

29 July 2016

JUNE 2016 QUARTERLY ACTIVITIES REPORT

## CORPORATE

ASX Symbol: ENT  
ACN 123 567 073  
Shares on issue: 315,133,979  
Market Cap: \$6.3 million

## CONTACT DETAILS

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## BOARD OF DIRECTORS

Dr Jingbin Wang  
Non-Executive Chairperson

Mr Dermot Ryan  
Managing Director

Dr Allan Trench  
Non-Executive Director

Mr Sam Middlemas  
Company Secretary/CFO

## PROJECTS

Copper/Zinc/Gold  
Doolgunna

Nickel/Copper  
Fraser Range

Gold/Copper/Zinc  
Darlot  
Yalgoo

## SUMMARY

### Doolgunna Cu-Zn (Au)

- Further 1 metre re-split assays were received for RC hole VWRC001 which tested the Vulcan West EM target in December 2015.
- Assay results from the 1 metre samples show a 5 metre zone from 251 to 256 metres averaging 0.17% Cu, 2.2ppm Mo and 0.87ppm Te, with a maximum 1 metre result, from 254 to 255 metres, of 0.5% Cu, 8.4ppm Mo and 2.7ppm Te.
- In light of the irregular shape and nature of Sandfire's Monty discovery, Enterprise considers that the Vulcan West EM/geochemical anomaly is open and requires further drill testing.

### Darlot Cu-Zn (Au)

- Data review showed anomalous Cu/Zn aircore geochemistry and near co-incident MLEM conductors at Jarrah Well Prospect, and highly anomalous Ni-Cu-PGE values in aircore drill samples at Waroonga Well Prospect.
- Enterprise has been granted \$150,000 from the Exploration Incentive Scheme (EIS) for co-funded drill testing of the Jarrah Well target.

### Fraser Range Ni-Cu (ENT 30%, AON 70%)

- On 26 April 2016, ENT's JV partner Apollo announced that three bedrock conductors had been identified from inversion and 3D modelling of moving loop electromagnetic (MLEM) data over Plato by Computational Geoscience Inc in Canada. Apollo has been awarded \$150,000 co-funding for drill testing these EM targets.

## Corporate

- On 21 April 2016, \$115,000 was raised via a \$100,000 placement from ENT's major shareholder SinoTech Minerals and a \$15,000 placement from an existing ENT sophisticated investor.
- ENT's cash position at 30 June 2016 was \$281,000.
- Fair value of liquid assets held at 29 July 2016 is shown below:
  - 13.5m shares in Alto Metals Limited (ASX: AME): \$1,215,000
  - 500,000 shares Apollo Minerals Limited (ASX: AON): \$ 42,500

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## SUMMARY OF EXPLORATION ACTIVITIES

### DOOLGUNNA PROJECT

In December 2015 RC drill hole VWRC001 was collared to test the Vulcan West EM anomaly. Four metre composite assays were reported to the ASX on 29 January 2016, but the 1 metre samples were not all retrieved from the field and submitted to the laboratory for several months. The assay results for 1 metre samples between 176 and 292 metres downhole were recently received and were reported to the ASX on 29 July 2016.

The assays from the 1 metre samples show a 5 metre zone from 251 to 256 metres averaging 0.17% Cu, 2.2ppm Mo and 0.87ppm Te, with a maximum 1 metre result, from 254 to 255 metres, of **0.5% Cu, 8.4ppm Mo and 2.7ppm Te**.

The Vulcan West EM target is a discrete basement conductor, interpreted to lie within the volcano-sedimentary Noonnyereena Member of the Karalundi Formation, in a similar stratigraphic position to Sandfire Resources NL's DeGrussa and Monty massive sulphide copper deposits.

RC drill hole VWRC001 was collared at 725047E, 7159404N with a -60 dip on azimuth 150 degrees magnetic. The hole penetrated a deep zone of oxidation to 81m downhole, then encountered medium grained dolerite, with weak-medium pervasive chlorite-epidote alteration, along with weak-moderate silicification.

At 176m down hole, a zone of weakly elevated copper (between 100-600ppm Cu) was intersected within a zone of interbedded green-grey shale and fine-grained dolerite, with red jasper occurring in or at the boundary with the shales. Locally minor pyrite (~0.1-1%) and trace chalcopyrite (~0.1%) were associated with the red jasper. The dolerite displayed weak-medium-strong chlorite-epidote alteration.

Between 222 - 251 metres, a zone of altered dolerite was encountered, and from 251 to 256 metres, weak copper mineralisation with elevated As, Bi, Mo, Sulphur and Te. (see Table 1 below)

**Table 1. Assays for 1 Metre Samples, Mineralised Dolerite 251m - 256m**

From (m)	To (m)	As ppm	Bi ppm	Cu ppm	Ind ppm	Mn ppm	Mo ppm	P ppm	S %	Se ppm	Te ppm
251	252	2	0.22	<b>2,140</b>	0.248	1,899	0.65	331	0.42	3.3	0.58
252	253	8.1	0.09	488	0.11	2,027	0.36	328	0.17	1.3	0.21
253	254	13.4	0.35	944	0.166	2,040	0.45	329	0.18	1.6	0.5
254	255	12.4	1.29	<b>4,489</b>	0.51	2,433	8.43	401	0.76	8.8	2.7
255	256	26.8	0.22	480	0.133	2,280	1.12	367	0.08	1.1	0.38
	<b>Average</b>	<b>12.54</b>	<b>0.434</b>	<b>1,708</b>	<b>0.2334</b>	<b>2,136</b>	<b>2.202</b>	<b>351</b>	<b>0.322</b>	<b>3.2</b>	<b>0.87</b>

The hole then entered a 40m thick zone of finely laminated sulphide-rich (~5% - 20%) black shale and minor dolerite. The sulphides were dominantly pyrite and pyrrhotite.

The interbedded sulphide-rich shale unit with minor dolerite from 256 to 296m is the likely source of the modelled Vulcan West MLEM anomaly. However, the zone from 192 to 256m which displayed red jasper alteration with associated sulphides (including trace chalcopyrite) is potentially an ore horizon.

In February 2016 Vortex completed a downhole electromagnetic (DHEM) survey on VWRC001 and the DHEM data was processed by geophysical consultants Terra Resources. The calculated strike length for the rotated modelled plate is ~200m. This leaves approximately 130m strike length of the modelled plate untested by drilling.

Given the highly variable nature and geometry of the DeGrussa and Monty massive sulphide bodies, a new drill hole was proposed to intersect the plate (conductive body) at 280m depth, but has not yet been drilled. (*refer ENT: ASX release 19 February 2016*)

In light of the irregular shape and nature of Sandfire's Monty discovery, Enterprise considers that the target is still open and requires further drill testing.

### **DARLOT PROJECT**

At the end on March 2016, Independence Group NL (IGO) formally withdrew from Enterprise's Darlot Project with no retained interest save for a 2% Net Smelter Royalty (NSR) on E37/1031. This tenement covers the Jarrah Well Cu/Zn target as defined by IGO.

During 2014 IGO completed reconnaissance aircore drilling programs over several Cu/Zn and Ni/Cu prospects within the Darlot JV area, and follow up drilling was undertaken at the Jarrah Well and 20Ft prospects in 2015. MLEM surveys were also conducted. (*refer ENT: ASX release 6 April 2016*)

At the Jarrah Well Prospect, 94 aircore drill holes (for 3,355m) and MLEM surveys (6 lines at 200m line spacing, 9.35km total) were completed. The MLEM survey delineated a number of anomalous conductive responses coincident with aircore Cu/Zn geochemical anomalies.

On 7 June 2016, Enterprise was advised by the Department of Mines and Petroleum that it had been awarded \$150,000 (Round 13) for co-funded drill testing of the Jarrah Well VHMS target.

### **FRASER RANGE PROJECT**

The Fraser Range Project is located within the Albany-Fraser Orogen approximately 100km east of Norseman. The Project is considered prospective for copper/nickel and gold mineralisation and covers the core of the Fraser Range gravity feature, which defines the prospective nickel-copper belt containing Independence Group NL's (ASX: IGO) Nova deposit.

Fraser Range Exploration Pty Ltd ("FRE") a wholly owned subsidiary of Apollo Minerals Ltd, holds a 70% beneficial interest in Enterprise's granted Exploration Licences 63/1281, 63/1282 and 28/2403, and Exploration Licence application 63/1695. Apollo is sole funding and managing 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.

On 26 April 2016, Apollo announced that three bedrock conductors had been identified from inversion and 3D modelling of moving loop electromagnetic (MLEM) data by Computational Geoscience Inc in Canada, and that planning for a drill program has confirmed that one of the conductors (Conductor A) is evident across multiple datasets and represents a significant nickel sulphide drill target.

The target conductor "A" (see Figure 1) dips steeply to the east and is spatially associated with the most magnetic part of a 3D magnetic inversion model. Anomalous surface soil geochemistry and adjacent drill holes reporting significant nickel intersections support the Company's interpretation that the conductor is related to nickel sulphide mineralization.

Apollo successfully applied for co-funding for drilling (Round 13) with the Department of Mines and Petroleum, and has been awarded \$150,000 for drill testing these EM targets to the north of Plato.

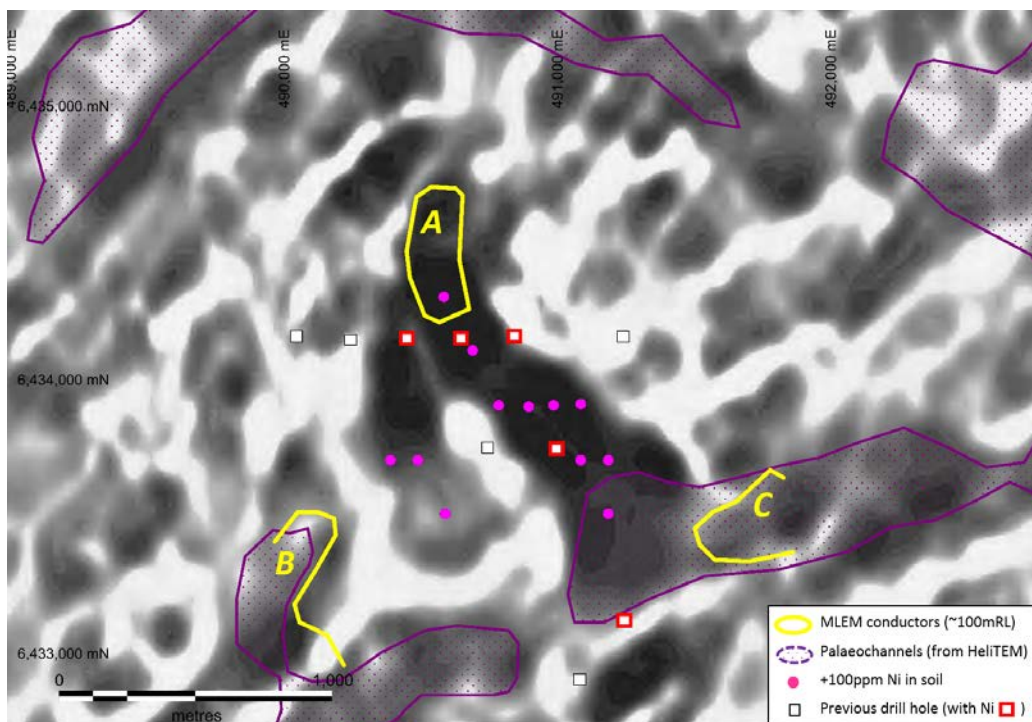


Figure 1. Plato Prospect showing location of significant drill target over a 1VD magnetic image

## ENTERPRISE METALS' INVESTMENT IN ALTO METALS LIMITED

Enterprise Metals Limited holds approximately 13.5 million shares in Alto Metals Limited (ASX: AME, or "Alto"). On 23 March 2016 Alto announced an agreement to acquire the majority of the Sandstone Archaean Greenstone Belt in Western Australia which has produced over 1.3 million oz of gold.

Alto has reported that it has almost completed the assembly of a comprehensive Sandstone drill hole database, and a mining consultant has been commissioned to undertake block modelling of the remnant resource at Lord Nelson with a view to estimating a JORC 2012 compliant Mineral Resource.

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Initial modelling of Lord Nelson by Alto staff has confirmed that the high grade west dipping shear hosted quartz reefs which Troy mined in the oxide zone persist into the primary (sulphide) zone, below the pit. A number of well-defined targets to underpin exploration, early-stage resource definition and mining have been identified.

On 25 July 2016, Alto announced that its Shareholder Purchase Plan (SPP) had closed fully subscribed, and the Company had raised \$1.7 million, bringing their cash balance to approximately \$2.8 million.

Enterprise Metals Ltd believes its 9.34% interest in Alto Metals Limited is valuable strategic shareholding. Enterprise's investment in AME is fair valued at **\$1,215,000** at the date of this report (29 July 2016).

### ISSUED CAPITAL AT 30 JUNE 2016

<b>Ordinary Fully Paid Shares on Issue</b>	<b>315,133,979</b>		
<b>Unlisted Options</b>	<b>Exercise Price</b>		<b>Expiry Date</b>
2,000,000	\$0.05		10/08/2017
16,662,500	\$0.08		30/11/2016

### CASH POSITION

Cash position at 30 June 2016: \$281,000\*

### CORPORATE

On 21 April 2016, the Company announced that it had raised \$115,000 through the issue of 6,388,889 fully paid ordinary shares in the Company, via a \$100,000 placement from SinoTech and a further \$15,000 from a sophisticated and existing professional shareholder of the Company. Following this placement, ENT has a total of 315,133,979 shares on issue.



**Dermot Ryan**  
Managing Director

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### Competent Persons statements

The information in this report that relates to non-geophysical Exploration Results 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.

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**TENEMENT SCHEDULES**  
**ENTERPRISE METALS LTD AND ITS 100% OWNED SUBSIDIARIES,**  
**ON A CONSOLIDATED BASIS**

**APPENDIX 1: ENT 100% Owned Tenements at 30 June 2016**

Project	Lease	ENT Interest	State	Status
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	E52/2049	100%	WA	Granted
Doolgunna	E51/1683	100%	WA	Application
Doolgunna	E52/3347	100%	WA	Application
Fraser Range	E63/1283	100%	WA	Granted
Darlot	E37/1112	100%	WA	Granted
Darlot	E37/1185	100%	WA	Granted
Darlot	E37/1105	100%	WA	Granted
Darlot	E36/768	100%	WA	Granted
Darlot	E37/1031	100%	WA	Granted
Darlot	E37/927	100%	WA	Granted
Darlot	E37/947	100%	WA	Granted
Darlot	E36/778	100%	WA	Granted
Yalgoo	E59/2076	100%	WA	Granted
Yalgoo	E59/2091	100%	WA	Granted

**APPENDIX 2: Darlot JV Tenements at 30 June 2016**

Project	Lease	ENT Interest	Rudd-Gianni Interest	State	Status
Darlot	E36/706	80%*	20%	WA	Granted
Darlot	E37/859	80%*	20%	WA	Granted

\* ENT registered holder of 80% interest, with Allan Rudd & Peter Gianni jointly holding a 20% free carried interest to completion of any Bankable Feasibility Study.

**APPENDIX 3: Fraser Range Joint Venture Tenements at 30 June 2016**

Project	Lease	ENT Interest*	AON Interest	State	Status
Fraser Range	E63/1281	30%	70%	WA	Granted
Fraser Range	E63/1282	30%	70%	WA	Granted
Fraser Range	E63/1695	30%	70%	WA	Application
Fraser Range	E28/2403	30%	70%	WA	Granted

\*ENT registered holder of 30% interest, free carried to completion of any Bankable Feasibility Study.

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