



3 July 2023 | ASX: SLS

# Aircore Drilling at Hobbes Delivers Rare Earth Oxide Results up to 0.97%, plus New Gold Anomalism

# **Highlights**

> Solstice Minerals Limited (Solstice or the Company) (ASX: SLS) is pleased to announce that recent aircore drilling at the Hobbes Gold Project (Solstice 80%) has opened up promising new total rare earth oxides + yttrium (TREOY¹) and gold targets.

# **Rare Earth Oxides:**

- > Drillholes that intersected felsic intrusive rocks were analysed for rare earth elements following the identification of strongly anomalous end of hole (EOH) assays up to 0.38% TREOY in historical drilling<sup>2</sup>.
- New 1m EOH results up to 0.97% TREOY have been returned from the Leviathan Prospect, a strongly magnetic >1km diameter intrusion located in the south of the licence. Consecutive holes at the Prospect are logged as partly weathered syenite and contain >0.1% TREOY at EOH.
- > EOH samples at the Leviathan Prospect also contain elevated neodymium and praseodymium up to 0.28% Nd+Pr oxides.
- > Composite sampling of oxide profiles at Leviathan and elsewhere in the Hobbes licence have also returned >0.10% TREOY intercepts.
- > Preparations are underway for follow-up aircore drilling to determine the footprint of the Leviathan intrusion and the distribution of TREOY.

#### Gold:

- > A series of soil-covered lithological and structural positions similar to that at the 177,000 ounce<sup>3</sup> Hobbes Gold Project were tested, returning anomalous (>0.10g/t Au) gold results at several new locations.
- > Results are being evaluated for step-out drilling, as well as first tests of new structural targets on the Hobbes licence and surrounding 100% owned ground.
- ➤ Hobbes is ideally located close to established mining and haul road infrastructure approximately 5km southwest of Northern Star Limited's Porphyry Mining Centre.

<sup>&</sup>lt;sup>1</sup> TREOY is defined as the sum of CeO2 + Dy2O3 + Er2O3 + Eu2O3 + Gd2O3 + Ho2O3 + La2O3 + Lu2O3 + Nd2O3 + Pr6O11

<sup>+</sup> Sm2O3 + Tb4O7 + Tm2O3 + Yb2O3 + Y2O3. Note: TREOY values quoted for historical drillholes are on the basis of available analytical data and may not always be a full suite analysis.

<sup>&</sup>lt;sup>2</sup> Refer to ASX: SLS 11May 2023 'Commencement of Regional Aircore Drilling Hobbes Gold Project'.

<sup>&</sup>lt;sup>3</sup> Refer to ASX announcement on 22 March 2023 – ("Robust Maiden Gold Mineral Resource at Hobbes")



Solstice Minerals' Chief Executive Officer and Managing Director, Mr Nick Castleden said:

"It is exciting to see a new style of mineralisation emerge around the Leviathan Prospect, a strongly magnetic intrusive plug that sits under transported cover in the southern part of the Hobbes tenement. The intrusion looks to have an enriched rare earth geochemical signature, with >0.1% TREOY at the end of multiple drillholes. While it's early days, EOH results of up to 0.97% TREOY hint at the potential for a primary (fresh rock) intrusive style. With only a single traverse of multi-element information to work with, the Prospect requires step out aircore drilling to properly evaluate, and preparations for this work are now underway. The aircore program has also identified gold anomalism to the southeast of the 177,000oz Hobbes deposit and in several other areas. These locations, along with other under-tested structural targets within the Hobbes licence and neighbouring 100% owned tenements, will be assessed for potential follow-up drilling. Solstice has a strong pipeline of targets for initial low-cost aircore testing and we expect this style of greenfield work to continue throughout 2023".

# **Aircore Drilling Program**

The Hobbes licence is almost entirely covered by transported alluvial material that limits the effectiveness of surface sampling. In this type of terrain aircore drilling can be utilised to provide a fast and cost-effective first test of the geological profile below the transported material. The completed program reported here comprised 143 holes for 6,645m of drilling (Appendix 1).

## Rare Earth Oxides + Yttrium (TREOY)

Following the identification of anomalism up to 0.38% TREOY at EOH in a small set of historical drillholes<sup>4</sup>, all drillholes in the current aircore program that intersected felsic intrusive were routinely analysed for TREOY at EOH, and selected 8m composite samples were collected through suitable overlying weathered bedrock profiles.

This work has returned a highly anomalous **EOH result of 0.97% TREOY** in LVNAC0152 (47-48m EOH) at the **Leviathan Prospect**, associated with a prominent strongly magnetic syenitic intrusion over 1km in diameter located in the south of the tenement (Figure 1). The EOH anomalism in LVNAC0152 is supported by an anomalous composite sample in overlying weathered intrusive (**8m @ 0.52% TREOY** from 38m).

Consecutive aircore holes approximately 160m apart at Leviathan were logged as ending in syenite and contain >0.1% TREOY at EOH (Figure 2). Samples in this area also have elevated neodymium and praseodymium, with LVNAC0152 containing up to 0.28% Nd+Pr oxides (47-48m EOH).

The Company notes that the freshest (least weathered) samples contain the highest TREOY readings, so the potential for a primary (fresh rock), syenite intrusive related system cannot be discounted. With only a single traverse of multi-element information at Leviathan, additional work is required to understand the setting and context of the high EOH results at this location.

Aircore drilling elsewhere on the Hobbes licence has returned >0.1% TREOY in multiple locations, either as selected 8m composite samples in oxide profiles or at EOH. The distribution of anomalous TREOY (or partial suite analysis of rare earth elements) is shown in Figure 1, and all intervals greater than 1,000ppm TREOY are shown in Table 1.

 $<sup>^4</sup>$  Refer to ASX: SLS 11May 2023 'Commencement of Regional Aircore Drilling Hobbes Gold Project'.



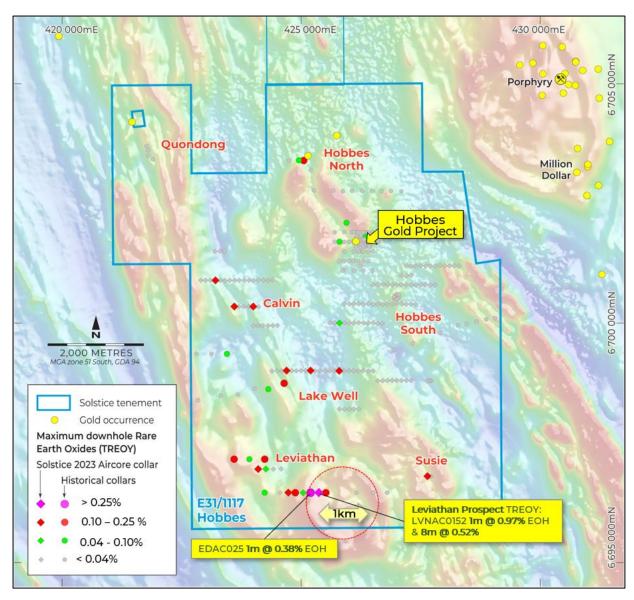


Figure 1: Aeromagnetic image of the Hobbes licence showing prospect areas and peak downhole rare earth oxide (TREOY) values in Solstice aircore and historical drilling<sup>5</sup>. Only drillholes with full or partial suite rare earth oxide analysis are shown.

Details of the Leviathan drill traverse is shown in Figure 2.

The Company is in the process of designing step-out aircore drilling to gain a more comprehensive understanding of the distribution of higher TREOY grades, and the geology and dimensions of the Leviathan intrusion.

<sup>&</sup>lt;sup>5</sup> Refer to ASX: SLS 11 May 2023 'Commencement of Regional Aircore Drilling Hobbes Gold Project'



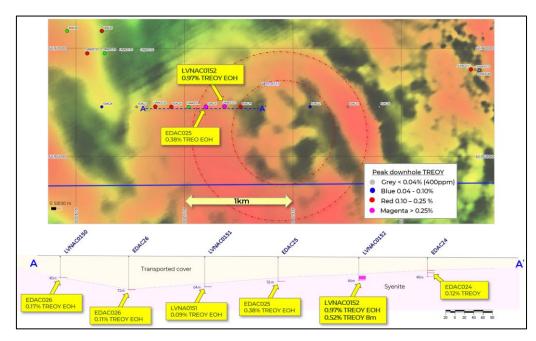


Figure 2: Aeromagnetic image and cross section of the Leviathan Prospect showing ringed magnetic responses and peak downhole rare earth oxide (TREOY) values in Solstice aircore and historical drilling. Only drillholes that have full or partial suite rare earth oxide analysis are shown.

Prospect	Hole ID	Easting	Northing	TREOY Intercept	From (m)
Leviathan	LVNAC0150	424731	6696461	1m @ 0.17% EOH	44
Leviathan	LVNAC0152	425370	6696461	8m @ 0.52%*	38
				1m @ 0.97% EOH	47
Leviathan	LVNAC0153	424102	6696952	1m @ 0.13% EOH	30
Calvin	CALAC0160	423207	6700894	8m @ 0.11%*	24
Calvin	CALAC0160	423207	6700894	1m @ 0.13% EOH	51
Calvin	CALAC0173	423602	6700347	1m @ 0.16% EOH	23
Calvin	CALAC0177	423998	6700347	1m @ 0.13% EOH	28
Calvin	CALAC0178	424105	6700342	8m @ 0.18%*	24
Calvin	CALAC0184	424504	6699953	8m @ 0.18%*	31
Lake Well	LKWAC0116	427201	6698805	8m @ 0.12%*	24
Lake Well	LKWAC0130	425795	6699003	5m @ 0.14%*	33
Lake Well	LKWAC0130	425795	6699003	1m @ 0.13% EOH	39
Lake Well	LKWAC0134	425396	6699003	8m @ 0.14%*	26
Lake Well	LKWAC0136	425197	6699010	1m @ 0.13% EOH	48
Lake Well	LKWAC0141	424695	6699009	5m @ 0.15% EOH*	40
Lake Well	LKWAC0148	425908	6698199	8m @ 0.18%*	38
Lake Well	LKWAC0149	425800	6698206	8m @ 0.19%*	40
Hobbes South	HBSAC0104	426000	6700000	8m @ 0.15%*	44
Susie	SUSAC0110	427680	6696801	8m @ 0.13%*	32
Susie	SUSAC0111	427641	6696803	1m @ 0.18% EOH	34

Table 1: Anomalous rare earth oxide intercepts in Solstice's aircore drilling, reported at >0.10% TREOY, with NIL internal dilution. Intercepts marked \* include composite samples. TREOY is defined as CeO2 + Dy2O3 + Er2O3 + Eu2O3 + Gd2O3 + Ho2O3 + Lu2O3 + Lu2O3 + Nd2O3 + Pr6O11 + Sm2O3 + Tb4O7 + Tm2O3 + Yb2O3 + Y2O3. Note: TREOY values quoted for historical drillholes are on the basis of available analytical data and may not always be a full suite analysis.



#### Gold

The completed aircore campaign provided first-pass tests of a series of soil-covered lithological and structural positions considered similar to that at the **177,000-ounce Hobbes Gold Project**<sup>6</sup>. The program has returned anomalous (>0.10g/t Au) gold results at several new locations, particularly to the south-east of Hobbes, and potentially in an orientation parallel to cross-cutting north-east trending faulting in this area. The distribution of anomalous gold results is shown in Figure 3, and in Table 2.

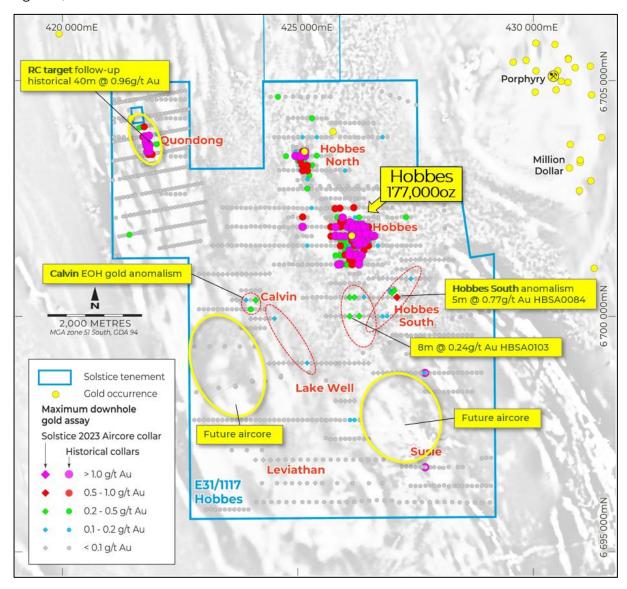


Figure 3: Aeromagnetic image of the Hobbes licence showing prospect areas, peak downhole gold values in Solstice aircore and historical drilling and future drill targets.

The anomalous results are being evaluated for step-out drilling, as well as additional first-pass tests of structural and intrusive targets on the Hobbes tenure and on Solstice's nearby 100% owned tenement package.

<sup>&</sup>lt;sup>6</sup> Refer to ASX announcement on 22 March 2023 – ("Robust Maiden Gold Mineral Resource at Hobbes")



Prospect	Hole ID	Easting	Northing	Intercept	From (m)
Hobbes South	HBSAC0074	426946	6700551	4m @ 0.12g/t Au*	65
Hobbes South	HBSAC0076	427051	6700548	1m @ 0.25g/t Au EOH	43
Hobbes South	HBSAC0080	426998	6700499	4m @ 0.17g/t Au*	38
				4m @ 0.33g/t Au*	46
				4m @ 0.39g/t Au*	54
Hobbes South	HBSAC0084	427104	6700404	5m @ 0.77g/t Au*	47
Hobbes South	HBSAC0091	426404	6700408	8m @ 0.16g/t Au*	0
Hobbes South	HBSAC0093	426201	6700405	1m @ 0.25g/t Au EOH	44
Hobbes South	HBSAC0094	426099	6700401	2m @ 0.22g/t Au*	50
Hobbes South	HBSAC0101	426303	6700005	1m @ 0.23g/t Au EOH	50
Hobbes South	HBSAC0103	426100	6700000	8m @ 0.24g/t Au*	32
Calvin	CALAC0176	423901	6700345	1m @ 0.16g/t Au EOH	30
Calvin	CALAC0178	424105	6700342	2m @ 0.22g/t Au*	40
Calvin	CALAC0184	424504	6699953	1m @ 0.11g/t Au EOH	47
Lake Well	LKWAC0113	427686	6698797	4m @ 0.12g/t Au*	19
Lake Well	LKWAC0136	425197	6699010	1m @ 0.14g/t Au	47

Table 2: Anomalous gold intercepts in aircore drilling reported at >0.1g/t gold with NIL internal dilution.

Intercepts marked \* include composite samples.

The Hobbes Gold Project is ideally located close to established mining and haul road infrastructure approximately 5km southwest of Northern Star Limited's Porphyry Mining Centre.

Northern Star operates open-pit and underground gold mines in the Porphyry area and is hauling material to its Carosue Dam operations located 36km to the south. The area is known for its widespread gold mineralisation in both felsic intrusive and vein settings, including Nexus Minerals' 175,000oz<sup>7</sup> Crusader-Templar gold deposit approximately 10km to the southeast, and the Yilgangi line of deposits to the northwest (Figure 4). The Company recently completed a pit-constrained Mineral Resource Estimate (MRE) at the Hobbes Gold Project comprising 4.6Mt at 1.2g/t Au for 177,000 ounces of gold<sup>8</sup>. High level economic criteria were applied to the resource which was reported at a 0.6g/t Au cut-off and constrained within an A\$2,500/oz optimised pit shell.

Hobbes mineralisation has both supergene and fresh rock components, with supergene gold in a flat-lying blanket up to 1km in strike, 400m width and in places up to 30m thick. Fresh rock gold mineralisation sits in multiple west-dipping lodes in intermediate volcanic or metasedimentary rocks. Gold lodes initiate from and are controlled by local cross-faulting.

The Hobbes tenure also hosts gold mineralisation in structures cutting granitic or syenitic intrusives such as that at Quandong and is often associated with a distinctive pink hematite-pyrite style of alteration identical to that at the nearby Porphyry-Wallbrook gold system (Figure 4).

<sup>&</sup>lt;sup>7</sup> Refer to ASX: NXM announcement 26 April 2023

<sup>&</sup>lt;sup>8</sup> Refer to ASX announcement on 22 March 2023 – ("Robust Maiden Gold Mineral Resource at Hobbes")



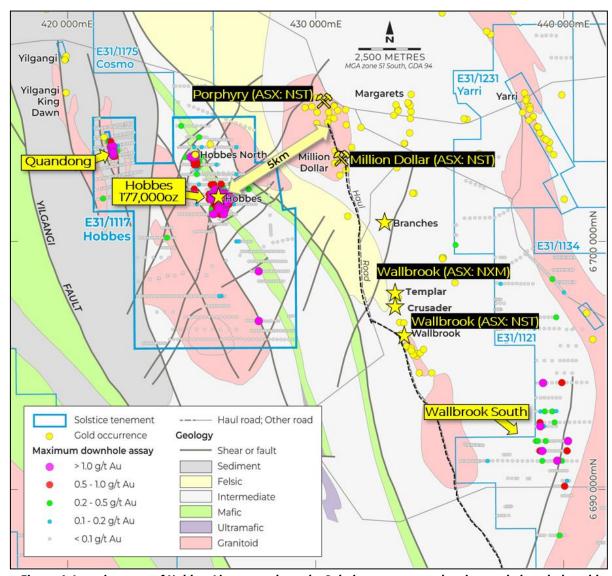


Figure 4: Location map of Hobbes Licence and nearby Solstice tenements showing peak downhole gold assays on simplified geology and adjoining gold projects.

This announcement has been authorised for release by the Board.

For further information please contact: Nick Castleden - CEO & Managing Director T: +61 (8) 9200 1838



#### ABOUT SOLSTICE MINERALS LIMITED

Solstice is a minerals exploration company with gold and base metal projects in the Eastern Goldfields of Western Australia (Figure 5). The Company's key projects are the extensive Yarri gold landholding (which includes the 177,000oz Hobbes Gold Project<sup>9</sup>), 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.

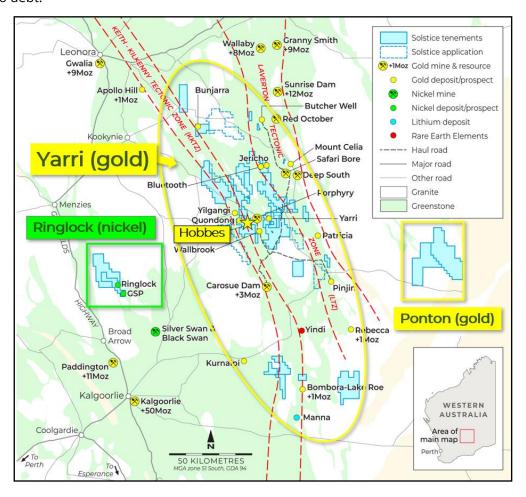


Figure 5: Solstice's Eastern Goldfields Projects

### **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,

<sup>9</sup> Refer to ASX announcement on 22 March 2023 – ("Robust Maiden Gold Mineral Resource at Hobbes")



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 Nick Castleden, a competent person who is a Member of the Australian Institute of Geoscientists. Mr Castleden is an employee of Solstice Minerals Limited. Mr Castleden 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 Castleden consents to the inclusion in this release of the new Exploration Results in the form and context in which they appear.

## **Previously Reported Results**

The information in this announcement that relates to Exploration Results and Estimates of Mineral Resources is extracted from the ASX announcements (**Original Announcements**) dated 11May 2023 ("Commencement of Regional Aircore Drilling Hobbes Gold Project"), 22 March 2023 ("Robust Maiden Gold Mineral Resource at Hobbes"), 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, in the case of Estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates 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: Summary table for aircore drilling completed at Hobbes in May 2023.

Drill GDA, Zon			one E1S		Total			
Hole ID	Prospect	Drill Type	East UTM	North UTM	Elev (metres)	Depth (metres)	Dip (degrees)	Azim (degrees)
HBSAC0045	Hobbes South	AC	428301	6701196	353	27	-90	0
HBSAC0046	Hobbes South	AC	428204	6701199	352	36	-90	0
HBSAC0047	Hobbes South	AC	428103	6701199	351	48	-90	0
HBSAC0048	Hobbes South	AC	428002	6701197	350	47	-90	0
HBSAC0049	Hobbes South	AC	427909	6701205	348	48	-90	0
HBSAC0050	Hobbes South	AC	427804	6701195	347	51	-90	0
HBSAC0051	Hobbes South	AC	427702	6701198	346	51	-90	0
HBSAC0052	Hobbes South	AC	427603	6701203	345	51	-90	0
HBSAC0053	Hobbes South	AC	427499	6701202	344	63	-90	0
HBSAC0054	Hobbes South	AC	427396	6701198	343	51	-90	0
HBSAC0055	Hobbes South	AC	427297	6701191	342	48	-90	0
HBSAC0056	Hobbes South	AC	427198	6701205	342	42	-90	0
HBSAC0057	Hobbes South	AC	427100	6701000	345	70	-90	0
HBSAC0058	Hobbes South	AC	427207	6700995	344	48	-90	0
HBSAC0059	Hobbes South Hobbes South	AC	427301	6701003	343	51	-90	0
HBSAC0060 HBSAC0061	Hobbes South	AC AC	427802 427700	6700803 6700800	346 346	56 48	-90 -90	0
HBSAC0061	Hobbes South	AC	427700	6700800	345	59	-90	0
HBSAC0062	Hobbes South	AC	427501	6700803	344	53	-90	0
HBSAC0064	Hobbes South	AC	427402	6700799	344	55	-90	0
HBSAC0065	Hobbes South	AC	427301	6700796	344	51	-90	0
HBSAC0066	Hobbes South	AC	427195	6700801	345	53	-90	0
HBSAC0067	Hobbes South	AC	427099	6700802	345	46	-90	0
HBSAC0068	Hobbes South	AC	426998	6700800	345	48	-90	0
HBSAC0069	Hobbes South	AC	426901	6700801	345	70	-90	0
HBSAC0070	Hobbes South	AC	426803	6700811	345	45	-90	0
HBSAC0071	Hobbes South	AC	426717	6700806	345	34	-90	0
HBSAC0072	Hobbes South	AC	426604	6700809	345	47	-90	0
HBSAC0073	Hobbes South	AC	426500	6700800	345	48	-90	0
HBSAC0074	Hobbes South	AC	426946	6700551	346	72	-60	90
HBSAC0075	Hobbes South	AC	426999	6700549	346	40	-90	0
HBSAC0076	Hobbes South	AC	427051	6700548	346	44	-60	270
HBSAC0077	Hobbes South	AC	427002	6700601	345	54	-90	0
HBSAC0078	Hobbes South	AC	427047	6700597	345	50	-60	270
HBSAC0079	Hobbes South	AC	426949	6700499	346	51	-90	0
HBSAC0080	Hobbes South	AC	426998	6700499	346	66	-60	270
HBSAC0081	Hobbes South	AC	427398	6700398	346	47	-90	0
HBSAC0082	Hobbes South	AC	427300	6700400	346	50	-90	0
HBSAC0083	Hobbes South Hobbes South	AC AC	427199 427104	6700397 6700404	346 346	62 56	-90 -90	0
HBSAC0084 HBSAC0085	Hobbes South	AC	427104	6700404	346	33	-90	0
HBSAC0085	Hobbes South	AC	426907	6700403	346	39	-90	0
HBSAC0087	Hobbes South	AC	426798	6700395	346	39	-90	0
HBSAC0088	Hobbes South	AC	426704	6700394	346	57	-90	0
HBSAC0089	Hobbes South	AC	426605	6700395	345	32	-90	0
HBSAC0090	Hobbes South	AC	426509	6700395	345	46	-90	0
HBSAC0091	Hobbes South	AC	426404	6700408	345	54	-90	0
HBSAC0092	Hobbes South	AC	426297	6700397	345	58	-90	0
HBSAC0093	Hobbes South	AC	426201	6700405	344	45	-90	0
HBSAC0094	Hobbes South	AC	426099	6700401	344	53	-90	0
HBSAC0095	Hobbes South	AC	426008	6700402	344	57	-90	0
HBSAC0096	Hobbes South	AC	425901	6700403	344	57	-90	0
HBSAC0097	Hobbes South	AC	426697	6699995	345	69	-90	0
HBSAC0098	Hobbes South	AC	426596	6699995	345	72	-90	0
HBSAC0099	Hobbes South	AC	426506	6700006	345	78	-90	0
HBSAC0100	Hobbes South	AC	426404	6700001	345	66	-90	0
HBSAC0101	Hobbes South	AC	426303	6700005	345	51	-90	0
HBSAC0102	Hobbes South	AC	426205	6700008	344	50	-90	0
HBSAC0103	Hobbes South	AC	426100	6700000	344	55 65	-90	0
HBSAC0104	Hobbes South	AC	426000	6700000	344	65	-90	0
HBSAC0105	Hobbes South	AC	425909	6700008	344	57	-90	0



		Drill	GDA, Z	one 51S	Elev	Total	Dip	Azim
Hole ID	Prospect	Туре	East UTM	North UTM	(metres)	Depth (metres)	(degrees)	(degrees)
HBSAC0106	Hobbes South	AC	425801	6700002	343	34	-90	0
HBSAC0107	Hobbes South	AC	425701	6700006	343	33	-90	0
HBSAC0108	Hobbes South	AC	425600	6700005	343	33	-90	0
SUSAC0109	Susie	AC	427720	6696796	350	50	-60	90
SUSAC0110	Susie	AC	427680	6696801	350	51	-60	90
SUSAC0111	Susie	AC	427641	6696803	350	35	-60	90
LKWAC0112	Lake Well	AC	427720	6698798	347	23	-60	90
LKWAC0113 LKWAC0114	Lake Well	AC	427686	6698797	347	44 20	-60 -60	90
LKWAC0114 LKWAC0115	Lake Well Lake Well	AC AC	427642 427302	6698796 6698803	347 346	54	-90	90
LKWAC0115	Lake Well	AC	427302	6698805	346	53	-90	0
LKWAC0110	Lake Well	AC	427096	6698804	346	36	-90	0
LKWAC0117	Lake Well	AC	426996	6698805	345	38	-90	0
LKWAC0119	Lake Well	AC	426902	6698806	345	32	-90	0
LKWAC0120	Lake Well	AC	426804	6698801	345	39	-90	0
LKWAC0121	Lake Well	AC	426703	6698798	346	27	-90	0
LKWAC0122	Lake Well	AC	426602	6698795	346	33	-90	0
LKWAC0123	Lake Well	AC	426502	6699003	346	54	-90	0
LKWAC0124	Lake Well	AC	426400	6699000	346	51	-90	0
LKWAC0125	Lake Well	AC	426296	6699010	346	66	-90	0
LKWAC0126	Lake Well	AC	426200	6699004	346	44	-90	0
LKWAC0127	Lake Well	AC	426097	6699005	346	47	-90	0
LKWAC0128	Lake Well	AC	425995	6699005	347	63	-90	0
LKWAC0129	Lake Well	AC	425890	6699009	346	51	-90	0
LKWAC0130	Lake Well	AC	425795	6699003	346	40	-90	0
LKWAC0131	Lake Well	AC	425702	6699004	346	46	-90	0
LKWAC0132	Lake Well	AC	425602	6699002	345	37	-90	0
LKWAC0133	Lake Well	AC	425498	6699000	345	65	-90	0
LKWAC0134	Lake Well	AC	425396	6699003	346	67	-90	0
LKWAC0135	Lake Well	AC	425288	6699003	346	42	-90	0
LKWAC0136	Lake Well	AC	425197	6699010	345	49	-90	0
LKWAC0137	Lake Well	AC	425092	6699009	345	61	-90	0
LKWAC0138	Lake Well	AC	424996	6699008	345	65	-90	0
LKWAC0139	Lake Well	AC	424897	6699003	345	62	-90	0
LKWAC0140	Lake Well	AC	424805	6699008	344	56	-90	0
LKWAC0141	Lake Well	AC	424695	6699009	344	45	-90	0
LKWAC0142	Lake Well	AC	424594	6699003	345	37	-90	0
LKWAC0143	Lake Well	AC	424500	6699003	345	45	-90	0
LKWAC0144	Lake Well	AC AC	424390 426200	6698996	345	28 46	-90 -90	0
LKWAC0145 LKWAC0146	Lake Well Lake Well		426200	6698205 6698204	346		-90	0
LKWAC0146 LKWAC0147	Lake Well	AC AC	426102	6698199	347 347	35 55	-90	0
LKWAC0147 LKWAC0148	Lake Well	AC	425908	6698199	347	59	-90	0
LKWAC0148 LKWAC0149	Lake Well	AC	425800	6698206	347	55	-90	0
LVNAC0149	Leviathan	AC	424731	6696461	347	45	-90	0
LVNAC0151	Leviathan	AC	425040	6696456	346	64	-90	0
LVNAC0152	Leviathan	AC	425370	6696461	344	48	-90	0
LVNAC0153	Leviathan	AC	424102	6696952	345	31	-90	0
LVNAC0154	Leviathan	AC	424263	6696953	346	50	-90	0
LVNAC0155	Leviathan	AC	424419	6696951	347	48	-90	0
LVNAC0156	Leviathan	AC	424581	6696956	347	75	-90	0
CALAC0157	Calvin	AC	422900	6700896	340	34	-90	0
CALAC0158	Calvin	AC	423002	6700895	340	45	-90	0
CALAC0159	Calvin	AC	423104	6700895	341	48	-90	0
CALAC0160	Calvin	AC	423207	6700894	341	52	-90	0
CALAC0161	Calvin	AC	423308	6700894	342	51	-90	0
CALAC0162	Calvin	AC	423406	6700891	342	52	-90	0
CALAC0163	Calvin	AC	423506	6700893	342	45	-90	0
CALAC0164	Calvin	AC	423612	6700892	341	43	-90	0
CALAC0165	Calvin	AC	423704	6700896	341	30	-90	0
CALAC0166	Calvin	AC	423810	6700896	341	21	-90	0
CALAC0167	Calvin	AC	423910	6700896	341	37	-90	0
CALAC0168	Calvin	AC	424005	6700892	341	32	-90	0



Hole ID Prospect	Drill	GDA, Z	one 51S	Elev	Total	Dip	Azim	
Hole ID	Prospect	Type	East UTM	North UTM	(metres)	Depth (metres)	(degrees)	(degrees)
CALAC0169	Calvin	AC	424107	6700897	342	44	-90	0
CALAC0170	Calvin	AC	424207	6700897	341	48	-90	0
CALAC0171	Calvin	AC	424308	6700895	341	51	-90	0
CALAC0172	Calvin	AC	424399	6700907	340	54	-90	0
CALAC0173	Calvin	AC	423602	6700347	342	24	-90	0
CALAC0174	Calvin	AC	423697	6700346	342	20	-90	0
CALAC0175	Calvin	AC	423798	6700343	342	24	-90	0
CALAC0176	Calvin	AC	423901	6700345	342	31	-90	0
CALAC0177	Calvin	AC	423998	6700347	342	29	-90	0
CALAC0178	Calvin	AC	424105	6700342	342	42	-90	0
CALAC0179	Calvin	AC	424002	6699944	343	36	-90	0
CALAC0180	Calvin	AC	424100	6699948	343	31	-90	0
CALAC0181	Calvin	AC	424198	6699946	343	31	-90	0
CALAC0182	Calvin	AC	424306	6699947	343	25	-90	0
CALAC0183	Calvin	AC	424408	6699951	343	25	-90	0
CALAC0184	Calvin	AC	424504	6699953	343	48	-90	0
CALAC0185	Calvin	AC	423396	6701504	342	21	-90	0
CALAC0186	Calvin	AC	423304	6701504	341	20	-90	0
CALAC0187	Calvin	AC	423195	6701497	341	14	-90	0

# Appendix 2: 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 explanation	Commentary
	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Historical Drilling Previous operators of the Hobbes Licence have sampled using Rotary Air Blast (RAB), Aircore (AC), Reverse Circulation (RC) and Diamond Drilling (DD). Drilling has been completed over a number of programs and varied spacings of holes and drill lines. Sampling is assumed to have been via conventional industry standards, i.e. spear sampling for RAB, 1/8 riffle splitting for RC and half core for DD.  Solstice Drilling Sampling of RC chips is undertaken using conventional industry standards. In transported regolith material (nominally 40m downhole) representative sampling is undertaken from either 1m sample interval piles or 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.
		nominal 1.2-3kg sample. RC sample bags are laid out systematically in rows of 30.  The 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.  For Aircore drilling, every 1m sample was ground-dumped and a composite or single metre sample collected with a spear and placed into a clean pre-numbered calico sample bag. Samples were ground
		dumped in rows of 20. For composite samples, proportional amounts of material were collected from each sample pile to create the composite.  All sampling was undertaken by Solstice staff.



Criteria	JORC Code explanation	Commentary
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems	Historical Drilling Measures taken by OreCorp to ensure sample representivity are the same as Solstice. Measures taken by other previous operators are unknown.
	used.	Solstice Drilling
		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.
		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.
		The 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.
		For aircore drilling, Duplicate samples were collected at the drill site and inserted into the sample stream at a frequency of 1 in 25 Primary samples. The Duplicates were collected with a spear in the same fashion as the Primary samples.
	Aspects of the determination of	Historical Drilling
	mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done	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.
	this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g	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.
	charge for fire assay'). In other	Solstice Drilling
	cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg	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.
	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.
		RC holes were downhole surveyed by the drilling contractor using a REFLEX SPRINT North Seeking survey tool referenced to True North, where possible.
		The 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



Criteria	JORC Code explanation	Commentary
		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.
		For aircore drilling each 1m sample was collected from a cyclone into a plastic bucket and laid out on a cleared area of ground in rows of 20 samples. Each 1m sample was sampled with a spear to create an 8m composite within the transported cover or 4m composite sample in the oxidised basement, and a single 1m sample for the end-of-hole (EOH). Each composite or EOH sample was approximately 1.5-2.5kg total mass.
Drilling	Drill type (eg core, reverse	Historical Drilling
techniques	circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of	Over the history of the Hobbes area 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
	diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what	The RAB drillhole depths range from 2m to 82m down hole, with an average depth of 31.8m down hole.
	method, etc).	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 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.
		Aircore drilling was undertaken by an independent contractor, Raglan Drilling, using a custom built, truck mounted drill rig. The drill string comprised 6m rods with a 3.5 inch Harlsan aircore bit. Each hole was
		drilled to blade-refusal, and on rare occasions a hammer and face- sampling button bit were used to penetrate more indurated layers in the transported cover material. Each drillhole was supervised by a Solstice geologist.
Drill sample	Method of recording and	Historical Drilling
recovery	assessing core and chip sample recoveries and results assessed.	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



Criteria	JORC Code explanation	Commentary
		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.
		The aircore sample recoveries for each metre were visually assessed and estimated to be within industry acceptable standards. Moisture content was recorded in drill logs.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Historical Drilling 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
		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.
		Minimal water was encountered in aircore drilling, with >95% of samples havening almost no moisture content. The aircore drill rig utilised an onboard 350psi compressor with 750cfm air pack, which provided very dry and representative samples with good recovery.
	Whether a relationship exists	Historical Drilling
	between sample recovery and grade and whether sample	No sample bias has been observed in data from historical reports reviewed by Solstice.
	bias may have occurred due to preferential loss/gain of fine/coarse material.	The Competent Person is satisfied that the drill sample recoveries have been adequately assessed and are appropriate to the mineralisation under investigation.
		Solstice Drilling



Criteria	JORC Code explanation	Commentary
		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.
		No relationship is apparent in the aircore data between sample recovery and grades, and therefore no bias is inferred.
Logging	Whether core and chip	Historical Drilling
	samples have been geologically and 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.
		The aircore drilling has been conducted as a reconnaissance phase of exploration and is not considered suitable for use in any Mineral Resource Estimation.
	Whether logging is qualitative or quantitative in nature. Core	Historical Drilling Logging historically was primarily qualitative.
	(or costean, channel, etc)	
	photography.	Solstice Drilling
		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.
		Logging of aircore drill samples included lithology, alteration, sulphide mineralisation and structure fabric. Transported cover and regolith types were also defined. The logging is considered appropriate for this reconnaissance phase of exploration.



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.
		The aircore drillhole samples are logged from surface to the EOH in summary format with EHO chip samples collected in chip trays for archive and future reference. Geological events such as bottom of transported cover, base of complete oxidation, water table, and top of fresh rock are also recorded. The logging is considered appropriate to this phase of exploration.
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.
		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.
	ury.	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.
		The aircore drill samples were spear sampled from piles laid out on the ground at the drill site. The majority of samples were collected dry, with very few (<2%) collected wet.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Historical Drilling 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.



Criteria	JORC Code explanation	Commentary
	·	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).
		For aircore drilling 8m and 4m composites were collected from the transported cover and oxidised basement, respectively, plus individual 1m EOH samples routinely collected. Each sample was collected with a spear. These are standard industry practices for this reconnaissance phase of exploration. The samples were sent to independent laboratory, Intertek, where samples were oven dried at 100C, crushed and pulverised to 85% of total sample passing 75µm, using the SP03 or SP05 methods. The nature and quality of the sample preparation are considered appropriate.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Historical Drilling 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, 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 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 ensure that	Historical Drilling
	the sampling is representative of the in-situ 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
	sampling.	near surface mineralisation with 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.
		For DD core sampling, quarter core Duplicate field samples are routinely collected after every 25th Primary sample and inserted in the sample batches.



Criteria	JORC Code explanation	Commentary
		Field Duplicate samples were collected during aircore drilling and inserted into the sample batches to check and ensure representivity of sample methods.
		Pulp repeats and element repeats for all sample types are undertaken by Intertek at the laboratory.
		The QAQC field Duplicate sample data are evaluated by Solstice's independent database manager, Geobase Pty Ltd, and these showed satisfactory reproducibility.
	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 mass for RC drilling 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.
		Sample mass for aircore drilling of nominally 1.5-3kg for each sample are considered appropriate for the rock type and style of mineralisation.
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.
		Multi-element and occasionally rare earth oxide analysis has been carried out at times by some historical operators, mostly as end of hole (EOH) analysis in reconnaissance RAB and aircore drilling.
		Historical rare earth element results are recorded in 41 samples from selected AC holes (EDAC1, 3, 5-8, 11, 13-14, 16-22, 24-31) as part of a multi-element suite. Selected samples from the top 4m of saprolite and an end-of-hole sample were collected and assayed for Au, Cu, Pb, Zn, Ag, Mn, Bi, Al, Ca, K, Mg, Ni, P, S, Sr, Ti, and V by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES) at ALS in Perth, and for Sb, As, Ba, Br, Ce, Cs, Cr, Co, Eu, Au, Hf, Ir, Fe, La, Lu, Mo, K, Rb, Sm, Sc, Se, Ag, Na, Ta, Te,, Zn, Th, Sn, W, U, Yb, and Zr by neutron activation analysis (NAA) at Becquerel Laboratories in NSW (Refer to Geological Survey of Western Australia Open File Report A59713).
		Solstice Drilling
		Laboratory assaying for all drill 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. The multi-element and Rare Earth Element analysis is done by a Four Acid digestion, considered near total dissolution of almost all mineral species, with measurement by ICP-MS or ICP-OES depending on the element.



Criteria	JORC Code explanation	Commentary
		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 applied and their derivation, etc.	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.
		Solstice Drilling
		Magnetic susceptibility is measured for each RC 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 RC samples during the RC drilling. The data was used in determining contacts of major rock units and support development of a geological model.
		For aircore samples no geophysical tools were used in the field in determining any analysis.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels	Historical Drilling 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.
	of accuracy (ie lack of bias) and precision have been established.	Solstice Drilling The Company's QAQC procedures are defined and governed by an internal geological protocol and 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.  During aircore drilling field Duplicates were taken on site for samples using the same method as the Primary sample (i.e. spear) from piles laid out on the ground.  At the laboratory Intertek 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.



Criteria	JORC Code explanation	Commentary
Verification of sampling and	The verification of significant intersections by either	Historical Drilling Consultants and technical personnel at Solstice have visually verified
assaying	independent or alternative company personnel.	the significant intersections in chips and DD core and results to date from the Prospect area.
		Solstice Drilling The assay results for significant gold and REE intercepts have been
		checked by Solstice's independent database manager, Geobase Pty Ltd, as well as internal Solstice geologists. Assay results have been checked against sample chip trays and geological logs. The 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.
		Solstice Drilling
	Documentation of primary	No twinned AC, RC or DD holes have been drilled by Solstice.  Historical Drilling
	data, data entry procedures, data verification, data storage (physical and electronic) protocols.	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 lithological data for aircore, RC and DD drilling is collected by a Company geologist in the field recording it on a paper log sheet or 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 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.



Criteria	JORC Code explanation	Commentary
		Rare Earth Element results reported by Intertek in parts per million were converted to stoichiometric oxide (REO) using standard, publicly available element-to-oxide stoichiometric conversion factors.
Location of	Accuracy and quality of	Historical Drilling
data points	surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	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 aircore, 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 RC and DD 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 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	Data spacing for reporting of	Historical Drilling
and distribution	Exploration Results.	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.
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		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 (east-west) between drillhole collars that spans 500m N-S and 450m E-W.
		The 2023 aircore drilling was a regional reconnaissance phase program done on variable line spacing, with hole stations are 100m to 200m apart.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore	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
	Reserve estimation procedure(s) and classifications applied.	The data spacing of 2023 aircore drilling is not sufficient to establish a Mineral Resource Estimate.
	Whether sample compositing has been applied.	Historical Drilling



Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	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.  Solstice Drilling  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.  The RC 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.  For aircore drilling, 8m composites were collected in the transported cover material, then 4m composites were collected in the oxidised basement material. The 4m composite samples with >100ppb gold are subsequently re-sampled as 1m individual samples. Aircore drillholes with thick oxidised profiles over granitic or syenitic basement were also sampled as 8m composites for Four Acid multi-element and REE analysis.  Historical Drilling  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 (NHRCO04) 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 geologica
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Historical Drilling No orientation-based sampling bias has been identified in the historical data at this point for drilling during reconnaissance stages on the project.  Solstice Drilling No orientation-based sampling bias from various drill types has been
Sample security	The measures taken to ensure sample security.	identified in the data at this point.  Historical Drilling



Criteria	JORC Code explanation	Commentary
		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
		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 RC and DD drilling program in July 2022 to ensure appropriate QAQC protocols are in place.
		A review of Solstice's data from the 2021 and 2022 drill campaigns at Hobbes was undertaken by Cube Consulting with procedures and data considered adequate.
		Internal reviews by experienced senior geologists of sampling techniques and data confirm that sampling has been conducted to industry standards.

# **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Hobbes Licence is located 150km northeast of Kalgoorlie and consists of a single tenement, E31/1117, owned by Solstice Minerals Ltd and Garry Warren Pty Ltd (GW). Solstice has earned an 80% equity in the tenement via sole funding \$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.  Aboriginal cultural heritage surveys have been conducted over the drill sites by Nyalpa Pirniku Native Title Claimaints.



Criteria	JORC Code explanation	Commentary
	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
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	April 2027.  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
Geology	Deposit type, geological setting and style of mineralisation.	The Hobbes tenure 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 Licence area the Edjudina Greenstone Belt is intruded by numerous monzonites, syenite and felsic porphyries.
		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



Criteria	JORC Code explanation	Commentary
		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, 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.	See Appendix 1.
	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.	For the Hobbes Prospect MRE, 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. For the aircore drilling significant gold assay results are reported above 100ppb with no averaging or dilution. The Rare Earth Element results reported by Intertek in parts per million were converted to stoichiometric oxide (REO) using standard, publicly available element-to-oxide stoichiometric conversion factors. Significant Rare Earth Element assays in reporting have included grades above 0.1% total Rare Earth oxide plus yttrium (TREOY). The TREOY is defined as CeO2 + Dy2O3 + Er2O3 + Eu2O3 + Gd2O3 + Ho2O3 + La2O3 +



Criteria	JORC Code explanation	Commentary
		Lu2O3 + Nd2O3 + Pr6O11 + Sm2O3 + Tb4O7 + Tm2O3 + Yb2O3 + Y2O3.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Metal equivalent values are not currently being reported.
Relationship between mineralisation 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.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	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 and REE assay results are reported. All previous and historical drill assay data has been reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk 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 work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The Company continues to interpret the data holistically and update the geological model to refine controls on gold mineralisation and prepare plans for further phased drill programs. Any further drilling within the Hobbes MRE area would include DD drill core and RC drilling to infill the highgrade mineralised zone, explore extensions of supergene mineralisation to the northeast and primary mineralisation to the northwest.  Reconnaissance aircore drilling may continue in gold and REE prospective areas within the broader E31/1117 tenement and adjoining Yarri Project tenure.