

# **ACTIVITIES REPORT FOR THE QUARTER ENDED 31 DECEMBER 2021**

Sunshine Gold Limited (ASX:SHN, "Sunshine Gold", "the Company") is pleased to present its Quarterly Activities Report for the period ended 31 December 2021.

#### **HIGHLIGHTS**

• Assays received for an 8 hole (1,550 m) RC program at Titov, Ravenswood West. Results included:

0	21TVRC006	10m @ 1.32 % Cu, 2.11 g/t Ag, from 115m
	Including	2m @ 5.93 % Cu, 0.13 g/t Au, 6.87 g/t Ag, from 123m
0	21TVRC004	66m @ 0.38 % Cu, 0.42 % Mo, 2.22 g/t Ag, from 26m
	Including	6m @ 0.42 % Cu, 3.02 % Mo, 3.94 g/t Ag, from 70m
0	21TVRC007	158m @ 0.37 % Cu, 0.07 % Mo, 2.25 g/t Ag, from surface
	Including	18m @ 0.50 % Cu, 0.12 % Mo, 2.89 g/t Ag, from 38m
	And	17m @ 0.65 % Cu, 0.15 % Mo, 4.00 g/t Ag, from 128m
0	21TVRC008	112m @ 0.44 % Cu, 0.08 % Mo, 2.48 g/t Ag, from surface
	Including	15m @ 0.62 % Cu, 0.02 % Mo, 2.38 g/t Ag, from surface
	And	17m @ 0.58 % Cu, 0.21 % Mo, 3.34 g/t Ag, from 50m

- Completion of a diamond drill hole at Titov, Ravenswood West.
- Completion of a 15 hole (1,824 m) RC program at Keans Cu-Au-Ag-Mo, Ravenswood West. Results included:
  - 12m @ 1.43% Cu, 33.07 g/t Ag, 0.03% Mo from 81m, 21KNRC004
     Including 3m @ 4.11% Cu, 120.27 g/t Ag, 0.07% Mo from 89m, 21KNRC004
  - o 4m @ 5.56 g/t Ag, 0.41% Mo from 21m, 21KNRC005
  - 6m @ 0.49 % Cu, 2.06 g/t Au, 4.96 g/t Ag, 0.09 % Mo from 51m, 21KNRC006
     Including 2m @ 1.03% Cu, 6.02 g/t Au, 12.59 g/t Ag, 0.20 % Mo from 55m, 21KNRC006
  - 21m @ 0.37% Cu, 1.53 g/t Ag, 0.13% Mo from 16m, 21KNRC003
     Including 2m @ 0.57% Cu, 0.07 g/t Au, 2.58 g/t Ag, 1.11% Mo from 35m, 21KNRC003
- Four rock chip samples from veining associated with a major NNW striking fault 300m west of Keans drilling returned high grade Cu-Au-Ag-Mo. Results include:
  - o 6.44% Cu, 24.58 g/t Ag, 0.18% Mo (EL04)
  - o 3.89% Cu, 0.20 g/t Au, 46.00 g/t Ag, 0.35% Mo (EL05)
  - o <u>0.51% Cu, 0.17 g/t Au, 17.98 g/t Ag, 0.19% Mo</u> (EL06)
- Commencement of 8,500m JORC Resource definition drilling program at Triumph Gold Project.

### **QUEENSLAND OPERATIONS**

Field work and drilling has been divided between Ravenswood West and Triumph for the December 2021 quarter. Drilling operations occurred at: Titov (501.5m diamond) and Keans (1,824m RC) at Ravenswood West and at Big Hans (2,450m RC) and South Constitution (1,856m RC) at Triumph.

Ten days of RC drilling time were lost due to heavy rainfall at Triumph in November 2021.

# **SAFETY AND PRODUCTIVITY**

The quarter was safe and productive. Key performance indicators for the December 2021 quarter are shown below:

- o A total of 6,130m of RC drilling and 501.5m of diamond drilling was completed;
- o 1,824m RC drilling at Keans was completed in October, 2021;
- o 501.5m diamond drilling took place at Titov in December 2021;
- o 1,856m RC drilling was completed at South Constitution, Triumph;
- o 2,450m RC drilling was completed at Big Hans, Triumph; and
- o Operations were productive and safe with nil reportable incidents.



#### **TITOV, RAVENSWOOD WEST (SHN 100%)**

Titov is a swarm of Mo-bearing quartz veins hosted within a malachite (Cu carbonate) stained granodiorite. The prospect is located on a hill that is a devoid of trees, owing to the elevated Cu in soils. A shaft and series of shallow workings are spread across the 300m x 120m surface anomaly.

The 8 hole RC drilling program provided geological and geochemical information over 200m of strike extent. The drilling program intersected broad zones of copper, molybdenum and silver mineralisation in all drill holes (see Table 1). The thickest intersections (estimated 100m true thickness) coincide with the some of the highest copper grades in the easternmost holes drilled by Sunshine Gold; 21TVRC007 and 21TVRC008. However the highest grade copper interval, 10m @ 1.32% Cu, 0.02% Mo and 2.11g/t Ag, was intersected in the deepest RC hole of the program.

Diamond drill hole, 21TVDD001, intersected an 84m zone of intense quartz veining and chlorite-sericite alteration. The mineralised zone also contained abundant molybdenite and chalcopyrite (Figure 1). Assays are pending for the diamond drill hole.

Titov Cu-Ag-Mo system is now defined over 300m of strike and 300m down dip from the outcrop. Titov is open at depth and to the east, where the highest copper grades have been intersected. There is also a large gold in soil anomaly to the east of the drill defined system and exploration efforts will focus on extending the system in 2022.



Figure 1. Molybdenite in quartz vein (338.1m, 21TVDD001).



Hole ID	From	То	Width	Cu_%	Mo_%	Ag_ppm
21TVRC001	1	122	121	0.35%	0.11%	1.99
21TVRC002	0	91	91	0.25%	0.06%	1.37
21TVRC003	87	173	86	0.27%	0.02%	1.28
21TVRC004	26	92	66	0.38%	0.42%	2.22
including	70	76	6	0.42%	3.02%	3.94
21TVRC005	38	84	46	0.23%	0.08%	1.34
21TVRC005	166	187	21	0.31%	0.02%	1.50
21TVRC006	115	125	10	1.32%	0.02%	2.11
including	123	125	2	5.93%	0.13%	6.87
21TVRC007	0	158	158	0.37%	0.07%	2.25
including	38	56	18	0.50%	0.12%	2.89
including	128	145	17	0.65%	0.15%	4.00
21TVRC008	0	112	112	0.44%	0.08%	2.48
including	0	15	15	0.62%	0.02%	2.38
including	50	67	17	0.58%	0.21%	3.34

Table 1. Significant intersections from Sunshine Gold RC drilling at Titov Cu-Ag-Mo, Ravenswood West. (LME Copper Price: US\$9,500/t, Molybdenum Price: US\$44,750)

# **KEANS CU-MO-AU-AG, RAVENSWOOD WEST (SHN 100%)**

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 Heuirs 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. Heuirs 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 <u>25% Cu, 1.03% Mo, 8.7 g/t Au and 183 oz/t Ag</u> across various samples (*company Report #465*).

A 15 hole (1,830m) reconnaissance program was completed at Keans during October 2021. The program tested a suite of outcropping quartz—sulphide veins and geophysical targets. The drilling intersected discrete veins with chlorite—sericite alteration haloes. The veins contained abundant sulphide, particularly in holes drilled near the historic gold mines (Shaft A and Heuirs Shaft, Figure 2).

Four rock chip samples collected during reconnaissance mapping have returned significant assays (Table 3) giving confidence in expanding the exploration effort at Keans. The samples were collected over 500m from the nearest RC drilling and highlight the potential for a broader mineralised system. The samples collected are in the vicinity of an interpreted major regional fault zone, a parallel to the NNW striking Podosky Fault. The area will see follow up mapping and drill testing in 2022.



Hole ID	From	То	Width	Au (g/t)	Ag (g/t)	Cu (%)	Mo (%)
21KNRC002	33	35	2	0.33	17.65	0.56%	0.03%
21KNRC003	16	37	21	0.04	1.53	0.37%	0.13%
inc	27	28	1	0.02	2.48	0.19%	0.11%
and	35	37	2	0.07	2.58	0.57%	1.11%
21KNRC004	81	93	12	0.05	33.07	1.43%	0.03%
inc	81	83	2	0.05	7.65	1.10%	0.02%
and	87	92	5	0.09	74.43	2.77%	0.06%
21KNRC005	21	24	3	0.04	6.66	0.05%	0.54%
21KNRC006	41	42	1	2.29	5.63	0.44%	0.10%
21KNRC006	44	45	1	1.12	14.13	0.40%	0.04%
21KNRC006	51	57	6	2.06	4.96	0.49%	0.09%
inc	55	<i>57</i>	2	6.02	12.59	1.03%	0.20%
21KNRC006	99	101	2	0.02	2.62	0.27%	0.23%
21KNRC008	49	52	3	0.02	1.72	0.19%	0.54%
21KNRC009	40	56	16	0.05	5.04	0.27%	0.08%
21KNRC012	50	52	2	0.04	7.53	0.99%	0.24%

Table 2. Best intersections from the SHN 15 hole reconnaissance RC program at Keans.

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



Figure 2. RC Chips containing chalcopyrite and molybdenite in 21KNRC004 (Keans).

Sample ID	Easting	Northing	Description	Au (g/t)	Ag (g/t)	Cu (%)	Mo (%)
EL003	481596	7772733	Quartz vein ~30cm thick. 30m of strike length	0.03	0.52	0.32%	0.01%
EL004	481489	7773077	Jointed quartz outcrop with patchy malachite	0.05	24.58	6.44%	0.18%
EL005	481446	7773387	2-3m thick quartz vein. 70m strike length	0.20	46.00	3.89%	0.35%
EL006	481544	7773627	Quartz vein 2 – 3m thick near 1.5m deep workings	0.17	17.98	0.51%	0.19%

Table 3. Results of rock chip sampling at Keans.





Figure 3. 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.

# **TRIUMPH AU (SHN 100%)**

An 8,630m drill campaign commenced in November 2021. Two RC rigs have been working simultaneously, commencing drilling at Big Hans and South Constitution. Heavy rains ceased drilling activities for 10 days during the quarter.

The campaign will consist of 80 RC drill holes and 4 orientated, diamond core holes. The diamond drill holes will be geotechnically logged and sampled for metallurgical test work. The drilling follows up on the successful maiden drilling campaign at Big Hans, Super Hans, South Constitution and New Constitution (Figure 4), which included results:

o 21SHRC002 <u>16m @ 5.48 g/t Au</u> from 34m (Super Hans)

Including **7m @ 10.64 g/t Au** from 34m

o 21BNRC001 4m @ 27.12 g/t Au from 43m (Big Hans)

Including **2m @ 52.86 g/t Au** from 43m

21NCRC007 6m @ 13.11 g/t Au from 96m (South Constitution)
 21NCRC002 1m @ 6.01 g/t Au from 31m (New Constitution)

And 3m @ 10.30 g/t Au from 64m

The drilling will provide enough data to estimate a maiden JORC Resource at Triumph in March 2022.



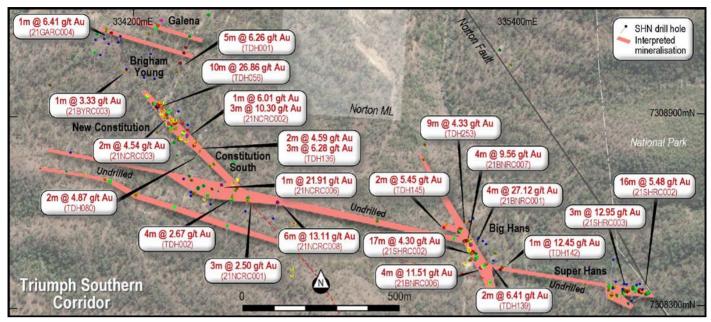


Figure 4. Best intersections from the Triumph Southern Corridor.

#### **PLANNED ACTIVITIES**

• January 2022: JORC Resource RC drilling at Triumph Au Project.

• January 2022: 31 December 2021 Quarterly Report.

• January – February 2022: Results from JORC Resource RC drilling at Triumph Au Project.

• 10 – 11 February 2022: Presentation at the Virtual Gold Conference.

• 15 – 17 February 2022: Presentation at the RIU Explorers Conference, Fremantle.

• February – March 2022: Historic Titov diamond drill core relogging.

• 15 March 2022: Financial Statements for half year ended 31 December 2021.

• March 2022: Triumph maiden JORC Resource estimate.

• March 2022: Titov diamond drill hole result.

April 2022: IP Survey Wilburs Hill – Smiths, Ravenswood West.
 April 2022: Shallow RC drilling, Titov East, Ravenswood West.



#### TENEMENT INFORMATION

Project	Tenement	Status	Beneficial Interest	
TRIUMPH	EPM 18486	GRANTED	100%	
TRIUMPH	EPM 19343	GRANTED	100%	
HODGKINSON	EPM 18171	GRANTED	100%	
HODGKINSON	EPM 19809	GRANTED	100%	
HODGKINSON	EPM 25139	GRANTED	100%	
HODGKINSON	EPM 27539	GRANTED	100%	
HODGKINSON	EPM 27574	GRANTED	100%	
HODGKINSON	EPM 27575	GRANTED	100%	
INVESTIGATOR	EPM 27343	GRANTED	100%	
INVESTIGATOR	EPM 27344	GRANTED	100%	
RAVENSWOOD WEST	EPM 26041	GRANTED	100%	
RAVENSWOOD WEST	EPM 26152	GRANTED	100%	
RAVENSWOOD WEST	EPM 26303	GRANTED	100%	
RAVENSWOOD WEST	EPM 26304	GRANTED	100%	
RAVENSWOOD WEST	EPM 27824	GRANTED	100%	
RAVENSWOOD WEST	EPM 27825	APPLICATON	100%	

# WESTERN AUSTRALIA COCKATOO IRON NL

Sunshine Gold holds 5,000,000 fully paid ordinary shares in Cockatoo Iron NL as a consequence of the sale of its interests in the Cockatoo Island Project. Cockatoo Iron NL is an unlisted company and also Pearl Gull Iron Limited's (ASX: PLG) largest shareholder, holding 43,250,001 fully paid ordinary shares, representing 43.24% of the total issued capital.

#### **CORPORATE**

#### SHAREHOLDER INFORMATION

As at 31 December 2021 the Company had 1,062 shareholders and 561,222,730 ordinary fully paid shares on issue with the top 20 shareholders holding 53.25% of the total issued capital.

#### **SHARE PLACEMENT**

Directors' participation in the share placement to raise \$5 million at an issue price of \$0.045 was approved by shareholders at the Company's Annual General Meeting. During the quarter the Company received \$315,000 from directors pursuant to the placement and directors contributed a further \$162,000 through the exercise of unlisted options. Total investment by directors as at 31 December 2021 was \$2.84 million.



# **FINANCE AND USE OF FUNDS**

Pursuant to the requirements of Listing Rule 5.3.4, the Company advises the proposed use of funds in section 1.6 of the Company's Prospectus in comparison to the actual use of funds is as follows:

Allocation of Funds	Prospectus	Current Quarter	Actual to Date
Exploration and evaluation (2years)	\$3,330,000	\$897,774	\$3,202,380
Working capital (2 years)	\$1,506,000	\$259,050	\$959,742
Expenses of Offer and XXXX Gold Acquisition	\$484,842	-	\$500,845

Pursuant to the requirements of Listing Rule 5.3.5, a description of and explanation for payments to related parties and their associates per Section 6.1 of the Appendix 5B following this Quarterly Activities Report is set out in the below table.

Director Remuneration	Current	Previous
	Quarter	Quarter
Managing Director fees	\$60,500	\$60,500
Executive Director fees	-	-
Non-Executive Director fees	\$37,800	\$30,068
Company Secretarial fees	\$9,900	\$6,600
Total payments to related parties of the entity and their associates	\$108,200	\$97,168

# **ENDS**

For further information:

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