# SOIL LOG

HOLE NO: **BH BV 1**

| | | |
|---|---|---|
| PROJECT : Brisbane Valley Grade Separation | JOB NO : QB10200.4 | PAGE : 1 OF 4 |
| POSITION : E: 470439, N: 6949653 (56 MGA94) | SURFACE ELEVATION : 56.8 (AHD) | LOCATION : Brisbane Valley Hwy |
| RIG TYPE : Hydrapower Scout | CONTRACTOR : GeoDrill - T Partleton | DIP / AZIMUTH : 90° |
| DATE DRILLED : 11/5/11 to 11/5/11 | LOGGED BY : LN CHECKED BY : VP | STANDARD : AS1736 |

| DRILLING & WATER DETAIL | LAB DATA: Moisture Content | Dry Density | % Fines | Atterberg Limits | SAMPLES & SPT DATA | RL (m) | DEPTH (m) | GRAPHIC LOG | MATERIAL DESCRIPTION<br>Soil Type, Colour, Plasticity or Particle Characteristic<br>Secondary and Minor Components | MOISTURE | CONSISTENCY / RELATIVE DENSITY (S / L, F / MD, St / D, VSt / VD) | COMMENTS<br>Field Test Data<br>& Other Observations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | D | | | | CLAY - high plasticity, dark brown, moist, firm. | M | | 0.00: Topsoil 0 to 0.3m. |
| | | | | | | 56.3 | 0.5 | | | | | |
| | | | | | 0.80m | | | | 0.80m | | | |
| | | | | | D | | | | CLAY - sandy silty CLAY, high plasticity, grey streaked orange brown, fine to coarse sand, moist, very stiff. | M | | |
| | | | | | 1.00m | 55.8 | 1.0 | | 1.00m | | | |
| | | | | | SPT N=16 | | | | SILT - sandy clayey SILT, high plasticity fines, grey mottled orange brown, some fine sand, moist, very stiff. | M | | 1.00: SPT Recovery: 0.45 m |
| | | | | | 1.45m | | | | | | | |
| | | | | | 1.50m | 55.3 | 1.5 | | 1.50m | | | |
| | | | | | D | | | | CLAY - sandy CLAY, high plasicity, light orange brown, fine to course sand, moist, very stiff. | M | | |
| | | | | | 1.60m | | | | | | | |
| | | | | | 2.00m | 54.8 | 2.0 | | 2.00m | | | |
| | | | | | SPT N=31 | | | | SILT - high plasticity fines, light grey mottled orange, moist, very stiff. | M | | 2.00: SPT Recovery: 0.45 m |
| | | | | | 2.45m | | | | | | | |
| | | | | | | 54.3 | 2.5 | | | | | |
| | | | | | 3.00m | 53.8 | 3.0 | | 3.00m | | | |
| | | | | | SPT N=22 | | | | SILT - sandy clayey SILT, high plasticity fines, light grey slightly mottled orange, fine to coarse sand, moist, very stiff. | M | | 3.00: SPT Recovery: 0.45 m |
| | | | | | 3.45m | | | | | | | |

Groundwater

**DRILLING**

| | | | |
|---|---|---|---|
| HA | Hand Auger | HQ | HQ Coring |
| AS | Auger | NQ | NQ Coring |
| WB | Washbore | PQ | PQ Coring |
| RR | Rock Rolling | | NMLC NMLC Coring |

GROUNDWATER SYMBOLS
▼ = Water level (static)
▽ = Water level (during drilling)

**SAMPLES & FIELD TESTS**

| | | | |
|---|---|---|---|
| D | Disturbed Sample | SPT | SPT Sample |
| ES | Env Soil Sample | U | Undisturbed Tube Sample |
| EW | Env Water Sample | W | Water Sample |

HP Hand Penetrometer
HV Hand Vane Shear
(P: Peak Su R: Residual Su)
N SPT blows per 300mm
HW SPT penetration by hammer weight
RW SPT penetration by rod weight

MOISTURE CONDITION
D = Dry M = Moist W = Wet

**DENSITY (N-value)**

| | | |
|---|---|---|
| VL | Very Loose | 0 - 4 |
| L | Loose | 4 - 10 |
| MD | Medium Dense | 10 - 30 |
| D | Dense | 30 - 50 |
| VD | Very Dense | 50 - 100 |
| CO | Compact | >50/150mm |

**CONSISTENCY (Su) {N-value}**

| | | |
|---|---|---|
| VS | Very Soft | < 12 kPa {0-2} |
| S | Soft | 12 - 25 {2-4} |
| F | Firm | 25 - 50 {4-8} |
| St | Stiff | 50 - 100 {8-15} |
| VSt | Very Stiff | 100 - 200 {15-30} |
| H | Hard | > 200 kPa {>30} |

# SOIL LOG

HOLE NO: **BH BV 1**

PROJECT : Brisbane Valley Grade Separation | JOB NO : QB10200.4 | PAGE : 2 OF 4

POSITION : E: 470439, N: 6949653 (56 MGA94) | SURFACE ELEVATION : 56.8 (AHD) | LOCATION : Brisbane Valley Hwy

RIG TYPE : Hydrapower Scout | CONTRACTOR : GeoDrill - T Partleton | DIP / AZIMUTH : 90°

DATE DRILLED : 11/5/11 to 11/5/11 | LOGGED BY : LN | CHECKED BY : VP | STANDARD : AS1736

| DRILLING & WATER DETAIL | LAB DATA: Moisture Content | Dry Density | % Fines | Atterberg Limits | SAMPLES & SPT DATA | RL (m) | DEPTH (m) | GRAPHIC LOG | MATERIAL DESCRIPTION (Soil Type, Colour, Plasticity or Particle Characteristic, Secondary and Minor Components) | MOISTURE | CONSISTENCY / RELATIVE DENSITY (S / L, F / MD, St / D, VSt / VD) | COMMENTS (Field Test Data & Other Observations) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | SILT - sandy clayey SILT, high plasticity fines, light grey slightly mottled orange, fine to coarse sand, moist, very stiff. *(continued)* | M | | |
| | | | | | 4.00m SPT N=57 | 52.8 | 4.0 | | | | | 4.00: SPT Recovery: 0.45 m |
| | | | | | | | 4.30m | | SILT - sandy SILT, high plasticity fines, light orange brown streaked grey, fine to coarse sand, moist, hard. | | | |
| | | | | | 4.45m | 52.3 | 4.5 | | | M | | |
| Groundwater | | | | | 5.00m SPT N=47 | 51.8 | 5.0 | | 5.00m SILT - sandy SILT, high plasticity fines, light grey with orange layering, fine to medium sand, moist, hard. | | | 5.00: SPT Recovery: 0.45 m |
| | | | | | 5.45m | 51.3 | 5.5 | | | M | | |
| | | | | | 6.00m SPT N=40 | 50.8 | 6.0 | | 6.00m SILT - high plasticity fines, light orange grey, trace of fine sand, moist, hard. | | | 6.00: SPT Recovery: 0.45 m |
| | | | | | 6.45m | 50.3 | 6.5 | | | M | | |
| | | | | | 7.00m | | | | 7.00m | | | |

**DRILLING**

| | | | |
|---|---|---|---|
| HA | Hand Auger | HQ | HQ Coring |
| AS | Auger | NQ | NQ Coring |
| WB | Washbore | PQ | PQ Coring |
| RR | Rock Rolling | | NMLC NMLC Coring |

GROUNDWATER SYMBOLS
▼ = Water level (static)
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**SAMPLES & FIELD TESTS**

| | | | |
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| D | Disturbed Sample | SPT | SPT Sample |
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HP Hand Penetrometer
HV Hand Vane Shear
(P: Peak Su R: Residual Su)
N SPT blows per 300mm
HW SPT penetration by hammer weight
RW SPT penetration by rod weight

MOISTURE CONDITION
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**DENSITY (N-value)**

| | | |
|---|---|---|
| VL | Very Loose | 0 - 4 |
| L | Loose | 4 - 10 |
| MD | Medium Dense | 10 - 30 |
| D | Dense | 30 - 50 |
| VD | Very Dense | 50 - 100 |
| CO | Compact | >50/150mm |

**CONSISTENCY (Su) {N-value}**

| | | | |
|---|---|---|---|
| VS | Very Soft | < 12 kPa | {0-2} |
| S | Soft | 12 - 25 | {2-4} |
| F | Firm | 25 - 50 | {4-8} |
| St | Stiff | 50 - 100 | {8-15} |
| VSt | Very Stiff | 100 - 200 | {15-30} |
| H | Hard | > 200 kPa | {>30} |

# SOIL LOG

HOLE NO: **BH BV 1**

| | | |
|---|---|---|
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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | SPT N=45 | | | | SILT - high plasticity fines, light orange grey, moist, hard. | M | | 7.00: SPT Recovery: 0.45 m |
| | | | | | 7.30m | | | | 7.30m | | | |
| | | | | | | | | | IRONSTONE - red brown, extremely weathered, extremely low strength, moist, medium dense. | | | |
| | | | | | 7.45m<br>7.50m<br>D<br>7.60m | 49.3 | 7.5 | | | M | | |
| | | | | | 7.80m | | | | 7.80m | | | |
| | | | | | | | | | SILT -high plasticity fines, light orange grey, minor dark brown fissuring, moist, hard. | | | |
| | | | | | 8.00m<br>SPT N=27 | 48.8 | 8.0 | | | | | 8.00: SPT Recovery: 0.45 m |
| | | | | | 8.45m | 48.3 | 8.5 | | | M | | |
| | | | | | 9.00m | 47.8 | 9.0 | | 9.00m | | | |
| | | | | | SPT N=48 | | | | SILT -high plasticity fines, orange grey, some fine sand, moist, hard. | | | 9.00: SPT Recovery: 0.45 m |
| | | | | | 9.45m | 47.3 | 9.5 | | | M | | |
| | | | | | 10.00m<br>SPT N=60 | 46.8 | 10.0 | | 10.00m<br>SILT - high plasticity fines, orange grey, trace of extremely weathered and extremely low strength ironstone, moist, hard. | | | 10.00: SPT Recovery: 0.45 m |
| | | | | | 10.45m | | | | 10.50m | M | | |

Groundwater

SKM AGS REV02.1 (WORKIN-BRISBANE).GLB Log SKM SOIL LOG BRISBANE VALLEY GRADE SEPARATION TP,AH AND BH LOGS.GPJ <<DrawingFile>> 29/11/2011 10:51

**DRILLING**

| | | | |
|---|---|---|---|
| HA | Hand Auger | HQ | HQ Coring |
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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 45.8 | 11.0 | | Terminated @ 10.5 m.<br>No water encountered. | | | | | | |
| | | | | | | 45.3 | 11.5 | | | | | | | | |
| | | | | | | 44.8 | 12.0 | | | | | | | | |
| | | | | | | 44.3 | 12.5 | | | | | | | | |
| | | | | | | 43.8 | 13.0 | | | | | | | | |
| | | | | | | 43.3 | 13.5 | | | | | | | | |

**DRILLING**

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