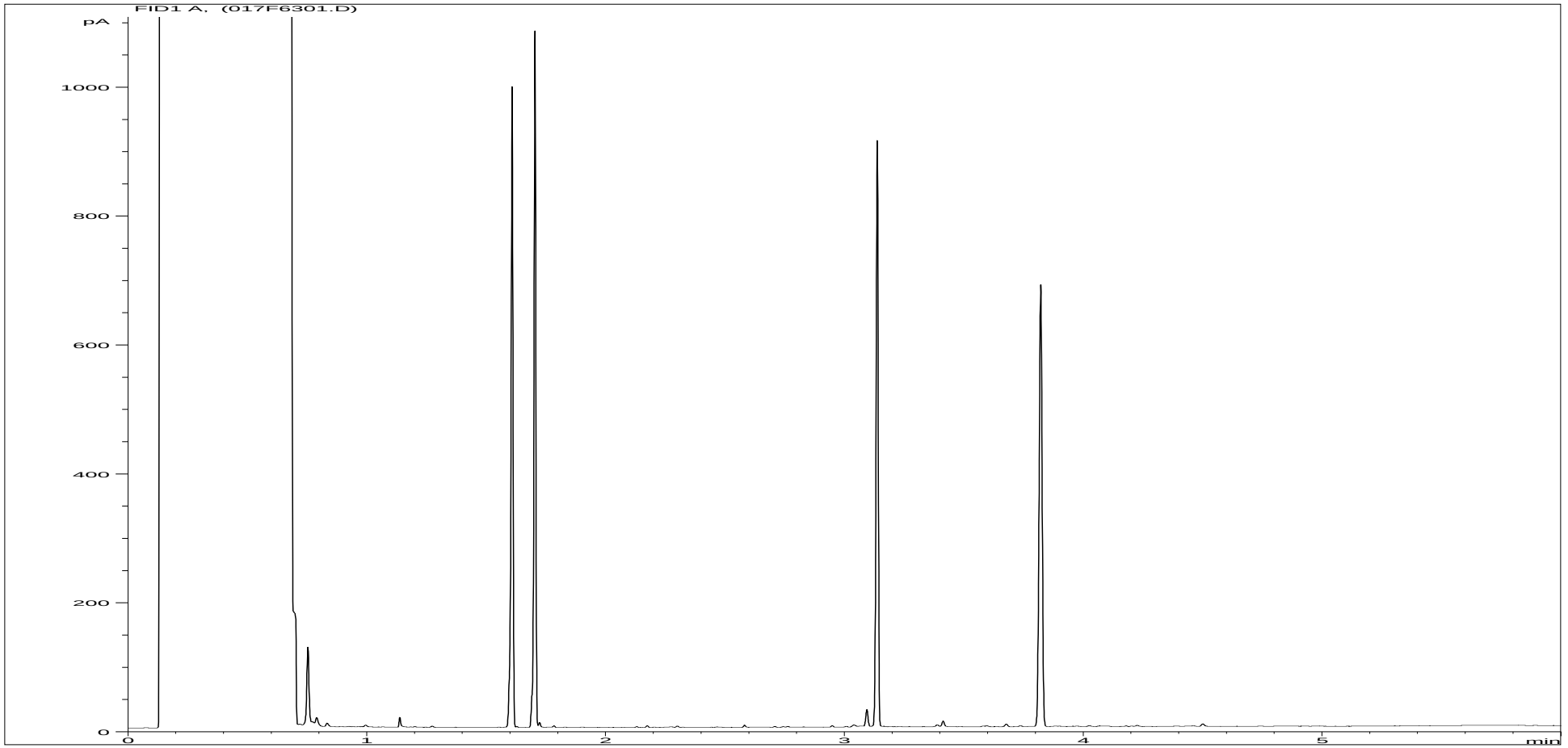
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603727 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | BH7 ES 1 0.30 |
| **Acquisition Date/Time:** | 06-Feb-16, 00:32:19 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\050F6201.D | | |

Where individual results are flagged see report notes for status.

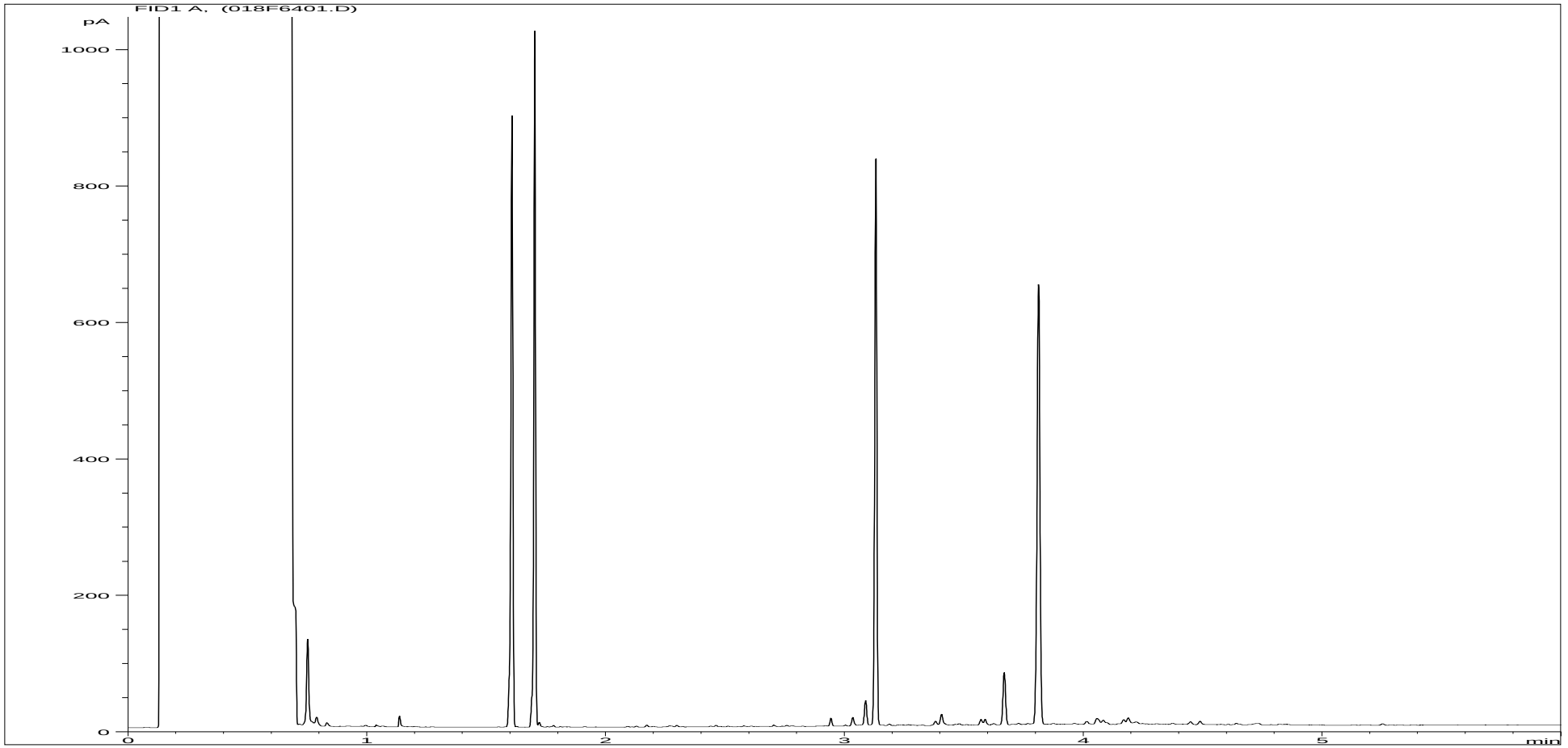
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603728 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | WS3 ES 10 3.00 |
| **Acquisition Date/Time:** | 06-Feb-16, 00:47:11 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\017F6301.D | | |

Where individual results are flagged see report notes for status.

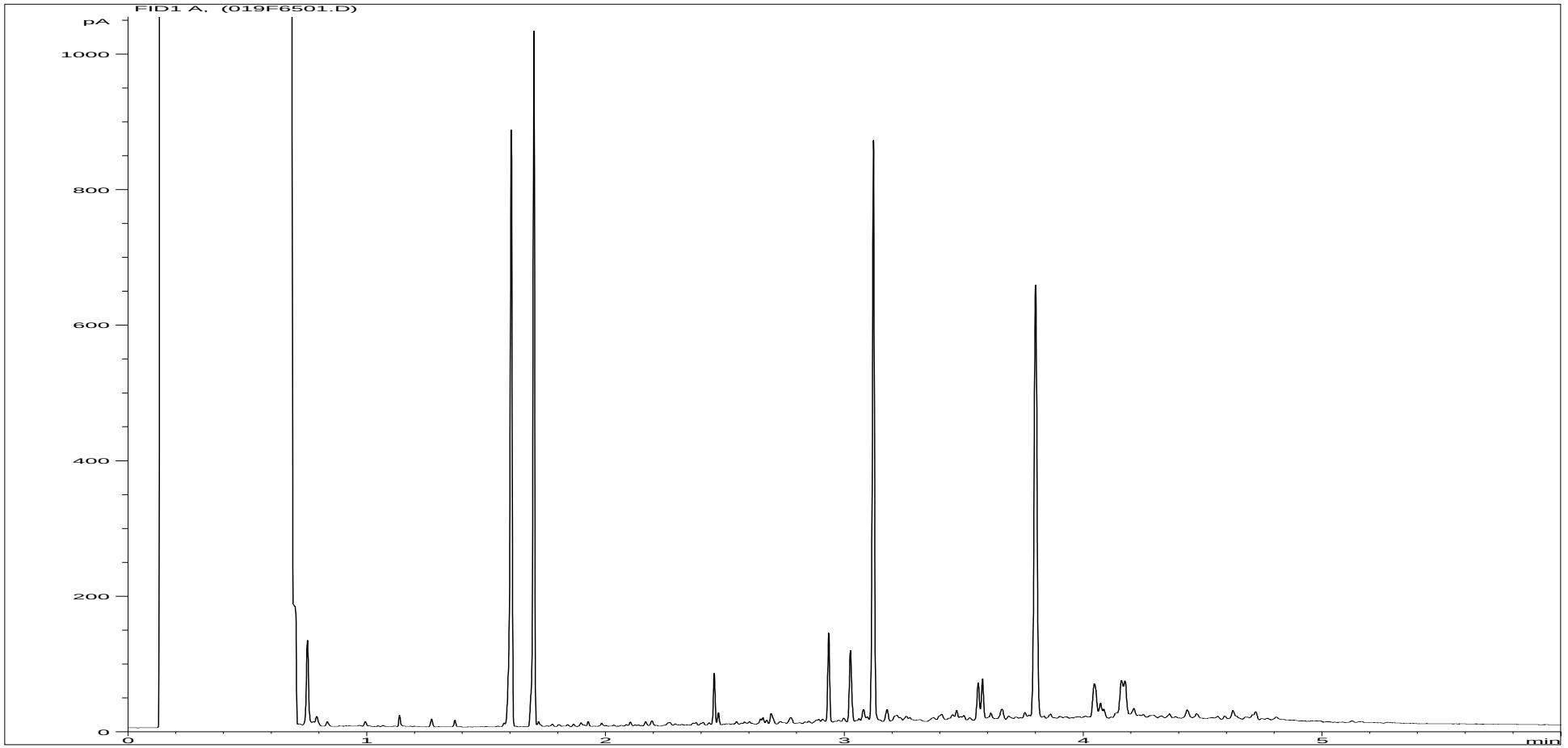
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603729 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | WS5 ES 2 1.50 |
| **Acquisition Date/Time:** | 06-Feb-16, 01:02:05 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\018F6401.D | | |

Where individual results are flagged see report notes for status.

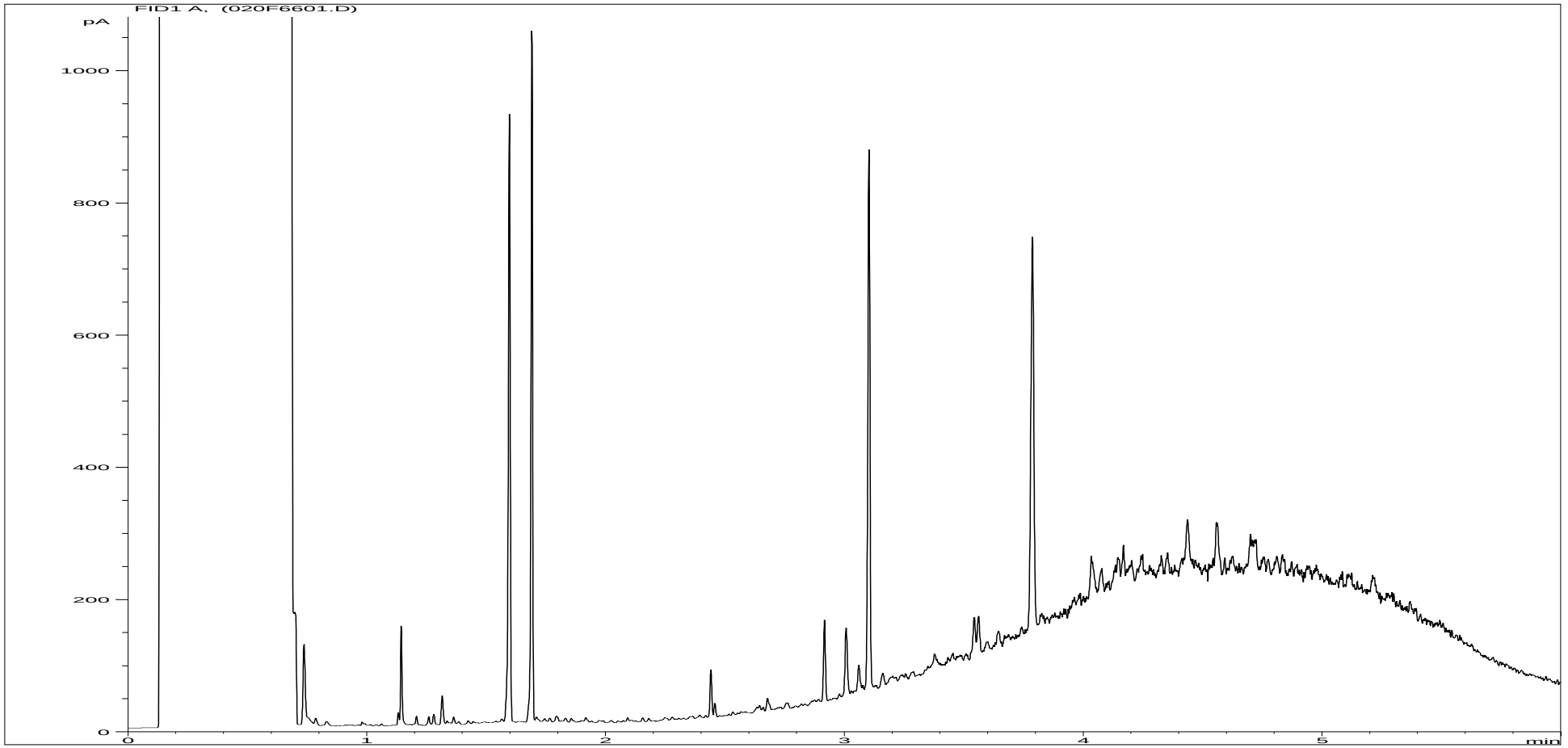
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603730 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | WS8 ES 9 2.60 |
| **Acquisition Date/Time:** | 06-Feb-16, 01:16:34 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\019F6501.D | | |

Where individual results are flagged see report notes for status.

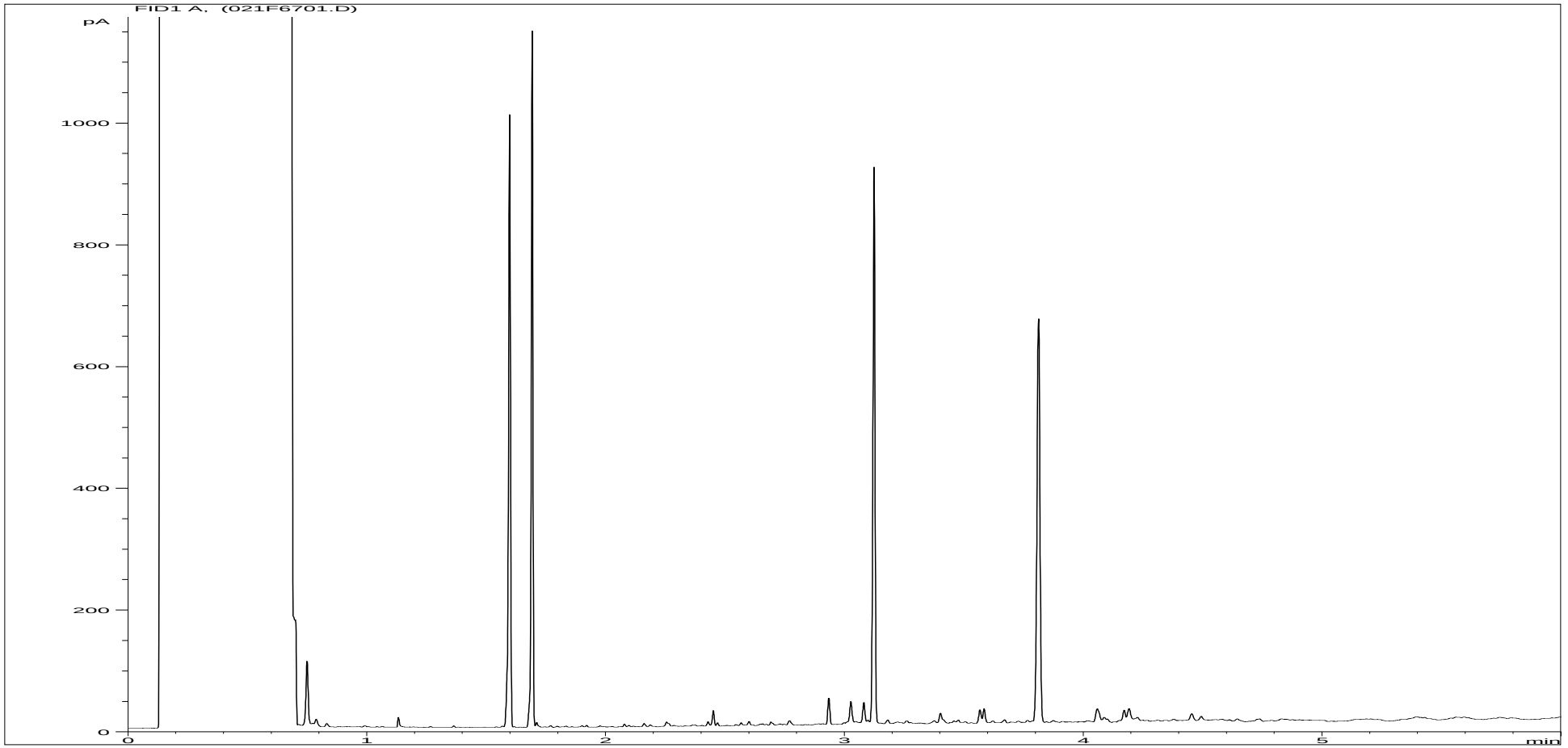
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603731 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | WS16 ES 2 0.30 |
| **Acquisition Date/Time:** | 06-Feb-16, 01:31:03 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\020F6601.D | | |

Where individual results are flagged see report notes for status.

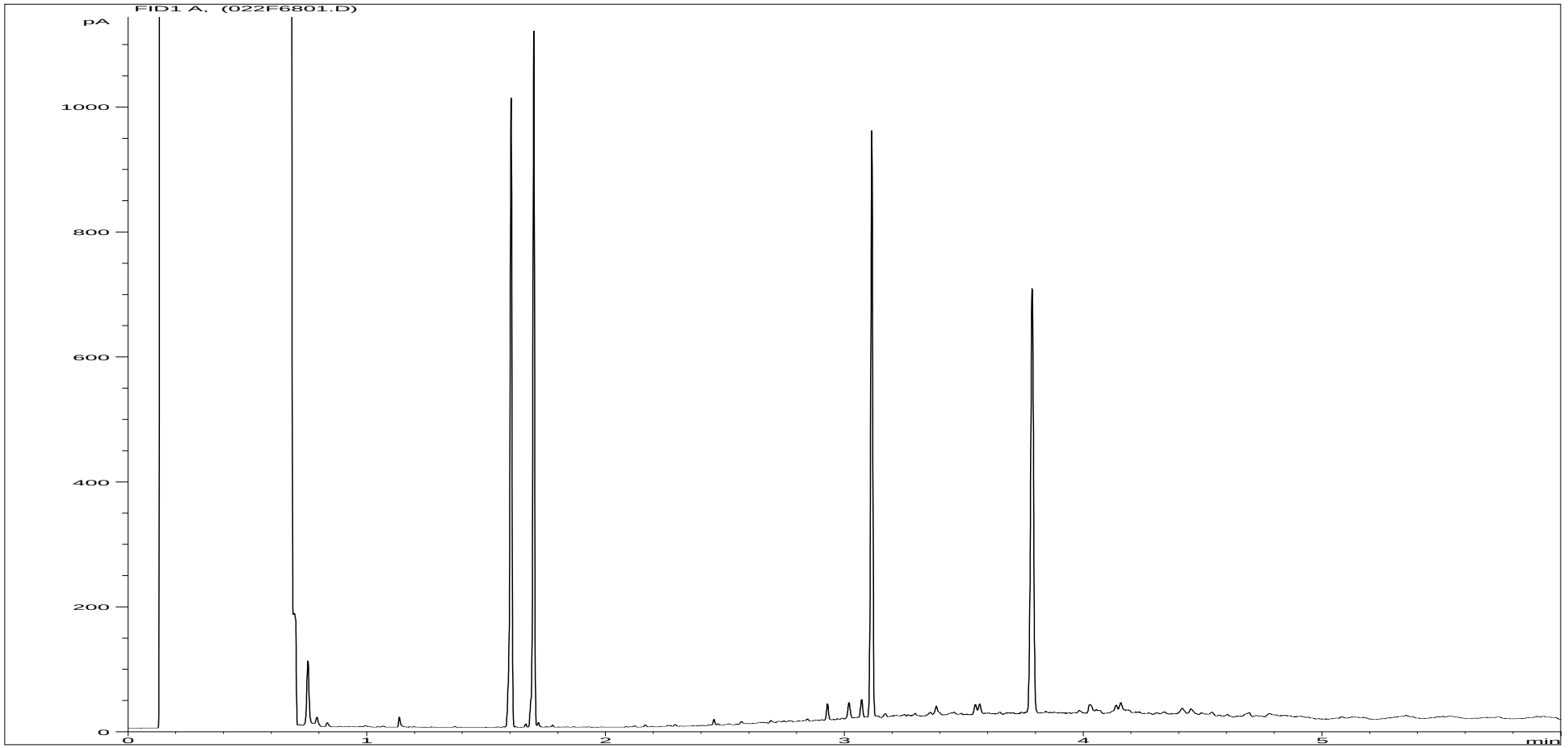
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603732 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | WS26A ES 4 0.90 |
| **Acquisition Date/Time:** | 06-Feb-16, 01:45:34 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\021F6701.D | | |

Where individual results are flagged see report notes for status.

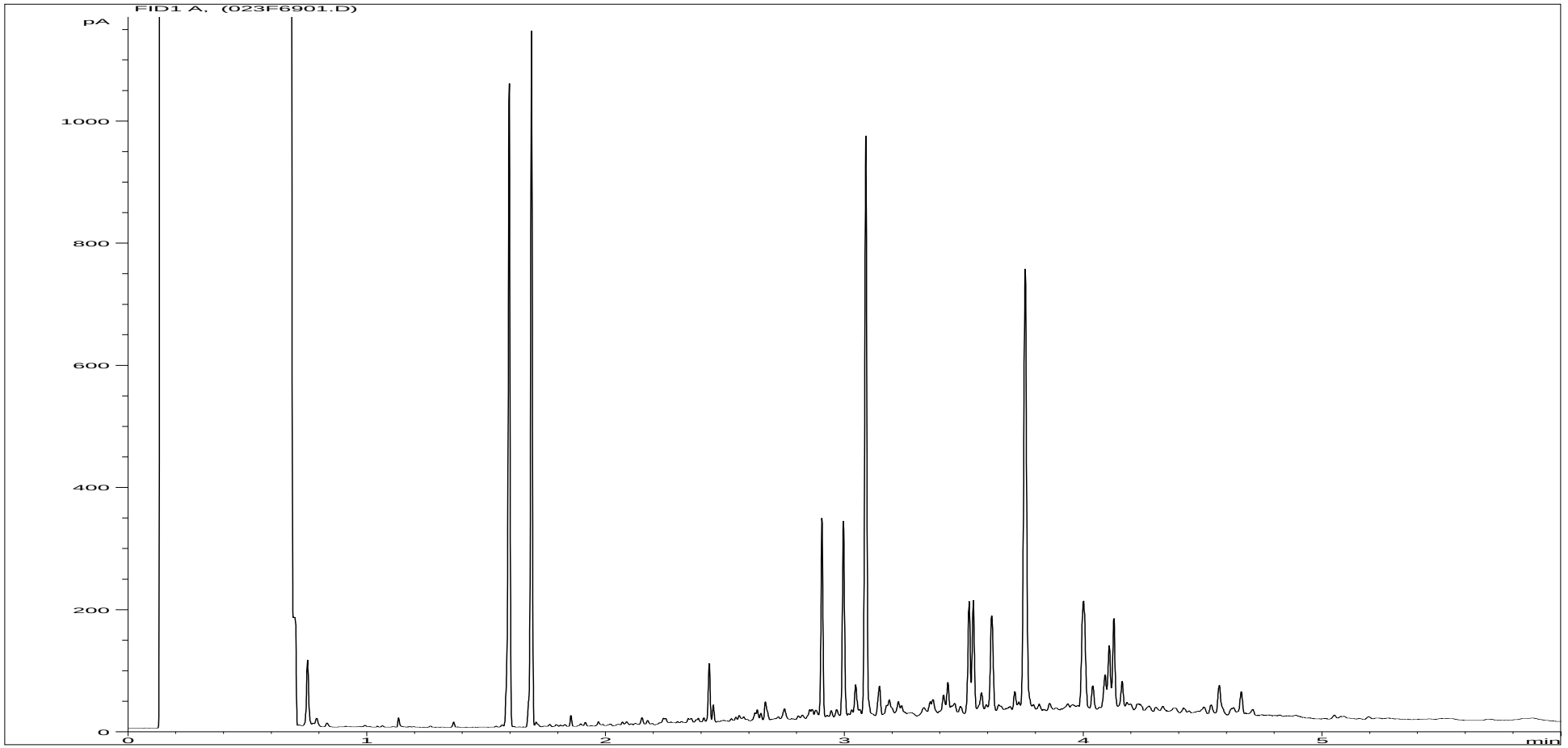
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603733 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | WS27 ES 3 1.00 |
| **Acquisition Date/Time:** | 06-Feb-16, 02:00:02 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\022F6801.D | | |

Where individual results are flagged see report notes for status.

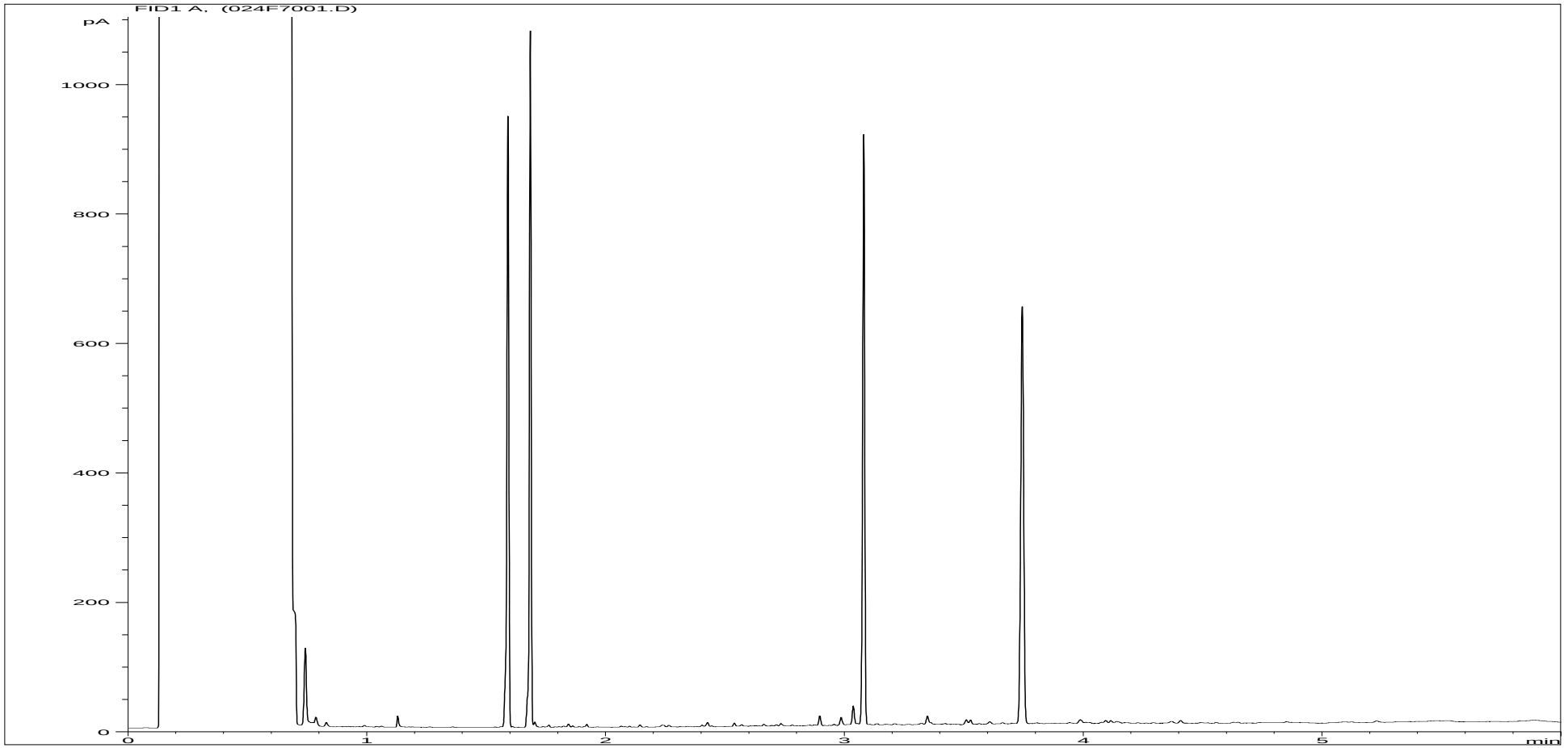
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603734 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | WS28 ES 3 1.00 |
| **Acquisition Date/Time:** | 06-Feb-16, 02:14:30 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\023F6901.D | | |

Where individual results are flagged see report notes for status.

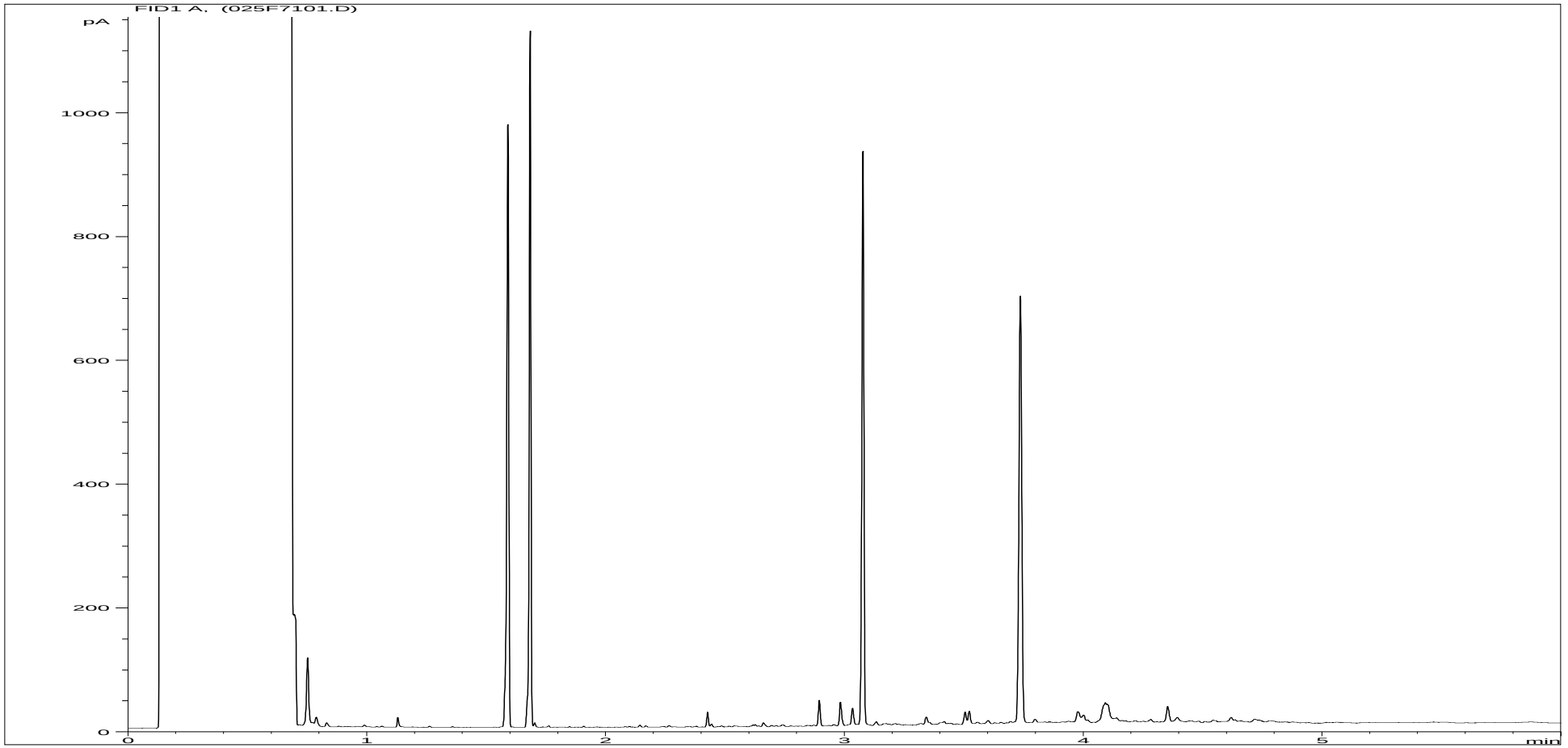
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603735 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | WS29 ES 1 0.30 |
| **Acquisition Date/Time:** | 06-Feb-16, 02:28:59 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\024F7001.D | | |

Where individual results are flagged see report notes for status.

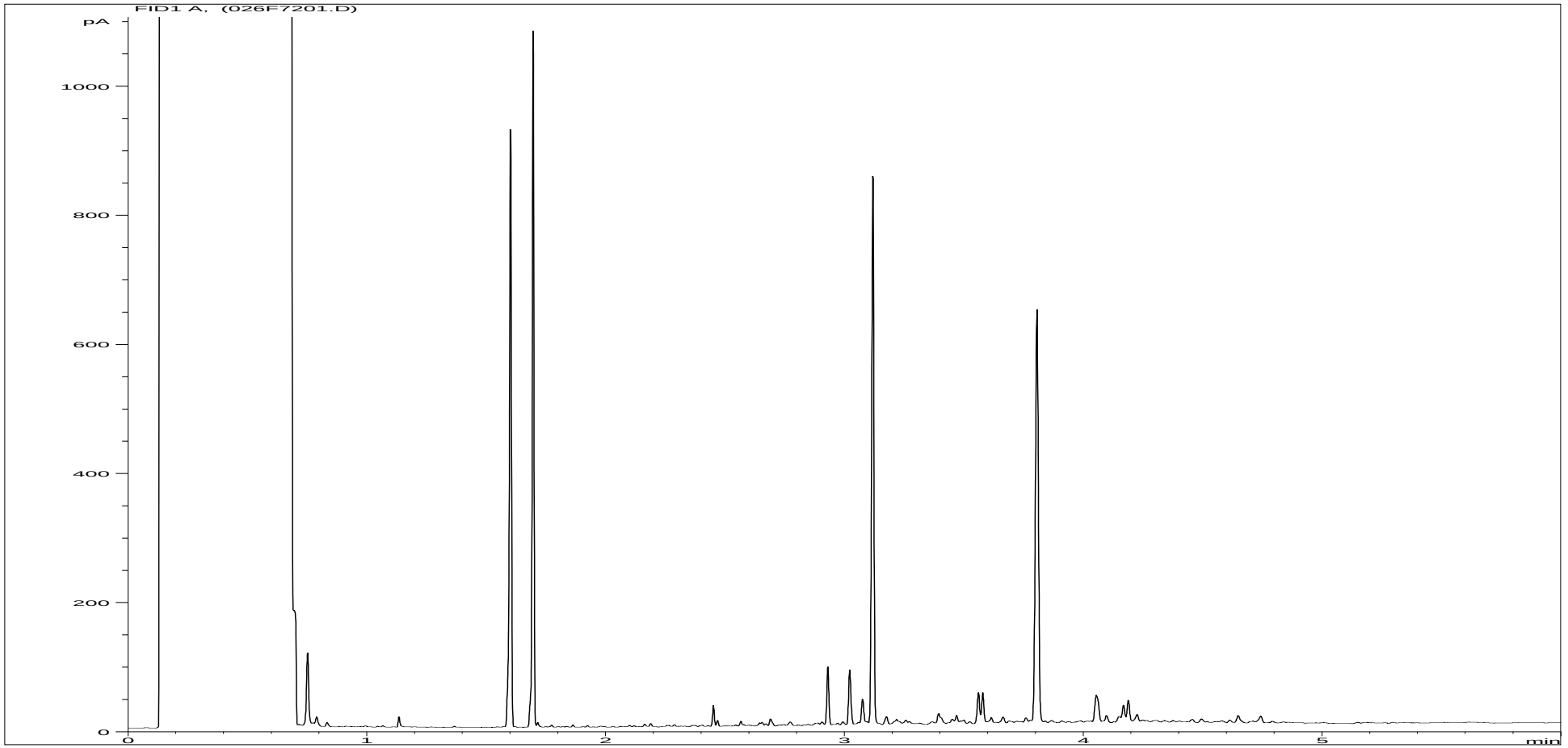
**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603736 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | TP2 ES 1 0.30 |
| **Acquisition Date/Time:** | 06-Feb-16, 02:43:29 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\025F7101.D | | |

Where individual results are flagged see report notes for status.

**Petroleum Hydrocarbons (C8 to C40) by GC/FID**




| | | | |
|---|---|---|---|
| **Sample ID:** | CL1603737 | **Job Number:** | S16_0820 |
| **Multiplier:** | 8 | **Client:** | ESG Wokingham |
| **Dilution:** | 1 | **Site:** | Central Somers Town, London |
| **Acquisition Method:** | 5UL_RUNFA.M | **Client Sample Ref:** | HP5 ES 3 1.00 |
| **Acquisition Date/Time:** | 06-Feb-16, 02:57:57 | | |
| **Datafile:** | D:\TES\DATA\Y2016\020516TPH_GC3\020516 2016-02-05 09-10-55\026F7201.D | | |

Where individual results are flagged see report notes for status.

# ASBESTOS ANALYSIS RESULTS - SOIL ANALYSIS

**ESG Asbestos Limited Certificate of Analysis for Asbestos in Soils**

1089

**Detection limit of Method SCI-ASB-020 is 0.001%**

**Sampling has been carried out by a third party**

| | | | |
|---|---|---|---|
| **Client:** | ESG Environmental Chemistry | **Page 1 of 1** | |
| **Address:** | Etwall House, Bretby Business Park, Ashby Road, Burton upon Trent | **Report No:** | **ANO-0488-11904** |
| **For the attention of:** | ESG Wokingham | **Report Date:** | **05/02/2016** |
| **Site Address:** | Central Somers Town, London | **Project Number:** | **S160820** |

| Sample Number | Sample Date | Sample Location | Test Date | Total Sample Dry Weight (g) | Weight of <2mm Fraction (g) | Asbestos(g) in >8mm+>2mm | Asbestos(g) in <2mm | % Asbestos by weight of Total Dried Sample | Asbestos Fibre Types Identified |
|---|---|---|---|---|---|---|---|---|---|
| CL/1603723 | | BH1A 0.50 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603724 | | BH4 1.00 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603725 | | BH5 0.50 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603726 | | BH6 1.00 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603727 | | BH7 0.30 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603728 | | WS3 3.00 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603729 | | WS5 1.50 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603730 | | WS8 2.60 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603731 | | WS16 0.30 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603732 | | WS26A 0.90 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603733 | | WS27 1.00 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603734 | | WS28 1.00 | 05/02/2016 | | | | | Screen Only | NAIIS |
| CL/1603735 | | WS29 0.30 | 05/02/2016 | | | | | Screen & ID | Amosite(Free Fibres) |
| CL/1603736 | | TP2 0.30 | 05/02/2016 | | | | | Screen & ID | Chrysotile(Free Fibres) |
| CL/1603737 | | HP5 1.00 | 05/02/2016 | | | | | Screen & ID | Amosite,Chrysotile(Free Fibres) |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

**Keys**

**NAACR = Not Analysed at Clients Request**

**NAIIS = No Asbestos Identified in Sample (Screens Only)**

*** visible to naked eye**

**NADIS = No Asbestos Detected in Sample (ID & Quant Only)**

| | | |
|---|---|---|
| Name: | Stacey Innes | Authorised Signatory: |
| Position: | Lab Analyst | |

The sample analysis for the above results was carried out using the procedures detailed in ESG Asbestos Limited in house method (SCI-ASB-020) based on HSE document MDHS 90 - Asbestos Contaminated Land - Draft 5 - November 1997 (withdrawn). Fibre identification was carried out using ESG Asbestos Limited in house method of transmitted/polarised light microscopy and centre stop dispersion staining (SCI-ASB-007), based on HSE's HSG 248. The analysis of fine fraction for asbestos content only includes fibres and does not discriminate non-asbestos fibres. All fibres are assumed, unless specified, to be amphiboles. All tests were carried out at ESG Asbestos Laboratory, Ashbourne House, Bretby Business Park, Ashby Road, Burton-upon-Trent, Staffordshire. DE15 0XD, UKAS Laboratory Number 1089.

# ASBESTOS ANALYSIS RESULTS - SOIL ANALYSIS

**ESG Asbestos Limited Certificate of Analysis for Asbestos in Soils**

1089

**Detection limit of Method SCI-ASB-020 is 0.001%**

**Sampling has been carried out by a third party**

| | | | |
|---|---|---|---|
| **Client:** | ESG Environmental Chemistry | **Page 1 of 1** | |
| **Address:** | Etwall House, Bretby Business Park, Ashby Road, Burton upon Trent | **Report No:** | **ANO-0503-11980** |
| **For the attention of:** | ESG Wokingham | **Report Date:** | **19/02/2016** |
| **Site Address:** | Central Somers Town, London | **Project Number:** | **S160820** |

| Sample Number | Sample Date | Sample Location | Test Date | Total Sample Dry Weight (g) | Weight of <2mm Fraction (g) | Asbestos(g) in >8mm+>2mm | Asbestos(g) in <2mm | % Asbestos by weight of Total Dried Sample | Asbestos Fibre Types Identified |
|---|---|---|---|---|---|---|---|---|---|
| CL/1603735 | | WS29 0.30 | 18/02/2016 | 402 | 217 | 0.0001 | 0.0187 | 0.005 | Chrysotile(Free Fibres) Amphiboles in Fines |
| CL/1603736 | | TP2 0.30 | 18/02/2016 | 812 | 724 | 0.0000 | 0.0000 | | NADIS |
| CL/1603737 | | HP5 1.00 | 18/02/2016 | 519 | 348 | 0.1483 | 0.0940 | 0.047 | Chrysotile(Insulating Board) Amphiboles in Fines |

**Keys**

**NAACR = Not Analysed at Clients Request**

*** visible to naked eye**

**NAIIS = No Asbestos Identified in Sample (Screens Only)**

**NADIS = No Asbestos Detected in Sample (ID & Quant Only)**

| | | |
|---|---|---|
| Name: | Tom Pratt | Authorised Signatory: |
| Position: | Lab Technician | |

The sample analysis for the above results was carried out using the procedures detailed in ESG Asbestos Limited in house method (SCI-ASB-020) based on HSE document MDHS 90 - Asbestos Contaminated Land - Draft 5 - November 1997 (withdrawn). Fibre identification was carried out using ESG Asbestos Limited in house method of transmitted/polarised light microscopy and centre stop dispersion staining (SCI-ASB-007), based on HSE's HSG 248. The analysis of fine fraction for asbestos content only includes fibres and does not discriminate non-asbestos fibres. All fibres are assumed, unless specified, to be amphiboles. All tests were carried out at ESG Asbestos Laboratory, Ashbourne House, Bretby Business Park, Ashby Road, Burton-upon-Trent, Staffordshire. DE15 0XD, UKAS Laboratory Number 1089.

# Sample Analysis

# ESG Environmental Chemistry
## Analytical and Deviating Sample Overview

# S160820

**Customer** ESG Wokingham
**Site** Central Somers Town, London
**Report No** S160820

Consignment No S52293
Date Logged 03-Feb-2016

Report Due 19-Feb-2016

| ID Number | Description | MethodID | CustServ | Dep.Opt | FOCS | ICPMSS | | | | | | | | | | ICPSOIL | | KONECR | PAHMSUS | PCBUSECDAR | PHSOIL | SFAPI | | Sub002 | Sub002a | TPHFIDUS | | WSLM59 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sampled | REPORT A | DO ID & Quant if ASB found | S.O.M. % (Calc) | Arsenic (MS) | Cadmium (MS) | Chromium (MS) | Copper (MS) | Lead (MS) | Mercury (MS) | Nickel (MS) | Selenium (MS) | Vanadium (MS) | Zinc (MS) | Barium. | Beryllium. | Chromium vi: | PAH (16) by GCMS | PCB-7 Congeners Analysis | pH units (AR) | Cyanide(Total) (AR) | Phenol Index.(AR) | ^Asbestos ID and Quantification | ^Asbestos Screen | TPH by GCFID (AR) | TPH Carbon Banding. | Total Organic Carbon |
| Test Method Accredited to ISO17025 | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| CL/1603723 | BH1A 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603724 | BH4 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603725 | BH5 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603726 | BH6 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603727 | BH7 0.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603728 | WS3 3.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603729 | WS5 1.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603730 | WS8 2.60 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603731 | WS16 0.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603732 | WS26A 0.90 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603733 | WS27 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603734 | WS28 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603735 | WS29 0.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603736 | TP2 0.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CL/1603737 | HP5 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.**

**In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.**

**Deviating Sample Key**

| | |
|---|---|
| A | The sample was received in an inappropriate container for this analysis |
| B | The sample was received without the correct preservation for this analysis |
| C | Headspace present in the sample container |
| D | The sampling date was not supplied so holding time may be compromised - applicable to all analysis |
| E | Sample processing did not commence within the appropriate holding time |
| F | Sample processing did not commence within the appropriate handling time |

**Requested Analysis Key**

| | |
|---|---|
| | Analysis Required |
| | Analysis dependant upon trigger result - **Note: due date may be affected if triggered** |
| | No analysis scheduled |
| ^ | Analysis Subcontracted - **Note: due date may vary** |

Where individual results are flagged see report notes for status.


The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

# Analytical and Deviating Sample Overview

**Customer** ESG Wokingham
**Site** Central Somers Town, London
**Report No** S160820

Consignment No S52293
Date Logged 03-Feb-2016

Report Due 19-Feb-2016

| ID Number | Description | MethodID | WSLM59 |
|---|---|---|---|
| | | Sampled | Total Organic Carbon |
| Test Method Accredited to ISO17025 | | | |
| CL/1603723 | BH1A 0.50 | | |
| CL/1603724 | BH4 1.00 | | |
| CL/1603725 | BH5 0.50 | | |
| CL/1603726 | BH6 1.00 | | |
| CL/1603727 | BH7 0.30 | | |
| CL/1603728 | WS3 3.00 | | |
| CL/1603729 | WS5 1.50 | | |
| CL/1603730 | WS8 2.60 | | |
| CL/1603731 | WS16 0.30 | | |
| CL/1603732 | WS26A 0.90 | | |
| CL/1603733 | WS27 1.00 | | |
| CL/1603734 | WS28 1.00 | | |
| CL/1603735 | WS29 0.30 | | |
| CL/1603736 | TP2 0.30 | | |
| CL/1603737 | HP5 1.00 | | |

**Note: For analysis where the scheduled turnaround is greater than the holding time we will do our utmost to prioritise these samples. However, it is possible that samples could become deviant whilst being processed in the laboratory.**

**In this instance please contact the laboratory immediately should you wish to discuss how you would like us to proceed. If you do not respond within 24 hours, we will proceed as originally requested.**

**Deviating Sample Key**

| | |
|---|---|
| A | The sample was received in an inappropriate container for this analysis |
| B | The sample was received without the correct preservation for this analysis |
| C | Headspace present in the sample container |
| D | The sampling date was not supplied so holding time may be compromised - applicable to all analysis |
| E | Sample processing did not commence within the appropriate holding time |
| F | Sample processing did not commence within the appropriate handling time |

**Requested Analysis Key**

| | |
|---|---|
| | Analysis Required |
| | Analysis dependant upon trigger result - **Note: due date may be affected if triggered** |
| | No analysis scheduled |
| ^ | Analysis Subcontracted - **Note: due date may vary** |

Where individual results are flagged see report notes for status.

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

# Method Descriptions

| Matrix | MethodID | Analysis Basis | Method Description |
|---|---|---|---|
| Soil | FOCS | Oven Dried @ < 35°C | Calculation of Soil Organic Matter content from Organic Carbon content of soil samples |
| Soil | ICPMSS | Oven Dried @ < 35°C | Determination of Metals in soil samples by aqua regia digestion followed by ICPMS |
| Soil | ICPSOIL | Oven Dried @ < 35°C | Determination of Metals in soil samples by aqua regia digestion followed by ICPOES detection |
| Soil | KONECR | Oven Dried @ < 35°C | Determination of Chromium vi in soil samples by water extraction followed by colorimetric detection |
| Soil | PAHMSUS | As Received | Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection |
| Soil | PCBUSECDAR | As Received | Determination of Polychlorinated Biphenyl (PCB) congeners/aroclors by hexane/acetone extraction followed by GCECD detection |
| Soil | PHSOIL | As Received | Determination of pH of 2.5:1 deionised water to soil extracts using pH probe. |
| Soil | SFAPI | As Received | Segmented flow analysis with colorimetric detection |
| Soil | SubCon* | * | Contact Laboratory for details of the methodology used by the sub-contractor. |
| Soil | TPHFIDUS | As Received | Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection. |
| Soil | WSLM59 | Oven Dried @ < 35°C | Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection |

# Report Notes

## Generic Notes

**Soil/Solid Analysis**

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

**Waters Analysis**

Unless stated otherwise results are expressed as mg/l

**Nil**: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

**Oil analysis specific**

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm$^3$@ 15$^o$C

**Gas (Tedlar bag) Analysis**

Unless stated otherwise, results are expressed as ug/l

**Asbestos Analysis**

**CH** Denotes Chrysotile **TR** Denotes Tremolite
**CR** Denotes Crocidolite **AC** Denotes Actinolite
**AM** Denotes Amosite **AN** Denotes Anthophylite
**NAIIS** No Asbestos Identified in Sample
**NADIS** No Asbestos Detected In Sample

## Symbol Reference

**^** Sub-contracted analysis.
**$$** Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
**¥** Results for guidance only due to possible interference
**&** Blank corrected result
**I.S** Insufficient sample to complete requested analysis
**I.S(g)** Insufficient sample to re-analyse, results for guidance only
**Intf** Unable to analyse due to interferences
**N.D** Not determined **N.Det** Not detected
**N.F** No Flow
**NS** Information Not Supplied
**Req** Analysis requested, see attached sheets for results
**Þ** Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result
§ accreditation has been removed for this result as it is a non-accredited matrix

**Note:** The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

## Sample Descriptions

**Client :** ESG Wokingham

**Site :** Central Somers Town, London

**Report Number :** S16_0820

Note: major constituent in upper case

| Lab ID Number | Client ID | Description |
|---|---|---|
| CL/1603723 | BH1A ES 4 0.50 | SILT |
| CL/1603724 | BH4 ES 8 1.00 | SILT |
| CL/1603725 | BH5 ES 5 0.50 | MADE GROUND |
| CL/1603726 | BH6 ES 6 1.00 | MADE GROUND |
| CL/1603727 | BH7 ES 1 0.30 | SILT |
| CL/1603728 | WS3 ES 10 3.00 | CLAY |
| CL/1603729 | WS5 ES 2 1.50 | CLAY |
| CL/1603730 | WS8 ES 9 2.60 | MADE GROUND |
| CL/1603731 | WS16 ES 2 0.30 | SILT |
| CL/1603732 | WS26A ES 4 0.90 | MADE GROUND |
| CL/1603733 | WS27 ES 3 1.00 | SILT |
| CL/1603734 | WS28 ES 3 1.00 | MADE GROUND |
| CL/1603735 | WS29 ES 1 0.30 | MADE GROUND |
| CL/1603736 | TP2 ES 1 0.30 | SILT |
| CL/1603737 | HP5 ES 3 1.00 | MADE GROUND |

**APPENDIX G**

**PHOTOGRAPHS**

| | |
|---|---|
| Trial Pit Photographs | TP4, TP5 and HP3 |