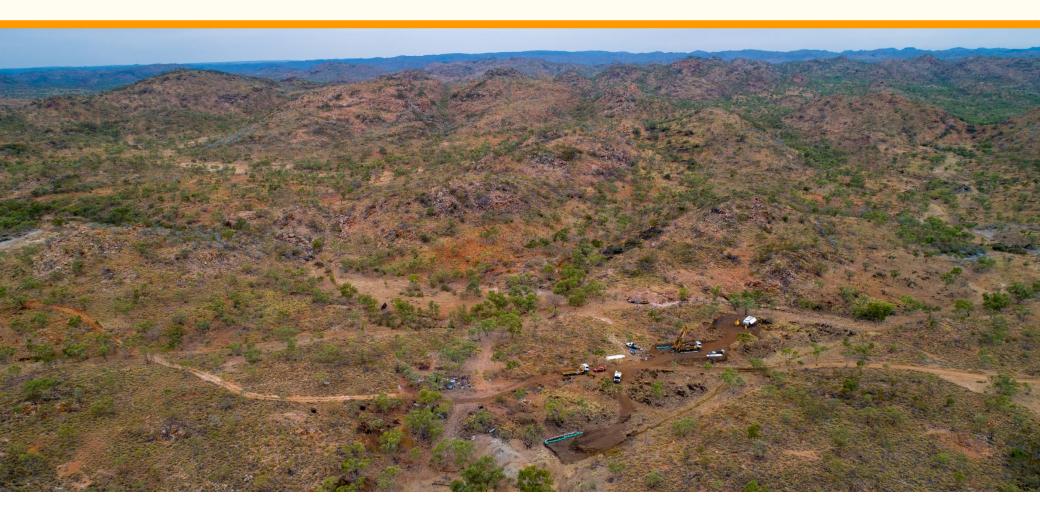
# **Minotaur Exploration** | ASX: MEP **Copper explorer and project generator**

AGM 28 November 2018





# It has been a busy 12 months for Minotaur



#### **Eloise JV**

- ✓ 2,500m inaugural drill campaign of 8 holes
- ✓ Infill EM survey to refine Jericho's extent
- ✓ Drilling scope expanded to 38 holes into Jericho
- ✓ Regional geophysics program
- ✓ Regional drilling campaign

### **Cloncurry regional**

- ✓ Acquired HighlandsCu project near Mt Isa
- √ 3 initial scout holes at Gospel
- ✓ CEI grant for EM program at Osborne
- ✓ Drill tested 2 new targets for Osborne JV

### √ 17,800m drilled

- √ 51 holes across 4 locations
- ✓ Jericho copper discovery
- ✓ several major EM surveys completed

### **WA Nickel**

- ✓ EM survey around the Saints nickel resource
- ✓ Agreed sale of Javelin gold tenement

### Other activity

- ✓ Prominent Hill JV 1,225m (4 holes)
- ✓ Sold Chameleon gold project
- ✓ Agreed farm-in to Rover Cu-Au project
- ✓ Agreed farm-out of Poochera kaolin project
- ✓ Agreed farm-in to Windsor Zn project

# Minotaur's strategic focus in Qld



### Focussed on copper and other base metals



- **Eloise JV** (MEP: 49%, OZL: 51%, earning 70%)
  - OZ Minerals sole funding to \$10m expenditure
  - Copper results prove high fertility along Jericho's strike extent
  - 38 holes completed into J1 and J2 structures
  - Every hole encountered copper
  - Combined mineralised length is 6km
- 3 Osborne JV (MEP: 100%)
  - Diamond drilling into 2 targets completed
  - no significant mineralisation located through recent drilling
  - JV partners to review project options

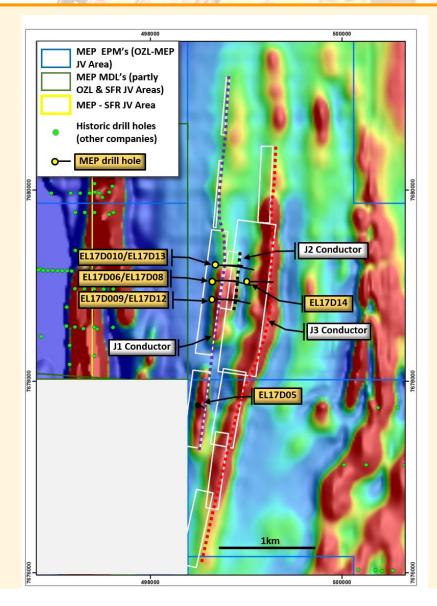
- 2 Highlands Project (MEP: 100%)
  - Acquired July 2018
  - Copper-gold rock chip samples correlate with EM targets below
  - 3 scout holes placed in Gospel target
  - Cu mineralisation validates EM response
  - Multiple targets available
- 4 Windsor JV (MEP may earn 80%)
  - Farm-in JV with tenement holder
  - Minotaur may earn 80% for \$4 million expenditure over 5 years
  - 629km² land package in vicinity of several high-grade polymetallic mines
  - Minotaur is preparing a geophysics and target generation program

# Eloise JV: Jericho EM conductors deliver Cu-Au results



### This time last year.....

- Jericho, a large EM conductor only 3 km from the Eloise copper-gold mine
- 8 scout holes completed
- All produced multiple copper-gold intersections in two parallel zones (J1 and J2)
  - Highly significant drill intercept in second hole: 27m @
     2.42% Cu, 0.71g/t Au
- J1 modelled to be 3.5km long
- J2 modelled to be 500m long
- 7 of the 8 holes tested only a 300m section of both J1 and J2
- Exploration strategy proven

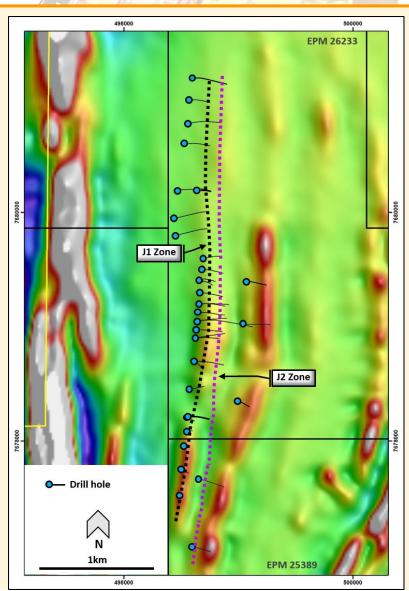


# Eloise JV: Jericho declared a Cu-Au discovery



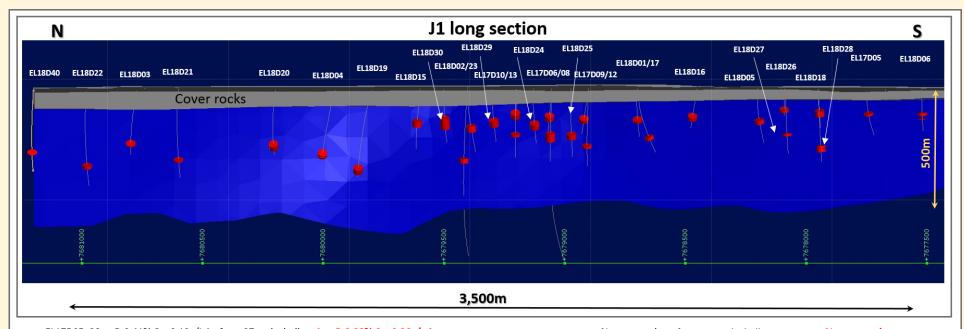
### 1 year on .....

- 38 holes now complete for total of 14,860m
- results validate Jericho as significant copper discovery
- J1 zone proven to be mineralised along 3.5km of strike
  - 2km of the structure only lightly drilled
- J2 zone extended from 500m to +2.5km
  - > 1.5km of the structure only very lightly drilled
- Closer spaced drilling in central J1 producing coherent zones of +2% Cu
  - EL18D02: 17m @ 2.3% Cu, 0.5g/t Au
  - EL18D18: 17m @ 2.39% Cu, 0.58g/t Au
  - > EL18D23: 11m @ 2.05% Cu, 0.41g/t Au
  - > EL18D24: 12m @ 2.23% Cu, 0.34g/t Au
  - > EL18D29: 12m @ 2.39% Cu, 0.42g/t Au
  - EL18D30: 11.3m @ 3.43% Cu, 0.44g/t Au



# Eloise JV: Jericho copper-gold discovery



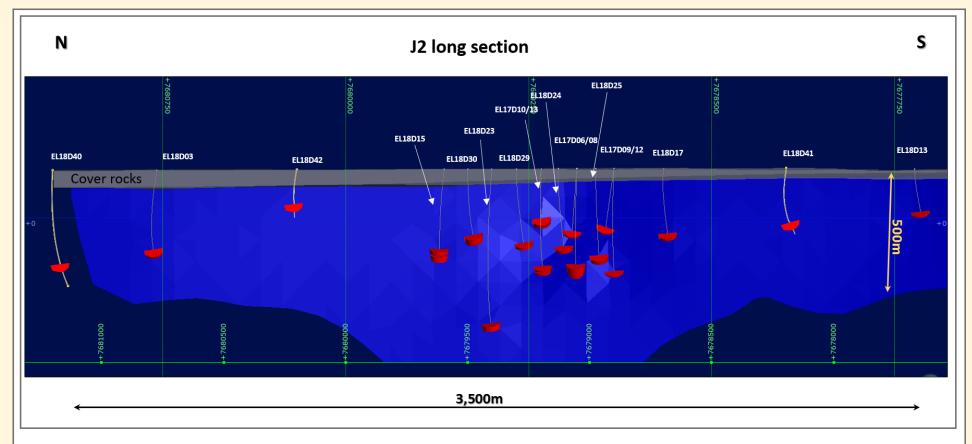


- EL17D05: 28m @ 0.41% Cu, 0.19g/t Au from 97m, including: 1m @ 2.38% Cu, 0.36g/t Au
- EL17D06: 35m @ 0.35% Cu, 0.05g/t Au from 197m , including: 1m @ 1.32% Cu, 0.22g/t Au
- EL17D08: 21m @ 0.82% Cu, 0.25g/t Au from 143m, including: 7.5m @ 1.67% Cu, 0.63g/t Au
- EL17D09: 46m @ 0.74% Cu, 0.17g/t Au from 214m, including: 8.4m @ 2.78% Cu, 0.66g/t Au
- EL17D10: 44m @ 0.3% Cu, 0.06g/t Au from 186m, including: 0.7m @ 4.1% Cu, 1.17g/t Au
- EE17 D10. 4411 & 0.378 Cd, 0.00g/ CAd Holl 10011, Including. 0.711 & 4.176 Cd, 1.176/ CA
- EL17D12: 25.35m @ 0.9% Cu, 0.16g/t Au from 149m, including: 11.9m @ 1.56% Cu, 0.31g/t Au
- EL17D13: 85m @ 0.44% Cu, 0.09g/t Au from 132m, including: 7m @ 3.17% Cu, 0.67g/t Au
- EL18D01: 24m @ 0.26% Cu, 0.03g/t Au from 206m, including: 1m @ 2.51% Cu, 0.19g/t Au
- EL18D02: 44m @ 1.05% Cu, 0.22g/t Au from 159m, including: 17m @ 2.3% Cu, 0.5g/t Au
- EL18D03: 6m @ 1.02% Cu, 0.28g/t Au from 278m
- EL18D04: 50.5m @ 0.51% Cu, 0.14g/t Au from 344.5m, including: 9m @ 1.43% Cu, 0.5g/t Au
- EL18D05: 17m @ 1.29% Cu, 0.22g/t Au from 135m, including: 3m @ 4.46% Cu, 0.69g/t Au
- EL18D06: 11m @ 0.85% Cu, 0.13g/t Au from 97m, including: 1m @ 2% Cu, 0.5g/t Au
- EL18D15: 18m @ 0.77% Cu, 0.22g/t Au from 139m, including: 12m @ 1.03% Cu, 0.31g/t Au
- EL18D16: 16m @ 0.77% Cu, 0.19g/t Au from 141m, including: 3m @ 1.51% Cu, 0.22g/t Au and 1m @ 4.93% Cu, 1.23g/t Au
- EL18D17: 22m @ 0.41% Cu, 0.11g/t Au from 154m, , including: 1m @ 1.3% Cu, 0.43g/t Au
- EL18D18: 17m @ 2.39% Cu, 0.58g/t Au from 97m

- EL18D19: 46m @ 0.35% Cu, 0.11g/t Au from 408m, including: 3m @ 1.39% Cu, 0.29g/t Au
- EL18D20 30m @ 0.42% Cu, 0.11g/t Au from 298m, including: 1m @ 1.43% Cu, 0.03g/t Au and 2m @ 1.93% Cu, 0.86g/t Au
- EL18D21: 20m @ 0.14% Cu, 0.07g/t Au from 327m
- EL18D22: 14m @ 1.27% Cu, 0.09g/t Au from 333m, including: 6m @ 2.65% Cu, 0.13g/t Au
- EL18D23: 21m @ 1.39% Cu, 0.30g/t Au from 289m, including: 11m @ 2.05% Cu, 0.41g/t Au, and 12m @ 0.57% Cu, 0.08g/t Au from 320m, including: 1m @ 2.85% Cu, 0.10g/t Au & 2m @ 1.37% Cu, 0.37g/t Au
- EL18D24: 26m @ 1.45% Cu, 0.23g/t Au from 162m, including: 12m @ 2.23% Cu, 0.34g/t Au & 1m @ 5.61% Cu, 0.84g/t Au
- EL18D25: 17m @ 0.34% Cu, 0.04g/t Au from 190m & 10m @ 0.41% Cu, 0.10g/t Au from 222m
- EL18D26: 31m @ 0.52% Cu, 0.15g/t Au from 91m, including: 12m @ 1.23% Cu, 0.36g/t Au
- EL18D27: 28m @ 0.37% Cu, 0.06g/t Au from 185m, including: 2.8m @ 1.25% Cu, 0.20g/t Au
- EL18D28: 28.4m @ 0.72% Cu, 0.05g/t Au from 229.8m, including: 6m @ 1.06% Cu, 0.20g/t Au & 7m @ 1.44% Cu, 0.13g/t Au
- EL18D29: 32m @ 1.06% Cu, 0.18g/t Au from 143m, including: 12m @ 2.39% Cu, 0.42g/t Au
- EL18D30: 30m @ 1.47% Cu, 0.21g/t Au from 130m, including: 11.3m @ 3.43% Cu, 0.44g/t Au

# Eloise JV: Jericho copper-gold discovery





- EL17D06: 38m @ 1.86% Cu, 0.52g/t Au from 426m, including: 27m @ 2.42% Cu, 0.71g/t Au
- EL17D08: 8m @ 1.11% Cu, 0.23g/t Au from 330m, including 2m @ 3.56% Cu, 0.85g/t Au
- EL17D09: 4.4m @ 1.6% Cu, 0.5g/t Au from 456m
- EL17D10: 18m @ 0.87% Cu, 0.28g/t Au from 435m, including: 2.9m @ 3.08% Cu, 1.5g/t Au
- EL17D12: 9.9m @ 0.43% Cu, 0.06g/t Au from 314m, including 0.9m @ 1.7% Cu, 0.24g/t Au
- EL17D13: 27m @ 0.38% Cu, 0.06g/t Au from 271m, including: 0.9m @ 2.61% Cu, 1.13g/t Au
- EL18D03: 13m @ 0.68% Cu, 0.29g/t Au from 433m, including: 2m @ 2.82% Cu, 0.72g/t Au
- EL18D15: 44m @ 0.75% Cu 0.07g/t Au from 349m, including: 11m @ 1.54% Cu, 0.13g/t Au & 7m @ 1.2% Cu, 0.1g/t Au

- EL18D17: 31m @ 0.89% Cu, 0.14g/t Au from 313m, including: 8m @ 2.49% Cu, 0.37g/t Au
- EL18D23: 20m @ 1.10% Cu, 0.21g/t Au from 645m, including: 2m @ 1.57% Cu, 0.17g/t Au & 9m @ 1.98% Cu, 0.40g/t Au
- EL18D24: 13m @ 0.32% Cu, 0.11g/t Au from 369m, including: 1m @ 1.75% Cu, 0.07g/t Au
- EL18D25: 23m @ 0.7% Cu, 0.29g/t Au from 400m, including: 5m @ 1.91% Cu, 1.12g/t Au
- EL18D29: 16m @ 0.45% Cu, 0.04g/t Au from 342m, including: 1m @ 1.48% Cu, 0.01g/t Au
- EL18D30: 26.1m @ 0.92% Cu, 0.19g/t Au from 305.9m, including: 10.1m @ 1.09% Cu, 0.19g/t Au & 6m @ 1.89% Cu, 0.49g/t Au

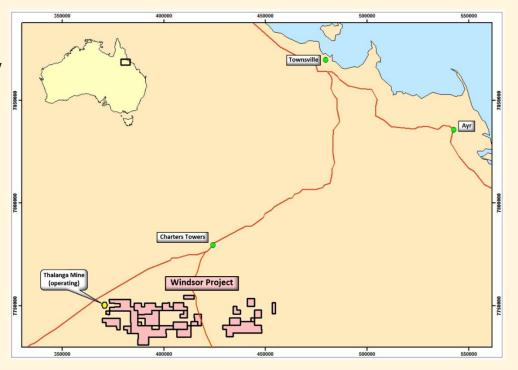
### Windsor JV



### Minotaur secured exploration rights to 'Windsor' ground adjacent to the Thalanga Zn-Pb mine

- The Windsor polymetallic JV is located 200km from Townsville and 60km from Charters Towers in northeast Queensland
- Red River Resources (ASX: RVR), owner of the adjacent Thalanga project, restarted mining operations in September 2017, producing high quality zinc, lead and copper concentrates with gold and silver by-products
- Minotaur Exploration and the tenement owner entered into a JV agreement over 7 tenements immediately east of the Thalanga project
- Tenement area 629km²
- The farm-in agreement commenced 15 October 2018
- Minotaur may earn up to 80% interest in the tenements for expenditure of \$4m over 5 years
- Minotaur has the right to introduce a 'backstop' funding partner in return for a tenement interest

#### Windsor location



### Windsor JV



The region is well endowed with high-grade VMS style deposits (not contained within the Windsor tenement group)

#### Thalanga (pre-mining):

 7Mt @ 11.9% Zn, 3.7% Pb, 2.5% Cu, 89g/t Ag, 0.6g/t Au

#### Thalanga (current)

 2.8Mt @ 6.86% Zn, 2.3% Pb, 1.3% Cu, 55g/t Ag, 0.2g/t Au

#### **Highway – Reward** (mined):

3.8Mt @ 6.2% Cu, 1g/t Au

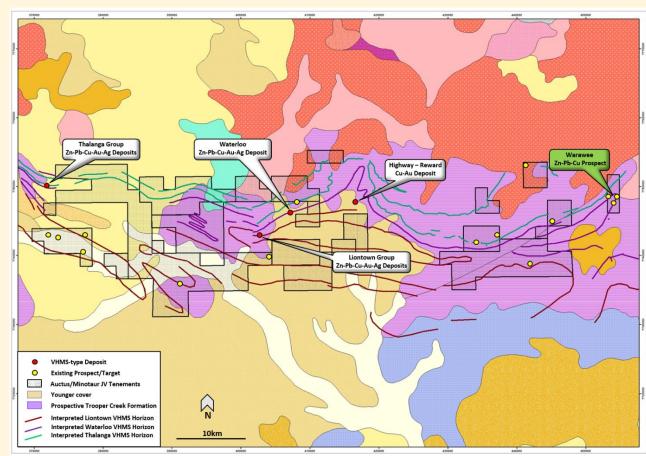
#### Waterloo (current):

 0.7Mt @ 11% Zn, 1.6% Pb, 1.9% Cu, 50g/t Ag, 1g/t A

#### Liontown (current):

 2Mt @ 4.6% Zn, 1.6% Pb, 0.5% Cu, 25g/t Ag, 0.8g/t Au

The tenements have received scant exploration attention since early 1990's due to presence of highly conductive cover



Minotaur sees this as opportunity to apply its under-cover exploration expertise using techniques responsive to sulphide dominant mineral systems

# Minotaur's other activity



#### Western Australia – Ni

- Leinster project (MEP: 100%)
  - Available for sale or JV
  - Saints project (MEP: 100%)
  - 2017 JORC Nickel resource at 'Saints'
  - 2018 EM shows additional, possibly mineralised, conductors are present
  - Available for sale or JV

#### South Australia – Industrial Minerals

- **Poochera JV** (MEP: 100%, ADN to earn 75%)
- Kaolin deposits
- Andromeda to spend A\$6M over 5 years
- Halloysite nanoclays R&D (MEP: 100%)
  - Uni of Newcastle R&D assessing nanotechnology applications for halloysite component of kaolin clays
  - Minotaur owns IP





Cloncumy Copper-Gold Projects

South Australia - Peake & Denison Inliers

Peake and Denison Domain a Transition Zone between Gawler Craton and Cloncurry IOCG Province

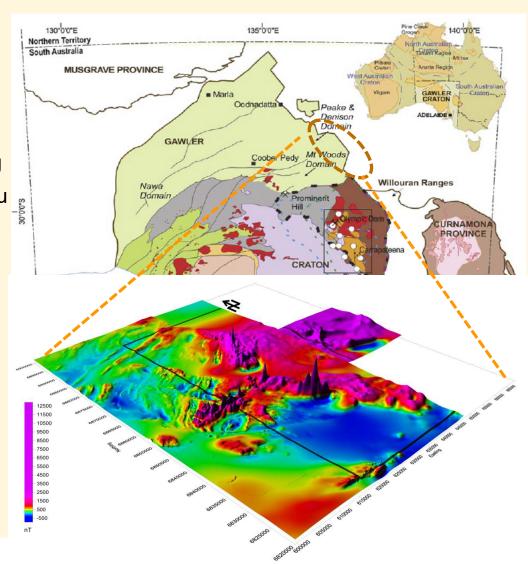


### South Australia's IOCG Province: OD, Carrapateena, Prominent Hill......Peake & Denison Domain

- Poorly known, under cover
- Intrusive ages more akin to Cloncurry
- Intense magnetic anomalism (>15,000 nT)
- Regional mag-epidote-albite alteration
- Fe metasomatism and magnetite bx in drilling
- Best drill intercept DCDH001 3m @ 2.75% Cu (330-333m) in magnetite breccia. Age unknown
- Key target styles are "Ernest Henry" or "Wirrda Well" magnetite breccia "pipes"
- an improved magnetic processing toolkit is essential

### **R&D** innovation;

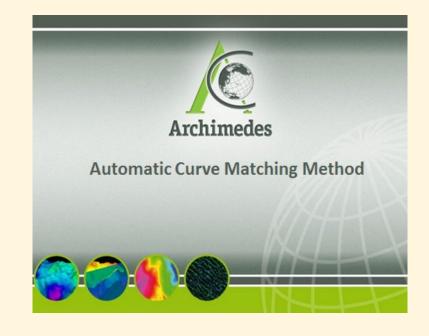
- 1. Confirm age framework for known mineralisation and alteration (UniSA)
- 2. New approach to discerning magnetic targets (Archimedes Consulting)





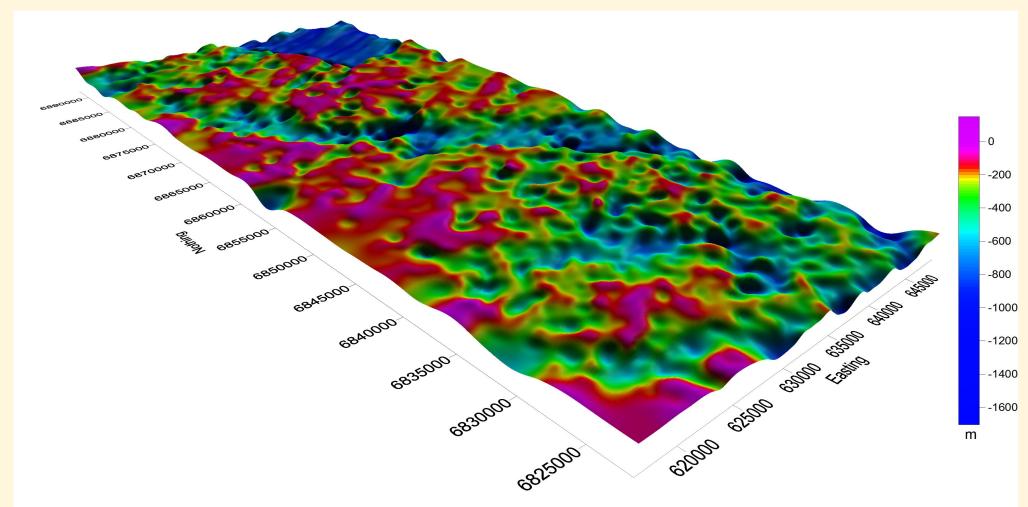
In partnership with Archimedes Consulting – 3D magnetic source mapping as a new approach to identifying potential targets of interest

- Automated magnetic source modelling
- Computed line by line at multiple wavelengths
- Generates millions of 3D data points with computed magnetic susceptibilities (mag sus)
- 3D visualisation cube of data points in the subsurface





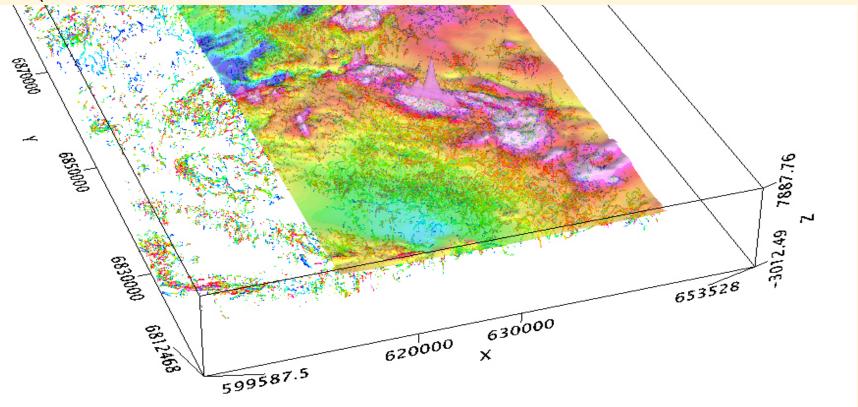
### Peake & Denison Domain...cover thickness - first output in High resolution





### 3D magnetic source mapping as a visualisation and target generation tool

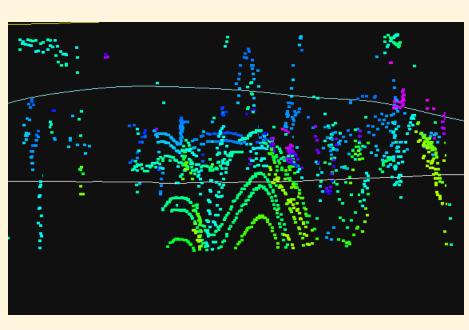
 Akin to a 3D seismic survey, it is anticipated that the very high density of data points (+ 6 million) will allow visual identification in 3D of causative features and bedrock structures (faults, folds, stratal units, intrusive bodies, and .....

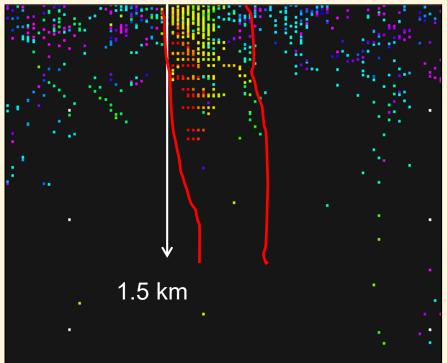




### 3D magnetic source mapping as a visualisation and target generation tool

Akin to a 3D seismic survey, it is anticipated that the very high density of data points (+ 6 million) will allow visual identification in 3D of causative features and bedrock structures (faults, folds, stratal units, intrusive bodies) and .... in particular, subvertical pipe-like clusters of magnetic sources that may indicate intrusive diatreme or breccia

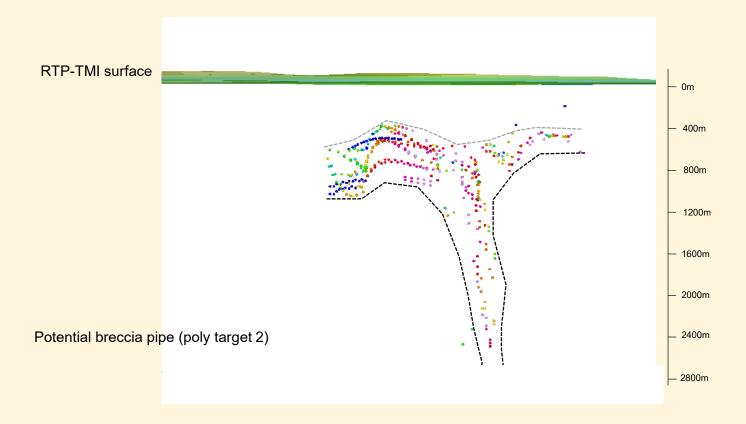






### 3D magnetic source mapping as a visualisation and target generation tool

 The aim: to generate new targets in a new way from existing aerial surveys ...... in particular, looking for subvertical pipe-like clusters of magnetic sources that may indicate intrusive magnetite bearing IOCG diatreme or breccia bodies





# **Appendix**

# Corporate snapshot



### Strong shareholders, smart mining investors and high quality JV partners

#### **About Minotaur Exploration (ASX: MEP)**

- Primary focus on copper, gold, and zinc exploration in Queensland
- Well regarded for technical excellence in exploration
- Supportive and high quality JV partners
- Creating JV entry opportunities to underpin business model

#### Share price performance over past 2 years



#### Financial information

Number of shares <sup>1</sup>	303.1m
Share price (26 Nov-18)	A\$0.040
Market capitalisation	A\$12.1m
Cash (30 Sep-18)	A\$2.5m
Debt (30 Sep-18)	A\$0.4m
Listed investments	A\$0.5m
Enterprise value	A\$9.5m
Top shareholders	
Top shareholders  Sprott Inc. (TSX: SII) a global resources fund	13.5%
<u> </u>	13.5% 6.1%
Sprott Inc. (TSX: SII) a global resources fund	
Sprott Inc. (TSX: SII) a global resources fund  Yarraandoo Private Australian mining investor	6.1%
Sprott Inc. (TSX: SII) a global resources fund Yarraandoo Private Australian mining investor OZ Minerals ASX-listed major copper-gold miner	6.1% 2.8%
Sprott Inc. (TSX: SII) a global resources fund Yarraandoo Private Australian mining investor OZ Minerals ASX-listed major copper-gold miner Mr I.R. Gemmell Private Australian mining investor	6.1% 2.8% 1.9%

#### Notes:

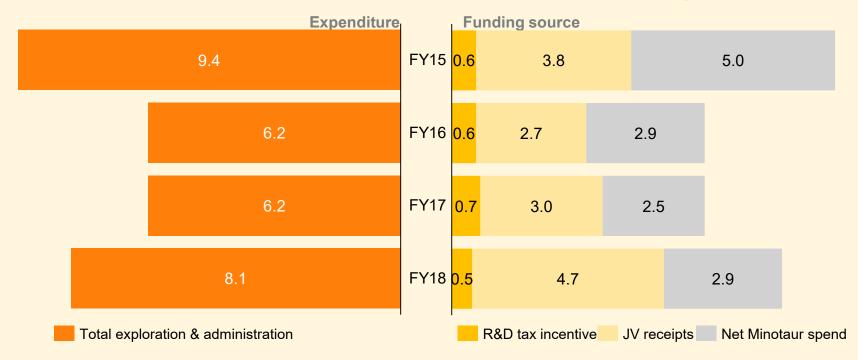
<sup>1.</sup> Excludes 24.2m listed options (MEPO) with exercise price of with exercise price range of A\$0.068 – A\$0.30 and expiry date range of 31 October 2019 to 6 September 2021

# Exploration funding model



# Minotaur's business model is based on JV funding; maximising exploration investment

Minotaur's annual exploration and administration expenditure and funding source (A\$m)



Source: Appendix 5Bs

# **Explanatory statements**



### About the Eloise Joint Venture

OZ Minerals Ltd (ASX: OZL) may sole fund up to \$10 million over six years for which it will earn 70% beneficial interest in Minotaur's 'Eloise' tenements, 65km south-east of Cloncurry, Queensland. OZ Minerals' 70% interest is forecast to be achieved by early 2019, 3 years earlier than originally contemplated. Minotaur is manager and operator of the joint venture.

### Disclaimer

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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.