PLACER DEVELOPMENT LIMITED

MEMORANDUM:

| TO: | D. A. Howard | DATE: | 3 February 1981 |
| :--- | :--- | :--- | :--- |
| FROM: | R. H. Pinsent | FILE: | V-164 |
| RE: | MO DISTRIBUTION AT ADANAC. |  |  |

The attached figures are computer contoured $12 m$ bench assay plans for the Adanac molybdenum deposit. The average Mo value attributable to each hole or each production bench has been contoured at $0.03,0.06,0.10,0.15$ and $>0.2 \%$ Mo intervals. The contours have been made to terminate against the Adera fault. There has been no attempt to include drill hole data from the ground to the north of the Adera fault.

The 16 plots cover the production benches between elevations of $1496 M$ and 1316 M They show the change in Mo content and distribution at 12 m intervals over a total depth of 192 m .

The 1496 M bench shows the effect of topography. Several of the holes in the lower part of the Ruby Creek cirque are collared at a lower elevation and some of the contours are projections. The top three bench plots show the effect of Mo leaching which is known to have occurred over the "high-grade" zone of mineralization.

The structure of the deposit is best shown between the 1460M and 1388M bench levels. The plans show the development of a pronounced ring structure to the mineralization, centred of a hidden sparse porphyry cupola. The benches above the dome are weakly mineralized but, below the 1412 Mlevel , the core of the cupola, which increases in size with depth, is barren ( $<0.03 \% \mathrm{Mo}$ ). The grade of the mineralization is clearly not uniform around the ring. Better-grade material is found in a trough of deformed coarsegrained quartz monzonite and mafic perphyry on the east side of the mineralized cupola and west of a dome of crowded porphyry. The trough which was drilled off in 1979, was also a centre for minor igneous intrusion prior to mineralization.

The topography rises steeply to the SW and very few holes have penetrated the western part of the mineralize zone below the 1376M bench. There is, therefore, insufficient data to judge the extent of the mineralization below the SW wall of the Ruby Creek Cirque. It is probable that it does continue, but at only moderate grade and with a prohibitive
strip ratio. The general grade of mineralization appears to decrease at depth and below the $1340^{\mathrm{m}}$ bench and the "high-grade" zone becomes diffuse.

The principal observations to be made are (1) that the mineralization is centred about a hidden sparse porphyry cupola, (2) the exposed sparse porphyry cupola south of Ruby Creek, which is probably older, is not mineralized, (3) the Adera fault has removed approximately half the ring of mineralization - assuming an originally symmetrical deposit.


RHP:mg
R. H. PINSENT.

Attach:

















