



MINOTAUR  
EXPLORATION

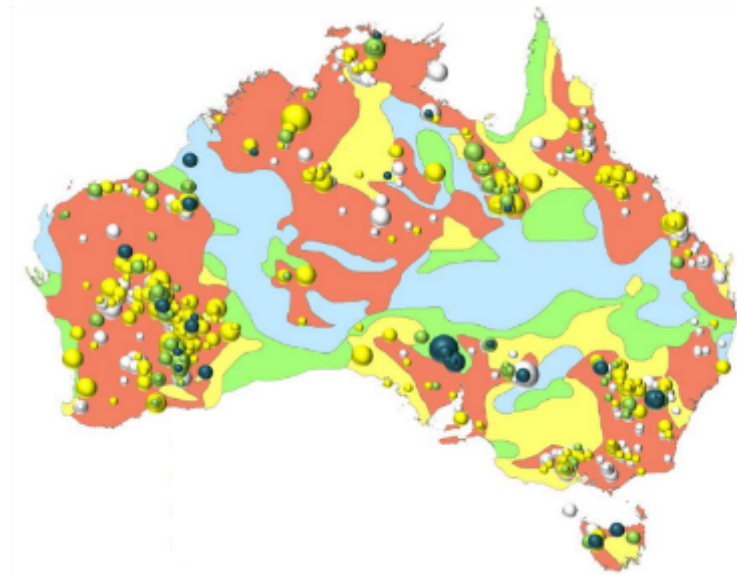
# Minotaur Exploration | ASX: MEP

## Activity Outlook – H1 of 2020

AGM 28 November 2019

# Minerals exploration is going under cover

**Approximately 80% of basement rocks in Australia are obscured under cover <sup>1</sup>**



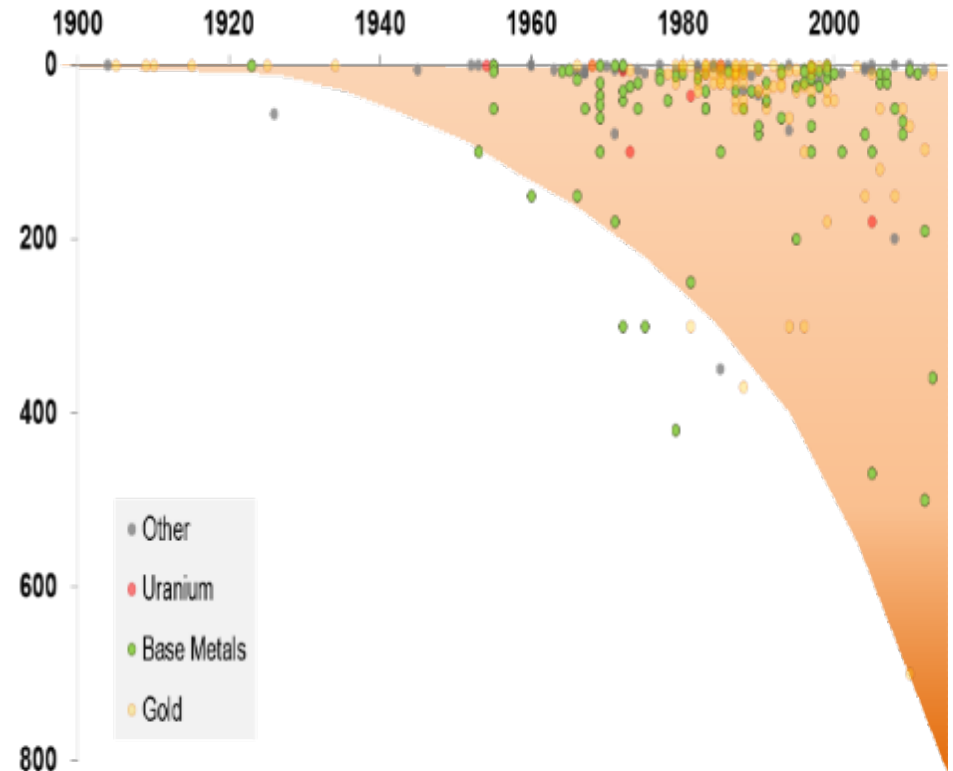
## Discoveries

- Outcropping
- 1-50 Metres
- 51-200 Metres
- >200 Metres

## Indicative depth of cover:

- Outcrop & shallow cover over Basement <100m
- Depth to Basement 100 to 500m
- Depth to Basement 500 to 1000m
- Depth to Basement >1000m

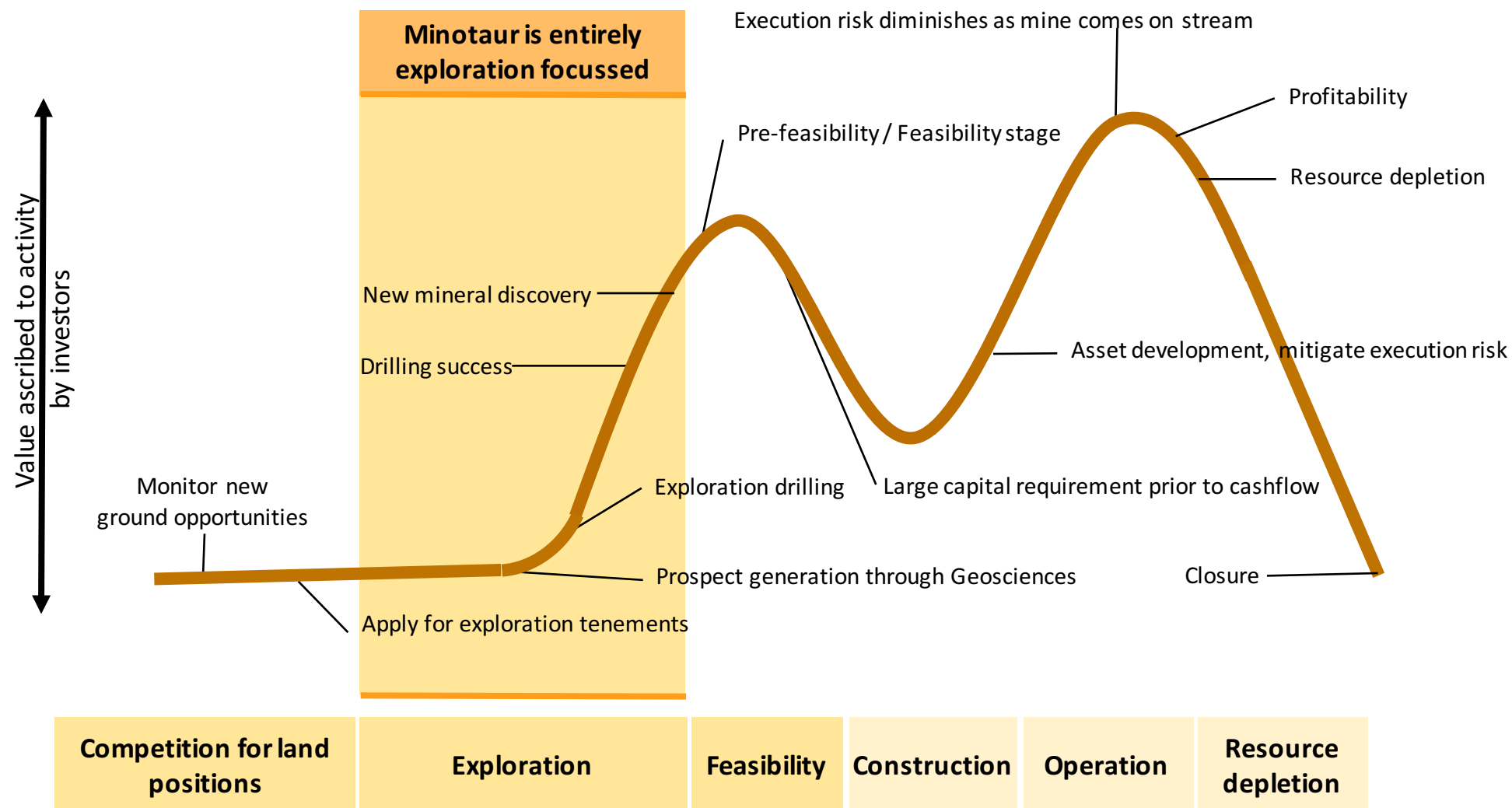
**Depth of cover to major mineral discoveries in Australia is increasing**



Source: MinEx Consulting © November 2015 Geoscience Australia

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# Exploration in the mining value chain



# Minotaur is a steady base metals explorer



**Expert in locating 'blind targets':** Exploring difficult-to-prospect areas using a tool box of refined geophysical techniques to locate mineralisation 'under cover'



**Active in the right space:** Strong outlook for base metals, with an impending long term supply-demand imbalance and expected price growth as head grades decline at major producers



**Proven JV business model and strong track record:** Minimises risk/dilution for shareholders, leads to high activity levels; demonstrated at Artemis (2014), Iris-Electra (2016), Jericho (2017)



**High quality portfolio:** Strategic partnerships with OZ Minerals (\$14.6m invested and 30,000m drilled at Jericho), world class halloysite-kaolin deposit at Poochera, Windsor VMS prospects



**Multiple levers for near term re-rating:** Ground geophysics at Warrawee; resumption of drilling at Jericho; pre-feasibility study at Poochera



**Platform model grows portfolio:** Strong target generation pipeline - Cloncurry Alliance, Highlands Cu-Au prospects, Peake & Denison IOCG prospects - provides growth options



# Corporate snapshot

**Share price**  
(22 Nov 2019)

**A\$0.047**

**Market  
capitalisation**

**A\$16.7m**

**Net Cash<sup>1</sup>: A\$1.0m**

**ASX Investments<sup>2</sup>:  
A\$1.898m**

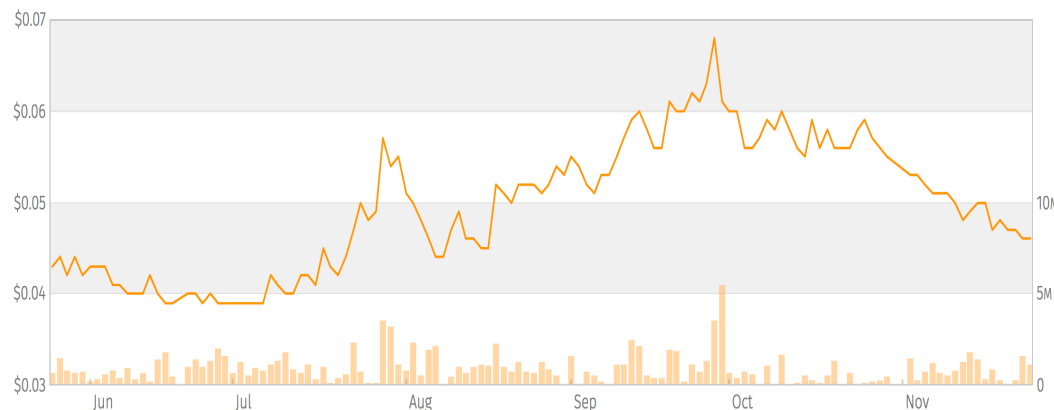
**Enterprise value**

**A\$14.2m**

**MEP price is at 38% discount to its 52 week high of 7.6c**

**Major shareholders**

**6 month Share price chart (Acps)** Source: IRESS



<b>Affiliates of the Sprott Group mining investor</b>	<b>12%</b>
<b>Yarraandoo private investor</b>	<b>7.0%</b>
<b>OZ Minerals ASX-listed copper-gold miner</b>	<b>2.4%</b>
<b>Miningnut private investor</b>	<b>1.3%</b>
<b>Chetan Enterprises private investor</b>	<b>1.1%</b>
<b>Top 20</b>	<b>34.7%</b>

**Notes:**

1. Cash = A\$1.0m, Debt = A\$0.36m, as at 31 Oct 2019, excludes non-recourse loan carry arrangement with OZ Minerals
2. Listed investments = A\$1.9m as at 22 Nov 2019; comprised 13.95% stake in Auroch Minerals (ASX:AOU), 0.63% stake in Petratherm (ASX:PTR) and 12.4% stake in Thomson Resources (ASX:TMZ)

# JMEI Tax Benefit for Minotaur's investors



## FY 2019

MEP distributed \$363k in JMEI tax credits for FY2019

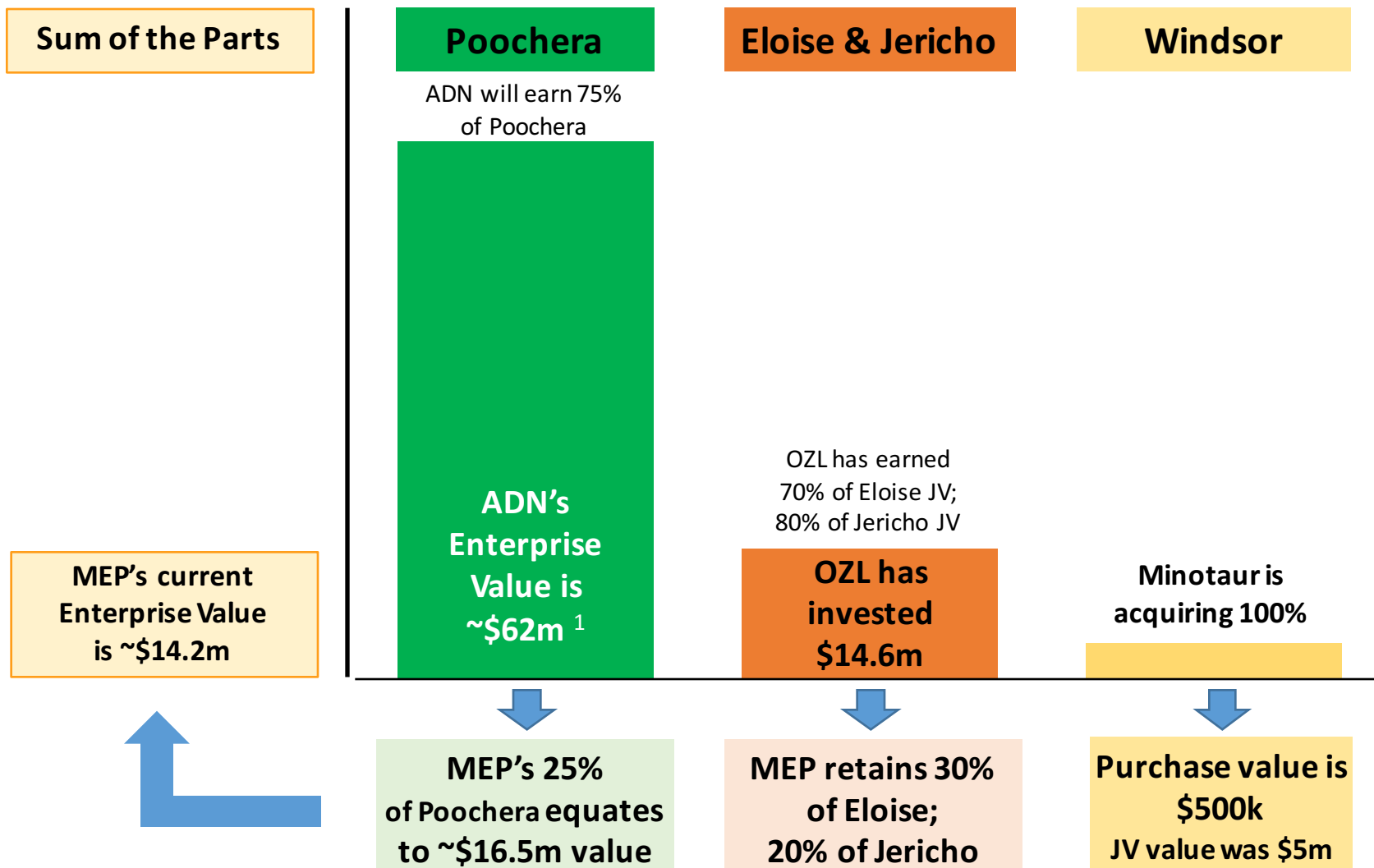
- Participants in the May 2019 Placement at 4c received 0.46c per share
- Participants in the Oct 2018 SPP at 4.2c received 0.48c per share
- **Represents 11.5% return**  
ie: a \$10,000 investment receives a tax credit of \$1,150

## FY 2020

**Minotaur secured \$1.06 million JMEI tax credits for distribution in FY2020**

**MEP may distribute from 0.5c and up to 1.1c per share (est) for greenfields exploration capital raised in FY2020**

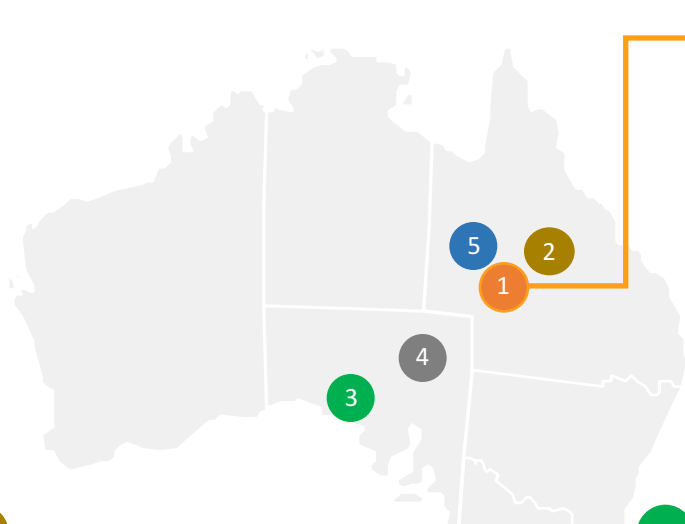
# Minotaur's asset base



Notes:

1. Andromeda's Enterprise value of ~\$62m rounded down from an estimated value of \$62.8m as at 22 Nov 2019. Calculation based on market capitalisation of \$65m as at 22 Nov 2019 and net cash of \$1.89m as retrieved from Andromeda's September Quarterly Report

## Asset base built through systematic ground selection and project generation expertise



1

### Cloncurry partnerships with OZ Minerals



- i. Jericho JV (OZL 80%)** OZL has invested \$10.6m to date  
Minotaur is 'loan carried' to production from April 2019
- ii. Eloise JV (OZL 70%)** OZL has invested \$4m to date  
EM targets ready to drill after Wet Season  
OZ Minerals is sole funding Eloise JV by A\$3m to 2021
- iii. Cloncurry Alliance** OZ Minerals is funding Minotaur with \$1m for project generation activities to 2021

2

### Windsor base metals JV (MEP may earn 80%)

- 631km<sup>2</sup> tenement package sited immediately east of Red River's Thalanga Zn-Pb-Cu mine
- Inaugural IP survey located a prospective VMS horizon under shallow cover
- Reconnaissance drilling showed the IP anomaly was due to pyritic shales
- IP remains a valid search tool
- 3D IP survey at 'Warrawee' deferred until Q2 2020 due to fire risk and West season conditions

3

### Poochera JV (MEP 100%; ADN: earning 75%)

- 'World-class' Kaolin-Halloysite deposits
- Andromeda Metals (ASX: ADN) to invest A\$6m by 2023
- ADN's Scoping study reported 174% IRR for 15 year LoM
- ADN is fully funded to complete PFS
- ADN proceeding with mine permitting activities
- Minotaur will receive 25% of mine cash flows

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### Peake & Denison (MEP: 100%)

- 2,500km<sup>2</sup> potentially a new frontier IOCG terrane
- Multiple IOCG and BHT style targets modelled from regional magnetics
- AMT survey planned for early 2020 to pinpoint anomalies, subject to land access approvals

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### Highlands (MEP: 100%)

- 753km<sup>2</sup> surrounding Round Oak Minerals' new Barbara Cu-Au mine



# Intermediate Activity Timeline



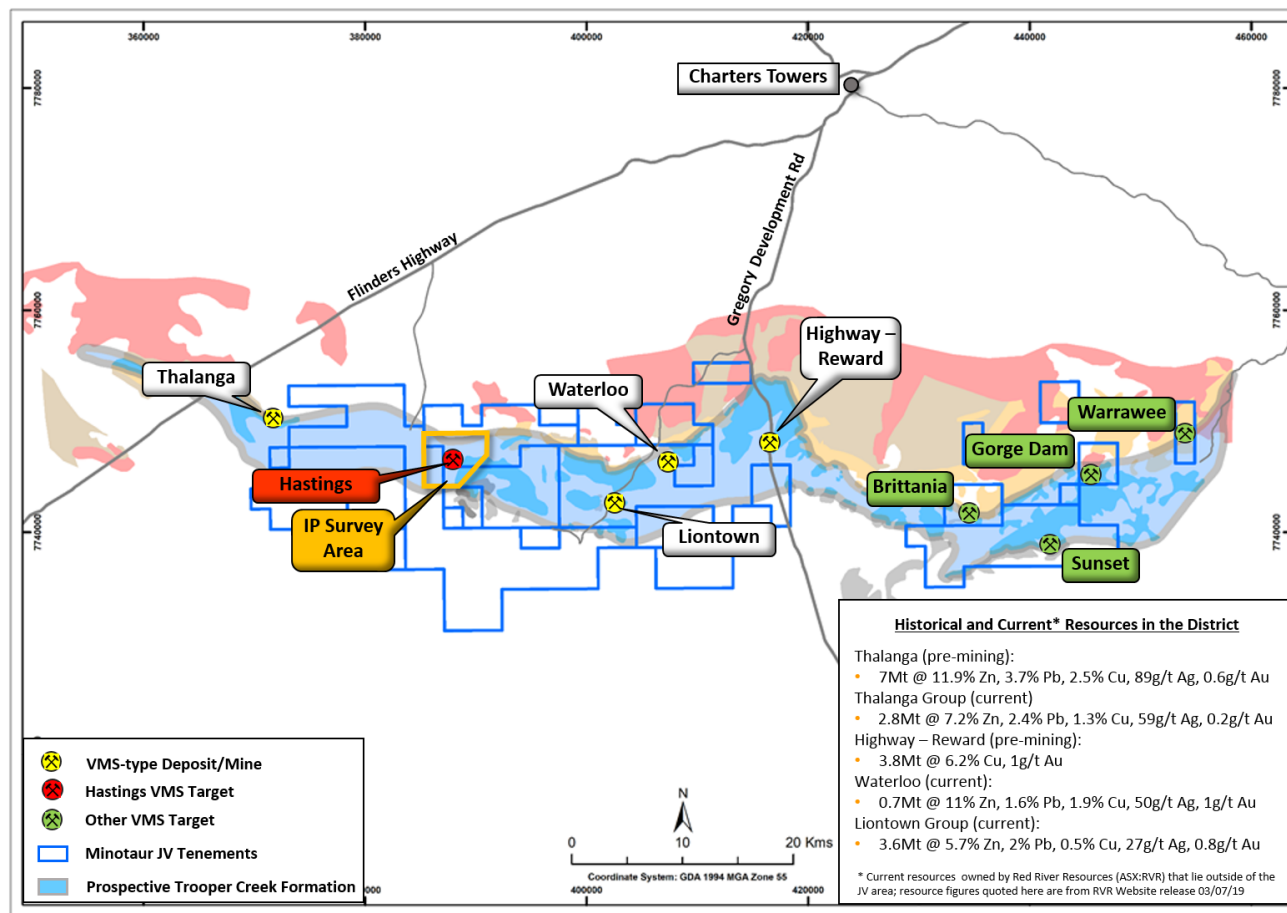
# Windsor: prospective for Zn, Pb, Cu, Au

Minotaur is purchasing 100% tenement ownership for \$250k Cash + \$250k of Minotaur shares

**Trooper Creek Formation (TCF)** is a highly prospective sequence extending across the tenement group

Red River Resources (ASX: RVR) reported impressive polymetallic results at Lione town eg: 5.35m @ 57.1% Zn Eq from New Queen Lens (see RVR\_ASX report dated 13 Nov 2019)

- Drilled into Hastings IP anomaly; found to be due to black shales
- IP remains a valid target generation technique
- Further IP to be carried out along Trooper Creek Formation
- 3D IP survey at Warrawee was suspended due to fire risk declaration across Queensland
- Field work will resume after the Wet season

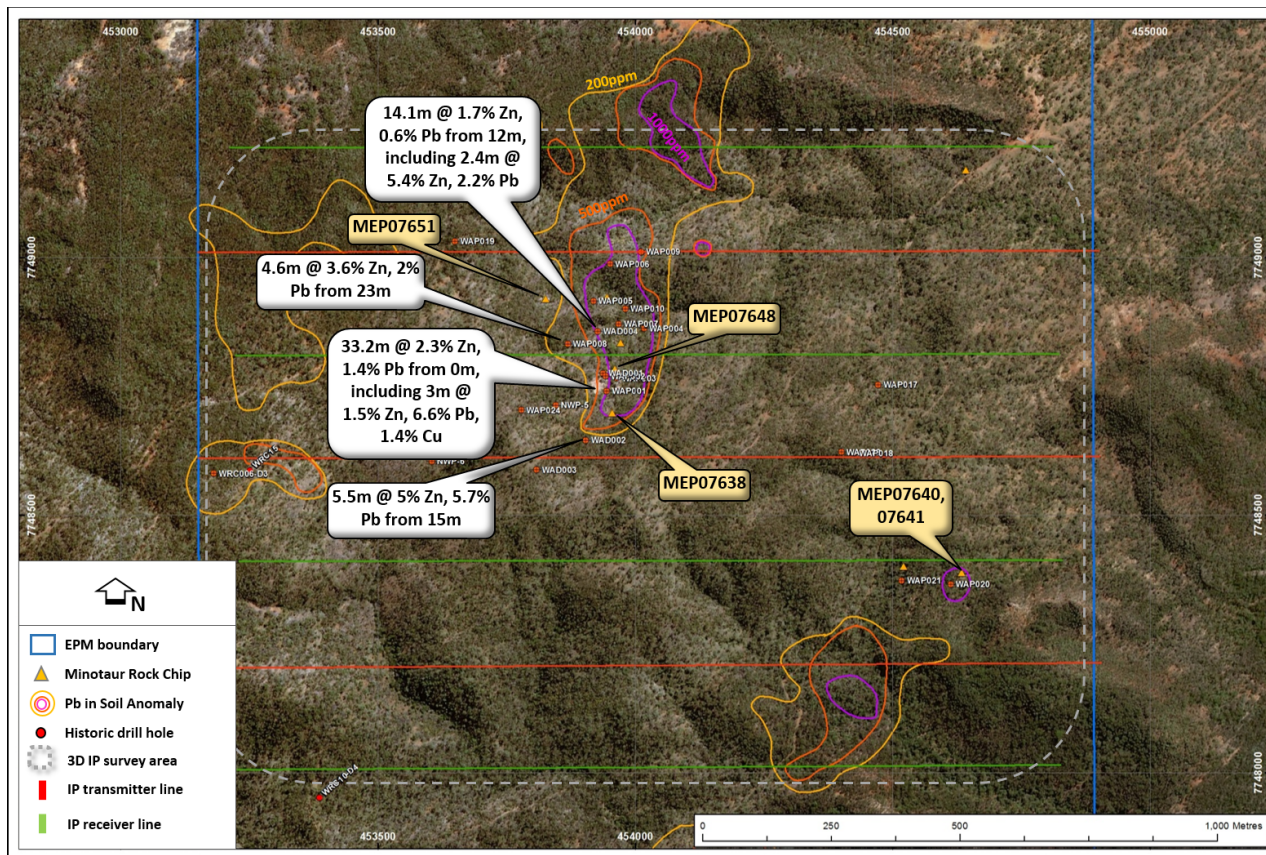


## VMS Outcrop

- Gossans are Pb-Ag-Cu-Zn mineralised
- Shallow 1992 drilling failed to locate source of mineralisation
- Recent rock chip samples taken:
  - 67.6g/t Au (MEP07641)
  - 5060g/t Ag (MEP07648)
  - 498g/t Ag (MEP07651)

## Warrawee work plan

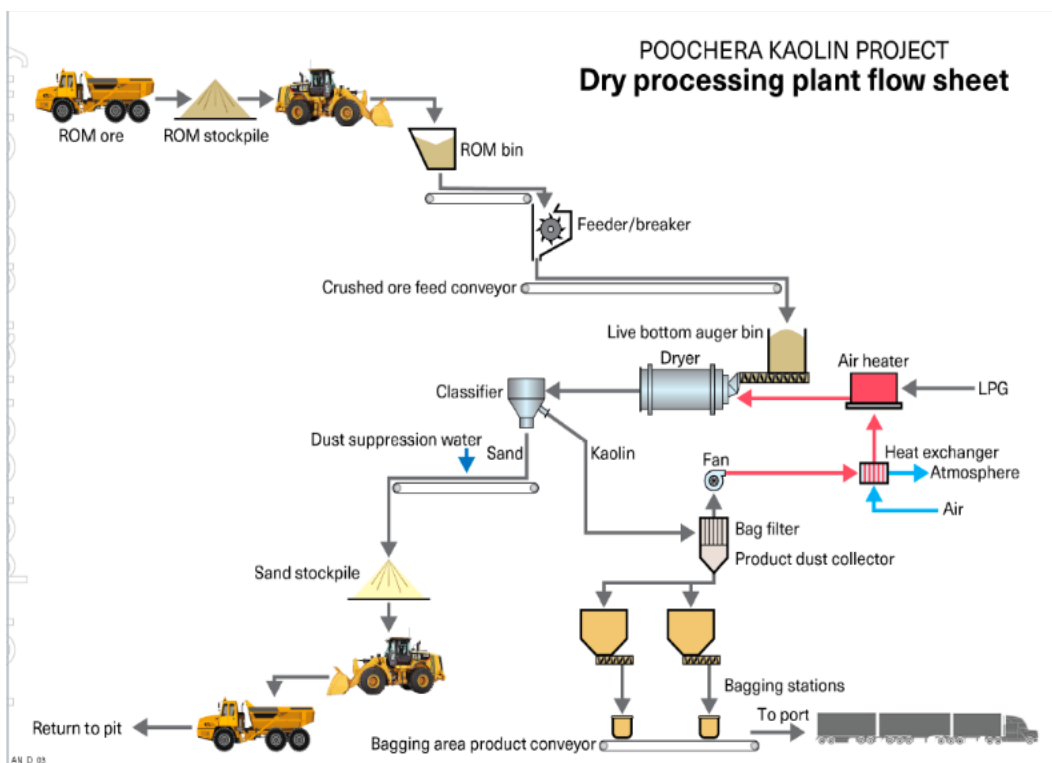
- 3D IP technique to map the subsurface for sulphide source
- 3D IP survey over 1,600m x 1,200m was initiated mid November
- Activity was suspended due to onset of severe fire risk conditions
- Survey team to be re-mobilised in April 2020, after Wet season



Warrawee 3D IP survey area with historic drill intercepts, soil anomalism gradients and selected rock samples taken by MEP

Andromeda Metals (ASX: ADN, EV ~\$62m) is earning 75%; Minotaur will receive 25% of mine revenues

## Simple, dry processing plant flow sheet



Refer ADN Scoping Study released on 30 September 2019 for details

## Andromeda Metals' (ADN) Scoping Study

### Mine Plan – Production Target

From Measured Resources	4.2 Mt
From Indicated Resources	3.4 Mt
<b>Total Production Target</b>	<b>7.6 Mt</b>

### Capital Costs

Initial Capital Costs, Year 0	\$9M
Working Capital to Month 3, Year 1	\$16M
Maximum Cash Requirement	\$25M
Processing Plant, funded by internal cash flow, Year 2	\$28M
Sustaining Capital Costs (Years 3-15 @ \$600K/yr)	\$9M

### Production Summary

Mine life	15 years
Dry-processing rate of kaolinised granite	500ktpa
Strip Ratio (Waste:Ore)	2.3
Premium Refined Kaolin Produced	187ktpa
Average Yield of Refined Kaolin (LOM average)	37%

### Project Economics

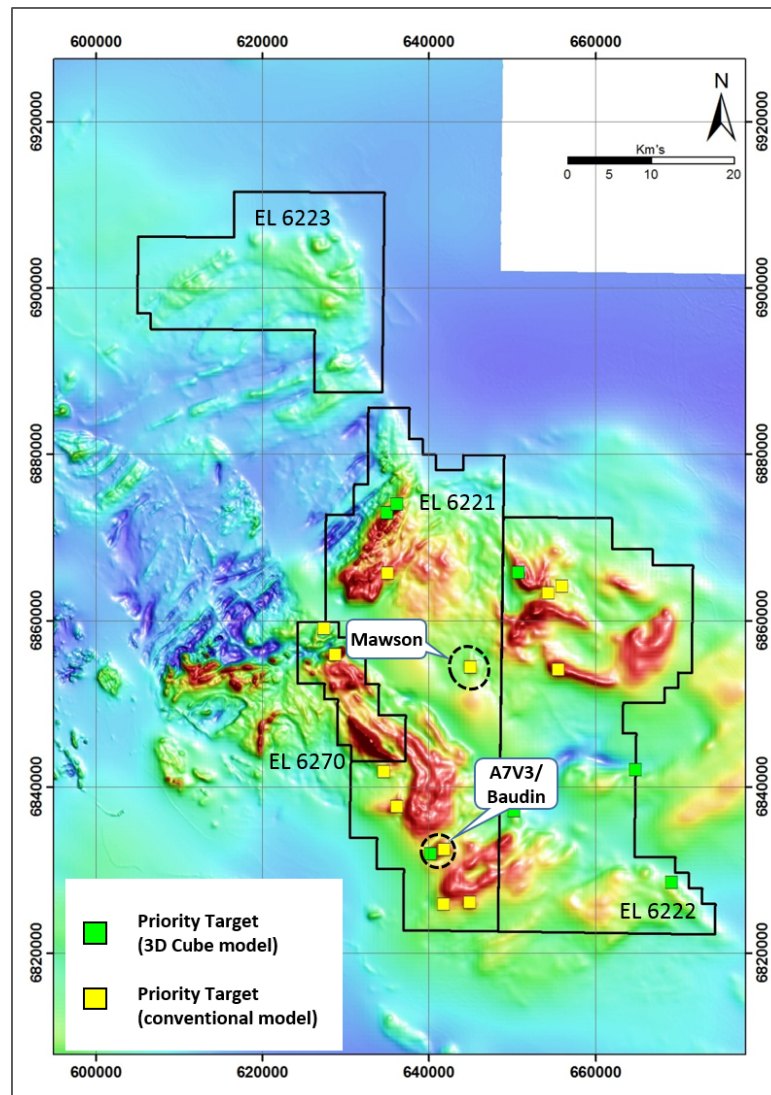
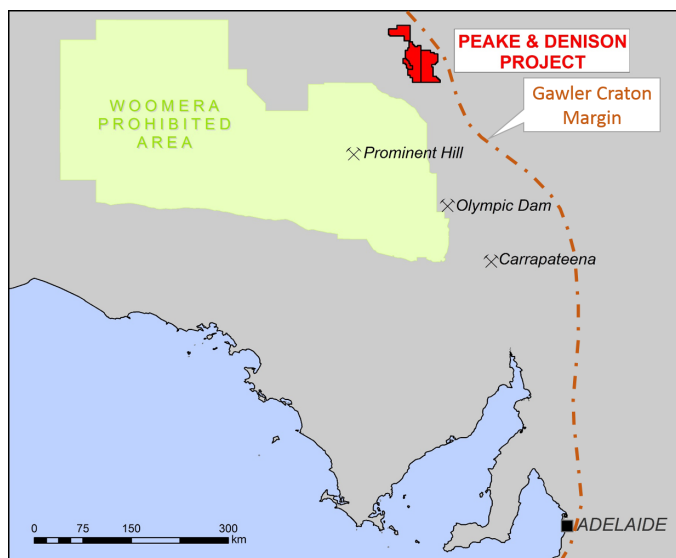
Kaolin Price – Premium Wet-Refined (A\$/tonne ex Asian works)	\$700/t
Revenue	\$1,953M
AISC equivalent (AUD/tonne Wet-Refined Premium Kaolin)	\$396/t
EBITDA LoM	\$844M
Cashflow	\$798M
NPV (8% pre-tax)	\$413M
IRR	174%
Payback from start of site works	15 months



## On the edge of the Gawler Craton

Peake and Denison Inlier shows striking similarities to Cloncurry terrane with multiple, large magnetic anomalies

- Regional granitoid Fe-Na-Ca alteration ages (1533-1490Ma) in same age range (1530-1490Ma) as Cloncurry granites
- 2,500km<sup>2</sup> with only 23 historic drill holes penetrating basement



## MEP 100%

- Bedrock ages obtained from historic core by Minotaur
- Core shows chalcopyrite-pyrite breccia in hydrothermal magnetite
- some magnetic anomalies lie adjacent to large faults
- 19 targets identified
- ground geophysics needed to refine drill designs
- AMT technique to be trialled in Q1 of 2020

## Target types

- **Ernest Henry** style Cu-Au breccia
- BHT-type Zn-Pb-Ag similar to **Cannington**



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# Questions?



# Important Notice

## About the Eloise Joint Venture

OZ Minerals Ltd (ASX: OZL) expended \$10 million in exploration activity through to 30 March 2019 on Minotaur's 'Eloise' tenements, 65km south-east of Cloncurry, Queensland, and thereby earned 70% beneficial interest. OZ Minerals will sole fund up to \$13 million by August 2021 to maintain its 70% beneficial interest in the tenement package. Minotaur is manager and operator of the joint venture.

## About the Jericho Joint Venture

OZ Minerals converted its 70% interest in the Jericho deposit to 80% by undertaking to fund Minotaur's 20% share of all expenses at Jericho from 1 April 2019 until production. The accruing amount is captured in a non-recourse loan account which Minotaur is liable to repay only from potential future positive cash flow from the Jericho deposit. At 30 September 2019 the loan balance was ~\$0.95 million.

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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.

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