

ASX Release

IP Surveys extend targets at Eloise Copper Project, Cloncurry

Highlights

- Follow-up IP surveys completed at the Eloise copper project near Cloncurry, Queensland
- Chargeability target zones at Artemis and Bullwinkle are clearly defined and drill-ready
- Artemis prospective zone now extends for over 700m north-south
- Chargeability target zone at Olympus increased substantially and poses as a standout regional drill target

A second induced polarisation (IP) geophysical survey has been completed at the Eloise copper project, southeast of Cloncurry. The new IP follows up highly encouraging results from the mid-year survey¹ where anomalies were defined but remained open at Artemis, Bullwinkle and Olympus. The location of new data from the Artemis - Sandy Creek - Bullwinkle and Olympus targets are shown in Figure 1 and Table 1.

Artemis - Sandy Creek - Bullwinkle

Eight east-west lines spaced at 150 to 250m intervals now cover the Artemis - Sandy Creek - Bullwinkle copper-gold-zinc prospect area. New data was collected on one line over the Bullwinkle anomaly and on two line extensions east of Bullwinkle and Sandy Creek (Figure 1).

Geophysical inversions of all IP data over the Artemis - Sandy Creek - Bullwinkle area reveal three main anomalies with observed IP values up to 21 msec (Figure 2). The Artemis anomaly now extends over 150 metres south and up to 450m north of the known extent of the massive sulphide zone currently defined by drilling; at least 700m in total. The Bullwinkle anomaly, not drilled, is now mapped over at least 250m of strike.

The mineralised envelope at Sandy Creek corresponds with a distinct, although slightly less intense, chargeability response of up to 17 msec over multiple lines (Figure 2). This anomaly appears to merge to the north with Bullwinkle, beyond the limits of current drilling.

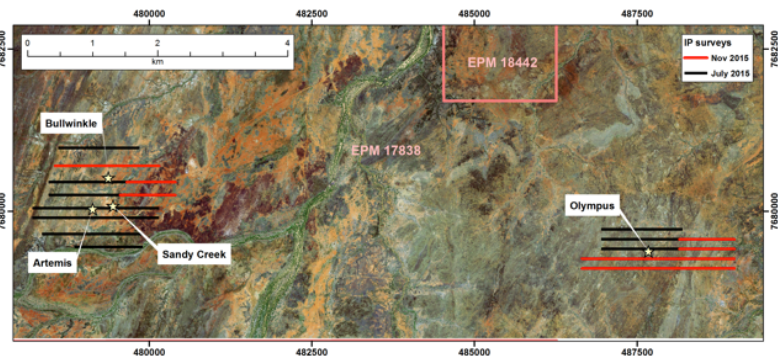


Figure 1: Artemis - Sandy Creek - Bullwinkle and Olympus prospects with completed IP survey lines over satellite image

¹ IP Surveys extend mineralised footprint at Eloise, ASX announcement dated 30 July 2015

OLYMPUS

Five east-west lines spaced at 150m intervals now cover the Olympus prospect area. New data has been collected on two eastern line extensions and on two new lines south of those collected previously (Figure 1).

Geophysical inversions of all IP data over the prospect area reveal a very large and coherent chargeability anomaly up to 400m wide and 500m long, still open to the south, with observed IP values up to 24 msec (Figure 3); these results are highly significant given the observed IP values are comparable to those at Artemis. Olympus has never been drilled.

Previous mapping at Olympus revealed a minor gossan with elevated copper and gold within a quartz-filled fault that lies above the discrete EM conductor that was the original target of Minotaur; the gossan lies on the western edge of the much larger IP anomaly (Figure 3). More recent mapping over the wider prospect area to the east has failed to reveal any other indications of surface mineralisation that could at least partly explain this very large IP anomaly despite the area being mostly outcrop. This suggests the source of the IP anomaly is blind at surface and the area has thus not been of interest to previous explorers.

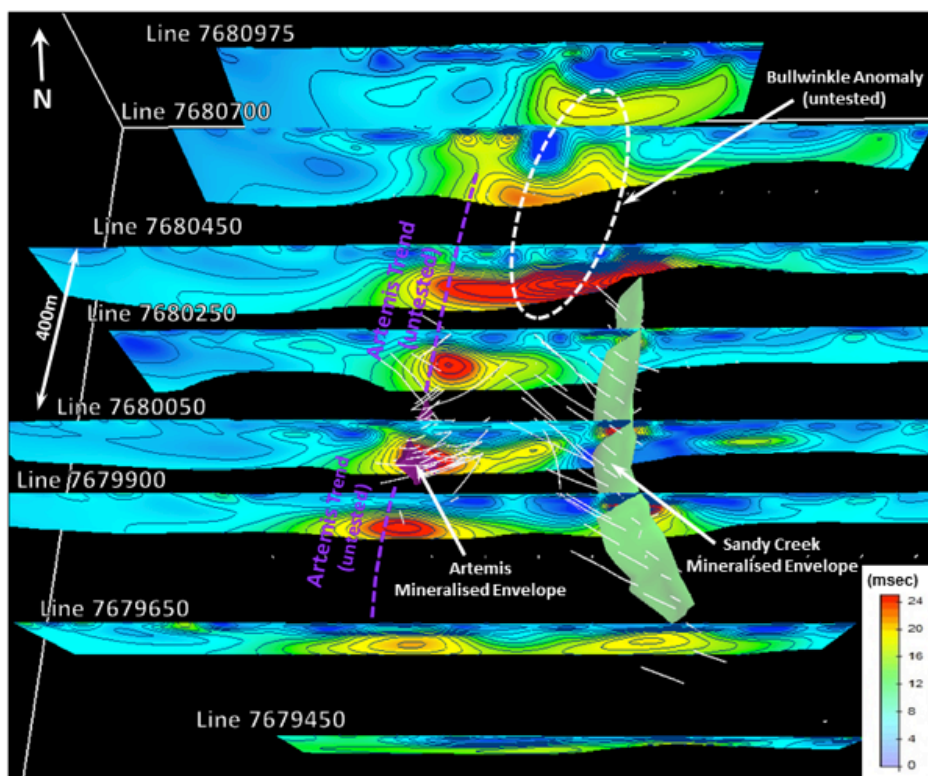


Figure 2: Artemis, Sandy Creek and Bullwinkle prospects with IP chargeability inversions. The red areas are zones of strong chargeability mapping out sulphide occurrence.

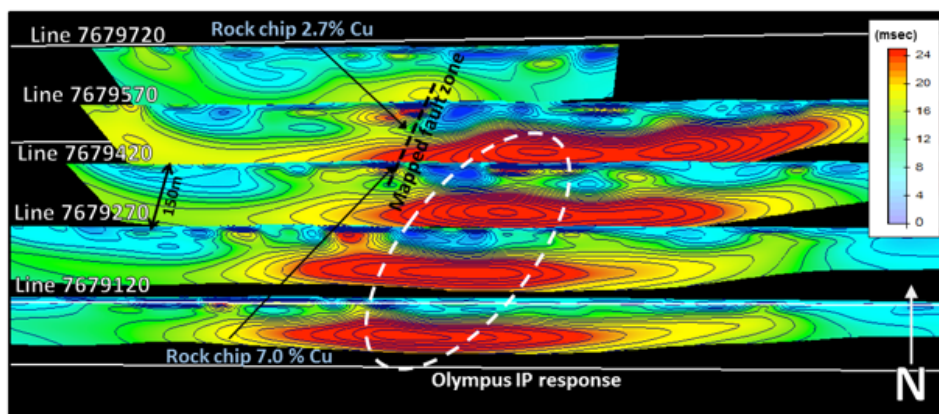


Figure 3: Olympus (EVT61) prospect with IP chargeability inversions. The red areas are zones of strong chargeability

Next Steps

Two IP surveys at Artemis, Sandy Creek, Bullwinkle and Olympus have successfully defined new areas with potential to host significant sulphide mineralisation. The IP data at Artemis and Sandy Creek validate the mineralisation known from previous drilling and, most importantly, appear to map out extensions to sulphidic zones along strike south and north at Artemis and along strike north at Sandy Creek, none of which has been drill tested. The newly defined Bullwinkle prospect is highly encouraging given the known copper-gold-zinc mineralisation in the immediate area; all three prospects require drilling. Minotaur intends a preliminary RC drill campaign to test each anomalous zone, on completion of the wet season.

Similarly, Olympus has emerged as a standout drill target despite occurring in an area of outcrop with limited obvious signs of mineralisation. Further work interpreting the magnetics data and satellite imagery is underway and will be followed by ground truthing to prepare the prospect ready for drill testing.

COMPETENT PERSON'S STATEMENT

Information in this report that relates to Exploration Results is based on information compiled by Mr G. Little, a Competent Person and a member of the Australian Institute of Geoscientists (AIG). Mr Little is a full time employee of the Company and has sufficient experience relevant to the style of mineralisation 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.

Prospect	Line North	Jul-15		Nov-15	
		East Min	East Max	East Min	East Max
Sandy Creek/Artemis	7679450	478850	479900		
Sandy Creek/Artemis	7679650	478350	479900		
Sandy Creek/Artemis	7679900	478200	480150		
Sandy Creek/Artemis	7680050	478200	480150		
Sandy Creek/Artemis	7680250	478450	479600	479500	480400
Sandy Creek/Artemis	7680450	478450	479700	479600	480400
Sandy Creek/Artemis	7680700			478550	480150
Bobby Dazzler	7680975	478600	479850		
EVT61	7679120			486650	489000
EVT61	7679270			486650	489000
EVT61	7679420	486950	488200	488100	489000
EVT61	7679570	486950	488200	488100	489000
EVT61	7679720	486950	488200		

Table 1: IP survey lines coordinates where data has been acquired in both surveys taken in July and November 2015 respectively (Projection: GDA94 MGA54).

Section 1: Sampling Techniques and Data

Table 1

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p><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></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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.</i></p>	<p>The subject of this release is to report on interim results from an Induced Polarisation (IP) geophysical survey that was conducted over Sandy Creek, Bullwinkle and Olympus (EVT61) prospects within the Eloise Copper Project in NW Qld. The IP survey was conducted by Zonge Engineering. The oversight of the survey and auditing and processing of data acquired from the survey was conducted by Kate Wittwer, an experienced geophysicist who is contracted to Minotaur. The geophysical survey type is Induced Polarisation (IP) and the layout of the survey (termed the "array type") is termed Dipole-Dipole with a 100m receiver dipole size and 100m transmitter dipole size. The transmitter dipole was moved at 50m intervals, achieving a 50m station spacing. All lines are oriented East-West and spaced between 150 and 250 metres apart. The transmitter used is Zonge GGT-30 30kVA transmitter system and the receiver used is a GDD GRX-32. The survey was collected with a frequency of 0.125Hz.</p> <p>The survey was designed to extend the areas of IP chargeability anomalism defined by the previous IP survey as announced on 30 July 2015.</p>
Drilling techniques	<p><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></p>	Not applicable
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><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></p>	Not applicable

Table 1

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

Table 1

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><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></p> <p><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></p>	<p>The Induced Polarisation (IP) survey method is commonly used to determine the location of disseminated sulphides. An external current is applied and charge separation can occur on sulphide grain boundaries. When the transmitter is turned off the charges decay away. The degree to which this current forms, and the nature of its decay once the primary current is switched off, can be measured. Rock masses containing disseminated sulphide minerals, including pyrite, chalcopyrite and pyrrhotite, become more readily charged than barren ground. The geophysical method used by Minotaur is entirely appropriate to the style of mineralisation being sought.</p>
Verification of sampling and assaying	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>All data was reviewed at the Zonge Engineering Adelaide office before being transferred to the Minotaur office for audit and processing.</p>
Location of data points	<p><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></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>Transmitter and receiver electrode positions area located to GPS accuracy.</p> <p>The accuracy of horizontal positional data is +/- 5m (UTM projection GDA94 Zone 54)</p>

Table 1

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><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></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>The Induced Polarisation (IP) survey is configured with a 100m receiver dipole size and 100m transmitter dipole size. The transmitter dipole was moved at 50m intervals, achieving a 50m station spacing. The survey lines are oriented East-West and spaced 150 to 250 metres apart.</p>
Orientation of data in relation to geological structure	<p><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></p> <p><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></p>	<p>The primary line direction is perpendicular to the general geological, structural and interpreted mineralisation trends in the area.</p> <p>No bias is believed to be introduced by the sampling method.</p>
Sample security	<p><i>The measures taken to ensure sample security.</i></p>	<p>All data was reviewed on site by Zonge Engineering before being transferred to the office of Minotaur. Data was reviewed daily for quality and accuracy.</p> <p>Data is also transferred to Minotaur for secure server storage.</p>
Audits or reviews	<p><i>The results of any audits or reviews of sampling techniques and data</i></p>	<p>Data is collected and reviewed by personnel of Zonge Engineering then reviewed by personnel of Minotaur.</p> <p>Minotaur is tasked as an independent program manager. No major issues with data quality have arisen during the program.</p>

Section 2: Reporting of Exploration Results

Table 2

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<p>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.</p> <p>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.</p>	<p>The information herein relates to tenement EPM17838 which is 100% owned by Levuka Resources Pty Ltd (Levuka), a subsidiary of Minotaur Exploration Limited (Minotaur). Levuka has a Native Title Agreement with the Mitakoodi over this EPM.</p> <p>There are no existing impediments to EPM 17838.</p>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<p>Extensive historical exploration by other companies across EPM 17838 includes surface rock chip analyses, geological mapping, airborne magnetic surveys, gravity surveys, induced polarization (IP) survey, EM surveys, RC drilling and diamond drilling.</p> <p>Historic exploration drill hole and IP geophysical data have been re-assessed with the view to aid Minotaur Exploration with our assessment of the prospects relevant to this announcement.</p>
Geology	Deposit type, geological setting and style of mineralisation	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±Cu±Au deposits e.g. Mt Isa, Cannington.
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"> • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • down hole length and interception depth • hole length. <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>	Not Applicable

Table 2

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<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> <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> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	Not Applicable
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its 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>	Not Applicable
Diagrams	<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>	See Figures 1 to 3 of this Report.
Balanced reporting	<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>	<p>The processed Induced Polarisation (IP) data is represented in this release as processed pseudo-sections (Figures 2-3).</p> <p>The pseudo-sections illustrate the modelled chargeability of the rock volume which they enclose. Resistivity data is routinely collected when conducting an Induced Polarisation (IP) survey of this type but is not presented in this report.</p>

Table 2

Criteria	JORC Code explanation	Commentary
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>	No significant exploration data have been omitted.
Further work	<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> <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>	It is envisioned that these areas will be further examined with a view to defining drill targets as soon as possible.