MINOTAUR EXPLORATION LIMITED
ACN 108 483 601
ASX: MEP

26 June 2020

ASX Release

ADI grant recognises Peake and Denison project potential, South Australia

Minotaur Exploration Ltd (ASX: MEP, 'Minotaur') has been awarded a $300,000 Accelerated Discovery Initiative (ADI) grant by South Australia's Department of Energy and Mining for Minotaur's 100% owned Peake and Denison project, located 750km NNW of Adelaide (Figure 1). The grant, adjudicated from a competitive field, provides funding support for a program of work comprising geophysical surveys and follow-up drilling.

ADI Grant

The South Australian Government's ADI grant recognises the technical merits of Minotaur's planned ground-based Audio Magnetotelluric (AMT) surveys and follow-up diamond drilling within the Peake and Denison area. Minotaur will receive up to $300,000 toward work program costs.

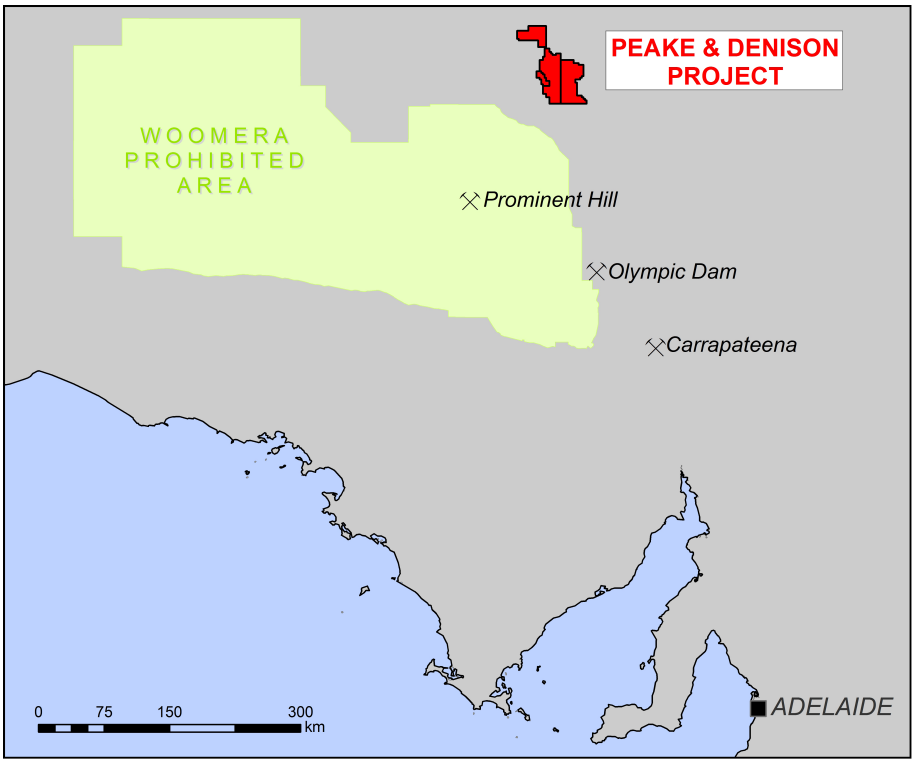

Figure 1: Location of Peake and Denison Project

Exploration Model

Potential for Iron Oxide Copper Gold (IOCG) style mineralisation is evident within the Peake and Denison area with copper mineralisation in magnetite-chalcopyrite-pyrite breccia recorded in historic drilling. Intense Fe-Na-Ca alteration was recently dated by Minotaur. The dates of the alteration assemblages are broadly the same age (1520-1470Ma) as pre-mineralisation alteration in the Cloncurry district of NW Qld which is known to be associated with IOCG deposits in that region, including the very large Ernest Henry Cu-Au deposit. Granite intrusion at Peake and Denison occurred at ~1530Ma - correlating with the same age range as the Williams – Naraku granites at Cloncurry (1547-1493Ma) linked to local copper-gold mineralisation.

Magnetite-associated Broken Hill Type (BHT) zinc-lead-silver mineralisation in metasedimentary and metavolcanic sequences subjected to later high-grade metamorphism, similar in style to the world-class Cannington silver-lead-zinc deposit in NW Qld, is similarly considered a possible mineralisation style at Peake and Denison.

Multiple strong magnetic anomalies occur across the Peake and Denison area. Minotaur considers these represent targets prospective for both IOCG and BHT styles of mineralisation (Figure 2). A select number will be tested through ADI funding support.

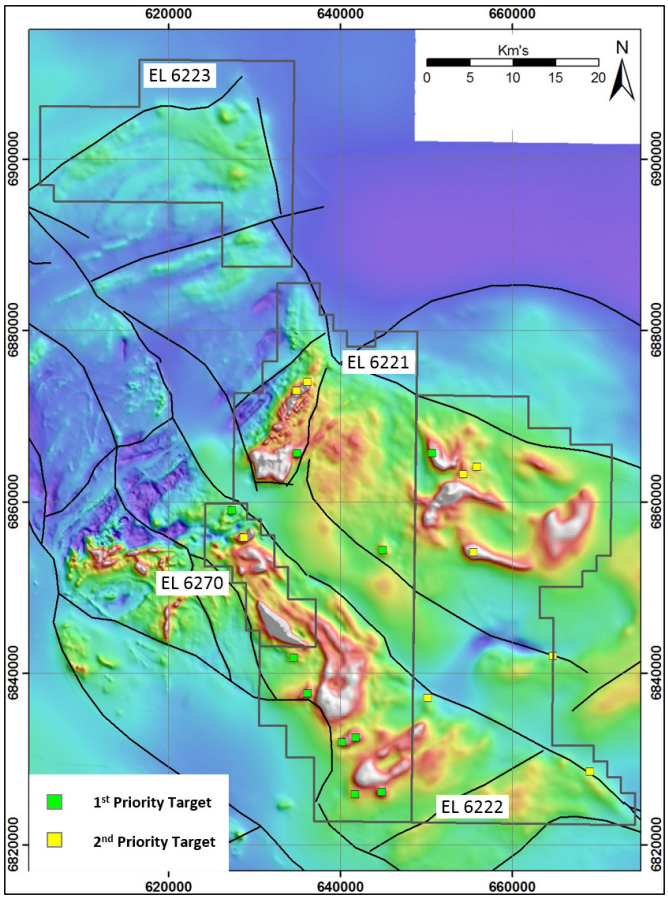

Figure 2: Priority magnetic anomalies throughout the Peake and Denison project area

Work Plan

Several discrete priority targets have been defined using innovative 3D magnetic cube modelling and conventional 2D and 3D magnetic and gravity modelling. Minotaur proposes to collect AMT data over 4-6 targets to help rank them prior to drill testing. All of the targets lie under cover, with modelled depth to top ranging 100-300m. AMT is a geophysical technique that maps conductivity possibly related to mineralisation and is particularly well suited to areas of deeper cover where other electrical geophysical techniques such as IP and EM are not suitable.

Two targets are presented below for illustration: the Leichhardt/A7V3 IOCG target (Figures 3-5) and Mawson BHT target (Figures 6-8), with AMT planned across both anomalies.

Subject to results of the AMT survey, it is expected 2-3 targets could proceed to drilling status.

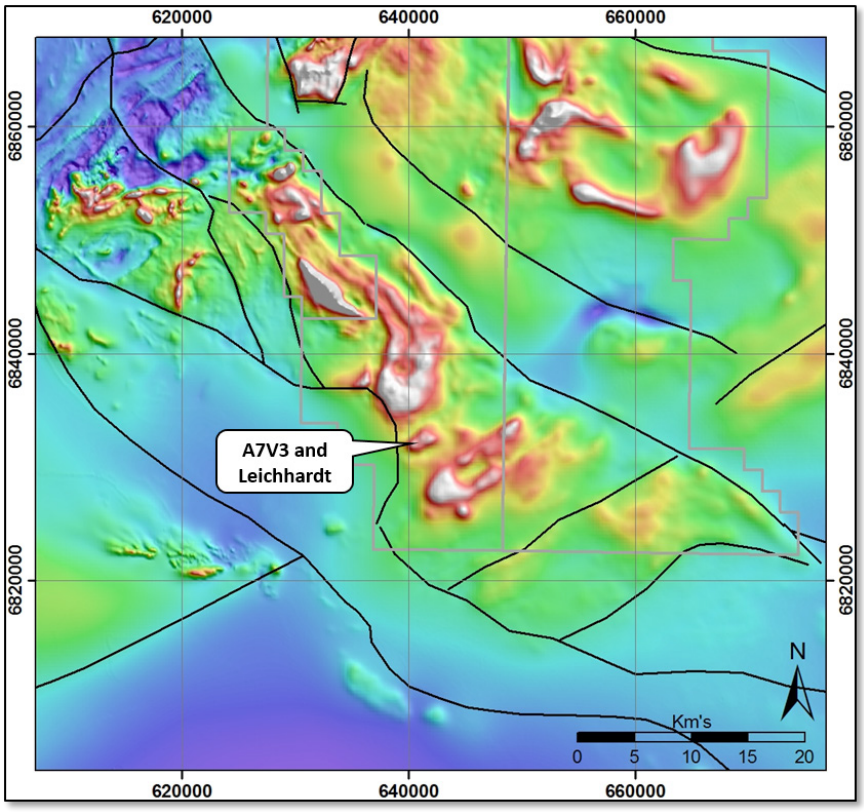

Figure 3: Twin-peaked A7V3 - Leichhardt IOCG target magnetic anomaly

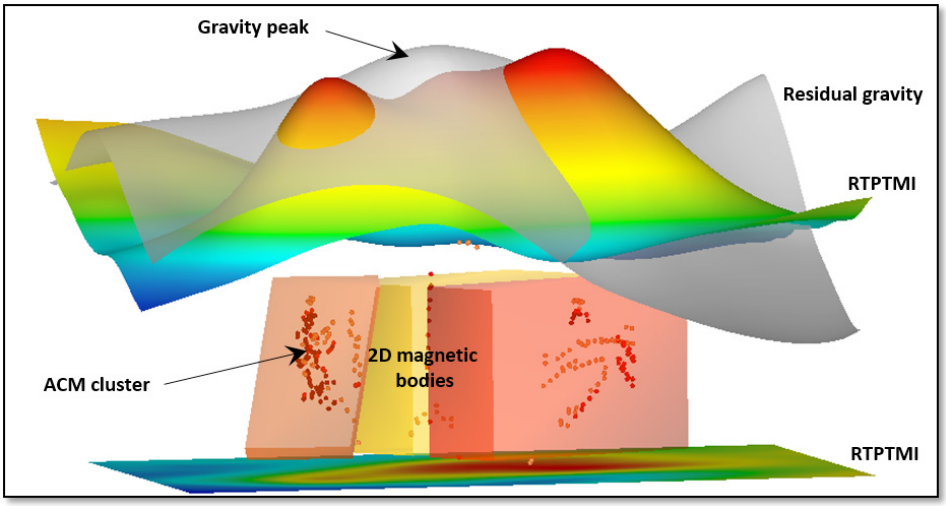

Figure 4: A7V3 -Leichhardt target with 1VD gravity and RTPTMI images, 2D magnetic model and AMC 3D magnetic cube clusters

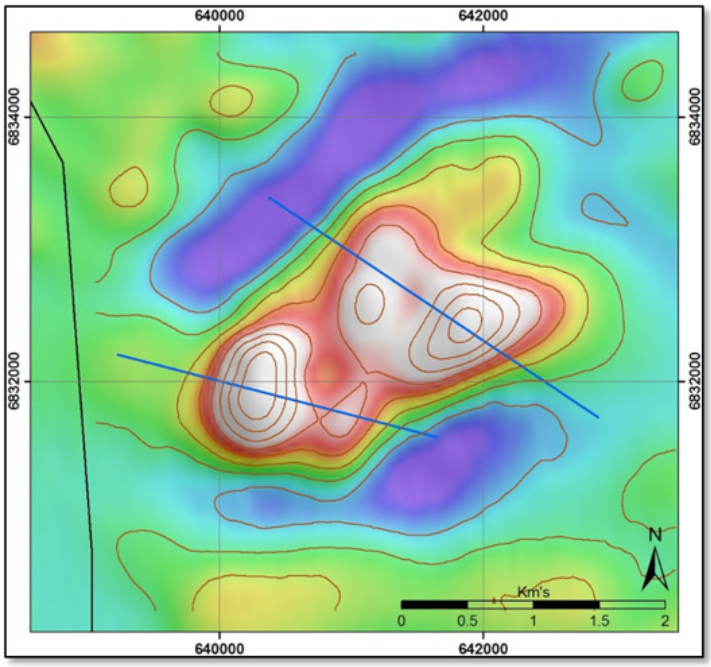

Figure 5: RTP1VD magnetic image with contours highlighting the twin peak anomalies (A7V3 on left and Leichhardt on right). Single lines of AMT are planned over each magnetic peak

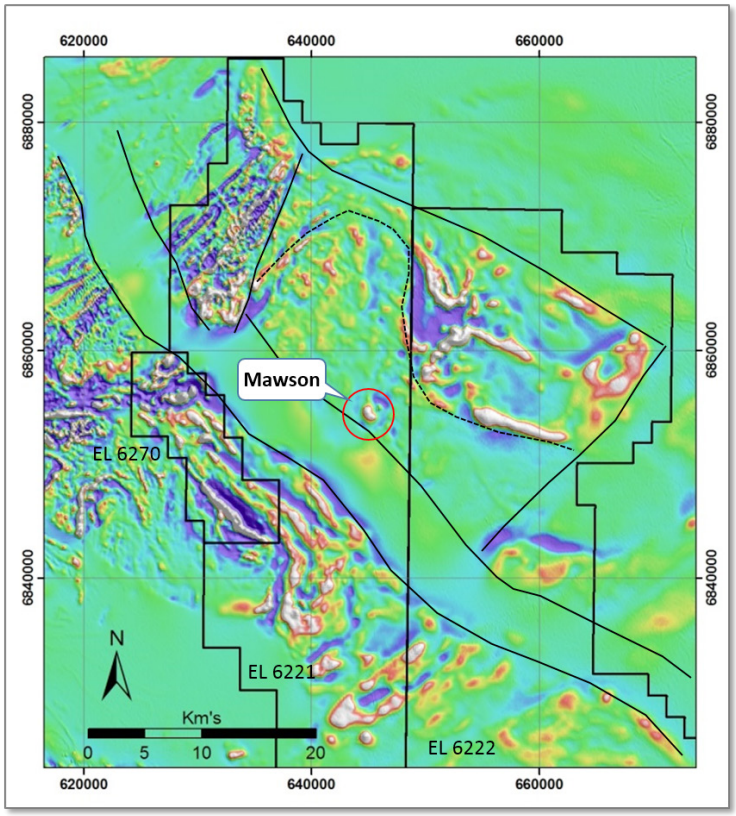

Figure 6: 1VD Magnetic signature of Mawson (1000nT, 0.8mGal).

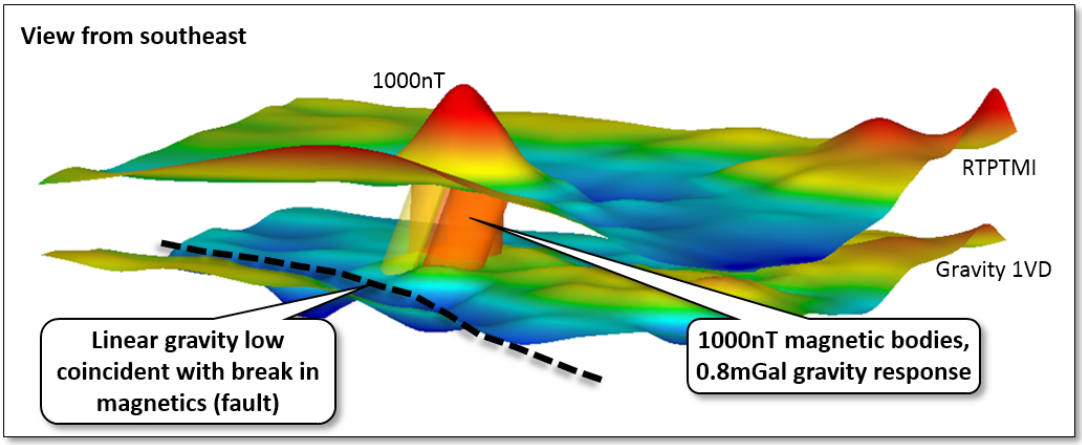

Figure 7: Mawson target with 1VD gravity and RTPTMI images and 2D magnetic model

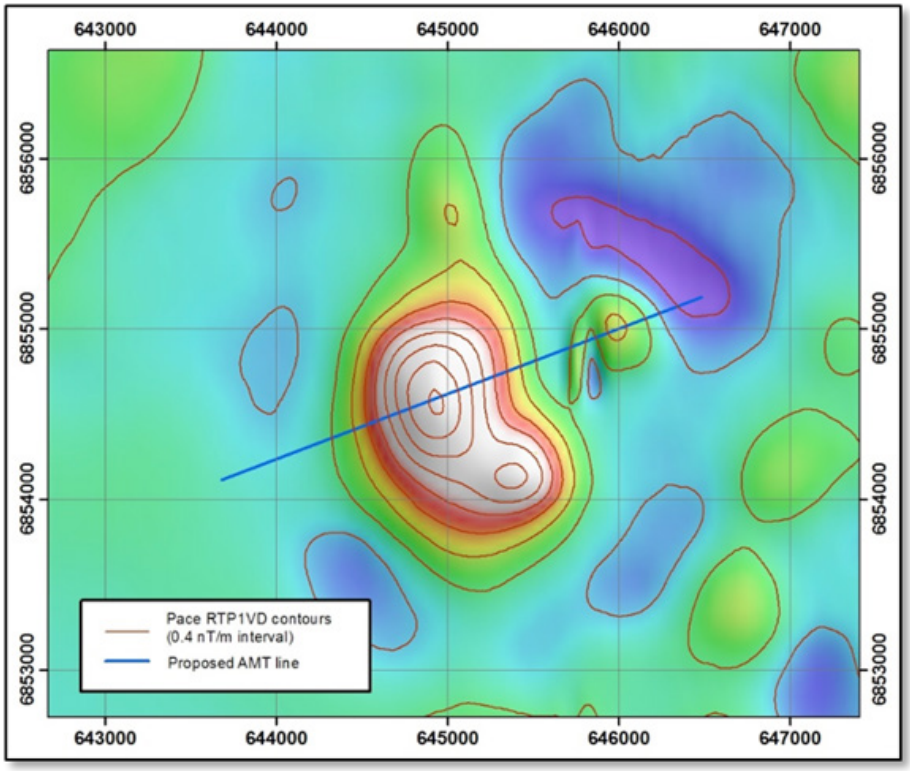

Figure 8: Mawson target RTP1VD magnetic image with contours highlighting the northern and southern zones. A single line of AMT is planned over the dense magnetic northern zone.

Next Steps

The AMT survey is the first step of the proposed work program and will be conducted over the coming months by a geoscience contractor.

Company Comment

Minotaur welcomes the South Australian Government's continued funding support for mining and exploration activity through the new ADI. This is particularly beneficial to Minotaur as we deploy our successful Cloncurry exploration tool box into the covered area of the Peake and Denison Inlier of South Australia. This area is vastly under explored and new data collected via this next phase of exploration will be of great benefit to the State.

This report is authorised by Mr Andrew Woskett, Managing Director, Minotaur Exploration Ltd. For further information contact Mr Glen Little, Exploration & Business Development Manager on 08 8132 3400.

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.

JORC Code, 2012 Edition, Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*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.*	• Dating of alteration minerals from historic drill holes in the project area were completed as part of an industry and university study titled "U-Pb" geochronology of the Peake and Denison region. U-Pb zircon geochronology (dating) was conducted by Laser-Ablation Inductively-Coupled Plasma-Mass Spectrometry (LA-ICP-MS) at the University of Adelaide. Analyses were carried out using a Resonetics M-50-LR 193-nm Excimer laser microprobe coupled to an Agilent 7700cx Quadrupole ICP–MS. • For the geophysical modelling; 3D magnetic cube modelling and conventional 2D and 3D magnetic modelling was conducted using GSSA pre-competitive GCAS (Gawler Craton Airborne Survey) dataset. 3D magnetic cube modelling was conducted by Archimedes Consulting using proprietary software. Conventional 2D modelling was conducted using ModelVision and unconstrained 3D inversion of the magnetic data used UBC mag3d. Results of this modelling should be considered indicative only and do not make any representation to mineralisation potential.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• Zircon data (used for dating) were corrected for mass bias, elemental fractionation and instrument drift based on the measured isotopic ratios of the primary zircon reference GJ-1 (TIMS normalization data: 207Pb/206Pb = 608.3 Ma, 206Pb/238U = 600.7 Ma, 207Pb/235U = 602.2 Ma; Jackson et al. (2004)). Secondary reference standards Plesovice and 91500 were analysed concurrently to measure data accuracy by standard–sample bracketing every ~15 unknown analyses. Throughout the analytical sessions, Plesovice and 91500 yielded respective weighted mean ages of 206Pb/238U = 337.7 ± 1.9 Ma (MSWD = 1.3, n = 9), and 207Pb/206Pb = 1073 ± 28 Ma (MSWD = 1.7, n = 7), respectively. Both ages are within uncertainty of the known values for the standards. • Titanite data (used for dating) were corrected using

Criteria	JORC Code explanation	Commentary
		the MKED-1 titanite standard. MKED is sourced from a coarse pink calcite and diopside vein that cuts banded diopside-K-feldspar-scapolite skarn rocks of the Elaine Dorothy Cu–Au–REE prospect and has been published on by Spandler et al. (2016, Chemical Geology 425, 110-126). ID-TIMS data for MKED are 206Pb/207Pb, 207Pb/235U, and 206Pb/238U ages of 1521.02 ± 0.55 Ma, 1518.87 ± 0.31 Ma, and 1517.32 ± 0.32 Ma respectively. A large titanite from Mt Painter is used as a secondary standard. This titanite has a 206Pb/238U age of 437.6 ± 3.6 Ma (ID-TIMS, Elburg et al., 2003, AJES 50, 611-631). In the course of this study, ages of 434.7 ± 1.5 (MSWD = 0.58, n = 19/20) and 436.4 ± 1.7 (MSWD = 0.89, n = 26) were obtained for the Mt Painter titanite.
	Aspects of the determination of mineralisation that are Material to the Public Report.	• Not relevant to this report
	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.	• Not relevant to this report
Drilling techniques	*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).*	• Not relevant to this report
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results*	• Not relevant to this report

Criteria	JORC Code explanation	Commentary
	assessed.	
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	• Not relevant to this report
	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.	• Not relevant to this report
Logging	*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.*	• Not relevant to this report
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	• Not relevant to this report
	The total length and percentage of the relevant intersections logged.	• Not relevant to this report
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	• Not relevant to this report
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	• Not relevant to this report
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• Not relevant to this report
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	• Not relevant to this report
	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.	• Not relevant to this report

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	Whether sample sizes are appropriate to the grain size of the material being sampled.	• Not relevant to this report
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• Zircon and titanite data were reduced using Iolite (version 3.65). Details of the data reduction methodology are outlined in Paton et al (2011). Age data were plotted using Isoplot v. 4.15 (Ludwig, 2012). Ages were not corrected for common Pb due to isobaric interference by 204Hg present in the Ar–He carrier gas, however, analyses were rejected on the basis of significant levels of 204Pb. • The quoted analytical uncertainties on individual analyses include contributions from the external reproducibility of the primary reference standard GJ-1 (approximately 2 %), and are given at the 2σ level. Uncertainties quoted with weighted mean and upper intercept calculations for pooled analyses are given at the 95 % confidence level.
	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.	• Dating of alteration minerals from historic drill holes in the project area were completed as part of an industry and university study titled “U-Pb” geochronology of the Peake and Denison region. U-Pb zircon geochronology (dating) was conducted by Laser-Ablation Inductively-Coupled Plasma-Mass Spectrometry (LA-ICP-MS) at the University of Adelaide. Analyses were carried out using a Resonetics M-50-LR 193-nm Excimer laser microprobe coupled to an Agilent 7700cx Quadrupole ICP–MS.
	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.	• Zircon data (used for dating) were corrected for mass bias, elemental fractionation and instrument drift based on the measured isotopic ratios of the primary zircon reference GJ-1 (TIMS normalization data: 207Pb/206Pb = 608.3 Ma, 206Pb/238U = 600.7 Ma, 207Pb/235U = 602.2 Ma; Jackson et al. (2004)). Secondary reference standards Plesovice and 91500 were analysed concurrently to measure data accuracy by standard–sample bracketing every ~15 unknown analyses. Throughout the analytical sessions, Plesovice and 91500 yielded

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Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	• Not relevant to this report
	The use of twinned holes.	• Not relevant to this report
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• Not relevant to this report
	Discuss any adjustment to assay data.	• Not relevant to this report
Location of data points	*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.*	• Not relevant to this report
	Specification of the grid system used.	• Not relevant to this report

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	Quality and adequacy of topographic control.	• Not relevant to this report
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	• Not relevant to this report
	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.	• Not relevant to this report
	Whether sample compositing has been applied.	• Not relevant to this report
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• Not relevant to this report
	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.	Not relevant to this report
Sample security	*The measures taken to ensure sample security.*	• Not relevant to this report
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• Not relevant to this report

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*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.*	• The Peake and Dension Project comprises 4 Exploration Licences, namely EL's 6221, 6222, 6223, 6270. All EL's are 100% owned by Minotaur Operations Pty Ltd, a wholly owned subsidiary of Minotaur Exploration Ltd. • Minotaur has a Native Title Mining Agreement for Exploration in place with Arabana Aborignal Corporation RNTBC that covers all for EL's.
	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.	• EL's 6221, 6222, 6223, 6270 are secure and compliant with the Conditions of Grant. There are no impediments to obtaining a licence to operate
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• Historical exploration by other companies across the project area includes airborne magnetic surveys and wide-spaced regional ground gravity surveys and 23 historical drill holes. This data was used to assess the project area for potential and some data was used for dating of alteration and modelling of geophysical models.
Geology	*Deposit type, geological setting and style of mineralisation.*	• Potential for Iron Oxide Copper Gold (IOCG) style mineralisation is evident within the Peake and Denison area with copper mineralisation in magnetite-chalcopyrite-pyrite breccia recorded in historic drilling. Intense Fe-Na-Ca alteration was recently dated by Minotaur. The dates of the alteration assemblages are broadly the same age (1520-1470Ma) as pre-mineralisation alteration in the Cloncurry district of NW Qld which is known to be associated with IOCG deposits in that region, including the very large Ernest Henry Cu-Au deposit. Granite intrusion at Peake and Denison occurred at ~1530Ma - correlating with the same age range as the Williams – Naraku granites in Cloncurry (1547-1493Ma) linked to local copper-gold mineralisation. • Magnetite-associated Broken Hill Type (BHT) zinc-lead-silver mineralisation in

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		metasedimentary and metavolcanic sequences subjected to later high-grade metamorphism, similar in style to the world-class Cannington silver-lead-zinc deposit in NW Qld, is similarly considered a possible mineralisation style at Peake and Denison.
Drill hole Information	*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:* ▪ *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.*	• No specific drill data is presented in this report.
	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.	• Age dating presented in the report comes from a variety of historic drill holes in the region including from outside of Minotaur's EL's. The location of the data is not deemed material as the proposed link between the age dates derived from those holes and alteration/mineralisation in the Cloncurry region is a concept only and none of the targets to be assessed by the proposed AMT survey have been drilled previously and therefore there is no direct link between Minotaur's proposed targets and those historic holes.
Data aggregation methods	*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.*	• Not relevant to this report

Criteria	JORC Code explanation	Commentary
	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.	• Not relevant to this report
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Not relevant to this report
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *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').*	• Not relevant to this report
Diagrams	*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.*	• The location of the priority targets is included in Figure 2 and examples of specific targets where AMT surveying is proposed are included in Figures 3-8.
Balanced reporting	*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.*	• Information presented in this report is relatively brief as all targets proposed for AMT surveying have no previous exploration data other than magnetics and gravity. None have been drilled previously and at present are conceptual until AMT data is collected and any of those targets are subsequently drill tested.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological*	• No substantive exploration data has been omitted

Criteria	JORC Code explanation	Commentary
	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.	
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• The next phase of exploration is to conduct AMT surveying over a number of select targets. That survey is expected to be conducted later in 2020 and results will be presented once data is received and interpreted.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Figure 2 shows the location of targets of interest to Minotaur but have had no on-ground exploration conducted to demonstrate the existence of mineralisation. Figures 3-8 show details of conceptual targets only.