Appendix E

Soil Vapour Bore Construction Logs
<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Interpreted Formation</th>
<th>SOIL DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 - 0.6</td>
<td>Blank Casing</td>
<td>Bitumen: Fill: silty CLAY, brown, firm, dry, low plasticity, trace gravel (grey, ironstone and calcareous), black staining</td>
</tr>
<tr>
<td>0.6 - 1.4</td>
<td>Bentonite Seal</td>
<td>Silty CLAY: brown, firm, dry, medium plasticity, trace grey and calcareous gravel (1 - 2 mm diameter)</td>
</tr>
<tr>
<td>1.4 - 2.2</td>
<td>Grout Backfill</td>
<td>Silty CLAY: brown, firm, dry, medium plasticity, calcareous gravel (2 - 5 mm diameter)</td>
</tr>
<tr>
<td>2.2</td>
<td>Bore hole terminated at 2.2 m</td>
<td>Silty CLAY: brown, firm, dry, medium plasticity, trace grey and ironstone gravel (0.5 - 2 mm diameter)</td>
</tr>
</tbody>
</table>

Comments: No odour, black staining observed in surficial horizon

East: 612372.838 Zone 54
North: 278123.043 Zone 54
**LOG OF: BSE_SV01B**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Interpreted Formation</th>
<th>Soil Description</th>
<th>Contact Depth (m)</th>
<th>Sample ID</th>
<th>PID (ppm)</th>
<th>Wall Log</th>
<th>Well Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.03</td>
<td>Fill Material</td>
<td>Bitumen</td>
<td></td>
<td>BSE_SV01B</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.50</td>
<td>Natural Material</td>
<td>Silty CLAY: brown, firm, dry, medium plasticity, trace grey and calcareous gravels (1 - 2 mm diameter)</td>
<td>0.50</td>
<td>BSE_SV01B</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.40</td>
<td></td>
<td>&quot;Silty CLAY&quot;: brown, firm, dry, medium plasticity, calcareous gravels (2 - 5 mm diameter)</td>
<td>1.40</td>
<td>BSE_SV01B</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.70</td>
<td></td>
<td>&quot;Silty CLAY&quot;: brown, firm, dry, medium plasticity, trace grey and ironstone gravels (0.5 - 2 mm diameter)</td>
<td>1.70</td>
<td>BSE_SV01B</td>
<td>2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.90</td>
<td></td>
<td>Clayey SAND: orange/brown, loose, dry, fine to medium sands, trace grey gravels (up to 1 mm diameter)</td>
<td>2.90</td>
<td>BSE_SV01B</td>
<td>2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.20</td>
<td></td>
<td>Silty CLAY: orange/brown, firm, dry, low plasticity, trace grey and ironstone gravels (up to 1 mm diameter)</td>
<td>3.20</td>
<td>BSE_SV01B</td>
<td>2.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.70</td>
<td></td>
<td>Clayey SAND: grey/brown with orange mottling, fine to medium sands, loose, dry, trace grey gravels (up to 2 mm diameter)</td>
<td>3.70</td>
<td>BSE_SV01B</td>
<td>2.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.20</td>
<td></td>
<td>Bore hole terminated at 4.2 m</td>
<td>4.20</td>
<td>BSE_SV01B</td>
<td>2.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Soil Description

#### Fill Material
- **Bitumen**
  - Fill: silty CLAY, brown, firm, dry, low plasticity, trace gravels (grey, ironstone and calcareous), black staining

#### Natural Material
- **Silty CLAY:** brown, firm, dry, medium plasticity, trace grey and calcareous gravels (1 - 2 mm diameter)
- **Silty CLAY:** brown, firm, dry, medium plasticity, calcareous gravels (2 - 5 mm diameter)
- **Silty CLAY:** brown, firm, dry, medium plasticity, trace grey and ironstone gravels (0.5 - 2 mm diameter)
- **Clayey SAND:** orange/brown, loose, dry, fine to medium sands, trace grey and ironstone gravels (up to 1 mm diameter)
- **Silty CLAY:** orange/brown, firm, dry, low plasticity, trace grey and ironstone gravels (up to 1 mm diameter)
- **Silty CLAY:** grey/brown with orange mottling, firm, fine to medium sands, trace grey and ironstone gravels (up to 2 mm diameter)
- **Clayey SAND:** grey/brown with grey mottling, firm, fine to medium sands, trace grey and ironstone gravels (up to 1 mm diameter)
- **Clayey SAND:** orange/brown with grey mottling, firm, slightly moist, medium plasticity, trace grey and ironstone gravels
- **Silty CLAY:** red/brown with grey mottling, firm, dry, medium plasticity, trace grey and ironstone gravels (up to 1 mm diameter)
- **Clayey SAND:** orange/brown, loose, dry, fine sands, trace grey and calcareous gravels (up to 1 mm diameter)
- **Clayey SAND:** red/brown, loose, dry, fine sands, trace grey and calcareous gravels (up to 1 mm diameter)
- **Clayey GRAVEL:** orange/red/brown, loose, slightly moist, sub-angular to sub-rounded poorly sorted gravels (grey, ironstone and calcareous) (3 - 12 mm diameter)

#### Notes
- Bore hole terminated at 7.6 m

#### Construction Details
- **Grout Backfill:** 0.0 - 5.8 m
- **Bentonite Seal:** 5.8 - 6.9 m
- **Gravel Pack:** 6.9 - 7.6 m
- **Annulus (m):** 50 mm
- **Screened Interval:** 7.4 - 7.5 m
- **Encountered WL:**
- **South Water Level (SWL):**
- **Contact Depth:**
- **TOC (mAHD):** 42.702
- **Logged By:** MB
- **Easting:** 612372.381 Zone 54
- **Northing:** 278124.759 Zone 54
- **Logging Method:** JH/HA/PT
- **Drilling Contractor:** Geodrill
- **Client:** Renewal SA
- **Project Name:** Tonsley VSCAP Investigations
- **Project Number:** 50130.07
- **Location:** Tonsley Innovation District
- **Drilling Method:** No odour or stains noted
- **Comments:**

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**GraphiC Log:**

- **Grout Backfill:**
- **Bentonite Seal:**
- **Stainless Steel Mesh:**
- **1.8 mm Graded Sand:**

**Logged By:** MB

**Drawn By:** MB

**Checked By:** RL
**LOG OF:** BSE_SV02A

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Interpreted Formation</th>
<th>SOIL DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>Blank Casing: 0.0 - 1.95 m</td>
<td></td>
</tr>
<tr>
<td>0.9</td>
<td>Bentonite Seal: 0.9 - 1.4 m</td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Gravel Pack: 1.4 - 2.25 m</td>
<td></td>
</tr>
<tr>
<td>2.25</td>
<td>Bore hole terminated at 2.25 m</td>
<td></td>
</tr>
</tbody>
</table>

**Fill Material**
- **Fill:** gravelly SAND, brown/grey, dry, loose, grey gravels (up to 15 mm diameter)
- **Fill:** silty SAND, brown, dry, loose, fine to medium sands, trace grey and calcareous gravels (3 - 14 mm diameter)
- **Silty CLAY:** red/brown/orange, dry, firm, medium plasticity, trace grey and ironstone gravels

**Natural Material**

**Client:** Renewal SA  
**Project Name:** Tonsley VSCAP Investigations  
**Project Number:** 50130.07  
**Location:** Tonsley Innovation District  
**Drilling Contractor:** Geodrill  
**Drilling Method:** JH/HAPT  
**TOC (mAHD):** 42.015  
**Logged By:** MB  
**Noting:** 278055.263 Zone 54  
**Easting:** 6123250.971 Zone 54  
**Northing:** 278055.263 Zone 54  
**Enforced WL:** Gatic  
**Bore hole terminated at 2.25 m**
**SOIL DESCRIPTION**

1. **Fill Material**
   - **Bitumen**
   - Fill: gravelly SAND, brown/grey, dry, loose, grey gravels (up to 15 mm diameter)
   - Fill: silty SAND, brown, dry, loose, fine to medium sands, trace grey and calcareous gravels (3 - 14 mm diameter)

2. **Natural Material**
   - Silty CLAY: red/brown/orange, dry, firm, medium plasticity, trace grey and ironstone gravels
   - Silty CLAY: red/brown/orange, dry, firm, medium plasticity, 20% trace grey and ironstone gravels (20 - 40 mm diameter)
   - Clayey SAND: orange/brown with grey mottling, loose, dry, grey and ironstone gravels (2 - 10 mm diameter)

3. **Bore hole terminated at 4.2 m**
   - Bore hole terminated at 4.2 m

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**LOG OF: BSE_SV02B**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Interpreted Formation</th>
<th>Graphic Log</th>
<th>Soil Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>Blank Casing: 0.0 - 2.6 m</td>
<td>Bentorite Seal: 2.6 - 3.4 m</td>
<td>Grout Backfill: 2.6 - 3.4 m</td>
</tr>
<tr>
<td>3.4</td>
<td>Gravel Pack: 3.4 - 4.2 m</td>
<td>Annulus (m): 50 mm</td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>Grout Backfill: 0.0 - 2.6 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.2</td>
<td>Grout Backfill: 0.0 - 2.6 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.03</td>
<td>Grout Backfill: 0.0 - 2.6 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.20</td>
<td>Grout Backfill: 0.0 - 2.6 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.70</td>
<td>Grout Backfill: 0.0 - 2.6 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.40</td>
<td>Grout Backfill: 0.0 - 2.6 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.70</td>
<td>Grout Backfill: 0.0 - 2.6 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.20</td>
<td>Grout Backfill: 0.0 - 2.6 m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Client:** Renewal SA  
**Completion Date:** 14/11/2017  
**BCL No.:** N/A

**Project Name:** Tonsley VSCAP Investigations  
**Project Number:** 50130.07  
**Location:** Tonsley Innovation District

**Drilling Contractor:** Geodrill  
**Drilling Method:** JH/HAPT  
**Easting:** 6123250.006 Zone 54  
**Northing:** 278054.967 Zone 54

**Comments:** No odour or stains noted
### SOIL DESCRIPTION

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Interpreted Formation</th>
<th>Contact</th>
<th>Sample ID</th>
<th>PID (ppm)</th>
<th>Wall Log</th>
<th>Wall Construction</th>
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</thead>
<tbody>
<tr>
<td>0.00</td>
<td>Bitumen</td>
<td>0.03</td>
<td>BSE_SV02C_0.1-0.2</td>
<td>1.5</td>
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<tr>
<td>0.20</td>
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<td>0.20</td>
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<td></td>
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<tr>
<td>0.70</td>
<td>Silicon Clay: red/brown/orange, dry, firm, medium plasticity, trace grey and ironstone gravels</td>
<td>0.70</td>
<td>BSE_SV02C_1.1-1.1</td>
<td>0.4</td>
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<tr>
<td>1.00</td>
<td>Silty Clay: red/brown/orange, dry, firm, medium plasticity, 20% trace grey and ironstone gravels (20 - 40 mm diameter)</td>
<td>2.40</td>
<td>BSE_SV02C_4.5-4.6</td>
<td>0.3</td>
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<tr>
<td>2.00</td>
<td>Clayey Sand: orange/brown with grey mottling, loose, dry, grey and ironstone gravels (2 - 10 mm diameter)</td>
<td>2.70</td>
<td>BSE_SV02C_6.1-6.2</td>
<td>0.6</td>
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<tr>
<td>2.30</td>
<td>Natural Material</td>
<td>4.20</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4.20</td>
<td>Silty Clay: orange/brown with grey mottling, dry, firm, low plasticity, trace grey gravels</td>
<td>4.60</td>
<td>BSE_SV02C_6.9-7</td>
<td>0.6</td>
<td></td>
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<tr>
<td>5.00</td>
<td>Sandy Clay: red/brown with grey mottling, dry, firm, low plasticity, trace grey gravels</td>
<td>5.00</td>
<td>BSE_SV02C_7.9-8</td>
<td>0.8</td>
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</tr>
<tr>
<td>5.60</td>
<td>Gravelly Sand, loose, dry, fine-medium sands, grey and calcareous gravels (up to 20 mm diameter)</td>
<td>6.50</td>
<td>BSE_SV02C_7.25-7.25</td>
<td>0.6</td>
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<tr>
<td>7.00</td>
<td>Silty Clay: orange/brown, stiff, dry, medium plasticity, trace grey gravels</td>
<td>7.50</td>
<td>BSE_SV02C_6.5-7.25</td>
<td>0.4</td>
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<tr>
<td>7.80</td>
<td></td>
<td>8.10</td>
<td></td>
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</tbody>
</table>

**Bore hole terminated at 8.1 m**
Client: Renewal SA  
Completion Date: 14/11/2017  
BCL No.: N/A

Project Name: Tonsley VSCAP Investigations  
Construction Details: Surface Feature: Gatic

Project Number: 50130.07  
Blank Casing: 0.0 - 1.9 m  
Screened Interval: 1.9 - 2.0 m

Location: Tonsley Innovation District  
Bentonite Seal: 0.6 - 1.45 m  
Grout Backfill: 0.0 - 0.6 m

Drilling Contractor: Geodrill  
Gravel Pack: 1.45 - 2.35 m  
Annulus (m): 50 mm

Drilling Method: JH/HAPT  
Encountered WL:

Fill Material:  
Natural Material:  
Comments: No odour or stains noted

Fill Material

- Bitumen reinforced with concrete
- Fill: gravelly SAND, loose, dry, grey and ironstone gravels (up to 14 mm diameter)
- Silty CLAY: red/brown, firm, dry, medium plasticity, trace grey gravels
- Silty SAND: brown, dry, loose, trace gravels
- Silty CLAY: brown/orange, firm, dry, high plasticity

Natural Material

- Bore hole terminated at 2.35 m
- 1.8 mm Graded Sand
- Stainless Steel Mesh

Logging By: MB  
Logged By: MB

Easting: 6123071.251 Zone 54  
Northing: 278049.435 Zone 54

Well Construction

Top of Completion: 14/11/2017

Drawn By: MB  
Checked By: RL
**Client:** Renewal SA  
**Project Name:** Tonsley VSCAP Investigations  
**Project Number:** 50130.07  
**Location:** Tonsley Innovation District  
**Drilling Contractor:** Geodrill  
**Drilling Method:** JH/H/A/PT  
**Comments:** No odour or stains noted

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Interpreted Formation</th>
<th>SOIL DESCRIPTION</th>
<th>Contact Depth (m)</th>
<th>Sample ID Analysed (ppm)</th>
<th>PID</th>
<th>Wall Log</th>
<th>Well Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 - 2.6 m</td>
<td>Blank Casing</td>
<td>Fill: gravely SAND, loose, dry, grey and ironstone gravels (up to 14 mm diameter)</td>
<td>0.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.6 - 3.4 m</td>
<td>Bentonite Seal</td>
<td>Silty CLAY: red/brown, firm, dry, medium plasticity, trace grey gravels</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 - 4.2 m</td>
<td>Gravel Pack</td>
<td>Silty SAND: brown, dry, loose, trace gravels</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.9 - 4.0 m</td>
<td>Screened Interval</td>
<td>Silty CLAY: brown/orange, firm, dry, high plasticity</td>
<td>1.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.0 - 4.2 m</td>
<td>Grout Backfill</td>
<td>Silty SAND: orange/brown, dry, loose, trace grey and ironstone gravels</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2 m</td>
<td>Bore hole terminated at 4.2 m</td>
<td>Sandy CLAY: orange/brown with grey mottling, firm, dry, medium plasticity, trace grey and ironstone gravels</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2 m</td>
<td>Blank Casing</td>
<td>Silty CLAY: red/brown with grey mottling, firm, dry, medium plasticity, trace grey and ironstone gravels</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fill Material**

- **Fill Material**
- **Natural Material**

**Surface Feature:** Gatic

**Encountered WL:**

- **TOC (mAHD):** 42.338
- **Logged By:** MB

**Geodrill**

- **Easting:** 6123071.24 Zone 54
- **Northing:** 278050.72 Zone 54

**Project Number:** 50130.07  
**Completion Date:** 15/11/2017  
**BCL No.:** N/A  
**Drilling Contractor:** Geodrill  
**Drilling Method:** JH/H/A/PT  
**Comments:** No odour or stains noted
# Soil Description

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Interpreted Formation</th>
<th>Soil Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 - 6.2 m</td>
<td>Fill Material</td>
<td>Bitumen reinforced with concrete</td>
</tr>
<tr>
<td>6.2 - 7.0 m</td>
<td>Bentonite Seal</td>
<td>Gravels and sands</td>
</tr>
<tr>
<td>7.0 - 7.8 m</td>
<td>Gravel Pack</td>
<td>Gravels and sands</td>
</tr>
<tr>
<td>7.8 m</td>
<td>Bore hole terminated at 7.8 m</td>
<td></td>
</tr>
</tbody>
</table>

- Fill: gravelly SAND, loose, dry, grey and ironstone gravels (up to 14 mm diameter)
- Silty CLAY: red/brown, firm, dry, medium plasticity, trace grey gravels
- Silty SAND: brown, dry, loose, trace gravels
- Silty CLAY: brown/orange, firm, dry, high plasticity
- Silty SAND: orange/brown, dry, loose, trace grey and ironstone gravels
- Sandy CLAY: orange/brown with grey mottling, firm, dry, low plasticity, trace grey and ironstone gravels
- Silty CLAY: red/brown with grey mottling, firm, dry, medium plasticity, trace grey and ironstone gravels
- Silty SAND: orange/brown, loose, dry, trace grey, ironstone and calcareous gravels
- Silty CLAY: red/brown with grey mottling, firm, dry, medium plasticity, trace grey and ironstone gravels
- Silty SAND: orange/brown, loose, dry, trace grey, ironstone and calcareous gravels
- Silty CLAY: grey/orange/white, firm, dry, low plasticity, calcareous material, trace fine to medium sands, trace grey and calcareous gravels
- Silty CLAY: brown with grey mottling, firm, dry, medium plasticity

**Client:** Renewal SA  
**Completion Date:** 15/11/2017  
**BCL No.:** N/A

**Project Name:** Tonsley VSCAP Investigations  
**Project Number:** 50130.07  
**Location:** Tonsley Innovation District  
**Drilling Contractor:** Geodrill  
**Drilling Method:** JH/HAPT  
**Comments:** No odour or stains noted
### Fill Material
- Fill: gravelly SAND, dark brown, loose, moist, fine to medium sands, gravels (1 - 20 mm diameter)

### Natural Material
- Silty CLAY: red/brown, firm, slightly moist, high plasticity, trace gravels
- Silty CLAY: orange/brown with grey mottling, firm, dry, medium plasticity, trace black staining (streaks), sandstone at 1.3 m
- Sandy CLAY: orange/brown, soft, dry, medium plasticity, trace grey, ironstone and calcareous gravels

### Bore hole terminated at 2.2 m
### Fill Material

- **Fill:** gravelly SAND, dark brown, loose, moist, fine to medium sands, gravels (1 - 20 mm diameter)

### Natural Material

- **Silty CLAY:** red/brown, firm, slightly moist, high plasticity, trace gravels
- **Silty CLAY:** orange/brown with grey mottling, firm, dry, medium plasticity, trace black staining (streaks), sandstone at 1.3 m
- **Sandy CLAY:** orange/brown, soft, dry, high plasticity, trace grey, ironstone and calcareous gravels
- **Silty CLAY:** red/brown, firm, dry, medium plasticity, trace ironstone gravels
- **Silty CLAY:** light brown with grey mottling, medium plasticity, trace grey, ironstone and calcareous gravels (1 - 2 mm)

### Bore hole terminated at 4.1 m
**Client:** Renewal SA  
**Completion Date:** 15/11/2017  
**BCL No.:** N/A

### Project Details
- **Project Name:** Tonsley VSCAP Investigations  
- **Project Number:** 50130.07  
- **Location:** Tonsley Innovation District  
- **Drilling Contractor:** Geodrill  
- **Drilling Method:** HA/PT  
- **TOC (mAHD):** 43.298  
- **Logged By:** MB  
- **Comments:** No odour or stains noted

### Soil Description

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Interpreted Formation</th>
<th>Soil Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>Fill Material</td>
<td>Fill: gravelly SAND, dark brown, loose, moist, fine to medium sands, gravels (1 - 20 mm diameter)</td>
</tr>
<tr>
<td>0.3</td>
<td></td>
<td>Silty CLAY: red/brown, firm, slightly moist, high plasticity, trace gravels</td>
</tr>
<tr>
<td>0.7</td>
<td></td>
<td>Silty CLAY: orange/brown with grey mottling, firm, dry, medium plasticity, trace black staining (streakes), sandstone at 1.3 m</td>
</tr>
<tr>
<td>1.4</td>
<td></td>
<td>Sandy CLAY: orange/brown, soft, dry, high plasticity, trace grey, ironstone and calcareous gravels</td>
</tr>
<tr>
<td>2.7</td>
<td></td>
<td>Silty CLAY: red/brown, firm, dry, medium plasticity, trace ironstone gravels</td>
</tr>
<tr>
<td>3.0</td>
<td></td>
<td>Silty CLAY: light brown with grey mottling, medium plasticity, trace grey, ironstone and calcareous gravels (1 - 2 mm)</td>
</tr>
<tr>
<td>4.0</td>
<td></td>
<td>Silty CLAY: brown, soft, slightly moist, high plasticity, trace grey gravels</td>
</tr>
<tr>
<td>4.2</td>
<td></td>
<td>Silty CLAY: brown with grey mottling, dry, firm, medium plasticity, trace gravel</td>
</tr>
<tr>
<td>5.7</td>
<td></td>
<td>Silty CLAY: grey with brown mottling, dry, firm, medium plasticity, calcareous gravels (1 - 3 mm diameter)</td>
</tr>
<tr>
<td>6.0</td>
<td></td>
<td>Bore hole terminated at 6.6 m</td>
</tr>
</tbody>
</table>

---

**Surface Feature:** Gatic  
**Encountered WL:**  

---

**Fill Material**  
**Natural Material**  

---

**Screened Interval:** 6.4 - 6.5 m  
**Grout Backfill:** 0.0 - 5.0 m  
**Annulus (m):** 50 mm  

---

**Drilling Method:** HA/PT  
**Encountered WL:**

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**SOIL DESCRIPTION**

- **Interpreted Formation**
- **Contact Depth (m)**
- **Sample ID**
- **PID (ppm)**
- **Wall Log**
- **Well Construction**

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**Client:** Renewal SA  
**Drilling Contractor:** Geodrill  
**Comments:** No odour or stains noted

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**Drawn By:** MB  
**Checked By:** RL

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**Bore Hole Terminated at 6.6 m**
**Fill Material**

- **Fill: sandy GRAVEL**, loose, moist, gravels (1 - 16 mm diameter)
- **Fill: silty SAND**, loose, moist, trace grey and ironstone gravels

**Natural Material**

- **Silty CLAY**: brown, firm, dry, medium plasticity, trace grey and ironstone gravels
- **Silty CLAY**: orange/brown, firm, dry, high plasticity, trace gravels
- **Sandstone**: Silty SAND, orange/brown, soft, dry, fine-medium sands, gravels (1 - 23 mm diameter)

Bore hole terminated at 2.2 m
### SOIL DESCRIPTION

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Interpreted Formation</th>
<th>Graphic Log</th>
<th>Contact Depth (m)</th>
<th>Sample ID</th>
<th>PID (ppm)</th>
<th>Wall Log</th>
<th>Well Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>Fill Material: sandy GRAVEL, loose, moist, gravels (1 - 16 mm diameter)</td>
<td></td>
<td>0.10</td>
<td></td>
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</tr>
<tr>
<td>0.1</td>
<td>Fill: Silty SAND, loose, moist, trace grey and ironstone gravels</td>
<td></td>
<td>0.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.4</td>
<td>Silty CLAY: brown, firm, dry, medium plasticity, trace grey and ironstone gravels</td>
<td></td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.7</td>
<td>Silty CLAY: orange/brown, firm, dry, high plasticity, trace gravels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Sandstone: Silty SAND, orange/brown, soft, dry, fine-medium sands, gravels (1 - 23 mm diameter)</td>
<td></td>
<td>1.30</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1.4</td>
<td></td>
<td></td>
<td>1.40</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.8</td>
<td>Silty CLAY: orange/brown with grey mottling, firm, dry, medium plasticity, trace grey, ironstone and calcareous gravels</td>
<td></td>
<td>2.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>Bore hole terminated at 4.2 m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Borehole Details:**
- **Drilling Method:** HA/PT
- **SWL:**
- **Encountered WL:**
- **Screened Interval:** 3.9 - 4.0 m
- **Grout Backfill:** 0.0 - 2.6 m
- **Annulus (m):** 50 mm
- **Bentonite Seal:** 2.6 - 3.4 m
- **Gravel Pack:** 3.4 - 4.2 m

**Interpreted Formation:**
- Fill Material
- Natural Material

**Notes:**
- No odour or stains noted
- No odour or stains noted

### Client Information
- **Client:** Renewal SA
- **Completion Date:** 15/11/2017
- **BCL No.:** N/A

### Project Information
- **Project Name:** Tonsley VSCAP Investigations
- **Project Number:** 50130.07
- **Location:** Tonsley Innovation District
- **Drilling Contractor:** Geodrill
- **Drilling Method:** HA/PT
- **TOC (mAH):** 45.059
- **Logged By:** MB
- **Easting:** 6122874.155 Zone 54
- **Northing:** 278131.103 Zone 54

**Comments:** No odour or stains noted

**Drilling Method:** HA/PT

**Notations:**
- Natural Material
- Fill Material

**Comments:**
- No odour or stains noted
- No odour or stains noted

**Interpreted Formation:**
- Fill Material
- Natural Material

**Log of:** BSE_SV05B

**Logged By:** MB

**Logged Date:** 15/11/2017

**Log Number:** 50130.07_SV BORE CONSTRUCTION LOGS_25MAY18.GPJ

**Drawn By:** MB

**Checked By:** RL
Fill Material

Fill: sandy GRAVEL, loose, moist, gravels (1 - 16 mm diameter)
Fill: silty SAND, loose, moist, trace grey and ironstone gravels

Silty CLAY: brown, firm, dry, medium plasticity, trace grey and ironstone gravels
Silty CLAY: orange/brown, firm, dry, high plasticity, trace gravels

Sandstone
Silty SAND, orange/brown, soft, dry, fine-medium sands, gravels (1 - 23 mm diameter)

Silty CLAY: orange/brown with grey mottling, firm, dry, medium plasticity, trace grey, ironstone and calcareous gravels

Silty CLAY: brown grey, firm, dry, high plasticity, trace grey gravels (approx. 1 mm diameter)

Silty CLAY: orange/brown with grey/white mottling, firm, high plasticity, dry

Silty CLAY: orange/brown with grey/white mottling, firm, high plasticity, dry, calcareous gravels (1 - 3 mm diameter)

Bore hole terminated at 6.8 m

GRAVITY CYLINDER LOG OF: BSE_SV05C (1 of 1)

Client: Renewal SA
Project Name: Tonsley VSCAP Investigations
Project Number: 50130.07
Location: Tonsley Innovation District
Drilling Contractor: Geodrill
Drilling Method: HA/PT

Comments: No odour or stains noted

Fill: sandy GRAVEL, loose, moist, gravels (1 - 16 mm diameter)
Fill: silty SAND, loose, moist, trace grey and ironstone gravels

Silty CLAY: brown, firm, dry, medium plasticity, trace grey and ironstone gravels
Silty CLAY: orange/brown, firm, dry, high plasticity, trace gravels

Sandstone
Silty SAND, orange/brown, soft, dry, fine-medium sands, gravels (1 - 23 mm diameter)

Silty CLAY: orange/brown with grey mottling, firm, dry, medium plasticity, trace grey, ironstone and calcareous gravels

Silty CLAY: brown grey, firm, dry, high plasticity, trace grey gravels (approx. 1 mm diameter)

Silty CLAY: orange/brown with grey/white mottling, firm, high plasticity, dry

Silty CLAY: orange/brown with grey/white mottling, firm, high plasticity, dry, calcareous gravels (1 - 3 mm diameter)

Bore hole terminated at 6.8 m

Fill Material

Fill: sandy GRAVEL, loose, moist, gravels (1 - 16 mm diameter)
Fill: silty SAND, loose, moist, trace grey and ironstone gravels

Silty CLAY: brown, firm, dry, medium plasticity, trace grey and ironstone gravels
Silty CLAY: orange/brown, firm, dry, high plasticity, trace gravels

Sandstone
Silty SAND, orange/brown, soft, dry, fine-medium sands, gravels (1 - 23 mm diameter)

Silty CLAY: orange/brown with grey mottling, firm, dry, medium plasticity, trace grey, ironstone and calcareous gravels

Silty CLAY: brown grey, firm, dry, high plasticity, trace grey gravels (approx. 1 mm diameter)

Silty CLAY: orange/brown with grey/white mottling, firm, high plasticity, dry

Silty CLAY: orange/brown with grey/white mottling, firm, high plasticity, dry, calcareous gravels (1 - 3 mm diameter)

Bore hole terminated at 6.8 m