

# **ASX Release**

31 January 2023

Intrusion related gold system footprint defined at Wilbur's Hill prospect, Ravenswood West Project.

Two refined targets conducive to gold deposition identified.

# **Highlights**

- Recent first-pass, diamond drilling has successfully identified indicators of a zoned breccia pipe associated, intrusion related gold system at the company's Wilbur's Hill prospect as seen at neighbouring Mt Leyshon (3.5 Moz Au) and Mt Wright (1 Moz Au) gold mines.
- Elevated Au-Cu-Pb-Sn-Zn and W-Te-Mn-V zones confirm zonation of mineralisation and provide vectors to potential high-grade gold mineralisation.
- Integration of data from diamond hole multi-element assays, mineralogy, soil sampling, mapping and historic rock chips (to 14.1 g/t Au) has identified two key targets to be RC drilled in the June 2023 quarter.
- As a result of the Wilbur's hill drilling and other recent work, 16 additional breccia pipe associated intrusion related gold targets have been identified at Ravenswood West.

Sunshine Gold Limited (ASX:SHN) has identified a potential intrusion related gold system analogous to nearby major gold mines after receiving complete assays for its recent diamond drill hole program at its Ravenswood West Project in north Queensland.

Elevated Au-Cu-Pb-Sn-Zn and W-Te-Mn-V zones provide vectors to potential high-grade gold mineralisation at the Wilbur's Hill Prospect, located 10km west of the 1-million-ounce Mt Wright Gold Mine, part of Queensland's largest gold mine at Ravenswood. The prospect is located on the Boori Lineament, a highly prospective gold corridor which extends from Mt Wright to the Mt Leyshon Gold Mine (3.5 Moz Au).

Sunshine Gold Managing Director, Dr Damien Keys, said the drilling together with 12 months of systematic exploration had provided critical information in refining the Wilbur's Hill target.



"We have seen a significant chemical and mineralogical difference between the two holes drilled despite being only 200m apart. This zonation in mineralogy is typical in intrusion related gold systems," Dr Keys said.

"The deeper hole, 22WHDD002, contained more abundant magnetite, tungsten and manganese which are all indicative of the system being too hot for significant gold deposition (Heat Zone).

"The shallower hole 22WHDD001, contained less magnetite, more abundant sulphide and gold, copper, lead, tin and zinc (Cool Zone)," he said.

Dr Keys said the drill results, when integrated with all other available data, identified two targets more conducive to gold deposition within 400m of the first pass drilling:

- Target 1 sits on the northern end of the Wilbur's Hill in a Cool Zone at the intersection of a NW fault and an ENE fault; and
- Target 2 is a breccia located on a NW fault to the SE of Wilbur's Hill with rock chip assays of 14.1 g/t Au and 4.27 g/t Au.

"Wilbur's Hill remains an exciting large-scale target and is scheduled for follow up testing when reverse circulation (RC) drilling returns to the project in April 2023," he said.

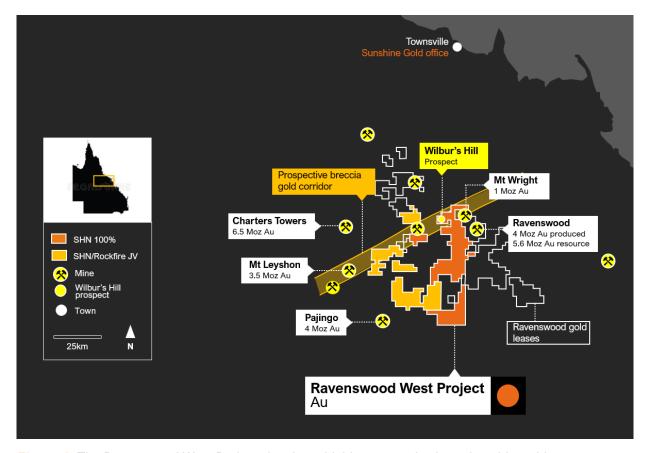


Figure 1: The Ravenswood West Project showing a highly prospective breccia gold corridor.



### Zoned, intrusion related gold system identified at Wilbur's Hill

Two diamond holes (22WHDD001 and 22WHDD002) were drilled at Wilbur's Hill (1,318m) in late 2022. The holes targeted an intrusion related gold system as seen at the nearby major gold mines at Mt Leyshon (3.5 Moz Au) and Mt Wright (1 Moz Au). Wilbur's Hill was targeted on coincident:

- strong Induced Polarisation (IP) chargeability anomaly;
- deep IP and MT resistivity low;
- · mapped rhyolite volcanic complex; and
- elevated Au, Ag, Bi, Cu, Mo, Te, Pb and Zn in soils.

# Drilling intercepted:

- 1m @ 0.31 g/t Au, 13.7 g/t Ag and 0.77% Cu from 68m; and
   1m @ 0.19 g/t Au, 4.1 g/t Ag and 0.33% Cu from 125m (22WHDD001)
- 480m interval of >3% pyrite\*, including 70m >5% pyrite\* (22WHDD001); and
   67m interval of >2% pyrite\* and a 36m interval of >3% pyrite\* (22WHDD002);
- intense magnetite alteration (22WHDD002);
- multiple zones of rhyolite, locally brecciated or flow banded; and
- geochemical evidence for a strongly zoned intrusion related gold system.

A key feature of a breccia pipe associated, intrusion related gold systems is the small size of the orebody relative to the overall host breccia pipe. At Mt Leyshon the orebody occupies ~25% of the host while Mt Wright is 30%.

The two holes drilled at Wilbur's Hill have tested only a small portion of the overall breccia pipe but have demonstrated the system is "live" with gold. Furthermore, important vectors to potential mineralised zones have been identified.



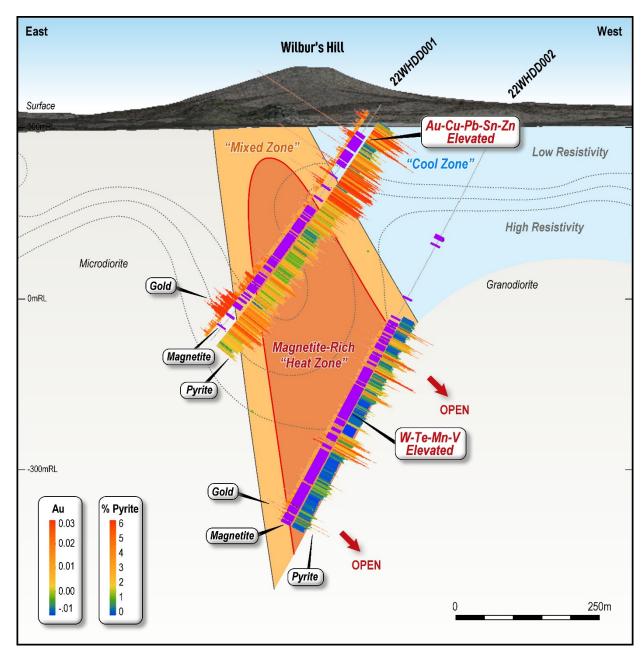


Figure 2. Cross section through 7782400mN showing diamond drill holes (22WHDD001 and 22WHDD002), IP response, metal zones and magnetite abundance.

# Conceptual Model for breccia pipe associated intrusion related gold system

Studies undertaken on the breccia pipe associated intrusion related gold systems at Mt Wright and Mt Leyshon conclude that (Figure 3):

- all intrusion related gold systems are zoned;
- the zones typically relate to a declining thermal gradient or cooling area (Cool Zone) away from the intense heat of the source intrusion (Heat Zone);
- magnetite is often associated with alteration around the Heat Zone; and
- metals near the Heat Zone are usually Mo-W-Te-V (as in 22WHDD002), with Au-Ag-Pb-Zn located further away in the Cool Zone (shallow in 22WHDD001).



The two recent diamond holes have identified gold in multiple phases of rhyolite and andesite intruding the host granodiorite. This confirms that Wilbur's Hill is likely to be an intrusion related gold system. For reasons discussed below, the recent drilling is interpreted to have been in the Heat Zone with further drilling required in the Cool Zone.

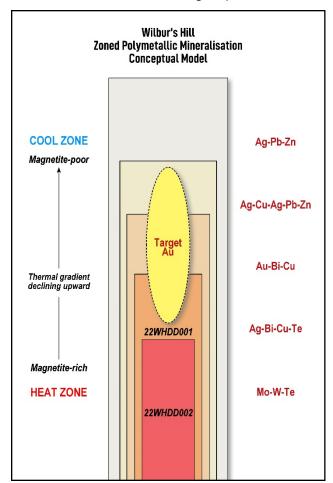


Figure 3. Zoned mineralisation conceptual model for breccia pipe style targets, modified from Morrison (2007) and Lisowiec and Morrison (2013). Interpreted zones of 22WHDD001 and 22WHDD002 diamond holes are highlighted.

In 22WHDD001, magnetite was typically seen to be focussed through zones of intense foliation or shearing. In the deeper hole, 22WHDD002, magnetite alteration was seen to be more pervasive through the groundmass of the granodiorite or on the margins of the rhyolites. This indicates that the holes were drilled into the Heat Zone (Figure 3).

The scale of hydrothermal alteration, the complexity of the intrusive history and the elevated pathfinder elements all provide important vectors towards potentially higher-grade areas within the system.

#### Refined Targets at Wilbur's Hill

The recent drill holes have provided important vectors into mineralisation at Wilbur's Hill. Accordingly, all available data has been reassessed and integrated to refine drill targets. Specifically, field mapping has been integrated with soil sampling, rock chip and geophysical data.



# Outcomes of this work include:

- a. The soils data clearly identifies three metal zones (Figure 4):
  - "Cool Zone" elevated Au, Ag, Pb, Zn, Cu
  - "Mixed Zone" moderate Te, Mo
  - "Heat Zone" elevated Te, Mo, W
- b. A comprehensive structural map reinforces two key targets (Figure 5).

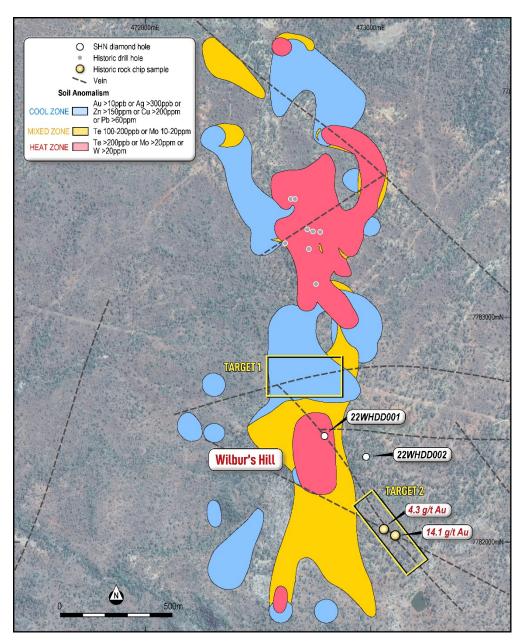


Figure 4. Soil zone map showing: Cool Zone (Au, Ag, Pb, Zn, Cu); Mixed Zone (Te, Mo) and Hot Zone (high Te, Mo, W). 22WHDD001 and 22WHDD002 are located in the Hot /Mixed Zones. Target 1 is in the Cool Zone at the intersection of a NW fault and an ENE fault.



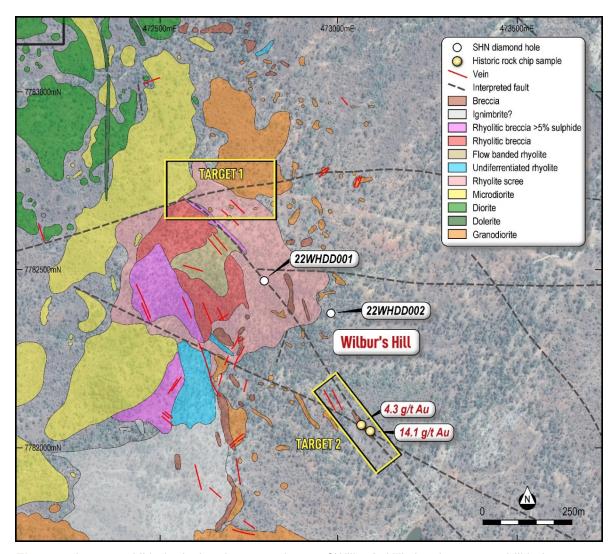


Figure 5. Integrated lithological and structural map of Wilbur's Hill showing recent drill hole locations, high-grade surface rock chips and the two key targets.

Target 1 sits on the northern end of the Wilbur's Hill in a Cool Zone at the intersection of a NW fault and an ENE fault (Figure 4).

Target 2 will test a breccia located on a NW fault to the SE of Wilbur's Hill. The fault is strongly sericitized and mapped in sub-crop over 100m. The breccia returned rock chip assays of <u>4.27</u> <u>g/t Au, 37 g/t Ag, 1.03% Pb</u> (1994) and <u>14.1 g/t Au, 10 g/t Ag, 0.2% Pb and 9.90% As</u> (2008).

The approach of integrating soils (metal zones), mapping and geophysical data to targeting, is also being applied to 16 other breccia pipe associated intrusion related gold targets at the broader Ravenswood West Project. These targets include Plateau and Cardigan Dam (Lighthouse Project), Boori and Mountain Maid (Ravenswood West).

First field mapping at the 50koz Au<sup>1</sup> Plateau target has commenced. Mapping is focussing on the distribution of alteration, especially magnetite, and definition of high Pb-Zn-Cu-Ag zones.

<sup>&</sup>lt;sup>1</sup> SHN ASX Release, 20th January 2023, "Consolidation of High-Grade Advanced Au Prospects RW". No new information has been collected and all material assumptions remain unchanged.



#### Planned activities.

- Jan 2023: Quarterly Activities & Financial Report
- Jan 2023: Commence first fieldwork Lighthouse Project, Ravenswood West
- Feb 2023: Extensional drilling Triumph Au
- Mar 2023: RC drilling Lighthouse Project, Ravenswood West
- Mar 2023: Interim Financial Report
- June 2023 quarter: RC drilling of Targets 1 and 2 at Wilbur's Hills Ravenswood West

# Attending:

• 14 – 17 Feb 2023: RIU Explorers Conference, Fremantle

#### Sunshine Gold's Board has authorised the release of this announcement to the market.

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# **Competent Person's Statement**

The information in this report that relates to Exploration Results is based on, and fairly represents, information compiled by Mr Matt Price, a Competent Person who is a Member of the Australian Institute of Geoscientists (AIG) and the Australian Institute of Mining and Metallurgy (AusIMM). Mr Price has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Price consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



#### **About Sunshine Gold**

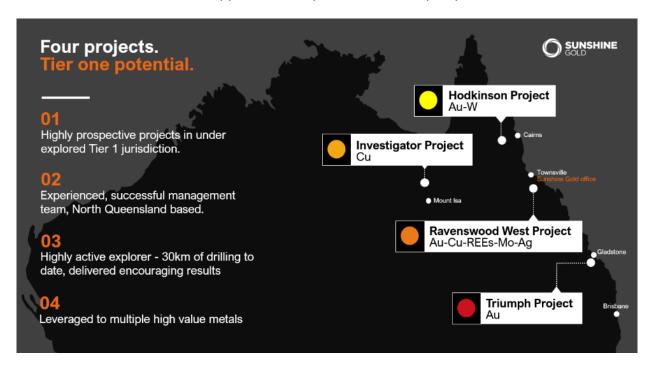
**Four projects. Tier one potential.** Sunshine Gold is developing four projects with tier one potential in north Queensland over 1,000km<sup>2</sup> in proven districts with high prospectivity for gold, copper, molybdenum, and rare earths elements:

*Triumph Project* (Au) – More than 85% of Triumph's Inferred Resource of 118,000 ounces @ 2.03 g/t Au<sup>2</sup> is less than 100m deep and largely located within 1.25km of strike within a 6km long trend called the Southern Corridor. Recent drilling has confirmed the project's intrusion-related gold system is characteristic of larger mines and deposits in the area including the Mt Morgan Mine and Evolution Mining's Mt Rawdon Mine.

Ravenswood West Project (Au-Cu-REEs-Mo-Ag) – Adjacent to Queensland's largest gold mine, Ravenswood, jointly owned by EMR Capital and SGL listed Gold Energy and Resources. The Ravenswood Mine hosts a 9.8Moz resource within a district that has produced over 20Moz of gold historically.

Investigator Project (Cu) - The project is located 100km north of the Mt Isa, home to rich copper-lead-zinc mines that have been worked for almost a century. Investigator is hosted in the same stratigraphy and a similar fault architecture as the Capricorn Copper Mine which is located 12km to the north.

Hodgkinson Project (Au-W) - The project is situated between the Palmer River alluvial gold field (1.35 Moz Au) and the historic Hodgkinson gold field (0.3 Moz Au) and incorporates the Elephant Creek Gold, Peninsula Gold-Copper and Campbell Creek Gold prospects.



<sup>&</sup>lt;sup>2</sup> SHN ASX Release, 31st March 2022, "Robust Maiden Resource at Triumph Gold Project". No new information has been collected and all material assumptions remain unchanged.



# **Section 1 - Sampling Techniques and Data**

| Criteria               | Explanation   | Commentary  |
|------------------------|---|---|
| Sampling techniques    | Nature and quality of sampling (e.g. 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.  Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'in dustry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information. | DRILLING  Diamond core (DD) drilling was used to obtain samples for geological logging and assaying. Triple tube barrels were used to maximise sample recovery. Drill core was oriented, measured and geotechnical recoveries were calculated. All core was geologically logged and selected core was sawn in half longitudinally for sampling and assay in accordance with a cut sheet designed by the logging geologist. The core was cut just off the orientation line / cut line with the right-hand piece placed into a pre-numbered sample bag and the left-hand piece placed back into the core tray. This ensure no bias during the sampling process.  Drill hole 22WHDD001 was sampled from 20.9m to 510.5m. Drill hole 22WHDD002 was sampled from 386.98m to 807.50m. These intervals were based on geological observations with the option to extend sampling if high Au was returned in assay.  At the laboratory, sample preparation consisted of crushing, splitting and drying of the sample, the entire sample being crushed to 70% passing 6mm and pulverised to 85% passing 75 microns in a ring and puck pulveriser. The samples were then assayed for gold by 50g fire assay with OES finish and multielement analysis will be completed using a four-acid digest with ICP-OES and MS finish.  GEOCHEMICAL SAMPLING  Historical: Rock chip samples by MIM were selected from subcrop/outcrop in both 1994 and 2000. Initial samples were assayed for Au, Ag, Cu, Pb, Zn, As and Bi, with methodology unknown. In 2000, samples were assayed for Au (using 50g fire assay with AAS finish) and for Cu, Pb, Zn, Ag, As, Bi, Mo and Fe using aqua regia digest and ICP-AES finish.  Sunshine Gold Soil Samples: Samples were collected from between 5 – 15cm below existing surface and sieved to -80 mesh size. Approximately 100g of sample was transported by SHN to the laboratory for assay. Samples were assayed using an aqua regia digest and AAS finish for Au; and a four-acid digest and ICP-OES/MS finish for multi-element.  GEOPHYSICS  The geophysical survey utilised the Quantec Geoscience |
| Drilling<br>techniques | Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).   | DRILLING  Diamond core (DD) drilling was used to obtain samples for geological logging and assaying. Drill holes were collared in PQ-sized core (standard barrel) and changed to HQ3 (triple tube) once in fresh rock. Holes was to be completed in HQ3 sized core, unless ground conditions / rig limitations require a reduction to NQ3 (triple tube) sized core. 22WHDD001 was completed in HQ3; drill hole 22WHDD002 reduced to NQ3 at 522.6m. Drilling utilised a chrome barrel to ensure minimum deviation of the drill hole. HQ3 (and NQ3 if required) core was oriented using an industry standard Reflex ACT III instrument.   |



| Criteria  | Explanation   | Commentary  |
|---|---|---|
| Drill sample<br>recovery                                | Method of recording and assessing core and chip sample recoveries and results assessed.  Measures taken to maximise sample recovery and ensure representative nature of the samples.  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.  | DRILLING  Diamond drill core recovery is maximised through the use of the triple tube system, which preserves integrity of the drill core upon extraction. The driller measures the core and a core block is placed after each extraction (each "run") which reports drilled length and recovery. This is subsequently checked upon arrival at the core shed by the Field Technicians, who measure exact core recovery whilst orienting and measuring the drill core. Any discrepancies are then reported to the drill crew. No significant recovery issues were reported.  |
| Logging   | 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.  Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.  The total length and percentage of the relevant intersections logged.   | DRILLING  All drill holes are geologically logged in full. Geology logs include lithology, alteration, mineralisation, veining and weathering types, styles and intensities. All drill core trays are photographed. Summary logs for both drill holes provided in previous releases (11 November 2022: 22WHDD001 & 2 December 2022: 22WHDD002)  GEOCHEMICAL SAMPLING  Historical: Brief rock chip descriptions were provided  Sunshine Gold Soils: No geological information has been logged whilst directly taking the soil sample. All samples are ensured they are not collected on top of infrastructure (e.g. historical workings) or from alluvial sources (e.g. creeks).   |
| Sub-sampling<br>techniques<br>and sample<br>preparation | If core, whether cut or sawn and whether quarter, half or all core taken.  If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.  For all sample types, the nature, quality and appropriateness of the sample preparation technique.  Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.  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.  Whether sample sizes are appropriate to the grain size of the material being sampled. | DRILLING  Sample intervals are typically 1m length, with minor variations based on lithological, structural or mineralogical contacts (to a minimum of 0.5m or maximum of 1.5m). Drill core is sawn 1cm off the orientation (or cut) line, with the right hand side sampled and the left hand side placed back into the core tray. Duplicates are taken routinely, with the original half core sample cut longitudinally in half again to create two quarter core samples – one to represent the original sample, the other to represent the duplicate sample. QAQC samples (Standards, Duplicates, Blanks) are submitted at a frequency of at least 1 in 10.  GEOCHEMICAL SAMPLING  Historical: Sample sizes are unknown. Rock chips were taken on the available outcrop and subcrop and should be considered as point samples – they do not represent the area as a whole.  Sunshine Gold Soils: Approximately 100g of -80 mesh sample is collected. This is deemed representative of the B-Horizon soil as a point location. Laboratory in-house QAQC protocols are solely used. |
| Quality of assay data                                   | The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.  | DRILLING  |



| Criteria                   | Explanation  | Commentary   |
|----------------------------|--|--|
| and<br>Laboratory<br>tests | 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.  Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision | DD samples were assayed using 50g fire assay with ICP-OES finish for gold which is considered appropriate for this style of mineralisation. Fire assay is considered total assay for gold. Multielement analysis is to be completed using a four-acid digest with ICP-OES and MS finish. Monitoring of results of duplicates, blanks and standards is conducted regularly. QAQC data is reviewed for bias prior to inclusion in any subsequent Mineral Resource estimate.  |
|                            |  | GEOCHEMICAL SAMPLING   |
|                            | have been established.   | Historical: No known QAQC is available for the rock chips. Samples from 1994 were assayed for Au, Ag, Cu, Pb, Zn, As and Bi, with methodology unknown. In 2000, samples were assayed for Au (using 50g fire assay with AAS finish) and for Cu, Pb, Zn, Ag, As, Bi, Mo and Fe using aqua regia digest and ICP-AES finish. Both the 1994 and 2000 samples were collected from the same subcrop and as such can be treated as validation.   |
|                            |  | Sunshine Gold Soils: Soils were assayed using a 25g charge for Au followed by an aqua regia digestion and analysis using ICP-MS/OES, which is considered appropriate for this style of mineralisation and sample type (Au-TL43). All other elements were assayed using a four-acid digest and ICP-MS/OES finish.   |
|                            |  | GEOPHYSICS   |
|                            |  | The geophysical survey utilised the Quantec Geoscience proprietary TITAN-24 DCIP-MT configuration. Transmitter stations were read at 100m intervals along each line. Twelve transmitter lines were completed (spaced 200m). Receivers were spaced 100m, approximately 1.6km long and with a 100m offset north and south of the transmitter line. Transmitter wires were 6mm size and utilised a GDD TX4 transmitter with a Honda EU65i generator. For the IP, current was injected at one side of the survey and all dipoles simultaneously read the response. This occurred throughout the surveyed line as the current was moved along the transmission line. As the current moved all dipoles in front and behind the survey were read, which helped in eliminating biased responses seen in conventional methods. MT surveying was typically completed at night due to lower solar magnetic disturbance. |
|                            |  | QAQC of data was reviewed daily by the on-site geophysical crew, as well as by off-site geophysical consultants. Any QAQC failures in the raw data resulted in recollection of the data.   |
| Verification of            | The verification of significant intersections by either independent or alternative company personnel.  | DRILLING   |
| sampling and assaying      | The use of twinned holes.  Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.  Discuss any adjustment to assay data  | Significant intersections will be routinely monitored through review of drill chips and core, and by site visits by the Exploration Manager. Data is verified and checked in Leapfrog software. No drill holes are twinned. Primary data is collected via hard copy documentation and subsequently entered into spreadsheet format. This is then validated and uploaded to a secure external database, which in turn has further validation checks.  |
|                            |  | GEOCHEMICAL SAMPLING   |
|                            |  | Historical data has been collected as per the open file reports, namely CR15685, CR26454 and CR32917 for Wilbur's Hill.  |
|                            |  | Sunshine Gold Soils: Some soils from the program will be collected near historical data and will be compared in due course.  |



| Criteria                            | Explanation  | Commentary  |  |  |  |
|-------------------------------------|--|---|--|--|--|
|                                     |  | GEOPHYSICS  |  |  |  |
|                                     |  | Geophysical data has been handled and reviewed by the survey company and third-party consultants.   |  |  |  |
| Location of data points             | 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.  Specification of the grid system used.  Quality and adequacy of topographic control.  | Drill hole collar locations are initially set out (and reported) using a hand-held GPS with a location error of +/- 3m. All completed holes are capped and marked and will be accurately surveyed via DGPS at a later date. The drill rig was aligned at the collar location by the site Geologist using a sighting compass. Down hole surveys were completed using an Axis Mine Technology Champ Gyroscope system routinely at intervals of 15m hole depth, 30m hole depth, and every 30m thereafter to end of hole. All drilling is conducted on MGA94 Zone 55 grid system. A topographic survey of the project area has partially been conducted using an in-house drone survey. Collar elevations will be compared and possibly adjusted to this surface. |  |  |  |
|                                     |  | GEOCHEMICAL SAMPLING  |  |  |  |
|                                     |  | Historical soils for Wilbur's Hill by Stavely Minerals are located as points provided in GDA94, Zone 55 format. Historical rock chips reported here were reported in AGD84, Zone 55. All historical data points should be considered as approximations only.  |  |  |  |
|                                     |  | Sunshine Gold Soils: Sample locations are located as points using handheld GPS in GDA94, Zone 55 format.  |  |  |  |
|                                     |  | GEOPHYSICS Survey was designed in GDA94, Zone 55 by a third-party consultant and undertaken by the survey company.  |  |  |  |
| Data spacing<br>and<br>distribution | Data spacing for reporting of Exploration Results.  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.  Whether sample compositing has been applied. | DRILLING  Diamond core drilling has been designed to target specific areas identified in geological, geochemical and geophysical programs. As such, the drill holes are not consistently spaced at this time. Should further drilling be required to establish a mineral resource, a required drill spacing will be developed. No subsequent sample compositing will be applied on the raw assay results for the reported intervals.  |  |  |  |
|                                     |  | GEOCHEMICAL SAMPLING  |  |  |  |
|                                     |  | Historical: Rock chip samples by MIM were selected at an ad hoc basis, with no defined sampling spacing.  |  |  |  |
|                                     |  | Sunshine Gold Soils: A nominal 100m x 100m grid was used for the soil sampling area.  |  |  |  |
|                                     |  | GEOPHYSICS  |  |  |  |
|                                     |  | Transmitter stations were read at 100m intervals along each line which ran east-west. Twelve transmitter lines were completed (spaced 200m). Receivers were spaced 100m, approximately 1.6km long and with a 100m offset north and south of the transmitter line.   |  |  |  |
| Orientation of data in relation     | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.   | DRILLING  |  |  |  |



| Criteria                   | Explanation  | Commentary  |
|----------------------------|--|---|
| to geological<br>structure | 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. | Drill holes have been designed to intersect the target rhyolite as orthogonally (perpendicular) as possible, with orientation based on geological and geophysical interpretation.   |
|                            |  | GEOCHEMICAL SAMPLING  |
|                            |  | Historical & Sunshine Gold Rock Chips – Samples are considered point samples only and no orientation is derived from the individual sample.   |
|                            |  | Historical and Sunshine Gold Soils – samples were aligned in east-west trending lines, designed to cover the north-south trending rhyolite intrusives.  |
|                            |  | GEOPHYSICS  |
|                            |  | The survey was designed as twelve transmitter lines which ran east-west, perpendicular to the lithological trend of the area where the target intrusive is interpreted to strike roughly north-south.   |
| Sample                     | The measures taken to ensure sample security.  | DRILLING  |
| security                   |  | Individual core samples were cut, sampled and bagged into calico bags by the SHN field staff at SHN's core facility. Five samples are then placed into marked polyweave bags and will be transported to the laboratory upon completion of the drill hole by SHN field staff.  |
|                            |  | GEOCHEMICAL SAMPLING  |
|                            |  | Historical – Sample security measures are unknown.  |
|                            |  | Sunshine Gold – Samples were pre-numbered prior to collection. Samples are sieved when collected and placed immediately into a paper geochemical bag marked with the sample ID. The paper bags are then placed in boxes or calicos with a numbered range. The samples are then transported by SHN to the laboratory. No third party was involved with the handling of the sample between collection and drop off. |
| Audits or reviews          | The results of any audits or reviews of sampling techniques and data.  | Sunshine Gold: The sampling techniques are regularly reviewed during the program and further review will take place prior to future drilling.   |



# **Section 2 - Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section.)

| Criteria   | Explanation  | Commentary  |  |  |   |                                    |                                      |  |   |
|--|--|---|--|--|---|------------------------------------|--------------------------------------|--|---|
| Mineral<br>tenement and<br>land tenure<br>status | Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.  The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. | <ul> <li>The Ravenswood West Project consists of EPMs 26041, 26152, 26303, 26404, 27824 and 27825. All EPMs are owned 100% by Ukalunda Pty Ltd or XXXX Gold Pty Ltd, both wholly owned subsidiaries of Sunshine Gold Limited. EPMAs 28237 and 28240 are owned 100% by XXXX Gold Pty Ltd, a wholly owned subsidiary of Sunshine Gold Limited. The tenements are in good standing and no known impediments exist.</li> <li>Two current, third party Mining Leases exist on EPM 26041 – named ML 10243 (Delour) and ML 10315 (Podosky). One further current, third party Mining Lease exists partially on EPM 26152 – named ML 1529 (Waterloo).</li> <li>All of EPM 26303 and part of EPM 26041 are situated within the Burdekin Falls Dam catchment area</li> </ul> |  |  |   |                                    |                                      |  |   |
| Exploration<br>done by other<br>parties          | Acknowledgment and appraisal of exploration by other parties.  | Hill, New C<br>Cormepar M   | onsolidated(<br>1inerals, Geo <sub>l</sub>     | Gold Fields, N<br>beko, Esso, Da                         | oranda, Pla<br>Impier Minir                 | net Metals, MA                     | AT, Nickel<br>Ravenswood             | Mines Ltd, Min<br>d Resources, Da                          | amely North Broken<br>defields, Kennecott,<br>alrymple Resource,<br>M, BHP, and Stavely     |
| Geology  | Deposit type, geological setting and style of mineralisation.  | within the Ra<br>granitoids an<br>intrusion-rela  | ivenswood Ba<br>nd lesser sed<br>ated gold dep | atholith of the C<br>imentary packa<br>posits, as well a | harters Tow<br>ages. The ar<br>as granitoid | ers Province, w<br>ea is considere | hich consisted by SHN to<br>molybden | ts primarily of Or<br>to be prospectiv<br>um, silver and r | ne project is hosted<br>rdovician to Silurian<br>ve for orogenic and<br>are earth deposits. |
| Drill hole<br>Information                        | the exploration results including a tabulation of the l  |   | Table  |  | ng conducte                                 | d at the prospe                    | ct area.                             |  |   |
|  | in metres) of the drill hole collar<br>dip and azimuth of the hole<br>down hole length and interception depth  | Coordinates listed in MGA 94, Zone 55 Wilbur's Hill:  |  |  |   |                                    |                                      |  |   |
|  |  | Hole ID   | Easting  | Northing   | RL  | Azimuth<br>(Grid)                  | Dip                                  | Hole Depth   |   |
|  | hole length.<br>If the exclusion of this information is justified on the basis that  | 22WHDD001   | 472792   | 7782470  | 338   | 275                                | -55                                  | 510.5  |   |
|  | the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case   | 22WHDD002   | 472988   | 7782381  | 313   | 265                                | -62                                  | 807.5  |   |



| Criteria   | Explanation  | Commentary   |
|--|--|--|
| Data<br>aggregation<br>methods   | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.  Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.  The assumptions used for any reporting of metal equivalent values should be clearly stated | Sunshine Gold diamond drilling is the first drilling conducted at Wilbur's Hill. Significant intercepts reported are individual samples only.  Pyrite percentage is an estimate that has been stoichiometrically calculated. The calculation assumes that all sulphide is pyrite. It is worth noting that chalcopyrite was noted in minor quantities in select intervals in 22WHDD001. The formula used to calculate pyrite percentage was Pyrite = % Sulphur / 0.5333 (Weight % S in Pyrite). Pyrite Percentage was composited using a 1% cut off with up to 3m of internal dilution.   |
| Relationship<br>between<br>mineralisation<br>widths and<br>intercept<br>length | These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').   | The geometry of the mineralisation is subject to ongoing interpretation and as such intervals are reported in downhole length only.  |
| Diagrams   | Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.  | All relevant diagrams are reported in the body of this report  |
| Balanced<br>reporting  | Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.  | Comments on mineralisation are considered representative for the intervals quoted based on summarising geological logs, however local variations within the zones are expected.  Pyrite can be known to host gold mineralisation in some deposit styles, including breccia hosted gold and porphyry gold deposits. However, at this stage, there is no known correlation between pyrite referred to in this report and anomalous gold content.  The provided drill hole section shows resistivity contours which are summarised from the 2D inversion section on Line 1350. "Low Resistivity" refers to modelled resistivity of <1000 Ωm and "High Resistivity" of >5000 Ωm. |
| Other<br>substantive<br>exploration<br>data                                    | Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.  | Relevant data is reported in the body of the report  |



| Criteria     | Explanation  | Commentary   |
|--------------|--|--|
| Further work | The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale stepout drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | Further work is addressed in the body of this report . |