ASX Announcement
17 February 2022

CRITICAL MINERAL POTENTIAL RECOGNISED WITH TWO CEI GRANTS AWARDED

Sunshine Gold Limited (ASX:SHN, "Sunshine Gold", "the Company") has been awarded two separate Collaborative Exploration Initiative ("CEI") grants from the Queensland Government.

HIGHLIGHTS

- Collaborative Exploration Initiative Grants awarded totalling $126,194 from the Queensland Government
- *Grant 1* $92,144 to contribute toward a Titan IP/MT geophysical survey at Wilburs Hill-Smiths
- *Grant 2* $34,050 to cover multielement assay costs of soil sampling at Elphinstone Creek

Figure 1. Wilburs Hill target, Ravenswood West.

Sunshine Gold's Managing Director, Damien Keys commented: *"Sunshine Gold would like to thank the Queensland Government for their investment in the mineral exploration sector. The panel reviewed grants recognise Ravenswood West as a potential source of multiple New Economy Minerals (including molybdenum, copper, silver, gold, tellurium and rare-earth elements).*

The two grants provided will allow Sunshine Gold to fast-track exploration works at two emerging prospects, Elphinstone Creek and Wilburs Hill/Smiths. Our first pass soil sampling and mapping activities at Elphinstone Creek have confirmed the REE and Au potential of the Barrabas Adamellite. The initial soil sampling program only covered 14% of the 27km^2 regionally "unique" intrusion. The grant will cover the multielement assay costs for a further 780 samples.

Wilburs Hill is a new prospect, generated from a detailed geochemical review and field mapping. The prospect is analogous to the nearby 1Moz Au Mt Wright Mine and the 3.5Moz Au Mt Leyshon Mine. The grant will provide funding toward a high-resolution IP and MT geophysical survey to delineate sulphide rich orebodies."

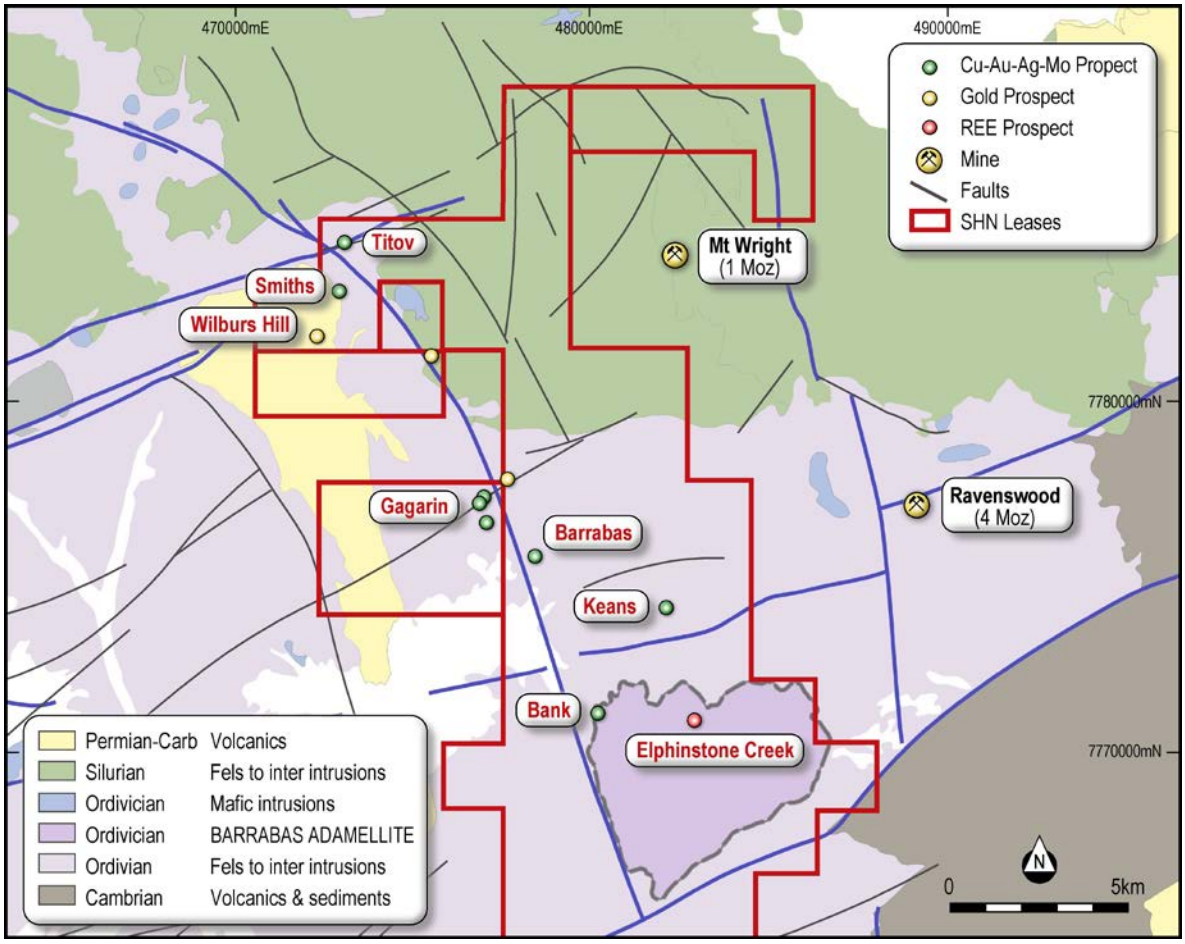


Figure 2. Geology of the 15km prospective Cu-Au-Ag-Mo corridor showing the Wilburs Hill and Elphinstone Creek targets.

ELPHINSTONE CREEK

The Elphinstone Creek and Bank Breccia targets are hosted in the Barrabas Adamellite, a quartz monzonite, comprising medium to coarse-grained plagioclase and alkali feldspar (~60%) with lesser quartz (~35%) and biotite (~5%). The Barrabas Adamellite is distinguishable as having broad, moderate magnetic response and a strong potassium radiometrics signature (Figure 3).

The prospective Barrabas Adamellite is large intrusion and occupies ~27km^2. To date soil sampling covers only 3.7km^2 (14%) of the area (Figure 3). The CEI grant awarded (up to $34,050) will cover geochemical analytical costs for a further 780 samples. The further sampling will cover the remainder of the Barrabas Adamellite on a 200m x 200m grid. The core of the Barrabas Adamellite is expressed as a subtle magnetic anomaly and soil sample spacing will be tightened to a 100m x 100m grid. The information gathered will be important in determining zones of local enrichment in preparation for first pass drill testing in late 2022.

Sunshine Gold collected 309 soil samples across the northern margin of the Barrabas Adamellite (Figure 3). The sampling confirmed that the Barrabas Adamellite is enriched in REE, with all Barrabas Adamellite soil samples grading >400 ppm TREO. A coherent 800m long, ENE striking REE soil anomaly grading (>900 ppm TREO) is observed in the vicinity of the Bank Breccia. The anomaly is supported by elevated stream sediment samples grading up to 1.56% TREO. The anomaly is located immediately east of the historic Bank Breccia drilling.

Further REE soil anomalism occurs close to the adamellite margins on either side of Elphinstone Creek. A peak value of 1,091ppm TREO (Sample 256157) was recorded immediately east of Elphinstone Creek.

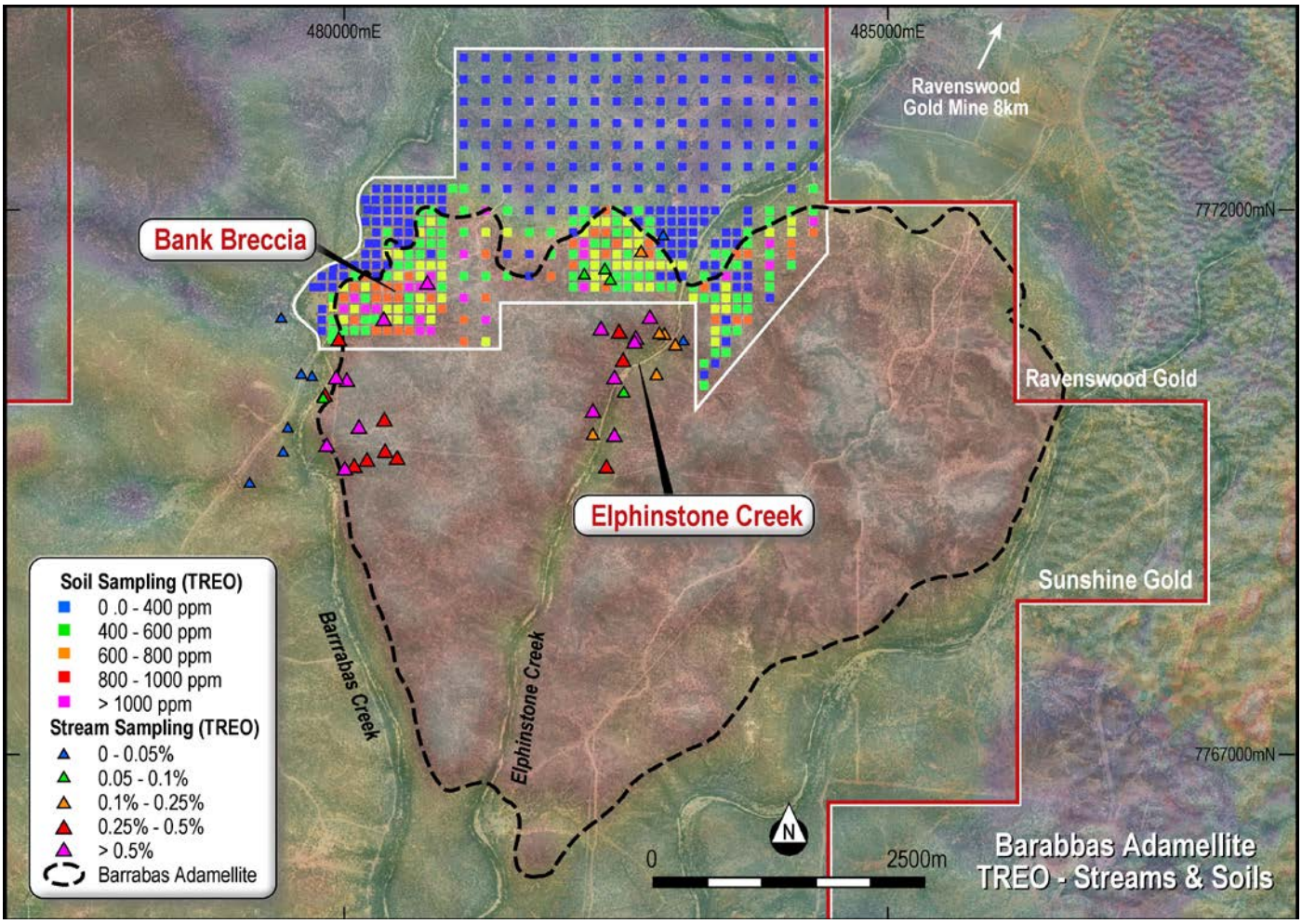


Figure 3. TREO distribution in soils. Only 14% of the Barrabas Adamellite has been sampled to date with the remaining 86% to be sampled in 2022.

Elevated REE and Au in stream sediment samples were collected from tributaries to Elphinstone Creek (Figure 4) where exploration in 2018 returned significant stream sediment assay results including:

- **6.28 g/t Au & 0.83% TREO including 0.12% Nd_2O_3, 0.05 % Pr_6O_{11}** (SRS13012)
- **1.11 g/t Au & 0.29% TREO including 0.04% Nd_2O_3, 0.01 % Pr_6O_{11}** (SRS10165)
- **2.28% TREO including 0.37% Nd_2O_3, 0.11 % Pr_6O_{11}** (SRS10163)
- **1.12% TREO including 0.19 % Nd_2O_3, 0.05 % Pr_6O_{11}** (SRS10164)
- **0.94% TREO including 0.15 % Nd_2O_3, 0.05 % Pr_6O_{11}** (SRS13008)

Stream sampling was also conducted from tributaries to the Barrabas Creek, which runs along the western margin of the Barrabas Adamellite (Figure 4). The stream sediments from the western margin of the Barrabas Adamellite contained results including:

- **1.63% TREO including 0.26 % Nd_2O_3, 0.08 % Pr_6O_{11}** (SRS10149)
- **1.56% TREO including 0.25 % Nd_2O_3, 0.08 % Pr_6O_{11}** (SRS10160)
- **0.83% TREO including 0.12 % Nd_2O_3, 0.05 % Pr_6O_{11}** (SRS10158)
- **0.81% TREO including 0.13 % Nd_2O_3, 0.04 % Pr_6O_{11}** (SRS10150)

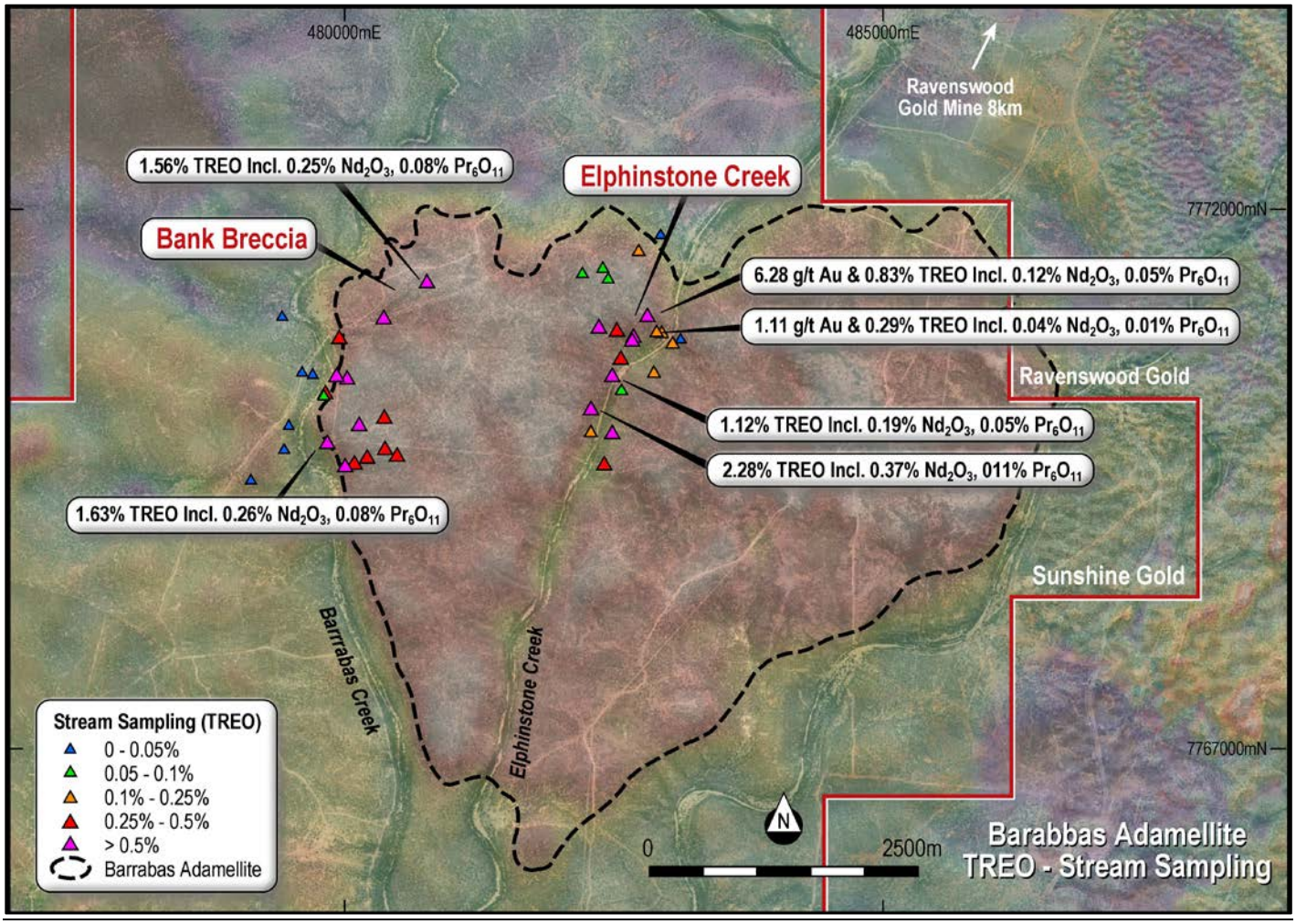


Figure 4. Stream sediment sampling locations at the Barrabas Adamellite over potassium radiometrics and airphoto.

WILBURS HILL

Wilburs Hill is located 1.8km south of the Titov Cu-Ag-Mo on the northeast corner of the Boori Igneous Complex, a late Carboniferous to Early Permian suite of intrusives and volcanics (Figure 2). Wilburs Hill forms a topographic high and is comprised of rhyolitic volcanics which exhibit flow-banding, local brecciation and limonitic fracture fill.

The target is analogous to the nearby 1Moz Au Mt Wright Mine (9km east of Wilburs Hill) and the 3.5Moz Au Mt Leyshon Mine (Table 1). Both Mt Wright and Mt Leyshon are hosted in late Carboniferous to Early Permian volcanic breccia pipes. Geophysical studies (1997-1999) at the Mt Wright deposit have shown the effectiveness of Induced Polarisation (IP) and Magnetotellurics (MT) for distinguishing mineralisation at depth. Notably, areas of coincident IP and MT anomalism which were drill tested intersected sulphide in almost all circumstances (*Webb and James, 2001*).

A CEI grant for $92,144, was awarded for a combined IP and MT geophysical survey over the Wilburs Hill – Smiths area. The grant amount covers the 38% of the total survey, processing and interpretation cost. The survey is proposed to cover an area of 1.5km x 1.6km with Wilburs Hill at the core of the grid. The survey proposes to use Quantec's TITAN DCIP & MT array-based system which has a maximum capable depth capacity of 750m.

Webb, D. & James, B., 2001, The Application of Electrical Geophysics to Gold Exploration at Mt Wright, North Queensland, ASEG Extended Abstracts, 2001:1, 1-4

The first targeted exploration at Wilburs Hill was in 1985 with rock chips taken assayed up to 0.56g/t Au, 3.21% Pb, and 0.28% Zn *(CR 15685)*. The area was flagged as prospective for gold, silver, lead and molybdenum. Regional BCL sampling taken by Ravenswood Resources in the streams around Wilburs Hill and Smith's reported assays up to 0.45g/t Au *(CR 20872)*.

Soil sampling completed in 2008 and 2017 defined a coincident gold, silver, tellurium, bismuth, copper, lead and zinc soil geochemical anomaly extending from Wilburs Hill to Smiths. The anomalous element assemblage is similar to that observed over Mt Wright and Mt Leyshon (Morrison and Beams, 2016).

Category	**Mt Wright (1 Moz Au)**	**Mt Leyshon (3 Moz Au)**	**Wilburs Hill**
Age of Host Rock	Late Carboniferous - Early Permian	Late Carboniferous - Early Permian	Late Carboniferous - Early Permian
Surface Lithology	Brecciated & Flow-Banded Rhyolites, Granite	Polymict Breccias, Porphyries, Felsic & Mafic Dykes, Intruded into Metasediments	Brecciated & Flow-Banded Rhyolites, Granitoids, Mafics to west
Alteration	Sericite, Siderite, Chlorite	Potassic, Illite-Smectite, Mn-siderite	Sericite & White Clay (illite-smectite?) on east side of hill
Ore Controls	Breccia, Lithology	Breccia, Strike-slip faults	Unknown
Magnetics Signature	Magnetic Low	Magnetic Low	Magnetic Low
Coincident Geochem	Au, Ag, Cu, Bi, Zn, Pb, Te, (Mo, W)	Au, Bi, Te (Ag, Zn, Mo, Pb, Cu, As, Se) +/- Sb, W, Sn	Au, Ag, As, Cu, Bi, Zn, Pb, Te, Mo
Topographic High	Yes	Yes	Yes
Other Notes		Significant Qz-Mo veins in upper parts of system	Significant Qz-Mo veins to north at Titov

Table 1. Characteristics of Mt Wright Mine, Mt Leyshon Mine and Wilburs Hill target.

Morrison, G & Beams S., 2016, Geochemical signatures and zoning of intrusion related mineral systems, Charters Towers Province, as part of Queensland Government Future Resources Program — Industry Priorities Initiative, TS Report 2016/013

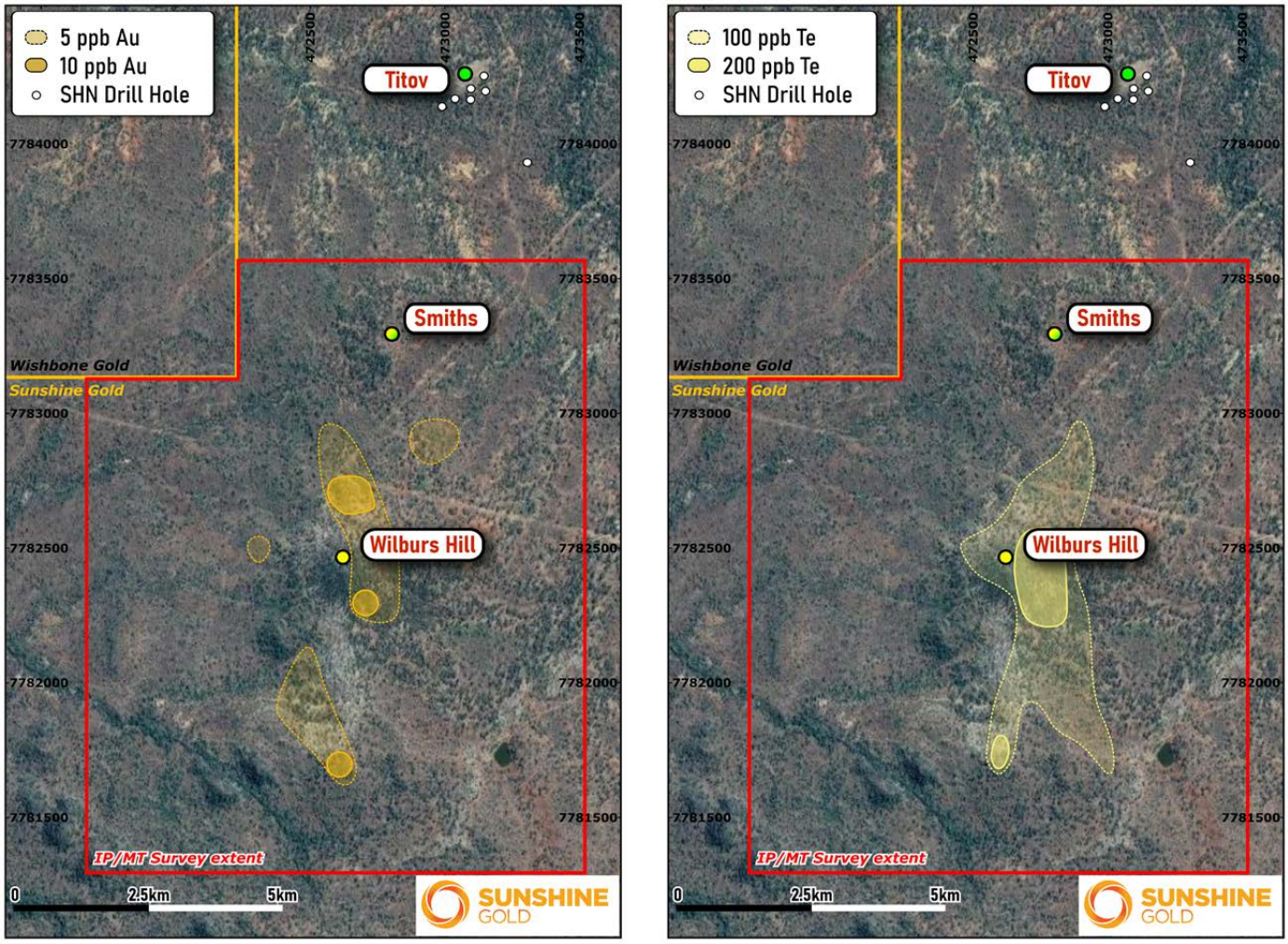


Figure 5. Gold (left) and Tellurium (right) geochemical soil anomalism

PLANNED ACTIVITIES

- February-March 2022: Results from JORC Resource RC drilling at Triumph Au Project.
- February – March 2022: Historic Titov diamond drill core relogging.
- February 2022: Titov IP, Ravenswood West.
- 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.
- March 2022: CEI IP/MT Survey Wilburs Hill – Smiths, Ravenswood West.
- April 2022: Shallow RC drilling, Titov East, Ravenswood West.

ABOUT RARE EARTH ELEMENTS

The unique chemical and physical properties of REEs have positioned them as a critical material across a number of rapidly evolving markets and industrial applications.

NDPr constitutes ~90% of global REE value.

NdPr are critical elements in the manufacture of permanent magnets used for motors, turbines and in mobile phones. Permanent magnet production accounts for ~90% of the total value of TREO consumption. Permanent magnets and catalysts are the largest, rare earth demand drivers.

Key global megatrends are driving strong and diversified demand for NdPr:

- Automation: accelerating technological progress
- Low carbon transition: environmental decarbonisation
- Sustainable resource security: increasing scarcity of and global competition for resources
- Supply chain security: against backdrop of heightened national protectionism

There are currently no acceptable substitutes for NdPr in permanent magnets for electric vehicles (EVs) and wind turbines.

ENDS

For further information:

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

Mr Alec Pismiris
Director & Company Secretary
Telephone: +61 402 212 532
E-mail: 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.

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.

Ravenswood West Gold-Copper-Rare Earth Project

(EPM 26041, EPM 26152, EPM 26303, EPM 26304, EPM 27824, EPM 27825: 100%)

Ravenswood West is comprised of a significant holding (392 km2) 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) in 2020 for up to $300m and is presently subject to a ~$200m upgrade. In addition, there are three other gold mills within 100 km, two of which are toll treating.

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

Triumph Gold Project (EPM18486, EPM19343: 100%)

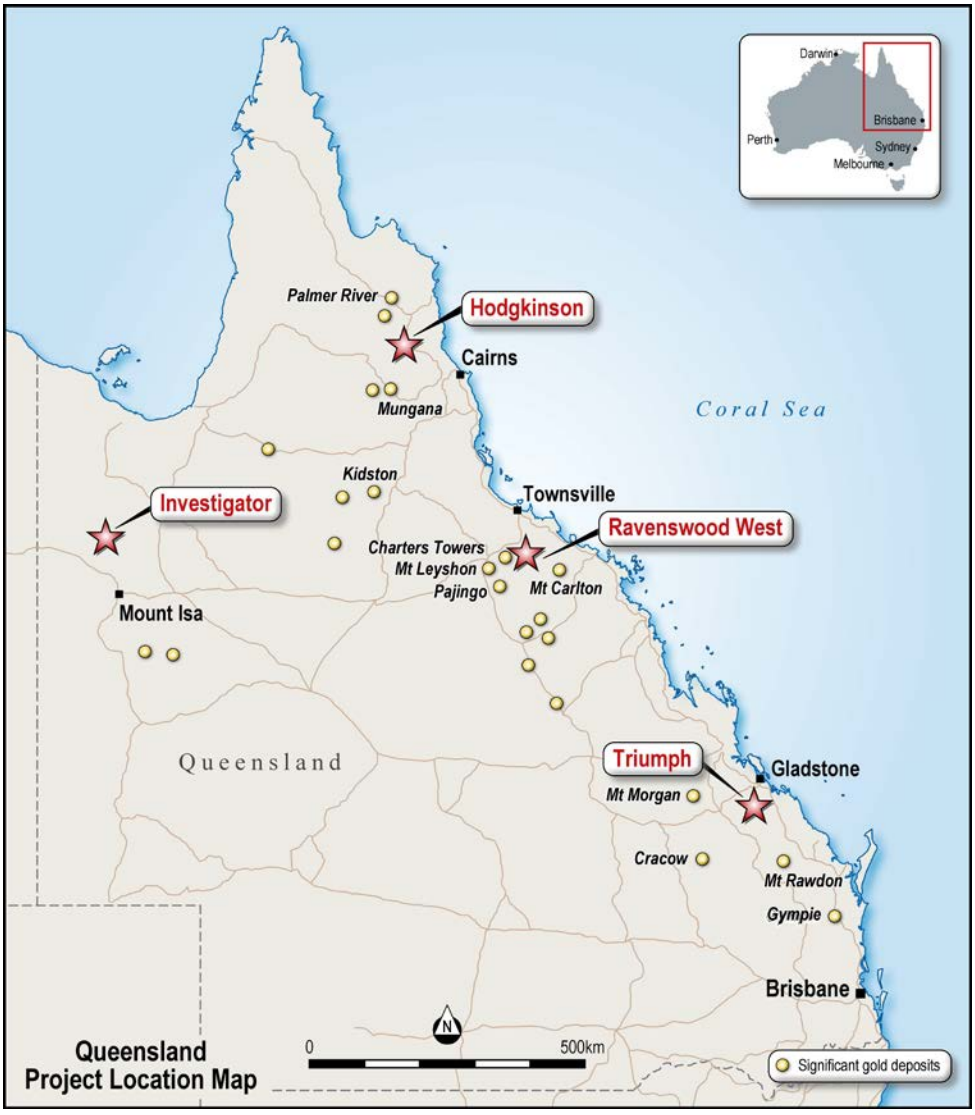
Triumph is centred around the historical Norton gold field from which ~20,000 oz of gold was extracted between 1879-1941. The project is located 50km south of the mining hub of Gladstone and comprises tenements covering 138km^2. Triumph is located within the Wandilla Province of the New England Orogen. 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^2 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 north east of Cairns in North Queensland. The project comprises tenements covering 365km^2. 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 project 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 tenements covering 115km^2. 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.


Darwin
Perth
Brisbane
Sydney
Melbourne
Palmer River
Hodgkinson
Cairns
Mungana
Coral Sea
Kidston
Townsville
Investigator
Ravenswood West
Charters Towers
Mt Leyshon
Pajingo
Mt Carlton
Mount Isa
Queensland
Triumph
Gladstone
Mt Morgan
Cracow
Mt Rawdon
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Project Location Map
Significant gold deposits