



16 November 2016

ASX Release

## 2.7km Conductive Trend, Iris-Electra, at Eloise JV, Cloncurry

### Highlights

- Extensive in-fill ground EM survey completed embracing Iris and Electra anomalies
- Electra models as a standout EM conductor with 1.4km of strike, untested by drilling
- Strong EM responses now indicate strike potential of 2.7km

### Surface EM grid extends conductive zones along strike

An in-fill ground EM geophysical survey over the Iris and Electra prospects is complete, centred approximately 5km north-northeast of the Eloise copper-gold mine (Figure 1). Approximately 18 line km were completed on 200m line spacing with stations 50m apart. This work, plus the earlier EM survey, encompasses 4km of line of strike along an interpreted shear zone along which Iris and Electra conductors are located.

Conductive overburden is generally about 130m thick over the survey area, providing technical challenges in receiving and processing EM signals from the basement below. Consequently, only a weak EM response was detected at Electra in the original survey. The new survey data over Electra were collected at double the original station density and on more closely spaced lines. Preliminary processing confirms a large, coherent and strong

conductor modelled at 470m depth with up to 1.4km of strike, significant depth extent and conductance of 1100 Siemens (Figure 2). Conductive bodies are now modelled along a strike length of 2.7km, from about 130m below surface at Iris South to about 470m below surface at Electra; note the large size of the modelled conductor at Electra relative to those at Iris North and South.

*Cautionary note: EM conductance can be due to the presence of pyrrhotite and/or pyrite (both forms of iron sulphide), chalcopyrite (copper sulphide) or graphite; the latter can form part of some rock sequences in the project area. Graphitic rocks have not been observed in drill core thus far at Iris where the source of the conductors is a mix of pyrrhotite and chalcopyrite. Minotaur interpret the host rocks at Electra to be similar to those at Iris, but Electra remains to be drill tested.*

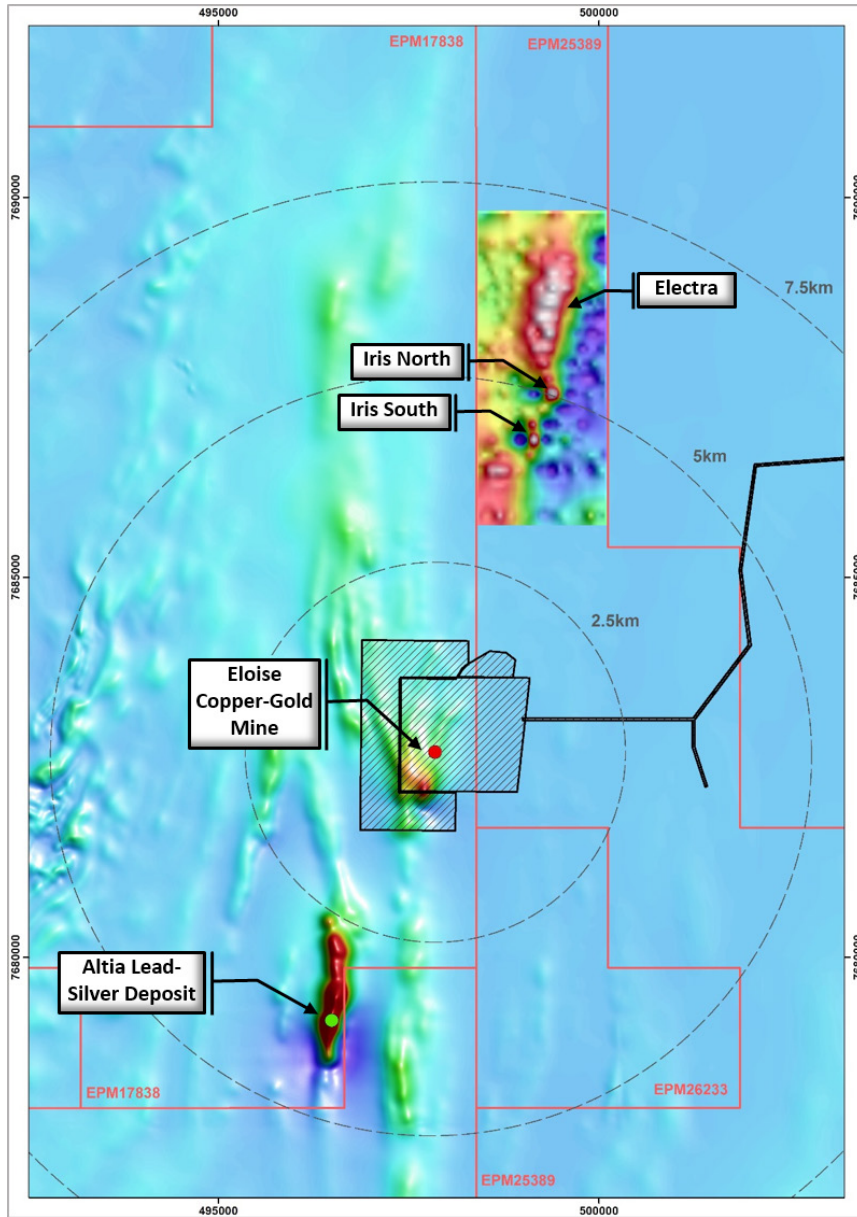


Figure 1: Location of Iris and Electra EM conductors in relation to the Eloise Copper-Gold mine. The coloured image at Iris and Electra is Channel 35 of the X-component EM response where white and red are strong responses. The main background image is RTP1VD magnetics.

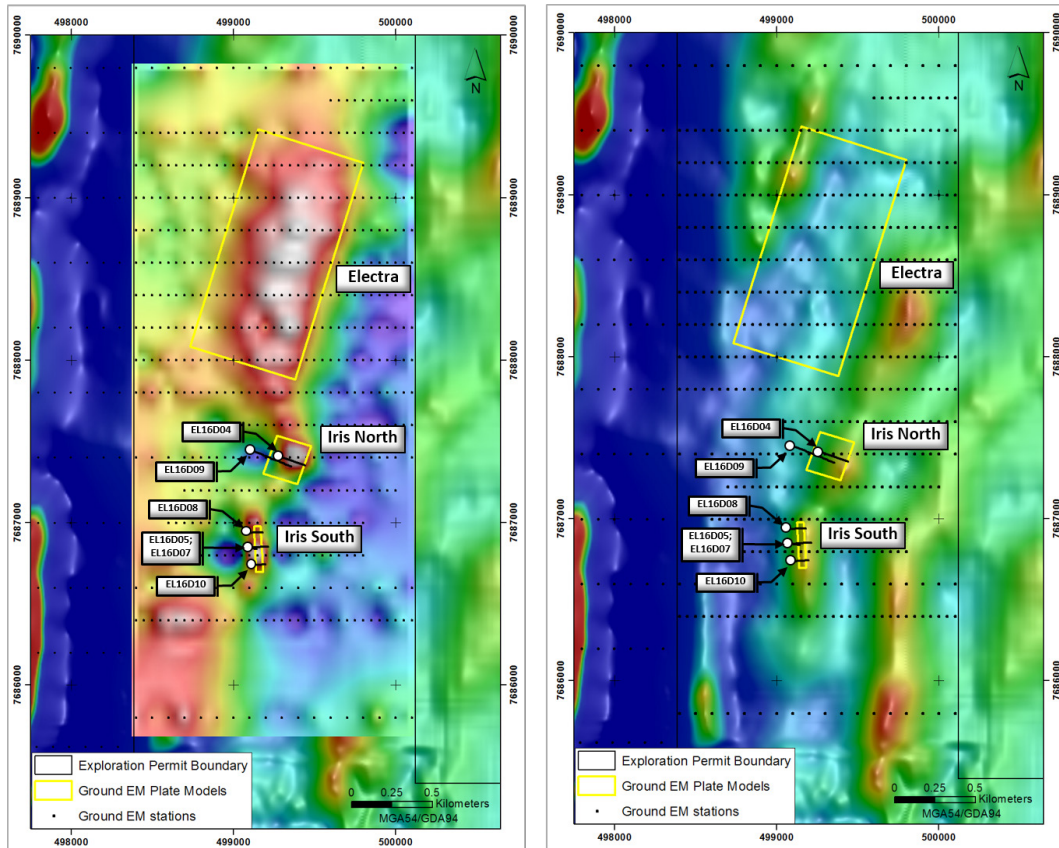


Figure 2: a) left image shows gridded conductivity (red and white zones are conductive) of the X-component EM data of channel 35. Yellow polygons are the modelled conductive plates; b) right image shows conductive plates over RTP1VD magnetics

## Next steps

Modelling and interpretation of the Electra EM anomaly and its relationship to Iris is underway, however early indications are the conductor is highly prospective for copper sulphide mineralisation given the clear association between high conductance at Iris and the presence of coexisting chalcopyrite and pyrrhotite, as evidenced in previous drilling (see *MEP ASX release 19 October 2016*). Assays are pending for subsequent drill holes EL16D07-EL16D10 at Iris.

## About the Eloise Joint Venture

OZ Minerals Ltd (ASX: OZL) has, through calendar 2016, funded \$2.1 million of exploration expenditure on Minotaur's 100% owned 'Eloise' tenements, 65km south-east of Cloncurry, Queensland. OZ Minerals may sole fund up to \$10 million over six years for which it will earn 70% beneficial interest in the tenement package. Minotaur is manager and operator of the joint venture, with the parties collaborating closely so as to maximise the probability of discovery success.

## COMPETENT PERSON'S STATEMENT

Information in this report that relates to Exploration Results is based on information compiled by Mr Glen Little, who is a full-time employee of the Company and a Member of the Australian Institute of Geoscientists (AIG). Mr Little has sufficient experience relevant to the style of mineralization and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Little consents to inclusion in this document of the information in the form and context in which it appears.

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**JORC Code, 2012 Edition, Table 1**

**Section 1: Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	<ul style="list-style-type: none"> <li>The EM survey within the Eloise JV area was conducted by GEM Geophysics, an external geophysical contractor.</li> <li>The EM system used Zonge ZT30 transmitter (using 0.25Hz frequency) and a 3-component SQUID EM sensor.</li> <li>EM data receiver stations were spaced at 50m intervals along E-W lines and each E-W lines was spaced at 200m intervals over the survey area.</li> <li>Data quality was of a high standard for the whole of the survey and consistent with results of the previous survey.</li> </ul>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<ul style="list-style-type: none"> <li>Internal checks of equipment were conducted prior to and during the survey to ensure the SQUID sensor was calibrated and measuring correctly and would therefore give the best representative sample results for this type of survey.</li> </ul>
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>
	<i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g 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.</i>	<ul style="list-style-type: none"> <li>EM Transmitter loops were doubled and were 200m x 200m in size using a moving-loop survey method. This type of system and loop configuration is considered appropriate for the survey area where the targeted basement rocks are covered by 100-130m of younger conductive cover and for the target size of any potential mineralisation.</li> </ul>
Drilling techniques	<i>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).</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	• Not relevant to this announcement
	<i>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.</i>	• Not relevant to this announcement
Logging	<i>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 studies.</i>	• Not relevant to this announcement
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	• Not relevant to this announcement
	<i>The total length and percentage of the relevant intersections logged.</i>	• Not relevant to this announcement
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	• Not relevant to this announcement
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	• Not relevant to this announcement
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	• Not relevant to this announcement
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	• Not relevant to this announcement
	<i>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.</i>	• Not relevant to this announcement
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	• Not relevant to this announcement
Quality of assay data	<i>The nature, quality and appropriateness of the assaying and laboratory procedures</i>	• Not relevant to this announcement



Criteria	JORC Code explanation	Commentary
<i>and laboratory tests</i>	<i>used and whether the technique is considered partial or total.</i>	
	<i>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.</i>	<ul style="list-style-type: none"> <li>The EM system used Zonge ZT30 transmitter (using 0.25Hz frequency) and a 3-component SQUID EM sensor. EM Transmitter loops were doubled and were 200m x 200m in size using a moving-loop survey method.</li> </ul>
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>
<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>
	<i>The use of twinned holes.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>
	<i>Discuss any adjustment to assay data.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>
<i>Location of data points</i>	<i>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.</i>	<ul style="list-style-type: none"> <li>Data acquisition stations were located using a handheld GPS with an accuracy of +/- 3m which is considered appropriate level of accuracy at this stage.</li> </ul>
	<i>Specification of the grid system used.</i>	<ul style="list-style-type: none"> <li>Grid system used is GDA94, MGA Zone 54</li> </ul>
	<i>Quality and adequacy of topographic control.</i>	<ul style="list-style-type: none"> <li>The topography is very flat in the survey and any changes in the topography will have no bearing on the data or interpretation</li> </ul>
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	<ul style="list-style-type: none"> <li>Data spacing of EM data acquisition station and survey lines is adequate for this level of early stage exploration.</li> </ul>
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>Whether sample compositing has been applied.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	<ul style="list-style-type: none"> <li>EM survey lines were oriented E-W that is as close as practical to being orthogonal to the interpreted strike of the geology based on interpretation of the available magnetics data</li> </ul>
	<i>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.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> <li>Not relevant to this announcement</li> </ul>



## Section 2: Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
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.	<ul style="list-style-type: none"> <li>The information that relates to the ground EM survey conducted by Minotaur Exploration Ltd is from EPM 25389. EPM 25389 is 100% owned by Minotaur Operations Pty Ltd, a subsidiary of Minotaur Exploration Limited (Minotaur).</li> <li>The EPM forms part of a Farm-In agreement with OZ Minerals Ltd called the Eloise JV. OZ Minerals are yet to earn equity in the JV</li> <li>The EPM has a registered Native Title Claim over it by the Mitakoodi and Mayi People #5 (Federal Court File No: QUD556/2015, Application No. QC2015/009). The Claim is yet to be determined by the Federal Court and the EPM was granted with no Native Title registered at the time of grant. Minotaur is operating under the Native Title Protection Conditions (NTPC's) as per the Conditions of Grant of tenure.</li> </ul>
	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.	<ul style="list-style-type: none"> <li>EPM 25389 is secure and compliant with its respective Conditions of Grant. There are no impediments to obtaining a licence to operate</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul style="list-style-type: none"> <li>Historical exploration by other companies across parts of the EM survey area includes airborne magnetic surveys, gravity surveys, EM surveys, RC drilling and diamond drilling, however there is no previous ground geophysical surveying or drilling by other companies in the area of the Iris and Electra EM anomalies.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul style="list-style-type: none"> <li>Within the eastern portion of Mt Isa Block targeted mineralisation styles include: IOCG and ISCG styles of mineralisation associated with ~1590–1500Ma granitic intrusions and fluid movement along structural contacts e.g. Eloise Cu-Au; and sediment-hosted Zn+Pb+Ag deposits e.g. Mt Isa, Cannington.</li> </ul>



Criteria	JORC Code explanation	Commentary
Drill hole Information	<p>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:</p> <ul style="list-style-type: none"> <li>▪ easting and northing of the drill hole collar</li> <li>▪ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>▪ dip and azimuth of the hole</li> <li>▪ down hole length and interception depth</li> <li>▪ hole length.</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to Figure 2 in the main body of this report for a map of the EM Channel 35 X-component data and related modelled EM plates.</li> <li>•</li> </ul>
	<p>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.</p>	
Data aggregation methods	<p>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.</p>	<ul style="list-style-type: none"> <li>• Not relevant to this announcement</li> </ul>
	<p>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.</p>	<ul style="list-style-type: none"> <li>• Not relevant to this announcement</li> </ul>
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<ul style="list-style-type: none"> <li>• Not relevant to this announcement</li> </ul>
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its</p>	<ul style="list-style-type: none"> <li>• Not relevant to this announcement</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>nature should be reported.</i></p> <p><i>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').</i></p>	
<i>Diagrams</i>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>The location of the Iris and Electra EM anomaly is presented in Figures 1 and 2 of this report.</li> </ul>
<i>Balanced reporting</i>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>All relevant information, including maps, is included in the body of this report.</li> </ul>
<i>Other substantive exploration data</i>	<p><i>Other exploration data, if meaningful and material, should be reported 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.</i></p>	<ul style="list-style-type: none"> <li>No substantive exploration data has been omitted</li> </ul>
<i>Further work</i>	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p>	<ul style="list-style-type: none"> <li>Follow-up work of the Iris and Electra EM anomalies is expected to occur in 2017 after the wet season has abated. It is expected that drill testing of Iris and Electra will occur but discussion are required with the Farm In partner OZ Minerals</li> </ul>
	<p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<ul style="list-style-type: none"> <li>Refer to Figure 2 in the report that shows the size of the EM targets at Iris and Electra.</li> </ul>