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Strong copper mineralisation intersected at 'Jericho' for Eloise JV, Cloncurry

- Inaugural drilling into 4km long Jericho target intersects multiple copper sulphide zones in first two holes
- Second hole, testing 3 separate EM conductors, intersected copper sulphide rich mineralisation at each of the western and central zones
- Central zone comprises massive and semi-massive copper sulphides in two horizons up to 7.2m wide
- Step out drilling approved to continue and second rig mobilising to test Arlington and St Louis

Minotaur Exploration Ltd (ASX: MEP, 'Minotaur') is pleased to provide a drilling update for the Eloise JV, northwest Queensland. Four holes are testing 3 electromagnetic (EM) anomalies located 5-13km south of the Eloise copper-gold mine (*Figure 1*). First-pass holes at the Jericho target intersected massive to semi-massive copper sulphides in several horizons.

Jericho comprises multi-plate conductive zones up to 4km in length (*Figure 2*). The anomalies lie coincident to weak magnetic features now known to be structurally-controlled pyrrhotite. The first hole, EL17D05, targeted the western conductor (J1) toward its southern end. The second hole, EL17D06, in the middle of Jericho, targeted 3 EM plates including the western (J1), central (J2) and eastern (J3) conductors (*Figure 3*). Note: all comments below referring to chalcopyrite content are based on visual estimates from geological logging and are provided as a guide only to the potential tenor of mineralisation; samples are yet to be sent to the laboratory for analysis. Chalcopyrite is an iron sulphide copper form with composition 34.6% copper.

EL17D05: was completed at 200.3m (*Table 1*), targeting the modelled EM conductor at 125m depth. Disseminated and stringer/veinlet pyrrhotite-chalcopyrite sulphide mineralisation was intersected over 97-125m; the best interval with visible chalcopyrite estimated to range between 1-4% chalcopyrite occurs 97-107m downhole.

EL17D06: was terminated at 894.1m (*Figure 3 and Table 1*) after passing through all 3 EM modelled plate positions (J1-J3).

J1: intersected between 202-232m, a 30m zone of disseminated, veinlet and crackle breccia hosted pyrrhotite-chalcopyrite. Based on visual estimates, the average chalcopyrite content over the entire interval is likely to be <1%, with localised zones up to 0.4m wide may contain up to 10% chalcopyrite (*Figure 4*).

J2: intersected between 439-465.4m two zones of massive to semi-massive chalcopyrite-pyrrhotite mineralisation comprising 4.4m from 440-444.4m and 7.2m from 454.5-461.7m (*Figures 5-6*). Visual estimates suggest the average chalcopyrite content over each of these zones is >10%. Enveloping this are zones of relatively narrow, weaker veins of disseminated chalcopyrite and pyrrhotite.



J3: the precise position of the modelled plate is not yet clear with multiple zones of veined and semi-massive pyrrhotite intersected intermittently over a wide interval between approximately 700m to end of hole. Most of the semi-massive pyrrhotite zones occur within brecciated quartz veins similar to those developed at J1 and J2 positions but are narrower and contain only minor chalcopyrite.

Both holes have been cased with PVC to allow for downhole EM (DHEM) survey in the coming days to assist drill follow-up.

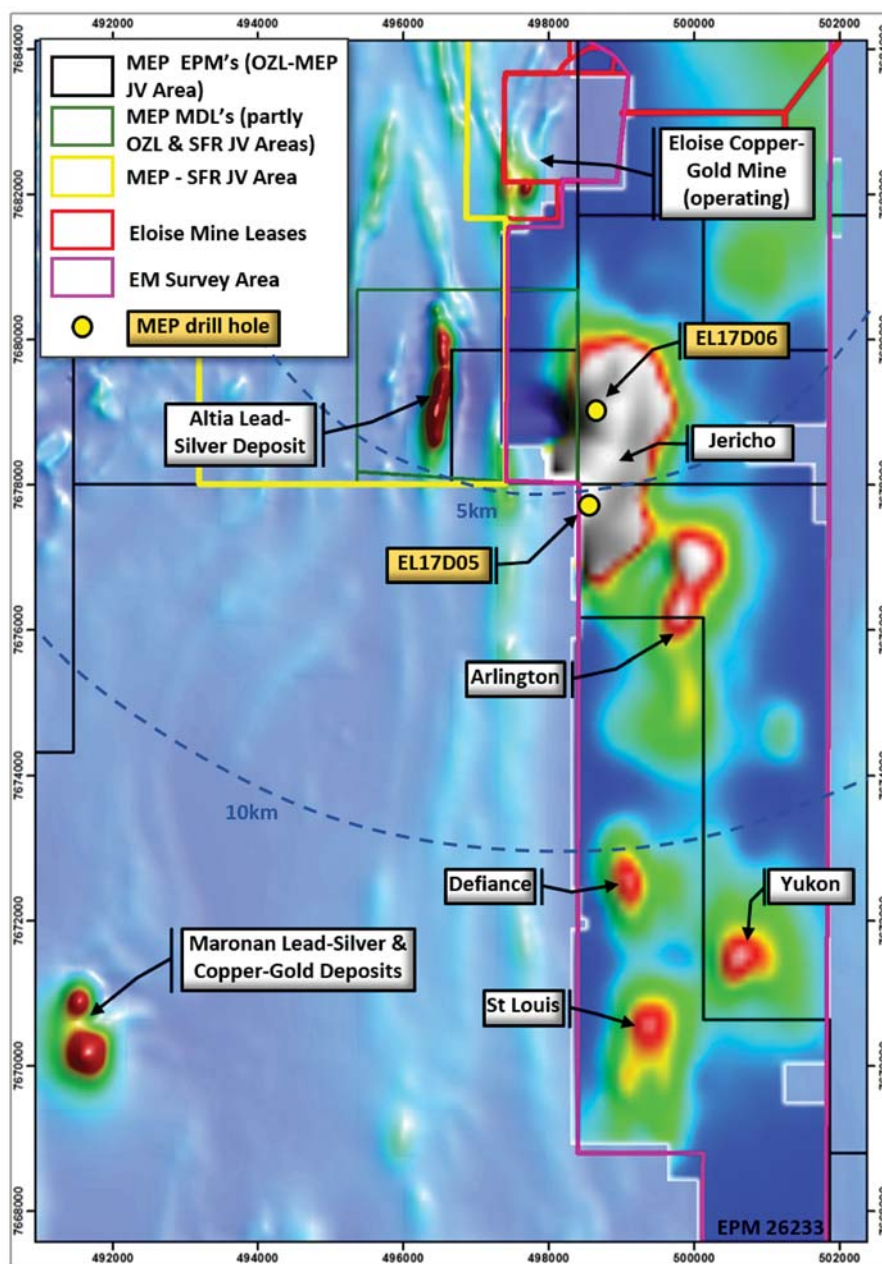


Figure 1: Priority drill targets south of Eloise mine; EM image is Z component, channel 30 over magnetics.



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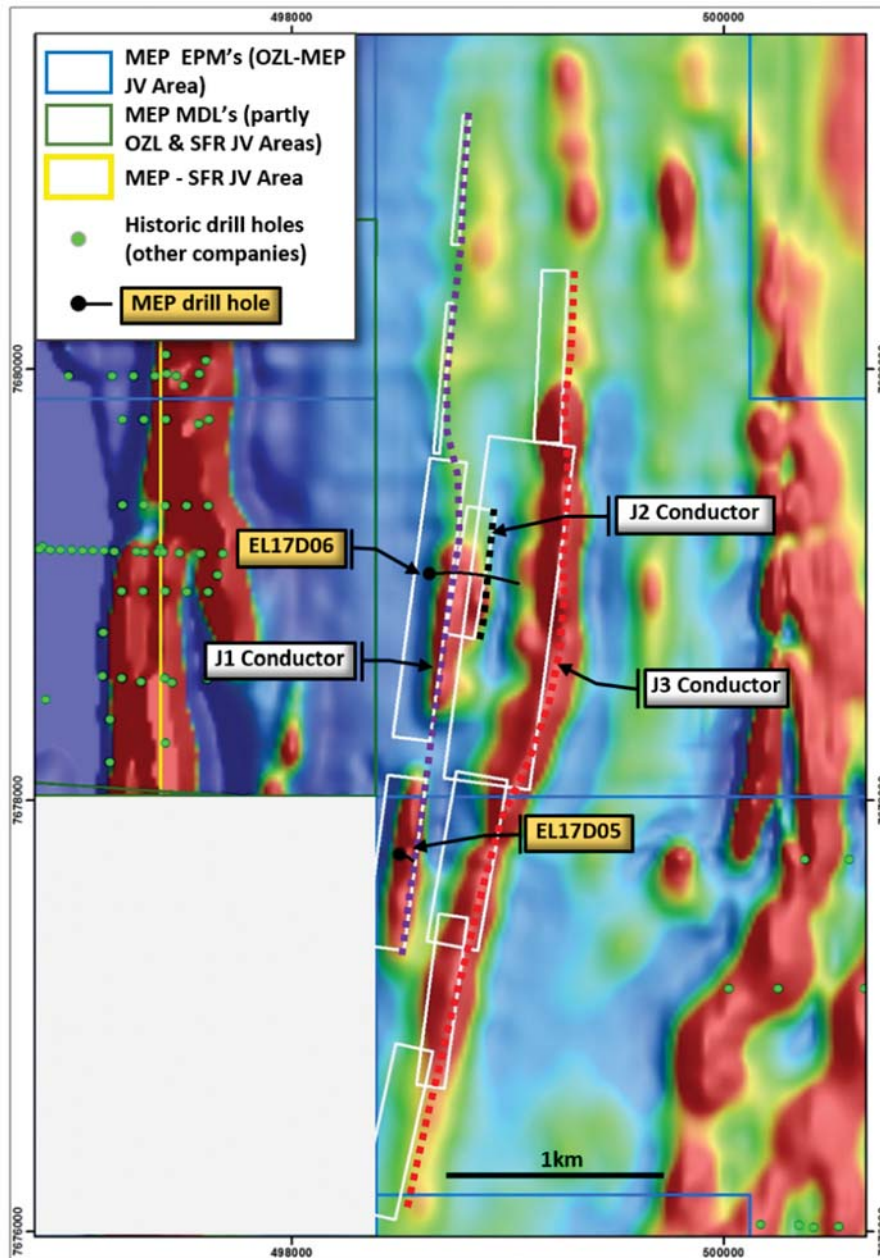


Figure 2: Jericho prospect with inaugural drill holes and EM conductors (white boxes and dashed lines) over magnetics.

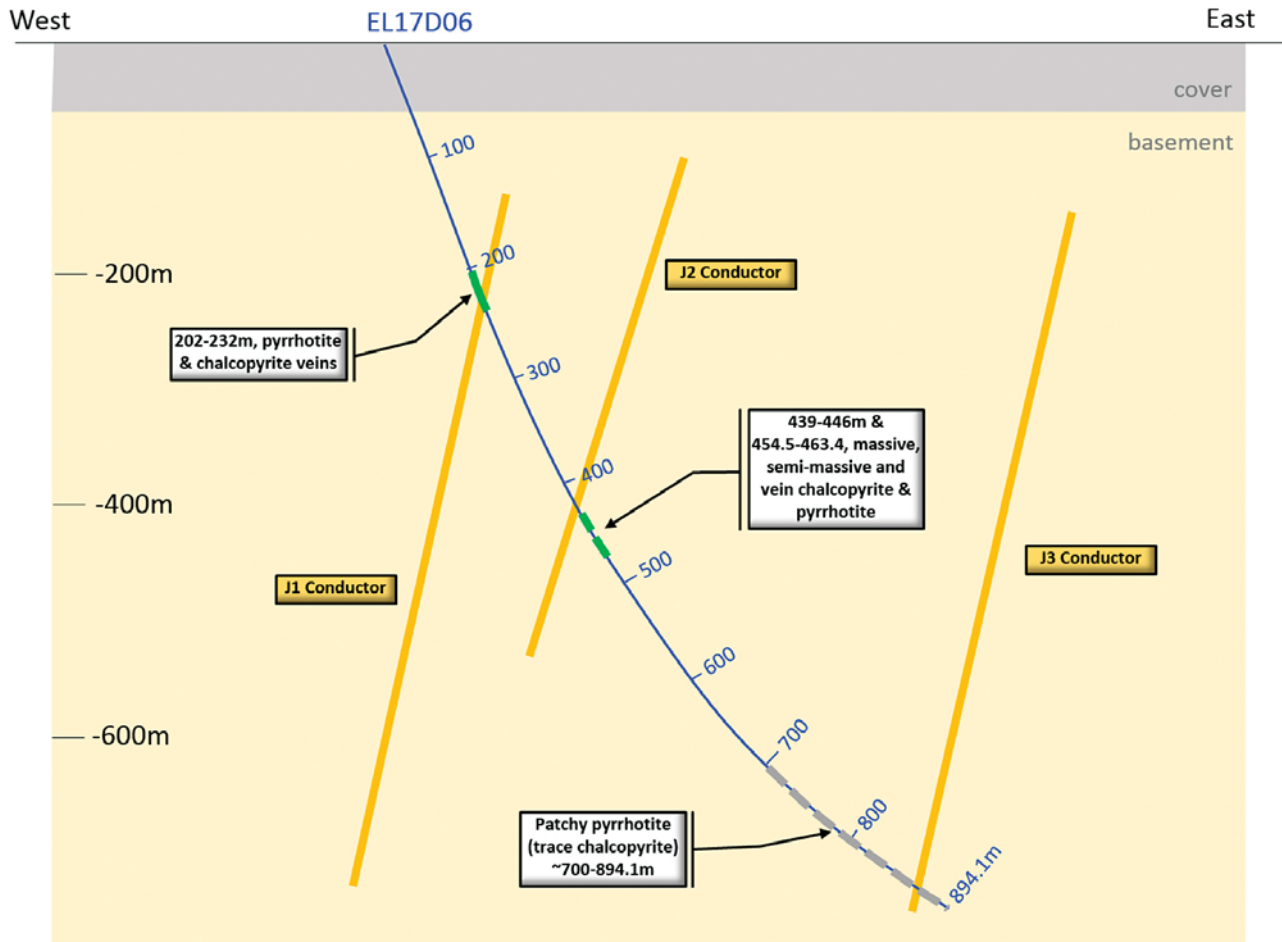


Figure 3: Cross-section (looking north) at Jericho prospect showing drill hole EL17D06, the 3 modelled EM plates and zones of visible copper sulphide mineralisation.

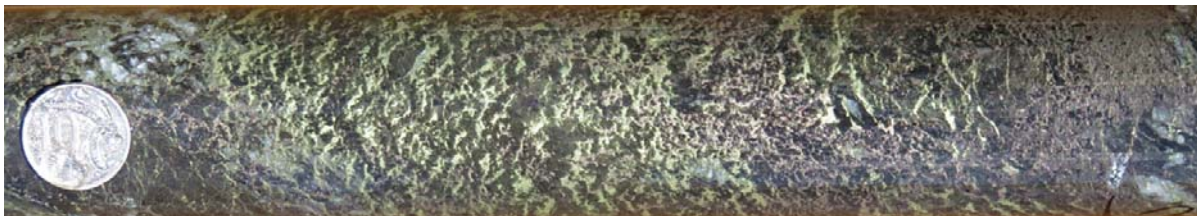


Figure 4: EL17D06: 223.7-224m semi-massive sulphide within a broader zone of lower tenor sulphide. Chalcopyrite is yellow, pyrrhotite is bronze in colour.



Figure 5: EL17D06: zone of massive and vein sulphide between 439-446m. Sulphide is mostly chalcopyrite (yellow) with lesser pyrrhotite (bronze in colour).



Figure 6: EL17D06: zone of massive and semi-massive sulphide between 454.5-461.7m. Sulphide is mostly chalcopyrite (yellow) with lesser pyrrhotite (bronze in colour).

Target Name	Drillhole	East	North	Dip	Azimuth	Depth (m)	Drill Type
Jericho	EL17D05	498500	7677750	-70	102	200.3	RC/DD
Jericho	EL17D06	498639	7679050	-70	86	894.1	RC/DD

Table 1: Drill collar details for Jericho holes. Coordinates are GDA94, Zone 54.



Next Steps

Intersections of visible copper mineralisation over multiple, wide horizons at Jericho marks a significant development in Minotaur's targeting of copper prospects in the Eloise area. Jericho's multiple conductors show strike extent of up to 4km and depth potential (based on current EM data) ranging up to 700m, and from just 100m below surface. Assay results, when received in the next 2-3 weeks, will clarify the quality of the intersections reported here. Meanwhile, the Eloise JV is acting on these highly encouraging results. New DHEM data will inform the placement of additional holes to probe Jericho's continuity. A second drill rig has been mobilised to test Arlington and St Louis while drilling continues at Jericho where 3-4 extra holes have been endorsed (*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\$10million.

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.

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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>Drill sample material from holes EL17D05 and EL17D06 have not yet been sampled and information in this report relates to visual estimates only of chalcopyrite (copper-bearing sulphide) content. Assays from these holes will be reported in due course.</p> <p>EL17D05 was drilled RC to 152m then changed to NQ2 coring when the limits of the RC drilling was reached. EL17D06 was drilled RC to 30m then changed to HQ coring to 110.4m then changed to NQ2 to EOH.</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>Relevant samples of mineralisation will be sent to the analytical lab in due course for confirmation assays.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	All samples relating to mineralisation commented on in this report are either 51/2 inch diameter RC, HQ or NQ2 core size. These RC samples were split onsite with a rig-mounted rifle splitter at 1m intervals. Core samples 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.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	Comments in this report relating to mineralisation in holes EL17D05 and EL17D06 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.
	<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>	All samples relating to mineralisation commented on in this report either 51/2 inch diameter RC, HQ or NQ2 core size. RC samples will mostly be 1-2m widths and weight around 3kg. Core samples 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.
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>	<p>EL17D05 was drilled RC to 152m then changed to NQ2 coring when the limits of the RC drilling was reached. EL17D06 was drilled RC to 30m then changed to HQ coring to 110.4m then changed to NQ2 to EOH.</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 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>



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Criteria	JORC Code explanation	Commentary
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	RC sample recovery was monitored and if samples were wet or of a smaller size this information was recorded. Drill core recovery was determined by measuring the length of core returned to surface against the distance drilled by the drilling contractor. RC recovery was excellent for the zones that are mineralised. Core recovery for all reported intervals averaging >99% recovery thereby providing no evidence for apparent correlation between ground conditions and metal grade.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Ground conditions 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>	Samples are yet to be sent to 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 RC and core 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 both RC and 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 relevant intersections logged.</i>	All holes have been logged for their entire length.
Sub-sampling techniques and sampling preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Core will be cut using an industry standard automatic core saw. Half core samples, expected to be 1-2m wide 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>	RC samples were split directly off the rig mounted riffled splitter. Some samples were wet and these were sampled using a PVC spear.
	<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.



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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>	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 parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	Minotaur has not relied on any instruments to assist 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.
	<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>	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. Downhole surveys have been conducted at 30 metre intervals using a north-seeking gyro with drillhole orientation by the drilling contractor DDH1.
	<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 area is flat lying with a ~1m of elevation change over the extended prospect area. Detailed elevation data is not required for this early stage of exploration in flat-lying topography.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Drill core has not yet been sampled for assay but sample intervals are likely to be 1m through the main zone of mineralisation and 2m outside of the zone 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.



Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<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.
Sample security	<i>The measures taken to ensure sample security.</i>	Drill core is stored at Minotaur exploration premises in Cloncurry. Samples will be driven by Minotaur personnel directly to the laboratory in Mt Isa when they are to be analysed.
Audits or reviews	<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
Mineral tenement and land tenure status	<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>	The drilling data reported herein were collected from drillholes EL17D05 and EL17D06 within EPM 26233 and EPM 25389 respectively which are 100% owned by Minotaur Exploration as part of a Farm-in agreement with OZ Minerals (OZL). OZL are yet to earn any equity in either EPM. 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. Conduct and Compensation Agreements are in place with the relevant landholders.
	<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.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	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. There is no evidence of any drilling at Jericho prior to Minotaur's work. The prospects were delineated solely by work completed by Minotaur as part of the Farm-in with OZL.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	Within the eastern portion of Mt Isa Block targeted mineralisation styles include: <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.



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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"> • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. 	Collar easting and northing plus drillhole azimuth, dip and final depth for EL17D05 and EL17D06 are presented in <i>Table 1</i> 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 EL17D05-06 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.
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>	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.
	<p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	Not applicable to this announcement.
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p>	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.
	<p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p>	The geometry of the mineralisation with respect to the drillhole angle is uncertain at this early stage of exploration.
	<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>	True widths of mineralisation are unknown. All depths and intervals referenced are downhole depths.



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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>	<p>The location of the Eloise JV EM targets are presented in <i>Figures 1 and 2</i></p> <p>A gridded image of the X-component Channel 30 EM data and the RTP1VD magnetics is presented in <i>Figure 2</i> showing the location of the modelled EM plates as presented in the text of the report.</p> <p>A cross section through drill hole EL17D06 is presented in <i>Figure 3</i> to show the location of the EM plates and visible copper sulphide mineralisation.</p> <p>Representative photos for zones of visible copper sulphide mineralisation have been included as <i>Figures 4, 5 and 6</i> in the body of the report; these images are for illustration only for the style of mineralisation intersected and to give a visual of the quantity of the copper sulphide.</p>
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 practised to avoid misleading reporting of Exploration Results.</i>	<p>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.</p> <p>Information on the drill holes is also brief and designed to provide an 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.</p>
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 meaningful and material 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>	Drilling continues in hole EL17D06 and that information will be reported in due course. As reported previously, drill holes are also planned for the Arlington and St Louis EM which has not yet been conducted. 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 <i>Figures 1, 2 and 3</i> 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.