

Quarterly Report

Period ended 31 December 2020



Minotaur Exploration Limited ACN 108 483 601 ASX: MEP
www.minotaurexploration.com.au

CORPORATE

Cash on hand at 31 December 2020 was \$7.68 million, as detailed in the accompanying Appendix 5B. Exploration expenditure in the December Quarter amounted to A\$1.94 million.

Minotaur's market value appreciated significantly through the Quarter reflecting its 25% equity in the Great White Kaolin JV with Andromeda Metals (ASX: ADN). Andromeda's capitalisation culminated at ~\$600 million¹, that suggesting the market values 100% of the project at ~\$800 million², while Minotaur contemporaneously was capitalised at ~\$82 million³. Directors reasonably postulate that Minotaur's share price offers substantial upside potential⁴. Minotaur expects issue of the project definitive feasibility study in the first half of 2021, supported by firming commitments to product off-take, will better inform project valuation.

In pursuance of the discovery and definition of copper-gold and gold systems and base metals the Company is actively seeking new opportunities around Australia. Accordingly, Minotaur moved to fulfil ownership of the Pyramid gold tenement package⁵ and is assessing other prospects.

EXPLORATION - Queensland

Eloise JV (OZL 70%: MEP 30%)

OZ Minerals has an ongoing obligation to fund the Eloise JV with a further \$2 million through 2020-2021 and the parties are considering opportunities, including additional ground EM surveys over strategic/structural zones adjacent the Levuka Shear Zone that hosts the Jericho and Eloise copper-gold deposits. Field activities are able to resume in Q2 2021.

¹ ASX data shows ADN closing price at 31 December 2020 was \$0.275 and with ~2.153b shares on issue had market capitalisation of \$592 million

² This methodology ascribes \$Nil value to all other assets (including cash) in either company

³ ASX data shows MEP closing price at 31 December 2020 was \$0.165 and with ~498.5m shares on issue had market capitalisation of \$82.25 million

⁴ For its 25% project equity Minotaur's proportionate interest would be ~\$200 million and its proportionate share price would be ~\$0.40

⁵ Refer MEP report to ASX dated 17 November 2020, *Minotaur confirms acquisition of Pyramid Gold project*



QUEENSLAND

Breena Plains JV (SFR 100%: OZL/MEP to earn up to 75%)

Ground EM surveys were conducted across two structural/stratigraphic corridors in the eastern sector of the project area, (Figure 1), targeting ISCG and BHT styles of base metal mineralisation under +200m of cover.

Corridor 1 was completed utilising funding from the Geological Survey of Queensland's (GSQ) Collaborative Exploration Initiative (CEI), secured by Minotaur under competitive application. The CEI provided up to \$200,000 to cover 100% of the survey costs. Minotaur wishes to acknowledge the ongoing support of the GSQ to mineral explorers through these competitive CEI schemes. Corridor 2 was funded by OZ Minerals under the Breena Plains JV.

Results of the survey were disappointing with no basement conductors identified; however the JV believes the strategy is appropriate and is planning more surveys within the project area. Field work is able to resume in Q2 2021.

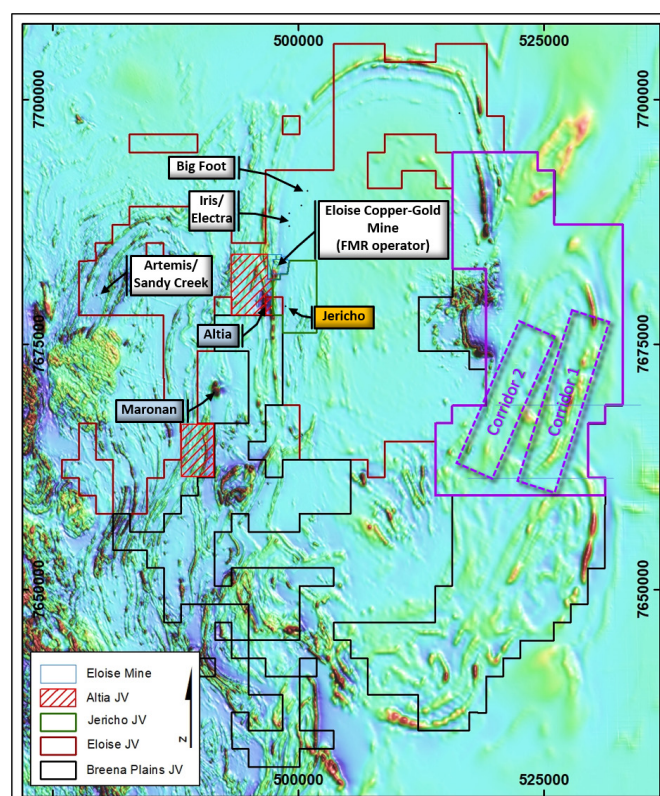


Figure 1: RTP 0.5VD magnetics showing Breena Plains tenements and area where further EM surveys are to be focused



QUEENSLAND

Windsor Project

Results from the 3D IP/resistivity geophysical survey conducted at the Warrawee VMS base metal prospect downgrade Warrawee's potential. Assessment of possible drill targets at each of the Royale and Orewin prospects continues.

Pyramid Gold Project

Minotaur completed its due diligence and entered into a Sale and Purchase Agreement (S&PA) on 17 November to acquire 100% ownership of the Pyramid Gold Project from Avira Resources Ltd (ASX: AVW). Under the S&PA Minotaur will pay \$150,000 cash (including the \$20,000 Option fee already paid) and allot \$100,000 in MEP shares (based on a 5-day VWAP) to the Vendor in return for transfer of titles. On Minotaur's publication of a JORC Resource of at least 25,000 oz Au grading not less than 1.8g/t Au Minotaur will pay \$75,000 cash, otherwise within 24 months of Completion Minotaur will allot \$75,000 in MEP shares. A 1.5% NSR will apply to the first 50,000oz Au produced.

The Pyramid tenement group is located 180km south of Townsville (Figure 2). The project, covering 150km² embraces two main areas prospective for gold, being the West Pyramid Range and East Pyramid Range (Figure 3). Minotaur is attracted to the project by the very credible drilling history and an extensive geochemical database, positioning Pyramid as a compilation of advanced gold exploration prospects.

West Pyramid Range offers significant potential to expand the gold mineralisation footprint defined through historic work, especially along an 8km section of the Gettysberg Fault corridor where significant gold mineralisation is known to occur at Sellheim, Gettysberg, Marrakesh and Pradesh prospects. The East Pyramid Range is less advanced, however Minotaur is of the view the area offers potential for Intrusion Related Gold Systems (IRGS), similar in style to other well-known gold deposits in the district (Figure 2) such as Mount Leyshon (+3.5Moz) and Mount Wright (+1Moz).



QUEENSLAND

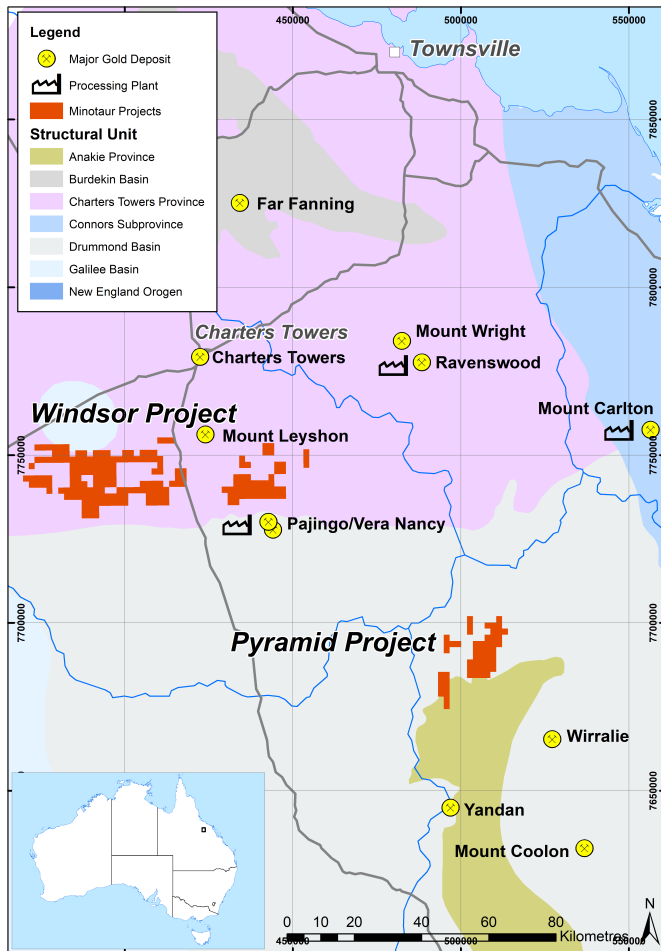
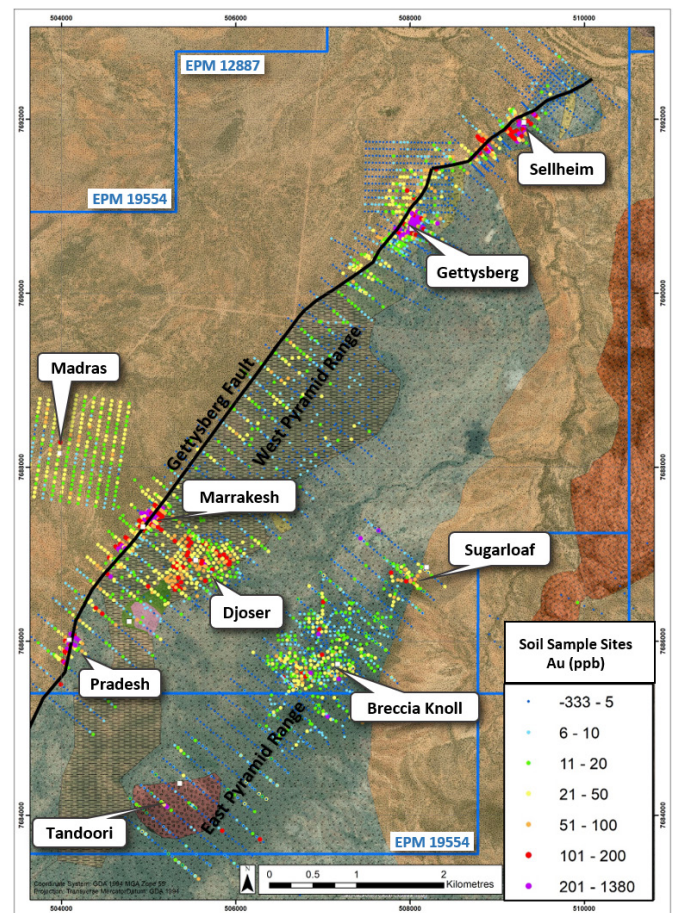


Figure 3: West Pyramid and East Pyramid Ranges gold-in-soil anomalies and main prospect locations

Figure 2: Location of Pyramid Project, Queensland





QUEENSLAND

The most significant gold occurrence is Gettysberg where Minotaur had planned to conduct drilling in December 2020; the areas of initial drilling focus are shown in Figure 4. Unfortunately, Qld closed its borders to South Australia due to a COVID-19 outbreak in Adelaide, those not reopened in time for drilling before the end of the field season.

Gettysberg is the most advanced prospect within the Pyramid project and remains highly prospective for additional gold mineralisation. Previous drilling covers around 600m of strike defining an NNE gold envelope around 500m long, ranging 25m-100m wide (Figure 4) to a vertical depth of 165m. The gold envelope plunges shallowly NNE. Mineralisation is primarily hosted in sandstone that is sericite altered and variably quartz-veined with attendant silica alteration. Gold mineralisation appears to be later and associated with dark chlorite and fine-grained sulphide (pyrite +/- arsenopyrite) in fracture veinlets and breccia where more advanced.

A thorough review of historic exploration drilling data has been undertaken and details of significant drill intercepts were reported on 17 November 2020. Selected, stand-out historic gold assays include:

- 35m @ 4g/t Au (MGTRC016)
- 15m @ 4.22g/t Au (MGTRC018)
- 8m @ 7.31g/t Au (MDRC031)
- 23m @ 3.22g/t Au (MDRC033)
- 12m @ 4.8g/t Au (MDRC034)
- 35m @ 2.22g/t Au (MDD02)
- 20m @ 2.18g/t Au (MGTRC009)
- 16m @ 2.6g/t Au (MGTRC020)

Drilling at Gettysberg is expected to commence upon cessation of the NE Queensland wet season, toward the end of Q1 2021. Pending results of that drilling a more extensive exploration program is envisaged throughout 2021, primarily along the Gettysberg Fault corridor.

QUEENSLAND

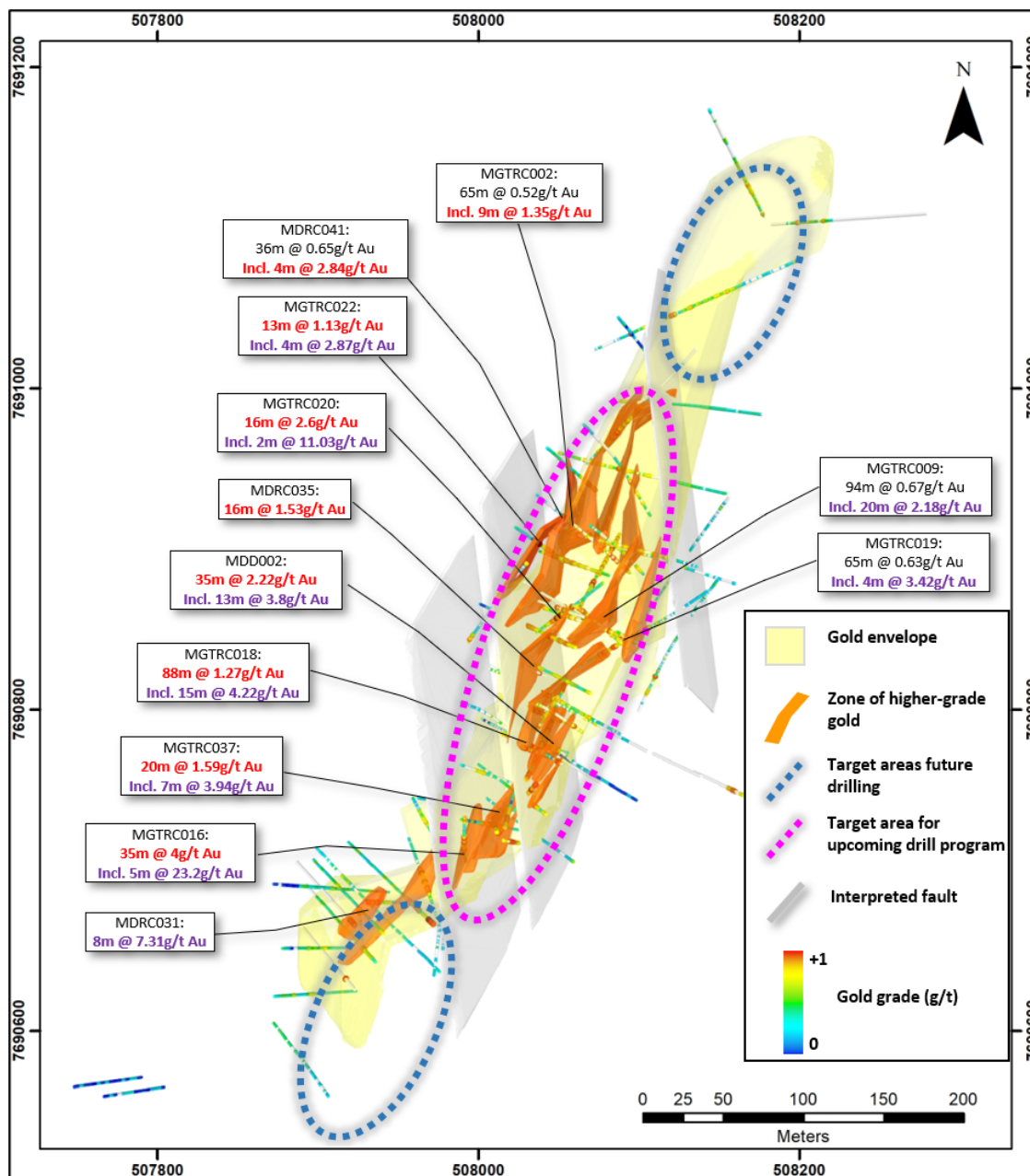


Figure 4: Gettysberg prospect showing location of drilling with gold assays, new geological model showing discrete 'shoots' of higher-grade gold mineralisation with selected drill intercepts included, interpreted faults and areas hosting possible extensions of mineralisation



EXPLORATION - South Australia

Peake & Denison Project

Minotaur's Peake and Denison project, located 750km NNW of Adelaide, was assessed for Iron Oxide Copper Gold (IOCG) style mineralisation and magnetite-associated Broken Hill Type (BHT) zinc-lead-silver mineralisation, similar in style to the Cannington silver-lead-zinc deposit in NW Qld.

Multiple strong magnetic anomalies are evident across the Peake and Denison area. Minotaur completed a ground Audio-Magnetotelluric (AMT) survey over 8 sites during November (Figure 5), the survey co-funded by a \$300,000 grant through the South Australia Government's Accelerated Discovery Initiative (ADI). No particularly strong AMT anomalies emerged from those sites, however assessment of the data is ongoing. The project remains prospective with numerous other magnetic and/or gravity anomalies requiring modelling and refinement to help determine the next steps for further on-ground exploration activity.

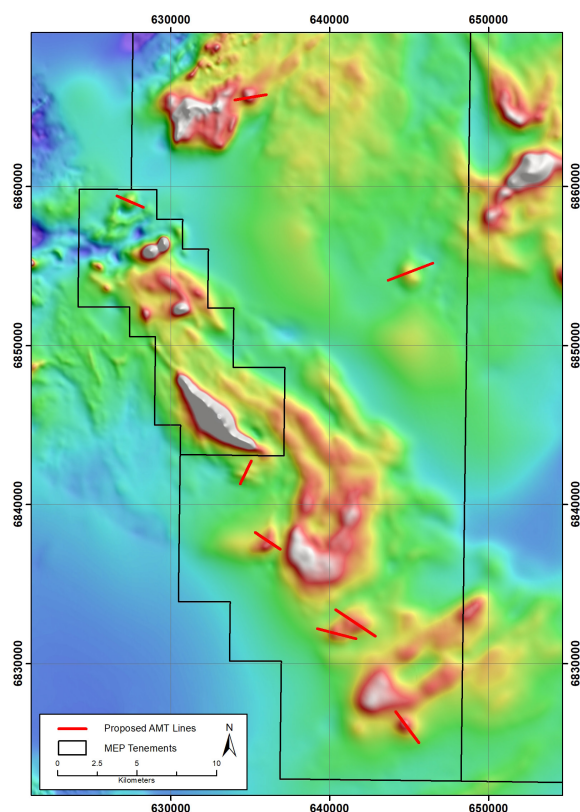


Figure 5: Peake and Denison project area with RTP magnetics and AMT survey lines



SOUTH AUSTRALIA

Great White Kaolin-Halloysite Project

Andromeda Metals Ltd (ASX: ADN), advanced to 75% equitable interest in the Great White Kaolin JV (formerly named the Poochera JV) and Minotaur is contributing its 25% share of project expenses from November 2020. Andromeda is targeting issue of a definitive feasibility study in H1 of 2021 and the start of operations at the Great White (formerly named Carey's Well) deposit (Figure 6) in early 2022.

The project was granted start-up Royalty reduction terms ('new mine rate') by the government of South Australia, until June 2026. A formal Mining Proposal is being documented for submission to the Regulator in the first Quarter of 2021.

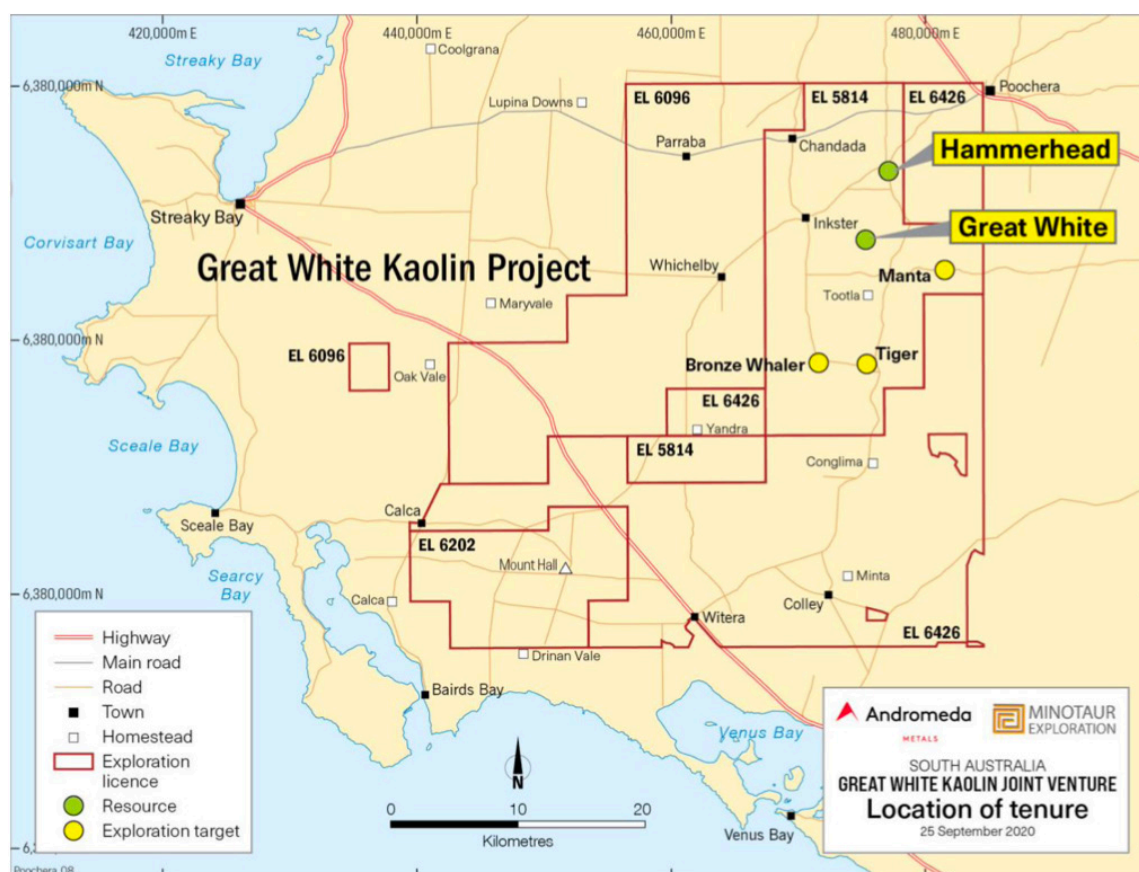


Figure 6: Location Plan Great White Kaolin JV tenements, Poochera district, SA



SOUTH AUSTRALIA

Halloysite R&D

Natural Nanotech Pty Ltd (NNT), a research and commercialisation venture jointly owned (50:50) by Minotaur and Andromeda, is investigating new technology applications of halloysite and kaolinite nanoparticles. Success will create new user markets for the halloysite nanotube fraction of the JV's high-grade kaolin deposits in South Australia and provide a potential global alternative to expensive manufactured carbon nanotubes.

Minotaur and Andromeda, through Natural Nanotech, are co-funding significant research programs at the University of Newcastle's Global Innovative Center for Advanced Nanomaterials (GICAN). Experimentation is continuing on optimising the conversion process for high halloysite kaolin into a variety of functionalised nanoporous structures including C60 and C70 fullerenes. With tunable pores, high surface areas, high-temperature stability, high charge-discharge capability, chargeability and conductivity, the resultant nanomaterials potentially have applications in battery, supercapacitors and semiconductor technologies, as peroxidase and antimicrobial agents in water treatment and for selective gaseous (CO₂, H₂) capture-storage-transport-conversion. As part of this program a demonstration battery cell based on halloysite-derived nanocarbon matrix is being prepared and the components of a CO₂ capture pilot plant are being assembled.

Patent applications are being prepared for the unique technology involved in producing carbon nanomaterials from halloysite-kaolin precursors and the subsequent processing routes for their specific environmental uses.

Project Generation Activities

Minotaur is constantly seeking to replenish its exploration avenues, particularly in copper and gold. The Company invites holders of tenements with an exploration history to make contact.



Compliance Statement

Payments made under a commercial lease agreement to a related entity of Dr Antonio Belperio, a Director of the Company, are reported in Appendix 5B, Section 6.1.

COMPETENT PERSON'S STATEMENT

Information in this report that relates to Exploration Results is based on information compiled by Mr G. Little, a Competent Person and a Member of Australian Institute of Geoscientists (AIG). Mr Little is a full time employee of the Company and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Little consents to inclusion in this document of the information in the form and context in which it appears.

This report contains information extracted from previous ASX releases which are referenced in the report and which are available on the company's website. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

December 2020 Quarter ASX Announcements

The following significant announcements were lodged with ASX during the December Quarter:

- *Natural Nanotech JV advances Halloysites uses*, 28 October 2020
- *Acquisition of Pyramid Gold Project*, 17 November 2020
- *Appointment of Financial Advisor*, 26 November 2020
- *Minotaur to vend out Highlands Cu project*, 14 December 2020

Andrew Woskett

Managing Director

Minotaur Exploration Ltd

T +61 8 8132 3400

www.minotaurexploration.com.au

Glen Little

Business Development & Exploration Manager

Minotaur Exploration Ltd

T +61 8 8132 3400

www.minotaurexploration.com.au