

# **ASX** Announcement

22 March 2023 | ASX: SLS

# Robust Maiden Gold Mineral Resource at Hobbes

Solstice Minerals Limited (ASX: SLS) is pleased to report a maiden JORC Mineral Resource Estimate (**MRE**) at the 80% owned **Hobbes Gold Project** located 5km to the southwest of Northern Star's (ASX: NST) Porphyry mining centre.

# **Highlights:**

- Maiden independently modelled Mineral Resource Estimate (JORC 2012) completed for the Hobbes deposit, following infill Reverse Circulation (RC) and Diamond (DD) drilling by the Company over the past two years
- Inferred MRE of 4.6 million tonnes at 1.2g/t Au for 177,000 ounces of gold, reported at a 0.6g/t Au cut-off & constrained within a A\$2,500/oz optimised pit shell
- > 52% of the MRE reports to a flat-lying layer of supergene (oxide) mineralisation up to 30m thick that is sourced from, and overlies a primary (fresh rock) gold system
- > Supergene mineralisation is open to the northeast, and primary lodes are open at depth
- > The resource is shallow, reported to a maximum depth of 160m below surface, and the geometry of the supergene and fresh rock material offers potential for a modest strip ratio after removal of relatively soft recent cover material
- First stage metallurgical testwork on supergene and primary gold material indicates good recoveries and non-refractory mineralisation with reported combined gravity and cyanide soluble gold recoveries of 97% and 89% for oxide and primary gold mineralisation respectively
- > Hobbes sits in a favourable location close to established mining and haul road infrastructure that may offer future commercial pathways for the Project
- Delivery of first MRE at Hobbes will spur ongoing exploration, led by aircore testing of 'lookalike' structural targets immediately south of the Hobbes system

Solstice is pleased to advise that the Company's recent exploration campaigns have delivered an important milestone at the **Hobbes Gold Project**, located 150km northeast of Kalgoorlie, with a maiden MRE. Independently modelled, the MRE is **4.6 million tonnes at 1.2g/t Au for 177,000** 

**ounces** reported in accordance with JORC 2012. Importantly, the Company has considered high-level economic parameters and has reported the MRE at a 0.6g/t Au cut-off, and only those gold ounces constrained within an A\$2,500/oz optimised pit shell (**Table 1**).

The Hobbes MRE has supergene and fresh rock components. Supergene gold mineralisation forms a flat-lying blanket with broader dimensions of up to 1km in strike, 400m width and is in places up to 30m thick. Optimisation using a \$2500/oz gold price produced a pit shell that incorporates a significant area of supergene mineralisation (**Figure 1**) as well as the core of an underlying primary gold system. The pit has a maximum depth of 160m from surface, and the combination of supergene and fresh rock material offers potential for a modest strip ratio in a commercial development.

Fresh rock gold mineralisation sits in multiple west-dipping lodes that initiate from and are controlled by local cross-faulting (**Figure 2**). The primary gold system remains open at depth.

Table 1: Hobbes Gold Project maiden JORC Mineral Resource Estimate.

Hobbes Gold Deposit				
JORC 2012 Classification	Tonnes	Gold Grade (g/t)	Gold Metal (oz)	
Indicated	-	-	-	
Inferred	4,600,000	1.2	177,000	
Total Indicated & Inferred	4,600,000	1.2	177,000	

Notes: The Mineral Resources are reported at a lower cut-off grade of 0.6 g/t Au and are constrained within A\$2,500/oz optimised pit shells based on mining parameters and operating costs typical for Australian open pit extraction of deposits of similar scale and geology. All numbers are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding. See Appendix 1 for JORC 2012 Table 1.

Weathering Domain	Category	Tonnes	Grade (g/t Au)	Ounces
Transitional	Inferred	2,500,000	1.2	92,000
Fresh	Inferred	2,100,000	1.2	85,000
	Total	4,600,000	1.2	177,000

Notes: The Mineral Resources are reported at a lower cut-off grade of 0.6 g/t Au and are constrained within A\$2,500/oz optimised pit shells based on mining parameters and operating costs typical for Australian open pit extraction of deposits of similar scale and geology. All numbers are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding. See Appendix 1 for JORC 2012 Table 1.

Solstice's Managing Director and CEO, Mr Nick Castleden said:

"The delivery of a robust first-ever Mineral Resource estimate at Hobbes is an excellent result - the deposit forms the nucleus of Solstice's Yarri district gold landholding and is ideally located within sight of active mining and infrastructure. The MRE is estimated by reputable independent consultant Cube Consulting and takes into consideration commercial parameters by reporting only ounces that fall into an optimised A\$2500/oz pit shell".

"We see this as strong foundation to build on and really like the potential to discover new gold mineralisation in lookalike structural targets on the Hobbes licence, and elsewhere in the Yarri tenements. The Company aims to kick off aircore drilling over priority targets in coming months and is working up RC targets that offer potential to immediately add to the MRE."

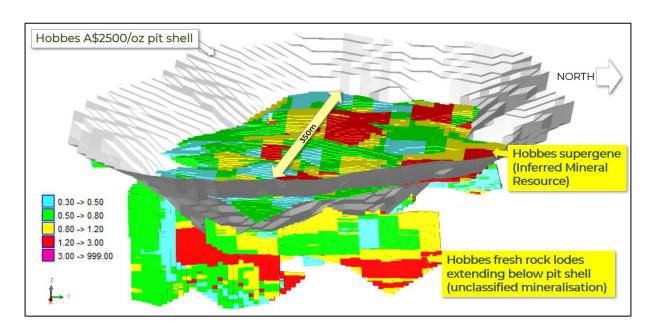


Figure 1: Oblique view of the Hobbes A\$2500/oz optimised pit shell looking west, showing the flatlying blanket of supergene (oxide) mineralised resource blocks, as well as fresh rock mineralised material extending below the pit boundaries. The Hobbes MRE only reports material that falls <u>inside</u> the A\$2500/oz pit shell

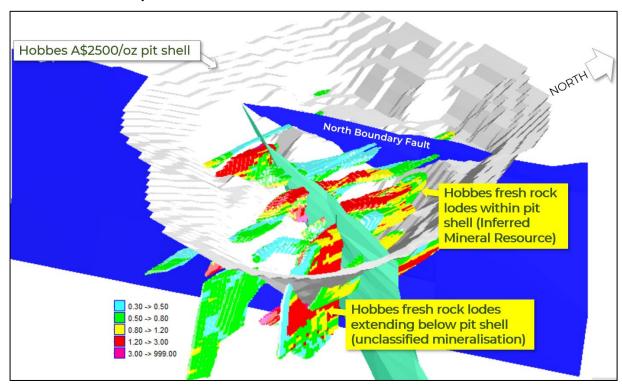


Figure 2: Oblique view of the Hobbes A\$2500/oz optimised pit shell looking northwest <u>with supergene (oxide) mineralised resource blocks removed</u> to allow viewing of fresh rock mineralised material within and extending below the pit boundaries, and the main controlling structures. The Hobbes MRE only reports material that falls <u>inside</u> the A\$2500/oz pit shell

The maiden Hobbes MRE was commissioned following Solstice's successful 2022 exploration campaigns at the Project. Solstice continued the work of previous explorers Newcrest Operations Ltd (**Newcrest**), Renaissance Minerals Ltd (**Renaissance**) and OreCorp Ltd (**OreCorp**), completing an infill and step-out RC and DD program comprising 27 RC holes for 5,884m, and ten DD holes for 2,500m on five traverses covering 300m of strike.

A reliable geological model based on aeromagnetic interpretation, logging and litho-geochemistry was developed. This was used to model fresh rock lode geometries in the MRE and the improved model can now be applied to identify priority step-out targets.

This announcement has been authorised for release by the Board.

## For further information please contact:

#### **Nick Castleden**

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#### **Mineral Resource Estimate**

## **Project Location**

The Hobbes exploration licence (E31/1117) is situated in the core of the Company's extensive Yarri landholdings and covers an area of 95km² approximately 5km west of Northern Star Resources' Porphyry Mining Centre (**Figure 3**). Nexus Minerals' emerging Crusader-Templar gold deposit is located approximately 10km to the southeast. Northern Star operates several mines in the Porphyry area and is hauling material to its Carosue Dam operations located 36km to the south.

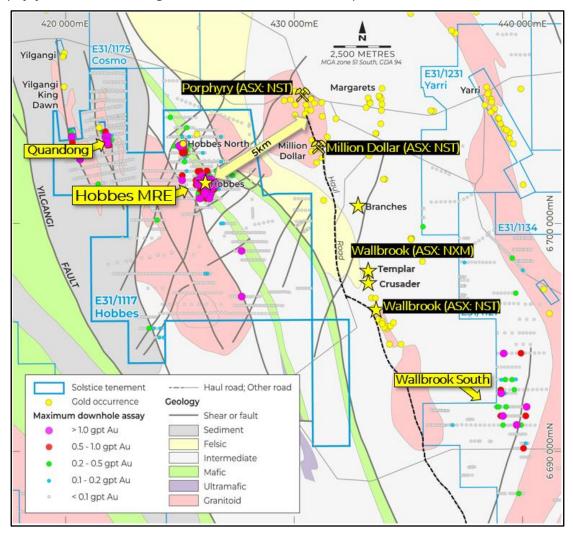


Figure 3: Geology and Gold Mineralisation of the Hobbes Project Area

## **Project Geology**

The Yarri Project is located on the eastern margin of the regional Keith-Kilkenny Tectonic Zone (**KKTZ**), a proven gold corridor that includes the >3moz Carosue Dam gold camp. The KKTZ is dominated by intermediate volcanic, felsic volcanic and sedimentary rocks often overlain by younger cover material.

Most of the gold mineralisation in the Hobbes area is hosted by structures cutting granitic or syenitic intrusives, as best seen at the nearby Porphyry-Wallbrook gold system (**Figure 3**) and ontenure at Quandong. Intrusive-hosted mineralisation is often associated with a distinctive pink hematite-pyrite style of alteration. Gold mineralisation in intermediate volcanic or

metasedimentary rocks is vein related, but often with a direct or spatial association with intrusives. Hobbes itself is hosted within volcaniclastic, andesite and carbonate altered mafic rocks, but there are altered molybdenum +/- copper bearing intrusive rocks nearby.

#### **Hobbes Local Geology**

The Hobbes MRE is located under an area of transported cover that includes paleochannel sediments and was discovered and delineated by a combination of aircore then RC and DD drilling. There is no outcrop in the immediate prospect area so geological interpretation is based on drillhole logging and litho-geochemical data collected from recent and historical drilling.

Hobbes gold mineralisation is interpreted to be located within a north-northwest trending package of intermediate volcanic rocks sandwiched between a basalt hanging wall and rhyodacitic volcanic to volcaniclastic footwall package. The stratigraphic sequence dips steeply to the west and is offset by a series of broadly northeast trending, apparently right lateral strike-slip faults, and a west-northwest striking left lateral strike slip fault (**Figure 4**). Intrusive units include syenite sills and dykes, and thin mafic sills.

Two of the northeast trending faults, the North Boundary Fault (**NBF**) and subparallel South Boundary Fault (**SBF**) enclose a broader, strongly altered and demagnetised zone. The NBF and the west-northwest striking fault appear to be an important control on higher grade primary gold mineralisation.

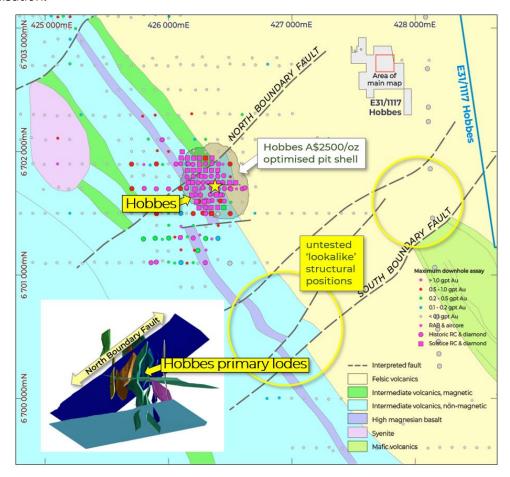


Figure 4: Geology map for the Hobbes Gold Project showing outline of the A\$2500/oz optimised pit shell constraining the Hobbes MRE, and similar untested structural positions along strike

#### **Hobbes Gold Mineralisation**

The Hobbes MRE has two components, a flat-lying blanket of supergene gold mineralisation that sits in the saprolite profile below transported material and covers an area of up to 1km in strike, 400m width and is up to 30m thick (**Figure 5**). The supergene mineralisation overlies and is sourced from a smaller but significant fresh rock system defined by multiple west-dipping lodes controlled by local cross-faulting.

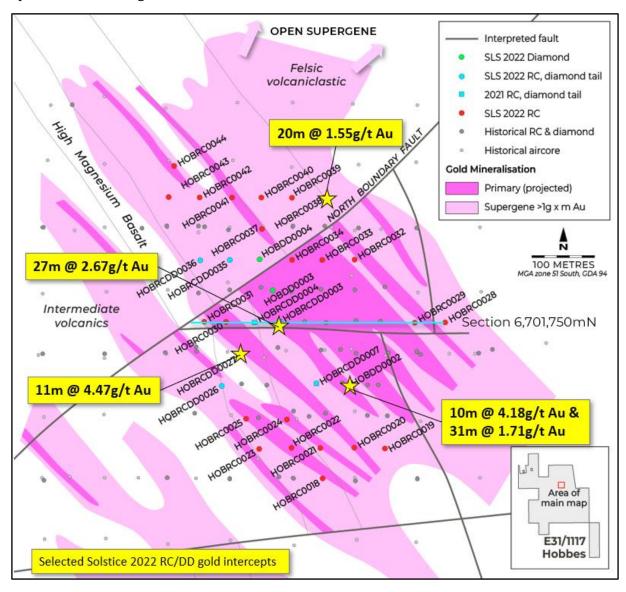


Figure 5: Hobbes Prospect with RC and DD hole collar locations showing generalised outlines of supergene (pale pink) and underlying primary mineralisation (dark pink) and selected Solstice drilling results

Prior to the commencement of the MRE, Solstice completed a drilling campaign (27 RC holes for 5,884m and ten DD holes for 2,500m) to infill historical drilling and complete 50m drill traverses over the 500m strike length of the known mineralisation.

Significant intercepts<sup>1</sup> of supergene gold mineralisation included:

- 19.8m @ 1.13g/t gold from 59.2m (HOBDD0004)
- 12m @ 1.21g/t gold from 57m (HOBRCDD0027)
- 13m @ 1.34/t gold from 58m (HOBRC0037)
- 17m @ 1.18g/t gold from 56m (HOBRC0032)
- 20m @ 1.55g/t gold from 53m (HOBRC0038)
- 10m @ 4.18g/t gold from 78m (HOBDD0002)
- 11m @ 0.96g/t gold from 55m (HOBDD0003)
- 7m @ 2.44g/t gold from 49m (HOBRC0029)
- 7m @ 1.15g/t gold from 69m (HOBRCDD0035)

Significant primary gold intercepts<sup>1</sup> beneath the supergene blanket included:

- 27m @ 2.67g/t gold from 113m (including 20m @ 3.25g/t gold from 120m); 4.8m @ 3.19g/t gold from 150m and 7.2m @ 1.30g/t gold from 190.8m (HOBRCDD0003)
- 13m @ 4.04g/t gold from 96m (HOBRC0030)
- 8m @ 2.05g/t gold from 110m and 8m @ 2.32g/t gold from 187m (HOBRC0033)
- 9m @ 1.59g/t gold from 156m (HOBRC0031)
- 31m @ 1.71g/t gold from 118m (HOBDD0002)
- 11m @ 4.47g/t gold from 264m and 4.30m @ 3.38g/t gold from 395m (HOBRCDD0027)
- 8.43m @ 1.28g/t gold from 134.67m and 10.08m @ 1.73g/t gold from 174m (HOBDD0003)
- 5.93m @ 1.95g/t gold from 235m (HOBRCDD0007)

These results added confidence to the geometry of gold lodes and complement historical RC and DD drilling results<sup>2</sup> at the Project. Primary gold mineralisation remains open down-dip and in places along strike, while parts of the supergene blanket remain open toward the north-east.

Geological modelling suggests that primary gold mineralisation is controlled by stacked WSW dipping NNW-striking zones in a fault block immediately south of the NBF. There is strong potential for the NBF to deliver new mineralisation across sequence, and for other 'lookalike' NE-striking faults to control new mineralised positions along strike, these targets will form the basis of ongoing aircore drilling into unexplored areas.

#### **Hobbes Drilling Summary**

Drilling density through the Hobbes deposit is at 50m line spacing, with angled RC and DD drilling at an approximate 50m spacing along lines for an approximate 50m  $\times$  50m drill-out. The

<sup>&</sup>lt;sup>1</sup> Refer to ASX:SLS 8 Dec 2022 ("Final Assay Results at Hobbes Return 20m at 3.25g/t Gold"), 15 November 2022 ("Encouraging Primary Gold Intercepts at Hobbes Gold Prospect") and 8 September 2022 ("Significant Gold Mineralisation in RC Drilling at Hobbes").

<sup>&</sup>lt;sup>2</sup> Refer to ASX:SLS 14 March 2022 ("Prospectus").

dimensions of the blanket of supergene gold mineralisation are supported by historical aircore drilling on typically a  $100m \times 100m$  pattern and down to  $50m \times 100m$  in places, although these holes are not utilised in the Hobbes MRE.

In addition to drilling carried out by Solstice, the Hobbes MRE includes historical drilling by Newcrest (47 RC holes for 7,085m and five DD holes for 2,587m), Renaissance (9 RC holes for 1,494m), and OreCorp (17 RC holes, 2,687m).

The 6,701,750N cross section below (**Figures 6** and **7**) shows the relationship between supergene and primary mineralised lodes, and significant gold intercepts.

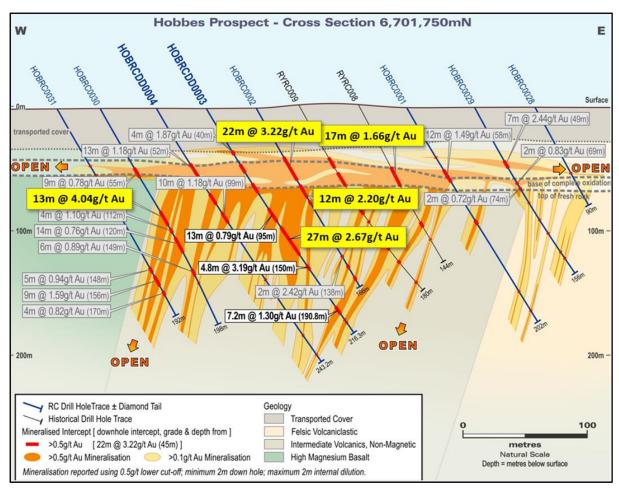


Figure 6: Hobbes Prospect 6701750N cross section showing RC and DD hole traces, interpreted solid geology and supergene and primary mineralisation

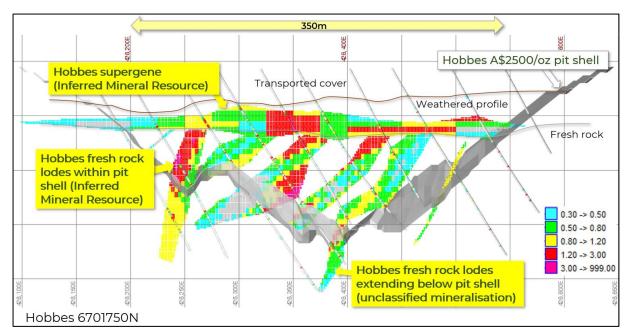


Figure 7: Hobbes Prospect 6701750N cross section through MRE block model showing outline of A\$2500/oz constraining pit shell and RC and DD hole traces. The Hobbes MRE only reports material that falls inside the A\$2500/oz pit shell

#### **Hobbes Preliminary Metallurgy**

Preliminary metallurgical testwork<sup>3</sup> for both oxide and primary gold mineralisation indicated the Hobbes gold mineralisation is non-refractory, with reported combined gravity and cyanide soluble gold recovery results of 97% and 89% for oxide and primary gold mineralisation, respectively.

The testwork was undertaken by ALS Metallurgy in Perth to establish preliminary key process parameters and included comminution testwork, mineralogical analysis by Xray Diffraction (XRD) method, grind establishment, Knelson gravity separation and mercury amalgamation, and direct cyanidation.

Composite samples for the testwork were selected from historical DD drill core for both oxide gold mineralisation and primary gold mineralisation. The comminution and grindability testwork indicated that oxide mineralisation is relatively soft, while primary mineralisation is consistent with typical Eastern Goldfields ores. Gold leach kinetics for both composite samples were fast, with most of the gold leaching in the first 4 hours, which is an excellent result.

Table 2: Summary results for gold recovery of the Hobbes oxide & primary mineralised material.

YARRI (HOBBES) GOLD PROJECT: GRAVITY SEPARATION/DIRECT CYANIDATION TESTWORK (Pso: 75 μm)										
Composite ID	Test No (WH)	% Au Extraction @ hours			Au Grade (g/t)		Consumption (kg/t)			
Composite ID		Grav.	2	4	8	48	Calc'd Head	Leach Residue	NaCN	Lime
NHD002 Oxide (#1)	11853	12.11	81.28	90.17	91.00	97.12	1.73	0.05	0.67	0.68
NHD002 Primary (#2)	11854	22.53	83.56	84.73	85.30	88.83	2.51	0.28	0.34	0.37

<sup>&</sup>lt;sup>3</sup> Refer to ASX: ORR 17 December 2021 ("Favourable Metallurgical Testwork Results for the Hobbes Gold Prospect")

These initial results are seen as positive, and the overall recovery of gold in primary material is expected to improve with further optimisation testwork.

## **Hobbes Sampling and Assay Summary**

The March 2023 Hobbes MRE is based entirely on data gathered through RC or DD drilling.

All Solstice's and OreCorp's RC holes utilised the same techniques and sampling methodology.

RC holes were drilled with a 5.25-inch face-sampling bit, with one metre samples collected through a cyclone and cone splitter to form a two to three-kilogram sample. Most RC assays used in the MRE are based on the original one metre sample intervals collected from the drilling during operations. In places composite samples were collected by representative spear-sampling of individual 1m bulk sample bags. Where composite assay results were greater than 0.10g/t Au, the corresponding 1m split samples were collected and submitted for 1m assay, and the 1m results allocated a higher priority in the assay database. A small number of composite samples were included in the MRE.

RC samples throughout the project are generally dry and of good representative quality. Where ground conditions prevented the delivery of dry sample the RC hole was terminated, and where required extended via a diamond 'tail'.

Solstice's DD drill holes were drilled at NQ diameter core size, often utilising a component of RC drilling to complete pre-collars through hanging wall rocks before commencing with NQ core drilling. Core recovery and ground conditions are good, with no significant core loss recorded in any part of the drill program.

Sampling of DD core was based on regular one metre intervals or occasional smaller intervals cut to discrete geological contacts. The core was cut in half to produce a sample mass of three to four kilograms per sample.

From Solstice's drilling activities 7,274 RC and all 2,520 DD samples were prepared at the Intertek Laboratory in Perth where samples were dried, and the whole sample pulverised to 80% passing 75um, and a sub-sample of approximately 200 grams retained. A nominal 50 grams was used for the analysis. The procedure is industry standard for this type of sample. All samples were analysed at the Intertek Laboratory in Perth using a 50-gram Fire Assay with AAS or ICP-MS finish.

Sampling and assay techniques utilised in RC and DD drilling by previous explorers including Newcrest and Renaissance are detailed in WAMEX Mineral exploration reports available in Open File at the West Australian Department of Mines, Industry Regulation and Safety<sup>4</sup>. All historical drilling is captured in the Hobbes Project drilling database, and the Company's review of this documentation and exploration methodology suggests that the previous work was carried out by reputable exploration teams and the data is of good quality.

Solstice follows a standard QAQC protocol for all drilling programs of Field Standards (Certified Reference Materials) and Blanks inserted at a rate of three Standards and two Blanks per 100 samples. RC Field Duplicates are generally inserted at a rate of approximately 1 in 25 samples. The RC duplicate sample is collected by spear sampling from the bulk 1m sample bag for the composite

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<sup>&</sup>lt;sup>4</sup> Newcrest Operations Ltd WAMEX report A-Numbers include: 77037 (RC), 81065 (RC and DD) and 89343 (DD). Renaissance Minerals Ltd WAMEX report A-Numbers include: 100680 and 104864 (RC).

samples, or directly from the second sample chute off the cyclone's cone splitter for the routine 1m samples. The duplicate samples for DD core is collected as quarter core from the same half as the respective primary sample.

At the Laboratory, regular assay Repeats, Laboratory Standards, Checks and Blanks are analysed. For the reported MRE, the relevant Solstice sample assays and QAQC numbers included a total sample submission of 10,639 samples. This included 112 Field Blanks, 403 Field Standards and 330 Field Duplicates. In addition, Laboratory Blanks, Laboratory Duplicates, and Laboratory Standards were inserted and analysed by the Intertek or SGS Laboratories as per their internal guidelines. Umpire Laboratory check assays were submitted by Solstice to SGS, as well as pulp-repeat samples submitted blind back to Intertek.

The Solstice and historical drill hole locations were pegged and then picked up by either standard 12-channel handheld GPS with +/-3 m accuracy or DGPS survey with sub 1m accuracy.

All Solstice's, OreCorp's and Newcrest's RC and DD drill holes were downhole directional surveyed on site using north-seeking Gyroscopic tools. Most DD drill holes were surveyed live whereas most RC holes were surveyed upon exiting the hole. The remaining 9 RC drill holes completed by Renaissance were surveyed by single or multi-shot downhole surveys, the majority of which are relevant for dip information only.

General observations are that DD drill traces stay predominantly within a few degrees of the collar dip and azimuth. RC drill holes may show local deviation in dip, generally downward in dip, and to the right downhole. No material deviation issues were recorded.

## **Geological Modelling**

Solstice has developed a reliable Hobbes geological model based on geological logging and downhole litho-geochemistry. The geological model was used to model fresh rock lithology, fault offsets and lode geometries, which are controlled by the fault structures.

The geological interpretation was compiled by Solstice by analysing all available relevant data, including geological logging (lithology and structure), gold assays, as well as interpretation of aeromagnetic and gravity geophysical data. A 3D geological interpretation was constructed on the basis of the logging and lithogeochemical data, and digital surfaces from this interpretation were then used as a guide in the construction of wireframes in Surpac three-dimensional modelling software by independent resource consultant Cube Consulting Pty Ltd (**Cube**).

Host rock lithologies (from east to west) consist of footwall felsic volcanics, a central core of intermediate volcanics and a hangingwall sequence of ultramafics. All units dip relatively steeply to the west.

A structural interpretation has been completed, mainly using the apparent offsets of the lithological units. The replication of these offsets in relation to the mineralisation domains indicates some offsets and terminations.

In total, 13 mineralisation domains were interpreted – one flat lying supergene style domain, hosted in the saprolite zone and 12 steep to shallow west dipping primary domains. The interpretation of the mineralised domains was completed by Cube. The majority of the primary mineralisation is hosted on the intermediate volcanics contacts or within the intermediate volcanics.

Weathering domains were completed by Cube, using a combination of logging, core photos and assay results. This resulted in the creation of cover, transitional and fresh weathering domains.

All available drilling was used to assist in the mineralisation domaining, although only RC and DD holes were used in the MRE. A sectional interpretation was completed on 50m sections, with the interpretation strings snapped to drilling. Generally, a 0.3 g/t Au cut-off was used, however to assist in geological continuity some lower grade material was included within the domains. These strings were then wireframed into the individual mineralisation domains.

#### **Mineral Resource Estimation**

Samples were composited to 1m within each estimation domain using best fit length option and a threshold inclusion of samples at sample length 50% of the targeted composite length.

A geostatistical analysis using a combination of methods including spatial location, histograms, log probability plots and CVs was conducted to determine the influence of extreme values. This influence was reduced by applying top-cutting to seven of the 13 domains.

Variogram modelling was undertaken for the composited data for all domains with sufficient data to produce robust variograms. All variogram models were undertaken by transforming the composite data to Gaussian space, modelling a Gaussian variogram, and then back-transforming the Gaussian models to real space for use in interpolation. For domains with geostatistically insignificant number of data points, variograms models were adopted from the modelled variograms and the orientation modified accordingly.

A Kriging Neighbourhood Analysis (**KNA**) and the domain widths and orientation were used to determine the most appropriate block size. Block sizes for the supergene and primary domains were adjusted to take into account the different orientations. For the supergene domain the parent block size was 25 m (X)  $\times$  25 m (Y)  $\times$  5 m (Z) and for the primary domains the parent block size was 3.125 m (X)  $\times$  25 m (Y)  $\times$  5 m (Z) and for volume resolution, sub-blocking was set to 1.5625 m (X)  $\times$  1.25 m (Y)  $\times$  1.25 m (Z).

KNA was also used to determine other estimation parameters such as minimum and maximum samples, discretisation, and search distance to be used for the estimation.

Gold was estimated into the supergene and primary models using Ordinary Kriging using with hard domain boundaries and parameters optimised for each domain based on the variogram models.

For the supergene domain the grade estimates used two passes with the first pass search distance of 75 m and the second pass using twice the first pass distance. A minimum number of samples was set to six and the maximum number of samples set to 16. For the primary domains, the estimation parameters were the same except the first pass search distance ranged from 50 – 85 m.

No other elements were estimated.

Bulk densities were determined from nearly 800 measurements. The final assignment of the bulk densities was based on a combination of weathering and lithological domains.

#### Classification

The MRE classification is a measure of confidence in the geological framework and estimation quality.

The classification was based on data quality, sample spacing, geological understanding of mineralisation controls and geological/mineralisation continuity and quality of the final grade estimate, however classification is typically defined by drillhole pierce points through each individual domain. Where there was pierce points at  $50 \text{ m} \times 50 \text{ m}$  or less, the material was classified as Inferred. All other material was not classified.

## **Reporting and Cut-Off Grades**

The MRE may be considered amenable to open cut mining and is reported at lower cut-off grade of 0.6g/t Au, which is considered appropriate.

The MRE reported is the portion of the resource model that is above 0.6 g/t Au and sits within an optimisation shell generated using a gold price of A\$2,500. The input parameters used in the optimisation were based on costs from similar Western Australian gold mines. These factors satisfy the JORC guidelines of having a "reasonable prospects of eventual economic extraction". The reported MRE falls in the Inferred category.

A range of other cut-offs for the MRE is presented in Table 3.

Table 3. Inferred Mineral Resources at varying gold cut-off grade. All numbers are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

Cut-of Au (g/t)	Tonnes	Grade Au (g/t)	Ounces
0.3	6,200,000	1.0	201,000
0.4	5,700,000	1.1	196,000
0.5	5,200,000	1.1	188,000
0.6	4,600,000	1.2	177,000
0.8	3,400,000	1.4	150,000
1.0	2,500,000	1.6	124,000
1.2	1,600,000	1.8	95,000

#### **Mining and Other Material Modifying Factors**

There has been no historical production from this deposit. No modifying factors were applied to the Mineral Resource, however modifying factors were used for the optimisation.

#### ABOUT SOLSTICE MINERALS LIMITED

Solstice is a minerals exploration company with gold and base metal projects in the Eastern Goldfields of Western Australia (**Figure 8**). The Company's key projects are the extensive Yarri gold landholding (which includes the advanced Hobbes gold Prospect), Ringlock Dam and the Ponton early-stage gold project.

Solstice has been listed on the Australian Securities Exchange since 2 May 2022, when Solstice demerged from OreCorp Limited, and trades under the code 'SLS'. The company is well funded with no debt.

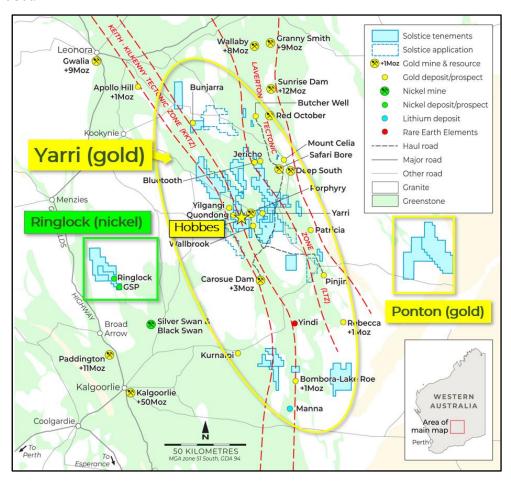


Figure 8: Solstice's Eastern Goldfields Projects

#### **Forward-Looking Statements**

This announcement may contain certain forward-looking statements, guidance, forecasts, estimates, prospects, projections or statements in relation to future matters that may involve risks or uncertainties and may involve significant items of subjective judgement and assumptions of future events that may or may not eventuate (**Forward-Looking Statements**). Forward-Looking Statements can generally be identified by the use of forward-looking words such as "anticipate", "estimates", "will", "should", "could", "may", "expects", "plans", "forecast", "target" or similar expressions and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production and expected costs. Indications of, and guidance on future earnings, cash flows, costs, financial position and performance are also Forward-Looking Statements.

Persons reading this announcement are cautioned that such statements are only predictions, and that actual future results or performance may be materially different. Forward-Looking Statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change, without notice, as are statements about market and industry trends, which are based on interpretation of current market conditions. Forward-Looking Statements are provided as a general guide only and should not be relied on as a guarantee of future performance.

No representation or warranty, express or implied, is made by Solstice that any Forward-Looking Statement will be achieved or proved to be correct. Further, Solstice disclaims any intent or obligation to update or revise any Forward-Looking Statement whether as a result of new information, estimates or options, future events or results or otherwise, unless required to do so by law.

#### **Compliance Statement**

The information in this release that relates to Exploration Results is based on and fairly represents information and supporting documentation prepared by Mr John McIntyre, a competent person who is a Member of the Australian Institute of Geoscientists. Mr McIntyre is an employee of Solstice Minerals Limited. Mr McIntyre has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr McIntyre consents to the inclusion in this release of the new Exploration Results in the form and context in which they appear.

The information contained in this announcement that relates to Mineral Resource Estimates for the Hobbes Gold Project is based on information compiled by Mr Mark Zammit, who is a full-time employee of Cube Consulting Pty Ltd (Cube) and is a Member of the AIG. Mr Zammit has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is an undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Zammit consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to previous Exploration Results is extracted from the ASX announcements (**Original Announcements**) dated 8 December 2022 ("Final Diamond Drill Assay Results Return 20m at 3.25g/t at Hobbes Gold Prospect, Yarri Project"), 15 November 2022 ("Diamond Drilling Returns Encouraging Primary Gold Intercepts at the Hobbes Gold Prospect, Yarri Project"), 8 September 2022 ("Significant Gold Mineralisation in RC Drilling at Hobbes") and 14 March 2022 ("Prospectus") which are available at www.solsticeminerals.com.au. Solstice confirms that it is not aware of any new information or data that materially affects the information included in the Original Announcements and that all material assumptions and technical parameters underpinning the Exploration Results in the Original Announcements continue to apply and have not materially changed. Solstice confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original announcement.

# Appendix 1: Hobbes Project – Table 1 (JORC Code, 2012)

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code	Commentary
	explanation	
Sampling	Nature and quality of	Historical Drilling
techniques	sampling (eg cut	Previous operators of the Hobbes Project have
	channels, random chips,	sampled using Rotary Air Blast (RAB), Aircore (AC),
	or specific specialised	Reverse Circulation (RC) and Diamond Drilling (DD).
	industry standard	Drilling has been completed over a number of
	measurement tools	programs and varied spacings of holes and drill lines.
	appropriate to the	Sampling is assumed to have been via conventional
	minerals under	industry standards, i.e. spear sampling for RAB, 1/8
	investigation, such as	riffle splitting for RC and half core for DD.
	down hole gamma	
	sondes, or handheld XRF	Solstice Drilling
	instruments, etc). These	Sampling of RC chips is undertaken using conventional
	examples should not be	industry standards. In transported regolith material
	taken as limiting the	(nominally 40m downhole) representative sampling is
	broad meaning of	undertaken from either 1m sample interval piles or
	sampling.	plastic bags using a scoop/spear to create nominal 1.2-
		3kg 4-metre composite samples which are placed in
		new, clean pre-numbered calico bags. In residual
		bedrock, every 1m RC sample is split directly into new,
		clean pre-numbered calico bags using a Metzke-style
		cone splitter attached to the drill rig to create a
		nominal 1.2-3kg sample. RC sample bags are laid out
		systematically in rows of 30.
		DD drill core samples are a combination of both HQ
		and NQ core diameter with sample intervals defined by
		the geologist to honour geological boundaries but with
		a minimum length of 0.3m and a maximum length of
		1.5m. Samples of core were collected as half core for
		Primary samples and quarter core for Duplicate field
		inserted samples. All sampling was undertaken by
		Solstice staff.
	Include reference to	Historical Drilling
	measures taken to	Measures taken by OreCorp to ensure sample
	ensure sample	representivity are the same as Solstice. Measures taker
	representivity and the	by other previous operators are unknown.
	appropriate calibration	
	of any measurement	Solstice Drilling
	tools or systems used.	A QAQC sample is inserted at a rate of 1 in 20 primary
		samples (CRM or Blank QAQC sample), also field
		Duplicates were inserted at a rate of 1 in 25 Primary
		samples. Appropriate certified reference materials
		(CRMs) were supplied by Geostats Pty Ltd and suitable
		Blank material was also sourced from Geostats Pty Ltd.

Criteria	JORC Code explanation	Commentary
		Analysis of QAQC samples inserted by the Company is undertaken to monitor sample representivity and independent laboratory conditions. The CRMs used by the Company are grade and matrix matched as close as possible to interpreted geology.
		The laboratory (Intertek) also performed its own internal checks including insertion of pulp duplicate, standard, and repeat samples as required.
		For RC drilling field Duplicates were taken using the same method as the primary sample i.e. scoop/spear from piles or plastic bags or using the second sample shoot from the Metzke-style cone spitter attached to the drill rig.
		For DD drilling the field Duplicates were collected as quarter core based on the same methods as that for the Primary sample.
		DD drill core is aligned and measured by tape at the core yard and data is compared to drill contractor core block data consistent with normal industry practice.
	Aspects of the	Historical Drilling
	determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work	Sample collection and assaying by OreCorp was the same as Solstice. Samples by other previous operators were collected at various intervals ranging between 0.1m–5.0m, although the majority of samples were taken on 1m intervals.
	has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3	Assaying is conducted by recognised assay laboratories, including Genalysis and Intertek, although information about assay procedures have not been provided by the previous operators.  Only RC and DD holes have been downhole surveyed.
	kg was pulverised to	Solstice Drilling
	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.	Reverse circulation drilling was used to obtain nominal 1.2-3kg, 1m samples. Samples were composited to 4m in transported regolith to a depth of 40m downhole. These samples were crushed and pulverised to 85% passing 75µm to produce a 50g charge for gold Fire Assay with an ICP-MS finish.
	Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information	Sample preparation and assaying is conducted by Intertek at its Maddington, Perth facility, a recognised assay laboratory. Intertek has International Standards Organisation (ISO) Certification 9001 (ISO 9001) for Quality Management Systems.

Criteria	JORC Code explanation	Commentary
		RC holes were downhole surveyed by the drilling contractor using a REFLEX SPRINT North Seeking survey tool referenced to True North, where possible.
		DD drilling was completed to industry standard using varying sample lengths (0.3 to 1.5m) based on geological intervals, which are then sampled and at the laboratory are crushed and pulverised to produce a ~200 gm pulp sub-sample with 85% passing 75µm to produce a 50g charge for gold Fire Assay with an ICP-MS finish.  Visible gold was logged in DD drillholes HOBRCDD0003
		and HOBRCDD0004.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	Over the history of the project there has been a total of 986 holes totalling 51,810.7m of drilling which includes Rotary Air Blast (RAB), 307 holes for 9,774m, Aircore (AC), 587 holes for 28,789m, Reverse Circulation (RC), 85 holes for 10,461m, DD 7 holes for 2,786.7m  The RAB drillhole depths range from 2m to 82m down hole, with an average depth of 31.8m down hole.  The AC drillhole depths range from 8m to 140m down hole, with an average depth of 49.0m down hole.  The RC drillhole depths range from 16m to 288m down hole, with an average depth of 123.1m down hole.  For the project, DD drillhole depths range from 99.5m to 606.5m, with an average depth of 398.1m. Minor structural information was available regarding core orientation.
		Solstice Drilling
		RC and DD drilling is used for all new holes reported here. The drilling contractors used were Raglan Drilling Pty Ltd (for RC) and Blue Spec Drilling Pty Ltd (for DD).
		For RC drilling a nominal 5.5" diameter face-sampling drill bit is used. The upper portion of the hole reamed out to allow a 150mm diameter PVC collar to be inserted to 6m. Hole depths range from 144m to 348m deep (HOBRC0018–0044).
		Three DD drillholes (HOBDD0002–0004) were collared from surface as HQ3 diameter core which continued through the cover material and saprock at which point the core drilling was reduced to NQ diameter. The remainder of the DD drillholes were undertaken as 'tails' on RC pre-collars drilled in 2021 or 2022. Drill core

Criteria	JORC Code explanation	Commentary
		was routinely oriented at the end of every run using a Reflex Act III tool.
		Reverse circulation drilling at Hobbes completed by OreCorp (now Solstice) in 2021 comprised 17 holes (HOBRC0001–0017) for a total of 2,687m. At the Quondong Prospect, approximately 5km to the northwest of Hobbes, four holes (QDRC001–004) for a total of 396m were completed.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Historical Drilling Sample recoveries were estimated by OreCorp using the same methodology as Solstice. Sample recoveries during other historical drilling process are unknown, however it is assumed the operators used standard industry practices of the period to record and assess core and chip sample recovery.
		Solstice Drilling
		The RC sample recoveries were estimated by Solstice geologists at the rig from the amount of sample in the green sample bag. These recoveries were estimated as percentages to the nearest 25%, recorded both on paper in the field and subsequently digitally recorded in a spreadsheet which was then uploaded into the Solstice company database. For Solstice's RC drilling >90% of samples had >75% recovery.
		For DD drilling the core recovery is measured and recorded as a percentage of measured core length versus drilled length. Core loss or gain is recorded in drill logs.
	Measures taken to	Historical Drilling
	maximise sample recovery and ensure representative nature of the samples.	Measures taken by OreCorp to maximise sample recovery and ensure representivity were the same as Solstice. Measures taken by other previous explorers to maximise sample recovery and ensure representivity are not recorded in historical reports. It is assumed that industry standard measures applicable at the time of drilling were implemented.
		Solstice Drilling

Criteria	JORC Code explanation	Commentary
		Every effort was taken during RC drilling to ensure full sample recovery from each interval collected. If sample weights were noted to reduce, it was recorded on the sample sheet and the RC drilling contractor was informed immediately. The RC drill system utilises a face-sampling drill bit which is industry best practice, and the drill contractor aims to maximise recovery at all times. The rig-mounted sample cyclone and splitter were cleaned regularly.
		In the case of missed Duplicate or missed Primary sample collection directly from the Cyclone/splitter the sample collection 'spear method' was used and that information recorded in geological logs.
		Reverse circulation drillholes are drilled dry whenever practical in order to maximise sample recovery and maintain sample integrity. Over 90% of all RC drillholes drilled in this program produced dry sample material. The RC drill rig was equipped with an auxiliary air compressor and booster which are critical in maintaining good RC sample recovery by keeping the sample dry.
		DD drilling typically provides high sample recovery due to the competent nature of the ground. Where DD drillholes were collared from surface, triple tube drilling as HQ3 was used to maximise recovery in poorly consolidated material.
	Whether a relationship	Historical Drilling
	exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No sample bias has been observed in data from historical reports reviewed by Solstice.  The Competent Person is satisfied that the drill sample recoveries have been adequately assessed and are appropriate to the mineralisation under investigation.
		Solstice Drilling
		For this RC drill program at Hobbes Prospect the Company completed a study of sample recovery versus gold grade from 2021 and 2022 RC drilling data and preliminary analysis of the data suggests no sample bias has been observed.
		Analysis of the DD drill assay data suggests no sample bias and relationship exists between sample recovery and gold assay grades. DD drill core sample recovery was extremely high.
Logging	Whether core and chip samples have been geologically and	Historical Drilling

Criteria	JORC Code explanation	Commentary
	geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Drill core and chip samples have been geologically logged by previous operators. Where available, geological log data is currently limited to lithology, grain size, texture and colour only. Solstice geologists undertook re-logging of chips and core from historical drilling to improve detail of early geological logging. Collection of pXRF data from historical RC drill sample pulps is also undertaken to provide a lithogeochemical dataset across the Hobbes Prospect.  The Company is actively working to import more geological information from historical reports.  The Competent Person is satisfied that the logging detail and quality is appropriate to the mineralisation under investigation.
		Solstice Drilling
		Geological data for both RC and DD drill samples is logged according to the Solstice Geology Legend which conforms to industry best practice procedures. This includes logging regolith, lithology, alteration, mineralisation, veining and structural features. Where required the logging recorded the abundance of particular minerals or the intensity of alteration using defined ranges.  Geological logging is governed by Solstice's internal geological protocols and procedures document to ensure consistency between loggers.  Rock quality designation (RQD) plus alpha and beta angles of structures were collected for DD drill core.  The Competent Person believes geological data has been collected to a level of detail to support a Mineral Resource Estimation.
	Whether logging is	Historical Drilling
	qualitative or quantitative in nature.	Logging historically was primarily qualitative.
	Core (or costean,	Solstice Drilling
	channel, etc) photography.	Logging of RC and DD core samples is primarily qualitative in nature and is closely governed by Solstice standard geological protocols and procedures. Where quantitative estimations (mineral, sulphide and veining percentages) are made these are from a washed and sieved sub-sample of each 1m sample interval.
		All drill core is photographed dry and wet before cutting and sampling is undertaken for future analysis. Core photos are labelled and archived on Solstice computer servers.

Criteria	JORC Code explanation	Commentary
	The total length and percentage of the relevant intersections logged.	Historical Drilling All OreCorp drillholes were fully logged. Based on inspection of reports and available log data, all drillholes by other previous explorers are believed to have been logged in full.
		Solstice Drilling  All RC and DD drillholes are logged in full from the surface (0-1m interval) to the end of hole, based on the 1m sample intervals for RC or the relevant sample intervals for DD core samples.
Sub- sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Historical Drilling Sampling of drill core was by half core techniques where the DD core was cut in half with half core then removed from the core box for assaying.
μ. ορ α α.α.σ		Solstice Drilling
		Sampling of historical drill core by Solstice was by half core techniques where the DD core was cut in half with half core then removed from the core box for assaying.
		The 2022 DD core samples were cut in half using an Almonté core saw based on sample intervals defined by the logging geologist. Where Duplicate field samples were defined quarter core was collected for the Duplicate and Primary samples. Half core was retained in the core trays for future reference. The mass of each core sample is typically <5kg. The same portion of core is consistently sampled based on the location of the orientation line.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Historical Drilling RC samples were collected on the rig using riffle splitters. No information is available on sample moisture.
		Solstice Drilling
		The 1m RC samples were collected at the drill rig using a Metzke-style cone splitter. The 4m composite samples were collected from 1m sample piles or plastic sample bags by stainless steel scoop or plastic spear ensuring a proportional amount collected from each sample to achieve a nominal 1.2-3kg composite sample mass.
		Sample moisture is recorded for every 1m RC sample interval and <5% of samples were recorded as wet.
	For all sample types, the nature, quality and	Historical Drilling

Criteria	JORC Code explanation	Commentary
	appropriateness of the sample preparation technique.	Sample preparation and methodology by OreCorp was the same as Solstice. The precise sample preparation technique used by other previous explorers is unknown but is assumed to have followed appropriate industry standard techniques at the time of analysis.
		Solstice Drilling
		For RC drilling the sampling of 4m composites (with spear/scoop) or 1m sample split (with cone) was undertaken and is considered appropriate as an industry standard practice. The nature and quality of the field sample preparation techniques are considered appropriate for the type of sample.
		For DD drilling, core samples are considered to have very high sample integrity and use of half core and quarter core samples is appropriate.
		The laboratory sample preparation undertaken by Intertek follows industry best practice for accredited facilities and is considered appropriate for the sample matrix type and analysis method. All laboratory preparation was undertaken in Perth.
		At the laboratory, RC samples are oven dried at 100C, crushed and pulverised to 85% of total sample passing 75µm, defined as Intertek code SP03.
		DD core samples are all oven dried at 100C, and those <3kg are crushed and pulverised to 85% of total sample passing 75µm (Intertek code SP64). Core samples >3kg are crushed to 2mm and riffle split first before pulverisation to 85% passing 75µm (Intertek code SP18).
	Quality control	Historical Drilling
	procedures adopted for all sub-sampling stages to maximise representivity of samples.	QAQC procedures by OreCorp were the same as Solstice. Detailed QAQC procedures are unknown for other previous explorers but are assumed to have been appropriate to maximise representivity of samples collected.
		Solstice Drilling
		On site, field Duplicate samples are taken at a rate of 1 in 25 Primary samples based on the Company's QAQC procedures and advice from Cube Consulting, which requires either a CRM, Blank or Duplicate be inserted in the sample stream at least every 20th Primary sample.
		The CRMs used by the Company are sourced from Geostats Pty Ltd and Oreas™ and are of gold grade and

Criteria	JORC Code explanation	Commentary
		matrix that matched as close as possible to the interpreted geology.
		At the laboratory stage, internal QAQC pulp duplicates are taken at a rate of 1 in 28 by Intertek. Appropriate CRM material is also inserted and assessed by Intertek for internal laboratory QAQC.
	Measures taken to	Historical Drilling
	ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half	Sample representivity measures by OreCorp were the same as Solstice. Measures taken historically to ensure that the sampling is representative of the in-situ material collected is poorly documented by other previous explorers.  Some close-spaced and scissor-hole drilling was conducted to test near surface mineralisation with
	sampling.	results showing good continuity between holes.
		Solstice Drilling
		The use of a Metzke-style cone splitter attached to the RC drill rig maximises representivity of the Primary 1m RC sample intervals. This is also controlled using field Duplicate sampling. The QAQC field Duplicate sample data are evaluated by Solstice's independent database manager, Geobase Pty Ltd, and these showed satisfactory reproducibility.
		For DD core sampling, quarter core Duplicate field samples are routinely collected after every 25th Primary sample and inserted in the sample batches.
		Pulp repeats and element repeats for all sample types are undertaken by Intertek at the laboratory.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes collected by OreCorp were the same as Solstice. Historical Drilling sample sizes, although not documented by other previous explorers, are assumed appropriate for the rock type and style of mineralisation.
		Solstice Drilling
		Sample sizes of nominally 1.2-3kg for each 1m interval are considered appropriate for the rock type and style of mineralisation. Sample mass is recorded at the rig by Solstice field staff and by the laboratory and reported to the Company for incorporation into the database.
		For DD drill samples with interval widths 0.3 to 1.5m in length, this is considered standard industry practice and is appropriate for greenstone-hosted gold mineralisation.

Criteria	JORC Code 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.	Historical Drilling Information about assay laboratories has been reviewed by Solstice, and exploration reports typically indicate Genalysis and Intertek laboratories in Maddington as the laboratory used for routine assay. The laboratory procedure and assaying are assumed to have been appropriate.
		Solstice Drilling
		Laboratory assaying for all sample types is undertaken by Intertek, an ISO 9001 certified laboratory. All sample types are subjected to the lead collection Fire Assay technique which uses a 50g charge with an ICP-MS finish and is considered to provide near total gold recovery. The nature and quality of the procedures and assaying techniques at the laboratory are considered appropriate for the rock type and style of mineralisation.  Intertek holds various International Standards
		Organisation (ISO) certifications, and the laboratory procedures are considered standard industry practice.
	For geophysical tools,	Historical Drilling
	spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors	No geophysical, spectrometer or handheld XRF instruments were noted by previous explorers as used to determine any mineral or element concentrations. Collection of handheld XRF data from historical RC drill sample pulps is being undertaken by Solstice to provide a lithogeochemical dataset across the Hobbes Prospect to be used in development of a geological model.
	applied and their derivation, etc.	Solstice Drilling
	derivation, etc.	Magnetic susceptibility is measured for each sample with a KT10+ S/C unit. The unit is calibrated based on manufacturer instructions.
		A handheld XRF unit was used on site to determine mineral or element concentrations of samples during the RC drilling. The data was used in determining contacts of major rock units and support development of a geological model.
	Nature of quality control	Historical Drilling
	procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and	QAQC procedures by OreCorp were the same as Solstice. Historical information about the nature of QAQC procedures is limited in reports by other previous explorers reviewed by Solstice.
	whether acceptable	-

Criteria	JORC Code explanation	Commentary
	levels of accuracy (ie	Solstice Drilling
	lack of bias) and	The Company's QAQC procedures are defined and
	precision have been	governed by an internal geological protocol and
	established.	procedure document to ensure consistency in
		application. A QAQC sample was inserted in the sample
		stream in the field at a rate of 1 in 20 primary samples,
		as either a CRM or Blank. A field Duplicate was also
		inserted at a frequency of 1 in 25 Primary samples as
		part of the QAQC protocol.
		Appropriate CRMs were procured from Geostats Pty
		Ltd or Oreas™ Pty Ltd and suitable Blank material was
		also sourced as from Geostats Pty Ltd (Bunbury Basalt).
		The CRM labels are removed so no information about
		the CRM is available to the laboratory.
		Field Duplicates were taken on site for RC samples
		using the same method as the primary sample i.e.
		scoop/spear from piles or plastic bags or using the
		second sample shoot from the Metzke-style cone
		spitter on the drill rig. This included CRM's or reference
		material in the top 40m of cover that were collected for
		laboratory submission as 4m composites.
		Field Duplicates for DD core samples were taken on
		site as quarter core samples cut from the half core
		designated as a Primary sample.
		Analysis of QAQC and Duplicate samples inserted by
		the Company is undertaken to monitor sample
		representivity and independent laboratory conditions.
		The analysis is undertaken by Solstice's independent
		database manager, Geobase Pty Ltd, and checked by
		the Solstice geologists. Acceptable levels of accuracy
		and precision have been established.
		The Intertek laboratory also performed internal checks
		including insertion of pulp duplicates, standards, and
		repeats as required. Internal screen checks are also
		performed to ensure the mass percent passing 75µm is
		consistently high.
Verification	The verification of	Historical Drilling
of sampling	significant intersections	Consultants and technical personnel at Solstice have
and	by either independent or	visually verified the significant intersections in chips
assaying	alternative company	and DD core and results to date from the Prospect
	personnel.	area.
		Solstice Drilling
		The assay results for significant gold intercepts have
		been checked by Solstice's independent database

Criteria	JORC Code	Commentary
0.100.10	explanation	,
		manager, Geobase Pty Ltd, as well as internal Solstice geologists. Assay results have been checked against RC sample chip trays and geological logs. DD drill core samples have been checked against significant intersections to verify host rock and alteration.
	The use of twinned holes.	Historical Drilling No twin hole drilling has been undertaken on the Prospect area.
		No twinned RC or DD holes have been drilled by Solstice during this program.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Historical Drilling Data collection by OreCorp was the same as Solstice. Depending on the age of the drilling, previous operators have collected data either in paper form or electronically. No historical database is available. The data is compiled from supplied data and data extracted from the Western Australian Mineral WAMEX database, validated by independent data management company, Geobase Pty Ltd. The subsequent compiled dataset is exported into appropriate formats for use by the Company.
		Solstice Drilling
		The primary data for RC and DD drilling is collected by a geologist in the field recording it directly into a database logging sheet on a Toughbook laptop. Data is entered onto pre-defined MS Excel based log sheets following the Company's documented internal geological protocols and procedures manual. Validation measures for the field data is built into the log sheets.
		Sample logs are recorded on paper sheets in the field. Sample data is entered into the database from the sample sheets and provided to the database manager for alignment of assay data.
		Field data is backed-up each day with logs stored in the company database hosted on a server. Field data is first verified by senior Company geologists and then sent electronically to Solstice's independent data management company, Geobase Pty Ltd, for incorporation into a Master Database. Geobase conducts several phases of field log data validation to ensure consistency and completeness. The subsequent validated and compiled dataset is exported into

Criteria	JORC Code explanation	Commentary
		appropriate formats (MS Access and Micromine™) for use by the Company geologists.  Laboratory data is provided electronically to the Company and Geobase Pty Ltd and is validated and imported by Geobase into the Master Database. Data is supplied by Intertek as MS Excel spreadsheets and PDF certificates signed by the relevant laboratory manager.
	Discuss any adjustment to assay data.	Historical Drilling No adjustments or calibrations were made to any assay data collected by previous explorers and compiled by the Company.  Solstice Drilling No adjustments or calibrations were made to any gold assay data for samples collected and presented by
		Solstice.
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.	Historical Drilling The location of most drill collars has been recorded using a handheld GPS unit of an unknown accuracy. It is estimated an accuracy of +/-5 to 10m dependent on the age of the survey and GPS used. The accuracy of this system is unknown.  Only the RC and DD holes have been down-hole surveyed.
		Solstice Drilling
		The location of RC and DD drill collars is recorded using a handheld Garmin GPS-Map unit with an accuracy of +/-3m, using MGA94 Zone 51 South. This method is considered appropriate for this phase of exploration drilling. Consulting surveyor, Lone Star Surveys, has undertaken a DGPS survey of drillhole collars to provide data with accuracy to +/-0.01m.
		Downhole surveys were conducted by trained Raglan and Blue Spec Drilling personnel at every 30m for DD holes and immediately after the completion of every RC and DD hole using a REFLEX Sprint, North Seeking survey tool referenced to True North.
	Specification of the grid system used.	All data is reported using the grid system MGA94 Zone 51 South.
	Quality and adequacy of topographic control.	A digital terrane model (DTM) was created using the DGPS collar pickups of the 2021-2022 drilling. Historical

Criteria	JORC Code explanation	Commentary
		hole collars were then draped onto the generated surface.  The Prospect area relief is almost flat with very little elevation change in the areas drilled and sampled.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Historical Drilling Previous AC and RC drilling has been conducted on various drill spacings. Reconnaissance first-pass drilling was undertaken on 400m spaced drill lines with infill over prospective zones to 100m line spacing. The RC and DD drilling over the area of initial primary interest for Solstice was historically conducted on a nominal 100m x 50m grid.
		Solstice Drilling The 2022 DD and RC drilling at Hobbes Prospect infills Solstice's 2021 RC drilling and the historical drilling to a nominal 50m line spacing with 40m hole spacing (eastwest) between drillhole collars that spans 500m N-S and 450m E-W.
	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	The data spacing, distribution and geological understanding of mineralisation controls is sufficient for the estimation of Mineral Resources. The results from the recent RC and DD drilling have been used to develop a geological model, identifying mineralisation controls, and estimation of a Mineral Resource at the Hobbes Prospect
	classifications applied. Whether sample compositing has been applied.	Historical Drilling Sample compositing by OreCorp used the same methodology as Solstice. It is not known if other previous explorers utilised composite sampling methods, but it is likely they did in the upper portion of RC holes, using the industry standard of 4m.
		Four metre composite samples are collected for RC drilling in the upper portion of each hole to 40m depth. The 4m composite samples were collected from each 1m sample pile or plastic sample bags by stainless steel scoop or plastic spear ensuring a proportional amount collected from each sample to achieve a nominal 1.2-3kg composite sample mass.

Criteria	JORC Code	Commentary
	explanation	
		The 4m composite samples were re-sampled at 1m intervals from the original piles or sample bags at each drill site if warranted on the basis of assay results being > 100 ppb.
		Appropriate certified reference materials (CRMs) were inserted into the 4m composite sample stream in the field, as well as Duplicate and Blank QAQC samples.  The CRMs were procured from Geostats Pty Ltd or Oreas™ Pty Ltd.
		DD core is sampled to geological boundaries, or a 1.5m maximum sample interval. No composite sampling is undertaken for DD sampling.
Orientation	Whether the orientation	Historical Drilling
of data in relation to geological structure	of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Reconnaissance aircore drilling by previous explorers was vertical. The RC drillholes were generally collared at -60 degrees dip with azimuth grid East, with only one historical RC (NHRC004) collared with an azimuth to grid West. DD drillholes (5 holes) were collared at -55 to -60 degrees dip and azimuth of 038, 090 and 270 degrees.
		Solstice Drilling
		Both the RC and DD drillholes were collared at -60 degrees dip with grid East (090°) azimuth. The orientation of sampling is considered appropriate for the current geological interpretation of the mineralisation style.
	If the relationship	Historical Drilling
	between the drilling orientation and the orientation of key mineralised structures is	No orientation-based sampling bias has been identified in the historical data at this point for drilling during reconnaissance stages on the project.
	considered to have	Solstice Drilling
	introduced a sampling bias, this should be assessed and reported if material.	No orientation-based sampling bias from either drill type has been identified in the data at this point.
Sample	The measures taken to	Historical Drilling
security	ensure sample security.	Chain of sample custody procedures by OreCorp were the same as Solstice. No information on sample security or chain of custody has been supplied or identified by Solstice in other historical reports.
		Solstice Drilling

Criteria	JORC Code explanation	Commentary
		Chain of sample custody is maintained by Solstice personnel. Samples were collected in calico bags which were then secured in numbered polyweave bags. These were stored in Bulka bags at Edjudina Station homestead and then transported by a reputable commercial contractor, Hampton's Transport, directly to the Sykes Transport facility in Kalgoorlie for subsequent transportation to Perth. These facilities have lockable yards to maintain security prior to sample processing.
		Sample submission documents listing the batch number, sample number and order number accompany the samples at each stage and emailed directly to the laboratory managers. Samples are checked by Intertek to confirm receipt of all samples. If a discrepancy is noted, this is reported by the laboratory to Solstice.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Historical Drilling Solstice's review of previous sampling techniques and methodology indicate that it appears to have been conducted to industry standards applicable at the time of drilling.
		Solstice Drilling
		Solstice has not undertaken external audits, however a Cube Consulting Senior Geological Consultant visited Hobbes Prospect during the drilling program in July 2022 to ensure appropriate QAQC protocols are in place. Internal reviews of sampling techniques and data confirm that sampling has been conducted to industry standards. A review of Solstice's data from the 2021 RC drill campaign was undertaken by Cube Consulting with procedures and data considered adequate.

# **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral	Type, reference name/number,	The Hobbes Licence is located 150km northeast
tenement	location and ownership	of Kalgoorlie and consists of a single tenement,
and land	including agreements or	E31/1117, owned by Solstice Minerals Ltd and
	material issues with third parties	Garry Warren Pty Ltd ( <b>GW</b> ). Solstice has earned
	such as joint ventures,	an 80% equity in the tenement via sole funding

Criteria	JORC Code explanation	Commentary
tenure status	partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	\$500,000 (Phase 1 and 2) of expenditure over a 24-month period. Solstice must commence good faith negotiations with a view to executing a Joint Venture agreement with GW within 90 days from completion of a definitive feasibility study with respective interests as follows:  • Solstice 80%  • GW 20%  There are no historical sites or environment protected areas on the tenement.
	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 tenement is in good standing and there are no known impediments to renewal of the tenement or to obtaining any licence to operate. An Extension application was granted to Solstice in early 2022 and the licence is valid to April 2027.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The project has an established exploration history with reported gold exploration dating back to 1979. Previous exploration within the area of historical tenement E31/597 was carried out by the following companies:  • Pennzoil 1979-1980  • Yilgangi Gold 1981-1983  • Clackline Refractories Ltd 1984-1986  • Tectonic Resources 1987-1988  • Mt Kersey Mining NL 1991-1998  • Capricorn Resources 1992-1993 and 1997-1998  • Goldfields Resources 1993-1997  • Jindalee Resources 2002-2003  • Newcrest Mining 2003-2011  • Renaissance Minerals 2012 -2015  • Crosspick Resources 2017-2018  • OreCorp Ltd 2018-2022
Geology	Deposit type, geological setting and style of mineralisation.	The Hobbes Licence straddles the Keith-Kilkenny Fault within the Edjudina Greenstone Belt of the Yilgarn Craton. The Edjudina Greenstone Belt within the vicinity of the licence area consists of basalt, dolerite, felsic-intermediate volcaniclastics and volcanics and minor ultramafic units.  Within the Hobbes Project area the Edjudina Greenstone Belt is intruded by numerous monzonites, syenite and felsic porphyries.

Criteria	JORC Code explanation	Commentary
		The Hobbes Prospect area appears to be situated on a major dilational jog associated with a number of volcanic and volcaniclastic rock units and a demagnetised zone. Hobbes gold mineralisation is interpreted to be located within a north-northwest trending package of intermediate volcanic rocks sandwiched between a high magnesian basalt hanging wall and rhyodacitic volcanic to volcaniclastic footwall package. The stratigraphic sequence dips steeply to the west and is offset by a series of broadly northeast trending, apparently strike-slip faults and a northwest striking internal fault. Gold mineralisation occurs as a shallow, sub-horizontal supergene blanket typically within the lower saprolite, overlying steeply dipping zones of primary gold mineralisation mainly hosted within the intermediate volcanic rocks.
		Two bounding faults, the North Boundary Fault (NBF) and subparallel South Boundary Fault (SBF) enclose a broader, strongly altered and demagnetised zone. The NBF and the smaller internal northwest striking fault appear to be an important control on higher grade primary gold mineralisation at the Hobbes Prospect.
		Most of the gold deposits in the region are hosted by granitoids, intermediate volcanics or Pig Well Graben sediments. Many deposits display a direct or spatial association with granitoids and NNW-SSE to N-S trending shears commonly localised along contact zones. The NE-SW trending shears/faults can also exert a control on gold mineralisation. For some deposits, like Porphyry the gold-bearing vein systems are horizontal to shallow-dipping stacked vein sets that are commonly interpreted to be linking structures between steeply dipping shears or thrusts. Many of the deposits plunge shallowly towards the south or southeast. Most of the deposits, including the mines, grade around 1.0-2.0 g/t Au. Major gold deposits and historic mining centres proximal to the E31/1117 tenement area include the Porphyry Gold Mine, Million Dollar,

Criteria	JORC Code explanation	Commentary
		Wallbrook-Redbrook and the Yilgangi Mining Centre. The Competent Person is satisfied that geological setting has been adequately considered and is appropriately described.
Drill hole Information	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:  • easting and northing of the drill hole collar  • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  • dip and azimuth of the hole  • down hole length and interception depth  • hole length.	For a more complete set of results pertaining to this announcement refer to ASX announcements: 8 December 2022 ("Final Diamond Drill Assay Results Return 20m at 3.25g/t at Hobbes Gold Prospect, Yarri Project"), 15 November 2022 ("Diamond Drilling Returns Encouraging Primary Gold Intercepts at the Hobbes Gold Prospect, Yarri Project"), 8 September 2022 ("Significant Gold Mineralisation in RC Drilling at Hobbes") and 14 March 2022 ("Prospectus") which are available at <a href="https://www.solsticeminerals.com.au">www.solsticeminerals.com.au</a> .
	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.	Not applicable, all information is included. The Competent Person is satisfied that drillhole information has been adequately considered, and material information has been appropriately described.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	Significant intercepts reported are down hole lengths only as there is not yet sufficient information available to confirm the orientation of mineralisation. True width is not known.
	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.	Weighted averages were calculated using parameters of a 0.1ppm, 0.5ppm and 1.0ppm Au lower cut-off, minimum reporting length of 2m, maximum length of consecutive internal waste of 2m and the minimum grade of the final composite of 0.1ppm, 0.5ppm and 1.0ppm Au respectively. No upper cut-off grade has been applied.  Short lengths of high-grade results use a nominal 1ppm Au lower cut-off, 2m minimum

		reporting length and 2m maximum internal dilution.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Metal equivalent values are not currently being reported.
p between mineralisati on widths and intercept lengths	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 (eg 'down hole length, true width not known').	Significant intercepts reported are down hole lengths only as there is insufficient information available to confirm the orientation of mineralisation. True width is not known.
	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.	Refer to figures in the body of text for plan maps of the location of relevant sample locations.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All currently known new gold assay results are reported. All previous and historical drill assay data has been reported.
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 samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All relevant exploration data is shown on figures in the main body of text.
Further	The nature and scale of planned further work (eg tests for lateral	The Company continues to interpret the data holistically and update the geological model to

Criteria	JORC Code explanation	Commentary
	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.	refine controls on gold mineralisation and prepare plans for further phased drill programs. Any further drilling within the prospect area (6701550mN – 6702100mN) & (426100mE – 426550mE) would include DD drill core and RC drilling to infill the high-grade mineralised zone, explore extensions of supergene mineralisation to the northeast and primary mineralisation to the northwest. Reconnaissance aircore drilling is planned at other prospective areas within the broader E31/1117 tenement. This is currently planned for 2023.

# **Section 3 Estimation and Reporting of Mineral Resources**

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	The primary field drillhole and sample data and laboratory assay data is provided electronically to Geobase Australia Pty Ltd, an independent geoscientific data management company engaged by Solstice. Import validation protocols and database validation checks are in place and run routinely to identify any errors or corruption of data that could take place.  Data was provided by Geobase directly to Cube Consulting to ensure no extra handling and prevent any potential corruption of data. The data was sent via email as an MS Access file.
	Data validation procedures used.	The primary field drill data is logged into MS Excel templates designed by the independent database consultant with locked pre-defined codes to ensure consistency. Electronic field data are supplied to Geobase who undertake a number of logic validation steps including overlapping sample intervals, data beyond the end of hole, collar end of hole data matches maximum sample depth, all sample intervals have geology data etc. Any issues with field data or laboratory data are reported to Solstice and rectified to ensure only validated data is uploaded to the database.

Criteria	JORC Code explanation	Commentary
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	A site visit was conducted by Andrew Grieve from Cube Consulting Pty Ltd on the 25th July 2022. The visit occurred whilst RC and DD drilling was occurring. The main observations of the site visit were:  In the main the samples were dry, however there were occasional intervals where the samples were very wet. Wet samples were recorded in the database.  The sampling equipment was well manufactured and designed and was deemed acceptable for collecting a representative sample.  Due to the high-water inflows caking of material within the sampling equipment was considerable. The equipment was being cleaned after every rod, but intra-rod contamination could still be occurring.  Logging system and data recorded was fit for purpose.  Ten CRMs were being utilised which is considered too many. At the time of the site visit, the CRMs were being stored close to the work area and were covered in dust, which could lead to contamination.  The insertion rate of CRMs and the collection of duplicate samples was considered acceptable.  Some extra material from the reject was being added to low weight (<1 kg) samples to increase the mass. Although only effecting 1-2% of samples, it was recommended that this practice cease.  Paper cross sections were being utilised at the drill site, which is a good practice.  DD drilling activities were acceptable.  Although at the time there was limited core, the core presentation, markup

Criteria	JORC Code explanation	Commentary
		and orientations appeared to be of high quality.
	If no site visits have been undertaken indicate why this is the case.	N/A
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	There is a moderate to high confidence in the lithological and structural models as these have been based on the interpretation of pXRF results.  There is a high confidence in the interpretation of the supergene mineralisation due to its extensive nature and position within the regolith profile.  There is a moderate confidence in the interpretation of the primary domains considering the current drill spacing and the current MRE classification.
	Nature of the data used and of any assumptions made.	Core photos, logging, lithological and structural models and assays were used to guide the interpretation of the mineralised domains.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The effect of alternative interpretations would be minimal as although there may be changes in the spatial locations, volume would remain similar. The current MRE classification takes into account any uncertainty.
	The use of geology in guiding and controlling Mineral Resource estimation.	A regolith model was completed by Cube, utilising logging information and core photos. This helped guide the differentiation of the supergene and primary mineralisation. The lithology and structural model generated by Solstice was used to guide the spatial location of the lodes in relation to host rocks and potential continuity due to interpreted faulting.
	The factors affecting continuity both of grade and geology.	Mineralisation domains were interpreted using a nominal cut-off of 0.3 g/t Au and guided by supporting lithology and regolith models. To ensure geological continuity, some zones < 0.3 g/t Au were captured within the domains. The lithological model was interpreted at a broad scale and it is acknowledged that other minor units due exist but not currently

Criteria	JORC Code explanation	Commentary
		honoured in the model. This is in-line with the current MRE classification.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The flat lying supergene mineralisation extends around 420 m east-west and 550 m north-south, ranges in thickness from 2 – 30 m and the top surface is around 30 – 50 m below the surface.  The primary mineralisation interpretation consists of 12 separate domains that extend for approximately 550 m along strike, 350 m across strike and commence around 60 m below the surface. Thicknesses ranges from several metres up to 40 m thick, but generally around 10 m.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Samples were composited to 1 m within each estimation domain using best fit length option and a threshold inclusion of samples at sample length 50% of the targeted composite length. A geostatistical analysis using a combination of methods including spatial location, histograms, log probability plots and CVs was conducted to determine the influence of extreme values. This influence was reduced by applying top-cutting to seven of the thirteen domains. Variogram modelling was undertaken within Snowden Supervisor ("Supervisor") for the composited data for all domains with sufficient data to produce robust variograms. All variogram models were undertaken by transforming the composite data to Gaussian space, modelling a Gaussian variogram, and then back-transforming the Gaussian models to real space for use in interpolation. For domains with geostatistically insignificant number of data points, variograms models were adopted from the modelled variograms and the orientation modified accordingly. A Kriging Neighbourhood Analysis (KNA) and the domain widths and orientation were used to determine the most appropriate block size. Block sizes for the supergene and primary domains were adjusted to take into account

Criteria	JORC Code explanation	Commentary
		the different orientations. For the supergene domain the parent block size was 25 m (X) × 25 m (Y) × 5 m (Z), with sub-blocking to 1.5625 m (X) × 6.25 m (Y) × 1.25 m (Z). For the primary domains, the parent block size 3.125 m (X) × 25 m (Y) × 5 m (Z), with sub-blocking to 1.5625 m (X) × 1.25 m (Y) × 1.25 m (Z). KNA was also used to determine other estimation parameters such as minimum and maximum samples, discretisation, and search distance to be used for the estimation.  Gold was estimated into the supergene and primary models using Geovia Surpac v6.9 (Surpac) using Ordinary Kriging with hard domain boundaries applied and parameters optimised for each domain based on the variogram models.  For the supergene domain the grade estimates used 2 passes with the first pass search distance of 75 m and the second pass using twice the first pass distance. A minimum number of samples was set to 6 and the maximum number of samples set to 16.  For the primary domains, the estimation parameters were the same except the first pass search distance ranged from 50 – 85 m.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	This is a maiden MRE, so no previous estimates or production has taken place.
	The assumptions made regarding recovery of by-products.	No assumptions are made regarding recovery of by-products. The model contains estimated values for gold only.
	Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	No other elements were estimated. Sulphur was not analysed.
	In the case of block model interpolation, the block size	Parent block sizes are generally around half the drill spacing and the search distances used will

Criteria	JORC Code explanation	Commentary
	in relation to the average sample spacing and the search employed.	capture adequate data without over smoothing the estimate.
	Any assumptions behind modelling of selective mining units.	Sub-cell sizes reflect the lode sizes, geometry and standard mining parameters used in Western Australia for similar mineralisation styles.
	Any assumptions about correlation between variables.	No correlation between any variables was undertaken.
	Description of how the geological interpretation was used to control the resource estimates.	Domain boundaries were used as hard boundaries.
	Discussion of basis for using or not using grade cutting or capping.	Grade capping was applied to seven of the thirteen domains using a geostatistical analysis of spatial location, histograms, log probability plots and CVs.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation was completed by a number of methods for comparing the grade estimate to the informing composite data including visual 3D inspection, global statistical comparison, and local Swath plot comparisons by northing, easting and elevation.  No historical reconciliation information is available as this is a maiden MRE.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Model estimates are done on a dry basis.
Cut-off parameters	The basis of the adopted cut- off grade(s) or quality parameters applied.	A cut-off grade of 0.6 g/t Au was selected as this was deemed suitable for open pit mining.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding	Any future mining is likely to be undertaken using conventional open pit mining methods that are common throughout Western Australia.  The MRE has been reported within an optimised pit shell using Whittle software. The optimisation was based on a A\$2,500/oz gold price with 5% dilution, 5% ore loss and recoveries of between 89% and 97%, depending upon the material type.

Criteria	JORC Code explanation	Commentary
	mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Sub-block sizes within the model reflect the geometry of the mineralisation and common mining parameters used in Western Australia.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Metallurgical testwork was carried out in 2021 on one oxide and one primary sample. Recoveries of 97% and 89% for the oxide and primary sample respectively were achieved after 48 hour leach times. Gravity testwork indicated indicated recoveries of 12% and 23% for oxide and primary respectively. Bond work indexes and abrasion indexes (10.6 and 16.9 and 0.029 and 0.156 for oxide and primary respectively) are considered to be similar to many other gold deposits in Western Australia.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental environmental impacts should be reported. Where	The Mineral Resource is located in a region where there is adjacent mining activity.  The location of the Mineral Resource lends itself to toll treating at a third party mill elsewhere in the district.

Criteria	JORC Code explanation	Commentary	1	
	these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.			
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	collected and principle. The approximatel drill core. There was a r	samples consing 20 cm portion elatively even considerent weath	ng the Archimedes sted of half or full DD
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Samples that were coated i		ed to be porous
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	their location domains. The Supervisor™ s histogram we the obvious o resultant filte some adjustm lithologies we	within lithologiese were then in software and the reanalysed. As utliers were read means were madere assigned the	ne resulting a result, some of
		Lithology	Regolith	Density (t/m³)
		Cover	Cover	2.14
		FV	Transitional	2.59
		FV	Fresh	2.81
		UV	Transitional	2.45
		UV	Fresh	2.85
		IV	Transitional	2.51
		IV	Fresh	2.80
		IVM	Transitional	2.51

Criteria	JORC Code explanation	Commentary
		IVM Fresh 2.80
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The Mineral Resource was classified as Inferred or Unclassified.  The Inferred Mineral Resource category was typically defined by drillhole piece points through each individual domain being 50 m × 50 m apart or less. The remaining material was Unclassified.
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The classification was based on data quality, sample spacing, geological understanding of mineralisation controls and geological/mineralisation continuity and quality of the final grade estimate.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	In the Competent Persons opinion, the MRE conducted is a fair view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The mineralisation domains created by Cube were reviewed by Solstice and any adjustments were made due to the geological understanding of the Solstice geologists.  The resulting estimation was reviewed by Solstice. No adjustments were made to the estimation methodology.  The Mineral Resource estimation process and block model have been internally peer reviewed at Cube Consulting, supporting the approach adopted.
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the	The relative accuracy of the Mineral Resource Estimates is reflected in the classification and reporting of the Mineral Resource as Inferred in accordance with the guidelines on the 2012 JORC Code.

Criteria	JORC Code explanation	Commentary
	resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or	All Mineral Resources are considered to be global estimates of gold grade.
	local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No historical production has occurred.