

ASX ANNOUNCEMENT

ACN 123 567 073

23 January 2014

DRILLING TO COMMENCE AT DOOLGUNNA

- RC drill rig mobilising to site, drilling to commence week beginning 27 January.
- > Seven co-incident gravity-GEM targets now defined for drill testing.

SUMMARY

Enterprise Metals Limited ("Enterprise" or "the Company", ASX: **"ENT"**) announces that it has completed gravity surveys over the previously identified ground Electromagnetic (GEM) conductors at Doolgunna.

Gravity surveys can identify subtle changes in the density of the underlying rocks. Thus, rocks of higher density (including sulphides) produce detectable gravity "highs". Similarly, key geological boundaries, where rocks that have different densities are in contact, can be traced using gravity - even where there are no other detectable changes in the geology (e.g. areas of similar magnetic signature)

Seven coincident GEM-gravity targets have been prioritised for drill testing. The gravity surveys also identified other discrete gravity highs requiring drill testing, which occur outside the restricted areas of the GEM surveys. The locations of the gravity surveys are shown below in Figure 1.

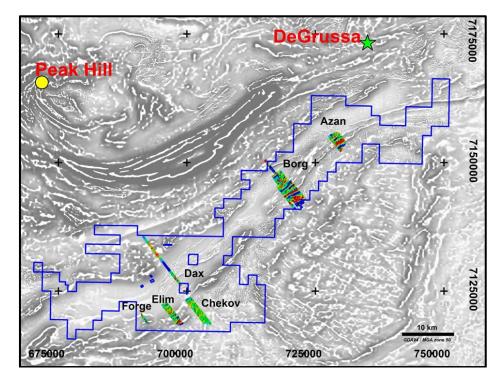


Figure 1. 1St Vertical Derivative (VD1) Magnetic Image Overlain with Coloured VD1 Bouguer Anomaly Gravity Data

DOOLGUNNA SEDEX DRILL TARGETS

Airborne EM targets with associated anomalous values of tellurium, bismuth, antimony and molybdenum in 'mag-lag' geochemistry were followed up with ground EM surveys (ENT:ASX releases 24/4/2013 & 30/10/2013), and subsequently gravity surveys were undertaken over six named prospects (A – F) in order to discriminate targets and prioritise the drilling sequence.

The recent gravity surveys consisted of 1,843 gravity stations at 50m, 100m and 200m station intervals on 200m, 400m and 800m line intervals. The results are discussed below by prospect.

BORG PROSPECT

Two GEM bedrock conductors (B2 & B3) were previously identified at the Borg Prospect. The surface projections of these GEM anomalies are shown as yellow diamonds in Figure 2.

The gravity survey has shown that the B2 & B3 GEM anomalies also have coincident gravity highs, which may reflect sediment hosted massive sulphide mineralisation at depth.

In addition, three other gravity features (B1, B4, B5) have been identified outside the area of the Borg GEM survey. In particular, **B5** is a large feature (~2000m x 800m) interpreted to lie in the basal Proterozoic sediment sequence, at the boundary with the Archaean Goodin Granite. This feature is non-magnetic and non-stratigraphic and may represent iron oxide with potential for copper-gold mineralisation.

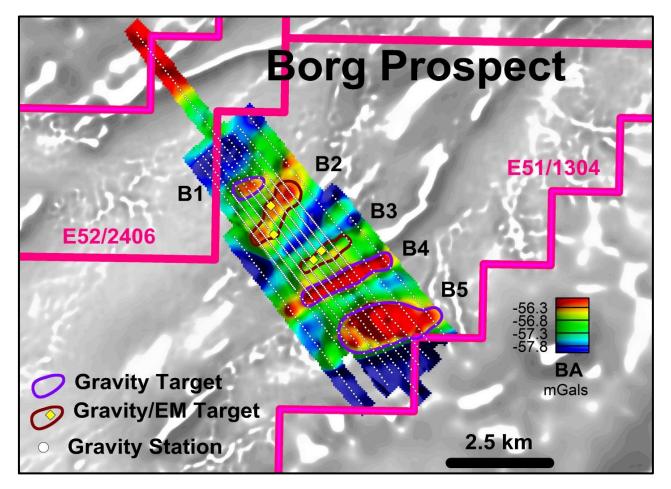


Figure 2. Borg Prospect. Bouguer Anomaly Gravity Image & Targets over 1VD Magnetic Image

AZAN PROSPECT

The A2 GEM bedrock conductor was previously identified at the Azan Prospect. The gravity survey has shown that the A2 GEM anomaly is coincident with a gravity high, which may reflect sediment hosted massive sulphide mineralisation at depth. In addition, one other gravity features (A1) has been identified on the margin of the GEM survey. This feature is non-magnetic and not closed off to the southwest.

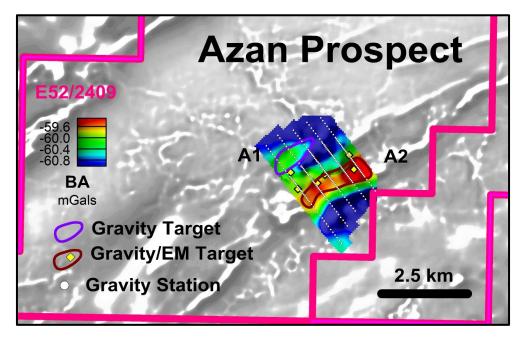


Figure 3. Azan Prospect. Bouguer Anomaly Gravity Image & Targets over 1VD Magnetic Image

DAX PROSPECT

The gravity survey shows that the D2 GEM anomaly is located on the northwest margin of a coincident gravity and magnetic high. This target may be related to the known northeast striking quartz –gold sulphide veins which have produced extensive alluvial gold finds.

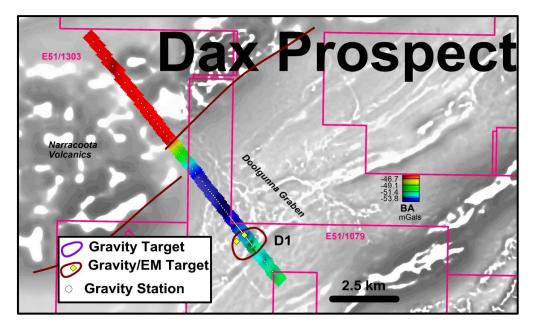


Figure 4. Dax Prospect. Bouguer Anomaly Gravity Image & Targets over 1VD Magnetic Image

CHEKOV, ELIM & FORGE PROSPECTS

At the Checkov Prospect, the gravity data suggests the GEM anomaly lies at a boundary between sediments to the northwest and denser sediments or mafic volcanic rocks to the southeast.

At the Elim and Forge Prospects, the E1, E2 and F1 GEM bedrock conductors are associated with linear gravity and magnetic highs.

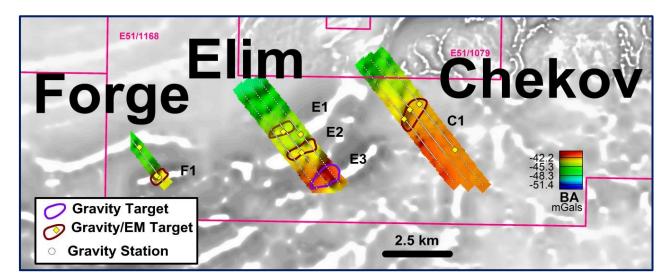


Figure 5. Chekov, Elim & Forge. Bouguer Anomaly Gravity Image & Targets

DRILLING PROGRAM

An RC drill rig is contracted to commence drill testing the Company's SEDEX targets. Subject to the current heavy rains abating, the drilling program will commence on or about 27 January 2014.

The Company also received notification in late June 2013 that it had been successful in applying for funding at Doolgunna under the Royalties for Regions Co-funded Government – Industry Drilling Program (Round 7). Enterprise is eligible for up to \$150,000 in EIS co-funding to undertake drill testing of its SEDEX targets at Doolgunna.

ABOUT THE DOOLGUNNA SEDEX PROGRAM

The Doolgunna Project covers approximately 1,036km² 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 Graben.

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Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Dermot Ryan, who is employed as the Managing Director of the Company through geological consultancy Xserv Pty Ltd. Mr Ryan is a Fellow of the Australasian Institute of Mining & Metallurgy, a Fellow 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 employed as a Consultant to the Company through geophysical consultancy Value Adding Resources Pty Ltd. Mr Robertson is a Member of the Australian Institute of Geoscientists and 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 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.

Line	Anomaly	Tenement	East	North	East	North	Stns	Dist. (km)
L1640	Forge	E51/1168	691123	692331	7118802	7120396	41	2.0
L2080	Elim	E51/1168	695275	698292	7118419	7122277	68	4.9
L2120	Elim	E51/1168	695620	698689	7118547	7122496	69	5.0
L2160	Elim	E51/1168	695998	699046	7118754	7122656	70	5.0
L2500	Chekov	E51/1168 E51/1079	699940	703413	7118785	7123235	84	5.7
L2540	Chekov	E51/1168 E51/1079	700265	703945	7118767	7123439	87	6.0
L2580	Chekov	E51/1168 E51/1079	700629	704504	7118690	7123651	92	6.3
L2600	Dax	E51/1079 E51/1303	691537	698735	7126265	7135489	86	11.7
L5260	Borg	E51/1304	717725	720875	7141098	7145236	53	5.2
L5300	Borg	E51/1304 E52/2406	716750	720329	7142495	7147190	86	5.9
L5320	Borg	E51/1304 E52/2406	716884	720509	7142604	7147322	93	6.0
L5340	Borg	E51/1304 E52/2406	717026	721524	7141568	7147471	108	7.4
L5360	Borg	E51/1304	717227	721636	7141864	7147501	108	7.2
L5380	Borg	E51/1304 E52/2406	715299	722286	7141333	7150325	145	11.4
L5400	Borg	E51/1304	717471	722123	7141945	7147804	105	7.5
L5420	Borg	E51/1304	717670	722290	7142070	7147866	104	7.4
L5440	Borg	E51/1304	717806	722551	7142222	7147996	106	7.5
L5480	Borg	E51/1304	718075	722573	7142633	7148256	73	7.2
L5520	Borg	E51/1304	720169	722926	7142829	7146267	45	4.4
L6650	Azan	E52/2049	727721	729861	7152243	7155016	45	3.5
L6690	Azan	E52/2049	728050	730030	7152735	7155314	46	3.3
L6740	Azan	E52/2049	728491	730256	7153158	7155461	45	2.9
L6780	Azan	E52/2049	728877	730548	7153494	7155685	43	2.8
L6820	Azan	E52/2049	729274	730825	7153727	7155812	41	2.6
Total							1843	138.7

Attachment 1: Location of Gravity Survey Lines

JORC Code, 2012 Edition – Table 1 report

23 January 2014 – Doolgunna Project

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	• Not applicable, not referred to. No drilling undertaken.
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Not applicable, not referred to. No drilling undertaken.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Not applicable, not referred to. No drilling undertaken.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical 	 Not applicable, not referred to. No drilling undertaken.

Criteria	JORC Code explanation	Commentary
	 studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Not applicable, not referred to. No drilling undertaken.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Not applicable, not referred to. No drilling undertaken. For historical maglag samples, all laboratory analysis results and QAQC data was imported direct from laboratory SIF files, and was merged with geological data and locational data into a Datashed relational database which has built-in triggers for validation of imported data. An experienced Database Administrator oversees quality control of data.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Not applicable, not referred to. No drilling undertaken. The Company has written data management protocols (<i>physical and electronic</i>) which are administered by the Database Administrator.

Criteria	JORC Code explanation	Commentary
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. 	No drilling undertaken.
	 Specification of the grid system used. Quality and adequacy of topographic control. 	 2013/2014 gravity surveys used survey coordinates on the GDA94 Datum.
		 GPS gravity stations employed the Fast Static / RTK GPS method with horizontal and vertical accuracy of +/- 5cm.
		 The coordinates and Gravity Readings were supplied in the following systems:
		• GDA94
		 Height in Australian Height Datum
		 Observed Gravity Isogal 84 (IGSN-71)
		Coordinates of trig stations and heights of benchmarks in close proximity of the exploration area were used to establish a control point in the area. Gravity control was established relative to local control stations.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the 	 1,843 gravity stations at 50 m, 100m and 200m station intervals on 200m, 400m and 800m line intervals.
	Resource and Ore Reserve estimation procedure(s) and classifications applied.	 Gravity observations were read to 0.01 mGals with a Scintrex CG-5 Autograv Gravity Metre. All observations are reduced to Bouguer Anomalies at 2.67 density and connected to the Australian National Gravity Grid.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 The gravity traverses were conducted orthogonal to strike of the sedimentary sequence interpreted from aeromagnetic data and geological mapping.
Sample security	• The measures taken to ensure sample security.	Not applicable, not referred to.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 Geophysical data supplied by the Contractor was reviewed by Enterprise's Consultant Geophysicist.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commen	tary			
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Doolgunna Project consists of multiple contiguous exploit licences and covers approximately 1,036km² and is located of northeast of Meekatharra and some 10km southwest of Sa Resources NL's (Sandfire) 2009 DeGrussa copper-gold discovery. The GEM and gravity prospects referred to are all on gittenements held 100% by either Enterprise Metals Limited or of wholly owned subsidiaries. The tenements are all in good standing. The prospects are either on former Doolgunna or Mooloogool paleases, now administered by the WA Government Department of and Wildlife (DPaW), Mt Padbury or Killara pastoral leases, or V Crown Land. (see table below). 			 and is located 110km southwest of Sandfire oper-gold discovery. ad to are all on granted Metals Limited or one its all in good standing. na or Mooloogool pastoral ment Department of Parks 	
		Prospect	Tenement	Grant Date	Expiry Date	Land
		Borg	E51/1304	28/06/2010	27/06/2015	Former Doolgunna & Mooloogool Pastoral Leases
		Azan	E52/2049	27/10/2008	26/10/2018	Former Doolgunna Pastoral Lease
		Dax	E51/1079	25/07/2006	24/07/2015	Mt Padbury Pastoral Lease
		Chekov	E51/1168	11/11/2008	10/11/2018	Vacant Crown Land
		Forge	E51/1168	11/11/2008	10/11/2018	Killara Pastoral Lease
		Elim	E51/1168	11/11/2008	10/11/2018	Killara Pastoral Lease
		 The pro Title Clain 	spects are n Group. N	covered by t ative Title Ag	he Yugunga- greements, a	se tenements. Nya [WAD6132/98] Native dministered by the Yamatji
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• A	summary c	·	xploration act	the relevant tenements.
		• TI	here has be	een little exp	oloration con	ducted by other parties in

Criteria	JORC Code explanation	Commentary			
		the areas of the Company's GEM and gravity targets other than " <i>metal detecting</i> " for alluvial gold by prospectors. The Company's GEM and gravity targets have not been previously tested by drilling.			
		 During the period 2001 – 2003, Murchison Exploration Pty Ltd Carried out regional 1km x 1km spaced <i>"mag-lag sampling"</i> over the project area. Limited infill sampling was subsequently undertaken in selected areas. 			
		 Sample sites were planned on a square 1km x 1km grid, and then located with GPS receiver. 			
		• The regolith landform setting was recorded. The proportions of the main lag types, Eg. highly ferruginous (including magnetic and non magnetic); ferruginised lithic; lithic; quartz; calcrete; other, and grain size were recorded.			
		 Lag was swept up with a plastic dust pan and brush over about a 5 m diameter area. (for ~ 2 kg sample). Coarse pebbles, sticks, etc (greater than 1 or 2 cm) were swept out on to a plastic sheet and any organic material was removed. Two magnetic susceptibility readings were recorded. A hand held magnet inside a plastic bag was used to collect the magnetic fraction (between 50-100gms). 			
	 Acknowledgment and appraisal of previous exploration by Enterprise 	• Samples were submitted to Ultra Trace Pty Ltd of Canning Vale, W.A. and after sorting and drying, samples were pulverized and then exposed to concentrated hydrochloric acid to extract moderately bound elements (partial extraction methodology) and analysed for a limited range of elements by ICPMS and ICPOES methods. (Au, Ag, As, Pt, Ta, Ba, Cr, Cu, Fe, Zn, Hg).			
	Acknowledgment and appraisal of previous exploration by Enterprise Metals Ltd.	 In 2007, Murchison Exploration Pty Ltd was acquired by Revere Mining Ltd, now called Enterprise Metals Ltd ("Enterprise"). 			
		 Revere (Enterprise) flew a detailed low level 100m line spaced airborne magnetic and radiometric survey over the majority of 			

Criteria	JORC Code explanation	Commentary
		the project area.
		 In 2008, Enterprise retrieved the maglag sample pulps from storage and submitted them to Actlabs Pacific Pty Ltd, Redcliffe W.A. for analysis of an expanded suite of 61 elements. Samples were pulverized prior to a total digest (four-acid) and determination of the elements listed below using ICP-MS and ICP-OES methods. Analysed elements were: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Hg, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pd, Pr, Pt, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tm, U, V, W, Y, Yb, Zn, Zr.
		 Between 2009 and 2012, the Company's exploration focus was for VMS style massive sulphide deposits in the Narracoota Fm volcanic sequence.
		 During 2012, the Company commenced a program to test the potential of the Yerrida Basin sediments for sediment hosted (SEDEX style) copper deposits.
		 In late 2012, the CSIRO flew a SPECTREM airborne EM survey at 5km line spacing in a south-south direction over the Doolgunna area, and generated a series of anomalies rated on a four part scale from A to D with A being 'excellent' and D being 'poor'. From this data, Enterprise selected six "A" rated EM anomalies along the SBF for follow up and ground EM surveying.
		 The strongly conducting nature of the AEM anomalies suggested that they were either massive sulphide or highly graphitic bodies. Considering the anomalies are hosted in a sedimentary package, and the proximity to Sipa's Enigma copper deposit and Ventnor's Thaduna and Green Dragon Copper deposits, Enterprise considered that this area and these AEM targets had the potential for SEDEX style copper deposits.

Criteria	JORC Code explanation	Commentary
		 In mid-2013, the Company conducted ground EM (GEM) surveys to follow up the SPECTREM EM anomalies. Two high priority bedrock conductors (A & B) are also associated with maglag samples considered to be anomalous in W, Sn, Mo, Bi, Sb & Te.
Geology	• Deposit type, geological setting and style of mineralisation.	• The Company considers the Yerrida Basin sediments to be prospective for sediment hosted (SEDEX style) copper deposits similar to those in the Central African Copperbelt.
		 The Southern Boundary Fault (SBF) and associated cross structures are potential conduits for mineralising fluids into the sediments of the "Doolgunna Graben". The Yerrida Basin sediments are also host to the Thaduna massive sulphide copper deposit and Sipa Resources' Enigma Deposit to the northeast along strike of the SBF.
		• Enterprise believes the "aeromagnetic redox feature" along the Southern Boundary Fault is a fluid outflow zone, so any ore would be (stratigraphically) below this zone, and probably in a trap site away from the immediate outflow zone. The target stratigraphy is more or less conformable reduced facies strata, and could be shales through to conglomerates.
		 Along the Southern Boundary Fault, within the Moolgoolool Group sediments, there are areas of intense magnetism (probably magnetite but possibly pyrrhotite) broken by areas of magnetic lows which may represent total magnetite destruction. The magnetite destruction is potentially the result of outflow of reducing fluids, including copper.
		 Although the area is covered by regolith, it is expected that the potentially mineralised zones would manifest themselves as electromagnetic conductors and/or gravity anomalies.

Criteria	JORC Code explanation	Commentary
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 Not applicable, not referred to.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Not applicable, not referred to.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 Not applicable, not referred to.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	 Not applicable, not referred to.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All significant results are reported.
Other	• Other exploration data, if meaningful and material, should be reported	

Criteria	JORC Code explanation	Commentary
substantive exploration data	including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 2,000m – 3,000m of RC Drilling along traverses orthogonal to the interpreted strike of the sedimentary sequence under a Program of Work (POW) approved by the Department of Mines and Petroleum. Geological logging and multi-element analysis of drill cuttings.