Minotaur Exploration Limited | ASX: MEP





Mining 2016 Resources Convention

Dr Tony Belperio, Executive Director 24 August 2016



Corporate snapshot



About Minotaur Exploration (ASX: MEP)

- Primary focus on copper-gold exploration in QLD and S.A.
- In the top 10% of most active 'junior explorers' throughout FY2011-16
- Business model based on JV funding; optimises cash reserves and maximises returns on exploration investment
- Supportive and high quality JV partners

Major shareholders at 30 July 2016	
Sprott Inc - a globally invested resources fund	13.1%
Yarraandoo - private Australian mining investor	6.2%
OZ Minerals (ASX: OZL)	3.8%
FMR Investments – owner/operator of the Eloise copper-gold mine	1.4%
Sandfire Resources (ASX: SFR)	1.2%

Board

- Non Executive Chairman Derek Carter
- Managing Director Andrew Woskett
- Executive Director Dr Antonio Belperio
- Non Executive Director Dr Roger Higgins
- Company Secretary Varis Lidums

Financial information at 30 June 2016	
Shares on issue	212M
Share price	A\$0.062
Market capitalisation	A\$13.2M
Cash	A\$4.5M
Listed investments	A\$0.6M
Enterprise value	A\$8.1M

Recent Corporate developments

- Buy-back of unmarketable parcels achieved 40% reduction in shareholder base, reducing registry costs
- Distributed \$570,000 of exploration tax credits at 30 June 2016 to eligible shareholders through the EDI Scheme
- Dr Roger Higgins joins MEP Board

Key Assets 2016



Strengths: technical team focussed on discovery and corporate team formulating appropriate strategies in a rapidly evolving investment world

- Our prime discovery focus, wholly within Australia, is copper-gold systems obscured under cover
 - We spread risk and costs through joint venture funding deals at the project level

South Australia Cu-Au

- Prominent Hill brownfields
 Exploration JV with OZ Minerals
- Gawler Ranges
 Collaboration Agreement (DET CRC and DSD)

Western Australia

- Follow-up historic gold projects
- Seeking nickel farm-out or divestment

Queensland Cu-Au

- Eloise project
 Exploration JVs with OZ M
 - Exploration JVs with OZ Minerals and Sandfire Resources
- Osborne projectExploration JV with JOGMEC
- Other Cloncurry projectsSeeking JV partners

Industrial Minerals

- Value add through innovative product and processing research
- Spin-out or Divestment when appropriate

Key Projects 2016



OSBORNE JOGMEC JV

- Targeting IOCG, ISCG and Cannington-style base metal mineralisation
- Geophysical surveys underway to generate multiple targets for drill testing
- CDI grant to drill test 'Yeti' deep haematite IOCG target

ELOISE

OZ Minerals and Sandfire JVs

- Targeting ISCG and Cannington-style base metal mineralisation
- Regional targeting and testing
- New targets along Levuka Shear are potential Eloise style repeats. Drilling imminent

PROMINENT HILL collaboration with OZ Minerals

- A refreshing new approach to Miner Explorer co-operation. A new industry model?
- Conceptual regional target identification phase completed
- On-ground proofing phase geophysics almost complete. Drill testing imminent

GAWLER RANGES DET CRC and DSD

- Deep drilling at the Gawler Ranges MSDP project completed, 10 holes for 5080m
- Drilling funded by tripartite DSD DETCRC Industry partnership
- Testing a range of new technologies and frontier mineral systems

KALGOORLIE Nickel and Gold

- Two gold prospects: Javelin and Chameleon tested
- JORC Resource completed for Chameleon (Inferred Resource of 1.1Mt @ 2.1 g/t Au for 77,000 ozs gold at 1 g/t cut-off (for details see MEP ASX release dated 29 July 2016)

INDUSTRIAL MINERALS

- Infrastructure limitations and poor global economic climate not currently conducive to project development; available for sale assets
- R&D continues, aimed at innovative new uses for kaolin, halloysite and gypsum

Cloncurry – Copper-Gold, base metals



JOGMEC - Osborne JV

- \$1M exploration spend in 2016
- IOCG, ISCG and Cannington-style polymetallic targets

OZ Minerals – Eloise JV

- \$1.5M exploration spend in 2016
- IOCG, ISCG and Cannington-style polymetallic targets

SANDFIRE - Altia (Eloise sub area) JV

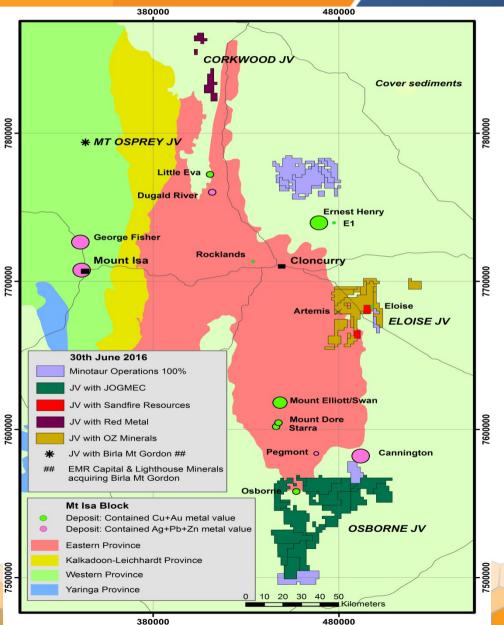
- \$4M second stage farm-in (SFR 60% moving to 80%)
- Cannington-style polymetallic targets

Red Metal - Corkwood JV

- IOCG type prospects
- Minotaur generating targets
- Seeking joint venture participation partner

Naraku Project

- ISCG type targets
- Seeking joint venture participation partner

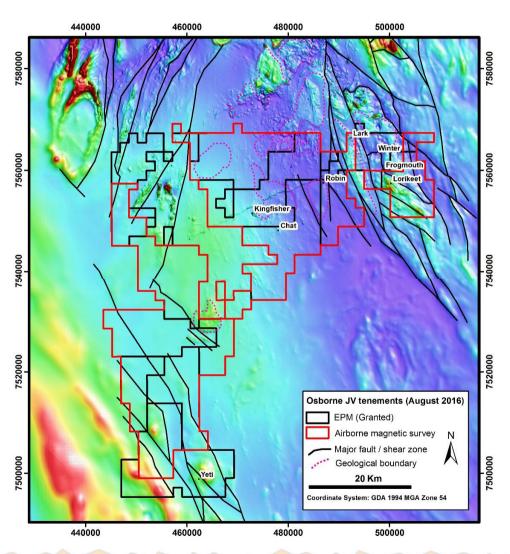


Cloncurry – Osborne Project



JOGMEC Osborne JV

- 13 granted tenements, 1900 km², joint venture with Japan Oil, Gas and Metals National Corporation (JOGMEC)
- Minotaur operator, targeting IOCG and ISCG coppergold and Cannington-style base metal mineralisation

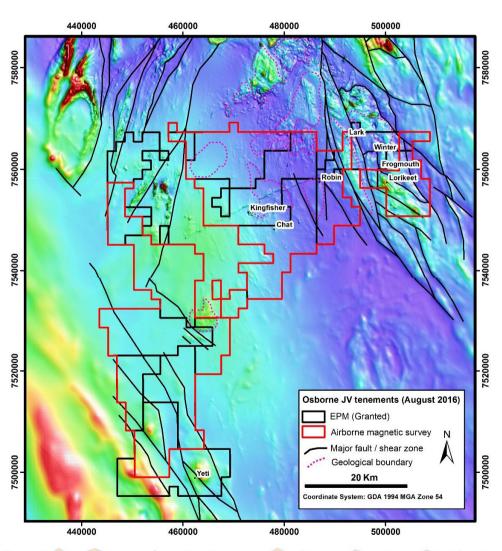


Cloncurry – Osborne Project



JOGMEC Osborne JV

- Regional airborne magnetic survey completed
- Structural interpretation and target selection for ground geophysical follow-up completed
- Ground EM & IP geophysical surveys underway
- such as, YETI Target:
 - a Prominent Hill style haematite IOCG target
 - a significant 3mgal gravity target under 400m cover, offset from 1000nT magnetic complex representing a large Na-Ca-Fe alteration system
 - CDI (Collaborative Drilling Initiative) grant received from Qld Government
 - expect to start drilling 800m hole to test Yeti in October

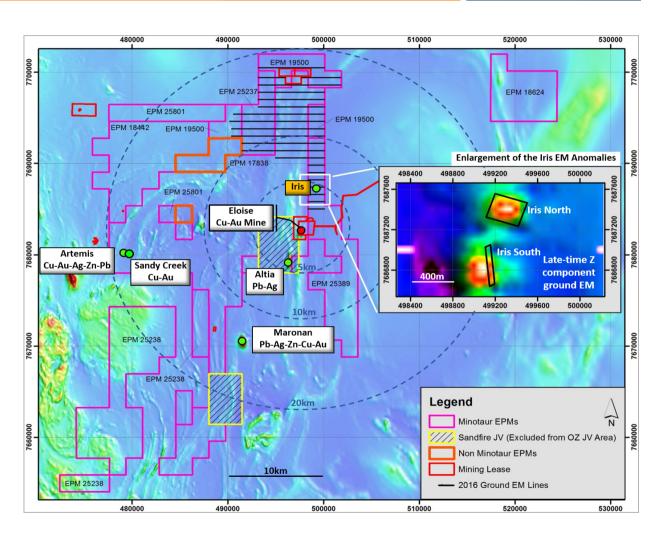


Cloncurry – *Eloise Project*



OZ Minerals JV

- Focus on regional target generation for ISCG and Cannington – style mineralisation
- In particular, gravity and deep penetrating EM surveys along Levuka Shear Zone north of the Eloise Mine lease for Eloise-style and Altia-style repeats
- Conductive cover of 50-150m
- New, conductive bedrock targets generated

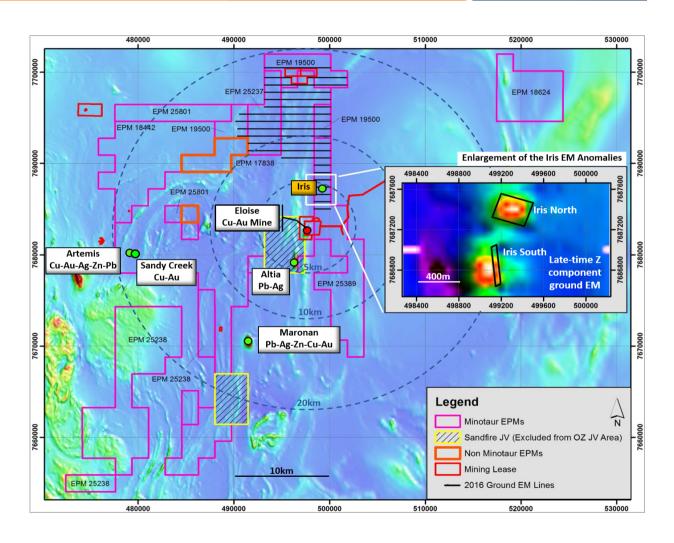


Cloncurry – *Eloise Project*



OZ Minerals JV

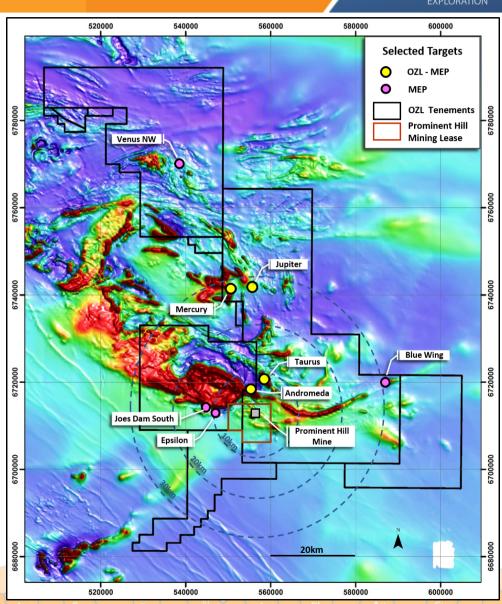
- New, non-magnetic bedrock conductors located along the 'mine corridor' and within 5km of Eloise Mine:
 - Iris North 100m cover, 1500 Siemens conductance
 - Iris South 135m cover, 3200 Siemens conductance
- Host basement interpreted as Mt Norna
 Quartzite, a regionally significant rock unit
 host to Eloise, Osborne and Cannington
 orebodies
- Diamond drill testing from mid September





Not your standard exploration JV

- Bringing Cloncurry IOCG lessons back to South Australia
- The outcropping to shallow cover setting of Cloncurry district has allowed a far greater number of IOCG alteration and mineralisation styles to be documented, compared to the thick cover setting pervasive across SA
- Innovative collaboration deal between MEP and OZL (tenement holder, Prominent Hill surrounds):
 - MEP reviewed OZ Minerals' vast exploration database
 - MEP selected several targets for field assessment
 - OZL-MEP agreed to co-explore 4 targets
 - Joint \$3M testing program underway
 - MEP may also follow-up targets OZL declined to pursue





MEP brings new models and exploration methodologies to bear in the Prominent Hill regional setting:

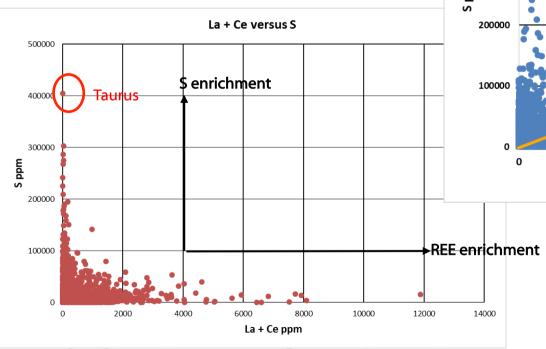
- eg: the ISCG model where Cu is associated with Fe in the form of pyrite and pyrrhotite rather than magnetite and/or haematite
- Deposit examples: Eloise, Cormorant, Artemis, Kulthor and parts of Osborne and Mt Elliot

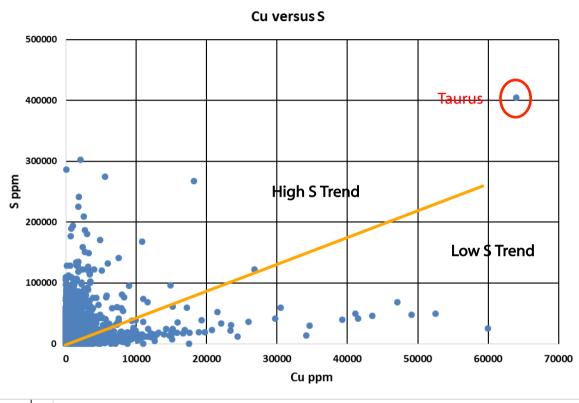
ISCG ELEMENTAL ASSOCIATIONS	MINERAL ZONATION
Cu, Au, Fe, Ag, Zn, Co, As, Bi, Se, Te, Ni (Eloise Mine)	po>cpy (north), cpy>po (south),
Pyrrhotite dominant	mgt>py>cpy (west)
Cu, Au, Fe, S, Ag, Zn, Pb, Co, As, Bi, Se, Cd, Sb (Artemis Prospect)	po>>cpy (no py or mgt)
Pyrrhotite dominant	1, 1, 1, 5,
Cu, Au, Fe, Ag, Co, Bi, Se, Te, Ni, Mo, Hg, W, LREE (Osborne Mine)	cpy-po-mgt (siliceous lode),
Magnetite bearing	mgt>cpy-py (magnetite lode)
Cu, Au, Fe, Ag, Co, Se, Te, Ni, Mo, LREE, U (Mt Elliott Mine)	cpy-po>mgt-py (hanging wall),
Magnetite bearing	mgt>cpy-py-po (footwall)



OZL's regional database provides good evidence that ISCG systems should indeed exist with distinct sulphide (S) and copper (Cu) enrichment populations evident in the data

Most S enriched sample - Taurus

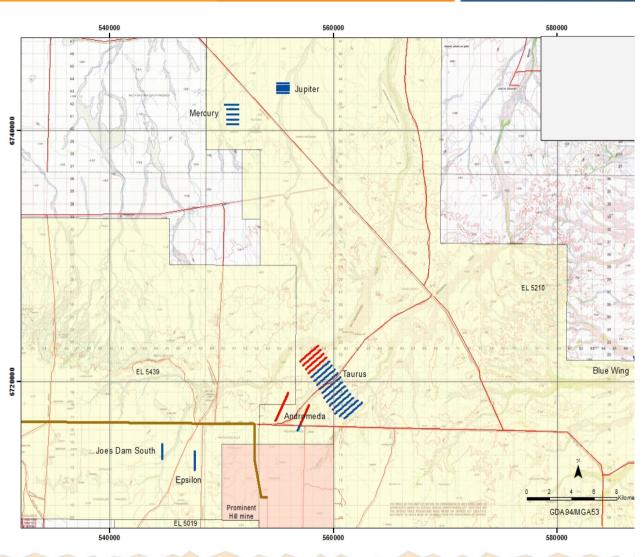






Taurus anomaly

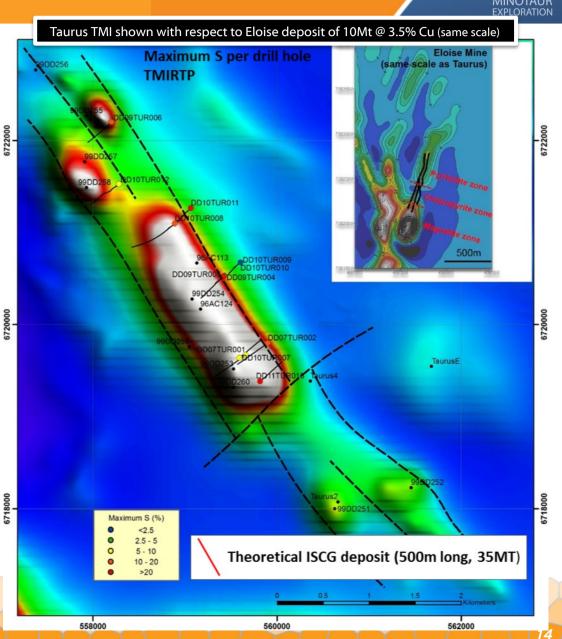
- Target Area an 8km long zone of structural complexity along the northwest trending Skylark Fault
- within 10km of the Prominent Hill mine
- within a complex of magnetic and gravity highs – a proven IOCG alteration system with anomalous Cu, Au, REE, Ag, PGE
- Historic drilling focussed on magnetite- and haematite- related targets (magnetic and gravity highs) revealing widespread alteration and mineralisation ('smoke')





Taurus anomaly

- MEP's review of drill data highlighted presence of late stage Py-Po veining and high S and Cu abundances
- Indicating potential for ISCG style mineralisation
- Ample space for a significant high grade coppersulphide mineralised body, but not detectable through magnetics or gravity
- No historic EM surveys an ISCG body within this complex requires an appropriate ground EM grid
- Deep penetrating EM grid survey with 400m spaced lines (100m ML) across key structures, with infill as required (25m FL), is almost complete
- Diamond drilling to start mid September



A deep stream of exploration activity through 2016



OSBORNE JV	
Ground geophysics	Underway
> Target modelling & prioritisation	Q3 2016
Diamond drill testing	from October 2016
ELOISE JV	
✓ Levuka Shear EM	Completed
✓ Levuka Target(s) Modelling	Completed
Diamond drill testing	from mid September
PROMINENT HILL JV	
Ground Geophysics	Almost complete
> Target Modelling	Almost complete
Priority Target diamond drill testing	from mid September

Disclaimer and Competent Person's Statement



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Competent Person's Statement

Information in this presentation that relates to exploration results for Minotaur Exploration Ltd 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 deposits under consideration and to the activity that he has undertaken 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 of this information in the form and context in which it appears.