

Rock chips were taken randomly over an area about 5m diameter around the pegs. Sample preparation and assaying for Cu, Pb, Zn, Ag, Mn, Co and Fe by AAS were carried out at Mt. Lyell. Sections of lines over I.P. anomalies were also fire assayed for Ag-Au (Table 20).

Soil and rock chip assay results for Cu, Pb and Zn are shown in figure 16, and rock chip assays for Fe and Ag-Au fire assay are shown in Figure 67. The distributions of Cu, Pb, Zn and Fe assays are shown in Figures 68 to 71 and summarised in Table 21.

Anomalous assays (Figure 72) are closely associated with the major prospects, the Jukes Pty adits and the King Jukes line of workings. This association is particularly pronounced in the contouring of block averages for Cu and Fe assays (Figures 73 and 74), the high Fe values being due to a combination of pyrite-magnetite-hematite mineralisation and chloritic alteration.

Apart from the grid sampling, 12 miscellaneous rock chip samples were collected during 1981-82 (Table 22). A picked mineralised sample (#30023) from the King Jukes No. 2 adit dump gave a high Au assay (9.1 g/t) which was also reflected in the relatively high assay (1.0 g/t) for a random sample of the same dump (#30026). The sampling of the King Jukes No. 2 adit averaged less than 0.1g/t Au.

2.10.6 Geophysics

1. Gradient Array I.P.

A 9.2 line-km gradient array I.P. survey was completed in two blocks by Scintrex Pty. Ltd. during February 1982 (Table 23) Scintrex IPR-8 receivers were used. Dipole spacing and station interval were 20m but on some lines intermediate stations were recorded.

Chargeabilities were generally around 10mv/v west of approximately 900E with higher values to the east (Figure 75). There were two zones of higher chargeabilities, both of 30+ mv/v. One trends N-S between 300N and 500N near 960E (Figure 72), the second trends west of north from 500N, 1210E to 800N, 1050E with a maximum value of 65.8mv/v at 700N, 1110E, which corresponds with the pyrite mineralisation showing in the Jukes Comstock adit.

Resistivities were generally between 5000 and 10,000 ohm-metres (Figure 76) with values less than 5000 ohm-m in the anomalous chargeability zone. The lowest recording was 1568ohm-m, also at 700N, 1110E.

2. Dipole-Dipole I.P.

Two dipole-dipole arrays were carried out: Line 700N, 800E-1320E and Line 300N, 840E-1320E. Both set-ups recorded to n=6 using dipole spacings of 40m. The surveys were conducted by Scintrex Pty. Ltd. in February, 1982.

Figures 77 and 78 show the resistivity and chargeability pseudo-sections for line 700N and 300N respectively. The 700N spread covered the strongest gradient array I.P. response at 1110E. The pseudo-sections show that the source mineralisation occurs at surface and is both chargeable and conductive. The anomaly corresponds with the Jukes Comstock No. 1 adit which returned rock chip assays averaging more than 3%S over 9m but with insignificant base and precious metal values.