

Unlocking Victoria's Copper-Gold Potential

RIU Explorer's Conference 25 February 2016



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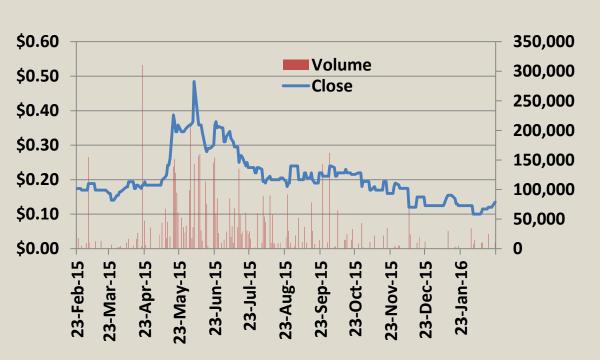


ASX Code – SVY Share Price - \$0.135 Cash (31/12/15) - \$2.16M\* \*Excludes Titeline Drilling agreement,

#### **Directors**

Bill Plyley
Non-executive Chairman
Chris Cairns
Managing Director
Jennifer Murphy
Technical Director
Peter Ironside
Non-executive Director
Amanda Sparks
Company Secretary

Shares on Issue – 93.8M Market Cap - \$12.7M

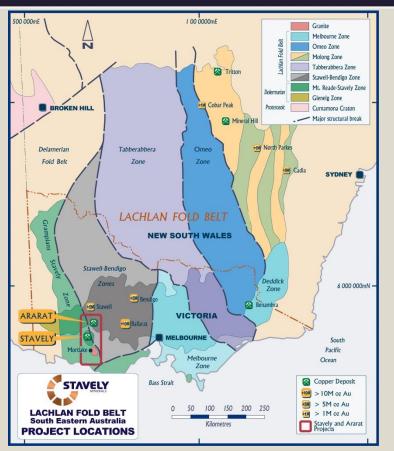


<sup>\*\$2</sup>m share subscription agreement with Titeline Drilling Pty Ltd announced to the ASX on 7 October 2014



#### VICTORIAN PROJECT LOCATIONS



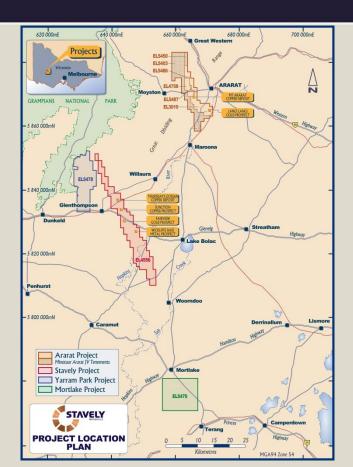


The Ararat Project is in the Moornambool Metamorphic Complex and is prospective for VMS base metals-gold and 'Stawell-style' gold mineralisation.

The Mount Stavely
Volcanic Complex is
prospective for ancient porphyry
copper-gold, VMS base metalsgold and intrusive related gold
mineralisation.

#### VICTORIAN PROJECT LOCATIONS





415 square kilometres of Stavely Minerals tenure

72 square kilometres of JV tenure

### MINERAL RESOURCES<sup>1</sup>



At the Ararat Project, hosted in a Besshi-style VMS:

• Inferred Mineral Resources of 1.3Mt at 2.0% copper, 0.5 g/t gold, 0.4% zinc and 6 g/t silver for 30kt of contained copper

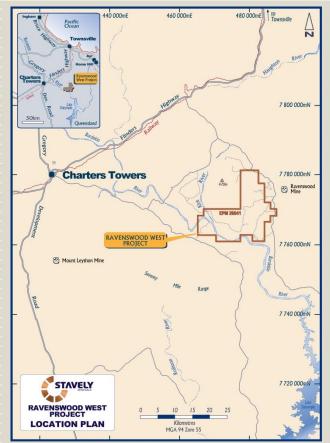
At the Stavely Project hosted in a secondary chalcociteenriched blanket:

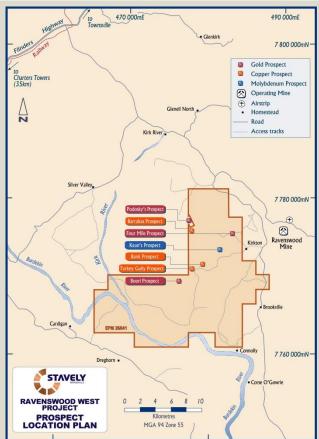
 Inferred Mineral Resources of 28Mt at 0.4% copper for 110kt of contained copper

<sup>&</sup>lt;sup>1</sup> reported in compliance with JORC 2012, see ASX announcement 8 September 2015 and available from www.stavely.com.au

#### **QUEENSLAND PROJECT LOCATION**







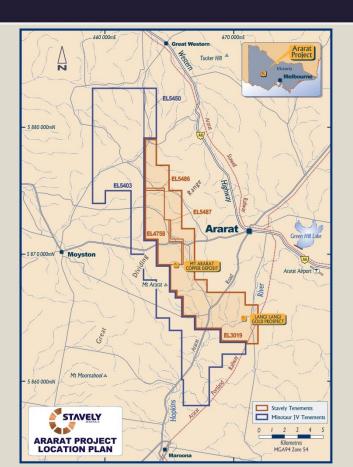
241 square kilometre Exploration Licence Application

4 porphyry prospects

3 gold prospects





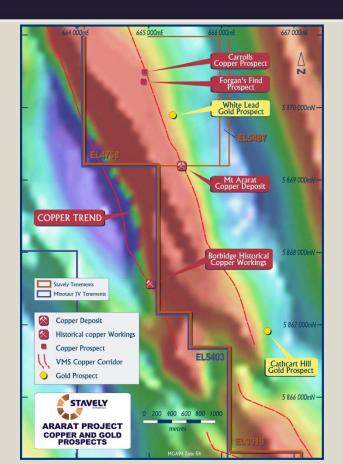


Hosts the:

Mt Ararat Besshi-style copper-gold VMS

and 'Stawell-style' gold targets



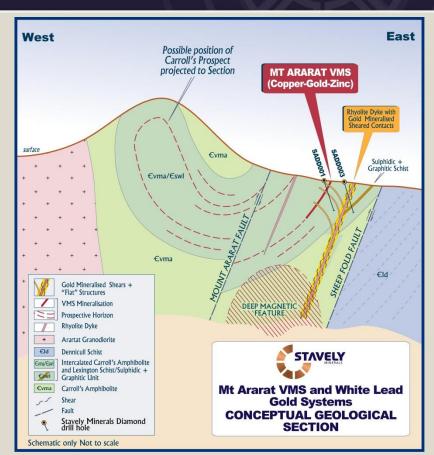


- ✓ Prospective VMS copper gold horizon extends over 15 kilometres within Stavely Minerals tenements, 23 kilometres including JV tenements.
- ✓ Recent reconnaissance exploration has confirmed the horizon is up to 1km wide
- ✓ 'Stawell-style' gold / arsenic anomalies along 4-5km of strike and open to north and south



#### **Conceptual Model**

- Multiple VMS target horizons – circa 530Ma age
- Steep west dipping gold feeder structures and shallow east-dipping horse-tail splays – circa 425Ma age

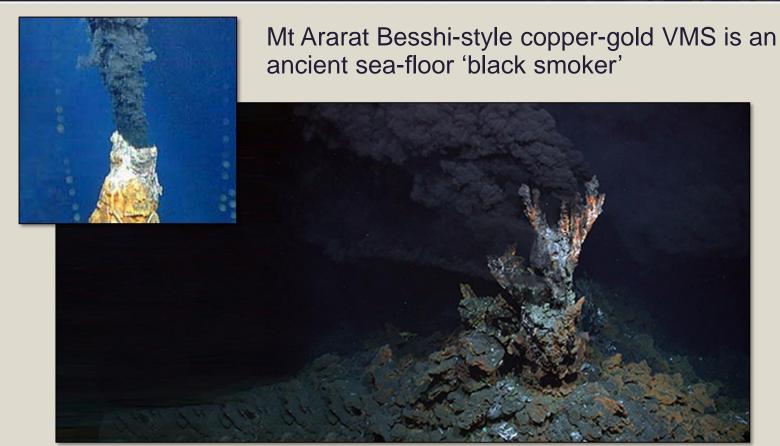


<sup>&</sup>lt;sup>1</sup> see ASX announcement dated 6 July 2015 and available from <a href="https://www.stavely.com.au">www.stavely.com.au</a>

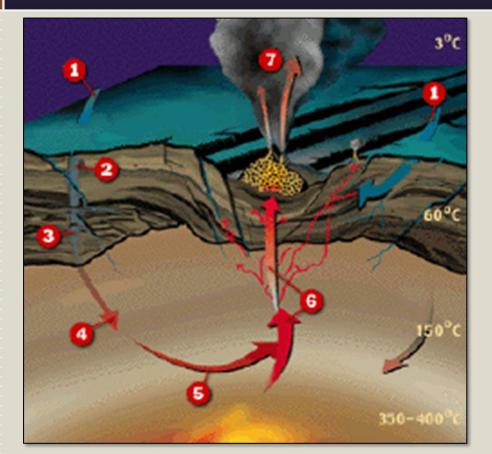


## **MOUNT ARARAT VMS**





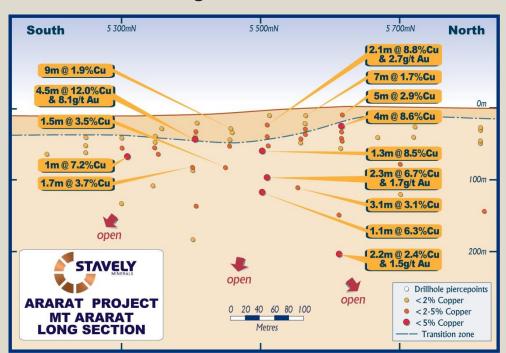




Mt Ararat Besshi-style coppergold VMS is an ancient seafloor 'black smoker' – they tend to occur in clusters of typically 6-8 deposits



- Mt Ararat Besshi-style VMS Inferred Mineral Resource of 1.3Mt at 2.0% copper, 0.5 g/t gold, 0.4% zinc and 6 g/t silver
- The Degrussa deposit is considered a Besshi-style VMS
- Open at depth and along strike





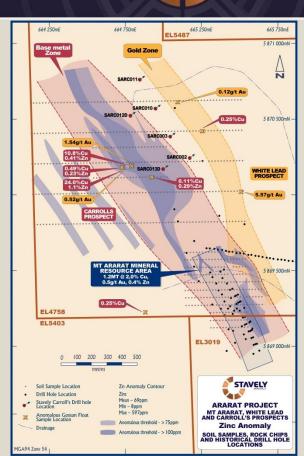
# **Carroll's and Forgan's Find Prospect Geochemistry**

Multiple mineralised horizons confirmed with Carroll's Copper prospect re-discovered with rock-chip results including:

- 10.8% copper, 0.41% Zn and 1.5 g/t gold
- 24% copper, 1.1% zinc and 0.52 g/t gold



<sup>1</sup> see ASX announcement dated 8 May 2015 and available from www.stavely.com.au





# Carroll's and Forgan's Find diamond drilling

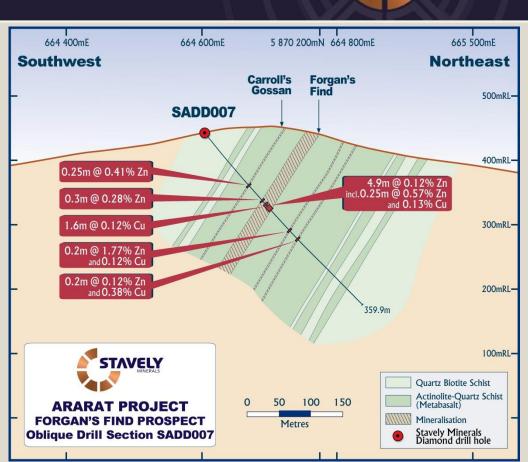
Initial drill results including:

- 0.2m at 1.77% Zn
- 0.25m at 0.57% Zn and 0.13% Cu

Narrow, zinc rich mineralisation considered distal.

Will deploy down-hole EM to identify thicker coppergold core.

see ASX announcement dated 24 February 2016 and available from www.stavely.com.au



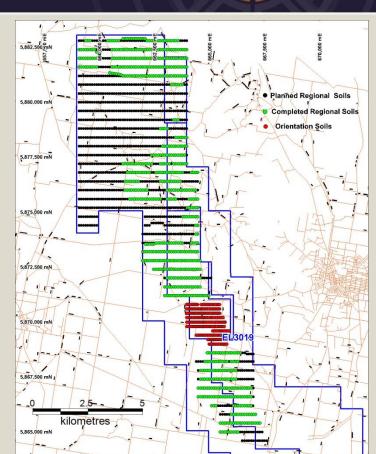


# Regional soil sampling VMS copper-gold and gold

Results from Forgan's Find confirm the potential for multiple occurrences of VMS base metal ± gold mineralisation within a 23km corridor.

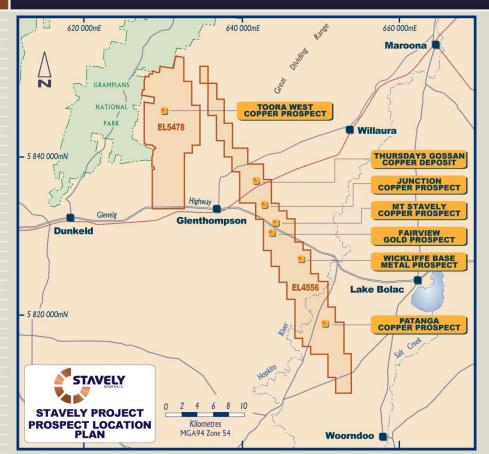
Also, Stawell and Wonga-style gold mineralisation potential.

Regional soil sampling on 13km strike extent approximately 60% complete.



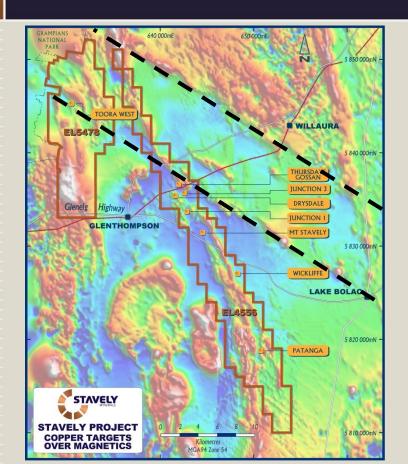






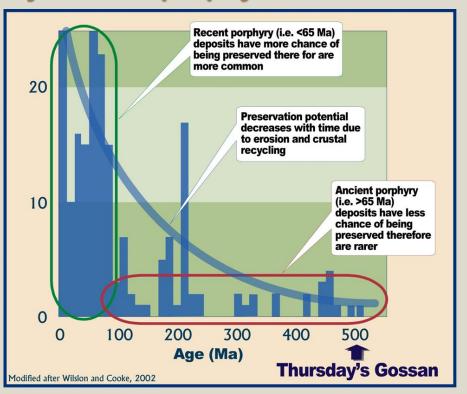
- Thursday's Gossan chalcocite enriched blanket – Inferred Mineral Resource of 28Mt at 0.4% copper containing 107kt copper
- Thursday's Gossan porphyry
- Junction porphyry
- Fairview Gold prospect
- Wickliffe VMS prospect
- Patanga porphyry prospect





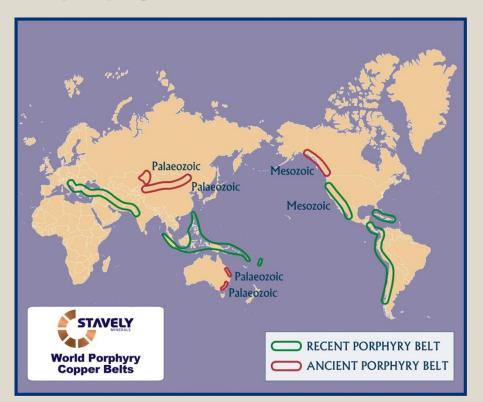
- Similar structural setting to Cadia Valley
  - ~N-S trending volcanic belt
  - Major NW trending structures



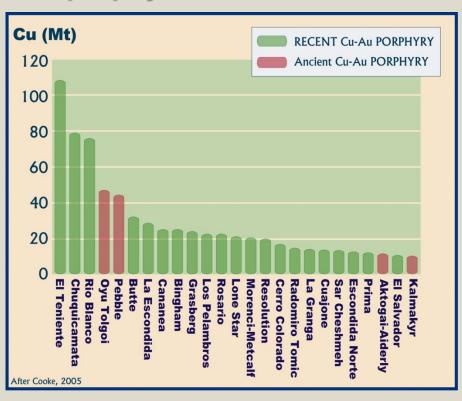


- Porphyry deposit examples from as early as Archaean age
- Likelihood of porphyry deposit preservation decreases with age due to erosion and crustal recycling

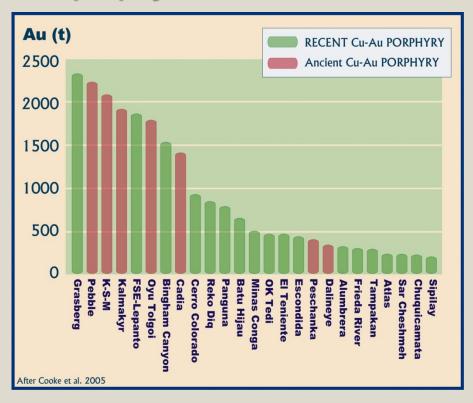










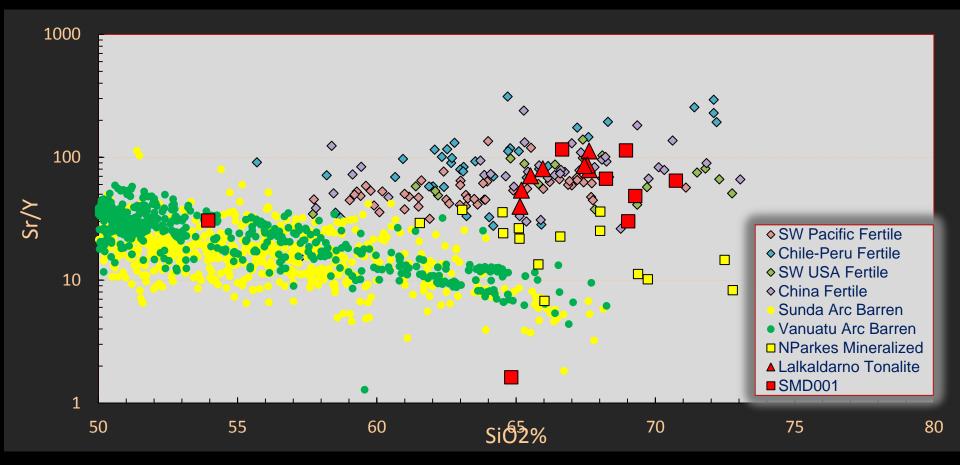




# But what evidence that the Thursday's Gossan porphyry is an alkalic copper-gold porphyry?

- Zones of pervasive hematite alteration
- Strongly negative δ34 sulphur isotope values
- Metal ratios gold and silver rich
  - 5m @ 1.4% copper, 0.25g/t gold and 11 g/t silver from the Junction deposit
  - D-veins from Thursday's Gossan
    - 7.7 metres at 4.14% copper, 1.08 g/t gold and 77g/t silver
    - 9.5 metres at 2.93% copper, 0.44g/t gold and 42 g/t silver
    - VSTD001 32m at 0.8% copper and 0.4g/t gold
- Geochemical similarity with alkalic 'switch' in the Mt Read Volcanics Tony Crawford, UTAS

<sup>&</sup>lt;sup>1</sup> see ASX announcement dated 12 May 2014 and available from <u>www.stavely.com.au</u>



Plot provided by Professor Tony Crawford (UTAS), after Loukes, R.R., 2014, Distinctive Composition of copper-ore-forming magmas, in Australian Journal of Earth Sciences





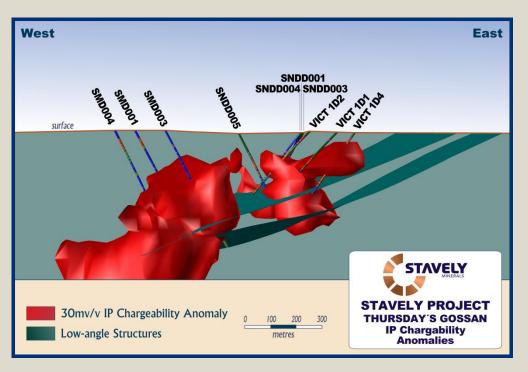
#### **Thursday's Gossan Porphyry**

Stavely Minerals drilled 3 deep diamond drill holes (between 532m to 640m deep) into an induced polarisation (IP) chargeability anomaly





#### **Thursday's Gossan Porphyry**



Drilling intercepted welldeveloped phyllic alteration (sericite-pyrite) which corresponded well with the IP chargeability anomaly

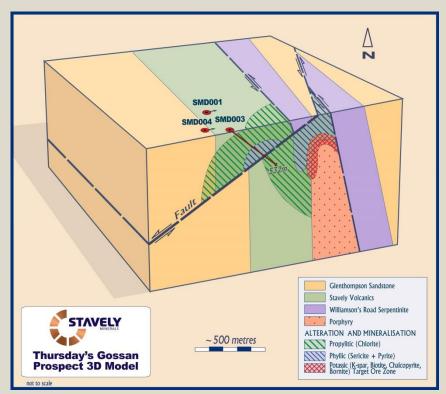


#### **Thursday's Gossan Porphyry**

The three deep diamond drill holes identified a low-angle structural offset to the porphyry system

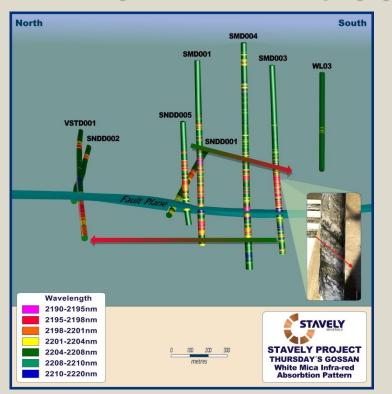
Evidence that 'unroofing' of the system has triggered resurgent intrusion and mineralisation — best gold values to the NE eg:

 32m at 0.8% Cu and 0.4g/t gold – VSTD001





#### **Thursday's Gossan Porphyry**



Structural analysis, kinematic indicators, white mica shortwave infra-red absorption features and sulphur isotope results all concur the porphyry 'core' has been transposed north and east beneath the structural zone.

# What do investors need to take from this?

The target porphyry 'core' is yet to be discovered and we believe we have strong evidence indicating where it has gone.

<sup>&</sup>lt;sup>1</sup> see ASX announcement dated 12 May 2014 and available from www.stavely.com.au



#### **Thursday's Gossan Porphyry**

- ✓ Very positive results from drilling the IP chargeability anomaly increasingly intense alteration, very 'busy' drill core, low-grade copper mineralisation in peripheral alteration
- ✓ Intercepted a low-angle structure at ~400-480m depth structural interpretation, kinematic indicators, white mica shortwave infra-red absorption features and sulphur isotopes all concur that the porphyry 'core' where best developed copper-gold mineralisation could be expected has been transposed to the north beneath the offset structural zone
- ✓ IP chargeability anomalies in areas predicted to host 'core'
- ✓ Additional drilling planned and seeking Victorian Government co-funding





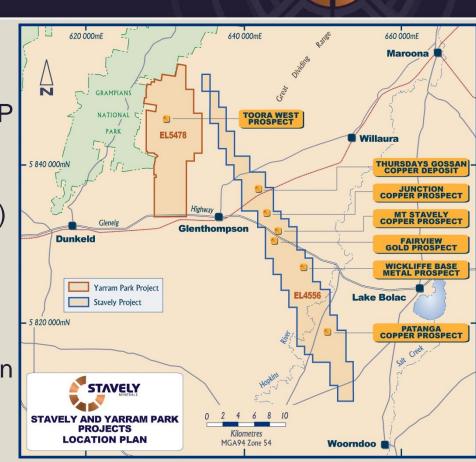
#### **Yarram Park Project**

Toora West Prospect is a coincident magnetic, gravity and IP chargeability anomaly consistent with a buried porphyry or subvolcanic diatreme (ie. Mt Leyshon)

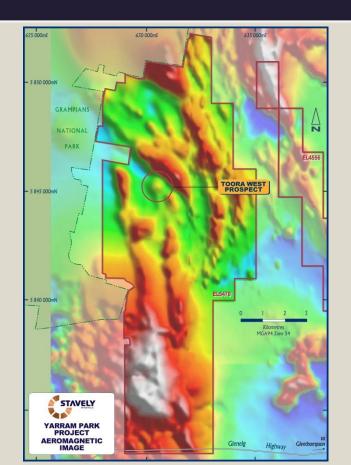
Nearest drill hole is 1.5 kilometres away indicating depth of transported cover is ~75m

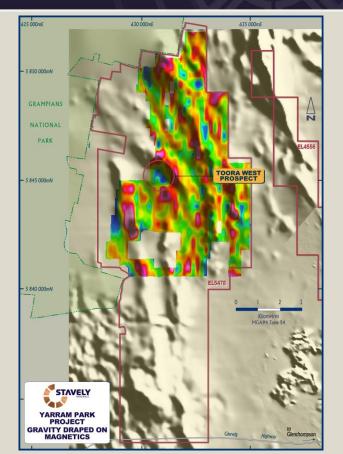
Government co-funding application for additional IP and drilling

see ASX announcement dated 12 January 2016 and available from <a href="https://www.stavely.com.au">www.stavely.com.au</a>

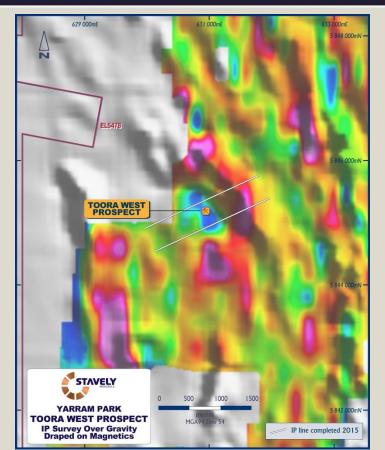


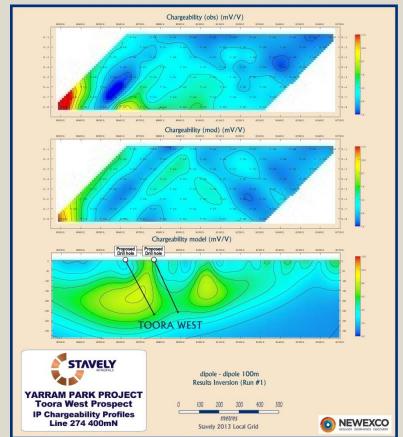
















#### **Ravenswood West Project**

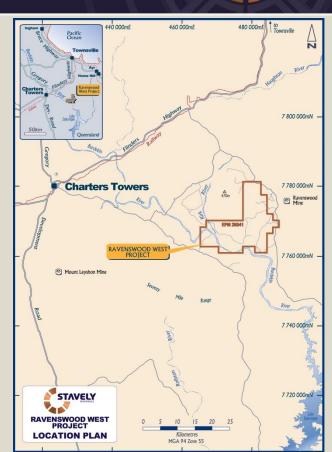
Metal-rich gold province with major historic and modern gold production:

Ravenswood – 4 million ounces

Charters Towers – 6.6 million ounces

Mt Leyshon – 2.5 million ounces

Pajingo - ?2 million ounces





#### **Ravenswood West Project**

4 porphyry prospects:

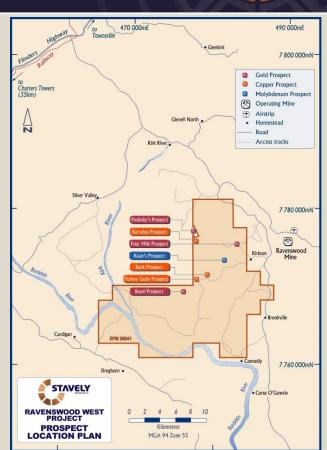
- The Bank
- Keans
- Barrabas
- Turkey Gully

#### 3 gold prospects:

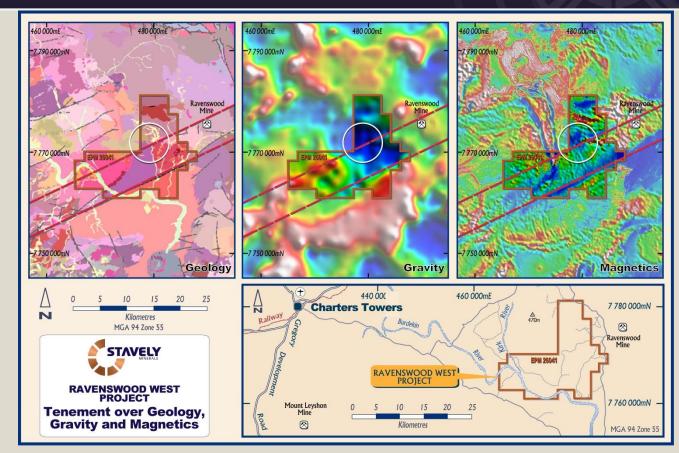
- Podosky's area
- Four Mile
- Boori

#### 1970 - most recent drill hole

see ASX announcement dated 16 February 2016 and available from www.stavely.com.au



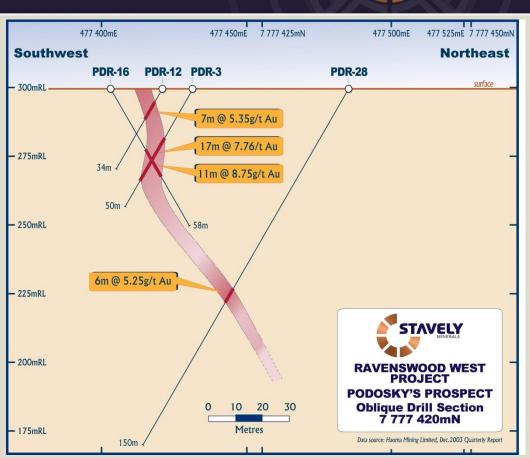






Podosky's Prospect (excised from EPM, owned by Kitchener Mining NL)

An example of high-grade gold mineralisation in the area



#### **WORK PROGRAMMES**



#### **Work programmes**

**Stavely Project** - Applications for drilling co-funding at Thursday's Gossan

**Yarram Park Project** - Applications for drilling co-funding, with additional IP, Yarram Park

Ararat Project - Soil survey in progress in the Ararat to highlight VMS exhalative centres and potential 'Stawell-' and 'Wonga-style' gold targets

Ravenswood West Project – Reconnaissance multi-element soils sampling and follow-up deep IP geophysics to define drill targets Also, follow-up very strong rare earths stream sediment anomalism of 0.25% Ce and 0.13% La

Even though the market is crappy for explorers, we are still very active, we are getting results and are generating quality opportunities for discovery and value creation

#### **STAVELY MINERALS**



#### **Thank You**

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