



11 May 2018

ASX Release

Drilling progresses at Eloise JV, Cloncurry

Minotaur Exploration Ltd (ASX: MEP, 'Minotaur') reports that 6 initial drill holes are complete at the Eloise JV, southeast of Cloncurry, NW Queensland (Figure 1). Drilling probed the J1 conductor, one of three known plates within the Jericho prospect, where significant copper-gold mineralisation was intersected in 2017¹.

Key Developments

- Conductor J1 returned 58m of continuous sulphide mineralisation; including
 - 16m of 2-5% chalcopyrite (visual estimate, assays awaited)
- New, shallow, high conductance plate J2 South identified within Jericho
- Drilling will test J2 South and J3 conductors
- Diamond rig now positioned on the Arlington EM anomaly
- Defiance, Yukon and St Louis, anomalies yet to be drilled

J1 has a strike length of 3.6km, along which the six new holes were widely spaced at 200-800m apart, aimed at scoping out the full geochemical footprint of the system (Figure 2). Five of the six holes intersected sulphide at the modelled EM conductor positions. Hole EL18D02 intersected continuous sulphide mineralisation over 58m including a zone of approximately 16m from 165.3m with 2-5% chalcopyrite (a copper sulphide), including 2 zones each of 1-2m exhibiting 10-15% chalcopyrite, based on visual estimates. Other holes, EL18D01 and EL18D04-EL18D06, intersected patchy pyrrhotite-dominated zones with narrow intervals of chalcopyrite and, with EL18D02, established mineralised continuity of the J1 conductor.

Geochemical results are expected in 3-4 weeks and will guide follow up exploration.

The rig has moved on to probe 'Arlington', 'Defiance', Yukon' and 'St Louis' conductors, with one initial hole planned at each target. Arlington is a complex conductor about 2.5km long and St Louis is around 2km long; both had 1 hole each drilled in 2017 showing encouraging sulphide that warranted follow-up given their large size. Defiance is 1km long and Yukon is around 2km long; neither has been drilled previously.

¹ MEP report to ASX 3 November 2017, *High grade copper-gold discovery confirmed at 'Jericho', Eloise JV, Cloncurry*

Meanwhile, Minotaur is preparing drill sites over the J2 South and J3 conductors at Jericho (Figure 2). J2 South is a new anomaly, discovered by the recent infill ground EM survey. The conductor appears to lie in the same structural position as the original J2 conductor (now named J2 North in Figure 2) that hosts high-grade copper-gold as highlighted by EL17D06 in the 2017 drilling. J2 South conductor has a modelled strike length of 500m, a strong conductance of 3000S and depth to top of 50m below surface. At J3, 4 sites have been selected to test the geochemical signature of that conductor along 2.3km of strike. The 4 drill targets have very strong modelled conductance of between 4000-4500S.

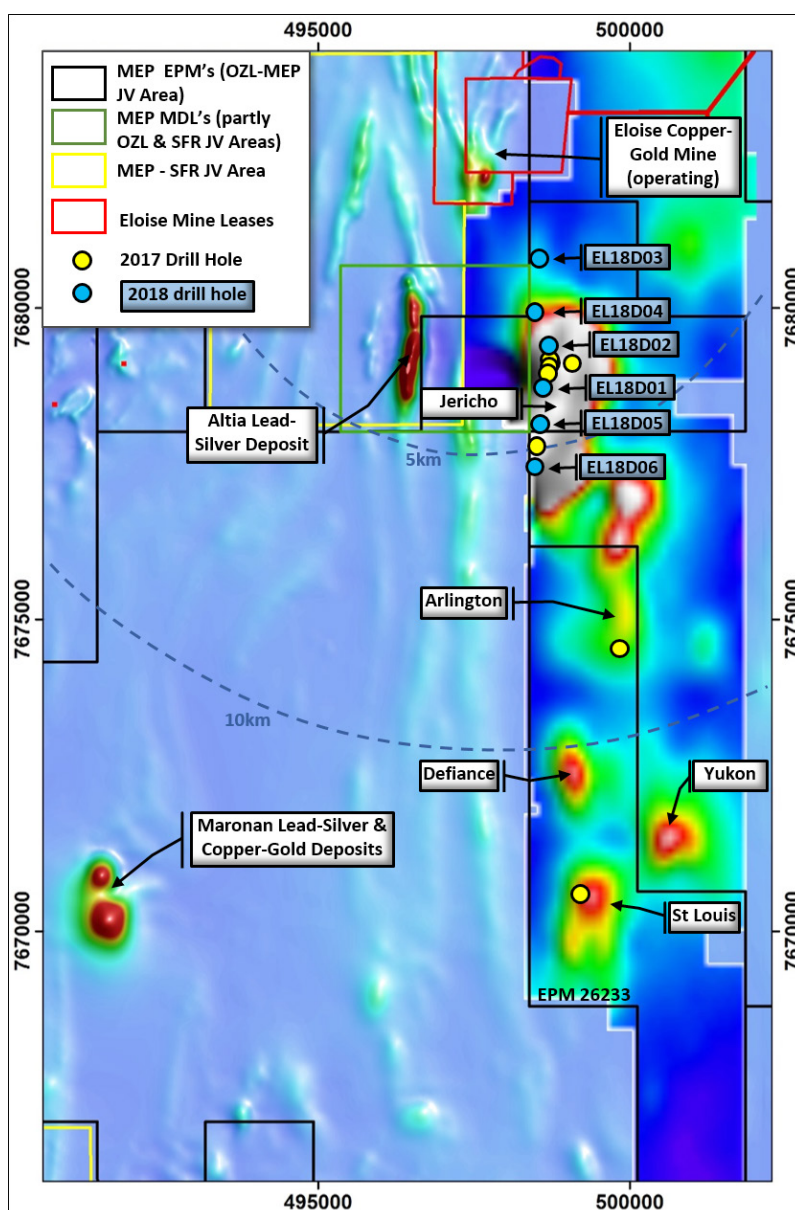


Figure 1: EM conductors and drill collar locations over magnetics

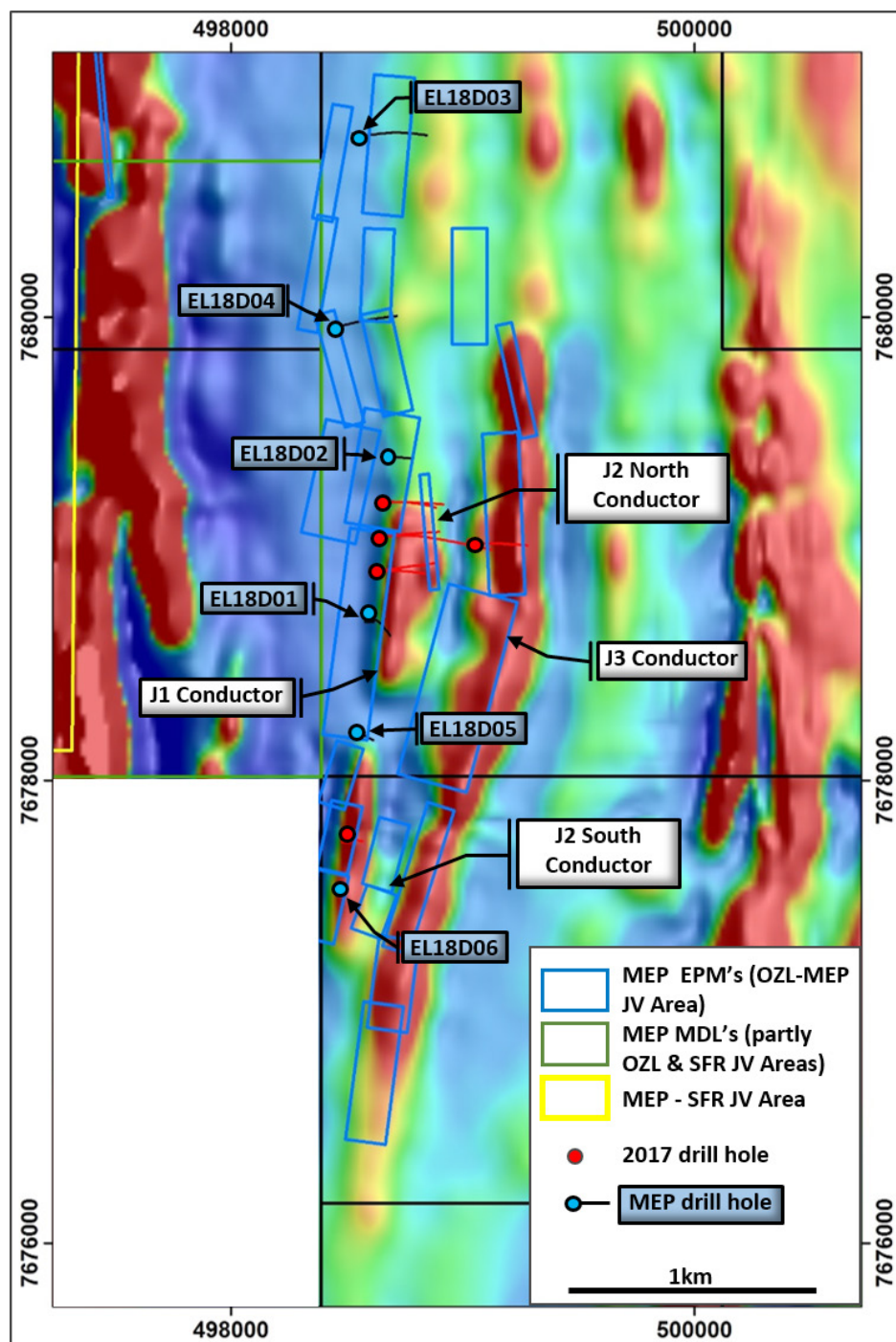


Figure 2: Jericho prospect with EM conductors and drill hole traces over magnetics

Hole No.	Prospect	Easting	Northing	RL	Dip	Azimuth	Depth
EL18D01	Jericho	498605	7678697	204	-70	98	290.9
EL18D02	Jericho	498679	7679401	202	-70	88	288.8
EL18D03	Jericho	498545	7680773	197	-55	74	458.7
EL18D04	Jericho	498450	7679950	200	-55	64	405.4
EL18D05	Jericho	498547	7678200	202	-80	88	240.8
EL18D06	Jericho	498475	7677520	201	-85	93	174.6

Table 1: Jericho prospect drill hole details. Coordinates are in GDA94, Zone 54

Project 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, having completed its A\$5M Stage 1 earn-in, now has 51% beneficial interest in the tenements. Work currently underway forms part of the Stage 2 earn-in where OZ Minerals may earn additional 19% equity by spending an additional A\$5M.

The Eloise JV 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 Figure 1).

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.

Andrew Woskett

Managing Director

Minotaur Exploration Ltd

T +61 8 8132 3400

www.minotaurexploration.com.au

JORC Code, 2012 Edition, Table 1

Section 1: Sampling Techniques and Data

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

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>	<p><u>Drilling</u></p> <p>Assay results from drill sample material from holes EL18D01-EL18D06 have not yet been received from the laboratory and information in this report relates to visual estimates only of chalcopyrite (copper-bearing sulphide) content. Samples from EL18D01 and EL18D02 have been sent to the lab; samples from holes EL18D03-EL18D06 have not yet be sent to the lab as sampling is not yet complete. Assays from these holes will be reported in due course.</p> <p>All holes were drilled RC through the cover sequence into basement then changed to HQ, then NQ2 core to end of hole.</p> <p>The drill bit sizes employed to sample the zones of interest are considered appropriate to indicate the degree and extent of mineralisation.</p> <p><u>EM Survey</u></p> <p>The EM survey within the Eloise JV area was conducted by GEM Geophysics, an external geophysical contractor.</p> <p>The EM system used Transmitter Technologies TTX-1 transmitter (using 0.25Hz frequency) and a 3-component Jessy Deep SQUID EM sensor.</p> <p>EM data receiver stations were spaced at 25-50m intervals along E-W lines and each E-W lines was spaced at 400m intervals over the wider survey area.</p> <p>Data quality was of a high standard for the whole of the survey and consistent with the type of target being sort.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<p><u>Drilling</u></p> <p>All samples relating to mineralisation commented on in this report are from either HQ or NQ2 core size. Core samples have been/will be split with a core saw and half</p>

Criteria	JORC Code explanation	Commentary
		<p>core samples, typically varying from 1-2m wide.</p> <p><u>EM Survey</u></p> <p>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.</p>
	<p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p>	<p>Comments in this report relating to mineralisation are based on visual estimates of chalcopyrite content only and do not represent actual copper content of any given part of the hole. For information, chalcopyrite contains approximately 1/3 copper; thus for example if 1% chalcopyrite is visually estimated over a given interval, say 1m, that 1m interval will contain approximately 0.35% copper.</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 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></p>	<p><u>Drilling</u></p> <p>All samples relating to mineralisation commented on in this report are either HQ or NQ2 core size. Core samples have been/will be split with a core saw and half core samples, typically varying from 1-2m wide, will be sent to the lab for assay in due course.</p> <p><u>EM Survey</u></p> <p>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.</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>	<p>EL18D01-EL18D06 were drilled RC through the cover sequence into basement then changed to HQ, then NQ2 core to end of hole.</p> <p>The drill bit sizes employed to sample the zones of interest are considered appropriate to indicate the degree and extent of mineralisation.</p> <p>A north-seeking gyro downhole survey system was used every ~30m by drilling contractors DDH1 to</p>

Criteria	JORC Code explanation	Commentary
		<p>monitor drillhole trajectory during drilling.</p> <p>The NQ2 cored portions of the drillholes have been oriented for structural logging using the Reflex ACT III core orientation tool. The drilling program was supervised by experienced Minotaur geological personnel.</p>
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Drill core recovery was determined by measuring the length of core returned to surface against the distance drilled by the drilling contractor. Core recovery for all reported intervals averaging >98% recovery thereby providing no evidence for apparent correlation between ground conditions and estimated chalcopyrite content.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Ground conditions in basement were suitable for standard RC and core drilling. Recoveries and ground conditions have been monitored during drilling. There was no requirement to conduct drilling with triple tube when diamond drilling.
	<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>	Assays are yet to be received from the laboratory for analyses however there are not expected to be any issues with sample recovery and grade and sample bias.
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>	Geological logging of the cover sequence and the cored basement has been conducted by Minotaur staff geologists. The level of detail of logging has been sufficient for early stage exploration drill holes which these hole are. The drill core has been oriented where possible and structural data has been recorded. No geotechnical logged has been conducted as the holes are early stage exploration drilling. Magnetic susceptibilities have been recorded every metre of the drill core and SG measured have been conducted at approximately 5m intervals for the core.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Geological logging is qualitative. Core photos have been taken for the entire cored section of each completed drillhole.
	<i>The total length and percentage of the</i>	All holes have been logged for their entire length.

Criteria	JORC Code explanation	Commentary
	<i>relevant intersections logged.</i>	
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Core has been/will be cut using an industry standard automatic core saw. Half core samples have been/will be sent to the lab for analyses. All other measures/sampling techniques and sample preparation under this section will be described in future relevant announcements
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Not applicable to this announcement
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Not applicable to this announcement
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Not applicable 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 applicable to this announcement
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Not applicable to this announcement
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Assay data is not presented in this report. However the information relating to mineralisation that is presented is based on geological logging only and are visual estimates of the sulphide content based on that logging. Minotaur has experienced geologists logging the core and are of the opinion that the visual estimates as presented in the text of this report are indicative of the mineralisation in each hole. Minotaur state that laboratory assay data is required to accurately determine the level of mineralisation encountered in each hole.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the</i>	<u>Drilling</u> Minotaur has not relied on any instruments to assist

Criteria	JORC Code explanation	Commentary
	<i>parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	<p>with estimating the visual content of chalcopyrite in each hole, however some readings have been taken using a handheld XRF device for internal use only.</p> <p><u>EM Survey</u></p> <p>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.</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>	Not applicable to this announcement
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Not applicable to this announcement
	<i>The use of twinned holes.</i>	Not applicable to this announcement
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Not applicable to this announcement
	<i>Discuss any adjustment to assay data.</i>	Not applicable to this announcement
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>	<p><u>Drilling</u></p> <p>Drill collar positions are located with a handheld GPS. The level of accuracy of the GPS is approximately +/- 3m and is considered adequate for this first-pass level of exploration drilling.</p> <p>Downhole surveys have been conducted at 30 metre intervals using a north-seeking gyro with drillhole orientation by the drilling contractor DDH1</p>
	<i>Specification of the grid system used.</i>	Grid system used is GDA94, Zone 54.
	<i>Quality and adequacy of topographic control.</i>	The Jericho is flat lying with <5m of elevation change over the extended prospect area. Detailed elevation data is not required for this early stage of exploration in

Criteria	JORC Code explanation	Commentary
		flat-lying topography.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Drill core has been/will be sampled at intervals around 1m in length through the main zone of mineralisation and 2m outside of the main zones of visible sulphide. Some samples may not be full metres because of geological contacts where required.
	<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>	The level of data spacing Minotaur propose to use for the sampling, as above, will be sufficient to enable an initial interpretation of the data and geological model. These are the first holes drilled into these prospects and will provide a guide for future drilling. The prospects are at too early a stage of exploration for detailed analyses.
	<i>Whether sample compositing has been applied.</i>	Not applicable to this announcement
<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>	The drill holes have been drilled to test modelled EM conductors and in each case have drilled as close as possible to perpendicular to the modelled EM plates. Structural logging of the core, and the location of the mineralised sections relative to the modelled plate, indicates that the holes are placed in the most favorable orientation for testing the targeted structures.
	<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>	No orientation based sampling bias is expected.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Drill core is stored at Minotaur exploration premises in Cloncurry. Samples have been/will be driven by Minotaur personnel directly to the laboratory in Mt Isa when they are to be analysed.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Not applicable to this announcement

Section 2: Reporting of Exploration Results

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

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>	<p>The drilling data reported herein were collected from drill holes EL18D01-EL18D06 are within EPM's 26233 and EPM 25389 which are 51%/49% owned by OZ Minerals (OZL) and Minotaur Exploration respectively as part of a Joint Venture agreement with.</p> <p>A registered native title claim exists over both EPM EPM's (Mitakoodi and Mayi People #5). Native title site clearances were conducted at each drill site prior to drilling.</p> <p>Conduct and Compensation Agreements are in place with the relevant landholders.</p>
	<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>	EPM's 25389 and 26233 are secure and compliant with the Conditions of Grant. There are no known impediments to obtaining a licence to operate in the Jericho area.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Prior to Minotaur's drilling, the only previous exploration data available for the Jericho prospect are open file aeromagnetic data and ground gravity data. The aeromagnetic data were used to interpret basement geological units to aid Minotaur's regional targeting.</p> <p>EM targets areas in this announcement were delineated solely by work completed by Minotaur as part of the Joint Venture with OZL.</p>
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>Within the eastern portion of Mt Isa Block targeted mineralisation styles include:</p> <ul style="list-style-type: none"> iron oxide Cu-Au (IOCG) and iron sulphide Cu-Au (ISCG) 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.

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> 	Collar easting and northing plus drillhole azimuth, dip and final depth for drill holes EL18D01-EL18D06 are presented in Table 1 of the body of this document.
	<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>	No data deemed material to the understanding of the exploration results from drillholes EL18D01-EL18D06 have been excluded from this document. Minotaur reiterate that the information provided in the report about visual copper sulphide (chalcopyrite) is an estimate only and should not be viewed as an accurate representation of the mineralisation. The assay data from the holes presented will be provided once the laboratory analyses are complete.
<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>	Not applicable to this announcement
	<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>	Not applicable to this announcement

Criteria	JORC Code explanation	Commentary
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Not applicable to this announcement
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	The drill holes have been drilled to test modelled EM conductors and in each case have drilled as close as possible to perpendicular to the modelled EM plates. Structural logging of the core, and the location of the mineralised sections relative to the modelled plate, indicates that the holes are placed in the most favorable orientation for testing the targeted structures.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	The geometry of the mineralisation with respect to the drill holes is uncertain in this early stage of exploration however logging of oriented drill core suggests that mineralisation at Jericho is likely steeply west dipping
	<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>	True widths of mineralisation are unknown at this stage. For the purpose of clarity, all depths and intervals referenced in this document are downhole depths.
<i>Diagrams</i>	<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>	The location of the Eloise JV EM targets and drill holes are presented in Figures 1 and 2. A gridded image of the X-component Channel 30 EM data and the RTP1VD magnetics is presented in Figure 1. The locations of the EM plates and drill holes at Jericho are shown in Figure 2 with the background image being 1VD magnetics.
<i>Balanced reporting</i>	<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>	Information presented on the EM targets is brief due to the nature of the data but illustrates the location of the EM plates that are being targeted with drilling. Details of the EM conductors were presented in previous ASX announcements Information on the drill holes is also brief and designed to provide at update of the progress of the drill holes and to maintain transparency of the ongoing work program at the Eloise JV. Detailed information on the drill results will be provided once it becomes available.

Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	<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 meaningful and material exploration data have been omitted.
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Drilling continues and is explained in the text of this report. The need for any follow-up drilling will be assessed as the current drill program progresses.
	<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>	Refer to Figures 1-2 of the main body of the report to show where drilling has been conducted. As results are still being assessed there are no diagrams provided showing future work as this has not yet been determined.