



Quarterly Report

Period ended 31 March 2017

MINOTAUR EXPLORATION LIMITED ACN 108 483 601 ASX: MEP
www.minotaurexploration.com.au

Corporate

The value of Company investments in listed explorers improved in line with overall market trends. Exposure to Thomson Resources (ASX: TMZ) lifted to capitalise on its mooted, new joint venture for the Bygoo tin project in NSW. On market trades adjusted the overall pool valuation to \$1 million. With joint venture receipts the end of March Quarter cash balance is \$3.2 million.

A sale agreement for the Chameleon gold deposit was finalised and the first staged payment received accordingly. The sale of nickel mining rights over third party tenements at West Kambalda was finalised.

Solicitor Mr George McKenzie, an accomplished Native Title and commercial practitioner, joined the Board on 31 January 2017 following many years as principal of Finlaysons Lawyers in Adelaide.

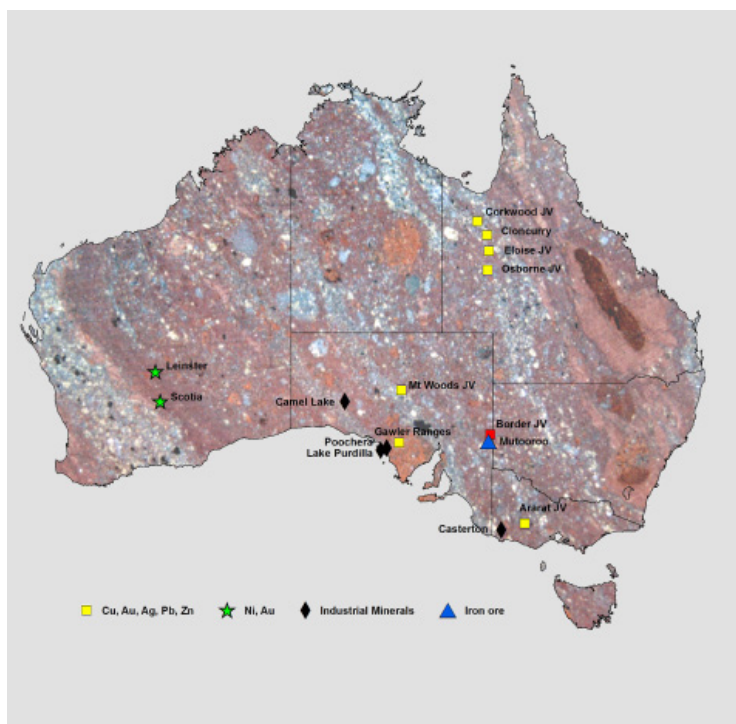


Figure 1: Minotaur Exploration's project locations

Project Location	Tenement Area km ²
South Australia [§]	6,459
Queensland [§]	3,270
Victoria [§]	295
Western Australia	273
Total Area	9,854

Table 1: Minotaur Exploration Limited's tenement areas, under application and/or held 100% and/or in joint ventures[§]



Exploration, R&D

QUEENSLAND

Minotaur is actively exploring along the Cloncurry mineral belt of Northwest Queensland. Proterozoic basement rocks prospective for iron oxide copper-gold (IOCG), iron sulphide copper-gold (ISCG) and Cannington-style lead-silver-zinc mineral systems (*Figure 2*) are obscured by up to 180m of conductive Mesozoic sediment cover, necessitating the finessed use of geophysical methods to locate drill targets.

No field work occurred on the Eloise and Osborne joint ventures during the extended wet season, however both projects have now reactivated with the return to dry weather.

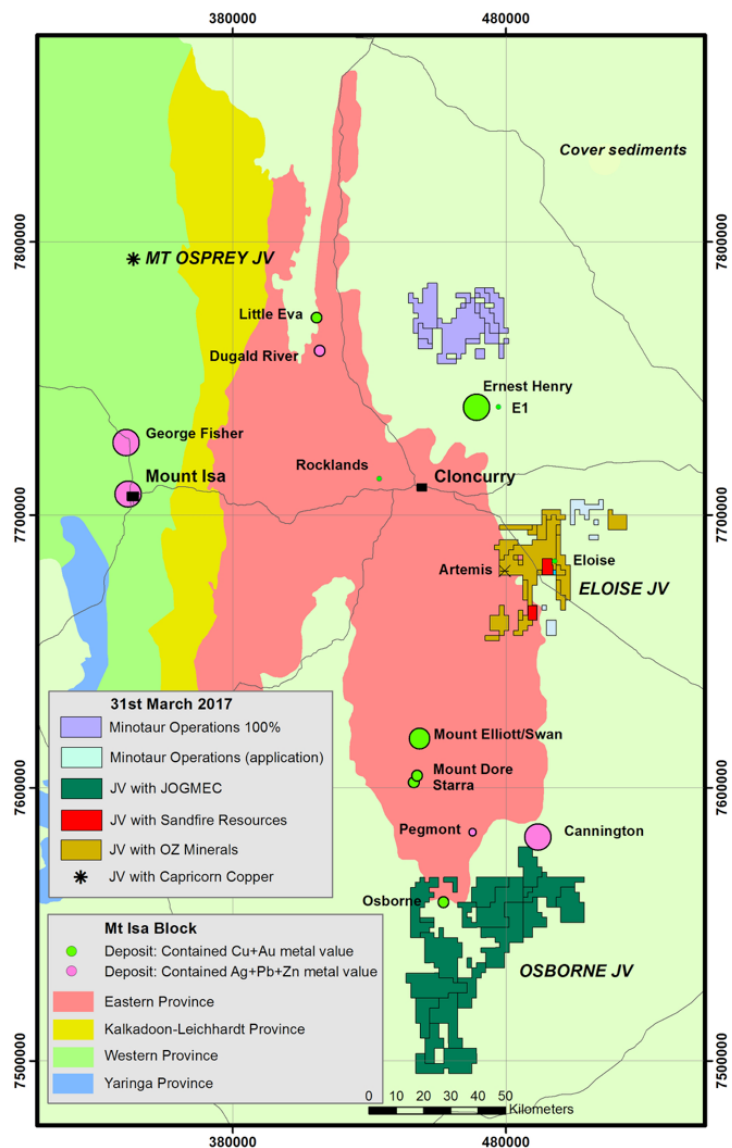


Figure 2: Location of Minotaur tenements in the Cloncurry region of Northwest Queensland



MINOTAUR
EXPLORATION

QUARTERLY REPORT 31 MARCH 2017



QUEENSLAND

Eloise Farm-In (OZ Minerals)

Minotaur 100% (except on those parts of MDL431 and EPM17838 where Sandfire Resources NL can earn 80%), Area 670km²

Native Title heritage clearances were obtained for proposed drill collar positions at the Iris-Electra copper-gold prospect. Cooperation provided by the Mitakoodi and Mayi claimant group is acknowledged.

OZ Minerals committed \$1.5 million to the joint venture program January through to June. A third phase, 3,700m drill program is underway at Iris-Electra (*Figure 3*). Drilling is initially focussed on the undrilled 'Electra' EM conductor along strike from 'Iris'. Modelling and interpretation of the Electra anomaly suggests that it is highly prospective for copper sulphide mineralisation, given the demonstrated relationship between high conductance and coexistence of chalcopyrite and pyrrhotite at both the adjacent Iris conductors and the Eloise mine some 5km distant.

The drill campaign seeks to build on highly encouraging results from the maiden drilling completed late 2016 at Iris (*Figure 4*), which indicated potential for a copper mineralised system with higher grades in the vicinity of EM conductors. This was evident in hole EL16D08 where a chalcopyrite rich zone returned 0.4m at 12.35% Cu and 14.3g/t Au (see ASX announcement dated 24 November 2016).

The Company secured new tenement EPM 26233, named 'Route 66', immediately south of the Eloise mine, along which a ground EM survey will investigate some 18km of strike along the Levuka Shear (*Figure 5*). This zone is interpreted to be a continuation of the Mt Norna Quartzite that hosts Eloise, Iris-Electra and Altia locally and Artemis, Sandy Creek, Maronan and Cannington deposits regionally.

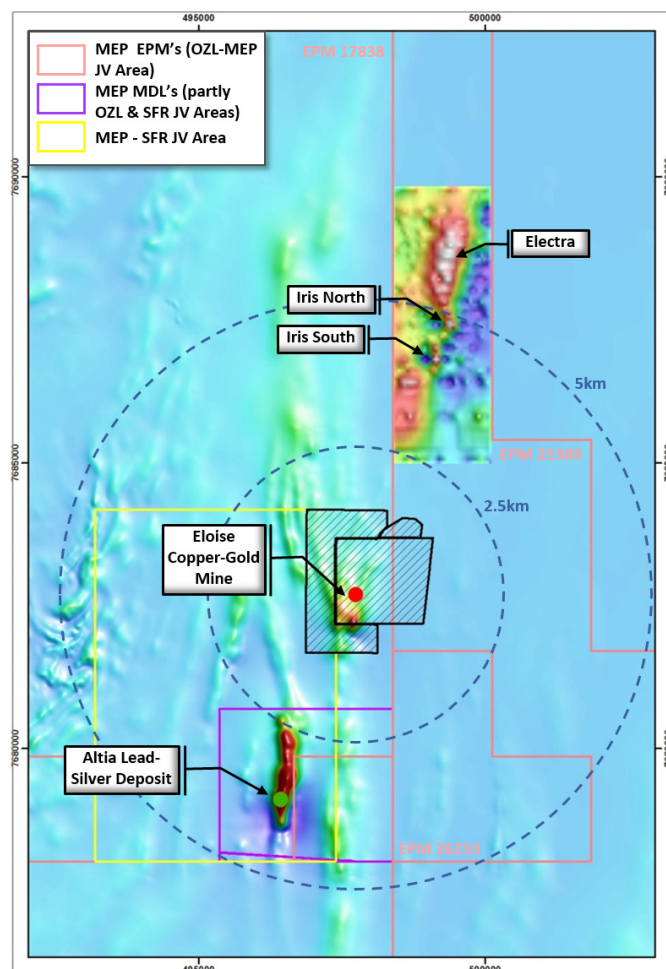


Figure 3: Eloise project depicting the Iris Cu-Au prospect and Electra EM target over RTP1VD magnetics. Locations of the Sandfire JV 'Altia' Pb-Ag deposit and the Eloise Mine shown for reference. The coloured image embracing Iris and Electra is Channel 35 of the X-component EM response where white and red are strong responses.

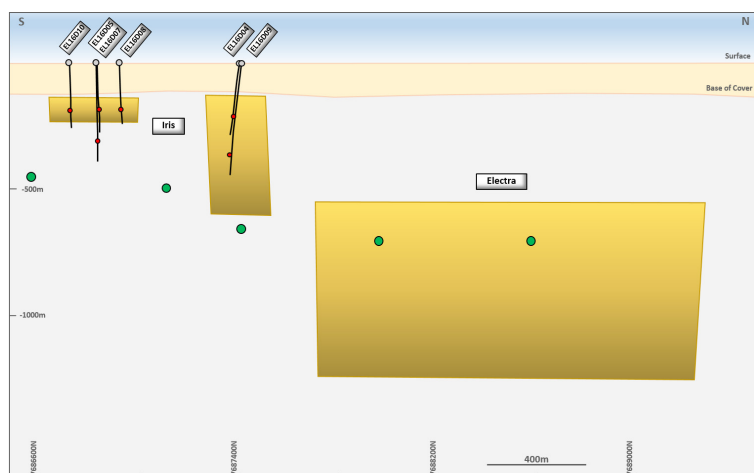


Figure 4: Long-section looking west showing Iris and Electra modelled EM conductors, 2016 drill traces and planned 2017 drill hole pierce points (green dots).



QUEENSLAND

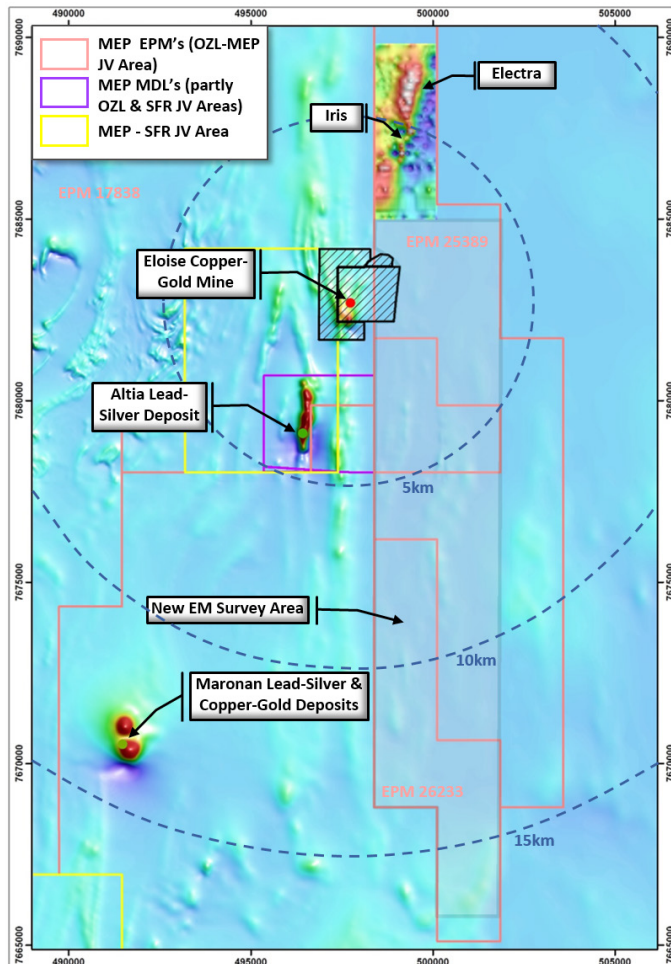


Figure 5: Eloise project depicting the Iris Cu-Au prospect, Electra EM target and new ground EM survey area on EPM 26233, over RTP1VD magnetics (and Channel 35 X-component EM at Iris/Electra). Locations of the Sandfire JV 'Altia' Pb-Ag deposit, the Maronan Pb-Ag and Cu-Au deposits and the Eloise Mine shown for reference.

JOGMEC Osborne Joint Venture

Minotaur 100%, Area 1,923km²

The 2016 field season at the Osborne project identified three geophysical anomalies for follow-up drilling where copper-gold and zinc-lead-silver mineralisation styles are targeted. Conductive basement targets were detected below sediment cover at the 'Winter', 'Lark' and 'Robin' prospects (Figure 6). Winter and Robin are prospective for Cannington style Zn-Pb-Ag mineralisation and Winter is interpreted as a possible analogue to Cannington itself – a low-amplitude positive magnetic anomaly within a broad and structurally complex magnetic low. A 700m diamond

hole in the June Quarter will test the magnetic body and multiple, coincident EM plates at Winter.

An infill ground EM survey at Robin will help refine the EM model and finalise the initial drill trajectory. Two conductive bodies are identified at Lark, where structurally-controlled copper-gold mineralisation is anticipated. New ground EM will close-off the EM plates and guide first-pass drill collar positioning.

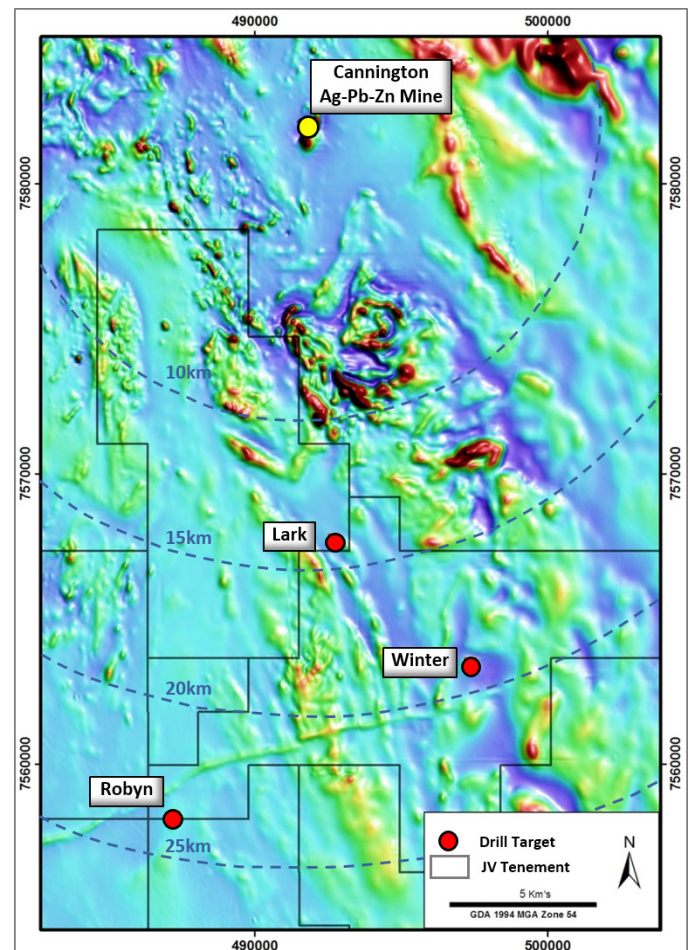


Figure 6: Osborne project - drill target locations over RTP magnetics image

Regional Cloncurry Project

Minotaur 100%, except in relation to EPM 8608 which has a net smelter royalty of 2% payable to South 32; Area 631km²

Minotaur seeks to introduce a new JV partner into the tenement package.



SOUTH AUSTRALIA

Prominent Hill Project

OZ Minerals 100% (Minotaur testing selected targets in collaboration with OZ Minerals), Area 3,532km²

Minotaur and OZ Minerals are collaborating in exploration around the Prominent Hill mine, through an exploration alliance.

Minotaur and OZ Minerals' geologists jointly finalised a follow-up work program for the Prominent Hill region, mainly focused on the Skylark Shear Zone (Figure 7), a structure identified as prospective for iron-sulphide, copper-gold style (ISCG) mineralisation. ISCG proof-of-concept drilling at the 'Bellatrix' target late 2016 showed that the Skylark Shear Zone hosts pyrrhotite associated copper-gold mineralisation. Field EM surveys are expected to start in the second Quarter.

Gawler Ranges Project

Minotaur 100%, Area 948km²

No activity during the reporting period.

Border Base Metal JV

Sumitomo 52.9%, Minotaur 47.1%, Area 443km²

Minotaur successfully divested four tenements on behalf of the joint venture with completion of the sale expected in the coming weeks. Minotaur retains EL 5079 hosting the substantial Mutooroo magnetite deposit.

Industrial Minerals - Research and Development

Minotaur 100%, Area 5,068km²

Research into potential new uses for high-halloysite kaolin, a natural alternative to manufactured carbon nanotubes, received a significant boost through an Innovation Connection Grant from AusIndustry for joint R&D with the University of South Australia's Future Industries Institute. This work during 2017 will look at the structural characterisation and new technology applications of halloysite nanotubes. Samples will be sourced from both the Carey's Well and Camel Lake kaolin- halloysite deposits.

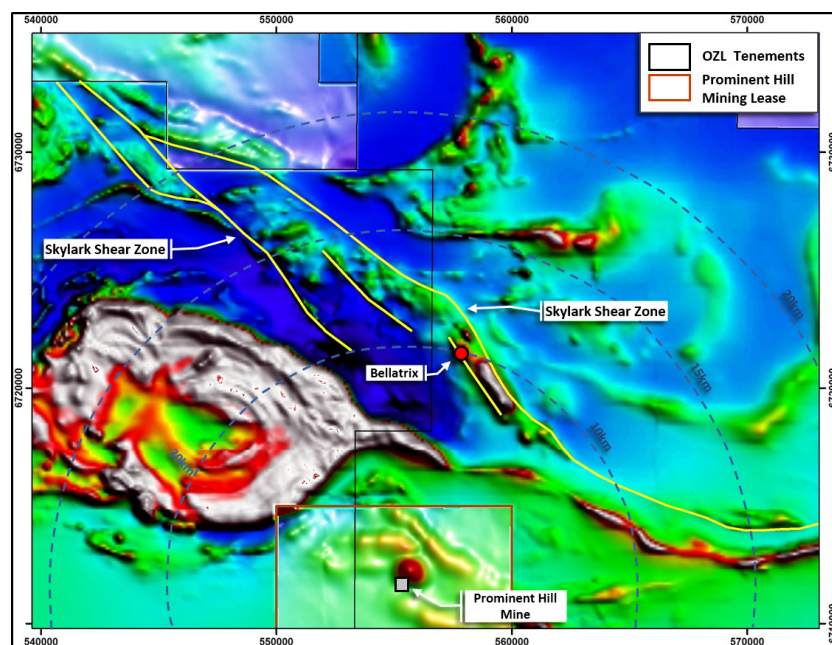


Figure 7: Location of Bellatrix and Skylark Shear Zone relative to Prominent Hill mine; background image is RTP magnetics

A PACE drilling supported investigation into the potential of groundwater brines in the western Gawler Ranges and Coober Pedy areas as sources of potassium and magnesium sulphates has been negatively impacted by Native Title heritage access issues and increasing red tape around drilling permissions.

WESTERN AUSTRALIA

Scotia Project

Minotaur 100%, Area 97km²

A sale and purchase agreement for the Chameleon gold deposit (E29/661) was finalised and the first of three staged payments received, with completion due in December.

Leinster Project

Minotaur 100%, Area 176km²

Minotaur seeks to divest these tenements and remain focused on copper-gold exploration in Queensland and South Australia. Minotaur invites buying interest in this package of nickel-gold prospective tenements south of Leinster.



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.

Note: March 2017 Quarter ASX Announcements

The following significant announcements were lodged with ASX during and since the March Quarter:

- Drilling resumes at Iris-Electra (18 April 2017)
- Company Update (11 April 2017)
- Minotaur to distribute tax credits to shareholders (20 March 2017)
- Chameleon sale agreement executed (2 March 2017)
- Director appointments (31 January 2017)

Andrew Woskett

Managing Director

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