| Proie | oct Nam | e: Crossrail Pro | niect No: | CR REV5 | | | | Pa | ge 1 o |
|-------|----------|---------------------------------|-----------|------------------------------|----------------|-----------|-----------------------|--|--------|
| | hole ID: | | Ject NO. | CK_KEV5 | | | | | |
| Loca | | | National | Grid): 526691.165 - 181348 | .819 Level: 27 | .78 | | | |
| Hole | | | | ates: 2008-01-15 - 2008-01-2 | | | | | |
| | | | | Project Engineer: GCG | | | | | |
| | | SPT Hammer | | | | | | | |
| | | Samples | | - | | | | | Dep |
| Well | Water | | | Result | Depth (m) | Level (m) | Legend | Stratum Description | |
| | | Depth (m) 0.0 | Type W | | | . , | | | _ |
| | | 0.0 0.15 - 0.2 | B | | | | КХĨ | MADE GROUND 50mm Tarmacadam over 100mm granite setts to 0 15m over | |
| | | 0.13-0.2 | Б | | | | \mathbb{N} | 50mm gravelly fine sand to 0 20m over | |
| | | | _ | | | | $[\times \times]$ | 50mm gravelly fine sand to 0 20m over 200mm concrete to 0 40m over 200mm brick and concrete fragments with sand | |
| | | 0.4 - 0.6 | В | | | | \sim | and flint gravel | 0.5 |
| | | 0.6 - 1.2 | В | | 0.60 | 27.18 | \sim | | 0.0 |
| | | 0.0 - 1.2 | Б | | | | KХІ | | |
| | | | | | | | $\mathbf{k} \times 1$ | | |
| | | | | | | | \mathbb{K} | | |
| | | | | | | | $[\times \times]$ | | 1.0 |
| | | | | | 1.20 | 26.58 | \mathbb{N} | | 11 |
| | | 1.2 - 1.65 1.2 - 1.7 | D B | 8 | 1.20 | 20.50 | | | 11 |
| | | 1.2 1.7 | D | | | | | | 11 |
| | | | | | | | | | 1.5 |
| | | | | | | | | MADE GROUND Brown slightly gravelly clayey sand Gravel is subangular to subrounded fine and medium flint and | |
| | | 1.7 - 2.15 | U | | | | | subrounded fine and medium flint and | |
| | | 2.10 | Ũ | | | | | sandstone with fragments up to 60mm of brick and concrete | |
| | | | | | | | | | |
| | | | | | | | | | 2. |
| | | 2 15 | Б | | | | | | |
| | | 2.15 2.2 - 2.65 | B | 12 | | | | | |
| | | | | | | | | | |
| | | | | | | | L | | 2. |
| | | | | | | | | | 2. |
| | | 2.7 - 3.15 | U | | | | | |] |
| | | 2.7 - 3.13 | 0 | | | | | Firm yellow brown with occasional grey | |
| | | | | | | | | Firm yellow brown with occasional grey mottling slightly sandy to sandy slightly gravelly CLAY Gravel is subangular to subrounded fine and medium flint | |
| | | | | | | | | subrounded fine and medium flint | 3. |
| | | 2.45 | | | | | | | |
| | | 3.15 3.2 - 3.65 3.2 - 3.7 | B | 44 | 3.20 | 24.58 | ÷ <u>,</u> * * | | |
| | | 3.2 - 3.7 | В | | | | •••••• | | |
| | | | | | | | Ì. O. S. | | 3. |
| | | | | | | | \$0,`` | | 3. |
| | | | | | | | °°°°9 | | |
| | | | | | | | °°°°° | Dense locally medium dense or very | ' |
| | | | | | | | · · · · | dense vellow brown and red brown verv | |
| | | | | | | | | sandy subangular to subrounded fine to coarse flint GRAVEL Sand and gravel | 4. |
| | | | | | | | · | proportions variable | |
| | | 4.2 - 4.7 | В | 34 | | | 0°°° | | |
| | | | | | | | °.0 °. ° | | |
| | | | | | | | | | . |
| | | | | | | | | | 4. |
| | | | | | | | °°°°° | | |
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P16R

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| | | - | | Grid): 526691.165 - 181348 | | .70 | | | |
|-----|-------|-------------------|--------|-----------------------------|-----------|-------------|---|---|----|
| | | | | ates: 2008-01-15 - 2008-01- | 23 | | | | |
| | Used: | SPT Hammer | | Project Engineer: GCG | | | | | |
| anı | Useu. | | | 5. | | | | | De |
| ell | Water | Samples | ; | Result | Dopth (m) | | Logond | Stratum Description | |
| en | water | Depth (m) | Туре | Result | Depth (m) | Level (III) | Legena | Stratum Description | |
| | | 5.2 - 5.7 | В | 35 | | | | Dense locally medium dense or very dense yellow brown and red brown very sandy subangular to subrounded fine to coarse flint GRAVEL Sand and gravel proportions variable | |
| | | | | | | | | | 5 |
| | | 6.2 - 6.7 | в | 50/250 | | | | | 6 |
| | | 0.2 - 0.7 | J | 50/250 | | | | | 6 |
| | | | | | | | | Stiff brown slightly gravelly CLAY Gravel is subrounded fine and medium flint | |
| | | 7.2 - 7.7 | В | 27 | | | | | 7 |
| | | | | | | | · • • • • • | Stiff becoming very stiff fissured dark grey brown CLAY with a silty texture Locally with lenses 25mm diameter of dark grey fine sand Fissures are very closely to closely spaced locally extremely closely spaced randomly orientated and | 7 |
| | | 8.0 - 8.4 | В | | | | | generally smooth Locally slightly polished to polished and tight | 8 |
| | | 8.5 8.6 - 9.05 | D U | | 8.50 | 19.28 | <u>, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,</u> | | 8 |
| | | 9.1 | D | | 8.90 | 18.88 | | | g |
| | | 9.2 - 9.65 | U | | | | | | g |
| | | 9.7 | D | | | | | | |

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Page 2 of 6

| Project Name: Crossnall Project No. CR, REVS Integration Sorehole ID: PTRR Socenarie ID: PTRR Socena | | | | | Boreh | ole Log | | | | 16 F e 3 o |
|---|---------|--------|------------------|----------|---------|-------------|-----------|--------|--|---|
| Acation: Co-ords (British National Grid): 528691-165 - 181348.819 Level: 27.78 Ide: Type: CP+RC Lagged By:: Date: 2006-01-15 - 2008-01-23 Deptite: Constant | Project | Name | e: Crossrail Pro | ject No: | CR_REV5 | | | | r ay | 630 |
| Ide Type: CP+RC Logged By: Dates: 2008-01-15 2008-01-23 Diant: Cossarial Limited Contractor: Project Engineer: GCG Big Part 10000 Depth (m) Logend Statum Description Depth (m) Depth (m) Logend and tak provider tak | Boreho | le ID: | P16R | - | | | | | | |
| Jime: Constal Limide Contractor: Project Enginee: GCG Part Used: SPT Hammer Sorial No: Vell Mare Depth (m) Type Result Depth (m) Legend Stratum Description Detwork (m) Vell Wate Depth (m) Type Result Depth (m) Legend Stratum Description Depth (m) Stratum Descriptio | | | | | | 9 Level: 27 | .78 | | | |
| Plant Used: Stratum Description Depth (m) Level (m) Legend Stratum Description Decription Vell Water Depth (m) Type Result Depth (m) Level (m) Legend Stratum Description Depth (m) Stratum Description Depth (m) Stratum Description Depth (m) Stratum Description Depth (m) Level (m) Legend Stratum Description Depth (m) Stratum Description Depth (m) Level (m) Lev | | | | - | | | | | | |
| Vell Samples Result Depth (m) Level (m) Legend Stratum Description De Vell A Depth (m) Type Result Depth (m) Level (m) Level (m) Legend Stratum Description Depth (m) Transmit fissured dark grey brown CLA's with a sity stratum cLash by the same servery closely apaced clocely settered with closely spaced clocely settered with closely settered with | | | | | | | | | | |
| View Depth (m) Type Result Depth (m) Lavel (m) Lagend Stratum Description Image: A stratum Description Image: A stratum Descrinding transmitteri of datis growthere | | ised: | | | 0. | | | | | De |
| 10.8 · 11.09 CL | Vell V | Vater | | | Result | Depth (m) | Level (m) | Legend | Stratum Description | |
| | | | 10.8 - 11.09 | CL | | | | | with lenses 25mm diameter of dark grey fine sand Fissures are very closely to closely spaced locally extremely closely spaced randomly orientated and | 10. 11. 11. 12. 12. 13. 14. |

| | | | | Boreh | ole Log | | | | P16R |
|-------|----------|------------------|-------------|--|-------------|-----------|--------|--|------------|
| Ducia | at Name | | ala at Nia. | | | | | P | age 4 of 6 |
| - | hole ID: | e: Crossrail Pro | oject No: | CR_REV5 | | | | | |
| | | | National | Grid): 526691.165 - 181348.81 | 9 Level: 27 | .78 | | | |
| | | | | ates: 2008-01-15 - 2008-01-23 | | - | | | |
| | | | | Project Engineer: GCG | | | | | |
| Plan | t Used: | SPT Hammer | Serial No | D: | | | | | |
| | | Samples | 3 | | | | | | Depth |
| Well | Water | Depth (m) | Туре | Result | Depth (m) | Level (m) | Legend | Stratum Description | r |
| | | 15.0 | V K CD | | | | | Stiff becoming very stiff fissured dark are | ev. |
| | | | | | | | | brown CLAY with a silty texture Locally with lenses 25mm diameter of dark grey | |
| | | | | | | | | fine sand Fissures are very closely to | |
| | | | | | | | | spaced randomly orientated and | d 15.5_ |
| | | | | | | | | Stiff becoming very stiff fissured dark gree brown CLAY with a silty texture Locally with lenses 25mm diameter of dark grey fine sand Fissures are very closely to closely spaced locally extremely closely spaced randomly orientated and generally smooth Locally slightly polished to polished and tight | u 15.5 - |
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| | | | | | | | | | 17.0- |
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| | | 17.4 | VК | | | | | | 17.5- |
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| | | | | | | | | | 19.0- |
| | | | | | | | | | 10.0- |
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| | | | | | | | | | |
| | | 40 5 40 70 | | | | | | | 19.5 - |
| | | 19.5 - 19.79 | CL | | | | | | 10.0- |
| | | | | | | | | | |
| | | 19.8 | VК | | | | | | |
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| | | | | Boreh | ole Log | | | | 216 |
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| Proie | ct Name | e: Crossrail Pro | piect No: | CR REV5 | | | | Pa | ge 5 |
| - | nole ID: | | | | | | | | |
| | | | National | Grid): 526691.165 - 181348.81 | 9 Level: 27 | .78 | | | |
| lole | Туре: С | P+RC Logged | By: Da | ates: 2008-01-15 - 2008-01-23 | | | | | |
| lien | t: Cross | rail Limited Co | ntractor: | Project Engineer: GCG | | | | | |
| lant | Used: | SPT Hammer | Serial No | D: | | | | | |
| | | Samples | 5 | | | | | | D |
| ell | Water | Depth (m) | Туре | Result | Depth (m) | Level (m) | Legend | Stratum Description | |
| | | Boptin (iii) | 1900 | | | | | | + |
| | | | | | | | | Stiff becoming very stiff fissured dark grey brown CLAY with a silty texture Locally | ′ |
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| | | | | | | | | fine sand Fissures are very closely to closely spaced locally extremely closely | |
| | | | | | | | | spaced randomly orientated and generally smooth Locally slightly polished | 2 |
| | | | | | | | | to polished and tight | |
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| | | | | | | | | | 11 |
| | | | | | | | | | |
| | | 22.5 - 22.79 | CL | | | | | | 2 |
| | | | | | | | | | |
| | | | | | | | | Very stiff fissured locally thinly bedded | |
| | | | | | | | | very dark grey brown slightly sandy CLAY with occasional lenses 2mm of dark grey | |
| | | | | | | | | fine sand Fissures are very closely to closely spaced randomly orientated | 2 |
| | | | | | | | [] | smooth and tight with slightly polished to polished surfaces locally dusted with fine | |
| | | | | | | | | sand silt | |
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| | | | | Boreh | ole Log | | | | 16R je 6 of |
|---------------------------|----------------------------|--|-----------------------------------|--|--------------|---------------------------|-----------------------|---|-----------------------|
| Proje | ct Nam | e: Crossrail Pro | oject No: | CR_REV5 | | | | Fay | 000 |
| Boreh | ole ID: | P16R | - | | | | | | |
| Locat | ion: | Co-ords (British | National | Grid): 526691.165 - 181348.819 | 9 Level: 27 | .78 | | | |
| | | | | ates: 2008-01-15 - 2008-01-23 | | | | | |
| | | | | Project Engineer: GCG | | | | | |
| Plant | Used: | | | 0: | | | | | Dep |
| Well | Water | Samples | | Result | Depth (m) | l evel (m) | Legend | Stratum Description | Dep |
| W C II | Water | Depth (m) | Туре | Kooun | Doput (iii) | | Logona | | |
| | | 25.5 - 25.77 | CL | | 26.22 | 1.56 | | Very stiff fissured locally thinly bedded very dark grey brown slightly sandy CLAY with occasional lenses 2mm of dark grey fine sand Fissures are very closely to closely spaced randomly orientated smooth and tight with slightly polished to polished surfaces locally dusted with fine sand silt | 25.5 26.0 26.5 |
| | | | | | | | | | 27.0 |
| | | | | | | | | | 27.5 |
| | | | | | | | | | 28.0 |
| | | | | | | | | | 28.5 |
| | | | | | | | | | 29.0 |
| | | | | | | | | | 29.8 |
| IMPO all of t 25-07 | RTAN he info -2025 a | F: This is a basic rmation supplied at 03:54. BGS Re | log auto in the or eference | generated from AGS data held b riginal AGS file. If you wish to dep 202002061142130629 | y the Natior | al Geoscie es to the N | ence Data GDC plea | Centre (NGDC) and does not necessarily incl se see www.bgs.ac.uk/services/ngdc. Genera | ude ated |

GENERAL REMARKS

Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit was hand-dug to 1.20m depth andones at 6.00m on 15/01/2008 and from 5.42m to 6.10m on 16/01/2008 after pulling back casing. See separate sheets. Test on 15/01/2008 possibly silted up; k value for test on 16/01/2008 3x10-4m/s.;An amount of water was added to facilitate boring and to maintain a positive hydrostatic head in granular strata from 4.20m to 8.60m, which may have obscured any groundwater strike.;The borehole was advanced by cable percussion means to 10.00m and then progressed by rotary coring means to 26.22m using Geobor S wireline, coreline and a TSD 5mm cube core bit.;A standpipe piezometer was installed at 23.00m. The installation was aborted as the hole collapsed during the withdrawal of the casing.;