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FORM	A.O.	E.G.	E.C.
E. DIR.	10 SEP 1985		
	DEPT. OF MINES		
REF. No.	9661/85		

E.L. 9/76

BLUE TIER AREA

REPORT ON THE AREA RELINQUISHED IN AUGUST 1985

 **OPEN FILE**

By: A.J. Cartwright

September, 1985.

Circulation: Mines Department (1)  
RGC (1)  
Hellyer (1)

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1.

1. INTRODUCTION

EL9/76 is located 25 km west of St. Helens in Eastern Tasmania. The EL covers an area of 77 sq. km and includes much of the foothills and plateau of the Blue Tier area (Figure 1).

Since 1977, Renison has been in Joint Venture with Hellyer Mining and Exploration Pty. Ltd., the title holder of EL 9/76, and engaged in exploration for large tonnage, greisen style tin deposits. This work has comprised two parts, viz:

- (i) To explore and delineate the total resource of the Anchor tin deposit.
- (ii) To locate new greisen style tin orebodies, which, together with the Anchor deposit, would constitute a viable resource.

Work completed on the relinquished area was all directed at the second target. This report briefly describes what work was undertaken to pursue that aim.

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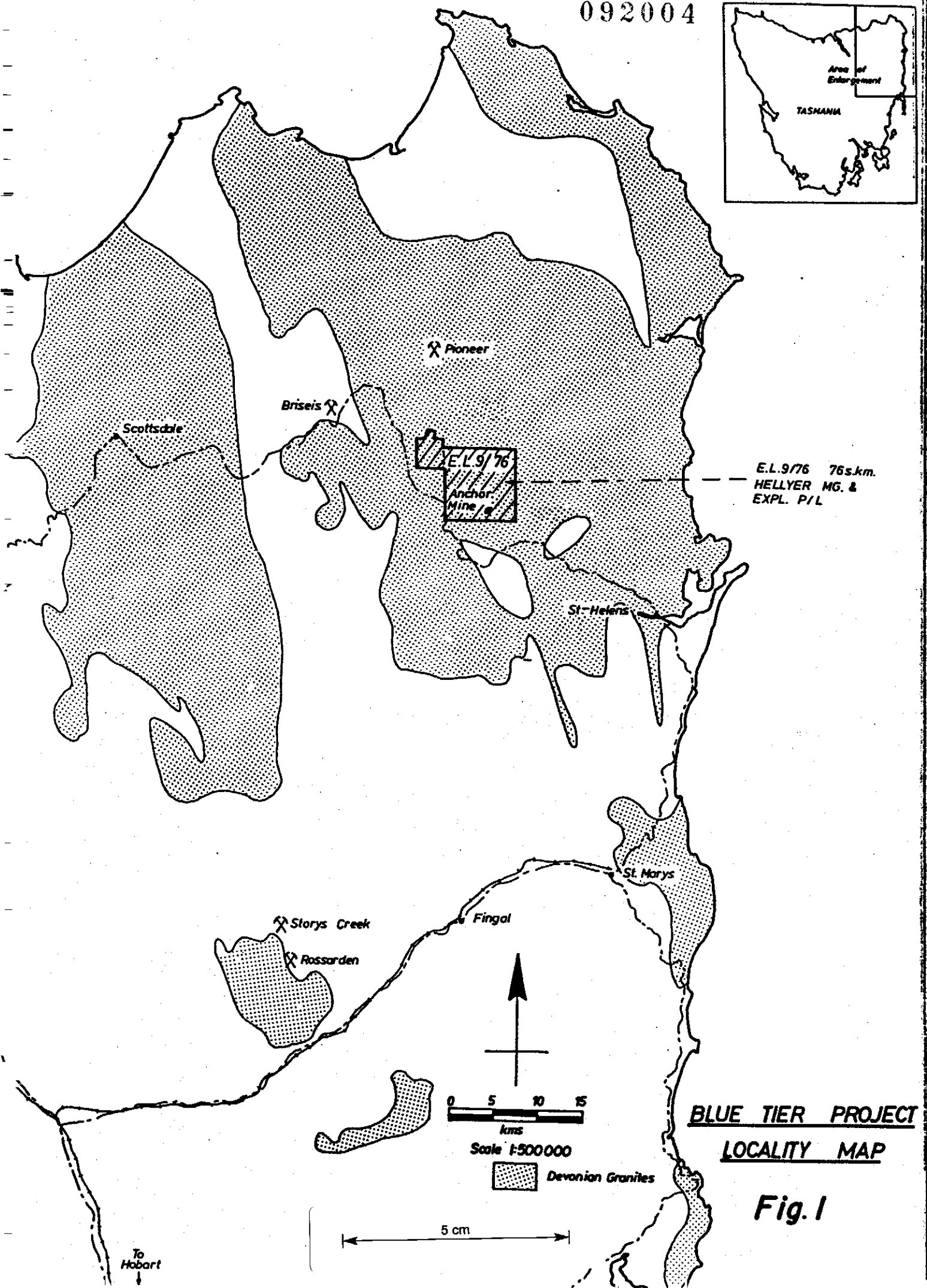
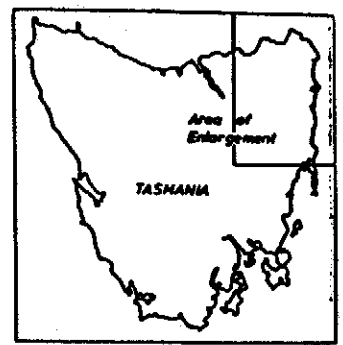


Fig. 1

2. WORK COMPLETED ON THE RELINQUISHED AREA (Figure 2)

The exploration history of the relinquished area since the licence was granted is summarised below. More detailed information is available in the open file reports referenced with the appropriate period of exploration.

1976-1978 Two diamond drill holes (BT40 and 41) were completed in 1978 on the Southern Cross/Haley's workings, 500m northwest of Poimena. Low tin grades were obtained. An orientation gradient array IP survey was carried out over 3 lines northeast of the Anchor workings, but the results of this survey showed that gradient array IP was not a particularly effective technique for locating concealed mineralisation. A similar orientation programme using a radiometric technique also proved fruitless.

**References:**

- 78-1256 Howland-Rose, A.W., 1978: A Brief Report on a Gradient Array IP Test Survey over the Anchor Mine near St. Helens, NE Tasmania, on behalf of Renison Limited, February 1978 (TAS-053 Scintrex).
- 78-1204 Newnham, L.A., 1977: Summary Report on Blue Tier Tin Prospect, EL9/76, Renison Limited, April 1977.
- 78-1314 Ross, A.F., 1978: EL9/76 - Blue Tier Area, Annual Report 1977-78, Renison Limited, November 1978.

1978-1980 A regional photogeological interpretation of the licence was completed by Hunting Ltd. in 1979. The Lottah Grid was established in the vicinity of the Anchor Mine and mapping, soil sampling and IP surveys (electrical soundings and down hole EIP) were carried out over this grid. Two geophysical anomalies were drilled (BT70 and 78) with negative results.

**References:**

- 78-1269 Coupard, M., 1979: Photogeological Study of the Blue Tier Area, Hunting Geology and Geophysics (Aust.) Pty.Ltd., February 1979.

- ? Howland-Rose, A.W., 1978: Comments on Downhole EIP and Resistivity 'At Hole' logs, Anchor Mine, November 1978 (TAS-061 Scintrex).
- 80-1424 Howland-Rose, A.W., 1979: Comments on Electrical Soundings at the Anchor Mine, June 1979 (TAS-071 Scintrex).
- 80-1418 Ross, A.F., 1980: EL9/76 Blue Tier Area - Eastern Tasmania, 1979 Annual Report, Renison Limited, March 1980.

1980-1982 At the Moon Mine, situated north of Poimena, 5 drill holes were completed (BT 90, 95, and 112-114) under and around the workings. The first hole, BT 90, obtained 16m of 0.6% Sn in a mineralised zone beneath the coarse-grained granite contact. BT 95, drilled 80m south of BT 90, and BT 112-114 were barren.

Between August and November 1981, Poltock Bros. carried out a large gridding, geological mapping and soil sampling programme over the northern half of the licence area. As a result of this mapping, drilling targets were selected in a search for Anchor style mineralisation in concealed fine-grained granite cupolas.

#### References:

- 82-1792 Poltock, R., 1981: EL9/76 Blue Tier Grid; Report for Renison Limited, November 1981.
- 82-1792 Roberts, P.A., 1982: EL9/76 Blue Tier Area, Progress Report, Renison Limited, April 1982.
- 80-1488 Ross, A.F., 1980: EL9/76 Blue Tier Area, Progress Report, Renison Limited, October 1980.

1982-1984 In 1982, 20 drill holes (BT 146-165), part percussion and part diamond drill core, were completed at a number of different localities throughout the licence area. The results of the drilling which failed to find buried mineralised cupolas, showed that such targets might exist in certain areas.

The Moon Mine area was re-evaluated in 1982 and the following year 4 drill holes (BT 167-170) were completed there with disappointing results. Also in 1983, a further 8 holes (BT 166, 171-177) were drilled to follow up the buried cupola possibilities, but only unmineralised fine-grained granite was intersected.

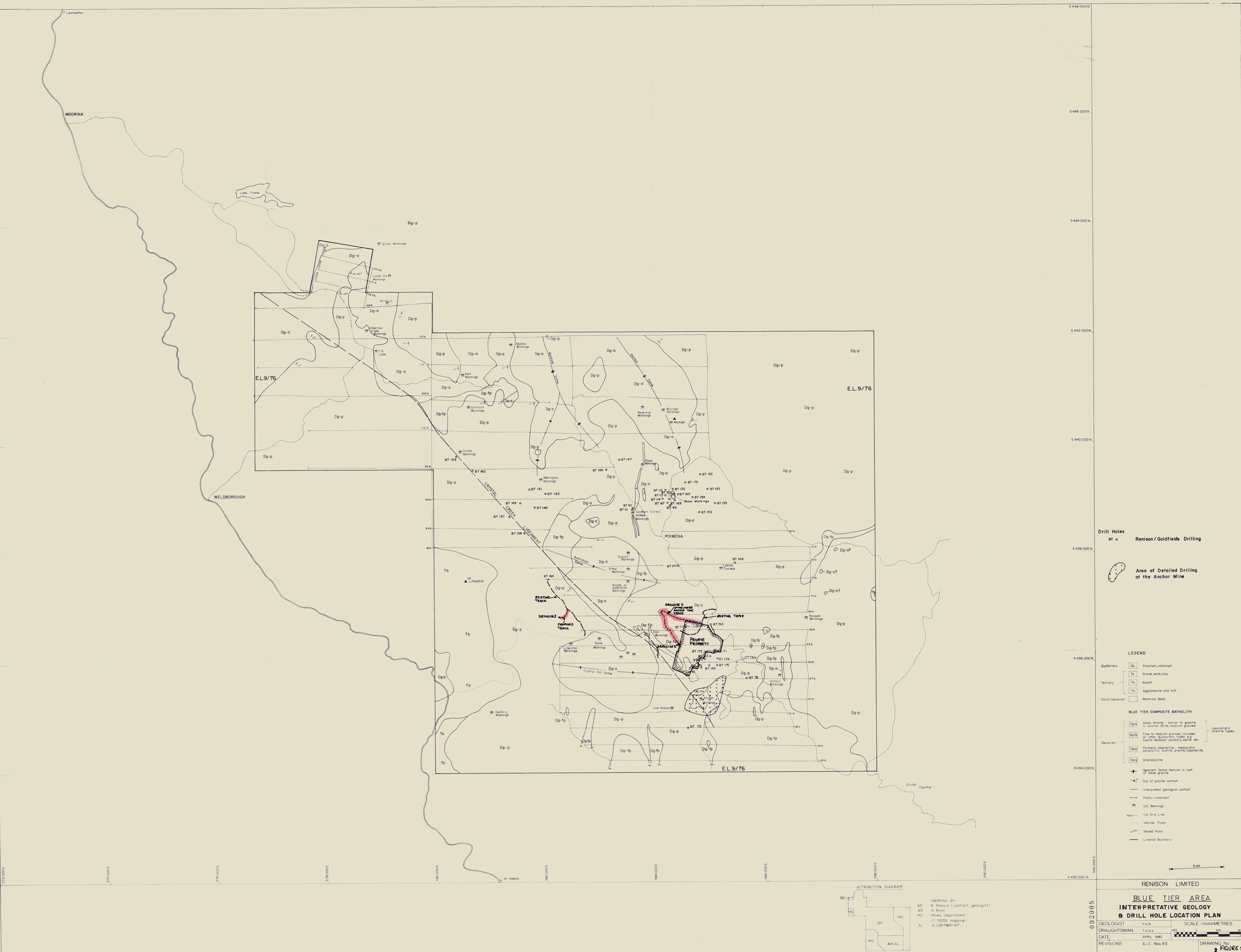
In 1984, 3 holes (BT 178-180) were drilled near the Gough's Lode and North Liberator prospects west of Lottah. These holes were designed to complete the coverage of the remaining areas where adequately sized, buried cupolas were thought likely to occur. Unfortunately, only tin poor greisen was intersected.

**References:**

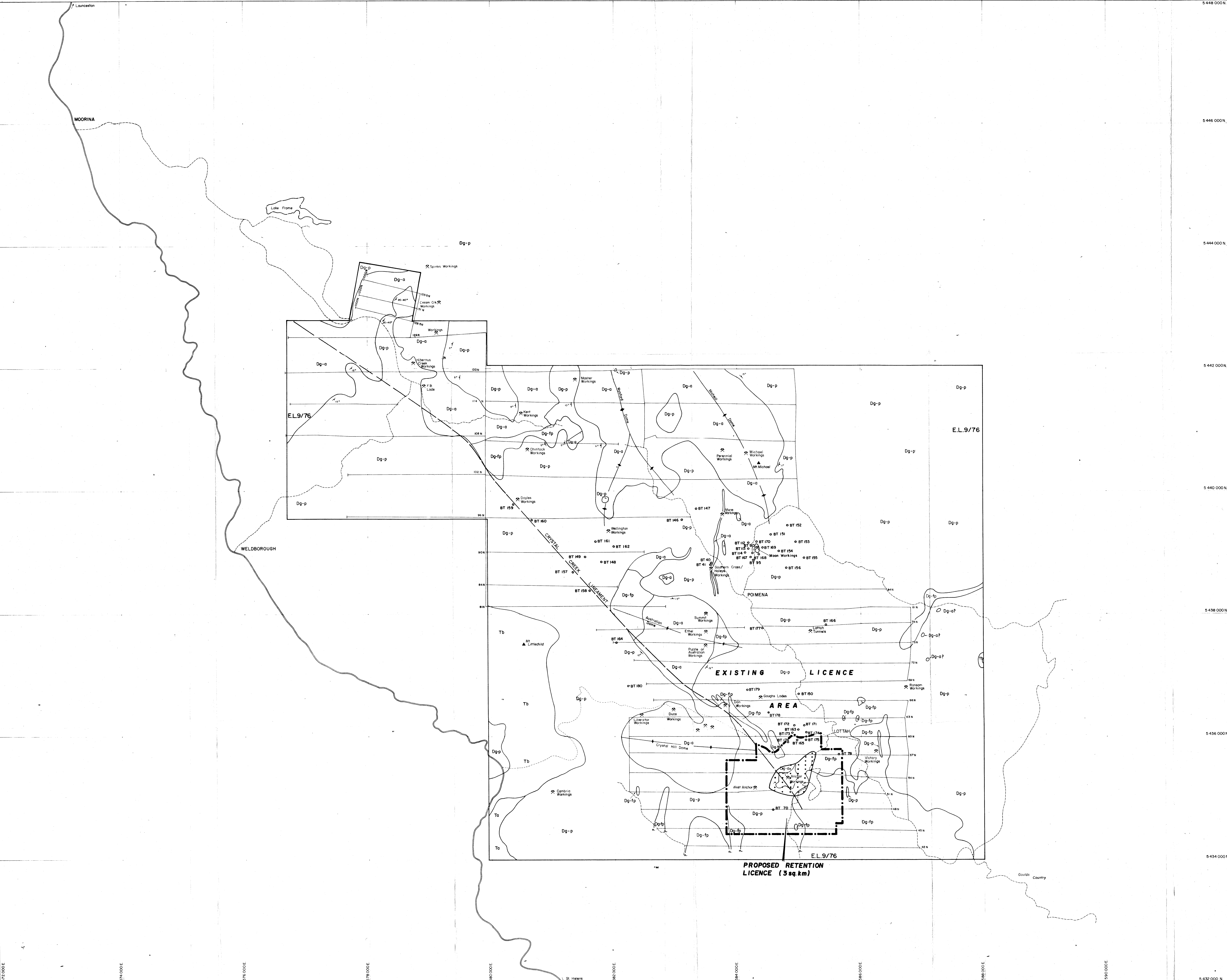
- 84-2143 Beddows, J.W., 1984: EL9/76 Blue Tier Area, Progress Report, Gold Fields Exploration Limited, May 1984.
- 82-1888 Cartwright, A.J., 1982: EL9/76 Blue Tier Area, Progress Report, Gold Fields Exploration Limited, December 1982.
- 84-2081 Cartwright, A.J., 1983: EL9/76 Blue Tier Area, Progress Report, Gold Fields Exploration Limited, December 1983.

Since 1984, no further work has been undertaken on EL9/76 as the probability of finding concealed greisen tin mineralisation is considered very slight. Consequently, early in 1985 a decision was made to relinquish the majority of EL9/76. A 3 sq. km area around the Anchor Mine was applied for as a retention licence (Figure 2), however it now appears that a 10 sq. km area will be granted.







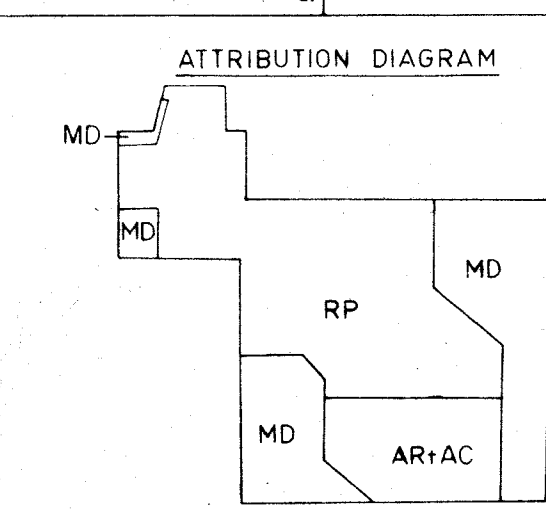


Drill Holes  
BT • Renison/Goldfields Drilling

Area of Detailed Drilling  
at the Anchor Mine

- LEGEND**
- Quaternary: Dg - Alluvium, colluvium
  - Tertiary: Ts - Gravel, sand, clay; Td - Basalt
  - Devonian: To - Agglomerate and tuff; Tm - Marine Beds
  - BLUE TIER COMPOSITE BATHOLITH**
    - Dg - Alkali Granite - similar to granite in Anchor Mine, medium grained
    - Dg - Silt to medium grained, includes all other leucocratic types e.g. quartz-feldspar porphyry, diorite etc.
    - Dg - Poimena Adipharite - mesocratic porphyritic biotite granite/adipharite
    - Dg - Granodiorite
  - Apparent Dimple feature in roof of alkali granite
  - Dip of granite contact
  - Interpreted geological contact
  - Photo-lineament
  - Old Workings
  - Cut Grid Line
  - Vehicle Track
  - Sealed Road
  - Licence Boundary

092009  
5 cm



MAPPING BY  
RP R. Pollock (contract geologist)  
AR A. Ross  
MD Mines Department  
AC (1:50000 mapping)  
A. CARTWRIGHT

RENISON LIMITED

**BLUE TIER AREA  
INTERPRETIVE GEOLOGY  
& DRILL HOLE LOCATION PLAN**

GEOLOGIST	P.A.B.	SCALE 1:20000 METRES
DRAUGHTSMAN	T.G.D.S.	0 400 800
DATE	APRIL 1982	
REVISIONS	A.J.C. Nov. 83 J.W.B. June 1984	DRAWING No 2