



# ENTERPRISE METALS LIMITED

(ACN 123 567 073)

30 APRIL 2010

MARCH 2010 QUARTERLY ACTIVITIES REPORT

ASX Symbol: ENT

Level 1, 640 Murray Street  
PO Box 992  
West Perth 6872  
Western Australia  
Phone: +618 9436 9200  
Facsimile: +618 9436 9220  
[www.enterprisemetals.com.au](http://www.enterprisemetals.com.au)

## BOARD OF DIRECTORS

Mr Paul Larsen  
Chairman

Mr Dermot Ryan  
Managing Director

Mr Bruce Hawley  
Executive Director

Mr Jay Stephenson  
CFO/Company Secretary

## PROJECTS

### Gold

Darlot (Yandal)  
Revere (Doolgunna)  
Wattagee (Cue)  
Fraser Range (SW Yilgarn)

### Uranium

Yalgoo (Murchison)  
Byro (Murchison)  
Maitland (Yandal)  
Lake Mason (Gidgee)  
Darlot (Yandal)  
Sylvania (Pilbara)

### Iron Ore

Cunderdin  
Sylvania  
Earaheedy  
Fraser Range  
Eucla

## ISSUED CAPITAL

**Shares:** 111,970,840

**Listed Options:** 15,281,966

**Unlisted Options:** 5,500,000

## HIGHLIGHTS

- **Cunderdin iron exploration project acquired & detailed airborne survey completed, drilling planned for late May/early June.**
- **Key Eucla tenement offered for grant by DMP.**
- **Limited RC drill testing of Wattagee gold & base metal targets concluded. Assays awaited.**
- **Byro detailed radiometric survey planned.**
- **Cash in bank at 31 March 2010: \$2.94M.**

## OVERVIEW

At Cunderdin the Company has acquired a 100% interest in E70/3756-I for a consideration of 3 million ENT shares and a 1.5% gross royalty. A low level 200m line spaced magnetic survey identified a linear magnetic anomaly with a strike of 110 km and an estimated width of 500-1,000m which the Company interprets to be quartz-magnetite/BIF. Drill testing awaits DMP and Shire approval.

At Eucla the DMP has offered key tenement E69/2603 for grant, and the Company has paid the GST and is expecting formal confirmation of grant within a week. This tenement covers the majority of the strong discrete magnetic targets with coincident gravity anomalism that have been identified by the Company.

At Wattagee the results of 3 RC drill holes at the Placer Prospect detected only low level gold over 4m composite samples. Assay results from the remaining 7 holes at other prospects are still awaited.

The Company's Share Purchase Plan closed on 5<sup>th</sup> March 2010 with applications for 7,556,820 shares from 192 Eligible Shareholders raising \$1,511,364. The Company raised an additional \$1,300,000 million by the placement of 6.5 million shares at 20 cents each to sophisticated investors.

## 1. SUMMARY OF EXPLORATION ACTIVITIES

### **CUNDERDIN PROJECT**

The Cunderdin iron exploration project is centered on the township of Cunderdin approximately 150 km east of Perth in Western Australia, and straddles the Great Eastern Highway and the standard gauge railway line that runs from Kalgoorlie to the port of Kwinana south of Perth. The project now consists of wholly owned Exploration Licence 70/3756-I and Exploration Licence application 70/3816 covering a total of approximately 713 km<sup>2</sup>.

Early in the Quarter, the Company entered into a 6 month option agreement over Exploration Licence 70/3756-I by paying an option fee of \$50,000 to the shareholders of Glintan Pty Ltd ("Glintan"). Following completion of due diligence, the Company exercised its option and purchased a 100% interest in Glintan for a consideration of 3 million Enterprise fully paid shares and a 1.5% gross royalty of on all minerals.

The Company's concept is that granites and granitic gneisses within the Cunderdin area contain enclaves of NW striking metamorphosed greenstone belts, which may also contain meta-sedimentary units including quartz-magnetite/ banded iron formation ("BIF"). However, deep weathering has resulted in little outcrop being left at surface, and hence detailed magnetic and radiometric surveys are critical in outlining these "blind" greenstone belts.

At the end of February, the Company completed a low level 200 metre line spaced magnetic and radiometric survey over the project area. This survey highlighted a layered linear magnetic anomaly with a strike extent of over 110 km and an estimated width of between 500 - 1,000 metres, which the Company interprets to be caused by a quartz-magnetite/ BIF horizon.

Field checking along public roads shows that the interpreted BIF horizon is represented largely by gently rolling hills capped by blankets of iron rich laterite. Regional mapping by the Geological Survey of Western Australia records very little outcrop in the project area, and no outcropping BIF.

However, immediately to the south-east along strike, Magnetic Resources NL [ASX code MAU] announced the discovery of BIF outcrops at Jubuk (near Corrigin) which they subsequently drill tested [MAU: ASX 3 March 2010] and produced high grade magnetite concentrates (69.7%Fe) with low impurities using Davis Tube testwork. [MAU: ASX 27 April 2010]

The Company has submitted programs of work ("PoW's") to the Department of Mines and Petroleum ("DMP") for approximately 20 drill traverses along Shire road reserves. Verbal support for the concept has been indicated by the Shire of Cunderdin, but formal permission from the DMP and Shire has yet to be granted. Assuming that all approvals for drilling are obtained during May, the Company expects to begin drill testing the magnetic target in late May/early June 2010.

Negotiations with landowners regarding access to farm land are due to begin in early May 2010 for the second stage of RC drilling. The DMP has advised the Company that Native Title has been extinguished over the private farm land comprising the granted tenement.

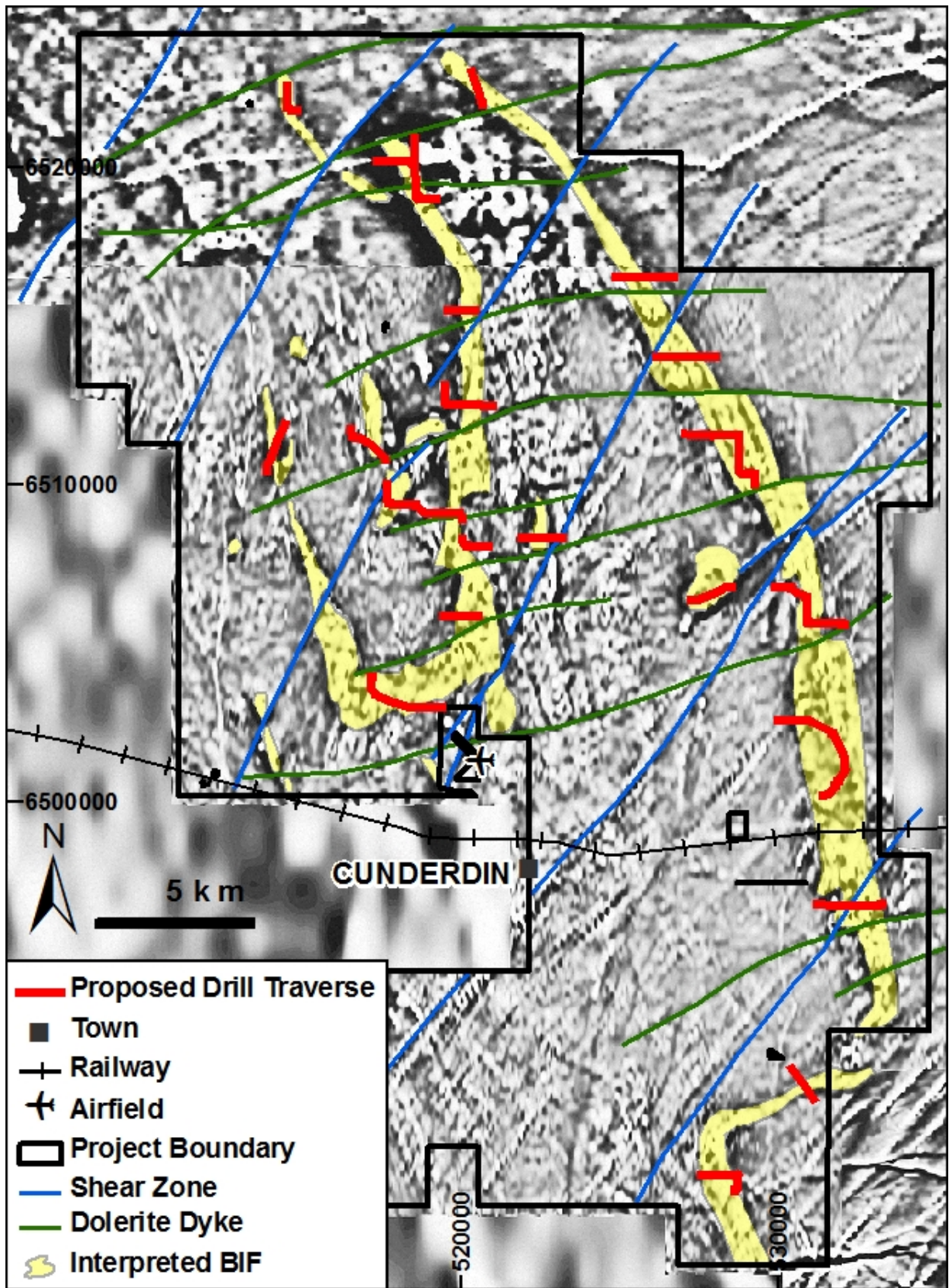


Figure 1. Planned drill hole traverses over interpreted Quartz-Magnetite/BIF Horizon

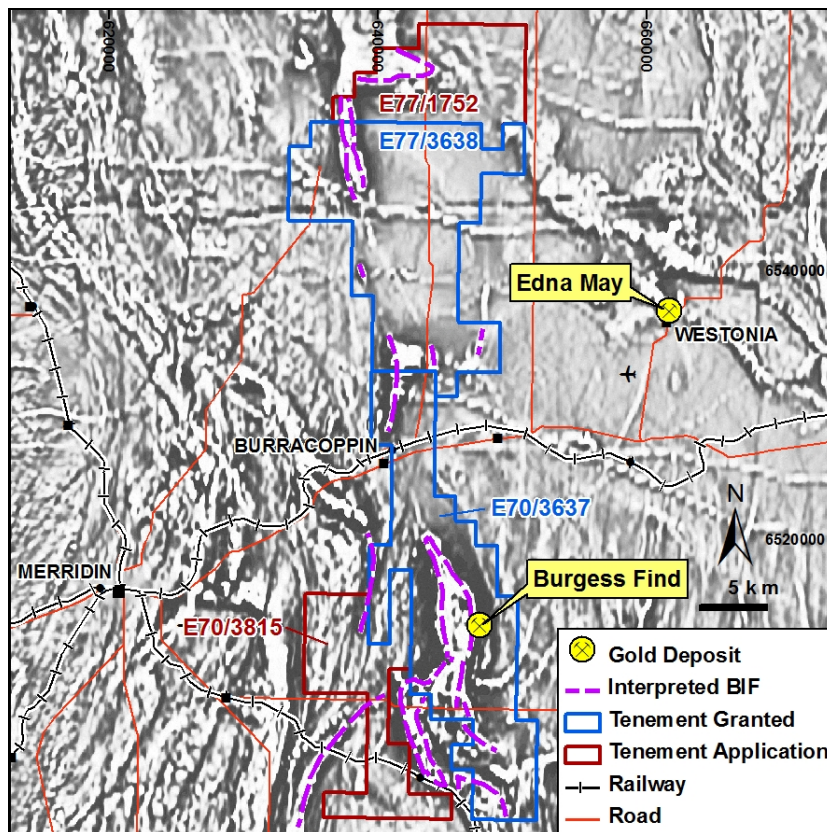
**BURGESS PROJECT**

During February the Company entered into an option agreement with MPF Exploration Pty Ltd (“MPF”) for the Burgess project tenements at Burracoppin, some 20km west of Westonia where Catalpa Resources Limited (ASX: CAH) plans to produce 100,000 ounces gold per annum from the Edna May Gold Operation.

Under the agreement, the Company is to pay an option fee of \$50,000 to undertake extended due diligence on MPF’s Exploration Licences 70/3637 and 70/3637 for a period of 6 months. The Company has the right but not the obligation to exercise its option to purchase an 85% interest in the tenements for a consideration of \$100,000 and 2 million Enterprise fully paid shares. The Company will free carry MPF’s 15% interest through the exploration stage to completion of a final feasibility study and decision to mine. If MPF declines to participate in a mining operation, its interest will revert to a gross production royalty of 1.5% on all minerals produced.

The tenements cover an area of approximately 420km<sup>2</sup> and overlie a portion of the poorly known “Burracoppin greenstone belt”, which is on the SW limb of the Westonia greenstone belt. Based on previous mapping and shallow drilling, the greenstone belt contains mafic, ultramafic and sedimentary rocks, including BIF. However, there has been no deeper drilling focused on the strongly magnetic units to specifically test these for iron content and thickness.

The area also contains several historical gold workings which were explored during the 1990’s, the largest of which is Burgess Find. Gold mineralisation occurs within quartz veins and quartz-rich granitic stringers hosted by sediments, mafic-to-felsic granulites and gabbroic rocks. A first vertical derivative image of the 400 metre line spaced aeromagnetic data is shown below which highlights the strong linear magnetic anomalies which are interpreted to be BIF.



**Figure 2. Burgess Project – 1<sup>st</sup> VD Aeromagnetic Image**

**EUCLA PROJECT**

The DMP has offered Exploration Licence 69/2603 at Balladonia for grant, and the Company has accepted the offer and paid the GST and is now expecting formal confirmation of grant within a week. This tenement is the first of a number of applications lodged in 2009, and covers the majority of the strong discrete magnetic targets with co-incident gravity anomalism that have been identified by the Company (refer Figure 3 below).

The strong discrete magnetic anomalies are several square kilometres in extent and may indicate the presence of large magnetite/hematite rich intrusives or metamorphosed iron-rich sedimentary bodies. Alternatively they may relate to enclaves of mafic and/or ultramafic rocks prospective for gold and base metals. There is no record of previous exploration of the immediate project area.

To test these targets, Enterprise has planned a drilling program of approximately 40 vertical RC holes with an average depth of 120 metres per hole, for a total of 4,800 metres. This program will be submitted for DMP approval following formal grant of E69/2603. It is expected that drilling will commence in the first week of July 2010, subject to site clearance by Native Title claimants.

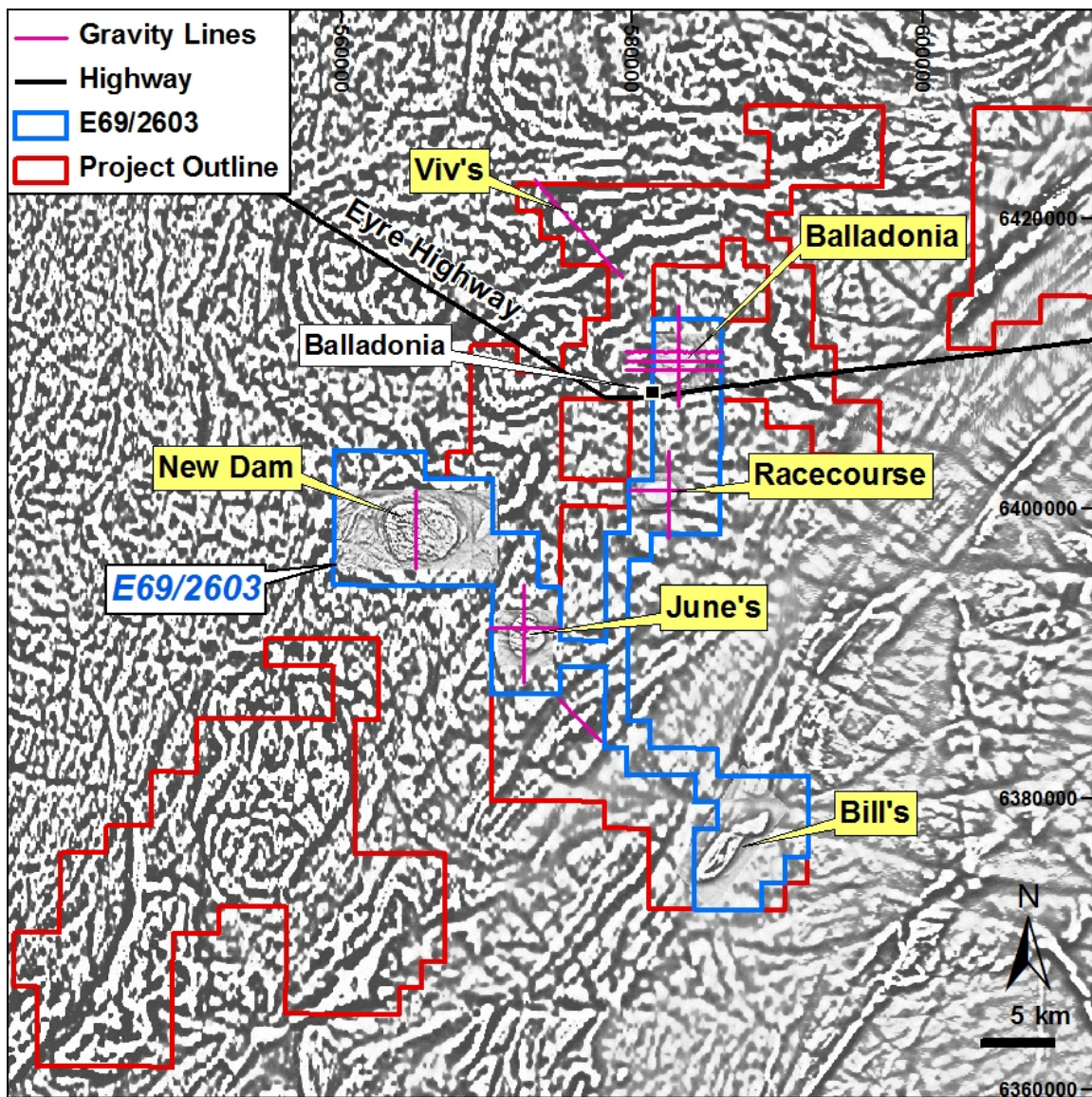


Figure 3. Eucla Project - GSWA/Enterprise Magnetic VD1 Image & Gravity Survey Lines

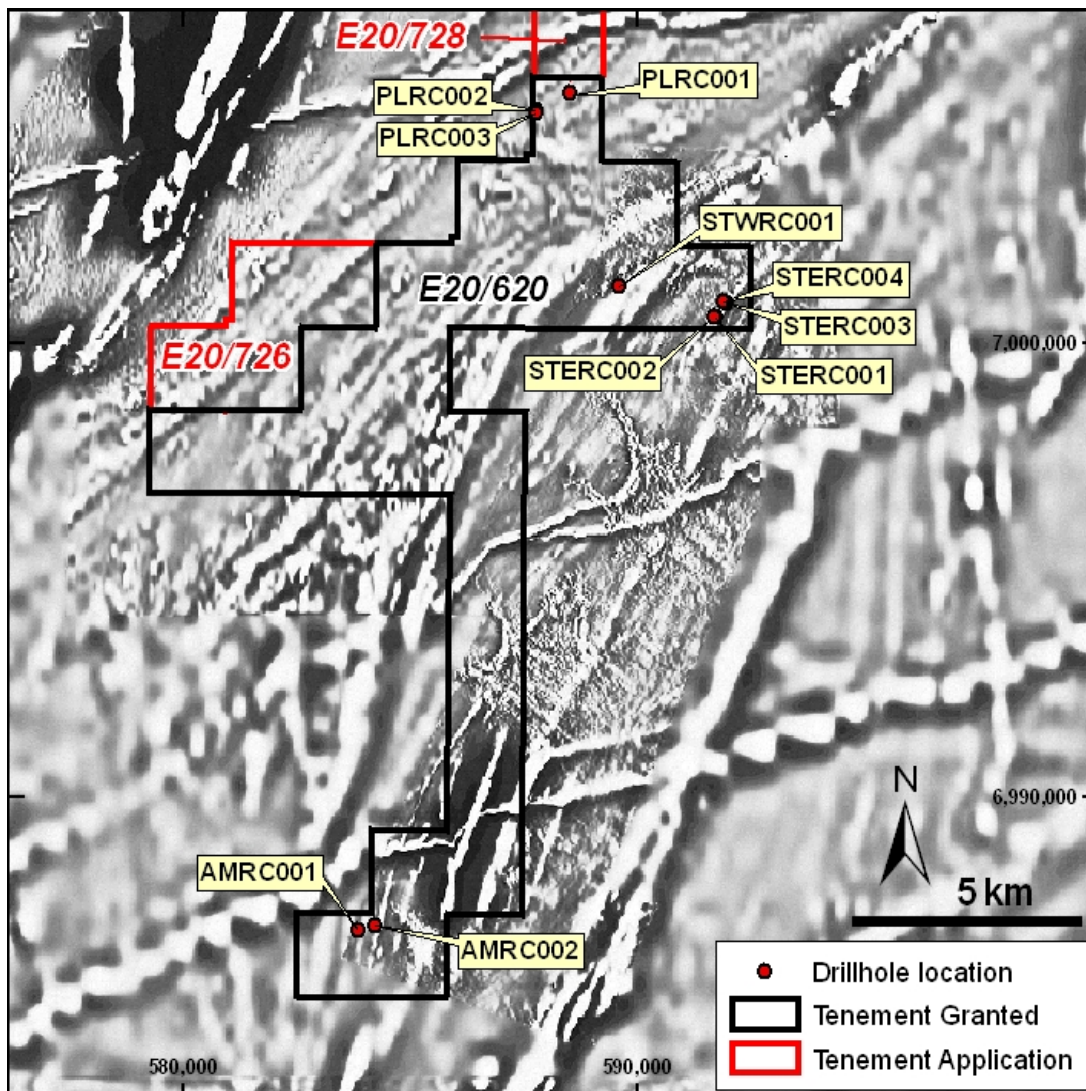
**WATTAGEE PROJECT**

The Wattagee area is located in the Murchison Province of the Yilgarn Craton some 30 km north of the town of Cue. The Company considers the geology of the project area to be prospective for economic gold and VMS style base metal deposits.

During the Quarter, the Company commenced first pass RC drill testing of the gold and IP targets at the Placer and Stock Yard Creek Prospects, and RC drill testing of the base metal and IP anomalies at the AM14 Prospect. The program was planned to drill several holes on each prospect to depths varying between 150 and 250 metres.

The drilling program was completed in late April following the drilling of ten holes, two of which were abandoned short of target due to drilling conditions. The locations of these holes are shown on the magnetic image below (Figure 4) and in Table 1 overleaf.

Assays have been received from the holes drilled at the Placer prospect (Refer Table 2 overleaf) but assays are still awaited for the holes at Stock Yard Creek and the AM14 Prospect.



**Figure 4. Wattagee Project, 1<sup>st</sup> VD Magnetic Image with Location of RC Drill Holes**

**Table 1. Wattagee Project - Summary of RC Holes**

Hole No.	GDA East	GDA North	Depth (m)	Dip	Azimuth	Prospect / comments
PLRC 001	588517	7005522	250	-60	45	Placer
PLRC 002	587776	7005154	198	-60	135	Placer
PLRC 003	587786	7005062	178	-60	135	Placer
STERC 001	591742	7000580	235	-60	135	Stockyard East
STERC 002	591700	7000591	118	-60	315	Stockyard East- <i>abandoned</i>
STERC 003	591970	7000890	250	-60	135	Stockyard East
STERC 004	591891	7000919	250	-60	135	Stockyard East
STWRC 001	589593	7001251	208	-60	315	Stockyard West
AMRC 001	583861	6987076	105	-60	270	AM14- <i>abandoned</i>
AMRC 002	584228	6987165	256	-60	270	AM14

At the **Placer Prospect**, three holes were drilled, one to test an IP phase anomaly (PLRC001) and the other two to test beneath a regolith gold anomaly identified by previous RAB drilling (5 metres @ 0.72g/t between 30 to 35 metres in GRB019).

A number of zones of weak gold anomalism accompanied by base metal anomalism were detected (refer Table 2 below). These zones have been re-sampled at 1 metre intervals and will be checked with a fire assay method.

The IP phase anomaly wasn't fully explained by results of the drilling, although there were some weak disseminated sulphides at depth. The two holes drilled under GRB019 intersected a number of low grade gold zones with a maximum of 0.21g/t gold over 4 metres. The gold is associated with low order base metal anomalism.

**Table 2. Placer Prospect - Anomalous Gold Values**

Hole No	From (m)	To (m)	Interval (m)	Au (g/t)
PLRC001	52	60	8	0.13
PLRC002	96	100	4	0.10
PLRC002	132	136	4	0.20
PLRC002	172	180	4	0.13
PLRC003	64	68	4	0.14
PLRC003	100	104	4	0.17
PLRC003	108	112	4	0.18

*NOTE: Samples were assayed as 4m composites using standard Aqua Regia digest/ICP-MS technique with a 1ppb detection limit for gold. All samples were assayed for gold and 15 base metal elements.*

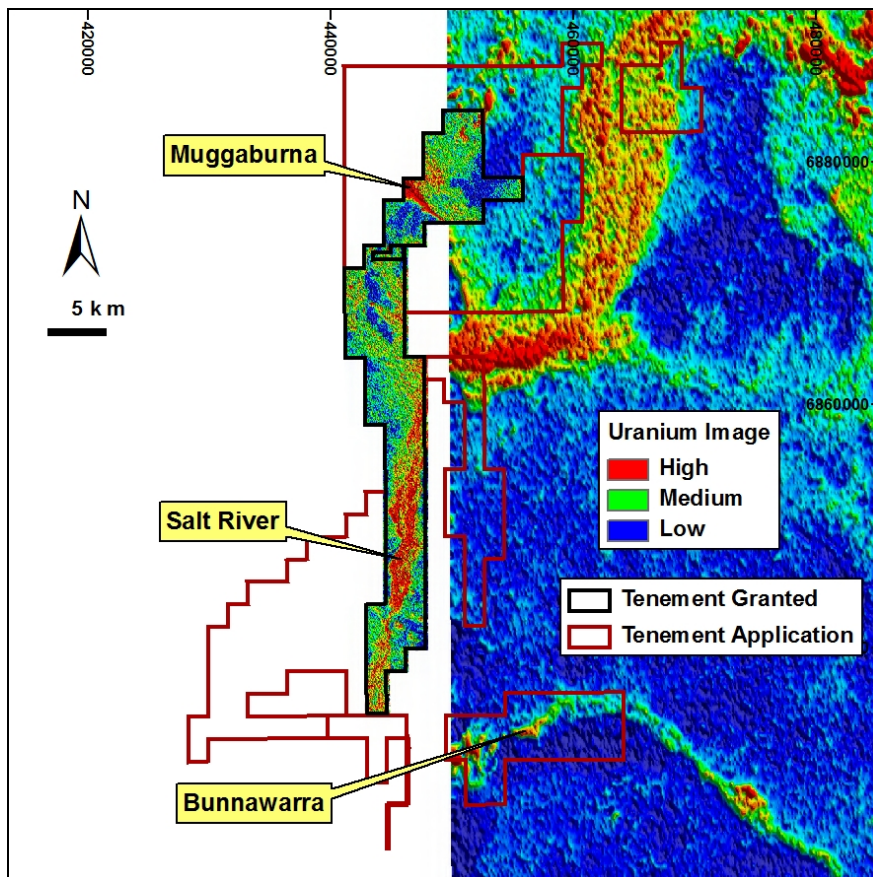
**YALGOO PROJECT**

The Yalgoo uranium project is located approximately 600kms north of Perth and 23kms west of the township of Yalgoo. Following additional tenement applications during the Quarter, the project now comprises one granted Exploration Licence (59/1437) and six exploration licence applications covering a total of 886 km<sup>2</sup>.

The focus at Yalgoo is the discovery of a substantial calcrete hosted uranium deposit within or adjacent to a major drainage system. On the 18<sup>th</sup> January 2010, the Company announced that it has received preliminary 100 metre line spaced magnetic and radiometric data from the Company’s airborne survey over granted Exploration Licence 59/1437. The imaged data clearly shows a 30km long north-south uranium channel anomaly coincident with the Salt River drainage valley.

The Salt River drainage system contains mapped calcrete deposits and overlies a north-south trending greenstone belt. The Company believes that the Yalgoo uranium targets satisfy many of the criteria for the development of calcrete hosted uranium deposits such as Yeelirrie. Along with the Salt River prospect, the Company has identified two other anomalies at Muggaburna and Bunnawarra.

The Company has completed processing of the final magnetic and radiometric data, and has generated specific targets for ground follow up in May. Follow up will consist of ground spectrometer traversing, soil sampling and ultimately aircore drilling once the focii of mineralisation have been located. Drill testing will be dependent upon an approval by the DMP of a proposed “Program of Work” (“PoW”) and site avoidance surveys by Native Title claimants.



**Figure 5. Yalgoo Project - Uranium Channel Image of Airborne Radiometrics**



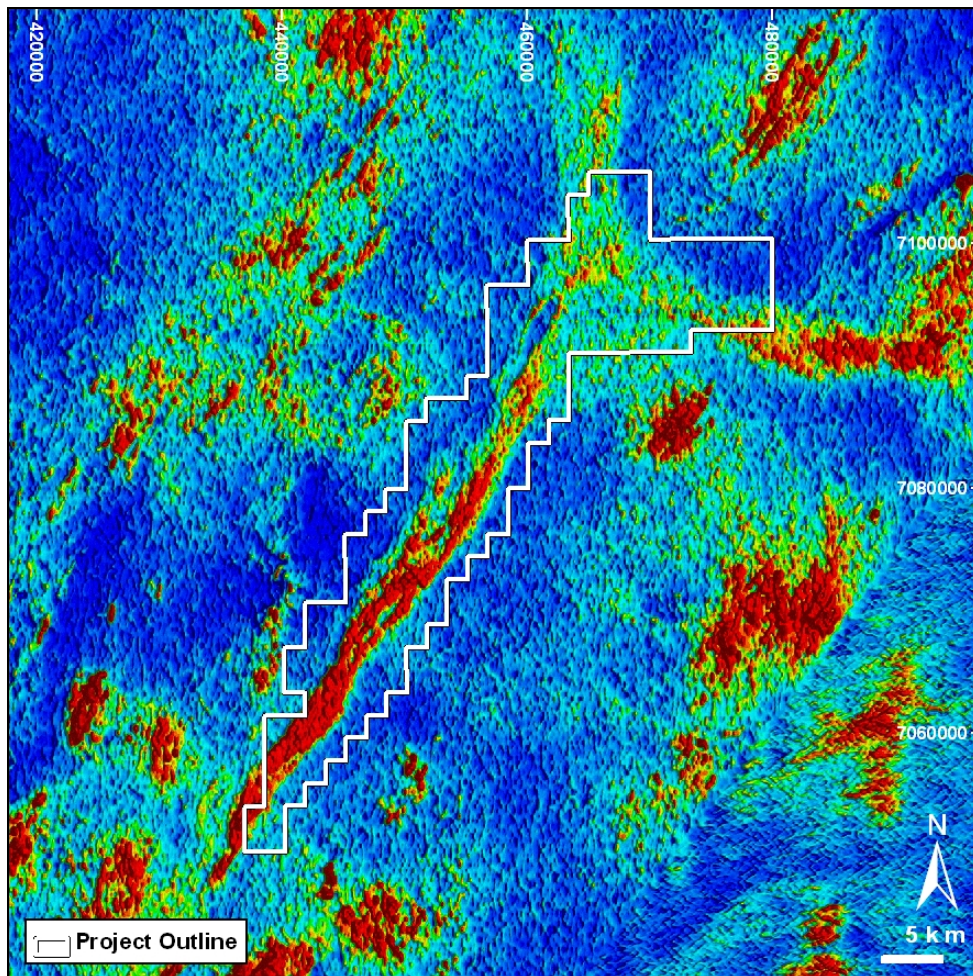
**BYRO PROJECT**

The Byro uranium project is located approximately 300 km NNE of Geraldton in Western Australia, and contains gneiss and migmatite, greenstone belt volcanic, sediments and typical Yilgarn granitoids of the Murchison Province. The project consists of two exploration licence applications, E20/723 and E59/1617, covering an area of approximately 1,100 km<sup>2</sup>.

On the 20<sup>th</sup> January 2010 the Company announced that it had signed an agreement to acquire Amiable Holdings Pty Ltd, (“Amiable”) the registered holder of the two exploration licence applications. The consideration for the acquisition of the project is \$50,000 cash, 1.5 million fully paid shares in Enterprise and a gross royalty of 1.5%.

The focus of this project is to discover a substantial calcrete hosted uranium deposit within a palaeo-valley on the flanks of the Murchison River. GSWA radiometric data shows a prominent NE trending linear uranium anomaly, some 45km long and 4 - 5 km wide, flanking the Murchison River. Mapping by the GSWA also shows the radiometric anomaly to be largely coincident with extensive areas of mapped calcrete.

The Company has planned the flying of a detailed airborne radiometric survey to better define the higher grade portions of the extensive channel. Processing of the detailed radiometric data will generate specific targets for ground follow up once the tenements are granted.



**Figure 6. Byro Project – “Murchison” Uranium Target  
Airborne Uranium Channel Image - GSWA 400m Line Spaced Airborne Survey.**

**REVERE PROJECT**

The majority of the 2009 exploration and drilling program was focused on the Company’s granted tenements covering the Doolgunna Formation sediments of the Yerrida Basin. The focus in 2010 has moved to the Narracoota Formation volcanics, the same geological unit that hosts Sandfire Resources recent De Grussa copper-gold discovery.

The Company is still awaiting the grant of a number of tenement applications (refer Figure 7 below) which overlie the Goodin Fault, which separates the Narracoota Formation volcanics from the Doolgunna Formation sediments.

The Company has a number of excellent soil and Maglag copper anomalies within the Narracoota Formation volcanics and along the Goodin Fault. These targets will be drill tested once the tenement applications are granted and site avoidance surveys by Native Title claimants are completed.

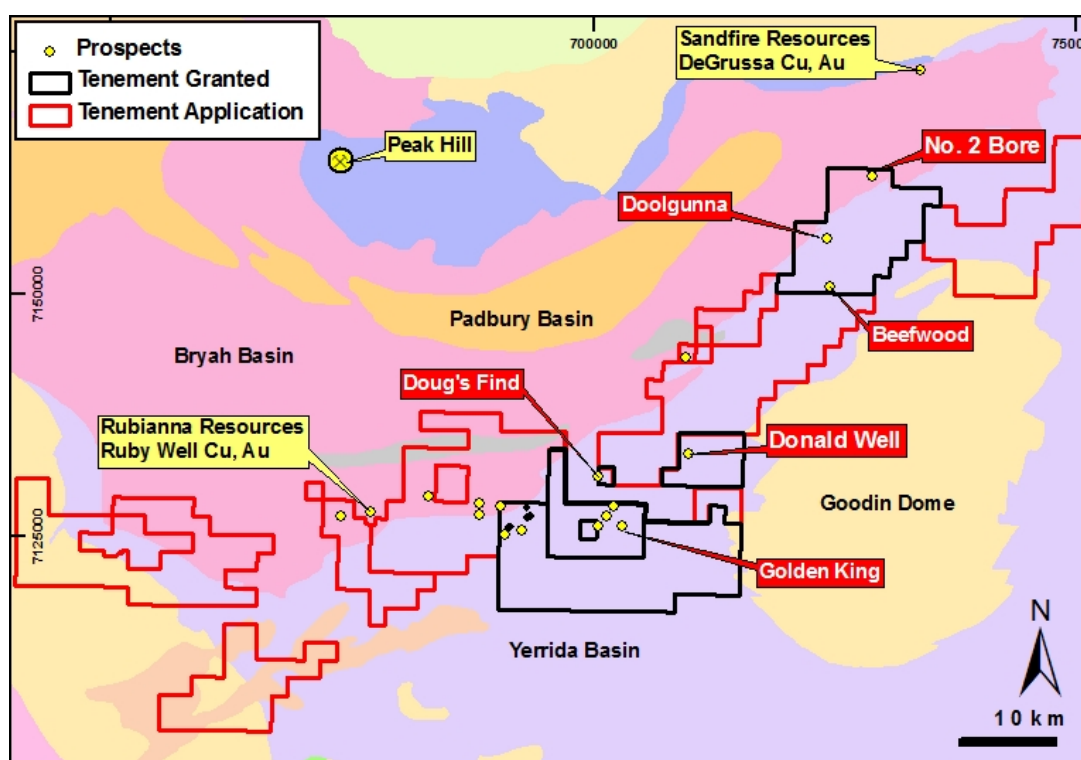


Figure 7. Revere Project - Regional Geology Showing Major Prospects at 31 December 2009

**3. CORPORATE**

**Share Purchase Plan (“SPP”)**

The Company completed the Share Purchase Plan (“SPP”) capital raising announced on 3 February 2010. Shareholders were entitled to apply for up to 75,000 SPP Shares each, at a subscription price of 20 cents each.

The SPP closed at 5.00pm WST Friday 5<sup>th</sup> March 2010. At that time the Company had received applications for 7,556,820 shares from 192 Eligible Shareholders, thereby raising \$1,511,364.

## Placement of Shares to Sophisticated Investors

In March 2010, the Company announced that it had raised an additional \$1,300,000 million by the placement of 6.5 million shares at 20 cents each to sophisticated investors. This placement was within Enterprise's 15% capacity under LR 7.1

The funds raised will be used to explore the Company's Western Australian portfolio of gold, base metal, iron ore and uranium projects, and specifically will be used to drill test targets at Wattagee, Cunderdin, Yandal, Doolgunna, Yalgoo, Eucla and Burgess projects within next 12 months.

## Issued Capital

Shares on issue:	111,970,840
Listed Options:	15,281,966
Unlisted Options:	5,500,000

## Cash Position

The Company's cash position at 31<sup>st</sup> March 2010 was \$2.944 million.



**Dermot Ryan**  
**Managing Director**

*The information in this announcement that relates to Exploration Results has been reviewed by Mr Dermot Ryan, who is a Fellow of the Australian Institute of Geoscientists, a Fellow of the Australasian Institute of Mining and Metallurgy, a Chartered Professional and a full time employee of geological consultancy XServ Pty Ltd. Mr Ryan has sufficient relevant experience in the styles of mineralisation and types of deposit under consideration, and in the activity he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code), and consents to the inclusion of the information in the form and context in which it appears.*

## Contact:

Telephone: 08 9436 9200 Facsimile: 08 9436 9299 Email: [admin@enterprisemetals.com.au](mailto:admin@enterprisemetals.com.au)

## PROJECT LOCATIONS – 31 March 2010

