

31 October 2014

September 2014 QUARTERLY ACTIVITIES REPORT

ASX Symbol: ENT

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#### **BOARD OF DIRECTORS**

Dr Jingbin Wang  
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Non-Executive Director

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Non-Executive Director

#### **COMPANY SECRETARY**

Ms Susan Hunter

#### **CHIEF FINANCIAL OFFICER**

Piers Lewis

#### **PROJECTS**

##### **Nickel/Copper**

Fraser Range 100%

Burracoppin 100

##### **Gold/Copper-Zinc**

Doolgunna 100%

Darlot 100% & Option to IGO

Yalgoo 100%

Wattagee 100%

## **HIGHLIGHTS**

### **Fraser Range Nickel-Copper Project**

- 29 Fixed Loop Electromagnetic (FLEM) surveys completed over Plato, (East, West & South) Oceanus, Heart and Highway Prospects.
- Infill ground EM at Plato South resolved anomaly into 3 bedrock EM conductors. Potential for feeder sill or conduit containing massive sulphides as feeder for Plato.
- Two separate conductors detected at Highway, coincident with magnetic lows and anomalous Ni, Cu, Co As soil geochemistry, plus other elements.
- Scout RC drilling commenced 28 October at Plato South, to be followed by RC drilling at Highway.
- Follow up Moving Loop EM surveys (MLEM) commenced at several prospects to better define drill targets.

### **Doolgunna Copper-Gold-Zinc Project**

- Additional Maglag sampling and gravity surveying further defines Borg SEDEX target as 4.5km x 0.6km high priority base metal target.
- New *Laser ablation* geochemistry applied to pyrites in Borg RC drill chips indicates a "near miss" to SEDEX base metal mineralisation.
- Pyrite samples from other Doolgunna co-incident EM and geochemical anomalies being evaluated by laser ablation geochemistry.

### **Darlot Gold-Copper-Zinc Project- Optioned to IGO**

- Two areas with prospective stratigraphy and anomalous base metals geochemistry selected for MLTEM survey.

## **CORPORATE**

- \$0.944M cash at 30 September 2014.



## SUMMARY OF EXPLORATION ACTIVITIES

### FRASER RANGE PROJECT

The Fraser Range Project covers 797km<sup>2</sup> and is located approximately 100km east of Norseman, within the Albany-Fraser Orogen. Enterprise’s landholding is located between Sirius Resources Ltd’s Nova and Crux prospects.

During the September Quarter, 29 Fixed Loop ground electromagnetic (FLEM) surveys were completed over Plato (East, West & South), Oceanus, Heart and Highway Prospects. An initial review of the data has highlighted conductive features at Plato South, Plato East, Oceanus and Highway. Initial modelling and interpretation of the data is in progress and some Moving Loop EM (MLEM) has been commissioned to better define some features. The target bodies are evident in channel 26 z amplitude images. (Refer Figure 1 below)

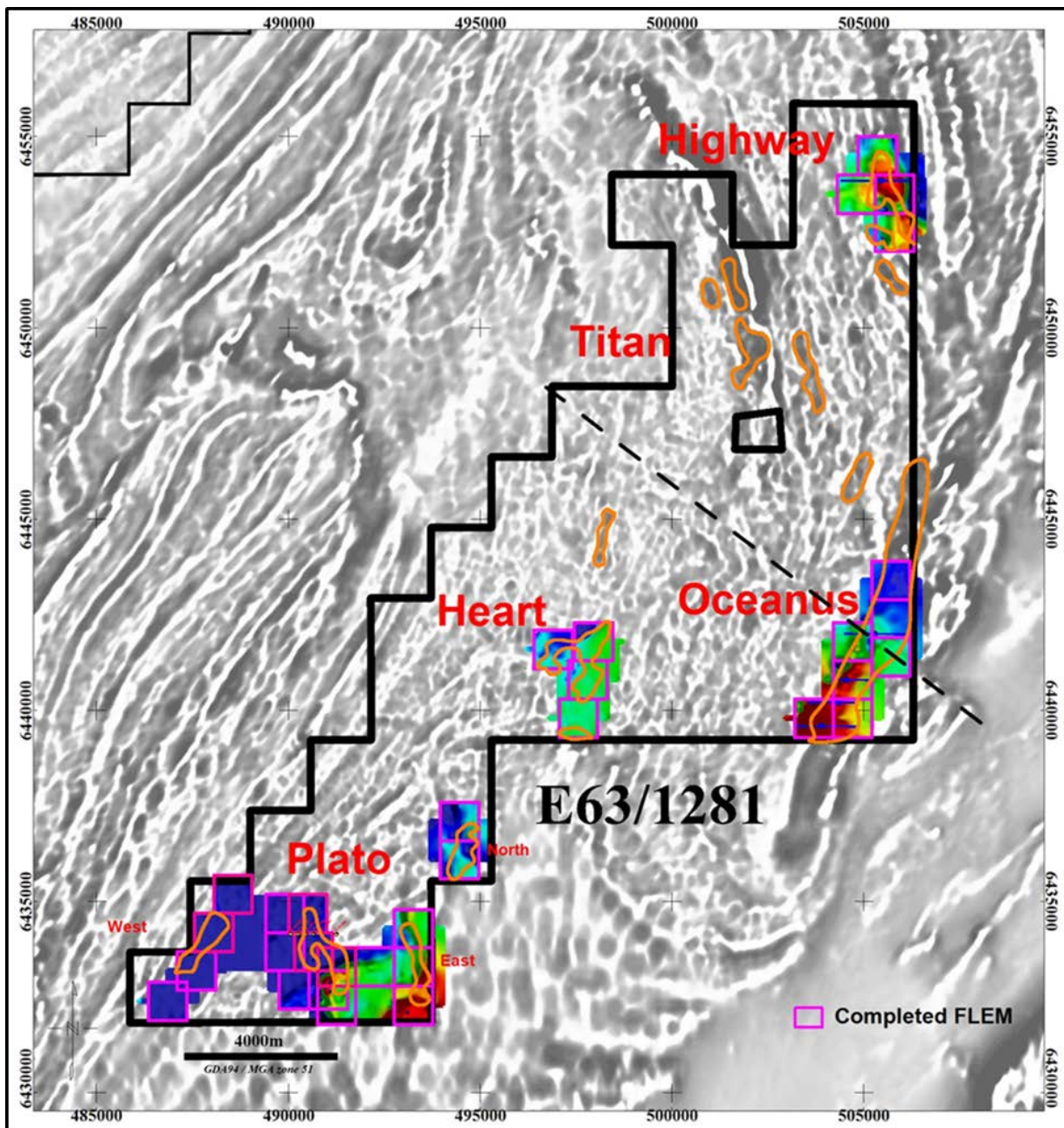


Figure 1. Channel 26 Fixed Loop EM Amplitude Contours over 1st VD Magnetics



**Plato South and Plato East Prospects**

The **Plato South** EM anomaly has been modelled and reverse circulation (RC) drill holes have been planned to test the interpreted sources. (refer ENT: ASX release 28 October 2014) Although up to 15 RC holes have been designed and approved, the priority RC drill holes portrayed as white dots (Figure 2) will be drilled first. 3D modelling results are expected in the next week and additional drilling will be undertaken if required.

The **Plato East** EM anomaly is awaiting detailed modelling, interpretation and approvals to drill. Figure 3 shows the magnetic lows which were the focus of the Plato FLEM surveys.

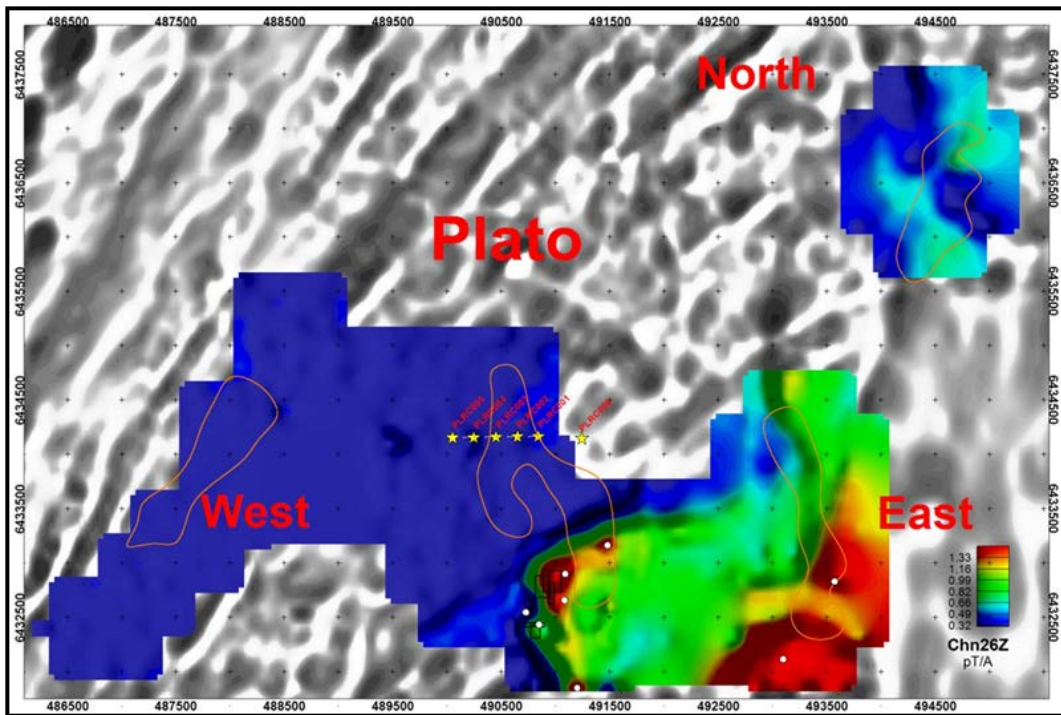


Figure 2. Plato Channel 26 Fixed Loop EM Amplitude Contours over 1st VD Magnetic Image

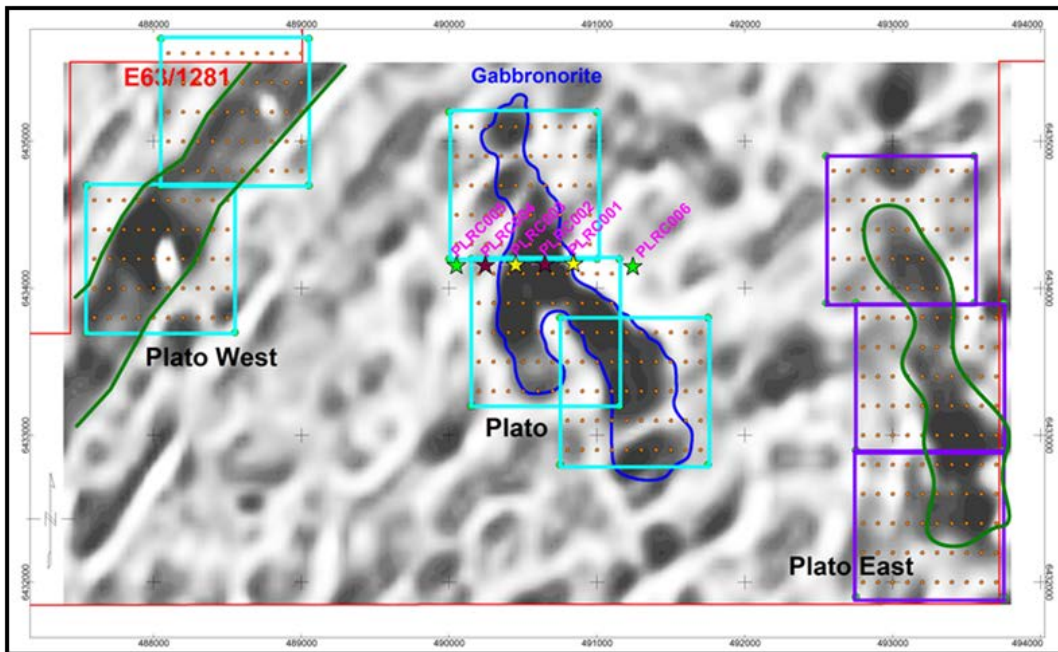
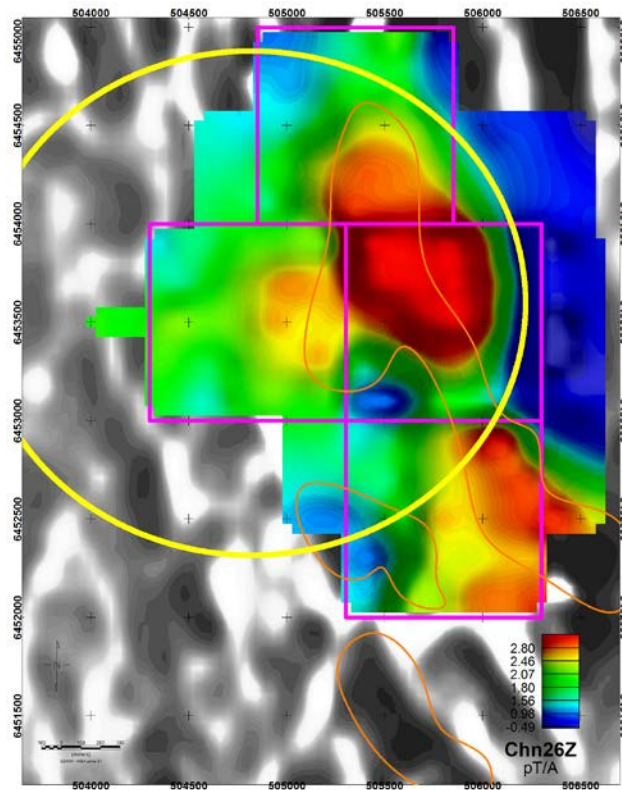


Figure 3. Plato 1st VD Magnetic Image Enlarged (Refer ASX release 10 June 2014)

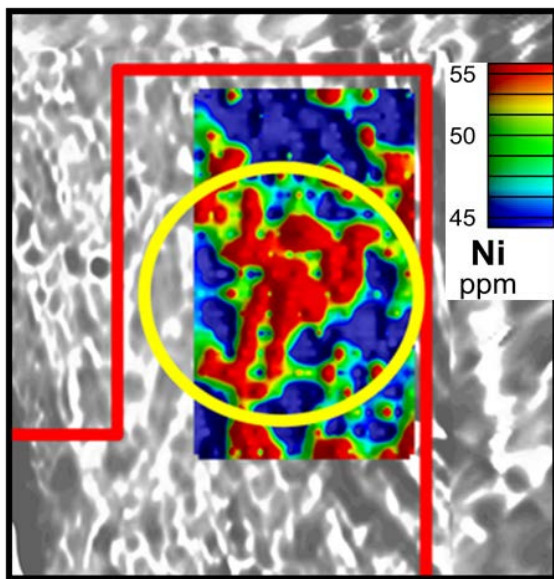
**Highway Prospect**

Four loops of FLEM surveying over the Highway Prospect, (a coincident geochemical anomaly and magnetic low) has produced two quite distinct conductive conductors. (Figure 4 below)

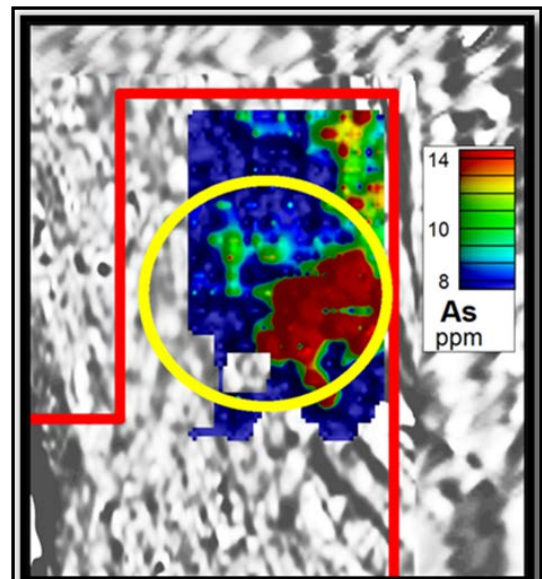


**Figure 4. Highway Channel 26 Fixed Loop EM Amplitude Contours over 1st VD Magnetic Image**

Soil sampling in 2012 and 2013 at the Highway Prospect detected a coincident Ni-Cu-Co-As anomaly with maximum values of 114ppm Ni, 56ppm Cu, 27ppm Co and 212ppm As. The arsenic anomaly in particular is coherent and coincident with anomalous Bi, Mo, Ni, Pb and Sb and is centred over a **large magnetic low**. On the periphery of the magnetic low, other anomalous elements include Cd, Co, Cu, Mn, Sc, Sn, Ti and W. (Refer ENT: ASX release 21 June 2013)



**Figure 5. Highway Soil Nickel Geochemistry**



**Figure 6. Highway Soil Arsenic Geochemistry**



**Oceanus Prospect**

The Oceanus Prospect was defined as a prominent linear magnetic low on the eastern boundary of the Company’s Fraser Range tenement package. The early time channels of the Company’s 2013 HeliTEM survey showed that this magnetic feature has a shallow conductive overburden which is interpreted as transported material in a drainage channel.

At present, Oceanus is interpreted as a late stage (ultramafic?) intrusive that has intruded the magnetic basement rocks of the Fraser Range Complex following displacement of the basement rocks by a prominent north-west trending fault. The FLEM data (refer Figure 7 below) suggests that this intrusive is more conductive immediately to the south of this NW trending structure.

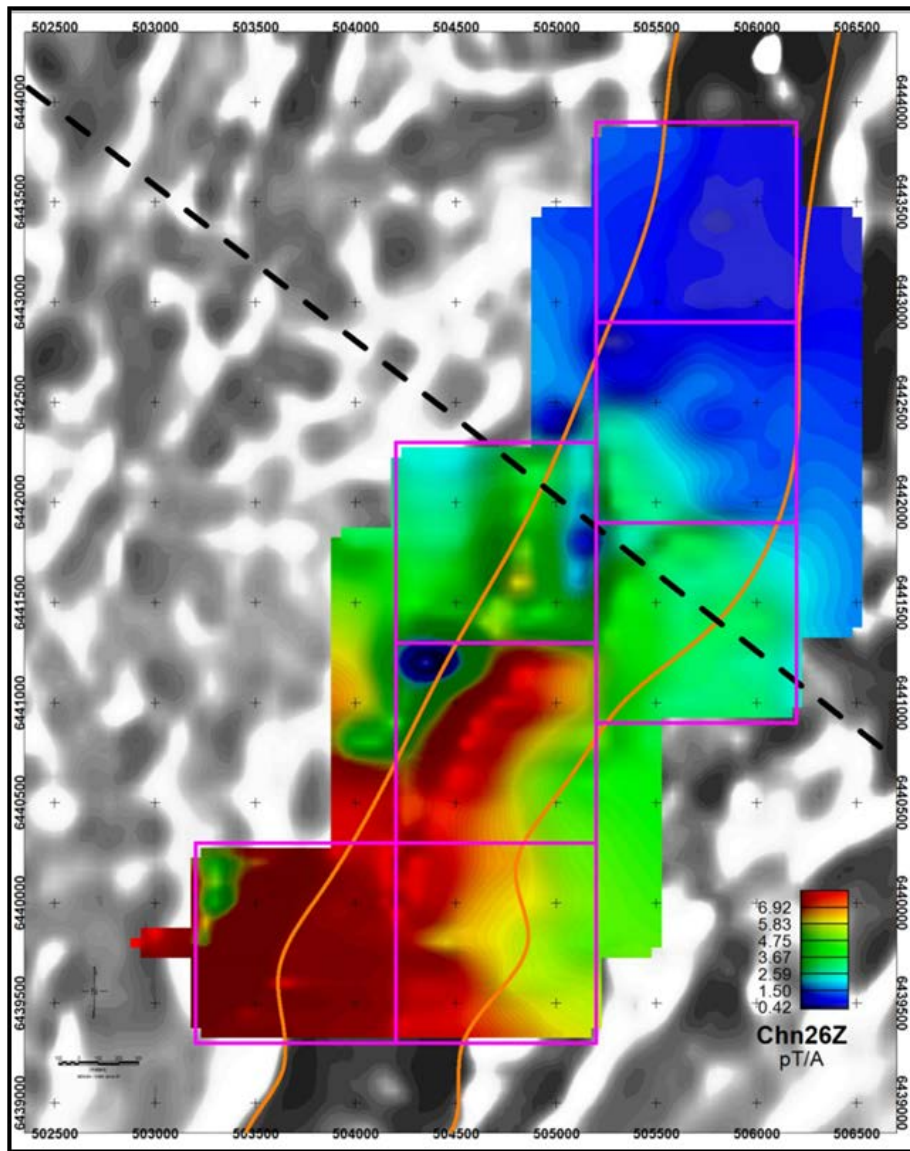


Figure 7. Oceanus Channel 26 Fixed Loop EM Amplitude Contours over 1st VD Magnetic Image

**DOOLGUNNA PROJECT**

The Doolgunna Project covers approximately 1,190km<sup>2</sup> and is located 110km northeast of Meekatharra and some 10km southwest of Sandfire Resources NL’s DeGrussa copper-gold mine. The project is considered prospective for volcanic hosted massive sulphide deposits (VMS) and sediment hosted base metals deposits (SEDEX copper).

The Doolgunna geological setting is similar in some respects to the Central African Copperbelt, and the Company has identified a number of SEDEX style copper-gold targets along the Southern Boundary Fault, which marks the southern boundary of the sediment filled Doolgunna basin.

In early 2014, Enterprise undertook scout RC drilling on 6 prospects identified from Maglag geochemical surveys, ground EM and gravity surveys. The best results were from the **Borg Prospect** on E51/1304, where disseminated and semi-massive pyrite bands, with minor vein style pyrite, was intersected in carbonaceous sedimentary rocks. These intersections were associated with anomalous base metal pathfinder elements. (refer ASX Release 8<sup>th</sup> July & 11 August 2014)

During the September Quarter 2014, the Company commissioned the Centre for Excellence in Ore Deposits (CODES, University of Tasmania) to use their Laser Ablation System coupled with ICP-MS to analyse the pyrites from drill holes BGRC004 and BGRC014 for the content of base metal pathfinder elements. CODES has developed a process where the assay results can be used to assess base metal fertility, and used as a vector to a potential ore-body. The locations of these two holes are shown in Figures 8 (below) and 9 (overleaf).

CODES identified two disseminated pyrite bands that stood out in terms of their chemistry. From the analysis of their chemistry they concluded: *“These two bands have sedimentary pyrite enriched in Au (up to and over 1 ppm), Te, Ag, Se, Mo, Cu, Ni and Co. The band in BGRC004 has the higher sulfide content and better geochemistry. This zone in **BGRC004** has the characteristics of a high potential gold source rock that can be used as a sedimentary marker to define gold-copper targets. Most of the disseminated pyrite in BGRC004 has the chemistry of distal SEDEX Zn halo pyrite..... A potential SEDEX deposit could be 5 to 15 km along strike from BGRC004.”*

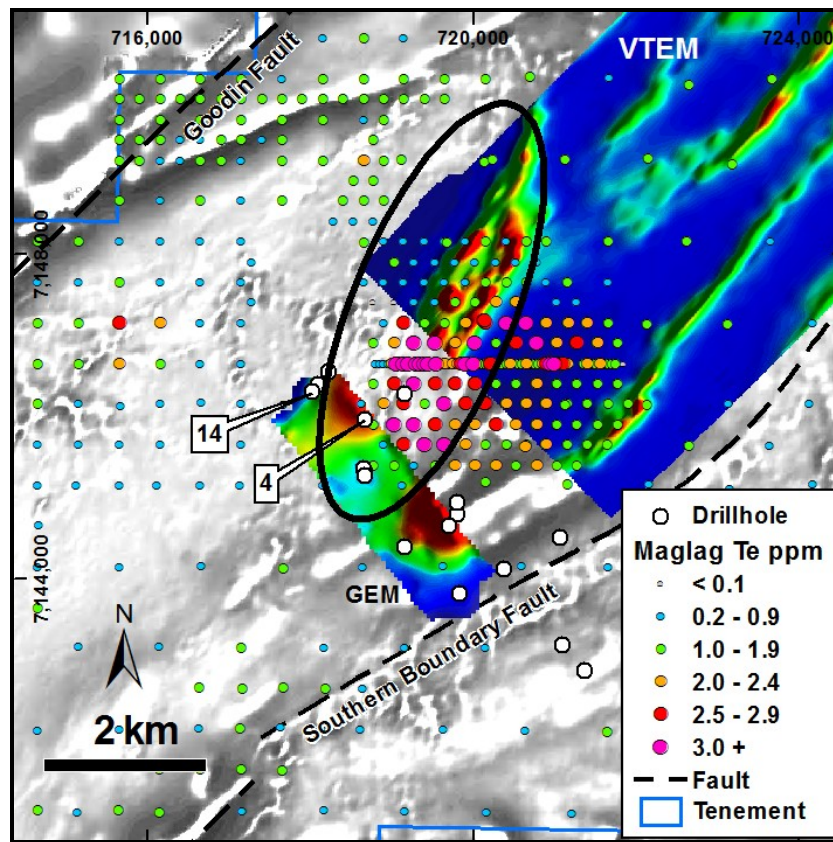


Figure 8. Borg Prospect: RC holes over Ground EM & VTEM Imagery with Te Maglag Geochem

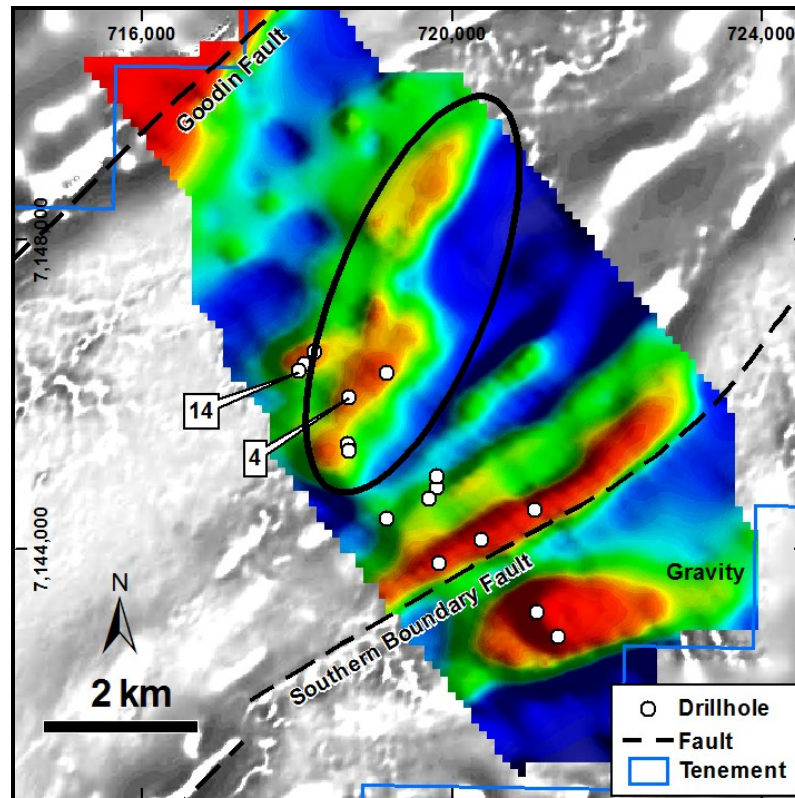


Figure 9. Borg Prospect E51/1304: RC drill holes over Coloured Gravity Imagery

Further Maglag soil sampling was completed around Borg during the September Quarter, and assay results are awaited.

The Borg Prospect is now a 4.5km long NE striking combined gravity, EM and geochemical target, and the Company has prepared and lodged with the Department of Mines and Petroleum a Program of Work (PoW) to drill test the Borg SEDEX target with a series of RC drill holes. Subject to statutory approvals and weather, this work could commence either in early 2015. The location of the Borg Prospect is shown below in Figure 10.

Pyrite samples from the Company’s drill holes at other Doolgunna co-incident EM and geochemical targets have also been selected and submitted for analysis by laser ablation geochemistry. Results are awaited.

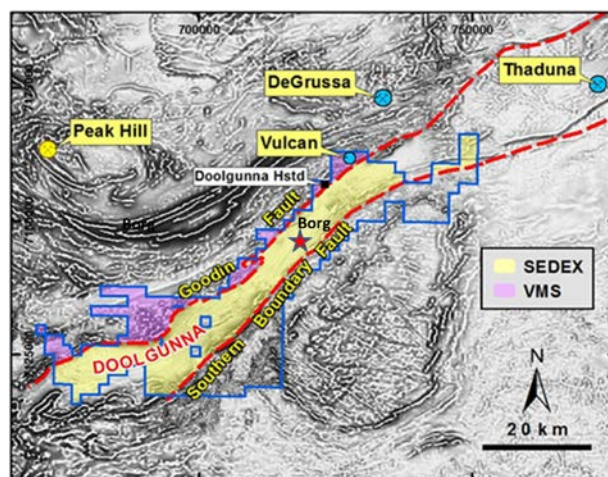


Figure 10. Borg Prospect Location over 1<sup>st</sup> VD Magnetic Imagery



## DARLOT PROJECT

During the December 2013 Quarter the Company entered into an agreement with Independence Group NL (ASX:IGO) whereby IGO has the right to earn a 70% - 80% interest in Enterprise's Darlot Project covering some 740km<sup>2</sup> of tenure approximately 60km north from IGO's Jaguar Project (Figure 11)

The project, which covers similar volcanic stratigraphy to the Jaguar Project, has strategic value to IGO in that any base metals discoveries are potentially within economically viable trucking distance of its Jaguar processing facility. IGO have reported as follows:

*"Results from the aircore drilling program, completed in the June 2014 Quarter, have been integrated into an updated geological interpretation.*

*Two areas with prospective stratigraphy and anomalous base metals geochemistry have been selected for testing by MLTEM survey, which is scheduled to commence early in the December 2014 Quarter.*

Refer IGO September 2014 Quarterly Report dated 29<sup>th</sup> October 2014

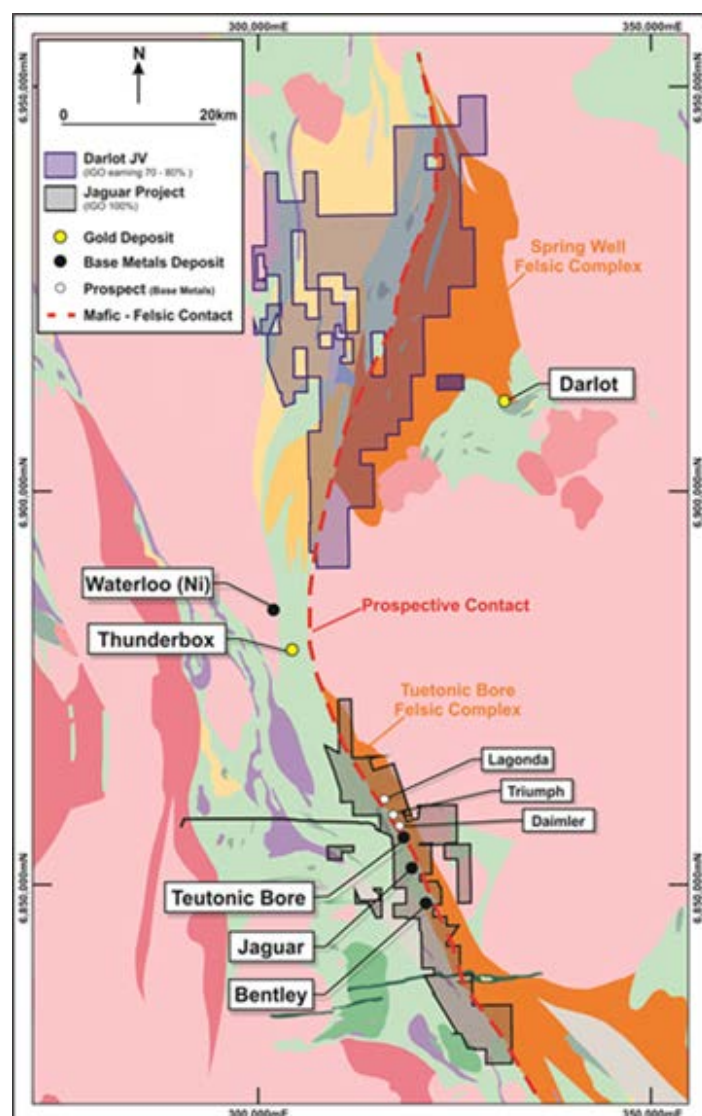


Figure 11. Darlot Project, Regional Geology and Location Plan

## CORPORATE

The Company's landholdings at 30 September 2014 are tabulated in Appendix 2 and 3.

### ISSUED CAPITAL AT 30 SEPTEMBER 2014

<b>Ordinary Shares</b>	<b>265,908,276</b>	
<b>Unlisted Options</b>	<b>Exercise Price</b>	<b>Expiry Date</b>
7,600,000	\$0.149	11/9/2015
16,662,500	\$0.08	30/11/2016
12,000,000	\$0.10	15/6/2016

### CASH POSITION

Cash position at 30 September 2014 was \$0.944 million.



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

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**Competent Persons statement**

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Dermot Ryan, who is an employee of the Company. Mr Ryan is a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Ryan consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The information in this report that relates to Geophysical Exploration Results is based on information compiled by Mr Bill Robertson, who is the Principal of geophysical consultancy Value Adding Resources Pty Ltd. Mr Robertson is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Robertson consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

**PROJECT LOCATIONS WESTERN AUSTRALIA**  
**30<sup>th</sup> SEPTEMBER 2014**



APPENDIX 1:

**Notes on Specifications of Fixed Loop EM surveys**

Vortex Geophysics completed the 29 fixed loop electromagnetic surveys over the Plato, Heart, Oceanus and Highway prospects for Enterprise. Readings were taken at 100m station intervals on lines 200m apart for each loop (1,000m by 1,000m). Parameters for the Fixed Loop EM Survey are shown below.

**Project:** Fraser Range  
**Transmitter:** Vortex VTX-100  
**Current:** 90 Amps  
**Base Frequency:** 0.5 Hz  
**Loop Size:** 1,000m by 1,000M  
**Receiver:** SMARTem24  
**Sensor:** SMARTFluxgate

Component Directions

Z Component: +ve up  
X Component: +ve towards 90<sup>0</sup> (east)  
Y Component: +ve towards 0<sup>0</sup> (north)



APPENDIX 2: Tenement Schedule at 30<sup>th</sup> September 2014

Project	Lease	Interest Held	State	Status
Booylgoo	E57/834	100%	WA	Granted
Burracoppin	E70/3637	100%	WA	Granted
Burracoppin	E70/3638	100%	WA	Granted
Burracoppin	E70/4538	100%	WA	Granted
Burracoppin	E77/1752	100%	WA	Granted
Darlot	E36/834	100%	WA	Granted
Darlot	E36/835	100%	WA	Granted
Darlot	E37/1185	100%	WA	Granted
Darlot	P36/1790	100%	WA	Granted
Darlot	P36/1791	100%	WA	Granted
Doolgunna	E51/1079	100%	WA	Granted
Doolgunna	E51/1168	100%	WA	Granted
Doolgunna	E51/1301	100%	WA	Granted
Doolgunna	E51/1303	100%	WA	Granted
Doolgunna	E51/1304	100%	WA	Granted
Doolgunna	E51/1539	100%	WA	Granted
Doolgunna	E51/1638	100%	WA	Application
Doolgunna	E51/1646	100%	WA	Application
Doolgunna	E52/2049	100%	WA	Granted
Doolgunna	E52/2404	80%	WA	Granted
Doolgunna	E52/2406	80%	WA	Granted
Fraser Range	E63/1281	100%	WA	Granted
Fraser Range	E63/1282	100%	WA	Granted
Fraser Range	E63/1283	100%	WA	Granted
Fraser Range	E63/1448	100%	WA	Granted
Fraser Range	E63/1695	100%	WA	Application
Fraser Range	E28/2403	100%	WA	Application
Wattagee	E51/1636	100%	WA	Application
Wattagee	E20/852	100%	WA	Application
Yalgoo	E59/2076	100%	WA	Application
Yalgoo	E59/2091	100%	WA	Application
Yalgoo	E59/2095	100%	WA	Application
Sylvania	E52/3150	100%	WA	Application

APPENDIX 2: Tenement Schedule at 30<sup>th</sup> September 2014 – IGO Option Tenements

Project	Lease	Interest Held	State	Status
Darlot	E36/706	80%**	WA	Granted
Darlot	E36/731	100%*	WA	Granted
Darlot	E36/768	100%*	WA	Granted
Darlot	E36/778	100%*	WA	Granted
Darlot	E36/781	100%*	WA	Granted
Darlot	E36/795	100%*	WA	Granted
Darlot	E37/1031	100%*	WA	Granted
Darlot	E37/1075	100%*	WA	Granted
Darlot	E37/1105	100%*	WA	Granted
Darlot	E37/1112	100%*	WA	Granted
Darlot	E37/859	80%**	WA	Granted
Darlot	E37/926	100%*	WA	Granted
Darlot	E37/927	100%*	WA	Granted
Darlot	E37/939	100%*	WA	Granted
Darlot	E37/947	100%*	WA	Granted

\*IGO have right earn an 80% interest

\*\* IGO have right to earn a 70% interest