ASX RELEASE



### AMENDED-MURCHISON PROJECT (WA) AIRBORNE SURVEY DATA RECEIVED

Enterprise Metals Limited (ASX: ENT; "Enterprise" or "the Company") is pleased to advise that it has received the data from the recently completed 4,352 line km airborne magnetic and radiometric survey over the south-west portion of the Company's 100% owned Murchison Gold and Base Metals Project in Western Australia.

This detailed and low level (line spacing 50m, flying height 30m) survey has covered the northern extensions and the junction of the mafic units hosting the Big Bell gold deposit and the Cuddingwarra gold deposits. This junction represents a prime exploration target, which is entirely covered by alluvium and under-explored.

The 2018 survey data has been image processed and stitched into Enterprise's existing airborne magnetic data set. Preliminary processing and interpretation of the magnetic data has commenced, but a more rigorous and detailed litho-structural interpretation for gold and base metal targets will be conducted in the December Quarter.

The preliminary magnetic image (Figure 1) below shows the detailed survey with pre-existing magnetic data and WAMEX Max-Au drill hole data. Enterprise believes that the historic drilling along the interpreted Cuddingwarra mine sequence corridor is too sparse and too shallow, and this is particularly so in the target area where the Cuddingwarra mine sequence is interpreted to intersect the Big Bell Shear Zone. Figure 2 overleaf illustrates the extent of alluvial cover.



Figure 1. Murchison Project 1<sup>st</sup> Vertical Derivative (1VD) Magnetic Image over Drill Hole Max Au





MURCHISON PROJECT – BACKGROUND

(Refer ENT ASX release 24 May 2018)

Enterprise's ~700 km<sup>2</sup> Murchison Project is 35km north of Cue and covers Archaean rock sequences prospective for orogenic gold and volcanogenic massive sulphide (VMS) copper-zinc deposits. The project includes strike extensions of the gold mineralised Big Bell, Cuddingwarra, Chieftain (or Mt Magnet) and Emily Shear Zones, and the Wattagee and Emily Well VMS horizons.

Geochemical work by the Geological Survey of Western Australia (GSWA) indicates that the felsic volcanics in both the Wattagee and Emily Well horizons have geochemical characteristics consistent with VMS fertile packages across the Yilgarn and Canadian Abitibi Provinces.

While the Cue district contains several major gold mines, including Westgold's Big Bell (2.8 Moz historical production and 2.5 Moz resource), Day Dawn (Great Fingall and Golden Crown mines, 1.7Moz historical production and 0.89 Moz resource) and Cuddingwarra camp gold mines (0.8 Moz production and current resources of 0.55 Moz), these deposits were easily found because they outcropped. Enterprise's Murchison Project area is under-explored due to surficial cover.

The Enterprise team has significant experience in exploring for and discovering "blind" mineral deposits in the deeply weathered Yilgarn of Western Australia, and makes extensive use of airborne and ground geophysics to "*see through*" the cover and define favourable litho-structural targets for drill testing. Figure 3 below shows the regional geological setting of the Murchison Project.





#### Dermot Ryan Managing Director +61 9381 2808 <u>admin@enterprisemetals.com.au</u>

#### Competent Persons statement

The information in this report that relates to the preliminary interpretation of the airborne magnetic survey, and historic 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 Fellow of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralization 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 the image processing of airborne geophysical data is based on information compiled by Mr William Robertson, who is an employee of Value Adding Resources Pty Ltd and a security holder of the Company. Mr Robertson is a member of the Australian Society of Exploration Geophysicists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and 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 the report of matters based on information in the form and context in which it appears.

#### Cautionary statement

All historic exploration results referred to in this Report were previously reported to the WA Department of Mines WAMEX Open File system by professionally managed mineral exploration companies, or by ASX listed companies under the JORC Code 2004. Enterprise Metals Ltd 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.

References		
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Richards, M. N.	1987	Annual report for Mary Jane Pool, E20/49, For year ending 23rd March
Thom, R.	1986	Annual report for E20/23, Gidgie Well, Year ending 2 September 1986
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Esso Exploration & Production Australia Inc	1976	Wattagee Project, Annual Report for the year ending 31/12/1976, MC20/2338-2354, 2438-2441, 2443-2463, 2465, 2467 & 2469. <i>A6744</i>
Brash, A.H. Carter, D. N.	1975	Wandagee Well, Report [non-statutory] on work completed to December 1974 on Temporary Reserve 5927H [TR70/5927] A5758

# JORC Code, 2012 Edition – Table 1 report Murchison Project, WA

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary						
Sampling techniques	No sampling by Enterprise Metals to date.						
Drilling techniques	No drilling by Enterprise Metals to date.						
Drill sample recovery	No drilling or sampling by Enterprise Metals to date						
Logging	No drilling by Enterprise Metals to date						
Sub-sampling techniques and sample preparation	No drilling or sampling by Enterprise Metals to date						
Quality of assay data and laboratory tests	No drilling, sampling or assaying by Enterprise Metals to date						
Verification of sampling and assaying	<ul> <li>No drilling, sampling or assaying by Enterprise Metals to date</li> </ul>						
Location of data points	MAGSPEC Airborne Surveys Pty Ltd ("Magspec") was contracted to undertake a detailed magnetic and radiometric survey of the SW quadrant of Enterprise's Murchison Project area in parky October 2018. Survey coefficient below:						
	Traverse	Traverse	Tie	Tie Line		Sensor	Total Line
	Line	Line Direction	Line	Directior	n (deg)	Height*	Kilometres
	spacing (m)	(deg)	Spacing (m)			(m)	
	50	090-270	500	000	000-180 30		4,352
	• *So	me draping may o	ccur due to ter	rain and/o	or safety	/ consideration	S.
Data spacing	Primary Equipment Configuration						
and distribution		Channel	Frequency		Distance		
(see above)	Magnetics		20 Hz		"'3.5 metres		
	Spectrometer 2 Hz "'35 metres						
	<ul> <li>Data Acquisition System</li> <li>Sample rates up to 20 Hz</li> <li>Integrated Novatel OEM GPS receiver providing positional information that is used to tag incoming data streams in addition to providing pilot navigation guidance</li> <li>Current monitoring</li> <li>Visual real time on-screen system monitoring/ error messages to limit re-flights</li> </ul>						

	Magnetometer						
	Geometrics GR823 tail sensor; mounted in a stinger housing.						
	Sensor Type     Resolution						
	Sensitivity						
	Sample Rate						
	Compensation						
	Gamma-Ray Spectrometer						
	Caesium vapour						
	• 0.001 nT						
	• 0.01nT						
	• 20 Hz (::::3.5 metre sample interval) 3-axis fluxgate magnetometer						
	<ul> <li>RSI RS-500 gamma-ray spectrometer, incorporating 2x RSX-4 detector packs.</li> </ul>						
	Total Crystal Volume						
	Channels						
	Sample Rate						
	• 32 L						
	• 1024						
	• 2 Hz						
	Multi-peak automatic gain stabilisation						
	Altimeters						
	Bendix/King KRA 405 radar altimeter.						
	Resolution - 0.3 m						
	• Sample Rate - 20 Hz						
	Range - 0-760 m Renishaw ILM-500-R laser altimeter.						
	Resolution - 0.01 m						
	• Accuracy - 0.1 m						
	• Sample Rate - up to 20 Hz						
	• Range - 0-500 m						
Oriontation of	The airborne survey lines are breadly orthogonal to interpreted strike of geological						
data in	• The another survey lines are broadly orthogonal to interpreted strike or geological						
relation to	units.						
geological							
structure							
Sample	No drilling, sampling or assaying by Enterprise Metals to date						
security							
Audits or	Enterprise is in the process of reviewing historical exploration data and previous exploration						
reviews	undertaken by competitors.						

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary			
Mineral tenement and land tenure status	<ul> <li>The Murchison Project Calypso Minerals Pty Enterprise Metals Lim</li> <li>Calypso Minerals Pty See Table below.</li> </ul>	t is comprised of 7 gr Ltd, and 2 granted P ited. Ltd, a wholly owned s	anted Exploration Lice rospecting Licences i subsidiary of Enterpris	ences in the name of n the name of e Metals Limited.
	Lease	ENT % Interest	State	Grant Date
	E20/911	100%	WA	18/05/2018
	E20/912	100%	WA	18/05/2018
	E20/913	100%	WA	22/05/2018
	E20/914	100%	WA	22/05/2018
	E20/915	100%	WA	22/05/2018
	E20/916	100%	WA	22/05/2018
	E20/918	100%	WA	22/05/2018
	P20/2302	100%	WA	18/05/2018
	P20/2303	100%	WA	18/05/2018

Exploration	Previous explorers and quantity of drilling carried out within area of Figure 1.					
done by other						
parties	Company/Operator	Prospect Name	Metres	No. Holes	Av Depth (m)	Commodity
	Big Bell Gold Operations Pty Ltd	Big Bell	17,073	369	46	Au
	Alchemy Resources (Murchison) Pty Ltd	South Murchison	7,386	125	59	Au
	Alchemy Resources Ltd	Big Bell North	761	30	25.4	Au
	Jindalee Resources Ltd	Big Bell North	2,735	49	55.8	Au
	Eagle Mining Corp NI	Gidgie Well	4,866	83	58.6	Cu, Pb, Zn, Au
	Normandy Murchison Pty Ltd	Behring Bore	3,410	52	65.8	Au
	Westgold Resources NI	South Pool Bore	2,753	125	22	Au
	Eagle Mining Corp NI	Gidgie Well	2,484	23	23	Au
	Posgold Ltd	Harris Heights	3,872	92	42	Au
	Solomon Pacific Resources NI	Harris Heights	177	6	29.5	Au
	Newcrest Mining Ltd	Tither Ridge	591	24	24.6	Au
	Outokumpu Exp Aust Pty Ltd	Wattagee Hill	15,146	290	52.2	Cu, Au, Pb, Zn
	Homestake Australia Ltd	Harris Heights	465	14	33.2	Au
	Chevron Exploration Corp	Gidgie Well	789	2	394	Cu, Au, Zn
	Chevron Exploration Corp	Gidgee Well	8,652	320	27	Cu, Au, Zn
	Freeport Australia Inc	Mary Jane Pool	2,096	30	69.9	Au
	Chevron Exploration Corp	Gidgie Well	3,122	169	18.5	Cu, Au, Zn
	Metals Exploration NI	Cuddingwarra	152	6	25.4	Cu, Ni, Zn
	Esso Exploration Aust Inc	Wattagee	4,203	123	42.3	Cu, Zn
	Shell Minerals Exp Aust Pty Ltd	Wandagee Well	786	16	49	Cu, Pb, Ni, Zn
		Total	81,519	1,948	41.8	

Criteria	Commentary
Exploration done by other parties (cont'd)	<ul> <li>From the early 1970's to about 1990, the main exploration focus was a base metal (Cu, Zn) search within the felsic volcanic suite that lies on the eastern side of the project area, between the Wattagee VMS Horizon and the Emily Well VMS Horizon. The main explorers at this time were Shell, Esso, Chevron and Outokompu utilizing extensive RAB drilling, with follow up percussion and diamond core drilling</li> <li>From the late 1980's gold explorers including Freeport, Homestake, Newcrest, Normandy, Eagle Mining Jindalee Resources, Alchemy Resources and Big Bell Operations Pty Ltd focused on the area beween the Big Bell Shear Zone and the Cuddingwarra Shear Zone.</li> <li>These companies made extensive use of shallow RAB drilling, and later shallow aircore drilling and RC. Much of this drilling was grid based and was too shallow to be effective. In particular, there is very little drilling along the Cuddingwarra mine sequence Corridor, and the area where the Cuddingwarra mine sequence intersects the Big Bell Shear Zone.</li> </ul>
Geology	<ul> <li>Interpreted geology is Archaean mafic sequence of rocks wrapped around younger intrusive Archaean granites, based on GSWA regional airborne magnetic surveys and previous GSWA geological mapping.</li> <li>Note: there is very little exposed bedrock in the area of the airborne survey as basement is obscured by alluvium and laterite.</li> </ul>
Drill hole Information	<ul> <li>Alto has digitized historical competitor drill hole collar information and recorded maximum down hole gold geochemistry.</li> </ul>
Data aggregation methods	No data to aggregate.
Relationship between mineralization widths and intercept lengths	<ul> <li>Cannot be determined at this early stage due to lack of outcrop and no diamond core drilling.</li> </ul>
Diagrams	Refer to figures in main body of this report
Balanced reporting	<ul> <li>Given the line spacing of the magnetic survey and the terrain clearance, the 1VD magnetic image presents a reasonably good location of the Big Bell Shear Zone and the mafic sequences hosting the Cuddingwarra gold deposits.</li> </ul>
Other substantive exploration data	<ul> <li>No other material information available for prospect area at this stage.</li> </ul>
Further work	Enterprise is planning a fence of deep AC/RC holes to test the Big Bell Shear Zone Target
Moisture	Not relevant at this stage due to lack of drilling data
Cut-off parameters	Not relevant at this stage due to lack of drilling data
Mining factors or assumptions	No mining assumptions at this early stage.
Metallurgical factors or assumptions	Not relevant at this stage due to lack of drill samples

Criteria	Commentary
Environmental	It is assumed that no environmental factors exist that could prohibit any potential mining.
factors or assumptions	<ul> <li>The Cue area has a strong history of mining, and there is strong local support for mining in the area.</li> </ul>
Bulk density	Not relevant at this stage due to lack of drill samples.
Classification	Not relevant at this stage due to lack of drilling data
Audits or reviews	<ul> <li>Enterprise has reviewed and commenced compiling historic drill hole and down hole geochemistry data.</li> </ul>
Discussion of relative accuracy/ confidence	Not relevant at this stage due to lack of drilling data