Quarterly Report

Period ended 30 September 2020



MINOTAUR EXPLORATION

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

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CORPORATE

Minotaur's cash position was solidified through a very successful placement and a strongly supported share purchase plan, demand requiring scale-back of both, collectively delivering $6 million to the Company (after costs). Cash on hand at 30 September 2020 was $9.6 million, as detailed in the accompanying Appendix 5B.

The SPP funding underwrites Minotaur's ability to contribute its 25% share of expenses from late 2020 in the Great White Kaolin JV with Andromeda Metals (ASX: ADN). Andromeda's market capitalisation appreciated markedly (about 250%) during the Quarter[1] upon sound project news flow, ending September at ~$270 million, that suggesting 100% JV project valuation of $360 million. Whereas Minotaur 's 25% proportionate inferred valuation of ~$90 million (allowing for all other assets in either entity being valued at $Nil) shows that relatively Minotaur is clearly undervalued, having a market capitalisation of $35.5 million[2]. Directors believe this differential will progressively narrow as the project moves closer to realisation and firm commitments to product off-take are secured.

For guidance, the Board's plan for participation in the Great White Kaolin JV is for the Company to maintain its 25% contributing share into production, presently projected to be mid 2022. The flow-on benefit to Minotaur of significant annual EBITDA revenues of ~$20 million (according to Andromeda's June 2020 PFS estimate) may position Minotaur as an exploration house cashed-up for growth with the flexibility to distribute profits to shareholders. Cautionary note: the Board cannot determine a dividend policy unless and until the JV project delivers profitable cash flow.

Minotaur's core business continues to be the discovery and definition of new mineral deposits within Australia, predominantly copper-gold and gold systems and base metals. The Company is aiming to establish an active exploration presence in the Charters Towers region of Queensland where multiple such systems have been found and developed into profitable operations spanning decades.

Minotaur thus struck a binding agreement to purchase the Pyramid Gold project, 180km south of Townsville. Subject to satisfactory finalisation of its due diligence, now nearing completion, Minotaur will acquire full ownership of the tenement package[3].

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[1] ASX data shows ADN closing price at 30 June 2020 was $0.051 with ~1.533b shares on issue and $0.16 on 30 September 2020 with ~1.711b shares on issue

[2] ASX data shows MEP closing price at 30 June 2020 was $0.045 and $0.072 on 30 September 2020 with ~493.4m shares on issue

[3] Refer MEP report to ASX dated 20 August 2020, *Minotaur to acquire under-explored gold tenement*

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EXPLORATION - Queensland

Eloise JV *(OZL 70%: MEP 30%)*

Two electromagnetic (EM) targets were tested by diamond drilling (Figure 1). The 'Seer' low conductance anomaly was tested by an initial hole (EL20D01). Minor copper mineralisation was observed over 16m from 250m down hole. The zone of mineralisation coincides with one of the modelled ground EM conductors however down hole EM data collected subsequently does not appear to support the design EM model. A review of the drill results and surface/downhole EM data is underway however it is unlikely the Seer prospect will be further pursued.

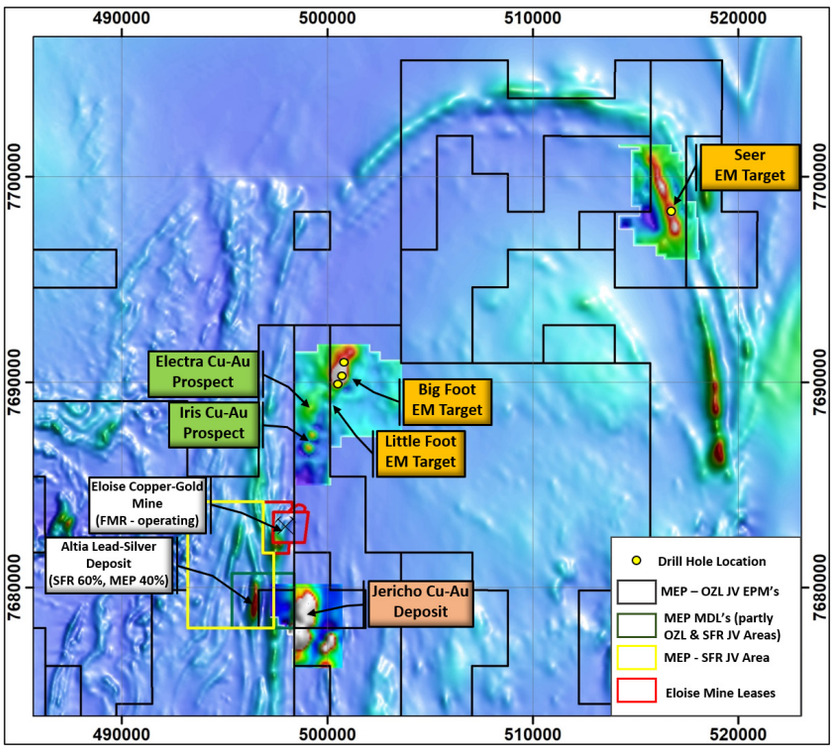


Figure 1: Big Foot and Seer drill hole locations with other EM anomalies and mineral occurrences over TMIRTP magnetics image.

The 'Big Foot' high conductance anomaly, north of the Iris and Electra copper prospects, was tested with three holes (EL20D02-EL20D04). Each hole intersected abundant pyrrhotite at the modelled EM plate positions, but only minor copper mineralisation associated with pyrrhotite was seen in each hole. Assessment of the complete geochemical assay suite will guide a future direction for the prospect.

Seer and Big Foot failed to deliver the desired drill results, a disappointing outcome, especially in view of Big Foot's proximity to the Iris-Electra Cu-Au mineralised systems. Nonetheless, 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.

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Breena Plains *(SFR 100%; OZL/MEP to earn up to 75%)*

Work on the Breena Plains JV was initiated through EM surveys across structural/stratigraphic corridors in the eastern sector of the project area (Figure 2). A first stage survey, comprising around 75-line kilometres crossing 25 km of a prospective structural corridor, commenced in October and will continue until early December.

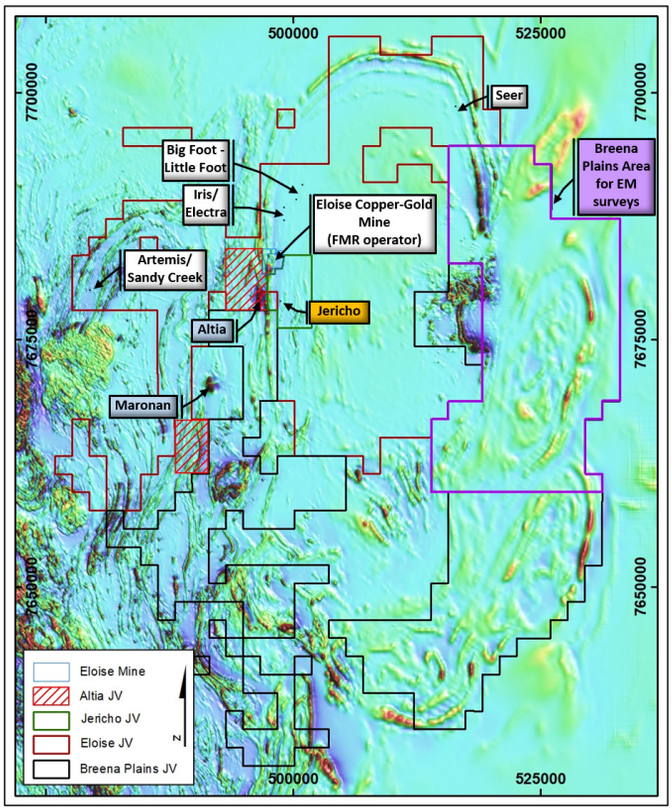


Figure 2: RTP 0.5VD magnetics showing Breena Plains tenements and area where EM surveys are to be focused

Pyramid Gold Project

Minotaur is close to finalising due diligence into the proposed purchase of the Pyramid project south of Townsville. Thus far, the opportunity continues to appeal and offers exploration potential to build on an impressive suite of historic gold intercepts.

[4] MEP report to ASX dated 20 August 2020, *Minotaur to acquire under-explored gold tenements, Queensland*

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Windsor Project

A 3D IP/resistivity geophysical survey resumed at the Warrawee VMS base metal prospect and was completed on 16 October. Modelling of the complex nature of the captured 3D data array is underway and will be assessed for possible deep drill targets.

Field reconnaissance was conducted at two new VMS targets: 'Royale' and 'Orewin' (Figure 3). Each anomaly underlies limited outcrop however mapping, rock chip and soil sampling gave strong indications of an exhalative-type horizon as is typically associated with base-metal VMS mineralisation. Assessment of potential drill targets at each prospect is proceeding.

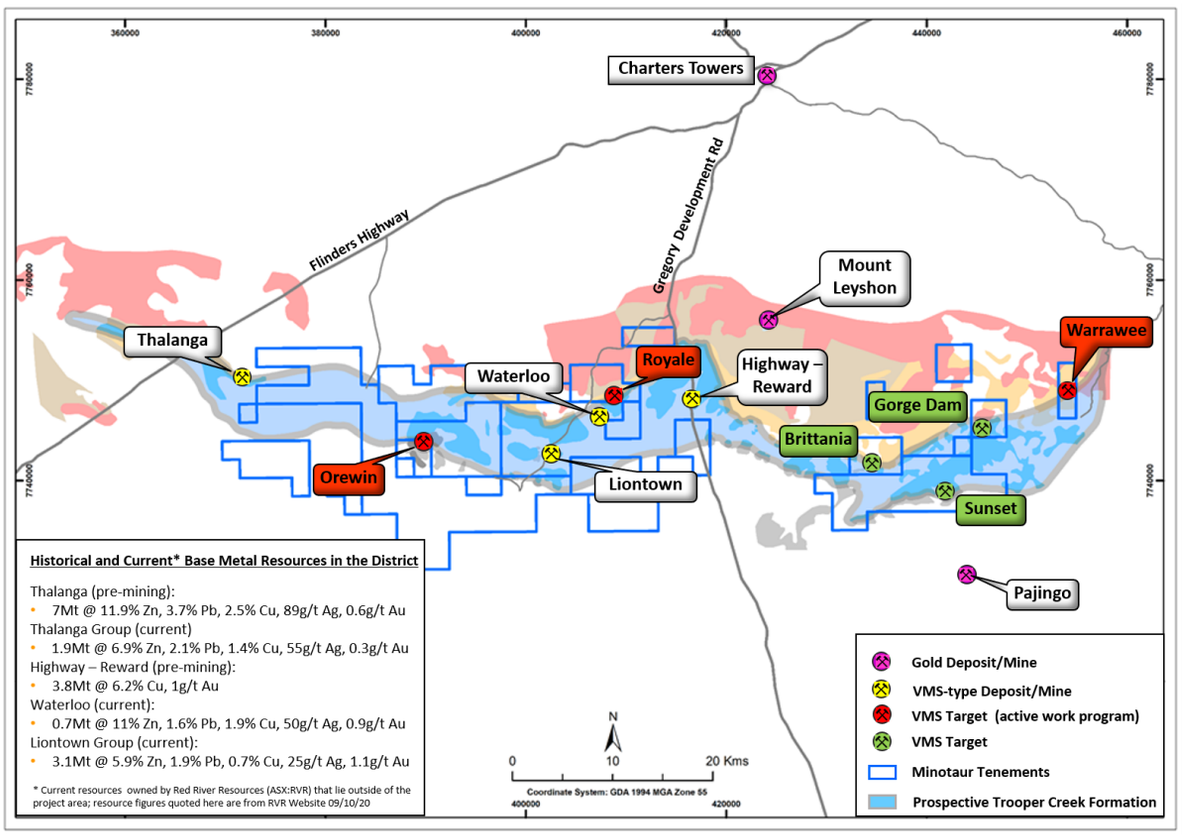


Figure 3: Windsor project showing location of Warrawee, Royale and Orewin prospects

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EXPLORATION - South Australia

Minotaur's 100% owned Peake and Denison project, located 750km NNW of Adelaide, exhibits potential 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 occur across the Peake and Denison area (Figure 4). Through November Minotaur will trial ground Audio-Magnetotelluric (AMT) surveys over 8 sites to generate drill targets, co-funded by a $300,000 grant through the South Australia Government's Accelerated Discovery Initiative (ADI).

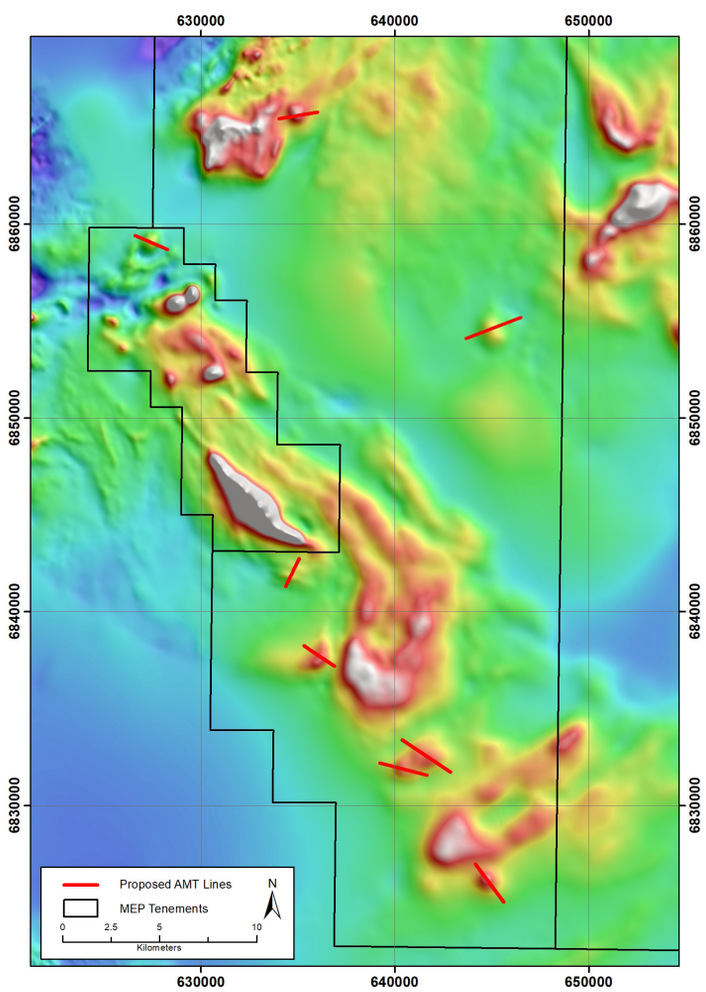


Figure 4: Peake and Denison project area with RTP magnetics and proposed AMT survey lines

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SOUTH AUSTRALIA

Great White Kaolin-Halloysite Project

Andromeda Metals Ltd (ASX: ADN), having earned 51% equitable interest in the Great White Kaolin JV (formerly named the Poochera JV), continues to advance the Great White halloysite-kaolin deposit towards a mine development decision. Andromeda expects to complete its 75% JV earn-in before end 2020, Minotaur ready to contribute its 25% share of project expenses from that point. Andromeda is targeting start-up of the Great White (formerly named Carey's Well) deposit in early 2022.

Halloysite is a nanotubular version of the clay mineral kaolin family, chemically identical to the more common, platy kaolinite. The JV deposits (Great White, Hammerhead, Tiger, Bronze Whaler, Manta, Camel Lake) contain variable natural halloysite-kaolinite blends, together making up the world's largest known accumulation of these natural nanotubes. The Great White deposit comprises, on average, 16:84 halloysite:kaolinite blend, rendering it ideal for the global high quality ceramics market. A newly defined resource for the Hammerhead deposit (ADN Report to ASX 29 Sept 2020) contains sub-domains high (>20%) in nanotubular halloysite, considered ideal as a bulk strengthening additive in concrete, or for selective upgrading for new technology applications.

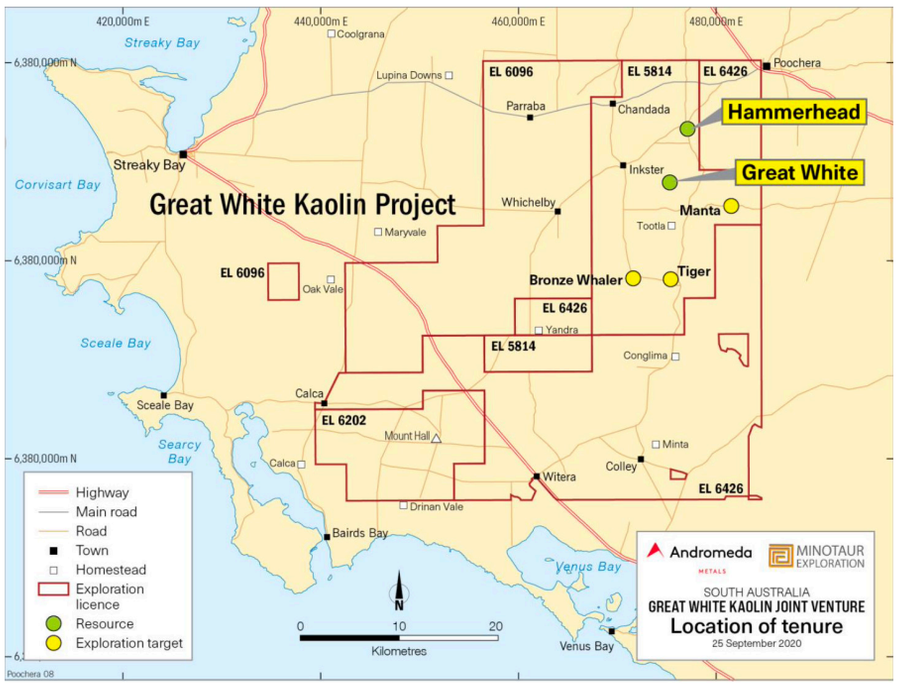


Figure 5: Location Plan Great White Kaolin JV tenements, Poochera district, SA

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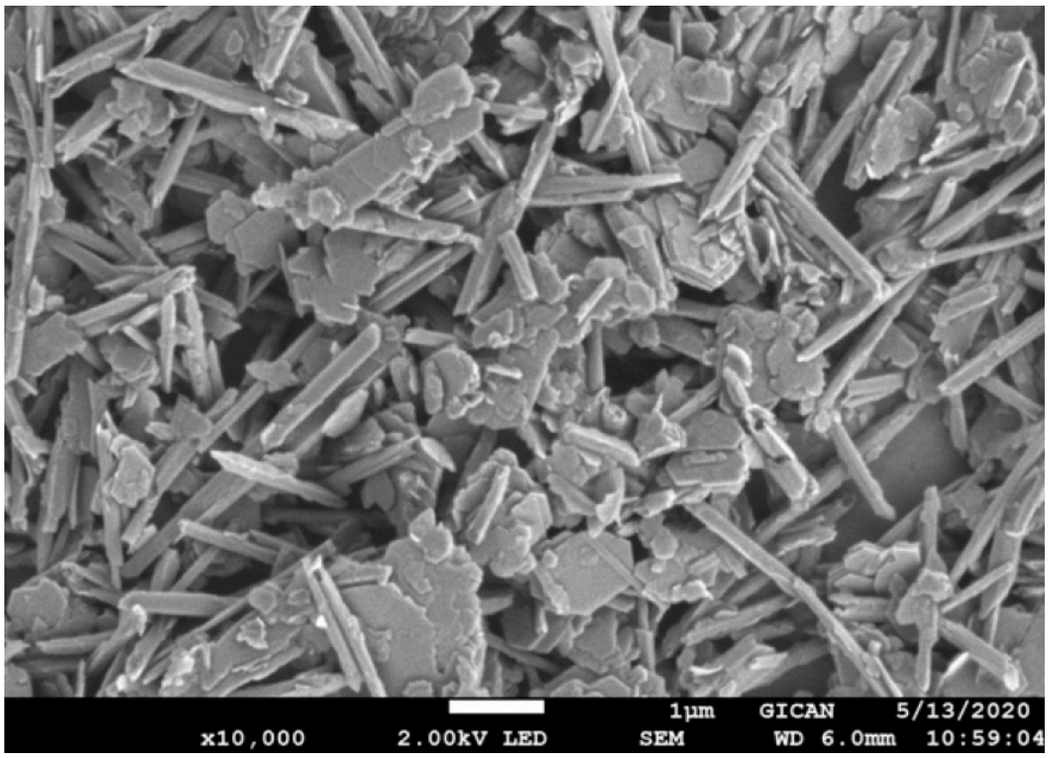


Figure 6: SEM microphotograph of mixed halloysite nanotubes and kaolinite platelets, typical of Great White Kaolin JV halloysite-kaolinite deposits

Halloysite R&D

Natural Nanotech Pty Ltd (NNT) is a research and commercialisation venture, jointly owned (50:50) by Minotaur and Andromeda, 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.

Natural Nanotech's inaugural project with the University of Newcastle's Global Innovation Center for Advanced Nanomaterials (GICAN) is to develop commercially attractive solutions to a range of environmental issues using nanoporous materials synthesised from natural halloysite-kaolinite mixtures and optimised for applications including:

- carbon capture and conversion
- hydrogen storage
- remediation of wastewater

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- detoxification of pollutants
- energy storage technologies
- antibacterial applications

The unique properties of the nanomaterials that make them so amenable to these applications are their enormous surface area per unit weight, their porous nature and differential charge capabilities between inner and outer surfaces. Having demonstrated potential applications at the laboratory scale, the GICAN team has started construction of a pilot plant for commercial scale sample preparation and testwork with particular reference to the carbon capture and conversion potential of Great White project halloysite.



Microporous and Mesoporous Materials 277 (2019) 229–236

Contents lists available at ScienceDirect

Microporous and Mesoporous Materials

journal homepage: www.elsevier.com/locate/micromeso

Halloysite nanotubes: Novel and eco-friendly adsorbents for high-pressure CO_2 capture

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Figure 7: Several academic research papers have been published in collaboration between University of Newcastle and NNT



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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.

September 2020 Quarter ASX Announcements

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

- 16 July 2020: *Jericho Maiden Resource Estimate*
- 19 August 2020: *Drilling resumes at Cloncurry*
- 20 August 2020: *Minotaur to acquire under-explored gold tenements, Queensland*
- 26 August 2020: *Minotaur completes oversubscribed Placement*
- 14 September 2020: *Company activities report*
- 23 September 2020: *Oversubscribed SPP garners $3.4 million*

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