

SUMMARY

The Shell Company of Australia Limited entered into a joint venture agreement in 1980 with Comalco Limited to explore exploration licences 7/74 (Moina) and 36/79 (Loongana). Investigations by Shell on E.L. 7/74 since January, 1981 have consisted largely of diamond drilling at the Shepherd and Murphy area and by a regional aeromagnetic/radiometric survey and subsequent follow-up work.

The main areas investigated have been:

- 1) The Shepherd and Murphy area where a large fluorite-tin-tungsten-wrigglite skarn deposit had been outlined by Comalco.
- 2) The Tin Spur - Devonian area, where low grade tin-gold mineralization had been outlined by Comalco.
- 3) Major aeromagnetic anomalies indicated by the regional aeromagnetic/radiometric survey completed for Shell Co. of Australia Ltd. early in 1980.

In the Shepherd and Murphy area a total of 2,059.7 m of diamond drilling has now been completed, testing various styles of mineralization. Associated geophysical surveys have also been carried out over the main limestone basin. Drilling has outlined approximately 26 000 000 tonnes grading an average of about 18% CaF_2 , 1000 ppm Sn, 1000 ppm W. (Askins, 1978, 1979). This mineralization is not economically viable due to severe metallurgical problems.

In the Tin Spur - Devonian area a possible 2 000 000 tonnes at 0.2% Sn, 1 ppm Au is inferred from Comalco drilling but is not thought to be economically viable.

Eight major aeromagnetic anomalies have been tested. Only one anomaly, the Lake Gairdner Anomaly, may have significant economic potential. Work is continuing on this anomaly.