

ASF COPPER PTY LIMITED
ABN: 17 154 824 441

TASMANIA

TEMMA PROJECT

EXPLORATION LICENCE: EL44/2011

PARTIAL RELINQUISHMENT REPORT:

JULY 2014

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Map Sheets:

SK55-3 Burnie 1:250,000

Ordnance 3042 and Temma 3043 1:25,000

Abstract

Exploration in the Temma area since the mid 1960s' has identified a number of epigenetic ironstone occurrences in which two stages of mineralisation have been demonstrated; an earlier magnetite-Cu association and a later quartz-Pb-Cu-Ag+/-Au event. Both mineralisation events are spatially associated. The magnetite bodies are developed as steeply, mostly west dipping planar bodies up to 20m thick and up to 1.0-1.5km in strike length. The mineralogy of the magnetite bodies is consistent with an IOCG style of mineralisation.

Despite a long history of exploration, considerable potential exists for significantly mineralised positions within and adjacent to the ironstones as geochemical anomalism remains unclosed at the Strickland and Possum Creek prospects and drilling has tested only approximately 500m of strike in the prospects drilled to date. In addition to the ironstone targets, a number of discrete helicopter borne EM (HEM) conductors remain unexplained and represent potential exploration targets.

Work by ASF Copper Pty Ltd during the period has involved rapid reconnaissance to assess access to the ironstone targets and determine the nature of the regolith for the suitability of further soil sampling. Seven HEM anomalies were briefly visited to determine if there were any obvious sources for the anomalies and to assess access and regolith to determine a practical exploration approach.

The only field based exploration within the proposed relinquished portion was a brief helicopter site visit of 1 day.

1.0 Introduction

EL 44/2011 is held by ASF Copper Pty Ltd and was granted on 4 April 2012.

A number of helimag EM targets identified by Jaguar Minerals from a January 2001 Geotech Hummingbird helicopter borne EM (HEM) survey were investigated and determined to be lithological in nature, this was verified by the brief field visit by ASF Copper. As such the eastern portion of E44/2011 will be relinquished.

2.0 Location and Access

EL 44/2011 is located in NW Tasmania, approximately 25km south of Arthur River (Fig.1). The small fishing village of Temma locates in the NW part of the tenement. Road access is limited, with the Sandy Creek Temma track providing access along the coast and the Balfour Track providing east-west access. These tracks are passible by 4WD in dry weather. A number of old tracks developed by previous explorers provide access to the Strickland and Possum Creek prospects, however these are in very poor condition and require upgrading to allow 4WD access to these areas.

The natural vegetation transitions from coastal heathland on the coast and variably throughout the licence area through to dense tea tree scrub and dense mixed tea tree-eucalypt forest.

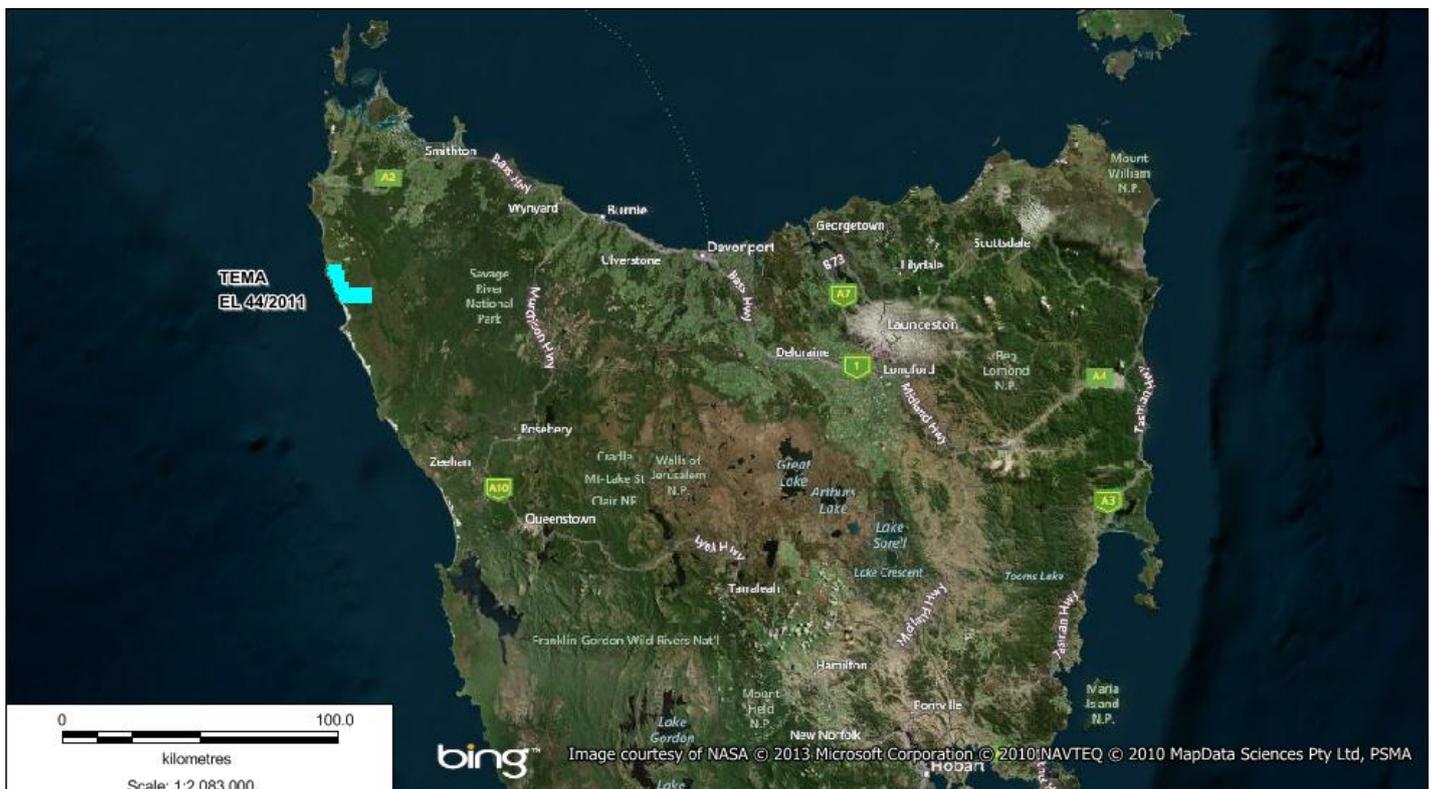


Figure 1: Location of Temma EL 44/2011

3.0 Tenure

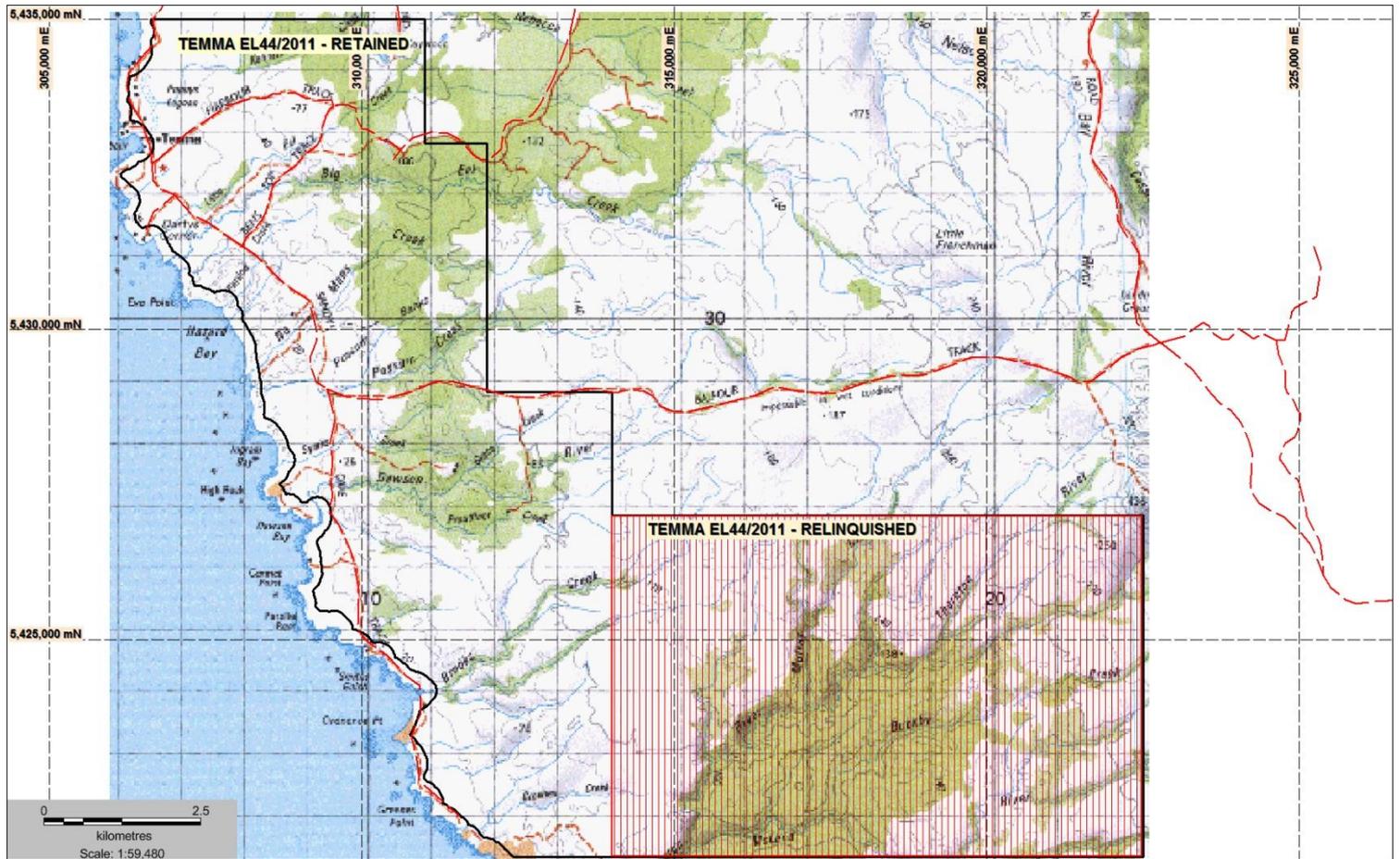


Figure 2: Temma Relinquishment Map

Following a review of historical exploration a decision was made to relinquish the eastern portion of EL44/2011 (Temma) as shown in Figure 2. The original L shaped licence was 104km² with 46km² proposed for partial relinquishment leaving the Temma licence with an area of 58km².

4.0 Geology

The regional and local geology of the area has been well described in the Annual Reports of previous explorers, notably; Herman and Sumpton (Geopeko, 1982), Weir (CRAE 1983) and Hughes (Jaguar 2009). L.A. Newnham (Pacific Nevada, 2000) provides detailed petrology and mineralogy for the Strickland prospect. The following summary is derived from these authors.

4.1 Geology

The regional geology is dominated by the Mesoproterozoic Rocky Cape Group, a thick siliclastic shelf sequence, the oldest rocks in Tasmania and for which the basement is unknown. The lithologies comprise clean, well sorted sandstones and siltstones through to laminated siltstones which may be graphitic and pyritic. The lithologies indicate a range of environments from reasonably high energy oxidizing to low energy reducing conditions.

The Rocky Cape Group has been divided into seven Sub Groups of which the Balfour Sub Group dominates the geology of the Temma area of interest, comprising inter-bedded sandstone and siltstone, chloritic siltstone and carbonaceous, pyritic siltstone and shale. The tectonic history is characterized by two early phases of syndepositional extension followed by at least four deformational events; the most significant being D3, considered being Devonian in age. The D3 deformation is manifested by NW directed folding, cleavage development and major, NE-directed low and high angled thrusts. Reactivated extensional structures during D3 may have provided fluid pathways for mineralisation.

Younger rocks in the Temma area include Tertiary basalt and unconsolidated Pleistocene and Holocene beach and dune deposits. These units are particularly important from an exploration methodology perspective. Tertiary basalt is mapped at both Strickland and Possum Creek prospects but the extent of the basalt with respect to the ironstones is uncertain. The basalt is present on at least part of the magnetic high which defines an ironstone to the west of the main ironstone at Possum Creek and a similar situation is apparent at Strickland. Variable cover of beach and dune sands occurs at both prospects and at Possum Creek is reported to attain 15m in thickness. Both the Tertiary basalt and sand cover has important ramifications for geochemical sampling.

4.0 Previous Exploration

Jaguar Minerals Ltd over the period 2006-2010 under EL 27/2005 processed and interpreted a Geotech Hummingbird HEM survey and selected a number of priority targets for follow up. Limited orientation ground magnetics and orientation partial leach geochemistry involving 8 lines were undertaken at Possum Creek. This work conclusively showed that "C" horizontal sampling is the most effective medium to use in the local area. Limited reconnaissance of selected HEM targets including some geochemistry on three, proved inconclusive.

Work by ASF Copper in 2012 comprised a thorough review of previous exploration results leading to the identification of target areas and the formulation of an exploration programme.

A reconnaissance trip was undertaken using a helicopter to rapidly traverse the areas of interest. The purpose of the reconnaissance was primarily to ascertain the nature of the

regolith for geochemical sampling, locate previous drill holes and to determine requirements for access. In addition, a total of seven HEM targets were briefly visited to inspect the geology, regolith and accessibility of the targets and to determine if any obvious sources for the EM response.

HEM anomalies 3,4,5,7, 11, 31 and 36 (Jaguar Minerals nomenclature, Busbridge, 2007) were located and a brief reconnaissance conducted over each. The seven HEM anomalies were interpreted by Jaguar to be priority targets and most likely to represent discrete bedrock conductors. All the anomalies were located in open, low-heath covered ground with good outcrop with a thin and variable cover of dune sand. The lithologies at every site were similar being fine grained highly siliceous sandstones and siltstones with lesser shale. No obvious sources for the EM response were observed except at HEM anomaly 31. This site is located above a deeply incised creek below the plateau of the drainage divide. At the actual location, lithologies comprise the usual white siliceous fine sandstones and siltstone. However an inspection of stream float in the creek immediately north of the site located a significant quantity of black graphitic shale. While not conclusive, the graphitic shale is considered a probable source for the anomaly.

5.0 Environmental

There has been no surface disturbance within the relinquished portion of EL44/2011.

6.0 Conclusions

Field based exploration by Jaguar Minerals and ASF Copper has determined that the EM targets are likely to be lithologically sourced, most likely graphitic sediments. As such the area is of no further interest to ASF Coppers Au/Cu/Fe exploration and will be relinquished.

Key Words

Temma, Rocky Cape Group, Balfour Sub Group, Strickland, Possum Creel, Little Eel, magnetite, ironstones, magnetics, electromagnetics, IOCG, copper, gold, soil geochemistry

List of References

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|---------------|------|--|
| Anderson N.M. | 2011 | Temma Project: EL 27/2005 Annual Report for the Period 23 March 2010 – 22 March 2011. MRT Report 11-6226 |
| Busbridge M.J | 2007 | Temma Project EL 27/2005 Annual Report for the Period 23 March 2006 – 22 March 2007 MRT Report 07-5446 |
| Hughes C.D.E | 2009 | Annual Report for the Period 23 March 2008 – 22 March 2009 Temma – EL27/2005 MRT Report 09-5836 |
| Hughes C.D.E | 2010 | Temma Project: EL 27/2005 Annual Report for the Period 23 |

March 2009 – 22 March 2010 EL report 10-6036

Herrmann W., Sumpton J.	1981	Progress Report EL 1/77 Temma Area 1981 MRT Report 82-1871
Perring R.J.	1983	EL 1/77 Rocky Cape Temma Area Progress Report 1 st August 1982 to 31 st July 1983 MRT Report 84-2151
Newnham L.A	2000	EL 27/97 Temma Strickland Drilling Program July 2000 MRT Report 00-4500
Swensson C.	2013	EL 44/2011 Temma Year 1 Annual Technical Report, 3 rd April 2012 to 11 th April 2013 for ASF Copper. . MRT Report
Turner N.J.	1999	EL 27/97 Temma Area Annual Report to 12.11.99 MRT Report 99-4387
Weir D.J.	1982	Rocky Cape EL 1/77, Progress Report, July 1981-June 30 th 1982 MRT Report 82-1811