



## **Mallee Bull copper-polymetallic discovery**

**Rob Tyson, Managing  
Director**

# Disclaimer & Competent Persons Statement

## • Disclaimer

- *The views expressed here other than historical fact constitute forward-looking statements. Forward-looking statements are based upon estimates and assumptions considered reasonable by the Company, albeit subject to uncertainties and contingencies of unknown factors that may cause variation in such forward-looking statements beyond the Company's ability to control or predict. Nothing in this release should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.*

## • Competent Persons Statement

- *The information in this report that relates to Exploration Results is based on information compiled by Mr Robert Tyson, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Tyson is Managing Director of Peel Mining Ltd. Mr Tyson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Tyson consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*
- *The information in this report that relates to mineral resource estimation for Apollo Hill is based on work completed by Mr Jonathon Abbott who is a full time employee of Hellman and Schofield Pty Ltd and a member of the Australasian Institute of Mining and Metallurgy. Hellman & Schofield was not required to review the quality or validity of the sampling data, as Peel Mining are accepting responsibility for these aspects of the estimates. Mr Abbott has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Abbott consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*
- *The information in this report relating to the Attunga resources is based on information compiled by Mr Murray Hutton, who is a Member of the Australian Institute of Geoscientists and is employed by Geos Mining. He has sufficient relevant experience to qualify as a Competent Person as defined in the 2004 edition of the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves.' Mr Hutton consents to the inclusion in this report of this information in the form and context in which it appears.*



# Capital and Corporate

- **Capital structure**

Fully paid shares: 110 million	Enterprise value: \$10 million
Options: 0.2 million	Top 20 investors: ~57%
Market cap (@ 9 cps): \$10 million	Directors' holding: ~26%

- **Business model**

- Identify and acquire undervalued/prospective mineral assets
- Add value through systematic exploration
- Monetise (through JV/sale/IPO) or take to production



# Board and Management

Small leadership team with blend of technical and commercial backgrounds;  
minimum of 15 years' experience for each team member

- **Board**

- **Rob Tyson (Managing Director)**  
geologist more than 15 years  
resources industry experience
- **Simon Hadfield (Chairman)**  
businessman with more than 35 years  
experience managing medium and  
large companies
- **Graham Hardie (Non-executive  
Director)** chartered accountant and  
property developer
- **Craig McGown (Non-executive  
Director)** chartered accountant and  
corporate finance specialist

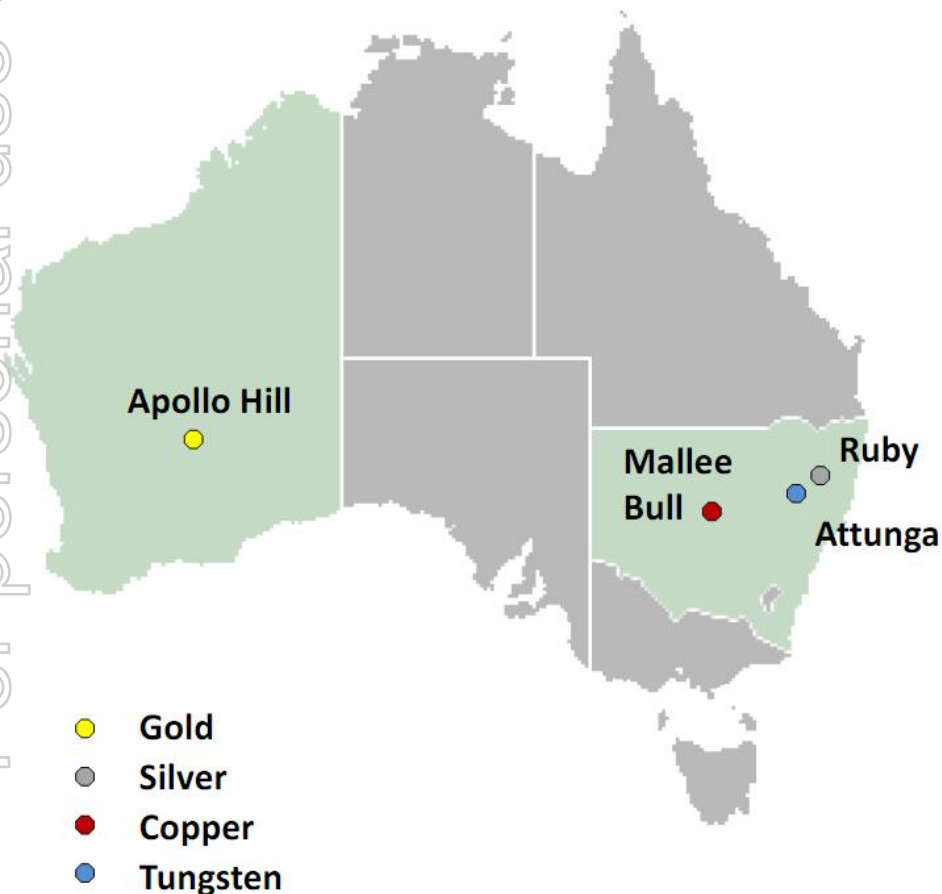
- **Technical Team**

- **Michael Oates (Project Geologist)**
- **Steve Leggett (Operations Manager)**
- **Nancy Vickery (Contract Geologist)**
- **Bob Brown (Contract Geologist)**



# Project Summary

## Emerging precious-base metal resources company

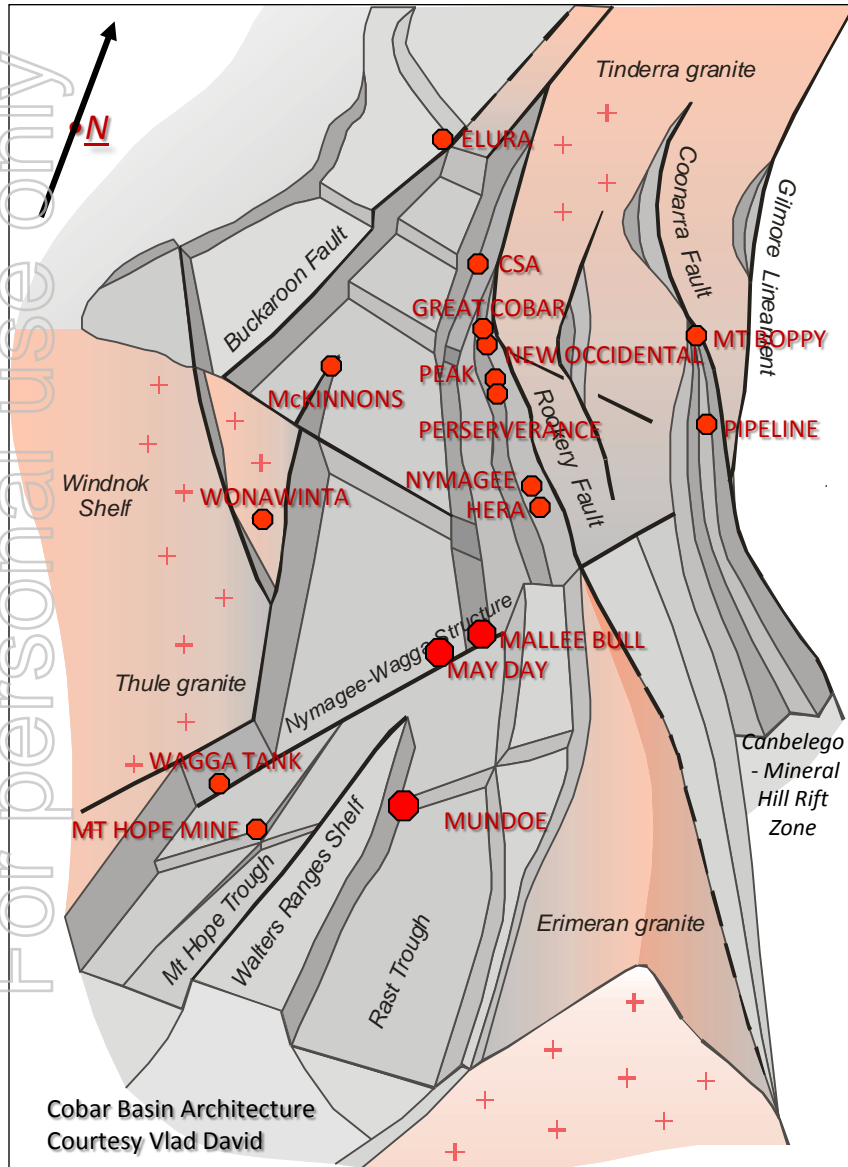


- **Key assets:**

- **Mallee Bull Copper-polymetallic Discovery (Gilgunnia, NSW)**
- Ruby Silver project (Armidale, NSW)
- Apollo Hill Gold project (Goldfields WA)
- Attunga Tungsten project (Tamworth, NSW)
- Rise & Shine Gold project (Central Otago, NZ)

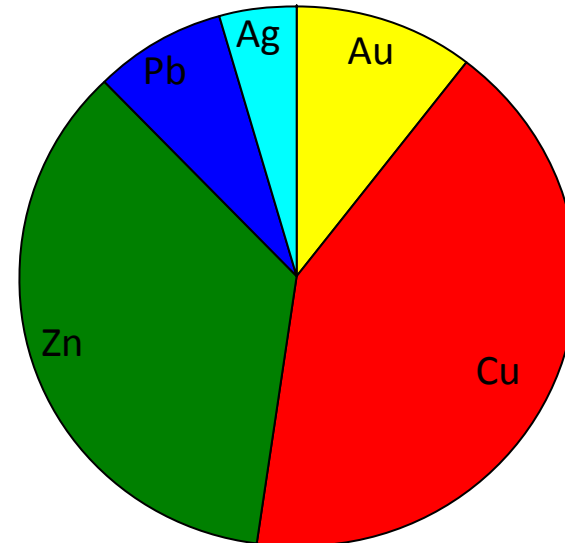


# Cobar Superbasin is worldclass mineral province

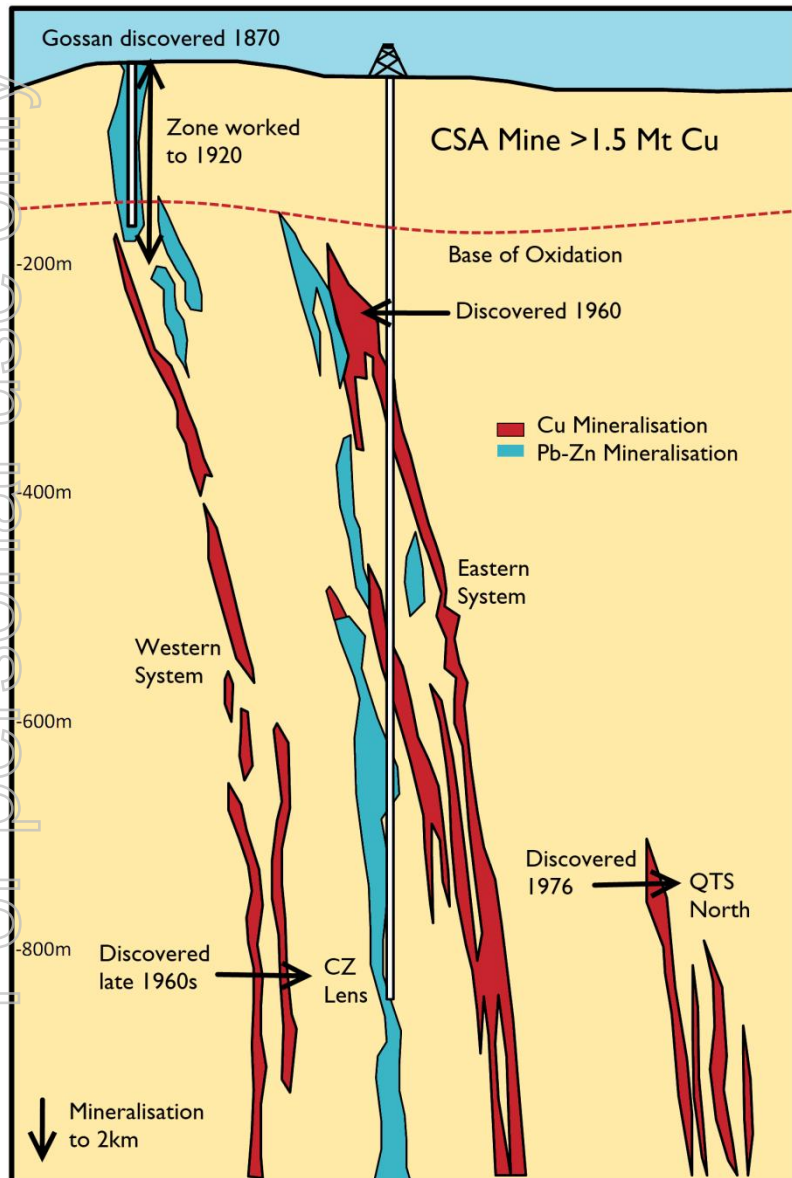


## • Cobar Superbasin pre-mining metal inventory:

- >2.2 Mt Cu = US\$18b
- >7 Moz Au = US\$12b
- >4.7 Mt Zn = US\$9.5b
- >2.8 Mt Pb = US\$5.5b
- >145 Moz Ag = US\$4.5b
- Total = US\$50b



# “Cobar –style” deposits vs Mallee Bull Discovery



## Attribute

Polymetallic (Cu-Ag-Au-Pb-Zn)

Proximity to major structures  
(growth/transfer faults)

Shear-hosted

Strongly leached near surface

Chlorite and silica alteration

Facies and rock competency contrasts

Moderate to high strain zone

Short strike length (<200m)

Narrow widths (5-20m)

Vertical continuity (>400m)

Generally occur as clustered/stacked  
lenses

## Mallee Bull

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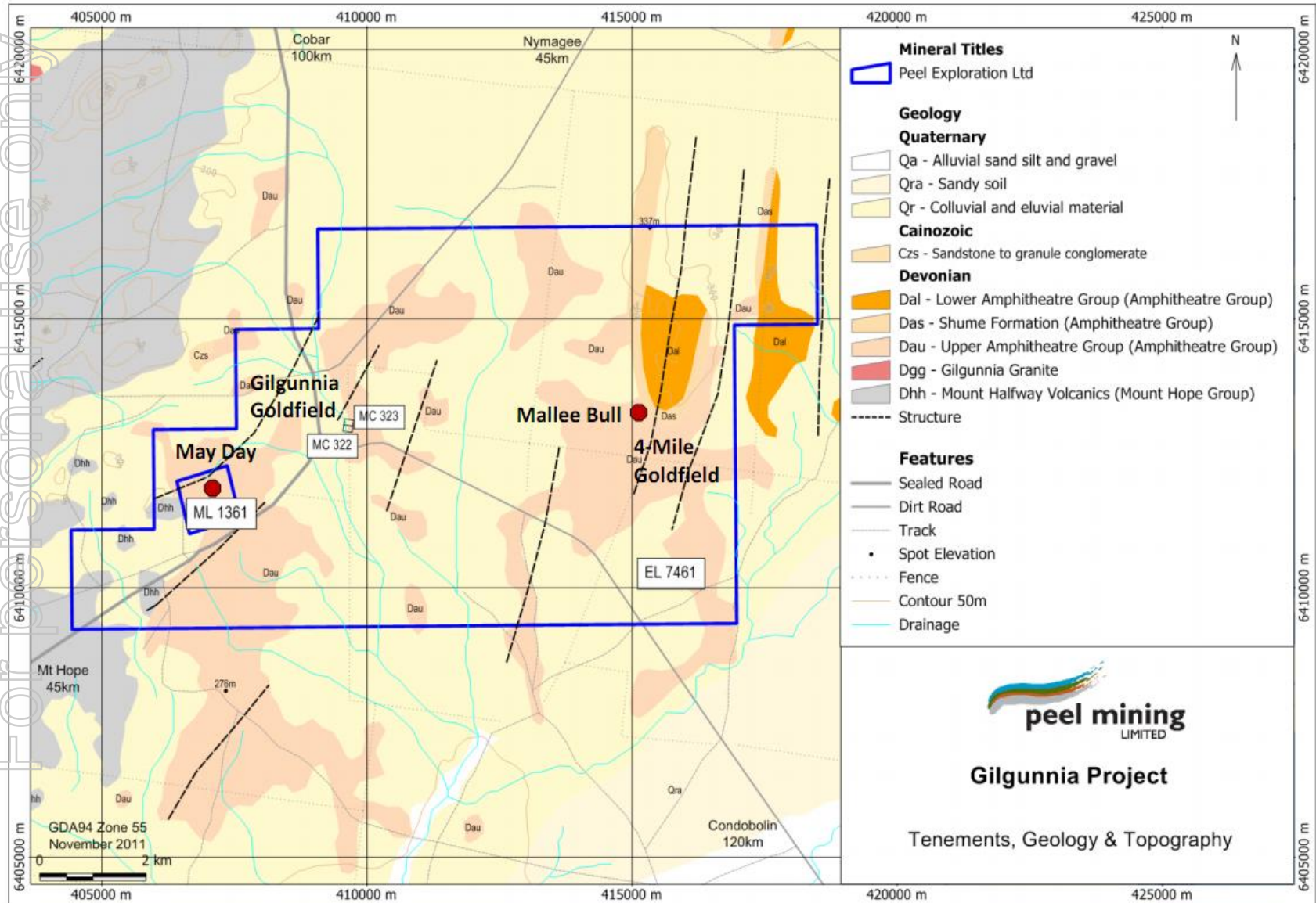
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# Gilgunnia (incl. Mallee Bull Discovery) Project



# Mallee Bull Discovery

## Follow-up drilling confirms Mallee Bull as a “Cobar-style” discovery

- **Location and tenure**
  - 100 km south of Cobar, NSW
  - 80 km<sup>2</sup> of granted leases (EL and ML)
- **Geology and mineralisation**
  - Located in Silurian-Devonian Cobar Superbasin
  - Cobar-style polymetallic (Cu-Au-Ag-Pb-Zn) mineralisation
- **Mallee Bull Cu-Ag-Au-Pb-Zn-Co Discovery**
  - 8km east of May Day Au-Ag-Pb-Zn-Cu deposit; adjacent to historic 4-Mile goldfield
  - Coincident EM and magnetic geophysical anomalies
  - Favourable geological position in volcanoclastic turbidite sequence age equivalent of Great Cobar geology
  - Favourable structural position located on “nose” of anticline; high strain environment
  - Ease of access, 3 km off major road
  - Perseverance required; several rounds of drilling necessary
  - High-grade massive sulphides intercepted in July/August 2011



# Mallee Bull Discovery

- **Results to date**

- *Mallee Bull Cobar-style discovery better results to date include:*

10m @ 9.01% Pb, 11.00% Zn, 41 g/t Ag, 0.77 g/t Au	6.65m @ 3.10% Cu, 34 g/t Ag, 0.93 g/t Au
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9.3m @ 1.20% Cu, 19 g/t Ag, 0.14 g/t Au	10m @ 1.70% Cu, 46 g/t Ag, 0.27 g/t Au
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5m @ 2.40% Cu, 28 g/t Ag, 0.60 g/t Au	7m @ 2.32% Cu, 14 g/t Ag, 0.15 g/t Au
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7m @ 1.31% Cu, 19 g/t Ag, 0.56 g/t Au	6m @ 2.01% Cu, 64 g/t Ag, 0.43 g/t Au
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11m @ 2.71% Cu, 36 g/t Ag, 0.26 g/t Au	10m @ 2.66% Cu, 41 g/t Ag, 0.51 g/t Au
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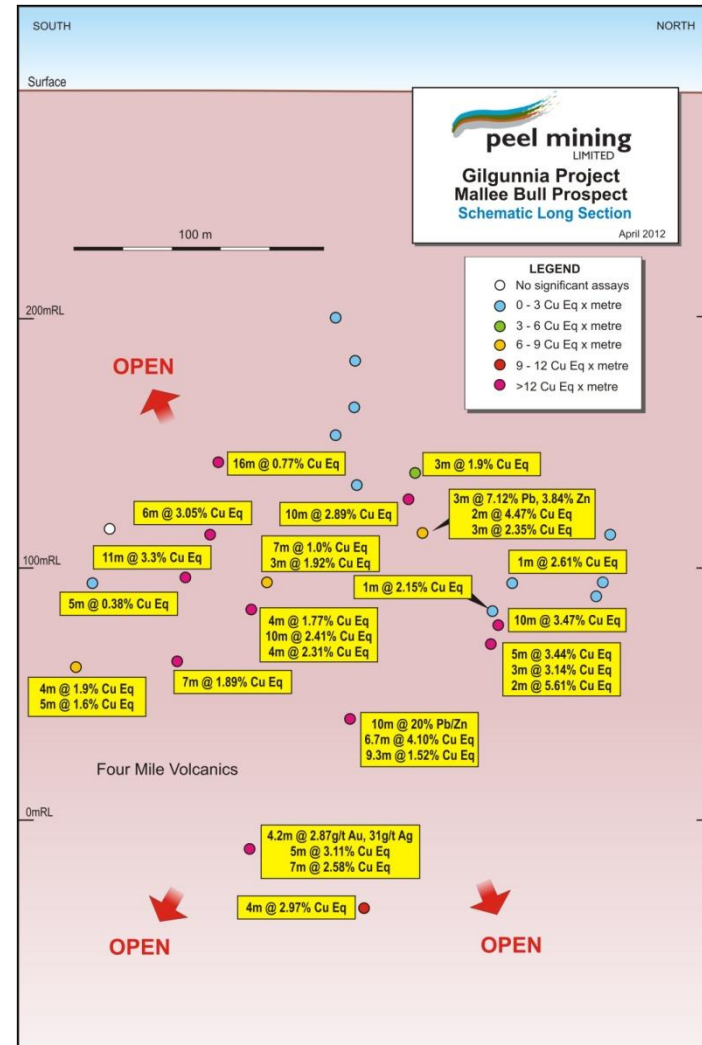
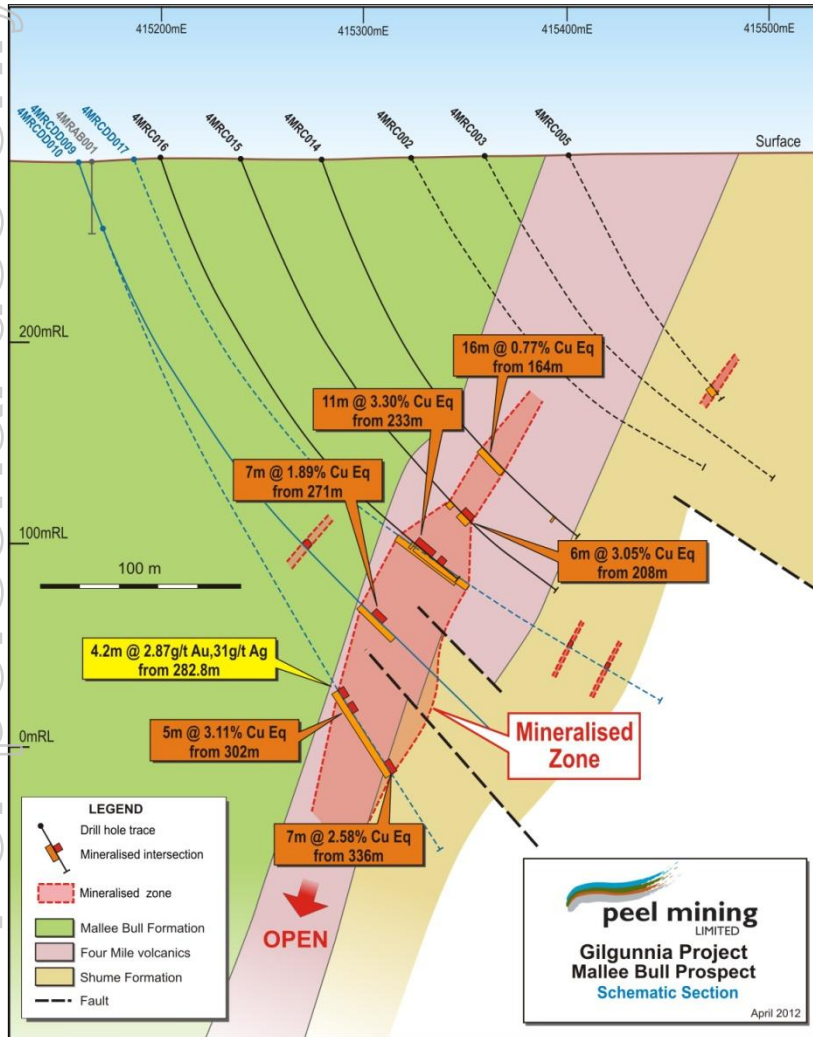
5m @ 2.14% Cu, 41 g/t Ag, 1.29 g/t Au	10m @ 2.22% Cu, 33 g/t Ag, 0.44 g/t Au
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- *Strike of mineralisation = >120m*
  - *Shallowest intercept to date = 150m below surface*
  - *Deepest intercept to date = 310m below surface*
  - *Mineralisation open in multiple directions, including down-dip*
  - *Option to purchase Wirchilleba Station (Mallee Bull “footprint”)*



# Mallee Bull Discovery

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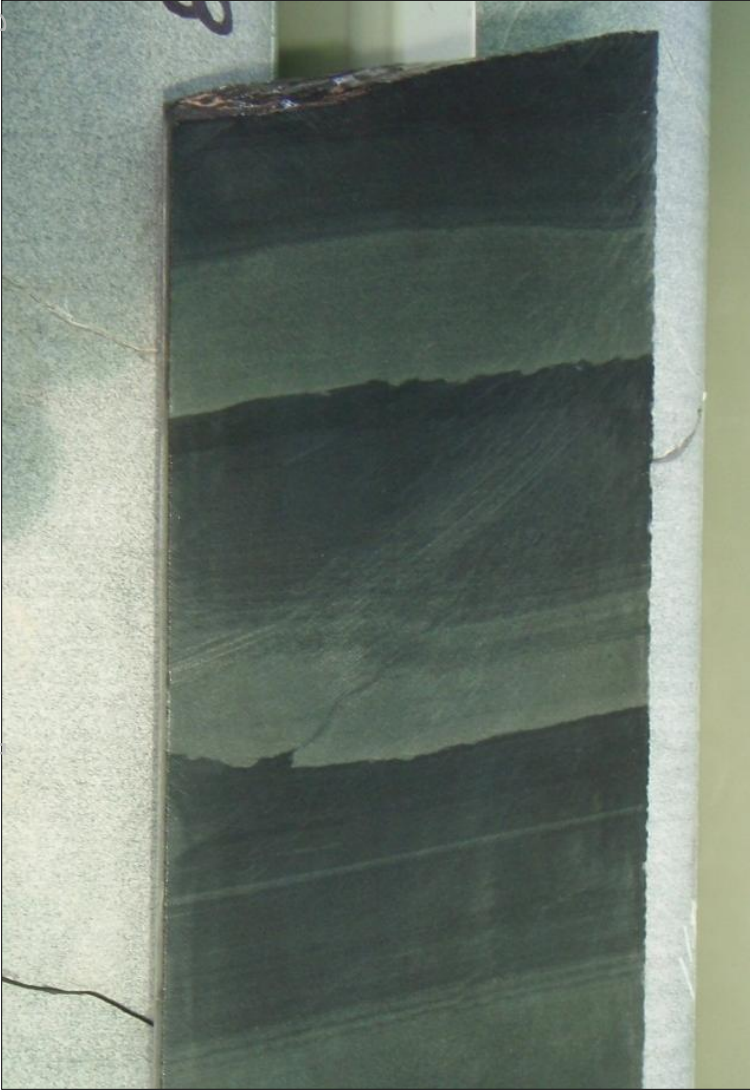


- **Mineralisation/geology characteristics**
  - *Broad alteration/mineralisation containing multiple intervals of massive sulphide and stringer mineralisation, including chalcopyrite, sphalerite, galena, pyrrhotite, arsenopyrite, pyrite*
  - *Geology comprises package of structurally deformed turbidite sequence sediments (including volcanoclastics)*
  - *Shoot-like structure dipping west and plunging to south?*
  - *Host unit interpreted to be age equivalent of Chesney and Great Cobar Slate*
  - *Favourable geological and structural position, sited on the “nose” of an anticline – a suitable high-stress environment*
  - *Multiple additional coincident geochem/magnetic anomalies*
  - *Large proximal magnetic anomaly to north (Butcher’s Dog) still unexplained*



# Mallee Bull Discovery

- Deep water turbiditic sediments



# Mallee Bull Discovery

- Deposit Drillcore comparison – Mallee Bull (left) vs Nymagee (right)



## Phase 2 drilling planned to commence in 4-8 weeks

- **Mallee Bull down dip**

- *Phase 2 drilling (10-12 diamond drillholes for 4,000m) to target down dip extensions*
- *DHEM*
- *MLEM/FLEM and IP targeting 4-Mile Volcanics unit*
- *RAB drilling targeting potential supergene enrichment*
- *RAB drilling targeting 4-Mile Volcanics unit*
- *Tenement wide surface geochemical surveys*
- *Additional VTEM/Spectrem EM over balance of EL*



# May Day Deposit

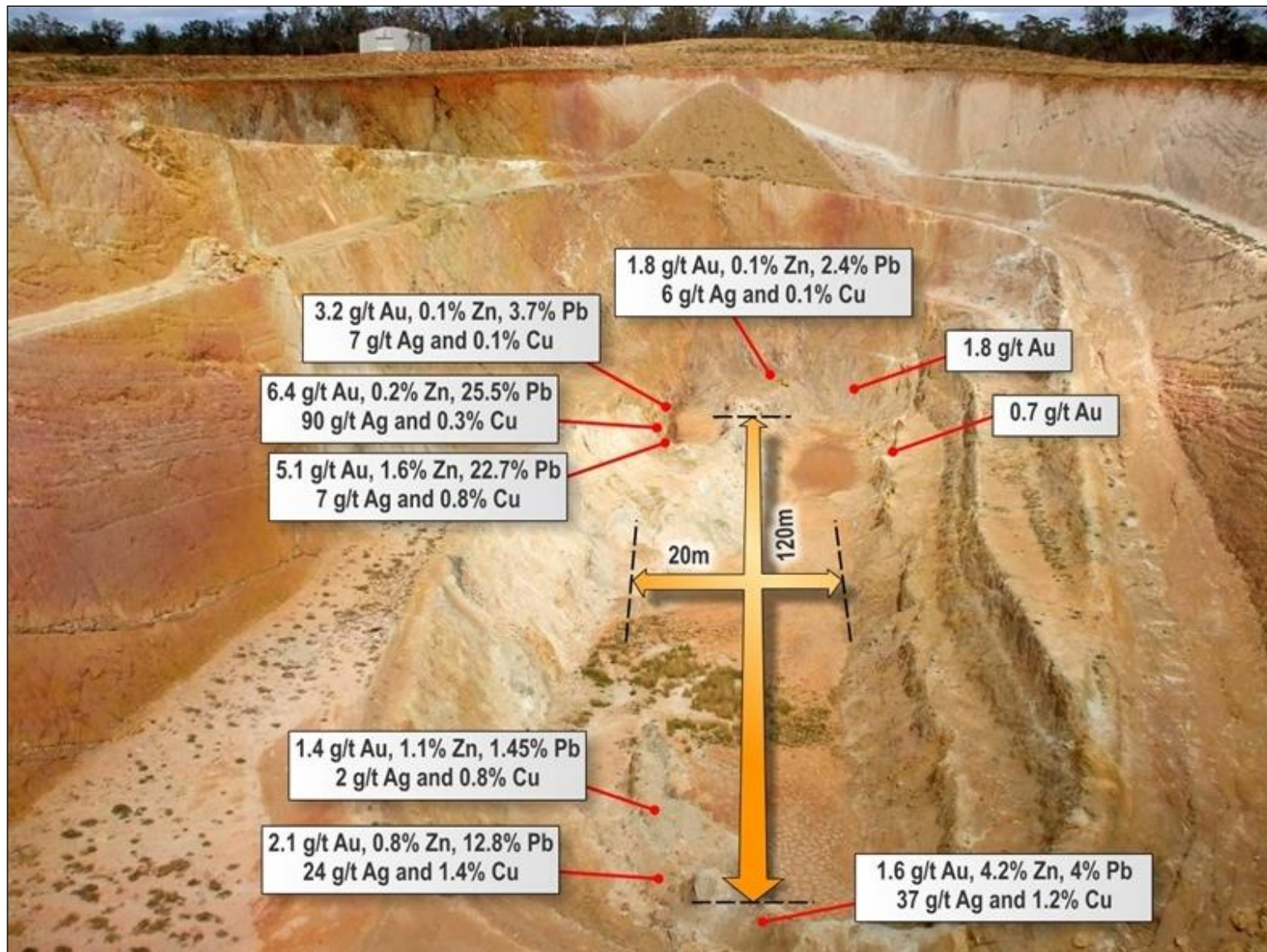
- **May Day Au-Ag-Pb-Zn-Cu deposit**

- 8 km west of Mallee Bull discovery
- Granted 1km x 1km Mining Licence
- Shallow (40m) open pit oxide Au heap-leach operation in 1990s
- Structurally-controlled Au-Ag-Pb-Zn-Cu near-vertical deposit below pit
- Drilling by Peel in 2010 returned better results including:
  - **16m @ 1.78 g/t Au, 42 g/t Ag, 0.25% Cu, 0.95% Pb, 1.33% Zn from 159m**
  - **27m @ 2.12 g/t Au, 27 g/t Ag, 0.11% Cu, 0.43% Pb, 0.75% Zn from 120m**
  - **3m at 1.33 g/t Au, 98 g/t Ag, 0.92% Cu, 7.29% Pb, 8.19% Zn from 140m**
  - **10m at 2.15 g/t Au, 28 g/t Ag, 0.06% Cu, 0.34% Pb, 0.39% Zn from 213m**
- Mineralisation extends from base of pit to at least 200m below surface and open at depth
- Large untested magnetic anomaly below May Day
- Cobar-style precious/base metal system?
- May Day Deeps drilling planned

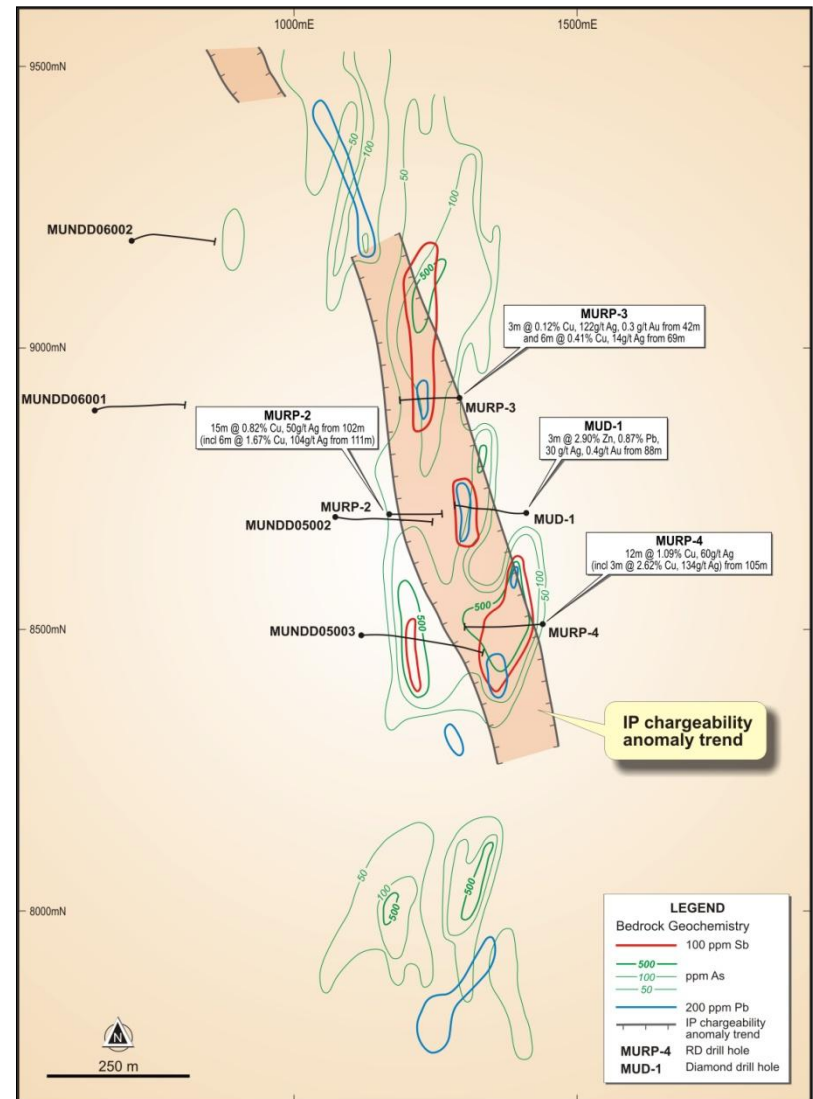


# May Day Deposit

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- **Location and tenure**
  - 50 km south of Mallee Bull
  - 300 km<sup>2</sup> of ELA
- **Key facts**
  - 2km long multi-element geochemical anomaly,
  - Coincident geophysical anomalies
  - Strong historic drill results including:
    - **3m @ 2.90% Zn, 0.87% Zn, 30 g/t Ag and 0.4 g/t Au**
    - **6m @ 1.66% Cu, 103 g/t Ag**
    - **3m @ 122 /t Ag, 0.3 g/t Au and 6m @ 0.42% Cu, 14 g/t Ag**
    - **12m @ 1.09% Cu and 60 g/t Ag**
  - Follow-up drilling in 2005 appears to have failed to adequately test previous mineralisation.

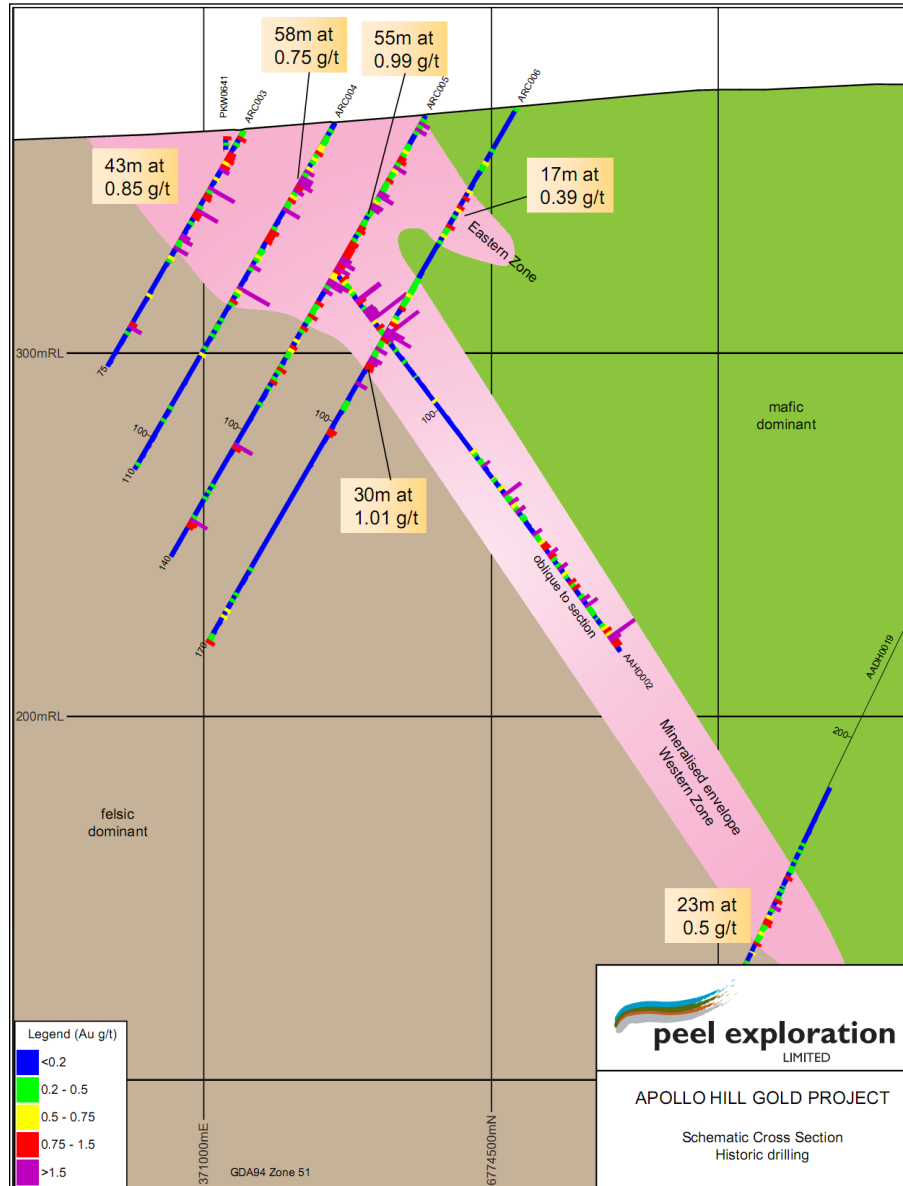


- **Location and tenure**
  - *50 km southeast of Leonora, WA*
  - *360 km<sup>2</sup> of tenements*
- **Geology and Mineralisation**
  - *Shear-hosted deposit on splay off Keith Kilkenny Lineament*
  - *Mineralisation straddles strongly deformed felsic/mafic contact*
  - *Extensive mineralisation, >1 km long & up to 250m wide*
- **Resource Estimate**
  - *Updated JORC inferred resource estimate completed August 2011*
  - ***17.2 Mt at 0.9 g/t Au for 505,000 oz (using 0.5 g/t cut)***
- **Apollo Hill 2012 Workplan**
  - *Metallurgical testwork underway*
  - *Scoping study*
  - *Regional exploration*
  - *Aboriginal Heritage over new ELs and lake edge*



# Apollo Hill

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- **Location and tenure**
  - 20 km north of Tamworth, NSW
  - ~120 km<sup>2</sup> of tenements (Els)
- **Geology and Mineralisation**
  - Skarn-hosted tungsten and copper-gold mineralisation; orogenic gold mineralisation
- **Attunga Tungsten Deposit:**
  - Updated JORC inferred resource estimate completed April 2008
  - **1.29 Mt @ 0.61% WO<sub>3</sub> and 0.05% Mo**
  - March 2009 metallurgical test work identifies potentially simple process route; high grade WO<sub>3</sub> concentrates produced
- **Attunga Copper Mine**
  - **75m at 1 g/t Au, 0.87% Cu, 0.09% Mo, 22 g/t Ag, 0.06% Bi**
  - **5.6m at 0.44% Mo, 0.7 g/t Au, 12 g/t Ag, 0.45% Cu and 1.4m at 22.7 g/t Au, 13 g/t Ag, 0.7% Cu**
- **2012 Forward Program:**
  - Seeking potential JV/offtake/development partners



- **Location and tenure**

- *30 km east of Armidale; 400 km north of Sydney, NSW*
- *~120 km<sup>2</sup> of tenements*

- **Geology and mineralisation**

- *Quartz-carbonate veins develop within fracture/shear/fissure zones, possibly associated with aplite dykes*

- **Ruby, Tulloch, Rockvale Mines**

- *~400,000 ounces silver at ~800 g/t Ag historic production*
- *Lodes up to 1.5 metres wide; traceable at surface to NE/SW for up to 1,200m*
- *Silver-rich massive sulphide ore grading up to 60,000 g/t silver*
- *1968 drilling at Ruby returned 5.1m grading 6,500 g/t silver; never followed up*

- **Ruby Silver Exploration/Forward Plan**

- *April/May 2011 – geological mapping and sampling completed; GIS*
- *May 2011 – 18 line km IP geophysics survey; multiple strong shallow chargeable anomalies identified proximal to historic workings*
- *March 2012 – RC drilling completed; assays awaited*



# Rise and Shine

- **Location and tenure:**
  - *20km northeast of Cromwell, Central Otago, NZ*
- **Geology and Mineralisation**
  - *Shear-hosted orogenic gold mineralisation*
- **Rise and Shine**
  - *Historic production of more than 180,000 oz gold*
  - *Gold workings cover >4km of strike along Rise and Shine Shear Zone*
  - *Structurally similar to Hydes-Macraes Shear Zone, host to multi-million oz Macraes gold mine*
  - *New exploration model suggests Rise and Shine Shear Zone possible “flatter” lying than previously assumed offering potential for large-tonnage, low-grade targets*
- **2012 forward program**
  - *Surface mapping and geochemical surveys*
  - *RC/RAB drilling, if warranted*



# Investment Highlights

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- 1 Cobar-style polymetallic discovery at Mallee Bull, NSW
- 2 Mineralisation open at depth
- 3 Cobar region increasingly in spotlight e.g. Glencore / YTC
- 4 Very low administration costs of ~\$130k per quarter
- 5 Small team but high exploration success rate
- 6 Maximising every dollar – money goes into the ground



*Thank you*

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***The Mallee Bull legend continues...***



## **Information regarding drilling/assaying data:**

1. Drilling was completed using a RC face sampling hammer or HQ/NQ diamond core.
2. Sample recoveries were considered adequate for all samples.
3. Drillcore has been, or is still to be, logged in detail based on lithology, mineralisation, and alteration.
4. Samples for analysis were collected by cone splitter sampling, hand spearing or by sawing core in half.
5. Samples were submitted as 4m composite chip samples, 1m chip samples or 1m half-core intervals unless a geological contact was used.
6. Samples were analysed at ALS Chemex utilising methods: Au-AA25 for Au (fire assay); ME-ICP61 for multi-element including Ag, Cu, Pb, Zn; Ag-OG62 for >100 g/t Ag; Cu-OG62 for >1% Cu; Pb-OG62 for >1% Pb; and Zn-OG62 for >1% Zn.
7. Drillhole collars were surveyed by DGPS.
8. Downhole gyroscopic surveys are being run continuously.

## **Copper Equivalent Calculation Explanation:**

- Mineralisation at Mallee Bull consists of copper, silver, gold, lead, zinc and cobalt, but only copper, silver and gold are used for Copper Equivalent Calculation.
- Copper equivalent values have been calculated as  $(CuEq) = Cu\% + Ag(ppm) \times 0.012 + Au(ppm) \times 0.625$
- Copper Equivalent or “CuEq” is the contained copper, silver and gold that are converted to an equal amount of pure copper and summed (based on assays of mineralised rock and nominated metal prices). It is used to allow interpretation of the possible theoretical ‘value’ of mineralised rock, without consideration of the ultimate extractability of any of the metals.
- Cobar-style copper deposits such as Mallee Bull typically recover those metals subject to prevailing metal prices and metallurgical characteristics.
- The ASX requires a metallurgical recovery be specified for each metal, however, no testwork has ever been undertaken at Mallee Bull and recoveries can only be assumed to be typical for Cobar-style copper deposits
- It is the Company’s opinion that each of the elements included in the metal equivalents calculation has reasonable potential to be recovered if the project proceeds to mining.
- Price Assumptions- Cu (US\$8,000/t), Ag (US\$30/oz), Au (US\$1,500/oz)



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