

30 April 2015

March 2015 QUARTERLY ACTIVITIES REPORT

ASX Symbol: ENT

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#### BOARD OF DIRECTORS

Dr Jingbin Wang  
Chairman

Mr Dermot Ryan  
Managing Director

Ms Anna Mao  
Non-Executive Director

Dr Allan Trench  
Non-Executive Director

Mr Barry Bourne  
Non-Executive Director

#### COMPANY SECRETARY

Mrs Susan Hunter

#### CHIEF FINANCIAL OFFICER

Mr Piers Lewis

#### PROJECTS

Nickel/Copper  
Fraser Range

Copper/Zinc/Gold  
Doolgunna

Gold/Copper/Zinc  
Darlot  
Yalgoo

## HIGHLIGHTS

### Doolgunna Copper-Zinc (Gold) Project

- Further pyrites from previous ENT RC drill holes are being analysed by CODES researchers using innovative laser ablation technique to assist drill targeting. Results expected shortly.
- Program of Work (PoW) lodged with Dept of Mines and Petroleum (DMP) for follow up RC/diamond core drilling at Borg prospect, utilising \$150,000 awarded for co-funded drilling under the WA State Government Exploration Incentive Scheme (EIS).

### Fraser Range Nickel-Copper Project

- Assay results from Plato South RC drilling included PLRC010: 8m @ 2,314ppm Ni, 267ppm Cu & 839ppm Co from 24m.
- Plato Ni/Cu prospective corridor now expanded by drilling to 1400m x 500m, and still open to north and south.
- Sale and Joint Venture Agreement settled with Apollo Minerals Ltd (ASX:AON). Consideration for 70% interest \$200,000 cash plus 20 million AON shares. ENT 30% interest free carried to completion of any Bankable Feasibility Study.
- Field trip completed with Apollo personnel. Highway, Oceanus, Plato and Plato East targets being assessed for follow up EM and aircore / RC drill testing.

### Darlot Copper-Zinc (Gold) Project

- JV partner Independence Group NL (IGO) plans Moving loop transient electromagnetic (MLTEM) surveys for April 2015.
- Aircore drilling program also planned to start in late April 2015, testing a number of key target areas.
- Post end of Quarter, IGO elect to continue exploration expenditure on reduced project area.

## CORPORATE

- Planned reduction in number of directors from 5 to 3, effective 30<sup>th</sup> April 2015. Consequent reduction in director's fees.

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**SUMMARY OF EXPLORATION ACTIVITIES**

**DOOLGUNNA PROJECT**

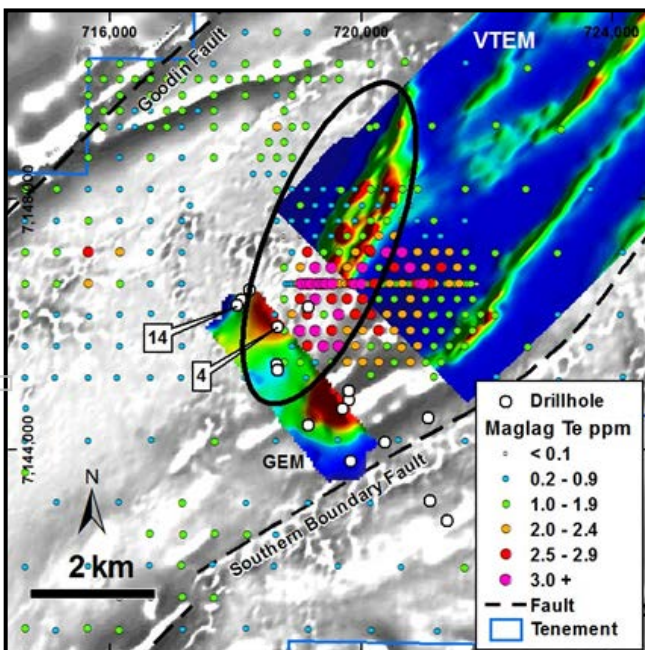
The project covers approximately 1,069km<sup>2</sup> and is located some 10km southwest of Sandfire Resources NL’s DeGrussa copper-gold mine. The project is considered prospective for volcanic hosted massive sulphide (VHMS) deposits and contains the strike extent of the Naracoota volcanic unit (host of DeGrussa VHMS mineralisation), and is prospective for sediment hosted base metals (SEDEX) deposits.

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 (zinc) and gold targets along the Southern Boundary Fault, which marks the southern boundary of the sediment filled Doolgunna basin.

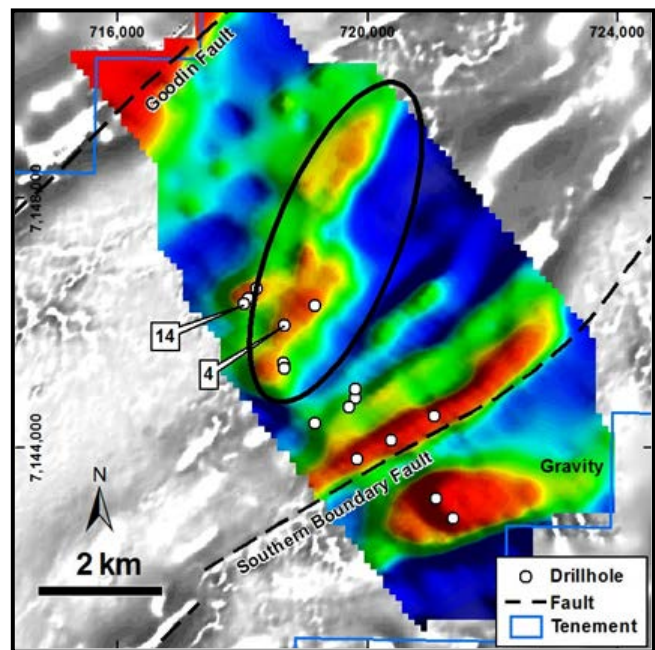
The Company’s gravity, soil geochemistry and electromagnetic surveys have identified a large 4.5km long bedrock anomaly at the Borg Prospect, interpreted to be due to the introduction of base metals sulphides into the sedimentary sequence. (Refer Figures 1 and 2 below) The scout RC drilling conducted earlier in 2014 is interpreted to be too shallow and was conducted along the western flank of the anomaly, which was not fully defined by the geophysics and geochemistry at the time the holes were drilled. (Refer ASX Release 29<sup>th</sup> January 2015)

In December 2014, the Company announced that its application for co-funding for drilling at the Borg Prospect under the WA State Government Co-funded Exploration Drilling program had been approved. The WA State Government will match the Company’s expenditure on its planned drilling program (to a maximum of \$150,000) at Borg. (Refer ASX Release 8<sup>th</sup> December 2014)

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 four RC drill traverses.



**Figure 1. RC holes over Coloured Ground EM & VTEM Imagery with Te Maglag Geochem**



**Figure 2. Borg RC drill holes over Coloured Gravity Imagery**

## Research on Borg Pyrite Geochemistry as a Vector to Ore

In late 2014, the Centre for Excellence in Ore Deposits (CODES, University of Tasmania) used their Laser Ablation System coupled with ICP-MS to analyse 44 pyrite grains from 5 samples in two drill holes (BGRC004 & BGRC014) for the content of base metal pathfinder elements. CODES identified two disseminated pyrite bands that stood out in terms of their chemistry, and the results of their research (*Steadman, J. A. et al*) are summarised below.

### **Hole BGRC004** at 84m and 116m:

- Sedimentary pyrite enriched in Au (up to and over 1ppm), Te, Ag, Se, Mo, Cu, Ni and Co.
- Higher sulfide content than BGRC014.

### **Hole BGRC014** at 84, 121 and 144m:

- Highest average Au and base metal content of dataset at 144m.
- Highest individual Au and As values of the dataset, though the two elements are not coexistent within the same sample.
- Sedimentary pyrite enriched in Au (up to and over 1ppm), Te, Ag, Se, Mo, Cu, Ni and Co.

Overall, pyrite chemistry from both drill holes overlaps the orogenic Au and sedimentary pyrite fields. The Co-Ni ratio of the Borg pyrites is typical of sedimentary pyrite in black shales, orogenic Au pyrite, and SEDEX Zn-Pb halo pyrite.

Positive correlations between Au-Te and Au-Ag contents in the Borg pyrites indicate that the drilled sequence is a favourable source rock for orogenic Au mineralisation. The most successful Au-Te (and Au-Ag) relationships at Borg are in the disseminated shale-hosted pyrites of BGRC004-116m.

Thallium-As was used to track the extent of the alteration halo in SEDEX Zn-Pb deposits. It was noted that approximately 20% of all pyrite analysed from Borg falls within the SEDEX halo field.

Although Cu-Ag and As-Sn relationships indicate possible VHMS mineralization near Borg, the Sn contents of Borg pyrites are low, far lower than that of Degruusa pyrites, and thus VHMS mineralisation is likely not present in the Borg vicinity."

Selenium-Pb ratios provide information about the formational conditions of sedimentary pyrite, as well as how many generations of pyrite are in a given sample. It was found that there were at least two generations of pyrite, both of which formed at relatively low temperatures (i.e. less than 200°C).

Overall, pyrite in the two RC holes sampled indicates that the Borg prospect is most favourable for SEDEX Zn-Pb mineralisation within the Doolgunna Formation, followed by orogenic Au-Cu mineralisation in structurally controlled sites above or below this unit.

Based on these early encouraging results from CODES, Enterprise in early 2015 selected a broader suite of pyrite samples from other previously drilled holes in the Doolgunna basin. These samples are currently being analysed by CODES researchers and it is hoped that the results of this new study will assist in the targeting of the next round of drill holes at Borg and other Doolgunna prospects.

## 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. The Project is considered prospective for copper/nickel/PGE and gold mineralisation and covers the core of the Fraser Range gravity feature, which defines the prospective nickel-copper belt containing Sirius' Nova deposit.

### Orpheus Base Metals JV (ENT 30% free carried to completion of BFS)

On 12<sup>th</sup> February 2015, Enterprise announced that it had entered into a Sale and Joint Venture Agreement ("the Agreement") with Apollo Minerals Limited ("Apollo": ASX: AON) on four tenements covering ~600km<sup>2</sup> in the Fraser Range district. Under the terms of the Agreement, Fraser Range Exploration Pty Ltd ("FRE") a wholly owned subsidiary of Apollo, has purchased a 70% beneficial interest in Enterprise's granted Exploration Licences 63/1281 and 63/1282, and Exploration Licence applications 63/1695 and 28/2403. The consideration was \$200,000 cash and 20 million Apollo (AON) ordinary fully paid shares.

Apollo will sole fund and manage all exploration to completion of Bankable Feasibility Study (BFS) on any discovery. Upon completion of a BFS and delineation of a mining area, the JV parties will contribute proportionally to the development of the Project towards mining. During the Quarter, Enterprise's corporate and technical staff conducted a field orientation program in the Fraser Range with Apollo's corporate and technical staff. All prospects were visited and assessed and plans for further exploration discussed.

On 23 March 2015, Enterprise released assay results from the November 2014 RC drill program at Plato South prospect. All 6 RC holes (1,439m) intersected mafic-ultramafic lithologies with minor visible sulphides. In the absence of any substantial sulphide intersections, the Company prepared 59 x 4 metre composite intervals for low priority geochemical analysis by a commercial laboratory. The selection of the composite intervals was based on XRF scanning of representative 1 metre drill samples in calico bags. All laboratory assay results are summarised in Table 1. The best interval was PLRC010: 8m @ 2,314ppm Ni, 267ppm Cu & 839ppm Co from 24m. The locations of Plato and Plato South holes are shown in Figure 3.

**Table 1. Summary of laboratory assays from all 4 metre composite samples analysed.  
All results in ppm, Averages rounded to nearest 1ppm**

Hole ID	From (m)	To (m)	Av Ni	Min Ni	Max Ni	Av Cu	Min Cu	Max Cu	Av Co	Min Co	Max Co
PLRC007	156	160	1			49			44		
PLRC009	112	116	36			56			46		
PLRC009	180	184	-			48			47		
<b>PLRC010</b>	<b>8</b>	<b>36</b>	<b>1458</b>	<b>756</b>	<b>2626</b>	<b>175</b>	<b>96</b>	<b>333</b>	<b>330</b>	<b>42</b>	<b>998</b>
PLRC010	36	48	387	369	406	92	77	105	73	52	86
<b>PLRC011</b>	<b>4</b>	<b>64</b>	<b>1108</b>	<b>764</b>	<b>1391</b>	<b>87</b>	<b>48</b>	<b>138</b>	<b>114</b>	<b>96</b>	<b>165</b>
PLRC011	64	76	370	173	626	33	26	46	44	25	70
<b>PLRC011</b>	<b>76</b>	<b>96</b>	<b>1410</b>	<b>1304</b>	<b>1487</b>	<b>88</b>	<b>62</b>	<b>110</b>	<b>143</b>	<b>136</b>	<b>149</b>
PLRC011	96	100	381			60			70		
<b>PLRC011</b>	<b>104</b>	<b>112</b>	<b>1377</b>	<b>1375</b>	<b>1378</b>	<b>72</b>	<b>69</b>	<b>75</b>	<b>137</b>	<b>136</b>	<b>138</b>
<b>PLRC011</b>	<b>156</b>	<b>160</b>	<b>1447</b>			<b>89</b>			<b>145</b>		
<b>PLRC011</b>	<b>168</b>	<b>172</b>	<b>1131</b>			<b>37</b>			<b>128</b>		
<b>PLRC011</b>	<b>176</b>	<b>229(EOH)</b>	<b>1062</b>	<b>509</b>	<b>1337</b>	<b>38</b>	<b>26</b>	<b>47</b>	<b>126</b>	<b>76</b>	<b>153</b>
PLRC012	4	24	224	26	365	80	44	110	125	36	345

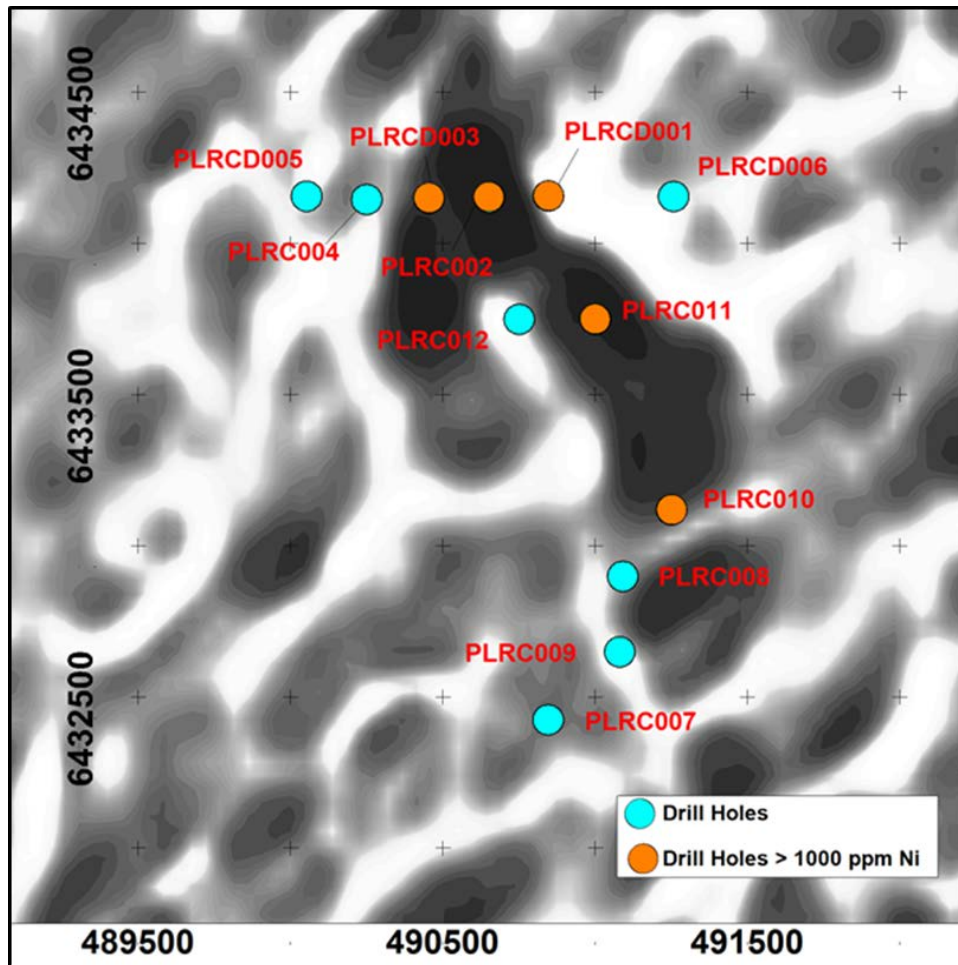


Figure 3. Magnetic Image showing Plato & Plato South Drill Hole Locations

**Fraser Range Project (ENT 100% interest)**

Enterprise has retained 100% ownership of two granted exploration licences in the Fraser Range, namely E63/1283 and E63/1448. These tenements lie along the western margin of the Albany-Fraser Orogen, where it abuts the sheared contact with Archaean granites and mafic and ultramafic rocks.

Previous soil sampling by Enterprise has indicated that these tenements are prospective for komatiite style nickel-copper deposits and Tropicana style gold deposits. The maximum calcrete gold values (26-50ppb Au) are clustered over interpreted Archaean greenstone units. Other lower but still significant values (11-25ppb Au) are clustered over linear magnetic (mafic?) units of either Archean or Proterozoic age. (Refer ASX release 30 July 2012)

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## DARLOT PROJECT

In December 2013, 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. 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's March 2015 Quarterly Report dated 22<sup>nd</sup> April 2015 reported as follows:

*"A moving loop transient electromagnetic (MLTEM) survey is scheduled to be carried out in April 2015. An aircore drilling program is also planned to start in late April 2015, testing a number of key target areas. Further work will be dependent on the results from these two exploration programs."*

Post the end of the Quarter, IGO and ENT agreed to reduce the area of the Darlot JV by removing the western most tenements covering mafic volcanics and salt lakes from the JV Agreement, in order to focus on the easternmost tenements, covering the felsic volcanic suite of rocks.

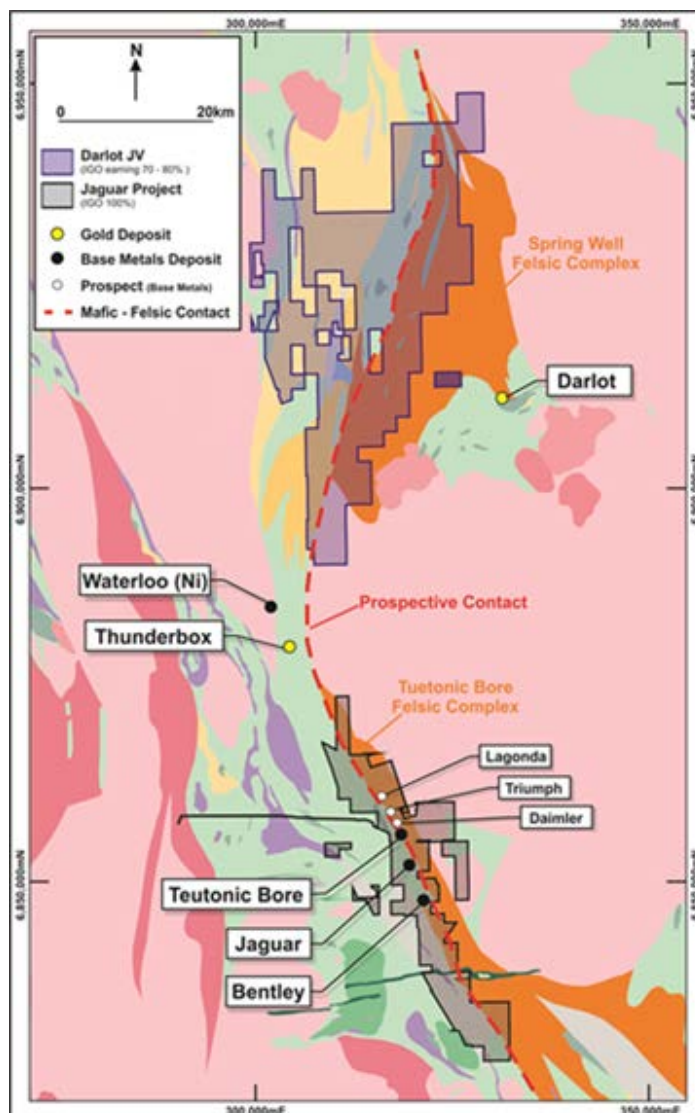


Figure 4. Darlot Project, Regional Geology and Location Plan

## ISSUED CAPITAL AT 31<sup>st</sup> MARCH 2014

<b>Ordinary Shares</b>	<b>274,508,276</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

## RESEARCH AND DEVELOPMENT CLAIM IN PROGRESS

An R & D claim for 2013/2014 (Doolgunna Project) has been lodged with the Australian Tax Office (ATO).

## CASH POSITION

Cash position at 31<sup>st</sup> March 2015: \$0.40million.

Other liquid assets (Shares in ASX listed companies) \$0.43 million.

**Dermot Ryan**  
Managing Director

**Contact:** Telephone: 08 9381 2808      Facsimile: 08 9381 5545      Email: [admin@enterprisemetals.com.au](mailto:admin@enterprisemetals.com.au)

## Competent Persons statements

*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 Xserv Pty Ltd and a Director and security holder 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 results of research by the Centre for Excellence in Ore Deposits (CODES, University of Tasmania) is based on information supplied by Professor Ross Large, Dr Jeff Steadman and Dr Ivan Belousov. Professor Large is internationally recognised for his research on sediment-hosted and volcanic-hosted ore deposits, including VHMS, SEDEX, sediment-hosted gold, volcanic-hosted gold and Carlin-type deposits and Professor Large and other authors consent to the inclusion in this report of the matters based on information in the form and context in which it appears.*

## References

Steadman, J. A, Large, R. & Belousov, I (2014) CODES Confidential Report: "Geochemical Fingerprinting of Enterprise Pyrite-Borg prospect-Doolgunna WA."

APPENDIX 1: ENT Majority Owned Tenements at 31<sup>st</sup> March

Project	Lease	Interest Held	State	Status
Burracoppin	E70/4538	100%	WA	Granted
Darlot	E36/834	100%	WA	Application
Darlot	E36/835	100%	WA	Application
Darlot	E37/1185	100%	WA	Application
Darlot	E37/1207	100%	WA	Application
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	E51/1683	100%	WA	Application
Doolgunna	E52/3267	100%	WA	Application
Doolgunna	E52/2049	100%	WA	Granted
Doolgunna	E52/2404*	80%	WA	Granted
Doolgunna	E52/2406*	80%	WA	Granted
Earaheedy	E69/3331	100%	WA	Application
Fraser Range	E63/1283	100%	WA	Granted
Fraser Range	E63/1448	100%	WA	Granted
Sylvania	E52/3150	100%	WA	Application
Yalgoo	E59/2076	100%	WA	Application
Yalgoo	E59/2091	100%	WA	Application
Yalgoo	E59/2095	100%	WA	Application

\*ENT 80% interest only

APPENDIX 2: Darlot Joint Ventured Tenements at 31<sup>st</sup> March 2015

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 earning an 80% interest    \*\* IGO earning a 70% interest

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**APPENDIX 3: Fraser Range Joint Ventured Tenements at 31<sup>st</sup> March 2015**

Project	Lease	Interest Held	State	Status
Fraser Range	E63/1281	100%	WA	Granted
Fraser Range	E63/1282	100%	WA	Granted
Fraser Range	E63/1695	100%	WA	Application
Fraser Range	E28/2403	100%	WA	Application

*\*AON 70% interest ENT 30% interest free carried to completion of BFS*

**PROJECT LOCATIONS WESTERN AUSTRALIA 31<sup>ST</sup> MARCH 2015**



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