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EXPLORATION LICENCE 23/79

WYNYARD, TASMANIA

SUMMARY FINAL REPORT TO JUNE 1985

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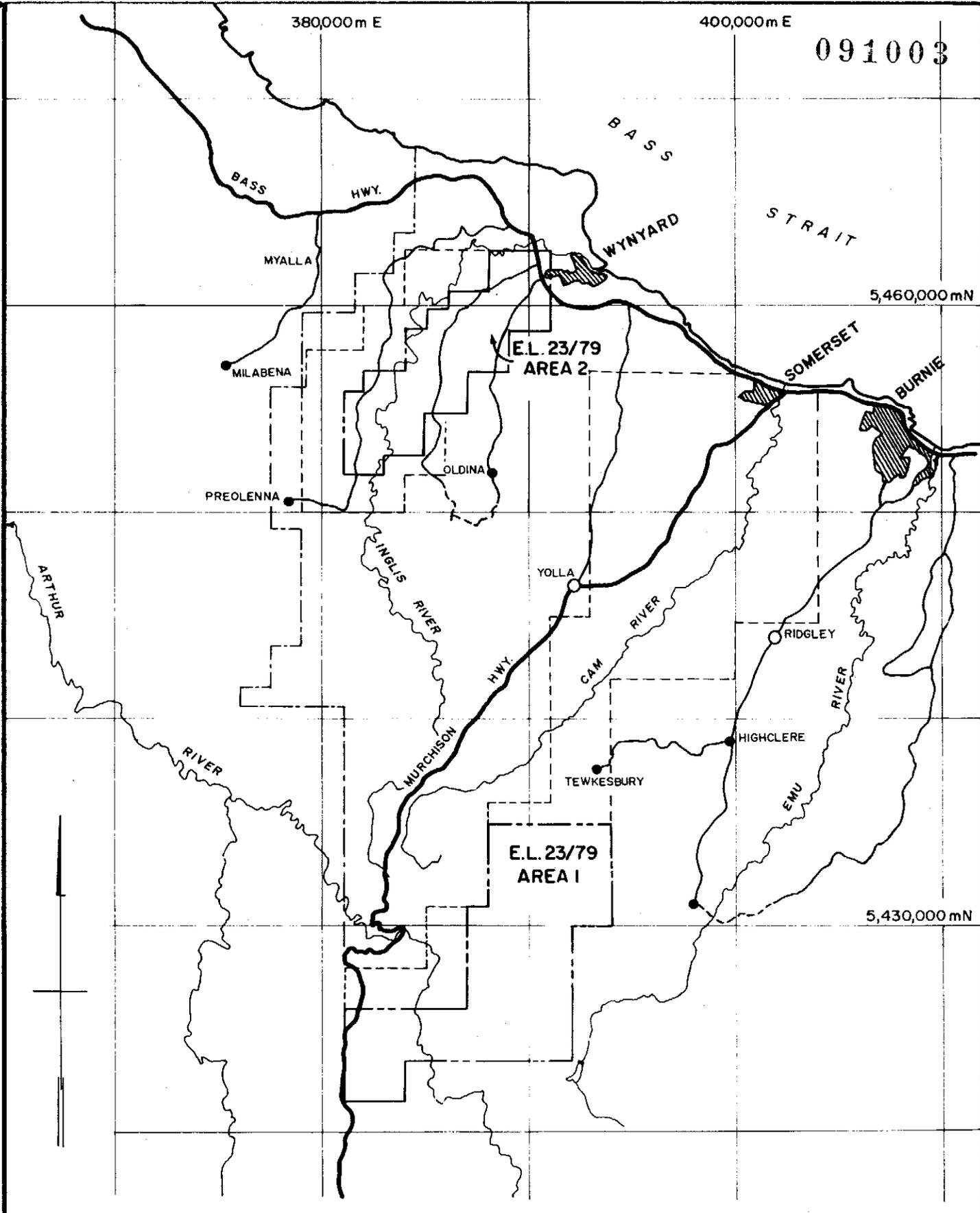
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FIGURE

1. A42473 - EL 23/79, Wynyard, Tasmania. Location Map

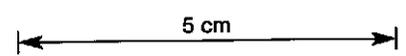
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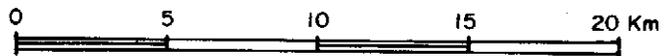


-  Original EL boundary.
-  Area relinquished 1-12-84.
-  EL 23/79, from 1-12-84.

A.M.G. ZONE 55



SCALE 1:250,000



Centre
Melbourne

Date
13.5.85

THE BROKEN HILL PROPRIETARY CO. LTD.
EL.23/79, WYNYARD, TASMANIA.

LOCATION MAP

Project No
T 64

Drawing No
A4-2473

WYNYARD, TASMANIASUMMARY/FINAL REPORT ON WORK CARRIED OUT TO JUNE 19851. GENERAL

Exploration Licence 23/79 of 715 square kilometres was granted to The Broken Hill Proprietary Company Limited on 14th December, 1979. The Licence area was reduced to 372 square kilometres on 1st December, 1983, made up of two separate blocks. In late August, 1984, notification was given of a further reduction to 124 square kilometres, this to be effective from 1st December, 1984. This area was finally relinquished in June, 1985. This report covers all exploration data relevant to the title area.

Regionally the principal target was a massive sulphide hosted tin deposit of the Renison type. Field work done was restricted to aeromagnetic coverage and very limited geological mapping and geochemical sampling. The area is poorly prospective. In addition to the Tertiary basalt cover large areas also have a thick underlying sequence of Permian sediments, as well as local Jurassic dolerites. The prospective Cambrian and Precambrian lithologies are deeply buried.

2. GEOLOGY

Within the licence area extensive flows of Tertiary basalt and Permian sediments overlie a basement consisting largely of Precambrian and Cambrian rocks which form a major structural extension of sequences in the Mt. Bischoff, Cleveland area to the south west. These basement rocks were held to be prospective for magnetic skarn and massive sulphide deposits of the Moina tin/tungsten and Renison tin types.

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The oldest rocks present are the Precambrian Keith Metamorphics which occur in a belt 8-15km wide trending north east from Savage River to Wynyard. Rocks in this belt include pelitic schist, quartzite and minor amphibolite. Younger Precambrian rocks of the Burnie Quartzite and Slate Formation flank the Keith Metamorphics in the lower Cam River. Dolomite has not been recorded in the Precambrian rocks of the Wynyard area.

Cambrian sediments are exposed in a large window in Tertiary basalt, in the Hellyer River upstream from the Murchison Highway crossing. Lithologies present include red-brown lithicwacke, red shale and pyrite-bearing chert.

Ordovician sediments have not been located within the licence area. They flank a major anticline at Companion Hill to the east of the southern portion of E.L. 23/79.

Permian sediments, up to 300 metres thick, consist of a basal tillite unit, siltstone with thin oil shale and coal horizons, and sandstone.

Jurassic dolerite is exposed in the central part of the licence area where it invades both tillite and siltstone.

Tertiary rocks include basalt of highly variable thickness (locally believed to be up to 350 metres), as well as marine sediments, lacustrine clays, sands and gravels up to 60m in thickness.

3. SUMMARY OF WORK CARRIED OUT AND RESULTS

1. Literature Survey and Review of Data: (CR3289)
Geological map and cross sections were produced.
2. A photogeological study and landsat interpretation: (CR3289)
utilised in geological mapping.

3. Reconnaissance Geological Mapping: (CR3289, 3492)
1:50,000 and 1:100,000 geology maps were produced and updated as exploration proceeded.

4. Forty Seven Line kilometres of Dighem II Flown on Four Lines in the southern part of the E.L: (CR3289).

5. Geochemical/Petrological Sampling Over Areas of Basement Exposure: (CR3289, 3492, 4087)
65 stream sediment, 59 Pan concentrate, 18 rockchip and 5 petrological samples were collected. Two stream sediments showed weakly anomalous gold and several anomalous tin values occurred in pan concentrates.

6. Aeromagnetic Survey: (CR3492)
A survey was flown covering the entire E.L. with east-west lines spaced at 250 metres and a sensor terrain clearance of 90m. Total magnetic intensity plots were produced as contours.

7. Orientation water sampling: (CR3492)
Ten samples were taken to test sub-basaltic seepages. One sample was anomalous with respect to Zn.

8. Drilling: (CR4087)
460m in two open-hole/diamond drill holes were drilled on magnetic anomalies to test the source of magnetism, the depth of overlying basalt and the stratigraphy of the basement.
One hole was stopped at 147m within Tertiary basalt, having exceeded the interpreted depth to source. The source was thought to be localised more magnetic basalt than surrounding basalts.
The second hole, drilled to a total of 313m, intersected Cambrian probable Crimson Creek correlates at the base of the basalt, and the magnetic source was interpreted as within the large thickness of basalt. No anomalous geochemistry was present at the base of the hole.

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9. Inspection for Magnesite Potential:

A brief geological inspection of the northern and of the EL was made to check for potential magnesite bearing stratigraphy in rocks of approximate equivalence to those carrying magnesite deposits in the Arthur River area. No encouragement was recieved.

4. LISTING OF REPORTS PREVIOUSLY SUBMITTED:

- CR3289
82-1687 Progress Report on Exploration to 1st December, 1981, including, Report for the Six Months Ended 1st December 1982.
- CR3492
82-1796 Report for the Six Months Ended 1st June, 1982.
- CR3788
In Records Report for the Six Months Ended 1st December, 1982.
- CR4087
84-2085 Annual Report for the Year Ended 1st December, 1983.
- CR4088
84-2086 Partial Relinquishment Report December, 1983.
- CR4089
In Records Report for the Quarter ended 1st December, 1983.
- CR4381
84-2286 Report for the Area Relinquished 1st December, 1984.

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5. EXPENDITURE

Total expenditure to end June 1985

Wages and Salaries	60,094
Field Support	6,916
Drilling	8,612
Vehicles	9,034
Equipment Hire	799
Geochemistry	5,781
Geophysics	53,862
Tenement Fees	20,205
Capital	13,561
Overheads	3,404
Services	6,941
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	189,209
Administrative Charge	18,921
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	208,130