# Sunday Creek

An Expanding and Significant Global Gold Discovery

Corporate Update: March 03, 2025





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### **Important Information**

**Overview:** This presentation (this "Presentation") dated March 03, 2025, has been prepared by Southern Cross Gold Consolidated Ltd ("SXGC" or the "Company") and is authorized for release by Managing Director, Michael Hudson.

Accuracy of Information: Readers are directed to the public disclosure of Southern Cross Gold Consolidated Ltd ("SXGC") available under SXGC's profile on SEDAR+ ("SEDAR+") at <u>www.sedarplus.ca</u>. Information contained in this presentation was believed to be accurate at the time it was posted but may be superseded by more recent public disclosure of SXGC. SXGC makes no representations or warranties as to the accuracy, reliability, completeness or timeliness of the information in this presentation.

Forward-Looking Information: Some of the statements contained in this presentation may be forward-looking statements or forward-looking information within the meaning of applicable securities laws (collectively, "forward-looking statements"). Forward-looking statements are typically identified by words such as: believe, expect, anticipate, intend, estimate, postulate and similar expressions, or which by their nature refer to future events. SXGC cautions investors that any forward-looking statements by SXGC are not guarantees of future performance, and that actual results may differ materially from those in forward looking statements as a result of various factors, including, but not limited to, risks and uncertainties associated with exploration and development; uncertainties relating to estimates of mineral resources including uncertainty that mineral resources may never be converted into mineral reserves, capital and other costs varying significantly from estimates, changes in world metal markets, changes in equity markets, that the political environment in which SXGC operates will continue to support the development and operation of mining projects, the threat associated with outbreaks of viruses and infectious diseases may affect SXGC, whether directly or through effects on employee health, workforce productivity and availability (including the ability to transport personnel to where SXGC has operations), travel restrictions, risks related to negative publicity with respect to SXGC or the mining industry in general; planned drill programs and results varying from expectations, delays in obtaining results, equipment failure, unexpected geological conditions, local community relations, dealings with non-governmental organizations, delays in operations due to permit grants, environmental and safety risks, SXGC's ability to identify one or more economic deposits on its properties, to produce minerals from its properties successfully or profitably, to continue its projected growth, to raise the necessary capital or to be fully able to implement its business strategies.

Although the Company believes its expectations are based upon reasonable assumptions and has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. As such, these risks are not exhaustive; however, they should be considered carefully. If any of these risks or uncertainties materialize, actual results may vary materially from those anticipated in the forward-looking statements found herein. Due to the risks, uncertainties, and assumptions inherent in forward-looking statements, readers should not place undue reliance on forward-looking statements.

Forward-looking statements contained herein are presented for the purpose of assisting investors in understanding the Company's business plans, potential financial performance and condition and may not be appropriate for other purposes.

The forward-looking statements contained herein are made only as of the date hereof. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent required by applicable law. The Company qualifies all of its forward-looking statements by these cautionary statements.

**Qualified/Competent Person:** Mr. Michael Hudson, President, CEO and Managing Director of SXGC, a Qualified Person as defined by National Instrument 43-101, and Competent Person as defined by JORC, and a Fellow in good standing with the Australasian Institute of Mining and Metallurgy, has reviewed, verified and approved the technical information in this Presentation.





### **Important Information**

**Summary information:** This Presentation contains summary information about the current and proposed activities of SXGC as at the date of this Presentation. The information in this Presentation is of a general nature and does not purport to be complete. This Presentation does not purport to contain all the information that an investor should consider when making an investment decision nor does it contain all the information which would be required in a disclosure document or prospectus prepared in accordance with the requirements of the Corporations Act. It should be read in conjunction with the Company's other periodic and continuous disclosure announcements lodged with the ASX, which are available at the ASX website www.asx.com.au under the code "SX2". Neither SXGC nor its directors, employees or advisers accept any responsibility to inform recipients specifically of any matter arising or coming to its attention after the date of this Presentation. Recipients should monitor SXGC's announcements to ASX, which can be obtained from ASX website as referred to above.

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Before making an investment decision, prospective investors should consider the appropriateness of the information having regard to their own objectives, financial situation and needs and seek appropriate advice, including financial, legal and taxation advice appropriate to their jurisdiction. SXGC is not licensed to provide financial product advice in respect of SXGC securities or any other investment.



### **Important Information**

For the purposes of JORC, certain information in this Presentation that relates to exploration results is extracted from the Independent Geologist's Report dated December 11, 2024, which was issued with the consent of the Competent Person, Mr. Steven Tambanis. The Technical Report is included the Company's prospectus dated December 11, 2024, which was lodge with the Australian Securities and Investments Commission (ASIC) on December 11, 2024, for the purpose of compliance with ASX Listing Rules, as part of the Company's application for admission to the Official List. The Technical Report is available for download at www2.asx.com.au under code "SX2". The Company confirms that it is not aware of any new information or data that materially affects the information results included in the prospectus. The Company confirms that the form and context of the Competent Persons' findings in relation to the report have not been materially modified from the prospectus filing.

For the purposes of NI 43-101, certain information in this Presentation that relates to exploration results is extracted from the independent technical report titled NI 43-101 Technical Report, Sunday Creek Gold-Antimony Project, Victoria, Australia" and dated September 25, 2024 (the "Technical Report") prepared for the Company by Mark Saxon, a quailed person under NI 43-101. The Technical Report is available for download under the Company's profile on <u>www.sedarplus.ca</u> and on the Company's website at <u>www.southerncrossgold.com</u>

Information in this Presentation relates to the Exploration Target for the Sunday Creek Project is based on information compiled by Mr Kenneth Bush and Mr Michael Hudson. Mr Bush is a Member of Australian Institute of Geoscientists and Mr Hudson is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Bush and Mr Hudson each have sufficient experience relevant to the style of mineralization and type of deposit under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bush is Exploration Manager and Mr Hudson is Managing Director of Southern Cross Gold Limited and both consent to the inclusion in the report of the matters based on their information in the form and context in which it appears. For further exploration target information see historic SXG News Release Dated 23/01/24: <a href="https://www.southerncrossgold.com/investor/historical-announcements-asx-sxg">https://www.southerncrossgold.com/investor/historical-announcements-asx-sxg</a>. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original document/announcement and the Company confirms that the form and context in which the Competent Person's findings are presented have not materially modified from the original market announcement.

Certain information in this Presentation also relates to prior exploration results reported by Southern Cross Gold Ltd, are extracted from the following announcements, which are available to view on <u>www.southerncrossgold.com</u> under historical announcements:

4 October, 2022 <u>SDDSC046</u>, 20 October, 2022 <u>SDDSC049</u>, 5 September, 2023 <u>SDDSC077B</u>, 12 October, 2023 <u>SDDLV003 & 4</u>, 23 October, 2023 <u>SDDSC082</u>, 9 November, 2023 <u>SDDSC091</u>, 14 December, 2023 <u>SDDSC092</u>, 5 March, 2024 <u>SDDSC107</u>, 27 May, 2024 <u>SDDSC117</u>, 13 June, 2024 <u>SDDSC118</u>, 28 October, 2024 <u>SDDSC137W2</u>, 10 December, 2024 <u>SDDSC145</u>, 18 December, 2024 <u>SDDSC129 & 144</u>

#### Au Equivalent Calculation

SXGC considers that both gold and antimony that are included in the gold equivalent calculation ("AuEq") have reasonable potential to be recovered at Sunday Creek, given current geochemical understanding, historic production statistics and geologically analogous mining operations. Historically, ore from Sunday Creek was treated onsite or shipped to the Costerfield mine, located 54 km to the northwest of the project, for processing during WW1. SXGC considers that it is appropriate to adopt the same gold equivalent variables as Mandalay Resources Ltd in its Mandalay Technical Report, 2024 dated 28 March 2024. The gold equivalence formula used by Mandalay Resources was calculated using Costerfield's 2023 production costs, using a gold price of US\$1,900 per ounce, an antimony price of US\$12,000 per tonne and 2023 total year metal recoveries of 94% for gold and 89% for antimony, and is as follows:  $AuEq = Au (g/t) + 1.88 \times Sb$  (%).

Based on the latest Costerfield calculation and given the similar geological styles and historic toll treatment of Sunday Creek mineralization at Costerfield, SXGC considers that a  $AuEq = Au (g/t) + 1.88 \times Sb$  (%) is appropriate to use for the initial exploration targeting of gold-antimony mineralization at Sunday Creek.



### Aim to Create the Highest Margin Gold Business Globally

#### **Exceptional Hit Rate**

Sunday Creek compares favorably with global leading hit rates for this stage of the project's development

60 individual intersections >100 AuEq g/t x m

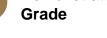
162 drill holes for 73.3 km drilling reported to date

70 vein sets wireframed within main drill area

#### 3 Clear Objectives

Drilling plan has three clear objectives that will have the largest emphasis









Demonstrate Scale

#### 6 diamond drill rigs operating at site

Aim to increase capacity with additional rig per quarter, 60 km drilling planned to Q3 2025

**News flow continuous** 



#### Funded with permits

A\$18 m cash

1,055 ha freehold

100% owned projects. no commercial royalties





### **Corporate Structure**



TSXV:SXGC ASX:SX2

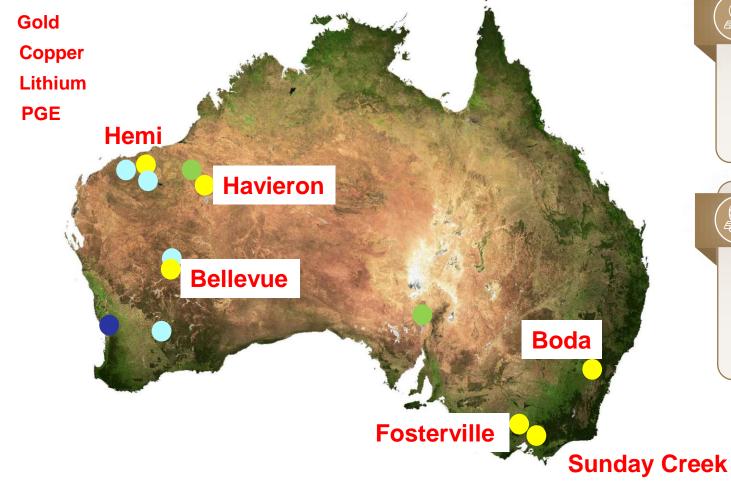
| Capitalization Summary                           |                 | Major Shareholder Summary   |                  |
|--|-----------------|---|------------------|
| Share Price<br>TSXV:SXGC, ASX:SX2 – FEB 28, 2024 | C\$3.31/A\$3.41 | UHNW (Darren Morcombe, Pierre Lassonde, Kiril Sokoloff ++)  | 31.2%            |
| Shares Issued                                    | 221.6M          | <b>Institutions</b> (Franklin Templeton, Konwave, Ruffer, Merk, Earthlabs,<br>SG Hiscock, Pendal, CQS, Schroders, Mackenzie, Incrementum, Firetrail,<br>US Global, Earth Resource, Serafin, Kaplan, Wincrest) | 23.7%            |
| Fully Diluted                                    | 238.0M          | Board and Management  | 3.0°<br>(8.6% FI |
| Basic Market Capitalization                      | C\$773.6M       | Other   | 42.1             |
| Cash   | A\$18M          | TOTAL   | 100.0            |

#### ) Share Price Performance – 1 Year and Coverage





#### Tier 1 Location Last Decade:12 Key Discoveries



Sunday Creek project is one of the very few GLOBAL independently owned large and high margin gold greenfield projects that is growing quickly



MinEx Consult: Twelve Tier 1 & 2 were made in Australia between 2014-2023

https://minexconsulting.com/wpcontent/uploads/2024/06/MinEx-AIG-Presentation-June-2024.pdf "Tier 1" deposits are company-making mines and are large, long life and low cost with NPV at the Decision-to-Build stage of >\$1000m (in 2013 US Dollars) "Tier 2" deposits are "significant" and have some of the elements of a Tier 1 but have an NPV of \$200 to \$1000m "Tier 3" deposits are modest or marginal deposits, with an NPV of \$0 to \$200m



TSXV:SXGC ASX:SX2

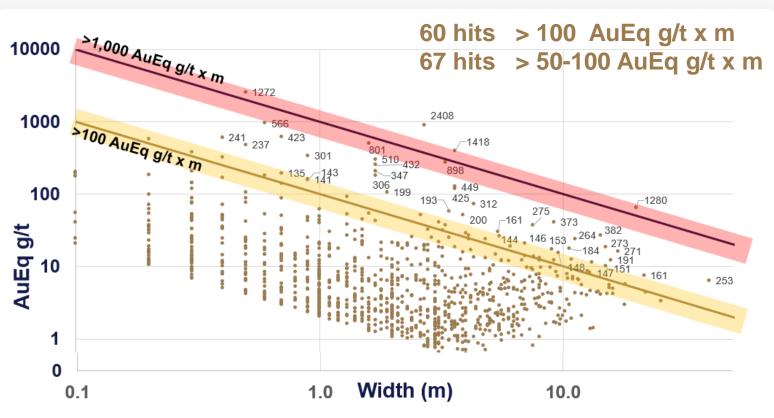
### Database Analysis: Grade vs Width

| Top 10 intersections at Sunday Creek |             |        |               |        |     |          |             |
|--------------------------------------|-------------|--------|---------------|--------|-----|----------|-------------|
| Hole-ID                              | From<br>(m) | To (m) | Length<br>(m) | Au g/t | Sb% | AuEq g/t | AuEqgt<br>m |
| SDDSC107                             | 684.3       | 687.0  | 2.7           | 891.2  | 0.2 | 891.7    | 2408        |
| SDDSC077B                            | 737.1       | 740.7  | 3.6           | 391.9  | 0.8 | 393.8    | 1418        |
| SDDSC091                             | 430.0       | 450.0  | 20.0          | 62.7   | 0.5 | 64.0     | 1280        |
| SDDSC145                             | 876.4       | 876.9  | 0.5           | 2541.9 | 1.1 | 2544.5   | 1272        |
| SDDSC092                             | 681.6       | 684.9  | 3.3           | 267.8  | 1.8 | 272.0    | 898         |
| SDDSC082                             | 417.4       | 419.0  | 1.6           | 500.3  | 0.1 | 500.6    | 801         |
| SDDSC144                             | 776.2       | 776.8  | 0.6           | 935.3  | 3.3 | 943.3    | 566         |
| SDDSC137W2                           | 208.2       | 209.9  | 1.7           | 296.2  | 1.7 | 300.2    | 510         |
| SDDSC118                             | 1120.4      | 1124.0 | 3.6           | 124.8  | 0.0 | 124.8    | 449         |
| SDDSC082                             | 413.6       | 415.3  | 1.7           | 230.6  | 9.9 | 254.2    | 432         |

\*AuEqgtm variations due to rounding



SDDSC107 from 684.7 m within assayed interval 1.0 m @ 2319 g/t AuEq (2318.4 g/t Au, 0.3 % Sb) TSXV:SXGC ASX:SX2



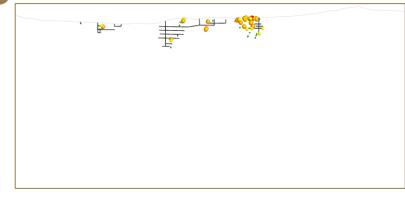
SXGC considers that both gold and antimony that are included in the gold equivalent calculation ("AuEq") have reasonable potential to be recovered and sold at Sunday Creek, given current geochemical understanding, historic production statistics and geologically analogous mining operations.

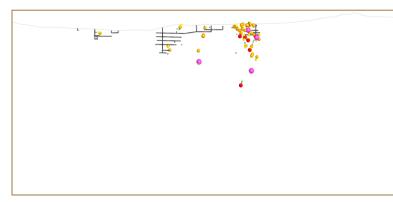
SXGC considers that it is appropriate to adopt the same gold equivalent variables as Mandalay Resources Ltd in its 2024 End of Year Mineral Reserves and Resources Press Release, dated February 20, 2025. The gold equivalence formula used by Mandalay Resources was calculated using Costerfield's 2024 production costs, using a gold price of US\$2,500 per ounce, an antimony price of US\$19,000 per tonne and 2024 total year metal recoveries of 91% for gold and 92% for antimony, and is as follows:

 $AuEq = Au (g/t) + 2.39 \times Sb (\%).$ 

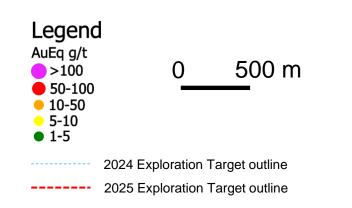


### Sunday Creek Building Ounces Rapidly

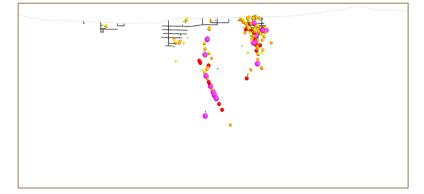




**1967:** Eastern Prospectors drilled 5 holes for 300 m **1994:** Ausminde drilled 29 holes for 958 m 5x 50-100 g/t\*m and 1 x > 100 g/t\*m**2008:** Beadell drilled 30 holes for 4,431 m 4x 50-100 g/t\*m and 0 x > 100 g/t\*m

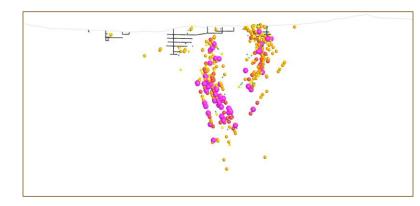


**2020-2021:** Mawson drilled 30 holes for 6,928 m 6x 50-100 g/t\*m and 2x >100 g/t\*m



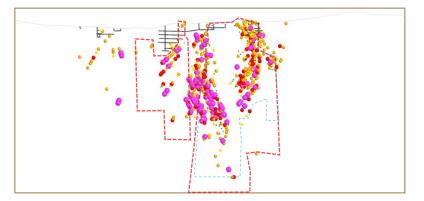
#### 2022

Southern Cross Gold drilled 33 holes for 10,348 m 10x 50-100 g/t\*m and 8x >100 g/t\*m



#### 2023

Southern Cross Gold drilled 58 holes for 28,215 m 22x 50-100 g/t\*m and 25x >100 g/t\*m



#### 2024-2025

Southern Cross Gold drilled 53 holes for 28,391 m 20x 50-100 g/t\*m and 24x >100 g/t\*m



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### **Exploration and Mining History**

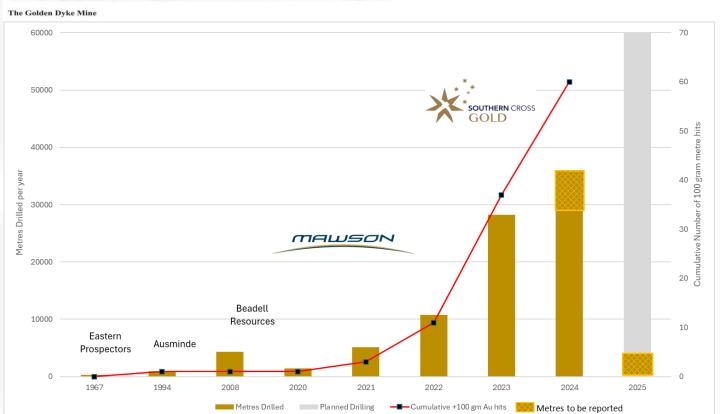
#### History

- 1850s Alluvial mining
- 1860s Surface mining to 30m
- 1880s Shaft mining to 100m, 1890s to 180m
- Early 1900s cyanide
- WW1 Open by Imperial munitions act antimony
- 1960s Eastern Prospectors few drill holes
- 1980s CRA/BHP
- 1986 mid 1990's, Ausminde 29 RC drill holes totalling 960 metres:
- 2008 Beadell Resources 30 RC holes with 7 diamond drill tails - oxide focus

#### Exploration

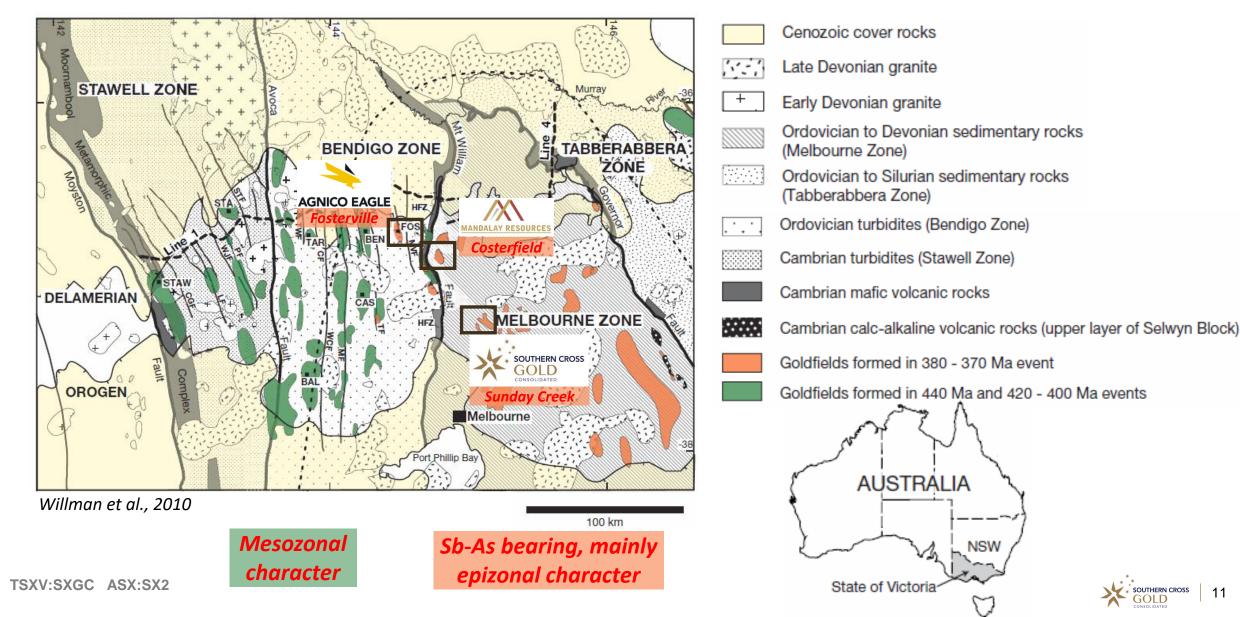
- Exploration has accelerated year-on-year
- 2021 was the first year with an individual +100 g/t Au assay interval
- 2023 included 28 individual Au assays +100 g/t Au and 6 individual Au assays +1,000 g/t Au.
- 2024 to date has 58 individual Au assays +100 g/t Au and 5 individual Au assays +1,000 g/t Au.

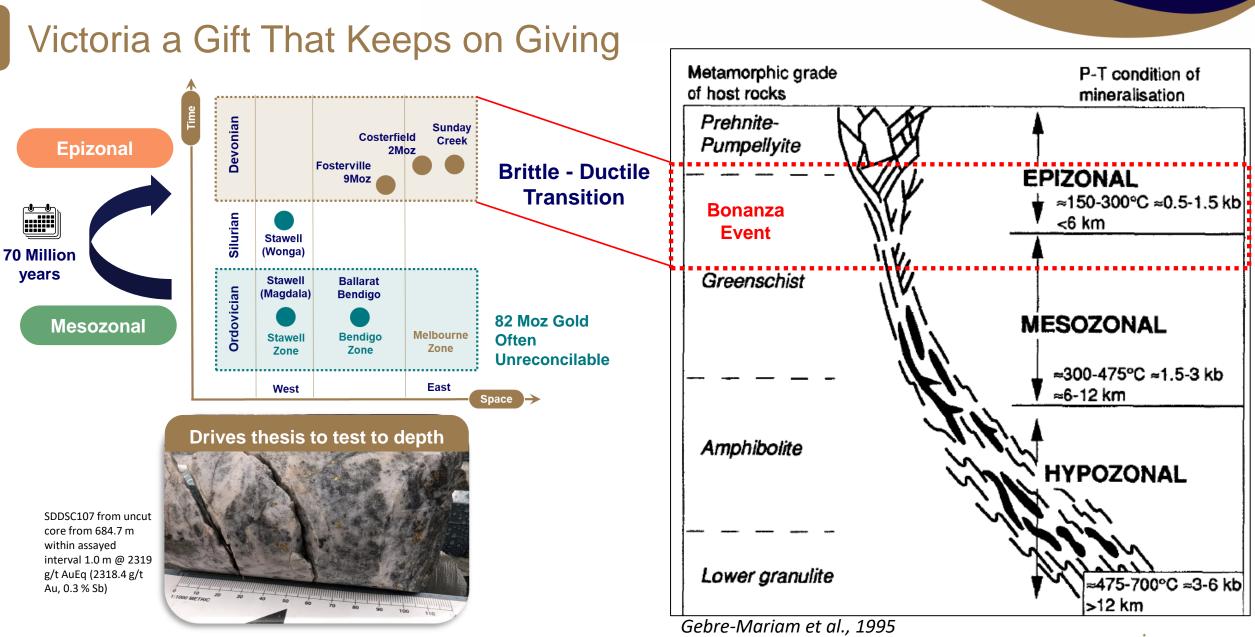




GOLD

### **Regional Setting**

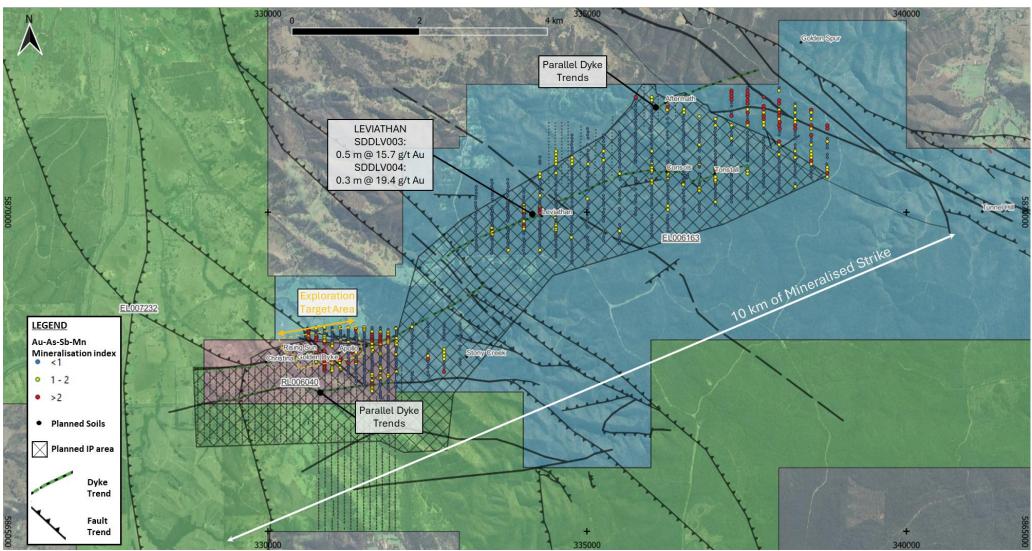






### **Regional and Parallel Trends**

- **Clear geochemical** anomalies can be identified from a combined trace element additive index using Au, As, Sb and Mn.
- Parallel dyke trends ٠ identified in outcrop and historic mining occurrences.
- **Regional Scale** ٠ **Induced Polarisation** (IP) Survey and regional geochemical soil sampling underway



GOLD

### Schematic Plan View Main Drill Area – The Golden Ladder

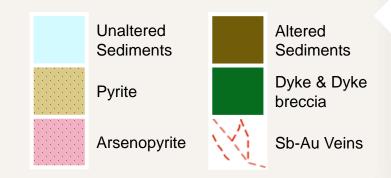


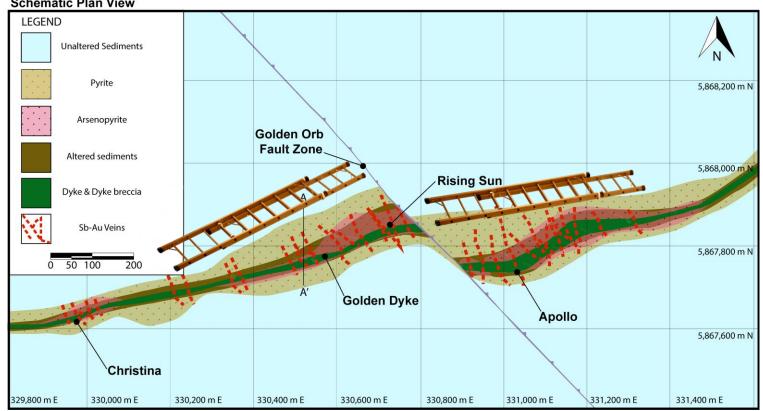
Ladder rails extend over 10km of strike. Core area drilled over 1km



"Rungs" extend from surface to 1.1km depth, Each "rung" 20-100m long, Apollo av. width 4.2m (median 3.8m), Rising Sun av. width 2.8m (median 2.4m), Golden Dyke av. Width 3.2m (median 2.3m) 70 "rungs" identified to date

Continuity informed by structural data, geostats (CV<2), geological likeness, predictability and 50 yr mining

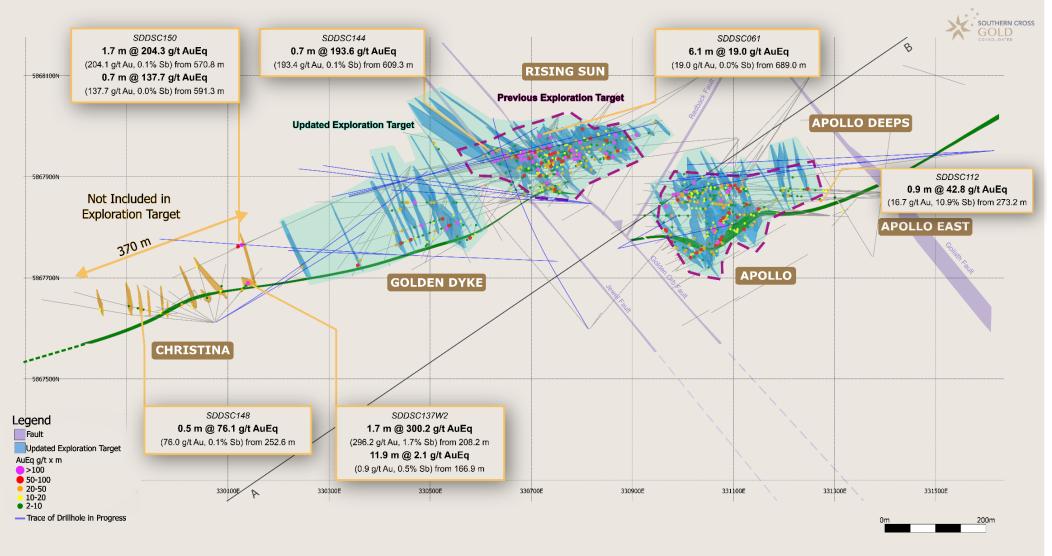




#### Schematic Plan View



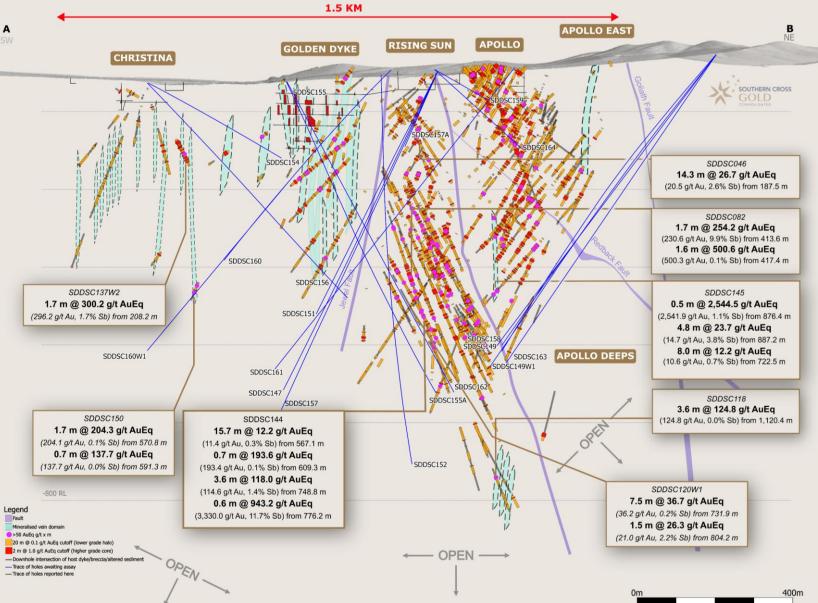
#### Plan View Main Drill Area







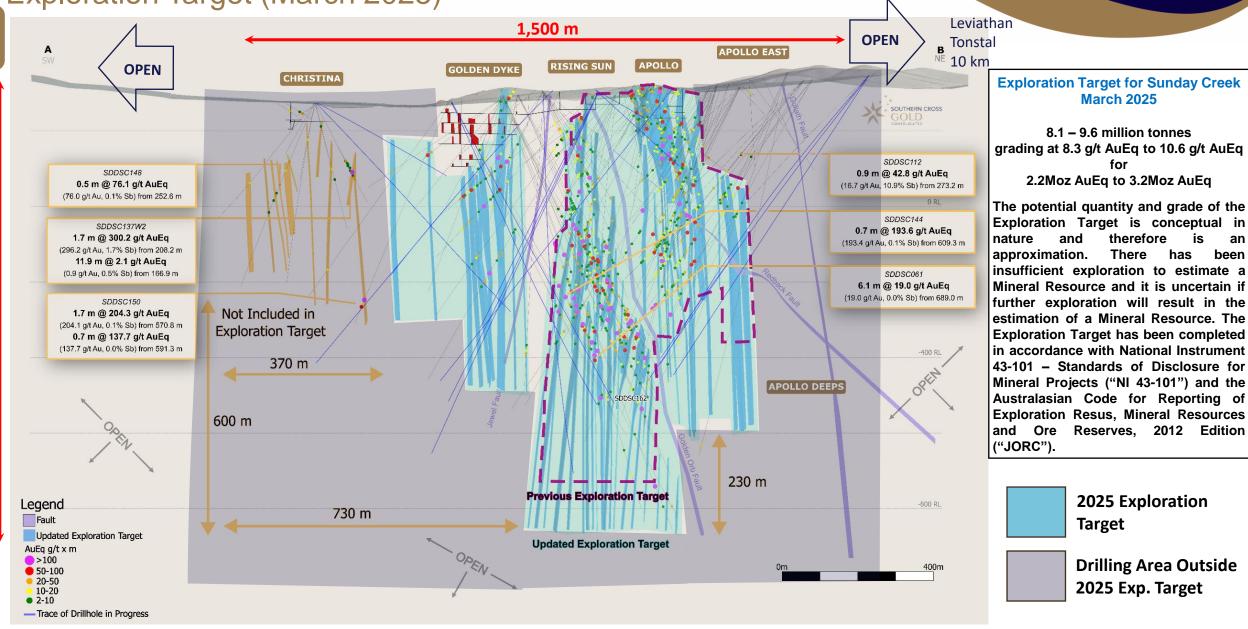
### Long Section View Main Drill Area





TSXV:SXGC ASX:SX2

#### **Exploration Target (March 2025)**



100 m

For further exploration target information see SXGC News Release dated 3/03/25: https://www.southerncrossgold.com/investor/announcements

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SOUTHERN CROSS

GOLD

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### **Exploration Target (March 2025)**

The March 2025 Exploration Target is constrained to the three main areas along the strike of the dyke breccia host on the Sunday Creek project: Rising Sun (over 340 m strike), Apollo (over 280 m strike) and Golden Dyke (over 400 m strike) for a total 1020 m of strike. This strike represents only 67% strike of the 1.5 km main drill footprint to date at Sunday Creek where high-grade drill intersections have already been made.

Only the Rising Sun, Apollo and Golden Dyke areas were considered for the Exploration Target as they contain sufficient drilling to suggest continuity and infer grade ranges but insufficient drill spacing to convert the entire area into a mineral resource estimate

Grade estimates were calculated using a post composite topcut of 80 g/t Au for vein sets in Apollo, Rising Sun and Golden Dyke. The high-grade sub domains had a range restriction of 15% applied (~10-15 m) and then a topcut of 300 g/t Au for Apollo and 400 g/t Au for Rising Sun.

| Range         | Tonnes<br>(Mt) | AuEq<br>g/t* | Au g/t | Sb % | Au Eq*<br>(Moz) | Au (Moz) | Sb (kt) |
|---------------|----------------|--------------|--------|------|-----------------|----------|---------|
| Lower<br>Case | 8.1            | 8.3          | 6.4    | 0.8  | 2.2             | 1.7      | 66.6    |
| Upper<br>Case | 9.6            | 10.6         | 8.3    | 0.9  | 3.2             | 2.6      | 88.2    |

#### Sunday Creek Exploration Target

#### \*2.39 AuEq Factor

The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code.

The tonnage and grade are estimates based on continuity of mineralization defined by exploration diamond drilling results within proximity to the intrusive "main structure" zone and bleached sediments. Strike extents in the lower-case model are minimized to half drill spacing (~15 m) or to locally restrictive geology (i.e. bounds of bleached sediment or dyke) whichever was smaller. The upper-case model strike extents were extended to the average vein strike (typically around ~40 m) or to geological constraints, whichever was smaller.

The Exploration Target is based on the interpretation of the following geology and mineralization data that has been collated as of the date of this announcement:

- 162 structurally oriented drillholes for 73,299.16 m at the main Sunday Creek area that have been drilled by Mawson/SXGC;
- 64 aircore, reverse circulation and unoriented diamond drill holes for 5,599 m that were drilled historically on the project;
- 49,595 drill hole assay results;
- 1,169 density measurements on mineralized diamond drill core, a variable SG was calculated using the average of rock types and a regression calculation dependent on the content of antimony, where Sb% >1 used an SG value of 0.0197 x Sb% + 2.77, and if below 1% Sb a value of 2.77 was applied to the Exploration Target.
- Surface geological mapping, costean data and diamond core geological logging;
- Detailed LiDAR imagery;
- Geophysical datasets including detailed ground magnetic and 3D induced polarization;
- 85 individual wireframes of the Apollo, Rising Sun and Golden Dyke mineralized bodies.

#### **JORC Competent Person Statement**

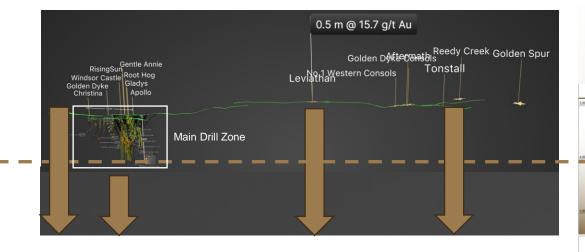
Information in this report that relates to the Exploration Target for the Sunday Creek Project is based on information compiled by Mr Kenneth Bush and Mr Michael Hudson. Mr Bush is a Member of Australian Institute of Geoscientists and Mr Hudson is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Bush and Mr Hudson each have sufficient experience relevant to the style of mineralization and type of deposit under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bush is Exploration Manager and Mr Hudson is Managing Director of Southern Cross Gold Limited and both consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

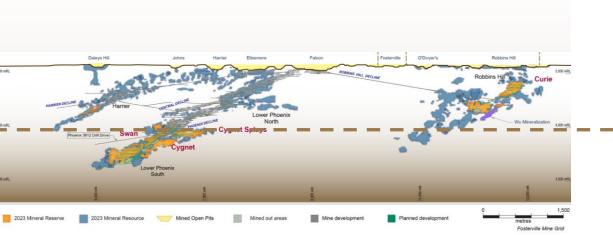


### Depth: Victorian Epizonal Systems Continue to at least 2 km

# Fosterville







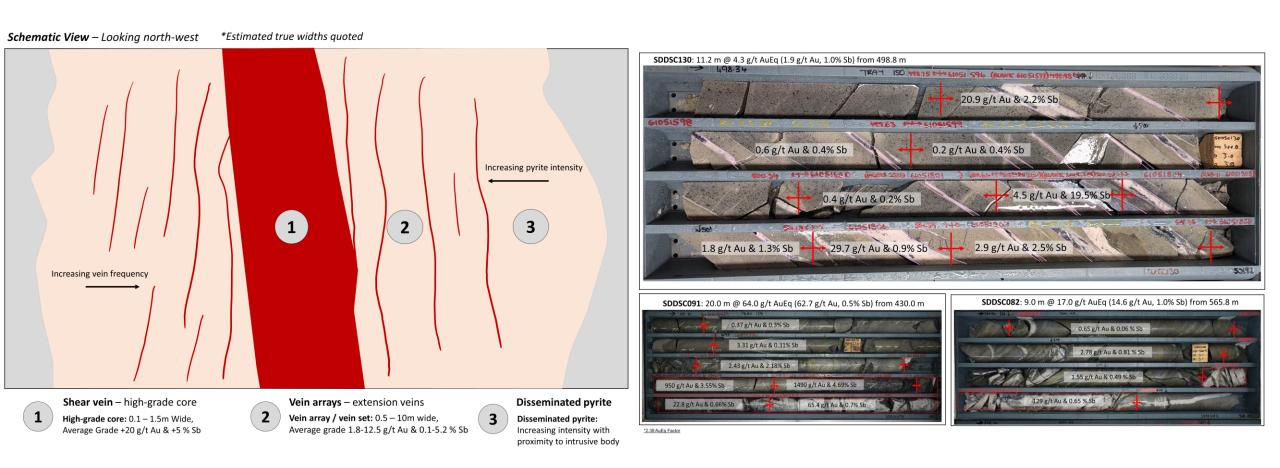
Source: https://s21.q4cdn.com/374334112/files/doc\_downloads/GeologyMaps/2024/Item-37-Fosterville-Composite-Longitudinal-Section.png





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### 70 Vein Sets: Geological Likeness Informs Continuity





### **Gold Coefficient of Variation**

Understanding grade continuity and geostatistical domain confidence is crucial for high-grade gold deposits.

Low variability or a low coefficient of variation (CV, standard deviation over mean) in assay results **lowers geological risk and reduces the cost of capital** (less drilling/more confidence in model).

#### **Rising Sun:**

- 33 vein sets
- Average true thickness 2.8 m, median 2.4 m
- Average Post TC: 10.3 g/t gold (80 g/t Au TC Vein sets), 72.6 (@400 g/t Au TC HG Cores)
- Average CV Pre TC is 1.8, and 1.35 Post TC

#### Apollo:

- 30 vein sets
- Average true thickness 4.2 m, median 3.8 m
- Average Post TC: 4.9 g/t gold (80 g/t Au TC Vein sets), 21 g/t gold (300 g/t Au TC HG Cores)
- Average CV Pre TC is 1.36, and 1.0 Post TC

#### Golden Dyke:

- 8 vein sets \* No HG cores modelled yet
- Average true thickness 3.2 m, median 2.3 m
- Average 5.5 g/t gold (80 g/t Au TC Vein sets)
- Average CV is 1.0







# Does High-Grade Mean High Nugget? No!

- Victorian epizonal Au-Sb is high-grade and not nuggety = reconcilable, high-margin mines
- 2. Repeatable data in lab and in core (visible gold both sides of core)
  = confidence
- 3. Understanding and constraining geology leads to low CV (<2)
  - = predictability and continuity



SDDSC107 from 684.7 m within assayed interval 1.0 m @ 2319 g/t AuEq (2318.4 g/t Au, 0.3 % Sb)



## Metallurgy

Preliminary Metallurgical Test Work

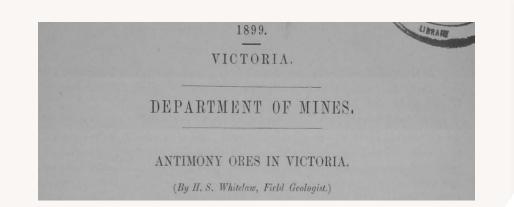
#### Non-refractory, simple gravity-flotation flow sheet

- Sighter Tests Utilized Costerfield flow sheet
- Mineralogical investigations demonstrated a high proportion of non-refractory native gold (82% 84%).
- Gravity (18-33%) with bulk flotation resulted in 93.3% 97.6% recovery of gold.
- Flotation alone resulted in 88.9% 95.0% recovery of gold in an antimony-gold concentrate:
  - Grading 32% 52% Sb (87.1% 93.8% recovery)
  - 81.4 g/t 313.6 g/t Au (40% of feed gold) with low to moderate arsenic contents (0.4% and 2.6%)
  - Opportunities to blend or float sulphide concentrate
  - 96% 98% of the contained gold was native gold
- Next Steps Due Q1 2025:
  - Optimize for gold into gravity and minimizing As into Sb-Au con (blending, sequential flotation)





## Antimony – Yesterday's and Today's Critical Metal





Historically and economically, antimony is the second most important metallic commodity in Victoria after gold.



The Victoria gold mining industry practically closed at the onset of WW1. Except antimony, mandated by the Imperial Government under the Munitions Act, 1915 to ship concentrates to the St. Helens Smelting and Refining Company in the UK

#### The Critical Minerals Institute Identifies the 14 Most Elusive Critical Minerals in the World and Launches New Website

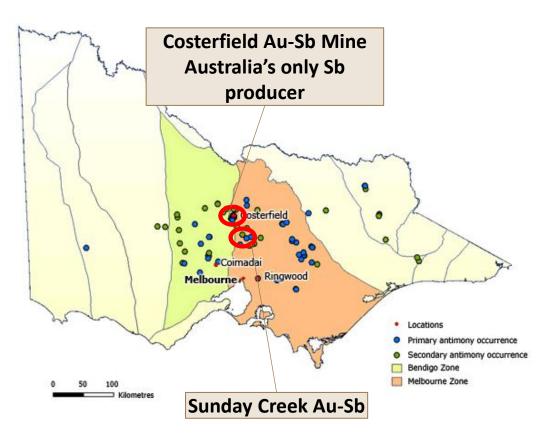
January 18, 2023(https://criticalmineralsinstitute.com/2023/01/18/)
 News Releases (https://criticalmineralsinstitute.com/category/news-releases/)



| 1. Antimony (sb) | 6. Indium (In)              | 11. Rare Earth Elements – of 17                    |  |  |
|------------------|-----------------------------|--|--|--|
| 2. Bismuth (Bi)  | 7. Lithium (Li)             | REEs: neodymium, praseodymium, dysprosium, Terbium |  |  |
| 3. Cobalt (Co)   | 8. Magnesium (Mg)           | 12. Tantalum (Ta)                                  |  |  |
| 4. Gallium (Ga)  | 9. Niobium (Nb)             | 13. Tungsten (W)                                   |  |  |
| 5. Graphite (C)  | 10. Platinum group of metal | 14. Vanadium (V)                                   |  |  |



### Antimony from Greek "anti" (not) and "monos" (alone)



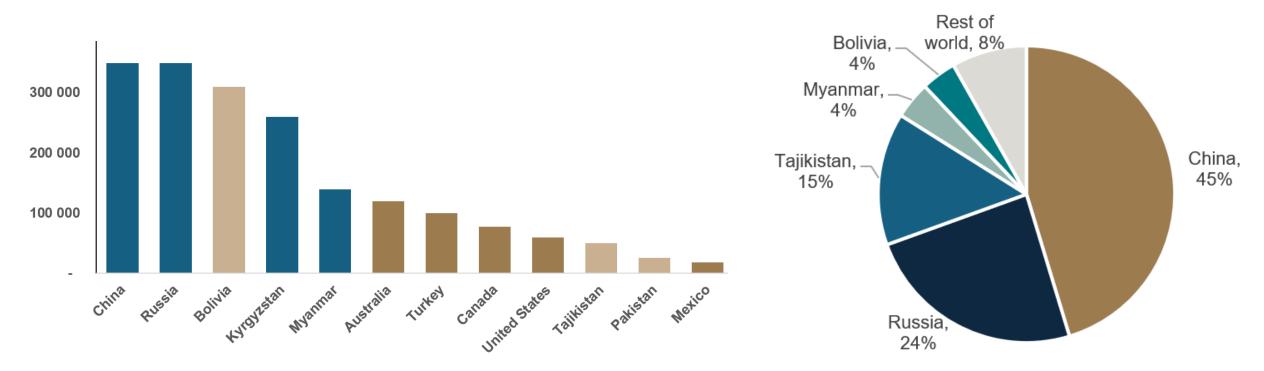
- Second most important metal in Victoria
  - 1870s: European wars
  - WW1: Imperial Munitions Act to ship concentrates to the UK



Antimony – Defence Strategic

### Reserves (70% Unfriendly)







# **AUKUS and China Export Restrictions**



Defence Ministers

Current Ministers Media releases Speeches Statements Transcripts Previous Ministers

🗧 Home / Media releases / Passage of priority AUKUS submarine and export control exemption legislation by the United States Congre

Passage of priority AUKUS submarine and export control exemption legislation by the United States Congress

15 DECEMBER 2023

 Adds Australia and the United Kingdom to Title III of the US Defense Production Act. This Act allows the US Government to incentivise its industrial base to expand the production and supply of critical materials and goods. Australia's addition will open new opportunities for Australian based industry to directly compete for business with the US Government. Programs 🗸 Experts

CSIS CENTER FOR STRATEGIC #

Regions 🗸 Topics 🗸

China's Antimony Export Restrictions: The Impact on U.S. National Security



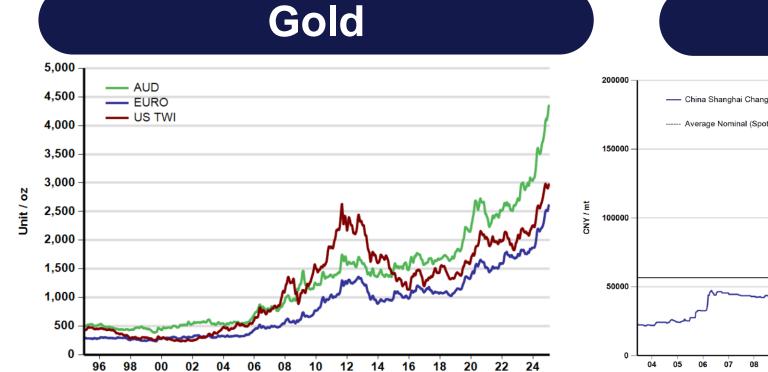
Photo: Milan via Adobe Stock

#### SXGC are members of Defense Industrial Base Consortium (DIBC) https://www.dibconsortium.org/





### Not only strategic, also valuable



# Antimony





### Location, Location: Positioning for Development

The company is actively de-risking the project through pre-development activities to be in an optimal position for design, feasibility studies and permitting





# \*\*\*\*

## Victoria is Open for Business

#### Two major Victorian mines permitted in Dec 2024



#### CRITICAL METALS

#### Victoria Improves Permitting to Back Critical Minerals Sector

Gabrielle De La Cruz | Dec. 16, 2024 09:20AM PST

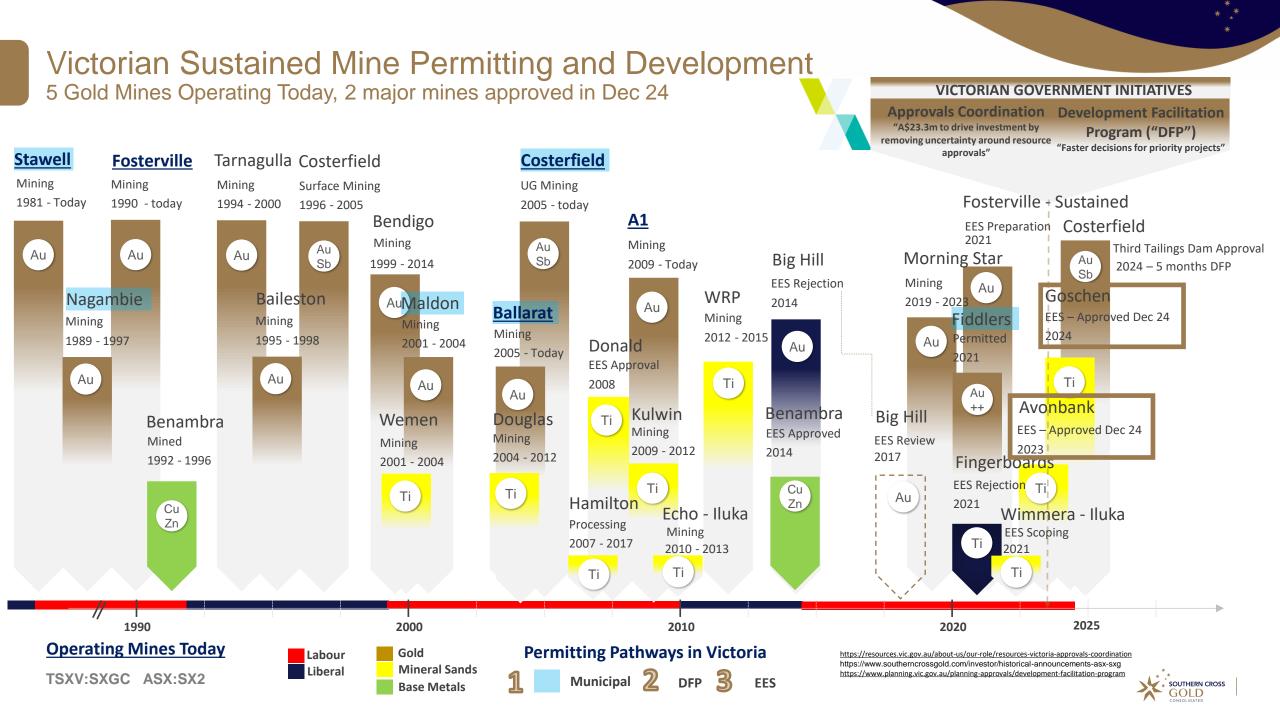
A Share

The Victorian government is supporting the state's growing critical minerals sector by addressing permitting delays in the mining industry.



- Critical Minerals Priority Development Zones
- "Victoria is open for business that's why we're unlocking industrial land, streamlining investment pathways, slashing red tape and backing new and existing industries," concluded Premier Jacinta Allan.
- Environmental effects statement (EES) cut assessment review to a **maximum of 18 months**.





### **Our People**





**Locally based staff –** living in the communities in which we work



Australian based board – focused on creating an ethical, shared value company with strong ESG credentials that employees and investors can be proud of



#### Strong relationships:

Community Reference Group, Shire, Taungurung Lands and Waters Council, State and Federal Government





#### Directors

TSXV:SXGC ASX:SX2



#### **Tom Eadie Non-Executive** Chairman

Explorer, mining executive and company director with many significant mineral discoveries and several successful companies to his name (Pasminco, Syrah, Copper Strike) Geologist with over 40 years' experience in the resources industry



#### **Michael Hudson** President & CEO, Director

Explorationist, entrepreneur, company director and manager, developed and financed mineral exploration properties globally over 30 years. Key member behind multiple discoveries. Cofounder and director of Hannan Metals Ltd (TSXV:HAN)



Experienced executive within Australian government and global corporate sectors Advisory roles in public and private mining and insurance sectors, OECD, Asian business councils and Australian university sector



#### **David Henstridge Non-Executive Director**

Geologist with over 50 years' experience in the mining industry including 20 years in managing publiclisted companies Associated with many mineral discoveries worldwide including in Australia, Peru & Finland



### Senior Management



Lisa Gibbons General Manager

30+ years' experience as a geologist in exploration & resource development Won the MCA Victoria 2022 Exceptional Woman in Victorian Resources Award for her career achievements, advocacy of women and contribution to social licence and the community



Nicholas Mead Corporate Development Manager Over 25 years experience in business development and investor relations primarily in the global mining investment sector. He has focussed on capital raising in both private equity and public markets and developing and maintaining relations with investors, consultants and stakeholders.



Kenny Bush **Exploration Manager** Experienced exploration and mine geologist specialising in 3D geological and structural modelling. He has worked extensively in Victoria on some of the highest-grade gold mines in the world including Costerfield and Fosterville and has provided detailed exploration and geological models for many Victorian exploration and mining companies.



**Nick Demare Chief Financial Officer Chartered Professional** Accountant providing accounting, management, securities regulatory compliance and corporate secretarial services to private and public-listed companies since 1991. He holds a Bachelor of Commerce degree from the University of British Columbia and is a member in good standing of the Institute of Chartered Accountants of British Columbia.



Mariana Bermudez Corporate Secretary, Canada

Over 20 years as a corporate secretary, primarily in junior mining companies. She has extensive experience in providing corporate secretarial, governance, compliance, and disclosure consulting services to various Canadian public-listed issuers on Toronto Stock Exchange, TSX Venture Exchange, OTC Markets, NYSE-MKT and Nasdag First North.



Justin Mouchacca Company Secretary, Australia

15 years' experience in public company responsibilities including statutory, corporate governance and financial reporting requirements. He is a Chartered Accountant and has been appointed Company Secretary and Financial Officer for a number of entities listed on the ASX and unlisted public companies.



#### Key Catalysts Next Quarter

Drill expansion of the main area while conducting monthly internal modelling updates with SRK Consulting to maintain a detailed understanding of the evolving system

Testing regional targets along the 12 km strike length through mapping, geophysics, soil sampling, and one drill rig dedicated to testing these targets.

Stage 2 metallurgical studies are underway and will be reported over the coming quarter.



Six rigs at site with one rig focussed on regional targets. Two further rigs are being sourced to focus on resource drill out.

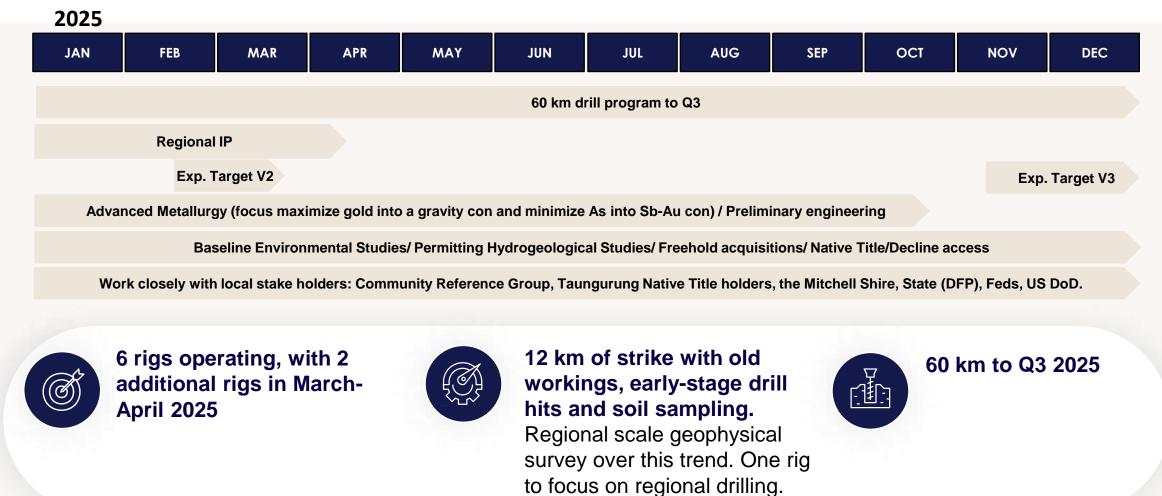


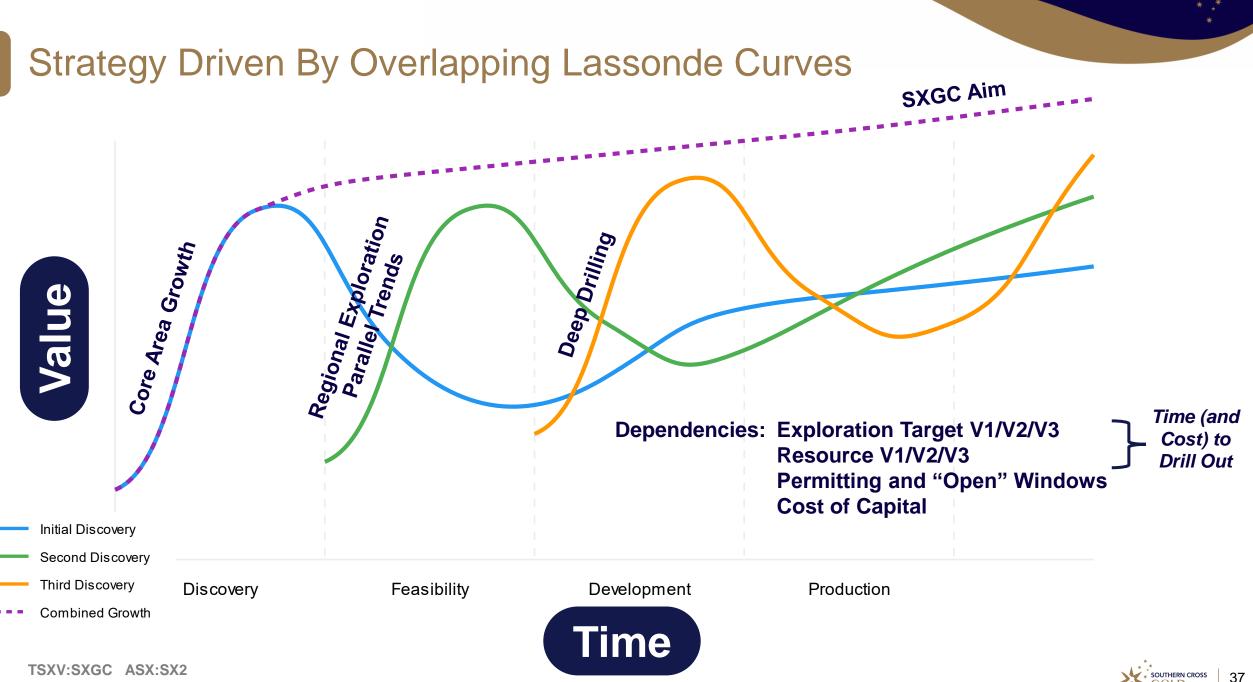
Permitting permissions and studies: working closely with the State of Victoria undertaking engineering and environmental studies, including the recent completion of seven water monitoring bores, taking the total to nine on the project, critical for hydrogeological studies.





### **Timetable Next Steps**





GOLD

#### Progress

Highest hit rate globally, grade increasing at depth:

- 60 intersections > 100 AuEq g/t x m from 73.3 km drilling
- 455.3 m @ 7.2 g/t Au including 1.0 m @ 2,318 g/t Au
- 331.5 m @ 6.8 g/t Au including 13.1 m @ 91.7 g/t Au

Free milling gold, 21-24% antimony by-product (defence critical)



Large exploration upside, only 3% of trend tested



162 drill holes for 73.3 km reported to date, 60 km drill program to Q3 2025



Seasoned discovery team focussed on value creation per share



Supportive shareholders to underpin value creation lifecycle Cash A\$18m, 1,055 ha freehold





#### **Contact Us**



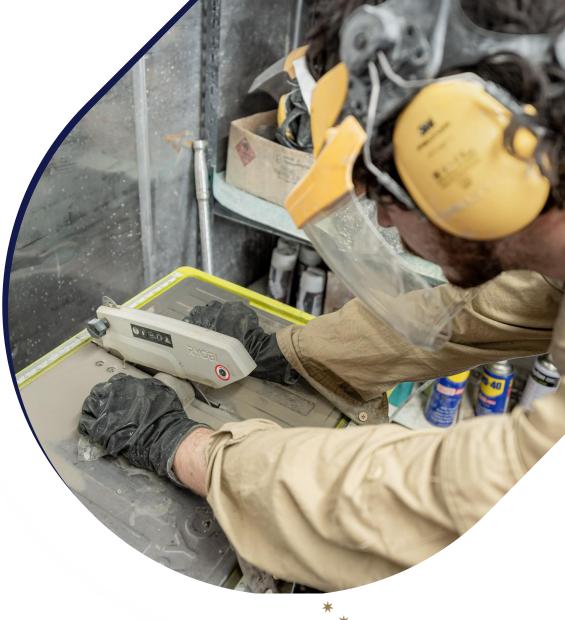
#### info@southerncrossgold.com

www.southerncrossgold.com

Corporate Secretary Mariana Bermudez <u>mbermudez@chasemgt.com</u> +1 604 685 9316

Corporate Development Nicholas Mead <u>nm@southerncrossgold.com</u> +61 415 153 122 Registered Office 1305 1090 West Georgia St Vancouver V6E3V7 BC Canada

Subsidiary Office Level 21 459 Collins St Melbourne 3000 Victoria Australia





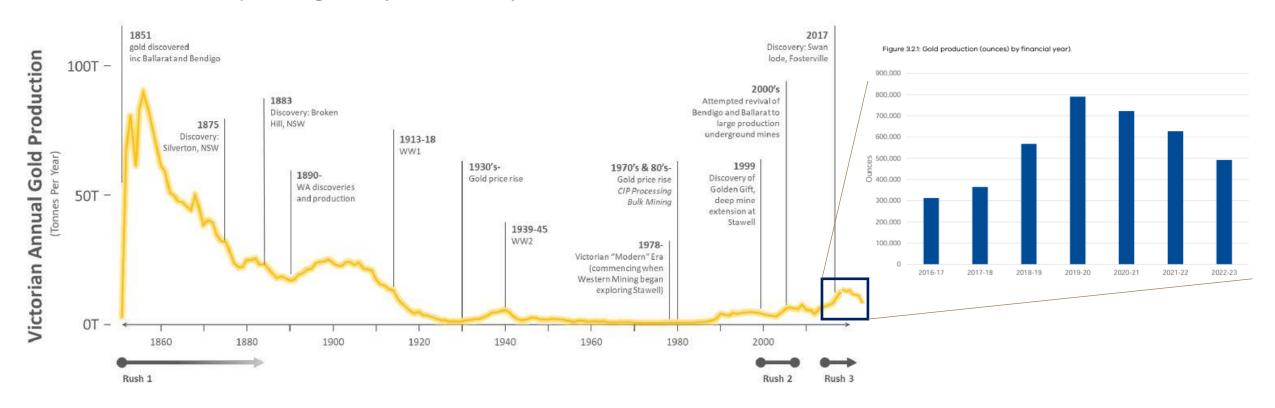
# Appendices





#### Victorian Gold Production – Rocking Because of a Change in Geology

✓ Today, Victoria is producing more gold than it has for 100 years
 ✓ 5 Gold Mines Operating Today – 500Koz/yr



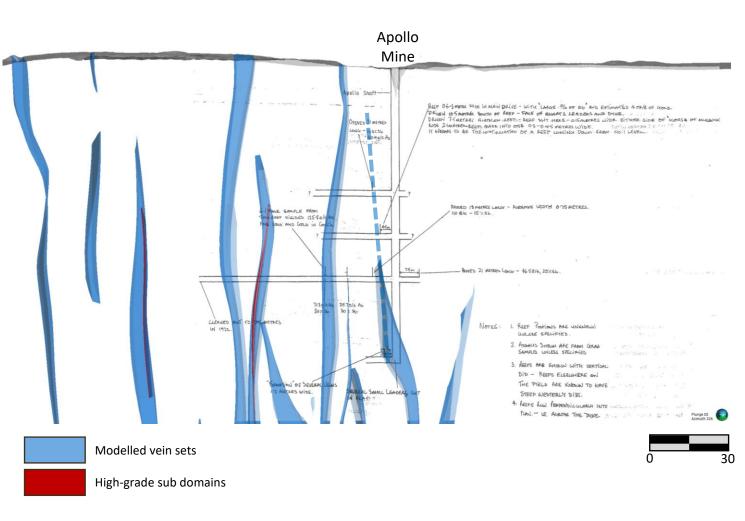






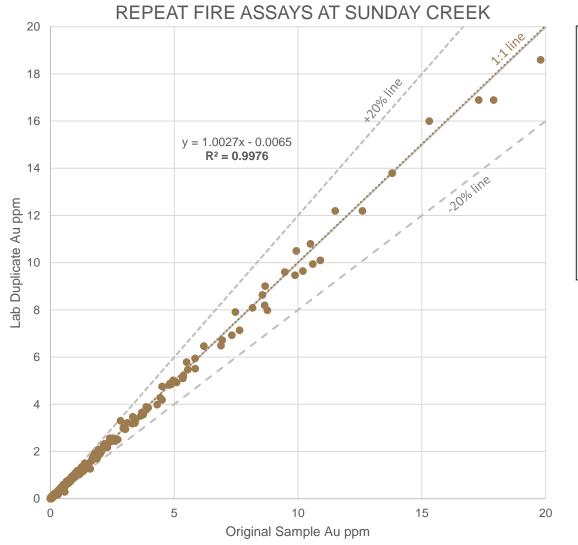
# How to model and predict this style?

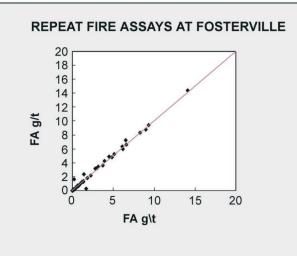
- Continuity of vein sets and grades are described in three dimensions across multiple datasets including:
  - Fifty years of historic mining records and drilled continuity below mined areas
  - ✓ Geological likeness
  - Structural oriented drill core data, quality control data and structural controls on mineralization trends
  - Geostatistics that demonstrate a low coefficient of variation

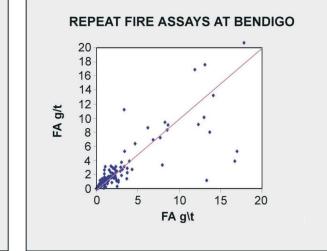




# Lab Duplicates Demonstrate Homogeneity of Samples







Fosterville – Kirkland Lake Gold December 2016 Technical report

Bendigo – GBM gold

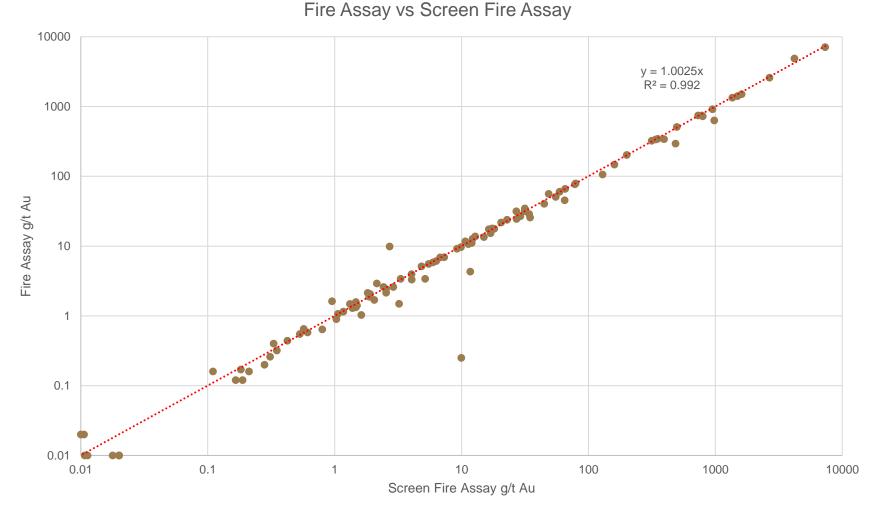
 Comparison of repeat fire assay data at Sunday Creek, Bendigo and Fosterville. All samples prepared in an LM5 pulverizer to nominal -75 micron with two samples taken from each pulp



# High Grade is Not Always Nuggetty: SFA and FA Duplicates



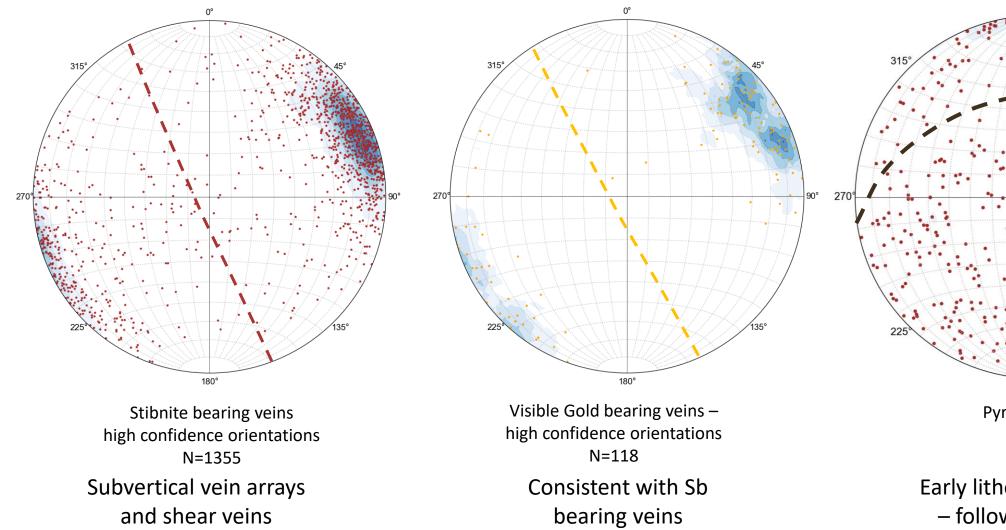
SDDSC117: 0.5 m @ 473.1 g/t AuEq (473.0 g/t Au, 0.0% Sb) from 913.6 m TSXV:SXGC ASX:SX2



Highly repeatable results between Fire Assay (25g charge) and Screen Fire Assay (entire sample to extinction)



# Structural Geology: Stereonets Inform Continuity



180 **Pyrite veinlets** N = 609

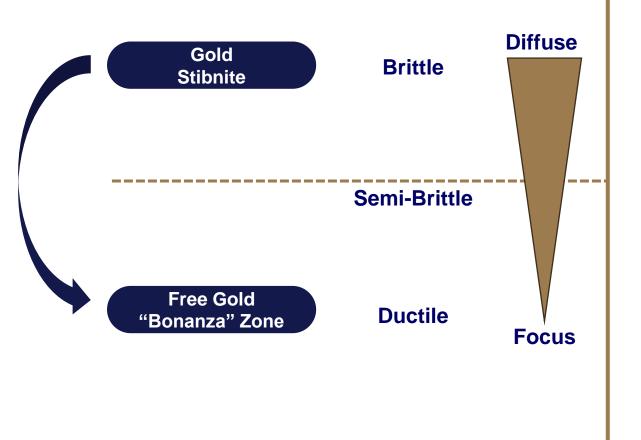
> Early lithological control – follows dyke trend

TSXV:SXGC ASX:SX2

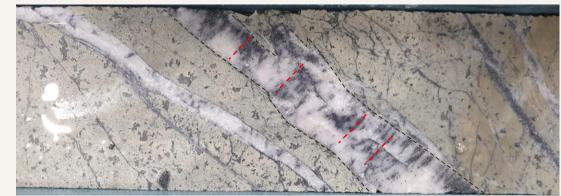


# Brittle to Ductile Transition

**Our Focus** 



#### **Brittle Features**

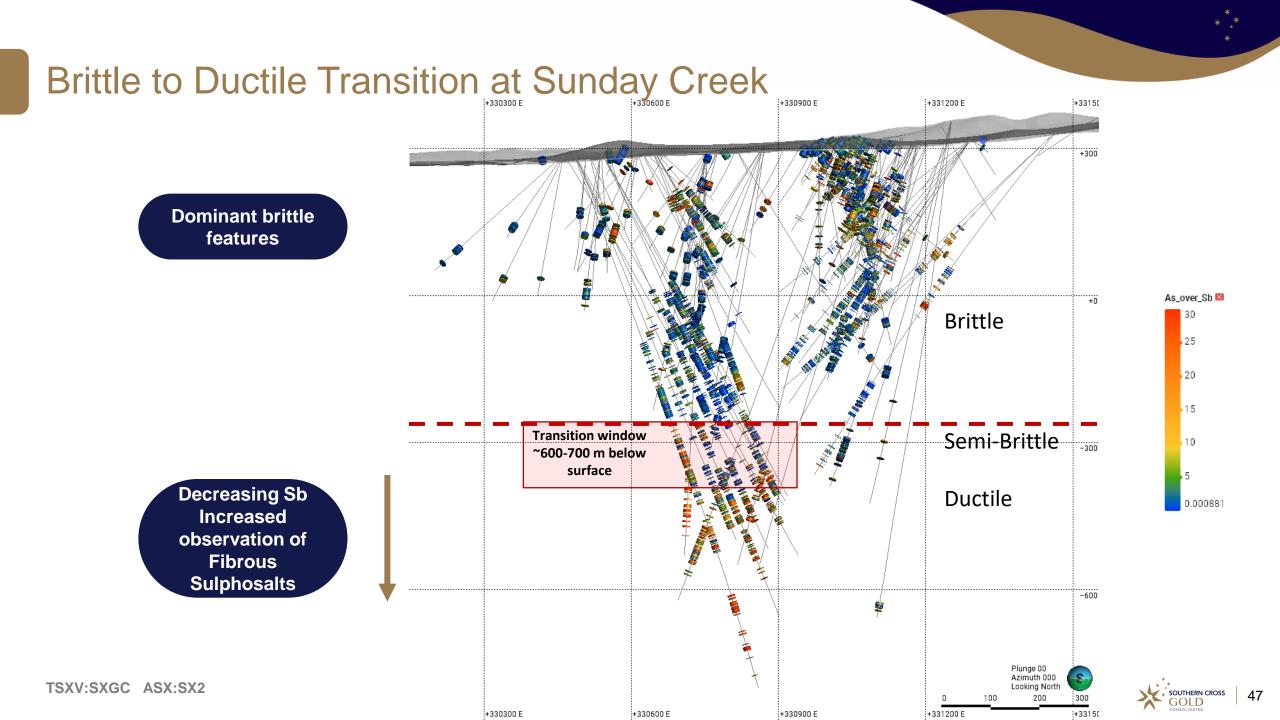


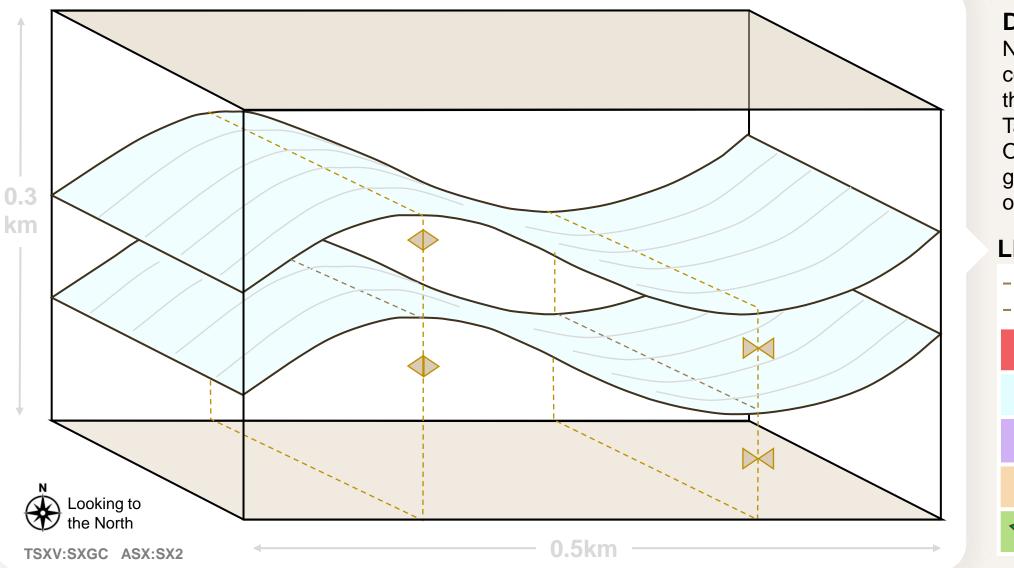
Quartz-carbonate-stibnite extension veins in altered dyke

#### **Ductile Features**







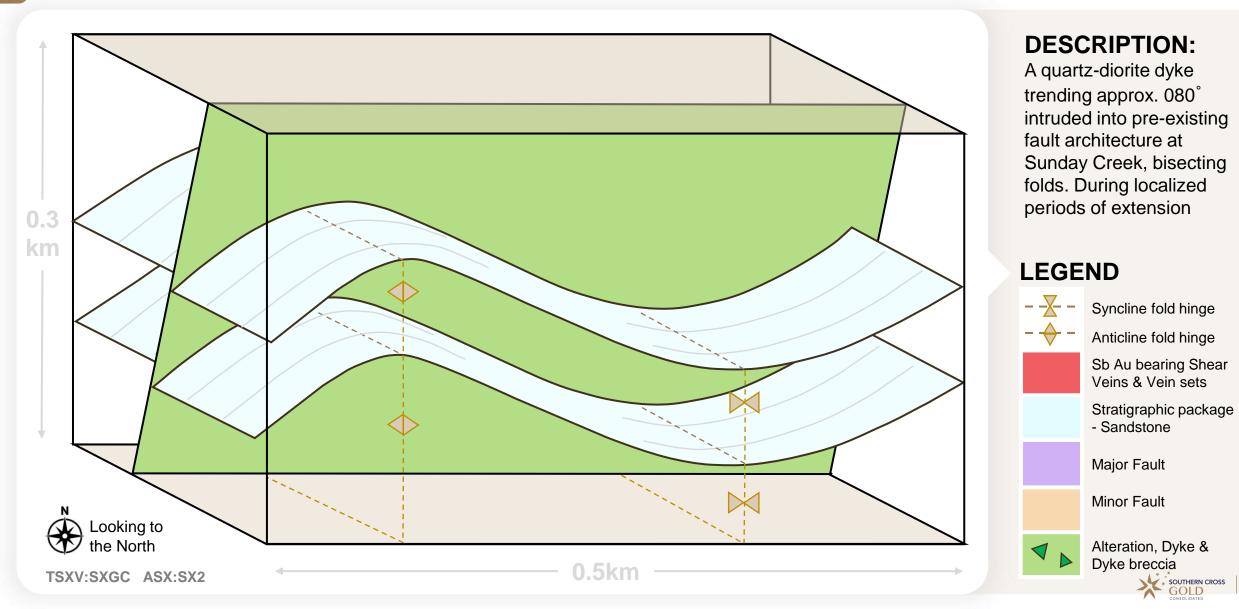


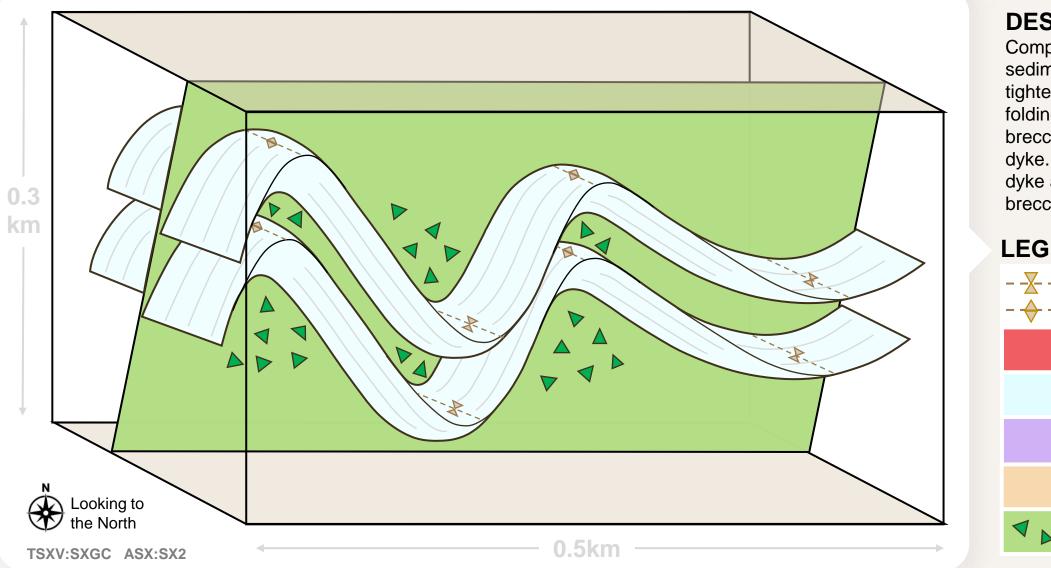
#### **DESCRIPTION:**

Northeast/southwest compression during the Middle Devonian Tabberabberan Orogeny creates gentle to open folding of sediments

#### LEGEND







#### **DESCRIPTION:**

Compression of dyke and sediments causes tightening and parasitic folding of sediments and brecciation of preexisting dyke. Novel addition of dyke and fluids to brecciated areas.

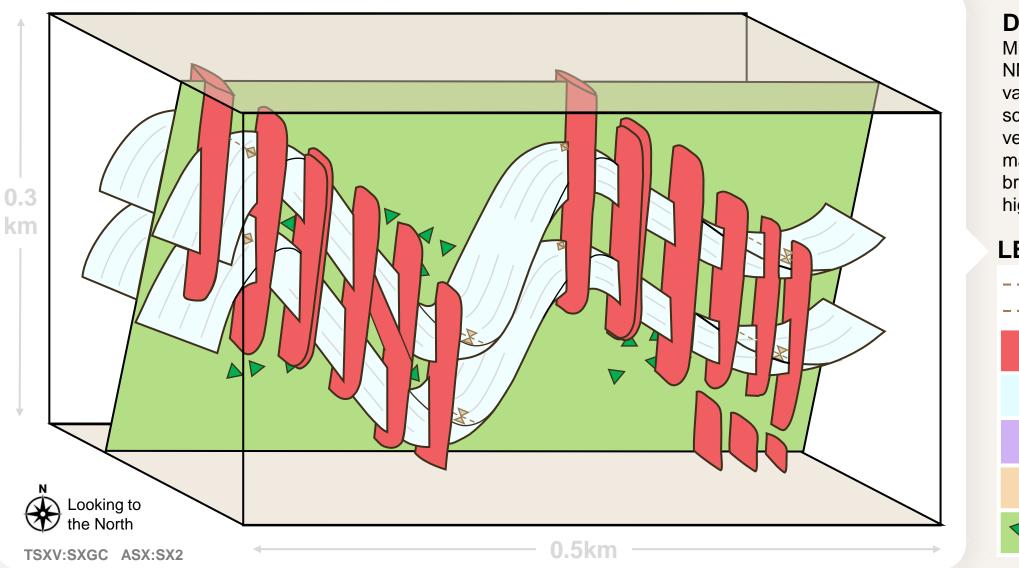




Major Fault

Minor Fault

Dyke breccia

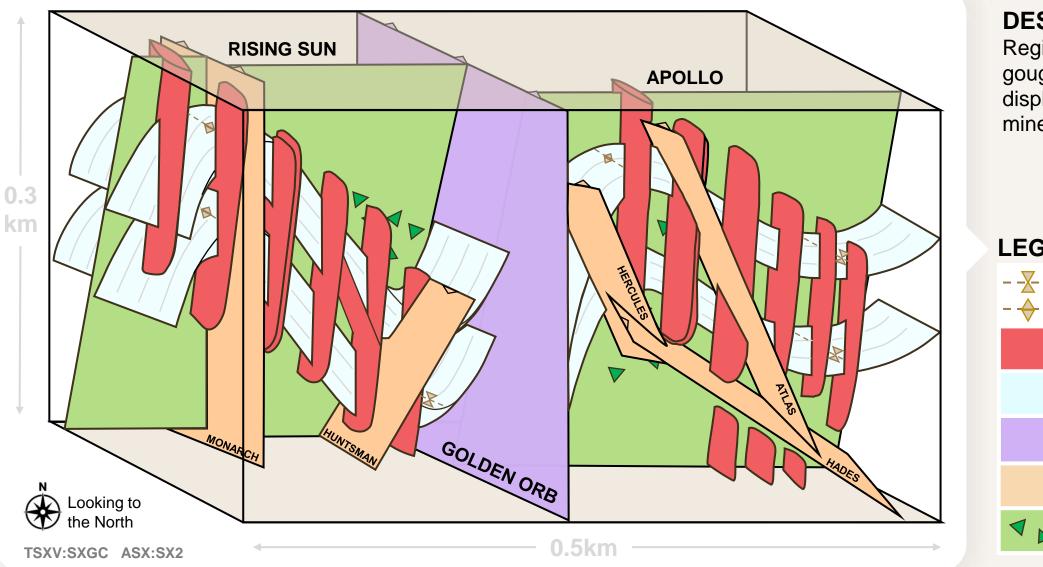


#### **DESCRIPTION:**

Mineralization forms within NNW striking vein sets, varying from centimeter scale crack-seal veins, to veins with sheared margins, to messy, veinbreccias often carrying higher grades.

#### LEGEND





#### **DESCRIPTION:**

Regional series of late gouge faults that displace the dyke and mineralization.





Alteration, Dyke & Dyke breccia

\* SOUTHERN CROSS