

DIAMOND DRILL RECORD

| | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------------------------|--------|--------|---|------|--------|-----------|---|--|--|--|--|--|--|--|--|--|--|--|--|
| Hole Number | JP1 | | | | | | | Purpose | | | | | | | | | | | | |
| Location | EL 9/66 | | | | | | | TO TEST FOR DEPTH EXTENSION TO MINERALISATION IN THE JUKES PTY ADITS ABOUT 100 M NORTH OF I.N.A.L. DRILL HOLE Z142003. | | | | | | | | | | | | |
| | JUKES PTY GRID | | | | | | | | | | | | | | | | | | | |
| | Grid Co-ordinates | | | | | | | | | | | | | | | | | | | |
| A.M.C. Co-ordinates | 35m of line 400 N, 1280 E | | | | | | | | | | | | | | | | | | | |
| | 8331 047 mN 383 606 mE | | | | | | | | | | | | | | | | | | | |
| Collar R.L. | 601 m | | | | | | | | | | | | | | | | | | | |
| Length | 141.5 m | | | | | | | | | | | | | | | | | | | |
| Survey Depth | 00 | 49m | 79m | 109m | 124m | 139m | | | | | | | | | | | | | | |
| Bearing A.M.C. | 292° | 291° | 291° | 291° | 294° | 295° | | | | | | | | | | | | | | |
| Inclination | -70° | -68.5° | -68.5° | -66° | -67° | -64.5° | | | | | | | | | | | | | | |
| Rod Size | HJ 0-3m | | | | | | | Comments MINOR CHALCOPYRITE MINERALISATION IN ALTERED TUFFS/GRITS IN THE FOOTWALL OF THE JUKES PTY FAULT. <i>Best Assay: 2m of 0.53% Cu, 3 g/t Ag (102-104m)</i> | | | | | | | | | | | | |
| | NQ 3-27m | | | | | | | | | | | | | | | | | | | |
| | BQ 27-141.5m | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| Machine | MINDRILL F 30 | | | Contractors: Associated Diamond Drillers - Zeehan | | | | | | | | | | | | | | | | |
| Logged by | M. J. HUTTON | | | | | | | | | | | | | | | | | | | |
| 1:500 Plans | | | | | | | | | | | | | | | | | | | | |
| 1:500 Sections | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | Commenced | 15TH APRIL, 1982 | | | | | | | | | | | | |
| | | | | | | | Completed | 20TH APRIL, 1982 | | | | | | | | | | | | |

749268

THE MOUNT LYELL MINING AND RAILWAY COMPANY LIMITED

APPENDIX O Continued

| ADVANCE | | RECOVERY | | ROD | | ASSAYS | | | | | | | | | | MAGNETIC SUSCEPTIBILITY | | | | | | |
|---------|-------|----------|-----|------|-----|--------|-------|-----|------|----|-----|----|-----|------|-----|-------------------------|-----|-------|---------|-------|-----|--|
| From | To | m | % | m | % | From | To | m | Cu | Pb | Zn | Ag | S% | Mn | Co | Five Assay | | Depth | MS | Depth | MS | |
| | | | | | | | | | | | | | | | | Au | Ag | | | | | |
| 0.0 | 3.0 | 0.90 | 30 | 0.29 | 10 | 0 | 10 | 5 | 50 | 20 | 10 | - | - | 270 | - | | | 0 | No | 95 | 3.6 | |
| | 5.5 | 2.10 | 84 | 1.80 | 72 | | 15 | 5 | 180 | 10 | 20 | - | 0.2 | 1100 | - | | | ↓ | reading | 96 | 5.0 | |
| | 8.5 | 2.60 | 83 | 1.30 | 43 | | 20 | 5 | 220 | 20 | 10 | - | 0.2 | 930 | - | | | 10 | 0 | 97 | 1.4 | |
| | 11.5 | 2.65 | 88 | 1.48 | 49 | | 25 | 5 | 40 | - | 10 | - | - | 930 | - | | | | | 98 | 0.4 | |
| | 14.5 | 2.77 | 92 | 1.78 | 59 | | 30 | 5 | 20 | 10 | 20 | - | 0.1 | 1000 | - | | | | | 99 | 0.7 | |
| | 17.5 | 1.90 | 63 | 0.30 | 10 | | 35 | 5 | 20 | - | 10 | - | - | 1050 | - | | | | | 100 | 0.6 | |
| | 20.5 | 2.00 | 67 | 1.07 | 36 | | 40 | 5 | 20 | - | - | - | - | 1200 | - | | | | | 101 | 0.3 | |
| | 23.5 | 2.45 | 82 | 1.35 | 45 | | 45 | 5 | 20 | - | - | - | 0.1 | 1000 | - | | | | | 102 | 1.6 | |
| | 26.5 | 2.45 | 98 | 1.84 | 61 | | 50 | 5 | 20 | - | - | - | - | 1100 | - | | | | | 103 | 2.8 | |
| | 27.0 | 0.50 | 100 | 0.48 | 96 | | 55 | 5 | 30 | 40 | - | - | - | 1000 | - | | | ↓ | ↓ | 104 | 1.0 | |
| | 29.5 | 1.75 | 70 | 0.86 | 34 | | 60 | 5 | 50 | 10 | 20 | - | 0.1 | 1700 | - | | | 27 | 0 | 105 | 4.3 | |
| | 32.5 | 3.00 | 100 | 1.83 | 61 | | 65 | 5 | 190 | 20 | 20 | - | 0.4 | 1100 | 20 | | | 28 | 0.2 | 106 | 2.7 | |
| | 35.5 | 3.00 | 100 | 1.74 | 58 | | 68 | 3 | 920 | 10 | 100 | - | 0.3 | 1050 | 20 | | | 29 | 0 | 107 | 1.3 | |
| | 38.5 | 3.00 | 100 | 1.86 | 62 | | 70 | 2 | 600 | - | 110 | - | - | 1650 | - | | | | | 108 | 2.9 | |
| | 41.5 | 2.90 | 97 | 0.94 | 31 | | 72 | 2 | 180 | - | 100 | - | 0.1 | 2100 | 10 | | | | | 109 | 1.8 | |
| | 44.5 | 2.75 | 92 | 1.19 | 40 | | 77 | 5 | 110 | 40 | 80 | - | - | 1400 | - | | | | | 110 | 2.5 | |
| | 47.5 | 2.77 | 92 | 1.31 | 44 | | 82 | 5 | 520 | 30 | 80 | - | 0.1 | 2700 | - | | | ↓ | ↓ | 111 | 2.0 | |
| | 50.5 | 2.42 | 81 | 0.39 | 13 | | 87 | 5 | 520 | - | 120 | - | 0.2 | 3200 | 10 | | | 65 | 0 | 112 | 3.2 | |
| | 53.5 | 2.45 | 98 | 1.51 | 50 | | 92 | 5 | 40 | - | 110 | - | - | 8400 | 10 | | | 66 | 1.0 | 113 | 1.5 | |
| | 56.5 | 2.45 | 98 | 2.03 | 68 | | 98 | 2 | 30 | - | 80 | - | 0.1 | 2600 | 20 | | | 67 | 1.0 | 114 | 3.0 | |
| | 59.5 | 3.00 | 100 | 1.53 | 52 | | 96 | 2 | 120 | 20 | 20 | - | - | 2500 | 20 | | | 68 | 1.2 | 115 | 4.3 | |
| | 62.5 | 2.45 | 98 | 0.78 | 26 | | 91 | 2 | 250 | 30 | 220 | - | 0.3 | 2700 | 20 | | | 69 | 0.9 | 116 | 2.2 | |
| | 65.5 | 2.90 | 97 | 0.31 | 10 | | 100 | 2 | 700 | 20 | 220 | - | 0.1 | 2800 | 220 | 0.1 | 0.3 | 70 | 1.5 | 117 | 2.4 | |
| | 68.5 | 3.00 | 100 | 1.81 | 60 | | 102 | 2 | 2800 | 20 | 220 | - | 0.7 | 2200 | 100 | - | 0.6 | 71 | 1.0 | 118 | 1.4 | |
| | 71.5 | 3.00 | 100 | 2.15 | 72 | | 104 | 2 | 5200 | 30 | 220 | 3 | 0.8 | 2100 | 90 | - | 1.4 | 72 | 0.8 | 119 | 2.1 | |
| | 74.5 | 3.00 | 100 | 2.43 | 81 | | 106 | 2 | 220 | 20 | 210 | - | 0.2 | 2200 | 60 | - | - | 73 | 1.4 | 120 | 1.7 | |
| | 77.5 | 2.95 | 98 | 1.61 | 54 | | 108 | 2 | 1000 | 20 | 240 | - | 0.2 | 2400 | 40 | - | 0.2 | 74 | 0.5 | 121 | 3.7 | |
| | 80.5 | 3.00 | 100 | 2.37 | 79 | | 110 | 2 | 280 | 20 | 240 | - | 0.3 | 1500 | 60 | | | 75 | 1.6 | 122 | 0.3 | |
| | 83.5 | 2.45 | 98 | 2.60 | 87 | | 112 | 2 | 720 | 40 | 220 | - | 0.5 | 1500 | 90 | | | 76 | 1.2 | 123 | 2.2 | |
| | 86.5 | 3.00 | 100 | 1.84 | 61 | | 117 | 5 | 670 | 50 | 220 | 2 | 0.9 | 1050 | 190 | - | 0.5 | 77 | 0.2 | 124 | 2.2 | |
| | 89.5 | 3.00 | 100 | 1.66 | 55 | | 122 | 5 | 520 | 40 | 220 | - | 0.6 | 1750 | 140 | - | - | 78 | 0 | 125 | 2.4 | |
| | 92.5 | 3.00 | 100 | 3.00 | 100 | | 127 | 5 | 1050 | 40 | 220 | 2 | 0.4 | 1850 | 90 | - | 0.3 | 79 | 2.0 | 126 | 2.0 | |
| | 95.5 | 3.00 | 100 | 2.43 | 81 | | 132 | 5 | 220 | 20 | 240 | - | 0.4 | 1200 | 40 | | | 80 | 1.2 | 127 | 1.7 | |
| | 98.5 | 3.00 | 100 | 1.85 | 62 | | 137 | 5 | 220 | 20 | 240 | - | 0.2 | 1150 | 20 | | | 81 | 0.6 | 128 | 1.7 | |
| | 101.5 | 3.00 | 100 | 2.52 | 84 | | 141.5 | 4.5 | 150 | 40 | 220 | - | 0.2 | 1900 | 10 | | | 82 | 1.2 | 129 | 2.6 | |
| | 104.5 | 3.00 | 100 | 2.08 | 69 | | | | | | | | | | | | | 83 | 0.9 | 130 | 2.1 | |
| | 107.5 | 3.00 | 100 | 2.32 | 77 | | | | | | | | | | | | | 84 | 0.5 | 131 | 1.7 | |
| | 110.5 | 3.00 | 100 | 2.59 | 86 | | | | | | | | | | | | | 85 | 2.1 | 132 | 2.5 | |
| | 113.5 | 2.45 | 98 | 1.83 | 61 | | | | | | | | | | | | | 86 | 1.4 | 133 | 1.9 | |
| | 116.5 | 2.40 | 93 | 1.61 | 54 | | | | | | | | | | | | | 87 | 5.0 | 134 | 2.2 | |
| | 119.5 | 2.45 | 98 | 1.17 | 39 | | | | | | | | | | | | | 88 | 3.4 | 135 | 3.4 | |
| | 122.5 | 3.00 | 100 | 1.57 | 52 | | | | | | | | | | | | | 89 | 3.2 | 136 | 2.2 | |
| | 125.5 | 3.00 | 100 | 2.33 | 78 | | | | | | | | | | | | | 90 | 6.5 | 137 | 2.3 | |
| | 128.5 | 3.00 | 100 | 1.29 | 43 | | | | | | | | | | | | | 91 | 2.8 | 138 | 2.7 | |
| | 131.5 | 3.00 | 100 | 2.16 | 72 | | | | | | | | | | | | | 92 | 0.4 | 139 | 1.8 | |
| | 134.5 | 3.00 | 100 | 1.81 | 60 | | | | | | | | | | | | | 93 | 0.3 | 140 | 1.6 | |
| | 137.5 | 3.00 | 100 | 1.60 | 53 | | | | | | | | | | | | | 94 | 0.8 | 141 | 1.7 | |
| | 140.5 | 3.00 | 100 | 1.20 | 40 | | | | | | | | | | | | | | | | | |
| | 141.5 | 1.00 | 100 | 0.68 | 68 | | | | | | | | | | | | | | | | | |

Detection limits : 10ppm Cu, Pb, Zn, Mn, Co
 2ppm Ag (AAS)
 0.1% S
 - = less than detection limit
 n = not assayed

| DESCRIPTION | | REMARKS |
|-------------|--|-------------------------------|
| 0.0 | Collar - AMG co-ordinates: 5331047 mN 383616 mE Bearings: 292°. Incline: -70°. | |
| | PALE GREEN SHEARED CRYSTAL-VITRIC-LITHIC TUFF/GRIT | EASTERN SEQUENCE |
| | Lithology: Foliated volcanic with primary textures largely destroyed by shearing and weathering but it may have been a crystal-vitric-lithic tuff or quartz grit derived from volcanic rocks. Quartz grains up to 4mm diameter, with overgrowths aligned along the foliation, are scattered throughout a pale green sericitic matrix. Dark green flecks, up to 3mm diameter, now comprised of chlorite-sericite, may have been feldspar phenocrysts, based on subhedral crystal shapes, and are locally abundant. The rock has a brecciated appearance in places. The proportion of lithic fragments increases downhole, especially towards the base of the unit. | |
| | Structure: Weathering extends to 9.5m, and thereafter in patches associated with more intensive fracturing and broken core. The zones of fresh rock are reasonably competent. The foliation occurs at about 10°-20° to the core axis. | |
| 61.3m | STRONGLY SHEARED LIGHT GREY ?CRYSTAL-LITHIC TUFF | JUKES PTY FAULT ZONE |
| | Lithology: Strongly sheared and broken rock which appears to have originally been a crystal-lithic tuff similar to the above unit. | |
| | Structure: A shear zone which has locally produced a mylonitic appearance. The core is highly broken. Shearing is at about 20°-30° to the core axis. | |
| 65.8m | DARK GREEN/PINK LITHIC-CRYSTAL TUFF/AGGLOMERATIC QUARTZ GRIT | BASAL EASTERN SEQUENCE |
| | Lithology: Sheared and brecciated, chloritised lithic-crystal tuffs/quartz grits with fragments of pink felsic lavas up to cobble size and quartz grains up to 5mm diameter. These are set in a dark green-grey chloritic-sericitic matrix. There are also some fragments of orange quartz- ?feldspar porphyritic ?crystal tuff. Relative proportions of crystal and lithic fragments vary considerably which may suggest a mixture of epiclastic and pyroclastic material. | |
| | Structure: Competency is variable, some highly broken zones, with partings along shear planes and fractures coated with ? carbonate and sulphides, occur locally within a reasonably competent unit which does not show a structural weakness associated with the foliation. There are zones containing irregularly-shaped ? tension gashes filled with ? carbonate-sericite + sulphides (mainly between 77.3-89.3m, 100.5-107.0m and 122.8-126.0m). | |
| | Mineralisation: 66.3- 71.0m Trace of disseminated and veinlet chalcopyrite-pyrite. 96.3-141.5m Minor scattered blebs and fine-grained disseminated pyrite. Trace of veinlet chalcopyrite, commonly associated with carbonate veinlets. Chalcopyrite more intense 98.5-104.0m | |
| 141.5m | END OF HOLE. | |