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S.P.L. 129

TRIAL HARBOR AREA

SUMMARY REPORT (1973-74) AND RECOMMENDATIONS

In the report "S.P.L. 129 Trial Harbor Area, Western Tasmania Preliminary Exploration Proposals", March 1974 it was recommended that all previous data on Area 1 be compiled and evaluated, and that Area 2 be relinquished.

The compilation of previous data from Area 1 has proved to be quite a big task and is unlikely to be completed before August. However, the areas warranting further investigation are already well defined. In this summary report, these areas are discussed and recommendations for further work are proposed.

Two broad areas of interest have emerged.

1. SOUTH HEEMSKIRK, and more particularly the Oonah and Crimson Creek Formation rocks south of the Heemskirk Granite.

2. TENTH LEGION FAULT AREA:

1. SOUTH HEEMSKIRK: Four distinct areas south of the granite warrant varying amounts of further work. They are shown on the accompanying plan as Areas A,B,C and D. Areas B and D are considered the most interesting, from the point of view of locating stratabound or fault confined cassiterite orebodies.

1.1. Area A: A zone extending from line 00 to 4W (E.Z. Grid) and probably corresponding to the Crimson Creek Formation - Serpentinite contact. Strong I.P. and magnetic responses were obtained in the area by E.Z. Soil samples taken by E.Z. were not assayed for tin. The geological environment is similar to that of Razorback and St. Dizier, where stanniferous magnetite bodies developed near where a stanniferous granite has intruded ultramafics.

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The area is quite open with no significant transported overburden present. It is recommended that a small grid of five lines each 500m. long be laid over the area. Soil samples should be taken every 25m. along these lines and analysed for tin in the medium or fine fractions. A poor tin response would be conclusive.

1.2. Area B: A zone extending from line 2E - 5E, corresponding approximately to the Oonah-Crimson Creek Formation boundary. Finely disseminated sulphides have been mapped in a creek which corresponds to the area of interest. E.Z. obtained a moderate 500-1500 magnetic response and weak Cu, Pb, Zn soil geochemical anomalies over the area (no tin analyses undertaken). The I.P. coverage was incomplete but there is a suggestion of I.P. anomalies developing.

It is recommended that a small grid of five lines each 500m. long be established over the area and that the grid be soil sampled as with Area A. Again a poor geochemical response would be conclusive.

1.3. Area C: A thin zone from 13E to 17E, lying within the Crimson Creek Formation which is strongly magnetic. There was no I.P. coverage and geochemical results of soil samples were poor. It is possible that the magnetic anomaly eminates from an eastward continuation of a microgabbro body which was mapped to the west and which is apparently magnetic.

It is recommended that the existance and source of the magnetic anomaly be checked by way of a magnetic and mapping program over a small 5 - line grid totalling 2500m. Some soil sampling may be justified after completion of this initial work.

1.4. Area D: This is a rather large zone lying east of Maynes Workings between lines 20E and 26E. Limited mapping and the generally high magnetic activity suggests the area may be underlain by Crimson Creek Formation rocks and not, as previously thought, Oonah Formation sediments. This in turn implies some major structural N-S trending feature immediately east of Mayne's Workings.

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Much of this area is covered by swamps or deep alluvium and geochemical contamination of such places is inevitable from the nearby granite. However, in spite of this, several soil and gossan samples from ridges in the area were highly anomalous for tin.

It is recommended that a five line grid totalling 6000m. be laid over the area (some of this may need to be cut) and that magnetic, mapping and soil sampling programs be completed over the grid.

2. TENTH LEGION FAULT AREA: Known mineralisation associated with this fault includes the Tenth Legion iron ore deposits, the Kynance Ag-Pb-Zn-Cu workings, and the Ag-Pb-Zn-Cu Comstock Mines which are currently being worked by E.Z. This fault may in fact be quite a strong feature and extend further east into the Zeehan area. The area is extensively covered by thick alluvium and swamp but is believed to be underlain by Donah Formation and Crimson Creek Formation rocks and mafic and ultramafic intrusives within the latter.

The Tenth Legion iron ore deposits probably formed by a combination of alteration of mafic and ultramafic Cambrian bodies caused by the nearby injection of the Devonian Heemskirk Granite, and the direct injection of Fe from the granite into the system along the Tenth Legion Fault.

In general this area is regarded as quite favourable for the generation, migration and emplacement of ore bearing fluids. The style of deposit most likely to be located is a "favourable host replacement type" or a "fault infilling" type, and the mineral assemblage most expected would be Ag-Pb-Zn-Cu sulphides.

However the area will be a hard one to evaluate as most exploratory techniques would be difficult to meaningfully apply. All the conditions necessary to produce most of the traditional geophysical and geochemical bogus anomalies are present. If all these inherent traps were fully appreciated, a combined I.P. - magnetic-geochemical soil sampling program coupled with a detailed mapping program should succeed in defining any sizable orebody. Exact location of anomalies would be very important and so deep soil sampling, and small dipole moving source I.P. would be essential.

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The proposed grid is shown on the accompanying plan. Total meterage is 15,000m., some of which would have to be cut. Options to Purchase the Kynance Mine would be an advantage.

BUDGET: (To complete the above recommendations).

		$	
Salaries:		6000	
Consumables:		1000	
Vehicles:		750	
Track Cutting:	(22.5 km)	2250	
Geochemistry:		5000	
Geophysics:		4500	
Contingencies:		1500	
TOTAL		21000	(Each company $7000).

PRIORITIES:

(i) Tenth Legion Fault Area.
(ii) Area D
(iii) Area B
(iv) Area C) It is difficult to get enthused
(v) Area A) about these two areas. Effort is probably better spent elsewhere.

L.A. Newnham.

L.A. NEWNHAM
CHIEF GEOLOGIST

8th July, 1974.

c.c. Mt. Lyell
C.G.F.A.

SOUTHERN OCEAN

E.L. 42/71
RENISON LIMITED.
(AREA 1)

RENISON LTD
CONSOLIDATED
MINING LEASE.

E.L. 42/71
RENISON LTD
(AREA 2)

MT HEEMSKIRK

MT AGNEW

MT. LYELL MINING & RAILWAY CO LTD
S.P.L. 129
(AREA 1)

MT. LYELL MINING & RAILWAY CO LTD
S.P.L. 129
(AREA 2)

MT. ZEEHAN

MT DUNDAS

Zeehan

Proposed Tenth Legion Fault Grid
10 x 1500 m. Lines, 200m Spacings

Geophoto Grid 1972.
(V.L.F. Magnetics, Geochem)

Proposed Area 'A' Grid
5 x 500m Lines, 200 Spacings.

E.Z. Grid 1963-73.
(Magnetics, some I.P., Geochem,
some Diamond Drilling.

Proposed Area
6 x 1000 m. Lines,
200m. Spacings

Proposed Area
5 x 500 m. Lines
200m. Spacings

Zeehan Syncline

Permian and Younger

Key

- Permian & Younger
- Devonian & Silurian Sediments
- Ordovician Sediments
- Cambrian Sediments & Volcanics.
- Precambrian Units.
- Cambrian Basic & Ultrabasic Intrusives
- Devonian Granite Intrusives
- Mine with Mineral(s) Produced (Operating or Abandoned).
- E.L. Licence Boundaries in which a Syndicate Company has an Interest.

SANDY CAPE | ARTHUR RIVER | HELLYER
CONICAL ROCKS | PIEMAN | SOPHIA
CAPE SORELL | FRANKLIN

RENISON LIMITED

S.P.L.129.
TRIAL HARBOUR AREA.
MAP 1.

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SCALE. 1:50,000 METRES

DRAWN	RJP
TRACED	
DATE	
SCALE	1:50000
DRAWING No.	