

ACN 123 567 073

# 30 April 2018

CORPORATE ASX Symbol: ENT ACN 123 567 073

At 31 March 2018 Shares on issue: 355,652,435

## CONTACTDETAILS

Suite 9, 12-14 Thelma Street PO Box 1014 WEST PERTH 6872 Western Australia

Ph: +61 8 6381 0392 Fx: +61 8 9381 5545

## **BOARD OF DIRECTORS**

Dr Allan Trench Non-Executive Chairman

Mr Dermot Ryan Managing Director

Dr Zhijun He Non-Executive Director

Mr Patrick Holywell Company Secretary/CFO

## PROJECTS

Copper/Zinc/Gold Doolgunna

Nickel/Copper Fraser Range

Gold/Copper/Zinc Murchison Ballard Darlot Yalgoo

# March 2018 Quarterly Activities Report

# Doolgunna Cu-Zn(Au) Project: SFR Farm-In, ENT 100%

- Sandfire Resources NL (ASX: SFR) continued with intensive drilling programs. Aircore drilling was conducted to in-fill the prospective mafic-sedimentary horizons in the White Well – Ruby Well area.
- Five RC drill holes were completed within the Ruby Well and White Well areas test a number of low-order airborne EM anomalies.
- Two diamond core holes were completed and a 3<sup>rd</sup> was in progress to test prospective stratigraphy along the Homestead-Vulcan West trend. A total of 2,559m were drilled in the Quarter but SFR reported no significant assay results.
- > Sandfire confirms Minimum Expenditure Condition met.

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

- Subsequent to the March quarter, Apollo Minerals Ltd (ASX: AON) announced that it will seek to list its wholly owned subsidiary Constellation Resources Ltd which holds its 70% interest in the Fraser Range Orpheus Joint Venture tenements.
- Constellation's initial public offering ("IPO") is expected raise A\$7.0 million (before costs) from an issue of 35 million new shares at an issue price of A\$0.20.

# Murchison (Cu/Zn/Au) Project: ENT 100%

- The Murchison Project covers northern extensions of structures hosting Au & Cu-Zn mineralization. Potential for Cu-Ni-Co also recognized.
- Heritage Agreements were negotiated with the Native Title Claimant groups, and tenement grant is expected shortly.
- Programs of Work (PoW) for aircore drilling of known gold anomalous areas are being prepared.

# **Corporate**

- > Cash and liquid assets at 31 March 2018: \$1.204 million.
- Comprised of Cash: \$220,000 and \$984,000 worth of Alto Metals Ltd shares. (12 million AME @ 8.2cents/share)

## DOOLGUNNA PROJECT

#### (SFR have right to earn up to 75%)

Sandfire Resources NI (ASX: SFR) entered into a Farm-in Agreement with Enterprise Metals Limited in October 2016 to earn up to a 75% interest in Enterprise's Doolgunna Project. During the Quarter, Sandfire advised Enterprise that the minimum expenditure commitment of \$1.5M over two years had been met and Sandfire were proceeding to sole fund exploration on the tenements to define a JORC 2012 compliant mineral resource of 50,000 tonnes of contained copper or copper equivalent.

The Enterprise tenements cover over 60km of strike of the southern boundary of the Bryah Basin which contains the Narracoota/Karalundi Formations hosting the DeGrussa and Monty copper-gold deposits.

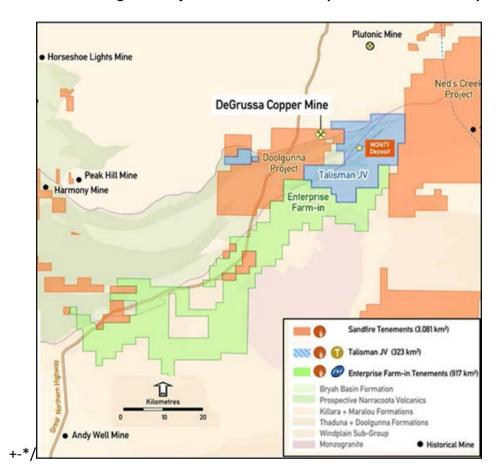


Figure 1. Sandfire's Doolgunna Project Area with the Enterprise Farm-In Area Incorporated.

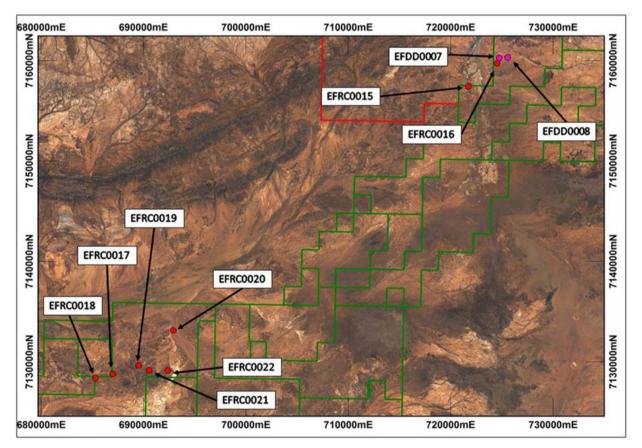
Sandfire have reported that diamond, RC and AC drilling continued at the Enterprise Project throughout the March Quarter 2018. Refer Sandfire's March Quarterly Report dated 27 April 2018.

Aircore drilling was conducted to in-fill the prospective mafic-sedimentary horizons within the White Well – Ruby Well area. This is designed to assist geological interpretation and provide quality bottomof-hole and saprolite dispersion geochemistry over the interpreted Karalundi Formation within the Enterprise Farm-In tenement block. A total of 519 drill holes were completed for a total advance of 34,953m. Regional AC exploration drilling consisted of an offset 800m x 100m line and hole spaced grid pattern designed to infill existing AC drilling to 400m line spacing and provide geochemical coverage and aid detailed geological interpretation. Five RC drill holes were completed within the Ruby Well and White Well prospect areas and were drilled as part of a program to test a number of low-order anomalies identified in the airborne electromagnetic (AEM) survey completed in 2017.

Two diamond drill holes were completed and another was ongoing at end of Quarter to test the prospective stratigraphy along the Homestead and Vulcan West trend. Favourable geology for VMS host environments was observed including hematite and magnetite-rich exhalite sediments, strong chlorite alteration, minor sulphides, jasper and chert in the Vulcan and Vulcan West prospects.

An aggregate of 2,559m RC and DC metres were drilled in the period, with no significant mineralization observed.

The locations of completed and commenced RC/DC drilling are shown in Figure 2, and the locations of all AC drill holes are displayed in Figure 3.





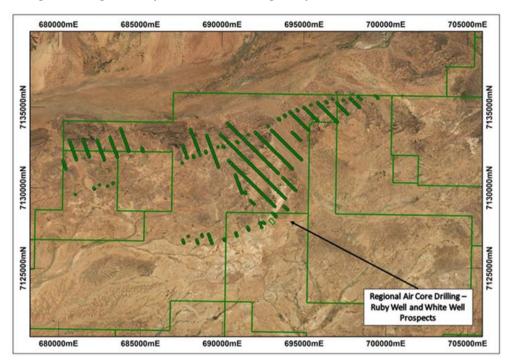


Figure 3. Regional exploration AC drilling completed in March Quarter 2018

Geophysics acquisition throughout the Quarter included a sequence of DHEM surveys focussing on the Vulcan, Vulcan West, Ruby Well and White Well Prospects. No significantly anomalous results were identified in the down hole surveys completed during the reporting period.

A Versatile Time Domain Electromagnetic (VTEM) survey is scheduled to be completed over the remainder of the tenements under the SFR-ENT Farm-in during the next Quarter. This survey will use a helicopter-borne VTEM-MAX system provided by UTS Geophysics. A map of the survey area is displayed in Figure 4.

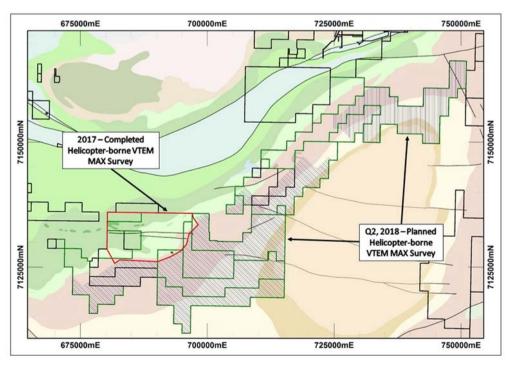
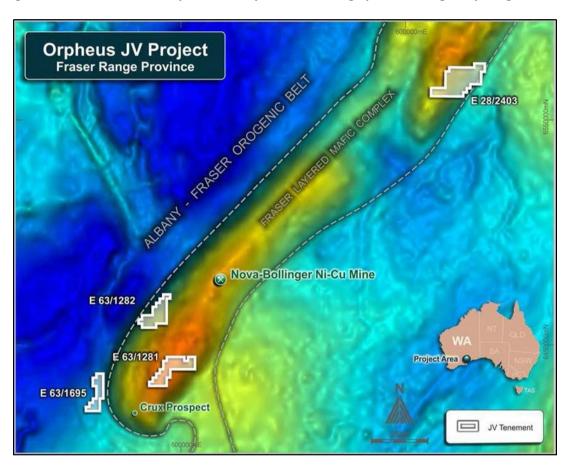


Figure 4. AEM Survey planned to commence in June Quarter2018

#### FRASER RANGE PROJECT

(AON 70% managing & funding, ENT 30% free carried to BFS)

The Fraser Range Project is located within the Albany-Fraser Orogen approximately 100km east of Norseman (Figure 5). On 13 February 2015, Enterprise announced it had entered into a Sale and Joint Venture Agreement with Apollo Minerals Ltd (ASX: AON) over the Fraser Range tenements. Apollo purchased a 70% interest in the tenements and is free carrying Enterprise's 30% interest to completion of a bankable feasibility stage (BFS) on any discovery.



#### Figure 5. Tenement Plan – Orpheus JV Project, Fraser Range province on gravity image

Apollo announced on 23 April 2018 that it will seek to list its wholly owned subsidiary Constellation Resources Limited ("Constellation"), which holds the Fraser Range nickel-copper and gold assets, via an initial public offering ("IPO") on the Australian Securities Exchange ("ASX").

Apollo reported that it is expected that Constellation will offer 35 million new shares at an issue price of A\$0.20 each to raise A\$7.0 million (before costs). The separate listing of Constellation will ensure that Constellation will have a dedicated management team and funding for exploration activities on the Fraser Range nickel, copper and gold assets (which are also referred to as the Orpheus Project).

Detailed information on Constellation, the offer of securities under the IPO, the capital structure and an indicative timetable will be included in a prospectus that will be made available after lodgement with the Australian Securities and Investments Commission ("ASIC").

Constellation expects to lodge a prospectus in the coming weeks.

## MURCHISON PROJECT

(Enterprise Metals 100%)

On 25 October 2017 Enterprise purchased 100% of the issued capital of Calypso Minerals Pty Ltd, the holder of seven Exploration Licence applications covering 733km<sup>2</sup> of greenstone belt in the Murchison Goldfields. Following the negotiation of heritage agreements with Native Title Claimants, Enterprise expects the tenements to be granted shortly. Plans for an aircore drilling program are being prepared.

Enterprise's Murchison landholdings are centered 30km north of Cue and 35km north-east of the Big Bell Gold Mine, and form a contiguous block of approximately 820km.<sup>2.</sup> The Cue district contains several major gold mines, refer Figure 6 below.

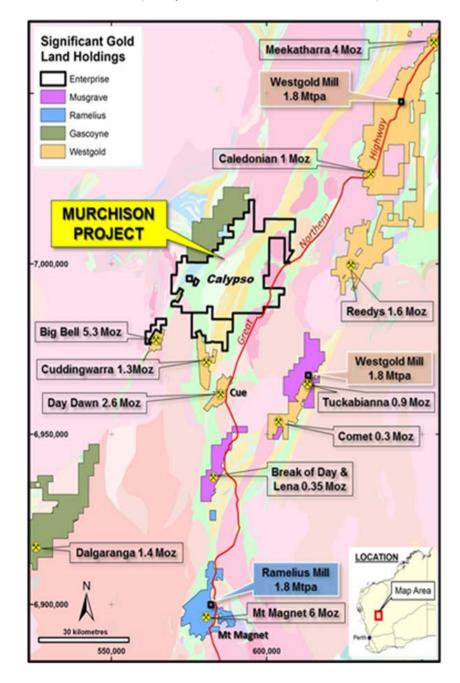


Figure 6. Murchison Project Geology & Competitor Landholdings with Gold Endowment (Moz produced + Moz current resource)

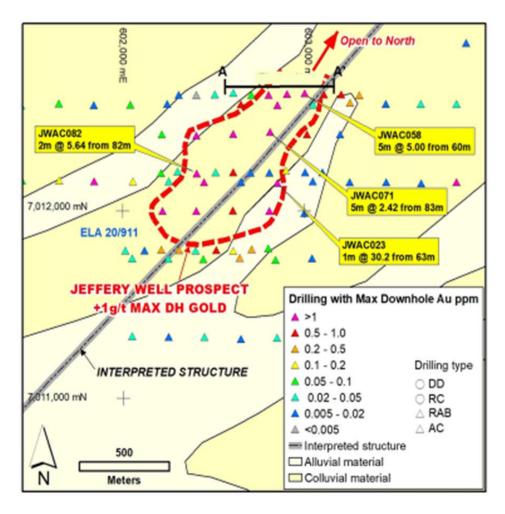
## **Gold Potential**

Several priority gold systems have been identified for follow up work, based on compilation of historical drilling and other exploration results reported by previous explorers. The compilation work is ongoing, with further prospective gold prospects to be defined, in addition to Cu-Zn prospects along the approximately 50km of VMS prospective stratigraphy contained within the tenement package.

At **Jeffery Well**, Alchemy Resources Ltd identified a +1/g/t Au maximum down hole gold anomaly in aircore drilling over a 1,000m x 500m area (Figure 7). The drilling was on a nominal 200m x 100m spacing. Significant results reported include **5m @ 5.0 g/t Au from 60m in JWAC058**, and a single metre intercept of **30.2 g/t Au from 63m in JWAC023**. The mineralisation appears to form a flat lying blanket (drawn in Figure 7), potentially developed by supergene remobilisation from an underlying mineralised system in the fresh rock basement.

Interpretation of the end of hole litho-geochemistry suggests there is a NNE-SSW oriented basement structure broadly parallel to the maximum gold envelope. Follow-up drilling is planned to test for a bedrock source to the extensive supergene(?) mineralisation identified to date, which is probably located along or marginal to the inferred bedrock structure.





At **Behring Bore** historical drilling has defined an extensive area of anomalous gold (and arsenic) mineralization, within which two significant gold systems are defined. The Behring Bore Prospect is defined by down hole gold values +1g/t over an area of approximately 900m x 500m in 200m x 100m spaced aircore drilling. Aircore drilling has intersected very thick, low grade mineralisation, including **31m @ 0.57g/t Au** in BBNAC092 and **59m @ 0.28 g/t Au** in BBNAC004.

While there are some closer spaced shallow holes, there are only two deeper RC holes (including BBRC-002, reporting **26m @ 0.66g/t Au from 81**, which includes several isolated +1/g/t Au intervals) testing this large, apparently flat lying gold system. The mineralisation is described as being hosted in the uppermost part of an altered, pyritic dolerite, overlain by graphitic schists. Note that all drilling is angled to the east, and will not have adequately tested for east dipping mineralisation, similar to the "**Metana Lode**" mineralisation located immediately to the east. (refer Figure 8 below).

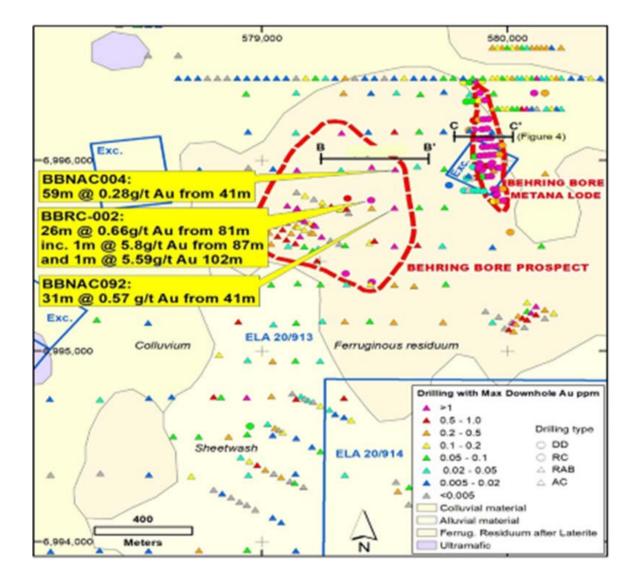


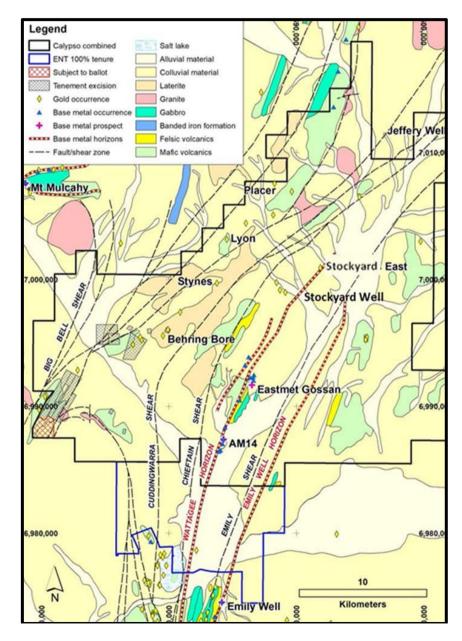
Figure 8. Behring Bore - Surface Geology and Drill Collar Plan & Maximum Downhole Au Values

#### VMS Copper-Zinc Potential

In addition to the gold potential, the new tenement package contains two stratigraphic horizons with VMS style mineralization identified by previous explorers.

The tenements contain 21km of strike of the Wattagee horizon, containing the AM14, Wattagee Hill and Metals Ex gossans or prospects, and 16km of strike of the Emily Well horizon, with VMS mineralization and gossans located at or near Emily Well.

Geochemical work by the GSWA indicates felsic volcanics in both the Wattagee horizon and the Emily Well horizon have geochemical characters consistent with VMS fertile packages across the Yilgarn and Canadian Abitibi Provinces.



## Figure 9. Murchison Project Tenements over GSWA Surface Geology & trace of the Wattagee and Emily Well Cu-Zn VMS Horizons

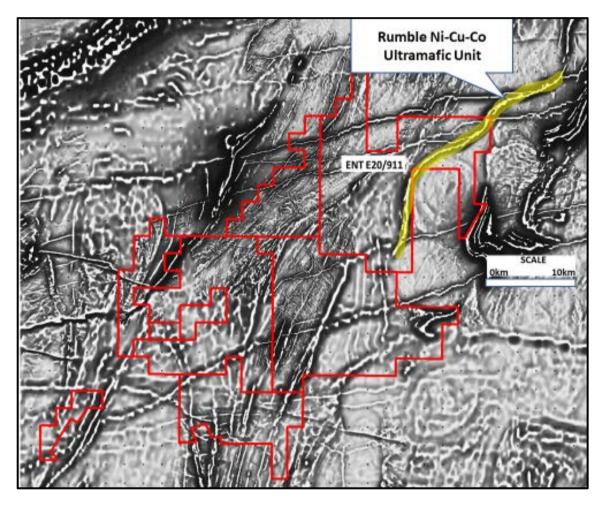
## Copper-Nickel Potential

An ultramafic dyke that occurs in the NE corner of **Enterprise's E20/911 close to the Jeffery Well prospect** is considered to have potential for Cu-Au and Cu-Ni-Co. Refer Figure 10 below.

The evidence for this lies in the adjacent Rumble Resources Ltd (ASX: RTR) Munarra Gully tenements E51/1677 and M51/122, where on 26 February 2018 Rumble announced that grab sampling (33 samples) completed by Rumble and others identified consistent copper in weathered ultramafic rocks exposed in two small pits currently being mined for gold. Refer Figure 11 overleaf.

Rumble reported grab sample assay results with an **average of 0.68% Cu (all 33 samples), with** maximum Cu to 2.1% Cu, Au to 1.9 g/t, Ni to 0.37% and Co to 0.11%.

Figure 10. 1<sup>st</sup> VD Magnetic Image Showing Location of Enterprise's Murchison Project tenements and Magnetic Copper-Ni-Co Bearing Ultramafic Unit



Rumble reported that previous exploration within E51/1677 focused primarily on gold exploration with wide spaced RAB drilling assaying only for gold and arsenic. However recent small scale mining at White Rose has identified a magnetic copper bearing ultramafic unit with potential for disseminated to massive copper +/- nickel sulphide mineralization. Rumble report that no systematic copper – nickel exploration has been completed over these targets. Refer Figure 11 overleaf.

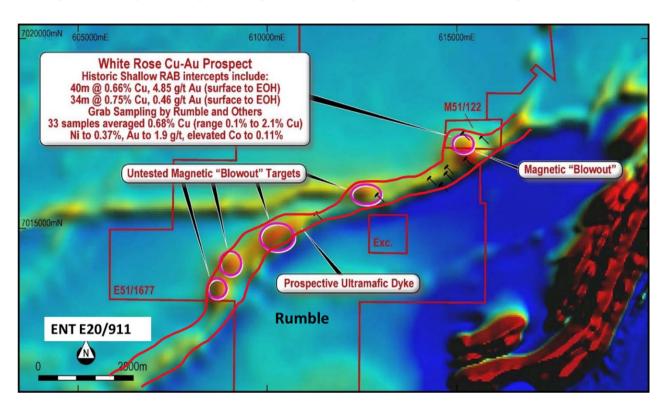


Figure 11. Magnetic Image Showing Rumble's Magnetic Copper-Ni-Co Bearing Ultramafic Unit

## BALLARD PROJECT

(Enterprise 90% managing and funding , Legendre 10%)

On 25 October 2017 Enterprise acquired a 90% interest in the Ballard Project, comprising granted Exploration Licences 30/472 and 29/991, located 150km NNW of Kalgoorlie, and 60km north of Eastern Goldfields Limited's ("EGF") Davyhurst operation, in the Eastern Goldfields of Western Australia (Refer Figure 12 overleaf).

The Ballard Project covers 190km<sup>2</sup> of Archaean greenstones prospective for orogenic gold and includes approximately 38km strike of greenstone sandwiched between the Ida Fault and Ballard Shear Zone, both first order structures with potential to focus gold mineralization into proximal subsidiary structures.

The Company's immediate focus will be to capture the historical soil sampling and drilling in digital form (the bulk of the historical work is presented as plans and sections in historical reports, and not in digital databases) and confirm the historical work, both in location and tenor of mineralization, before planning extension and/or infill sampling and RAB/aircore drilling.

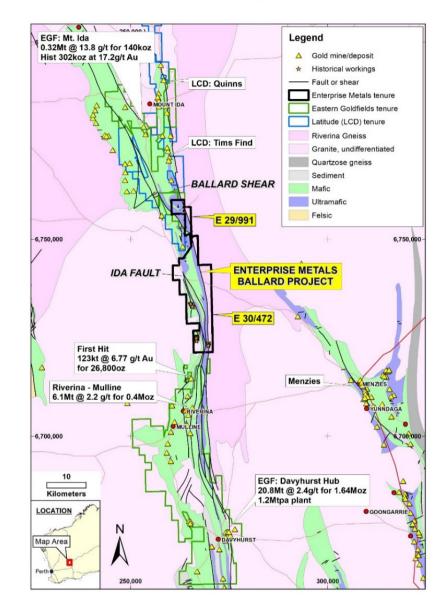


Figure 12. Location Plan – Ballard Project and nearby historical and current mines

## **OTHER PROJECTS**

Enterprise has two small tenements and one joint venture tenement remaining in the Yandal Greenstone Belt and one exploration licence immediately north of Yalgoo township.

## **CORPORATE**

On 28 February 2018, Mr Patrick Holywell was appointed Chief Financial Officer and Company Secretary following the resignation of Mr Sam Middlemas. Mr Holywell is a Chartered Accountant with fifteen years' experience in corporate governance, finance and accounting including employment with Deloitte Touche Tohmatsu Ltd and Patersons Securities Ltd. Mr Holywell has been employed by and acted as company secretary, CFO and/or director of a number of companies in the resources sector.

## **INVESTMENTS**

Enterprise currently holds 12 million shares in **Alto Metals Limited** (ASX: AME, or "Alto"). Alto's main asset is the Sandstone Gold Project, which covers ~ 85% of the Sandstone Greenstone Belt in Western Australia. This greenstone belt has produced over 1.3 million ounces of gold. At 31 March 2018, Enterprise's 12 million Alto shares had a fair market value of \$0.984M based on a share price of 8.02cents/share

## CASH POSITION AT 31 MARCH 2018

Cash at bank:	\$220,000
Shares held in ASX Listed Companies,	
Share value at 31 March 2018:	<u>\$984,000</u>
Total Cash and liquid securities at the end of the Quarter:	\$1,204,000

#### Further information, contact:

Dermot Ryan Managing Director +61 8 9381 2808

Email: <u>admin@enterprisemetals.com.</u>

#### **Competent Person Statement**

The information in this report that relates to Exploration Results on the Murchison Project 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.

Historic exploration results referred to in this Report were previously reported by numerous ASX listed companies. Enterprise Metals Limited understands that this information has not been updated since to comply with the JORC Code 2012, but believes the information has not materially changed since it was last reported.

The information in this report that relates to Exploration Results at Doolgunna is based on information compiled by Mr Shannan Bamforth who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Bamforth is a permanent employee of Sandfire Resources and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bamforth consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# **Tenement Information as Required by Listing Rule 5.3.3**

Enterprise Metals Ltd & Its 100% Owned Subsidiaries, on a Consolidated Basis

# APPENDIX 1: ENT 100% Owned Tenements - Sandfire Resources NL Farm-In

Project	Lease	ENT Interest	State	Status	
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	Granted	
Doolgunna	E52/3347	100%*	WA	Granted	

\* ENT registered holder of 100% interest, with Sandfire Resources NL managing and funding to earn a 75% in the Doolgunna Project tenements subject to discovery of a resource of 50,000t contained copper or equivalent.

#### APPENDIX 2: ENT 100% Owned Tenements

Project	Lease	<b>ENT Interest</b>	State	Status	
Darlot	E37/1031	100%	WA	Granted	
Darlot	E36/778	100%	WA	Granted	
Yalgoo	E59/2076	100%	WA	Granted	
Murchison	E20/742	100%	WA	Granted	
Murchison	E20/911	100%	WA	Application	
Murchison	E20/912	100%	WA	Application	
Murchison	E20/913	100%	WA	Application	
Murchison	E20/914	100%	WA	Application	
Murchison	E20/915	100%	WA	Application	
Murchison	E20/916	100%	WA	Application	
Murchison	E20/918	100%	WA	Application	
Murchison	P20/2302	100%	WA	Application	
Murchison	P20/2303	100%	WA	Application	

#### **APPENDIX 3: Fraser Range (Orpheus Joint Venture) Tenements**

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.

#### **APPENDIX 4: Other Joint Venture Tenements**

Project	Lease	ENT Interest	Other Party	State	Status
Darlot	E37/859	80%**	20%	WA	Granted
Ballard	E29/991	90%***	10%	WA	Granted
Ballard	E30/472	90%***	10%	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.

\*\*\* ENT registered holder of 90% interest, with Bruce Legendre jointly holding a 10% free carried interest to completion of any Bankable Feasibility Study.