



# Quarterly Report

Period ending 30 June 2015

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## HIGHLIGHTS

### EXPLORATION

- Queensland Geological Survey acquired VTEM Supermax survey data over part of the Osborne tenement group.
- Queensland Geological Survey awarded a drilling grant to test a copper-gold geophysical target near the Osborne mine.
- Ground geophysics surveys on southern margin of Gawler Range Volcanics delineated 5 intensely conductive anomalies.
- Major drilling program on the Gawler Range tenements under The Minerals Systems Drilling Program 2015 will commence after heritage clearances are obtained by Department of State Development.
- WA nickel sulphide targets attracted two grants from the Western Australian Department of Mines' Exploration Incentive Scheme.
- A 4-hole diamond drilling program started on the JOGMEC JV project targeting iron-sulphide style copper prospective anomalies under cover.
- IP geophysical survey underway testing six targets on Eloise Copper project.

## CORPORATE REVIEW

Minotaur acknowledges the support it has recently received, through various exploration level grants, from the minerals divisions of the state governments of South Australia, Queensland and Western Australia. Financial support of this nature to the industry generally reinforces the minerals exploration sector in each jurisdiction and assists explorers' pursuit of conceptual mineralisation models. Endorsement of company concepts by the states' geological survey experts reflects the innovative nature of exploration and recognises the inherent risk-reward balance.

Minotaur is honoured that our internal technical expertise has been evaluated, weighed, benchmarked and endorsed by the various state agencies. It underscores the level of credibility Minotaur has garnered across multiple jurisdictions and mineralisation styles.

For Minotaur's shareholders it demonstrates a significant point of difference in a crowded junior sector.

The Eloise Copper Joint Venture and the Leinster Gold Joint Venture were terminated due to financial non-performance by JV partner Golden Fields Resources Pty Ltd (GFR). Minotaur now holds 100% interest in the relevant tenements. Discussions with potential alternative joint venture parties were initiated and are continuing.

The marketing process for the Scotia and Leinster tenement groups was drawing to conclusion. The Company's advisors are evaluating preliminary responses and there can be no surety that the Company will enter into a sale transaction.

At Quarter end Minotaur held \$4.17 million in cash.



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## REVIEW OF ACTIVITIES



Figure 1: Minotaur Exploration's project locations

Project Location	Tenement Area km <sup>2</sup>
South Australia <sup>s</sup>	8,502
Queensland <sup>s</sup>	3,787
Victoria	956
Western Australia <sup>xt</sup>	411
<b>Total Area</b>	<b>13,656</b>

Table 1: Minotaur Exploration Limited's tenement areas, under application and/or held 100% and/or in joint venture<sup>s</sup> or within Minotaur Gold Solutions Ltd<sup>xt</sup> (Minotaur Exploration as to 50%)

## QUEENSLAND

Minotaur is actively exploring along the Cloncurry copper belt of North Queensland where an extensive (3,787 km<sup>2</sup>) package of iron oxide copper-gold prospective tenements has been assembled (Figure 2).

Most tenements are veneered by cover sediments and are being systematically surveyed using advanced geophysical techniques to generate new drill targets.





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## QUEENSLAND

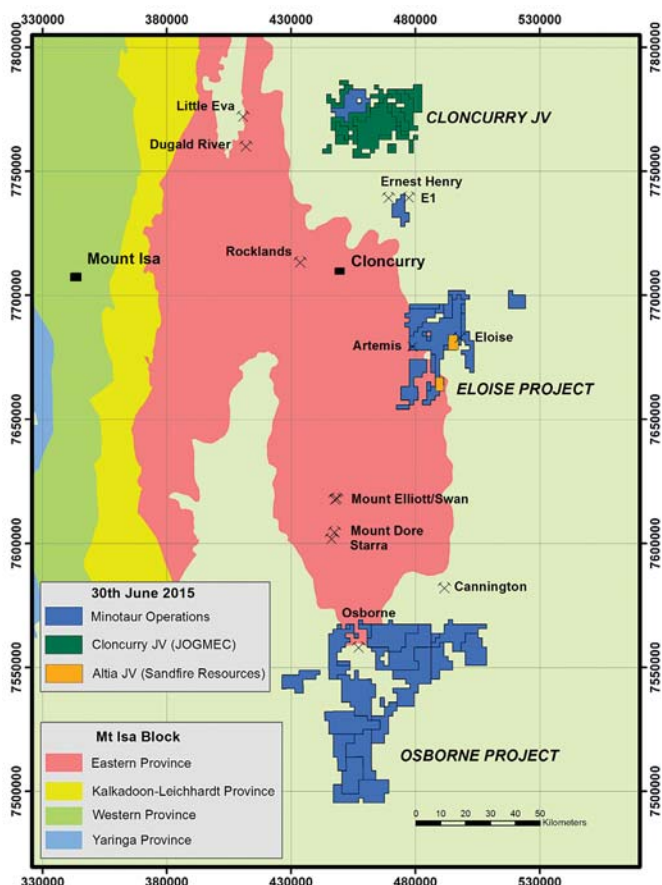


Figure 2: Location of Minotaur tenements in the Cloncurry region of North Queensland

### Eloise Copper Project

EPM 17838 & 18442, MDL431 & 432; Minotaur 100% (except on those parts of MDL 432, MDL431 and EPM17838 where Sandfire Resources NL is earning 80%), Area 400km<sup>2</sup>

Field work at the Artemis copper-gold-zinc-silver prospect was placed on hold pending resolution of payment defaults by then joint venture partner GFR. The defaults were not satisfactorily remedied and Minotaur terminated the joint venture on 9 June.

An induced polarisation (IP) geophysical survey is underway in the vicinity of the Artemis prospect to bring several copper-gold targets to drill status. The six targets are named Sandy Creek, Bobby Dazzler, Roberts Creek and EVT 48, 51 and 61 (Figure 3). The survey will be completed in July.

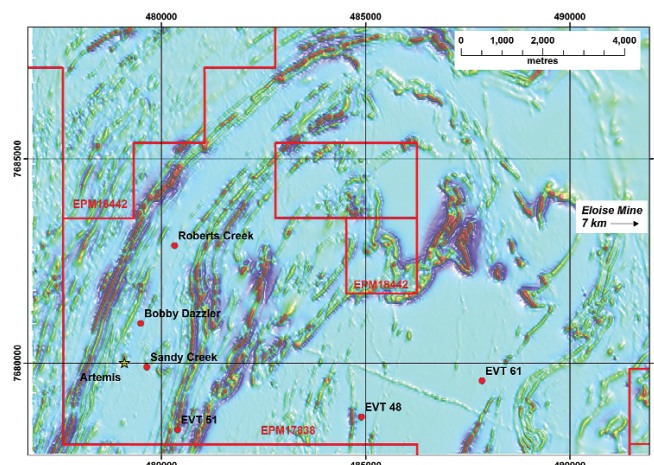


Figure 3: Sandy Creek, Bobby Dazzler, Roberts Creek, EVT 48, 51, 61 targets relative to Artemis prospect, over aeromagnetic image

### Altia Joint Venture

MDL432, parts of MDL431 and parts of EPM17838; Sandfire Resources NL earning 80%

The Altia joint venture project, operated by Sandfire Resources NL (ASX: SFR) and located immediately south-west of the Eloise copper-gold mine (Figure 2), includes an option with Minotaur subsidiary Breakaway Resources Pty Ltd to joint venture into two areas encompassing 43.7km<sup>2</sup>, whereby Sandfire may earn up to 80% of the project.

Heritage surveys have been completed for diamond drill testing of extensions to the Altia deposit. Further soil sampling is planned in the southern portion of the joint venture.

### Regional Cloncurry Project

EPM 19412, 19500, 19775, 25237, 25238, 25389 & 25801; Minotaur 100%, Area 596km<sup>2</sup>

Ground reconnaissance of historic airborne EM anomalies was initiated to establish the existence of any artificial features prior to preparing a ground EM program.

A surrender application was lodged for EPM18624 Oorindi Park northeast of Eloise Mine.



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## QUEENSLAND

### JOGMEC Joint Venture

EPM 8608, 16975, 17286, 18068, 18802, 18861, 19412, 19530, 25862 & EPMA 25889, (except EPM 8608 in relation to which a net smelter royalty of 2% is payable to South32 Limited); JOGMEC 55.7% Minotaur 44.3% (diluting), Area 650km<sup>2</sup>

A new round of drilling started on the Cloncurry JV project, 60km to the north of Cloncurry. Four drill targets are being tested at Emu South, Gidyea Bore, Woolshed Waterhole and Cormorant prospects (Figure 4).

The drill campaign will test a range of geophysical targets that were not drilled in the previous drill program in late 2014. Targets have been generated from ground geophysical surveys conducted by Minotaur previously comprising gravity, magnetics, EM and DHEM data. Geological settings represent structurally-controlled pyrrhotite-dominant targets prospective for copper, gold and zinc mineralisation.

The drill program will continue into August.

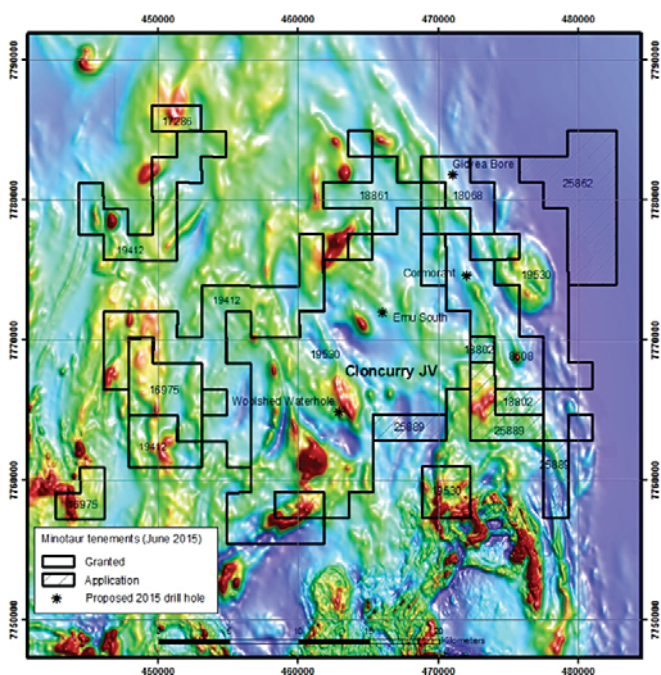


Figure 4: Regional TMI-RTP magnetic image for the Cloncurry JV showing tenements and exploration targets at Emu South, Woolshed Waterhole, Gidyea Bore and Cormorant South

### Osborne Project

EPMs 18571, 18572, 18573, 18574, 18575, 18576, 18720, 19050, 19061, 19066, 25197 & 25699; EPMA 25856, 25886, 25888 & 25960; Minotaur 100%, Area 2,141km<sup>2</sup>

Negotiations for a new joint venture over the Osborne project are approaching conclusion. Minotaur will announce the outcome in coming weeks.

The Queensland Geological Survey completed its VTEM Supermax survey over part of the Osborne tenement group in April (Figure 5). Minotaur is reviewing the data, however preliminary modelling indicates a good basement conductor is coincident with the un-drilled 'Rosella' target, a positive gravity anomaly with a modelled density of 2.90 g/cm<sup>3</sup> at relatively shallow depth (Figures 5 and 6).

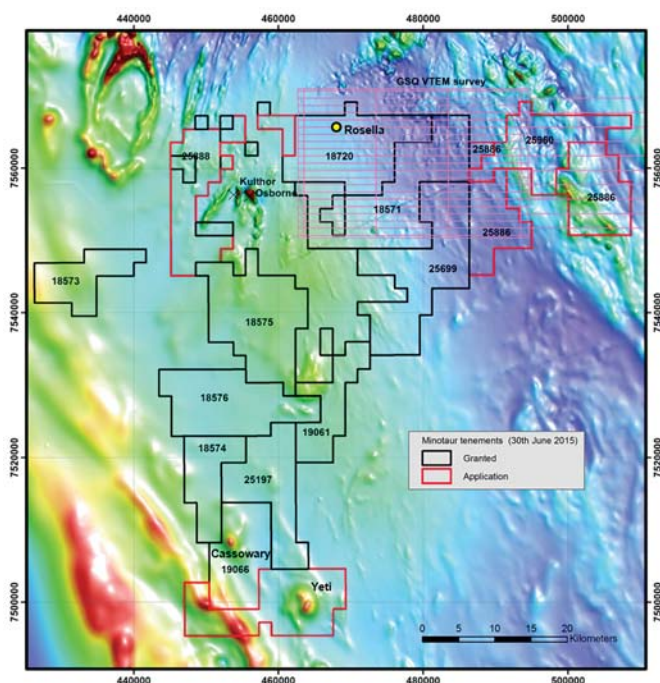


Figure 5: TMI-RTP magnetic image for the Osborne area showing granted tenements (black), new tenement applications (red), GSQ VTEM flight lines (pink) and priority targets





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## QUEENSLAND

### Osborne Project

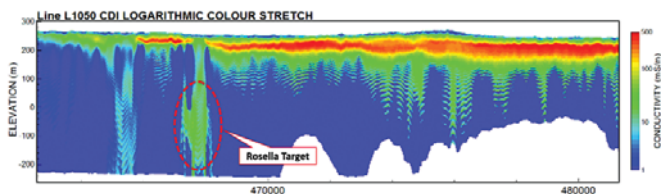


Figure 6: Preliminary model (slice) of VTEM Supermax conductivity across part of the northern Osborne area showing a basement conductor coincident with the Rosella gravity anomaly

Minotaur was awarded a \$90,000 drilling grant from the Queensland Geological Survey under Round 9 of the Future Resources Program – Collaborative Drilling Initiative. Funding is to assist Minotaur to drill a single deep hole to test the large 'Cassowary' magnetic anomaly under cover on EPM 19066 (Figure 5). Drilling is scheduled to be conducted later this year.

One new tenement application was lodged for EPMA 25960 'Jubilee'. The tenement lies in the north-east corner of the Osborne project area (Figure 5). Minotaur considers the tenement to be prospective for copper-gold mineralisation similar in style to the Eloise mine further north and for lead-zinc-silver mineralisation similar to the world-class Cannington mine 15km north of the tenement.

## SOUTH AUSTRALIA

### Bonython Hill Project

EL 4745; Minotaur 100%, Area 120km<sup>2</sup>

No activity during the Quarter.

### Border Base Metal Project

EL 4844, 5079, 5437 & 5502; Sumitomo 55.9%, Minotaur 44.1%, Area 1,006km<sup>2</sup>

Preparations were completed for an RC drill program to test the prospective Mingary Mine 'line of lode' striking along nearly 12 kilometres within EL 4844. Drilling is scheduled in August, co-funded by a PACE drilling grant.

### Industrial Minerals Project

EL 4575, 4697, 5016, 5095, 5308, 5365 5395 & 5398; ELA 5502; Minotaur 100%, Area 2,902km<sup>2</sup>

Operating and logistical cost estimates continue to be refined for each of the kaolin and gypsum projects. A trans-shipment options study provided very encouraging results that advance the conjunctive investment and development case for the Lake Purdilla gypsum and Poochera kaolin and halloysite assets, with further shipping synergies available through cooperation with regional grain producers.

Proppant formulation test work using Poochera kaolin returned very encouraging results, with several formulations of high-halloysite material matching the benchmark properties of commercial HSLW (high-strength light-weight) proppants (Figure 7). Additional samples of high-halloysite kaolin were prepared for further proppant testwork, as well as for trials and characterisation testwork by other potential offtake partners in the strengthening filler and ceramic markets.



Figure 7: Proppant formulation 8602: Fired proppants (left), Crush residue (centre) and Scanning Electron Microscope image (right)

### Gawler Ranges Project

EL 4776 & 5232; ELA 256/14, 2015/74, 2015/75, 2015/79, & 2015/80; Minotaur 100%, Area 4,474km<sup>2</sup>

Arrangements for participation in the PACE Frontiers Minerals System Drilling Program 2015 were completed. South Australia's Department of State Development (DSD) selected multiple geophysical targets presented by Minotaur for funding to drill up to 5,000m in two tenements (Figure 8).

Minotaur completed ground magnetic, EM and MT geophysical surveys, with numerous strong conductors identified improving resolution over a number of targets.



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## SOUTH AUSTRALIA

### Gawler Ranges Project

Interpretation of the new geophysical data is ongoing and will modify final design of drill holes. DSD expects to start drilling in September, after it gains heritage clearances.

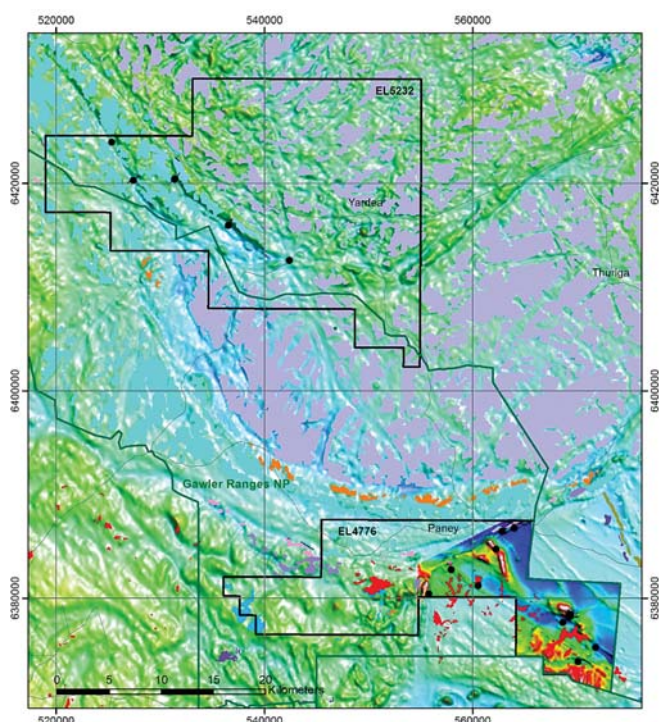


Figure 8: Basement exposure for EL4776 and EL5232 (Gawler Ranges) showing exploration targets (black circles), exposed Gawler Range Volcanics (pastel colours) over regional TMI-RTP magnetic image and detailed insert TMI-RTP image for Mt Double East

### North Flinders Project

ELs 5542, 4478 & 5117; ML 4386; Minotaur 10%, Perilya 90%, Area 670km<sup>2</sup>

EL 4388 was renewed and replaced by EL 5542. Soil and rock chip sampling was conducted by Perilya within EL's 4478 and 5542, targeting zinc at Linda, Fountain Head, Wirrealpa, Erinna Waters, Narrina and Mt Lyell prospects. The best results were returned from Mt Lyell with zinc-in-soil values up to 2,550ppm. Perilya propose to extend the soil sampling in this area to fully evaluate the anomaly.

## VICTORIA

### Victorian Copper Project

EL 5402 & 5450; Minotaur 100%, Stavely Minerals earning 51%, Area 296km<sup>2</sup>

EL 5403 & 5475; Minotaur 100%, Area 660km<sup>2</sup>

Stavely Minerals has planned a ground gravity survey to be conducted next Quarter. A soil geochemical survey is also planned but won't be conducted until drier ground conditions after the winter rain season.

## WESTERN AUSTRALIA

### Yerrida Project

E51/1580, E51/1581, E51/1585, E51/1591 & E51/1593; Minotaur 0%

Field inspection of several airborne VTEM anomalies was completed and numerous grab, soil and rock chip samples were collected. With no geochemical anomalism reported the tenements were surrendered.

### Scotia Project

E29/661 & E29/886; P29/2105, P29/2117, P29/2118, P29/2119, P29/2120 & P29/2121; M29/245, M29/246, M24/279 & M24/336; Minotaur Gold Solutions Ltd 100% (of which Minotaur 50%, GFR 50%), Area 129km<sup>2</sup>

The Scotia Project comprises a group of tenements located about 65km north of Kalgoorlie in Western Australia. The tenements are held by Minotaur Gold Solutions Ltd (MinAuSol), which is jointly owned 50/50 by Minotaur and GFR.

Minotaur Gold Solutions was awarded, by the Western Australia Department of Mining and Petroleum (DMP), a co-funded exploration drilling grant of \$75,000 to drill test the Saints nickel prospect. The grant is for a 600m diamond hole to be drilled west to east across the western and eastern contact zones in an attempt to resolve the stratigraphic relationship of these contacts, specifically to determine if both are indeed in the same horizon. Drilling is required to be conducted within 12 months of grant.



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## WESTERN AUSTRALIA

### Leinster Gold Project

E36/235 & E37/909; M36/475, M36/502, M36/511, M36/524, M36/526, M36/548, M37/806, M37/877 & M37/878; P37/170, P37/7370, P37/7371, P37/7372 & P37/7373; Minotaur 100%, Area 281km<sup>2</sup>

Field work had been suspended since February pending resolution of payment defaults by then joint venture partner GFR. The defaults were not satisfactorily remedied and Minotaur terminated the joint venture on 9 June.

An infill soil and lag sampling program was conducted over the Javelin prospect on E37/909. Previous surface sampling by Minotaur defined anomalous gold in rock chips up to 4.5 g/t Au, lag up to 1.63g/t Au and soil up to 124ppb Au in an area of sub-cropping komatiite with quartz veins on the eastern margin of a NW-trending regional-scale structure. Results from the new sampling over this area defines a zone of +45ppb Au in lag covering 380m x 230m and +20ppb Au in soil covering 380m x 180m.

Minotaur was awarded, by the Western Australia Department of Mining and Petroleum (DMP), a co-funded exploration drilling grant of \$104,500 to drill test the 'Valdez' EM conductor. Valdez is a Waterloo-style channel-hosted nickel sulphide target and lies in the very northeastern corner of the Leinster project. Drilling is required to be conducted within 12 months of grant.

### West Kambalda

Minotaur holds certain nickel mining rights and obligations and other mineral royalty rights across 19 tenements in the West Kambalda region of Western Australia. 10 tenements are held by Tychean Resources Ltd and 9 tenements are held by Mithril Resources Ltd. No activities took place on the West Kambalda tenements.

## Note: June 2015 Quarter

### ASX Announcements

- Minotaur Presentation at SA Resources Conference (13 April 2015)
- Eloise Copper JV report (21 April 2015)
- Quarterly Report for period ending 31 March 2015 (29 April 2015)
- Eloise Copper JV status (4 May 2015)
- MEP terminates Gypsum Sale Agreement (7 May 2015)
- Eloise Copper JV update (11 May 2015)
- Ceasing to be a Substantial Holder for PTR (29 May 2015)
- Eloise Copper JV terminated (9 June 2015)
- Leinster Nickel JV terminated (9 June 2015)
- Change of Director's Interest Notice (18 June 2015)
- Change of Director's Interest Notice (22 June 2015)
- Drilling underway at JOGMEC JV, Cloncurry (22 June 2015)
- Resignation of Director Mr J Atkins (23 June 2015)
- Minotaur awarded WA co-funded Drilling Grants (24 June 2015)
- State governments endorse Minotaur's discovery expertise (29 June 2015)



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## 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 fulltime 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.

## INVESTMENTS

Minotaur has exposure to a range of exploration opportunities through its holdings in junior listed companies.

At the end of June 2015 those investments were valued at market at \$0.839 million, as shown in Table 2.

Company	ASX Code	Holding at 30 June 2015	Minotaur %	Closing Price @ 30 June 2015	Closing Value
Mithril	MTH	32,845,238	7.8%	\$0.005	\$164,226
Mungana	MUX	3,076,923	1.3%	\$0.130	\$400,000
Petratherm	PTR	22,428,896	4.3%	\$0.002	\$44,858
Thomson	TMZ	10,000,000	11.9%	\$0.023	\$230,000
<b>TOTAL</b>					<b>\$839,084</b>

Table 2: Summary of Investments in ASX Listed companies

**Andrew Woskett**  
(Managing Director)

**Tony Belperio**  
(Director, Business Development)

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