

## LARGE-SCALE CU-MO SYSTEM CONFIRMED AT TITOV, RAVENSWOOD WEST

Sunshine Gold Limited (ASX:SHN, "Sunshine Gold", "the Company") is pleased to announce results from the first two holes drilled at the Titov prospect, Ravenswood West.

### HIGHLIGHTS

- RC drilling confirms large-scale vein and alteration system at Titov. Quartz veining, intense chlorite-sericite alteration and associated molybdenite and chalcopyrite have been logged in broad intervals in all eight drill holes. Titov is the first of at least five of Cu-Mo prospects that will be tested by Sunshine Gold along a 15km prospective corridor. Assays results from the first two holes into Titov include:
  - 21TVRC001 **121m @ 0.35 % Cu, 0.11 % Mo, 1.99 g/t Ag**, from 1m  
Incl. **1m @ 1.38 % Mo, 1.86 g/t Ag**, from 13m  
Incl. **4m @ 0.86 % Mo, 4.72 g/t Ag**, from 31m
  - 21TVRC002 **91m @ 0.25 % Cu, 0.05 % Mo, 1.37 g/t Ag**, from surface  
**8m @ 0.26 % Cu, 0.06 % Mo, 1.49 g/t Ag**, from 109m  
**14m @ 0.25% Cu, 0.04 % Mo, 1.24 g/t Ag**, from 135m
- First pass reconnaissance drilling at Keans Cu-Mo-Au-Ag prospect was completed on 18 October 2021. Fifteen holes (1,830m) were drilled testing a series of veins reconnaissance program at Keans. The program has intersected significant mineralisation in the form of discrete quartz – chalcopyrite–molybdenite veins in several holes.



**Figure 1. Photo of the broad vegetation anomaly at Titov. Green bags from holes 21TVRC003 and 21TVRC004 can be seen in the left background.**

Sunshine Gold's Managing Director, Damien Keys commented: "We are encouraged by the potential of Titov where we have confirmed the large-scale system potential, the southerly plunge to mineralisation and gathered a full geochemical suite. Titov is the first of a suite of Cu-Mo prospects that will be tested along a 15km long corridor. We will maintain momentum at Titov with geophysical surveys, diamond drilling and soil sampling commencing in November 2021. Pleasingly, drilling at Keans has also intersected sulphide mineralisation, particularly in holes drilled around the two historic mine shafts. We look forward to receiving the remaining assays from both programs."

### SUNSHINE GOLD LIMITED (ASX:SHN)

#### Directors:

Mr Alec Pismiris  
Dr Damien Keys  
Mr Anthony Torresan  
Mr Paul Chapman  
Mr Les Davis

#### Postal Address:

PO Box 572  
Floreat WA 6014  
**Queensland Office:**  
3/50 Tully Street  
South Townsville QLD 4810

#### Contact:

T | +61 8 6245 9828  
E | [info@shngold.com.au](mailto:info@shngold.com.au)  
W | [www.shngold.com.au](http://www.shngold.com.au)  
ABN 12 063 388 821

#### Capital:

Ordinary shares: 467,822,730  
Unquoted shares: 88,000,000 (24m Esc)  
Deferred shares: 100,000,000 (24m Esc)  
Unlisted options: 71,000,000 (24m Esc)  
Unlisted plan options: 2,000,000  
Perf Rights: 17,000,000 (24m Esc)

### TITOV DRILL PROGRAM (Sunshine Gold 100%)

Eight RC holes (1,550m) were drilled at Titov. Assay results have been returned for the first two holes drilled at Titov; 21TVRC001 and 21TVRC002. The holes, drilled from the same drill pad (-60 dip and vertical). Results include;

Hole ID	From (m)	To (m)	Interval (m)	Cu %	Mo %	Ag g/t
21TVRC001	1	122	121	0.35	0.11	1.99
	135	137	2	0.36	-	1.93
	147	148	1	0.22	-	0.92
	167	168	1	0.40	-	1.37
	172	173	1	0.33	-	1.44
	176	177	1	0.21	-	0.69
21TVRC002	0	91	91	0.25	0.05	1.37
	109	117	8	0.26	0.06	1.49
	121	122	1	0.22	0.11	1.00
	135	149	14	0.25	0.04	1.24
	152	153	1	0.50	-	1.86
	155	156	1	0.24	-	1.17
	161	168	7	0.26	-	1.37
	182	185	3	0.26	-	1.92

**Table 1. Assay results > 0.20% Cu for 21TVRC001 and 21TVRC002.**

The Titov drill program's objectives were to:

- Confirm large thickness intervals of historic Cu-Mo drill intersections;
- Assess potential for Au-Ag mineralisation within the Cu-Mo mineralisation;
- Define the dip of the mineralised envelope;
- Define zones of high-grade mineralisation within the broader mineralised envelope; and
- Test the nature of the emerging IP chargeability anomaly at depth with downhole geophysics on the deepest drilling.

Drilling has confirmed that a large-scale quartz vein and chlorite-sericite alteration system is present (Table 1). The pale coloured alteration zone is visually distinct from the red-black coloured host granite (Figure 4). Molybdenite ( $\text{MoS}_2$ ) and coarse chalcopyrite ( $\text{CuFeS}_2$ ) are common in quartz veined intervals with fine chalcopyrite disseminated through the altered porphyry. A distinct south dipping footwall to the mineralisation is observed in all eight drill holes drilled to date. Discrete intersections of copper and silver are associated with quartz veining in the footwall to the main chlorite – sericite alteration system.

Gold is confined to discrete intervals with a peak value of 2m @ 0.19 g/t obtained in 21TVRC001 (54-56m). The gold results do not explain the surface rock chip anomalism from Titov (samples to 2.03 g/t Au) nor the significant 20ppb Au soil gold anomaly. The results from the remaining six holes will be assessed before a final determination on the gold prospectivity can be reached.



Downhole IP (Induced Polarisation) is planned in November 2021 to assess the potential for higher-grade mineralisation at depth. Two diamond drill holes are planned. One of the holes will test mineralisation at depth to: ascertain any change in mineralisation character/grade; confirm vein orientations; and determine mineral timing relationships.

A soil sampling campaign is also planned to test the Titov surrounds. Potential evidence for boiling textures (epithermal mineralisation) has been recognised in field collected samples found ~300m north of Titov (Figure 5). The breccias were found in the same location that returned historic rock chip samples including 3.95% Cu, 418 g/t Ag, 0.16 g/t Au and 0.23% Zn.



*Figure 2. Aerial photograph of looking east at Titov: with recent Sunshine Gold drilling (21TVRC001 to 21TVRC008).*



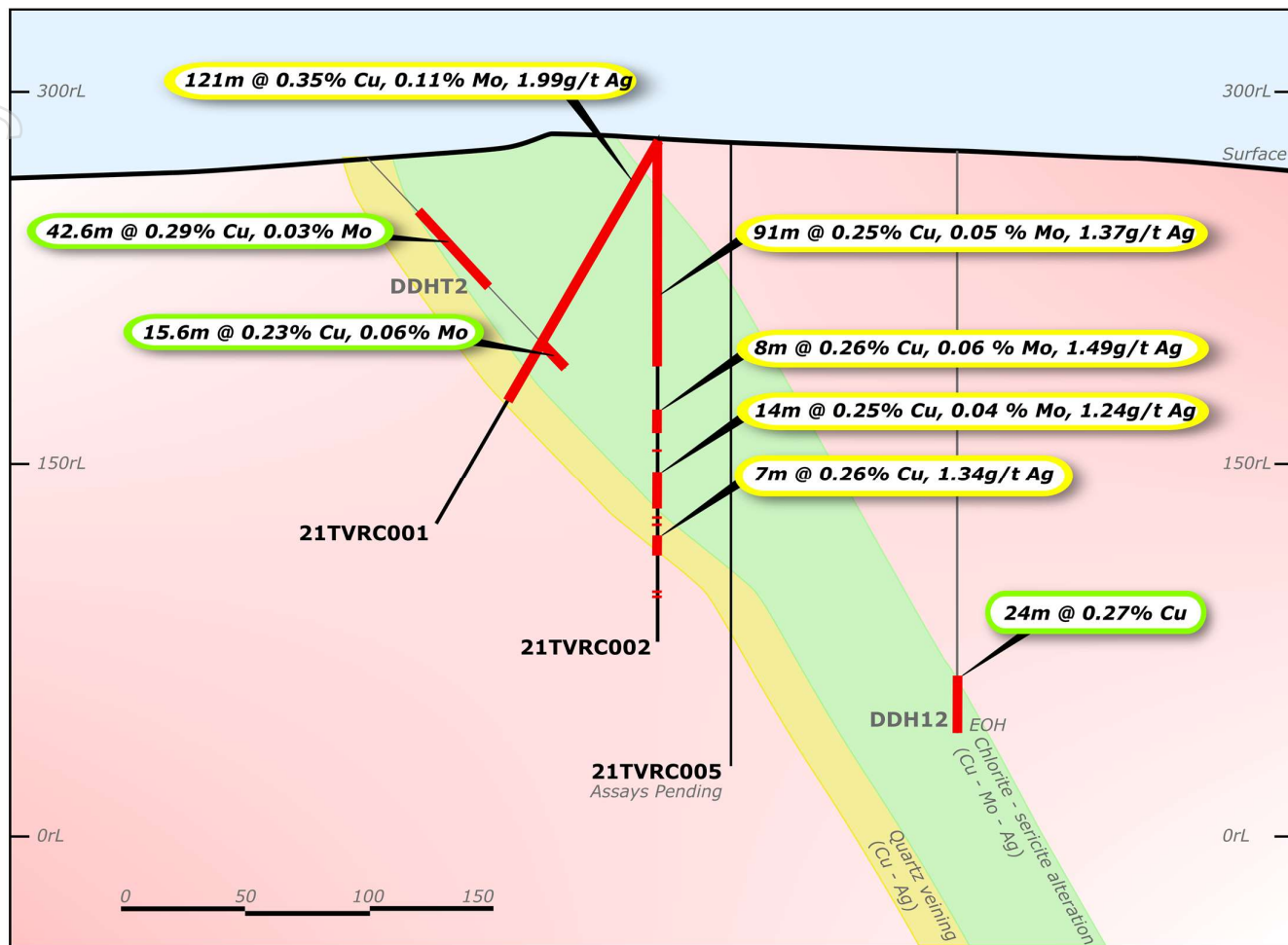


Figure 3. Cross section through 21TVRC001, 21TVRC002 and 21TVRC005.

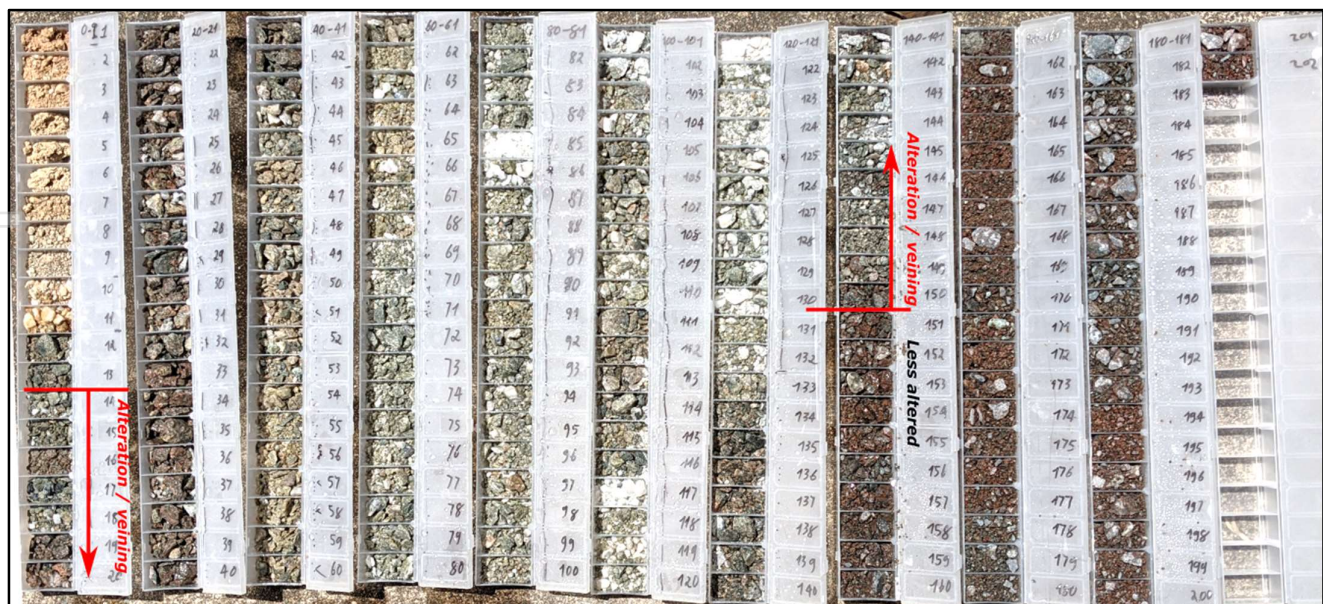


Figure 4. Chip trays from 21TVRC002 with lighter altered veining interval highlighted.



**Figure 5. Mineralised breccia from (472689mE, 7784524mN).**

Hole ID	From (m)	To (m)	Interval (m)	Cu (%)	Mo (%)
DDH4	3.0	145.1	142.0	0.32	0.05
DDH5	0.0	110.9	110.9	0.35	0.09
DDH6 *	211.4	234.7	23.3	0.27	-
DDH9	0.0	44.4	44.4	0.22	0.01
DDH10	6.1	103.4	97.3	0.41	0.10
DDH11	94.5	109.7	15.2	0.51	-
DDH11	181.4	189.0	7.6	0.25	-
DDH12 ^	61.0	91.4	30.5	0.25	-
DDHT2	30.5	73.2	42.7	0.29	0.03
DDHT2 *	103.6	119.2	15.5	0.23	0.06
DDHT3 *	91.4	117.3	25.9	0.37	0.02

\* Interval coincides with bottom of hole

^ Hole did not reach Titov target surface

**Table 2. Significant assays from 1950/60s Titov drilling.**

#### **KEANS DRILL PROGRAM (Sunshine Gold 100%)**

A fifteen-hole (1,830m) reconnaissance program was completed at Keans Cu-Mo-Au-Ag on 17 October 2021. The drilling tested a suite of outcropping quartz–sulphide veins and geophysical targets. The drilling intersected discrete veins with chlorite–sericite alteration haloes. Locally the veins contained abundant sulphide (see Figure 6), particularly in holes drilled near the historic gold mines (Shaft A and Heurs Shaft).



**88 - 89m    89 - 90m    90 - 91m    91 - 92m    92 - 93m**



**Figure 6. RC Chips containing chalcopyrite and molybdenite in 21KNRC004.**

Keans is a series of outcropping quartz–sulphide veins within a granodiorite that were initially worked for gold in the 1930s. The two shafts, Shaft A and Heurs Shaft, were sunk to depths of ~20m and ~7m respectively. No production totals are available. However, Shaft A reported mined grades of 28 g/t Au near the top of the shaft decreasing to 3 g/t Au at the base. Heurs Shaft reported 46 g/t Au mined grades at top of the workings decreasing to 15 g/t Au at base (Company Report #465).

The first documented exploration at Keans in 1959, noted high amounts of molybdenite within the shaft spoils which led explorers to target porphyry-style mineralisation. Rock chip samples taken from the prospect were highly encouraging, including highest values of **25% Cu, 1.03% Mo, 8.7 g/t Au and 183 oz/t Ag** across various samples (Company Report #465).

Eight diamond holes were drilled at Keans between 1959 and 1962. Assay information is limited to select intersections of Cu, Mo, Au and Ag. Both the drill core and the “drill sludge” were assayed. Assays from core record impressive Mo results including **3.3m @ 1.02% Mo** (Hole R1) and **13.8m @ 0.26% Mo** (Hole R4). Gold showed a best intercept of **3m @ 1.36 g/t Au** (Hole R2) from sludge sampling. This result, whilst deemed unreliable, highlights the potential for gold in the system. Elevated silver including **0.5m @ 61 g/t Ag** (Hole R6) was also recorded. No further drilling has been recorded at Keans.

Recent field mapping of Keans shows two dominant vein orientations. Mo and Cu (malachite and azurite) are commonly seen in both vein sets. A series of 1-4m thick, north-south oriented veins are mapped with a moderate, westerly dip and are laterally continuous for up to 200m in areas. Three east-west oriented costeans were cut in 1962 to sample prominent north-south veins. A second set of east-west oriented veins have also been mapped throughout the prospect. The east-west veins are often narrower (50cm-2m thickness) but are typically sheeted and are believed to be the mineralisation host in Shaft A. Many of the significant rock chip assays reported have been sampled from the east-west oriented veining.





**Figure 7. Sunshine Gold's MD, Damien Keys and Exploration Manager, Matt Price, mapping a 1962 costean at Keans. The 4m wide, N-S striking, quartz vein contained abundant fine-grained molybdenite.**

A major regional fault, easily defined in magnetics, passes to the south of Keans. The fault is inferred to be the Buck Reef Fault, a key structural feature of the Ravenswood Gold Mine (>9 Moz Au). In the Ravenswood Gold Mine, higher gold grades are observed on structures near the intersection with the Buck Reef Fault.

The planned reconnaissance drilling program will test several veins south of Keans near the Buck Reef Fault for signs of enrichment. Sunshine Gold's Keans RC drill campaign aims to:

- Assess the Cu-Mo-Au-Ag prospectivity of both north-south and east-west oriented vein sets, especially near untested historic workings; and
- Assess veins in the south of the Keans prospect area that may be associated with the regionally significant Buck Reef Fault.

#### **OTHER ACTIVITIES**

Soil sampling is soon to commence in the greater Titov area. The sampling will test a full multi-element suite on 200m x 50m grid space. The program will appraise metal zonation and assist with further target vectoring. Two diamond holes are planned to be drilled at Titov in late November. The holes will provide information on the mineralised system at depth.

Drilling will recommence at the Triumph Gold Project in November 2021. The drilling program will comprise over 8,500m of both diamond and RC in preparation for a maiden JORC 2012 Resource to be released in March 2022.

Field mapping is also planned for the Investigator Copper Project in November 2021.

### About Molybdenum (Mo)

Mo is a silvery metal with the sixth-highest melting point of any element, it can withstand extremely high temperatures and is highly resistant to corrosion. Mo is a great steel alloy because of its strength and high melting point, which preserves and protects steels from corrosion, embrittlement, and decay. Mo is mainly used as an alloying agent in stainless steel and also in the manufacture of aircraft parts and industrial motors.

Mo is typically found in quantities of 0.01%-0.25% in porphyry or skarn deposits and is often associated with larger copper and tungsten occurrences.

China is the world's biggest consumer of molybdenum.

The current Mo price is US\$45.00/kg.



Figure 8: 5-year Mo price chart (source Trading Economics)

### PLANNED ACTIVITIES

- Oct 2021 quarter: Infill and extensional drilling at Triumph Au Project.
- Oct 2021 quarter: Early-stage field work at Ravenswood West.
- October 2021: September 2021 quarterly report.
- 10-12 November 2021: Presentation at the Noosa Mining Investor Conference.
- 18 November 2021: Annual General Meeting.
- November 2021: Diamond drill Titov Cu-Mo-Au-Ag.
- November 2021: Field mapping Investigator Cu Project.
- 10-11 February 2022: Presentation at the Australian Gold Conference, Sydney.
- 15-17 February 2022: Presentation at the RIU Explorers Conference, Fremantle.
- March 2022: Triumph maiden JORC Resource estimate.



## ENDS

For further information:

Dr Damien Keys  
Managing Director  
Telephone: +61 428 717 466  
E-mail: [dkeys@shngold.com.au](mailto:dkeys@shngold.com.au)

Mr Alec Pismiris  
Director & Company Secretary  
Telephone: +61 402 212 532  
E-mail: [alec@lexconservices.com.au](mailto:alec@lexconservices.com.au)

This ASX announcement is authorised for market release by the Board of Sunshine Gold.

### Competent Person's Statement

*The information in this report that relates to Exploration Results is based on, and fairly represents, information compiled by Dr Damien Keys, a Competent Person who is a Member of the Australian Institute of Geoscientists (AIG). Dr Keys 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. Dr Keys consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

Hole ID	Easting	Northing	Hole Depth	Dip	Azimuth
21TVRC001	473097	7784205	178	-60	310
21TVRC002	473097	7784205	202	-90	0
21TVRC003	472987	7784131	214	-90	0
21TVRC004	473041	7784176	202	-90	0
21TVRC005	473087	7784164	250	-90	0
21TVRC006	473148	7784191	214	-90	0
21TVRC007	473144	7784249	178	-90	0
21TVRC008	473144	7784249	112	-60	310
21KNRC001	481604	7774546	178	-50	175
21KNRC002	481724	7774491	160	-50	175
21KNRC003	481883	7774257	106	-50	120
21KNRC004	481936	7774253	106	-60	180
21KNRC005	482096	7774128	100	-60	170
21KNRC006	482036	7774125	118	-60	170
21KNRC007	482160	7774148	82	-60	140
21KNRC008	482202	7774016	118	-50	135
21KNRC009	482154	7774010	124	-60	160
21KNRC010	482027	7773851	142	-50	170
21KNRC011	482699	7773384	136	-50	140
21KNRC012	482450	7773559	100	-60	150
21KNRC013	482013	7773429	100	-50	130
21KNRC014	481946	7773182	106	-60	170
21KNRC015	483724	7773938	154	-50	170

**Table 3. Collar location and survey details for drilled holes.**

## **ABOUT SUNSHINE GOLD**

Sunshine Gold is focused on its high-quality gold and copper projects in Queensland comprising a 100% interest in the Triumph, Hodgkinson, Investigator and Ravenswood West projects.

### ***Triumph Gold Project (EPM18486, EPM19343: 100%)***

Triumph is centred around the historical Norton gold field from which ~20,000 oz of gold was extracted between 1879-1941. The project is located 50km south of the mining hub of Gladstone and comprises two exploration permits covering 138km<sup>2</sup>. Triumph is located within the Wandilla Province of the New England Orogen. Nearby large gold deposits include Mt Rawdon (2.8 Moz Au), Mt Morgan (8 Moz Au and 0.4 Mt Cu) and Cracow (2 Moz Au). Triumph is a 15km<sup>2</sup> intrusion related gold system which has the potential to host both discrete high-grade vein deposits and large-scale, shear hosted gold deposits.

### ***Hodgkinson Gold Copper Project (EPM18171, EPM19809, EPM25139, EPM27539, EPM27574, EPM27575: 100%)***

Hodgkinson is located 100km northeast of Cairns in North Queensland. The project comprises four exploration permits and two exploration lease applications covering 365km<sup>2</sup>. 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. Hodgkinson has been extensively explored for tungsten, owing to its proximity to the Watershed and Mt Carbine tungsten deposits, but underexplored for gold. BHP-Utah International completed stream sediment sampling across the entire tenure in the late 1980's and confirmed that the area was anomalous in gold as well as tungsten.

### ***Investigator Copper Project (EPM27344, EPM27345: 100%)***

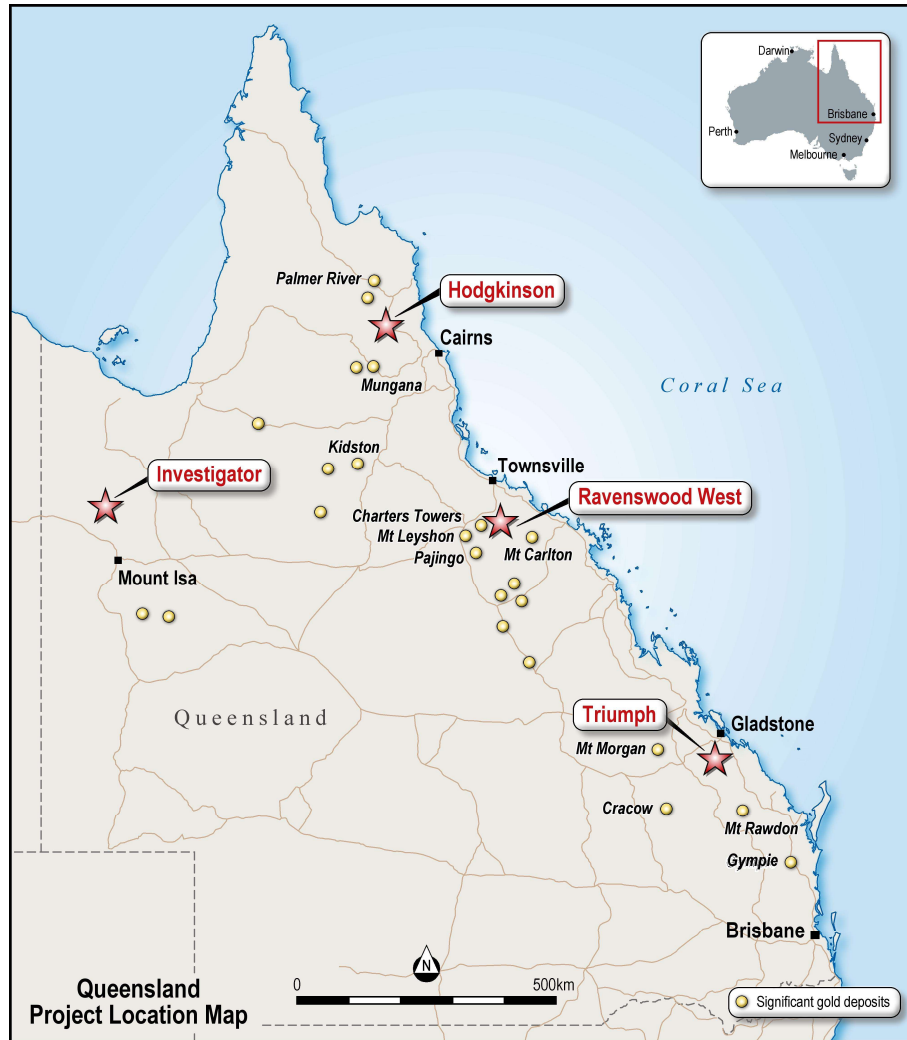
Investigator comprises two exploration permits covering 115km<sup>2</sup>. It is located 110km north of Mt Isa and 12km south of the Mt Gordon Copper Mine. Investigator has seen no modern exploration and importantly, no holes have been drilled in the most prospective stratigraphic and structural positions.

### ***Ravenswood West Gold-Copper-Rare Earths Project (EPM 26041, EPM 26152, EPM 26303, EPM 26304: 100%)***

Ravenswood West is comprised of a significant holding (392 km<sup>2</sup>) of highly prospective gold-copper ground within 5 kms of the Ravenswood Mining Centre (4 Moz Au produced, a further 4.3 Moz Au in Resource and 1.8 Moz in Ore Reserves). The Ravenswood Mining Centre was purchased by EMR Capital and Golden Energy & Resources Ltd. (SGX:AUE) from Resolute Mining Ltd. (ASX:RSG) in 2020 for up to \$300m and is presently subject to a ~\$200m upgrade. In addition, there are three other gold mills within 100km, two of which are toll treating.

The project is also highly prospective for intrusion-related and orogenic gold, porphyry copper-molybdenum-gold and rare earth elements. Ravenswood West covers 20-25km of strike along a major fault that links Pajingo (4 Moz) and Ravenswood (9.8 Moz) and contains numerous historic gold workings.





## JORC Code, 2012 Edition 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 (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.</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. In cases where 'industry 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.</li> </ul>	<p><b>Historical Drilling:</b></p> <p><b>Titov</b> – North Broken Hill – Diamond half core samples (CR1838) as resampled by New Consolidated Goldfields. Half core samples also taken for New Consolidated Goldfields and Planet Metals holes, and Placer Exploration diamond tails. RC chips for Placer were riffle split as per industry standard.</p> <p><b>Keans</b> – Diamond full core samples alongside sludge samples. (CR476 &amp; CR1776). It is believed those reported in this release were core samples.</p> <p><b>Historical Rock Chips</b> – Were collected from outcrop or float. Partial records exist of provenance. No records are present on sample size.</p> <p><b>Sunshine Gold Rock Chips:</b> Rocks were selected by the field geologist and recorded as either in situ (outcrop), float (alluvial) or from working spoil. A standard geopick hammer is utilised to collect a sample typically of 1 – 2kg size along the required outcrop ensuring care is taken to only sample the required unit.</p>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<p><b>Historical Drilling:</b></p> <p><b>Titov</b> – North Broken Hill – Diamond drilling, unorientated, unknown size but likely similar to that reported at Keans.</p> <ul style="list-style-type: none"> <li>New Consolidated Goldfields – Diamond drilling, unorientated, AXT size.</li> <li>Planet Metals – Six "dust" holes (percussion); and nine diamond core holes collaring in NMLC up to approximately 68ft then drilled in NQ for the remainder.</li> <li>Placer – Three RC holes using a 4.75" hammer; followed by one diamond tail on hole TIRC-1 (renamed TIRD-1) using NQ core.</li> </ul> <p><b>Keans</b> – Diamond drilling, unorientated, collaring in NX size, reducing to BX around 34ft, AX at 49ft and EX at 99ft (Hole R1).</p>



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>	<p><b>Historical Drilling:</b></p> <p><b>Titov</b> – North Broken Hill and New Consolidated Goldfields – No records available.</p> <p>Planet Metals – no record of dust hole recoveries; Diamond core recoveries typically over 90%.</p> <p>Placer – Recoveries for RC or diamond tail not recorded.</p> <p><b>Keans</b> – Recoveries for holes R1 to R6 averaged 83.4% (CR1776).</p>
<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>	<p><b>Historical Drilling:</b></p> <p><b>Titov</b> – North Broken Hill &amp; New Consolidated Goldfields – No geological logs have been located.</p> <ul style="list-style-type: none"> <li>Planet Metals – Geological logs obtained for all diamond core intervals. No logs for dust holes.</li> <li>Placer – Full logs located.</li> </ul> <p><b>Keans</b> – Holes reportedly logged in full but only log for hole R1 located. No photos are available.</p> <p><b>Historical Rocks:</b></p> <p>Partial logging was undertaken to record rock type, alteration and mineralisation.</p> <p><b>Sunshine Gold Rock Chips:</b></p> <p>Rocks have been logged for lithology, alteration, mineralisation and veining and recorded in the Sunshine Gold Geochemistry Database. Photos are taken of all submitted samples.</p>
<b>Sub-sampling techniques, 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> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p><b>Titov</b> – North Broken Hill &amp; New Consolidated Gold Fields – Initial selective samples taken by New Broken Hill, followed up by full half core repeat sampled of NBH core by NCGF, and on NCGF core.</p> <p>Planet Metals – Diamond holes were typically sampled as half core in 5ft intervals; Dust holes were sampled in 5ft intervals after splitting.</p> <p>Placer – RC samples were riffle split to 5kg and composited over 2m. Core samples were half core and composited to 2m.</p> <p><b>Historical Rock Chips:</b></p> <p>Keans &amp; Titov – No sampling methodologies available.</p> <p><b>Sunshine Gold Rock Chips:</b></p> <p>Sample size of 1 – 3kg is deemed representative as a “point sample” within a referenced outcrop or location. They are not deemed representative of the entire outcrop or prospect as a whole. No Sunshine Gold QC procedures used for rock chips. Samples have utilised the laboratory in-house QAQC protocols.</p>

Criteria	JORC Code explanation	Commentary
Quality of data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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 have been established.</li> </ul>	<p><b>Historical Drilling:</b></p> <p><b>Titov</b> – North Broken Hill – the only record states the holes were analysed spectrographically for Cu and Mo.</p> <p>New Consolidated Goldfields – Cu was reportedly determined by “wet assay method” and Mo by quantitative spectrographic analyses.</p> <p>Planet Metals – Assayed for Cu, Pb, Ag and Au in the dust holes using AAS. It is unknown what methods were used for the diamond holes, however only Cu and Mo were reported.</p> <p>Placer – Samples were assayed for Au using 50g fire assay with AAS finish, and for Cu, Pb, Zn, and Ag by perchloric digest with AAS finish.</p> <p><b>Keans</b> – No information is available on the analysis methodology, however it is likely similar to that at Titov.</p> <p>Sunshine Gold Rock Chips:</p> <p>Rock chips were assayed using a 50g fire assay for gold which is considered appropriate for this style of mineralisation. Fire assay is considered total assay for gold. All other elements were assayed using ICP-MS.</p> <p><b>Historical Rocks:</b> No QAQC or raw data available.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<p><b>Historical Datasets:</b></p> <p>Historical data is reported as per the open file reports. No twinned holes are available for direct correlation to drill hole. Primary data is largely unavailable. Internal validation has been undertaken by Sunshine Gold personnel. Historical depth intervals have been converted from feet into metres. No conversions on assays have been undertaken here.</p> <p>Sunshine Gold drilling will assist in validating some of the historical intercepts.</p> <p><b>Sunshine Gold Rock Chips:</b></p> <p>All rock chips are considered valid for that point location only if outcrop, or as an example of ore/waste material if mullock.</p> <p><b>Sunshine Gold Soils:</b></p> <p>Some soils from the program will be collected near historical data and will be compared in due course.</p>



Criteria	JORC Code explanation	Commentary
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<p><b>Historical Drilling:</b></p> <p>Keans &amp; Titov – Collar locations are approximates only and are calculated using historical maps roughly registered into GDA94 Zone 55 projection.</p> <p><b>Historical Rocks:</b></p> <p>Provided in QLD open file datasets, downloaded in CSV format.</p> <p><b>Sunshine Gold Rock Chips and Soils:</b></p> <p>Rock chips locations are located as points using handheld GPS in GDA94, Zone 55 format.</p>
<b>Data Spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<p><b>Historical Drilling:</b></p> <p>Historical drill holes were exploration holes only and therefore did not have a set spacing. The holes were considered appropriately located for the target.</p> <p><b>Historical and Sunshine Gold Rock Chips:</b></p> <p>No data spacing has been applied to the rock chip samples due to the nature of the technique.</p>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<p><b>Historical Drilling:</b></p> <p>Drill holes in order to intersect the interpreted mineralisation trends as orthogonal (perpendicular) as possible. These trends were determined using surface geology and target interpretations.</p>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<p><b>Historical Datasets:</b></p> <p>No information on sample security is available.</p> <p><b>Sunshine Gold Rock Chips:</b></p> <p>Samples were allocated an identification number upon collection, which was written on the calico sample bag by the Geologist. The samples were then placed into plastic bags (approximately five per bag) and transported by Sunshine Gold to the laboratory. No third party was involved with the handling of the sample between collection and drop off.</p>

Criteria	JORC Code explanation	Commentary
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<p><b>Historical Datasets:</b></p> <p>Sampling techniques and data are considered standard for the time at which they were collected. As with all historical datasets, there is an acknowledged gap in the available information and as such should be treated with caution.</p> <p><b>Sunshine Gold:</b></p> <p>The sampling techniques are regularly reviewed during the program and further review will take place prior to future drilling.</p>

Section 2 – Reporting of Exploration Results (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<p>The Ravenswood West Project consists of EPMs 26041, 26152, 26303 and 26404, and EPMA's 27824 and 27825. All EPMs are owned 100% by Ukalunda Pty Ltd, a wholly owned subsidiary of Sunshine Gold Limited. EPMA's 27824 and 27825 are owned 100% by XXXX Gold Pty Ltd, also a wholly owned subsidiary of Sunshine Gold Limited. The tenements are in good standing and no known impediments exist.</p> <p>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).</p> <p>All of EPM 26303 and part of EPM 26041 are situated within the Burdekin Falls Dam catchment area.</p>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>Numerous exploration companies have explored within the Ravenswood West Project area, namely North Broken Hill, New Consolidated Gold Fields, Noranda, Planet Metals, MAT, Nickel Mines Ltd, Minefields, Kennecott, Cormepar Minerals, Geopeko, Esso, Dampier Mining, IMC, CRA, Ravenswood Resources, Dalrymple Resource, BJ Hallt, Poseidon, Haoma Mining, Kitchener Mining, Placer, Goldfields, Carpentaria Gold, MIM, BHP, and Stavely Minerals.</p>

Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>The Ravenswood West Project area is located within open file 100k map sheet area 8257.</p> <p>The project is hosted within the Ravenswood Batholith of the Charters Towers Province, which consists primarily of Ordovician to Silurian granitoids and lesser sedimentary packages. The area is considered by Sunshine Gold to be prospective for orogenic and intrusion-related gold deposits, as well as granitoid-related copper, molybdenum, silver and rare earth deposits. There also appears to be prospectivity for MVT deposits on the fringes of the tenement area.</p>
<b>Drill hole information</b>	<ul style="list-style-type: none"> <li>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>o easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and intercept depth</li> </ul> </li> <li>• hole length.</li> </ul>	Refer Table 1.
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Historical drilling results are reported as previously reported in open file data.



Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<p>The geometry of the mineralisation is subject to ongoing interpretation and as such intervals are reported in downhole length only.</p> <p>Refer JORC Table 1, Section 1.</p>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>Refer to figures contained within this report.</p>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>All results are presented in figures and tables contained within this report.</p>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>Geophysical data – Historical geophysical data has been approximately registered in GDA94 Zone 55, using the available open-file information. These approximations have then been used to determine geological interpretations, some of which will be the target of this drilling campaign.</p>