



# Knocking on the Door to Discovery in Western Victoria

**RIU Explorer's Conference 2018**



## Disclaimer

This presentation contains only an overview of Stavely Minerals Limited (“Stavely” or the “Company”) and its activities and operations. The contents of this presentation, including matters relating to the geology and exploration potential of the Company’s projects, may rely on various assumptions and subjective interpretations which it is not possible to detail in this presentation and which have not been subject to any independent verification.

This presentation contains a number of forward-looking statements. Known and unknown risks and uncertainties, and factors outside of the Company’s control, may cause the actual results, performance and achievements of the Company to differ materially from those expressed or implied in this presentation.

To the maximum extent permitted by law, Stavely does not warrant the accuracy, currency or completeness of the information in this presentation, nor the future performance of the Company, and will not be responsible for any loss or damage arising from the use of the information.

The information contained in this presentation is not a substitute for detailed investigation or analysis of any particular issue. Current and potential investors should seek independent advice before making any investment decision in regard to the Company or its activities.



# STAVELY MINERALS



ASX Code – SVY

Share Price - \$0.315

Cash (20/02/18) - \$8.8m\*

*\*Excludes Titeline Drilling agreement and Victorian Gov't co-funding, includes SPP funds*

Shares on Issue – 148.7M

Market Cap - \$46.8M

Management ~34.4% equity

## Directors

Bill Plyley

*Non-executive Chairman*

Chris Cairns

*Managing Director*

Jennifer Murphy

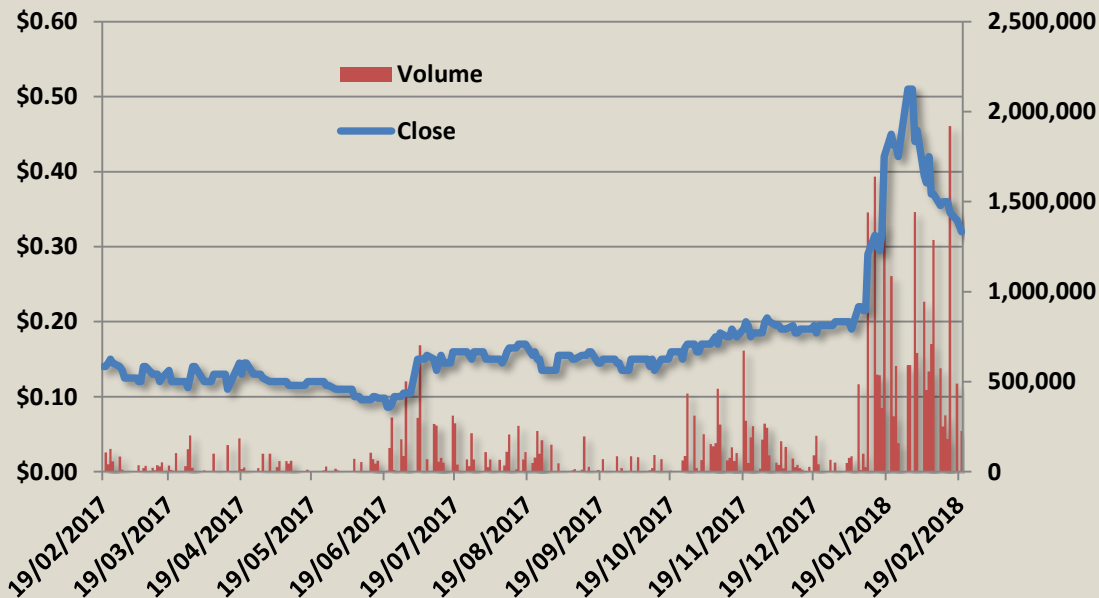
*Technical Director*

Peter Ironside

*Non-executive Director*

Amanda Sparks

*Company Secretary*



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



# TAKE AWAY MESSAGES



1. Stavely provides good value for investors – 71% ‘in the ground’
2. Stavely has conclusively demonstrated that copper **and** gold alkalic porphyry-style mineralisation is present at Thursday’s Gossan
3. Alkalic porphyries are amongst the largest gold deposits
4. Recent drill results demonstrate that we are very close to the high-grade copper-gold zone
5. Given the Stavely Volcanic Belt is an alkalic copper-gold porphyry belt, other porphyry targets in the belt with very little prior exploration are also significant discovery opportunities eg. Toora West, Mount Stavely (not a single drill hole), Drysdale and Junction

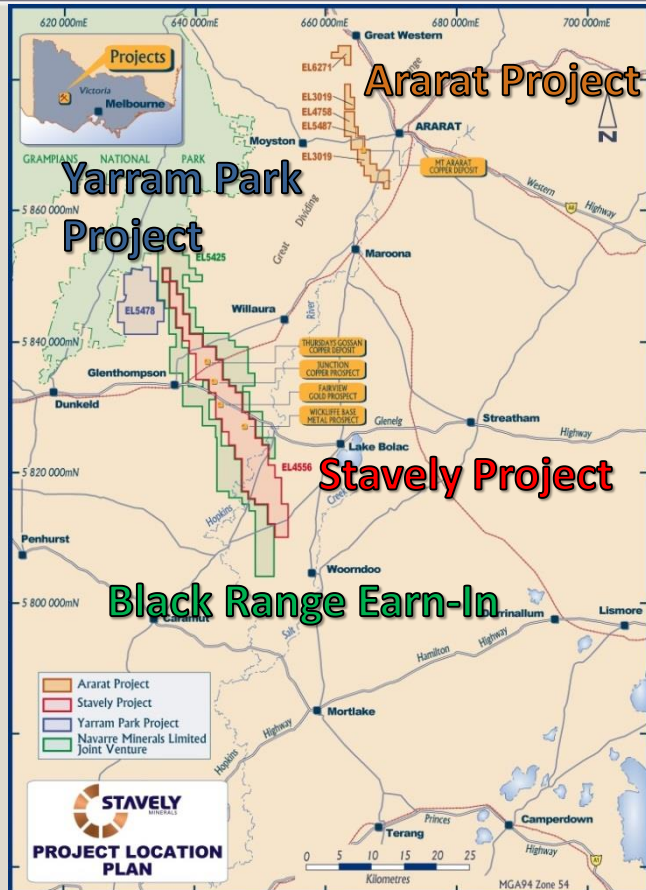




# PROJECTS



# VICTORIAN PROJECT LOCATIONS



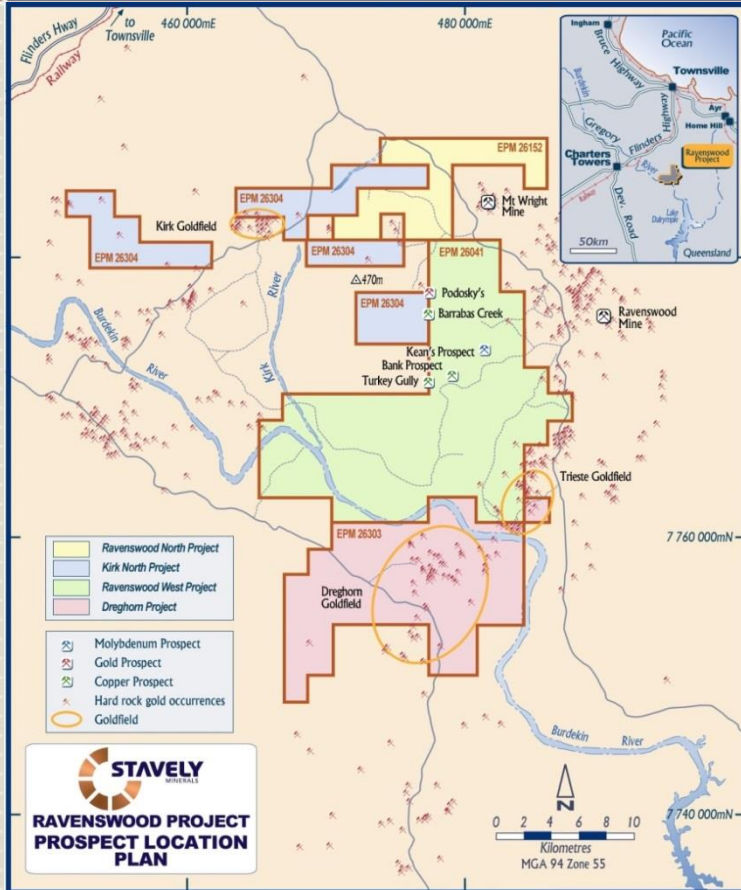
## Victorian Projects

The Ararat Project is prospective for VMS base metals-gold and 'Stawell-style' gold mineralisation.

The Stavely, Yarram Park and Black Range Projects are prospective for ancient porphyry copper-gold and VMS base metals-gold mineralisation.



# QUEENSLAND PROJECT LOCATION



## Queensland Project

The Ravenswood Project is prospective for:

- porphyry copper-moly-gold,
- quartz-sulphide vein-hosted gold
- breccia-hosted gold mineralisation
- epithermal gold
- VMS copper-gold

Active exploration to resume in April – too damn hot!



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 chalcocite-enriched blanket:

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

<sup>1</sup> reported in compliance with JORC 2012, see ASX announcement 8 September 2015, subsequent Annual Reports and available from [www.stavely.com.au](http://www.stavely.com.au)



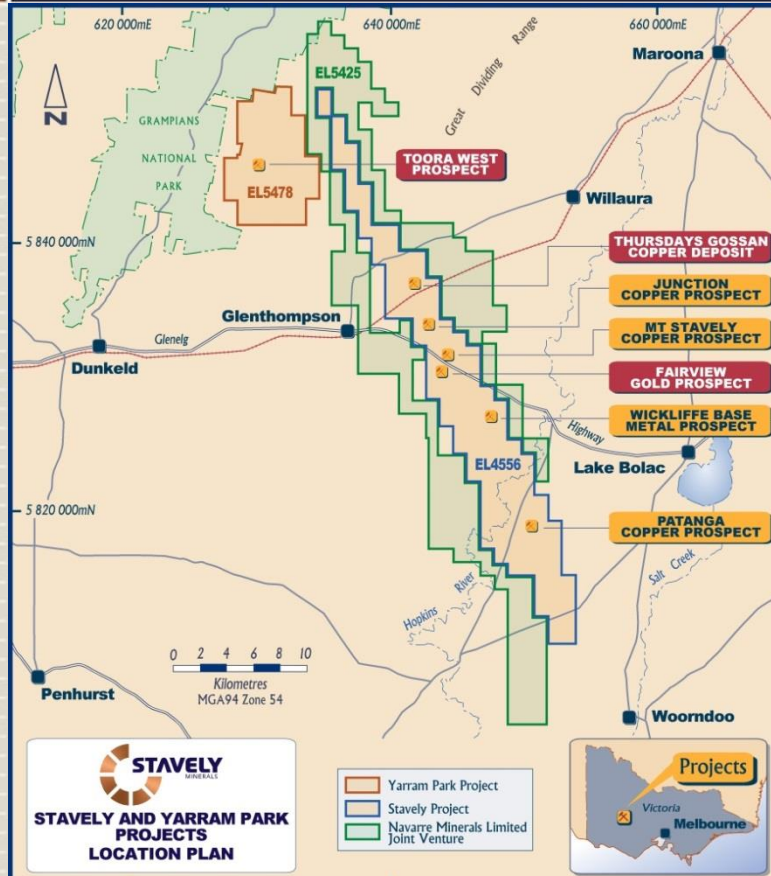


# **PORPHYRY DISCOVERY OPPORTUNITIES:**

# **THURSDAY'S GOSSAN, TOORA WEST AND OTHERS**



# STAVELY VOLCANIC BELT

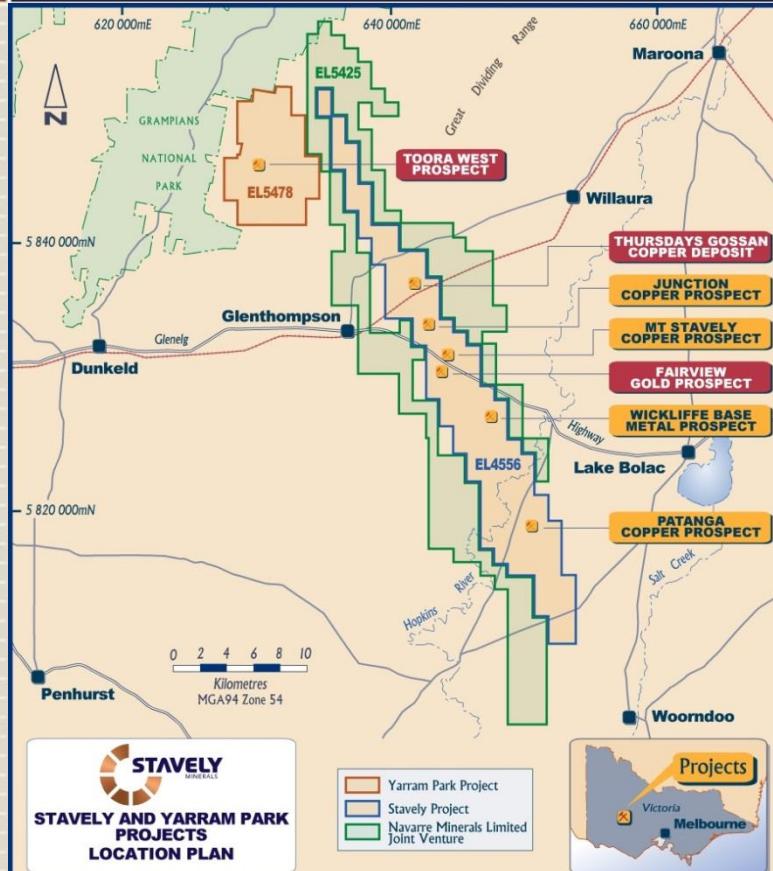


**Stavely has the largest and most strategic tenement holding in the belt**

- Thursday's Gossan porphyry
- Toora West porphyry prospect
- Junction porphyry
- Mount Stavely porphyry
- Fairview Gold prospect
- Wickliffe VMS prospect
- Patanga copper prospect



# STAVELY VOLCANIC BELT



Stavely has the largest and most strategic tenement holding in the belt

- **Thursday's Gossan porphyry**
- **Toora West porphyry prospect**
- Junction porphyry
- **Mount Stavely porphyry**
- Fairview Gold prospect
- Wickliffe VMS prospect
- Patanga copper prospect



# THURSDAY'S GOSSAN PORPHYRY

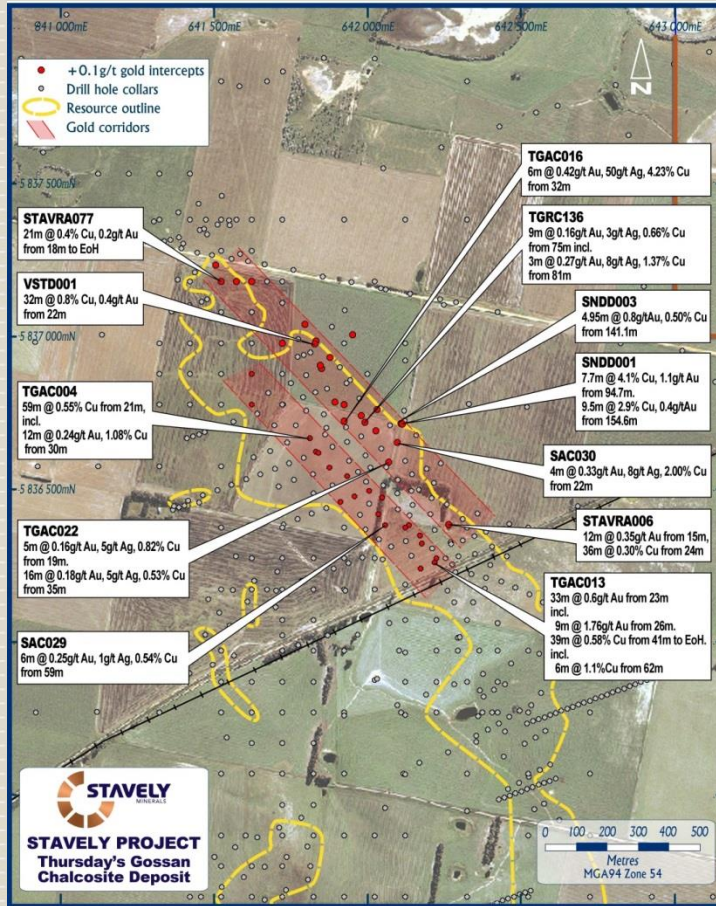


## Thursday's Gossan Chalcocite Blanket

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



# THURSDAY'S GOSSAN PORPHYRY



Two parallel zones of near-surface high-grade copper mineralisation with associated silver and gold....

These zones correspond to the near-surface expression of sulphide-rich porphyry 'D' veins

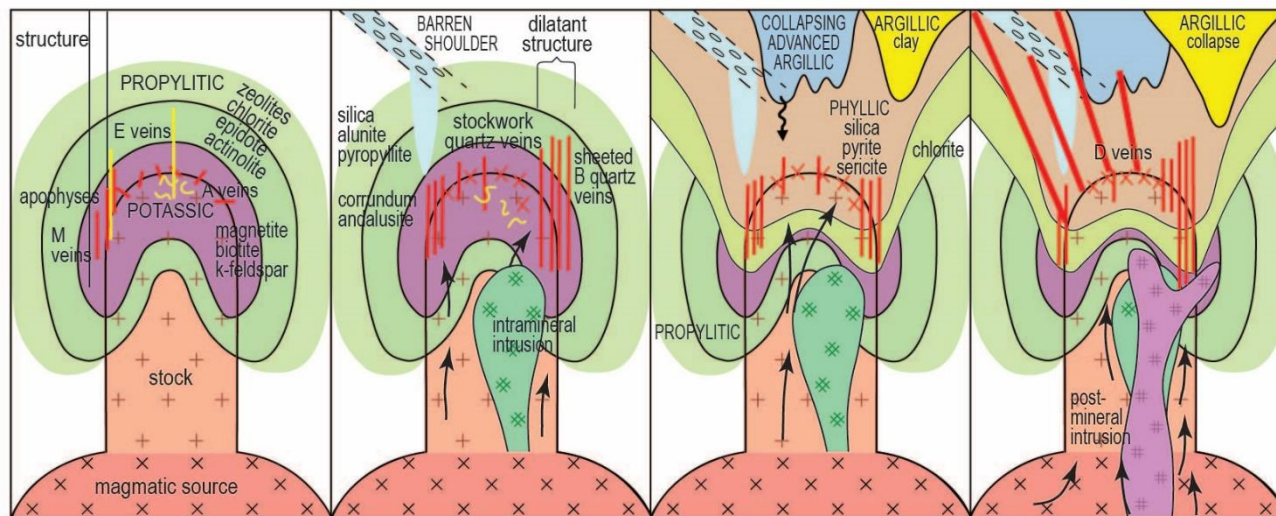


# WHAT ARE 'D' VEINS?

## STAGED PORPHYRY Cu-Au EVOLUTION

EARLY

LATE



Intrusion emplacement and heat transfer with prograde alteration. E veins.

Initiation of A & M quartz vein formation and early mineralization.

B quartz vein formation.

Exsolution of magmatic volatiles and formation of barren shoulder.

Cooling and collapsing of retrograde phyllic and argillic alteration and overprinting collapsing advanced argillic alteration..

Local retrograde alteration selvages to B grades.

Continued retrograde collapse. D vein mineralization, & post-mineral features.

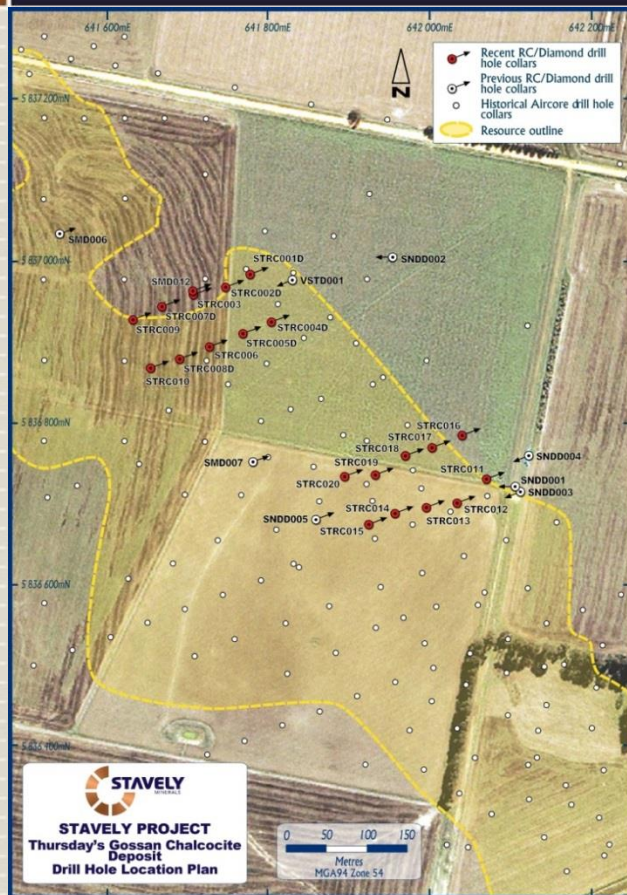
'D' veins are late-stage sulphide-rich veins with characteristic sericite alteration selvages.

They should be a 'yellow brick road' down to the source porphyry.

*After Corbett, 2012*



# THURSDAY'S GOSSAN PORPHYRY



Completed 20 x drill hole RC drilling programme to target these high-tenor copper, silver and gold zones

- ✓ Potential for material impact on Mineral Resources update given **NO** silver and gold ever estimated within the Mineral Resource
- ✓ Help us understand where the gold and silver are coming from

see ASX announcements on 03/07/2017, 23/08/2017 and 05/09/2017 and available from [www.stavely.com.au](http://www.stavely.com.au)



# THURSDAY'S GOSSAN PORPHYRY

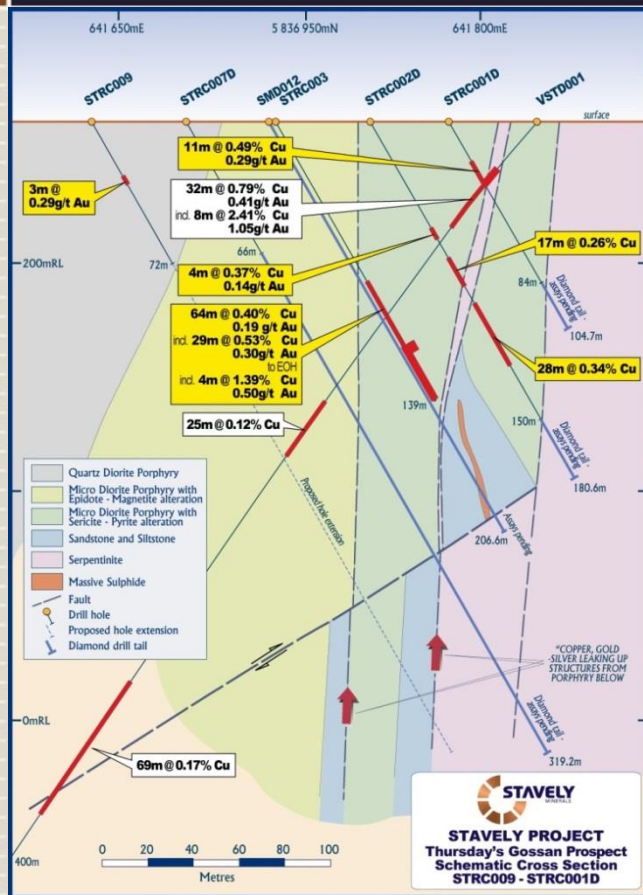


## Thursday's Gossan RC drilling

- 24 metres at 0.64% copper and 1.2 g/t gold including:
  - 14 metres at 0.82% copper and 1.99 g/t gold including
  - 1 metre at 0.84% copper and 22.2 g/t gold
- 29 metres at 0.53% copper and 0.30 g/t gold to end of hole (EoH), including
  - 4 metres at 1.39% copper, 0.5 g/t gold and 55 g/t silver
- 25 metres at 0.52% copper and 0.37 g/t gold to EoH
- 3 metres at 4.14% copper, 0.36 g/t gold and 59 g/t silver
- 43 metres at 0.55% copper and 0.11 g/t gold
- 28 metres at 0.59% copper and 0.19 g/t gold
- 8 metres at 0.74% copper and 0.17 g/t gold
- 25 metres at 0.30% copper and 0.29 g/t gold to EoH including
  - 3 metres at 1.24% copper and 1.31 g/t gold



# THURSDAY'S GOSSAN PORPHYRY



## Thursday's Gossan RC Drilling (north section)

Shallow RC drill results:

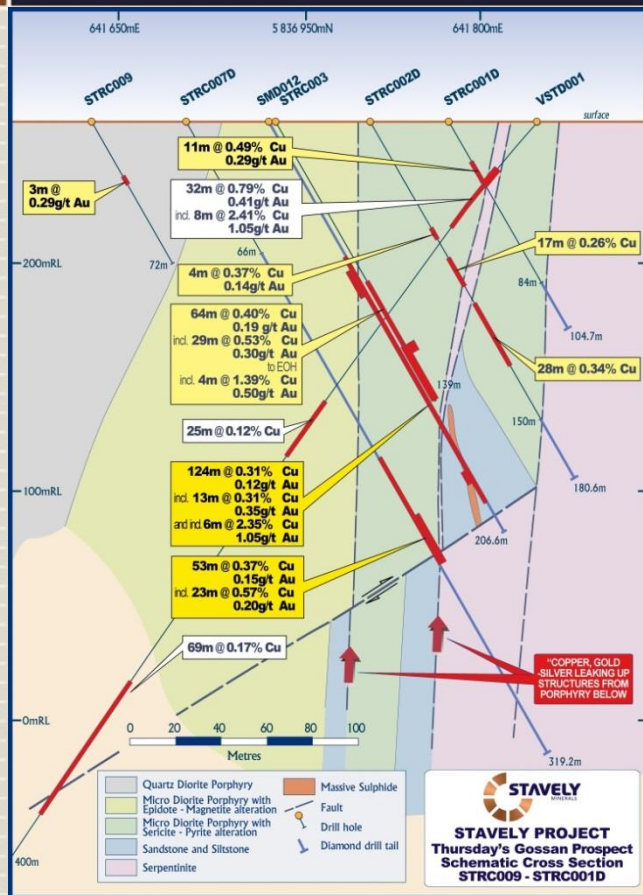
- **64m at 0.40% copper and 0.19g/t gold**, including
  - **29m at 0.53% copper and 0.3g/t gold** to end of hole
- **11m at 0.49% copper and 0.29g/t gold**, and

A number of RC drill holes stopped in grade.

see ASX announcements on 03/07/2017, 23/08/2017 and 05/09/2017 and available from [www.stavelly.com.au](http://www.stavelly.com.au)



# THURSDAY'S GOSSAN PORPHYRY



## Thursday's Gossan Diamond Tails (north section)

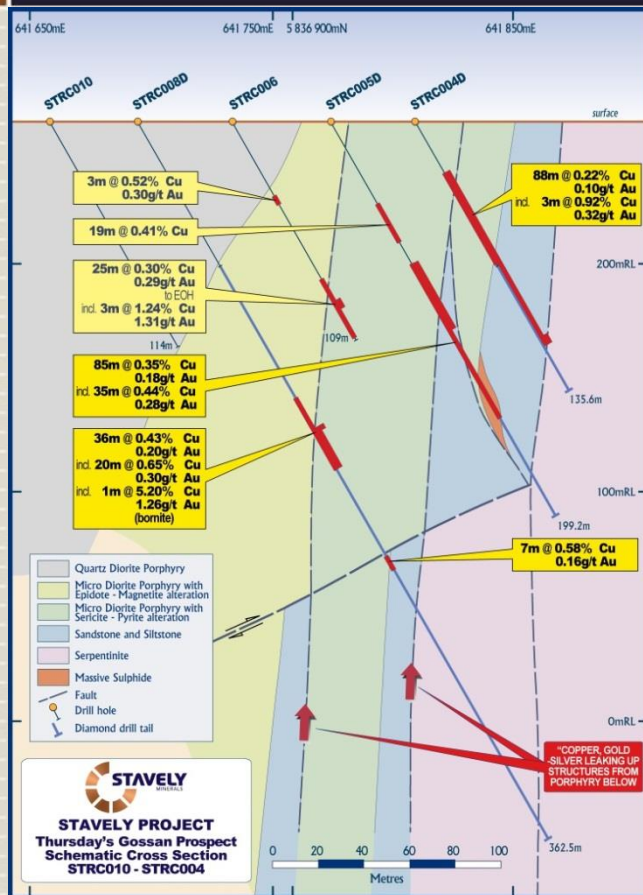
RC drill holes continued / twinned with diamond drill 'tails'. Diamond drill results:

- 124m at 0.31% copper and 0.12g/t gold, and
- 53m at 0.37% copper and 0.15g/t gold, including
  - 23m at 0.57% copper and 0.20g/t gold

see ASX announcement 23/08/2017 and available from [www.stavely.com.au](http://www.stavely.com.au)



# THURSDAY'S GOSSAN PORPHYRY



## Thursday's Gossan Diamond Tails (second north section)

RC drill holes continued / twinned with diamond drill 'tails'. Diamond drill results:

- 36m at 0.43% copper and 0.20g/t gold, including
  - 20m at 0.65% copper and 0.30g/t gold
- 85m at 0.35% copper and 0.18g/t gold, including
  - 35m at 0.44% copper and 0.28g/t gold

see ASX announcement 05/09/2017 and available from [www.stavely.com.au](http://www.stavely.com.au)



**CADIA RIDGEWAY ANALOGY:**  
**7-PHASES OF DRILLING BEFORE**  
**DISCOVERY, HIGH-GRADE GOLD-**  
**COPPER MINERALISATION**  
**ASSOCIATED WITH 'M' VEINS**



# THE PRIZE

The Cadia Ridgeway gold-copper deposit had total production to March 2012 of 76.7Mt at 1.83g/t gold and 0.63% copper for a contained **4.5 million ounces** of gold and **483,000 tonnes of copper**.

Source: Porter GeoConsultancy Pty Ltd.

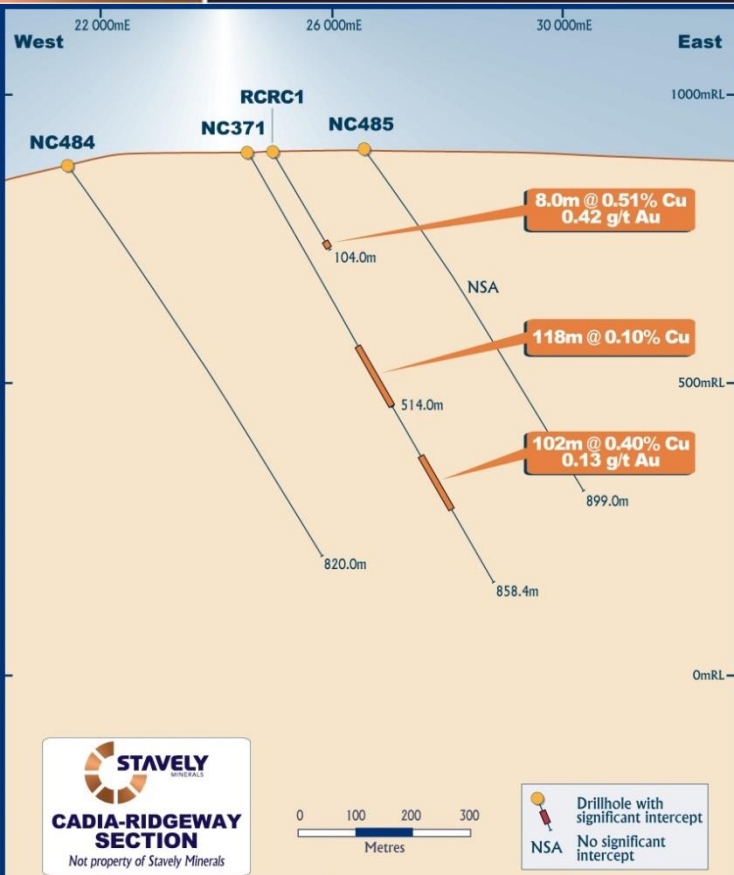
The Cadia Ridgeway gold-copper deposit has horizontal dimensions of 250m x 150m.

Source: Wilson (2003) PhD Thesis

It is 600m tall.



# CADIA RIDGEWAY EXPLORATION



## Cadia Ridgeway (pre-discovery)

Diamond drill results:

- 118m at 0.10% copper and spotty gold
- 102m at 0.40% copper and 0.13g/t gold

## Thursday's Gossan Porphyry (so far)

Diamond drill results:

- 283m at 0.16% copper
- 85m at 0.35% copper and 0.18g/t gold
- 124m at 0.31% copper and 0.12g/t gold

see ASX announcement 05/09/2017 and available from [www.stavely.com.au](http://www.stavely.com.au)



# CADIA RIDGEWAY EXPLORATION



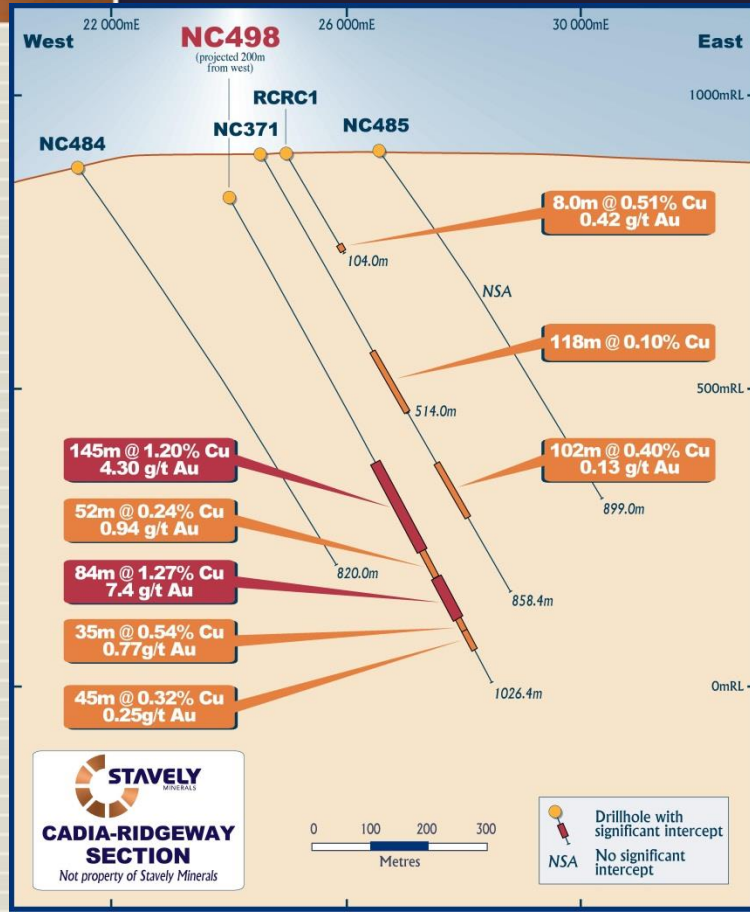
## Cadia Ridgeway (discovery)

Diamond drill results:

- 145m at 1.2% copper and 4.30g/t gold,
- 84m at 1.27% copper and 7.40g/t gold

## Thursday's Gossan Porphyry

Drilling in-progress



see ASX announcement 05/09/2017 and available from [www.stavely.com.au](http://www.stavely.com.au)



# CADIA RIDGEWAY EXPLORATION



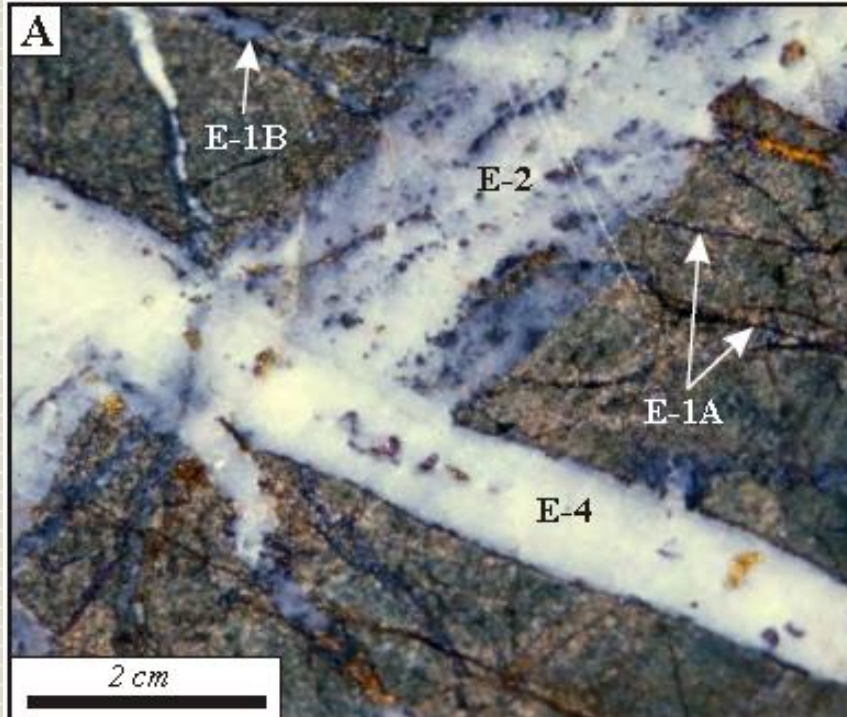
## Cadia Ridgeway (discovery)

Diamond drill results:

- 145m at 1.2% copper and 4.30g/t gold,
- 84m at 1.27% copper and 7.40g/t gold

The distribution of high-grade gold is closely related to the distribution of E-2 'M' veins.

'E' is used to indicate that they are 'early' in the mineralising sequence.





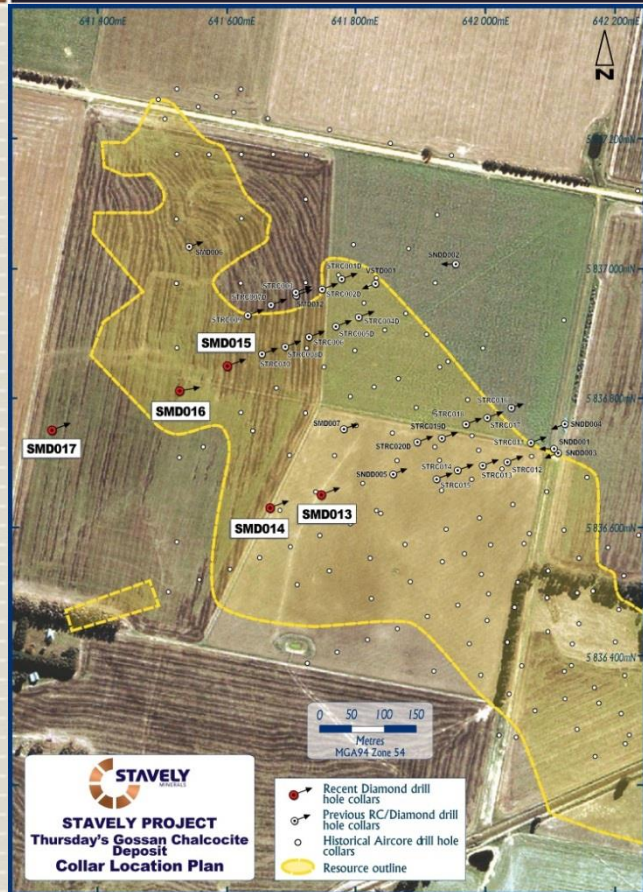


# **DRILL HOLES**

## **SMD015, 016 AND 017**



# THURSDAY'S GOSSAN PORPHYRY



## Recent results from late 'D' veins in SMD015:

- 9m of 2.62% copper and 0.28g/t gold, including
  - 4m of 5.41% copper and 0.35g/t gold, including
    - 1m at 14.75% copper and 0.33g/t gold
- 4m at 5.85% copper and 0.27g/t gold, including
  - 1m at 10.75% copper and 0.60g/t gold

see ASX announcement 19/01/2018 and available from [www.stavely.com.au](http://www.stavely.com.au)



# THURSDAY'S GOSSAN PORPHYRY



**Magnetite veins intercepted in SMD015 could be far more important as a proximal indicator to mineralisation**



- +100m intercept of classic porphyry 'M' veins:
- Typical of **gold-rich porphyries**
- Veins in this photo are similar to the E-1A 'M' veins at Cadia Ridgeway



# THURSDAY'S GOSSAN PORPHYRY



**Magnetite veins intercepted in SMD015 are important as a proximal indicator to mineralisation**

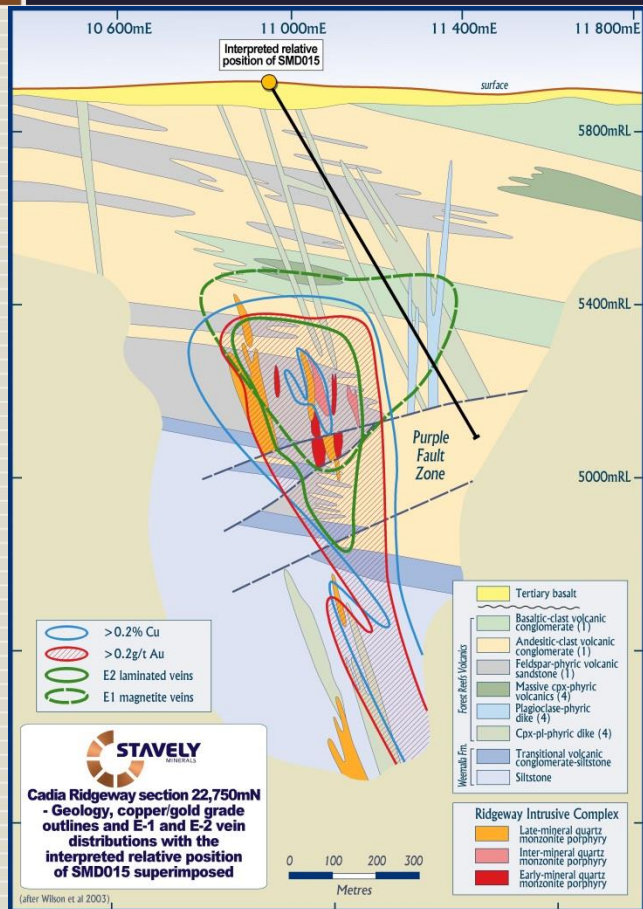
The veins in this photo are similar to the Cadia Ridgeway E-1B 'M' veins



see ASX announcement 12/01/2018 and available from [www.stavely.com.au](http://www.stavely.com.au)



# THURSDAY'S GOSSAN PORPHYRY



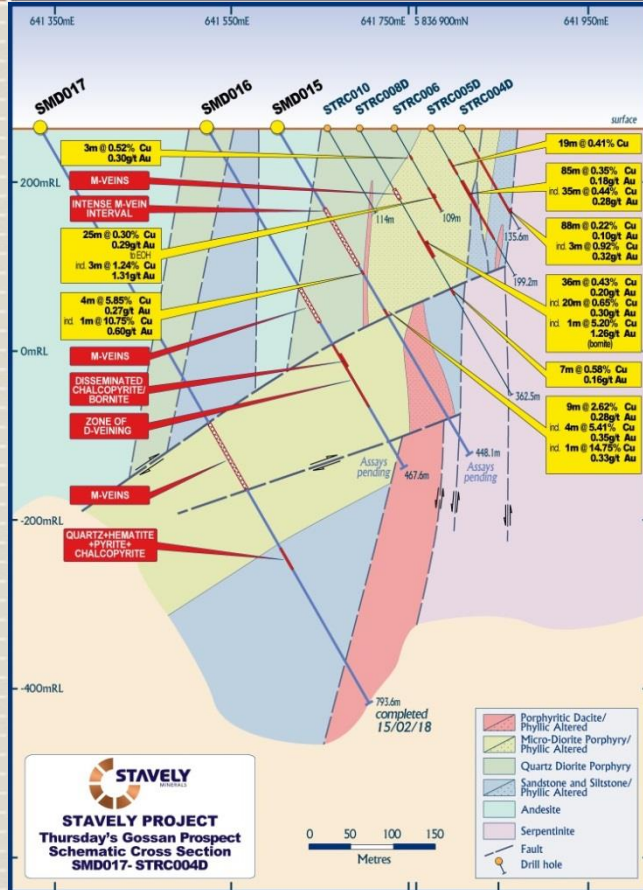
**Magnetite veins intercepted in SMD015 are important as a proximal indicator to mineralisation:**

- SMD015 interpreted to have intercepted the equivalent of the E-1 early phase of 'M' veins
- High-grade gold-copper mineralisation closely associated with more limited distribution of E-2 laminated 'M' veins

see ASX announcement 12/01/2018 and available from [www.stavelly.com.au](http://www.stavelly.com.au)



# THURSDAY'S GOSSAN PORPHYRY



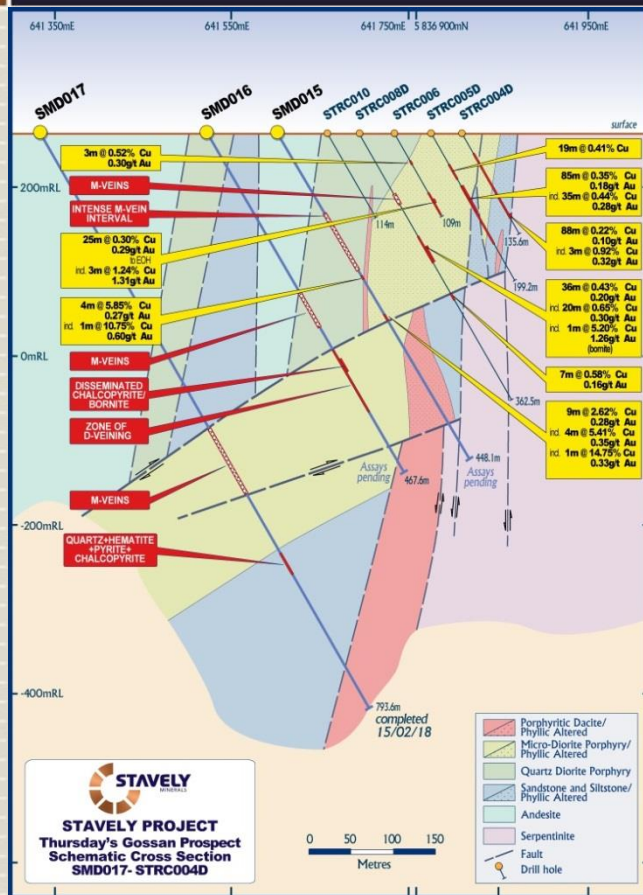
## SMD016

- 45m interval of porphyry 'M' veins from 220m to 265m
  - also with early porphyry 'A' veins
- Moderate to strong hematite-magnetite+-actinolite alteration from 307m to 325m with very fine **disseminated bornite and chalcopyrite**
- Low-angle structure at 325m
- Pyrite ± chalcopyrite ± bornite ± hematite 'D' veins from 325m to ~ 400m – **first occurrence of 'D' veins below the LAS**

see ASX announcement 24/01/2018 and available from [www.stavelly.com.au](http://www.stavelly.com.au)



# THURSDAY'S GOSSAN PORPHYRY



## SMD017

- 80m interval of porphyry 'M' veins from 408m to 488m
  - also with early porphyry 'A' veins
- The 'M' veins in SMD017 display similarities to the Cadia Ridgeway barren E-1A and E-1B veins but – importantly also the E-2 laminated 'M' veins that are associated with the main copper-gold mineralised event
- Now we have 2 targets, the porphyry above the structure and the porphyry below

see ASX announcement 18/02/2018 and available from [www.stavely.com.au](http://www.stavely.com.au)



# THURSDAY'S GOSSAN PORPHYRY



## SMD017 468m

The veins in this photo are similar to Cadia Ridgeway E-1A and E-1B veins and are likely barren but proximal to copper-gold mineralisation



see ASX announcement 18/02/2018 and available from [www.stavelly.com.au](http://www.stavelly.com.au)

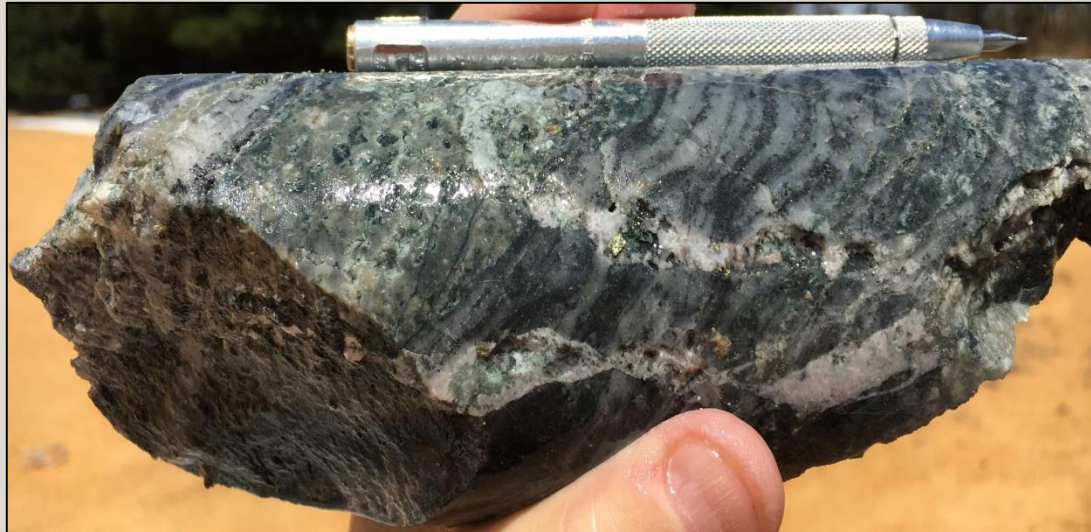


# THURSDAY'S GOSSAN PORPHYRY



## SMD017 470m

The laminated 'M' vein in this photo has inter-grown chalcopyrite with the magnetite and is similar to Cadia Ridgeway E-2 veins associated with the early copper-gold mineralisation event



see ASX announcement 18/02/2018 and available from [www.stavely.com.au](http://www.stavely.com.au)



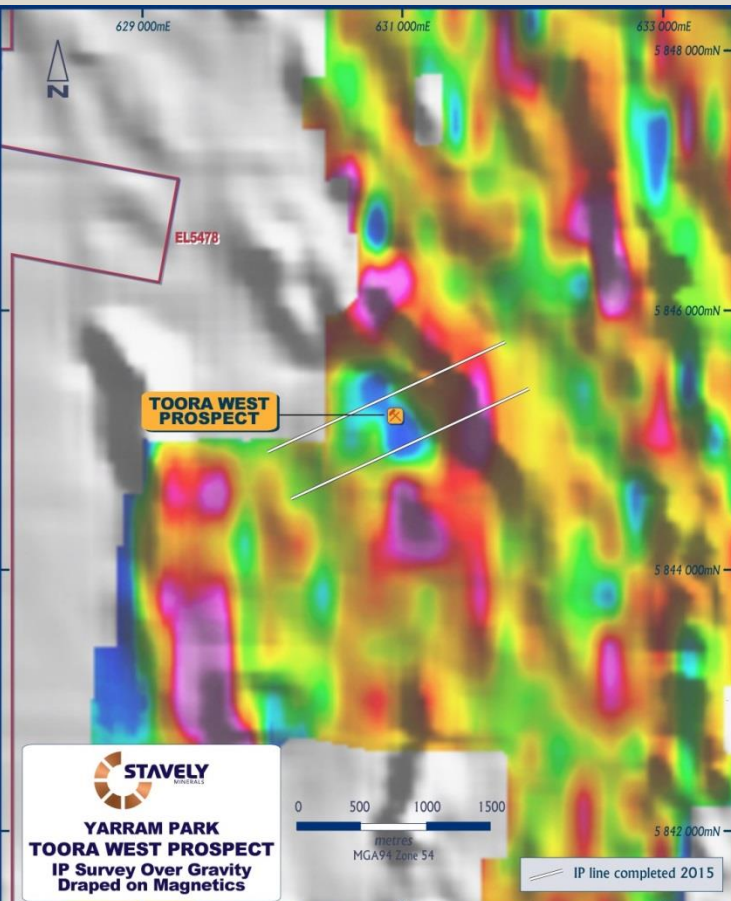
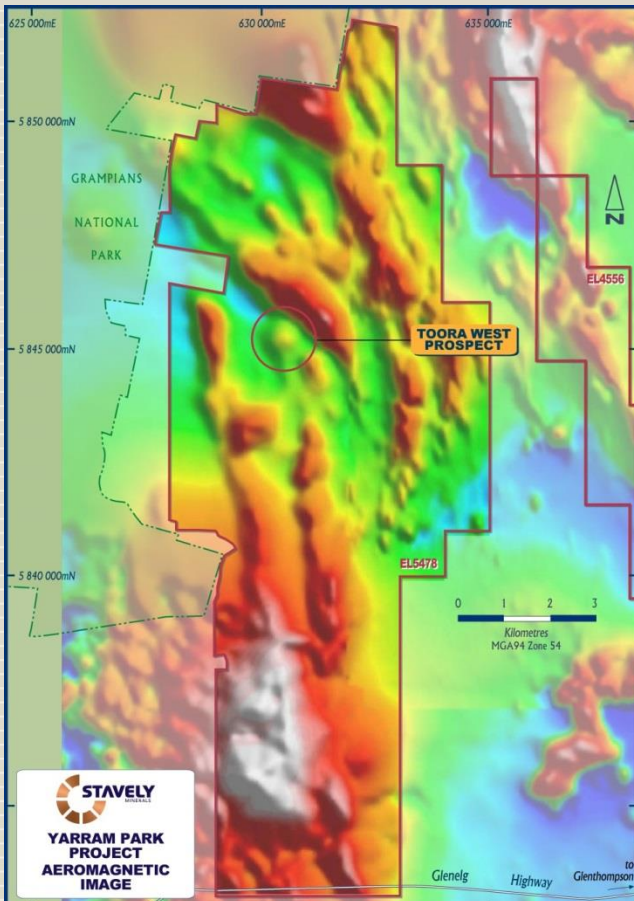
The background features a dark blue field with a large, faint, circular radar chart or sonar scan pattern. The pattern consists of concentric arcs and radial lines. A central portion of this pattern is highlighted in a metallic copper or bronze color. On the far left, there is a vertical bar with a copper-colored top half and a white bottom half. The Stavelly Minerals logo is positioned in the upper right area, featuring the company name in white text.

**STAVELY**  
MINERALS

**TOORA WEST**



# YARRAM PARK PROJECT



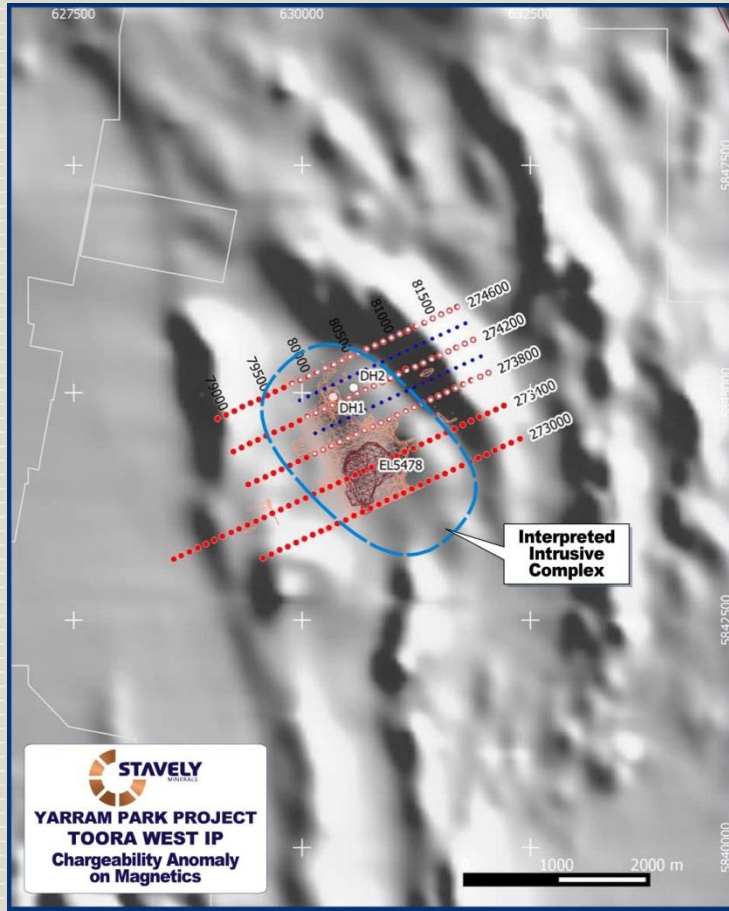
## Toora West prospect

- ✓ Magnetic / gravity geophysical anomaly
- ✓ 'Blind' target beneath younger transported cover

see ASX announcement 12/07/2017  
and available from  
[www.stavely.com.au](http://www.stavely.com.au)



# YARRAM PARK PROJECT



## Toora West prospect

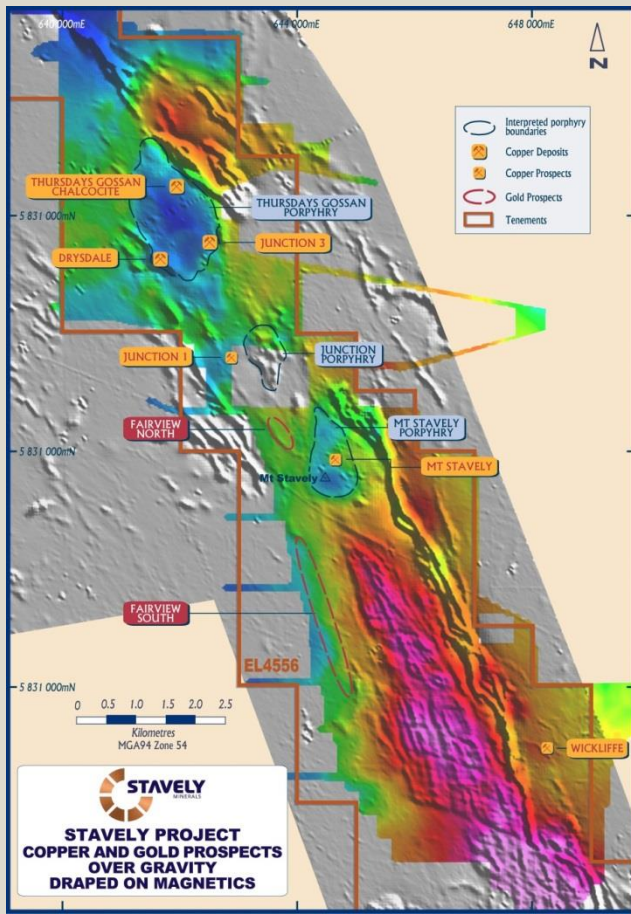
- ✓ Early 2017 drilling by Stavely Minerals has identified early, hot potassic porphyry-style alteration
- ✓ Subsequent extension to IP geophysical survey has identified a very large and very strong chargeability anomaly **500m in diameter at 50mV/V**
- ✓ Potentially disseminated sulphides associated with copper-gold mineralisation
- ✓ For drill testing early 2018





# MOUNT STAVELY PORPHYRY AND FAIRVIEW GOLD





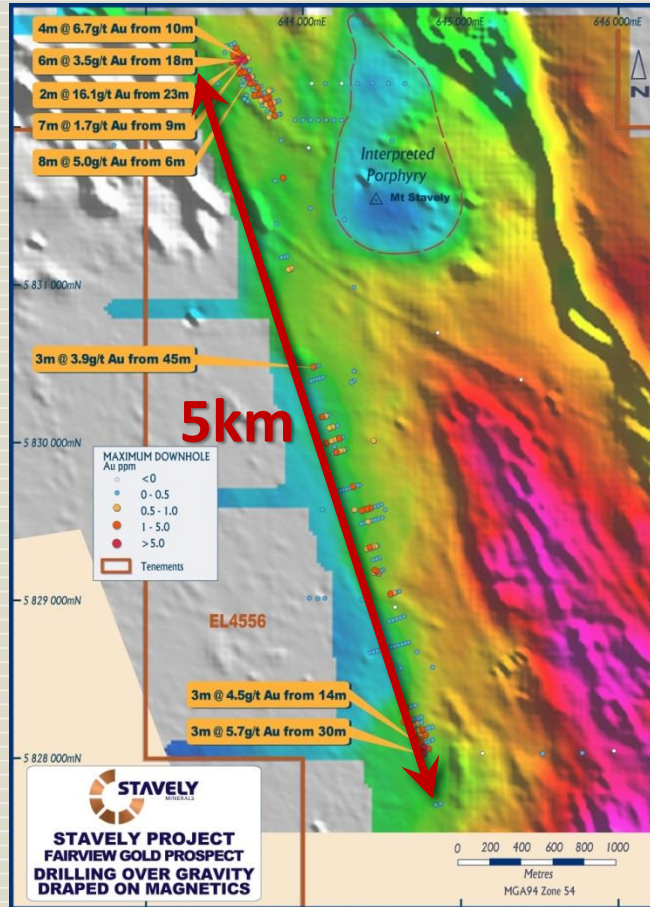
## Mount Stavely Porphyry and Fairview Gold

- ✓ Interpreted buried porphyry reflected in pronounced gravity low
- ✓ 5km of peripheral mesothermal to epithermal gold associated with quartz-sulphide veins (adularia noted)

see ASX announcements on 18/04/2017 and 21/07/2017 and available from [www.stavely.com.au](http://www.stavely.com.au)



# FAIRVIEW GOLD PROSPECT

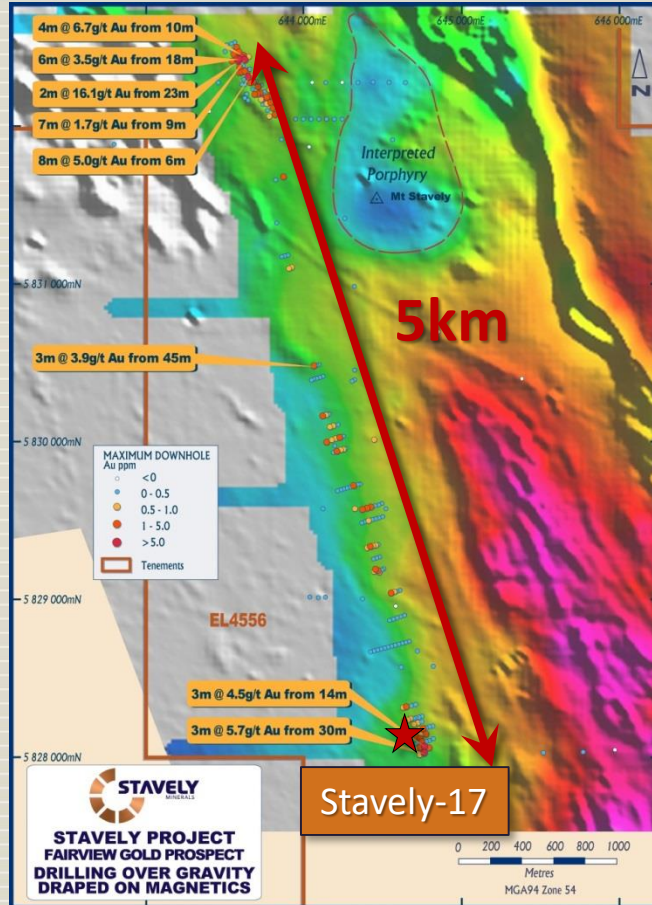


## Fairview Gold Prospect

- ✓ 5km strike of quartz-sulphide vein related gold mineralisation
- ✓ Previous drilling intercepts including:
  - **2.5m at 17.4 g/t gold** from 28m drill depth
  - **2m at 16.1 g/t gold** from 23m drill depth
  - **4m at 6.7 g/t gold** from 10m drill depth
  - **8m at 5.0 g/t gold** from 6m drill depth



# FAIRVIEW GOLD PROSPECT



Recent drilling by Stavely Minerals intercepted wide intervals of shallow gold mineralisation including:

- **30m at 1.4 g/t gold** from 47 metres drill depth, including
  - 11 metres at 2.4 g/t gold
- **17m at 1.23g/t gold** from 23m drill depth within a larger low-grade interval of
  - 57m at 0.57g/t gold from surface
- **16m at 1.04g/t gold** from 6m drill depth within a larger low-grade interval of
  - 68m at 0.42g/t gold from surface





Record 2077/02 | 404 20052

Regional geology and mineral systems  
of the Stavely region, western Victoria  
Data release 5 - Geochemistry data

A. R. E. Molyneux, D. L. Molyneux, E. M. Seaton, J. Adcock, J. H. E. Seaton, D. Topley, D. Chappell, J. L. Bradman,  
R. R. Leary, and R. Dunlop

## Stavely-17 interpretation

- Two-stage pyrite growth in most samples
  - High T first stage (oscillatory Co-Ni zonation; high Se)
  - Lower T second stage; Cu-As-Ag-Sb-Au-Pb±Mo±Ti±Bi
- The high-T stage likely relates to porphyry-style mineralization at depth
- The low-T stage is likely an epithermal overprint
- Similar to Wafi-Golpu, Lihir, etc. (next slide)
- Based on py chemistry, estimated distance to target is 0.5-1 km



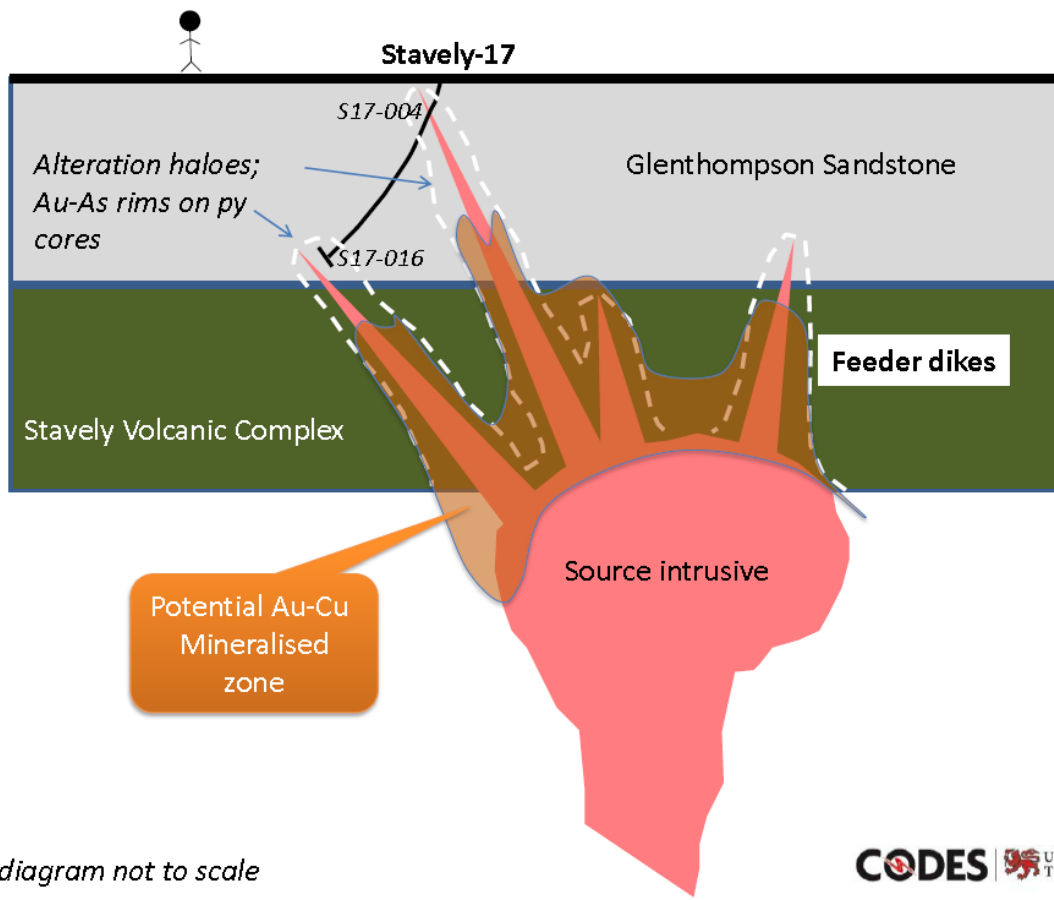
# FAIRVIEW GOLD PROSPECT



Record 2077/02 | +0M 20052

Regional geology and mineral systems  
of the Stavely region, western Victoria  
Data release 5 - Geochemistry data

A. R. E. Molyneux, D. L. Hu, K. E. H. Lee, J. Edwards, J. H. E. Bailey, D. Topley, D. Chappell, J. L. Woodman,  
R. R. Large, and R. Dunbar



Note: diagram not to scale



The background features a dark blue field with a faint, large-scale radial grid pattern. A solid orange circle is positioned in the upper right quadrant, partially overlapping the grid. The Stavelly Minerals logo is placed over this orange circle. On the far left, there is a vertical bar with a copper-colored top half and a white bottom half.

**STAVELY**  
MINERALS

**TAKE AWAY MESSAGES**



# TAKE AWAY MESSAGES



- ✓ Stavely Minerals has conclusively demonstrated that copper **plus** gold alkalic porphyry-style mineralisation is present at Thursday's Gossan
- ✓ Results to date are great **but** we are not yet in the sweet spot and grades should be very attractive when we do get there
- ✓ 'M' veins indicate we are very close
- ✓ Given it is now demonstrated that the Stavely Volcanic Belt is an alkalic copper-gold porphyry belt, other porphyry targets in the belt with very little prior exploration have now become much more significant discovery opportunities eg. Toora West, Mount Stavely (not a single drill hole), Drysdale and Junction



## Thank You

Contact Us:

Stavely Minerals Limited

Level 1, 168 Stirling Highway

Nedlands WA 6009

[www.stavely.com.au](http://www.stavely.com.au)

[info@stavely.com.au](mailto:info@stavely.com.au)

Ph: 08 9287 7630

*The information in this presentation is extracted from information available to view on [www.stavely.com.au](http://www.stavely.com.au). The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.*