

## SXG INTERSECTS 1.2 m @ 121.8 g/t GOLD IN DEEPEST HOLE

### VISIBLE GOLD INCREASING WITH DEPTH

16 MAY 2023

Melbourne, Australia — Southern Cross Gold Ltd (“SXG” or the “Company”) (ASX: SXG) announces results from drillhole SDDSC064 (1.2 m @ 121.8 g/t Au from 889.6 m) from the **deepest mineralisation** (830 m vertically below surface) and **one of the two highest grade intersections** to date, and a **115 m down-dip extension** from SDDSC061 (12.0 m @ 7.4 g/t AuEq incl 0.3 m @ 249.5 g/t AuEq) at the 100%-owned Sunday Creek Project in Victoria (Figure 1). Of major importance is the increasing abundance of visible gold at depth at Sunday Creek (Photos 1-4), as is typical for epizonal deposits.

### DRILLHOLE HIGHLIGHTS

- **SDDSC064** (Figs 3-6) drilled the **deepest mineralisation** (830 m vertically below surface) and **one of the two highest grade intersections** on the Sunday Creek project with increasing abundance of visible gold (Photos 1-4). Highlights from five separate mineralised veins include:
  - 0.4 m @ 48.5 g/t AuEq (44.6 g/t Au, 2.5 %Sb) from 715.8 m
  - 0.3 m @ 16.3 g/t AuEq (15.6 g/t Au, 0.4 %Sb) from 725.8 m
  - 0.9 m @ 5.6 g/t AuEq (5.2 g/t Au, 0.2 %Sb) from 882.7 m
  - **1.2 m @ 121.8 g/t AuEq (121.8 g/t Au, 0.1 %Sb) from 889.6 m including:**
    - 0.5 m @ 158.5 g/t Au and 0.4 m @ 177.5 g/t Au**
  - 0.6 m @ 12.6 g/t AuEq (8.6 g/t Au, 2.5 %Sb) from 907.3 m
- As well as being the deepest mineralisation on project, SDDSC064 extended mineralisation significantly, being a **115 m down-dip extension** from SDDSC061 (12.0 m @ 7.4 g/t AuEq incl 0.3 m @ 249.5 g/t AuEq).
- Of major importance is the abundance of visible gold becoming increasingly significant at depth.

**Southern Cross Gold’s Managing Director, Michael Hudson, states, “SDDSC064 intersected five high-grade veins with visible gold (Photos 1 – 4) including 1.2 m @ 121.8 g/t gold. This is the deepest mineralisation and one of the two highest grade results drilled to date at Sunday Creek. The scale of the mineralised system continues to grow and deliver significant results at a globally leading hit-rate.**

*At Sunday Creek, and as is typical for epizonal deposits (for example Fosterville and Costerfield, Reefton (NZ)), visible gold becomes increasingly significant at depth. The hole importantly extended mineralisation to depth, being a 115 m down-dip extension from SDDSC061 (12.0 m @ 7.4 g/t AuEq incl 0.3 m @ 249.5 g/t AuEq). It demonstrated increased frequency of high-grade mineralised vein sets. Further, it has defined continuity and increased strike length (up to 60 m) of individual veins and defined a broad mineralised halo intersecting 212.8 m @ 1.0 g/t gold around high-grade mineralisation.*

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 Issued Capital: 183.8M fully paid shares

*With four rigs working the main drill area at Sunday Creek and up to 7.5 km along strike, and with sixteen holes being geologically processed and analysed, news flow from Southern Cross Gold will be continuous. You can expect our technical team to continue to take logical progressions as we continue to define scale and demonstrate continuity of mineralised zones.”*

This data, along with an interview on these results with Managing Director Michael Hudson, including a 3D presentation, can be viewed at [www.southerncrossgold.com.au](http://www.southerncrossgold.com.au).

### Drill Hole Discussion

SDDSC064 (collar azimuth 239.6 degrees), drilled in the Rising Sun area of Sunday Creek, was designed to extend mineralisation to depth as a scissor hole (drilled in an opposite direction) to SDDSC050 (collar azimuth 077 degrees) (305.8 m @ 2.4 g/t AuEq). It achieved this and delivered new and exciting data on multiple levels:

1. **Discovered the deepest mineralisation on project** (830 m vertically below surface), with SDDSC064 the first hole to exceed 1 km in length on the project, terminating at 1,013.5 m.
2. **One of the two highest grade intersections on project** (after SDDSC046 @ 2.1 m @ 121.6 g/t AuEq).
3. **Defined significant extensions to known mineralisation:**
  - a. At its lower levels SDDSC064 (1.2 m @ 121.8 g/t AuEq) was a **115 m down dip extension** from SDDSC061 (12.0 m @ 7.4 g/t AuEq incl 0.3 m @ 249.5 g/t AuEq)
4. **Demonstrated the high frequency of mineralised veins:**
  - a. Five high-grade NW veins intersected over 100 m horizontal true thickness (within 192 m down hole width), implying a vein frequency each 20 m on average.
5. **Demonstrated continuity across multiple high-grade veins in a 430 m (down dip) x 180 m (wide) and 60 m (strike) area beneath drill hole SDDSC050:**
  - a. At its upper levels SDDSC064 (0.4 m @ 48.5 g/t AuEq from 715.8 m and 0.3 m @ 16.3 g/t AuEq from 725.8 m) showed the NW mineralised veins strike length **increases at depth** with the same vein drilled in SDDSC050 (9.0 m @ 7.3 g/t AuEq from 712.0 m including 1.5 m @ 41.5 g/t AuEq) located 60 m along strike to the northwest.
6. **Drilled a broad and extensive halo to high grade gold** with low antimony and higher arsenopyrite:
  - a. 212.8 m @ 1.0 g/t Au 0.04% Sb from 715.8 (no lower cut).

### Update on Current Drilling

Drilling with four rigs is in progress at Sunday Creek at the Rising Sun and Apollo prospects and also 7.5 km north-east at the Tonstal prospect. Sixteen new holes (SDDSC066 - 75 and SDDTS001-6) are currently being geologically processed and analysed, with three holes (SDDSC070, 73, 74, and SDDTS007) in drill progress (Figure 2). These holes will provide continuous news flow from the Sunday Creek project. SDDSC068 has been temporarily halted at 959.4 m below Apollo, awaiting an upgrade to a new drill feed rail to allow deeper drilling to continue.

### About Sunday Creek

The Sunday Creek epizonal-style gold project is located 60 km north of Melbourne within 19,365 hectares of granted exploration tenements. SXG is also the freehold landholder of 132.64 hectares that form the key portion in and around the drilled area at the Sunday Creek Project.

The hit rate at Sunday Creek compares favourably with leading global hit rates for this stage of the project's development. Cumulatively, 125 drill holes for 25,084 m have been completed at Sunday Creek. In total, 29 individual intersections exceed 50 AuEq g/t \* m ("AuEq g/t x width in m") and 14 individual intersections exceed 100 AuEq g/t \* m, with SDDSC064 another >100 AuEq g/t \* m hole on the project. Twenty-four (24)

>100 cumulative grade x metres ("AuEq g/t x m") holes have now been intersected on the project.

Sunday Creek has an 11 km mineralised trend that extends beyond the drill area and is defined by historic workings and soil sampling. This large footprint is being drill tested for the very first time to depth with the fourth drill rig at Tonal. Results are pending (Figure 6).

Geologically, the project is located within the Melbourne Structural Zone in the Lachlan Fold Belt. The regional host to the Sunday Creek mineralisation is an interbedded turbidite sequence of siltstones and minor sandstones metamorphosed to sub-greenschist facies and folded into a set of open NW trending folds.

### **Mineralisation, Scale and Comparison to Other Epizonal Deposits**

Mineralisation at Sunday Creek is structurally controlled, with increased mineralisation associated with brittle-ductile shear veins that show quartz-stibnite extension veining, stibnite-gold-matrix breccias and disseminated mineralisation in the form of arsenian pyrite, pyrite and arsenopyrite. The immediate host for mineralisation is a zone of intensely altered 'bleached' sericite-albitic siltstones, and sericite-carbonate-albite altered dyke rocks. A larger arsenic anomaly is associated with gold mineralisation, mostly represented by arsenian-pyrite but arsenopyrite-bearing zones predominate below 700 m vertical depth with a clear spatial relationship to high-grade gold. A sulphidic (pyritic) halo, predominately in bleached pyrite-sericitic veins rounds out the larger visible alteration footprint.

Mineralised vein sets are typically 20 to 40 m wide (cut off dependent), 20 to 60 m along strike with SDDSC064 showing the strike length increasing at depth, and 300 to 830 m down dip. As compared to other deposits, Sunday Creek benefits from the presence of multiple high-grade veins sets (up to 25 wider zones defined to date) within at least 50 m of each other across the project. Mineralised shoots at Sunday Creek can also be formed at the intersection of the sub-vertical to shallower dipping 330 degree (NW) striking mineralised veins sets and the east-west striking, steeply north dipping structure hosting dioritic dykes and related intrusive breccias.

At Sunday Creek, and as is typical for epizonal deposits (for example Fosterville and Costerfield, Reefton (NZ)), visible gold becomes increasingly significant at depth below approximately 800 m. This represents the different temperatures and changes in structural regimes of formation of epizonal Au-Sb and Au dominant mineralisation. Gold at Sunday Creek is hosted in quartz and carbonate vein sets, associated with stibnite bearing veins and breccias.

### **Further Information**

Further discussion and analysis of the Sunday Creek project is available through the interactive Vrify 3D animations, presentations and videos all available on the SXG website. These data, along with an interview on these results with Managing Director Michael Hudson, with a 3D Leapfrog presentation, can be viewed at [www.southerncrossgold.com.au](http://www.southerncrossgold.com.au)

Figures 1-6 show project location, plan, longitudinal and cross-sectional views of drill results reported here and Tables 1-3 provide collar and assay data. The true thickness of the mineralised intervals reported are interpreted to be approximately 60-70% of the sampled thickness. Lower grades were cut at 0.3 g/t Au lower cutoff over a maximum width of 3 m with higher grades cut at 5.0 g/t Au cutoff over a maximum of 1 m width, unless otherwise stated.

### **Gold Equivalent Calculation**

SXG 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. The Costerfield mine corridor, now owned by Mandalay Resources Ltd contains two million ounces of equivalent gold (Mandalay Q3 2021 Results), and in 2020 was the sixth highest-grade global underground mine and a top 5 global producer of antimony.

SXG considers that it is appropriate to adopt the same gold equivalent variables as Mandalay Resources Ltd in its Mandalay Technical Report, 2022 dated 25 March 2022. The gold equivalence formula used by Mandalay Resources was calculated using recoveries achieved at the Costerfield Property Brunswick Processing Plant during 2020, using a gold price of US\$1,700 per ounce, an antimony price of US\$8,500 per tonne and 2021 total year metal recoveries of 93% for gold and 95% for antimony, and is as follows:  $AuEq = Au (g/t) + 1.58 \times Sb (\%)$ .

Based on the latest Costerfield calculation and given the similar geological styles and historic toll treatment of Sunday Creek mineralisation at Costerfield, SXG considers that a  $AuEq = Au (g/t) + 1.58 \times Sb (\%)$  is appropriate to use for the initial exploration targeting of gold-antimony mineralisation at Sunday Creek.

- Ends -

This announcement has been approved for release by the Board of Southern Cross Gold Ltd.

### Competent Person Statement

Information in this announcement that relates to new exploration results contained in this report is based on information compiled by Mr Michael Hudson, a Fellow of the Australasian Institute of Mining and Metallurgy. He is MD for Southern Cross Gold Ltd. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity being undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Michael Hudson has consented to the inclusion in this report of the matters based on this information in the form and context in which it appears.

Certain information in this announcement that relates to prior exploration results is extracted from the Independent Geologist's Report dated 16 March 2022 which was issued with the consent of the Competent Person, Mr Terry C. Lees. The report is included the Company's prospectus dated 17 March 2022 which was released as an announcement to ASX on 12 May 2022 and is available at [www2.asx.com.au](http://www2.asx.com.au) under code "SXG". The Company confirms that it is not aware of any new information or data that materially affects the information related to exploration results included in the original market announcement. 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 original market announcement.

Previously reported drill results<sup>1</sup> can be accessed from the follows:

- [https://uploads-ssl.webflow.com/6164f987875e87a4dbb1404e/626f5bb404af2a844fec9702\\_Southern%20Cross%20Prospectus%20-%2017%20March%202022%20Final%20Version.pdf](https://uploads-ssl.webflow.com/6164f987875e87a4dbb1404e/626f5bb404af2a844fec9702_Southern%20Cross%20Prospectus%20-%2017%20March%202022%20Final%20Version.pdf)
- <https://www.southerncrossgold.com.au/investor/asx-announcements>

### About Southern Cross Gold Ltd



The Southern Cross Gold corporate branding embodies important characteristics of the Company. The blue lettering acknowledges the state colour of Victoria, and the gold recognises the Victorian goldfields. The Southern Cross is a constellation also represented on the Australian flag which provides a strong cultural significance to all Australians. The main 7-pointed star represents the unity of the six states and the territories of the Commonwealth of Australia and the

addition of a miner's pickaxe within the body of the star reflects the central place that mineral exploration has in Australia and, of course, to Southern Cross Gold.

**For further information, please contact:**

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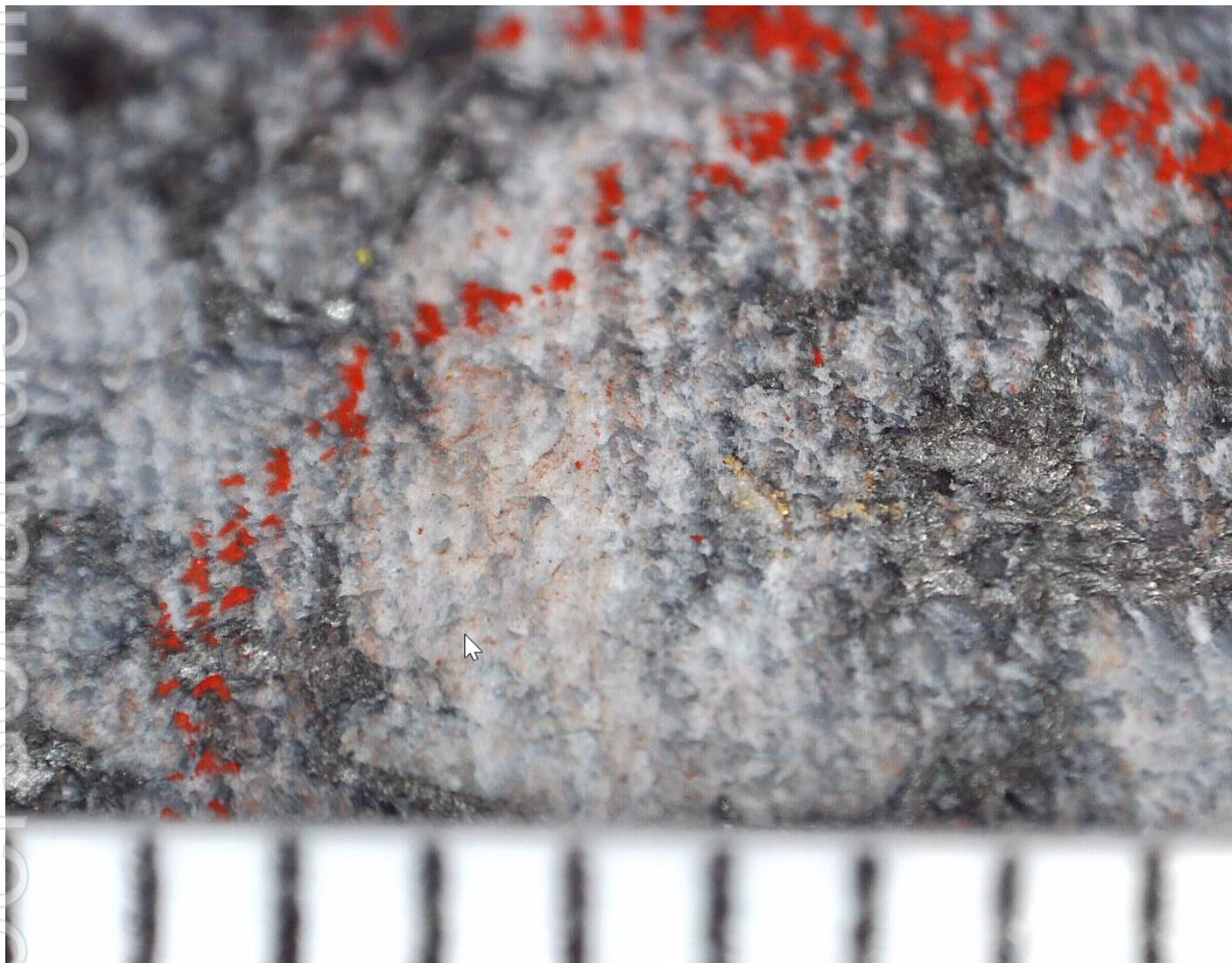


Photo 1: SDDSC064 716.0 m showing visible gold along stibnite and arsenopyrite veinlets within quartz carbonate vein. Ticks show mm scale.

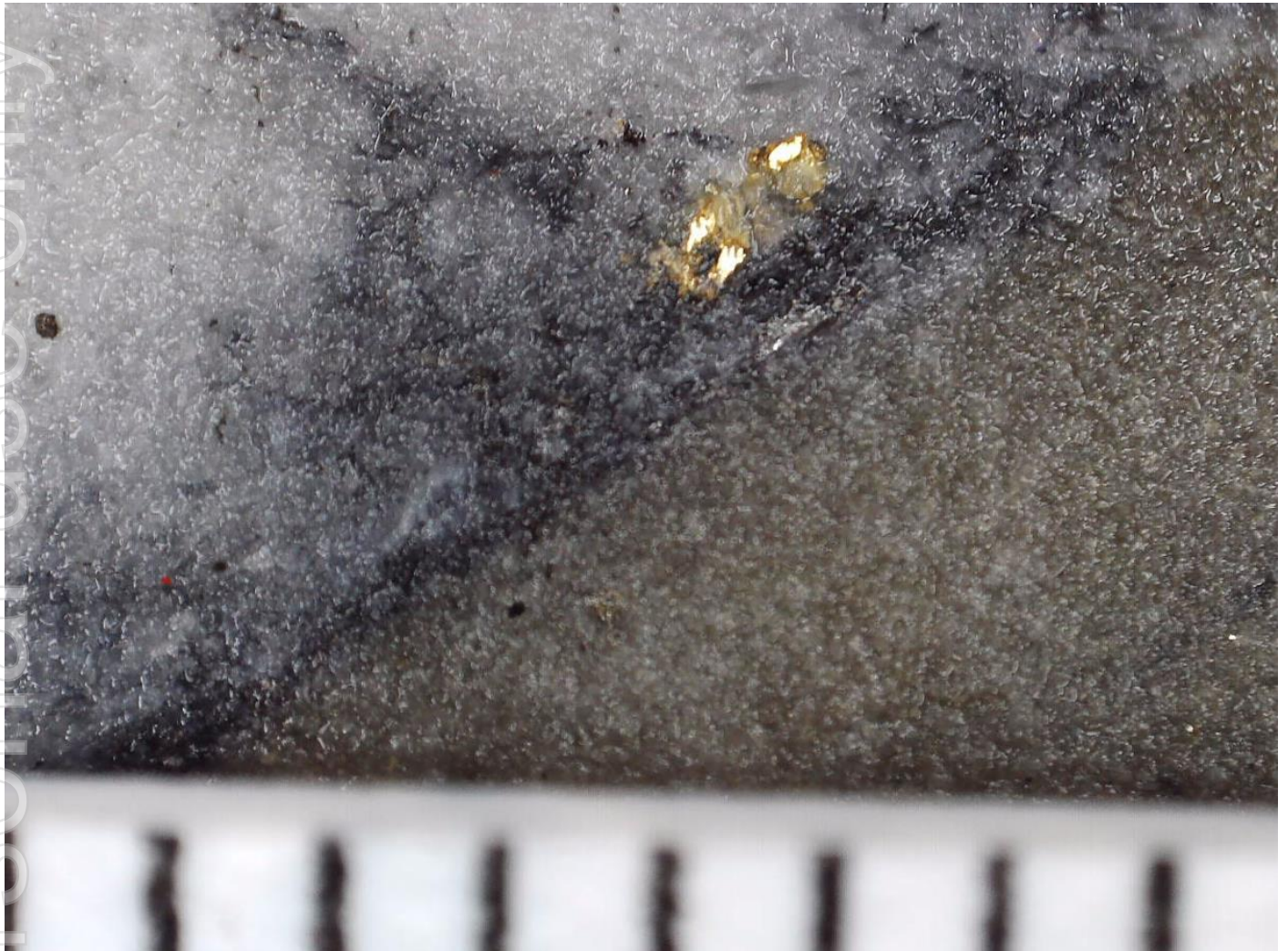


Photo 2: SDDSC064 725.8 m showing visible gold on the margin of a quartz carbonate vein with arsenopyrite. Ticks show mm scale.





Photo 3: SDDSC064 between 890.2-890.7 m showing visible gold within a quartz carbonate vein stockwork hosted by albitised and sericitized dioritic dyke. Minor fuchsite (lime green) alteration in dyke. Field of view 30mm.

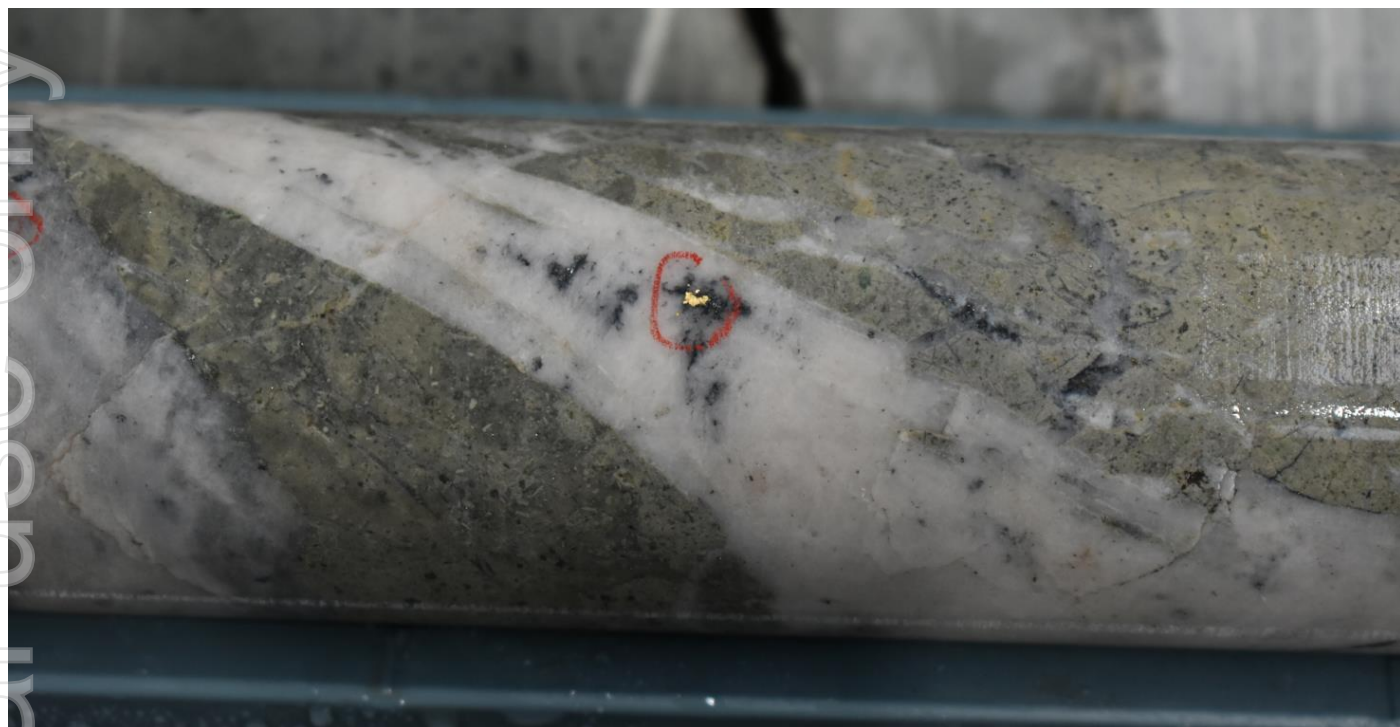


Photo 4: SDDSC064 between 890.2-890.7 m showing visible gold within a quartz carbonate vein hosted by albited and sericitised dioritic dyke. Drill core (NQ) is 47.6 mm wide.



Figure 1: Location of the Sunday Creek project, along with SXG's other Victoria projects.



- Epizonal Gold Deposits
- SXG Projects
- SXG Nagambie Right of First Refusal
- Agnico Eagle Mines ML (Fosterville)
- Mandalay Resources (Costerfield)

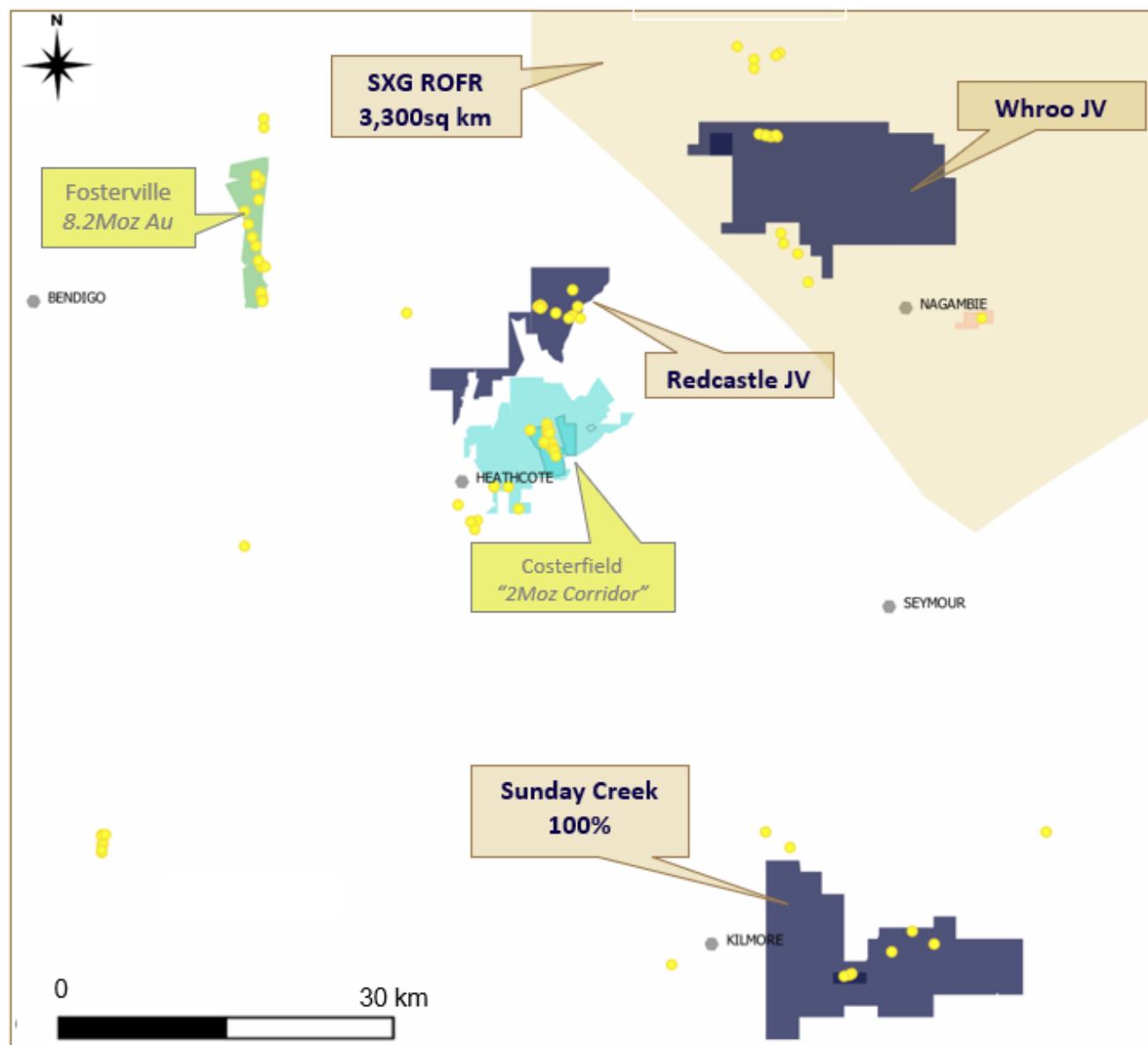


Figure 2: Sunday Creek plan view showing holes reported in this press release (grey boxes), selected prior reported drill holes<sup>1</sup> and pending holes (yellow collar and red trace).

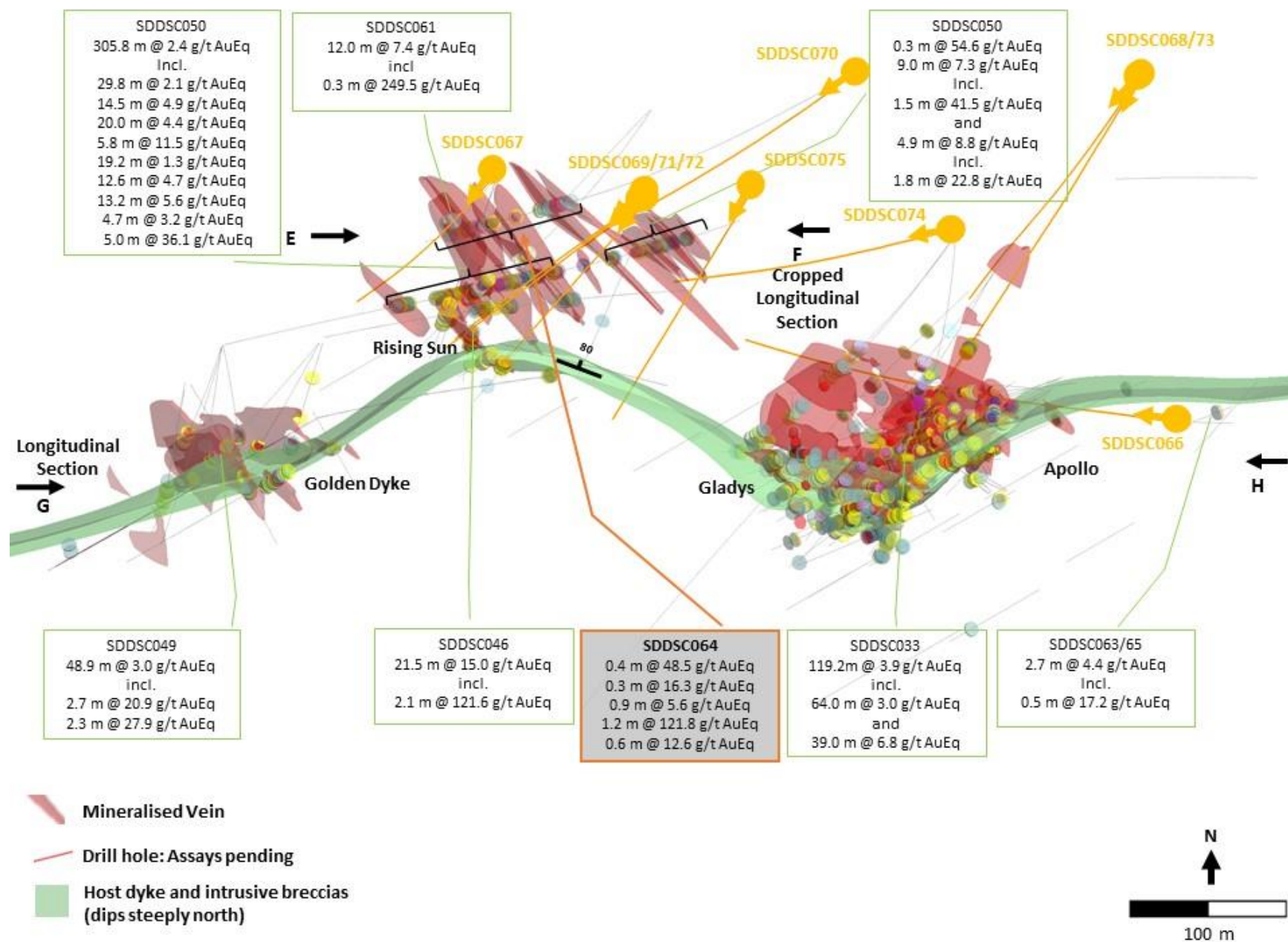


Figure 3: Sunday Creek cropped longitudinal section E-F (50 m influence) across the Rising Sun area looking towards the north showing dyke interpreted mineralised veins sets, SDDSC064 reported here and prior reported drill holes<sup>1</sup>.

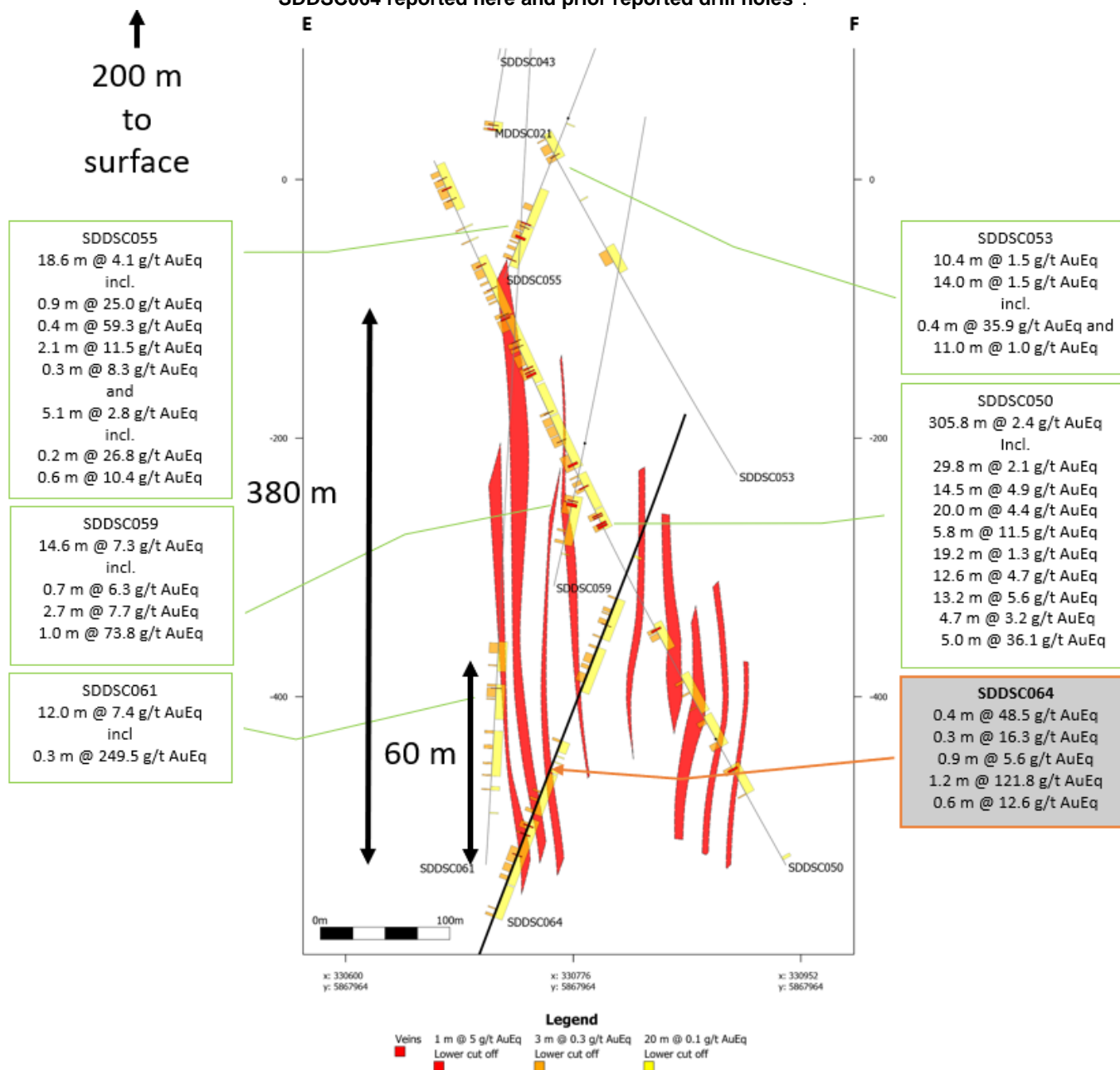




Figure 4: Sunday Creek level plan (100 m influence) at -330 m RL (650 m vertically below surface) at Rising Sun area showing dyke breccia host, sulphidic halo and interpreted mineralised veins sets. Note the relationship between SDDSC064, reported here and SDDSC050<sup>1</sup> showing 60 m strike extension to the NW mineralised veins (strike is longer at depth).

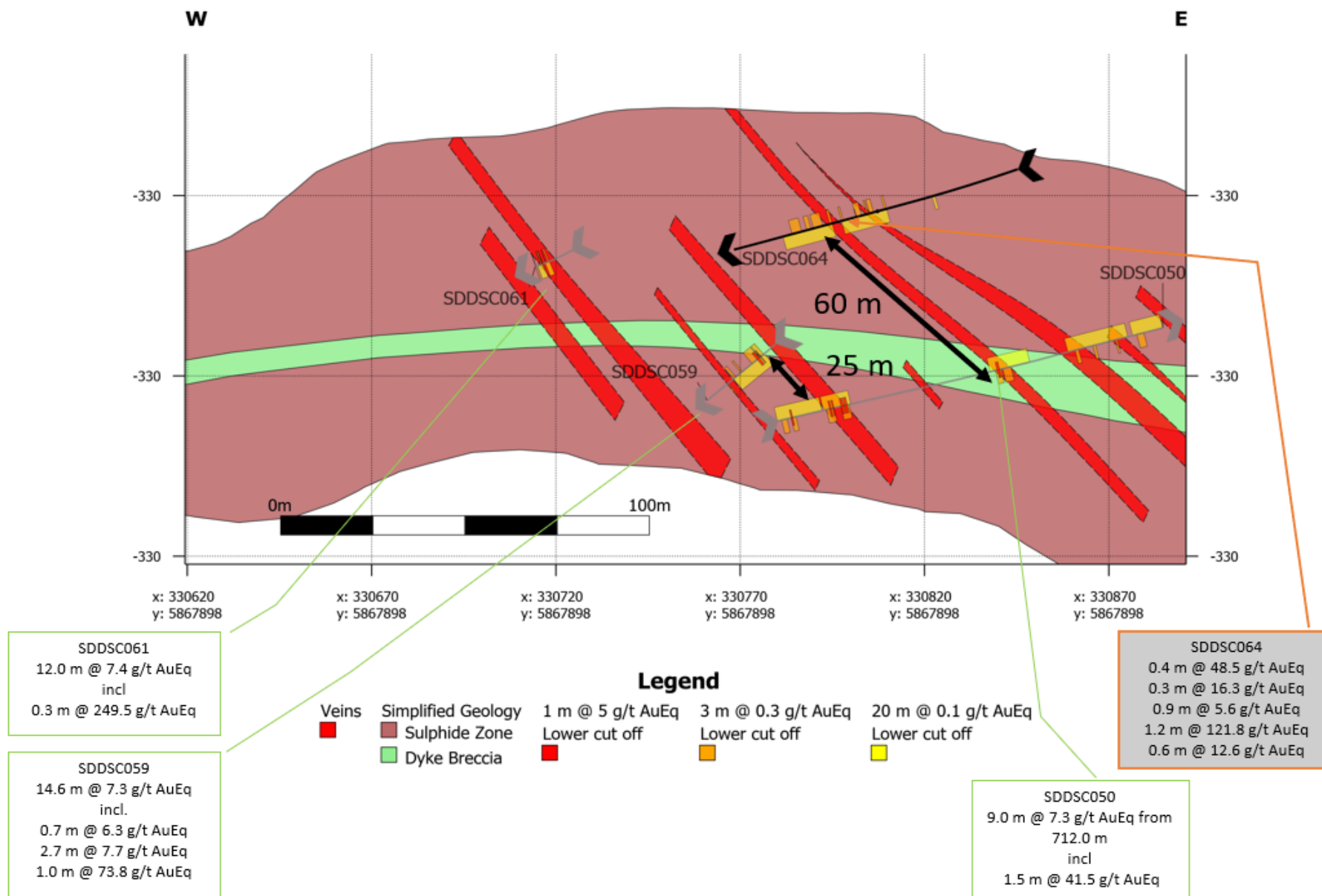


Figure 5: Sunday Creek east-west longitudinal section G-H along the trend of the dyke/structure, looking to 000 higher grade assays and selected mineralised veins sets. Also, prior reported drill holes shown<sup>1</sup>.

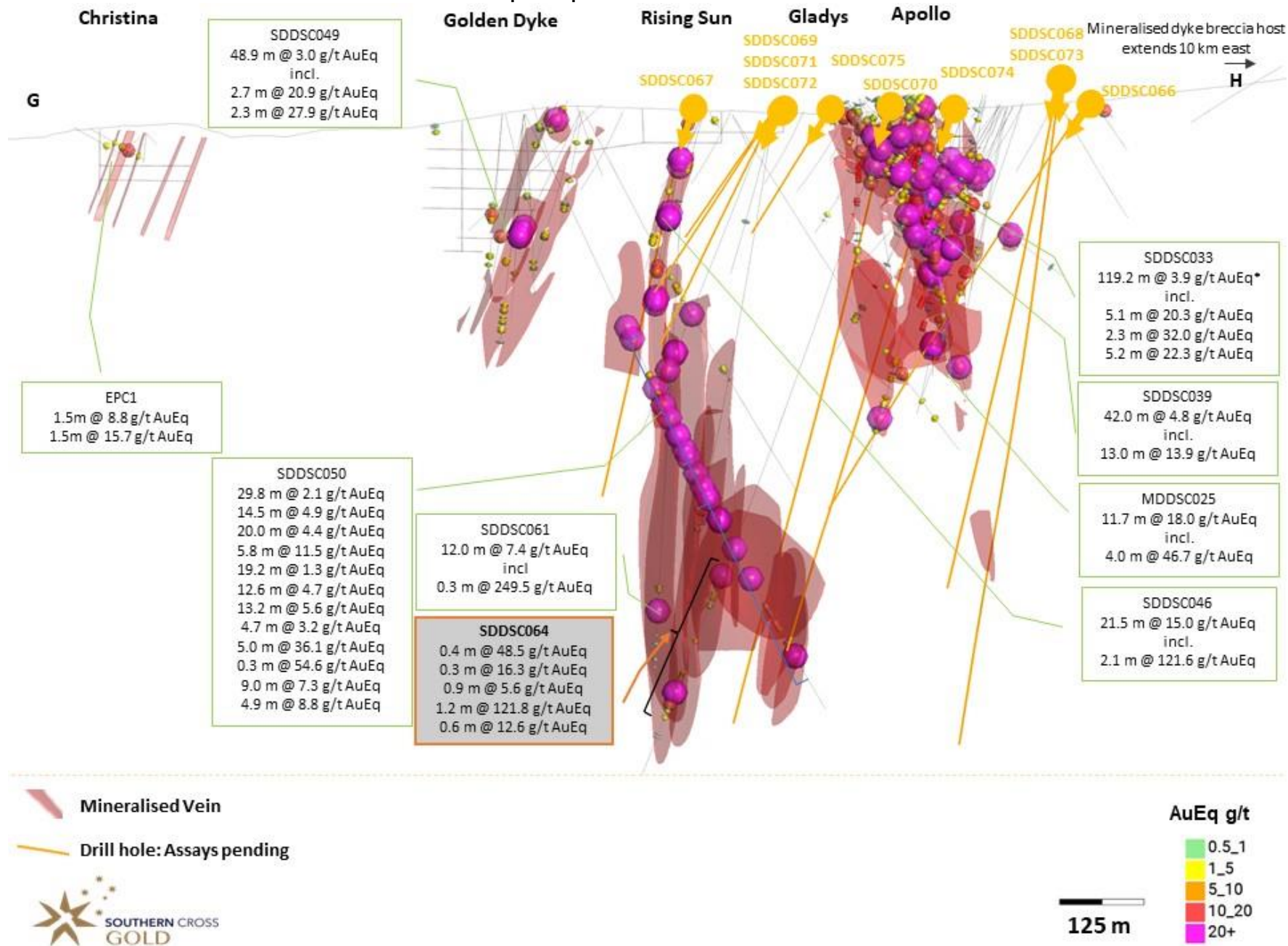
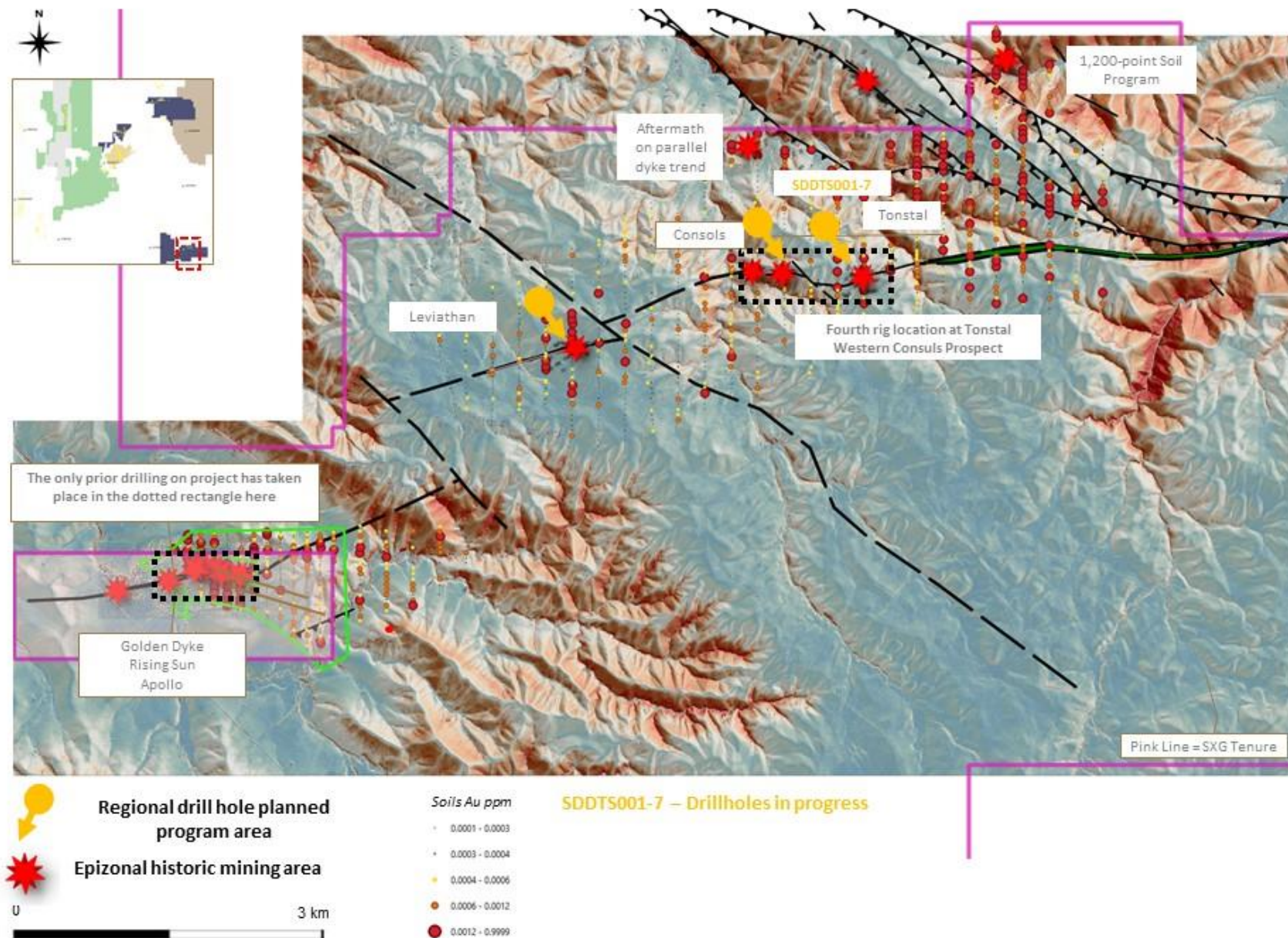




Figure 6: Sunday Creek regional plan view showing LiDAR, soil sampling, structural framework, regional historic epizonal gold mining areas and broad regional areas to be tested in a 2,500 m diamond drill program. The first drill area at Tonal is located 7.5 km along strike from the main drill area at Golden Dyke- Apollo.





**Table 1: Drill collar summary table for recent drill holes in progress.**

Hole_ID	Hole Size	Depth (m)	Prospect	East GDA94_Z55	North GDA94_Z55	Elevation	Azimuth	Plunge
SDDSC059	HQ	641.9	Root Hog	330883	5868075	306.7	214	-75.5
SDDSC060	HQ	263.8	Golden Dyke	330534.6	5867882.1	295.9	167.3	-69.9
SDDSC061	HQ	821.8	Gentle Annie	330754.2	5868022.2	294.3	209.5	-81.7
SDDSC062	HQ	339.3	Golden Dyke	330537.1	5867883.4	295.6	199	-74.2
SDDSC063	HQ	41.1	Apollo	331292.5	5867824.6	316.4	68	-35
SDDSC064	HQ	1013.5	Root Hog	331031.5	5868097.6	325.1	239.6	-69.2
SDDSC065	HQ	40.1	Apollo	331292.5	5867824.6	316.4	92	-39
SDDSC066	HQ	669.9	Apollo	331291.1	5867823.1	316.8	278.9	-57
SDDSC067	HQ	551	Rising Sun	330754.2	5868022.2	294.3	220.2	-70.4
SDDSC068	HQ	959.4	Apollo	331254	5868098.6	353.9	211.3	-77.7
SDDSC069	HQ	385.8	Rising Sun	330875	5868005	307.19	234	-59
SDDSC070	HQ	911.3	Rising Sun	331031.5	5868097.6	325.1	231	-74.5
SDDSC071	HQ	329.3	Rising Sun	330875	5868005	307.19	232	-51
SDDSC072	HQ	259.7	Rising Sun	330875	5868005	307.19	222	-43
SDDSC073	HQ	In progress plan 770 m	Apollo	331254	5868097	353.9	212	-69
SDDSC074	HQ	In progress plan 800 m	Root Hog	331108	5867975	319.4	255	-73
SDDSC075	HQ	In progress plan 280 m	Root Hog	330951	5868007	313.7	211	-40
SDDTS001	NQ2	179.75	Tonstal	336788	5870637	525	156	-50
SDDTS002	NQ2	182.6	Tonstal	336788	5870637	525	111	-42
SDDTS003	NQ2	197.8	Tonstal	336788	5870637	525	111	-73
SDDTS004	NQ2	62.6	Tonstal	336788	5870637	525	79	-60
SDDTS004A	NQ2	170.6	Tonstal	336788	5870637	525	79	-60
SDDTS005	NQ2	16	Tonstal	336788	5870637	525	70	-42
SDDTS005A	NQ2	256	Tonstal	336788	5870637	525	70	-42
SDDTS006	NQ2	In progress plan 250 m	Tonstal	336788	5870637	525	48	-50

**Table 2:** Tables of mineralised drill hole intersections reported from SDDSC064 using two cut-off criteria. Lower grades cut at 0.3 g/t lower cutoff over a maximum of 3 m with higher grades cut at 5.0 g/t AuEq cutoff over a maximum of 1 m.

Drill Hole	From (m)	To (m)	Width (m)	Au g/t	Sb %	AuEq g/t
SDDSC064	715.75	716.10	0.4	44.6	2.5	48.5
SDDSC064	725.75	727.00	1.3	3.4	0.2	3.7
including	725.75	726.00	0.3	15.6	0.4	16.3
SDDSC064	734.00	735.85	1.9	0.2	0.3	0.7
SDDSC064	741.00	753.00	12.0	0.5	0.1	0.6
SDDSC064	756.85	764.00	7.1	0.7	0.2	1.0
SDDSC064	880.80	886.00	5.2	1.5	0.1	1.6
including	882.66	883.60	0.9	5.2	0.2	5.6
SDDSC064	889.60	890.78	1.2	121.8	0.1	121.8
SDDSC064	889.92	890.78	0.9	166.9	0.1	167.0
SDDSC064	898.25	921.87	23.6	0.7	0.1	0.9
including	907.25	907.84	0.6	8.6	2.5	12.6

**Table 3:** All individual assays reported from SDDSC064 >0.1g/t AuEq.

Drill Hole	from (m)	to (m)	width (m)	Au g/t	Sb %
SDDSC064	111.05	111.9	0.8	0.1	0.00
SDDSC064	349.25	350.0	0.8	0.1	0.00
SDDSC064	350.00	351.0	1.0	0.2	0.00
SDDSC064	600.40	601.4	1.0	0.1	0.00
SDDSC064	601.40	601.7	0.3	0.1	0.00
SDDSC064	657.00	658.0	1.0	0.2	0.00
SDDSC064	658.00	659.0	1.0	0.2	0.00
SDDSC064	659.00	660.0	1.0	0.1	0.00
SDDSC064	693.30	694.7	1.4	0.9	0.01
SDDSC064	697.20	698.4	1.2	0.1	0.00
SDDSC064	699.60	701.0	1.4	0.2	0.00
SDDSC064	702.00	703.0	1.0	0.1	0.01
SDDSC064	703.00	704.0	1.0	0.4	0.04
SDDSC064	704.00	705.0	1.0	0.1	0.01
SDDSC064	705.00	706.0	1.0	0.4	0.04
SDDSC064	707.00	708.0	1.0	0.1	0.20
SDDSC064	708.00	709.0	1.0	0.1	0.02
SDDSC064	709.00	710.0	1.0	0.1	0.00
SDDSC064	710.00	711.0	1.0	0.1	0.03
SDDSC064	711.00	712.0	1.0	0.1	0.03
SDDSC064	712.00	712.8	0.8	0.4	0.37
SDDSC064	712.80	713.5	0.7	0.2	0.06
SDDSC064	713.50	714.0	0.5	0.2	0.03
SDDSC064	715.75	716.1	0.4	44.6	2.47
SDDSC064	721.00	722.0	1.0	0.1	0.03
SDDSC064	724.00	725.1	1.1	0.2	0.00
SDDSC064	725.10	725.8	0.7	0.1	0.02
SDDSC064	725.75	726.0	0.3	15.6	0.44
SDDSC064	726.00	727.0	1.0	0.4	0.11
SDDSC064	732.00	733.0	1.0	0.1	0.00
SDDSC064	734.00	735.0	1.0	0.1	0.23
SDDSC064	735.00	735.9	0.9	0.3	0.46
SDDSC064	737.90	739.0	1.1	0.1	0.01
SDDSC064	740.00	741.0	1.0	0.1	0.03
SDDSC064	741.00	742.0	1.0	0.6	0.20
SDDSC064	742.00	743.0	1.0	0.5	0.23
SDDSC064	743.00	744.0	1.0	0.9	0.08
SDDSC064	744.00	745.0	1.0	0.3	0.02
SDDSC064	745.00	746.0	1.0	0.2	0.01
SDDSC064	746.00	747.0	1.0	0.6	0.02
SDDSC064	747.00	748.0	1.0	1.1	0.04



SDDSC064	749.00	749.9	0.9	0.1	0.01
SDDSC064	749.90	751.0	1.1	0.8	0.10
SDDSC064	751.00	752.0	1.0	0.1	0.08
SDDSC064	752.00	753.0	1.0	0.5	0.09
SDDSC064	756.00	756.9	0.9	0.1	0.05
SDDSC064	756.85	758.0	1.2	0.9	0.22
SDDSC064	758.00	759.0	1.0	0.2	0.03
SDDSC064	759.00	760.0	1.0	0.7	0.12
SDDSC064	760.00	760.9	0.9	0.7	0.15
SDDSC064	760.85	761.4	0.5	0.9	1.18
SDDSC064	761.35	762.4	1.0	1.8	0.09
SDDSC064	762.35	763.0	0.7	0.4	0.06
SDDSC064	763.00	764.0	1.0	0.3	0.09
SDDSC064	768.00	769.0	1.0	0.1	0.06
SDDSC064	787.00	788.0	1.0	0.1	0.00
SDDSC064	802.00	803.0	1.0	0.1	0.00
SDDSC064	811.00	812.0	1.0	0.1	0.01
SDDSC064	812.00	813.1	1.1	0.4	0.01
SDDSC064	813.06	814.0	0.9	1.5	0.01
SDDSC064	820.00	821.0	1.0	0.2	0.00
SDDSC064	824.00	825.0	1.0	0.1	0.03
SDDSC064	829.00	830.0	1.0	0.1	0.01
SDDSC064	835.00	836.0	1.0	0.2	0.01
SDDSC064	837.00	838.0	1.0	0.1	0.01
SDDSC064	839.00	840.0	1.0	0.1	0.00
SDDSC064	842.00	843.0	1.0	0.1	0.00
SDDSC064	843.00	844.0	1.0	0.1	0.01
SDDSC064	844.00	845.0	1.0	0.3	0.00
SDDSC064	849.95	850.4	0.5	0.1	0.01
SDDSC064	850.40	851.0	0.6	0.2	0.01
SDDSC064	853.00	854.0	1.0	0.1	0.00
SDDSC064	853.96	854.5	0.5	0.1	0.00
SDDSC064	854.50	855.2	0.7	0.3	0.00
SDDSC064	855.18	856.0	0.8	0.3	0.00
SDDSC064	857.00	858.0	1.0	0.2	0.00
SDDSC064	860.00	861.0	1.0	0.1	0.01
SDDSC064	861.02	861.5	0.5	2.0	0.07
SDDSC064	861.50	862.3	0.8	0.4	0.02
SDDSC064	862.25	863.0	0.8	0.5	0.01
SDDSC064	863.00	864.0	1.0	0.1	0.00
SDDSC064	864.00	865.1	1.1	0.1	0.00
SDDSC064	867.00	867.9	0.9	0.2	0.00
SDDSC064	867.87	868.6	0.8	0.1	0.00

SDDSC064	868.62	869.8	1.2	0.1	0.00
SDDSC064	869.80	870.4	0.6	0.4	0.01
SDDSC064	870.36	871.2	0.8	0.8	0.00
SDDSC064	871.17	872.0	0.8	0.1	0.00
SDDSC064	872.00	872.7	0.7	0.4	0.01
SDDSC064	872.70	873.8	1.1	0.1	0.00
SDDSC064	874.80	875.7	0.9	0.1	0.00
SDDSC064	877.07	877.7	0.6	0.2	0.00
SDDSC064	880.80	881.2	0.4	0.6	0.01
SDDSC064	881.15	882.0	0.9	1.0	0.03
SDDSC064	882.00	882.7	0.7	0.3	0.01
SDDSC064	882.66	883.6	0.9	5.2	0.24
SDDSC064	883.60	884.5	0.9	1.0	0.02
SDDSC064	884.45	885.0	0.6	0.3	0.12
SDDSC064	885.00	886.0	1.0	0.4	0.01
SDDSC064	886.00	887.0	1.0	0.1	0.01
SDDSC064	887.75	888.7	0.9	0.2	0.01
SDDSC064	889.60	889.9	0.3	0.4	0.01
SDDSC064	889.92	890.4	0.5	158.5	0.09
SDDSC064	890.40	890.8	0.4	177.5	0.05
SDDSC064	890.78	891.4	0.6	0.3	0.01
SDDSC064	891.40	892.0	0.6	0.1	0.01
SDDSC064	894.85	895.9	1.0	0.1	0.01
SDDSC064	895.85	896.3	0.5	0.1	0.01
SDDSC064	896.30	897.2	0.9	0.1	0.01
SDDSC064	897.20	897.7	0.5	0.2	0.00
SDDSC064	897.70	898.3	0.6	0.1	0.00
SDDSC064	898.25	899.1	0.8	0.3	0.00
SDDSC064	899.05	900.0	1.0	0.1	0.00
SDDSC064	900.00	901.0	1.0	0.1	0.00
SDDSC064	901.00	902.0	1.0	0.1	0.01
SDDSC064	902.00	902.9	0.9	0.7	0.01
SDDSC064	902.87	903.9	1.0	0.6	0.01
SDDSC064	905.30	906.0	0.7	0.7	0.01
SDDSC064	905.95	906.8	0.9	0.6	0.01
SDDSC064	906.82	907.3	0.4	1.1	1.11
SDDSC064	907.25	907.8	0.6	8.6	2.51
SDDSC064	907.84	908.6	0.8	0.4	0.09
SDDSC064	908.62	909.5	0.9	0.4	0.12
SDDSC064	910.18	911.0	0.8	0.9	0.01
SDDSC064	911.00	912.0	1.0	0.3	0.01
SDDSC064	912.00	912.7	0.7	0.2	0.03
SDDSC064	912.65	913.3	0.6	1.8	0.57

SDDSC064	913.25	914.0	0.7	1.5	0.30
SDDSC064	913.96	914.7	0.7	0.2	0.01
SDDSC064	914.70	915.8	1.1	0.2	0.00
SDDSC064	915.75	916.8	1.1	0.6	0.03
SDDSC064	916.80	917.7	0.9	0.5	0.01
SDDSC064	917.70	918.7	1.0	1.0	0.03
SDDSC064	918.70	919.3	0.6	0.3	0.10
SDDSC064	919.28	919.9	0.6	0.4	0.03
SDDSC064	919.90	920.7	0.8	0.2	0.02
SDDSC064	920.67	921.9	1.2	0.4	0.04
SDDSC064	921.87	922.9	1.1	0.2	0.01
SDDSC064	925.12	925.5	0.3	0.4	0.40
SDDSC064	925.45	926.2	0.7	0.2	0.07
SDDSC064	927.95	928.5	0.6	1.0	0.02
SDDSC064	928.52	929.0	0.5	0.2	0.01
SDDSC064	929.00	930.0	1.0	0.1	0.00
SDDSC064	930.00	931.0	1.0	0.1	0.01
SDDSC064	932.00	932.9	0.9	0.2	0.00
SDDSC064	932.85	933.6	0.7	0.2	0.00
SDDSC064	933.55	934.3	0.8	0.1	0.00
SDDSC064	935.00	936.0	1.0	0.1	0.00
SDDSC064	950.00	951.0	1.0	0.2	0.01
SDDSC064	951.00	952.0	1.0	0.2	0.01
SDDSC064	952.00	953.0	1.0	0.6	0.01
SDDSC064	953.00	953.3	0.3	0.1	0.01
SDDSC064	956.40	957.0	0.6	0.1	0.01
SDDSC064	957.00	958.0	1.0	0.7	0.09
SDDSC064	958.00	959.0	1.0	0.4	0.01



## JORC Table 1

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections).

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling has been conducted on drill core (half core for &gt;90 % and quarter core for check samples), grab samples (field samples of in-situ bedrock and boulders; including duplicate samples), trench samples (rock chips, including duplicates) and soil samples (including duplicate samples). Locations of field samples were obtained by using a GPS, generally to an accuracy of within 5 metres. Drill hole and trench locations have been confirmed to &lt;1 metre using a differential GPS. Samples locations have also been verified by plotting locations on the high-resolution Lidar maps</li> <li>Drill core is marked for cutting at the Nagambie core shed and sent by commercial transport to an automated diamond saw used by Company staff in Bendigo. Samples are bagged at the core saw and transported to the nearby OnSite Laboratory for assay. At OnSite samples are crushed using a jaw crusher combined with a rotary splitter and a 1 kg split is separated for pulverizing (LM5) and assay.</li> <li>Standard fire assay techniques are used for gold assay on a 30 g charge by experienced staff (used to dealing with high sulphide and stibnite-rich charges). OnSite gold method by fire assay code PE01S.</li> <li>Screen fire assay is used to understand gold grain-size distribution where coarse gold is evident.</li> <li>ICP-OES is used to analyse the aqua regia digested pulp for an additional 12 elements (method BM011) and over-range antimony is measured using flame AAS (method known as B050).</li> <li>Soil samples were sieved in the field and an 80 mesh sample bagged and transported to ALS Global laboratories in Brisbane for super-low level gold analysis on a 50 g samples by method ST44 (using aqua regia and ICP-MS).</li> <li>Grab and rock chip samples are generally submitted to OnSite Laboratories for standard fire assay and 12 element ICP-OES as described above.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>HQ diameter diamond drill core, oriented using Boart Longyear TruCore orientation tool with the orientation line marked on the base of the drill core by the driller/offsider. A standard 3 metre core barrel has been found to be most effective in both the hard and soft rocks in the project.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Core recoveries were maximised using HQ diamond drill core with careful control over water pressure to maintain soft-rock integrity and prevent loss of fines from soft drill core. Recoveries are determined on a metre-by-metre basis in the core shed using a tape measure against marked up drill core checking against driller's core blocks.</li> <li>Plots of grade versus recovery and RQD (described below) show no trends relating to loss of drill core, or fines.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Geotechnical logging of the drill core takes place on racks in the the company core shed. Core orientations marked at the drill rig are checked for consistency, and base of core orientation lines are marked on core where two or more orientations match within 10 degrees. Core recoveries are measured for each metre RQD measurements (cumulative quantity of core sticks &gt; 10 cm in a metre) are made on a metre by metre basis.</li> <li>Each tray of drill core is photographed (wet and dry) after it is fully marked up for sampling and cutting.</li> <li>The ½ core cutting line is placed approximately 10 degrees above the orientation line so the orientation line is retained in the core tray for future work.</li> <li>Geological logging of drill core includes the following parameters: Rock types, lithology Alteration Structural information (orientations of veins, bedding, fractures using standard alpha-beta measurements from orientation line; or, in the case of un-oriented parts of the core, the alpha angles are measured) Veining (quartz, carbonate, stibnite) Key minerals (visible under hand lens, e.g. gold, stibnite)</li> <li>100 % of drill core is logged for all components described above into the company MX logging database.</li> <li>Logging is fully quantitative, although the description of lithology and alteration relies on visible observations by trained geologists.</li> <li>Each tray of drill core is photographed (wet and dry) after it is fully marked up for sampling and cutting.</li> <li>Logging is considered to be at an appropriate quantitative standard to use in future studies.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>Drill core is typically sampled using half of the HD diameter. The drill core orientation line is retained.</li> <li>Quarter core is used when taking sampling duplicates (termed FDUP in the database).</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sampling representivity is maximised by always taking the same side of the drill core (whenever oriented), and consistently drawing a cut line on the core where orientation is not possible. The field technician draws these lines.</li> <li>• Sample sizes are maximised for coarse gold by using half core, and using quarter core and half core splits (laboratory duplicates) allows an estimation of nugget effect.</li> <li>• In mineralised rock the company uses approximately 10% of ¼ core duplicates, certified reference materials (suitable OREAS materials), laboratory sample duplicates and instrument repeats.</li> <li>• In the soil sampling program duplicates were obtained every 20<sup>th</sup> sample and the laboratory inserted low-level gold standards regularly into the sample flow.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The fire assay technique for gold used by OnSite is a globally recognised method, and over-range follow-ups including gravimetric finish and screen fire assay are standard. Of significance at the OnSite laboratory is the presence of fire assay personnel who are experienced in dealing with high sulphide charges (especially those with high stibnite contents) – this substantially reduces the risk of in accurate reporting in complex sulphide-gold charges.</li> <li>• The ICP-OES technique is a standard analytical technique for assessing elemental concentrations. The digest used (aqua regia) is excellent for the dissolution of sulphides (in this case generally stibnite, pyrite and trace arsenopyrite), but other silicate-hosted elements, in particular vanadium (V), may only be partially dissolved. These silicate-hosted elements are not important in the determination of the quantity of gold, antimony, arsenic or sulphur.</li> <li>• A portable XRF has been used in a qualitative manner on drill core to ensure appropriate core samples have been taken (no pXRF data are reported or included in the MX database).</li> <li>• Acceptable levels of accuracy and precision have been established using the following methods  <i>¼ duplicates</i> – half core is split into quarters and given separate sample numbers (commonly in mineralised core) – low to medium gold grades indicate strong correlation, dropping as the gold grade increases over 40 g/t Au.  <i>Blanks</i> – blanks are inserted after visible gold and in strongly mineralised rocks to confirm that the crushing and pulping are not affected by gold smearing onto the crusher and LM5 swing mill surfaces. Results are excellent, generally below detection limit and a single sample at 0.03 g/t Au.  <i>Certified Reference Materials</i> – OREAS CRMs have been used throughout the project including blanks, low (&lt;1 g/t Au), medium (up to 5 g/t Au) and high-grade gold samples (&gt; 5 g/t Au). Results are automatically checked on </li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>data import into the MX database to fall within 2 standard deviations of the expected value.</p> <p><i>Laboratory splits</i> – OnSite conducts splits of both coarse crush and pulp duplicates as quality control and reports all data. In particular, high Au samples have the most repeats.</p> <p><i>Laboratory CRMs</i> – OnSite regularly inserts their own CRM materials into the process flow and reports all data</p> <p><i>Laboratory precision</i> – duplicate measurements of solutions (both Au from fire assay and other elements from the aqua regia digests) are made regularly by the laboratory and reported.</p> <ul style="list-style-type: none"> <li>• <i>Accuracy and precision</i> have been determined carefully by using the sampling and measurement techniques described above during the sampling (accuracy) and laboratory (accuracy and precision) stages of the analysis.</li> <li>• <i>Soil sample</i> company duplicates and laboratory certified reference materials all fall within expected ranges.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Independent Geologist has visited Sunday Creek drill sites and inspected drill core held at the Nagambie core shed.</li> <li>• Visual inspection of drill intersections matches the both the geological descriptions in the database and the expected assay data (for example, gold and stibnite visible in drill core is matched by high Au and Sb results in assays).</li> <li>• In addition, on receipt of results Company geologists assess the gold, antimony and arsenic results to verify that the intersections returned expected data.</li> <li>• The electronic data storage in the MX database is of a high standard. Primary logging data are entered directly by the geologists and field technicians and the assay data are electronically matched against sample number on return from the laboratory.</li> <li>• Certified reference materials, ¼ core field duplicates (FDUP), laboratory splits and duplicates and instrument repeats are all recorded in the database.</li> <li>• Exports of data have the option of including all primary data, or a subset with average field duplicates for some reporting.</li> <li>• Adjustments to assay data are recorded by MX, and none are present (or required).</li> <li>• Twinned drill holes are not available at this stage of the project.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Differential GPS used to locate drill collars, trenches and some workings</li> <li>• Standard GPS for some field locations (grab and soils samples), verified against Lidar data.</li> <li>• The grid system used throughout is Geocentric datum of Australia 1994; Map Grid Zone 55 (GDA94_Z55), also referred to as ELSG 28355.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Topographic control is excellent owing to sub 10 cm accuracy from Lidar data.</li> <li>• The data spacing is suitable for reporting of exploration results – evidence for this is based on the improving predictability of high grade gold-antimony intersections.</li> <li>• At this time the data spacing and distribution are not sufficient for the reporting of Mineral Resource Estimates. This however may change as knowledge of grade controls increase with future drill programs.</li> <li>• Sample compositing has not been applied to the reporting of any drill results.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The true thickness of the mineralised intervals reported are interpreted to be approximately 60-70% of the sampled thickness.</li> <li>• Drilling is oriented in an optimum direction when considering the combination of host rock orientation and apparent vein control on gold and antimony grade. The steep nature of some of the veins may give increases in apparent thickness of some intersections, but more drilling is required to quantify.</li> <li>• A sampling bias is not evident from the data collected to date (drill holes cut across mineralised structures at a moderate angle).</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill core is delivered to the Nagambie core logging shed by either the drill contractor or company field staff. Samples are marked up by company staff at the Nagambie core shed, loaded onto strapped secured pallets and trucked by commercial transport to Bendigo where they are cut by company staff in an automated diamond saw and bagged before submission to the laboratory. There is no evidence in any stage of the process, or in the data for any sample security issues.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Continuous monitoring of CRM results, blanks and duplicates is undertaken by geologists and the company data geologist. Dr Nick Cook, Technical Advisor for SXG has the orientation, logging and assay data.</li> </ul>