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## **ASX Release**

14 March 2023

# First fieldwork confirms high-grade potential at Lighthouse, Ravenswood West Project.

#### Highlights – Plateau Prospect

- Mapping and rock chip sampling has confirmed the presence of a drill-ready target, being a gold-bearing shear zone, south of Plateau. Two rock chips returned:
  - $\circ$  7.46g/t Au, 116g/t Ag, 0.50% Ba, 0.16% V<sub>2</sub>O<sub>5</sub> (PL23\_003)
  - o 1.53g/t Au, 8.35g/t Ag, 0.74% Pb, 0.44% Zn (PL23\_004)

#### Highlights - Cardigan Dam and Horse Creek Prospects

- Field reconnaissance over a previously identified ridge of gold anomalism at Cardigan Dam identified a gossanous breccia. The gossan extends for over 300m in strike and is 2m wide at the sampled location. A rock chip from the gossan assayed:
  - o 8.35g/t Au, 32.8g/t Ag, 0.28% Cu, 0.13% Co, 1.0% Ba (CD23\_001)
- At Horse Creek, the site of a nickel-rich historic rock chip was located and resampled. Field observations concur with petrographic analysis that the outcrop is either a pyroxenite or a meteorite. Elevated Ni, Cr and Mg in soils are coincident with a magnetic high. Further studies are ongoing. The rock chip assayed:
  - o 1.1% Ni, 0.27% Cr, 0.12g/t Au, 0.75g/t Pt, 0.45g/t Pd, 0.05% Co (HC23\_001)

Sunshine Gold Limited (ASX:SHN) has completed first pass reconnaissance mapping and sampling at three prospects on the Lighthouse farm-in tenements, part of Sunshine Gold's 100% owned Ravenswood West Project.

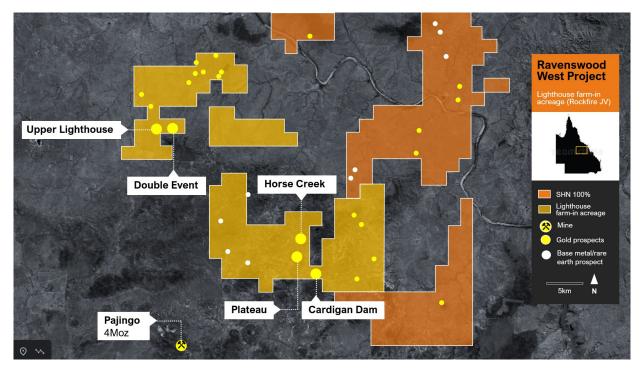
Sunshine Gold Managing Director, Dr Damien Keys, said first field mapping was encouraging.

"Recent reconnaissance mapping has focussed on three key prospects, Plateau, Cardigan Dam and Horse Creek. We have confirmed a drill-ready, mineralised shear zone immediately south of Plateau," Dr Keys said.



"Cardigan Dam has gold anomalism along more than 250m of strike and sampling now shows cobalt and barium enrichment. Further mapping is focussing on an outcropping gossan that was identified. The cobalt potential of the system is also being reviewed.

"At Horse Creek, a historic nickel occurrence was assessed. Possible explanations for the occurrence include either a discrete, ultramafic unit, or a meteorite. Sampling was undertaken and will provide more context. We are highly encouraged by this promising start," he said.



*Figure 1: Recent field activities focussed on highly prospective areas at Plateau, Cardigan Dam and Horse Creek.* 

#### Plateau: undrilled shear zone drill target identified

The Plateau polymictic breccia pipe, host to the current Resource (50Koz @ 1.66 g/t Au<sup>1</sup>), was sampled and mapped. The breccia contains semi-rounded clasts of rhyolite, granodiorite and sediment (Figure 2).

Field reconnaissance also focussed on an area to the south of Plateau where a NW trending shear zone is interpreted from magnetic data and historic mapping. Two rock chip samples were collected 140m apart and both returned anomalous gold, silver and pathfinder elements. The results include:

- **7.46g/t Au, 116g/t Ag, 0.50% Ba, 0.16% V<sub>2</sub>O<sub>5</sub>** (PL23\_003)
- o **1.53g/t Au, 8.35g/t Ag, 0.74% Pb, 0.44% Zn** (PL23\_004)

The shear zone presents a target for first pass RC drilling in the June 2023 quarter.

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





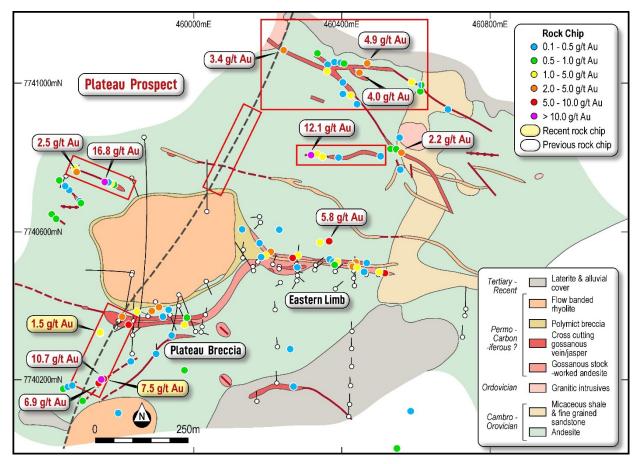
*Figure 2:* Sample of polymictic breccia from the mineralised southern margin of the Plateau rhyolite (*PL23\_002*).

Encouragingly, a second rhyolite body was identified 300m south of Plateau. Further mapping is focussing on the rhyolite margins, which host the breccia-style mineralisation at Plateau.

Fieldwork continues around Plateau particularly over three gossans:

- Gossan 1: is located to the NE of Plateau with a <u>rock chip sample of 3.4g/t Au</u>. The SE oriented gossan intersects a NE-SW fault at the sampled locality. Both the fault zone and the gossan are prospective and are undrilled.
- Gossan 2: is a gossan located to the north of Plateau with <u>rock chip grades to 12.1g/t Au</u>. The gossan is mapped to extend >100m on surface.
- Gossan 3: is a gossan on the NW margin of Plateau with <u>rock chip grades to 16.8g/t Au</u>. The outcrop extends >100m on surface.





*Figure 3.* Undrilled targets (red) surrounding the Plateau polymictic breccia pipe. High-grade rock chip samples are located on mapped faults (confirmed from ground magnetic data) and present opportunities for further mineralisation.

#### Cardigan Dam and Horse Creek: Strong rock chip and gold (-copper) in soil anomalies

<u>Cardigan Dam</u> is located 3.5km SE of Plateau and comprises a ~250m long, sub-cropping zone of brecciated and sheared granodiorites. <u>Historic rock chip results include: 23.4 g/t Au, 15.6 g/t Au, 11.4 g/t Au and 9.9 g/t Au</u>. The rock chips correlate with a 350m long, >50ppb Au soil anomaly and are coincident with a magnetic feature interpreted to be a large fault zone.

Recent field reconnaissance located the historic ridge of rock chip gold anomalism and identified a gossanous breccia with clasts of rhyolite and granodiorite. A sample of the manganiferous gossan was elevated in gold, silver, copper, cobalt and a significant amount of barium. The gossan extends for >300m in strike and is 2m wide at the sampled location. A rock chip assayed:

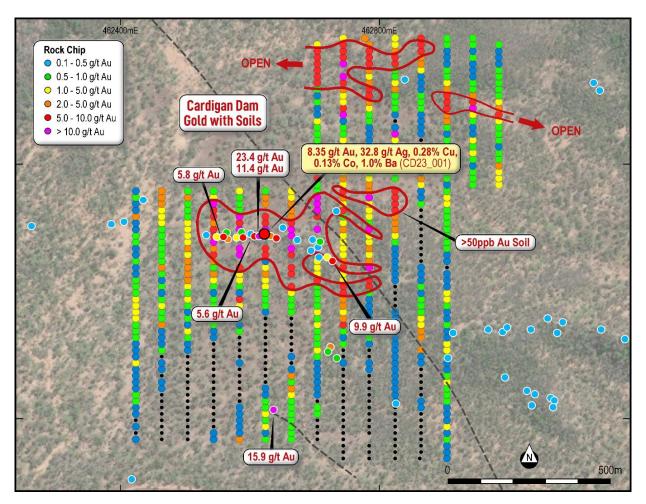
#### o 8.35g/t Au, 32.8g/t Ag, 0.28% Cu, 0.13% Co, 1.0% Ba (CD23\_001)

Field work includes mapping out the extent of the outcropping gossan as well as a second zone of soil gold anomalism to the north of the gossan. The cobalt potential of the system is a focus.





*Figure 4:* Sample of manganiferous gossan from Cardigan Dam that is elevated in gold, silver, copper, cobalt and barium.

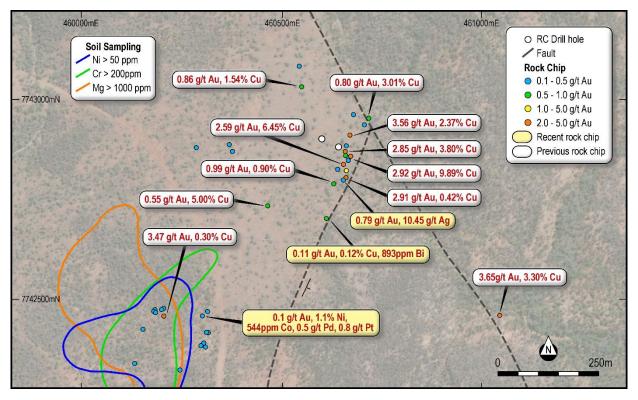


*Figure 5.* Soil (square) and rock chip sample (dots) at Cardigan Dam show coherent and significant gold anomalism over ~250m of strike.



**Horse Creek** is located 2km north of Plateau and contains a 200m long x ~15-20m ferruginous gossan with quartz veining. Rock chip samples consistently contain strong secondary copper and gold mineralisation.

The field visit confirmed the presence of nickel sulphide in one specific subcrop. Petrographic analysis suggests the rock was either a pyroxenite (nickel-bearing ultramafic unit) or an achondritic meteorite. Field observations did not identify more of the nickel-bearing rock. The rock is located atop a magnetic high, with elevated Ni, Cr and Mg extending for ~200m x 300m north of the sample. A traverse of the magnetic and soil anomalous zone has identified altered and brecciated mafics. No sulphides were observed in the altered and brecciated mafics and assay results are pending. Further studies will be undertaken to determine the origins of the nickel-bearing rock.



*Figure 6.* High-grade copper and gold rock chip results from Horse Creek. A nickel-bearing subcrop has been located to the SW of the main gold-copper trend. Elevated nickel, chromium and magnesium soil samples are observed in the vicinity of the nickel-bearing subcrop.





*Figure 7.* The subcropping nickel-bearing rock in situ (pelican pick 42cm long). Disseminated sulphides are seen in small fragments of the rock.

#### **Planned activities**

- Mar 2023: Extensional drilling commences, Triumph Au
- Mar 2023: Lighthouse field work update, Ravenswood West
- Apr 2023: Quarterly Activities & Cash Flow Reports
- June 2023 quarter: RC drilling of various targets at Ravenswood West

#### Attending:

• 22-23 March 2023: Brisbane Mining Conference, Brisbane

#### Farm-In and Joint Venture Agreement with Rockfire Resources

Sunshine Gold has signed a binding Farm-In and Joint Venture agreement with London-listed Rockfire Resources to earn into Lighthouse. The agreement will see Sunshine Gold earn into 75% of the project by spending \$2.2M over three years. The transaction is subject to a number of standard conditions and completion requirements. Completion is expected in March 2023.



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

For more information, please contact:

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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**

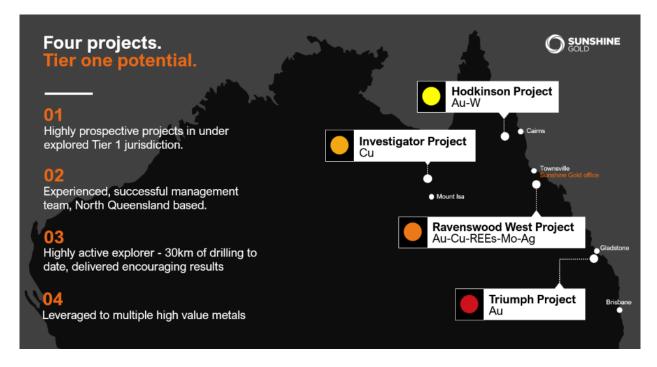
**Four projects. Tier one potential.** Sunshine Gold is developing four projects with tier one potential in north Queensland over 1,000km<sup>2</sup> in proven districts with high prospectivity for gold, copper, molybdenum, and rare earths elements:

*Triumph Project* (Au) – More than 85% of Triumph's Inferred Resource of 118,000 ounces @ 2.03g/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 in this section apply to all succeeding sections.)

Criteria	Explanation	Commentary							
Sampling	Nature and quality of sampling (e.g. cut channels,	GEOCHEMICAL SAMPLING							
techniques	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 '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.	SHN – 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.							
Drilling	Drill type (e.g. core, reverse circulation, open-hole	DRILLING							
techniques	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.).	No drilling referred to in this report.							
Drill sample	Method of recording and assessing core and chip	DRILLING							
recovery	sample recoveries and results assessed.	No drilling referred to in this report.							



Criteria	Explanation	Commentary
	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.	
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.	GEOCHEMICAL SAMPLING SHN – Rocks have been logged for lithology, alteration, mineralisation and veining and recorded in the SHN Geochemistry Database. Photos are taken of all submitted samples.
Sub-sampling techniques and sample 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.	GEOCHEMICAL SAMPLING SHN: Sample size of 1 – 2kg 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 SHN QC procedures are used for rock chips. Samples have utilised the laboratory in-house QAQC protocols.



Criteria	Explanation	Commentary
Quality of assay data and Laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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 have been established.	GEOCHEMICAL SAMPLING SHN – Rock chips were assayed using a 50g fire assay for gold with AAS finish, which is considered appropriate for this style of mineralisation. Fire assay is considered total assay for gold. All other elements were assayed using an ICP- MS/OES.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. 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	GEOCHEMICAL SAMPLING SHN – All rock chips are considered valid for that point location only if outcrop, or as an example of ore/waste material if mullock.
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.	GEOCHEMICAL SAMPLING SHN – Sample locations are located as points using handheld GPS in GDA94, Zone 55 format.
Data spacing and 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.	GEOCHEMICAL SAMPLING SHN – No data spacing has been applied to the rock chip samples due to the nature of the technique.



Criteria	Explanation	Commentary
	Whether sample compositing has been applied.	
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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.	GEOCHEMICAL SAMPLING SHN – Rock samples are collected as "point" samples with no bearing on overall orientation of the possible structure.
Sample security	The measures taken to ensure sample security.	<b>GEOCHEMICAL SAMPLING</b> SHN – Samples were numbered in the field at the time of collection. The samples are photographed at the time of collection and 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 tenement and land tenure 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.	The Lighthouse Project consists of EPMs 25617 and 26705. All EPMs are owned 100% by BGM Investments Pty Ltd, a wholly owned subsidiary of Rockfire Resources Limited. No current Mining Leases exist on the tenure. South-eastern blocks on EPM 26705 are situated within the Burdekin Falls Dam catchment area. Sunshine Gold has the option to earn 75% of the project.



Criteria	Explanation	Commentary							
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Numerous exploration companies have explored within the tenure, most notably Cormepar Minerals, Penarroya, Pan Australian, Esso Australia, Battle Mountain, CRA Exploration, Western Mining Corporation, Aberfoyle Resources, Mt Leyshon Gold Mines, Liontown Resources, Ramelius Resources and most recently Rockfire Resources.							
Geology	Deposit type, geological setting and style of mineralisation.	The tenure is dominated by the Seventy Mile Range Group, which is considered prospective for VHMS deposits. These rocks have been intruded by younger felsics (and lesser mafics) including those of Ordovician, Silurian and Late Carboniferous-Early Permian age, the latter being prospective for breccia pipe style gold mineralisation.							
Drill hole Information	<ul> <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> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that 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</li> </ul>	No drilling referred to in this report.							
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades)	Assay results reported within are raw assays directly reported by the laboratory with no subsequent modification of the data, with the exception of V <sub>2</sub> O <sub>5</sub> assay which uses the following calculation: • V <sub>2</sub> O <sub>5</sub> ppm = V ppm x 1.785							



Criteria	Explanation	Commentary
	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	
Relationship between mineralisation widths and intercept 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 rock chip samples are designated as point samples only and do not pronounce dimensions or orientations of the outcrop from which they are sourced.
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 reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low	All relevant results are provided within this report



Criteria	Explanation	Comment	ary												
	and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.														
Other substantive exploration 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	Details of the Plateau Resource are located in ASX:SHN report dated 20 <sup>th</sup> January 2023: "Consolidation of High Grade Advanced Au Prospects RW" Relevant rock chip sample data is tabulated below. Coordinates in GDA94, Zone 55.												dvanced	
	samples – size and method of treatment; metallurgical test results;	Sample ID	East	North	RL	Au_ppm	Ag_ppm	Ba_ppm	Co_ppm	Cu_ppm	Ni_ppm	Pb_ppm	V_ppm	Pt_ppm	Pd_ppm
	bulk density, groundwater, geotechnical	CD23 001	462618	7737869	318	8.35	32.8	>10000	1305	2810	20	52	51		
	and rock characteristics; potential	HC23 001	460305	7742461	326	0.12	0.1	70	544	88	10950	9	69	0.75	0.45
	deleterious or contaminating	HC23 002	460134	7742340	313	<0.01	0.0	260	35	258	151	13	229		
	substances.	HC23 003	460248	7742324	327	0.06	0.2	200	19	101	19	16	471		
		HC23 004	460615	7742705	317	0.11	2.1	50	33	1215	125	25	197		
		HC23 005	460658	7742802	310	0.79	10.5	80	85	17350	8	10	106		
		PL23 001	459914	7740378		0.19	1.1	80	3	198	3	309	122		
		PL23 002	459929	7740385	328	0.38	1.8	330	3	24	13	274	100		/
		PL23 003	459759	7740196	313	7.46	116.0	5280	30	158	83	210	896		
		PL23 004	459744	7740327	313	1.53	8.4	170	67	459	31	7360	64		
		PL23 005	459796	7740112	316	0.02	0.1	1510	2	19	8	28	30		
		PL23 006	460191	7740529	334	0.07	1.0	170	3	92	3	39	167		1
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out 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 wor	k is addres	ssed in the	body c	f this rep	ort.	1	1		1				