

ASX Release

IP Surveys Extend Mineralised footprint, Eloise copper project, Cloncurry

Highlights

- IP surveys completed at the Eloise copper project near Cloncurry, Queensland
- IP data significantly expands the target footprint of Artemis and Sandy Creek copper-gold prospects
- Untested chargeability zone on strike north and south from Artemis.
- Significant IP responses also present at target EVT61 and target EVT48.
- Follow-up mapping will continue to refine drill targets.

An induced polarisation (IP) geophysical survey has been completed at the Eloise copper project, 50km to the southeast of Cloncurry, to investigate the broader Sandy Creek-Artemis mineralised footprint and to progress several regional copper-gold targets to drill status (see MEP ASX release of 3 July 2015). Data has been collected from the Artemis - Sandy Creek area, from Bobby Dazzler and regional targets EVT 48, 51 and 61 (Figure 1 and Table 1).

The new IP data significantly expands the target footprint of Artemis and Sandy Creek copper-gold prospects (Figure 2).

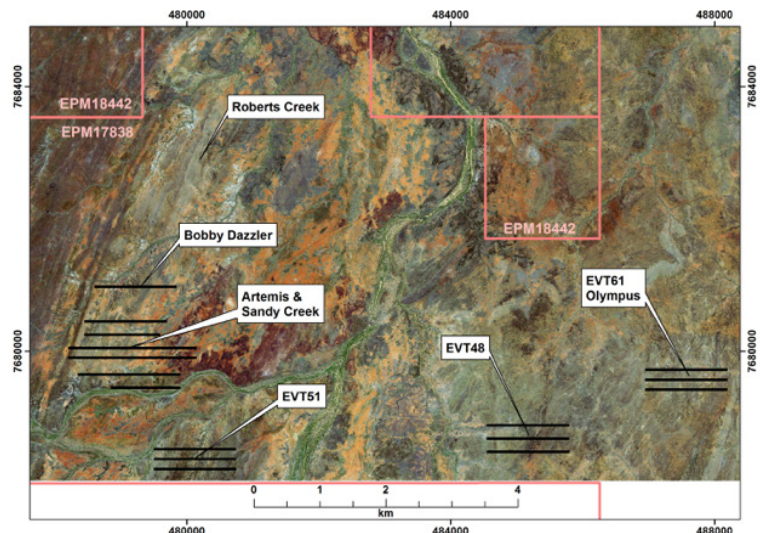


Figure 1: Sandy Creek, Bobby Dazzler, Roberts Creek, EVT 48, 51, 61 prospects with completed IP survey lines over satellite image

Artemis and Sandy Creek

Six east-west lines spaced at 150 to 250m intervals were undertaken over the Sandy Creek copper-gold prospect, with five lines also extending across the nearby Artemis copper-gold-zinc prospect discovered by Minotaur in 2014 (see MEP ASX release of 31 July 2014).

Geophysical inversions of the data collected show a strong correlation between the known mineralisation at Artemis and an intense chargeability anomaly with observed values of up to 21 mrad (Figure 2). The anomaly extends over 150 metres south and 200m north of the known extent of the massive sulphide zone currently defined by drilling.

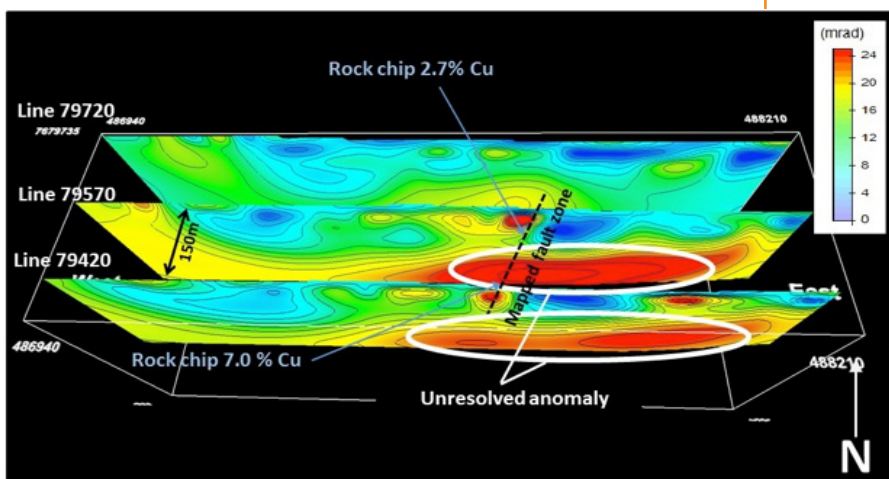
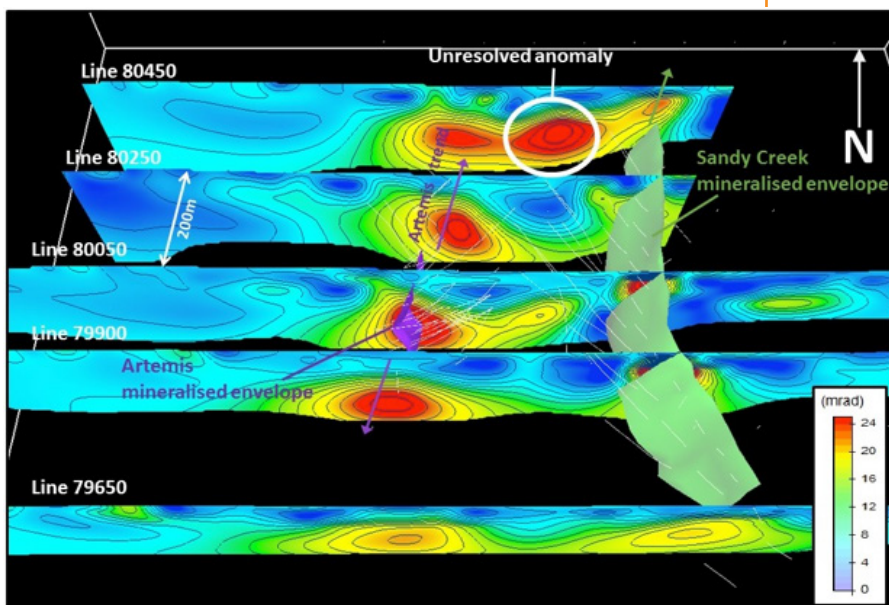
Another chargeability feature of similar amplitude occurs 400 metres north of Artemis (Line 804050), between the interpreted Artemis and Sandy Creek trends. This anomaly has not been tested by drilling.

At Sandy Creek the survey was aimed at investigating potential for down-plunge and along-strike extensions of the existing copper-gold resource. As at Artemis, the mineralised envelope corresponds with a distinct, although slightly less intense, chargeability response of up to 17 mrad over multiple lines (Figure 2). No significant southerly extension were generated from this data, however the chargeability feature does extend northwards beyond the limits of current drilling.

EVT61

EVT61 is a moderate-strength EM conductor (1200 S/m¹) identified from airborne VTEM surveys undertaken by Minotaur in 2013. Mapping in the area of the anomaly defined a quartz-filled fault outcropping over approximately 100m of strike with patches of gossan assaying between 2.7-7.0% Cu and up to 0.8 g/t Au. The location of the gossanous fault corresponds closely with the up-dip position of the modelled EM conductor. Three 150 metre-spaced lines of IP data were collected over the modelled conductor. Inversions of the data show an

intense chargeability anomaly of 22 mrad lying approximately 200 metres below surface, underneath the outcropping fault zone (Figure 3). The feature models as a relatively flat-lying body 400 metres wide and at least 150 metres long, and is open to the east, south and at depth. The observed chargeability values are similar in strength to those defined at Artemis and it is considered possible that the outcropping and conductive copper-bearing faults at EVT61 represent fluid pathways from a deeper disseminated sulphide system detected as the chargeability anomaly in the survey data. There is no historic drilling in the area.



Top left

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

Bottom left

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

1 Siemens per metre, a measure of electrical conductance

EVT48

EVT48 is a relatively small but strong EM conductor (11,400 S/m¹) also defined from the VTEM flown in 2013. Mapping in the area of the anomaly by Minotaur defined a small gossan assaying 0.38% Cu, 0.84% Zn and 0.23% Pb and a second gossan 400m east-southeast of EVT48 that assays 9.9% Cu & 0.1 g/t Au. Three 200m-spaced lines of IP data were collected over the EM conductor and both gossans.

Inversions of the data at EVT48 indicate a shallow, low-order chargeability anomaly (10 mrad) of limited depth extent associated with the strong EM conductor identified previously. However, the gossan 400m east-southeast returned a much stronger 15 mrad chargeability anomaly starting near surface and extending to 125m below surface, dipping to the west (Figure 4). A similar feature occurs on the western end of this traverse but dips eastwards. Both chargeable bodies are associated with linear north-trending weak magnetic features. The eastern IP anomaly is also present on the adjacent line 200m to the north, as well as remaining open to the south. None of the chargeability anomalies have been drill tested.

Roberts Creek, Bobby Dazzler and EVT51

Targets at Roberts Creek were not surveyed as part of this program and will be the subject of a future work program. No significant anomalies were defined at either the Bobby Dazzler or ETV51 targets.

Next steps

Minotaur is continuing to process and assess the IP data to refine the targets for drill testing. Follow-up mapping is required in the Sandy Creek and Artemis areas particularly in the northern extents of both prospects where strong IP responses were defined. There has been no previous mapping by Minotaur in this area because the VTEM and ground EM data did not show them as areas of interest previously. Detailed mapping will also be undertaken at EVT61 and EVT48 to better constrain the geology models and consideration will be given to extending the IP surveys to the south and east at both prospects.

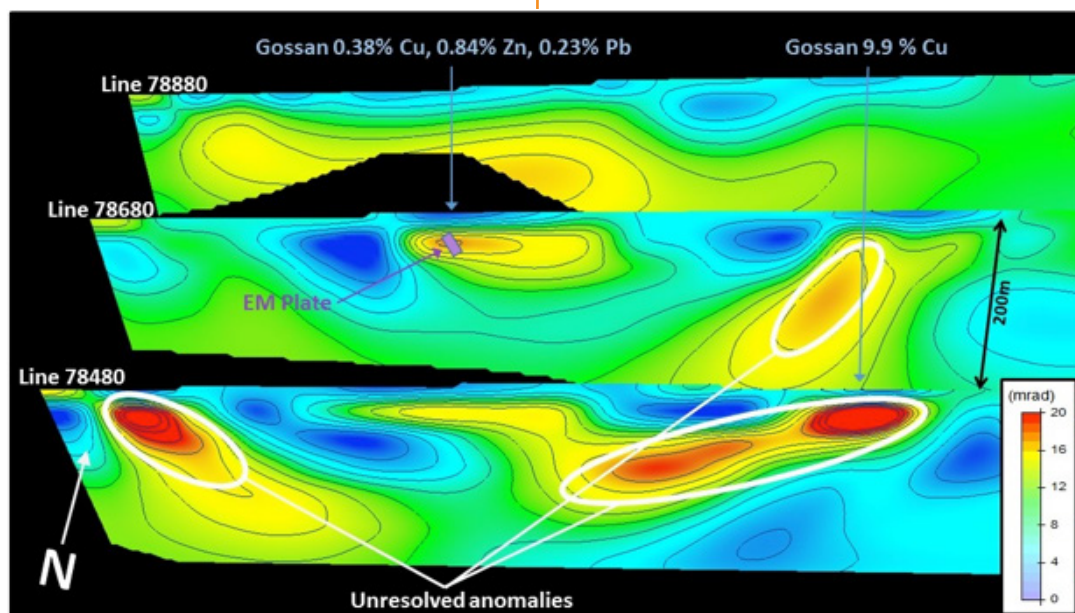


Figure 4: EVT48 target with IP chargeability inversions. The red areas are zones of moderate chargeability

Prospect	Line North	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
Sandy Creek/Artemis	7680450	478450	479700
Bobby Dazzler	7680975	478600	479850
EVT48	7678480	484550	485800
EVT48	7678680	484550	485800
EVT48	7678880	484550	485800
EVT61	7679420	486950	488200
EVT61	7679570	486950	488200
EVT61	7679720	486950	488200
EVT51	7678220	479500	480750
EVT51	7678370	479500	480750
EVT51	7678520	479500	480750

Table 1: IP survey line coordinates where data has been acquired
(Projection: GDA94 MGA54)

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 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.

Andrew Woskett
(Managing Director)

Tony Belperio
(Director, Business Development)

Section 1: Sampling Techniques and Data

Table 2

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, Artemis, Bobby Dazzler, EVT48, EVT51 and 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 only every second reading, 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. The survey was collected with a frequency of 0.125Hz.</p> <p>The survey was designed to cover the areas of known mineralisation at Sandy Creek and Artemis looking for potential strike and/or dip extensions and to search for zones of unknown sulphide occurrences at Bobby Dazzler, EVT48, EVT51 and EVT61 where either historic IP occurs (Bobby Dazzler) or VTEM EM conductors have been defined by Minotaur previously (EVT48, 51, 61)</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 2

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
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 in units of milli-radians, or mrad as used throughout this release. 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>

Table 2

Criteria	JORC Code explanation	Commentary
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>	All data was reviewed at the Zonge Engineering Adelaide office before being transferred to the Minotaur office for audit and processing.
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>
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>	The Induced Polarisation (IP) survey is configured with a 100m receiver dipole size and 100m transmitter dipole size. The transmitter dipole was moved only every second reading, achieving a 50m station spacing. The survey lines are oriented East-West and spaced 150 to 250 metres apart.
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>

Table 2

Criteria	JORC Code explanation	Commentary
Sample security	<i>The measures taken to ensure sample security.</i>	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.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	<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

Not applicable to this release.

Table 3

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.	<p>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.</p>

Table 3

Criteria	JORC Code explanation	Commentary
Drill hole Information	<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>down hole length and interception depth</i> <i>hole length.</i> <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>	<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>
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

Table 3

Criteria	JORC Code explanation	Commentary
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>	See Figures 1 to 4 of this 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>	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. 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.
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	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Not Applicable