



# ENTERPRISE METALS LIMITED

(ACN 123 567 073)

22 July 2010

JUNE 2010 QUARTERLY ACTIVITIES REPORT

ASX Symbol: **ENT**

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## 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)

### Iron Ore

Cunderdin  
Sylvania  
Earaheedy  
Fraser Range  
Eucla

### Uranium

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

## ISSUED CAPITAL

Shares on Issue: **111,970,840**

Shares Quoted: **111,970,840**

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

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

## HIGHLIGHTS

- **Key Eucla project tenement granted & heritage clearance surveys completed. RC drilling awaiting approval from DMP.**
- **Second tenement granted at Cunderdin iron exploration project. RC drilling awaiting approval from DMP.**
- **“First pass” RC drill testing of Wattagee gold & base metal targets completed.**
- **Cash in bank at 30 June 2010: \$2.10 million.**
- **Grants totaling \$317,000 obtained from WA State Government for co-funded drilling at Cunderdin, Eucla and Yalgoo Projects.**

## OVERVIEW

At Eucla the key tenement containing the majority of the magnetic targets was granted, and the Company completed heritage “clearance” surveys with representatives of the two native title claimant groups. Approval from the DMP for commencement of RC drilling is still awaited. A grant of up to \$150,000 was awarded by WA State Government for the drill testing of these discrete magnetic targets.

At Cunderdin, approval from the DMP for a “first pass” RC drilling program along shire road verges is awaited. A grant of up to \$150,000 was awarded by WA State Government for drill testing of the Company’s conceptual iron ore targets.

At Wattagee, 15 RC holes were completed to test gold and base metals targets at the *Placer, Stockyard East/West* and *AM14* prospects. Hole STERC004 intersected 8m @ at 5.3g/t Au from 181m. Three of five subsequent holes intersected zones of semi-massive pyrite with lesser arsenopyrite associated with lower levels of gold mineralization. These results are being assessed.

## **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>.

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.

Following the completion of a low level 200 metre line spaced magnetic and radiometric survey over the project area, the Company submitted programs of work ("PoW's") to the Department of Mines and Petroleum ("DMP") for approximately 20 drill traverses along Shire road reserves. The Shire of Cunderdin has approved the drilling on road reserves, but formal permission from the DMP has yet to be granted.

Assuming that all approvals for drilling are obtained during late July, the Company may be able to commence drill testing the magnetic targets in August 2010.

### **EUCLA PROJECT**

The main tenement containing the majority of the discrete coincident magnetic-gravity anomalies, Exploration Licence 69/2603, was recently granted by the DMP. Heritage and native title clearance surveys were completed in early July, and all magnetic targets were cleared for drill testing. Subject to approval from the DMP, drill testing of these targets is expected to commence in August.

A grant of up to \$150,000 was awarded by WA State Government for the drill testing of these discrete magnetic targets. The Government will match the Company's expenditure on actual drilling costs.

The strong discrete magnetic targets also have co-incident gravity anomalies, which suggests the sources are more dense than the surrounding granites, and may be possibly caused by large magnetite/hematite rich intrusive (similar too Roxby Downs in South Australia) or by intrusives of mafic and/or ultramafic rocks prospective for gold and base metals.

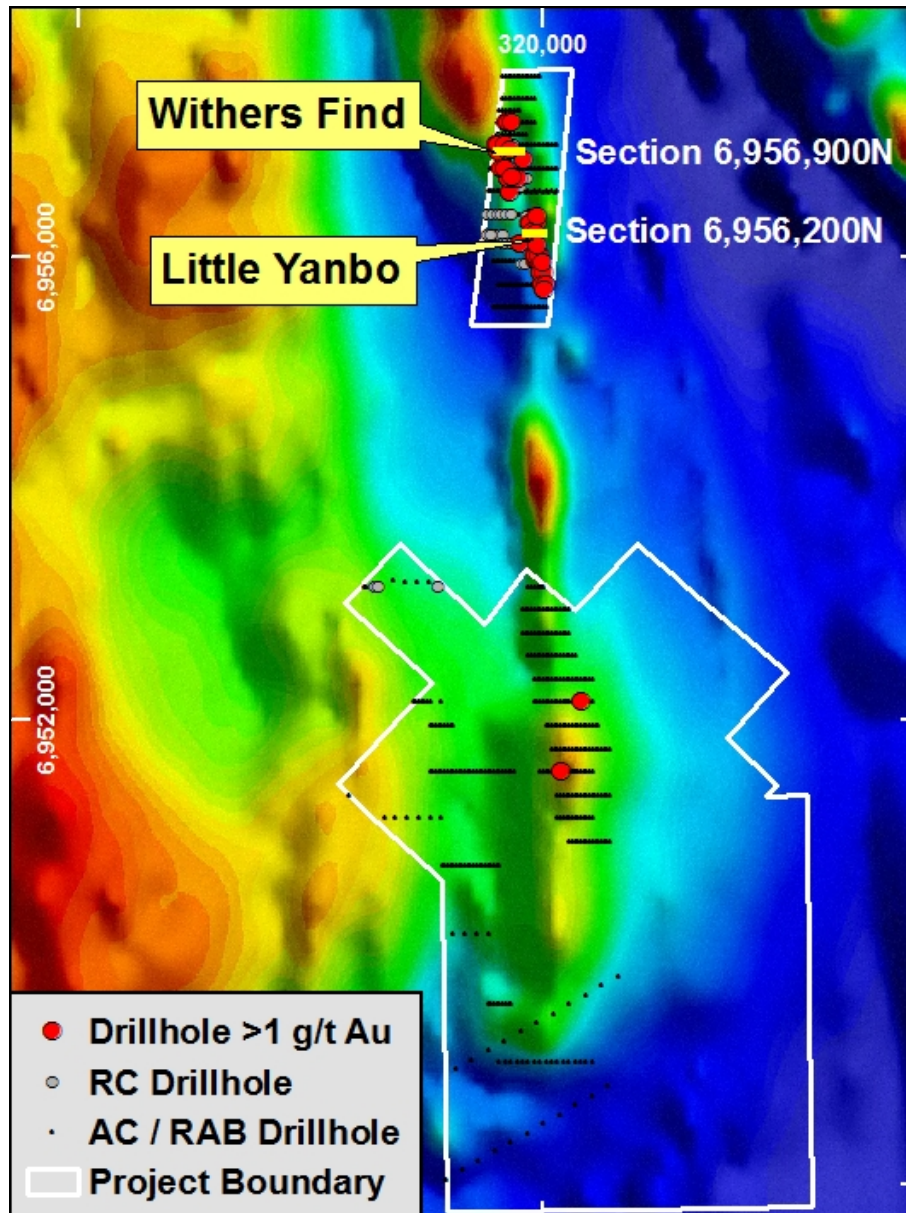
### **DARLOT PROJECT**

During the March Quarter, the Company finalised an agreement to purchase one granted mining lease, one exploration licence and several prospecting licences from prospector Bruce Legendre and his company Nemex Pty Ltd. The project is located in the eastern Yandal Greenstone Belt, near the old Yandal Homestead, and some 22km SE of the Bronzewing Gold Mine operated by Navigator Resources Ltd.

The area is underlain by mafic to ultramafic greenstone lithologies and interleaved granitoid bodies, covered by a thick saprolite (weathered) zone.

The Company's interest in the area is centred on the Withers Find and Little Yanbo gold occurrences discovered by past shallow drilling. (Arimco Mining Ltd 1993-1996 & Maximus Resources Ltd 2005). The fresh rocks below and down-dip from Withers Find and Little Yanbo and are essentially untested by deeper drilling. A 10km long gold anomalous corridor extends south of Withers Find - Little Yanbo area and through the project tenements.

Figure 1 below shows the location of past drilling with colour coded "maximum 1 metre gold intersections" or "Max Au".



**Figure 1. Yandal Homestead Prospect  
Max Au in Drill Holes, over image of Total Magnetic Intensity.**

Enterprise has completed two IP traverses across Withers Find and Little Yanbo which revealed chargeability highs down dip from Withers Find (Figure 2 overleaf), and vertically below Little Yanbo.

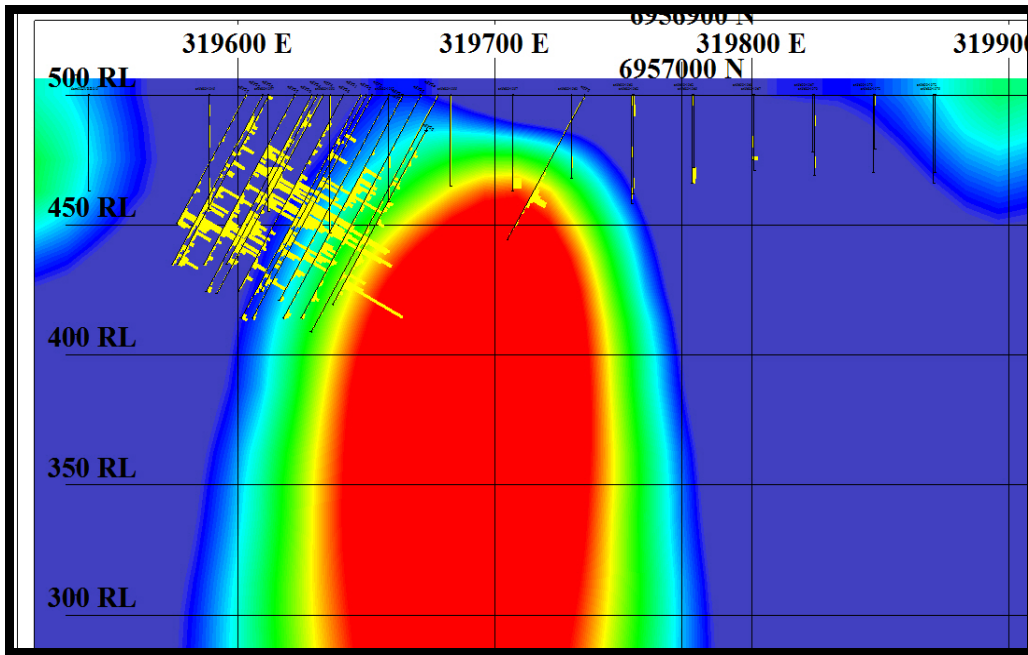


Figure 2. Wither's Find - Section 6956,900N (GDA94) with IP Phase Model

During the current Quarter, past exploration data was compiled and drill sections prepared. An RC drilling program to test the fresh rocks for high grade multiple ore shoots (similar to Bronzewing) has been designed, and is expected to commence in the next Quarter. The critical question to be addressed by the proposed RC drilling on 2 key sections is whether there are high grade multiple ore shoots in the untested fresh rocks both down dip from, and vertically below Wither's Find and Little Yanbo.

Figure 3 shows Section 6956,900 (GDA94) through WITHERS Find, and Figure 4 (overleaf) shows Section 6956,200N (GDA 94) through Little Yanbo, with proposed RC drill holes.

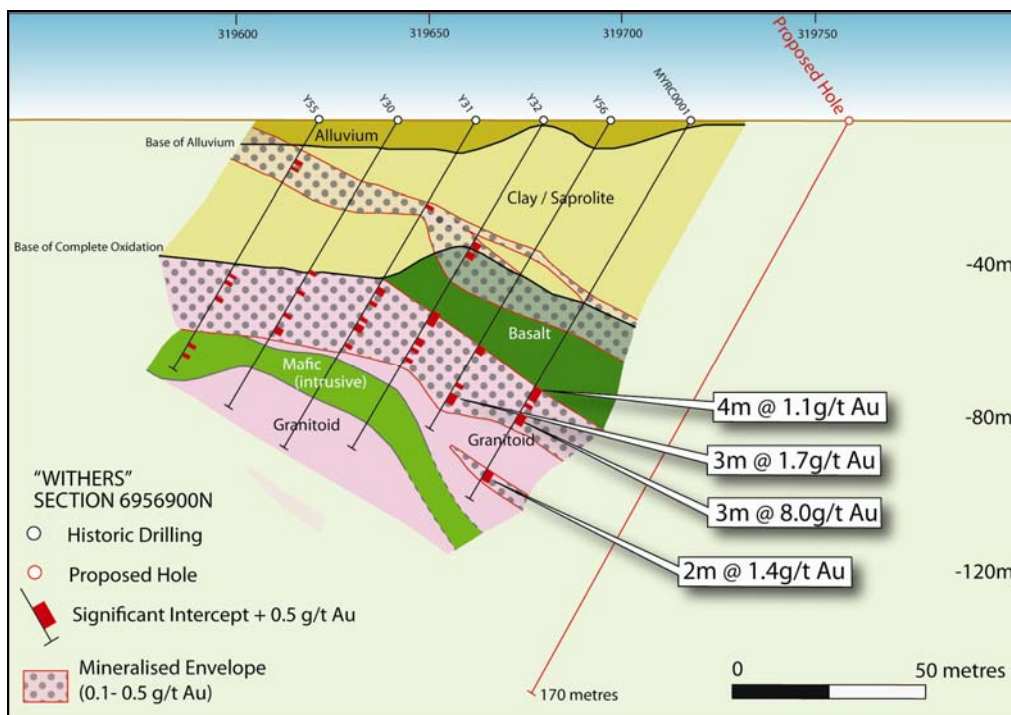


Figure 3. Wither's Find - Drill Section 6956,900N (GDA94)

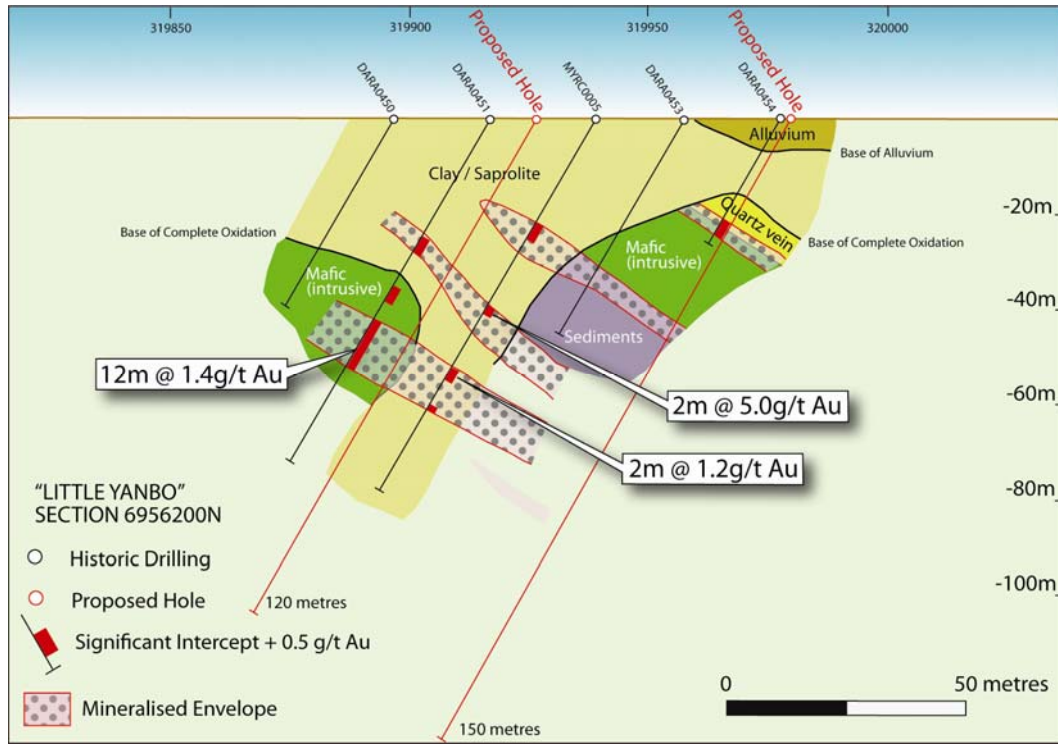


Figure 4. Little Yanbo - Drill Section 6956,200N (GDA94)

**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.

In April 2010 the Company completed 10 RC drill holes (inc. 2 abandoned) on the *Placer, Stockyard East/West* and *AM14* prospects. A further 5 RC holes (932m) were drilled at the Stockyard East prospect in late June 2010. Three of these additional holes were drilled to the south and north along strike from historical hole NCR006, where gold mineralization of 4m at 17.9g/t was intercepted and two holes north and south along strike from STERC004 where 8m of gold mineralisation at 5.3g/t was intercepted in April. (Refer Figure 1 overleaf, Cross Section through Stockyard Creek Prospect)

Three of the five new drill holes (STERC007-009) intersected massive or semi-massive sulphides soon after passing into fresher rock. All sulphides were dominantly pyrite with lesser arsenopyrite. Whilst these follow up holes have intersected lower tenor gold mineralization, they have confirmed the general strike and dip of the mineralized zone.

The two holes drilled around STERC004 both encountered sulphide rich intervals. These correspond to a subdued IP anomaly. A similar, but larger more intense series of IP zones lie to the west and this possibly indicates other areas of disseminated arsenopyrite rich mineralisation.

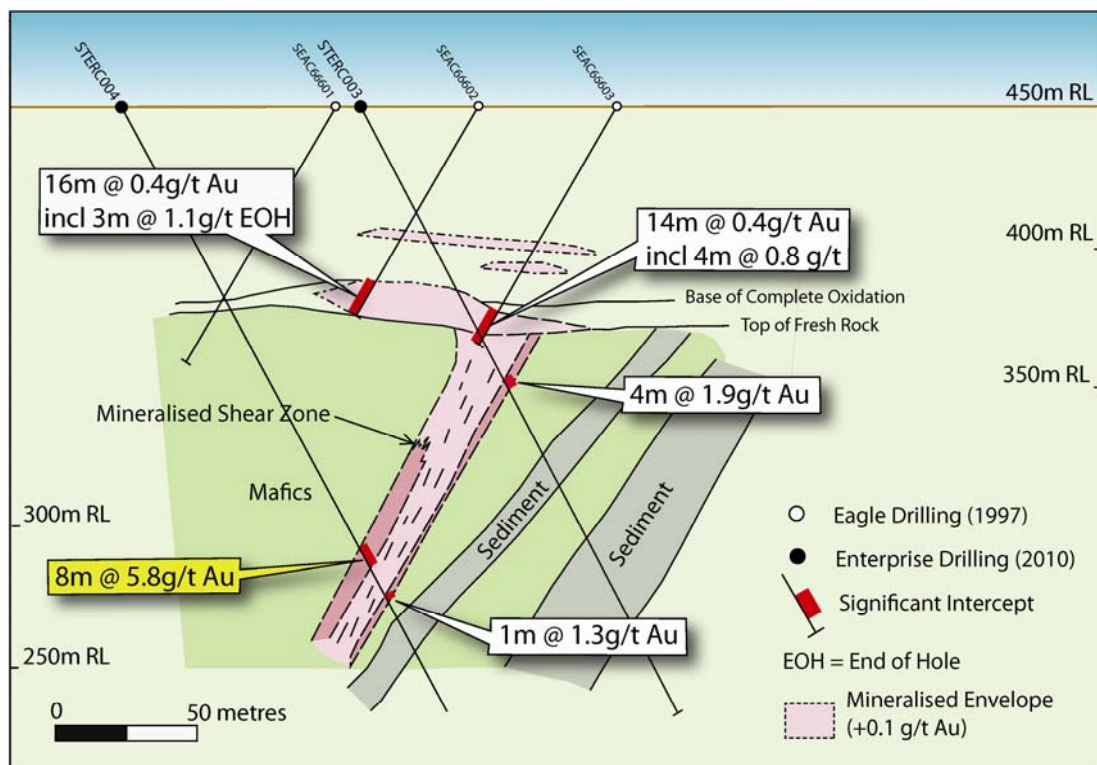
Four x 1.0 kilogram samples from the gold bearing interval in drillhole STERC 004 were also tested for their response to cyanide leaching as well as determining the fractions of gold associated with sulphides and silicates. The majority of the gold is associated with the arsenopyrite.

Details of these holes are shown overleaf in Table 1, and the hole locations are shown in Figure 5 also overleaf.

**Table 1. Wattagee Gold Prospects - RC Drilling Results**

Hole No.	Prospect	GDA East	GDA North	Depth (m)	Dip	Azi	From (m)	Int (m)	Au (g/t)	As (%)
PLRC001	Placer	588517	7005522	250	-60	45	52	8	0.1	
PLRC002	Placer	587776	7005154	198	-60	135	132	4	0.2	
PLRC003	Placer	587786	7005062	178	-60	135	108	4	0.9	
Incl.								1	2.9	
STWRC001	Stockyard W.	589593	7001251	208	-60	315				
STERC001	Stockyard E.	591742	7000580	235	-60	135	184	4	0.7	
STERC002	Aband.	591700	7000591	118						
STERC003	Stockyard E.	591970	7000890	250	-60	135	112	4	1.9	
STERC004	Stockyard E.	591891	7000919	250	-60	135	181	8	5.3	3.20
STERC005	Stockyard E.	591778	7000561	170	-60	112	120	4	1.2	0.09
STERC006	Stockyard E.	591784	7000591	136	-60	112	20	4	0.6	0.05
STERC007	Stockyard E.	591751	7000630	226	-60	110	80	4	1.4	0.71
Incl.							81	1	3.3	0.59
STERC008	Stockyard E.	591918	7000883	200	-60	110	128	1	1.4	0.40
and	Stockyard E.						156	4	1.7	0.45
Incl.							157	1	6.3	1.53
and							164	1	2.3	0.20
STERC009	Stockyard E.	591940	7000934	200	-60	110	91	1	1.0	0.24

NOTE: Samples were initially assayed as 4m or 2m 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. One metre re-splits were Fire Assayed followed by an ICP-MS analysis of the same element suite.



**Figure 5. Stockyard Creek Prospect, Section showing RC Holes STERC003 & STERC004**

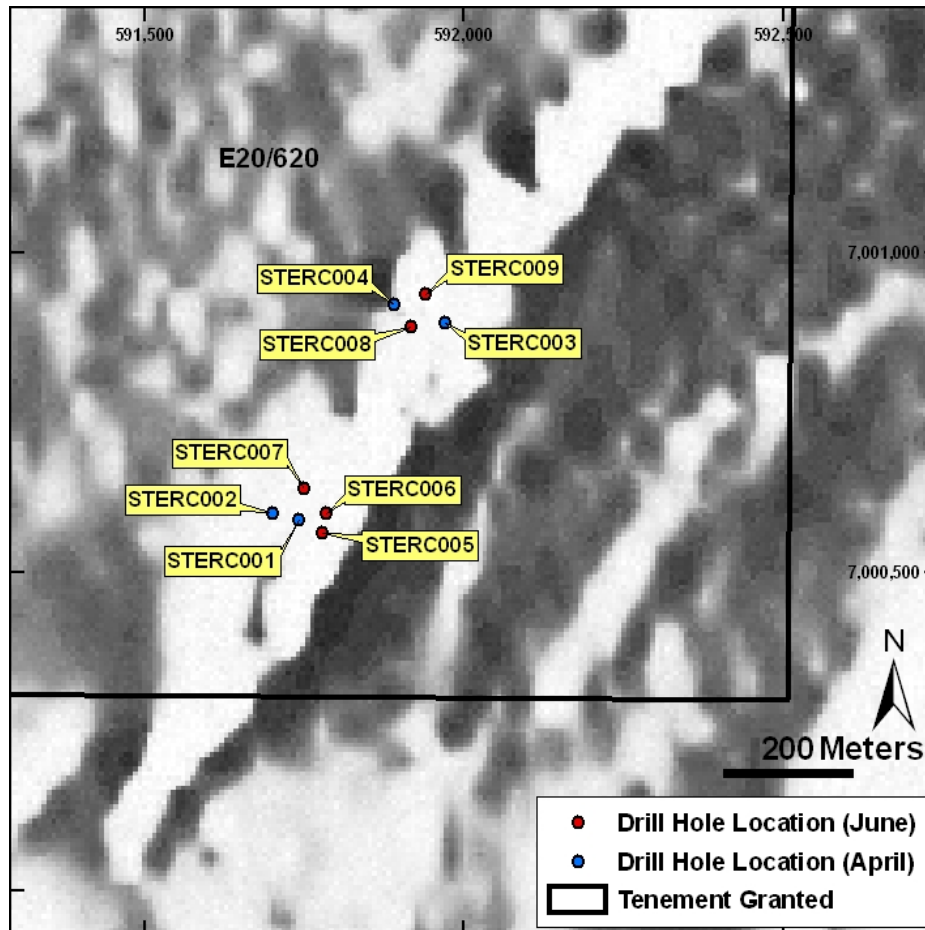


Figure 6. Stockyard Creek Prospect, Drill Hole Location Plan over 1<sup>st</sup> VD Magnetic Image

At the AM14 prospect, 2 RC drill holes were drilled to follow up anomalous base metal results encountered in 1970’s and 1980’s drilling by Esso Exploration, Shell and Chevron. AMRC001 was abandoned due to the loss of a drill bit before reaching the main mineralized target zone, and this **main zone remains untested**. An attempt to redrill AMRC001 will be made at a later date.

AMRC002 tested a weaker mineralized zone to the east of the main zone. Only one 8 metre strongly altered anomalous base metal zone was encountered from 96 – 104m, as shown below in Table 2 below. Re-split sampling of AMRC002 produced 2m of 0.96g/t Pd, 1.21% Zn and 0.29% Cu from 99m.

Table 2: Wattagee Base Metal Prospect - RC Drilling Results

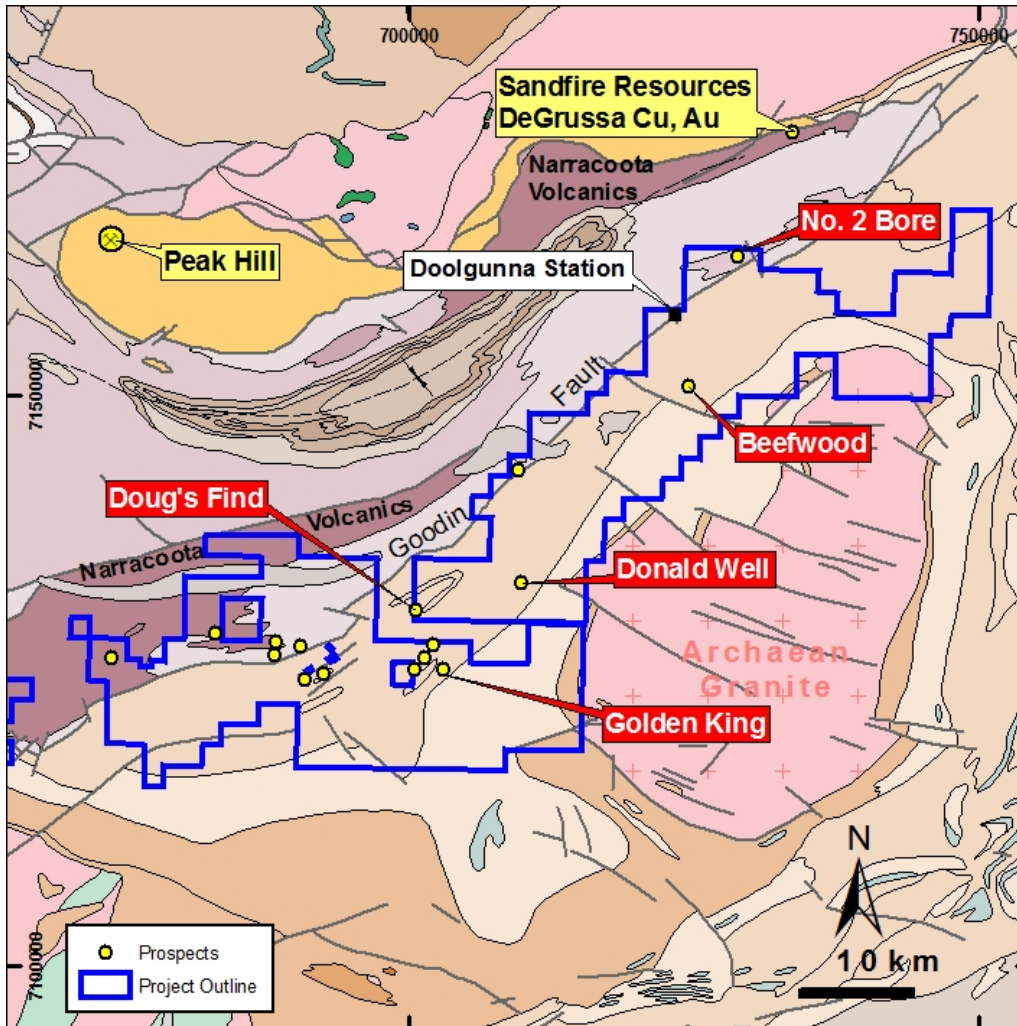
Hole No.	Prospect	GDA East	GDA North	Depth (m)	Dip	Azi	From (m)	Int (m)	Cu %	Zn %	Pd ppm
AMRC001	Aband.	583861	6987076	105							
AMRC002	AM-14	584228	6987165	256	-60	270	96	4	0.18	0.81	
AMRC002	AM-14						100	4	-	0.64	
AMRC002	AM-14						99	2	0.29	1.21	0.96

NOTE: Samples were initially assayed as 4m or 2m 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.

**REVERE (DOOLGUNNA) PROJECT**

During the Quarter, an additional four exploration licences totalling were granted, one of which contains Narracoota Formation volcanics which are prospective for Degruusa style massive sulphide deposits.

In addition, a 500m spaced regional soil sampling program (798 samples) was completed over an area of approximately 350 square kilometres that had not been previously sampled. The program was primarily to sample areas of Narracoota Formation volcanics along the Goodin Fault, and interpretation of this data is in progress. Results of this work will be reported separately.



**Figure 7. Doolgunna Project- Landholdings over Geology**

**BURGESS PROJECT**

At Burracoppin, historical competitor drilling and geological information has been located and compiled into the Company's GIS database. Most of this work was focused on detecting gold in greenstones adjacent to linear magnetic anomalies seen in GSWA 1,600m line spaced magnetic data.

Although there is little to no outcrop in the area, previous mapping has also detected float and scree of Banded Iron Formation ("Bif") and ironstone associated with a number of linear airborne magnetic anomalies.



During February the Company entered into an option agreement to undertake due diligence on MPF Exploration Pty Ltd's ("MPF") two exploration licences at Burracoppin. The Company has allowed that option to lapse, but is continuing discussions with MPF.

In the meantime, the Company is awaiting grant of its 100% owned tenements so that various magnetic targets can be drill tested for magnetite and hematite. Geological logs from a number of shallow RAB and RC holes drilled in the 1990's by competitors reported Bif, ironstone or hematite in bottom-of-hole samples but no iron analyses were completed. The significance of these observations is being assessed against more recent 400m line spaced airborne magnetic data.

### 3. CORPORATE

#### ISSUED CAPITAL

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

#### Cash Position

The Company's cash position at 30 June 2010 was \$2.10 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:**

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## PROJECT LOCATIONS WESTERN AUSTRALIA 30 June 2010

