



EXPLORATION LICENCE
EL 20/2007
STRAHAN, WESTERN TASMANIA

ANNUAL REPORT
FOR THE YEAR ENDED
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Prepared by:
John Richardson
Consulting Geologist
Macquarie Harbour Mining Limited

Submitted by:
Frank Rogers
Managing Director
Macquarie Harbour Mining Limited

Macquarie Harbour Mining Limited ABN 124 212 175 20 Recreation Street,
Kingston Beach, Tasmania, 7050
TELEPHONE: 03 6229 9955 FACSIMILE: 03 6229 8430
EMAIL: info@mhml.com.au WEBSITE: www.mhml.com.au

1 EXECUTIVE SUMMARY

EL 20/2007 (Strahan) is the only one of Macquarie Harbour Mining Limited's Western Tasmanian tenements to be located on the north-eastern side of Macquarie Harbour. It is considered prospective for volcanic hosted massive sulphide (VHMS) deposits within Cambrian volcanics, carbonate hosted zinc-lead in rocks of Ordovician age, and possibly ultramafic hosted nickel beneath cover in the southern part of the tenement.

A literature review of published documents and open-file company reports relating to previous exploration formed the main part of the work during the year. A short reconnaissance trip into the area was undertaken during late 2008.

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2 INTRODUCTION

This is the first annual report on EL20/2007 (235 sq km) which is held in the name of Goldstock Mining Pty Ltd, a wholly owned subsidiary of Macquarie Harbour Mining Ltd ("MHM"). The location of the tenement, together with the other MHM West Coast tenements, is shown in Figure 1. The licence lies on the Cape Sorell 1:100,000 topographic map sheet with the town of Strahan situated at its north-western end; it is bounded by Macquarie Harbour along most of its western boundary.

Access into much of the area is extremely limited, particularly in the central and southern parts of the tenement.

3 REGIONAL GEOLOGY AND ECONOMIC POTENTIAL

The boundaries of the licence and the geology that it covers are shown in Figure 2. The lower reaches of the King River flow over the section of the Cambrian Belt south east of Strahan before entering the Macquarie Harbour just north of King Point. At the mouth of the King River a delta has formed which contains a significant proportion of tailings derived from the Mt Lyell Copper Mines. These have been deposited in a black shale environment within the deltaic deposits and have been assessed as a source of base metals, gold, and pyrite. It has been estimated that there are 100Mt of sediment in the delta of which 15% is tailings containing 45% sulphides. These deposits are not covered by the MHM licence.

Tracing the regional airborne magnetics (Figure 3) from south to north reveals that the general strike of the Cambrian volcano-sedimentary package swings to the north west on the northern side of Macquarie Harbour beneath a significant thickness of Cainozoic sediments. In the central area of the tenement the strike is generally NNW-SSE and the Cambrian rocks outcrop, while to the west of Strahan there is a further covering of Tertiary and Quaternary sediments. A magnetic low is centred approximately 5km west of that portion of the Sorell Peninsula lying immediately west of the entrance to Macquarie Harbour (outside EL20/2007), indicating that rocks of low magnetic susceptibility exist in this area, possibly a granite, which may increase the economic potential of volcanics in the vicinity of Strahan.

Although the tenement is considered to be prospective for base metal mineralization there are no identified deposits indicated on the MRT online database. Sub-economic base metal mineralization has been reported from the Ordovician sediments which outcrop to the east of the Cambrian succession but there has been no exploration in recent years.

4 REVIEW OF PREVIOUS WORK

In 1956 a JV between The Electrolytic Zinc Company of Australasia Limited and Mt Lyell Mining and Railway Co Ltd (Lyell – EZ Explorations or the LEE JV) was formed to explore the Mt Read Volcanics in the southwest of Tasmania. In 1958 an airborne magnetic survey by the JV identified an anomaly at Ocean Beach. This was investigated and was due to magnetite in beach sands. In 1960 the LEE JV mounted field exploration programmes in the area. On the northern side of the harbour they undertook a study of the Tertiary cover. This was reported to consist of unconsolidated sands and gravel containing bands of clay and lignite in a central zone. The total thickness was calculated to be 225m minimum with 170m being below sea level. Dating by fossils in the lignite suggested a Pliocene age for these deposits.

In 1981 CRA Exploration Pty Ltd mounted a drilling programme to assess the brown coal potential of the Cainozoic succession. The drilling rig was not capable and the programme was abandoned. The limited results obtained were interpreted to indicate there was little potential for brown coal.

In 1987-1990 a JV between BHP, Utah, and New Holland explored the sub outcropping Cambrian rocks north of the King River with EL29/1987. They report that these appear to have a dominantly felsic provenance. There are few indications that hydrothermal activity has been intense in the area. Stream sediment sampling revealed low level Cu-Zn anomalism in the SW of the area (up to 228 ppm Zn, 63 ppm Cu). An airborne GEOTEM EM survey did not detect any responses that could be attributed to conductive sulphide mineralization so no further work was undertaken. This JV also explored an easterly area of the Cambrian stratigraphy to the south of the King River with EL30/1987. They reported evaluation of previous geophysical and geological data suggested that the volcanics are possible time equivalents of the Que-Hellyer and Noddy Creek volcanics. Several additional structures were delineated. A significant structural zone was located in which a major NW-SE trending magnetic lineament abruptly truncates magnetic mafic volcanics. Seven rock chip samples showed weak anomalism in Zn and Cu. An airborne EM survey was carried out but did not detect any responses that could be attributed to bedrock conductors such as sulphide mineralisation. No further follow up work was undertaken. BHP-Utah withdrew from the JV and New Holland relinquished the tenements. The exploration programme conducted by this JV did not include any drilling.

CRAE acquired EL64/1994 in 1994 to explore Ordovician carbonates of the Gordon Group in the Swift Creek area for Irish-type carbonate hosted zinc. Part of this area falls within the extreme eastern part of EL20/2007 where the prospective rocks have a faulted contact with the Cambrian succession to the west. Bedrock sampling at two localities indicated anomalous zinc and lead which may be analogous with the Grieves mineralisation near Zeehan. A fence of five short diamond holes was drilled to test the prospective stratigraphy but only narrow zones with low values were intersected.

5 EXPLORATION COMPLETED DURING THE REPORT PERIOD

Most of the work on EL20/2007 has comprised data compilation and literature research from hard copy and digital reports available from the Mineral Resources Tasmania. Part of an exhaustive bibliography, compiled by Featherstone Geological Consultants with assistance from MHM staff, is included in this report. Diamond drill core from CRAE's exploration campaign and held by MRT was also examined.

A reconnaissance field trip in November enabled the following:

- (a) A considerable section of the Cambrian succession to be examined, along both the Lyell Highway and eastwards from the mouth of the King River.
- (b) Access via forestry tracks southwards from the highway into the eastern part of the tenement.

No indication of mineralisation or hydrothermal alteration was observed in the volcanic rocks and little outcrop was observed in the Teepookana Plateau area where the Ordovician rocks are mapped.

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7 EXPENDITURE

Total annual expenditure for EL20/2007.

Geoscientific Costs	
Geology	34,289.00
Geochemistry	
Geophysics	100.00
Remote sensing	
Drilling & Gridding Costs	
Gridding	
Drilling	
Earthmoving	
Land Access Costs	6,082.00
Feasibility Costs	6,160.00
Other Costs	5,599.00
Rental fees	
Vehicular track Construction	
Surveying, contract drafting etc	
Capital equipment purchase	
Administration Costs	
(note: not to exceed 10% of annual expend)	
Legal	
Office & Admin	2,709.00
Total	54,939.00