



Tim Callaghan – Resource and Exploration Geology



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**BLYTHE RIVER PROJECT**  
**ANNUAL REPORT**  
**EL35/2006 HAMPSHIRE 1**  
**NW TASMANIA**

**Prepared for: Forward Mining Limited**

**Tim Callaghan, March 2012**

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## **MAP CONVENTIONS**

Coordinates in this report and in digital data associated with this report are recorded as GDA94 Zone 55.

RL's in this report are MSL.

Cross sections are drawn looking north.



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## **EXECUTIVE SUMMARY**

This report covers exploration activities completed on EL35/2006 Hampshire 1. The EL forms part of a tenement package prospective for Magnetite and tungsten mineralisation around the House Top Granite in NW Tasmania.

Only limited reconnaissance field work was completed in 2011. The proposed work program for 2012 includes data compilation, interpretation and targeting with limited field mapping and chemistry. The majority of the work for 2012 will concentrate on the Kara No2 deposits on EL's 18/2007 and 53/2007.



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## 1 INTRODUCTION

EL35/2006 Hampshire is one of 6 current exploration licenses held by either Red River Resources Ltd (RVR) or Iron Mountain Ltd (IRM) and managed by Forward Mining Ltd (FWD). FWD currently has an option to purchase the tenements off RVR and IRM pending successful listing on the ASX. Tenement details are listed in Table 1.

<b>EL</b>	<b>Name</b>	<b>Held By</b>	<b>Size</b>	<b>Expiry</b>	<b>Comments</b>
EL6/2005	Cuprona	IRM	22km <sup>2</sup>	9/2011	Apply for Extension
EL15/2006	Camena	IRM	30km <sup>2</sup>	6/2011	Apply for Extension
EL25/2009	Highclere	RVR	33km <sup>2</sup>	5/2015	4 years remaining
EL35/2006	Hampshire 1	RVR	89km <sup>2</sup>	2/2012	Expires early 2012
EL18/2007	Hampshire 2	RVR	103km <sup>2</sup>	7/2012	Expires mid 2012
EL53/2007	Mt Everett	IRM	47km <sup>2</sup>	12/2012	2 years remaining

Permission to submit a combined annual report for all tenements in the Blythe Project was granted on 10<sup>th</sup> June 2009, with EL 25/2009 being granted on 24<sup>th</sup> May 2010 and added to the reporting area. The board of FWD decided to return to separate annual reports for the tenements in early 2012. This report contains information on exploration activities completed on EL35/2006 which have been partially reported in the Combined Annual Report for the district submitted in November 2011 (Callaghan, 2011).

Five of the six tenements are nearing the end of the term of tenure and will require terms of extension and diligent commitment to work programs. The majority of the work completed over the last year was focused on EL18/2007 Hampshire 2 with only limited reconnaissance work completed on EL35/2006. A term of extension of 1 year was granted for EL35/2006 on March 2<sup>nd</sup> 2012.

The Blythe River Iron Project (BRIP) consists of a number of small to medium size magnetite skarn deposits located in NW Tasmania, approximately 30km south of Burnie (Figure 1 and 2). Exploration is focused on resource delineation of semi massive to massive magnetite deposits to provide a resource base for a magnetite mining operation for the iron ore market.



## 2 REGIONAL GEOLOGY

The Blythe River Iron Project is located on the western margin of the Dial Range Trough and is underlain by lithologies of the Late Proterozoic Oonah Formation, Owen Group Siliciclastics, Gordon Group Limestone, Devonian Granites and Tertiary Basalt (Figure 1). The Dial Trough is a structurally interesting basin that includes a possible Northern Extension of the Hellyer Fault, and significant basin bounding faults on the western and eastern sides. The Devonian post orogenic Husetop Granite dominates the geology to the south of the project area and is considered to underlie much of the southern Dial Trough. The Dial Trough has been poorly mapped and stratigraphic correlations are uncertain for many units.

### *Oonah Formation*

The oldest rocks in the district are the Proterozoic Oonah formation, consisting of poly-deformed quartzwacke, siltstone and pelite with lesser dolerite intrusives. These are overlain by a sequence of pelite-carbonate with minor mafic volcanics and conglomerate. This association is host to replacement deposits at Mt Bischoff and near Zeehan and consequently represents a potential host for similar styles of skarn mineralisation.

### *Mt Read Volcanics*

Mt Read Volcanic associations have been correlated with the felsic volcanoclastics of the Western Volcano-sedimentary sequence and the Tyndall Group quartz-feldspar phyrlic volcanoclastics.

### *Owen Group*

The Late Cambrian to Ordovician Owen Group overlies the Mt Read Volcanics and is comprised dominantly of siliciclastic conglomerate and sandstone. Locally volcanic derived conglomerates are associated with basal members. The Moina Sandstone, comprised of coarse to fine siliciclastic sandstone with minor intercalated conglomerate is the uppermost siliciclastic unit of the Owen Group and has a gradational contact with the overlying Gordon Group.

### *Gordon Group Limestone*

Conformably overlying the Owen Group is the Gordon Group limestone and dolomite sequence which is the host of the Kara district magnetite skarns. The stratigraphic thickness of the limestone is regionally variable ranging between 50-1000m.

### *Husetop Granite*

The Husetop granite outcrops in much of the Blythe River Prospect and is believed to extend below much of the area (Leaman, 1993). Leaman concludes that the Husetop granite is anomalously dense and highly magnetic, which may explain the abundance of iron metasomatism in the district. The granite is responsible for massive Magnetite-Sn-WO<sub>3</sub> mineralisation of the Kara District. The association of Tasmanian Devonian granites with Magnetite, Sn-WO<sub>3</sub>, Pb-Zn-Ag and Au mineralisation is well documented.



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### *Tertiary Basalt*

Basaltic flows are widespread throughout the Blythe River Iron Project area, flooding Tertiary palaeo-topographic lows. The basalts vary widely in thickness and frequently have a high magnetic susceptibility creating difficulties for magnetite exploration below basaltic cover. Recent resource and exploration drilling at the Kara Mine indicates that the magnetite skarn extends below basalt cover.

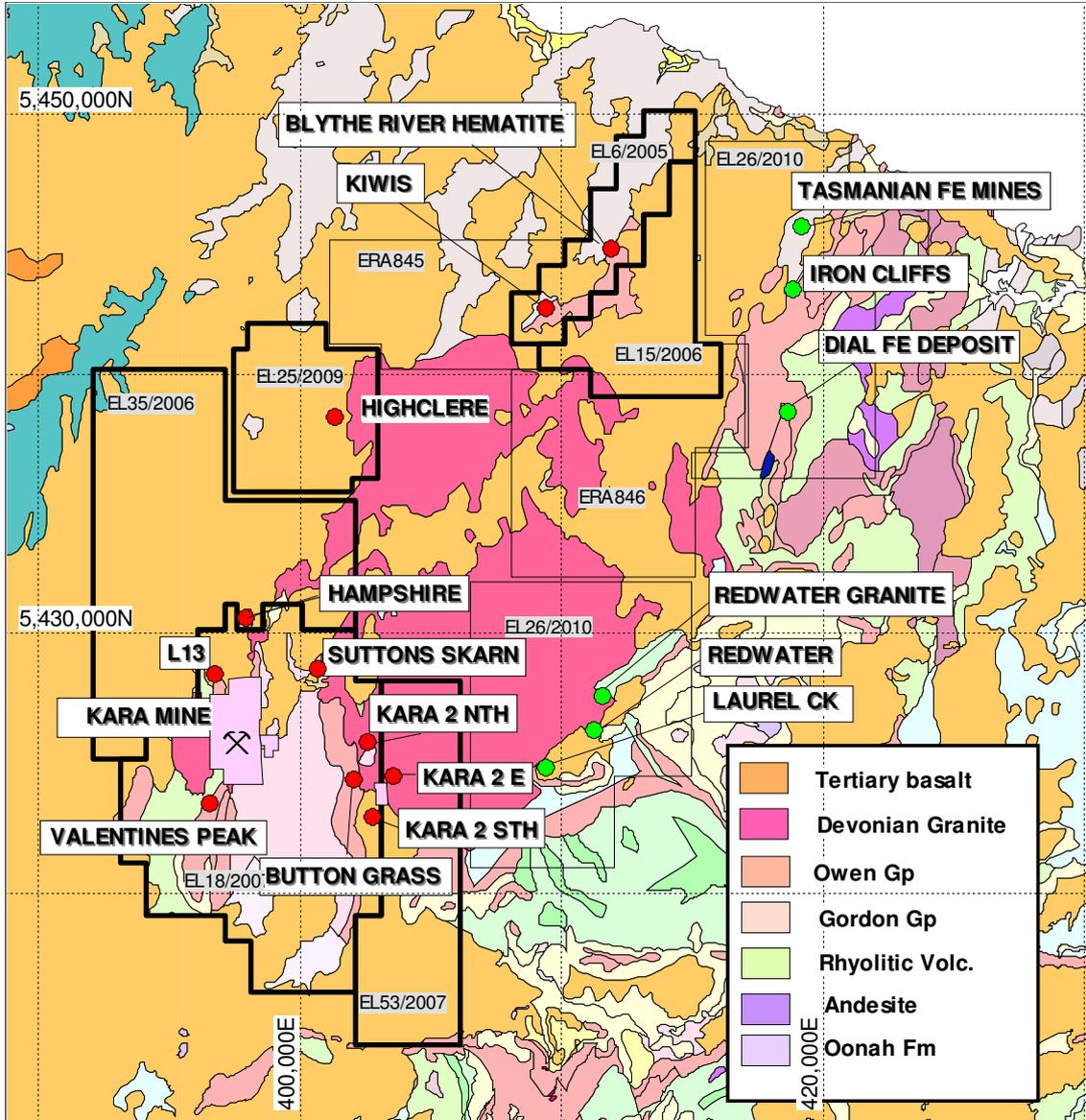


Figure 1. Blythe River Project location, Fe Prospects and MRT 250k Geology. Red dots are Blythe Project Fe prospects, green dots are other regional Fe Prospects.

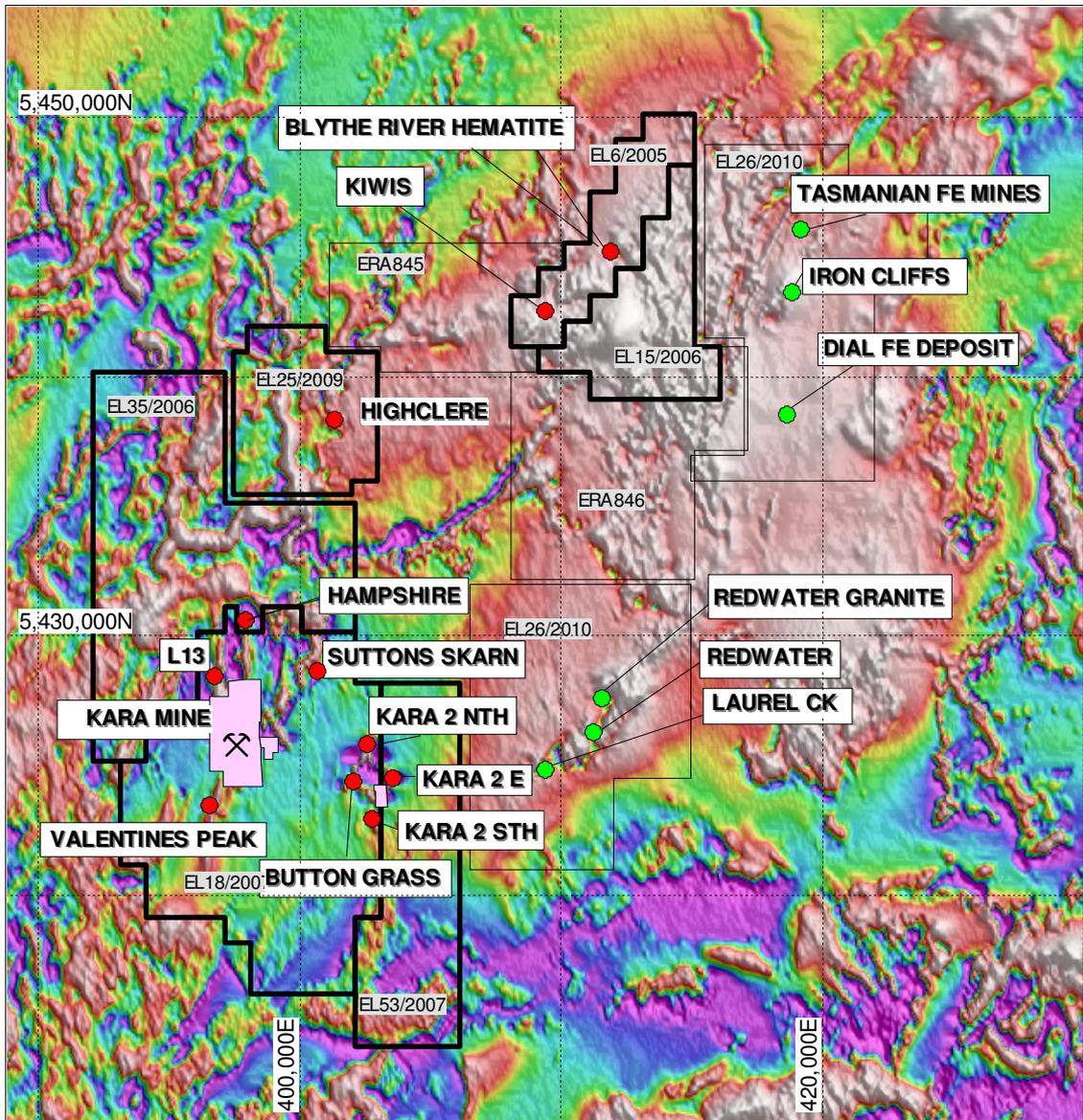


Figure 2. Blythe Project tenements, TMI and prospect locations. Red dots are Blythe Project Fe prospects, green dots are other regional Fe Prospects.



## 2.1 LOCAL GEOLOGY

The geology of EL35/2006 is dominated by Tertiary basalt flows, particularly to the north. On the southern boundary several basement windows expose granite intrusions with adjacent skarn mineralisation and the underlying Moina Sandstone including the Hampshire magnetite skarn, typical of the metasomatic magnetite rich skarns associated with the Housetop Granite.

The Hampshire Magnetite skarn has been explored historically for Sn and  $WO_3$  by ANZECO and MacIntyre Mines during the 1970's and 1980's. Red River-Iron Mountain completed a resource delineation RC drilling program on the Hampshire Magnetite skarn and exploration RC drilling on the Nolan's Hill and Sea Slug magnetic anomalies. The Nolan's Hill and Sea slug anomalies were possibly not fully tested with all holes ending in basalt, failing to reach the basement.

The Hampshire magnetite skarn dips moderately west and remains open to the south and west. Drilling returned numerous high grade magnetite intersections in a consistently dipping body. The magnetic anomaly coincident with the skarn continues to the south onto E118/2007 beneath basalt cover.

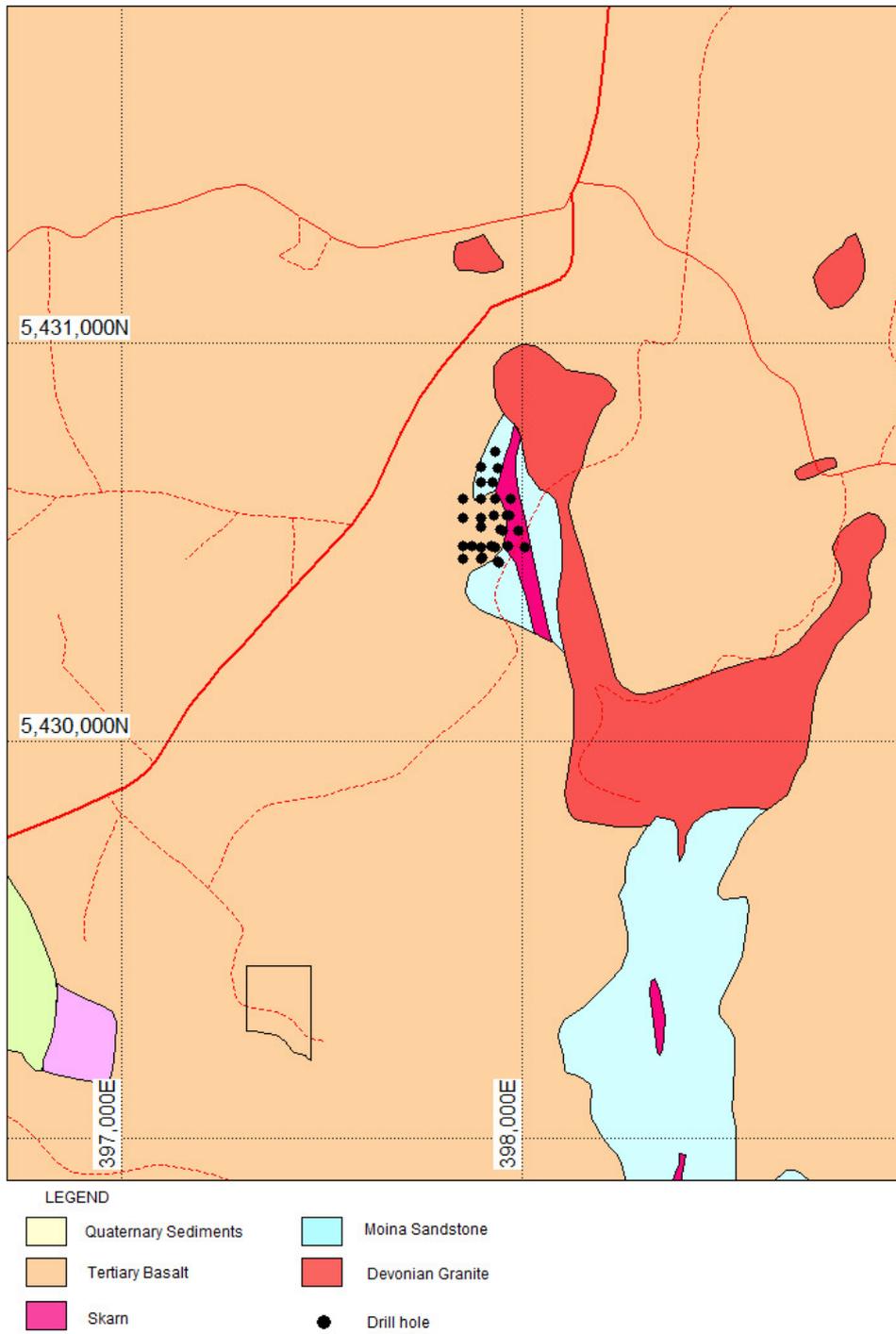


Figure 3. Hampshire geology (after Whitehead, 1982).



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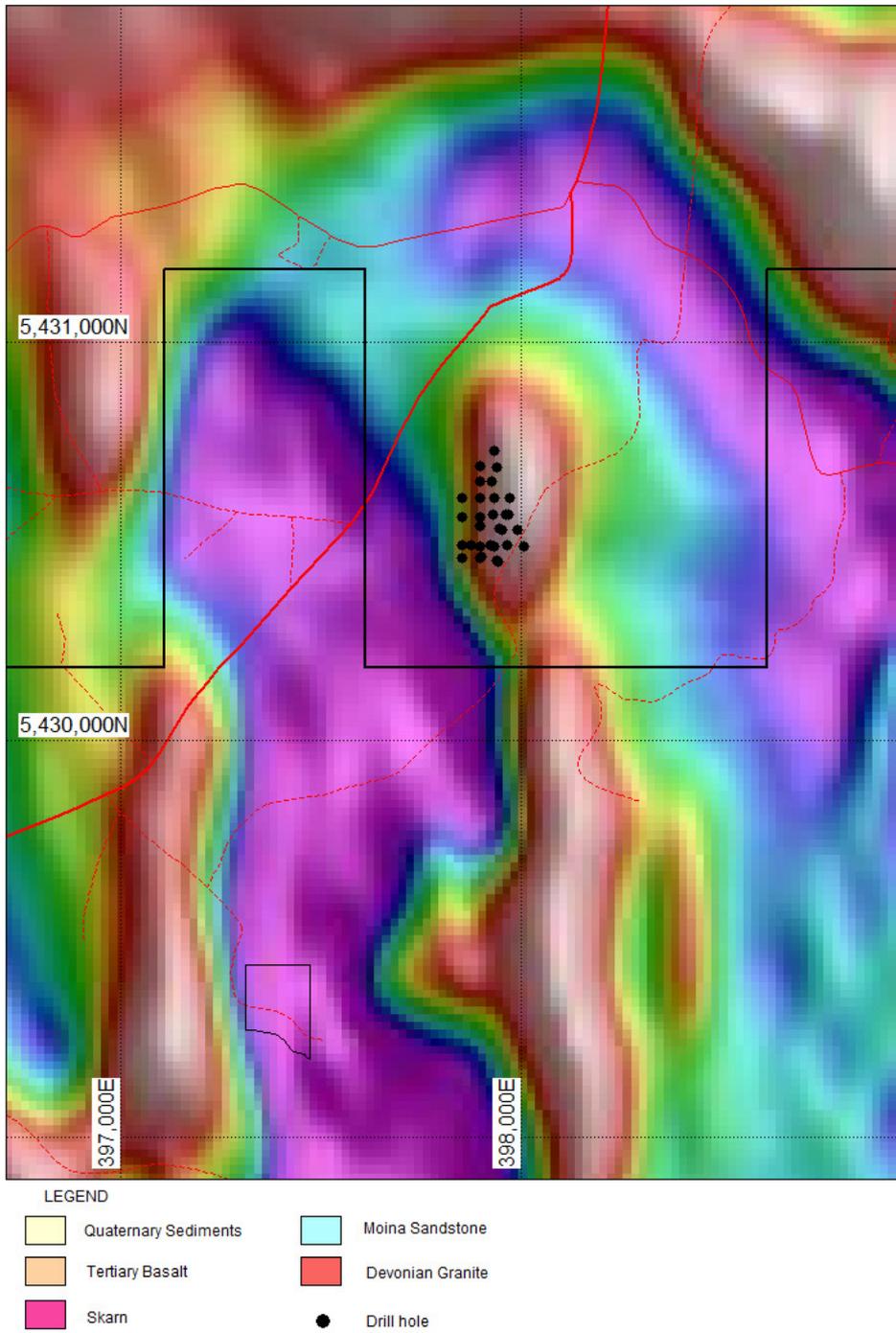


Figure 4. Hampshire TMI



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### **3 WORK COMPLETED FEB 2011 – FEB 2012**

Work completed specifically on EL35/2006 included reconnaissance geological work, compilation of historic data and a report on proposed exploration for the Blythe River Iron Project.



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#### **4 PROPOSED WORK PROGRAM**

A 2 year exploration program for the Blythe River Project involving a full expenditure of \$1.9M was proposed to the board of Forward Mining. Most of the proposed work for 2012 was likely to occur on EL's 18/2007 and 53/2007 involving definition drilling and completion of a feasibility study on the Kara No2 skarns.

Work planned for EL35/2006 involves prospect mapping, data compilation, interpretation and target generation. Future work will involve a resource estimation of the Hampshire deposit and exploration drilling testing the southern strike extension of the deposit. A proposed expenditure of \$25,000 is expected for the EL.



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## **5 ENVIRONMENTAL**

No rehabilitation was required during 2011.



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## **6 EXPENDITURE**

Expenditure for 2012 is anticipated to be approximately \$25,000.



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## **ADDITIONAL NOTES**

### ***LIMITATIONS AND CONSENT***

The report is provided to Forward Mining Ltd in the context of an Annual Report and should not be used or relied upon for any other purpose.

This report has been prepared using information available to the Author at the time of writing. The opinions stated herein are given in good faith and with the belief that the basic assumptions are factual and correct and the interpretations reasonable.

This report is not intended for use as a public document nor, in whole or in part, in a public document without written consent to the form and context in which it appears.

### ***COMPETENT PERSON AND JORC CODE***

This report was prepared in accordance with the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code") by Tim Callaghan, who is a Member of The Australian Institute of Mining and Metallurgy ("AusIMM"), has a minimum of five years experience in the estimation and assessment and evaluation of Mineral Resources of this style and is the competent Person as defined in the JORC Code. This announcement accurately summarises and fairly reports his estimations and he has consented to the resource report in the form and context it appears.

### ***STATEMENT OF INDEPENDENCE***

Tim Callaghan has no material interest or entitlement in the securities or assets of the Forward Mining Ltd or any associated companies.