

Mineralisation at the Rise and Shine Gold deposit, Bendigo District

Andrew Allibone, Consulting Geologist

AusIMM NZ Branch Annual Conference

August 2023



Disclaimer

Disclaimer

All information contained in this presentation is of a general nature. Potential investors are cautioned against using the content of this presentation, in isolation, for making investment decisions and should also refer to Santana Minerals Limited ('Santana') Annual Reports and ASX:SMI releases. For further information about Santana visit our website at www.santanaminerals.com.

Best efforts have been made to ensure the accuracy of information contained (at the time of preparation). Where forward targets and/or assumptions have been included – all such instances are indicative only and subject to alteration and/or cancellation as and when the management of Santana determines.

Research and advice of a qualified financial advisor or accountant are strongly recommended to anyone considering investing in listed company securities, including those of Santana.

Forward-Looking Statements

Forward-looking statements in this presentation include, but are not limited to, statements with respect to Santana's future plans, strategy, activities, events or developments the Company believes, expects or anticipates will or may occur. By their very nature, forward-looking statements require Santana to make assumptions that may not materialize or that may not be accurate. Although Santana believes that the expectations reflected in the forward-looking statements in this presentation are reasonable, no assurance can be given that these expectations will prove to have been correct, as actual results and future events could differ materially from those anticipated in the forward-looking statements.

Accordingly, viewers are cautioned not to place undue reliance on forward-looking statements. Santana does not undertake to update publicly or to revise any of the included forward-looking statements, except as may be required under applicable securities laws.

Previous Disclosure - 2012 JORC Code

The information in this report that relates to Mineral Resources or Ore Reserves is based on information provided in the following ASX announcements:

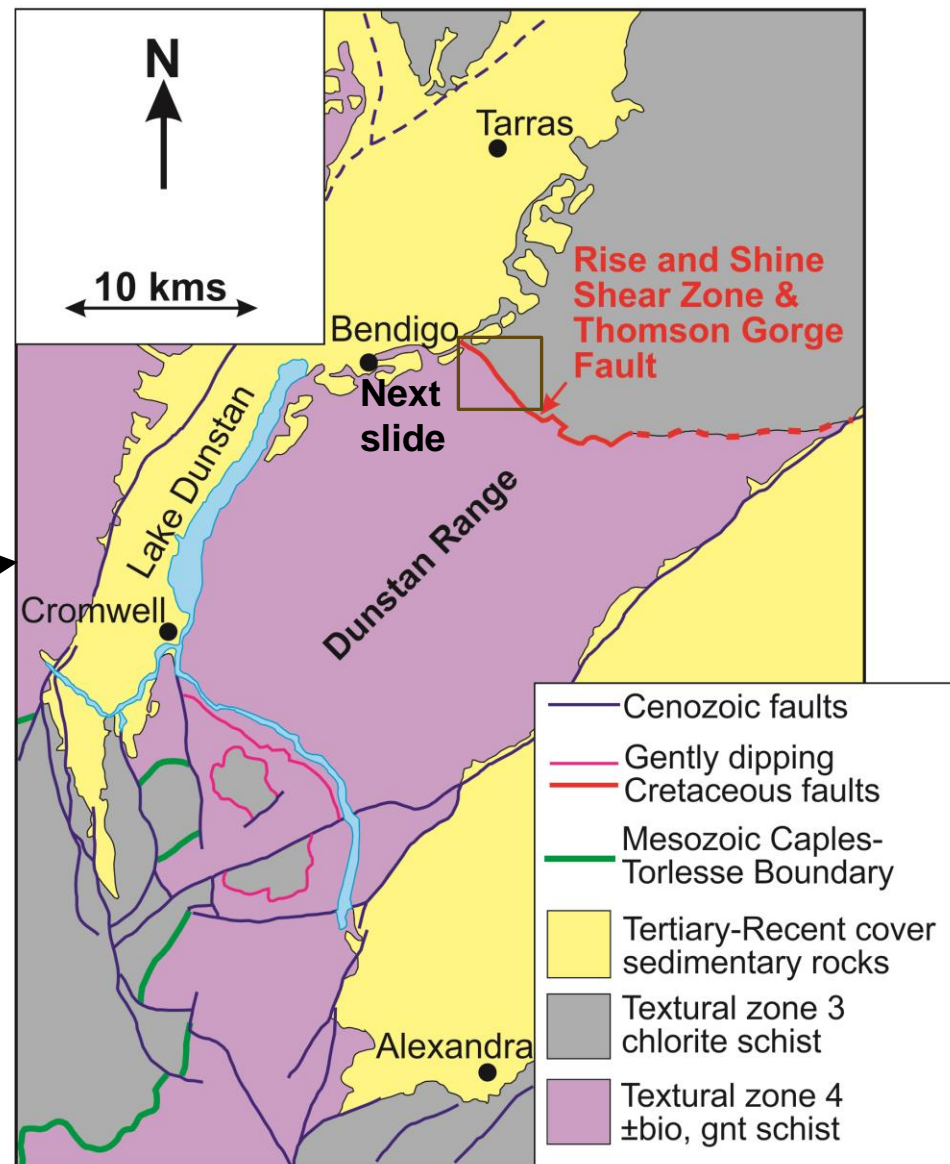
- "RAS Resource Upgrade – One Million Ounces Added at Higher Gold Grades" dated 2 February 2023

Information relating to general Resources, Exploration Targets and Exploration Data associated with the Company's projects in this announcement is extracted from the following ASX Announcements:

- ASX announcement titled "RAS continues to deliver strong gold grades" dated 2 November 2022
- ASX announcement titled "RAS Glows with more high gold grades over wide intervals" dated 29 November 2022
- ASX announcement titled "More High Gold Grades from RAS Infill Drilling" dated 4 April 2023
- ASX announcement titled "New Gold Assays and Metallurgical Results from RAS" dated 24 April 2023
- ASX announcement titled "New Gold Assays and Metallurgical Results from RAS" dated 24 April 2023
- ASX announcement titled "New Infill Drilling Gold Assay Results from RAS" dated 3 May 2023
- ASX announcement titled "High Grade Intercept from Infill Drilling South of RAS Ridge" dated 3 June 2023
- ASX announcement titled "RAS High Grade Zones Expand with New Drilling Results" dated 22 June 2023
- ASX announcement titled "Results of Infill Drilling at RAS continues to grow confidence" dated 13 July 2023
- ASX announcement titled "High-grade zones strengthened ahead of RAS MRE update." dated 27 July 2023

A copy of such announcement is available to view on the Santana Minerals Limited website www.santanaminerals.com The reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of mineral resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changes. 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 announcements.

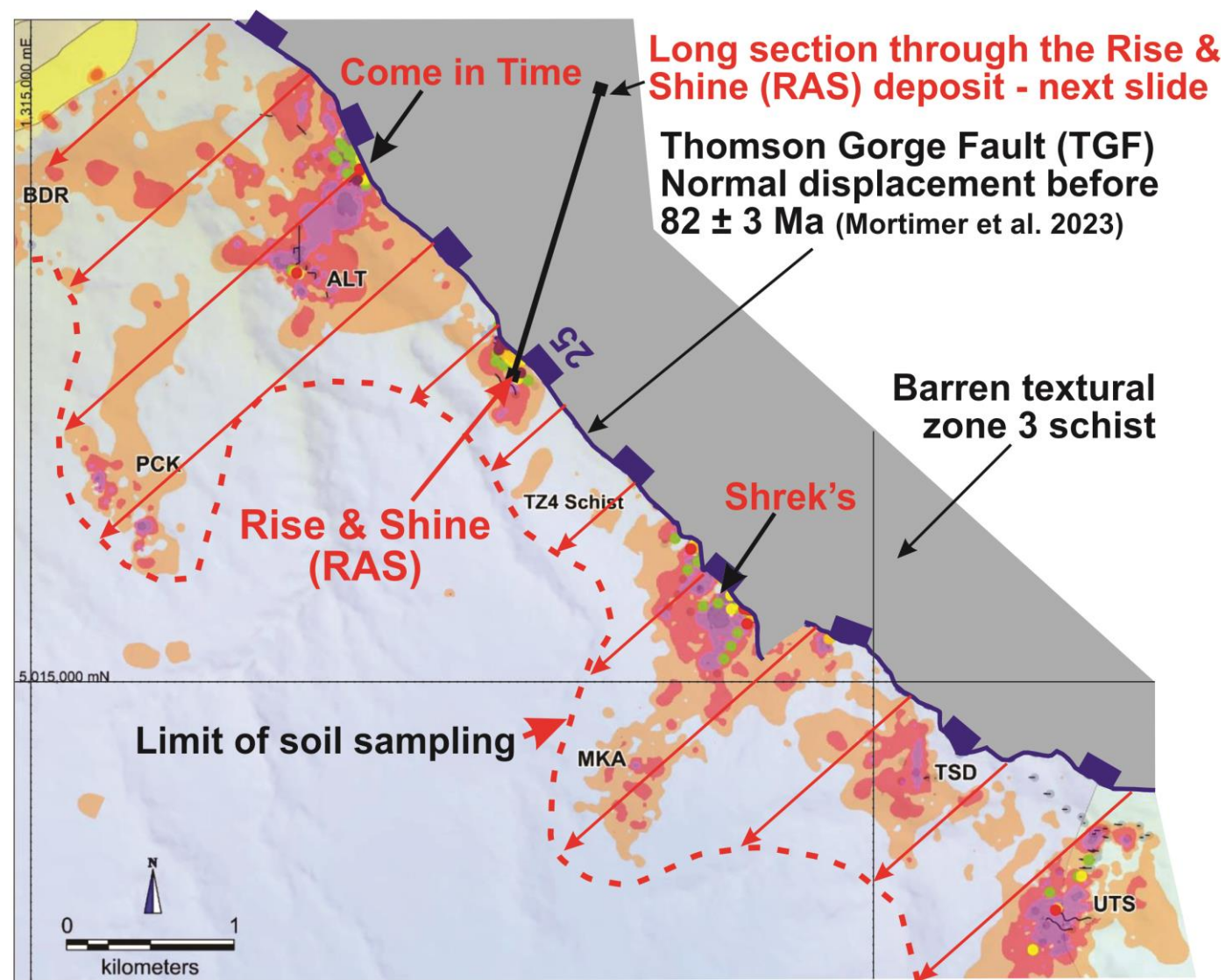
Project location and regional geological setting



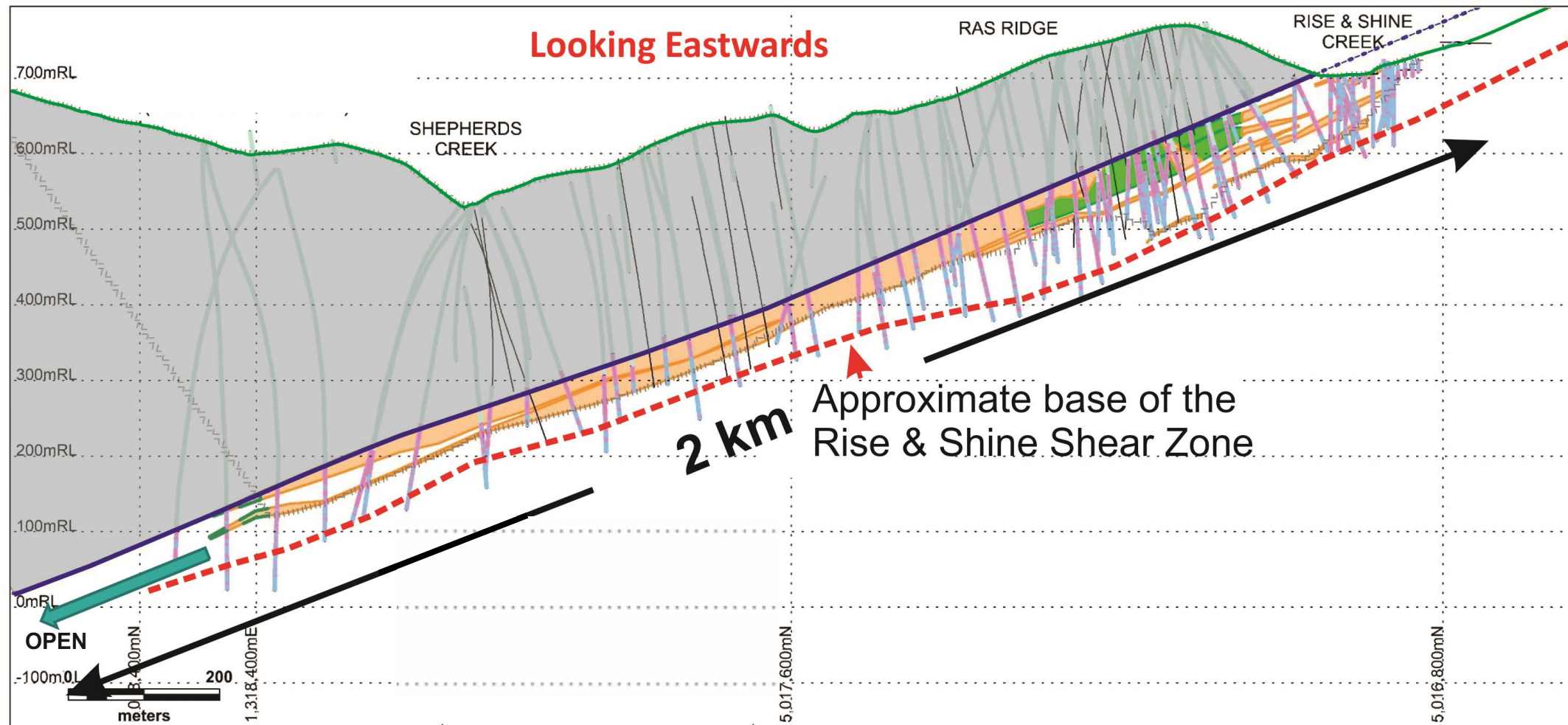
Local geological context of the Rise and Shine Shear Zone (RSSZ)

Rise and Shine Shear Zone: *Surface geochemical footprint*
Soil As (ppm)

- > 500
- 150-500
- 50-149
- 20-49
- < 20



Long section through the RSSZ and TGF



Barren textural zone 3 schist

Thomson Gorge Fault

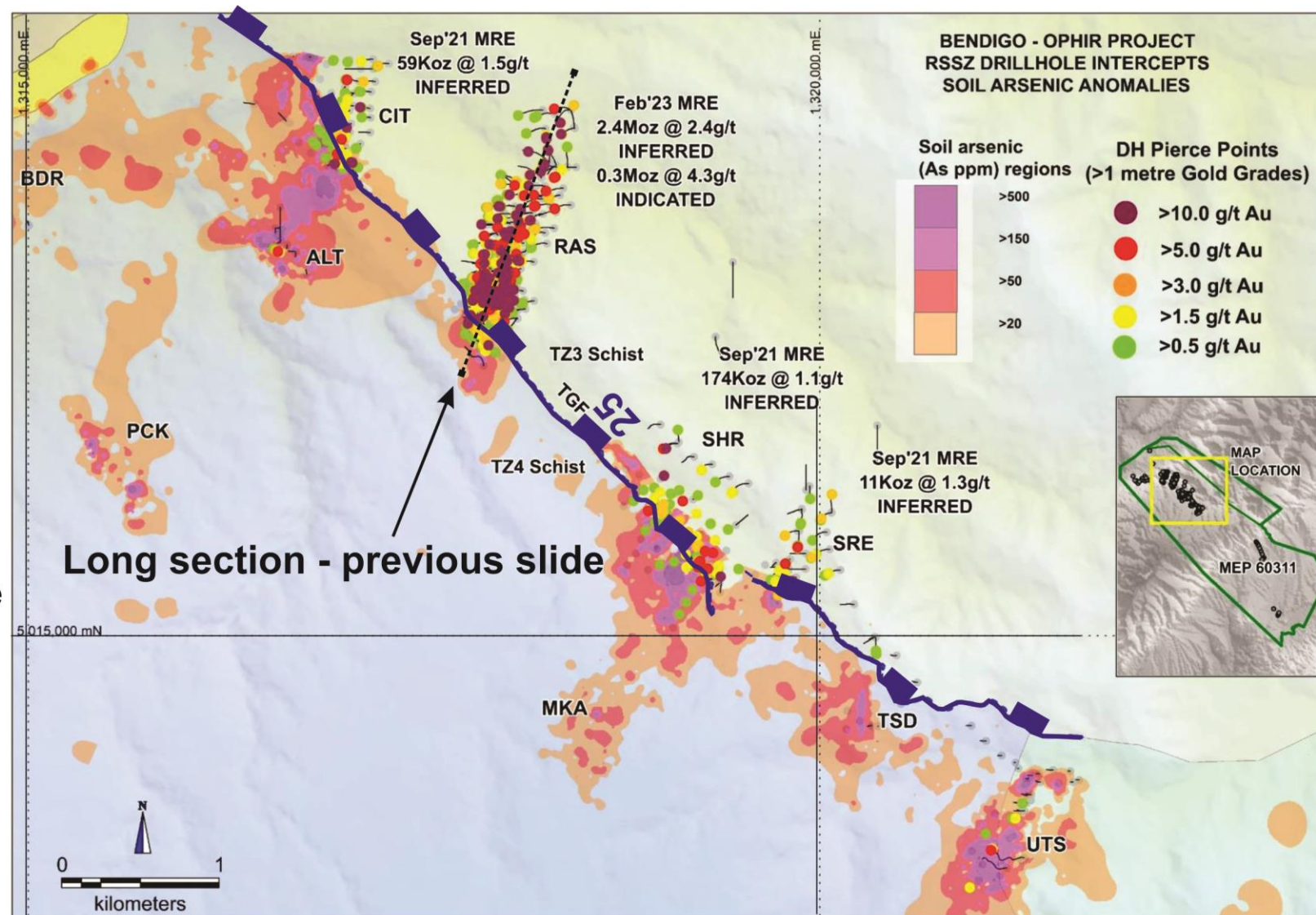
Inferred resource, 2.38 Moz @ 2.4 g/t

Indicated resource, 0.28 Moz @ 4.3 g/t

Drilling through the Thomson Gorge Fault (TGF)

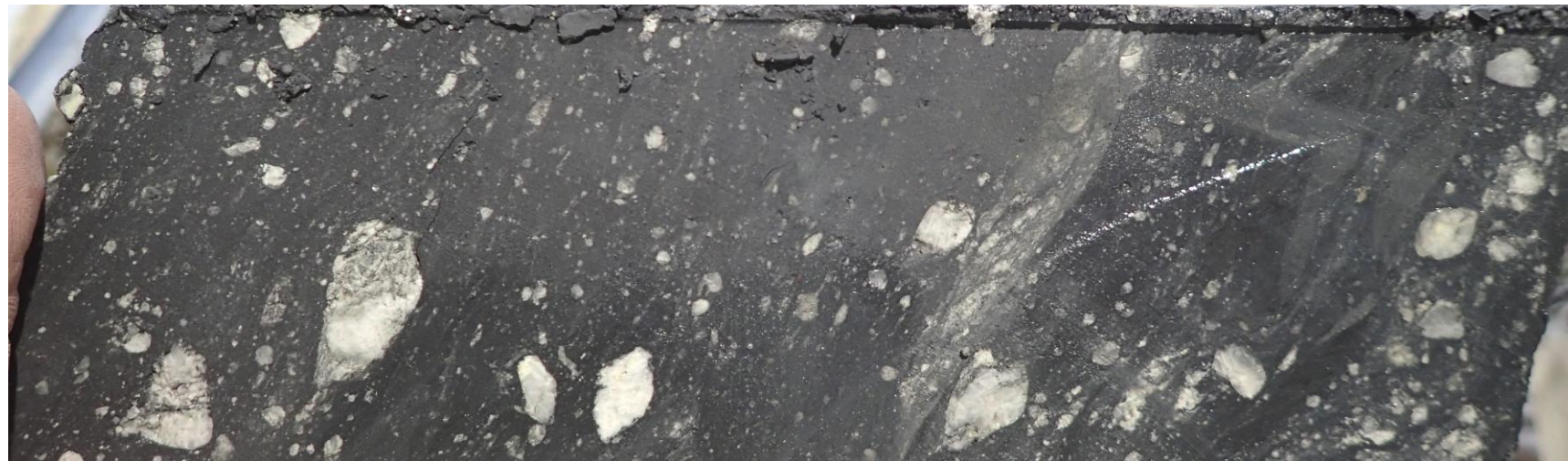
Gold prospects and deposits along the Rise and Shine Shear Zone (RSSZ)

- RAS Rise and Shine
- SHR Shreks
- CIT Come in Time
- SRE Shreks East
- BDR Bendigo Reefs
- ALT Alta
- TSD Thomsons Saddle
- UTS Upper Thomsons
- MKA Mount Moka
- PCK Perrys Creek



Thomson Gorge Fault (TGF)

The Thomson Gorge Fault comprises 20-100 cm of soft, clay rich puggy cataclasite which structurally underlies less strongly deformed TZ3 schist (HQ core)



Minor splays off the main strand of the Thomson Gorge Fault extend into the underlying mineralised TZ4 schist locally, mostly along the eastern side of the RAS deposit (HQ core)

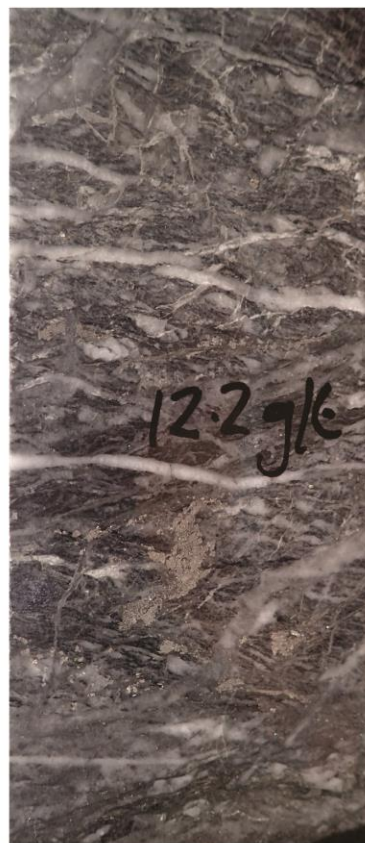


Strands of the Rise and Shine Shear Zone



Unmineralised
TZ4 schist

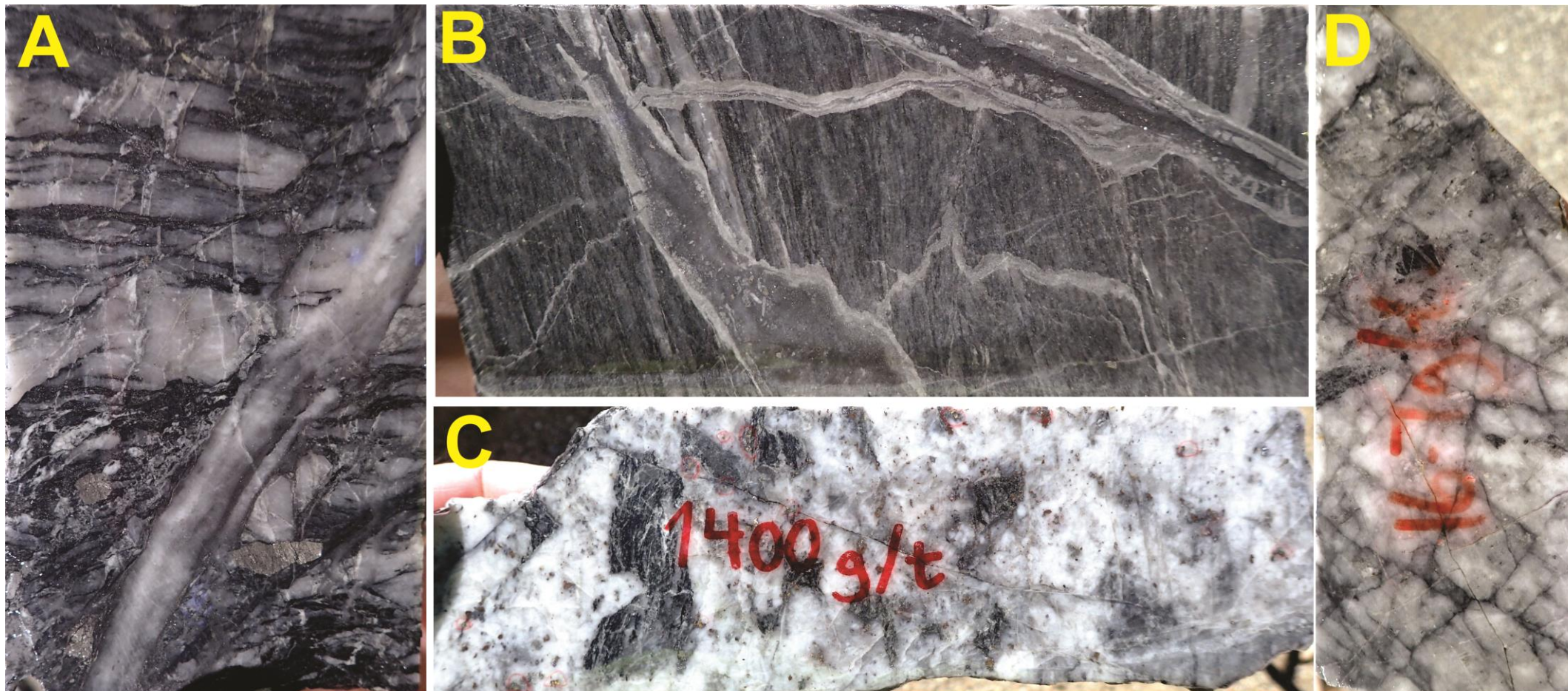
→
Brittle
deformation
and alteration



Altered (silica-ankerite-arsenopyrite) cataclasite and ultra-cataclasite from the main strand of the Rise and Shine Shear Zone with variably deformed mineralised quartz veins

(All examples HQ core)

Infill veins and breccias within the RSSZ



A, B: cm-thick mineralised blue-grey quartz \pm [arsenopyrite, ankerite-siderite, galena, sphalerite] veins commonly associated with gold grades 2-20 g/t over a metre-wide section.

C. Breccia pod containing schist fragments, abundant gold, and sphalerite

D. Weakly deformed 1-2 m thick vein localised along 2nd order strand of the Rise and Shine Shear Zone.

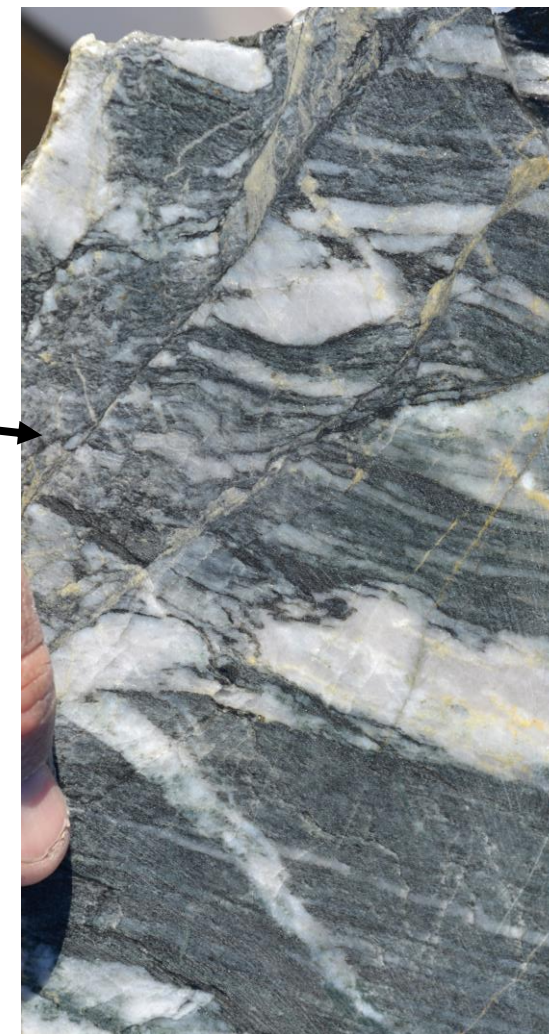
(All samples HQ core)

Other elements of the Rise and Shine Shear Zone



Minor altered
shears associated
with some veins

Micro-faults and
associated
carbonate veinlets



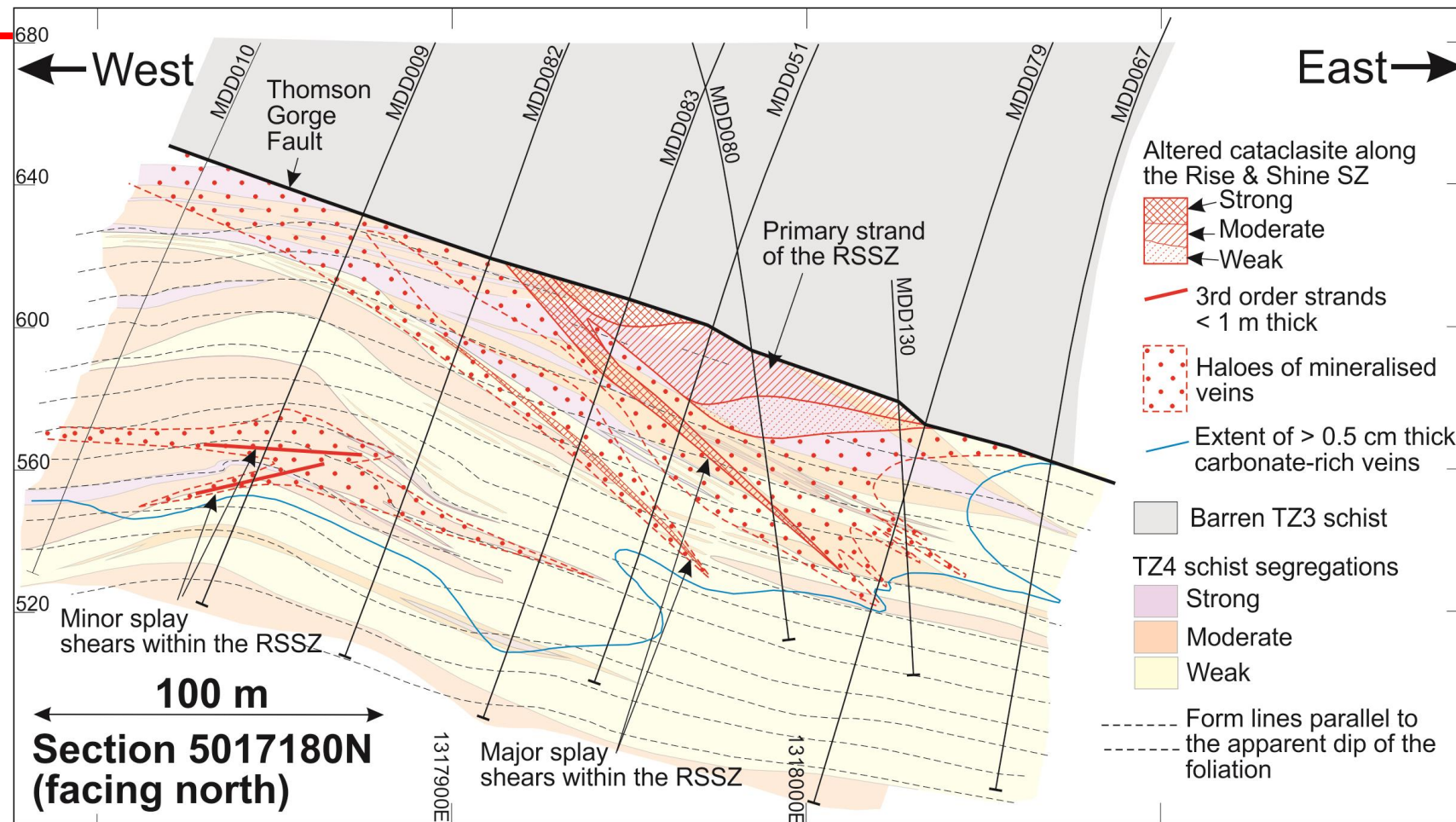
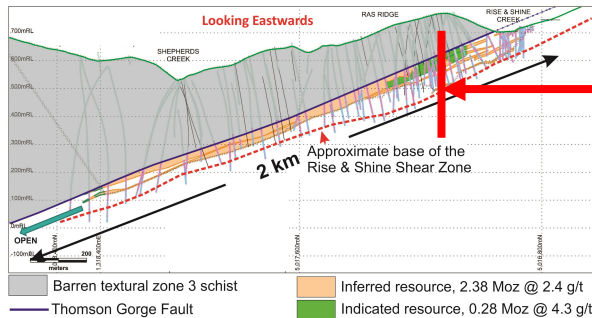
Early banded
ankerite/siderite
quartz veins

(All examples HQ core)



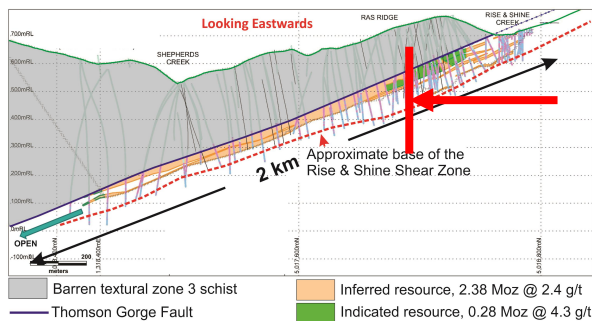
The Rise & Shine SZ is not a single simple fault/shear zone surface

East-west cross section 5017180N through RAS

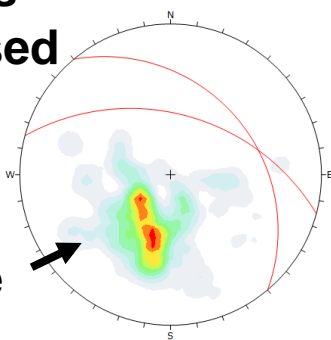


- At RAS, the main strand of the RSSZ is a trough-shaped zone of altered cataclasite whose upper surface is truncated by the TG Fault.
- Splay shears cut the footwall of the main strand of the RSSZ
- Mineralised veins form haloes around the altered shears

East-west cross section 5017240N through RAS

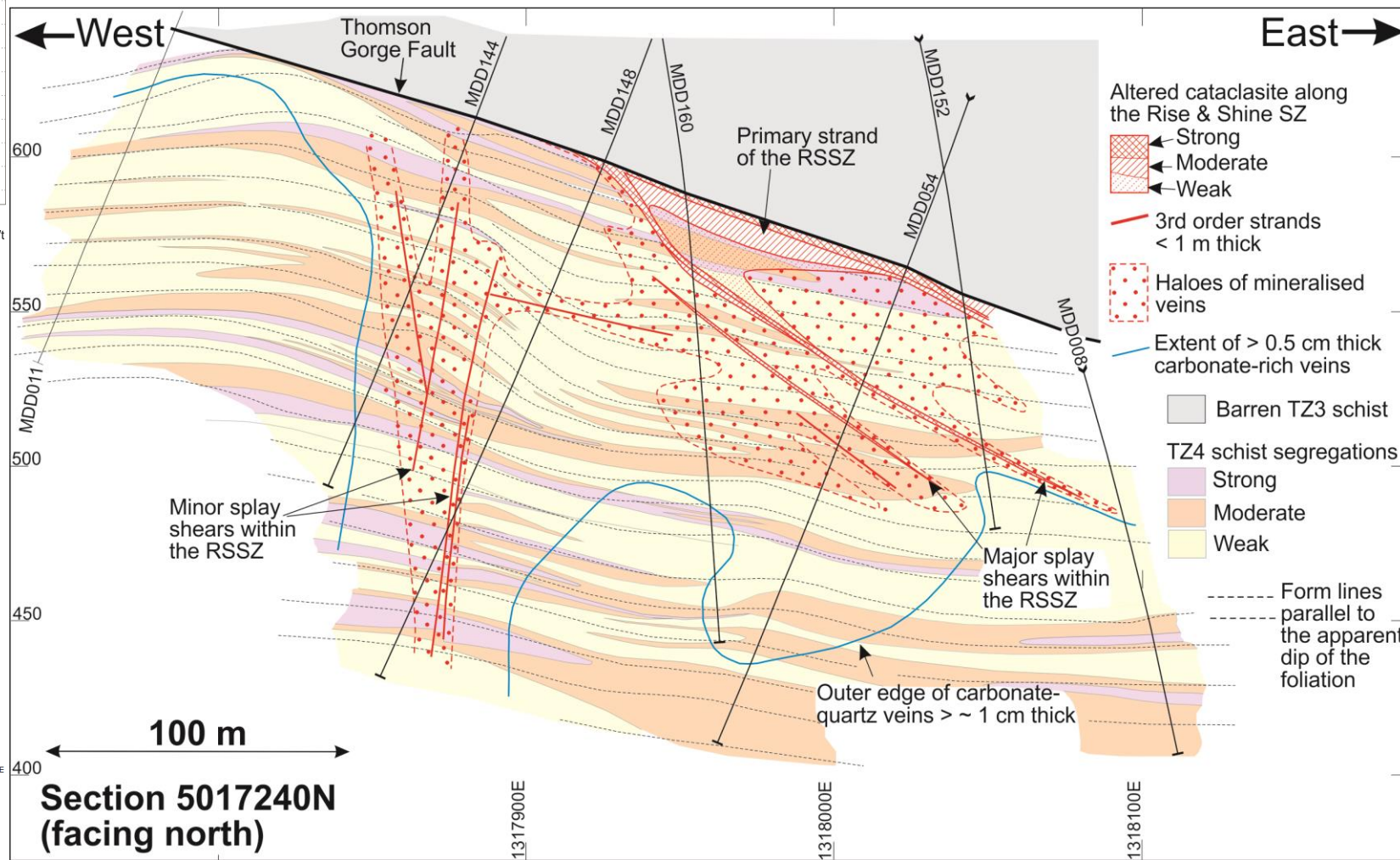
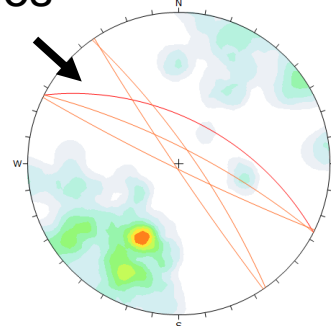


Orientations of mineralised veins

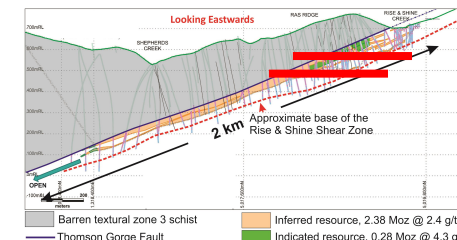


Deposit core

Western zones



560mRL and 530mRL level plans through RAS



Rise & Shine Shear Zone

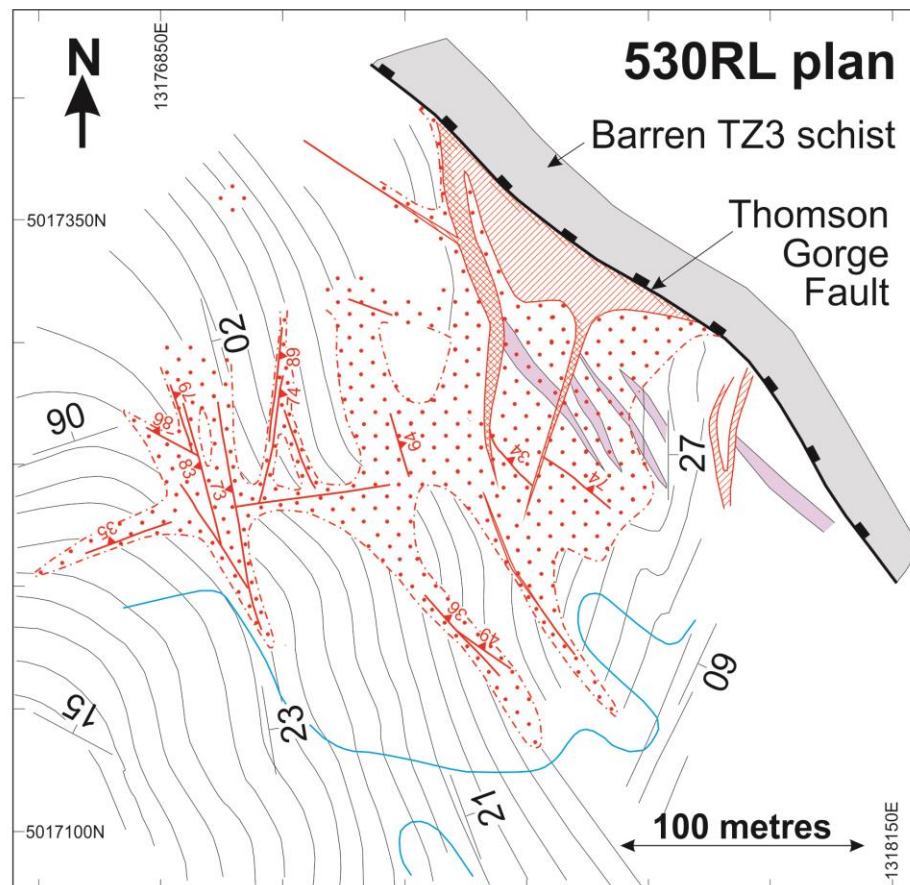
Altered cataclasite



Shear zone strands < 1 m thick

Haloed mineralised veins

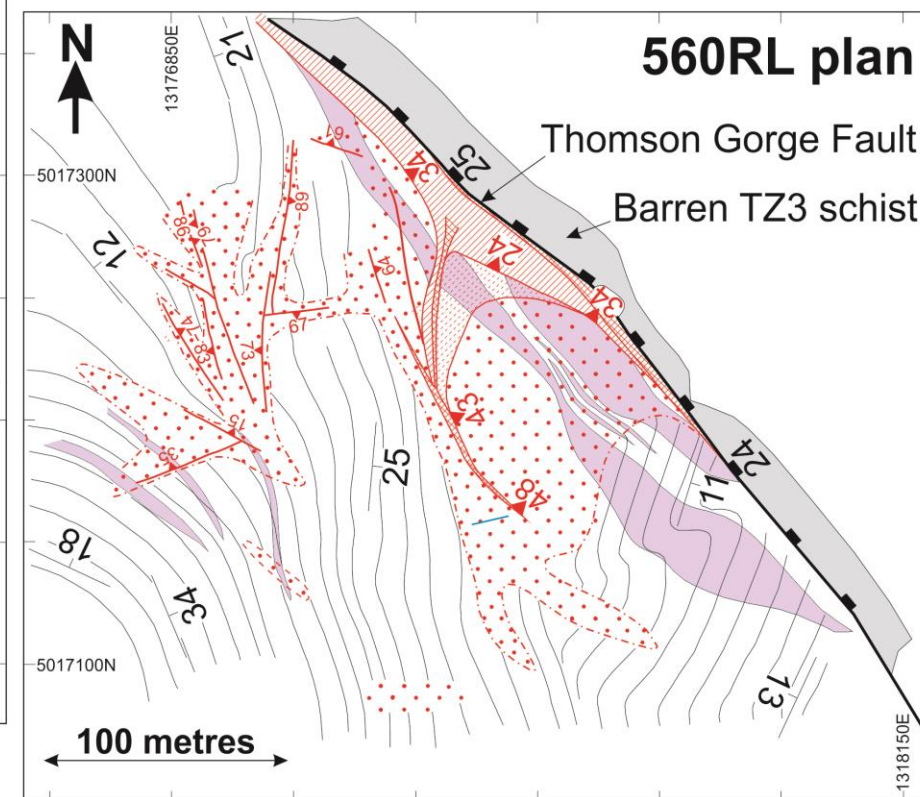
Extent of > 0.5 cm thick carbonate-rich veins



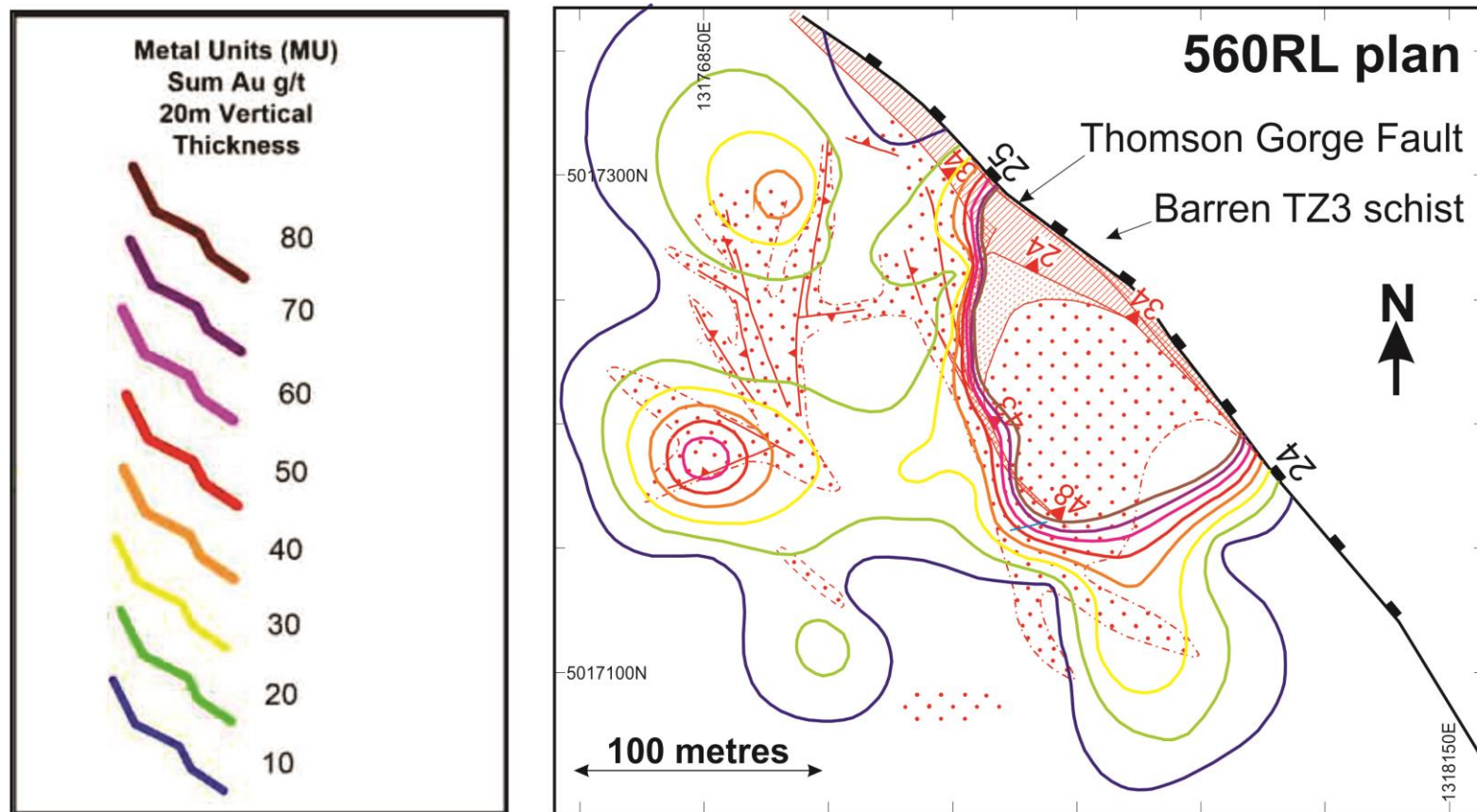
Schist structure

Strongly segregated schist

Foliation orientation & parallel form lines



Correlation between Au distribution and geology



Rise & Shine Shear Zone

Altered cataclasite





Shear zone strands < 1 m thick







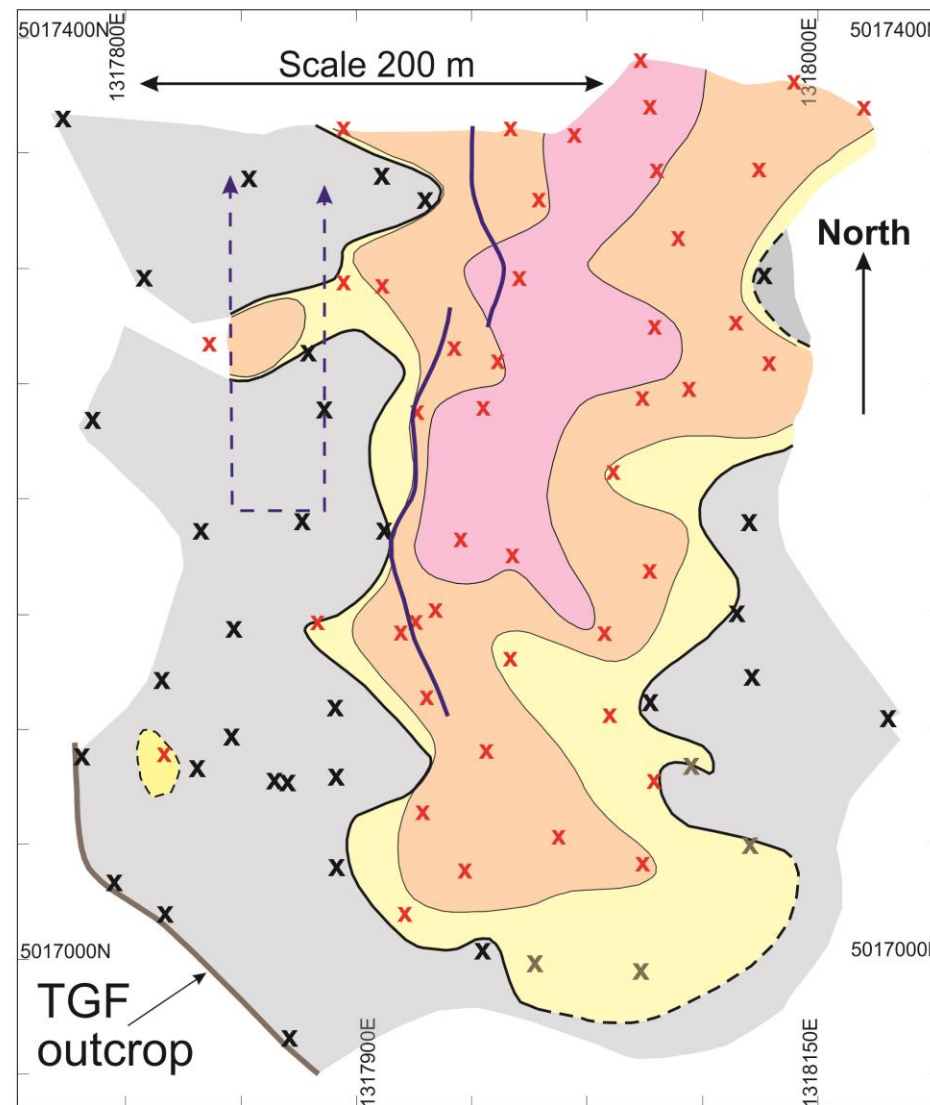
Deposit plunge and up-plunge extent

Inclined section on the base of the TGF

 Location of steeply dipping NNW-NNE-striking strands of RSSZ below the TGF
 Intersection of the main strand of the RSSZ and largest splays

Thickness of the main strand of the RSSZ below the TGF

-  >10 metres thick
-  1-10 metres thick
-  0-1 metre thick
-  Main strand of the RSSZ faulted out by the TGF



Summary

The southern part of the RAS deposit is:

1. Located in and between a NNE-trending rod/trough-shaped body of cataclasite in the deposit core and several 50-300+ metre-scale 2nd-3rd order splays.
 2. The core of the deposit doesn't extend to surface.
 3. Gold is largely hosted in crack-seal infill veins and dilational breccias with additional gold in zones of silica-ankerite/siderite-arsenopyrite altered cataclasite.
 4. Although the Thomson Gorge Fault and Rise & Shine Shear Zone are approx. parallel at the district-scale they diverge at the deposit scale and this local divergence is critical to the structural preservation of the RAS deposit.
-

SANTANA
MINERALS LIMITED



ASX:SMI

Damian Spring
Chief Executive Officer

dspring@santanaminerals.com

+64 21 333943

Cameron Peacock
Investor Relations & Business Development

cpeacock@santanaminerals.com

+61 439 908 732

santanaminerals.com

