

## GROUP MINERAL RESOURCES STATEMENT

Following the successful completion of the merger between Horizon Minerals Limited (ASX: HRZ) and Greenstone Resources Limited (formerly ASX: GSR), additional resource model work and reviews, the Company is pleased to provide a consolidated statement of group Mineral Resources as of 30 June 2024.

### HIGHLIGHTS

- Mineral Resources currently stand at:
  - 1.8Moz gold <sup>1</sup>
  - 20.2Moz silver, 104kt zinc <sup>2</sup>
  - 283kt nickel, 40.5kt cobalt and 296.2kt manganese (50% owned) <sup>2</sup>
- Mineral Resources are underpinned by the large cornerstone Boorara and Burbanks assets
- Updated Mineral Resource Estimates (MRE) include a maiden MRE for Pinner, an update for Monument and a revision for Boorara which is currently under an Ore Reserve Study (ORS) from AMC Consultants
- Changes to the gold MREs include:
  - Addition of 297,650oz from Burbanks open pit <sup>3</sup>
  - Addition of 167,920oz from Burbanks underground <sup>3</sup>
  - Addition of 13,000oz from Pinner <sup>4</sup>
  - Addition of 3,000oz from Monument, and <sup>4</sup>
  - Reduction of 20,240oz from Boorara <sup>5</sup>
- Large Mineral Resource base and ongoing studies pave the way for a development profile aiming at sustained gold production and continuous cashflows

HORIZON MINERALS GOLD MINERAL RESOURCE ESTIMATE <sup>1</sup>

	Measured			Indicated			Inferred			Total		
	Mt	Au g/t	Oz	Mt	Au g/t	Oz	Mt	Au g/t	Oz	Mt	Au g/t	Oz
<b>Total</b>	<b>1.31</b>	<b>1.34</b>	<b>56,300</b>	<b>16.48</b>	<b>1.82</b>	<b>963,081</b>	<b>12.74</b>	<b>1.90</b>	<b>778,373</b>	<b>30.37</b>	<b>1.84</b>	<b>1,797,764</b>

Commenting on the Group MRE upgrade, Managing Director and CEO Mr Grant Haywood said:

“It is very pleasing to have the Burbanks and Phillips Find assets under single ownership with Horizon’s complementary and extensive project base. Together this provides 1.8 million ounce gold portfolio, which is a great platform to implement our near term strategy of cashflow from operations and further growth into the medium and long term”.

<sup>1</sup> See JORC Table 1 on page 20 and Mineral Resource Table and Confirmations on Page 14-16. <sup>2</sup> see Mineral Resource Table and Confirmations on Pages 17-18. <sup>3</sup> see Mineral Resource Table and Confirmations on Pages 14-16. <sup>4</sup> see ASX Disclosures on page 6 and Mineral Resource Table and Confirmations on Page 12-14. <sup>5</sup> see ASX Disclosures on page 6 and Mineral Resource Table and Confirmations on Page 11.

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Overview

Horizon Minerals Limited (ASX: HRZ) (“Horizon” or the “Company”) is pleased to provide an updated Mineral Resource Statement for the Company’s gold projects located near Kalgoorlie-Boulder in the heart of the Western Australian goldfields (Figure 1). In addition, following the merger with Greenstone Resources, the Company has also added the Burbanks, Phillips Find and 50% owned Mt Thirsty projects to the Company’s resources.

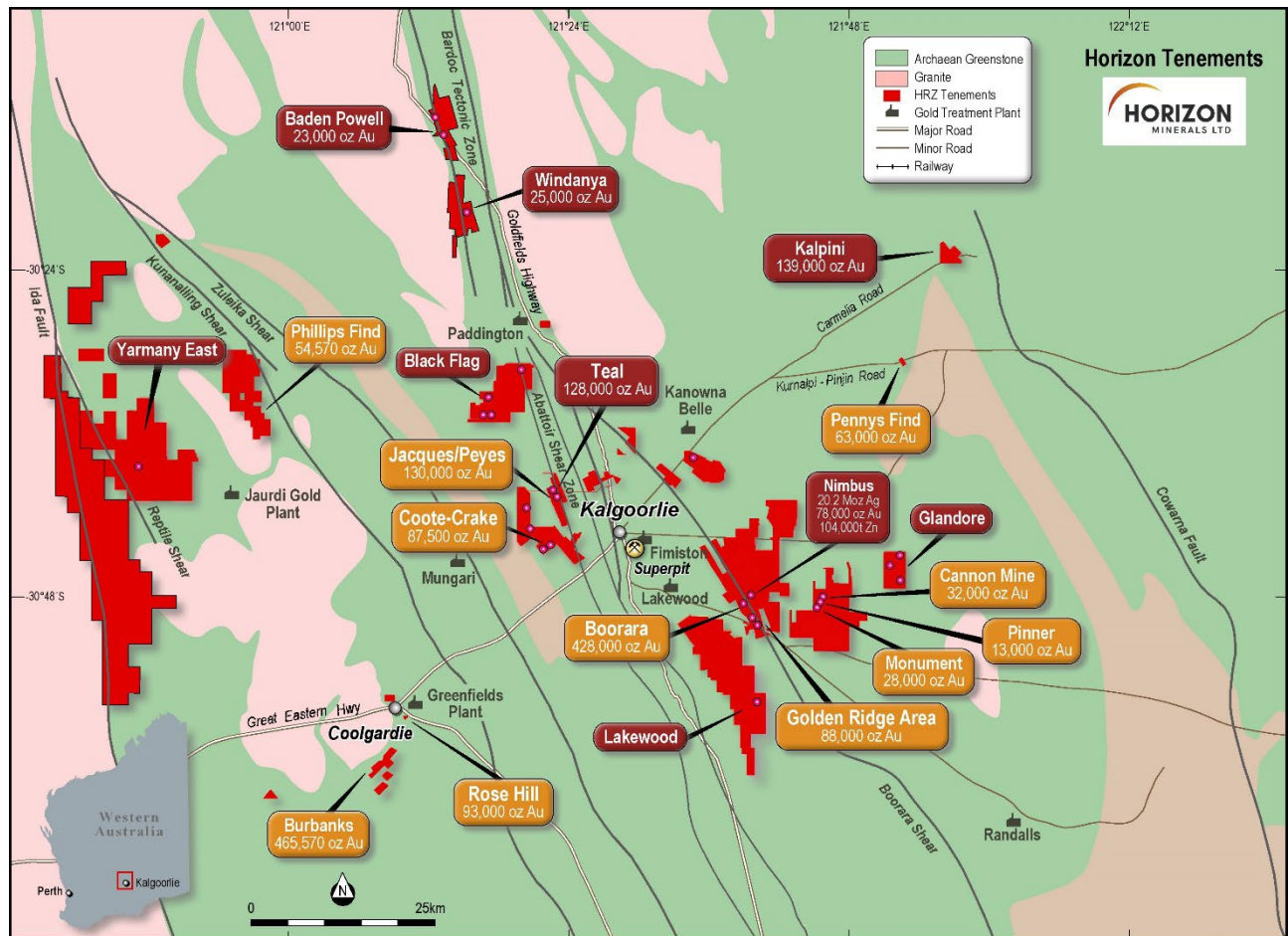


Figure 1: Kalgoorlie project area locations and surrounding infrastructure

The gold MREs include an updated Monument MRE and a maiden MRE for Pinner, both part of the larger Cannon project area, and a review of the cornerstone Boorara project. A summary of the revised MREs are as follows:

- Monument 740,000t grading 1.18g/t Au for 28,000oz at a 0.5g/t Au cut-off grade <sup>1</sup>
- Pinner 330,000t grading 1.21g/t Au for 12,844oz at a 0.5g/t Au cut-off grade <sup>1</sup>
- Boorara 10.53Mt grading at 1.27g/t Au for 428,000oz at a 0.5g/t Au cut-off grade <sup>2</sup>

<sup>1</sup> see ASX Disclosures on page 6 and Mineral Resource Table and Confirmations on Page 12-14 and JORC Table 1 on page 20. <sup>2</sup> see ASX Disclosures on page 6 and Mineral Resource Table and Confirmations on Page 11 and JORC Table 1 on page 20.

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### Cannon, Monument and Pinner Project Overview

The Cannon deposit (Figure 1) is located 30 km east-southeast of Kalgoorlie in the Eastern Goldfields region of Western Australia on granted mining leases M25/333 and M25/357. The Cannon mine and surrounding area is dominated by mafic to ultramafic rocks of the Bulong Complex overlain by a sequence of felsic volcanics, volcanoclastics and sediments. Lithologies present include komatiitic mafics and ultramafics, peridotites, basalts and gabbros. Sedimentary rocks include shales and cherts with rare, banded iron formation. The geological structure is complex and dominated by the Cannon shear which is recognised as a key ingredient for local gold and possibly nickel sulphide mineralisation.

The gold mineralisation at the adjacent Pinner deposit is similar to Cannon and consists small pods of semi-continuous mineralisation with three dominant directions that highlight the structural complexity observed at Pinner. The dominant lodes trend SW/NE, N/S, and E/W with cross cutting faults influencing the geometry.

Gold mineralisation within the Monument deposit consists of two main zones oriented NNW and NW, dipping steeply to the west. There is some indication of faulting through the centre of the mineralised area.

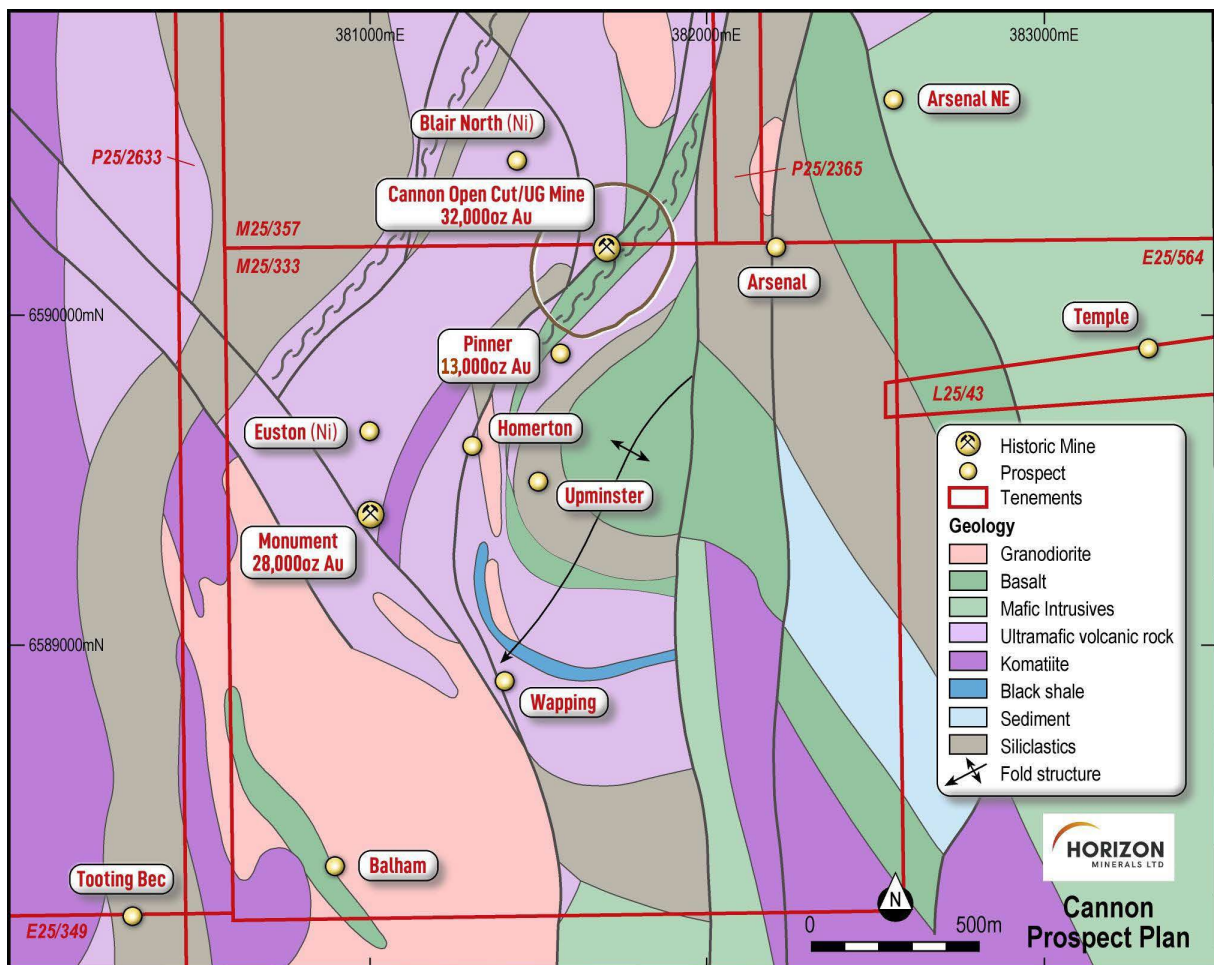


Figure 2: Cannon Project area showing surrounding prospects

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The updated Mineral Resource Estimate (JORC 2012) for Monument is shown below: <sup>1</sup>

Monument at 0.5 g/t lower cut-off grade			
Resource category	Tonnes (Mt)	Grade (g/t Au)	Gold Metal (Oz)
Measured	-	-	-
Indicated	0.74	1.18	28,000
Inferred	-	-	-
<b>Total</b>	<b>0.74</b>	<b>1.18</b>	<b>28,000</b>

The maiden Mineral Resource Estimate (JORC 2012) for Pinner is shown below: <sup>1</sup>

Pinner at 0.5 g/t lower cut-off grade			
Resource category	Tonnes (Mt)	Grade (g/t Au)	Gold Metal (Oz)
Measured	-	-	-
Indicated	0.06	1.02	2,091
Inferred	0.27	1.25	10,753
<b>Total</b>	<b>0.33</b>	<b>1.21</b>	<b>12,844</b>

### Boorara Overview

The Boorara Gold Project is located 15 km east of Kalgoorlie-Boulder (Figure 1) adjacent to the Super Pit, and 1 km southwest of the Nimbus Silver-Zinc Project site where established offices are connected to mains power and existing water supplies.

The deposit is hosted in a quartz dolerite comprising a sheeted quartz vein array system with bounding shear zones and late-stage cross faults. Mineralisation occurs as northwest dipping sheeted and stockwork quartz-carbonate vein arrays within the quartz dolerite host rocks, and steeply dipping zones along sheared geological contacts trending to the north-northwest.

The updated Mineral Resource Estimate (JORC 2012) for Boorara is shown below: <sup>2</sup>

Boorara at 0.5 g/t lower cut-off grade			
Resource category	Tonnes (Mt)	Grade (g/t Au)	Gold Metal (Oz)
Measured	1.12	1.22	44,000
Indicated	6.85	1.28	281,000
Inferred	2.56	1.26	103,000
<b>Total</b>	<b>10.53</b>	<b>1.27</b>	<b>428,000</b>

<sup>1</sup> See JORC Table 1 on page 20 and Mineral Resource Table and Confirmations on Page 12-14 and ASX Disclosures on page 6. <sup>2</sup> See JORC Table 1 on page 20 and Mineral Resource Table and Confirmations on Page 12-14 and ASX Disclosures on page 9.

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**Authorised for release by the Board of Directors**

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### **Listing Rule 5.8 Disclosures**

#### **Pinner and Monument**

##### **Regional Geology**

The Project is located within the Bulong District of the East Coolgardie Mineral Field and is on the Hampton Hill pastoral lease.

The Bulong South Project area lies within the Kurnalpi Terrane of the Norseman-Wiluna Greenstone Belt. This terrane includes the former Gindalbie and Laverton Terranes. It is currently defined as being bounded by the Ockerburry Fault System to the west and the Hootanui Fault System to the east.

The Kurnalpi Terrane comprises a series of thin, linear north-north-westerly trending, fault bounded domains of dominantly mafic–felsic volcanic sequences with prominent lateral facies changes. Komatiite horizons are thin and discontinuous and more common to the west, with the major occurrence centred on the Bulong Anticline. Locally, regions of calc-alkaline volcanic and epiclastic deposits and banded iron-formation are found.

##### **Monument – Local Geology**

The Monument area is underlain by predominantly fine grained ultramafics, high-MgO basalts and minor komatiites. There are also several black shale units which more than likely represent interflow sedimentary horizons between the mafic and ultramafic flows. A small granitoid intrudes these lithologies in the southern parts of M25/333.

The prospect geology consists of a series of narrow, NNW-trending felsic dykes intruding a package of predominantly komatiitic ultramafics with minor basaltic flows. Late-stage NE trending brittle faults cut the dykes in several places, however the only significant offset occurs near the middle of the deposit, where there is also a change in orientation of the mineralisation from NNW in the north to N-S in the southern zone. Modelling of the interpreted continuation of the main felsic dykes has allowed for a high success rate in intercepting gold.

Gold mineralisation within the Monument deposit consists of two main zones oriented NNW and NW, dipping steeply to the west. There is some indication of faulting through the centre of the mineralised area. Anomalous intercepts are also associated with other felsic units and these interpreted cross-cutting NE trending faults.

The best intersections occur within or on the margins of felsic intrusive units that run the length of the deposit along the NW trend.

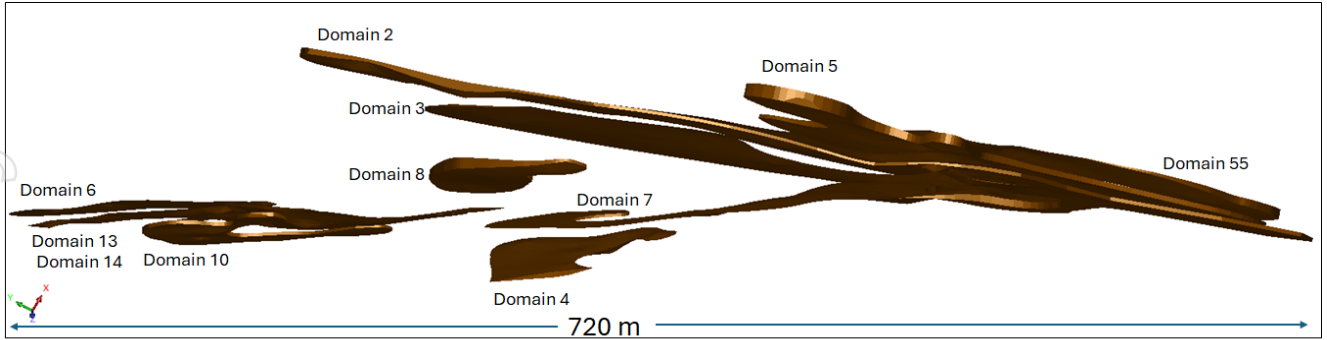


Figure 1 - Monument Mineralised Lodes

**Pinner – Local Geology**

Pinner lies immediately south of Cannon and has been interpreted as an extension of the Cannon mineralisation. Mineralisation is hosted within fine grained basaltic and ultramafic rocks and display discrete alteration associated with quartz veining and lesser amounts of carbonate veining. Petrological examination has identified an alteration assemblage of albite-quartz-biotite-pyrite with carbonate associated with the gold mineralisation. Minor gold mineralisation is also associated with thin felsic porphyry intrusives.

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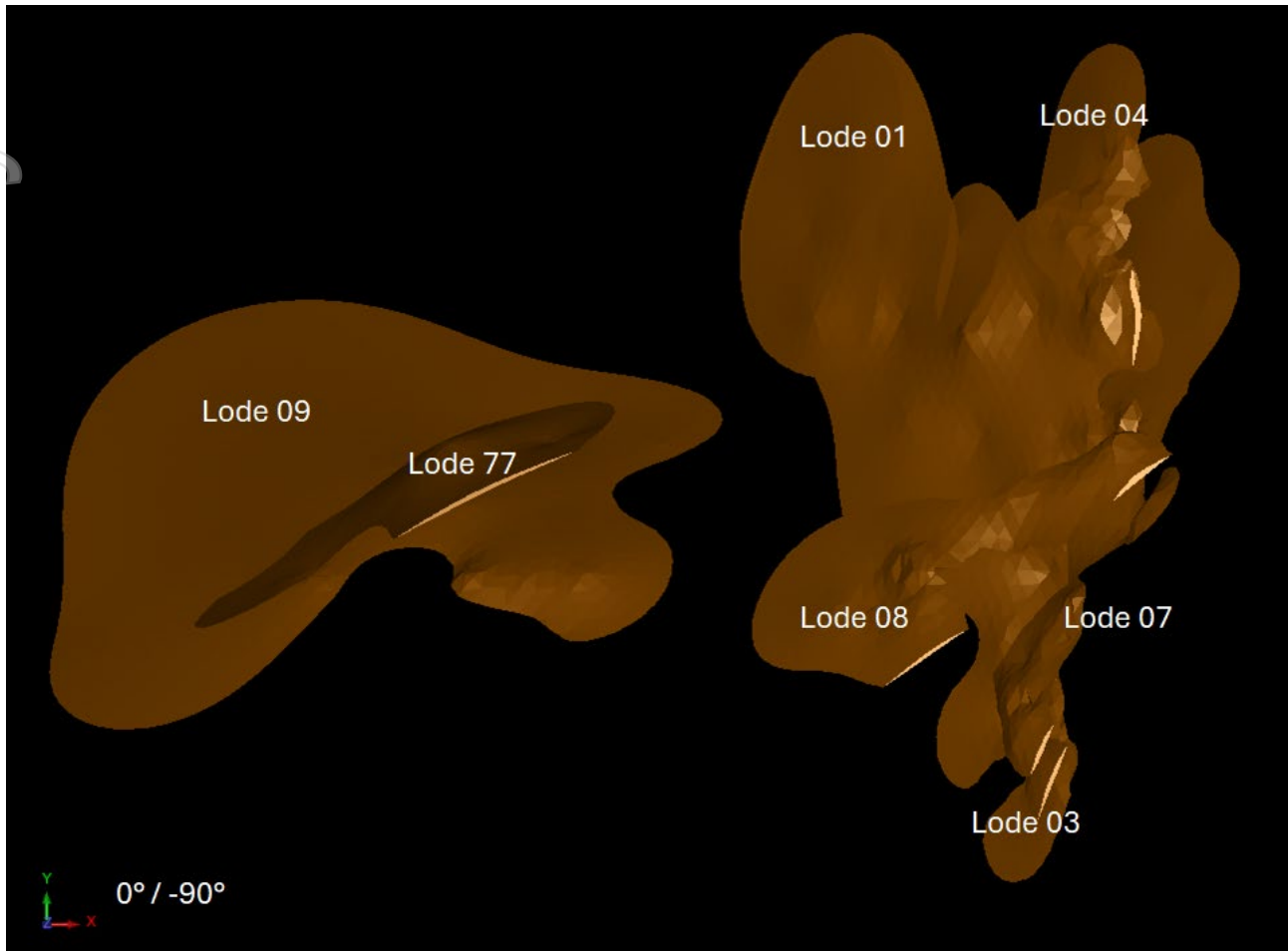


Figure 2 - Pinner Lodes 2024

### **Drilling Techniques**

Face sampling Reverse Circulation (RC) percussion drilling and HQ diamond core were used to sample the deposit. RAB drilling from early reconnaissance work was not used in the resource.

Drill hole collar positions have been surveyed by Differential GPS to an accuracy of +/- 0.1m. The grid system used for locating the collar positions of drill holes is the Geocentric Datum of Australia (GDA94), Zone 51 (MGA Projection).

Topographic control in the area is provided by SRTM regional data and local mine site surveying. Elevations are recorded in Australian Height Datum (AHD).

Down hole surveys used an Eastman single shot system or an EMS tool (Reflex EZ shot), by the relevant drill contractor.

All drill holes were geologically logged.

### **Sampling and Sub-Sampling Techniques**

RC drill holes were sampled at 1m intervals via a cone-splitter connected via a cyclone directly to the drill stream, or via spear sampling for 2 m to 4 m composites. Samples were taken dry.



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Historically, individual RC drilling samples were cone split from the drill rig or put through a 3-tier riffle splitter and collected into pre-numbered calico bags. Diamond core was sampled as half core.

Diamond core was sampled at geologically defined intervals no greater than 1.3 m and no less than 0.15 m. Sampling did not cross lithological boundaries.

Field duplicates were collected at every 10th metre mark on each hole. Certified Reference Material (standards) were submitted with the field samples at a rate of 1:20.

### **Sample analysis method**

Preparation and analysis of samples was undertaken historically by either Genalysis or Minanalytical, and by SGS for the recent HRZ drilling.

Sample size presented for analysis was approximately 2 kg. Samples were pulverised to 85% passing 75 micron, or 90% at 106 micron in the 2013-2016 programs. Each sample was completely pulverised, to produce a 25 g, 40 g or 50 g charge for fire assay with AAS finish. Selected samples from some programs were submitted for multi element analysis.

### **Pinner - Estimation methodology**

Three primary mineralisation trends were identified at Pinner – E-W, NEE – SWW and ESE – WNW. Continuous zones were flagged and modelled in Seequent Leapfrog Geo.

The 3D mineralisation models were used in block model construction and grade estimation in Geovia Surpac.

Grade estimation for the Pinner deposit was carried out using linear estimation methods. A multi-pass estimation plan was used for all estimation domains. An Inverse Distance algorithm using a power of two (ID2) was used to estimate Au only. Waste domains were not estimated.

Only samples from AC, RC and Diamond drill holes were used in the estimation of grades. No RAB samples were used as annular return samples can become contaminated. High-grade outlier samples were managed with top cutting.

Hard boundaries were used between domains so that a domain was estimated with only the samples within that domain. No boundary was applied between different oxidation state material within a domain.

Search ellipses were aligned with the mineralisation orientation. Search distances were set to ensure adequate samples were found to make an estimate. Pass 1 used a search ellipse 40 m x 20 m x 10 m. Pass 2 expanded the sample search to 60 m and pass 3 to 80 m. Pass 4 used a minimum sample requirement of 2. See figures below.

71% of blocks were estimated by the first estimation pass; 17% by the second pass and the remainder by passes 3 and 4.

Bulk density was assigned to the model based on values used in the 2020 Cannon resource model.

The model and grade estimation were validated by visual inspection of the blocks compared to the drilling, and statistically comparing average domain composite grades to model grades.

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### **Monument - Estimation methodology**

The geological model for Monument was constructed using Seequent's Leapfrog Geo software. Mineralised intervals were coded by lode and the lodes modelled as veins. A minimum 2 m downhole interval was maintained. RC, Diamond and RAB drillholes were used to inform the geological model. Vein boundaries were modelled to limit the distance projected from drillhole data.

Grade estimation for the Monument deposit was carried out using linear estimation methods. A multi-pass estimation plan was used for all estimation domains.

Ordinary Kriging was used to estimate Au only. Waste domains were not estimated.

Only samples from RC and Diamond drill holes were used in the estimation of grades. No RAB samples were used as annular return samples can become contaminated.

High-grade outlier samples were managed with top cutting in selected domains.

Hard boundaries were used between domains so that a domain was estimated with only the samples within that domain. No boundary was applied between different oxidation state material within a domain.

Search ellipses were aligned with the mineralisation orientation. Search distances were set to ensure adequate samples were found to make an estimate – Pass 1 40 m. Pass 2 expanded the sample search to 60 m and pass 3 to 80 m. Pass 4 used a minimum sample requirement of 2 and a search radius of 160 m.

82% of blocks were estimated by the first estimation pass; 12% by the second; 5% in passes 3 and 4. 2% of blocks remain un-estimated.

The model and grade estimation were validated by visual inspection of the blocks compared to the drilling; and statistically comparing average domain composite grades to model grades.

### **Pinner - Classification**

Resource classification reflects the confidence in the geological interpretation and grade estimation. The near surface well drilled lodes 2 and 8 have been classified as Indicated. The other domains have been classified as Inferred with the distal north-eastern edge of domain 9 left unclassified.

### **Monument – Classification**

Classification has taken into account the geological confidence, distribution of data and confidence in the reliability of the estimated resource given the nature of the deposit.

The Resource is classified as inferred due to a lack of Density data. Density values have been adopted from the nearby Cannon deposit.

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If the density data was available estimation passes 1 and 2 would be classified Indicated. Pass 3 would be Inferred. Pass 4 would be an exploration target (confirmation drilling required).

This classification is in line with the CP's view of the deposit. It is estimated that measured density values for the Monument deposit could change the resource tonnes by  $\pm 5\%$ .

### **Boorara**

#### **Geology and Mineralisation Interpretation**

Boorara is hosted within the Boorara Shear Zone (BSZ), a major tectonic feature of the Kalgoorlie Terrane. At Boorara the BSZ contains a number of ultramafic, mafic-volcanic and sedimentary units. The host Boorara Dolerite package has a 4km strike length, and consists of layers of pyroxenite, dolerite and granophyric coarse-grained quartz dolerites. The package is at its widest in the northern area (500m) due to intercalated dolerite, high magnesian basalt (komatiite) and sediment units. The central and southern parts of the project generally lack the internal komatiites and sediments and averages less than 60m width.

The local geology has been extensively mapped and relogged by Dr Gerard Tripp and forms the basis for the compilation of a 3D geological model for the Boorara deposit and the construct of mineralisation domains. Additionally, the vein analysis provides significant support for the grade continuity analysis.

Due to the change in deposit characteristics along its strike length, the Boorara deposit is divided into three areas; Regal, Crown Jewel and Royal.

The Regal mineralisation is dominantly hosted in stockworks within quartz dolerites or on the margins of sedimentary units. These consist of moderately NE dipping veins within steeply dipping zones.

The Crown Jewel area has mineralisation within a moderately north-east dipping zone within the quartz dolerite. This is a continuation of the Royal (southern stockwork) style of mineralisation, but with a narrower zone of quartz dolerite and shallower dip.

The Royal area presents as well-developed steeply north-east dipping zones containing high frequency vein arrays developed proximal to shears at the upper and lower contacts of the dolerite unit.

#### **Drilling Techniques**

The deposit was sampled using Reverse Circulation (RC), Diamond drillholes (DDH) and Grade Control RC (GCRC) on spacings ranging from 4 m x 10 m and 4 m x 4 m (vertical) at Royal, nominally 4 m x 10 m (vertical) at Crown Jewel and 5 m x 10 m (angled) at Regal. The exploration/resource development drilling patterns were typically spaced at 10 – 20 m x 20 m but can extend out to >100 m spacing where deeper. An approximate total of 337 RC holes, 50 DDH holes and 812 GCRC holes were drilled for 133,695 m, 8,537 m and 22,978 m respectively. Other types of sampling such as trenches, Aircore and RAB drilling were not used in the Mineral Resource Estimate.

#### **Sampling Techniques**

Reverse Circulation drilling was used to obtain 1m samples from which approximately 1.5 – 2 kg was pulverised to produce a 50 g charge for fire assay. RC chips were geologically logged. Diamond

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Core was logged and sampled by cutting PQ, HQ, NQ2 core along the orientation line and submitting the half core for assay. Sample intervals were determined by the supervising geologist.

### Sampling Analyses Method

Samples were assayed for Au ppm only for this program. Assays were determined by 50 g fire assay with AAS finish samples grading >5 g/t were repeat assayed and if a sample exceeded 100 g/t or coarse gold is suspected then a screen fire assay (Au-SCR22AA) has been undertaken on those samples and those results reported instead of the fire assay result. Detection limits are typically accurate to 0.01 g/t Au.

### Estimation Methodology

Mineralisation was domained as two mineralisation sets (termed the “Contact” Lodes and “Flat” Lodes) which were then estimated as separate block models that were then joined together for the final model. The Contact Lode mineralisation model relates to the vein stockworks contained within steeply dipping granophyric dolerites. The Flat lode mineralisation relates to sheeted extensional quartz vein arrays that are developed between the contact lodes at Regal, and mainly on the footwall side of the Crown Jewel and Royal deposits. These models were estimated separately, and the Contact lodes were overprinted onto the Flat Lode mineralisation model.

In terms of the interpretation process where Flat lode Mineralisation domains cross-cut the Contact domains the samples were used to form the wireframes and the composites are used to inform both models. The tenor of the mineralisation is very similar for both domains so is not considered to be an issue likely to cause over-estimation issues in the model.

Grades were composited to 1 m downhole constrained within the mineralised domains. To avoid loss of data from small ‘residuals’ at the end of a composite (i.e., small intervals that might otherwise be excluded), a “best fit” compositing routine that divided each mineralised intercept into equal lengths that was as close as possible to 1m was chosen.

High grade results within the deposit were capped by analysing histograms, log histograms, log probability plots and spatial analysis of individual high grades. Top-cuts for the Contact Lodes were selected on a lode by lode basis and top-cuts for the Flat Lodes were selected on a domain grouping basis. Top cuts varied between 8 g/t and 43 g/t gold. Low grade subdomains within the Contact Lodes were all top-cut to 2 g/t gold. Top-cuts were applied to composites prior to estimation.

#### *Flat lode model:-*

Flat lode domains were grouped into seven orientation domains and variography was undertaken. The Regal flat Lodes (88 domains) were individually estimated by ordinary kriging dynamic anisotropy, using hard domain boundaries. The search ellipse for the Regal Lodes was aligned to the local orientation of the mineralised trend of each domain using dynamic anisotropy. The Crown Jewel and Royal Lodes were estimated as a group, using ordinary kriging with a search ellipse flattened across strike to force a strong anisotropic search. Flat lodes were estimated into a parent block of 10 m (Y) x 10 m (X) x 5 m (Z) with sub celling to 1m (X,Y,Z).

#### *Contact lode model:-*

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Categorical indicator variography was completed for each of the Contact lodes using dynamic anisotropy to control the search at a 0.25 g/t gold Indicator. This estimation was used to define the low grade subdomains. Variography was undertaken on the flat lode high grade sub-domains which were individually estimated by ordinary kriging using dynamic anisotropy with hard boundaries applied apart from Domain 101, 301 and 401. Contact lodes were estimated into a parent block of 10m (Y) x 20m (X) x 5m (Z) with sub celling to 1m (X) by 2m (Y) by 1m (Z).

For both models three search passes were run. The size of the initial anisotropic search ellipsoid was based on the variogram ranges. The searches were oriented in the same directions as the variograms i.e., parallel to the individual vein geometries.

### Cut-off Grade

The cut-off grades for Mineral Resource Estimation reporting are 0.5 g/t gold for open pit resources and the Mineral Resource has been reported above the 200 mRL (approximately 200 m below ground level) as the boundary for open pit RPEEE ("Reasonable Potential for Eventual Economic Extraction")

Previously reported MREs have used the same cut-off grade based on reasonable prospects of eventual economic extraction using optimisation shells run by Mining Consultants using assumed cost scenarios.

### Mineral Resource Classification

Blocks have been classified as Measured, Indicated, Inferred or Unclassified based on drill hole spacing, geological continuity and estimation quality parameters.

### Mining and Metallurgical Parameters

Gold grades and geometry of the mineralised veins are amenable to open pit mining. No dilution for mining has been incorporated into the model. The model and reported Mineral Resources are for the mineralised lodes only, and further mining studies are required to determine the appropriate amount of dilution. Trial mining in 2016 and 2020 and reconciliation of ore shall also assist in determining the appropriate mining parameters.

Metallurgical test work on Boorara was completed by ALS Laboratories in 2014, 2015, a further two test work programs occurred in 2016 and another in 2018 and 2019, Bureau Veritas in 2011 and 2021 and two programs in 2017 in addition to ore characterisation testwork undertaken in 2017 by HydroGeoSense. Test work was undertaken on the various lodes and weathering profiles through master and bulk composites. In addition, trial mining in 2016 of the Royal lodes processed at FMR Investments' Greenfields Mill, and trial mining in 2020 of the Regal and Crown Jewel lodes treated at Golden Mile Milling's Lakewood plant, enabled confirmation of metallurgical recoveries, reagent consumptions and optimal processing parameters for plant design.

Comminution test work included SAG Mill Comminution Data, Unconfined compressive strength (UCS), Crushing Work Index, Bond Ball Work Index, Bond Abrasion Index which indicate the transitional/fresh ore on average is of medium hardness and moderately abrasive.

Metallurgical recovery test work included gravity and CIL leach test work and direct leach test work at various grind sizes which showed moderate to high gravity recovery and high leach recovery, with milling confirming these results averaging typically above 40% gravity recovery and achieving overall recovery of 94.5% across all lodes at Boorara.

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### Horizon Minerals Limited – Summary of Gold Mineral Resources

Project	Cutoff	Measured			Indicated			Inferred			Total		
	Au g/t	Mt	Au g/t	Oz	Mt	Au g/t	Oz	Mt	Au g/t	Oz	Mt	Au g/t	Oz
Boorara OP	0.5	1.12	1.22	44,000	6.85	1.28	281,000	2.56	1.26	103,000	10.53	1.27	428,000
Burbanks OP	0.5	-	-	-	1.43	2.00	92,780	3.43	1.90	204,870	4.86	1.90	297,650
Burbanks UG	2.5/2.0*	-	-	-	0.12	4.30	16,730	1.07	4.40	151,190	1.19	4.40	167,920
Phillips Find OP	0.5	-	-	-	0.54	2.40	41,650	0.19	2.10	12,700	0.73	2.30	54,360
Phillips Find UG	2	-	-	-	-	-	-	0.03	2.30	210	0.03	2.30	210
Golden Ridge	1	-	-	-	0.47	1.83	27,920	0.10	1.70	2,800	0.52	1.82	30,720
Golden Ridge North	0.8	-	-	-	0.65	1.15	24,260	0.77	1.30	32,340	1.42	1.23	56,600
Cannon UG	1	-	-	-	0.19	4.80	28,620	0.10	2.30	3,450	0.23	4.29	32,070
Monument	0.5	-	-	-	0.74	1.18	28,000	-	-	-	0.74	1.18	28,000
Pinner	0.5	-	-	-	0.06	1.02	2091	0.27	1.25	10,753	0.33	1.21	12,844
Pennys Find	1.5	-	-	-	0.30	5.19	51,000	0.12	3.00	12,000	0.43	4.57	63,000
Kalpini	0.8	-	-	-	1.40	2.43	108,000	0.50	2.00	31,000	1.87	2.33	139,000
Rose Hill UG	2	-	-	-	0.33	4.50	47,100	0.20	4.80	27,800	0.51	4.60	74,900
Rose Hill OP	0.5	0.19	2.00	12,300	0.09	2.00	6,100	-	-	-	0.29	2.00	18,400
Jacques-Peyes	0.8	-	-	-	0.97	2.59	81,000	0.80	2.00	49,000	1.74	2.32	130,000
Teal	1	-	-	-	1.01	1.96	63,680	0.80	2.50	64,460	1.81	2.20	128,140
Crake	0.8	-	-	-	1.33	1.47	63,150	0.10	1.30	3,300	1.42	1.46	66,450
Coote	1	-	-	-	-	-	-	0.40	1.50	21,000	0.42	1.54	21,000
Capricorn	0.5	-	-	-	-	-	-	0.70	1.20	25,500	0.70	1.20	25,500
Baden Powell	0.5	-	-	-	-	-	-	0.60	1.20	23,000	0.60	1.20	23,000
<b>Total</b>		<b>1.31</b>	<b>1.34</b>	<b>56,300</b>	<b>16.48</b>	<b>1.82</b>	<b>963,081</b>	<b>12.74</b>	<b>1.90</b>	<b>778,373</b>	<b>30.37</b>	<b>1.84</b>	<b>1,797,764</b>

#### Confirmation

The information in this report that relates to Horizon's Mineral Resources estimates is extracted from and was originally reported in Horizon's ASX announcements "Intermin's Mineral Resources Grow 30% to over 560,000 Ounces", (ASX:IRC) (Teal) dated 19 September 2018, "Gold resources increase to 1.24moz" (Coote, Capricorn, Baden Powell) dated 28 September 2022, "Rose Hill firms as quality high grade open pit and underground gold project" dated 8 December 2020, "Pennys Find Resource Update" dated 29 December 2023, "Updated Crake Resource improves in quality" dated 7 September 2021, "Jacques Find- Peyes Farm Mineral Resource update" dated 15 September 2021, "Asset Swap with Northern Star Completion", dated 20 December, 2019, "Investor Presentation June 2022", 31 May 2022, "Maiden Resources for Monument and Golden Ridge North", 19 July 2023 and "Kalpini Gold Project Mineral Resource Update" dated 28 September 2021, each of which is available at [www.asx.com.au](http://www.asx.com.au). Horizon Minerals resources at Burbanks were originally reported by Greenstone Resources (GSR) in

## ASX ANNOUNCEMENT

“Global Gold Resource Increases 57% to 520,134 oz”, on 5 July 2023. Horizon Minerals resources at Phillips Find were originally reported by Greenstone Resources (GSR) in “Interim Update Increases Resource by 128% to 332,114 oz”, on 20 September 2022.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person’s findings in relation to those Mineral Resources estimates or Ore Reserves estimates have not been materially modified from the original market announcements.

### Competent Persons Statement – Monument and Pinner

The information in the MRE reporting that relates to the monument and Pinner Mineral Resources is based on information compiled by Mr Stephen Godfrey. Mr Godfrey, Resource Development Manager with Horizon Minerals and Fellow of the Australasian Institute of Mining and Metallurgy (FAusImm 110542) and a Member of the Australian Institute of Geoscientists (MAIG 3993), oversaw the above reports with respect to drilling, data collection and sample analyses and was responsible for the above resources with respect to resource estimation.

The information was prepared under the JORC Code 2012. Mr Godfrey has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that they are undertaking to qualify as a Competent Persons as defined in the 2012 edition of the ‘Australasian Code for Reporting of Exploration, Results, Mineral Resource and Ore Reserves’. Mr Godfrey consents to the inclusion in this announcement of the matters based on their information in the form and context in which they appear.

### Competent Persons Statement – Boorara

The information in this announcement which relates to Exploration Results and geological interpretation at Boorara is based on information compiled by Horizon Minerals Limited under the supervision and review of Mr Stephen Godfrey Resource Development Manager at Horizon Minerals Ltd, who is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusImm 110542) and a Member of the Australian Institute of Geoscientists (MAIG 3993). Mr Godfrey consents to the inclusion in the announcement of the matters based on their information in the form and context in which it appears. The information in this announcement which relates to the estimation of the Boorara mineral resource was compiled by Mr Mark Drabble. Mr Drabble is a Principal Geological Consultant at Optiro Pty Ltd. and an independent consultant to Horizon Minerals Ltd (HRZ) and is responsible for the Mineral Resource Estimation. Mr Drabble is a Member of the Australian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Messrs Godfrey and Drabble have sufficient experience relevant to the style of mineralisation and deposit type under consideration and to the activities being undertaken 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”. Messrs Godfrey and

## **ASX ANNOUNCEMENT**

Drabble consent to the inclusion in the report of matters based on his information in the form and context in which it appears

### **Competent Persons Statement – Burbanks and Phillips Find**

The information in this report which relates to Exploration Results and geological interpretation at Burbanks is based on information compiled by Mr Glenn Poole an employee of Horizon Minerals Limited and who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Poole consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information in the report to which this statement is attached that relates to the estimation and reporting of global gold Mineral Resources at the Phillips Find deposits and Burbanks deposits is based on information compiled by Mr Glenn Poole, BSc, a Competent Person and a current Member of the Australian Institute of Mining and Metallurgy (AusIMM 317798). Mr Poole is Chief Geologist at Horizon Minerals Ltd and has sufficient experience relevant to the style of mineralisation and deposit type under consideration and to the activities being undertaken 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 Poole consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

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## ASX ANNOUNCEMENT

### Horizon Minerals Limited – Summary of non-Gold Mineral Resources

#### Nimbus All Lodes (bottom cuts 12g/t Ag, 0.5% Zn, 0.3g/t Au)

Category	Tonnes	Grade			Contained Metal		
	Mt	Ag (g/t)	Au (g/t)	Zn (%)	Ag (Moz)	Au ('000oz)	Zn ('000t)
Measured Resource	3.62	102	0.09	1.2	11.9	10	45
Indicated Resource	3.18	48	0.21	1.0	4.9	21	30
Inferred Resource	5.28	20	0.27	0.5	3.4	46	29
<b>TOTAL RESOURCE</b>	<b>12.08</b>	<b>52</b>	<b>0.20</b>	<b>0.9</b>	<b>20.2</b>	<b>77</b>	<b>104</b>

#### Nimbus high grade silver zinc resource (500g/t Ag bottom cut and 2800g/t Ag top cut)

Category	Tonnes	Grade		Contained Metal	
	Mt	Ag (g/t)	Zn (%)	Ag (Moz)	Zn ('000t)
Measured Resource	-	-	-	-	-
Indicated Resource	0.17	762	12.8	4.2	22
Inferred Resource	0.09	797	13.0	2.2	11
<b>TOTAL RESOURCE</b>	<b>0.26</b>	<b>774</b>	<b>12.8</b>	<b>6.4</b>	<b>33</b>

#### Mt Thirsty (Cut-off Grade 0.25% NiEq%)

Category	Tonnes	Grade			Contained Metal		
	Mt	Ni (%)	Co (%)	Mn (%)	Ni ('000t)	Co ('000t)	Mn ('000t)
<b>Mt Thirsty Main (MTTM)</b>							
Measured Resource	-	-	-	-	-	-	-
Indicated Resource	30.2	0.51	0.10	0.69	154.7	29.3	207.8
Inferred Resource	31.9	0.35	0.03	0.24	110.4	9.3	76.6
<b>Total Resource</b>	<b>62.1</b>	<b>0.43</b>	<b>0.06</b>	<b>0.46</b>	<b>265.1</b>	<b>38.5</b>	<b>284.4</b>
<b>Mt Thirsty North (MTTN)</b>							
Measured Resource	-	-	-	-	-	-	-
Indicated Resource	-	-	-	-	-	-	-
Inferred Resource	4.2	0.43	0.05	0.29	17.9	2.0	11.8
<b>Total Resource</b>	<b>4.2</b>	<b>0.43</b>	<b>0.05</b>	<b>0.29</b>	<b>17.9</b>	<b>2.0</b>	<b>11.8</b>
<b>TOTAL RESOURCE</b>	<b>66.2</b>	<b>0.43</b>	<b>0.06</b>	<b>0.45</b>	<b>283.0</b>	<b>40.5</b>	<b>296.2</b>

### Confirmation

Horizon Minerals Ltd resources at Mt Thirsty were originally reported by Greenstone Resources (GSR) in "Mt Thirsty Mineral Resource Increases by Over 145%", on 26 April 2023.

### Nimbus

The information in this report that relates to Horizon's Mineral Resources estimates on the Nimbus Silver Zinc Project is extracted from and was originally reported in Intermin's and

## ASX ANNOUNCEMENT

MacPhersons' ASX Announcement "Intermin and MacPhersons Agree to Merge – Creation of a New Gold Company Horizon Minerals Ltd" dated 11 December 2018 and in MacPhersons' ASX announcements "Quarterly Activities Report" dated 25 October 2018, "New High Grade Nimbus Silver Core Averaging 968 g/t Ag" dated 10th May 2016 and "Nimbus Increases Resources" dated 30th April 2015, each of which is available at [www.asx.com.au](http://www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person's findings in relation to those Mineral Resources estimates have not been materially modified from the original market announcements.

### **Mt Thirsty**

The information in this announcement which relates to Exploration Results and geological interpretation at Mt Thirsty is based on information compiled by Mr Glenn Poole an employee of Greenstone Resources Limited who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM 317798). Mr Poole consents to the inclusion in the announcement of the matters based on their information in the form and context in which it appears.

The Mineral Resource Statement for the Mt Thirsty Mineral Resource Estimate was prepared during 2023 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

The information in this announcement which relates to Mineral Resources is based on information provided to and compiled by Richard Gaze, who is a full-time employee of WSP Australia Pty Ltd, and a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Richard Gaze has sufficient relevant experience regarding the style of mineralisation and type of deposits under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in JORC 2012.

The company is not aware of any new information or data that materially affects the information presented and that the material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

## ASX ANNOUNCEMENT

### Forward Looking and Cautionary Statements

Some statements in this report regarding estimates or future events are forward looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward looking statements include, but are not limited to, statements preceded by words such as “planned”, “expected”, “projected”, “estimated”, “may”, “scheduled”, “intends”, “anticipates”, “believes”, “potential”, “could”, “nominal”, “conceptual” and similar expressions. 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 interpretations 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. Forward looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company’s actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain any additional mine licenses, permits and other regulatory approvals required in connection with mining and third party processing operations, competition for among other things, capital, acquisition of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rate, currency and interest fluctuations, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, the ability to secure adequate financing and management’s ability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward looking statements will prove to be correct.

Statements regarding plans with respect to the Company’s mineral properties may contain forward looking statements in relation to future matters that can only be made where the Company has a reasonable basis for making those statements.

This announcement has been prepared in compliance with the JORC Code (2012) and the current ASX Listing Rules.

The Company believes that it has a reasonable basis for making the forward looking statements in the announcement, including with respect to any production targets and financial estimates, based on the information contained in this and previous ASX announcements.

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**Appendix 1 – project CANNON – prospect MONUMENT – model MON\_2024B.MDL**

**JORC Code (2012) Table 1, Section 1, 2 and 3**

Mr Stephen Godfrey, Resource Development Manager for Horizon Minerals compiled the information presented in the following JORC Table 1 and is the Competent Person for that data.

The following Table and Sections are provided to ensure compliance with the JORC Code (2012 edition) guidelines for the reporting of Mineral Resources.

**Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	
<p><b>Sampling techniques</b></p>	<p><i>Nature and quality of sampling (e.g. 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.</i></p>	<ul style="list-style-type: none"> <li>• Pre-collar RC and full RC holes were sampled using face sampling reverse circulation (RC) percussion drilling. Southern Gold sampled selectively using original 1 m samples or 4 m spear sampled composites. Cyprus collected 2 m composite samples. HRZ composited 1 m samples to 4 m and resampled at 1 m where anomalous gold was returned in the 4 m assay results. HRZ AC drilling used the same protocols as RC.</li> <li>• Diamond tails were HQ3 core and sampled as half core. Diamond core was sampled at intervals from 0.2 m to 4.0 m, with a maximum of 1.3 m in mineralised zones. Sampling did not cross lithological boundaries.</li> <li>• RAB drill programs samples were collected from the cyclone at one metre intervals and placed on the ground. These intervals were sampled as 4 metre composites and submitted for gold and arsenic analysis.</li> <li>• Cyprus RAB and RC sample Au analysis was done by Aqua Regia on a 50 g pulverised subsample with an AAS or B/ETA finish.</li> </ul>

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Criteria	JORC Code explanation	
	<p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	<ul style="list-style-type: none"> <li>• Southern Gold used a 50g charge fire assay with detection by atomic absorption (FA50AAS) and multi-element analysis (19 other elements) by MS and OES methods after a 4-acid digest (MA40MS, MA40OES).</li> <li>• HRZ used a 50 g fire assay analysis with AAS finish for Au only.</li> </ul>
<b>Drilling Techniques</b>	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-</i></p>	<ul style="list-style-type: none"> <li>• Face sampling reverse circulation percussion (RC) drilling and HQ diamond core were the drilling techniques used. Rotary Air Blast (RAB) drilling was used in early reconnaissance work. RAB drilling was used to</li> </ul>

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**ASX ANNOUNCEMENT**

Criteria	JORC Code explanation																
	<p>sampling bit or other type, whether core is oriented and if so, by what method, etc).</p>	<p>inform the geological interpretation but not the grade estimation of the mineral resource.</p> <ul style="list-style-type: none"> <li>Southern Gold holes were surveyed using an EMS tool, by the drill contractor. HRZ holes were surveyed using a north seeking downhole gyro. RAB drilling as not downhole surveyed.</li> <li>Number of holes and metres drilled in the Monument are summarised below:</li> </ul> <table border="1" data-bbox="1339 635 1832 826"> <thead> <tr> <th>Company</th> <th>Holes</th> <th>Metres</th> </tr> </thead> <tbody> <tr> <td>Cyprus</td> <td>1</td> <td>100</td> </tr> <tr> <td>Southern</td> <td>59</td> <td>5563.3</td> </tr> <tr> <td>HRZ</td> <td>52</td> <td>5113</td> </tr> <tr> <td><b>Grand Total</b></td> <td><b>112</b></td> <td><b>10776.3</b></td> </tr> </tbody> </table> <p>Monument drilling limited by:</p> <ul style="list-style-type: none"> <li>y &gt; 6589100</li> <li>y &lt; 6589800</li> <li>x &gt; 380600</li> <li>x &lt; 381075</li> </ul>	Company	Holes	Metres	Cyprus	1	100	Southern	59	5563.3	HRZ	52	5113	<b>Grand Total</b>	<b>112</b>	<b>10776.3</b>
Company	Holes	Metres															
Cyprus	1	100															
Southern	59	5563.3															
HRZ	52	5113															
<b>Grand Total</b>	<b>112</b>	<b>10776.3</b>															

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Criteria	JORC Code explanation	
<p><b>Drill sample recovery</b></p>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<ul style="list-style-type: none"> <li>• Drilling of diamond core and RC holes were conducted with machinery and using drilling techniques appropriate to the terrain and with drillers experienced in the area.</li> <li>• Sample loss was kept to a minimum by good drilling practices.</li> <li>• Sampling intervals during RC drilling were routinely checked by comparing the position of the drill rod against the sample bag being filled.</li> <li>• Bag volumes are monitored to ensure a consistent representative sample was being obtained.</li> <li>• Diamond core recovery was reconciled using a tape measure and driller’s markings.</li> <li>• Cone splitting of RC holes and geologically informed sampling of diamond core provided good representation of the intervals sampled.</li> <li>• No recovery issues were identified with the RC or core drilling. Loss of fines at the cyclone was minimal and is not considered to have had a significant effect on sample recovery. No significant core loss was noted in reporting.</li> <li>• No relationship has been noted between sample recovery and grade.</li> </ul>

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Criteria	JORC Code explanation	
<p><b>Logging</b></p>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<ul style="list-style-type: none"> <li>• All drill holes have been geologically logged by Company geologists using a standard format over the full length of each hole. Features for each sample or geological interval recorded, where observable, included weathering, lithology, alteration mineralogy, structural information, mineralisation mineralogy, veining, vein mineralogy and proportions of non-economic minerals.</li> <li>• Geological logging recorded factual data (e.g. colour, grain size, percentage of identifiable minerals present) and interpretative data (e.g. lithology).</li> <li>• A subsample of washed and sieved RC chips from each metre was collected and stored sequentially in numbered plastic chip trays. Chips trays representing each RC drill hole are stored by the relevant company. Diamond core was sampled as half core with the remaining half stored at the company facilities in Kalgoorlie. For HRZ sample storage is at the Nimbus mine site.</li> </ul>

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Criteria	JORC Code explanation	
<p><b>Sub-sampling techniques and sample preparation</b></p>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<ul style="list-style-type: none"> <li>• RC samples were sampled from a cone splitter or rifle splitter attached to the drill rig at 1m intervals and rejects collected placed in sequential order on the ground adjacent to the drill rig. Diamond core was cut using a core saw and sampled as half core.</li> <li>• Samples were taken dry. No issues with wet samples were noted.</li> <li>• RC sample size presented for analysis was approximately 2 kg.</li> <li>• Preparation and analysis of samples was undertaken by Genalysis for Cyprus RAB samples; Minlab for Cyprus RC samples: Minanalytical for Southern Gold RC and Diamond Core samples; SGS (Kalgoorlie) for HRZ samples.</li> <li>• Samples were pulverised to 85% passing 75 µm.</li> <li>• For Southern Gold and HRZ field duplicates were collected at every 20th metre mark on each hole, and CRM submitted with each batch of samples. Cyprus reported no QAQC protocols for their RAB sampling. No anomalies were reported from the QAQC sample results.</li> </ul>

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### **Quality of assay data and laboratory tests**

*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*

*For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*

*Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*

- For Cyprus RAB samples intervals were sampled as 4 metre composites and submitted for gold and arsenic analysis. In the laboratory, the samples were dried prior to being pulverised, in stages, to a nominal 75 µm for analysis. Gold was analysed from a 50g sub-sample in an Aqua-regia digest by Genalysis B/ETA method to a detection limit of 1 ppb. Arsenic was determined from the same digest by B/AAS method to a detection limit of 5 ppm.
- For Cyprus RC drill holes samples were collected at 1m intervals and initially composted to 2m and submitted for analysis for Au and As by Minlab. Oxidised samples were digested in Aqua-regia and read by AAS to a detection limit of 0.01ppm for gold and 10 ppm for arsenic respectively. Fresh rock samples were analysed by fire assay technique to the same detection limit as for Aqua-regia.
- For Southern Gold samples until the end of 2011, Gold was analysed by Genalysis using a 25g or 50g charge fire assay followed by atomic absorption spectroscopy (FA25AA or FA50AA). Composite samples were analysed using an aqua regia digest followed by graphite furnace AAS (B-ETA), for composite samples reporting elevated Au, 1m samples were submitted for assay by FA25AA or FA50AA. No strong nugget effect was observed in repeated assays and screening of samples prior to fire assay was not considered necessary. For a selection of samples, a small multi element suite was assayed by aqua regia digest with an optical emission spectral (MA201) Finish or for acid digest with an optical emission spectral or MS finish Methods.
- For samples collected in 2013 and 2016 gold was analysed by Minanalytical using either a 25g or 50g charge fire assay followed by atomic absorption spectroscopy (FA25AAS or FA50AAS). No strong nugget effect was observed in repeated assays and screening of samples prior to fire assay was not considered necessary. A four-acid digest was used to produce a solution which was then analysed for a multi-element

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		<p>suite with detection by mass spectrometer or optical emission spectral methods (19 elements MA40OES &amp; MS).</p> <ul style="list-style-type: none"><li>• HRZ samples were analysed by fire assay (SGS - GO_FAA50V10) using a 50 g charge with an AAS finish giving results within a 0.01 ppm to 100 ppm detection limit.</li><li>• No data from geophysical tools were used to determine grade control assay results.</li><li>• The QAQC protocol used consisted of certified reference materials plus blanks varied by drill program, with reference materials inserted at a rate of 1:15 or 1:20.</li><li>• Field duplicates were collected at every 20th metre mark and stored onsite by Southern Gold for assay if required. HRZ duplicates were assayed as taken.</li><li>• A review of the analytical performance of the external standards and blanks by Southern Gold staff indicated that the results were acceptable in the majority of samples.</li><li>• No anomalous QAQC analysis results were note in HRZ samples.</li></ul>
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## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
<p><b>Verification of sampling and assaying</b></p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> <li>• Significant intersections were visually inspected and verified by the Southern Gold Competent Person, Mr Ian Blucher, and Stephen Godfrey (CP) and David O’Farrell (Chief Geologist) for HRZ.</li> <li>• Twinned holes have not been intentionally drilled.</li> </ul> <p>Historical logging and sampling data was recorded on computer spreadsheets or by hand onto logging sheets and re-checked before submission to the lab. Data was then entered into digital form and stored on the Company database after validation. Original logging sheets were filed in the Southern Gold Head Office in Adelaide.</p> <ul style="list-style-type: none"> <li>• HRZ used Geobank field logging software. Logs are routinely uploaded to the main HEZ SQL database.</li> <li>• Historical data has been transferred to the HRZ main database.</li> <li>• No adjustments are made to the assay data after review of QAQC measures as stated above.</li> <li>• The database resides on the HRZ Perth server and is backed up off-site.</li> </ul>

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Criteria	JORC Code explanation	
<p><b>Location of data points</b></p>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> <li>• Historical and recent drill hole collar positions have been surveyed by Differential GPS to an accuracy of +/- 0.1 m.</li> <li>• Historical holes were down hole surveyed using an EMS tool. HRZ holes have all been down hole surveyed with a north seeking gyro.</li> <li>• The grid system used for locating the collar positions of drill holes is the Geocentric Datum of Australia (GDA94), Zone 51 (MGA Projection). Elevations are recorded in Australian Height Datum (AHD).</li> <li>• Topographic control in the area is provided regionally SRTM data and locally by mine site and drill collar surveying.</li> </ul>

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Criteria	JORC Code explanation	
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<ul style="list-style-type: none"> <li>• The drill hole spacing was approximately 10 m - 20 m on east-west lines. With north-south line spacing (burden) ranging from 15 m to 40m.</li> <li>• The drill spacing and distribution is considered sufficient to establish the geological and grade continuity for an Indicated Mineral Resource.</li> <li>• Sample compositing has been applied for preliminary RC samples. 2 m and 4 m composites of the original sampling were collected and assayed, with the original samples collected and assayed where anomalous Au is detected in the composite.</li> <li>• 1m composite samples were used in the MRE (see section 3).</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• Based on the current geological interpretation, drilling is at a high enough angle to lithological boundaries and structural trends to provide an unbiased sample.</li> </ul>
<b>The measures taken to ensure sample security</b>	<p><i>The measures taken to ensure sample security.</i></p>	<ul style="list-style-type: none"> <li>• RC samples are placed into pre-numbered calico bags directly from the splitter under the supervision of the rig geologist. Core is cut and sampled in a secure facility.</li> <li>• The geologist places the calicos bags containing the samples into larger bags and transports them to the sample preparation laboratory. Samples</li> </ul>

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Criteria	JORC Code explanation	
		<p>are accompanied by a sample submission form by which the samples are tracked through the laboratory.</p> <ul style="list-style-type: none"> <li>The laboratory provides the Company with a reconciliation of samples submitted compared to samples received.</li> </ul>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> <li>No external audits or reviews were undertaken for the historical drilling.</li> <li>HRZ procedures are monitored by the CP. The CP makes a site visit during drilling programs to ensure sampling procedures are being implemented correctly.</li> </ul>

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### Section 2 Reporting of Exploration Results

(Criteria listed in section 1 also apply to this section.)

Section 2 Reporting of Exploration Results		
<p><b>Mineral tenement and land tenure status</b></p>	<p>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.</p> <p>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.</p>	<ul style="list-style-type: none"> <li>• The Monument Gold Resource is within M25/333 and is located ca. 30 km East of Kalgoorlie, WA.</li> <li>• The tenement is held by Black Mountain Gold Limited, a fully owned subsidiary of Horizon Minerals Ltd.</li> <li>• There are no material issues with third parties.</li> <li>• There are no known impediments to obtaining a licence to operate</li> </ul>
<p><b>Exploration done by other parties</b></p>	<p>Acknowledgment and appraisal of exploration by other parties.</p>	<ul style="list-style-type: none"> <li>• The Monument Gold Resource was discovered and initially drilled out to Resource stage by Southern Gold Ltd. HRZ has drilled 52 RC resource definition holes.</li> <li>• Results of earlier widely spaced RAB programs by Cyprus Gold and Acacia Resources failed to identify significant mineralisation.</li> </ul>
<p><b>Geology</b></p>	<p>Deposit type, geological setting and style of mineralisation.</p>	<ul style="list-style-type: none"> <li>• The deposit consists of narrow, steeply dipping low to medium grade Au lodes associated with the contact of felsic intrusive and the greenstone units of the area.</li> </ul>



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<p><b>Drill hole Information</b></p>	<p>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:</p> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul> <p>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.</p>	<ul style="list-style-type: none"> <li>• Exploration Results are not being reported.</li> <li>• A drill hole listing is appended to the MRE report.</li> </ul>
<p><b>Data aggregation methods</b></p>	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</p>	<ul style="list-style-type: none"> <li>• Exploration Results are not being reported.</li> <li>• No weighting average techniques or grade aggregations have been reported in this any previous release of Exploration Results for the Monument prospect.</li> </ul>

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	<p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<ul style="list-style-type: none"> <li>• No aggregated results are being reported.</li> <li>• No metal equivalent values have been reported.</li> </ul>
<p><b>Relationship between mineralisation widths and intercept lengths</b></p>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</p>	<ul style="list-style-type: none"> <li>• Exploration Results are not being reported.</li> <li>• Based on the current geological interpretation, drilling is at a high angle to lithological boundaries and structural trends and should provide intersections close to true width.</li> </ul>
<p><b>Diagrams</b></p>	<p>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</p>	<ul style="list-style-type: none"> <li>• Relevant figures are included in report.</li> </ul>

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	collar locations and appropriate sectional views	
<b>Balanced reporting</b>	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.	<ul style="list-style-type: none"> <li>• Exploration Results are not being reported.</li> </ul>
<b>Other substantive exploration data</b>	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.	<ul style="list-style-type: none"> <li>• All relevant observations have been noted in the report.</li> </ul>

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<p><b>Further work</b></p>	<p>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	<ul style="list-style-type: none"> <li>• Drilling along strike (north and south) is required to confirm the extent of, and close off the deposit.</li> <li>• Relevant figures are included in report.</li> <li>• The next phase of drilling for Monument will be Grade Control.</li> </ul>
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### 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	
<p><b>Database integrity</b></p>	<p><i>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.</i></p> <p><i>Data validation procedures used.</i></p>	<ul style="list-style-type: none"> <li>Data has been exported from the Southern Gold (SAU) database and imported into the HRZ Geobank (SQL) data base. Internal referential integrity was confirmed during the import. The data has been spot validated against WAMEX data.</li> <li>HRZ drill logs are entered into Geobank Mobile and imported into the main Geobank database (GB_HORIZON_DATA). Mobile data must be valid prior to export. Data is imported via buffers and must be valid for import to the main tables.</li> </ul>

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Criteria	JORC Code explanation	
<p><b>Site visits</b></p>	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></p> <p><i>If no site visits have been undertaken indicate why this is the case.</i></p>	<p>Historical</p> <ul style="list-style-type: none"> <li>• The competent Person (Mr Ian Blucher, Southern Gold) has visited the site on a number of occasions and has seen samples from key intersections.</li> <li>• The Competent person is a senior geologist and has a very good knowledge of procedures used by SAU during drilling and sampling and is happy these are fit for purpose.</li> </ul> <p>HRZ</p> <ul style="list-style-type: none"> <li>• The Competent Person has visited the site on several occasions, including during the last drilling campaign.</li> <li>• The CP has reviewed and approved all drilling and sampling procedures.</li> <li>• Selected drill hole locations were independently verified by the CP.</li> </ul>

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Criteria	JORC Code explanation	
<p><b>Geological interpretation</b></p>	<p><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></p> <p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<ul style="list-style-type: none"> <li>• The confidence in the geological interpretation of the deposit is high, as highlighted by the success of the most recent drill program in intercepting the target zones.</li> <li>• The data used in the geological interpretation, includes lithological, alteration, and mineralogical information.</li> <li>• The association of gold mineralisation with some of the felsic intrusives was used to guide the production of the mineralisation model, in turn controlling the estimation of the resource.</li> <li>• The mineralisation follows two intersecting trends (143° and 160°). It is not determined whether these are structural or geological trends. Discontinuities in the mineralisation suggest the effects of faulting.</li> <li>• Thickness and grade are variable within most lodes.</li> </ul>
<p><b>Dimensions</b></p>	<p><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and</i></p>	<ul style="list-style-type: none"> <li>• The Monument lodes have a strike extent of 700 m; a plan width of 30 m - 40 m; and vertical extent of 180 m. Lodes have a maximum thickness of ~8 m.</li> </ul>

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Criteria	JORC Code explanation	
	<p><i>depth below surface to the upper and lower limits of the Mineral Resource.</i></p>	

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### **Estimation and modeling 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.*

*The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*

*The assumptions made regarding recovery of by-products.*

*Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*

*In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*

*Any assumptions behind modelling of selective mining units.*

- The geological model for Monument was constructed using Seequent’s Leapfrog Geo software. Mineralised intervals were coded by lode and the lodges modelled as veins. A minimum 2 m downhole interval was maintained. RC, Diamond and RAB drillholes were used to inform the geological model. Vein boundaries were modelled to limit the distance projected from drillhole data.
- Grade estimation for the Monument deposit was carried out using linear estimation methods. A multi-pass estimation plan was used for all estimation domains.
- Ordinary Kriging was used to estimate Au only. Waste domains were not estimated.
- Only samples from RC and Diamond drill holes were used in the estimation of grades. No RAB samples were used as annular return samples can become contaminated.
- High-grade outlier samples were managed with top cutting in selected domains.
- Hard boundaries were used between domains so that a domain was estimated with only the samples within that domain. No boundary was applied between different oxidation state material within a domain.
- Search ellipses were aligned with the mineralisation orientation. Search distances were set to ensure adequate samples were found to make an estimate – Pass 1 40 m. Pass 2 expanded the sample search to 60 m and pass 3 to 80 m. Pass 4 used a minimum sample requirement of 2 and a search radius of 160 m.
- 82% of blocks were estimated by the first estimation pass; 12% by the second; 5% in passes 3 and 4. 2% of blocks remain unestimated.
- The model and grade estimation were validated by visual inspection of the blocks compared to the drilling; and statistically comparing average domain composite grades to model grades.

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*Any assumptions about correlation between variables.*

*Description of how the geological interpretation was used to control the resource estimates.*

*Discussion of basis for using or not using grade cutting or capping.*

*The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*

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Criteria	JORC Code explanation	
<b>Moisture</b>	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	<ul style="list-style-type: none"> <li>The tonnages are estimated on a dry basis.</li> </ul>
<b>Cut-off parameters</b>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	<ul style="list-style-type: none"> <li>Geological modelling used a nominal Au edge cutoff of 0.3 g/t Au.</li> <li>A reporting cut-off of 0.5 g/t Au was used. This is comparable to similar deposits in the Kalgoorlie-Coolgardie goldfield and is considered a reasonable open pit reporting grade by the Competent Person.</li> </ul>
<b>Mining factors or assumptions</b>	<i>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 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.</i>	<ul style="list-style-type: none"> <li>It is assumed the upper part of the deposit will be mined using an open pit method.</li> <li>No other mining related factors such as dilution have been applied at this stage.</li> </ul>

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Criteria	JORC Code explanation	
<b>Metallurgical factors or assumptions</b>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• No metallurgical assumptions have been applied to the mineral resource estimation.</li> <li>• It is assumed that the mineralisation at Monument will be produce similar recoveries to the adjacent Cannon Gold Mine, when processed by a similar method.</li> </ul>
<b>Environmental factors or assumptions</b>	<p><i>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 impacts should be reported. Where these aspects have not been considered this should be reported</i></p>	<ul style="list-style-type: none"> <li>• It is assumed that Monument will be processed under a toll treatment style with processing residues placed into appropriate storage facilities by the process operator.</li> <li>• It is assumed mining waste will either be placed locally to the deposit or transported to the adjacent Cannon mine waste heaps.</li> <li>• Based on the experience of the adjacent Cannon Mine, waste material is expected be non-acid producing.</li> </ul>

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Criteria	JORC Code explanation	
	<i>with an explanation of the environmental assumptions made.</i>	
<b>Bulk density</b>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<ul style="list-style-type: none"> <li>• Bulk density is based on values used for the adjacent Cannon resource (2020).</li> <li>• A bulk density of 2.7 <math>\text{tm}^{-3}</math> has been used for the fresh mineralised material.</li> <li>• A bulk density of 2.9 <math>\text{tm}^{-3}</math> has been used for the fresh un-mineralised material.</li> <li>• A bulk density of 2.3 <math>\text{tm}^{-3}</math> has been used for the Transitional material, and 1.8 <math>\text{tm}^{-3}</math> for Oxide material.</li> </ul>

## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
<p><b>Classification</b></p>	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></p> <p><i>Whether appropriate account has been taken of all relevant factors (i.e. 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).</i></p> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<ul style="list-style-type: none"> <li>• Classification has taking into account the geological confidence, distribution of data and confidence in the reliability of the estimated resource given the nature of the deposit</li> <li>• The Resource is classified as inferred due to a lack of Density data.</li> <li>• If the density data was available estimation passes 1 &amp; 2 would be classified Indicated. Pass 3 would be Inferred. Pass 4 would be an exploration target (confirmation drilling required).</li> <li>• This classification is in line with the CP's view of the deposit.</li> </ul>
<p><b>Audits or reviews</b></p>	<p><i>The results of any audits or reviews of Mineral Resource estimates.</i></p>	<ul style="list-style-type: none"> <li>• No other independent review or audits have been undertaken on this mineral resource estimate.</li> </ul>

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Criteria	JORC Code explanation	
<p><b>Discussion of relative accuracy/ confidence</b></p>	<p><i>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 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.</i></p> <p><i>The statement should specify whether it relates to global or 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.</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<ul style="list-style-type: none"> <li>• The Mineral Resource has been reported in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and reflects the relative accuracy of the Mineral Resource estimate.</li> <li>• This estimate is a global resource estimate for the Monument Deposit</li> <li>• There is no production data to compare the estimate against.</li> <li>• The CP estimates that the acquisition of density data for the deposit is unlikely to make more than 5% difference to the total tonnes and ounces.</li> </ul>

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**Appendix 2 – project CANNON – prospect PINNER – model PINNER\_2024\_002.mdl**

**JORC Code (2012) Table 1, Section 1, 2 and 3**

Mr Stephen Godfrey, Resource Development Manager for Horizon Minerals compiled the information presented in the following JORC Table 1 and is the Competent Person for that data.

The following Table and Sections are provided to ensure compliance with the JORC Code (2012 edition) guidelines for the reporting of Mineral Resources.

**Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	
<p><b>Sampling techniques</b></p>	<p><i>Nature and quality of sampling (e.g. 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.</i></p>	<ul style="list-style-type: none"> <li>• All sample of Pinner has been done using drilling techniques</li> <li>• Early reconnaissance was done using RAB holes.</li> <li>• Followup and recent drilling used 5 ½ inch RC and some Air Core sampling of 2 m or 4 m composites speared from original 1 m cone split samples.</li> <li>• All drilling and sampling has been to accepted industry standard.</li> </ul>

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Criteria	JORC Code explanation	
	<p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	
<p><b>Drilling Techniques</b></p>	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<ul style="list-style-type: none"> <li>• Face sampling reverse circulation percussion (RC) drilling and HQ diamond core were the drilling techniques used. Rotary Air Blast (RAB) drilling was used in early reconnaissance work. RAB drilling was used to inform the geological interpretation but not the grade estimation of the mineral resource.</li> <li>• Southern Gold holes were surveyed using an EMS tool, by the drill contractor. HRZ holes were surveyed using a north seeking downhole gyro. RAB drilling as not downhole surveyed.</li> </ul>

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Criteria	JORC Code explanation															
	<ul style="list-style-type: none"> <li>Number of holes and metres informing the Pinner MRE are summarised below: <table border="1" data-bbox="1339 408 1827 592"> <thead> <tr> <th>Company</th> <th>Holes</th> <th>Metres</th> </tr> </thead> <tbody> <tr> <td>HRZ</td> <td>39</td> <td>1630</td> </tr> <tr> <td>METALSX</td> <td>22</td> <td>642</td> </tr> <tr> <td>Southern</td> <td>31</td> <td>3500</td> </tr> <tr> <td><b>Grand Total</b></td> <td><b>92</b></td> <td><b>5772</b></td> </tr> </tbody> </table> </li> </ul> <p>Pinner drilling limited by:</p> <ul style="list-style-type: none"> <li>y &gt; 6589600</li> <li>y &lt; 6590100</li> <li>x &gt; 381100</li> <li>x &lt; 381900</li> </ul>	Company	Holes	Metres	HRZ	39	1630	METALSX	22	642	Southern	31	3500	<b>Grand Total</b>	<b>92</b>	<b>5772</b>
Company	Holes	Metres														
HRZ	39	1630														
METALSX	22	642														
Southern	31	3500														
<b>Grand Total</b>	<b>92</b>	<b>5772</b>														

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## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
<p><b>Drill sample recovery</b></p>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<ul style="list-style-type: none"> <li>• Drilling RC and AC holes were conducted with machinery and using drilling techniques appropriate to the terrain and with drillers experienced in the area.</li> <li>• Sample loss was kept to a minimum by good drilling practices.</li> <li>• Sampling intervals during RC drilling were routinely checked by comparing the position of the drill rod against the sample bag being filled.</li> <li>• Bag volumes are monitored to ensure a consistent representative sample was being obtained.</li> <li>• Cone splitting of RC and AC holes provided good representation of the intervals sampled.</li> <li>• No recovery issues were identified with the RC or core drilling. Loss of fines at the cyclone was minimal and is not considered to have had a significant effect on sample recovery.</li> <li>• No relationship has been noted between sample recovery and grade.</li> </ul>

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Criteria	JORC Code explanation	
<p><b>Logging</b></p>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean channel etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<ul style="list-style-type: none"> <li>• All drill holes have been geologically logged by Company geologists using a standard format over the full length of each hole. Features for each sample or geological interval recorded where observable included weathering lithology alteration mineralogy structural information mineralisation mineralogy veining vein mineralogy and proportions of non-economic minerals.</li> <li>• Geological logging recorded factual data (e.g. colour, grain size, percentage of identifiable minerals present) and interpretative data (e.g. lithology).</li> <li>• A subsample of washed and sieved RC chips from each metre was collected and stored sequentially in numbered plastic chip trays. Chips trays representing each RC drill hole are stored by the relevant company. For HRZ sample storage is at the Nimbus mine site.</li> </ul>

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Criteria	JORC Code explanation	
<p><b>Sub-sampling techniques and sample preparation</b></p>	<p><i>If core whether cut or sawn and whether quarter half or all core taken.</i></p> <p><i>If non-core whether riffled tube sampled rotary split etc and whether sampled wet or dry.</i></p> <p><i>For all sample types the nature quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in situ material collected including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<ul style="list-style-type: none"> <li>• RC samples were sampled from a cone splitter or 3 tier rifle splitter attached to the drill rig, at 1m intervals and rejects collected placed in sequential order on the ground adjacent to the drill rig.</li> <li>• Samples were taken dry. No issues with wet samples were noted.</li> <li>• RC sample size presented for analysis was approximately 2 kg.</li> <li>• Genalysis Laboratories and later Minanalytical used by Southern Gold pulverised samples to 90% passing 106 µm.</li> <li>• HRZ samples were pulverised to 85% passing 75 µm.</li> <li>• For Southern Gold and HRZ field duplicates were collected at every 20th metre mark on each hole and CRM submitted with each batch of samples. No anomalies were reported from the QAQC sample results.</li> </ul>

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**Quality of assay data and laboratory tests**

*The nature quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*

*For geophysical tools spectrometers handheld XRF instruments etc the parameters used in determining the analysis including instrument make and model reading times calibrations factors applied and their derivation etc.*

*Nature of quality control procedures adopted (e.g. standards blanks duplicates external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*

- Assaying for all Southern Gold drilling up until August 2011 was undertaken by Genalysis Laboratories in Perth Western Australia. All 1m RC samples and diamond core samples were assayed for Au using 25g or 50g charge fire assay with detection by atomic absorption spectrometry (FA25/AA or FA50AA). Composite samples were assayed for Au by aqua regia digest with a graphite furnace AAS finish (B-ETA). Single metre split calicos from composite intervals returning assays greater than 100ppb were submitted for fire assay whilst some single other meter splits were submitted for fire assay based on geologist's discretion.
- Assaying of drill samples from 2013 to 2016 was undertaken by Minanalytical Laboratories in Perth Western Australia. All 1m RC samples and diamond core samples were assayed for Au using either 25g or 50g charge fire assay with detection by atomic absorption (FA25/AA or FA50AAS).
- All in pit RC assay from 2015 to 2016 conducted under Metals X/Westgold management was sent to Bureau Veritas in Kalgoorlie.
- HRZ used a 50 g fire assay analysis with AAS finish for Au only.
- No data from geophysical tools were used to determine grade control assay results.
- The QAQC protocol used consisted of certified reference materials plus blanks varied by drill program with reference materials inserted at a rate of 1:15 or 1:20.
- Field duplicates were collected at every 20th metre mark and stored onsite by Southern Gold for assay if required. HRZ duplicates were assayed as taken.
- A review of the analytical performance of the external standards and blanks by Southern Gold staff indicated that the results were acceptable in the majority of samples.

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- No anomalous QAQC analysis results were noted in HRZ samples.

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## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
<p><b>Verification of sampling and assaying</b></p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures data verification data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> <li>• Significant intersections were visually inspected and verified by the Southern Gold Competent Person Mr Ian Blucher , and Stephen Godfrey (CP) and David O’Farrell (Chief Geologist) for HRZ.</li> <li>• Twinned holes have not been intentionally drilled.</li> <li>• Historical logging and sampling data was recorded on computer spreadsheets or by hand onto logging sheets and re-checked before submission to the lab. Data was then entered into digital form and stored on the Company database after validation. Original logging sheets were filed in the Southern Gold Head Office in Adelaide.</li> <li>• HRZ used Geobank field logging software. Logs are routinely uploaded to the main HEZ SQL database.</li> <li>• Historical data has been transferred to the HRZ main database.</li> <li>• No adjustments were made to the assay data.</li> <li>• The database resides on the HRZ Perth server and is backed up off-site.</li> </ul>

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Criteria	JORC Code explanation	
<p><b>Location of data points</b></p>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> <li>• Historical and recent drill hole collar positions have been surveyed by Differential GPS to an accuracy of +/- 0.1 m.</li> <li>• Historical holes were down hole surveyed using an EMS tool. HRZ holes have all been down hole surveyed with a north seeking gyro.</li> <li>• The grid system used for locating the collar positions of drill holes is the Geocentric Datum of Australia (GDA94) Zone 51 (MGA Projection). Elevations are recorded in Australian Height Datum (AHD).</li> <li>• Topographic control in the area is provided regionally SRTM data and locally by mine site and drill collar surveying.</li> </ul>

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## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<ul style="list-style-type: none"> <li>• The drill hole spacing is variable. 10 m x 5 m to 20 m x 20 m, wider at the limits of the mineralisation.</li> <li>• The drill spacing and distribution is considered sufficient to establish the geological and grade continuity for a Measured or Indicated Mineral Resource.</li> <li>• Sample compositing has been applied for preliminary RC samples. 2 m and 4 m composites of the original sampling were collected and assayed with the original samples collected and assayed where anomalous Au is detected in the composite.</li> <li>• 1m composite samples were used in the MRE (see section 3).</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known considering the deposit type.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• Based on the current geological interpretation, drilling is generally at a high enough angle to lithological boundaries and structural trends to provide an unbiased sample. In some instances, due to the apparent variable structural directions, the drilling orientation may not be optimal.</li> </ul>
<b>The measures taken to ensure sample security</b>	<p><i>The measures taken to ensure sample security.</i></p>	<ul style="list-style-type: none"> <li>• RC samples are placed into pre-numbered calico bags directly from the splitter under the supervision of the rig geologist.</li> <li>• The geologist places the calicos bags containing the samples into larger bags and transports them to the sample preparation laboratory. Samples</li> </ul>

## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
		<p>are accompanied by a sample submission form by which the samples are tracked through the laboratory.</p> <ul style="list-style-type: none"> <li>The laboratory provides the Company with a reconciliation of samples submitted compared to samples received.</li> </ul>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> <li>No external audits or reviews were undertaken for the historical drilling.</li> <li>HRZ procedures are monitored by the CP. The CP makes a site visit during drilling programs to ensure sampling procedures are being implemented correctly.</li> </ul>

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## Section 2 Reporting of Exploration Results

(Criteria listed in section 1 also apply to this section.)

Section 2 Reporting of Exploration Results		
<p><b>Mineral tenement and land tenure status</b></p>	<p>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.</p> <p>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.</p>	<ul style="list-style-type: none"> <li>• The Pinner Gold Resource is within M25/333 and is located ca. 30 km East of Kalgoorlie, WA.</li> <li>• The tenement is held by Black Mountain Gold Limited, a fully owned subsidiary of Horizon Minerals Ltd.</li> <li>• There are no material issues with third parties.</li> <li>• There are no known impediments to obtaining a licence to operate</li> </ul>
<p><b>Exploration done by other parties</b></p>	<p>Acknowledgment and appraisal of exploration by other parties.</p>	<ul style="list-style-type: none"> <li>• The Pinner Gold Resource was discovered and initially drilled out to Resource stage by Southern Gold Ltd as part of the adjacent Canon Project. HRZ has drilled 47 RC and AC resource definition holes.</li> <li>• Earlier widely spaced RAB programs by Acacia Resources and Southern Gold helped target the later RC drilling.</li> </ul>
<p><b>Geology</b></p>	<p>Deposit type, geological setting and style of mineralisation.</p>	<ul style="list-style-type: none"> <li>• The deposit consists of narrow, moderate to steeply dipping Au lodes. The lodes appear to be structurally controlled.</li> </ul>

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<p><b>Drill hole Information</b></p>	<p>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:</p> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul> <p>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.</p>	<ul style="list-style-type: none"> <li>• Exploration Results are not being reported.</li> <li>• A drill hole listing is appended to the MRE report.</li> </ul>
<p><b>Data aggregation methods</b></p>	<p>In reporting Exploration Results weighting averaging techniques maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</p>	<ul style="list-style-type: none"> <li>• Exploration Results are not being reported.</li> <li>• No weighting average techniques or grade aggregations have been reported in this any previous release of Exploration Results for the Pinner prospect.</li> </ul>

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	<p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<ul style="list-style-type: none"> <li>• No aggregated results are being reported.</li> <li>• No metal equivalent values have been reported.</li> </ul>
<p><b>Relationship between mineralisation widths and intercept lengths</b></p>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known its nature should be reported.</p> <p>If it is not known and only the down hole lengths are reported there should be a clear statement to this effect (e.g. 'down hole length true width not known').</p>	<ul style="list-style-type: none"> <li>• Exploration Results are not being reported.</li> <li>• Based on the current geological interpretation, drilling is generally at a high enough angle to lithological boundaries and structural trends to provide an unbiased sample. In some instances, due to the apparent variable structural directions, the drilling orientation may not be optimal.</li> </ul>
<p><b>Diagrams</b></p>	<p>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery</p>	<ul style="list-style-type: none"> <li>• Relevant figures are included in report.</li> </ul>

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	being reported These should include but not be limited to a plan view of drill hole collar locations and appropriate sectional views	
<b>Balanced reporting</b>	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.	<ul style="list-style-type: none"> <li>• Exploration Results are not being reported.</li> </ul>
<b>Other substantive exploration data</b>	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.	<ul style="list-style-type: none"> <li>• All relevant observations have been noted in the MRE report.</li> </ul>

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<p><b>Further work</b></p>	<p>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	<ul style="list-style-type: none"> <li>• Further investigation and drilling is warranted to the South and South West.</li> <li>• Relevant figures are included in report.</li> </ul>
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## ASX ANNOUNCEMENT

### 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	
<b>Database integrity</b>	<p><i>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.</i></p> <p><i>Data validation procedures used.</i></p>	<ul style="list-style-type: none"> <li>• Historical data has been exported from the Southern Gold (SAU) database and imported into the HRZ Geobank (SQL) data base. Internal referential integrity was confirmed during the import. The data has been spot validated against WAMEX data.</li> <li>• HRZ drill logs are entered into Geobank Mobile and imported into the main Geobank database (GB_HORIZON_DATA). Mobile data must be valid prior to export. Data is imported via buffers and must be valid for import to the main tables.</li> </ul>

## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
<p><b>Site visits</b></p>	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></p> <p><i>If no site visits have been undertaken indicate why this is the case.</i></p>	<p>Historical</p> <ul style="list-style-type: none"> <li>• The competent Person (Mr Ian Blucher Southern Gold) has visited the site on a number of occasions and has seen samples from key intersections.</li> <li>• The Competent person is a senior geologist and has a very good knowledge of procedures used by SAU during drilling and sampling and is happy these are fit for purpose.</li> </ul> <p>HRZ</p> <ul style="list-style-type: none"> <li>• The Competent Person has visited the site on several occasions, including during the last drilling campaign.</li> <li>• The CP has reviewed and approved all drilling and sampling procedures.</li> <li>• Selected drill hole locations were independently verified by the CP.</li> </ul>

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Criteria	JORC Code explanation	
<p><b>Geological interpretation</b></p>	<p><i>Confidence in (or conversely the uncertainty of) the geological interpretation of the mineral deposit.</i></p> <p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect if any of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<ul style="list-style-type: none"> <li>• The confidence in the geological interpretation of the deposit is moderate, The multiple structural/mineralisation orientations in the current interpretation need validation.</li> <li>• The data used in the geological interpretation, includes lithological, alteration, mineralogical and mineralisation information.</li> <li>• The mineralisation appears to follow 5 trends. It is not determined whether these are structural or geological trends.</li> <li>• Thickness and grade are variable within most lodes.</li> </ul>
<p><b>Dimensions</b></p>	<p><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise) plan width and</i></p>	<ul style="list-style-type: none"> <li>• The Pinner lodes have a strike extents of ~250 m and a vertical extent of ~130 m. Lodes vary in thickness and average 6 m.</li> </ul>

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Criteria	JORC Code explanation	
	<i>depth below surface to the upper and lower limits of the Mineral Resource.</i>	

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### **Estimation and modeling 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.*

*The availability of check estimates previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*

*The assumptions made regarding recovery of by-products.*

*Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*

*In the case of block model interpolation the block size in relation to the average sample spacing and the search employed.*

*Any assumptions behind modelling of selective mining units.*

- The geological model for Pinner was constructed using Seequent’s Leapfrog Geo software. Mineralised intervals were coded by lode and the lodes modelled as veins. RC, AC and RAB drillholes were used to inform the geological model. Intervals to a minimum of 1 m were modelled to maintain continuity. Veins were modelled to pinch out with some boundaries modelled to limit the distance projected from drillhole data.
- Grade estimation for the Pinner deposit was carried out using linear estimation methods. A multi-pass estimation plan was used for all estimation domains.
- An Inverse Distance algorithm was used to estimate Au only (ID<sup>2</sup>). Waste domains were not estimated.
- Only samples from RC and AC drill holes were used in the estimation of grades. No RAB samples were used as annular return samples can become contaminated.
- High-grade outlier samples were managed with top cutting in selected domains.
- Hard boundaries were used between domains so that a domain was estimated with only the samples within that domain. No boundary was applied between different oxidation state material within a domain.
- Search ellipses were aligned with the mineralisation orientation. Search distances were set to ensure adequate samples were found to make an estimate – Pass 1 40 m. Pass 2 expanded the sample search to 60 m and pass 3 to 80 m. Pass 4 used a minimum sample requirement of 2 and a search radius of 80 m.
- 72% of blocks were estimated by the first estimation pass; 17% by the second; 7% in pass 3 and 4% in pass 4.
- The model and grade estimation were validated by visual inspection of the blocks compared to the drilling; and statistically comparing average domain composite grades to model grades.

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	<p><i>Any assumptions about correlation between variables.</i></p> <p><i>Description of how the geological interpretation was used to control the resource estimates.</i></p> <p><i>Discussion of basis for using or not using grade cutting or capping.</i></p> <p><i>The process of validation the checking process used the comparison of model data to drill hole data and use of reconciliation data if available.</i></p>	<ul style="list-style-type: none"> <li>• An un-cut check estimate was run for comparison and validation of the cut estimate.</li> </ul>
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## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
<b>Moisture</b>	<i>Whether the tonnages are estimated on a dry basis or with natural moisture and the method of determination of the moisture content.</i>	<ul style="list-style-type: none"> <li>The tonnages are estimated on a dry basis.</li> </ul>
<b>Cut-off parameters</b>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	<ul style="list-style-type: none"> <li>Geological modelling used a nominal Au edge cutoff of 0.3 g/t Au.</li> <li>A reporting cut-off of 0.5 g/t Au was used. This is comparable to similar deposits in the Kalgoorlie-Coolgardie goldfield and is considered a reasonable open pit reporting grade by the Competent Person.</li> </ul>
<b>Mining factors or assumptions</b>	<i>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 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.</i>	<ul style="list-style-type: none"> <li>It is assumed the upper part of the deposit will be mined using an open pit method.</li> <li>No other mining related factors such as dilution have been applied at this stage.</li> </ul>

## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
<b>Metallurgical factors or assumptions</b>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• No metallurgical assumptions have been applied to the mineral resource estimation.</li> <li>• It is assumed that the mineralisation at Pinner will be produce similar recoveries to the adjacent Cannon Gold Mine, when processed by a similar method.</li> </ul>
<b>Environmental factors or assumptions</b>	<p><i>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 impacts should be reported. Where these aspects have not been considered this should be reported</i></p>	<ul style="list-style-type: none"> <li>• It is assumed that Pinner will be processed under a toll treatment style with processing residues placed into appropriate storage facilities by the process operator.</li> <li>• It is assumed mining waste will either be placed locally to the deposit or transported to the adjacent Cannon mine waste heaps.</li> <li>• Based on the experience of the adjacent Cannon Mine, waste material is expected be non-acid producing.</li> </ul>



## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
	<i>with an explanation of the environmental assumptions made.</i>	
<b>Bulk density</b>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<ul style="list-style-type: none"> <li>• Bulk density is based on values used for the adjacent Cannon resource (2020).</li> <li>• A bulk density of 2.7 <math>\text{tm}^{-3}</math> has been used for the fresh mineralised material.</li> <li>• A bulk density of 2.9 <math>\text{tm}^{-3}</math> has been used for the fresh un-mineralised material.</li> <li>• A bulk density of 2.3 <math>\text{tm}^{-3}</math> has been used for the Transitional material, and 1.8 <math>\text{tm}^{-3}</math> for Oxide material.</li> </ul>

## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
<b>Classification</b>	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></p> <p><i>Whether appropriate account has been taken of all relevant factors (i.e. 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).</i></p> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<ul style="list-style-type: none"> <li>• Classification has taking into account the geological confidence, distribution of data and confidence in the reliability of the estimated resource given the nature of the deposit</li> <li>• The Resource is classified as Indicated and Inferred based principally on data density.</li> <li>• This classification is in line with the CP's view of the deposit.</li> </ul>
<b>Audits or reviews</b>	<p><i>The results of any audits or reviews of Mineral Resource estimates.</i></p>	<ul style="list-style-type: none"> <li>• No other independent review or audits have been undertaken on this mineral resource estimate.</li> </ul>

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## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	
<p><b>Discussion of relative accuracy/ confidence</b></p>	<p><i>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 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.</i></p> <p><i>The statement should specify whether it relates to global or 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.</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data where available.</i></p>	<ul style="list-style-type: none"> <li>• The Mineral Resource has been reported in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and reflects the relative accuracy of the Mineral Resource estimate.</li> <li>• This estimate is a global resource estimate for the Pinner Deposit</li> <li>• There is no production data to compare the estimate against.</li> </ul>

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**Appendix 3 – Boorara Gold Project  
JORC Code (2012) Table 1, Sections 1 and 2**

**Competent Person Statement**

*Mr Stephen Godfrey Resource Development Manager compiled the information in Section 1 and Section 2 of the following JORC Table 1 and is the Competent Person for those sections. Mr Mark Drabble, Principal of Optiro Pty Ltd, compiled the information in Section 3 of the following JORC Table 1 and is the Competent Person for that section. The following Table and Sections are provided to ensure compliance with the JORC Code (2012 edition) requirements for the reporting of Mineral Resources. For further detail, please refer to the announcements made to the ASX by Intermin Resources Ltd and Horizon Minerals Ltd (2019-2020) relating to the Boorara gold project areas.*

**Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>Nature and quality of sampling (e.g., 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.</i></p>	<ul style="list-style-type: none"> <li>• The deposit was sampled using Reverse Circulation (RC), Diamond drillholes (DDH) and Grade Control RC (GCRC) on spacings ranging from 4m x 10m and 4m x 4m (vertical) at Royal, nominally 4m x 10m (vertical) at Crown Jewel and 5m x 10m (angled) at Regal. The exploration/resource development drilling patterns were typically spaced at 10-20m x 20m but can extend out to &gt;100m spacing where deeper. An approximate total of 337 RC holes, 50 DDH holes and 812 GCRC holes were drilled for 133,695m, 8537m and 22,978m respectively.</li> <li>• Other types of sampling such as trenches, Aircore and RAB drilling were not used in the Mineral Resource Estimate.</li> <li>• Exploration (RC) samples are collected from the drill rig cyclone in a bucket or green plastic bag in 1m intervals and are laid out in rows of 10, 20, 30 or 40. A 2-4 kg representative sample is split via the rig mounted cone splitter and placed on top of the green plastic for that metre interval.</li> <li>• GCRC samples are typically collected from rig mounted cone type splitters on a 1m downhole interval producing and 2-4kg sample.</li> <li>• Diamond drilling was HQ, PQ or NQ2 size. MRP drilled 24 of the 50 DDH. Sampling typically uses one metre lengths with half cut core being taken adjacent to bottom of hole orientation line.</li> </ul>

# ASX ANNOUNCEMENT

Criteria	JORC Code explanation	Commentary
	<p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p>	<ul style="list-style-type: none"> <li>All sampling is undertaken using Macphersons Resources and/or Horizon Minerals Ltd (HRZ) sampling procedures and QAQC in line with industry best practice which includes duplicate cyclone split samples every 25 samples and insertion of certified standards followed by a blank sample every 30 samples. The RC drilling rig provides a sample at the end of each metre of drilling. A 2-4kg is collected from the drill rig mounted cone splitter which is representative of that metre. PQ, HQ and NQ2 diamond core was half cut to produce a 1-4 kg sample for analysis.</li> </ul>
	<p><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.</i></p>	<ul style="list-style-type: none"> <li>RC was used to obtain 1m samples from which approximately 1.5-2kg was pulverised to produce a 50 g charge for fire assay. RC chips were geologically logged over 1m intervals, sampled over 1m intervals. Samples assayed for Au only for this program. Assays were determined by 50g fire assay with AAS finish samples grading &gt;5g/t were repeat assayed and if a sample exceeded 100 g/t or coarse gold is suspected then a screen fire assay (Au-SCR22AA) has been undertaken on those samples and those results reported instead of the fire assay result.</li> <li>Historic hole collars have been recovered where possible and surveyed by a licenced surveyor using a DGPS (0.01). Historic holes were down hole surveyed where access was possible for deviation by north seeking gyroscope method by local contactor ABIMS.</li> </ul>
<p><b>Drilling techniques</b></p>	<p><i>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<ul style="list-style-type: none"> <li>RC drilling accounts for 81% of the drilling in the resource area, with DDH (5%) and RCGC (14%). Hole depths range from 11m to 332m for RC, 45m to 1,023m for DDH and 6m to 54m for RCGC drilling.</li> <li>RC drilling used a 137 mm face sampling hammer bit. The diamond drilling used HQ3 (tripletube) and NQ2 sizes.</li> <li>Core was oriented using the Reflex Technique/method with the bulk of the orientations rated as "reasonable" especially in the ore zone areas. Poor core orientations were usually found in highly weathered, low indurated core and fractured or broken ground.</li> </ul>
<p><b>Drill sample recovery</b></p>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p>	<ul style="list-style-type: none"> <li>RC recovery and meterage were assessed by comparing drill chip volumes for individual meters. Estimates of sample recoveries were recorded. Routine checks for correct sample depths are undertaken every RC rod (6m). RC sample recoveries were visually checked for recovery, moisture and contamination. The cyclone was routinely cleaned ensuring no material build up.</li> <li>Due to the generally good/standard drilling conditions around sample intervals (dry) the geologist believes the samples are representative. Poor sample recovery was rarely an issue, apart from intersecting narrow</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>intervals in old underground workings.</p> <ul style="list-style-type: none"> <li>• Drill core was measured and compared to drilled intervals and recorded as a percentage recovery. Recovery in oxidised rock is regarded as reasonable whereas in fresh rock is noted as excellent.</li> <li>• No sample bias has been identified to date.</li> </ul>
<b>Logging</b>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<ul style="list-style-type: none"> <li>• Each RC metre drilled underwent detailed logging through the entire hole with record kept of colour, lithology, degree of oxidation, and type and intensity of alteration, veining and sulphide content. Chip trays are stored on site.</li> <li>• Logging was qualitative in nature.</li> <li>• All drill holes were geologically logged in full (100%).</li> <li>• All 24 MRP diamond core holes have been photographed and are stored on the Nimbus mine site server.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all cores taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p>	<ul style="list-style-type: none"> <li>• Standard 1m RC sample interval.</li> <li>• All RC sub-samples are collected via a cone splitter system mounted on the drill rig.</li> <li>• All samples were analysed via a 50-gram fire assay. Following that analysis in cases where visible gold has been observed or a fire assay grade has exceeded 100 g/t or coarse gold is suspected then a screen fire assay (Au-SCR22AA) has been undertaken on those samples and those results reported instead of the fire assay result.</li> <li>• Sample preparation and analysis were completed by ALS/SGS in Kalgoorlie. When received, samples are processed by code PREP-31: logged into tracking system and bar code attached, fine crush to better than 70% passing 2mm, split sample using riffle splitter, split of up to 1000g pulverised to &gt;85% sample passing 75um.</li> <li>• All sampling equipment and sample bags are kept clean at all times. The RC drill rig mounted cone splitter is set to ensure that the 1m split sample weights average between 2-4kg. The cone splitter is cleaned using an air nozzle after every drill rod (6m). Horizon Minerals sampling procedures and QAQC is used to</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<p><i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>maximise representivity of samples and minimise contamination. Duplicate field samples are collected every 25 samples from the cyclone splitter.</p> <ul style="list-style-type: none"> <li>• The sample sizes of 2-4 kg are considered appropriate for the style of mineralisation at Boorara.</li> <li>• Core was half cut with a diamond saw with the same half always sampled (w.r.t bottom of hole line) and the other half retained in coretrays. No duplicate core was taken.</li> <li>• In some instances, oxidised and non-competent clay zones are carefully split in half using sampling wedge and sampled as half core.</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.</i></p>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures follow industry standard best practices for Archaean mesothermal lode gold deposits. The fire assay technique will result in a total assay result. In cases where visible gold has been observed or a fire assay grade has exceeded 100 g/t or coarse gold is suspected then a screen fire assay (Au-SCR22AA) has been carried out on those samples and reported instead of the fire assay result.</li> <li>• No geophysical assay tools were used.</li> <li>• Certified Reference Materials (standards) are purchased from an independent supplier of such materials. Blanks are made up from samples previously collected from other drill programs that have analysed as less than detection Au values. A standard sample followed by a blank sample are inserted every 30<sup>th</sup> sample. A duplicate sample is taken every 25 samples. Evaluation of the Macphersons/Horizon submitted standards and blanks analysis results indicates that assaying is accurate and without significant drift or bias.</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p>	<ul style="list-style-type: none"> <li>• At least two different company personnel visually verified intersections in the collected drill chips. A representative sample of each metre is collected and stored for further verification if needed.</li> <li>• Work was supervised by senior ALS staff experienced in metals assaying. QC data reports confirming the sample quality are supplied.</li> <li>• Data collected in the form of spread sheets, for drill hole collars, surveys, lithology and sampling. All geological and field data is entered into Microsoft Excel spreadsheets with lookup tables and fixed formatting (and protected from modification) thus only allowing data to be entered using the MacPhersons geological code system and sample protocol. Data is verified and validated by MRP/HRZ geologists and stored in a Microsoft Access Database. Data is emailed to a database administrator for validation and importation into a GEMS database. All drill data is stored in a database at Horizon's Perth</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<i>Discuss any adjustment to assay data.</i>	<p>office.</p> <ul style="list-style-type: none"> <li>No adjustments are made to the primary assay data imported into the database.</li> </ul>
<b>Location of data points</b>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> <li>Initial hole collars surveyed by licenced surveyor DGPS and a 0.01m dip reading was checked with clinometer on drill mast at set up on hole. RC holes are surveyed by down hole surveys at 20m intervals using "Reflex Gyro" +/- 0.1° by drill contractor. Some holes were open hole gyro surveyed by local contractor ABIMS.</li> <li>Final hole locations were surveyed by licenced surveyor (Minecomp Pty Ltd) using RTK DGPS (0.01m).</li> <li>The grid system used is Geodetic Datum of Australia 1994 (GDA 94) and local grid.</li> <li>In 2011 Fugro Spatial Solutions Pty Ltd carried out a detailed aerial photographic survey with Ortho rectification and mosaicking performed using Inpho Digital Photogrammetric Systems. Expected accuracy of detail within 0.8mm at ortho-image map scale. Topographic control is from ground surveys and aerial imagery elsewhere.</li> </ul>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<ul style="list-style-type: none"> <li>Drilling at Boorara is nominally on 10 to 20m line spacings with infill on 4 or 5m to 20m spacings. Deeper drilling is typically done at 40m or 80m centres.</li> <li>The mineralisation style is quartz veins in sheeted vein arrays and stockworks within mafic host rocks. A significant amount of test work has been carried out to determine the optimal drilling orientation for intersection of each style of mineralisation and the density and orientation is considered to be sufficient for definition and classification of the Mineral Resource.</li> <li>No sample compositing has been applied in the field.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have</i></p>	<ul style="list-style-type: none"> <li>Drilling at Boorara Regal deposit is a 060°/-60° perpendicular to geology contacts but also is preferred orientation for estimating grade of quartz veins and arrays. Drilling at Boorara Crown Jewel and Royal deposits uses vertical holes which is also a preferred orientation for estimating grade of quartz veins and arrays in these two areas. Previously vertical drill hole assay results at Boorara Trial Pit reconciled very well to actual tonnes mined and milled. Angled holes used in the latest grade control program appeared to be in broad agreement with mined grade, suggest that any potential bias from oblique holes has been countered via increased drill density.</li> <li>Historical drilling has used a number of drill orientations, resulting in some low angle intersections due to the complex geometry of the quartz and ore zones where ore lodes have been hit obliquely. This is not considered to have a material effect on the interpretation or estimation.</li> </ul>



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Criteria	JORC Code explanation	Commentary
	<i>introduced a sampling bias, this should be assessed and reported if material.</i>	
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	<ul style="list-style-type: none"> <li>Chain of custody is managed by MRP/ Horizon Minerals Ltd. Field samples are stored overnight onsite (if not delivered to laboratory) which is equipped with security cameras and caretaker in residence who is an employee of Horizon.</li> <li>Field samples are delivered to the assay laboratory in Kalgoorlie. Whilst in storage at the laboratory, they are kept in a secured yard. Tracking sheets have been set up online to track the progress of batches of samples through the laboratory.</li> </ul>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> <li>CSA Global completed a review in early 2015 of the MRP sampling protocols as part of their Resource estimation work and were satisfied that the adequacy of sample preparation, sample security and analytical procedures are of industry standard. This procedure has been adopted and now used by HRZ. Optiro carried out a field visit and desktop review of the sampling and QAQC during 2019 and did not identify any issues.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>The Boorara Project is located approximately 17km east-southeast of Kalgoorlie, 2km west of Nimbus and 6km north-northwest of Golden Ridge. The Boorara project is situated within mining leases M26/29, M26/277 and M26/318 accessed from the Kalgoorlie-Bulong Road via an unsealed haul road. The tenements are located within the Hampton Hill Pastoral Station.</li> <li>Normal Western Australian state royalties apply. A third-party royalty of \$1/t is payable to a maximum of \$1 million on M26/277. A third-party royalty based on production milestones is payable on M26/29, M26/318 &amp; M26/161 as below; 25,000 ounces gold production – 375-ounce royalty payable</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p>	<p>50,000 ounces gold production – 375-ounce royalty payable 75,000 ounces gold production – 375-ounce royalty payable 100,000 ounces gold production – 375-ounce royalty payable</p> <ul style="list-style-type: none"> <li>Situated within the Boorara Project area is the historic townsite reserve. Proposed open pit operations will not impact on this land. The location of waste dumps will be sited so as to avoid Mineral Resources, exploration targets and to work with other mining infrastructure associated with the Nimbus operations located within 2km of the proposed Boorara open pits. MRP purchased the Nimbus property on 8<sup>th</sup> September 2011 from Kalgoorlie Ore Treatment Company Pty Ltd (KOTC). The tenements are held by KOTC, a wholly owned subsidiary of Horizon Minerals Limited.</li> <li>The tenements are in good standing and no known impediments exist.</li> </ul>
<p><b>Exploration done by other parties</b></p>	<p><i>Acknowledgment and appraisal of exploration by other parties.</i></p>	<ul style="list-style-type: none"> <li>Historic gold production at Boorara produced 30,673 oz’s from the treatment of 54,731 tonnes of ore. This production was from underground mining at the Cataract shaft, East Lode shaft and the Crown Jewel shaft. Historic mine plans and sections show two orientations of mine stopes, one at 040°/25° NW and another at 315°/65°W.</li> <li>Dampier Mining Pty Ltd and Texas Gulf Australia Ltd in 1980 drilled 20 RC holes for 1,038m and 10 diamond holes for 1,695m.</li> <li>Western Reefs NL in 1985 undertook soil sampling on a 40m x 20m grid. They also completed 180 RAB holes for 9892m, 268 RC holes for 20,831m and 26 diamond holes for 2,609m. Geological mapping was undertaken by Western Reefs including costean mapping and sampling.</li> <li>The Cataract shaft was refurbished and geologically mapped and surveyed. The Crown Jewel shaft was mapped and surveyed also.</li> <li>Windsor Resources in 1988 drilled 174 RC holes for 11,274m.</li> <li>Newmont in 1990 drilled 338 RAB holes for 15,446m, 39 RC holes for 4,319m and 4 diamond holes for 718m. Geological mapping and soil sampling was also undertaken.</li> <li>Mt Monger Gold Project in 1993 drilled 116 RC holes for 6,222m.</li> <li>Fimiston Mining NL in 1995 drilled 110 RC holes for 7,257m and 1 diamond hole for 195m. The data relating to the Boorara gold deposits comprising the Southern Stockwork Zone, Northern Stockwork Zone, Cataract Area, East Lode and Digger Dam was reviewed. The database was updated to incorporate the drilling completed by Fimiston and cross sections and interpretations made. A global polygonal based</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<p>resource estimate was compiled which reported global Resources of 2.25 million tonnes @ 1.40g/t Au at a cut-off grade of 0.5g/t or 1.42 million tonnes @ 1.72 g/t Au at a cut off of 1.0 g/t. Block modelling of this polygonal data was then completed which returned a total oxide Resource of 1,293,000 tonnes @ 1.49 g/t, and a total fresh Resource of 1,095,000 tonnes @ 1.86g/t.</p> <ul style="list-style-type: none"> <li>• New Hampton Goldfields Ltd in 2001 undertook a resource estimate at Boorara which resulted in a JORC compliant undiluted Mineral Resource of 1,506,000t @ 1.85 g/t Au. Open pit design of the Southern Stockwork, Cataract and the Northern Stockwork resulted in a Probable Reserve of 179,000t @ 3.0 g/t Au. The New Hampton Goldfields Ltd – Jubilee Gold Operations report, “Mineral Resource Estimate Report, Boorara M26/29 M26/318 and M26/161, June 2001, G. Job” outlines the methodology and an explanation of the resource calculation.</li> <li>• Polymetals (WA) Pty Ltd in 2006 estimated a NON JORC complaint total resource summary of 1,904,800t @1.38g/t Au using a cutoff grade of 0.5 g/t Au. Polymetals in 2009 completed 18 RC holes for 1770m. From this program 126 samples with &gt;1.0g/t Au were screen fire assayed, with another 34 duplicates taking the total samples assayed via screen fire assay to 160.</li> </ul>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none"> <li>• The Boorara Au deposit is an Archaean mesothermal Au deposit. The Boorara local geology consists of a sequence of ultramafic, mafic and felsic volcanic and volcanoclastic rocks, with interflow carbonaceous sediments found on the lithological boundaries. Dolerite intrusions are conformable within the sequence. The metamorphic grade of rocks at Boorara is lower greenschist facies. The alteration assemblage associated with mineralisation consists of quartz carbonate and sericite. Pyrite and arsenopyrite are associated with the higher Au grades at Boorara. Mineralisation envelopes at Boorara consist of three dominant orientations:             <ol style="list-style-type: none"> <li>1. Regal - NW trending sub-vertical mineralisation which is typically sub parallel to lithology contacts.</li> <li>2. Crown Jewel - NW trending, NE shallow dipping mineralisation, sub parallel to lithology contacts</li> <li>3. Quartz dolerite hosted NW striking with shallow to moderate NW dipping vein arrays as seen in the Boorara trial pit and at the Cataract workings.</li> </ol> </li> </ul>
<b>Drill hole Information</b>	<i>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:</i>	<ul style="list-style-type: none"> <li>• Please refer to previous ASX announcements by Horizon Minerals, Macphersons Resources Ltd and previous operators for full details.</li> </ul>

## ASX ANNOUNCEMENT

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul> <p>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.</p>	<ul style="list-style-type: none"> <li>• No individual drill holes are quoted in this release. The report is a Mineral Resource Estimate Summary only.</li> </ul>
<b>Data aggregation methods</b>	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<ul style="list-style-type: none"> <li>• Holes include up to 2m of internal dilution - host dolerite was intersected in the 2m diluted section with significant alteration. A nominal cut-off grade of 0.4 g/t Au was used to interpret mineralisation domains and top cut grades were applied to each domain. Further detail is given in Section 3. The procedure applied to the aggregate intercepts quoted is length weighted average (sum product of interval x corresponding interval assay grade), divided by sum of interval lengths and rounded by one decimal place.</li> <li>• No metal equivalent calculations were applied.</li> </ul>
<b>Relationship between mineralisation widths and</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p>	<ul style="list-style-type: none"> <li>• Drill intercepts at Regal are 50-75% of the true width of vertical sub vertical mineralisation and close to true width of NW striking NE dipping lodes.</li> <li>• Drill intercepts at Crown Jewel and Royal may be down dip of the dolerite host and do not represent true widths over the majority of this mineralisation.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<b>intercept lengths</b>	<p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</i></p>	<ul style="list-style-type: none"> <li>Vertical and 060°/-60° intersect the mineralisation hosted in the various quartz vein sheeted vein array orientations 020°/48°NW, 060°/40°NW &amp; 100°/43°N.</li> </ul>
<b>Diagrams</b>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Please refer to the body of the report.</li> </ul>
<b>Balanced reporting</b>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>No Summary results are shown.</li> </ul>
<b>Other substantive exploration data</b>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>See details from previous ASX releases from MacPhersons Resources Limited (ASX: MRP) and more recently Horizon Minerals (ASX: HRZ). These can be accessed via the internet.</li> <li>Diamond drill core was utilized for bulk density measurements by the dry weight/wet weight (Archimedes method). Geotechnical logging has been completed on all geotechnical diamond holes by a consultant geotechnical engineer.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<b>Further work</b>	<p><i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<ul style="list-style-type: none"> <li>No further Boorara resource (specific) drilling is planned in 2021. Mine based exploration such as strike extensions, will be reviewed in conjunction with open pit or underground economic assessments.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

## ASX ANNOUNCEMENT

### Boorara Gold deposit

The following table provides a summary of important assessment and reporting criteria used for the reporting of the Boorara Deposit Mineral Resource in accordance with the Table 1 checklist in The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition) on an 'if not, why not' basis.

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<p>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.</p> <p>Data validation procedures used.</p>	<ul style="list-style-type: none"> <li>The integrity and security of the drill hole database was preserved by the Company by only allowing access to the persons authorized to handle the data and by ensuring that all original data is kept securely on site. Secure backups are stored offsite.</li> <li>Data from MRP drilling and pre-MRP drilling has been checked and validated prior to uploading into the MRP Datashed database by the Project Geologist. HRZ data is checked and validated by the Project Geologist prior to uploading to the current MS Access Database.</li> <li>Historical data was validated by CSA global in 2016 with no fatal flaws detected. Minor validation issues were corrected. CSA again reviewed the database in 2018 and found no issues.</li> <li>Cube Consulting completed validation and verification checks in 2018 and concluded that the exploration database has been prepared according to industry standards and is suitable for Mineral Resource estimation.</li> <li>At the preliminary data entry stage, the database is checked against the raw logs.</li> <li>Historical data has been checked against available reports (internal, WAMEX).</li> <li>All data was checked visually in 3D to ensure that hole locations and surveys were correct.</li> <li>The MRP DataShed database was validated against available original data in 2016 (CSA).</li> <li>A large number of holes were verified against core photography by CSA (2018).</li> </ul>
<b>Site visits</b>	<p>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</p> <p>If no site visits have been undertaken indicate why this is the case.</p>	<ul style="list-style-type: none"> <li>The Competent Person (Mr Mark Drabble) visited the Boorara project on May 29, 2019. The areas covered during this visit were the drilling information and exposures of geology and mineralisation visible in outcrops, pits and underground workings.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<b>Geological interpretation</b>	<p><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></p> <p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p>	<ul style="list-style-type: none"> <li>The framework of the deposits is based on field mapping of the host units which has been interpreted into a 3D model of the lithology and mineralisation domains, with a fault system imposed to control offsets and terminations in the deposit. Mapping of the Cataract underground workings was also incorporated into the 3D model. The high density of RC and DDH drilling throughout the deposit has supported the development of a robust geological model.</li> <li>The host rocks are generally well defined in the logged lithology records and the structural framework is based on field measurements, aeromagnetic data and detailed surface geological mapping within test pits.</li> <li>Geological continuity is demonstrated by field exposures of host rocks and vein packages.</li> <li>Data is stored in Access databases. Data is verified using Datashed, Micromine and Surpac.</li> <li>Alternative interpretations for the flat lodes have been considered and tested using categorical indicator estimation.</li> <li>Detailed structural mapping of a test pit confirms the orientations of flat lying veins and contact stockwork domains.</li> <li>All geological observations were used to guide the interpretation and further control the trends of the Mineral Resource estimate.</li> </ul>
<b>Dimensions</b>	<p><i>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</i></p>	<ul style="list-style-type: none"> <li>The Boorara Deposit Mineral Resource has an approximate strike length of 2,150m and width of 150m. The full block model extends down to 720 m depth. The classified Mineral Resource is constrained to 425m depth.</li> <li>The plan width of mineralised zones ranges from 5m to 30m for the steep Contact lodes. The NW dipping sheeted flat lodes have thickness averaging 1m to 5m and can extend along strike for up to 200m.</li> </ul>



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<p><b>Estimation and modelling techniques</b></p>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• Software used:               <ul style="list-style-type: none"> <li>• Leapfrog Geo – wireframe modelling of geology and mineralised domains.</li> <li>• Snowden Supervisor - geostatistics, variography, quantitative kriging neighbourhood analysis (KNA) and block model validation.</li> <li>• Datamine Studio RM - drill hole validation, compositing, block modelling, estimation, classification and reporting.</li> <li>• Surpac - data transform from AGM to local grid.</li> </ul> </li>   <li>• Mineralisation was domained as two mineralisation sets (Contact and Flat Lodes) which were estimated as separate block models that were combined. The Contact Lode mineralisation model overprinted the Flat Lode mineralisation model.</li> <li>• Grades were composited to 1 m downhole constrained within the mineralised domains. Where Flat lode domains cross over the Contact domains the composites are used to inform both models, however the low proportion of intersections and the consistent tenor of both sets of veins means this issue is not considered to be detrimental to the estimate.</li> <li>• Treatment of extreme grade values – high grade results within the deposit were capped by analysing histograms, log histograms, log probability plots and spatial analysis of individual high grades. Top cuts varied between 8g/t and 43g/t. gold. Low grade subdomains within the Contact Lodes were all top cut to 2 g/t gold. Top cuts were applied to composites prior to estimation.</li>   <li>• Flat Lode Model               <ul style="list-style-type: none"> <li>• Individual flat lode domain statistics was analysed and determined to be a single population so were then grouped into 7 orientation domains, for further exploratory data analysis. The variography search was aligned to the mineralised trend of each domain-group. Variography was undertaken returning a nugget between 51% and 58% and most of the remaining correlation associated with the nugget and first range structure (73% to 91%) ranging from 8m to 11m.</li> <li>• The Regal flat Lodes (88 domains) were individually estimated by ordinary kriging dynamic anisotropy, using hard domain boundaries. The Crown Jewel and Royal Lodes were estimated as two groups, using ordinary kriging. Flat lodes were estimated into a parent block of 10m (Y) x 10m (X) x 5m (Z) with sub celling to 1m (X, Y, Z).</li> <li>• The search ellipse for the Regal Lodes was aligned to the mineralised trend of each domain using dynamic anisotropy. The search ellipse for the Crown Jewel and Royal Lodes was aligned to the</li> </ul> </li> </ul>

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		<p>mineralised trend of each domain and flattened across strike to force a strong anisotropic search.</p> <ul style="list-style-type: none"> <li>Search neighbourhood for the flat lodes was determined by KNA and variography. Search pass one correlated with the maximum range of variography from 35m by 35m by 5m to 45m by 54m by 12m using a minimum of 8 and maximum of 22 composites per estimate. Pass 2 expanded the search range by 1.5 and used a minimum of 6 and maximum of 28 composites per estimate. Pass 3 expanded the search range by 3 and used a minimum of 4 and maximum of 28 composites per estimate. Blocks that were not estimated were given their domain mean grade and a search pass of 4.</li> <li>Contact Lode Model             <ul style="list-style-type: none"> <li>Categorical indicator variography was completed for each of the Contact lodes using dynamic anisotropy to control the search at a 0.25g/t gold Indicator. Categorical variography returned a nugget between 38% and 46% and maximum ranges extending from 34m by 15m by 14m to 34m by 15m by 14m. Categorical indicator estimation was used to define the low-grade subdomains that are below the 50% threshold.</li> <li>Grade variography was undertaken on the Contact lode high-grade sub-domains to provide a nugget in the range of 42% to 57% and a range extending out up to 62m by 62m by 25m. As the Contact Lode is a mixed population of stockwork veins 78% to 90% of the continuity is within the nugget and shorter first range structure (up to 20m by 20m by 10m).</li> <li>The Contact Domains were individually estimated by ordinary kriging dynamic anisotropy. Hard boundaries were applied apart from Domain 101, 301 and 401 which are continuous along strike and offset by faults. Contact lodes were estimated into a parent block of 10m (Y) x 20m (X) x 5m (Z) with sub celling to 1m (X) by 2m (Y) by 1m (Z).</li> <li>The variography search was aligned to the mineralised trend of each domain-group. Variography was undertaken returning a nugget between 51% and 58% and most of the remaining correlation associated with the first range structure (22% to 31%) ranging from 8m to 11m.</li> <li>The search ellipse for the Contact Lodes was aligned to the mineralised trend of each domain using dynamic anisotropy. Search neighbourhood was determined by KNA and variography. Search pass one correlated with the maximum range of variography from 15m by 12m by 10m to 70m by 70m by 30m using a minimum of 10 and maximum of 32 composites per estimate. Pass 2 expanded the search range by 1.5 and used a minimum of 6 and maximum of 32 composites per estimate. Pass 3 expanded the search range by 3 and used a minimum of 4 and maximum of 32 composites per estimate. Blocks that were not estimated were given their domain mean grade and a search pass of</li> </ul> </li> </ul>

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	<p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p> <p><i>The assumptions made regarding recovery of by-products.</i></p> <p><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation).</i></p> <p><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></p> <p><i>Any assumptions behind modelling of selective mining units.</i></p> <p><i>Any assumptions about correlation between variables.</i></p> <p><i>Description of how the geological interpretation was used to control the resource estimates.</i></p>	<p>4.</p> <ul style="list-style-type: none"> <li>• Previous recent estimates have been carried out by Optiro (2019) and Cube (2018). Comparisons to these models are not definitive due to the markedly differing methodology used. It is considered the comparisons are useful at a global level, as significant changes to the local interpretations have occurred in the 2021 MRE. Production has been carried out from open pits in each deposit and reconciliations are comparable to the MRE expectations.</li> <li>• No by-product recovery has been assumed.</li> <li>• No other elements were estimated.</li> <li>• For the Contact Lode block model, the parent block size is 10m (Y) x 20m (X) x 5m (Z) and the Flat Lode block model the parent block size is 10m (Y) x 10m (X) x 5m (Z). This is based upon an average drillhole spacing of 20 m x 20 m.</li> <li>• The Boorara deposit has been mined by open pits and the selectivity implied by the MRE model is considered to be appropriate for a vein style gold deposit being exploited by this mining method. Internal dilution has been applied during grade control to account for the stockwork nature of the mineralisation domains.</li> <li>• No correlated variables have been investigated or estimated.</li> <li>• The geological interpretation was used at all stages to control the estimation. It was used to guide the orientation and shape of the mineralised domains. These were then used as boundaries for the grade</li> </ul>

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	<p><i>Discussion of basis for using or not using grade cutting or capping.</i></p> <p><i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i></p>	<p>estimation, using the trend of the mineralisation to control the search ellipse direction and the major controls on the distribution of grade.</p> <ul style="list-style-type: none"> <li>• Top cuts were used in the estimate to control the over-influence of high grades outliers. Top cuts, where appropriate, were applied on an individual domain basis for the Contact lodes and a grouped (by orientation) domain basis for the Flat lodes.</li> <li>• Validation checks of the estimate occurred by way of global and local statistical comparison, comparison of volume of wireframe verses the volume of the block model, comparison of the model average grade (and general statistics) and the declustered sample grade by domain, swath plots by northing, easting and elevation, visual check of drill data vs model data, comparison of global statistics for check estimates.</li> <li>• Where domains were showing an overestimation of gold the top cuts were further reduced to ensure metal was representing the declustered input data.</li> </ul>
<b>Moisture</b>	<p><i>The basis of the adopted cut-off grade(s) or quality parameters applied</i></p>	<ul style="list-style-type: none"> <li>• The tonnage was estimated on a dry basis.</li> </ul>
<b>Cut-off parameters</b>	<p><i>The basis of the adopted cut-off grade(s) or quality parameters applied</i></p>	<ul style="list-style-type: none"> <li>• A nominal lower cut-off grade of 0.4g/t Au was utilised for interpreting geological continuity of the mineralisation. For reporting, the cut-off grades applied to the estimate were 0.5g/t gold reporting above 200mRL. A 0.5g/t gold cut-off grade is generally considered to be the lower limit of economic extraction in an open pit.</li> </ul>
<b>Mining factors or assumptions</b>	<p><i>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 mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the</i></p>	<ul style="list-style-type: none"> <li>• The Mineral Resource is constrained to a maximum vertical depth of 200m below surface to satisfy the reasonable prospect of eventual economic extraction criteria for JORC compliance. This is based on pit optimisations run by Mining Consultants using assumed cost scenarios.</li> </ul>

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	<p><i>case, this should be reported with an explanation of the basis of the mining assumptions made.</i></p>	
<p><b>Metallurgical factors or assumptions</b></p>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• Processing of the ‘test pit’ high- and low-grade material through the processing facility did not identify any significant problematic issues of concern.</li> <li>• An approximate metallurgical recovery of 90% has been assumed in determining Reasonable Prospects of Eventual Economic Extraction.</li> </ul>
<p><b>Environmental factors or assumptions</b></p>	<p><i>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 impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made</i></p>	<ul style="list-style-type: none"> <li>• The deposit lies within granted Mining Leases M26/29, M26/277 and M26/318.</li> <li>• The Boorara project is located in a mature gold mining district, with mining in the area occurring over the past 100 years. There are no major water courses in the project area, although ephemeral streams cut across the project. There are reserves associated with the Boorara townsite situated within the Boorara Project area. Permission has been granted from the City of Kalgoorlie-Boulder and the DMIRS to mine on these reserves.</li> <li>• The current assumption of waste rock being of no environmental significance is based on local experience in numerous greenschist facies gold deposits which contain significant carbonate mineralogy as part of the mineralisation and waste rock. The mineralisation is a low sulphidation type with limited acid forming potential.</li> <li>• It is assumed that surface waste dumps will be used to store waste material and conventional storage facilities will be used for the process plant tailings.</li> </ul>

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<p><b>Bulk density</b></p>	<p><i>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.</i></p> <p><i>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,</i></p> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<ul style="list-style-type: none"> <li>• Bulk density was assigned to the block model based on material type and lithology. The assumed density values were derived from 2,130 experimental data primarily based on specific gravity determinations from predominantly unweathered diamond core pieces. The values assigned are similar to those assumed in previous estimates.</li> <li>• The method for the bulk density measurements was by the dry weight/wet weight (Archimedes method) on both mineralised and waste rock.</li> <li>• Samples taken were coded by lithology and weathering. Averages were derived within each weathering zone and this value then used to code the block model. Results within each weathering zone (oxide, transitional and fresh) compared well to previous model bulk density application.</li> </ul>
<p><b>Classification</b></p>	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories</i></p>	<ul style="list-style-type: none"> <li>• The Mineral Resource has been constrained to a maximum vertical depth of 200m below surface.</li> <li>• Blocks have been classified as Measured, Indicated, Inferred or Unclassified based on drill hole spacing, geological continuity and estimation quality parameters.</li> <li>• Measured Mineral Resource is supported by multiple orientations of drilling, tighter than 20m x 20m exploration spacing and grade control drilling of 4-5m x 10m spacing within the open pits. The grade estimate is supported by greater than 20 samples in the estimate. There is strong geological support including open pit mapping of vein structures and frequency.</li> <li>• Indicated Mineral Resource is supported by exploration drilling with nominal 20m x 30m spacing, supported by 15 to over 20 samples. Geological continuity is demonstrated by the geological interpretation, pit and surface mapping, vein studies of orientation and continuity and multiple exposures of mineralisation in-mine workings.</li> <li>• Inferred Mineral Resource was defined where there was a low to moderate level of geological confidence in geometry, there was still continuity of grade and drill spacing was greater than 30m. It is supported by less than 15 samples in the estimate. Geological support was defined to a lower level of confidence in terms of continuity and extent.</li> <li>• Unclassified mineralisation has not been included in this Mineral Resource and is the material that has no estimated grades and is unsupported by geology and drilling. This includes all material below the</li> </ul>

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	<p><i>Whether appropriate account has been taken of all relevant factors (i.e., 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).</i></p> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<p>200mRL.</p> <ul style="list-style-type: none"> <li>• Grade reliability, volume uncertainty and assay uncertainty have all been considered in the assignment of Mineral Resource categories. Consideration has been given to all relevant factors in the classification of the Mineral Resource.</li> <li>• The classification reflects the Competent Person's view of the deposit.</li> </ul>
<p><b>Audits or reviews</b></p>	<p><i>The results of any audits or reviews of Mineral Resource estimates.</i></p> <p><i>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 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</i></p> <p><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic</i></p>	<ul style="list-style-type: none"> <li>• No external audits have been conducted on the Mineral Resource estimate.</li> <li>• With further drilling it is expected that there will be variances to the tonnage, grade and metal of the deposit. The Competent Person expects that these variances will not impact on the economic extraction of the deposit. One of the main issues is continuity and thickness variations, and these will continue to be a key focus of mining as the deposit is exploited, and locally there will be variable outcomes as grade control progresses. Optiro considers the Mineral Resource categories to be appropriate with respect to these risks.</li> <li>• It is the Competent Person's view that this Mineral Resource estimate is appropriate to the type of deposit. The Eastern Goldfields vein hosted style of mineralisation is well understood and has a substantial mining history to underpin the decisions made in preparing this MRE.</li> <li>• The Mineral Resource classification is appropriate at the global scale.</li> </ul>

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	<p><i>evaluation. Documentation should include assumptions made and the procedures used</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available</i></p>	<ul style="list-style-type: none"> <li>• The Model was validated against Crown Jewel test pit and the Regal test pits mined high-grade claimed tonnes and grade.</li> <li>• The Model reports 17% extra tonnes and 31% extra metal for the Crown Jewel test pit, however the test pit is 17Kt and the tonnages are low. The Model reports 2% extra tonnes for a reduction of 18% metal (on 120Kt mined) compared to the Regal mill reconciled high-grade tonnes and grade. Variability in the reconciliation is attributed to the incomplete mill processing of pit material (only high-grade material has been processed).</li> </ul>

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