# 27 January 2012

## **DECEMBER 2011 QUARTERLY ACTIVITIES REPORT**

ASX Symbol:

**ENT** 

#### **CONTACT**

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## **PROJECTS**

## Iron Ore

Burracoppin Sylvania Earaheedy Booylgoo Cunderdin

## **Gold/Base Metals**

Doolgunna Darlot Wattagee Fraser Range

## Uranium

Yalgoo Byro Darlot Harris Lake Ponton

#### **ISSUED CAPITAL 31 DEC 2011**

 Shares on Issue
 203,220,776

 Shares Quoted
 203,220,776

 Listed Options
 22,782,001

 Unlisted Options
 63,725,806

## **HIGHLIGHTS**

# Doolgunna:

- 8m @ 1.01% Cu, 1.6g/t Ag from 144m RC drillhole confirms mineralisation where indicated by IP anomaly.
- Follow up programme being developed to establish extent of mineralisation and test other anomalies.
- Yalgoo: Airborne magnetic and radiometric survey has established highly prospective zone for drilling. A radiation baseline survey to be undertaken mid February in preparation for drilling.
- Earaheedy: 139 RC hole programme developed to test channel iron targets once DMP drilling approval and heritage clearance is obtained.

## Burracoppin:

- Initial drilling programme restricted to areas already harvested by pastoralists.
- Early assays have intersected a number of anomalous gold zones which warrant follow up investigation.
- Drilling of the primary focus area which targets strong iron anomalies will occur once further access discussions completed.
- WA Government Co-funding Grants: ENT awarded \$140,000 for drilling programmes at Byro (\$120,000) and Yalgoo (\$20,000).

# **CORPORATE**

- Paul Hallam appointed a non-executive Director.
- Cash of \$11.5 million at 31<sup>st</sup> December 2011.

## 1. SUMMARY OF EXPLORATION ACTIVITIES BY PROJECT

## **DOOLGUNNA PROJECT**

The Company completed an RC drilling programme (31 holes for 5,049m, refer Appendix 1) which successfully tested coincident IP and elevated coincident multi-element surface geochemical anomalies in Narracoota Formation volcanics and associated sediments adjacent to the Goodin Fault. (refer ENT: ASX release 23 January 2012)

At the Doolgunna Prospect, 10 RC holes (total 1,518m) were drilled which confirmed the presence of sulphide mineralisation at the prospect. RC drillhole DGRC007, drilled to test an IP anomaly in close proximity to the interpreted position of the Goodin Fault returned 8m @ 1.01% Cu, 1.6g/t Ag and 16.5 ppm Bi from 144m. The copper occurs as disseminated chalcocite hosted in fresh volcanics with associated quartz veining. DGRC007 is the first drill test of the prominent linear IP target located close to the Goodin Fault. Significant results are summarised in Table 1 below and drillhole locations are shown on Figure 1.

Drillhole	From	То	Int	Au	Cu	Description
	(m)	(m)	(m)	(g/t)	(ppm)	-
DGRC003	52	56	4	0.23	-	Oxide zone (saprolite)
DGRC004	16	101*	85	-	344	Basalt
DGRC005	12	150*	138	-	252	Basalt
DGRC007	144	152	8	-	1.01%	Volcanic (pyroclastic?)

Table 1: Doolgunna Prospect - Summary of Significant Drilling Results

132

136

DGRC010

The Company holds 12 strike kilometres of the Goodin Fault in the vicinity of the Doolgunna Prospect. A follow up programme to further test the extent of this sulphide mineralisation and to test other anomalies is being developed.

0.4

At the Ruby Well West & East Prospects, 21 RC holes were drilled (total 3,531m) to test a number of coincident IP and elevated coincident multi-element surface geochemical anomalies in Narracoota Formation volcanics and associated Karalundi Formation sediments adjacent to the Goodin Fault.

The RC drilling has adequately explained the targeted IP features, with several holes returning narrow intervals of sulphide mineralisation with elevated gold and copper values. The broader surface copper geochemical anomalism is thought to be a reflection of a general increase in the copper content of the volcanics in the vicinity of Ruby Well. Significant drill results are shown in Table 2.

Drillhole From To Int Au Cu Description (m) (m) (m) (g/t) (ppm) RWRC002 Saprock/Basalt 132 140 8 0.49 Shale RWRC012 88 92 4 0.13 RWRC019 88 96 8 0.12 Saprolite/Saprock RWRC016 168 176 1150 Volcanic

Table 2: Ruby Well Prospects - Summary of Significant Drilling Results

Basalt/Dolerite

denotes end of hole.

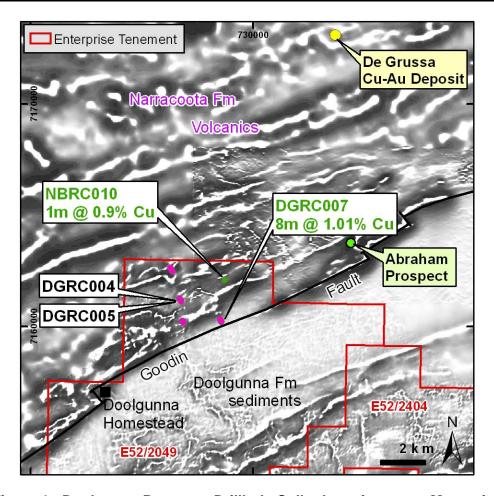


Figure 1: Doolgunna Prospect, Drillhole Collar Locations over Magnetics

## **BURRACOPPIN PROJECT**

The initial RC drilling program (31 holes for 4,048m, refer Appendix 2) at Burracoppin was completed in December 2011. The drilling was designed to test a variety of airborne magnetic features which had returned elevated iron, gold or palladium (+Pt) assays from rockchip or soil sampling. The drilling was limited to magnetic targets where harvesting of wheat crops had been recently completed.

Ten RC holes were drilled to test two targets (A & B) north of the Great Eastern Highway, and twenty one RC holes were drilled to test four targets (C - F) south of the highway. The drilling program was partially funded by a "Co-Funded Drilling" grant from the Western Australian Government. The anomalous drillhole results are discussed below, and hole locations are shown in Figure 2.

Anomalous gold intersections were generally hosted within meta-basalts/dolerites which are quartz veined, chlorite altered and contain minor sulphides. A number of holes with elevated gold, copper and tungsten are of interest as this association also occurs at the 1.5 million ounce Edna May deposit, approximately 20km to the northeast. Anomalous +0.1g/t Au results include:

Hole BURC001 intersected an anomalous gold zone averaging **24m at 0.1g/t Au from 48m** within quartz veined metabasalt.

BURC011 returned a gold assay of **4m** @ **0.3g/t Au from 84m** in a zone of pervasive chlorite alteration. This interval also had elevated copper (to 190ppm) and the following 8m interval (88-96m) assayed 170ppm tungsten.

Hole BURC026, drilled 50m north of BURC011, returned **4m @ 0.1g/t from 96m** and this interval also had 34ppm tungsten.

Hole BURC028 intersected 4m at 0.3g/t Au from 80m and 4m at 0.4g/t Au from 128m, within a dolerite unit.

Iron and palladium assays in fresh rock were generally lower than assays that were obtained in previous soil and rockchip sampling programs. It is concluded that there is significant surficial enrichment in iron and palladium in the Burracoppin area.

Banded Iron Formation (BIF) type targets in the western half of the project area will be drill tested for magnetite, hematite and goethite when access has been negotiated with holders of the surface rights.

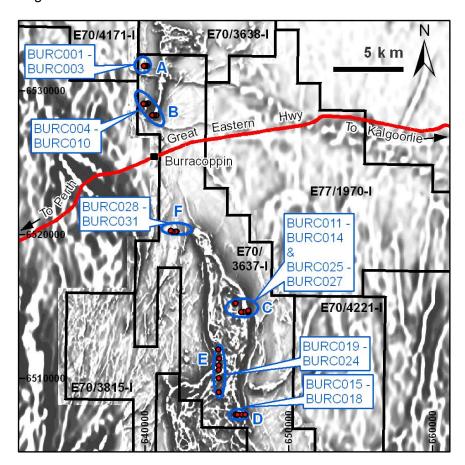


Figure 2: Burracoppin Project - Drillhole Location Plan over Magnetic Image

#### **SYLVANIA PROJECT**

A heritage clearance survey over proposed RC drill sites in the eastern portion of the Project area was completed on the 25-26<sup>th</sup> of October, with no sites of significance identified. A second survey is required to clear the remaining drill sites in the west prior to the undertaking of RC drilling.

## **YALGOO PROJECT**

Following the success of the Enterprise 2010 airborne survey in identifying uranium anomalism on E59/1437, the Company has undertaken a further detailed 100m spaced magnetic, radiometric and digital terrain survey over an additional 721km² of the Yalgoo Project area. All survey data from the 2010 and 2011 surveys has been merged to provide regional perspective of the Project's magnetic and radiometric character.

Figure 3 shows the uranium channel response (high values in red) draped over the digital terrain model. Regional "hot" granites are considered the source of the uranium which has been mobilised into the drainage system. This merged image clearly identifies two drainage systems within the Project area containing elevated uranium, notably;

- 1) the 7.5km long Muggaburna channel within the northern part of E59/1437 and central E59/1632.
- 2) the 30km long Salt Creek channel which runs through E59/1437 in a N-S direction.

The Company has planned an aircore drilling programme primarily focussing on testing anomalous rockchip samples (up to 418ppm U) associated with the Muggaburna drainage channel. Addition drill testing of regional targets will also be undertaken. DMP approval has been received for the drilling, along with the approval of a Radiation Management Plan. A heritage clearance survey was completed over the proposed aircore drillsites on the 27-28<sup>th</sup> of November. A radiation baseline survey is planned for mid February in preparation for drilling.

The magnetic data is also high quality and indicates that greenstone lithologies may be more extensive than previously thought, especially evident to the south (E59/1633) and in the north (E59/1632 & E59/1655). The gold potential of these areas has been greatly enhanced by the survey and requires further evaluation.

The Company was notified on the 7<sup>th</sup> of December that it was successful in receiving WA Government co-funding of \$20,000 to assist with the cost of the aircore drilling.

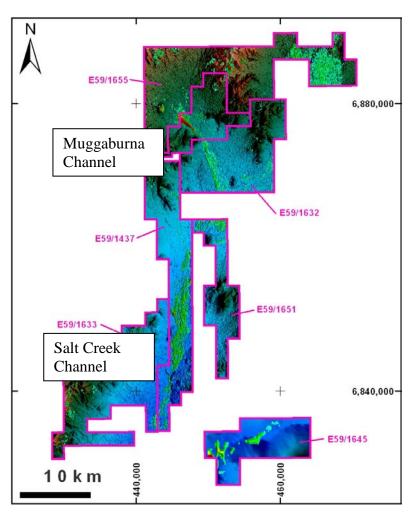


Figure 3: Uranium Channel over Digital Terrain Model Image

#### **BYRO PROJECT**

Enterprise was successful in receiving WA Government co-funding of \$120,000 for RC drilling to test uranium targets within the Wooleen Lake region. The targets were identified by a radiometric survey completed by Enterprise in May 2011.

#### **DARLOT PROJECT**

Drilling approval has been received from the DMP and Department of Indigenous Affairs for an RC drilling programme in the Yandal Homestead area. The drilling is targeting chargeable IP features down dip and beneath known gold mineralisation at the Withers Find and Little Yanbo workings. Previous drilling has intersected supergene gold in the saprolite zone, however this mineralisation is essentially untested by deeper drilling. A heritage clearance survey is planned during February.

#### **EARAHEEDY PROJECT**

An RC drilling programme comprising 139 holes along 14 traverses has been developed targeting extensive palaeochannels identified in the recent aeromagnetic survey (see *ENT: ASX Announcement, 26 October 2011*). DMP drilling approval and heritage clearance is required prior to the commencement of drilling.

### **BOOYLGOO PROJECT**

The Booylgoo Project is located 60km east northeast of Sandstone and covers the northern part of the Archaean Booylgoo Range greenstone belt. The belt is interpreted to be the southerly continuation/equivalent of the Joyners Find greenstone belt, which hosts Golden West Resources' Wiluna West Hematite Project (*Resource - 127.2Mt @ 60.2% Fe, GWR: ASX Announcement 24 May 2011*).

Enterprise's Project area contains 20km of mapped BIF, with the potential to host iron ore in the form of hematite/goethite deposits associated with these BIF units. To assist with the evaluation of the BIF, the Company commissioned a detailed (100m line spacing) airborne magnetic and radiometric survey covering the entire project area.

#### **PONTON PROJECT**

On the 26<sup>th</sup> October 2011, the Company announced that it had lodged five new uranium exploration licence applications over the confluence of Lake Rebecca, Lake Yindana and the Ponton River on the SE margin of the Archaean Yilgarn Craton, some 135km east of Kalgoorlie. The five new tenements cover a total area of 1,240km².

The Company considers these tenements highly prospective for uranium.

## FRASER RANGE PROJECT (Beachfront JV)

The Fraser Range Project is located approximately 60-100 km east of the gold mining centre of Norseman in Western Australia and is comprised of four granted exploration licences covering 596 km<sup>2</sup>.

Contractors for the Company's JV partner, Beachfront Resources Ltd (earning a 70% interest) commenced soil and calcrete sampling in the Fraser Range tenements. The Fraser Range Project occupies a similar tectono-stratigraphic position to the +5 million ounce Tropicana gold deposit, i.e. at the contact between the Archaean Yilgarn Craton and the Proterozoic Albany-Fraser Orogen. (Refer Figure 4)

Up to the 31<sup>st</sup> December 2011, some 204 calcrete and soil samples had been collected. The calcrete samples have been submitted for low level gold analysis, and results are awaited.

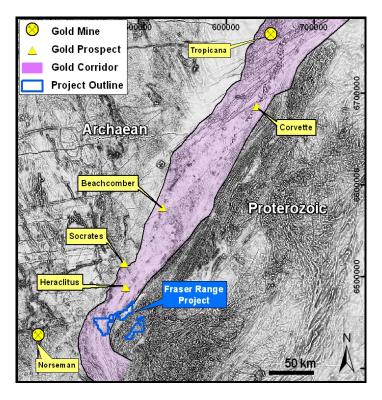


Figure 4: Fraser Range Project Tenements in Relation to Tropicana Gold Deposit.

# **WATTAGEE PROJECT (Beachfront JV)**

Two RC drillholes (STERC010-011) totalling 348m were completed at the Stockyard East Prospect during the quarter. The drilling was targeting known mineralised structures identified in previous drilling by Enterprise, which returned a best intersection of 8m @ 5.33g/t Au from 181m in STERC004. Table 3 below provides the details of the RC drillholes.

**Table 3: RC Drillhole Locations at Stockyard East Prospect** 

Hole No	MGA94_E	MGA94_N	Dip	Azimuth	Depth (m)
STERC010	591969	7000891	-60	200	180
STERC011	592025	7000916	-60	200	168
Total					348

Anomalous gold intercepts (4m composite samples) are provided below.

**STERC010** 4m @ 1.05g/t from 72m

**STERC011** 32m @ 0.62g/t from 80m

Incl. 4m @ 1.07g/t from 80m Incl. 4m @ 1.92g/t from 96m

Further assessment of these results is required, along with evaluating several other gold prospects identified by surficial sampling and aircore/RC drilling.

#### 2. CORPORATE

On the 15 November 2011, Mr Paul Hallam was appointed a non-executive Director of the Company. Mr Hallam's extensive experience will assist the Company transition from a junior explorer to a major explorer, and potentially, to a mine developer and operator.

Mr Hallam has over 30 years technical and managerial experience in major Australian and international companies. He is a qualified mining engineer with a BE(Hons) Mining from Melbourne University, a Certificate of Mineral Economics from Curtin University and a Company Director's Diploma from the Australian Institute of Company Directors. He is a Fellow of the Australian Institute of Company Directors and the Australasian Institute of Mining & Metallurgy.

Coincident with Mr Hallam's appointment, Mr Dennis Wilkins resigned from his interim non-executive Director's role, which he has held since 14<sup>th</sup> July 2011. Mr Wilkins is continuing in the role of Company Secretary and CFO.

The Company's Annual General Meeting of Shareholders was held on 21 November 2011. The ordinary business included the receipt of financial statements of the Company for the year ended 30 June 2011, consisting of the Annual Financial Report, the Directors' Report and the Auditor's Report. All four Reports, including the Remuneration Report were approved by the Shareholders.

Non-executive Directors Mr Bruce Hawley and Mr Paul Larsen, having retired as Directors of the Company in accordance with the Company's Constitution were re-elected as Directors of the Company.

A new Employee Share Option Plan was approved by Shareholders in accordance with Listing Rule 7.2, Exception 9(b) which paves the way for the issue of Options under the Employee and Contractors Incentive Option plan known as the "Employee Share Option Plan of Enterprise Metals Limited".

Reflecting the increase in the Board composition due to the inclusion of our major new shareholders (Sinotech Minerals Exploration and Worldtex Capital) shareholders approved an increase in the maximum aggregate remuneration payable to Directors as Directors' fees in any financial year to \$450,000 per year.

On 22 December 2011, the Company paid \$50,000 and issued 250,000 fully paid Shares to Mr Bruce Legendre as consideration for the purchase of several granted tenements in the Yalgoo and Meekatharra area.

Dermot Ryan Managing Director

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The information in this announcement that relates to Exploration Results is based on information compiled by Mr Derek Waterfield, a Member of the Australian Institute of Geoscientists and a full time employee of Enterprise Metals Limited. Mr Waterfield 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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**APPENDIX 1: Doolgunna Project - Drillhole Collar Locations** 

Hole_ID	East	North	Dip	Azimuth	Depth
DGRC001	<b>GDA_z50</b> 726343	<b>GDA_z50</b> 7162552	(degrees) -60	(degrees) 330	<b>(m)</b> 154
DGRC001	726386	7162332	-60	330	155
DGRC002	726300	7162471	-60	330	143
DGRC004	726700	7161237	-60	330	101
DGRC005	726747	7161171	-60	330	150
DGRC006	726772	7161126	-60	330	150
DGRC007	728593	7160213	-60	330	200
DGRC008	728553	7160287	-60	330	155
DGRC009	726882	7160153	-60	330	155
DGRC010	726835	7160232	-60	330	155
RWRC001	682200	7129650	-60	0	200
RWRC002	682200	7129875	-60	0	200
RWRC003	683000	7129400	-60	0	200
RWRC004	683000	7129500	-60	0	200
RWRC005	683000	7129900	-60	0	200
RWRC006	691000	7130650	-60	0	179
RWRC007	691000	7130550	-60	0	200
RWRC008	691400	7130300	-60	0	200
RWRC009	691400	7130400	-60	0	107
RWRC010	691800	7131650	-60	180	59
RWRC011	691800	7131750	-60	180	131
RWRC012	690600	7128975	-60	0	200
RWRC013	690600	7128875	-60	0	200
RWRC014	692600	7130200	-60	0	150
RWRC015	692600	7129925	-60	0	150
RWRC016	692600	7129150	-60	180	200
RWRC017	692600	7129450	-60	180	150
RWRC018	692600	7129550	-60	180	155
RWRC019	682600	7128550	-60	0	150
RWRC020	681800	7130100	-60	180	150
RWRC021	681800	7130050	-60	180	150

**APPENDIX 2: Burracoppin Project - Drillhole Collar Locations** 

Hole_ID	East	North	Dip	Azimuth	Depth
	GDA_z50	GDA_z50	(degrees)	(degrees)	(m)
BURC001	640146	6531723	-60	090	150
BURC002	640044	6531722	-60	090	150
BURC003	639949	6531721	-60	092	150
BURC004	640205	6529104	-60	091	150
BURC005	640102	6529100	-60	095	150
BURC006	640004	6529103	-60	093	150
BURC007	639900	6529100	-60	090	120
BURC008	640801	6528299	-60	090	150
BURC009	640634	6528302	-60	093	150
BURC010	640501	6528301	-60	091	150
BURC011	647199	6514599	-60	090	126
BURC012	647100	6514608	-60	092	120
BURC013	646891	6514608	-60	091	150
BURC014	646699	6514597	-60	089	150
BURC015	646758	6507462	-60	091	150
BURC016	646307	6507471	-60	091	150
BURC017	646452	6507469	-60	091	162
BURC018	646968	6507458	-60	090	120
BURC019	645130	6509010	-90	0	54
BURC020	645142	6509994	-90	0	42
BURC021	645157	6510586	-90	0	54
BURC022	645152	6510882	-90	0	150
BURC023	644116	6511379	-90	0	150
BURC025	646306	6515203	-90	0	150
BURC026	647199	6514651	-60	090	144
BURC027	647198	6514700	-60	090	126
BURC028	642235	6520197	-60	090	150
BURC029	642150	6520199	-60	089	124
BURC030	641948	6520201	-60	089	126
BURC031	641820	6520262	-60	089	114

# PROJECT LOCATIONS WESTERN AUSTRALIA 31 December 2011

