

Initial Tenneco interest was confined to the known mineralisation at the Spray, Oonah and Oceania Mines (Besley, 1971a, b). Interest gradually extended to the study of dumps at all zones of known mineralisation (Besley, 1971c) and finally to regional studies of all limestone areas. This regional study consisted of an airborne (helicopter) electromagnetic and magnetic survey and covered the Black Jack's to Bannockburn area of E.L. 15/76 (Besley, 1972). Significant but weak conductor axes were noted in the Black Jacks area (Figure 35).

These E.M. anomalies were followed-up by ground EM and SP surveys along cut grids. Results of these surveys (Figures 35 and 36) showed four north to north-northwest trending shallow but weak conductors. SP and EM anomaly correlations were poor.

A follow-up gravity traverse on Line 8S (Rugg, 1972) showed no anomalies coincident with the SP or EM anomalies (Figure 37). Tenneco concluded that there was no economic mineralisation in that portion of E.L. 44/70 now within E.L. 15/76 boundaries.

Dobson allowed E.L. 44/70 to expire on 3rd November 1972.

#### 5.2.11 McIntyre Mines (SPL 46)

In October 1968 McIntyre Mines (Australia) Pty. Ltd. pegged the central part of the present E.L. 15/76 as SPL 46. This covered the area to the east of (and included) the Mariposa Mine and between the South Comet mine and the Little Henty River. Most of the Farrell River drainage was included in this area (Figure 38).

Initial work by McIntyre involved sampling most of the drainage within the licence at 200 foot intervals