526081

081

BROKEN HILL PROPRIETARY CO. LTD.

DRILL LOG HEADER SHEET

Project: Tin, Tasmania
Prospect: WARATAH T650
Local Grid co-ords.
AMG co-ords CQ 811177
Drilling Co: OVERLAND DRILLING Co.
Drill type: WARMAN Y50
Driller: P. HARPER V. EVERSDEN I. LARSEN

Hole No: WA.3.
Total depth: 284.2m
Bearing:
Depression VERTICAL
R.L. Collar:
Commenced: 15/2/83
Completed: 24/2/83
Logged by: S.P. KERBER
Sampled by: S.P. KERBER

| Hole Size | | From | To | Total |
|---|---|---|---|---|
| Non-core | HQ | 0 | 141.0 | 141.0 |
| | | | | |
| Core | NQ | 141.0 | 207.4 | 66.4 |
| | BQ | 207.4 | 284.2 | 76.8 |
| | | | | |
| Casing | | | | |
| | | | | |
| Casing left. | | | | |

| | |
|---|---|
| Core storage: | SCAMANDER |
| No. of trays. | 15 CORE 2 CHIP |
| Sample storage | ANALABS - COOEE |
| Geochem. Lab. | ANALABS |
| Analytical reports | |
| | |
| Min. and Pet Lab. | M.R.L. |
| Min and Pet report | |
| | |

Hole Survey Data: Susceptibility - 2m intervals. Geochemistry - BE 5042 - BE 5051
Petrology - WA3-1 to WA3-4

Summary Log: TERTIARY 0 - 240.35 Basalt
240.35 - 241.4 Chert, clay, gravel.

CAMBRIAN 241.4 - 254.0 Basalt - Tuff.
254.0 - 254.44 CHERT
254.44 - 256.0 BRECCIA
256.0 - 264.6 KOMATIITE
264.6 - 276.1 TUFF
276.1 - 284.2 KOMATIITE

Comments:

E.O.H. 284.2m

Project WARATAH T650

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole N° WA.3.

Sheet 1 of 4

| DRILLING | | | | | | DESCRIPTIVE LOG | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Core size | From m | To | Inter-sected m | Recov-ered | % Recovery | From m | To | LITHOLOGY | MINERALISATION | Sample N° | INTERSECTION ANGLE LCA Bedding | Veins | | Other | | Petrology etc | Box N° |
| | | | | | | 0.0 | 2.0 | SOIL brown, weathered basalt chips. | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| N | | | | | | 2.0 | 16.0 | CLAY brown rounded clay balls, white clay balls, weathered basalt chips. | | | | | | | | | |
| O | | | | | | | | | | | | | | | | | |
| N | | | | | | 16.0 | 141.0 | BASALT | | | | | | | | | |
| I | | | | | | | | 16.0-18.0 Basalt, grey and light grey clay. | | | | | | | | | |
| C | | | | | | | | 18.0-46.0 Basalt, dark grey, red-brown shale chips, kaolinite, zeolite | | | | | | | | | |
| O | | | | | | | | 46.0-58.0 Basalt, pinkish, weathered | | | | | | | | | |
| R | | | | | | | | 58.0-68.0 Basalt, grey. | | | | | | | | | |
| I | | | | | | | | 68.0-72.0 Basalt, pink weathered. | | | | | | | | | |
| N | | | | | | | | 72.0-104.0 Basalt, grey | | | | | | | | | |
| G | | | | | | | | 104-110 Basalt, pinkish hinge, weathered. | | | | | | | | | |
| | | | | | | | | 110-124 Basalt, grey. | | | | | | | | | |
| | | | | | | | | 124-126 Basalt, pinkish, weathered. | | | | | | | | | |
| | | | | | | | | 126-141 Basalt, grey. | | | | | | | | | |
| | | | | | | 141.0 | 240.35 | BASALT grey, medium grained, minor interflow sediments. | | | | | | | | | 1 |
| | 141.0 | 141.6 | 0.6 | 0.35 | 58.3 | | | 141.0-141.6 Basalt, dense. | | | | | | | | | |
| | 141.6 | 148.8 | 7.2 | 1.1 | 15.2 | | | 141.6-148.1 Basalt, amygdaloidal, black iddingsite/laumontite filling | | | | | | | | | |
| | 148.8 | 150.4 | 1.6 | 1.1 | 68.8 | | | 148.1-150.49 Mudstone, light tan, minor plant fossils. | | | | | | | | | |
| N | 150.4 | 153.4 | 3.0 | 2.7 | 90.0 | | | 150.49-150.74 Basalt, pale green, weathered, vesicular, kaolinite replacing feldspar laths. | | | | | | | | | |
| Q | 153.4 | 156.4 | 3.0 | 3.0 | 100 | | | 150.74-153.98 Basalt, mauve, weathered vesicular clayey. | | | | | | | | | |
| | | | | | | | | 153.98-155.82 Basalt, dense | | | | | | | | | 2 |
| | 156.4 | 159.4 | 3.0 | 2.96 | 98.7 | | | 155.82-159.13 Basalt, pinky hinge, weathered, vesicular | | | | | | | | | |
| C | | | | | | | | 159.13-159.58 Basalt, grey-green, dense | | | | | | | | | |
| O | 159.4 | 162.4 | 3.0 | 3.0 | 100 | | | 159.58-161.06 Basalt, vesicular | | | | | | | | | |
| R | 162.4 | 165.4 | 3.0 | 3.0 | 100 | | | 161.06-167.4 Basalt, dense iddingsite/laudingsite ± phenocrysts. | | | | | | | | | 3 |
| I | 165.4 | 168.4 | 3.0 | 3.0 | 100 | | | 167.4-167.3 Basalt, grey-brown chalcedony vein | | | | | | | | | |
| N | 168.4 | 171.4 | 3.0 | 3.0 | 100 | | | 167.3-167.46 Basalt, pink, vesicular ½-1cm vugs. | | | | | | | | | |
| G | | | | | | | | 167.46-170.66 Basalt, smaller vesicles. | | | | | | | | | |
| | | | | | | | | 170.66-171.4 Basalt, vesicular. | | | | | | | | | 4 |
| | 171.4 | 174.4 | 3.0 | 3.0 | 100 | | | 171.4-173.12 Basalt, dense. | | | | | | | | | |
| | 174.4 | 177.4 | 3.0 | 3.0 | 100 | | | 173.12-175.02 Basalt, very vesicular, pink, clayey | | | | | | | | | |
| | | | | | | | | 175.02-177.0 Basalt, vesicular grey | | | | | | | | | |
| | | | | | | | | 177.0-178.23 Basalt, dense. | | | | | | | | | |

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5260082

Project WARATAH T650

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole No. WA 3.

Sheet 2 of 4

| DRILLING | | | | | | | | DESCRIPTIVE LOG | | | INTERSECTION ANGLE CA | | | | | Box No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Core size | From m | To | Intersected m | Recovered | % Recovery | From m | To | LITHOLOGY | MINERALISATION | Sample No. | Bedding | Veins | | Other cont. | feet | |
| | 177.4 | 180.4 | 3.0 | 3.0 | 100 | | | BASALT | | | | | | | | 5 |
| N | 180.4 | 183.4 | 3.0 | 3.0 | 100 | | | 178.22-180.81 Basalt, mauve, vesicular. Lam vugs. | | | | | | | | |
| Q | 182.4 | 186.4 | 3.0 | 3.0 | 100 | | | 180.81-182.57 Basalt, dense. High felsic mineral content | | | | | | | 70° | |
| | | | | | | | | 182.57-185.0 Basalt, mauve, green, vesicular. High chalcedony content. | | | | | | | | |
| C | | | | | | | | 185.0-186.25 Basalt, dense. | | | | | | | | 6 |
| O | 186.4 | 189.4 | 3.0 | 3.0 | 100 | | | 186.25-186.8 Basalt, vesicular | | | | | | | | |
| R | | | | | | | | 186.8-187.18 Basalt, mauve vesicular | | | | | | | | |
| I | | | | | | | | 187.18-187.88 Basalt, vesicular | | | | | | | | |
| N | 189.4 | 192.4 | 3.0 | 3.0 | 100 | | | 187.88-190.5 Basalt, grey-green, dense vesicle amygdales zeolite filled. | | | | | | | | |
| G | | | | | | | | 190.5-191.7 Basalt, vesicular, mauve. | | | | | | | | |
| | 192.4 | 195.4 | 3.0 | 2.86 | 95.3 | | | 191.7-193.5 Basalt, amygdaloidal, green clay | | | | | | | | 7 |
| | 195.4 | 198.4 | 3.0 | 3.0 | 100 | | | 193.5-200.5 Basalt, dense | | | | | | | | |
| | 198.4 | 201.4 | 3.0 | 2.45 | 81.7 | | | 200.5-201.96 Basalt, green, vesicular, amygdaloidal, abundant kaolinised feldspar. | | | | | | | | 8 |
| | 201.4 | 204.4 | 3.0 | 3.0 | 100 | | | 201.96-204.8 Basalt, darker, dense. | | | | | | | 75° | |
| | 204.4 | 207.4 | 3.0 | 3.0 | 100 | | | 204.8-207.5 Basalt, vesicular, amygdaloidal | | | | | | | | 9 |
| | 207.4 | 209.2 | 1.8 | 1.8 | 100 | | | 207.5-210.13 Basalt, dense | | | | | | | | |
| | 209.2 | 210.2 | 1.0 | 1.0 | 100 | | | 210.13-210.57 Basalt, pink, vesicular. | | | | | | | | |
| | 210.2 | 213.2 | 3.0 | 3.0 | 100 | | | 210.57-212.88 Basalt, vesicular, yellow zeolite | | | | | | | | |
| | | | | | | | | 212.88-213.2 Basalt, red staining, dense, fragmented at the top. | | | | | | | | |
| B | 213.2 | 213.6 | 0.4 | 0.4 | 100 | | | 213.2-214.16 Basalt, green, weathered | | | | | | | | |
| Q | 213.6 | 216.4 | 2.8 | 2.5 | 89.3 | | | 214.16-214.96 Basalt, dense, calcite vein. High chalcedony content | | | | | | | | |
| | | | | | | | | 214.96-215.03 Basalt, vein of tan colored zeolite or secondary mineral. | | | | | | | | |
| | 216.4 | 218.15 | 1.75 | 1.75 | 100 | | | 215.03-216.89 Basalt, dense, calcite veining clay fill in fracture. | | | | | | | | |
| C | | | | | | | | 216.89-217.07 Basalt, green clayey fracture fill | | | | | | | | |
| O | | | | | | | | 217.07-217.85 Basalt, dense | | | | | | | | 10 |
| R | | | | | | | | 217.85-218.15 Basalt, green, serpentinised vein, abundant calcite veining | | | | | | | | |
| I | 218.15 | 221.2 | 3.05 | 3.05 | 100 | | | 218.15-218.81 Basalt, dense, abundant calcite veining. | | | | | | | | |
| N | | | | | | | | 218.81-220.38 Basalt, dense. | | | | | | | | |
| G | | | | | | | | 220.38-220.48 Mudstone, bar. | | | | | | | | |
| | | | | | | | | 220.48-220.9 Clay, fracture fill. | | | | | | | | |
| | 221.2 | 222.4 | 1.2 | 1.2 | 100 | | | 220.9-221.7 Basalt, green mauve, weathered, clayey. | | | | | | | | |
| | | | | | | | | 221.7-222.4 Basalt, fresh vesicular. | | | | | | | | |
| | 222.4 | 224.8 | 2.4 | 2.19 | 91.3 | | | 222.4-222.9 Basalt, dense | | | | | | | | |
| | 224.8 | 228.0 | 3.2 | 3.2 | 100 | | | 222.9-224.2 Basalt, vesicular, green, clayey | | | | | | | | |
| | 228.0 | 231.15 | 3.15 | 3.15 | 100 | | | 224.2-228.4 Basalt, dense. | | | | | | | | 11 |

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526083

Project WARATAH T650

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole No. WA 3

Sheet 3 of 4

| DRILLING | | | | | | DESCRIPTIVE LOG | | | | | INTERSECTION ANGLE LCA | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Core Size | From m | To | Intersected m | Recovered | % Recovery | From m | To | LITHOLOGY | MINERALISATION | Sample No. | Bedding | Veins | | Other (FAULT) | | Petrology etc. | Box No. |
| | 231.15 | 234.2 | 3.05 | 3.05 | 100 | | | BASALT | | | | | | | | | |
| | 234.2 | 237.35 | 3.15 | 3.15 | 100 | | | 234.2 - 236.8 Basalt, vesicular, green clay | | | | | | | | | 12 |
| | | | | | | | | 236.8 - 237.35 Fracture fill, soft grey chalcedony | | | | | | | | | |
| | 237.35 | 240.35 | 3.0 | 3.0 | 100 | | | 237.35 - 239.1 Basalt, dense, 4cm zeolite vugs | | | | | | | | | |
| B | | | | | | | | 239.1 - 239.6 Basalt, vesicular, amygdaloidal, zeolites | | | | | | | | | |
| Q | | | | | | | | 239.6 - 240.35 Basalt, dense | | | | | | | | | |
| | | | | | | | | TERTIARY SEDIMENTS | | | | | | | | | |
| | 240.35 | 241.4 | 1.05 | 0.24 | 22.9 | 240.35 | 241.4 | 240.35 - 241.4 Coal, clay and chert pebbles | | | | | | | | | |
| | | | | | | | | CAMBRIAN BASALTS | | | | | | | | | |
| | 241.4 | 243.35 | 1.95 | 0.2 | 10.3 | 241.4 | 251.6 | 241.4 - 251.6 Basalt, greeny brown, very weathered, oxide staining | | BE 5043 | | | | | | | |
| C | 243.35 | 244.25 | 0.9 | 0.14 | 15.6 | | | | | | | | | | | | |
| O | 244.25 | 246.4 | 2.15 | 1.98 | 92.0 | | | | | | | | | | | | |
| R | 246.4 | 247.2 | 0.8 | 0.8 | 100 | | | | | BE 5042 | | | | | | | |
| I | 247.2 | 248.4 | 1.2 | 1.0 | 83.3 | | | | | | | | | | | | |
| N | 248.4 | 249.3 | 0.9 | 0.6 | 66.7 | | | | | | | | | | | | |
| G | 249.2 | 251.4 | 2.1 | 0.54 | 25.7 | | | TUFF | | | | | | | | | 13 |
| | 251.4 | 252.0 | 0.6 | 0.6 | 100 | 251.6 | 258.0 | 251.6 - 252.0 Basaltic lava, dark green, serpentinized | | | | | | | | | |
| | 252.0 | 254.0 | 2.0 | 2.0 | 100 | | | 252.0 - 254.0 Tuff, dark green, breccia, very fine grained | | | | | | 25° | | WA3-1 252.9m | |
| | | | | | | 254.0 | 254.44 | CHERT | | BE 5044 | | | | | | | |
| | 254.0 | 257.0 | 3.0 | 2.9 | 96.7 | | | 254.0 - 254.44 Chert, green, very fine grained, layering defined by grainsize, serpentinized | | | | | | | | | |
| | | | | | | 254.44 | 256.0 | BRECCIA | | | | | | | | | |
| | | | | | | | | 254.44 - 256.0 Breccia, dark green fragments of chert in black veins | | BE 5045 | | | | | | | |
| | | | | | | 256.0 | 264.6 | KOMATIITE | | | | | | | | | |
| | 257.0 | 259.8 | 2.8 | 2.51 | 89.6 | | | 256.0 - 264.6 Komatiite, dark green, fine grained matrix, chlorite-serpentine rich, | | BE 5046 | | | | | | | |
| | 259.8 | 261.45 | 1.65 | 1.25 | 75.8 | | | relic phenocrystic texture, abundant veinlets. | | | | | | | | | |
| | 261.45 | 262.9 | 1.45 | 1.22 | 84.1 | | | | | BE 5047 | | | | | | | |
| | 262.9 | 263.0 | 0.1 | 0.1 | 100 | | | | | | | | | | | WA3-2 262.93 | |
| | | | | | | | | TUFF | | BE 5048 | | | | | | | |
| | 263.0 | 267.1 | 4.1 | 4.07 | 99.3 | 264.6 | 276.1 | 264.6 - 276.1 Tuff, dark green, 4-5cm size fragments of basalt, some amygdaloidal, angular, fragmented grandmoos, minor calcite veining | | | | 5° | | | | | |

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526084

Project: JARATAH T650

THE BROKEN HILL PROPRIETARY CO. LTD.

Drillhole N°: WA 3.

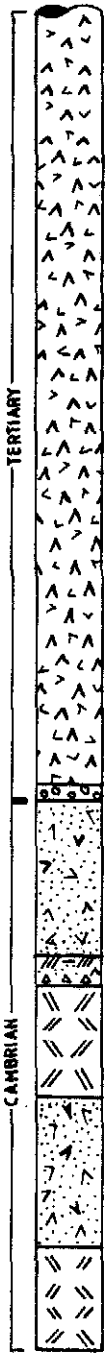
Sheet 4 of 4

| DRILLING | | | | | | DESCRIPTIVE LOG | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Core size | From m | To | Inter-sected m | Recov-ered | % Recovery | From m | To | LITHOLOGY | MINERALISATION | Sample N° | INTERSECTION ANGLE LCA Bedding | Veins | | Other | | Petrologs etc | Box N° |
| B | 267·1 | 270·2 | 3·1 | 3·1 | 100 | | | | | | | | | | | | |
| Q | 270·2 | 273·55 | 3·35 | 3·33 | 99·4 | | | | | BE 3049 | | | | | | WA3-3 273·96 | 15 |
| | | | | | | 276·1 | 284·2 | KOMATIITE | | | | | | | | | |
| C | 273·55 | 276·35 | 2·8 | 2·8 | 100 | | | 276·1 - 284·2 Komatiite, dark green, fine grained matrix, serpentine rich, abundant calcite veining, abundant pyroxenes and chromitite porphyritic, peridotitic. Relict phenocrystic olivine textures. | | BE 3050 | | | | | | | |
| O | 276·35 | 278·85 | 2·5 | 2·5 | 100 | | | | | | | | | | | | |
| R | 278·85 | 279·35 | 0·5 | 0·5 | 100 | | | | | | | | | | | | |
| I | 279·35 | 279·9 | 0·6 | 0·53 | 88·3 | | | | | BE 3051 | | | | | | | |
| N | 279·9 | 282·4 | 2·5 | 2·5 | 100 | | | | | | | | | | | WA3-4 282·3 | 16 |
| G | 282·4 | 283·1 | 0·7 | 0·7 | 100 | | | | | | | | | | | | |
| | 283·1 | 283·2 | 0·1 | 0·1 | 100 | | | | | | | | | | | | |
| | 283·2 | 283·8 | 0·5 | 0·5 | 100 | | | | | | | | | | | | |
| | 283·8 | 284·2 | 0·4 | 0·4 | 100 | | | E.O.H. 284·2m. | | | | | | | | | |

085

526085

RL 640m




Basalt, grey, medium grainsize, minor interflow sediments, approximately 20 flows below 141metres. Average thickness 4·8 metres.

Sediments, coal, clay, chert pebbles

Basalt, greeny brown, weathered, oxidised.

Sediments, dark green cherty, fine grained, brecciated base.

Komatiite, dark green, fine grained matrix, chlorite-serpentinite rich.

Tuff, dark green, 4-5cm basalt fragments.

Komatiite, dark green, fine grained matrix.

| Sample No | Interval | | Cu | Pb | Zn | Ag | As | Sn | W |
|---|---|---|---|---|---|---|---|---|---|
| BE 5042 | 241·4 | 246·4 | 205 | - | 295 | - | - | 3 | - |
| BE 5043 | 246·4 | 252·0 | 110 | 5 | 145 | - | - | - | - |
| BE 5044 | 252·0 | 254·4 | 115 | 5 | 130 | - | - | 3 | - |
| BE 5045 | 254·4 | 256·0 | 85 | - | 85 | - | - | - | - |
| BE 5046 | 256·0 | 261·5 | 65 | - | 70 | - | - | - | - |
| BE 5047 | 261·5 | 264·6 | 65 | 5 | 70 | - | - | - | - |
| BE 5048 | 264·6 | 270·2 | 110 | 10 | 105 | - | - | - | - |
| BE 5049 | 270·2 | 276·1 | 120 | 5 | 95 | - | 50 | - | - |
| BE 5050 | 276·1 | 279·4 | 55 | - | 70 | - | - | - | - |
| BE 5051 | 279·4 | 284·2 | 60 | - | 65 | - | - | - | - |

TD 284·2metres

Vertical scale 1:500

5 cm

Centre HOBART

Date 9-5-83

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILL HOLE WA3 (ANOMALY D)

GRAPHIC LOG AND GEOCHEMISTRY RESULTS

Project No. T650

Drawing No.