

DRILL CORE RECORD

35 192

HOLE NO: SCS 2
STATE : TASMAN

| | | |
|-------------|------------------|----------------------------------------------------------------|
| PROJECT | SOCK CREEK SOUTH | PURPOSE |
| DESIGNED BY | J.G. PURVIS | TO TEST UTEM/SIROTEM ANOMALY CENTERED 50M BENEATH 5200N/2315E. |
| LOGGED BY | J.G. PURVIS | |
| COMMENCED | 27.4.88 | |
| COMPLETED | 4.5.88 | |

| | |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LOG SUMMARY | QUARTZ-FELDSPAR PORPHYRY AND BASALT WERE INTERSECTED IN THE UPPER PART OF THE HOLE, WHICH THEN PASSED THROUGH WEAKLY-MINERALISED SEDIMENTS AND ENDED IN DIABTIC LAVAS AND BRECCIA. THE EM ANOMALY PLOTS WITHIN THE BASALT UNIT CLOSE TO CONTACT WITH WEAKLY-SULPHIDIC SEDIMENTS. |
| GENERAL COMMENTS | |

ASSAY SUMMARY

| INTERVAL | | Cu | Pb | Zn | Ag | Au | As | Ba | COMMENTS | | | | | | | | | | | | |
|----------|-------|---------------------|------|------|-----|------|----|------|-------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| From | To | BEST INTERSECTIONS: | | | | | | | | | | | | | | | | | | | |
| 83.75 | 85.0 | 20 | 1120 | 4950 | 1.1 | 0.01 | 28 | 1280 | | | | | | | | | | | | | |
| 122.0 | 123.5 | 12 | 105 | 3150 | 0.2 | 0.03 | 28 | 290 | BLACK TUFF-SHALE WITH DISSEMINATED SULPHIDE BLACK SILTSTONE WITH 2-3% SULPHIDES. | | | | | | | | | | | | |

LOCATION

| | |
|----------|--------|
| NORTHING | 5200m |
| EASTING | 2282m |
| R.L. | |
| GRID | LOCAL |
| LENGTH | 148.5m |

HOLE CONDITION

| SIZE | |
|-----------|--------|
| Hole Size | Depth |
| HQ | 6m |
| HQ | 78.3m |
| NQ | 148.5m |

| SIGNIFICANT CORE LOSS INTERVALS | | |
|---------------------------------|----|--------|
| From | To | % Lost |
| | | |
| | | |
| | | |
| | | |
| | | |

| POOR GROUND CONDITION ZONES | | |
|-----------------------------|-------|-------------------------------------------|
| From | To | Condition |
| 0 | 75.6m | GENERALLY BADLY BROKEN WITH CLAYEY ZONES. |
| | | |
| | | |
| | | |
| | | |

HOLE CONDITIONS AFTER COMPLETION

50mm ID PLASTIC CASING FROM COLLAR TO BOTTOM OF HOLE.

3m STEEL STEM PIPE (HQ ROD) WITH CAP, PLACED IN TOP OF HOLE.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type) = MAGNETIC.

| SURVEY | | | INTERVAL | | | VERTICAL | | | HORIZONTAL | | | SURVEY | | | INTERVAL | | | VERTICAL | | | HORIZONTAL | | |
|--------|------------|----------|----------|----|----------|-----------|------|-----------|------------|-------|---------|--------|------|----|----------|-----------|------|-----------|------------|--|------------|--|--|
| Depth | Bearing | Dip | From | To | Distance | D Sin Dip | R.L. | O Cos Dip | Prog Total | Depth | Bearing | Dip | From | To | Distance | D Sin Dip | R.L. | O Cos Dip | Prog Total | | | | |
| 0.1m | 120° M | -58° 30' | | | | | | | | | | | | | | | | | | | | | |
| 3m | 121° M | -59° 30' | | | | | | | | | | | | | | | | | | | | | |
| 5m | 119° M | -60° | | | | | | | | | | | | | | | | | | | | | |
| 7m | 119° M | -60° | | | | | | | | | | | | | | | | | | | | | |
| 15m | 120° 30' M | -60° | | | | | | | | | | | | | | | | | | | | | |
| 15m | 122° 15' M | -60° | | | | | | | | | | | | | | | | | | | | | |

61 3 8107722; # 1
0047125459
4:35PM ;
10- 4-91
SENT BY: BHP EXPL QUEENSTOWN

PROJECT: SOCK CREEK SOUTH DRILL CORE LOG AND ASSAY DATA

SENT BY: BHP EXPL QUEENSTOWN ; 10- 4-91 4:38PM ; 004712545+ 61 3 8107722: # 3

| INTERVAL | RECOVERY | | DESCRIPTION | ASSAY DATA (COMLABS - DESPATCH N° 1184) | | | | | | | | | | | | | | | | |
|----------|----------|--------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-------|-----|----|------|------|------|-------|----|------|--|--|--|--|--|
| | From | To (m) | | Rec % | Cu | Pb | Zn | Ag | Au | As | Ba | | | | | | | | | |
| | | | Frags in silic matrix. | | | | | | | | | | | | | | | | | |
| 6 | 79.9m | 4.1 | 95 | FINE LITHIC BRECCIA / SANDSTONE Dark grey-green. Only if broken. Abund fgr silic lithics (mainly tuffs and clasts) up to 25mm, in matrix of sandy lithic feld xyl and tuff-sediment. Clasts have been stretched by mud solution deformation, and some appear to have been soft and not lithified when emplaced. Schistosity SS/LCA. Weakly sericitized. Bedded: 65°/LCA @ 77m; 70°/LCA @ 79.2m; 1-3% py-sph > sp-gr. Trace cp. Some in veins, esp the sp-gr. Basal contact irreg. | 7761 | 75.5 | 76.5 | 80 | 28 | 92 | 185 | <0.1 | 0.04 | 38 | 1440 | | | | | |
| | | | | | 7762 | 76.5 | 77.5 | 100 | 28 | 210 | 330 | 1.0 | <0.01 | 54 | 1120 | | | | | |
| | | | | | 7763 | 77.5 | 78.5 | 85 | 38 | 380 | 980 | 1.2 | 0.01 | 44 | 1200 | | | | | |
| | | | | | 7764 | 78.5 | 79.5 | 85 | 38 | 1040 | 2150 | 1.3 | <0.01 | 44 | 1400 | | | | | |
| 9 | 89.55m | 9.45 | 99 | TUFF-SHALE Dark greenish-grey to black. fgr. Gen unbroken. Weakly carbonaceous. Sericitic. Bedded (70°/LCA @ 81.5m; 70°/LCA @ 83.75m). Some irreg bedding due to silt-red deformation. At 83.2m graded bedding indicated facing up-hole. Minor siltstone and sandstone interbeds. Below 85.5m intervals of feld xyl ± lithic tuff (often silic) and zone 86.75-88.5m of silic feld xyl-lithic breccia similar to unit below. 79.9-83.75m: 1-3% py-sph > sp-gr. Trace cp. Py mainly as ultra fgr disse. Sp commonly in carb veins // to LCA. 83.75-85m: 3-5% sp > py. Trace cp, ga & po. Sp disse. + in carbonate-sericitic veins at all angles. 85-89.55m: 1-2% sp-sph. Basal contact irreg bedding SS/LCA. | 7765 | 79.5 | 81.0 | 100 | 16 | 680 | 1480 | 0.9 | <0.01 | 26 | 910 | | | | | |
| | | | | | 7766 | 81.0 | 82.5 | 93 | 24 | 550 | 1100 | 1.1 | 0.01 | 26 | 1360 | | | | | |
| | | | | | 7767 | 82.5 | 83.75 | 100 | 50 | 280 | 340 | 1.2 | 0.01 | 44 | 1060 | | | | | |
| | | | | | 7768 | 83.75 | 85.0 | 100 | 20 | 1120 | 4950 | 1.1 | 0.01 | 28 | 1280 | | | | | |
| | | | | | 7769 | 85.0 | 86.5 | 100 | 10 | 150 | 910 | <0.1 | 0.01 | 30 | 980 | | | | | |
| | | | | | 7770 | 86.5 | 88.0 | 100 | 12 | 105 | 1380 | <0.1 | <0.01 | 14 | 440 | | | | | |
| | | | | | 7771 | 88.0 | 89.55 | 100 | 7 | 80 | 280 | 1.2 | 0.03 | 16 | 950 | | | | | |
| 85 | 132.0m | 32.15 | 99 | DACITIC LAVA BRECCIA AND FLOW-BANDED DACITIC LAVA Dark greenish-grey and pale red, E zones of creamy grey (lava). Strongly silicified with patchy strong albitisation, sericitisation and chloritisation. Gen unbroken. Breccia (silic + alb) comprising angular, irreg & often diffuse | 7772 | 89.55 | 91.0 | 100 | 13 | 56 | 1060 | <0.1 | 0.02 | 10 | 450 | | | | | |
| | | | | | 7773 | 91.0 | 92.5 | 100 | 6 | 18 | 810 | 1.1 | 0.02 | 11 | 300 | | | | | |
| | | | | | 7774 | 92.5 | 94.0 | 100 | 11 | 10 | 860 | <0.1 | <0.01 | 14 | 195 | | | | | |

PROJECT: SOCK CREEK SOUTH DRILL CORE LOG AND ASSAY DATA

SENT BY: BHP EXPL QUEENSTOWN : 10- 4-91 4:39PM : 004712545-# 4 61 3 8107722: # 4

| INTERNAL | | RECOVERY | | DESCRIPTION | ASSAY DATA | | | | | | | | | | |
|----------|--------|----------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------|--------|-------|----|-----|------|------|-------|----|-----|
| # | To | m | % | | Sample No | From | To (m) | Rec % | Cu | Pb | Zn | Ag | Au | As | Ba |
| | | | | feld-phyric lava clasts at 10-20mm rarely + 50mm in siliceous matrix, extends to 97m where it grades into massive flow-banded dacite (silt, the rest). Lava contains euhedral white or pink felds at 2mm, and is flow banded. Clasts in breccia are identical. At 114-3m lava passes abruptly back into lava breccia with black shale matrix becoming inc common below 118m. Some minor shale matrix from 89-55-91-5m also. (Unit appears to be lava flow with autoassociated margins). At 102-3m flow banding 55%/LCA. 89-55-94m: 1% sp & py. Inc & depth. 94-114-3m: Trace disten + fuchite - filling py & sp. 114-3-120m: 1-2% py & sp. Mainly in matrix & breccia. 20-122m: 2% sp & py. Inc & depth. In both matrix & clasts. | 7775 | 114-0 | 116-0 | 100 | 8 | 60 | 520 | <0.1 | 0.02 | 13 | 400 |
| | | | | | 7776 | 116-0 | 118-0 | 100 | 7 | 12 | 155 | <0.1 | <0.01 | 15 | 240 |
| | | | | | 7777 | 118-0 | 120-0 | 100 | 9 | 56 | 290 | <0.1 | <0.01 | 18 | 155 |
| | | | | | 7778 | 120-0 | 122-0 | 85 | 9 | 115 | 1720 | <0.1 | <0.01 | 17 | 135 |
| D | 123-5m | 1-5 | 100 | SILTSTONE It grey to black. Unbedded. Goes massive and uniform fairly hard & silic. It color mostly chlorite with probably minor carbonaceous matter. Mod chloritized. Bedding 65%/LCA @ 122-5m. Basal 300mm contains some interbedded material @ unit beneath. 2-3% sp, minor py. Disten + veinlets ± gr-carb. Basal contact abrupt - bedding @ 65%/LCA. | 7779 | 122-0 | 123-5 | 100 | 12 | 105 | 3150 | 0.2 | 0.03 | 28 | 290 |
| S | 133-85 | 10-35 | 100 | ALTERED GLASSY VOLCANICLASTIC (HYALOCLASTIC?) Lab. Uniq green and orange. Densely packed angular, irtra & stretched clasts and shards of glass with characteristic fine wavy banding (opusca?), with lesser clasts of kft and fibs. Glass bags are highly sensitized and bleached, lava clasts altered in place, esp 126.2-129.5m, and in zones to 1m thick below this. Lava clasts at <10mm, max 10mm, of dacite composition, have marked internal shattering suggestive of cold water quenching while hot. | 7780 | 123-5 | 125-0 | 100 | 18 | 88 | 330 | 0.7 | 0.03 | 84 | 790 |
| | | | | | 7781 | 125-0 | 126-5 | 100 | 14 | 28 | 70 | 0.2 | <0.01 | 16 | 610 |
| | | | | | 7782 | 126-5 | 128-0 | 100 | 10 | 18 | 64 | <0.1 | 0.01 | 15 | 850 |
| | | | | | 7783 | 128-0 | 129-5 | 100 | 12 | 20 | 80 | 0.1 | 0.01 | 14 | 660 |
| | | | | | 7784 | 129-5 | 131-0 | 100 | 12 | 42 | 155 | 0.2 | 0.01 | 17 | 750 |
| | | | | | 7785 | 131-0 | 132-5 | 100 | 14 | 14 | 40 | 0.1 | 0.01 | 15 | 660 |
| | | | | | 7786 | 132-5 | 134-0 | 100 | 15 | 70 | 210 | <0.1 | 0.01 | 13 | 670 |

| INTERNAL | | RECOVERY | | DESCRIPTION | ASSAY DATA | | | | | | | | |
|----------|--------|----------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------|----|-------|--|--|--|--|--|
| 1 | 2 | 3 | 4 | | Sample No | From | To | Rec % | | | | | |
| | | | | <p>High schistose deformation (40°/LCH @ 125.3m; 55°/LCH @ 128m). Locally broken, esp above 126m and around fault @ 130.5m. Occ. qb-chlor veins. 123.5 - 127m: 1-3% py - mainly reflecting small clasts 127 - 133.95m: 1% py, dec. depth. Gradual change at base.</p> | | | | | | | | | |
| 135 | 133.5m | 133.5m | 100 | <p>DACITE LAVA BRECCIA dk greenish-grey and orange. Unbroken. Abund. angular and irreg. lava clasts (flow-banded, very glassy, sometimes feld-phonic) to 100mm, at 10-20° to clasts at all angles - no clear orientation. Matrix comprises densely packed glassy clasts and shards, and small lava frags, esp. in unit above. Pale lime green, highly sericitic; matrix becomes much less abund. with depth, esp. below 138m. Lava clasts are abundant - silic - ser. Some silic of matrix at depth. Fairly strong deformation of matrix. No sulphides.</p> | | | | | | | | | |
| | | | | <p>END OF HOLE</p> | | | | | | | | | |

61 3 8107722; # 5
 004712545
 4:40PM ;
 10-4-91
 SENT BY: BHP EXPL QUEENSTOWN