



24 August 2017

ASX Release

EM survey reveals compelling drill targets for Eloise JV, Cloncurry

- Ground EM survey along 17km of Levuka Shear Zone completed
- Data reveals numerous conductors immediately south of the Eloise copper-gold mine
- New drill campaign designed to test 3 priority targets
- 4 diamond holes for 2250m in close vicinity of several base metal deposits

Minotaur Exploration Ltd (ASX: MEP, "Minotaur") advises completion of an extensive ground electromagnetic ("EM") survey on strike from the operating Eloise copper-gold mine, along the Levuka Shear Zone. The survey returned multiple conductors suggestive of sulphide mineralisation; all within 12km of the Eloise mine (refer to Figure 1).

Background

The Eloise project, 55km south-east of Cloncurry, is a joint venture ("Eloise JV") between Minotaur and OZ Minerals Ltd (ASX: OZL). OZ Minerals may earn up to 70% beneficial interest in the tenements by spending up to A\$10m, with A\$3.2m applied to 30 June 2017. The joint venture is seeking Eloise-style copper-gold and Cannington-style silver-lead-zinc mineralisation, with both styles evident in the well endowed mineral camp around the Eloise, Altia and Maronan deposits (refer to Figures 1 and 2).

EM targets

EM lines spaced at 800m intervals, along 17km of the Levuka Shear Zone south of the Eloise mine, identified multiple high conductance responses (Figure 2). Infill surveying was completed over the priority responses, of which the following are targeted for initial drill testing:

Jericho: comprises two linear, multi-plate conductive zones 3-4km in length, modelled to be 50-275m below surface. The anomaly lies coincident to a weak magnetic unit that may represent pyrrhotite or thin banded iron formation. A central conductor occurring between the linear trends is interpreted to not be related to stratigraphy. This conductor's subdued magnetic response suggests a non-magnetic source, with similar geophysical characteristics to mineralization at the nearby Eloise mine. No prior drilling is recorded in the area.

Arlington: a multi-plate anomaly up to 2.5km in length, modelled to be 300-450m below surface. Magnetic inversion modelling places several Arlington conductors immediately adjacent to interpreted ironstone/amphibolite. This setting is considered analogous to the Cannington and Pegmont deposits. Three historic drill holes penetrated 30m into basement, reporting minor chalcopyrite and pyrrhotite/pyrite, but well above the modelled position of the conductors.

St Louis: a two-plate anomaly up to 2km in length, modelled to be 135-265m below surface. The northern plate lies on the intersection of a major northwest-striking fault and an interpreted rotational fault plane, with minimal magnetic response. No prior drilling is recorded in the area.

All targets are sited on the eastern flank of the Levuka Shear Zone, structural host of the Eloise deposit and within 12km of the mine. Close by, the Altia Pb-Ag-Zn deposit¹ and the Maronan Pb-Ag-Cu deposit² collectively demonstrate base metal and copper-gold prolificacy in the immediate region.

Drill program

A diamond drill campaign to investigate at least six of the new EM plates has been designed by Minotaur and endorsed by the joint venture. Planning envisages all holes being completed by mid November, contingent upon finalisation of landowner access agreements and Native Title heritage clearance of proposed drill sites.

Some 2250m of drilling across 4 holes is proposed, as follows:

- **Jericho:** two holes planned for 1020m
- **Arlington:** one hole planned for 750m
- **St Louis:** one hole planned for 500m

The recently completed EM program and the proposed drill campaign represent a significant on-going earn-in investment by OZ Minerals.

¹ Altia is a joint venture between Minotaur Exploration (40%) and Sandfire Resources (60%)

² Maronan is 100% owned by Red Metal Limited (ASX: RDM)

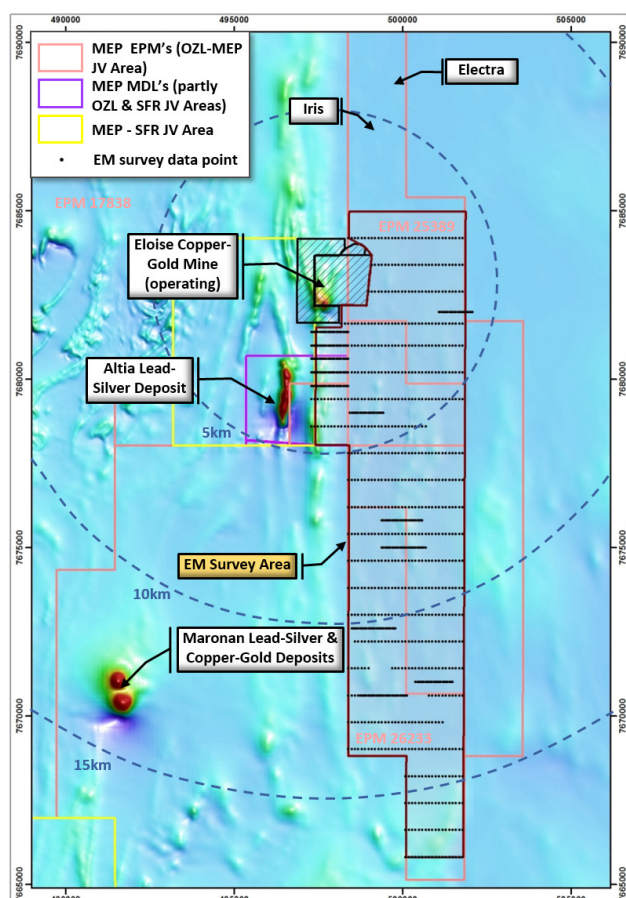


Figure 1: Eastern portion of the Eloise JV tenements over magnetics. The area shaded encompasses the ground EM survey.

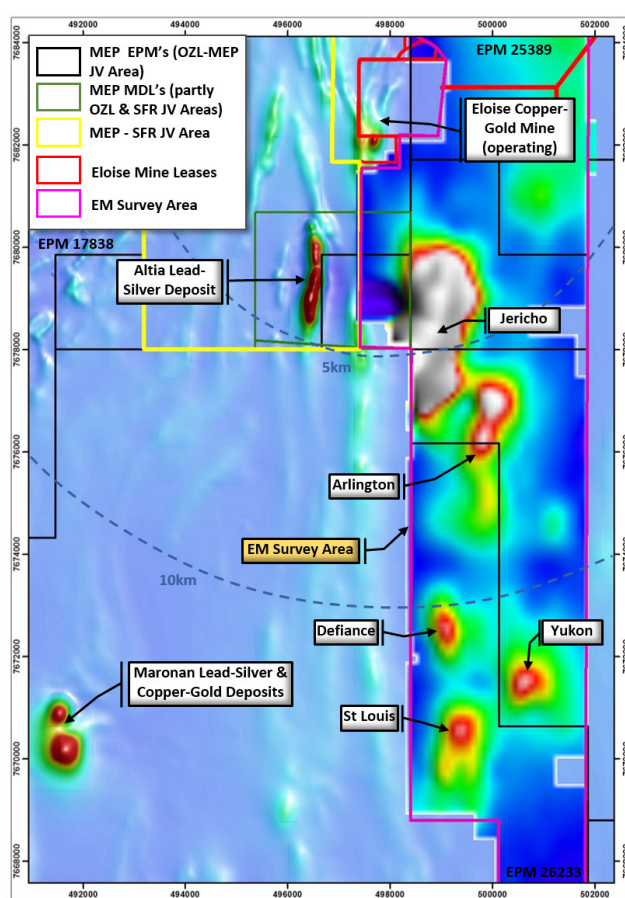


Figure 2: High conductance EM responses to south of Eloise mine; EM image is Z component, channel 30 over magnetics

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"> The EM survey within the Eloise JV area was conducted by GEM Geophysics, an external geophysical contractor. The EM system used Transmitter Technologies TTX-1 transmitter (using 0.25Hz frequency) and a 3-component Jessy Deep SQUID EM sensor. EM data receiver stations were spaced at 100m intervals along E-W lines and each E-W lines was spaced at 800m intervals over the wider survey area. For infill survey lines EM data receiver stations were spaced at 50m intervals along E-W lines over EM anomalies at Jericho, Arlington, Defiance, Joplin, Marlborough and St Louis. Data quality was of a high standard for the whole of the survey and consistent with the type of target being sort.
	<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"> Internal checks of equipment was conducted prior to and during commencement of the survey to enquire the SQUID sensor was calibrated and measuring correctly and would therefore give the best representative sample results for this type of survey.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<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"> EM Transmitter loops 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 50-120m of younger conductive cover and for the target size of any potential mineralisation.
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"> Not relevant to this report

Criteria	JORC Code explanation	Commentary
<i>Drill sample recovery</i>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<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>	<ul style="list-style-type: none"> Not relevant to this report
<i>Logging</i>	<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>	<ul style="list-style-type: none"> Not relevant to this report
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<i>The total length and percentage of the relevant intersections logged.</i>	<ul style="list-style-type: none"> Not relevant to this report
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<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>	<ul style="list-style-type: none"> Not relevant to this report
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	<ul style="list-style-type: none"> Not relevant to this report

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<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"> The EM system used Transmitter Technologies TTX-1 transmitter (using 0.25Hz frequency) and a 3-component Jessy Deep SQUID EM sensor. EM Transmitter loops were 200m x 200m in size using a moving-loop survey method.
	<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"> Not relevant to this report
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<i>The use of twinned holes.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<i>Discuss any adjustment to assay data.</i>	<ul style="list-style-type: none"> Not relevant to this report
Location of data points	<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"> Not relevant to this report
	<i>Specification of the grid system used.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<i>Quality and adequacy of topographic control.</i>	<ul style="list-style-type: none"> Not relevant to this report
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	<ul style="list-style-type: none"> Not relevant to this report
	<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</i>	<ul style="list-style-type: none"> Not relevant to this report

Criteria	JORC Code explanation	Commentary
	<i>procedure(s) and classifications applied.</i>	
	<i>Whether sample compositing has been applied.</i>	<ul style="list-style-type: none"> Not relevant to this report
<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"> Not relevant to this report
	<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>	Not relevant to this report
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	<ul style="list-style-type: none"> Not relevant to this report
<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"> No external audits have been undertaken however data has been peer reviewed in-house.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>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.</i>	<ul style="list-style-type: none"> The information that relates to the ground EM survey conducted by Minotaur Exploration Ltd is from EPM's 25389 and 26233 that are 100% owned by Minotaur Operations Pty Ltd; the company is a subsidiary of Minotaur Exploration Limited (Minotaur). Both EPM's form part of a Farm-In agreement with OZ Minerals Ltd called the Eloise JV. OZ Minerals are yet to earn equity in the JV Both EPM's have a registered Native Title Claim over them by the Mitakoodi and Mayi People #5 (Federal Court File No: QUD556/2015, Application No. QC2015/009). A Native Title Agreement is in place for both EPM's.
	<i>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.</i>	<ul style="list-style-type: none"> All tenements related to information in this table are secure and compliant with their respective Conditions of Grant. There are no impediments to obtaining a licence to operate
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none"> Historical exploration by other companies across parts of the EM survey area includes airborne magnetic surveys, ground gravity surveys and minimal RC drilling. None of the targets proposed for drill testing by Minotaur have been tested by historical drilling however the historical drill data has been used to assist with interpretation of the basement lithologies as the whole of the EM survey area is under younger cover sediments.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none"> 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.

Criteria	JORC Code explanation	Commentary
<i>Drill hole Information</i>	<p><i>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:</i></p> <ul style="list-style-type: none"> ▪ <i>easting and northing of the drill hole collar</i> ▪ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ▪ <i>dip and azimuth of the hole</i> ▪ <i>down hole length and interception depth</i> ▪ <i>hole length.</i> 	<ul style="list-style-type: none"> • No drill data is presented in this report. Data relating to the EM survey results is sufficiently explained in other sections above.
	<p><i>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.</i></p>	<ul style="list-style-type: none"> • No drill data is presented in this report. Data relating to the EM survey results is sufficiently explained in other sections above.
<i>Data aggregation methods</i>	<p><i>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.</i></p>	<ul style="list-style-type: none"> • Not relevant to this report
	<p><i>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.</i></p>	<ul style="list-style-type: none"> • Not relevant to this report
	<p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<ul style="list-style-type: none"> • Not relevant to this report
<i>Relationship between mineralisation widths and intercept lengths</i>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p>	<ul style="list-style-type: none"> • Not relevant to this report
	<p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p>	

Criteria	JORC Code explanation	Commentary
	<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>	
Diagrams	<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>	<ul style="list-style-type: none"> The location of the EM survey area is presented in Figure 1 of this report and the location of Jericho, Arlington and St Louis EM anomalies is presented in Figure 2 of the report.
Balanced reporting	<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>	<ul style="list-style-type: none"> Information presented in this report is relatively brief due to the nature of the geophysical data collected and models produced. The only way to test the EM "targets" is to drill test them and those results will be reported once drilling is completed and the drill data becomes available.
Other substantive exploration data	<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>	<ul style="list-style-type: none"> No substantive exploration data has been omitted
Further work	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	<ul style="list-style-type: none"> Follow-up work is yet to be determined as the EM targets are yet to be drill tested. Any further work requirements will be reported once the proposed drilling has been completed, assessed and reported.
	<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>	<ul style="list-style-type: none"> Refer to Figure 2 in the report that shows the size and location of the EM targets. No other images are supplied due to the early stage of exploration. More detailed diagrams will be provided once the proposed drilling has been completed, assessed and reported.