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CSR LIMITED - MINERALS DIVISION
EXPLORATION GROUP

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PERIOD REPORT

AUGUST 1981 TO FEBRUARY 1982

E.L. 15/76, DUNDAS, TASMANIA

EMR 12/82

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KEYWORDS

CAMBRIAN
EXPLORATION
GEOCHEMISTRY
GEOPHYSICS
MAGNETIC
ELECTROMAGNETIC
LEAD

TIN
ZINC
GOLD
NICKEL
CHROMIUM
SILVER

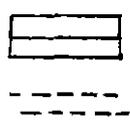
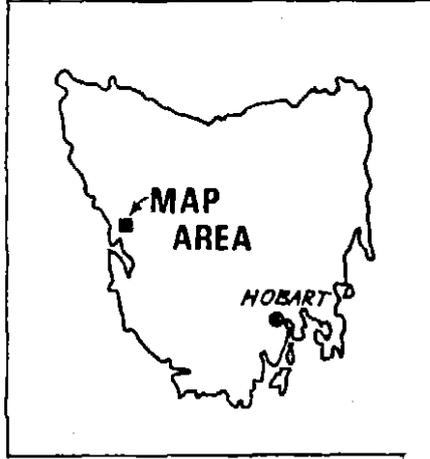
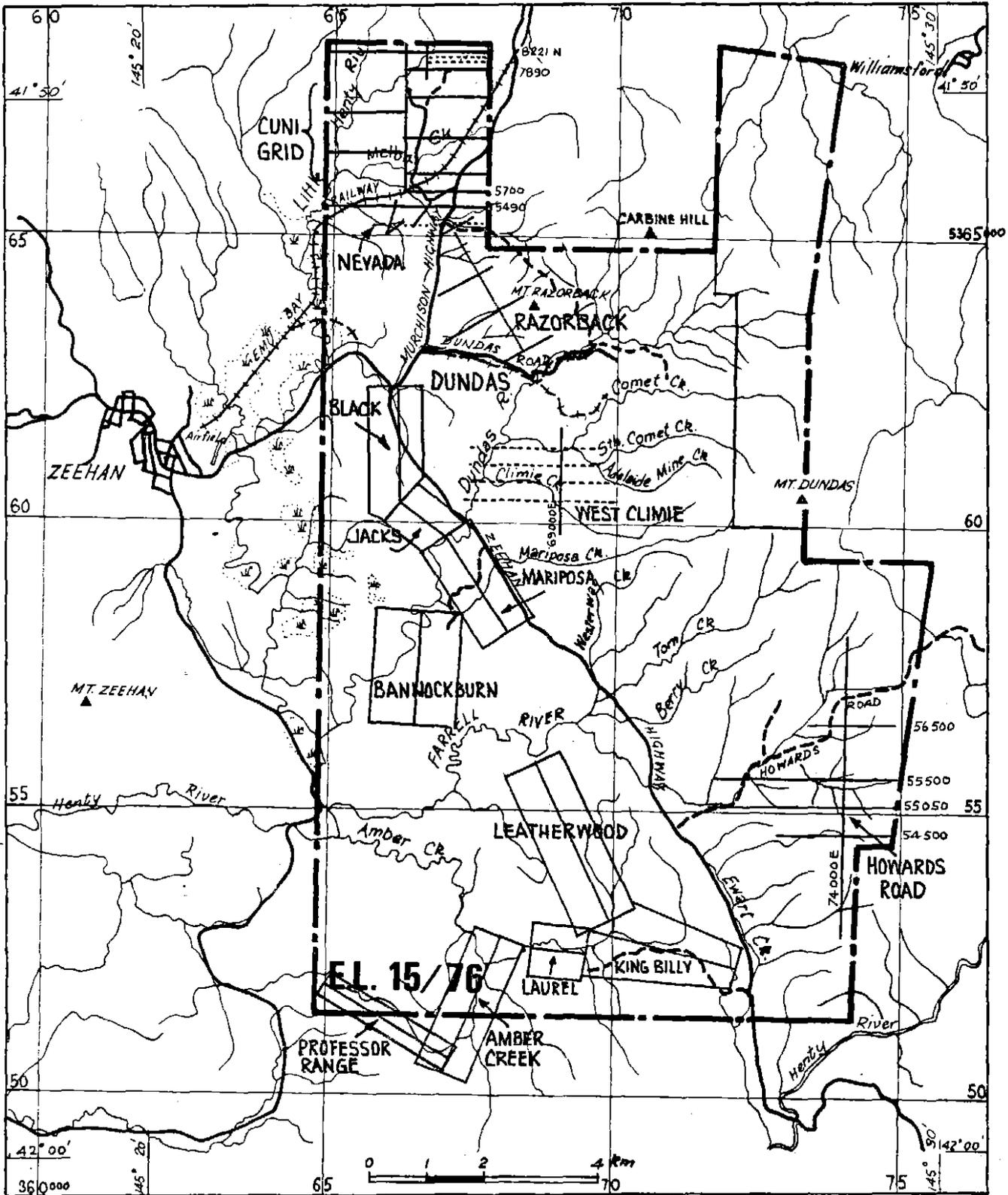
1. INTRODUCTION

This report deals with exploration activities planned and executed within E.L. 15/76 in the period from 2nd August 1981 to 2nd February 1982. Actual work carried out is to early January 1982, the date of writing the report.

E.L. 15/76 is held by CSR Limited. During the period a joint venture agreement was entered into with Amoco Minerals Australia Company covering exploration over a western part of the E.L. This area lies mainly to the south and west of the Zeehan to Queenstown highway. The main exploration target in this area is silver-lead-zinc in the Ordovician Gordon Limestone.

Elsewhere on the E.L. the main target minerals are :-

- (a) tin associated with sulphide bodies in the Cuni, Razorback, Dundas, Frazer-North Montezuma Grids.
- (b) silver-lead-zinc in the Cuni and Dundas areas;
- (c) copper-nickel on the Cuni and Nevada Creek grids, and possibly also chromium and gold;
- (d) gold on the Howards Road Grid, and possibly in the Dundas area.

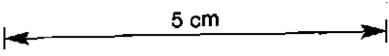


CSR-AMOCO GRIDS TO JAN. 1981
GRIDS IN PROGRESS

LOCATION MAP - CSR-AMOCO GRIDS

E.L. 15/76 DUNDAS
TASMANIA

FIG. 1



2. SUMMARY

On the Howards Road Grid in the southeast part of the E.L., 15.8 km of gridding were completed and 465 soil samples collected at 10 m intervals on two cross-lines. The work is aimed at locating the source of widespread anomalous gold values detected in panned concentrates from drainages in the area (see Figure 1).

Further gridding is currently underway on the Cuni, Nevada and West Climie Grids prior to soil sampling and ground geophysics being carried out over the next few months. The work is aimed at defining various soil anomalies or locating the source of various drainage anomalies. Metals being sought include Sn, Cu, Zn, Pb, Ag, Au, Ni, Co and Cr.

On the Amoco/CSR joint venture in the west of the E.L., 87.2 line km of gridding were completed over 8 grids (Figure 1). Approximately 100 soil samples were augered on the Mariposa Grid using a bombardier-mounted Jacro 200 auger. Analyses received to date indicate values in soil up to 2.8% Pb, 1.1% Zn and 40 ppm Ag.

Arrangements are being made with Geoex Pty. Limited to fly in-fill aeromagnetics at 250 m intervals over the E.L. It is hoped to integrate this data with Mines Department 1 km spaced traverses.

Three reports covering exploration over the E.L. were forwarded to the Mines Department during the term of the Licence.

Future ground exploration will involve drainage geochemistry around gridded areas, and soil geochemistry and ground geophysics on grids aimed at locating drill targets. In particular, over the next few months, work will be carried out on the Cuni, Nevada, West Climie and Howards Road Grids and on the Gordon Limestone grids in the west.

3. CAMBRIAN PROSPECTION

3.1 Cuni Grid

A report covering a two-diamond drill hole programme in late 1980 was forwarded during the current term (Macnamara, 1981b).

A report compiling the results of soil sampling on the Cuni and Nevada Grids between 1979 and 1981 was completed recently (Macnamara, 1981c). A number of Sn, Cu, Zn, Pb and Ag soil anomalies were indicated as a result of this work and were listed in the report.

Follow-up work in hand aims at checking a strong Cu-Pb anomaly in the northeast part of the Cuni Grid, where values to 2300 ppm Cu, 2400 ppm Zn, 6000 ppm Pb, 16 ppm Ag and 770 ppm Co were recorded (see Table 1, Macnamara, 1981c).

A 500 m long sub-base line has been cut northwards of line 7890N at 6600E on the Cuni Grid, and cross-lines are being cut. Soil sampling, VLF-EM and magnetic surveys aimed at defining a possible drill target will follow.

3.2 Nevada Grid

Values to 640 ppm Cu, 2800 ppm Zn, 1240 ppm Pb, 5000 ppm Ni, 560 ppm Co and 15.3% Cr plus minor Au were recorded on the Nevada Grid (Table 2, Macnamara, 1981c). These are associated with a thin ultramafic unit occurring between Razorback Conglomerate and Hodge Slate.

Work is in progress on gridding the anomalous zone more closely and will be followed by further soil geochemistry, magnetic and VLF-EM surveys along the grid aimed at defining the best position for drilling a diamond drill hole. Copper nickel, chromium and possibly gold are the main target metals.

It is expected that the above field work will be completed during the next two months.

3.3 Dundas Grids

In the central northern part of the E.L. between Mariposa Creek and Mt. Razorback and around the old Dundas township a considerable amount of grid exploration for silver-lead mineralisation was carried out on various grids by Geophoto Resources in the early 1970's. This work is currently being re-evaluated for indications of tin mineralisation especially of the Renison Bell and Zeehan massive sulphide type.

CSR Limited has recently applied for three exploration licences over former leases in the Dundas area in order to more effectively prospect the ground near the former town of Dundas. If title is granted, current gridding will be extended into the new areas.

As a follow-up of Sn, Pb, Ag and Au drainage anomalies detected in the southwest part of the Dundas area in early 1981 gridding has commenced around the western sections of Climie and Comet Creeks. This grid will be referred to in future as the West Climie Grid (see Figure 1).

A 2.2 km long base line designated 69000E had been cut up to early January 1981. Four cross-lines totalling 10 km were planned to enable soil sampling, magnetic and VLF-EM surveys to be conducted along them in early 1982. The main target minerals are tin, lead, zinc, silver and gold.

3.4 Howards Road Grid

Panning of drainages in the Howards Road area in the southeast part of the E.L. indicated a widespread anomalous gold distribution (Macnamara, 1980). Values ranging up to 114 ppm Au were recorded. The area is

masked by Pleistocene morainal boulders and gravels.

In order to locate any bedrock gold source within the E.L., cutting of the Howards Road Grid was commenced in November 1981. To date, a total of 15.8 line km of gridding has been done. This includes a 5.6 km baseline and four cross-lines (see Figure 1).

To early January 1982, 465 soil samples had been augered from lines 55500N and 55050N. Morainal cover was penetrated at 0.5 m to 2.0 m depth in 90% of the auger holes. Soil sampling is continuing and will be followed by magnetic and VLF-EM surveys.

Chemical analyses of soil samples are not yet to hand.

4. GORDON LIMESTONE (ORDOVICIAN)

4.1 Amoco/CSR Joint Venture

Under the terms of a joint venture entered into in the latter part of 1981, Amoco Minerals is conducting exploration over a western section of E.L. 15/76. The area involved lies largely to the south and west of the Zeehan to Queenstown highway.

The main target is silver-lead-zinc mineralisation in the Ordovician Gordon Limestone.

4.2 Current Work

To early January 1981, 87.2 line km of line cutting and gridding over eight grids had been carried out. These are from Black Jacks in the north to Professor Range in the south (see Figure 1).

The grids each comprise a central baseline cut by cross-lines of approximately 1 km length at 200 m intervals. Details are as follows :-

<u>Grid Name</u>	<u>Base Line Length</u>	<u>Cross Lines Length</u>
Black Jack's	3.0 km	15.3 km
Mariposa	2.0 km	16.0 km
Bannockburn	2.0 km	16.5 km
Leatherwood	3.0 km	1.6 km
King Billy	2.7 km	6.6 km
Laurel	1.0 km	3.7 km
Amber Creek	2.6 km	1.3 km
Professor Range	2.6 km	7.3 km
	<u>18.9 km</u>	<u>68.3 km</u>

A further 30 line km of gridding is planned to complete the initial programme.

On the Mariposa Grid, approximately 100 samples have been augered at 25 m intervals from C horizon material

- 7 -

using a bombardier-mounted Jacro 200 auger.

Chemical analyses received for 64 samples showed values up to 2.8% Pb, 1.15% Zn and 40 ppm Ag.

Preparation of plans showing cultural features, old workings, etc., are in hand and further soil augering will follow.

5. AEROMAGNETICS

Following completion of the Mines Department 1 km spaced aeromagnetic traverses, arrangements have been made for Georex Pty. Limited to fly in-fill traverses 250 m apart over E.L. 15/76. If permission is granted by the Director of Mines, it is hoped to integrate these data with the Mines Dept. traverses and produce a contoured magnetics plan at 1:10,000 scale covering the whole E.L.

6. REPORTS

Over the past six months, the following reports were completed and copies forwarded to the Mines Department.

- (a) Airborne Input EM/Magnetic Test Lines, E.L. 15/76, Dundas, Tasmania. Report No. EMR 46/81.
- (b) Diamond Drilling 1980, Lead Blocks-Cuni Areas, E.L. 15/76, Dundas. Report No. EMR 85/81.
- (c) Soil Sampling 1979-1981, Cuni-Nevada Grids, E.L. 15/76, Dundas, West Tasmania. Report No. EMR 138/81.

7. REFERENCES

- MACNAMARA, P.M. (1980)
1979 Drainage Sampling, Dundas, E.L. 15/76, West
Tasmania. EMR 60/80.
- MACNAMARA, P.M. (1981a)
Airborne Inout EM/Magnetic Test Lines, E.L. 15/76,
Dundas, Tasmania. EMR 46/81.
- MACNAMARA, P.M. (1981b)
Diamond Drilling 1980, Lead Blocks, Cuni Area,
E.L. 15/76, Dundas. EMR 85/81.
- MACNAMARA, P.M. (1981c)
Soil Sampling 1979-1981, Cuni-Nevada Grids, E.L.
15/76, Dundas, Tasmania. EMR 138/81.

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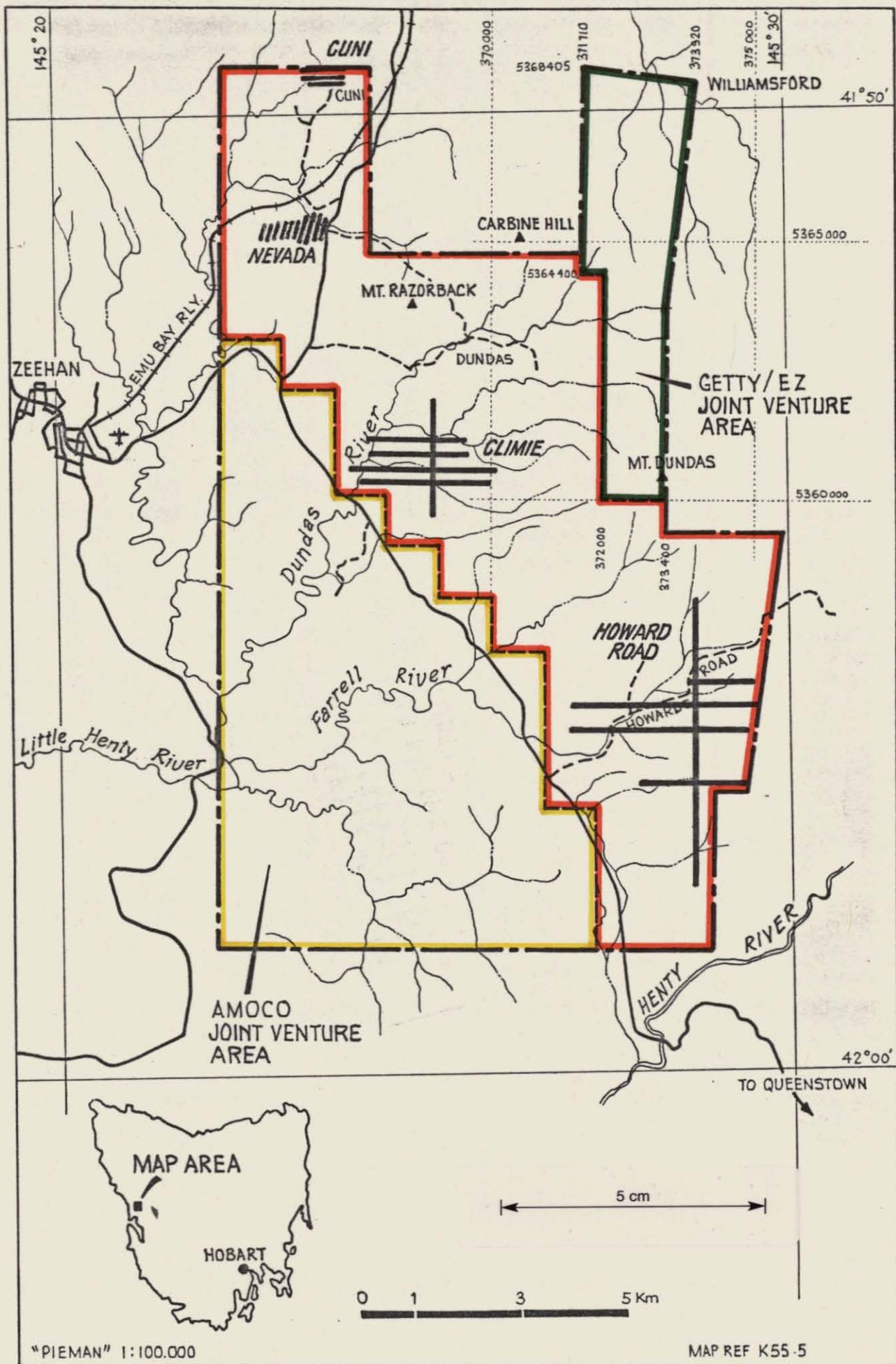
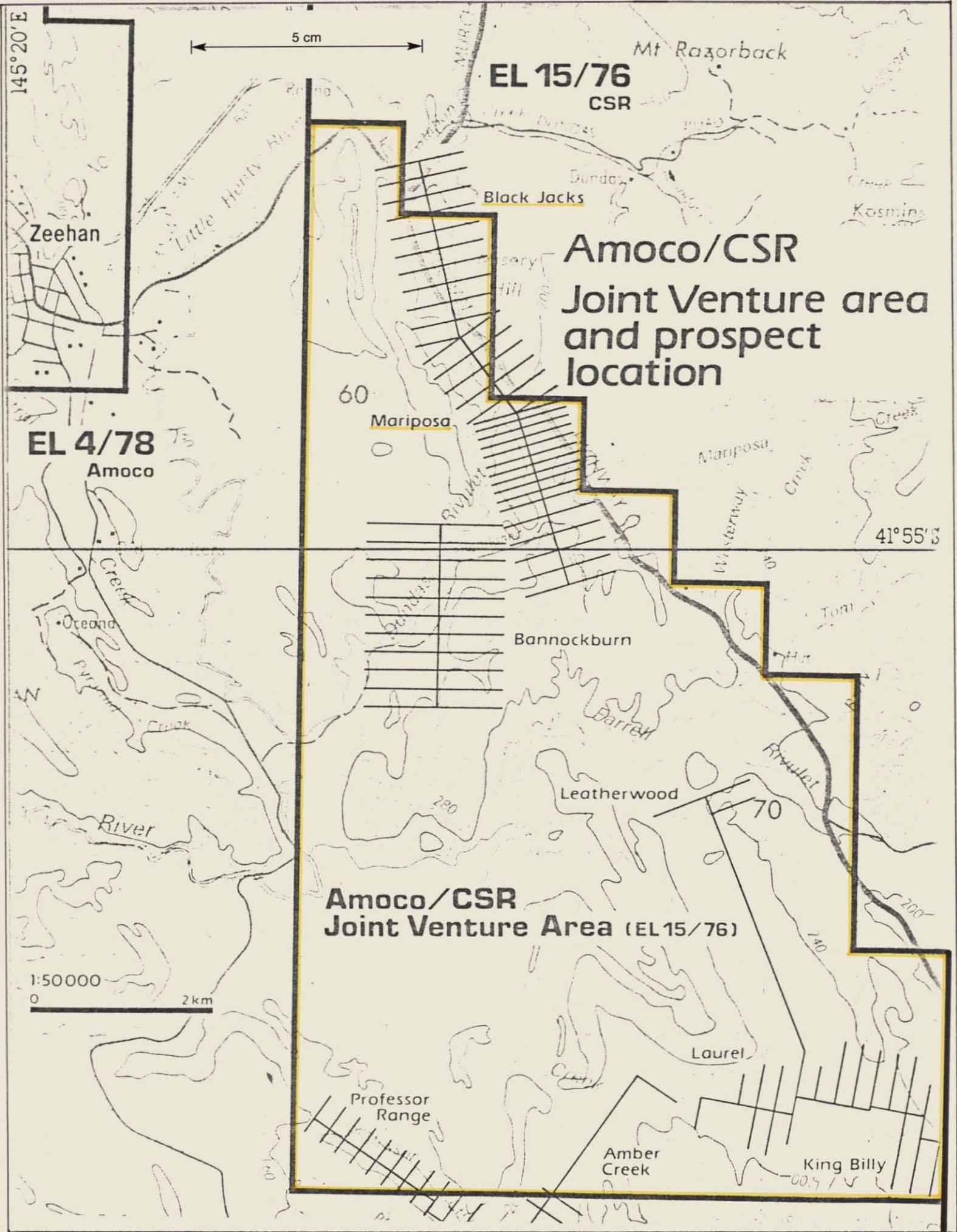


FIG. 1. LOCATION MAP E.L. 15/76 DUNDAS, TASMANIA SHOWING JOINT VENTURE AREAS & CSR 1982 GRIDS

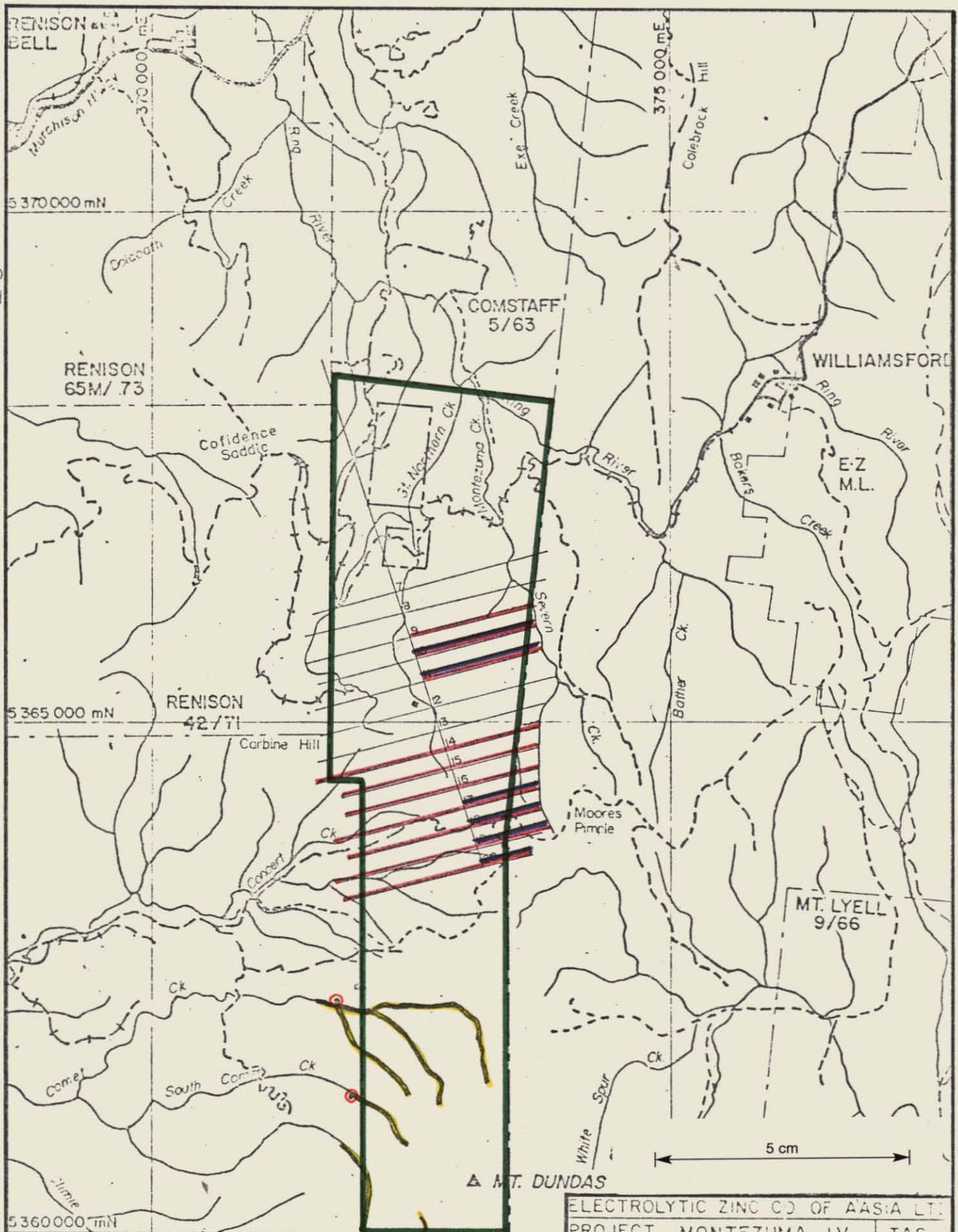
Figures 1, 2, 3. received 10 Jan 83 to be attached to last 1/4ly rept.



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FIG.2. CSR JOINT VENTURE - E.L.15/76 DUNDAS TAS.

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LEGEND	
	Access - formed; Geology mapped
	Creek - cut; Geology mapped; sampled (• Sediment; ◉ Heavy mineral concentrate)
	Line - cut, pegged, soil sampled, geology mapped.
	Line
	Soil pit - dug and sampled
	Follow-up mapping and sampling
	Diamond Drillhole

ELECTROLYTIC ZINC CO. OF ASIA LTD.
 PROJECT MONTEZUMA JV. TAS

CSR 15/76 E-Z 1/62

WORK COMPLETED
 PERIOD TO
 20. 11. 1982

FIG. 3.

SCALE 1:50000	Survey 1/62	Map 1/62
reference	Date 7.12.74	
		AD-197-0001